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I. Care and Maintenance

Operational Warning: Fleetwood products operate smoothly and special care should be taken by the owner to make sure users are not injured.

This product is factory finished. Please handle with extreme care. Protect all exposed surfaces from contact with caustics, corrosives, solvents, abrasions, impacts, wet packing material etc. **FAILURE TO DO SO WILL NULLIFY THE WARRANTY**. Before **ANY CLEANING**, review the Care & Maintenance Instructions (go to www.fleetwoodusa.com for more information). **Contact the local dealer with any questions or concerns.** Fleetwood strongly recommends that all products be cleaned after installation and totally protected from construction debris and equipment.

II. Tools / Materials, Sealant Requirements, & Load / Anchor Instructions

Tools Required: Tape measure, Soft mallet, adjustable crescent wrench, Plumb bob / line, Flat head screwdriver, Laser Level or 8' level, Shims, Nails, Screws, Sealant, caulk gun, Backer Rod, Scissors or utility knife, hex keys, drill bit, drive bit and powered drill.

Sealant Requirements

- The sealant referred to within this document for seals associated with the assembly of the product should conform to **AAMA 800**. It is recommended that all other sealants conform to **AAMA 800** but may be a sealant recommended and approved by the sealant manufacturer that is compatible with the framing, finish, and surrounding materials.
- All sealant bead sizes must conform to the sealant manufacturers' size requirements.
- The Owner / General Contractor is responsible for identifying the need for any additional sealant to be applied by others. Such sealant shall be elastomeric material, with the framing, finish and surrounding materials.

Load / Anchor Instructions

- Live or Dead Loads can affect product functionality, loads shall be designed to withstand the most critical effects of load factors and load combinations as required by building code.
- Fleetwood requires maximum vertical deflection of the header not to exceed Span/720 or 1/8"
- Structural engineer to determine anchor quantity and spacing for design load requirements.
- Review panel pressure loads and lateral force with flooring manufacturers specifications.
- Proper material must be used between all dissimilar materials (i.e. block/concrete & aluminum).

III. Assembly and Installation

General: The key to any window or door installation is preparation. This extends from storage of the product to the final installation and to all points in between. Careful planning and attention to detail can help ensure proper installation.

It is essential that each Fleetwood product be assembled and glazed in accordance with AAMA standards and factory instructions. It is the installer's responsibility to ensure that each Fleetwood product is assembled, glazed and installed and completely sealed to ensure that the product is leak-free and operates correctly**. Installation of Fleetwood products must be in accordance with the standards set forth in ASTM E 2112**. If there are any questions regarding the installation of a Fleetwood product contact the factory customer service department.

Fleetwood has provided this product with recommended field glazed weather-stripping. If the provided weather-stripping does not ensure an optimum fit of glass to frame the Fleetwood

Authorized Dealer should contact Customer Service for an expedited NO CHARGE shipment of replacement weather-stripping.

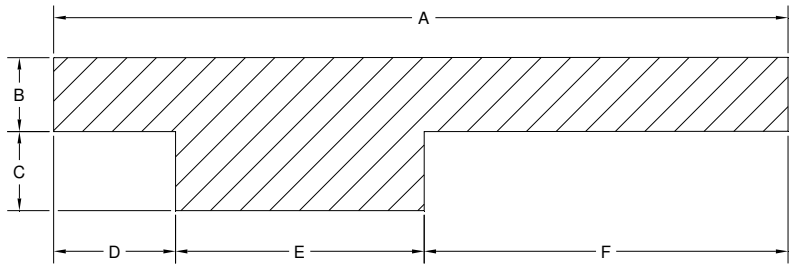
IV. Arche-Duct opening verification (skip if no Arche-Duct)

Table 1: Arche-Duct Framing Dimensions

Model	A	B		C		D	E	F	G	
H28	N.F.W. + 1.00”	3.75”	5.25” Sillpan Tabs	4.25”	3.5” Sillpan Tabs	Pivot Location – 2.75”	13.375”	A - (D+E)	8.00”	9.5” Sillpan Tabs
Pivot Set							7”			

For additional dimensions see Appendix A.

Method A:



OR

Method B:

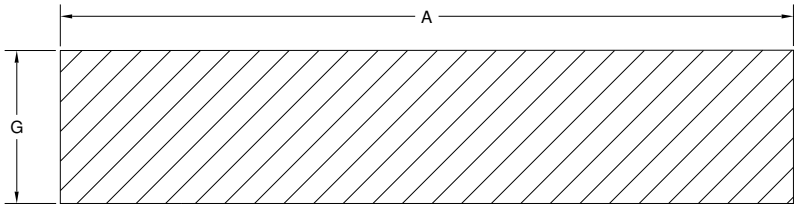
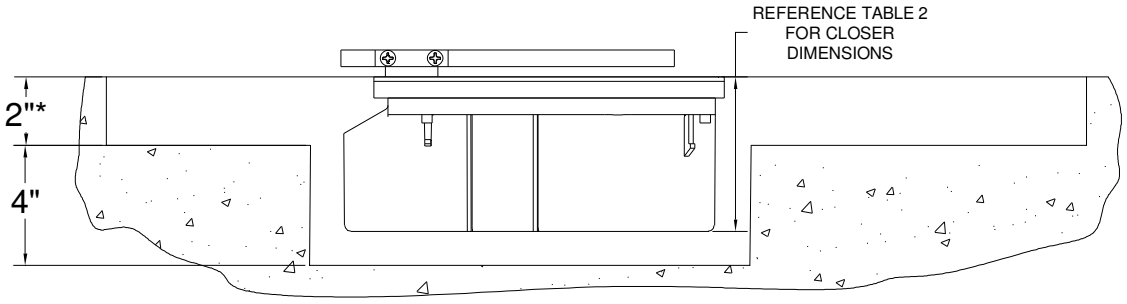


Figure 1:
Arche-Duct Framing (Top View)



* Minimum depth required for Arche-Duct and Rixson closer. Additional depth may be required for drainage. Side drains sit $\frac{3}{16}$" below bottom of Arche-Duct

Figure 2:
Rixson Arche-Duct Opening (Side View)

V. Opening, Frame and Panel Verification

1. Opening Verification

- Check the measurements of the opening and verify that the door will fit into the opening. Measure all four sides of the opening to make sure it is 1/2" larger than the doors in width and 1/4" in height.
- Verify the opening is plumb, square, and level (Figure 3).
- Verify location / dimension Arche-Duct opening (Figure 1,2).
- Remove the frame from packaging (save all red bag items for use later) and lay it in front of the opening. Check door net frame width / height dimensions and verify pivot distance (per order).

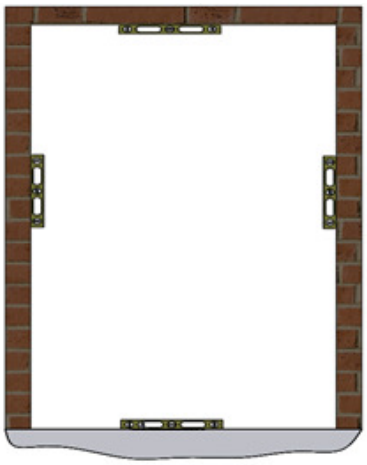


Figure 3:
Level Locations

2. Pre-Fit and Leveling

Note: Do not leave the Arche-Duct system exposed for more than 3 months. Prolonged exposure will damage the powder coated finish.

- Place the Arche-Duct drain system into the opening and determine any leveling that must be done prior to installation (Figure 3). Prepare relief areas for the PVC drain flange(s).
- Shim as necessary to stabilize the entire depth and length of the Arche-Duct. No unsupported width of more than 8” is allowed. Shim to be load bearing, non-porous, non-absorbent and inorganic.
- If more than 1/8” shim height is required, it is recommended that pouring self-leveling “Rock Hard” (or equal) to achieve level and stable surface.

3. Flash the Opening

- Once the opening has been confirmed, flashing of the opening is required prior to Frame installation. Paper and/or liquid flashing methods are acceptable (see AAMA 711/714 for material requirements).
- Check local Building codes for any additional flashing requirements.

Paper Flashing

- At each Jamb the flashing paper should be cut at least 3” past the weep-screed or diado flashing and at least 6” above the head of the door. The flashing must wrap around the jamb and at least 3” back into the opening.
- At the Head run the flashing paper long enough to extend at least 3” past the jamb flashing and wrap around the Header at least 3” into the opening.

Liquid Flashing

- Follow the liquid flashing manufacturer instructions.

4. Arche-Duct Water Test

Note: Installer responsible for verifying the integrity of the Arche-Duct for water leakage and performance.

- Block all drain outlets and fill the Arche-Duct with water to verify the integrity of all seams and drain connections. Look for leak points, the water level of the Arche-Duct should remain constant. If the Arche-Duct passes water test, drain Arche-Duct and continue with installation of frame.

5. Arche-Duct Install

Note: Do not leave the Arche-Duct system exposed for more than 3 months. Prolonged exposure will damage the powder coated finish.

- Confirm proper orientation of Arche-Duct for tracks and drain location with customer order and/or dealer drawings.
- Install Arche-Duct into already leveled opening. An insulating material should be placed between the Arche-Duct and the supporting structure (concrete, steel, etc.) to prevent corrosion of the aluminum Arche-Duct.
- Connect tubing or pipe to Arche-Duct drain connections.

6. Confirm Weeping Slots

- Typical weep slot quantity to be 3 per single panel configuration.

7. Backfill

- Do not back-fill until door operation is fully tested, including locking into jamb(s) and locking into pocket interlocker (when applicable).
- Verify you have access to drainage connections and clean out as necessary.

VI. Frame Assembly

Note: Failure to assemble the frame according to the installation instructions, nullifies warranties related to this product.

- Apply a compatible sealant to the corners of the frame. Assemble the frame with screws provided (Figure 4).

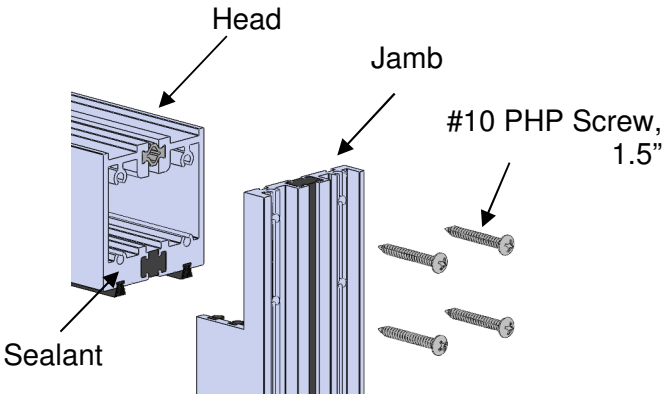


Figure 4:
Frame Assembly

VII. Frame Installation

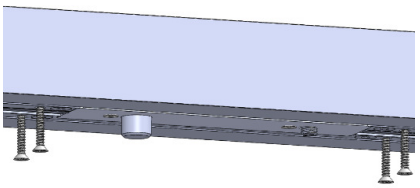


Figure 5:
Securing Top Pivot

Note: Fleetwood recommends the use of a laser level or 8' level for frame installations. Cross-measure within ±1/32" for interior and exterior.

1. If the product has V-Locks attach the wiring harness to the V-Lock now. After frame and panel installation is completed it is recommended that operation of the V-Lock is tested. See Section XI for instructions on how to test the operation of the V-Lock.
2. Seal frame and vent joints completely with compatible sealant.
3. Insert the frame into the Arche-Duct. Cross-measure and adjust to achieve a plumb square and level condition. Shim where needed. Seal all fastener heads with compatible sealant.
4. Insert sill extrusions into Arche-Duct.
5. Secure top pivot to header with #10 screw min. 4" long (not by Fleetwood). See Figure 5 for illustration.

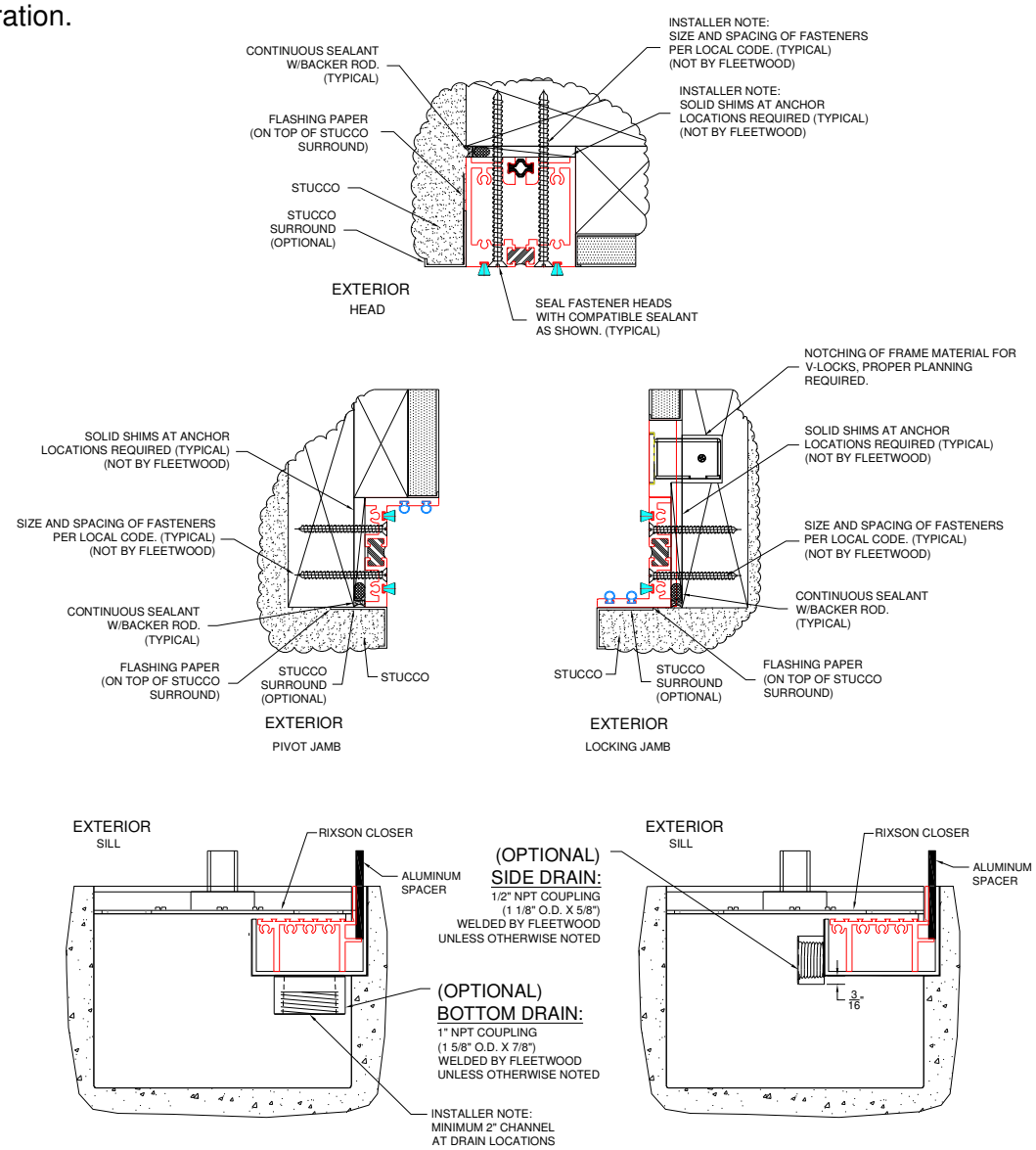


Figure 6:
Rixson Block Frame Installation

VIII. Floor Closer Installation

1. Set the closer into the floor 1-1/4” from the back of the jamb and level (confirm with plumb line as stated in step 4). Closer is to be installed in line to the door and flush to the floor (Figure 7).
2. Measure dimension of “A” as specified from opening to the spindle center (Figure 8 & Table 2).
3. Set closer surface flush with the finished floor. Continue to step 4.

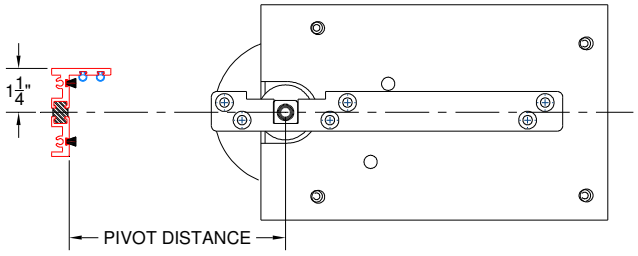
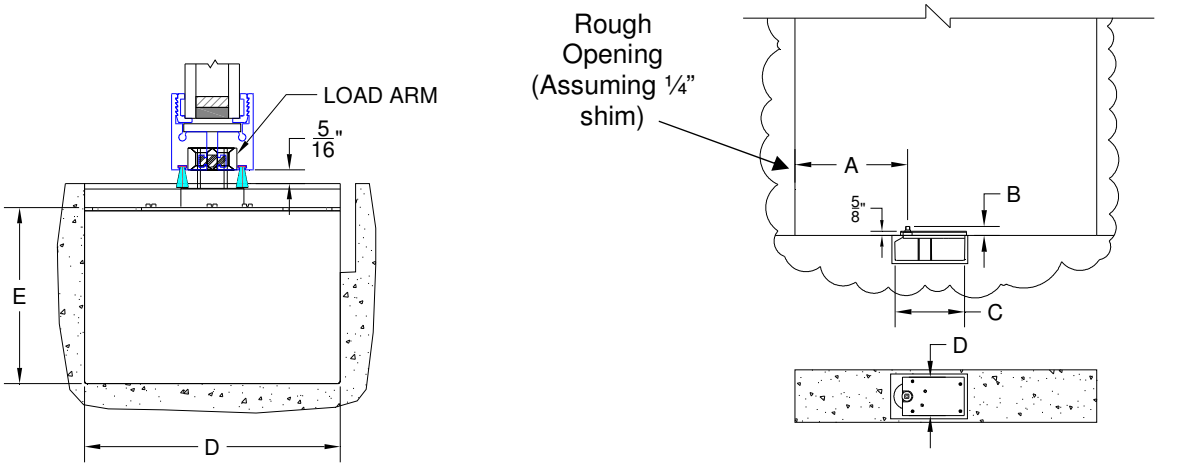


Figure 7:
Closer Positioning



Rixson Closer H28-587 Shown.

Figure 8:
Frame, Closer, Pivot Opening

Table 2: Pivot Location, Floor Closer & Pivot Set Dimensions.

Model	A	B	C*	D*	E*	Cover Plates
H28-587	Pivot Location + 0.75”	1.375”	11.375”	6.125”	4.063”	0.625”
Pivot Set H117 3/4-587			6.5”	5.5”	2.375”	

* Hole rough opening: add a minimum 1.0” around the closer (& pivot set) for cement or equivalent back fill.

4. Use a plumb line to center top pivot pin with center of closer spindle (Figure 9).

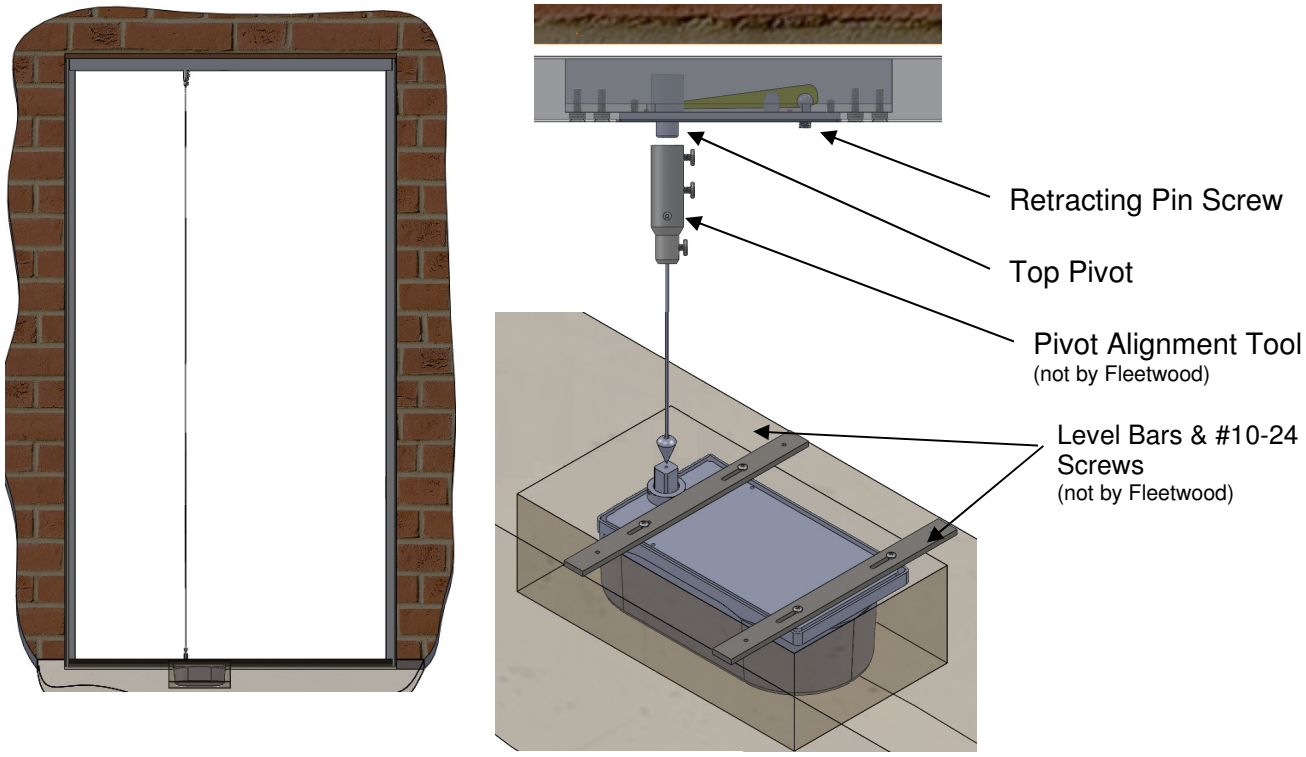


Figure 9:
In-line Verification

5. Grout in closer with cement or equivalent. Continue to Section X, panel installation when cement is cured.
6. Complete flooring around closer and Arche-Duct.
7. Install cover plates to closer (Figure 10).

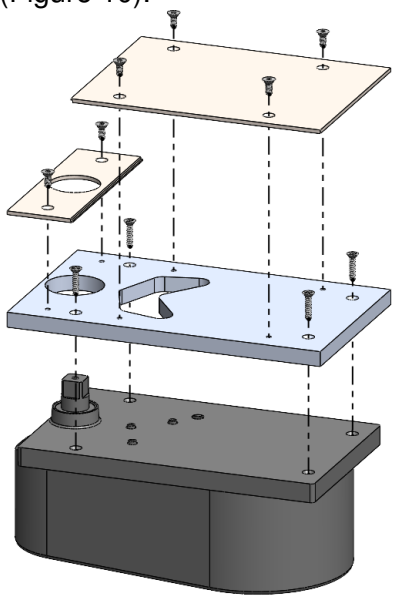


Figure 10:
Cover Plate Installation

IX. Glass Key Assembly (For Replacement Glass)

Note: Keep for replacement glass, installer to size and cut.

1. Measure the glass thickness along all 4 sides of the glass.
2. Add the measurements together and divide by the number of measurements taken. This is the average glass thickness.
3. Use Table 3 to select the appropriate glass keys. Figure 11 can be used to properly identify the glass keys.

Table 3: Glass Key Selection

Average Glass Thickness	Extrusion
1.1875”-1.212”	Es0017
1.213”-1.237”	Es0017 & Es0002
1.238”-1.262”	Es0002
1.263”-1.313”	Es0002 & Es0018

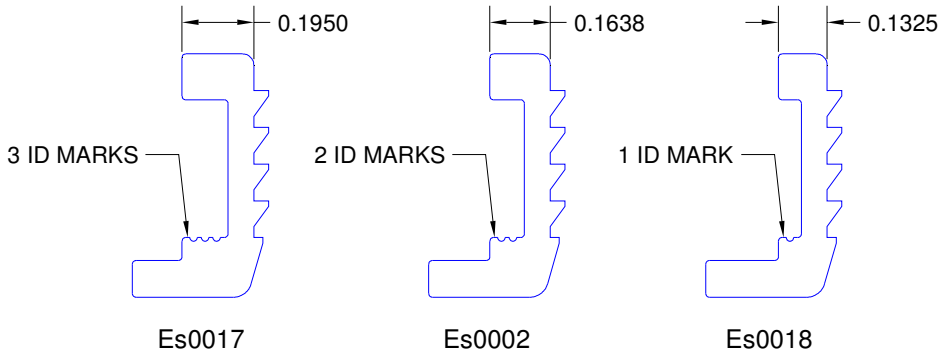


Figure 11:
Glass Key Identification

4. Measure the side of the glass where the glass key is to be placed. Subtract 1-1/8” from the measurement. This is to leave a 9/16” gap at the corners of the glass, without this gap it will not be possible to slide / remove the panel components.
5. Cut the glass keys to size. Clean off any debris.
6. Place 1/4” × 1/4” bead of structural sealant along middle of glass keys.
7. Press the glass key to the face of the glass. The key needs to be placed firmly against the edge of the glass (Figure 12). This is most easily achieved by pressing at a 45° angle onto the glass.
8. Repeat the procedure for all sides top and bottom of the glass.
9. Apply a bead of sealant that is compatible with the insulated glass seal to all four ***exterior*** corners as shown in Detail “A”.

Notes:

a. The glass thickness, net width and height must be to size within +/- 1/32”.
b. Failure to install according to these instructions nullifies all warranties related to this product.

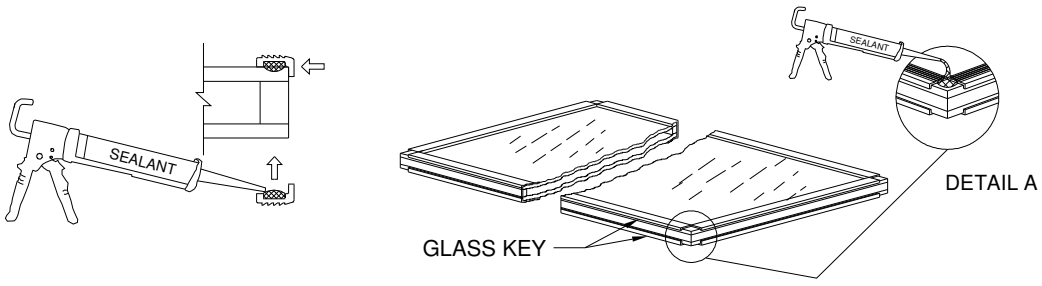


Figure 12:
Glass Key Application

X. Panel Installation

- **Closing Speed Adjustment** see Appendix B.

1. Retract top pivot pin by turning retracting pin screw counterclockwise (Figure 13). Install washer & thrust bearing to spindle (Figure 15).
2. On the panel, remove the Load Arm Cover Plate with a T15 torx bit. Then remove the (2) Phillips head screws holding the Load Arm Block in place (Figure 14).
3. With the floor closer in the slowest settings use a crescent wrench to turn the pivot perpendicular to the frame.
4. Tilt door to place on spindle (Figure 15) and attach Load Arm Block but do not tighten.
5. Align the two portions of top pivot and turn pin retracting screw clockwise (Figure 13).
6. Tighten Load Arm Block screws and install Load Arm Cover Plate.
7. The installer is responsible for the integrity of all framing joints after installation and must therefore water test all joints to guarantee a completely sealed product. Apply joint sealer and/or sealant necessary to ensure watertight joints. Retest as necessary.
8. To complete the panel installation, apply backer rod and a complete bed of sealant to the entire exterior and interior joint between the frame and the building structure. Tool the sealant to eliminate bubbles, voids and / or breaks and ensure a completely watertight seal (Figure 6).

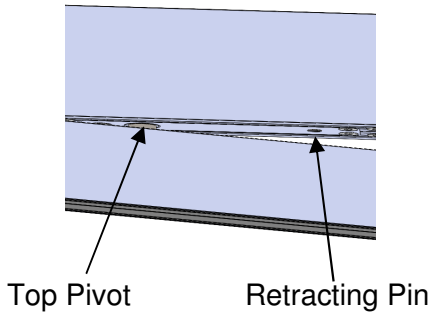


Figure 13:
Top Pivot Locking

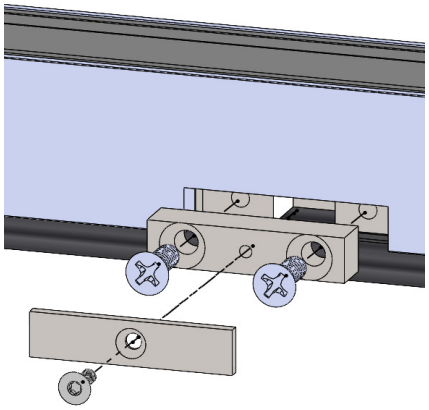


Figure 14:
Load Arm Cover Plate / Block Assembly

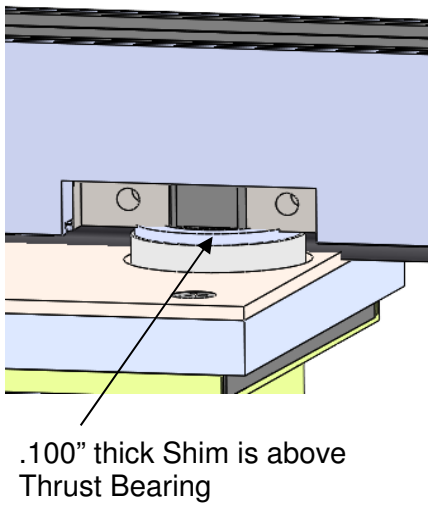


Figure 15:
Shim Location, Interior (weatherseal removed for clarity only)

XI. V-Lock Testing

- **V-Lock Wiring & Indication LED** see Appendix C or included V-Lock Instructions
- **FOR TESTING ONLY**
- **ONE test kit per door** (regardless of quantity of locks).
- **ONE Wiring Harness per V-Lock**

Note: The V-Lock Wiring Harness will need to be accessible for testing and special care should be taken to not damage the connection between the latch and the harness.

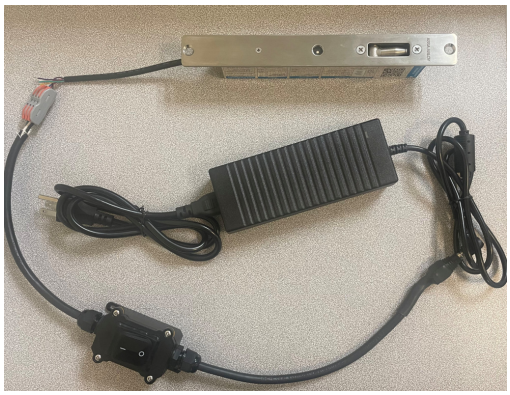


Figure 16:
V-Lock Testing Kit

1. Fleetwood has provided the following kit in order to test the operation of the V-Lock only, it is not meant for permanent use. This testing is to be done prior to adding the surround to the frame.
2. Unbox the V-Lock Test Kit. This kit includes a power adapter, toggle switch, and a quick connect as shown in Figure 16 (the wiring harness is to be installed to the V-Lock during the frame installation phase to avoid any need to remove the lock from the frame).
3. Use the wiring diagram (Figure 17) to wire the V-Lock to the Testing Kit.
4. The lock is provided in a fail-safe mode, when the toggle switch is in the I position and the panel is closed the V-Lock should move to the locked (extended) position, indication LED should display red. When power is removed, the lock should retract to the unlocked position (toggle switch, O position), indication LED should display green.
5. Once operation of the lock is observed, return the V-Lock to the unlocked position.
6. Unplug the adapter from the wall outlet / power supply and remove the connections from the wiring harness to the quick connect, special care should be taken to not damage the connection between the latch and the harness.

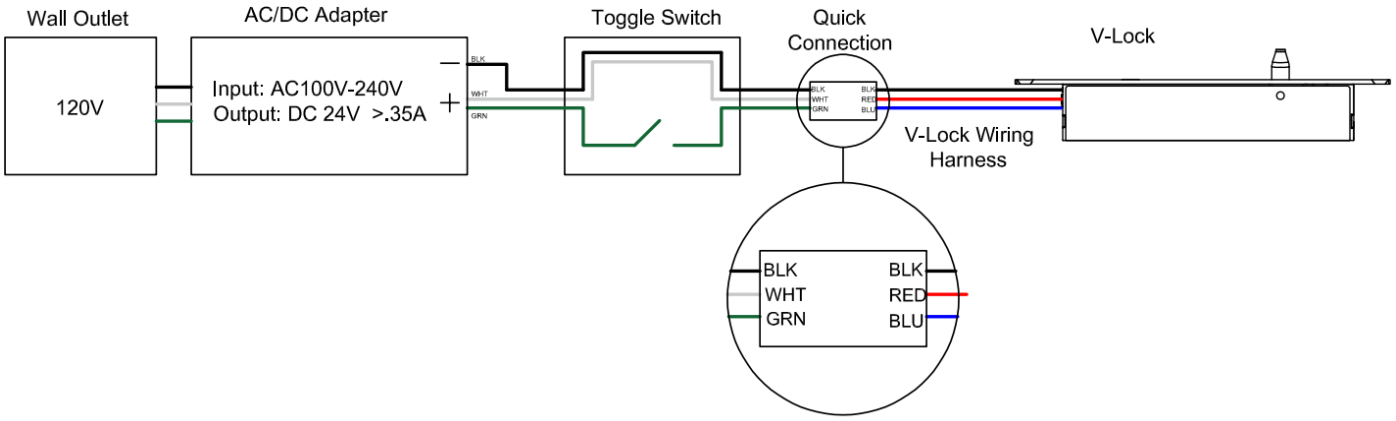


Figure 17:
Wiring Diagram
(V-Lock shown in the locked position)

XII. Blade Case Installation

Note: Any gaps between blade case and finished flooring/jambs must be sealed to prevent water infiltration.

1. Determine the location setting for the blade case (Figure 18). Remove screws (from the underside) and reassemble as necessary (Figure 19).
2. Mark the blade case locations.
   Method 1:
   If the panel is un-installed the case locations can be determined from dealer drawings.
   Method 2:
   If the panels are installed the blade can be activated and the location marked.
3. Predrill holes for a #10 screw using a #25 drill bit. Fasten blade case with #10 X 1" PHP Screw.

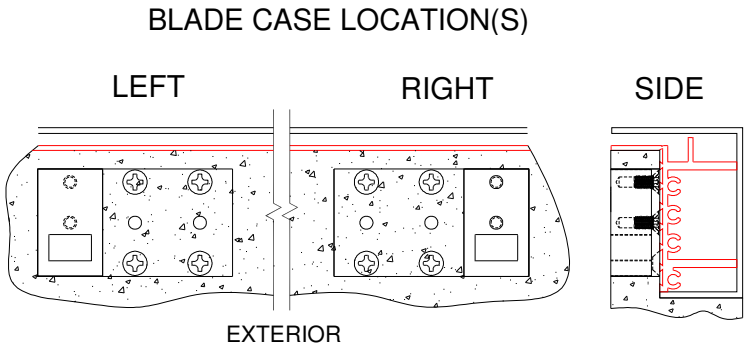


Figure 18:
Blade Case Location Options

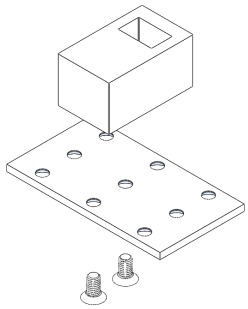


Figure 19:
Blade Case Disassembly

XIII. Finished Flooring Installation

Flooring Material: The sill for this product was designed to incorporate the finished flooring as a key component to the bottom rail sealing and the linear slot drain. The material chosen to surround the extruded sill should be such that water will not damage it.

Linear Slot drain: The sill comes with an aluminum spacer to ensure the linear slot drain spacing is correct. This spacer is to be removed after the flooring is installed.

Appendix A: Arche-Duct Dimensional References

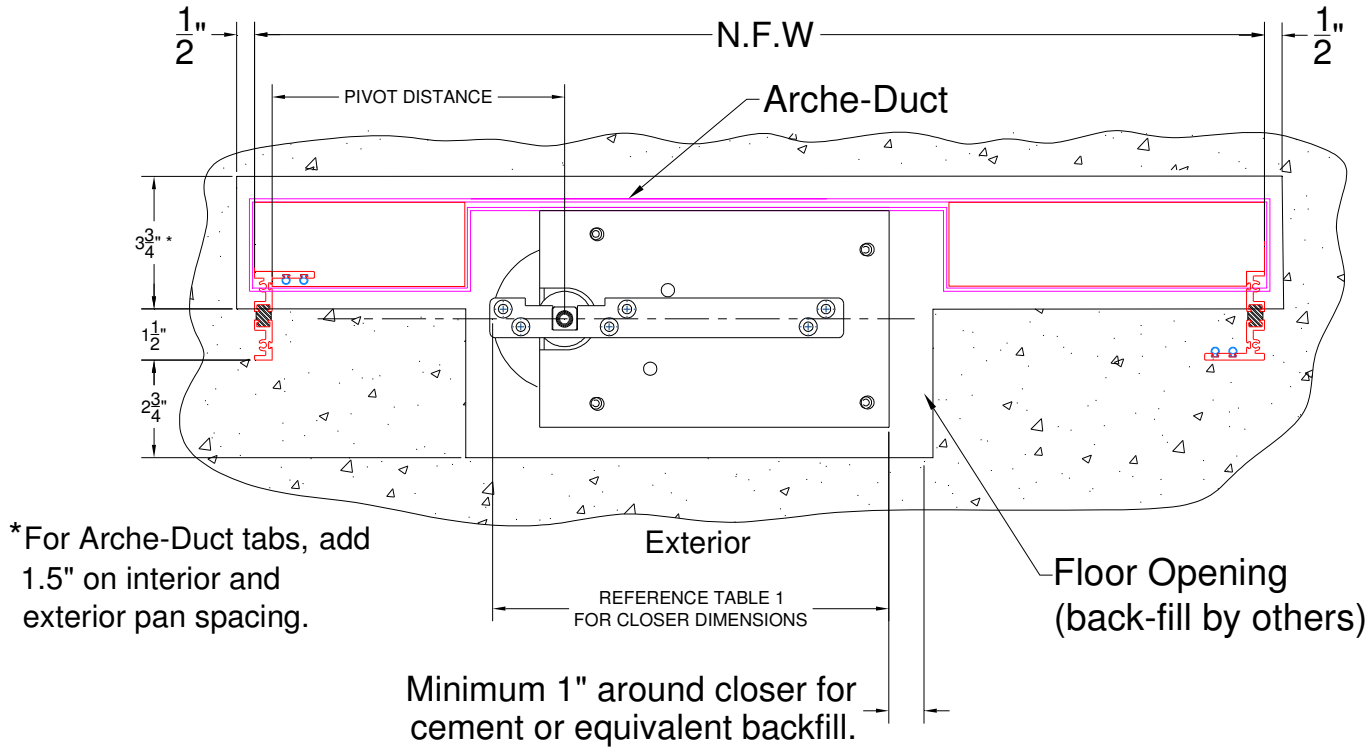


Figure A1:
Rixson Arche-Duct Opening
(weatherseals removed for clarity only)

Appendix B: Rixson Additional References

Sample installation instruction video:
https://www.youtube.com/watch?v=9bOtpwgSsuQ&feature=youtu.be

Replacing A Rixson Floor Closer
https://www.youtube.com/watch?v=aKwpdBrH9-M&feature=youtu.be

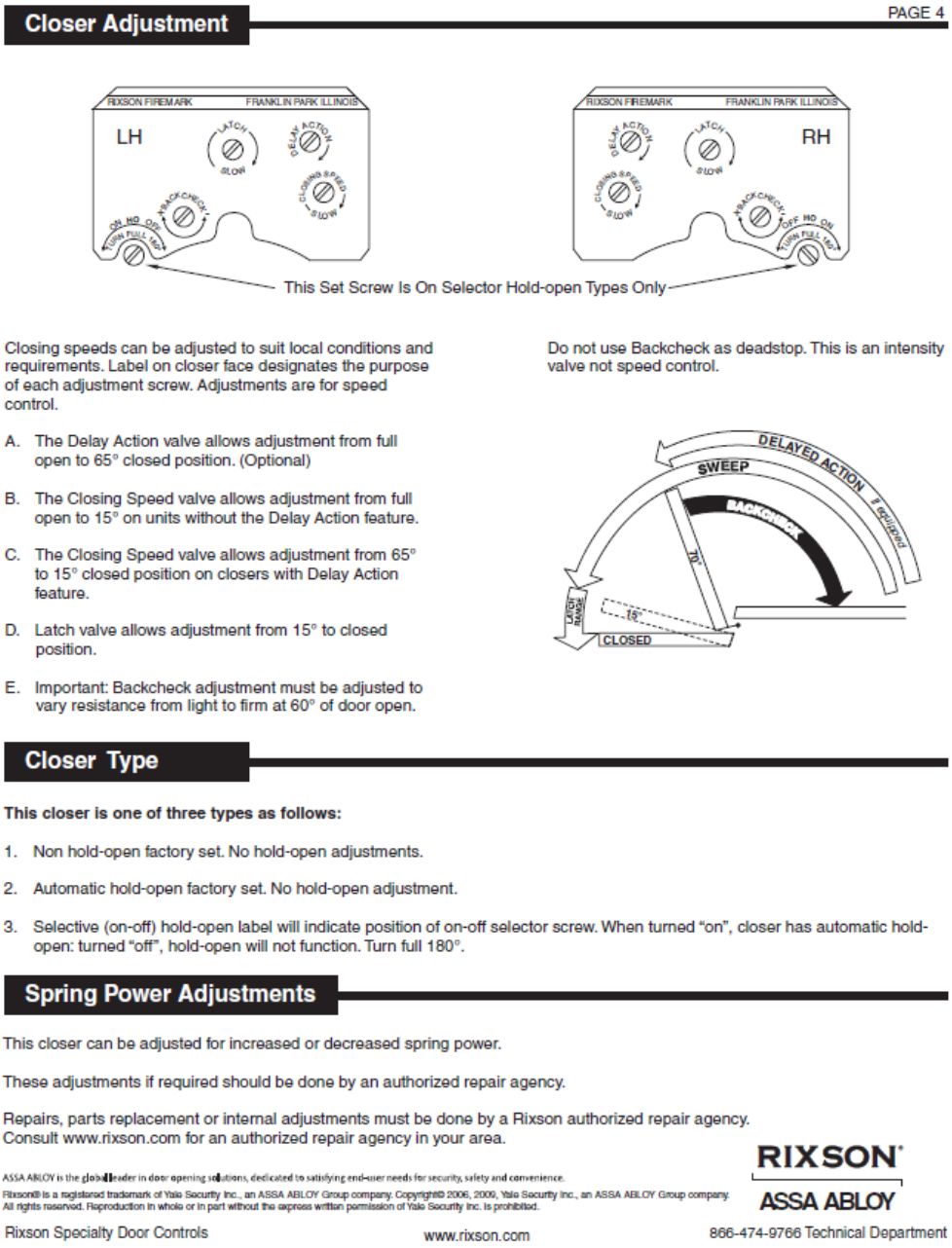
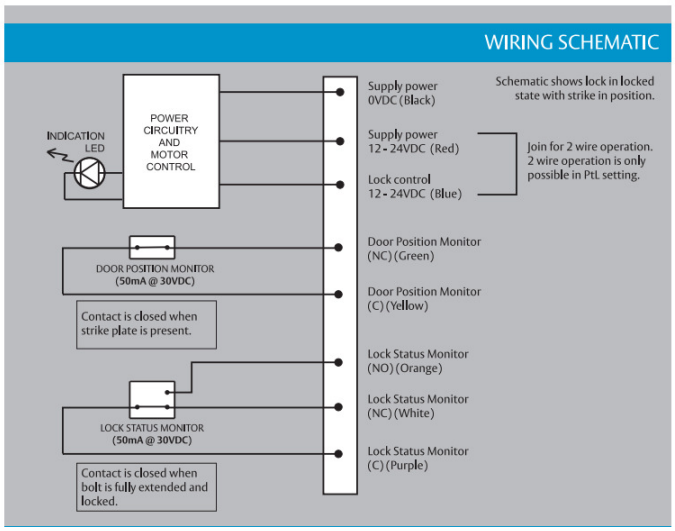
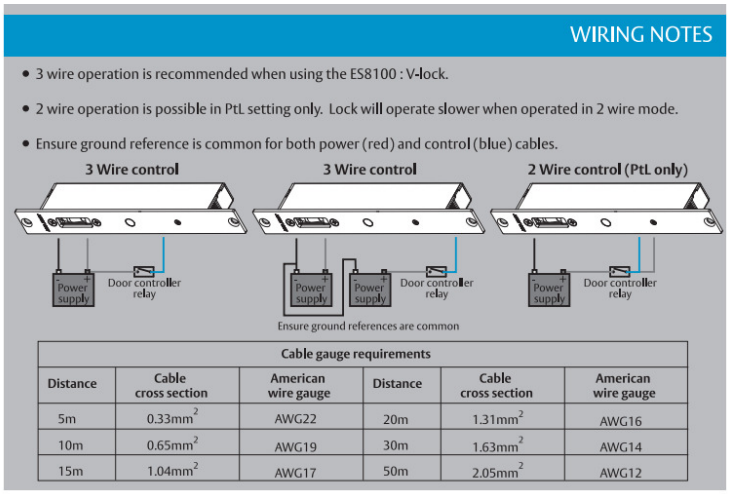


Figure B1:
Rixson Closer Adjustments

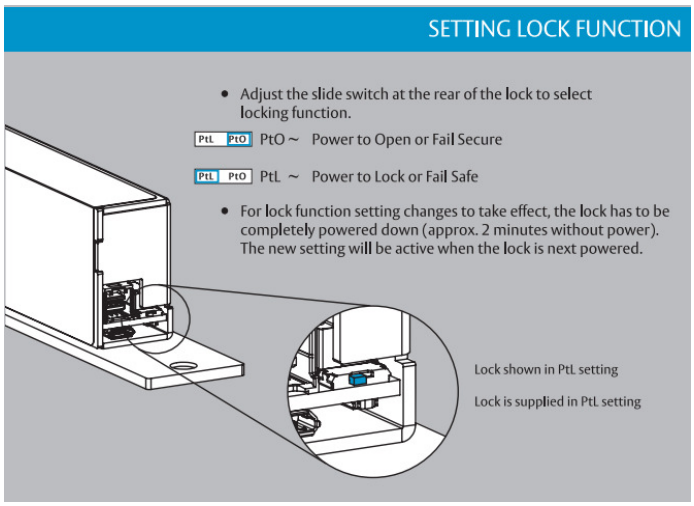
Appendix C: Wiring Schematic

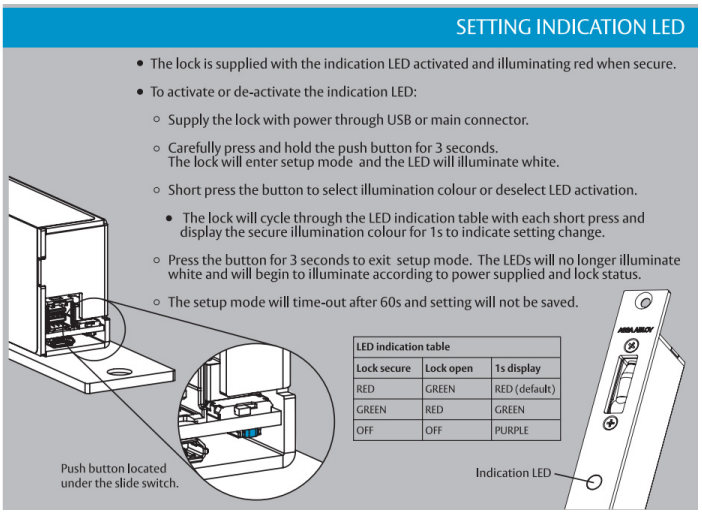




Cable gauge requirements

Distance	Cable cross section	American wire gauge	Distance	Cable cross section	American wire gauge
5m	0.33mm^2	AWG22	20m	1.31mm^2	AWG16
10m	0.65mm^2	AWG19	30m	1.63mm^2	AWG14
15m	1.04mm^2	AWG17	50m	2.05mm^2	AWG12





LED indication table

Lock secure	Lock open	1s display
RED	GREEN	RED (default)
GREEN	RED	GREEN
OFF	OFF	PURPLE