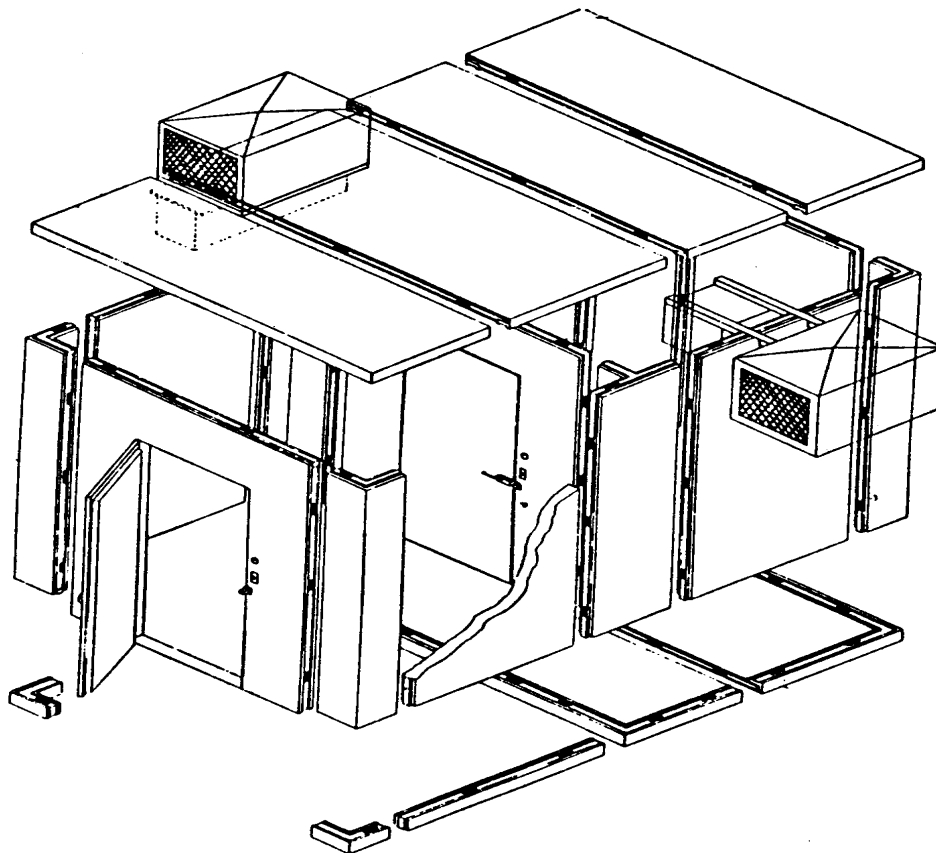


Thermo-Kool®

INSTALLATION/MAINTENANCE MANUAL FOR WALK-IN COOLERS/FREEZERS



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THERMO-KOOL/Mid-South Industries, Inc.
Walk-in
Installation and Maintenance Manual

TABLE OF CONTENTS

| SECTION TITLE | PARAGRAPH NUMBER | PARAGRAPH TITLE | PAGE NUMBER |
|--------------------------|-----------------------------|---|------------------------|
| | | PREFACE | i |
| A | | INSTALLATION OF PREFAB FLOOR TYPE WALK-INS | 1 |
| | I. | PREPARATION OF BUILDING FLOOR | 1 |
| | II. | OPERATION OF THERMO-KOOL INSTA-LOKS | 1 |
| | III. | INSTALLATION OF FLOOR PANELS | 2 |
| | IV. | INSTALLATION OF WALL PANELS | 2 |
| B | | INSTALLATION OF FLOORLESS TYPE WALK-INS | 4 |
| | I. | PREPARATION OF BUILDING FLOOR | 4 |
| | II. | VINYL U-CHANNEL AND FLOOR SCREED INSTALLATION | 5 |
| | III. | FLOORLESS FOAM SCREEDS | 7 |
| C | | INSTALLATION OF INTERIOR BEAMS AND POSTS | 8 |
| D | | INSTALLATION OF WEATHERCAPS | 10 |
| | I. | METAL WEATHERCAP INSTALLATION | 10 |
| | II. | SLOPED METAL WEATHERCAP INSTALLATION | 10 |
| | III. | VINYL WEATHERCAP INSTALLATION | 11 |
| | IV. | SLOPED VINYL WEATHERCAP INSTALLATION | 12 |
| | V. | DOOR CANOPY INSTALLATION | 13 |
| E | | ELECTRICAL INSTALLATION | 14 |
| | I. | ELECTRICAL CONNECTION TO DOOR PANEL | 14 |
| | II. | HEATED PRESSURE RELIEF VENT | 16 |
| | III. | CEILING MOUNTED VAPOR PROOF LIGHTS | 16 |
| F | | MISCELLANEOUS | 17 |
| | I. | DIAL THERMOMETER CALIBRATION | 17 |
| | II. | VINYL SWEEP GASKET ADJUSTMENT | 18 |
| | III. | FRAME HEATER CABLE REPLACEMENT | 18 |
| | | HEATER WIRE REMOVAL | 18 |
| | | HEATER WIRE INSTALLATION | 19 |
| | IV. | PANEL PENETRATIONS | 20 |
| G | | METAL CLEANING PROCEDURE | 21 |
| | I. | NORMAL CLEANING | 21 |
| | II. | HEAVY STAINS | 21 |
| | | ALUMINUM/STAINLESS STEEL/GALVANIZED PANELS | 21 |

LIST OF FIGURES

| FIGURE NUMBER | FIGURE TITLE | PAGE NUMBER |
|------------------|--|----------------|
| 1 | Camlock Operation | 1 |
| 2 | Floor Panel Layout | 2 |
| 3 | Floor Leveling | 2 |
| 4a | Wall Locking Sequence | 3 |
| 4b | Ceiling, Floor, and Wall Section Layout | 3 |
| 5 | Building Floor Section | 4 |
| 6 | Chalk Line Layout | 4 |
| 7 | Perimeter Layout | 4 |
| 8 | Vinyl Floor Screed Layout | 5 |
| 9 | U-Channel Layout | 5 |
| 10 | Door Layout | 6 |
| 11 | Floorless Foamed Screed Section | 7 |
| 12 | Interior Beam & Exposed Post | 8 |
| 13 | Interior Beam & Concealed Post | 8 |
| 14 | Interior Beam & Exposed Post (2) | 9 |
| 15 | Interior Beam Cover | 9 |
| 16 | Metal Weathercap Installation Flashed to Building Wall | 10 |
| 17 | Sloped Aluminum Weathercap | 10 |
| 18 | Vinyl Weathercap Layout | 11 |
| 19 | Vinyl Weathercap Anchoring | 11 |
| 20 | Fastener Locations | 11 |
| 21 | Additional Vinyl Weathercap Anchoring | 11 |
| 22 | Vinyl Weathercap End Piece | 12 |
| 23 | Flashing Trim | 12 |
| 24 | Walk-In Vinyl Weathercap Section | 12 |
| 25 | Sloped Vinyl Weathercap Section | 13 |
| 26 | Door Canopy Installation | 13 |
| 27 | VP Light and Conduit Connections Sections | 16 |
| 28 | Wall Mounted Heated PR Vent Section | 16 |
| 29 | Ceiling Mounted VP Light Section | 16 |
| 30 | Dial Thermometer Calibration | 17 |
| 31 | Sweep Gasket Section | 18 |
| 32 | Door Frame Heater Wire Replacement | 19 |
| 33 | Panel Penetration | 20 |

LIST OF WIRING DIAGRAMS

| DIAGRAM NUMBER | WIRING DIAGRAM | PAGE NUMBER |
|-------------------|-------------------|----------------|
| 1 | Door Frame | 15 |
| 2 | Heated PR Vent | 16 |

PREFACE

Please read this manual thoroughly before attempting to install your **THERMO-KOOL** walk-in. It contains important instructions, information, and precautions about the installation of the walk-in panels and accessories, and must be followed carefully for an accurate and easy installation.

RECEIVING

When this equipment is delivered to the jobsite or warehouse, be sure to inspect for damage. If damage is found, indicate the type of damage on the carrier's bill of lading so a claim can be filed. If concealed damage or loss is discovered, notify your carrier at once and request an inspection. **This is absolutely necessary.** A concealed damage or loss report **must be completed within 15 days of delivery of shipment.** Refer to the pink copy of loss or damaged goods notification found in the hardware box for additional instructions. Any shortage of components or parts must be reported to **THERMO-KOOL** within 5 days. **Do not throw away any crates or cartons if parts are missing before thoroughly checking.**

STORAGE

If panels must be stored once they are received, some precautions must be taken to ensure the panels remain in like new condition until they are installed. **Improper storage such as being stored outdoor without a tarp can result in physical damage to the panels.**

More importantly, moisture may damage the panels. All metals, especially galvanized steel and aluminum, will water stain or white rust if allowed to be exposed to water in the form of rain, snow, or condensation in areas of high humidity. Once the metal surface is discolored, the discoloration is difficult and sometimes impossible to remove. Where possible, store panels inside a building away from any chemicals, chemical fumes, or moisture.

If panels must be stored outdoors, additional precautions must be taken. If panels are stored on open ground, use a plastic ground cover to prevent moisture from condensating on the panels. Stack the panels on wooden runners or skids or on edge allowing 1/4" - 1/2" air space between the panels. Cover the panels with a new waterproof tarpaulin. Elevate to one side or end to allow moisture to run off the cover. DO NOT USE PLASTIC to cover the panels as plastic will trap moisture underneath, possibly damaging panels.

INSTALLATION OF PREFAB FLOOR TYPE WALK-INS

Section A

General

When the walk-in is to be erected next to a building wall, allow approximately 1" clearance between the walk-in and building wall. This will allow for any building wall surface irregularity and ventilation.

I. PREPARATION OF BUILDING FLOOR

1. **The existing building floor must be level.** Unlevel building floors can cause the walk-in panels to be uneven, sawtoothed, difficult to align and lock, and can create air gaps at seams leading to air infiltration problems. The hinged entrance door may be out of plumb, may not seal, and may be difficult to operate. Mark on the building floor the area the walk-in is to occupy. Check the area for squareness by measuring diagonally across corners. Find the highest point in the building floor and level from that point. If the walk-in is larger than 10' x 10', use of a transit is recommended.
2. The levelness of the walk-in floor is very important. The entire floor area must be leveled from the highest point. If shimming is required to level the floor sections, the shims must extend underneath the entire section, not just at the edges. Shims must be used at the ends and at all floor seams. Shims must not exceed 12" on center (Refer to Figure 3).
Note: If shims are used, the floor panel load carrying capacity will be reduced. If the walk-in floor panels are set in a building floor depression, self-leveling grout or a mud bed may be used to level the floor panels. The use of sand is not recommended.
3. If the floor panels are placed directly on the concrete building floor, use a barrier such as 50 lb. asphalt paper between the building floor and the floor panels.

II. OPERATION OF THERMO-KOOL CAMLOCKS

1. Before beginning the installation of a walk-in, it is essential to be familiar with the operation of the THERMO-KOOL camlock (Refer to Figure 1). The operation of the camlock is achieved by the use of a 5/16" hexagon wrench supplied with each walk-in. Insert the wrench into the access hole in the panel and rotate the camlock by turning the wrench in a clockwise direction. Turn the wrench counter clockwise to retract the camlock into its housing.
2. **The camlock must be fully retracted into its housing before attempting to relock the camlock.** This will fully extend the hook. Failure to do so may not allow the hook to engage the pin, resulting in failure to properly lock the camlock.

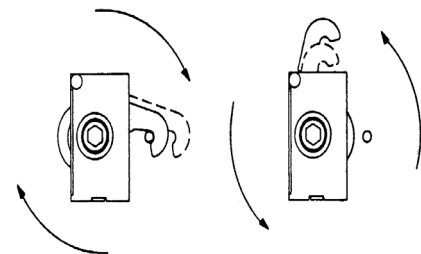


Figure 1 - Camlock Operation

Note: On wall panels with the male tongue on the left hand vertical side when facing the panel from the interior side, the camlock will operate in a counter clockwise manner. Turn the wrench clockwise to retract the camlock into its housing.

- Refer to Figures 2 and 3 for examples of typical panel layouts. The instructions in this manual reference the panel numbers shown in the illustrations. Your walk-in may be different from that shown, but the installation procedure is the same. Refer to the floor plan drawing packed in the hardware box for your particular walk-in.

III. INSTALLATION OF FLOOR PANELS

All floor panels are identified by letters. The first floor end panel will be identified by the letter "A" and remaining panels B, C, D, E, etc., in sequence (Refer to Figure 2). Place floor end panel "A" into position and level front to back and side to side. Place the remaining floor panels, locking and leveling each panel as you go. Be sure all camlocks are locked to the full cam position and all panels are level.

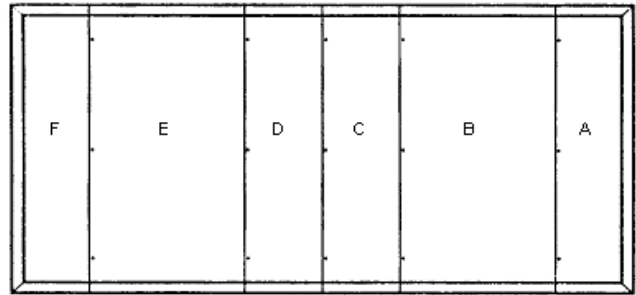


Figure 2 - Floor Panel Layout

Walk-in floor panels are designed to maintain their integrity under a maximum, uniformly distributed, stationary load of 600 lbs/ft². **If carts, buggies, pallet jacks, or other type mobile equipment are to be used inside the walk-in, a thick set concrete wearing floor must be installed on top of the walk-in floor panels. Failure to do so voids the warranty.**

IV. INSTALLATION OF WALL PANELS

- Pull the protective paper, if present, approximately two inches from the edges prior to installation. This will make paper removal easier once the panels are installed.

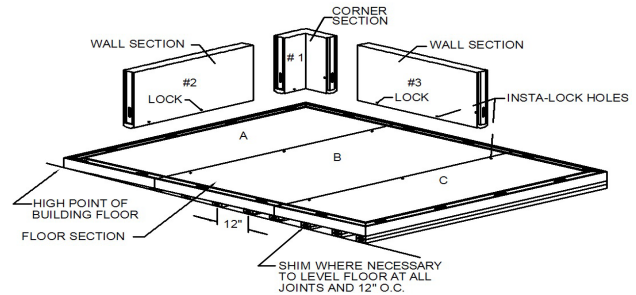


Figure 3 - Floor Leveling

- Place corner panel #1 into position and lock it to the floor panel. Place wall panels #2 and #3 into their respective positions. Fully lock the middle camlock and half lock the top and bottom camlocks, making sure the wall panels are aligned and even at the top and bottom. Align the wall panels to the floor panels, ensuring squareness, levelness, and alignment to the floor (Refer to Figure 3). Lock the remaining camlocks, securing the wall panels to each other first and then to the floor panels.

3. The typical and best sequence of locking the wall panels and floors together to ensure the wall panels are aligned at the top and bottom can be seen in Figure 4a.

4. Proceed placing wall panels #4, #5, and #6, per the walk-in layout drawing, completely locking the middle camlocks only and half locking the top and bottom camlocks. Ensure that the wall panels are properly aligned to each other and the floor. Lock the remaining camlocks, securing the wall panels to each other first, then to the floor panels (Refer to Figure 4b).

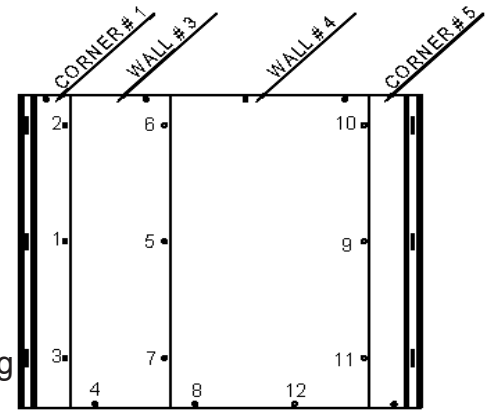


Figure 4a - Wall Locking Sequence

5. Place ceiling panel #7 into position, locking all wall-to-ceiling camlocks except for the one on each side nearest the exposed ceiling panel seam. Leaving these two camlocks unlocked will ensure easier installation of the next ceiling panel. Continue with wall panels #9, #10, and #11, as outlined in step 2.

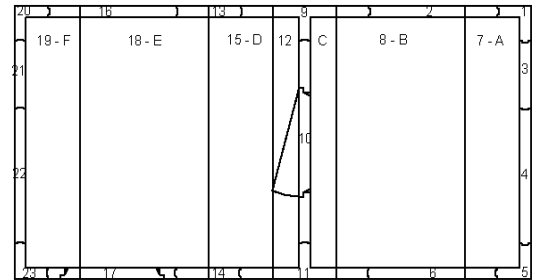


Figure 4b - Ceiling, Floor, and Wall Section Layout

6. Special attention must be given to door panel assembly #10 as it is a partition door section (Refer to Figure 4b). **Be sure the door section is leveled front to back, vertically, and side to side.** Check to ensure the frame opening is square to the door and the door is flush at the top and bottom on the latch side. **Note: The door may not seal or operate correctly if the frame is not level and square.**

7. Place ceiling panel #8 into position and lock it to ceiling panel #7 first, then to the wall panels, leaving the wall-to-ceiling panel camlocks nearest the exposed ceiling panel seam on either side of ceiling panel #8 unlocked. Lock the two wall-to-ceiling panel camlocks left unlocked in step 4 to panel #7. Proceed with wall panels #13 and #14, as outlined in step 2.

8. Place ceiling panel #12 into position by following the procedure outlined in step 6. Place ceiling panel #15 into position following the procedure outlined in step 6. Proceed with wall panels #16 and #17, as outlined in step 2. Special attention must also be given to door panel assembly #17 that should be installed in the same manner as door panel assembly #10.

9. Place ceiling panel #18 into position by following the procedure outlined in step 6. Proceed with wall panels #20, #21, #22, and #23, as outlined in step 2. At this point the last ceiling panel #19 should be placed into position. Lock ceiling panel #19 to ceiling panel #18 first, then lock the remaining camlocks.

10. Remove all protective paper from the panels and all panel number labels immediately after installation. **Do not** remove any other labels until the building inspector has inspected the walk-in, if applicable. **The Underwriters Laboratory labels should remain indefinitely, even after the building inspector has inspected the walk-in.**

11. Install #8 x 3/4" threshold screws provided to secure the threshold to the floor panel.
12. Insert plastic plug buttons into all camlock access holes. If the buttons are difficult to insert into the holes, a small screwdriver should be used to remove any excess foam that may be in the hole. This will allow easier plug button installation.

Caution: If concrete, quarry tile, etc., is to be installed after the walk-in is erected, do not leave the entrance door closed. Curing concrete generates hydrogen gas and will cause blackening of aluminum and galvanized metal skins. Leave all doors open until concrete or grout has cured. Protect the wall panels from concrete, grout, and chemical splatter with polyethylene taped to the walls.

INSTALLATION OF FLOORLESS TYPE WALK-INS Section B

I. PREPARATION OF BUILDING FLOOR

1. Most floorless applications require a building floor designed with slab insulation and breaker strips built into the floor by the general contractor (Refer to Figure 5). **Insulated wall panels and screeds, if supplied, must be installed on the breaker strip.** The breaker strip reduces heat transfer from the warm side of the panels to the cold side of the panels. The breaker strip must be exposed and not covered by concrete or mortar. Chip away any concrete that may be covering the breaker strip. The recommended breaker strip size is 2" x 8" with a minimum recommended size of 2" x 6".

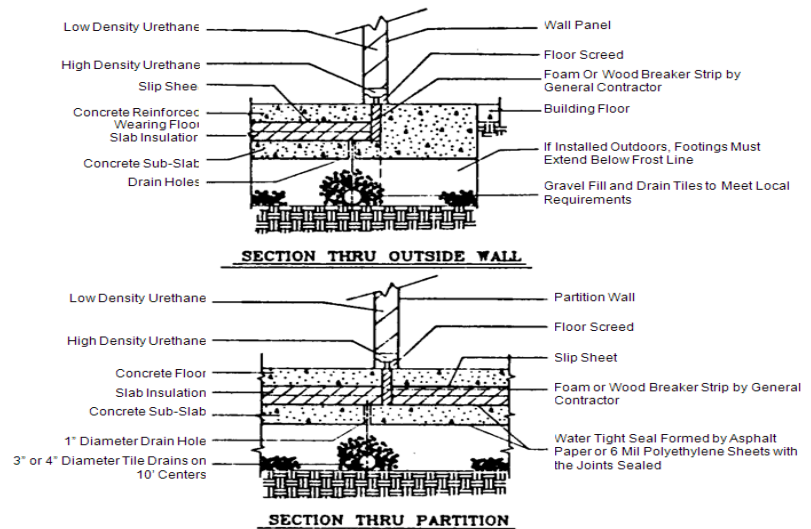


Figure 5 - Building Floor Section

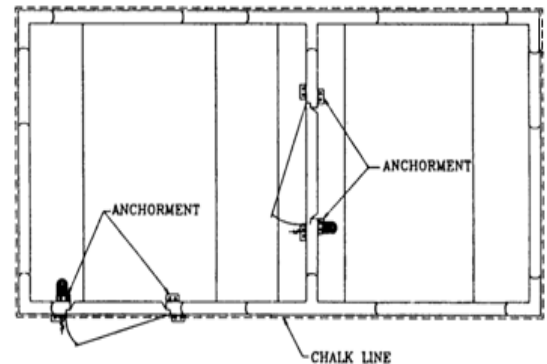


Figure 6 - Chalk Line Layout

2. **Using a chalk line, lay out the outside perimeter of the walk-in.** The perimeter should be 2-1/2" from the center line of the breaker strip. Make sure the area is square by measuring diagonally across corners (Refer to Figures 6 and 7).
3. Find the high point of the building floor and level the screeds from that point if necessary. If the walk-in is larger than 10' x 10' use of a transit is recommended.

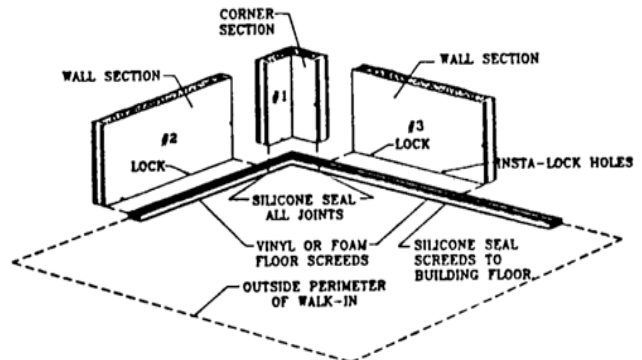


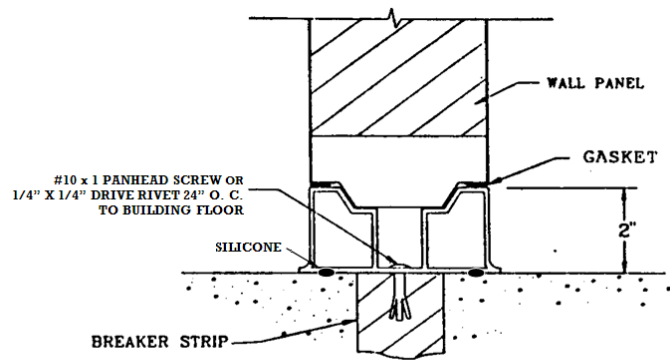
Figure 7 - Perimeter Layout

II. VINYL U-CHANNEL AND FLOOR SCREED INSTALLATION

1. Anchor vinyl U-channel and floor screeds by the following method (Refer to Figures 8 and 9; page 5):

- A. Apply a continuous bead of silicone sealant approximately 1/4" wide 1/2" from the interior and exterior edges along the bottom surface of the floor screed or U-channel.
- B. Drill pilot holes approximately 24" apart O.C. in the center of the screed and fasten the U-channel or floor screed to the breaker strip with the #10 x 1 panhead screws and washers; or 1/4" x 1/4" drive rivet.

2. Starting at the location for corner panel #1, layout vinyl U-channel / floor screed #A-A, #B-B, #C-C, as shown on the vinyl U-channel / floor screed layout drawing found in the hardware box. Position the vinyl U-channel / floor screed so it is flush with the perimeter line and centered over the breaker strip. Level the first sections to the high point of the floor. After leveling, anchor the screeds. Silicone the joints between the screeds on the exterior and interior sides.
3. Follow instructions for setting up wall and ceiling panels outlined in Section A, pages 1-3.
4. Anchor the door sections as shown in Figure 10, page 6. Aluminum angles are provided to anchor the exterior and interior side of the door frame jambs. After the door frame is leveled and square, secure the bottom of the frame with the aluminum angled anchors. This will prevent the frame from shifting position.
5. Continue following the screed layout drawing until the last corner panel is in place.
6. Beginning with corner panel #1 and performing the sequence described in Section A, pages 1-3, lock all camlocks to wall panels, vinyl floor screeds or vinyl U-channels, and the ceiling panels as the walk-in is being set up.



FLOORLESS VINYL SCREED

Figure 8 - Vinyl Floor Screed Layout

NOTE: IF A WOODEN BREAKER IS NOT USED, THEN A DRIVE ANCHOR SHOULD BE USED IN PLACE OF A SCREW

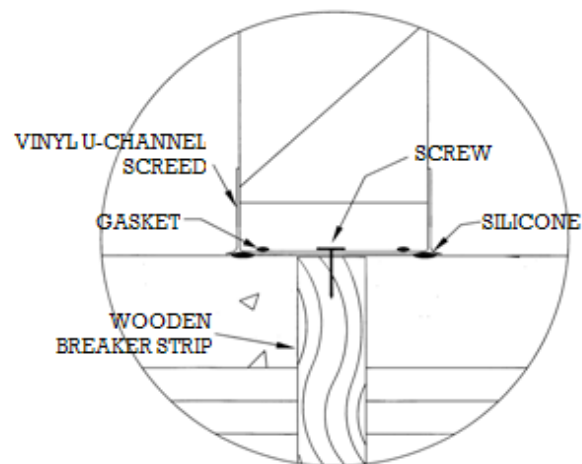
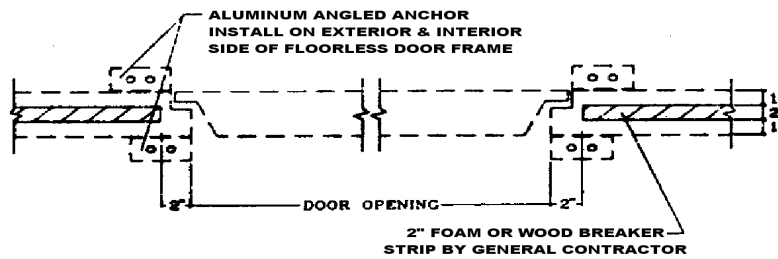


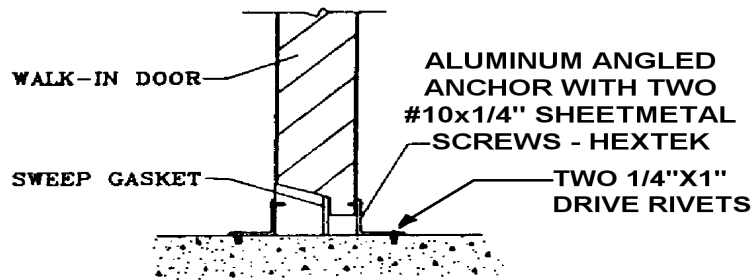
Figure 9 - U-Channel Layout

7. Remove all protective paper, if present, from the panels and all panel number labels immediately after installation. Do not remove any other labels until the building inspector has inspected the walk-in if applicable. **The UL Laboratory labels should remain indefinitely, even after the building inspector has inspected the walk-in.**
8. Install plastic plug buttons in all camlock access holes. If the buttons are difficult to insert in the holes, a small screwdriver should be used to remove any excess foam that may be in the hole. This will allow easier plug button installation.

Caution: If concrete, quarry tile, etc., is to be installed after the walk-in is erected, do not leave entrance door closed. Curing concrete generates hydrogen gas and will cause blackening of aluminum and galvanized metal skins. Leave all doors open until concrete or grout has cured. Protect the wall panels from concrete, grout, and chemical splatter with polyethylene taped to the walls.



PLAN VIEW AT ALL DOORS



SECTION THRU DOOR FRAME

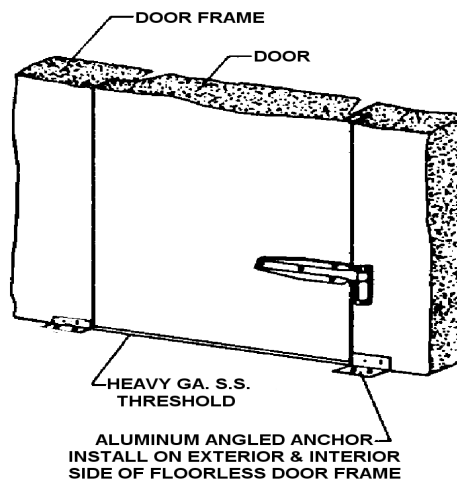


FIGURE 10 - DOOR LAYOUT

III. FLOORLESS FOAM SCREEDS

1. Anchor foamed floor screeds by the following method:
 - A. Use a 3/8" x 6" hexhead lag screw with expansion shield to drill a 3/8" diameter hole in center of screed approximately 23" O.C. and counter bore 1-1/4" x 3/8" deep (Refer to Figure 11).
 - B. Apply a continuous bead of silicone sealant approximately 1/4" wide along the interior and exterior edges along the bottom surface of the screed.
2. Install foam screeds as outlined in Section B, page 4.
3. Install coved base molding after walk-in is erected. Coved base molding is mandatory to meet NSF Standard 7 requirements.
4. Anchor door sections as outlined in Section B, step 4; Figure 10, page 6.

Caution. If concrete, quarry tile, etc., is to be installed after the walk-in is erected, do not leave the entrance door closed. Concrete generates hydrogen gas and will cause blackening of aluminum and galvanized metal skins. Leave all doors open until concrete or grout has cured. Protect the wall panels from concrete, grout, and chemical splatter with polyethylene taped to the walls.

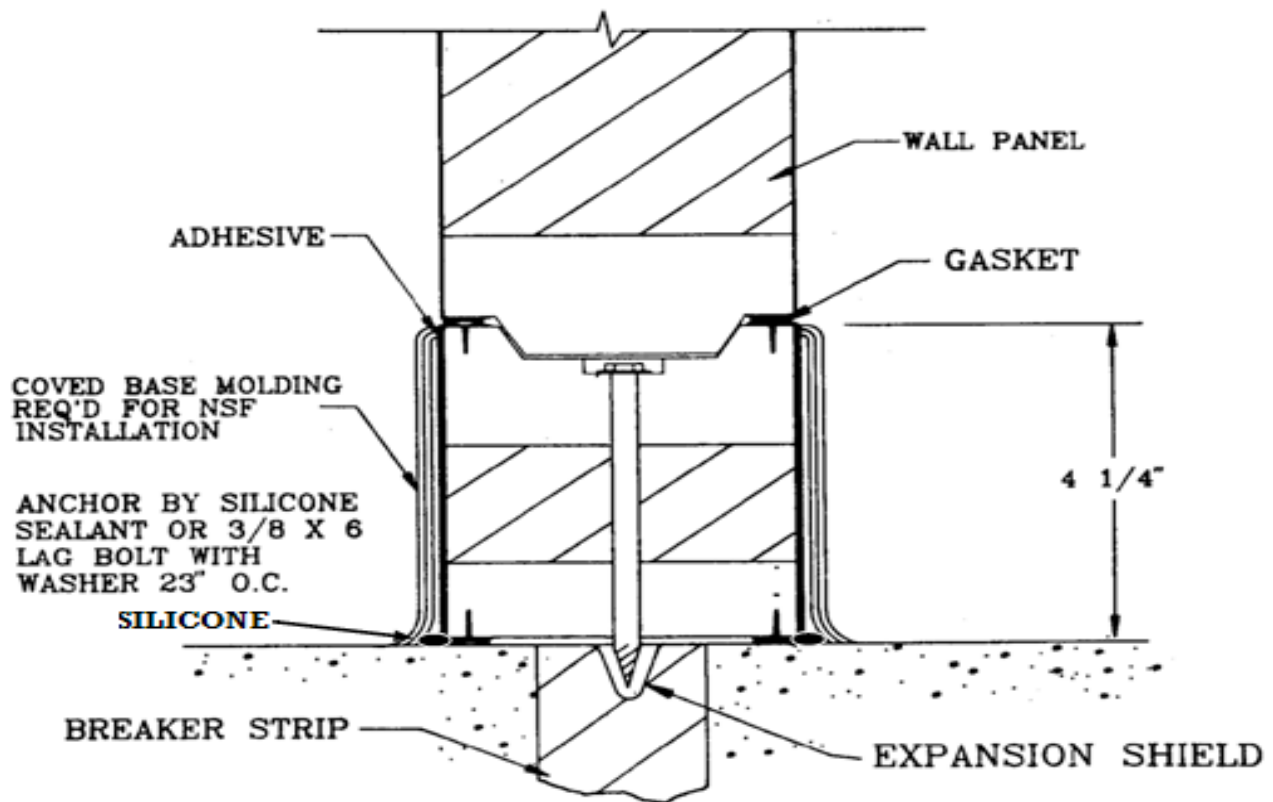


Figure 11 - Floorless Foamed Screed Section

INSTALLATION OF INTERIOR BEAMS AND POSTS

Section C

1. Assemble the walk-in per Section A, pages 1-3, supporting the ceiling panels until the interior beam and post structural members can be installed.
2. Assemble the beams and posts per Figures 12, 13 and 14.
3. Install the beam covers referencing Figures 14 and 15. All workmanship must meet the requirements of NSF Standard 7.

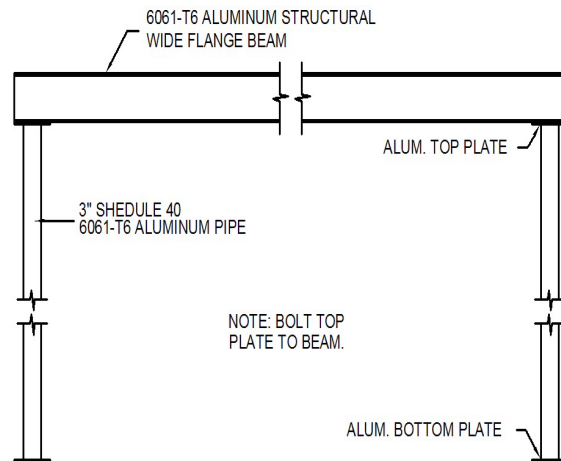


FIGURE 12 - INTERIOR BEAM & EXPOSED POST

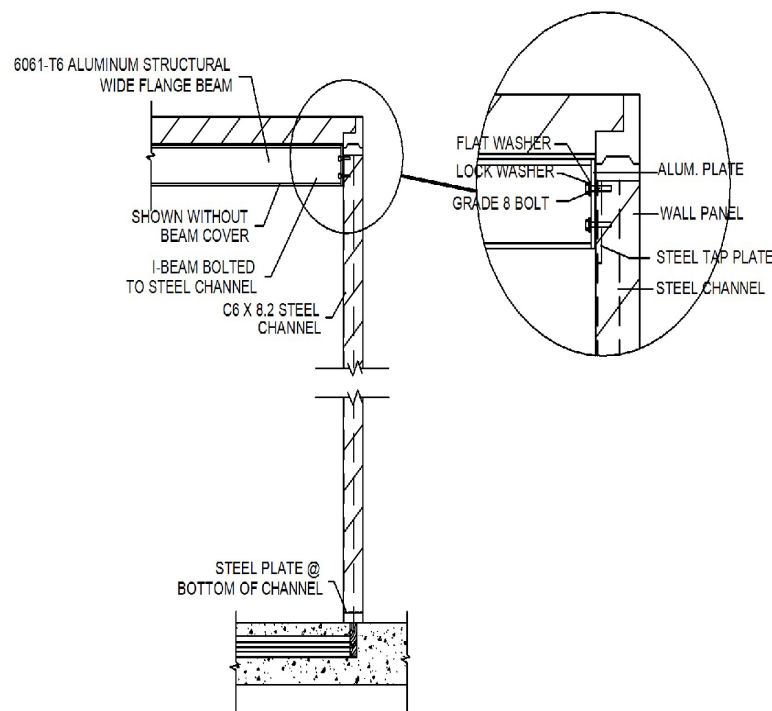


FIGURE 13 - INTERIOR BEAM & CONCEALED POST
(BEAM TO CONCEALED POST ATTACHMENT)

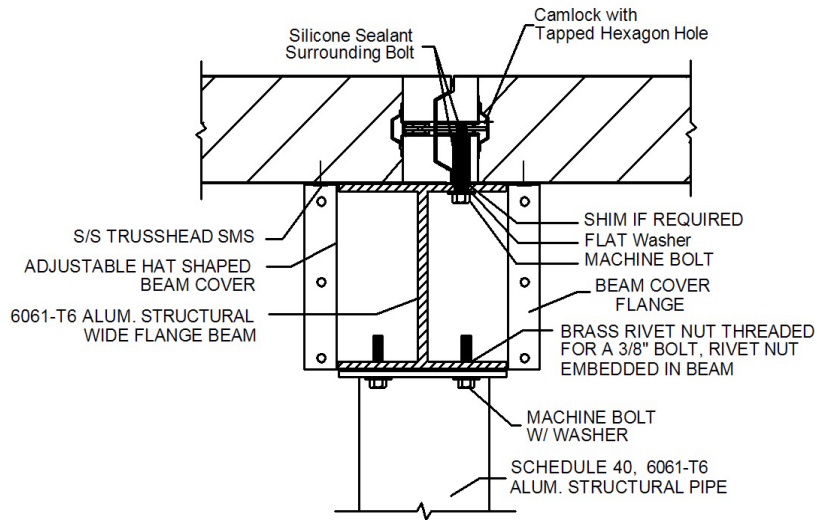


FIGURE 14 - INTERIOR BEAM & EXPOSED POST

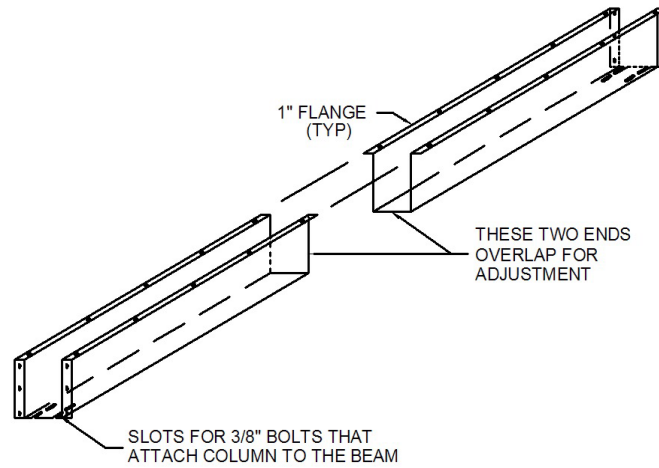


FIGURE 15 - INTERIOR BEAM COVER

INSTALLATION OF WEATHERCAPS

Section D

I. METAL WEATHERCAP INSTALLATION

1. Inspect the roof of the walk-in and remove any foreign matter. Seal all roof seams and all protruding screw heads, nuts, rivets, etc., with silicone sealant. This will help prevent penetrating or wearing a hole in the metal roof cap after it has been installed.
2. Roll out roofing felt on ceiling panels overlapping the edges by 2" - 4". Roofing felt will help prevent condensation from forming underneath the cap.
3. Position the first weathercap #WC-1 and attach 6" flange to ceiling panels with #8 x 3/4" screws provided. Continue placing #WC-2, #WC-3, etc., fastening to the ceiling panels. Ensure all metal seams are snug. Do not allow metal seams to spread or the overall cap will be too large for the walk-in (Refer to Figure 16).
4. After all metal caps are in place and securely fastened to ceiling panels, seal all edges and seams. **Note: Where the walk-in is installed next to a building wall, the ends of the weathercap will flange upwards 6" against the building. Attach the flange to the building wall and seal watertight (Refer to Figure 16).**

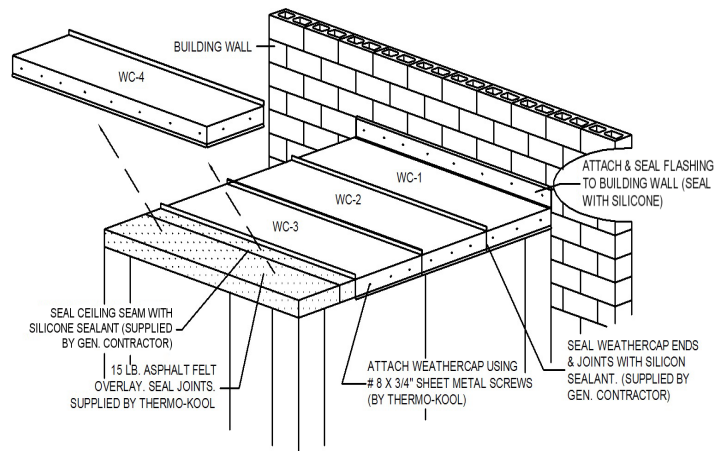


FIGURE 16 - METAL WEATHERCAP INSTALLATION FLASHED TO BUILDING WALL

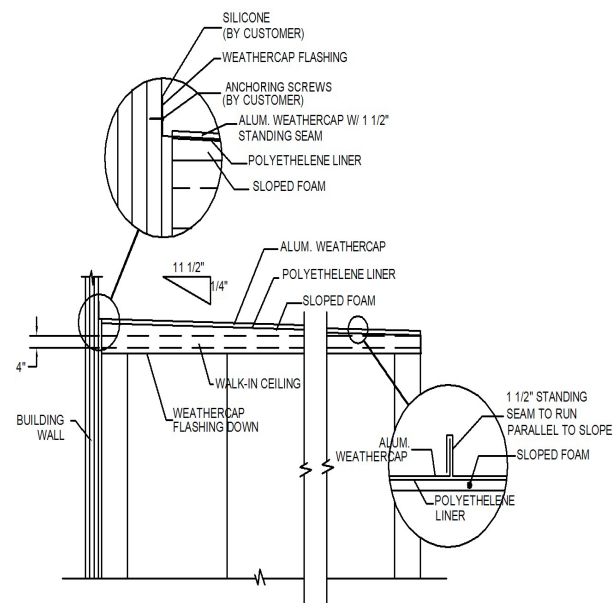


FIGURE 17 - SLOPED ALUMINUM WEATHERCAP

II. SLOPED METAL WEATHERCAP INSTALLATION

1. Sloped metal weathercaps are provided with the sloped foam.

2. Clean and seal the ceiling panels and attach the sloped foam to the ceiling panels (Refer to Figure 17; page 10).
3. Install the metal weathercaps as described in Section E, Paragraph I, page 10.

III. VINYL WEATHERCAP INSTALLATION

1. Before installation, check the overall width and length of the vinyl weathercap. It should be approximately both one foot wider and longer than the walk-in.
2. Check the roof top of the walk-in and remove any foreign matter. Seal all roof seams and seal all protruding screw heads, nuts, rivets, etc., with silicone sealant. This will help prevent penetrating or wearing a hole in the vinyl roof cap.

3. With the smooth finish side of the vinyl roof cap up (tabs on underneath side) mark 6" in from each side and end of the vinyl weathercap (Refer to Figure 18). This will aid in alignment and allow the proper 6" overhang around the perimeter of the walk-in.

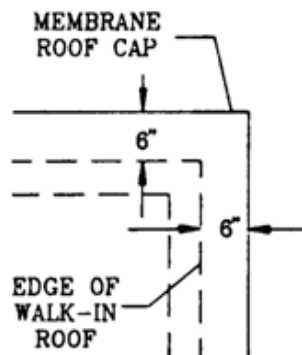


Figure 18 - Vinyl Weathercap Layout

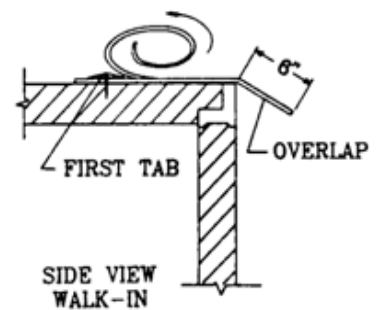


Figure 19 - Vinyl Weathercap Anchoring

4. Once the vinyl weathercap is correctly positioned on top of the walk-in, anchoring may begin. Anchor the short side of the cap first and then roll the vinyl weathercap. Roll the vinyl weathercap back to the first anchoring tab nearest to the edge of the walk-in (Refer to Figure 19). Using #10 x 1-1/2" long sheet metal screws and the hold down plates, anchor the first tab down to the roof. The hold down plate and fastener locations are pre-marked on the tab at the factory (Refer to Figure 20). Start in the center of the tab and work toward the ends, making certain the tab is square with the roof and 6" of roof cap is overhanging the edges of the roof. The tab should be flat. **Do not allow excessive wrinkles between hold down plates as the cap will not lay flat. The tabs should run the shortest length of the walk-in.**

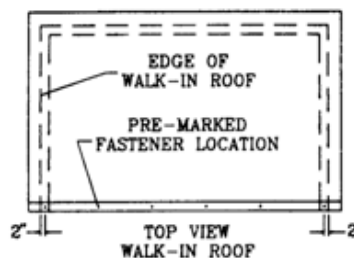


Figure 20 - Fastener Locations

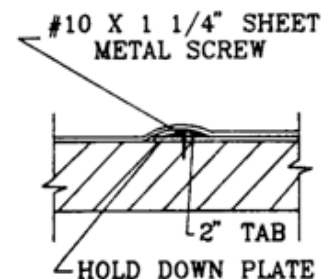


Figure 21 - Additional Vinyl Weathercap Anchoring

5. Once the first tab is anchored to the walk-in roof, roll the vinyl weathercap over to the next tab (Refer to Figure 21) and repeat step 4 (Refer to Figure 19). **Do not allow the vinyl roof to wrinkle or have excessive material between tabs.**

- Repeat steps 4 and 5 until all tabs are anchored and the end of the vinyl roof cap is reached. Check the overall width of the weathercap often to be sure a 6" overhang is being maintained on each side. Also ensure that all slack between tabs has been removed and the weathercap is square.

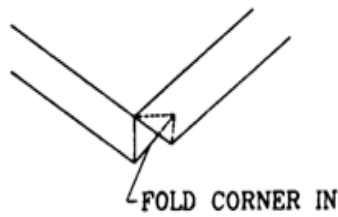


Figure 22 - Vinyl Weathercap End Piece

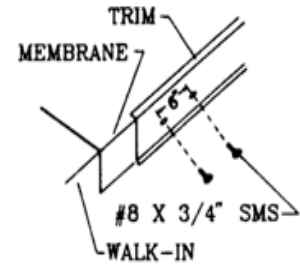


Figure 23 - Flashing Trim End Piece

- Once the attachment of the vinyl weathercap has been completed, fold the corners of the vinyl roof cap as shown (Refer to Figure 22) and install flashing trim (Refer to Figure 23) around the perimeter of the walk-in, using #8 x 3/4" sheet metal screws spaced 6" on center (Refer to Figures 23 and 24). Seal the top edges of flashing trim to the vinyl roof (Refer to Figure 24).
Note: Do not penetrate the vinyl weathercap. The refrigeration and electrical lines must exit the walk-in from a side wall panel below the seam of the ceiling.

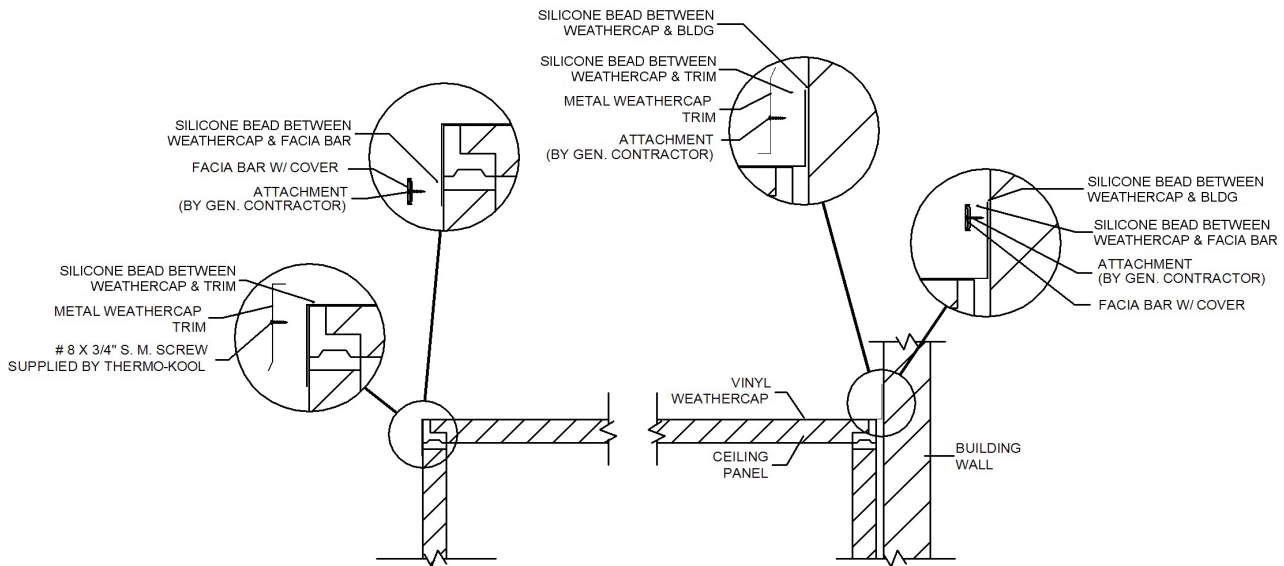


FIGURE 24 - WALK-IN VINYL WEATHERCAP SECTION

IV. SLOPED VINYL WEATHERCAP INSTALLATION

- Install sloped foam on the top of the walk-in ceiling panels to control water flow from the roof (Refer to Figure 25, page 13).
- Install vinyl weathercap as outlined in Section D, Paragraph III, page 11.
Note: Where the walk-in is installed next to a building wall, the end of the vinyl weathercap must be turned upwards and attached to the building wall. The 6" overhang must be slit at the adjacent corners in order to accomplish this. Attach the metal trim in an inverted position over the vinyl weathercap and seal the seams with silicone as shown (Refer to Figure 25, page 13).

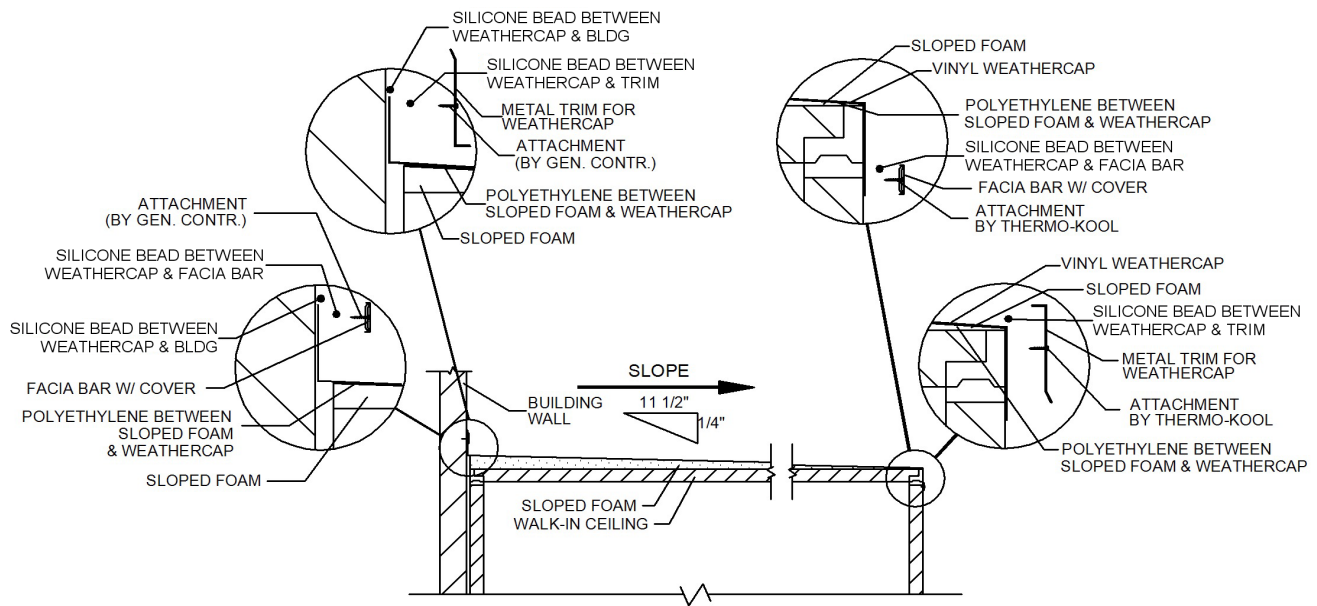


FIGURE 25 - SLOPED VINYL WEATHERCAP SECTION

V. DOOR CANOPY INSTALLATION

1. A door canopy must be installed on all doors exposed to the exterior. Pilot screw holes are provided in the door section (Refer to Figure 26).
2. Use #8 x 3/4" sheet metal screws provided to mount the door canopy.
3. Seal between the door section and the door canopy with silicone sealant.

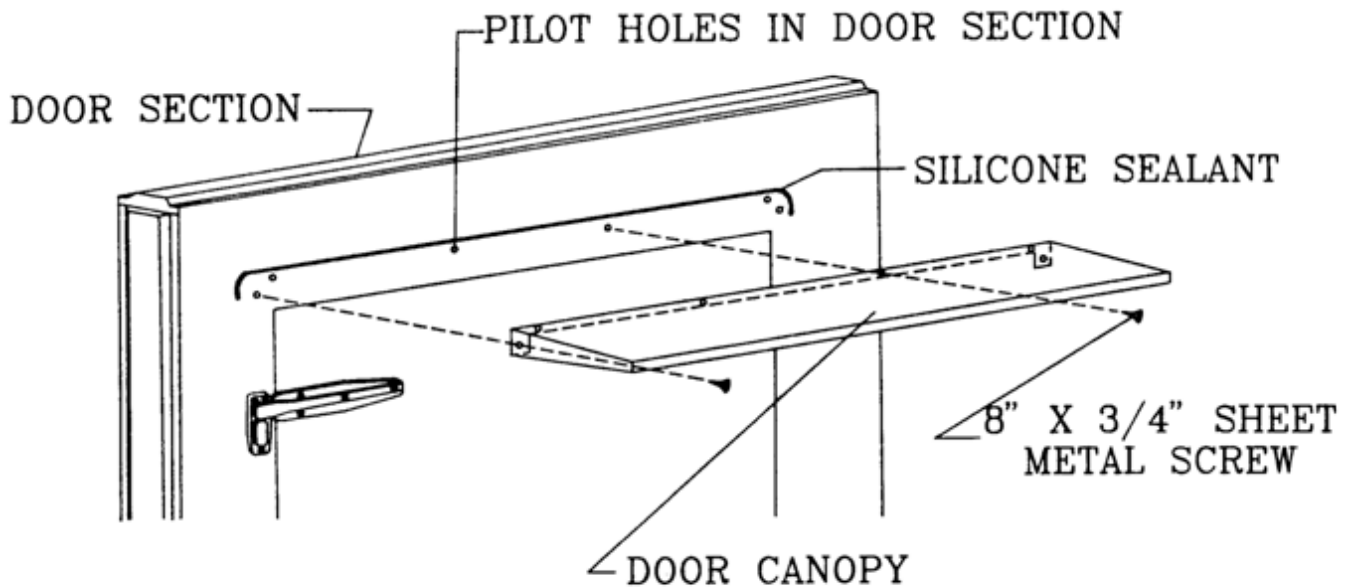


FIGURE 26 - Door Canopy Installation

ELECTRICAL INSTALLATION

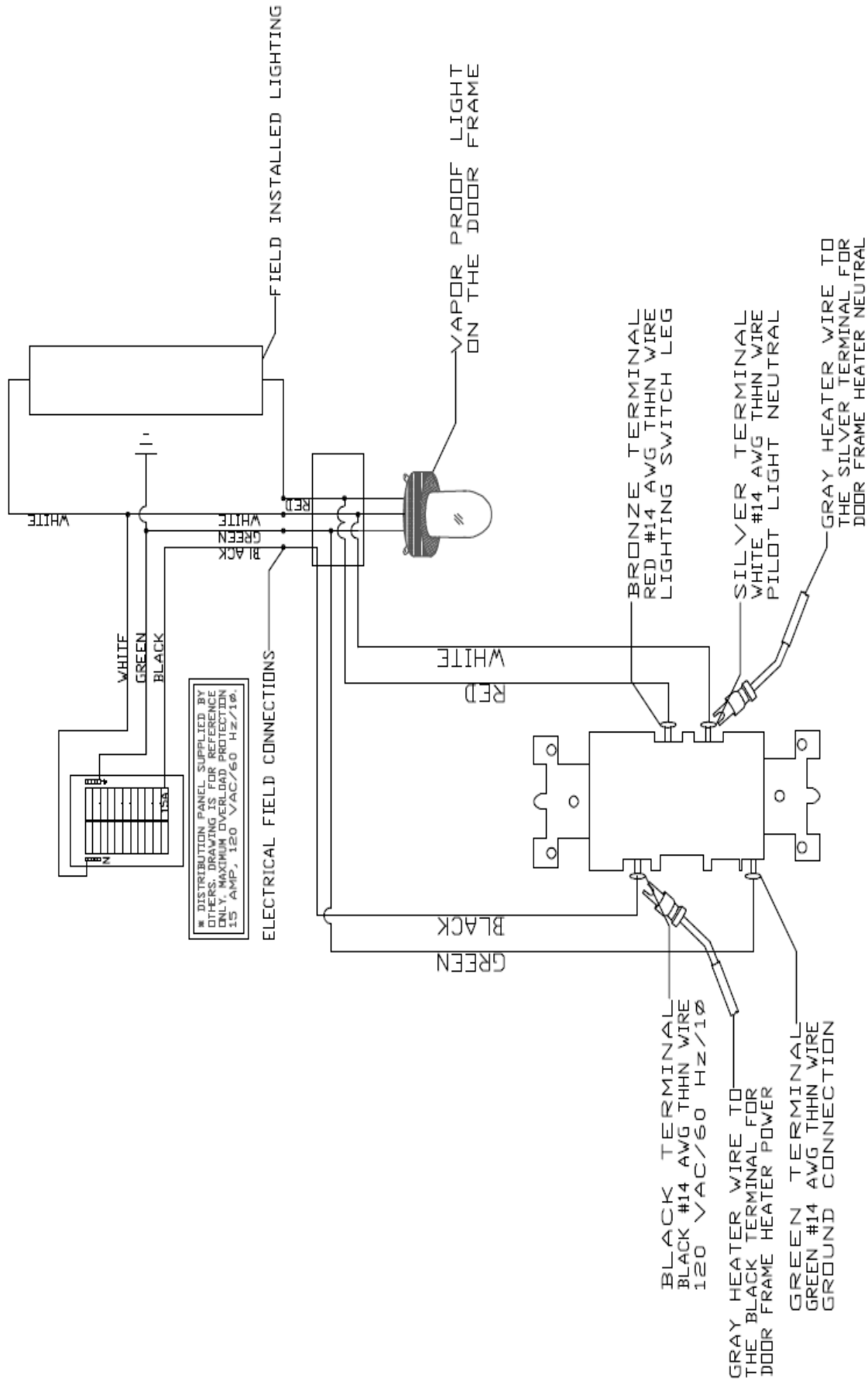
Section E

General

THERMO-KOOL's door panels are shipped prewired. Switch assemblies, heater wires, and vapor proof lights are furnished as standard and are factory wired, mounted and tested (Refer to Wiring Diagram 1). A field service box is factory mounted for electrical connection to the door panel. **DO NOT DISCONNECT OR REMOVE ANY FACTORY MOUNTED OR WIRED COMPONENTS.** Options such as alarms, digital thermometer, etc., may be furnished either factory wired and mounted or for field installation. Figure 27 on page 16 shows a typical connection to the field service box.

I. ELECTRICAL CONNECTION TO DOOR PANEL FOR EXPOSED CONDUIT INSIDE OF WALK-IN

1. Drill hole through ceiling panel. Refer to Section F, Paragraph IV, page 20, for panel penetration instructions. **Ceiling panel penetrations are NOT allowed if a vinyl weathercap is installed.**
2. Mount junction box on ceiling panel as shown.
3. If local code permits, use PVC electrical conduit and fittings. Install the conduit and guide electrical wires through the conduit. The field service box contains four, 14 gauge wires (black, white, red and green). **NOTE: Red wire will be for field mounted lighting inside walk-in.**
4. Make electrical connection in field service box.
5. Seal conduit ends with silicone sealant and seal around the penetration through ceiling panel. **Caution: Do not energize door panel until refrigeration is operational. The heater wire may overheat and vapor proof light globe may melt.**



CAUTION LIVE ELECTRICAL COMPONENTS
TURN OFF POWER BEFORE WORKING
ON THE DOOR FRAME OR DOOR.

Wiring Diagram 1 - Door Frame

II. HEATED PRESSURE RELIEF VENT

Pressure relief vents are typically mounted in a wall panel next to the door when possible but may be mounted in the door frame header (Refer to Figure 28).

Caution: To prevent damage to the walk-in and problems with the door, the pressure relief vent must be connected.

1. Electrical power to the pressure relief vent can be furnished from the front door panel field service box.
2. The electrical connection is made at the flush mounted field box next to the pressure relief vent.
3. If local code permits, use PVC electrical conduit and fittings.
4. Seal all conduit ends and penetrations with silicone sealant.

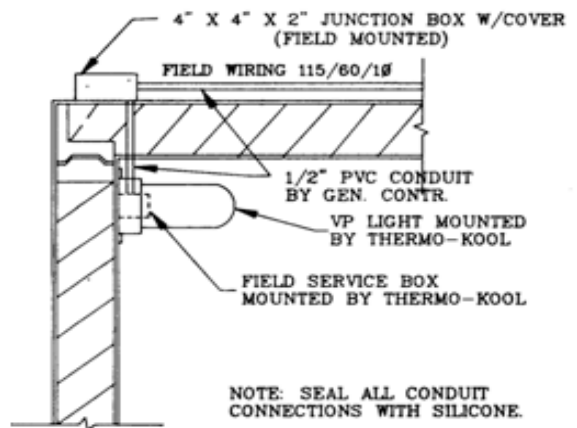
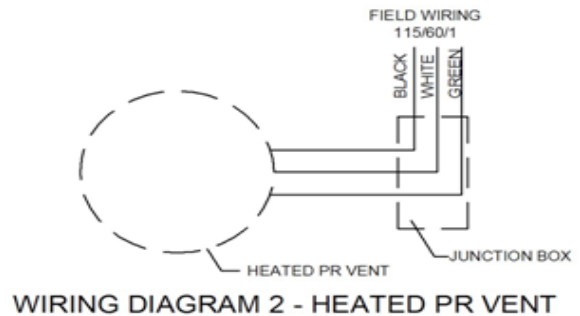


Figure 27 - VP Light and Conduit Connections



III. CEILING MOUNTED VAPOR PROOF LIGHTS

1. Locate the position of the vapor proof lights on each ceiling panel and drill a hole through the panel for each light. Refer to Section F, Paragraph IV, page 20 for panel penetration instructions. **Panel penetrations are NOT allowed if a vinyl weathercap is installed.**
2. If local code permits, use PVC electrical conduit and fittings. Install the vapor proof lights per Figure 29. Seal all interior conduits to prevent condensation.
3. Seal around each penetration, the ends of conduit, and the vapor proof light base with silicone sealant.

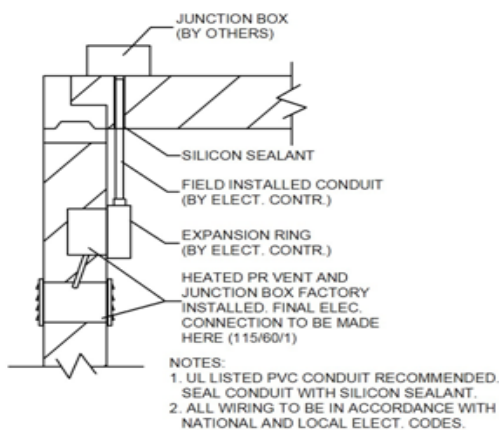


FIGURE 28 - WALL MOUNTED HEATED PR VENT SECTION

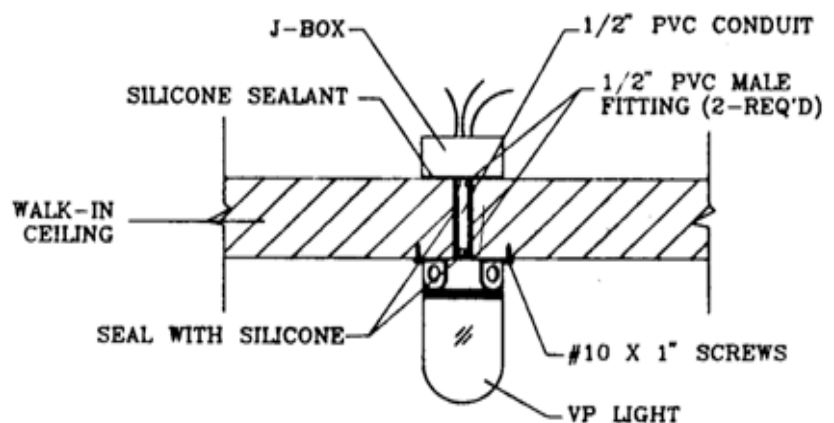


FIGURE 29 - Ceiling Mounted VP Light Section

MISCELLANEOUS

Section F

I. DIAL THERMOMETER CALIBRATION

There may be times when the dial thermometer needs recalibrating due to shipping. Should this be necessary, follow the instructions below.

1. Using another thermometer placed inside the walk-in for approximately five minutes, establish an actual inside temperature of the walk-in.
2. Refer to the dial thermometer drawing below. Using a small flat screwdriver, carefully remove the cover of the thermometer.
3. To lower the temperature indicated by the dial thermometer, place an index finger at the left side of the wide end of the needle, but close to the hub. This will prevent the needle from moving during the adjustment. Insert the screwdriver into the hub slot and slowly turn the screwdriver clockwise. Adjust the needle to the temperature read from the other thermometer (Refer to Figure 30 below).
4. To raise the temperature indicated by the dial thermometer, place an index finger at the right side of the wide end of the needle, but close to the hub. This will prevent the needle from moving during the adjustment. Insert the screwdriver into the hub slot and slowly turn the screwdriver counter clockwise. Adjust the needle to the temperature read from the other thermometer (Refer to Figure 30 below).

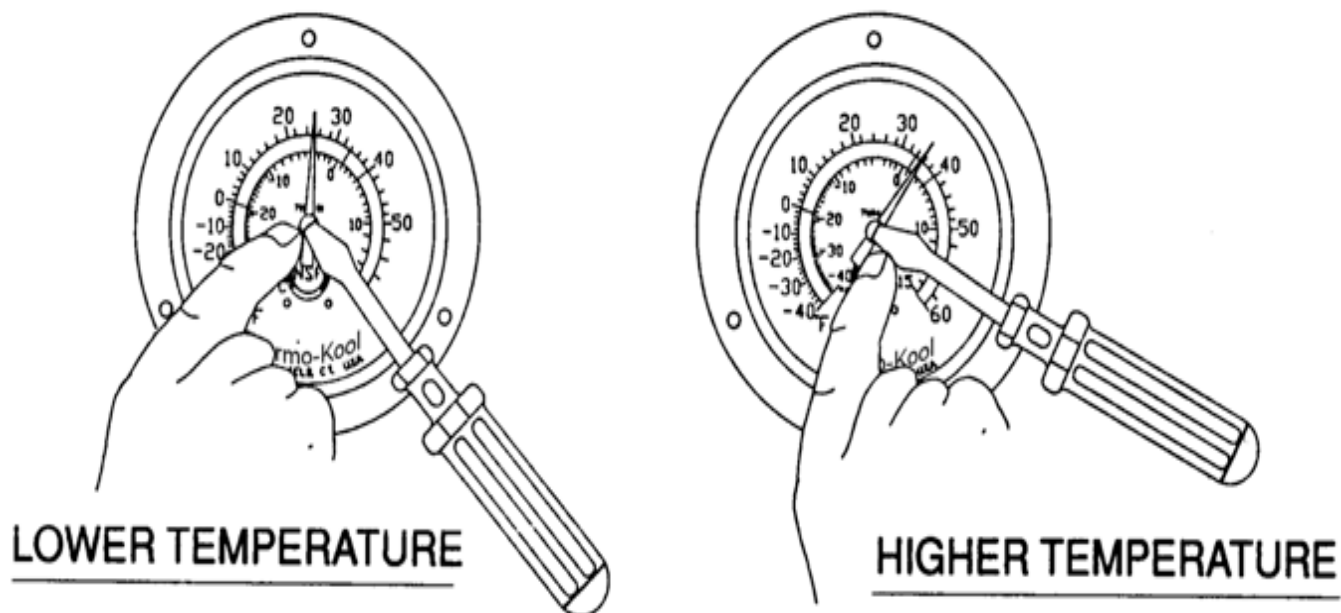


FIGURE 30 - Dial Thermometer Calibration

II. VINYL SWEEP GASKET ADJUSTMENT

1. Loosen the #8 screws holding the retainer found at the bottom of the door in place. Do not completely remove the screws (Refer to Figure 31).
2. The vinyl sweep gasket has slots allowing up to 1/2" adjustment. Move the sweep gasket up or down as required. Retighten the screws. If more than 1/2" adjustment is required, remove the screws, reposition the gasket to the required height, and drill new screw holes in the gasket. The vinyl sweep gasket should touch the threshold when the door is completely closed. Do not adjust the sweep gasket too low as it will bind against the threshold plate, prematurely wearing the gasket, and may cause the door not to close properly. Adjusting the sweep is mandatory during initial walk-in installation. Once the sweep gasket is in position, adjustment slots should be sealed with silicone.

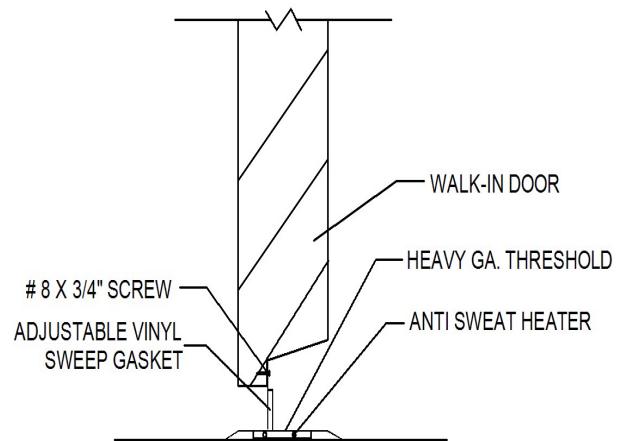


FIGURE 33 - SWEEP GASKET SECTION

III. FRAME HEATER CABLE REPLACEMENT

Caution: LIVE ELECTRICAL COMPONENTS. Disconnect power supply before working on door frame.

Heater Wire Removal

1. Using Figure 32, page 19, as a reference, remove the switch/pilot light cover plate and switch/pilot light assembly.
2. Disconnect gray heater wire leads from switch assembly. The heater wire connection to the switch will be on the right side of the light switch.
3. Remove the four #8 x 3/4" Phillips panhead screws from the right and left side stainless steel jamb trim and the three #8 x 3/4" Phillips panhead screws from the stainless steel header trim.
4. Remove the three 1/4" – 20 screws and the three #8 x 3/4" screws from the threshold plate. After removing the trim and threshold, the heater wire will be exposed.
5. Remove the electrical tape insulation covering the heater wire at the threshold. The heater wire may now be removed from the frame.

Heater Wire Installation

1. The new heater wire may now be installed. Route the gray leads of the heater wire into the switch box. Do not overlap the leads as this may create a hot spot in the heater wire causing the heater wire to prematurely burn out.
2. Starting with the lead from one end of the heater wire coming out of the switch box, carefully press the heater wire into the slot of the breaker strip routed around the perimeter of the door frame opening, taking care not to break the heater wire or damage the wire braid.
3. Reconnect the heater wire to the switch and install the switch/pilot light cover, jamb and header trim, and threshold plate. The heater wire should be embedded in the breaker strip so that it touches the header and jamb trim after these trim pieces have been reinstalled.
4. Turn on the circuit breaker on the door frame and check the heater wire for proper operation. The heater wire is working properly when the jamb trim feels warm to the touch, or after 24 hours there is no condensation visible on the exterior of either the door or frame.

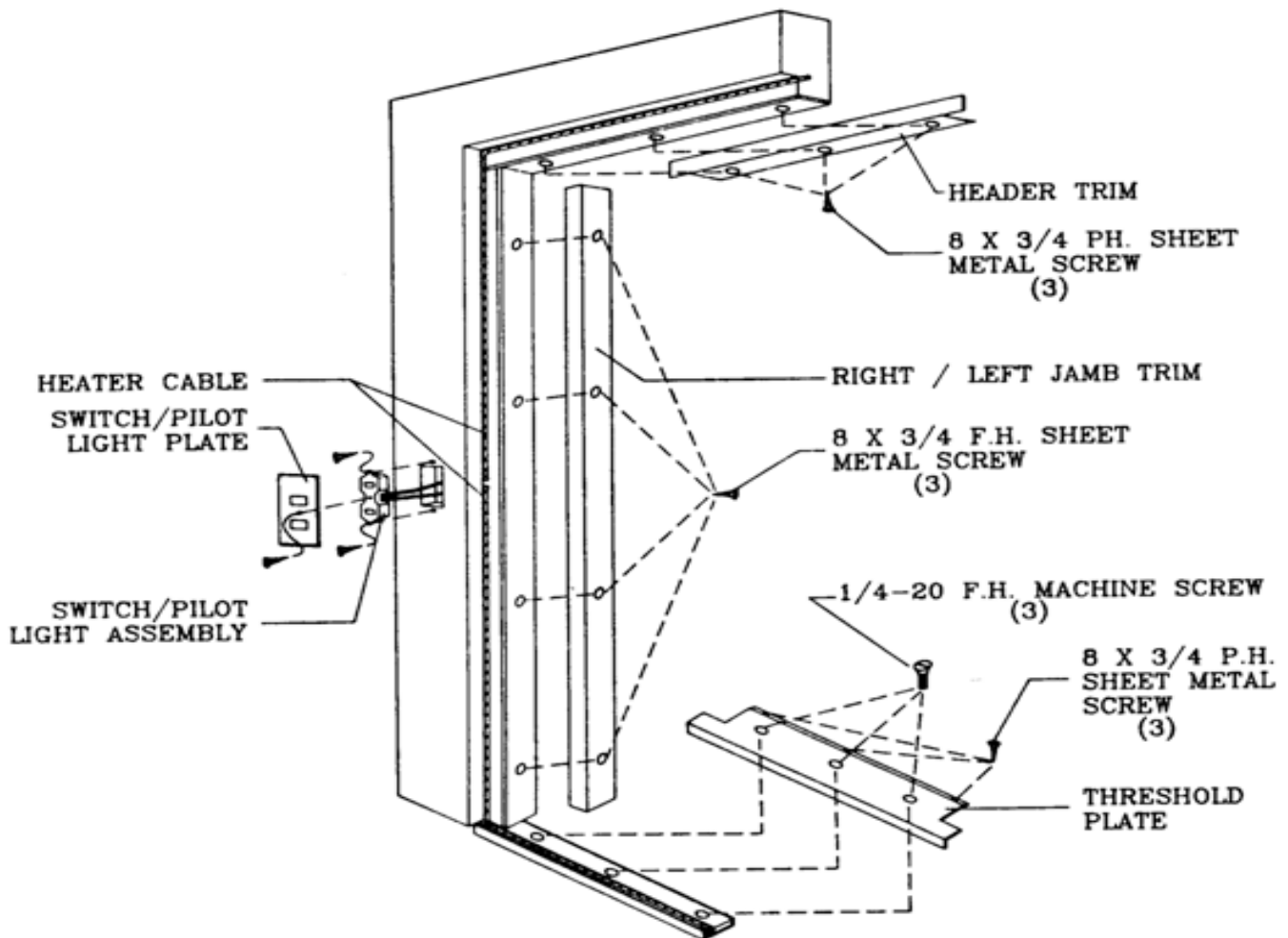


FIGURE 32 - DOOR FRAME HEATER WIRE REPLACEMENT

IV. PANEL PENETRATIONS

When it is necessary to cut or drill holes into walk-in panels to install remote refrigeration systems, make electrical connections, etc., take care not to damage the camlock panel locking assemblies. Do not cut or drill holes within a six inch radius of the camlock access hole, as shown in Figure 33. **Under no circumstance are ceiling panel penetrations allowed when a vinyl weathercap is installed.**

Holes may be cut in any other area without damaging the panel due to THERMO-KOOL's all urethane design.

After connections are made, tightly seal the hole openings with instafoam and silicone to ensure proper insulation.

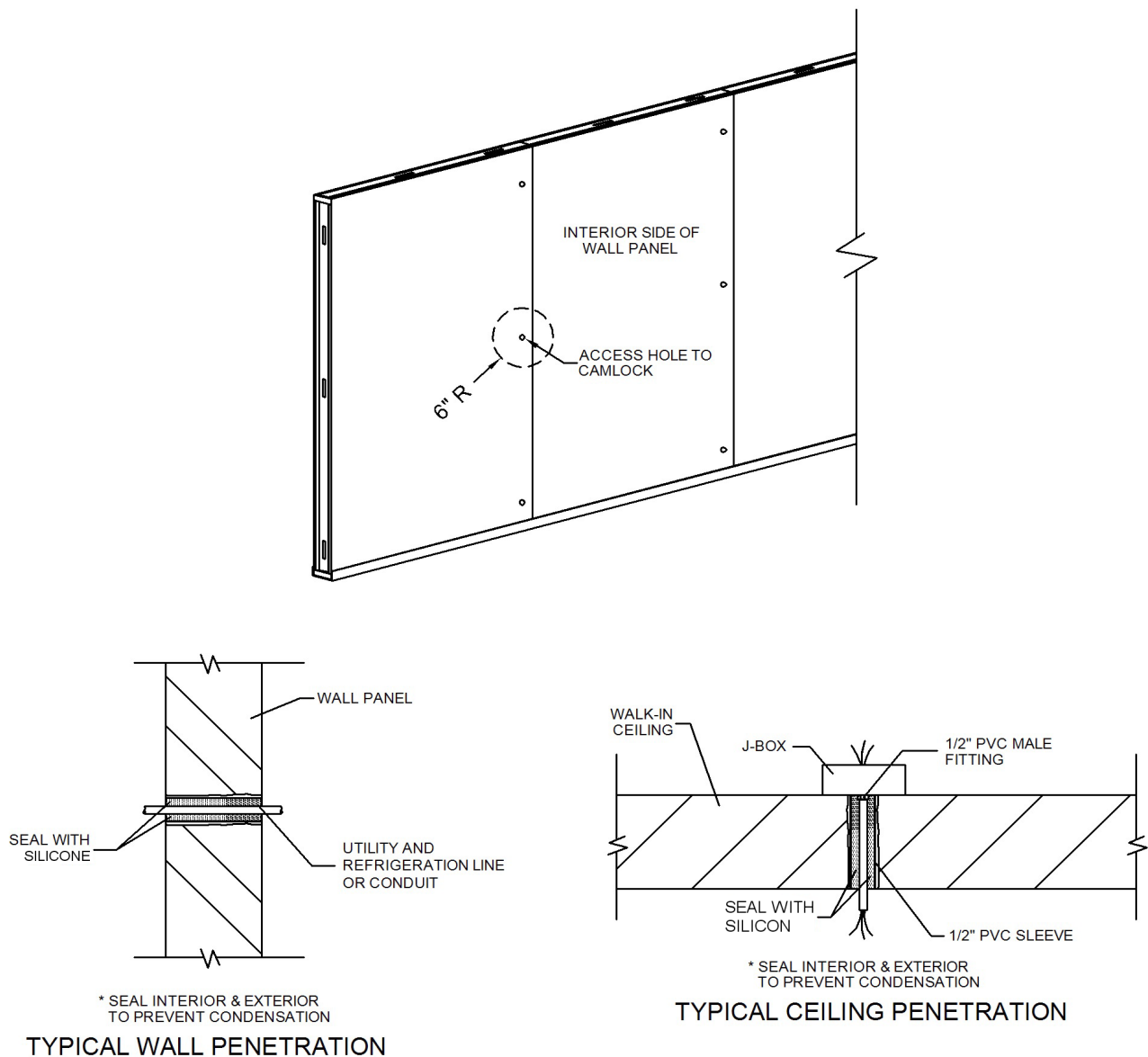


FIGURE 33 - PANEL PENETRATION

METAL CLEANING PROCEDURE

Section G

General

Sometimes the metal finish of the walk-in panels will become stained during installation. This may be due to fingerprints from handling, water staining, or chemicals used during building construction. Cleaning should be performed immediately after the installation is completed and every 60 days thereafter. Some stains, such as water marks, may develop into white rust if not cleaned properly. Before cleaning, remove all food items from the area to prevent contamination.

I. NORMAL CLEANING

Normal cleaning requires only a mild detergent followed by a sanitizing solution (Check with the local authorities for a recommended solution). After cleaning and rinsing well, allow the surface to completely air dry. An oil such as lemon oil may be applied to the cleaned surface.

II. HEAVY STAINS

Aluminum Panels/Stainless Steel Panels/Galvanized Steel Panels

1. Using a cleaner/polisher for metal surfaces, gently rub the affected area until the stain is removed.
2. Clean the affected area with a mild detergent, rinse well, and allow to completely air dry.
3. Apply lemon oil to the cleaned surface.

Note: This procedure will normally make the metal finish shiny. Therefore, for best results, clean and polish the entire panel or surface for an even appearance.

NOTES



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