









PUTTING INNOVATION TO WORK







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INTRODUCTION

Clear-Vu Panels offer the same high quality welded aluminum frame and operating hardware as the Solar panels. However, Clear-Vu Panels are glazed with a crystal clear acrylic sheet making it a popular choice for Tie Stall dairies and other applications desiring unobstructed vision and/or maximum light transmission.

The Clear Vu Panel has become a premium solution for parlours, holding areas and tie stall barns where it can withstand the rigors of power washing and ensure a draft free seal on a continuous opening. The Faromor Clear Vu Panels aluminum frames create a light weight system with a high quality appearance. All hardware is stainless steel, aluminum or galvanized for longer life expectancy.

The Faromor Clear Vu Panels can be operated manually by hand or by automatic power units connected to a thermostat.

GENERAL CONSIDERATIONS

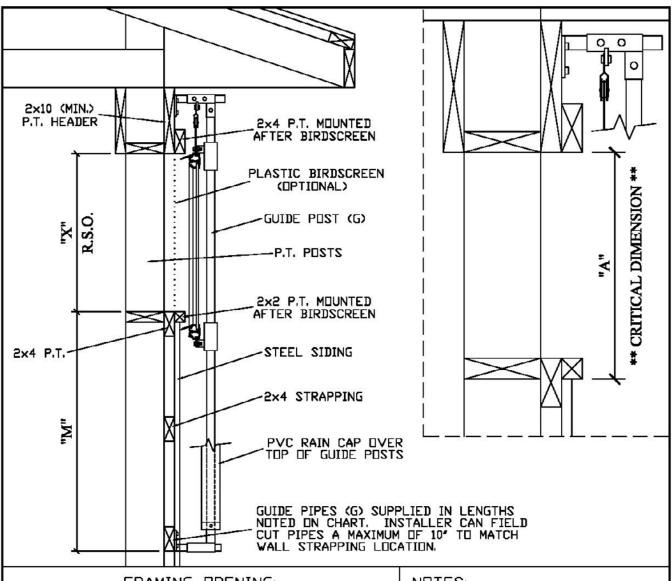
**Please read the following notes prior to installing the Clear Vu panel:

- 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.
- 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 DPENING:

PANEL SIZE:	R.S.D. ("X")	GUIDE POST (G)	LENGT	H (M)	CRITICAL DIM. ("A")
2 FT. 3 FT. 4 FT. 5 FT.	22 ' 34 ' 46 ' 58 '	72* 96* 120* 144*	34" 46" 58" 70"	56 * 68 *	23 1/2" 35 1/2" 47 1/2" 59 1/2"

NOTES:

ABOVE DETAILS FOR SALES PURPOSES ONLY. SEE DETAILED FRAMING DRAWINGS FOR MORE INFORMATION.
SOLAR AND CLEAR-VU PANEL LENGTHS ARE AVAILABLE IN FOUR FOOT LONG INCREMENTS.

PANEL OPENING LENGTH TO BE SIX INCH LESS THAN ACTUAL PANEL.

FAROMOR

P.O. Box 279, RR#1 Shakespeare, Ontario. NOB 2P0 - (519) 625-8000 TITLE:

SOLAR / CLEAR-VU PANEL ON POST FRAME STRUCTURE

PROJECT / OWNER:

DRAWN: FEBRUARY 2004 DWG. FILE: 03-SOL/CLEAR-P-W





PARTS LISTING

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	PVCBARCAP	PVC bar Cap	A Diff
7	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	
8	PVCRAINCAP	PVC rain cap for guide system	
9	03-250-01-01	Nylon rain cap bushing	
10	08-100-28	Brake winch and bracket	





PARTS LISTING

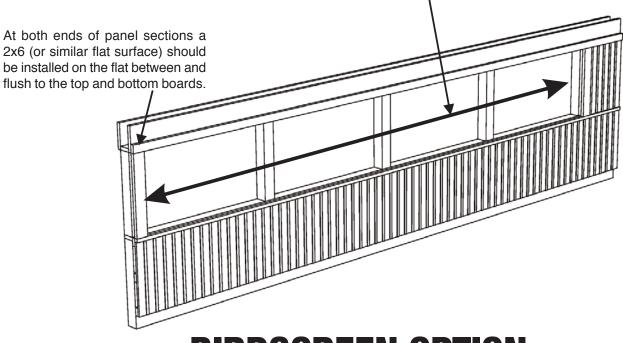
Item#	Part#	Description	Picture
11	08-110-04	End pulley bracket	0/0/
12	03-320-01	Stainless steel reverse pull-up pulley	
13	BZHLB516112 SSMS812TAP SSMS1034TAP	5/16" x 1-1/2" hex head lag #8 x ½"s.s. self tapping screw #10 x 3/4" s.s. screw	
14	08-210-24-05 08-210-24-12	3/16" s.s. cable 7x19 flexible 3/16" s.s. cable 1x19 stiff	
15	08-200-17-04 08-210-24-04	1/8" cable clamp 3/16" cable clamp	
16	03-240-01-06	Aluminum joiner x 5"	
17	SZ10X58HWSD	#10 x 5/8 hex self screw	
18	09-320-40	Cable Tension	
19			
20			



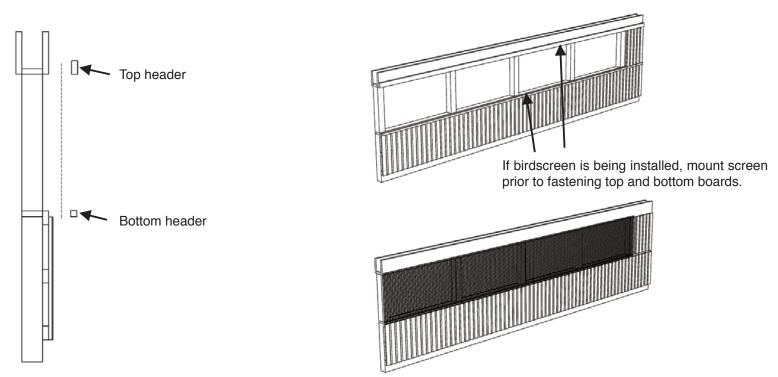


END OF SECTION FRAMING

**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.



BIRDSCREEN OPTION

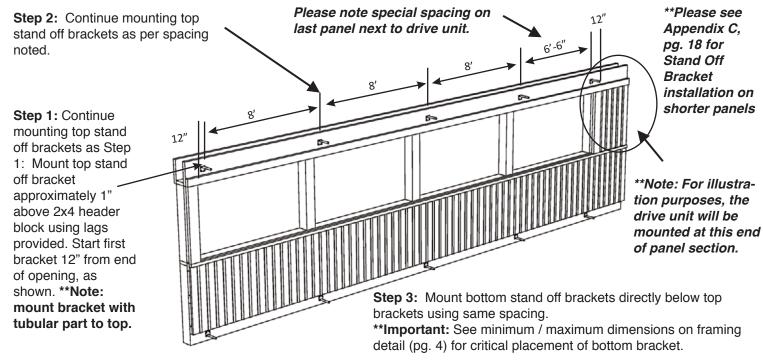


Faromor Tip: It is recommended that the birdscreen be mounted prior to framing panel openings so that the screen is sandwiched between boards.



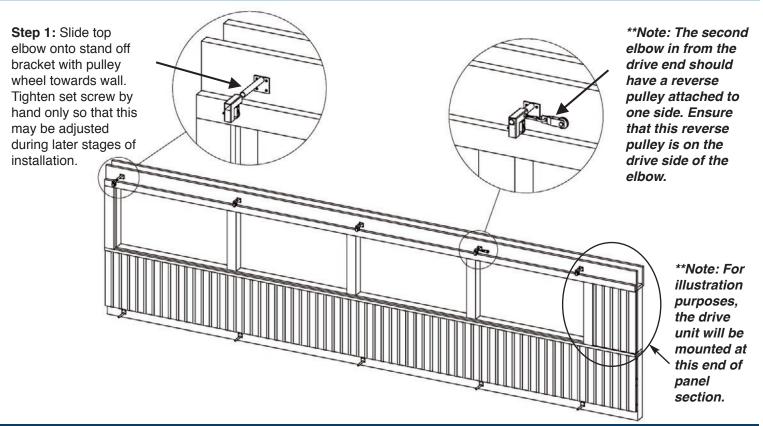


STAND OFF BRACKET MOUNTING DETAIL



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

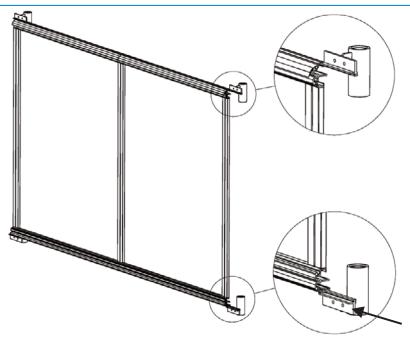






SOLAR GLIDE INSTALLATION

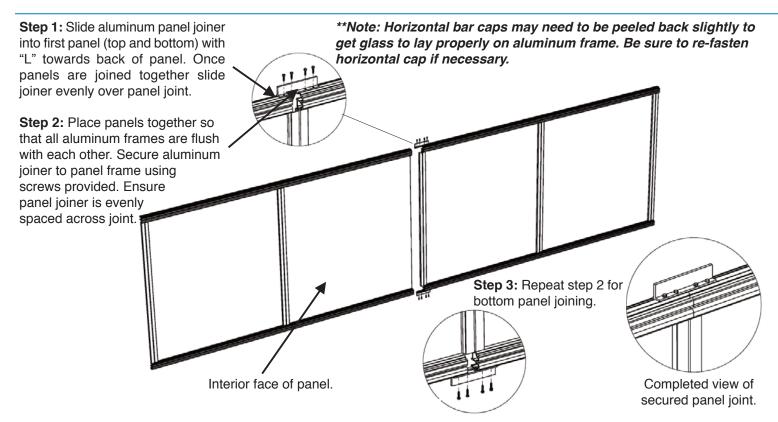
Step 1: Slide solar glide T-bar into front groove of top and bottom channels as noted on drawing.



Solar glides are always floating and do not get fastened to panel frame. This allows for easy adjustments if necessary,

**Note: The starting panel (closest to the drive unit) of each section will require a solar glide on both ends approximately 8" in from the ends. All intermediate panels and other end panel will have one set of glides, top and bottom, approximately 6" in from non-drive side of panel.

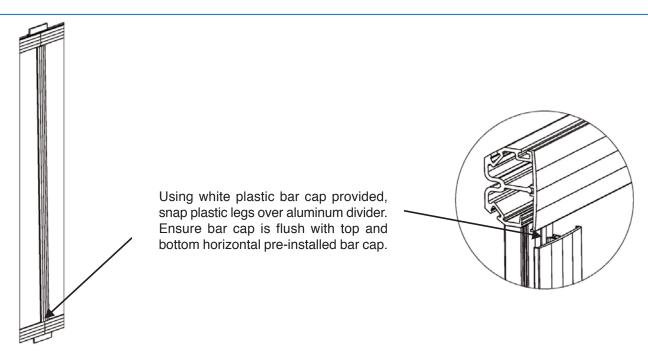
PANEL CONNECTION





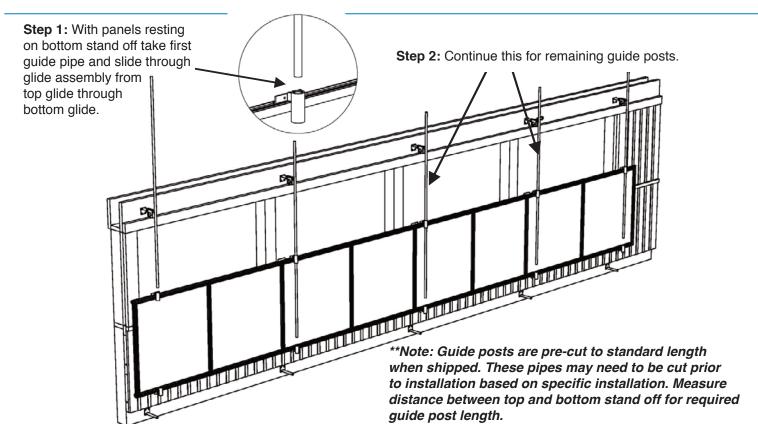


BAR CAP INSTALLATION



Faromor Tip: For secure installation of bar cap, it is recommended that a rubber mallet be used, and that there is support behind the panel while hammering on bar cap.

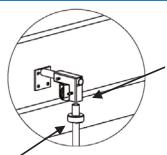
GUIDE POST INSTALLATION





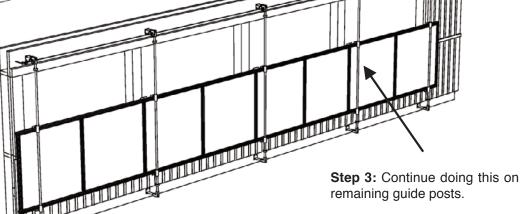


GUIDE POST INSTALLATION - CONT'D

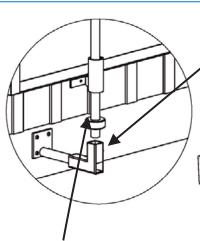


Step 2: Slide top of guide post into top elbow bracket as far as possible. Hand tighten set bolt.

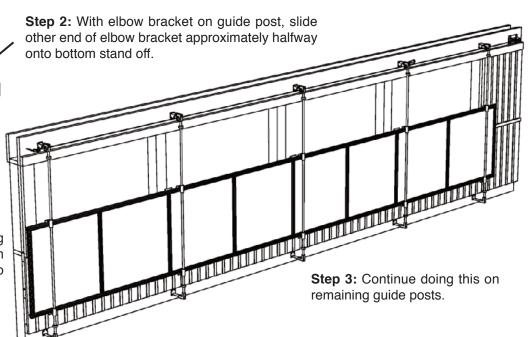
Step 1: Slide plastic spacer ring over top of guide post and leave loose until later stages of installation.



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.

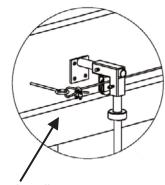


Faromor Tip: All set bolts should be hand tightened only. Final adjustments will be made upon completion of installation.



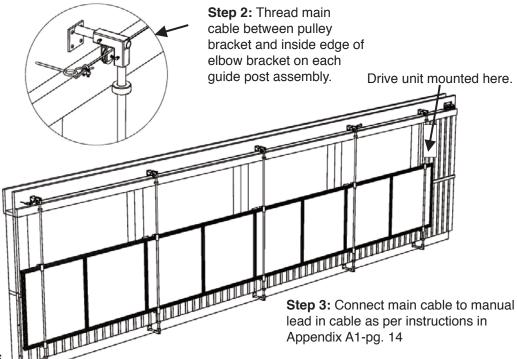


MAIN CABLE INSTALLATION



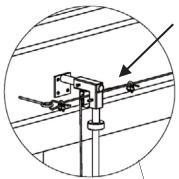
Step 1: Install temporary screweye beyond last guide post and attach main cable with supplied cable clamp.

**Note: Panel systems can be installed either manually or automatically. Please see Appendix A1 - pg. 14 for instructions.



PULL UP CABLE INSTALLATION

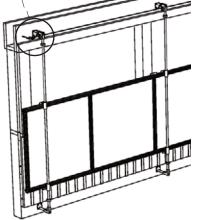
Panel should be in open position when connecting pull up cables. Final cable adjustment can be done at end of installation.



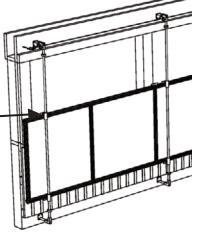
Non-drive end of

panel section.

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.



Step 2: Take other end of cable __down to top 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 cable clamps provided.

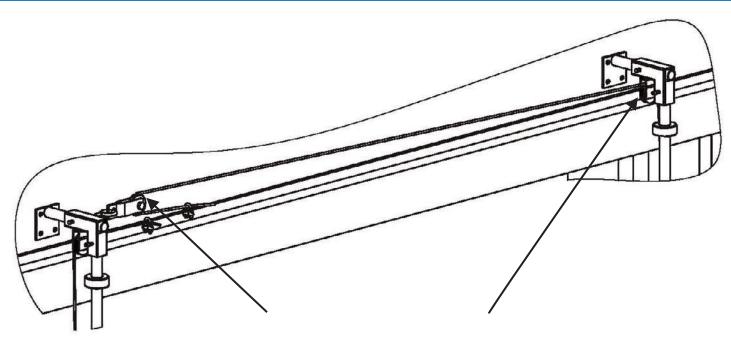


Step 3: Continue doing this on remaining pulleys except for guide post closest to drive unit where a reverse pull is required (see next page).





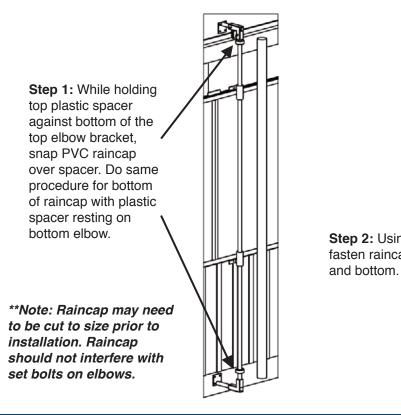
REVERSE PULL UP CABLE INSTALLATION

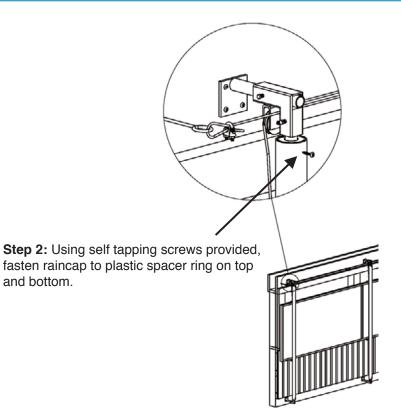


Step 1: Thread pull up cable over pulley on drive end side. Take cable back to next guide post that has reverse pulley attached. Thread cable over top of reverse pulley and attach to main cable.

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

PVC RAINCAP INSTALLATION

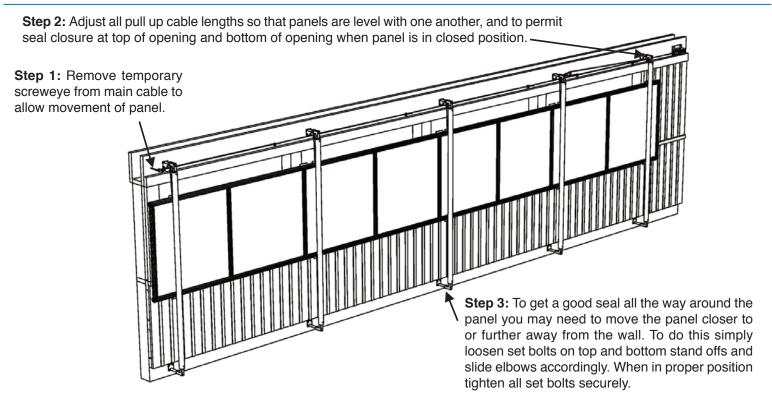






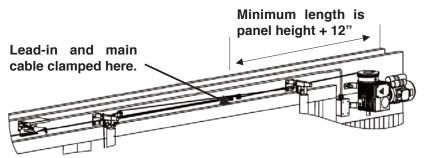


INSTALLATION COMPLETION

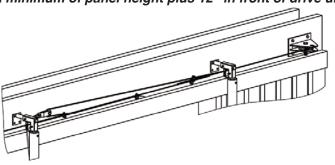


APPENDIX A1 - DRIVE UNIT INSTALLATION

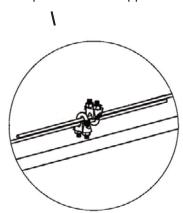
Main cable to lead in cable connection



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



Step2: Connect lead-in cable to drive unit as per instructions on following appendix pages.



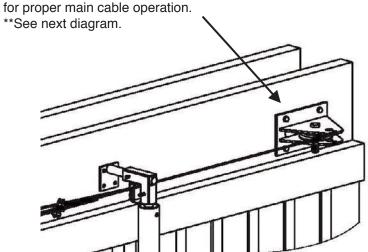


APPENDIX A2 - END PULLEY BRACKET INSTALLATION

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.

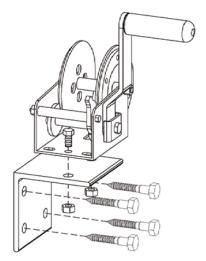
The outside block pulley and inside block pulley must line up for proper main cable operation



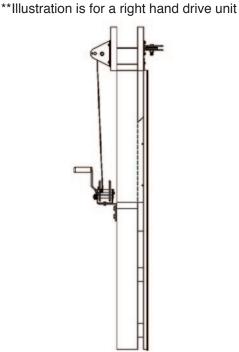
A hole must be Interior block drilled through pulley should header so the be mounted cable can pass vertically through the builddirect cable ing. down towards winch. Brake winch and bracket should be mounted at suitable height for operator with handle facing away from wall. The main cable should wrap several times around drum and secured to drum. Outside Inside

APPENDIX A3 - MANUAL WINCH INSTALLATION

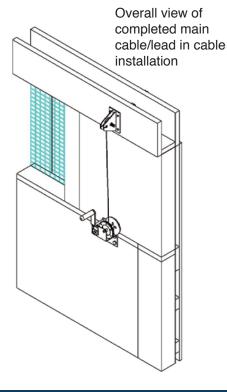
Manual drive units are interchangeable from right-hand to left-hand.



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.



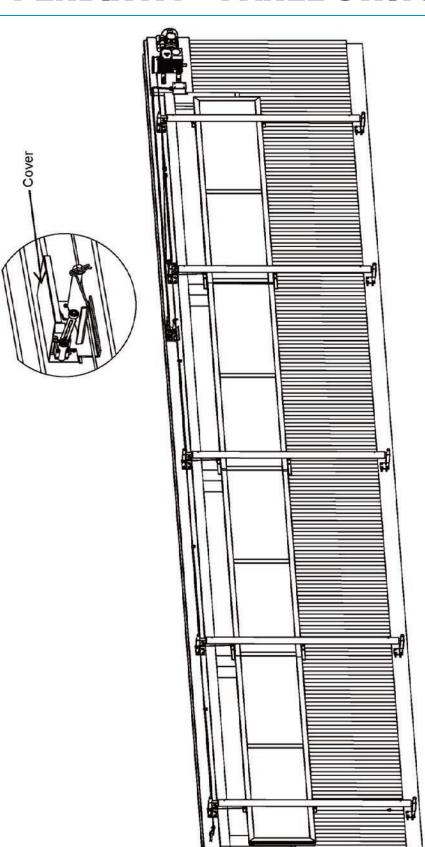
Connect lead in cable to winch by threading cable through winch drum and gathering slack cable on drum.







APPENDIX A4 - PANEL SWITCH MOUNTING



the panels to open and cool the inside of the barn, the drive will start to rotate and unwind the cable. If the panels are not able to lower, the cable becomes slack. When the panels un-thaw they can drop suddenly and depending on how much slack is there the cable panels be damaged. When When these panels are operating in cold temperatures they can freeze to the wall. When this happens, if the temperature inside the barn calls for the cable becomes loose, the limit switch will activate and the drive will turn off. When the panels un-thaw, they will drop slightly putting tension on the cable and turning the limit switch back on, this will enable the drive to continue to work, lowering the panel to the proper position.

Mount the limit switch to the header in the 2nd section from the drive unit.

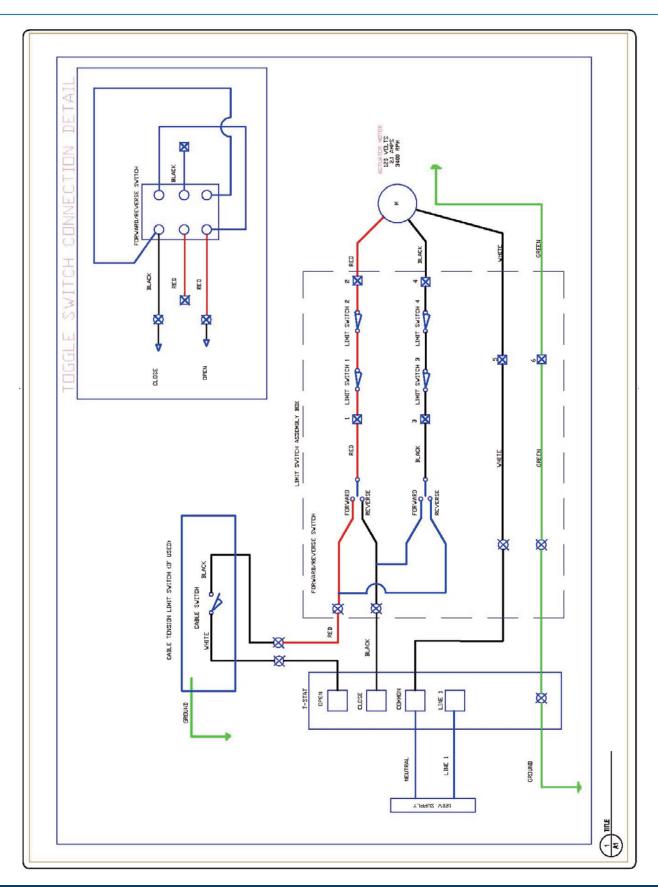
Position it so the flapper sits on top of the main cable, lift or lower the switch so you can hear the switch activate - this is the correct position Check when the switch is fastened to the header by pulling down on the cable slightly. You should hear the switch click.

The top cover comes separate with the switch but it needs to be installed to prevent birds from building nests directly on the switch.





APPENDIX A5 - PANEL SWITCH WIRING







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.

09-100-40 Auto winch drum unit 110V 09-101-40 Auto winch drum unit 220V OLD STYLE

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. Trim off excess cable pulled through drum hole.

Step 1: Mount drum unit on a pre-blocked area (12" x 36") 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.

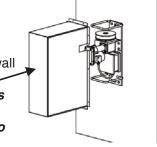
*S.S. Cover dimensions: 11"w x 30-1/2"h

**Note: Pre-blocked area should be a minimum 14" wide x 36" high x 3" thick, and flush with the top header board.

**Note: It is best to have only one layer of cable on drum surface.

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.

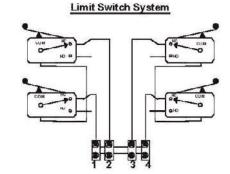


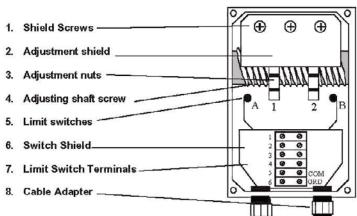
APPENDIX B1: LIMIT SWITCH SYSTEM

- a) Remove adjustment shield 2.
- b) Momentarily jog to verify that it is clockwise rotation. Adjusting nut 1 must be travelling toward limt switch A.
- c) 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

- d) 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.
- e) While holding adjustment nut 1, adjust in the counter clockwise direction by repeating step d) using adjusting nut 2 and limit switch b.
- f) Replace adjustment shield 2 in reverse position from which you recieved it from the manufacturer, ensuring that the shield edge retains the adjusting nuts in place.
- g) Replace cover to avoid dirt and humidity entering limit switch compartment.

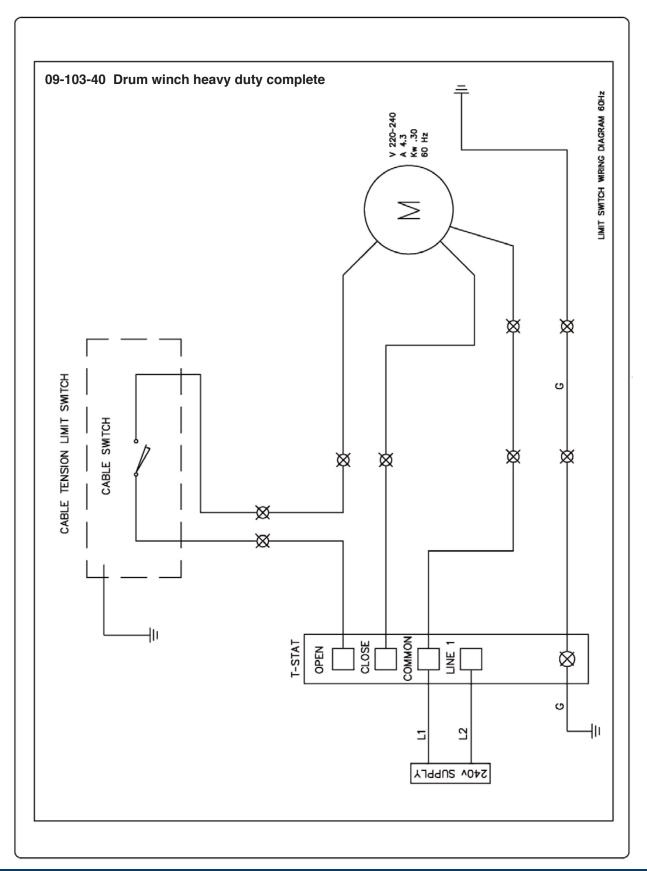








APPENDIX A7 - PANEL SWITCH WIRING





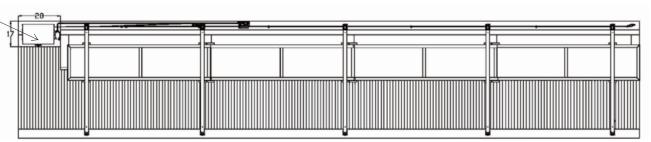


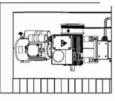
APPENDIX A8 - AUTOMATIC DRIVE UNIT INSTALLATION

Automatic drum winches can be a left or right hand drive unit. **For illustration purposes, the diagram below depicts a left hand drive unit. If it is a right hand drive rotate drive 180 degrees and put drum on top shaft.

**Note: Pre-blocked area should be a minimum 28" wide x 17" high x 3" thick, and flush with the top header board.

Step 1: Mount drum unit on a pre-blocked area (28" x 17") 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.

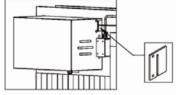




Step 2: Wrap lead in cable around wall side of drum, thread through cable hole in drum, and clamp with cable clamp provided on outside of drum.

**Note: cable should wrap 1-1/2 to 2 times around drum before connecting. Trim off excess cable pulled through drum hole.

*Note: It is best to have only one layer of cable on drum surface.

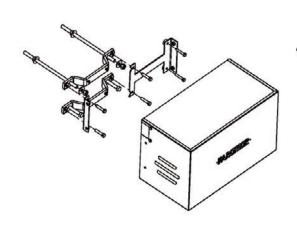


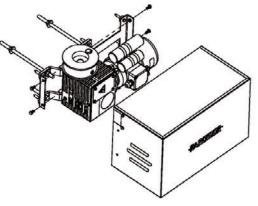
Step 3: Wrap lead in cable around wall side of drum, thread through cable hole in drum, and clamp with cable clamp provided on outside of drum.

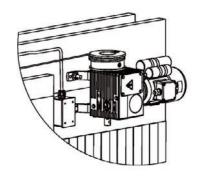
**Note: Depending on whether it is left hand or right hand drive, the small cable hole plate may need to be switched to opposite side. Install s.s. plate on opposite side.

APPENDIX A9 - MOUNTING DRIVES

**NOTE: drive removed for view



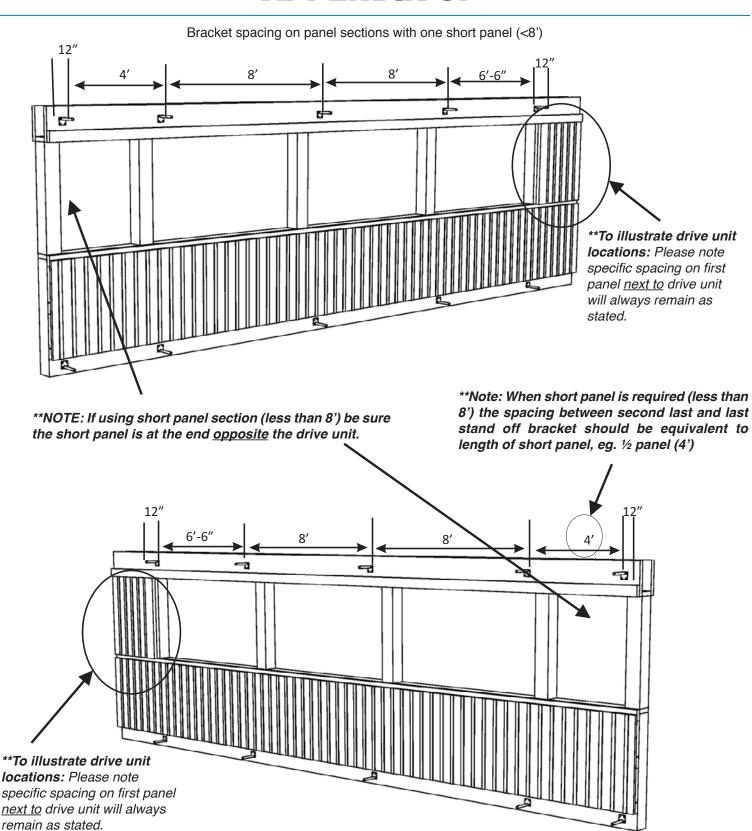








APPENDIX C:



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.





APPENDIX A10: SETTING DRIVE LIMITS

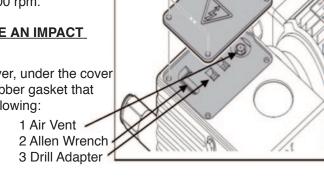


Limits should be set before power is applied to the unit.

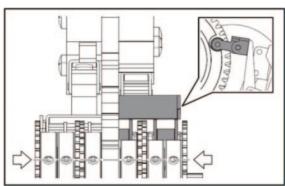
Use a drill with a maximum Speed of 1400 rpm.

DO NOT USE AN IMPACT

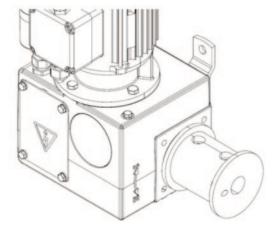
Remove cover, under the cover there is a rubber gasket that holds the following:



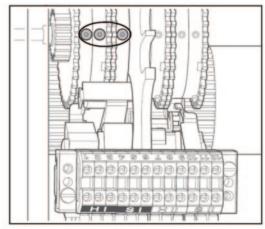
Remove plug and replace with air vent. (Install air vent here on drives with this orientation.



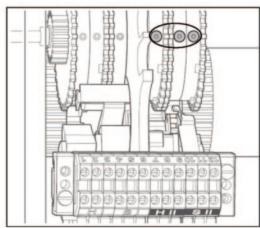
Before using drill to operate drive, chaeck that all the Allen screws are loose and inline across as per above drawing.



When operating drill, take note which direction the drum is turning as per marking on housing.



If drum is rotating in the I direction stop the drill when you reach desired position and tighten all 3 screws as above. Do not over tighten screws.



If drum is rotating in the II direction stop the drill when you reach desired position and tighten all 3 screws as above. Do not over tighten screws.





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 point 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 truck 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.



SAFETY & MAINTENANCE



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 refasten 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 botom 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.

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