

Installation Manual

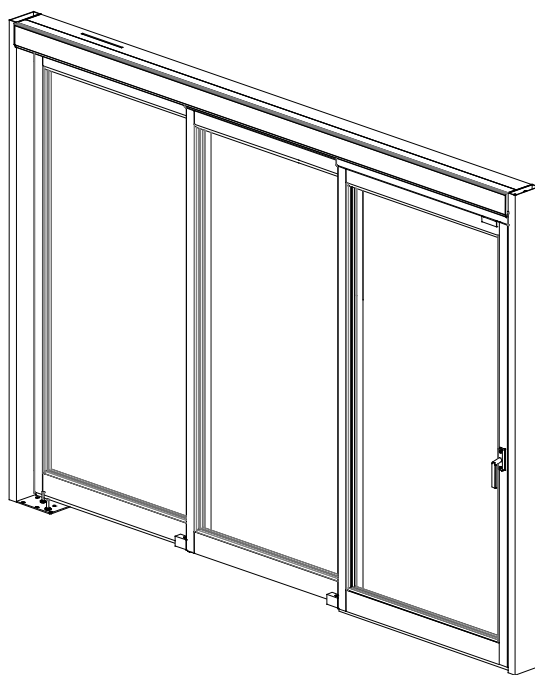
VersaMax™

ICU/CCU Telescopic Package

ASSA ABLOY

ASSA ABLOY Entrance Systems

The global leader in
door opening solutions



Complies with applicable sections of NFPA 101 and the IBC Life Safety Codes for Manually Operated Pedestrian Doors.

1016378

Issue 8-04-2017

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CAUTION

Improperly adjusted doors can cause injury and/or equipment damage.

Inspect door operation using Functional and Visual Inspection information in Owner's Manual.

Safety devices must be in place and operational where applicable.

In this manual, the word:

CAUTION - Means that personal injury or property damage can result from failure to follow instructions.

NOTE! - Means that there is additional helpful information directly relevant to the subject matter.

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Revisions

The following pages have been revised:

Page	Revision

Important Information

Important Safety Instructions for Use



WARNING!

**It is important for the safety of persons to follow these instructions.
(Save these instructions.)**

Safety Precautions

To avoid bodily injury, material damage and malfunction of the product, the instructions contained in this manual must be strictly observed during installation, adjustment, repairs and service etc. Training is needed to carry out these tasks safely. Only ASSA ABLOY Entrance Systems-trained technicians should be allowed to carry out these operations.

CAUTION!

Improperly adjusted doors can cause injury and equipment damage.

Adjust doors for proper operation in accordance with manufacturer's instruction and adherence to NFPA 101 and the IBC Life Safety Code and/or AHJ "Authority Having Jurisdiction" for manually Operated Pedestrian Doors.

Service/Maintenance

Regular inspections shall be made according to national regulations and product documentation by an ASSA ABLOY Entrance Systems-trained and qualified technician. The number of service occasions should be in accordance with national requirements and product documentation. This is especially important when the installation concerns a fire-approved door or a door with an emergency opening function.

As with all other technical products, a manual door needs maintenance and service. It is essential to know the importance of maintenance to have a reliable and safe product.

Service and adjustments will ensure a safe and proper operation of a manual door unit.

Note!

The glazing material in all unframed swing doors shall comply with the requirements in the Performance Specifications and Methods of Test for Safety Glazing Material Used in Buildings, ANSI Z97.1. Glazing materials for other pedestrian doors shall also comply with ANSI Z97.1, except that single strength or heavier glass may be used for those portions of doors involving a glazed area of less than 1 sq. ft. and having no dimension greater than 18".

Environmental Requirements

Please act according to your local regulations and dispose of your old product(s) and packaging properly. The correct disposal will help prevent potential negative consequences for the environment and human health.

Introduction

This manual contains the necessary details and instructions for the installation, maintenance and service of this manual sliding door package, the ASSA ABLOY Entrance Systems VersaMax ICU/CCU.

The ASSA ABLOY Entrance Systems ICU/CCU is designed for an overhead-concealed installation between two vertical jambs. The header, which is supported by the surrounding structure, supports the sliding doors and sidelites.

Models

The ICU/CCU Telescopic Equal Panel door packages can be bi-parting (6-panel) or single slide (3-panel, left or right handed), and sidelites may be installed fixed or hinged to break out.

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Please be specific by this following title:
 C3=CLUB MEMBER
 E6=EMERITUS MEMBER
 SP=Special (May consist of West Point)

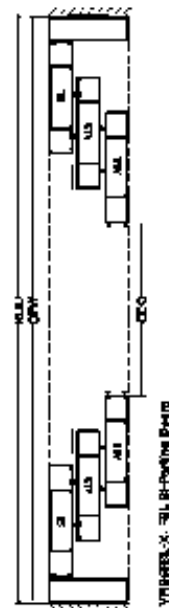
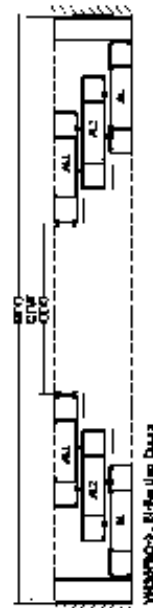
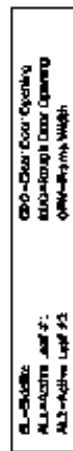
Naming Convention	Explanation
1.1.1 1.1.2 1.1.3 1.1.4 1.1.5 1.1.6 1.1.7 1.1.8 1.1.9 1.1.10 1.1.11 1.1.12 1.1.13 1.1.14 1.1.15 1.1.16 1.1.17 1.1.18 1.1.19 1.1.20 1.1.21 1.1.22 1.1.23 1.1.24 1.1.25 1.1.26 1.1.27 1.1.28 1.1.29 1.1.30 1.1.31 1.1.32 1.1.33 1.1.34 1.1.35 1.1.36 1.1.37 1.1.38 1.1.39 1.1.40 1.1.41 1.1.42 1.1.43 1.1.44 1.1.45 1.1.46 1.1.47 1.1.48 1.1.49 1.1.50 1.1.51 1.1.52 1.1.53 1.1.54 1.1.55 1.1.56 1.1.57 1.1.58 1.1.59 1.1.60 1.1.61 1.1.62 1.1.63 1.1.64 1.1.65 1.1.66 1.1.67 1.1.68 1.1.69 1.1.70 1.1.71 1.1.72 1.1.73 1.1.74 1.1.75 1.1.76 1.1.77 1.1.78 1.1.79 1.1.80 1.1.81 1.1.82 1.1.83 1.1.84 1.1.85 1.1.86 1.1.87 1.1.88 1.1.89 1.1.90 1.1.91 1.1.92 1.1.93 1.1.94 1.1.95 1.1.96 1.1.97 1.1.98 1.1.99 1.1.100 1.1.101 1.1.102 1.1.103 1.1.104 1.1.105 1.1.106 1.1.107 1.1.108 1.1.109 1.1.110 1.1.111 1.1.112 1.1.113 1.1.114 1.1.115 1.1.116 1.1.117 1.1.118 1.1.119 1.1.120 1.1.121 1.1.122 1.1.123 1.1.124 1.1.125 1.1.126 1.1.127 1.1.128 1.1.129 1.1.130 1.1.131 1.1.132 1.1.133 1.1.134 1.1.135 1.1.136 1.1.137 1.1.138 1.1.139 1.1.140 1.1.141 1.1.142 1.1.143 1.1.144 1.1.145 1.1.146 1.1.147 1.1.148 1.1.149 1.1.150 1.1.151 1.1.152 1.1.153 1.1.154 1.1.155 1.1.156 1.1.157 1.1.158 1.1.159 1.1.160 1.1.161 1.1.162 1.1.163 1.1.164 1.1.165 1.1.166 1.1.167 1.1.168 1.1.169 1.1.170 1.1.171 1.1.172 1.1.173 1.1.174 1.1.175 1.1.176 1.1.177 1.1.178 1.1.179 1.1.180 1.1.181 1.1.182 1.1.183 1.1.184 1.1.185 1.1.186 1.1.187 1.1.188 1.1.189 1.1.190 1.1.191 1.1.192 1.1.193 1.1.194 1.1.195 1.1.196 1.1.197 1.1.198 1.1.199 1.1.200 1.1.201 1.1.202 1.1.203 1.1.204 1.1.205 1.1.206 1.1.207 1.1.208 1.1.209 1.1.210 1.1.211 1.1.212 1.1.213 1.1.214 1.1.215 1.1.216 1.1.217 1.1.218 1.1.219 1.1.220 1.1.221 1.1.222 1.1.223 1.1.224 1.1.225 1.1.226 1.1.227 1.1.228 1.1.229 1.1.230 1.1.231 1.1.232 1.1.233 1.1.234 1.1.235 1.1.236 1.1.237 1.1.238 1.1.239 1.1.240 1.1.241 1.1.242 1.1.243 1.1.244 1.1.245</	

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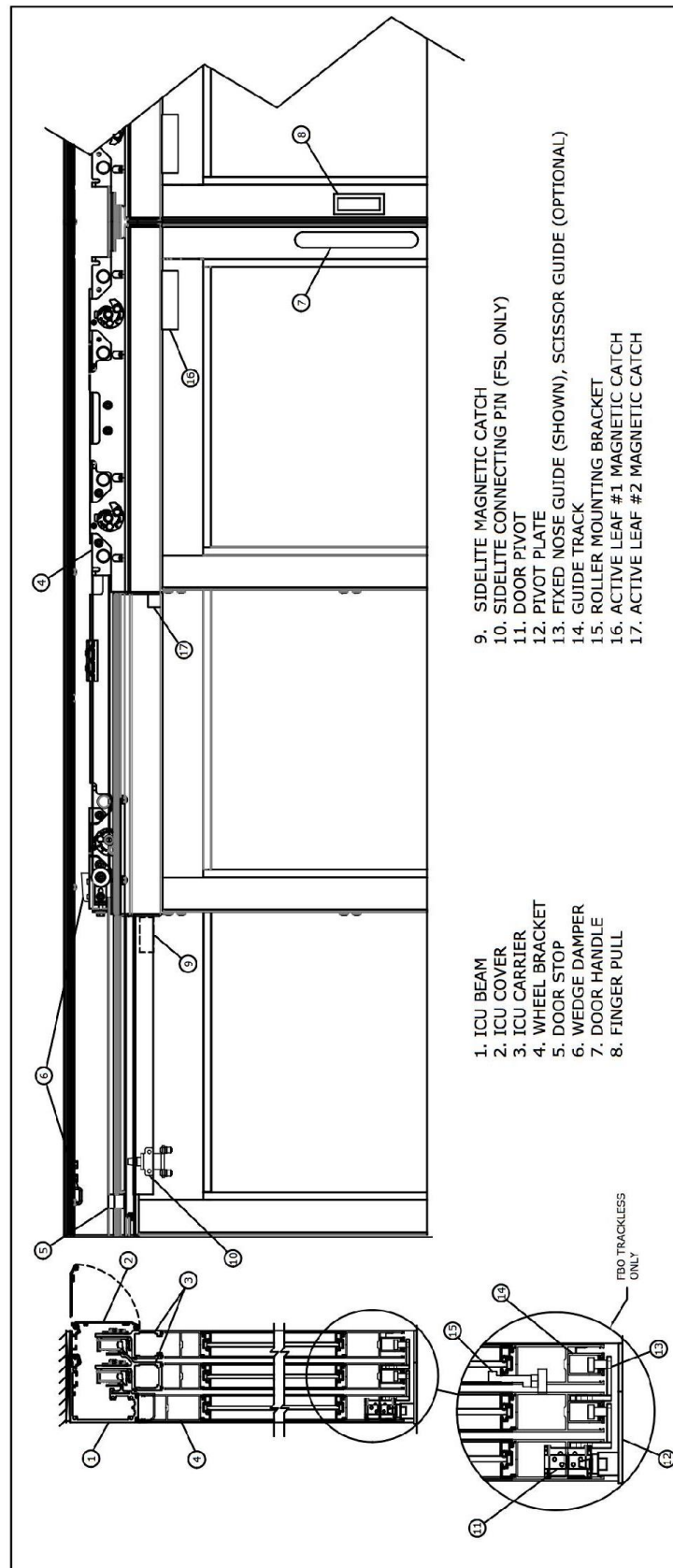
440404 N4	OVERALL PLANE FLIGHT TO (A)	CLIMB DOOR OPENING (B)	MAXIMUM CRUISING ALTITUDE (C)	ACTUAL 2 SECONDLY LEAP FLIGHT (D)
VMSB-400-10	130° [144.5]	63 130°10" [144.5]	120 1/2° [140.7]	51 1/2° [144.0]
VMSB-400-12	144° [147.4]	77 131°00" [147.0]	119 3/4° [140.5]	58 3/4° [144.1]
VMSB-400-14	160° [156.1]	63 131°00" [147.0]	108 1/2° [142.0]	54 1/2° [143.2]
607	157° [157.7]	62 131°10-16 3/4° [147.0-148.5]	111° [141.7]	60 3/4° [144.0]

GLASS SIZE TABLE			
	WIDTH	PACKAGE	CTY
HEIGHT		SQUARE PANEL	LEAF WIDTH 4 3/4" (11.9")
		POLYCARBONATE	DPH - 13.433 (341.5)
		TECO W/TRACE	DPH - 13.433 (341.5)
		POLYCARBONATE	DPH - 34 (863.4)

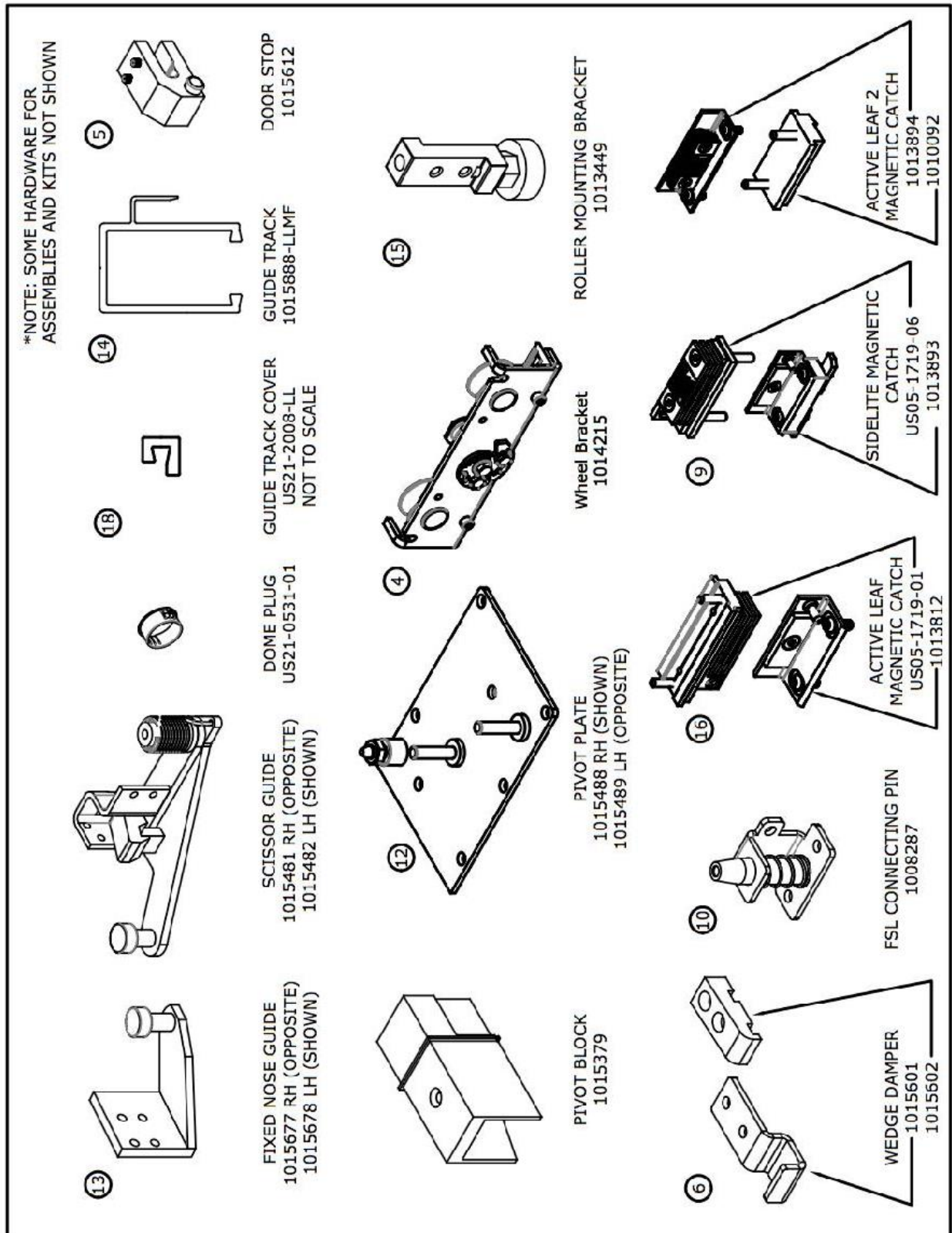
Note: Chisel a 1/2" square file core with 1/4" glazing. Under files will reduce the tool diameter accordingly.



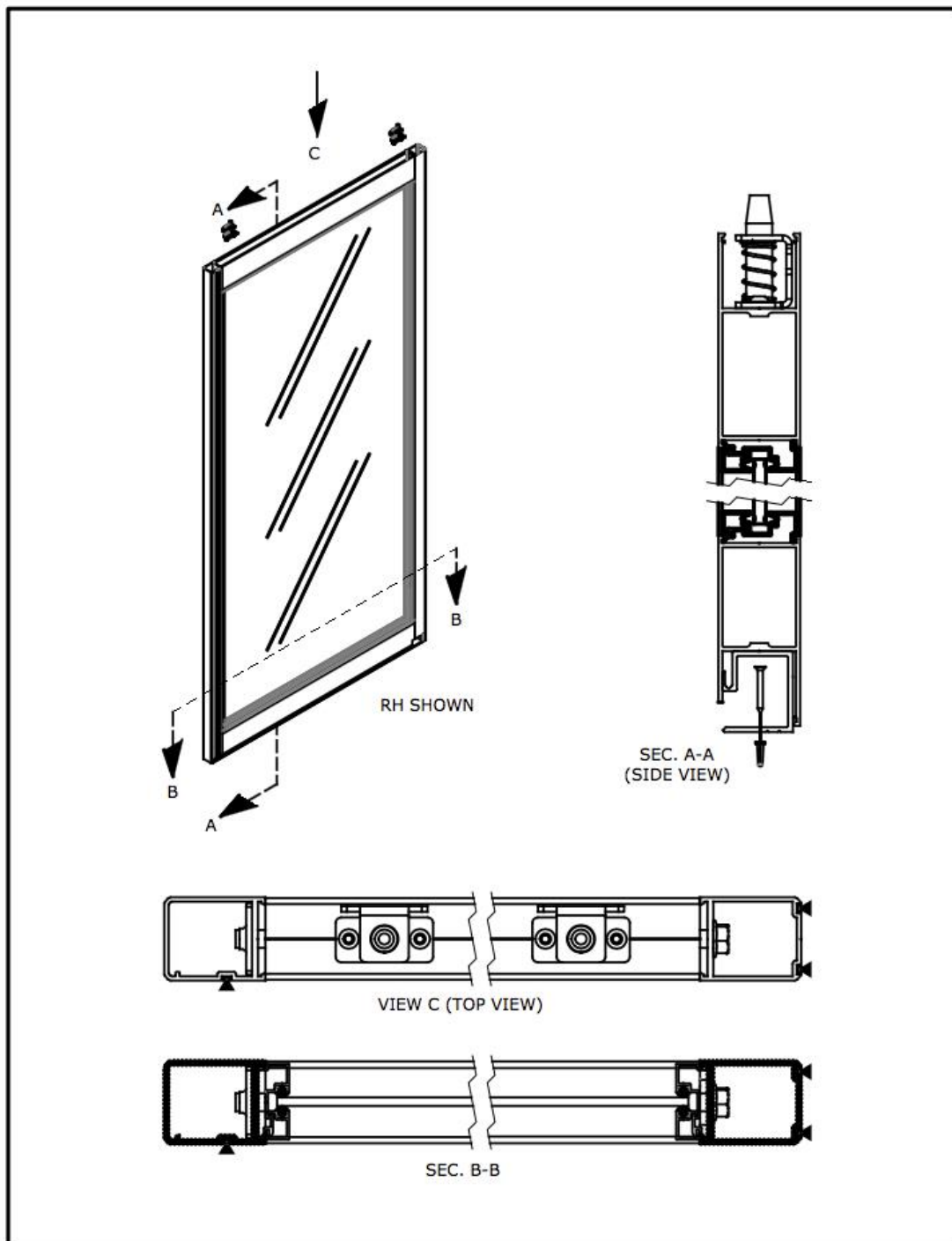
Part Identification and Options



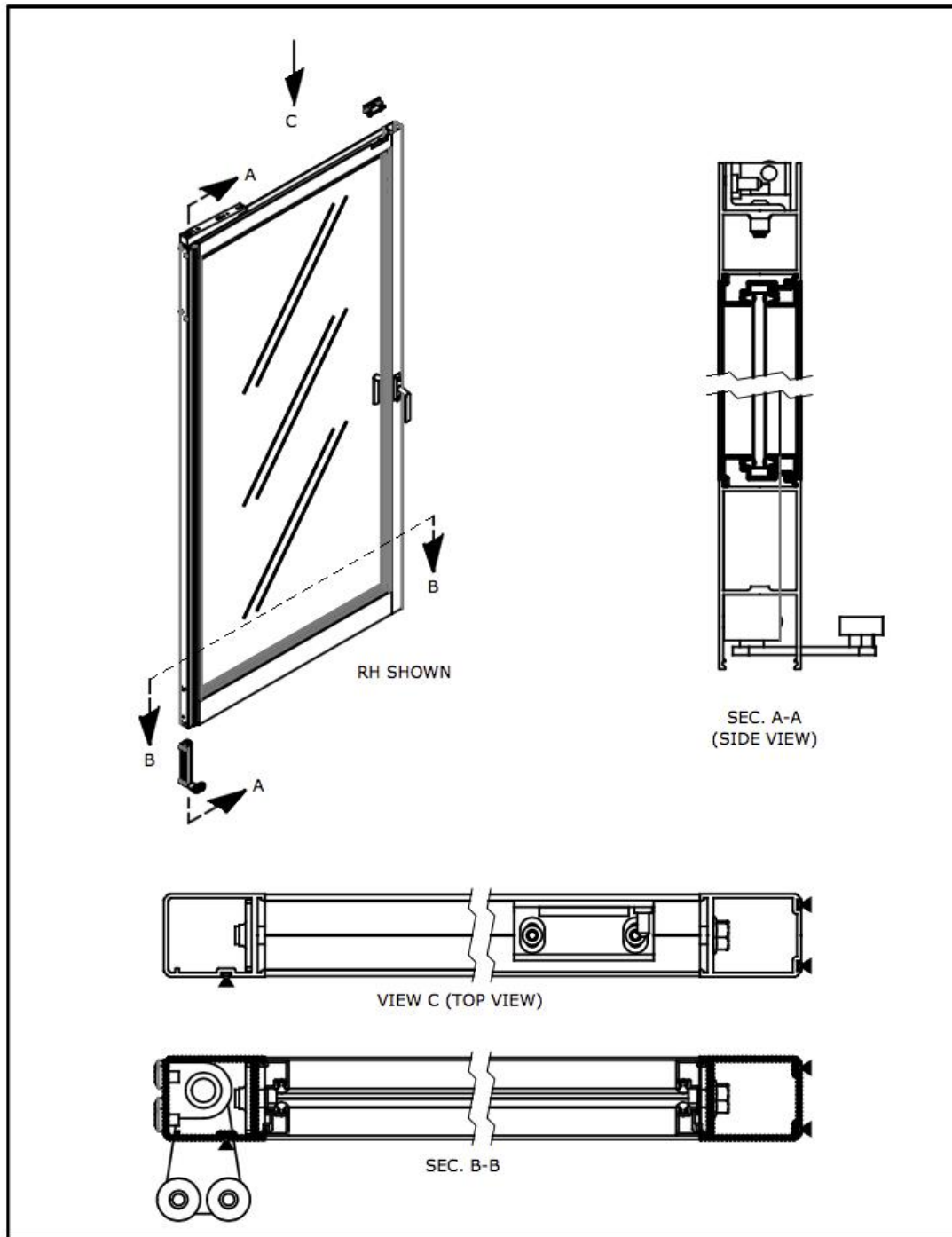
Part Identification and Options (Continued)

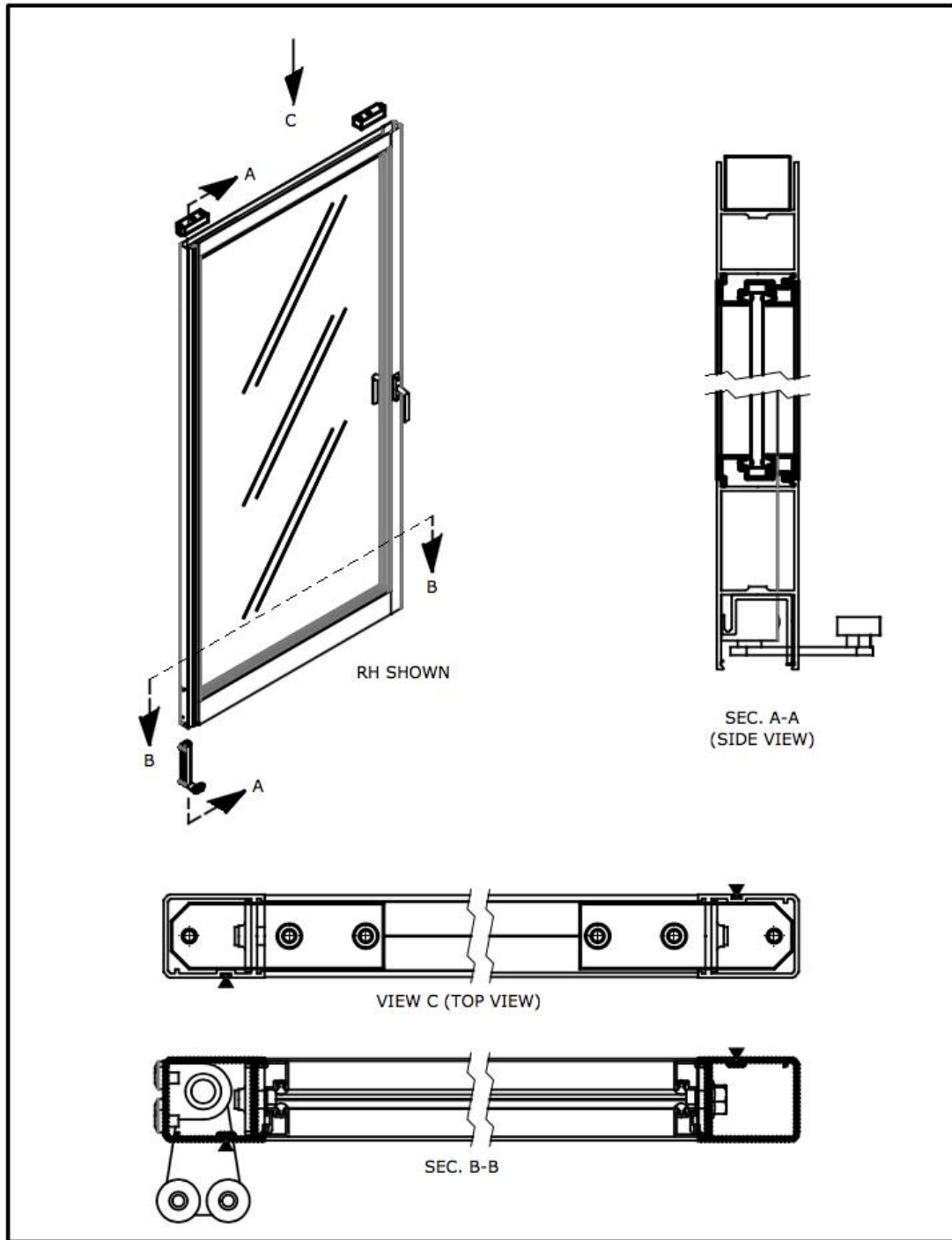


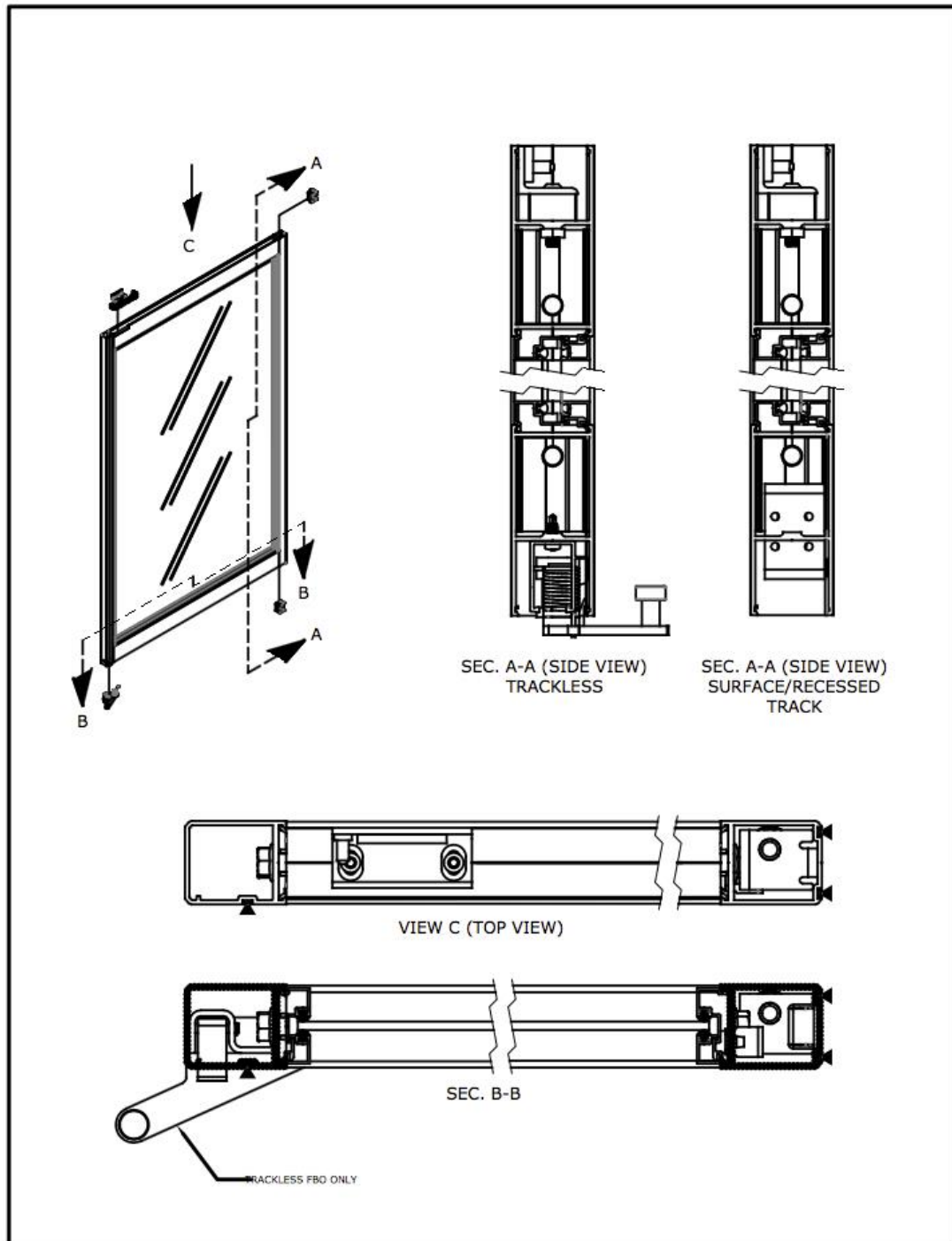
Sidelite, FSL (Fixed Sidelite)



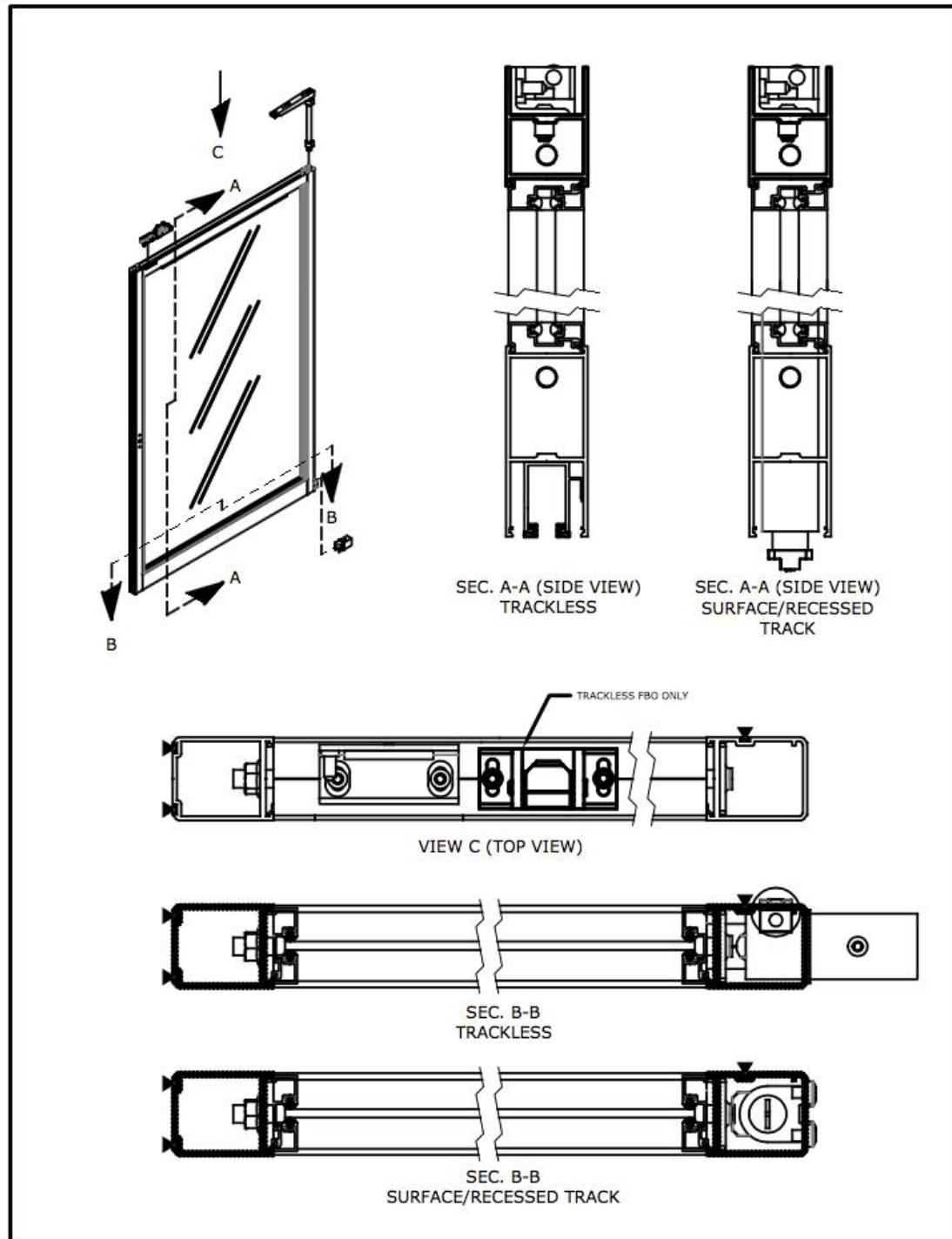
Active Leaf #1, FSL (Fixed Sidelite)



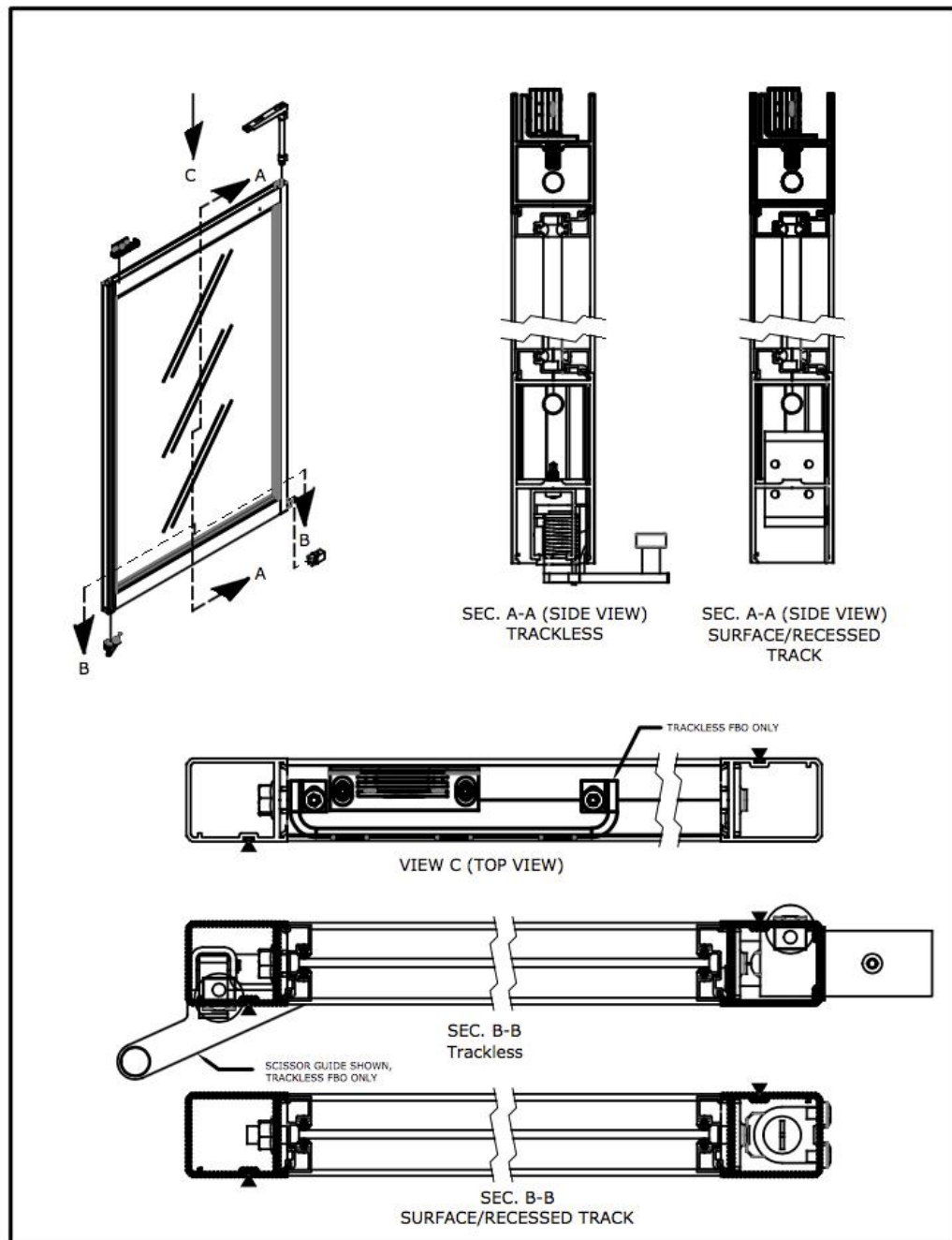




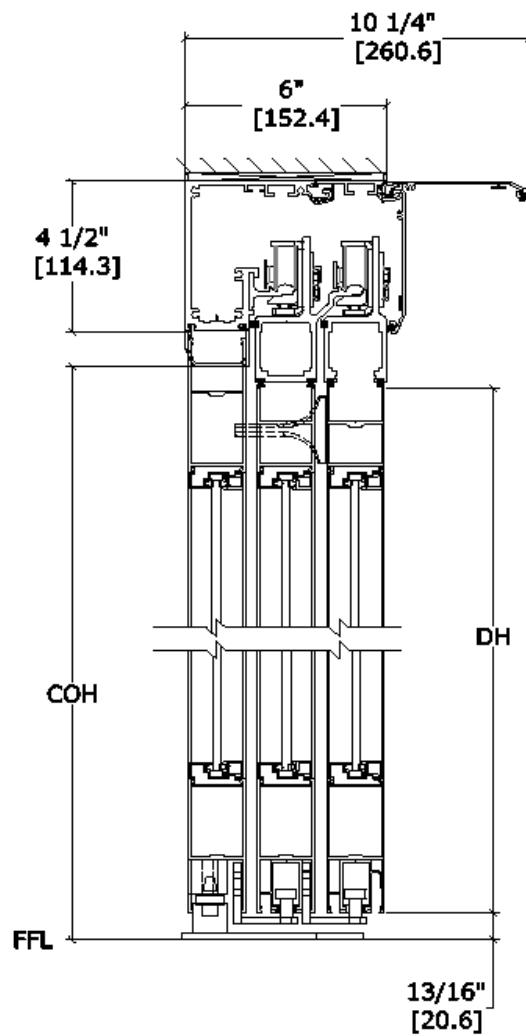
Active Leaf #1, FBO (Full Break Out)



Active Leaf #2, FBO (Full Break Out)



Space Required



NOTE:

Watch for low hanging items that could obstruct the opening of the cover, such as exit signs and wall conditions.

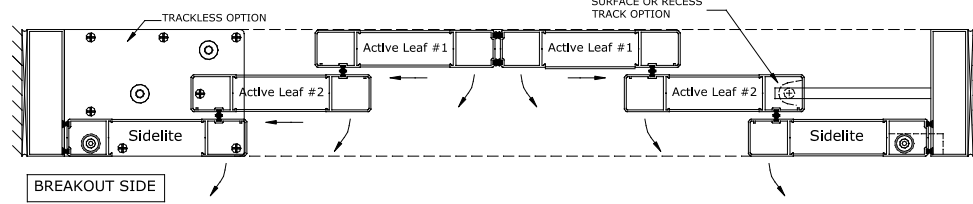
COH= Clear Opening Height

DH= Door Height

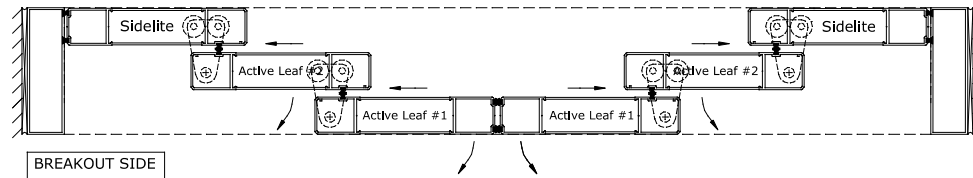
FFL= Finished Floor Level

Installation Examples

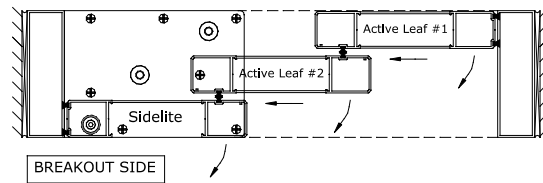
Bi-Part Full Breakout (FBO)



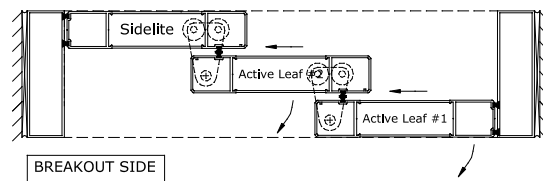
Bi-Part Fixed Sidelite (FSL)



Left Hand Single Slide Full Breakout (FBO)



Left Hand Single Slide Fixed Sidelite (FSL)



Installation Requirements

Fastening Requirements

Base door / wall material	Minimum Anchor Embedment*
Steel	3/16" (5 mm)*
Aluminum	1/4" (6 mm)*
Reinforced concrete	1 1/2" (38 mm) from the underside
Wood	1 1/2" (38 mm)
Brick wall	Expansion-shell bolt, min. (1/4" x 3 1/2"), min. 2" (50 mm) from the underside

* ASSA ABLOY Entrance Systems minimum recommended requirements. Consult local building code.

* Always use the appropriate fastener for the material in which you are anchoring.

Tools Required

- Carpenter's level (4 foot)
- Tape rule
- Straight edge
- Power drill and set of drill bits, Unibit, Hammer drill
- Metric hex key set 6, 5, 4, 3 and 2.5 mm
- Screw driver Torx T10, T20, T30
- Flat blade screw driver (small/medium/large)
- Chalk line
- #2 Phillips screw driver
- Center punch
- String
- Plumb bob
- Silicone sealant
- Pencil
- 10mm Nut Driver and wrench
- Allen Wrench Set

Additional mounting hardware (not supplied - see fastening requirements above)

Door Installation Process

The door installation process incorporates, unpacking and installing hardware on the door panels.

Unpacking

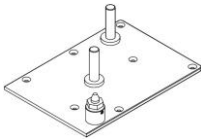
It is important that all packing is removed from the door package so that it will not interfere with the operation of the door.

Remove and dispose of all packaging and scrap materials in accordance with local regulations.

Hardware Installation

Depending on the options chosen, some or all of the hardware shown below must be installed on the door panels prior to installation. All hardware items are kitted with the required fasteners.

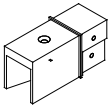
Pivot Plate



1015486 (Right Hand Plate Kit)

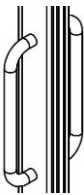
1015487 (Left Hand Plate Kit - Shown)

Pivot Block



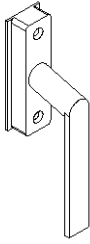
1015379 (Pivot Block Kit)

“C” Handle



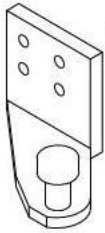
US08-1661-02

Positive Latch



1015130

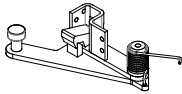
Fixed Nose Guide



1015678 Left Hand (ICU Fixed Guide Kit - Shown)

1015677 Right Hand (ICU Fixed Guide Kit)

Automatic Latching Swing Arm (Optional)



1015481 Right Hand (ICU Swing Arm Kit)

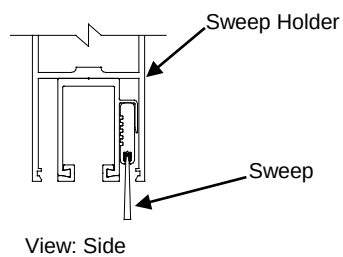
1015482 Left Hand (ICU Swing Arm Kit - Shown)

Breakout Cam (Optional)



1016400 (Breakout Cam Kit)

Sweep (Optional)



50-20-215 Standard

US20-1627-02 Smoke Rated

If sweeps are included, trim to length required for each panel, then insert into sweep holder. Note: Sweeps will be longer than the sweep holder. Install sweep and holder into bottom of door as shown. Once doors are hung, adjust sweeps to desired height and location, secure with 8 x 32 self-tapping screws.

Smoke Seals (Optional)

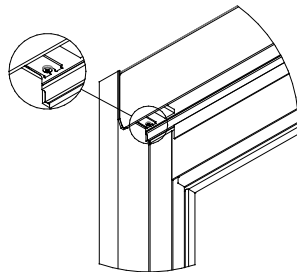
On door packages with the smoke rated seals option, the seals have been factory installed on the door stiles intentionally past the end of the doors. This option helps prevent temperature changes at different package installation locations.

Once the door package is received, trim excess smoke seal flush to the end of the door stile.

Mechanical Installation

Cover Opening/Closing and Locking Process

The cover has to be unlocked in order to gain access into header. The locks are located at each end of the cover, next to the jambs.



1. To unlock, loosen and remove each screw located near both ends of the cover. Repeat for the other side.
2. To open, stand at the center of the cover, rotate the cover 90 degrees, and then push inward toward the header. This will engage the cover into the header, preventing it from closing.

Caution!

Bumping or jarring the cover may cause it to disengage and close suddenly.

3. To close, pull the cover away from the header until it disengages and swings downward freely.
4. To lock, reverse the order of Step 1. The cover is designed to be self-supporting in the open position.

Header, Jamb and Floor Track Assembly and Installation

Rough Opening Inspection

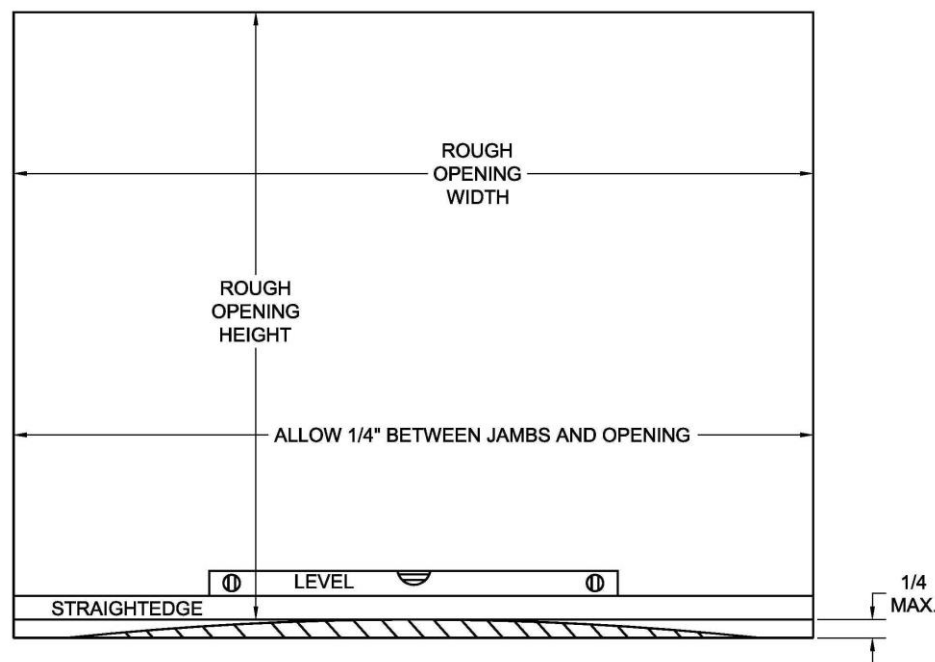
Check that there is sufficient material to adequately support and attach the Header using the factory-predrilled holes.

The rough opening must be plumb and square and the finished floor must not vary by more than 1/4" from the highest to the lowest point. If necessary, have the floor leveled before attempting to install the sliding door system.

It is important to check that the floor is level within the travel and path of the doors in break out mode. The doors must not encounter any obstruction when broken out. Ideally, the floor should be level or slope away from the wall on the breakout side of the door.

Verify that the rough opening width is 1/2" wider than the overall frame width of the sliding door system, and that the rough opening height is 1/4" higher than the overall frame height. For example, an overall frame height of 89-3/4", requires a Rough Opening Height (ROH) of 90" measured from the highest point of the floor in the opening between the jambs.

$$(96 \times 89 \frac{3}{4} = 96 \frac{1}{2} \times 90 \text{ RO})$$



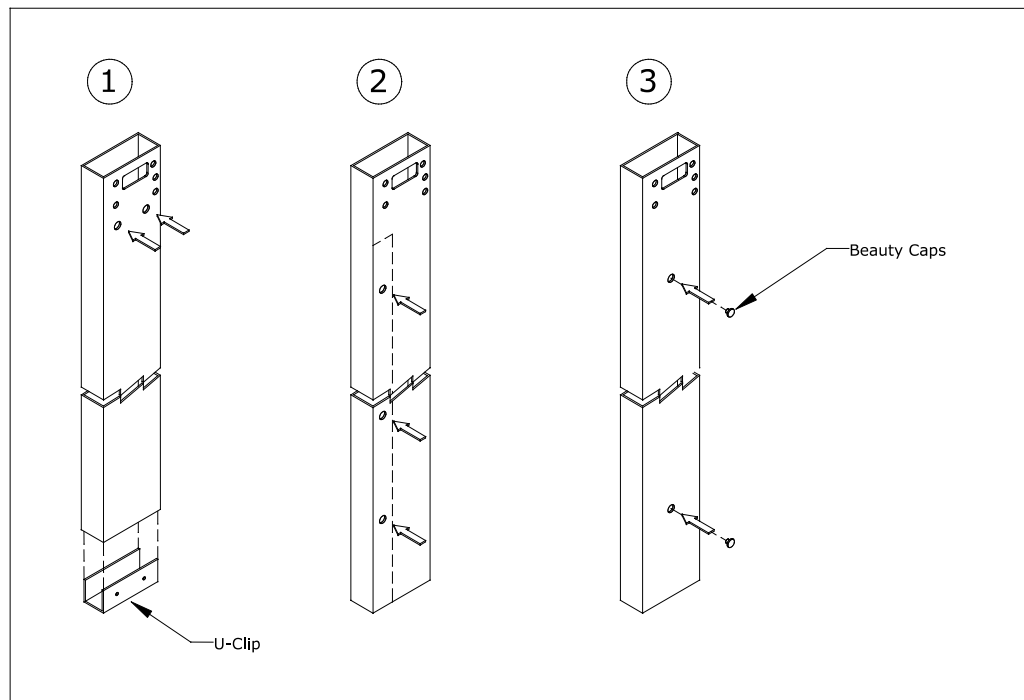
Jamb and Header Assembly

ASSA ABLOY Entrance Systems jambs are factory prepared for header installation. Mount jambs to header using five screws per jamb. (Factory Provided.)

Jamb/Wall Attachment

Suggested methods for attaching the jambs in which the screw holes are not exposed are as follows:

1. Install "U" shaped clips to the floor in which the jambs will slide over the top. Drill a hole through the jamb and clip to attach the bottom of the jamb. Drill a hole through the jamb inside of the header to attach the top of the jamb.
2. Countersink the holes on the exterior jamb walls in line with the sidelite such that the sidelite covers the holes when installed.
3. To secure jambs to door opening, mark holes at the top, middle and bottom of the jambs, adjusting for site conditions that may require the holes to be at a certain height. Drill 1/2" holes through the face of the jamb to allow for the installation of beauty caps on exterior holes and then drill the back holes to a maximum of 1/4".

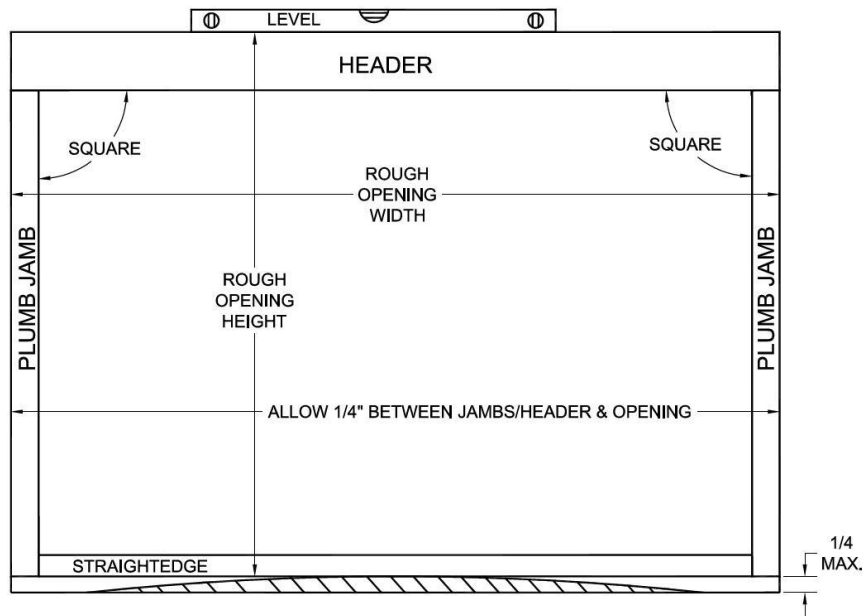


Leveling Header and Jambs

Note!

The header and jambs must be installed plumb, square and level to ensure proper door operation.

1. Check rough opening for plumb, level and square.



2. Tilt header/jamb assembly into rough opening.
3. Insert shims under jambs as required, correcting for an uneven floor condition.
4. Check the position of the header; adjust side-to-side and front-to-back as needed, then clamp or temporarily fasten the assembly in place at the top of each jamb.

Note!

ICU Headers are not self-supporting and require overhead support for proper operation. Anchor holes will be pre-drilled at the factory in header to aid in installation.

5. Starting at the center of the header and working towards each jamb, partially install anchors through each pre-drilled installation hole.
6. Remove temporary fasteners and/or clamps from jambs.
7. Re-check header for level, insert shims as required and tighten header anchors.

Note!

It may be necessary to leave a slight gap between the opening and header so that the installation anchor can draw the header up to a level condition.

8. Check each jamb for plumb and square, insert shims as required and install anchors.
9. Recheck all members for level, plumb and square, making adjustments as required.

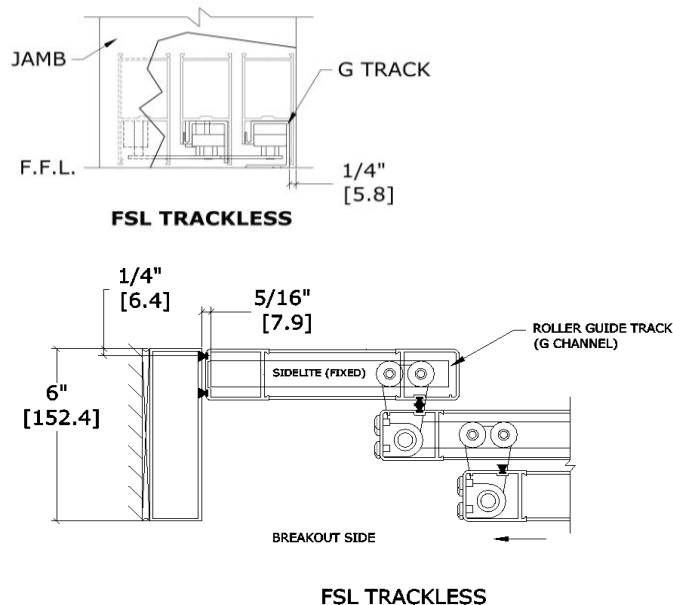
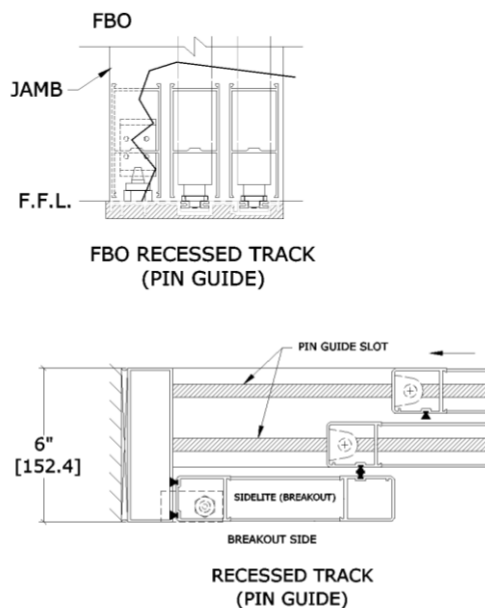
Fitting the Floor Track

The following steps explain how to install the floor mounted guide tracks for door applications.

Note!

It is important that the floor guide track be installed level to prevent derailment of the floor guide system when the door is swung out.

1. Inspect the floor for conditions such as high and low spots that can cause the track to twist and rock. High spots (such as small rocks) should be removed. Check floor to ensure that it is level.
2. Using a chalk line, snap a reference line from jamb to jamb on the side where the track is being installed.
3. Using the measurements provided, lay the track in place, mark the holes, then remove track and drill for anchors.



Note!

The G track is not to be mounted and leveled any lower than the bottom of the jamb and it must have an equal measurement from the top of the G track to the bottom of the header across its entire length.

4. Secure the track to the floor with the use of concrete anchors and #12x2" long countersunk screws supplied with door package, leveling it with shims from end-to-end. (Sealant should be used under the track assembly.)
5. After securing the track, check the track again to ensure that it is still level. Measure from the top of the track to the bottom of the header, checking for the same result at each fastener.

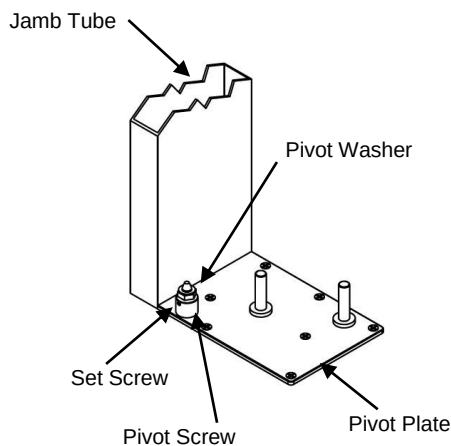
Note!

All screws must be countersunk and fully tightened to avoid interference with guide system travel.

Installing the Pivot Plate (FBO Trackless Application Only)

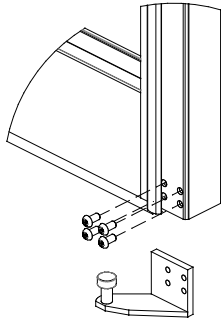
All trackless packages are a patent pending design.

1. Place Pivot Plate on floor flush to Jamb Tube.
2. Insert shims as required to level the Pivot Plate.
3. Mark hole locations.
4. Remove Pivot Plate, drill $\frac{1}{4}$ " holes and insert anchors.
5. Fasten Pivot Plate to floor with provided hardware.
6. Place Bearing Washer on Pivot Pin.

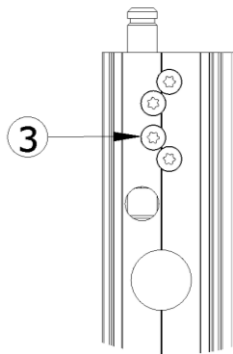
**FBO Sidelite Installation Procedure – Trackless Applications****Note!**

Remove any packing material from the sidelite before installation.

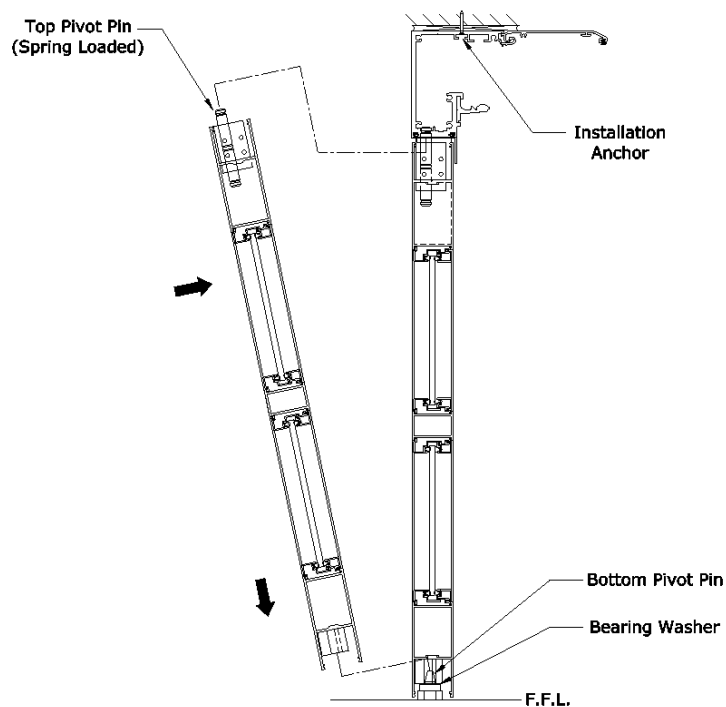
1. Ensure that the Pivot Plate has been installed. (Reference [Installing the Pivot Plate](#) procedure)
2. Install the Fixed Nose Guide to the bottom of the sidelite using hardware provided.



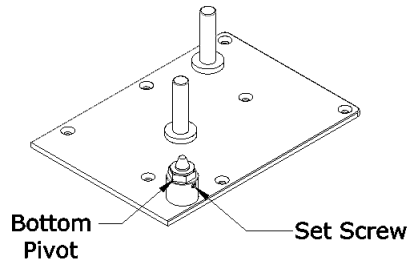
3. Remove screw labeled "3" as shown in the top pivot to allow spring loaded pin to depress.



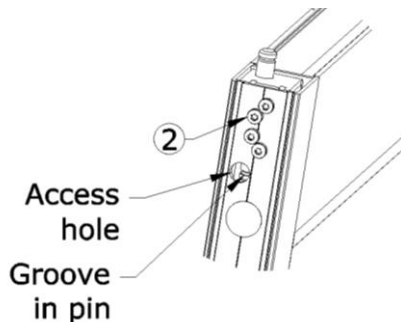
4. Position the sidelite on break-out side of header at 90° angle to the header.
5. Set the sidelite on the pivot screw and tilt it into place. (Check gap between top of door and header and adjust to 3/16".)



6. With the sidelite on the bottom pivot, carefully push down the top spring-loaded pivot pin and line it up with its receiving hole in the header until the shaft pops into place.
7. To adjust, remove the sidelite, raise or lower the bottom pivot by loosening the set screw at the side of the pivot shaft and turn the pivot clockwise to lower the sidelite or counter clockwise to raise the sidelite, as required, and then retighten the set screw. To remove sidelite, see [Sidelite Removal Procedure](#) section.



8. Check all clearances and adjust the breakout for the magnetic catch. See [Magnetic Catch Adjustment](#) section.
9. When all sidelite panels are installed, re-install the screw that was previously removed in the top pivot, labeled "3".
10. Remove the screw labeled "2" from the top pivot as shown. Insert a small flat blade screwdriver into the access hole. Locate the groove near the bottom of the spring loaded pin and push up on the pin until the washer in the center of the pin is above the hole for the screw that was removed. While holding the pin in this position, re-install the screw labeled "2".



Note!

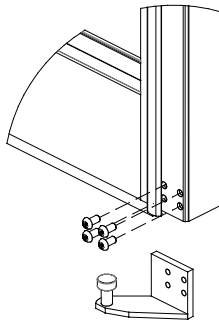
If the glass has not been previously installed, recheck magnetic catch alignment after glazing and readjust as required.

FBO Active Leaf #2 Installation Procedure- Trackless Applications

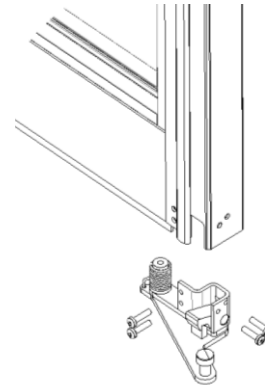
Note!

A Scissor Guide is to be installed on active leaf #2 in all applications where Positive Latch or “C” Handle options are chosen. For standard units, a Fixed Nose Guide is used.

1. Install the Fixed Nose Guide or Scissor Guide to the bottom of active leaf #2 using hardware provided.

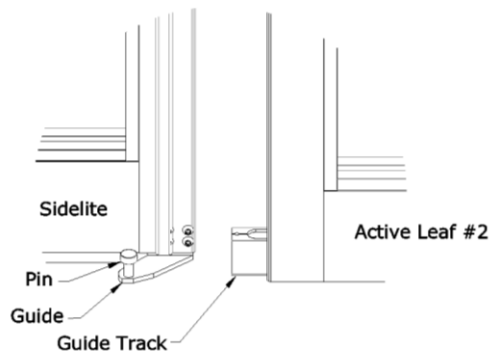


Fixed Nose Guide

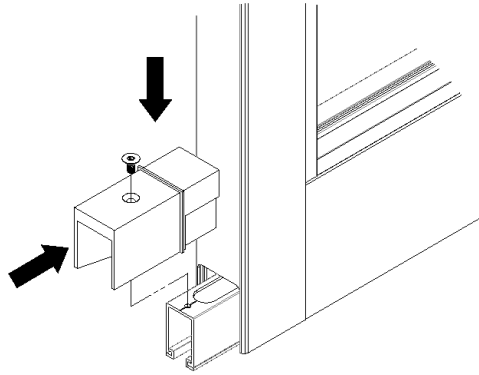


Scissor Guide

2. Move the inner carrier for active leaf #2 to the closed position.
3. Wheel brackets are factory adjusted to the fully upward position. Double check and ensure that they are adjusted to fully upward position. If adjustment is needed see [Active Leaf Door Height Adjustment](#) Section.
4. Align the track extending from the back side of the active leaf to the pin on the fixed nose guide mounted on the sidelite. Slide the active leaf down the guide track until the PSA Arm is behind the carrier. Care should be taken not to damage the Fixed Nose Guide or the Swing Arm.



5. Slide the PSA arm into carrier so that it is recessed 1/4" and adjust PSA arm so that Magnetic Catch aligns and secures door. See [PSA Arm Adjustment](#) Section.
6. Adjust magnetic catch. See [Magnetic Catch Adjustment](#) section.
7. Install Pivot Block to door panel by sliding it onto the top of the guide track. Then slide the Pivot Block until flush with the face of the rail. Install the c'sunk screw by hand as to not strip it out of the track.



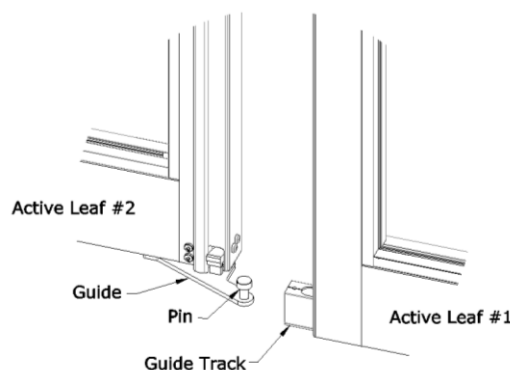
8. To adjust the door height, see [Active Leaf Door Height Adjustment](#) Section.

Note!

If the glass has not been previously installed, recheck magnetic catch alignment after glazing and readjust as required.

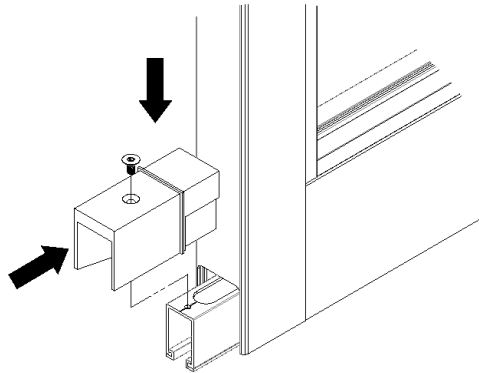
FBO Active Leaf #1 Installation Procedure- Trackless Applications

1. Move the outer carrier for active leaf #1 to the center of the header.
2. Wheel brackets are factory adjusted to the fully upward position. Double check and ensure that they are adjusted to fully upward position. If adjustment is needed see [Active Leaf Door Height Adjustment](#) Section.
3. Align the track extending from the back side of the active leaf to the pin on the guide mounted on the sidelite. Slide the active leaf down the guide track until the PSA Arm is behind the carrier. Care should be taken not to damage the Fixed Nose Guide or the Swing Arm.

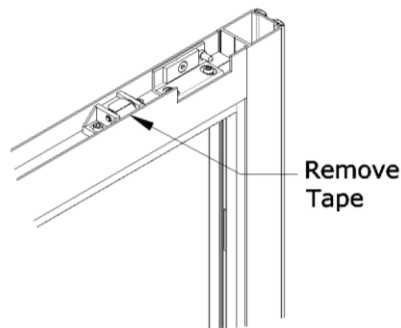


4. Slide the PSA arm into carrier so that it is recessed 1/4" and adjust PSA arm so that Magnetic Catch aligns and secures door. See [PSA Arm Adjustment](#) Section.
5. Adjust magnetic catch. See [Magnetic Catch Adjustment](#) section.

-
6. Install Pivot Block to door panel by sliding it onto the top of the guide track. Then slide the Pivot Block until flush with the face of the rail. Install the c' sunk screw by hand as to not strip it out of the track.



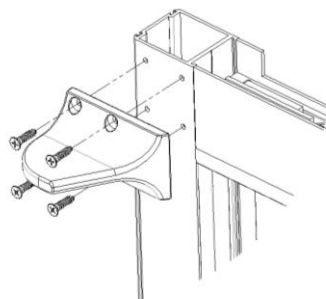
7. Remove tape from top latch.



Note!

If the tape gets removed prior to this step, the door will not break open. To break the door open if this is the case, slide a thin object such as a business card or putty knife into the gap between the top of the door and the carrier and push the rotating latch to the horizontal position.

8. If the package is equipped with positive latching or double "C" handles, install the Breakout Cam to the top of the nose rail of the active leaf.



9. Slide doors to full open position, engaging the pivot block to the pivot pin on the floor mounted plate.

-
10. Check height of bottom of active leaf #2 compared to bottom of active leaf #1. They must be the same to avoid damage to Bottom Guide Assembly. (Note, the distance between the highest place on the floor to the bottom of the #1 Leaf must be no less than $1/8 \pm 1/16$ ". Once this distance has been established, all leveling is done from Panel-to-Panel.)
 11. Install handles/latches.
 12. To adjust the door height, see [Active Leaf Door Height Adjustment](#) Section.

Note!

Active Leaf #1 cannot be adjusted higher than Active #2 else it will not break out.

13. Adjust Wedge Damper to desired location. (Damper should hold the door in place when fully open.) (See [Wedge Damper Adjustment](#) Section)

Note!

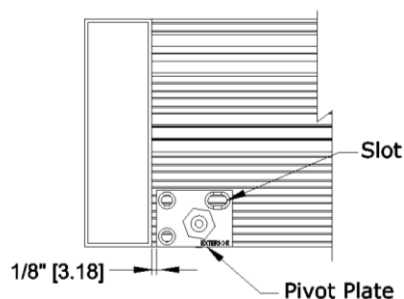
If the glass has not been previously installed, recheck magnetic catch alignment after glazing and readjust as required.

FBO Sidelite Installation Procedure- Recessed Track Applications

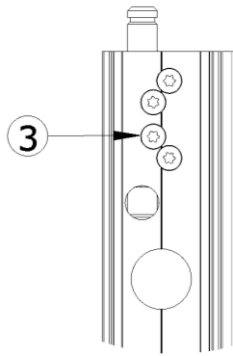
Note!

Remove packing material from the sidelite before installation.

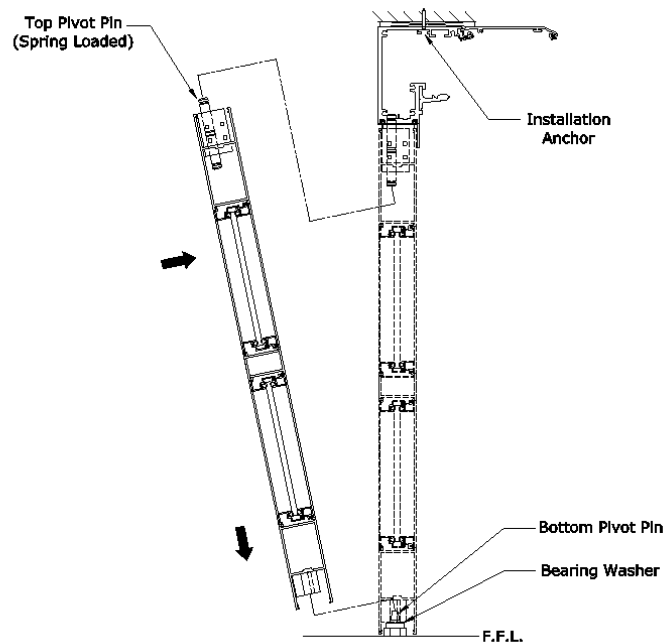
1. Install and level any tracks (surface or recessed) before installing any of the door panels.
2. Install floor mounted pivot plate. Space pivot plate $1/8$ " away from jamb. Use (1) screw in slot of pivot plate for initial install of sidelite. The countersunk holes in the pivot plate always go next to jamb, confirm 'exterior' marking facing correctly.



3. Place the bearing washer on the bottom pivot shaft.
4. Remove screw labeled "3" as shown in the top pivot to allow spring loaded pin to depress.

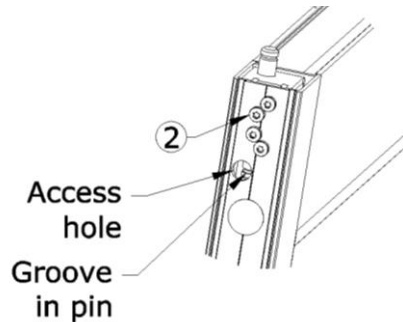


5. Set the sidelite on the bottom pivot pin, tilt it into place and carefully push down the top spring-loaded pivot pin and line it up with its receiving hole in the header until the shaft pops into place.



6. Adjust pivot for 3/16" gap between the bottom of the header and the top of the sidelite.
7. To adjust, remove the sidelite, raise or lower the bottom pivot by loosening the set screw at the side of the pivot shaft and turn the pivot clockwise to lower the sidelite or counter clockwise to raise the sidelite, as required, then retighten the set screw. (To remove the sidelite, see [Sidelite Removal Procedure](#) section.)
8. Check all clearances and adjust the Magnetic Catch. For additional information, see [Magnetic Catch Adjustment](#) section.
9. When all sidelite panels are installed, re-install the screw that was previously removed in the top pivot, labeled "3".

-
10. Remove the screw labeled “2” from the top pivot as shown. Insert a small flat blade screwdriver into the access hole. Locate the groove near the bottom of the spring loaded pin and push up on the pin until the washer in the center of the pin is above the hole for the screw that was removed. While holding the pin in this position, re-install the screw labeled “2”.



Note!

If the glass has not been previously installed, recheck magnetic catch alignment after glazing and readjust as required.

FBO Active Leaf #2 Installation Procedure (Track)

1. Move inner carrier, for active leaf #2, away from sidelite.
2. Wheel brackets are factory adjusted to the fully upward position. Double check and ensure that they are adjusted to fully upward position. If adjustment is needed see [Active Leaf Door Height Adjustment](#) Section.
3. Slide the PSA arm into carrier so that it is recessed 1/4" and adjust PSA arm so that Magnetic Catch aligns and secures door.
4. Swing panel in and engage pin guide into track. Adjust PSA Arm as required. See [PSA Arm Adjustments](#) section.
5. Adjust magnetic catch. See [Magnetic Catch Adjustment](#) section.
6. To adjust the door height, see [Active Leaf Door Height Adjustment](#) Section.

Note!

If the glass has not been previously installed, recheck magnetic catch alignment after glazing and readjust as required.

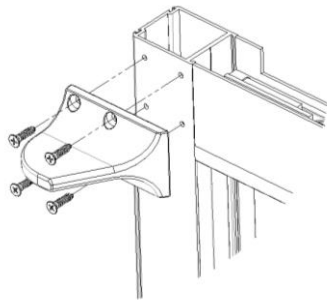
FBO Active Leaf #1 Installation Procedure

Note!

A Breakout Cam is to be installed on active leaf #1 in all applications where a Positive Latch or “C” Handle options are chosen.

1. Move outer carrier for active leaf #1 away from active leaf #2

-
2. Wheel brackets are factory adjusted to the fully upward position. Double check and ensure that they are adjusted to fully upward position. If adjustment is needed see [Active Leaf Door Height Adjustment](#) Section.
 3. With Active Leaf #1 swung out away from carrier, slide PSA arm into carrier so that it is recessed 1/4".
 4. Swing panel in and engage Pin Guide into Track. Adjust PSA as required. See [PSA Arm Adjustments](#).
 5. Adjust magnetic catch. See [Magnetic Catch Adjustment](#) section.
 6. Install handles/latches.
 7. Install the Breakout Cam on Active Leaf #1.



8. To adjust the door height, see [Active Leaf Door Height Adjustment](#) Section.

Note!

Active Leaf #1 cannot be adjusted higher than Active #2 else it will not break out.

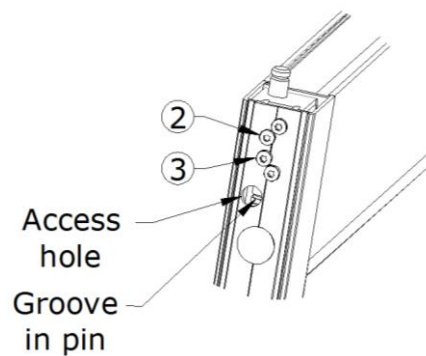
9. Adjust Wedge Damper to desired friction. (Damper should hold the door in place when fully open.) (See [Wedge Damper Adjustment](#) Section.)

Note!

If the glass has not been previously installed, recheck ball catch alignment after glazing and readjust as required.

Sidelite Removal Procedure

1. Breakout sidelite to gain access to Top Pivot.
2. Remove the screws labeled "2" and "3".
3. Insert a small flat blade screwdriver into the access hole. Locate the groove near the bottom of the spring loaded pin and push down on the pin until it dis-engages from the header.
4. Tilt the top of door away from the header.
5. Lift the panel off from bottom pivot.

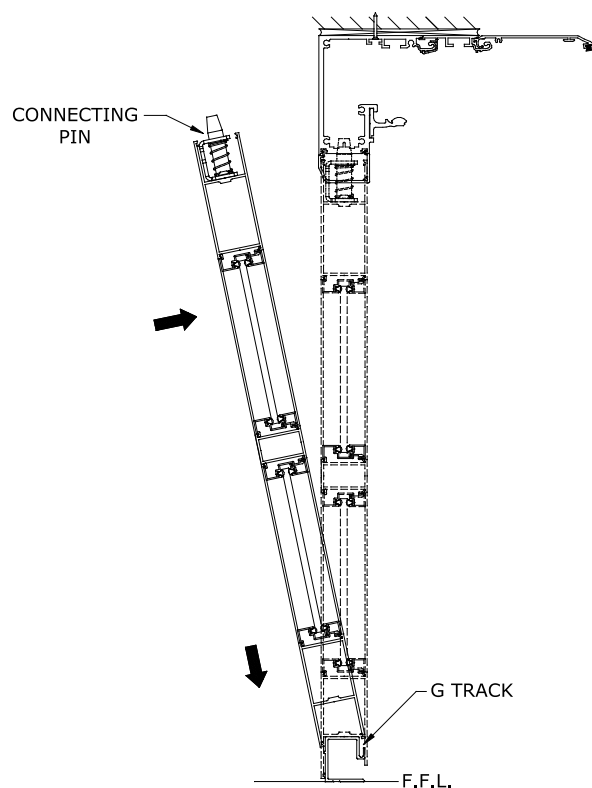


FSL Sidelite Installation Procedure

Note!

Remove packing material from the sidelite, if it has not already been removed, before installation.

1. Place sidelite on "G" track.



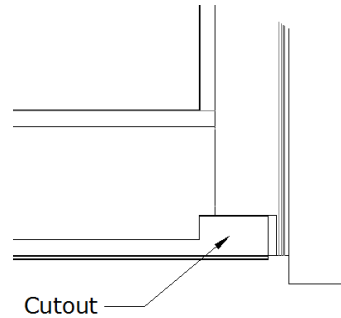
2. Line up the (2) connecting posts, located approximately 6" from each end of the top horizontal, with the (2) holes in the bottom of the header.
3. Tilt sidelite into place.
4. Lock the sidelite to the header by inserting the M6 x 50 SHC screw through the header into the connecting post.

Note!

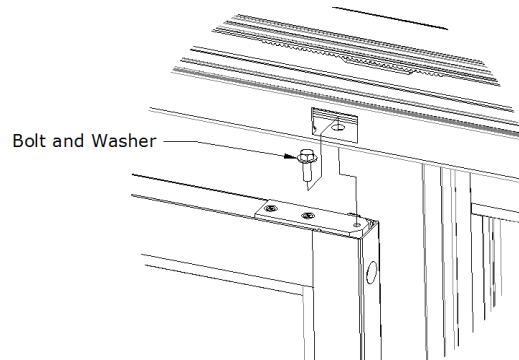
Adjust connecting post position, if out of alignment with header, pre-drilled holes.

FSL, Active Leaf #2 Installation Procedure

1. Position active leaf #2 so the bottom roller guide wheels can be inserted into cutout in the bottom horizontal rail of sidelite.



2. Position active leaf #2 under the carrier so that bolt holes in #2 Leaf line up with bolt holes in the carrier as shown.



3. Install one bolt at each end of carrier to secure active leaf #2 to Carrier.
4. To adjust the door height, see [Active Leaf Door Height Adjustment](#) Section.

Note!

If the glass has not been previously installed, recheck magnetic catch alignment after glazing and readjust as required.

FSL, Active Leaf #1 Installation Procedure

1. Position active leaf #1 so the bottom roller guide wheels can be inserted into cutout in bottom horizontal rail of the active leaf #2.
2. With active leaf #1 swung away from the carrier, slide PSA arm into carrier so that it is recessed 1/4". Adjust the PSA arm so that the magnetic catch aligns and secures the door. See [PSA Arm Adjustment](#) section.
3. Adjust magnetic catch. See [Magnetic Catch Adjustment](#) section.
4. Check height of bottom of active leaf #2 compared to bottom of active leaf #1. They must be the same to avoid damage to Bottom Guide Assembly. (Note, the distance between the highest place on the floor to the bottom of the #1 Leaf must be no less than 1/8±1/16". Once this distance has been established, all leveling is done from Panel-to-Panel.)
5. Install handles/latches.

Note!

Active Leaf #1 cannot be adjusted higher than Active #2 else it will not break out.

6. To adjust the door height, see [Active Leaf Door Height Adjustment](#) Section.

Note!

If the glass has not been previously installed, recheck magnetic catch alignment after glazing and readjust as required.

Package Final Inspection and Adjustment

Door packages may be glazed before or after installation. Final adjustments and operational checks should be performed after all doors are installed and glazing and installation of any trim and accessories are completed.

Check clearances with floor and header in both sliding and break-out modes as well as sweep adjustment if applicable.

Dispose of all packing and waste materials in accordance with state and local requirements.

Adjustments

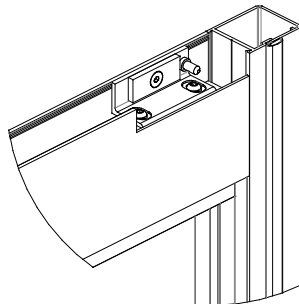
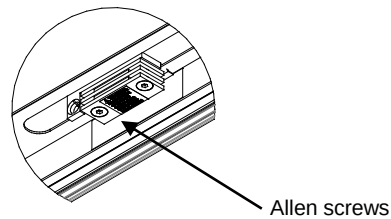
Magnetic Catch Adjustment

All break-out panels are equipped with a magnetic catch.

Break-out force limits vary by location. Check local building codes for egress requirements.

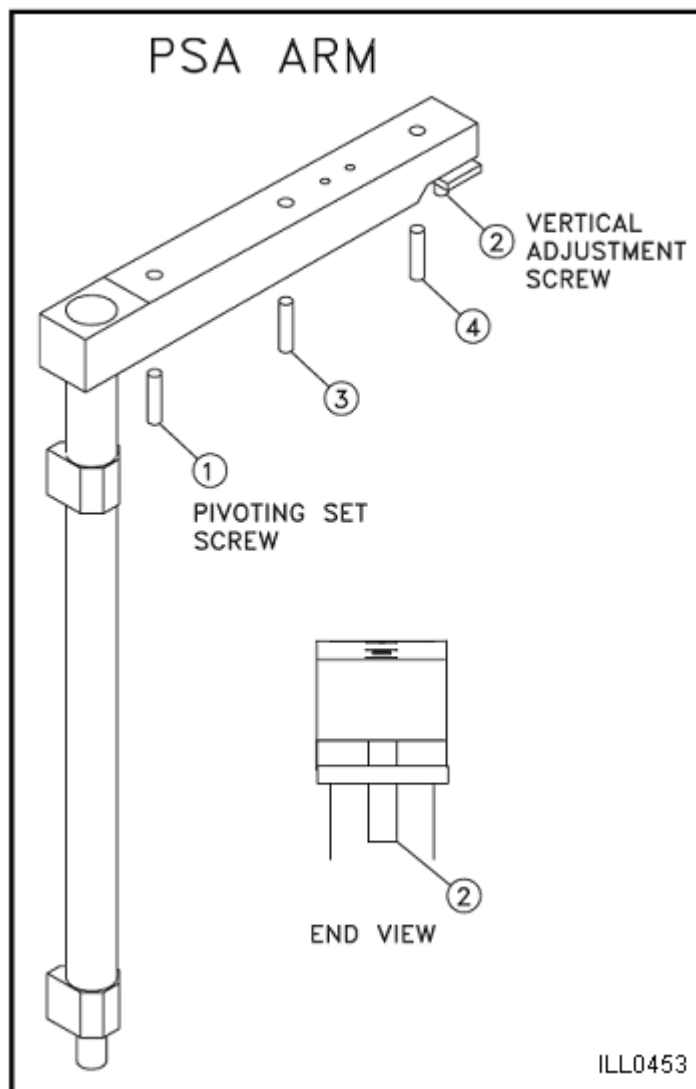
Adjust doors for proper operation in accordance with manufacturer's instruction and adherence to NFPA 101 Life Safety Code and/or AHJ "Authority Having Jurisdiction". Tension is not to exceed 50 lbs. breakout force.

1. To adjust tension, loosen Allen screws on magnetic portion of catch. Push one or both magnets away from catch plate to lower breakout force.
2. To increase the tension, push one or both magnets towards catch plate. Then tighten both Allen screws to secure catch.



PSA Arm Adjustment

1. Open door and lock down #1 screw (pivoting set screw) of PSA arm, and loosen set screws #3 and #4.
2. Adjust #2 screw (PSA vertical adjustment screw) on PSA arm to lift the door and magnetic catch lead edge into alignment with magnetic catch receiver. (Note, if the glass has not previously been installed, you will need to recheck alignment once the glass is in place and readjust as necessary.)
3. Once the adjustment is complete, tighten remaining set screws #3 and #4 on PSA arm and close the door engaging the m catch.
4. Confirm that the lead edge of the door and lead edge of the carriers are still flush.

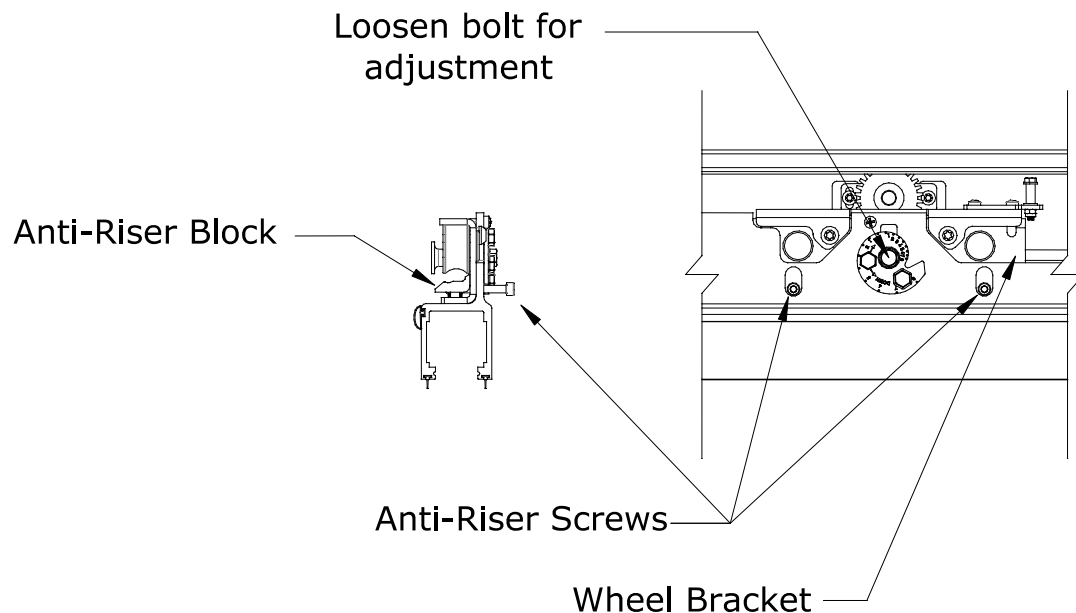


Active Leaf Door Height Adjustment

Note!

Sidelite should be adjusted level and plumb with the proper 3/16" gap at the head before adjusting active leaf.

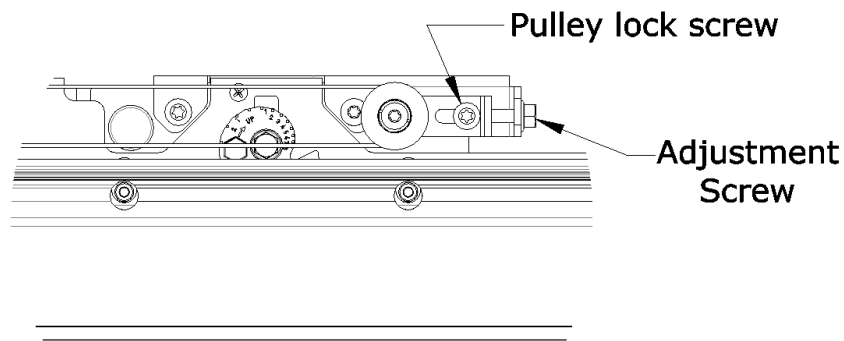
1. Loosen the adjustment bolts on each wheel bracket on each side of the door.
2. Rotate the cam via a 10mm socket and level the door and align horizontally with the sidelite.
3. After leveling process is complete, retighten the adjustment bolts on each wheel bracket on both sides of door and recheck for level.



Telescopic Belt Tension Adjustment

The belt tension is factory-adjusted and readjustment is normally not needed. If the belt should need to be adjusted, perhaps due to belt replacement, proceed as follows. The belt can be adjusted from either side of the active leaf #2 carrier.

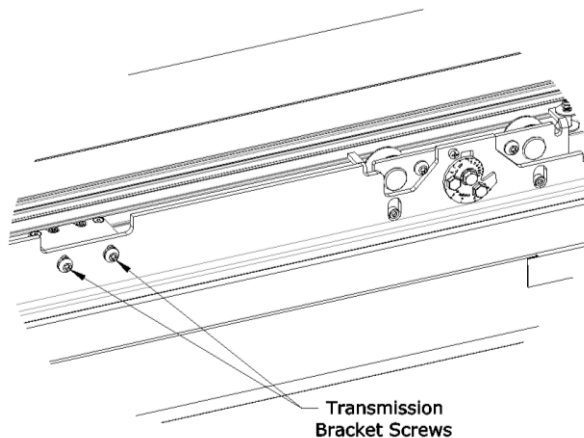
1. Loosen the pulley lock screw.
2. Tighten adjustment screw to a torque of 283 oz-in +/- 35 oz in (2Nm +/- 0.25Nm)
3. Tighten the pulley lock screw.



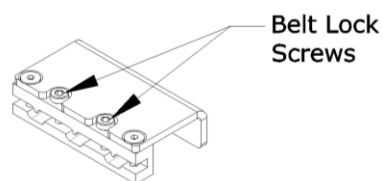
Belt Timing Adjustment

Once all doors are installed and fully adjusted, move the doors to the fully closed position. The door should have enough travel such that the seals meet and compress slightly against the jamb. If a positive latch is installed, ensure that the door has enough travel to latch properly. Also, check that the verticals between all three doors are aligned. Now open the doors to the fully open position. Both doors should have enough travel such that the guide blocks land against the pins on the pivot plate. If any of the above scenarios need adjustment then proceed as follows.

1. Slide the doors to the position where adjustment is needed.
2. Remove the two screws holding the transmission bracket in place on AL# carrier.



3. Mark the belt with the edge of the transmission bracket.
4. Loosen the two belt lock screws holding the belt in place and remove the belt.

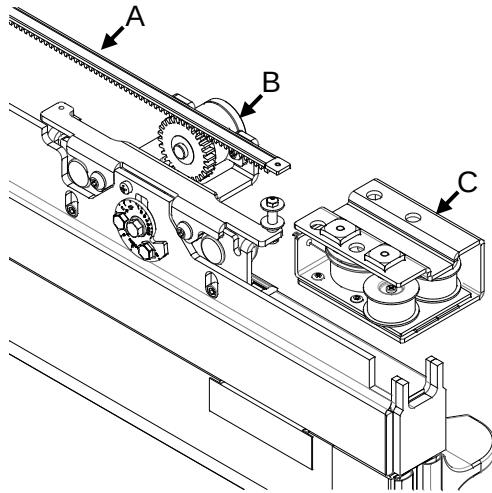


5. Slide door(s) to desired position.
6. Insert belt back into the transmission bracket.
7. Re-install the belt lock screws.
8. Re-install the transmission bracket onto the carrier.
9. Slide the doors back to the position where adjustment was needed and check if corrected.

Telescopic Self Closing System Setup and Adjustment

The self-closing system consists of three main components:

- **Rack Gear (A)** – is factory installed in the door header and works with the speed control to regulate speed and latching force.
- **Speed Control (B)** – is shipped loose and should be attached the door panel after installing Active Leaf Panel, and regulates door-closing speed. Dial on back of unit adjusts the dampening. Rotating counter-clockwise increases the dampening effect and rotating clockwise reduces damping.
- **Spring Unit (C)**– is factory installed in the header, and provides the force to pull the door closed.



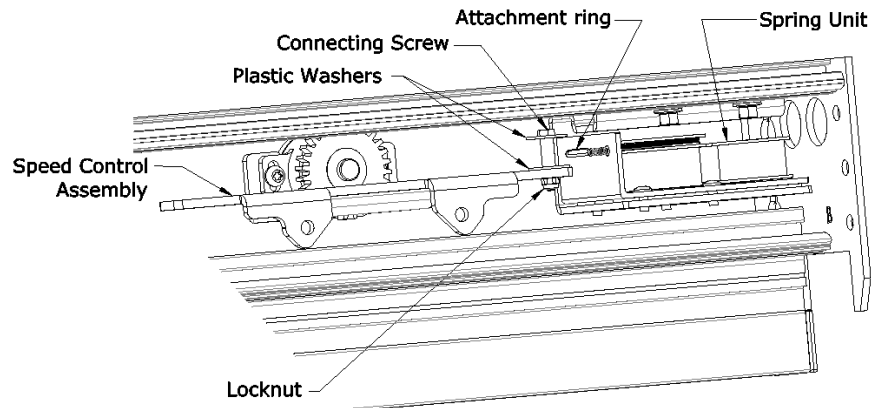
Note!

Speed Control components are adjustable to provide flexibility and customization for the user. It is important to understand the adjustments and how they interact with each other as well as how the door will be utilized, in order to set-up the system to operate appropriately.

Spring Unit Setup

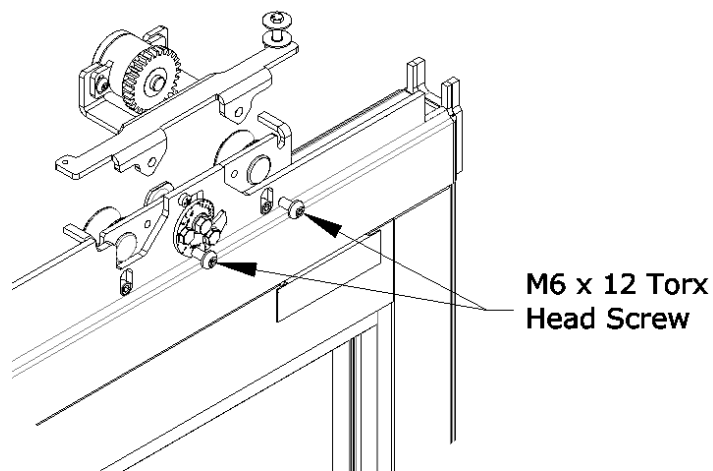
Spring Unit is installed in the factory and gets connected to the Speed Control assembly that ships loose.

1. Remove lock nut from the connecting screw located on the spring control assembly.
2. Remove the connecting screw and bottom washer.
3. Insert the attachment ring from the Spring Unit over the plastic sleeve on the connecting screw, in between the plastic washers.
4. Re-install connecting screw and locknut on the Speed Control bracket



Speed Control Installation

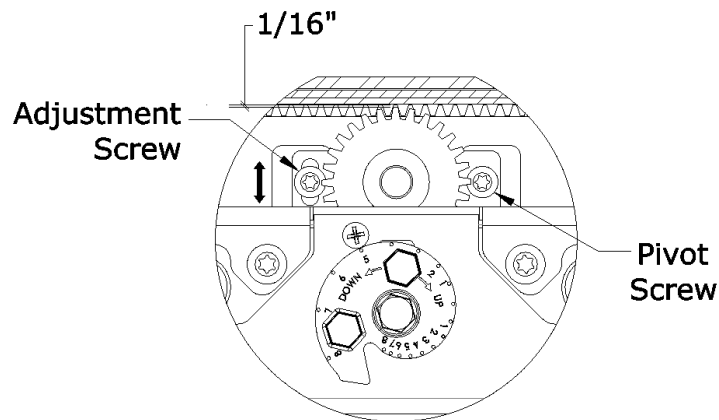
1. The Speed Control assembly is shipped loose from the factory. Attach this to the wheel bracket at the nose end of the carrier via the M6 x 12 Torx Head screws provided.



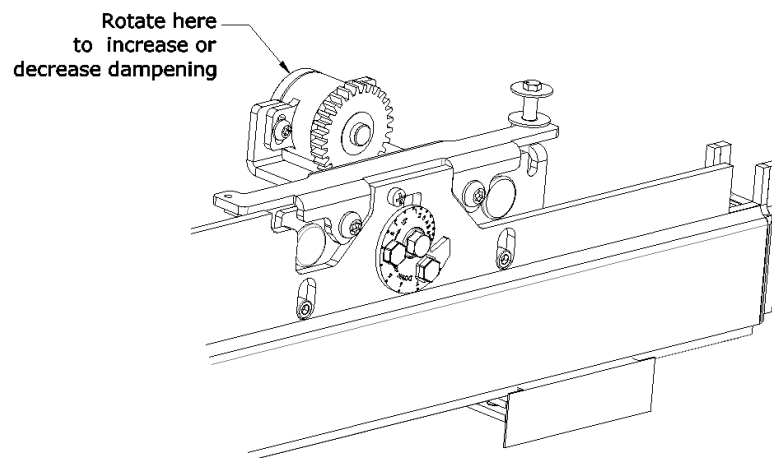
Speed Control Setup

1. With the active door in the closed position, open the header cover and locate the gear rack in the top of the header next to the Spring Unit.

2. Loosen the Pivot Screw and the Adjustment Screw to properly align the gears on the Speed Control to the rack in the header.
3. Adjust the Speed Control body's position so that there is a 1/16" gap between the speed control teeth and the gear rack.



4. Tighten the pivot and adjustment screws to lock the speed control in place.
5. Once the door is glazed, open the door to various positions from fully open to a few inches from fully closed and allow the door to close on its' own. The door should close and latch from all positions.
6. To increase or decrease the closing forces, rotate the wheel on the Speed Control either clockwise or counter clockwise.

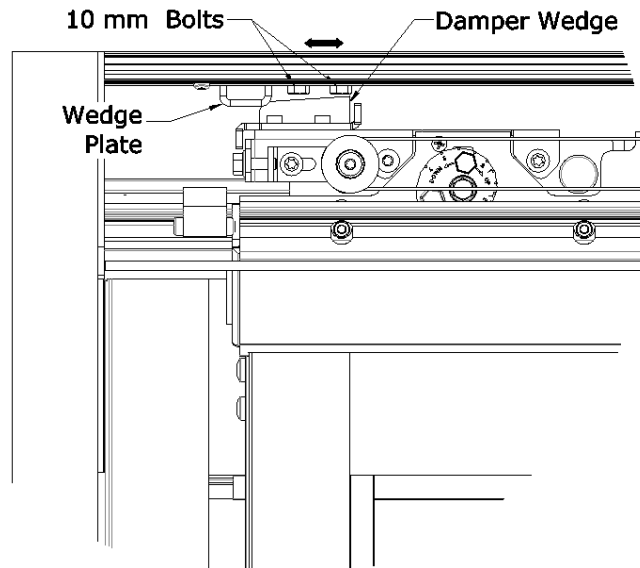


7. If more closing force is needed after the Speed Control has been maxed out, then loosen the pivot and adjustment screws on the Speed Control and decrease the distance between the teeth on the Speed Control and the Rack Gear.
8. If less closing force is needed after the Speed Control has been minimized, then one of the gear racks can be removed. To do this, loosen the square nut adjacent to the gear rack via a 2mm Allen wrench. Slide the gear rack down to the other side of the beam until the slot cutout. Slide the square nut and track out through this slot. Re-insert the square nut and push it back adjacent to the track remaining and tighten.

Wedge Damper Adjustment

Wedge Damper location can be adjusted by loosening the (2) 10mm screws and sliding the assembly in the appropriate direction. Position Wedge Damper where the active leaf is fully open and the pivot block on the bottom of the heel rail is resting against the pins on the pivot plate.

1. Open the door to full open position. (The wedge damper should hold the door firmly in the full open position.)
2. Loosen the two 10mm screws and slide the damper to proper location then re-tighten the screws.



3. After completing adjustments, close and latch the cover.

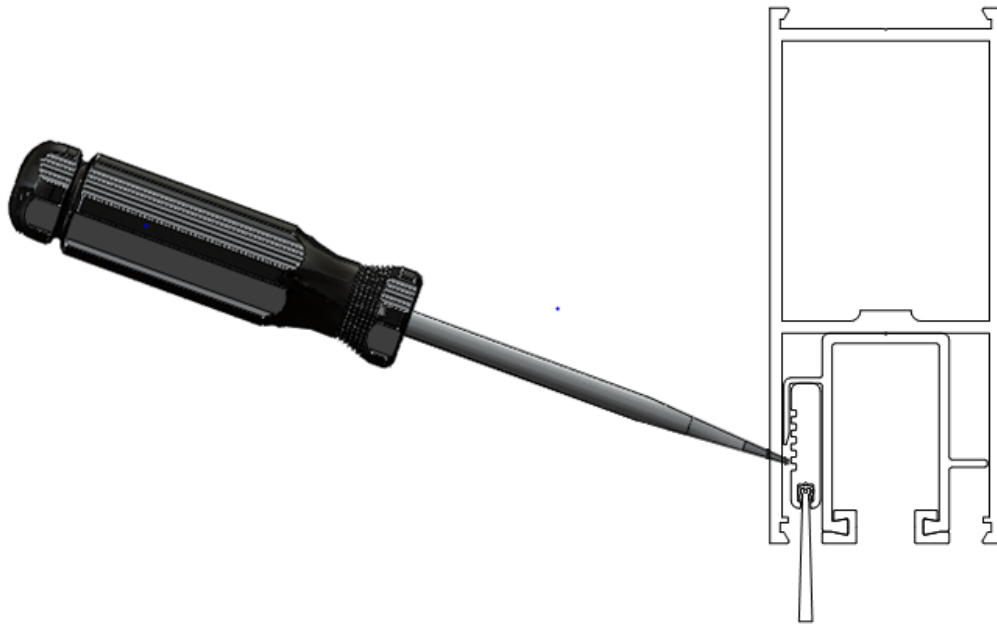
Sweeps Adjustment

1. If sweeps are included in your package, trim to length required for each panel.
2. Insert sweep into Sweep Holder.

Note!

Sweeps will be longer than the sweep holder.

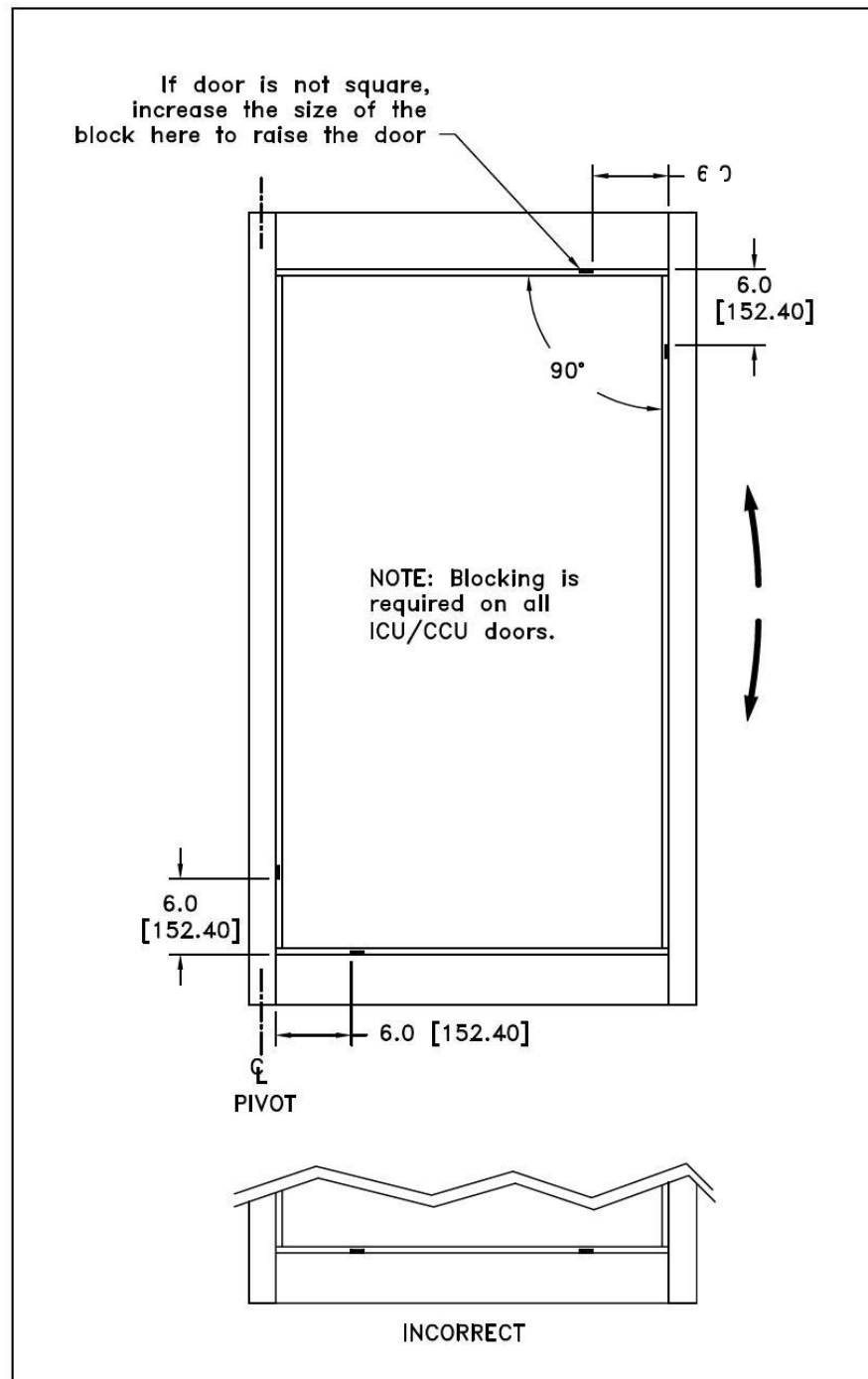
3. Install sweep and holder into bottom of door as shown. Install sweep holder with grooves facing towards outside of door per picture below.
4. Once doors are hung, insert small flat head screwdriver into countersunk holes to adjust sweeps to desired height.
5. Secure sweep with hardware supplied with door.



Typical Sweep Installation
(Trackless FBO Package Shown)

Glazing and Blocking

Install glass using the proper glazing tools. Glass blocks are installed by door manufacturer. Please verify that glass block locations match graphic below. Observe standard glazing techniques when installing glass.



CAUTION: If doors are not square, possible malfunction of doors and alignment issues may occur.

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