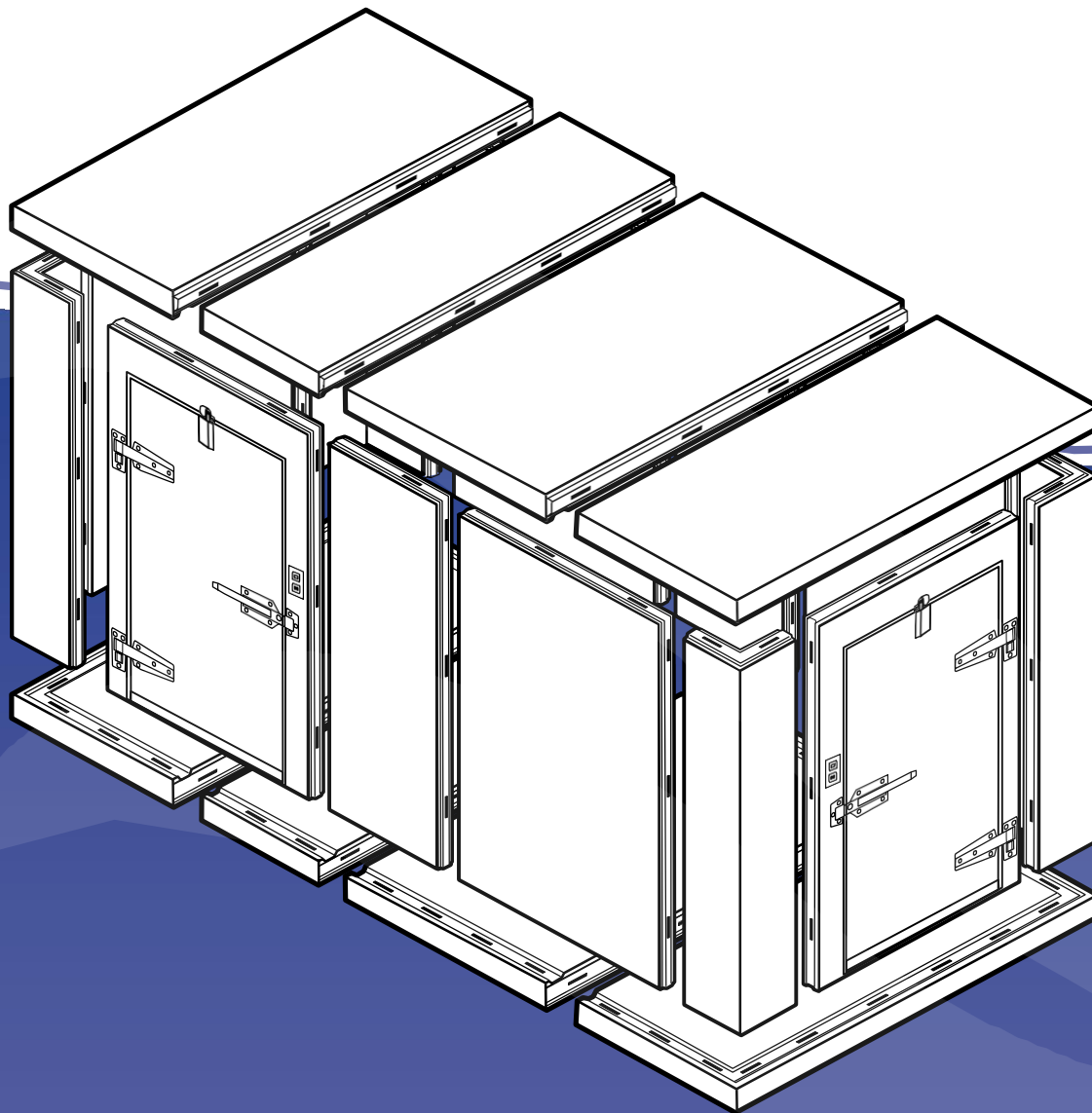# TAFCO

Walk-In to Quality

Energy Independence and Security Act of 2007 Compliant

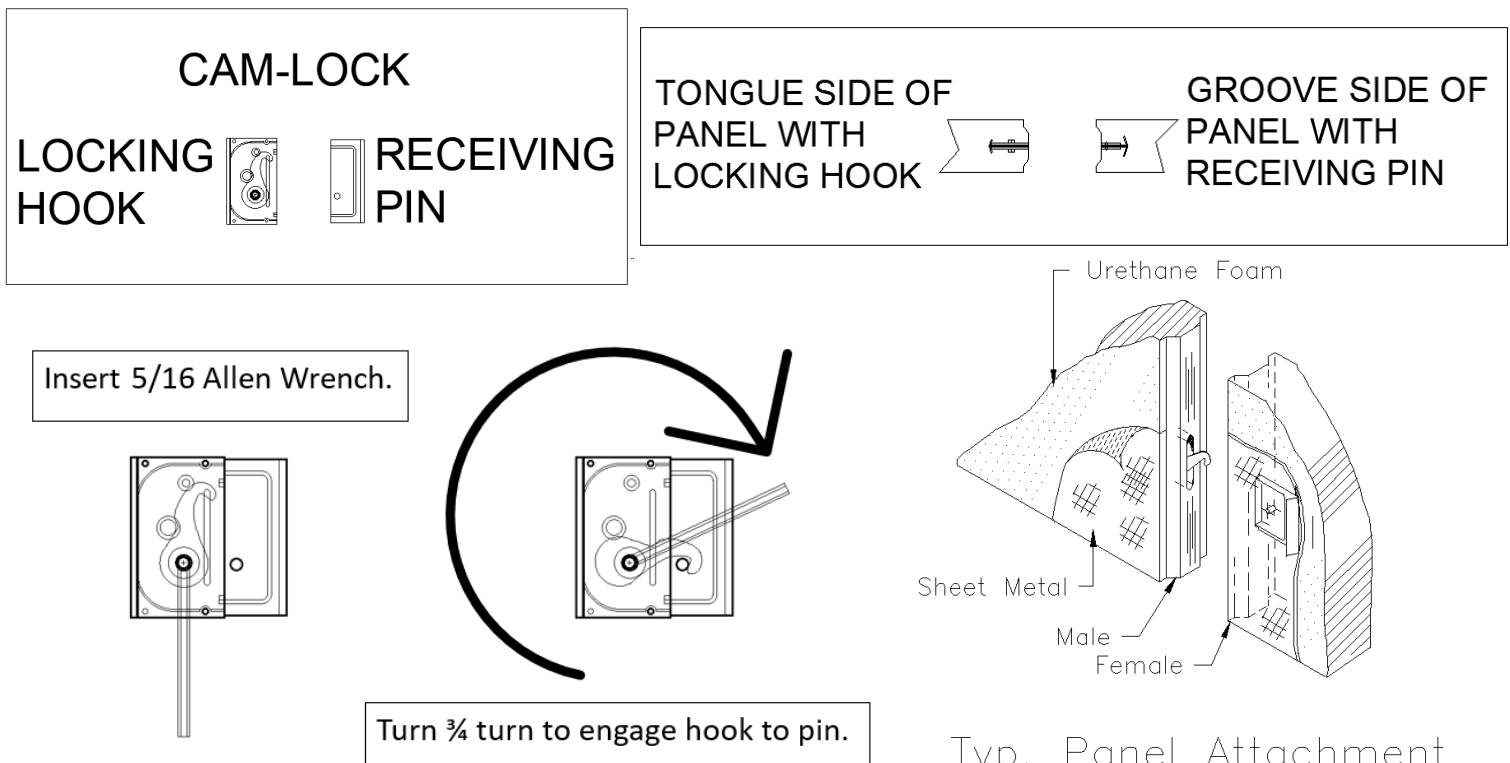# INSTALLATION MANUAL

TABLE OF CONTENTS

1. INSTALLATION PREPARATION

Tools and Materials Needed for Installation
- Carpenter's level for small structures
- Surveyor's level or transit for large applications
- Shims, if leveling becomes necessary
- Caulking for floor rims
- Silicone sealant for small penetrations
- Spray foam for large penetrations
- 5/16" allen wrench (supplied in the parts box)
- Philips and straight screwdrivers
- Adjustable wrench
- Hammers
- Pry-bar
- Utility knife

Operation of the Cam-Lock Fastener System
Before beginning installation, the correct operation of the panel fasteners must be understood. The panel fasteners are made up of two parts. These two parts are the locking hook, found in the tongue of a panel, and the receiving pin, found in the groove of a panel. When two panels are pushed together a 5/16 Allen wrench is inserted into the locking hook side through a hole in the panel and turned ¾ of a turn to have the hook engage and pull the receiving pin to join the two panels.

CAM-LOCK

LOCKING HOOK   RECEIVING PIN

TONGUE SIDE OF PANEL WITH LOCKING HOOK   GROOVE SIDE OF PANEL WITH RECEIVING PIN

Insert 5/16 Allen Wrench.

Turn ¾ turn to engage hook to pin.

Urethane Foam

Sheet Metal

Male

Female

Typ. Panel Attachment
Male/Female — Pin/Hook
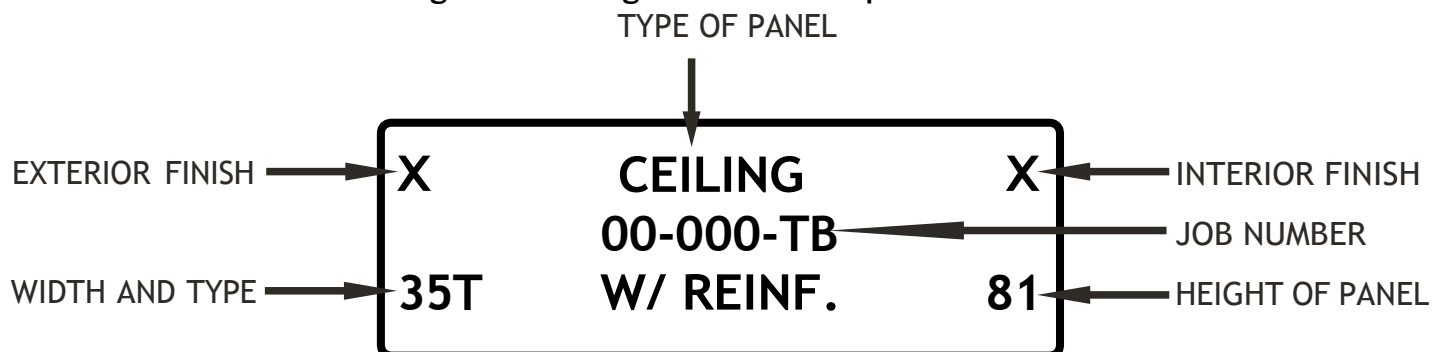
2. SITE PREPARATION

Mark the outline of the pre-fab structure on the building floor. Be sure it has sufficient clearance from building walls, ceilings, or any other obstructions. The most important condition for the erection is the levelness of the floor section. The building floor, in the area where the pre-fab structure is to be erected, should be checked with a level and the floor section of the structure should be shimmed if necessary.

1. Site Review
    A. Measure area of installation, comparing to drawings provided with walk-in
        I. Minimum of 2" air gap is required between walk-in and any adjacent building walls. (Air gap is required to avoid sweating / condensation from forming on walls and possible formation of mold in the future.)
    B. Verify condition of slab is leve l
        I. Recommend using a self-leveling laser to verify
            1. Floor must be level for a proper installation
                a. Recommended methods for leveling sub floor
                    i. Self-leveling epoxy
                    ii. Concrete skim coat / grouting
                    iii. Compacted leveling sand if box is installed in a recessed pit
                    iv. Shimming of floor panels can be done, but is not the best method to support the floor
                    v. Shimming of floor panels required at a minimum 12 inches apart around perimeter of box and 16 inches in the middle of the box. more shimming could be required for high traffic or heavy load bearing floors.
                    vi. Note: it is important that installation starts with a good base, as in all construction
        II. Chalk lines for foot print of walk-in after sub floor is leveled
            1. Allow a minimum of 2" air space between walk-in and any adjacent walls
            2. Start by snapping a line on slab across front of walk-in
            3. Sides of walk-in can be laid out by using the following:
                a. Laser projecting a perpendicular line to face of walk-in
                b. Using the 3.4.5 method, or multiples of, for larger installations

Panel Identification

The tag on each panel indicates its use (wall, floor, ceiling, etc.) and their size. The first number indicates the width of the panel, and the second number indicates the length. In some cases, a letter may follow the width number: either "T" for tongue or "G" for groove. See example.

TYPE OF PANEL

EXTERIOR FINISH → X   CEILING   X ← INTERIOR FINISH

00-000-TB ← JOB NUMBER

WIDTH AND TYPE → 35T   W/ REINF.   81 ← HEIGHT OF PANEL

3. EXAMPLE PACKING LIST

TOTAL # OF PANELS (37)						TOTAL # OF FRAMES w / DOORS (2)				

WALLS / PANELS ABOVE

QTY.	EXT.	WIDTH.	HGT.	INT.		QTY.	EXT.	WIDTH.	HGT.	INT.		QTY.	EXT.	WIDTH.	HGT.	INT.	
4	V26	12/12	117	V26	W00	2	V26	46	23	V26	W08 PANEL ABOVE w/ BOTTOM GROOVE RECS. TO MATCH 46" FRAME						
1	V26	13.5/12	117	V26	W01												
8	V26	46	117	V26	W02												
3	V26	34.5	117	V26	W03												
1	V26	34.5	117	V26	W04 w/ INT. WALL GROOVE & SPEC. BOTTOM LOCK												
1	V26	19.5	117	V26	W05 DOUBLE TONGUE w/ SPEC. TOP & BOTTOM LOCKS												
1	V26	11.5	117	V26	W06												
1	V26	23TG	117	V26	W07												

CEILINGS

QTY.	EXT.	WIDTH.	HGT.	INT.	
1	V26	35T	150.5	V26	C00 w/ U-CHANNEL
1	V26	35G	150.5	V26	C01 w/ SPEC. WALL GROOVE RECS. & U-CHANNEL
1	V26	46	150.5	V26	C02 w/ U-CHANNEL
1	V26	46	150.5	V26	C03 w/ SPEC. WALL GROOVE RECS. & U-CHANNEL
1	V26	11.5	150.5	V26	C04 w/ U-CHANNEL

FLOOR FRONTS / FLOOR REARS

QTY.	EXT.	WIDTH.	HGT.	INT.		QTY.	EXT.	WIDTH.	HGT.	INT.	
1	V26	35T	81	S18	F00 w/ SPEC. WALL GROOVE RECS. & SPEC. SIDE LOCKS	1	V26	35T	69.5	S18	F05
1	V26	35G	81	S18	F01	1	V26	35G	69.5	S18	F06
1	V26	46	81	S18	F02 w/ SPEC. WALL GROOVE RECS. & SPEC. SIDE RECS.	2	V26	46	69.5	S18	F07
1	V26	46	81	S18	F03	1	V26	11.5	69.5	S18	F08
1	V26	11.5	81	S18	F04						

METAL	(E) STUCCO ALUMINUM	(WE) WHITE STUCCO ALUMINUM	(G) GALVANIZED
FINISH	(A) SMOOTH ALUMINUM	(WA) WHITE SMOOTH ALUMINUM	(G14) 14GA GALVANIZED
CODE	(X) STUCCO GALV. STEEL	(V) STUCCO GALVALUME	(S) STAINLESS
			(S16) 16GA STAINLESS

PARTS LIST

ASSEMBLY INSTRUCTIONS	ONE (1) SET
Wrench	TWO(2)
VXS100 Light Cover	TWO(2)
Plastic buttons, gray	(300)
SCREED INSTRUCTIONS	NOT REQ'D
REFRIGERATION	BY OTHERS
Silicone Sealant (Gray)	ONE(1)

FRP FRAMES AND DOORS

	DOOR #D01	DOOR #D02
FRAME	(V26) 46" x 94" (V26)	(V26) 46" x 94" (V26)
DOOR	(V26) 36.5" x 77.875" (V26)	(V26) 36.5" x 77.875" (V26)
FLOOR	TYPE 3-I w/ MTD. SILL PLATE	TYPE 1 w/ ATTACHED SILL PLATE
FLUSH	YES	YES
OVERLAP	NO	NO
GASKET	MAG	MAG
HINGED	LEFT	LEFT
HINGES	(3) W-59-L	(3) W-59-L
LATCH	W-29NC	W-29NC w/ Locking Hasp
FINISH	Polished	Polished
THERM	---	---
LIGHT	VXS100	VXS100
SWITCH	24-DT	24-DT
HEAT D	---	---
HEAT F	226"	BLANK J-BOX
JUNCT BOX	HEATER J-BOX	STD
D. CLOSER	W-94	W-94

BOTH w/ VENT #K1825 IN HEADER
BOTH w/ SPEC. SIDE LOCKS AND RECS

DATE: 4/6/2016	
DRN BY: xxxx	JOB # 116-XXXX-TB

TAFCO

EXAMPLE CRATE LIST

- *Note: Parts box and drawings are located inside corner crate, and additional set of drawings and bill of materials are located in envelope taped to door and frame.

TAFCO ORDER # 116-XXXX-TB-	DATE: 4-6-16	TOTAL CRATES: 4 / CTNS:
CUSTOMER ORDER #		SHEET 1 of 3
SHIP TO:		
FOR ACCOUNT OF:	**TAFCO** CRATE LIST	
SHIPPED VIA:		

CRATE # 1   SKID # 1
123"L X 48"W X   "H
        LBS
3   W02 V26 46x117 V26 WALL PANEL
4   W00 V26 12/12x117 V26 CORNER PANEL
1   W07 V26 23TGx117 V26 TEE PANEL
1   W01 V26 13.5/12x117 V26 CORNER PANEL
     PARTS BOX

CRATE # 2   SKID # 2
123"L X 48"W X   "H
        LBS
3   W02 V26 46x117 V26 WALL PANEL
3   W03 V26 34.5x117 V26 WALL PANEL
1   W04 V26 34.5x117 V26 WALL INT. WALL GRV.
1   W06 V26 11.5x117 V26 WALL PANEL
2   W08 V26 46x23 V26 WALL PANEL ABOVE W/ BOT. GRV.
1   W05 V26 19.5x117 V26 WALL DBL TON.

CRATE # 3   SKID # 2
123"L X 48"W X   "H
        LBS
2   W02 V26 46x117 V26 WALL PANEL
1   J01 V26 46x94 V26 LHH DOOR AND FRAME D01
1   J02 V26 46x94 V26 LHH DOOR AND FRAME D02

CRATE # 4   SKID # 2
156.5"L X 48"W X   "H
        LBS
1   C00 V26 35Tx150.5" V26 CEILING U-CHANNEL
1   C01 V26 35Gx150.5" V26 CEILING U-CHANNEL, SP. WALL GRV. REC.S
1   C02 V26 46x150.5" V26 CEILING U-CHANNEL
1   C03 V26 46x150.5" V26 CEILING U-CHANNEL, SP. WALL GRV. REC.S
1   C04 V26 11.5x150.5" V26 CEILING U-CHANNEL
1   F00 V26 35Tx81" S18 FLOOR (FRONT) SP. WALL GRV. REC.S, SP. SIDE LOCKS
1   F01 V26 35Gx81" S18 FLOOR PANEL (FRONT)
1   F02 V26 46x81" S18 FLOOR (FRONT) SP. WALL GRV. REC.S & SP. SIDE REC.S
1   F03 V26 46x81" S18 FLOOR PANEL (FRONT)
1   F04 V26 11.5x81" S18 FLOOR PANEL (FRONT)
1   F05 V26 35Tx69.5" S18 FLOOR PANEL (REAR)
1   F06 V26 35Gx69.5" S18 FLOOR PANEL (REAR)
2   F07 V26 46x69.5" S18 FLOOR PANEL (REAR)
1   F08 V26 11.5x69.5" S18 FLOOR PANEL (REAR)

EXAMPLE SCREED LAYOUT & INSTRUCTIONS

GRAY PVC WITH-TONGUE SCREED LAYOUT

10.75"   48"   48"   10.75"

1 5/8" x 3 5/16" notches for door frame

Quote No	Sheet	Date	Project / Customer
116-0310-TB	1 of 1	4/4/2016	XXXX

TWO(2)pcs 72" LONG

TWO (2)pcs 48" LONG

ONE (1)pc 42.125" Flat / 1 5/8" x 3 3/4" notch for door frame

ONE (1)pc 19.125" 1 5/8" x 3 3/4" notch for door frame / Flat

FOUR (4)pcs 10.75" / 10.75" CORNER

SCREED CUT TO LENGTH

4. SCREED INSTALLATION (Walk-in without Floor)

- Review screed layout drawing

- Snap lines for interior of screed 1 ½ inches less than interior dimension or snap lines for exterior of screed 1 ½ inches bigger than outside of walk-in to allow for 3/4" cove on screed.

4A

4B

- Be sure layout is square (refer to box layout instruction)

4C

- Layout pieces of screed starting in one corner. Silicone and or butyl caulk bottom of screed. Set screed in place on snapped line. Anchor down by drilling interior of channel and installing 1/4" drive pin anchors.

4D

4E

4F
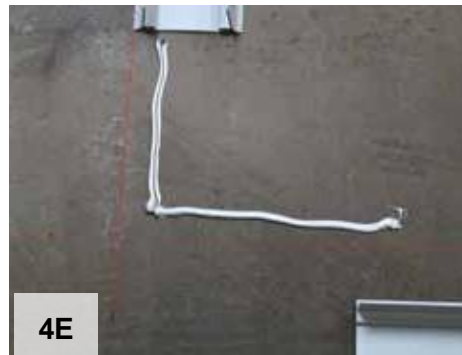
- Slide walls into channel of screed. Lock walls lining up top corners of each wall.

4G

4H

4I

4J

5. FLOOR INSTALLATION INSTRUCTIONS

- Check floor for level; if floor is un-level, can level with sand or self-leveling epoxy.

- All panels are locked together with cam latches; to lock cams, insert cam wrench and turn clockwise.

- Be sure to allow at least 2" of space between building walls and cooler walls.

- Check cooler drawing for panel layout.

- Begin by locking floor panels together; starting at one end, flush panels side to side and top to top (see figures 5A - 5B).

5A

5B

- Check with level (see figures 5C - 5D).

5C

5D
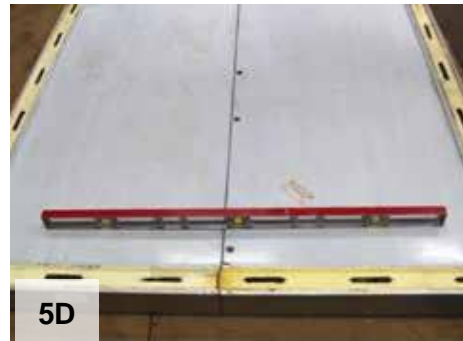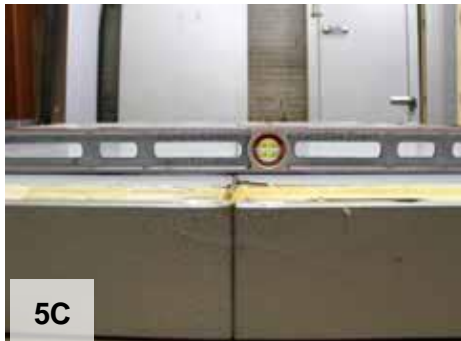
6. WALL INSTALLATION INSTRUCTIONS

- Check drawing for panel layout.

- Start with back corner (see figures 6A - 6B).

6A

6B
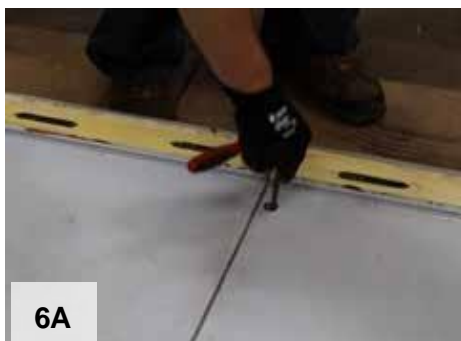
- Back wall panel next to corner panel, lock panels together starting with top lock, then middle lock and bottom lock, making sure panels are flush (see figures 6C - 6F).

6C

6D

6E

6F

- Then lock side wall panel next to corner panel.

- Continue installing rear wall panels according to drawing.

- Install 2nd rear corner panel (see figures 6G - 6H).

6G

6H

- Continue installing side panels according to drawing (see figures 6I - 6N).

6I

6J

6K

6L

6M

6N

- Install left front corner panel making sure panels are flush on top and panel to panel (see figures 6O - 6R)

6O

6P

6Q

6R
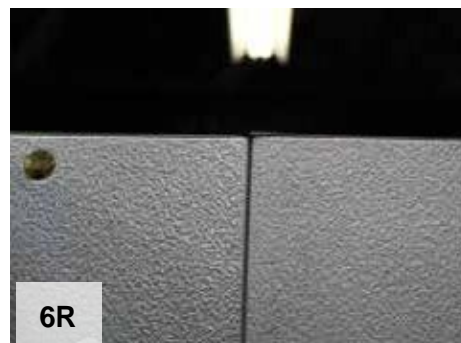
- Install front wall panels according to drawings (see figures 6S - 6T).

6S

6T

- Install right front corner panel making sure panels are flush on top and panel to panel (see figures 6U - 6W).

6U

6V

6W

7. CEILING PANEL INSTALLATION

- Layout all panels according to drawing.

- Lock front corners of walls to ceiling panels making sure they are flush.

- Starting with front ceiling panel, lock ceiling panel to ceiling panel making sure they are not stepped (see fig. 7A - 7C).

7A

7B

7C

- Continue locking all ceiling panels to ceiling panels.

- Starting from front, lock all ceiling panels to wall panels making sure they are flush with walls (see figure 7D).

7D

8. INSTALLING DOOR & FRAME

- After door section is installed, check for plumb. Using a level on the face of the door section, adjust position before locking to adjacent section.

8A

8B

- The electrical junction connected to the lamp fixture on the inside of the door frame must be connected to the appropriate voltage. We recommend a separately fused 15 amp circuit. (It is also recommended that power is not connected until operating temperature has been reached, as it may damage heater wire.)

- To connect electric, drill a hole in the ceiling panel above the junction box.

- Extend conduit through the hole into the junction box connected to the lamp fixture.

- Once wires have been pulled, seal ends of conduit with caulking to prevent moisture from infiltrating the lamp fixture.

- Connect the electric supply to the conductors inside the junction box that feed the lamp and door and frame heaters. (There may also be a red wire marked "LIGHT" in the junction box; this wire is to be used for additional lighting, or can remain capped off if no additional lighting is required).

9. MOUNTING DOOR SILL

(With a Floor)

- Remove shipping bracket (see figure 9A), then insert sill plate (see figure 9B).

9A

9B

- Attach sill plate to inside top of floor panel with 3 self-tapping screws (see figures 9C - 9E).

9C

9D

9E

- Attach front of sill plate to floor panel with 3 self-tapping screws (see figures 9F - 9H).

9F

9G

9H

(Without a Floor)

- Install door frame in screed. (See figure 9I)

9I

- Open door and mark hole locations. We recommend 2" from each side and one centered and ¾ of an inch from the edge of the sill. (see figures 9J - 9L)

9J

9K

9L

- Using appropriate drill bit for the material being drilled, drill a ¼" hole to a maximum depth of 1 ½".
- Insert a drive rivot into the hole and pound pin flush. (see figures 9M - 9O)

9M

9N

9O

- For the inside of the door frame, we recommend ⅝" from the outside and one centered. (see figures 9P - 9Q)

9P

9Q

10. INSTALL BUTTONS OVER CAM LOCK HOLES

- Insert button in cam lock hole and hit button with a hammer (see figures 10A - 10C).

10A

10B

10C
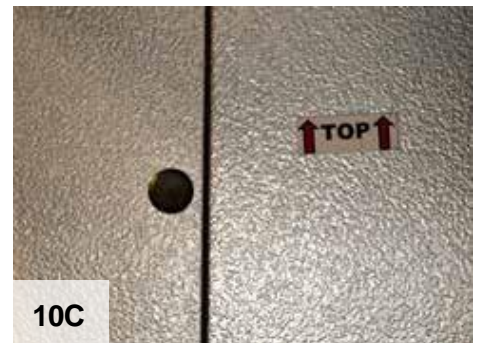
11. INSTALLING CEILING HANGER BRACKETS

- It is important that the ceiling is installed level and square with the walk-in.

- A minimum of 1 hanger bracket every 2 feet is required.

- On multiple sectional ceilings, extra care needs to be taken by adjusting locking patterns to be sure ceilings are installed square and true. (It is important that ceiling corners line up and no stepping occurs).

- Place the bracket in the groove side as shown (figure 11A - 11B). Bracket will slide into place (figure 11C).

11A

11B

11C

- Pry the bracket over with a screwdriver.

11D

- Make sure there is a nut and washer both top and bottom of ceiling hanger bracket.

11E
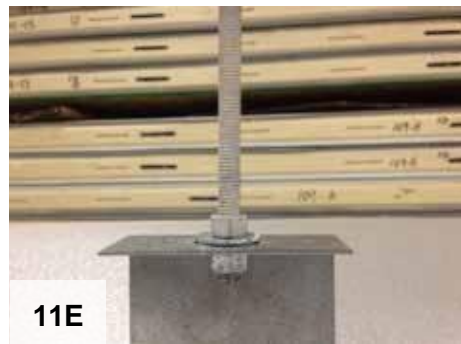
- Rods must be installed plumb to prevent ceiling from being pushed or pulled out of square.

11F

- It is recommended that the installer apply silicone sealant to the short side of the groove just prior to locking the next panel in.

11G
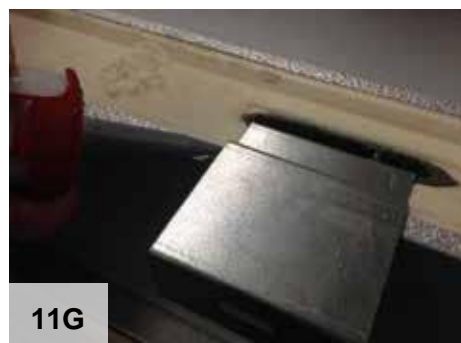
12A. MEMBRANE ROOF INSTALLATION (Free Standing Walk-in)

- Check the roof top of the walk-in and remove any foreign matter. Seal all protruding rough edges such as screw heads, rivets, etc. with caulking. This will prevent any chance of penetrating or wearing a hole in the membrane roof cap.

- Before installation, check the overall width and length of the membrane roof cap. It should be approximately one foot longer and wider than the walk-in.

12A

12B

- Snap a chalk line approximately 51" from edge of walk-in. Line up tab on membrane roof with chalk line. Using screws and Duro-last fasteners provided, start securing 6" from edge; continue fastening every 12" on center until 3" tab is secured along entire tab.

12C

12D

- Unroll roof cap membrane to nest tab and fasten. When fastening remaining tabs, check often to make sure all slack in roof cap is pulled taught.

- On completion of roof cap tabs, fold corners (see figure 12E) and install flashing trim around perimeter of walk-in. Apply a bead of silicone caulking under trim before fastening in place. Screws should be installed at 6" center line. After installing trim, remove excess material.

12E

12F

12G

12H

12I
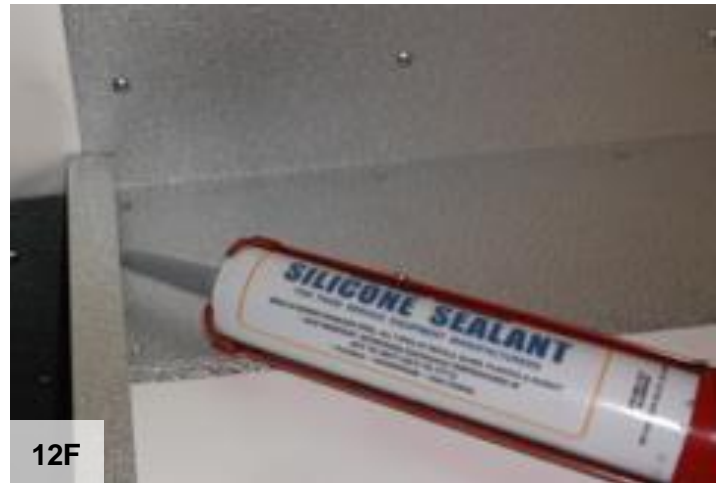
12B. MEMBRANE ROOF INSTALLATION
(Flashed Against Building Wall)

NOTE: The following installation instruction should be followed when the membrane roof cap is installed on walk-in adjacent to an existing building wall.

1. Check roof top of walk-in and remove any foreign matter. Seal all protruding rough edges such as screw heads, rivets, etc. with caulk. This will prevent any chance of penetrating or wearing a hole in the membrane roof cap.

2. Before installation, check the overall width and length of the membrane roof cap. It should be approximately one foot wider and longer than the walk-in.

3. Starting where walk-in meets existing building wall (see figure 12J), fasten reverse tab (when provided) using a 1 ½" screw and a Duro-last plate. Start securement 6" from edge (see figure 12 K). Continue fastening, 12" on center, until 3" tab is secured along the entire tab (see figure 12L) be sure to keep roof material pulled tight while securing.


12J

12K

12L

4. Install 6"x 6" wall flashing using appropriate screws and seal with caulking (see figure 12M).

12M

5. Unroll roof cap membrane to next tab and fasten. When fastening remaining tabs, check often to make sure all slack in roof cap is pulled taught.

6. Use flashing to cover seam between walk-in and existing wall as shown. Place 3"x 3" trim in the corner and apply a bead of caulking to both sides, and fasten using appropriate screws. Fold roof flap over trim.

12N

12O

12P

7. After finishing all membrane roof tabs, fold corners as shown and install Terminator strips by applying a bead of caulking on the underside of the 90 degree bend, using a #8 X 1/2" sheet metal screw through the front of the terminator strip into the walk-in wall on 6" centers.

12Q

12R

12S

12T

12U
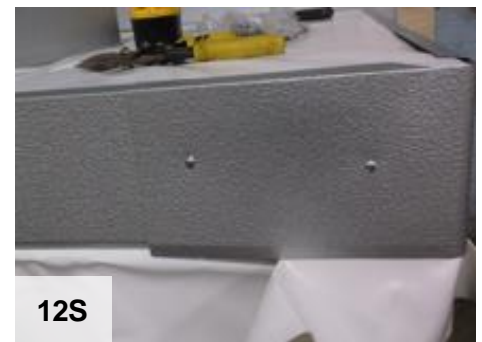
8. Trim excess membrane material even with bottom of terminator strips.

12V

12W

12X

12Y

9. Seal all seams with silicone caulking.

13. BUCK OPENING AND GLASS DOOR INSTALLATION

When installing a buck opening be sure to keep the opening square and walls level.

- Install corner brackets to keep the opening square.

13A

13B

- Install door frame and clamp into place.


13C

13D

- Once the frame is clamped firmly in place and is level, using the screws provided, screw the glass door frame to the buck opening.

13E

14. INSTALLING A PACKAGED REFRIGERATION UNIT

- Packaged refrigeration units are designed to be dropped in through a cut out in the walk-in ceiling. Refrigeration units will be shipped with a wooden curb which is to be installed before the membrane roof and will allow for proper water drainage away from the opening.

- Place wooden curb around opening, before installing membrane roof.

14A

14B
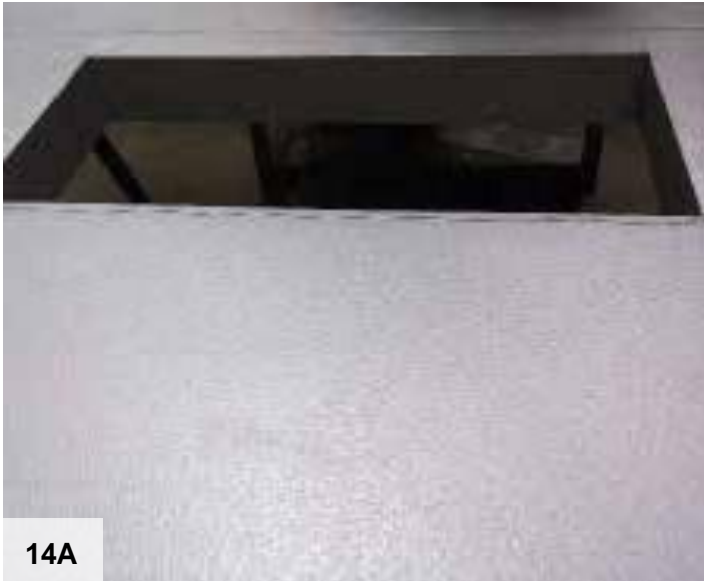
- Install membrane roof according to instructions, pulling roofing material over wooden curb.

14C

14D

- Cut an opening in the membrane roof above the opening in the walk-in ceiling. Remove only a small amount of material and allow excess to be folded inside opening.

- A bead of silicon should be put on the membrane roof prior to dropping unit through the opening. After the refrigeration unit is through the opening, a second bead of caulking is recommended around entire base of the unit.

- Install trim pieces on interior of the walk-in.

- Zanotti packaged units are equipped with a micro door switch that can be wired to a magnetic door switch, which allows for operation of the light (if wired to zanotti wiring harness) and will also pause fan operation while door is open. Most walk-ins will come with a 24 DT digital thermometer and switch mounted in the door frame. Refrigeration units are also packaged with a key pad that can be mounted at the door frame and acts as a digital thermometer and light switch, and also allows for programming of the refrigeration system. (Some customers may prefer not to mount refrigeration controls where unauthorized persons could have access).

14E

14F

14G

14H

TAFCO
Walk-In to Quality

1395 Industrial Park Road
Clearfield, PA 16830

PO Box 269
Hyde, PA 16843

Phone: 814-765-9615
Fax: 814-765-5410
Toll Free: 800-233-1954

www.tafcowalkins.com

09/2024   F-ENG-02