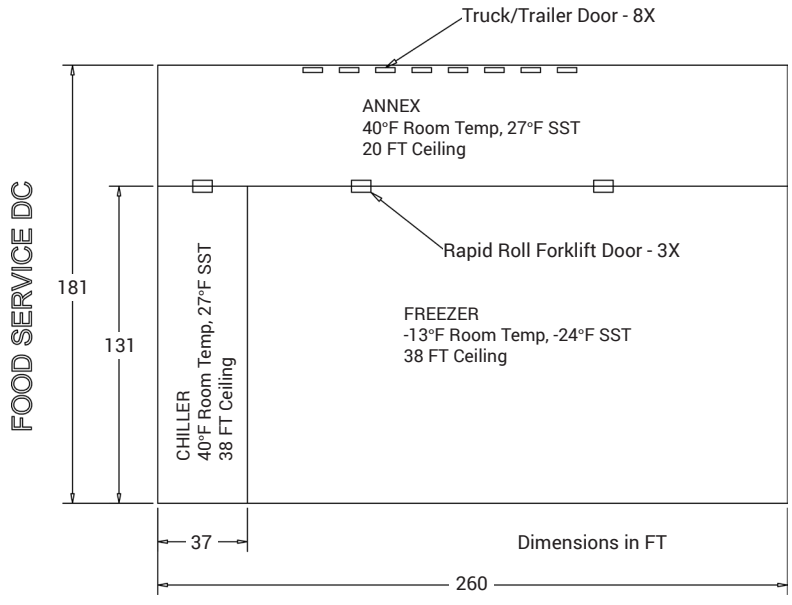
COLMAC COIL
Manufacturing Inc.

REFRIGERATION LOAD SIMULATOR

BREAKTHROUGH TECHNOLOGY

Colmac Coil announces a new way to make refrigeration load calculations. The online Refrigeration Load Simulator Program offers the following features and benefits:

- Allows user to create complete facility layout
- Performs heat and mass balance for entire facility
- Predicts sensible and latent loads and room RH
- Based on state-of-the-art equations
- Define custom shaped rooms
- Vary door operations and climate conditions to observe effects
- Works with A+Pro software to select air coolers



Create complete facility layouts, including custom shaped rooms

Access to the Refrigeration Load Simulator is available to authorized Colmac Coil representatives and qualified customers.

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Location/Climate			
Location	CHICAGO/MIDWAY, Illinois, USA	Percentile	0.4 %
Design Outdoor Dry Bulb	97.4 °F	Mean Coincident Wet Bulb	78.4 °F
Ground Temperature	51.633 °F	Elevation	617 ft

Summary

	Annex	Chiller	Freezer
Room Temp [°F]	40.0	40.0	-13.0
Evap Temp [°F]	27.0	33.0	-24.0
Leaving Air Temp [°F]	34.4	36.7	-19.0
Room RH [%]	94	82	98
Air Flow [CFM]	78583	18388	47507
Air Changes / HR	18	6	3
Latent Load [TR]	30.0	0.2	2.6
Sensible Load [TR]	41.0	5.7	29.9
Total Load [TR]	71.1	5.9	32.5
Sensible Heat Ratio	0.58	0.97	0.92
Moisture Removal [gal/day]	766.6	5.2	67.0
Floor Area/Load [ft²/TR]	183	827	900
Active Heating [MBH]	0.0	0.0	0.0
Time Cycle Factor [hrs/day]	16.9	24	19.8
Recommended Time Between Defrosts [hrs]	4.2	-	22.6
Adjusted Cooler Capacity [TR]	100.8	5.86	39.4

An example report from the refrigeration load simulator

www.colmaccoil.com

"The Heat Transfer Experts"

North American Headquarters
Colmac Coil Manufacturing, Inc.
370 N. Lincoln St. | P.O. Box 571
Colville, WA 99114 | USA
+1.509.684.2595 | +1.800.845.6778

Midwest US Manufacturing
Colmac Coil Midwest
350 Baltimore Dr. | Paxton, IL 60957 | USA

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