

Things to consider when purchasing a Walk-in Cooler or Freezer from Industrial Refrigeration & Design, Inc.

It's important to carefully select your walk-in because it's a major purchase that will have a lasting effect on the operation of your business. Before diving headlong into this purchase, here are a few items to consider before making your decision.

1. **Storage Space** – If you're running a restaurant, you will need approximately 1.5 cubic feet of storage space for every meal you serve per day. It's better to have too much storage space than not enough. However, your walk-in shouldn't be exorbitantly large because your monthly operating cost generally increases as its size increases. If you are opening a Brewery consider the interior height of the cooler to make sure that you are able to fit your tanks in if required. Most coils will hang 16" below the ceiling so this needs to be considered as well.
2. **Location of Box** – Whether you're going to locate your walk-in indoors or outdoors, make sure you have adequate space to accommodate the box. Outdoor walk-ins will require floor, roofing, refrigeration hood and a drip cap for over the door (if the door doesn't open from within the building). If the door does open up into your building and you are considering cutting an opening, allow a minimum of 6" on both sides of the door and 6" above the door when cutting the access door. Your flooring will need to be the same height and needs to be considered when engineering the foundation of the cooler / freezer. Assess the foundation to make sure it's suitable for load-bearing. If you have a concrete floor, a walk-in cooler can be placed on it as long as it is inside. If the walk-in is going on a wood frame floor, it will require insulated floor panels. A walk-in freezer **ALWAYS** requires an insulated floor. Sometimes this must be done by cutting out the existing concrete and pouring an insulated pad with thermal breaks so that your concrete will not spawl.

Structural review may be required to ensure that the cooler or freezer will meet your local government's requirements.

1. Insulated Floors are not designed for fork-lift traffic.

3. **Refrigeration System** – Confirm that you are getting a refrigeration system that is sized correctly for your walk-in. If your system is underpowered it will run often and wear out quickly. If your system is overpowered it will not cycle enough to effectively remove humidity from the box and may cause icing. There are different types of refrigeration systems with different purposes and benefits. For example, remote refrigeration can be located outdoors when your walk-in is located indoors. This is MORE COSTLY BUT beneficial because you're not adding heat or noise to the room where the walk-in operates. It's also important to know the voltage requirements for your building (single or 3 phase power). In general, commercial buildings will use 3 phase power and residential will use single phase. Electrical availability is your responsibility. It is a good idea for Brrr to consult with your electrician to ensure that that you have ample power to accommodate your cooler / freezer.
4. **Design features and Accessories** – Do you need a strip curtain for higher energy efficiency, a temperature alarm to alert you that your refrigeration is not functioning properly, a kick-plate to protect the door, or an internal or external ramp to help you wheel carts into your cooler or freezer? Make a list of additional features you want in your walk-in. It's better to bundle any add-ons with your walk-in purchase because they are often sold at a lower markup vs. buying aftermarket.
5. **Plan for future growth** – It is always a good idea to plan what your refrigeration needs might be in the future. This allows us to design your cooler or freezer so that it will allow for the most affordable expansion when you are ready to do so.

Quality – Quality is not something you want to skimp on with your walk-in cooler or freezer. A cheaply purchased box can sometimes mean inflated electricity costs over the life of the walk-in. The initial sticker price is sometimes the only

consideration instead of what the walk-in will cost you in the long run. Quality LED lighting and refrigeration will be more expensive but it can save you considerable amounts on energy costs over the life of your walk-in. See what kind of insulation is available and how it will affect the price and efficiency. It's important for your walk-in to have a high initial R-value.

Cooler	Average Cost per month	Freezer	Average Cost per month
6x6	\$65.98	6x6	\$227.72
6x8	\$65.98	6x8	\$227.72
8x8	\$117.98	8x8	\$227.72
8x10	\$111.27	8x10	\$347.24
8x12	\$111.27	8x12	\$347.24
10x10	\$140.91	10x10	\$347.24
10x12	\$140.91	10x12	\$406.38

Note: The above figures are estimates; your exact numbers may vary.

6. **Electrical** – Unless you want Brrr to include the electrical bid in our scope, **you are responsible for ALL electrical...** For Coolers, this typically includes power to the condenser, power to the coil inside of the cooler, lighting, switches, power to the thermometer, disconnects and service outlets. For Freezers, add to the list above, heat for the door(s), and heat for the condensate line inside of the freezer. If there is not an adequate floor drain, a condensate pump or evaporative pan may require an electrical outlet as well. There are wires that need to control the solenoid and T-stat these wires go from the coil location to the condenser location. Every job is different but typically these are 2ea 14ga wires that turn the compressor on and off during operation. Brrr refrigeration and Design's Technicians are NOT licensed electricians and CAN NOT do ANY wiring due to liability issues. It is YOUR responsibility to ensure that your electrician is capable of wiring everything properly.

A wiring schematic is on the inside of the coil and Many electricians state that they do not do control wiring. These are not control wiring they are 115v or 220v and they talk to the solenoid via the T-stat.

7. **Roofing, Sealing and Penetrations** – Brrr Can coordinate the roofing and sealing of the penetrations if you wish but this is typically handled by the building owner / Landlord because of warranties on the existing roofing. If included, Brrr will state on the estimate exactly what is being handled by our subcontracted licensed roofer. If you have questions, please contact us at 720-420-0235.

8. **Manufacturers** – Brrr represents all of the major manufacturers of walk-in coolers and freezers. They also vary in terms of quality, price, EISA compliance and design options available. If you have a preferred manufacturer, ask Brrr Refrigeration and Design what manufacturer we recommend and why. It's always a good idea to let your Brrr Salesperson know as much detail as possible so that we can design the most affordable solution for you that will accommodate all of your needs.

9. **Dealers** – Walk-ins are sold through many dealers such as HVAC, HVACR and foodservice companies who then resell to end users like c-stores and restaurants. **MANY DEALERS DO NOT DO THE INSTALLATION THEMSELVES.** You will save time, money, finger pointing and headache if you buy from someone like Industrial Refrigeration & Design, Inc. that does the installation as well.

“We Specialize in Walk-Ins”

10. **Refrigeration piping and service** – Brrr will orchestrate the complete sales process from start to finish if you would like or we can support any part of the process that
[Industrial Refrigeration & Design, Inc.](http://www.industrialrefrigerationco.com) 10750 Irma Drive, Unit 12 Northglenn, CO 80233 720-420-0235 www.industrialrefrigerationco.com

you would like. We subcontract the piping of your cooler or freezer because we have found that it is most beneficial for you to have a technician near you in the event of failure to ensure that you are back up and running as soon as possible.

11. **REFRIGERATION IS FINICKY AND EVERY INSTALLATION IS DIFFERENT** – Often times we will start up your equipment everything will appear to be operating flawlessly then there is a change in temperature or some other fluxuation and we are required to come back until everything gets dialed in with your system. Installation workmanship is waranteed for 90 days and you will want to monitor your equipment closely within this period. Adjustments outside the 90 days will cost you a service call which is typically \$100 just for a service tech to come to you plus time and materials after that.

12. **All remote coolers and freezers require a drain** for the condensate which drains off of the coil that inside of the box. We have options that will allow for drains that are not within 6' of the box. Please be aware that there will be additional charges and electrical requirements if a heated condensate pan or auxiliary pump is required.

13. **EISA Compliance** – The Energy Independence and Security Act that sets standards for walk-in coolers and freezers went into effect January 1st, 2009. Not all manufactures are complying with these requirements and are selling boxes with cheap insulation that doesn't meet the R-value requirements (R-25 for cooler, R-32 for freezers) or refrigeration that doesn't meet efficiency standards. Make sure the manufacturer is aware of EISA requirements and fully compliant with them. To meet current requirements manufacturers will use insulation that is at least 4 inches thick of Extruded Polystyrene or Foamed-In-Place Polyurethane.

14. **Extra Costs** – Living in Colorado where there are substantial distance from ANY panel manufacturer, freight is going to be a major expense. We attempt to quote EVERY job with the freight included. It is a good idea to always ask for a freight estimate up front. Likewise check your tax liability. The installation of your walk-in should be done by our professionals that install refrigeration every day. The refrigeration system must be installed by a licensed refrigeration contractor. Make sure you're made aware of all costs before committing to buy.



15. Walk-ins are shipped unassembled in stacks of panels.

Shipping & Lead Time – For a custom designed walk-in, the standard industry lead time is about 3-4 weeks, but this can easily fluctuate based on manufacturing material supply and consumer demand. If you need a walk-in that's not a typical shape or size, one that needs non-standard refrigeration or any component that must be ordered, see how this will affect your lead time. For example, ordering glass merchandising doors or side access doors may add to your lead time. Walk-ins are shipped unassembled in stacks of panels on skids. If you do not have a forklift available, you will need to pay for a lift gate service.

16. **Warranties** – Below is the standard warranty for panels, refrigeration and walk-in hardware. It is ALWAYS recommended that you purchase the extended warranty offered with you refrigeration equipment. Not only does it offer piece of mind but it

is a small insurance policy should something go wrong that could save you thousands.

WARRANTY POLICY – CLP PANELS

Warranty Provider: Custom Cooler, Inc.

Warranty Recipient: The original purchaser

Warranty Period for Panels: One (1) year from the date of shipment, but not to exceed One

(1) year and Three (3) months.

Warranty Covers: Any defects in material or workmanship under normal use on the CLP panels.

Other Warranty Items: None.

Warranty Statement: Brrr Refrigeration, Inc. will repair or replace any panel found, to the satisfaction of Brrr Refrigeration, Inc., to be defective within the warranty period.

Warranty Exclusions: Panels that have been damaged due to abuse, improper installation, modification, accident, fire, flood, or act of God.

This warranty only covers replacement or repair of the defective panels. No labor or service charges are covered.

WARRANTY POLICY – CAMLOCK PANELS

Warranty Provider: Custom Cooler, Inc.

Warranty Recipient: The original purchaser

Warranty Period for Panels: Ten (10) years from the date of shipment, but not to exceed Ten

(10) years and Six (6) months.

Warranty Covers: Any defects in material or workmanship under normal use on the foamed-in-place panels.

Other Warranty Items: Hardware, accessories, and electrical components such as heater wire or heated air vents.

Warranty Period for Other Items: One (1) year from the date of shipment.

Warranty Statement: Brrr Refrigeration, Inc. will repair or replace any panel or part found, to the satisfaction of Brrr Refrigeration, Inc., to be defective

within the warranty period.

Warranty Exclusions: Parts that have been damaged due to abuse, improper installation, modification, accident, fire, flood, or act of God. This warranty only covers replacement or repair of the defective part. No labor or service charges are covered.

Refrigeration:

If refrigeration equipment is included with the order the following policy applies. A standard of one (1) year parts is included with the refrigeration equipment, effective from the date of sale.

Refrigeration Extended Warranty Program:

All compressors are covered for one (1) year, but an extended warranty can be purchased at the time of order to extend the warranty period to a total of five (5) years.

Refrigeration Labor Warranty (Larkin only):

One (1) year and five (5) year labor warranties, if purchased at the time of order, will cover the labor for those specified periods.

Here is a link to more detail on standard and extended warranties from Heatcraft <http://www.heatcraft.com/res/pdfs/WARRANTYCOVERAGE.pdf>

17. Permitting - Colorado

1. A mechanical Permit for the piping of the refrigeration system is required.
2. If more than one permit is required ie- mechanical and electrical you may be required to hire a general contractor and pull a C1 permit. You may also be required to hire an architect to draw up the plans so that your general contractor can submit for permitting. Check your local governments for more details. It is up to you to make sure that you follow the guidelines set forth by your local governments.
3. Depending on the size of your walk-in, you may be required to add sprinklers bases off of local fire code.
4. A structural stamp may be required for installation where the condensing unit is going to go on the roof or the cooler or freezer must be suspended from the ceiling.

Brrr will ask the following prior to offering you an estimate:

• *Your Ideal Size?*

• *Desired Holding temperature?*

• *Is Alarm Required?*

- | | | |
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| <ul style="list-style-type: none">• <i>Floor required?</i>
_____• <i>Load?</i>
_____• <i>Permitting Required?</i>
_____• <i>Distance from the Condenser</i>
_____ | <p style="text-align: center;"><i>Location to the Coil Location</i>
_____</p> <ul style="list-style-type: none">• <i>Power Available</i>
_____• <i>Redundancy</i>
_____• <i>Condenser location</i>
_____ | <ul style="list-style-type: none">• <i>Condensate Drain Location</i>
_____• <i>Door Location and Hinged Right or Left</i>
_____ |
|--|--|--|

All of us here at Industrial Refrigeration & Design, Inc. hope that this guide will help you make an informed decision on your next walk-in. We are proud to offer you a no obligation price estimate. It is recommended that we come to your site and make suggestions based off of your space, needs, budget and requirements.

We do all sizes of coolers and freezers from Hundred Thousand sq ft warehouses to step-ins and We Look forward to helping you design a product that will meet all of your needs.

