FAROMOR

Standard Top Down

INSTALLATION MANUAL



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Introduction

Standard Top Down (TD) curtains are permanently fastened at the bottom of the opening and lowered (opened) from the top. In cold weather the initial air enters high on the side-wall to ensure ventilation with minimum draft.

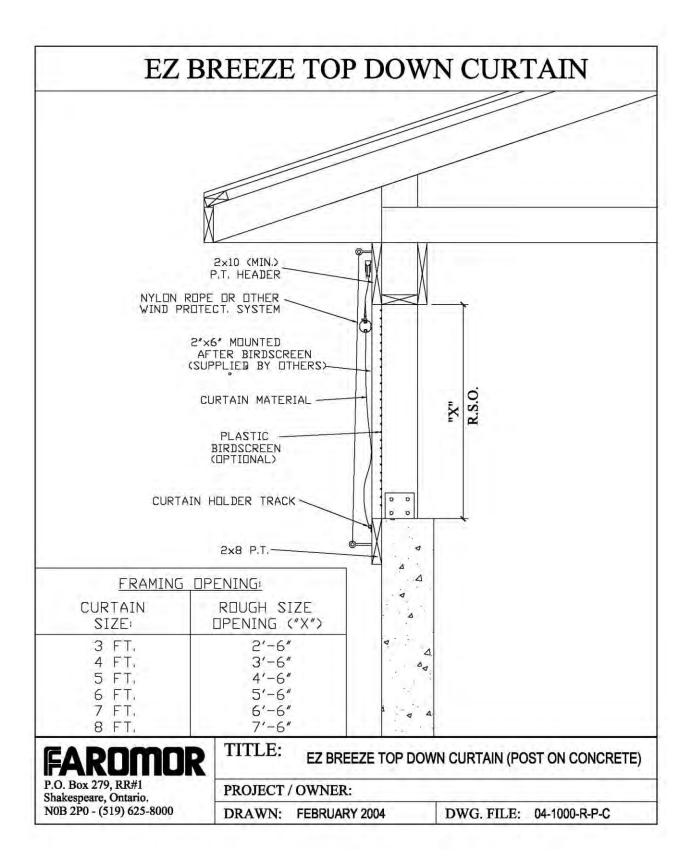
Curtains are operated on a cable and pulley system and can be operated by manual hand winch or automated with linear actuator and thermostat.

General Considerations

**Please read the following notes prior to installing the Standard Top Down Curtain: (For installation purposes, this manual shows "typical" installation with inside screen and outside wind ropes)

- 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 (manual vs automatic, wind ropes vs wind pipes, etc.)
- 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



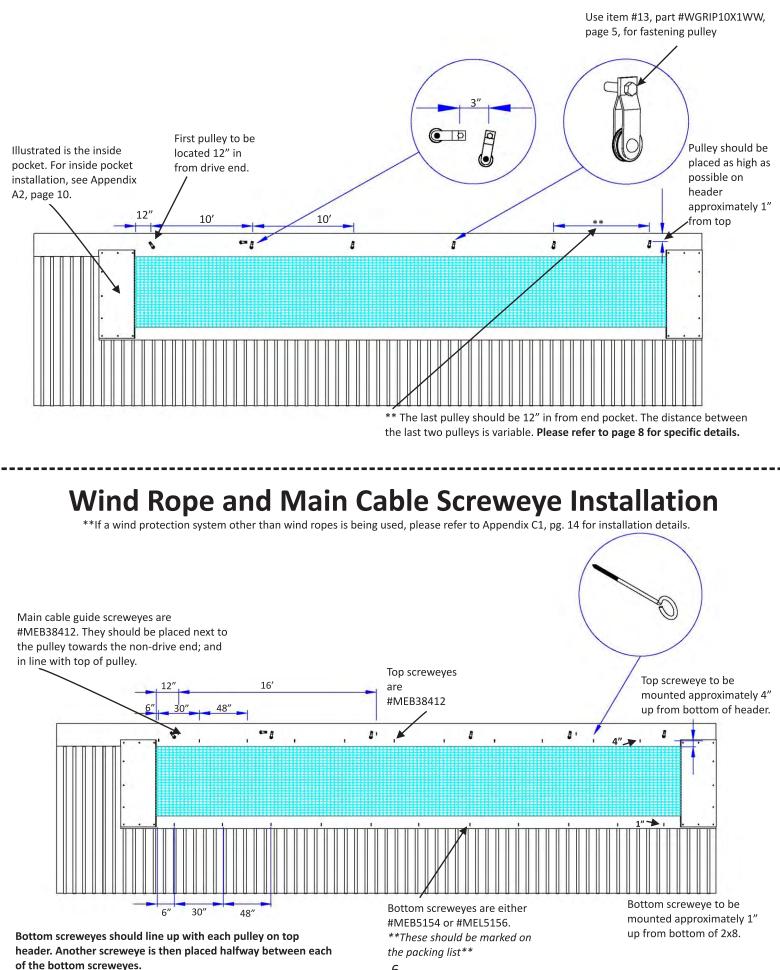
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Parts Listing

ltem #	Part #	Description	Picture
1	04-241-03 to 04-241-12	End pocket with track	
2	04-241-03-01	End pocket "U" bracket	
3	04-241-03-02	End pocket bracket	9 9
4	04-241-03-03	Tube holder bracket	
5	08-230-01-09	Aluminum tube	
6	04-143-03	3' curtain material - double rope	
7	ALCURTTRACK	Aluminum track for gear box	
8	MTRACKSEAL	Gray rubber moulding	۲ <u>ا</u>
9	BSCB5161 and NSHN516FF	5/16" x 1" s.s. carriage bolt and 5/16" s.s. hex nut	
10	BZHLB14X112 and SZWS14112TA	1/4" x 1-1/2" hex head lag and #14 x 1-1/2" pan soc head - zinc	
11	04-242-03 to 04-242-12	Outside Plain Pocket	
12	04-243-03 to 04-243-12	Inside end pocket (6' wide x curtain height + 1')	
13	WGRIP10X1WW	#10 X 1 w/w woodgrip screws	
14	08-230-14-01	S.S. Curtain pulley	CTIO
15	MEB38412 MEB5154 MEL5156 MSE551010	Screweyes	
16	08-110-04	End pulley bracket	

ltem #	Part #	Description	Picture
17	08-100-18 or 08-210-24-05	Stainless steel cable - 1/8" or 3/16"	$\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{$
18	08-200-17-04 or 08-210-24-04	Cable clamp - 1/8" or 3/16"	
19	08-230-01-10	Aluminum lift bar for curtain	
20	08-230-01-08	Tube joiner for 2" tubing	
21	R316X34SF	Small head aluminum rivet	фр
22	08-230-01-02	#5 nylon wind rope	\leq
23	08-230-25-02	Top "L" bracket	0
24	08-230-25-06	"Foot" bracket	the second se
25	ST12SCH40 GALV	½"galvanized wind pipe	
26	08-232-25-03	Bottom L Bracket for 2" Pipe Complete	
27	08-230-25-06	"Foot" bracket	A A A A A A A A A A A A A A A A A A A
28	08-130-21	Aluminum curtain track	
29	08-231-25-04	Centre bracket for split wind pipes	
30			
31			
32			

Curtain Pulley Installation

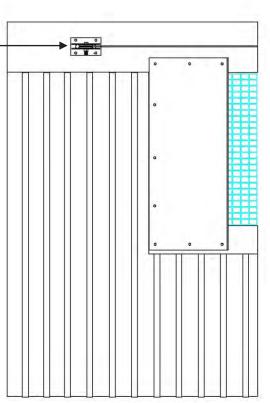


End Pulley Bracket and Winch Installation

Block pulley should be mounted in line with top of pull-up pulleys. It can be mounted at the outer edge of the end pocket.

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

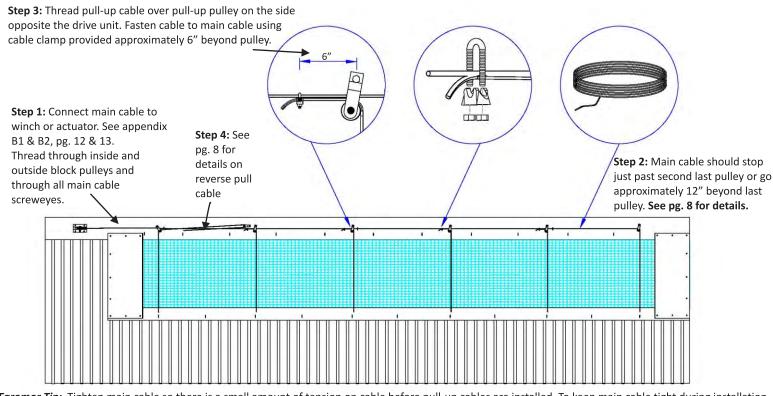
The outside block pulley and inside block pulley must line up for proper main cable operation. **See next diagram.



the cable can pass through the building. Interior block pulley should be mounted vertically to direct cable down towards winch. 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 to hold in place. Inside Outside

A hole must be drilled through header so

Pull-up Cable Installation

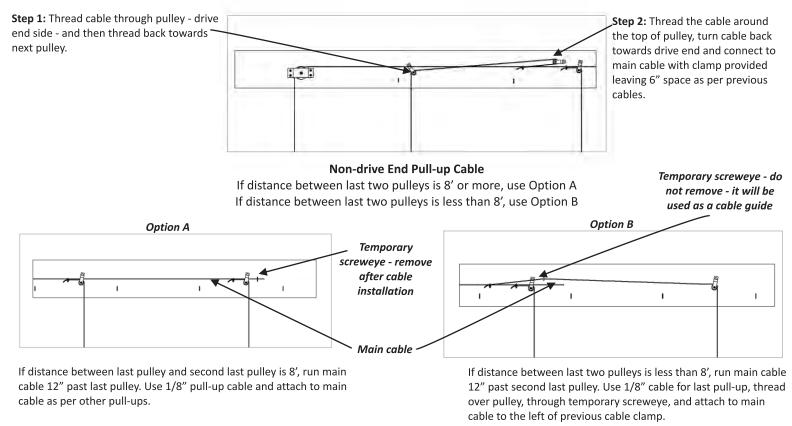


Faromor Tip: Tighten main cable so there is a small amount of tension on cable before pull-up cables are installed. To keep main cable tight during installation, it is recommended that you install a temporary screweye 12" beyond last pull-up pulley or second last pulley, depending on spacing. (See pg. 8) Fasten main cable to this screweye using cable clamp. Note: this screweye may need to be removed upon completion of cable installation.

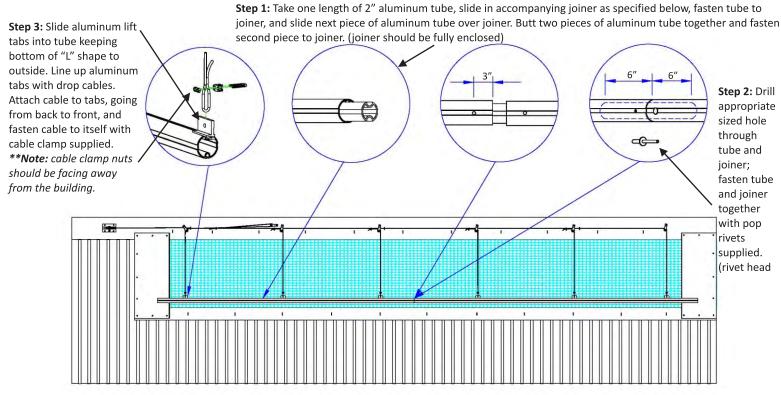
End Pull-up Cable Installation

Reverse Pull-up Cable Drive-end

Reverse pull-up cable should be packed separately and is twice as long as standard pull-up cable.



Top Aluminum Tube and Lift Tab Installation Installation



Faromor Tip: To ensure drop cable lengths are even, lay entire length of aluminum pipe onto bottom screweyes. Attach cable to lift tabs and tighten securely. (hold aluminum pipe firmly onto screweyes to avoid lifting of pipe)

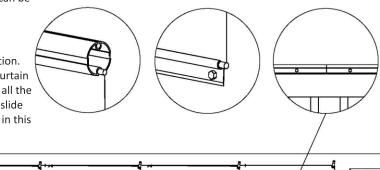
Curtain and Bottom Track Installation

Step 1: Sewn into the top and bottom of curtain material is a nylon rope. With top tube raised to convenient height begin sliding rope/curtain material into aluminum tube. Slide curtain to far end of tube so curtain is fully unrolled. If curtain material is too long it can be cut to size.

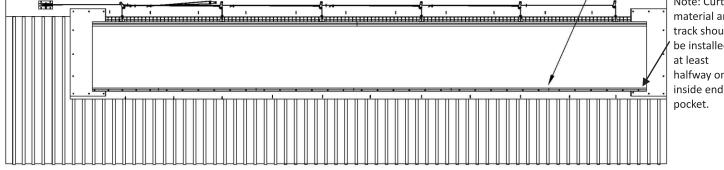
**See Faromor tip.

Step 2: Raise curtain to top of opening so it is in the closed position. Take one length of aluminum track, slide onto bottom rope on curtain material with flat part pointing down and against the wall. Slide all the way to far end of curtain. Take second piece of aluminum track, slide onto bottom of curtain and butt up against first piece. Continue in this fashion until all necessary track is installed.

Step 3: Starting from one end, hold aluminum track and pull downwards until curtain material is tight. Put track onto bottom board and fasten with screws provided. Continue fastening track at 12" intervals.



Note: Curtain material and track should be installed at least halfway onto inside end pocket.



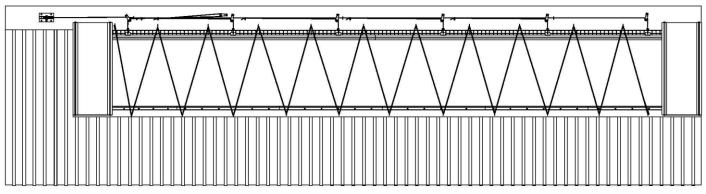
Faromor Tip: 1) Before sliding rope/curtain into top tube, temporarily fasten top tube to wall at one end to prevent pipe from moving while pulling curtain. **Note: Remove temporary fastener from tube when complete.

2) To prevent curtain from moving while installing bottom track, fasten rope/curtain to top aluminum tube by screwing self-drilling screw through rope into aluminum at one end.

Wind Rope Installation

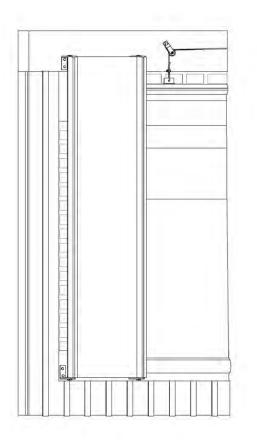
At this point, the curtain must be raised to the closed position. This can be done by cranking manual winch or override winch with main cable attached. See drive unit installation Appendix B1 or B2, pg. 12 or 13. The top aluminum tube should come completely onto top header but not touching top screweyes.

> To install wind ropes, attach one end of rope to first top screweye by tying a knot. Thread rope down through first bottom screweye, then back up to next top screweye. Continue in this zig-zag fashion to end of section. **Note: It is recommended that the rope be installed in approximately 50' sections. Tie off rope at a bottom screweye and start next 50' length on same screweye. (As the rope will stretch over time, this will allow you to more easily tighten or repair when necessary)





Appendix A1 - End Pocket Installation



GENERAL

Inside end flap must be installed first.

The height of a pocket is one foot higher than curtain height.

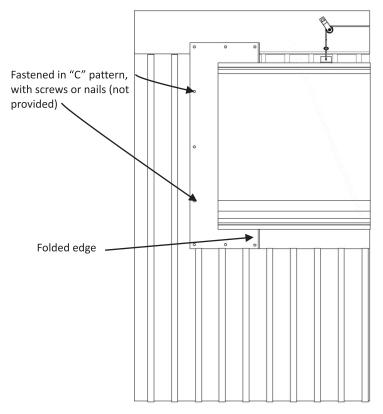
Outside end pockets are determined by curtain styles. There will either be two plain pockets (as shown here); or one plain and one pocket with tracks.

For plain outside end pocket assembly, see pg. 11.

For pockets with tracks, (used with split curtain installations), see Appendix A4, pg. 11.

**Please note: For Roll-A-Way curtains, and Standard Top Down curtains (with Summer Roll-Up or on a split curtain system), you must use an end pocket with track to match top and bottom.

Appendix A2 - Inside Pockets



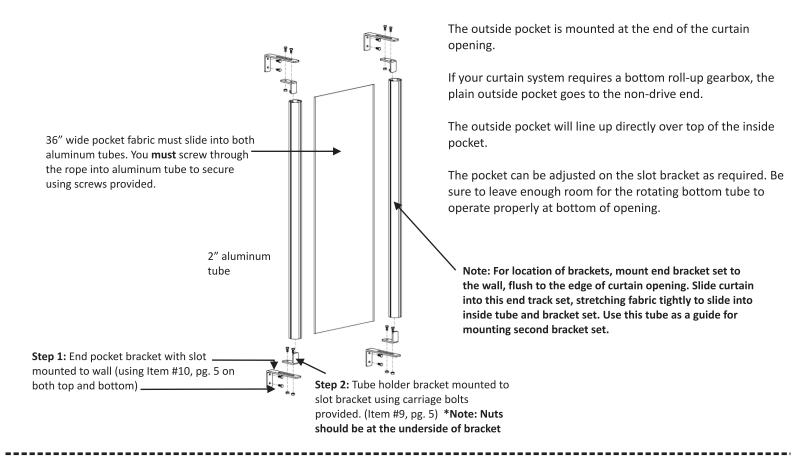
Inside end pockets are the same for any style of curtain.

The inside flap is 6' wide material that is folded in half to make a 3' wide inside pocket. The height of the pocket will be one foot longer than the height of your curtain; e.g. 4' high curtain requires 5' high end pocket.

The inside flap should be mounted at both ends of the curtain opening. The folded edge is to the interior of the opening. (See diagram)

You must fasten the material to the wall along the top, the outer edge, and the bottom in a "C" pattern. (see diagram)

Appendix A3 - Outside Plain Pocket



Appendix A4 - End Pocket with Track

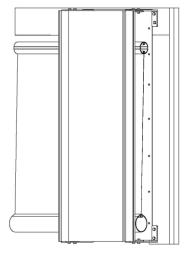
The outside pocket is mounted at the end of the curtain opening. If your curtain system requires a bottom roll-up gearbox, the plain outside pocket goes to the non-drive end. Step 5: Gray rubber moulding slides into -The outside pocket will line up directly over top of the inside each track and overlaps. The convex rubber pocket. fingers should overlap for a good seal. The pocket can be adjusted on the slot bracket as required. Be sure to leave enough room for the rotating bottom tube to Step 4: 36" wide pocket fabric must slide into operate properly at bottom of opening. both aluminum tubes. You must screw through the rope into aluminum tube to secure using screws provided. (Need to fasten Note: For location of brackets, mount end bracket set to the wall, at top only) flush to the edge of curtain opening. Slide curtain into this end track set, stretching fabric tightly to slide into inside tube and bracket set. Use this tube as a guide for mounting second bracket set. Aluminum track Tube holder bracket mounted to slot Step 3: Track mounted to "U" bracket bracket using carriage bolts provided using 1/4" bolt and nut provided Step 2: End pocket "U" bracket mounted to slot bracket using carriage bolts Step 1: End pocket bracket with slot provided. *Note: Nuts should be at the underside of bracket mounted to wall using Item #10, pg. 5, on both top and bottom. -11-

Appendix A5 - End pocket Completion

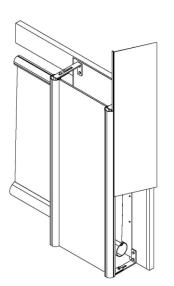
To complete the end pockets, we must now close in the very end of the sections. On either style of end pocket (with or without track) you will have a groove in the aluminum at the outermost edge to allow curtain material to slide in. Use one foot wide curtain material with rope and slide into track or tube.

Make sure curtain material reaches top to bottom, pull material onto framed opening and fasten to wall using plastic nailer strip and woodgrips provided. Trim off excess curtain material as required.

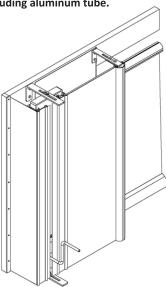
**Note: For Roll-A-Way curtains only: On drive unit end, curtain material must finish approximately 3" above protruding aluminum tube.



Step 1: End pocket before installation of fabric closure strip.



Step 2: Install fabric end closure strip - slide into aluminum tube from top or bottom.

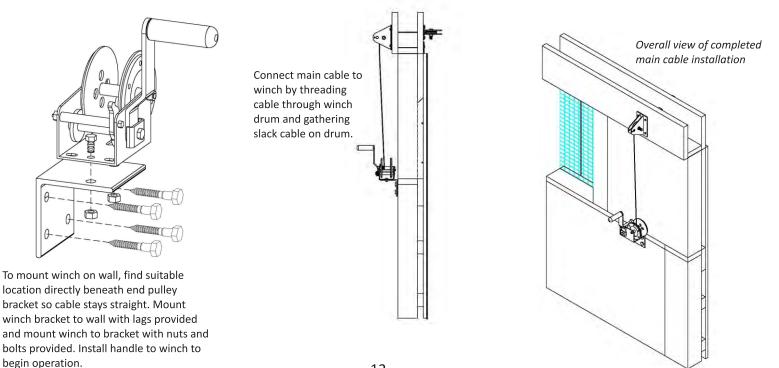


Step 3: Install plastic or wood nailer strip. (Can be mounted as shown or wrapped to outside to hide strip)

Appendix B1 - Manual Drive Unit Installation

Manual drive units are interchangeable from right-hand to left-hand. **Illustration is for a right hand drive unit

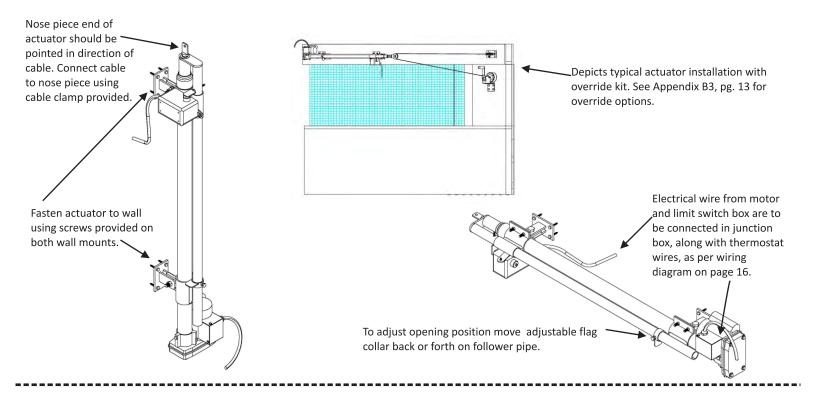
Gear box drive unit is mounted into the outermost track on the end pocket.



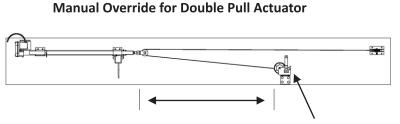
Appendix B2 - Linear Actuator Installation

Linear actuator can be installed either horizontally or vertically on the inside of the building. The actuator must be situated so that the main cable comes from the inside pulley and can attach to the nose piece.

Each actuator must be located a minimum of twice the stroke length plus one foot away from end pulley. i.e., 3' actuator should be 7' away from end pulley.



Appendix B3: Manual Override Installation



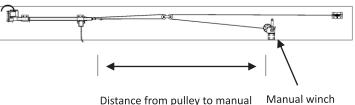
Distance from pulley to manual winch must be greater than actuator stroke length plus one foot.

Manual winch placement is variable. (see pg. 12)

With actuator in closed position (where limit switch is touching flag), thread main cable around end pulley through pulley on end of actuator and connect to manual winch. Crank manual winch until outside curtain comes to fully closed position. The actuator may now be used in automatic mode. **Step 1:** Attach override cable to nose piece of actuator using cable clamp, thread around one wheel of double floating pulley, bring cable back to actuator, and attach to foot mount bracket using cable clamp.

****Note:** Be sure not to leave cable too long or too short. Adjust for proper length at end of installation, i.e. twice length of stroke plus one foot.

Manual Override for Single Pull Actuator



Distance from pulley to manual winch must be greater than actuator stroke length plus one foot. Manual winch placement is variable. (see pg. 12)

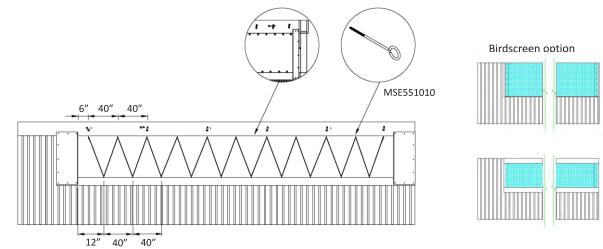
Step 2: Thread main cable around inside end pulley through second wheel on double floating pulley and attach to manual winch. With actuator in closed position, crank winch until curtain is in closed position. You may now operate actuator in automatic mode.

Appendix C1: Wind Protection Systems

Inside Wind Protection System Options

If installing birdscreen, it should be done first.

However if using inside wind rope system it can be installed at the same time as outside wind rope on pg. 9.



Birdscreen should be installed prior to top header and bottom board and should be installed from one end of opening to the other. To install birdscreen, fasten at one end of opening using galvanized roof nail (not supplied). Stretch roll to next post and fasten with same fasteners and continue until other end of opening. ****Note:** Keep birdscreen as tight as possible to avoid wrinkles.

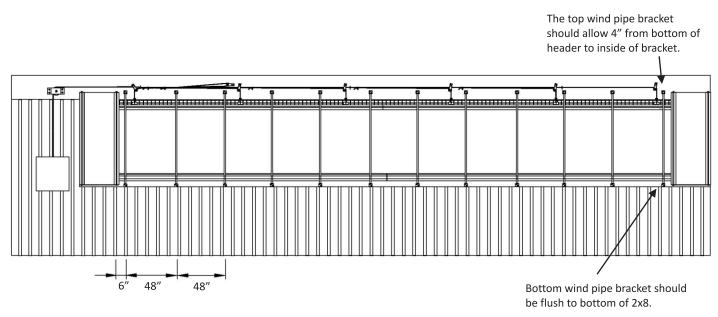
If inside wind rope is being installed use small screweye for both top and bottom. Spacing of inside screweyes should be opposite those on page 10. The inside top screweye should line up underneath each pulley and spaced as per above. Screweyes are to be mounted on underside of header and on top of bottom board.

**Note: It is recommended that the rope be installed in approximately 50' sections. Tie off rope at a bottom screweye and start next 50' length on same screweye. (This will allow you to more easily tighten and repair wind rope if necessary)

Once birdscreen is covering the full opening, you can now install top and bottom boards which will sandwich the birdscreen and help hold it in place.

Appendix C2: Wind Pipe Installation

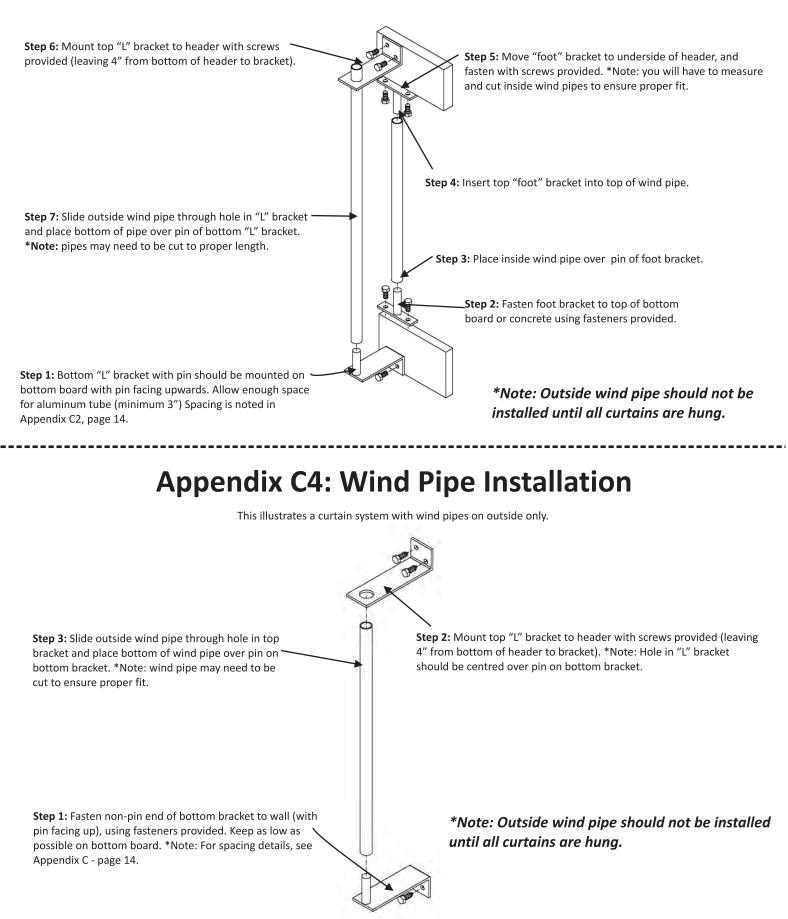
If curtain system is to have both inside and outside wind pipes, install inside wind pipe after curtain pulley installation on page 6. If system is to have outside wind pipes only, they should be installed as the last step of the overall installation.



Typical spacing

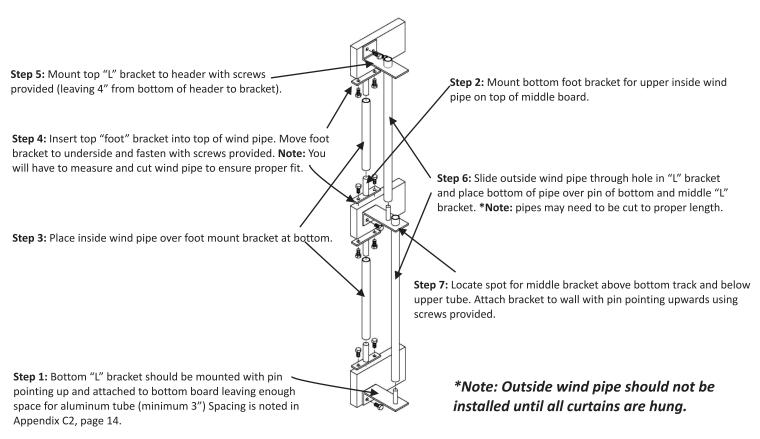
Appendix C3: Wind Pipe Installation

This illustrates a curtain system with wind pipes inside and outside.

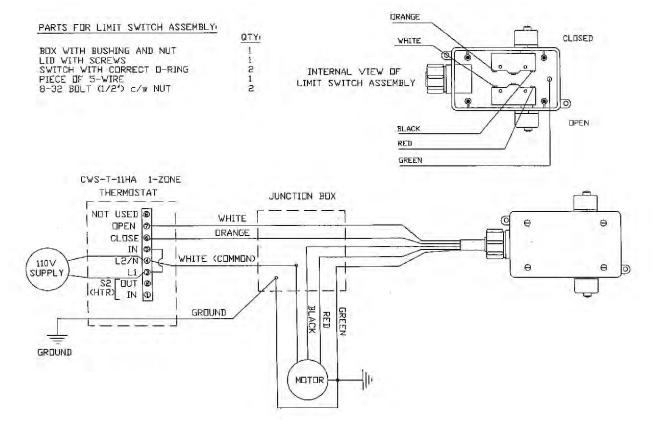


Appendix C5: Wind Pipe Installation

This illustrates a split curtain system with inside and outside wind pipes.



Appendix D1: Limit Switch System



Finishing Tips and Touches

- Double check all pull-up pulleys and flush mount pulleys to ensure smooth operation. Check all cable movements and ensure that no cables are getting caught or stuck which will result in curtain not operating properly.
- 2) Use a small piece of electrical tape to tape off all loose ends of pull-up and main cables. This will help to prevent fraying of cables, which can result in curtain being damaged.
- 3) Ensure end pockets are proper distance away from wall after installation is complete. They should allow curtain to roll and have some movement in and out from wall, but not allow excessive movement that might be caused by strong winds permitting excessive air leakage.
- 4) If using linear actuator, ensure limit switches are set properly and securely before using curtain in automatic mode.

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.





CURTAIN SYSTEMS SAFETY PRECAUTIONS

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

General Operation

- Curtains 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.

CURTAIN SYSTEMS MAINTENANCE

RAW/BRU/STD/STDS

- 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 curtain system. Where necessary, loosen cable clamp, pull cable tight and refasten clamp when curtain is level.
- Ensure all cable clamps are tightly secured so it does not result in drop cables coming loose.
- Ensure curtains remain pulled tight from one end to the other. If curtain seems to be bunching or creasing, curtain may need to be tightened.
- Check all pulleys for excess wear on wheels that may cause cable to get caught.
- Periodically check over aluminum tubes to ensure they are connected tightly.
- · Check end pockets to ensure all nuts and bolts are tightly secured.
- Tighten windropes as necessary to make sure there is no slack.
- For bottom roll-up systems, ensure aluminum track is clear of any debris and that gearbox wheels are turning smoothly.

PRC

- Ensure all mounting brackets are secured tightly to wall and to end of aluminum tube.
- Periodically check that center support rollers are rolling properly and not seized.
- If applicable, ensure valance does not get caught in roller tube.
- Check for wear on sidewall seals periodically if heavy cow traffic is an issue.

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

Corporate Office: 2157 Parkedale Ave. PO Box 367, Brockville, Ontario K6V 5V6. Fax: 1-800-263-4598 **Arthur Manufacturing Facility:** 7686 Sixteenth Line, Arthur, Ontario N0G 1A0. Fax: 1-800-263-4598



General Cleaning:

AgSystems

- 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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