

# **Required Instructions**

## FAILURE TO FOLLOW THESE INSTRUCTIONS MAY AFFECT YOUR WARRANTY.

#### Low Temperature (Freezer) Door and Frame Installation

Over the last decade, the Department of Energy (DOE/NRCAN) has mandated a reduction in energy consumption for glass doors, frames, and lighting. For glass door manufacturers to qualify their products, each model (both normal and low temp) must be submitted to the DOE/NRCAN. All data must be validated.

\*\*\* Energy Door Company doors are compliant.\*\*\*

## These DOE/NRCAN-mandated changes affect all glass display door manufacturers and therefore...

- 1. The amount of heat that can be applied to normal and low-temp frames and doors has been reduced, requiring Low E (heat reflective) glass along with gas, and the elimination of heated glass.
- 2. Less heat on the doors and frames means conditions in the cooler/freezer, as well as the store conditions, <u>must be within the recommended limits</u>.
- Consequently, on low temp (freezer) doors/frames and especially <u>narrow</u> walk-in freezers and coolers, <u>it is critical that evaporators</u>:
  - Are located at least 8 feet from the back of frames -- to reduce the amount of cold air blown directly on the frames.
  - Shelves must be stocked to assist in blocking cold air hitting the doors directly.
  - In some situations, it is required to have air deflectors installed. (Supplied by others.)
- 4. Taller freezers are recommended. The bottom of the evaporator should be at least 2 feet above the top of the frames.
- 5. Store temperatures and humidity levels must be maintained according to the performance <u>charts</u> provided by the door manufacturer.
- 6. It is important that installation is performed according to the door manufacturer's instructions to assure:
  - All frames and doors are plumb and square.
  - All frames are sealed properly, and that doors are torqued to the <u>manufacturer's instructions</u>.
- 7. It is critical that the frame fits the net cooler opening. If there are gaps, they must be sealed with NSF Approved expanding foam and/or Low Temperature caulk (down to -60F/-50C).



### LOW TEMP DOOR & FRAME **INSTALL INSTRUCTIONS**

#### **Tools needed**

- Tape measure •
- Drill •
- Level
- Screwdriver
- Needle nose pliers

#### **Materials needed**

Low temperature silicone sealant like <b>TruSil 100</b> or equivalent.	Butyl sealant like <b>Xtra</b> <b>Bond 1500NS</b> or equivalent.	Insulation tape like <b>Armorflex Tape</b> or equivalent: 1/8" thick x 2"
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See full technical data sheet.	See full technical data sheet.	

See full technical data sheet.







## LOW TEMP DOOR & FRAME INSTALL INSTRUCTIONS (pg.2)

#### 1. Prepare the Box/Case

- All frame installation areas need to be **debris free.** 
  - Remove sheet rock mud and other materials that could protrude into the net opening.
  - Frames should be installed directly on the walk-in, not on top of sheetrock.
  - Make sure there are no jagged edges that could come into contact with the frame.
  - Assure nothing will transfer cold to the frame.
  - Sweep all areas where the frame is being installed to remove dust, dirt, and building materials.

#### 2. Pre-fit the fame to the net opening

- Place frame into net opening.
  - Assure it is level and square into the opening.
  - Temporarily pin/screw it to the cooler.
- Using blue painter's tape, tape around the perimeter of the flange.
  - When you remove the temporarily-installed frame, this will allow you to see the area that will NOT be covered by the frame.
- Remove the pre-fit frame.

#### 3. Apply a <sup>1</sup>/<sub>4</sub>" bead of butyl sealant on all four sides of the opening to the...

- Corner edge of the walk-in box opening (<u>customer side</u> of the thermal barrier).
- Inside edge of the thermal barrier (product side of the thermal barrier).

#### 4. Wrap the Armorflex tape around the perimeter.

- Wrap it to the inside of the box starting at the customer side about 1/8" from the blue outline tape (applied in step 2).
  - This will encapsulate the butyl sealant.

#### 5. Install the frame back into the net opening.

• Make sure to align it with the edges of the tape to confirm the frame is level and square.



## LOW TEMP DOOR & FRAME INSTALL INSTRUCTIONS (pg.3)

#### 6. Back seal the frame from the inside of the box.

- Seal around all 4 sides where the frame meets the box.
  - If necessary, bend the post brackets <u>slightly</u> to ensure a seal behind them, then bend back into place.
- 7. Have licensed electrician wire the frame to your power source.
- 8. Install posts and shelving, if applicable.
- 9. Install metal flashing/deflector across the tops of posts. (Not included.)
  - Include a bend that goes up the cooler wall at the customer side. <u>This</u> metal will ensure that the evaporator fans do not pump cold air through the tops of the doors when the doors are opened from the customer side.
- **10.** Install all doors.