

## **Product: Reach-in Refrigerators/Freezers/Warming Cabinets**

**Variations:** Single, two and three section models, single sided or pass-thru, full and halfsize doors or combinations of the above, solid or glass doors, finishes, and slide/shelf configurations, self-contained or remote, mobile or stationary.

**General:** Most refrigerators are called "medium temperature" units, or will hold a temperature of +35 degrees. Most freezers are called "low temperature" units, or will hold -10 degrees. Most school applications use "spec" model units in lieu of "economy" units. This means they generally use a larger size compressor and have slightly higher capacities. When used between the kitchen and the serving areas, pass-thru models are used. Warming cabinets should be able to hold from 140-180 degrees. Schools often use pass-thru refrigerators and heated cabinets with glass doors on the kitchen side to help the workers in knowing what products need to be replenished.

**Differences:** Single section units have a capacity of 24 cubic feet.  
Two section units have a capacity of 47 cubic feet.  
Three section units have a capacity of 69 cubic feet.  
Single sided units used when unit to be against a wall.  
Pass-thru units used when unit to be between kitchen and serving area.  
Mobile units are mounted on casters for ease of cleaning.  
Three shelves are standard and are used for general purpose storage.  
Pan slides are optional and are used when either bun pans or cafeteria pans are to be stored. Shelves can hold anything; pan slides should only be specified if you will predominantly be using pans. You can specify a combination of shelves in half of the unit and slides in the other half. Half size doors are not usually used in school foodservice. Almost all schools use self-contained units. Remote units use compressors that are located outside the kitchen; these are usually used in large institutions such as hospitals or factories or prisons.

**Required Information:** Space available - left-to-right and vertical, voltage (usually 110 volt, except for three section freezers), type of product to be stored and how it is to be stored, i.e. in pans, pots, cartons, bun pans, etc. Warming cabinets are generally 208-240 volt, single phase and must be wired in, no plugs.

**Concerns:** The biggest concern when specifying refrigeration is to use a unit that has sufficient compressor capacity and insulation characteristics to adequately hold your valuable products at acceptable temperatures. There are new concerns with freon type. R-12 freon, the generally accepted freon for the recent past, has been outlawed by the "Montreal Protocol". This is a body of people that wrote the guidelines for Ozone protection. Be sure that the manufacturer you specify or allow to bid meets the requirements of the protocol. Be aware of the product to be stored when specifying the finish. Stainless steel will hold up better to high-acid products such as fruits and pasta sauces. All high quality manufacturers use stainless steel as standard for the front of units. Aluminum is standard inside. You can specify stainless steel exteriors or interiors as needed.



**Product: Reach-in Refrigerators/Freezers/Warming Cabinets**    **Quantity:** \_\_\_\_\_

**Manufacturer:** \_\_\_\_\_    **Model #:** \_\_\_\_\_

**Type:**     Reach-in Refrigerator  
 Reach-in Freezer  
 Reach-in Heated Cabinet

**Size:**     One Section  
 Two Section  
 Three Section

**Door Type:**     Stainless full length     Glass full length doors  
 Stainless half-size doors     Glass doors on kitchen side of pass- or roll-thru

**Style:**     Single Sided  
 Pass-thru

**Shelves & Slides:**     Three epoxy coated shelves per section (standard)  
 Universal pan slides in full door  
 One half door to be shelves, one half universal pan slides

**Finish:**     Stainless steel front, aluminum sides & interior  
 Stainless steel front, sides & interior

**Options:**     Stainless steel rear (for island installations)  
 6" casters  
 Digital thermometer  
 Stainless steel shelves in lieu of epoxy coated

**Spec:**    Other pertinent information should accompany the above to provide a spec that looks something like this:

One (1) two section reach-in refrigerator, total of 47 cubic feet of storage, unit to have type 304 stainless steel front, interior and exterior. Unit to be of pass-thru construction. Each section to have two (2) shelves in upper half of compartment and universal pan slides in lower half of compartment. Unit to maintain a temperature of +35 degrees under full or empty load conditions. Unit to operate using expansion valve; no capillary tube units accepted. Condensing units to use R-22 refrigerant. Doors to have magnetic, replaceable gaskets. Door sections to be complete with anticondensate heaters on full perimeter of door. Options to include 6" casters. Digital thermometer is to be standard. One-year parts & labor warranty and five-year compressor warranty.

