



Vertical Insulated Panel

INSTALLATION MANUAL



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Introduction

Faromor manufactures an **Insulated Wall Panel (VIP)** that is used in those applications when heat loss and freezing concerns outweigh the benefits of natural light. This could be the case in areas of extreme winter temperature and/or applications where the operator wishes to maintain warmer interior temperatures. These conditions can promote condensation & associated icing that can be objectionable or adversely affect panel operation.

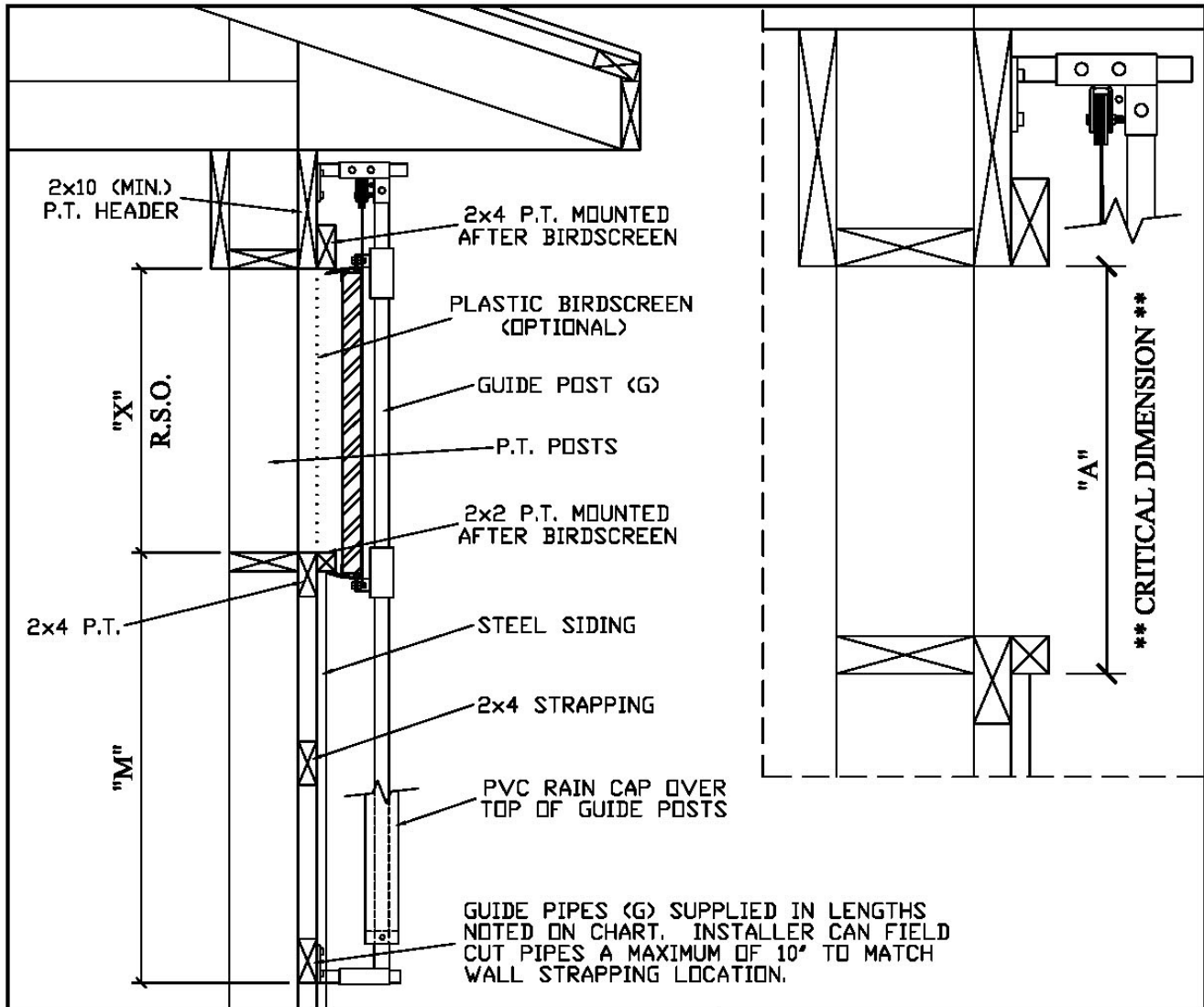
Should natural light still be desired these panels can be equipped with fixed thermal windows. Operating hardware and guide system is the same as used with the Solar and Clear-Vu products.

General Considerations

**Please read the following notes prior to installing the VIP panel:

- 1) Verify framing details are correct, as per page 4, to assure installation will work properly.
- 2) Read all instructions prior to beginning installation to familiarize yourself with parts and terminology.
- 3) Confirm what appendixes are required for your specific installation (E.g. Manual vs automatic)
- 4) Watch for “Faromor Tips” on installation pages for pointers that will assist with installation.
- 5) Please read final page “Finishing Tips and Touches” before completing installation.

Framing Detail



FRAMING OPENING:

PANEL SIZE:	R.S.O. ("X")	GUIDE POST (G)	LENGTH (M)		CRITICAL DIM. ("A")
			MIN.	MAX.	
2 FT.	23"	72"	34"	44"	24 1/2"
3 FT.	35"	96"	46"	56"	36 1/2"
4 FT.	47"	120"	58"	68"	48 1/2"
5 FT.	59"	144"	70"	80"	60 1/2"

NOTES:

ABOVE DETAILS FOR SALES PURPOSES ONLY. SEE DETAILED FRAMING DRAWINGS FOR MORE INFORMATION.
 V.I.P. PANEL LENGTHS ARE AVAILABLE IN FOUR FOOT LONG INCREMENTS.
 PANEL OPENING LENGTH TO BE SIX INCH LESS THAN ACTUAL PANEL.

FAROMOR


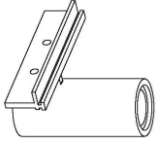
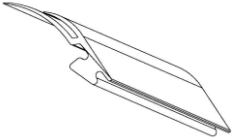
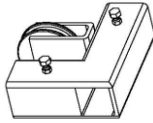
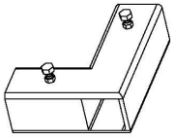
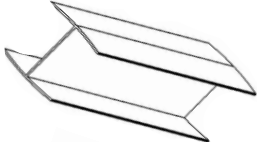


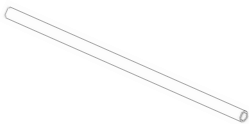
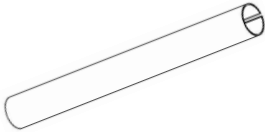

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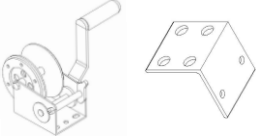
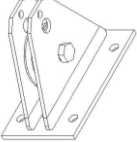
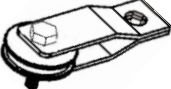
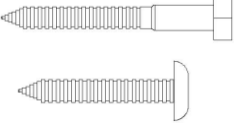



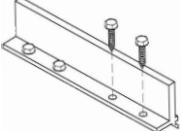

TITLE: V.I.P. PANEL ON POST
 FRAME STRUCTURE

PROJECT / OWNER:

DRAWN: FEBRUARY 2004

DWG. FILE: 02-VIP-P-W

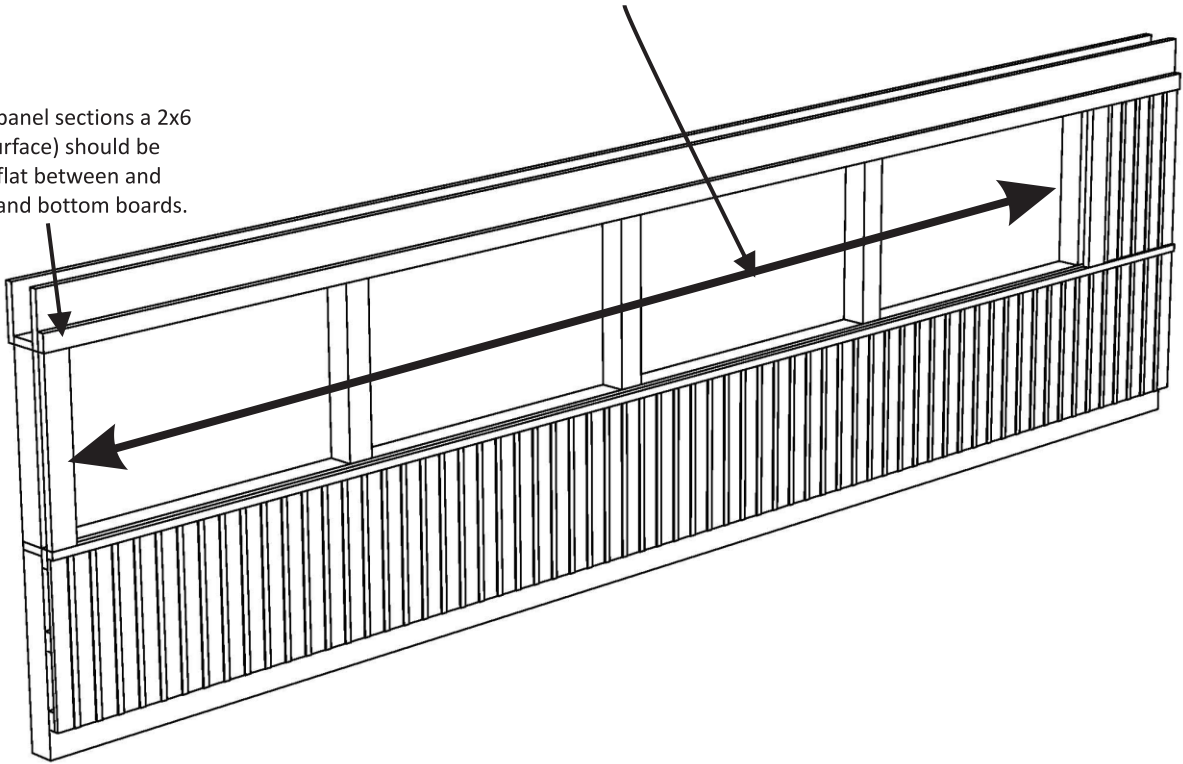
Item #	Part #	Description	Picture
1	03-210-01	Top tubular stand-off	
2	03-340-01	Solar glide	
3	MDBLGRAY	Double finger rubber seal	
4	03-220-01	Top elbow	
5	03-230-01	Bottom elbow	
6	PCHJOIN	PVC "H" joiner	
7	02-200-01-05	PVC top channel x 8'	
8	02-200-01-10	Aluminum bottom channel x 8'	
9	03-240-01-01 03-240-02-01 03-240-03-01 03-240-04-01	Guide post for 2' panel Guide post for 3' panel Guide post for 4' panel Guide post for 5' panel	
10	PVCRAINCAP	PVC rain cap for guide system	
11	03-250-01-01	Nylon rain cap bushing	

Item #	Part #	Description	Picture
12	02-301-01 02-301-03 02-301-04	Textured FRP panel - 2'/3'/4'	
13	08-210-24-11	Galvanized VIP panel joiner	
14	08-100-28	Brake winch and bracket	
15	08-110-04	End pulley bracket	
16	03-320-01	Stainless steel reverse pull-up pulley	
17	BZHLB516112 SSMS812TAP SSMS1034TAP	5/16" x 1-1/2" hex head lag #8 x 1/2" s.s. self tapping screw #10 x 3/4" s.s. screw	
18	08-210-24-05 08-210-24-12	3/16" s.s. cable 7x19 flexible 3/16" s.s. cable 1x19 stiff	
19	08-200-17-04 08-210-24-04	1/8" cable clamp 3/16" cable clamp	
20	20-300-34	White caulking	
21	03-240-01-06	Aluminum joiner x 5"	
22	SZ10X58HWSD	#10 x 5/8 hex self screw	

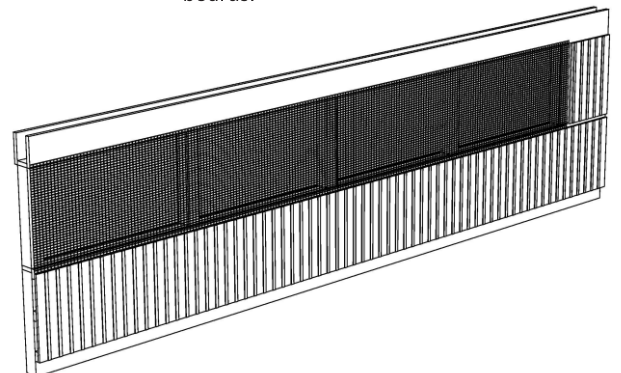
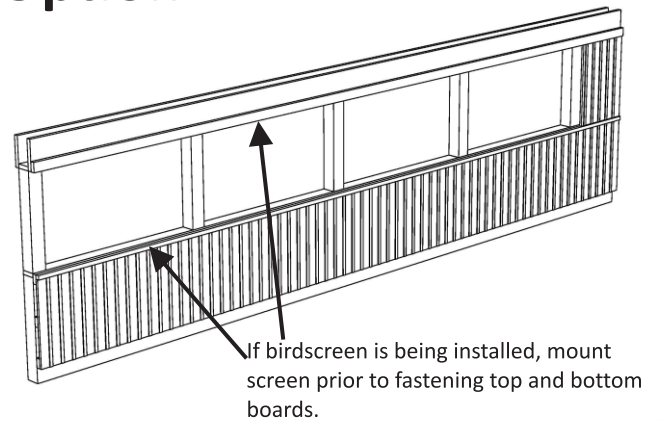
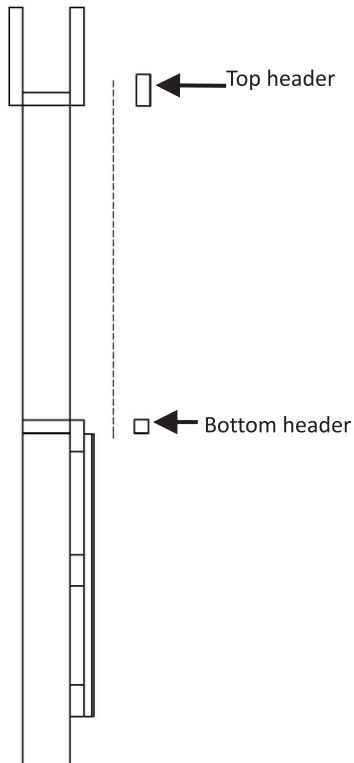
End of section framing

****Note:** Finished opening size for length should be 6" less than actual panel size. i.e: 64' panel should have opening of 63'-6". This allows for 3" overlap on each end for full weather seal.

At both ends of panel sections a 2x6 (or similar flat surface) should be installed on the flat between and flush to the top and bottom boards.

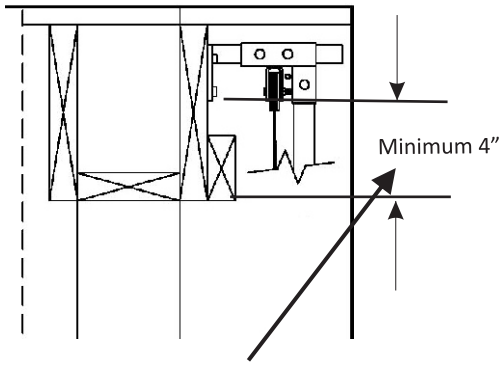


Birdscreen Option



Faromor Tip: It is recommended that the birdscreen be mounted prior to framing panel openings so that the screen is sandwiched between boards.

Stand off bracket mounting detail



Step 1: Mount top stand off bracket at least 4" up from the inside top of the opening using lags provided.

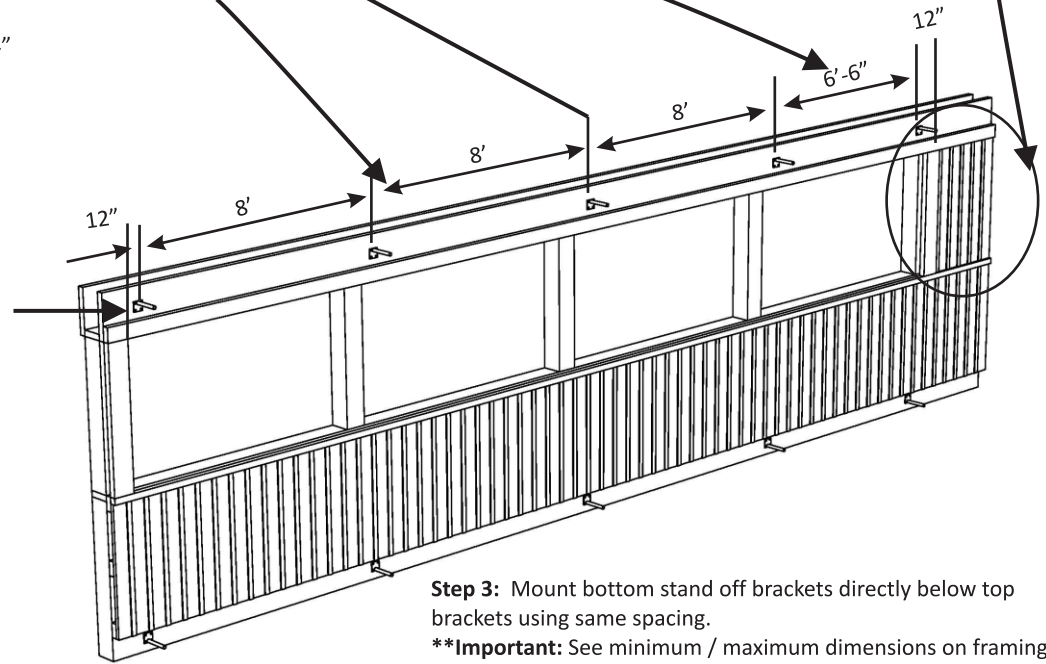
****Note:** mount bracket with tubular part to top.

****Please see Appendix C, pg. 20 for Stand Off Bracket installation on shorter panels**

Step 2: Continue mounting top stand off brackets as per spacing noted.

Please note special spacing on last panel next to drive unit.

****Note:** For illustration purposes, the drive unit will be mounted at this end of panel section.



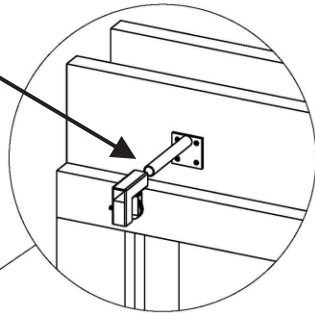
Step 3: Mount bottom stand off brackets directly below top brackets using same spacing.

****Important:** See minimum / maximum dimensions on framing detail (pg. 4) for critical placement of bottom bracket.

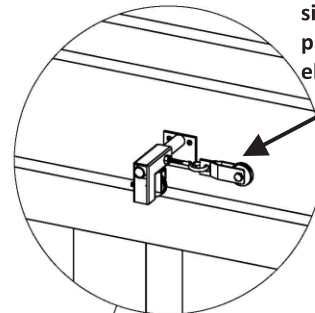
Faromor Tip: Ensure plumbness of top/bottom brackets to make sure guide posts are straight. If guides are not straight binding will occur.

Top elbow installation

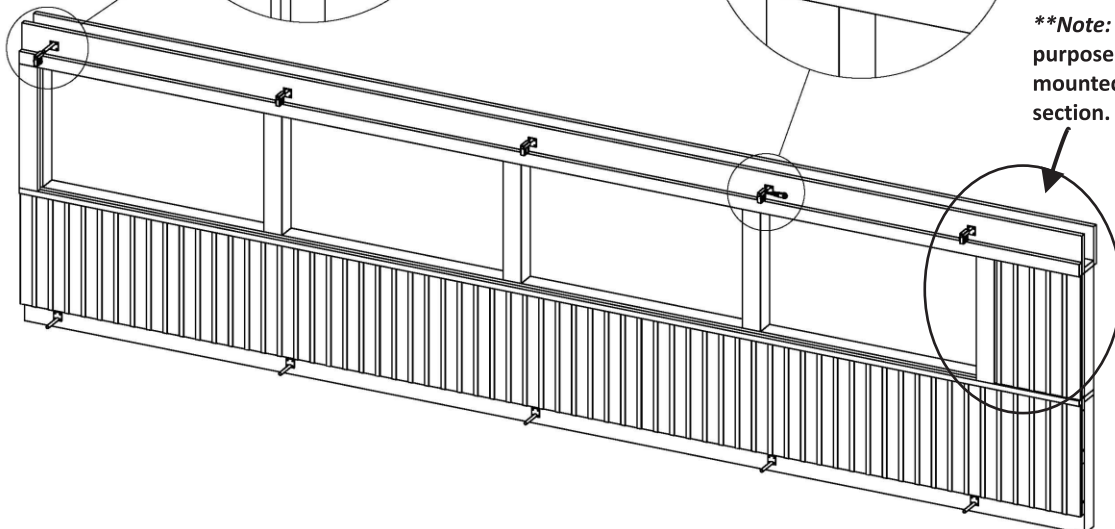
Step 1: Slide top elbow onto stand off bracket with pulley wheel towards wall. Tighten set screw by hand only so that this may be adjusted during later stages of installation.



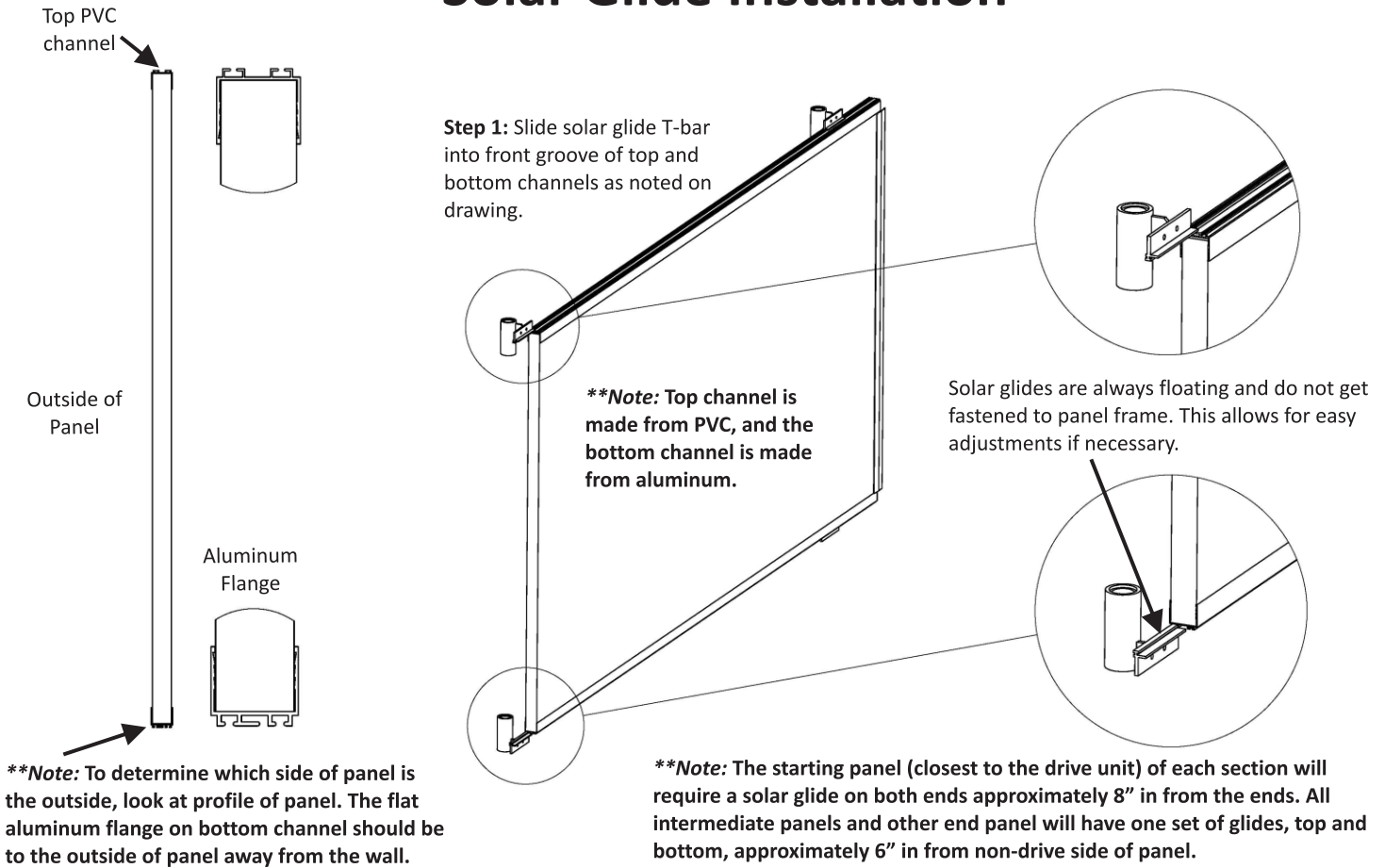
****Note:** The second elbow in from the drive end should have a reverse pulley attached to one side. Ensure that this reverse pulley is on the drive side of the elbow.



****Note:** For illustration purposes, the drive unit will be mounted at this end of panel section.

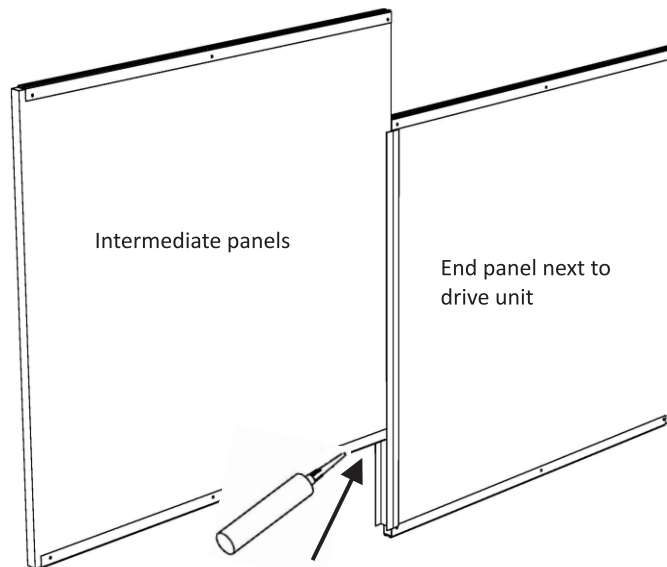


Solar Glide Installation



Panel Connection

Step 1: Take one of the end panels with solar glides already mounted and stand panel on stand off brackets at bottom of wall



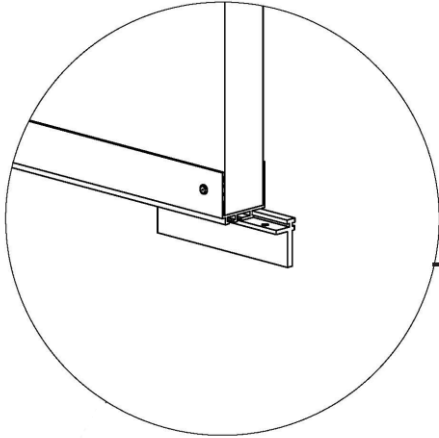
Step 2: Caulk H-joint on first panel with caulking provided, being sure to do both inside edges of H-joint.

Step 3: Take next panel and slide open end into H-joint of first panel. Start panel towards top and slide to bottom. Ensure that panels are level and pushed tight together.

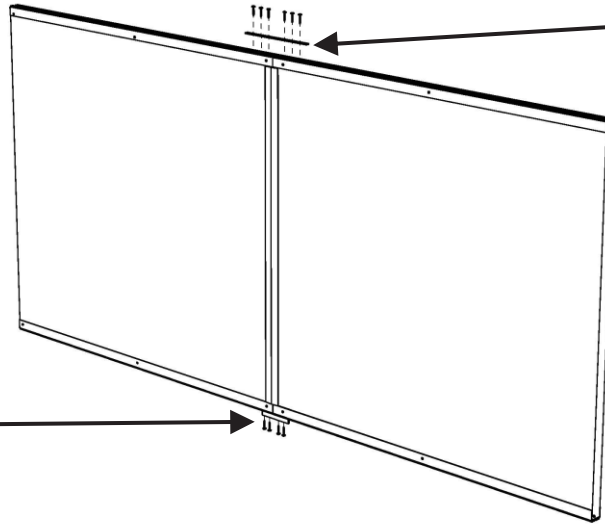
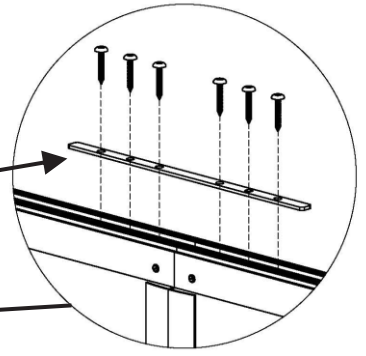
****Note:** It is recommended that you secure two panels together (see next page), before adding another panel. This process should be repeated after each panel.

Securing Panel Joiner

Step 1: Insert bottom joiner into outside groove of bottom aluminum channel. The joiner should be spaced evenly across joint. Secure in place with screws provided.



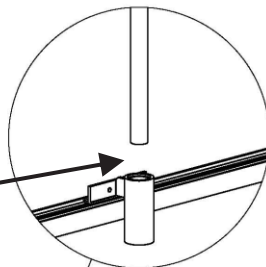
Step 2: Once panels are joined together by H-joiner, lay flat joiner bar in flat area between grooves of top channel. Space joiner so that there are three holes on each panel. Fasten joiner to channels using self-tapping screws provided.



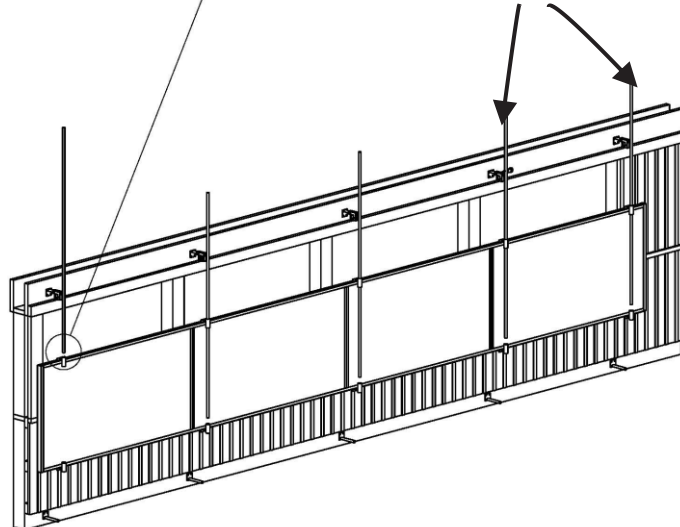
****Note:** It is recommended that you secure two panels together before adding another panel. This process should be repeated after each panel.

Guide Post Installation

Step 1: With panels resting on bottom stand off take first guide pipe and slide through glide assembly from top glide through bottom glide.



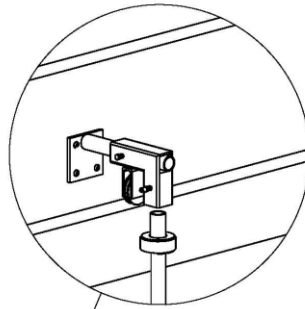
Step 2: Continue this for remaining guide posts.



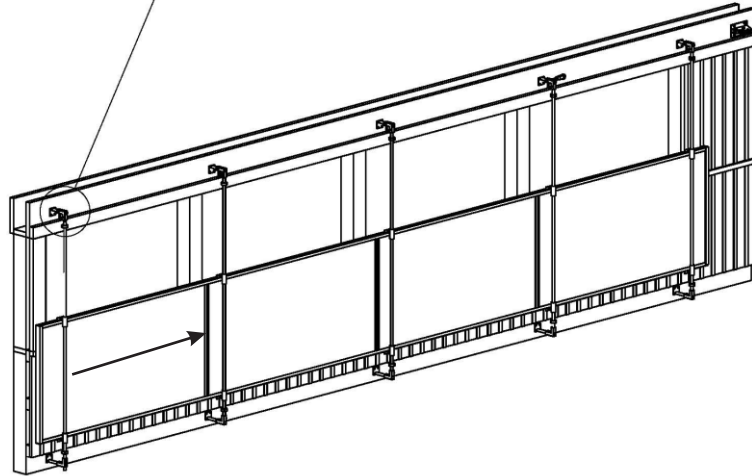
****Note:** Guide posts are pre-cut to standard length when shipped. These pipes may need to be cut prior to installation based on specific installation. Measure distance between top and bottom stand off for required guide post length.

Guide Post Installation - cont'd

Step 1: Slide plastic spacer ring over top of guide post and leave loose until later stages of installation.



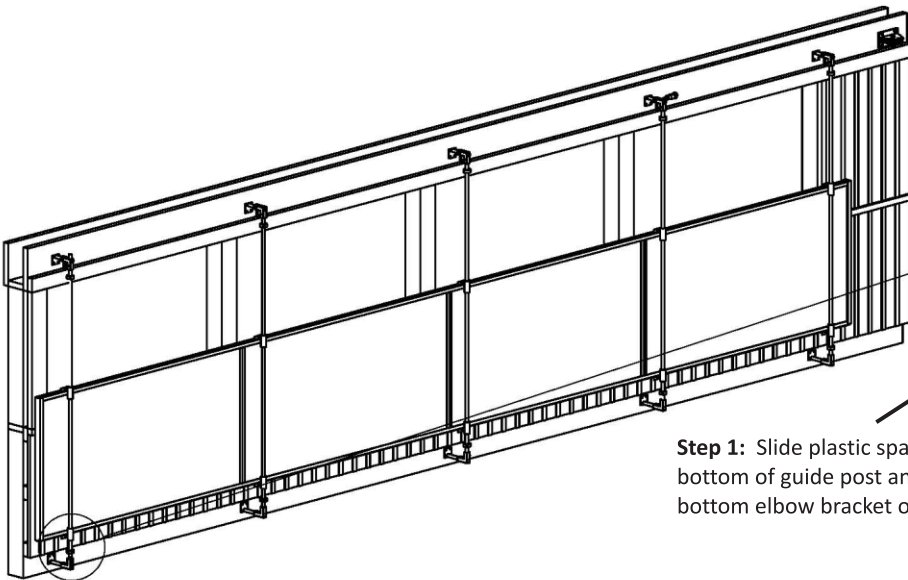
Step 2: Slide top of guide post into top elbow bracket as far as possible. Hand tighten set bolt.



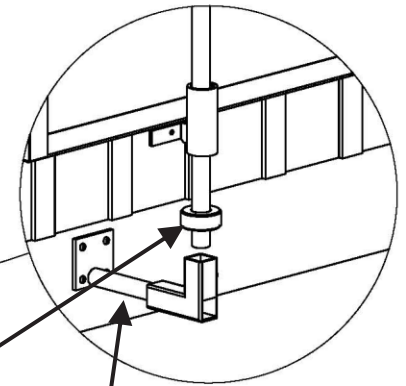
Step 3: Continue doing this on remaining guide posts.

Guide Post Installation - cont'd

Step 1: Slide plastic spacer ring over bottom of guide post and then slide bottom elbow bracket onto guide post.



Step 2: With elbow bracket on guide post, slide other end of elbow bracket approximately halfway onto bottom stand off.

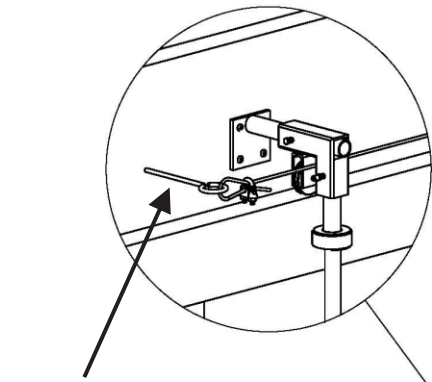


Step 3: Continue doing this on remaining guide posts.

Faromor Tip: All set bolts should be hand tightened only. Final adjustments will be made upon completion of installation.

Main Cable Installation

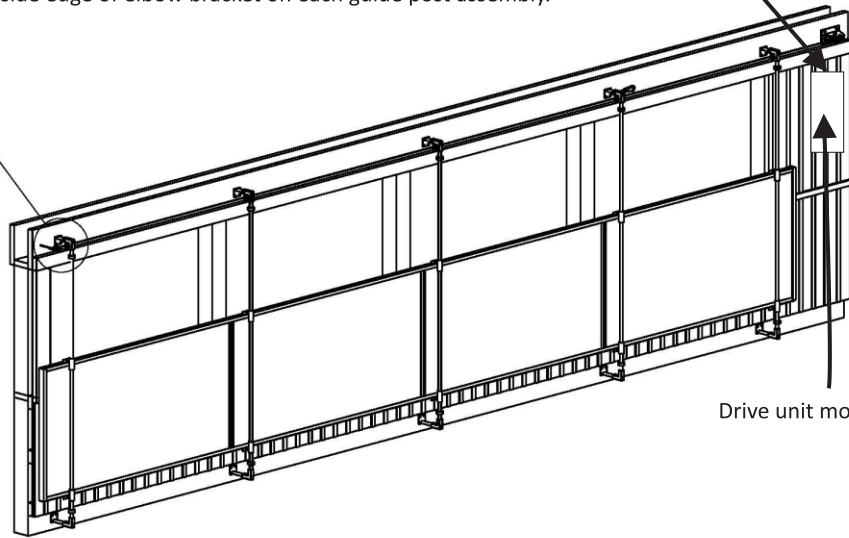
****Note:** Panel systems can be installed either manually or automatically. Please see Appendix A1 - pg. 15 for instructions.



Step 1: Install temporary screw eye beyond last guide post and attach main cable with supplied cable clamp.

Step 2: Thread main cable between pulley bracket and inside edge of elbow bracket on each guide post assembly.

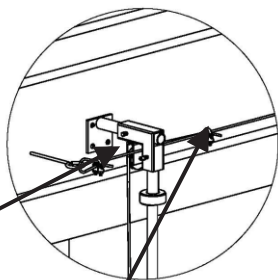
Step 3: Connect main cable to drum unit or manual lead in cable as per instructions in Appendix A1-pg. 15



Drive unit mounted here.

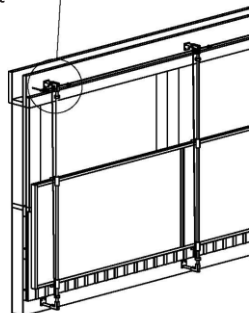
Pull Up Cable Installation

Panel should be in open position when connecting pull up cables. Final cable adjustment can be done at end of installation.

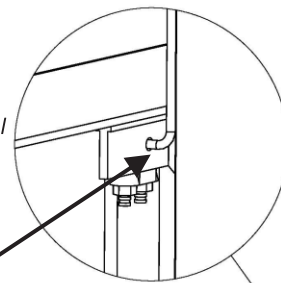


Step 1: Thread one end of pull up cable (supplied) over top of nylon pulley from the non-drive end. Attach to main cable using clamps provided approximately 12" past guide posts.

Non-drive end of panel section.

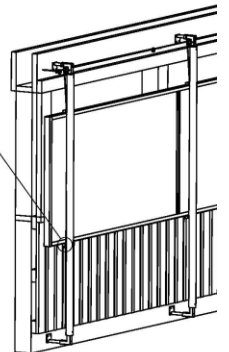
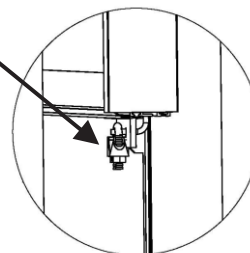


Front View of Panel



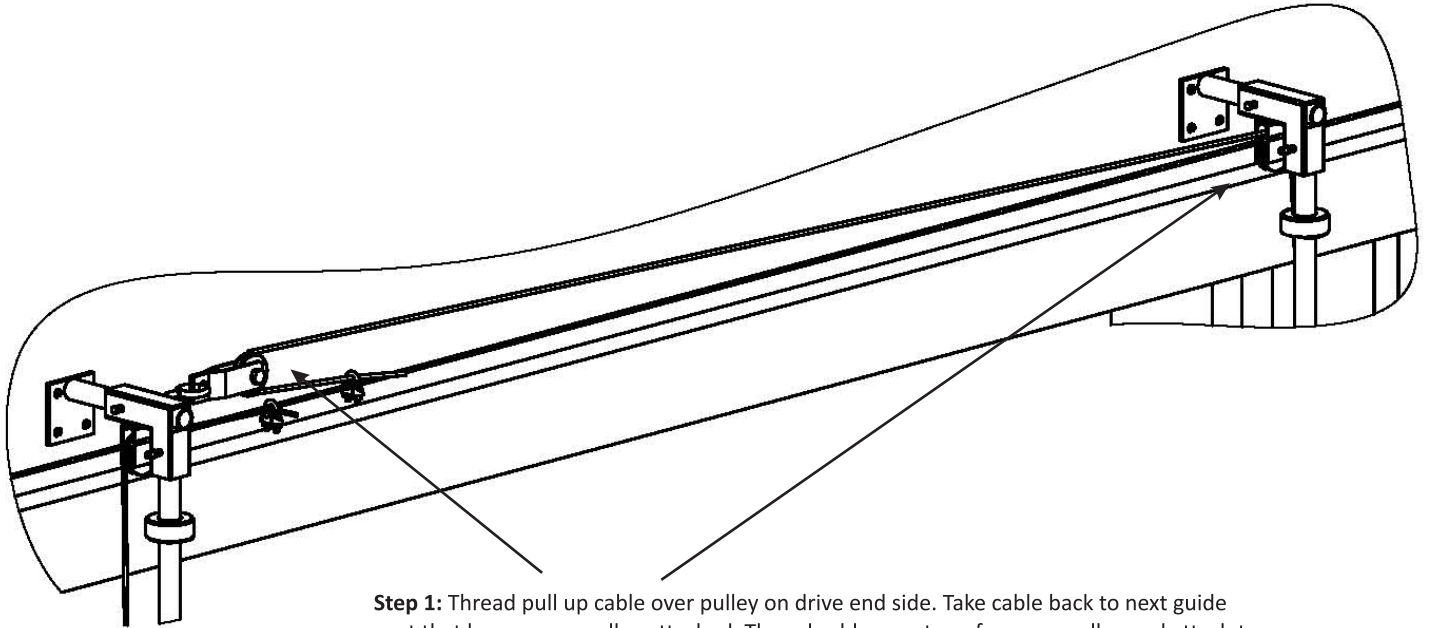
Step 2: Take other end of cable down the outside of the panel to bottom solar glide and thread through one of the two holes in the T-bracket. Clamp end of cable on back side of solar glide with clamps provided.

Rear View of Panel



Step 3: Continue doing this on remaining pulleys except for guide post closest to drive unit where a reverse pull is required (see next page).

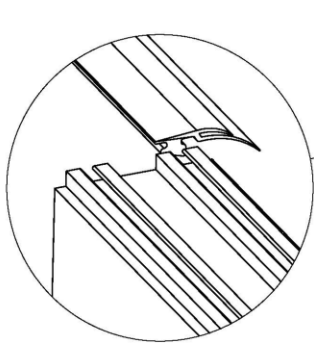
Reverse Pull Up Cable Installation



Step 1: Thread pull up cable over pulley on drive end side. Take cable back to next guide post that has reverse pulley attached. Thread cable over top of reverse pulley and attach to main cable.

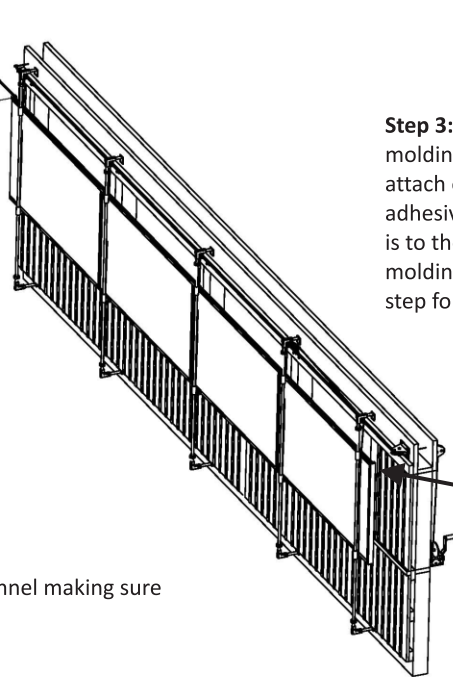
****Note:** Be sure this cable is attached in front of previous pull up cable.

Rubber Molding Installation

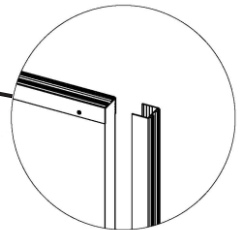


Step 1: Take one end of rubber molding and begin sliding into inside track of top channel. Be sure rubber "fingers" are installed on wall side of panel with shorter finger on top.

Step 2: Repeat step one for bottom channel making sure fingers are on wall side of panel.



Step 3: For end cap installation slide rubber molding into end cap channel provided and attach end channel to VIP panel using adhesive provided. Make sure rubber molding is to the wall side of the panel and secure molding with screws provided. Repeat this step for both ends.

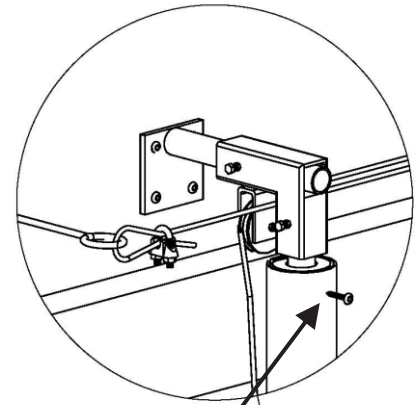
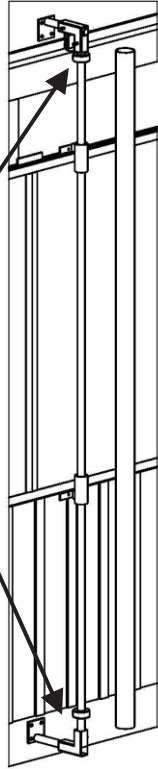


Faromor Tip: Where joint in rubber molding may occur, fasten end of molding to top or bottom channel using stainless steel screws provided. At ends of panels, cut off excess and screw down to hold in place.

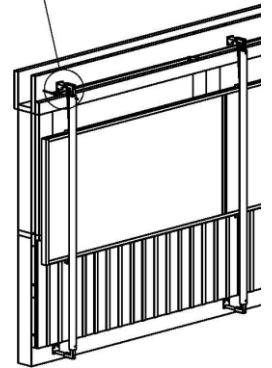
PVC Raincap Installation

Step 1: While holding top plastic spacer against bottom of the top elbow bracket, snap PVC raincap over spacer. Do same procedure for bottom of raincap with plastic spacer resting on bottom elbow.

****Note:** Raincap may need to be cut to size prior to installation. Raincap should not interfere with set bolts on elbows.



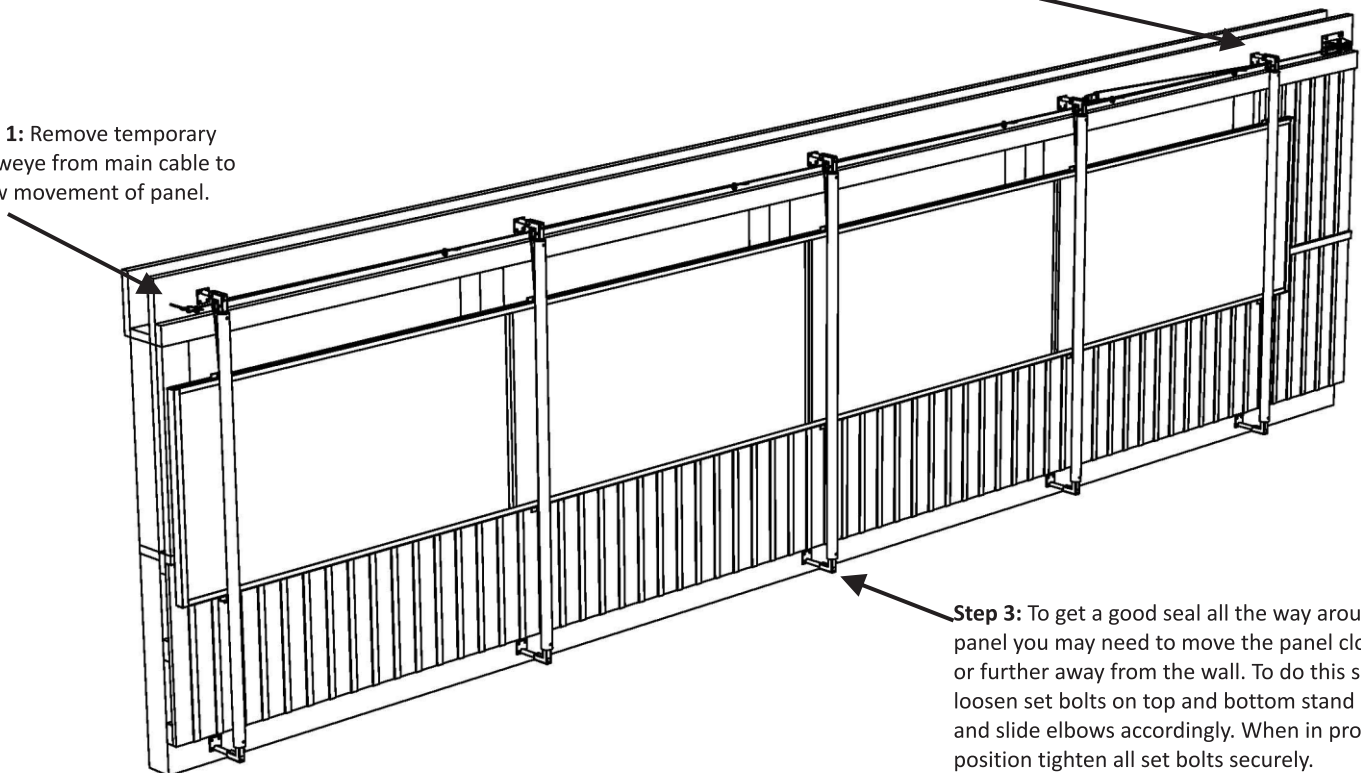
Step 2: Using self tapping screws provided, fasten raincap to plastic spacer ring on top and bottom.



Installation Completion

Step 2: Adjust all pull up cable lengths so that panels are level with one another, and to permit seal closure at top of opening and bottom of opening when panel is in closed position.

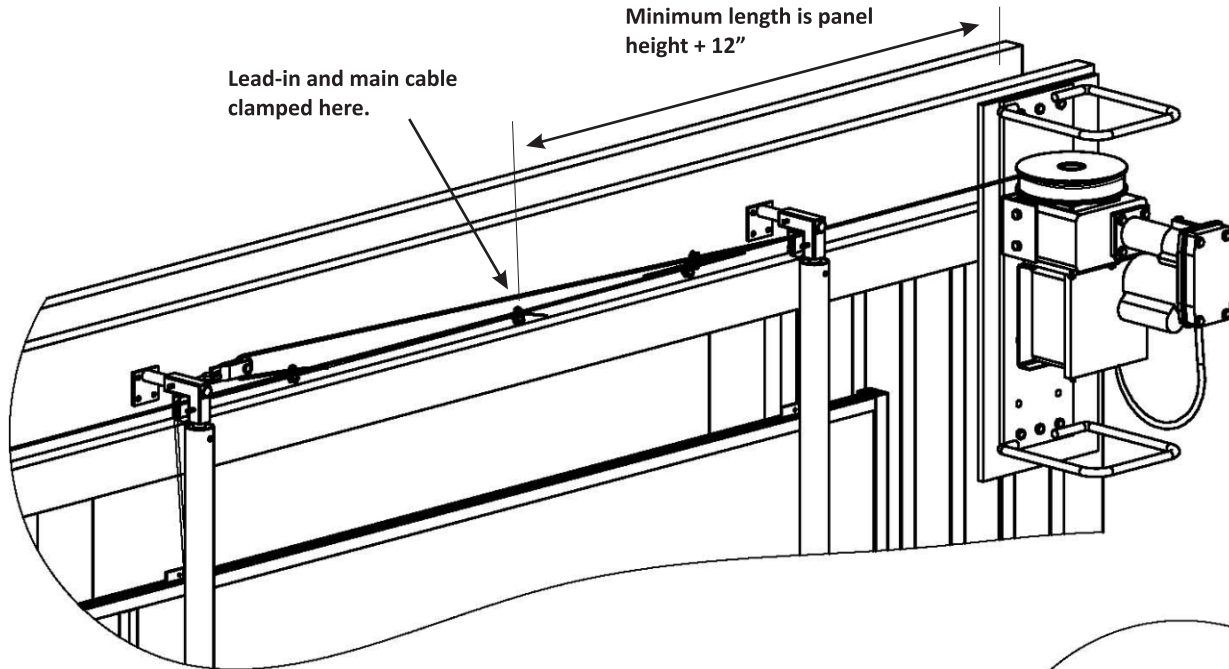
Step 1: Remove temporary screweye from main cable to allow movement of panel.



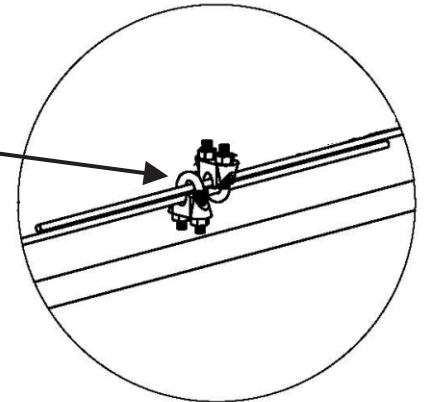
Step 3: To get a good seal all the way around the panel you may need to move the panel closer to or further away from the wall. To do this simply loosen set bolts on top and bottom stand offs and slide elbows accordingly. When in proper position tighten all set bolts securely.

Appendix A1 - Drive Unit Installation

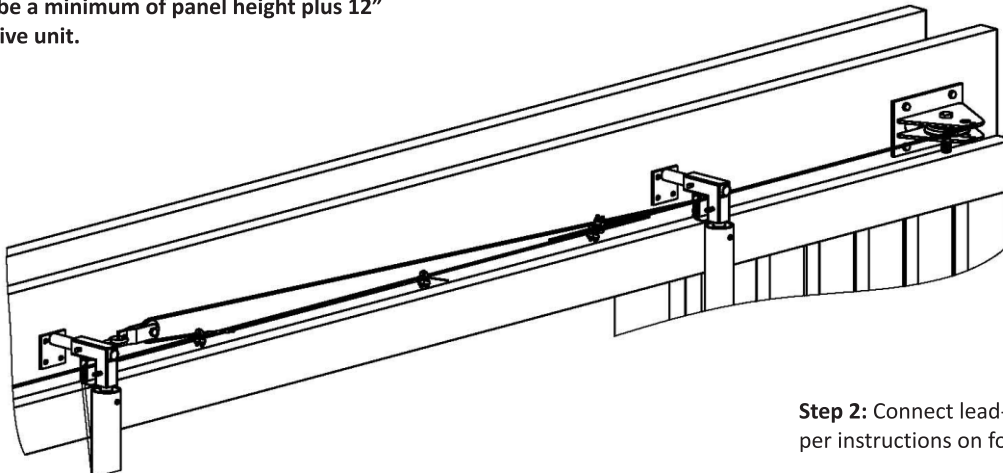
Main cable to lead in cable connection



Step 1: With panel in the open position attach end of main cable to one end of lead-in cable overlapping 6". Fasten with two cable clamps secured on opposite sides.



****Note:** The main cable is six feet shorter than overall panel length. To connect main cable to drive unit you must join main cable with lead-in cable supplied as per connection diagram in step 1. Cable joint should be a minimum of panel height plus 12" in front of drive unit.



Step 2: Connect lead-in cable to drive unit as per instructions on following appendix pages.

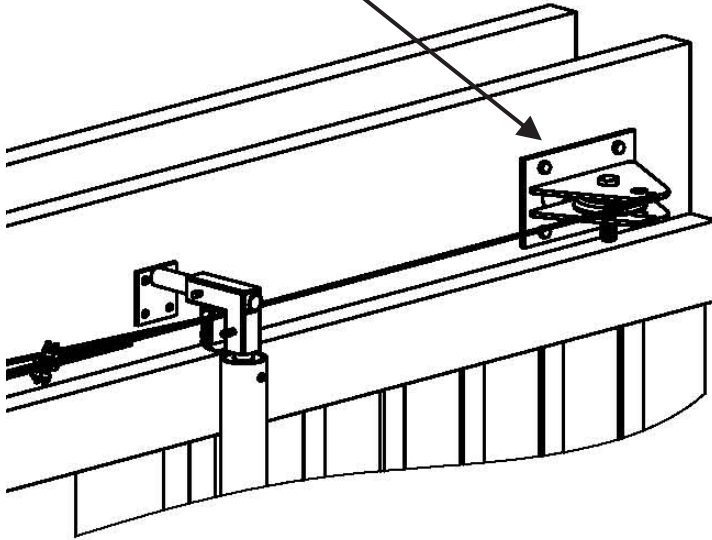
Appendix A2 - End Pulley Bracket Installation

Block pulley should be mounted in line with top elbows. It should be mounted at least 6" past end of panel.

***Note:** pulley must be mounted horizontally so it turns cable into the wall.

The outside block pulley and inside block pulley must line up for proper main cable operation.

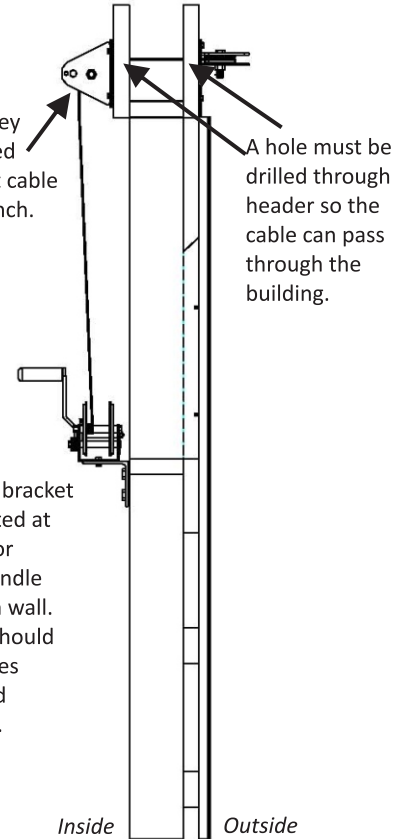
**See next diagram.



Interior block pulley should be mounted vertically to direct cable down towards winch.

A hole must be drilled through header so the cable can pass through the building.

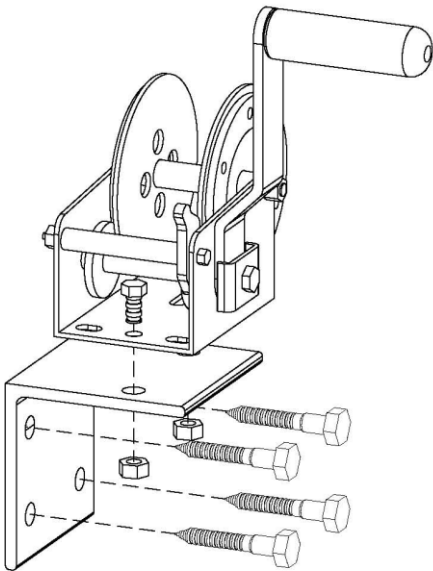
Brake winch and bracket should be mounted at suitable height for operator with handle facing away from wall. The main cable should wrap several times around drum and secured to drum.



Appendix A3 - Manual Winch Installation

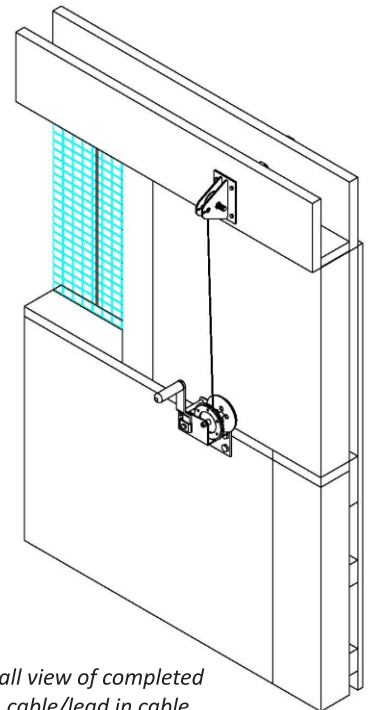
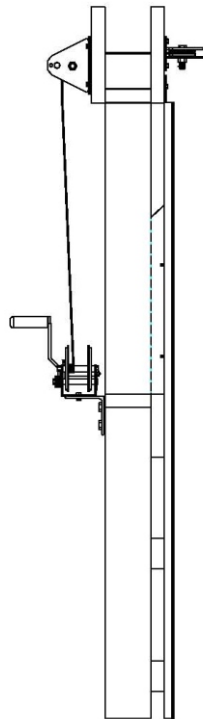
Manual drive units are interchangeable from right-hand to left-hand.

**Illustration is for a right hand drive unit



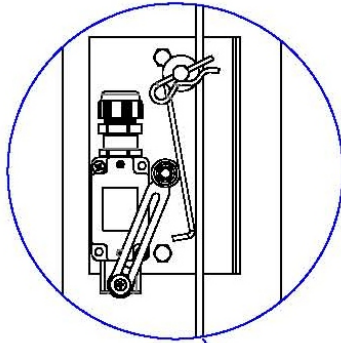
Connect lead in cable to winch by threading cable through winch drum and gathering slack cable on drum.

To mount winch on wall, find suitable location directly beneath end pulley bracket so cable stays straight. Mount winch bracket to wall with lags provided and mount winch to bracket with nuts and bolts provided. Install handle to winch to begin operation.



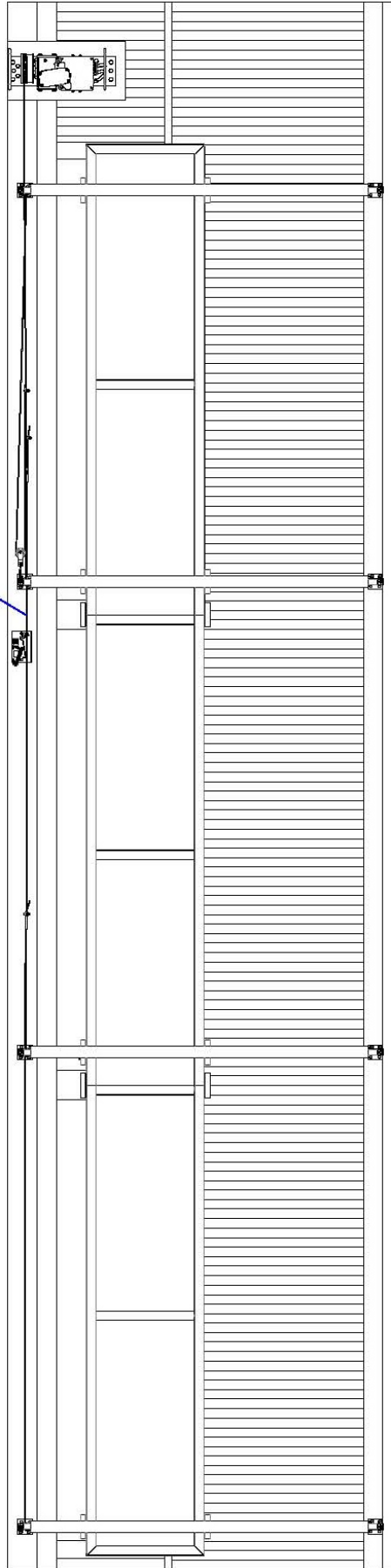
Overall view of completed main cable/lead in cable installation

Appendix A4 - Panel Switch Mounting

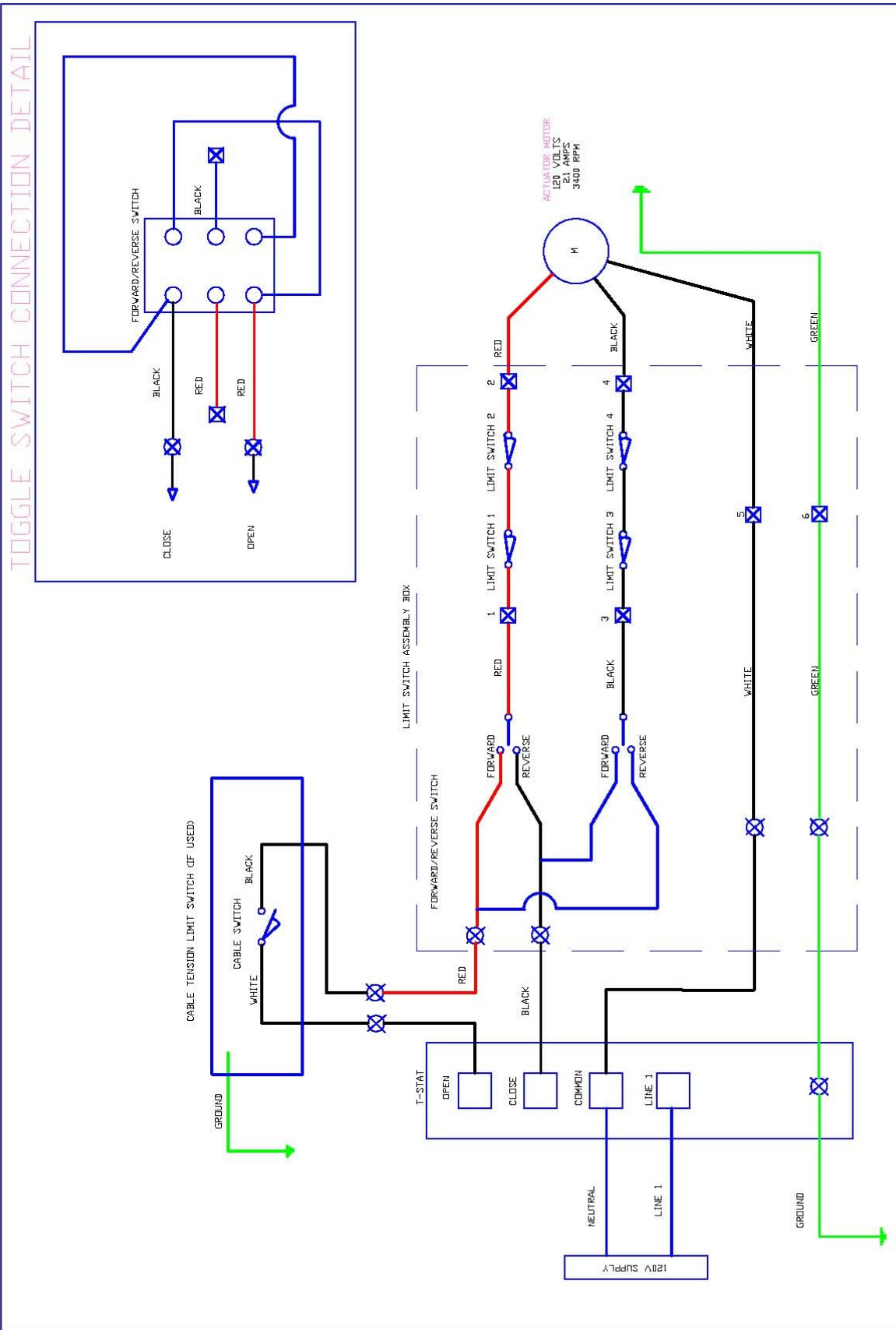


Main Cable

Mount Panel Limit Switch between 2nd and 3rd guide pipe from drive end.
When switch is mounted, push cable down and you should hear switch click, when you release cable you should hear switch click again.



Appendix A5 - Panel Switch Wiring



1 TITLE
A1

Appendix A6 - Automatic Drive Unit Installation

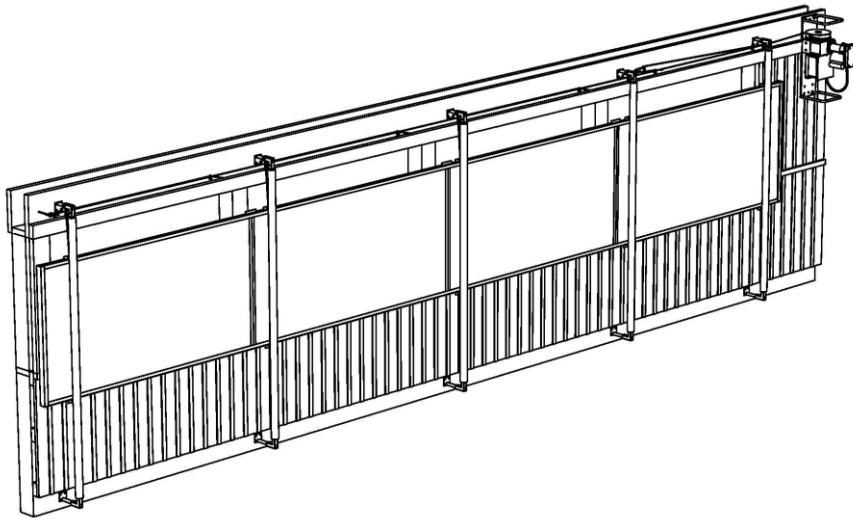
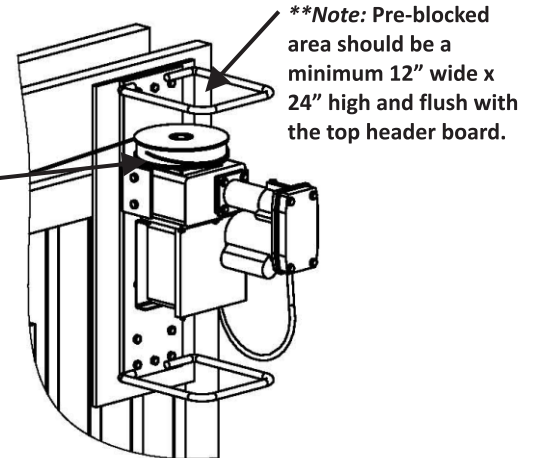
Automatic drum winches can be a left or right hand drive unit.

**For illustration purposes, the diagram below depicts a right hand drive unit.

Step 1: Mount drum unit on a pre-bocked area (12" x 24") with cable drum at the top. The centre of the cable drum should be in line with the main cable. Drum winch should be mounted at least 6" away from end of panel.

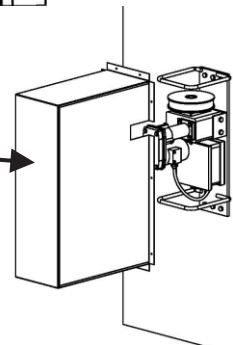
Step 2: Wrap lead in cable around wall side of drum, thread through cable hole in drum, and clamp with cable clamp provided on outside of drum.

****Note:** cable should wrap 1-1/2 to 2 times around drum before connecting.



Step 3: Mount stainless steel cover over top of drum unit and attach to wall using screws provided.

****Note:** Depending on whether it is left hand or right hand drive, the small cable hole plate may need to be switched to opposite side.



Appendix B1: Limit Switch System

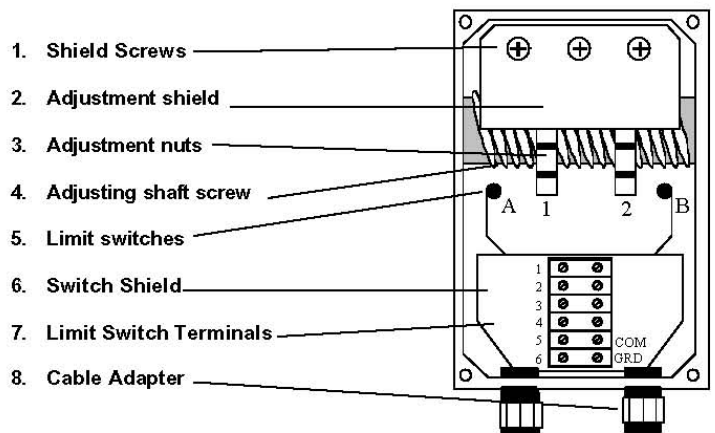
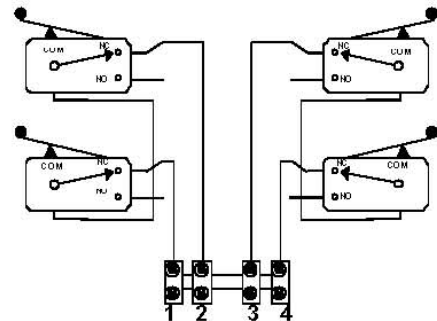
- Remove adjustment shield 2.
- Momentarily jog to verify that it is clockwise rotation. Adjusting nut 1 must be traveling towards limit switch A.
- If unit is rotating in the wrong direction, reverse motor leads or reverse limit switch connections such that wires 1 and 2 connect to terminals 3 and 4 and wires 3 and 4 go to terminals 1 and 2 respectively.

Note:

Depending on right hand or left hand positioning of drive requires opposite rotation.

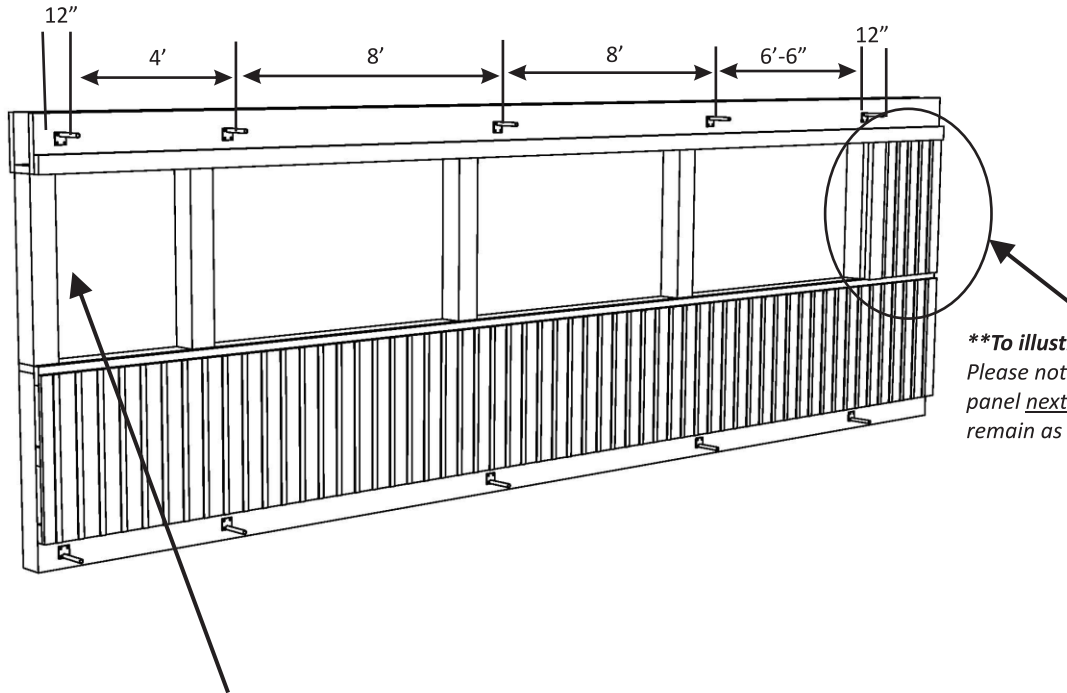
- While motor is running in the clockwise direction turn adjusting nut 1 with screwdriver or finger until desired vent location and the motor is stopped.
- While holding adjusting nut 1, adjust in the counter clockwise direction by repeating step d) using adjusting nut 2 and limit switch b.
- Replace adjustment shield 2 in reverse position from which you received it from the manufacturer ensuring that the shield edge retains the adjusting nuts in place.
- Replace cover to avoid dirt and humidity entering limit switch compartment.

Limit Switch System



Appendix C:

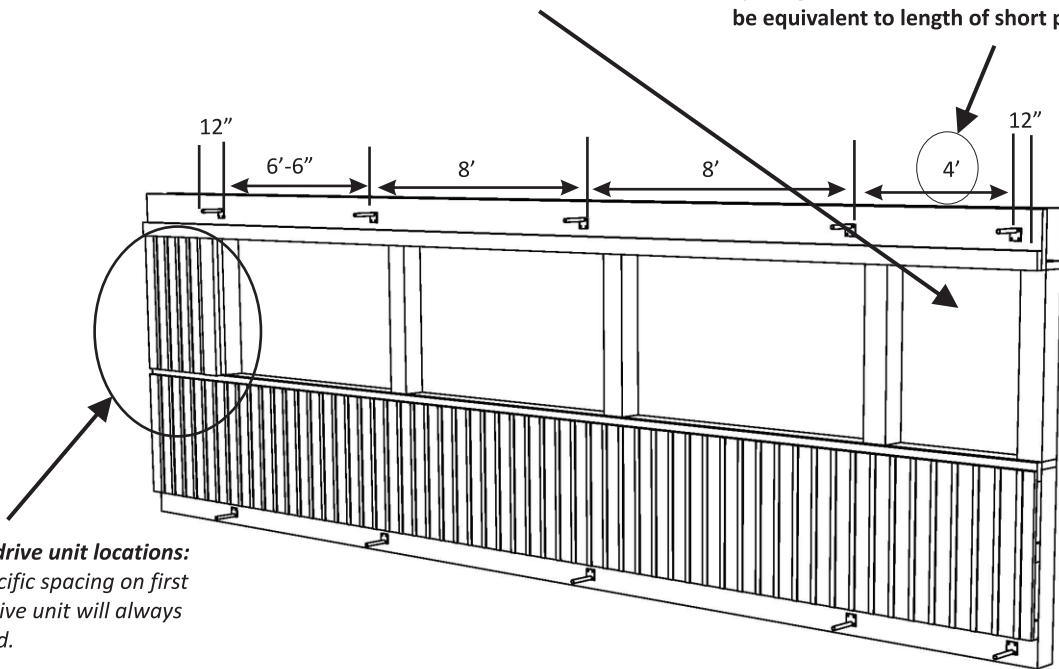
Bracket spacing on panel sections with one short panel (<8')



****To illustrate drive unit locations:**
Please note specific spacing on first panel next to drive unit will always remain as stated.

****NOTE:** If using short panel section (less than 8') be sure the short panel is at the end opposite the drive unit.

****Note:** When short panel is required (less than 8') the spacing between second last and last stand off bracket should be equivalent to length of short panel, eg. ½ panel (4')



****To illustrate drive unit locations:**
Please note specific spacing on first panel next to drive unit will always remain as stated.

Faromor Tip: Be sure that last pull-up cable on short end panel does not interfere with second to last pull-up and pulley when attached to main cable.

Finishing Tips and Touches

- 1) It is very critical to make sure all guide posts are vertically straight to ensure panel does not bind while moving up and down the posts. In the closed position, adjustments can be made on pull up cables to ensure proper seal against top of opening and that the panel is level along the wall. Adjustments can also be made on elbow brackets to slide panel closer to or away from wall for proper weather seal. When closed, rubber molding should be partially folded over and touching bottom of top board and pulled up slightly on bottom of bottom board. These are the critical seal points for panel closure.
- 2) Double check all pull up pulleys and end pulleys (where required) to ensure smooth operation. Check all cable movements and ensure that no cables or clamps are getting caught or stuck which will result in panels not operating properly.
- 3) Make sure PVC raincaps are installed properly so they do not interfere with movement of panel glides on guide posts.
- 4) Check clamp connection between main cable and lead in cable to prevent separation of cables, which will result in panels falling.
- 5) Use a small piece of electrical tape to tape off all loose ends of pull up and main cables to prevent fraying of cable ends.

WARRANTY POLICY

Faromor Ltd. Warranty Policy covers all parts manufactured and supplied by Faromor. Warranty starts from date of initial installation of product and lasts one (1) year.

Faromor will also give full warranty on any installation labour we provide for a period of up to one (1) year from date of installation.

All digital thermostats have a two (2) year full warranty.

PANEL SYSTEM SAFETY

NOTE: ALL INSTALLATION OF ELECTRICAL CONTROLS SHOULD BE DONE BY A QUALIFIED ELECTRICIAN.

General Operation

- Panels should only be operated when the owner or other responsible persons are in the facility.
- Unauthorized persons or small children should not be near or have access to the outside or inside automatic/manual drive units as they may result in injury. Do not attempt to stop any automatic drive unit by hand while it is in operation.
- Do not attempt to adjust cables or pulleys while system is in operation.
- When making adjustments to automatic drive units, ensure that the override switch is in the “off” position so that the curtain cannot start while any work is being completed.

Protective Covering

- Ensure that all drive units (manual or automatic) have the covers installed where applicable.
- Electrical motors mounted on outside of building should be covered to prevent damage.

PANEL SYSTEM MAINTENANCE

SOLAR/CLEAR VU/VIP

- All cables (main and pull-ups) should be checked on a monthly basis to ensure proper operation. Over time, some cables may stretch causing uneven pull up of panel system. Where necessary, loosen cable clamp, pull cable tight and re-fasten clamp when panel is level.
- Ensure all cable clamps are tightly secured so it does not result in drop cables coming loose.
- Check all pulleys for excess wear on wheels that may cause cable to get caught.
- Periodically check over aluminum panel joiners top and bottom to ensure they are fastened tightly.

NOTE: FOR ANY SERVICE ON THERMOSTATS OR AUTOMATIC DRIVE UNITS, PLEASE CONTACT A SERVICE REPRESENTATIVE FOR ASSISTANCE. FOR ADJUSTMENT OF LIMIT SWITCHES SEE INSTALLATION MANUALS – ELECTRICAL SECTION.

General Cleaning:

- Use mild soap or detergents for cleaning any of our Faromor products – do not use solvents or aggressive cleaning agents.
- High pressure washers can be used on all products but maintain a minimum distance from product of approximately 1m so as not to put too much pressure on the material – especially fabric curtains.
- Ensure rolling curtains are in the fully closed position when washing so that excess water does not get caught in the rolls of the fabric – allow the water to run completely off the curtains.
- Avoid direct pressure on any curtain area that has an existing hole or ClearVu panel that has an existing crack – the added water pressure may cause more damage at those locations.
- **FOR DRIVE UNITS** – it is recommended to do a simple hand cleaning of the units with warm water and avoid excess water around the motor, wiring or vent plugs so no water will enter the gears or damage the wiring – this will cause premature failure.

NOTE: DO NOT USE HIGH PRESSURE WASHERS OR WATER OF ANY KIND TO CLEAN DRIVE UNITS OR THERMOSTATS – THIS WILL DAMAGE THE UNITS.