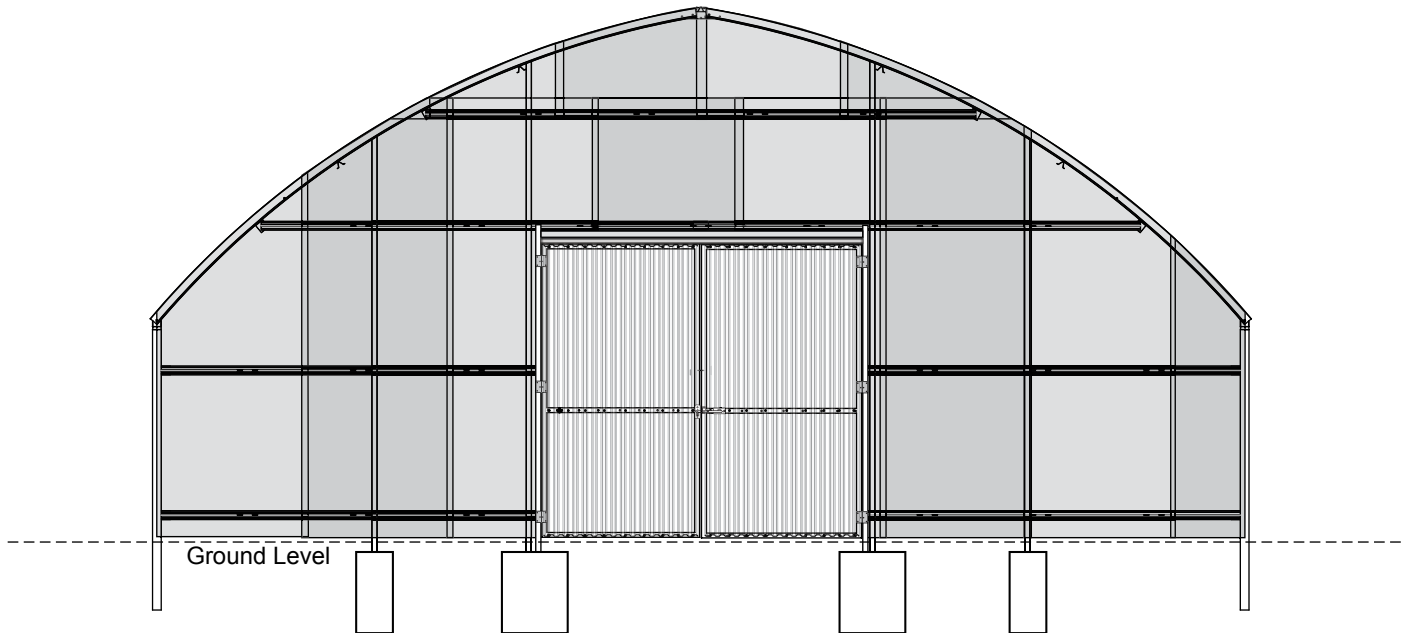




## ClearSpan™ Pro Solar Star™ Greenhouse Door Kits (Double Swinging Door)



*Diagram shows a corrugated double swinging door centered and installed in an end wall frame. The door kit includes materials for the double door only. All other components shown in the diagram above and other diagrams throughout this guide are not included and require additional purchase.*

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STK# R035B00011A (Twin-Wall Polycarbonate) R035B00011B (Corrugated Polycarbonate)
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Revision date: 05.28.10

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## DOUBLE SWINGING DOOR KIT: READ THIS BEFORE YOU BEGIN

The double swinging door kit is designed to attach to any of these end frame kits: R020B00001, R024B00001, R030B00001, and R035B00001. These instructions and the instructions for the end frame are written to be used together.

If you have not installed your end frame kit, consult these instructions as you assemble the framing for both the door and the end frame. Adjust dimensions as needed to accommodate the door installation and location.

**NOTE:** The end frame is designed to frame an end of one of our roll-form buildings (20', 24' 30' or 35' wide). Some end frame components may not be used when a door is installed in the end frame.

If you have already installed the end frame kit, use these instructions to determine the best location for the door and remove the end framing as needed to install this door kit. Reinstall end frame as described in this guide.

If you are installing this door kit in an end frame that is not identified above, use these instructions for critical dimensions and details.

Consult the services of a qualified contractor if needed. *It is the responsibility of the owner/contractor to adapt these instructions to safely and competently install this door in an end frame or building that it was not designed for.*

Complete these steps to begin and to install the door:

1. Based on the dimensions of the door (or doors), determine where you can position the door in the end frame. Use the diagrams from both this manual and the end wall assembly guide.
2. Return to the end wall instructions and frame the end wall as needed based on the door location. Secure the door framing to the end wall framing.
3. Assemble the door and attach the assembled door to the door frame of the end wall.

**NOTE:** If you purchased a fabric end panel to cover the end wall frame, install the panel *before* you install the door; then remove the panel material as needed to allow for the installation of the door.

If you purchased a polycarbonate package (8mm twin-wall or corrugated), install those panels after installing the door(s). Panels or parts of panels will remain from the end panel kit resulting from the installation of the door(s).

# Important Information



## YOU MUST READ THIS DOCUMENT BEFORE YOU BEGIN TO ASSEMBLE THE DOOR KIT.

Thank you for purchasing this ClearSpan™ door kit. When properly assembled and maintained, this product will provide years of reliable service. These instructions include helpful hints and important information needed to safely assemble and properly maintain the doors. Please read these instructions **before** you begin.

### SAFETY PRECAUTIONS

- Wear eye protection.
- Wear head protection.
- Use a portable GFCI (Ground Fault Circuit Interrupter) when working with power tools and cords.
- Do not climb on the framing during or after construction.
- Provide proper ingress and egress to prevent entrapment.

**⚠ WARNING:** The individuals assembling these doors are responsible for designing and furnishing all temporary bracing, shoring and support needed during the assembly process.

For safety reasons, those who are not familiar with recognized construction methods and techniques must seek the help of a qualified contractor.

### REQUIRED TOOLS

The following list identifies the main tools needed to assemble the doors. *Additional tools and supports may be needed depending on the structure, location, and application.*

- Tape measure or measuring device
- Fine point marker to mark the location frame members.
- Variable speed drill and impact driver (cordless with extra batteries works best)
- Tool to cut the polycarbonate panel
- Hammers, gloves, and eye protection
- Ladders, work platforms, and other machinery for lifting designed to work safely at the height of the door and door frame.

**ATTENTION:** Consult the services of a qualified, professional contractor if you are not familiar with the construction of similar frame structures and components.

# Important Information

## ASSEMBLY PROCEDURE

Following the instructions as presented will help ensure the proper installation of the end frame and doors. The steps outlining the assembly process are as follows:

1. Verify that all parts are included in the shipment. Notify Customer Service for questions or concerns.
2. Read these instructions and all additional documentation included with the shipment **before** you begin.
3. Gather the tools, bracing, ladders (and lifts), and assistants needed to install the doors and door frame.
4. Read the care and maintenance information at the end of these instructions.
5. Complete and return all warranty information as instructed (if included).

## UNPACK AND IDENTIFY PARTS

The following steps will ensure that you have all the necessary parts *before* you begin.

1. Unpack the contents of the shipment and place where you can easily inventory the parts. Refer to the Bill of Materials/Spec Sheets.
2. Verify that all parts listed on the Bill of Materials/Spec Sheets are present. If anything is missing or you have questions, consult the parts guide and all diagrams for clarification, or contact customer service.

**NOTE:** At this time, you do not need to open the plastic bags containing smaller parts such as fasteners and clamps (if equipped).

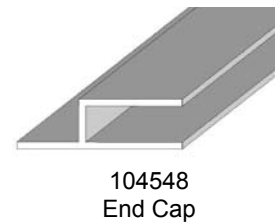
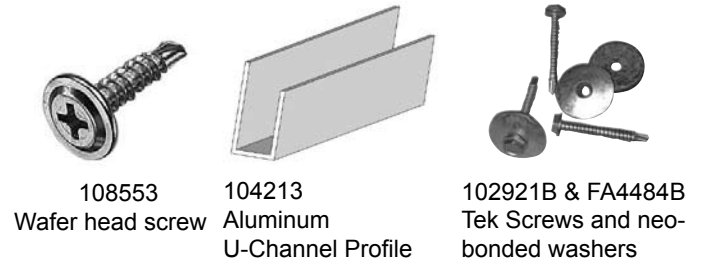
## QUICK START DIAGRAMS

For a quick overview of the end wall, doors, and components, consult the diagrams located at the back of these instructions.

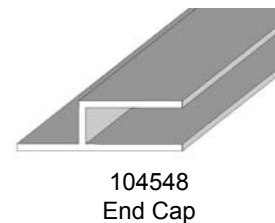
## PARTS IDENTIFICATION

The following graphics and photos will help identify the different hardware for each door kit. (Some parts are not shown.)

### Twin-Wall Polycarbonate Double Door Kit (R035B00011A)



### Corrugated Polycarbonate Double Door Kit (R035B00011B)



# Door Frame Assembly

## ASSEMBLING THE DOOR FRAME COMPONENTS

Consult the diagrams at the back of these instructions *before* you begin. Assistance is required to assemble the door frame.

### INSTALL THE DOOR JAMBS

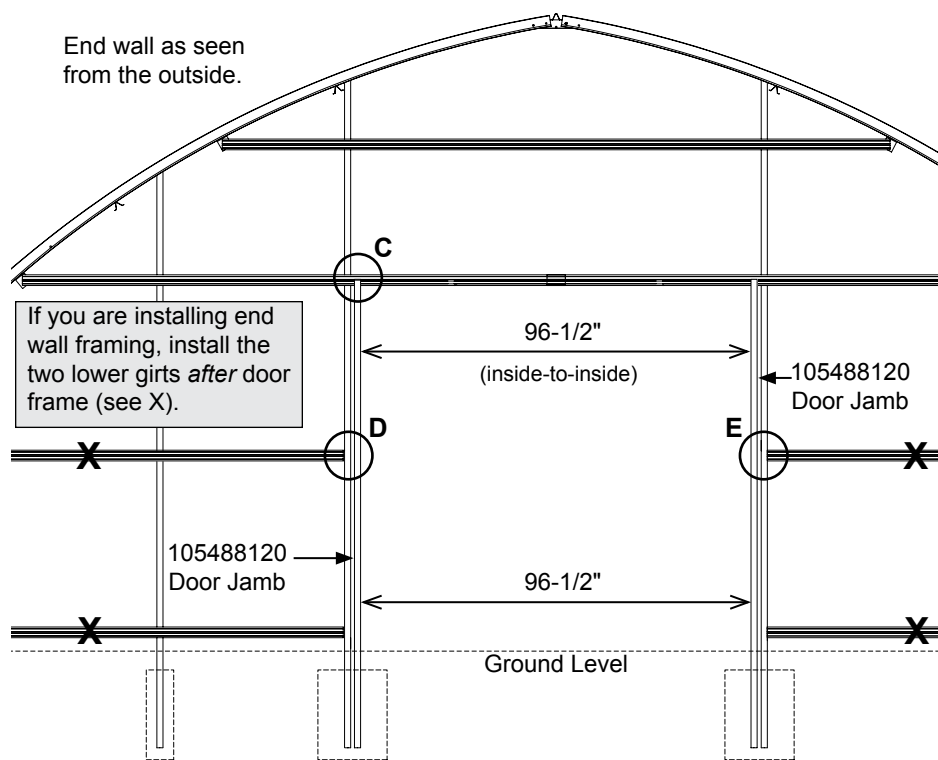
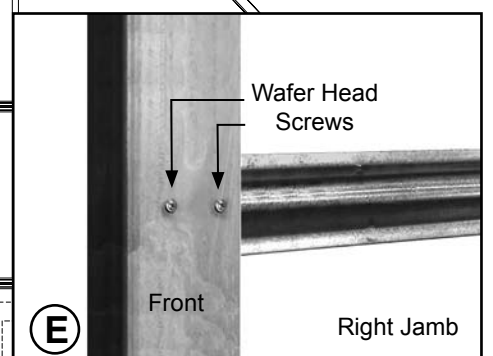
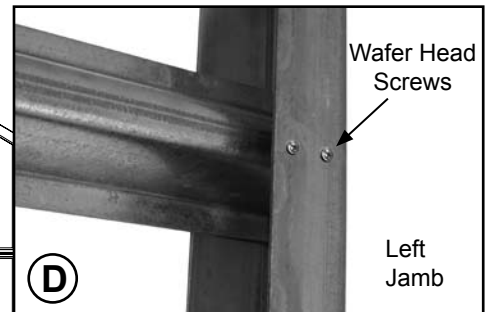
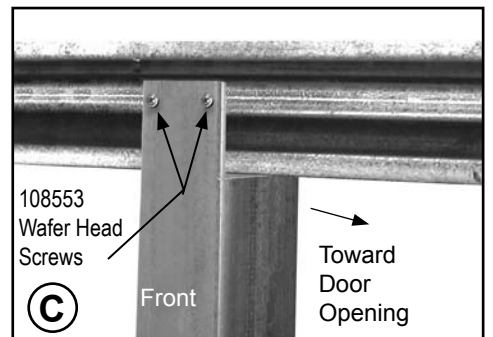
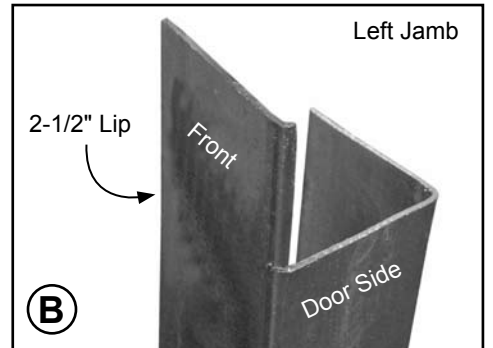
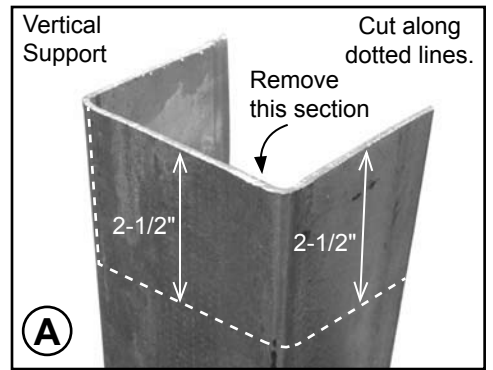
The following steps describe one way to set the door jambs.

- Using the dimensions from the *Door Frame Layout* located in the *Quick Start* section, locate and mark the positions of the door jambs.
- Dig a 10"-12" diameter hole at the locations found in previous step to a depth that is *below the geographic frost line*. (Minimum depth: 24".)
- Locate the 120" door jambs (105488120). Using a metal saw, cut and remove the 2-1/2" sections from one end of each door jamb as shown in photo A. *This creates a lip and allows the jamb to be attached to the girt (see photo B and C).*

**ATTENTION:** Diagrams A-D show the left door jamb only. *Adjust cuts when cutting the end for the right jamb.*

- Using the diagrams as a guide, attach each jamb to the girts using 108553 wafer head screws as shown in photo C, D, and E. (Install end wall girts if needed.)

**ATTENTION:** Position the door jambs so the open sides of the C-channel face away from the door opening (as shown in the photo C) and the lip overlaps the girt. When attached to the girt, the lower end of each jamb extends into a ground anchor hole and is secured in place using concrete. *Consult a knowledgeable contractor if needed.* When installing the lower girts (if needed) of the end wall, verify that the inside-to-inside dimension for the door frame remains consistent.

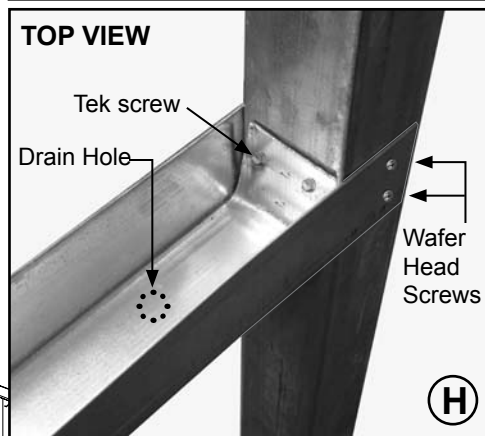
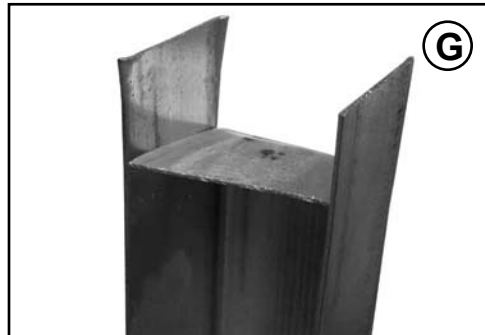
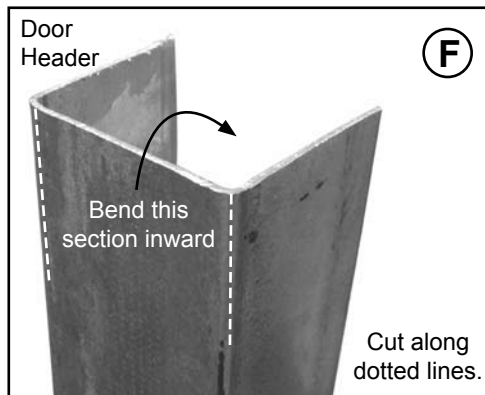


## Door Frame Assembly

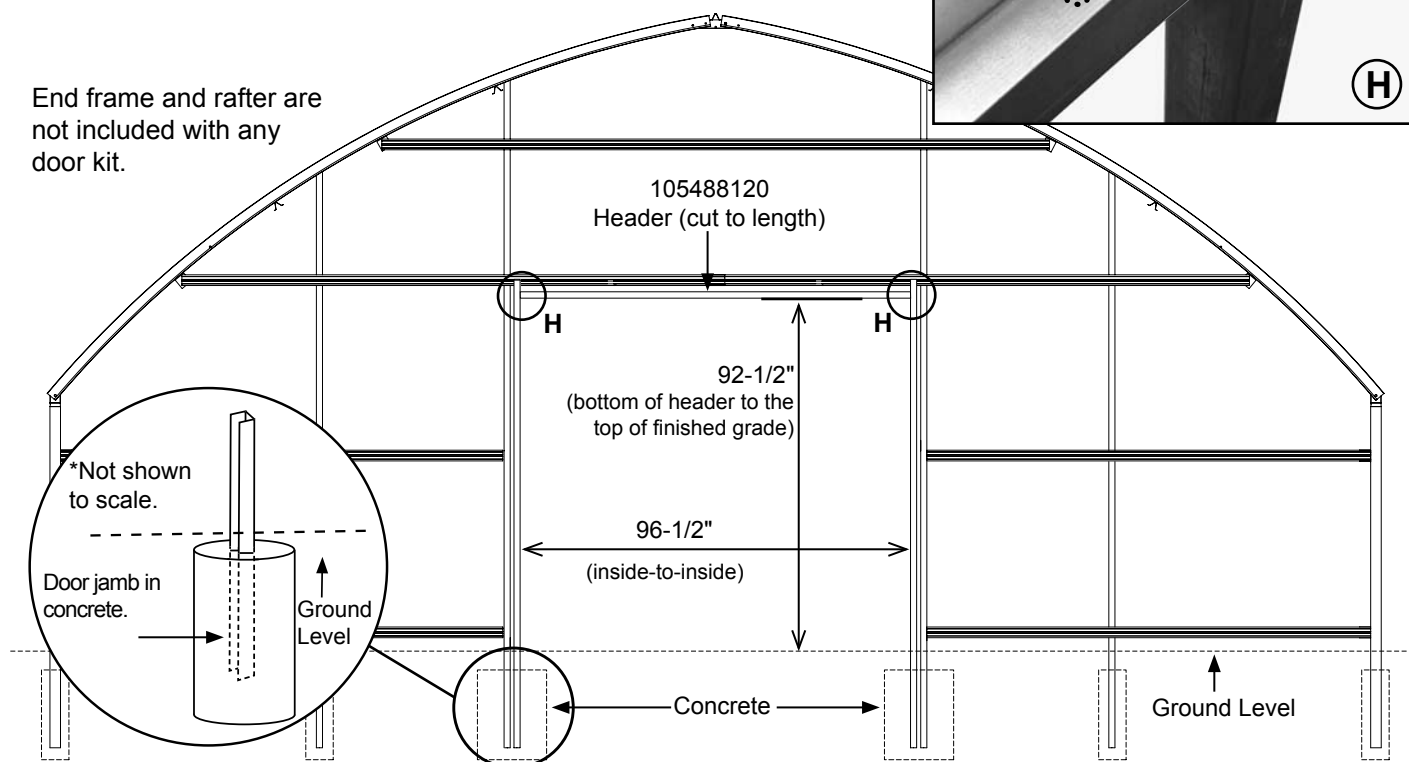
### ASSEMBLING THE DOOR FRAME COMPONENTS (continued)

5. With the door jambs attached, measure and mark the height of the rough door opening. *Consult drawing below and the Door Frame Layout located in the Quick Start section located at the back of these instructions.* Measure from finished grade to underside of header.
6. Locate the 105488120 header, measure the *outside-to-outside* distance of the door jambs and cut the header to required length.
7. Using a metal saw, cut two 2" sections and bend the lip inward from both ends of the door header as shown to the right (see photos F and G). This creates two (2) lips and allows the header to be attached to the door jambs. **Open channel of the header points upward.**
8. Drill a 3/8" hole near each end of the header to create a drain hole for the header. This helps prevent water from collecting inside the door header (see photo H).
9. Position the header so that the two (2) lips on each side overlap the door jambs (see photo H) and align the bottom of the header with vertical support marks made in Step 5.
10. With the header level, attach the front and back of the header to the door jambs using wafer head screws. Reinforce the header by securing the bent lip to the vertical support using Tek screws as shown in photo H. (Or, customer-supplied bolts can be used.)
11. After the door frame is square and assembled, secure the door jambs in the ground using concrete.

**NOTE:** Concrete should remain at least 2"-4" below ground level so that it does not interfere with construction, installation of other end wall components (if equipped), or the operation of the door.



End frame and rafter are not included with any door kit.



# Twin-Wall Double Swinging Doors

## DOUBLE TWIN-WALL DOOR ASSEMBLY

**If your doors include corrugated polycarbonate panels, skip this section and continue with the assembly steps for those doors.** The materials and parts needed to assemble the R035B00011A double door include:

- Door frames (#102923), 8mm panels (102908), door hinges (FA5030), end cap (104548), and latches (FA2410)
- Tek screws (#FA4484B), neo-bonded washers (#102921B), and aluminum profile (#104213)

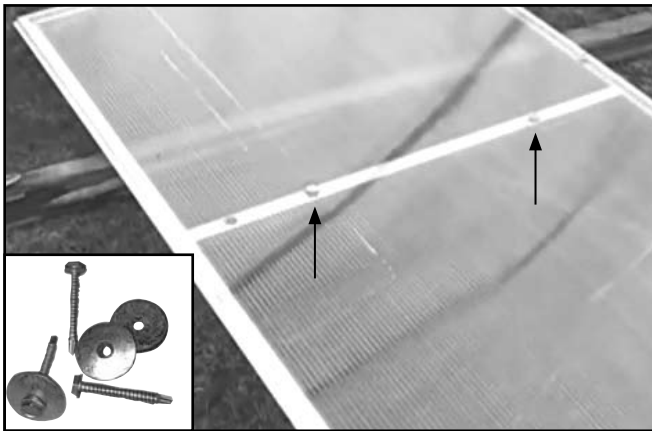
### Assemble and Attach the Doors

**NOTE:** Install the polycarbonate panels with the UV-protected side toward the outside/sun.

1. Locate one (1) door frame (#102923) and place it on a flat surface.
2. Take one (1) polycarbonate panel and trim it so that the length is one-quarter inch (1/4") shorter than the length of the door frame.
3. Trim the width of the polycarbonate panel so that it is one-quarter inch (1/4") narrower than the width of the door frame.

**NOTE:** Trimming the panels as instructed will keep the panel flush with the edge of the door frame *once the aluminum profile (104213) is installed.*

4. Center the panel on the door frame so that approximately one-eighth of an inch (1/8") of the door frame extends beyond the edge of the panel.
5. Using Tek screws (FA4484B) and galvanized neo-bonded washers, attach the panel to the horizontal cross tube of the door frame. *Evenly space Tek screws and washers every 12".*



**NOTE:** Attach the panel in the locations shown in the photo to hold the panel in place while attaching the aluminum profile to the perimeter of the panel. **DO NOT INSTALL NEAR LATCH MOUNTING HOLE.**

6. Install aluminum U-channel profile to all edges of the polycarbonate panel. The 104213 sections at the top and bottom of the panel run to the panel edges to seal the cells in the panel.

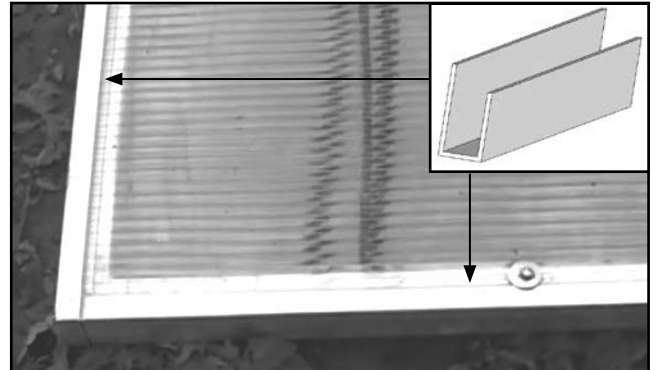
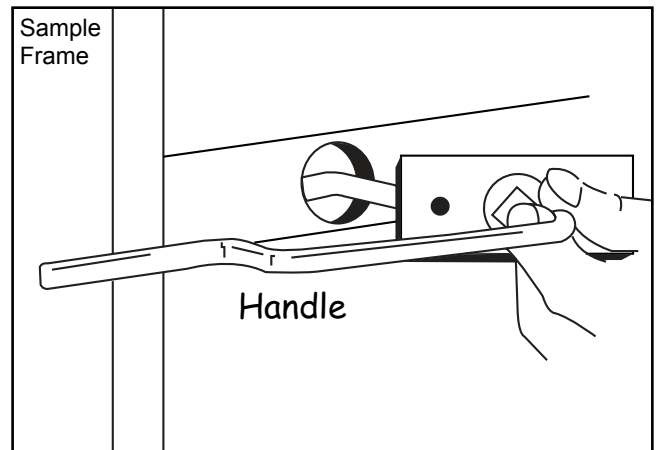


Photo shows the polycarbonate panel attached to the outside of the door frame and finished with the aluminum (104213) U-channel profile.

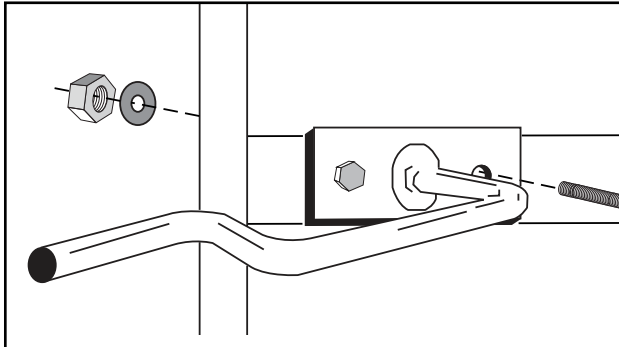
7. To keep the panel and profile in place, install Tek screws and neo-bonded galvanized washers so the screw drills through the longer edge of the U-channel (underside of the polycarbonate panel) and the washer overlaps the shorter edge of the U-channel (top) as shown above. *Evenly space Tek screws every 12".*
8. Repeat the above steps to attach the polycarbonate panel and to install the aluminum profile for the remaining door frame.
9. Determine which door to install the handle, locate the door latch hole (5" from edge of door in cross member) and drill 1" hole through the polycarbonate panel at the hole location.



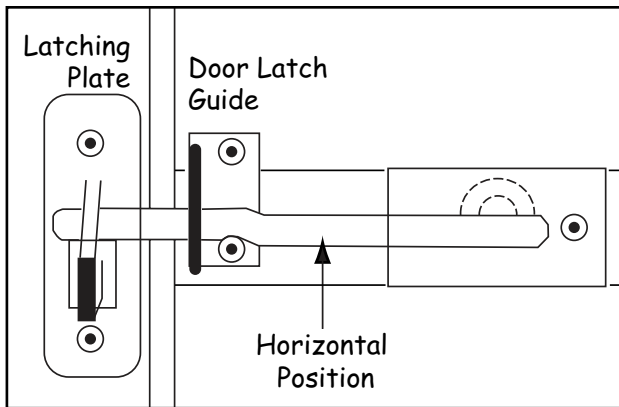
# Twin-Wall Double Swinging Doors

## DOUBLE TWIN-WALL DOOR ASSEMBLY (continued)

- Place one (1) main handle of assembly through hole in door and twist main handle and front plate into place as shown in the drawing below.



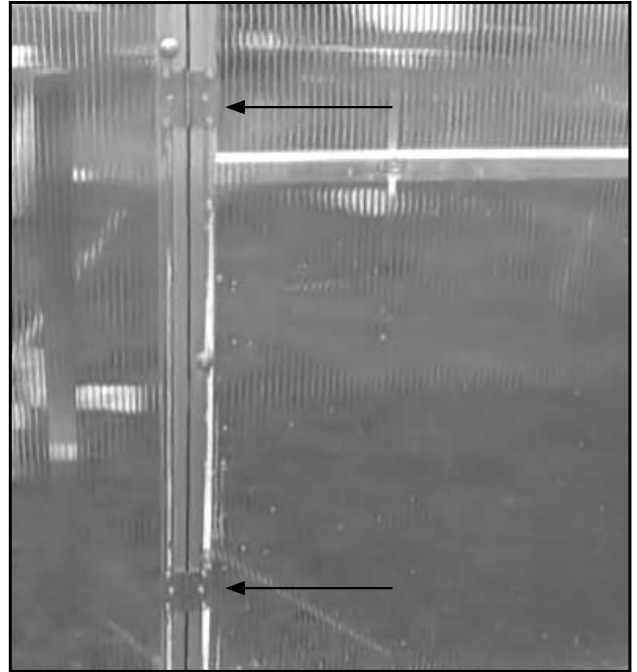
- Mark the plate mounting hole locations on the panel and drill a 5/16" hole through the panel and door frame. Support frame with a block of wood if needed.
- Slide back mounting plate into position, square it with the mounting holes and front plate and secure using two (2) 1/4" x 3" bolts and lock nuts. Verify that latch turns freely. Mount one (1) door latch guide (slotted plate) using the remaining 1/4" x 3" bolts. Position so latch handle is level. See below.



- After assembling the doors, evenly space the three (3) hinges along the door frame of each door and attach the hinges to each assembled door using Tek screws.



- With assistance, set the assembled doors in the end wall door frame and secure hinges to the door jamb using one Tek screw per hinge at this time.

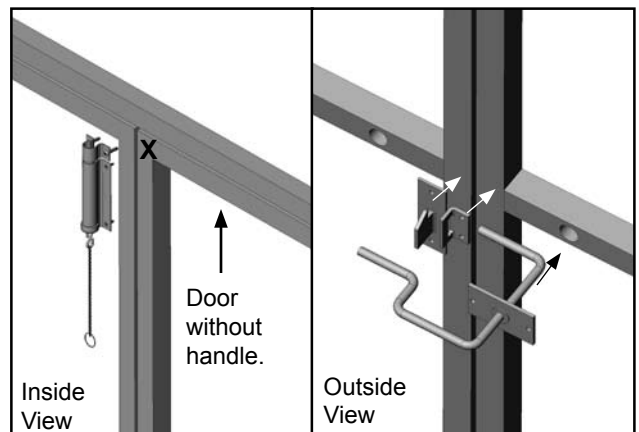


Locations of door hinges may vary.

**NOTE:** Verify that there is sufficient clearance along all door edges to allow the doors to swing freely in the opening. *If end panels are installed, either attach to the outside of the end panels as shown above or loosen the panels, secure the hinges directly to the door jamb, and reinstall panel fasteners.*

- Test the door operation, adjust hinges as needed, and install the remaining Tek screws.
- Attach the 6" chain bolt to the inside, upper corner of the door without the handle (see X in drawing below).

Mount the latching plate to the outside of the same door (see drawing in step 12). *The screws supplied with the latch are not used for metal jambs.*





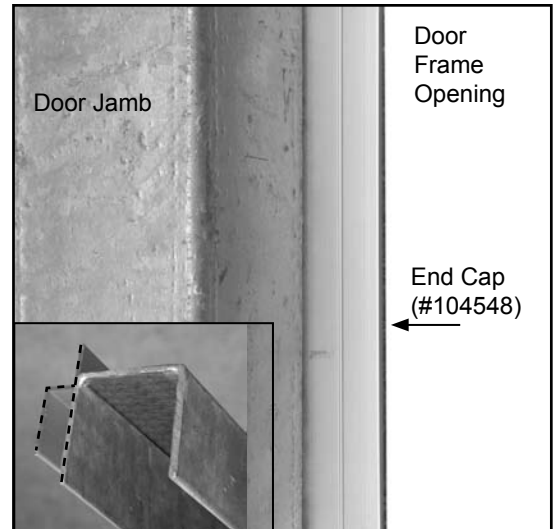
# Twin-Wall Double Swinging Doors

## DOUBLE TWIN-WALL DOOR ASSEMBLY (continued)

17. At the top and sides of the end wall door opening on the inside of the frame, attach end cap and allow it to extend below and into the door frame opening.

**ATTENTION:** This profile acts as a stop for the double doors, which prevents undo stress on the hinges. Consult the photos to the right.

- Photo shows the end cap as attached to the door jamb. *View shows the assembly from the outside.*
- Cross section insert shows the end cap (dashed line) attached to the inside/back of the door jamb.
- Dashed line below identifies where to attach the end cap profile. The end cap extends beyond the frame members and into the rough opening to stop the door in the frame and to help seal the gap between the door and frame.

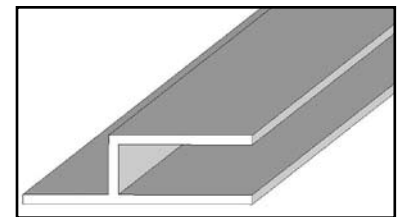


*The installed polycarbonate end wall panels have been removed to better show the door jamb.*

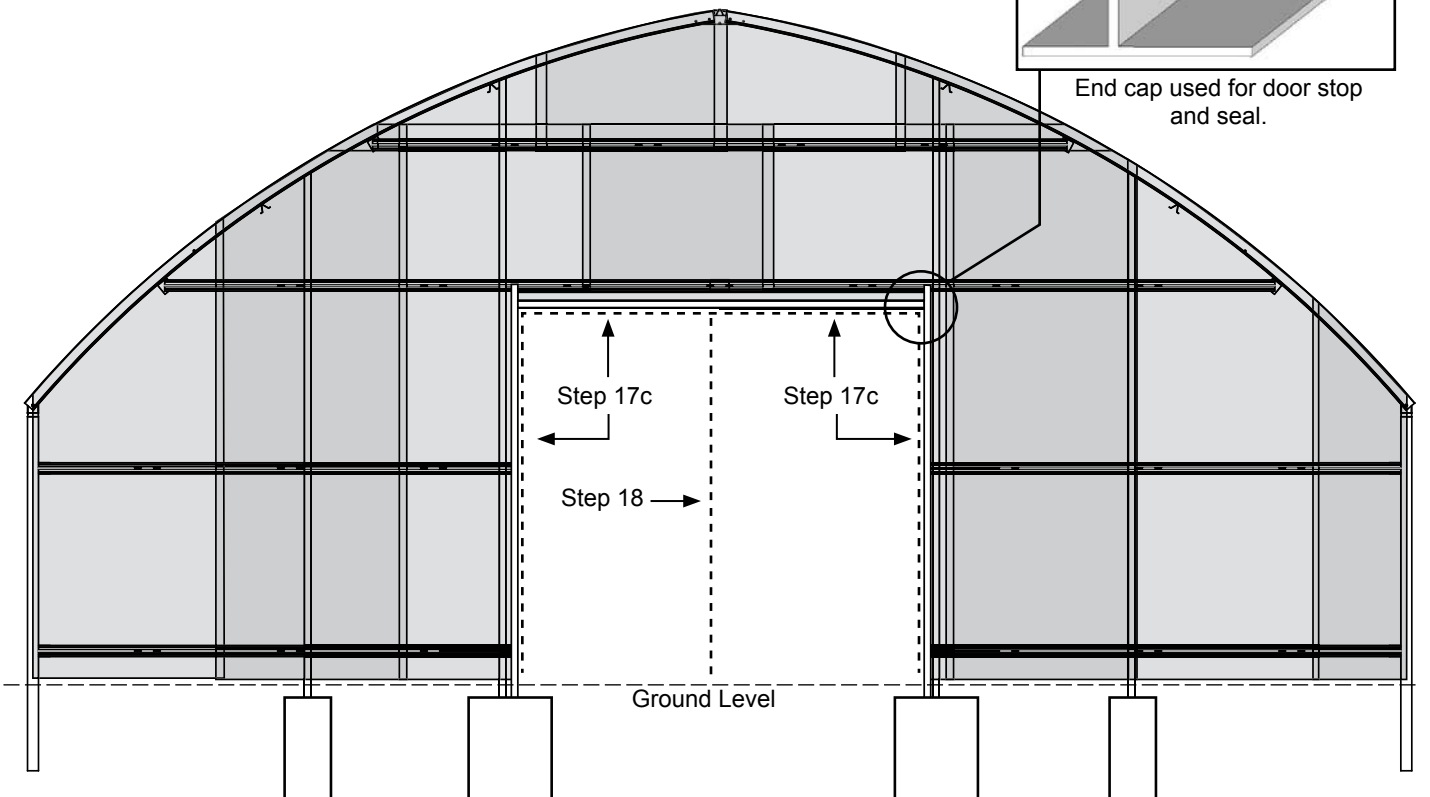
18. After end cap profile is installed, install another section of the same end cap on the *inside frame of the door that includes the chain latch*.

**NOTE:** This end cap serves as a stop for the remaining door of the double door assembly when both doors are closed.

19. Check the operation of the latches and the doors.  
20. After installing the door to the frame, read the care and maintenance section.



End cap used for door stop and seal.

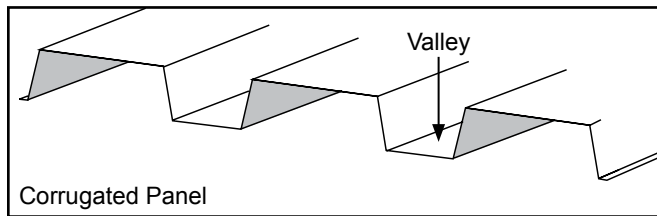


# Corrugated Double Swinging Doors

## DOUBLE CORRUGATED DOOR ASSEMBLY

If your doors includes 8mm twin-wall polycarbonate, skip this section and continue with the assembly steps for that door. The materials and parts needed to assemble the R035B00011B double door include:

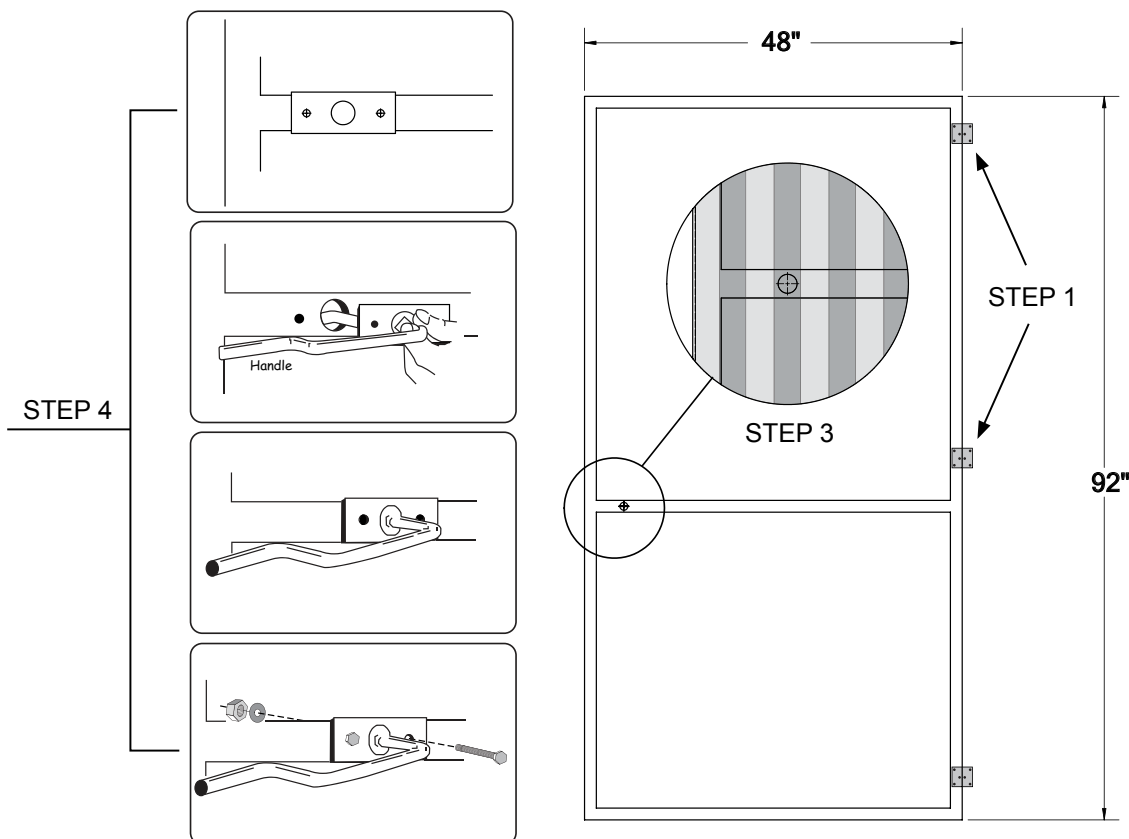
- Door frames (#102923), corrugated panels (104620C), door hinges (FA5030), end cap (104548) and latches (FA2410)
- Tek screws (#FA4482B), neo-bonded washers (#102921B), and foam closure strips (104709)



**NOTE:** Verify that the horizontal closure strip under the panel is in place *before* attaching the panel to the door frame. Read the notice on the corrugated panel to install the panel correctly.

### Assemble and Attach the Door

1. After installing the end frame for the doors, locate one (1) door frame (#102923), place it on a flat surface, and attach the three (3) hinges (FA5030) using Tek screws. Evenly space the hinges along the side of the frame.
2. Select the corrugated panel (104620C) and trim it so that the length is approximately one-quarter inch (1/4") shorter than the length of the door frame. (This helps protect the edges of the polycarbonate panel.)
3. Position the panel on the door frame so that a panel valley is placed over (or near) the door latch hole of the frame as shown below. (Trim panel width—both edges if necessary—to align valley with door latch hole.) Mark the door latch hole position on the corrugated panel, drill a 3/4" hole in the panel at that mark, set the panel aside, and install the door latch as described in the diagram below and in the following step.
4. Center the latch mounting plate over the door frame hole, mark the bolt holes, and drill two 5/16" holes through frame. With assistance, slide the latch and mounting plate assembly through the front side of the door frame, add the mounting plate on the back side, and secure using two (2) 1/4" x 3" bolts. Verify that latch turns freely.
5. Reposition the polycarbonate panel on the door frame by threading the latch through the hole drilled in the panel (Step 3). Square panel on the frame as needed.



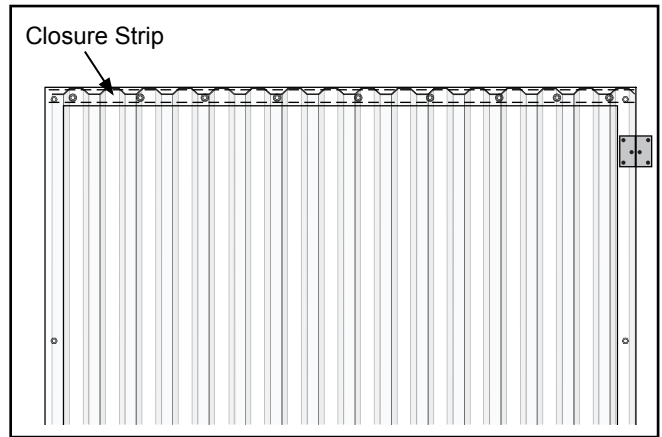
# Corrugated Double Swinging Doors

## DOUBLE CORRUGATED DOOR ASSEMBLY (continued)

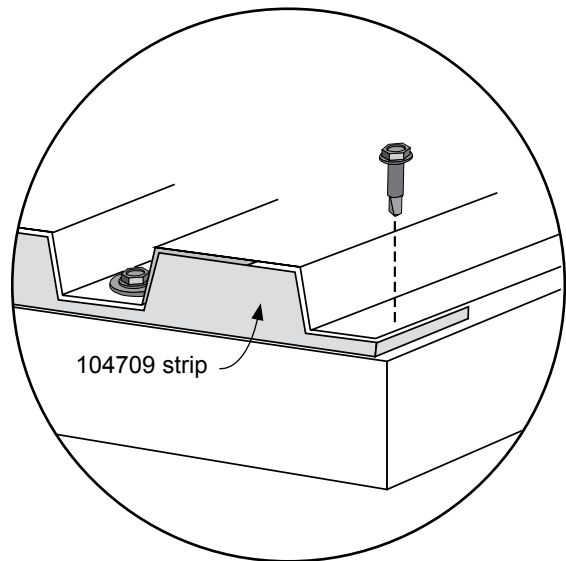
6. Install sections of the horizontal closure strips (104709) under the panel *before* attaching the panel to the door frame. *Trim closure strips as needed.*
7. Drive Tek screws and washers through the panel, closure strip, and into the frame every 6" or so. *Install Tek screws and washers in the valleys of the panel. Screws should be snug. Do not overtighten screws.*
8. Attach the panel in the locations as shown to hold the panel in place. If needed, secure the sides of the polycarbonate panel to the door frame using Tek screws only every 16".
9. Attach the *door latch guide* to the door frame using the remaining 1/4" bolts. Trim the edge of the corrugated panel as needed to allow free movement of latch.
10. Repeat the required steps needed to assemble the remaining door frame and installation of the panel.
11. With assistance, set the assembled doors in the end wall door frame and secure hinges to the door jamb using *one Tek screw per hinge at this time.*

**NOTE:** Verify that there is sufficient clearance along all door edges to allow the doors to swing freely in the opening. *If end panels are installed, loosen the panels, secure the hinges directly to the door jamb, and reinstall panel fasteners.*

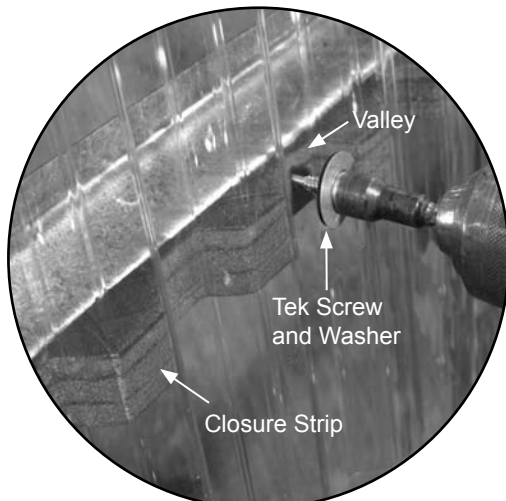
12. Test the operation of the doors, adjust hinges as needed, and install the remaining Tek screws to secure hinges.



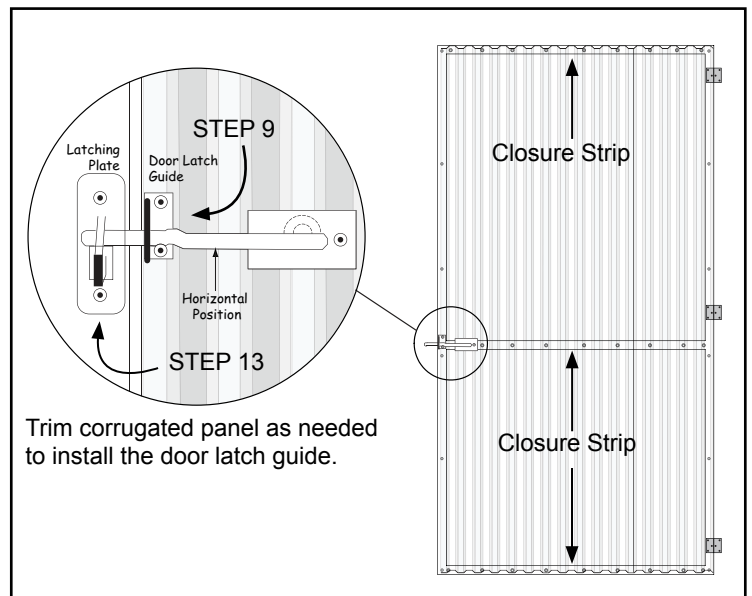
STEP 7



STEP 8



STEP 6



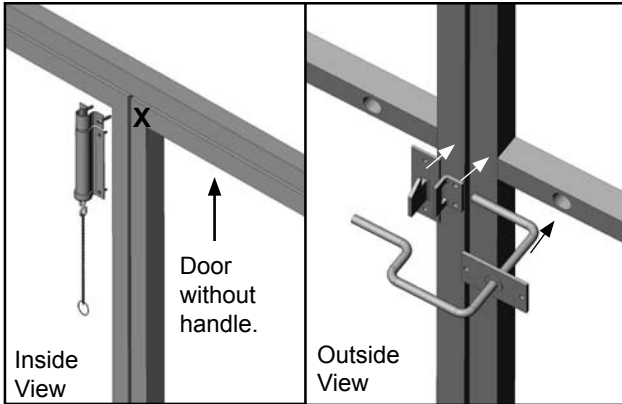
STEP 11

# Corrugated Double Swinging Doors

## DOUBLE CORRUGATED DOOR ASSEMBLY (continued)

13. Attach the 6" chain bolt to the inside, upper corner of the door without the handle (see X in drawing below).

Mount the latching plate to the outside of the same door (see drawing in step 12). The screws supplied with the latch are not used for metal jambs.



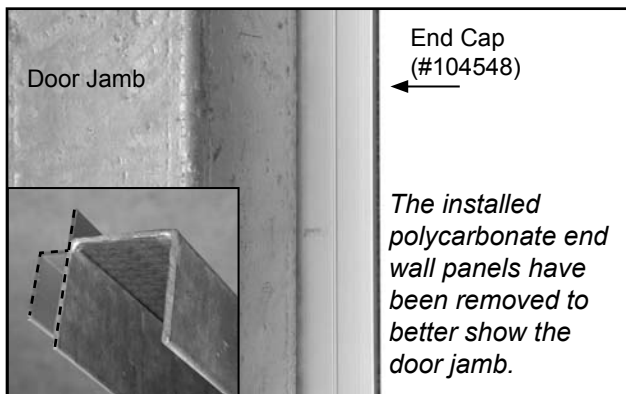
**ATTENTION:** This profile acts as a stop for the double doors, which prevents undo stress on the hinges.

- Photos show the end cap as attached to the end wall door jamb. View shows the assembly from the outside.
- Cross section insert shows the end cap (dashed line) attached to the inside/back of the door jamb.
- Dashed line below identifies where to attach the end cap profile. The end cap extends beyond the frame members and into the rough opening to stop the door in the frame and to help seal the gap between the door and frame.

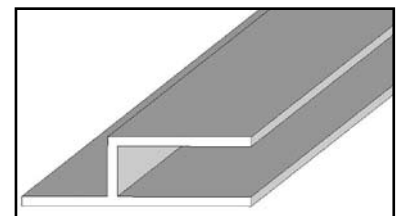
15. After end cap profile is installed, install another section of the same end cap on the inside frame of the door that includes the chain latch.

**NOTE:** This length of end cap will act as a stop for the remaining door of the double door assembly when both doors are closed.

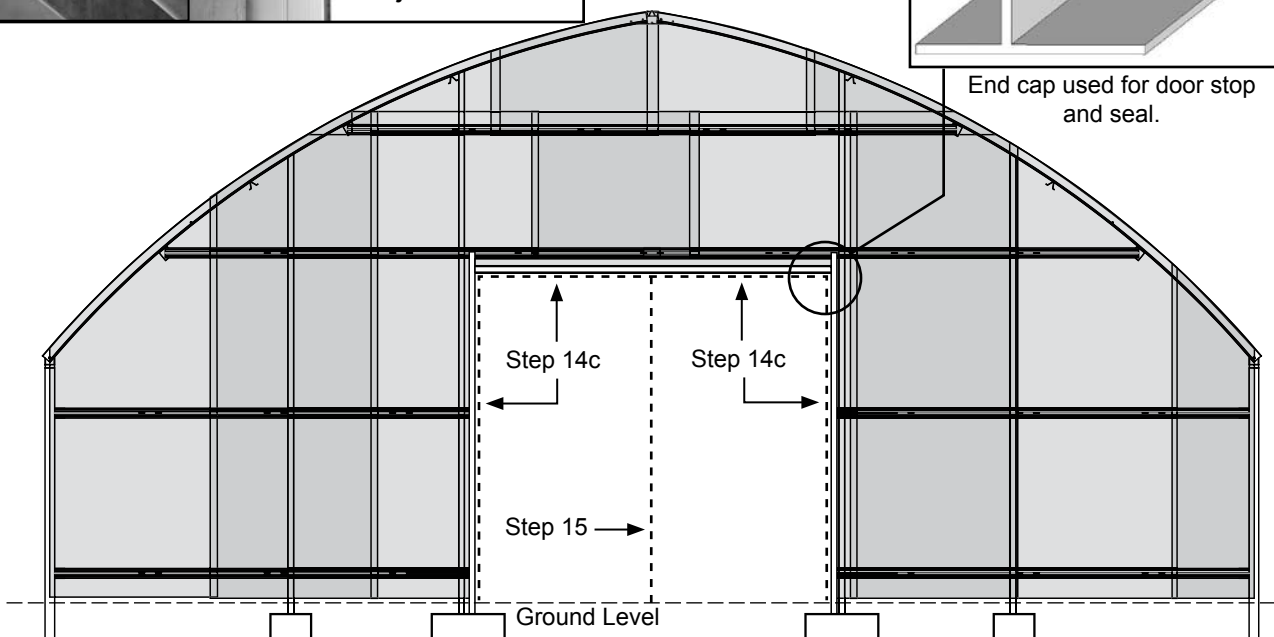
14. At the top and sides of the end wall door opening on the inside of the frame, attach end cap and allow it to extend below and into the door frame opening. Consult the photos below.



- Check the operation of the latches and the doors.
- After installing the door to the frame, read the care and maintenance section.



End cap used for door stop and seal.



# Shelter Care and Maintenance

## SHELTER CARE AND MAINTENANCE

Proper care and maintenance of the doors is important. Check the following items periodically to properly maintain the doors and door frame:

- Regularly check the polycarbonate panels to see that they remain secure and in good condition. Replace damaged panels if needed.
- Check connections and all fasteners to verify that they remain tight.
- Check the contents of the shelter to verify that nothing is touching the polycarbonate panels that could cause damage or interfere with the door operation.
- ***Do not leave the doors ajar. Close doors and secure with latch or prop doors open to avoid personal injury or damage to the doors.***
- For replacement or missing parts, contact you sales representative for assistance.



Space below is reserved for customer notes.

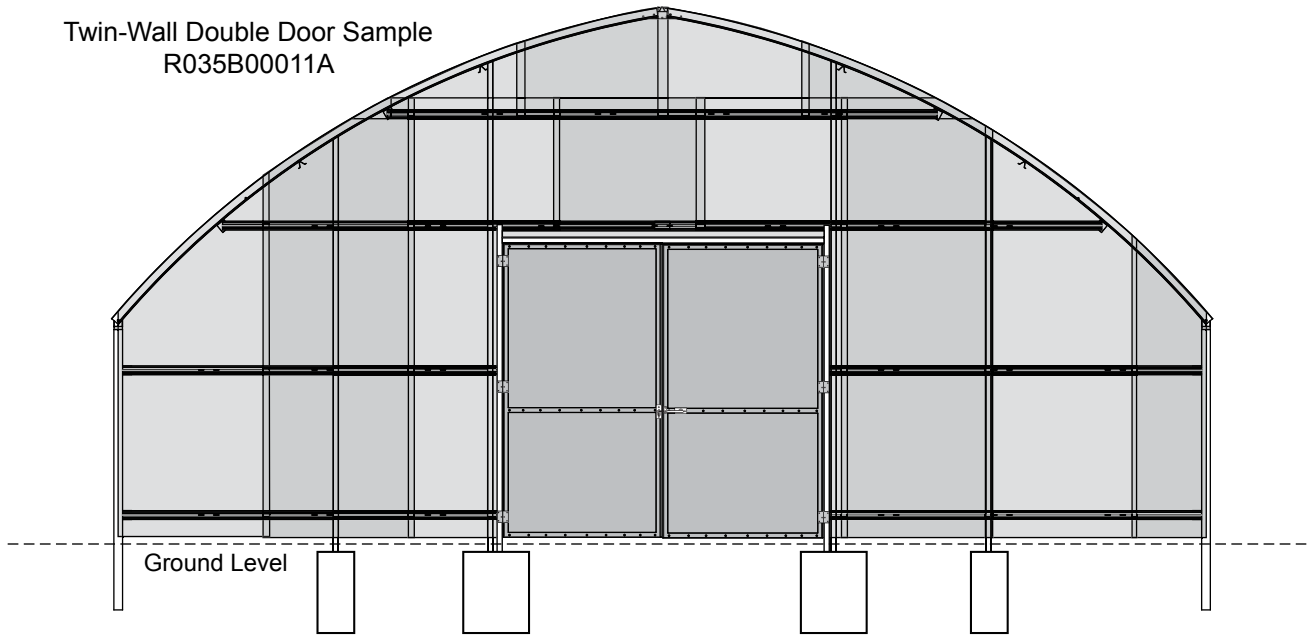
# Quick Start Guide



## QUICK START GUIDE

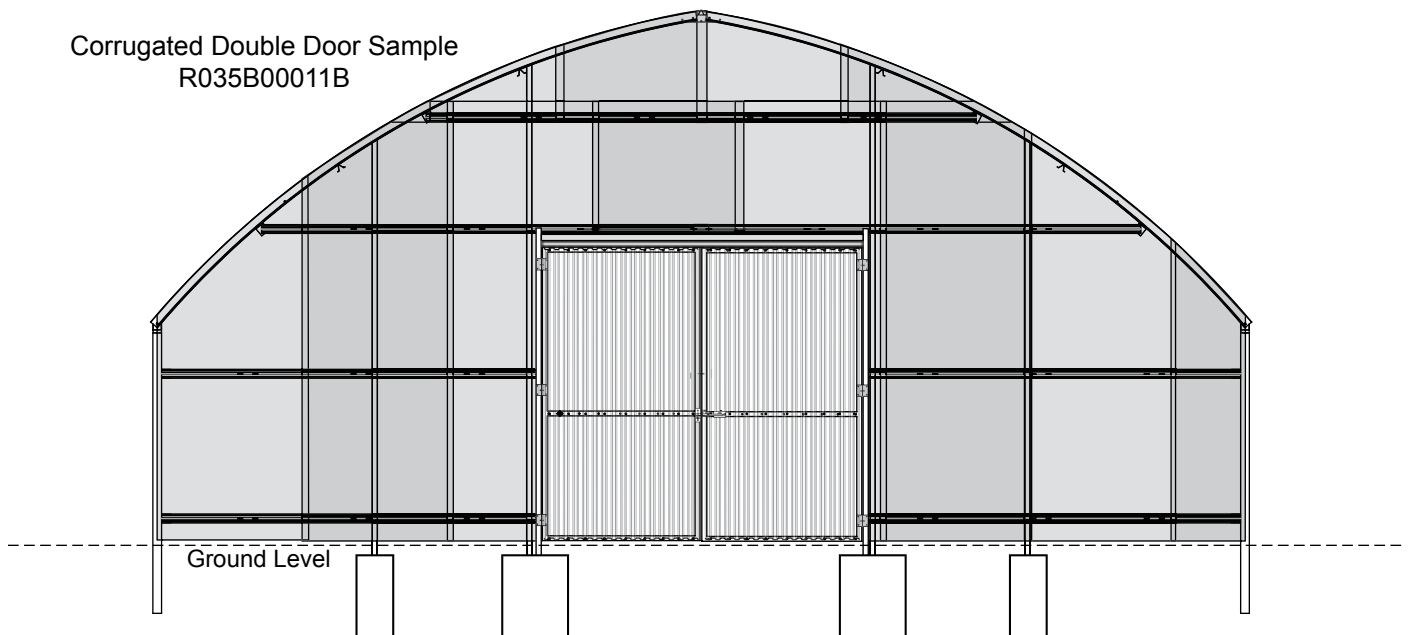
Double Swinging Door Kit (R035B00011A and R035B00011B)

Twin-Wall Double Door Sample  
R035B00011A



**End frame and end rafter are not included with any door kit.**

Corrugated Double Door Sample  
R035B00011B



# Double Door Frame Layout

