Commercial Cooling Walk-in Box Purchasing Guide

There are several factors to consider when purchasing a walk-in box. In this purchasing guide we will cover some walk-in box basic's to help you to make an informed buying decision.

Outdoor v. Indoor Walk-In. When deciding on the location of your box, consider the following characteristics of outdoor v. indoor boxes.

Indoor walk-in pro's

- Less costly.
- Convenient access to contents.
- Walk-in is protected from elements and severe weather.

Indoor walk-in cons

- Occupies significant amount of expensive indoor space.
- Less convenient for unloading and deliveries.

Outdoor walk-in pro's

- Leaves maximum indoor storage space.
- Easy installation.
- Convenient for unloading and deliveries.

Outdoor walk-in con's

- Potential cost of building a door that leads outside to walk-in.
- Requires roof membrane and 6" raise concrete slab.
- Higher energy use than with indoor.

Cooler v. Freezer v. Combo. Your cold storage needs will dictate the type of box to purchase. Cooler: Typically store items at 35°F. When ordering please specify what will be stored. Freezers: Store items at 0°F or colder, standard freezer is for 'holding' meaning product enters frozen, for ice cream we recommend -15°F to -20°F
Combo: A combo has a cooler and a freezer section with common wall.

Panel Size. Our panels are constructed using high density foam rails along the perimeter with polyurethane foamed-in-place insulation and metal skins. Metal finishes include: galvanized steel; galvalume; aluminum; and stainless steel. Panel thickness can range from 3 ½', 4", 4 ½" & 5". We recommend 5" panels on freezers with holding temperatures of -10°F and colder.

Insulation – Polystyrene v. Polyurethane. The Energy Independence and Security Act (EISA) set R-value requirements, R-25 coolers, R-28 for freezer floors and R-32 for freezers. To meet current requirements Commercial Cooling uses insulation that is at least 3.5" inches thick of Foamed-In-Place Polyurethane. Each Panel has an R-Value which exceeds EISA requirements. By comparison, using polystyrene you would need a panel thicker than 6" for same R-Value as 3.5" Commercial Cooling Panel.

Flooring. Walk-in coolers typically do not need floors unless they are not on-grade, but freezers require insulated flooring. We offer many options for insulated floors.

Door. A very important element of any walk-in, the door must provide access while still preventing cold air from escaping. Purchasing a unit with a self-closing door mechanism, high quality door hinges and latches, along with well-fitting gaskets can help it last longer and prevent loss of cold air resulting in greater energy efficiency. Hinged right means that when you face the front of the walk-in the handle is on your left and the hinges are on your right.

We offer a variety of options, including: Flush or overlap swing doors; manual and electric sliding doors; accessories can include: view windows; temperature alarms; diamond tread kickplates; and locks including locking bars.

Walk-in Box Size. It's wise to plan walk-in refrigeration from the inside out, determine how much space you want inside, including your ideal aisle width and shelving size, and then choose a walk-in that has the external dimensions to accommodate those factors. All sizes on drawings are exterior outside to outside dimensions.

The Refrigeration System – Remote v. Self-contained

Remote refrigeration system. The refrigeration is not a one-piece system, there is a condensing unit located outside with an evaporator coil inside the walk-in. Power source is 208/230, single or three phase and 460V. Characteristics include:

- Less expensive to purchase but more expensive to install.
- Typically sits on roof of the building to improve refrigeration efficiency by nearly 20%.
- Charged with refrigerant at site upon completion.
- Evaporator coil requires drain lines (freezer drain needs heated electrical tape).

Self-contained refrigeration system. One piece refrigeration system – evaporator coil and condensing are all together and mounted on top of the ceiling of the walk-in. Power source is 208/230, single or three phase. Characteristics include:

- More expensive to purchase but cheaper to install.
- Comes pre-charged with refrigerant from factory.
- Built-in drainage system, except with outdoor units.
- Need 3' clearance above walk-in box ceiling.
- Discharge heat into the building which increases load on HVAC system.
- More noise because motor and fans are located inside.

Additional services. To get the most out of your walk-in box, consider additional services such as: delivery and installation; job site surveys; engineering calculations and stamped drawings; and box load calculations.

Warranty. Commercial Cooling offers industry best 20-year original equipment panel warranty. Manufacturer offers one-year warranty on refrigeration equipment. Optional 1, 2 & 5-year extended warranties available through Trinity on refrigeration, parts and labor.