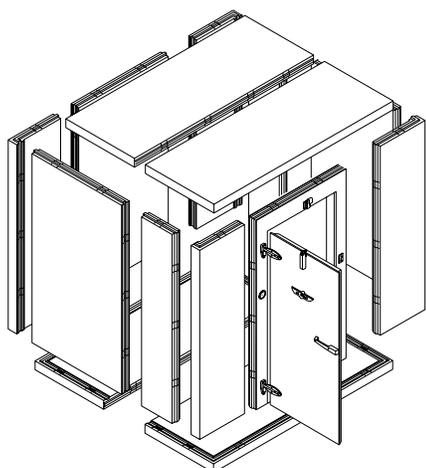




## **WALK-IN COOLER AND FREEZER MANUAL**



Installation Instructions

Trouble Shooting

Warranty

Drawings

U.S. Cooler  
401 Delaware, Quincy, Illinois 62301  
800.521.2665 Fax 217.228.2424  
[www.uscooler.com](http://www.uscooler.com)



# Installation Instructions



## General:

- Check bill of lading for correct number of skids.
- Put on gloves before handling any panels.
- Check and report to trucking company and U.S. Cooler any damaged or missing items immediately.
- Remove packing list at end of skid and installation pack on door.
- Locate freezer/cooler drawing in installation pack (see figure 1) along with cam wrench (large L shaped allen wrench).

## Tools Required:

- Cam-lock wrench (Provided)
- Gloves for handling panels
- Caulk gun and NSF silicone caulk
- Power drill with phillips driver and 1/8" drill bit
- 1/2" metal drill bit (for side mount refrigeration units)

## Floor Installation (Floored Units):

Locate skid(s) that have panel numbers starting with the letter F. These are floor panels. Using chalk line, measure out and mark floor for location of box. Lay the F1 floorpanel in the location designated on the floor plan drawing (see figure 2). Take the F2 floor panel and fit male side of F1 panel into female side of F2 panel. Align both ends until they are even (see figure 3). Insert cam wrench into center hole on F1 panel. If hook is showing, back cam counter clockwise until you reach a stop, but do not force cam. Turn cam wrench clockwise until a solid stop is reached (see figure 4). Again, do not force past stop. Check to see if F1 and F2 floor panels are firmly attached together. If not, repeat this step. Otherwise, lock remaining cams and go to next panels until all floor panels are assembled.

## Screeding Installation (Floorless Units):

Using chalk line, mark location of box walls according to enclosed plans (see figure 5). Add 1/2" to each side for screeding oversize. Lay two beads of silicon caulk within the 4" wall location (see figure 6). Gray screeding can optionally be screwed down with Tapcon screws placed directly in the center of screeding (see figure 7). Seal top of screeding where it contacts metal skin with NSF approved silicone caulk.

## Wall Panels Installation:

Start with corner wall consisting of W1 and the adjacent wall panel that forms the corner (see figure 8). On floor-less walk-ins, work panels into pre-installed screeding. On floored units, place male bottom of wall panel in female groove of floor panel. Make sure the floor arrow on the wall panel is pointing down. Once corner is assembled correctly, install W2 wall panel with W1 panel, male edge will be inserted into female edge of W2 panel. Special care should be given to ensure that top edges and sides of wall panels are flush (see figure 9). Take cam wrench and insert it into center hole of W1 panel. Be sure cam lock is set by first turning wrench in a counter clockwise direction until stop is felt. Do not force cam. After checking set of cam, turn wrench in a clockwise direction until stop is felt (see figure 10). Again, do not force cam. Check to see if panels are firmly locked together. If not, repeat this step. If they are, finish panel installation by locking all wall cams. **Do not lock the panels to the floor until all wall and ceiling panels have been locked together.** Continue installing wall panels by alternating from the lowest wall number to the highest wall number. On combination units, install center wall before continuing into adjacent section.

# Installation Instructions (continued)

If the floor is uneven, adjustments must be made to ensure wall panels are flush at the top. When installing door panel, remove door by lifting door in an upward direction on panel and set aside until the frame is installed.

## Door Installation:

### Standard Nominal Units:

Doors on quick ship units can be installed in any of the standard full size wall panel locations, while special order units have fixed door locations. A door threshold bar must be installed in the floor panel where the door is going to be installed. Place the hooks of the door threshold bar, with the hooks going in the same direction of the cams, into the slots on the cams. The hook on the bar should contact the pins in the cams. Gently tap the threshold bar in the direction of the cams and hooks until it quits moving, locking it in place with the cam pins (approx. 1½"). Continue installation of wall panels.

### Custom Unit with Floor:

Check your drawing to locate where the door will be installed. 3 screws are provided to screw threshold to floor.

### Cooler without Floor:

Angle brackets should be installed on exterior door legs using angle brackets and screws provided.

**WARNING: Risk of fire or electrical shock. Connect only to a grounded circuit protected by a ground fault circuit interrupter (GFCI). Failure to do so can result in death or serious injury.**

## Ceiling Panels Installation:

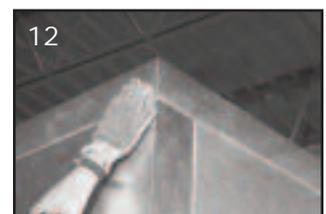
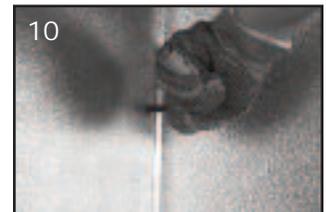
Once wall panels are installed, proceed with C1 ceiling panel by placing it in location according to drawing (see figure 11). Align it so it is even on all edges. Many times uneven floors may cause ceiling to either be slightly bigger or smaller than wall panels. If this is the case, split the difference. All panels are made to allow adjustments due to varying installation conditions. Lock all cams according to previous instruction. After locking C1 panel, lift C2 panel into location so male side of C1 fits into female side of C2. Line up both ends and lock all cams (see figure 12). Continue installing ceiling panels from smallest number to largest number.

## Door Adjustments:

After all panels have been installed, mount door to hinges and close walk-in door. If the door does not shut correctly, verify that the reveal between the door and frame is even around the perimeter (see figure 13). A reveal that increases or decreases across the top of the door indicates one leg of the door frame is lower than the other and will need to be shimmed to correct the condition. The door and frame should be flush around the perimeter. If one corner of the door protrudes from the frame, it indicates that the bottom of one door leg is not aligned with the other leg & the frame has a slight twist. Unlock the cams around the perimeter of the frame and move the door leg in or out to correct the condition, then re-lock the cams. Once box is completely installed and door alignment is verified, screw the threshold down to the threshold bar on floored boxes and to the floor on floorless boxes with the stainless steel screws provided. On floorless units, attach L-shaped hold down bracket to door legs and floor (see figure 14).

## Caulking Instructions:

It is advisable to caulk all joints inside walk-in. This will provide for an even better sealed unit. Use NSF approved silicone type caulking.



# Installation Instructions (continued)

## Rain Roof Installation:

Install evaporator coil prior to rain roof installation and apply silicone caulking around the carriage bolt heads to avoid perforating the rain roof. For rain roof installation, place vinyl-roofing material, with flaps underneath, on top of walk-in across narrow end. Allow 6" of vinyl to lap over each of the three sides. Carefully unroll vinyl material across walk-in until vinyl flap falls into position. Take a stainless steel screw and square plate and screw through plate and flap in the middle of flap. Then screw a plate at each end of flap. Install screw and plate in 1' increments across flap. Continue to roll out vinyl until the end or the next flap, then repeat screwdown process. Once the end is reached, it should lap over end by at least six inches. For units installed up against buildings, lap vinyl 1 foot up the wall, fold vinyl back and run two beads of Mastik caulk along wall edge 3" above walk-in. Then fold vinyl twice so there is 4" left to fasten plastic strip to building. Fasten plastic strip over vinyl with stainless steel screws or galvanized nails. Place round piece of vinyl over each corner to protect against vinyl puncture. Place a bead of caulking around top sides of walk-in 5" below top of unit. Place plastic strip on top of vinyl so bottom of plastic strip falls 6" from the top. Screw into side of walk-in with stainless steel screws. Fold corners and continue around box on all four sides. Note: If vinyl hangs over more, cut off extra or fold extra under plastic strips.

## Refrigeration Installation:

- Remote System: Install evaporator coil and run the appropriate refrigeration and electric lines.
- Saddle mount units: Set refrigeration system over notched wall panel with compressor mounted on outside of walk-in.
- Side mount refrigeration: Drill through wall with 1/2" drill bit and bolt unit on with provided bolts.
- Top mount self-contained refrigeration system: Place unit in prefabricated hole in top of walk-in with air flow marker pointing away from wall. Caulk around perimeter of refrigeration unit.

With the exception of PRO3 and Apex, all refrigeration units must have a condensation line run to the outside of the walk-in. When running any utilities, including those for refrigeration, drill into the wall panel (NOT ceiling) of the walk-in. After running any utilities, caulk around drilled holes. Follow all local building and electrical codes during installation. All refrigeration components must be installed by a certified refrigeration contractor, who must be present at startup. This may affect your warranty.

## Troubleshooting:

### Ceiling overhangs walls:

If walls are racked at the top, loosen wall cams and adjust walls so the tops of the walls line up. If walls are level at the top, loosen corner wall panel and bump out wall panel to line up with outer edge of ceiling. Lock ceiling to wall and relock corner seam.

### Door doesn't shut:

Check to make sure door closer is working properly and it is catching the hook. Check to make sure walls aren't racked. See installation instructions for further door alignment information.

### Door sags:

Check to make sure the floor is level. If not, shim as needed under correct door leg.

### Ceiling panels won't pull down to lock into walls:

If walls have been locked to walk-in floor, unlock walls from the floor, lock ceiling panels down to walls and relock walls to floor.

### Cam wrench is binding in cam hole:

Only insert the wrench far enough to catch the mechanism. Make sure you are inserting the tapered end of the wrench in the hole.

### Cam lock not engaging (locking):

Make sure adjoining wall panels are flush on sides and top, so cams are lined up properly. Before locking, be sure to reset cam by turning it counter-clockwise until it resets. Do not over-reset cam. Then relock cam.

### Door thermometer reads incorrect temperature:

Door thermometer doesn't register proper temperature. Make sure that the temperature probe is toward the center of the walk-in. Door thermometer may need to be calibrated. Place index finger on wide end of pointer. Insert screwdriver in pointer's slot and turn either clockwise (lowering temperature) or counter-clockwise for raising temperature

## U.S. Cooler Ten Year Limited Warranty

U. S. Cooler Company, Inc. warrants to the original purchaser that the walk-in panels manufactured by the company are free from any defect in material or workmanship under conditions of normal use and service. The obligation of the manufacturer under this warranty shall be limited to repairing or replacing at their option FOB factory, panels of said walk-in which proves defective within ten years from the date of purchase. All hardware carries a standard one-year warranty.

Refrigeration equipment carries a standard one-year factory warranty for compressor and accessories. The obligation of the manufacturer under this warranty shall be limited to repairing or replacing at their option FOB factory, any part of said refrigeration system which proves defective within one year from the date of purchase. An extended four-year compressor warranty and a 1st day through 5th year labor warranty are also available as an option.

This warranty is in lieu of all other warranties expressed or implied and does not apply to equipment which has been subject to any accident, alteration, abuse, misuse or improper installation. U.S. Cooler Company, Inc. expressly disclaims all other warranties expressed or implied. The standard warranty does not include any labor charges for replacement or repair of defective parts. In no event shall U.S. Cooler Company, Inc. be liable for any special, direct or indirect, incidental or consequential damages or for any lost product, lost profits or revenues or other losses or damages caused by lost product or lost profits or revenues, whether for breach of warranty or otherwise.

For warranty work on your U. S. Cooler walk-in cooler or freezer, call our Customer Service Department immediately. You will then be advised of the proper procedure to follow. NO warranty work is to be performed without an authorization number, which will be provided by the Customer Service Manager. U.S. Cooler assumes no responsibility for work performed without an authorization number.

### Customer Service Contact Information:

U.S. Cooler Company  
401 Delaware  
Quincy, IL 62301

Toll Free: 800.521.2665

Phone: 217.228.2421

Fax: 217.228.2424

Email: [customerservice@uscooler.com](mailto:customerservice@uscooler.com)

Company Website: [www.uscooler.com](http://www.uscooler.com)

# Door Drawings

## STANDARD OVERLAP PLUG DOOR WITH FACE CASE FRAME

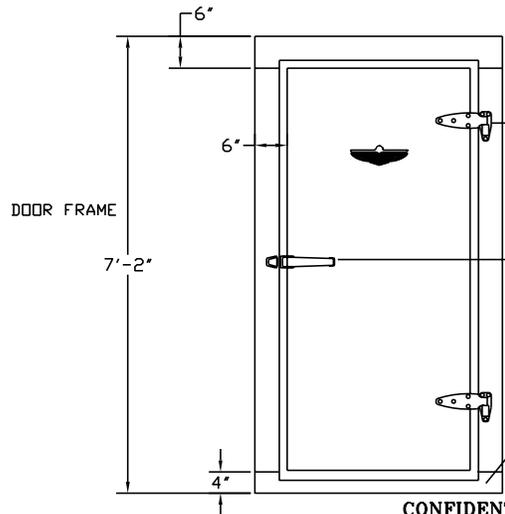
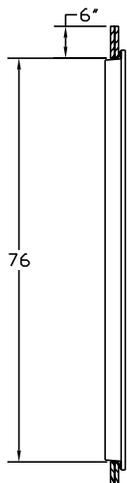
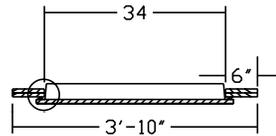
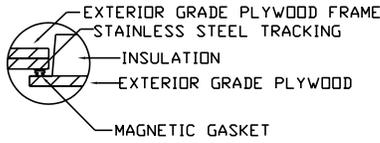
STANDARD DOOR SIZE = 34" W x 76" H  
ROUGH OPENING = 34" x 76"

FINISH:  
26GA. STUCCO GALVALUME STEEL,  
GALVANIZED, PAINTED (WHITE OR TAN)  
OR 24GA STAINLESS STEEL

INSULATION:  
R-32 EXTRUDED

HINGE DIRECTION:  
RIGHT OR LEFT

HEATER WIRE  
INCLUDED IN FREEZER APPLICATIONS.



CAMLIFT HINGES  
2 PER STANDARD  
DOOR  
CHROME FINISH

PLUG DOOR HANDLE  
W/SAFETY RELEASE  
ACCEPTS PADLOCK  
CHROME FINISH

4" SILL (TRIPLE VINYL  
SWEEP INCLUDED IN  
FLOORLESS APPLICATION)

CONFIDENTIAL  
PROPRIETARY



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## PLUG DOOR WITH FRAME

DOOR SIZE = 34" x 77"  
ROUGH OPENING = 38 3/4" x 79 5/8"  
DOOR THICKNESS = 3 13/16"

FINISH:  
26GA. STUCCO GALVALUME STEEL,  
GALVANIZED, PAINTED (WHITE OR TAN)  
OR 24GA STAINLESS STEEL

INSULATION:  
R-32 EXTRUDED

HINGE DIRECTION:  
RIGHT

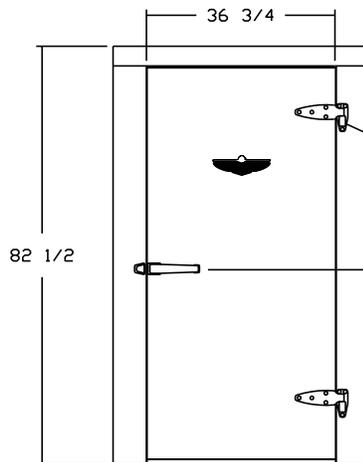
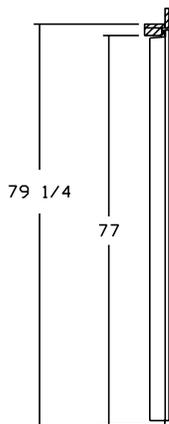
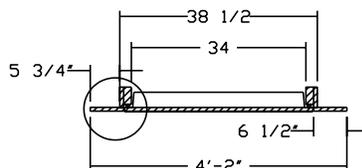
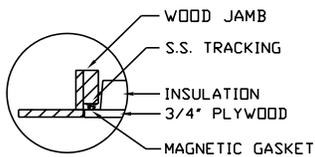
HEATER WIRE AND LAMP JUNCTION  
INCLUDED IN FREEZER APPLICATIONS.

FRAME IS OVERLAP  
DOOR IS FLUSH MOUNT

CAMLIFT HINGES  
BRUSHED CHROME  
FINISH  
2 PER STANDARD  
DOOR

PLUG DOOR HANDLE  
W/SAFETY RELEASE  
ACCEPTS PADLOCK  
BRUSHED CHROME  
FINISH

TRIM: 2"x2" ANGLE WITH HEMMED EDGES  
(2) 81 5/8"L, (1) 42 3/4"L

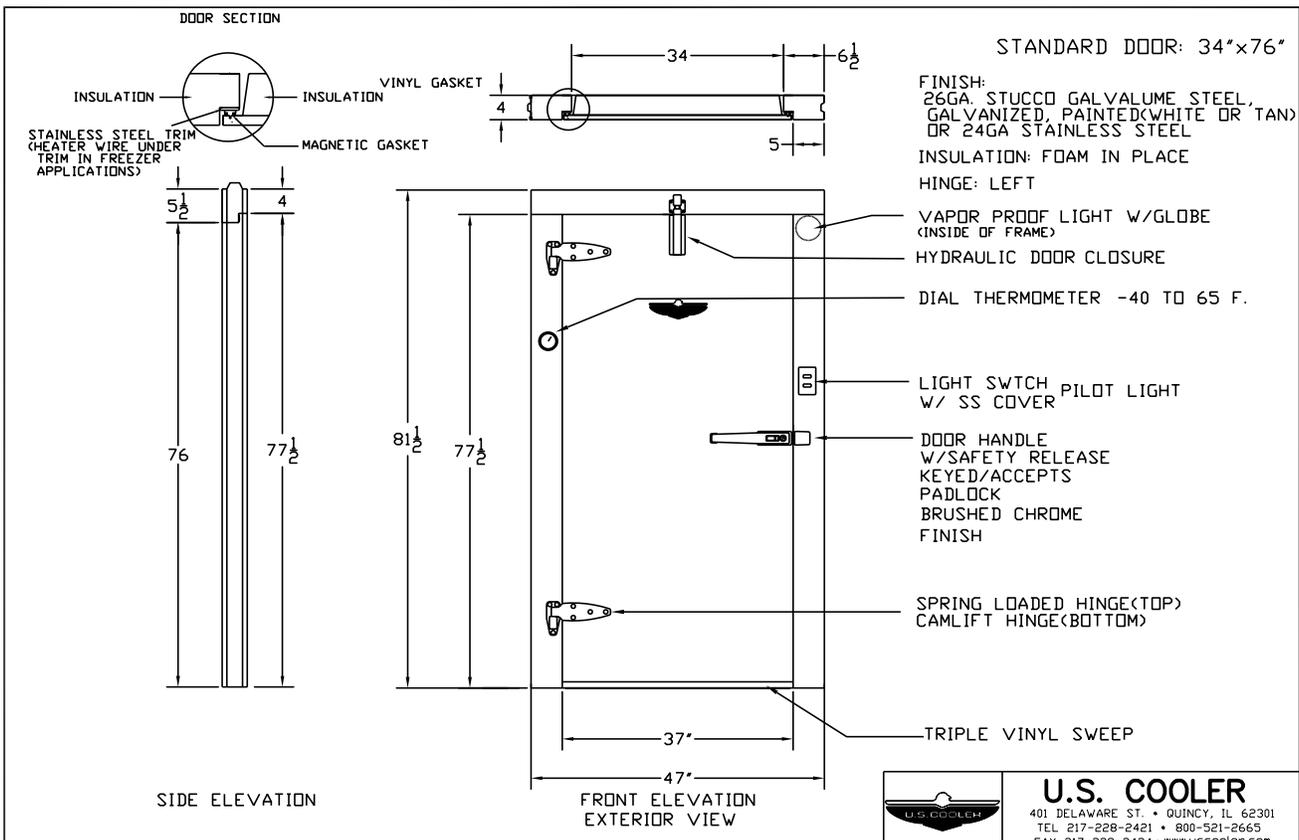


TRIPLE VINYL SWEEP



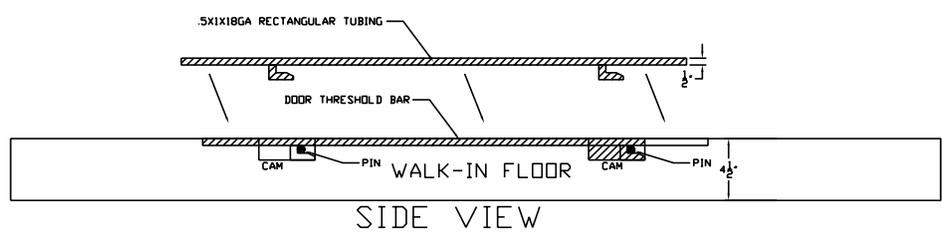
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## DOOR THRESHOLD BAR INSTALLATION INSTRUCTIONS



The door threshold bar must be installed in the floor panel where the door is to be located. With the hooks pointing in the same direction as the pins on the cam-locks in the floor, place the hooks of the threshold bar into the slots of the cams. Push the bar in the direction of the pin of the cam-lock until they contact. Gently tap the locking bar until it locks into the cams or quits moving. This movement is about 1 1/2". The locking bar is now installed.

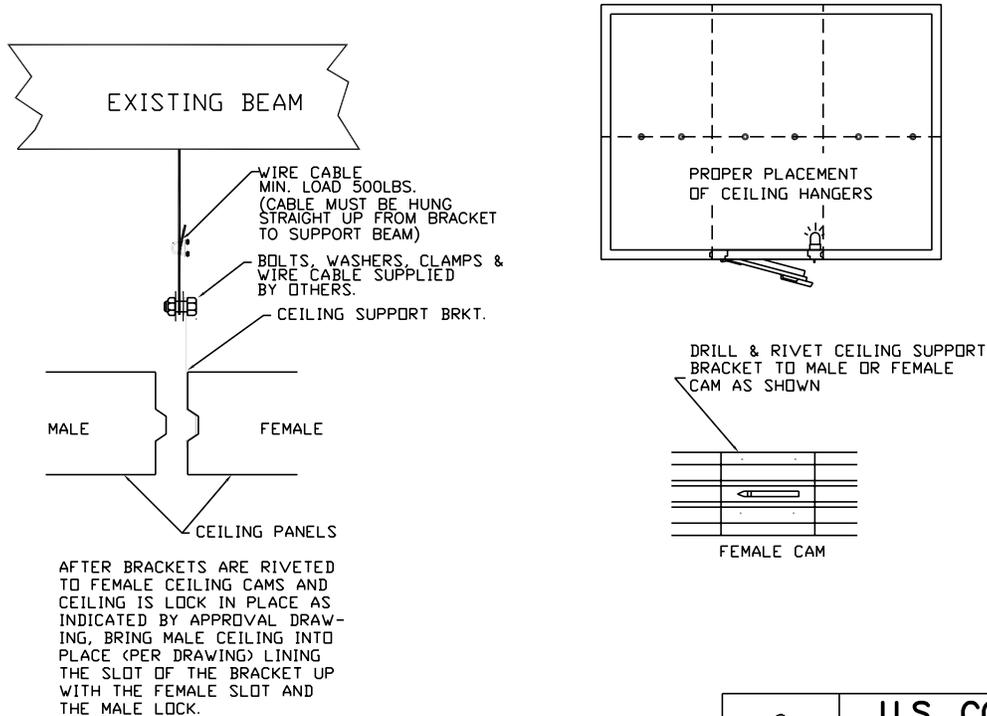
When the door is installed, screw the threshold down to the locking bar with the self-tapping screws provided in the install pack.



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# Ceiling and Footing Drawings

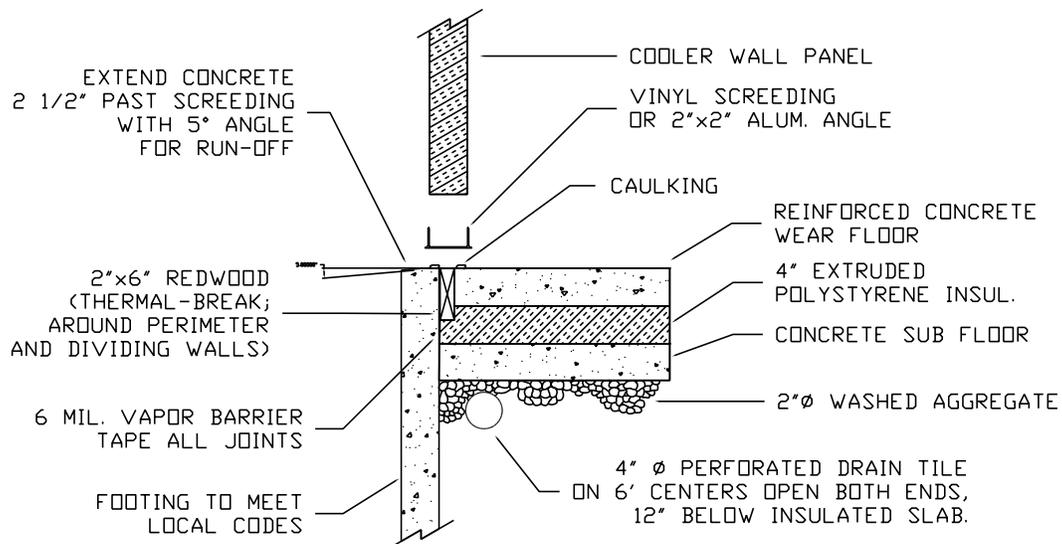
## CEILING SUPPORT DETAIL



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## FOOTING DETAIL

(FLOORLESS APPLICATION)

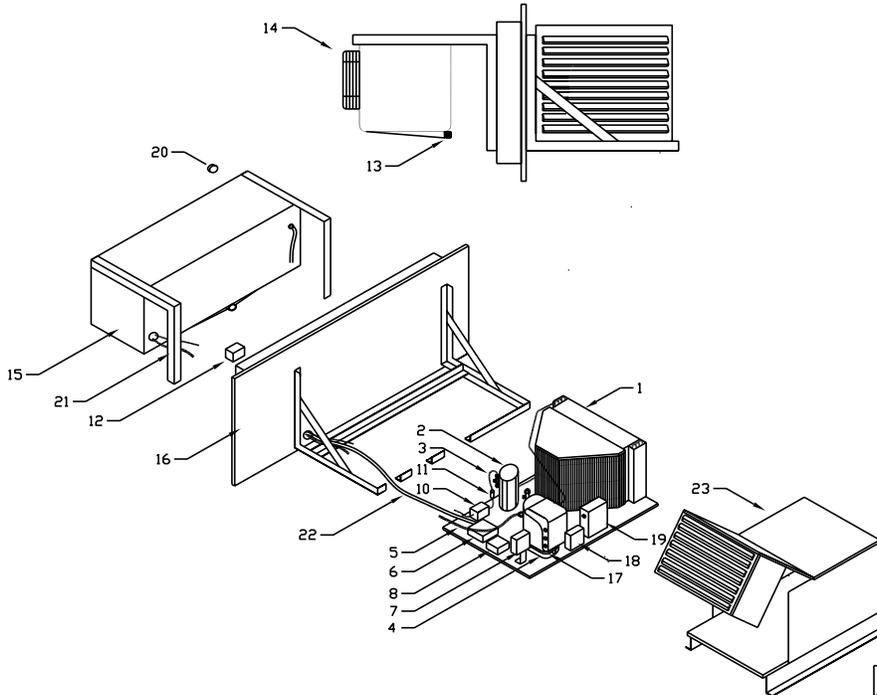


Design used for Conceptual purposes Consult local Engineer for requirements.  
Craig Industries is not responsible for foundation design. This is an example.



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## GENERAL ASSEMBLY FOR SIDE MOUNT SELF-CONTAINED



PARTS LIST	
#	PART
1	CONDENSOR
2	RECEIVER
3	LIQUID LINE
4	COMPRESSOR
5	SUCTION LINE
6	POWER INLET
7	PRESSURE CONTROL
8	TIMER - FRZ. ONLY
9	TEMPERATURE CONTROL
10	DRIER
11	SITE GLASS
12	SOLENOID VALVE
13	DRAIN OUTLET
14	FAN
15	EVAPORATOR
16	PLUG
17	CRANK CASE HEATER-OPTIONAL
18	FAN CYCLE CONTROL-OPTIONAL
19	START RELAY & CAPACITOR
20	THERMOSTAT
21	REFRIGERATION BRACKET
22	WIRING HARNESS
23	COMPRESSOR COVER-OPTIONAL

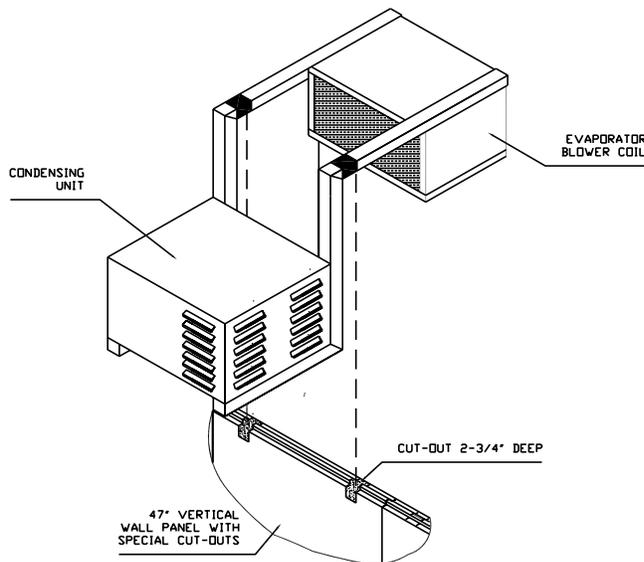
NOTE: PARTS AND LOCATIONS MAY VARY  
DEPENDING ON UNIT



**U.S. COOLER**

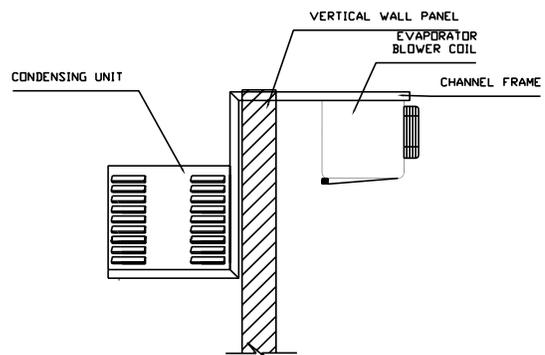
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FAX 217-228-2424 • www.uscooler.com

## SADDLE MOUNT SELF-CONTAINED INSTALL DRAWING



PERSPECTIVE VIEW

NOTE: 24" OF CLEARANCE FROM EXISTING WALL IS REQUIRED FOR ACCESS  
ELECTRICAL JUNCTION BOX AND COMPRESSOR CONTROLS.



SECTION VIEW

FIG. 1 INSTALLING SADDLE MOUNTED SYSTEMS

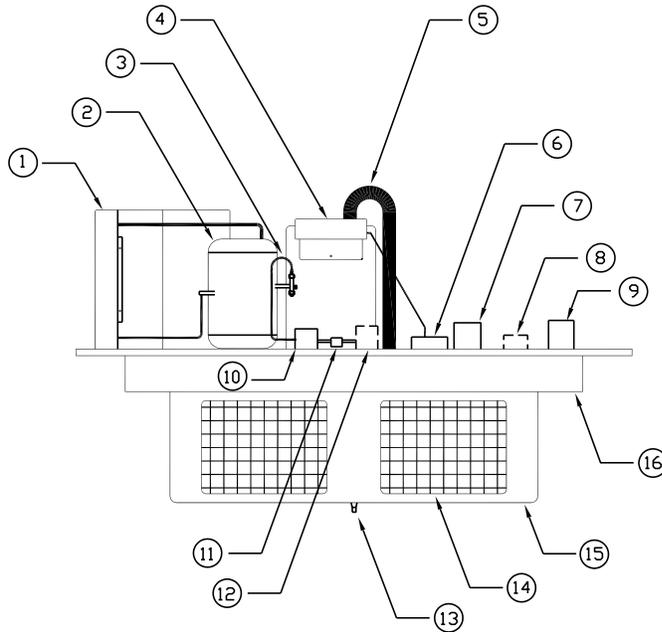


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# Refrigeration Drawings

GENERAL ASSEMBLY FOR TOP MOUNT SELF-CONTAINED COOLER



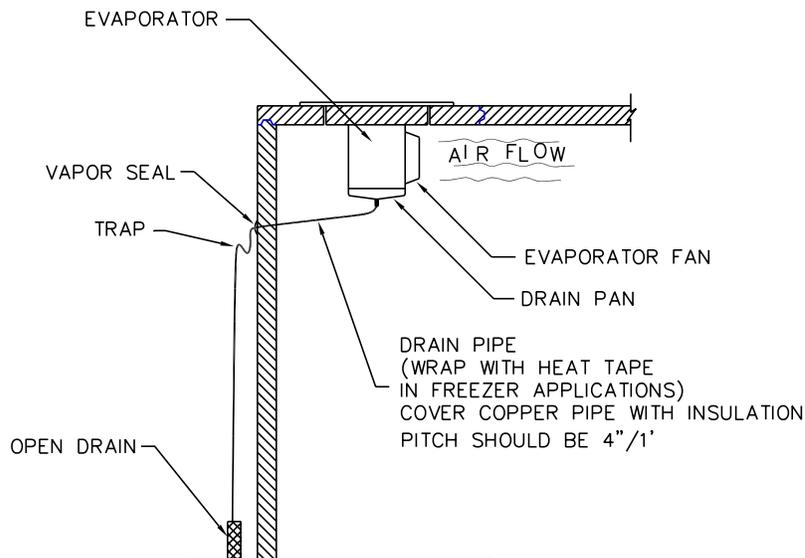
PARTS LIST	
#	PART
1	CONDENSER
2	RECEIVER
3	LIQUID LINE
4	COMPRESSOR
5	SUCTION LINE
6	POWER INLET
7	PRESSURE CONTROL
8	TIMER - FRZ. ONLY
9	TEMPERATURE CONTROL
10	DRIER
11	SIGHT GLASS
12	SOLENOID VALVE-FRZ. ONLY
13	DRAIN OUTLET
14	FAN
15	EVAPORATOR
16	PLUG

NOTE: PARTS AND LOCATIONS MAY VARY DEPENDING ON UNIT



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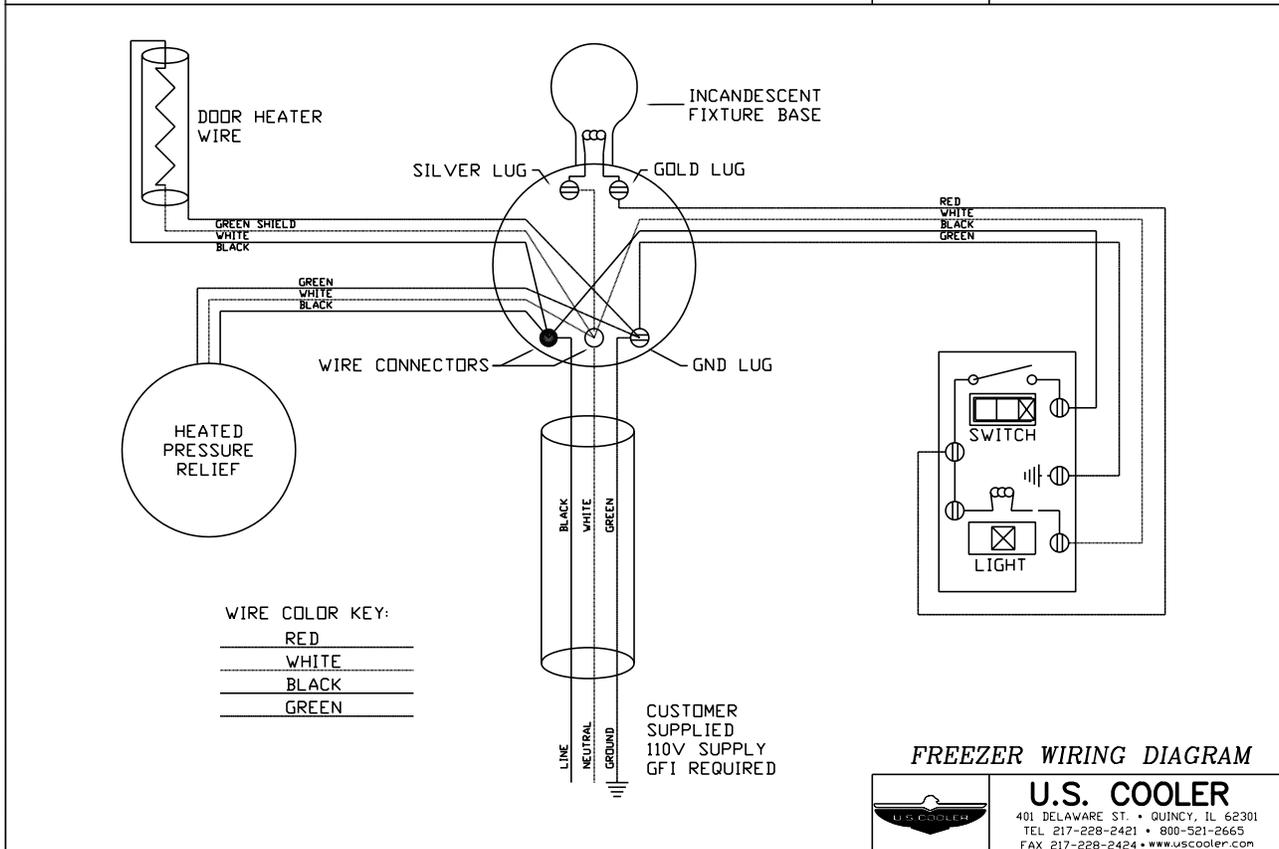
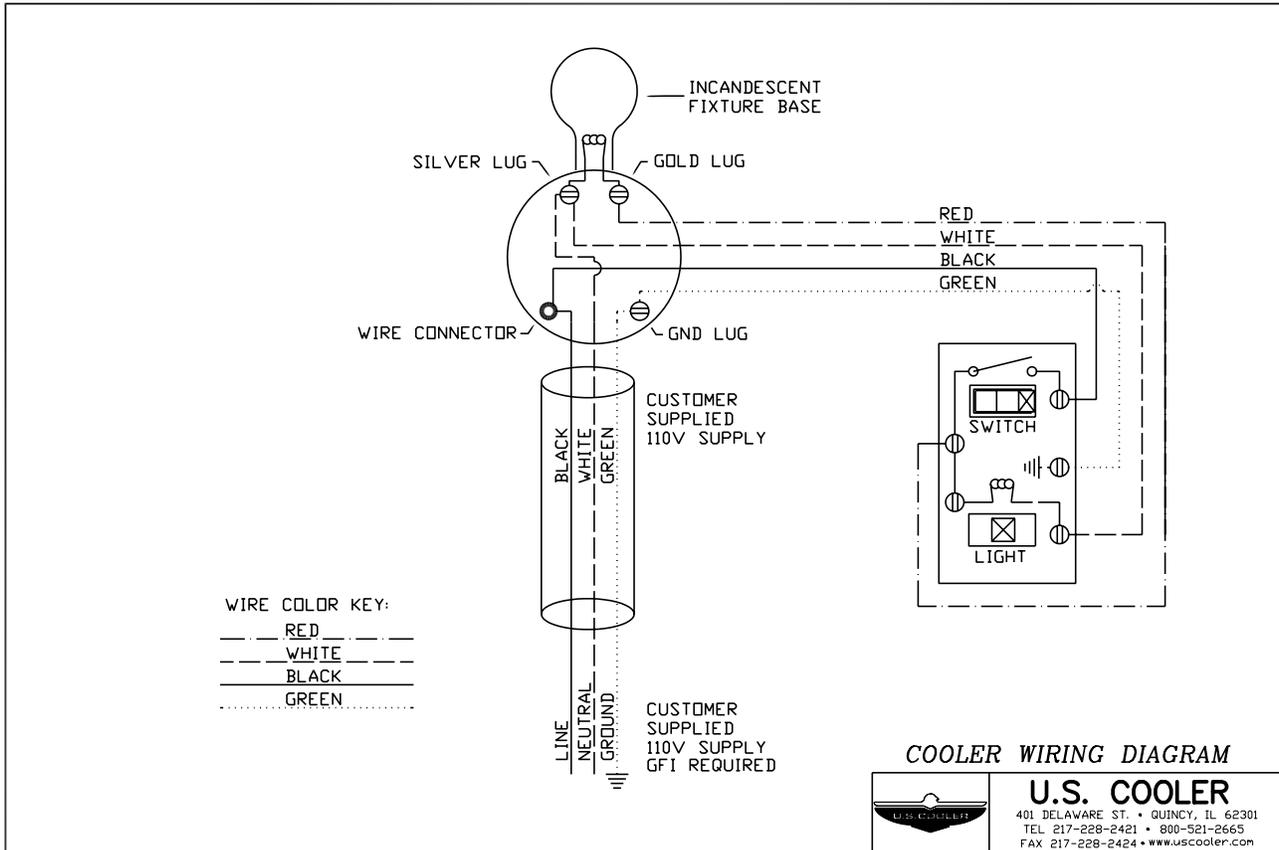
## INSTALL INSTRUCTIONS FOR EVAPORATOR DRAIN LINE (INSTRUCTIONS APPLY TO REMOTE AND SELF CONTAIN UNITS)



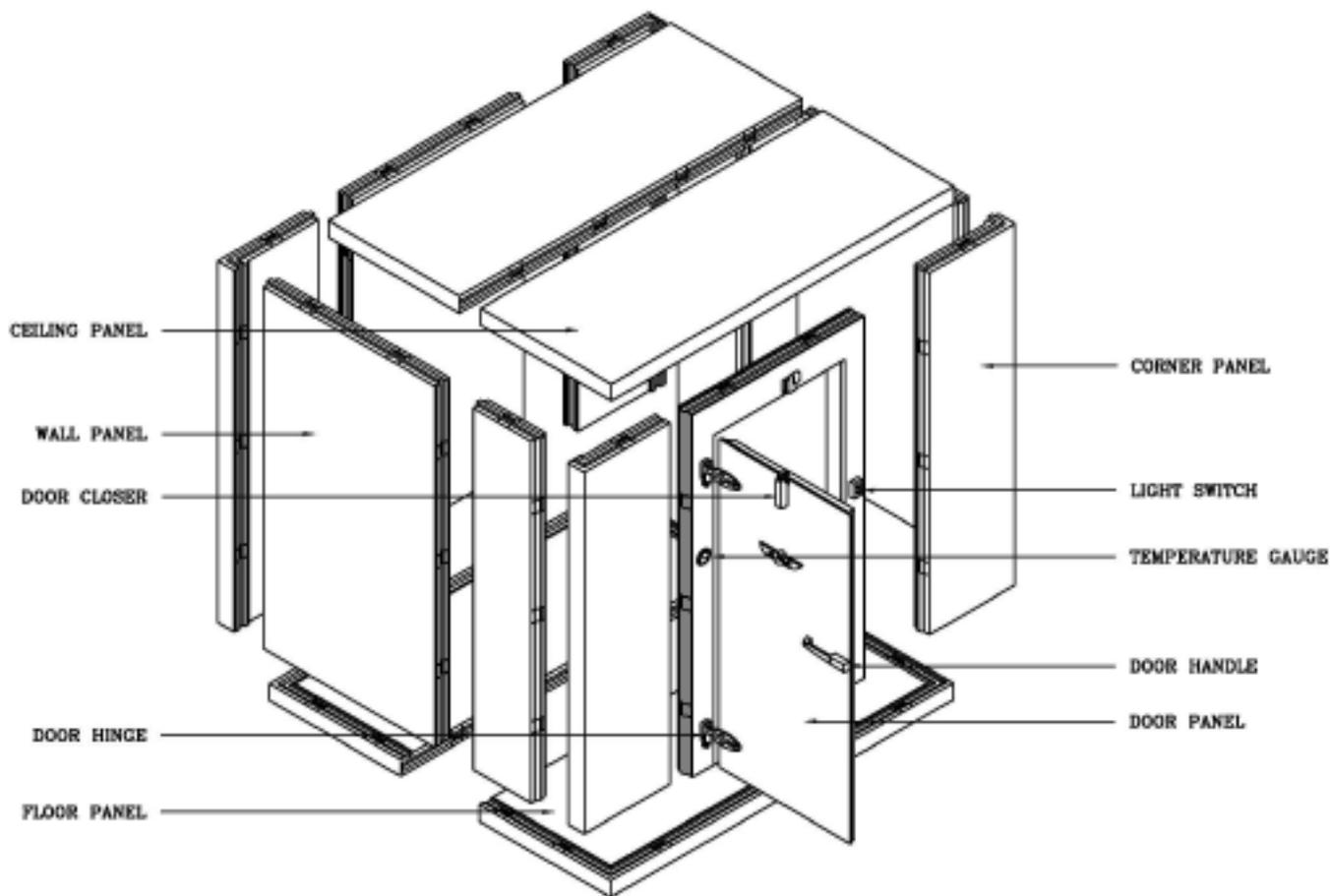
NOTE: DRAIN PIPE SIZES VARY SEE FACTORY SPECIFICATIONS



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## Walk-in Cooler/Freezer Exploded View



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