

Request for Refrigeration Budget Quote

Please fill out form and email: Support@FEcompany.com

Main: 206.800.1903

Project Information			
Your Name: _____	Box Application:	(Food Storage)	Warm Food Cooling
The Project Name: _____	Wine Bottle Storage	Floral Cooler	Prep / Cutting Room
Project City/State: _____	Wine Barrel Storage	Morgue	Ice Cream Hardening
Box Information			
Refrigerated Box Dimensions	Wall / Ceiling Thickness	Floor Thickness:	Installation Type:
Box Length: _____	3.5"	3.5"	R-Value _____
Box Width: _____	(4.0")	(4.0")	(Polyurethane)
Box Height: _____	5.0"	5.0"	Concrete
Door Air Load Information			
Refrigerated Box Door Dimensions	ASHRAE Calculation	Manual Calculation	Glass Doors
Qty of Doors: _____	**Normal (2x's)	(Use ASHRAE)	(NO)
Door Width: _____	**Heavy (3x's)	Minutes Open Per Hour	If yes, how many?
Door Height: _____	Strip Curtains: Y / N	_____	_____
Product Load			
Will You Be Cooling Any Warm Food in the Box:	(NO)	** Product will arrive off a Refrigerated Truck	
(If YES), please enter product load information:	Weight _____ Lbs./Hr.	Entering Temp _____ °F	Cooling Time _____ Hrs.
Miscellaneous Load			
Are there any Forklift(s) being used:	(NO)	(Manual Calculation) _____ Min/Hr.	
People inside box, minutes per hour:	** (ASHRAE Calculation)	(Manual Calculation) _____ Min/Hr.	
Mechanical Equipment Selection Information			
Type of System:	(Air Cooled)	Water Cooled	Self-Contained
Type of Controls:	(Mechanical)	intelliGen	QRC
Evaporator Type:	(Low Profile)	Center Mount	Low Velocity
Evap. Voltage:	(Recommended)	230V	460V
Cond. Unit Voltage:	(230V)	460V	(Single Phase)
Temperature of the Air surrounding the Compressor / Condensing Unit:	(95°F)	Other _____ °F	

(IMPORTANT)

If a selection or value has not been provided, the grey highlighted boxes will be considered as the default values used to determine the refrigeration system's target cooling capacity. Note: The resulting quote is an over simplified sizing guide to help the quoting agent better understand the application with limited job information to generate a budget quote only. The corresponding boxload and equipment quote should be carefully reviewed in-depth with the end-user to ensure accuracy of the information provided prior to order placement. Also, the selected voltage and phase could increase based on size of equipment selected.

** All load calculations are derived from American Society of Heating, Refrigeration and Airconditioning Engineers (ASHRAE) research and recommendations. All loads are calculated using Heatcraft developed box load calculation and selection software.

Door Air Load Default: ASHRAE developed a simple method for calculating air infiltration amounts based on many years of research in the 1950's concerning commercial walk-in coolers and freezers. The data was used to generate 'average' rates of air changes within coolers and freezers based on their room volumes. This method is called the air change method and is very popular to establish a base-line when clear, accurate infiltration values are not present.

Product Load Default: General mix of products entering at 2 pounds per ft³ with product entering temperature 10°F above room temperature for freezers and 5°F for coolers.

Motor Load Default: For coolers default is set to 1HP per 16,000 ft³ of room volume and freezers 1HP per 12,500 ft³ of room volume. These will not be sufficient for heavily used areas (i.e., loading docks, blast cooler or freezers, distribution warehouses or processing rooms).

Forklift Load Default: Zero is default as "Motor Loads" include allowance for forklift operation in basic storage applications.

People Inside Box Default: One person per 25,000 ft³ of room volume.

Lighting Default: 1 watt/ft² of floor area