



Custom Stainless Flat Plates Shown



Custom Wrapped Box Evaporators Shown

Custom Flat Plate Evaporators

Custom stainless steel plates are available for installation into an insulated box. The plates have stainless tubing with special heat transfer compound to improve efficiency. Rectangular plates of any dimension from 10" to 36" are available. Plate size is chosen to maximize the surface area in the box, with a minimum of 40% of the inside wall area covered. Plates are pre-charged with R-134a, and have quick connect fittings. Plates without charge are also available.

Custom Wrapped Box Evaporators

Cruisair custom wrapped boxes are ideal for use where a clean box interior is necessary, although almost any refrigeration application can be built. Using the wrapped box as bait freezers or catch boxes helps keep the items from freezing to the evaporator surface, and aids in cleaning of the box. The fiberglass box is wrapped with copper tubing and pre-charged with R-134a at the factory. A special heat transfer compound is used to help heat transfer from the box to the tubing. All boxes are supplied with quick connect fittings to speed installation. In fact, Cruisair can offer a turn-key product: the fiberglass box per your design, wrapped with tubing and insulated.

Pre-charged 3/8" copper tubing for wrapping boxes is also available in lengths of 50 - 150 feet.

Contact the applications department for help in designing your refrigeration system.

Features

Custom Wrapped Box

- Inside of freezer box is free of all refrigeration equipment, and has a clean look.
- Less holes through box mean less chance of content leakage.
- There are no plates for food, bait, or catch to freeze on.
- Easy cleaning of box.
- Excellent performance as a freezer or refrigerator.
- Factory sealed refrigerant connections of evaporator tubing.
- Cruisair will help design the box that will fit your needs.
- Cruisair can build a turn-key unit which includes the fiber glass box, tubing wrap, and insulation.

Custom Flat Plates

- Cruisair custom stainless steel refrigeration plates can be the answer to refrigeration of your fish box, cockpit freezer, drink box, bait freezer, or any other custom refrigeration needs.
- Refrigeration plates can be built to the exact dimensions of each particular box requirement.
- Cruisair refrigeration plates are ideal for both freezer and refrigeration applications.
- Refrigeration plates are constructed of durable 18 gauge 304 stainless steel which will resist corrosion from harsh environments and damage from objects in the box.
- Total thickness of plate is held to a max. of 5/8" which allows for use of virtually all of the interior of the box.
- Refrigerant tubing is spot welded to the underside of the plate. The tubing is 3/8" stainless steel, so it also resists corrosion from harsh environments.
- Cruisair will help with box design, thickness, condenser sizing and plate sizing.

Specifying Your Custom Flat Plate Evaporators

To Determine what size plates you will need to order, first decide where you can place the plates in the box to maximize plate surface area. Plate surface area should be at least 40% of the box's total surface area, which means adding all six sides of the inside of the box into the equation. Less plate surface can be used when box is operating only as a refrigerator (35°F+).

For example, a box that is 20" long, 20" deep, and 10" wide has a total of 1600 sq. inches. Forty percent of 1600 sq. inches is 640 sq. inches, so we will need plates to cover at least 640 sq. inches. If we pick the two ends, that only gives about 400 sq., but if we cover the two sides that are 20" x 20", we have about 800 sq. inches to cover. This would give enough plate surface area to efficiently cool the box.

When ordering, be sure to specify length and width of plate, where the refrigerant lines need to come out of the plate, and length of the lines.

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