



Le Groupe CMI Experts-Conseils inc.

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RAPPORT DE COMPARAISON ÉNERGÉTIQUE

Sainte-Marie-Madeleine02-02-2026

Bâtiments	Rue Laniel, Salaberry-De-Valleyfield, Québec
Client	Le Quartier 395
Ingénieurs-conseils et rédacteur	Le groupe CMI experts-conseils inc. 540 Jarry Ste-Marie-Madeleine, (Québec) J0H 1S0
Architecte	N/A
Dossier	CMI-26909

1 OBJECTIF

- 1.1 Ce rapport énonce les différences énergétiques des bâtiments s'ils étaient conçus selon les normes minimums permises par le code du bâtiment versus une conception optimisant l'efficacité énergétique des composantes architecturales et des systèmes électromécaniques afin de se conformer au programme APH-Select de la SCHL. Dans ce cas, le client cherche à se conformer aux demandes de l'APH-Select de Niveau 3 pour une construction neuve.

2 EXPLICATIF

- 2.1 Les simulations utilisent les données météorologiques de l'ASHRAE (fichier de données venant de QC – Saint-Anicet – Zone 6A) selon l'emplacement le plus près du projet et une température extérieure hivernale de -20 °F même si les données météorologiques de la ville en question sont plus élevées. Le but est d'avoir un comparatif et une méthodologie répétable d'une simulation à l'autre et d'assurer que le design mécanique permet un confort acceptable des locataires plus de 90% du temps tel que demandé par l'ASHRAE et le CNÉB.
- 2.2 La section **DONNÉES** commence par la description des bâtiments. Ensuite, il est question d'estimer les résistances thermiques des composantes architecturales et les spécifications des systèmes électromécaniques des bâtiments tel qu'ils ont été construits. Ce sont les données utilisées dans la Simulation 1, dite de Référence.

Le même exercice est fait avec les résistances thermiques des composantes architecturales et les spécifications électromécaniques une fois qu'elles ont été optimisées. Ceci constitue la Simulation 2, dite de Concept.

2.3 La simulation de concept sert donc à optimiser les résistances thermiques des composantes architecturales ainsi que les systèmes électromécaniques afin d'atteindre l'objectif de 40% d'efficacité énergétique désiré par le client.

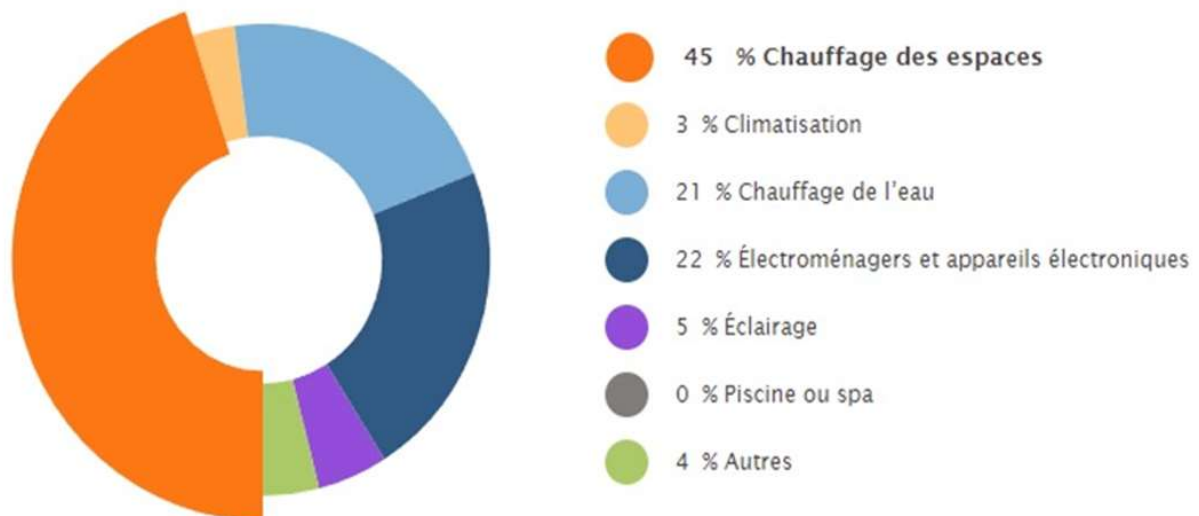
2.4 Dans la section **CONSOMMATION ET COÛTS**, il est indiqué le résultat des simulations au niveau de la consommation électrique et du coût monétaire totale annuelle pour le chauffage, la climatisation et le conditionnement de l'air.

L'économie observé dans les tableaux de cette section est attribuée directement au chauffage, à la climatisation et au conditionnement de l'air puisque le logiciel utilisé (Carrier HAP) ne prend pas en considération d'autre élément.

2.5 Dans la section **CALCULS** sont détaillées les calculations non pris en charge par le logiciel Carrier HAP. Ces calculs sont nécessaires afin d'obtenir les résultats qui démontrent une conformation aux demandes du programme APH-Select.

Il est important de noter que plusieurs des calculs sont faits sur une base de 73%, car la part d'électricité qu'utilisent les électroménagers, les appareils électroniques et les autres charges sont sous le contrôle des occupants et n'ont pas de lien avec l'efficacité énergétique du bâtiment. Voici les pourcentages moyens de consommation électrique selon Hydro-Québec :

Figure 1 : Répartition de la consommation moyenne d'électricité par usage d'une habitation dans un multiplex ou un immeuble à logements multiple avec climatisation selon Hydro-Québec



En retirant la part qu'occupe les électroménagers, les appareils électroniques et les autres charges, un pourcentage de 73% est obtenu.

- 2.6 Dans la section **ANALYSES ET RÉSULTATS FINAUX** se retrouvent un résumé des données et des résultats importants qui montre la conformité des bâtiments avec les critères du programme APH-Select.
- 2.7 Dans la section **CONCLUSION** se retrouve la déclaration de conformité. Il y a aussi les résistances thermiques finales des composantes architecturales et les spécifications finales des systèmes électromécaniques. Finalement, il y a la signature de l'ingénieur en charge.
- 2.8 Abréviations :
N/A – Non applicable
N/D – Non disponible

3 DONNÉES

- 3.1 L'immeuble est une construction neuve qui contient cinq niveaux dont un sous-sol. Ce dernier est un garage souterrain. Suite au sous-sol, il y a un rez-de-chaussée qui contient dix logements et une salle communautaire. Les deuxième, troisième et quatrième niveaux contiennent douze logements chacun. Pour un total de cinquante-huit logements.

Les corridors, SAS et hall d'entrée sont des zones desservies par une unité d'apport d'air frais. Ce dernier sera en fonction en tout temps et pressurisera ces zones.

Les salles mécaniques seront ventilées sur détection de température élevée. Les hausses de température dans les salles mécaniques sont occasionnelles et ne sont généralement pas de longue durée. Il est donc logique d'estimer que l'impact de cette ventilation occasionnel soit négligeable.

Les zones communes accessibles aux occupants, comme les rangements, les casiers et les conciergeries seront ventilées sur détection de présence. Ces pièces servent à transiter brièvement. La présence des occupants à ces endroits sera donc courte. Pour cette raison, il est donc logique d'estimer que l'impact de cette ventilation occasionnel soit négligeable.

Les aires de stationnement ne sont pas climatisées et ne sont pas ventilées en tout temps. Un détecteur de monoxyde de carbone et de dioxyde d'azote déclenche la ventilation selon la qualité de l'air. Les garages servent à transiter vers l'extérieur et les occupants ayant des automobiles y seront pour de courtes périodes. Pour cette raison, la ventilation ne se déclenchera pas régulièrement. Il est donc logique d'estimer que l'impact de cette ventilation occasionnel soit négligeable.

Il y a des thermopompes et des plinthes électriques pour chauffer et climatiser les logements. Il y a aussi des échangeurs d'air pour conditionner l'air frais entrant. Il y a chauffe-eau au gaz naturel pour chauffer l'eau.

Tableau 1 : Résistances thermiques

Bâtiment	Nbr de bâtiments identiques où ces données s'appliquent	Simulation	Composante	Résistance Thermique (R)
Rue Laniel, Salaberry-De-Valleyfield, Québec	1	1 (Référence)	Murs extérieurs	24.5
			Murs fondation	17
			Toit	41
			Dalle	7.5
		2 (Concept)	Murs extérieurs	24.5
			Murs fondation	17
			Toit	41
			Dalle	10

Tableau 2 : Spécifications des fenêtres et des portes

Bâtiment	Nbr de bâtiments identiques où ces données s'appliquent	Simulation	Spécification	
Rue Laniel, Salaberry-De-Valleyfield, Québec	1	1 (Référence)	U=	0.3
			SHGC =	0.35
		2 (Concept)	U =	0.28
			SHGC =	0.72

Tableau 3 : Spécifications des thermopompes

Bâtiment	Nbr de bâtiments identiques où ces données s'appliquent	Simulation	Spécification	Valeurs 9 MBH	Valeurs 12 MBH	Valeurs 24 MBH
Rue Laniel, Salaberry-De-Valleyfield, Québec	1	1 (Référence)	SEER	14.3	14.3	14.3
			HSPF	7.7	7.7	7.7
			COP	N/A	N/A	N/A
			T (°F) min.	23	23	23
		2 (Concept)	SEER2	28.1	28.1	21.5
			HSPF	N/A	N/A	N/A
			COP	3.81	3.81	3.40
			T (°F) min.	-22	-22	-22

Tableau 4 : Spécifications des échangeurs d'air

Bâtiment	Nbr de bâtiments identiques où ces données s'appliquent	Simulation	Efficacité moyenne (%)	CFM	° F
130 logis rue du Vieux-Moulin, Lévis	1	1 (Référence)	65	100	32
		2 (Concept)	78	100	32

Tableau 5 : Éclairage

Bâtiment	Nbr de bâtiments identiques où ces données s'appliquent	Simulation	Type d'éclairage	Efficacité (Lumens/Watt)
Rue Laniel, Salaberry-De-Valleyfield, Québec	1	1 (Référence)	DEL	N/A
		2 (Concept)	DEL	N/A

Tableau 6 : Appareils de plomberie

Bâtiment	Nbr de bâtiments identiques où ces données s'appliquent	Simulation	Débit (USGPM)
Rue Laniel, Salaberry-De- Valleyfield, Québec	1	1 (Référence)	2.5
		2 (Concept)	Douches 1.5 Éviers 1 Lavabos 0.5

4 CONSOMMATION

Tableau 7 : Proportion de la consommation dû à l'utilisation du gaz naturel dans une zone biénergie selon les statistiques d'Hydro-Québec

Type de Coût	Coût (\$)	m3 gaz	KWH
Électrique	1143	N/A	23030
Gaz	574	3273	34819
Ratio (%)	60.19		

Note 1 : Les données par rapport aux coûts se retrouvent sur le site d'Hydro-Québec. Figure ci-dessous :

[Potentiel d'économies avec la biénergie – électricité et gaz naturel au tarif DT](#)

Voyez les économies moyennes réalisables annuellement avec la biénergie – électricité et gaz naturel au tarif DT sur les coûts d'énergie d'une habitation dotée d'un système de chauffage central à air chaud.

Si, par ailleurs, vous utilisez un climatiseur central ou un chauffe-piscine, le tarif DT vous fera également économiser sur la consommation d'énergie des appareils qui fonctionnent à plein régime durant l'été.

	Consommation annuelle* Résidence de taille moyenne, y compris la climatisation
Gaz naturel – Chauffage (1 442 \$)	2 220 \$
Électricité – Reste de l'énergie (778 \$)	
Biénergie	1 717 \$
Électricité facturée au tarif DT (1 143 \$) + 574 \$ de gaz naturel**	
Économie annuelle potentielle	502 \$

* La consommation annuelle inclut le chauffage des espaces et de l'eau, la climatisation et les usages de base pour une résidence de taille moyenne – individuelle, duplex ou triplex – de 160 m² (environ 1 722 pi²) située à Montréal. Les montants sont arrondis.

** Chauffage des espaces au gaz naturel en période de grand froid.

Source du prix des tarifs :

- Tarifs d'électricité au 1^{er} avril 2025.
- Tarifs de gaz naturel d'Énergir : moyenne de l'historique des prix d'avril 2024 à mars 2025.

Note 2 : KWH d'hydro-électricité obtenu en divisant le coût par le tarif d'Hydro-Québec soit 8.5¢/KWH.

Note 3 : KWH de gaz obtenu en convertissant le coût en m³ gaz. Le tarif moyen (17.540¢/m³) de janvier 2025 à janvier 2026 chez Énergir a été utilisé pour cette conversion. Ensuite, le nombre de m³ est converti en KWH. Un m³ équivalent à 10.63668 KWH.

Tableau 8 : Consommation annuelle des zones biénergie

Simulation	Chauffage/climatisation total (KWH)	Chauffage/ climatisation gaz (KWH)	Chauffage/climatisation hydro-électrique (KWH)
de Référence	0.00001	0	0
de Concept	0.00001	0	0

Note 1 : Les données de chauffage et climatisation sont tirées directement du logiciel HAP Carrier.

Note 2 : La consommation du gaz est obtenue en multipliant par le ratio vu au Tableau 7.

Tableau 9 : Répartition de la consommation annuelle dû au chauffage, à la climatisation et au conditionnement de l'air

Simulation	Total (KWH)	Gaz (KWH)	Hydro-électricité Biénergie(KWH)	Hydro-électricité Standard(KWH)
1 (Référence)	253519	0	0	253519
2 (Concept)	156996	0	0	156996

Note 1 : La consommation totale est tirée directement du logiciel HAP Carrier. La consommation du gaz et de l'électricité biénergie sont tiré du Tableau 8. L'électricité standard s'obtient en soustrayant du total la consommation du gaz et de l'électricité biénergie.

Tableau 10 : Répartition des gains au niveau de la consommation du chauffage, de la climatisation et du conditionnement de l'air

Données	Gas Biénergie	Hydro-Électricité Biénergie	Hydro-Électricité Standard	Total
Économie : simulation de référence - simulation de concept (KWH) Voir Tableau 9	0	0	96523	96523
a) Part d'économie sur l'économie total du bâtiment (%)	0.00	0.00	100.00	100.00
b) Pourcentage d'économie de la simulation de référence versus la simulation de concept (%) Voir Tableau 8 et Calcul 5.1	0.00	0.00	25.03	N/A
Pourcentage d'économie par rapport à l'économie total (a*b) (%)	0.00	0.00	25.03	25.03

5 CALCULS

5.1 Calcul du gain par rapport au chauffage, à la climatisation et au conditionnement de l'air

Légende :

		Signification
Variable	A	Consommation en lien avec le chauffage, à la climatisation et au conditionnement de l'air pour la Simulation 1 de Référence (Voir Tableau 9 et 10)
	B	Consommation en lien avec le chauffage, à la climatisation et au conditionnement de l'air pour la Simulation 2 de Concept (Voir Tableau 9 et 10)
Constante	$\frac{100}{73}$	Résultat remis sur 73% (Voir point 2.5)
	48 %	Pourcentage de la consommation d'hydro-électricité correspondant au chauffage et à la climatisation selon Hydro-Québec. (Voir Figure 1)

Exemple de calcul :

$$\frac{A(KWH) - B(KWH)}{A(KWH)} \times \frac{100}{73} \times 48 \% = \text{Gain} (\%)$$

Résultats :

Bâtiment	Nbr de bâtiments identiques où ces résultats s'appliquent	Gain (%)
Rue Laniel, Salaberry-De-Valleyfield, Québec	1	25.03

5.2 Calcul du gain pour l'ajout d'appareil de plomberie à faible débit

Figure 2 : Répartition de la consommation moyenne d'eau chaude par usage d'une habitation dans un multiplex ou un immeuble à logements multiple selon Hydro-Québec

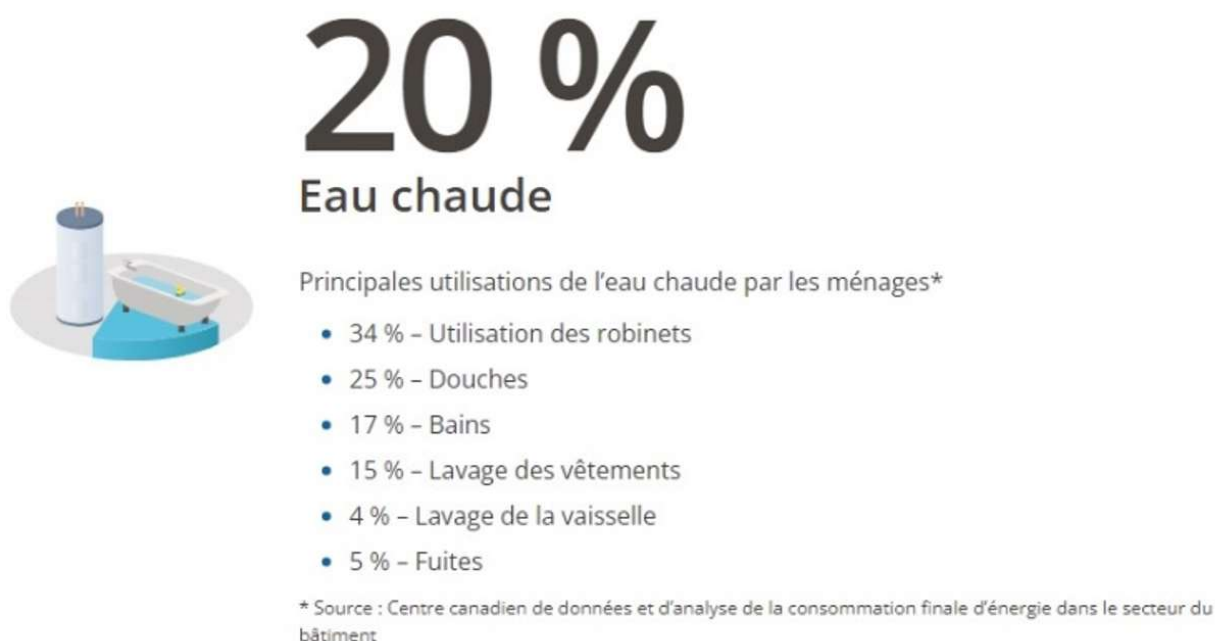


Tableau 11 : Diminution de la charge énergétique des appareils de plomberie selon le débit

Débit (USGPM)	Diminution de la charge énergétique (%)
2.5 (Robinetterie à débit standard)	Non applicable
2	20
1.5	40
1.25	50
1	60

Légende :

Variable	Signification
A	Diminution de la charge énergétique par rapport aux appareils de plomberie faibles débits. (Voir Tableau 6 et 11)
Constante	$\frac{100}{73}$
	Résultat remis sur 73% (Voir point 2.5)
	20 %
	Pourcentage de la consommation d'hydro-électricité correspondant à l'utilisation de l'eau chaude. (Voir Figure 2)

Exemple de calcul :

$$A(\%) \times \frac{100}{73} \times 20\% = \text{Gain}(\%)$$

Résultat :

Bâtiment	Nbr de bâtiments identiques où ces résultats s'appliquent	Gain (%)
Rue Laniel, Salaberry-De-Valleyfield, Québec	1	15.70

5.3 Calcul du gain par rapport à l'éclairage

Tableau 12 : Gain selon l'efficacité de l'éclairage

Efficacité (Lumens/Watt)	Diminution de la charge énergétique (%)
50	N/A
75	25
100	50

Légende :

		Signification
Variable	A	Diminution de la charge énergétique par rapport à l'éclairage (Voir Tableau 5 et 12)
Constante	$\frac{100}{73}$	Résultat remis sur 73% (Voir point 2.5)
	5 %	Pourcentage de la consommation d'hydro-électricité correspondant l'éclairage. (Voir Figure 1)

Exemple de calcul :

$$A(\%) \times \frac{100}{73} \times 5\% = \text{Gain}(\%)$$

Résultat :

Bâtiment	Nbr de bâtiments identiques où ces résultats s'appliquent	Gain (%)
Rue Laniel, Salaberry-De-Valleyfield, Québec	1	N/A

5.4 Calcul du gain total de la Simulation 2 de Concept

Légende :

		Signification
Variable	A	Gain par rapport au chauffage, à la climatisation et au conditionnement de l'air. (Voir point 5.1)
	B	Gain pour l'ajout d'appareil de plomberie à faible débit. (Voir point 5.2)
	C	Gain par rapport à l'éclairage. (Voir point 5.3)

Exemple de calcul :

$$A(\%) + B(\%) + C(\%) = \text{Gain total } (\%)$$

Résultat :

Bâtiment	Nbr de bâtiments identiques où ces résultats s'appliquent	Gain (%)
Rue Laniel, Salaberry-De-Valleyfield, Québec	1	40.73

5.5 Estimation de la consommation annuelle globale de l'immeuble à partir de la consommation en chauffage, climatisation et conditionnement de l'air

Légende :

		Signification
Variable	A	Consommation en lien avec le chauffage, à la climatisation et au conditionnement de l'air pour la Simulation 1 de Référence (Voir Tableau 7)
	B	Consommation globale en électricité pour la Simulation 1 de Référence
	C	Diminution de la charge énergétique provoquée par le gain total. (Voir Calcul 5.4)
Constante	$\frac{100}{48}$	Règle de trois utilisée pour estimer la consommation globale en électricité à partir de la consommation en lien avec le chauffage, à la climatisation et au conditionnement de l'air qui équivaut à 48% de la facture (Voir Figure 1)

Exemple de calcul :

$$\text{Simulation 1 : } A(KWH) \times \frac{100}{48} = B(KWH)$$

$$\text{Simulation 2 : } (B(KWH) - (B(KWH) \times C(\%))) = \text{Consommation globale (KWH)}$$

Résultats :

Total Simulation 1 de Référence (KWH)	Total Simulation 2 de Concept (KWH)	Gaz Simulation 1 de Référence (KWH)	Gaz Simulation 2 de Concept (KWH)	Hydro-Électricité Simulation 1 de Référence (KWH)	Hydro-Électricité Simulation 2 de Concept (KWH)
528165	313044	105633	45118	422532	267926

Note 1 : Les chiffres pour les simulations sur le gaz sont le résultat d'une règle de trois avec les données du Tableau 9. En considérant que ces dernières sont l'équivalents de 48% de la consommation et nous voulons estimer ce que serait 100% de la consommation.

5.6 Estimation de la consommation d'hydro-électricité ET de gaz annuelle pour le chauffage de l'eau et de l'économie suite à l'ajout d'équipement de plomberie à faible débit

Légende :

		Signification
Variable	A	Consommation Globale pour la Simulation 1 de Référence (Voir Calcul 5.5)
	B	Consommation pour l'eau chaude de la Simulation 1 de Référence
	C	Diminution de la charge énergétique provoquée par l'utilisation d'appareils de plomberies à faibles débit. (Voir Tableau 6 et 11)
Constante	20%	Pourcentage d'hydro-électricité attribué à l'utilisation d'eau chaude selon Hydro-Québec (Voir Figure 2)

Exemple de calcul :

$$\text{Simulation 1 Total} : A(KWH) \times 20\% = B(KWH)$$

$$\text{Simulation 2 Total} : B(KWH) \times (1 - C(\%)) = \text{Consommation eau chaude après économie (KWH)}$$

Résultats :

Simulation 1 Total Référence (KWH)	Simulation 2 Total Concept (KWH)	Gaz Simulation 1 de Référence (KWH)	Gaz Simulation 2 de Concept (KWH)	Hydro-Électricité Simulation 1 de Référence (KWH)	Hydro-Électricité Simulation 2 de Concept (KWH)
105633	45118	105633	45118	0	0

Note : Pour obtenir la consommation du gaz pour le chauffage de l'eau, le ratio du Tableau 7 a été appliqué aux Totaux de la simulation 1 et 2 respectivement. Cent pourcent du chauffage de l'eau est assuré par une bouilloire au gaz naturel. Par conséquent, cent pourcent de la consommation d'énergie pour le chauffage de l'eau se retrouve en consommation de gaz.

Note 2 : La consommation en hydro-électricité est la soustraction de la consommation du gaz des Totaux.

5.7 Estimation de la consommation d'hydro-électricité annuelle pour l'éclairage et de l'économie suite à l'ajout de lumières haute efficacité

Légende :

		Signification
Variable	A	Consommation Globale pour la Simulation 1 de Référence (Voir Calcul 5.5)
	B	Consommation pour l'éclairage de la Simulation 1 de Référence
	C	Diminution de la charge énergétique provoquée par l'utilisation de lumière haute efficacité. (Voir Tableau 5 et 12)
Constante	5%	Pourcentage d'hydro-électricité attribué à l'éclairage selon Hydro-Québec (Voir Figure 2)

Exemple de calcul :

$$\text{Simulation 1 : } A(KWH) \times 5\% = B(KWH)$$

$$\text{Simulation 2 : } B(KWH) \times (1 - C(\%)) = \text{Consommation éclairage après économie (KWH)}$$

Résultat :

Bâtiment	Nbr de bâtiments identiques où ces résultats s'appliquent	Simulation 1 de Référence (KWH)	Simulation 2 de Référence (KWH)
Rue Laniel, Salaberry-De-Valleyfield, Québec	1	26408	26408

5.8 Calcul de la quantité de GES relié à l'utilisation de l'électricité

Légende :

		Signification
Variable	A	Consommation Globale pour la Simulation 1 de Référence (Voir Calcul 5.5)
	B	Émission de GES pour la Simulation 1 de Référence
	C	Diminution de la charge énergétique provoquée par le gain total. (Voir Calcul 5.4)
Constante	34.5g de CO₂/KWH	Cette donnée provient d'Hydro-Québec et correspond à l'émission de CO ₂ générée par l'utilisation de combustibles fossiles dans le processus de l'hydro-électricité
	1000000	Facteur de conversion de grammes de CO ₂ à tonnes de CO ₂ .
	10.63668	Facteur de conversion de KWH en m ³ de gaz naturel

Exemple de calcul hydro-électricité :

$$\text{Simulation 1 : } \frac{A(\text{KWH}) \times 34.5 \text{ g de CO}_2/\text{KWH}}{1000000} = B(T)$$

$$\text{Simulation 2 : } = B(T) - (B(T) \times C(\%)) = \text{GES après économie (T)}$$

Exemple de calcul gaz :

$$\text{Simulation 1 et 2 : } \frac{A/10.63668(\text{m}^3) \times 2445 \text{ g de CO}_2/\text{m}^3}{1000000} = B(T)$$

Résultats :

GES Gaz Simulation 1 de Référence (T)	GES Gaz Simulation 2 de Concept (T)	GES Hydro- électricité Simulation 1 de Référence (T)	GES Hydro- électricité Simulation 2 de Concept (T)	GES Totaux Simulation 1 de Référence (T)	GES Totaux Simulation 2 de Concept (T)
24.3	10.4	14.6	8.6	38.9	19.0

Note 1 : Calculés à partir des résultats du Calcul 5.5.

5.9 Conversion de KWH en GJ pour la consommation globale d'hydro-électricité ET de gaz

Légende :

		Signification
Variable	A	Consommation Globale pour la Simulation 1 de Référence (Voir Calcul 5.5)
	B	Consommation Globale pour la Simulation 2 de Concept (Voir Calcul 5.5)
Constante	0.0036	Facteur de conversion de KWH à GJ.

Exemple de calcul :

$$\text{Simulation 1 : } A(\text{KWH}) \times 0.0036(\text{GJ}/\text{KWH}) = \text{Consommation globale(GJ)}$$

$$\text{Simulation 2 : } B(\text{KWH}) \times 0.0036(\text{GJ}/\text{KWH}) = \text{Consommation globale(GJ)}$$

Résultats :

Bâtiment	Nbr de bâtiments identiques où ces résultats s'appliquent	Consommation Simulation 1 de Référence (GJ)	Consommation Simulation 2 de Concept (GJ)
Rue Laniel, Salaberry-De-Valleyfield, Québec	1	1901	1127

6 ANALYSE ET RÉSULTATS FINAUX

6.1 Récapitulatif :

Tableau 13 : Récapitulatif de la consommation électrique avant et après optimisation énergétique

Définition	Valeurs (KWH)						Commentaire
Consommation d'électricité et de gaz totale annuelle pour le chauffage, la climatisation et le conditionnement de l'air.	Gaz		Élec Biénergie		Élec Standard		Voir Tableau 9
	Initiale	Optimisée	Initiale	Optimisée	Initiale	Optimisée	
	0	0	0	0	253519	156996	
Estimation de la consommation annuelle globale de l'immeuble à partir de la consommation en chauffage, climatisation et conditionnement de l'air.	Gaz		Hydro-Électricité				Voir point 6.2
	Initiale	Optimisée	Initiale		Optimisée		
	105633	45118	422532		267926		
Estimation de la consommation d'électricité annuelle pour l'eau chaude et de l'économie suite à l'ajout d'équipement de plomberie à faible débit.	Gaz		Hydro-Électricité				Voir point 6.3
	Initiale	Optimisée	Initiale		Optimisée		
	105633	45118	0		0		
Estimation de la consommation d'électricité annuelle pour l'éclairage et de l'économie suite à l'ajout de lumière haute efficacité.	Hydro-Électricité						Voir point 6.4
	Initiale			Optimisée			
	26408			26408			

- 6.2 Il est très difficile d'évaluer la part d'électricité qu'utilisent le chauffage de l'eau chaude, l'éclairage, les électroménagers, les appareils électroniques et les autres charges, car ces éléments sont sous le contrôle des occupants. Il est alors plus précis et fiable de se baser sur les statistiques connues et éprouvées d'Hydro-Québec (Voir Figure 1).

Pour obtenir la consommation annuelle globale, il faut donc extrapoler à partir de données connues, c'est-à-dire celles de la consommation d'électricité totale annuelle pour le chauffage, la climatisation et le conditionnement de l'air qui proviennent du logiciel HAP Carrier. La logique est celle d'une règle de trois. Si les KWH du chauffage et de la climatisation correspondent à 48% de la facture d'électricité selon Hydro-Québec (Voir Figure 1), quel serait le nombre de KWH équivalant à 100% de la facture.

- 6.3 Pour l'estimation de la consommation annuelle du chauffage de l'eau, la part qu'occupe ce dernier dans la facture totale d'électricité selon Hydro-Québec (20%, Voir Figure 1) est multipliée par l'estimation de la consommation annuelle globale.
- 6.4 Pour l'estimation de la consommation annuelle de l'éclairage, la part qu'occupe ce dernier dans la facture totale d'électricité selon Hydro-Québec (5%, Voir Figure 1) est multipliée par l'estimation de la consommation annuelle globale.

Tableau 11 : Résultats finaux des simulations en GJ prenant en considération le nombre de bâtiments identiques

	Immeuble évalué (E)	Immeuble de référence (R)	Économies d'énergie (en %) (R-E)/R x 100
Consommation d'énergie annuelle totale (GJ/année)	1127	1901	40.73
Émissions de gaz à effet de serre annuelles totales (nombre de tonnes d'équivalent CO2 par année)	19.0	38.9	51.08

7 CONCLUSION

- 7.1 La conception de l'immeuble du présent rapport dépasse le pourcentage d'efficacité énergétique demandé par le niveau 3 de l'APH-Select, soit de 40% par rapport au bâtiment existant tel qu'il a été construit. Le projet est donc conforme aux demandent de l'APH-Select Niveau 3 pour une construction existante.

- 7.2 Par conséquent, le client fera financer son bâtiment par un programme correspondant au Niveau 3 de l'APH-Select.

Tableau 12 : Spécifications finales des composantes architecturales et des systèmes électromécaniques

Bâtiment	Nombre de bâtiments identiques	Spécification				Statut par rapport à la Simulation 1
Rue Laniel, Salaberry-De-Valleyfield, Québec	1	Résistance Thermique (R)				Idem
		Murs extérieurs	Murs sous-sol	Toiture	Dalle	
		24.5	17	41	10	
		Échangeur d'air				N/A
		Efficacité (%) =	78	CFM =	100	
		Thermopompes				Améliorée
		MBH	SEER2	COP	T (°F) Min.	
		9	28.1	3.81	-22	
		12	28.1	3.81	-22	
		24	21.5	3.4	N/A	
		N/A	N/A	N/A	N/A	
		Fenêtres et Porte Vitrées				Idem
		U =	0.28	SC =	0.72	
		Débit des appareils de plomberie				Amélioré
		USGPM =	Douches 1.5 Éviers 1 Lavabos 0.5			
		Éclairage DEL				N/A
		Lumens/Watt =		N/A		
		----- Système de chauffage auxiliaire Plinthe Électrique				Idem

Tableau 13 : Emplacement des systèmes de chauffage/climatisation

		Systèmes VRF			
		MBH	EER	COP	Récupération d'énergie (%)
Zones	N/A	N/A	N/A	N/A	N/A
	N/A	N/A	N/A	N/A	N/A
	N/A	N/A	N/A	N/A	N/A
	N/A	N/A	N/A	N/A	N/A
		Thermopompes Bi-Bloc			
		MBH	SEER	COP	T (°F) Min.
Zones	Logement du troisième étage	12	30.5	3.8	-22
	Logement du deuxième étage	9	38	4.47	-22
	Trois logements du rez-de-chaussée	9	38	4.47	-22
	Stationnement sous-terrain	24	21.5	3.4	-22

7.3 Sceau de l'ingénieur

Approuvé par Charles Morissette ing.

CM/cm



Design Weather Parameters

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

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Design Parameters:

Location **St-Anicet 1, QC, Canada**
 Latitude **45.12** °N (+ : north, - : south)
 Longitude **-74.29** °E (+ : east, - : west)
 Elevation **161.0** ft
 Climate Zone **6A - Cold Humid**
 Local Time Zone **-5.0** hours from GMT (+ : east, - : west)
 Summer Design Condition **0.4% Cooling**
 Summer Design Dry-Bulb **87.0** F
 Summer Coincident Wet-Bulb **72.8** F
 Summer Daily Range **20.2** F
 Hottest Month **July**
 Winter Design Condition **99.6% Heating**
 Winter Design Dry-Bulb **-12.3** F
 Winter Design Wet-Bulb **-13.2** F
 Outdoor Air CO2 Level **400** ppm
 Average Ground Reflectance **0.20**
 Soil Conductivity **0.800** BTU/(hr ft F)
 Design Cooling Months **January to December**
 Consider Daylight Savings Time **Yes**
 Daylight Savings Begins **March 12**
 Daylight Savings Ends **November 5**
 Simulation Weather Data **St Anicet (TMYx_2004_2018)**
 Current Data is **ASHRAE Default**

Design Day Maximum Solar Fluxes

(The flux values are expressed in BTU/(hr sqft))

Month	N	NNE	NE	ENE	E	ESE	SE	SSE	S
January	18.1	18.1	23.2	89.3	164.8	227.4	268.9	287.4	293.6
February	24.1	24.1	56.7	138.0	200.1	255.2	277.8	287.0	287.9
March*	29.1	35.6	112.0	174.4	234.6	261.7	271.3	262.7	254.8
April*	33.3	89.4	153.5	213.7	244.1	255.1	240.2	218.4	205.3
May*	53.3	121.1	181.0	224.3	244.2	236.4	208.7	179.7	164.7
June*	57.9	122.8	174.1	214.3	227.3	218.1	189.5	159.6	143.9
July*	47.0	112.5	167.0	211.6	227.1	224.7	200.3	172.4	157.6
August*	33.3	79.3	142.8	195.7	225.1	237.2	225.7	205.9	193.5
September*	28.2	34.9	102.7	164.5	214.3	244.1	251.4	244.4	237.8
October*	22.1	22.1	57.2	118.2	187.2	229.7	258.7	266.2	265.9
November	17.2	17.2	17.2	84.5	147.3	208.7	245.8	268.1	273.1
December	15.8	15.8	15.8	65.6	136.5	198.4	243.7	266.2	274.8
Month	SSW	SW	WSW	W	WNW	NW	NNW	HOR	Mult
January	289.0	265.2	228.3	159.1	93.5	18.1	18.1	135.5	1.00
February	289.3	282.0	250.0	205.9	133.6	62.6	24.1	186.3	1.00
March*	262.9	271.3	263.9	233.1	178.0	112.0	35.2	233.1	1.00
April*	218.5	241.0	255.2	242.9	213.6	155.8	88.0	272.3	1.00
May*	180.3	210.5	237.5	242.3	225.9	178.1	121.6	291.3	1.00
June*	159.8	189.8	218.3	226.8	214.6	173.1	122.8	287.7	1.00
July*	172.2	199.6	224.4	228.5	211.2	165.8	112.8	281.7	1.00
August*	205.9	225.6	237.3	224.7	195.9	142.5	79.7	258.9	1.00
September*	243.8	250.9	240.6	216.4	163.0	102.2	35.4	219.7	1.00
October*	263.8	256.6	233.4	182.1	124.4	53.4	22.1	169.3	1.00
November	267.5	248.7	205.5	151.8	76.6	22.5	17.2	125.4	1.00
December	267.9	244.7	195.4	138.0	61.0	15.8	15.8	110.5	1.00

Mult. = User-defined solar multiplier factor.

* : Daylight Saving Month

building1

Project: 26909 APH 58 Log, rue Laniel à Salaberry-de-Valleyfield
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1. General Information

Building building1
Default Level-to-Level Height 9' 8 1/8"
Default Ceiling Space Yes
Default Floor-to-Ceiling Height 8' 2"
Default Raised Floor No
Default Window Opening Elevation 1' 6"
Validation Errors None
Notes None

2. Floor Plan Images

2.1. Summary of Floor Plan Images

Floor Plan Image	North Orientation (deg)	Scale	Used in Level(s)
2E - 3E - 4E	-112.0	3/16" = 1'	2E, 3E, 4E
Élévations	0.0	1/8" = 1'	
Élévations arrière	0.0	-	
Orientation -112	-112.4	-	
RDC	-112.0	3/16" = 1'	RDC
Sous-Sol	-112.0	<user-specified scale>	SS

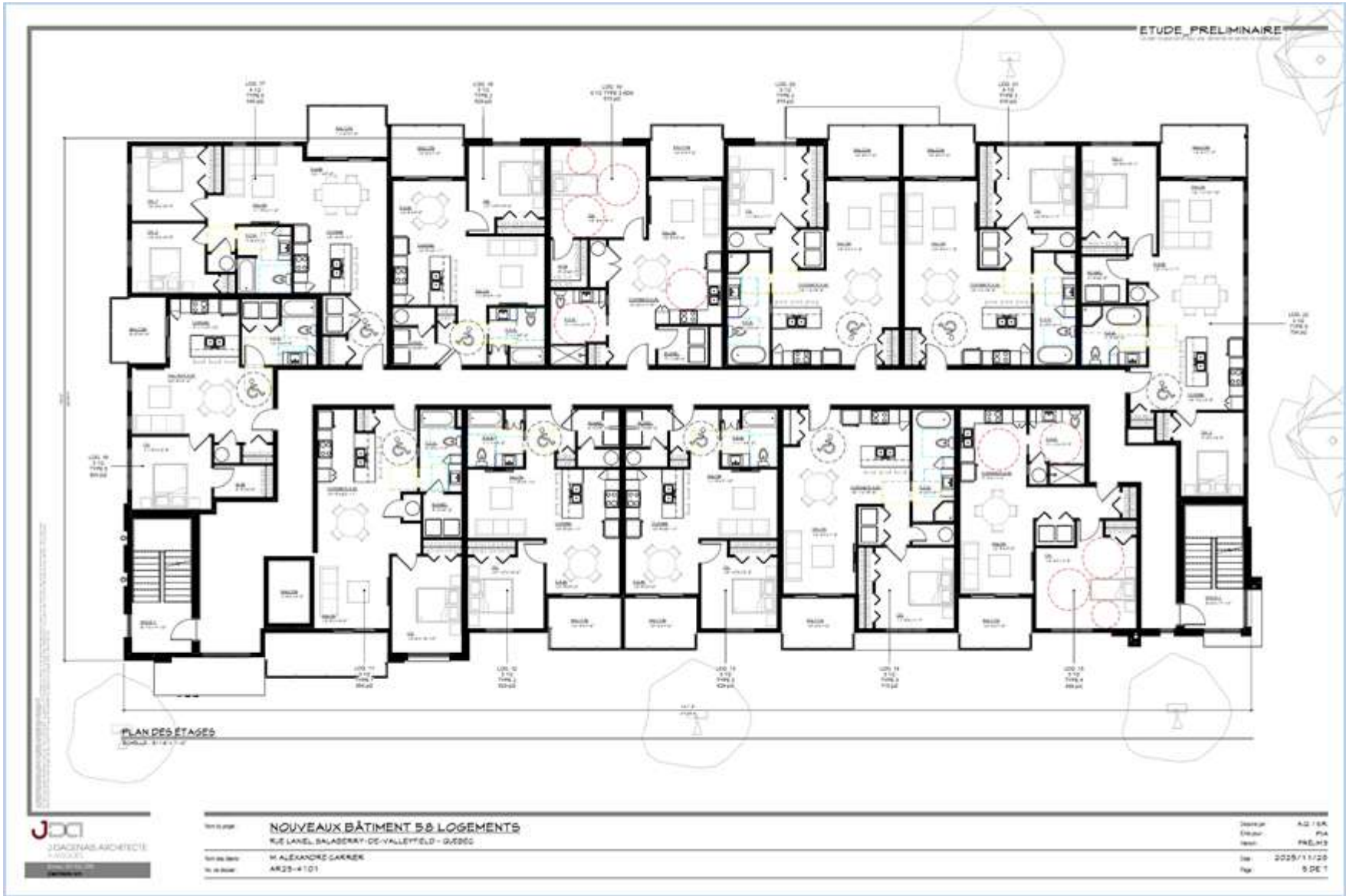
building1

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2.2. Floor Plan Images

2E - 3E - 4E:



building1

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Élévations:



building1

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Élévations arrière:



building1

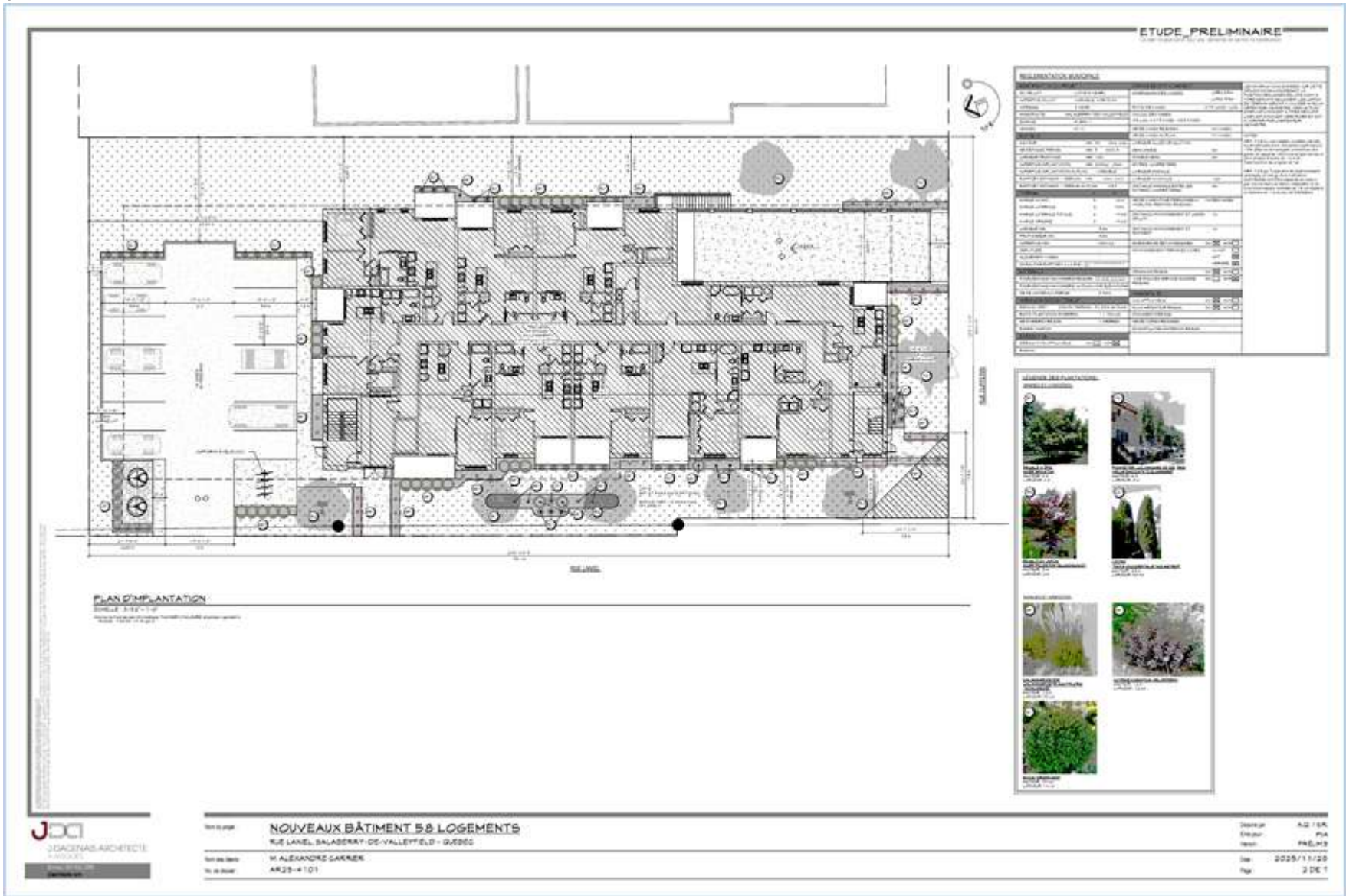
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Orientation -112:

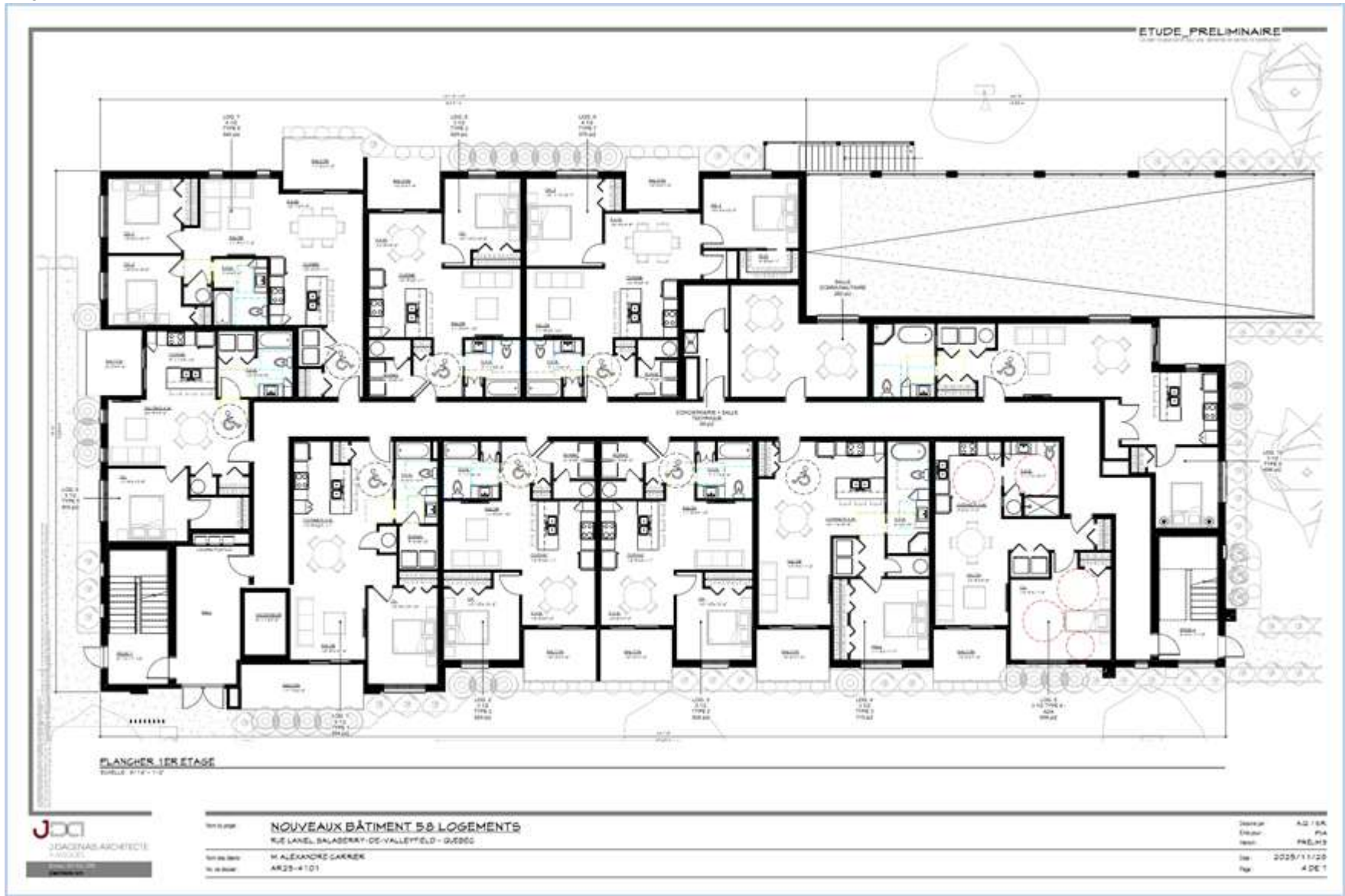


building1

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RDC:

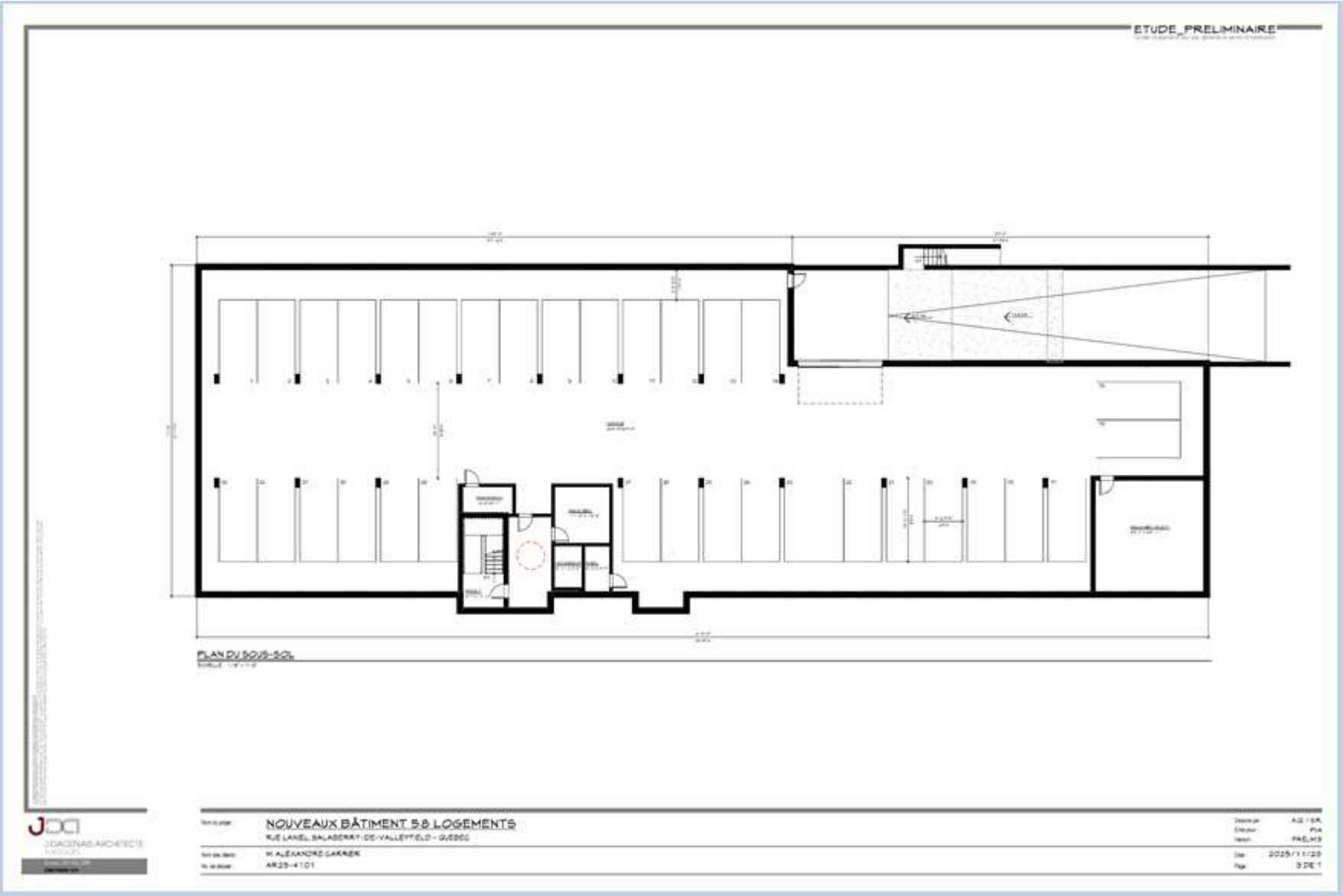


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Sous-Sol:



building1

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3. Levels

Level	Vertical Position	Override General Defaults	Level-to-Level Height	Floor-to-Ceiling Height	Default Opening Elevation	Raised Floor Height	Associated Floor Plan Image
4E	Above 3E	No	9' 8 1/8"	8' 2"	1' 6"	-	2E - 3E - 4E
3E	Above 2E	No	9' 8 1/8"	8' 2"	1' 6"	-	2E - 3E - 4E
2E	Above RDC	No	9' 8 1/8"	8' 2"	1' 6"	-	2E - 3E - 4E
RDC	At-grade	No	9' 8 1/8"	8' 2"	1' 6"	-	RDC
SS	Below RDC	No	9' 8 1/8"	8' 2"	1' 6"	-	Sous-Sol

4. Walls & Spaces, Roofs

4.1. Building Summary

Level	Space Count	Floor Area (sqft)	Volume (cuft)	Interior Wall Gross Area (sqft)	Exterior Wall Gross Area (sqft)
4E	11	10733.8	103734.2	9877.5	5274.1
3E	3	10733.8	103769.6	6660.0	5275.9
2E	3	10733.8	103804.9	6660.0	5274.1
RDC	11	9589.8	92783.9	9208.9	5173.3
SS	2	13477.4	124172.3	826.1	5641.4
Total	30	55268.7	528264.8	33232.5	26638.9

4.2. Building Summary (Roof Levels)

Level	Section Count	Total Roof Area (sqft)	Heat Transfer Area (sqft)	Exterior Wall Gross Area (sqft)
Implied Roofs	12	11036.0	11036.0	0.0

4.3. Space Details

Space	Floor Area (sqft)	Volume (cuft)	Interior Wall Gross Area (sqft)	Exterior Wall Gross Area (sqft)	Multi-Level	Floor-to-Ceiling Height	Raised Floor Height	Notes
4E								
4E #11 à #15	3562.4	29076.1	1496.2	1286.4	No	8' 2"	-	

building1

Project: 26909 APH 58 Log, rue Laniel à Salaberry-de-Valleyfield

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Space	Floor Area (sqft)	Volume (cuft)	Interior Wall Gross Area (sqft)	Exterior Wall Gross Area (sqft)	Multi-Level	Floor-to-Ceiling Height	Raised Floor Height	Notes
4E #16	650.0	5305.0	656.5	303.6	No	8' 2"	-	
4E #17	902.9	7369.3	562.9	578.9	No	8' 2"	-	
4E #18	674.7	5506.8	669.8	228.9	No	8' 2"	-	
4E #19	767.3	6262.8	693.2	252.0	No	8' 2"	-	
4E #20	761.8	6217.4	647.8	293.1	No	8' 2"	-	
4E #21	761.7	6216.8	691.4	250.2	No	8' 2"	-	
4E #22	985.6	8044.5	617.7	617.8	No	8' 2"	-	
4E corridor	1280.6	10451.9	3359.0	157.3	No	8' 2"	-	
4E ESC1	200.4	1635.3	247.1	247.2	No	8' 2"	-	
4E ESC2	186.4	1521.3	236.0	236.0	No	8' 2"	-	
Ceiling/Floor Spaces	-	16127.0	-	822.7	-	-	-	
3E								
3E #11 à #15	3562.4	29076.1	1496.2	1286.4	No	8' 2"	-	
3E #16 à #22	5890.8	48079.4	1804.9	3007.7	No	8' 2"	-	
3E corridor	1280.6	10451.9	3359.0	157.3	No	8' 2"	-	
Ceiling/Floor Spaces	-	16162.2	-	824.5	-	-	-	
2E								
2E #11 à #15	3562.4	29087.8	1496.2	1286.4	No	8' 2"	-	
2E #16 à #22	5890.8	48098.7	1804.9	3007.7	No	8' 2"	-	
2E corridor	1280.6	10456.1	3359.0	157.3	No	8' 2"	-	
Ceiling/Floor Spaces	-	16162.3	-	822.7	-	-	-	
RDC								
RDC #1 à #5	3562.4	29087.8	1496.2	1286.4	No	8' 2"	-	
RDC #10	780.6	6373.7	662.8	662.8	No	8' 2"	-	
RDC #6	672.0	5486.9	659.2	303.6	No	8' 2"	-	
RDC #7	901.2	7358.4	562.9	578.9	No	8' 2"	-	
RDC #8	672.7	5492.4	669.2	228.4	No	8' 2"	-	
RDC #9	1069.0	8728.6	731.4	543.0	No	8' 2"	-	

building1

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Space	Floor Area (sqft)	Volume (cuft)	Interior Wall Gross Area (sqft)	Exterior Wall Gross Area (sqft)	Multi-Level	Floor-to-Ceiling Height	Raised Floor Height	Notes
RDC Corridor	1049.0	8571.9	3050.1	48.2	No	8' 2"	-	
RDC ESC1	200.4	1635.9	247.1	247.2	No	8' 2"	-	
RDC ESC2	183.6	1499.5	233.7	233.7	No	8' 2"	-	
RDC Hall	210.2	1718.4	413.7	109.1	No	8' 2"	-	
RDC Salle Communautaire	288.8	2357.7	482.7	123.4	No	8' 2"	-	
Ceiling/Floor Spaces	-	14472.9	-	808.4	-	-	-	
SS								
SS Garage	13278.7	108465.2	442.0	4652.6	No	8' 2"	-	
SS SAS	198.8	1623.5	384.1	109.2	No	8' 2"	-	
Ceiling/Floor Spaces	-	14083.5	-	879.7	-	-	-	

4.4. Unmodeled Space Details

Unmodeled Spaces	Level	Notes
2E ASC	2E	
3E ASC	3E	
4E ASC	4E	
RDC ASC	RDC	
SS ASC	SS	

4.5. Roof Details

Name	Shape	Total Area (sqft)	Heat Transfer Area (sqft)	Pitch		Notes
				Pitch A	Pitch B	
4E						
Ceiling Space for 4E #11 à #15	Flat	3562.4	3562.4	-	-	
Ceiling Space for 4E #16	Flat	650.0	650.0	-	-	
Ceiling Space for 4E #17	Flat	902.9	902.9	-	-	
Ceiling Space for 4E #18	Flat	674.7	674.7	-	-	
Ceiling Space for 4E #19	Flat	767.3	767.3	-	-	

building1

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Name	Shape	Total Area (sqft)	Heat Transfer Area (sqft)	Pitch		Notes
				Pitch A	Pitch B	
Ceiling Space for 4E #20	Flat	761.8	761.8	-	-	
Ceiling Space for 4E #21	Flat	761.7	761.7	-	-	
Ceiling Space for 4E #22	Flat	985.6	985.6	-	-	
Ceiling Space for 4E corridor	Flat	1280.6	1280.6	-	-	
Ceiling Space for 4E ESC1	Flat	200.4	200.4	-	-	
Ceiling Space for 4E ESC2	Flat	186.4	186.4	-	-	
SS						
Ceiling Space for SS Garage	Flat	302.2	302.2	-	-	

4.6. Summary of Wall Groups

Wall Group	Interior Wall Gross Area (sqft)	Exterior Wall Gross Area (sqft)	Notes
Default	33232.5	26638.9	
Air Walls	0.0	0.0	

5. Openings

5.1. Schedule of Window Openings

Tag	Count	Total Area (sqft)	Width	Height	Elevation	Exterior Shade	Notes
F1	40	1200.4	6'	5'	1' 6"	None	
F2	3	105.0	7'	5'	1' 6"	None	
F3	19	379.8	4'	5'	1' 6"	None	
F4	7	186.7	5' 4"	5'	1' 6"	None	
F5	27	270.3	2'	5'	1' 6"	None	
F6	3	50.0	3' 4"	5'	1' 6"	None	
F7 esc	4	36.7	1' 10"	5'	1' 6"	None	

building1

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5.2. Schedule of Door Openings

Tag	Count	Total Area (sqft)	Width	Height	Shade	Notes
PP	37	1769.8	7'	6' 10"	None	
PP1	7	287.0	6'	6' 10"	None	
PV entrée	1	50.7	6' 4"	8'	None	
PV simple	2	43.3	3' 2"	6' 10"	None	

5.3. Schedule of Skylight Openings

None

a) Space Model REF

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
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1. General Information

Space Model a) Space Model REF
Building building1
Infiltration Model Constant Infiltration
Notes:

2. Spaces

The space model contains 30 spaces with total floor area of 55,269 sqft.

2.1. Ventilation

Index	Space	Level	Floor Area (sqft)	Space Type	Ventilation						
					ASHRAE Standard 62.1-2019 Space Usage	OA Requirement 1		OA Requirement 2		Direct Exhaust	
						Airflow	Units	Airflow	Units	Airflow	Units
1	2E #11 à #15	2E	3562.4	(None)	User Defined	500.0	CFM	0.00	CFM/sqft	0.0	CFM
2	2E #16 à #22	2E	5890.8	(None)	User Defined	700.0	CFM	0.00	CFM/sqft	0.0	CFM
3	2E corridor	2E	1280.6	(None)	RESIDENTIAL: Common corridor	0.0	CFM/person	0.06	CFM/sqft	0.0	CFM
4	3E #11 à #15	3E	3562.4	(None)	User Defined	500.0	CFM	0.00	CFM/sqft	0.0	CFM
5	3E #16 à #22	3E	5890.8	(None)	User Defined	700.0	CFM	0.00	CFM/sqft	0.0	CFM
6	3E corridor	3E	1280.6	(None)	RESIDENTIAL: Common corridor	0.0	CFM/person	0.06	CFM/sqft	0.0	CFM
7	4E #11 à #15	4E	3562.4	(None)	User Defined	500.0	CFM	0.00	CFM/sqft	0.0	CFM
8	4E #16	4E	650.0	(None)	User Defined	100.0	CFM	0.00	CFM/sqft	0.0	CFM
9	4E #17	4E	902.9	(None)	User Defined	100.0	CFM	0.00	CFM/sqft	0.0	CFM
10	4E #18	4E	674.7	(None)	User Defined	100.0	CFM	0.00	CFM/sqft	0.0	CFM
11	4E #19	4E	767.3	(None)	User Defined	100.0	CFM	0.00	CFM/sqft	0.0	CFM
12	4E #20	4E	761.8	(None)	User Defined	100.0	CFM	0.00	CFM/sqft	0.0	CFM
13	4E #21	4E	761.7	(None)	User Defined	100.0	CFM	0.00	CFM/sqft	0.0	CFM
14	4E #22	4E	985.6	(None)	User Defined	100.0	CFM	0.00	CFM/sqft	0.0	CFM
15	4E corridor	4E	1280.6	(None)	RESIDENTIAL: Common corridor	0.0	CFM/person	0.06	CFM/sqft	0.0	CFM
16	4E ESC1	4E	200.4	(None)	User Defined	0.0	CFM/person	0.00	CFM/sqft	0.0	CFM
17	4E ESC2	4E	186.4	(None)	User Defined	0.0	CFM/person	0.00	CFM/sqft	0.0	CFM
18	RDC #1 à #5	RDC	3562.4	(None)	User Defined	500.0	CFM	0.00	CFM/sqft	0.0	CFM
19	RDC #10	RDC	780.6	(None)	User Defined	100.0	CFM	0.00	CFM/sqft	0.0	CFM

a) Space Model REF

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

Prepared by: Groupe CMI

01/26/2026

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Index	Space	Level	Floor Area (sqft)	Space Type	Ventilation						
					ASHRAE Standard 62.1-2019 Space Usage	OA Requirement 1		OA Requirement 2		Direct Exhaust	
						Airflow	Units	Airflow	Units	Airflow	Units
20	RDC #6	RDC	672.0	(None)	User Defined	100.0	CFM	0.00	CFM/sqft	0.0	CFM
21	RDC #7	RDC	901.2	(None)	User Defined	100.0	CFM	0.00	CFM/sqft	0.0	CFM
22	RDC #8	RDC	672.7	(None)	User Defined	100.0	CFM	0.00	CFM/sqft	0.0	CFM
23	RDC #9	RDC	1069.0	(None)	User Defined	100.0	CFM	0.00	CFM/sqft	0.0	CFM
24	RDC Corridor	RDC	1049.0	(None)	RESIDENTIAL: Common corridor	0.0	CFM/person	0.06	CFM/sqft	0.0	CFM
25	RDC ESC1	RDC	200.4	(None)	User Defined	0.0	CFM/person	0.00	CFM/sqft	0.0	CFM
26	RDC ESC2	RDC	183.6	(None)	User Defined	0.0	CFM/person	0.00	CFM/sqft	0.0	CFM
27	RDC Hall	RDC	210.2	(None)	RESIDENTIAL: Common corridor	0.0	CFM/person	0.06	CFM/sqft	0.0	CFM
28	RDC Salle Communautaire	RDC	288.8	(None)	User Defined	100.0	CFM	0.00	CFM/sqft	0.0	CFM
29	SS Garage	SS	13278.7	(None)	User Defined	0.0	CFM/person	0.00	CFM/sqft	0.0	CFM
30	SS SAS	SS	198.8	(None)	RESIDENTIAL: Common corridor	0.0	CFM/person	0.06	CFM/sqft	0.0	CFM

a) Space Model REF

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

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2.2. Overhead Lighting and Daylighting Control

Index	Space	Overhead Lighting							Daylighting Control		
		ASHRAE Standard 90.1-2019		Power	Units	Lighting Type	Schedule	Power Multi.	Control Type	Illum. Setpoint	Units
		Lighting Method	Space Usage								
1	2E #11 à #15	Building Area	User Defined	0.00	W/sqft	Fluorescent: Recessed, no Lens, Unvented	(None)	1.00	Not Used	---	---
2	2E #16 à #22	Building Area	User Defined	0.00	W/sqft	Fluorescent: Recessed, no Lens, Unvented	(None)	1.00	Not Used	---	---
3	2E corridor	Building Area	User Defined	0.00	W/sqft	Fluorescent: Recessed, no Lens, Unvented	(None)	1.00	Not Used	---	---
4	3E #11 à #15	Building Area	User Defined	0.00	W/sqft	Fluorescent: Recessed, no Lens, Unvented	(None)	1.00	Not Used	---	---
5	3E #16 à #22	Building Area	User Defined	0.00	W/sqft	Fluorescent: Recessed, no Lens, Unvented	(None)	1.00	Not Used	---	---
6	3E corridor	Building Area	User Defined	0.00	W/sqft	Fluorescent: Recessed, no Lens, Unvented	(None)	1.00	Not Used	---	---
7	4E #11 à #15	Building Area	User Defined	0.00	W/sqft	Fluorescent: Recessed, no Lens, Unvented	(None)	1.00	Not Used	---	---
8	4E #16	Building Area	User Defined	0.00	W/sqft	Fluorescent: Recessed, no Lens, Unvented	(None)	1.00	Not Used	---	---
9	4E #17	Building Area	User Defined	0.00	W/sqft	Fluorescent: Recessed, no Lens, Unvented	(None)	1.00	Not Used	---	---
10	4E #18	Building Area	User Defined	0.00	W/sqft	Fluorescent: Recessed, no Lens, Unvented	(None)	1.00	Not Used	---	---
11	4E #19	Building Area	User Defined	0.00	W/sqft	Fluorescent: Recessed, no Lens, Unvented	(None)	1.00	Not Used	---	---
12	4E #20	Building Area	User Defined	0.00	W/sqft	Fluorescent: Recessed, no Lens, Unvented	(None)	1.00	Not Used	---	---
13	4E #21	Building Area	User Defined	0.00	W/sqft	Fluorescent: Recessed, no Lens, Unvented	(None)	1.00	Not Used	---	---
14	4E #22	Building Area	User Defined	0.00	W/sqft	Fluorescent: Recessed, no Lens, Unvented	(None)	1.00	Not Used	---	---
15	4E corridor	Building Area	User Defined	0.00	W/sqft	Fluorescent: Recessed, no Lens, Unvented	(None)	1.00	Not Used	---	---
16	4E ESC1	Building Area	User Defined	0.00	W/sqft	Fluorescent: Recessed, no Lens, Unvented	(None)	1.00	Not Used	---	---
17	4E ESC2	Building Area	User Defined	0.00	W/sqft	Fluorescent: Recessed, no Lens, Unvented	(None)	1.00	Not Used	---	---
18	RDC #1 à #5	Building Area	User Defined	0.00	W/sqft	Fluorescent: Recessed, no Lens, Unvented	(None)	1.00	Not Used	---	---
19	RDC #10	Building Area	User Defined	0.00	W/sqft	Fluorescent: Recessed, no Lens, Unvented	(None)	1.00	Not Used	---	---
20	RDC #6	Building Area	User Defined	0.00	W/sqft	Fluorescent: Recessed, no Lens, Unvented	(None)	1.00	Not Used	---	---
21	RDC #7	Building Area	User Defined	0.00	W/sqft	Fluorescent: Recessed, no Lens, Unvented	(None)	1.00	Not Used	---	---

a) Space Model REF

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

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Index	Space	Overhead Lighting							Daylighting Control		
		ASHRAE Standard 90.1-2019		Power	Units	Lighting Type	Schedule	Power Multi.	Control Type	Illum. Setpoint	Units
		Lighting Method	Space Usage								
22	RDC #8	Building Area	User Defined	0.00	W/sqft	Fluorescent: Recessed, no Lens, Unvented	(None)	1.00	Not Used	---	---
23	RDC #9	Building Area	User Defined	0.00	W/sqft	Fluorescent: Recessed, no Lens, Unvented	(None)	1.00	Not Used	---	---
24	RDC Corridor	Building Area	User Defined	0.00	W/sqft	Fluorescent: Recessed, no Lens, Unvented	(None)	1.00	Not Used	---	---
25	RDC ESC1	Building Area	User Defined	0.00	W/sqft	Fluorescent: Recessed, no Lens, Unvented	(None)	1.00	Not Used	---	---
26	RDC ESC2	Building Area	User Defined	0.00	W/sqft	Fluorescent: Recessed, no Lens, Unvented	(None)	1.00	Not Used	---	---
27	RDC Hall	Building Area	User Defined	0.00	W/sqft	Fluorescent: Recessed, no Lens, Unvented	(None)	1.00	Not Used	---	---
28	RDC Salle Communautaire	Building Area	User Defined	0.00	W/sqft	Fluorescent: Recessed, no Lens, Unvented	(None)	1.00	Not Used	---	---
29	SS Garage	Building Area	User Defined	0.00	W/sqft	Fluorescent: Recessed, no Lens, Unvented	(None)	1.00	Not Used	---	---
30	SS SAS	Building Area	User Defined	0.00	W/sqft	Fluorescent: Recessed, no Lens, Unvented	(None)	1.00	Not Used	---	---

a) Space Model REF

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

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2.3. Task Lighting, Electric Equipment and Miscellaneous Heat Gain

Index	Space	Task Lighting			Electric Equipment			Miscellaneous Heat Gain			
		Power	Units	Schedule	Power	Units	Schedule	Sens. (BTU/hr)	Schedule	Latent (BTU/hr)	Schedule
1	2E #11 à #15	0.00	W/sqft	(None)	0.00	W/sqft	(None)	0	(None)	0	(None)
2	2E #16 à #22	0.00	W/sqft	(None)	0.00	W/sqft	(None)	0	(None)	0	(None)
3	2E corridor	0.00	W/sqft	(None)	0.00	W/sqft	(None)	0	(None)	0	(None)
4	3E #11 à #15	0.00	W/sqft	(None)	0.00	W/sqft	(None)	0	(None)	0	(None)
5	3E #16 à #22	0.00	W/sqft	(None)	0.00	W/sqft	(None)	0	(None)	0	(None)
6	3E corridor	0.00	W/sqft	(None)	0.00	W/sqft	(None)	0	(None)	0	(None)
7	4E #11 à #15	0.00	W/sqft	(None)	0.00	W/sqft	(None)	0	(None)	0	(None)
8	4E #16	0.00	W/sqft	(None)	0.00	W/sqft	(None)	0	(None)	0	(None)
9	4E #17	0.00	W/sqft	(None)	0.00	W/sqft	(None)	0	(None)	0	(None)
10	4E #18	0.00	W/sqft	(None)	0.00	W/sqft	(None)	0	(None)	0	(None)
11	4E #19	0.00	W/sqft	(None)	0.00	W/sqft	(None)	0	(None)	0	(None)
12	4E #20	0.00	W/sqft	(None)	0.00	W/sqft	(None)	0	(None)	0	(None)
13	4E #21	0.00	W/sqft	(None)	0.00	W/sqft	(None)	0	(None)	0	(None)
14	4E #22	0.00	W/sqft	(None)	0.00	W/sqft	(None)	0	(None)	0	(None)
15	4E corridor	0.00	W/sqft	(None)	0.00	W/sqft	(None)	0	(None)	0	(None)
16	4E ESC1	0.00	W/sqft	(None)	0.00	W/sqft	(None)	0	(None)	0	(None)
17	4E ESC2	0.00	W/sqft	(None)	0.00	W/sqft	(None)	0	(None)	0	(None)
18	RDC #1 à #5	0.00	W/sqft	(None)	0.00	W/sqft	(None)	0	(None)	0	(None)
19	RDC #10	0.00	W/sqft	(None)	0.00	W/sqft	(None)	0	(None)	0	(None)
20	RDC #6	0.00	W/sqft	(None)	0.00	W/sqft	(None)	0	(None)	0	(None)
21	RDC #7	0.00	W/sqft	(None)	0.00	W/sqft	(None)	0	(None)	0	(None)
22	RDC #8	0.00	W/sqft	(None)	0.00	W/sqft	(None)	0	(None)	0	(None)
23	RDC #9	0.00	W/sqft	(None)	0.00	W/sqft	(None)	0	(None)	0	(None)
24	RDC Corridor	0.00	W/sqft	(None)	0.00	W/sqft	(None)	0	(None)	0	(None)
25	RDC ESC1	0.00	W/sqft	(None)	0.00	W/sqft	(None)	0	(None)	0	(None)
26	RDC ESC2	0.00	W/sqft	(None)	0.00	W/sqft	(None)	0	(None)	0	(None)

a) Space Model REF

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

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Index	Space	Task Lighting			Electric Equipment			Miscellaneous Heat Gain			
		Power	Units	Schedule	Power	Units	Schedule	Sens. (BTU/hr)	Schedule	Latent (BTU/hr)	Schedule
27	RDC Hall	0.00	W/sqft	(None)	0.00	W/sqft	(None)	0	(None)	0	(None)
28	RDC Salle Communautaire	0.00	W/sqft	(None)	0.00	W/sqft	(None)	0	(None)	0	(None)
29	SS Garage	0.00	W/sqft	(None)	0.00	W/sqft	(None)	0	(None)	0	(None)
30	SS SAS	0.00	W/sqft	(None)	0.00	W/sqft	(None)	0	(None)	0	(None)

a) Space Model REF

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

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2.4. Occupancy and Infiltration

Index	Space	Occupants						Infiltration				
		Occupancy	Units	Schedule	Activity Level	Sens. (BTU/hr/person)	Latent (BTU/hr/person)	Constant Cooling Airflow	Constant Heating Airflow	Constant Simulation Airflow	Units	Occurs
1	2E #11 à #15	0	People	(None)	User Defined	245.0	205.0	0.00	0.10	0.10	CFM/sqft	All Hours
2	2E #16 à #22	0	People	(None)	User Defined	245.0	205.0	0.00	0.10	0.10	CFM/sqft	All Hours
3	2E corridor	0	People	(None)	User Defined	245.0	205.0	0.00	0.10	0.10	CFM/sqft	All Hours
4	3E #11 à #15	0	People	(None)	User Defined	245.0	205.0	0.00	0.10	0.10	CFM/sqft	All Hours
5	3E #16 à #22	0	People	(None)	User Defined	245.0	205.0	0.00	0.10	0.10	CFM/sqft	All Hours
6	3E corridor	0	People	(None)	User Defined	245.0	205.0	0.00	0.10	0.10	CFM/sqft	All Hours
7	4E #11 à #15	0	People	(None)	User Defined	245.0	205.0	0.00	0.10	0.10	CFM/sqft	All Hours
8	4E #16	0	People	(None)	User Defined	245.0	205.0	0.00	0.10	0.10	CFM/sqft	All Hours
9	4E #17	0	People	(None)	User Defined	245.0	205.0	0.00	0.10	0.10	CFM/sqft	All Hours
10	4E #18	0	People	(None)	User Defined	245.0	205.0	0.00	0.10	0.10	CFM/sqft	All Hours
11	4E #19	0	People	(None)	User Defined	245.0	205.0	0.00	0.10	0.10	CFM/sqft	All Hours
12	4E #20	0	People	(None)	User Defined	245.0	205.0	0.00	0.10	0.10	CFM/sqft	All Hours
13	4E #21	0	People	(None)	User Defined	245.0	205.0	0.00	0.10	0.10	CFM/sqft	All Hours
14	4E #22	0	People	(None)	User Defined	245.0	205.0	0.00	0.10	0.10	CFM/sqft	All Hours
15	4E corridor	0	People	(None)	User Defined	245.0	205.0	0.00	0.10	0.10	CFM/sqft	All Hours
16	4E ESC1	0	People	(None)	User Defined	245.0	205.0	0.00	0.10	0.10	CFM/sqft	All Hours
17	4E ESC2	0	People	(None)	User Defined	245.0	205.0	0.00	0.10	0.10	CFM/sqft	All Hours
18	RDC #1 à #5	0	People	(None)	User Defined	245.0	205.0	0.00	0.10	0.10	CFM/sqft	All Hours
19	RDC #10	0	People	(None)	User Defined	245.0	205.0	0.00	0.10	0.10	CFM/sqft	All Hours
20	RDC #6	0	People	(None)	User Defined	245.0	205.0	0.00	0.10	0.10	CFM/sqft	All Hours
21	RDC #7	0	People	(None)	User Defined	245.0	205.0	0.00	0.10	0.10	CFM/sqft	All Hours
22	RDC #8	0	People	(None)	User Defined	245.0	205.0	0.00	0.10	0.10	CFM/sqft	All Hours
23	RDC #9	0	People	(None)	User Defined	245.0	205.0	0.00	0.10	0.10	CFM/sqft	All Hours
24	RDC Corridor	0	People	(None)	User Defined	245.0	205.0	0.00	0.10	0.10	CFM/sqft	All Hours
25	RDC ESC1	0	People	(None)	User Defined	245.0	205.0	0.00	0.10	0.10	CFM/sqft	All Hours
26	RDC ESC2	0	People	(None)	User Defined	245.0	205.0	0.00	0.10	0.10	CFM/sqft	All Hours

a) Space Model REF

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

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Index	Space	Occupants						Infiltration				
		Occupancy	Units	Schedule	Activity Level	Sens. (BTU/hr/person)	Latent (BTU/hr/person)	Constant Cooling Airflow	Constant Heating Airflow	Constant Simulation Airflow	Units	Occurs
27	RDC Hall	0	People	(None)	User Defined	245.0	205.0	0.00	0.10	0.10	CFM/sqft	All Hours
28	RDC Salle Communautaire	0	People	(None)	User Defined	245.0	205.0	0.00	0.10	0.10	CFM/sqft	All Hours
29	SS Garage	0	People	(None)	User Defined	245.0	205.0	0.0	0.0	0.0	CFM	Unoccupied
30	SS SAS	0	People	(None)	User Defined	245.0	205.0	0.0	0.0	0.0	CFM	Unoccupied

a) Space Model REF

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

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3. Zoning

Zone	Space	Level
2E #11 à #15		
	2E #11 à #15	2E
2E #16 à #22		
	2E #16 à #22	2E
2E corridor		
	2E corridor	2E
3E #11 à #15		
	3E #11 à #15	3E
3E #16 à #22		
	3E #16 à #22	3E
3E corridor		
	3E corridor	3E
4E #11 à #15		
	4E #11 à #15	4E
4E #16		
	4E #16	4E
4E #17		
	4E #17	4E
4E #18		
	4E #18	4E
4E #19		
	4E #19	4E
4E #20		
	4E #20	4E
4E #21		
	4E #21	4E
4E #22		

a) Space Model REF

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Prepared by: Groupe CMI

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Zone	Space	Level
	4E #22	4E
4E corridor		
	4E corridor	4E
4E ESC1		
	4E ESC1	4E
4E ESC2		
	4E ESC2	4E
RDC #1 à #5		
	RDC #1 à #5	RDC
RDC #10		
	RDC #10	RDC
RDC #6		
	RDC #6	RDC
RDC #7		
	RDC #7	RDC
RDC #8		
	RDC #8	RDC
RDC #9		
	RDC #9	RDC
RDC Corridor		
	RDC Corridor	RDC
RDC ESC1		
	RDC ESC1	RDC
RDC ESC2		
	RDC ESC2	RDC
RDC Hall		
	RDC Hall	RDC
RDC Salle Communautaire		
	RDC Salle Communautaire	RDC

a) Space Model REF

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

Prepared by: Groupe CMI

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Zone	Space	Level
SS Garage		
	SS Garage	SS
SS SAS		
	SS SAS	SS
Unconditioned (no spaces)		
Unassigned (no spaces)		

4. Assemblies

Category	Surface Group	Selected Assembly
Exterior Above Grade Wall		
	Default	R=24.5
Exterior Below Grade Wall		
	Default	R=17
Interior Wall		
	Default	Default Wall
Roof		
	Default	R=41
Ceiling		
	Interior Ceilings	Default Ceiling
Floor Above Space		
	Interior Floors Above Space	Default Floor
Slab Floor On Grade		
	At-Grade Floors	R=7.5
Slab Floor Below Grade		
	Below Grade Floors	R=7.5.
Floor Above Ambient		
	Floor Above Ambient	R=24.5.

a) Space Model REF

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

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5. Windows & Doors

Category	Tag	Width x Height, Elevation	Selected Assembly
Window			
	F1	6' x 5' , 1' 6"	U=0.3 SHGC=0.35
	F2	7' x 5' , 1' 6"	U=0.3 SHGC=0.35
	F3	4' x 5' , 1' 6"	U=0.3 SHGC=0.35
	F4	5' 4" x 5' , 1' 6"	U=0.3 SHGC=0.35
	F5	2' x 5' , 1' 6"	U=0.3 SHGC=0.35
	F6	3' 4" x 5' , 1' 6"	U=0.3 SHGC=0.35
	F7 esc	1' 10" x 5' , 1' 6"	U=0.3 SHGC=0.35
Door			
	PP	7' x 6' 10"	U=0.3 SHGC=0.35
	PP1	6' x 6' 10"	U=0.3 SHGC=0.35
	PV entrée	6' 4" x 8'	U=0.3 SHGC=0.35
	PV simple	3' 2" x 6' 10"	U=0.3 SHGC=0.35

ASHRAE 90.1 Vertical Glazing Summary:

Total Window Opening Glazing Area 2228.8 sqft
 Total Door Opening Glazing Area 2150.8 sqft
 Total Gross Above Grade Wall Area 20997.5 sqft
 Window-to-wall Ratio (WWR) 16.4 %

b) Space Model CPT

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

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1. General Information

Space Model b) Space Model CPT
Building building1
Infiltration Model Constant Infiltration
Notes:

2. Spaces

The space model contains 30 spaces with total floor area of 55,269 sqft.

2.1. Ventilation

Index	Space	Level	Floor Area (sqft)	Space Type	Ventilation						
					ASHRAE Standard 62.1-2019 Space Usage	OA Requirement 1		OA Requirement 2		Direct Exhaust	
						Airflow	Units	Airflow	Units	Airflow	Units
1	2E #11 à #15	2E	3562.4	(None)	User Defined	500.0	CFM	0.00	CFM/sqft	0.0	CFM
2	2E #16 à #22	2E	5890.8	(None)	User Defined	700.0	CFM	0.00	CFM/sqft	0.0	CFM
3	2E corridor	2E	1280.6	(None)	RESIDENTIAL: Common corridor	0.0	CFM/person	0.06	CFM/sqft	0.0	CFM
4	3E #11 à #15	3E	3562.4	(None)	User Defined	500.0	CFM	0.00	CFM/sqft	0.0	CFM
5	3E #16 à #22	3E	5890.8	(None)	User Defined	700.0	CFM	0.00	CFM/sqft	0.0	CFM
6	3E corridor	3E	1280.6	(None)	RESIDENTIAL: Common corridor	0.0	CFM/person	0.06	CFM/sqft	0.0	CFM
7	4E #11 à #15	4E	3562.4	(None)	User Defined	500.0	CFM	0.00	CFM/sqft	0.0	CFM
8	4E #16	4E	650.0	(None)	User Defined	100.0	CFM	0.00	CFM/sqft	0.0	CFM
9	4E #17	4E	902.9	(None)	User Defined	100.0	CFM	0.00	CFM/sqft	0.0	CFM
10	4E #18	4E	674.7	(None)	User Defined	100.0	CFM	0.00	CFM/sqft	0.0	CFM
11	4E #19	4E	767.3	(None)	User Defined	100.0	CFM	0.00	CFM/sqft	0.0	CFM
12	4E #20	4E	761.8	(None)	User Defined	100.0	CFM	0.00	CFM/sqft	0.0	CFM
13	4E #21	4E	761.7	(None)	User Defined	100.0	CFM	0.00	CFM/sqft	0.0	CFM
14	4E #22	4E	985.6	(None)	User Defined	100.0	CFM	0.00	CFM/sqft	0.0	CFM
15	4E corridor	4E	1280.6	(None)	RESIDENTIAL: Common corridor	0.0	CFM/person	0.06	CFM/sqft	0.0	CFM
16	4E ESC1	4E	200.4	(None)	User Defined	0.0	CFM/person	0.00	CFM/sqft	0.0	CFM
17	4E ESC2	4E	186.4	(None)	User Defined	0.0	CFM/person	0.00	CFM/sqft	0.0	CFM

b) Space Model CPT

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

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Index	Space	Level	Floor Area (sqft)	Space Type	Ventilation						
					ASHRAE Standard 62.1-2019 Space Usage	OA Requirement 1		OA Requirement 2		Direct Exhaust	
						Airflow	Units	Airflow	Units	Airflow	Units
18	RDC #1 à #5	RDC	3562.4	(None)	User Defined	500.0	CFM	0.00	CFM/sqft	0.0	CFM
19	RDC #10	RDC	780.6	(None)	User Defined	100.0	CFM	0.00	CFM/sqft	0.0	CFM
20	RDC #6	RDC	672.0	(None)	User Defined	100.0	CFM	0.00	CFM/sqft	0.0	CFM
21	RDC #7	RDC	901.2	(None)	User Defined	100.0	CFM	0.00	CFM/sqft	0.0	CFM
22	RDC #8	RDC	672.7	(None)	User Defined	100.0	CFM	0.00	CFM/sqft	0.0	CFM
23	RDC #9	RDC	1069.0	(None)	User Defined	100.0	CFM	0.00	CFM/sqft	0.0	CFM
24	RDC Corridor	RDC	1049.0	(None)	RESIDENTIAL: Common corridor	0.0	CFM/person	0.06	CFM/sqft	0.0	CFM
25	RDC ESC1	RDC	200.4	(None)	User Defined	0.0	CFM/person	0.00	CFM/sqft	0.0	CFM
26	RDC ESC2	RDC	183.6	(None)	User Defined	0.0	CFM/person	0.00	CFM/sqft	0.0	CFM
27	RDC Hall	RDC	210.2	(None)	RESIDENTIAL: Common corridor	0.0	CFM/person	0.06	CFM/sqft	0.0	CFM
28	RDC Salle Communautaire	RDC	288.8	(None)	User Defined	100.0	CFM	0.00	CFM/sqft	0.0	CFM
29	SS Garage	SS	13278.7	(None)	User Defined	0.0	CFM/person	0.00	CFM/sqft	0.0	CFM
30	SS SAS	SS	198.8	(None)	RESIDENTIAL: Common corridor	0.0	CFM/person	0.06	CFM/sqft	0.0	CFM

b) Space Model CPT

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

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2.2. Overhead Lighting and Daylighting Control

Index	Space	Overhead Lighting							Daylighting Control		
		ASHRAE Standard 90.1-2019		Power	Units	Lighting Type	Schedule	Power Multi.	Control Type	Illum. Setpoint	Units
		Lighting Method	Space Usage								
1	2E #11 à #15	Building Area	User Defined	0.00	W/sqft	Fluorescent: Recessed, no Lens, Unvented	(None)	1.00	Not Used	---	---
2	2E #16 à #22	Building Area	User Defined	0.00	W/sqft	Fluorescent: Recessed, no Lens, Unvented	(None)	1.00	Not Used	---	---
3	2E corridor	Building Area	User Defined	0.00	W/sqft	Fluorescent: Recessed, no Lens, Unvented	(None)	1.00	Not Used	---	---
4	3E #11 à #15	Building Area	User Defined	0.00	W/sqft	Fluorescent: Recessed, no Lens, Unvented	(None)	1.00	Not Used	---	---
5	3E #16 à #22	Building Area	User Defined	0.00	W/sqft	Fluorescent: Recessed, no Lens, Unvented	(None)	1.00	Not Used	---	---
6	3E corridor	Building Area	User Defined	0.00	W/sqft	Fluorescent: Recessed, no Lens, Unvented	(None)	1.00	Not Used	---	---
7	4E #11 à #15	Building Area	User Defined	0.00	W/sqft	Fluorescent: Recessed, no Lens, Unvented	(None)	1.00	Not Used	---	---
8	4E #16	Building Area	User Defined	0.00	W/sqft	Fluorescent: Recessed, no Lens, Unvented	(None)	1.00	Not Used	---	---
9	4E #17	Building Area	User Defined	0.00	W/sqft	Fluorescent: Recessed, no Lens, Unvented	(None)	1.00	Not Used	---	---
10	4E #18	Building Area	User Defined	0.00	W/sqft	Fluorescent: Recessed, no Lens, Unvented	(None)	1.00	Not Used	---	---
11	4E #19	Building Area	User Defined	0.00	W/sqft	Fluorescent: Recessed, no Lens, Unvented	(None)	1.00	Not Used	---	---
12	4E #20	Building Area	User Defined	0.00	W/sqft	Fluorescent: Recessed, no Lens, Unvented	(None)	1.00	Not Used	---	---
13	4E #21	Building Area	User Defined	0.00	W/sqft	Fluorescent: Recessed, no Lens, Unvented	(None)	1.00	Not Used	---	---
14	4E #22	Building Area	User Defined	0.00	W/sqft	Fluorescent: Recessed, no Lens, Unvented	(None)	1.00	Not Used	---	---
15	4E corridor	Building Area	User Defined	0.00	W/sqft	Fluorescent: Recessed, no Lens, Unvented	(None)	1.00	Not Used	---	---
16	4E ESC1	Building Area	User Defined	0.00	W/sqft	Fluorescent: Recessed, no Lens, Unvented	(None)	1.00	Not Used	---	---
17	4E ESC2	Building Area	User Defined	0.00	W/sqft	Fluorescent: Recessed, no Lens, Unvented	(None)	1.00	Not Used	---	---
18	RDC #1 à #5	Building Area	User Defined	0.00	W/sqft	Fluorescent: Recessed, no Lens, Unvented	(None)	1.00	Not Used	---	---
19	RDC #10	Building Area	User Defined	0.00	W/sqft	Fluorescent: Recessed, no Lens, Unvented	(None)	1.00	Not Used	---	---
20	RDC #6	Building Area	User Defined	0.00	W/sqft	Fluorescent: Recessed, no Lens, Unvented	(None)	1.00	Not Used	---	---
21	RDC #7	Building Area	User Defined	0.00	W/sqft	Fluorescent: Recessed, no Lens, Unvented	(None)	1.00	Not Used	---	---

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Prepared by: Groupe CMI

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Index	Space	Overhead Lighting							Daylighting Control		
		ASHRAE Standard 90.1-2019		Power	Units	Lighting Type	Schedule	Power Multi.	Control Type	Illum. Setpoint	Units
		Lighting Method	Space Usage								
22	RDC #8	Building Area	User Defined	0.00	W/sqft	Fluorescent: Recessed, no Lens, Unvented	(None)	1.00	Not Used	---	---
23	RDC #9	Building Area	User Defined	0.00	W/sqft	Fluorescent: Recessed, no Lens, Unvented	(None)	1.00	Not Used	---	---
24	RDC Corridor	Building Area	User Defined	0.00	W/sqft	Fluorescent: Recessed, no Lens, Unvented	(None)	1.00	Not Used	---	---
25	RDC ESC1	Building Area	User Defined	0.00	W/sqft	Fluorescent: Recessed, no Lens, Unvented	(None)	1.00	Not Used	---	---
26	RDC ESC2	Building Area	User Defined	0.00	W/sqft	Fluorescent: Recessed, no Lens, Unvented	(None)	1.00	Not Used	---	---
27	RDC Hall	Building Area	User Defined	0.00	W/sqft	Fluorescent: Recessed, no Lens, Unvented	(None)	1.00	Not Used	---	---
28	RDC Salle Communautaire	Building Area	User Defined	0.00	W/sqft	Fluorescent: Recessed, no Lens, Unvented	(None)	1.00	Not Used	---	---
29	SS Garage	Building Area	User Defined	0.00	W/sqft	Fluorescent: Recessed, no Lens, Unvented	(None)	1.00	Not Used	---	---
30	SS SAS	Building Area	User Defined	0.00	W/sqft	Fluorescent: Recessed, no Lens, Unvented	(None)	1.00	Not Used	---	---

b) Space Model CPT

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

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2.3. Task Lighting, Electric Equipment and Miscellaneous Heat Gain

Index	Space	Task Lighting			Electric Equipment			Miscellaneous Heat Gain			
		Power	Units	Schedule	Power	Units	Schedule	Sens. (BTU/hr)	Schedule	Latent (BTU/hr)	Schedule
1	2E #11 à #15	0.00	W/sqft	(None)	0.00	W/sqft	(None)	0	(None)	0	(None)
2	2E #16 à #22	0.00	W/sqft	(None)	0.00	W/sqft	(None)	0	(None)	0	(None)
3	2E corridor	0.00	W/sqft	(None)	0.00	W/sqft	(None)	0	(None)	0	(None)
4	3E #11 à #15	0.00	W/sqft	(None)	0.00	W/sqft	(None)	0	(None)	0	(None)
5	3E #16 à #22	0.00	W/sqft	(None)	0.00	W/sqft	(None)	0	(None)	0	(None)
6	3E corridor	0.00	W/sqft	(None)	0.00	W/sqft	(None)	0	(None)	0	(None)
7	4E #11 à #15	0.00	W/sqft	(None)	0.00	W/sqft	(None)	0	(None)	0	(None)
8	4E #16	0.00	W/sqft	(None)	0.00	W/sqft	(None)	0	(None)	0	(None)
9	4E #17	0.00	W/sqft	(None)	0.00	W/sqft	(None)	0	(None)	0	(None)
10	4E #18	0.00	W/sqft	(None)	0.00	W/sqft	(None)	0	(None)	0	(None)
11	4E #19	0.00	W/sqft	(None)	0.00	W/sqft	(None)	0	(None)	0	(None)
12	4E #20	0.00	W/sqft	(None)	0.00	W/sqft	(None)	0	(None)	0	(None)
13	4E #21	0.00	W/sqft	(None)	0.00	W/sqft	(None)	0	(None)	0	(None)
14	4E #22	0.00	W/sqft	(None)	0.00	W/sqft	(None)	0	(None)	0	(None)
15	4E corridor	0.00	W/sqft	(None)	0.00	W/sqft	(None)	0	(None)	0	(None)
16	4E ESC1	0.00	W/sqft	(None)	0.00	W/sqft	(None)	0	(None)	0	(None)
17	4E ESC2	0.00	W/sqft	(None)	0.00	W/sqft	(None)	0	(None)	0	(None)
18	RDC #1 à #5	0.00	W/sqft	(None)	0.00	W/sqft	(None)	0	(None)	0	(None)
19	RDC #10	0.00	W/sqft	(None)	0.00	W/sqft	(None)	0	(None)	0	(None)
20	RDC #6	0.00	W/sqft	(None)	0.00	W/sqft	(None)	0	(None)	0	(None)
21	RDC #7	0.00	W/sqft	(None)	0.00	W/sqft	(None)	0	(None)	0	(None)
22	RDC #8	0.00	W/sqft	(None)	0.00	W/sqft	(None)	0	(None)	0	(None)
23	RDC #9	0.00	W/sqft	(None)	0.00	W/sqft	(None)	0	(None)	0	(None)
24	RDC Corridor	0.00	W/sqft	(None)	0.00	W/sqft	(None)	0	(None)	0	(None)
25	RDC ESC1	0.00	W/sqft	(None)	0.00	W/sqft	(None)	0	(None)	0	(None)
26	RDC ESC2	0.00	W/sqft	(None)	0.00	W/sqft	(None)	0	(None)	0	(None)

b) Space Model CPT

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 Prepared by: Groupe CMI

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Index	Space	Task Lighting			Electric Equipment			Miscellaneous Heat Gain			
		Power	Units	Schedule	Power	Units	Schedule	Sens. (BTU/hr)	Schedule	Latent (BTU/hr)	Schedule
27	RDC Hall	0.00	W/sqft	(None)	0.00	W/sqft	(None)	0	(None)	0	(None)
28	RDC Salle Communautaire	0.00	W/sqft	(None)	0.00	W/sqft	(None)	0	(None)	0	(None)
29	SS Garage	0.00	W/sqft	(None)	0.00	W/sqft	(None)	0	(None)	0	(None)
30	SS SAS	0.00	W/sqft	(None)	0.00	W/sqft	(None)	0	(None)	0	(None)

b) Space Model CPT

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Prepared by: Groupe CMI

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2.4. Occupancy and Infiltration

Index	Space	Occupants						Infiltration				
		Occupancy	Units	Schedule	Activity Level	Sens. (BTU/hr/person)	Latent (BTU/hr/person)	Constant Cooling Airflow	Constant Heating Airflow	Constant Simulation Airflow	Units	Occurs
1	2E #11 à #15	0	People	(None)	User Defined	245.0	205.0	0.00	0.10	0.10	CFM/sqft	All Hours
2	2E #16 à #22	0	People	(None)	User Defined	245.0	205.0	0.00	0.10	0.10	CFM/sqft	All Hours
3	2E corridor	0	People	(None)	User Defined	245.0	205.0	0.00	0.10	0.10	CFM/sqft	All Hours
4	3E #11 à #15	0	People	(None)	User Defined	245.0	205.0	0.00	0.10	0.10	CFM/sqft	All Hours
5	3E #16 à #22	0	People	(None)	User Defined	245.0	205.0	0.00	0.10	0.10	CFM/sqft	All Hours
6	3E corridor	0	People	(None)	User Defined	245.0	205.0	0.00	0.10	0.10	CFM/sqft	All Hours
7	4E #11 à #15	0	People	(None)	User Defined	245.0	205.0	0.00	0.10	0.10	CFM/sqft	All Hours
8	4E #16	0	People	(None)	User Defined	245.0	205.0	0.00	0.10	0.10	CFM/sqft	All Hours
9	4E #17	0	People	(None)	User Defined	245.0	205.0	0.00	0.10	0.10	CFM/sqft	All Hours
10	4E #18	0	People	(None)	User Defined	245.0	205.0	0.00	0.10	0.10	CFM/sqft	All Hours
11	4E #19	0	People	(None)	User Defined	245.0	205.0	0.00	0.10	0.10	CFM/sqft	All Hours
12	4E #20	0	People	(None)	User Defined	245.0	205.0	0.00	0.10	0.10	CFM/sqft	All Hours
13	4E #21	0	People	(None)	User Defined	245.0	205.0	0.00	0.10	0.10	CFM/sqft	All Hours
14	4E #22	0	People	(None)	User Defined	245.0	205.0	0.00	0.10	0.10	CFM/sqft	All Hours
15	4E corridor	0	People	(None)	User Defined	245.0	205.0	0.00	0.10	0.10	CFM/sqft	All Hours
16	4E ESC1	0	People	(None)	User Defined	245.0	205.0	0.00	0.10	0.10	CFM/sqft	All Hours
17	4E ESC2	0	People	(None)	User Defined	245.0	205.0	0.00	0.10	0.10	CFM/sqft	All Hours
18	RDC #1 à #5	0	People	(None)	User Defined	245.0	205.0	0.00	0.10	0.10	CFM/sqft	All Hours
19	RDC #10	0	People	(None)	User Defined	245.0	205.0	0.00	0.10	0.10	CFM/sqft	All Hours
20	RDC #6	0	People	(None)	User Defined	245.0	205.0	0.00	0.10	0.10	CFM/sqft	All Hours
21	RDC #7	0	People	(None)	User Defined	245.0	205.0	0.00	0.10	0.10	CFM/sqft	All Hours
22	RDC #8	0	People	(None)	User Defined	245.0	205.0	0.00	0.10	0.10	CFM/sqft	All Hours
23	RDC #9	0	People	(None)	User Defined	245.0	205.0	0.00	0.10	0.10	CFM/sqft	All Hours
24	RDC Corridor	0	People	(None)	User Defined	245.0	205.0	0.00	0.10	0.10	CFM/sqft	All Hours
25	RDC ESC1	0	People	(None)	User Defined	245.0	205.0	0.00	0.10	0.10	CFM/sqft	All Hours
26	RDC ESC2	0	People	(None)	User Defined	245.0	205.0	0.00	0.10	0.10	CFM/sqft	All Hours

b) Space Model CPT

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Prepared by: Groupe CMI

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Index	Space	Occupants						Infiltration				
		Occupancy	Units	Schedule	Activity Level	Sens. (BTU/hr/person)	Latent (BTU/hr/person)	Constant Cooling Airflow	Constant Heating Airflow	Constant Simulation Airflow	Units	Occurs
27	RDC Hall	0	People	(None)	User Defined	245.0	205.0	0.00	0.10	0.10	CFM/sqft	All Hours
28	RDC Salle Communautaire	0	People	(None)	User Defined	245.0	205.0	0.00	0.10	0.10	CFM/sqft	All Hours
29	SS Garage	0	People	(None)	User Defined	245.0	205.0	0.0	0.0	0.0	CFM	Unoccupied
30	SS SAS	0	People	(None)	User Defined	245.0	205.0	0.0	0.0	0.0	CFM	Unoccupied

b) Space Model CPT

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3. Zoning

Zone	Space	Level
2E #11 à #15		
	2E #11 à #15	2E
2E #16 à #22		
	2E #16 à #22	2E
2E corridor		
	2E corridor	2E
3E #11 à #15		
	3E #11 à #15	3E
3E #16 à #22		
	3E #16 à #22	3E
3E corridor		
	3E corridor	3E
4E #11 à #15		
	4E #11 à #15	4E
4E #16		
	4E #16	4E
4E #17		
	4E #17	4E
4E #18		
	4E #18	4E
4E #19		
	4E #19	4E
4E #20		
	4E #20	4E
4E #21		
	4E #21	4E
4E #22		

b) Space Model CPT

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Prepared by: Groupe CMI

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Zone	Space	Level
	4E #22	4E
4E corridor		
	4E corridor	4E
4E ESC1		
	4E ESC1	4E
4E ESC2		
	4E ESC2	4E
RDC #1 à #5		
	RDC #1 à #5	RDC
RDC #10		
	RDC #10	RDC
RDC #6		
	RDC #6	RDC
RDC #7		
	RDC #7	RDC
RDC #8		
	RDC #8	RDC
RDC #9		
	RDC #9	RDC
RDC Corridor		
	RDC Corridor	RDC
RDC ESC1		
	RDC ESC1	RDC
RDC ESC2		
	RDC ESC2	RDC
RDC Hall		
	RDC Hall	RDC
RDC Salle Communautaire		
	RDC Salle Communautaire	RDC

b) Space Model CPT

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Prepared by: Groupe CMI

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Zone	Space	Level
SS Garage		
	SS Garage	SS
SS SAS		
	SS SAS	SS
Unconditioned (no spaces)		
Unassigned (no spaces)		

4. Assemblies

Category	Surface Group	Selected Assembly
Exterior Above Grade Wall		
	Default	R=24.5
Exterior Below Grade Wall		
	Default	R=17
Interior Wall		
	Default	Default Wall
Roof		
	Default	R=41
Ceiling		
	Interior Ceilings	Default Ceiling
Floor Above Space		
	Interior Floors Above Space	Default Floor
Slab Floor On Grade		
	At-Grade Floors	R=10
Slab Floor Below Grade		
	Below Grade Floors	R10
Floor Above Ambient		
	Floor Above Ambient	R=24.5.

b) Space Model CPT

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Prepared by: Groupe CMI

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5. Windows & Doors

Category	Tag	Width x Height, Elevation	Selected Assembly
Window			
	F1	6' x 5' , 1' 6"	U=0.28 et SHGC=0.72
	F2	7' x 5' , 1' 6"	U=0.28 et SHGC=0.72
	F3	4' x 5' , 1' 6"	U=0.28 et SHGC=0.72
	F4	5' 4" x 5' , 1' 6"	U=0.28 et SHGC=0.72
	F5	2' x 5' , 1' 6"	U=0.28 et SHGC=0.72
	F6	3' 4" x 5' , 1' 6"	U=0.28 et SHGC=0.72
	F7 esc	1' 10" x 5' , 1' 6"	U=0.28 et SHGC=0.72
Door			
	PP	7' x 6' 10"	U0.28 SHGC0.72
	PP1	6' x 6' 10"	U0.28 SHGC0.72
	PV entrée	6' 4" x 8'	U0.28 SHGC0.72
	PV simple	3' 2" x 6' 10"	U0.28 SHGC0.72

ASHRAE 90.1 Vertical Glazing Summary:

Total Window Opening Glazing Area 2228.8 sqft
Total Door Opening Glazing Area 2150.8 sqft
Total Gross Above Grade Wall Area 20997.5 sqft
Window-to-wall Ratio (WWR) 16.4 %

01 2E #11 à #15 REF Input Data

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

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1. General Details:

Air System Name 01 2E #11 à #15 REF
Equipment Type Split AHU
Air System Type Single Zone CAV
Space Model: a) Space Model REF
Notes:

2. System Components:

Ventilation Air Data:

Airflow Control Constant Ventilation Airflow
Ventilation Sizing Method Sum of Space OA Airflows
Unocc. Damper Position Closed
Damper Leak Rate 0 %

Air-to-Air Energy Recovery Data:

Recovery Type Sensible Heat
Thermal Efficiency 65 %
Input kW 0.000 kW
Schedule JFMAMJJASOND

Central Cooling Data:

Supply Air Temperature 58.0 F
Cooling Source Air-Cooled DX
Schedule JFMAMJJASOND
Capacity Control Cycled or Staged Capacity - Fan On

Central Heating Data:

Supply Temperature 95.0 F
Heating Source Air Source Heat Pump
Schedule JFMAMJJASOND
Capacity Control Cycled or Staged Capacity - Fan On

Supply Fan Data:

Fan Type Forward Curved
Configuration Draw-thru
Fan Performance 0.00 kW
Fan Control 1-speed, cooling and heating

Duct System Data:

Supply Duct Data:
Duct Leakage 0 %

Return Duct or Plenum Data:

Return Air Via Ducted Return

3. Zone Components:

Assigned Zones:

Zone	Zone Name
1	2E #11 à #15

Number of zones 1

Thermostats and Zone Data:

Zone	Cooling T-Stat Occ. (F)	Cooling T-Stat Unocc. (F)	Heating T-Stat Occ. (F)	Heating T-Stat Unocc. (F)	T-Stat Throttling Range (F)	Diversity Factor (%)	Direct Exhaust Fan (kW)
1	75.0	80.0	70.0	65.0	1.50	100	0.0

Thermostat Schedule 24h/24h
Unoccupied Cooling is Available

01 2E #11 à #15 REF Input Data

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

01/26/2026
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Supply Terminals Data:

Zone	Terminal Type	Air Distribution	Air Distribution Effectiveness Specification	Air Distribution Effectiveness	Minimum Airflow	Design Supply Temp.	Fan Perf.	Fan Efficiency
1	Diffuser (no reheat)	Ceiling supply / ceiling return	Not Used	-	0.00 CFM/person	-	-	-

4. Sizing Data (Computer-Generated):

System Sizing Data:

Sizing Data:

Cooling Supply Temperature 58.0 F
Supply Fan Airflow 1513.0 CFM
Ventilation Airflow 500.0 CFM
Heating Supply Temperature 95.0 F

Hydronic Sizing Specifications:

Chilled Water Supply Temperature 44.0 F
Chilled Water Delta-T 10.0 F
Hot Water Supply Temperature 140.0 F
Hot Water Delta-T 20.0 F

Safety Factors:

Cooling Sensible 15 %
Cooling Latent 15 %
Heating 15 %

Zone Sizing Data:

Zone Airflow Sizing Method Sum of space airflow rates
Space Airflow Sizing Method Individual peak space loads

Zone	Supply Airflow (CFM)	Zone Htg Unit (MBH)	Reheat Coil (MBH)	FPMBX Fan (CFM)
1	1513.0	-	-	-

5. Equipment Data

Central Cooling Unit - Air-Cooled DX

Estimated Maximum Load 37.4 MBH
Design OADB 95.0 F
Design EWB 67.0 F
Equipment Sizing User-Defined
Gross Cooling Capacity 60.0 MBH
AHRI Performance Rating 14.300 SEER
DX System Configuration 1-stage, 1 compressor, 1 circuit
Low Temperature Cutoff OAT 0.0 F

Central Heating Unit - ASHP

Estimated Maximum Load 45.2 MBH
Design OADB 47.0 F
Design EDB 70.0 F
Equipment Sizing User-Defined
Gross Heating Capacity 60.0 MBH
AHRI Performance Rating 7.700 HSPF
Cutoff OAT 23.0 F

Auxiliary Heating:

Auxiliary Heating Type Electric Resistance
Auxiliary Heating Upper Cutoff 70.0 F

02 2E #11 à #15 CPT Input Data

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

01/26/2026
11:18 AM

1. General Details:

Air System Name 02 2E #11 à #15 CPT
Equipment Type Split AHU
Air System Type Single Zone CAV
Space Model: b) Space Model CPT
Notes:

2. System Components:

Ventilation Air Data:

Airflow Control Constant Ventilation Airflow
Ventilation Sizing Method Sum of Space OA Airflows
Unocc. Damper Position Closed
Damper Leak Rate 0 %

Air-to-Air Energy Recovery Data:

Recovery Type Sensible Heat
Thermal Efficiency 78 %
Input kW 0.000 kW
Schedule JFMAMJJASOND

Central Cooling Data:

Supply Air Temperature 58.0 F
Cooling Source Air-Cooled DX
Schedule JFMAMJJASOND
Capacity Control Cycled or Staged Capacity - Fan On

Central Heating Data:

Supply Temperature 95.0 F
Heating Source Air Source Heat Pump
Schedule JFMAMJJASOND
Capacity Control Cycled or Staged Capacity - Fan On

Supply Fan Data:

Fan Type Forward Curved
Configuration Draw-thru
Fan Performance 0.00 kW
Fan Control 1-speed, cooling and heating

Duct System Data:

Supply Duct Data:
Duct Leakage 0 %

Return Duct or Plenum Data:

Return Air Via Ducted Return

3. Zone Components:

Assigned Zones:

Zone	Zone Name
1	2E #11 à #15

Number of zones 1

Thermostats and Zone Data:

Zone	Cooling T-Stat Occ. (F)	Cooling T-Stat Unocc. (F)	Heating T-Stat Occ. (F)	Heating T-Stat Unocc. (F)	T-Stat Throttling Range (F)	Diversity Factor (%)	Direct Exhaust Fan (kW)
1	75.0	80.0	70.0	65.0	1.50	100	0.0

Thermostat Schedule 24h/24h
Unoccupied Cooling is Available

02 2E #11 à #15 CPT Input Data

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

01/26/2026
11:18 AM

Supply Terminals Data:

Zone	Terminal Type	Air Distribution	Air Distribution Effectiveness Specification	Air Distribution Effectiveness	Minimum Airflow	Design Supply Temp.	Fan Perf.	Fan Efficiency
1	Diffuser (no reheat)	Ceiling supply / ceiling return	Not Used	-	0.00 CFM/person	-	-	-

4. Sizing Data (Computer-Generated):

System Sizing Data:

Sizing Data:

Cooling Supply Temperature **58.0** F
Supply Fan Airflow **2865.8** CFM
Ventilation Airflow **500.0** CFM
Heating Supply Temperature **95.0** F

Hydronic Sizing Specifications:

Chilled Water Supply Temperature **44.0** F
Chilled Water Delta-T **10.0** F
Hot Water Supply Temperature **140.0** F
Hot Water Delta-T **20.0** F

Safety Factors:

Cooling Sensible **15** %
Cooling Latent **15** %
Heating **15** %

Zone Sizing Data:

Zone Airflow Sizing Method **Sum of space airflow rates**
Space Airflow Sizing Method **Individual peak space loads**

Zone	Supply Airflow (CFM)	Zone Htg Unit (MBH)	Reheat Coil (MBH)	FPMBX Fan (CFM)
1	2865.8	-	-	-

5. Equipment Data

Central Cooling Unit - Air-Cooled DX

Estimated Maximum Load **60.9** MBH
Design OADB **95.0** F
Design EWB **67.0** F
Equipment Sizing **User-Defined**
Gross Cooling Capacity **60.0** MBH
AHRI Performance Rating **28.100** SEER
DX System Configuration **2-stage, 2 compressors, 2 circuits**
Low Temperature Cutoff OAT **0.0** F

Central Heating Unit - ASHP

Estimated Maximum Load **39.2** MBH
Design OADB **47.0** F
Design EDB **70.0** F
Equipment Sizing **User-Defined**
Gross Heating Capacity **60.0** MBH
AHRI Performance Rating **3.810** COP
Cutoff OAT **-22.0** F

Auxiliary Heating:

Auxiliary Heating Type **Electric Resistance**
Auxiliary Heating Upper Cutoff **70.0** F

03 2E #16 à #22 REF Input Data

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

01/26/2026
11:18 AM

1. General Details:

Air System Name 03 2E #16 à #22 REF
Equipment Type Split AHU
Air System Type Single Zone CAV
Space Model: a) Space Model REF
Notes:

2. System Components:

Ventilation Air Data:

Airflow Control Constant Ventilation Airflow
Ventilation Sizing Method Sum of Space OA Airflows
Unocc. Damper Position Closed
Damper Leak Rate 0 %

Air-to-Air Energy Recovery Data:

Recovery Type Sensible Heat
Thermal Efficiency 65 %
Input kW 0.000 kW
Schedule JFMAMJJASOND

Central Cooling Data:

Supply Air Temperature 58.0 F
Cooling Source Air-Cooled DX
Schedule JFMAMJJASOND
Capacity Control Cycled or Staged Capacity - Fan On

Central Heating Data:

Supply Temperature 95.0 F
Heating Source Air Source Heat Pump
Schedule JFMAMJJASOND
Capacity Control Cycled or Staged Capacity - Fan On

Supply Fan Data:

Fan Type Forward Curved
Configuration Draw-thru
Fan Performance 0.00 kW
Fan Control 1-speed, cooling and heating

Duct System Data:

Supply Duct Data:
Duct Leakage 0 %

Return Duct or Plenum Data:

Return Air Via Ducted Return

3. Zone Components:

Assigned Zones:

Zone	Zone Name
1	2E #16 à #22

Number of zones 1

Thermostats and Zone Data:

Zone	Cooling T-Stat Occ. (F)	Cooling T-Stat Unocc. (F)	Heating T-Stat Occ. (F)	Heating T-Stat Unocc. (F)	T-Stat Throttling Range (F)	Diversity Factor (%)	Direct Exhaust Fan (kW)
1	75.0	80.0	70.0	65.0	1.50	100	0.0

Thermostat Schedule 24h/24h
Unoccupied Cooling is Available

03 2E #16 à #22 REF Input Data

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

01/26/2026
11:18 AM

Supply Terminals Data:

Zone	Terminal Type	Air Distribution	Air Distribution Effectiveness Specification	Air Distribution Effectiveness	Minimum Airflow	Design Supply Temp.	Fan Perf.	Fan Efficiency
1	Diffuser (no reheat)	Ceiling supply / ceiling return	Not Used	-	0.00 CFM/person	-	-	-

4. Sizing Data (Computer-Generated):

System Sizing Data:

Sizing Data:

Cooling Supply Temperature 58.0 F
Supply Fan Airflow 2599.4 CFM
Ventilation Airflow 700.0 CFM
Heating Supply Temperature 95.0 F

Hydronic Sizing Specifications:

Chilled Water Supply Temperature 44.0 F
Chilled Water Delta-T 10.0 F
Hot Water Supply Temperature 140.0 F
Hot Water Delta-T 20.0 F

Safety Factors:

Cooling Sensible 15 %
Cooling Latent 15 %
Heating 15 %

Zone Sizing Data:

Zone Airflow Sizing Method Sum of space airflow rates
Space Airflow Sizing Method Individual peak space loads

Zone	Supply Airflow (CFM)	Zone Htg Unit (MBH)	Reheat Coil (MBH)	FPMBX Fan (CFM)
1	2599.4	-	-	-

5. Equipment Data

Central Cooling Unit - Air-Cooled DX

Estimated Maximum Load 44.8 MBH
Design OADB 95.0 F
Design EWB 67.0 F
Equipment Sizing User-Defined
Gross Cooling Capacity 84.0 MBH
AHRI Performance Rating 14.300 SEER
DX System Configuration 1-stage, 1 compressor, 1 circuit
Low Temperature Cutoff OAT 0.0 F

Central Heating Unit - ASHP

Estimated Maximum Load 91.3 MBH
Design OADB 47.0 F
Design EDB 70.0 F
Equipment Sizing User-Defined
Gross Heating Capacity 84.0 MBH
AHRI Performance Rating 7.700 HSPF
Cutoff OAT 23.0 F

Auxiliary Heating:

Auxiliary Heating Type Electric Resistance
Auxiliary Heating Upper Cutoff 70.0 F

04 2E #16 à #22 CPT Input Data

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

01/26/2026
11:18 AM

1. General Details:

Air System Name 04 2E #16 à #22 CPT
Equipment Type Split AHU
Air System Type Single Zone CAV
Space Model: b) Space Model CPT
Notes:

2. System Components:

Ventilation Air Data:

Airflow Control Constant Ventilation Airflow
Ventilation Sizing Method Sum of Space OA Airflows
Unocc. Damper Position Closed
Damper Leak Rate 0 %

Air-to-Air Energy Recovery Data:

Recovery Type Sensible Heat
Thermal Efficiency 78 %
Input kW 0.000 kW
Schedule JFMAMJJASOND

Central Cooling Data:

Supply Air Temperature 58.0 F
Cooling Source Air-Cooled DX
Schedule JFMAMJJASOND
Capacity Control Cycled or Staged Capacity - Fan On

Central Heating Data:

Supply Temperature 95.0 F
Heating Source Air Source Heat Pump
Schedule JFMAMJJASOND
Capacity Control Cycled or Staged Capacity - Fan On

Supply Fan Data:

Fan Type Forward Curved
Configuration Draw-thru
Fan Performance 0.00 kW
Fan Control 1-speed, cooling and heating

Duct System Data:

Supply Duct Data:
Duct Leakage 0 %

Return Duct or Plenum Data:

Return Air Via Ducted Return

3. Zone Components:

Assigned Zones:

Zone	Zone Name
1	2E #16 à #22

Number of zones 1

Thermostats and Zone Data:

Zone	Cooling T-Stat Occ. (F)	Cooling T-Stat Unocc. (F)	Heating T-Stat Occ. (F)	Heating T-Stat Unocc. (F)	T-Stat Throttling Range (F)	Diversity Factor (%)	Direct Exhaust Fan (kW)
1	75.0	80.0	70.0	65.0	1.50	100	0.0

Thermostat Schedule 24h/24h
Unoccupied Cooling is Available

04 2E #16 à #22 CPT Input Data

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

01/26/2026
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Supply Terminals Data:

Zone	Terminal Type	Air Distribution	Air Distribution Effectiveness Specification	Air Distribution Effectiveness	Minimum Airflow	Design Supply Temp.	Fan Perf.	Fan Efficiency
1	Diffuser (no reheat)	Ceiling supply / ceiling return	Not Used	-	0.00 CFM/person	-	-	-

4. Sizing Data (Computer-Generated):

System Sizing Data:

Sizing Data:

Cooling Supply Temperature 58.0 F
Supply Fan Airflow 4079.1 CFM
Ventilation Airflow 700.0 CFM
Heating Supply Temperature 95.0 F

Hydronic Sizing Specifications:

Chilled Water Supply Temperature 44.0 F
Chilled Water Delta-T 10.0 F
Hot Water Supply Temperature 140.0 F
Hot Water Delta-T 20.0 F

Safety Factors:

Cooling Sensible 15 %
Cooling Latent 15 %
Heating 15 %

Zone Sizing Data:

Zone Airflow Sizing Method Sum of space airflow rates
Space Airflow Sizing Method Individual peak space loads

Zone	Supply Airflow (CFM)	Zone Htg Unit (MBH)	Reheat Coil (MBH)	FPMBX Fan (CFM)
1	4079.1	-	-	-

5. Equipment Data

Central Cooling Unit - Air-Cooled DX

Estimated Maximum Load 83.9 MBH
Design OADB 95.0 F
Design EWB 67.0 F
Equipment Sizing User-Defined
Gross Cooling Capacity 84.0 MBH
AHRI Performance Rating 28.100 SEER
DX System Configuration 2-stage, 2 compressors, 2 circuits
Low Temperature Cutoff OAT 0.0 F

Central Heating Unit - ASHP

Estimated Maximum Load 82.6 MBH
Design OADB 47.0 F
Design EDB 70.0 F
Equipment Sizing User-Defined
Gross Heating Capacity 84.0 MBH
AHRI Performance Rating 3.810 COP
Cutoff OAT -22.0 F

Auxiliary Heating:

Auxiliary Heating Type Electric Resistance
Auxiliary Heating Upper Cutoff 70.0 F

05 3E #11 à #15 REF Input Data

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

01/26/2026
11:18 AM

1. General Details:

Air System Name 05 3E #11 à #15 REF
Equipment Type Split AHU
Air System Type Single Zone CAV
Space Model: a) Space Model REF
Notes:

2. System Components:

Ventilation Air Data:

Airflow Control Constant Ventilation Airflow
Ventilation Sizing Method Sum of Space OA Airflows
Unocc. Damper Position Closed
Damper Leak Rate 0 %

Air-to-Air Energy Recovery Data:

Recovery Type Sensible Heat
Thermal Efficiency 65 %
Input kW 0.000 kW
Schedule JFMAMJJASOND

Central Cooling Data:

Supply Air Temperature 58.0 F
Cooling Source Air-Cooled DX
Schedule JFMAMJJASOND
Capacity Control Cycled or Staged Capacity - Fan On

Central Heating Data:

Supply Temperature 95.0 F
Heating Source Air Source Heat Pump
Schedule JFMAMJJASOND
Capacity Control Cycled or Staged Capacity - Fan On

Supply Fan Data:

Fan Type Forward Curved
Configuration Draw-thru
Fan Performance 0.00 kW
Fan Control 1-speed, cooling and heating

Duct System Data:

Supply Duct Data:
Duct Leakage 0 %

Return Duct or Plenum Data:

Return Air Via Ducted Return

3. Zone Components:

Assigned Zones:

Zone	Zone Name
1	3E #11 à #15

Number of zones 1

Thermostats and Zone Data:

Zone	Cooling T-Stat Occ. (F)	Cooling T-Stat Unocc. (F)	Heating T-Stat Occ. (F)	Heating T-Stat Unocc. (F)	T-Stat Throttling Range (F)	Diversity Factor (%)	Direct Exhaust Fan (kW)
1	75.0	80.0	70.0	65.0	1.50	100	0.0

Thermostat Schedule 24h/24h
Unoccupied Cooling is Available

05 3E #11 à #15 REF Input Data

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

01/26/2026
11:18 AM

Supply Terminals Data:

Zone	Terminal Type	Air Distribution	Air Distribution Effectiveness Specification	Air Distribution Effectiveness	Minimum Airflow	Design Supply Temp.	Fan Perf.	Fan Efficiency
1	Diffuser (no reheat)	Ceiling supply / ceiling return	Not Used	-	0.00 CFM/person	-	-	-

4. Sizing Data (Computer-Generated):

System Sizing Data:

Sizing Data:

Cooling Supply Temperature 58.0 F
Supply Fan Airflow 1518.1 CFM
Ventilation Airflow 500.0 CFM
Heating Supply Temperature 95.0 F

Hydronic Sizing Specifications:

Chilled Water Supply Temperature 44.0 F
Chilled Water Delta-T 10.0 F
Hot Water Supply Temperature 140.0 F
Hot Water Delta-T 20.0 F

Safety Factors:

Cooling Sensible 15 %
Cooling Latent 15 %
Heating 15 %

Zone Sizing Data:

Zone Airflow Sizing Method Sum of space airflow rates
Space Airflow Sizing Method Individual peak space loads

Zone	Supply Airflow (CFM)	Zone Htg Unit (MBH)	Reheat Coil (MBH)	FPMBX Fan (CFM)
1	1518.1	-	-	-

5. Equipment Data

Central Cooling Unit - Air-Cooled DX

Estimated Maximum Load 37.4 MBH
Design OADB 95.0 F
Design EWB 67.0 F
Equipment Sizing User-Defined
Gross Cooling Capacity 60.0 MBH
AHRI Performance Rating 14.300 SEER
DX System Configuration 1-stage, 1 compressor, 1 circuit
Low Temperature Cutoff OAT 0.0 F

Central Heating Unit - ASHP

Estimated Maximum Load 45.3 MBH
Design OADB 47.0 F
Design EDB 70.0 F
Equipment Sizing User-Defined
Gross Heating Capacity 60.0 MBH
AHRI Performance Rating 7.700 HSPF
Cutoff OAT 23.0 F

Auxiliary Heating:

Auxiliary Heating Type Electric Resistance
Auxiliary Heating Upper Cutoff 70.0 F

06 3E #11 à #15 CPT Input Data

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

01/26/2026
11:18 AM

1. General Details:

Air System Name 06 3E #11 à #15 CPT
Equipment Type Split AHU
Air System Type Single Zone CAV
Space Model: b) Space Model CPT
Notes:

2. System Components:

Ventilation Air Data:

Airflow Control Constant Ventilation Airflow
Ventilation Sizing Method Sum of Space OA Airflows
Unocc. Damper Position Closed
Damper Leak Rate 0 %

Air-to-Air Energy Recovery Data:

Recovery Type Sensible Heat
Thermal Efficiency 78 %
Input kW 0.000 kW
Schedule JFMAMJJASOND

Central Cooling Data:

Supply Air Temperature 58.0 F
Cooling Source Air-Cooled DX
Schedule JFMAMJJASOND
Capacity Control Cycled or Staged Capacity - Fan On

Central Heating Data:

Supply Temperature 95.0 F
Heating Source Air Source Heat Pump
Schedule JFMAMJJASOND
Capacity Control Cycled or Staged Capacity - Fan On

Supply Fan Data:

Fan Type Forward Curved
Configuration Draw-thru
Fan Performance 0.00 kW
Fan Control 1-speed, cooling and heating

Duct System Data:

Supply Duct Data:
Duct Leakage 0 %

Return Duct or Plenum Data:

Return Air Via Ducted Return

3. Zone Components:

Assigned Zones:

Zone	Zone Name
1	3E #11 à #15

Number of zones 1

Thermostats and Zone Data:

Zone	Cooling T-Stat Occ. (F)	Cooling T-Stat Unocc. (F)	Heating T-Stat Occ. (F)	Heating T-Stat Unocc. (F)	T-Stat Throttling Range (F)	Diversity Factor (%)	Direct Exhaust Fan (kW)
1	75.0	80.0	70.0	65.0	1.50	100	0.0

Thermostat Schedule 24h/24h
Unoccupied Cooling is Available

06 3E #11 à #15 CPT Input Data

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

01/26/2026
11:18 AM

Supply Terminals Data:

Zone	Terminal Type	Air Distribution	Air Distribution Effectiveness Specification	Air Distribution Effectiveness	Minimum Airflow	Design Supply Temp.	Fan Perf.	Fan Efficiency
1	Diffuser (no reheat)	Ceiling supply / ceiling return	Not Used	-	0.00 CFM/person	-	-	-

4. Sizing Data (Computer-Generated):

System Sizing Data:

Sizing Data:

Cooling Supply Temperature 58.0 F
Supply Fan Airflow 2867.1 CFM
Ventilation Airflow 500.0 CFM
Heating Supply Temperature 95.0 F

Hydronic Sizing Specifications:

Chilled Water Supply Temperature 44.0 F
Chilled Water Delta-T 10.0 F
Hot Water Supply Temperature 140.0 F
Hot Water Delta-T 20.0 F

Safety Factors:

Cooling Sensible 15 %
Cooling Latent 15 %
Heating 15 %

Zone Sizing Data:

Zone Airflow Sizing Method Sum of space airflow rates
Space Airflow Sizing Method Individual peak space loads

Zone	Supply Airflow (CFM)	Zone Htg Unit (MBH)	Reheat Coil (MBH)	FPMBX Fan (CFM)
1	2867.1	-	-	-

5. Equipment Data

Central Cooling Unit - Air-Cooled DX

Estimated Maximum Load 61.0 MBH
Design OADB 95.0 F
Design EWB 67.0 F
Equipment Sizing User-Defined
Gross Cooling Capacity 60.0 MBH
AHRI Performance Rating 28.100 SEER
DX System Configuration 2-stage, 2 compressors, 2 circuits
Low Temperature Cutoff OAT 0.0 F

Central Heating Unit - ASHP

Estimated Maximum Load 39.2 MBH
Design OADB 47.0 F
Design EDB 70.0 F
Equipment Sizing User-Defined
Gross Heating Capacity 60.0 MBH
AHRI Performance Rating 3.810 COP
Cutoff OAT -22.0 F

Auxiliary Heating:

Auxiliary Heating Type Electric Resistance
Auxiliary Heating Upper Cutoff 70.0 F

07 3E #16 à #22 REF Input Data

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
 Prepared by: Groupe CMI

01/26/2026
 11:18 AM

1. General Details:

Air System Name **07 3E #16 à #22 REF**
 Equipment Type **Split AHU**
 Air System Type **Single Zone CAV**
 Space Model: **a) Space Model REF**
 Notes:

2. System Components:**Ventilation Air Data:**

Airflow Control **Constant Ventilation Airflow**
 Ventilation Sizing Method **Sum of Space OA Airflows**
 Unocc. Damper Position **Closed**
 Damper Leak Rate **0** %

Air-to-Air Energy Recovery Data:

Recovery Type **Sensible Heat**
 Thermal Efficiency **65** %
 Input kW **0.000** kW
 Schedule **JFMAMJJASOND**

Central Cooling Data:

Supply Air Temperature **58.0** F
 Cooling Source **Air-Cooled DX**
 Schedule **JFMAMJJASOND**
 Capacity Control **Cycled or Staged Capacity - Fan On**

Central Heating Data:

Supply Temperature **95.0** F
 Heating Source **Air Source Heat Pump**
 Schedule **JFMAMJJASOND**
 Capacity Control **Cycled or Staged Capacity - Fan On**

Supply Fan Data:

Fan Type **Forward Curved**
 Configuration **Draw-thru**
 Fan Performance **0.00** kW
 Fan Control **1-speed, cooling and heating**

Duct System Data:

Supply Duct Data:
 Duct Leakage **0** %

Return Duct or Plenum Data:

Return Air Via **Ducted Return**

3. Zone Components:**Assigned Zones:**

Zone	Zone Name
1	3E #16 à #22

Number of zones **1**

Thermostats and Zone Data:

Zone	Cooling T-Stat Occ. (F)	Cooling T-Stat Unocc. (F)	Heating T-Stat Occ. (F)	Heating T-Stat Unocc. (F)	T-Stat Throttling Range (F)	Diversity Factor (%)	Direct Exhaust Fan (kW)
1	75.0	80.0	70.0	65.0	1.50	100	0.0

Thermostat Schedule **24h/24h**
 Unoccupied Cooling is **Available**

07 3E #16 à #22 REF Input Data

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
 Prepared by: Groupe CMI

01/26/2026
 11:18 AM

Supply Terminals Data:

Zone	Terminal Type	Air Distribution	Air Distribution Effectiveness Specification	Air Distribution Effectiveness	Minimum Airflow	Design Supply Temp.	Fan Perf.	Fan Efficiency
1	Diffuser (no reheat)	Ceiling supply / ceiling return	Not Used	-	0.00 CFM/person	-	-	-

4. Sizing Data (Computer-Generated):**System Sizing Data:****Sizing Data:**

Cooling Supply Temperature **58.0** F
 Supply Fan Airflow **2447.8** CFM
 Ventilation Airflow **700.0** CFM
 Heating Supply Temperature **95.0** F

Hydronic Sizing Specifications:

Chilled Water Supply Temperature **44.0** F
 Chilled Water Delta-T **10.0** F
 Hot Water Supply Temperature **140.0** F
 Hot Water Delta-T **20.0** F

Safety Factors:

Cooling Sensible **15** %
 Cooling Latent **15** %
 Heating **15** %

Zone Sizing Data:

Zone Airflow Sizing Method **Sum of space airflow rates**
 Space Airflow Sizing Method **Individual peak space loads**

Zone	Supply Airflow (CFM)	Zone Htg Unit (MBH)	Reheat Coil (MBH)	FPMBX Fan (CFM)
1	2447.8	-	-	-

5. Equipment Data**Central Cooling Unit - Air-Cooled DX**

Estimated Maximum Load **43.8** MBH
 Design OADB **95.0** F
 Design EWB **67.0** F
 Equipment Sizing **User-Defined**
 Gross Cooling Capacity **84.0** MBH
 AHRI Performance Rating **14.300** SEER
 DX System Configuration **1-stage, 1 compressor, 1 circuit**
 Low Temperature Cutoff OAT **0.0** F

Central Heating Unit - ASHP

Estimated Maximum Load **87.3** MBH
 Design OADB **47.0** F
 Design EDB **70.0** F
 Equipment Sizing **User-Defined**
 Gross Heating Capacity **84.0** MBH
 AHRI Performance Rating **7.700** HSPF
 Cutoff OAT **23.0** F

Auxiliary Heating:

Auxiliary Heating Type **Electric Resistance**
 Auxiliary Heating Upper Cutoff **70.0** F

08 3E #16 à #22 CPT Input Data

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

01/26/2026
11:18 AM

1. General Details:

Air System Name 08 3E #16 à #22 CPT
Equipment Type Split AHU
Air System Type Single Zone CAV
Space Model: b) Space Model CPT
Notes:

2. System Components:

Ventilation Air Data:

Airflow Control Constant Ventilation Airflow
Ventilation Sizing Method Sum of Space OA Airflows
Unocc. Damper Position Closed
Damper Leak Rate 0 %

Air-to-Air Energy Recovery Data:

Recovery Type Sensible Heat
Thermal Efficiency 78 %
Input kW 0.000 kW
Schedule JFMAMJJASOND

Central Cooling Data:

Supply Air Temperature 58.0 F
Cooling Source Air-Cooled DX
Schedule JFMAMJJASOND
Capacity Control Cycled or Staged Capacity - Fan On

Central Heating Data:

Supply Temperature 95.0 F
Heating Source Air Source Heat Pump
Schedule JFMAMJJASOND
Capacity Control Cycled or Staged Capacity - Fan On

Supply Fan Data:

Fan Type Forward Curved
Configuration Draw-thru
Fan Performance 0.00 kW
Fan Control 1-speed, cooling and heating

Duct System Data:

Supply Duct Data:
Duct Leakage 0 %

Return Duct or Plenum Data:

Return Air Via Ducted Return

3. Zone Components:

Assigned Zones:

Zone	Zone Name
1	3E #16 à #22

Number of zones 1

Thermostats and Zone Data:

Zone	Cooling T-Stat Occ. (F)	Cooling T-Stat Unocc. (F)	Heating T-Stat Occ. (F)	Heating T-Stat Unocc. (F)	T-Stat Throttling Range (F)	Diversity Factor (%)	Direct Exhaust Fan (kW)
1	75.0	80.0	70.0	65.0	1.50	100	0.0

Thermostat Schedule 24h/24h
Unoccupied Cooling is Available

08 3E #16 à #22 CPT Input Data

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
 Prepared by: Groupe CMI

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Supply Terminals Data:

Zone	Terminal Type	Air Distribution	Air Distribution Effectiveness Specification	Air Distribution Effectiveness	Minimum Airflow	Design Supply Temp.	Fan Perf.	Fan Efficiency
1	Diffuser (no reheat)	Ceiling supply / ceiling return	Not Used	-	0.00 CFM/person	-	-	-

4. Sizing Data (Computer-Generated):**System Sizing Data:****Sizing Data:**

Cooling Supply Temperature **58.0** F
 Supply Fan Airflow **3974.5** CFM
 Ventilation Airflow **700.0** CFM
 Heating Supply Temperature **95.0** F

Hydronic Sizing Specifications:

Chilled Water Supply Temperature **44.0** F
 Chilled Water Delta-T **10.0** F
 Hot Water Supply Temperature **140.0** F
 Hot Water Delta-T **20.0** F

Safety Factors:

Cooling Sensible **15** %
 Cooling Latent **15** %
 Heating **15** %

Zone Sizing Data:

Zone Airflow Sizing Method **Sum of space airflow rates**
 Space Airflow Sizing Method **Individual peak space loads**

Zone	Supply Airflow (CFM)	Zone Htg Unit (MBH)	Reheat Coil (MBH)	FPMBX Fan (CFM)
1	3974.5	-	-	-

5. Equipment Data**Central Cooling Unit - Air-Cooled DX**

Estimated Maximum Load **81.3** MBH
 Design OADB **95.0** F
 Design EWB **67.0** F
 Equipment Sizing **User-Defined**
 Gross Cooling Capacity **84.0** MBH
 AHRI Performance Rating **28.100** SEER
 DX System Configuration **2-stage, 2 compressors, 2 circuits**
 Low Temperature Cutoff OAT **0.0** F

Central Heating Unit - ASHP

Estimated Maximum Load **78.5** MBH
 Design OADB **47.0** F
 Design EDB **70.0** F
 Equipment Sizing **User-Defined**
 Gross Heating Capacity **84.0** MBH
 AHRI Performance Rating **3.810** COP
 Cutoff OAT **-22.0** F

Auxiliary Heating:

Auxiliary Heating Type **Electric Resistance**
 Auxiliary Heating Upper Cutoff **70.0** F

09 4E #11 à #15 REF Input Data

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

01/26/2026
11:18 AM

1. General Details:

Air System Name 09 4E #11 à #15 REF
Equipment Type Split AHU
Air System Type Single Zone CAV
Space Model: a) Space Model REF
Notes:

2. System Components:

Ventilation Air Data:

Airflow Control Constant Ventilation Airflow
Ventilation Sizing Method Sum of Space OA Airflows
Unocc. Damper Position Closed
Damper Leak Rate 0 %

Air-to-Air Energy Recovery Data:

Recovery Type Sensible Heat
Thermal Efficiency 65 %
Input kW 0.000 kW
Schedule JFMAMJJASOND

Central Cooling Data:

Supply Air Temperature 58.0 F
Cooling Source Air-Cooled DX
Schedule JFMAMJJASOND
Capacity Control Cycled or Staged Capacity - Fan On

Central Heating Data:

Supply Temperature 95.0 F
Heating Source Air Source Heat Pump
Schedule JFMAMJJASOND
Capacity Control Cycled or Staged Capacity - Fan On

Supply Fan Data:

Fan Type Forward Curved
Configuration Draw-thru
Fan Performance 0.00 kW
Fan Control 1-speed, cooling and heating

Duct System Data:

Supply Duct Data:
Duct Leakage 0 %

Return Duct or Plenum Data:

Return Air Via Ducted Return

3. Zone Components:

Assigned Zones:

Zone	Zone Name
1	4E #11 à #15

Number of zones 1

Thermostats and Zone Data:

Zone	Cooling T-Stat Occ. (F)	Cooling T-Stat Unocc. (F)	Heating T-Stat Occ. (F)	Heating T-Stat Unocc. (F)	T-Stat Throttling Range (F)	Diversity Factor (%)	Direct Exhaust Fan (kW)
1	75.0	80.0	70.0	65.0	1.50	100	0.0

Thermostat Schedule 24h/24h
Unoccupied Cooling is Available

09 4E #11 à #15 REF Input Data

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

01/26/2026
11:18 AM

Supply Terminals Data:

Zone	Terminal Type	Air Distribution	Air Distribution Effectiveness Specification	Air Distribution Effectiveness	Minimum Airflow	Design Supply Temp.	Fan Perf.	Fan Efficiency
1	Diffuser (no reheat)	Ceiling supply / ceiling return	Not Used	-	0.00 CFM/person	-	-	-

4. Sizing Data (Computer-Generated):

System Sizing Data:

Sizing Data:

Cooling Supply Temperature 58.0 F
Supply Fan Airflow 1812.4 CFM
Ventilation Airflow 500.0 CFM
Heating Supply Temperature 95.0 F

Hydronic Sizing Specifications:

Chilled Water Supply Temperature 44.0 F
Chilled Water Delta-T 10.0 F
Hot Water Supply Temperature 140.0 F
Hot Water Delta-T 20.0 F

Safety Factors:

Cooling Sensible 15 %
Cooling Latent 15 %
Heating 15 %

Zone Sizing Data:

Zone Airflow Sizing Method Sum of space airflow rates
Space Airflow Sizing Method Individual peak space loads

Zone	Supply Airflow (CFM)	Zone Htg Unit (MBH)	Reheat Coil (MBH)	FPMBX Fan (CFM)
1	1812.4	-	-	-

5. Equipment Data

Central Cooling Unit - Air-Cooled DX

Estimated Maximum Load 43.0 MBH
Design OADB 95.0 F
Design EWB 67.0 F
Equipment Sizing User-Defined
Gross Cooling Capacity 60.0 MBH
AHRI Performance Rating 14.300 SEER
DX System Configuration 1-stage, 1 compressor, 1 circuit
Low Temperature Cutoff OAT 0.0 F

Central Heating Unit - ASHP

Estimated Maximum Load 53.3 MBH
Design OADB 47.0 F
Design EDB 70.0 F
Equipment Sizing User-Defined
Gross Heating Capacity 60.0 MBH
AHRI Performance Rating 7.700 HSPF
Cutoff OAT 23.0 F

Auxiliary Heating:

Auxiliary Heating Type Electric Resistance
Auxiliary Heating Upper Cutoff 70.0 F

10 4E #11 à #15 CPT Input Data

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

01/26/2026
11:18 AM

1. General Details:

Air System Name 10 4E #11 à #15 CPT
Equipment Type Split AHU
Air System Type Single Zone CAV
Space Model: b) Space Model CPT
Notes:

2. System Components:

Ventilation Air Data:

Airflow Control Constant Ventilation Airflow
Ventilation Sizing Method Sum of Space OA Airflows
Unocc. Damper Position Closed
Damper Leak Rate 0 %

Air-to-Air Energy Recovery Data:

Recovery Type Sensible Heat
Thermal Efficiency 78 %
Input kW 0.000 kW
Schedule JFMAMJJASOND

Central Cooling Data:

Supply Air Temperature 58.0 F
Cooling Source Air-Cooled DX
Schedule JFMAMJJASOND
Capacity Control Cycled or Staged Capacity - Fan On

Central Heating Data:

Supply Temperature 95.0 F
Heating Source Air Source Heat Pump
Schedule JFMAMJJASOND
Capacity Control Cycled or Staged Capacity - Fan On

Supply Fan Data:

Fan Type Forward Curved
Configuration Draw-thru
Fan Performance 0.00 kW
Fan Control 1-speed, cooling and heating

Duct System Data:

Supply Duct Data:
Duct Leakage 0 %

Return Duct or Plenum Data:

Return Air Via Ducted Return

3. Zone Components:

Assigned Zones:

Zone	Zone Name
1	4E #11 à #15

Number of zones 1

Thermostats and Zone Data:

Zone	Cooling T-Stat Occ. (F)	Cooling T-Stat Unocc. (F)	Heating T-Stat Occ. (F)	Heating T-Stat Unocc. (F)	T-Stat Throttling Range (F)	Diversity Factor (%)	Direct Exhaust Fan (kW)
1	75.0	80.0	70.0	65.0	1.50	100	0.0

Thermostat Schedule 24h/24h
Unoccupied Cooling is Available

10 4E #11 à #15 CPT Input Data

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

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Supply Terminals Data:

Zone	Terminal Type	Air Distribution	Air Distribution Effectiveness Specification	Air Distribution Effectiveness	Minimum Airflow	Design Supply Temp.	Fan Perf.	Fan Efficiency
1	Diffuser (no reheat)	Ceiling supply / ceiling return	Not Used	-	0.00 CFM/person	-	-	-

4. Sizing Data (Computer-Generated):

System Sizing Data:

Sizing Data:

Cooling Supply Temperature 58.0 F
Supply Fan Airflow 3119.8 CFM
Ventilation Airflow 500.0 CFM
Heating Supply Temperature 95.0 F

Hydronic Sizing Specifications:

Chilled Water Supply Temperature 44.0 F
Chilled Water Delta-T 10.0 F
Hot Water Supply Temperature 140.0 F
Hot Water Delta-T 20.0 F

Safety Factors:

Cooling Sensible 15 %
Cooling Latent 15 %
Heating 15 %

Zone Sizing Data:

Zone Airflow Sizing Method Sum of space airflow rates
Space Airflow Sizing Method Individual peak space loads

Zone	Supply Airflow (CFM)	Zone Htg Unit (MBH)	Reheat Coil (MBH)	FPMBX Fan (CFM)
1	3119.8	-	-	-

5. Equipment Data

Central Cooling Unit - Air-Cooled DX

Estimated Maximum Load 66.6 MBH
Design OADB 95.0 F
Design EWB 67.0 F
Equipment Sizing User-Defined
Gross Cooling Capacity 60.0 MBH
AHRI Performance Rating 28.100 SEER
DX System Configuration 2-stage, 2 compressors, 2 circuits
Low Temperature Cutoff OAT 0.0 F

Central Heating Unit - ASHP

Estimated Maximum Load 47.3 MBH
Design OADB 47.0 F
Design EDB 70.0 F
Equipment Sizing User-Defined
Gross Heating Capacity 60.0 MBH
AHRI Performance Rating 3.810 COP
Cutoff OAT -22.0 F

Auxiliary Heating:

Auxiliary Heating Type Electric Resistance
Auxiliary Heating Upper Cutoff 70.0 F

11 4E #16 REF Input Data

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

01/26/2026
11:18 AM

1. General Details:

Air System Name 11 4E #16 REF
Equipment Type Split AHU
Air System Type Single Zone CAV
Space Model: a) Space Model REF
Notes:

2. System Components:

Ventilation Air Data:

Airflow Control Constant Ventilation Airflow
Ventilation Sizing Method Sum of Space OA Airflows
Unocc. Damper Position Closed
Damper Leak Rate 0 %

Air-to-Air Energy Recovery Data:

Recovery Type Sensible Heat
Thermal Efficiency 65 %
Input kW 0.000 kW
Schedule JFMAMJJASOND

Central Cooling Data:

Supply Air Temperature 58.0 F
Cooling Source Air-Cooled DX
Schedule JFMAMJJASOND
Capacity Control Cycled or Staged Capacity - Fan On

Central Heating Data:

Supply Temperature 95.0 F
Heating Source Air Source Heat Pump
Schedule JFMAMJJASOND
Capacity Control Cycled or Staged Capacity - Fan On

Supply Fan Data:

Fan Type Forward Curved
Configuration Draw-thru
Fan Performance 0.00 kW
Fan Control 1-speed, cooling and heating

Duct System Data:

Supply Duct Data:
Duct Leakage 0 %

Return Duct or Plenum Data:

Return Air Via Ducted Return

3. Zone Components:

Assigned Zones:

Zone	Zone Name
1	4E #16

Number of zones 1

Thermostats and Zone Data:

Zone	Cooling T-Stat Occ. (F)	Cooling T-Stat Unocc. (F)	Heating T-Stat Occ. (F)	Heating T-Stat Unocc. (F)	T-Stat Throttling Range (F)	Diversity Factor (%)	Direct Exhaust Fan (kW)
1	75.0	80.0	70.0	65.0	1.50	100	0.0

Thermostat Schedule 24h/24h
Unoccupied Cooling is Available

11 4E #16 REF Input Data

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

01/26/2026
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Supply Terminals Data:

Zone	Terminal Type	Air Distribution	Air Distribution Effectiveness Specification	Air Distribution Effectiveness	Minimum Airflow	Design Supply Temp.	Fan Perf.	Fan Efficiency
1	Diffuser (no reheat)	Ceiling supply / ceiling return	Not Used	-	0.00 CFM/person	-	-	-

4. Sizing Data (Computer-Generated):

System Sizing Data:

Sizing Data:

Cooling Supply Temperature 58.0 F
Supply Fan Airflow 319.3 CFM
Ventilation Airflow 100.0 CFM
Heating Supply Temperature 95.0 F

Hydronic Sizing Specifications:

Chilled Water Supply Temperature 44.0 F
Chilled Water Delta-T 10.0 F
Hot Water Supply Temperature 140.0 F
Hot Water Delta-T 20.0 F

Safety Factors:

Cooling Sensible 15 %
Cooling Latent 15 %
Heating 15 %

Zone Sizing Data:

Zone Airflow Sizing Method Sum of space airflow rates
Space Airflow Sizing Method Individual peak space loads

Zone	Supply Airflow (CFM)	Zone Htg Unit (MBH)	Reheat Coil (MBH)	FPMBX Fan (CFM)
1	319.3	-	-	-

5. Equipment Data

Central Cooling Unit - Air-Cooled DX

Estimated Maximum Load 3.3 MBH
Design OADB 95.0 F
Design EWB 67.0 F
Equipment Sizing User-Defined
Gross Cooling Capacity 12.0 MBH
AHRI Performance Rating 14.300 SEER
DX System Configuration 1-stage, 1 compressor, 1 circuit
Low Temperature Cutoff OAT 0.0 F

Central Heating Unit - ASHP

Estimated Maximum Load 11.6 MBH
Design OADB 47.0 F
Design EDB 70.0 F
Equipment Sizing User-Defined
Gross Heating Capacity 12.0 MBH
AHRI Performance Rating 7.700 HSPF
Cutoff OAT 23.0 F

Auxiliary Heating:

Auxiliary Heating Type Electric Resistance
Auxiliary Heating Upper Cutoff 70.0 F

12 4E #16 CPT Input Data

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

01/26/2026
11:18 AM

1. General Details:

Air System Name 12 4E #16 CPT
Equipment Type Split AHU
Air System Type Single Zone CAV
Space Model: b) Space Model CPT
Notes:

2. System Components:

Ventilation Air Data:

Airflow Control Constant Ventilation Airflow
Ventilation Sizing Method Sum of Space OA Airflows
Unocc. Damper Position Closed
Damper Leak Rate 0 %

Air-to-Air Energy Recovery Data:

Recovery Type Sensible Heat
Thermal Efficiency 78 %
Input kW 0.000 kW
Schedule JFMAMJJASOND

Central Cooling Data:

Supply Air Temperature 58.0 F
Cooling Source Air-Cooled DX
Schedule JFMAMJJASOND
Capacity Control Cycled or Staged Capacity - Fan On

Central Heating Data:

Supply Temperature 95.0 F
Heating Source Air Source Heat Pump
Schedule JFMAMJJASOND
Capacity Control Cycled or Staged Capacity - Fan On

Supply Fan Data:

Fan Type Forward Curved
Configuration Draw-thru
Fan Performance 0.00 kW
Fan Control 1-speed, cooling and heating

Duct System Data:

Supply Duct Data:
Duct Leakage 0 %

Return Duct or Plenum Data:

Return Air Via Ducted Return

3. Zone Components:

Assigned Zones:

Zone	Zone Name
1	4E #16

Number of zones 1

Thermostats and Zone Data:

Zone	Cooling T-Stat Occ. (F)	Cooling T-Stat Unocc. (F)	Heating T-Stat Occ. (F)	Heating T-Stat Unocc. (F)	T-Stat Throttling Range (F)	Diversity Factor (%)	Direct Exhaust Fan (kW)
1	75.0	80.0	70.0	65.0	1.50	100	0.0

Thermostat Schedule 24h/24h
Unoccupied Cooling is Available

12 4E #16 CPT Input Data

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

01/26/2026
11:18 AM

Supply Terminals Data:

Zone	Terminal Type	Air Distribution	Air Distribution Effectiveness Specification	Air Distribution Effectiveness	Minimum Airflow	Design Supply Temp.	Fan Perf.	Fan Efficiency
1	Diffuser (no reheat)	Ceiling supply / ceiling return	Not Used	-	0.00 CFM/person	-	-	-

4. Sizing Data (Computer-Generated):

System Sizing Data:

Sizing Data:

Cooling Supply Temperature **58.0** F
Supply Fan Airflow **314.3** CFM
Ventilation Airflow **100.0** CFM
Heating Supply Temperature **95.0** F

Hydronic Sizing Specifications:

Chilled Water Supply Temperature **44.0** F
Chilled Water Delta-T **10.0** F
Hot Water Supply Temperature **140.0** F
Hot Water Delta-T **20.0** F

Safety Factors:

Cooling Sensible **15** %
Cooling Latent **15** %
Heating **15** %

Zone Sizing Data:

Zone Airflow Sizing Method **Sum of space airflow rates**
Space Airflow Sizing Method **Individual peak space loads**

Zone	Supply Airflow (CFM)	Zone Htg Unit (MBH)	Reheat Coil (MBH)	FPMBX Fan (CFM)
1	314.3	-	-	-

5. Equipment Data

Central Cooling Unit - Air-Cooled DX

Estimated Maximum Load **4.7** MBH
Design OADB **95.0** F
Design EWB **67.0** F
Equipment Sizing **User-Defined**
Gross Cooling Capacity **12.0** MBH
AHRI Performance Rating **28.100** SEER
DX System Configuration **2-stage, 2 compressors, 2 circuits**
Low Temperature Cutoff OAT **0.0** F

Central Heating Unit - ASHP

Estimated Maximum Load **10.3** MBH
Design OADB **47.0** F
Design EDB **70.0** F
Equipment Sizing **User-Defined**
Gross Heating Capacity **12.0** MBH
AHRI Performance Rating **3.810** COP
Cutoff OAT **-22.0** F

Auxiliary Heating:

Auxiliary Heating Type **Electric Resistance**
Auxiliary Heating Upper Cutoff **70.0** F

13 4E #17 REF Input Data

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

01/26/2026
11:18 AM

1. General Details:

Air System Name 13 4E #17 REF
Equipment Type Split AHU
Air System Type Single Zone CAV
Space Model: a) Space Model REF
Notes:

2. System Components:

Ventilation Air Data:

Airflow Control Constant Ventilation Airflow
Ventilation Sizing Method Sum of Space OA Airflows
Unocc. Damper Position Closed
Damper Leak Rate 0 %

Air-to-Air Energy Recovery Data:

Recovery Type Sensible Heat
Thermal Efficiency 65 %
Input kW 0.000 kW
Schedule JFMAMJJASOND

Central Cooling Data:

Supply Air Temperature 58.0 F
Cooling Source Air-Cooled DX
Schedule JFMAMJJASOND
Capacity Control Cycled or Staged Capacity - Fan On

Central Heating Data:

Supply Temperature 95.0 F
Heating Source Air Source Heat Pump
Schedule JFMAMJJASOND
Capacity Control Cycled or Staged Capacity - Fan On

Supply Fan Data:

Fan Type Forward Curved
Configuration Draw-thru
Fan Performance 0.00 kW
Fan Control 1-speed, cooling and heating

Duct System Data:

Supply Duct Data:
Duct Leakage 0 %

Return Duct or Plenum Data:

Return Air Via Ducted Return

3. Zone Components:

Assigned Zones:

Zone	Zone Name
1	4E #17

Number of zones 1

Thermostats and Zone Data:

Zone	Cooling T-Stat Occ. (F)	Cooling T-Stat Unocc. (F)	Heating T-Stat Occ. (F)	Heating T-Stat Unocc. (F)	T-Stat Throttling Range (F)	Diversity Factor (%)	Direct Exhaust Fan (kW)
1	75.0	80.0	70.0	65.0	1.50	100	0.0

Thermostat Schedule 24h/24h
Unoccupied Cooling is Available

13 4E #17 REF Input Data

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

01/26/2026
11:18 AM

Supply Terminals Data:

Zone	Terminal Type	Air Distribution	Air Distribution Effectiveness Specification	Air Distribution Effectiveness	Minimum Airflow	Design Supply Temp.	Fan Perf.	Fan Efficiency
1	Diffuser (no reheat)	Ceiling supply / ceiling return	Not Used	-	0.00 CFM/person	-	-	-

4. Sizing Data (Computer-Generated):

System Sizing Data:

Sizing Data:

Cooling Supply Temperature **58.0** F
Supply Fan Airflow **530.7** CFM
Ventilation Airflow **100.0** CFM
Heating Supply Temperature **95.0** F

Hydronic Sizing Specifications:

Chilled Water Supply Temperature **44.0** F
Chilled Water Delta-T **10.0** F
Hot Water Supply Temperature **140.0** F
Hot Water Delta-T **20.0** F

Safety Factors:

Cooling Sensible **15** %
Cooling Latent **15** %
Heating **15** %

Zone Sizing Data:

Zone Airflow Sizing Method **Sum of space airflow rates**
Space Airflow Sizing Method **Individual peak space loads**

Zone	Supply Airflow (CFM)	Zone Htg Unit (MBH)	Reheat Coil (MBH)	FPMBX Fan (CFM)
1	530.7	-	-	-

5. Equipment Data

Central Cooling Unit - Air-Cooled DX

Estimated Maximum Load **6.3** MBH
Design OADB **95.0** F
Design EWB **67.0** F
Equipment Sizing **User-Defined**
Gross Cooling Capacity **12.0** MBH
AHRI Performance Rating **14.300** SEER
DX System Configuration **1-stage, 1 compressor, 1 circuit**
Low Temperature Cutoff OAT **0.0** F

Central Heating Unit - ASHP

Estimated Maximum Load **17.3** MBH
Design OADB **47.0** F
Design EDB **70.0** F
Equipment Sizing **User-Defined**
Gross Heating Capacity **12.0** MBH
AHRI Performance Rating **7.700** HSPF
Cutoff OAT **23.0** F

Auxiliary Heating:

Auxiliary Heating Type **Electric Resistance**
Auxiliary Heating Upper Cutoff **70.0** F

14 4E #17 CPT Input Data

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

01/26/2026
11:18 AM

1. General Details:

Air System Name 14 4E #17 CPT
Equipment Type Split AHU
Air System Type Single Zone CAV
Space Model: b) Space Model CPT
Notes:

2. System Components:

Ventilation Air Data:

Airflow Control Constant Ventilation Airflow
Ventilation Sizing Method Sum of Space OA Airflows
Unocc. Damper Position Closed
Damper Leak Rate 0 %

Air-to-Air Energy Recovery Data:

Recovery Type Sensible Heat
Thermal Efficiency 78 %
Input kW 0.000 kW
Schedule JFMAMJJASOND

Central Cooling Data:

Supply Air Temperature 58.0 F
Cooling Source Air-Cooled DX
Schedule JFMAMJJASOND
Capacity Control Cycled or Staged Capacity - Fan On

Central Heating Data:

Supply Temperature 95.0 F
Heating Source Air Source Heat Pump
Schedule JFMAMJJASOND
Capacity Control Cycled or Staged Capacity - Fan On

Supply Fan Data:

Fan Type Forward Curved
Configuration Draw-thru
Fan Performance 0.00 kW
Fan Control 1-speed, cooling and heating

Duct System Data:

Supply Duct Data:
Duct Leakage 0 %

Return Duct or Plenum Data:

Return Air Via Ducted Return

3. Zone Components:

Assigned Zones:

Zone	Zone Name
1	4E #17

Number of zones 1

Thermostats and Zone Data:

Zone	Cooling T-Stat Occ. (F)	Cooling T-Stat Unocc. (F)	Heating T-Stat Occ. (F)	Heating T-Stat Unocc. (F)	T-Stat Throttling Range (F)	Diversity Factor (%)	Direct Exhaust Fan (kW)
1	75.0	80.0	70.0	65.0	1.50	100	0.0

Thermostat Schedule 24h/24h
Unoccupied Cooling is Available

14 4E #17 CPT Input Data

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

01/26/2026
11:18 AM

Supply Terminals Data:

Zone	Terminal Type	Air Distribution	Air Distribution Effectiveness Specification	Air Distribution Effectiveness	Minimum Airflow	Design Supply Temp.	Fan Perf.	Fan Efficiency
1	Diffuser (no reheat)	Ceiling supply / ceiling return	Not Used	-	0.00 CFM/person	-	-	-

4. Sizing Data (Computer-Generated):

System Sizing Data:

Sizing Data:

Cooling Supply Temperature **58.0** F
Supply Fan Airflow **637.3** CFM
Ventilation Airflow **100.0** CFM
Heating Supply Temperature **95.0** F

Hydronic Sizing Specifications:

Chilled Water Supply Temperature **44.0** F
Chilled Water Delta-T **10.0** F
Hot Water Supply Temperature **140.0** F
Hot Water Delta-T **20.0** F

Safety Factors:

Cooling Sensible **15** %
Cooling Latent **15** %
Heating **15** %

Zone Sizing Data:

Zone Airflow Sizing Method **Sum of space airflow rates**
Space Airflow Sizing Method **Individual peak space loads**

Zone	Supply Airflow (CFM)	Zone Htg Unit (MBH)	Reheat Coil (MBH)	FPMBX Fan (CFM)
1	637.3	-	-	-

5. Equipment Data

Central Cooling Unit - Air-Cooled DX

Estimated Maximum Load **12.6** MBH
Design OADB **95.0** F
Design EWB **67.0** F
Equipment Sizing **User-Defined**
Gross Cooling Capacity **12.0** MBH
AHRI Performance Rating **28.100** SEER
DX System Configuration **2-stage, 2 compressors, 2 circuits**
Low Temperature Cutoff OAT **0.0** F

Central Heating Unit - ASHP

Estimated Maximum Load **16.0** MBH
Design OADB **47.0** F
Design EDB **70.0** F
Equipment Sizing **User-Defined**
Gross Heating Capacity **12.0** MBH
AHRI Performance Rating **3.810** COP
Cutoff OAT **-22.0** F

Auxiliary Heating:

Auxiliary Heating Type **Electric Resistance**
Auxiliary Heating Upper Cutoff **70.0** F

15 4E #18 REF Input Data

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

01/26/2026
11:18 AM

1. General Details:

Air System Name 15 4E #18 REF
Equipment Type Split AHU
Air System Type Single Zone CAV
Space Model: a) Space Model REF
Notes:

2. System Components:

Ventilation Air Data:

Airflow Control Constant Ventilation Airflow
Ventilation Sizing Method Sum of Space OA Airflows
Unocc. Damper Position Closed
Damper Leak Rate 0 %

Air-to-Air Energy Recovery Data:

Recovery Type Sensible Heat
Thermal Efficiency 65 %
Input kW 0.000 kW
Schedule JFMAMJJASOND

Central Cooling Data:

Supply Air Temperature 58.0 F
Cooling Source Air-Cooled DX
Schedule JFMAMJJASOND
Capacity Control Cycled or Staged Capacity - Fan On

Central Heating Data:

Supply Temperature 95.0 F
Heating Source Air Source Heat Pump
Schedule JFMAMJJASOND
Capacity Control Cycled or Staged Capacity - Fan On

Supply Fan Data:

Fan Type Forward Curved
Configuration Draw-thru
Fan Performance 0.00 kW
Fan Control 1-speed, cooling and heating

Duct System Data:

Supply Duct Data:
Duct Leakage 0 %

Return Duct or Plenum Data:

Return Air Via Ducted Return

3. Zone Components:

Assigned Zones:

Zone	Zone Name
1	4E #18

Number of zones 1

Thermostats and Zone Data:

Zone	Cooling T-Stat Occ. (F)	Cooling T-Stat Unocc. (F)	Heating T-Stat Occ. (F)	Heating T-Stat Unocc. (F)	T-Stat Throttling Range (F)	Diversity Factor (%)	Direct Exhaust Fan (kW)
1	75.0	80.0	70.0	65.0	1.50	100	0.0

Thermostat Schedule 24h/24h
Unoccupied Cooling is Available

15 4E #18 REF Input Data

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

01/26/2026
11:18 AM

Supply Terminals Data:

Zone	Terminal Type	Air Distribution	Air Distribution Effectiveness Specification	Air Distribution Effectiveness	Minimum Airflow	Design Supply Temp.	Fan Perf.	Fan Efficiency
1	Diffuser (no reheat)	Ceiling supply / ceiling return	Not Used	-	0.00 CFM/person	-	-	-

4. Sizing Data (Computer-Generated):

System Sizing Data:

Sizing Data:

Cooling Supply Temperature **58.0** F
Supply Fan Airflow **281.3** CFM
Ventilation Airflow **100.0** CFM
Heating Supply Temperature **95.0** F

Hydronic Sizing Specifications:

Chilled Water Supply Temperature **44.0** F
Chilled Water Delta-T **10.0** F
Hot Water Supply Temperature **140.0** F
Hot Water Delta-T **20.0** F

Safety Factors:

Cooling Sensible **15** %
Cooling Latent **15** %
Heating **15** %

Zone Sizing Data:

Zone Airflow Sizing Method **Sum of space airflow rates**
Space Airflow Sizing Method **Individual peak space loads**

Zone	Supply Airflow (CFM)	Zone Htg Unit (MBH)	Reheat Coil (MBH)	FPMBX Fan (CFM)
1	281.3	-	-	-

5. Equipment Data

Central Cooling Unit - Air-Cooled DX

Estimated Maximum Load **6.4** MBH
Design OADB **95.0** F
Design EWB **67.0** F
Equipment Sizing **User-Defined**
Gross Cooling Capacity **12.0** MBH
AHRI Performance Rating **14.300** SEER
DX System Configuration **1-stage, 1 compressor, 1 circuit**
Low Temperature Cutoff OAT **0.0** F

Central Heating Unit - ASHP

Estimated Maximum Load **10.0** MBH
Design OADB **47.0** F
Design EDB **70.0** F
Equipment Sizing **User-Defined**
Gross Heating Capacity **12.0** MBH
AHRI Performance Rating **7.700** HSPF
Cutoff OAT **23.0** F

Auxiliary Heating:

Auxiliary Heating Type **Electric Resistance**
Auxiliary Heating Upper Cutoff **70.0** F

16 4E #18 CPT Input Data

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

01/26/2026
11:18 AM

1. General Details:

Air System Name 16 4E #18 CPT
Equipment Type Split AHU
Air System Type Single Zone CAV
Space Model: b) Space Model CPT
Notes:

2. System Components:

Ventilation Air Data:

Airflow Control Constant Ventilation Airflow
Ventilation Sizing Method Sum of Space OA Airflows
Unocc. Damper Position Closed
Damper Leak Rate 0 %

Air-to-Air Energy Recovery Data:

Recovery Type Sensible Heat
Thermal Efficiency 78 %
Input kW 0.000 kW
Schedule JFMAMJJASOND

Central Cooling Data:

Supply Air Temperature 58.0 F
Cooling Source Air-Cooled DX
Schedule JFMAMJJASOND
Capacity Control Cycled or Staged Capacity - Fan On

Central Heating Data:

Supply Temperature 95.0 F
Heating Source Air Source Heat Pump
Schedule JFMAMJJASOND
Capacity Control Cycled or Staged Capacity - Fan On

Supply Fan Data:

Fan Type Forward Curved
Configuration Draw-thru
Fan Performance 0.00 kW
Fan Control 1-speed, cooling and heating

Duct System Data:

Supply Duct Data:
Duct Leakage 0 %

Return Duct or Plenum Data:

Return Air Via Ducted Return

3. Zone Components:

Assigned Zones:

Zone	Zone Name
1	4E #18

Number of zones 1

Thermostats and Zone Data:

Zone	Cooling T-Stat Occ. (F)	Cooling T-Stat Unocc. (F)	Heating T-Stat Occ. (F)	Heating T-Stat Unocc. (F)	T-Stat Throttling Range (F)	Diversity Factor (%)	Direct Exhaust Fan (kW)
1	75.0	80.0	70.0	65.0	1.50	100	0.0

Thermostat Schedule 24h/24h
Unoccupied Cooling is Available

16 4E #18 CPT Input Data

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

01/26/2026
11:18 AM

Supply Terminals Data:

Zone	Terminal Type	Air Distribution	Air Distribution Effectiveness Specification	Air Distribution Effectiveness	Minimum Airflow	Design Supply Temp.	Fan Perf.	Fan Efficiency
1	Diffuser (no reheat)	Ceiling supply / ceiling return	Not Used	-	0.00 CFM/person	-	-	-

4. Sizing Data (Computer-Generated):

System Sizing Data:

Sizing Data:

Cooling Supply Temperature **58.0** F
Supply Fan Airflow **555.2** CFM
Ventilation Airflow **100.0** CFM
Heating Supply Temperature **95.0** F

Hydronic Sizing Specifications:

Chilled Water Supply Temperature **44.0** F
Chilled Water Delta-T **10.0** F
Hot Water Supply Temperature **140.0** F
Hot Water Delta-T **20.0** F

Safety Factors:

Cooling Sensible **15** %
Cooling Latent **15** %
Heating **15** %

Zone Sizing Data:

Zone Airflow Sizing Method **Sum of space airflow rates**
Space Airflow Sizing Method **Individual peak space loads**

Zone	Supply Airflow (CFM)	Zone Htg Unit (MBH)	Reheat Coil (MBH)	FPMBX Fan (CFM)
1	555.2	-	-	-

5. Equipment Data

Central Cooling Unit - Air-Cooled DX

Estimated Maximum Load **11.6** MBH
Design OADB **95.0** F
Design EWB **67.0** F
Equipment Sizing **User-Defined**
Gross Cooling Capacity **12.0** MBH
AHRI Performance Rating **28.100** SEER
DX System Configuration **2-stage, 2 compressors, 2 circuits**
Low Temperature Cutoff OAT **0.0** F

Central Heating Unit - ASHP

Estimated Maximum Load **8.8** MBH
Design OADB **47.0** F
Design EDB **70.0** F
Equipment Sizing **User-Defined**
Gross Heating Capacity **12.0** MBH
AHRI Performance Rating **3.810** COP
Cutoff OAT **-22.0** F

Auxiliary Heating:

Auxiliary Heating Type **Electric Resistance**
Auxiliary Heating Upper Cutoff **70.0** F

17 4E #19 REF Input Data

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

01/26/2026
11:18 AM

1. General Details:

Air System Name 17 4E #19 REF
Equipment Type Split AHU
Air System Type Single Zone CAV
Space Model: a) Space Model REF
Notes:

2. System Components:

Ventilation Air Data:

Airflow Control Constant Ventilation Airflow
Ventilation Sizing Method Sum of Space OA Airflows
Unocc. Damper Position Closed
Damper Leak Rate 0 %

Air-to-Air Energy Recovery Data:

Recovery Type Sensible Heat
Thermal Efficiency 65 %
Input kW 0.000 kW
Schedule JFMAMJJASOND

Central Cooling Data:

Supply Air Temperature 58.0 F
Cooling Source Air-Cooled DX
Schedule JFMAMJJASOND
Capacity Control Cycled or Staged Capacity - Fan On

Central Heating Data:

Supply Temperature 95.0 F
Heating Source Air Source Heat Pump
Schedule JFMAMJJASOND
Capacity Control Cycled or Staged Capacity - Fan On

Supply Fan Data:

Fan Type Forward Curved
Configuration Draw-thru
Fan Performance 0.00 kW
Fan Control 1-speed, cooling and heating

Duct System Data:

Supply Duct Data:
Duct Leakage 0 %

Return Duct or Plenum Data:

Return Air Via Ducted Return

3. Zone Components:

Assigned Zones:

Zone	Zone Name
1	4E #19

Number of zones 1

Thermostats and Zone Data:

Zone	Cooling T-Stat Occ. (F)	Cooling T-Stat Unocc. (F)	Heating T-Stat Occ. (F)	Heating T-Stat Unocc. (F)	T-Stat Throttling Range (F)	Diversity Factor (%)	Direct Exhaust Fan (kW)
1	75.0	80.0	70.0	65.0	1.50	100	0.0

Thermostat Schedule 24h/24h
Unoccupied Cooling is Available

17 4E #19 REF Input Data

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

01/26/2026
11:18 AM

Supply Terminals Data:

Zone	Terminal Type	Air Distribution	Air Distribution Effectiveness Specification	Air Distribution Effectiveness	Minimum Airflow	Design Supply Temp.	Fan Perf.	Fan Efficiency
1	Diffuser (no reheat)	Ceiling supply / ceiling return	Not Used	-	0.00 CFM/person	-	-	-

4. Sizing Data (Computer-Generated):

System Sizing Data:

Sizing Data:

Cooling Supply Temperature 58.0 F
Supply Fan Airflow 317.5 CFM
Ventilation Airflow 100.0 CFM
Heating Supply Temperature 95.0 F

Hydronic Sizing Specifications:

Chilled Water Supply Temperature 44.0 F
Chilled Water Delta-T 10.0 F
Hot Water Supply Temperature 140.0 F
Hot Water Delta-T 20.0 F

Safety Factors:

Cooling Sensible 15 %
Cooling Latent 15 %
Heating 15 %

Zone Sizing Data:

Zone Airflow Sizing Method Sum of space airflow rates
Space Airflow Sizing Method Individual peak space loads

Zone	Supply Airflow (CFM)	Zone Htg Unit (MBH)	Reheat Coil (MBH)	FPMBX Fan (CFM)
1	317.5	-	-	-

5. Equipment Data

Central Cooling Unit - Air-Cooled DX

Estimated Maximum Load 7.0 MBH
Design OADB 95.0 F
Design EWB 67.0 F
Equipment Sizing User-Defined
Gross Cooling Capacity 12.0 MBH
AHRI Performance Rating 14.300 SEER
DX System Configuration 1-stage, 1 compressor, 1 circuit
Low Temperature Cutoff OAT 0.0 F

Central Heating Unit - ASHP

Estimated Maximum Load 10.8 MBH
Design OADB 47.0 F
Design EDB 70.0 F
Equipment Sizing User-Defined
Gross Heating Capacity 12.0 MBH
AHRI Performance Rating 7.700 HSPF
Cutoff OAT 23.0 F

Auxiliary Heating:

Auxiliary Heating Type Electric Resistance
Auxiliary Heating Upper Cutoff 70.0 F

18 4E #19 CPT Input Data

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

01/26/2026
11:18 AM

1. General Details:

Air System Name 18 4E #19 CPT
Equipment Type Split AHU
Air System Type Single Zone CAV
Space Model: b) Space Model CPT
Notes:

2. System Components:

Ventilation Air Data:

Airflow Control Constant Ventilation Airflow
Ventilation Sizing Method Sum of Space OA Airflows
Unocc. Damper Position Closed
Damper Leak Rate 0 %

Air-to-Air Energy Recovery Data:

Recovery Type Sensible Heat
Thermal Efficiency 78 %
Input kW 0.000 kW
Schedule JFMAMJJASOND

Central Cooling Data:

Supply Air Temperature 58.0 F
Cooling Source Air-Cooled DX
Schedule JFMAMJJASOND
Capacity Control Cycled or Staged Capacity - Fan On

Central Heating Data:

Supply Temperature 95.0 F
Heating Source Air Source Heat Pump
Schedule JFMAMJJASOND
Capacity Control Cycled or Staged Capacity - Fan On

Supply Fan Data:

Fan Type Forward Curved
Configuration Draw-thru
Fan Performance 0.00 kW
Fan Control 1-speed, cooling and heating

Duct System Data:

Supply Duct Data:
Duct Leakage 0 %

Return Duct or Plenum Data:

Return Air Via Ducted Return

3. Zone Components:

Assigned Zones:

Zone	Zone Name
1	4E #19

Number of zones 1

Thermostats and Zone Data:

Zone	Cooling T-Stat Occ. (F)	Cooling T-Stat Unocc. (F)	Heating T-Stat Occ. (F)	Heating T-Stat Unocc. (F)	T-Stat Throttling Range (F)	Diversity Factor (%)	Direct Exhaust Fan (kW)
1	75.0	80.0	70.0	65.0	1.50	100	0.0

Thermostat Schedule 24h/24h
Unoccupied Cooling is Available

18 4E #19 CPT Input Data

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

01/26/2026
11:18 AM

Supply Terminals Data:

Zone	Terminal Type	Air Distribution	Air Distribution Effectiveness Specification	Air Distribution Effectiveness	Minimum Airflow	Design Supply Temp.	Fan Perf.	Fan Efficiency
1	Diffuser (no reheat)	Ceiling supply / ceiling return	Not Used	-	0.00 CFM/person	-	-	-

4. Sizing Data (Computer-Generated):

System Sizing Data:

Sizing Data:

Cooling Supply Temperature **58.0** F
Supply Fan Airflow **630.9** CFM
Ventilation Airflow **100.0** CFM
Heating Supply Temperature **95.0** F

Hydronic Sizing Specifications:

Chilled Water Supply Temperature **44.0** F
Chilled Water Delta-T **10.0** F
Hot Water Supply Temperature **140.0** F
Hot Water Delta-T **20.0** F

Safety Factors:

Cooling Sensible **15** %
Cooling Latent **15** %
Heating **15** %

Zone Sizing Data:

Zone Airflow Sizing Method **Sum of space airflow rates**
Space Airflow Sizing Method **Individual peak space loads**

Zone	Supply Airflow (CFM)	Zone Htg Unit (MBH)	Reheat Coil (MBH)	FPMBX Fan (CFM)
1	630.9	-	-	-

5. Equipment Data

Central Cooling Unit - Air-Cooled DX

Estimated Maximum Load **12.9** MBH
Design OADB **95.0** F
Design EWB **67.0** F
Equipment Sizing **User-Defined**
Gross Cooling Capacity **12.0** MBH
AHRI Performance Rating **28.100** SEER
DX System Configuration **2-stage, 2 compressors, 2 circuits**
Low Temperature Cutoff OAT **0.0** F

Central Heating Unit - ASHP

Estimated Maximum Load **9.6** MBH
Design OADB **47.0** F
Design EDB **70.0** F
Equipment Sizing **User-Defined**
Gross Heating Capacity **12.0** MBH
AHRI Performance Rating **3.810** COP
Cutoff OAT **-22.0** F

Auxiliary Heating:

Auxiliary Heating Type **Electric Resistance**
Auxiliary Heating Upper Cutoff **70.0** F

19 4E #20 REF Input Data

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

01/26/2026
11:18 AM

1. General Details:

Air System Name 19 4E #20 REF
Equipment Type Split AHU
Air System Type Single Zone CAV
Space Model: a) Space Model REF
Notes:

2. System Components:

Ventilation Air Data:

Airflow Control Constant Ventilation Airflow
Ventilation Sizing Method Sum of Space OA Airflows
Unocc. Damper Position Closed
Damper Leak Rate 0 %

Air-to-Air Energy Recovery Data:

Recovery Type Sensible Heat
Thermal Efficiency 65 %
Input kW 0.000 kW
Schedule JFMAMJJASOND

Central Cooling Data:

Supply Air Temperature 58.0 F
Cooling Source Air-Cooled DX
Schedule JFMAMJJASOND
Capacity Control Cycled or Staged Capacity - Fan On

Central Heating Data:

Supply Temperature 95.0 F
Heating Source Air Source Heat Pump
Schedule JFMAMJJASOND
Capacity Control Cycled or Staged Capacity - Fan On

Supply Fan Data:

Fan Type Forward Curved
Configuration Draw-thru
Fan Performance 0.00 kW
Fan Control 1-speed, cooling and heating

Duct System Data:

Supply Duct Data:
Duct Leakage 0 %

Return Duct or Plenum Data:

Return Air Via Ducted Return

3. Zone Components:

Assigned Zones:

Zone	Zone Name
1	4E #20

Number of zones 1

Thermostats and Zone Data:

Zone	Cooling T-Stat Occ. (F)	Cooling T-Stat Unocc. (F)	Heating T-Stat Occ. (F)	Heating T-Stat Unocc. (F)	T-Stat Throttling Range (F)	Diversity Factor (%)	Direct Exhaust Fan (kW)
1	75.0	80.0	70.0	65.0	1.50	100	0.0

Thermostat Schedule 24h/24h
Unoccupied Cooling is Available

19 4E #20 REF Input Data

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

01/26/2026
11:18 AM

Supply Terminals Data:

Zone	Terminal Type	Air Distribution	Air Distribution Effectiveness Specification	Air Distribution Effectiveness	Minimum Airflow	Design Supply Temp.	Fan Perf.	Fan Efficiency
1	Diffuser (no reheat)	Ceiling supply / ceiling return	Not Used	-	0.00 CFM/person	-	-	-

4. Sizing Data (Computer-Generated):

System Sizing Data:

Sizing Data:

Cooling Supply Temperature **58.0** F
Supply Fan Airflow **319.1** CFM
Ventilation Airflow **100.0** CFM
Heating Supply Temperature **95.0** F

Hydronic Sizing Specifications:

Chilled Water Supply Temperature **44.0** F
Chilled Water Delta-T **10.0** F
Hot Water Supply Temperature **140.0** F
Hot Water Delta-T **20.0** F

Safety Factors:

Cooling Sensible **15** %
Cooling Latent **15** %
Heating **15** %

Zone Sizing Data:

Zone Airflow Sizing Method **Sum of space airflow rates**
Space Airflow Sizing Method **Individual peak space loads**

Zone	Supply Airflow (CFM)	Zone Htg Unit (MBH)	Reheat Coil (MBH)	FPMBX Fan (CFM)
1	319.1	-	-	-

5. Equipment Data

Central Cooling Unit - Air-Cooled DX

Estimated Maximum Load **7.1** MBH
Design OADB **95.0** F
Design EWB **67.0** F
Equipment Sizing **User-Defined**
Gross Cooling Capacity **12.0** MBH
AHRI Performance Rating **14.300** SEER
DX System Configuration **1-stage, 1 compressor, 1 circuit**
Low Temperature Cutoff OAT **0.0** F

Central Heating Unit - ASHP

Estimated Maximum Load **11.4** MBH
Design OADB **47.0** F
Design EDB **70.0** F
Equipment Sizing **User-Defined**
Gross Heating Capacity **12.0** MBH
AHRI Performance Rating **7.700** HSPF
Cutoff OAT **23.0** F

Auxiliary Heating:

Auxiliary Heating Type **Electric Resistance**
Auxiliary Heating Upper Cutoff **70.0** F

20 4E #20 CPT Input Data

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

01/26/2026
11:18 AM

1. General Details:

Air System Name 20 4E #20 CPT
Equipment Type Split AHU
Air System Type Single Zone CAV
Space Model: b) Space Model CPT
Notes:

2. System Components:

Ventilation Air Data:

Airflow Control Constant Ventilation Airflow
Ventilation Sizing Method Sum of Space OA Airflows
Unocc. Damper Position Closed
Damper Leak Rate 0 %

Air-to-Air Energy Recovery Data:

Recovery Type Sensible Heat
Thermal Efficiency 78 %
Input kW 0.000 kW
Schedule JFMAMJJASOND

Central Cooling Data:

Supply Air Temperature 58.0 F
Cooling Source Air-Cooled DX
Schedule JFMAMJJASOND
Capacity Control Cycled or Staged Capacity - Fan On

Central Heating Data:

Supply Temperature 95.0 F
Heating Source Air Source Heat Pump
Schedule JFMAMJJASOND
Capacity Control Cycled or Staged Capacity - Fan On

Supply Fan Data:

Fan Type Forward Curved
Configuration Draw-thru
Fan Performance 0.00 kW
Fan Control 1-speed, cooling and heating

Duct System Data:

Supply Duct Data:
Duct Leakage 0 %

Return Duct or Plenum Data:

Return Air Via Ducted Return

3. Zone Components:

Assigned Zones:

Zone	Zone Name
1	4E #20

Number of zones 1

Thermostats and Zone Data:

Zone	Cooling T-Stat Occ. (F)	Cooling T-Stat Unocc. (F)	Heating T-Stat Occ. (F)	Heating T-Stat Unocc. (F)	T-Stat Throttling Range (F)	Diversity Factor (%)	Direct Exhaust Fan (kW)
1	75.0	80.0	70.0	65.0	1.50	100	0.0

Thermostat Schedule 24h/24h
Unoccupied Cooling is Available

20 4E #20 CPT Input Data

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

01/26/2026
11:18 AM

Supply Terminals Data:

Zone	Terminal Type	Air Distribution	Air Distribution Effectiveness Specification	Air Distribution Effectiveness	Minimum Airflow	Design Supply Temp.	Fan Perf.	Fan Efficiency
1	Diffuser (no reheat)	Ceiling supply / ceiling return	Not Used	-	0.00 CFM/person	-	-	-

4. Sizing Data (Computer-Generated):

System Sizing Data:

Sizing Data:

Cooling Supply Temperature **58.0** F
Supply Fan Airflow **633.1** CFM
Ventilation Airflow **100.0** CFM
Heating Supply Temperature **95.0** F

Hydronic Sizing Specifications:

Chilled Water Supply Temperature **44.0** F
Chilled Water Delta-T **10.0** F
Hot Water Supply Temperature **140.0** F
Hot Water Delta-T **20.0** F

Safety Factors:

Cooling Sensible **15** %
Cooling Latent **15** %
Heating **15** %

Zone Sizing Data:

Zone Airflow Sizing Method **Sum of space airflow rates**
Space Airflow Sizing Method **Individual peak space loads**

Zone	Supply Airflow (CFM)	Zone Htg Unit (MBH)	Reheat Coil (MBH)	FPMBX Fan (CFM)
1	633.1	-	-	-

5. Equipment Data

Central Cooling Unit - Air-Cooled DX

Estimated Maximum Load **13.0** MBH
Design OADB **95.0** F
Design EWB **67.0** F
Equipment Sizing **User-Defined**
Gross Cooling Capacity **12.0** MBH
AHRI Performance Rating **28.100** SEER
DX System Configuration **2-stage, 2 compressors, 2 circuits**
Low Temperature Cutoff OAT **0.0** F

Central Heating Unit - ASHP

Estimated Maximum Load **10.3** MBH
Design OADB **47.0** F
Design EDB **70.0** F
Equipment Sizing **User-Defined**
Gross Heating Capacity **12.0** MBH
AHRI Performance Rating **3.810** COP
Cutoff OAT **-22.0** F

Auxiliary Heating:

Auxiliary Heating Type **Electric Resistance**
Auxiliary Heating Upper Cutoff **70.0** F

21 4E #21 REF Input Data

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

01/26/2026
11:18 AM

1. General Details:

Air System Name 21 4E #21 REF
Equipment Type Split AHU
Air System Type Single Zone CAV
Space Model: a) Space Model REF
Notes:

2. System Components:

Ventilation Air Data:

Airflow Control Constant Ventilation Airflow
Ventilation Sizing Method Sum of Space OA Airflows
Unocc. Damper Position Closed
Damper Leak Rate 0 %

Air-to-Air Energy Recovery Data:

Recovery Type Sensible Heat
Thermal Efficiency 65 %
Input kW 0.000 kW
Schedule JFMAMJJASOND

Central Cooling Data:

Supply Air Temperature 58.0 F
Cooling Source Air-Cooled DX
Schedule JFMAMJJASOND
Capacity Control Cycled or Staged Capacity - Fan On

Central Heating Data:

Supply Temperature 95.0 F
Heating Source Air Source Heat Pump
Schedule JFMAMJJASOND
Capacity Control Cycled or Staged Capacity - Fan On

Supply Fan Data:

Fan Type Forward Curved
Configuration Draw-thru
Fan Performance 0.00 kW
Fan Control 1-speed, cooling and heating

Duct System Data:

Supply Duct Data:
Duct Leakage 0 %

Return Duct or Plenum Data:

Return Air Via Ducted Return

3. Zone Components:

Assigned Zones:

Zone	Zone Name
1	4E #21

Number of zones 1

Thermostats and Zone Data:

Zone	Cooling T-Stat Occ. (F)	Cooling T-Stat Unocc. (F)	Heating T-Stat Occ. (F)	Heating T-Stat Unocc. (F)	T-Stat Throttling Range (F)	Diversity Factor (%)	Direct Exhaust Fan (kW)
1	75.0	80.0	70.0	65.0	1.50	100	0.0

Thermostat Schedule 24h/24h
Unoccupied Cooling is Available

21 4E #21 REF Input Data

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

01/26/2026
11:18 AM

Supply Terminals Data:

Zone	Terminal Type	Air Distribution	Air Distribution Effectiveness Specification	Air Distribution Effectiveness	Minimum Airflow	Design Supply Temp.	Fan Perf.	Fan Efficiency
1	Diffuser (no reheat)	Ceiling supply / ceiling return	Not Used	-	0.00 CFM/person	-	-	-

4. Sizing Data (Computer-Generated):

System Sizing Data:

Sizing Data:

Cooling Supply Temperature **58.0** F
Supply Fan Airflow **322.2** CFM
Ventilation Airflow **100.0** CFM
Heating Supply Temperature **95.0** F

Hydronic Sizing Specifications:

Chilled Water Supply Temperature **44.0** F
Chilled Water Delta-T **10.0** F
Hot Water Supply Temperature **140.0** F
Hot Water Delta-T **20.0** F

Safety Factors:

Cooling Sensible **15** %
Cooling Latent **15** %
Heating **15** %

Zone Sizing Data:

Zone Airflow Sizing Method **Sum of space airflow rates**
Space Airflow Sizing Method **Individual peak space loads**

Zone	Supply Airflow (CFM)	Zone Htg Unit (MBH)	Reheat Coil (MBH)	FPMBX Fan (CFM)
1	322.2	-	-	-

5. Equipment Data

Central Cooling Unit - Air-Cooled DX

Estimated Maximum Load **7.1** MBH
Design OADB **95.0** F
Design EWB **67.0** F
Equipment Sizing **User-Defined**
Gross Cooling Capacity **12.0** MBH
AHRI Performance Rating **14.300** SEER
DX System Configuration **1-stage, 1 compressor, 1 circuit**
Low Temperature Cutoff OAT **0.0** F

Central Heating Unit - ASHP

Estimated Maximum Load **10.7** MBH
Design OADB **47.0** F
Design EDB **70.0** F
Equipment Sizing **User-Defined**
Gross Heating Capacity **12.0** MBH
AHRI Performance Rating **7.700** HSPF
Cutoff OAT **23.0** F

Auxiliary Heating:

Auxiliary Heating Type **Electric Resistance**
Auxiliary Heating Upper Cutoff **70.0** F

22 4E #21 CPT Input Data

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

01/26/2026
11:18 AM

1. General Details:

Air System Name 22 4E #21 CPT
Equipment Type Split AHU
Air System Type Single Zone CAV
Space Model: b) Space Model CPT
Notes:

2. System Components:

Ventilation Air Data:

Airflow Control Constant Ventilation Airflow
Ventilation Sizing Method Sum of Space OA Airflows
Unocc. Damper Position Closed
Damper Leak Rate 0 %

Air-to-Air Energy Recovery Data:

Recovery Type Sensible Heat
Thermal Efficiency 78 %
Input kW 0.000 kW
Schedule JFMAMJJASOND

Central Cooling Data:

Supply Air Temperature 58.0 F
Cooling Source Air-Cooled DX
Schedule JFMAMJJASOND
Capacity Control Cycled or Staged Capacity - Fan On

Central Heating Data:

Supply Temperature 95.0 F
Heating Source Air Source Heat Pump
Schedule JFMAMJJASOND
Capacity Control Cycled or Staged Capacity - Fan On

Supply Fan Data:

Fan Type Forward Curved
Configuration Draw-thru
Fan Performance 0.00 kW
Fan Control 1-speed, cooling and heating

Duct System Data:

Supply Duct Data:
Duct Leakage 0 %

Return Duct or Plenum Data:

Return Air Via Ducted Return

3. Zone Components:

Assigned Zones:

Zone	Zone Name
1	4E #21

Number of zones 1

Thermostats and Zone Data:

Zone	Cooling T-Stat Occ. (F)	Cooling T-Stat Unocc. (F)	Heating T-Stat Occ. (F)	Heating T-Stat Unocc. (F)	T-Stat Throttling Range (F)	Diversity Factor (%)	Direct Exhaust Fan (kW)
1	75.0	80.0	70.0	65.0	1.50	100	0.0

Thermostat Schedule 24h/24h
Unoccupied Cooling is Available

22 4E #21 CPT Input Data

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

01/26/2026
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Supply Terminals Data:

Zone	Terminal Type	Air Distribution	Air Distribution Effectiveness Specification	Air Distribution Effectiveness	Minimum Airflow	Design Supply Temp.	Fan Perf.	Fan Efficiency
1	Diffuser (no reheat)	Ceiling supply / ceiling return	Not Used	-	0.00 CFM/person	-	-	-

4. Sizing Data (Computer-Generated):

System Sizing Data:

Sizing Data:

Cooling Supply Temperature 58.0 F
Supply Fan Airflow 634.5 CFM
Ventilation Airflow 100.0 CFM
Heating Supply Temperature 95.0 F

Hydronic Sizing Specifications:

Chilled Water Supply Temperature 44.0 F
Chilled Water Delta-T 10.0 F
Hot Water Supply Temperature 140.0 F
Hot Water Delta-T 20.0 F

Safety Factors:

Cooling Sensible 15 %
Cooling Latent 15 %
Heating 15 %

Zone Sizing Data:

Zone Airflow Sizing Method Sum of space airflow rates
Space Airflow Sizing Method Individual peak space loads

Zone	Supply Airflow (CFM)	Zone Htg Unit (MBH)	Reheat Coil (MBH)	FPMBX Fan (CFM)
1	634.5	-	-	-

5. Equipment Data

Central Cooling Unit - Air-Cooled DX

Estimated Maximum Load 13.0 MBH
Design OADB 95.0 F
Design EWB 67.0 F
Equipment Sizing User-Defined
Gross Cooling Capacity 12.0 MBH
AHRI Performance Rating 28.100 SEER
DX System Configuration 2-stage, 2 compressors, 2 circuits
Low Temperature Cutoff OAT 0.0 F

Central Heating Unit - ASHP

Estimated Maximum Load 9.6 MBH
Design OADB 47.0 F
Design EDB 70.0 F
Equipment Sizing User-Defined
Gross Heating Capacity 12.0 MBH
AHRI Performance Rating 3.810 COP
Cutoff OAT -22.0 F

Auxiliary Heating:

Auxiliary Heating Type Electric Resistance
Auxiliary Heating Upper Cutoff 70.0 F

23 4E #22 REF Input Data

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

01/26/2026
11:18 AM

1. General Details:

Air System Name 23 4E #22 REF
Equipment Type Split AHU
Air System Type Single Zone CAV
Space Model: a) Space Model REF
Notes:

2. System Components:

Ventilation Air Data:

Airflow Control Constant Ventilation Airflow
Ventilation Sizing Method Sum of Space OA Airflows
Unocc. Damper Position Closed
Damper Leak Rate 0 %

Air-to-Air Energy Recovery Data:

Recovery Type Sensible Heat
Thermal Efficiency 65 %
Input kW 0.000 kW
Schedule JFMAMJJASOND

Central Cooling Data:

Supply Air Temperature 58.0 F
Cooling Source Air-Cooled DX
Schedule JFMAMJJASOND
Capacity Control Cycled or Staged Capacity - Fan On

Central Heating Data:

Supply Temperature 95.0 F
Heating Source Air Source Heat Pump
Schedule JFMAMJJASOND
Capacity Control Cycled or Staged Capacity - Fan On

Supply Fan Data:

Fan Type Forward Curved
Configuration Draw-thru
Fan Performance 0.00 kW
Fan Control 1-speed, cooling and heating

Duct System Data:

Supply Duct Data:
Duct Leakage 0 %

Return Duct or Plenum Data:

Return Air Via Ducted Return

3. Zone Components:

Assigned Zones:

Zone	Zone Name
1	4E #22

Number of zones 1

Thermostats and Zone Data:

Zone	Cooling T-Stat Occ. (F)	Cooling T-Stat Unocc. (F)	Heating T-Stat Occ. (F)	Heating T-Stat Unocc. (F)	T-Stat Throttling Range (F)	Diversity Factor (%)	Direct Exhaust Fan (kW)
1	75.0	80.0	70.0	65.0	1.50	100	0.0

Thermostat Schedule 24h/24h
Unoccupied Cooling is Available

23 4E #22 REF Input Data

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

01/26/2026
11:18 AM

Supply Terminals Data:

Zone	Terminal Type	Air Distribution	Air Distribution Effectiveness Specification	Air Distribution Effectiveness	Minimum Airflow	Design Supply Temp.	Fan Perf.	Fan Efficiency
1	Diffuser (no reheat)	Ceiling supply / ceiling return	Not Used	-	0.00 CFM/person	-	-	-

4. Sizing Data (Computer-Generated):

System Sizing Data:

Sizing Data:

Cooling Supply Temperature **58.0** F
Supply Fan Airflow **583.1** CFM
Ventilation Airflow **100.0** CFM
Heating Supply Temperature **95.0** F

Hydronic Sizing Specifications:

Chilled Water Supply Temperature **44.0** F
Chilled Water Delta-T **10.0** F
Hot Water Supply Temperature **140.0** F
Hot Water Delta-T **20.0** F

Safety Factors:

Cooling Sensible **15** %
Cooling Latent **15** %
Heating **15** %

Zone Sizing Data:

Zone Airflow Sizing Method **Sum of space airflow rates**
Space Airflow Sizing Method **Individual peak space loads**

Zone	Supply Airflow (CFM)	Zone Htg Unit (MBH)	Reheat Coil (MBH)	FPMBX Fan (CFM)
1	583.1	-	-	-

5. Equipment Data

Central Cooling Unit - Air-Cooled DX

Estimated Maximum Load **9.4** MBH
Design OADB **95.0** F
Design EWB **67.0** F
Equipment Sizing **User-Defined**
Gross Cooling Capacity **12.0** MBH
AHRI Performance Rating **14.300** SEER
DX System Configuration **1-stage, 1 compressor, 1 circuit**
Low Temperature Cutoff OAT **0.0** F

Central Heating Unit - ASHP

Estimated Maximum Load **18.7** MBH
Design OADB **47.0** F
Design EDB **70.0** F
Equipment Sizing **User-Defined**
Gross Heating Capacity **12.0** MBH
AHRI Performance Rating **7.700** HSPF
Cutoff OAT **23.0** F

Auxiliary Heating:

Auxiliary Heating Type **Electric Resistance**
Auxiliary Heating Upper Cutoff **70.0** F

24 4E #22 CPT Input Data

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

01/26/2026
11:18 AM

1. General Details:

Air System Name 24 4E #22 CPT
Equipment Type Split AHU
Air System Type Single Zone CAV
Space Model: b) Space Model CPT
Notes:

2. System Components:

Ventilation Air Data:

Airflow Control Constant Ventilation Airflow
Ventilation Sizing Method Sum of Space OA Airflows
Unocc. Damper Position Closed
Damper Leak Rate 0 %

Air-to-Air Energy Recovery Data:

Recovery Type Sensible Heat
Thermal Efficiency 78 %
Input kW 0.000 kW
Schedule JFMAMJJASOND

Central Cooling Data:

Supply Air Temperature 58.0 F
Cooling Source Air-Cooled DX
Schedule JFMAMJJASOND
Capacity Control Cycled or Staged Capacity - Fan On

Central Heating Data:

Supply Temperature 95.0 F
Heating Source Air Source Heat Pump
Schedule JFMAMJJASOND
Capacity Control Cycled or Staged Capacity - Fan On

Supply Fan Data:

Fan Type Forward Curved
Configuration Draw-thru
Fan Performance 0.00 kW
Fan Control 1-speed, cooling and heating

Duct System Data:

Supply Duct Data:
Duct Leakage 0 %

Return Duct or Plenum Data:

Return Air Via Ducted Return

3. Zone Components:

Assigned Zones:

Zone	Zone Name
1	4E #22

Number of zones 1

Thermostats and Zone Data:

Zone	Cooling T-Stat Occ. (F)	Cooling T-Stat Unocc. (F)	Heating T-Stat Occ. (F)	Heating T-Stat Unocc. (F)	T-Stat Throttling Range (F)	Diversity Factor (%)	Direct Exhaust Fan (kW)
1	75.0	80.0	70.0	65.0	1.50	100	0.0

Thermostat Schedule 24h/24h
Unoccupied Cooling is Available

24 4E #22 CPT Input Data

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

01/26/2026
11:18 AM

Supply Terminals Data:

Zone	Terminal Type	Air Distribution	Air Distribution Effectiveness Specification	Air Distribution Effectiveness	Minimum Airflow	Design Supply Temp.	Fan Perf.	Fan Efficiency
1	Diffuser (no reheat)	Ceiling supply / ceiling return	Not Used	-	0.00 CFM/person	-	-	-

4. Sizing Data (Computer-Generated):

System Sizing Data:

Sizing Data:

Cooling Supply Temperature **58.0** F
Supply Fan Airflow **848.8** CFM
Ventilation Airflow **100.0** CFM
Heating Supply Temperature **95.0** F

Hydronic Sizing Specifications:

Chilled Water Supply Temperature **44.0** F
Chilled Water Delta-T **10.0** F
Hot Water Supply Temperature **140.0** F
Hot Water Delta-T **20.0** F

Safety Factors:

Cooling Sensible **15** %
Cooling Latent **15** %
Heating **15** %

Zone Sizing Data:

Zone Airflow Sizing Method **Sum of space airflow rates**
Space Airflow Sizing Method **Individual peak space loads**

Zone	Supply Airflow (CFM)	Zone Htg Unit (MBH)	Reheat Coil (MBH)	FPMBX Fan (CFM)
1	848.8	-	-	-

5. Equipment Data

Central Cooling Unit - Air-Cooled DX

Estimated Maximum Load **16.2** MBH
Design OADB **95.0** F
Design EWB **67.0** F
Equipment Sizing **User-Defined**
Gross Cooling Capacity **12.0** MBH
AHRI Performance Rating **28.100** SEER
DX System Configuration **2-stage, 2 compressors, 2 circuits**
Low Temperature Cutoff OAT **0.0** F

Central Heating Unit - ASHP

Estimated Maximum Load **17.4** MBH
Design OADB **47.0** F
Design EDB **70.0** F
Equipment Sizing **User-Defined**
Gross Heating Capacity **12.0** MBH
AHRI Performance Rating **3.810** COP
Cutoff OAT **-22.0** F

Auxiliary Heating:

Auxiliary Heating Type **Electric Resistance**
Auxiliary Heating Upper Cutoff **70.0** F

25 4E ESC1 REF Input Data

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

01/26/2026
11:18 AM

1. General Details:

Air System Name **25 4E ESC1 REF**
Equipment Type **Split AHU**
Air System Type **Single Zone CAV**
Space Model: **a) Space Model REF**
Notes:

2. System Components:

Ventilation Air Data:

Airflow Control **Constant Ventilation Airflow**
Ventilation Sizing Method **Sum of Space OA Airflows**
Unocc. Damper Position **Closed**
Damper Leak Rate **0** %

Central Heating Data:

Supply Temperature **95.0** F
Heating Source **Electric Resistance**
Schedule **JFMAMJJASOND**
Capacity Control **Cycled or Staged Capacity - Fan On**

Supply Fan Data:

Fan Type **Forward Curved**
Configuration **Draw-thru**
Fan Performance **2.00** in wg
Overall Efficiency **54** %
Fan Control **1-speed, cooling and heating**

Duct System Data:

Supply Duct Data:

Duct Leakage **0** %

Return Duct or Plenum Data:

Return Air Via **Ducted Return**

3. Zone Components:

Assigned Zones:

Zone	Zone Name
1	4E ESC1

Number of zones **1**

Thermostats and Zone Data:

Zone	Cooling T-Stat Occ. (F)	Cooling T-Stat Unocc. (F)	Heating T-Stat Occ. (F)	Heating T-Stat Unocc. (F)	T-Stat Throttling Range (F)	Diversity Factor (%)	Direct Exhaust Fan (kW)
1	75.0	80.0	70.0	65.0	1.50	100	0.0

Thermostat Schedule **24h/24h**
Unoccupied Cooling is **Available**

Supply Terminals Data:

Zone	Terminal Type	Air Distribution	Air Distribution Effectiveness Specification	Air Distribution Effectiveness	Minimum Airflow	Design Supply Temp.	Fan Perf.	Fan Efficiency
1	Diffuser (no reheat)	Ceiling supply / ceiling return	Not Used	-	0.00 CFM/person	-	-	-

4. Sizing Data (Computer-Generated):

System Sizing Data:

Sizing Data:
Supply Fan Airflow **183.8** CFM
Ventilation Airflow **0.0** CFM
Heating Supply Temperature **95.0** F

25 4E ESC1 REF Input Data

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

01/26/2026
11:18 AM

Hydronic Sizing Specifications:

Chilled Water Supply Temperature **44.0** F
Chilled Water Delta-T **10.0** F
Hot Water Supply Temperature **140.0** F
Hot Water Delta-T **20.0** F

Safety Factors:

Cooling Sensible **15** %
Cooling Latent **15** %
Heating **15** %

Zone Sizing Data:

Zone Airflow Sizing Method **Sum of space airflow rates**
Space Airflow Sizing Method **Individual peak space loads**

Zone	Supply Airflow (CFM)	Zone Htg Unit (MBH)	Reheat Coil (MBH)	FPMBX Fan (CFM)
1	183.8	-	-	-

5. Equipment Data

No equipment data required for this system.

26 4E ESC1 CPT Input Data

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

01/26/2026
11:18 AM

1. General Details:

Air System Name 26 4E ESC1 CPT
Equipment Type Split AHU
Air System Type Single Zone CAV
Space Model: b) Space Model CPT
Notes:

2. System Components:

Ventilation Air Data:

Airflow Control Constant Ventilation Airflow
Ventilation Sizing Method Sum of Space OA Airflows
Unocc. Damper Position Closed
Damper Leak Rate 0 %

Central Heating Data:

Supply Temperature 95.0 F
Heating Source Electric Resistance
Schedule JFMAMJJASOND
Capacity Control Cycled or Staged Capacity - Fan On

Supply Fan Data:

Fan Type Forward Curved
Configuration Draw-thru
Fan Performance 2.00 in wg
Overall Efficiency 54 %
Fan Control 1-speed, cooling and heating

Duct System Data:

Supply Duct Data:

Duct Leakage 0 %

Return Duct or Plenum Data:

Return Air Via Ducted Return

3. Zone Components:

Assigned Zones:

Zone	Zone Name
1	4E ESC1

Number of zones 1

Thermostats and Zone Data:

Zone	Cooling T-Stat Occ. (F)	Cooling T-Stat Unocc. (F)	Heating T-Stat Occ. (F)	Heating T-Stat Unocc. (F)	T-Stat Throttling Range (F)	Diversity Factor (%)	Direct Exhaust Fan (kW)
1	75.0	80.0	70.0	65.0	1.50	100	0.0

Thermostat Schedule 24h/24h
Unoccupied Cooling is Available

Supply Terminals Data:

Zone	Terminal Type	Air Distribution	Air Distribution Effectiveness Specification	Air Distribution Effectiveness	Minimum Airflow	Design Supply Temp.	Fan Perf.	Fan Efficiency
1	Diffuser (no reheat)	Ceiling supply / ceiling return	Not Used	-	0.00 CFM/person	-	-	-

4. Sizing Data (Computer-Generated):

System Sizing Data:

Sizing Data:

Supply Fan Airflow 182.8 CFM
Ventilation Airflow 0.0 CFM
Heating Supply Temperature 95.0 F

26 4E ESC1 CPT Input Data

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

01/26/2026
11:18 AM

Hydronic Sizing Specifications:

Chilled Water Supply Temperature **44.0** F
Chilled Water Delta-T **10.0** F
Hot Water Supply Temperature **140.0** F
Hot Water Delta-T **20.0** F

Safety Factors:

Cooling Sensible **15** %
Cooling Latent **15** %
Heating **15** %

Zone Sizing Data:

Zone Airflow Sizing Method **Sum of space airflow rates**
Space Airflow Sizing Method **Individual peak space loads**

Zone	Supply Airflow (CFM)	Zone Htg Unit (MBH)	Reheat Coil (MBH)	FPMBX Fan (CFM)
1	182.8	-	-	-

5. Equipment Data

No equipment data required for this system.

27 4E ESC2 REF Input Data

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

01/26/2026
11:18 AM

1. General Details:

Air System Name 27 4E ESC2 REF
Equipment Type Split AHU
Air System Type Single Zone CAV
Space Model: a) Space Model REF
Notes:

2. System Components:

Ventilation Air Data:

Airflow Control Constant Ventilation Airflow
Ventilation Sizing Method Sum of Space OA Airflows
Unocc. Damper Position Closed
Damper Leak Rate 0 %

Central Heating Data:

Supply Temperature 95.0 F
Heating Source Electric Resistance
Schedule JFMAMJJASOND
Capacity Control Cycled or Staged Capacity - Fan On

Supply Fan Data:

Fan Type Forward Curved
Configuration Draw-thru
Fan Performance 2.00 in wg
Overall Efficiency 54 %
Fan Control 1-speed, cooling and heating

Duct System Data:

Supply Duct Data:

Duct Leakage 0 %

Return Duct or Plenum Data:

Return Air Via Ducted Return

3. Zone Components:

Assigned Zones:

Zone	Zone Name
1	4E ESC2

Number of zones 1

Thermostats and Zone Data:

Zone	Cooling T-Stat Occ. (F)	Cooling T-Stat Unocc. (F)	Heating T-Stat Occ. (F)	Heating T-Stat Unocc. (F)	T-Stat Throttling Range (F)	Diversity Factor (%)	Direct Exhaust Fan (kW)
1	75.0	80.0	70.0	65.0	1.50	100	0.0

Thermostat Schedule 24h/24h
Unoccupied Cooling is Available

Supply Terminals Data:

Zone	Terminal Type	Air Distribution	Air Distribution Effectiveness Specification	Air Distribution Effectiveness	Minimum Airflow	Design Supply Temp.	Fan Perf.	Fan Efficiency
1	Diffuser (no reheat)	Ceiling supply / ceiling return	Not Used	-	0.00 CFM/person	-	-	-

4. Sizing Data (Computer-Generated):

System Sizing Data:

Sizing Data:
Supply Fan Airflow 211.2 CFM
Ventilation Airflow 0.0 CFM
Heating Supply Temperature 95.0 F

27 4E ESC2 REF Input Data

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

01/26/2026
11:18 AM

Hydronic Sizing Specifications:

Chilled Water Supply Temperature **44.0** F
Chilled Water Delta-T **10.0** F
Hot Water Supply Temperature **140.0** F
Hot Water Delta-T **20.0** F

Safety Factors:

Cooling Sensible **15** %
Cooling Latent **15** %
Heating **15** %

Zone Sizing Data:

Zone Airflow Sizing Method **Sum of space airflow rates**
Space Airflow Sizing Method **Individual peak space loads**

Zone	Supply Airflow (CFM)	Zone Htg Unit (MBH)	Reheat Coil (MBH)	FPMBX Fan (CFM)
1	211.2	-	-	-

5. Equipment Data

No equipment data required for this system.

28 4E ESC2 CPT Input Data

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

01/26/2026
11:18 AM

1. General Details:

Air System Name **28 4E ESC2 CPT**
Equipment Type **Split AHU**
Air System Type **Single Zone CAV**
Space Model: **b) Space Model CPT**
Notes:

2. System Components:

Ventilation Air Data:

Airflow Control **Constant Ventilation Airflow**
Ventilation Sizing Method **Sum of Space OA Airflows**
Unocc. Damper Position **Closed**
Damper Leak Rate **0** %

Central Heating Data:

Supply Temperature **95.0** F
Heating Source **Electric Resistance**
Schedule **JFMAMJJASOND**
Capacity Control **Cycled or Staged Capacity - Fan On**

Supply Fan Data:

Fan Type **Forward Curved**
Configuration **Draw-thru**
Fan Performance **2.00** in wg
Overall Efficiency **54** %
Fan Control **1-speed, cooling and heating**

Duct System Data:

Supply Duct Data:

Duct Leakage **0** %

Return Duct or Plenum Data:

Return Air Via **Ducted Return**

3. Zone Components:

Assigned Zones:

Zone	Zone Name
1	4E ESC2

Number of zones **1**

Thermostats and Zone Data:

Zone	Cooling T-Stat Occ. (F)	Cooling T-Stat Unocc. (F)	Heating T-Stat Occ. (F)	Heating T-Stat Unocc. (F)	T-Stat Throttling Range (F)	Diversity Factor (%)	Direct Exhaust Fan (kW)
1	75.0	80.0	70.0	65.0	1.50	100	0.0

Thermostat Schedule **24h/24h**
Unoccupied Cooling is **Available**

Supply Terminals Data:

Zone	Terminal Type	Air Distribution	Air Distribution Effectiveness Specification	Air Distribution Effectiveness	Minimum Airflow	Design Supply Temp.	Fan Perf.	Fan Efficiency
1	Diffuser (no reheat)	Ceiling supply / ceiling return	Not Used	-	0.00 CFM/person	-	-	-

4. Sizing Data (Computer-Generated):

System Sizing Data:

Sizing Data:
Supply Fan Airflow **207.7** CFM
Ventilation Airflow **0.0** CFM
Heating Supply Temperature **95.0** F

28 4E ESC2 CPT Input Data

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

01/26/2026
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Hydronic Sizing Specifications:

Chilled Water Supply Temperature **44.0** F
Chilled Water Delta-T **10.0** F
Hot Water Supply Temperature **140.0** F
Hot Water Delta-T **20.0** F

Safety Factors:

Cooling Sensible **15** %
Cooling Latent **15** %
Heating **15** %

Zone Sizing Data:

Zone Airflow Sizing Method **Sum of space airflow rates**
Space Airflow Sizing Method **Individual peak space loads**

Zone	Supply Airflow (CFM)	Zone Htg Unit (MBH)	Reheat Coil (MBH)	FPMBX Fan (CFM)
1	207.7	-	-	-

5. Equipment Data

No equipment data required for this system.

29 RDC #1 à #5 REF Input Data

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

01/26/2026
11:18 AM

1. General Details:

Air System Name 29 RDC #1 à #5 REF
Equipment Type Split AHU
Air System Type Single Zone CAV
Space Model: a) Space Model REF
Notes:

2. System Components:

Ventilation Air Data:

Airflow Control Constant Ventilation Airflow
Ventilation Sizing Method Sum of Space OA Airflows
Unocc. Damper Position Closed
Damper Leak Rate 0 %

Air-to-Air Energy Recovery Data:

Recovery Type Sensible Heat
Thermal Efficiency 65 %
Input kW 0.000 kW
Schedule JFMAMJJASOND

Central Cooling Data:

Supply Air Temperature 58.0 F
Cooling Source Air-Cooled DX
Schedule JFMAMJJASOND
Capacity Control Cycled or Staged Capacity - Fan On

Central Heating Data:

Supply Temperature 95.0 F
Heating Source Air Source Heat Pump
Schedule JFMAMJJASOND
Capacity Control Cycled or Staged Capacity - Fan On

Supply Fan Data:

Fan Type Forward Curved
Configuration Draw-thru
Fan Performance 0.00 kW
Fan Control 1-speed, cooling and heating

Duct System Data:

Supply Duct Data:
Duct Leakage 0 %

Return Duct or Plenum Data:

Return Air Via Ducted Return

3. Zone Components:

Assigned Zones:

Zone	Zone Name
1	RDC #1 à #5

Number of zones 1

Thermostats and Zone Data:

Zone	Cooling T-Stat Occ. (F)	Cooling T-Stat Unocc. (F)	Heating T-Stat Occ. (F)	Heating T-Stat Unocc. (F)	T-Stat Throttling Range (F)	Diversity Factor (%)	Direct Exhaust Fan (kW)
1	75.0	80.0	70.0	65.0	1.50	100	0.0

Thermostat Schedule 24h/24h
Unoccupied Cooling is Available

29 RDC #1 à #5 REF Input Data

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

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Supply Terminals Data:

Zone	Terminal Type	Air Distribution	Air Distribution Effectiveness Specification	Air Distribution Effectiveness	Minimum Airflow	Design Supply Temp.	Fan Perf.	Fan Efficiency
1	Diffuser (no reheat)	Ceiling supply / ceiling return	Not Used	-	0.00 CFM/person	-	-	-

4. Sizing Data (Computer-Generated):

System Sizing Data:

Sizing Data:

Cooling Supply Temperature 58.0 F
Supply Fan Airflow 1477.1 CFM
Ventilation Airflow 500.0 CFM
Heating Supply Temperature 95.0 F

Hydronic Sizing Specifications:

Chilled Water Supply Temperature 44.0 F
Chilled Water Delta-T 10.0 F
Hot Water Supply Temperature 140.0 F
Hot Water Delta-T 20.0 F

Safety Factors:

Cooling Sensible 15 %
Cooling Latent 15 %
Heating 15 %

Zone Sizing Data:

Zone Airflow Sizing Method Sum of space airflow rates
Space Airflow Sizing Method Individual peak space loads

Zone	Supply Airflow (CFM)	Zone Htg Unit (MBH)	Reheat Coil (MBH)	FPMBX Fan (CFM)
1	1477.1	-	-	-

5. Equipment Data

Central Cooling Unit - Air-Cooled DX

Estimated Maximum Load 37.9 MBH
Design OADB 95.0 F
Design EWB 67.0 F
Equipment Sizing User-Defined
Gross Cooling Capacity 60.0 MBH
AHRI Performance Rating 14.300 SEER
DX System Configuration 1-stage, 1 compressor, 1 circuit
Low Temperature Cutoff OAT 0.0 F

Central Heating Unit - ASHP

Estimated Maximum Load 44.4 MBH
Design OADB 47.0 F
Design EDB 70.0 F
Equipment Sizing User-Defined
Gross Heating Capacity 60.0 MBH
AHRI Performance Rating 7.700 HSPF
Cutoff OAT 23.0 F

Auxiliary Heating:

Auxiliary Heating Type Electric Resistance
Auxiliary Heating Upper Cutoff 70.0 F

30 RDC #1 à #5 CPT Input Data

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

01/26/2026
11:18 AM

1. General Details:

Air System Name 30 RDC #1 à #5 CPT
Equipment Type Split AHU
Air System Type Single Zone CAV
Space Model: b) Space Model CPT
Notes:

2. System Components:

Ventilation Air Data:

Airflow Control Constant Ventilation Airflow
Ventilation Sizing Method Sum of Space OA Airflows
Unocc. Damper Position Closed
Damper Leak Rate 0 %

Air-to-Air Energy Recovery Data:

Recovery Type Sensible Heat
Thermal Efficiency 78 %
Input kW 0.000 kW
Schedule JFMAMJJASOND

Central Cooling Data:

Supply Air Temperature 58.0 F
Cooling Source Air-Cooled DX
Schedule JFMAMJJASOND
Capacity Control Cycled or Staged Capacity - Fan On

Central Heating Data:

Supply Temperature 95.0 F
Heating Source Air Source Heat Pump
Schedule JFMAMJJASOND
Capacity Control Cycled or Staged Capacity - Fan On

Supply Fan Data:

Fan Type Forward Curved
Configuration Draw-thru
Fan Performance 0.00 kW
Fan Control 1-speed, cooling and heating

Duct System Data:

Supply Duct Data:
Duct Leakage 0 %

Return Duct or Plenum Data:

Return Air Via Ducted Return

3. Zone Components:

Assigned Zones:

Zone	Zone Name
1	RDC #1 à #5

Number of zones 1

Thermostats and Zone Data:

Zone	Cooling T-Stat Occ. (F)	Cooling T-Stat Unocc. (F)	Heating T-Stat Occ. (F)	Heating T-Stat Unocc. (F)	T-Stat Throttling Range (F)	Diversity Factor (%)	Direct Exhaust Fan (kW)
1	75.0	80.0	70.0	65.0	1.50	100	0.0

Thermostat Schedule 24h/24h
Unoccupied Cooling is Available

30 RDC #1 à #5 CPT Input Data

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

01/26/2026
11:18 AM

Supply Terminals Data:

Zone	Terminal Type	Air Distribution	Air Distribution Effectiveness Specification	Air Distribution Effectiveness	Minimum Airflow	Design Supply Temp.	Fan Perf.	Fan Efficiency
1	Diffuser (no reheat)	Ceiling supply / ceiling return	Not Used	-	0.00 CFM/person	-	-	-

4. Sizing Data (Computer-Generated):

System Sizing Data:

Sizing Data:

Cooling Supply Temperature **58.0** F
Supply Fan Airflow **2831.2** CFM
Ventilation Airflow **500.0** CFM
Heating Supply Temperature **95.0** F

Hydronic Sizing Specifications:

Chilled Water Supply Temperature **44.0** F
Chilled Water Delta-T **10.0** F
Hot Water Supply Temperature **140.0** F
Hot Water Delta-T **20.0** F

Safety Factors:

Cooling Sensible **15** %
Cooling Latent **15** %
Heating **15** %

Zone Sizing Data:

Zone Airflow Sizing Method **Sum of space airflow rates**
Space Airflow Sizing Method **Individual peak space loads**

Zone	Supply Airflow (CFM)	Zone Htg Unit (MBH)	Reheat Coil (MBH)	FPMBX Fan (CFM)
1	2831.2	-	-	-

5. Equipment Data

Central Cooling Unit - Air-Cooled DX

Estimated Maximum Load **61.5** MBH
Design OADB **95.0** F
Design EWB **67.0** F
Equipment Sizing **User-Defined**
Gross Cooling Capacity **60.0** MBH
AHRI Performance Rating **28.100** SEER
DX System Configuration **2-stage, 2 compressors, 2 circuits**
Low Temperature Cutoff OAT **0.0** F

Central Heating Unit - ASHP

Estimated Maximum Load **38.4** MBH
Design OADB **47.0** F
Design EDB **70.0** F
Equipment Sizing **User-Defined**
Gross Heating Capacity **60.0** MBH
AHRI Performance Rating **3.810** COP
Cutoff OAT **-22.0** F

Auxiliary Heating:

Auxiliary Heating Type **Electric Resistance**
Auxiliary Heating Upper Cutoff **70.0** F

31 RDC #10 REF Input Data

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

01/26/2026
11:18 AM

1. General Details:

Air System Name 31 RDC #10 REF
Equipment Type Split AHU
Air System Type Single Zone CAV
Space Model: a) Space Model REF
Notes:

2. System Components:

Ventilation Air Data:

Airflow Control Constant Ventilation Airflow
Ventilation Sizing Method Sum of Space OA Airflows
Unocc. Damper Position Closed
Damper Leak Rate 0 %

Air-to-Air Energy Recovery Data:

Recovery Type Sensible Heat
Thermal Efficiency 65 %
Input kW 0.000 kW
Schedule JFMAMJJASOND

Central Cooling Data:

Supply Air Temperature 58.0 F
Cooling Source Air-Cooled DX
Schedule JFMAMJJASOND
Capacity Control Cycled or Staged Capacity - Fan On

Central Heating Data:

Supply Temperature 95.0 F
Heating Source Air Source Heat Pump
Schedule JFMAMJJASOND
Capacity Control Cycled or Staged Capacity - Fan On

Supply Fan Data:

Fan Type Forward Curved
Configuration Draw-thru
Fan Performance 0.00 kW
Fan Control 1-speed, cooling and heating

Duct System Data:

Supply Duct Data:
Duct Leakage 0 %

Return Duct or Plenum Data:

Return Air Via Ducted Return

3. Zone Components:

Assigned Zones:

Zone	Zone Name
1	RDC #10

Number of zones 1

Thermostats and Zone Data:

Zone	Cooling T-Stat Occ. (F)	Cooling T-Stat Unocc. (F)	Heating T-Stat Occ. (F)	Heating T-Stat Unocc. (F)	T-Stat Throttling Range (F)	Diversity Factor (%)	Direct Exhaust Fan (kW)
1	75.0	80.0	70.0	65.0	1.50	100	0.0

Thermostat Schedule 24h/24h
Unoccupied Cooling is Available

31 RDC #10 REF Input Data

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

01/26/2026
11:18 AM

Supply Terminals Data:

Zone	Terminal Type	Air Distribution	Air Distribution Effectiveness Specification	Air Distribution Effectiveness	Minimum Airflow	Design Supply Temp.	Fan Perf.	Fan Efficiency
1	Diffuser (no reheat)	Ceiling supply / ceiling return	Not Used	-	0.00 CFM/person	-	-	-

4. Sizing Data (Computer-Generated):

System Sizing Data:

Sizing Data:

Cooling Supply Temperature **58.0** F
Supply Fan Airflow **457.8** CFM
Ventilation Airflow **100.0** CFM
Heating Supply Temperature **95.0** F

Hydronic Sizing Specifications:

Chilled Water Supply Temperature **44.0** F
Chilled Water Delta-T **10.0** F
Hot Water Supply Temperature **140.0** F
Hot Water Delta-T **20.0** F

Safety Factors:

Cooling Sensible **15** %
Cooling Latent **15** %
Heating **15** %

Zone Sizing Data:

Zone Airflow Sizing Method **Sum of space airflow rates**
Space Airflow Sizing Method **Individual peak space loads**

Zone	Supply Airflow (CFM)	Zone Htg Unit (MBH)	Reheat Coil (MBH)	FPMBX Fan (CFM)
1	457.8	-	-	-

5. Equipment Data

Central Cooling Unit - Air-Cooled DX

Estimated Maximum Load **4.6** MBH
Design OADB **95.0** F
Design EWB **67.0** F
Equipment Sizing **User-Defined**
Gross Cooling Capacity **12.0** MBH
AHRI Performance Rating **14.300** SEER
DX System Configuration **1-stage, 1 compressor, 1 circuit**
Low Temperature Cutoff OAT **0.0** F

Central Heating Unit - ASHP

Estimated Maximum Load **15.4** MBH
Design OADB **47.0** F
Design EDB **70.0** F
Equipment Sizing **User-Defined**
Gross Heating Capacity **12.0** MBH
AHRI Performance Rating **7.700** HSPF
Cutoff OAT **23.0** F

Auxiliary Heating:

Auxiliary Heating Type **Electric Resistance**
Auxiliary Heating Upper Cutoff **70.0** F

32 RDC #10 CPT Input Data

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

01/26/2026
11:18 AM

1. General Details:

Air System Name 32 RDC #10 CPT
Equipment Type Split AHU
Air System Type Single Zone CAV
Space Model: b) Space Model CPT
Notes:

2. System Components:

Ventilation Air Data:

Airflow Control Constant Ventilation Airflow
Ventilation Sizing Method Sum of Space OA Airflows
Unocc. Damper Position Closed
Damper Leak Rate 0 %

Air-to-Air Energy Recovery Data:

Recovery Type Sensible Heat
Thermal Efficiency 78 %
Input kW 0.000 kW
Schedule JFMAMJJASOND

Central Cooling Data:

Supply Air Temperature 58.0 F
Cooling Source Air-Cooled DX
Schedule JFMAMJJASOND
Capacity Control Cycled or Staged Capacity - Fan On

Central Heating Data:

Supply Temperature 95.0 F
Heating Source Air Source Heat Pump
Schedule JFMAMJJASOND
Capacity Control Cycled or Staged Capacity - Fan On

Supply Fan Data:

Fan Type Forward Curved
Configuration Draw-thru
Fan Performance 0.00 kW
Fan Control 1-speed, cooling and heating

Duct System Data:

Supply Duct Data:
Duct Leakage 0 %

Return Duct or Plenum Data:

Return Air Via Ducted Return

3. Zone Components:

Assigned Zones:

Zone	Zone Name
1	RDC #10

Number of zones 1

Thermostats and Zone Data:

Zone	Cooling T-Stat Occ. (F)	Cooling T-Stat Unocc. (F)	Heating T-Stat Occ. (F)	Heating T-Stat Unocc. (F)	T-Stat Throttling Range (F)	Diversity Factor (%)	Direct Exhaust Fan (kW)
1	75.0	80.0	70.0	65.0	1.50	100	0.0

Thermostat Schedule 24h/24h
Unoccupied Cooling is Available

32 RDC #10 CPT Input Data

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

01/26/2026
11:18 AM

Supply Terminals Data:

Zone	Terminal Type	Air Distribution	Air Distribution Effectiveness Specification	Air Distribution Effectiveness	Minimum Airflow	Design Supply Temp.	Fan Perf.	Fan Efficiency
1	Diffuser (no reheat)	Ceiling supply / ceiling return	Not Used	-	0.00 CFM/person	-	-	-

4. Sizing Data (Computer-Generated):

System Sizing Data:

Sizing Data:

Cooling Supply Temperature **58.0** F
Supply Fan Airflow **453.9** CFM
Ventilation Airflow **100.0** CFM
Heating Supply Temperature **95.0** F

Hydronic Sizing Specifications:

Chilled Water Supply Temperature **44.0** F
Chilled Water Delta-T **10.0** F
Hot Water Supply Temperature **140.0** F
Hot Water Delta-T **20.0** F

Safety Factors:

Cooling Sensible **15** %
Cooling Latent **15** %
Heating **15** %

Zone Sizing Data:

Zone Airflow Sizing Method **Sum of space airflow rates**
Space Airflow Sizing Method **Individual peak space loads**

Zone	Supply Airflow (CFM)	Zone Htg Unit (MBH)	Reheat Coil (MBH)	FPMBX Fan (CFM)
1	453.9	-	-	-

5. Equipment Data

Central Cooling Unit - Air-Cooled DX

Estimated Maximum Load **7.8** MBH
Design OADB **95.0** F
Design EWB **67.0** F
Equipment Sizing **User-Defined**
Gross Cooling Capacity **12.0** MBH
AHRI Performance Rating **28.100** SEER
DX System Configuration **2-stage, 2 compressors, 2 circuits**
Low Temperature Cutoff OAT **0.0** F

Central Heating Unit - ASHP

Estimated Maximum Load **14.1** MBH
Design OADB **47.0** F
Design EDB **70.0** F
Equipment Sizing **User-Defined**
Gross Heating Capacity **12.0** MBH
AHRI Performance Rating **3.810** COP
Cutoff OAT **-22.0** F

Auxiliary Heating:

Auxiliary Heating Type **Electric Resistance**
Auxiliary Heating Upper Cutoff **70.0** F

33 RDC #6 REF Input Data

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

01/26/2026
11:18 AM

1. General Details:

Air System Name 33 RDC #6 REF
Equipment Type Split AHU
Air System Type Single Zone CAV
Space Model: a) Space Model REF
Notes:

2. System Components:

Ventilation Air Data:

Airflow Control Constant Ventilation Airflow
Ventilation Sizing Method Sum of Space OA Airflows
Unocc. Damper Position Closed
Damper Leak Rate 0 %

Air-to-Air Energy Recovery Data:

Recovery Type Sensible Heat
Thermal Efficiency 65 %
Input kW 0.000 kW
Schedule JFMAMJJASOND

Central Cooling Data:

Supply Air Temperature 58.0 F
Cooling Source Air-Cooled DX
Schedule JFMAMJJASOND
Capacity Control Cycled or Staged Capacity - Fan On

Central Heating Data:

Supply Temperature 95.0 F
Heating Source Air Source Heat Pump
Schedule JFMAMJJASOND
Capacity Control Cycled or Staged Capacity - Fan On

Supply Fan Data:

Fan Type Forward Curved
Configuration Draw-thru
Fan Performance 0.00 kW
Fan Control 1-speed, cooling and heating

Duct System Data:

Supply Duct Data:
Duct Leakage 0 %

Return Duct or Plenum Data:

Return Air Via Ducted Return

3. Zone Components:

Assigned Zones:

Zone	Zone Name
1	RDC #6

Number of zones 1

Thermostats and Zone Data:

Zone	Cooling T-Stat Occ. (F)	Cooling T-Stat Unocc. (F)	Heating T-Stat Occ. (F)	Heating T-Stat Unocc. (F)	T-Stat Throttling Range (F)	Diversity Factor (%)	Direct Exhaust Fan (kW)
1	75.0	80.0	70.0	65.0	1.50	100	0.0

Thermostat Schedule 24h/24h
Unoccupied Cooling is Available

33 RDC #6 REF Input Data

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

01/26/2026
11:18 AM

Supply Terminals Data:

Zone	Terminal Type	Air Distribution	Air Distribution Effectiveness Specification	Air Distribution Effectiveness	Minimum Airflow	Design Supply Temp.	Fan Perf.	Fan Efficiency
1	Diffuser (no reheat)	Ceiling supply / ceiling return	Not Used	-	0.00 CFM/person	-	-	-

4. Sizing Data (Computer-Generated):

System Sizing Data:

Sizing Data:

Cooling Supply Temperature 58.0 F
Supply Fan Airflow 226.9 CFM
Ventilation Airflow 100.0 CFM
Heating Supply Temperature 95.0 F

Hydronic Sizing Specifications:

Chilled Water Supply Temperature 44.0 F
Chilled Water Delta-T 10.0 F
Hot Water Supply Temperature 140.0 F
Hot Water Delta-T 20.0 F

Safety Factors:

Cooling Sensible 15 %
Cooling Latent 15 %
Heating 15 %

Zone Sizing Data:

Zone Airflow Sizing Method Sum of space airflow rates
Space Airflow Sizing Method Individual peak space loads

Zone	Supply Airflow (CFM)	Zone Htg Unit (MBH)	Reheat Coil (MBH)	FPMBX Fan (CFM)
1	226.9	-	-	-

5. Equipment Data

Central Cooling Unit - Air-Cooled DX

Estimated Maximum Load 1.7 MBH
Design OADB 95.0 F
Design EWB 67.0 F
Equipment Sizing User-Defined
Gross Cooling Capacity 12.0 MBH
AHRI Performance Rating 14.300 SEER
DX System Configuration 1-stage, 1 compressor, 1 circuit
Low Temperature Cutoff OAT 0.0 F

Central Heating Unit - ASHP

Estimated Maximum Load 9.2 MBH
Design OADB 47.0 F
Design EDB 70.0 F
Equipment Sizing User-Defined
Gross Heating Capacity 12.0 MBH
AHRI Performance Rating 7.700 HSPF
Cutoff OAT 23.0 F

Auxiliary Heating:

Auxiliary Heating Type Electric Resistance
Auxiliary Heating Upper Cutoff 70.0 F

34 RDC #6 CPT Input Data

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

01/26/2026
11:18 AM

1. General Details:

Air System Name 34 RDC #6 CPT
Equipment Type Split AHU
Air System Type Single Zone CAV
Space Model: b) Space Model CPT
Notes:

2. System Components:

Ventilation Air Data:

Airflow Control Constant Ventilation Airflow
Ventilation Sizing Method Sum of Space OA Airflows
Unocc. Damper Position Closed
Damper Leak Rate 0 %

Air-to-Air Energy Recovery Data:

Recovery Type Sensible Heat
Thermal Efficiency 78 %
Input kW 0.000 kW
Schedule JFMAMJJASOND

Central Cooling Data:

Supply Air Temperature 58.0 F
Cooling Source Air-Cooled DX
Schedule JFMAMJJASOND
Capacity Control Cycled or Staged Capacity - Fan On

Central Heating Data:

Supply Temperature 95.0 F
Heating Source Air Source Heat Pump
Schedule JFMAMJJASOND
Capacity Control Cycled or Staged Capacity - Fan On

Supply Fan Data:

Fan Type Forward Curved
Configuration Draw-thru
Fan Performance 0.00 kW
Fan Control 1-speed, cooling and heating

Duct System Data:

Supply Duct Data:
Duct Leakage 0 %

Return Duct or Plenum Data:

Return Air Via Ducted Return

3. Zone Components:

Assigned Zones:

Zone	Zone Name
1	RDC #6

Number of zones 1

Thermostats and Zone Data:

Zone	Cooling T-Stat Occ. (F)	Cooling T-Stat Unocc. (F)	Heating T-Stat Occ. (F)	Heating T-Stat Unocc. (F)	T-Stat Throttling Range (F)	Diversity Factor (%)	Direct Exhaust Fan (kW)
1	75.0	80.0	70.0	65.0	1.50	100	0.0

Thermostat Schedule 24h/24h
Unoccupied Cooling is Available

34 RDC #6 CPT Input Data

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

01/26/2026
11:18 AM

Supply Terminals Data:

Zone	Terminal Type	Air Distribution	Air Distribution Effectiveness Specification	Air Distribution Effectiveness	Minimum Airflow	Design Supply Temp.	Fan Perf.	Fan Efficiency
1	Diffuser (no reheat)	Ceiling supply / ceiling return	Not Used	-	0.00 CFM/person	-	-	-

4. Sizing Data (Computer-Generated):

System Sizing Data:

Sizing Data:

Cooling Supply Temperature **58.0** F
Supply Fan Airflow **223.9** CFM
Ventilation Airflow **100.0** CFM
Heating Supply Temperature **95.0** F

Hydronic Sizing Specifications:

Chilled Water Supply Temperature **44.0** F
Chilled Water Delta-T **10.0** F
Hot Water Supply Temperature **140.0** F
Hot Water Delta-T **20.0** F

Safety Factors:

Cooling Sensible **15** %
Cooling Latent **15** %
Heating **15** %

Zone Sizing Data:

Zone Airflow Sizing Method **Sum of space airflow rates**
Space Airflow Sizing Method **Individual peak space loads**

Zone	Supply Airflow (CFM)	Zone Htg Unit (MBH)	Reheat Coil (MBH)	FPMBX Fan (CFM)
1	223.9	-	-	-

5. Equipment Data

Central Cooling Unit - Air-Cooled DX

Estimated Maximum Load **3.6** MBH
Design OADB **95.0** F
Design EWB **67.0** F
Equipment Sizing **User-Defined**
Gross Cooling Capacity **12.0** MBH
AHRI Performance Rating **28.100** SEER
DX System Configuration **2-stage, 2 compressors, 2 circuits**
Low Temperature Cutoff OAT **0.0** F

Central Heating Unit - ASHP

Estimated Maximum Load **7.9** MBH
Design OADB **47.0** F
Design EDB **70.0** F
Equipment Sizing **User-Defined**
Gross Heating Capacity **12.0** MBH
AHRI Performance Rating **3.810** COP
Cutoff OAT **-22.0** F

Auxiliary Heating:

Auxiliary Heating Type **Electric Resistance**
Auxiliary Heating Upper Cutoff **70.0** F

35 RDC #7 REF Input Data

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

01/26/2026
11:18 AM

1. General Details:

Air System Name 35 RDC #7 REF
Equipment Type Split AHU
Air System Type Single Zone CAV
Space Model: a) Space Model REF
Notes:

2. System Components:

Ventilation Air Data:

Airflow Control Constant Ventilation Airflow
Ventilation Sizing Method Sum of Space OA Airflows
Unocc. Damper Position Closed
Damper Leak Rate 0 %

Air-to-Air Energy Recovery Data:

Recovery Type Sensible Heat
Thermal Efficiency 65 %
Input kW 0.000 kW
Schedule JFMAMJJASOND

Central Cooling Data:

Supply Air Temperature 58.0 F
Cooling Source Air-Cooled DX
Schedule JFMAMJJASOND
Capacity Control Cycled or Staged Capacity - Fan On

Central Heating Data:

Supply Temperature 95.0 F
Heating Source Air Source Heat Pump
Schedule JFMAMJJASOND
Capacity Control Cycled or Staged Capacity - Fan On

Supply Fan Data:

Fan Type Forward Curved
Configuration Draw-thru
Fan Performance 0.00 kW
Fan Control 1-speed, cooling and heating

Duct System Data:

Supply Duct Data:
Duct Leakage 0 %

Return Duct or Plenum Data:

Return Air Via Ducted Return

3. Zone Components:

Assigned Zones:

Zone	Zone Name
1	RDC #7

Number of zones 1

Thermostats and Zone Data:

Zone	Cooling T-Stat Occ. (F)	Cooling T-Stat Unocc. (F)	Heating T-Stat Occ. (F)	Heating T-Stat Unocc. (F)	T-Stat Throttling Range (F)	Diversity Factor (%)	Direct Exhaust Fan (kW)
1	75.0	80.0	70.0	65.0	1.50	100	0.0

Thermostat Schedule 24h/24h
Unoccupied Cooling is Available

35 RDC #7 REF Input Data

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

01/26/2026
11:18 AM

Supply Terminals Data:

Zone	Terminal Type	Air Distribution	Air Distribution Effectiveness Specification	Air Distribution Effectiveness	Minimum Airflow	Design Supply Temp.	Fan Perf.	Fan Efficiency
1	Diffuser (no reheat)	Ceiling supply / ceiling return	Not Used	-	0.00 CFM/person	-	-	-

4. Sizing Data (Computer-Generated):

System Sizing Data:

Sizing Data:

Cooling Supply Temperature 58.0 F
Supply Fan Airflow 444.6 CFM
Ventilation Airflow 100.0 CFM
Heating Supply Temperature 95.0 F

Hydronic Sizing Specifications:

Chilled Water Supply Temperature 44.0 F
Chilled Water Delta-T 10.0 F
Hot Water Supply Temperature 140.0 F
Hot Water Delta-T 20.0 F

Safety Factors:

Cooling Sensible 15 %
Cooling Latent 15 %
Heating 15 %

Zone Sizing Data:

Zone Airflow Sizing Method Sum of space airflow rates
Space Airflow Sizing Method Individual peak space loads

Zone	Supply Airflow (CFM)	Zone Htg Unit (MBH)	Reheat Coil (MBH)	FPMBX Fan (CFM)
1	444.6	-	-	-

5. Equipment Data

Central Cooling Unit - Air-Cooled DX

Estimated Maximum Load 6.7 MBH
Design OADB 95.0 F
Design EWB 67.0 F
Equipment Sizing User-Defined
Gross Cooling Capacity 12.0 MBH
AHRI Performance Rating 14.300 SEER
DX System Configuration 1-stage, 1 compressor, 1 circuit
Low Temperature Cutoff OAT 0.0 F

Central Heating Unit - ASHP

Estimated Maximum Load 15.0 MBH
Design OADB 47.0 F
Design EDB 70.0 F
Equipment Sizing User-Defined
Gross Heating Capacity 12.0 MBH
AHRI Performance Rating 7.700 HSPF
Cutoff OAT 23.0 F

Auxiliary Heating:

Auxiliary Heating Type Electric Resistance
Auxiliary Heating Upper Cutoff 70.0 F

36 RDC #7 CPT Input Data

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

01/26/2026
11:18 AM

1. General Details:

Air System Name 36 RDC #7 CPT
Equipment Type Split AHU
Air System Type Single Zone CAV
Space Model: b) Space Model CPT
Notes:

2. System Components:

Ventilation Air Data:

Airflow Control Constant Ventilation Airflow
Ventilation Sizing Method Sum of Space OA Airflows
Unocc. Damper Position Closed
Damper Leak Rate 0 %

Air-to-Air Energy Recovery Data:

Recovery Type Sensible Heat
Thermal Efficiency 78 %
Input kW 0.000 kW
Schedule JFMAMJJASOND

Central Cooling Data:

Supply Air Temperature 58.0 F
Cooling Source Air-Cooled DX
Schedule JFMAMJJASOND
Capacity Control Cycled or Staged Capacity - Fan On

Central Heating Data:

Supply Temperature 95.0 F
Heating Source Air Source Heat Pump
Schedule JFMAMJJASOND
Capacity Control Cycled or Staged Capacity - Fan On

Supply Fan Data:

Fan Type Forward Curved
Configuration Draw-thru
Fan Performance 0.00 kW
Fan Control 1-speed, cooling and heating

Duct System Data:

Supply Duct Data:
Duct Leakage 0 %

Return Duct or Plenum Data:

Return Air Via Ducted Return

3. Zone Components:

Assigned Zones:

Zone	Zone Name
1	RDC #7

Number of zones 1

Thermostats and Zone Data:

Zone	Cooling T-Stat Occ. (F)	Cooling T-Stat Unocc. (F)	Heating T-Stat Occ. (F)	Heating T-Stat Unocc. (F)	T-Stat Throttling Range (F)	Diversity Factor (%)	Direct Exhaust Fan (kW)
1	75.0	80.0	70.0	65.0	1.50	100	0.0

Thermostat Schedule 24h/24h
Unoccupied Cooling is Available

36 RDC #7 CPT Input Data

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

01/26/2026
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Supply Terminals Data:

Zone	Terminal Type	Air Distribution	Air Distribution Effectiveness Specification	Air Distribution Effectiveness	Minimum Airflow	Design Supply Temp.	Fan Perf.	Fan Efficiency
1	Diffuser (no reheat)	Ceiling supply / ceiling return	Not Used	-	0.00 CFM/person	-	-	-

4. Sizing Data (Computer-Generated):

System Sizing Data:

Sizing Data:

Cooling Supply Temperature **58.0** F
Supply Fan Airflow **648.3** CFM
Ventilation Airflow **100.0** CFM
Heating Supply Temperature **95.0** F

Hydronic Sizing Specifications:

Chilled Water Supply Temperature **44.0** F
Chilled Water Delta-T **10.0** F
Hot Water Supply Temperature **140.0** F
Hot Water Delta-T **20.0** F

Safety Factors:

Cooling Sensible **15** %
Cooling Latent **15** %
Heating **15** %

Zone Sizing Data:

Zone Airflow Sizing Method **Sum of space airflow rates**
Space Airflow Sizing Method **Individual peak space loads**

Zone	Supply Airflow (CFM)	Zone Htg Unit (MBH)	Reheat Coil (MBH)	FPMBX Fan (CFM)
1	648.3	-	-	-

5. Equipment Data

Central Cooling Unit - Air-Cooled DX

Estimated Maximum Load **13.1** MBH
Design OADB **95.0** F
Design EWB **67.0** F
Equipment Sizing **User-Defined**
Gross Cooling Capacity **12.0** MBH
AHRI Performance Rating **28.100** SEER
DX System Configuration **2-stage, 2 compressors, 2 circuits**
Low Temperature Cutoff OAT **0.0** F

Central Heating Unit - ASHP

Estimated Maximum Load **13.7** MBH
Design OADB **47.0** F
Design EDB **70.0** F
Equipment Sizing **User-Defined**
Gross Heating Capacity **12.0** MBH
AHRI Performance Rating **3.810** COP
Cutoff OAT **-22.0** F

Auxiliary Heating:

Auxiliary Heating Type **Electric Resistance**
Auxiliary Heating Upper Cutoff **70.0** F

37 RDC #8 REF Input Data

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

01/26/2026
11:18 AM

1. General Details:

Air System Name 37 RDC #8 REF
Equipment Type Split AHU
Air System Type Single Zone CAV
Space Model: a) Space Model REF
Notes:

2. System Components:

Ventilation Air Data:

Airflow Control Constant Ventilation Airflow
Ventilation Sizing Method Sum of Space OA Airflows
Unocc. Damper Position Closed
Damper Leak Rate 0 %

Air-to-Air Energy Recovery Data:

Recovery Type Sensible Heat
Thermal Efficiency 65 %
Input kW 0.000 kW
Schedule JFMAMJJASOND

Central Cooling Data:

Supply Air Temperature 58.0 F
Cooling Source Air-Cooled DX
Schedule JFMAMJJASOND
Capacity Control Cycled or Staged Capacity - Fan On

Central Heating Data:

Supply Temperature 95.0 F
Heating Source Air Source Heat Pump
Schedule JFMAMJJASOND
Capacity Control Cycled or Staged Capacity - Fan On

Supply Fan Data:

Fan Type Forward Curved
Configuration Draw-thru
Fan Performance 0.00 kW
Fan Control 1-speed, cooling and heating

Duct System Data:

Supply Duct Data:
Duct Leakage 0 %

Return Duct or Plenum Data:

Return Air Via Ducted Return

3. Zone Components:

Assigned Zones:

Zone	Zone Name
1	RDC #8

Number of zones 1

Thermostats and Zone Data:

Zone	Cooling T-Stat Occ. (F)	Cooling T-Stat Unocc. (F)	Heating T-Stat Occ. (F)	Heating T-Stat Unocc. (F)	T-Stat Throttling Range (F)	Diversity Factor (%)	Direct Exhaust Fan (kW)
1	75.0	80.0	70.0	65.0	1.50	100	0.0

Thermostat Schedule 24h/24h
Unoccupied Cooling is Available

37 RDC #8 REF Input Data

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

01/26/2026
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Supply Terminals Data:

Zone	Terminal Type	Air Distribution	Air Distribution Effectiveness Specification	Air Distribution Effectiveness	Minimum Airflow	Design Supply Temp.	Fan Perf.	Fan Efficiency
1	Diffuser (no reheat)	Ceiling supply / ceiling return	Not Used	-	0.00 CFM/person	-	-	-

4. Sizing Data (Computer-Generated):

System Sizing Data:

Sizing Data:

Cooling Supply Temperature 58.0 F
Supply Fan Airflow 283.8 CFM
Ventilation Airflow 100.0 CFM
Heating Supply Temperature 95.0 F

Hydronic Sizing Specifications:

Chilled Water Supply Temperature 44.0 F
Chilled Water Delta-T 10.0 F
Hot Water Supply Temperature 140.0 F
Hot Water Delta-T 20.0 F

Safety Factors:

Cooling Sensible 15 %
Cooling Latent 15 %
Heating 15 %

Zone Sizing Data:

Zone Airflow Sizing Method Sum of space airflow rates
Space Airflow Sizing Method Individual peak space loads

Zone	Supply Airflow (CFM)	Zone Htg Unit (MBH)	Reheat Coil (MBH)	FPMBX Fan (CFM)
1	283.8	-	-	-

5. Equipment Data

Central Cooling Unit - Air-Cooled DX

Estimated Maximum Load 6.7 MBH
Design OADB 95.0 F
Design EWB 67.0 F
Equipment Sizing User-Defined
Gross Cooling Capacity 12.0 MBH
AHRI Performance Rating 14.300 SEER
DX System Configuration 1-stage, 1 compressor, 1 circuit
Low Temperature Cutoff OAT 0.0 F

Central Heating Unit - ASHP

Estimated Maximum Load 8.3 MBH
Design OADB 47.0 F
Design EDB 70.0 F
Equipment Sizing User-Defined
Gross Heating Capacity 12.0 MBH
AHRI Performance Rating 7.700 HSPF
Cutoff OAT 23.0 F

Auxiliary Heating:

Auxiliary Heating Type Electric Resistance
Auxiliary Heating Upper Cutoff 70.0 F

38 RDC #8 CPT Input Data

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

01/26/2026
11:18 AM

1. General Details:

Air System Name 38 RDC #8 CPT
Equipment Type Split AHU
Air System Type Single Zone CAV
Space Model: b) Space Model CPT
Notes:

2. System Components:

Ventilation Air Data:

Airflow Control Constant Ventilation Airflow
Ventilation Sizing Method Sum of Space OA Airflows
Unocc. Damper Position Closed
Damper Leak Rate 0 %

Air-to-Air Energy Recovery Data:

Recovery Type Sensible Heat
Thermal Efficiency 78 %
Input kW 0.000 kW
Schedule JFMAMJJASOND

Central Cooling Data:

Supply Air Temperature 58.0 F
Cooling Source Air-Cooled DX
Schedule JFMAMJJASOND
Capacity Control Cycled or Staged Capacity - Fan On

Central Heating Data:

Supply Temperature 95.0 F
Heating Source Air Source Heat Pump
Schedule JFMAMJJASOND
Capacity Control Cycled or Staged Capacity - Fan On

Supply Fan Data:

Fan Type Forward Curved
Configuration Draw-thru
Fan Performance 0.00 kW
Fan Control 1-speed, cooling and heating

Duct System Data:

Supply Duct Data:
Duct Leakage 0 %

Return Duct or Plenum Data:

Return Air Via Ducted Return

3. Zone Components:

Assigned Zones:

Zone	Zone Name
1	RDC #8

Number of zones 1

Thermostats and Zone Data:

Zone	Cooling T-Stat Occ. (F)	Cooling T-Stat Unocc. (F)	Heating T-Stat Occ. (F)	Heating T-Stat Unocc. (F)	T-Stat Throttling Range (F)	Diversity Factor (%)	Direct Exhaust Fan (kW)
1	75.0	80.0	70.0	65.0	1.50	100	0.0

Thermostat Schedule 24h/24h
Unoccupied Cooling is Available

38 RDC #8 CPT Input Data

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

01/26/2026
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Supply Terminals Data:

Zone	Terminal Type	Air Distribution	Air Distribution Effectiveness Specification	Air Distribution Effectiveness	Minimum Airflow	Design Supply Temp.	Fan Perf.	Fan Efficiency
1	Diffuser (no reheat)	Ceiling supply / ceiling return	Not Used	-	0.00 CFM/person	-	-	-

4. Sizing Data (Computer-Generated):

System Sizing Data:

Sizing Data:

Cooling Supply Temperature **58.0** F
Supply Fan Airflow **573.8** CFM
Ventilation Airflow **100.0** CFM
Heating Supply Temperature **95.0** F

Hydronic Sizing Specifications:

Chilled Water Supply Temperature **44.0** F
Chilled Water Delta-T **10.0** F
Hot Water Supply Temperature **140.0** F
Hot Water Delta-T **20.0** F

Safety Factors:

Cooling Sensible **15** %
Cooling Latent **15** %
Heating **15** %

Zone Sizing Data:

Zone Airflow Sizing Method **Sum of space airflow rates**
Space Airflow Sizing Method **Individual peak space loads**

Zone	Supply Airflow (CFM)	Zone Htg Unit (MBH)	Reheat Coil (MBH)	FPMBX Fan (CFM)
1	573.8	-	-	-

5. Equipment Data

Central Cooling Unit - Air-Cooled DX

Estimated Maximum Load **11.8** MBH
Design OADB **95.0** F
Design EWB **67.0** F
Equipment Sizing **User-Defined**
Gross Cooling Capacity **12.0** MBH
AHRI Performance Rating **28.100** SEER
DX System Configuration **2-stage, 2 compressors, 2 circuits**
Low Temperature Cutoff OAT **0.0** F

Central Heating Unit - ASHP

Estimated Maximum Load **7.1** MBH
Design OADB **47.0** F
Design EDB **70.0** F
Equipment Sizing **User-Defined**
Gross Heating Capacity **12.0** MBH
AHRI Performance Rating **3.810** COP
Cutoff OAT **-22.0** F

Auxiliary Heating:

Auxiliary Heating Type **Electric Resistance**
Auxiliary Heating Upper Cutoff **70.0** F

39 RDC #9 REF Input Data

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

01/26/2026
11:18 AM

1. General Details:

Air System Name 39 RDC #9 REF
Equipment Type Split AHU
Air System Type Single Zone CAV
Space Model: a) Space Model REF
Notes:

2. System Components:

Ventilation Air Data:

Airflow Control Constant Ventilation Airflow
Ventilation Sizing Method Sum of Space OA Airflows
Unocc. Damper Position Closed
Damper Leak Rate 0 %

Air-to-Air Energy Recovery Data:

Recovery Type Sensible Heat
Thermal Efficiency 65 %
Input kW 0.000 kW
Schedule JFMAMJJASOND

Central Cooling Data:

Supply Air Temperature 58.0 F
Cooling Source Air-Cooled DX
Schedule JFMAMJJASOND
Capacity Control Cycled or Staged Capacity - Fan On

Central Heating Data:

Supply Temperature 95.0 F
Heating Source Air Source Heat Pump
Schedule JFMAMJJASOND
Capacity Control Cycled or Staged Capacity - Fan On

Supply Fan Data:

Fan Type Forward Curved
Configuration Draw-thru
Fan Performance 0.00 kW
Fan Control 1-speed, cooling and heating

Duct System Data:

Supply Duct Data:
Duct Leakage 0 %

Return Duct or Plenum Data:

Return Air Via Ducted Return

3. Zone Components:

Assigned Zones:

Zone	Zone Name
1	RDC #9

Number of zones 1

Thermostats and Zone Data:

Zone	Cooling T-Stat Occ. (F)	Cooling T-Stat Unocc. (F)	Heating T-Stat Occ. (F)	Heating T-Stat Unocc. (F)	T-Stat Throttling Range (F)	Diversity Factor (%)	Direct Exhaust Fan (kW)
1	75.0	80.0	70.0	65.0	1.50	100	0.0

Thermostat Schedule 24h/24h
Unoccupied Cooling is Available

39 RDC #9 REF Input Data

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

01/26/2026
11:18 AM

Supply Terminals Data:

Zone	Terminal Type	Air Distribution	Air Distribution Effectiveness Specification	Air Distribution Effectiveness	Minimum Airflow	Design Supply Temp.	Fan Perf.	Fan Efficiency
1	Diffuser (no reheat)	Ceiling supply / ceiling return	Not Used	-	0.00 CFM/person	-	-	-

4. Sizing Data (Computer-Generated):

System Sizing Data:

Sizing Data:

Cooling Supply Temperature **58.0** F
Supply Fan Airflow **531.1** CFM
Ventilation Airflow **100.0** CFM
Heating Supply Temperature **95.0** F

Hydronic Sizing Specifications:

Chilled Water Supply Temperature **44.0** F
Chilled Water Delta-T **10.0** F
Hot Water Supply Temperature **140.0** F
Hot Water Delta-T **20.0** F

Safety Factors:

Cooling Sensible **15** %
Cooling Latent **15** %
Heating **15** %

Zone Sizing Data:

Zone Airflow Sizing Method **Sum of space airflow rates**
Space Airflow Sizing Method **Individual peak space loads**

Zone	Supply Airflow (CFM)	Zone Htg Unit (MBH)	Reheat Coil (MBH)	FPMBX Fan (CFM)
1	531.1	-	-	-

5. Equipment Data

Central Cooling Unit - Air-Cooled DX

Estimated Maximum Load **9.3** MBH
Design OADB **95.0** F
Design EWB **67.0** F
Equipment Sizing **User-Defined**
Gross Cooling Capacity **12.0** MBH
AHRI Performance Rating **14.300** SEER
DX System Configuration **1-stage, 1 compressor, 1 circuit**
Low Temperature Cutoff OAT **0.0** F

Central Heating Unit - ASHP

Estimated Maximum Load **17.3** MBH
Design OADB **47.0** F
Design EDB **70.0** F
Equipment Sizing **User-Defined**
Gross Heating Capacity **12.0** MBH
AHRI Performance Rating **7.700** HSPF
Cutoff OAT **23.0** F

Auxiliary Heating:

Auxiliary Heating Type **Electric Resistance**
Auxiliary Heating Upper Cutoff **70.0** F

40 RDC #9 CPT Input Data

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

01/26/2026
11:18 AM

1. General Details:

Air System Name 40 RDC #9 CPT
Equipment Type Split AHU
Air System Type Single Zone CAV
Space Model: b) Space Model CPT
Notes:

2. System Components:

Ventilation Air Data:

Airflow Control Constant Ventilation Airflow
Ventilation Sizing Method Sum of Space OA Airflows
Unocc. Damper Position Closed
Damper Leak Rate 0 %

Air-to-Air Energy Recovery Data:

Recovery Type Sensible Heat
Thermal Efficiency 78 %
Input kW 0.000 kW
Schedule JFMAMJJASOND

Central Cooling Data:

Supply Air Temperature 58.0 F
Cooling Source Air-Cooled DX
Schedule JFMAMJJASOND
Capacity Control Cycled or Staged Capacity - Fan On

Central Heating Data:

Supply Temperature 95.0 F
Heating Source Air Source Heat Pump
Schedule JFMAMJJASOND
Capacity Control Cycled or Staged Capacity - Fan On

Supply Fan Data:

Fan Type Forward Curved
Configuration Draw-thru
Fan Performance 0.00 kW
Fan Control 1-speed, cooling and heating

Duct System Data:

Supply Duct Data:
Duct Leakage 0 %

Return Duct or Plenum Data:

Return Air Via Ducted Return

3. Zone Components:

Assigned Zones:

Zone	Zone Name
1	RDC #9

Number of zones 1

Thermostats and Zone Data:

Zone	Cooling T-Stat Occ. (F)	Cooling T-Stat Unocc. (F)	Heating T-Stat Occ. (F)	Heating T-Stat Unocc. (F)	T-Stat Throttling Range (F)	Diversity Factor (%)	Direct Exhaust Fan (kW)
1	75.0	80.0	70.0	65.0	1.50	100	0.0

Thermostat Schedule 24h/24h
Unoccupied Cooling is Available

40 RDC #9 CPT Input Data

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

01/26/2026
11:18 AM

Supply Terminals Data:

Zone	Terminal Type	Air Distribution	Air Distribution Effectiveness Specification	Air Distribution Effectiveness	Minimum Airflow	Design Supply Temp.	Fan Perf.	Fan Efficiency
1	Diffuser (no reheat)	Ceiling supply / ceiling return	Not Used	-	0.00 CFM/person	-	-	-

4. Sizing Data (Computer-Generated):

System Sizing Data:

Sizing Data:

Cooling Supply Temperature 58.0 F
Supply Fan Airflow 899.2 CFM
Ventilation Airflow 100.0 CFM
Heating Supply Temperature 95.0 F

Hydronic Sizing Specifications:

Chilled Water Supply Temperature 44.0 F
Chilled Water Delta-T 10.0 F
Hot Water Supply Temperature 140.0 F
Hot Water Delta-T 20.0 F

Safety Factors:

Cooling Sensible 15 %
Cooling Latent 15 %
Heating 15 %

Zone Sizing Data:

Zone Airflow Sizing Method Sum of space airflow rates
Space Airflow Sizing Method Individual peak space loads

Zone	Supply Airflow (CFM)	Zone Htg Unit (MBH)	Reheat Coil (MBH)	FPMBX Fan (CFM)
1	899.2	-	-	-

5. Equipment Data

Central Cooling Unit - Air-Cooled DX

Estimated Maximum Load 17.8 MBH
Design OADB 95.0 F
Design EWB 67.0 F
Equipment Sizing User-Defined
Gross Cooling Capacity 12.0 MBH
AHRI Performance Rating 28.100 SEER
DX System Configuration 2-stage, 2 compressors, 2 circuits
Low Temperature Cutoff OAT 0.0 F

Central Heating Unit - ASHP

Estimated Maximum Load 15.8 MBH
Design OADB 47.0 F
Design EDB 70.0 F
Equipment Sizing User-Defined
Gross Heating Capacity 12.0 MBH
AHRI Performance Rating 3.810 COP
Cutoff OAT -22.0 F

Auxiliary Heating:

Auxiliary Heating Type Electric Resistance
Auxiliary Heating Upper Cutoff 70.0 F

41 RDC ESC1 REF Input Data

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

01/26/2026
11:19 AM

1. General Details:

Air System Name 41 RDC ESC1 REF
Equipment Type Split AHU
Air System Type Single Zone CAV
Space Model: a) Space Model REF
Notes:

2. System Components:

Ventilation Air Data:

Airflow Control Constant Ventilation Airflow
Ventilation Sizing Method Sum of Space OA Airflows
Unocc. Damper Position Closed
Damper Leak Rate 0 %

Central Heating Data:

Supply Temperature 95.0 F
Heating Source Electric Resistance
Schedule JFMAMJJASOND
Capacity Control Cycled or Staged Capacity - Fan On

Supply Fan Data:

Fan Type Forward Curved
Configuration Draw-thru
Fan Performance 2.00 in wg
Overall Efficiency 54 %
Fan Control 1-speed, cooling and heating

Duct System Data:

Supply Duct Data:

Duct Leakage 0 %

Return Duct or Plenum Data:

Return Air Via Ducted Return

3. Zone Components:

Assigned Zones:

Zone	Zone Name
1	RDC ESC1

Number of zones 1

Thermostats and Zone Data:

Zone	Cooling T-Stat Occ. (F)	Cooling T-Stat Unocc. (F)	Heating T-Stat Occ. (F)	Heating T-Stat Unocc. (F)	T-Stat Throttling Range (F)	Diversity Factor (%)	Direct Exhaust Fan (kW)
1	75.0	80.0	70.0	65.0	1.50	100	0.0

Thermostat Schedule 24h/24h
Unoccupied Cooling is Available

Supply Terminals Data:

Zone	Terminal Type	Air Distribution	Air Distribution Effectiveness Specification	Air Distribution Effectiveness	Minimum Airflow	Design Supply Temp.	Fan Perf.	Fan Efficiency
1	Diffuser (no reheat)	Ceiling supply / ceiling return	Not Used	-	0.00 CFM/person	-	-	-

4. Sizing Data (Computer-Generated):

System Sizing Data:

Sizing Data:

Supply Fan Airflow 168.2 CFM
Ventilation Airflow 0.0 CFM
Heating Supply Temperature 95.0 F

41 RDC ESC1 REF Input Data

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

01/26/2026
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Hydronic Sizing Specifications:

Chilled Water Supply Temperature **44.0** F
Chilled Water Delta-T **10.0** F
Hot Water Supply Temperature **140.0** F
Hot Water Delta-T **20.0** F

Safety Factors:

Cooling Sensible **15** %
Cooling Latent **15** %
Heating **15** %

Zone Sizing Data:

Zone Airflow Sizing Method **Sum of space airflow rates**
Space Airflow Sizing Method **Individual peak space loads**

Zone	Supply Airflow (CFM)	Zone Htg Unit (MBH)	Reheat Coil (MBH)	FPMBX Fan (CFM)
1	168.2	-	-	-

5. Equipment Data

No equipment data required for this system.

42 RDC ESC1 CPT Input Data

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

01/26/2026
11:19 AM

1. General Details:

Air System Name 42 RDC ESC1 CPT
Equipment Type Split AHU
Air System Type Single Zone CAV
Space Model: b) Space Model CPT
Notes:

2. System Components:

Ventilation Air Data:

Airflow Control Constant Ventilation Airflow
Ventilation Sizing Method Sum of Space OA Airflows
Unocc. Damper Position Closed
Damper Leak Rate 0 %

Central Heating Data:

Supply Temperature 95.0 F
Heating Source Electric Resistance
Schedule JFMAMJJASOND
Capacity Control Cycled or Staged Capacity - Fan On

Supply Fan Data:

Fan Type Forward Curved
Configuration Draw-thru
Fan Performance 2.00 in wg
Overall Efficiency 54 %
Fan Control 1-speed, cooling and heating

Duct System Data:

Supply Duct Data:

Duct Leakage 0 %

Return Duct or Plenum Data:

Return Air Via Ducted Return

3. Zone Components:

Assigned Zones:

Zone	Zone Name
1	RDC ESC1

Number of zones 1

Thermostats and Zone Data:

Zone	Cooling T-Stat Occ. (F)	Cooling T-Stat Unocc. (F)	Heating T-Stat Occ. (F)	Heating T-Stat Unocc. (F)	T-Stat Throttling Range (F)	Diversity Factor (%)	Direct Exhaust Fan (kW)
1	75.0	80.0	70.0	65.0	1.50	100	0.0

Thermostat Schedule 24h/24h
Unoccupied Cooling is Available

Supply Terminals Data:

Zone	Terminal Type	Air Distribution	Air Distribution Effectiveness Specification	Air Distribution Effectiveness	Minimum Airflow	Design Supply Temp.	Fan Perf.	Fan Efficiency
1	Diffuser (no reheat)	Ceiling supply / ceiling return	Not Used	-	0.00 CFM/person	-	-	-

4. Sizing Data (Computer-Generated):

System Sizing Data:

Sizing Data:
Supply Fan Airflow 166.9 CFM
Ventilation Airflow 0.0 CFM
Heating Supply Temperature 95.0 F

42 RDC ESC1 CPT Input Data

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

01/26/2026
11:19 AM

Hydronic Sizing Specifications:

Chilled Water Supply Temperature **44.0** F
Chilled Water Delta-T **10.0** F
Hot Water Supply Temperature **140.0** F
Hot Water Delta-T **20.0** F

Safety Factors:

Cooling Sensible **15** %
Cooling Latent **15** %
Heating **15** %

Zone Sizing Data:

Zone Airflow Sizing Method **Sum of space airflow rates**
Space Airflow Sizing Method **Individual peak space loads**

Zone	Supply Airflow (CFM)	Zone Htg Unit (MBH)	Reheat Coil (MBH)	FPMBX Fan (CFM)
1	166.9	-	-	-

5. Equipment Data

No equipment data required for this system.

43 RDC ESC2 REF Input Data

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

01/26/2026
11:19 AM

1. General Details:

Air System Name 43 RDC ESC2 REF
Equipment Type Split AHU
Air System Type Single Zone CAV
Space Model: a) Space Model REF
Notes:

2. System Components:

Ventilation Air Data:

Airflow Control Constant Ventilation Airflow
Ventilation Sizing Method Sum of Space OA Airflows
Unocc. Damper Position Closed
Damper Leak Rate 0 %

Central Heating Data:

Supply Temperature 95.0 F
Heating Source Electric Resistance
Schedule JFMAMJJASOND
Capacity Control Cycled or Staged Capacity - Fan On

Supply Fan Data:

Fan Type Forward Curved
Configuration Draw-thru
Fan Performance 2.00 in wg
Overall Efficiency 54 %
Fan Control 1-speed, cooling and heating

Duct System Data:

Supply Duct Data:

Duct Leakage 0 %

Return Duct or Plenum Data:

Return Air Via Ducted Return

3. Zone Components:

Assigned Zones:

Zone	Zone Name
1	RDC ESC2

Number of zones 1

Thermostats and Zone Data:

Zone	Cooling T-Stat Occ. (F)	Cooling T-Stat Unocc. (F)	Heating T-Stat Occ. (F)	Heating T-Stat Unocc. (F)	T-Stat Throttling Range (F)	Diversity Factor (%)	Direct Exhaust Fan (kW)
1	75.0	80.0	70.0	65.0	1.50	100	0.0

Thermostat Schedule 24h/24h
Unoccupied Cooling is Available

Supply Terminals Data:

Zone	Terminal Type	Air Distribution	Air Distribution Effectiveness Specification	Air Distribution Effectiveness	Minimum Airflow	Design Supply Temp.	Fan Perf.	Fan Efficiency
1	Diffuser (no reheat)	Ceiling supply / ceiling return	Not Used	-	0.00 CFM/person	-	-	-

4. Sizing Data (Computer-Generated):

System Sizing Data:

Sizing Data:

Supply Fan Airflow 186.9 CFM
Ventilation Airflow 0.0 CFM
Heating Supply Temperature 95.0 F

43 RDC ESC2 REF Input Data

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

01/26/2026
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Hydronic Sizing Specifications:

Chilled Water Supply Temperature **44.0** F
Chilled Water Delta-T **10.0** F
Hot Water Supply Temperature **140.0** F
Hot Water Delta-T **20.0** F

Safety Factors:

Cooling Sensible **15** %
Cooling Latent **15** %
Heating **15** %

Zone Sizing Data:

Zone Airflow Sizing Method **Sum of space airflow rates**
Space Airflow Sizing Method **Individual peak space loads**

Zone	Supply Airflow (CFM)	Zone Htg Unit (MBH)	Reheat Coil (MBH)	FPMBX Fan (CFM)
1	186.9	-	-	-

5. Equipment Data

No equipment data required for this system.

44 RDC ESC25 CPT Input Data

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

01/26/2026
11:19 AM

1. General Details:

Air System Name 44 RDC ESC25 CPT
Equipment Type Split AHU
Air System Type Single Zone CAV
Space Model: b) Space Model CPT
Notes:

2. System Components:

Ventilation Air Data:

Airflow Control Constant Ventilation Airflow
Ventilation Sizing Method Sum of Space OA Airflows
Unocc. Damper Position Closed
Damper Leak Rate 0 %

Central Heating Data:

Supply Temperature 95.0 F
Heating Source Electric Resistance
Schedule JFMAMJJASOND
Capacity Control Cycled or Staged Capacity - Fan On

Supply Fan Data:

Fan Type Forward Curved
Configuration Draw-thru
Fan Performance 2.00 in wg
Overall Efficiency 54 %
Fan Control 1-speed, cooling and heating

Duct System Data:

Supply Duct Data:

Duct Leakage 0 %

Return Duct or Plenum Data:

Return Air Via Ducted Return

3. Zone Components:

Assigned Zones:

Zone	Zone Name
1	RDC ESC2

Number of zones 1

Thermostats and Zone Data:

Zone	Cooling T-Stat Occ. (F)	Cooling T-Stat Unocc. (F)	Heating T-Stat Occ. (F)	Heating T-Stat Unocc. (F)	T-Stat Throttling Range (F)	Diversity Factor (%)	Direct Exhaust Fan (kW)
1	75.0	80.0	70.0	65.0	1.50	100	0.0

Thermostat Schedule 24h/24h
Unoccupied Cooling is Available

Supply Terminals Data:

Zone	Terminal Type	Air Distribution	Air Distribution Effectiveness Specification	Air Distribution Effectiveness	Minimum Airflow	Design Supply Temp.	Fan Perf.	Fan Efficiency
1	Diffuser (no reheat)	Ceiling supply / ceiling return	Not Used	-	0.00 CFM/person	-	-	-

4. Sizing Data (Computer-Generated):

System Sizing Data:

Sizing Data:

Supply Fan Airflow 183.6 CFM
Ventilation Airflow 0.0 CFM
Heating Supply Temperature 95.0 F

44 RDC ESC25 CPT Input Data

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

01/26/2026
11:19 AM

Hydronic Sizing Specifications:

Chilled Water Supply Temperature **44.0** F
Chilled Water Delta-T **10.0** F
Hot Water Supply Temperature **140.0** F
Hot Water Delta-T **20.0** F

Safety Factors:

Cooling Sensible **15** %
Cooling Latent **15** %
Heating **15** %

Zone Sizing Data:

Zone Airflow Sizing Method **Sum of space airflow rates**
Space Airflow Sizing Method **Individual peak space loads**

Zone	Supply Airflow (CFM)	Zone Htg Unit (MBH)	Reheat Coil (MBH)	FPMBX Fan (CFM)
1	183.6	-	-	-

5. Equipment Data

No equipment data required for this system.

45 RDC Salle Communautaire REF Input Data

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

01/26/2026
11:19 AM

1. General Details:

Air System Name 45 RDC Salle Communautaire REF
Equipment Type Split AHU
Air System Type Single Zone CAV
Space Model: a) Space Model REF
Notes:

2. System Components:

Ventilation Air Data:

Airflow Control Constant Ventilation Airflow
Ventilation Sizing Method Sum of Space OA Airflows
Unocc. Damper Position Closed
Damper Leak Rate 0 %

Air-to-Air Energy Recovery Data:

Recovery Type Sensible Heat
Thermal Efficiency 65 %
Input kW 0.000 kW
Schedule JFMAMJJASOND

Central Cooling Data:

Supply Air Temperature 58.0 F
Cooling Source Air-Cooled DX
Schedule JFMAMJJASOND
Capacity Control Cycled or Staged Capacity - Fan On

Central Heating Data:

Supply Temperature 95.0 F
Heating Source Air Source Heat Pump
Schedule JFMAMJJASOND
Capacity Control Cycled or Staged Capacity - Fan On

Supply Fan Data:

Fan Type Forward Curved
Configuration Draw-thru
Fan Performance 0.00 kW
Fan Control 1-speed, cooling and heating

Duct System Data:

Supply Duct Data:
Duct Leakage 0 %

Return Duct or Plenum Data:

Return Air Via Ducted Return

3. Zone Components:

Assigned Zones:

Zone	Zone Name
1	RDC Salle Communautaire

Number of zones 1

Thermostats and Zone Data:

Zone	Cooling T-Stat Occ. (F)	Cooling T-Stat Unocc. (F)	Heating T-Stat Occ. (F)	Heating T-Stat Unocc. (F)	T-Stat Throttling Range (F)	Diversity Factor (%)	Direct Exhaust Fan (kW)
1	75.0	80.0	70.0	65.0	1.50	100	0.0

Thermostat Schedule 24h/24h
Unoccupied Cooling is Available

45 RDC Salle Communautaire REF Input Data

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

01/26/2026
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Supply Terminals Data:

Zone	Terminal Type	Air Distribution	Air Distribution Effectiveness Specification	Air Distribution Effectiveness	Minimum Airflow	Design Supply Temp.	Fan Perf.	Fan Efficiency
1	Diffuser (no reheat)	Ceiling supply / ceiling return	Not Used	-	0.00 CFM/person	-	-	-

4. Sizing Data (Computer-Generated):

System Sizing Data:

Sizing Data:

Cooling Supply Temperature **58.0** F
Supply Fan Airflow **115.9** CFM
Ventilation Airflow **100.0** CFM
Heating Supply Temperature **95.0** F

Hydronic Sizing Specifications:

Chilled Water Supply Temperature **44.0** F
Chilled Water Delta-T **10.0** F
Hot Water Supply Temperature **140.0** F
Hot Water Delta-T **20.0** F

Safety Factors:

Cooling Sensible **15** %
Cooling Latent **15** %
Heating **15** %

Zone Sizing Data:

Zone Airflow Sizing Method **Sum of space airflow rates**
Space Airflow Sizing Method **Individual peak space loads**

Zone	Supply Airflow (CFM)	Zone Htg Unit (MBH)	Reheat Coil (MBH)	FPMBX Fan (CFM)
1	115.9	-	-	-

5. Equipment Data

Central Cooling Unit - Air-Cooled DX

Estimated Maximum Load **3.6** MBH
Design OADB **95.0** F
Design EWB **67.0** F
Equipment Sizing **User-Defined**
Gross Cooling Capacity **9.0** MBH
AHRI Performance Rating **14.300** SEER
DX System Configuration **1-stage, 1 compressor, 1 circuit**
Low Temperature Cutoff OAT **0.0** F

Central Heating Unit - ASHP

Estimated Maximum Load **6.2** MBH
Design OADB **47.0** F
Design EDB **70.0** F
Equipment Sizing **User-Defined**
Gross Heating Capacity **9.0** MBH
AHRI Performance Rating **7.700** HSPF
Cutoff OAT **23.0** F

Auxiliary Heating:

Auxiliary Heating Type **Electric Resistance**
Auxiliary Heating Upper Cutoff **70.0** F

46 RDC Salle Communautaire CPT Input Data

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

01/26/2026
11:19 AM

1. General Details:

Air System Name 46 RDC Salle Communautaire CPT
Equipment Type Split AHU
Air System Type Single Zone CAV
Space Model: b) Space Model CPT
Notes:

2. System Components:

Ventilation Air Data:

Airflow Control Constant Ventilation Airflow
Ventilation Sizing Method Sum of Space OA Airflows
Unocc. Damper Position Closed
Damper Leak Rate 0 %

Air-to-Air Energy Recovery Data:

Recovery Type Sensible Heat
Thermal Efficiency 78 %
Input kW 0.000 kW
Schedule JFMAMJJASOND

Central Cooling Data:

Supply Air Temperature 58.0 F
Cooling Source Air-Cooled DX
Schedule JFMAMJJASOND
Capacity Control Cycled or Staged Capacity - Fan On

Central Heating Data:

Supply Temperature 95.0 F
Heating Source Air Source Heat Pump
Schedule JFMAMJJASOND
Capacity Control Cycled or Staged Capacity - Fan On

Supply Fan Data:

Fan Type Forward Curved
Configuration Draw-thru
Fan Performance 0.00 kW
Fan Control 1-speed, cooling and heating

Duct System Data:

Supply Duct Data:
Duct Leakage 0 %

Return Duct or Plenum Data:

Return Air Via Ducted Return

3. Zone Components:

Assigned Zones:

Zone	Zone Name
1	RDC Salle Communautaire

Number of zones 1

Thermostats and Zone Data:

Zone	Cooling T-Stat Occ. (F)	Cooling T-Stat Unocc. (F)	Heating T-Stat Occ. (F)	Heating T-Stat Unocc. (F)	T-Stat Throttling Range (F)	Diversity Factor (%)	Direct Exhaust Fan (kW)
1	75.0	80.0	70.0	65.0	1.50	100	0.0

Thermostat Schedule 24h/24h
Unoccupied Cooling is Available

46 RDC Salle Communautaire CPT Input Data

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

01/26/2026
11:19 AM

Supply Terminals Data:

Zone	Terminal Type	Air Distribution	Air Distribution Effectiveness Specification	Air Distribution Effectiveness	Minimum Airflow	Design Supply Temp.	Fan Perf.	Fan Efficiency
1	Diffuser (no reheat)	Ceiling supply / ceiling return	Not Used	-	0.00 CFM/person	-	-	-

4. Sizing Data (Computer-Generated):

System Sizing Data:

Sizing Data:

Cooling Supply Temperature 58.0 F
Supply Fan Airflow 244.0 CFM
Ventilation Airflow 100.0 CFM
Heating Supply Temperature 95.0 F

Hydronic Sizing Specifications:

Chilled Water Supply Temperature 44.0 F
Chilled Water Delta-T 10.0 F
Hot Water Supply Temperature 140.0 F
Hot Water Delta-T 20.0 F

Safety Factors:

Cooling Sensible 15 %
Cooling Latent 15 %
Heating 15 %

Zone Sizing Data:

Zone Airflow Sizing Method Sum of space airflow rates
Space Airflow Sizing Method Individual peak space loads

Zone	Supply Airflow (CFM)	Zone Htg Unit (MBH)	Reheat Coil (MBH)	FPMBX Fan (CFM)
1	244.0	-	-	-

5. Equipment Data

Central Cooling Unit - Air-Cooled DX

Estimated Maximum Load 5.5 MBH
Design OADB 95.0 F
Design EWB 67.0 F
Equipment Sizing User-Defined
Gross Cooling Capacity 9.0 MBH
AHRI Performance Rating 28.100 SEER
DX System Configuration 2-stage, 2 compressors, 2 circuits
Low Temperature Cutoff OAT 0.0 F

Central Heating Unit - ASHP

Estimated Maximum Load 5.0 MBH
Design OADB 47.0 F
Design EDB 70.0 F
Equipment Sizing User-Defined
Gross Heating Capacity 9.0 MBH
AHRI Performance Rating 3.810 COP
Cutoff OAT -22.0 F

Auxiliary Heating:

Auxiliary Heating Type Electric Resistance
Auxiliary Heating Upper Cutoff 70.0 F

47 SS Garage REF Input Data

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

01/26/2026
11:19 AM

1. General Details:

Air System Name 47 SS Garage REF
Equipment Type Split AHU
Air System Type Single Zone CAV
Space Model: a) Space Model REF
Notes:

2. System Components:

Ventilation Air Data:

Airflow Control Constant Ventilation Airflow
Ventilation Sizing Method Sum of Space OA Airflows
Unocc. Damper Position Closed
Damper Leak Rate 0 %

Central Heating Data:

Supply Temperature 95.0 F
Heating Source Electric Resistance
Schedule JFMAMJJASOND
Capacity Control Cycled or Staged Capacity - Fan On

Supply Fan Data:

Fan Type Forward Curved
Configuration Draw-thru
Fan Performance 2.00 in wg
Overall Efficiency 54 %
Fan Control 1-speed, cooling and heating

Duct System Data:

Supply Duct Data:

Duct Leakage 0 %

Return Duct or Plenum Data:

Return Air Via Ducted Return

3. Zone Components:

Assigned Zones:

Zone	Zone Name
1	SS Garage

Number of zones 1

Thermostats and Zone Data:

Zone	Cooling T-Stat Occ. (F)	Cooling T-Stat Unocc. (F)	Heating T-Stat Occ. (F)	Heating T-Stat Unocc. (F)	T-Stat Throttling Range (F)	Diversity Factor (%)	Direct Exhaust Fan (kW)
1	75.0	80.0	70.0	65.0	1.50	100	0.0

Thermostat Schedule 24h/24h
Unoccupied Cooling is Available

Supply Terminals Data:

Zone	Terminal Type	Air Distribution	Air Distribution Effectiveness Specification	Air Distribution Effectiveness	Minimum Airflow	Design Supply Temp.	Fan Perf.	Fan Efficiency
1	Diffuser (no reheat)	Ceiling supply / ceiling return	Not Used	-	0.00 CFM/person	-	-	-

4. Sizing Data (Computer-Generated):

System Sizing Data:

Sizing Data:

Supply Fan Airflow 1191.2 CFM
Ventilation Airflow 0.0 CFM
Heating Supply Temperature 95.0 F

47 SS Garage REF Input Data

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

01/26/2026
11:19 AM

Hydronic Sizing Specifications:

Chilled Water Supply Temperature **44.0** F
Chilled Water Delta-T **10.0** F
Hot Water Supply Temperature **140.0** F
Hot Water Delta-T **20.0** F

Safety Factors:

Cooling Sensible **15** %
Cooling Latent **15** %
Heating **15** %

Zone Sizing Data:

Zone Airflow Sizing Method **Sum of space airflow rates**
Space Airflow Sizing Method **Individual peak space loads**

Zone	Supply Airflow (CFM)	Zone Htg Unit (MBH)	Reheat Coil (MBH)	FPMBX Fan (CFM)
1	1191.2	-	-	-

5. Equipment Data

No equipment data required for this system.

48 SS Garage CPT Input Data

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

01/26/2026
11:19 AM

1. General Details:

Air System Name 48 SS Garage CPT
Equipment Type Split AHU
Air System Type Single Zone CAV
Space Model: b) Space Model CPT
Notes:

2. System Components:

Ventilation Air Data:

Airflow Control Constant Ventilation Airflow
Ventilation Sizing Method Sum of Space OA Airflows
Unocc. Damper Position Closed
Damper Leak Rate 0 %

Central Heating Data:

Supply Temperature 95.0 F
Heating Source Air Source Heat Pump
Schedule JFMAMJJASOND
Capacity Control Cycled or Staged Capacity - Fan On

Supply Fan Data:

Fan Type Forward Curved
Configuration Draw-thru
Fan Performance 2.00 in wg
Overall Efficiency 54 %
Fan Control 1-speed, cooling and heating

Duct System Data:

Supply Duct Data:

Duct Leakage 0 %

Return Duct or Plenum Data:

Return Air Via Ducted Return

3. Zone Components:

Assigned Zones:

Zone	Zone Name
1	SS Garage

Number of zones 1

Thermostats and Zone Data:

Zone	Cooling T-Stat Occ. (F)	Cooling T-Stat Unocc. (F)	Heating T-Stat Occ. (F)	Heating T-Stat Unocc. (F)	T-Stat Throttling Range (F)	Diversity Factor (%)	Direct Exhaust Fan (kW)
1	75.0	80.0	70.0	65.0	1.50	100	0.0

Thermostat Schedule 24h/24h
Unoccupied Cooling is Available

Supply Terminals Data:

Zone	Terminal Type	Air Distribution	Air Distribution Effectiveness Specification	Air Distribution Effectiveness	Minimum Airflow	Design Supply Temp.	Fan Perf.	Fan Efficiency
1	Diffuser (no reheat)	Ceiling supply / ceiling return	Not Used	-	0.00 CFM/person	-	-	-

4. Sizing Data (Computer-Generated):

System Sizing Data:

Sizing Data:

Supply Fan Airflow 1151.6 CFM
Ventilation Airflow 0.0 CFM
Heating Supply Temperature 95.0 F

48 SS Garage CPT Input Data

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

01/26/2026
11:19 AM

Hydronic Sizing Specifications:

Chilled Water Supply Temperature **44.0** F
Chilled Water Delta-T **10.0** F
Hot Water Supply Temperature **140.0** F
Hot Water Delta-T **20.0** F

Safety Factors:

Cooling Sensible **15** %
Cooling Latent **15** %
Heating **15** %

Zone Sizing Data:

Zone Airflow Sizing Method **Sum of space airflow rates**
Space Airflow Sizing Method **Individual peak space loads**

Zone	Supply Airflow (CFM)	Zone Htg Unit (MBH)	Reheat Coil (MBH)	FPMBX Fan (CFM)
1	1151.6	-	-	-

5. Equipment Data

Central Heating Unit - ASHP

Estimated Maximum Load **29.0** MBH
Design OADB **47.0** F
Design EDB **70.0** F
Equipment Sizing **User-Defined**
Gross Heating Capacity **24.0** MBH
AHRI Performance Rating **3.400** COP
Cutoff OAT **-22.0** F

Auxiliary Heating:

Auxiliary Heating Type **Electric Resistance**
Auxiliary Heating Upper Cutoff **70.0** F

49 Couloir REF Input Data

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

Prepared by: Groupe CMI

01/26/2026

11:19 AM

1. General Details:

Air System Name 49 Couloir REF
Equipment Type Packaged Rooftop Units
Air System Type VAV
Space Model: a) Space Model REF
Notes:

2. System Components:

Ventilation Air Data:

Airflow Control Constant Ventilation Airflow
Ventilation Sizing Method Sum of Space OA Airflows
Unocc. Damper Position Closed
Damper Leak Rate 0 %

Preheat Coil Data:

Setpoint 55.0 F
Heating Source Electric Resistance
Schedule JFMAMJJASOND
Coil position Downstream of Mixing Point

Central Cooling Data:

Supply Air Temperature 55.0 F
Cooling Source Air-Cooled DX
Schedule JFMAMJJASOND
Capacity Control Cycled or Staged Capacity - Fan On

Supply Fan Data:

Fan Type Forward Curved
Configuration Draw-thru
Fan Performance 0.00 kW

% Airflow	100	90	80	70	60	50
% kW	100	91	81	72	61	54

% Airflow	40	30	20	10	0
% kW	46	40	33	27	21

Duct System Data:

Supply Duct Data:

Duct Leakage 0 %

Return Duct or Plenum Data:

Return Air Via Ducted Return

3. Zone Components:

Assigned Zones:

Zone	Zone Name
1	2E corridor
2	3E corridor
3	4E corridor
4	RDC Corridor
5	RDC Hall
6	SS SAS

Number of zones 6

49 Couloir REF Input Data

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

01/26/2026
11:19 AM

Thermostats and Zone Data:

Zone	Cooling T-Stat Occ. (F)	Cooling T-Stat Unocc. (F)	Heating T-Stat Occ. (F)	Heating T-Stat Unocc. (F)	T-Stat Throttling Range (F)	Diversity Factor (%)	Direct Exhaust Fan (kW)
1	75.0	80.0	70.0	65.0	1.50	100	0.0
2	75.0	80.0	70.0	65.0	1.50	100	0.0
3	75.0	80.0	70.0	65.0	1.50	100	0.0
4	75.0	80.0	70.0	65.0	1.50	100	0.0
5	75.0	80.0	70.0	65.0	1.50	100	0.0
6	75.0	80.0	70.0	65.0	1.50	100	0.0

Thermostat Schedule 24h/24h
Unoccupied Cooling is Available

Supply Terminals Data:

Zone	Terminal Type	Air Distribution	Air Distribution Effectiveness Specification	Air Distribution Effectiveness	Minimum Airflow	Design Supply Temp.	Fan Perf.	Fan Efficiency
1	VAV box with RH (Dual Maximum)	Ceiling supply / ceiling return	Not Used	-	0.00 CFM/person	95.0 F	-	-
2	VAV box with RH (Dual Maximum)	Ceiling supply / ceiling return	Not Used	-	0.00 CFM/person	95.0 F	-	-
3	VAV box with RH (Dual Maximum)	Ceiling supply / ceiling return	Not Used	-	0.00 CFM/person	95.0 F	-	-
4	VAV box with RH (Dual Maximum)	Ceiling supply / ceiling return	Not Used	-	0.00 CFM/person	95.0 F	-	-
5	VAV box with RH (Dual Maximum)	Ceiling supply / ceiling return	Not Used	-	0.00 CFM/person	95.0 F	-	-
6	VAV box with RH (Dual Maximum)	Ceiling supply / ceiling return	Not Used	-	0.00 CFM/person	95.0 F	-	-

Reheat Coil Source Electric Resistance
Reheat Coil Schedule JFMAMJJASOND

4. Sizing Data (Computer-Generated):

System Sizing Data:

Sizing Data:

Cooling Supply Temperature 55.0 F
Supply Fan Airflow 933.2 CFM
Ventilation Airflow 318.0 CFM

Hydronic Sizing Specifications:

Chilled Water Supply Temperature 44.0 F
Chilled Water Delta-T 10.0 F
Hot Water Supply Temperature 140.0 F
Hot Water Delta-T 20.0 F

Safety Factors:

Cooling Sensible 15 %
Cooling Latent 15 %
Heating 15 %

Zone Sizing Data:

Zone Airflow Sizing Method Peak zone sensible load
Space Airflow Sizing Method Individual peak space loads

Zone	Supply Airflow (CFM)	Zone Htg Unit (MBH)	Reheat Coil (MBH)	FPMBX Fan (CFM)

49 Couloir REF Input Data

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

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1	188.1	-	6.4	-
2	189.1	-	6.4	-
3	297.1	-	10.7	-
4	73.2	-	2.3	-
5	174.1	-	4.6	-
6	19.4	-	0.8	-

5. Equipment Data

Central Cooling Unit - Air-Cooled DX

Estimated Maximum Load 29.7 MBH
Design OADB 95.0 F
Design EWB 67.0 F
Equipment Sizing User-Defined
Gross Cooling Capacity 1.0 MBH
AHRI Performance Rating 11.000 EER
DX System Configuration 1-stage, 1 compressor, 1 circuit
Low Temperature Cutoff OAT 0.0 F

50 Couloir CPT Input Data

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

01/26/2026
11:19 AM

1. General Details:

Air System Name 50 Couloir CPT
Equipment Type Packaged Rooftop Units
Air System Type VAV
Space Model: b) Space Model CPT
Notes:

2. System Components:

Ventilation Air Data:

Airflow Control Constant Ventilation Airflow
Ventilation Sizing Method Sum of Space OA Airflows
Unocc. Damper Position Closed
Damper Leak Rate 0 %

Preheat Coil Data:

Setpoint 55.0 F
Heating Source Electric Resistance
Schedule JFMAMJJASOND
Coil position Downstream of Mixing Point

Central Cooling Data:

Supply Air Temperature 55.0 F
Cooling Source Air-Cooled DX
Schedule JFMAMJJASOND
Capacity Control Cycled or Staged Capacity - Fan On

Supply Fan Data:

Fan Type Forward Curved
Configuration Draw-thru
Fan Performance 0.00 kW

% Airflow	100	90	80	70	60	50
% kW	100	91	81	72	61	54

% Airflow	40	30	20	10	0
% kW	46	40	33	27	21

Duct System Data:

Supply Duct Data:

Duct Leakage 0 %

Return Duct or Plenum Data:

Return Air Via Ducted Return

3. Zone Components:

Assigned Zones:

Zone	Zone Name
1	2E corridor
2	3E corridor
3	4E corridor
4	RDC Corridor
5	RDC Hall
6	SS SAS

Number of zones 6

50 Couloir CPT Input Data

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

01/26/2026
11:19 AM

Thermostats and Zone Data:

Zone	Cooling T-Stat Occ. (F)	Cooling T-Stat Unocc. (F)	Heating T-Stat Occ. (F)	Heating T-Stat Unocc. (F)	T-Stat Throttling Range (F)	Diversity Factor (%)	Direct Exhaust Fan (kW)
1	75.0	80.0	70.0	65.0	1.50	100	0.0
2	75.0	80.0	70.0	65.0	1.50	100	0.0
3	75.0	80.0	70.0	65.0	1.50	100	0.0
4	75.0	80.0	70.0	65.0	1.50	100	0.0
5	75.0	80.0	70.0	65.0	1.50	100	0.0
6	75.0	80.0	70.0	65.0	1.50	100	0.0

Thermostat Schedule 24h/24h
Unoccupied Cooling is Available

Supply Terminals Data:

Zone	Terminal Type	Air Distribution	Air Distribution Effectiveness Specification	Air Distribution Effectiveness	Minimum Airflow	Design Supply Temp.	Fan Perf.	Fan Efficiency
1	VAV box with RH (Dual Maximum)	Ceiling supply / ceiling return	Not Used	-	0.00 CFM/person	95.0 F	-	-
2	VAV box with RH (Dual Maximum)	Ceiling supply / ceiling return	Not Used	-	0.00 CFM/person	95.0 F	-	-
3	VAV box with RH (Dual Maximum)	Ceiling supply / ceiling return	Not Used	-	0.00 CFM/person	95.0 F	-	-
4	VAV box with RH (Dual Maximum)	Ceiling supply / ceiling return	Not Used	-	0.00 CFM/person	95.0 F	-	-
5	VAV box with RH (Dual Maximum)	Ceiling supply / ceiling return	Not Used	-	0.00 CFM/person	95.0 F	-	-
6	VAV box with RH (Dual Maximum)	Ceiling supply / ceiling return	Not Used	-	0.00 CFM/person	95.0 F	-	-

Reheat Coil Source Electric Resistance
Reheat Coil Schedule JFMAMJJASOND

4. Sizing Data (Computer-Generated):

System Sizing Data:

Sizing Data:

Cooling Supply Temperature 55.0 F
Supply Fan Airflow 1757.7 CFM
Ventilation Airflow 318.0 CFM

Hydronic Sizing Specifications:

Chilled Water Supply Temperature 44.0 F
Chilled Water Delta-T 10.0 F
Hot Water Supply Temperature 140.0 F
Hot Water Delta-T 20.0 F

Safety Factors:

Cooling Sensible 15 %
Cooling Latent 15 %
Heating 15 %

Zone Sizing Data:

Zone Airflow Sizing Method Peak zone sensible load
Space Airflow Sizing Method Individual peak space loads

Zone	Supply Airflow (CFM)	Zone Htg Unit (MBH)	Reheat Coil (MBH)	FPMBX Fan (CFM)

50 Couloir CPT Input Data

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Groupe CMI

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1	385.2	-	6.1	-
2	386.1	-	6.1	-
3	506.9	-	10.2	-
4	149.4	-	2.2	-
5	341.5	-	4.4	-
6	18.8	-	0.8	-

5. Equipment Data

Central Cooling Unit - Air-Cooled DX

Estimated Maximum Load 47.4 MBH
Design OADB 95.0 F
Design EWB 67.0 F
Equipment Sizing User-Defined
Gross Cooling Capacity 1.0 MBH
AHRI Performance Rating 11.000 EER
DX System Configuration 1-stage, 1 compressor, 1 circuit
Low Temperature Cutoff OAT 0.0 F

a) Alternative REF Input Data

Project: 26909 APH 58 Log, rue Laniel à Salaberry-de-Valleyf...
Prepared by: Le Groupe CMI Experts-Conseils inc.

02-02-2026
6:01 PM

1. General Details:

Name a) Alternative REF
Energy Sim. Status Calculated
Baseline-90° Status Not Calculated
Baseline-180° Status Not Calculated
Baseline-270° Status Not Calculated

2. Plants Included in this Alternative:

(none)

3. Air Systems Included in this Alternative:

Air System	# Zones
01 2E #11 à #15 REF	1
03 2E #16 à #22 REF	1
05 3E #11 à #15 REF	1
07 3E #16 à #22 REF	1
09 4E #11 à #15 REF	1
11 4E #16 REF	1
13 4E #17 REF	1
15 4E #18 REF	1
17 4E #19 REF	1
19 4E #20 REF	1
21 4E #21 REF	1
23 4E #22 REF	1
25 4E ESC1 REF	1
27 4E ESC2 REF	1
29 RDC #1 à #5 REF	1
31 RDC #10 REF	1
33 RDC #6 REF	1
35 RDC #7 REF	1
37 RDC #8 REF	1
39 RDC #9 REF	1
41 RDC ESC1 REF	1
43 RDC ESC2 REF	1
45 RDC Salle Communautaire REF	1
47 SS Garage REF	1
49 Couloir REF	6

4. Space Models Included in this Alternative:

Summary Calculation Status:

Design Sizing Calculated
Energy Simulation Calculated

Space Model: a) Space Model REF (for building1)

Design Sizing Calculated
Energy Simulation Calculated

Zone	Air System
2E #11 à #15	01 2E #11 à #15 REF
2E #16 à #22	03 2E #16 à #22 REF
2E corridor	49 Couloir REF
3E #11 à #15	05 3E #11 à #15 REF
3E #16 à #22	07 3E #16 à #22 REF
3E corridor	49 Couloir REF
4E #11 à #15	09 4E #11 à #15 REF
4E #16	11 4E #16 REF
4E #17	13 4E #17 REF
4E #18	15 4E #18 REF
4E #19	17 4E #19 REF
4E #20	19 4E #20 REF
4E #21	21 4E #21 REF

a) Alternative REF Input Data

Project: 26909 APH 58 Log, rue Laniel à Salaberry-de-Valleyf...
Prepared by: Le Groupe CMI Experts-Conseils inc.

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4E #22	23 4E #22 REF
4E corridor	49 Couloir REF
4E ESC1	25 4E ESC1 REF
4E ESC2	27 4E ESC2 REF
RDC #1 à #5	29 RDC #1 à #5 REF
RDC #10	31 RDC #10 REF
RDC #6	33 RDC #6 REF
RDC #7	35 RDC #7 REF
RDC #8	37 RDC #8 REF
RDC #9	39 RDC #9 REF
RDC Corridor	49 Couloir REF
RDC ESC1	41 RDC ESC1 REF
RDC ESC2	43 RDC ESC2 REF
RDC Hall	49 Couloir REF
RDC Salle Communautaire	45 RDC Salle Communautaire REF
SS Garage	47 SS Garage REF
SS SAS	49 Couloir REF

5. Miscellaneous Energy

(no items defined)

6. Meters

Electric Default Electric Rate

7. Miscellaneous Data

Average Building Power Factor 100.00 %
Source Electric Generating Efficiency 90.00 %
Additional Floor Area 0.0 sqft

b) Alternative CPT Input Data

Project: 26909 APH 58 Log, rue Laniel à Salaberry-de-Valleyf...

02-02-2026

Prepared by: Le Groupe CMI Experts-Conseils inc.

6:01 PM

1. General Details:

Name **b) Alternative CPT**
 Energy Sim. Status **Calculated**
 Baseline-90° Status **Not Calculated**
 Baseline-180° Status **Not Calculated**
 Baseline-270° Status **Not Calculated**

2. Plants Included in this Alternative:

(none)

3. Air Systems Included in this Alternative:

Air System	# Zones
02 2E #11 à #15 CPT	1
04 2E #16 à #22 CPT	1
06 3E #11 à #15 CPT	1
08 3E #16 à #22 CPT	1
10 4E #11 à #15 CPT	1
12 4E #16 CPT	1
14 4E #17 CPT	1
16 4E #18 CPT	1
18 4E #19 CPT	1
20 4E #20 CPT	1
22 4E #21 CPT	1
24 4E #22 CPT	1
26 4E ESC1 CPT	1
28 4E ESC2 CPT	1
30 RDC #1 à #5 CPT	1
32 RDC #10 CPT	1
34 RDC #6 CPT	1
36 RDC #7 CPT	1
38 RDC #8 CPT	1
40 RDC #9 CPT	1
42 RDC ESC1 CPT	1
44 RDC ESC25 CPT	1
46 RDC Salle Communautaire CPT	1
48 SS Garage CPT	1
50 Couloir CPT	6

4. Space Models Included in this Alternative:

Summary Calculation Status:

Design Sizing **Calculated**
 Energy Simulation **Calculated**

Space Model: b) Space Model CPT (for building1)

Design Sizing **Calculated**
 Energy Simulation **Calculated**

Zone	Air System
2E #11 à #15	02 2E #11 à #15 CPT
2E #16 à #22	04 2E #16 à #22 CPT
2E corridor	50 Couloir CPT
3E #11 à #15	06 3E #11 à #15 CPT
3E #16 à #22	08 3E #16 à #22 CPT
3E corridor	50 Couloir CPT
4E #11 à #15	10 4E #11 à #15 CPT
4E #16	12 4E #16 CPT
4E #17	14 4E #17 CPT
4E #18	16 4E #18 CPT
4E #19	18 4E #19 CPT
4E #20	20 4E #20 CPT
4E #21	22 4E #21 CPT

b) Alternative CPT Input Data

Project: 26909 APH 58 Log, rue Laniel à Salaberry-de-Valleyf...
Prepared by: Le Groupe CMI Experts-Conseils inc.

02-02-2026
6:01 PM

4E #22	24 4E #22 CPT
4E corridor	50 Couloir CPT
4E ESC1	26 4E ESC1 CPT
4E ESC2	28 4E ESC2 CPT
RDC #1 à #5	30 RDC #1 à #5 CPT
RDC #10	32 RDC #10 CPT
RDC #6	34 RDC #6 CPT
RDC #7	36 RDC #7 CPT
RDC #8	38 RDC #8 CPT
RDC #9	40 RDC #9 CPT
RDC Corridor	50 Couloir CPT
RDC ESC1	42 RDC ESC1 CPT
RDC ESC2	44 RDC ESC25 CPT
RDC Hall	50 Couloir CPT
RDC Salle Communautaire	46 RDC Salle Communautaire CPT
SS Garage	48 SS Garage CPT
SS SAS	50 Couloir CPT

5. Miscellaneous Energy

(no items defined)

6. Meters

Electric Default Electric Rate

7. Miscellaneous Data

Average Building Power Factor 100.00 %
Source Electric Generating Efficiency 90.00 %
Additional Floor Area 0.0 sqft

Air System Sizing Summary for 01 2E #11 à #15 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

Air System Information

Air System Name **01 2E #11 à #15 REF**
Equipment Class **SPLT AHU**
Air System Type **SZCAV**

Number of zones **1**
Floor Area **3562.5** sqft
Location **St-Anicet 1, QC, Canada**

Sizing Calculation Information

Calculation Months **Jan to Dec**
Sizing Data **Calculated**

Zone CFM Sizing **Sum of space airflow rates**
Space CFM Sizing **Individual peak space loads**

Central Cooling Coil Sizing Data

Total coil load **3.1** Tons
Total coil load **37.4** MBH
Sensible coil load **27.3** MBH
Coil CFM at peak load **1513** CFM
Sum of peak zone CFM **1513** CFM
Sensible heat ratio **0.732**
CFM/Ton **486.0**
sqft/Ton **1144.3**
BTU/(hr sqft) **10.5**
Water flow @ 10.0 F rise **N/A**

Peak coil load occurs at **July 17:00**
OA DB / WB **85.8 / 72.5** F
Entering DB / WB **76.2 / 67.1** F
Leaving DB / WB **59.8 / 59.5** F
Resulting RH **59** %
Design supply temp. **58.0** F
Zone T-stat Check **1 of 1** OK
Max zone temperature deviation **0.0** F

Central Heating Coil Sizing Data

Max coil load **45.2** MBH
Coil CFM at Design Heating **1513** CFM
Max coil CFM **1513** CFM
Water flow @ 20.0 F drop **N/A**

Load occurs at **Design Heating**
BTU/(hr sqft) **12.7**
Ent. DB / Lvg DB **60.5 / 88.2** F

Supply Fan Sizing Data

Design CFM **1513** CFM
Design CFM/sqft **0.42** CFM/sqft

Fan motor BHP **0.00** BHP
Fan motor kW **0.00** kW

Outdoor Ventilation Air Data

Design airflow CFM **500** CFM
CFM/sqft **0.14** CFM/sqft

CFM/person **0.00** CFM/person

Zone Sizing Summary for 01 2E #11 à #15 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

Air System Information

Air System Name **01 2E #11 à #15 REF**
Equipment Class **SPLT AHU**
Air System Type **SZCAV**

Number of zones **1**
Floor Area **3562.5** sqft
Location **St-Anicet 1, QC, Canada**

Sizing Calculation Information

Calculation Months **Jan to Dec**
Sizing Data **Calculated**

Zone CFM Sizing **Sum of space airflow rates**
Space CFM Sizing **Individual peak space loads**

Zone Terminal Sizing Data

Zone Name	Design Supply Airflow (CFM)	Minimum Supply Airflow (CFM)	Zone CFM/sqft	Reheat Coil Capacity (MBH)	Reheat Coil Water gpm @ 20.0 F	Zone Htg Unit Coil Capacity (MBH)	Zone Htg Unit Water gpm @ 20.0 F	Mixing Box Fan Airflow (CFM)
2E #11 à #15	1513	1513	0.42	0.0	-	0.0	-	0

Zone Peak Sensible Loads

Zone Name	Zone Cooling Sensible (MBH)	Time of Peak Sensible Cooling Load	Zone Heating Load (MBH)	Zone Floor Area (sqft)
2E #11 à #15	27.6	June 17:00	29.2	3562.5

Space Loads and Airflows

Zone Name / Space Name	Cooling Sensible (MBH)	Time of Peak Sensible Load	Air Flow (CFM)	Heating Load (MBH)	Floor Area (sqft)	Space CFM/sqft
2E #11 à #15						
2E #11 à #15	27.6	June 17:00	1513	29.2	3562.5	0.42

Air System Heat Balance Summary for 01 2E #11 à #15 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

Table 1. System Loads

COMPONENT LOADS	DESIGN COOLING - JULY 17:00			DESIGN HEATING		
	OA DB / WB 85.8 F / 72.5 F			OA DB / WB -12.3 F / -13.2 F		
	Details	Sensible [BTU/hr]	Latent [BTU/hr]	Details	Sensible [BTU/hr]	Latent [BTU/hr]
Zone Conditioning	-	25213	1625	-	29659	0
Plenum Load	-	0	0	-	0	0
Return Fan Load	1513 CFM	0	-	1513 CFM	0	-
Ventilation Load	500 CFM	1996	7121	500 CFM	15464	0
Supply Fan Load	1513 CFM	0	-	1513 CFM	0	-
Zone Fan Coil Fans Load	-	0	-	-	0	-
>> Total System Loads	-	27208	8746	-	45123	0
Central Cooling Coil	-	27332	10026	-	0	0
Central Heating Coil	-	0	-	-	45165	-
>> Total Conditioning	-	27332	10026	-	45165	0
Key:	Positive values are cooling loads Negative values are heating loads			Positive values are heating loads Negative values are cooling loads		

Table 2. Zone Heat Balance Loads

Zone Heat Balance Component	DESIGN COOLING - JULY 17:00			DESIGN HEATING		
	OA DB / WB 85.8 F / 72.5 F			OA DB / WB -12.3 F / -13.2 F		
	Details	Sensible [BTU/hr]	Latent [BTU/hr]	Details	Sensible [BTU/hr]	Latent [BTU/hr]
Exterior Wall Convection	924 sqft	1864	-	924 sqft	2019	-
Roof Convection	0 sqft	0	-	0 sqft	0	-
Window Convection	130 sqft	1285	-	130 sqft	1288	-
Skylight Convection	0 sqft	0	-	0 sqft	0	-
Door Convection	232 sqft	2257	-	232 sqft	2286	-
Floor Convection	3562 sqft	7025	-	3562 sqft	2430	-
Interior Wall Convection	1496 sqft	2198	-	1496 sqft	667	-
Ceiling Convection	3562 sqft	9181	-	3562 sqft	3270	-
Overhead Lighting Convection	0 W	0	-	0 W	0	-
Task Lighting Convection	0 W	0	-	0 W	0	-
Electric Equipment Convection	0 W	0	-	0 W	0	-
People Convection	0	0	0	0	0	0
Infiltration	0 CFM	0	0	129 CFM	13456	0
Miscellaneous Equipment	-	0	0	-	0	0
Air Internal Energy Change	-	0	-	-	0	0
Safety Factor	15% / 15%	3571	0	15%	3813	0
>> Total Zone Loads	-	27380	0	-	29229	0
Key:	Positive values are cooling loads Negative values are heating loads			Positive values are heating loads Negative values are cooling loads		

Note 1: Surface convection line items show the combined effects of conductive heat gain to the surface and radiative heat gains absorbed at the surface which are then convected to room air.

Note 2: Lighting, equipment, and people line items include only the direct convective heat gain from the heat source to the room air. The radiative portion of the heat gain is first absorbed by surfaces in the room and then later convected from the surface to the air. Therefore the effect of the radiative portion of the heat gain is found in the surface convection line items.

Note 3: Solar heat gain is absorbed by surfaces in the room, re-radiated to other surfaces, and finally convected from the surfaces to room air. Therefore, the effect of solar heat gain is found in the surface convection line items.

System Psychrometrics for 01 2E #11 à #15 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

DESIGN COOLING DAY AT JULY 17:00

TABLE 1: SYSTEM DATA

Component	Location	Dry-Bulb Temp (F)	Specific Humidity (lb/lb)	Airflow (CFM)	CO2 Level (ppm)	Sensible Heat (BTU/hr)	Latent Heat (BTU/hr)
Ventilation Air	Inlet	85.6	0.01418	500	400	1996	7121
Air-to-Air Energy Recovery	Outlet	78.8	0.01418	500	400	3792	0
Vent - Return Mixing	Outlet	76.2	0.01216	1513	400	-	-
Central Cooling Coil	Outlet	59.8	0.01080	1513	400	27332	10026
Central Heating Coil	Outlet	59.8	0.01080	1513	400	0	-
Supply Fan	Outlet	59.8	0.01080	1513	400	0	-
Cold Supply Duct	Outlet	59.8	0.01080	1513	400	-	-
Zone Air	-	75.0	0.01103	1513	400	25213	1625
Return Air	Outlet	75.0	0.01117	1513	400	-	-

Air Density x Heat Capacity x Conversion Factor: At sea level = 1.080; At site altitude = 1.074 BTU/(hr-CFM-F)

Air Density x Heat of Vaporization x Conversion Factor: At sea level = 4746.6; At site altitude = 4719.0 BTU/(hr-CFM)

Site Altitude = 161.0 ft

TABLE 2: ZONE DATA

Zone Name	Zone Sensible Load (BTU/hr)	T-stat Mode	Zone Cond (BTU/hr)	Zone Temp (F)	Zone Airflow (CFM)	CO2 Level (ppm)	Terminal Heating Coil (BTU/hr)	Zone Heating Unit (BTU/hr)
2E #11 à #15	25199	Cooling	25213	75.0	1513	400	0	0

System Psychrometrics for 01 2E #11 à #15 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

WINTER DESIGN HEATING

TABLE 1: SYSTEM DATA

Component	Location	Dry-Bulb Temp (F)	Specific Humidity (lb/lb)	Airflow (CFM)	CO2 Level (ppm)	Sensible Heat (BTU/hr)	Latent Heat (BTU/hr)
Ventilation Air	Inlet	-12.3	0.00018	500	400	-15464	0
Air-to-Air Energy Recovery	Outlet	41.2	0.00018	500	400	-28797	0
Vent - Return Mixing	Outlet	60.5	0.00018	1513	400	-	-
Central Cooling Coil	Outlet	60.5	0.00018	1513	400	0	0
Central Heating Coil	Outlet	88.2	0.00018	1513	400	45165	-
Supply Fan	Outlet	88.2	0.00018	1513	400	0	-
Cold Supply Duct	Outlet	88.2	0.00018	1513	400	-	-
Zone Air	-	70.0	0.00018	1513	400	-29659	0
Return Air	Outlet	70.0	0.00018	1513	400	-	-

Air Density x Heat Capacity x Conversion Factor: At sea level = 1.080; At site altitude = 1.074 BTU/(hr-CFM-F)

Air Density x Heat of Vaporization x Conversion Factor: At sea level = 4746.6; At site altitude = 4719.0 BTU/(hr-CFM)

Site Altitude = 161.0 ft

TABLE 2: ZONE DATA

Zone Name	Zone Sensible Load (BTU/hr)	T-stat Mode	Zone Cond (BTU/hr)	Zone Temp (F)	Zone Airflow (CFM)	CO2 Level (ppm)	Terminal Heating Coil (BTU/hr)	Zone Heating Unit (BTU/hr)
2E #11 à #15	-29659	Heating	-29659	70.0	1513	400	0	0

Air System Sizing Summary for 03 2E #16 à #22 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

Air System Information

Air System Name **03 2E #16 à #22 REF**
Equipment Class **SPLT AHU**
Air System Type **SZCAV**

Number of zones **1**
Floor Area **5890.8** sqft
Location **St-Anicet 1, QC, Canada**

Sizing Calculation Information

Calculation Months **Jan to Dec**
Sizing Data **Calculated**

Zone CFM Sizing **Sum of space airflow rates**
Space CFM Sizing **Individual peak space loads**

Central Cooling Coil Sizing Data

Total coil load **3.7** Tons
Total coil load **44.8** MBH
Sensible coil load **36.1** MBH
Coil CFM at peak load **2599** CFM
Sum of peak zone CFM **2599** CFM
Sensible heat ratio **0.807**
CFM/Ton **696.7**
sqft/Ton **1578.9**
BTU/(hr sqft) **7.6**
Water flow @ 10.0 F rise **N/A**

Peak coil load occurs at **August 10:00**
OA DB / WB **75.9 / 69.6** F
Entering DB / WB **75.1 / 66.9** F
Leaving DB / WB **62.5 / 61.7** F
Resulting RH **62** %
Design supply temp. **58.0** F
Zone T-stat Check **1 of 1** OK
Max zone temperature deviation **0.0** F

Central Heating Coil Sizing Data

Max coil load **91.3** MBH
Coil CFM at Design Heating **2599** CFM
Max coil CFM **2599** CFM
Water flow @ 20.0 F drop **N/A**

Load occurs at **Design Heating**
BTU/(hr sqft) **15.5**
Ent. DB / Lvg DB **62.2 / 94.9** F

Supply Fan Sizing Data

Design CFM **2599** CFM
Design CFM/sqft **0.44** CFM/sqft

Fan motor BHP **0.00** BHP
Fan motor kW **0.00** kW

Outdoor Ventilation Air Data

Design airflow CFM **700** CFM
CFM/sqft **0.12** CFM/sqft

CFM/person **0.00** CFM/person

Zone Sizing Summary for 03 2E #16 à #22 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

Air System Information

Air System Name **03 2E #16 à #22 REF**
Equipment Class **SPLT AHU**
Air System Type **SZCAV**

Number of zones **1**
Floor Area **5890.8** sqft
Location **St-Anicet 1, QC, Canada**

Sizing Calculation Information

Calculation Months **Jan to Dec**
Sizing Data **Calculated**

Zone CFM Sizing **Sum of space airflow rates**
Space CFM Sizing **Individual peak space loads**

Zone Terminal Sizing Data

Zone Name	Design Supply Airflow (CFM)	Minimum Supply Airflow (CFM)	Zone CFM/sqft	Reheat Coil Capacity (MBH)	Reheat Coil Water gpm @ 20.0 F	Zone Htg Unit Coil Capacity (MBH)	Zone Htg Unit Water gpm @ 20.0 F	Mixing Box Fan Airflow (CFM)
2E #16 à #22	2599	2599	0.44	0.0	-	0.0	-	0

Zone Peak Sensible Loads

Zone Name	Zone Cooling Sensible (MBH)	Time of Peak Sensible Cooling Load	Zone Heating Load (MBH)	Zone Floor Area (sqft)
2E #16 à #22	37.5	August 10:00	69.8	5890.8

Space Loads and Airflows

Zone Name / Space Name	Cooling Sensible (MBH)	Time of Peak Sensible Load	Air Flow (CFM)	Heating Load (MBH)	Floor Area (sqft)	Space CFM/sqft
2E #16 à #22						
2E #16 à #22	37.5	August 10:00	2599	69.8	5890.8	0.44

Air System Heat Balance Summary for 03 2E #16 à #22 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

Table 1. System Loads

COMPONENT LOADS	DESIGN COOLING - AUGUST 10:00			DESIGN HEATING		
	OA DB / WB 75.9 F / 69.6 F			OA DB / WB -12.3 F / -13.2 F		
	Details	Sensible [BTU/hr]	Latent [BTU/hr]	Details	Sensible [BTU/hr]	Latent [BTU/hr]
Zone Conditioning	-	35801	2	-	69569	0
Plenum Load	-	0	0	-	0	0
Return Fan Load	2599 CFM	0	-	2599 CFM	0	-
Ventilation Load	700 CFM	269	8295	700 CFM	21650	0
Supply Fan Load	2599 CFM	0	-	2599 CFM	0	-
Zone Fan Coil Fans Load	-	0	-	-	0	-
>> Total System Loads	-	36070	8297	-	91220	0
Central Cooling Coil	-	36124	8646	-	0	0
Central Heating Coil	-	0	-	-	91278	-
>> Total Conditioning	-	36124	8646	-	91278	0
Key:	Positive values are cooling loads Negative values are heating loads			Positive values are heating loads Negative values are cooling loads		

Table 2. Zone Heat Balance Loads

Zone Heat Balance Component	DESIGN COOLING - AUGUST 10:00			DESIGN HEATING		
	OA DB / WB 75.9 F / 69.6 F			OA DB / WB -12.3 F / -13.2 F		
	Details	Sensible [BTU/hr]	Latent [BTU/hr]	Details	Sensible [BTU/hr]	Latent [BTU/hr]
Exterior Wall Convection	2270 sqft	3152	-	2270 sqft	5744	-
Roof Convection	0 sqft	0	-	0 sqft	0	-
Window Convection	409 sqft	2108	-	409 sqft	4050	-
Skylight Convection	0 sqft	0	-	0 sqft	0	-
Door Convection	328 sqft	2681	-	328 sqft	3185	-
Floor Convection	5891 sqft	10128	-	5891 sqft	7817	-
Interior Wall Convection	1805 sqft	2235	-	1805 sqft	1110	-
Ceiling Convection	5891 sqft	12330	-	5891 sqft	7313	-
Overhead Lighting Convection	0 W	0	-	0 W	0	-
Task Lighting Convection	0 W	0	-	0 W	0	-
Electric Equipment Convection	0 W	0	-	0 W	0	-
People Convection	0	0	0	0	0	0
Infiltration	0 CFM	0	0	301 CFM	31457	0
Miscellaneous Equipment	-	0	0	-	0	0
Air Internal Energy Change	-	0	-	-	0	0
Safety Factor	15% / 15%	4895	0	15%	9101	0
>> Total Zone Loads	-	37529	0	-	69777	0
Key:	Positive values are cooling loads Negative values are heating loads			Positive values are heating loads Negative values are cooling loads		

Note 1: Surface convection line items show the combined effects of conductive heat gain to the surface and radiative heat gains absorbed at the surface which are then convected to room air.

Note 2: Lighting, equipment, and people line items include only the direct convective heat gain from the heat source to the room air. The radiative portion of the heat gain is first absorbed by surfaces in the room and then later convected from the surface to the air. Therefore the effect of the radiative portion of the heat gain is found in the surface convection line items.

Note 3: Solar heat gain is absorbed by surfaces in the room, re-radiated to other surfaces, and finally convected from the surfaces to room air. Therefore, the effect of solar heat gain is found in the surface convection line items.

System Psychrometrics for 03 2E #16 à #22 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

DESIGN COOLING DAY AT AUGUST 10:00

TABLE 1: SYSTEM DATA

Component	Location	Dry-Bulb Temp (F)	Specific Humidity (lb/lb)	Airflow (CFM)	CO2 Level (ppm)	Sensible Heat (BTU/hr)	Latent Heat (BTU/hr)
Ventilation Air	Inlet	76.1	0.01416	700	400	269	8295
Air-to-Air Energy Recovery	Outlet	75.4	0.01416	700	400	604	0
Vent - Return Mixing	Outlet	75.1	0.01233	2599	400	-	-
Central Cooling Coil	Outlet	62.5	0.01165	2599	400	36124	8646
Central Heating Coil	Outlet	62.5	0.01165	2599	400	0	-
Supply Fan	Outlet	62.5	0.01165	2599	400	0	-
Cold Supply Duct	Outlet	62.5	0.01165	2599	400	-	-
Zone Air	-	75.0	0.01165	2599	400	35801	2
Return Air	Outlet	75.0	0.01165	2599	400	-	-

Air Density x Heat Capacity x Conversion Factor: At sea level = 1.080; At site altitude = 1.074 BTU/(hr-CFM-F)

Air Density x Heat of Vaporization x Conversion Factor: At sea level = 4746.6; At site altitude = 4719.0 BTU/(hr-CFM)

Site Altitude = 161.0 ft

TABLE 2: ZONE DATA

Zone Name	Zone Sensible Load (BTU/hr)	T-stat Mode	Zone Cond (BTU/hr)	Zone Temp (F)	Zone Airflow (CFM)	CO2 Level (ppm)	Terminal Heating Coil (BTU/hr)	Zone Heating Unit (BTU/hr)
2E #16 à #22	35800	Cooling	35801	75.0	2599	400	0	0

System Psychrometrics for 03 2E #16 à #22 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

WINTER DESIGN HEATING

TABLE 1: SYSTEM DATA

Component	Location	Dry-Bulb Temp (F)	Specific Humidity (lb/lb)	Airflow (CFM)	CO2 Level (ppm)	Sensible Heat (BTU/hr)	Latent Heat (BTU/hr)
Ventilation Air	Inlet	-12.3	0.00018	700	400	-21650	0
Air-to-Air Energy Recovery	Outlet	41.2	0.00018	700	400	-40315	0
Vent - Return Mixing	Outlet	62.2	0.00018	2599	400	-	-
Central Cooling Coil	Outlet	62.2	0.00018	2599	400	0	0
Central Heating Coil	Outlet	94.9	0.00018	2599	400	91278	-
Supply Fan	Outlet	94.9	0.00018	2599	400	0	-
Cold Supply Duct	Outlet	94.9	0.00018	2599	400	-	-
Zone Air	-	70.0	0.00018	2599	400	-69569	0
Return Air	Outlet	70.0	0.00018	2599	400	-	-

Air Density x Heat Capacity x Conversion Factor: At sea level = 1.080; At site altitude = 1.074 BTU/(hr-CFM-F)

Air Density x Heat of Vaporization x Conversion Factor: At sea level = 4746.6; At site altitude = 4719.0 BTU/(hr-CFM)

Site Altitude = 161.0 ft

TABLE 2: ZONE DATA

Zone Name	Zone Sensible Load (BTU/hr)	T-stat Mode	Zone Cond (BTU/hr)	Zone Temp (F)	Zone Airflow (CFM)	CO2 Level (ppm)	Terminal Heating Coil (BTU/hr)	Zone Heating Unit (BTU/hr)
2E #16 à #22	-69569	Heating	-69569	70.0	2599	400	0	0

Air System Sizing Summary for 05 3E #11 à #15 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

Air System Information

Air System Name **05 3E #11 à #15 REF**
Equipment Class **SPLT AHU**
Air System Type **SZCAV**

Number of zones **1**
Floor Area **3562.5** sqft
Location **St-Anicet 1, QC, Canada**

Sizing Calculation Information

Calculation Months **Jan to Dec**
Sizing Data **Calculated**

Zone CFM Sizing **Sum of space airflow rates**
Space CFM Sizing **Individual peak space loads**

Central Cooling Coil Sizing Data

Total coil load **3.1** Tons
Total coil load **37.4** MBH
Sensible coil load **27.4** MBH
Coil CFM at peak load **1518** CFM
Sum of peak zone CFM **1518** CFM
Sensible heat ratio **0.733**
CFM/Ton **487.7**
sqft/Ton **1144.5**
BTU/(hr sqft) **10.5**
Water flow @ 10.0 F rise **N/A**

Peak coil load occurs at **July 17:00**
OA DB / WB **85.8 / 72.5** F
Entering DB / WB **76.2 / 67.1** F
Leaving DB / WB **59.9 / 59.5** F
Resulting RH **59** %
Design supply temp. **58.0** F
Zone T-stat Check **1 of 1** OK
Max zone temperature deviation **0.0** F

Central Heating Coil Sizing Data

Max coil load **45.3** MBH
Coil CFM at Design Heating **1518** CFM
Max coil CFM **1518** CFM
Water flow @ 20.0 F drop **N/A**

Load occurs at **Design Heating**
BTU/(hr sqft) **12.7**
Ent. DB / Lvg DB **60.5 / 88.2** F

Supply Fan Sizing Data

Design CFM **1518** CFM
Design CFM/sqft **0.43** CFM/sqft

Fan motor BHP **0.00** BHP
Fan motor kW **0.00** kW

Outdoor Ventilation Air Data

Design airflow CFM **500** CFM
CFM/sqft **0.14** CFM/sqft

CFM/person **0.00** CFM/person

Zone Sizing Summary for 05 3E #11 à #15 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

Air System Information

Air System Name **05 3E #11 à #15 REF**
 Equipment Class **SPLT AHU**
 Air System Type **SZCAV**

Number of zones **1**
 Floor Area **3562.5** sqft
 Location **St-Anicet 1, QC, Canada**

Sizing Calculation Information

Calculation Months **Jan to Dec**
 Sizing Data **Calculated**

Zone CFM Sizing **Sum of space airflow rates**
 Space CFM Sizing **Individual peak space loads**

Zone Terminal Sizing Data

Zone Name	Design Supply Airflow (CFM)	Minimum Supply Airflow (CFM)	Zone CFM/sqft	Reheat Coil Capacity (MBH)	Reheat Coil Water gpm @ 20.0 F	Zone Htg Unit Coil Capacity (MBH)	Zone Htg Unit Water gpm @ 20.0 F	Mixing Box Fan Airflow (CFM)
3E #11 à #15	1518	1518	0.43	0.0	-	0.0	-	0

Zone Peak Sensible Loads

Zone Name	Zone Cooling Sensible (MBH)	Time of Peak Sensible Cooling Load	Zone Heating Load (MBH)	Zone Floor Area (sqft)
3E #11 à #15	27.7	June 17:00	29.3	3562.5

Space Loads and Airflows

Zone Name / Space Name	Cooling Sensible (MBH)	Time of Peak Sensible Load	Air Flow (CFM)	Heating Load (MBH)	Floor Area (sqft)	Space CFM/sqft
3E #11 à #15						
3E #11 à #15	27.7	June 17:00	1518	29.3	3562.5	0.43

Air System Heat Balance Summary for 05 3E #11 à #15 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

Table 1. System Loads

COMPONENT LOADS	DESIGN COOLING - JULY 17:00			DESIGN HEATING		
	OA DB / WB 85.8 F / 72.5 F			OA DB / WB -12.3 F / -13.2 F		
	Details	Sensible [BTU/hr]	Latent [BTU/hr]	Details	Sensible [BTU/hr]	Latent [BTU/hr]
Zone Conditioning	-	25242	1616	-	29753	0
Plenum Load	-	0	0	-	0	0
Return Fan Load	1518 CFM	0	-	1518 CFM	0	-
Ventilation Load	500 CFM	1996	7099	500 CFM	15464	0
Supply Fan Load	1518 CFM	0	-	1518 CFM	0	-
Zone Fan Coil Fans Load	-	0	-	-	0	-
>> Total System Loads	-	27237	8715	-	45218	0
Central Cooling Coil	-	27361	9992	-	0	0
Central Heating Coil	-	0	-	-	45259	-
>> Total Conditioning	-	27361	9992	-	45259	0
Key:	Positive values are cooling loads Negative values are heating loads			Positive values are heating loads Negative values are cooling loads		

Table 2. Zone Heat Balance Loads

Zone Heat Balance Component	DESIGN COOLING - JULY 17:00			DESIGN HEATING		
	OA DB / WB 85.8 F / 72.5 F			OA DB / WB -12.3 F / -13.2 F		
	Details	Sensible [BTU/hr]	Latent [BTU/hr]	Details	Sensible [BTU/hr]	Latent [BTU/hr]
Exterior Wall Convection	924 sqft	1883	-	924 sqft	2024	-
Roof Convection	0 sqft	0	-	0 sqft	0	-
Window Convection	130 sqft	1284	-	130 sqft	1291	-
Skylight Convection	0 sqft	0	-	0 sqft	0	-
Door Convection	232 sqft	2256	-	232 sqft	2294	-
Floor Convection	3562 sqft	7039	-	3562 sqft	2451	-
Interior Wall Convection	1496 sqft	2202	-	1496 sqft	670	-
Ceiling Convection	3562 sqft	9235	-	3562 sqft	3302	-
Overhead Lighting Convection	0 W	0	-	0 W	0	-
Task Lighting Convection	0 W	0	-	0 W	0	-
Electric Equipment Convection	0 W	0	-	0 W	0	-
People Convection	0	0	0	0	0	0
Infiltration	0 CFM	0	0	129 CFM	13463	0
Miscellaneous Equipment	-	0	0	-	0	0
Air Internal Energy Change	-	0	-	-	0	0
Safety Factor	15% / 15%	3585	0	15%	3824	0
>> Total Zone Loads	-	27485	0	-	29320	0
Key:	Positive values are cooling loads Negative values are heating loads			Positive values are heating loads Negative values are cooling loads		

Note 1: Surface convection line items show the combined effects of conductive heat gain to the surface and radiative heat gains absorbed at the surface which are then convected to room air.

Note 2: Lighting, equipment, and people line items include only the direct convective heat gain from the heat source to the room air. The radiative portion of the heat gain is first absorbed by surfaces in the room and then later convected from the surface to the air. Therefore the effect of the radiative portion of the heat gain is found in the surface convection line items.

Note 3: Solar heat gain is absorbed by surfaces in the room, re-radiated to other surfaces, and finally convected from the surfaces to room air. Therefore, the effect of solar heat gain is found in the surface convection line items.

System Psychrometrics for 05 3E #11 à #15 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

DESIGN COOLING DAY AT JULY 17:00

TABLE 1: SYSTEM DATA

Component	Location	Dry-Bulb Temp (F)	Specific Humidity (lb/lb)	Airflow (CFM)	CO2 Level (ppm)	Sensible Heat (BTU/hr)	Latent Heat (BTU/hr)
Ventilation Air	Inlet	85.6	0.01418	500	400	1996	7099
Air-to-Air Energy Recovery	Outlet	78.8	0.01418	500	400	3792	0
Vent - Return Mixing	Outlet	76.2	0.01217	1518	400	-	-
Central Cooling Coil	Outlet	59.9	0.01082	1518	400	27361	9992
Central Heating Coil	Outlet	59.9	0.01082	1518	400	0	-
Supply Fan	Outlet	59.9	0.01082	1518	400	0	-
Cold Supply Duct	Outlet	59.9	0.01082	1518	400	-	-
Zone Air	-	75.0	0.01104	1518	400	25242	1616
Return Air	Outlet	75.0	0.01118	1518	400	-	-

Air Density x Heat Capacity x Conversion Factor: At sea level = 1.080; At site altitude = 1.074 BTU/(hr-CFM-F)

Air Density x Heat of Vaporization x Conversion Factor: At sea level = 4746.6; At site altitude = 4719.0 BTU/(hr-CFM)

Site Altitude = 161.0 ft

TABLE 2: ZONE DATA

Zone Name	Zone Sensible Load (BTU/hr)	T-stat Mode	Zone Cond (BTU/hr)	Zone Temp (F)	Zone Airflow (CFM)	CO2 Level (ppm)	Terminal Heating Coil (BTU/hr)	Zone Heating Unit (BTU/hr)
3E #11 à #15	25228	Cooling	25242	75.0	1518	400	0	0

System Psychrometrics for 05 3E #11 à #15 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

WINTER DESIGN HEATING

TABLE 1: SYSTEM DATA

Component	Location	Dry-Bulb Temp (F)	Specific Humidity (lb/lb)	Airflow (CFM)	CO2 Level (ppm)	Sensible Heat (BTU/hr)	Latent Heat (BTU/hr)
Ventilation Air	Inlet	-12.3	0.00018	500	400	-15464	0
Air-to-Air Energy Recovery	Outlet	41.2	0.00018	500	400	-28797	0
Vent - Return Mixing	Outlet	60.5	0.00018	1518	400	-	-
Central Cooling Coil	Outlet	60.5	0.00018	1518	400	0	0
Central Heating Coil	Outlet	88.2	0.00018	1518	400	45259	-
Supply Fan	Outlet	88.2	0.00018	1518	400	0	-
Cold Supply Duct	Outlet	88.2	0.00018	1518	400	-	-
Zone Air	-	70.0	0.00018	1518	400	-29753	0
Return Air	Outlet	70.0	0.00018	1518	400	-	-

Air Density x Heat Capacity x Conversion Factor: At sea level = 1.080; At site altitude = 1.074 BTU/(hr-CFM-F)

Air Density x Heat of Vaporization x Conversion Factor: At sea level = 4746.6; At site altitude = 4719.0 BTU/(hr-CFM)

Site Altitude = 161.0 ft

TABLE 2: ZONE DATA

Zone Name	Zone Sensible Load (BTU/hr)	T-stat Mode	Zone Cond (BTU/hr)	Zone Temp (F)	Zone Airflow (CFM)	CO2 Level (ppm)	Terminal Heating Coil (BTU/hr)	Zone Heating Unit (BTU/hr)
3E #11 à #15	-29753	Heating	-29753	70.0	1518	400	0	0

Air System Sizing Summary for 07 3E #16 à #22 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

Air System Information

Air System Name **07 3E #16 à #22 REF**
Equipment Class **SPLT AHU**
Air System Type **SZCAV**

Number of zones **1**
Floor Area **5890.8** sqft
Location **St-Anicet 1, QC, Canada**

Sizing Calculation Information

Calculation Months **Jan to Dec**
Sizing Data **Calculated**

Zone CFM Sizing **Sum of space airflow rates**
Space CFM Sizing **Individual peak space loads**

Central Cooling Coil Sizing Data

Total coil load **3.6** Tons
Total coil load **43.8** MBH
Sensible coil load **34.8** MBH
Coil CFM at peak load **2448** CFM
Sum of peak zone CFM **2448** CFM
Sensible heat ratio **0.794**
CFM/Ton **670.8**
sqft/Ton **1614.3**
BTU/(hr sqft) **7.4**
Water flow @ 10.0 F rise **N/A**

Peak coil load occurs at **August 10:00**
OA DB / WB **75.9 / 69.6** F
Entering DB / WB **75.1 / 66.9** F
Leaving DB / WB **62.2 / 61.5** F
Resulting RH **62** %
Design supply temp. **58.0** F
Zone T-stat Check **1 of 1** OK
Max zone temperature deviation **0.0** F

Central Heating Coil Sizing Data

Max coil load **87.3** MBH
Coil CFM at Design Heating **2448** CFM
Max coil CFM **2448** CFM
Water flow @ 20.0 F drop **N/A**

Load occurs at **Design Heating**
BTU/(hr sqft) **14.8**
Ent. DB / Lvg DB **61.8 / 94.9** F

Supply Fan Sizing Data

Design CFM **2448** CFM
Design CFM/sqft **0.42** CFM/sqft

Fan motor BHP **0.00** BHP
Fan motor kW **0.00** kW

Outdoor Ventilation Air Data

Design airflow CFM **700** CFM
CFM/sqft **0.12** CFM/sqft

CFM/person **0.00** CFM/person

Zone Sizing Summary for 07 3E #16 à #22 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

Air System Information

Air System Name **07 3E #16 à #22 REF**
 Equipment Class **SPLT AHU**
 Air System Type **SZCAV**

Number of zones **1**
 Floor Area **5890.8** sqft
 Location **St-Anicet 1, QC, Canada**

Sizing Calculation Information

Calculation Months **Jan to Dec**
 Sizing Data **Calculated**

Zone CFM Sizing **Sum of space airflow rates**
 Space CFM Sizing **Individual peak space loads**

Zone Terminal Sizing Data

Zone Name	Design Supply Airflow (CFM)	Minimum Supply Airflow (CFM)	Zone CFM/sqft	Reheat Coil Capacity (MBH)	Reheat Coil Water gpm @ 20.0 F	Zone Htg Unit Coil Capacity (MBH)	Zone Htg Unit Water gpm @ 20.0 F	Mixing Box Fan Airflow (CFM)
3E #16 à #22	2448	2448	0.42	0.0	-	0.0	-	0

Zone Peak Sensible Loads

Zone Name	Zone Cooling Sensible (MBH)	Time of Peak Sensible Cooling Load	Zone Heating Load (MBH)	Zone Floor Area (sqft)
3E #16 à #22	36.4	August 10:00	65.7	5890.8

Space Loads and Airflows

Zone Name / Space Name	Cooling Sensible (MBH)	Time of Peak Sensible Load	Air Flow (CFM)	Heating Load (MBH)	Floor Area (sqft)	Space CFM/sqft
3E #16 à #22						
3E #16 à #22	36.4	August 10:00	2448	65.7	5890.8	0.42

Air System Heat Balance Summary for 07 3E #16 à #22 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

Table 1. System Loads

COMPONENT LOADS	DESIGN COOLING - AUGUST 10:00			DESIGN HEATING		
	OA DB / WB 75.9 F / 69.6 F			OA DB / WB -12.3 F / -13.2 F		
	Details	Sensible [BTU/hr]	Latent [BTU/hr]	Details	Sensible [BTU/hr]	Latent [BTU/hr]
Zone Conditioning	-	34454	57	-	65543	0
Plenum Load	-	0	0	-	0	0
Return Fan Load	2448 CFM	0	-	2448 CFM	0	-
Ventilation Load	700 CFM	269	8564	700 CFM	21650	0
Supply Fan Load	2448 CFM	0	-	2448 CFM	0	-
Zone Fan Coil Fans Load	-	0	-	-	0	-
>> Total System Loads	-	34723	8622	-	87193	0
Central Cooling Coil	-	34780	9009	-	0	0
Central Heating Coil	-	0	-	-	87251	-
>> Total Conditioning	-	34780	9009	-	87251	0
Key:	Positive values are cooling loads Negative values are heating loads			Positive values are heating loads Negative values are cooling loads		

Table 2. Zone Heat Balance Loads

Zone Heat Balance Component	DESIGN COOLING - AUGUST 10:00			DESIGN HEATING		
	OA DB / WB 75.9 F / 69.6 F			OA DB / WB -12.3 F / -13.2 F		
	Details	Sensible [BTU/hr]	Latent [BTU/hr]	Details	Sensible [BTU/hr]	Latent [BTU/hr]
Exterior Wall Convection	2270 sqft	3108	-	2270 sqft	5512	-
Roof Convection	0 sqft	0	-	0 sqft	0	-
Window Convection	409 sqft	2086	-	409 sqft	4035	-
Skylight Convection	0 sqft	0	-	0 sqft	0	-
Door Convection	328 sqft	2654	-	328 sqft	3172	-
Floor Convection	5891 sqft	9471	-	5891 sqft	5355	-
Interior Wall Convection	1805 sqft	2206	-	1805 sqft	975	-
Ceiling Convection	5891 sqft	12156	-	5891 sqft	6616	-
Overhead Lighting Convection	0 W	0	-	0 W	0	-
Task Lighting Convection	0 W	0	-	0 W	0	-
Electric Equipment Convection	0 W	0	-	0 W	0	-
People Convection	0	0	0	0	0	0
Infiltration	0 CFM	0	0	301 CFM	31473	0
Miscellaneous Equipment	-	0	0	-	0	0
Air Internal Energy Change	-	0	-	-	0	0
Safety Factor	15% / 15%	4752	0	15%	8571	0
>> Total Zone Loads	-	36432	0	-	65708	0
Key:	Positive values are cooling loads Negative values are heating loads			Positive values are heating loads Negative values are cooling loads		

Note 1: Surface convection line items show the combined effects of conductive heat gain to the surface and radiative heat gains absorbed at the surface which are then convected to room air.

Note 2: Lighting, equipment, and people line items include only the direct convective heat gain from the heat source to the room air. The radiative portion of the heat gain is first absorbed by surfaces in the room and then later convected from the surface to the air. Therefore the effect of the radiative portion of the heat gain is found in the surface convection line items.

Note 3: Solar heat gain is absorbed by surfaces in the room, re-radiated to other surfaces, and finally convected from the surfaces to room air. Therefore, the effect of solar heat gain is found in the surface convection line items.

System Psychrometrics for 07 3E #16 à #22 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

DESIGN COOLING DAY AT AUGUST 10:00

TABLE 1: SYSTEM DATA

Component	Location	Dry-Bulb Temp (F)	Specific Humidity (lb/lb)	Airflow (CFM)	CO2 Level (ppm)	Sensible Heat (BTU/hr)	Latent Heat (BTU/hr)
Ventilation Air	Inlet	76.1	0.01416	700	400	269	8564
Air-to-Air Energy Recovery	Outlet	75.4	0.01416	700	400	604	0
Vent - Return Mixing	Outlet	75.1	0.01231	2448	400	-	-
Central Cooling Coil	Outlet	62.2	0.01156	2448	400	34780	9009
Central Heating Coil	Outlet	62.2	0.01156	2448	400	0	-
Supply Fan	Outlet	62.2	0.01156	2448	400	0	-
Cold Supply Duct	Outlet	62.2	0.01156	2448	400	-	-
Zone Air	-	75.0	0.01156	2448	400	34454	57
Return Air	Outlet	75.0	0.01157	2448	400	-	-

Air Density x Heat Capacity x Conversion Factor: At sea level = 1.080; At site altitude = 1.074 BTU/(hr-CFM-F)

Air Density x Heat of Vaporization x Conversion Factor: At sea level = 4746.6; At site altitude = 4719.0 BTU/(hr-CFM)

Site Altitude = 161.0 ft

TABLE 2: ZONE DATA

Zone Name	Zone Sensible Load (BTU/hr)	T-stat Mode	Zone Cond (BTU/hr)	Zone Temp (F)	Zone Airflow (CFM)	CO2 Level (ppm)	Terminal Heating Coil (BTU/hr)	Zone Heating Unit (BTU/hr)
3E #16 à #22	34452	Cooling	34454	75.0	2448	400	0	0

System Psychrometrics for 07 3E #16 à #22 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

WINTER DESIGN HEATING

TABLE 1: SYSTEM DATA

Component	Location	Dry-Bulb Temp (F)	Specific Humidity (lb/lb)	Airflow (CFM)	CO2 Level (ppm)	Sensible Heat (BTU/hr)	Latent Heat (BTU/hr)
Ventilation Air	Inlet	-12.3	0.00018	700	400	-21650	0
Air-to-Air Energy Recovery	Outlet	41.2	0.00018	700	400	-40315	0
Vent - Return Mixing	Outlet	61.8	0.00018	2448	400	-	-
Central Cooling Coil	Outlet	61.8	0.00018	2448	400	0	0
Central Heating Coil	Outlet	94.9	0.00018	2448	400	87251	-
Supply Fan	Outlet	94.9	0.00018	2448	400	0	-
Cold Supply Duct	Outlet	94.9	0.00018	2448	400	-	-
Zone Air	-	70.0	0.00018	2448	400	-65543	0
Return Air	Outlet	70.0	0.00018	2448	400	-	-

Air Density x Heat Capacity x Conversion Factor: At sea level = 1.080; At site altitude = 1.074 BTU/(hr-CFM-F)

Air Density x Heat of Vaporization x Conversion Factor: At sea level = 4746.6; At site altitude = 4719.0 BTU/(hr-CFM)

Site Altitude = 161.0 ft

TABLE 2: ZONE DATA

Zone Name	Zone Sensible Load (BTU/hr)	T-stat Mode	Zone Cond (BTU/hr)	Zone Temp (F)	Zone Airflow (CFM)	CO2 Level (ppm)	Terminal Heating Coil (BTU/hr)	Zone Heating Unit (BTU/hr)
3E #16 à #22	-65543	Heating	-65543	70.0	2448	400	0	0

Air System Sizing Summary for 09 4E #11 à #15 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

Air System Information

Air System Name **09 4E #11 à #15 REF**
Equipment Class **SPLT AHU**
Air System Type **SZCAV**

Number of zones **1**
Floor Area **3562.5** sqft
Location **St-Anicet 1, QC, Canada**

Sizing Calculation Information

Calculation Months **Jan to Dec**
Sizing Data **Calculated**

Zone CFM Sizing **Sum of space airflow rates**
Space CFM Sizing **Individual peak space loads**

Central Cooling Coil Sizing Data

Total coil load **3.6** Tons
Total coil load **43.0** MBH
Sensible coil load **32.8** MBH
Coil CFM at peak load **1812** CFM
Sum of peak zone CFM **1812** CFM
Sensible heat ratio **0.763**
CFM/Ton **506.3**
sqft/Ton **995.1**
BTU/(hr sqft) **12.1**
Water flow @ 10.0 F rise **N/A**

Peak coil load occurs at **July 17:00**
OA DB / WB **85.8 / 72.5** F
Entering DB / WB **76.0 / 66.6** F
Leaving DB / WB **59.6 / 59.2** F
Resulting RH **58** %
Design supply temp. **58.0** F
Zone T-stat Check **1 of 1** OK
Max zone temperature deviation **0.0** F

Central Heating Coil Sizing Data

Max coil load **53.3** MBH
Coil CFM at Design Heating **1812** CFM
Max coil CFM **1812** CFM
Water flow @ 20.0 F drop **N/A**

Load occurs at **Design Heating**
BTU/(hr sqft) **15.0**
Ent. DB / Lvg DB **62.1 / 89.4** F

Supply Fan Sizing Data

Design CFM **1812** CFM
Design CFM/sqft **0.51** CFM/sqft

Fan motor BHP **0.00** BHP
Fan motor kW **0.00** kW

Outdoor Ventilation Air Data

Design airflow CFM **500** CFM
CFM/sqft **0.14** CFM/sqft

CFM/person **0.00** CFM/person

Zone Sizing Summary for 09 4E #11 à #15 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

Air System Information

Air System Name **09 4E #11 à #15 REF**
 Equipment Class **SPLT AHU**
 Air System Type **SZCAV**

Number of zones **1**
 Floor Area **3562.5** sqft
 Location **St-Anicet 1, QC, Canada**

Sizing Calculation Information

Calculation Months **Jan to Dec**
 Sizing Data **Calculated**

Zone CFM Sizing **Sum of space airflow rates**
 Space CFM Sizing **Individual peak space loads**

Zone Terminal Sizing Data

Zone Name	Design Supply Airflow (CFM)	Minimum Supply Airflow (CFM)	Zone CFM/sqft	Reheat Coil Capacity (MBH)	Reheat Coil Water gpm @ 20.0 F	Zone Htg Unit Coil Capacity (MBH)	Zone Htg Unit Water gpm @ 20.0 F	Mixing Box Fan Airflow (CFM)
4E #11 à #15	1812	1812	0.51	0.0	-	0.0	-	0

Zone Peak Sensible Loads

Zone Name	Zone Cooling Sensible (MBH)	Time of Peak Sensible Cooling Load	Zone Heating Load (MBH)	Zone Floor Area (sqft)
4E #11 à #15	33.1	July 17:00	37.4	3562.5

Space Loads and Airflows

Zone Name / Space Name	Cooling Sensible (MBH)	Time of Peak Sensible Load	Air Flow (CFM)	Heating Load (MBH)	Floor Area (sqft)	Space CFM/sqft
4E #11 à #15						
4E #11 à #15	33.1	July 17:00	1812	37.4	3562.5	0.51

Air System Heat Balance Summary for 09 4E #11 à #15 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

Table 1. System Loads

COMPONENT LOADS	DESIGN COOLING - JULY 17:00			DESIGN HEATING		
	OA DB / WB 85.8 F / 72.5 F			OA DB / WB -12.3 F / -13.2 F		
	Details	Sensible [BTU/hr]	Latent [BTU/hr]	Details	Sensible [BTU/hr]	Latent [BTU/hr]
Zone Conditioning	-	30674	1316	-	37760	0
Plenum Load	-	0	0	-	0	0
Return Fan Load	1812 CFM	0	-	1812 CFM	0	-
Ventilation Load	500 CFM	1996	7590	500 CFM	15464	0
Supply Fan Load	1812 CFM	0	-	1812 CFM	0	-
Zone Fan Coil Fans Load	-	0	-	-	0	-
>> Total System Loads	-	32669	8906	-	53225	0
Central Cooling Coil	-	32798	10163	-	0	0
Central Heating Coil	-	0	-	-	53266	-
>> Total Conditioning	-	32798	10163	-	53266	0
Key:	Positive values are cooling loads Negative values are heating loads			Positive values are heating loads Negative values are cooling loads		

Table 2. Zone Heat Balance Loads

Zone Heat Balance Component	DESIGN COOLING - JULY 17:00			DESIGN HEATING		
	OA DB / WB 85.8 F / 72.5 F			OA DB / WB -12.3 F / -13.2 F		
	Details	Sensible [BTU/hr]	Latent [BTU/hr]	Details	Sensible [BTU/hr]	Latent [BTU/hr]
Exterior Wall Convection	924 sqft	2008	-	924 sqft	2213	-
Roof Convection	0 sqft	0	-	0 sqft	0	-
Window Convection	130 sqft	1347	-	130 sqft	1297	-
Skylight Convection	0 sqft	0	-	0 sqft	0	-
Door Convection	232 sqft	2380	-	232 sqft	2309	-
Floor Convection	3562 sqft	7514	-	3562 sqft	3262	-
Interior Wall Convection	1496 sqft	2344	-	1496 sqft	857	-
Ceiling Convection	3562 sqft	13175	-	3562 sqft	9092	-
Overhead Lighting Convection	0 W	0	-	0 W	0	-
Task Lighting Convection	0 W	0	-	0 W	0	-
Electric Equipment Convection	0 W	0	-	0 W	0	-
People Convection	0	0	0	0	0	0
Infiltration	0 CFM	0	0	129 CFM	13470	0
Miscellaneous Equipment	-	0	0	-	0	0
Air Internal Energy Change	-	0	-	-	0	0
Safety Factor	15% / 15%	4315	0	15%	4875	0
>> Total Zone Loads	-	33083	0	-	37375	0
Key:	Positive values are cooling loads Negative values are heating loads			Positive values are heating loads Negative values are cooling loads		

Note 1: Surface convection line items show the combined effects of conductive heat gain to the surface and radiative heat gains absorbed at the surface which are then convected to room air.

Note 2: Lighting, equipment, and people line items include only the direct convective heat gain from the heat source to the room air. The radiative portion of the heat gain is first absorbed by surfaces in the room and then later convected from the surface to the air. Therefore the effect of the radiative portion of the heat gain is found in the surface convection line items.

Note 3: Solar heat gain is absorbed by surfaces in the room, re-radiated to other surfaces, and finally convected from the surfaces to room air. Therefore, the effect of solar heat gain is found in the surface convection line items.

System Psychrometrics for 09 4E #11 à #15 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

DESIGN COOLING DAY AT JULY 17:00

TABLE 1: SYSTEM DATA

Component	Location	Dry-Bulb Temp (F)	Specific Humidity (lb/lb)	Airflow (CFM)	CO2 Level (ppm)	Sensible Heat (BTU/hr)	Latent Heat (BTU/hr)
Ventilation Air	Inlet	85.6	0.01418	500	400	1996	7590
Air-to-Air Energy Recovery	Outlet	78.8	0.01418	500	400	3790	0
Vent - Return Mixing	Outlet	76.0	0.01185	1812	400	-	-
Central Cooling Coil	Outlet	59.6	0.01070	1812	400	32798	10163
Central Heating Coil	Outlet	59.6	0.01070	1812	400	0	-
Supply Fan	Outlet	59.6	0.01070	1812	400	0	-
Cold Supply Duct	Outlet	59.6	0.01070	1812	400	-	-
Zone Air	-	75.0	0.01086	1812	400	30674	1316
Return Air	Outlet	75.0	0.01097	1812	400	-	-

Air Density x Heat Capacity x Conversion Factor: At sea level = 1.080; At site altitude = 1.074 BTU/(hr-CFM-F)

Air Density x Heat of Vaporization x Conversion Factor: At sea level = 4746.6; At site altitude = 4719.0 BTU/(hr-CFM)

Site Altitude = 161.0 ft

TABLE 2: ZONE DATA

Zone Name	Zone Sensible Load (BTU/hr)	T-stat Mode	Zone Cond (BTU/hr)	Zone Temp (F)	Zone Airflow (CFM)	CO2 Level (ppm)	Terminal Heating Coil (BTU/hr)	Zone Heating Unit (BTU/hr)
4E #11 à #15	30662	Cooling	30674	75.0	1812	400	0	0

System Psychrometrics for 09 4E #11 à #15 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

WINTER DESIGN HEATING

TABLE 1: SYSTEM DATA

Component	Location	Dry-Bulb Temp (F)	Specific Humidity (lb/lb)	Airflow (CFM)	CO2 Level (ppm)	Sensible Heat (BTU/hr)	Latent Heat (BTU/hr)
Ventilation Air	Inlet	-12.3	0.00018	500	400	-15464	0
Air-to-Air Energy Recovery	Outlet	41.2	0.00018	500	400	-28797	0
Vent - Return Mixing	Outlet	62.1	0.00018	1812	400	-	-
Central Cooling Coil	Outlet	62.1	0.00018	1812	400	0	0
Central Heating Coil	Outlet	89.4	0.00018	1812	400	53266	-
Supply Fan	Outlet	89.4	0.00018	1812	400	0	-
Cold Supply Duct	Outlet	89.4	0.00018	1812	400	-	-
Zone Air	-	70.0	0.00018	1812	400	-37760	0
Return Air	Outlet	70.0	0.00018	1812	400	-	-

Air Density x Heat Capacity x Conversion Factor: At sea level = 1.080; At site altitude = 1.074 BTU/(hr-CFM-F)

Air Density x Heat of Vaporization x Conversion Factor: At sea level = 4746.6; At site altitude = 4719.0 BTU/(hr-CFM)

Site Altitude = 161.0 ft

TABLE 2: ZONE DATA

Zone Name	Zone Sensible Load (BTU/hr)	T-stat Mode	Zone Cond (BTU/hr)	Zone Temp (F)	Zone Airflow (CFM)	CO2 Level (ppm)	Terminal Heating Coil (BTU/hr)	Zone Heating Unit (BTU/hr)
4E #11 à #15	-37760	Heating	-37760	70.0	1812	400	0	0

Air System Sizing Summary for 11 4E #16 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

Air System Information

Air System Name **11 4E #16 REF**
Equipment Class **SPLT AHU**
Air System Type **SZCAV**

Number of zones **1**
Floor Area **650.0** sqft
Location **St-Anicet 1, QC, Canada**

Sizing Calculation Information

Calculation Months **Jan to Dec**
Sizing Data **Calculated**

Zone CFM Sizing **Sum of space airflow rates**
Space CFM Sizing **Individual peak space loads**

Central Cooling Coil Sizing Data

Total coil load **0.3** Tons
Total coil load **3.3** MBH
Sensible coil load **2.9** MBH
Coil CFM at peak load **319** CFM
Sum of peak zone CFM **319** CFM
Sensible heat ratio **0.895**
CFM/Ton **1174.5**
sqft/Ton **2390.9**
BTU/(hr sqft) **5.0**
Water flow @ 10.0 F rise **N/A**

Peak coil load occurs at **July 15:00**
OA DB / WB **87.0 / 72.8** F
Entering DB / WB **76.3 / 69.2** F
Leaving DB / WB **68.0 / 66.3** F
Resulting RH **73** %
Design supply temp. **58.0** F
Zone T-stat Check **1 of 1** OK
Max zone temperature deviation **0.0** F

Central Heating Coil Sizing Data

Max coil load **11.6** MBH
Coil CFM at Design Heating **319** CFM
Max coil CFM **319** CFM
Water flow @ 20.0 F drop **N/A**

Load occurs at **Design Heating**
BTU/(hr sqft) **17.9**
Ent. DB / Lvg DB **61.0 / 94.8** F

Supply Fan Sizing Data

Design CFM **319** CFM
Design CFM/sqft **0.49** CFM/sqft

Fan motor BHP **0.00** BHP
Fan motor kW **0.00** kW

Outdoor Ventilation Air Data

Design airflow CFM **100** CFM
CFM/sqft **0.15** CFM/sqft

CFM/person **0.00** CFM/person

Zone Sizing Summary for 11 4E #16 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

Air System Information

Air System Name **11 4E #16 REF**
 Equipment Class **SPLT AHU**
 Air System Type **SZCAV**

Number of zones **1**
 Floor Area **650.0** sqft
 Location **St-Anicet 1, QC, Canada**

Sizing Calculation Information

Calculation Months **Jan to Dec**
 Sizing Data **Calculated**

Zone CFM Sizing **Sum of space airflow rates**
 Space CFM Sizing **Individual peak space loads**

Zone Terminal Sizing Data

Zone Name	Design Supply Airflow (CFM)	Minimum Supply Airflow (CFM)	Zone CFM/sqft	Reheat Coil Capacity (MBH)	Reheat Coil Water gpm @ 20.0 F	Zone Htg Unit Coil Capacity (MBH)	Zone Htg Unit Water gpm @ 20.0 F	Mixing Box Fan Airflow (CFM)
4E #16	319	319	0.49	0.0	-	0.0	-	0

Zone Peak Sensible Loads

Zone Name	Zone Cooling Sensible (MBH)	Time of Peak Sensible Cooling Load	Zone Heating Load (MBH)	Zone Floor Area (sqft)
4E #16	2.4	July 16:00	8.6	650.0

Space Loads and Airflows

Zone Name / Space Name	Cooling Sensible (MBH)	Time of Peak Sensible Load	Air Flow (CFM)	Heating Load (MBH)	Floor Area (sqft)	Space CFM/sqft
4E #16						
4E #16	2.4	July 16:00	319	8.6	650.0	0.49

Air System Heat Balance Summary for 11 4E #16 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

Table 1. System Loads

COMPONENT LOADS	DESIGN COOLING - JULY 15:00			DESIGN HEATING		
	OA DB / WB 87.0 F / 72.8 F			OA DB / WB -12.3 F / -13.2 F		
	Details	Sensible [BTU/hr]	Latent [BTU/hr]	Details	Sensible [BTU/hr]	Latent [BTU/hr]
Zone Conditioning	-	2456	27	-	8534	0
Plenum Load	-	0	0	-	0	0
Return Fan Load	319 CFM	0	-	319 CFM	0	-
Ventilation Load	100 CFM	448	287	100 CFM	3093	0
Supply Fan Load	319 CFM	0	-	319 CFM	0	-
Zone Fan Coil Fans Load	-	0	-	-	0	-
>> Total System Loads	-	2904	314	-	11627	0
Central Cooling Coil	-	2918	344	-	0	0
Central Heating Coil	-	0	-	-	11635	-
>> Total Conditioning	-	2918	344	-	11635	0
Key:	Positive values are cooling loads Negative values are heating loads			Positive values are heating loads Negative values are cooling loads		

Table 2. Zone Heat Balance Loads

Zone Heat Balance Component	DESIGN COOLING - JULY 15:00			DESIGN HEATING		
	OA DB / WB 87.0 F / 72.8 F			OA DB / WB -12.3 F / -13.2 F		
	Details	Sensible [BTU/hr]	Latent [BTU/hr]	Details	Sensible [BTU/hr]	Latent [BTU/hr]
Exterior Wall Convection	213 sqft	190	-	213 sqft	530	-
Roof Convection	0 sqft	0	-	0 sqft	0	-
Window Convection	50 sqft	111	-	50 sqft	508	-
Skylight Convection	0 sqft	0	-	0 sqft	0	-
Door Convection	41 sqft	86	-	41 sqft	410	-
Floor Convection	650 sqft	460	-	650 sqft	644	-
Interior Wall Convection	656 sqft	351	-	656 sqft	414	-
Ceiling Convection	650 sqft	883	-	650 sqft	1765	-
Overhead Lighting Convection	0 W	0	-	0 W	0	-
Task Lighting Convection	0 W	0	-	0 W	0	-
Electric Equipment Convection	0 W	0	-	0 W	0	-
People Convection	0	0	0	0	0	0
Infiltration	0 CFM	0	0	30 CFM	3182	0
Miscellaneous Equipment	-	0	0	-	0	0
Air Internal Energy Change	-	0	-	-	0	0
Safety Factor	15% / 15%	312	0	15%	1118	0
>> Total Zone Loads	-	2395	0	-	8571	0
Key:	Positive values are cooling loads Negative values are heating loads			Positive values are heating loads Negative values are cooling loads		

Note 1: Surface convection line items show the combined effects of conductive heat gain to the surface and radiative heat gains absorbed at the surface which are then convected to room air.

Note 2: Lighting, equipment, and people line items include only the direct convective heat gain from the heat source to the room air. The radiative portion of the heat gain is first absorbed by surfaces in the room and then later convected from the surface to the air. Therefore the effect of the radiative portion of the heat gain is found in the surface convection line items.

Note 3: Solar heat gain is absorbed by surfaces in the room, re-radiated to other surfaces, and finally convected from the surfaces to room air. Therefore, the effect of solar heat gain is found in the surface convection line items.

System Psychrometrics for 11 4E #16 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

DESIGN COOLING DAY AT JULY 15:00

TABLE 1: SYSTEM DATA

Component	Location	Dry-Bulb Temp (F)	Specific Humidity (lb/lb)	Airflow (CFM)	CO2 Level (ppm)	Sensible Heat (BTU/hr)	Latent Heat (BTU/hr)
Ventilation Air	Inlet	86.9	0.01418	100	400	448	287
Air-to-Air Energy Recovery	Outlet	79.2	0.01418	100	400	855	0
Vent - Return Mixing	Outlet	76.3	0.01377	319	400	-	-
Central Cooling Coil	Outlet	68.0	0.01355	319	400	2918	344
Central Heating Coil	Outlet	68.0	0.01355	319	400	0	-
Supply Fan	Outlet	68.0	0.01355	319	400	0	-
Cold Supply Duct	Outlet	68.0	0.01355	319	400	-	-
Zone Air	-	75.0	0.01356	319	400	2456	27
Return Air	Outlet	75.0	0.01357	319	400	-	-

Air Density x Heat Capacity x Conversion Factor: At sea level = 1.080; At site altitude = 1.074 BTU/(hr-CFM-F)

Air Density x Heat of Vaporization x Conversion Factor: At sea level = 4746.6; At site altitude = 4719.0 BTU/(hr-CFM)

Site Altitude = 161.0 ft

TABLE 2: ZONE DATA

Zone Name	Zone Sensible Load (BTU/hr)	T-stat Mode	Zone Cond (BTU/hr)	Zone Temp (F)	Zone Airflow (CFM)	CO2 Level (ppm)	Terminal Heating Coil (BTU/hr)	Zone Heating Unit (BTU/hr)
4E #16	2456	Cooling	2456	75.0	319	400	0	0

System Psychrometrics for 11 4E #16 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

WINTER DESIGN HEATING

TABLE 1: SYSTEM DATA

Component	Location	Dry-Bulb Temp (F)	Specific Humidity (lb/lb)	Airflow (CFM)	CO2 Level (ppm)	Sensible Heat (BTU/hr)	Latent Heat (BTU/hr)
Ventilation Air	Inlet	-12.3	0.00018	100	400	-3093	0
Air-to-Air Energy Recovery	Outlet	41.2	0.00018	100	400	-5759	0
Vent - Return Mixing	Outlet	61.0	0.00018	319	400	-	-
Central Cooling Coil	Outlet	61.0	0.00018	319	400	0	0
Central Heating Coil	Outlet	94.8	0.00018	319	400	11635	-
Supply Fan	Outlet	94.8	0.00018	319	400	0	-
Cold Supply Duct	Outlet	94.8	0.00018	319	400	-	-
Zone Air	-	70.0	0.00018	319	400	-8534	0
Return Air	Outlet	70.0	0.00018	319	400	-	-

Air Density x Heat Capacity x Conversion Factor: At sea level = 1.080; At site altitude = 1.074 BTU/(hr-CFM-F)

Air Density x Heat of Vaporization x Conversion Factor: At sea level = 4746.6; At site altitude = 4719.0 BTU/(hr-CFM)

Site Altitude = 161.0 ft

TABLE 2: ZONE DATA

Zone Name	Zone Sensible Load (BTU/hr)	T-stat Mode	Zone Cond (BTU/hr)	Zone Temp (F)	Zone Airflow (CFM)	CO2 Level (ppm)	Terminal Heating Coil (BTU/hr)	Zone Heating Unit (BTU/hr)
4E #16	-8534	Heating	-8534	70.0	319	400	0	0

Air System Sizing Summary for 13 4E #17 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

Air System Information

Air System Name **13 4E #17 REF**
Equipment Class **SPLT AHU**
Air System Type **SZCAV**

Number of zones **1**
Floor Area **902.9** sqft
Location **St-Anicet 1, QC, Canada**

Sizing Calculation Information

Calculation Months **Jan to Dec**
Sizing Data **Calculated**

Zone CFM Sizing **Sum of space airflow rates**
Space CFM Sizing **Individual peak space loads**

Central Cooling Coil Sizing Data

Total coil load **0.5** Tons
Total coil load **6.3** MBH
Sensible coil load **5.5** MBH
Coil CFM at peak load **531** CFM
Sum of peak zone CFM **531** CFM
Sensible heat ratio **0.876**
CFM/Ton **1017.9**
sqft/Ton **1732.0**
BTU/(hr sqft) **6.9**
Water flow @ 10.0 F rise **N/A**

Peak coil load occurs at **August 10:00**
OA DB / WB **75.9 / 69.6** F
Entering DB / WB **75.1 / 67.8** F
Leaving DB / WB **65.7 / 64.4** F
Resulting RH **68** %
Design supply temp. **58.0** F
Zone T-stat Check **1 of 1** OK
Max zone temperature deviation **0.0** F

Central Heating Coil Sizing Data

Max coil load **17.3** MBH
Coil CFM at Design Heating **531** CFM
Max coil CFM **531** CFM
Water flow @ 20.0 F drop **N/A**

Load occurs at **Design Heating**
BTU/(hr sqft) **19.2**
Ent. DB / Lvg DB **64.6 / 94.8** F

Supply Fan Sizing Data

Design CFM **531** CFM
Design CFM/sqft **0.59** CFM/sqft

Fan motor BHP **0.00** BHP
Fan motor kW **0.00** kW

Outdoor Ventilation Air Data

Design airflow CFM **100** CFM
CFM/sqft **0.11** CFM/sqft

CFM/person **0.00** CFM/person

Zone Sizing Summary for 13 4E #17 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

Air System Information

Air System Name **13 4E #17 REF**
Equipment Class **SPLT AHU**
Air System Type **SZCAV**

Number of zones **1**
Floor Area **902.9** sqft
Location **St-Anicet 1, QC, Canada**

Sizing Calculation Information

Calculation Months **Jan to Dec**
Sizing Data **Calculated**

Zone CFM Sizing **Sum of space airflow rates**
Space CFM Sizing **Individual peak space loads**

Zone Terminal Sizing Data

Zone Name	Design Supply Airflow (CFM)	Minimum Supply Airflow (CFM)	Zone CFM/sqft	Reheat Coil Capacity (MBH)	Reheat Coil Water gpm @ 20.0 F	Zone Htg Unit Coil Capacity (MBH)	Zone Htg Unit Water gpm @ 20.0 F	Mixing Box Fan Airflow (CFM)
4E #17	531	531	0.59	0.0	-	0.0	-	0

Zone Peak Sensible Loads

Zone Name	Zone Cooling Sensible (MBH)	Time of Peak Sensible Cooling Load	Zone Heating Load (MBH)	Zone Floor Area (sqft)
4E #17	5.7	July 9:00	14.2	902.9

Space Loads and Airflows

Zone Name / Space Name	Cooling Sensible (MBH)	Time of Peak Sensible Load	Air Flow (CFM)	Heating Load (MBH)	Floor Area (sqft)	Space CFM/sqft
4E #17						
4E #17	5.7	July 9:00	531	14.2	902.9	0.59

Air System Heat Balance Summary for 13 4E #17 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

Table 1. System Loads

COMPONENT LOADS	DESIGN COOLING - AUGUST 10:00			DESIGN HEATING		
	OA DB / WB 75.9 F / 69.6 F			OA DB / WB -12.3 F / -13.2 F		
	Details	Sensible [BTU/hr]	Latent [BTU/hr]	Details	Sensible [BTU/hr]	Latent [BTU/hr]
Zone Conditioning	-	5438	39	-	14195	0
Plenum Load	-	0	0	-	0	0
Return Fan Load	531 CFM	0	-	531 CFM	0	-
Ventilation Load	100 CFM	38	673	100 CFM	3093	0
Supply Fan Load	531 CFM	0	-	531 CFM	0	-
Zone Fan Coil Fans Load	-	0	-	-	0	-
>> Total System Loads	-	5476	712	-	17288	0
Central Cooling Coil	-	5480	775	-	0	0
Central Heating Coil	-	0	-	-	17296	-
>> Total Conditioning	-	5480	775	-	17296	0
Key:	Positive values are cooling loads Negative values are heating loads			Positive values are heating loads Negative values are cooling loads		

Table 2. Zone Heat Balance Loads

Zone Heat Balance Component	DESIGN COOLING - AUGUST 10:00			DESIGN HEATING		
	OA DB / WB 75.9 F / 69.6 F			OA DB / WB -12.3 F / -13.2 F		
	Details	Sensible [BTU/hr]	Latent [BTU/hr]	Details	Sensible [BTU/hr]	Latent [BTU/hr]
Exterior Wall Convection	461 sqft	610	-	461 sqft	1223	-
Roof Convection	0 sqft	0	-	0 sqft	0	-
Window Convection	70 sqft	270	-	70 sqft	744	-
Skylight Convection	0 sqft	0	-	0 sqft	0	-
Door Convection	48 sqft	428	-	48 sqft	497	-
Floor Convection	903 sqft	1330	-	903 sqft	936	-
Interior Wall Convection	563 sqft	667	-	563 sqft	377	-
Ceiling Convection	903 sqft	1558	-	903 sqft	2547	-
Overhead Lighting Convection	0 W	0	-	0 W	0	-
Task Lighting Convection	0 W	0	-	0 W	0	-
Electric Equipment Convection	0 W	0	-	0 W	0	-
People Convection	0	0	0	0	0	0
Infiltration	0 CFM	0	0	58 CFM	6064	0
Miscellaneous Equipment	-	0	0	-	0	0
Air Internal Energy Change	-	0	-	-	0	0
Safety Factor	15% / 15%	729	0	15%	1858	0
>> Total Zone Loads	-	5593	0	-	14245	0
Key:	Positive values are cooling loads Negative values are heating loads			Positive values are heating loads Negative values are cooling loads		

Note 1: Surface convection line items show the combined effects of conductive heat gain to the surface and radiative heat gains absorbed at the surface which are then convected to room air.

Note 2: Lighting, equipment, and people line items include only the direct convective heat gain from the heat source to the room air. The radiative portion of the heat gain is first absorbed by surfaces in the room and then later convected from the surface to the air. Therefore the effect of the radiative portion of the heat gain is found in the surface convection line items.

Note 3: Solar heat gain is absorbed by surfaces in the room, re-radiated to other surfaces, and finally convected from the surfaces to room air. Therefore, the effect of solar heat gain is found in the surface convection line items.

System Psychrometrics for 13 4E #17 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

DESIGN COOLING DAY AT AUGUST 10:00

TABLE 1: SYSTEM DATA

Component	Location	Dry-Bulb Temp (F)	Specific Humidity (lb/lb)	Airflow (CFM)	CO2 Level (ppm)	Sensible Heat (BTU/hr)	Latent Heat (BTU/hr)
Ventilation Air	Inlet	76.1	0.01416	100	400	38	673
Air-to-Air Energy Recovery	Outlet	75.4	0.01416	100	400	86	0
Vent - Return Mixing	Outlet	75.1	0.01301	531	400	-	-
Central Cooling Coil	Outlet	65.7	0.01271	531	400	5480	775
Central Heating Coil	Outlet	65.7	0.01271	531	400	0	-
Supply Fan	Outlet	65.7	0.01271	531	400	0	-
Cold Supply Duct	Outlet	65.7	0.01271	531	400	-	-
Zone Air	-	75.0	0.01272	531	400	5438	39
Return Air	Outlet	75.0	0.01274	531	400	-	-

Air Density x Heat Capacity x Conversion Factor: At sea level = 1.080; At site altitude = 1.074 BTU/(hr-CFM-F)

Air Density x Heat of Vaporization x Conversion Factor: At sea level = 4746.6; At site altitude = 4719.0 BTU/(hr-CFM)

Site Altitude = 161.0 ft

TABLE 2: ZONE DATA

Zone Name	Zone Sensible Load (BTU/hr)	T-stat Mode	Zone Cond (BTU/hr)	Zone Temp (F)	Zone Airflow (CFM)	CO2 Level (ppm)	Terminal Heating Coil (BTU/hr)	Zone Heating Unit (BTU/hr)
4E #17	5437	Cooling	5438	75.0	531	400	0	0

System Psychrometrics for 13 4E #17 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

WINTER DESIGN HEATING

TABLE 1: SYSTEM DATA

Component	Location	Dry-Bulb Temp (F)	Specific Humidity (lb/lb)	Airflow (CFM)	CO2 Level (ppm)	Sensible Heat (BTU/hr)	Latent Heat (BTU/hr)
Ventilation Air	Inlet	-12.3	0.00018	100	400	-3093	0
Air-to-Air Energy Recovery	Outlet	41.2	0.00018	100	400	-5759	0
Vent - Return Mixing	Outlet	64.6	0.00018	531	400	-	-
Central Cooling Coil	Outlet	64.6	0.00018	531	400	0	0
Central Heating Coil	Outlet	94.8	0.00018	531	400	17296	-
Supply Fan	Outlet	94.8	0.00018	531	400	0	-
Cold Supply Duct	Outlet	94.8	0.00018	531	400	-	-
Zone Air	-	70.0	0.00018	531	400	-14195	0
Return Air	Outlet	70.0	0.00018	531	400	-	-

Air Density x Heat Capacity x Conversion Factor: At sea level = 1.080; At site altitude = 1.074 BTU/(hr-CFM-F)

Air Density x Heat of Vaporization x Conversion Factor: At sea level = 4746.6; At site altitude = 4719.0 BTU/(hr-CFM)

Site Altitude = 161.0 ft

TABLE 2: ZONE DATA

Zone Name	Zone Sensible Load (BTU/hr)	T-stat Mode	Zone Cond (BTU/hr)	Zone Temp (F)	Zone Airflow (CFM)	CO2 Level (ppm)	Terminal Heating Coil (BTU/hr)	Zone Heating Unit (BTU/hr)
4E #17	-14195	Heating	-14195	70.0	531	400	0	0

Air System Sizing Summary for 15 4E #18 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

Air System Information

Air System Name **15 4E #18 REF**
Equipment Class **SPLT AHU**
Air System Type **SZCAV**

Number of zones **1**
Floor Area **674.7** sqft
Location **St-Anicet 1, QC, Canada**

Sizing Calculation Information

Calculation Months **Jan to Dec**
Sizing Data **Calculated**

Zone CFM Sizing **Sum of space airflow rates**
Space CFM Sizing **Individual peak space loads**

Central Cooling Coil Sizing Data

Total coil load **0.5** Tons
Total coil load **6.4** MBH
Sensible coil load **4.7** MBH
Coil CFM at peak load **281** CFM
Sum of peak zone CFM **281** CFM
Sensible heat ratio **0.741**
CFM/Ton **530.6**
sqft/Ton **1272.8**
BTU/(hr sqft) **9.4**
Water flow @ 10.0 F rise **N/A**

Peak coil load occurs at **August 10:00**
OA DB / WB **75.9 / 69.6** F
Entering DB / WB **75.1 / 66.5** F
Leaving DB / WB **59.9 / 59.4** F
Resulting RH **58** %
Design supply temp. **58.0** F
Zone T-stat Check **1 of 1** OK
Max zone temperature deviation **0.0** F

Central Heating Coil Sizing Data

Max coil load **10.0** MBH
Coil CFM at Design Heating **281** CFM
Max coil CFM **281** CFM
Water flow @ 20.0 F drop **N/A**

Load occurs at **Design Heating**
BTU/(hr sqft) **14.8**
Ent. DB / Lvg DB **59.8 / 92.7** F

Supply Fan Sizing Data

Design CFM **281** CFM
Design CFM/sqft **0.42** CFM/sqft

Fan motor BHP **0.00** BHP
Fan motor kW **0.00** kW

Outdoor Ventilation Air Data

Design airflow CFM **100** CFM
CFM/sqft **0.15** CFM/sqft

CFM/person **0.00** CFM/person

Zone Sizing Summary for 15 4E #18 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

Air System Information

Air System Name **15 4E #18 REF**
 Equipment Class **SPLT AHU**
 Air System Type **SZCAV**

Number of zones **1**
 Floor Area **674.7** sqft
 Location **St-Anicet 1, QC, Canada**

Sizing Calculation Information

Calculation Months **Jan to Dec**
 Sizing Data **Calculated**

Zone CFM Sizing **Sum of space airflow rates**
 Space CFM Sizing **Individual peak space loads**

Zone Terminal Sizing Data

Zone Name	Design Supply Airflow (CFM)	Minimum Supply Airflow (CFM)	Zone CFM/sqft	Reheat Coil Capacity (MBH)	Reheat Coil Water gpm @ 20.0 F	Zone Htg Unit Coil Capacity (MBH)	Zone Htg Unit Water gpm @ 20.0 F	Mixing Box Fan Airflow (CFM)
4E #18	281	281	0.42	0.0	-	0.0	-	0

Zone Peak Sensible Loads

Zone Name	Zone Cooling Sensible (MBH)	Time of Peak Sensible Cooling Load	Zone Heating Load (MBH)	Zone Floor Area (sqft)
4E #18	5.1	August 10:00	6.8	674.7

Space Loads and Airflows

Zone Name / Space Name	Cooling Sensible (MBH)	Time of Peak Sensible Load	Air Flow (CFM)	Heating Load (MBH)	Floor Area (sqft)	Space CFM/sqft
4E #18						
4E #18	5.1	August 10:00	281	6.8	674.7	0.42

Air System Heat Balance Summary for 15 4E #18 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

Table 1. System Loads

COMPONENT LOADS	DESIGN COOLING - AUGUST 10:00			DESIGN HEATING		
	OA DB / WB 75.9 F / 69.6 F			OA DB / WB -12.3 F / -13.2 F		
	Details	Sensible [BTU/hr]	Latent [BTU/hr]	Details	Sensible [BTU/hr]	Latent [BTU/hr]
Zone Conditioning	-	4663	-15	-	6865	0
Plenum Load	-	0	0	-	0	0
Return Fan Load	281 CFM	0	-	281 CFM	0	-
Ventilation Load	100 CFM	38	1606	100 CFM	3093	0
Supply Fan Load	281 CFM	0	-	281 CFM	0	-
Zone Fan Coil Fans Load	-	0	-	-	0	-
>> Total System Loads	-	4701	1591	-	9958	0
Central Cooling Coil	-	4713	1648	-	0	0
Central Heating Coil	-	0	-	-	9967	-
>> Total Conditioning	-	4713	1648	-	9967	0
Key:	Positive values are cooling loads Negative values are heating loads			Positive values are heating loads Negative values are cooling loads		

Table 2. Zone Heat Balance Loads

Zone Heat Balance Component	DESIGN COOLING - AUGUST 10:00			DESIGN HEATING		
	OA DB / WB 75.9 F / 69.6 F			OA DB / WB -12.3 F / -13.2 F		
	Details	Sensible [BTU/hr]	Latent [BTU/hr]	Details	Sensible [BTU/hr]	Latent [BTU/hr]
Exterior Wall Convection	161 sqft	257	-	161 sqft	373	-
Roof Convection	0 sqft	0	-	0 sqft	0	-
Window Convection	20 sqft	190	-	20 sqft	194	-
Skylight Convection	0 sqft	0	-	0 sqft	0	-
Door Convection	48 sqft	452	-	48 sqft	460	-
Floor Convection	675 sqft	1228	-	675 sqft	537	-
Interior Wall Convection	670 sqft	948	-	670 sqft	350	-
Ceiling Convection	675 sqft	1391	-	675 sqft	1632	-
Overhead Lighting Convection	0 W	0	-	0 W	0	-
Task Lighting Convection	0 W	0	-	0 W	0	-
Electric Equipment Convection	0 W	0	-	0 W	0	-
People Convection	0	0	0	0	0	0
Infiltration	0 CFM	0	0	23 CFM	2392	0
Miscellaneous Equipment	-	0	0	-	0	0
Air Internal Energy Change	-	0	-	-	0	0
Safety Factor	15% / 15%	670	0	15%	891	0
>> Total Zone Loads	-	5135	0	-	6828	0
Key:	Positive values are cooling loads Negative values are heating loads			Positive values are heating loads Negative values are cooling loads		

Note 1: Surface convection line items show the combined effects of conductive heat gain to the surface and radiative heat gains absorbed at the surface which are then convected to room air.

Note 2: Lighting, equipment, and people line items include only the direct convective heat gain from the heat source to the room air. The radiative portion of the heat gain is first absorbed by surfaces in the room and then later convected from the surface to the air. Therefore the effect of the radiative portion of the heat gain is found in the surface convection line items.

Note 3: Solar heat gain is absorbed by surfaces in the room, re-radiated to other surfaces, and finally convected from the surfaces to room air. Therefore, the effect of solar heat gain is found in the surface convection line items.

System Psychrometrics for 15 4E #18 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

DESIGN COOLING DAY AT AUGUST 10:00

TABLE 1: SYSTEM DATA

Component	Location	Dry-Bulb Temp (F)	Specific Humidity (lb/lb)	Airflow (CFM)	CO2 Level (ppm)	Sensible Heat (BTU/hr)	Latent Heat (BTU/hr)
Ventilation Air	Inlet	76.1	0.01416	100	400	38	1606
Air-to-Air Energy Recovery	Outlet	75.4	0.01416	100	400	86	0
Vent - Return Mixing	Outlet	75.1	0.01197	281	400	-	-
Central Cooling Coil	Outlet	59.9	0.01077	281	400	4713	1648
Central Heating Coil	Outlet	59.9	0.01077	281	400	0	-
Supply Fan	Outlet	59.9	0.01077	281	400	0	-
Cold Supply Duct	Outlet	59.9	0.01077	281	400	-	-
Zone Air	-	75.0	0.01076	281	400	4663	-15
Return Air	Outlet	75.0	0.01076	281	400	-	-

Air Density x Heat Capacity x Conversion Factor: At sea level = 1.080; At site altitude = 1.074 BTU/(hr-CFM-F)

Air Density x Heat of Vaporization x Conversion Factor: At sea level = 4746.6; At site altitude = 4719.0 BTU/(hr-CFM)

Site Altitude = 161.0 ft

TABLE 2: ZONE DATA

Zone Name	Zone Sensible Load (BTU/hr)	T-stat Mode	Zone Cond (BTU/hr)	Zone Temp (F)	Zone Airflow (CFM)	CO2 Level (ppm)	Terminal Heating Coil (BTU/hr)	Zone Heating Unit (BTU/hr)
4E #18	4663	Cooling	4663	75.0	281	400	0	0

System Psychrometrics for 15 4E #18 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

WINTER DESIGN HEATING

TABLE 1: SYSTEM DATA

Component	Location	Dry-Bulb Temp (F)	Specific Humidity (lb/lb)	Airflow (CFM)	CO2 Level (ppm)	Sensible Heat (BTU/hr)	Latent Heat (BTU/hr)
Ventilation Air	Inlet	-12.3	0.00018	100	400	-3093	0
Air-to-Air Energy Recovery	Outlet	41.2	0.00018	100	400	-5759	0
Vent - Return Mixing	Outlet	59.8	0.00018	281	400	-	-
Central Cooling Coil	Outlet	59.8	0.00018	281	400	0	0
Central Heating Coil	Outlet	92.7	0.00018	281	400	9967	-
Supply Fan	Outlet	92.7	0.00018	281	400	0	-
Cold Supply Duct	Outlet	92.7	0.00018	281	400	-	-
Zone Air	-	70.0	0.00018	281	400	-6865	0
Return Air	Outlet	70.0	0.00018	281	400	-	-

Air Density x Heat Capacity x Conversion Factor: At sea level = 1.080; At site altitude = 1.074 BTU/(hr-CFM-F)

Air Density x Heat of Vaporization x Conversion Factor: At sea level = 4746.6; At site altitude = 4719.0 BTU/(hr-CFM)

Site Altitude = 161.0 ft

TABLE 2: ZONE DATA

Zone Name	Zone Sensible Load (BTU/hr)	T-stat Mode	Zone Cond (BTU/hr)	Zone Temp (F)	Zone Airflow (CFM)	CO2 Level (ppm)	Terminal Heating Coil (BTU/hr)	Zone Heating Unit (BTU/hr)
4E #18	-6865	Heating	-6865	70.0	281	400	0	0

Air System Sizing Summary for 17 4E #19 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

Air System Information

Air System Name **17 4E #19 REF**
Equipment Class **SPLT AHU**
Air System Type **SZCAV**

Number of zones **1**
Floor Area **767.3** sqft
Location **St-Anicet 1, QC, Canada**

Sizing Calculation Information

Calculation Months **Jan to Dec**
Sizing Data **Calculated**

Zone CFM Sizing **Sum of space airflow rates**
Space CFM Sizing **Individual peak space loads**

Central Cooling Coil Sizing Data

Total coil load **0.6** Tons
Total coil load **7.0** MBH
Sensible coil load **5.3** MBH
Coil CFM at peak load **317** CFM
Sum of peak zone CFM **317** CFM
Sensible heat ratio **0.763**
CFM/Ton **544.9**
sqft/Ton **1317.0**
BTU/(hr sqft) **9.1**
Water flow @ 10.0 F rise **N/A**

Peak coil load occurs at **August 10:00**
OA DB / WB **75.9 / 69.6** F
Entering DB / WB **75.1 / 66.2** F
Leaving DB / WB **59.8 / 59.4** F
Resulting RH **58** %
Design supply temp. **58.0** F
Zone T-stat Check **1 of 1** OK
Max zone temperature deviation **0.0** F

Central Heating Coil Sizing Data

Max coil load **10.8** MBH
Coil CFM at Design Heating **317** CFM
Max coil CFM **317** CFM
Water flow @ 20.0 F drop **N/A**

Load occurs at **Design Heating**
BTU/(hr sqft) **14.1**
Ent. DB / Lvg DB **60.9 / 92.5** F

Supply Fan Sizing Data

Design CFM **317** CFM
Design CFM/sqft **0.41** CFM/sqft

Fan motor BHP **0.00** BHP
Fan motor kW **0.00** kW

Outdoor Ventilation Air Data

Design airflow CFM **100** CFM
CFM/sqft **0.13** CFM/sqft

CFM/person **0.00** CFM/person

Zone Sizing Summary for 17 4E #19 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

Air System Information

Air System Name **17 4E #19 REF**
 Equipment Class **SPLT AHU**
 Air System Type **SZCAV**

Number of zones **1**
 Floor Area **767.3** sqft
 Location **St-Anicet 1, QC, Canada**

Sizing Calculation Information

Calculation Months **Jan to Dec**
 Sizing Data **Calculated**

Zone CFM Sizing **Sum of space airflow rates**
 Space CFM Sizing **Individual peak space loads**

Zone Terminal Sizing Data

Zone Name	Design Supply Airflow (CFM)	Minimum Supply Airflow (CFM)	Zone CFM/sqft	Reheat Coil Capacity (MBH)	Reheat Coil Water gpm @ 20.0 F	Zone Htg Unit Coil Capacity (MBH)	Zone Htg Unit Water gpm @ 20.0 F	Mixing Box Fan Airflow (CFM)
4E #19	317	317	0.41	0.0	-	0.0	-	0

Zone Peak Sensible Loads

Zone Name	Zone Cooling Sensible (MBH)	Time of Peak Sensible Cooling Load	Zone Heating Load (MBH)	Zone Floor Area (sqft)
4E #19	5.8	August 10:00	7.6	767.3

Space Loads and Airflows

Zone Name / Space Name	Cooling Sensible (MBH)	Time of Peak Sensible Load	Air Flow (CFM)	Heating Load (MBH)	Floor Area (sqft)	Space CFM/sqft
4E #19						
4E #19	5.8	August 10:00	317	7.6	767.3	0.41

Air System Heat Balance Summary for 17 4E #19 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

Table 1. System Loads

COMPONENT LOADS	DESIGN COOLING - AUGUST 10:00			DESIGN HEATING		
	OA DB / WB 75.9 F / 69.6 F			OA DB / WB -12.3 F / -13.2 F		
	Details	Sensible [BTU/hr]	Latent [BTU/hr]	Details	Sensible [BTU/hr]	Latent [BTU/hr]
Zone Conditioning	-	5286	-23	-	7683	0
Plenum Load	-	0	0	-	0	0
Return Fan Load	317 CFM	0	-	317 CFM	0	-
Ventilation Load	100 CFM	38	1625	100 CFM	3093	0
Supply Fan Load	317 CFM	0	-	317 CFM	0	-
Zone Fan Coil Fans Load	-	0	-	-	0	-
>> Total System Loads	-	5324	1601	-	10776	0
Central Cooling Coil	-	5336	1655	-	0	0
Central Heating Coil	-	0	-	-	10784	-
>> Total Conditioning	-	5336	1655	-	10784	0
Key:	Positive values are cooling loads Negative values are heating loads			Positive values are heating loads Negative values are cooling loads		

Table 2. Zone Heat Balance Loads

Zone Heat Balance Component	DESIGN COOLING - AUGUST 10:00			DESIGN HEATING		
	OA DB / WB 75.9 F / 69.6 F			OA DB / WB -12.3 F / -13.2 F		
	Details	Sensible [BTU/hr]	Latent [BTU/hr]	Details	Sensible [BTU/hr]	Latent [BTU/hr]
Exterior Wall Convection	174 sqft	271	-	174 sqft	404	-
Roof Convection	0 sqft	0	-	0 sqft	0	-
Window Convection	30 sqft	285	-	30 sqft	291	-
Skylight Convection	0 sqft	0	-	0 sqft	0	-
Door Convection	48 sqft	451	-	48 sqft	459	-
Floor Convection	767 sqft	1429	-	767 sqft	617	-
Interior Wall Convection	693 sqft	992	-	693 sqft	365	-
Ceiling Convection	767 sqft	1612	-	767 sqft	1857	-
Overhead Lighting Convection	0 W	0	-	0 W	0	-
Task Lighting Convection	0 W	0	-	0 W	0	-
Electric Equipment Convection	0 W	0	-	0 W	0	-
People Convection	0	0	0	0	0	0
Infiltration	0 CFM	0	0	25 CFM	2641	0
Miscellaneous Equipment	-	0	0	-	0	0
Air Internal Energy Change	-	0		-	0	0
Safety Factor	15% / 15%	756	0	15%	995	0
>> Total Zone Loads	-	5795	0	-	7631	0
Key:	Positive values are cooling loads Negative values are heating loads			Positive values are heating loads Negative values are cooling loads		

Note 1: Surface convection line items show the combined effects of conductive heat gain to the surface and radiative heat gains absorbed at the surface which are then convected to room air.

Note 2: Lighting, equipment, and people line items include only the direct convective heat gain from the heat source to the room air. The radiative portion of the heat gain is first absorbed by surfaces in the room and then later convected from the surface to the air. Therefore the effect of the radiative portion of the heat gain is found in the surface convection line items.

Note 3: Solar heat gain is absorbed by surfaces in the room, re-radiated to other surfaces, and finally convected from the surfaces to room air. Therefore, the effect of solar heat gain is found in the surface convection line items.

System Psychrometrics for 17 4E #19 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

DESIGN COOLING DAY AT AUGUST 10:00

TABLE 1: SYSTEM DATA

Component	Location	Dry-Bulb Temp (F)	Specific Humidity (lb/lb)	Airflow (CFM)	CO2 Level (ppm)	Sensible Heat (BTU/hr)	Latent Heat (BTU/hr)
Ventilation Air	Inlet	76.1	0.01416	100	400	38	1625
Air-to-Air Energy Recovery	Outlet	75.4	0.01416	100	400	86	0
Vent - Return Mixing	Outlet	75.1	0.01181	317	400	-	-
Central Cooling Coil	Outlet	59.8	0.01074	317	400	5336	1655
Central Heating Coil	Outlet	59.8	0.01074	317	400	0	-
Supply Fan	Outlet	59.8	0.01074	317	400	0	-
Cold Supply Duct	Outlet	59.8	0.01074	317	400	-	-
Zone Air	-	75.0	0.01072	317	400	5286	-23
Return Air	Outlet	75.0	0.01072	317	400	-	-

Air Density x Heat Capacity x Conversion Factor: At sea level = 1.080; At site altitude = 1.074 BTU/(hr-CFM-F)

Air Density x Heat of Vaporization x Conversion Factor: At sea level = 4746.6; At site altitude = 4719.0 BTU/(hr-CFM)

Site Altitude = 161.0 ft

TABLE 2: ZONE DATA

Zone Name	Zone Sensible Load (BTU/hr)	T-stat Mode	Zone Cond (BTU/hr)	Zone Temp (F)	Zone Airflow (CFM)	CO2 Level (ppm)	Terminal Heating Coil (BTU/hr)	Zone Heating Unit (BTU/hr)
4E #19	5286	Cooling	5286	75.0	317	400	0	0

System Psychrometrics for 17 4E #19 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

WINTER DESIGN HEATING

TABLE 1: SYSTEM DATA

Component	Location	Dry-Bulb Temp (F)	Specific Humidity (lb/lb)	Airflow (CFM)	CO2 Level (ppm)	Sensible Heat (BTU/hr)	Latent Heat (BTU/hr)
Ventilation Air	Inlet	-12.3	0.00018	100	400	-3093	0
Air-to-Air Energy Recovery	Outlet	41.2	0.00018	100	400	-5759	0
Vent - Return Mixing	Outlet	60.9	0.00018	317	400	-	-
Central Cooling Coil	Outlet	60.9	0.00018	317	400	0	0
Central Heating Coil	Outlet	92.5	0.00018	317	400	10784	-
Supply Fan	Outlet	92.5	0.00018	317	400	0	-
Cold Supply Duct	Outlet	92.5	0.00018	317	400	-	-
Zone Air	-	70.0	0.00018	317	400	-7683	0
Return Air	Outlet	70.0	0.00018	317	400	-	-

Air Density x Heat Capacity x Conversion Factor: At sea level = 1.080; At site altitude = 1.074 BTU/(hr-CFM-F)

Air Density x Heat of Vaporization x Conversion Factor: At sea level = 4746.6; At site altitude = 4719.0 BTU/(hr-CFM)

Site Altitude = 161.0 ft

TABLE 2: ZONE DATA

Zone Name	Zone Sensible Load (BTU/hr)	T-stat Mode	Zone Cond (BTU/hr)	Zone Temp (F)	Zone Airflow (CFM)	CO2 Level (ppm)	Terminal Heating Coil (BTU/hr)	Zone Heating Unit (BTU/hr)
4E #19	-7683	Heating	-7683	70.0	317	400	0	0

Air System Sizing Summary for 19 4E #20 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

Air System Information

Air System Name **19 4E #20 REF**
Equipment Class **SPLT AHU**
Air System Type **SZCAV**

Number of zones **1**
Floor Area **761.8** sqft
Location **St-Anicet 1, QC, Canada**

Sizing Calculation Information

Calculation Months **Jan to Dec**
Sizing Data **Calculated**

Zone CFM Sizing **Sum of space airflow rates**
Space CFM Sizing **Individual peak space loads**

Central Cooling Coil Sizing Data

Total coil load **0.6** Tons
Total coil load **7.1** MBH
Sensible coil load **5.4** MBH
Coil CFM at peak load **319** CFM
Sum of peak zone CFM **319** CFM
Sensible heat ratio **0.763**
CFM/Ton **542.6**
sqft/Ton **1295.5**
BTU/(hr sqft) **9.3**
Water flow @ 10.0 F rise **N/A**

Peak coil load occurs at **August 10:00**
OA DB / WB **75.9 / 69.6** F
Entering DB / WB **75.1 / 66.2** F
Leaving DB / WB **59.8 / 59.3** F
Resulting RH **58** %
Design supply temp. **58.0** F
Zone T-stat Check **1 of 1** OK
Max zone temperature deviation **0.0** F

Central Heating Coil Sizing Data

Max coil load **11.4** MBH
Coil CFM at Design Heating **319** CFM
Max coil CFM **319** CFM
Water flow @ 20.0 F drop **N/A**

Load occurs at **Design Heating**
BTU/(hr sqft) **15.0**
Ent. DB / Lvg DB **61.0 / 94.2** F

Supply Fan Sizing Data

Design CFM **319** CFM
Design CFM/sqft **0.42** CFM/sqft

Fan motor BHP **0.00** BHP
Fan motor kW **0.00** kW

Outdoor Ventilation Air Data

Design airflow CFM **100** CFM
CFM/sqft **0.13** CFM/sqft

CFM/person **0.00** CFM/person

Zone Sizing Summary for 19 4E #20 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

Air System Information

Air System Name **19 4E #20 REF**
 Equipment Class **SPLT AHU**
 Air System Type **SZCAV**

Number of zones **1**
 Floor Area **761.8** sqft
 Location **St-Anicet 1, QC, Canada**

Sizing Calculation Information

Calculation Months **Jan to Dec**
 Sizing Data **Calculated**

Zone CFM Sizing **Sum of space airflow rates**
 Space CFM Sizing **Individual peak space loads**

Zone Terminal Sizing Data

Zone Name	Design Supply Airflow (CFM)	Minimum Supply Airflow (CFM)	Zone CFM/sqft	Reheat Coil Capacity (MBH)	Reheat Coil Water gpm @ 20.0 F	Zone Htg Unit Coil Capacity (MBH)	Zone Htg Unit Water gpm @ 20.0 F	Mixing Box Fan Airflow (CFM)
4E #20	319	319	0.42	0.0	-	0.0	-	0

Zone Peak Sensible Loads

Zone Name	Zone Cooling Sensible (MBH)	Time of Peak Sensible Cooling Load	Zone Heating Load (MBH)	Zone Floor Area (sqft)
4E #20	5.8	August 10:00	8.3	761.8

Space Loads and Airflows

Zone Name / Space Name	Cooling Sensible (MBH)	Time of Peak Sensible Load	Air Flow (CFM)	Heating Load (MBH)	Floor Area (sqft)	Space CFM/sqft
4E #20						
4E #20	5.8	August 10:00	319	8.3	761.8	0.42

Air System Heat Balance Summary for 19 4E #20 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

Table 1. System Loads

COMPONENT LOADS	DESIGN COOLING - AUGUST 10:00			DESIGN HEATING		
	OA DB / WB 75.9 F / 69.6 F			OA DB / WB -12.3 F / -13.2 F		
	Details	Sensible [BTU/hr]	Latent [BTU/hr]	Details	Sensible [BTU/hr]	Latent [BTU/hr]
Zone Conditioning	-	5330	-12	-	8328	0
Plenum Load	-	0	0	-	0	0
Return Fan Load	319 CFM	0	-	319 CFM	0	-
Ventilation Load	100 CFM	38	1627	100 CFM	3093	0
Supply Fan Load	319 CFM	0	-	319 CFM	0	-
Zone Fan Coil Fans Load	-	0	-	-	0	-
>> Total System Loads	-	5368	1615	-	11421	0
Central Cooling Coil	-	5380	1676	-	0	0
Central Heating Coil	-	0	-	-	11429	-
>> Total Conditioning	-	5380	1676	-	11429	0
Key:	Positive values are cooling loads Negative values are heating loads			Positive values are heating loads Negative values are cooling loads		

Table 2. Zone Heat Balance Loads

Zone Heat Balance Component	DESIGN COOLING - AUGUST 10:00			DESIGN HEATING		
	OA DB / WB 75.9 F / 69.6 F			OA DB / WB -12.3 F / -13.2 F		
	Details	Sensible [BTU/hr]	Latent [BTU/hr]	Details	Sensible [BTU/hr]	Latent [BTU/hr]
Exterior Wall Convection	215 sqft	333	-	215 sqft	513	-
Roof Convection	0 sqft	0	-	0 sqft	0	-
Window Convection	30 sqft	285	-	30 sqft	290	-
Skylight Convection	0 sqft	0	-	0 sqft	0	-
Door Convection	48 sqft	454	-	48 sqft	460	-
Floor Convection	762 sqft	1436	-	762 sqft	650	-
Interior Wall Convection	648 sqft	938	-	648 sqft	353	-
Ceiling Convection	762 sqft	1618	-	762 sqft	1910	-
Overhead Lighting Convection	0 W	0	-	0 W	0	-
Task Lighting Convection	0 W	0	-	0 W	0	-
Electric Equipment Convection	0 W	0	-	0 W	0	-
People Convection	0	0	0	0	0	0
Infiltration	0 CFM	0	0	29 CFM	3071	0
Miscellaneous Equipment	-	0	0	-	0	0
Air Internal Energy Change	-	0	-	-	0	0
Safety Factor	15% / 15%	760	0	15%	1087	0
>> Total Zone Loads	-	5824	0	-	8336	0
Key:	Positive values are cooling loads Negative values are heating loads			Positive values are heating loads Negative values are cooling loads		

Note 1: Surface convection line items show the combined effects of conductive heat gain to the surface and radiative heat gains absorbed at the surface which are then convected to room air.

Note 2: Lighting, equipment, and people line items include only the direct convective heat gain from the heat source to the room air. The radiative portion of the heat gain is first absorbed by surfaces in the room and then later convected from the surface to the air. Therefore the effect of the radiative portion of the heat gain is found in the surface convection line items.

Note 3: Solar heat gain is absorbed by surfaces in the room, re-radiated to other surfaces, and finally convected from the surfaces to room air. Therefore, the effect of solar heat gain is found in the surface convection line items.

System Psychrometrics for 19 4E #20 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

DESIGN COOLING DAY AT AUGUST 10:00

TABLE 1: SYSTEM DATA

Component	Location	Dry-Bulb Temp (F)	Specific Humidity (lb/lb)	Airflow (CFM)	CO2 Level (ppm)	Sensible Heat (BTU/hr)	Latent Heat (BTU/hr)
Ventilation Air	Inlet	76.1	0.01416	100	400	38	1627
Air-to-Air Energy Recovery	Outlet	75.4	0.01416	100	400	86	0
Vent - Return Mixing	Outlet	75.1	0.01180	319	400	-	-
Central Cooling Coil	Outlet	59.8	0.01072	319	400	5380	1676
Central Heating Coil	Outlet	59.8	0.01072	319	400	0	-
Supply Fan	Outlet	59.8	0.01072	319	400	0	-
Cold Supply Duct	Outlet	59.8	0.01072	319	400	-	-
Zone Air	-	75.0	0.01071	319	400	5330	-12
Return Air	Outlet	75.0	0.01072	319	400	-	-

Air Density x Heat Capacity x Conversion Factor: At sea level = 1.080; At site altitude = 1.074 BTU/(hr-CFM-F)

Air Density x Heat of Vaporization x Conversion Factor: At sea level = 4746.6; At site altitude = 4719.0 BTU/(hr-CFM)

Site Altitude = 161.0 ft

TABLE 2: ZONE DATA

Zone Name	Zone Sensible Load (BTU/hr)	T-stat Mode	Zone Cond (BTU/hr)	Zone Temp (F)	Zone Airflow (CFM)	CO2 Level (ppm)	Terminal Heating Coil (BTU/hr)	Zone Heating Unit (BTU/hr)
4E #20	5330	Cooling	5330	75.0	319	400	0	0

System Psychrometrics for 19 4E #20 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

WINTER DESIGN HEATING

TABLE 1: SYSTEM DATA

Component	Location	Dry-Bulb Temp (F)	Specific Humidity (lb/lb)	Airflow (CFM)	CO2 Level (ppm)	Sensible Heat (BTU/hr)	Latent Heat (BTU/hr)
Ventilation Air	Inlet	-12.3	0.00018	100	400	-3093	0
Air-to-Air Energy Recovery	Outlet	41.2	0.00018	100	400	-5759	0
Vent - Return Mixing	Outlet	61.0	0.00018	319	400	-	-
Central Cooling Coil	Outlet	61.0	0.00018	319	400	0	0
Central Heating Coil	Outlet	94.2	0.00018	319	400	11429	-
Supply Fan	Outlet	94.2	0.00018	319	400	0	-
Cold Supply Duct	Outlet	94.2	0.00018	319	400	-	-
Zone Air	-	70.0	0.00018	319	400	-8328	0
Return Air	Outlet	70.0	0.00018	319	400	-	-

Air Density x Heat Capacity x Conversion Factor: At sea level = 1.080; At site altitude = 1.074 BTU/(hr-CFM-F)

Air Density x Heat of Vaporization x Conversion Factor: At sea level = 4746.6; At site altitude = 4719.0 BTU/(hr-CFM)

Site Altitude = 161.0 ft

TABLE 2: ZONE DATA

Zone Name	Zone Sensible Load (BTU/hr)	T-stat Mode	Zone Cond (BTU/hr)	Zone Temp (F)	Zone Airflow (CFM)	CO2 Level (ppm)	Terminal Heating Coil (BTU/hr)	Zone Heating Unit (BTU/hr)
4E #20	-8328	Heating	-8328	70.0	319	400	0	0

Air System Sizing Summary for 21 4E #21 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

Air System Information

Air System Name **21 4E #21 REF**
Equipment Class **SPLT AHU**
Air System Type **SZCAV**

Number of zones **1**
Floor Area **761.7** sqft
Location **St-Anicet 1, QC, Canada**

Sizing Calculation Information

Calculation Months **Jan to Dec**
Sizing Data **Calculated**

Zone CFM Sizing **Sum of space airflow rates**
Space CFM Sizing **Individual peak space loads**

Central Cooling Coil Sizing Data

Total coil load **0.6** Tons
Total coil load **7.1** MBH
Sensible coil load **5.4** MBH
Coil CFM at peak load **322** CFM
Sum of peak zone CFM **322** CFM
Sensible heat ratio **0.765**
CFM/Ton **547.3**
sqft/Ton **1293.7**
BTU/(hr sqft) **9.3**
Water flow @ 10.0 F rise **N/A**

Peak coil load occurs at **August 10:00**
OA DB / WB **75.9 / 69.6** F
Entering DB / WB **75.1 / 66.2** F
Leaving DB / WB **59.9 / 59.4** F
Resulting RH **58** %
Design supply temp. **58.0** F
Zone T-stat Check **1 of 1** OK
Max zone temperature deviation **0.0** F

Central Heating Coil Sizing Data

Max coil load **10.7** MBH
Coil CFM at Design Heating **322** CFM
Max coil CFM **322** CFM
Water flow @ 20.0 F drop **N/A**

Load occurs at **Design Heating**
BTU/(hr sqft) **14.1**
Ent. DB / Lvg DB **61.1 / 92.0** F

Supply Fan Sizing Data

Design CFM **322** CFM
Design CFM/sqft **0.42** CFM/sqft

Fan motor BHP **0.00** BHP
Fan motor kW **0.00** kW

Outdoor Ventilation Air Data

Design airflow CFM **100** CFM
CFM/sqft **0.13** CFM/sqft

CFM/person **0.00** CFM/person

Zone Sizing Summary for 21 4E #21 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

Air System Information

Air System Name **21 4E #21 REF**
 Equipment Class **SPLT AHU**
 Air System Type **SZCAV**

Number of zones **1**
 Floor Area **761.7** sqft
 Location **St-Anicet 1, QC, Canada**

Sizing Calculation Information

Calculation Months **Jan to Dec**
 Sizing Data **Calculated**

Zone CFM Sizing **Sum of space airflow rates**
 Space CFM Sizing **Individual peak space loads**

Zone Terminal Sizing Data

Zone Name	Design Supply Airflow (CFM)	Minimum Supply Airflow (CFM)	Zone CFM/sqft	Reheat Coil Capacity (MBH)	Reheat Coil Water gpm @ 20.0 F	Zone Htg Unit Coil Capacity (MBH)	Zone Htg Unit Water gpm @ 20.0 F	Mixing Box Fan Airflow (CFM)
4E #21	322	322	0.42	0.0	-	0.0	-	0

Zone Peak Sensible Loads

Zone Name	Zone Cooling Sensible (MBH)	Time of Peak Sensible Cooling Load	Zone Heating Load (MBH)	Zone Floor Area (sqft)
4E #21	5.9	August 10:00	7.6	761.7

Space Loads and Airflows

Zone Name / Space Name	Cooling Sensible (MBH)	Time of Peak Sensible Load	Air Flow (CFM)	Heating Load (MBH)	Floor Area (sqft)	Space CFM/sqft
4E #21						
4E #21	5.9	August 10:00	322	7.6	761.7	0.42

Air System Heat Balance Summary for 21 4E #21 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

Table 1. System Loads

COMPONENT LOADS	DESIGN COOLING - AUGUST 10:00			DESIGN HEATING		
	OA DB / WB 75.9 F / 69.6 F			OA DB / WB -12.3 F / -13.2 F		
	Details	Sensible [BTU/hr]	Latent [BTU/hr]	Details	Sensible [BTU/hr]	Latent [BTU/hr]
Zone Conditioning	-	5356	-16	-	7648	0
Plenum Load	-	0	0	-	0	0
Return Fan Load	322 CFM	0	-	322 CFM	0	-
Ventilation Load	100 CFM	38	1617	100 CFM	3093	0
Supply Fan Load	322 CFM	0	-	322 CFM	0	-
Zone Fan Coil Fans Load	-	0	-	-	0	-
>> Total System Loads	-	5395	1601	-	10741	0
Central Cooling Coil	-	5407	1659	-	0	0
Central Heating Coil	-	0	-	-	10749	-
>> Total Conditioning	-	5407	1659	-	10749	0
Key:	Positive values are cooling loads Negative values are heating loads			Positive values are heating loads Negative values are cooling loads		

Table 2. Zone Heat Balance Loads

Zone Heat Balance Component	DESIGN COOLING - AUGUST 10:00			DESIGN HEATING		
	OA DB / WB 75.9 F / 69.6 F			OA DB / WB -12.3 F / -13.2 F		
	Details	Sensible [BTU/hr]	Latent [BTU/hr]	Details	Sensible [BTU/hr]	Latent [BTU/hr]
Exterior Wall Convection	172 sqft	287	-	172 sqft	400	-
Roof Convection	0 sqft	0	-	0 sqft	0	-
Window Convection	30 sqft	288	-	30 sqft	292	-
Skylight Convection	0 sqft	0	-	0 sqft	0	-
Door Convection	48 sqft	456	-	48 sqft	463	-
Floor Convection	762 sqft	1451	-	762 sqft	616	-
Interior Wall Convection	691 sqft	1004	-	691 sqft	368	-
Ceiling Convection	762 sqft	1629	-	762 sqft	1847	-
Overhead Lighting Convection	0 W	0	-	0 W	0	-
Task Lighting Convection	0 W	0	-	0 W	0	-
Electric Equipment Convection	0 W	0	-	0 W	0	-
People Convection	0	0	0	0	0	0
Infiltration	0 CFM	0	0	25 CFM	2613	0
Miscellaneous Equipment	-	0	0	-	0	0
Air Internal Energy Change	-	0		-	0	0
Safety Factor	15% / 15%	767	0	15%	990	0
>> Total Zone Loads	-	5882	0	-	7588	0
Key:	Positive values are cooling loads Negative values are heating loads			Positive values are heating loads Negative values are cooling loads		

Note 1: Surface convection line items show the combined effects of conductive heat gain to the surface and radiative heat gains absorbed at the surface which are then convected to room air.

Note 2: Lighting, equipment, and people line items include only the direct convective heat gain from the heat source to the room air. The radiative portion of the heat gain is first absorbed by surfaces in the room and then later convected from the surface to the air. Therefore the effect of the radiative portion of the heat gain is found in the surface convection line items.

Note 3: Solar heat gain is absorbed by surfaces in the room, re-radiated to other surfaces, and finally convected from the surfaces to room air. Therefore, the effect of solar heat gain is found in the surface convection line items.

System Psychrometrics for 21 4E #21 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

DESIGN COOLING DAY AT AUGUST 10:00

TABLE 1: SYSTEM DATA

Component	Location	Dry-Bulb Temp (F)	Specific Humidity (lb/lb)	Airflow (CFM)	CO2 Level (ppm)	Sensible Heat (BTU/hr)	Latent Heat (BTU/hr)
Ventilation Air	Inlet	76.1	0.01416	100	400	38	1617
Air-to-Air Energy Recovery	Outlet	75.4	0.01416	100	400	86	0
Vent - Return Mixing	Outlet	75.1	0.01180	322	400	-	-
Central Cooling Coil	Outlet	59.9	0.01075	322	400	5407	1659
Central Heating Coil	Outlet	59.9	0.01075	322	400	0	-
Supply Fan	Outlet	59.9	0.01075	322	400	0	-
Cold Supply Duct	Outlet	59.9	0.01075	322	400	-	-
Zone Air	-	75.0	0.01074	322	400	5356	-16
Return Air	Outlet	75.0	0.01074	322	400	-	-

Air Density x Heat Capacity x Conversion Factor: At sea level = 1.080; At site altitude = 1.074 BTU/(hr-CFM-F)

Air Density x Heat of Vaporization x Conversion Factor: At sea level = 4746.6; At site altitude = 4719.0 BTU/(hr-CFM)

Site Altitude = 161.0 ft

TABLE 2: ZONE DATA

Zone Name	Zone Sensible Load (BTU/hr)	T-stat Mode	Zone Cond (BTU/hr)	Zone Temp (F)	Zone Airflow (CFM)	CO2 Level (ppm)	Terminal Heating Coil (BTU/hr)	Zone Heating Unit (BTU/hr)
4E #21	5356	Cooling	5356	75.0	322	400	0	0

System Psychrometrics for 21 4E #21 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

WINTER DESIGN HEATING

TABLE 1: SYSTEM DATA

Component	Location	Dry-Bulb Temp (F)	Specific Humidity (lb/lb)	Airflow (CFM)	CO2 Level (ppm)	Sensible Heat (BTU/hr)	Latent Heat (BTU/hr)
Ventilation Air	Inlet	-12.3	0.00018	100	400	-3093	0
Air-to-Air Energy Recovery	Outlet	41.2	0.00018	100	400	-5759	0
Vent - Return Mixing	Outlet	61.1	0.00018	322	400	-	-
Central Cooling Coil	Outlet	61.1	0.00018	322	400	0	0
Central Heating Coil	Outlet	92.0	0.00018	322	400	10749	-
Supply Fan	Outlet	92.0	0.00018	322	400	0	-
Cold Supply Duct	Outlet	92.0	0.00018	322	400	-	-
Zone Air	-	70.0	0.00018	322	400	-7648	0
Return Air	Outlet	70.0	0.00018	322	400	-	-

Air Density x Heat Capacity x Conversion Factor: At sea level = 1.080; At site altitude = 1.074 BTU/(hr-CFM-F)

Air Density x Heat of Vaporization x Conversion Factor: At sea level = 4746.6; At site altitude = 4719.0 BTU/(hr-CFM)

Site Altitude = 161.0 ft

TABLE 2: ZONE DATA

Zone Name	Zone Sensible Load (BTU/hr)	T-stat Mode	Zone Cond (BTU/hr)	Zone Temp (F)	Zone Airflow (CFM)	CO2 Level (ppm)	Terminal Heating Coil (BTU/hr)	Zone Heating Unit (BTU/hr)
4E #21	-7648	Heating	-7648	70.0	322	400	0	0

Air System Sizing Summary for 23 4E #22 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

Air System Information

Air System Name **23 4E #22 REF**
Equipment Class **SPLT AHU**
Air System Type **SZCAV**

Number of zones **1**
Floor Area **985.6** sqft
Location **St-Anicet 1, QC, Canada**

Sizing Calculation Information

Calculation Months **Jan to Dec**
Sizing Data **Calculated**

Zone CFM Sizing **Sum of space airflow rates**
Space CFM Sizing **Individual peak space loads**

Central Cooling Coil Sizing Data

Total coil load **0.8** Tons
Total coil load **9.4** MBH
Sensible coil load **8.2** MBH
Coil CFM at peak load **583** CFM
Sum of peak zone CFM **583** CFM
Sensible heat ratio **0.875**
CFM/Ton **746.1**
sqft/Ton **1261.0**
BTU/(hr sqft) **9.5**
Water flow @ 10.0 F rise **N/A**

Peak coil load occurs at **August 15:00**
OA DB / WB **87.0 / 72.8** F
Entering DB / WB **75.7 / 67.0** F
Leaving DB / WB **62.9 / 62.2** F
Resulting RH **64** %
Design supply temp. **58.0** F
Zone T-stat Check **1 of 1** OK
Max zone temperature deviation **0.0** F

Central Heating Coil Sizing Data

Max coil load **18.7** MBH
Coil CFM at Design Heating **583** CFM
Max coil CFM **583** CFM
Water flow @ 20.0 F drop **N/A**

Load occurs at **Design Heating**
BTU/(hr sqft) **19.0**
Ent. DB / Lvg DB **65.1 / 94.8** F

Supply Fan Sizing Data

Design CFM **583** CFM
Design CFM/sqft **0.59** CFM/sqft

Fan motor BHP **0.00** BHP
Fan motor kW **0.00** kW

Outdoor Ventilation Air Data

Design airflow CFM **100** CFM
CFM/sqft **0.10** CFM/sqft

CFM/person **0.00** CFM/person

Zone Sizing Summary for 23 4E #22 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

Air System Information

Air System Name **23 4E #22 REF**
 Equipment Class **SPLT AHU**
 Air System Type **SZCAV**

Number of zones **1**
 Floor Area **985.6** sqft
 Location **St-Anicet 1, QC, Canada**

Sizing Calculation Information

Calculation Months **Jan to Dec**
 Sizing Data **Calculated**

Zone CFM Sizing **Sum of space airflow rates**
 Space CFM Sizing **Individual peak space loads**

Zone Terminal Sizing Data

Zone Name	Design Supply Airflow (CFM)	Minimum Supply Airflow (CFM)	Zone CFM/sqft	Reheat Coil Capacity (MBH)	Reheat Coil Water gpm @ 20.0 F	Zone Htg Unit Coil Capacity (MBH)	Zone Htg Unit Water gpm @ 20.0 F	Mixing Box Fan Airflow (CFM)
4E #22	583	583	0.59	0.0	-	0.0	-	0

Zone Peak Sensible Loads

Zone Name	Zone Cooling Sensible (MBH)	Time of Peak Sensible Cooling Load	Zone Heating Load (MBH)	Zone Floor Area (sqft)
4E #22	8.3	August 15:00	15.7	985.6

Space Loads and Airflows

Zone Name / Space Name	Cooling Sensible (MBH)	Time of Peak Sensible Load	Air Flow (CFM)	Heating Load (MBH)	Floor Area (sqft)	Space CFM/sqft
4E #22						
4E #22	8.3	August 15:00	583	15.7	985.6	0.59

Air System Heat Balance Summary for 23 4E #22 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

Table 1. System Loads

COMPONENT LOADS	DESIGN COOLING - AUGUST 15:00			DESIGN HEATING		
	OA DB / WB 87.0 F / 72.8 F			OA DB / WB -12.3 F / -13.2 F		
	Details	Sensible [BTU/hr]	Latent [BTU/hr]	Details	Sensible [BTU/hr]	Latent [BTU/hr]
Zone Conditioning	-	7739	14	-	15600	0
Plenum Load	-	0	0	-	0	0
Return Fan Load	583 CFM	0	-	583 CFM	0	-
Ventilation Load	100 CFM	448	1096	100 CFM	3093	0
Supply Fan Load	583 CFM	0	-	583 CFM	0	-
Zone Fan Coil Fans Load	-	0	-	-	0	-
>> Total System Loads	-	8186	1111	-	18693	0
Central Cooling Coil	-	8208	1171	-	0	0
Central Heating Coil	-	0	-	-	18701	-
>> Total Conditioning	-	8208	1171	-	18701	0
Key:	Positive values are cooling loads Negative values are heating loads			Positive values are heating loads Negative values are cooling loads		

Table 2. Zone Heat Balance Loads

Zone Heat Balance Component	DESIGN COOLING - AUGUST 15:00			DESIGN HEATING		
	OA DB / WB 87.0 F / 72.8 F			OA DB / WB -12.3 F / -13.2 F		
	Details	Sensible [BTU/hr]	Latent [BTU/hr]	Details	Sensible [BTU/hr]	Latent [BTU/hr]
Exterior Wall Convection	470 sqft	1012	-	470 sqft	1258	-
Roof Convection	0 sqft	0	-	0 sqft	0	-
Window Convection	100 sqft	768	-	100 sqft	1048	-
Skylight Convection	0 sqft	0	-	0 sqft	0	-
Door Convection	48 sqft	145	-	48 sqft	497	-
Floor Convection	986 sqft	1668	-	986 sqft	1068	-
Interior Wall Convection	618 sqft	827	-	618 sqft	442	-
Ceiling Convection	986 sqft	2790	-	986 sqft	2831	-
Overhead Lighting Convection	0 W	0	-	0 W	0	-
Task Lighting Convection	0 W	0	-	0 W	0	-
Electric Equipment Convection	0 W	0	-	0 W	0	-
People Convection	0	0	0	0	0	0
Infiltration	0 CFM	0	0	62 CFM	6467	0
Miscellaneous Equipment	-	0	0	-	0	0
Air Internal Energy Change	-	0	-	-	0	0
Safety Factor	15% / 15%	1081	0	15%	2042	0
>> Total Zone Loads	-	8291	0	-	15653	0
Key:	Positive values are cooling loads Negative values are heating loads			Positive values are heating loads Negative values are cooling loads		

Note 1: Surface convection line items show the combined effects of conductive heat gain to the surface and radiative heat gains absorbed at the surface which are then convected to room air.

Note 2: Lighting, equipment, and people line items include only the direct convective heat gain from the heat source to the room air. The radiative portion of the heat gain is first absorbed by surfaces in the room and then later convected from the surface to the air. Therefore the effect of the radiative portion of the heat gain is found in the surface convection line items.

Note 3: Solar heat gain is absorbed by surfaces in the room, re-radiated to other surfaces, and finally convected from the surfaces to room air. Therefore, the effect of solar heat gain is found in the surface convection line items.

System Psychrometrics for 23 4E #22 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

DESIGN COOLING DAY AT AUGUST 15:00

TABLE 1: SYSTEM DATA

Component	Location	Dry-Bulb Temp (F)	Specific Humidity (lb/lb)	Airflow (CFM)	CO2 Level (ppm)	Sensible Heat (BTU/hr)	Latent Heat (BTU/hr)
Ventilation Air	Inlet	86.9	0.01418	100	400	448	1096
Air-to-Air Energy Recovery	Outlet	79.2	0.01418	100	400	852	0
Vent - Return Mixing	Outlet	75.7	0.01226	583	400	-	-
Central Cooling Coil	Outlet	62.9	0.01185	583	400	8208	1171
Central Heating Coil	Outlet	62.9	0.01185	583	400	0	-
Supply Fan	Outlet	62.9	0.01185	583	400	0	-
Cold Supply Duct	Outlet	62.9	0.01185	583	400	-	-
Zone Air	-	75.0	0.01185	583	400	7739	14
Return Air	Outlet	75.0	0.01186	583	400	-	-

Air Density x Heat Capacity x Conversion Factor: At sea level = 1.080; At site altitude = 1.074 BTU/(hr-CFM-F)

Air Density x Heat of Vaporization x Conversion Factor: At sea level = 4746.6; At site altitude = 4719.0 BTU/(hr-CFM)

Site Altitude = 161.0 ft

TABLE 2: ZONE DATA

Zone Name	Zone Sensible Load (BTU/hr)	T-stat Mode	Zone Cond (BTU/hr)	Zone Temp (F)	Zone Airflow (CFM)	CO2 Level (ppm)	Terminal Heating Coil (BTU/hr)	Zone Heating Unit (BTU/hr)
4E #22	7738	Cooling	7739	75.0	583	400	0	0

System Psychrometrics for 23 4E #22 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

WINTER DESIGN HEATING

TABLE 1: SYSTEM DATA

Component	Location	Dry-Bulb Temp (F)	Specific Humidity (lb/lb)	Airflow (CFM)	CO2 Level (ppm)	Sensible Heat (BTU/hr)	Latent Heat (BTU/hr)
Ventilation Air	Inlet	-12.3	0.00018	100	400	-3093	0
Air-to-Air Energy Recovery	Outlet	41.2	0.00018	100	400	-5759	0
Vent - Return Mixing	Outlet	65.1	0.00018	583	400	-	-
Central Cooling Coil	Outlet	65.1	0.00018	583	400	0	0
Central Heating Coil	Outlet	94.8	0.00018	583	400	18701	-
Supply Fan	Outlet	94.8	0.00018	583	400	0	-
Cold Supply Duct	Outlet	94.8	0.00018	583	400	-	-
Zone Air	-	70.0	0.00018	583	400	-15600	0
Return Air	Outlet	70.0	0.00018	583	400	-	-

Air Density x Heat Capacity x Conversion Factor: At sea level = 1.080; At site altitude = 1.074 BTU/(hr-CFM-F)

Air Density x Heat of Vaporization x Conversion Factor: At sea level = 4746.6; At site altitude = 4719.0 BTU/(hr-CFM)

Site Altitude = 161.0 ft

TABLE 2: ZONE DATA

Zone Name	Zone Sensible Load (BTU/hr)	T-stat Mode	Zone Cond (BTU/hr)	Zone Temp (F)	Zone Airflow (CFM)	CO2 Level (ppm)	Terminal Heating Coil (BTU/hr)	Zone Heating Unit (BTU/hr)
4E #22	-15600	Heating	-15600	70.0	583	400	0	0

Air System Sizing Summary for 25 4E ESC1 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

Air System Information

Air System Name **25 4E ESC1 REF**
Equipment Class **SPLT AHU**
Air System Type **SZCAV**

Number of zones **1**
Floor Area **200.4** sqft
Location **St-Anicet 1, QC, Canada**

Sizing Calculation Information

Calculation Months **Jan to Dec**
Sizing Data **Calculated**

Zone CFM Sizing **Sum of space airflow rates**
Space CFM Sizing **Individual peak space loads**

Central Heating Coil Sizing Data

Max coil load **4.6** MBH
Coil CFM at Design Heating **184** CFM
Max coil CFM **184** CFM
Water flow @ 20.0 F drop **N/A**

Load occurs at **Design Heating**
BTU/(hr sqft) **23.2**
Ent. DB / Lvg DB **70.0 / 93.5** F

Supply Fan Sizing Data

Design CFM **184** CFM
Design CFM/sqft **0.92** CFM/sqft

Fan motor BHP **0.10** BHP
Fan motor kW **0.08** kW
Fan total static **2.00** in wg

Outdoor Ventilation Air Data

Design airflow CFM **0** CFM
CFM/sqft **0.00** CFM/sqft

CFM/person **0.00** CFM/person

Zone Sizing Summary for 25 4E ESC1 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

Air System Information

Air System Name **25 4E ESC1 REF**
Equipment Class **SPLT AHU**
Air System Type **SZCAV**

Number of zones **1**
Floor Area **200.4** sqft
Location **St-Anicet 1, QC, Canada**

Sizing Calculation Information

Calculation Months **Jan to Dec**
Sizing Data **Calculated**

Zone CFM Sizing **Sum of space airflow rates**
Space CFM Sizing **Individual peak space loads**

Zone Terminal Sizing Data

Zone Name	Design Supply Airflow (CFM)	Minimum Supply Airflow (CFM)	Zone CFM/sqft	Reheat Coil Capacity (MBH)	Reheat Coil Water gpm @ 20.0 F	Zone Htg Unit Coil Capacity (MBH)	Zone Htg Unit Water gpm @ 20.0 F	Mixing Box Fan Airflow (CFM)
4E ESC1	184	184	0.92	0.0	-	0.0	-	0

Zone Peak Sensible Loads

Zone Name	Zone Cooling Sensible (MBH)	Time of Peak Sensible Cooling Load	Zone Heating Load (MBH)	Zone Floor Area (sqft)
4E ESC1	0.0	March 12:00	4.9	200.4

Space Loads and Airflows

Zone Name / Space Name	Cooling Sensible (MBH)	Time of Peak Sensible Load	Air Flow (CFM)	Heating Load (MBH)	Floor Area (sqft)	Space CFM/sqft
4E ESC1						
4E ESC1	0.0	March 12:00	184	4.9	200.4	0.92

Air System Heat Balance Summary for 25 4E ESC1 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

Table 1. System Loads

COMPONENT LOADS	DESIGN COOLING			DESIGN HEATING		
	NO COOLING DATA			OA DB / WB -12.3 F / -13.2 F		
	Details	Sensible [BTU/hr]	Latent [BTU/hr]	Details	Sensible [BTU/hr]	Latent [BTU/hr]
Zone Conditioning	-	-	-	-	4922	0
Plenum Load	-	-	-	-	0	0
Return Fan Load	-	-	-	184 CFM	0	-
Ventilation Load	-	-	-	0 CFM	0	0
Supply Fan Load	-	-	-	184 CFM	-273	-
Zone Fan Coil Fans Load	-	-	-	-	0	-
>> Total System Loads	-	-	-	-	4649	0
Central Heating Coil	-	-	-	-	4649	-
>> Total Conditioning	-	-	-	-	4649	0
Key:	Positive values are cooling loads Negative values are heating loads			Positive values are heating loads Negative values are cooling loads		

Table 2. Zone Heat Balance Loads

Zone Heat Balance Component	DESIGN COOLING			DESIGN HEATING		
	NO COOLING DATA			OA DB / WB -12.3 F / -13.2 F		
	Details	Sensible [BTU/hr]	Latent [BTU/hr]	Details	Sensible [BTU/hr]	Latent [BTU/hr]
Exterior Wall Convection	230 sqft	-	-	230 sqft	626	-
Roof Convection	0 sqft	-	-	0 sqft	0	-
Window Convection	17 sqft	-	-	17 sqft	198	-
Skylight Convection	0 sqft	-	-	0 sqft	0	-
Door Convection	0 sqft	-	-	0 sqft	0	-
Floor Convection	200 sqft	-	-	200 sqft	173	-
Interior Wall Convection	247 sqft	-	-	247 sqft	154	-
Ceiling Convection	200 sqft	-	-	200 sqft	554	-
Overhead Lighting Convection	-	-	-	0 W	0	-
Task Lighting Convection	-	-	-	0 W	0	-
Electric Equipment Convection	-	-	-	0 W	0	-
People Convection	-	-	-	0	0	0
Infiltration	-	-	-	25 CFM	2586	0
Miscellaneous Equipment	-	-	-	-	0	0
Air Internal Energy Change	-	-	-	-	0	0
Safety Factor	15% / 15%	-	-	15%	644	0
>> Total Zone Loads	-	-	-	-	4934	0
Key:	Positive values are cooling loads Negative values are heating loads			Positive values are heating loads Negative values are cooling loads		

Note 1: Surface convection line items show the combined effects of conductive heat gain to the surface and radiative heat gains absorbed at the surface which are then convected to room air.

Note 2: Lighting, equipment, and people line items include only the direct convective heat gain from the heat source to the room air. The radiative portion of the heat gain is first absorbed by surfaces in the room and then later convected from the surface to the air. Therefore the effect of the radiative portion of the heat gain is found in the surface convection line items.

Note 3: Solar heat gain is absorbed by surfaces in the room, re-radiated to other surfaces, and finally convected from the surfaces to room air. Therefore, the effect of solar heat gain is found in the surface convection line items.

System Psychrometrics for 25 4E ESC1 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

WINTER DESIGN HEATING

TABLE 1: SYSTEM DATA

Component	Location	Dry-Bulb Temp (F)	Specific Humidity (lb/lb)	Airflow (CFM)	CO2 Level (ppm)	Sensible Heat (BTU/hr)	Latent Heat (BTU/hr)
Ventilation Air	Inlet	-12.3	0.00018	0	400	0	0
Vent - Return Mixing	Outlet	70.0	0.00018	184	400	-	-
Central Heating Coil	Outlet	93.5	0.00018	184	400	4649	-
Supply Fan	Outlet	94.9	0.00018	184	400	273	-
Cold Supply Duct	Outlet	94.9	0.00018	184	400	-	-
Zone Air	-	70.0	0.00018	184	400	-4922	0
Return Air	Outlet	70.0	0.00018	184	400	-	-

Air Density x Heat Capacity x Conversion Factor: At sea level = 1.080; At site altitude = 1.074 BTU/(hr-CFM-F)

Air Density x Heat of Vaporization x Conversion Factor: At sea level = 4746.6; At site altitude = 4719.0 BTU/(hr-CFM)

Site Altitude = 161.0 ft

TABLE 2: ZONE DATA

Zone Name	Zone Sensible Load (BTU/hr)	T-stat Mode	Zone Cond (BTU/hr)	Zone Temp (F)	Zone Airflow (CFM)	CO2 Level (ppm)	Terminal Heating Coil (BTU/hr)	Zone Heating Unit (BTU/hr)
4E ESC1	-4922	Heating	-4922	70.0	184	400	0	0

Air System Sizing Summary for 27 4E ESC2 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

Air System Information

Air System Name **27 4E ESC2 REF**
Equipment Class **SPLT AHU**
Air System Type **SZCAV**

Number of zones **1**
Floor Area **186.4** sqft
Location **St-Anicet 1, QC, Canada**

Sizing Calculation Information

Calculation Months **Jan to Dec**
Sizing Data **Calculated**

Zone CFM Sizing **Sum of space airflow rates**
Space CFM Sizing **Individual peak space loads**

Central Heating Coil Sizing Data

Max coil load **5.4** MBH
Coil CFM at Design Heating **211** CFM
Max coil CFM **211** CFM
Water flow @ 20.0 F drop **N/A**

Load occurs at **Design Heating**
BTU/(hr sqft) **28.7**
Ent. DB / Lvg DB **70.0 / 93.6** F

Supply Fan Sizing Data

Design CFM **211** CFM
Design CFM/sqft **1.13** CFM/sqft

Fan motor BHP **0.12** BHP
Fan motor kW **0.09** kW
Fan total static **2.00** in wg

Outdoor Ventilation Air Data

Design airflow CFM **0** CFM
CFM/sqft **0.00** CFM/sqft

CFM/person **0.00** CFM/person

Zone Sizing Summary for 27 4E ESC2 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

Air System Information

Air System Name **27 4E ESC2 REF**
Equipment Class **SPLT AHU**
Air System Type **SZCAV**

Number of zones **1**
Floor Area **186.4** sqft
Location **St-Anicet 1, QC, Canada**

Sizing Calculation Information

Calculation Months **Jan to Dec**
Sizing Data **Calculated**

Zone CFM Sizing **Sum of space airflow rates**
Space CFM Sizing **Individual peak space loads**

Zone Terminal Sizing Data

Zone Name	Design Supply Airflow (CFM)	Minimum Supply Airflow (CFM)	Zone CFM/sqft	Reheat Coil Capacity (MBH)	Reheat Coil Water gpm @ 20.0 F	Zone Htg Unit Coil Capacity (MBH)	Zone Htg Unit Water gpm @ 20.0 F	Mixing Box Fan Airflow (CFM)
4E ESC2	211	211	1.13	0.0	-	0.0	-	0

Zone Peak Sensible Loads

Zone Name	Zone Cooling Sensible (MBH)	Time of Peak Sensible Cooling Load	Zone Heating Load (MBH)	Zone Floor Area (sqft)
4E ESC2	0.0	October 13:00	5.7	186.4

Space Loads and Airflows

Zone Name / Space Name	Cooling Sensible (MBH)	Time of Peak Sensible Load	Air Flow (CFM)	Heating Load (MBH)	Floor Area (sqft)	Space CFM/sqft
4E ESC2						
4E ESC2	0.0	October 13:00	211	5.7	186.4	1.13

Air System Heat Balance Summary for 27 4E ESC2 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

Table 1. System Loads

COMPONENT LOADS	DESIGN COOLING			DESIGN HEATING		
	NO COOLING DATA			OA DB / WB -12.3 F / -13.2 F		
	Details	Sensible [BTU/hr]	Latent [BTU/hr]	Details	Sensible [BTU/hr]	Latent [BTU/hr]
Zone Conditioning	-	-	-	-	5670	0
Plenum Load	-	-	-	-	0	0
Return Fan Load	-	-	-	211 CFM	0	-
Ventilation Load	-	-	-	0 CFM	0	0
Supply Fan Load	-	-	-	211 CFM	-313	-
Zone Fan Coil Fans Load	-	-	-	-	0	-
>> Total System Loads	-	-	-	-	5357	0
Central Heating Coil	-	-	-	-	5357	-
>> Total Conditioning	-	-	-	-	5357	0
Key:	Positive values are cooling loads Negative values are heating loads			Positive values are heating loads Negative values are cooling loads		

Table 2. Zone Heat Balance Loads

Zone Heat Balance Component	DESIGN COOLING			DESIGN HEATING		
	NO COOLING DATA			OA DB / WB -12.3 F / -13.2 F		
	Details	Sensible [BTU/hr]	Latent [BTU/hr]	Details	Sensible [BTU/hr]	Latent [BTU/hr]
Exterior Wall Convection	174 sqft	-	-	174 sqft	549	-
Roof Convection	0 sqft	-	-	0 sqft	0	-
Window Convection	63 sqft	-	-	63 sqft	796	-
Skylight Convection	0 sqft	-	-	0 sqft	0	-
Door Convection	0 sqft	-	-	0 sqft	0	-
Floor Convection	186 sqft	-	-	186 sqft	248	-
Interior Wall Convection	236 sqft	-	-	236 sqft	243	-
Ceiling Convection	186 sqft	-	-	186 sqft	625	-
Overhead Lighting Convection	-	-	-	0 W	0	-
Task Lighting Convection	-	-	-	0 W	0	-
Electric Equipment Convection	-	-	-	0 W	0	-
People Convection	-	-	-	0	0	0
Infiltration	-	-	-	24 CFM	2471	0
Miscellaneous Equipment	-	-	-	-	0	0
Air Internal Energy Change	-	-	-	-	0	0
Safety Factor	15% / 15%	-	-	15%	740	0
>> Total Zone Loads	-	-	-	-	5670	0
Key:	Positive values are cooling loads Negative values are heating loads			Positive values are heating loads Negative values are cooling loads		

Note 1: Surface convection line items show the combined effects of conductive heat gain to the surface and radiative heat gains absorbed at the surface which are then convected to room air.

Note 2: Lighting, equipment, and people line items include only the direct convective heat gain from the heat source to the room air. The radiative portion of the heat gain is first absorbed by surfaces in the room and then later convected from the surface to the air. Therefore the effect of the radiative portion of the heat gain is found in the surface convection line items.

Note 3: Solar heat gain is absorbed by surfaces in the room, re-radiated to other surfaces, and finally convected from the surfaces to room air. Therefore, the effect of solar heat gain is found in the surface convection line items.

System Psychrometrics for 27 4E ESC2 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

WINTER DESIGN HEATING

TABLE 1: SYSTEM DATA

Component	Location	Dry-Bulb Temp (F)	Specific Humidity (lb/lb)	Airflow (CFM)	CO2 Level (ppm)	Sensible Heat (BTU/hr)	Latent Heat (BTU/hr)
Ventilation Air	Inlet	-12.3	0.00018	0	400	0	0
Vent - Return Mixing	Outlet	70.0	0.00018	211	400	-	-
Central Heating Coil	Outlet	93.6	0.00018	211	400	5357	-
Supply Fan	Outlet	94.9	0.00018	211	400	313	-
Cold Supply Duct	Outlet	94.9	0.00018	211	400	-	-
Zone Air	-	70.0	0.00018	211	400	-5670	0
Return Air	Outlet	70.0	0.00018	211	400	-	-

Air Density x Heat Capacity x Conversion Factor: At sea level = 1.080; At site altitude = 1.074 BTU/(hr-CFM-F)

Air Density x Heat of Vaporization x Conversion Factor: At sea level = 4746.6; At site altitude = 4719.0 BTU/(hr-CFM)

Site Altitude = 161.0 ft

TABLE 2: ZONE DATA

Zone Name	Zone Sensible Load (BTU/hr)	T-stat Mode	Zone Cond (BTU/hr)	Zone Temp (F)	Zone Airflow (CFM)	CO2 Level (ppm)	Terminal Heating Coil (BTU/hr)	Zone Heating Unit (BTU/hr)
4E ESC2	-5670	Heating	-5670	70.0	211	400	0	0

Air System Sizing Summary for 29 RDC #1 à #5 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

Air System Information

Air System Name **29 RDC #1 à #5 REF**
Equipment Class **SPLT AHU**
Air System Type **SZCAV**

Number of zones **1**
Floor Area **3562.5** sqft
Location **St-Anicet 1, QC, Canada**

Sizing Calculation Information

Calculation Months **Jan to Dec**
Sizing Data **Calculated**

Zone CFM Sizing **Sum of space airflow rates**
Space CFM Sizing **Individual peak space loads**

Central Cooling Coil Sizing Data

Total coil load **3.2** Tons
Total coil load **37.9** MBH
Sensible coil load **27.4** MBH
Coil CFM at peak load **1477** CFM
Sum of peak zone CFM **1477** CFM
Sensible heat ratio **0.725**
CFM/Ton **468.0**
sqft/Ton **1128.7**
BTU/(hr sqft) **10.6**
Water flow @ 10.0 F rise **N/A**

Peak coil load occurs at **July 17:00**
OA DB / WB **85.8 / 72.5** F
Entering DB / WB **76.3 / 67.0** F
Leaving DB / WB **59.4 / 59.0** F
Resulting RH **58** %
Design supply temp. **58.0** F
Zone T-stat Check **1 of 1** OK
Max zone temperature deviation **0.0** F

Central Heating Coil Sizing Data

Max coil load **44.4** MBH
Coil CFM at Design Heating **1477** CFM
Max coil CFM **1477** CFM
Water flow @ 20.0 F drop **N/A**

Load occurs at **Design Heating**
BTU/(hr sqft) **12.5**
Ent. DB / Lvg DB **60.2 / 88.2** F

Supply Fan Sizing Data

Design CFM **1477** CFM
Design CFM/sqft **0.41** CFM/sqft

Fan motor BHP **0.00** BHP
Fan motor kW **0.00** kW

Outdoor Ventilation Air Data

Design airflow CFM **500** CFM
CFM/sqft **0.14** CFM/sqft

CFM/person **0.00** CFM/person

Zone Sizing Summary for 29 RDC #1 à #5 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

Air System Information

Air System Name **29 RDC #1 à #5 REF**
 Equipment Class **SPLT AHU**
 Air System Type **SZCAV**

Number of zones **1**
 Floor Area **3562.5** sqft
 Location **St-Anicet 1, QC, Canada**

Sizing Calculation Information

Calculation Months **Jan to Dec**
 Sizing Data **Calculated**

Zone CFM Sizing **Sum of space airflow rates**
 Space CFM Sizing **Individual peak space loads**

Zone Terminal Sizing Data

Zone Name	Design Supply Airflow (CFM)	Minimum Supply Airflow (CFM)	Zone CFM/sqft	Reheat Coil Capacity (MBH)	Reheat Coil Water gpm @ 20.0 F	Zone Htg Unit Coil Capacity (MBH)	Zone Htg Unit Water gpm @ 20.0 F	Mixing Box Fan Airflow (CFM)
RDC #1 à #5	1477	1477	0.41	0.0	-	0.0	-	0

Zone Peak Sensible Loads

Zone Name	Zone Cooling Sensible (MBH)	Time of Peak Sensible Cooling Load	Zone Heating Load (MBH)	Zone Floor Area (sqft)
RDC #1 à #5	27.0	June 17:00	28.4	3562.5

Space Loads and Airflows

Zone Name / Space Name	Cooling Sensible (MBH)	Time of Peak Sensible Load	Air Flow (CFM)	Heating Load (MBH)	Floor Area (sqft)	Space CFM/sqft
RDC #1 à #5						
RDC #1 à #5	27.0	June 17:00	1477	28.4	3562.5	0.41

Air System Heat Balance Summary for 29 RDC #1 à #5 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

Table 1. System Loads

	DESIGN COOLING - JULY 17:00			DESIGN HEATING		
	OA DB / WB 85.8 F / 72.5 F			OA DB / WB -12.3 F / -13.2 F		
COMPONENT LOADS	Details	Sensible [BTU/hr]	Latent [BTU/hr]	Details	Sensible [BTU/hr]	Latent [BTU/hr]
Zone Conditioning	-	25319	1678	-	28869	0
Plenum Load	-	0	0	-	0	0
Return Fan Load	1477 CFM	0	-	1477 CFM	0	-
Ventilation Load	500 CFM	1996	7454	500 CFM	15464	0
Supply Fan Load	1477 CFM	0	-	1477 CFM	0	-
Zone Fan Coil Fans Load	-	0	-	-	0	-
>> Total System Loads	-	27315	9132	-	44333	0
Central Cooling Coil	-	27443	10430	-	0	0
Central Heating Coil	-	0	-	-	44375	-
>> Total Conditioning	-	27443	10430	-	44375	0
Key:	Positive values are cooling loads Negative values are heating loads			Positive values are heating loads Negative values are cooling loads		

Table 2. Zone Heat Balance Loads

	DESIGN COOLING - JULY 17:00			DESIGN HEATING		
	OA DB / WB 85.8 F / 72.5 F			OA DB / WB -12.3 F / -13.2 F		
Zone Heat Balance Component	Details	Sensible [BTU/hr]	Latent [BTU/hr]	Details	Sensible [BTU/hr]	Latent [BTU/hr]
Exterior Wall Convection	924 sqft	1849	-	924 sqft	1981	-
Roof Convection	0 sqft	0	-	0 sqft	0	-
Window Convection	130 sqft	1281	-	130 sqft	1276	-
Skylight Convection	0 sqft	0	-	0 sqft	0	-
Door Convection	232 sqft	2247	-	232 sqft	2262	-
Floor Convection	3562 sqft	6757	-	3562 sqft	2006	-
Interior Wall Convection	1496 sqft	2128	-	1496 sqft	607	-
Ceiling Convection	3562 sqft	9094	-	3562 sqft	3103	-
Overhead Lighting Convection	0 W	0	-	0 W	0	-
Task Lighting Convection	0 W	0	-	0 W	0	-
Electric Equipment Convection	0 W	0	-	0 W	0	-
People Convection	0	0	0	0	0	0
Infiltration	0 CFM	0	0	129 CFM	13450	0
Miscellaneous Equipment	-	0	0	-	0	0
Air Internal Energy Change	-	0	-	-	0	0
Safety Factor	15% / 15%	3503	0	15%	3703	0
>> Total Zone Loads	-	26858	0	-	28389	0
Key:	Positive values are cooling loads Negative values are heating loads			Positive values are heating loads Negative values are cooling loads		

Note 1: Surface convection line items show the combined effects of conductive heat gain to the surface and radiative heat gains absorbed at the surface which are then convected to room air.

Note 2: Lighting, equipment, and people line items include only the direct convective heat gain from the heat source to the room air. The radiative portion of the heat gain is first absorbed by surfaces in the room and then later convected from the surface to the air. Therefore the effect of the radiative portion of the heat gain is found in the surface convection line items.

Note 3: Solar heat gain is absorbed by surfaces in the room, re-radiated to other surfaces, and finally convected from the surfaces to room air. Therefore, the effect of solar heat gain is found in the surface convection line items.

System Psychrometrics for 29 RDC #1 à #5 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

DESIGN COOLING DAY AT JULY 17:00

TABLE 1: SYSTEM DATA

Component	Location	Dry-Bulb Temp (F)	Specific Humidity (lb/lb)	Airflow (CFM)	CO2 Level (ppm)	Sensible Heat (BTU/hr)	Latent Heat (BTU/hr)
Ventilation Air	Inlet	85.6	0.01418	500	400	1996	7454
Air-to-Air Energy Recovery	Outlet	78.8	0.01418	500	400	3791	0
Vent - Return Mixing	Outlet	76.3	0.01209	1477	400	-	-
Central Cooling Coil	Outlet	59.4	0.01065	1477	400	27443	10430
Central Heating Coil	Outlet	59.4	0.01065	1477	400	0	-
Supply Fan	Outlet	59.4	0.01065	1477	400	0	-
Cold Supply Duct	Outlet	59.4	0.01065	1477	400	-	-
Zone Air	-	75.0	0.01089	1477	400	25319	1678
Return Air	Outlet	75.0	0.01102	1477	400	-	-

Air Density x Heat Capacity x Conversion Factor: At sea level = 1.080; At site altitude = 1.074 BTU/(hr-CFM-F)

Air Density x Heat of Vaporization x Conversion Factor: At sea level = 4746.6; At site altitude = 4719.0 BTU/(hr-CFM)

Site Altitude = 161.0 ft

TABLE 2: ZONE DATA

Zone Name	Zone Sensible Load (BTU/hr)	T-stat Mode	Zone Cond (BTU/hr)	Zone Temp (F)	Zone Airflow (CFM)	CO2 Level (ppm)	Terminal Heating Coil (BTU/hr)	Zone Heating Unit (BTU/hr)
RDC #1 à #5	25306	Cooling	25320	75.0	1477	400	0	0

System Psychrometrics for 29 RDC #1 à #5 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

WINTER DESIGN HEATING

TABLE 1: SYSTEM DATA

Component	Location	Dry-Bulb Temp (F)	Specific Humidity (lb/lb)	Airflow (CFM)	CO2 Level (ppm)	Sensible Heat (BTU/hr)	Latent Heat (BTU/hr)
Ventilation Air	Inlet	-12.3	0.00018	500	400	-15464	0
Air-to-Air Energy Recovery	Outlet	41.2	0.00018	500	400	-28797	0
Vent - Return Mixing	Outlet	60.2	0.00018	1477	400	-	-
Central Cooling Coil	Outlet	60.2	0.00018	1477	400	0	0
Central Heating Coil	Outlet	88.2	0.00018	1477	400	44375	-
Supply Fan	Outlet	88.2	0.00018	1477	400	0	-
Cold Supply Duct	Outlet	88.2	0.00018	1477	400	-	-
Zone Air	-	70.0	0.00018	1477	400	-28869	0
Return Air	Outlet	70.0	0.00018	1477	400	-	-

Air Density x Heat Capacity x Conversion Factor: At sea level = 1.080; At site altitude = 1.074 BTU/(hr-CFM-F)

Air Density x Heat of Vaporization x Conversion Factor: At sea level = 4746.6; At site altitude = 4719.0 BTU/(hr-CFM)

Site Altitude = 161.0 ft

TABLE 2: ZONE DATA

Zone Name	Zone Sensible Load (BTU/hr)	T-stat Mode	Zone Cond (BTU/hr)	Zone Temp (F)	Zone Airflow (CFM)	CO2 Level (ppm)	Terminal Heating Coil (BTU/hr)	Zone Heating Unit (BTU/hr)
RDC #1 à #5	-28869	Heating	-28869	70.0	1477	400	0	0

Air System Sizing Summary for 31 RDC #10 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

Air System Information

Air System Name **31 RDC #10 REF**
Equipment Class **SPLT AHU**
Air System Type **SZCAV**

Number of zones **1**
Floor Area **780.6** sqft
Location **St-Anicet 1, QC, Canada**

Sizing Calculation Information

Calculation Months **Jan to Dec**
Sizing Data **Calculated**

Zone CFM Sizing **Sum of space airflow rates**
Space CFM Sizing **Individual peak space loads**

Central Cooling Coil Sizing Data

Total coil load **0.4** Tons
Total coil load **4.6** MBH
Sensible coil load **4.2** MBH
Coil CFM at peak load **458** CFM
Sum of peak zone CFM **458** CFM
Sensible heat ratio **0.914**
CFM/Ton **1185.7**
sqft/Ton **2021.9**
BTU/(hr sqft) **5.9**
Water flow @ 10.0 F rise **N/A**

Peak coil load occurs at **August 15:00**
OA DB / WB **87.0 / 72.8** F
Entering DB / WB **75.9 / 68.8** F
Leaving DB / WB **67.5 / 66.0** F
Resulting RH **72** %
Design supply temp. **58.0** F
Zone T-stat Check **1 of 1** OK
Max zone temperature deviation **0.0** F

Central Heating Coil Sizing Data

Max coil load **15.4** MBH
Coil CFM at Design Heating **458** CFM
Max coil CFM **458** CFM
Water flow @ 20.0 F drop **N/A**

Load occurs at **Design Heating**
BTU/(hr sqft) **19.7**
Ent. DB / Lvg DB **63.7 / 94.9** F

Supply Fan Sizing Data

Design CFM **458** CFM
Design CFM/sqft **0.59** CFM/sqft

Fan motor BHP **0.00** BHP
Fan motor kW **0.00** kW

Outdoor Ventilation Air Data

Design airflow CFM **100** CFM
CFM/sqft **0.13** CFM/sqft

CFM/person **0.00** CFM/person

Zone Sizing Summary for 31 RDC #10 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

Air System Information

Air System Name **31 RDC #10 REF**
Equipment Class **SPLT AHU**
Air System Type **SZCAV**

Number of zones **1**
Floor Area **780.6** sqft
Location **St-Anicet 1, QC, Canada**

Sizing Calculation Information

Calculation Months **Jan to Dec**
Sizing Data **Calculated**

Zone CFM Sizing **Sum of space airflow rates**
Space CFM Sizing **Individual peak space loads**

Zone Terminal Sizing Data

Zone Name	Design Supply Airflow (CFM)	Minimum Supply Airflow (CFM)	Zone CFM/sqft	Reheat Coil Capacity (MBH)	Reheat Coil Water gpm @ 20.0 F	Zone Htg Unit Coil Capacity (MBH)	Zone Htg Unit Water gpm @ 20.0 F	Mixing Box Fan Airflow (CFM)
RDC #10	458	458	0.59	0.0	-	0.0	-	0

Zone Peak Sensible Loads

Zone Name	Zone Cooling Sensible (MBH)	Time of Peak Sensible Cooling Load	Zone Heating Load (MBH)	Zone Floor Area (sqft)
RDC #10	3.6	August 15:00	12.3	780.6

Space Loads and Airflows

Zone Name / Space Name	Cooling Sensible (MBH)	Time of Peak Sensible Load	Air Flow (CFM)	Heating Load (MBH)	Floor Area (sqft)	Space CFM/sqft
RDC #10						
RDC #10	3.6	August 15:00	458	12.3	780.6	0.59

Air System Heat Balance Summary for 31 RDC #10 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

Table 1. System Loads

COMPONENT LOADS	DESIGN COOLING - AUGUST 15:00			DESIGN HEATING		
	OA DB / WB 87.0 F / 72.8 F			OA DB / WB -12.3 F / -13.2 F		
	Details	Sensible [BTU/hr]	Latent [BTU/hr]	Details	Sensible [BTU/hr]	Latent [BTU/hr]
Zone Conditioning	-	3769	3	-	12259	0
Plenum Load	-	0	0	-	0	0
Return Fan Load	458 CFM	0	-	458 CFM	0	-
Ventilation Load	100 CFM	448	377	100 CFM	3093	0
Supply Fan Load	458 CFM	0	-	458 CFM	0	-
Zone Fan Coil Fans Load	-	0	-	-	0	-
>> Total System Loads	-	4217	381	-	15352	0
Central Cooling Coil	-	4232	401	-	0	0
Central Heating Coil	-	0	-	-	15360	-
>> Total Conditioning	-	4232	401	-	15360	0
Key:	Positive values are cooling loads Negative values are heating loads			Positive values are heating loads Negative values are cooling loads		

Table 2. Zone Heat Balance Loads

Zone Heat Balance Component	DESIGN COOLING - AUGUST 15:00			DESIGN HEATING		
	OA DB / WB 87.0 F / 72.8 F			OA DB / WB -12.3 F / -13.2 F		
	Details	Sensible [BTU/hr]	Latent [BTU/hr]	Details	Sensible [BTU/hr]	Latent [BTU/hr]
Exterior Wall Convection	593 sqft	798	-	593 sqft	1438	-
Roof Convection	0 sqft	0	-	0 sqft	0	-
Window Convection	70 sqft	349	-	70 sqft	704	-
Skylight Convection	0 sqft	0	-	0 sqft	0	-
Door Convection	0 sqft	0	-	0 sqft	0	-
Floor Convection	781 sqft	639	-	781 sqft	526	-
Interior Wall Convection	663 sqft	472	-	663 sqft	319	-
Ceiling Convection	781 sqft	858	-	781 sqft	767	-
Overhead Lighting Convection	0 W	0	-	0 W	0	-
Task Lighting Convection	0 W	0	-	0 W	0	-
Electric Equipment Convection	0 W	0	-	0 W	0	-
People Convection	0	0	0	0	0	0
Infiltration	0 CFM	0	0	66 CFM	6933	0
Miscellaneous Equipment	-	0	0	-	0	0
Air Internal Energy Change	-	0	-	-	0	0
Safety Factor	15% / 15%	467	0	15%	1603	0
>> Total Zone Loads	-	3583	0	-	12288	0
Key:	Positive values are cooling loads Negative values are heating loads			Positive values are heating loads Negative values are cooling loads		

Note 1: Surface convection line items show the combined effects of conductive heat gain to the surface and radiative heat gains absorbed at the surface which are then convected to room air.

Note 2: Lighting, equipment, and people line items include only the direct convective heat gain from the heat source to the room air. The radiative portion of the heat gain is first absorbed by surfaces in the room and then later convected from the surface to the air. Therefore the effect of the radiative portion of the heat gain is found in the surface convection line items.

Note 3: Solar heat gain is absorbed by surfaces in the room, re-radiated to other surfaces, and finally convected from the surfaces to room air. Therefore, the effect of solar heat gain is found in the surface convection line items.

System Psychrometrics for 31 RDC #10 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

DESIGN COOLING DAY AT AUGUST 15:00

TABLE 1: SYSTEM DATA

Component	Location	Dry-Bulb Temp (F)	Specific Humidity (lb/lb)	Airflow (CFM)	CO2 Level (ppm)	Sensible Heat (BTU/hr)	Latent Heat (BTU/hr)
Ventilation Air	Inlet	86.9	0.01418	100	400	448	377
Air-to-Air Energy Recovery	Outlet	79.2	0.01418	100	400	854	0
Vent - Return Mixing	Outlet	75.9	0.01356	458	400	-	-
Central Cooling Coil	Outlet	67.5	0.01338	458	400	4232	401
Central Heating Coil	Outlet	67.5	0.01338	458	400	0	-
Supply Fan	Outlet	67.5	0.01338	458	400	0	-
Cold Supply Duct	Outlet	67.5	0.01338	458	400	-	-
Zone Air	-	75.0	0.01338	458	400	3769	3
Return Air	Outlet	75.0	0.01338	458	400	-	-

Air Density x Heat Capacity x Conversion Factor: At sea level = 1.080; At site altitude = 1.074 BTU/(hr-CFM-F)

Air Density x Heat of Vaporization x Conversion Factor: At sea level = 4746.6; At site altitude = 4719.0 BTU/(hr-CFM)

Site Altitude = 161.0 ft

TABLE 2: ZONE DATA

Zone Name	Zone Sensible Load (BTU/hr)	T-stat Mode	Zone Cond (BTU/hr)	Zone Temp (F)	Zone Airflow (CFM)	CO2 Level (ppm)	Terminal Heating Coil (BTU/hr)	Zone Heating Unit (BTU/hr)
RDC #10	3769	Cooling	3769	75.0	458	400	0	0

System Psychrometrics for 31 RDC #10 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

WINTER DESIGN HEATING

TABLE 1: SYSTEM DATA

Component	Location	Dry-Bulb Temp (F)	Specific Humidity (lb/lb)	Airflow (CFM)	CO2 Level (ppm)	Sensible Heat (BTU/hr)	Latent Heat (BTU/hr)
Ventilation Air	Inlet	-12.3	0.00018	100	400	-3093	0
Air-to-Air Energy Recovery	Outlet	41.2	0.00018	100	400	-5759	0
Vent - Return Mixing	Outlet	63.7	0.00018	458	400	-	-
Central Cooling Coil	Outlet	63.7	0.00018	458	400	0	0
Central Heating Coil	Outlet	94.9	0.00018	458	400	15360	-
Supply Fan	Outlet	94.9	0.00018	458	400	0	-
Cold Supply Duct	Outlet	94.9	0.00018	458	400	-	-
Zone Air	-	70.0	0.00018	458	400	-12259	0
Return Air	Outlet	70.0	0.00018	458	400	-	-

Air Density x Heat Capacity x Conversion Factor: At sea level = 1.080; At site altitude = 1.074 BTU/(hr-CFM-F)

Air Density x Heat of Vaporization x Conversion Factor: At sea level = 4746.6; At site altitude = 4719.0 BTU/(hr-CFM)

Site Altitude = 161.0 ft

TABLE 2: ZONE DATA

Zone Name	Zone Sensible Load (BTU/hr)	T-stat Mode	Zone Cond (BTU/hr)	Zone Temp (F)	Zone Airflow (CFM)	CO2 Level (ppm)	Terminal Heating Coil (BTU/hr)	Zone Heating Unit (BTU/hr)
RDC #10	-12259	Heating	-12259	70.0	458	400	0	0

Air System Sizing Summary for 33 RDC #6 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

Air System Information

Air System Name **33 RDC #6 REF**
Equipment Class **SPLT AHU**
Air System Type **SZCAV**

Number of zones **1**
Floor Area **672.0** sqft
Location **St-Anicet 1, QC, Canada**

Sizing Calculation Information

Calculation Months **Jan to Dec**
Sizing Data **Calculated**

Zone CFM Sizing **Sum of space airflow rates**
Space CFM Sizing **Individual peak space loads**

Central Cooling Coil Sizing Data

Total coil load **0.1** Tons
Total coil load **1.7** MBH
Sensible coil load **1.7** MBH
Coil CFM at peak load **227** CFM
Sum of peak zone CFM **227** CFM
Sensible heat ratio **0.952**
CFM/Ton **1561.3**
sqft/Ton **4623.3**
BTU/(hr sqft) **2.6**
Water flow @ 10.0 F rise **N/A**

Peak coil load occurs at **July 15:00**
OA DB / WB **87.0 / 72.8** F
Entering DB / WB **76.8 / 69.8** F
Leaving DB / WB **70.2 / 67.7** F
Resulting RH **75** %
Design supply temp. **58.0** F
Zone T-stat Check **1 of 1** OK
Max zone temperature deviation **0.0** F

Central Heating Coil Sizing Data

Max coil load **9.2** MBH
Coil CFM at Design Heating **227** CFM
Max coil CFM **227** CFM
Water flow @ 20.0 F drop **N/A**

Load occurs at **Design Heating**
BTU/(hr sqft) **13.7**
Ent. DB / Lvg DB **57.3 / 94.9** F

Supply Fan Sizing Data

Design CFM **227** CFM
Design CFM/sqft **0.34** CFM/sqft

Fan motor BHP **0.00** BHP
Fan motor kW **0.00** kW

Outdoor Ventilation Air Data

Design airflow CFM **100** CFM
CFM/sqft **0.15** CFM/sqft

CFM/person **0.00** CFM/person

Zone Sizing Summary for 33 RDC #6 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

Air System Information

Air System Name **33 RDC #6 REF**
 Equipment Class **SPLT AHU**
 Air System Type **SZCAV**

Number of zones **1**
 Floor Area **672.0** sqft
 Location **St-Anicet 1, QC, Canada**

Sizing Calculation Information

Calculation Months **Jan to Dec**
 Sizing Data **Calculated**

Zone CFM Sizing **Sum of space airflow rates**
 Space CFM Sizing **Individual peak space loads**

Zone Terminal Sizing Data

Zone Name	Design Supply Airflow (CFM)	Minimum Supply Airflow (CFM)	Zone CFM/sqft	Reheat Coil Capacity (MBH)	Reheat Coil Water gpm @ 20.0 F	Zone Htg Unit Coil Capacity (MBH)	Zone Htg Unit Water gpm @ 20.0 F	Mixing Box Fan Airflow (CFM)
RDC #6	227	227	0.34	0.0	-	0.0	-	0

Zone Peak Sensible Loads

Zone Name	Zone Cooling Sensible (MBH)	Time of Peak Sensible Cooling Load	Zone Heating Load (MBH)	Zone Floor Area (sqft)
RDC #6	1.2	June 8:00	6.1	672.0

Space Loads and Airflows

Zone Name / Space Name	Cooling Sensible (MBH)	Time of Peak Sensible Load	Air Flow (CFM)	Heating Load (MBH)	Floor Area (sqft)	Space CFM/sqft
RDC #6						
RDC #6	1.2	June 8:00	227	6.1	672.0	0.34

Air System Heat Balance Summary for 33 RDC #6 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

Table 1. System Loads

COMPONENT LOADS	DESIGN COOLING - JULY 15:00			DESIGN HEATING		
	OA DB / WB 87.0 F / 72.8 F			OA DB / WB -12.3 F / -13.2 F		
	Details	Sensible [BTU/hr]	Latent [BTU/hr]	Details	Sensible [BTU/hr]	Latent [BTU/hr]
Zone Conditioning	-	1200	-5	-	6085	0
Plenum Load	-	0	0	-	0	0
Return Fan Load	227 CFM	0	-	227 CFM	0	-
Ventilation Load	100 CFM	448	88	100 CFM	3093	0
Supply Fan Load	227 CFM	0	-	227 CFM	0	-
Zone Fan Coil Fans Load	-	0	-	-	0	-
>> Total System Loads	-	1648	82	-	9178	0
Central Cooling Coil	-	1661	83	-	0	0
Central Heating Coil	-	0	-	-	9186	-
>> Total Conditioning	-	1661	83	-	9186	0
Key:	Positive values are cooling loads Negative values are heating loads			Positive values are heating loads Negative values are cooling loads		

Table 2. Zone Heat Balance Loads

Zone Heat Balance Component	DESIGN COOLING - JULY 15:00			DESIGN HEATING		
	OA DB / WB 87.0 F / 72.8 F			OA DB / WB -12.3 F / -13.2 F		
	Details	Sensible [BTU/hr]	Latent [BTU/hr]	Details	Sensible [BTU/hr]	Latent [BTU/hr]
Exterior Wall Convection	254 sqft	134	-	254 sqft	535	-
Roof Convection	0 sqft	0	-	0 sqft	0	-
Window Convection	50 sqft	89	-	50 sqft	488	-
Skylight Convection	0 sqft	0	-	0 sqft	0	-
Door Convection	0 sqft	0	-	0 sqft	0	-
Floor Convection	672 sqft	239	-	672 sqft	331	-
Interior Wall Convection	659 sqft	204	-	659 sqft	241	-
Ceiling Convection	672 sqft	145	-	672 sqft	525	-
Overhead Lighting Convection	0 W	0	-	0 W	0	-
Task Lighting Convection	0 W	0	-	0 W	0	-
Electric Equipment Convection	0 W	0	-	0 W	0	-
People Convection	0	0	0	0	0	0
Infiltration	0 CFM	0	0	30 CFM	3177	0
Miscellaneous Equipment	-	0	0	-	0	0
Air Internal Energy Change	-	0		-	0	0
Safety Factor	15% / 15%	122	0	15%	795	0
>> Total Zone Loads	-	932	0	-	6092	0
Key:	Positive values are cooling loads Negative values are heating loads			Positive values are heating loads Negative values are cooling loads		

Note 1: Surface convection line items show the combined effects of conductive heat gain to the surface and radiative heat gains absorbed at the surface which are then convected to room air.

Note 2: Lighting, equipment, and people line items include only the direct convective heat gain from the heat source to the room air. The radiative portion of the heat gain is first absorbed by surfaces in the room and then later convected from the surface to the air. Therefore the effect of the radiative portion of the heat gain is found in the surface convection line items.

Note 3: Solar heat gain is absorbed by surfaces in the room, re-radiated to other surfaces, and finally convected from the surfaces to room air. Therefore, the effect of solar heat gain is found in the surface convection line items.

System Psychrometrics for 33 RDC #6 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

DESIGN COOLING DAY AT JULY 15:00

TABLE 1: SYSTEM DATA

Component	Location	Dry-Bulb Temp (F)	Specific Humidity (lb/lb)	Airflow (CFM)	CO2 Level (ppm)	Sensible Heat (BTU/hr)	Latent Heat (BTU/hr)
Ventilation Air	Inlet	86.9	0.01418	100	400	448	88
Air-to-Air Energy Recovery	Outlet	79.2	0.01418	100	400	855	0
Vent - Return Mixing	Outlet	76.8	0.01408	227	400	-	-
Central Cooling Coil	Outlet	70.2	0.01400	227	400	1661	83
Central Heating Coil	Outlet	70.2	0.01400	227	400	0	-
Supply Fan	Outlet	70.2	0.01400	227	400	0	-
Cold Supply Duct	Outlet	70.2	0.01400	227	400	-	-
Zone Air	-	75.0	0.01400	227	400	1200	-5
Return Air	Outlet	75.0	0.01400	227	400	-	-

Air Density x Heat Capacity x Conversion Factor: At sea level = 1.080; At site altitude = 1.074 BTU/(hr-CFM-F)

Air Density x Heat of Vaporization x Conversion Factor: At sea level = 4746.6; At site altitude = 4719.0 BTU/(hr-CFM)

Site Altitude = 161.0 ft

TABLE 2: ZONE DATA

Zone Name	Zone Sensible Load (BTU/hr)	T-stat Mode	Zone Cond (BTU/hr)	Zone Temp (F)	Zone Airflow (CFM)	CO2 Level (ppm)	Terminal Heating Coil (BTU/hr)	Zone Heating Unit (BTU/hr)
RDC #6	1200	Cooling	1200	75.0	227	400	0	0

System Psychrometrics for 33 RDC #6 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

WINTER DESIGN HEATING

TABLE 1: SYSTEM DATA

Component	Location	Dry-Bulb Temp (F)	Specific Humidity (lb/lb)	Airflow (CFM)	CO2 Level (ppm)	Sensible Heat (BTU/hr)	Latent Heat (BTU/hr)
Ventilation Air	Inlet	-12.3	0.00018	100	400	-3093	0
Air-to-Air Energy Recovery	Outlet	41.2	0.00018	100	400	-5759	0
Vent - Return Mixing	Outlet	57.3	0.00018	227	400	-	-
Central Cooling Coil	Outlet	57.3	0.00018	227	400	0	0
Central Heating Coil	Outlet	94.9	0.00018	227	400	9186	-
Supply Fan	Outlet	94.9	0.00018	227	400	0	-
Cold Supply Duct	Outlet	94.9	0.00018	227	400	-	-
Zone Air	-	70.0	0.00018	227	400	-6085	0
Return Air	Outlet	70.0	0.00018	227	400	-	-

Air Density x Heat Capacity x Conversion Factor: At sea level = 1.080; At site altitude = 1.074 BTU/(hr-CFM-F)

Air Density x Heat of Vaporization x Conversion Factor: At sea level = 4746.6; At site altitude = 4719.0 BTU/(hr-CFM)

Site Altitude = 161.0 ft

TABLE 2: ZONE DATA

Zone Name	Zone Sensible Load (BTU/hr)	T-stat Mode	Zone Cond (BTU/hr)	Zone Temp (F)	Zone Airflow (CFM)	CO2 Level (ppm)	Terminal Heating Coil (BTU/hr)	Zone Heating Unit (BTU/hr)
RDC #6	-6085	Heating	-6085	70.0	227	400	0	0

Air System Sizing Summary for 35 RDC #7 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

Air System Information

Air System Name **35 RDC #7 REF**
Equipment Class **SPLT AHU**
Air System Type **SZCAV**

Number of zones **1**
Floor Area **901.2** sqft
Location **St-Anicet 1, QC, Canada**

Sizing Calculation Information

Calculation Months **Jan to Dec**
Sizing Data **Calculated**

Zone CFM Sizing **Sum of space airflow rates**
Space CFM Sizing **Individual peak space loads**

Central Cooling Coil Sizing Data

Total coil load **0.6** Tons
Total coil load **6.7** MBH
Sensible coil load **5.6** MBH
Coil CFM at peak load **445** CFM
Sum of peak zone CFM **445** CFM
Sensible heat ratio **0.843**
CFM/Ton **797.9**
sqft/Ton **1617.4**
BTU/(hr sqft) **7.4**
Water flow @ 10.0 F rise **N/A**

Peak coil load occurs at **August 10:00**
OA DB / WB **75.9 / 69.6** F
Entering DB / WB **75.1 / 67.1** F
Leaving DB / WB **63.6 / 62.6** F
Resulting RH **64** %
Design supply temp. **58.0** F
Zone T-stat Check **1 of 1** OK
Max zone temperature deviation **0.0** F

Central Heating Coil Sizing Data

Max coil load **15.0** MBH
Coil CFM at Design Heating **445** CFM
Max coil CFM **445** CFM
Water flow @ 20.0 F drop **N/A**

Load occurs at **Design Heating**
BTU/(hr sqft) **16.6**
Ent. DB / Lvg DB **63.5 / 94.9** F

Supply Fan Sizing Data

Design CFM **445** CFM
Design CFM/sqft **0.49** CFM/sqft

Fan motor BHP **0.00** BHP
Fan motor kW **0.00** kW

Outdoor Ventilation Air Data

Design airflow CFM **100** CFM
CFM/sqft **0.11** CFM/sqft

CFM/person **0.00** CFM/person

Zone Sizing Summary for 35 RDC #7 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

Air System Information

Air System Name **35 RDC #7 REF**
 Equipment Class **SPLT AHU**
 Air System Type **SZCAV**

Number of zones **1**
 Floor Area **901.2** sqft
 Location **St-Anicet 1, QC, Canada**

Sizing Calculation Information

Calculation Months **Jan to Dec**
 Sizing Data **Calculated**

Zone CFM Sizing **Sum of space airflow rates**
 Space CFM Sizing **Individual peak space loads**

Zone Terminal Sizing Data

Zone Name	Design Supply Airflow (CFM)	Minimum Supply Airflow (CFM)	Zone CFM/sqft	Reheat Coil Capacity (MBH)	Reheat Coil Water gpm @ 20.0 F	Zone Htg Unit Coil Capacity (MBH)	Zone Htg Unit Water gpm @ 20.0 F	Mixing Box Fan Airflow (CFM)
RDC #7	445	445	0.49	0.0	-	0.0	-	0

Zone Peak Sensible Loads

Zone Name	Zone Cooling Sensible (MBH)	Time of Peak Sensible Cooling Load	Zone Heating Load (MBH)	Zone Floor Area (sqft)
RDC #7	5.9	July 9:00	11.9	901.2

Space Loads and Airflows

Zone Name / Space Name	Cooling Sensible (MBH)	Time of Peak Sensible Load	Air Flow (CFM)	Heating Load (MBH)	Floor Area (sqft)	Space CFM/sqft
RDC #7						
RDC #7	5.9	July 9:00	445	11.9	901.2	0.49

Air System Heat Balance Summary for 35 RDC #7 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

Table 1. System Loads

COMPONENT LOADS	DESIGN COOLING - AUGUST 10:00			DESIGN HEATING		
	OA DB / WB 75.9 F / 69.6 F			OA DB / WB -12.3 F / -13.2 F		
	Details	Sensible [BTU/hr]	Latent [BTU/hr]	Details	Sensible [BTU/hr]	Latent [BTU/hr]
Zone Conditioning	-	5593	-11	-	11899	0
Plenum Load	-	0	0	-	0	0
Return Fan Load	445 CFM	0	-	445 CFM	0	-
Ventilation Load	100 CFM	38	1022	100 CFM	3093	0
Supply Fan Load	445 CFM	0	-	445 CFM	0	-
Zone Fan Coil Fans Load	-	0	-	-	0	-
>> Total System Loads	-	5631	1011	-	14992	0
Central Cooling Coil	-	5637	1049	-	0	0
Central Heating Coil	-	0	-	-	15001	-
>> Total Conditioning	-	5637	1049	-	15001	0
Key:	Positive values are cooling loads Negative values are heating loads			Positive values are heating loads Negative values are cooling loads		

Table 2. Zone Heat Balance Loads

Zone Heat Balance Component	DESIGN COOLING - AUGUST 10:00			DESIGN HEATING		
	OA DB / WB 75.9 F / 69.6 F			OA DB / WB -12.3 F / -13.2 F		
	Details	Sensible [BTU/hr]	Latent [BTU/hr]	Details	Sensible [BTU/hr]	Latent [BTU/hr]
Exterior Wall Convection	461 sqft	611	-	461 sqft	1139	-
Roof Convection	0 sqft	0	-	0 sqft	0	-
Window Convection	70 sqft	271	-	70 sqft	697	-
Skylight Convection	0 sqft	0	-	0 sqft	0	-
Door Convection	48 sqft	430	-	48 sqft	466	-
Floor Convection	901 sqft	1252	-	901 sqft	721	-
Interior Wall Convection	563 sqft	661	-	563 sqft	306	-
Ceiling Convection	901 sqft	1673	-	901 sqft	992	-
Overhead Lighting Convection	0 W	0	-	0 W	0	-
Task Lighting Convection	0 W	0	-	0 W	0	-
Electric Equipment Convection	0 W	0	-	0 W	0	-
People Convection	0	0	0	0	0	0
Infiltration	0 CFM	0	0	58 CFM	6055	0
Miscellaneous Equipment	-	0	0	-	0	0
Air Internal Energy Change	-	0		-	0	0
Safety Factor	15% / 15%	735	0	15%	1557	0
>> Total Zone Loads	-	5633	0	-	11934	0
Key:	Positive values are cooling loads Negative values are heating loads			Positive values are heating loads Negative values are cooling loads		

Note 1: Surface convection line items show the combined effects of conductive heat gain to the surface and radiative heat gains absorbed at the surface which are then convected to room air.

Note 2: Lighting, equipment, and people line items include only the direct convective heat gain from the heat source to the room air. The radiative portion of the heat gain is first absorbed by surfaces in the room and then later convected from the surface to the air. Therefore the effect of the radiative portion of the heat gain is found in the surface convection line items.

Note 3: Solar heat gain is absorbed by surfaces in the room, re-radiated to other surfaces, and finally convected from the surfaces to room air. Therefore, the effect of solar heat gain is found in the surface convection line items.

System Psychrometrics for 35 RDC #7 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

DESIGN COOLING DAY AT AUGUST 10:00

TABLE 1: SYSTEM DATA

Component	Location	Dry-Bulb Temp (F)	Specific Humidity (lb/lb)	Airflow (CFM)	CO2 Level (ppm)	Sensible Heat (BTU/hr)	Latent Heat (BTU/hr)
Ventilation Air	Inlet	76.1	0.01416	100	400	38	1022
Air-to-Air Energy Recovery	Outlet	75.4	0.01416	100	400	86	0
Vent - Return Mixing	Outlet	75.1	0.01249	445	400	-	-
Central Cooling Coil	Outlet	63.6	0.01200	445	400	5637	1049
Central Heating Coil	Outlet	63.6	0.01200	445	400	0	-
Supply Fan	Outlet	63.6	0.01200	445	400	0	-
Cold Supply Duct	Outlet	63.6	0.01200	445	400	-	-
Zone Air	-	75.0	0.01200	445	400	5593	-11
Return Air	Outlet	75.0	0.01200	445	400	-	-

Air Density x Heat Capacity x Conversion Factor: At sea level = 1.080; At site altitude = 1.074 BTU/(hr-CFM-F)

Air Density x Heat of Vaporization x Conversion Factor: At sea level = 4746.6; At site altitude = 4719.0 BTU/(hr-CFM)

Site Altitude = 161.0 ft

TABLE 2: ZONE DATA

Zone Name	Zone Sensible Load (BTU/hr)	T-stat Mode	Zone Cond (BTU/hr)	Zone Temp (F)	Zone Airflow (CFM)	CO2 Level (ppm)	Terminal Heating Coil (BTU/hr)	Zone Heating Unit (BTU/hr)
RDC #7	5592	Cooling	5593	75.0	445	400	0	0

System Psychrometrics for 35 RDC #7 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

WINTER DESIGN HEATING

TABLE 1: SYSTEM DATA

Component	Location	Dry-Bulb Temp (F)	Specific Humidity (lb/lb)	Airflow (CFM)	CO2 Level (ppm)	Sensible Heat (BTU/hr)	Latent Heat (BTU/hr)
Ventilation Air	Inlet	-12.3	0.00018	100	400	-3093	0
Air-to-Air Energy Recovery	Outlet	41.2	0.00018	100	400	-5759	0
Vent - Return Mixing	Outlet	63.5	0.00018	445	400	-	-
Central Cooling Coil	Outlet	63.5	0.00018	445	400	0	0
Central Heating Coil	Outlet	94.9	0.00018	445	400	15001	-
Supply Fan	Outlet	94.9	0.00018	445	400	0	-
Cold Supply Duct	Outlet	94.9	0.00018	445	400	-	-
Zone Air	-	70.0	0.00018	445	400	-11899	0
Return Air	Outlet	70.0	0.00018	445	400	-	-

Air Density x Heat Capacity x Conversion Factor: At sea level = 1.080; At site altitude = 1.074 BTU/(hr-CFM-F)

Air Density x Heat of Vaporization x Conversion Factor: At sea level = 4746.6; At site altitude = 4719.0 BTU/(hr-CFM)

Site Altitude = 161.0 ft

TABLE 2: ZONE DATA

Zone Name	Zone Sensible Load (BTU/hr)	T-stat Mode	Zone Cond (BTU/hr)	Zone Temp (F)	Zone Airflow (CFM)	CO2 Level (ppm)	Terminal Heating Coil (BTU/hr)	Zone Heating Unit (BTU/hr)
RDC #7	-11899	Heating	-11899	70.0	445	400	0	0

Air System Sizing Summary for 37 RDC #8 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

Air System Information

Air System Name **37 RDC #8 REF**
Equipment Class **SPLT AHU**
Air System Type **SZCAV**

Number of zones **1**
Floor Area **672.7** sqft
Location **St-Anicet 1, QC, Canada**

Sizing Calculation Information

Calculation Months **Jan to Dec**
Sizing Data **Calculated**

Zone CFM Sizing **Sum of space airflow rates**
Space CFM Sizing **Individual peak space loads**

Central Cooling Coil Sizing Data

Total coil load **0.6** Tons
Total coil load **6.7** MBH
Sensible coil load **4.6** MBH
Coil CFM at peak load **284** CFM
Sum of peak zone CFM **284** CFM
Sensible heat ratio **0.695**
CFM/Ton **510.8**
sqft/Ton **1210.7**
BTU/(hr sqft) **9.9**
Water flow @ 10.0 F rise **N/A**

Peak coil load occurs at **August 9:00**
OA DB / WB **72.1 / 68.4** F
Entering DB / WB **74.1 / 66.2** F
Leaving DB / WB **59.2 / 58.8** F
Resulting RH **58** %
Design supply temp. **58.0** F
Zone T-stat Check **1 of 1** OK
Max zone temperature deviation **0.0** F

Central Heating Coil Sizing Data

Max coil load **8.3** MBH
Coil CFM at Design Heating **284** CFM
Max coil CFM **284** CFM
Water flow @ 20.0 F drop **N/A**

Load occurs at **Design Heating**
BTU/(hr sqft) **12.4**
Ent. DB / Lvg DB **59.9 / 87.1** F

Supply Fan Sizing Data

Design CFM **284** CFM
Design CFM/sqft **0.42** CFM/sqft

Fan motor BHP **0.00** BHP
Fan motor kW **0.00** kW

Outdoor Ventilation Air Data

Design airflow CFM **100** CFM
CFM/sqft **0.15** CFM/sqft

CFM/person **0.00** CFM/person

Zone Sizing Summary for 37 RDC #8 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

Air System Information

Air System Name **37 RDC #8 REF**
 Equipment Class **SPLT AHU**
 Air System Type **SZCAV**

Number of zones **1**
 Floor Area **672.7** sqft
 Location **St-Anicet 1, QC, Canada**

Sizing Calculation Information

Calculation Months **Jan to Dec**
 Sizing Data **Calculated**

Zone CFM Sizing **Sum of space airflow rates**
 Space CFM Sizing **Individual peak space loads**

Zone Terminal Sizing Data

Zone Name	Design Supply Airflow (CFM)	Minimum Supply Airflow (CFM)	Zone CFM/sqft	Reheat Coil Capacity (MBH)	Reheat Coil Water gpm @ 20.0 F	Zone Htg Unit Coil Capacity (MBH)	Zone Htg Unit Water gpm @ 20.0 F	Mixing Box Fan Airflow (CFM)
RDC #8	284	284	0.42	0.0	-	0.0	-	0

Zone Peak Sensible Loads

Zone Name	Zone Cooling Sensible (MBH)	Time of Peak Sensible Cooling Load	Zone Heating Load (MBH)	Zone Floor Area (sqft)
RDC #8	5.2	August 9:00	5.1	672.7

Space Loads and Airflows

Zone Name / Space Name	Cooling Sensible (MBH)	Time of Peak Sensible Load	Air Flow (CFM)	Heating Load (MBH)	Floor Area (sqft)	Space CFM/sqft
RDC #8						
RDC #8	5.2	August 9:00	284	5.1	672.7	0.42

Air System Heat Balance Summary for 37 RDC #8 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

Table 1. System Loads

COMPONENT LOADS	DESIGN COOLING - AUGUST 9:00			DESIGN HEATING		
	OA DB / WB 72.1 F / 68.4 F			OA DB / WB -12.3 F / -13.2 F		
	Details	Sensible [BTU/hr]	Latent [BTU/hr]	Details	Sensible [BTU/hr]	Latent [BTU/hr]
Zone Conditioning	-	4912	255	-	5228	0
Plenum Load	-	0	0	-	0	0
Return Fan Load	284 CFM	0	-	284 CFM	0	-
Ventilation Load	100 CFM	-278	1562	100 CFM	3093	0
Supply Fan Load	284 CFM	0	-	284 CFM	0	-
Zone Fan Coil Fans Load	-	0	-	-	0	-
>> Total System Loads	-	4633	1817	-	8321	0
Central Cooling Coil	-	4636	2031	-	0	0
Central Heating Coil	-	0	-	-	8330	-
>> Total Conditioning	-	4636	2031	-	8330	0
Key:	Positive values are cooling loads Negative values are heating loads			Positive values are heating loads Negative values are cooling loads		

Table 2. Zone Heat Balance Loads

Zone Heat Balance Component	DESIGN COOLING - AUGUST 9:00			DESIGN HEATING		
	OA DB / WB 72.1 F / 68.4 F			OA DB / WB -12.3 F / -13.2 F		
	Details	Sensible [BTU/hr]	Latent [BTU/hr]	Details	Sensible [BTU/hr]	Latent [BTU/hr]
Exterior Wall Convection	161 sqft	207	-	161 sqft	334	-
Roof Convection	0 sqft	0	-	0 sqft	0	-
Window Convection	20 sqft	191	-	20 sqft	191	-
Skylight Convection	0 sqft	0	-	0 sqft	0	-
Door Convection	48 sqft	456	-	48 sqft	453	-
Floor Convection	673 sqft	1229	-	673 sqft	323	-
Interior Wall Convection	669 sqft	917	-	669 sqft	249	-
Ceiling Convection	673 sqft	1504	-	673 sqft	522	-
Overhead Lighting Convection	0 W	0	-	0 W	0	-
Task Lighting Convection	0 W	0	-	0 W	0	-
Electric Equipment Convection	0 W	0	-	0 W	0	-
People Convection	0	0	0	0	0	0
Infiltration	0 CFM	0	0	23 CFM	2386	0
Miscellaneous Equipment	-	0	0	-	0	0
Air Internal Energy Change	-	0		-	0	0
Safety Factor	15% / 15%	676	0	15%	668	0
>> Total Zone Loads	-	5180	0	-	5125	0
Key:	Positive values are cooling loads Negative values are heating loads			Positive values are heating loads Negative values are cooling loads		

Note 1: Surface convection line items show the combined effects of conductive heat gain to the surface and radiative heat gains absorbed at the surface which are then convected to room air.

Note 2: Lighting, equipment, and people line items include only the direct convective heat gain from the heat source to the room air. The radiative portion of the heat gain is first absorbed by surfaces in the room and then later convected from the surface to the air. Therefore the effect of the radiative portion of the heat gain is found in the surface convection line items.

Note 3: Solar heat gain is absorbed by surfaces in the room, re-radiated to other surfaces, and finally convected from the surfaces to room air. Therefore, the effect of solar heat gain is found in the surface convection line items.

System Psychrometrics for 37 RDC #8 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

DESIGN COOLING DAY AT AUGUST 9:00

TABLE 1: SYSTEM DATA

Component	Location	Dry-Bulb Temp (F)	Specific Humidity (lb/lb)	Airflow (CFM)	CO2 Level (ppm)	Sensible Heat (BTU/hr)	Latent Heat (BTU/hr)
Ventilation Air	Inlet	72.4	0.01416	100	400	-278	1562
Air-to-Air Energy Recovery	Outlet	72.4	0.01416	100	400	0	0
Vent - Return Mixing	Outlet	74.1	0.01201	284	400	-	-
Central Cooling Coil	Outlet	59.2	0.01054	284	400	4636	2031
Central Heating Coil	Outlet	59.2	0.01054	284	400	0	-
Supply Fan	Outlet	59.2	0.01054	284	400	0	-
Cold Supply Duct	Outlet	59.2	0.01054	284	400	-	-
Zone Air	-	75.0	0.01073	284	400	4912	255
Return Air	Outlet	75.0	0.01085	284	400	-	-

Air Density x Heat Capacity x Conversion Factor: At sea level = 1.080; At site altitude = 1.074 BTU/(hr-CFM-F)

Air Density x Heat of Vaporization x Conversion Factor: At sea level = 4746.6; At site altitude = 4719.0 BTU/(hr-CFM)

Site Altitude = 161.0 ft

TABLE 2: ZONE DATA

Zone Name	Zone Sensible Load (BTU/hr)	T-stat Mode	Zone Cond (BTU/hr)	Zone Temp (F)	Zone Airflow (CFM)	CO2 Level (ppm)	Terminal Heating Coil (BTU/hr)	Zone Heating Unit (BTU/hr)
RDC #8	4910	Cooling	4912	75.0	284	400	0	0

System Psychrometrics for 37 RDC #8 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

WINTER DESIGN HEATING

TABLE 1: SYSTEM DATA

Component	Location	Dry-Bulb Temp (F)	Specific Humidity (lb/lb)	Airflow (CFM)	CO2 Level (ppm)	Sensible Heat (BTU/hr)	Latent Heat (BTU/hr)
Ventilation Air	Inlet	-12.3	0.00018	100	400	-3093	0
Air-to-Air Energy Recovery	Outlet	41.2	0.00018	100	400	-5759	0
Vent - Return Mixing	Outlet	59.9	0.00018	284	400	-	-
Central Cooling Coil	Outlet	59.9	0.00018	284	400	0	0
Central Heating Coil	Outlet	87.1	0.00018	284	400	8330	-
Supply Fan	Outlet	87.1	0.00018	284	400	0	-
Cold Supply Duct	Outlet	87.1	0.00018	284	400	-	-
Zone Air	-	70.0	0.00018	284	400	-5228	0
Return Air	Outlet	70.0	0.00018	284	400	-	-

Air Density x Heat Capacity x Conversion Factor: At sea level = 1.080; At site altitude = 1.074 BTU/(hr-CFM-F)

Air Density x Heat of Vaporization x Conversion Factor: At sea level = 4746.6; At site altitude = 4719.0 BTU/(hr-CFM)

Site Altitude = 161.0 ft

TABLE 2: ZONE DATA

Zone Name	Zone Sensible Load (BTU/hr)	T-stat Mode	Zone Cond (BTU/hr)	Zone Temp (F)	Zone Airflow (CFM)	CO2 Level (ppm)	Terminal Heating Coil (BTU/hr)	Zone Heating Unit (BTU/hr)
RDC #8	-5228	Heating	-5228	70.0	284	400	0	0

Air System Sizing Summary for 39 RDC #9 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

Air System Information

Air System Name **39 RDC #9 REF**
Equipment Class **SPLT AHU**
Air System Type **SZCAV**

Number of zones **1**
Floor Area **1069.0** sqft
Location **St-Anicet 1, QC, Canada**

Sizing Calculation Information

Calculation Months **Jan to Dec**
Sizing Data **Calculated**

Zone CFM Sizing **Sum of space airflow rates**
Space CFM Sizing **Individual peak space loads**

Central Cooling Coil Sizing Data

Total coil load **0.8** Tons
Total coil load **9.3** MBH
Sensible coil load **7.4** MBH
Coil CFM at peak load **531** CFM
Sum of peak zone CFM **531** CFM
Sensible heat ratio **0.801**
CFM/Ton **687.5**
sqft/Ton **1383.6**
BTU/(hr sqft) **8.7**
Water flow @ 10.0 F rise **N/A**

Peak coil load occurs at **August 9:00**
OA DB / WB **72.1 / 68.4** F
Entering DB / WB **74.5 / 66.5** F
Leaving DB / WB **61.8 / 61.1** F
Resulting RH **62** %
Design supply temp. **58.0** F
Zone T-stat Check **1 of 1** OK
Max zone temperature deviation **0.0** F

Central Heating Coil Sizing Data

Max coil load **17.3** MBH
Coil CFM at Design Heating **531** CFM
Max coil CFM **531** CFM
Water flow @ 20.0 F drop **N/A**

Load occurs at **Design Heating**
BTU/(hr sqft) **16.2**
Ent. DB / Lvg DB **64.6 / 94.9** F

Supply Fan Sizing Data

Design CFM **531** CFM
Design CFM/sqft **0.50** CFM/sqft

Fan motor BHP **0.00** BHP
Fan motor kW **0.00** kW

Outdoor Ventilation Air Data

Design airflow CFM **100** CFM
CFM/sqft **0.09** CFM/sqft

CFM/person **0.00** CFM/person

Zone Sizing Summary for 39 RDC #9 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

Air System Information

Air System Name **39 RDC #9 REF**
 Equipment Class **SPLT AHU**
 Air System Type **SZCAV**

Number of zones **1**
 Floor Area **1069.0** sqft
 Location **St-Anicet 1, QC, Canada**

Sizing Calculation Information

Calculation Months **Jan to Dec**
 Sizing Data **Calculated**

Zone CFM Sizing **Sum of space airflow rates**
 Space CFM Sizing **Individual peak space loads**

Zone Terminal Sizing Data

Zone Name	Design Supply Airflow (CFM)	Minimum Supply Airflow (CFM)	Zone CFM/sqft	Reheat Coil Capacity (MBH)	Reheat Coil Water gpm @ 20.0 F	Zone Htg Unit Coil Capacity (MBH)	Zone Htg Unit Water gpm @ 20.0 F	Mixing Box Fan Airflow (CFM)
RDC #9	531	531	0.50	0.0	-	0.0	-	0

Zone Peak Sensible Loads

Zone Name	Zone Cooling Sensible (MBH)	Time of Peak Sensible Cooling Load	Zone Heating Load (MBH)	Zone Floor Area (sqft)
RDC #9	8.2	August 10:00	14.3	1069.0

Space Loads and Airflows

Zone Name / Space Name	Cooling Sensible (MBH)	Time of Peak Sensible Load	Air Flow (CFM)	Heating Load (MBH)	Floor Area (sqft)	Space CFM/sqft
RDC #9						
RDC #9	8.2	August 10:00	531	14.3	1069.0	0.50

Air System Heat Balance Summary for 39 RDC #9 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

Table 1. System Loads

COMPONENT LOADS	DESIGN COOLING - AUGUST 9:00			DESIGN HEATING		
	OA DB / WB 72.1 F / 68.4 F			OA DB / WB -12.3 F / -13.2 F		
	Details	Sensible [BTU/hr]	Latent [BTU/hr]	Details	Sensible [BTU/hr]	Latent [BTU/hr]
Zone Conditioning	-	7704	362	-	14212	0
Plenum Load	-	0	0	-	0	0
Return Fan Load	531 CFM	0	-	531 CFM	0	-
Ventilation Load	100 CFM	-279	1175	100 CFM	3093	0
Supply Fan Load	531 CFM	0	-	531 CFM	0	-
Zone Fan Coil Fans Load	-	0	-	-	0	-
>> Total System Loads	-	7425	1537	-	17305	0
Central Cooling Coil	-	7424	1847	-	0	0
Central Heating Coil	-	0	-	-	17313	-
>> Total Conditioning	-	7424	1847	-	17313	0
Key:	Positive values are cooling loads Negative values are heating loads			Positive values are heating loads Negative values are cooling loads		

Table 2. Zone Heat Balance Loads

Zone Heat Balance Component	DESIGN COOLING - AUGUST 9:00			DESIGN HEATING		
	OA DB / WB 72.1 F / 68.4 F			OA DB / WB -12.3 F / -13.2 F		
	Details	Sensible [BTU/hr]	Latent [BTU/hr]	Details	Sensible [BTU/hr]	Latent [BTU/hr]
Exterior Wall Convection	435 sqft	589	-	435 sqft	1029	-
Roof Convection	0 sqft	0	-	0 sqft	0	-
Window Convection	60 sqft	573	-	60 sqft	577	-
Skylight Convection	0 sqft	0	-	0 sqft	0	-
Door Convection	48 sqft	454	-	48 sqft	454	-
Floor Convection	1069 sqft	1886	-	1069 sqft	3311	-
Interior Wall Convection	731 sqft	1042	-	731 sqft	330	-
Ceiling Convection	1069 sqft	2530	-	1069 sqft	1020	-
Overhead Lighting Convection	0 W	0	-	0 W	0	-
Task Lighting Convection	0 W	0	-	0 W	0	-
Electric Equipment Convection	0 W	0	-	0 W	0	-
People Convection	0	0	0	0	0	0
Infiltration	0 CFM	0	0	54 CFM	5676	0
Miscellaneous Equipment	-	0	0	-	0	0
Air Internal Energy Change	-	0	-	-	0	0
Safety Factor	15% / 15%	1061	0	15%	1860	0
>> Total Zone Loads	-	8134	0	-	14258	0
Key:	Positive values are cooling loads Negative values are heating loads			Positive values are heating loads Negative values are cooling loads		

Note 1: Surface convection line items show the combined effects of conductive heat gain to the surface and radiative heat gains absorbed at the surface which are then convected to room air.

Note 2: Lighting, equipment, and people line items include only the direct convective heat gain from the heat source to the room air. The radiative portion of the heat gain is first absorbed by surfaces in the room and then later convected from the surface to the air. Therefore the effect of the radiative portion of the heat gain is found in the surface convection line items.

Note 3: Solar heat gain is absorbed by surfaces in the room, re-radiated to other surfaces, and finally convected from the surfaces to room air. Therefore, the effect of solar heat gain is found in the surface convection line items.

System Psychrometrics for 39 RDC #9 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

DESIGN COOLING DAY AT AUGUST 9:00

TABLE 1: SYSTEM DATA

Component	Location	Dry-Bulb Temp (F)	Specific Humidity (lb/lb)	Airflow (CFM)	CO2 Level (ppm)	Sensible Heat (BTU/hr)	Latent Heat (BTU/hr)
Ventilation Air	Inlet	72.4	0.01416	100	400	-279	1175
Air-to-Air Energy Recovery	Outlet	72.4	0.01416	100	400	0	0
Vent - Return Mixing	Outlet	74.5	0.01213	531	400	-	-
Central Cooling Coil	Outlet	61.8	0.01142	531	400	7424	1847
Central Heating Coil	Outlet	61.8	0.01142	531	400	0	-
Supply Fan	Outlet	61.8	0.01142	531	400	0	-
Cold Supply Duct	Outlet	61.8	0.01142	531	400	-	-
Zone Air	-	75.0	0.01157	531	400	7704	362
Return Air	Outlet	75.0	0.01167	531	400	-	-

Air Density x Heat Capacity x Conversion Factor: At sea level = 1.080; At site altitude = 1.074 BTU/(hr-CFM-F)

Air Density x Heat of Vaporization x Conversion Factor: At sea level = 4746.6; At site altitude = 4719.0 BTU/(hr-CFM)

Site Altitude = 161.0 ft

TABLE 2: ZONE DATA

Zone Name	Zone Sensible Load (BTU/hr)	T-stat Mode	Zone Cond (BTU/hr)	Zone Temp (F)	Zone Airflow (CFM)	CO2 Level (ppm)	Terminal Heating Coil (BTU/hr)	Zone Heating Unit (BTU/hr)
RDC #9	7701	Cooling	7704	75.0	531	400	0	0

System Psychrometrics for 39 RDC #9 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

WINTER DESIGN HEATING

TABLE 1: SYSTEM DATA

Component	Location	Dry-Bulb Temp (F)	Specific Humidity (lb/lb)	Airflow (CFM)	CO2 Level (ppm)	Sensible Heat (BTU/hr)	Latent Heat (BTU/hr)
Ventilation Air	Inlet	-12.3	0.00018	100	400	-3093	0
Air-to-Air Energy Recovery	Outlet	41.2	0.00018	100	400	-5759	0
Vent - Return Mixing	Outlet	64.6	0.00018	531	400	-	-
Central Cooling Coil	Outlet	64.6	0.00018	531	400	0	0
Central Heating Coil	Outlet	94.9	0.00018	531	400	17313	-
Supply Fan	Outlet	94.9	0.00018	531	400	0	-
Cold Supply Duct	Outlet	94.9	0.00018	531	400	-	-
Zone Air	-	70.0	0.00018	531	400	-14212	0
Return Air	Outlet	70.0	0.00018	531	400	-	-

Air Density x Heat Capacity x Conversion Factor: At sea level = 1.080; At site altitude = 1.074 BTU/(hr-CFM-F)

Air Density x Heat of Vaporization x Conversion Factor: At sea level = 4746.6; At site altitude = 4719.0 BTU/(hr-CFM)

Site Altitude = 161.0 ft

TABLE 2: ZONE DATA

Zone Name	Zone Sensible Load (BTU/hr)	T-stat Mode	Zone Cond (BTU/hr)	Zone Temp (F)	Zone Airflow (CFM)	CO2 Level (ppm)	Terminal Heating Coil (BTU/hr)	Zone Heating Unit (BTU/hr)
RDC #9	-14212	Heating	-14212	70.0	531	400	0	0

Air System Sizing Summary for 41 RDC ESC1 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

Air System Information

Air System Name **41 RDC ESC1 REF**
Equipment Class **SPLT AHU**
Air System Type **SZCAV**

Number of zones **1**
Floor Area **200.4** sqft
Location **St-Anicet 1, QC, Canada**

Sizing Calculation Information

Calculation Months **Jan to Dec**
Sizing Data **Calculated**

Zone CFM Sizing **Sum of space airflow rates**
Space CFM Sizing **Individual peak space loads**

Central Heating Coil Sizing Data

Max coil load **4.3** MBH
Coil CFM at Design Heating **168** CFM
Max coil CFM **168** CFM
Water flow @ 20.0 F drop **N/A**

Load occurs at **Design Heating**
BTU/(hr sqft) **21.3**
Ent. DB / Lvg DB **70.0 / 93.5** F

Supply Fan Sizing Data

Design CFM **168** CFM
Design CFM/sqft **0.84** CFM/sqft

Fan motor BHP **0.09** BHP
Fan motor kW **0.07** kW
Fan total static **2.00** in wg

Outdoor Ventilation Air Data

Design airflow CFM **0** CFM
CFM/sqft **0.00** CFM/sqft

CFM/person **0.00** CFM/person

Zone Sizing Summary for 41 RDC ESC1 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

Air System Information

Air System Name **41 RDC ESC1 REF**
 Equipment Class **SPLT AHU**
 Air System Type **SZCAV**

Number of zones **1**
 Floor Area **200.4** sqft
 Location **St-Anicet 1, QC, Canada**

Sizing Calculation Information

Calculation Months **Jan to Dec**
 Sizing Data **Calculated**

Zone CFM Sizing **Sum of space airflow rates**
 Space CFM Sizing **Individual peak space loads**

Zone Terminal Sizing Data

Zone Name	Design Supply Airflow (CFM)	Minimum Supply Airflow (CFM)	Zone CFM/sqft	Reheat Coil Capacity (MBH)	Reheat Coil Water gpm @ 20.0 F	Zone Htg Unit Coil Capacity (MBH)	Zone Htg Unit Water gpm @ 20.0 F	Mixing Box Fan Airflow (CFM)
RDC ESC1	168	168	0.84	0.0	-	0.0	-	0

Zone Peak Sensible Loads

Zone Name	Zone Cooling Sensible (MBH)	Time of Peak Sensible Cooling Load	Zone Heating Load (MBH)	Zone Floor Area (sqft)
RDC ESC1	0.0	April 6:00	4.5	200.4

Space Loads and Airflows

Zone Name / Space Name	Cooling Sensible (MBH)	Time of Peak Sensible Load	Air Flow (CFM)	Heating Load (MBH)	Floor Area (sqft)	Space CFM/sqft
RDC ESC1						
RDC ESC1	0.0	April 6:00	168	4.5	200.4	0.84

Air System Heat Balance Summary for 41 RDC ESC1 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

Table 1. System Loads

COMPONENT LOADS	DESIGN COOLING			DESIGN HEATING		
	NO COOLING DATA			OA DB / WB -12.3 F / -13.2 F		
	Details	Sensible [BTU/hr]	Latent [BTU/hr]	Details	Sensible [BTU/hr]	Latent [BTU/hr]
Zone Conditioning	-	-	-	-	4509	0
Plenum Load	-	-	-	-	0	0
Return Fan Load	-	-	-	168 CFM	0	-
Ventilation Load	-	-	-	0 CFM	0	0
Supply Fan Load	-	-	-	168 CFM	-249	-
Zone Fan Coil Fans Load	-	-	-	-	0	-
>> Total System Loads	-	-	-	-	4260	0
Central Heating Coil	-	-	-	-	4260	-
>> Total Conditioning	-	-	-	-	4260	0
Key:	Positive values are cooling loads Negative values are heating loads			Positive values are heating loads Negative values are cooling loads		

Table 2. Zone Heat Balance Loads

Zone Heat Balance Component	DESIGN COOLING			DESIGN HEATING		
	NO COOLING DATA			OA DB / WB -12.3 F / -13.2 F		
	Details	Sensible [BTU/hr]	Latent [BTU/hr]	Details	Sensible [BTU/hr]	Latent [BTU/hr]
Exterior Wall Convection	226 sqft	-	-	226 sqft	595	-
Roof Convection	0 sqft	-	-	0 sqft	0	-
Window Convection	0 sqft	-	-	0 sqft	0	-
Skylight Convection	0 sqft	-	-	0 sqft	0	-
Door Convection	22 sqft	-	-	22 sqft	245	-
Floor Convection	200 sqft	-	-	200 sqft	145	-
Interior Wall Convection	247 sqft	-	-	247 sqft	146	-
Ceiling Convection	200 sqft	-	-	200 sqft	213	-
Overhead Lighting Convection	-	-	-	0 W	0	-
Task Lighting Convection	-	-	-	0 W	0	-
Electric Equipment Convection	-	-	-	0 W	0	-
People Convection	-	-	-	0	0	0
Infiltration	-	-	-	25 CFM	2582	0
Miscellaneous Equipment	-	-	-	-	0	0
Air Internal Energy Change	-	-	-	-	0	0
Safety Factor	15% / 15%	-	-	15%	589	0
>> Total Zone Loads	-	-	-	-	4516	0
Key:	Positive values are cooling loads Negative values are heating loads			Positive values are heating loads Negative values are cooling loads		

Note 1: Surface convection line items show the combined effects of conductive heat gain to the surface and radiative heat gains absorbed at the surface which are then convected to room air.

Note 2: Lighting, equipment, and people line items include only the direct convective heat gain from the heat source to the room air. The radiative portion of the heat gain is first absorbed by surfaces in the room and then later convected from the surface to the air. Therefore the effect of the radiative portion of the heat gain is found in the surface convection line items.

Note 3: Solar heat gain is absorbed by surfaces in the room, re-radiated to other surfaces, and finally convected from the surfaces to room air. Therefore, the effect of solar heat gain is found in the surface convection line items.

System Psychrometrics for 41 RDC ESC1 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

WINTER DESIGN HEATING

TABLE 1: SYSTEM DATA

Component	Location	Dry-Bulb Temp (F)	Specific Humidity (lb/lb)	Airflow (CFM)	CO2 Level (ppm)	Sensible Heat (BTU/hr)	Latent Heat (BTU/hr)
Ventilation Air	Inlet	-12.3	0.00018	0	400	0	0
Vent - Return Mixing	Outlet	70.0	0.00018	168	400	-	-
Central Heating Coil	Outlet	93.5	0.00018	168	400	4260	-
Supply Fan	Outlet	94.9	0.00018	168	400	249	-
Cold Supply Duct	Outlet	94.9	0.00018	168	400	-	-
Zone Air	-	70.0	0.00018	168	400	-4509	0
Return Air	Outlet	70.0	0.00018	168	400	-	-

Air Density x Heat Capacity x Conversion Factor: At sea level = 1.080; At site altitude = 1.074 BTU/(hr-CFM-F)

Air Density x Heat of Vaporization x Conversion Factor: At sea level = 4746.6; At site altitude = 4719.0 BTU/(hr-CFM)

Site Altitude = 161.0 ft

TABLE 2: ZONE DATA

Zone Name	Zone Sensible Load (BTU/hr)	T-stat Mode	Zone Cond (BTU/hr)	Zone Temp (F)	Zone Airflow (CFM)	CO2 Level (ppm)	Terminal Heating Coil (BTU/hr)	Zone Heating Unit (BTU/hr)
RDC ESC1	-4509	Heating	-4509	70.0	168	400	0	0

Air System Sizing Summary for 43 RDC ESC2 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

Air System Information

Air System Name **43 RDC ESC2 REF**
Equipment Class **SPLT AHU**
Air System Type **SZCAV**

Number of zones **1**
Floor Area **183.6** sqft
Location **St-Anicet 1, QC, Canada**

Sizing Calculation Information

Calculation Months **Jan to Dec**
Sizing Data **Calculated**

Zone CFM Sizing **Sum of space airflow rates**
Space CFM Sizing **Individual peak space loads**

Central Heating Coil Sizing Data

Max coil load **4.7** MBH
Coil CFM at Design Heating **187** CFM
Max coil CFM **187** CFM
Water flow @ 20.0 F drop **N/A**

Load occurs at **Design Heating**
BTU/(hr sqft) **25.8**
Ent. DB / Lvg DB **70.0 / 93.6** F

Supply Fan Sizing Data

Design CFM **187** CFM
Design CFM/sqft **1.02** CFM/sqft

Fan motor BHP **0.10** BHP
Fan motor kW **0.08** kW
Fan total static **2.00** in wg

Outdoor Ventilation Air Data

Design airflow CFM **0** CFM
CFM/sqft **0.00** CFM/sqft

CFM/person **0.00** CFM/person

Zone Sizing Summary for 43 RDC ESC2 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

Air System Information

Air System Name **43 RDC ESC2 REF**
 Equipment Class **SPLT AHU**
 Air System Type **SZCAV**

Number of zones **1**
 Floor Area **183.6** sqft
 Location **St-Anicet 1, QC, Canada**

Sizing Calculation Information

Calculation Months **Jan to Dec**
 Sizing Data **Calculated**

Zone CFM Sizing **Sum of space airflow rates**
 Space CFM Sizing **Individual peak space loads**

Zone Terminal Sizing Data

Zone Name	Design Supply Airflow (CFM)	Minimum Supply Airflow (CFM)	Zone CFM/sqft	Reheat Coil Capacity (MBH)	Reheat Coil Water gpm @ 20.0 F	Zone Htg Unit Coil Capacity (MBH)	Zone Htg Unit Water gpm @ 20.0 F	Mixing Box Fan Airflow (CFM)
RDC ESC2	187	187	1.02	0.0	-	0.0	-	0

Zone Peak Sensible Loads

Zone Name	Zone Cooling Sensible (MBH)	Time of Peak Sensible Cooling Load	Zone Heating Load (MBH)	Zone Floor Area (sqft)
RDC ESC2	0.0	January 11:00	5.0	183.6

Space Loads and Airflows

Zone Name / Space Name	Cooling Sensible (MBH)	Time of Peak Sensible Load	Air Flow (CFM)	Heating Load (MBH)	Floor Area (sqft)	Space CFM/sqft
RDC ESC2						
RDC ESC2	0.0	January 11:00	187	5.0	183.6	1.02

Air System Heat Balance Summary for 43 RDC ESC2 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

Table 1. System Loads

COMPONENT LOADS	DESIGN COOLING			DESIGN HEATING		
	NO COOLING DATA			OA DB / WB -12.3 F / -13.2 F		
	Details	Sensible [BTU/hr]	Latent [BTU/hr]	Details	Sensible [BTU/hr]	Latent [BTU/hr]
Zone Conditioning	-	-	-	-	5020	0
Plenum Load	-	-	-	-	0	0
Return Fan Load	-	-	-	187 CFM	0	-
Ventilation Load	-	-	-	0 CFM	0	0
Supply Fan Load	-	-	-	187 CFM	-277	-
Zone Fan Coil Fans Load	-	-	-	-	0	-
>> Total System Loads	-	-	-	-	4742	0
Central Heating Coil	-	-	-	-	4742	-
>> Total Conditioning	-	-	-	-	4742	0
Key:	Positive values are cooling loads Negative values are heating loads			Positive values are heating loads Negative values are cooling loads		

Table 2. Zone Heat Balance Loads

Zone Heat Balance Component	DESIGN COOLING			DESIGN HEATING		
	NO COOLING DATA			OA DB / WB -12.3 F / -13.2 F		
	Details	Sensible [BTU/hr]	Latent [BTU/hr]	Details	Sensible [BTU/hr]	Latent [BTU/hr]
Exterior Wall Convection	176 sqft	-	-	176 sqft	532	-
Roof Convection	0 sqft	-	-	0 sqft	0	-
Window Convection	36 sqft	-	-	36 sqft	440	-
Skylight Convection	0 sqft	-	-	0 sqft	0	-
Door Convection	22 sqft	-	-	22 sqft	260	-
Floor Convection	184 sqft	-	-	184 sqft	202	-
Interior Wall Convection	234 sqft	-	-	234 sqft	208	-
Ceiling Convection	184 sqft	-	-	184 sqft	277	-
Overhead Lighting Convection	-	-	-	0 W	0	-
Task Lighting Convection	-	-	-	0 W	0	-
Electric Equipment Convection	-	-	-	0 W	0	-
People Convection	-	-	-	0	0	0
Infiltration	-	-	-	23 CFM	2444	0
Miscellaneous Equipment	-	-	-	-	0	0
Air Internal Energy Change	-	-	-	-	0	0
Safety Factor	15% / 15%	-	-	15%	654	0
>> Total Zone Loads	-	-	-	-	5016	0
Key:	Positive values are cooling loads Negative values are heating loads			Positive values are heating loads Negative values are cooling loads		

Note 1: Surface convection line items show the combined effects of conductive heat gain to the surface and radiative heat gains absorbed at the surface which are then convected to room air.

Note 2: Lighting, equipment, and people line items include only the direct convective heat gain from the heat source to the room air. The radiative portion of the heat gain is first absorbed by surfaces in the room and then later convected from the surface to the air. Therefore the effect of the radiative portion of the heat gain is found in the surface convection line items.

Note 3: Solar heat gain is absorbed by surfaces in the room, re-radiated to other surfaces, and finally convected from the surfaces to room air. Therefore, the effect of solar heat gain is found in the surface convection line items.

System Psychrometrics for 43 RDC ESC2 REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

WINTER DESIGN HEATING

TABLE 1: SYSTEM DATA

Component	Location	Dry-Bulb Temp (F)	Specific Humidity (lb/lb)	Airflow (CFM)	CO2 Level (ppm)	Sensible Heat (BTU/hr)	Latent Heat (BTU/hr)
Ventilation Air	Inlet	-12.3	0.00018	0	400	0	0
Vent - Return Mixing	Outlet	70.0	0.00018	187	400	-	-
Central Heating Coil	Outlet	93.6	0.00018	187	400	4742	-
Supply Fan	Outlet	95.0	0.00018	187	400	277	-
Cold Supply Duct	Outlet	95.0	0.00018	187	400	-	-
Zone Air	-	70.0	0.00018	187	400	-5020	0
Return Air	Outlet	70.0	0.00018	187	400	-	-

Air Density x Heat Capacity x Conversion Factor: At sea level = 1.080; At site altitude = 1.074 BTU/(hr-CFM-F)

Air Density x Heat of Vaporization x Conversion Factor: At sea level = 4746.6; At site altitude = 4719.0 BTU/(hr-CFM)

Site Altitude = 161.0 ft

TABLE 2: ZONE DATA

Zone Name	Zone Sensible Load (BTU/hr)	T-stat Mode	Zone Cond (BTU/hr)	Zone Temp (F)	Zone Airflow (CFM)	CO2 Level (ppm)	Terminal Heating Coil (BTU/hr)	Zone Heating Unit (BTU/hr)
RDC ESC2	-5020	Heating	-5020	70.0	187	400	0	0

Air System Sizing Summary for 45 RDC Salle Communautaire REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

Air System Information

Air System Name **45 RDC Salle Communautaire REF**
Equipment Class **SPLT AHU**
Air System Type **SZCAV**

Number of zones **1**
Floor Area **288.8** sqft
Location **St-Anicet 1, QC, Canada**

Sizing Calculation Information

Calculation Months **Jan to Dec**
Sizing Data **Calculated**

Zone CFM Sizing **Sum of space airflow rates**
Space CFM Sizing **Individual peak space loads**

Central Cooling Coil Sizing Data

Total coil load **0.3** Tons
Total coil load **3.6** MBH
Sensible coil load **1.9** MBH
Coil CFM at peak load **116** CFM
Sum of peak zone CFM **116** CFM
Sensible heat ratio **0.547**
CFM/Ton **390.2**
sqft/Ton **972.7**
BTU/(hr sqft) **12.3**
Water flow @ 10.0 F rise **N/A**

Peak coil load occurs at **August 10:00**
OA DB / WB **75.9 / 69.6** F
Entering DB / WB **75.3 / 68.9** F
Leaving DB / WB **60.1 / 59.6** F
Resulting RH **59** %
Design supply temp. **58.0** F
Zone T-stat Check **1 of 1** OK
Max zone temperature deviation **0.0** F

Central Heating Coil Sizing Data

Max coil load **6.2** MBH
Coil CFM at Design Heating **116** CFM
Max coil CFM **116** CFM
Water flow @ 20.0 F drop **N/A**

Load occurs at **Design Heating**
BTU/(hr sqft) **21.4**
Ent. DB / Lvg DB **45.1 / 94.8** F

Supply Fan Sizing Data

Design CFM **116** CFM
Design CFM/sqft **0.40** CFM/sqft

Fan motor BHP **0.00** BHP
Fan motor kW **0.00** kW

Outdoor Ventilation Air Data

Design airflow CFM **100** CFM
CFM/sqft **0.35** CFM/sqft

CFM/person **0.00** CFM/person

Zone Sizing Summary for 45 RDC Salle Communautaire REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

Air System Information

Air System Name **45 RDC Salle Communautaire REF**
 Equipment Class **SPLT AHU**
 Air System Type **SZCAV**

Number of zones **1**
 Floor Area **288.8** sqft
 Location **St-Anicet 1, QC, Canada**

Sizing Calculation Information

Calculation Months **Jan to Dec**
 Sizing Data **Calculated**

Zone CFM Sizing **Sum of space airflow rates**
 Space CFM Sizing **Individual peak space loads**

Zone Terminal Sizing Data

Zone Name	Design Supply Airflow (CFM)	Minimum Supply Airflow (CFM)	Zone CFM/sqft	Reheat Coil Capacity (MBH)	Reheat Coil Water gpm @ 20.0 F	Zone Htg Unit Coil Capacity (MBH)	Zone Htg Unit Water gpm @ 20.0 F	Mixing Box Fan Airflow (CFM)
RDC Salle Communautaire	116	116	0.40	0.0	-	0.0	-	0

Zone Peak Sensible Loads

Zone Name	Zone Cooling Sensible (MBH)	Time of Peak Sensible Cooling Load	Zone Heating Load (MBH)	Zone Floor Area (sqft)
RDC Salle Communautaire	2.1	August 10:00	3.1	288.8

Space Loads and Airflows

Zone Name / Space Name	Cooling Sensible (MBH)	Time of Peak Sensible Load	Air Flow (CFM)	Heating Load (MBH)	Floor Area (sqft)	Space CFM/sqft
RDC Salle Communautaire						
RDC Salle Communautaire	2.1	August 10:00	116	3.1	288.8	0.40

Air System Heat Balance Summary for 45 RDC Salle Communautaire REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

Table 1. System Loads

COMPONENT LOADS	DESIGN COOLING - AUGUST 10:00			DESIGN HEATING		
	OA DB / WB 75.9 F / 69.6 F			OA DB / WB -12.3 F / -13.2 F		
	Details	Sensible [BTU/hr]	Latent [BTU/hr]	Details	Sensible [BTU/hr]	Latent [BTU/hr]
Zone Conditioning	-	1900	18	-	3089	0
Plenum Load	-	0	0	-	0	0
Return Fan Load	116 CFM	0	-	116 CFM	0	-
Ventilation Load	100 CFM	38	1525	100 CFM	3093	0
Supply Fan Load	116 CFM	0	-	116 CFM	0	-
Zone Fan Coil Fans Load	-	0	-	-	0	-
>> Total System Loads	-	1939	1543	-	6182	0
Central Cooling Coil	-	1950	1613	-	0	0
Central Heating Coil	-	0	-	-	6191	-
>> Total Conditioning	-	1950	1613	-	6191	0
Key:	Positive values are cooling loads Negative values are heating loads			Positive values are heating loads Negative values are cooling loads		

Table 2. Zone Heat Balance Loads

Zone Heat Balance Component	DESIGN COOLING - AUGUST 10:00			DESIGN HEATING		
	OA DB / WB 75.9 F / 69.6 F			OA DB / WB -12.3 F / -13.2 F		
	Details	Sensible [BTU/hr]	Latent [BTU/hr]	Details	Sensible [BTU/hr]	Latent [BTU/hr]
Exterior Wall Convection	93 sqft	75	-	93 sqft	204	-
Roof Convection	0 sqft	0	-	0 sqft	0	-
Window Convection	30 sqft	278	-	30 sqft	278	-
Skylight Convection	0 sqft	0	-	0 sqft	0	-
Door Convection	0 sqft	0	-	0 sqft	0	-
Floor Convection	289 sqft	589	-	289 sqft	512	-
Interior Wall Convection	483 sqft	450	-	483 sqft	174	-
Ceiling Convection	289 sqft	447	-	289 sqft	233	-
Overhead Lighting Convection	0 W	0	-	0 W	0	-
Task Lighting Convection	0 W	0	-	0 W	0	-
Electric Equipment Convection	0 W	0	-	0 W	0	-
People Convection	0	0	0	0	0	0
Infiltration	0 CFM	0	0	12 CFM	1289	0
Miscellaneous Equipment	-	0	0	-	0	0
Air Internal Energy Change	-	0	-	-	0	0
Safety Factor	15% / 15%	276	0	15%	404	0
>> Total Zone Loads	-	2115	0	-	3094	0
Key:	Positive values are cooling loads Negative values are heating loads			Positive values are heating loads Negative values are cooling loads		

Note 1: Surface convection line items show the combined effects of conductive heat gain to the surface and radiative heat gains absorbed at the surface which are then convected to room air.

Note 2: Lighting, equipment, and people line items include only the direct convective heat gain from the heat source to the room air. The radiative portion of the heat gain is first absorbed by surfaces in the room and then later convected from the surface to the air. Therefore the effect of the radiative portion of the heat gain is found in the surface convection line items.

Note 3: Solar heat gain is absorbed by surfaces in the room, re-radiated to other surfaces, and finally convected from the surfaces to room air. Therefore, the effect of solar heat gain is found in the surface convection line items.

System Psychrometrics for 45 RDC Salle Communautaire REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

DESIGN COOLING DAY AT AUGUST 10:00

TABLE 1: SYSTEM DATA

Component	Location	Dry-Bulb Temp (F)	Specific Humidity (lb/lb)	Airflow (CFM)	CO2 Level (ppm)	Sensible Heat (BTU/hr)	Latent Heat (BTU/hr)
Ventilation Air	Inlet	76.1	0.01416	100	400	38	1525
Air-to-Air Energy Recovery	Outlet	75.4	0.01416	100	400	86	0
Vent - Return Mixing	Outlet	75.3	0.01372	116	400	-	-
Central Cooling Coil	Outlet	60.1	0.01087	116	400	1950	1613
Central Heating Coil	Outlet	60.1	0.01087	116	400	0	-
Supply Fan	Outlet	60.1	0.01087	116	400	0	-
Cold Supply Duct	Outlet	60.1	0.01087	116	400	-	-
Zone Air	-	75.0	0.01090	116	400	1900	18
Return Air	Outlet	75.0	0.01093	116	400	-	-

Air Density x Heat Capacity x Conversion Factor: At sea level = 1.080; At site altitude = 1.074 BTU/(hr-CFM-F)

Air Density x Heat of Vaporization x Conversion Factor: At sea level = 4746.6; At site altitude = 4719.0 BTU/(hr-CFM)

Site Altitude = 161.0 ft

TABLE 2: ZONE DATA

Zone Name	Zone Sensible Load (BTU/hr)	T-stat Mode	Zone Cond (BTU/hr)	Zone Temp (F)	Zone Airflow (CFM)	CO2 Level (ppm)	Terminal Heating Coil (BTU/hr)	Zone Heating Unit (BTU/hr)
RDC Salle Communautaire	1900	Cooling	1900	75.0	116	400	0	0

System Psychrometrics for 45 RDC Salle Communautaire REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:21 AM

WINTER DESIGN HEATING

TABLE 1: SYSTEM DATA

Component	Location	Dry-Bulb Temp (F)	Specific Humidity (lb/lb)	Airflow (CFM)	CO2 Level (ppm)	Sensible Heat (BTU/hr)	Latent Heat (BTU/hr)
Ventilation Air	Inlet	-12.3	0.00018	100	400	-3093	0
Air-to-Air Energy Recovery	Outlet	41.2	0.00018	100	400	-5759	0
Vent - Return Mixing	Outlet	45.1	0.00018	116	400	-	-
Central Cooling Coil	Outlet	45.1	0.00018	116	400	0	0
Central Heating Coil	Outlet	94.8	0.00018	116	400	6191	-
Supply Fan	Outlet	94.8	0.00018	116	400	0	-
Cold Supply Duct	Outlet	94.8	0.00018	116	400	-	-
Zone Air	-	70.0	0.00018	116	400	-3089	0
Return Air	Outlet	70.0	0.00018	116	400	-	-

Air Density x Heat Capacity x Conversion Factor: At sea level = 1.080; At site altitude = 1.074 BTU/(hr-CFM-F)

Air Density x Heat of Vaporization x Conversion Factor: At sea level = 4746.6; At site altitude = 4719.0 BTU/(hr-CFM)

Site Altitude = 161.0 ft

TABLE 2: ZONE DATA

Zone Name	Zone Sensible Load (BTU/hr)	T-stat Mode	Zone Cond (BTU/hr)	Zone Temp (F)	Zone Airflow (CFM)	CO2 Level (ppm)	Terminal Heating Coil (BTU/hr)	Zone Heating Unit (BTU/hr)
RDC Salle Communautaire	-3089	Heating	-3089	70.0	116	400	0	0

Air System Sizing Summary for 47 SS Garage REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:22 AM

Air System Information

Air System Name **47 SS Garage REF**
Equipment Class **SPLT AHU**
Air System Type **SZCAV**

Number of zones **1**
Floor Area **13278.7** sqft
Location **St-Anicet 1, QC, Canada**

Sizing Calculation Information

Calculation Months **Jan to Dec**
Sizing Data **Calculated**

Zone CFM Sizing **Sum of space airflow rates**
Space CFM Sizing **Individual peak space loads**

Central Heating Coil Sizing Data

Max coil load **30.1** MBH
Coil CFM at Design Heating **1191** CFM
Max coil CFM **1191** CFM
Water flow @ 20.0 F drop **N/A**

Load occurs at **Design Heating**
BTU/(hr sqft) **2.3**
Ent. DB / Lvg DB **70.0 / 93.5** F

Supply Fan Sizing Data

Design CFM **1191** CFM
Design CFM/sqft **0.09** CFM/sqft

Fan motor BHP **0.65** BHP
Fan motor kW **0.52** kW
Fan total static **2.00** in wg

Outdoor Ventilation Air Data

Design airflow CFM **0** CFM
CFM/sqft **0.00** CFM/sqft

CFM/person **0.00** CFM/person

Zone Sizing Summary for 47 SS Garage REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:22 AM

Air System Information

Air System Name **47 SS Garage REF**
 Equipment Class **SPLT AHU**
 Air System Type **SZCAV**

Number of zones **1**
 Floor Area **13278.7** sqft
 Location **St-Anicet 1, QC, Canada**

Sizing Calculation Information

Calculation Months **Jan to Dec**
 Sizing Data **Calculated**

Zone CFM Sizing **Sum of space airflow rates**
 Space CFM Sizing **Individual peak space loads**

Zone Terminal Sizing Data

Zone Name	Design Supply Airflow (CFM)	Minimum Supply Airflow (CFM)	Zone CFM/sqft	Reheat Coil Capacity (MBH)	Reheat Coil Water gpm @ 20.0 F	Zone Htg Unit Coil Capacity (MBH)	Zone Htg Unit Water gpm @ 20.0 F	Mixing Box Fan Airflow (CFM)
SS Garage	1191	1191	0.09	0.0	-	0.0	-	0

Zone Peak Sensible Loads

Zone Name	Zone Cooling Sensible (MBH)	Time of Peak Sensible Cooling Load	Zone Heating Load (MBH)	Zone Floor Area (sqft)
SS Garage	0.0	July 18:00	32.0	13278.7

Space Loads and Airflows

Zone Name / Space Name	Cooling Sensible (MBH)	Time of Peak Sensible Load	Air Flow (CFM)	Heating Load (MBH)	Floor Area (sqft)	Space CFM/sqft
SS Garage						
SS Garage	0.0	July 18:00	1191	32.0	13278.7	0.09

Air System Heat Balance Summary for 47 SS Garage REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:22 AM

Table 1. System Loads

COMPONENT LOADS	DESIGN COOLING			DESIGN HEATING		
	NO COOLING DATA			OA DB / WB -12.3 F / -13.2 F		
	Details	Sensible [BTU/hr]	Latent [BTU/hr]	Details	Sensible [BTU/hr]	Latent [BTU/hr]
Zone Conditioning	-	-	-	-	31879	0
Plenum Load	-	-	-	-	0	0
Return Fan Load	-	-	-	1191 CFM	0	-
Ventilation Load	-	-	-	0 CFM	0	0
Supply Fan Load	-	-	-	1191 CFM	-1766	-
Zone Fan Coil Fans Load	-	-	-	-	0	-
>> Total System Loads	-	-	-	-	30113	0
Central Heating Coil	-	-	-	-	30113	-
>> Total Conditioning	-	-	-	-	30113	0
Key:	Positive values are cooling loads Negative values are heating loads			Positive values are heating loads Negative values are cooling loads		

Table 2. Zone Heat Balance Loads

Zone Heat Balance Component	DESIGN COOLING			DESIGN HEATING		
	NO COOLING DATA			OA DB / WB -12.3 F / -13.2 F		
	Details	Sensible [BTU/hr]	Latent [BTU/hr]	Details	Sensible [BTU/hr]	Latent [BTU/hr]
Exterior Wall Convection	4653 sqft	-	-	4653 sqft	8939	-
Roof Convection	0 sqft	-	-	0 sqft	0	-
Window Convection	0 sqft	-	-	0 sqft	0	-
Skylight Convection	0 sqft	-	-	0 sqft	0	-
Door Convection	0 sqft	-	-	0 sqft	0	-
Floor Convection	13279 sqft	-	-	13279 sqft	18002	-
Interior Wall Convection	442 sqft	-	-	442 sqft	10	-
Ceiling Convection	13279 sqft	-	-	13279 sqft	854	-
Overhead Lighting Convection	-	-	-	0 W	0	-
Task Lighting Convection	-	-	-	0 W	0	-
Electric Equipment Convection	-	-	-	0 W	0	-
People Convection	-	-	-	0	0	0
Infiltration	-	-	-	0 CFM	0	0
Miscellaneous Equipment	-	-	-	-	0	0
Air Internal Energy Change	-	-	-	-	0	0
Safety Factor	15% / 15%	-	-	15%	4171	0
>> Total Zone Loads	-	-	-	-	31976	0
Key:	Positive values are cooling loads Negative values are heating loads			Positive values are heating loads Negative values are cooling loads		

Note 1: Surface convection line items show the combined effects of conductive heat gain to the surface and radiative heat gains absorbed at the surface which are then convected to room air.

Note 2: Lighting, equipment, and people line items include only the direct convective heat gain from the heat source to the room air. The radiative portion of the heat gain is first absorbed by surfaces in the room and then later convected from the surface to the air. Therefore the effect of the radiative portion of the heat gain is found in the surface convection line items.

Note 3: Solar heat gain is absorbed by surfaces in the room, re-radiated to other surfaces, and finally convected from the surfaces to room air. Therefore, the effect of solar heat gain is found in the surface convection line items.

System Psychrometrics for 47 SS Garage REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:22 AM

WINTER DESIGN HEATING

TABLE 1: SYSTEM DATA

Component	Location	Dry-Bulb Temp (F)	Specific Humidity (lb/lb)	Airflow (CFM)	CO2 Level (ppm)	Sensible Heat (BTU/hr)	Latent Heat (BTU/hr)
Ventilation Air	Inlet	-12.3	0.00018	0	400	0	0
Vent - Return Mixing	Outlet	70.0	0.00018	1191	400	-	-
Central Heating Coil	Outlet	93.5	0.00018	1191	400	30113	-
Supply Fan	Outlet	94.9	0.00018	1191	400	1766	-
Cold Supply Duct	Outlet	94.9	0.00018	1191	400	-	-
Zone Air	-	70.0	0.00018	1191	400	-31879	0
Return Air	Outlet	70.0	0.00018	1191	400	-	-

Air Density x Heat Capacity x Conversion Factor: At sea level = 1.080; At site altitude = 1.074 BTU/(hr-CFM-F)

Air Density x Heat of Vaporization x Conversion Factor: At sea level = 4746.6; At site altitude = 4719.0 BTU/(hr-CFM)

Site Altitude = 161.0 ft

TABLE 2: ZONE DATA

Zone Name	Zone Sensible Load (BTU/hr)	T-stat Mode	Zone Cond (BTU/hr)	Zone Temp (F)	Zone Airflow (CFM)	CO2 Level (ppm)	Terminal Heating Coil (BTU/hr)	Zone Heating Unit (BTU/hr)
SS Garage	-31879	Heating	-31879	70.0	1191	400	0	0

Air System Sizing Summary for 49 Couloir REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:22 AM

Air System Information

Air System Name **49 Couloir REF**
Equipment Class **PKG ROOF**
Air System Type **VAV**

Number of zones **6**
Floor Area **5299.7** sqft
Location **St-Anicet 1, QC, Canada**

Sizing Calculation Information

Calculation Months **Jan to Dec**
Sizing Data **Calculated**

Zone CFM Sizing **Peak zone sensible load**
Space CFM Sizing **Individual peak space loads**

Central Cooling Coil Sizing Data

Total coil load **2.5** Tons
Total coil load **29.7** MBH
Sensible coil load **20.2** MBH
Coil CFM at peak load **789** CFM
Sum of peak zone CFM **941** CFM
Sensible heat ratio **0.680**
CFM/Ton **318.4**
sqft/Ton **2139.6**
BTU/(hr sqft) **5.6**
Water flow @ 10.0 F rise **N/A**

Peak coil load occurs at **July 17:00**
OA DB / WB **85.8 / 72.5** F
Entering DB / WB **79.3 / 67.6** F
Leaving DB / WB **56.0 / 55.6** F
Resulting RH **56** %
Design supply temp. **55.0** F
Zone T-stat Check **6 of 6** OK
Max zone temperature deviation **0.0** F

Preheat Coil Sizing Data

Max coil load **16.3** MBH
Coil CFM at Design Heating **735** CFM
Max coil CFM **933** CFM
Water flow @ 20.0 F drop **N/A**

Load occurs at **Design Heating**
Ent. DB / Lvg DB **34.3 / 55.0** F

Supply Fan Sizing Data

Design CFM **933** CFM
Design CFM occurs at **July 18:00**
Design CFM/sqft **0.18** CFM/sqft
Sum of peak zone CFM **941** CFM
VAV Fan Diversity **0.8** %

Fan motor BHP **0.00** BHP
Fan motor kW **0.00** kW

Outdoor Ventilation Air Data

Design airflow CFM **318** CFM
CFM/sqft **0.06** CFM/sqft

CFM/person **0.00** CFM/person

Zone Sizing Summary for 49 Couloir REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:22 AM

Air System Information

Air System Name **49 Couloir REF**
 Equipment Class **PKG ROOF**
 Air System Type **VAV**

Number of zones **6**
 Floor Area **5299.7** sqft
 Location **St-Anicet 1, QC, Canada**

Sizing Calculation Information

Calculation Months **Jan to Dec**
 Sizing Data **Calculated**

Zone CFM Sizing **Peak zone sensible load**
 Space CFM Sizing **Individual peak space loads**

Zone Terminal Sizing Data

Zone Name	Design Supply Airflow (CFM)	Minimum Supply Airflow (CFM)	Zone CFM/sqft	Reheat Coil Capacity (MBH)	Reheat Coil Water gpm @ 20.0 F	Zone Htg Unit Coil Capacity (MBH)	Zone Htg Unit Water gpm @ 20.0 F	Mixing Box Fan Airflow (CFM)
2E corridor	188	77	0.15	6.4	-	0.0	-	0
3E corridor	189	77	0.15	6.4	-	0.0	-	0
4E corridor	297	77	0.23	10.7	-	0.0	-	0
RDC Corridor	73	63	0.07	2.3	-	0.0	-	0
RDC Hall	174	13	0.83	4.6	-	0.0	-	0
SS SAS	19	12	0.10	0.8	-	0.0	-	0

Zone Peak Sensible Loads

Zone Name	Zone Cooling Sensible (MBH)	Time of Peak Sensible Cooling Load	Zone Heating Load (MBH)	Zone Floor Area (sqft)
2E corridor	4.0	July 18:00	4.1	1280.6
3E corridor	4.1	July 18:00	4.1	1280.6
4E corridor	6.4	July 18:00	6.7	1280.6
RDC Corridor	1.6	July 18:00	1.4	1049.0
RDC Hall	3.7	July 17:00	2.9	210.2
SS SAS	0.1	July 0:00	0.5	198.8

Space Loads and Airflows

Zone Name / Space Name	Cooling Sensible (MBH)	Time of Peak Sensible Load	Air Flow (CFM)	Heating Load (MBH)	Floor Area (sqft)	Space CFM/sqft
2E corridor						
2E corridor	4.0	July 18:00	188	4.1	1280.6	0.15
3E corridor						
3E corridor	4.1	July 18:00	189	4.1	1280.6	0.15
4E corridor						
4E corridor	6.4	July 18:00	297	6.7	1280.6	0.23
RDC Corridor						
RDC Corridor	1.6	July 18:00	73	1.4	1049.0	0.07
RDC Hall						
RDC Hall	3.7	July 17:00	174	2.9	210.2	0.83
SS SAS						
SS SAS	0.1	July 0:00	19	0.5	198.8	0.10

Air System Heat Balance Summary for 49 Couloir REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:22 AM

Table 1. System Loads

COMPONENT LOADS	DESIGN COOLING - JULY 17:00			DESIGN HEATING		
	OA DB / WB 85.8 F / 72.5 F			OA DB / WB -12.3 F / -13.2 F		
	Details	Sensible [BTU/hr]	Latent [BTU/hr]	Details	Sensible [BTU/hr]	Latent [BTU/hr]
Zone Conditioning	-	16415	2833	-	19384	0
Plenum Load	-	0	0	-	0	0
Return Fan Load	789 CFM	0	-	735 CFM	0	-
Ventilation Load	318 CFM	3642	5887	318 CFM	28099	0
Supply Fan Load	789 CFM	0	-	735 CFM	0	-
Zone Fan Coil Fans Load	-	0	-	-	0	-
>> Total System Loads	-	20057	8720	-	47483	0
Central Cooling Coil	-	20207	9517	-	0	0
Preheat Coil	-	0	-	-	16308	-
Terminal Reheat Coils	-	0	-	-	31250	-
>> Total Conditioning	-	20207	9517	-	47559	0
Key:	Positive values are cooling loads Negative values are heating loads			Positive values are heating loads Negative values are cooling loads		

Table 2. Zone Heat Balance Loads

Zone Heat Balance Component	DESIGN COOLING - JULY 17:00			DESIGN HEATING		
	OA DB / WB 85.8 F / 72.5 F			OA DB / WB -12.3 F / -13.2 F		
	Details	Sensible [BTU/hr]	Latent [BTU/hr]	Details	Sensible [BTU/hr]	Latent [BTU/hr]
Exterior Wall Convection	543 sqft	529	-	543 sqft	968	-
Roof Convection	0 sqft	0	-	0 sqft	0	-
Window Convection	145 sqft	1182	-	145 sqft	1428	-
Skylight Convection	0 sqft	0	-	0 sqft	0	-
Door Convection	51 sqft	618	-	51 sqft	507	-
Floor Convection	5300 sqft	3377	-	5300 sqft	1481	-
Interior Wall Convection	13925 sqft	6844	-	13925 sqft	2773	-
Ceiling Convection	5301 sqft	4352	-	5301 sqft	3387	-
Overhead Lighting Convection	0 W	0	-	0 W	0	-
Task Lighting Convection	0 W	0	-	0 W	0	-
Electric Equipment Convection	0 W	0	-	0 W	0	-
People Convection	0	0	0	0	0	0
Infiltration	0 CFM	0	0	63 CFM	6574	0
Miscellaneous Equipment	-	0	0	-	0	0
Air Internal Energy Change	-	0	-	-	0	0
Safety Factor	15% / 15%	2535	0	15%	2568	0
>> Total Zone Loads	-	19438	0	-	19685	0
Key:	Positive values are cooling loads Negative values are heating loads			Positive values are heating loads Negative values are cooling loads		

Note 1: Surface convection line items show the combined effects of conductive heat gain to the surface and radiative heat gains absorbed at the surface which are then convected to room air.

Note 2: Lighting, equipment, and people line items include only the direct convective heat gain from the heat source to the room air. The radiative portion of the heat gain is first absorbed by surfaces in the room and then later convected from the surface to the air. Therefore the effect of the radiative portion of the heat gain is found in the surface convection line items.

Note 3: Solar heat gain is absorbed by surfaces in the room, re-radiated to other surfaces, and finally convected from the surfaces to room air. Therefore, the effect of solar heat gain is found in the surface convection line items.

System Psychrometrics for 49 Couloir REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:22 AM

DESIGN COOLING DAY AT JULY 17:00

TABLE 1: SYSTEM DATA

Component	Location	Dry-Bulb Temp (F)	Specific Humidity (lb/lb)	Airflow (CFM)	CO2 Level (ppm)	Sensible Heat (BTU/hr)	Latent Heat (BTU/hr)
Ventilation Air	Inlet	85.6	0.01418	318	400	3642	5887
Vent - Return Mixing	Outlet	79.3	0.01184	789	400	-	-
Preheat Coil	Outlet	79.3	0.01184	789	400	0	-
Central Cooling Coil	Outlet	56.0	0.00936	789	400	20207	9517
Supply Fan	Outlet	56.0	0.00936	789	400	0	-
Cold Supply Duct	Outlet	56.0	0.00936	789	400	-	-
Zone Air	-	74.9	0.01045	789	400	16415	2833
Return Air	Outlet	75.0	0.01026	789	400	-	-

Air Density x Heat Capacity x Conversion Factor: At sea level = 1.080; At site altitude = 1.074 BTU/(hr-CFM-F)

Air Density x Heat of Vaporization x Conversion Factor: At sea level = 4746.6; At site altitude = 4719.0 BTU/(hr-CFM)

Site Altitude = 161.0 ft

TABLE 2: ZONE DATA

Zone Name	Zone Sensible Load (BTU/hr)	T-stat Mode	Zone Cond (BTU/hr)	Zone Temp (F)	Zone Airflow (CFM)	CO2 Level (ppm)	Terminal Heating Coil (BTU/hr)	Zone Heating Unit (BTU/hr)
2E corridor	2981	Cooling	2985	75.0	143	400	0	0
3E corridor	2983	Cooling	2986	75.0	143	400	0	0
4E corridor	5289	Cooling	5292	75.0	254	400	0	0
RDC Corridor	612	Cooling	1297	74.7	63	400	0	0
RDC Hall	3626	Cooling	3627	75.0	174	400	0	0
SS SAS	0	Deadband	227	73.3	12	400	0	0

System Psychrometrics for 49 Couloir REF

(In Alternative: a) Alternative REF)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:22 AM

WINTER DESIGN HEATING

TABLE 1: SYSTEM DATA

Component	Location	Dry-Bulb Temp (F)	Specific Humidity (lb/lb)	Airflow (CFM)	CO2 Level (ppm)	Sensible Heat (BTU/hr)	Latent Heat (BTU/hr)
Ventilation Air	Inlet	-12.3	0.00018	318	400	-28099	0
Vent - Return Mixing	Outlet	34.4	0.00018	735	400	-	-
Preheat Coil	Outlet	55.0	0.00018	735	400	16308	-
Central Cooling Coil	Outlet	55.0	0.00018	735	400	0	0
Supply Fan	Outlet	55.0	0.00018	735	400	0	-
Cold Supply Duct	Outlet	55.0	0.00018	735	400	-	-
Zone Air	-	70.0	0.00018	735	400	-19384	0
Return Air	Outlet	70.0	0.00018	735	400	-	-

Air Density x Heat Capacity x Conversion Factor: At sea level = 1.080; At site altitude = 1.074 BTU/(hr-CFM-F)

Air Density x Heat of Vaporization x Conversion Factor: At sea level = 4746.6; At site altitude = 4719.0 BTU/(hr-CFM)

Site Altitude = 161.0 ft

TABLE 2: ZONE DATA

Zone Name	Zone Sensible Load (BTU/hr)	T-stat Mode	Zone Cond (BTU/hr)	Zone Temp (F)	Zone Airflow (CFM)	CO2 Level (ppm)	Terminal Heating Coil (BTU/hr)	Zone Heating Unit (BTU/hr)
2E corridor	-4023	Heating	-4023	70.0	149	400	6437	0
3E corridor	-4021	Heating	-4021	70.0	149	400	6434	0
4E corridor	-6663	Heating	-6663	70.0	248	400	10661	0
RDC Corridor	-1300	Heating	-1300	70.0	63	400	2317	0
RDC Hall	-2853	Heating	-2853	70.0	106	400	4565	0
SS SAS	-524	Heating	-523	70.0	19	400	837	0

Air System Sizing Summary for 02 2E #11 à #15 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:22 AM

Air System Information

Air System Name **02 2E #11 à #15 CPT**
Equipment Class **SPLT AHU**
Air System Type **SZCAV**

Number of zones **1**
Floor Area **3562.5** sqft
Location **St-Anicet 1, QC, Canada**

Sizing Calculation Information

Calculation Months **Jan to Dec**
Sizing Data **Calculated**

Zone CFM Sizing **Sum of space airflow rates**
Space CFM Sizing **Individual peak space loads**

Central Cooling Coil Sizing Data

Total coil load **5.1** Tons
Total coil load **60.9** MBH
Sensible coil load **49.9** MBH
Coil CFM at peak load **2866** CFM
Sum of peak zone CFM **2866** CFM
Sensible heat ratio **0.818**
CFM/Ton **564.2**
sqft/Ton **701.4**
BTU/(hr sqft) **17.1**
Water flow @ 10.0 F rise **N/A**

Peak coil load occurs at **July 17:00**
OA DB / WB **85.8 / 72.5** F
Entering DB / WB **75.4 / 65.9** F
Leaving DB / WB **59.6 / 59.2** F
Resulting RH **58** %
Design supply temp. **58.0** F
Zone T-stat Check **1 of 1** OK
Max zone temperature deviation **0.0** F

Central Heating Coil Sizing Data

Max coil load **39.2** MBH
Coil CFM at Design Heating **2866** CFM
Max coil CFM **2866** CFM
Water flow @ 20.0 F drop **N/A**

Load occurs at **Design Heating**
BTU/(hr sqft) **11.0**
Ent. DB / Lvg DB **66.8 / 79.5** F

Supply Fan Sizing Data

Design CFM **2866** CFM
Design CFM/sqft **0.80** CFM/sqft

Fan motor BHP **0.00** BHP
Fan motor kW **0.00** kW

Outdoor Ventilation Air Data

Design airflow CFM **500** CFM
CFM/sqft **0.14** CFM/sqft

CFM/person **0.00** CFM/person

Zone Sizing Summary for 02 2E #11 à #15 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:22 AM

Air System Information

Air System Name **02 2E #11 à #15 CPT**
 Equipment Class **SPLT AHU**
 Air System Type **SZCAV**

Number of zones **1**
 Floor Area **3562.5** sqft
 Location **St-Anicet 1, QC, Canada**

Sizing Calculation Information

Calculation Months **Jan to Dec**
 Sizing Data **Calculated**

Zone CFM Sizing **Sum of space airflow rates**
 Space CFM Sizing **Individual peak space loads**

Zone Terminal Sizing Data

Zone Name	Design Supply Airflow (CFM)	Minimum Supply Airflow (CFM)	Zone CFM/sqft	Reheat Coil Capacity (MBH)	Reheat Coil Water gpm @ 20.0 F	Zone Htg Unit Coil Capacity (MBH)	Zone Htg Unit Water gpm @ 20.0 F	Mixing Box Fan Airflow (CFM)
2E #11 à #15	2866	2866	0.80	0.0	-	0.0	-	0

Zone Peak Sensible Loads

Zone Name	Zone Cooling Sensible (MBH)	Time of Peak Sensible Cooling Load	Zone Heating Load (MBH)	Zone Floor Area (sqft)
2E #11 à #15	52.3	May 17:00	28.7	3562.5

Space Loads and Airflows

Zone Name / Space Name	Cooling Sensible (MBH)	Time of Peak Sensible Load	Air Flow (CFM)	Heating Load (MBH)	Floor Area (sqft)	Space CFM/sqft
2E #11 à #15						
2E #11 à #15	52.3	May 17:00	2866	28.7	3562.5	0.80

Air System Heat Balance Summary for 02 2E #11 à #15 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:22 AM

Table 1. System Loads

	DESIGN COOLING - JULY 17:00			DESIGN HEATING		
	OA DB / WB 85.8 F / 72.5 F			OA DB / WB -12.3 F / -13.2 F		
COMPONENT LOADS	Details	Sensible [BTU/hr]	Latent [BTU/hr]	Details	Sensible [BTU/hr]	Latent [BTU/hr]
Zone Conditioning	-	48516	1384	-	29408	0
Plenum Load	-	0	0	-	0	0
Return Fan Load	2866 CFM	0	-	2866 CFM	0	-
Ventilation Load	500 CFM	1254	7734	500 CFM	9720	0
Supply Fan Load	2866 CFM	0	-	2866 CFM	0	-
Zone Fan Coil Fans Load	-	0	-	-	0	-
>> Total System Loads	-	49770	9118	-	39129	0
Central Cooling Coil	-	49883	11066	-	0	0
Central Heating Coil	-	0	-	-	39155	-
>> Total Conditioning	-	49883	11066	-	39155	0
Key:	Positive values are cooling loads Negative values are heating loads			Positive values are heating loads Negative values are cooling loads		

Table 2. Zone Heat Balance Loads

	DESIGN COOLING - JULY 17:00			DESIGN HEATING		
	OA DB / WB 85.8 F / 72.5 F			OA DB / WB -12.3 F / -13.2 F		
Zone Heat Balance Component	Details	Sensible [BTU/hr]	Latent [BTU/hr]	Details	Sensible [BTU/hr]	Latent [BTU/hr]
Exterior Wall Convection	924 sqft	3475	-	924 sqft	2000	-
Roof Convection	0 sqft	0	-	0 sqft	0	-
Window Convection	130 sqft	1290	-	130 sqft	1206	-
Skylight Convection	0 sqft	0	-	0 sqft	0	-
Door Convection	232 sqft	2286	-	232 sqft	2142	-
Floor Convection	3562 sqft	13650	-	3562 sqft	2331	-
Interior Wall Convection	1496 sqft	4743	-	1496 sqft	642	-
Ceiling Convection	3562 sqft	18778	-	3562 sqft	3158	-
Overhead Lighting Convection	0 W	0	-	0 W	0	-
Task Lighting Convection	0 W	0	-	0 W	0	-
Electric Equipment Convection	0 W	0	-	0 W	0	-
People Convection	0	0	0	0	0	0
Infiltration	0 CFM	0	0	129 CFM	13456	0
Miscellaneous Equipment	-	0	0	-	0	0
Air Internal Energy Change	-	0	-	-	0	0
Safety Factor	15% / 15%	6633	0	15%	3740	0
>> Total Zone Loads	-	50855	0	-	28676	0
Key:	Positive values are cooling loads Negative values are heating loads			Positive values are heating loads Negative values are cooling loads		

Note 1: Surface convection line items show the combined effects of conductive heat gain to the surface and radiative heat gains absorbed at the surface which are then convected to room air.

Note 2: Lighting, equipment, and people line items include only the direct convective heat gain from the heat source to the room air. The radiative portion of the heat gain is first absorbed by surfaces in the room and then later convected from the surface to the air. Therefore the effect of the radiative portion of the heat gain is found in the surface convection line items.

Note 3: Solar heat gain is absorbed by surfaces in the room, re-radiated to other surfaces, and finally convected from the surfaces to room air. Therefore, the effect of solar heat gain is found in the surface convection line items.

System Psychrometrics for 02 2E #11 à #15 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:22 AM

DESIGN COOLING DAY AT JULY 17:00

TABLE 1: SYSTEM DATA

Component	Location	Dry-Bulb Temp (F)	Specific Humidity (lb/lb)	Airflow (CFM)	CO2 Level (ppm)	Sensible Heat (BTU/hr)	Latent Heat (BTU/hr)
Ventilation Air	Inlet	85.6	0.01418	500	400	1254	7734
Air-to-Air Energy Recovery	Outlet	77.4	0.01418	500	400	4548	0
Vent - Return Mixing	Outlet	75.4	0.01148	2866	400	-	-
Central Cooling Coil	Outlet	59.6	0.01069	2866	400	49883	11066
Central Heating Coil	Outlet	59.6	0.01069	2866	400	0	-
Supply Fan	Outlet	59.6	0.01069	2866	400	0	-
Cold Supply Duct	Outlet	59.6	0.01069	2866	400	-	-
Zone Air	-	75.0	0.01079	2866	400	48516	1384
Return Air	Outlet	75.0	0.01091	2866	400	-	-

Air Density x Heat Capacity x Conversion Factor: At sea level = 1.080; At site altitude = 1.074 BTU/(hr-CFM-F)

Air Density x Heat of Vaporization x Conversion Factor: At sea level = 4746.6; At site altitude = 4719.0 BTU/(hr-CFM)

Site Altitude = 161.0 ft

TABLE 2: ZONE DATA

Zone Name	Zone Sensible Load (BTU/hr)	T-stat Mode	Zone Cond (BTU/hr)	Zone Temp (F)	Zone Airflow (CFM)	CO2 Level (ppm)	Terminal Heating Coil (BTU/hr)	Zone Heating Unit (BTU/hr)
2E #11 à #15	48503	Cooling	48516	75.0	2866	400	0	0

System Psychrometrics for 02 2E #11 à #15 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:22 AM

WINTER DESIGN HEATING

TABLE 1: SYSTEM DATA

Component	Location	Dry-Bulb Temp (F)	Specific Humidity (lb/lb)	Airflow (CFM)	CO2 Level (ppm)	Sensible Heat (BTU/hr)	Latent Heat (BTU/hr)
Ventilation Air	Inlet	-12.3	0.00018	500	400	-9720	0
Air-to-Air Energy Recovery	Outlet	51.9	0.00018	500	400	-34556	0
Vent - Return Mixing	Outlet	66.8	0.00018	2866	400	-	-
Central Cooling Coil	Outlet	66.8	0.00018	2866	400	0	0
Central Heating Coil	Outlet	79.5	0.00018	2866	400	39155	-
Supply Fan	Outlet	79.5	0.00018	2866	400	0	-
Cold Supply Duct	Outlet	79.5	0.00018	2866	400	-	-
Zone Air	-	70.0	0.00018	2866	400	-29408	0
Return Air	Outlet	70.0	0.00018	2866	400	-	-

Air Density x Heat Capacity x Conversion Factor: At sea level = 1.080; At site altitude = 1.074 BTU/(hr-CFM-F)

Air Density x Heat of Vaporization x Conversion Factor: At sea level = 4746.6; At site altitude = 4719.0 BTU/(hr-CFM)

Site Altitude = 161.0 ft

TABLE 2: ZONE DATA

Zone Name	Zone Sensible Load (BTU/hr)	T-stat Mode	Zone Cond (BTU/hr)	Zone Temp (F)	Zone Airflow (CFM)	CO2 Level (ppm)	Terminal Heating Coil (BTU/hr)	Zone Heating Unit (BTU/hr)
2E #11 à #15	-29408	Heating	-29408	70.0	2866	400	0	0

Air System Sizing Summary for 04 2E #16 à #22 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:22 AM

Air System Information

Air System Name **04 2E #16 à #22 CPT**
Equipment Class **SPLT AHU**
Air System Type **SZCAV**

Number of zones **1**
Floor Area **5890.8** sqft
Location **St-Anicet 1, QC, Canada**

Sizing Calculation Information

Calculation Months **Jan to Dec**
Sizing Data **Calculated**

Zone CFM Sizing **Sum of space airflow rates**
Space CFM Sizing **Individual peak space loads**

Central Cooling Coil Sizing Data

Total coil load **7.0** Tons
Total coil load **83.9** MBH
Sensible coil load **69.0** MBH
Coil CFM at peak load **4079** CFM
Sum of peak zone CFM **4079** CFM
Sensible heat ratio **0.822**
CFM/Ton **583.5**
sqft/Ton **842.6**
BTU/(hr sqft) **14.2**
Water flow @ 10.0 F rise **N/A**

Peak coil load occurs at **August 9:00**
OA DB / WB **72.1 / 68.4** F
Entering DB / WB **74.6 / 65.2** F
Leaving DB / WB **59.2 / 58.7** F
Resulting RH **57** %
Design supply temp. **58.0** F
Zone T-stat Check **1 of 1** OK
Max zone temperature deviation **0.0** F

Central Heating Coil Sizing Data

Max coil load **82.6** MBH
Coil CFM at Design Heating **4079** CFM
Max coil CFM **4079** CFM
Water flow @ 20.0 F drop **N/A**

Load occurs at **Design Heating**
BTU/(hr sqft) **14.0**
Ent. DB / Lvg DB **66.9 / 85.7** F

Supply Fan Sizing Data

Design CFM **4079** CFM
Design CFM/sqft **0.69** CFM/sqft

Fan motor BHP **0.00** BHP
Fan motor kW **0.00** kW

Outdoor Ventilation Air Data

Design airflow CFM **700** CFM
CFM/sqft **0.12** CFM/sqft

CFM/person **0.00** CFM/person

Zone Sizing Summary for 04 2E #16 à #22 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:22 AM

Air System Information

Air System Name **04 2E #16 à #22 CPT**
 Equipment Class **SPLT AHU**
 Air System Type **SZCAV**

Number of zones **1**
 Floor Area **5890.8** sqft
 Location **St-Anicet 1, QC, Canada**

Sizing Calculation Information

Calculation Months **Jan to Dec**
 Sizing Data **Calculated**

Zone CFM Sizing **Sum of space airflow rates**
 Space CFM Sizing **Individual peak space loads**

Zone Terminal Sizing Data

Zone Name	Design Supply Airflow (CFM)	Minimum Supply Airflow (CFM)	Zone CFM/sqft	Reheat Coil Capacity (MBH)	Reheat Coil Water gpm @ 20.0 F	Zone Htg Unit Coil Capacity (MBH)	Zone Htg Unit Water gpm @ 20.0 F	Mixing Box Fan Airflow (CFM)
2E #16 à #22	4079	4079	0.69	0.0	-	0.0	-	0

Zone Peak Sensible Loads

Zone Name	Zone Cooling Sensible (MBH)	Time of Peak Sensible Cooling Load	Zone Heating Load (MBH)	Zone Floor Area (sqft)
2E #16 à #22	74.5	August 10:00	68.7	5890.8

Space Loads and Airflows

Zone Name / Space Name	Cooling Sensible (MBH)	Time of Peak Sensible Load	Air Flow (CFM)	Heating Load (MBH)	Floor Area (sqft)	Space CFM/sqft
2E #16 à #22						
2E #16 à #22	74.5	August 10:00	4079	68.7	5890.8	0.69

Air System Heat Balance Summary for 04 2E #16 à #22 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:22 AM

Table 1. System Loads

COMPONENT LOADS	DESIGN COOLING - AUGUST 9:00			DESIGN HEATING		
	OA DB / WB 72.1 F / 68.4 F			OA DB / WB -12.3 F / -13.2 F		
	Details	Sensible [BTU/hr]	Latent [BTU/hr]	Details	Sensible [BTU/hr]	Latent [BTU/hr]
Zone Conditioning	-	70912	1397	-	68920	0
Plenum Load	-	0	0	-	0	0
Return Fan Load	4079 CFM	0	-	4079 CFM	0	-
Ventilation Load	700 CFM	-1950	11670	700 CFM	13609	0
Supply Fan Load	4079 CFM	0	-	4079 CFM	0	-
Zone Fan Coil Fans Load	-	0	-	-	0	-
>> Total System Loads	-	68963	13067	-	82529	0
Central Cooling Coil	-	68985	14905	-	0	0
Central Heating Coil	-	0	-	-	82565	-
>> Total Conditioning	-	68985	14905	-	82565	0
Key:	Positive values are cooling loads Negative values are heating loads			Positive values are heating loads Negative values are cooling loads		

Table 2. Zone Heat Balance Loads

Zone Heat Balance Component	DESIGN COOLING - AUGUST 9:00			DESIGN HEATING		
	OA DB / WB 72.1 F / 68.4 F			OA DB / WB -12.3 F / -13.2 F		
	Details	Sensible [BTU/hr]	Latent [BTU/hr]	Details	Sensible [BTU/hr]	Latent [BTU/hr]
Exterior Wall Convection	2270 sqft	6267	-	2270 sqft	5689	-
Roof Convection	0 sqft	0	-	0 sqft	0	-
Window Convection	409 sqft	1956	-	409 sqft	3819	-
Skylight Convection	0 sqft	0	-	0 sqft	0	-
Door Convection	328 sqft	2667	-	328 sqft	3004	-
Floor Convection	5891 sqft	21361	-	5891 sqft	7592	-
Interior Wall Convection	1805 sqft	4936	-	1805 sqft	1075	-
Ceiling Convection	5891 sqft	27189	-	5891 sqft	7098	-
Overhead Lighting Convection	0 W	0	-	0 W	0	-
Task Lighting Convection	0 W	0	-	0 W	0	-
Electric Equipment Convection	0 W	0	-	0 W	0	-
People Convection	0	0	0	0	0	0
Infiltration	0 CFM	0	0	301 CFM	31457	0
Miscellaneous Equipment	-	0	0	-	0	0
Air Internal Energy Change	-	0	-	-	0	0
Safety Factor	15% / 15%	9656	0	15%	8960	0
>> Total Zone Loads	-	74033	0	-	68694	0
Key:	Positive values are cooling loads Negative values are heating loads			Positive values are heating loads Negative values are cooling loads		

Note 1: Surface convection line items show the combined effects of conductive heat gain to the surface and radiative heat gains absorbed at the surface which are then convected to room air.

Note 2: Lighting, equipment, and people line items include only the direct convective heat gain from the heat source to the room air. The radiative portion of the heat gain is first absorbed by surfaces in the room and then later convected from the surface to the air. Therefore the effect of the radiative portion of the heat gain is found in the surface convection line items.

Note 3: Solar heat gain is absorbed by surfaces in the room, re-radiated to other surfaces, and finally convected from the surfaces to room air. Therefore, the effect of solar heat gain is found in the surface convection line items.

System Psychrometrics for 04 2E #16 à #22 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:22 AM

DESIGN COOLING DAY AT AUGUST 9:00

TABLE 1: SYSTEM DATA

Component	Location	Dry-Bulb Temp (F)	Specific Humidity (lb/lb)	Airflow (CFM)	CO2 Level (ppm)	Sensible Heat (BTU/hr)	Latent Heat (BTU/hr)
Ventilation Air	Inlet	72.4	0.01416	700	400	-1950	11670
Air-to-Air Energy Recovery	Outlet	72.4	0.01416	700	400	0	0
Vent - Return Mixing	Outlet	74.6	0.01123	4079	400	-	-
Central Cooling Coil	Outlet	59.2	0.01048	4079	400	68985	14905
Central Heating Coil	Outlet	59.2	0.01048	4079	400	0	-
Supply Fan	Outlet	59.2	0.01048	4079	400	0	-
Cold Supply Duct	Outlet	59.2	0.01048	4079	400	-	-
Zone Air	-	75.0	0.01055	4079	400	70912	1397
Return Air	Outlet	75.0	0.01062	4079	400	-	-

Air Density x Heat Capacity x Conversion Factor: At sea level = 1.080; At site altitude = 1.074 BTU/(hr-CFM-F)

Air Density x Heat of Vaporization x Conversion Factor: At sea level = 4746.6; At site altitude = 4719.0 BTU/(hr-CFM)

Site Altitude = 161.0 ft

TABLE 2: ZONE DATA

Zone Name	Zone Sensible Load (BTU/hr)	T-stat Mode	Zone Cond (BTU/hr)	Zone Temp (F)	Zone Airflow (CFM)	CO2 Level (ppm)	Terminal Heating Coil (BTU/hr)	Zone Heating Unit (BTU/hr)
2E #16 à #22	70900	Cooling	70913	75.0	4079	400	0	0

System Psychrometrics for 04 2E #16 à #22 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:22 AM

WINTER DESIGN HEATING

TABLE 1: SYSTEM DATA

Component	Location	Dry-Bulb Temp (F)	Specific Humidity (lb/lb)	Airflow (CFM)	CO2 Level (ppm)	Sensible Heat (BTU/hr)	Latent Heat (BTU/hr)
Ventilation Air	Inlet	-12.3	0.00018	700	400	-13609	0
Air-to-Air Energy Recovery	Outlet	51.9	0.00018	700	400	-48378	0
Vent - Return Mixing	Outlet	66.9	0.00018	4079	400	-	-
Central Cooling Coil	Outlet	66.9	0.00018	4079	400	0	0
Central Heating Coil	Outlet	85.7	0.00018	4079	400	82565	-
Supply Fan	Outlet	85.7	0.00018	4079	400	0	-
Cold Supply Duct	Outlet	85.7	0.00018	4079	400	-	-
Zone Air	-	70.0	0.00018	4079	400	-68920	0
Return Air	Outlet	70.0	0.00018	4079	400	-	-

Air Density x Heat Capacity x Conversion Factor: At sea level = 1.080; At site altitude = 1.074 BTU/(hr-CFM-F)

Air Density x Heat of Vaporization x Conversion Factor: At sea level = 4746.6; At site altitude = 4719.0 BTU/(hr-CFM)

Site Altitude = 161.0 ft

TABLE 2: ZONE DATA

Zone Name	Zone Sensible Load (BTU/hr)	T-stat Mode	Zone Cond (BTU/hr)	Zone Temp (F)	Zone Airflow (CFM)	CO2 Level (ppm)	Terminal Heating Coil (BTU/hr)	Zone Heating Unit (BTU/hr)
2E #16 à #22	-68920	Heating	-68920	70.0	4079	400	0	0

Air System Sizing Summary for 06 3E #11 à #15 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:22 AM

Air System Information

Air System Name **06 3E #11 à #15 CPT**
Equipment Class **SPLT AHU**
Air System Type **SZCAV**

Number of zones **1**
Floor Area **3562.5** sqft
Location **St-Anicet 1, QC, Canada**

Sizing Calculation Information

Calculation Months **Jan to Dec**
Sizing Data **Calculated**

Zone CFM Sizing **Sum of space airflow rates**
Space CFM Sizing **Individual peak space loads**

Central Cooling Coil Sizing Data

Total coil load **5.1** Tons
Total coil load **61.0** MBH
Sensible coil load **49.9** MBH
Coil CFM at peak load **2867** CFM
Sum of peak zone CFM **2867** CFM
Sensible heat ratio **0.819**
CFM/Ton **564.4**
sqft/Ton **701.2**
BTU/(hr sqft) **17.1**
Water flow @ 10.0 F rise **N/A**

Peak coil load occurs at **July 17:00**
OA DB / WB **85.8 / 72.5** F
Entering DB / WB **75.4 / 65.9** F
Leaving DB / WB **59.6 / 59.2** F
Resulting RH **58** %
Design supply temp. **58.0** F
Zone T-stat Check **1 of 1** OK
Max zone temperature deviation **0.0** F

Central Heating Coil Sizing Data

Max coil load **39.2** MBH
Coil CFM at Design Heating **2867** CFM
Max coil CFM **2867** CFM
Water flow @ 20.0 F drop **N/A**

Load occurs at **Design Heating**
BTU/(hr sqft) **11.0**
Ent. DB / Lvg DB **66.8 / 79.6** F

Supply Fan Sizing Data

Design CFM **2867** CFM
Design CFM/sqft **0.80** CFM/sqft

Fan motor BHP **0.00** BHP
Fan motor kW **0.00** kW

Outdoor Ventilation Air Data

Design airflow CFM **500** CFM
CFM/sqft **0.14** CFM/sqft

CFM/person **0.00** CFM/person

Zone Sizing Summary for 06 3E #11 à #15 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:22 AM

Air System Information

Air System Name **06 3E #11 à #15 CPT**
 Equipment Class **SPLT AHU**
 Air System Type **SZCAV**

Number of zones **1**
 Floor Area **3562.5** sqft
 Location **St-Anicet 1, QC, Canada**

Sizing Calculation Information

Calculation Months **Jan to Dec**
 Sizing Data **Calculated**

Zone CFM Sizing **Sum of space airflow rates**
 Space CFM Sizing **Individual peak space loads**

Zone Terminal Sizing Data

Zone Name	Design Supply Airflow (CFM)	Minimum Supply Airflow (CFM)	Zone CFM/sqft	Reheat Coil Capacity (MBH)	Reheat Coil Water gpm @ 20.0 F	Zone Htg Unit Coil Capacity (MBH)	Zone Htg Unit Water gpm @ 20.0 F	Mixing Box Fan Airflow (CFM)
3E #11 à #15	2867	2867	0.80	0.0	-	0.0	-	0

Zone Peak Sensible Loads

Zone Name	Zone Cooling Sensible (MBH)	Time of Peak Sensible Cooling Load	Zone Heating Load (MBH)	Zone Floor Area (sqft)
3E #11 à #15	52.3	May 17:00	28.8	3562.5

Space Loads and Airflows

Zone Name / Space Name	Cooling Sensible (MBH)	Time of Peak Sensible Load	Air Flow (CFM)	Heating Load (MBH)	Floor Area (sqft)	Space CFM/sqft
3E #11 à #15						
3E #11 à #15	52.3	May 17:00	2867	28.8	3562.5	0.80

Air System Heat Balance Summary for 06 3E #11 à #15 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:22 AM

Table 1. System Loads

COMPONENT LOADS	DESIGN COOLING - JULY 17:00			DESIGN HEATING		
	OA DB / WB 85.8 F / 72.5 F			OA DB / WB -12.3 F / -13.2 F		
	Details	Sensible [BTU/hr]	Latent [BTU/hr]	Details	Sensible [BTU/hr]	Latent [BTU/hr]
Zone Conditioning	-	48535	1380	-	29484	0
Plenum Load	-	0	0	-	0	0
Return Fan Load	2867 CFM	0	-	2867 CFM	0	-
Ventilation Load	500 CFM	1254	7735	500 CFM	9720	0
Supply Fan Load	2867 CFM	0	-	2867 CFM	0	-
Zone Fan Coil Fans Load	-	0	-	-	0	-
>> Total System Loads	-	49790	9115	-	39205	0
Central Cooling Coil	-	49903	11060	-	0	0
Central Heating Coil	-	0	-	-	39231	-
>> Total Conditioning	-	49903	11060	-	39231	0
Key:	Positive values are cooling loads Negative values are heating loads			Positive values are heating loads Negative values are cooling loads		

Table 2. Zone Heat Balance Loads

Zone Heat Balance Component	DESIGN COOLING - JULY 17:00			DESIGN HEATING		
	OA DB / WB 85.8 F / 72.5 F			OA DB / WB -12.3 F / -13.2 F		
	Details	Sensible [BTU/hr]	Latent [BTU/hr]	Details	Sensible [BTU/hr]	Latent [BTU/hr]
Exterior Wall Convection	924 sqft	3493	-	924 sqft	2005	-
Roof Convection	0 sqft	0	-	0 sqft	0	-
Window Convection	130 sqft	1289	-	130 sqft	1210	-
Skylight Convection	0 sqft	0	-	0 sqft	0	-
Door Convection	232 sqft	2283	-	232 sqft	2149	-
Floor Convection	3562 sqft	13605	-	3562 sqft	2352	-
Interior Wall Convection	1496 sqft	4743	-	1496 sqft	646	-
Ceiling Convection	3562 sqft	18851	-	3562 sqft	3191	-
Overhead Lighting Convection	0 W	0	-	0 W	0	-
Task Lighting Convection	0 W	0	-	0 W	0	-
Electric Equipment Convection	0 W	0	-	0 W	0	-
People Convection	0	0	0	0	0	0
Infiltration	0 CFM	0	0	129 CFM	13463	0
Miscellaneous Equipment	-	0	0	-	0	0
Air Internal Energy Change	-	0	-	-	0	0
Safety Factor	15% / 15%	6640	0	15%	3752	0
>> Total Zone Loads	-	50904	0	-	28767	0
Key:	Positive values are cooling loads Negative values are heating loads			Positive values are heating loads Negative values are cooling loads		

Note 1: Surface convection line items show the combined effects of conductive heat gain to the surface and radiative heat gains absorbed at the surface which are then convected to room air.

Note 2: Lighting, equipment, and people line items include only the direct convective heat gain from the heat source to the room air. The radiative portion of the heat gain is first absorbed by surfaces in the room and then later convected from the surface to the air. Therefore the effect of the radiative portion of the heat gain is found in the surface convection line items.

Note 3: Solar heat gain is absorbed by surfaces in the room, re-radiated to other surfaces, and finally convected from the surfaces to room air. Therefore, the effect of solar heat gain is found in the surface convection line items.

System Psychrometrics for 06 3E #11 à #15 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:22 AM

DESIGN COOLING DAY AT JULY 17:00

TABLE 1: SYSTEM DATA

Component	Location	Dry-Bulb Temp (F)	Specific Humidity (lb/lb)	Airflow (CFM)	CO2 Level (ppm)	Sensible Heat (BTU/hr)	Latent Heat (BTU/hr)
Ventilation Air	Inlet	85.6	0.01418	500	400	1254	7735
Air-to-Air Energy Recovery	Outlet	77.4	0.01418	500	400	4548	0
Vent - Return Mixing	Outlet	75.4	0.01148	2867	400	-	-
Central Cooling Coil	Outlet	59.6	0.01069	2867	400	49903	11060
Central Heating Coil	Outlet	59.6	0.01069	2867	400	0	-
Supply Fan	Outlet	59.6	0.01069	2867	400	0	-
Cold Supply Duct	Outlet	59.6	0.01069	2867	400	-	-
Zone Air	-	75.0	0.01079	2867	400	48535	1380
Return Air	Outlet	75.0	0.01091	2867	400	-	-

Air Density x Heat Capacity x Conversion Factor: At sea level = 1.080; At site altitude = 1.074 BTU/(hr-CFM-F)

Air Density x Heat of Vaporization x Conversion Factor: At sea level = 4746.6; At site altitude = 4719.0 BTU/(hr-CFM)

Site Altitude = 161.0 ft

TABLE 2: ZONE DATA

Zone Name	Zone Sensible Load (BTU/hr)	T-stat Mode	Zone Cond (BTU/hr)	Zone Temp (F)	Zone Airflow (CFM)	CO2 Level (ppm)	Terminal Heating Coil (BTU/hr)	Zone Heating Unit (BTU/hr)
3E #11 à #15	48522	Cooling	48536	75.0	2867	400	0	0

System Psychrometrics for 06 3E #11 à #15 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:22 AM

WINTER DESIGN HEATING

TABLE 1: SYSTEM DATA

Component	Location	Dry-Bulb Temp (F)	Specific Humidity (lb/lb)	Airflow (CFM)	CO2 Level (ppm)	Sensible Heat (BTU/hr)	Latent Heat (BTU/hr)
Ventilation Air	Inlet	-12.3	0.00018	500	400	-9720	0
Air-to-Air Energy Recovery	Outlet	51.9	0.00018	500	400	-34556	0
Vent - Return Mixing	Outlet	66.8	0.00018	2867	400	-	-
Central Cooling Coil	Outlet	66.8	0.00018	2867	400	0	0
Central Heating Coil	Outlet	79.6	0.00018	2867	400	39231	-
Supply Fan	Outlet	79.6	0.00018	2867	400	0	-
Cold Supply Duct	Outlet	79.6	0.00018	2867	400	-	-
Zone Air	-	70.0	0.00018	2867	400	-29484	0
Return Air	Outlet	70.0	0.00018	2867	400	-	-

Air Density x Heat Capacity x Conversion Factor: At sea level = 1.080; At site altitude = 1.074 BTU/(hr-CFM-F)

Air Density x Heat of Vaporization x Conversion Factor: At sea level = 4746.6; At site altitude = 4719.0 BTU/(hr-CFM)

Site Altitude = 161.0 ft

TABLE 2: ZONE DATA

Zone Name	Zone Sensible Load (BTU/hr)	T-stat Mode	Zone Cond (BTU/hr)	Zone Temp (F)	Zone Airflow (CFM)	CO2 Level (ppm)	Terminal Heating Coil (BTU/hr)	Zone Heating Unit (BTU/hr)
3E #11 à #15	-29484	Heating	-29484	70.0	2867	400	0	0

Air System Sizing Summary for 08 3E #16 à #22 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:22 AM

Air System Information

Air System Name **08 3E #16 à #22 CPT**
Equipment Class **SPLT AHU**
Air System Type **SZCAV**

Number of zones **1**
Floor Area **5890.8** sqft
Location **St-Anicet 1, QC, Canada**

Sizing Calculation Information

Calculation Months **Jan to Dec**
Sizing Data **Calculated**

Zone CFM Sizing **Sum of space airflow rates**
Space CFM Sizing **Individual peak space loads**

Central Cooling Coil Sizing Data

Total coil load **6.8** Tons
Total coil load **81.3** MBH
Sensible coil load **66.6** MBH
Coil CFM at peak load **3975** CFM
Sum of peak zone CFM **3975** CFM
Sensible heat ratio **0.819**
CFM/Ton **586.3**
sqft/Ton **869.0**
BTU/(hr sqft) **13.8**
Water flow @ 10.0 F rise **N/A**

Peak coil load occurs at **August 9:00**
OA DB / WB **72.1 / 68.4** F
Entering DB / WB **74.5 / 65.3** F
Leaving DB / WB **59.3 / 58.8** F
Resulting RH **57** %
Design supply temp. **58.0** F
Zone T-stat Check **1 of 1** OK
Max zone temperature deviation **0.0** F

Central Heating Coil Sizing Data

Max coil load **78.5** MBH
Coil CFM at Design Heating **3975** CFM
Max coil CFM **3975** CFM
Water flow @ 20.0 F drop **N/A**

Load occurs at **Design Heating**
BTU/(hr sqft) **13.3**
Ent. DB / Lvg DB **66.8 / 85.2** F

Supply Fan Sizing Data

Design CFM **3975** CFM
Design CFM/sqft **0.67** CFM/sqft

Fan motor BHP **0.00** BHP
Fan motor kW **0.00** kW

Outdoor Ventilation Air Data

Design airflow CFM **700** CFM
CFM/sqft **0.12** CFM/sqft

CFM/person **0.00** CFM/person

Zone Sizing Summary for 08 3E #16 à #22 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:22 AM

Air System Information

Air System Name **08 3E #16 à #22 CPT**
 Equipment Class **SPLT AHU**
 Air System Type **SZCAV**

Number of zones **1**
 Floor Area **5890.8** sqft
 Location **St-Anicet 1, QC, Canada**

Sizing Calculation Information

Calculation Months **Jan to Dec**
 Sizing Data **Calculated**

Zone CFM Sizing **Sum of space airflow rates**
 Space CFM Sizing **Individual peak space loads**

Zone Terminal Sizing Data

Zone Name	Design Supply Airflow (CFM)	Minimum Supply Airflow (CFM)	Zone CFM/sqft	Reheat Coil Capacity (MBH)	Reheat Coil Water gpm @ 20.0 F	Zone Htg Unit Coil Capacity (MBH)	Zone Htg Unit Water gpm @ 20.0 F	Mixing Box Fan Airflow (CFM)
3E #16 à #22	3975	3975	0.67	0.0	-	0.0	-	0

Zone Peak Sensible Loads

Zone Name	Zone Cooling Sensible (MBH)	Time of Peak Sensible Cooling Load	Zone Heating Load (MBH)	Zone Floor Area (sqft)
3E #16 à #22	72.5	August 10:00	64.6	5890.8

Space Loads and Airflows

Zone Name / Space Name	Cooling Sensible (MBH)	Time of Peak Sensible Load	Air Flow (CFM)	Heating Load (MBH)	Floor Area (sqft)	Space CFM/sqft
3E #16 à #22						
3E #16 à #22	72.5	August 10:00	3975	64.6	5890.8	0.67

Air System Heat Balance Summary for 08 3E #16 à #22 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:22 AM

Table 1. System Loads

COMPONENT LOADS	DESIGN COOLING - AUGUST 9:00			DESIGN HEATING		
	OA DB / WB 72.1 F / 68.4 F			OA DB / WB -12.3 F / -13.2 F		
	Details	Sensible [BTU/hr]	Latent [BTU/hr]	Details	Sensible [BTU/hr]	Latent [BTU/hr]
Zone Conditioning	-	68556	1400	-	64889	0
Plenum Load	-	0	0	-	0	0
Return Fan Load	3975 CFM	0	-	3975 CFM	0	-
Ventilation Load	700 CFM	-1950	11516	700 CFM	13609	0
Supply Fan Load	3975 CFM	0	-	3975 CFM	0	-
Zone Fan Coil Fans Load	-	0	-	-	0	-
>> Total System Loads	-	66607	12916	-	78497	0
Central Cooling Coil	-	66627	14716	-	0	0
Central Heating Coil	-	0	-	-	78534	-
>> Total Conditioning	-	66627	14716	-	78534	0
Key:	Positive values are cooling loads Negative values are heating loads			Positive values are heating loads Negative values are cooling loads		

Table 2. Zone Heat Balance Loads

Zone Heat Balance Component	DESIGN COOLING - AUGUST 9:00			DESIGN HEATING		
	OA DB / WB 72.1 F / 68.4 F			OA DB / WB -12.3 F / -13.2 F		
	Details	Sensible [BTU/hr]	Latent [BTU/hr]	Details	Sensible [BTU/hr]	Latent [BTU/hr]
Exterior Wall Convection	2270 sqft	6217	-	2270 sqft	5455	-
Roof Convection	0 sqft	0	-	0 sqft	0	-
Window Convection	409 sqft	1922	-	409 sqft	3798	-
Skylight Convection	0 sqft	0	-	0 sqft	0	-
Door Convection	328 sqft	2631	-	328 sqft	2987	-
Floor Convection	5891 sqft	19943	-	5891 sqft	5146	-
Interior Wall Convection	1805 sqft	4899	-	1805 sqft	940	-
Ceiling Convection	5891 sqft	27064	-	5891 sqft	6402	-
Overhead Lighting Convection	0 W	0	-	0 W	0	-
Task Lighting Convection	0 W	0	-	0 W	0	-
Electric Equipment Convection	0 W	0	-	0 W	0	-
People Convection	0	0	0	0	0	0
Infiltration	0 CFM	0	0	301 CFM	31473	0
Miscellaneous Equipment	-	0	0	-	0	0
Air Internal Energy Change	-	0	-	-	0	0
Safety Factor	15% / 15%	9401	0	15%	8430	0
>> Total Zone Loads	-	72076	0	-	64631	0
Key:	Positive values are cooling loads Negative values are heating loads			Positive values are heating loads Negative values are cooling loads		

Note 1: Surface convection line items show the combined effects of conductive heat gain to the surface and radiative heat gains absorbed at the surface which are then convected to room air.

Note 2: Lighting, equipment, and people line items include only the direct convective heat gain from the heat source to the room air. The radiative portion of the heat gain is first absorbed by surfaces in the room and then later convected from the surface to the air. Therefore the effect of the radiative portion of the heat gain is found in the surface convection line items.

Note 3: Solar heat gain is absorbed by surfaces in the room, re-radiated to other surfaces, and finally convected from the surfaces to room air. Therefore, the effect of solar heat gain is found in the surface convection line items.

System Psychrometrics for 08 3E #16 à #22 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:22 AM

DESIGN COOLING DAY AT AUGUST 9:00

TABLE 1: SYSTEM DATA

Component	Location	Dry-Bulb Temp (F)	Specific Humidity (lb/lb)	Airflow (CFM)	CO2 Level (ppm)	Sensible Heat (BTU/hr)	Latent Heat (BTU/hr)
Ventilation Air	Inlet	72.4	0.01416	700	400	-1950	11516
Air-to-Air Energy Recovery	Outlet	72.4	0.01416	700	400	0	0
Vent - Return Mixing	Outlet	74.5	0.01128	3975	400	-	-
Central Cooling Coil	Outlet	59.3	0.01052	3975	400	66627	14716
Central Heating Coil	Outlet	59.3	0.01052	3975	400	0	-
Supply Fan	Outlet	59.3	0.01052	3975	400	0	-
Cold Supply Duct	Outlet	59.3	0.01052	3975	400	-	-
Zone Air	-	75.0	0.01060	3975	400	68556	1400
Return Air	Outlet	75.0	0.01067	3975	400	-	-

Air Density x Heat Capacity x Conversion Factor: At sea level = 1.080; At site altitude = 1.074 BTU/(hr-CFM-F)

Air Density x Heat of Vaporization x Conversion Factor: At sea level = 4746.6; At site altitude = 4719.0 BTU/(hr-CFM)

Site Altitude = 161.0 ft

TABLE 2: ZONE DATA

Zone Name	Zone Sensible Load (BTU/hr)	T-stat Mode	Zone Cond (BTU/hr)	Zone Temp (F)	Zone Airflow (CFM)	CO2 Level (ppm)	Terminal Heating Coil (BTU/hr)	Zone Heating Unit (BTU/hr)
3E #16 à #22	68544	Cooling	68557	75.0	3975	400	0	0

System Psychrometrics for 08 3E #16 à #22 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:22 AM

WINTER DESIGN HEATING

TABLE 1: SYSTEM DATA

Component	Location	Dry-Bulb Temp (F)	Specific Humidity (lb/lb)	Airflow (CFM)	CO2 Level (ppm)	Sensible Heat (BTU/hr)	Latent Heat (BTU/hr)
Ventilation Air	Inlet	-12.3	0.00018	700	400	-13609	0
Air-to-Air Energy Recovery	Outlet	51.9	0.00018	700	400	-48378	0
Vent - Return Mixing	Outlet	66.8	0.00018	3975	400	-	-
Central Cooling Coil	Outlet	66.8	0.00018	3975	400	0	0
Central Heating Coil	Outlet	85.2	0.00018	3975	400	78534	-
Supply Fan	Outlet	85.2	0.00018	3975	400	0	-
Cold Supply Duct	Outlet	85.2	0.00018	3975	400	-	-
Zone Air	-	70.0	0.00018	3975	400	-64889	0
Return Air	Outlet	70.0	0.00018	3975	400	-	-

Air Density x Heat Capacity x Conversion Factor: At sea level = 1.080; At site altitude = 1.074 BTU/(hr-CFM-F)

Air Density x Heat of Vaporization x Conversion Factor: At sea level = 4746.6; At site altitude = 4719.0 BTU/(hr-CFM)

Site Altitude = 161.0 ft

TABLE 2: ZONE DATA

Zone Name	Zone Sensible Load (BTU/hr)	T-stat Mode	Zone Cond (BTU/hr)	Zone Temp (F)	Zone Airflow (CFM)	CO2 Level (ppm)	Terminal Heating Coil (BTU/hr)	Zone Heating Unit (BTU/hr)
3E #16 à #22	-64889	Heating	-64889	70.0	3975	400	0	0

Air System Sizing Summary for 10 4E #11 à #15 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:22 AM

Air System Information

Air System Name **10 4E #11 à #15 CPT**
Equipment Class **SPLT AHU**
Air System Type **SZCAV**

Number of zones **1**
Floor Area **3562.5** sqft
Location **St-Anicet 1, QC, Canada**

Sizing Calculation Information

Calculation Months **Jan to Dec**
Sizing Data **Calculated**

Zone CFM Sizing **Sum of space airflow rates**
Space CFM Sizing **Individual peak space loads**

Central Cooling Coil Sizing Data

Total coil load **5.5** Tons
Total coil load **66.6** MBH
Sensible coil load **55.4** MBH
Coil CFM at peak load **3120** CFM
Sum of peak zone CFM **3120** CFM
Sensible heat ratio **0.832**
CFM/Ton **562.3**
sqft/Ton **642.1**
BTU/(hr sqft) **18.7**
Water flow @ 10.0 F rise **N/A**

Peak coil load occurs at **July 17:00**
OA DB / WB **85.8 / 72.5** F
Entering DB / WB **75.4 / 65.6** F
Leaving DB / WB **59.2 / 58.8** F
Resulting RH **57** %
Design supply temp. **58.0** F
Zone T-stat Check **1 of 1** OK
Max zone temperature deviation **0.0** F

Central Heating Coil Sizing Data

Max coil load **47.3** MBH
Coil CFM at Design Heating **3120** CFM
Max coil CFM **3120** CFM
Water flow @ 20.0 F drop **N/A**

Load occurs at **Design Heating**
BTU/(hr sqft) **13.3**
Ent. DB / Lvg DB **67.1 / 81.2** F

Supply Fan Sizing Data

Design CFM **3120** CFM
Design CFM/sqft **0.88** CFM/sqft

Fan motor BHP **0.00** BHP
Fan motor kW **0.00** kW

Outdoor Ventilation Air Data

Design airflow CFM **500** CFM
CFM/sqft **0.14** CFM/sqft

CFM/person **0.00** CFM/person

Zone Sizing Summary for 10 4E #11 à #15 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:22 AM

Air System Information

Air System Name **10 4E #11 à #15 CPT**
 Equipment Class **SPLT AHU**
 Air System Type **SZCAV**

Number of zones **1**
 Floor Area **3562.5** sqft
 Location **St-Anicet 1, QC, Canada**

Sizing Calculation Information

Calculation Months **Jan to Dec**
 Sizing Data **Calculated**

Zone CFM Sizing **Sum of space airflow rates**
 Space CFM Sizing **Individual peak space loads**

Zone Terminal Sizing Data

Zone Name	Design Supply Airflow (CFM)	Minimum Supply Airflow (CFM)	Zone CFM/sqft	Reheat Coil Capacity (MBH)	Reheat Coil Water gpm @ 20.0 F	Zone Htg Unit Coil Capacity (MBH)	Zone Htg Unit Water gpm @ 20.0 F	Mixing Box Fan Airflow (CFM)
4E #11 à #15	3120	3120	0.88	0.0	-	0.0	-	0

Zone Peak Sensible Loads

Zone Name	Zone Cooling Sensible (MBH)	Time of Peak Sensible Cooling Load	Zone Heating Load (MBH)	Zone Floor Area (sqft)
4E #11 à #15	56.9	June 17:00	36.8	3562.5

Space Loads and Airflows

Zone Name / Space Name	Cooling Sensible (MBH)	Time of Peak Sensible Load	Air Flow (CFM)	Heating Load (MBH)	Floor Area (sqft)	Space CFM/sqft
4E #11 à #15						
4E #11 à #15	56.9	June 17:00	3120	36.8	3562.5	0.88

Air System Heat Balance Summary for 10 4E #11 à #15 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:22 AM

Table 1. System Loads

COMPONENT LOADS	DESIGN COOLING - JULY 17:00			DESIGN HEATING		
	OA DB / WB 85.8 F / 72.5 F			OA DB / WB -12.3 F / -13.2 F		
	Details	Sensible [BTU/hr]	Latent [BTU/hr]	Details	Sensible [BTU/hr]	Latent [BTU/hr]
Zone Conditioning	-	54001	1205	-	37587	0
Plenum Load	-	0	0	-	0	0
Return Fan Load	3120 CFM	0	-	3120 CFM	0	-
Ventilation Load	500 CFM	1254	8129	500 CFM	9720	0
Supply Fan Load	3120 CFM	0	-	3120 CFM	0	-
Zone Fan Coil Fans Load	-	0	-	-	0	-
>> Total System Loads	-	55256	9334	-	47307	0
Central Cooling Coil	-	55374	11205	-	0	0
Central Heating Coil	-	0	-	-	47333	-
>> Total Conditioning	-	55374	11205	-	47333	0
Key:	Positive values are cooling loads Negative values are heating loads			Positive values are heating loads Negative values are cooling loads		

Table 2. Zone Heat Balance Loads

Zone Heat Balance Component	DESIGN COOLING - JULY 17:00			DESIGN HEATING		
	OA DB / WB 85.8 F / 72.5 F			OA DB / WB -12.3 F / -13.2 F		
	Details	Sensible [BTU/hr]	Latent [BTU/hr]	Details	Sensible [BTU/hr]	Latent [BTU/hr]
Exterior Wall Convection	924 sqft	3641	-	924 sqft	2196	-
Roof Convection	0 sqft	0	-	0 sqft	0	-
Window Convection	130 sqft	1330	-	130 sqft	1220	-
Skylight Convection	0 sqft	0	-	0 sqft	0	-
Door Convection	232 sqft	2357	-	232 sqft	2171	-
Floor Convection	3562 sqft	13920	-	3562 sqft	3160	-
Interior Wall Convection	1496 sqft	4924	-	1496 sqft	834	-
Ceiling Convection	3562 sqft	22701	-	3562 sqft	8971	-
Overhead Lighting Convection	0 W	0	-	0 W	0	-
Task Lighting Convection	0 W	0	-	0 W	0	-
Electric Equipment Convection	0 W	0	-	0 W	0	-
People Convection	0	0	0	0	0	0
Infiltration	0 CFM	0	0	129 CFM	13470	0
Miscellaneous Equipment	-	0	0	-	0	0
Air Internal Energy Change	-	0	-	-	0	0
Safety Factor	15% / 15%	7331	0	15%	4803	0
>> Total Zone Loads	-	56204	0	-	36826	0
Key:	Positive values are cooling loads Negative values are heating loads			Positive values are heating loads Negative values are cooling loads		

Note 1: Surface convection line items show the combined effects of conductive heat gain to the surface and radiative heat gains absorbed at the surface which are then convected to room air.

Note 2: Lighting, equipment, and people line items include only the direct convective heat gain from the heat source to the room air. The radiative portion of the heat gain is first absorbed by surfaces in the room and then later convected from the surface to the air. Therefore the effect of the radiative portion of the heat gain is found in the surface convection line items.

Note 3: Solar heat gain is absorbed by surfaces in the room, re-radiated to other surfaces, and finally convected from the surfaces to room air. Therefore, the effect of solar heat gain is found in the surface convection line items.

System Psychrometrics for 10 4E #11 à #15 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:22 AM

DESIGN COOLING DAY AT JULY 17:00

TABLE 1: SYSTEM DATA

Component	Location	Dry-Bulb Temp (F)	Specific Humidity (lb/lb)	Airflow (CFM)	CO2 Level (ppm)	Sensible Heat (BTU/hr)	Latent Heat (BTU/hr)
Ventilation Air	Inlet	85.6	0.01418	500	400	1254	8129
Air-to-Air Energy Recovery	Outlet	77.4	0.01418	500	400	4546	0
Vent - Return Mixing	Outlet	75.4	0.01129	3120	400	-	-
Central Cooling Coil	Outlet	59.2	0.01055	3120	400	55374	11205
Central Heating Coil	Outlet	59.2	0.01055	3120	400	0	-
Supply Fan	Outlet	59.2	0.01055	3120	400	0	-
Cold Supply Duct	Outlet	59.2	0.01055	3120	400	-	-
Zone Air	-	75.0	0.01064	3120	400	54001	1205
Return Air	Outlet	75.0	0.01074	3120	400	-	-

Air Density x Heat Capacity x Conversion Factor: At sea level = 1.080; At site altitude = 1.074 BTU/(hr-CFM-F)

Air Density x Heat of Vaporization x Conversion Factor: At sea level = 4746.6; At site altitude = 4719.0 BTU/(hr-CFM)

Site Altitude = 161.0 ft

TABLE 2: ZONE DATA

Zone Name	Zone Sensible Load (BTU/hr)	T-stat Mode	Zone Cond (BTU/hr)	Zone Temp (F)	Zone Airflow (CFM)	CO2 Level (ppm)	Terminal Heating Coil (BTU/hr)	Zone Heating Unit (BTU/hr)
4E #11 à #15	53989	Cooling	54002	75.0	3120	400	0	0

System Psychrometrics for 10 4E #11 à #15 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:22 AM

WINTER DESIGN HEATING

TABLE 1: SYSTEM DATA

Component	Location	Dry-Bulb Temp (F)	Specific Humidity (lb/lb)	Airflow (CFM)	CO2 Level (ppm)	Sensible Heat (BTU/hr)	Latent Heat (BTU/hr)
Ventilation Air	Inlet	-12.3	0.00018	500	400	-9720	0
Air-to-Air Energy Recovery	Outlet	51.9	0.00018	500	400	-34556	0
Vent - Return Mixing	Outlet	67.1	0.00018	3120	400	-	-
Central Cooling Coil	Outlet	67.1	0.00018	3120	400	0	0
Central Heating Coil	Outlet	81.2	0.00018	3120	400	47333	-
Supply Fan	Outlet	81.2	0.00018	3120	400	0	-
Cold Supply Duct	Outlet	81.2	0.00018	3120	400	-	-
Zone Air	-	70.0	0.00018	3120	400	-37587	0
Return Air	Outlet	70.0	0.00018	3120	400	-	-

Air Density x Heat Capacity x Conversion Factor: At sea level = 1.080; At site altitude = 1.074 BTU/(hr-CFM-F)

Air Density x Heat of Vaporization x Conversion Factor: At sea level = 4746.6; At site altitude = 4719.0 BTU/(hr-CFM)

Site Altitude = 161.0 ft

TABLE 2: ZONE DATA

Zone Name	Zone Sensible Load (BTU/hr)	T-stat Mode	Zone Cond (BTU/hr)	Zone Temp (F)	Zone Airflow (CFM)	CO2 Level (ppm)	Terminal Heating Coil (BTU/hr)	Zone Heating Unit (BTU/hr)
4E #11 à #15	-37587	Heating	-37587	70.0	3120	400	0	0

Air System Sizing Summary for 12 4E #16 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:22 AM

Air System Information

Air System Name **12 4E #16 CPT**
Equipment Class **SPLT AHU**
Air System Type **SZCAV**

Number of zones **1**
Floor Area **650.0** sqft
Location **St-Anicet 1, QC, Canada**

Sizing Calculation Information

Calculation Months **Jan to Dec**
Sizing Data **Calculated**

Zone CFM Sizing **Sum of space airflow rates**
Space CFM Sizing **Individual peak space loads**

Central Cooling Coil Sizing Data

Total coil load **0.4** Tons
Total coil load **4.7** MBH
Sensible coil load **3.9** MBH
Coil CFM at peak load **314** CFM
Sum of peak zone CFM **314** CFM
Sensible heat ratio **0.822**
CFM/Ton **796.9**
sqft/Ton **1648.0**
BTU/(hr sqft) **7.3**
Water flow @ 10.0 F rise **N/A**

Peak coil load occurs at **July 15:00**
OA DB / WB **87.0 / 72.8** F
Entering DB / WB **75.8 / 68.1** F
Leaving DB / WB **64.6 / 63.7** F
Resulting RH **67** %
Design supply temp. **58.0** F
Zone T-stat Check **1 of 1** OK
Max zone temperature deviation **0.0** F

Central Heating Coil Sizing Data

Max coil load **10.3** MBH
Coil CFM at Design Heating **314** CFM
Max coil CFM **314** CFM
Water flow @ 20.0 F drop **N/A**

Load occurs at **Design Heating**
BTU/(hr sqft) **15.8**
Ent. DB / Lvg DB **64.2 / 94.6** F

Supply Fan Sizing Data

Design CFM **314** CFM
Design CFM/sqft **0.48** CFM/sqft

Fan motor BHP **0.00** BHP
Fan motor kW **0.00** kW

Outdoor Ventilation Air Data

Design airflow CFM **100** CFM
CFM/sqft **0.15** CFM/sqft

CFM/person **0.00** CFM/person

Zone Sizing Summary for 12 4E #16 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:22 AM

Air System Information

Air System Name **12 4E #16 CPT**
 Equipment Class **SPLT AHU**
 Air System Type **SZCAV**

Number of zones **1**
 Floor Area **650.0** sqft
 Location **St-Anicet 1, QC, Canada**

Sizing Calculation Information

Calculation Months **Jan to Dec**
 Sizing Data **Calculated**

Zone CFM Sizing **Sum of space airflow rates**
 Space CFM Sizing **Individual peak space loads**

Zone Terminal Sizing Data

Zone Name	Design Supply Airflow (CFM)	Minimum Supply Airflow (CFM)	Zone CFM/sqft	Reheat Coil Capacity (MBH)	Reheat Coil Water gpm @ 20.0 F	Zone Htg Unit Coil Capacity (MBH)	Zone Htg Unit Water gpm @ 20.0 F	Mixing Box Fan Airflow (CFM)
4E #16	314	314	0.48	0.0	-	0.0	-	0

Zone Peak Sensible Loads

Zone Name	Zone Cooling Sensible (MBH)	Time of Peak Sensible Cooling Load	Zone Heating Load (MBH)	Zone Floor Area (sqft)
4E #16	3.8	June 7:00	8.4	650.0

Space Loads and Airflows

Zone Name / Space Name	Cooling Sensible (MBH)	Time of Peak Sensible Load	Air Flow (CFM)	Heating Load (MBH)	Floor Area (sqft)	Space CFM/sqft
4E #16						
4E #16	3.8	June 7:00	314	8.4	650.0	0.48

Air System Heat Balance Summary for 12 4E #16 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:22 AM

Table 1. System Loads

	DESIGN COOLING - JULY 15:00			DESIGN HEATING		
	OA DB / WB 87.0 F / 72.8 F			OA DB / WB -12.3 F / -13.2 F		
COMPONENT LOADS	Details	Sensible [BTU/hr]	Latent [BTU/hr]	Details	Sensible [BTU/hr]	Latent [BTU/hr]
Zone Conditioning	-	3596	9	-	8336	0
Plenum Load	-	0	0	-	0	0
Return Fan Load	314 CFM	0	-	314 CFM	0	-
Ventilation Load	100 CFM	281	800	100 CFM	1944	0
Supply Fan Load	314 CFM	0	-	314 CFM	0	-
Zone Fan Coil Fans Load	-	0	-	-	0	-
>> Total System Loads	-	3877	808	-	10280	0
Central Cooling Coil	-	3892	841	-	0	0
Central Heating Coil	-	0	-	-	10285	-
>> Total Conditioning	-	3892	841	-	10285	0
Key:	Positive values are cooling loads Negative values are heating loads			Positive values are heating loads Negative values are cooling loads		

Table 2. Zone Heat Balance Loads

	DESIGN COOLING - JULY 15:00			DESIGN HEATING		
	OA DB / WB 87.0 F / 72.8 F			OA DB / WB -12.3 F / -13.2 F		
Zone Heat Balance Component	Details	Sensible [BTU/hr]	Latent [BTU/hr]	Details	Sensible [BTU/hr]	Latent [BTU/hr]
Exterior Wall Convection	213 sqft	252	-	213 sqft	526	-
Roof Convection	0 sqft	0	-	0 sqft	0	-
Window Convection	50 sqft	112	-	50 sqft	476	-
Skylight Convection	0 sqft	0	-	0 sqft	0	-
Door Convection	41 sqft	89	-	41 sqft	384	-
Floor Convection	650 sqft	788	-	650 sqft	625	-
Interior Wall Convection	656 sqft	581	-	656 sqft	400	-
Ceiling Convection	650 sqft	1388	-	650 sqft	1744	-
Overhead Lighting Convection	0 W	0	-	0 W	0	-
Task Lighting Convection	0 W	0	-	0 W	0	-
Electric Equipment Convection	0 W	0	-	0 W	0	-
People Convection	0	0	0	0	0	0
Infiltration	0 CFM	0	0	30 CFM	3182	0
Miscellaneous Equipment	-	0	0	-	0	0
Air Internal Energy Change	-	0	-	-	0	0
Safety Factor	15% / 15%	482	0	15%	1100	0
>> Total Zone Loads	-	3693	0	-	8437	0
Key:	Positive values are cooling loads Negative values are heating loads			Positive values are heating loads Negative values are cooling loads		

Note 1: Surface convection line items show the combined effects of conductive heat gain to the surface and radiative heat gains absorbed at the surface which are then convected to room air.

Note 2: Lighting, equipment, and people line items include only the direct convective heat gain from the heat source to the room air. The radiative portion of the heat gain is first absorbed by surfaces in the room and then later convected from the surface to the air. Therefore the effect of the radiative portion of the heat gain is found in the surface convection line items.

Note 3: Solar heat gain is absorbed by surfaces in the room, re-radiated to other surfaces, and finally convected from the surfaces to room air. Therefore, the effect of solar heat gain is found in the surface convection line items.

System Psychrometrics for 12 4E #16 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:22 AM

DESIGN COOLING DAY AT JULY 15:00

TABLE 1: SYSTEM DATA

Component	Location	Dry-Bulb Temp (F)	Specific Humidity (lb/lb)	Airflow (CFM)	CO2 Level (ppm)	Sensible Heat (BTU/hr)	Latent Heat (BTU/hr)
Ventilation Air	Inlet	86.9	0.01418	100	400	281	800
Air-to-Air Energy Recovery	Outlet	77.6	0.01418	100	400	1023	0
Vent - Return Mixing	Outlet	75.8	0.01303	314	400	-	-
Central Cooling Coil	Outlet	64.6	0.01248	314	400	3892	841
Central Heating Coil	Outlet	64.6	0.01248	314	400	0	-
Supply Fan	Outlet	64.6	0.01248	314	400	0	-
Cold Supply Duct	Outlet	64.6	0.01248	314	400	-	-
Zone Air	-	75.0	0.01249	314	400	3596	9
Return Air	Outlet	75.0	0.01249	314	400	-	-

Air Density x Heat Capacity x Conversion Factor: At sea level = 1.080; At site altitude = 1.074 BTU/(hr-CFM-F)

Air Density x Heat of Vaporization x Conversion Factor: At sea level = 4746.6; At site altitude = 4719.0 BTU/(hr-CFM)

Site Altitude = 161.0 ft

TABLE 2: ZONE DATA

Zone Name	Zone Sensible Load (BTU/hr)	T-stat Mode	Zone Cond (BTU/hr)	Zone Temp (F)	Zone Airflow (CFM)	CO2 Level (ppm)	Terminal Heating Coil (BTU/hr)	Zone Heating Unit (BTU/hr)
4E #16	3596	Cooling	3596	75.0	314	400	0	0

System Psychrometrics for 12 4E #16 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:22 AM

WINTER DESIGN HEATING

TABLE 1: SYSTEM DATA

Component	Location	Dry-Bulb Temp (F)	Specific Humidity (lb/lb)	Airflow (CFM)	CO2 Level (ppm)	Sensible Heat (BTU/hr)	Latent Heat (BTU/hr)
Ventilation Air	Inlet	-12.3	0.00018	100	400	-1944	0
Air-to-Air Energy Recovery	Outlet	51.9	0.00018	100	400	-6911	0
Vent - Return Mixing	Outlet	64.2	0.00018	314	400	-	-
Central Cooling Coil	Outlet	64.2	0.00018	314	400	0	0
Central Heating Coil	Outlet	94.6	0.00018	314	400	10285	-
Supply Fan	Outlet	94.6	0.00018	314	400	0	-
Cold Supply Duct	Outlet	94.6	0.00018	314	400	-	-
Zone Air	-	70.0	0.00018	314	400	-8336	0
Return Air	Outlet	70.0	0.00018	314	400	-	-

Air Density x Heat Capacity x Conversion Factor: At sea level = 1.080; At site altitude = 1.074 BTU/(hr-CFM-F)

Air Density x Heat of Vaporization x Conversion Factor: At sea level = 4746.6; At site altitude = 4719.0 BTU/(hr-CFM)

Site Altitude = 161.0 ft

TABLE 2: ZONE DATA

Zone Name	Zone Sensible Load (BTU/hr)	T-stat Mode	Zone Cond (BTU/hr)	Zone Temp (F)	Zone Airflow (CFM)	CO2 Level (ppm)	Terminal Heating Coil (BTU/hr)	Zone Heating Unit (BTU/hr)
4E #16	-8336	Heating	-8336	70.0	314	400	0	0

Air System Sizing Summary for 14 4E #17 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:22 AM

Air System Information

Air System Name **14 4E #17 CPT**
Equipment Class **SPLT AHU**
Air System Type **SZCAV**

Number of zones **1**
Floor Area **902.9** sqft
Location **St-Anicet 1, QC, Canada**

Sizing Calculation Information

Calculation Months **Jan to Dec**
Sizing Data **Calculated**

Zone CFM Sizing **Sum of space airflow rates**
Space CFM Sizing **Individual peak space loads**

Central Cooling Coil Sizing Data

Total coil load **1.1** Tons
Total coil load **12.6** MBH
Sensible coil load **10.2** MBH
Coil CFM at peak load **637** CFM
Sum of peak zone CFM **637** CFM
Sensible heat ratio **0.812**
CFM/Ton **606.7**
sqft/Ton **859.6**
BTU/(hr sqft) **14.0**
Water flow @ 10.0 F rise **N/A**

Peak coil load occurs at **July 8:00**
OA DB / WB **68.6 / 67.3** F
Entering DB / WB **74.1 / 65.2** F
Leaving DB / WB **59.4 / 58.9** F
Resulting RH **57** %
Design supply temp. **58.0** F
Zone T-stat Check **1 of 1** OK
Max zone temperature deviation **0.0** F

Central Heating Coil Sizing Data

Max coil load **16.0** MBH
Coil CFM at Design Heating **637** CFM
Max coil CFM **637** CFM
Water flow @ 20.0 F drop **N/A**

Load occurs at **Design Heating**
BTU/(hr sqft) **17.7**
Ent. DB / Lvg DB **67.2 / 90.4** F

Supply Fan Sizing Data

Design CFM **637** CFM
Design CFM/sqft **0.71** CFM/sqft

Fan motor BHP **0.00** BHP
Fan motor kW **0.00** kW

Outdoor Ventilation Air Data

Design airflow CFM **100** CFM
CFM/sqft **0.11** CFM/sqft

CFM/person **0.00** CFM/person

Zone Sizing Summary for 14 4E #17 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:22 AM

Air System Information

Air System Name **14 4E #17 CPT**
 Equipment Class **SPLT AHU**
 Air System Type **SZCAV**

Number of zones **1**
 Floor Area **902.9** sqft
 Location **St-Anicet 1, QC, Canada**

Sizing Calculation Information

Calculation Months **Jan to Dec**
 Sizing Data **Calculated**

Zone CFM Sizing **Sum of space airflow rates**
 Space CFM Sizing **Individual peak space loads**

Zone Terminal Sizing Data

Zone Name	Design Supply Airflow (CFM)	Minimum Supply Airflow (CFM)	Zone CFM/sqft	Reheat Coil Capacity (MBH)	Reheat Coil Water gpm @ 20.0 F	Zone Htg Unit Coil Capacity (MBH)	Zone Htg Unit Water gpm @ 20.0 F	Mixing Box Fan Airflow (CFM)
4E #17	637	637	0.71	0.0	-	0.0	-	0

Zone Peak Sensible Loads

Zone Name	Zone Cooling Sensible (MBH)	Time of Peak Sensible Cooling Load	Zone Heating Load (MBH)	Zone Floor Area (sqft)
4E #17	11.6	July 9:00	14.1	902.9

Space Loads and Airflows

Zone Name / Space Name	Cooling Sensible (MBH)	Time of Peak Sensible Load	Air Flow (CFM)	Heating Load (MBH)	Floor Area (sqft)	Space CFM/sqft
4E #17						
4E #17	11.6	July 9:00	637	14.1	902.9	0.71

Air System Heat Balance Summary for 14 4E #17 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:22 AM

Table 1. System Loads

COMPONENT LOADS	DESIGN COOLING - JULY 8:00			DESIGN HEATING		
	OA DB / WB 68.6 F / 67.3 F			OA DB / WB -12.3 F / -13.2 F		
	Details	Sensible [BTU/hr]	Latent [BTU/hr]	Details	Sensible [BTU/hr]	Latent [BTU/hr]
Zone Conditioning	-	10884	358	-	14008	0
Plenum Load	-	0	0	-	0	0
Return Fan Load	637 CFM	0	-	637 CFM	0	-
Ventilation Load	100 CFM	-636	1575	100 CFM	1944	0
Supply Fan Load	637 CFM	0	-	637 CFM	0	-
Zone Fan Coil Fans Load	-	0	-	-	0	-
>> Total System Loads	-	10248	1933	-	15952	0
Central Cooling Coil	-	10240	2365	-	0	0
Central Heating Coil	-	0	-	-	15958	-
>> Total Conditioning	-	10240	2365	-	15958	0
Key:	Positive values are cooling loads Negative values are heating loads			Positive values are heating loads Negative values are cooling loads		

Table 2. Zone Heat Balance Loads

Zone Heat Balance Component	DESIGN COOLING - JULY 8:00			DESIGN HEATING		
	OA DB / WB 68.6 F / 67.3 F			OA DB / WB -12.3 F / -13.2 F		
	Details	Sensible [BTU/hr]	Latent [BTU/hr]	Details	Sensible [BTU/hr]	Latent [BTU/hr]
Exterior Wall Convection	461 sqft	1191	-	461 sqft	1213	-
Roof Convection	0 sqft	0	-	0 sqft	0	-
Window Convection	70 sqft	364	-	70 sqft	698	-
Skylight Convection	0 sqft	0	-	0 sqft	0	-
Door Convection	48 sqft	377	-	48 sqft	467	-
Floor Convection	903 sqft	2856	-	903 sqft	912	-
Interior Wall Convection	563 sqft	1637	-	563 sqft	365	-
Ceiling Convection	903 sqft	3561	-	903 sqft	2519	-
Overhead Lighting Convection	0 W	0	-	0 W	0	-
Task Lighting Convection	0 W	0	-	0 W	0	-
Electric Equipment Convection	0 W	0	-	0 W	0	-
People Convection	0	0	0	0	0	0
Infiltration	0 CFM	0	0	58 CFM	6064	0
Miscellaneous Equipment	-	0	0	-	0	0
Air Internal Energy Change	-	0	-	-	0	0
Safety Factor	15% / 15%	1498	0	15%	1836	0
>> Total Zone Loads	-	11484	0	-	14075	0
Key:	Positive values are cooling loads Negative values are heating loads			Positive values are heating loads Negative values are cooling loads		

Note 1: Surface convection line items show the combined effects of conductive heat gain to the surface and radiative heat gains absorbed at the surface which are then convected to room air.

Note 2: Lighting, equipment, and people line items include only the direct convective heat gain from the heat source to the room air. The radiative portion of the heat gain is first absorbed by surfaces in the room and then later convected from the surface to the air. Therefore the effect of the radiative portion of the heat gain is found in the surface convection line items.

Note 3: Solar heat gain is absorbed by surfaces in the room, re-radiated to other surfaces, and finally convected from the surfaces to room air. Therefore, the effect of solar heat gain is found in the surface convection line items.

System Psychrometrics for 14 4E #17 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:22 AM

DESIGN COOLING DAY AT JULY 8:00

TABLE 1: SYSTEM DATA

Component	Location	Dry-Bulb Temp (F)	Specific Humidity (lb/lb)	Airflow (CFM)	CO2 Level (ppm)	Sensible Heat (BTU/hr)	Latent Heat (BTU/hr)
Ventilation Air	Inlet	69.1	0.01415	100	400	-636	1575
Air-to-Air Energy Recovery	Outlet	69.1	0.01415	100	400	0	0
Vent - Return Mixing	Outlet	74.1	0.01133	637	400	-	-
Central Cooling Coil	Outlet	59.4	0.01057	637	400	10240	2365
Central Heating Coil	Outlet	59.4	0.01057	637	400	0	-
Supply Fan	Outlet	59.4	0.01057	637	400	0	-
Cold Supply Duct	Outlet	59.4	0.01057	637	400	-	-
Zone Air	-	75.0	0.01069	637	400	10884	358
Return Air	Outlet	75.0	0.01081	637	400	-	-

Air Density x Heat Capacity x Conversion Factor: At sea level = 1.080; At site altitude = 1.074 BTU/(hr-CFM-F)

Air Density x Heat of Vaporization x Conversion Factor: At sea level = 4746.6; At site altitude = 4719.0 BTU/(hr-CFM)

Site Altitude = 161.0 ft

TABLE 2: ZONE DATA

Zone Name	Zone Sensible Load (BTU/hr)	T-stat Mode	Zone Cond (BTU/hr)	Zone Temp (F)	Zone Airflow (CFM)	CO2 Level (ppm)	Terminal Heating Coil (BTU/hr)	Zone Heating Unit (BTU/hr)
4E #17	10881	Cooling	10884	75.0	637	400	0	0

System Psychrometrics for 14 4E #17 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:22 AM

WINTER DESIGN HEATING

TABLE 1: SYSTEM DATA

Component	Location	Dry-Bulb Temp (F)	Specific Humidity (lb/lb)	Airflow (CFM)	CO2 Level (ppm)	Sensible Heat (BTU/hr)	Latent Heat (BTU/hr)
Ventilation Air	Inlet	-12.3	0.00018	100	400	-1944	0
Air-to-Air Energy Recovery	Outlet	51.9	0.00018	100	400	-6911	0
Vent - Return Mixing	Outlet	67.2	0.00018	637	400	-	-
Central Cooling Coil	Outlet	67.2	0.00018	637	400	0	0
Central Heating Coil	Outlet	90.4	0.00018	637	400	15958	-
Supply Fan	Outlet	90.4	0.00018	637	400	0	-
Cold Supply Duct	Outlet	90.4	0.00018	637	400	-	-
Zone Air	-	70.0	0.00018	637	400	-14008	0
Return Air	Outlet	70.0	0.00018	637	400	-	-

Air Density x Heat Capacity x Conversion Factor: At sea level = 1.080; At site altitude = 1.074 BTU/(hr-CFM-F)

Air Density x Heat of Vaporization x Conversion Factor: At sea level = 4746.6; At site altitude = 4719.0 BTU/(hr-CFM)

Site Altitude = 161.0 ft

TABLE 2: ZONE DATA

Zone Name	Zone Sensible Load (BTU/hr)	T-stat Mode	Zone Cond (BTU/hr)	Zone Temp (F)	Zone Airflow (CFM)	CO2 Level (ppm)	Terminal Heating Coil (BTU/hr)	Zone Heating Unit (BTU/hr)
4E #17	-14008	Heating	-14008	70.0	637	400	0	0

Air System Sizing Summary for 16 4E #18 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:22 AM

Air System Information

Air System Name **16 4E #18 CPT**
Equipment Class **SPLT AHU**
Air System Type **SZCAV**

Number of zones **1**
Floor Area **674.7** sqft
Location **St-Anicet 1, QC, Canada**

Sizing Calculation Information

Calculation Months **Jan to Dec**
Sizing Data **Calculated**

Zone CFM Sizing **Sum of space airflow rates**
Space CFM Sizing **Individual peak space loads**

Central Cooling Coil Sizing Data

Total coil load **1.0** Tons
Total coil load **11.6** MBH
Sensible coil load **9.4** MBH
Coil CFM at peak load **555** CFM
Sum of peak zone CFM **555** CFM
Sensible heat ratio **0.812**
CFM/Ton **575.7**
sqft/Ton **699.6**
BTU/(hr sqft) **17.2**
Water flow @ 10.0 F rise **N/A**

Peak coil load occurs at **August 9:00**
OA DB / WB **72.1 / 68.4** F
Entering DB / WB **74.5 / 65.3** F
Leaving DB / WB **59.1 / 58.7** F
Resulting RH **57** %
Design supply temp. **58.0** F
Zone T-stat Check **1 of 1** OK
Max zone temperature deviation **0.0** F

Central Heating Coil Sizing Data

Max coil load **8.8** MBH
Coil CFM at Design Heating **555** CFM
Max coil CFM **555** CFM
Water flow @ 20.0 F drop **N/A**

Load occurs at **Design Heating**
BTU/(hr sqft) **13.1**
Ent. DB / Lvg DB **66.7 / 81.5** F

Supply Fan Sizing Data

Design CFM **555** CFM
Design CFM/sqft **0.82** CFM/sqft

Fan motor BHP **0.00** BHP
Fan motor kW **0.00** kW

Outdoor Ventilation Air Data

Design airflow CFM **100** CFM
CFM/sqft **0.15** CFM/sqft

CFM/person **0.00** CFM/person

Zone Sizing Summary for 16 4E #18 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:22 AM

Air System Information

Air System Name **16 4E #18 CPT**
 Equipment Class **SPLT AHU**
 Air System Type **SZCAV**

Number of zones **1**
 Floor Area **674.7** sqft
 Location **St-Anicet 1, QC, Canada**

Sizing Calculation Information

Calculation Months **Jan to Dec**
 Sizing Data **Calculated**

Zone CFM Sizing **Sum of space airflow rates**
 Space CFM Sizing **Individual peak space loads**

Zone Terminal Sizing Data

Zone Name	Design Supply Airflow (CFM)	Minimum Supply Airflow (CFM)	Zone CFM/sqft	Reheat Coil Capacity (MBH)	Reheat Coil Water gpm @ 20.0 F	Zone Htg Unit Coil Capacity (MBH)	Zone Htg Unit Water gpm @ 20.0 F	Mixing Box Fan Airflow (CFM)
4E #18	555	555	0.82	0.0	-	0.0	-	0

Zone Peak Sensible Loads

Zone Name	Zone Cooling Sensible (MBH)	Time of Peak Sensible Cooling Load	Zone Heating Load (MBH)	Zone Floor Area (sqft)
4E #18	10.1	August 10:00	6.7	674.7

Space Loads and Airflows

Zone Name / Space Name	Cooling Sensible (MBH)	Time of Peak Sensible Load	Air Flow (CFM)	Heating Load (MBH)	Floor Area (sqft)	Space CFM/sqft
4E #18						
4E #18	10.1	August 10:00	555	6.7	674.7	0.82

Air System Heat Balance Summary for 16 4E #18 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:22 AM

Table 1. System Loads

COMPONENT LOADS	DESIGN COOLING - AUGUST 9:00			DESIGN HEATING		
	OA DB / WB 72.1 F / 68.4 F			OA DB / WB -12.3 F / -13.2 F		
	Details	Sensible [BTU/hr]	Latent [BTU/hr]	Details	Sensible [BTU/hr]	Latent [BTU/hr]
Zone Conditioning	-	9673	207	-	6860	0
Plenum Load	-	0	0	-	0	0
Return Fan Load	555 CFM	0	-	555 CFM	0	-
Ventilation Load	100 CFM	-279	1657	100 CFM	1944	0
Supply Fan Load	555 CFM	0	-	555 CFM	0	-
Zone Fan Coil Fans Load	-	0	-	-	0	-
>> Total System Loads	-	9395	1865	-	8804	0
Central Cooling Coil	-	9398	2175	-	0	0
Central Heating Coil	-	0	-	-	8809	-
>> Total Conditioning	-	9398	2175	-	8809	0
Key:	Positive values are cooling loads Negative values are heating loads			Positive values are heating loads Negative values are cooling loads		

Table 2. Zone Heat Balance Loads

Zone Heat Balance Component	DESIGN COOLING - AUGUST 9:00			DESIGN HEATING		
	OA DB / WB 72.1 F / 68.4 F			OA DB / WB -12.3 F / -13.2 F		
	Details	Sensible [BTU/hr]	Latent [BTU/hr]	Details	Sensible [BTU/hr]	Latent [BTU/hr]
Exterior Wall Convection	161 sqft	461	-	161 sqft	370	-
Roof Convection	0 sqft	0	-	0 sqft	0	-
Window Convection	20 sqft	189	-	20 sqft	182	-
Skylight Convection	0 sqft	0	-	0 sqft	0	-
Door Convection	48 sqft	454	-	48 sqft	433	-
Floor Convection	675 sqft	2642	-	675 sqft	521	-
Interior Wall Convection	670 sqft	2056	-	670 sqft	340	-
Ceiling Convection	675 sqft	3007	-	675 sqft	1612	-
Overhead Lighting Convection	0 W	0	-	0 W	0	-
Task Lighting Convection	0 W	0	-	0 W	0	-
Electric Equipment Convection	0 W	0	-	0 W	0	-
People Convection	0	0	0	0	0	0
Infiltration	0 CFM	0	0	23 CFM	2392	0
Miscellaneous Equipment	-	0	0	-	0	0
Air Internal Energy Change	-	0	-	-	0	0
Safety Factor	15% / 15%	1321	0	15%	878	0
>> Total Zone Loads	-	10131	0	-	6728	0
Key:	Positive values are cooling loads Negative values are heating loads			Positive values are heating loads Negative values are cooling loads		

Note 1: Surface convection line items show the combined effects of conductive heat gain to the surface and radiative heat gains absorbed at the surface which are then convected to room air.

Note 2: Lighting, equipment, and people line items include only the direct convective heat gain from the heat source to the room air. The radiative portion of the heat gain is first absorbed by surfaces in the room and then later convected from the surface to the air. Therefore the effect of the radiative portion of the heat gain is found in the surface convection line items.

Note 3: Solar heat gain is absorbed by surfaces in the room, re-radiated to other surfaces, and finally convected from the surfaces to room air. Therefore, the effect of solar heat gain is found in the surface convection line items.

System Psychrometrics for 16 4E #18 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:22 AM

DESIGN COOLING DAY AT AUGUST 9:00

TABLE 1: SYSTEM DATA

Component	Location	Dry-Bulb Temp (F)	Specific Humidity (lb/lb)	Airflow (CFM)	CO2 Level (ppm)	Sensible Heat (BTU/hr)	Latent Heat (BTU/hr)
Ventilation Air	Inlet	72.4	0.01416	100	400	-279	1657
Air-to-Air Energy Recovery	Outlet	72.4	0.01416	100	400	0	0
Vent - Return Mixing	Outlet	74.5	0.01128	555	400	-	-
Central Cooling Coil	Outlet	59.1	0.01047	555	400	9398	2175
Central Heating Coil	Outlet	59.1	0.01047	555	400	0	-
Supply Fan	Outlet	59.1	0.01047	555	400	0	-
Cold Supply Duct	Outlet	59.1	0.01047	555	400	-	-
Zone Air	-	75.0	0.01055	555	400	9673	207
Return Air	Outlet	75.0	0.01064	555	400	-	-

Air Density x Heat Capacity x Conversion Factor: At sea level = 1.080; At site altitude = 1.074 BTU/(hr-CFM-F)

Air Density x Heat of Vaporization x Conversion Factor: At sea level = 4746.6; At site altitude = 4719.0 BTU/(hr-CFM)

Site Altitude = 161.0 ft

TABLE 2: ZONE DATA

Zone Name	Zone Sensible Load (BTU/hr)	T-stat Mode	Zone Cond (BTU/hr)	Zone Temp (F)	Zone Airflow (CFM)	CO2 Level (ppm)	Terminal Heating Coil (BTU/hr)	Zone Heating Unit (BTU/hr)
4E #18	9672	Cooling	9673	75.0	555	400	0	0

System Psychrometrics for 16 4E #18 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:22 AM

WINTER DESIGN HEATING

TABLE 1: SYSTEM DATA

Component	Location	Dry-Bulb Temp (F)	Specific Humidity (lb/lb)	Airflow (CFM)	CO2 Level (ppm)	Sensible Heat (BTU/hr)	Latent Heat (BTU/hr)
Ventilation Air	Inlet	-12.3	0.00018	100	400	-1944	0
Air-to-Air Energy Recovery	Outlet	51.9	0.00018	100	400	-6911	0
Vent - Return Mixing	Outlet	66.7	0.00018	555	400	-	-
Central Cooling Coil	Outlet	66.7	0.00018	555	400	0	0
Central Heating Coil	Outlet	81.5	0.00018	555	400	8809	-
Supply Fan	Outlet	81.5	0.00018	555	400	0	-
Cold Supply Duct	Outlet	81.5	0.00018	555	400	-	-
Zone Air	-	70.0	0.00018	555	400	-6860	0
Return Air	Outlet	70.0	0.00018	555	400	-	-

Air Density x Heat Capacity x Conversion Factor: At sea level = 1.080; At site altitude = 1.074 BTU/(hr-CFM-F)

Air Density x Heat of Vaporization x Conversion Factor: At sea level = 4746.6; At site altitude = 4719.0 BTU/(hr-CFM)

Site Altitude = 161.0 ft

TABLE 2: ZONE DATA

Zone Name	Zone Sensible Load (BTU/hr)	T-stat Mode	Zone Cond (BTU/hr)	Zone Temp (F)	Zone Airflow (CFM)	CO2 Level (ppm)	Terminal Heating Coil (BTU/hr)	Zone Heating Unit (BTU/hr)
4E #18	-6860	Heating	-6860	70.0	555	400	0	0

Air System Sizing Summary for 18 4E #19 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:22 AM

Air System Information

Air System Name **18 4E #19 CPT**
Equipment Class **SPLT AHU**
Air System Type **SZCAV**

Number of zones **1**
Floor Area **767.3** sqft
Location **St-Anicet 1, QC, Canada**

Sizing Calculation Information

Calculation Months **Jan to Dec**
Sizing Data **Calculated**

Zone CFM Sizing **Sum of space airflow rates**
Space CFM Sizing **Individual peak space loads**

Central Cooling Coil Sizing Data

Total coil load **1.1** Tons
Total coil load **12.9** MBH
Sensible coil load **10.7** MBH
Coil CFM at peak load **631** CFM
Sum of peak zone CFM **631** CFM
Sensible heat ratio **0.829**
CFM/Ton **585.6**
sqft/Ton **712.3**
BTU/(hr sqft) **16.8**
Water flow @ 10.0 F rise **N/A**

Peak coil load occurs at **August 9:00**
OA DB / WB **72.1 / 68.4** F
Entering DB / WB **74.6 / 65.2** F
Leaving DB / WB **59.1 / 58.6** F
Resulting RH **57** %
Design supply temp. **58.0** F
Zone T-stat Check **1 of 1** OK
Max zone temperature deviation **0.0** F

Central Heating Coil Sizing Data

Max coil load **9.6** MBH
Coil CFM at Design Heating **631** CFM
Max coil CFM **631** CFM
Water flow @ 20.0 F drop **N/A**

Load occurs at **Design Heating**
BTU/(hr sqft) **12.5**
Ent. DB / Lvg DB **67.1 / 81.3** F

Supply Fan Sizing Data

Design CFM **631** CFM
Design CFM/sqft **0.82** CFM/sqft

Fan motor BHP **0.00** BHP
Fan motor kW **0.00** kW

Outdoor Ventilation Air Data

Design airflow CFM **100** CFM
CFM/sqft **0.13** CFM/sqft

CFM/person **0.00** CFM/person

Zone Sizing Summary for 18 4E #19 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:22 AM

Air System Information

Air System Name **18 4E #19 CPT**
 Equipment Class **SPLT AHU**
 Air System Type **SZCAV**

Number of zones **1**
 Floor Area **767.3** sqft
 Location **St-Anicet 1, QC, Canada**

Sizing Calculation Information

Calculation Months **Jan to Dec**
 Sizing Data **Calculated**

Zone CFM Sizing **Sum of space airflow rates**
 Space CFM Sizing **Individual peak space loads**

Zone Terminal Sizing Data

Zone Name	Design Supply Airflow (CFM)	Minimum Supply Airflow (CFM)	Zone CFM/sqft	Reheat Coil Capacity (MBH)	Reheat Coil Water gpm @ 20.0 F	Zone Htg Unit Coil Capacity (MBH)	Zone Htg Unit Water gpm @ 20.0 F	Mixing Box Fan Airflow (CFM)
4E #19	631	631	0.82	0.0	-	0.0	-	0

Zone Peak Sensible Loads

Zone Name	Zone Cooling Sensible (MBH)	Time of Peak Sensible Cooling Load	Zone Heating Load (MBH)	Zone Floor Area (sqft)
4E #19	11.5	August 9:00	7.5	767.3

Space Loads and Airflows

Zone Name / Space Name	Cooling Sensible (MBH)	Time of Peak Sensible Load	Air Flow (CFM)	Heating Load (MBH)	Floor Area (sqft)	Space CFM/sqft
4E #19						
4E #19	11.5	August 9:00	631	7.5	767.3	0.82

Air System Heat Balance Summary for 18 4E #19 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:22 AM

Table 1. System Loads

COMPONENT LOADS	DESIGN COOLING - AUGUST 9:00			DESIGN HEATING		
	OA DB / WB 72.1 F / 68.4 F			OA DB / WB -12.3 F / -13.2 F		
	Details	Sensible [BTU/hr]	Latent [BTU/hr]	Details	Sensible [BTU/hr]	Latent [BTU/hr]
Zone Conditioning	-	10995	216	-	7674	0
Plenum Load	-	0	0	-	0	0
Return Fan Load	631 CFM	0	-	631 CFM	0	-
Ventilation Load	100 CFM	-279	1668	100 CFM	1944	0
Supply Fan Load	631 CFM	0	-	631 CFM	0	-
Zone Fan Coil Fans Load	-	0	-	-	0	-
>> Total System Loads	-	10717	1884	-	9618	0
Central Cooling Coil	-	10720	2207	-	0	0
Central Heating Coil	-	0	-	-	9623	-
>> Total Conditioning	-	10720	2207	-	9623	0
Key:	Positive values are cooling loads Negative values are heating loads			Positive values are heating loads Negative values are cooling loads		

Table 2. Zone Heat Balance Loads

Zone Heat Balance Component	DESIGN COOLING - AUGUST 9:00			DESIGN HEATING		
	OA DB / WB 72.1 F / 68.4 F			OA DB / WB -12.3 F / -13.2 F		
	Details	Sensible [BTU/hr]	Latent [BTU/hr]	Details	Sensible [BTU/hr]	Latent [BTU/hr]
Exterior Wall Convection	174 sqft	499	-	174 sqft	401	-
Roof Convection	0 sqft	0	-	0 sqft	0	-
Window Convection	30 sqft	286	-	30 sqft	274	-
Skylight Convection	0 sqft	0	-	0 sqft	0	-
Door Convection	48 sqft	456	-	48 sqft	432	-
Floor Convection	767 sqft	3133	-	767 sqft	599	-
Interior Wall Convection	693 sqft	2168	-	693 sqft	355	-
Ceiling Convection	767 sqft	3473	-	767 sqft	1834	-
Overhead Lighting Convection	0 W	0	-	0 W	0	-
Task Lighting Convection	0 W	0	-	0 W	0	-
Electric Equipment Convection	0 W	0	-	0 W	0	-
People Convection	0	0	0	0	0	0
Infiltration	0 CFM	0	0	25 CFM	2641	0
Miscellaneous Equipment	-	0	0	-	0	0
Air Internal Energy Change	-	0	-	-	0	0
Safety Factor	15% / 15%	1502	0	15%	980	0
>> Total Zone Loads	-	11515	0	-	7517	0
Key:	Positive values are cooling loads Negative values are heating loads			Positive values are heating loads Negative values are cooling loads		

Note 1: Surface convection line items show the combined effects of conductive heat gain to the surface and radiative heat gains absorbed at the surface which are then convected to room air.

Note 2: Lighting, equipment, and people line items include only the direct convective heat gain from the heat source to the room air. The radiative portion of the heat gain is first absorbed by surfaces in the room and then later convected from the surface to the air. Therefore the effect of the radiative portion of the heat gain is found in the surface convection line items.

Note 3: Solar heat gain is absorbed by surfaces in the room, re-radiated to other surfaces, and finally convected from the surfaces to room air. Therefore, the effect of solar heat gain is found in the surface convection line items.

System Psychrometrics for 18 4E #19 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:22 AM

DESIGN COOLING DAY AT AUGUST 9:00

TABLE 1: SYSTEM DATA

Component	Location	Dry-Bulb Temp (F)	Specific Humidity (lb/lb)	Airflow (CFM)	CO2 Level (ppm)	Sensible Heat (BTU/hr)	Latent Heat (BTU/hr)
Ventilation Air	Inlet	72.4	0.01416	100	400	-279	1668
Air-to-Air Energy Recovery	Outlet	72.4	0.01416	100	400	0	0
Vent - Return Mixing	Outlet	74.6	0.01118	631	400	-	-
Central Cooling Coil	Outlet	59.1	0.01046	631	400	10720	2207
Central Heating Coil	Outlet	59.1	0.01046	631	400	0	-
Supply Fan	Outlet	59.1	0.01046	631	400	0	-
Cold Supply Duct	Outlet	59.1	0.01046	631	400	-	-
Zone Air	-	75.0	0.01054	631	400	10995	216
Return Air	Outlet	75.0	0.01062	631	400	-	-

Air Density x Heat Capacity x Conversion Factor: At sea level = 1.080; At site altitude = 1.074 BTU/(hr-CFM-F)

Air Density x Heat of Vaporization x Conversion Factor: At sea level = 4746.6; At site altitude = 4719.0 BTU/(hr-CFM)

Site Altitude = 161.0 ft

TABLE 2: ZONE DATA

Zone Name	Zone Sensible Load (BTU/hr)	T-stat Mode	Zone Cond (BTU/hr)	Zone Temp (F)	Zone Airflow (CFM)	CO2 Level (ppm)	Terminal Heating Coil (BTU/hr)	Zone Heating Unit (BTU/hr)
4E #19	10994	Cooling	10996	75.0	631	400	0	0

System Psychrometrics for 18 4E #19 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:22 AM

WINTER DESIGN HEATING

TABLE 1: SYSTEM DATA

Component	Location	Dry-Bulb Temp (F)	Specific Humidity (lb/lb)	Airflow (CFM)	CO2 Level (ppm)	Sensible Heat (BTU/hr)	Latent Heat (BTU/hr)
Ventilation Air	Inlet	-12.3	0.00018	100	400	-1944	0
Air-to-Air Energy Recovery	Outlet	51.9	0.00018	100	400	-6911	0
Vent - Return Mixing	Outlet	67.1	0.00018	631	400	-	-
Central Cooling Coil	Outlet	67.1	0.00018	631	400	0	0
Central Heating Coil	Outlet	81.3	0.00018	631	400	9623	-
Supply Fan	Outlet	81.3	0.00018	631	400	0	-
Cold Supply Duct	Outlet	81.3	0.00018	631	400	-	-
Zone Air	-	70.0	0.00018	631	400	-7674	0
Return Air	Outlet	70.0	0.00018	631	400	-	-

Air Density x Heat Capacity x Conversion Factor: At sea level = 1.080; At site altitude = 1.074 BTU/(hr-CFM-F)

Air Density x Heat of Vaporization x Conversion Factor: At sea level = 4746.6; At site altitude = 4719.0 BTU/(hr-CFM)

Site Altitude = 161.0 ft

TABLE 2: ZONE DATA

Zone Name	Zone Sensible Load (BTU/hr)	T-stat Mode	Zone Cond (BTU/hr)	Zone Temp (F)	Zone Airflow (CFM)	CO2 Level (ppm)	Terminal Heating Coil (BTU/hr)	Zone Heating Unit (BTU/hr)
4E #19	-7674	Heating	-7674	70.0	631	400	0	0

Air System Sizing Summary for 20 4E #20 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:22 AM

Air System Information

Air System Name **20 4E #20 CPT**
Equipment Class **SPLT AHU**
Air System Type **SZCAV**

Number of zones **1**
Floor Area **761.8** sqft
Location **St-Anicet 1, QC, Canada**

Sizing Calculation Information

Calculation Months **Jan to Dec**
Sizing Data **Calculated**

Zone CFM Sizing **Sum of space airflow rates**
Space CFM Sizing **Individual peak space loads**

Central Cooling Coil Sizing Data

Total coil load **1.1** Tons
Total coil load **13.0** MBH
Sensible coil load **10.8** MBH
Coil CFM at peak load **633** CFM
Sum of peak zone CFM **633** CFM
Sensible heat ratio **0.829**
CFM/Ton **585.5**
sqft/Ton **704.4**
BTU/(hr sqft) **17.0**
Water flow @ 10.0 F rise **N/A**

Peak coil load occurs at **August 9:00**
OA DB / WB **72.1 / 68.4** F
Entering DB / WB **74.6 / 65.2** F
Leaving DB / WB **59.1 / 58.6** F
Resulting RH **57** %
Design supply temp. **58.0** F
Zone T-stat Check **1 of 1** OK
Max zone temperature deviation **0.0** F

Central Heating Coil Sizing Data

Max coil load **10.3** MBH
Coil CFM at Design Heating **633** CFM
Max coil CFM **633** CFM
Water flow @ 20.0 F drop **N/A**

Load occurs at **Design Heating**
BTU/(hr sqft) **13.5**
Ent. DB / Lvg DB **67.1 / 82.2** F

Supply Fan Sizing Data

Design CFM **633** CFM
Design CFM/sqft **0.83** CFM/sqft

Fan motor BHP **0.00** BHP
Fan motor kW **0.00** kW

Outdoor Ventilation Air Data

Design airflow CFM **100** CFM
CFM/sqft **0.13** CFM/sqft

CFM/person **0.00** CFM/person

Zone Sizing Summary for 20 4E #20 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:22 AM

Air System Information

Air System Name **20 4E #20 CPT**
 Equipment Class **SPLT AHU**
 Air System Type **SZCAV**

Number of zones **1**
 Floor Area **761.8** sqft
 Location **St-Anicet 1, QC, Canada**

Sizing Calculation Information

Calculation Months **Jan to Dec**
 Sizing Data **Calculated**

Zone CFM Sizing **Sum of space airflow rates**
 Space CFM Sizing **Individual peak space loads**

Zone Terminal Sizing Data

Zone Name	Design Supply Airflow (CFM)	Minimum Supply Airflow (CFM)	Zone CFM/sqft	Reheat Coil Capacity (MBH)	Reheat Coil Water gpm @ 20.0 F	Zone Htg Unit Coil Capacity (MBH)	Zone Htg Unit Water gpm @ 20.0 F	Mixing Box Fan Airflow (CFM)
4E #20	633	633	0.83	0.0	-	0.0	-	0

Zone Peak Sensible Loads

Zone Name	Zone Cooling Sensible (MBH)	Time of Peak Sensible Cooling Load	Zone Heating Load (MBH)	Zone Floor Area (sqft)
4E #20	11.6	August 9:00	8.2	761.8

Space Loads and Airflows

Zone Name / Space Name	Cooling Sensible (MBH)	Time of Peak Sensible Load	Air Flow (CFM)	Heating Load (MBH)	Floor Area (sqft)	Space CFM/sqft
4E #20						
4E #20	11.6	August 9:00	633	8.2	761.8	0.83

Air System Heat Balance Summary for 20 4E #20 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:22 AM

Table 1. System Loads

COMPONENT LOADS	DESIGN COOLING - AUGUST 9:00			DESIGN HEATING		
	OA DB / WB 72.1 F / 68.4 F			OA DB / WB -12.3 F / -13.2 F		
	Details	Sensible [BTU/hr]	Latent [BTU/hr]	Details	Sensible [BTU/hr]	Latent [BTU/hr]
Zone Conditioning	-	11037	219	-	8324	0
Plenum Load	-	0	0	-	0	0
Return Fan Load	633 CFM	0	-	633 CFM	0	-
Ventilation Load	100 CFM	-279	1667	100 CFM	1944	0
Supply Fan Load	633 CFM	0	-	633 CFM	0	-
Zone Fan Coil Fans Load	-	0	-	-	0	-
>> Total System Loads	-	10759	1886	-	10268	0
Central Cooling Coil	-	10762	2215	-	0	0
Central Heating Coil	-	0	-	-	10273	-
>> Total Conditioning	-	10762	2215	-	10273	0
Key:	Positive values are cooling loads Negative values are heating loads			Positive values are heating loads Negative values are cooling loads		

Table 2. Zone Heat Balance Loads

Zone Heat Balance Component	DESIGN COOLING - AUGUST 9:00			DESIGN HEATING		
	OA DB / WB 72.1 F / 68.4 F			OA DB / WB -12.3 F / -13.2 F		
	Details	Sensible [BTU/hr]	Latent [BTU/hr]	Details	Sensible [BTU/hr]	Latent [BTU/hr]
Exterior Wall Convection	215 sqft	625	-	215 sqft	509	-
Roof Convection	0 sqft	0	-	0 sqft	0	-
Window Convection	30 sqft	286	-	30 sqft	273	-
Skylight Convection	0 sqft	0	-	0 sqft	0	-
Door Convection	48 sqft	458	-	48 sqft	434	-
Floor Convection	762 sqft	3138	-	762 sqft	631	-
Interior Wall Convection	648 sqft	2060	-	648 sqft	343	-
Ceiling Convection	762 sqft	3482	-	762 sqft	1887	-
Overhead Lighting Convection	0 W	0	-	0 W	0	-
Task Lighting Convection	0 W	0	-	0 W	0	-
Electric Equipment Convection	0 W	0	-	0 W	0	-
People Convection	0	0	0	0	0	0
Infiltration	0 CFM	0	0	29 CFM	3071	0
Miscellaneous Equipment	-	0	0	-	0	0
Air Internal Energy Change	-	0	-	-	0	0
Safety Factor	15% / 15%	1507	0	15%	1072	0
>> Total Zone Loads	-	11557	0	-	8222	0
Key:	Positive values are cooling loads Negative values are heating loads			Positive values are heating loads Negative values are cooling loads		

Note 1: Surface convection line items show the combined effects of conductive heat gain to the surface and radiative heat gains absorbed at the surface which are then convected to room air.

Note 2: Lighting, equipment, and people line items include only the direct convective heat gain from the heat source to the room air. The radiative portion of the heat gain is first absorbed by surfaces in the room and then later convected from the surface to the air. Therefore the effect of the radiative portion of the heat gain is found in the surface convection line items.

Note 3: Solar heat gain is absorbed by surfaces in the room, re-radiated to other surfaces, and finally convected from the surfaces to room air. Therefore, the effect of solar heat gain is found in the surface convection line items.

System Psychrometrics for 20 4E #20 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:22 AM

DESIGN COOLING DAY AT AUGUST 9:00

TABLE 1: SYSTEM DATA

Component	Location	Dry-Bulb Temp (F)	Specific Humidity (lb/lb)	Airflow (CFM)	CO2 Level (ppm)	Sensible Heat (BTU/hr)	Latent Heat (BTU/hr)
Ventilation Air	Inlet	72.4	0.01416	100	400	-279	1667
Air-to-Air Energy Recovery	Outlet	72.4	0.01416	100	400	0	0
Vent - Return Mixing	Outlet	74.6	0.01118	633	400	-	-
Central Cooling Coil	Outlet	59.1	0.01046	633	400	10762	2215
Central Heating Coil	Outlet	59.1	0.01046	633	400	0	-
Supply Fan	Outlet	59.1	0.01046	633	400	0	-
Cold Supply Duct	Outlet	59.1	0.01046	633	400	-	-
Zone Air	-	75.0	0.01054	633	400	11037	219
Return Air	Outlet	75.0	0.01062	633	400	-	-

Air Density x Heat Capacity x Conversion Factor: At sea level = 1.080; At site altitude = 1.074 BTU/(hr-CFM-F)

Air Density x Heat of Vaporization x Conversion Factor: At sea level = 4746.6; At site altitude = 4719.0 BTU/(hr-CFM)

Site Altitude = 161.0 ft

TABLE 2: ZONE DATA

Zone Name	Zone Sensible Load (BTU/hr)	T-stat Mode	Zone Cond (BTU/hr)	Zone Temp (F)	Zone Airflow (CFM)	CO2 Level (ppm)	Terminal Heating Coil (BTU/hr)	Zone Heating Unit (BTU/hr)
4E #20	11035	Cooling	11037	75.0	633	400	0	0

System Psychrometrics for 20 4E #20 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:22 AM

WINTER DESIGN HEATING

TABLE 1: SYSTEM DATA

Component	Location	Dry-Bulb Temp (F)	Specific Humidity (lb/lb)	Airflow (CFM)	CO2 Level (ppm)	Sensible Heat (BTU/hr)	Latent Heat (BTU/hr)
Ventilation Air	Inlet	-12.3	0.00018	100	400	-1944	0
Air-to-Air Energy Recovery	Outlet	51.9	0.00018	100	400	-6911	0
Vent - Return Mixing	Outlet	67.1	0.00018	633	400	-	-
Central Cooling Coil	Outlet	67.1	0.00018	633	400	0	0
Central Heating Coil	Outlet	82.2	0.00018	633	400	10273	-
Supply Fan	Outlet	82.2	0.00018	633	400	0	-
Cold Supply Duct	Outlet	82.2	0.00018	633	400	-	-
Zone Air	-	70.0	0.00018	633	400	-8324	0
Return Air	Outlet	70.0	0.00018	633	400	-	-

Air Density x Heat Capacity x Conversion Factor: At sea level = 1.080; At site altitude = 1.074 BTU/(hr-CFM-F)

Air Density x Heat of Vaporization x Conversion Factor: At sea level = 4746.6; At site altitude = 4719.0 BTU/(hr-CFM)

Site Altitude = 161.0 ft

TABLE 2: ZONE DATA

Zone Name	Zone Sensible Load (BTU/hr)	T-stat Mode	Zone Cond (BTU/hr)	Zone Temp (F)	Zone Airflow (CFM)	CO2 Level (ppm)	Terminal Heating Coil (BTU/hr)	Zone Heating Unit (BTU/hr)
4E #20	-8324	Heating	-8324	70.0	633	400	0	0

Air System Sizing Summary for 22 4E #21 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:22 AM

Air System Information

Air System Name **22 4E #21 CPT**
Equipment Class **SPLT AHU**
Air System Type **SZCAV**

Number of zones **1**
Floor Area **761.7** sqft
Location **St-Anicet 1, QC, Canada**

Sizing Calculation Information

Calculation Months **Jan to Dec**
Sizing Data **Calculated**

Zone CFM Sizing **Sum of space airflow rates**
Space CFM Sizing **Individual peak space loads**

Central Cooling Coil Sizing Data

Total coil load **1.1** Tons
Total coil load **13.0** MBH
Sensible coil load **10.8** MBH
Coil CFM at peak load **635** CFM
Sum of peak zone CFM **635** CFM
Sensible heat ratio **0.828**
CFM/Ton **584.2**
sqft/Ton **701.3**
BTU/(hr sqft) **17.1**
Water flow @ 10.0 F rise **N/A**

Peak coil load occurs at **August 9:00**
OA DB / WB **72.1 / 68.4** F
Entering DB / WB **74.6 / 65.2** F
Leaving DB / WB **59.1 / 58.6** F
Resulting RH **57** %
Design supply temp. **58.0** F
Zone T-stat Check **1 of 1** OK
Max zone temperature deviation **0.0** F

Central Heating Coil Sizing Data

Max coil load **9.6** MBH
Coil CFM at Design Heating **635** CFM
Max coil CFM **635** CFM
Water flow @ 20.0 F drop **N/A**

Load occurs at **Design Heating**
BTU/(hr sqft) **12.6**
Ent. DB / Lvg DB **67.1 / 81.2** F

Supply Fan Sizing Data

Design CFM **635** CFM
Design CFM/sqft **0.83** CFM/sqft

Fan motor BHP **0.00** BHP
Fan motor kW **0.00** kW

Outdoor Ventilation Air Data

Design airflow CFM **100** CFM
CFM/sqft **0.13** CFM/sqft

CFM/person **0.00** CFM/person

Zone Sizing Summary for 22 4E #21 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:22 AM

Air System Information

Air System Name **22 4E #21 CPT**
 Equipment Class **SPLT AHU**
 Air System Type **SZCAV**

Number of zones **1**
 Floor Area **761.7** sqft
 Location **St-Anicet 1, QC, Canada**

Sizing Calculation Information

Calculation Months **Jan to Dec**
 Sizing Data **Calculated**

Zone CFM Sizing **Sum of space airflow rates**
 Space CFM Sizing **Individual peak space loads**

Zone Terminal Sizing Data

Zone Name	Design Supply Airflow (CFM)	Minimum Supply Airflow (CFM)	Zone CFM/sqft	Reheat Coil Capacity (MBH)	Reheat Coil Water gpm @ 20.0 F	Zone Htg Unit Coil Capacity (MBH)	Zone Htg Unit Water gpm @ 20.0 F	Mixing Box Fan Airflow (CFM)
4E #21	635	635	0.83	0.0	-	0.0	-	0

Zone Peak Sensible Loads

Zone Name	Zone Cooling Sensible (MBH)	Time of Peak Sensible Cooling Load	Zone Heating Load (MBH)	Zone Floor Area (sqft)
4E #21	11.6	August 10:00	7.5	761.7

Space Loads and Airflows

Zone Name / Space Name	Cooling Sensible (MBH)	Time of Peak Sensible Load	Air Flow (CFM)	Heating Load (MBH)	Floor Area (sqft)	Space CFM/sqft
4E #21						
4E #21	11.6	August 10:00	635	7.5	761.7	0.83

Air System Heat Balance Summary for 22 4E #21 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:22 AM

Table 1. System Loads

COMPONENT LOADS	DESIGN COOLING - AUGUST 9:00			DESIGN HEATING		
	OA DB / WB 72.1 F / 68.4 F			OA DB / WB -12.3 F / -13.2 F		
	Details	Sensible [BTU/hr]	Latent [BTU/hr]	Details	Sensible [BTU/hr]	Latent [BTU/hr]
Zone Conditioning	-	11070	231	-	7639	0
Plenum Load	-	0	0	-	0	0
Return Fan Load	635 CFM	0	-	635 CFM	0	-
Ventilation Load	100 CFM	-279	1665	100 CFM	1944	0
Supply Fan Load	635 CFM	0	-	635 CFM	0	-
Zone Fan Coil Fans Load	-	0	-	-	0	-
>> Total System Loads	-	10791	1896	-	9583	0
Central Cooling Coil	-	10795	2239	-	0	0
Central Heating Coil	-	0	-	-	9588	-
>> Total Conditioning	-	10795	2239	-	9588	0
Key:	Positive values are cooling loads Negative values are heating loads			Positive values are heating loads Negative values are cooling loads		

Table 2. Zone Heat Balance Loads

Zone Heat Balance Component	DESIGN COOLING - AUGUST 9:00			DESIGN HEATING		
	OA DB / WB 72.1 F / 68.4 F			OA DB / WB -12.3 F / -13.2 F		
	Details	Sensible [BTU/hr]	Latent [BTU/hr]	Details	Sensible [BTU/hr]	Latent [BTU/hr]
Exterior Wall Convection	172 sqft	508	-	172 sqft	397	-
Roof Convection	0 sqft	0	-	0 sqft	0	-
Window Convection	30 sqft	288	-	30 sqft	275	-
Skylight Convection	0 sqft	0	-	0 sqft	0	-
Door Convection	48 sqft	458	-	48 sqft	435	-
Floor Convection	762 sqft	3159	-	762 sqft	597	-
Interior Wall Convection	691 sqft	2163	-	691 sqft	357	-
Ceiling Convection	762 sqft	3489	-	762 sqft	1823	-
Overhead Lighting Convection	0 W	0	-	0 W	0	-
Task Lighting Convection	0 W	0	-	0 W	0	-
Electric Equipment Convection	0 W	0	-	0 W	0	-
People Convection	0	0	0	0	0	0
Infiltration	0 CFM	0	0	25 CFM	2613	0
Miscellaneous Equipment	-	0	0	-	0	0
Air Internal Energy Change	-	0	-	-	0	0
Safety Factor	15% / 15%	1510	0	15%	975	0
>> Total Zone Loads	-	11575	0	-	7473	0
Key:	Positive values are cooling loads Negative values are heating loads			Positive values are heating loads Negative values are cooling loads		

Note 1: Surface convection line items show the combined effects of conductive heat gain to the surface and radiative heat gains absorbed at the surface which are then convected to room air.

Note 2: Lighting, equipment, and people line items include only the direct convective heat gain from the heat source to the room air. The radiative portion of the heat gain is first absorbed by surfaces in the room and then later convected from the surface to the air. Therefore the effect of the radiative portion of the heat gain is found in the surface convection line items.

Note 3: Solar heat gain is absorbed by surfaces in the room, re-radiated to other surfaces, and finally convected from the surfaces to room air. Therefore, the effect of solar heat gain is found in the surface convection line items.

System Psychrometrics for 22 4E #21 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:22 AM

DESIGN COOLING DAY AT AUGUST 9:00

TABLE 1: SYSTEM DATA

Component	Location	Dry-Bulb Temp (F)	Specific Humidity (lb/lb)	Airflow (CFM)	CO2 Level (ppm)	Sensible Heat (BTU/hr)	Latent Heat (BTU/hr)
Ventilation Air	Inlet	72.4	0.01416	100	400	-279	1665
Air-to-Air Energy Recovery	Outlet	72.4	0.01416	100	400	0	0
Vent - Return Mixing	Outlet	74.6	0.01118	635	400	-	-
Central Cooling Coil	Outlet	59.1	0.01046	635	400	10795	2239
Central Heating Coil	Outlet	59.1	0.01046	635	400	0	-
Supply Fan	Outlet	59.1	0.01046	635	400	0	-
Cold Supply Duct	Outlet	59.1	0.01046	635	400	-	-
Zone Air	-	75.0	0.01054	635	400	11070	231
Return Air	Outlet	75.0	0.01063	635	400	-	-

Air Density x Heat Capacity x Conversion Factor: At sea level = 1.080; At site altitude = 1.074 BTU/(hr-CFM-F)

Air Density x Heat of Vaporization x Conversion Factor: At sea level = 4746.6; At site altitude = 4719.0 BTU/(hr-CFM)

Site Altitude = 161.0 ft

TABLE 2: ZONE DATA

Zone Name	Zone Sensible Load (BTU/hr)	T-stat Mode	Zone Cond (BTU/hr)	Zone Temp (F)	Zone Airflow (CFM)	CO2 Level (ppm)	Terminal Heating Coil (BTU/hr)	Zone Heating Unit (BTU/hr)
4E #21	11068	Cooling	11070	75.0	635	400	0	0

System Psychrometrics for 22 4E #21 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:22 AM

WINTER DESIGN HEATING

TABLE 1: SYSTEM DATA

Component	Location	Dry-Bulb Temp (F)	Specific Humidity (lb/lb)	Airflow (CFM)	CO2 Level (ppm)	Sensible Heat (BTU/hr)	Latent Heat (BTU/hr)
Ventilation Air	Inlet	-12.3	0.00018	100	400	-1944	0
Air-to-Air Energy Recovery	Outlet	51.9	0.00018	100	400	-6911	0
Vent - Return Mixing	Outlet	67.1	0.00018	635	400	-	-
Central Cooling Coil	Outlet	67.1	0.00018	635	400	0	0
Central Heating Coil	Outlet	81.2	0.00018	635	400	9588	-
Supply Fan	Outlet	81.2	0.00018	635	400	0	-
Cold Supply Duct	Outlet	81.2	0.00018	635	400	-	-
Zone Air	-	70.0	0.00018	635	400	-7639	0
Return Air	Outlet	70.0	0.00018	635	400	-	-

Air Density x Heat Capacity x Conversion Factor: At sea level = 1.080; At site altitude = 1.074 BTU/(hr-CFM-F)

Air Density x Heat of Vaporization x Conversion Factor: At sea level = 4746.6; At site altitude = 4719.0 BTU/(hr-CFM)

Site Altitude = 161.0 ft

TABLE 2: ZONE DATA

Zone Name	Zone Sensible Load (BTU/hr)	T-stat Mode	Zone Cond (BTU/hr)	Zone Temp (F)	Zone Airflow (CFM)	CO2 Level (ppm)	Terminal Heating Coil (BTU/hr)	Zone Heating Unit (BTU/hr)
4E #21	-7639	Heating	-7639	70.0	635	400	0	0

Air System Sizing Summary for 24 4E #22 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:22 AM

Air System Information

Air System Name **24 4E #22 CPT**
Equipment Class **SPLT AHU**
Air System Type **SZCAV**

Number of zones **1**
Floor Area **985.6** sqft
Location **St-Anicet 1, QC, Canada**

Sizing Calculation Information

Calculation Months **Jan to Dec**
Sizing Data **Calculated**

Zone CFM Sizing **Sum of space airflow rates**
Space CFM Sizing **Individual peak space loads**

Central Cooling Coil Sizing Data

Total coil load **1.3** Tons
Total coil load **16.2** MBH
Sensible coil load **14.6** MBH
Coil CFM at peak load **849** CFM
Sum of peak zone CFM **849** CFM
Sensible heat ratio **0.904**
CFM/Ton **630.1**
sqft/Ton **731.6**
BTU/(hr sqft) **16.4**
Water flow @ 10.0 F rise **N/A**

Peak coil load occurs at **September 11:00**
OA DB / WB **73.3 / 67.5** F
Entering DB / WB **74.8 / 64.7** F
Leaving DB / WB **59.1 / 58.6** F
Resulting RH **56** %
Design supply temp. **58.0** F
Zone T-stat Check **1 of 1** OK
Max zone temperature deviation **0.0** F

Central Heating Coil Sizing Data

Max coil load **17.4** MBH
Coil CFM at Design Heating **849** CFM
Max coil CFM **849** CFM
Water flow @ 20.0 F drop **N/A**

Load occurs at **Design Heating**
BTU/(hr sqft) **17.7**
Ent. DB / Lvg DB **67.9 / 86.9** F

Supply Fan Sizing Data

Design CFM **849** CFM
Design CFM/sqft **0.86** CFM/sqft

Fan motor BHP **0.00** BHP
Fan motor kW **0.00** kW

Outdoor Ventilation Air Data

Design airflow CFM **100** CFM
CFM/sqft **0.10** CFM/sqft

CFM/person **0.00** CFM/person

Zone Sizing Summary for 24 4E #22 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:22 AM

Air System Information

Air System Name **24 4E #22 CPT**
 Equipment Class **SPLT AHU**
 Air System Type **SZCAV**

Number of zones **1**
 Floor Area **985.6** sqft
 Location **St-Anicet 1, QC, Canada**

Sizing Calculation Information

Calculation Months **Jan to Dec**
 Sizing Data **Calculated**

Zone CFM Sizing **Sum of space airflow rates**
 Space CFM Sizing **Individual peak space loads**

Zone Terminal Sizing Data

Zone Name	Design Supply Airflow (CFM)	Minimum Supply Airflow (CFM)	Zone CFM/sqft	Reheat Coil Capacity (MBH)	Reheat Coil Water gpm @ 20.0 F	Zone Htg Unit Coil Capacity (MBH)	Zone Htg Unit Water gpm @ 20.0 F	Mixing Box Fan Airflow (CFM)
4E #22	849	849	0.86	0.0	-	0.0	-	0

Zone Peak Sensible Loads

Zone Name	Zone Cooling Sensible (MBH)	Time of Peak Sensible Cooling Load	Zone Heating Load (MBH)	Zone Floor Area (sqft)
4E #22	15.5	September 11:00	15.4	985.6

Space Loads and Airflows

Zone Name / Space Name	Cooling Sensible (MBH)	Time of Peak Sensible Load	Air Flow (CFM)	Heating Load (MBH)	Floor Area (sqft)	Space CFM/sqft
4E #22						
4E #22	15.5	September 11:00	849	15.4	985.6	0.86

Air System Heat Balance Summary for 24 4E #22 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:22 AM

Table 1. System Loads

COMPONENT LOADS	DESIGN COOLING - SEPTEMBER 11:00			DESIGN HEATING		
	OA DB / WB 73.3 F / 67.5 F			OA DB / WB -12.3 F / -13.2 F		
	Details	Sensible [BTU/hr]	Latent [BTU/hr]	Details	Sensible [BTU/hr]	Latent [BTU/hr]
Zone Conditioning	-	14763	136	-	15465	0
Plenum Load	-	0	0	-	0	0
Return Fan Load	849 CFM	0	-	849 CFM	0	-
Ventilation Load	100 CFM	-156	1255	100 CFM	1944	0
Supply Fan Load	849 CFM	0	-	849 CFM	0	-
Zone Fan Coil Fans Load	-	0	-	-	0	-
>> Total System Loads	-	14607	1392	-	17409	0
Central Cooling Coil	-	14611	1555	-	0	0
Central Heating Coil	-	0	-	-	17414	-
>> Total Conditioning	-	14611	1555	-	17414	0
Key:	Positive values are cooling loads Negative values are heating loads			Positive values are heating loads Negative values are cooling loads		

Table 2. Zone Heat Balance Loads

Zone Heat Balance Component	DESIGN COOLING - SEPTEMBER 11:00			DESIGN HEATING		
	OA DB / WB 73.3 F / 67.5 F			OA DB / WB -12.3 F / -13.2 F		
	Details	Sensible [BTU/hr]	Latent [BTU/hr]	Details	Sensible [BTU/hr]	Latent [BTU/hr]
Exterior Wall Convection	470 sqft	1553	-	470 sqft	1247	-
Roof Convection	0 sqft	0	-	0 sqft	0	-
Window Convection	100 sqft	802	-	100 sqft	985	-
Skylight Convection	0 sqft	0	-	0 sqft	0	-
Door Convection	48 sqft	400	-	48 sqft	467	-
Floor Convection	986 sqft	3700	-	986 sqft	1039	-
Interior Wall Convection	618 sqft	2217	-	618 sqft	428	-
Ceiling Convection	986 sqft	4800	-	986 sqft	2797	-
Overhead Lighting Convection	0 W	0	-	0 W	0	-
Task Lighting Convection	0 W	0	-	0 W	0	-
Electric Equipment Convection	0 W	0	-	0 W	0	-
People Convection	0	0	0	0	0	0
Infiltration	0 CFM	0	0	62 CFM	6467	0
Miscellaneous Equipment	-	0	0	-	0	0
Air Internal Energy Change	-	0	-	-	0	0
Safety Factor	15% / 15%	2021	0	15%	2015	0
>> Total Zone Loads	-	15494	0	-	15445	0
Key:	Positive values are cooling loads Negative values are heating loads			Positive values are heating loads Negative values are cooling loads		

Note 1: Surface convection line items show the combined effects of conductive heat gain to the surface and radiative heat gains absorbed at the surface which are then convected to room air.

Note 2: Lighting, equipment, and people line items include only the direct convective heat gain from the heat source to the room air. The radiative portion of the heat gain is first absorbed by surfaces in the room and then later convected from the surface to the air. Therefore the effect of the radiative portion of the heat gain is found in the surface convection line items.

Note 3: Solar heat gain is absorbed by surfaces in the room, re-radiated to other surfaces, and finally convected from the surfaces to room air. Therefore, the effect of solar heat gain is found in the surface convection line items.

System Psychrometrics for 24 4E #22 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:22 AM

DESIGN COOLING DAY AT SEPTEMBER 11:00

TABLE 1: SYSTEM DATA

Component	Location	Dry-Bulb Temp (F)	Specific Humidity (lb/lb)	Airflow (CFM)	CO2 Level (ppm)	Sensible Heat (BTU/hr)	Latent Heat (BTU/hr)
Ventilation Air	Inlet	73.5	0.01314	100	400	-156	1255
Air-to-Air Energy Recovery	Outlet	73.5	0.01314	100	400	0	0
Vent - Return Mixing	Outlet	74.8	0.01079	849	400	-	-
Central Cooling Coil	Outlet	59.1	0.01042	849	400	14611	1555
Central Heating Coil	Outlet	59.1	0.01042	849	400	0	-
Supply Fan	Outlet	59.1	0.01042	849	400	0	-
Cold Supply Duct	Outlet	59.1	0.01042	849	400	-	-
Zone Air	-	75.0	0.01045	849	400	14763	136
Return Air	Outlet	75.0	0.01048	849	400	-	-

Air Density x Heat Capacity x Conversion Factor: At sea level = 1.080; At site altitude = 1.074 BTU/(hr-CFM-F)

Air Density x Heat of Vaporization x Conversion Factor: At sea level = 4746.6; At site altitude = 4719.0 BTU/(hr-CFM)

Site Altitude = 161.0 ft

TABLE 2: ZONE DATA

Zone Name	Zone Sensible Load (BTU/hr)	T-stat Mode	Zone Cond (BTU/hr)	Zone Temp (F)	Zone Airflow (CFM)	CO2 Level (ppm)	Terminal Heating Coil (BTU/hr)	Zone Heating Unit (BTU/hr)
4E #22	14762	Cooling	14763	75.0	849	400	0	0

System Psychrometrics for 24 4E #22 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:22 AM

WINTER DESIGN HEATING

TABLE 1: SYSTEM DATA

Component	Location	Dry-Bulb Temp (F)	Specific Humidity (lb/lb)	Airflow (CFM)	CO2 Level (ppm)	Sensible Heat (BTU/hr)	Latent Heat (BTU/hr)
Ventilation Air	Inlet	-12.3	0.00018	100	400	-1944	0
Air-to-Air Energy Recovery	Outlet	51.9	0.00018	100	400	-6911	0
Vent - Return Mixing	Outlet	67.9	0.00018	849	400	-	-
Central Cooling Coil	Outlet	67.9	0.00018	849	400	0	0
Central Heating Coil	Outlet	86.9	0.00018	849	400	17414	-
Supply Fan	Outlet	86.9	0.00018	849	400	0	-
Cold Supply Duct	Outlet	86.9	0.00018	849	400	-	-
Zone Air	-	70.0	0.00018	849	400	-15465	0
Return Air	Outlet	70.0	0.00018	849	400	-	-

Air Density x Heat Capacity x Conversion Factor: At sea level = 1.080; At site altitude = 1.074 BTU/(hr-CFM-F)

Air Density x Heat of Vaporization x Conversion Factor: At sea level = 4746.6; At site altitude = 4719.0 BTU/(hr-CFM)

Site Altitude = 161.0 ft

TABLE 2: ZONE DATA

Zone Name	Zone Sensible Load (BTU/hr)	T-stat Mode	Zone Cond (BTU/hr)	Zone Temp (F)	Zone Airflow (CFM)	CO2 Level (ppm)	Terminal Heating Coil (BTU/hr)	Zone Heating Unit (BTU/hr)
4E #22	-15465	Heating	-15465	70.0	849	400	0	0

Air System Sizing Summary for 26 4E ESC1 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:22 AM

Air System Information

Air System Name **26 4E ESC1 CPT**
Equipment Class **SPLT AHU**
Air System Type **SZCAV**

Number of zones **1**
Floor Area **200.4** sqft
Location **St-Anicet 1, QC, Canada**

Sizing Calculation Information

Calculation Months **Jan to Dec**
Sizing Data **Calculated**

Zone CFM Sizing **Sum of space airflow rates**
Space CFM Sizing **Individual peak space loads**

Central Heating Coil Sizing Data

Max coil load **4.6** MBH
Coil CFM at Design Heating **183** CFM
Max coil CFM **183** CFM
Water flow @ 20.0 F drop **N/A**

Load occurs at **Design Heating**
BTU/(hr sqft) **23.0**
Ent. DB / Lvg DB **70.0 / 93.4** F

Supply Fan Sizing Data

Design CFM **183** CFM
Design CFM/sqft **0.91** CFM/sqft

Fan motor BHP **0.10** BHP
Fan motor kW **0.08** kW
Fan total static **2.00** in wg

Outdoor Ventilation Air Data

Design airflow CFM **0** CFM
CFM/sqft **0.00** CFM/sqft

CFM/person **0.00** CFM/person

Zone Sizing Summary for 26 4E ESC1 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:22 AM

Air System Information

Air System Name **26 4E ESC1 CPT**
 Equipment Class **SPLT AHU**
 Air System Type **SZCAV**

Number of zones **1**
 Floor Area **200.4** sqft
 Location **St-Anicet 1, QC, Canada**

Sizing Calculation Information

Calculation Months **Jan to Dec**
 Sizing Data **Calculated**

Zone CFM Sizing **Sum of space airflow rates**
 Space CFM Sizing **Individual peak space loads**

Zone Terminal Sizing Data

Zone Name	Design Supply Airflow (CFM)	Minimum Supply Airflow (CFM)	Zone CFM/sqft	Reheat Coil Capacity (MBH)	Reheat Coil Water gpm @ 20.0 F	Zone Htg Unit Coil Capacity (MBH)	Zone Htg Unit Water gpm @ 20.0 F	Mixing Box Fan Airflow (CFM)
4E ESC1	183	183	0.91	0.0	-	0.0	-	0

Zone Peak Sensible Loads

Zone Name	Zone Cooling Sensible (MBH)	Time of Peak Sensible Cooling Load	Zone Heating Load (MBH)	Zone Floor Area (sqft)
4E ESC1	0.0	July 6:00	4.9	200.4

Space Loads and Airflows

Zone Name / Space Name	Cooling Sensible (MBH)	Time of Peak Sensible Load	Air Flow (CFM)	Heating Load (MBH)	Floor Area (sqft)	Space CFM/sqft
4E ESC1						
4E ESC1	0.0	July 6:00	183	4.9	200.4	0.91

Air System Heat Balance Summary for 26 4E ESC1 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:22 AM

Table 1. System Loads

COMPONENT LOADS	DESIGN COOLING			DESIGN HEATING		
	NO COOLING DATA			OA DB / WB -12.3 F / -13.2 F		
	Details	Sensible [BTU/hr]	Latent [BTU/hr]	Details	Sensible [BTU/hr]	Latent [BTU/hr]
Zone Conditioning	-	-	-	-	4875	0
Plenum Load	-	-	-	-	0	0
Return Fan Load	-	-	-	183 CFM	0	-
Ventilation Load	-	-	-	0 CFM	0	0
Supply Fan Load	-	-	-	183 CFM	-271	-
Zone Fan Coil Fans Load	-	-	-	-	0	-
>> Total System Loads	-	-	-	-	4604	0
Central Heating Coil	-	-	-	-	4604	-
>> Total Conditioning	-	-	-	-	4604	0
Key:	Positive values are cooling loads Negative values are heating loads			Positive values are heating loads Negative values are cooling loads		

Table 2. Zone Heat Balance Loads

Zone Heat Balance Component	DESIGN COOLING			DESIGN HEATING		
	NO COOLING DATA			OA DB / WB -12.3 F / -13.2 F		
	Details	Sensible [BTU/hr]	Latent [BTU/hr]	Details	Sensible [BTU/hr]	Latent [BTU/hr]
Exterior Wall Convection	230 sqft	-	-	230 sqft	623	-
Roof Convection	0 sqft	-	-	0 sqft	0	-
Window Convection	17 sqft	-	-	17 sqft	186	-
Skylight Convection	0 sqft	-	-	0 sqft	0	-
Door Convection	0 sqft	-	-	0 sqft	0	-
Floor Convection	200 sqft	-	-	200 sqft	170	-
Interior Wall Convection	247 sqft	-	-	247 sqft	151	-
Ceiling Convection	200 sqft	-	-	200 sqft	551	-
Overhead Lighting Convection	-	-	-	0 W	0	-
Task Lighting Convection	-	-	-	0 W	0	-
Electric Equipment Convection	-	-	-	0 W	0	-
People Convection	-	-	-	0	0	0
Infiltration	-	-	-	25 CFM	2586	0
Miscellaneous Equipment	-	-	-	-	0	0
Air Internal Energy Change	-	-	-	-	0	0
Safety Factor	15% / 15%	-	-	15%	640	0
>> Total Zone Loads	-	-	-	-	4907	0
Key:	Positive values are cooling loads Negative values are heating loads			Positive values are heating loads Negative values are cooling loads		

Note 1: Surface convection line items show the combined effects of conductive heat gain to the surface and radiative heat gains absorbed at the surface which are then convected to room air.

Note 2: Lighting, equipment, and people line items include only the direct convective heat gain from the heat source to the room air. The radiative portion of the heat gain is first absorbed by surfaces in the room and then later convected from the surface to the air. Therefore the effect of the radiative portion of the heat gain is found in the surface convection line items.

Note 3: Solar heat gain is absorbed by surfaces in the room, re-radiated to other surfaces, and finally convected from the surfaces to room air. Therefore, the effect of solar heat gain is found in the surface convection line items.

System Psychrometrics for 26 4E ESC1 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:22 AM

WINTER DESIGN HEATING

TABLE 1: SYSTEM DATA

Component	Location	Dry-Bulb Temp (F)	Specific Humidity (lb/lb)	Airflow (CFM)	CO2 Level (ppm)	Sensible Heat (BTU/hr)	Latent Heat (BTU/hr)
Ventilation Air	Inlet	-12.3	0.00018	0	400	0	0
Vent - Return Mixing	Outlet	70.0	0.00018	183	400	-	-
Central Heating Coil	Outlet	93.4	0.00018	183	400	4604	-
Supply Fan	Outlet	94.8	0.00018	183	400	271	-
Cold Supply Duct	Outlet	94.8	0.00018	183	400	-	-
Zone Air	-	70.0	0.00018	183	400	-4875	0
Return Air	Outlet	70.0	0.00018	183	400	-	-

Air Density x Heat Capacity x Conversion Factor: At sea level = 1.080; At site altitude = 1.074 BTU/(hr-CFM-F)

Air Density x Heat of Vaporization x Conversion Factor: At sea level = 4746.6; At site altitude = 4719.0 BTU/(hr-CFM)

Site Altitude = 161.0 ft

TABLE 2: ZONE DATA

Zone Name	Zone Sensible Load (BTU/hr)	T-stat Mode	Zone Cond (BTU/hr)	Zone Temp (F)	Zone Airflow (CFM)	CO2 Level (ppm)	Terminal Heating Coil (BTU/hr)	Zone Heating Unit (BTU/hr)
4E ESC1	-4875	Heating	-4875	70.0	183	400	0	0

Air System Sizing Summary for 28 4E ESC2 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:22 AM

Air System Information

Air System Name **28 4E ESC2 CPT**
Equipment Class **SPLT AHU**
Air System Type **SZCAV**

Number of zones **1**
Floor Area **186.4** sqft
Location **St-Anicet 1, QC, Canada**

Sizing Calculation Information

Calculation Months **Jan to Dec**
Sizing Data **Calculated**

Zone CFM Sizing **Sum of space airflow rates**
Space CFM Sizing **Individual peak space loads**

Central Heating Coil Sizing Data

Max coil load **5.2** MBH
Coil CFM at Design Heating **208** CFM
Max coil CFM **208** CFM
Water flow @ 20.0 F drop **N/A**

Load occurs at **Design Heating**
BTU/(hr sqft) **28.1**
Ent. DB / Lvg DB **70.0 / 93.5** F

Supply Fan Sizing Data

Design CFM **208** CFM
Design CFM/sqft **1.11** CFM/sqft

Fan motor BHP **0.11** BHP
Fan motor kW **0.09** kW
Fan total static **2.00** in wg

Outdoor Ventilation Air Data

Design airflow CFM **0** CFM
CFM/sqft **0.00** CFM/sqft

CFM/person **0.00** CFM/person

Zone Sizing Summary for 28 4E ESC2 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:22 AM

Air System Information

Air System Name **28 4E ESC2 CPT**
 Equipment Class **SPLT AHU**
 Air System Type **SZCAV**

Number of zones **1**
 Floor Area **186.4** sqft
 Location **St-Anicet 1, QC, Canada**

Sizing Calculation Information

Calculation Months **Jan to Dec**
 Sizing Data **Calculated**

Zone CFM Sizing **Sum of space airflow rates**
 Space CFM Sizing **Individual peak space loads**

Zone Terminal Sizing Data

Zone Name	Design Supply Airflow (CFM)	Minimum Supply Airflow (CFM)	Zone CFM/sqft	Reheat Coil Capacity (MBH)	Reheat Coil Water gpm @ 20.0 F	Zone Htg Unit Coil Capacity (MBH)	Zone Htg Unit Water gpm @ 20.0 F	Mixing Box Fan Airflow (CFM)
4E ESC2	208	208	1.11	0.0	-	0.0	-	0

Zone Peak Sensible Loads

Zone Name	Zone Cooling Sensible (MBH)	Time of Peak Sensible Cooling Load	Zone Heating Load (MBH)	Zone Floor Area (sqft)
4E ESC2	0.0	January 17:00	5.6	186.4

Space Loads and Airflows

Zone Name / Space Name	Cooling Sensible (MBH)	Time of Peak Sensible Load	Air Flow (CFM)	Heating Load (MBH)	Floor Area (sqft)	Space CFM/sqft
4E ESC2						
4E ESC2	0.0	January 17:00	208	5.6	186.4	1.11

Air System Heat Balance Summary for 28 4E ESC2 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:22 AM

Table 1. System Loads

COMPONENT LOADS	DESIGN COOLING			DESIGN HEATING		
	NO COOLING DATA			OA DB / WB -12.3 F / -13.2 F		
	Details	Sensible [BTU/hr]	Latent [BTU/hr]	Details	Sensible [BTU/hr]	Latent [BTU/hr]
Zone Conditioning	-	-	-	-	5552	0
Plenum Load	-	-	-	-	0	0
Return Fan Load	-	-	-	208 CFM	0	-
Ventilation Load	-	-	-	0 CFM	0	0
Supply Fan Load	-	-	-	208 CFM	-308	-
Zone Fan Coil Fans Load	-	-	-	-	0	-
>> Total System Loads	-	-	-	-	5244	0
Central Heating Coil	-	-	-	-	5244	-
>> Total Conditioning	-	-	-	-	5244	0
Key:	Positive values are cooling loads Negative values are heating loads			Positive values are heating loads Negative values are cooling loads		

Table 2. Zone Heat Balance Loads

Zone Heat Balance Component	DESIGN COOLING			DESIGN HEATING		
	NO COOLING DATA			OA DB / WB -12.3 F / -13.2 F		
	Details	Sensible [BTU/hr]	Latent [BTU/hr]	Details	Sensible [BTU/hr]	Latent [BTU/hr]
Exterior Wall Convection	174 sqft	-	-	174 sqft	542	-
Roof Convection	0 sqft	-	-	0 sqft	0	-
Window Convection	63 sqft	-	-	63 sqft	746	-
Skylight Convection	0 sqft	-	-	0 sqft	0	-
Door Convection	0 sqft	-	-	0 sqft	0	-
Floor Convection	186 sqft	-	-	186 sqft	239	-
Interior Wall Convection	236 sqft	-	-	236 sqft	234	-
Ceiling Convection	186 sqft	-	-	186 sqft	615	-
Overhead Lighting Convection	-	-	-	0 W	0	-
Task Lighting Convection	-	-	-	0 W	0	-
Electric Equipment Convection	-	-	-	0 W	0	-
People Convection	-	-	-	0	0	0
Infiltration	-	-	-	24 CFM	2471	0
Miscellaneous Equipment	-	-	-	-	0	0
Air Internal Energy Change	-	-	-	-	0	0
Safety Factor	15% / 15%	-	-	15%	727	0
>> Total Zone Loads	-	-	-	-	5574	0
Key:	Positive values are cooling loads Negative values are heating loads			Positive values are heating loads Negative values are cooling loads		

Note 1: Surface convection line items show the combined effects of conductive heat gain to the surface and radiative heat gains absorbed at the surface which are then convected to room air.

Note 2: Lighting, equipment, and people line items include only the direct convective heat gain from the heat source to the room air. The radiative portion of the heat gain is first absorbed by surfaces in the room and then later convected from the surface to the air. Therefore the effect of the radiative portion of the heat gain is found in the surface convection line items.

Note 3: Solar heat gain is absorbed by surfaces in the room, re-radiated to other surfaces, and finally convected from the surfaces to room air. Therefore, the effect of solar heat gain is found in the surface convection line items.

System Psychrometrics for 28 4E ESC2 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:23 AM

WINTER DESIGN HEATING

TABLE 1: SYSTEM DATA

Component	Location	Dry-Bulb Temp (F)	Specific Humidity (lb/lb)	Airflow (CFM)	CO2 Level (ppm)	Sensible Heat (BTU/hr)	Latent Heat (BTU/hr)
Ventilation Air	Inlet	-12.3	0.00018	0	400	0	0
Vent - Return Mixing	Outlet	70.0	0.00018	208	400	-	-
Central Heating Coil	Outlet	93.5	0.00018	208	400	5244	-
Supply Fan	Outlet	94.8	0.00018	208	400	308	-
Cold Supply Duct	Outlet	94.8	0.00018	208	400	-	-
Zone Air	-	70.0	0.00018	208	400	-5552	0
Return Air	Outlet	70.0	0.00018	208	400	-	-

Air Density x Heat Capacity x Conversion Factor: At sea level = 1.080; At site altitude = 1.074 BTU/(hr-CFM-F)

Air Density x Heat of Vaporization x Conversion Factor: At sea level = 4746.6; At site altitude = 4719.0 BTU/(hr-CFM)

Site Altitude = 161.0 ft

TABLE 2: ZONE DATA

Zone Name	Zone Sensible Load (BTU/hr)	T-stat Mode	Zone Cond (BTU/hr)	Zone Temp (F)	Zone Airflow (CFM)	CO2 Level (ppm)	Terminal Heating Coil (BTU/hr)	Zone Heating Unit (BTU/hr)
4E ESC2	-5552	Heating	-5552	70.0	208	400	0	0

Air System Sizing Summary for 30 RDC #1 à #5 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:23 AM

Air System Information

Air System Name **30 RDC #1 à #5 CPT**
Equipment Class **SPLT AHU**
Air System Type **SZCAV**

Number of zones **1**
Floor Area **3562.5** sqft
Location **St-Anicet 1, QC, Canada**

Sizing Calculation Information

Calculation Months **Jan to Dec**
Sizing Data **Calculated**

Zone CFM Sizing **Sum of space airflow rates**
Space CFM Sizing **Individual peak space loads**

Central Cooling Coil Sizing Data

Total coil load **5.1** Tons
Total coil load **61.5** MBH
Sensible coil load **50.1** MBH
Coil CFM at peak load **2831** CFM
Sum of peak zone CFM **2831** CFM
Sensible heat ratio **0.816**
CFM/Ton **552.9**
sqft/Ton **695.6**
BTU/(hr sqft) **17.3**
Water flow @ 10.0 F rise **N/A**

Peak coil load occurs at **July 17:00**
OA DB / WB **85.8 / 72.5** F
Entering DB / WB **75.4 / 65.8** F
Leaving DB / WB **59.3 / 58.9** F
Resulting RH **57** %
Design supply temp. **58.0** F
Zone T-stat Check **1 of 1** OK
Max zone temperature deviation **0.0** F

Central Heating Coil Sizing Data

Max coil load **38.4** MBH
Coil CFM at Design Heating **2831** CFM
Max coil CFM **2831** CFM
Water flow @ 20.0 F drop **N/A**

Load occurs at **Design Heating**
BTU/(hr sqft) **10.8**
Ent. DB / Lvg DB **66.8 / 79.4** F

Supply Fan Sizing Data

Design CFM **2831** CFM
Design CFM/sqft **0.79** CFM/sqft

Fan motor BHP **0.00** BHP
Fan motor kW **0.00** kW

Outdoor Ventilation Air Data

Design airflow CFM **500** CFM
CFM/sqft **0.14** CFM/sqft

CFM/person **0.00** CFM/person

Zone Sizing Summary for 30 RDC #1 à #5 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:23 AM

Air System Information

Air System Name **30 RDC #1 à #5 CPT**
 Equipment Class **SPLT AHU**
 Air System Type **SZCAV**

Number of zones **1**
 Floor Area **3562.5** sqft
 Location **St-Anicet 1, QC, Canada**

Sizing Calculation Information

Calculation Months **Jan to Dec**
 Sizing Data **Calculated**

Zone CFM Sizing **Sum of space airflow rates**
 Space CFM Sizing **Individual peak space loads**

Zone Terminal Sizing Data

Zone Name	Design Supply Airflow (CFM)	Minimum Supply Airflow (CFM)	Zone CFM/sqft	Reheat Coil Capacity (MBH)	Reheat Coil Water gpm @ 20.0 F	Zone Htg Unit Coil Capacity (MBH)	Zone Htg Unit Water gpm @ 20.0 F	Mixing Box Fan Airflow (CFM)
RDC #1 à #5	2831	2831	0.79	0.0	-	0.0	-	0

Zone Peak Sensible Loads

Zone Name	Zone Cooling Sensible (MBH)	Time of Peak Sensible Cooling Load	Zone Heating Load (MBH)	Zone Floor Area (sqft)
RDC #1 à #5	51.7	May 17:00	27.8	3562.5

Space Loads and Airflows

Zone Name / Space Name	Cooling Sensible (MBH)	Time of Peak Sensible Load	Air Flow (CFM)	Heating Load (MBH)	Floor Area (sqft)	Space CFM/sqft
RDC #1 à #5						
RDC #1 à #5	51.7	May 17:00	2831	27.8	3562.5	0.79

Air System Heat Balance Summary for 30 RDC #1 à #5 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:23 AM

Table 1. System Loads

COMPONENT LOADS	DESIGN COOLING - JULY 17:00			DESIGN HEATING		
	OA DB / WB 85.8 F / 72.5 F			OA DB / WB -12.3 F / -13.2 F		
	Details	Sensible [BTU/hr]	Latent [BTU/hr]	Details	Sensible [BTU/hr]	Latent [BTU/hr]
Zone Conditioning	-	48761	1408	-	28693	0
Plenum Load	-	0	0	-	0	0
Return Fan Load	2831 CFM	0	-	2831 CFM	0	-
Ventilation Load	500 CFM	1254	7947	500 CFM	9720	0
Supply Fan Load	2831 CFM	0	-	2831 CFM	0	-
Zone Fan Coil Fans Load	-	0	-	-	0	-
>> Total System Loads	-	50016	9355	-	38413	0
Central Cooling Coil	-	50132	11321	-	0	0
Central Heating Coil	-	0	-	-	38439	-
>> Total Conditioning	-	50132	11321	-	38439	0
Key:	Positive values are cooling loads Negative values are heating loads			Positive values are heating loads Negative values are cooling loads		

Table 2. Zone Heat Balance Loads

Zone Heat Balance Component	DESIGN COOLING - JULY 17:00			DESIGN HEATING		
	OA DB / WB 85.8 F / 72.5 F			OA DB / WB -12.3 F / -13.2 F		
	Details	Sensible [BTU/hr]	Latent [BTU/hr]	Details	Sensible [BTU/hr]	Latent [BTU/hr]
Exterior Wall Convection	924 sqft	3454	-	924 sqft	1962	-
Roof Convection	0 sqft	0	-	0 sqft	0	-
Window Convection	130 sqft	1285	-	130 sqft	1196	-
Skylight Convection	0 sqft	0	-	0 sqft	0	-
Door Convection	232 sqft	2275	-	232 sqft	2119	-
Floor Convection	3562 sqft	13279	-	3562 sqft	1914	-
Interior Wall Convection	1496 sqft	4635	-	1496 sqft	583	-
Ceiling Convection	3562 sqft	18753	-	3562 sqft	2992	-
Overhead Lighting Convection	0 W	0	-	0 W	0	-
Task Lighting Convection	0 W	0	-	0 W	0	-
Electric Equipment Convection	0 W	0	-	0 W	0	-
People Convection	0	0	0	0	0	0
Infiltration	0 CFM	0	0	129 CFM	13450	0
Miscellaneous Equipment	-	0	0	-	0	0
Air Internal Energy Change	-	0	-	-	0	0
Safety Factor	15% / 15%	6552	0	15%	3632	0
>> Total Zone Loads	-	50232	0	-	27847	0
Key:	Positive values are cooling loads Negative values are heating loads			Positive values are heating loads Negative values are cooling loads		

Note 1: Surface convection line items show the combined effects of conductive heat gain to the surface and radiative heat gains absorbed at the surface which are then convected to room air.

Note 2: Lighting, equipment, and people line items include only the direct convective heat gain from the heat source to the room air. The radiative portion of the heat gain is first absorbed by surfaces in the room and then later convected from the surface to the air. Therefore the effect of the radiative portion of the heat gain is found in the surface convection line items.

Note 3: Solar heat gain is absorbed by surfaces in the room, re-radiated to other surfaces, and finally convected from the surfaces to room air. Therefore, the effect of solar heat gain is found in the surface convection line items.

System Psychrometrics for 30 RDC #1 à #5 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:23 AM

DESIGN COOLING DAY AT JULY 17:00

TABLE 1: SYSTEM DATA

Component	Location	Dry-Bulb Temp (F)	Specific Humidity (lb/lb)	Airflow (CFM)	CO2 Level (ppm)	Sensible Heat (BTU/hr)	Latent Heat (BTU/hr)
Ventilation Air	Inlet	85.6	0.01418	500	400	1254	7947
Air-to-Air Energy Recovery	Outlet	77.4	0.01418	500	400	4547	0
Vent - Return Mixing	Outlet	75.4	0.01141	2831	400	-	-
Central Cooling Coil	Outlet	59.3	0.01059	2831	400	50132	11321
Central Heating Coil	Outlet	59.3	0.01059	2831	400	0	-
Supply Fan	Outlet	59.3	0.01059	2831	400	0	-
Cold Supply Duct	Outlet	59.3	0.01059	2831	400	-	-
Zone Air	-	75.0	0.01070	2831	400	48761	1408
Return Air	Outlet	75.0	0.01082	2831	400	-	-

Air Density x Heat Capacity x Conversion Factor: At sea level = 1.080; At site altitude = 1.074 BTU/(hr-CFM-F)

Air Density x Heat of Vaporization x Conversion Factor: At sea level = 4746.6; At site altitude = 4719.0 BTU/(hr-CFM)

Site Altitude = 161.0 ft

TABLE 2: ZONE DATA

Zone Name	Zone Sensible Load (BTU/hr)	T-stat Mode	Zone Cond (BTU/hr)	Zone Temp (F)	Zone Airflow (CFM)	CO2 Level (ppm)	Terminal Heating Coil (BTU/hr)	Zone Heating Unit (BTU/hr)
RDC #1 à #5	48749	Cooling	48762	75.0	2831	400	0	0

System Psychrometrics for 30 RDC #1 à #5 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:23 AM

WINTER DESIGN HEATING

TABLE 1: SYSTEM DATA

Component	Location	Dry-Bulb Temp (F)	Specific Humidity (lb/lb)	Airflow (CFM)	CO2 Level (ppm)	Sensible Heat (BTU/hr)	Latent Heat (BTU/hr)
Ventilation Air	Inlet	-12.3	0.00018	500	400	-9720	0
Air-to-Air Energy Recovery	Outlet	51.9	0.00018	500	400	-34556	0
Vent - Return Mixing	Outlet	66.8	0.00018	2831	400	-	-
Central Cooling Coil	Outlet	66.8	0.00018	2831	400	0	0
Central Heating Coil	Outlet	79.4	0.00018	2831	400	38439	-
Supply Fan	Outlet	79.4	0.00018	2831	400	0	-
Cold Supply Duct	Outlet	79.4	0.00018	2831	400	-	-
Zone Air	-	70.0	0.00018	2831	400	-28693	0
Return Air	Outlet	70.0	0.00018	2831	400	-	-

Air Density x Heat Capacity x Conversion Factor: At sea level = 1.080; At site altitude = 1.074 BTU/(hr-CFM-F)

Air Density x Heat of Vaporization x Conversion Factor: At sea level = 4746.6; At site altitude = 4719.0 BTU/(hr-CFM)

Site Altitude = 161.0 ft

TABLE 2: ZONE DATA

Zone Name	Zone Sensible Load (BTU/hr)	T-stat Mode	Zone Cond (BTU/hr)	Zone Temp (F)	Zone Airflow (CFM)	CO2 Level (ppm)	Terminal Heating Coil (BTU/hr)	Zone Heating Unit (BTU/hr)
RDC #1 à #5	-28693	Heating	-28693	70.0	2831	400	0	0

Air System Sizing Summary for 32 RDC #10 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:23 AM

Air System Information

Air System Name **32 RDC #10 CPT**
Equipment Class **SPLT AHU**
Air System Type **SZCAV**

Number of zones **1**
Floor Area **780.6** sqft
Location **St-Anicet 1, QC, Canada**

Sizing Calculation Information

Calculation Months **Jan to Dec**
Sizing Data **Calculated**

Zone CFM Sizing **Sum of space airflow rates**
Space CFM Sizing **Individual peak space loads**

Central Cooling Coil Sizing Data

Total coil load **0.7** Tons
Total coil load **7.8** MBH
Sensible coil load **6.5** MBH
Coil CFM at peak load **454** CFM
Sum of peak zone CFM **454** CFM
Sensible heat ratio **0.833**
CFM/Ton **695.6**
sqft/Ton **1196.3**
BTU/(hr sqft) **10.0**
Water flow @ 10.0 F rise **N/A**

Peak coil load occurs at **August 14:00**
OA DB / WB **86.0 / 72.5** F
Entering DB / WB **75.5 / 67.0** F
Leaving DB / WB **62.5 / 61.8** F
Resulting RH **63** %
Design supply temp. **58.0** F
Zone T-stat Check **1 of 1** OK
Max zone temperature deviation **0.0** F

Central Heating Coil Sizing Data

Max coil load **14.1** MBH
Coil CFM at Design Heating **454** CFM
Max coil CFM **454** CFM
Water flow @ 20.0 F drop **N/A**

Load occurs at **Design Heating**
BTU/(hr sqft) **18.0**
Ent. DB / Lvg DB **66.0 / 94.8** F

Supply Fan Sizing Data

Design CFM **454** CFM
Design CFM/sqft **0.58** CFM/sqft

Fan motor BHP **0.00** BHP
Fan motor kW **0.00** kW

Outdoor Ventilation Air Data

Design airflow CFM **100** CFM
CFM/sqft **0.13** CFM/sqft

CFM/person **0.00** CFM/person

Zone Sizing Summary for 32 RDC #10 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:23 AM

Air System Information

Air System Name **32 RDC #10 CPT**
Equipment Class **SPLT AHU**
Air System Type **SZCAV**

Number of zones **1**
Floor Area **780.6** sqft
Location **St-Anicet 1, QC, Canada**

Sizing Calculation Information

Calculation Months **Jan to Dec**
Sizing Data **Calculated**

Zone CFM Sizing **Sum of space airflow rates**
Space CFM Sizing **Individual peak space loads**

Zone Terminal Sizing Data

Zone Name	Design Supply Airflow (CFM)	Minimum Supply Airflow (CFM)	Zone CFM/sqft	Reheat Coil Capacity (MBH)	Reheat Coil Water gpm @ 20.0 F	Zone Htg Unit Coil Capacity (MBH)	Zone Htg Unit Water gpm @ 20.0 F	Mixing Box Fan Airflow (CFM)
RDC #10	454	454	0.58	0.0	-	0.0	-	0

Zone Peak Sensible Loads

Zone Name	Zone Cooling Sensible (MBH)	Time of Peak Sensible Cooling Load	Zone Heating Load (MBH)	Zone Floor Area (sqft)
RDC #10	7.3	October 11:00	12.2	780.6

Space Loads and Airflows

Zone Name / Space Name	Cooling Sensible (MBH)	Time of Peak Sensible Load	Air Flow (CFM)	Heating Load (MBH)	Floor Area (sqft)	Space CFM/sqft
RDC #10						
RDC #10	7.3	October 11:00	454	12.2	780.6	0.58

Air System Heat Balance Summary for 32 RDC #10 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:23 AM

Table 1. System Loads

COMPONENT LOADS	DESIGN COOLING - AUGUST 14:00			DESIGN HEATING		
	OA DB / WB 86.0 F / 72.5 F			OA DB / WB -12.3 F / -13.2 F		
	Details	Sensible [BTU/hr]	Latent [BTU/hr]	Details	Sensible [BTU/hr]	Latent [BTU/hr]
Zone Conditioning	-	6242	90	-	12115	0
Plenum Load	-	0	0	-	0	0
Return Fan Load	454 CFM	0	-	454 CFM	0	-
Ventilation Load	100 CFM	260	1135	100 CFM	1944	0
Supply Fan Load	454 CFM	0	-	454 CFM	0	-
Zone Fan Coil Fans Load	-	0	-	-	0	-
>> Total System Loads	-	6502	1224	-	14059	0
Central Cooling Coil	-	6520	1310	-	0	0
Central Heating Coil	-	0	-	-	14065	-
>> Total Conditioning	-	6520	1310	-	14065	0
Key:	Positive values are cooling loads Negative values are heating loads			Positive values are heating loads Negative values are cooling loads		

Table 2. Zone Heat Balance Loads

Zone Heat Balance Component	DESIGN COOLING - AUGUST 14:00			DESIGN HEATING		
	OA DB / WB 86.0 F / 72.5 F			OA DB / WB -12.3 F / -13.2 F		
	Details	Sensible [BTU/hr]	Latent [BTU/hr]	Details	Sensible [BTU/hr]	Latent [BTU/hr]
Exterior Wall Convection	593 sqft	1173	-	593 sqft	1429	-
Roof Convection	0 sqft	0	-	0 sqft	0	-
Window Convection	70 sqft	347	-	70 sqft	662	-
Skylight Convection	0 sqft	0	-	0 sqft	0	-
Door Convection	0 sqft	0	-	0 sqft	0	-
Floor Convection	781 sqft	1383	-	781 sqft	511	-
Interior Wall Convection	663 sqft	938	-	663 sqft	310	-
Ceiling Convection	781 sqft	1804	-	781 sqft	749	-
Overhead Lighting Convection	0 W	0	-	0 W	0	-
Task Lighting Convection	0 W	0	-	0 W	0	-
Electric Equipment Convection	0 W	0	-	0 W	0	-
People Convection	0	0	0	0	0	0
Infiltration	0 CFM	0	0	66 CFM	6933	0
Miscellaneous Equipment	-	0	0	-	0	0
Air Internal Energy Change	-	0	-	-	0	0
Safety Factor	15% / 15%	847	0	15%	1589	0
>> Total Zone Loads	-	6490	0	-	12183	0
Key:	Positive values are cooling loads Negative values are heating loads			Positive values are heating loads Negative values are cooling loads		

Note 1: Surface convection line items show the combined effects of conductive heat gain to the surface and radiative heat gains absorbed at the surface which are then convected to room air.

Note 2: Lighting, equipment, and people line items include only the direct convective heat gain from the heat source to the room air. The radiative portion of the heat gain is first absorbed by surfaces in the room and then later convected from the surface to the air. Therefore the effect of the radiative portion of the heat gain is found in the surface convection line items.

Note 3: Solar heat gain is absorbed by surfaces in the room, re-radiated to other surfaces, and finally convected from the surfaces to room air. Therefore, the effect of solar heat gain is found in the surface convection line items.

System Psychrometrics for 32 RDC #10 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:23 AM

DESIGN COOLING DAY AT AUGUST 14:00

TABLE 1: SYSTEM DATA

Component	Location	Dry-Bulb Temp (F)	Specific Humidity (lb/lb)	Airflow (CFM)	CO2 Level (ppm)	Sensible Heat (BTU/hr)	Latent Heat (BTU/hr)
Ventilation Air	Inlet	86.0	0.01418	100	400	260	1135
Air-to-Air Energy Recovery	Outlet	77.5	0.01418	100	400	946	0
Vent - Return Mixing	Outlet	75.5	0.01231	454	400	-	-
Central Cooling Coil	Outlet	62.5	0.01172	454	400	6520	1310
Central Heating Coil	Outlet	62.5	0.01172	454	400	0	-
Supply Fan	Outlet	62.5	0.01172	454	400	0	-
Cold Supply Duct	Outlet	62.5	0.01172	454	400	-	-
Zone Air	-	75.0	0.01176	454	400	6242	90
Return Air	Outlet	75.0	0.01178	454	400	-	-

Air Density x Heat Capacity x Conversion Factor: At sea level = 1.080; At site altitude = 1.074 BTU/(hr-CFM-F)

Air Density x Heat of Vaporization x Conversion Factor: At sea level = 4746.6; At site altitude = 4719.0 BTU/(hr-CFM)

Site Altitude = 161.0 ft

TABLE 2: ZONE DATA

Zone Name	Zone Sensible Load (BTU/hr)	T-stat Mode	Zone Cond (BTU/hr)	Zone Temp (F)	Zone Airflow (CFM)	CO2 Level (ppm)	Terminal Heating Coil (BTU/hr)	Zone Heating Unit (BTU/hr)
RDC #10	6241	Cooling	6242	75.0	454	400	0	0

System Psychrometrics for 32 RDC #10 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:23 AM

WINTER DESIGN HEATING

TABLE 1: SYSTEM DATA

Component	Location	Dry-Bulb Temp (F)	Specific Humidity (lb/lb)	Airflow (CFM)	CO2 Level (ppm)	Sensible Heat (BTU/hr)	Latent Heat (BTU/hr)
Ventilation Air	Inlet	-12.3	0.00018	100	400	-1944	0
Air-to-Air Energy Recovery	Outlet	51.9	0.00018	100	400	-6911	0
Vent - Return Mixing	Outlet	66.0	0.00018	454	400	-	-
Central Cooling Coil	Outlet	66.0	0.00018	454	400	0	0
Central Heating Coil	Outlet	94.8	0.00018	454	400	14065	-
Supply Fan	Outlet	94.8	0.00018	454	400	0	-
Cold Supply Duct	Outlet	94.8	0.00018	454	400	-	-
Zone Air	-	70.0	0.00018	454	400	-12115	0
Return Air	Outlet	70.0	0.00018	454	400	-	-

Air Density x Heat Capacity x Conversion Factor: At sea level = 1.080; At site altitude = 1.074 BTU/(hr-CFM-F)

Air Density x Heat of Vaporization x Conversion Factor: At sea level = 4746.6; At site altitude = 4719.0 BTU/(hr-CFM)

Site Altitude = 161.0 ft

TABLE 2: ZONE DATA

Zone Name	Zone Sensible Load (BTU/hr)	T-stat Mode	Zone Cond (BTU/hr)	Zone Temp (F)	Zone Airflow (CFM)	CO2 Level (ppm)	Terminal Heating Coil (BTU/hr)	Zone Heating Unit (BTU/hr)
RDC #10	-12115	Heating	-12115	70.0	454	400	0	0

Air System Sizing Summary for 34 RDC #6 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:23 AM

Air System Information

Air System Name **34 RDC #6 CPT**
Equipment Class **SPLT AHU**
Air System Type **SZCAV**

Number of zones **1**
Floor Area **672.0** sqft
Location **St-Anicet 1, QC, Canada**

Sizing Calculation Information

Calculation Months **Jan to Dec**
Sizing Data **Calculated**

Zone CFM Sizing **Sum of space airflow rates**
Space CFM Sizing **Individual peak space loads**

Central Cooling Coil Sizing Data

Total coil load **0.3** Tons
Total coil load **3.6** MBH
Sensible coil load **2.2** MBH
Coil CFM at peak load **224** CFM
Sum of peak zone CFM **224** CFM
Sensible heat ratio **0.599**
CFM/Ton **742.9**
sqft/Ton **2229.2**
BTU/(hr sqft) **5.4**
Water flow @ 10.0 F rise **N/A**

Peak coil load occurs at **July 7:00**
OA DB / WB **67.2 / 66.9** F
Entering DB / WB **71.6 / 67.0** F
Leaving DB / WB **62.8 / 62.2** F
Resulting RH **66** %
Design supply temp. **58.0** F
Zone T-stat Check **1 of 1** OK
Max zone temperature deviation **0.0** F

Central Heating Coil Sizing Data

Max coil load **7.9** MBH
Coil CFM at Design Heating **224** CFM
Max coil CFM **224** CFM
Water flow @ 20.0 F drop **N/A**

Load occurs at **Design Heating**
BTU/(hr sqft) **11.8**
Ent. DB / Lvg DB **61.9 / 94.8** F

Supply Fan Sizing Data

Design CFM **224** CFM
Design CFM/sqft **0.33** CFM/sqft

Fan motor BHP **0.00** BHP
Fan motor kW **0.00** kW

Outdoor Ventilation Air Data

Design airflow CFM **100** CFM
CFM/sqft **0.15** CFM/sqft

CFM/person **0.00** CFM/person

Zone Sizing Summary for 34 RDC #6 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:23 AM

Air System Information

Air System Name **34 RDC #6 CPT**
 Equipment Class **SPLT AHU**
 Air System Type **SZCAV**

Number of zones **1**
 Floor Area **672.0** sqft
 Location **St-Anicet 1, QC, Canada**

Sizing Calculation Information

Calculation Months **Jan to Dec**
 Sizing Data **Calculated**

Zone CFM Sizing **Sum of space airflow rates**
 Space CFM Sizing **Individual peak space loads**

Zone Terminal Sizing Data

Zone Name	Design Supply Airflow (CFM)	Minimum Supply Airflow (CFM)	Zone CFM/sqft	Reheat Coil Capacity (MBH)	Reheat Coil Water gpm @ 20.0 F	Zone Htg Unit Coil Capacity (MBH)	Zone Htg Unit Water gpm @ 20.0 F	Mixing Box Fan Airflow (CFM)
RDC #6	224	224	0.33	0.0	-	0.0	-	0

Zone Peak Sensible Loads

Zone Name	Zone Cooling Sensible (MBH)	Time of Peak Sensible Cooling Load	Zone Heating Load (MBH)	Zone Floor Area (sqft)
RDC #6	3.5	June 7:00	6.0	672.0

Space Loads and Airflows

Zone Name / Space Name	Cooling Sensible (MBH)	Time of Peak Sensible Load	Air Flow (CFM)	Heating Load (MBH)	Floor Area (sqft)	Space CFM/sqft
RDC #6						
RDC #6	3.5	June 7:00	224	6.0	672.0	0.33

Air System Heat Balance Summary for 34 RDC #6 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:23 AM

Table 1. System Loads

COMPONENT LOADS	DESIGN COOLING - JULY 7:00			DESIGN HEATING		
	OA DB / WB 67.2 F / 66.9 F			OA DB / WB -12.3 F / -13.2 F		
	Details	Sensible [BTU/hr]	Latent [BTU/hr]	Details	Sensible [BTU/hr]	Latent [BTU/hr]
Zone Conditioning	-	3000	415	-	5972	0
Plenum Load	-	0	0	-	0	0
Return Fan Load	224 CFM	0	-	224 CFM	0	-
Ventilation Load	100 CFM	-815	796	100 CFM	1944	0
Supply Fan Load	224 CFM	0	-	224 CFM	0	-
Zone Fan Coil Fans Load	-	0	-	-	0	-
>> Total System Loads	-	2185	1211	-	7916	0
Central Cooling Coil	-	2166	1451	-	0	0
Central Heating Coil	-	0	-	-	7921	-
>> Total Conditioning	-	2166	1451	-	7921	0
Key:	Positive values are cooling loads Negative values are heating loads			Positive values are heating loads Negative values are cooling loads		

Table 2. Zone Heat Balance Loads

Zone Heat Balance Component	DESIGN COOLING - JULY 7:00			DESIGN HEATING		
	OA DB / WB 67.2 F / 66.9 F			OA DB / WB -12.3 F / -13.2 F		
	Details	Sensible [BTU/hr]	Latent [BTU/hr]	Details	Sensible [BTU/hr]	Latent [BTU/hr]
Exterior Wall Convection	254 sqft	143	-	254 sqft	531	-
Roof Convection	0 sqft	0	-	0 sqft	0	-
Window Convection	50 sqft	135	-	50 sqft	458	-
Skylight Convection	0 sqft	0	-	0 sqft	0	-
Door Convection	0 sqft	0	-	0 sqft	0	-
Floor Convection	672 sqft	706	-	672 sqft	318	-
Interior Wall Convection	659 sqft	732	-	659 sqft	233	-
Ceiling Convection	672 sqft	946	-	672 sqft	510	-
Overhead Lighting Convection	0 W	0	-	0 W	0	-
Task Lighting Convection	0 W	0	-	0 W	0	-
Electric Equipment Convection	0 W	0	-	0 W	0	-
People Convection	0	0	0	0	0	0
Infiltration	0 CFM	0	0	30 CFM	3177	0
Miscellaneous Equipment	-	0	0	-	0	0
Air Internal Energy Change	-	0	-	-	0	0
Safety Factor	15% / 15%	399	0	15%	784	0
>> Total Zone Loads	-	3062	0	-	6011	0
Key:	Positive values are cooling loads Negative values are heating loads			Positive values are heating loads Negative values are cooling loads		

Note 1: Surface convection line items show the combined effects of conductive heat gain to the surface and radiative heat gains absorbed at the surface which are then convected to room air.

Note 2: Lighting, equipment, and people line items include only the direct convective heat gain from the heat source to the room air. The radiative portion of the heat gain is first absorbed by surfaces in the room and then later convected from the surface to the air. Therefore the effect of the radiative portion of the heat gain is found in the surface convection line items.

Note 3: Solar heat gain is absorbed by surfaces in the room, re-radiated to other surfaces, and finally convected from the surfaces to room air. Therefore, the effect of solar heat gain is found in the surface convection line items.

System Psychrometrics for 34 RDC #6 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:23 AM

DESIGN COOLING DAY AT JULY 7:00

TABLE 1: SYSTEM DATA

Component	Location	Dry-Bulb Temp (F)	Specific Humidity (lb/lb)	Airflow (CFM)	CO2 Level (ppm)	Sensible Heat (BTU/hr)	Latent Heat (BTU/hr)
Ventilation Air	Inlet	67.4	0.01414	100	400	-815	796
Air-to-Air Energy Recovery	Outlet	67.4	0.01414	100	400	0	0
Vent - Return Mixing	Outlet	71.6	0.01321	224	400	-	-
Central Cooling Coil	Outlet	62.8	0.01188	224	400	2166	1451
Central Heating Coil	Outlet	62.8	0.01188	224	400	0	-
Supply Fan	Outlet	62.8	0.01188	224	400	0	-
Cold Supply Duct	Outlet	62.8	0.01188	224	400	-	-
Zone Air	-	75.0	0.01228	224	400	3000	415
Return Air	Outlet	75.0	0.01246	224	400	-	-

Air Density x Heat Capacity x Conversion Factor: At sea level = 1.080; At site altitude = 1.074 BTU/(hr-CFM-F)

Air Density x Heat of Vaporization x Conversion Factor: At sea level = 4746.6; At site altitude = 4719.0 BTU/(hr-CFM)

Site Altitude = 161.0 ft

TABLE 2: ZONE DATA

Zone Name	Zone Sensible Load (BTU/hr)	T-stat Mode	Zone Cond (BTU/hr)	Zone Temp (F)	Zone Airflow (CFM)	CO2 Level (ppm)	Terminal Heating Coil (BTU/hr)	Zone Heating Unit (BTU/hr)
RDC #6	2998	Cooling	3001	75.0	224	400	0	0

System Psychrometrics for 34 RDC #6 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:23 AM

WINTER DESIGN HEATING

TABLE 1: SYSTEM DATA

Component	Location	Dry-Bulb Temp (F)	Specific Humidity (lb/lb)	Airflow (CFM)	CO2 Level (ppm)	Sensible Heat (BTU/hr)	Latent Heat (BTU/hr)
Ventilation Air	Inlet	-12.3	0.00018	100	400	-1944	0
Air-to-Air Energy Recovery	Outlet	51.9	0.00018	100	400	-6911	0
Vent - Return Mixing	Outlet	61.9	0.00018	224	400	-	-
Central Cooling Coil	Outlet	61.9	0.00018	224	400	0	0
Central Heating Coil	Outlet	94.8	0.00018	224	400	7921	-
Supply Fan	Outlet	94.8	0.00018	224	400	0	-
Cold Supply Duct	Outlet	94.8	0.00018	224	400	-	-
Zone Air	-	70.0	0.00018	224	400	-5972	0
Return Air	Outlet	70.0	0.00018	224	400	-	-

Air Density x Heat Capacity x Conversion Factor: At sea level = 1.080; At site altitude = 1.074 BTU/(hr-CFM-F)

Air Density x Heat of Vaporization x Conversion Factor: At sea level = 4746.6; At site altitude = 4719.0 BTU/(hr-CFM)

Site Altitude = 161.0 ft

TABLE 2: ZONE DATA

Zone Name	Zone Sensible Load (BTU/hr)	T-stat Mode	Zone Cond (BTU/hr)	Zone Temp (F)	Zone Airflow (CFM)	CO2 Level (ppm)	Terminal Heating Coil (BTU/hr)	Zone Heating Unit (BTU/hr)
RDC #6	-5972	Heating	-5972	70.0	224	400	0	0

Air System Sizing Summary for 36 RDC #7 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:23 AM

Air System Information

Air System Name **36 RDC #7 CPT**
Equipment Class **SPLT AHU**
Air System Type **SZCAV**

Number of zones **1**
Floor Area **901.2** sqft
Location **St-Anicet 1, QC, Canada**

Sizing Calculation Information

Calculation Months **Jan to Dec**
Sizing Data **Calculated**

Zone CFM Sizing **Sum of space airflow rates**
Space CFM Sizing **Individual peak space loads**

Central Cooling Coil Sizing Data

Total coil load **1.1** Tons
Total coil load **13.1** MBH
Sensible coil load **10.7** MBH
Coil CFM at peak load **648** CFM
Sum of peak zone CFM **648** CFM
Sensible heat ratio **0.818**
CFM/Ton **595.6**
sqft/Ton **827.9**
BTU/(hr sqft) **14.5**
Water flow @ 10.0 F rise **N/A**

Peak coil load occurs at **July 8:00**
OA DB / WB **68.6 / 67.3** F
Entering DB / WB **74.1 / 65.0** F
Leaving DB / WB **59.1 / 58.6** F
Resulting RH **57** %
Design supply temp. **58.0** F
Zone T-stat Check **1 of 1** OK
Max zone temperature deviation **0.0** F

Central Heating Coil Sizing Data

Max coil load **13.7** MBH
Coil CFM at Design Heating **648** CFM
Max coil CFM **648** CFM
Water flow @ 20.0 F drop **N/A**

Load occurs at **Design Heating**
BTU/(hr sqft) **15.2**
Ent. DB / Lvg DB **67.2 / 86.9** F

Supply Fan Sizing Data

Design CFM **648** CFM
Design CFM/sqft **0.72** CFM/sqft

Fan motor BHP **0.00** BHP
Fan motor kW **0.00** kW

Outdoor Ventilation Air Data

Design airflow CFM **100** CFM
CFM/sqft **0.11** CFM/sqft

CFM/person **0.00** CFM/person

Zone Sizing Summary for 36 RDC #7 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:23 AM

Air System Information

Air System Name **36 RDC #7 CPT**
 Equipment Class **SPLT AHU**
 Air System Type **SZCAV**

Number of zones **1**
 Floor Area **901.2** sqft
 Location **St-Anicet 1, QC, Canada**

Sizing Calculation Information

Calculation Months **Jan to Dec**
 Sizing Data **Calculated**

Zone CFM Sizing **Sum of space airflow rates**
 Space CFM Sizing **Individual peak space loads**

Zone Terminal Sizing Data

Zone Name	Design Supply Airflow (CFM)	Minimum Supply Airflow (CFM)	Zone CFM/sqft	Reheat Coil Capacity (MBH)	Reheat Coil Water gpm @ 20.0 F	Zone Htg Unit Coil Capacity (MBH)	Zone Htg Unit Water gpm @ 20.0 F	Mixing Box Fan Airflow (CFM)
RDC #7	648	648	0.72	0.0	-	0.0	-	0

Zone Peak Sensible Loads

Zone Name	Zone Cooling Sensible (MBH)	Time of Peak Sensible Cooling Load	Zone Heating Load (MBH)	Zone Floor Area (sqft)
RDC #7	11.8	June 8:00	11.8	901.2

Space Loads and Airflows

Zone Name / Space Name	Cooling Sensible (MBH)	Time of Peak Sensible Load	Air Flow (CFM)	Heating Load (MBH)	Floor Area (sqft)	Space CFM/sqft
RDC #7						
RDC #7	11.8	June 8:00	648	11.8	901.2	0.72

Air System Heat Balance Summary for 36 RDC #7 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:23 AM

Table 1. System Loads

COMPONENT LOADS	DESIGN COOLING - JULY 8:00			DESIGN HEATING		
	OA DB / WB 68.6 F / 67.3 F			OA DB / WB -12.3 F / -13.2 F		
	Details	Sensible [BTU/hr]	Latent [BTU/hr]	Details	Sensible [BTU/hr]	Latent [BTU/hr]
Zone Conditioning	-	11333	320	-	11791	0
Plenum Load	-	0	0	-	0	0
Return Fan Load	648 CFM	0	-	648 CFM	0	-
Ventilation Load	100 CFM	-636	1650	100 CFM	1944	0
Supply Fan Load	648 CFM	0	-	648 CFM	0	-
Zone Fan Coil Fans Load	-	0	-	-	0	-
>> Total System Loads	-	10696	1969	-	13735	0
Central Cooling Coil	-	10689	2373	-	0	0
Central Heating Coil	-	0	-	-	13740	-
>> Total Conditioning	-	10689	2373	-	13740	0
Key:	Positive values are cooling loads Negative values are heating loads			Positive values are heating loads Negative values are cooling loads		

Table 2. Zone Heat Balance Loads

Zone Heat Balance Component	DESIGN COOLING - JULY 8:00			DESIGN HEATING		
	OA DB / WB 68.6 F / 67.3 F			OA DB / WB -12.3 F / -13.2 F		
	Details	Sensible [BTU/hr]	Latent [BTU/hr]	Details	Sensible [BTU/hr]	Latent [BTU/hr]
Exterior Wall Convection	461 sqft	1197	-	461 sqft	1129	-
Roof Convection	0 sqft	0	-	0 sqft	0	-
Window Convection	70 sqft	368	-	70 sqft	654	-
Skylight Convection	0 sqft	0	-	0 sqft	0	-
Door Convection	48 sqft	381	-	48 sqft	438	-
Floor Convection	901 sqft	2774	-	901 sqft	696	-
Interior Wall Convection	563 sqft	1639	-	563 sqft	295	-
Ceiling Convection	901 sqft	3845	-	901 sqft	962	-
Overhead Lighting Convection	0 W	0	-	0 W	0	-
Task Lighting Convection	0 W	0	-	0 W	0	-
Electric Equipment Convection	0 W	0	-	0 W	0	-
People Convection	0	0	0	0	0	0
Infiltration	0 CFM	0	0	58 CFM	6055	0
Miscellaneous Equipment	-	0	0	-	0	0
Air Internal Energy Change	-	0	-	-	0	0
Safety Factor	15% / 15%	1531	0	15%	1534	0
>> Total Zone Loads	-	11734	0	-	11764	0
Key:	Positive values are cooling loads Negative values are heating loads			Positive values are heating loads Negative values are cooling loads		

Note 1: Surface convection line items show the combined effects of conductive heat gain to the surface and radiative heat gains absorbed at the surface which are then convected to room air.

Note 2: Lighting, equipment, and people line items include only the direct convective heat gain from the heat source to the room air. The radiative portion of the heat gain is first absorbed by surfaces in the room and then later convected from the surface to the air. Therefore the effect of the radiative portion of the heat gain is found in the surface convection line items.

Note 3: Solar heat gain is absorbed by surfaces in the room, re-radiated to other surfaces, and finally convected from the surfaces to room air. Therefore, the effect of solar heat gain is found in the surface convection line items.

System Psychrometrics for 36 RDC #7 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:23 AM

DESIGN COOLING DAY AT JULY 8:00

TABLE 1: SYSTEM DATA

Component	Location	Dry-Bulb Temp (F)	Specific Humidity (lb/lb)	Airflow (CFM)	CO2 Level (ppm)	Sensible Heat (BTU/hr)	Latent Heat (BTU/hr)
Ventilation Air	Inlet	69.1	0.01415	100	400	-636	1650
Air-to-Air Energy Recovery	Outlet	69.1	0.01415	100	400	0	0
Vent - Return Mixing	Outlet	74.1	0.01119	648	400	-	-
Central Cooling Coil	Outlet	59.1	0.01044	648	400	10689	2373
Central Heating Coil	Outlet	59.1	0.01044	648	400	0	-
Supply Fan	Outlet	59.1	0.01044	648	400	0	-
Cold Supply Duct	Outlet	59.1	0.01044	648	400	-	-
Zone Air	-	75.0	0.01054	648	400	11333	320
Return Air	Outlet	75.0	0.01065	648	400	-	-

Air Density x Heat Capacity x Conversion Factor: At sea level = 1.080; At site altitude = 1.074 BTU/(hr-CFM-F)

Air Density x Heat of Vaporization x Conversion Factor: At sea level = 4746.6; At site altitude = 4719.0 BTU/(hr-CFM)

Site Altitude = 161.0 ft

TABLE 2: ZONE DATA

Zone Name	Zone Sensible Load (BTU/hr)	T-stat Mode	Zone Cond (BTU/hr)	Zone Temp (F)	Zone Airflow (CFM)	CO2 Level (ppm)	Terminal Heating Coil (BTU/hr)	Zone Heating Unit (BTU/hr)
RDC #7	11330	Cooling	11333	75.0	648	400	0	0

System Psychrometrics for 36 RDC #7 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:23 AM

WINTER DESIGN HEATING

TABLE 1: SYSTEM DATA

Component	Location	Dry-Bulb Temp (F)	Specific Humidity (lb/lb)	Airflow (CFM)	CO2 Level (ppm)	Sensible Heat (BTU/hr)	Latent Heat (BTU/hr)
Ventilation Air	Inlet	-12.3	0.00018	100	400	-1944	0
Air-to-Air Energy Recovery	Outlet	51.9	0.00018	100	400	-6911	0
Vent - Return Mixing	Outlet	67.2	0.00018	648	400	-	-
Central Cooling Coil	Outlet	67.2	0.00018	648	400	0	0
Central Heating Coil	Outlet	86.9	0.00018	648	400	13740	-
Supply Fan	Outlet	86.9	0.00018	648	400	0	-
Cold Supply Duct	Outlet	86.9	0.00018	648	400	-	-
Zone Air	-	70.0	0.00018	648	400	-11791	0
Return Air	Outlet	70.0	0.00018	648	400	-	-

Air Density x Heat Capacity x Conversion Factor: At sea level = 1.080; At site altitude = 1.074 BTU/(hr-CFM-F)

Air Density x Heat of Vaporization x Conversion Factor: At sea level = 4746.6; At site altitude = 4719.0 BTU/(hr-CFM)

Site Altitude = 161.0 ft

TABLE 2: ZONE DATA

Zone Name	Zone Sensible Load (BTU/hr)	T-stat Mode	Zone Cond (BTU/hr)	Zone Temp (F)	Zone Airflow (CFM)	CO2 Level (ppm)	Terminal Heating Coil (BTU/hr)	Zone Heating Unit (BTU/hr)
RDC #7	-11791	Heating	-11791	70.0	648	400	0	0

Air System Sizing Summary for 38 RDC #8 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:23 AM

Air System Information

Air System Name **38 RDC #8 CPT**
Equipment Class **SPLT AHU**
Air System Type **SZCAV**

Number of zones **1**
Floor Area **672.7** sqft
Location **St-Anicet 1, QC, Canada**

Sizing Calculation Information

Calculation Months **Jan to Dec**
Sizing Data **Calculated**

Zone CFM Sizing **Sum of space airflow rates**
Space CFM Sizing **Individual peak space loads**

Central Cooling Coil Sizing Data

Total coil load **1.0** Tons
Total coil load **11.8** MBH
Sensible coil load **9.7** MBH
Coil CFM at peak load **574** CFM
Sum of peak zone CFM **574** CFM
Sensible heat ratio **0.821**
CFM/Ton **582.0**
sqft/Ton **682.3**
BTU/(hr sqft) **17.6**
Water flow @ 10.0 F rise **N/A**

Peak coil load occurs at **August 9:00**
OA DB / WB **72.1 / 68.4** F
Entering DB / WB **74.5 / 65.2** F
Leaving DB / WB **59.1 / 58.7** F
Resulting RH **57** %
Design supply temp. **58.0** F
Zone T-stat Check **1 of 1** OK
Max zone temperature deviation **0.0** F

Central Heating Coil Sizing Data

Max coil load **7.1** MBH
Coil CFM at Design Heating **574** CFM
Max coil CFM **574** CFM
Water flow @ 20.0 F drop **N/A**

Load occurs at **Design Heating**
BTU/(hr sqft) **10.6**
Ent. DB / Lvg DB **66.8 / 78.4** F

Supply Fan Sizing Data

Design CFM **574** CFM
Design CFM/sqft **0.85** CFM/sqft

Fan motor BHP **0.00** BHP
Fan motor kW **0.00** kW

Outdoor Ventilation Air Data

Design airflow CFM **100** CFM
CFM/sqft **0.15** CFM/sqft

CFM/person **0.00** CFM/person

Zone Sizing Summary for 38 RDC #8 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:23 AM

Air System Information

Air System Name **38 RDC #8 CPT**
 Equipment Class **SPLT AHU**
 Air System Type **SZCAV**

Number of zones **1**
 Floor Area **672.7** sqft
 Location **St-Anicet 1, QC, Canada**

Sizing Calculation Information

Calculation Months **Jan to Dec**
 Sizing Data **Calculated**

Zone CFM Sizing **Sum of space airflow rates**
 Space CFM Sizing **Individual peak space loads**

Zone Terminal Sizing Data

Zone Name	Design Supply Airflow (CFM)	Minimum Supply Airflow (CFM)	Zone CFM/sqft	Reheat Coil Capacity (MBH)	Reheat Coil Water gpm @ 20.0 F	Zone Htg Unit Coil Capacity (MBH)	Zone Htg Unit Water gpm @ 20.0 F	Mixing Box Fan Airflow (CFM)
RDC #8	574	574	0.85	0.0	-	0.0	-	0

Zone Peak Sensible Loads

Zone Name	Zone Cooling Sensible (MBH)	Time of Peak Sensible Cooling Load	Zone Heating Load (MBH)	Zone Floor Area (sqft)
RDC #8	10.5	April 9:00	5.0	672.7

Space Loads and Airflows

Zone Name / Space Name	Cooling Sensible (MBH)	Time of Peak Sensible Load	Air Flow (CFM)	Heating Load (MBH)	Floor Area (sqft)	Space CFM/sqft
RDC #8						
RDC #8	10.5	April 9:00	574	5.0	672.7	0.85

Air System Heat Balance Summary for 38 RDC #8 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:23 AM

Table 1. System Loads

COMPONENT LOADS	DESIGN COOLING - AUGUST 9:00			DESIGN HEATING		
	OA DB / WB 72.1 F / 68.4 F			OA DB / WB -12.3 F / -13.2 F		
	Details	Sensible [BTU/hr]	Latent [BTU/hr]	Details	Sensible [BTU/hr]	Latent [BTU/hr]
Zone Conditioning	-	9983	174	-	5196	0
Plenum Load	-	0	0	-	0	0
Return Fan Load	574 CFM	0	-	574 CFM	0	-
Ventilation Load	100 CFM	-279	1669	100 CFM	1944	0
Supply Fan Load	574 CFM	0	-	574 CFM	0	-
Zone Fan Coil Fans Load	-	0	-	-	0	-
>> Total System Loads	-	9704	1843	-	7141	0
Central Cooling Coil	-	9708	2123	-	0	0
Central Heating Coil	-	0	-	-	7146	-
>> Total Conditioning	-	9708	2123	-	7146	0
Key:	Positive values are cooling loads Negative values are heating loads			Positive values are heating loads Negative values are cooling loads		

Table 2. Zone Heat Balance Loads

Zone Heat Balance Component	DESIGN COOLING - AUGUST 9:00			DESIGN HEATING		
	OA DB / WB 72.1 F / 68.4 F			OA DB / WB -12.3 F / -13.2 F		
	Details	Sensible [BTU/hr]	Latent [BTU/hr]	Details	Sensible [BTU/hr]	Latent [BTU/hr]
Exterior Wall Convection	161 sqft	466	-	161 sqft	331	-
Roof Convection	0 sqft	0	-	0 sqft	0	-
Window Convection	20 sqft	191	-	20 sqft	179	-
Skylight Convection	0 sqft	0	-	0 sqft	0	-
Door Convection	48 sqft	459	-	48 sqft	424	-
Floor Convection	673 sqft	2603	-	673 sqft	308	-
Interior Wall Convection	669 sqft	2072	-	669 sqft	239	-
Ceiling Convection	673 sqft	3204	-	673 sqft	503	-
Overhead Lighting Convection	0 W	0	-	0 W	0	-
Task Lighting Convection	0 W	0	-	0 W	0	-
Electric Equipment Convection	0 W	0	-	0 W	0	-
People Convection	0	0	0	0	0	0
Infiltration	0 CFM	0	0	23 CFM	2386	0
Miscellaneous Equipment	-	0	0	-	0	0
Air Internal Energy Change	-	0		-	0	0
Safety Factor	15% / 15%	1349	0	15%	656	0
>> Total Zone Loads	-	10346	0	-	5026	0
Key:	Positive values are cooling loads Negative values are heating loads			Positive values are heating loads Negative values are cooling loads		

Note 1: Surface convection line items show the combined effects of conductive heat gain to the surface and radiative heat gains absorbed at the surface which are then convected to room air.

Note 2: Lighting, equipment, and people line items include only the direct convective heat gain from the heat source to the room air. The radiative portion of the heat gain is first absorbed by surfaces in the room and then later convected from the surface to the air. Therefore the effect of the radiative portion of the heat gain is found in the surface convection line items.

Note 3: Solar heat gain is absorbed by surfaces in the room, re-radiated to other surfaces, and finally convected from the surfaces to room air. Therefore, the effect of solar heat gain is found in the surface convection line items.

System Psychrometrics for 38 RDC #8 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:23 AM

DESIGN COOLING DAY AT AUGUST 9:00

TABLE 1: SYSTEM DATA

Component	Location	Dry-Bulb Temp (F)	Specific Humidity (lb/lb)	Airflow (CFM)	CO2 Level (ppm)	Sensible Heat (BTU/hr)	Latent Heat (BTU/hr)
Ventilation Air	Inlet	72.4	0.01416	100	400	-279	1669
Air-to-Air Energy Recovery	Outlet	72.4	0.01416	100	400	0	0
Vent - Return Mixing	Outlet	74.5	0.01123	574	400	-	-
Central Cooling Coil	Outlet	59.1	0.01048	574	400	9708	2123
Central Heating Coil	Outlet	59.1	0.01048	574	400	0	-
Supply Fan	Outlet	59.1	0.01048	574	400	0	-
Cold Supply Duct	Outlet	59.1	0.01048	574	400	-	-
Zone Air	-	75.0	0.01054	574	400	9983	174
Return Air	Outlet	75.0	0.01062	574	400	-	-

Air Density x Heat Capacity x Conversion Factor: At sea level = 1.080; At site altitude = 1.074 BTU/(hr-CFM-F)

Air Density x Heat of Vaporization x Conversion Factor: At sea level = 4746.6; At site altitude = 4719.0 BTU/(hr-CFM)

Site Altitude = 161.0 ft

TABLE 2: ZONE DATA

Zone Name	Zone Sensible Load (BTU/hr)	T-stat Mode	Zone Cond (BTU/hr)	Zone Temp (F)	Zone Airflow (CFM)	CO2 Level (ppm)	Terminal Heating Coil (BTU/hr)	Zone Heating Unit (BTU/hr)
RDC #8	9981	Cooling	9983	75.0	574	400	0	0

System Psychrometrics for 38 RDC #8 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:23 AM

WINTER DESIGN HEATING

TABLE 1: SYSTEM DATA

Component	Location	Dry-Bulb Temp (F)	Specific Humidity (lb/lb)	Airflow (CFM)	CO2 Level (ppm)	Sensible Heat (BTU/hr)	Latent Heat (BTU/hr)
Ventilation Air	Inlet	-12.3	0.00018	100	400	-1944	0
Air-to-Air Energy Recovery	Outlet	51.9	0.00018	100	400	-6911	0
Vent - Return Mixing	Outlet	66.8	0.00018	574	400	-	-
Central Cooling Coil	Outlet	66.8	0.00018	574	400	0	0
Central Heating Coil	Outlet	78.4	0.00018	574	400	7146	-
Supply Fan	Outlet	78.4	0.00018	574	400	0	-
Cold Supply Duct	Outlet	78.4	0.00018	574	400	-	-
Zone Air	-	70.0	0.00018	574	400	-5196	0
Return Air	Outlet	70.0	0.00018	574	400	-	-

Air Density x Heat Capacity x Conversion Factor: At sea level = 1.080; At site altitude = 1.074 BTU/(hr-CFM-F)

Air Density x Heat of Vaporization x Conversion Factor: At sea level = 4746.6; At site altitude = 4719.0 BTU/(hr-CFM)

Site Altitude = 161.0 ft

TABLE 2: ZONE DATA

Zone Name	Zone Sensible Load (BTU/hr)	T-stat Mode	Zone Cond (BTU/hr)	Zone Temp (F)	Zone Airflow (CFM)	CO2 Level (ppm)	Terminal Heating Coil (BTU/hr)	Zone Heating Unit (BTU/hr)
RDC #8	-5196	Heating	-5196	70.0	574	400	0	0

Air System Sizing Summary for 40 RDC #9 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:23 AM

Air System Information

Air System Name **40 RDC #9 CPT**
Equipment Class **SPLT AHU**
Air System Type **SZCAV**

Number of zones **1**
Floor Area **1069.0** sqft
Location **St-Anicet 1, QC, Canada**

Sizing Calculation Information

Calculation Months **Jan to Dec**
Sizing Data **Calculated**

Zone CFM Sizing **Sum of space airflow rates**
Space CFM Sizing **Individual peak space loads**

Central Cooling Coil Sizing Data

Total coil load **1.5** Tons
Total coil load **17.8** MBH
Sensible coil load **15.4** MBH
Coil CFM at peak load **899** CFM
Sum of peak zone CFM **899** CFM
Sensible heat ratio **0.864**
CFM/Ton **604.8**
sqft/Ton **719.0**
BTU/(hr sqft) **16.7**
Water flow @ 10.0 F rise **N/A**

Peak coil load occurs at **August 9:00**
OA DB / WB **72.1 / 68.4** F
Entering DB / WB **74.7 / 64.9** F
Leaving DB / WB **59.1 / 58.6** F
Resulting RH **56** %
Design supply temp. **58.0** F
Zone T-stat Check **1 of 1** OK
Max zone temperature deviation **0.0** F

Central Heating Coil Sizing Data

Max coil load **15.8** MBH
Coil CFM at Design Heating **899** CFM
Max coil CFM **899** CFM
Water flow @ 20.0 F drop **N/A**

Load occurs at **Design Heating**
BTU/(hr sqft) **14.8**
Ent. DB / Lvg DB **68.0 / 84.3** F

Supply Fan Sizing Data

Design CFM **899** CFM
Design CFM/sqft **0.84** CFM/sqft

Fan motor BHP **0.00** BHP
Fan motor kW **0.00** kW

Outdoor Ventilation Air Data

Design airflow CFM **100** CFM
CFM/sqft **0.09** CFM/sqft

CFM/person **0.00** CFM/person

Zone Sizing Summary for 40 RDC #9 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:23 AM

Air System Information

Air System Name **40 RDC #9 CPT**
 Equipment Class **SPLT AHU**
 Air System Type **SZCAV**

Number of zones **1**
 Floor Area **1069.0** sqft
 Location **St-Anicet 1, QC, Canada**

Sizing Calculation Information

Calculation Months **Jan to Dec**
 Sizing Data **Calculated**

Zone CFM Sizing **Sum of space airflow rates**
 Space CFM Sizing **Individual peak space loads**

Zone Terminal Sizing Data

Zone Name	Design Supply Airflow (CFM)	Minimum Supply Airflow (CFM)	Zone CFM/sqft	Reheat Coil Capacity (MBH)	Reheat Coil Water gpm @ 20.0 F	Zone Htg Unit Coil Capacity (MBH)	Zone Htg Unit Water gpm @ 20.0 F	Mixing Box Fan Airflow (CFM)
RDC #9	899	899	0.84	0.0	-	0.0	-	0

Zone Peak Sensible Loads

Zone Name	Zone Cooling Sensible (MBH)	Time of Peak Sensible Cooling Load	Zone Heating Load (MBH)	Zone Floor Area (sqft)
RDC #9	16.4	April 9:00	13.8	1069.0

Space Loads and Airflows

Zone Name / Space Name	Cooling Sensible (MBH)	Time of Peak Sensible Load	Air Flow (CFM)	Heating Load (MBH)	Floor Area (sqft)	Space CFM/sqft
RDC #9						
RDC #9	16.4	April 9:00	899	13.8	1069.0	0.84

Air System Heat Balance Summary for 40 RDC #9 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:23 AM

Table 1. System Loads

COMPONENT LOADS	DESIGN COOLING - AUGUST 9:00			DESIGN HEATING		
	OA DB / WB 72.1 F / 68.4 F			OA DB / WB -12.3 F / -13.2 F		
	Details	Sensible [BTU/hr]	Latent [BTU/hr]	Details	Sensible [BTU/hr]	Latent [BTU/hr]
Zone Conditioning	-	15685	307	-	13842	0
Plenum Load	-	0	0	-	0	0
Return Fan Load	899 CFM	0	-	899 CFM	0	-
Ventilation Load	100 CFM	-279	1680	100 CFM	1944	0
Supply Fan Load	899 CFM	0	-	899 CFM	0	-
Zone Fan Coil Fans Load	-	0	-	-	0	-
>> Total System Loads	-	15407	1988	-	15786	0
Central Cooling Coil	-	15410	2431	-	0	0
Central Heating Coil	-	0	-	-	15791	-
>> Total Conditioning	-	15410	2431	-	15791	0
Key:	Positive values are cooling loads Negative values are heating loads			Positive values are heating loads Negative values are cooling loads		

Table 2. Zone Heat Balance Loads

Zone Heat Balance Component	DESIGN COOLING - AUGUST 9:00			DESIGN HEATING		
	OA DB / WB 72.1 F / 68.4 F			OA DB / WB -12.3 F / -13.2 F		
	Details	Sensible [BTU/hr]	Latent [BTU/hr]	Details	Sensible [BTU/hr]	Latent [BTU/hr]
Exterior Wall Convection	435 sqft	1380	-	435 sqft	1018	-
Roof Convection	0 sqft	0	-	0 sqft	0	-
Window Convection	60 sqft	575	-	60 sqft	540	-
Skylight Convection	0 sqft	0	-	0 sqft	0	-
Door Convection	48 sqft	459	-	48 sqft	425	-
Floor Convection	1069 sqft	3934	-	1069 sqft	3045	-
Interior Wall Convection	731 sqft	2396	-	731 sqft	318	-
Ceiling Convection	1069 sqft	5470	-	1069 sqft	991	-
Overhead Lighting Convection	0 W	0	-	0 W	0	-
Task Lighting Convection	0 W	0	-	0 W	0	-
Electric Equipment Convection	0 W	0	-	0 W	0	-
People Convection	0	0	0	0	0	0
Infiltration	0 CFM	0	0	54 CFM	5676	0
Miscellaneous Equipment	-	0	0	-	0	0
Air Internal Energy Change	-	0	-	-	0	0
Safety Factor	15% / 15%	2132	0	15%	1802	0
>> Total Zone Loads	-	16347	0	-	13815	0
Key:	Positive values are cooling loads Negative values are heating loads			Positive values are heating loads Negative values are cooling loads		

Note 1: Surface convection line items show the combined effects of conductive heat gain to the surface and radiative heat gains absorbed at the surface which are then convected to room air.

Note 2: Lighting, equipment, and people line items include only the direct convective heat gain from the heat source to the room air. The radiative portion of the heat gain is first absorbed by surfaces in the room and then later convected from the surface to the air. Therefore the effect of the radiative portion of the heat gain is found in the surface convection line items.

Note 3: Solar heat gain is absorbed by surfaces in the room, re-radiated to other surfaces, and finally convected from the surfaces to room air. Therefore, the effect of solar heat gain is found in the surface convection line items.

System Psychrometrics for 40 RDC #9 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:23 AM

DESIGN COOLING DAY AT AUGUST 9:00

TABLE 1: SYSTEM DATA

Component	Location	Dry-Bulb Temp (F)	Specific Humidity (lb/lb)	Airflow (CFM)	CO2 Level (ppm)	Sensible Heat (BTU/hr)	Latent Heat (BTU/hr)
Ventilation Air	Inlet	72.4	0.01416	100	400	-279	1680
Air-to-Air Energy Recovery	Outlet	72.4	0.01416	100	400	0	0
Vent - Return Mixing	Outlet	74.7	0.01099	899	400	-	-
Central Cooling Coil	Outlet	59.1	0.01044	899	400	15410	2431
Central Heating Coil	Outlet	59.1	0.01044	899	400	0	-
Supply Fan	Outlet	59.1	0.01044	899	400	0	-
Cold Supply Duct	Outlet	59.1	0.01044	899	400	-	-
Zone Air	-	75.0	0.01051	899	400	15685	307
Return Air	Outlet	75.0	0.01060	899	400	-	-

Air Density x Heat Capacity x Conversion Factor: At sea level = 1.080; At site altitude = 1.074 BTU/(hr-CFM-F)

Air Density x Heat of Vaporization x Conversion Factor: At sea level = 4746.6; At site altitude = 4719.0 BTU/(hr-CFM)

Site Altitude = 161.0 ft

TABLE 2: ZONE DATA

Zone Name	Zone Sensible Load (BTU/hr)	T-stat Mode	Zone Cond (BTU/hr)	Zone Temp (F)	Zone Airflow (CFM)	CO2 Level (ppm)	Terminal Heating Coil (BTU/hr)	Zone Heating Unit (BTU/hr)
RDC #9	15682	Cooling	15685	75.0	899	400	0	0

System Psychrometrics for 40 RDC #9 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

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WINTER DESIGN HEATING

TABLE 1: SYSTEM DATA

Component	Location	Dry-Bulb Temp (F)	Specific Humidity (lb/lb)	Airflow (CFM)	CO2 Level (ppm)	Sensible Heat (BTU/hr)	Latent Heat (BTU/hr)
Ventilation Air	Inlet	-12.3	0.00018	100	400	-1944	0
Air-to-Air Energy Recovery	Outlet	51.9	0.00018	100	400	-6911	0
Vent - Return Mixing	Outlet	68.0	0.00018	899	400	-	-
Central Cooling Coil	Outlet	68.0	0.00018	899	400	0	0
Central Heating Coil	Outlet	84.3	0.00018	899	400	15791	-
Supply Fan	Outlet	84.3	0.00018	899	400	0	-
Cold Supply Duct	Outlet	84.3	0.00018	899	400	-	-
Zone Air	-	70.0	0.00018	899	400	-13842	0
Return Air	Outlet	70.0	0.00018	899	400	-	-

Air Density x Heat Capacity x Conversion Factor: At sea level = 1.080; At site altitude = 1.074 BTU/(hr-CFM-F)

Air Density x Heat of Vaporization x Conversion Factor: At sea level = 4746.6; At site altitude = 4719.0 BTU/(hr-CFM)

Site Altitude = 161.0 ft

TABLE 2: ZONE DATA

Zone Name	Zone Sensible Load (BTU/hr)	T-stat Mode	Zone Cond (BTU/hr)	Zone Temp (F)	Zone Airflow (CFM)	CO2 Level (ppm)	Terminal Heating Coil (BTU/hr)	Zone Heating Unit (BTU/hr)
RDC #9	-13842	Heating	-13842	70.0	899	400	0	0

Air System Sizing Summary for 42 RDC ESC1 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:23 AM

Air System Information

Air System Name **42 RDC ESC1 CPT**
Equipment Class **SPLT AHU**
Air System Type **SZCAV**

Number of zones **1**
Floor Area **200.4** sqft
Location **St-Anicet 1, QC, Canada**

Sizing Calculation Information

Calculation Months **Jan to Dec**
Sizing Data **Calculated**

Zone CFM Sizing **Sum of space airflow rates**
Space CFM Sizing **Individual peak space loads**

Central Heating Coil Sizing Data

Max coil load **4.2** MBH
Coil CFM at Design Heating **167** CFM
Max coil CFM **167** CFM
Water flow @ 20.0 F drop **N/A**

Load occurs at **Design Heating**
BTU/(hr sqft) **21.0**
Ent. DB / Lvg DB **70.0 / 93.5** F

Supply Fan Sizing Data

Design CFM **167** CFM
Design CFM/sqft **0.83** CFM/sqft

Fan motor BHP **0.09** BHP
Fan motor kW **0.07** kW
Fan total static **2.00** in wg

Outdoor Ventilation Air Data

Design airflow CFM **0** CFM
CFM/sqft **0.00** CFM/sqft

CFM/person **0.00** CFM/person

Zone Sizing Summary for 42 RDC ESC1 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:23 AM

Air System Information

Air System Name **42 RDC ESC1 CPT**
 Equipment Class **SPLT AHU**
 Air System Type **SZCAV**

Number of zones **1**
 Floor Area **200.4** sqft
 Location **St-Anicet 1, QC, Canada**

Sizing Calculation Information

Calculation Months **Jan to Dec**
 Sizing Data **Calculated**

Zone CFM Sizing **Sum of space airflow rates**
 Space CFM Sizing **Individual peak space loads**

Zone Terminal Sizing Data

Zone Name	Design Supply Airflow (CFM)	Minimum Supply Airflow (CFM)	Zone CFM/sqft	Reheat Coil Capacity (MBH)	Reheat Coil Water gpm @ 20.0 F	Zone Htg Unit Coil Capacity (MBH)	Zone Htg Unit Water gpm @ 20.0 F	Mixing Box Fan Airflow (CFM)
RDC ESC1	167	167	0.83	0.0	-	0.0	-	0

Zone Peak Sensible Loads

Zone Name	Zone Cooling Sensible (MBH)	Time of Peak Sensible Cooling Load	Zone Heating Load (MBH)	Zone Floor Area (sqft)
RDC ESC1	0.0	June 7:00	4.5	200.4

Space Loads and Airflows

Zone Name / Space Name	Cooling Sensible (MBH)	Time of Peak Sensible Load	Air Flow (CFM)	Heating Load (MBH)	Floor Area (sqft)	Space CFM/sqft
RDC ESC1						
RDC ESC1	0.0	June 7:00	167	4.5	200.4	0.83

Air System Heat Balance Summary for 42 RDC ESC1 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:23 AM

Table 1. System Loads

COMPONENT LOADS	DESIGN COOLING			DESIGN HEATING		
	NO COOLING DATA			OA DB / WB -12.3 F / -13.2 F		
	Details	Sensible [BTU/hr]	Latent [BTU/hr]	Details	Sensible [BTU/hr]	Latent [BTU/hr]
Zone Conditioning	-	-	-	-	4464	0
Plenum Load	-	-	-	-	0	0
Return Fan Load	-	-	-	167 CFM	0	-
Ventilation Load	-	-	-	0 CFM	0	0
Supply Fan Load	-	-	-	167 CFM	-247	-
Zone Fan Coil Fans Load	-	-	-	-	0	-
>> Total System Loads	-	-	-	-	4217	0
Central Heating Coil	-	-	-	-	4217	-
>> Total Conditioning	-	-	-	-	4217	0
Key:	Positive values are cooling loads Negative values are heating loads			Positive values are heating loads Negative values are cooling loads		

Table 2. Zone Heat Balance Loads

Zone Heat Balance Component	DESIGN COOLING			DESIGN HEATING		
	NO COOLING DATA			OA DB / WB -12.3 F / -13.2 F		
	Details	Sensible [BTU/hr]	Latent [BTU/hr]	Details	Sensible [BTU/hr]	Latent [BTU/hr]
Exterior Wall Convection	226 sqft	-	-	226 sqft	592	-
Roof Convection	0 sqft	-	-	0 sqft	0	-
Window Convection	0 sqft	-	-	0 sqft	0	-
Skylight Convection	0 sqft	-	-	0 sqft	0	-
Door Convection	22 sqft	-	-	22 sqft	230	-
Floor Convection	200 sqft	-	-	200 sqft	141	-
Interior Wall Convection	247 sqft	-	-	247 sqft	142	-
Ceiling Convection	200 sqft	-	-	200 sqft	209	-
Overhead Lighting Convection	-	-	-	0 W	0	-
Task Lighting Convection	-	-	-	0 W	0	-
Electric Equipment Convection	-	-	-	0 W	0	-
People Convection	-	-	-	0	0	0
Infiltration	-	-	-	25 CFM	2582	0
Miscellaneous Equipment	-	-	-	-	0	0
Air Internal Energy Change	-	-	-	-	0	0
Safety Factor	15% / 15%	-	-	15%	584	0
>> Total Zone Loads	-	-	-	-	4480	0
Key:	Positive values are cooling loads Negative values are heating loads			Positive values are heating loads Negative values are cooling loads		

Note 1: Surface convection line items show the combined effects of conductive heat gain to the surface and radiative heat gains absorbed at the surface which are then convected to room air.

Note 2: Lighting, equipment, and people line items include only the direct convective heat gain from the heat source to the room air. The radiative portion of the heat gain is first absorbed by surfaces in the room and then later convected from the surface to the air. Therefore the effect of the radiative portion of the heat gain is found in the surface convection line items.

Note 3: Solar heat gain is absorbed by surfaces in the room, re-radiated to other surfaces, and finally convected from the surfaces to room air. Therefore, the effect of solar heat gain is found in the surface convection line items.

System Psychrometrics for 42 RDC ESC1 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:23 AM

WINTER DESIGN HEATING

TABLE 1: SYSTEM DATA

Component	Location	Dry-Bulb Temp (F)	Specific Humidity (lb/lb)	Airflow (CFM)	CO2 Level (ppm)	Sensible Heat (BTU/hr)	Latent Heat (BTU/hr)
Ventilation Air	Inlet	-12.3	0.00018	0	400	0	0
Vent - Return Mixing	Outlet	70.0	0.00018	167	400	-	-
Central Heating Coil	Outlet	93.5	0.00018	167	400	4217	-
Supply Fan	Outlet	94.8	0.00018	167	400	247	-
Cold Supply Duct	Outlet	94.8	0.00018	167	400	-	-
Zone Air	-	70.0	0.00018	167	400	-4464	0
Return Air	Outlet	70.0	0.00018	167	400	-	-

Air Density x Heat Capacity x Conversion Factor: At sea level = 1.080; At site altitude = 1.074 BTU/(hr-CFM-F)

Air Density x Heat of Vaporization x Conversion Factor: At sea level = 4746.6; At site altitude = 4719.0 BTU/(hr-CFM)

Site Altitude = 161.0 ft

TABLE 2: ZONE DATA

Zone Name	Zone Sensible Load (BTU/hr)	T-stat Mode	Zone Cond (BTU/hr)	Zone Temp (F)	Zone Airflow (CFM)	CO2 Level (ppm)	Terminal Heating Coil (BTU/hr)	Zone Heating Unit (BTU/hr)
RDC ESC1	-4464	Heating	-4464	70.0	167	400	0	0

Air System Sizing Summary for 44 RDC ESC25 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:23 AM

Air System Information

Air System Name **44 RDC ESC25 CPT**
Equipment Class **SPLT AHU**
Air System Type **SZCAV**

Number of zones **1**
Floor Area **183.6** sqft
Location **St-Anicet 1, QC, Canada**

Sizing Calculation Information

Calculation Months **Jan to Dec**
Sizing Data **Calculated**

Zone CFM Sizing **Sum of space airflow rates**
Space CFM Sizing **Individual peak space loads**

Central Heating Coil Sizing Data

Max coil load **4.6** MBH
Coil CFM at Design Heating **184** CFM
Max coil CFM **184** CFM
Water flow @ 20.0 F drop **N/A**

Load occurs at **Design Heating**
BTU/(hr sqft) **25.3**
Ent. DB / Lvg DB **70.0 / 93.5** F

Supply Fan Sizing Data

Design CFM **184** CFM
Design CFM/sqft **1.00** CFM/sqft

Fan motor BHP **0.10** BHP
Fan motor kW **0.08** kW
Fan total static **2.00** in wg

Outdoor Ventilation Air Data

Design airflow CFM **0** CFM
CFM/sqft **0.00** CFM/sqft

CFM/person **0.00** CFM/person

Zone Sizing Summary for 44 RDC ESC25 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:23 AM

Air System Information

Air System Name **44 RDC ESC25 CPT**
Equipment Class **SPLT AHU**
Air System Type **SZCAV**

Number of zones **1**
Floor Area **183.6** sqft
Location **St-Anicet 1, QC, Canada**

Sizing Calculation Information

Calculation Months **Jan to Dec**
Sizing Data **Calculated**

Zone CFM Sizing **Sum of space airflow rates**
Space CFM Sizing **Individual peak space loads**

Zone Terminal Sizing Data

Zone Name	Design Supply Airflow (CFM)	Minimum Supply Airflow (CFM)	Zone CFM/sqft	Reheat Coil Capacity (MBH)	Reheat Coil Water gpm @ 20.0 F	Zone Htg Unit Coil Capacity (MBH)	Zone Htg Unit Water gpm @ 20.0 F	Mixing Box Fan Airflow (CFM)
RDC ESC2	184	184	1.00	0.0	-	0.0	-	0

Zone Peak Sensible Loads

Zone Name	Zone Cooling Sensible (MBH)	Time of Peak Sensible Cooling Load	Zone Heating Load (MBH)	Zone Floor Area (sqft)
RDC ESC2	0.0	January 17:00	4.9	183.6

Space Loads and Airflows

Zone Name / Space Name	Cooling Sensible (MBH)	Time of Peak Sensible Load	Air Flow (CFM)	Heating Load (MBH)	Floor Area (sqft)	Space CFM/sqft
RDC ESC2						
RDC ESC2	0.0	January 17:00	184	4.9	183.6	1.00

Air System Heat Balance Summary for 44 RDC ESC25 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:23 AM

Table 1. System Loads

COMPONENT LOADS	DESIGN COOLING			DESIGN HEATING		
	NO COOLING DATA			OA DB / WB -12.3 F / -13.2 F		
	Details	Sensible [BTU/hr]	Latent [BTU/hr]	Details	Sensible [BTU/hr]	Latent [BTU/hr]
Zone Conditioning	-	-	-	-	4922	0
Plenum Load	-	-	-	-	0	0
Return Fan Load	-	-	-	184 CFM	0	-
Ventilation Load	-	-	-	0 CFM	0	0
Supply Fan Load	-	-	-	184 CFM	-272	-
Zone Fan Coil Fans Load	-	-	-	-	0	-
>> Total System Loads	-	-	-	-	4650	0
Central Heating Coil	-	-	-	-	4650	-
>> Total Conditioning	-	-	-	-	4650	0
Key:	Positive values are cooling loads Negative values are heating loads			Positive values are heating loads Negative values are cooling loads		

Table 2. Zone Heat Balance Loads

Zone Heat Balance Component	DESIGN COOLING			DESIGN HEATING		
	NO COOLING DATA			OA DB / WB -12.3 F / -13.2 F		
	Details	Sensible [BTU/hr]	Latent [BTU/hr]	Details	Sensible [BTU/hr]	Latent [BTU/hr]
Exterior Wall Convection	176 sqft	-	-	176 sqft	525	-
Roof Convection	0 sqft	-	-	0 sqft	0	-
Window Convection	36 sqft	-	-	36 sqft	412	-
Skylight Convection	0 sqft	-	-	0 sqft	0	-
Door Convection	22 sqft	-	-	22 sqft	244	-
Floor Convection	184 sqft	-	-	184 sqft	194	-
Interior Wall Convection	234 sqft	-	-	234 sqft	199	-
Ceiling Convection	184 sqft	-	-	184 sqft	268	-
Overhead Lighting Convection	-	-	-	0 W	0	-
Task Lighting Convection	-	-	-	0 W	0	-
Electric Equipment Convection	-	-	-	0 W	0	-
People Convection	-	-	-	0	0	0
Infiltration	-	-	-	23 CFM	2444	0
Miscellaneous Equipment	-	-	-	-	0	0
Air Internal Energy Change	-	-	-	-	0	0
Safety Factor	15% / 15%	-	-	15%	643	0
>> Total Zone Loads	-	-	-	-	4929	0
Key:	Positive values are cooling loads Negative values are heating loads			Positive values are heating loads Negative values are cooling loads		

Note 1: Surface convection line items show the combined effects of conductive heat gain to the surface and radiative heat gains absorbed at the surface which are then convected to room air.

Note 2: Lighting, equipment, and people line items include only the direct convective heat gain from the heat source to the room air. The radiative portion of the heat gain is first absorbed by surfaces in the room and then later convected from the surface to the air. Therefore the effect of the radiative portion of the heat gain is found in the surface convection line items.

Note 3: Solar heat gain is absorbed by surfaces in the room, re-radiated to other surfaces, and finally convected from the surfaces to room air. Therefore, the effect of solar heat gain is found in the surface convection line items.

System Psychrometrics for 44 RDC ESC25 CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:23 AM

WINTER DESIGN HEATING

TABLE 1: SYSTEM DATA

Component	Location	Dry-Bulb Temp (F)	Specific Humidity (lb/lb)	Airflow (CFM)	CO2 Level (ppm)	Sensible Heat (BTU/hr)	Latent Heat (BTU/hr)
Ventilation Air	Inlet	-12.3	0.00018	0	400	0	0
Vent - Return Mixing	Outlet	70.0	0.00018	184	400	-	-
Central Heating Coil	Outlet	93.5	0.00018	184	400	4650	-
Supply Fan	Outlet	94.9	0.00018	184	400	272	-
Cold Supply Duct	Outlet	94.9	0.00018	184	400	-	-
Zone Air	-	70.0	0.00018	184	400	-4922	0
Return Air	Outlet	70.0	0.00018	184	400	-	-

Air Density x Heat Capacity x Conversion Factor: At sea level = 1.080; At site altitude = 1.074 BTU/(hr-CFM-F)

Air Density x Heat of Vaporization x Conversion Factor: At sea level = 4746.6; At site altitude = 4719.0 BTU/(hr-CFM)

Site Altitude = 161.0 ft

TABLE 2: ZONE DATA

Zone Name	Zone Sensible Load (BTU/hr)	T-stat Mode	Zone Cond (BTU/hr)	Zone Temp (F)	Zone Airflow (CFM)	CO2 Level (ppm)	Terminal Heating Coil (BTU/hr)	Zone Heating Unit (BTU/hr)
RDC ESC2	-4922	Heating	-4922	70.0	184	400	0	0

Air System Sizing Summary for 46 RDC Salle Communautaire CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:23 AM

Air System Information

Air System Name **46 RDC Salle Communautaire CPT**
Equipment Class **SPLT AHU**
Air System Type **SZCAV**

Number of zones **1**
Floor Area **288.8** sqft
Location **St-Anicet 1, QC, Canada**

Sizing Calculation Information

Calculation Months **Jan to Dec**
Sizing Data **Calculated**

Zone CFM Sizing **Sum of space airflow rates**
Space CFM Sizing **Individual peak space loads**

Central Cooling Coil Sizing Data

Total coil load **0.5** Tons
Total coil load **5.5** MBH
Sensible coil load **4.0** MBH
Coil CFM at peak load **244** CFM
Sum of peak zone CFM **244** CFM
Sensible heat ratio **0.722**
CFM/Ton **533.7**
sqft/Ton **631.7**
BTU/(hr sqft) **19.0**
Water flow @ 10.0 F rise **N/A**

Peak coil load occurs at **August 10:00**
OA DB / WB **75.9 / 69.6** F
Entering DB / WB **75.1 / 66.8** F
Leaving DB / WB **60.3 / 59.9** F
Resulting RH **59** %
Design supply temp. **58.0** F
Zone T-stat Check **1 of 1** OK
Max zone temperature deviation **0.0** F

Central Heating Coil Sizing Data

Max coil load **5.0** MBH
Coil CFM at Design Heating **244** CFM
Max coil CFM **244** CFM
Water flow @ 20.0 F drop **N/A**

Load occurs at **Design Heating**
BTU/(hr sqft) **17.3**
Ent. DB / Lvg DB **62.6 / 81.6** F

Supply Fan Sizing Data

Design CFM **244** CFM
Design CFM/sqft **0.84** CFM/sqft

Fan motor BHP **0.00** BHP
Fan motor kW **0.00** kW

Outdoor Ventilation Air Data

Design airflow CFM **100** CFM
CFM/sqft **0.35** CFM/sqft

CFM/person **0.00** CFM/person

Zone Sizing Summary for 46 RDC Salle Communautaire CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:23 AM

Air System Information

Air System Name **46 RDC Salle Communautaire CPT**
 Equipment Class **SPLT AHU**
 Air System Type **SZCAV**

Number of zones **1**
 Floor Area **288.8** sqft
 Location **St-Anicet 1, QC, Canada**

Sizing Calculation Information

Calculation Months **Jan to Dec**
 Sizing Data **Calculated**

Zone CFM Sizing **Sum of space airflow rates**
 Space CFM Sizing **Individual peak space loads**

Zone Terminal Sizing Data

Zone Name	Design Supply Airflow (CFM)	Minimum Supply Airflow (CFM)	Zone CFM/sqft	Reheat Coil Capacity (MBH)	Reheat Coil Water gpm @ 20.0 F	Zone Htg Unit Coil Capacity (MBH)	Zone Htg Unit Water gpm @ 20.0 F	Mixing Box Fan Airflow (CFM)
RDC Salle Communautaire	244	244	0.84	0.0	-	0.0	-	0

Zone Peak Sensible Loads

Zone Name	Zone Cooling Sensible (MBH)	Time of Peak Sensible Cooling Load	Zone Heating Load (MBH)	Zone Floor Area (sqft)
RDC Salle Communautaire	4.5	September 9:00	3.0	288.8

Space Loads and Airflows

Zone Name / Space Name	Cooling Sensible (MBH)	Time of Peak Sensible Load	Air Flow (CFM)	Heating Load (MBH)	Floor Area (sqft)	Space CFM/sqft
RDC Salle Communautaire						
RDC Salle Communautaire	4.5	September 9:00	244	3.0	288.8	0.84

Air System Heat Balance Summary for 46 RDC Salle Communautaire CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:23 AM

Table 1. System Loads

COMPONENT LOADS	DESIGN COOLING - AUGUST 10:00			DESIGN HEATING		
	OA DB / WB 75.9 F / 69.6 F			OA DB / WB -12.3 F / -13.2 F		
	Details	Sensible [BTU/hr]	Latent [BTU/hr]	Details	Sensible [BTU/hr]	Latent [BTU/hr]
Zone Conditioning	-	3929	-44	-	3049	0
Plenum Load	-	0	0	-	0	0
Return Fan Load	244 CFM	0	-	244 CFM	0	-
Ventilation Load	100 CFM	22	1554	100 CFM	1944	0
Supply Fan Load	244 CFM	0	-	244 CFM	0	-
Zone Fan Coil Fans Load	-	0	-	-	0	-
>> Total System Loads	-	3951	1510	-	4993	0
Central Cooling Coil	-	3961	1525	-	0	0
Central Heating Coil	-	0	-	-	4998	-
>> Total Conditioning	-	3961	1525	-	4998	0
Key:	Positive values are cooling loads Negative values are heating loads			Positive values are heating loads Negative values are cooling loads		

Table 2. Zone Heat Balance Loads

Zone Heat Balance Component	DESIGN COOLING - AUGUST 10:00			DESIGN HEATING		
	OA DB / WB 75.9 F / 69.6 F			OA DB / WB -12.3 F / -13.2 F		
	Details	Sensible [BTU/hr]	Latent [BTU/hr]	Details	Sensible [BTU/hr]	Latent [BTU/hr]
Exterior Wall Convection	93 sqft	165	-	93 sqft	202	-
Roof Convection	0 sqft	0	-	0 sqft	0	-
Window Convection	30 sqft	278	-	30 sqft	262	-
Skylight Convection	0 sqft	0	-	0 sqft	0	-
Door Convection	0 sqft	0	-	0 sqft	0	-
Floor Convection	289 sqft	1366	-	289 sqft	480	-
Interior Wall Convection	483 sqft	964	-	483 sqft	167	-
Ceiling Convection	289 sqft	892	-	289 sqft	225	-
Overhead Lighting Convection	0 W	0	-	0 W	0	-
Task Lighting Convection	0 W	0	-	0 W	0	-
Electric Equipment Convection	0 W	0	-	0 W	0	-
People Convection	0	0	0	0	0	0
Infiltration	0 CFM	0	0	12 CFM	1289	0
Miscellaneous Equipment	-	0	0	-	0	0
Air Internal Energy Change	-	0		-	0	0
Safety Factor	15% / 15%	550	0	15%	394	0
>> Total Zone Loads	-	4216	0	-	3019	0
Key:	Positive values are cooling loads Negative values are heating loads			Positive values are heating loads Negative values are cooling loads		

Note 1: Surface convection line items show the combined effects of conductive heat gain to the surface and radiative heat gains absorbed at the surface which are then convected to room air.

Note 2: Lighting, equipment, and people line items include only the direct convective heat gain from the heat source to the room air. The radiative portion of the heat gain is first absorbed by surfaces in the room and then later convected from the surface to the air. Therefore the effect of the radiative portion of the heat gain is found in the surface convection line items.

Note 3: Solar heat gain is absorbed by surfaces in the room, re-radiated to other surfaces, and finally convected from the surfaces to room air. Therefore, the effect of solar heat gain is found in the surface convection line items.

System Psychrometrics for 46 RDC Salle Communautaire CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:23 AM

DESIGN COOLING DAY AT AUGUST 10:00

TABLE 1: SYSTEM DATA

Component	Location	Dry-Bulb Temp (F)	Specific Humidity (lb/lb)	Airflow (CFM)	CO2 Level (ppm)	Sensible Heat (BTU/hr)	Latent Heat (BTU/hr)
Ventilation Air	Inlet	76.1	0.01416	100	400	22	1554
Air-to-Air Energy Recovery	Outlet	75.2	0.01416	100	400	103	0
Vent - Return Mixing	Outlet	75.1	0.01222	244	400	-	-
Central Cooling Coil	Outlet	60.3	0.01094	244	400	3961	1525
Central Heating Coil	Outlet	60.3	0.01094	244	400	0	-
Supply Fan	Outlet	60.3	0.01094	244	400	0	-
Cold Supply Duct	Outlet	60.3	0.01094	244	400	-	-
Zone Air	-	75.0	0.01090	244	400	3929	-44
Return Air	Outlet	75.0	0.01087	244	400	-	-

Air Density x Heat Capacity x Conversion Factor: At sea level = 1.080; At site altitude = 1.074 BTU/(hr-CFM-F)

Air Density x Heat of Vaporization x Conversion Factor: At sea level = 4746.6; At site altitude = 4719.0 BTU/(hr-CFM)

Site Altitude = 161.0 ft

TABLE 2: ZONE DATA

Zone Name	Zone Sensible Load (BTU/hr)	T-stat Mode	Zone Cond (BTU/hr)	Zone Temp (F)	Zone Airflow (CFM)	CO2 Level (ppm)	Terminal Heating Coil (BTU/hr)	Zone Heating Unit (BTU/hr)
RDC Salle Communautaire	3929	Cooling	3929	75.0	244	400	0	0

System Psychrometrics for 46 RDC Salle Communautaire CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:23 AM

WINTER DESIGN HEATING

TABLE 1: SYSTEM DATA

Component	Location	Dry-Bulb Temp (F)	Specific Humidity (lb/lb)	Airflow (CFM)	CO2 Level (ppm)	Sensible Heat (BTU/hr)	Latent Heat (BTU/hr)
Ventilation Air	Inlet	-12.3	0.00018	100	400	-1944	0
Air-to-Air Energy Recovery	Outlet	51.9	0.00018	100	400	-6911	0
Vent - Return Mixing	Outlet	62.6	0.00018	244	400	-	-
Central Cooling Coil	Outlet	62.6	0.00018	244	400	0	0
Central Heating Coil	Outlet	81.6	0.00018	244	400	4998	-
Supply Fan	Outlet	81.6	0.00018	244	400	0	-
Cold Supply Duct	Outlet	81.6	0.00018	244	400	-	-
Zone Air	-	70.0	0.00018	244	400	-3049	0
Return Air	Outlet	70.0	0.00018	244	400	-	-

Air Density x Heat Capacity x Conversion Factor: At sea level = 1.080; At site altitude = 1.074 BTU/(hr-CFM-F)

Air Density x Heat of Vaporization x Conversion Factor: At sea level = 4746.6; At site altitude = 4719.0 BTU/(hr-CFM)

Site Altitude = 161.0 ft

TABLE 2: ZONE DATA

Zone Name	Zone Sensible Load (BTU/hr)	T-stat Mode	Zone Cond (BTU/hr)	Zone Temp (F)	Zone Airflow (CFM)	CO2 Level (ppm)	Terminal Heating Coil (BTU/hr)	Zone Heating Unit (BTU/hr)
RDC Salle Communautaire	-3049	Heating	-3049	70.0	244	400	0	0

Air System Sizing Summary for 48 SS Garage CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:23 AM

Air System Information

Air System Name **48 SS Garage CPT**
Equipment Class **SPLT AHU**
Air System Type **SZCAV**

Number of zones **1**
Floor Area **13278.7** sqft
Location **St-Anicet 1, QC, Canada**

Sizing Calculation Information

Calculation Months **Jan to Dec**
Sizing Data **Calculated**

Zone CFM Sizing **Sum of space airflow rates**
Space CFM Sizing **Individual peak space loads**

Central Heating Coil Sizing Data

Max coil load **29.0** MBH
Coil CFM at Design Heating **1152** CFM
Max coil CFM **1152** CFM
Water flow @ 20.0 F drop **N/A**

Load occurs at **Design Heating**
BTU/(hr sqft) **2.2**
Ent. DB / Lvg DB **70.0 / 93.4** F

Supply Fan Sizing Data

Design CFM **1152** CFM
Design CFM/sqft **0.09** CFM/sqft

Fan motor BHP **0.63** BHP
Fan motor kW **0.50** kW
Fan total static **2.00** in wg

Outdoor Ventilation Air Data

Design airflow CFM **0** CFM
CFM/sqft **0.00** CFM/sqft

CFM/person **0.00** CFM/person

Zone Sizing Summary for 48 SS Garage CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:23 AM

Air System Information

Air System Name **48 SS Garage CPT**
 Equipment Class **SPLT AHU**
 Air System Type **SZCAV**

Number of zones **1**
 Floor Area **13278.7** sqft
 Location **St-Anicet 1, QC, Canada**

Sizing Calculation Information

Calculation Months **Jan to Dec**
 Sizing Data **Calculated**

Zone CFM Sizing **Sum of space airflow rates**
 Space CFM Sizing **Individual peak space loads**

Zone Terminal Sizing Data

Zone Name	Design Supply Airflow (CFM)	Minimum Supply Airflow (CFM)	Zone CFM/sqft	Reheat Coil Capacity (MBH)	Reheat Coil Water gpm @ 20.0 F	Zone Htg Unit Coil Capacity (MBH)	Zone Htg Unit Water gpm @ 20.0 F	Mixing Box Fan Airflow (CFM)
SS Garage	1152	1152	0.09	0.0	-	0.0	-	0

Zone Peak Sensible Loads

Zone Name	Zone Cooling Sensible (MBH)	Time of Peak Sensible Cooling Load	Zone Heating Load (MBH)	Zone Floor Area (sqft)
SS Garage	0.0	June 20:00	30.9	13278.7

Space Loads and Airflows

Zone Name / Space Name	Cooling Sensible (MBH)	Time of Peak Sensible Load	Air Flow (CFM)	Heating Load (MBH)	Floor Area (sqft)	Space CFM/sqft
SS Garage						
SS Garage	0.0	June 20:00	1152	30.9	13278.7	0.09

Air System Heat Balance Summary for 48 SS Garage CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:23 AM

Table 1. System Loads

COMPONENT LOADS	DESIGN COOLING			DESIGN HEATING		
	NO COOLING DATA			OA DB / WB -12.3 F / -13.2 F		
	Details	Sensible [BTU/hr]	Latent [BTU/hr]	Details	Sensible [BTU/hr]	Latent [BTU/hr]
Zone Conditioning	-	-	-	-	30707	0
Plenum Load	-	-	-	-	0	0
Return Fan Load	-	-	-	1152 CFM	0	-
Ventilation Load	-	-	-	0 CFM	0	0
Supply Fan Load	-	-	-	1152 CFM	-1707	-
Zone Fan Coil Fans Load	-	-	-	-	0	-
>> Total System Loads	-	-	-	-	29000	0
Central Heating Coil	-	-	-	-	29000	-
>> Total Conditioning	-	-	-	-	29000	0
Key:	Positive values are cooling loads Negative values are heating loads			Positive values are heating loads Negative values are cooling loads		

Table 2. Zone Heat Balance Loads

Zone Heat Balance Component	DESIGN COOLING			DESIGN HEATING		
	NO COOLING DATA			OA DB / WB -12.3 F / -13.2 F		
	Details	Sensible [BTU/hr]	Latent [BTU/hr]	Details	Sensible [BTU/hr]	Latent [BTU/hr]
Exterior Wall Convection	4653 sqft	-	-	4653 sqft	8932	-
Roof Convection	0 sqft	-	-	0 sqft	0	-
Window Convection	0 sqft	-	-	0 sqft	0	-
Skylight Convection	0 sqft	-	-	0 sqft	0	-
Door Convection	0 sqft	-	-	0 sqft	0	-
Floor Convection	13279 sqft	-	-	13279 sqft	17154	-
Interior Wall Convection	442 sqft	-	-	442 sqft	9	-
Ceiling Convection	13279 sqft	-	-	13279 sqft	786	-
Overhead Lighting Convection	-	-	-	0 W	0	-
Task Lighting Convection	-	-	-	0 W	0	-
Electric Equipment Convection	-	-	-	0 W	0	-
People Convection	-	-	-	0	0	0
Infiltration	-	-	-	0 CFM	0	0
Miscellaneous Equipment	-	-	-	-	0	0
Air Internal Energy Change	-	-	-	-	0	0
Safety Factor	15% / 15%	-	-	15%	4032	0
>> Total Zone Loads	-	-	-	-	30913	0
Key:	Positive values are cooling loads Negative values are heating loads			Positive values are heating loads Negative values are cooling loads		

Note 1: Surface convection line items show the combined effects of conductive heat gain to the surface and radiative heat gains absorbed at the surface which are then convected to room air.

Note 2: Lighting, equipment, and people line items include only the direct convective heat gain from the heat source to the room air. The radiative portion of the heat gain is first absorbed by surfaces in the room and then later convected from the surface to the air. Therefore the effect of the radiative portion of the heat gain is found in the surface convection line items.

Note 3: Solar heat gain is absorbed by surfaces in the room, re-radiated to other surfaces, and finally convected from the surfaces to room air. Therefore, the effect of solar heat gain is found in the surface convection line items.

System Psychrometrics for 48 SS Garage CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:23 AM

WINTER DESIGN HEATING

TABLE 1: SYSTEM DATA

Component	Location	Dry-Bulb Temp (F)	Specific Humidity (lb/lb)	Airflow (CFM)	CO2 Level (ppm)	Sensible Heat (BTU/hr)	Latent Heat (BTU/hr)
Ventilation Air	Inlet	-12.3	0.00018	0	400	0	0
Vent - Return Mixing	Outlet	70.0	0.00018	1152	400	-	-
Central Heating Coil	Outlet	93.4	0.00018	1152	400	29000	-
Supply Fan	Outlet	94.8	0.00018	1152	400	1707	-
Cold Supply Duct	Outlet	94.8	0.00018	1152	400	-	-
Zone Air	-	70.0	0.00018	1152	400	-30707	0
Return Air	Outlet	70.0	0.00018	1152	400	-	-

Air Density x Heat Capacity x Conversion Factor: At sea level = 1.080; At site altitude = 1.074 BTU/(hr-CFM-F)

Air Density x Heat of Vaporization x Conversion Factor: At sea level = 4746.6; At site altitude = 4719.0 BTU/(hr-CFM)

Site Altitude = 161.0 ft

TABLE 2: ZONE DATA

Zone Name	Zone Sensible Load (BTU/hr)	T-stat Mode	Zone Cond (BTU/hr)	Zone Temp (F)	Zone Airflow (CFM)	CO2 Level (ppm)	Terminal Heating Coil (BTU/hr)	Zone Heating Unit (BTU/hr)
SS Garage	-30707	Heating	-30707	70.0	1152	400	0	0

Air System Sizing Summary for 50 Couloir CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:23 AM

Air System Information

Air System Name **50 Couloir CPT**
Equipment Class **PKG ROOF**
Air System Type **VAV**

Number of zones **6**
Floor Area **5299.7** sqft
Location **St-Anicet 1, QC, Canada**

Sizing Calculation Information

Calculation Months **Jan to Dec**
Sizing Data **Calculated**

Zone CFM Sizing **Peak zone sensible load**
Space CFM Sizing **Individual peak space loads**

Central Cooling Coil Sizing Data

Total coil load **4.0** Tons
Total coil load **47.4** MBH
Sensible coil load **37.3** MBH
Coil CFM at peak load **1632** CFM
Sum of peak zone CFM **1788** CFM
Sensible heat ratio **0.786**
CFM/Ton **412.9**
sqft/Ton **1340.9**
BTU/(hr sqft) **8.9**
Water flow @ 10.0 F rise **N/A**

Peak coil load occurs at **July 17:00**
OA DB / WB **85.8 / 72.5** F
Entering DB / WB **77.1 / 65.3** F
Leaving DB / WB **56.3 / 55.8** F
Resulting RH **53** %
Design supply temp. **55.0** F
Zone T-stat Check **6 of 6** OK
Max zone temperature deviation **0.0** F

Preheat Coil Sizing Data

Max coil load **16.8** MBH
Coil CFM at Design Heating **705** CFM
Max coil CFM **1758** CFM
Water flow @ 20.0 F drop **N/A**

Load occurs at **Design Heating**
Ent. DB / Lvg DB **32.8 / 55.0** F

Supply Fan Sizing Data

Design CFM **1758** CFM
Design CFM occurs at **June 18:00**
Design CFM/sqft **0.33** CFM/sqft
Sum of peak zone CFM **1788** CFM
VAV Fan Diversity **1.7** %

Fan motor BHP **0.00** BHP
Fan motor kW **0.00** kW

Outdoor Ventilation Air Data

Design airflow CFM **318** CFM
CFM/sqft **0.06** CFM/sqft

CFM/person **0.00** CFM/person

Zone Sizing Summary for 50 Couloir CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:23 AM

Air System Information

Air System Name **50 Couloir CPT**
 Equipment Class **PKG ROOF**
 Air System Type **VAV**

Number of zones **6**
 Floor Area **5299.7** sqft
 Location **St-Anicet 1, QC, Canada**

Sizing Calculation Information

Calculation Months **Jan to Dec**
 Sizing Data **Calculated**

Zone CFM Sizing **Peak zone sensible load**
 Space CFM Sizing **Individual peak space loads**

Zone Terminal Sizing Data

Zone Name	Design Supply Airflow (CFM)	Minimum Supply Airflow (CFM)	Zone CFM/sqft	Reheat Coil Capacity (MBH)	Reheat Coil Water gpm @ 20.0 F	Zone Htg Unit Coil Capacity (MBH)	Zone Htg Unit Water gpm @ 20.0 F	Mixing Box Fan Airflow (CFM)
2E corridor	385	77	0.30	6.1	-	0.0	-	0
3E corridor	386	77	0.30	6.1	-	0.0	-	0
4E corridor	507	77	0.40	10.2	-	0.0	-	0
RDC Corridor	149	63	0.14	2.2	-	0.0	-	0
RDC Hall	342	13	1.63	4.4	-	0.0	-	0
SS SAS	19	12	0.09	0.8	-	0.0	-	0

Zone Peak Sensible Loads

Zone Name	Zone Cooling Sensible (MBH)	Time of Peak Sensible Cooling Load	Zone Heating Load (MBH)	Zone Floor Area (sqft)
2E corridor	8.3	May 17:00	4.0	1280.6
3E corridor	8.3	May 17:00	4.0	1280.6
4E corridor	10.9	July 18:00	6.6	1280.6
RDC Corridor	3.2	July 18:00	1.4	1049.0
RDC Hall	7.3	May 17:00	2.8	210.2
SS SAS	0.1	August 0:00	0.5	198.8

Space Loads and Airflows

Zone Name / Space Name	Cooling Sensible (MBH)	Time of Peak Sensible Load	Air Flow (CFM)	Heating Load (MBH)	Floor Area (sqft)	Space CFM/sqft
2E corridor						
2E corridor	8.3	May 17:00	385	4.0	1280.6	0.30
3E corridor						
3E corridor	8.3	May 17:00	386	4.0	1280.6	0.30
4E corridor						
4E corridor	10.9	July 18:00	507	6.6	1280.6	0.40
RDC Corridor						
RDC Corridor	3.2	July 18:00	149	1.4	1049.0	0.14
RDC Hall						
RDC Hall	7.3	May 17:00	342	2.8	210.2	1.63
SS SAS						
SS SAS	0.1	August 0:00	19	0.5	198.8	0.09

Air System Heat Balance Summary for 50 Couloir CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:23 AM

Table 1. System Loads

COMPONENT LOADS	DESIGN COOLING - JULY 17:00			DESIGN HEATING		
	OA DB / WB 85.8 F / 72.5 F			OA DB / WB -12.3 F / -13.2 F		
	Details	Sensible [BTU/hr]	Latent [BTU/hr]	Details	Sensible [BTU/hr]	Latent [BTU/hr]
Zone Conditioning	-	33511	2410	-	18493	0
Plenum Load	-	0	0	-	0	0
Return Fan Load	1632 CFM	0	-	705 CFM	0	-
Ventilation Load	318 CFM	3629	6519	318 CFM	28099	0
Supply Fan Load	1632 CFM	0	-	705 CFM	0	-
Zone Fan Coil Fans Load	-	0	-	-	0	-
>> Total System Loads	-	37140	8929	-	46592	0
Central Cooling Coil	-	37291	10137	-	0	0
Preheat Coil	-	0	-	-	16795	-
Terminal Reheat Coils	-	0	-	-	29872	-
>> Total Conditioning	-	37291	10137	-	46667	0
Key:	Positive values are cooling loads Negative values are heating loads			Positive values are heating loads Negative values are cooling loads		

Table 2. Zone Heat Balance Loads

Zone Heat Balance Component	DESIGN COOLING - JULY 17:00			DESIGN HEATING		
	OA DB / WB 85.8 F / 72.5 F			OA DB / WB -12.3 F / -13.2 F		
	Details	Sensible [BTU/hr]	Latent [BTU/hr]	Details	Sensible [BTU/hr]	Latent [BTU/hr]
Exterior Wall Convection	543 sqft	837	-	543 sqft	963	-
Roof Convection	0 sqft	0	-	0 sqft	0	-
Window Convection	145 sqft	1032	-	145 sqft	1330	-
Skylight Convection	0 sqft	0	-	0 sqft	0	-
Door Convection	51 sqft	652	-	51 sqft	474	-
Floor Convection	5300 sqft	6966	-	5300 sqft	1428	-
Interior Wall Convection	13925 sqft	13847	-	13925 sqft	2697	-
Ceiling Convection	5301 sqft	8956	-	5301 sqft	3325	-
Overhead Lighting Convection	0 W	0	-	0 W	0	-
Task Lighting Convection	0 W	0	-	0 W	0	-
Electric Equipment Convection	0 W	0	-	0 W	0	-
People Convection	0	0	0	0	0	0
Infiltration	0 CFM	0	0	63 CFM	6574	0
Miscellaneous Equipment	-	0	0	-	0	0
Air Internal Energy Change	-	0	-	-	0	0
Safety Factor	15% / 15%	4844	0	15%	2519	0
>> Total Zone Loads	-	37134	0	-	19310	0
Key:	Positive values are cooling loads Negative values are heating loads			Positive values are heating loads Negative values are cooling loads		

Note 1: Surface convection line items show the combined effects of conductive heat gain to the surface and radiative heat gains absorbed at the surface which are then convected to room air.

Note 2: Lighting, equipment, and people line items include only the direct convective heat gain from the heat source to the room air. The radiative portion of the heat gain is first absorbed by surfaces in the room and then later convected from the surface to the air. Therefore the effect of the radiative portion of the heat gain is found in the surface convection line items.

Note 3: Solar heat gain is absorbed by surfaces in the room, re-radiated to other surfaces, and finally convected from the surfaces to room air. Therefore, the effect of solar heat gain is found in the surface convection line items.

System Psychrometrics for 50 Couloir CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:23 AM

DESIGN COOLING DAY AT JULY 17:00

TABLE 1: SYSTEM DATA

Component	Location	Dry-Bulb Temp (F)	Specific Humidity (lb/lb)	Airflow (CFM)	CO2 Level (ppm)	Sensible Heat (BTU/hr)	Latent Heat (BTU/hr)
Ventilation Air	Inlet	85.6	0.01418	318	400	3629	6519
Vent - Return Mixing	Outlet	77.1	0.01069	1632	400	-	-
Preheat Coil	Outlet	77.1	0.01069	1632	400	0	-
Central Cooling Coil	Outlet	56.3	0.00941	1632	400	37291	10137
Supply Fan	Outlet	56.3	0.00941	1632	400	0	-
Cold Supply Duct	Outlet	56.3	0.00941	1632	400	-	-
Zone Air	-	75.0	0.00991	1632	400	33511	2410
Return Air	Outlet	75.0	0.00984	1632	400	-	-

Air Density x Heat Capacity x Conversion Factor: At sea level = 1.080; At site altitude = 1.074 BTU/(hr-CFM-F)

Air Density x Heat of Vaporization x Conversion Factor: At sea level = 4746.6; At site altitude = 4719.0 BTU/(hr-CFM)

Site Altitude = 161.0 ft

TABLE 2: ZONE DATA

Zone Name	Zone Sensible Load (BTU/hr)	T-stat Mode	Zone Cond (BTU/hr)	Zone Temp (F)	Zone Airflow (CFM)	CO2 Level (ppm)	Terminal Heating Coil (BTU/hr)	Zone Heating Unit (BTU/hr)
2E corridor	6999	Cooling	7002	75.0	341	400	0	0
3E corridor	7004	Cooling	7007	75.0	341	400	0	0
4E corridor	9804	Cooling	9807	75.0	478	400	0	0
RDC Corridor	2447	Cooling	2449	75.0	119	400	0	0
RDC Hall	7010	Cooling	7010	75.0	342	400	0	0
SS SAS	0	Deadband	230	73.8	12	400	0	0

System Psychrometrics for 50 Couloir CPT

(In Alternative: b) Alternative CPT)

Project: 58 Log, rue Laniel à Salaberry-de-Valleyfield

01/26/2026

Prepared by: Groupe CMI

11:23 AM

WINTER DESIGN HEATING

TABLE 1: SYSTEM DATA

Component	Location	Dry-Bulb Temp (F)	Specific Humidity (lb/lb)	Airflow (CFM)	CO2 Level (ppm)	Sensible Heat (BTU/hr)	Latent Heat (BTU/hr)
Ventilation Air	Inlet	-12.3	0.00018	318	400	-28099	0
Vent - Return Mixing	Outlet	32.9	0.00018	705	400	-	-
Preheat Coil	Outlet	55.0	0.00018	705	400	16795	-
Central Cooling Coil	Outlet	55.0	0.00018	705	400	0	0
Supply Fan	Outlet	55.0	0.00018	705	400	0	-
Cold Supply Duct	Outlet	55.0	0.00018	705	400	-	-
Zone Air	-	70.0	0.00018	705	400	-18493	0
Return Air	Outlet	70.0	0.00018	705	400	-	-

Air Density x Heat Capacity x Conversion Factor: At sea level = 1.080; At site altitude = 1.074 BTU/(hr-CFM-F)

Air Density x Heat of Vaporization x Conversion Factor: At sea level = 4746.6; At site altitude = 4719.0 BTU/(hr-CFM)

Site Altitude = 161.0 ft

TABLE 2: ZONE DATA

Zone Name	Zone Sensible Load (BTU/hr)	T-stat Mode	Zone Cond (BTU/hr)	Zone Temp (F)	Zone Airflow (CFM)	CO2 Level (ppm)	Terminal Heating Coil (BTU/hr)	Zone Heating Unit (BTU/hr)
2E corridor	-3808	Heating	-3808	70.0	141	400	6093	0
3E corridor	-3802	Heating	-3802	70.0	141	400	6083	0
4E corridor	-6391	Heating	-6391	70.0	237	400	10225	0
RDC Corridor	-1221	Heating	-1221	70.0	63	400	2237	0
RDC Hall	-2768	Heating	-2768	70.0	103	400	4429	0
SS SAS	-503	Heating	-503	70.0	19	400	806	0

Annual Cost Summary

Project: 26909 APH 58 Log, rue Laniel à Salaberry-de-Valleyf...
 Prepared by: Le Groupe CMI Experts-Conseils inc.

02-02-2026
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Table 1. Annual Costs

Component	a) Alternative REF (\$)	b) Alternative CPT (\$)
Air System Fans	722	704
Cooling	823	1,033
Heating	23,231	13,607
Pumps	0	0
Heat Rejection Fans	0	0
HVAC Sub-Total	24,777	15,344
Lights	0	0
Electric Equipment	0	0
Misc. Electric	0	0
Misc. Fuel Use	0	0
Non-HVAC Sub-Total	0	0
Grand Total	24,777	15,344

Table 2. Annual Cost per Unit Floor Area

Component	a) Alternative REF (\$/sqft)	b) Alternative CPT (\$/sqft)
Air System Fans	0.013	0.013
Cooling	0.015	0.019
Heating	0.420	0.246
Pumps	0.000	0.000
Heat Rejection Fans	0.000	0.000
HVAC Sub-Total	0.448	0.278
Lights	0.000	0.000
Electric Equipment	0.000	0.000
Misc. Electric	0.000	0.000
Misc. Fuel Use	0.000	0.000
Non-HVAC Sub-Total	0.000	0.000
Grand Total	0.448	0.278
Gross Floor Area (sqft)	55268.7	55268.7
Modeled Floor Area (sqft)	55268.7	55268.7

Note: Values in this table are calculated using the Gross Floor Area.

Table 3. Component Cost as a Percentage of Total Cost

Component	a) Alternative REF (%)	b) Alternative CPT (%)
Air System Fans	2.9	4.6
Cooling	3.3	6.7
Heating	93.8	88.7
Pumps	0.0	0.0
Heat Rejection Fans	0.0	0.0
HVAC Sub-Total	100.0	100.0
Lights	0.0	0.0
Electric Equipment	0.0	0.0
Misc. Electric	0.0	0.0
Misc. Fuel Use	0.0	0.0
Non-HVAC Sub-Total	0.0	0.0
Grand Total	100.0	100.0

Annual Energy and Emissions Summary

Project: 26909 APH 58 Log, rue Laniel à Salaberry-de-Valleyf...
 Prepared by: Le Groupe CMI Experts-Conseils inc.

02-02-2026
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Table 1. Annual Costs

Component	a) Alternative REF (\$)	b) Alternative CPT (\$)
HVAC Components		
Electric	24,777	15,344
Natural Gas	0	0
Fuel Oil	0	0
Propane	0	0
Remote HW	0	0
Remote Steam	0	0
Remote CW	0	0
HVAC Sub-Total	24,777	15,344
Non-HVAC Components		
Electric	0	0
Natural Gas	0	0
Fuel Oil	0	0
Propane	0	0
Remote HW	0	0
Remote Steam	0	0
Non-HVAC Sub-Total	0	0
Grand Total	24,777	15,344

Table 2. Annual Energy Consumption

Component	a) Alternative REF	b) Alternative CPT
HVAC Components		
Electric (kWh)	253,519	156,996
Natural Gas (na)	0	0
Fuel Oil (na)	0	0
Propane (na)	0	0
Remote HW (na)	0	0
Remote Steam (na)	0	0
Remote CW (na)	0	0
Non-HVAC Components		
Electric (kWh)	0	0
Natural Gas (na)	0	0
Fuel Oil (na)	0	0
Propane (na)	0	0
Remote HW (na)	0	0
Remote Steam (na)	0	0
Totals		
Electric (kWh)	253,519	156,996
Natural Gas (na)	0	0
Fuel Oil (na)	0	0
Propane (na)	0	0
Remote HW (na)	0	0
Remote Steam (na)	0	0
Remote CW (na)	0	0

Annual Energy and Emissions Summary

Project: 26909 APH 58 Log, rue Laniel à Salaberry-de-Valleyf...
 Prepared by: Le Groupe CMI Experts-Conseils inc.

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Table 3. Annual Emissions

Component	a) Alternative REF	b) Alternative CPT
CO2 Equivalent (lb)	0	0

Table 4. Annual Cost per Unit Floor Area

Component	a) Alternative REF (\$/sqft)	b) Alternative CPT (\$/sqft)
HVAC Components		
Electric	0.448	0.278
Natural Gas	0.000	0.000
Fuel Oil	0.000	0.000
Propane	0.000	0.000
Remote HW	0.000	0.000
Remote Steam	0.000	0.000
Remote CW	0.000	0.000
HVAC Sub-Total	0.448	0.278
Non-HVAC Components		
Electric	0.000	0.000
Natural Gas	0.000	0.000
Fuel Oil	0.000	0.000
Propane	0.000	0.000
Remote HW	0.000	0.000
Remote Steam	0.000	0.000
Non-HVAC Sub-Total	0.000	0.000
Grand Total	0.448	0.278
Gross Floor Area (sqft)	55268.7	55268.7
Modeled Floor Area (sqft)	55268.7	55268.7

Note: Values in this table are calculated using the Gross Floor Area.

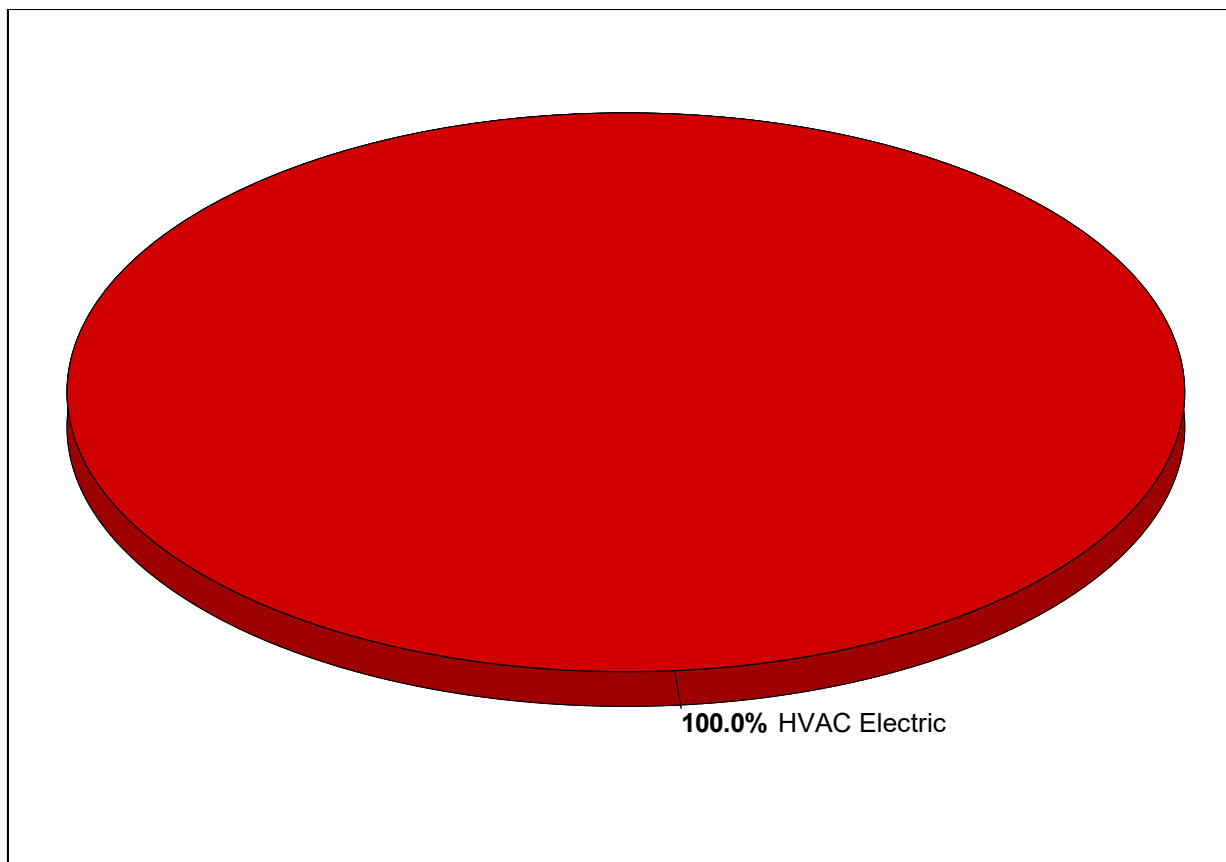
Table 5. Component Cost as a Percentage of Total Cost

Component	a) Alternative REF (%)	b) Alternative CPT (%)
HVAC Components		
Electric	100.0	100.0
Natural Gas	0.0	0.0
Fuel Oil	0.0	0.0
Propane	0.0	0.0
Remote HW	0.0	0.0
Remote Steam	0.0	0.0
Remote CW	0.0	0.0
HVAC Sub-Total	100.0	100.0
Non-HVAC Components		
Electric	0.0	0.0
Natural Gas	0.0	0.0
Fuel Oil	0.0	0.0
Propane	0.0	0.0
Remote HW	0.0	0.0
Remote Steam	0.0	0.0
Non-HVAC Sub-Total	0.0	0.0
Grand Total	100.0	100.0

Annual Energy Costs - a) Alternative REF

Project: 26909 APH 58 Log, rue Laniel à Salaberry-de-Valleyf...
Prepared by: Le Groupe CMI Experts-Conseils inc.

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1. Annual Costs

Component	Annual Cost (\$)	(\$/sqft)	Percent of Total (%)
HVAC Components			
Electric	24,777	0.448	100.0
Natural Gas	0	0.000	0.0
Fuel Oil	0	0.000	0.0
Propane	0	0.000	0.0
Remote Hot Water	0	0.000	0.0
Remote Steam	0	0.000	0.0
Remote Chilled Water	0	0.000	0.0
HVAC Sub-Total	24,777	0.448	100.0
Non-HVAC Components			
Electric	0	0.000	0.0
Natural Gas	0	0.000	0.0
Fuel Oil	0	0.000	0.0
Propane	0	0.000	0.0
Remote Hot Water	0	0.000	0.0
Remote Steam	0	0.000	0.0
Non-HVAC Sub-Total	0	0.000	0.0
Grand Total	24,777	0.448	100.0

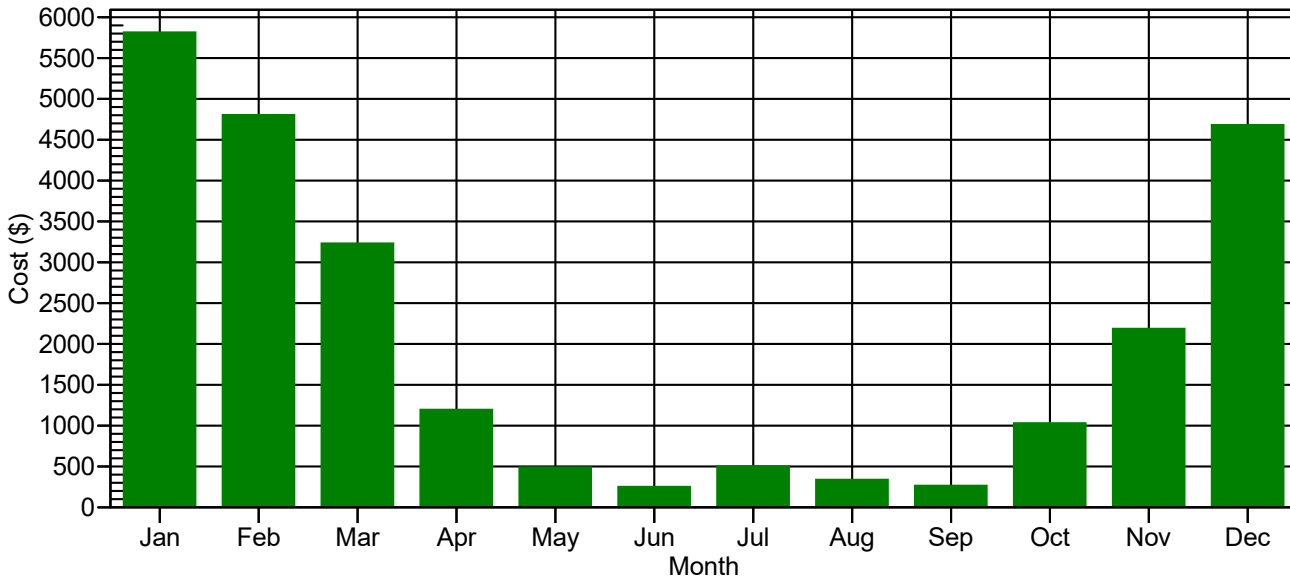
Note: Cost per unit floor area is based on the gross building floor area.

Gross Floor Area **55,268.7** sqft
Modeled Floor Area **55,268.7** sqft

Monthly Energy Costs - a) Alternative REF

Project: 26909 APH 58 Log, rue Laniel à Salaberry-de-Valleyf...
Prepared by: Le Groupe CMI Experts-Conseils inc.

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1. HVAC Costs

Month	Electric (\$)	Natural Gas (\$)	Fuel Oil (\$)	Propane (\$)	Remote Hot Water (\$)	Remote Steam (\$)	Remote Chilled Water (\$)
January	5,813	0	0	0	0	0	0
February	4,802	0	0	0	0	0	0
March	3,230	0	0	0	0	0	0
April	1,194	0	0	0	0	0	0
May	488	0	0	0	0	0	0
June	250	0	0	0	0	0	0
July	503	0	0	0	0	0	0
August	337	0	0	0	0	0	0
September	264	0	0	0	0	0	0
October	1,030	0	0	0	0	0	0
November	2,186	0	0	0	0	0	0
December	4,680	0	0	0	0	0	0
Total	24,777	0	0	0	0	0	0

2. Non-HVAC Costs

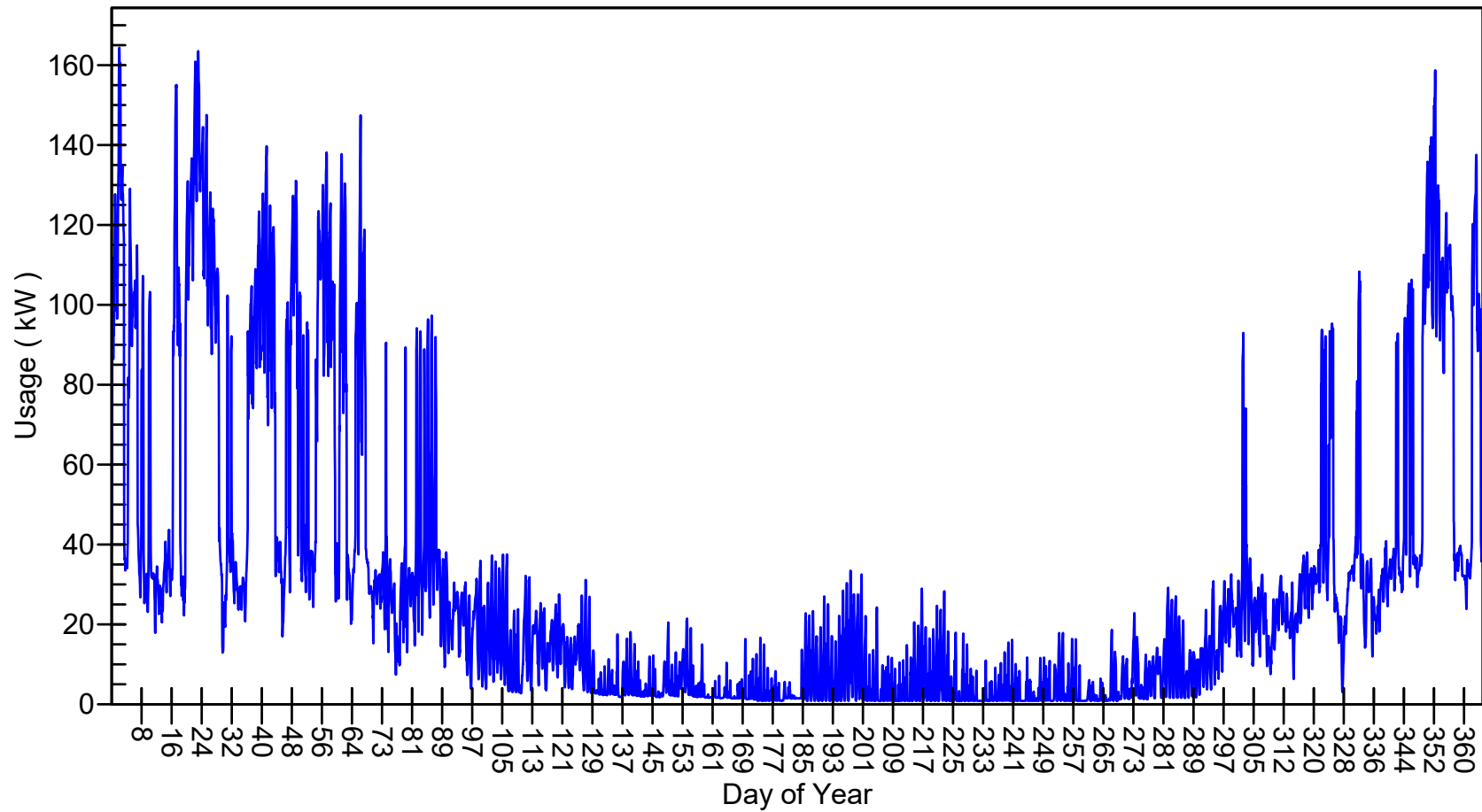
Month	Electric (\$)	Natural Gas (\$)	Fuel Oil (\$)	Propane (\$)	Remote Hot Water (\$)	Remote Steam (\$)
January	0	0	0	0	0	0
February	0	0	0	0	0	0
March	0	0	0	0	0	0
April	0	0	0	0	0	0
May	0	0	0	0	0	0
June	0	0	0	0	0	0
July	0	0	0	0	0	0
August	0	0	0	0	0	0
September	0	0	0	0	0	0
October	0	0	0	0	0	0
November	0	0	0	0	0	0
December	0	0	0	0	0	0
Total	0	0	0	0	0	0

Use Profiles - Electric - a) Alternative REF

Project: 26909 APH 58 Log, rue Laniel à Salaberry-de-Valleyf...
Prepared by: Le Groupe CMI Experts-Conseils inc.

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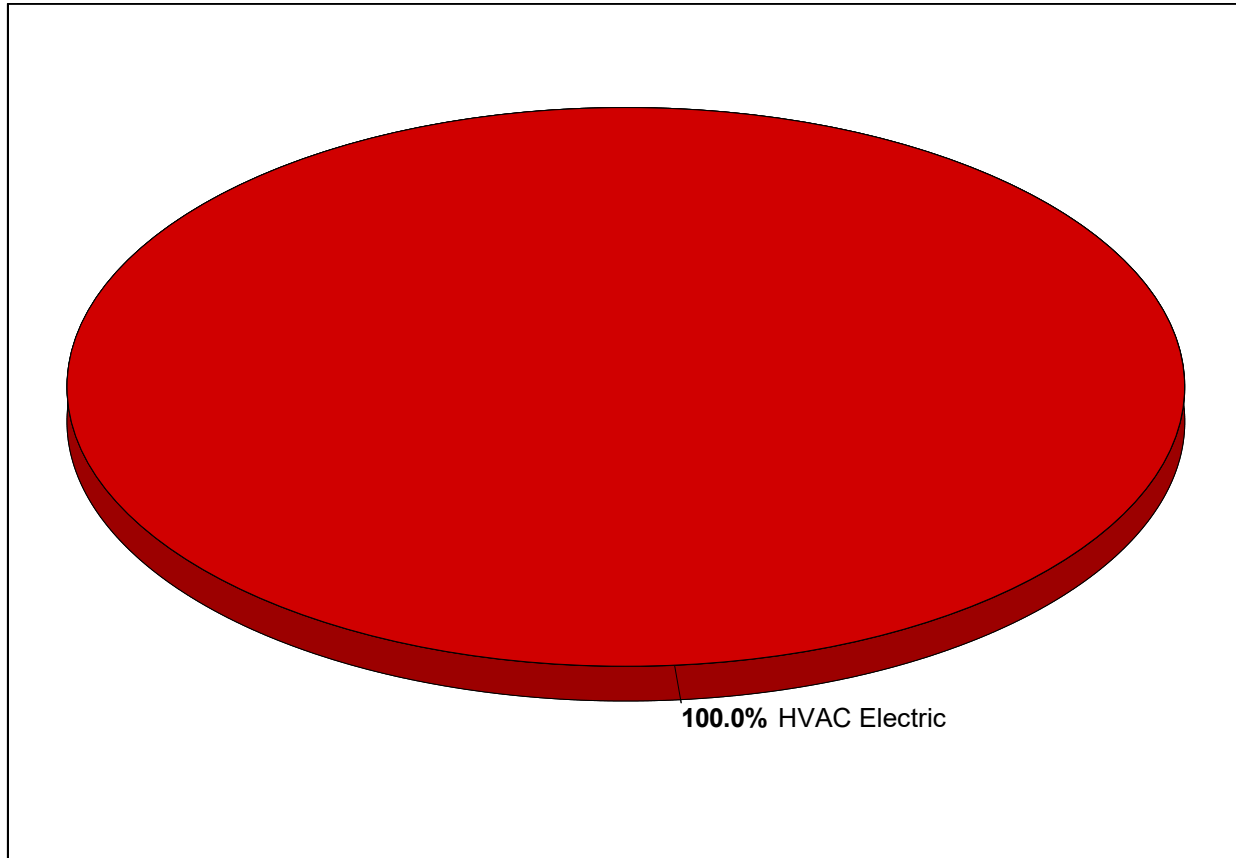
Electric Use Profiles - Sunday, January 1 (day 1) thru Sunday, December 31 (day 365)



Annual Energy Costs - b) Alternative CPT

Project: 26909 APH 58 Log, rue Laniel à Salaberry-de-Valleyfield
Prepared by: Le Groupe CMI Experts-Conseils inc.

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1. Annual Costs

Component	Annual Cost (\$)	(\$/sqft)	Percent of Total (%)
HVAC Components			
Electric	15,344	0.278	100.0
Natural Gas	0	0.000	0.0
Fuel Oil	0	0.000	0.0
Propane	0	0.000	0.0
Remote Hot Water	0	0.000	0.0
Remote Steam	0	0.000	0.0
Remote Chilled Water	0	0.000	0.0
HVAC Sub-Total	15,344	0.278	100.0
Non-HVAC Components			
Electric	0	0.000	0.0
Natural Gas	0	0.000	0.0
Fuel Oil	0	0.000	0.0
Propane	0	0.000	0.0
Remote Hot Water	0	0.000	0.0
Remote Steam	0	0.000	0.0
Non-HVAC Sub-Total	0	0.000	0.0
Grand Total	15,344	0.278	100.0

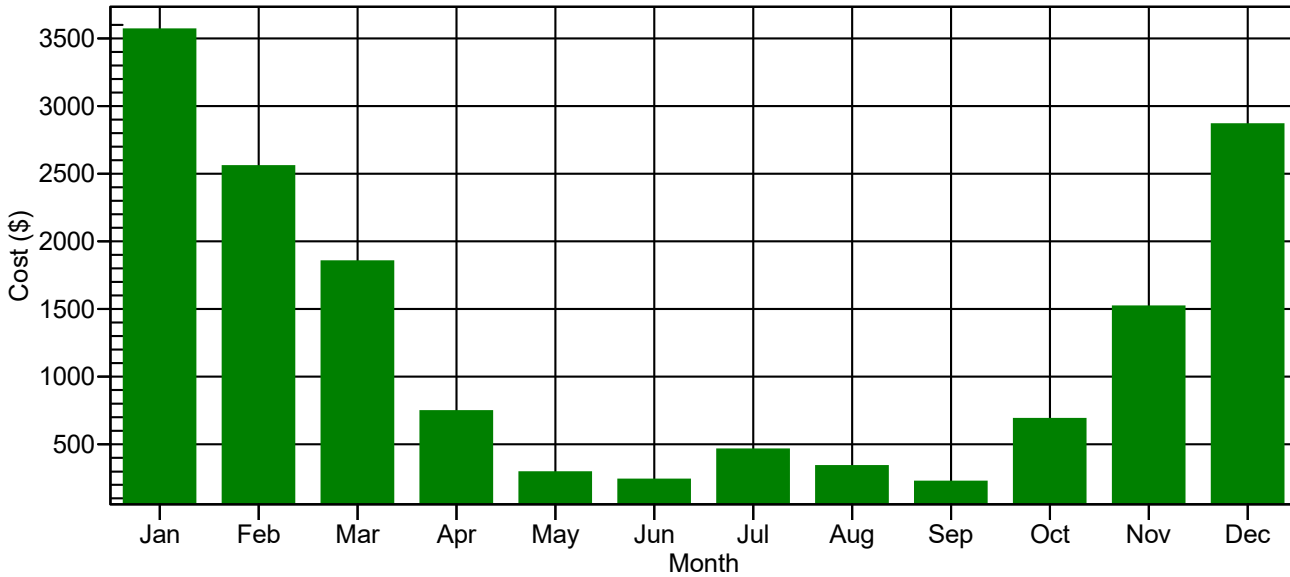
Note: Cost per unit floor area is based on the gross building floor area.

Gross Floor Area **55,268.7** sqft
Modeled Floor Area **55,268.7** sqft

Monthly Energy Costs - b) Alternative CPT

Project: 26909 APH 58 Log, rue Laniel à Salaberry-de-Valleyf...
Prepared by: Le Groupe CMI Experts-Conseils inc.

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1. HVAC Costs

Month	Electric (\$)	Natural Gas (\$)	Fuel Oil (\$)	Propane (\$)	Remote Hot Water (\$)	Remote Steam (\$)	Remote Chilled Water (\$)
January	3,567	0	0	0	0	0	0
February	2,556	0	0	0	0	0	0
March	1,852	0	0	0	0	0	0
April	744	0	0	0	0	0	0
May	293	0	0	0	0	0	0
June	238	0	0	0	0	0	0
July	461	0	0	0	0	0	0
August	338	0	0	0	0	0	0
September	223	0	0	0	0	0	0
October	687	0	0	0	0	0	0
November	1,518	0	0	0	0	0	0
December	2,865	0	0	0	0	0	0
Total	15,344	0	0	0	0	0	0

2. Non-HVAC Costs

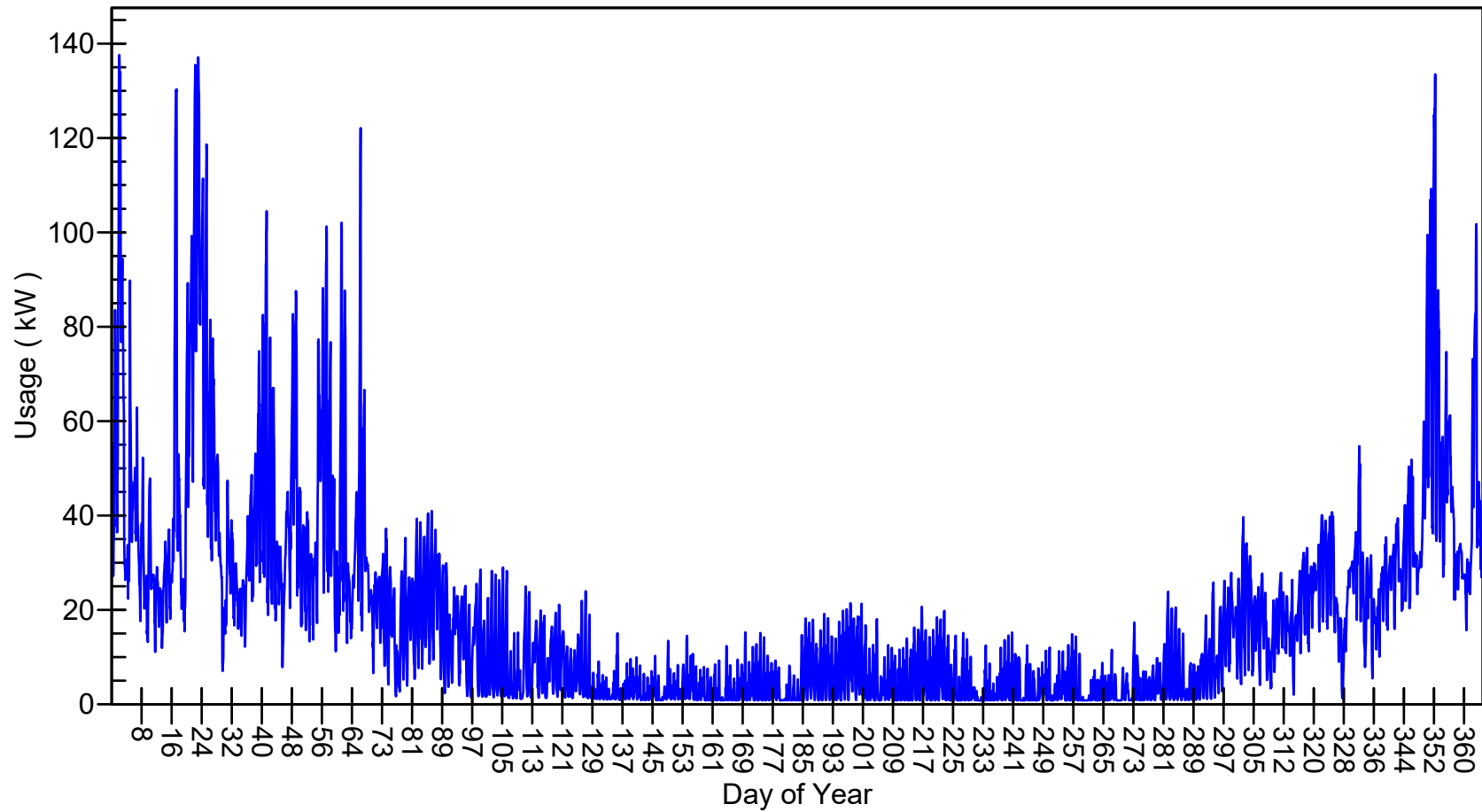
Month	Electric (\$)	Natural Gas (\$)	Fuel Oil (\$)	Propane (\$)	Remote Hot Water (\$)	Remote Steam (\$)
January	0	0	0	0	0	0
February	0	0	0	0	0	0
March	0	0	0	0	0	0
April	0	0	0	0	0	0
May	0	0	0	0	0	0
June	0	0	0	0	0	0
July	0	0	0	0	0	0
August	0	0	0	0	0	0
September	0	0	0	0	0	0
October	0	0	0	0	0	0
November	0	0	0	0	0	0
December	0	0	0	0	0	0
Total	0	0	0	0	0	0

Use Profiles - Electric - b) Alternative CPT

Project: 26909 APH 58 Log, rue Laniel à Salaberry-de-Valleyf...
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02-02-2026
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Electric Use Profiles - Sunday, January 1 (day 1) thru Sunday, December 31 (day 365)



Monthly Simulation Results for 01 2E #11 à #15 REF

(In Alternative: a) Alternative REF)

Project: 26909 APH 58 Log, rue Laniel à Salaberry-de-Valleyfield

02-02-2026

Prepared by: Le Groupe CMI Experts-Conseils inc.

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Air System Simulation Results (Table 1) :

Month	Central Cooling Coil Load (kBTU)	Central Unit Clg Input (kWh)	Central Heating Coil Load (kBTU)	Central Unit Htg Input (kWh)	Central Unit Aux. Htg. Load (kBTU)	Central Unit Aux. Htg. Input (kWh)	Supply Fan (kWh)
January	0	0	5455	564	12790	3748	0
February	0	0	5119	546	10264	3008	0
March	0	0	8475	897	4403	1290	0
April	9	1	6431	626	0	0	0
May	325	28	1919	172	0	0	0
June	1102	90	432	39	0	0	0
July	5419	438	46	4	0	0	0
August	2948	245	106	9	0	0	0
September	504	42	963	87	0	0	0
October	8	1	5636	534	224	66	0
November	0	0	9770	988	1490	437	0
December	0	0	7961	841	8806	2581	0
Total	10316	844	52314	5309	37977	11130	0

Air System Simulation Results (Table 2) :

Month	Air-to-Air Energy Recovery (kWh)	Lighting (kWh)	Electric Equipment (kWh)
January	0	0	0
February	0	0	0
March	0	0	0
April	0	0	0
May	0	0	0
June	0	0	0
July	0	0	0
August	0	0	0
September	0	0	0
October	0	0	0
November	0	0	0
December	0	0	0
Total	0	0	0

Monthly Simulation Results for 03 2E #16 à #22 REF

(In Alternative: a) Alternative REF)

Project: 26909 APH 58 Log, rue Laniel à Salaberry-de-Valleyf...

02-02-2026

Prepared by: Le Groupe CMI Experts-Conseils inc.

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Air System Simulation Results (Table 1) :

Month	Central Cooling Coil Load (kBTU)	Central Unit Clg Input (kWh)	Central Heating Coil Load (kBTU)	Central Unit Htg Input (kWh)	Central Unit Aux. Htg. Load (kBTU)	Central Unit Aux. Htg. Input (kWh)	Supply Fan (kWh)
January	0	0	10509	1067	23942	7017	0
February	0	0	9841	1029	18865	5529	0
March	0	0	16278	1691	7900	2315	0
April	0	0	11502	1106	0	0	0
May	224	21	3680	327	0	0	0
June	1082	87	911	81	0	0	0
July	8813	699	144	13	0	0	0
August	5504	441	264	23	0	0	0
September	1034	84	1826	163	0	0	0
October	2	0	10296	968	426	125	0
November	0	0	18178	1812	2663	780	0
December	0	0	15139	1567	16429	4815	0
Total	16659	1332	98567	9848	70225	20581	0

Air System Simulation Results (Table 2) :

Month	Air-to-Air Energy Recovery (kWh)	Lighting (kWh)	Electric Equipment (kWh)
January	0	0	0
February	0	0	0
March	0	0	0
April	0	0	0
May	0	0	0
June	0	0	0
July	0	0	0
August	0	0	0
September	0	0	0
October	0	0	0
November	0	0	0
December	0	0	0
Total	0	0	0

Monthly Simulation Results for 05 3E #11 à #15 REF

(In Alternative: a) Alternative REF)

Project: 26909 APH 58 Log, rue Laniel à Salaberry-de-Valleyf...

02-02-2026

Prepared by: Le Groupe CMI Experts-Conseils inc.

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Air System Simulation Results (Table 1) :

Month	Central Cooling Coil Load (kBTU)	Central Unit Clg Input (kWh)	Central Heating Coil Load (kBTU)	Central Unit Htg Input (kWh)	Central Unit Aux. Htg. Load (kBTU)	Central Unit Aux. Htg. Input (kWh)	Supply Fan (kWh)
January	0	0	5468	566	12811	3754	0
February	0	0	5130	547	10283	3014	0
March	0	0	8489	898	4410	1292	0
April	10	1	6408	624	0	0	0
May	352	30	1847	166	0	0	0
June	1209	98	394	36	0	0	0
July	5597	452	41	4	0	0	0
August	3064	254	90	8	0	0	0
September	543	45	913	82	0	0	0
October	9	1	5614	533	225	66	0
November	0	0	9793	991	1494	438	0
December	0	0	7981	843	8824	2586	0
Total	10784	881	52167	5298	38046	11150	0

Air System Simulation Results (Table 2) :

Month	Air-to-Air Energy Recovery (kWh)	Lighting (kWh)	Electric Equipment (kWh)
January	0	0	0
February	0	0	0
March	0	0	0
April	0	0	0
May	0	0	0
June	0	0	0
July	0	0	0
August	0	0	0
September	0	0	0
October	0	0	0
November	0	0	0
December	0	0	0
Total	0	0	0

Monthly Simulation Results for 07 3E #16 à #22 REF

(In Alternative: a) Alternative REF)

Project: 26909 APH 58 Log, rue Laniel à Salaberry-de-Valleyf...

02-02-2026

Prepared by: Le Groupe CMI Experts-Conseils inc.

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Air System Simulation Results (Table 1) :

Month	Central Cooling Coil Load (kBTU)	Central Unit Clg Input (kWh)	Central Heating Coil Load (kBTU)	Central Unit Htg Input (kWh)	Central Unit Aux. Htg. Load (kBTU)	Central Unit Aux. Htg. Input (kWh)	Supply Fan (kWh)
January	0	0	9976	1015	22929	6720	0
February	0	0	9365	982	18058	5292	0
March	0	0	15446	1608	7577	2221	0
April	0	0	10878	1048	0	0	0
May	203	19	3298	294	0	0	0
June	1105	89	744	66	0	0	0
July	8835	701	99	9	0	0	0
August	5480	439	185	16	0	0	0
September	992	81	1575	141	0	0	0
October	0	0	9740	918	413	121	0
November	0	0	17351	1733	2555	749	0
December	0	0	14453	1500	15729	4610	0
Total	16616	1329	93110	9331	67260	19712	0

Air System Simulation Results (Table 2) :

Month	Air-to-Air Energy Recovery (kWh)	Lighting (kWh)	Electric Equipment (kWh)
January	0	0	0
February	0	0	0
March	0	0	0
April	0	0	0
May	0	0	0
June	0	0	0
July	0	0	0
August	0	0	0
September	0	0	0
October	0	0	0
November	0	0	0
December	0	0	0
Total	0	0	0

Monthly Simulation Results for 09 4E #11 à #15 REF

(In Alternative: a) Alternative REF)

Project: 26909 APH 58 Log, rue Laniel à Salaberry-de-Valleyf...

02-02-2026

Prepared by: Le Groupe CMI Experts-Conseils inc.

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Air System Simulation Results (Table 1) :

Month	Central Cooling Coil Load (kBTU)	Central Unit Clg Input (kWh)	Central Heating Coil Load (kBTU)	Central Unit Htg Input (kWh)	Central Unit Aux. Htg. Load (kBTU)	Central Unit Aux. Htg. Input (kWh)	Supply Fan (kWh)
January	0	0	6473	666	14996	4395	0
February	0	0	6041	641	12049	3531	0
March	0	0	9921	1046	5187	1520	0
April	37	3	7606	740	0	0	0
May	711	59	2444	219	0	0	0
June	1840	148	644	57	0	0	0
July	6839	548	131	12	0	0	0
August	3952	325	228	20	0	0	0
September	892	74	1372	122	0	0	0
October	37	3	6809	643	264	77	0
November	0	0	11573	1166	1761	516	0
December	0	0	9424	990	10348	3033	0
Total	14310	1160	62666	6323	44604	13072	0

Air System Simulation Results (Table 2) :

Month	Air-to-Air Energy Recovery (kWh)	Lighting (kWh)	Electric Equipment (kWh)
January	0	0	0
February	0	0	0
March	0	0	0
April	0	0	0
May	0	0	0
June	0	0	0
July	0	0	0
August	0	0	0
September	0	0	0
October	0	0	0
November	0	0	0
December	0	0	0
Total	0	0	0

Monthly Simulation Results for 11 4E #16 REF

(In Alternative: a) Alternative REF)

Project: 26909 APH 58 Log, rue Laniel à Salaberry-de-Valleyf...

02-02-2026

Prepared by: Le Groupe CMI Experts-Conseils inc.

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Air System Simulation Results (Table 1) :

Month	Central Cooling Coil Load (kBTU)	Central Unit Clg Input (kWh)	Central Heating Coil Load (kBTU)	Central Unit Htg Input (kWh)	Central Unit Aux. Htg. Load (kBTU)	Central Unit Aux. Htg. Input (kWh)	Supply Fan (kWh)
January	0	0	1406	143	3278	961	0
February	0	0	1329	139	2660	780	0
March	0	0	2306	239	1151	337	0
April	0	0	1768	169	0	0	0
May	29	3	554	49	0	0	0
June	117	10	138	12	0	0	0
July	1009	81	29	3	0	0	0
August	516	43	54	5	0	0	0
September	64	5	338	30	0	0	0
October	0	0	1548	144	58	17	0
November	0	0	2532	252	383	112	0
December	0	0	2050	212	2251	660	0
Total	1735	142	14053	1397	9781	2866	0

Air System Simulation Results (Table 2) :

Month	Air-to-Air Energy Recovery (kWh)	Lighting (kWh)	Electric Equipment (kWh)
January	0	0	0
February	0	0	0
March	0	0	0
April	0	0	0
May	0	0	0
June	0	0	0
July	0	0	0
August	0	0	0
September	0	0	0
October	0	0	0
November	0	0	0
December	0	0	0
Total	0	0	0

Monthly Simulation Results for 13 4E #17 REF

(In Alternative: a) Alternative REF)

Project: 26909 APH 58 Log, rue Laniel à Salaberry-de-Valleyf...

02-02-2026

Prepared by: Le Groupe CMI Experts-Conseils inc.

6:03 PM

Air System Simulation Results (Table 1) :

Month	Central Cooling Coil Load (kBTU)	Central Unit Clg Input (kWh)	Central Heating Coil Load (kBTU)	Central Unit Htg Input (kWh)	Central Unit Aux. Htg. Load (kBTU)	Central Unit Aux. Htg. Input (kWh)	Supply Fan (kWh)
January	0	0	1949	195	4672	1369	0
February	0	0	1788	184	3764	1103	0
March	0	0	3109	318	1596	468	0
April	0	0	2238	213	6	2	0
May	69	6	710	63	0	0	0
June	275	22	185	16	0	0	0
July	1666	132	41	4	0	0	0
August	989	79	65	6	0	0	0
September	174	14	404	36	0	0	0
October	0	0	2041	189	98	29	0
November	0	0	3468	340	578	169	0
December	0	0	2785	283	3285	963	0
Total	3173	254	18783	1848	13998	4102	0

Air System Simulation Results (Table 2) :

Month	Air-to-Air Energy Recovery (kWh)	Lighting (kWh)	Electric Equipment (kWh)
January	0	0	0
February	0	0	0
March	0	0	0
April	0	0	0
May	0	0	0
June	0	0	0
July	0	0	0
August	0	0	0
September	0	0	0
October	0	0	0
November	0	0	0
December	0	0	0
Total	0	0	0

Monthly Simulation Results for 15 4E #18 REF

(In Alternative: a) Alternative REF)

Project: 26909 APH 58 Log, rue Laniel à Salaberry-de-Valleyf...

02-02-2026

Prepared by: Le Groupe CMI Experts-Conseils inc.

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Air System Simulation Results (Table 1) :

Month	Central Cooling Coil Load (kBTU)	Central Unit Clg Input (kWh)	Central Heating Coil Load (kBTU)	Central Unit Htg Input (kWh)	Central Unit Aux. Htg. Load (kBTU)	Central Unit Aux. Htg. Input (kWh)	Supply Fan (kWh)
January	0	0	1201	123	2723	798	0
February	0	0	1125	119	2147	629	0
March	0	0	1854	194	883	259	0
April	0	0	1277	123	0	0	0
May	40	4	391	35	0	0	0
June	180	15	94	8	0	0	0
July	1202	96	15	1	0	0	0
August	730	59	26	2	0	0	0
September	119	10	205	18	0	0	0
October	0	0	1196	113	48	14	0
November	0	0	2100	210	305	89	0
December	0	0	1732	181	1876	550	0
Total	2270	183	11217	1127	7983	2340	0

Air System Simulation Results (Table 2) :

Month	Air-to-Air Energy Recovery (kWh)	Lighting (kWh)	Electric Equipment (kWh)
January	0	0	0
February	0	0	0
March	0	0	0
April	0	0	0
May	0	0	0
June	0	0	0
July	0	0	0
August	0	0	0
September	0	0	0
October	0	0	0
November	0	0	0
December	0	0	0
Total	0	0	0

Monthly Simulation Results for 17 4E #19 REF

(In Alternative: a) Alternative REF)

Project: 26909 APH 58 Log, rue Laniel à Salaberry-de-Valleyf...

02-02-2026

Prepared by: Le Groupe CMI Experts-Conseils inc.

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Air System Simulation Results (Table 1) :

Month	Central Cooling Coil Load (kBTU)	Central Unit Clg Input (kWh)	Central Heating Coil Load (kBTU)	Central Unit Htg Input (kWh)	Central Unit Aux. Htg. Load (kBTU)	Central Unit Aux. Htg. Input (kWh)	Supply Fan (kWh)
January	0	0	1290	132	2913	854	0
February	0	0	1204	127	2289	671	0
March	0	0	1969	206	938	275	0
April	0	0	1346	130	0	0	0
May	44	4	409	37	0	0	0
June	203	16	96	9	0	0	0
July	1301	103	15	1	0	0	0
August	802	64	25	2	0	0	0
September	137	11	209	19	0	0	0
October	0	0	1265	119	52	15	0
November	0	0	2244	225	325	95	0
December	0	0	1858	194	2007	588	0
Total	2487	199	11929	1200	8525	2498	0

Air System Simulation Results (Table 2) :

Month	Air-to-Air Energy Recovery (kWh)	Lighting (kWh)	Electric Equipment (kWh)
January	0	0	0
February	0	0	0
March	0	0	0
April	0	0	0
May	0	0	0
June	0	0	0
July	0	0	0
August	0	0	0
September	0	0	0
October	0	0	0
November	0	0	0
December	0	0	0
Total	0	0	0

Monthly Simulation Results for 19 4E #20 REF

(In Alternative: a) Alternative REF)

Project: 26909 APH 58 Log, rue Laniel à Salaberry-de-Valleyf...

02-02-2026

Prepared by: Le Groupe CMI Experts-Conseils inc.

6:03 PM

Air System Simulation Results (Table 1) :

Month	Central Cooling Coil Load (kBTU)	Central Unit Clg Input (kWh)	Central Heating Coil Load (kBTU)	Central Unit Htg Input (kWh)	Central Unit Aux. Htg. Load (kBTU)	Central Unit Aux. Htg. Input (kWh)	Supply Fan (kWh)
January	0	0	1350	137	3045	892	0
February	0	0	1261	132	2395	702	0
March	0	0	2071	216	990	290	0
April	0	0	1434	138	0	0	0
May	48	4	445	40	0	0	0
June	208	17	108	10	0	0	0
July	1330	106	19	2	0	0	0
August	827	66	30	3	0	0	0
September	153	12	228	20	0	0	0
October	0	0	1328	125	55	16	0
November	0	0	2340	234	338	99	0
December	0	0	1943	202	2092	613	0
Total	2566	206	12558	1258	8916	2613	0

Air System Simulation Results (Table 2) :

Month	Air-to-Air Energy Recovery (kWh)	Lighting (kWh)	Electric Equipment (kWh)
January	0	0	0
February	0	0	0
March	0	0	0
April	0	0	0
May	0	0	0
June	0	0	0
July	0	0	0
August	0	0	0
September	0	0	0
October	0	0	0
November	0	0	0
December	0	0	0
Total	0	0	0

Monthly Simulation Results for 21 4E #21 REF

(In Alternative: a) Alternative REF)

Project: 26909 APH 58 Log, rue Laniel à Salaberry-de-Valleyf...

02-02-2026

Prepared by: Le Groupe CMI Experts-Conseils inc.

6:03 PM

Air System Simulation Results (Table 1) :

Month	Central Cooling Coil Load (kBTU)	Central Unit Clg Input (kWh)	Central Heating Coil Load (kBTU)	Central Unit Htg Input (kWh)	Central Unit Aux. Htg. Load (kBTU)	Central Unit Aux. Htg. Input (kWh)	Supply Fan (kWh)
January	0	0	1284	131	2898	849	0
February	0	0	1197	126	2274	666	0
March	0	0	1954	205	932	273	0
April	0	0	1332	129	0	0	0
May	47	4	399	36	0	0	0
June	216	17	92	8	0	0	0
July	1324	105	15	1	0	0	0
August	814	65	25	2	0	0	0
September	143	12	207	18	0	0	0
October	0	0	1253	118	51	15	0
November	0	0	2231	224	323	95	0
December	0	0	1849	193	1997	585	0
Total	2544	204	11838	1193	8475	2484	0

Air System Simulation Results (Table 2) :

Month	Air-to-Air Energy Recovery (kWh)	Lighting (kWh)	Electric Equipment (kWh)
January	0	0	0
February	0	0	0
March	0	0	0
April	0	0	0
May	0	0	0
June	0	0	0
July	0	0	0
August	0	0	0
September	0	0	0
October	0	0	0
November	0	0	0
December	0	0	0
Total	0	0	0

Monthly Simulation Results for 23 4E #22 REF

(In Alternative: a) Alternative REF)

Project: 26909 APH 58 Log, rue Laniel à Salaberry-de-Valleyf...

02-02-2026

Prepared by: Le Groupe CMI Experts-Conseils inc.

6:03 PM

Air System Simulation Results (Table 1) :

Month	Central Cooling Coil Load (kBTU)	Central Unit Clg Input (kWh)	Central Heating Coil Load (kBTU)	Central Unit Htg Input (kWh)	Central Unit Aux. Htg. Load (kBTU)	Central Unit Aux. Htg. Input (kWh)	Supply Fan (kWh)
January	0	0	1942	194	4663	1366	0
February	0	0	1731	179	3703	1085	0
March	0	0	2850	292	1631	478	0
April	10	1	2167	207	15	4	0
May	192	16	711	63	0	0	0
June	526	42	189	17	0	0	0
July	2254	176	42	4	0	0	0
August	1596	126	62	5	0	0	0
September	606	48	367	33	0	0	0
October	82	7	1896	177	111	32	0
November	0	0	3362	330	612	179	0
December	0	0	2728	278	3353	983	0
Total	5265	416	18047	1778	14087	4129	0

Air System Simulation Results (Table 2) :

Month	Air-to-Air Energy Recovery (kWh)	Lighting (kWh)	Electric Equipment (kWh)
January	0	0	0
February	0	0	0
March	0	0	0
April	0	0	0
May	0	0	0
June	0	0	0
July	0	0	0
August	0	0	0
September	0	0	0
October	0	0	0
November	0	0	0
December	0	0	0
Total	0	0	0

Monthly Simulation Results for 25 4E ESC1 REF

(In Alternative: a) Alternative REF)

Project: 26909 APH 58 Log, rue Laniel à Salaberry-de-Valleyf...

02-02-2026

Prepared by: Le Groupe CMI Experts-Conseils inc.

6:03 PM

Air System Simulation Results (Table 1) :

Month	Central Heating Coil Load (kBTU)	Central Heating Coil Input (kWh)	Supply Fan (kWh)	Lighting (kWh)	Electric Equipment (kWh)
January	1812	531	59	0	0
February	1544	453	54	0	0
March	1339	392	59	0	0
April	677	198	58	0	0
May	184	54	59	0	0
June	41	12	58	0	0
July	5	2	59	0	0
August	9	3	59	0	0
September	103	30	58	0	0
October	598	175	59	0	0
November	1124	330	58	0	0
December	1661	487	59	0	0
Total	9097	2666	700	0	0

Monthly Simulation Results for 27 4E ESC2 REF

(In Alternative: a) Alternative REF)

Project: 26909 APH 58 Log, rue Laniel à Salaberry-de-Valleyf...

02-02-2026

Prepared by: Le Groupe CMI Experts-Conseils inc.

6:03 PM

Air System Simulation Results (Table 1) :

Month	Central Heating Coil Load (kBTU)	Central Heating Coil Input (kWh)	Supply Fan (kWh)	Lighting (kWh)	Electric Equipment (kWh)
January	1778	521	68	0	0
February	1438	421	62	0	0
March	1164	341	68	0	0
April	576	169	66	0	0
May	161	47	68	0	0
June	38	11	66	0	0
July	7	2	68	0	0
August	9	3	68	0	0
September	81	24	66	0	0
October	494	145	68	0	0
November	1064	312	66	0	0
December	1650	484	68	0	0
Total	8459	2479	804	0	0

Monthly Simulation Results for 29 RDC #1 à #5 REF

(In Alternative: a) Alternative REF)

Project: 26909 APH 58 Log, rue Laniel à Salaberry-de-Valleyf...

02-02-2026

Prepared by: Le Groupe CMI Experts-Conseils inc.

6:03 PM

Air System Simulation Results (Table 1) :

Month	Central Cooling Coil Load (kBTU)	Central Unit Clg Input (kWh)	Central Heating Coil Load (kBTU)	Central Unit Htg Input (kWh)	Central Unit Aux. Htg. Load (kBTU)	Central Unit Aux. Htg. Input (kWh)	Supply Fan (kWh)
January	0	0	5509	569	12841	3763	0
February	0	0	5179	551	10327	3026	0
March	0	0	8641	912	4444	1302	0
April	4	0	6747	654	0	0	0
May	229	20	2308	205	0	0	0
June	756	62	648	57	0	0	0
July	4144	338	92	8	0	0	0
August	2256	189	187	16	0	0	0
September	367	31	1199	107	0	0	0
October	5	0	5858	553	225	66	0
November	0	0	9835	993	1493	438	0
December	0	0	7995	843	8807	2581	0
Total	7761	641	54198	5469	38137	11177	0

Air System Simulation Results (Table 2) :

Month	Air-to-Air Energy Recovery (kWh)	Lighting (kWh)	Electric Equipment (kWh)
January	0	0	0
February	0	0	0
March	0	0	0
April	0	0	0
May	0	0	0
June	0	0	0
July	0	0	0
August	0	0	0
September	0	0	0
October	0	0	0
November	0	0	0
December	0	0	0
Total	0	0	0

Monthly Simulation Results for 31 RDC #10 REF

(In Alternative: a) Alternative REF)

Project: 26909 APH 58 Log, rue Laniel à Salaberry-de-Valleyf...

02-02-2026

Prepared by: Le Groupe CMI Experts-Conseils inc.

6:03 PM

Air System Simulation Results (Table 1) :

Month	Central Cooling Coil Load (kBTU)	Central Unit Clg Input (kWh)	Central Heating Coil Load (kBTU)	Central Unit Htg Input (kWh)	Central Unit Aux. Htg. Load (kBTU)	Central Unit Aux. Htg. Input (kWh)	Supply Fan (kWh)
January	0	0	1740	175	4057	1189	0
February	0	0	1637	170	3257	955	0
March	0	0	2814	290	1434	420	0
April	0	0	2229	212	0	0	0
May	15	1	859	76	0	0	0
June	20	2	283	25	0	0	0
July	746	61	56	5	0	0	0
August	456	38	81	7	0	0	0
September	82	7	398	35	0	0	0
October	1	0	1791	167	77	22	0
November	0	0	3038	301	466	136	0
December	0	0	2507	257	2775	813	0
Total	1318	109	17432	1720	12065	3536	0

Air System Simulation Results (Table 2) :

Month	Air-to-Air Energy Recovery (kWh)	Lighting (kWh)	Electric Equipment (kWh)
January	0	0	0
February	0	0	0
March	0	0	0
April	0	0	0
May	0	0	0
June	0	0	0
July	0	0	0
August	0	0	0
September	0	0	0
October	0	0	0
November	0	0	0
December	0	0	0
Total	0	0	0

Monthly Simulation Results for 33 RDC #6 REF

(In Alternative: a) Alternative REF)

Project: 26909 APH 58 Log, rue Laniel à Salaberry-de-Valleyf...

02-02-2026

Prepared by: Le Groupe CMI Experts-Conseils inc.

6:03 PM

Air System Simulation Results (Table 1) :

Month	Central Cooling Coil Load (kBTU)	Central Unit Clg Input (kWh)	Central Heating Coil Load (kBTU)	Central Unit Htg Input (kWh)	Central Unit Aux. Htg. Load (kBTU)	Central Unit Aux. Htg. Input (kWh)	Supply Fan (kWh)
January	0	0	1142	116	2673	783	0
February	0	0	1090	114	2180	639	0
March	0	0	1939	200	945	277	0
April	0	0	1540	145	0	0	0
May	1	0	536	47	0	0	0
June	0	0	149	13	0	0	0
July	359	29	23	2	0	0	0
August	128	11	45	4	0	0	0
September	1	0	293	26	0	0	0
October	0	0	1289	119	47	14	0
November	0	0	2055	204	309	91	0
December	0	0	1656	171	1824	535	0
Total	490	41	11758	1159	7979	2338	0

Air System Simulation Results (Table 2) :

Month	Air-to-Air Energy Recovery (kWh)	Lighting (kWh)	Electric Equipment (kWh)
January	0	0	0
February	0	0	0
March	0	0	0
April	0	0	0
May	0	0	0
June	0	0	0
July	0	0	0
August	0	0	0
September	0	0	0
October	0	0	0
November	0	0	0
December	0	0	0
Total	0	0	0

Monthly Simulation Results for 35 RDC #7 REF

(In Alternative: a) Alternative REF)

Project: 26909 APH 58 Log, rue Laniel à Salaberry-de-Valleyf...

02-02-2026

Prepared by: Le Groupe CMI Experts-Conseils inc.

6:03 PM

Air System Simulation Results (Table 1) :

Month	Central Cooling Coil Load (kBTU)	Central Unit Clg Input (kWh)	Central Heating Coil Load (kBTU)	Central Unit Htg Input (kWh)	Central Unit Aux. Htg. Load (kBTU)	Central Unit Aux. Htg. Input (kWh)	Supply Fan (kWh)
January	0	0	1745	176	4072	1194	0
February	0	0	1637	170	3247	952	0
March	0	0	2812	289	1362	399	0
April	0	0	2045	195	0	0	0
May	16	2	720	63	0	0	0
June	47	4	211	19	0	0	0
July	975	78	40	4	0	0	0
August	548	44	66	6	0	0	0
September	52	4	385	34	0	0	0
October	0	0	1825	170	75	22	0
November	0	0	3068	303	462	136	0
December	0	0	2518	258	2788	817	0
Total	1638	132	17074	1686	12008	3519	0

Air System Simulation Results (Table 2) :

Month	Air-to-Air Energy Recovery (kWh)	Lighting (kWh)	Electric Equipment (kWh)
January	0	0	0
February	0	0	0
March	0	0	0
April	0	0	0
May	0	0	0
June	0	0	0
July	0	0	0
August	0	0	0
September	0	0	0
October	0	0	0
November	0	0	0
December	0	0	0
Total	0	0	0

Monthly Simulation Results for 37 RDC #8 REF

(In Alternative: a) Alternative REF)

Project: 26909 APH 58 Log, rue Laniel à Salaberry-de-Valleyf...

02-02-2026

Prepared by: Le Groupe CMI Experts-Conseils inc.

6:03 PM

Air System Simulation Results (Table 1) :

Month	Central Cooling Coil Load (kBTU)	Central Unit Clg Input (kWh)	Central Heating Coil Load (kBTU)	Central Unit Htg Input (kWh)	Central Unit Aux. Htg. Load (kBTU)	Central Unit Aux. Htg. Input (kWh)	Supply Fan (kWh)
January	0	0	1025	106	2330	683	0
February	0	0	968	103	1834	538	0
March	0	0	1628	172	749	220	0
April	0	0	1161	112	0	0	0
May	6	1	399	35	0	0	0
June	24	2	107	9	0	0	0
July	624	50	13	1	0	0	0
August	359	29	25	2	0	0	0
September	29	2	193	17	0	0	0
October	0	0	1039	98	41	12	0
November	0	0	1784	180	256	75	0
December	0	0	1471	156	1594	467	0
Total	1042	83	9813	993	6804	1994	0

Air System Simulation Results (Table 2) :

Month	Air-to-Air Energy Recovery (kWh)	Lighting (kWh)	Electric Equipment (kWh)
January	0	0	0
February	0	0	0
March	0	0	0
April	0	0	0
May	0	0	0
June	0	0	0
July	0	0	0
August	0	0	0
September	0	0	0
October	0	0	0
November	0	0	0
December	0	0	0
Total	0	0	0

Monthly Simulation Results for 39 RDC #9 REF

(In Alternative: a) Alternative REF)

Project: 26909 APH 58 Log, rue Laniel à Salaberry-de-Valleyf...

02-02-2026

Prepared by: Le Groupe CMI Experts-Conseils inc.

6:03 PM

Air System Simulation Results (Table 1) :

Month	Central Cooling Coil Load (kBTU)	Central Unit Clg Input (kWh)	Central Heating Coil Load (kBTU)	Central Unit Htg Input (kWh)	Central Unit Aux. Htg. Load (kBTU)	Central Unit Aux. Htg. Input (kWh)	Supply Fan (kWh)
January	0	0	1963	196	4318	1266	0
February	0	0	1801	185	3476	1019	0
March	0	0	3124	318	1439	422	0
April	0	0	2293	216	1	0	0
May	5	0	812	71	0	0	0
June	41	3	199	18	0	0	0
July	1035	82	17	2	0	0	0
August	665	53	27	2	0	0	0
September	76	6	275	25	0	0	0
October	0	0	1705	160	73	21	0
November	0	0	3132	310	462	135	0
December	0	0	2640	270	2886	846	0
Total	1822	144	17988	1774	12654	3709	0

Air System Simulation Results (Table 2) :

Month	Air-to-Air Energy Recovery (kWh)	Lighting (kWh)	Electric Equipment (kWh)
January	0	0	0
February	0	0	0
March	0	0	0
April	0	0	0
May	0	0	0
June	0	0	0
July	0	0	0
August	0	0	0
September	0	0	0
October	0	0	0
November	0	0	0
December	0	0	0
Total	0	0	0

Monthly Simulation Results for 41 RDC ESC1 REF

(In Alternative: a) Alternative REF)

Project: 26909 APH 58 Log, rue Laniel à Salaberry-de-Valleyf...

02-02-2026

Prepared by: Le Groupe CMI Experts-Conseils inc.

6:03 PM

Air System Simulation Results (Table 1) :

Month	Central Heating Coil Load (kBTU)	Central Heating Coil Input (kWh)	Supply Fan (kWh)	Lighting (kWh)	Electric Equipment (kWh)
January	1670	489	54	0	0
February	1422	417	49	0	0
March	1234	362	54	0	0
April	628	184	53	0	0
May	176	51	54	0	0
June	39	11	53	0	0
July	4	1	54	0	0
August	8	2	54	0	0
September	97	28	53	0	0
October	550	161	54	0	0
November	1032	302	53	0	0
December	1527	447	54	0	0
Total	8386	2458	640	0	0

Monthly Simulation Results for 43 RDC ESC2 REF

(In Alternative: a) Alternative REF)

Project: 26909 APH 58 Log, rue Laniel à Salaberry-de-Valleyf...

02-02-2026

Prepared by: Le Groupe CMI Experts-Conseils inc.

6:03 PM

Air System Simulation Results (Table 1) :

Month	Central Heating Coil Load (kBTU)	Central Heating Coil Input (kWh)	Supply Fan (kWh)	Lighting (kWh)	Electric Equipment (kWh)
January	1583	464	60	0	0
February	1280	375	55	0	0
March	1040	305	60	0	0
April	520	152	58	0	0
May	154	45	60	0	0
June	38	11	58	0	0
July	6	2	60	0	0
August	8	2	60	0	0
September	72	21	58	0	0
October	438	128	60	0	0
November	940	275	59	0	0
December	1463	429	60	0	0
Total	7543	2211	711	0	0

Monthly Simulation Results for 45 RDC Salle Communautaire REF

(In Alternative: a) Alternative REF)

Project: 26909 APH 58 Log, rue Laniel à Salaberry-de-Valleyf...

02-02-2026

Prepared by: Le Groupe CMI Experts-Conseils inc.

6:03 PM

Air System Simulation Results (Table 1) :

Month	Central Cooling Coil Load (kBTU)	Central Unit Clg Input (kWh)	Central Heating Coil Load (kBTU)	Central Unit Htg Input (kWh)	Central Unit Aux. Htg. Load (kBTU)	Central Unit Aux. Htg. Input (kWh)	Supply Fan (kWh)
January	0	0	764	73	1727	506	0
February	0	0	729	71	1392	408	0
March	0	0	1274	123	593	174	0
April	0	0	998	90	0	0	0
May	5	1	405	34	0	0	0
June	2	0	141	12	0	0	0
July	320	25	33	3	0	0	0
August	176	14	43	4	0	0	0
September	14	1	189	16	0	0	0
October	0	0	798	71	30	9	0
November	0	0	1322	124	193	57	0
December	0	0	1084	105	1173	344	0
Total	516	42	7781	723	5108	1497	0

Air System Simulation Results (Table 2) :

Month	Air-to-Air Energy Recovery (kWh)	Lighting (kWh)	Electric Equipment (kWh)
January	0	0	0
February	0	0	0
March	0	0	0
April	0	0	0
May	0	0	0
June	0	0	0
July	0	0	0
August	0	0	0
September	0	0	0
October	0	0	0
November	0	0	0
December	0	0	0
Total	0	0	0

Monthly Simulation Results for 47 SS Garage REF

(In Alternative: a) Alternative REF)

Project: 26909 APH 58 Log, rue Laniel à Salaberry-de-Valleyf...

02-02-2026

Prepared by: Le Groupe CMI Experts-Conseils inc.

6:03 PM

Air System Simulation Results (Table 1) :

Month	Central Heating Coil Load (kBTU)	Central Heating Coil Input (kWh)	Supply Fan (kWh)	Lighting (kWh)	Electric Equipment (kWh)
January	9105	2669	385	0	0
February	8030	2353	348	0	0
March	8194	2401	385	0	0
April	6025	1766	373	0	0
May	3851	1129	385	0	0
June	1486	435	373	0	0
July	168	49	385	0	0
August	0	0	385	0	0
September	195	57	373	0	0
October	2288	671	385	0	0
November	4380	1284	373	0	0
December	6372	1868	385	0	0
Total	50095	14681	4534	0	0

Monthly Simulation Results for 49 Couloir REF

(In Alternative: a) Alternative REF)

Project: 26909 APH 58 Log, rue Laniel à Salaberry-de-Valleyf...

02-02-2026

Prepared by: Le Groupe CMI Experts-Conseils inc.

6:03 PM

Air System Simulation Results (Table 1) :

Month	Preheat Coil Load (kBTU)	Preheat Coil Input (kWh)	Central Cooling Coil Load (kBTU)	Central Unit Clg Input (kWh)	Terminal Heating Coil Load (kBTU)	Terminal Heating Coil Input (kWh)	Supply Fan (kWh)
January	8226	2411	0	0	11334	3322	0
February	7477	2191	0	0	9186	2692	0
March	6367	1866	0	0	8129	2382	0
April	2666	781	9	1	5011	1469	0
May	662	194	79	6	2030	595	0
June	214	63	149	11	573	168	0
July	116	34	456	32	50	15	0
August	82	24	300	22	144	42	0
September	372	109	104	8	968	284	0
October	1938	568	15	1	4669	1368	0
November	4490	1316	0	0	7528	2206	0
December	7524	2205	0	0	10321	3025	0
Total	40134	11762	1112	80	59941	17567	0

Air System Simulation Results (Table 2) :

Month	Lighting (kWh)	Electric Equipment (kWh)
January	0	0
February	0	0
March	0	0
April	0	0
May	0	0
June	0	0
July	0	0
August	0	0
September	0	0
October	0	0
November	0	0
December	0	0
Total	0	0

Monthly Simulation Results for 02 2E #11 à #15 CPT

(In Alternative: b) Alternative CPT)

Project: 26909 APH 58 Log, rue Laniel à Salaberry-de-Valleyf...

02-02-2026

Prepared by: Le Groupe CMI Experts-Conseils inc.

6:03 PM

Air System Simulation Results (Table 1) :

Month	Central Cooling Coil Load (kBTU)	Central Unit Clg Input (kWh)	Central Heating Coil Load (kBTU)	Central Unit Htg Input (kWh)	Central Unit Aux. Htg. Load (kBTU)	Central Unit Aux. Htg. Input (kWh)	Supply Fan (kWh)
January	0	0	13043	1830	1686	494	0
February	0	0	11493	1488	327	96	0
March	2	0	8604	1029	171	50	0
April	436	17	3429	348	0	0	0
May	2185	87	631	59	0	0	0
June	4054	161	78	7	0	0	0
July	10070	406	0	0	0	0	0
August	6382	263	0	0	0	0	0
September	2158	88	204	19	0	0	0
October	197	8	3503	349	0	0	0
November	0	0	8697	922	0	0	0
December	0	0	12960	1634	673	197	0
Total	25485	1030	62641	7684	2856	837	0

Air System Simulation Results (Table 2) :

Month	Air-to-Air Energy Recovery (kWh)	Lighting (kWh)	Electric Equipment (kWh)
January	0	0	0
February	0	0	0
March	0	0	0
April	0	0	0
May	0	0	0
June	0	0	0
July	0	0	0
August	0	0	0
September	0	0	0
October	0	0	0
November	0	0	0
December	0	0	0
Total	0	0	0

Monthly Simulation Results for 04 2E #16 à #22 CPT

(In Alternative: b) Alternative CPT)

Project: 26909 APH 58 Log, rue Laniel à Salaberry-de-Valleyf...

02-02-2026

Prepared by: Le Groupe CMI Experts-Conseils inc.

6:03 PM

Air System Simulation Results (Table 1) :

Month	Central Cooling Coil Load (kBTU)	Central Unit Clg Input (kWh)	Central Heating Coil Load (kBTU)	Central Unit Htg Input (kWh)	Central Unit Aux. Htg. Load (kBTU)	Central Unit Aux. Htg. Input (kWh)	Supply Fan (kWh)
January	0	0	21536	2862	6162	1806	0
February	0	0	19179	2363	2581	756	0
March	1	0	15894	1805	944	277	0
April	337	13	7017	690	0	0	0
May	3115	125	1522	138	0	0	0
June	6716	261	242	22	0	0	0
July	17269	681	11	1	0	0	0
August	12558	496	2	0	0	0	0
September	5431	213	610	56	0	0	0
October	636	25	6925	672	0	0	0
November	0	0	15931	1636	56	16	0
December	0	0	22571	2709	2989	876	0
Total	46061	1815	111441	12953	12733	3732	0

Air System Simulation Results (Table 2) :

Month	Air-to-Air Energy Recovery (kWh)	Lighting (kWh)	Electric Equipment (kWh)
January	0	0	0
February	0	0	0
March	0	0	0
April	0	0	0
May	0	0	0
June	0	0	0
July	0	0	0
August	0	0	0
September	0	0	0
October	0	0	0
November	0	0	0
December	0	0	0
Total	0	0	0

Monthly Simulation Results for 06 3E #11 à #15 CPT

(In Alternative: b) Alternative CPT)

Project: 26909 APH 58 Log, rue Laniel à Salaberry-de-Valleyf...

02-02-2026

Prepared by: Le Groupe CMI Experts-Conseils inc.

6:03 PM

Air System Simulation Results (Table 1) :

Month	Central Cooling Coil Load (kBTU)	Central Unit Clg Input (kWh)	Central Heating Coil Load (kBTU)	Central Unit Htg Input (kWh)	Central Unit Aux. Htg. Load (kBTU)	Central Unit Aux. Htg. Input (kWh)	Supply Fan (kWh)
January	0	0	13056	1831	1691	496	0
February	0	0	11503	1489	329	96	0
March	2	0	8587	1027	171	50	0
April	449	17	3365	342	0	0	0
May	2260	90	611	57	0	0	0
June	4149	164	71	7	0	0	0
July	10167	410	0	0	0	0	0
August	6437	265	0	0	0	0	0
September	2202	90	189	18	0	0	0
October	204	8	3460	345	0	0	0
November	0	0	8705	923	0	0	0
December	0	0	12978	1636	677	199	0
Total	25871	1045	62524	7674	2869	841	0

Air System Simulation Results (Table 2) :

Month	Air-to-Air Energy Recovery (kWh)	Lighting (kWh)	Electric Equipment (kWh)
January	0	0	0
February	0	0	0
March	0	0	0
April	0	0	0
May	0	0	0
June	0	0	0
July	0	0	0
August	0	0	0
September	0	0	0
October	0	0	0
November	0	0	0
December	0	0	0
Total	0	0	0

Monthly Simulation Results for 08 3E #16 à #22 CPT

(In Alternative: b) Alternative CPT)

Project: 26909 APH 58 Log, rue Laniel à Salaberry-de-Valleyf...

02-02-2026

Prepared by: Le Groupe CMI Experts-Conseils inc.

6:03 PM

Air System Simulation Results (Table 1) :

Month	Central Cooling Coil Load (kBTU)	Central Unit Clg Input (kWh)	Central Heating Coil Load (kBTU)	Central Unit Htg Input (kWh)	Central Unit Aux. Htg. Load (kBTU)	Central Unit Aux. Htg. Input (kWh)	Supply Fan (kWh)
January	0	0	20779	2784	5374	1575	0
February	0	0	18362	2276	2131	625	0
March	0	0	14841	1699	805	236	0
April	300	12	6297	623	0	0	0
May	3023	122	1271	116	0	0	0
June	6637	259	172	16	0	0	0
July	17093	675	0	0	0	0	0
August	12352	489	0	0	0	0	0
September	5254	206	441	41	0	0	0
October	558	22	6274	613	0	0	0
November	0	0	15000	1548	37	11	0
December	0	0	21622	2612	2556	749	0
Total	45218	1785	105058	12327	10904	3196	0

Air System Simulation Results (Table 2) :

Month	Air-to-Air Energy Recovery (kWh)	Lighting (kWh)	Electric Equipment (kWh)
January	0	0	0
February	0	0	0
March	0	0	0
April	0	0	0
May	0	0	0
June	0	0	0
July	0	0	0
August	0	0	0
September	0	0	0
October	0	0	0
November	0	0	0
December	0	0	0
Total	0	0	0

Monthly Simulation Results for 10 4E #11 à #15 CPT

(In Alternative: b) Alternative CPT)

Project: 26909 APH 58 Log, rue Laniel à Salaberry-de-Valleyf...

02-02-2026

Prepared by: Le Groupe CMI Experts-Conseils inc.

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Air System Simulation Results (Table 1) :

Month	Central Cooling Coil Load (kBTU)	Central Unit Clg Input (kWh)	Central Heating Coil Load (kBTU)	Central Unit Htg Input (kWh)	Central Unit Aux. Htg. Load (kBTU)	Central Unit Aux. Htg. Input (kWh)	Supply Fan (kWh)
January	0	0	14913	2029	3117	914	0
February	0	0	13521	1711	1066	312	0
March	5	0	10665	1246	405	119	0
April	610	23	4782	478	0	0	0
May	2851	113	1067	98	0	0	0
June	4859	191	194	18	0	0	0
July	11336	454	25	2	0	0	0
August	7315	299	28	2	0	0	0
September	2676	108	548	50	0	0	0
October	300	12	4800	469	0	0	0
November	0	0	10818	1131	2	1	0
December	0	0	15300	1879	1400	410	0
Total	29953	1201	76660	9113	5990	1755	0

Air System Simulation Results (Table 2) :

Month	Air-to-Air Energy Recovery (kWh)	Lighting (kWh)	Electric Equipment (kWh)
January	0	0	0
February	0	0	0
March	0	0	0
April	0	0	0
May	0	0	0
June	0	0	0
July	0	0	0
August	0	0	0
September	0	0	0
October	0	0	0
November	0	0	0
December	0	0	0
Total	0	0	0

Monthly Simulation Results for 12 4E #16 CPT

(In Alternative: b) Alternative CPT)

Project: 26909 APH 58 Log, rue Laniel à Salaberry-de-Valleyf...

02-02-2026

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Air System Simulation Results (Table 1) :

Month	Central Cooling Coil Load (kBTU)	Central Unit Clg Input (kWh)	Central Heating Coil Load (kBTU)	Central Unit Htg Input (kWh)	Central Unit Aux. Htg. Load (kBTU)	Central Unit Aux. Htg. Input (kWh)	Supply Fan (kWh)
January	0	0	3174	414	765	224	0
February	0	0	2973	362	296	87	0
March	0	0	2533	285	107	31	0
April	4	0	1110	108	0	0	0
May	159	7	243	22	0	0	0
June	482	20	42	4	0	0	0
July	1685	68	7	1	0	0	0
August	968	40	8	1	0	0	0
September	219	9	146	13	0	0	0
October	2	0	1132	108	0	0	0
November	0	0	2375	242	2	1	0
December	0	0	3273	388	355	104	0
Total	3519	145	17017	1948	1526	447	0

Air System Simulation Results (Table 2) :

Month	Air-to-Air Energy Recovery (kWh)	Lighting (kWh)	Electric Equipment (kWh)
January	0	0	0
February	0	0	0
March	0	0	0
April	0	0	0
May	0	0	0
June	0	0	0
July	0	0	0
August	0	0	0
September	0	0	0
October	0	0	0
November	0	0	0
December	0	0	0
Total	0	0	0

Monthly Simulation Results for 14 4E #17 CPT

(In Alternative: b) Alternative CPT)

Project: 26909 APH 58 Log, rue Laniel à Salaberry-de-Valleyf...

02-02-2026

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Air System Simulation Results (Table 1) :

Month	Central Cooling Coil Load (kBTU)	Central Unit Clg Input (kWh)	Central Heating Coil Load (kBTU)	Central Unit Htg Input (kWh)	Central Unit Aux. Htg. Load (kBTU)	Central Unit Aux. Htg. Input (kWh)	Supply Fan (kWh)
January	0	0	3729	476	1939	568	0
February	0	0	3500	419	1061	311	0
March	0	0	3197	351	373	109	0
April	30	1	1484	143	0	0	0
May	484	20	362	32	0	0	0
June	1105	43	70	6	0	0	0
July	2858	112	14	1	0	0	0
August	1941	77	14	1	0	0	0
September	689	27	194	17	0	0	0
October	36	1	1529	144	14	4	0
November	0	0	3233	323	92	27	0
December	0	0	4078	471	1129	331	0
Total	7143	281	21404	2385	4608	1351	0

Air System Simulation Results (Table 2) :

Month	Air-to-Air Energy Recovery (kWh)	Lighting (kWh)	Electric Equipment (kWh)
January	0	0	0
February	0	0	0
March	0	0	0
April	0	0	0
May	0	0	0
June	0	0	0
July	0	0	0
August	0	0	0
September	0	0	0
October	0	0	0
November	0	0	0
December	0	0	0
Total	0	0	0

Monthly Simulation Results for 16 4E #18 CPT

(In Alternative: b) Alternative CPT)

Project: 26909 APH 58 Log, rue Laniel à Salaberry-de-Valleyf...

02-02-2026

Prepared by: Le Groupe CMI Experts-Conseils inc.

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Air System Simulation Results (Table 1) :

Month	Central Cooling Coil Load (kBTU)	Central Unit Clg Input (kWh)	Central Heating Coil Load (kBTU)	Central Unit Htg Input (kWh)	Central Unit Aux. Htg. Load (kBTU)	Central Unit Aux. Htg. Input (kWh)	Supply Fan (kWh)
January	0	0	2718	373	430	126	0
February	0	0	2364	299	119	35	0
March	0	0	1850	215	52	15	0
April	36	1	771	77	0	0	0
May	363	15	165	15	0	0	0
June	776	30	26	2	0	0	0
July	2033	81	2	0	0	0	0
August	1424	57	0	0	0	0	0
September	540	21	73	7	0	0	0
October	24	1	808	79	0	0	0
November	0	0	1844	193	0	0	0
December	0	0	2733	338	176	52	0
Total	5197	207	13355	1598	777	228	0

Air System Simulation Results (Table 2) :

Month	Air-to-Air Energy Recovery (kWh)	Lighting (kWh)	Electric Equipment (kWh)
January	0	0	0
February	0	0	0
March	0	0	0
April	0	0	0
May	0	0	0
June	0	0	0
July	0	0	0
August	0	0	0
September	0	0	0
October	0	0	0
November	0	0	0
December	0	0	0
Total	0	0	0

Monthly Simulation Results for 18 4E #19 CPT

(In Alternative: b) Alternative CPT)

Project: 26909 APH 58 Log, rue Laniel à Salaberry-de-Valleyf...

02-02-2026

Prepared by: Le Groupe CMI Experts-Conseils inc.

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Air System Simulation Results (Table 1) :

Month	Central Cooling Coil Load (kBTU)	Central Unit Clg Input (kWh)	Central Heating Coil Load (kBTU)	Central Unit Htg Input (kWh)	Central Unit Aux. Htg. Load (kBTU)	Central Unit Aux. Htg. Input (kWh)	Supply Fan (kWh)
January	0	0	2846	387	546	160	0
February	0	0	2484	312	180	53	0
March	0	0	1963	227	71	21	0
April	56	2	822	82	0	0	0
May	432	17	173	16	0	0	0
June	887	35	27	2	0	0	0
July	2252	89	2	0	0	0	0
August	1604	64	0	0	0	0	0
September	636	25	73	7	0	0	0
October	36	1	856	84	0	0	0
November	0	0	1979	206	0	0	0
December	0	0	2897	356	238	70	0
Total	5903	233	14121	1678	1035	303	0

Air System Simulation Results (Table 2) :

Month	Air-to-Air Energy Recovery (kWh)	Lighting (kWh)	Electric Equipment (kWh)
January	0	0	0
February	0	0	0
March	0	0	0
April	0	0	0
May	0	0	0
June	0	0	0
July	0	0	0
August	0	0	0
September	0	0	0
October	0	0	0
November	0	0	0
December	0	0	0
Total	0	0	0

Monthly Simulation Results for 20 4E #20 CPT

(In Alternative: b) Alternative CPT)

Project: 26909 APH 58 Log, rue Laniel à Salaberry-de-Valleyf...

02-02-2026

Prepared by: Le Groupe CMI Experts-Conseils inc.

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Air System Simulation Results (Table 1) :

Month	Central Cooling Coil Load (kBTU)	Central Unit Clg Input (kWh)	Central Heating Coil Load (kBTU)	Central Unit Htg Input (kWh)	Central Unit Aux. Htg. Load (kBTU)	Central Unit Aux. Htg. Input (kWh)	Supply Fan (kWh)
January	0	0	2900	390	641	188	0
February	0	0	2560	319	235	69	0
March	0	0	2081	239	89	26	0
April	59	2	893	89	0	0	0
May	435	17	195	18	0	0	0
June	894	35	32	3	0	0	0
July	2288	91	3	0	0	0	0
August	1639	65	1	0	0	0	0
September	684	27	86	8	0	0	0
October	63	2	914	89	0	0	0
November	0	0	2070	214	2	1	0
December	0	0	2975	362	292	86	0
Total	6062	239	14708	1731	1259	369	0

Air System Simulation Results (Table 2) :

Month	Air-to-Air Energy Recovery (kWh)	Lighting (kWh)	Electric Equipment (kWh)
January	0	0	0
February	0	0	0
March	0	0	0
April	0	0	0
May	0	0	0
June	0	0	0
July	0	0	0
August	0	0	0
September	0	0	0
October	0	0	0
November	0	0	0
December	0	0	0
Total	0	0	0

Monthly Simulation Results for 22 4E #21 CPT

(In Alternative: b) Alternative CPT)

Project: 26909 APH 58 Log, rue Laniel à Salaberry-de-Valleyf...

02-02-2026

Prepared by: Le Groupe CMI Experts-Conseils inc.

6:03 PM

Air System Simulation Results (Table 1) :

Month	Central Cooling Coil Load (kBTU)	Central Unit Clg Input (kWh)	Central Heating Coil Load (kBTU)	Central Unit Htg Input (kWh)	Central Unit Aux. Htg. Load (kBTU)	Central Unit Aux. Htg. Input (kWh)	Supply Fan (kWh)
January	0	0	2812	382	536	157	0
February	0	0	2446	307	176	52	0
March	0	0	1928	224	70	21	0
April	62	2	807	80	0	0	0
May	460	18	169	15	0	0	0
June	933	36	25	2	0	0	0
July	2318	92	1	0	0	0	0
August	1647	65	0	0	0	0	0
September	664	26	73	7	0	0	0
October	45	2	840	82	0	0	0
November	0	0	1950	203	0	0	0
December	0	0	2863	351	233	68	0
Total	6130	242	13914	1655	1016	298	0

Air System Simulation Results (Table 2) :

Month	Air-to-Air Energy Recovery (kWh)	Lighting (kWh)	Electric Equipment (kWh)
January	0	0	0
February	0	0	0
March	0	0	0
April	0	0	0
May	0	0	0
June	0	0	0
July	0	0	0
August	0	0	0
September	0	0	0
October	0	0	0
November	0	0	0
December	0	0	0
Total	0	0	0

Monthly Simulation Results for 24 4E #22 CPT

(In Alternative: b) Alternative CPT)

Project: 26909 APH 58 Log, rue Laniel à Salaberry-de-Valleyf...

02-02-2026

Prepared by: Le Groupe CMI Experts-Conseils inc.

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Air System Simulation Results (Table 1) :

Month	Central Cooling Coil Load (kBTU)	Central Unit Clg Input (kWh)	Central Heating Coil Load (kBTU)	Central Unit Htg Input (kWh)	Central Unit Aux. Htg. Load (kBTU)	Central Unit Aux. Htg. Input (kWh)	Supply Fan (kWh)
January	0	0	3333	424	1930	566	0
February	0	0	2932	352	1152	338	0
March	23	1	2830	311	431	126	0
April	331	12	1460	141	0	0	0
May	1058	41	361	32	0	0	0
June	1715	65	71	6	0	0	0
July	3796	146	13	1	0	0	0
August	3002	116	13	1	0	0	0
September	1826	68	173	16	0	0	0
October	601	22	1378	131	20	6	0
November	26	1	2968	296	131	38	0
December	0	0	3695	425	1214	356	0
Total	12378	473	19227	2135	4878	1430	0

Air System Simulation Results (Table 2) :

Month	Air-to-Air Energy Recovery (kWh)	Lighting (kWh)	Electric Equipment (kWh)
January	0	0	0
February	0	0	0
March	0	0	0
April	0	0	0
May	0	0	0
June	0	0	0
July	0	0	0
August	0	0	0
September	0	0	0
October	0	0	0
November	0	0	0
December	0	0	0
Total	0	0	0

Monthly Simulation Results for 26 4E ESC1 CPT

(In Alternative: b) Alternative CPT)

Project: 26909 APH 58 Log, rue Laniel à Salaberry-de-Valleyf...

02-02-2026

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6:03 PM

Air System Simulation Results (Table 1) :

Month	Central Heating Coil Load (kBTU)	Central Heating Coil Input (kWh)	Supply Fan (kWh)	Lighting (kWh)	Electric Equipment (kWh)
January	1762	516	59	0	0
February	1483	435	53	0	0
March	1237	362	59	0	0
April	536	157	57	0	0
May	107	31	59	0	0
June	17	5	57	0	0
July	1	0	59	0	0
August	0	0	59	0	0
September	59	17	57	0	0
October	511	150	59	0	0
November	1075	315	57	0	0
December	1617	474	59	0	0
Total	8405	2463	696	0	0

Monthly Simulation Results for 28 4E ESC2 CPT

(In Alternative: b) Alternative CPT)

Project: 26909 APH 58 Log, rue Laniel à Salaberry-de-Valleyf...

02-02-2026

Prepared by: Le Groupe CMI Experts-Conseils inc.

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Air System Simulation Results (Table 1) :

Month	Central Heating Coil Load (kBTU)	Central Heating Coil Input (kWh)	Supply Fan (kWh)	Lighting (kWh)	Electric Equipment (kWh)
January	1512	443	67	0	0
February	1149	337	61	0	0
March	889	261	67	0	0
April	388	114	65	0	0
May	77	23	67	0	0
June	12	4	65	0	0
July	1	0	67	0	0
August	0	0	67	0	0
September	31	9	65	0	0
October	342	100	67	0	0
November	873	256	65	0	0
December	1426	418	67	0	0
Total	6701	1964	790	0	0

Monthly Simulation Results for 30 RDC #1 à #5 CPT

(In Alternative: b) Alternative CPT)

Project: 26909 APH 58 Log, rue Laniel à Salaberry-de-Valleyf...

02-02-2026

Prepared by: Le Groupe CMI Experts-Conseils inc.

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Air System Simulation Results (Table 1) :

Month	Central Cooling Coil Load (kBTU)	Central Unit Clg Input (kWh)	Central Heating Coil Load (kBTU)	Central Unit Htg Input (kWh)	Central Unit Aux. Htg. Load (kBTU)	Central Unit Aux. Htg. Input (kWh)	Supply Fan (kWh)
January	0	0	13187	1844	1730	507	0
February	0	0	11685	1508	350	103	0
March	1	0	8982	1068	181	53	0
April	356	14	3956	398	0	0	0
May	1769	71	860	79	0	0	0
June	3292	131	145	13	0	0	0
July	8611	350	0	0	0	0	0
August	5496	228	0	0	0	0	0
September	1806	74	320	30	0	0	0
October	155	6	3858	381	0	0	0
November	0	0	8859	937	0	0	0
December	0	0	13061	1644	682	200	0
Total	21486	874	64911	7903	2944	863	0

Air System Simulation Results (Table 2) :

Month	Air-to-Air Energy Recovery (kWh)	Lighting (kWh)	Electric Equipment (kWh)
January	0	0	0
February	0	0	0
March	0	0	0
April	0	0	0
May	0	0	0
June	0	0	0
July	0	0	0
August	0	0	0
September	0	0	0
October	0	0	0
November	0	0	0
December	0	0	0
Total	0	0	0

Monthly Simulation Results for 32 RDC #10 CPT

(In Alternative: b) Alternative CPT)

Project: 26909 APH 58 Log, rue Laniel à Salaberry-de-Valleyf...

02-02-2026

Prepared by: Le Groupe CMI Experts-Conseils inc.

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Air System Simulation Results (Table 1) :

Month	Central Cooling Coil Load (kBTU)	Central Unit Clg Input (kWh)	Central Heating Coil Load (kBTU)	Central Unit Htg Input (kWh)	Central Unit Aux. Htg. Load (kBTU)	Central Unit Aux. Htg. Input (kWh)	Supply Fan (kWh)
January	0	0	3404	439	1386	406	0
February	0	0	3180	383	716	210	0
March	0	0	2947	326	266	78	0
April	7	0	1526	147	0	0	0
May	95	4	440	39	0	0	0
June	280	12	96	9	0	0	0
July	1519	62	11	1	0	0	0
August	1128	46	10	1	0	0	0
September	486	20	158	14	0	0	0
October	77	3	1308	124	2	1	0
November	0	0	2764	278	33	10	0
December	0	0	3641	425	738	216	0
Total	3592	148	19486	2185	3140	920	0

Air System Simulation Results (Table 2) :

Month	Air-to-Air Energy Recovery (kWh)	Lighting (kWh)	Electric Equipment (kWh)
January	0	0	0
February	0	0	0
March	0	0	0
April	0	0	0
May	0	0	0
June	0	0	0
July	0	0	0
August	0	0	0
September	0	0	0
October	0	0	0
November	0	0	0
December	0	0	0
Total	0	0	0

Monthly Simulation Results for 34 RDC #6 CPT

(In Alternative: b) Alternative CPT)

Project: 26909 APH 58 Log, rue Laniel à Salaberry-de-Valleyf...

02-02-2026

Prepared by: Le Groupe CMI Experts-Conseils inc.

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Air System Simulation Results (Table 1) :

Month	Central Cooling Coil Load (kBTU)	Central Unit Clg Input (kWh)	Central Heating Coil Load (kBTU)	Central Unit Htg Input (kWh)	Central Unit Aux. Htg. Load (kBTU)	Central Unit Aux. Htg. Input (kWh)	Supply Fan (kWh)
January	0	0	2773	366	365	107	0
February	0	0	2554	313	77	23	0
March	0	0	2153	243	39	11	0
April	0	0	963	93	0	0	0
May	16	1	218	19	0	0	0
June	94	4	38	3	0	0	0
July	878	36	1	0	0	0	0
August	456	19	0	0	0	0	0
September	50	2	95	9	0	0	0
October	0	0	914	87	0	0	0
November	0	0	1890	193	0	0	0
December	0	0	2725	327	141	41	0
Total	1494	62	14325	1654	623	183	0

Air System Simulation Results (Table 2) :

Month	Air-to-Air Energy Recovery (kWh)	Lighting (kWh)	Electric Equipment (kWh)
January	0	0	0
February	0	0	0
March	0	0	0
April	0	0	0
May	0	0	0
June	0	0	0
July	0	0	0
August	0	0	0
September	0	0	0
October	0	0	0
November	0	0	0
December	0	0	0
Total	0	0	0

Monthly Simulation Results for 36 RDC #7 CPT

(In Alternative: b) Alternative CPT)

Project: 26909 APH 58 Log, rue Laniel à Salaberry-de-Valleyf...

02-02-2026

Prepared by: Le Groupe CMI Experts-Conseils inc.

6:03 PM

Air System Simulation Results (Table 1) :

Month	Central Cooling Coil Load (kBTU)	Central Unit Clg Input (kWh)	Central Heating Coil Load (kBTU)	Central Unit Htg Input (kWh)	Central Unit Aux. Htg. Load (kBTU)	Central Unit Aux. Htg. Input (kWh)	Supply Fan (kWh)
January	0	0	3467	451	1427	418	0
February	0	0	3217	389	705	207	0
March	0	0	2866	318	245	72	0
April	20	1	1339	130	0	0	0
May	276	11	344	31	0	0	0
June	757	29	66	6	0	0	0
July	2241	88	7	1	0	0	0
August	1556	61	5	0	0	0	0
September	530	21	152	14	0	0	0
October	20	1	1334	127	2	1	0
November	0	0	2812	285	31	9	0
December	0	0	3718	437	759	222	0
Total	5401	212	19328	2189	3168	928	0

Air System Simulation Results (Table 2) :

Month	Air-to-Air Energy Recovery (kWh)	Lighting (kWh)	Electric Equipment (kWh)
January	0	0	0
February	0	0	0
March	0	0	0
April	0	0	0
May	0	0	0
June	0	0	0
July	0	0	0
August	0	0	0
September	0	0	0
October	0	0	0
November	0	0	0
December	0	0	0
Total	0	0	0

Monthly Simulation Results for 38 RDC #8 CPT

(In Alternative: b) Alternative CPT)

Project: 26909 APH 58 Log, rue Laniel à Salaberry-de-Valleyf...

02-02-2026

Prepared by: Le Groupe CMI Experts-Conseils inc.

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Air System Simulation Results (Table 1) :

Month	Central Cooling Coil Load (kBTU)	Central Unit Clg Input (kWh)	Central Heating Coil Load (kBTU)	Central Unit Htg Input (kWh)	Central Unit Aux. Htg. Load (kBTU)	Central Unit Aux. Htg. Input (kWh)	Supply Fan (kWh)
January	0	0	2347	331	226	66	0
February	0	0	1998	257	34	10	0
March	0	0	1571	186	22	7	0
April	35	1	668	67	0	0	0
May	218	9	148	14	0	0	0
June	505	20	24	2	0	0	0
July	1508	60	0	0	0	0	0
August	1096	43	0	0	0	0	0
September	400	15	48	4	0	0	0
October	16	1	658	65	0	0	0
November	0	0	1492	158	0	0	0
December	0	0	2277	288	85	25	0
Total	3779	149	11231	1372	367	108	0

Air System Simulation Results (Table 2) :

Month	Air-to-Air Energy Recovery (kWh)	Lighting (kWh)	Electric Equipment (kWh)
January	0	0	0
February	0	0	0
March	0	0	0
April	0	0	0
May	0	0	0
June	0	0	0
July	0	0	0
August	0	0	0
September	0	0	0
October	0	0	0
November	0	0	0
December	0	0	0
Total	0	0	0

Monthly Simulation Results for 40 RDC #9 CPT

(In Alternative: b) Alternative CPT)

Project: 26909 APH 58 Log, rue Laniel à Salaberry-de-Valleyf...

02-02-2026

Prepared by: Le Groupe CMI Experts-Conseils inc.

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Air System Simulation Results (Table 1) :

Month	Central Cooling Coil Load (kBTU)	Central Unit Clg Input (kWh)	Central Heating Coil Load (kBTU)	Central Unit Htg Input (kWh)	Central Unit Aux. Htg. Load (kBTU)	Central Unit Aux. Htg. Input (kWh)	Supply Fan (kWh)
January	0	0	3606	463	1584	464	0
February	0	0	3315	397	843	247	0
March	0	0	3080	338	294	86	0
April	79	3	1497	144	0	0	0
May	374	14	367	33	0	0	0
June	867	33	59	5	0	0	0
July	2454	95	0	0	0	0	0
August	1878	72	0	0	0	0	0
September	795	30	91	8	0	0	0
October	60	2	1191	115	1	0	0
November	0	0	2795	283	33	10	0
December	0	0	3760	441	807	237	0
Total	6509	250	19761	2227	3563	1044	0

Air System Simulation Results (Table 2) :

Month	Air-to-Air Energy Recovery (kWh)	Lighting (kWh)	Electric Equipment (kWh)
January	0	0	0
February	0	0	0
March	0	0	0
April	0	0	0
May	0	0	0
June	0	0	0
July	0	0	0
August	0	0	0
September	0	0	0
October	0	0	0
November	0	0	0
December	0	0	0
Total	0	0	0

Monthly Simulation Results for 42 RDC ESC1 CPT

(In Alternative: b) Alternative CPT)

Project: 26909 APH 58 Log, rue Laniel à Salaberry-de-Valleyf...

02-02-2026

Prepared by: Le Groupe CMI Experts-Conseils inc.

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Air System Simulation Results (Table 1) :

Month	Central Heating Coil Load (kBTU)	Central Heating Coil Input (kWh)	Supply Fan (kWh)	Lighting (kWh)	Electric Equipment (kWh)
January	1613	473	54	0	0
February	1350	396	49	0	0
March	1118	328	54	0	0
April	481	141	52	0	0
May	93	27	54	0	0
June	15	5	52	0	0
July	0	0	54	0	0
August	0	0	54	0	0
September	47	14	52	0	0
October	458	134	54	0	0
November	976	286	52	0	0
December	1478	433	54	0	0
Total	7630	2236	635	0	0

Monthly Simulation Results for 44 RDC ESC25 CPT

(In Alternative: b) Alternative CPT)

Project: 26909 APH 58 Log, rue Laniel à Salaberry-de-Valleyf...

02-02-2026

Prepared by: Le Groupe CMI Experts-Conseils inc.

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Air System Simulation Results (Table 1) :

Month	Central Heating Coil Load (kBTU)	Central Heating Coil Input (kWh)	Supply Fan (kWh)	Lighting (kWh)	Electric Equipment (kWh)
January	1345	394	59	0	0
February	1022	300	54	0	0
March	791	232	59	0	0
April	348	102	57	0	0
May	69	20	59	0	0
June	11	3	57	0	0
July	0	0	59	0	0
August	0	0	59	0	0
September	22	6	57	0	0
October	300	88	59	0	0
November	770	226	58	0	0
December	1264	370	59	0	0
Total	5943	1742	699	0	0

Monthly Simulation Results for 46 RDC Salle Communautaire CPT

(In Alternative: b) Alternative CPT)

Project: 26909 APH 58 Log, rue Laniel à Salaberry-de-Valleyf...

02-02-2026

Prepared by: Le Groupe CMI Experts-Conseils inc.

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Air System Simulation Results (Table 1) :

Month	Central Cooling Coil Load (kBTU)	Central Unit Clg Input (kWh)	Central Heating Coil Load (kBTU)	Central Unit Htg Input (kWh)	Central Unit Aux. Htg. Load (kBTU)	Central Unit Aux. Htg. Input (kWh)	Supply Fan (kWh)
January	0	0	1719	235	106	31	0
February	0	0	1477	185	8	2	0
March	0	0	1219	140	9	3	0
April	0	0	589	57	0	0	0
May	31	1	174	15	0	0	0
June	111	5	38	3	0	0	0
July	669	27	4	0	0	0	0
August	488	20	4	0	0	0	0
September	136	5	63	6	0	0	0
October	2	0	501	48	0	0	0
November	0	0	1060	110	0	0	0
December	0	0	1622	201	34	10	0
Total	1437	58	8469	1002	157	46	0

Air System Simulation Results (Table 2) :

Month	Air-to-Air Energy Recovery (kWh)	Lighting (kWh)	Electric Equipment (kWh)
January	0	0	0
February	0	0	0
March	0	0	0
April	0	0	0
May	0	0	0
June	0	0	0
July	0	0	0
August	0	0	0
September	0	0	0
October	0	0	0
November	0	0	0
December	0	0	0
Total	0	0	0

Monthly Simulation Results for 48 SS Garage CPT

(In Alternative: b) Alternative CPT)

Project: 26909 APH 58 Log, rue Laniel à Salaberry-de-Valleyf...

02-02-2026

Prepared by: Le Groupe CMI Experts-Conseils inc.

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Air System Simulation Results (Table 1) :

Month	Central Heating Coil Load (kBTU)	Central Unit Htg Input (kWh)	Central Unit Aux. Htg. Load (kBTU)	Central Unit Aux. Htg. Input (kWh)	Supply Fan (kWh)	Lighting (kWh)	Electric Equipment (kWh)
January	7007	865	445	130	372	0	0
February	6470	752	75	22	336	0	0
March	6536	681	34	10	372	0	0
April	4577	392	0	0	360	0	0
May	2160	168	0	0	372	0	0
June	256	20	0	0	360	0	0
July	0	0	0	0	372	0	0
August	0	0	0	0	372	0	0
September	0	0	0	0	360	0	0
October	1218	109	0	0	372	0	0
November	3580	349	0	0	361	0	0
December	5174	613	11	3	372	0	0
Total	36977	3949	565	165	4383	0	0

Monthly Simulation Results for 50 Couloir CPT

(In Alternative: b) Alternative CPT)

Project: 26909 APH 58 Log, rue Laniel à Salaberry-de-Valleyf...

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Air System Simulation Results (Table 1) :

Month	Preheat Coil Load (kBTU)	Preheat Coil Input (kWh)	Central Cooling Coil Load (kBTU)	Central Unit Clg Input (kWh)	Terminal Heating Coil Load (kBTU)	Terminal Heating Coil Input (kWh)	Supply Fan (kWh)
January	8426	2469	0	0	10284	3014	0
February	7647	2241	0	0	8050	2359	0
March	6418	1881	0	0	6491	1902	0
April	2663	781	35	2	3336	978	0
May	668	196	170	12	977	286	0
June	214	63	285	19	181	53	0
July	110	32	599	40	9	3	0
August	81	24	425	29	16	5	0
September	375	110	185	13	315	92	0
October	1958	574	34	3	3454	1012	0
November	4546	1332	0	0	6785	1989	0
December	7673	2249	0	0	9463	2773	0
Total	40779	11951	1732	120	49362	14467	0

Air System Simulation Results (Table 2) :

Month	Lighting (kWh)	Electric Equipment (kWh)
January	0	0
February	0	0
March	0	0
April	0	0
May	0	0
June	0	0
July	0	0
August	0	0
September	0	0
October	0	0
November	0	0
December	0	0
Total	0	0