ClearSpan™
Gathering Door

Photo may show a different but similar model.

WARNING: Cancer and Reproductive Toxicity - P65Warnings.ca.gov

Revision date: 07.05.17

YOU MUST READ THIS DOCUMENT BEFORE YOU BEGIN TO ASSEMBLE THE DOOR

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

If you have any questions during the assembly, contact Customer Service for assistance.

SAFETY PRECAUTIONS

- Wear eye protection.
- Wear gloves when handling cable and steel parts.
- Use a portable GFCI when working with power tools and cords.

REQUIRED TOOLS

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

- Metal-cutting saw or tool to cut cable and conduit
- Tape measure or measuring device
- Marker to mark locations during the assembly
- Variable speed drill and drill bits (A cordless drill with extra batteries works best.)
- Hammers and gloves
- Wrenches and sockets
- Ladders and/or work platforms

ASSEMBLY PROCEDURE

The following instructions are general guidelines. The drawings and photographs contained in these instructions are for reference only.

Large size doors may require equipment capable of lifting the weight of the door.

Read and follow all safety information and instructions. Failing to follow these instructions may result in an improperly assembled door and may void all warranty and protection the owner is entitled to.

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 assembling the door.
3. Gather the tools, bracing, ladders, lifts, and assistance needed to assemble and install the door.
4. Set the parts of the door near the building opening so various components can be easily accessed as the instructions call for them.
5. Read the care and maintenance information at the end of these instructions.
6. Complete all warranty information as instructed (if included).

IMPORTANT: Some photos and diagrams throughout these instructions may show a door with slightly different dimensions or parts than your door. The assembly procedures are similar regardless of these differences.

This installation example presented in this guide shows attaching the gathering door to the outside of the door frame. Slight modification of these installation steps is required if you are attaching the gathering door to the inside of the door frame. That installation method is not shown.

DO NOT ATTEMPT TO HANG THE DOOR PANEL IN WINDY OR STORMY CONDITIONS OR WHEN SUCH CONDITIONS ARE EXPECTED.

ONLY A SLIGHT BREEZE IS REQUIRED TO MOVE THE PANEL. TO PREVENT INJURY OR DAMAGE DURING THE INSTALLATION, PREPARE FOR BREEZY CONDITIONS THAT COULD UNEXPECTEDLY CATCH THE PANEL BEFORE IT IS FULLY SECURED TO THE DOOR FRAME.

The following graphics and photos will help identify the different parts and show how they are used. (Some parts are not shown.)

The horizontal conduits for your door are shipped in standard lengths. ***Door conduits may need trimmed to fit the framed door opening of the end wall. Consult the diagram on page 15 for top view of an assembled door.***

ATTENTION: FRAME THE DOOR OPENING ACCORDING TO THE SIZE OF THE GATHERING DOOR. FOR EXAMPLE, THE INSIDE-TO-INSIDE DOOR FRAME DIMENSIONS FOR A 16' X 24' GATHERING DOOR WILL BE 16' X 24'. CONSULT THE TOP VIEW DIAGRAM ON PAGE 15 FOR CONDUIT POSITIONS.

FASTENERS AND CONDUIT FOR 1 DOOR		
Part #	**Description**	**Where Used**
FALB04B	3/8" nut	winch/pulley mt
FAG355B	3/8" x 1" bolt	winch/pulley mt
FAK36	3/8" threaded rod	winch/pulley mt
FAME08B	3/8" flat washer	winch/pulley mt
FAG363B	3/8" x 3" bolt	pulley axle
FA4482B	#14 x 1" Tek screw	Z-rail to flt plate
AR1570	1/4" cable	door
AS1004	1/4" cable clamp	secure cable
190Pxxxx*	1.90" pipe	door conduit
2375Pxxxx*	2.375" pipe	door conduit
Gathering door panel		door installation
*Pipe diameter depends on door width. Kits will include pipe of one diameter only.		

FALB04B
3/8" Nut

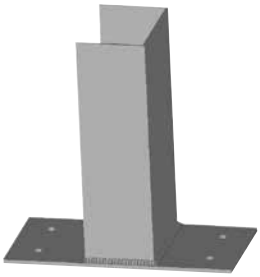
FAME08B
3/8" Flat Washer

102921B
Neo Bonded Washer

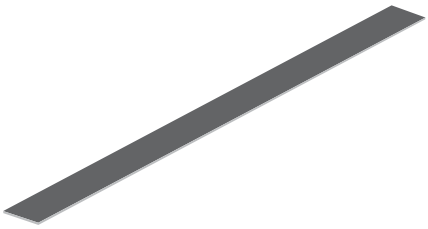
FA4482B
Tek Screw

AS1004
Cable Clamp

Hex Cap Bolts
(various lengths)



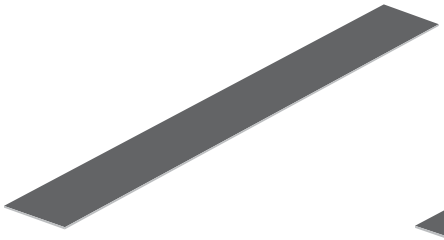
105088
2" x 3" One-Way Connector



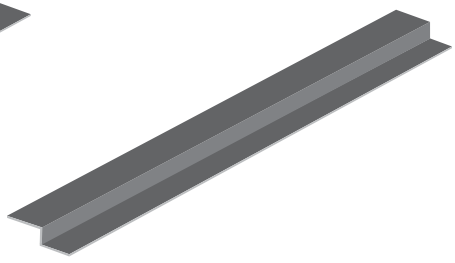
112480
1" x 12' Aluminum Flat

102946
Winch Mounting Bracket

AS9355
Brake Winch

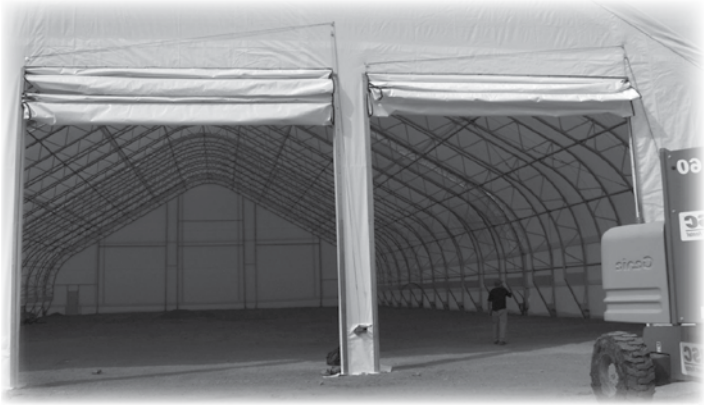


106937
Steel Galvanized Flat



Steel Galvanized Z-Door Rail

AS5220
Pulley w/ Bearings

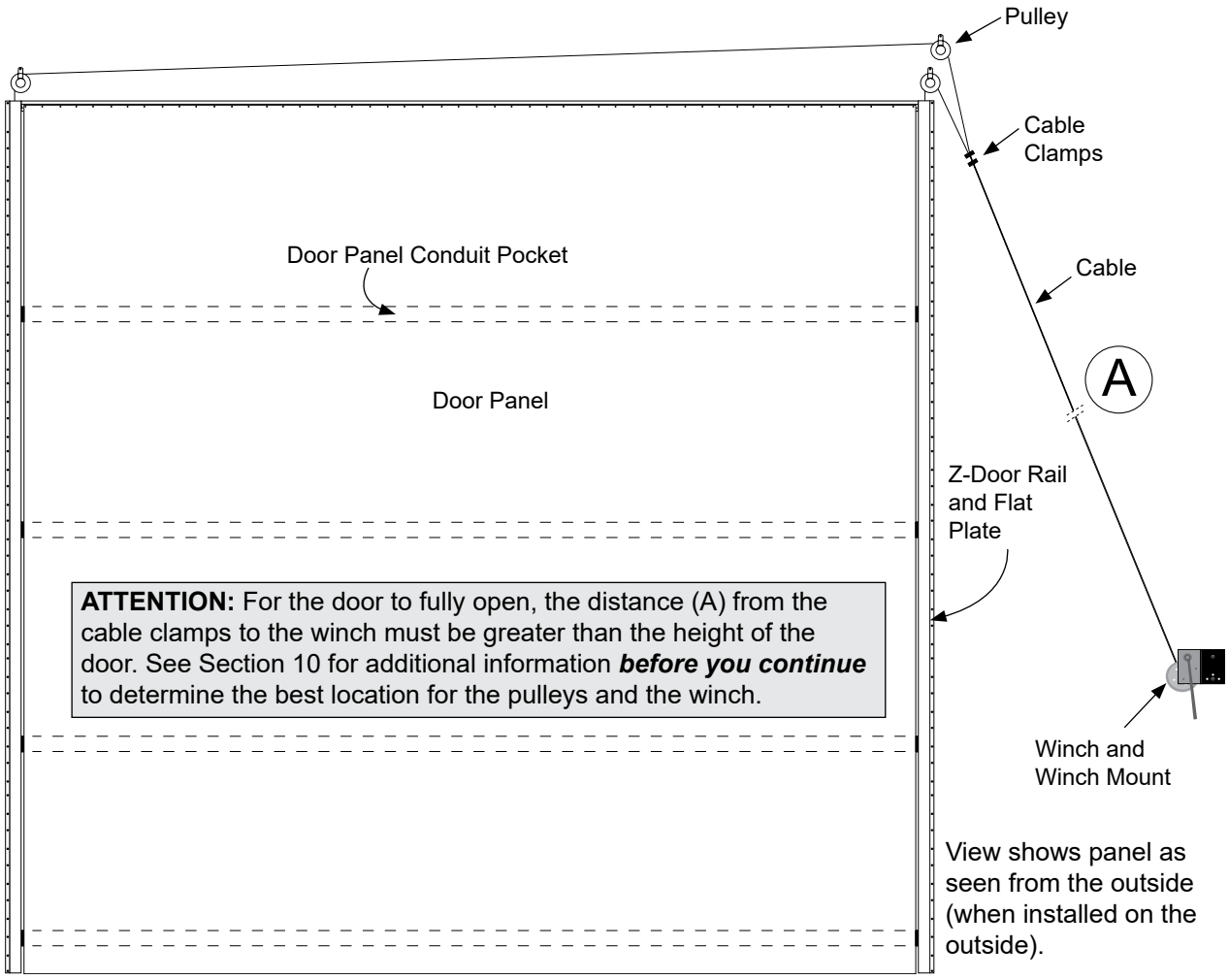


ClearSpan™ Gathering Door

OVERVIEW

This section describes how to assemble the gathering door. See illustration below to identify the main parts of the door.

1. Locate the required parts for each assembly procedure.
2. Assemble the building end frame and attach the end cover.
3. Install gathering door flat plates.
4. Cut door opening in end panel and secure end panel to the door frame.
5. Attach winch mounting bracket and winch to the end wall.
6. Center, hang, and secure door panel to header.
7. Measure the length of the door conduit required for your gathering door and cut the conduits (if needed) to that length. Consult the diagram on page 15 for conduit position.
8. Drill door conduits and insert into door panel. Trim conduit pockets as needed to expose and access the installed conduits.
9. Attach pulleys to end wall.
10. Thread cables through conduits.
11. Thread cables through pulleys and attach.
12. Attach Z-door rails to installed flat plates.
13. Test door operation.



View shows panel as seen from the outside (when installed on the outside).

1

INSTALL GATHERING DOOR FLAT PLATES

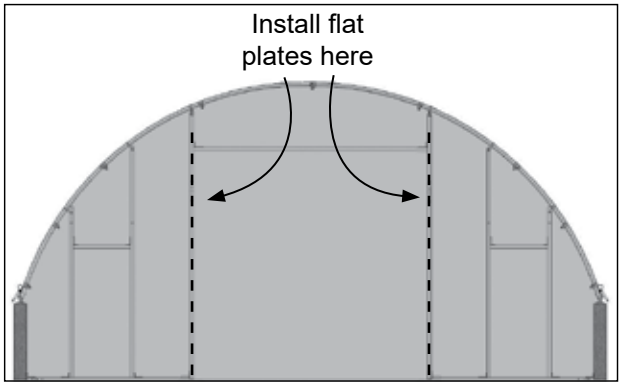
Install the end wall and door framing and end panel according to the instructions supplied with the building.

The flat plates provide a mounting surface for additional gathering door hardware. Plates run from ground level up to the header along each side of the door opening. They also help to secure the end panel to the end wall frame.

Before cutting the door opening in the installed end panel, secure the flat plates to the outside of the shelter along each door jamb. (Outside mount only.)

Required parts include:

- 106937 galvanized flat plates
- FA4482B Tek screws

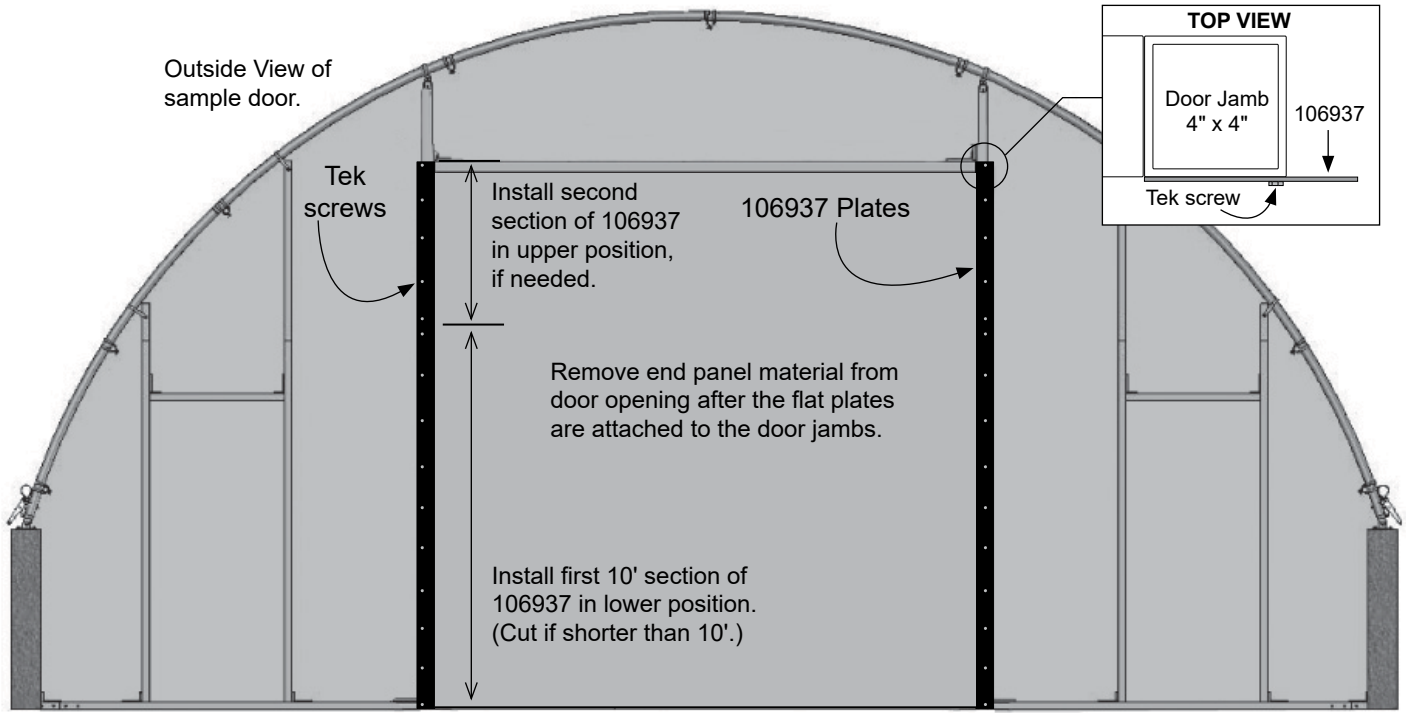


Gathering door can be mounted to the inside or outside of the end wall frame. These instructions describe attaching the components to the outside.

Drawings throughout these instructions may show a different shelter. Drawings are used for illustration purposes only. The installation procedures for other shelters are similar regardless of these differences.

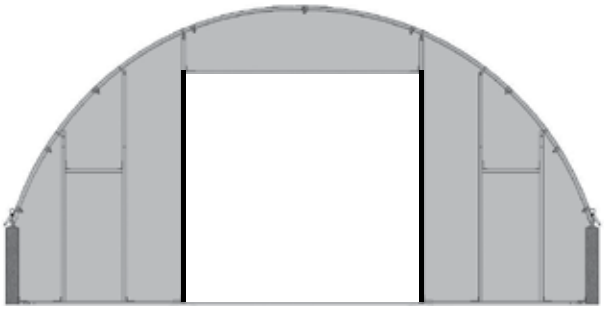
Complete these steps to attach the flat plates to the door jambs. (Outside mount example is shown.)

1. Take one section of the 106937 flat plate and, beginning at ground level, place the first section of 106937 (6" x 10') against the door jamb *flush with the inside edge* and secure to the jamb using Tek screws. Install Tek screws on the *outside edge* of the door jamb. See diagram below. (If door is less than 10' high, cut plate as needed.)
2. Measure and cut a section of 106937 to finish the area above the first plate and secure that to the jamb. (Applies to door taller than 10'.)
3. Repeat the steps to attach the plates to the remaining jamb.
4. Continue by removing the end panel material from within the door opening (if needed).



2

CUT DOOR OPENING (Skip if this does not apply.)



After removing a portion of the end panel, the border that remains is wrapped around the jambs and header to the inside of the frame and is secured to the backside of the end wall frame using flat aluminum and Tek screws.

These steps describe one way to cut a door opening in the end panel when the door is attached to the outside of the frame:

1. Working *from inside the frame*, mark a 16"-18" border along the door jambs and below the header. (Consult the diagram below.) The width of the border depends on the dimensions of the door frame members. Adjust the border dimensions as needed so you can wrap the end panel material around the door frame and secure it tightly to the frame.

   NOTE: Flaps wrap around the door framing and are secured to the inside of the *door frame* once the final diagonal cuts are made.

2. Using the diagram as a guide, cut the end panel to remove the dark shaded section outlined above.

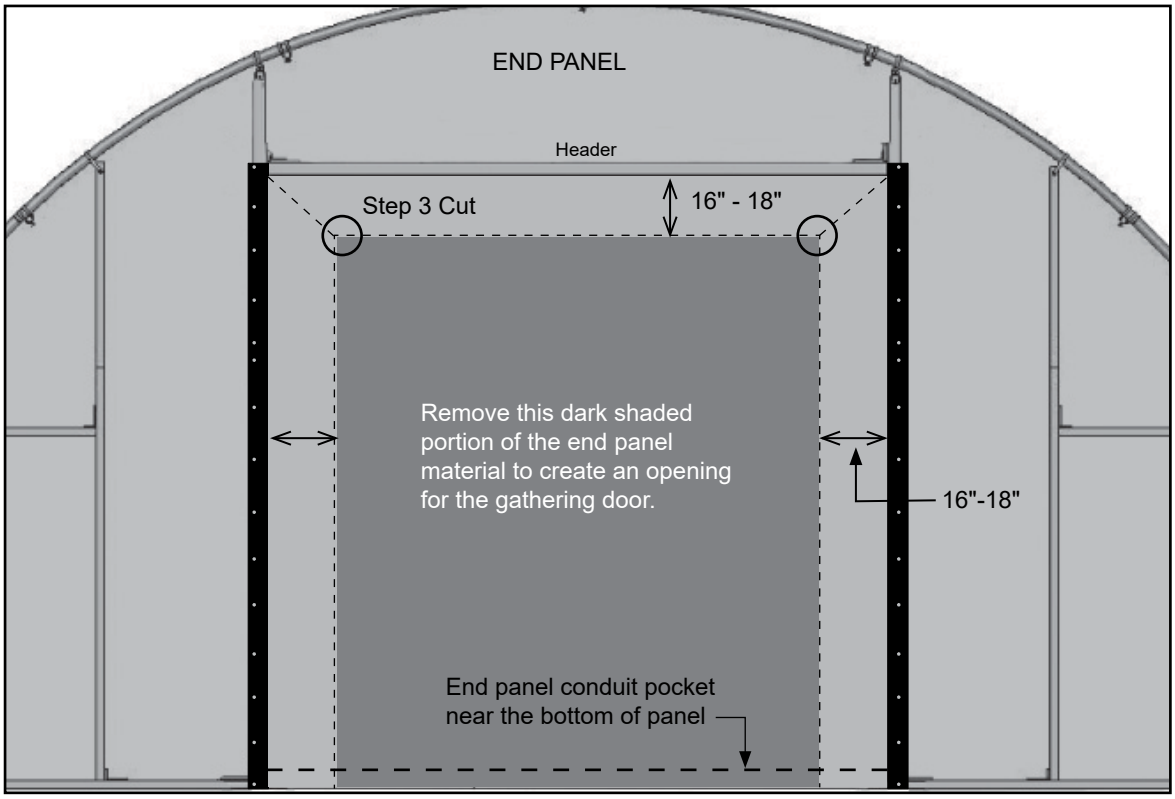


Diagram above shows the end wall and end panel as seen from the outside. Width of the border may vary depending on the dimensions of the door jambs and header. Cut panel as needed to wrap around frame.

3. Make two (2) diagonal cuts in the end panel as shown above to create the 16"-18" flaps. Adjust the flap dimensions as needed to ensure that enough material remains to wrap around the door frame.

4. Continue with the steps that follow to secure the end panel to the door frame. (Skip to Section 4 if this section does not apply.)

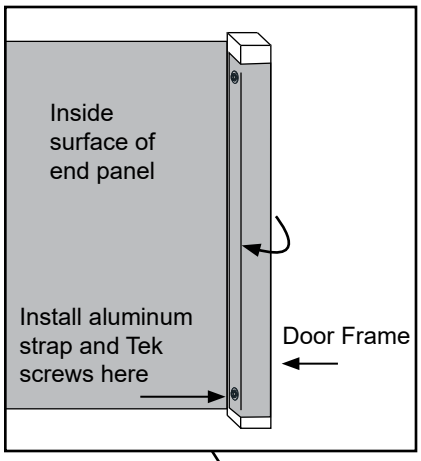
3 SECURE THE END PANEL TO DOOR FRAME

(If this does not apply, continue with Section 4.)

1. After cutting the opening, secure the end panel to the door frame using a section of 112480 flat aluminum (cut to the required length) and Tek screws. See diagram below. Space Tek screws every 12" for best results. Use Tek screws and 102921B washers in areas where you are unable to use the flat aluminum stock.

   NOTE: For the exposed corners of the door frame that remain, cut a piece of material *from the scrap end panel material* and secure the piece to the exposed corners using Tek screws (if desired).

2. Repeat the steps to install and secure the remaining end panel.



EXAMPLE

Secure the end panel to the inside surface of the door frame using Tek screws and 102921B washers.

Applies to narrow jambs when space is limited. May not apply to actual application.

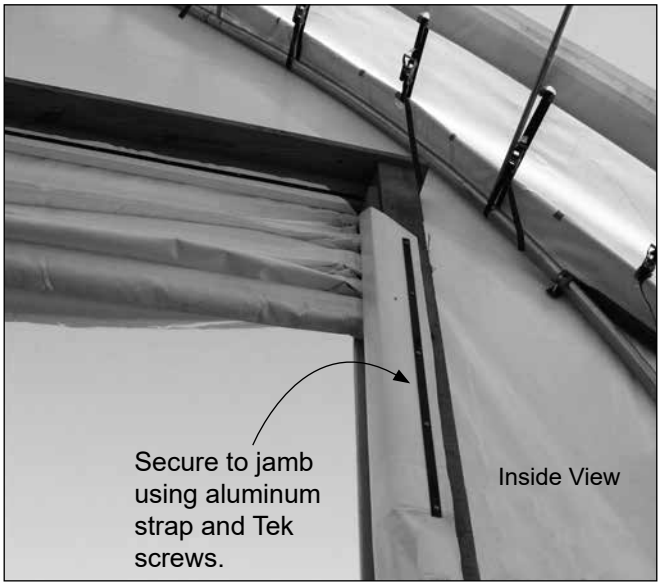


Photo is of a typical door frame showing how to attach the end panel using aluminum strap and Tek screws. May not apply to actual application.

ATTENTION: Refer to the examples on this page to properly secure the end panel to the door frame. Consult a professional contractor for assistance if needed.

These are examples only. Due to the custom design of many end walls and buildings and the materials used for construction, the actual installation techniques may differ from what is shown. Customer may need to purchase additional materials and fasteners to properly install the components of this gathering door kit.

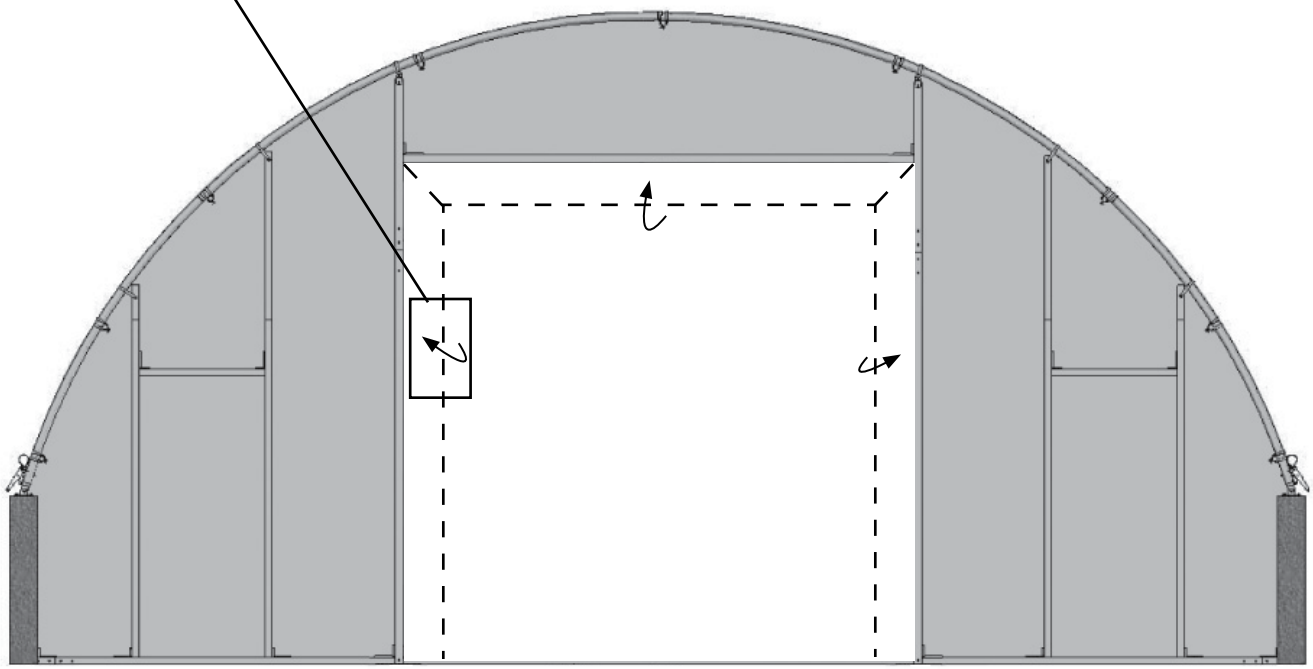


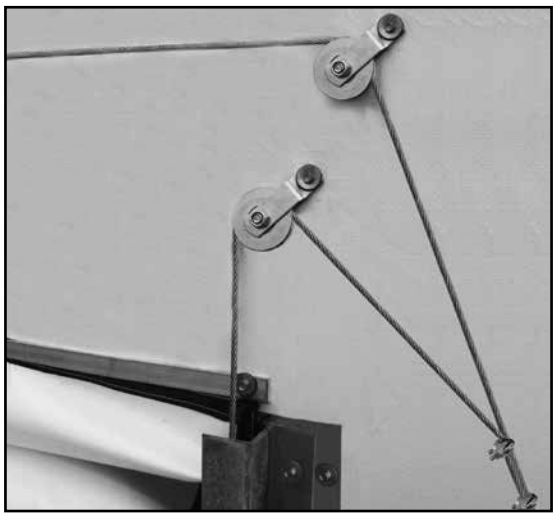
Diagram above shows the end wall and end panel as seen from the inside the shelter.

4

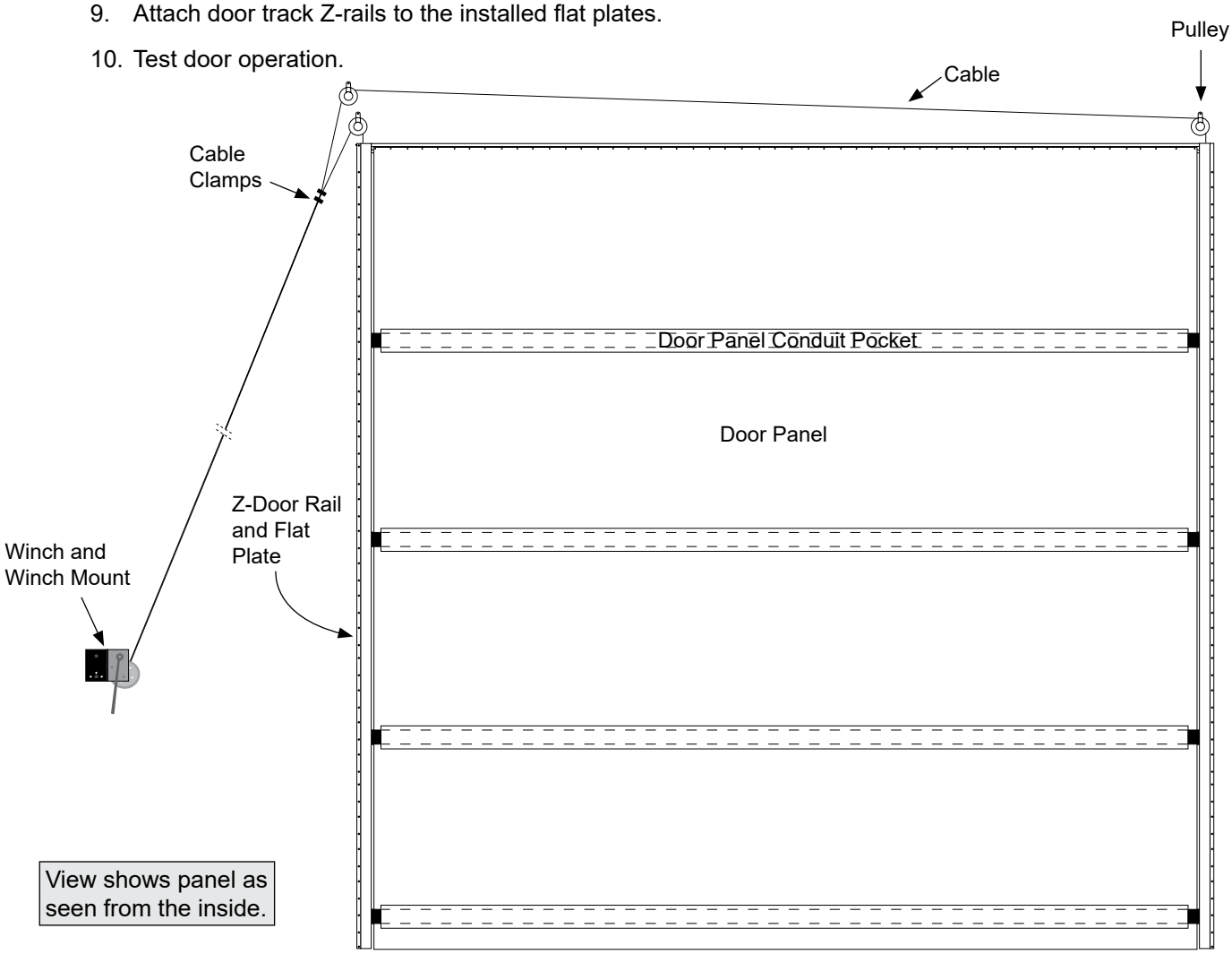
GATHERING DOOR INSTALLATION

This section describes how to assemble and install the gathering door. See illustration for typical installation.

1. Locate the required parts for each assembly procedure.
2. Attach winch mounting bracket and winch to frame.
3. Center, hang, and secure door panel to header.
4. Measure the length of the door conduit required for your gathering door and cut the conduits (if needed) to that length. Consult the diagram on page 15 for conduit position.
5. Drill door conduits and insert into door panel. Trim *conduit pockets* as needed to expose and access the installed conduits. ***Do not cut the main panel.***
6. Attach pulleys to end wall.
7. Thread cables through conduits.
8. Thread cables through pulleys and attach cables to winch.
9. Attach door track Z-rails to the installed flat plates.
10. Test door operation.



Actual component locations may differ. Photo shows pulleys and gathering door attached to the outside of the end frame.



5 ATTACH WINCH TO END WALL

> ⚠ To prevent damage and possible injury, *do not attempt to install the gathering door on windy or stormy days*.

Drawing may show a different shelter. Drawing is used for illustration purposes only. *Winch locations vary per shelter. Install winch securely to the shelter.*

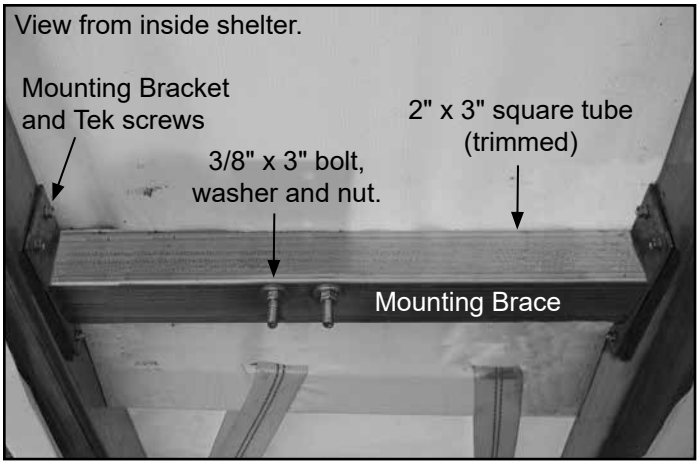
Required parts:

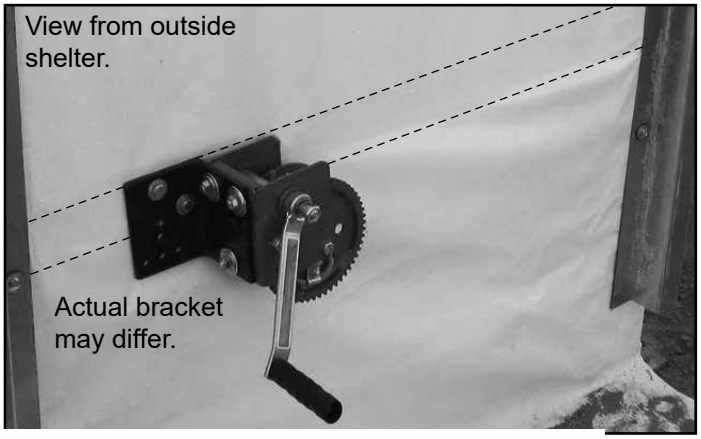
- 102946 winch mounting bracket and FAG355B bolts
- AS9355 winch, FAME08B flat washers, FALB04B nuts, and FAG363B (3/8" x 3") bolts; 105088 1-way connector, 105331 2" x 3" square tube, and Tek screws

Complete these steps:

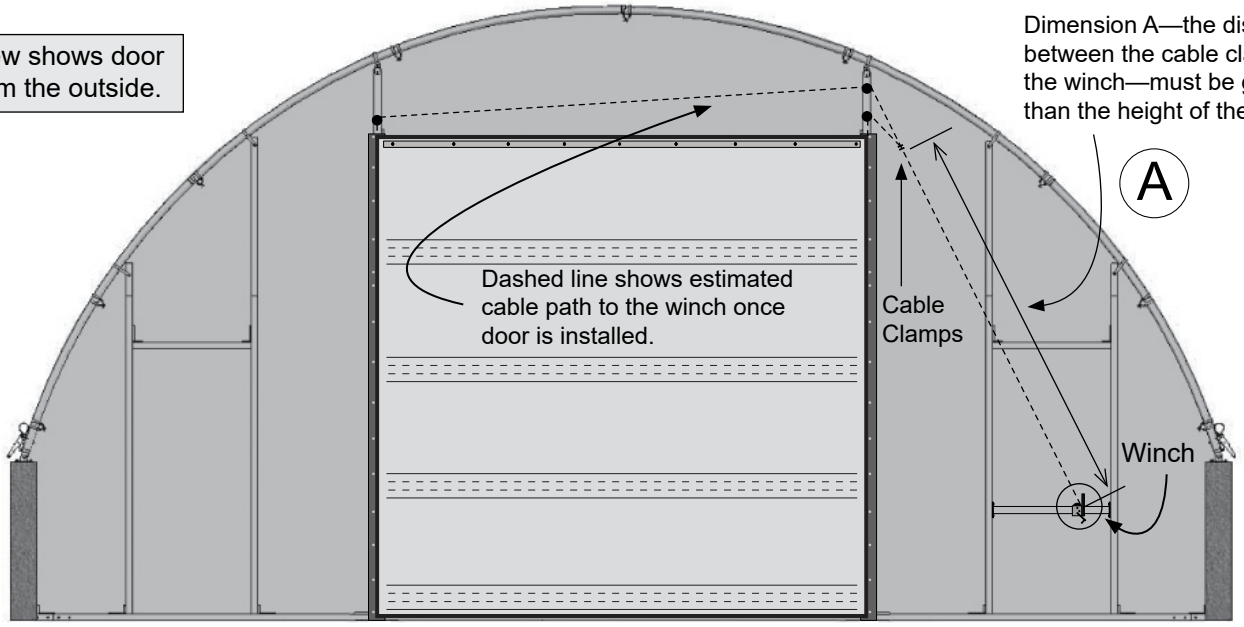
1. Move to the *inside of the shelter* where the winch mounting brace will be installed. Measure the distance between two end wall supports and cut the 2" x 3" square tube to required length. See note below regarding Dimension A.
2. Secure the trimmed 2" x 3' square tube to the end wall supports using two (2) 105088 1-way connectors and Tek screws as shown in the photo to the right.

   NOTE: Position brace at the desired height of the winch. See the diagram below for possible winch locations.
3. Move to the *outside of the shelter* where the door will be installed and secure the 102946 winch mounting bracket to the winch mounting brace using two (2) FAG363B 3/8" x 3" bolts, nuts, and flat washers.
4. Using the FAG355B 3/8" x 1" bolts, nuts, and flat washers, secure the winch to the mounting bracket.
5. Continue by hanging the door panel and securing it to the header.





View shows door from the outside.

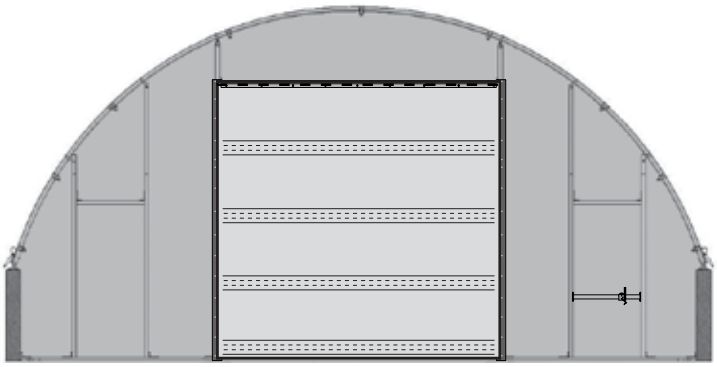


6

ATTACH DOOR PANEL TO THE HEADER

Required parts:

- Gathering door panel
- 112480 flat aluminum (1" x 12')
- FA4482B Tek screws

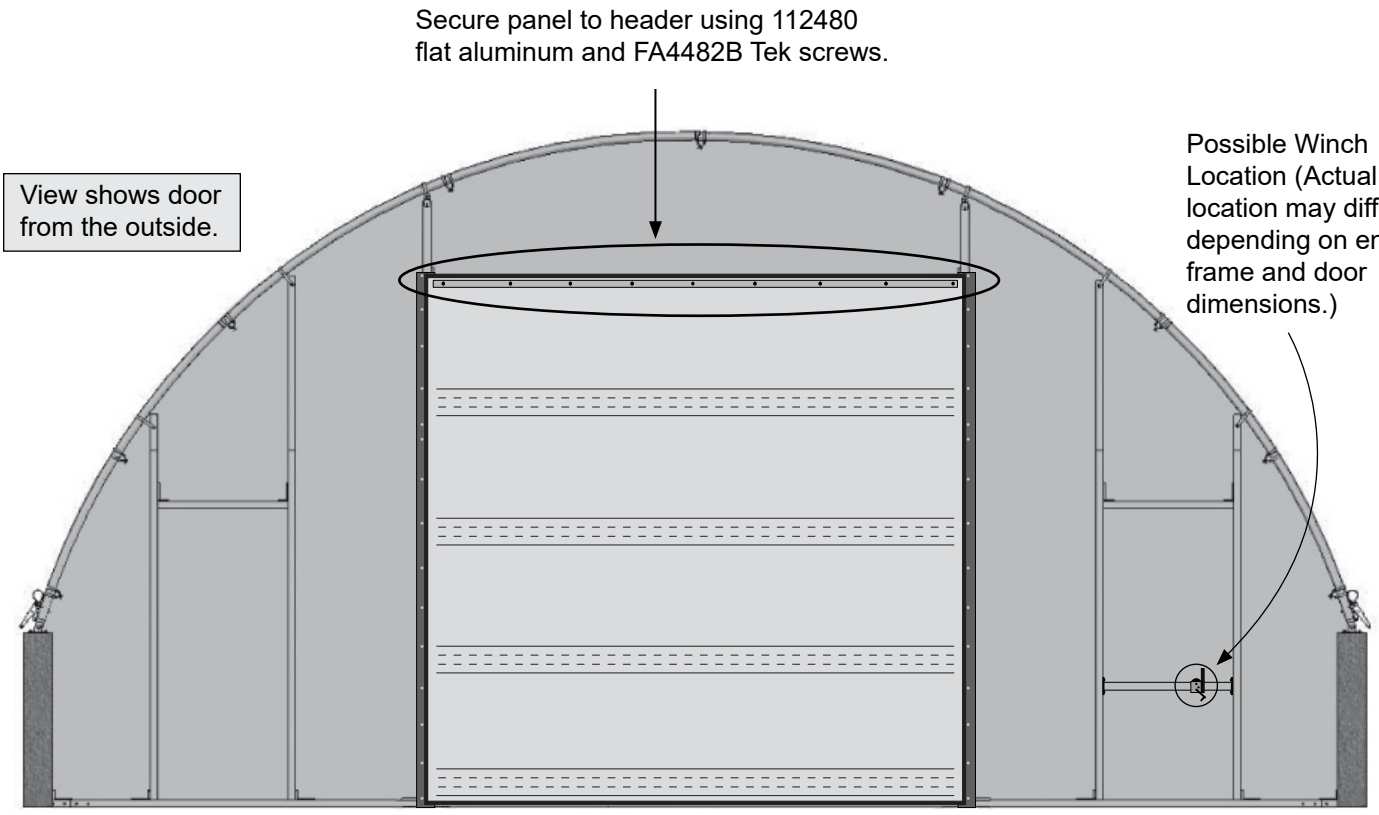


Dashed line shows where to install the flat aluminum and Tek screws to secure the upper edge of the door panel.

Complete these steps:

1. Take the 112480 flat aluminum stock and cut as needed to create enough to span the rough door opening (inside-to-inside).
2. Mark and pre-drill holes into the aluminum stock using a 1/4" bit. Space evenly at 12".
3. With assistance and lifts or ladders, place the door panel over the opening. Stretch panel evenly and verify that it is centered. Lower edge of the door panel should remain on the ground.

   ATTENTION: Position the panel pockets *to the inside* of the opening.
4. With assistance, secure panel to the header using the 112480 aluminum and FA4482B Tek screws.



7

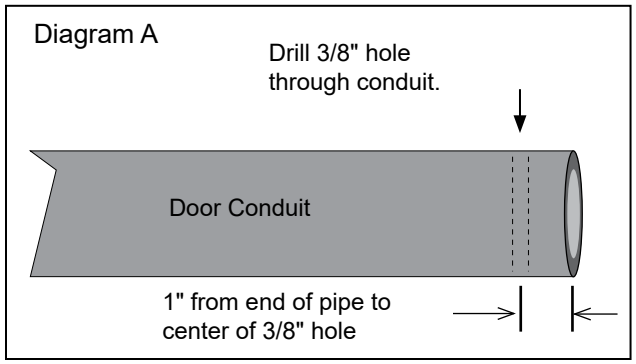
PREPARE AND INSTALL DOOR CONDUITS

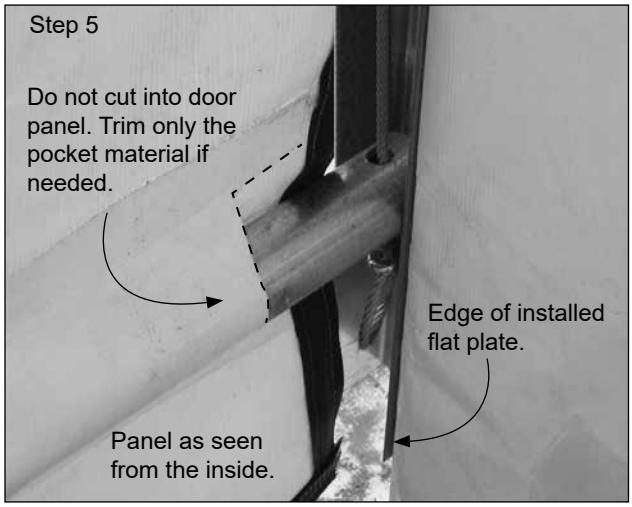
Required parts:

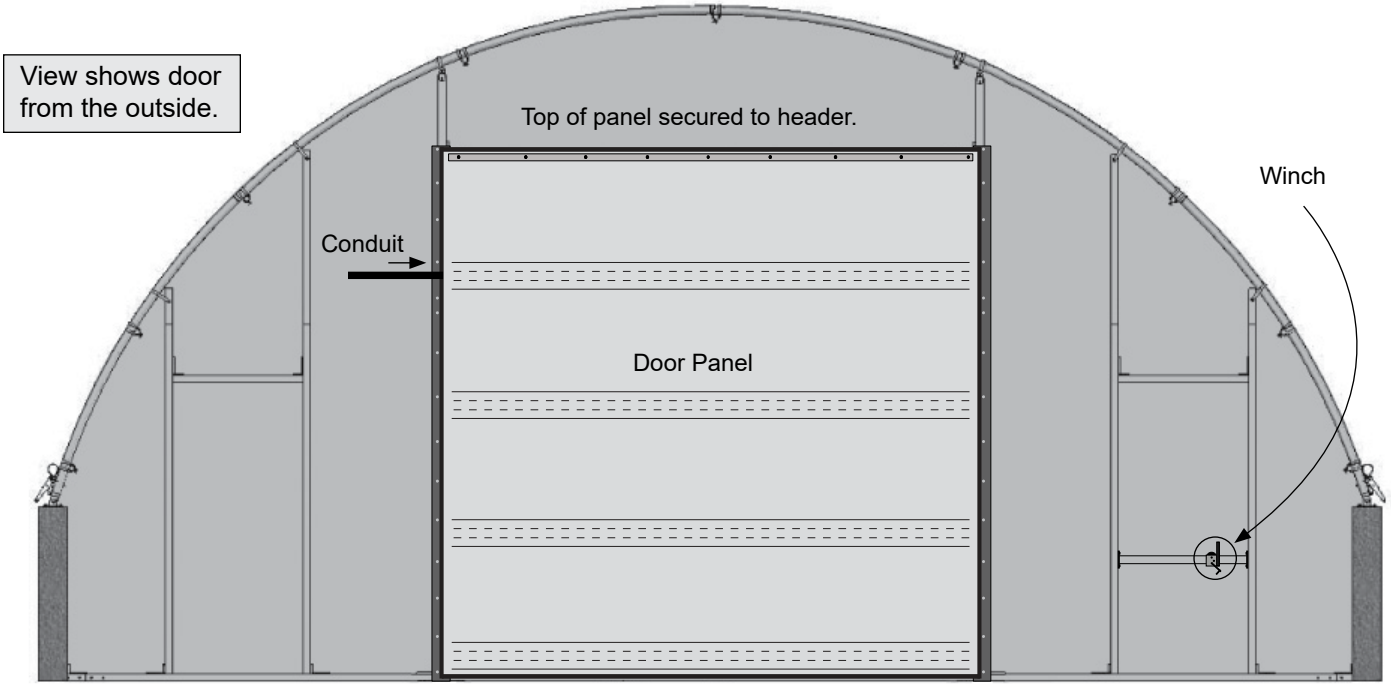
- Pipe Conduit (Quantity and diameter depends on door dimensions and kit.) Cut to length as needed. See diagrams on page 15 for conduit position when assembled.

Complete these steps:

1. With the door panel attached and covering the door opening, locate the pipe conduits for the door panel.
2. Using the diagrams on page 15, determine the length of the door conduits and cut the conduit ***if needed***.
3. Take one conduit, measure 1" in from each end and drill a 3/8" hole through each conduit end for the cable. See Diagram A. ***Drill holes parallel to each.***
4. Repeat the step for the remaining door conduits.
5. With assistance, slide one conduit into one pocket of the gathering door panel. Tape one end of the conduit if needed to more easily slide it into the pocket. Center the conduits evenly within the pockets and rotate so the cable holes are pointing toward the top and bottom of the door panel.
6. Trim conduit pocket as needed to expose conduit and continue by attaching the pulley assemblies. ***Do not cut the main panel.***

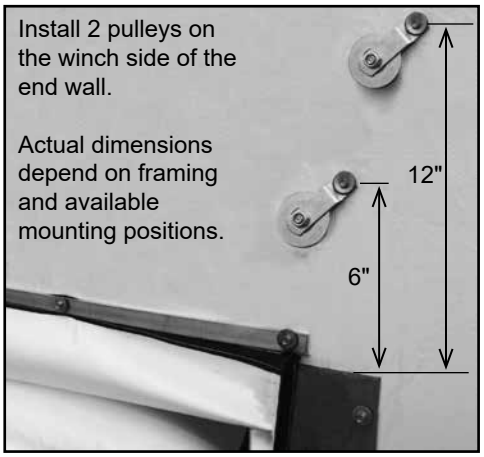






8

INSTALL PULLEYS



Required parts:

- AS5220 pulleys (3)
- FAK36 (3/8" x 3') threaded rod
- FALB04B (3/8") nut and FAME08B (3/8") washers (for spacers)

Complete these steps:

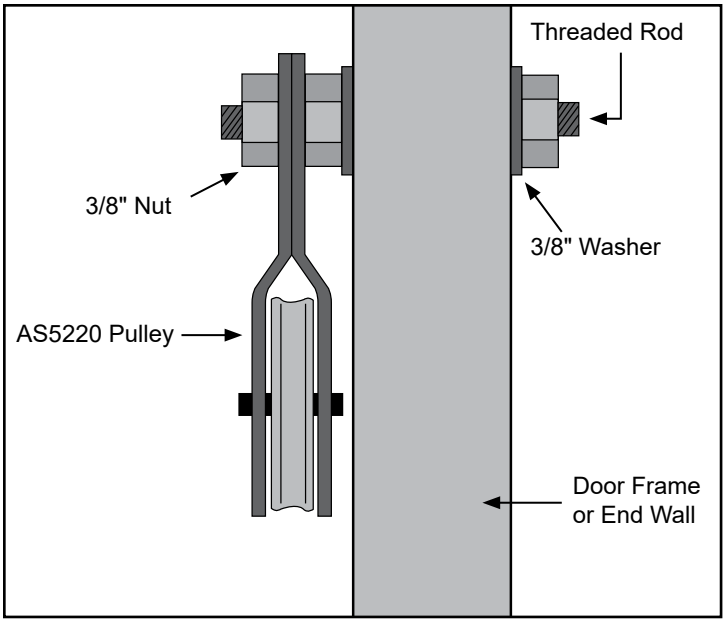
1. Drill a 3/8" hole above the door opening where the pulleys will be installed as shown in the photo to the right. ***Adjust dimensions as needed for your building and door. Contact a qualified contractor if assistance is needed.***

   NOTE: See Section 10 for length of cable comment.

2. Take one door pulley and attach to end wall using one FAK36 threaded rod, FALB04B 3/8" nut, and FALB08B 3/8"washer.

   NOTE: Attach as shown to the right. Pulley will turn freely when installed as shown.

3. Repeat the steps to attach the remaining pulleys to the door frame or end wall.



9

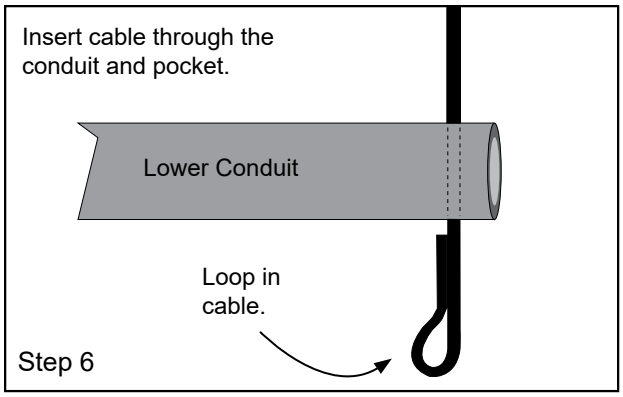
THREAD AND SECURE CABLES

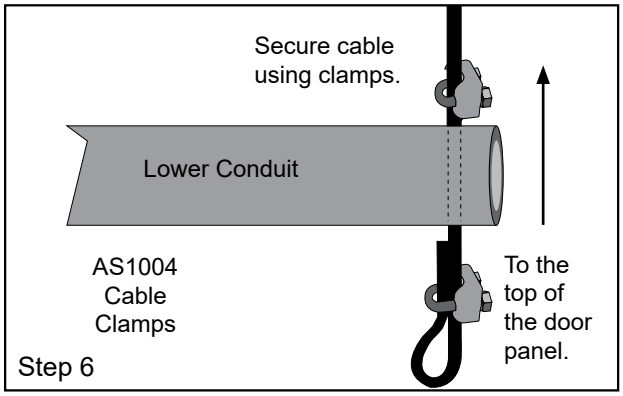
Required parts:

- 1/4" cable
- 1/4" cable clamps (AS1004)

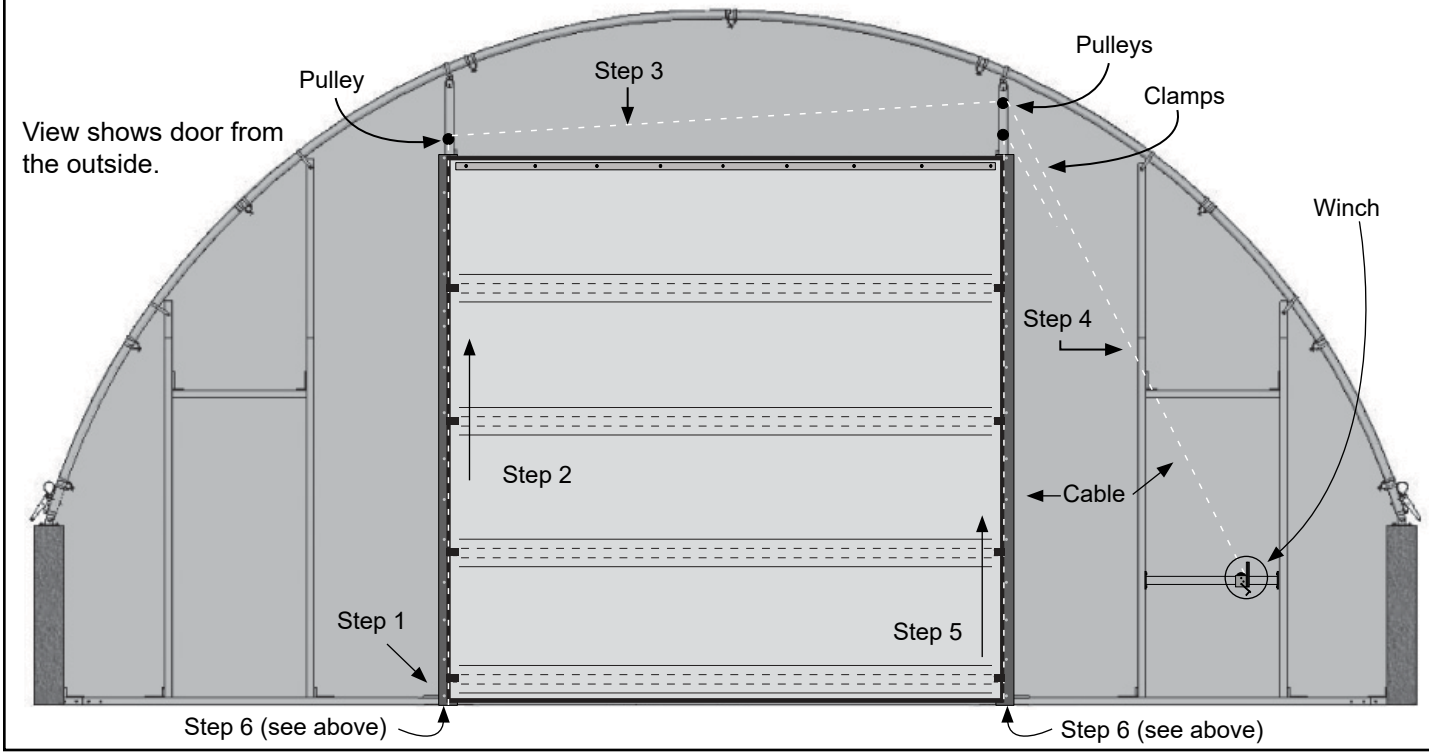
Complete these steps:

1. Beginning at the end of the lower door conduit farthest from the winch, take the free end of the cable and feed it up through the drilled hole in the conduit.
2. Continue feeding the cable through conduits until you reach the top of the door panel.
3. Pull the cable through the conduits and over the single pulley, then across *to the upper pulley*, and down to the winch mounted on the outside of the end wall.
4. Add 12" or so extra, and cut the cable to length. *Do not cut the cable too short.* Measure again if needed. Temporarily secure both ends of the cable so it does not slip out of the pulleys or conduit.





5. Repeat the steps to thread the last cable through the holes at the other end of the door conduits and over the lower pulley. Cut cable so it can be attached to the first cable. See diagrams on the next page.
6. Move to the end of each cable extending from the lower conduit, loop each cable end, and install a clamp to secure each cable to the conduit. Install a second clamp above the conduit. See diagrams.
7. Continue with the steps on the next page.



10

SECURE CABLES

Complete these steps:

1. Verify that the long cable is properly threaded through the two pulleys and down to the winch.

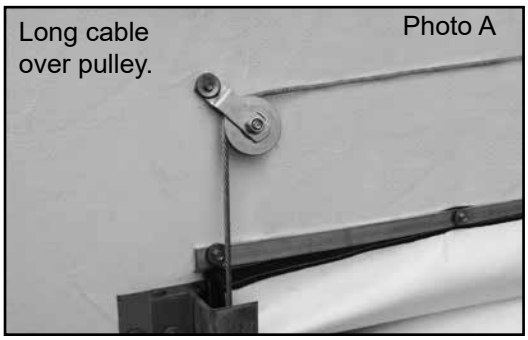
   NOTE: Photos show the Z-door rail already installed. For this procedure, the Z-door rail is installed after securing the cables. *The bottom of the door must remain on the ground during the cabling procedure.*

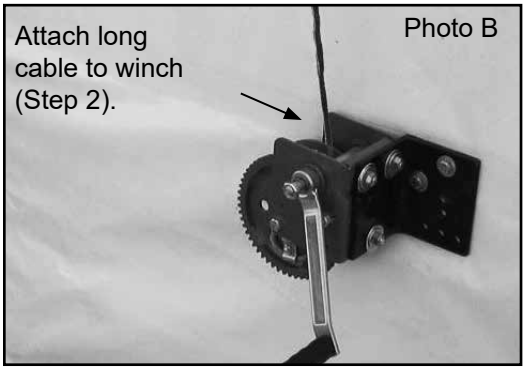
2. Secure first/long cable to the winch. (Trim excess before attaching if needed.) Consult the instructions that shipped with the winch to properly secure the cable. See Photo B.

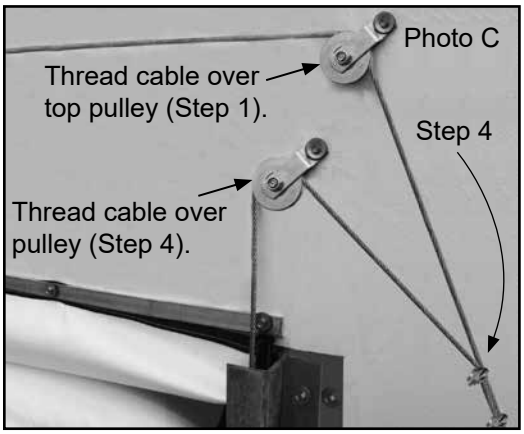
3. Tighten the winch as needed to remove all cable slack in the first/long cable. Door is down/closed.

4. Verify that the remaining cable is threaded through the pulley (Photo C). Remove slack from cable so both cables remain taut and attach it to the first cable using two cable clamps. ***See the important note below.***

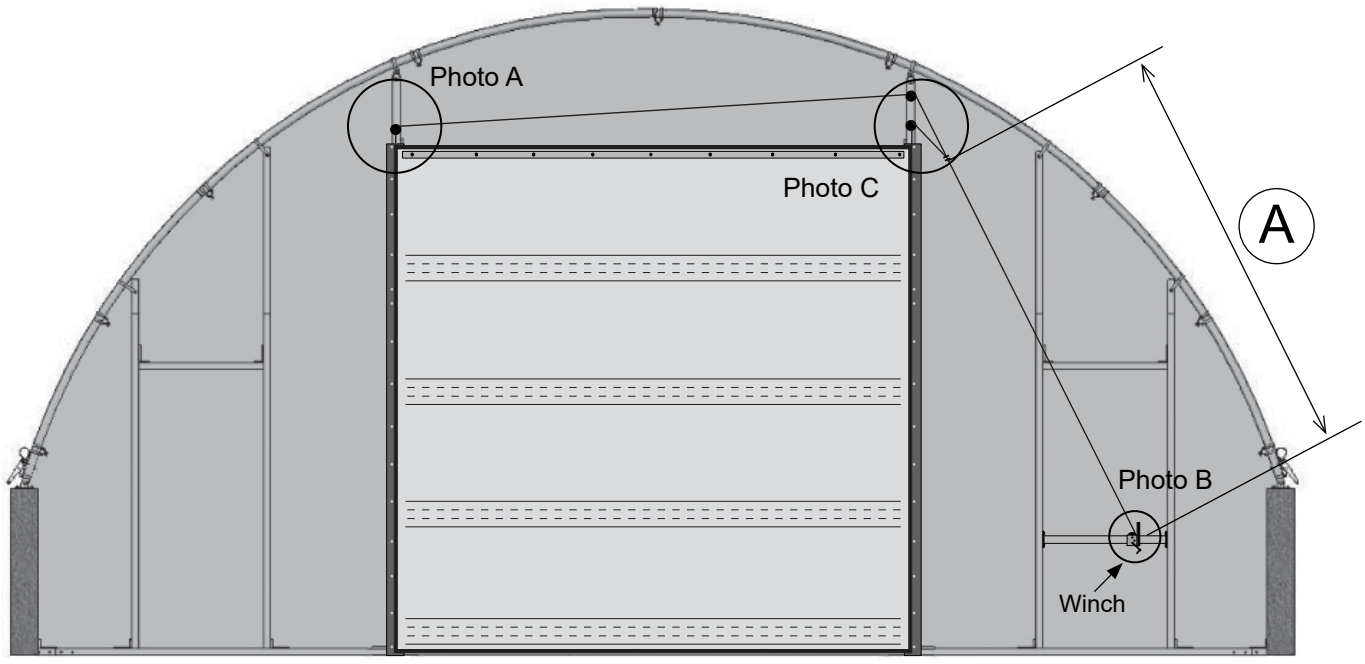
5. Continue by installing the Z-door rail to secure the door to the door jambs.







IMPORTANT: For the door to fully open, Dimension A—the distance between clamps and the winch—must be greater than the height of the door. Do not allow clamps to wrap into winch.



11

ATTACH Z-DOOR RAIL TO SECURE DOOR TO END WALL

Required parts:

- Z-door rail and FA4482B Tek screws

Complete these steps:

1. Take one 10' section of the Z-door rail and, beginning at ground level on one side of the door, secure the Z-door rail to the flat plate attached to the door jamb. Verify that the door is in the correct position and centered. Use FA4482B Tek screws
2. Verify that the finished edge of the door panel is outside the channel created by the Z-rail. See diagram below and photo to the right.
3. Take another Z-door rail section, cut a section to complete the first run, and secure in place. Z-door rail runs to the top of the installed flat plate attached to each door jamb. *Do not install above this point.*
4. Repeat the steps to attach the Z-door rail to the remaining door jamb.

   ATTENTION: For the door to operate smoothly, door conduits must remain loose in the Z-door rail once it is installed. Verify that the correct clearance is maintained and that the cables are not pinched between the Z-door rail and the flat plate.
5. Test the operation of the door. Adjust cables as needed so door opens evenly.