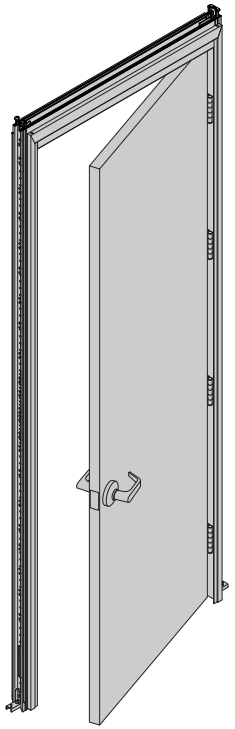
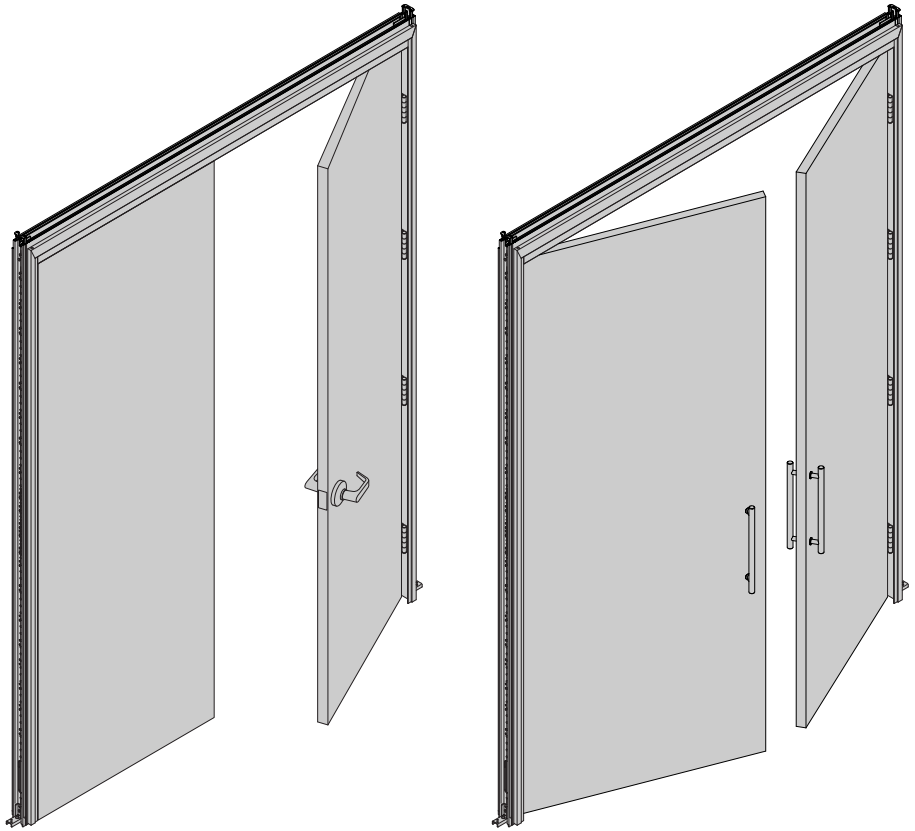
Steelcase®

V.I.A.™ Reversible Door



SINGLE DOOR



PAIR OF DOORS

If you have a problem, question, or request, call your local dealer, or Steelcase Line 1 at **888.STEELCASE** (888.783.3522) for immediate action by people who want to help you.

(Outside the U.S.A., Canada, Mexico, Puerto Rico, and the U.S. Virgin Islands, call: 1.616.247.2500)
Or visit our website: www.steelcase.com

Grand Rapids, MI 49501
U.S.A.

Printed in U.S.A.

By Steelcase Inc. Grand Rapids, MI 49501-1967
www.steelcase.com/patents
Model: FEIJA2V
Ship Date: 10/09/13 Athens
Order No.: 05207605-001160
Barcode: 1PN8Z952O
Assembled By: F529602
Finishes **6249**

J0DEF
PH: 108.000 MH: 105.618

Installation Reference Identification (IRID) Label example shown above.
Many V.I.A. Products have specific locations within the floor plan layout.
These products will be identified with an Installation Reference Identification Label.
The Installation Reference ID Label number will indicate the location of the product within the floor plan layout. Detailed information can be found on the label including style/model number, finish, Plan dimensions, Measured dimensions etc....

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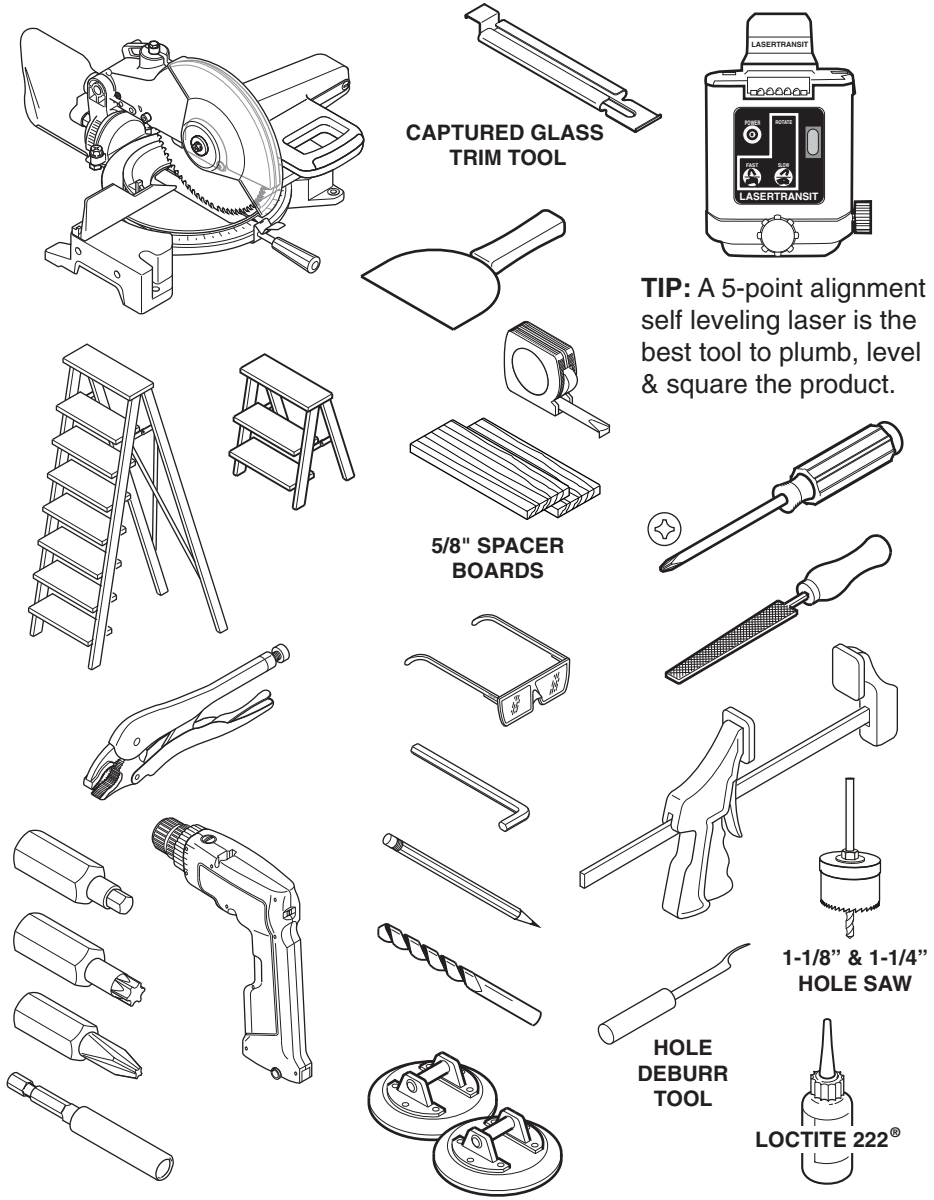
Tools



TIP: A 5-point alignment self leveling laser is the best tool to plumb, level & square the product.

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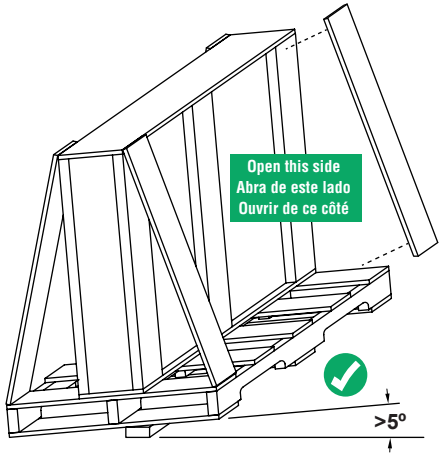
⚠ WARNING ⚠ ADVERTENCIA ⚠ AVERTISSEMENT

READ DIRECTIONS AND MANUAL FIRST
LEA PRIMERO LAS INSTRUCCIONES Y EL MANUAL
LISEZ D'ABORD LES DIRECTIVES ET LE GUIDE



RISK OF SERIOUS INJURY
RIESGO DE LESIONES GRAVES
RISQUE DE GRAVES BLESSURES!

Safety Instructions Instrucciones de Seguridad Consignes de Sécurité

- Before opening, ensure crate is stable and tilted at least 5 degrees to prevent glass from falling out.
- To open, cut any bands first and pry off boards on front of crate.
- Before removing glass, check crate and remove protruding nails or screws that could scratch glass.
- Wear appropriate personal protective equipment (safety glasses, gloves, safety shoes and skin protection).
- Tempered Glass is very heavy and can shatter while handling. Use two or more people to handle glass.
- Handle carefully. A scratched surface, damaged surface, or edge impact can cause the glass to shatter suddenly into sharp pieces.

- Antes de abrir, asegúrese de que la caja esté estable e inclinada al menos por 5 grados para evitar que el vidrio se salga de la caja.
- Para abrir, corte primero las bandas de embalaje y luego separe las tablas del frente de la caja.
- Antes de retirar el vidrio, chequee la caja y quite los clavos o tornillos salientes que puedan rayar el vidrio.
- Use el equipo apropiado de protección personal (gafas de seguridad, guantes, zapatos de seguridad y protección para la piel).
- El vidrio templado es muy pesado y se puede romper durante su manipulación. Use dos o más personas para manipular el vidrio.
- Manéjelo con cuidado. Una superficie rayada o dañada, o el impacto sobre el borde pueden causar que el vidrio se rompa de repente en trozos afilados.

- Avant d'ouvrir, assurez-vous que la caisse à claire-voie est stable et inclinée d'au moins 5 degrés pour éviter que la vitre bascule hors de la caisse.
- Pour ouvrir, coupez d'abord les bandes d'emballage, puis écartez les bords sur le devant de la caisse.
- Avant de retirer la vitre, vérifiez la caisse et enlevez les clous ou les vis qui pourraient dépasser et qui pourraient égratigner la vitre.
- Portez de l'équipement de protection individuelle approprié (lunettes de sécurité, gants, chaussures de sécurité et vêtements de protection).
- Le verre trempé est très lourd et peut se briser en éclats lorsqu'on le manipule. Au moins deux personnes sont nécessaires pour manipuler la vitre.
- Manipulez avec soin. Une surface égratignée ou endommagée ou encore un choc sur le rebord peut faire en sorte que le verre se brise soudainement en éclats tranchants.

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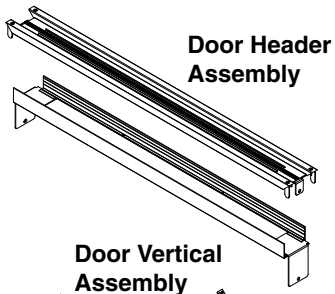
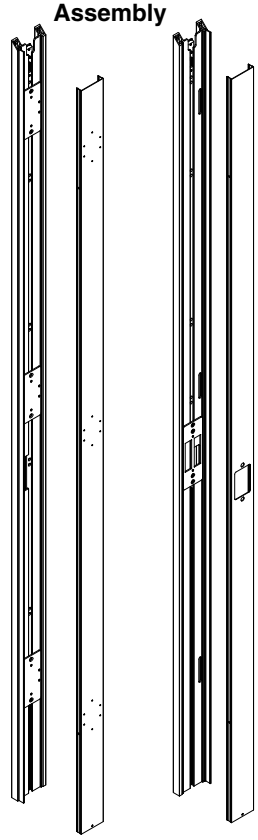
Door Frame Components:

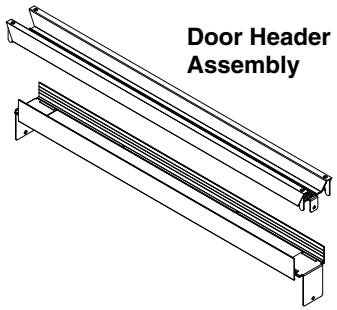
Transom Height Frame

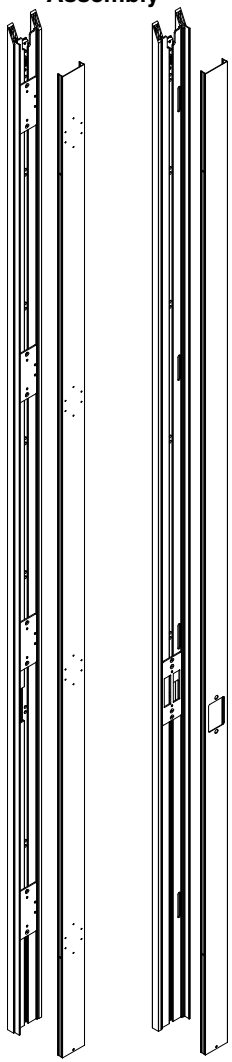




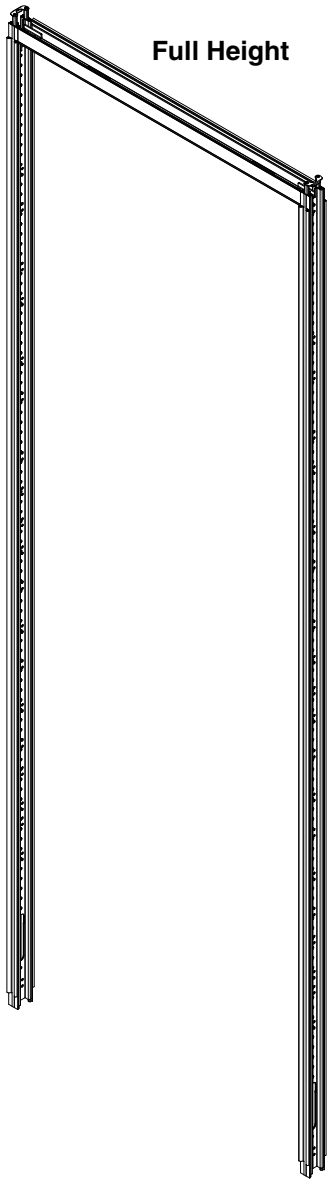
Acoustic Seal

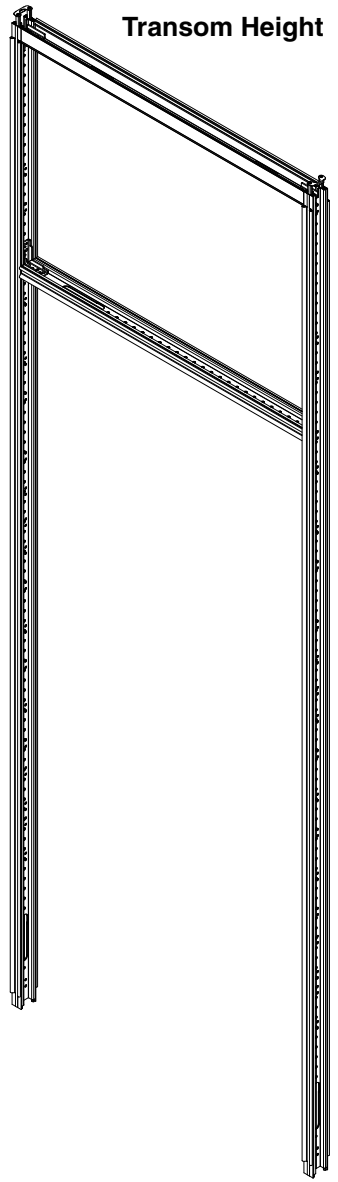
Full Height Frame





Structural Frame Types:





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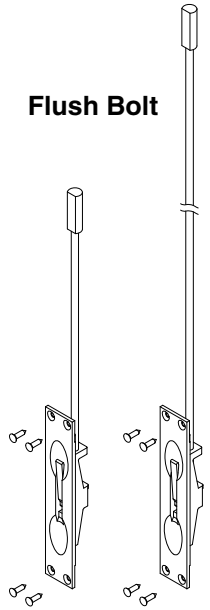
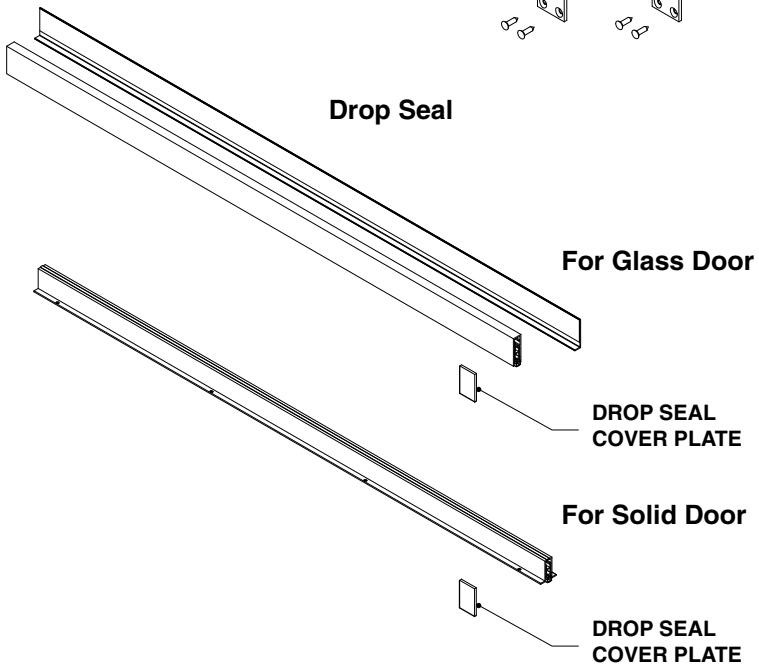
Hardware Options

Refer to the directions that are within the box for each particular product assembly.

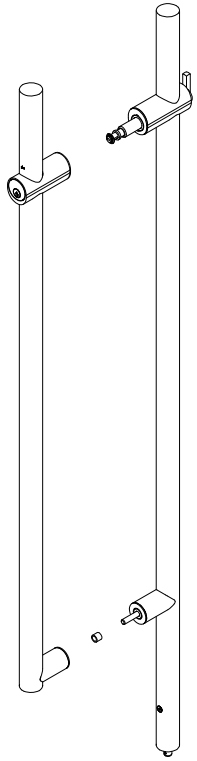
Flush Bolt



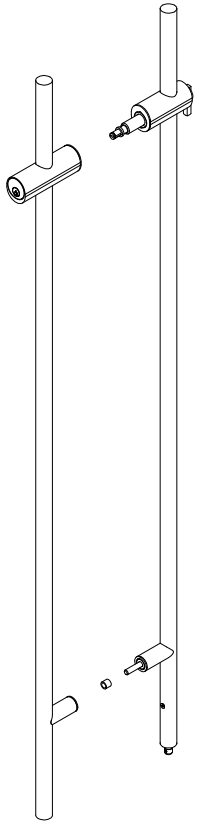
Drop Seal



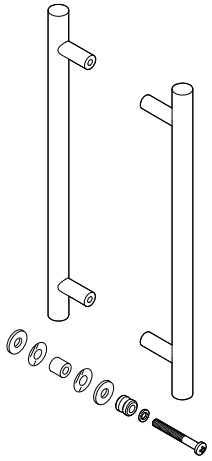
Ladder-Pull Handle (Offset)



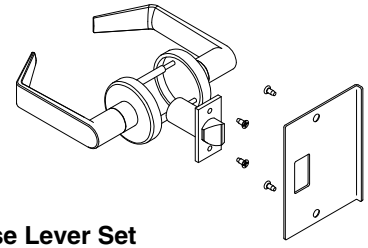
Ladder-Pull Handle (Aligned)



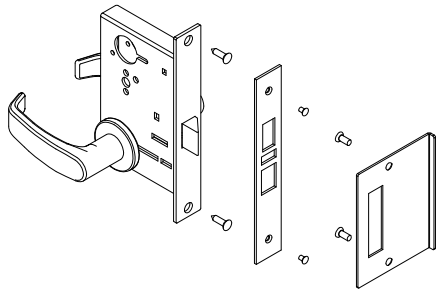
Push-Pull Handle



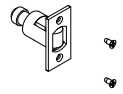
Cylindrical Lever Set



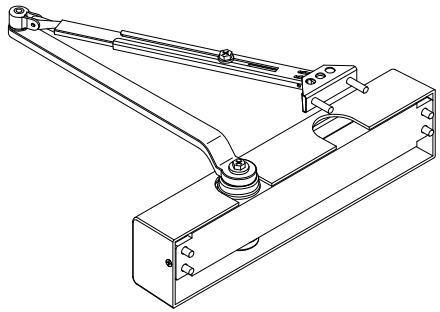
Mortise Lever Set



Roller Latch



Door Closer



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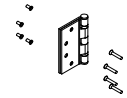
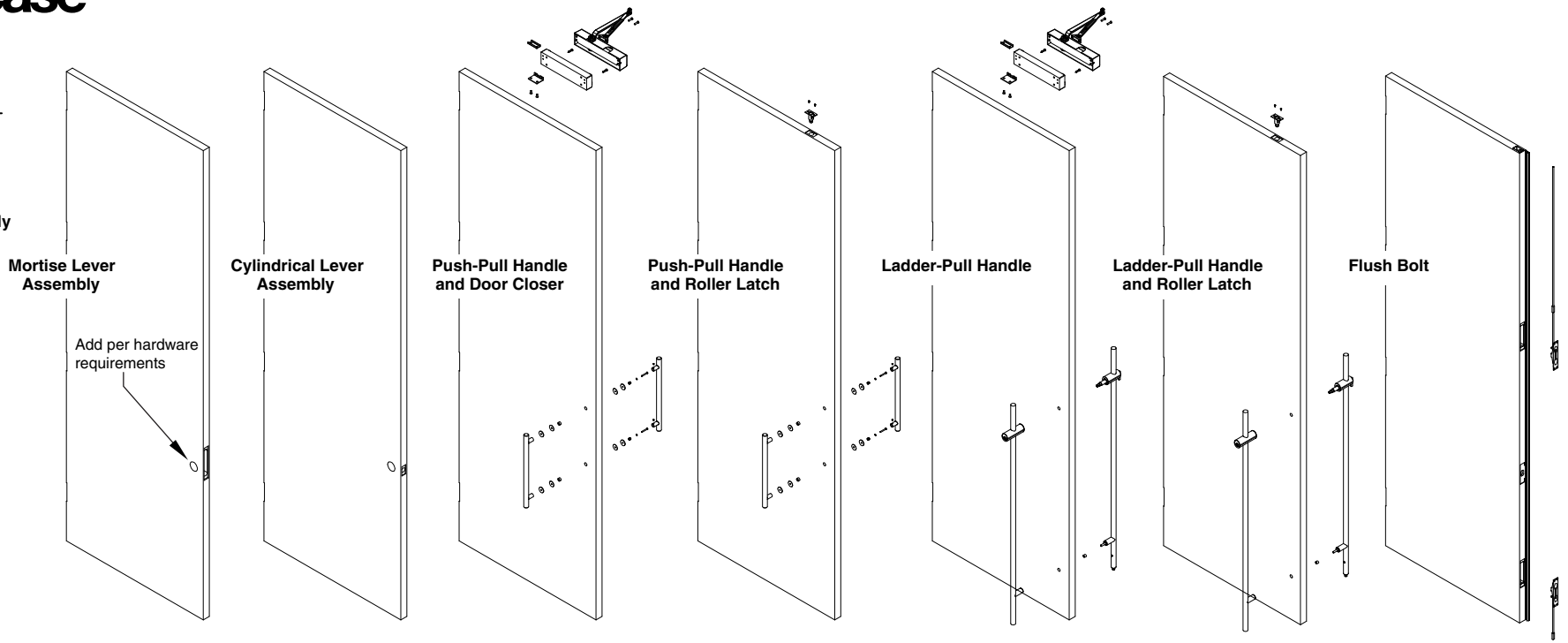
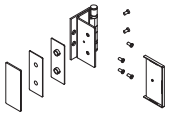
Solid Door Options



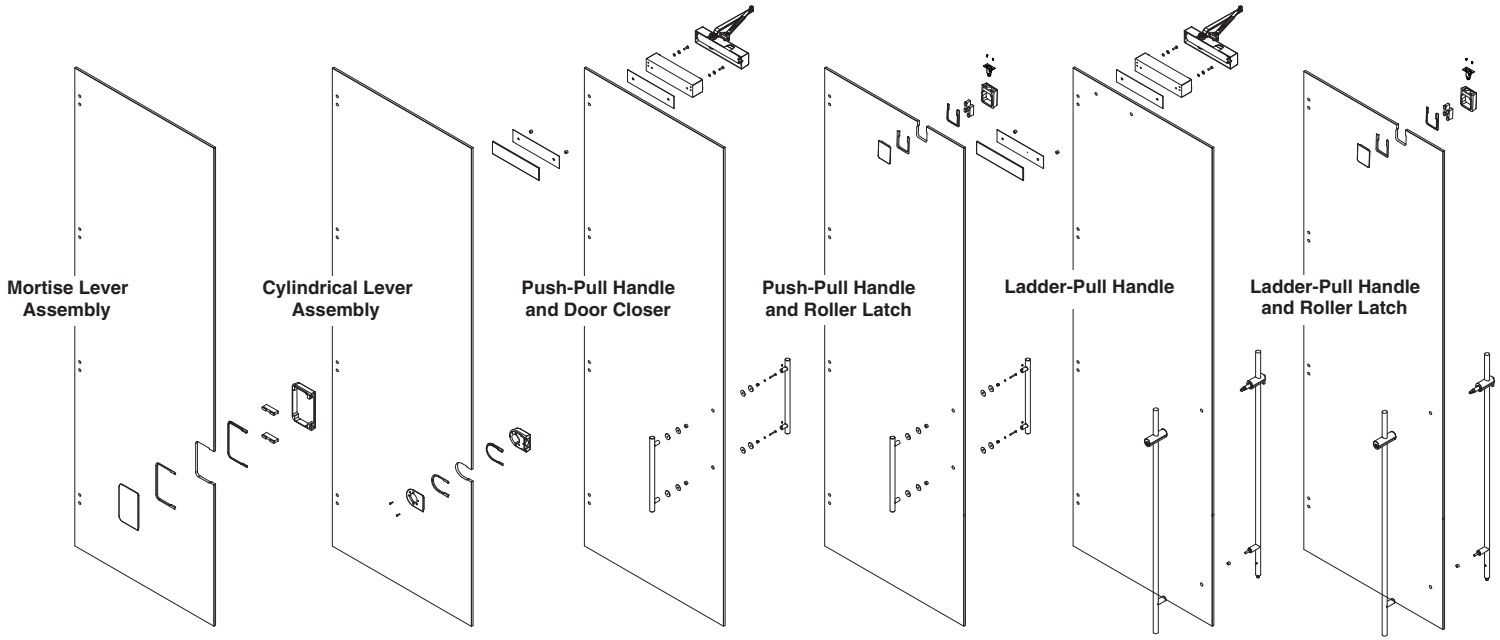
Hinge Assembly



Glass Door Options



Hinge Assembly



Door Pre-Installation Information

• All skin and trim elements next to the door must be removed prior to door installation.

• Structural Frame opening (W) plumb and square within 1/16”.

• Top-to-bottom variation of structural frame opening (W) not to exceed 1/16”.

• Laser level system hole across structural frame opening within 1/32”.

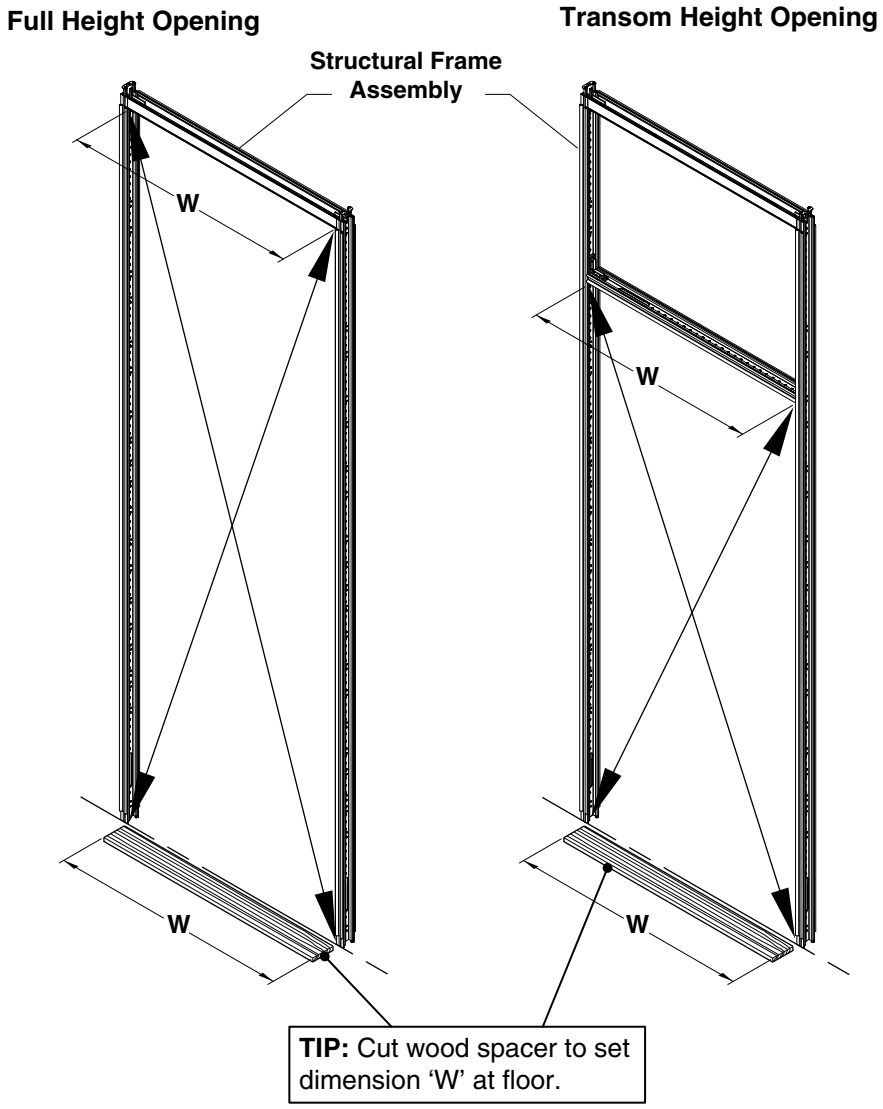
• Minimum 1/2” clearance recommended between the floor and the bottom of the door.

• 5/8” thick wood spacer required to set 1/2” floor-to-door clearance during the door installation.

• Determine which side of the door will have the hinges.

• Determine the door swing direction.

• Floor guides **ARE REQUIRED** at vertical posts and junctions when adjacent to a door frame. Refer to Assembly Directions V.I.A. Frames and Structure 939502326 or V.I.A. Seismic Floor Guide 939502155 for seismic requirement.



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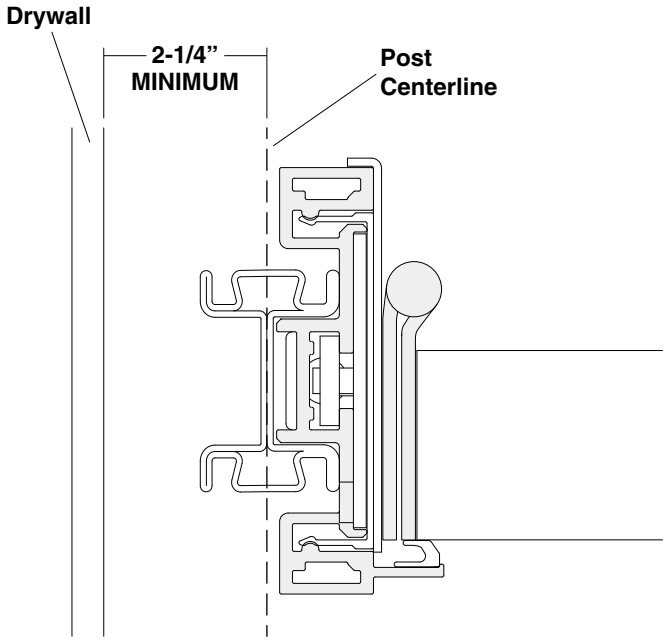
Positioning Door Next To A Wall

When positioning a door next to a wall the minimum distance from the face of the perpendicular wall to the post centerline is 2-1/4 inches.



Carpet Installation / Transition

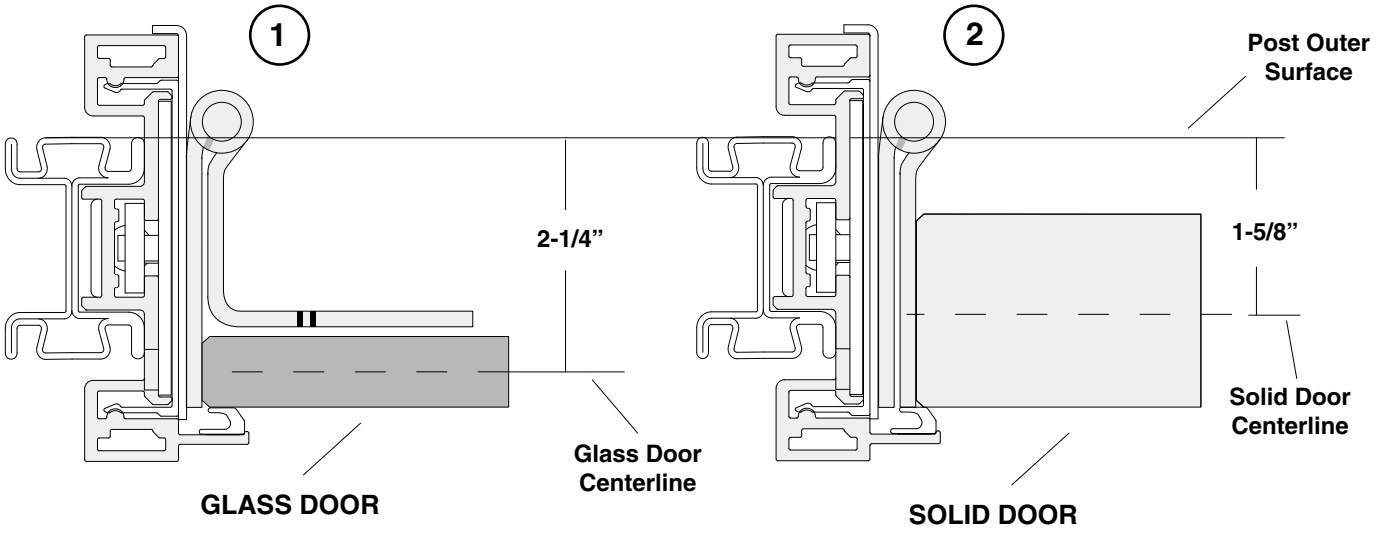
It may be desirable to have carpet transition to another carpet type at mid-point of the door. This transition can be defined by a dimension from the post outer surface to the door centerline.

1. Glass Door

Post outer surface -to- the glass door centerline: 2-1/4”

2. Solid Door

Post outer surface -to- the solid door centerline: 1- 5/8”



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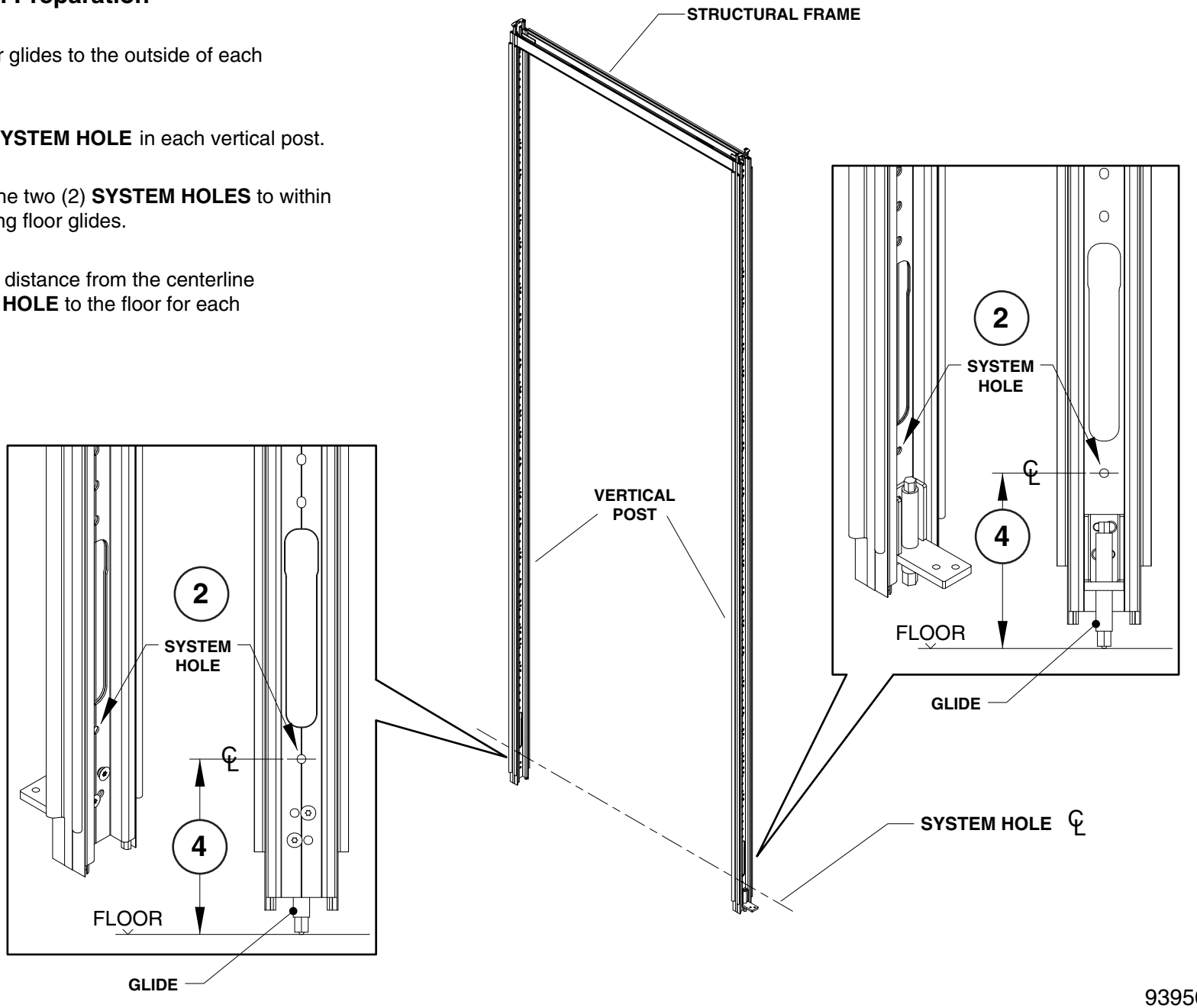
Door Vertical Preparation

1. Position floor glides to the outside of each vertical post.

2. Locate the **SYSTEM HOLE** in each vertical post.

3. Laser level the two (2) **SYSTEM HOLES** to within 1/32” by adjusting floor glides.

4. Measure the distance from the centerline of the **SYSTEM HOLE** to the floor for each vertical post.



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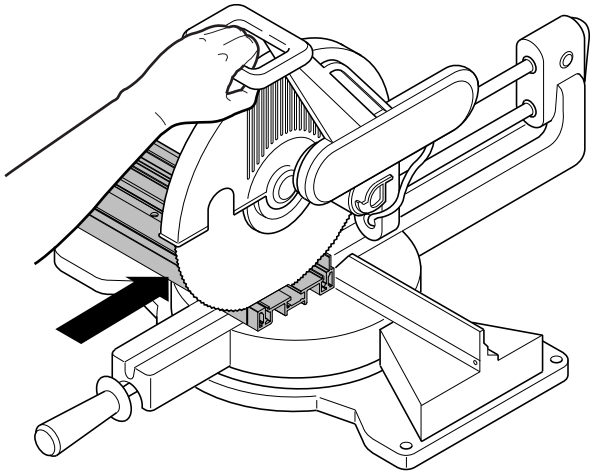
Door Vertical Preparation (continued)

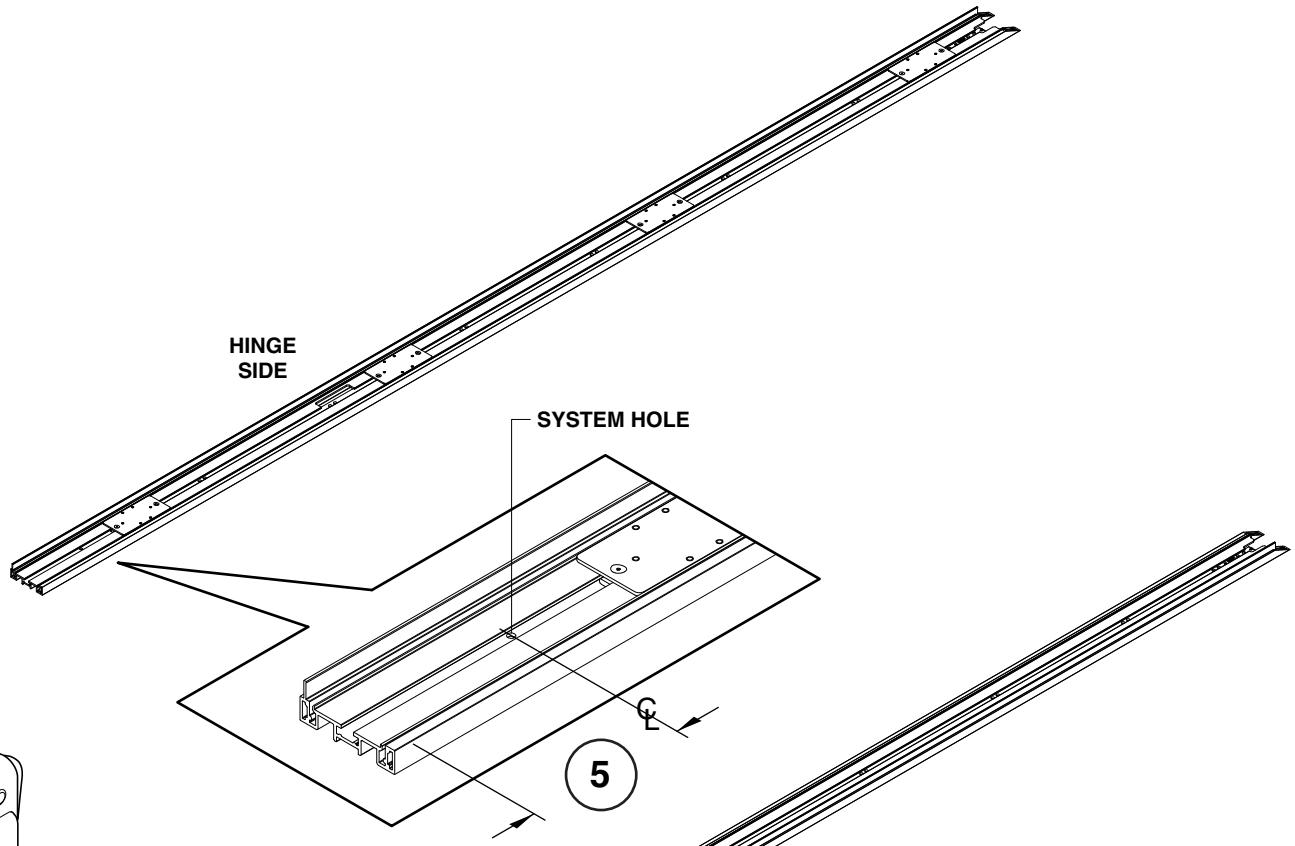
5. Cut the door vertical assemblies per the dimension measured in step 3.

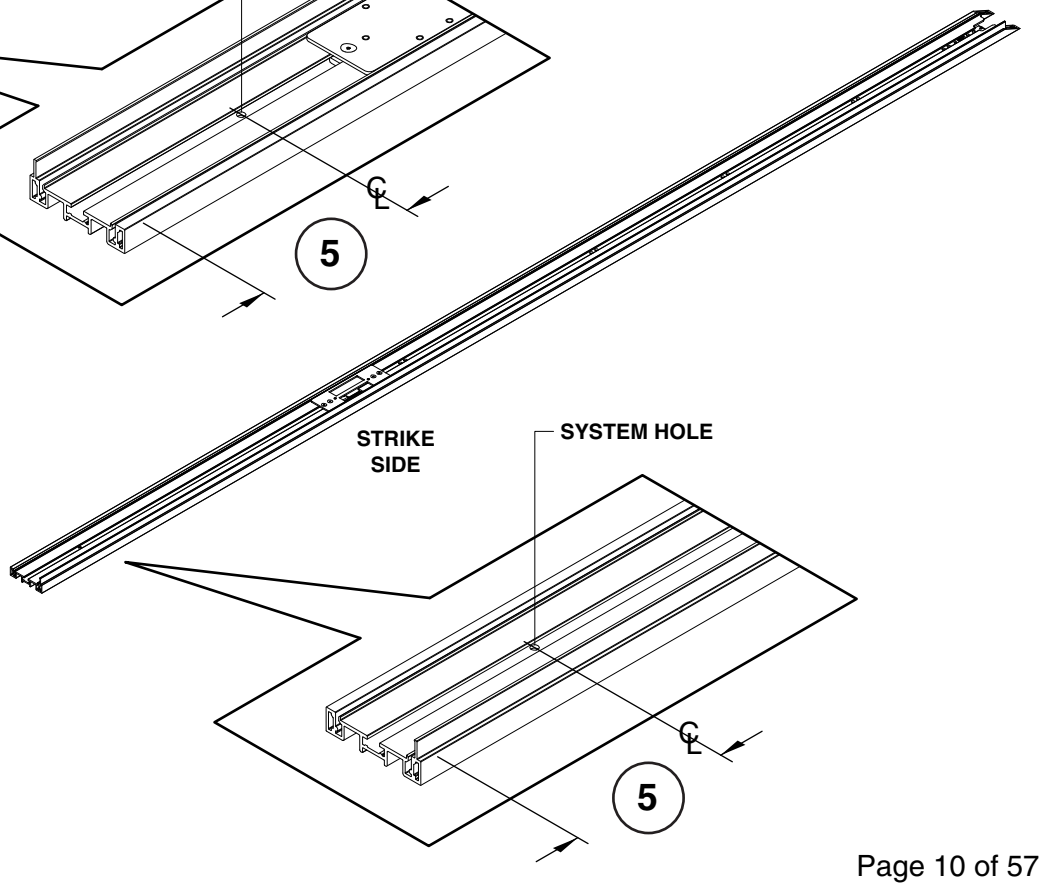
SINGLE DOOR: Consist of a hinge side and a strike side door vertical assembly.

PAIR OF DOORS: Consist of two (2) hinge side door vertical assemblies.

NOTE: Do not cut the end that has the miter angle.







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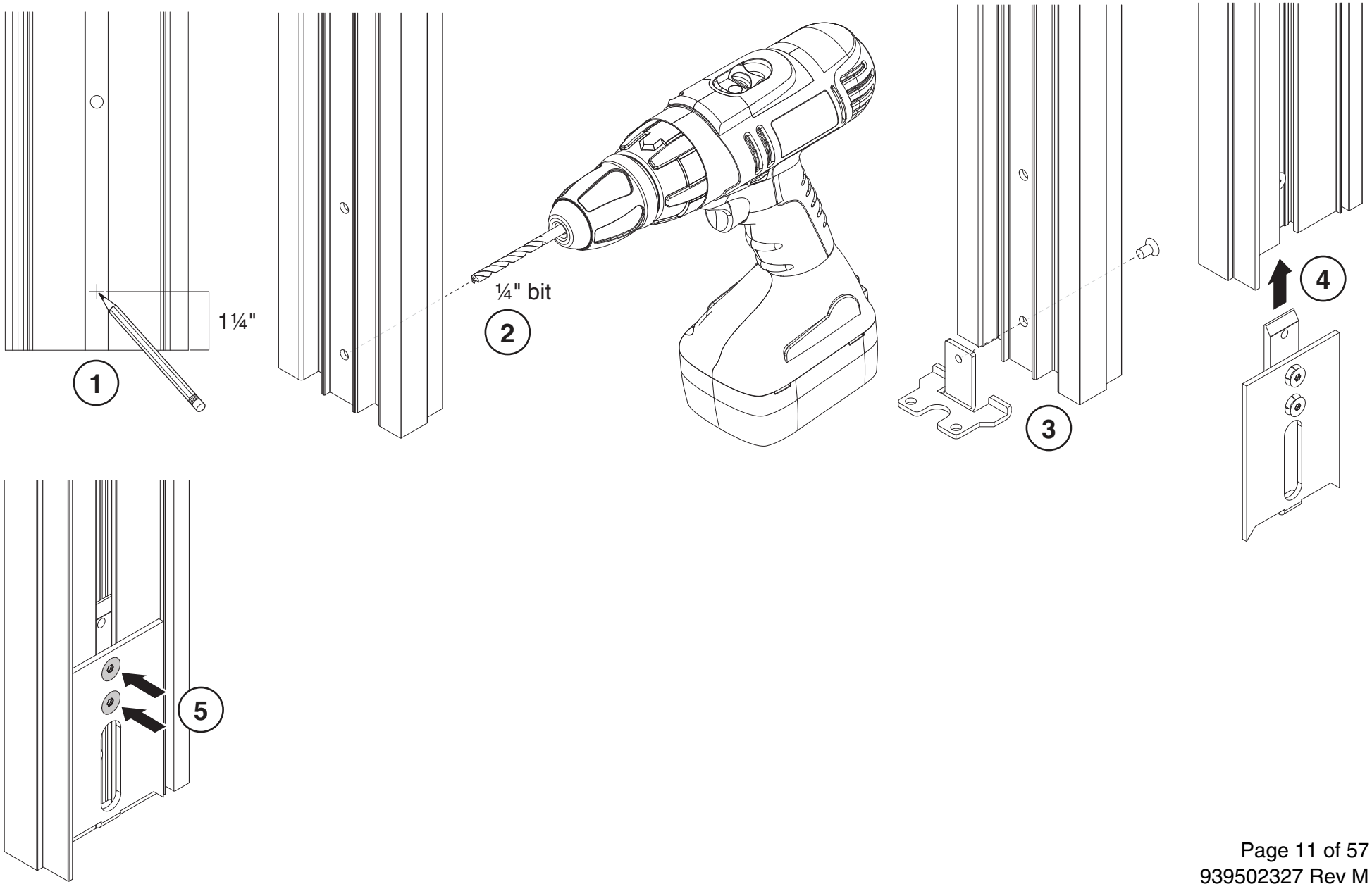
Door Frame Floor Bracket Installation

NOTE: These brackets only needed if door frame is being installed in a Lite Scale Glass application.



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Fixed Header Preparation & Installation

NOTE: If you will be installing a Door Closer, refer to DOOR CLOSER INSTALLATION starting on page 38 before installing fixed header.

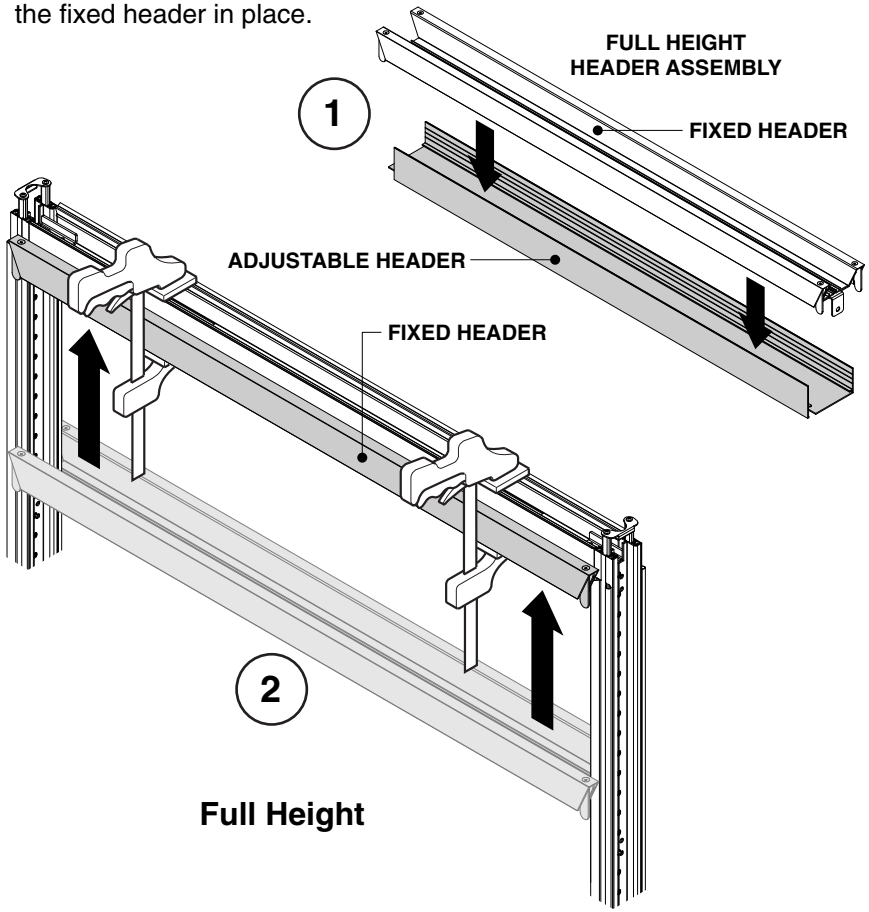
NOTE: All skin and trim parts next to the door must be removed prior to door frame installation.

1. Remove the adjustable header from the fixed header.

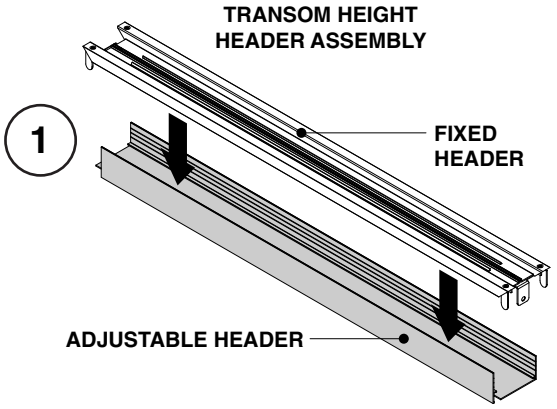
PAIR OF DOORS: If you have a roller latch application, refer to PAIR OF DOORS - ROLLER LATCH on page 12.

2. Install the fixed header at the top of the structural frame opening. Secure with quick release bar clamp.

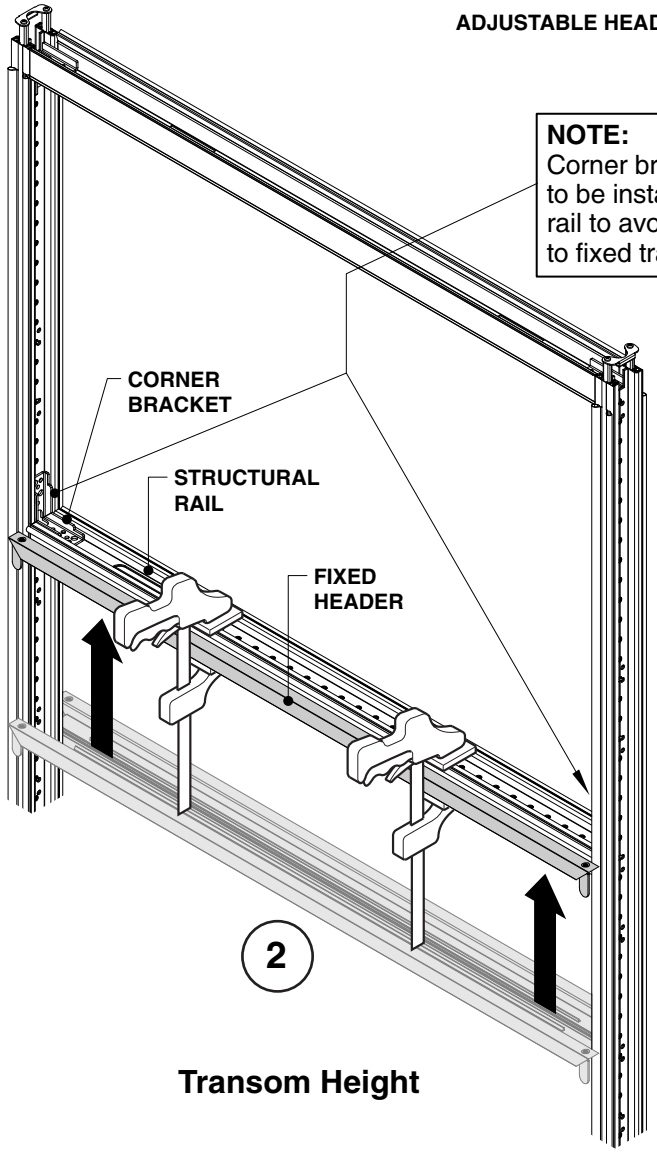
NOTE: Quick clamps may not work at a ceiling application, manually hold the fixed header in place.



Full Height



NOTE:
Corner brackets (both sides) need to be installed on top of structural rail to avoid interference condition to fixed transom header.



Transom Height

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Fixed Header Preparation & Installation (continued)

PAIR OF DOORS - ROLLER LATCH

An active-active door application can have two (2) roller latch assemblies (shown) or an active-inactive application consists of one (1) roller latch assembly.

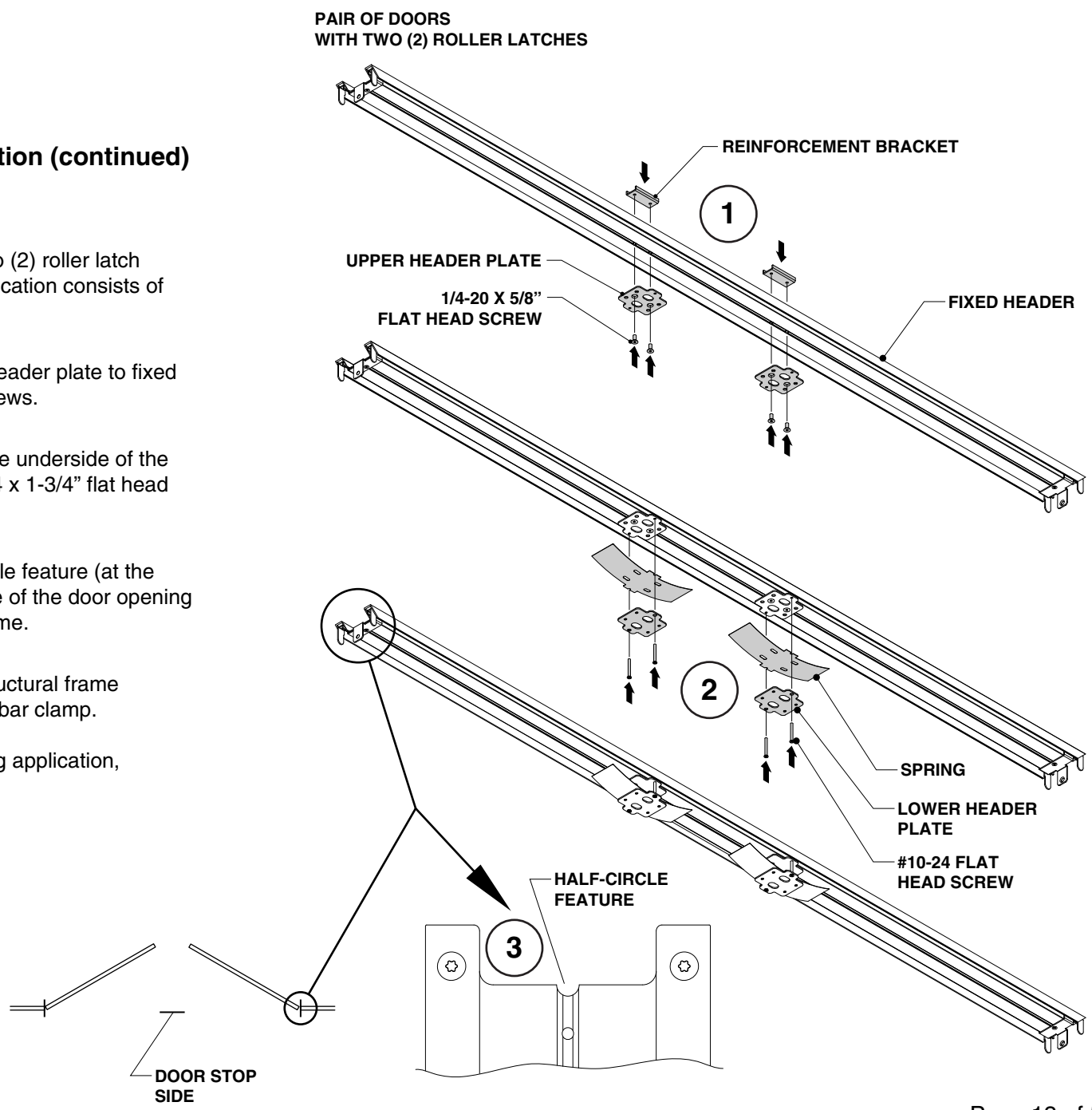
1. Secure reinforcement bracket and upper header plate to fixed header with two (2) 1/4-20 x 5/8” flat head screws.

2. Secure spring and lower header plate to the underside of the fixed header lower surface with two (2) #10-24 x 1-3/4” flat head screws.

3. Orient the fixed header so that the half-circle feature (at the end of fixed header) is located to the right side of the door opening when facing the door stop side of the door frame.

4. Install the fixed header at the top of the structural frame opening (page 11). Secure with quick release bar clamp.

NOTE: Quick clamps may not work at a ceiling application, manually hold the fixed header in place.



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Door Vertical Installation

1. Position the mitered end of the two (2) door vertical assemblies to engage the fixed header corner brackets.

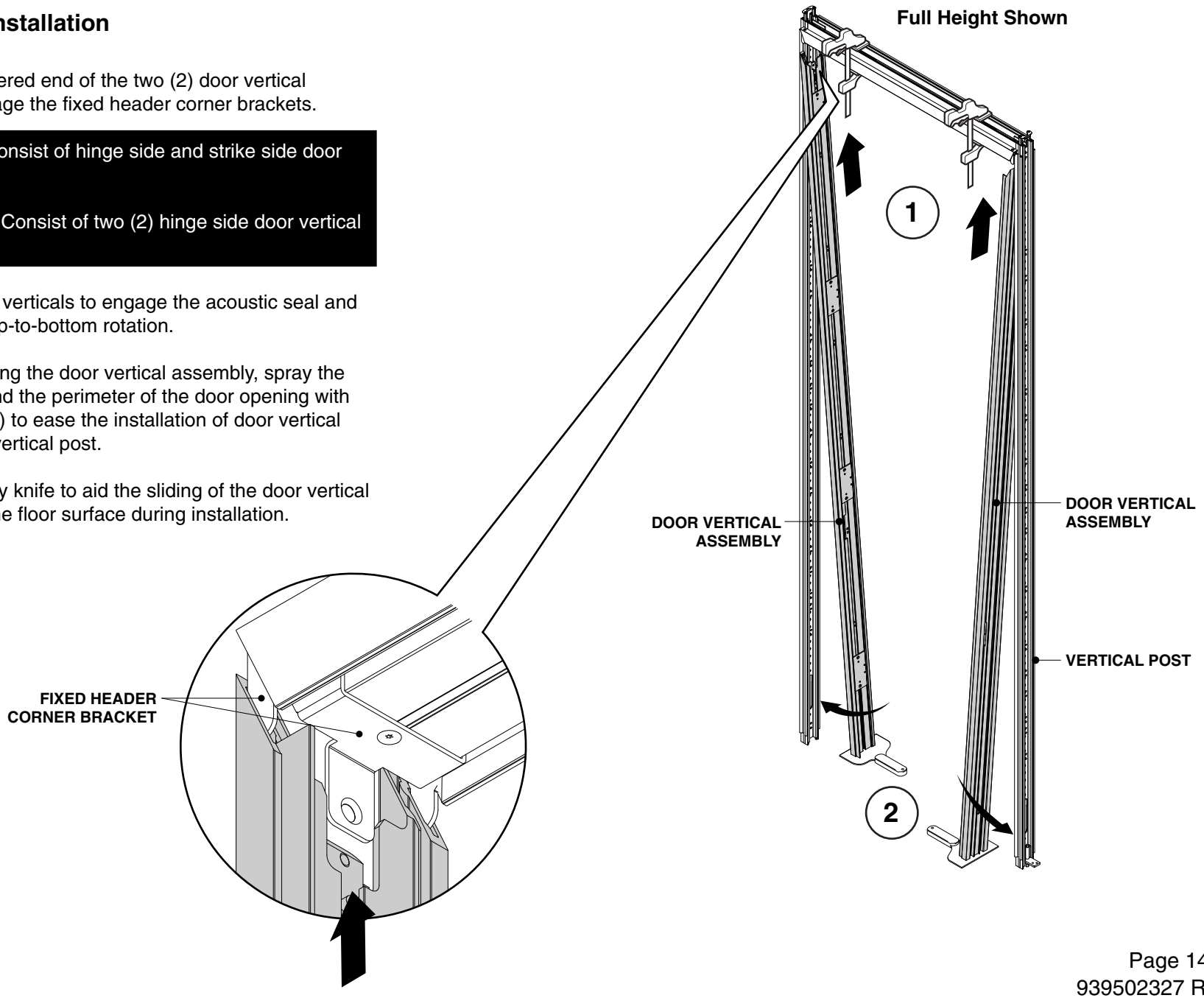
SINGLE DOOR: Consist of hinge side and strike side door vertical assembly.

PAIR OF DOORS: Consist of two (2) hinge side door vertical assemblies.

2. Rotate the door verticals to engage the acoustic seal and vertical post in a top-to-bottom rotation.

TIP: Prior to installing the door vertical assembly, spray the acoustic seal around the perimeter of the door opening with Windex® (or similar) to ease the installation of door vertical assemblies to the vertical post.

TIP: Use a dry putty knife to aid the sliding of the door vertical assembly across the floor surface during installation.



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Door Vertical Installation (continued)

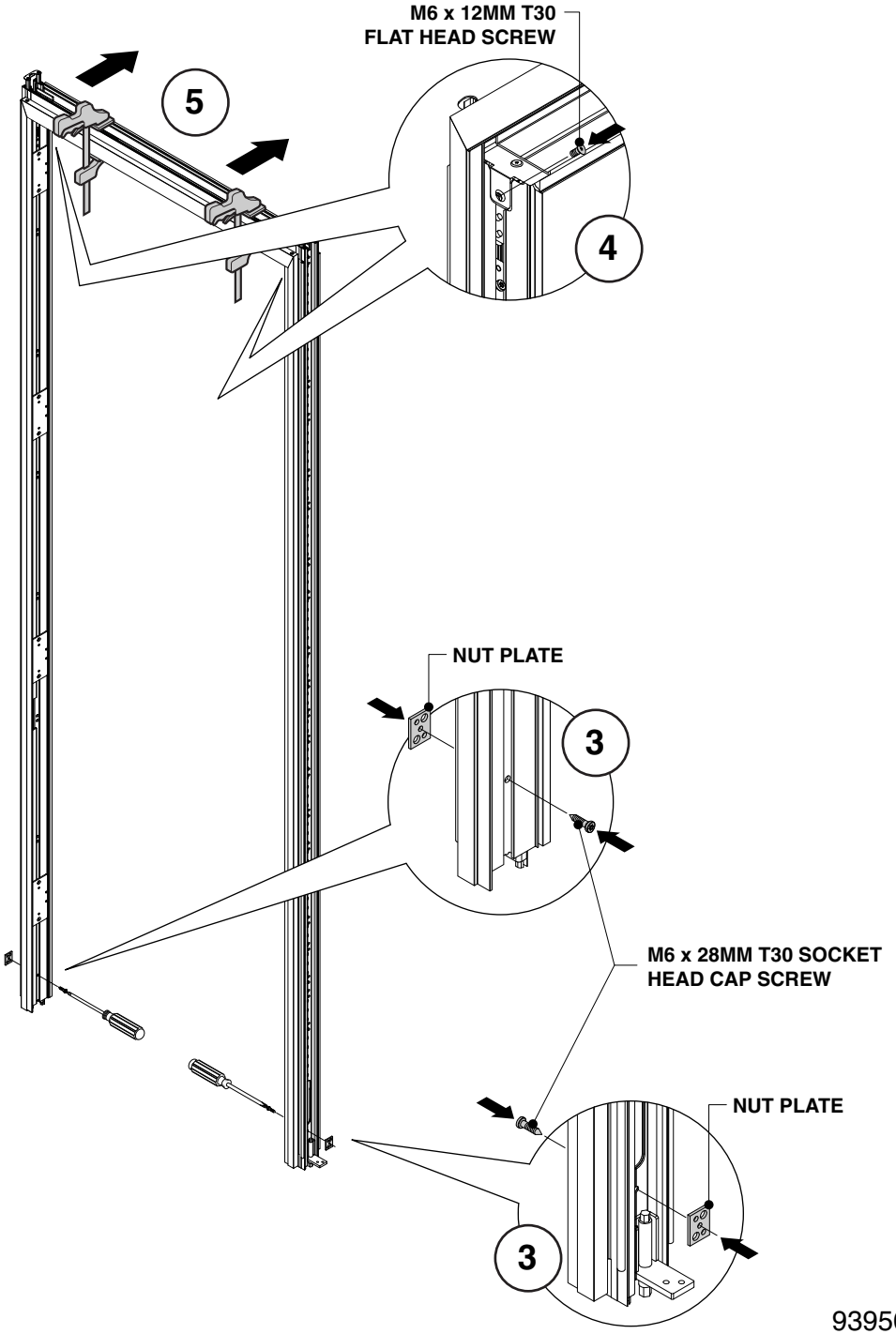
3. Align **system hole** on each door vertical assembly to the mating system hole in the vertical post. Secure with M6 x 28mm T30 socket head cap screw (black finish) and nut plate.

ASSEMBLY TIPS:

- Use a phillips screwdriver to align the door vertical and post system holes.
- Tuck adjacent base trim in behind the door vertical to avoid potential interference during door frame installation.
- Nut plate is **NOT** required for the following applications: door vertical next to a junction & wall start (thread feature provided by each).

4. Secure each vertical assembly to the fixed header with M6 x 12mm T30 flat head screw.

5. Remove quick release clamps from the door header.



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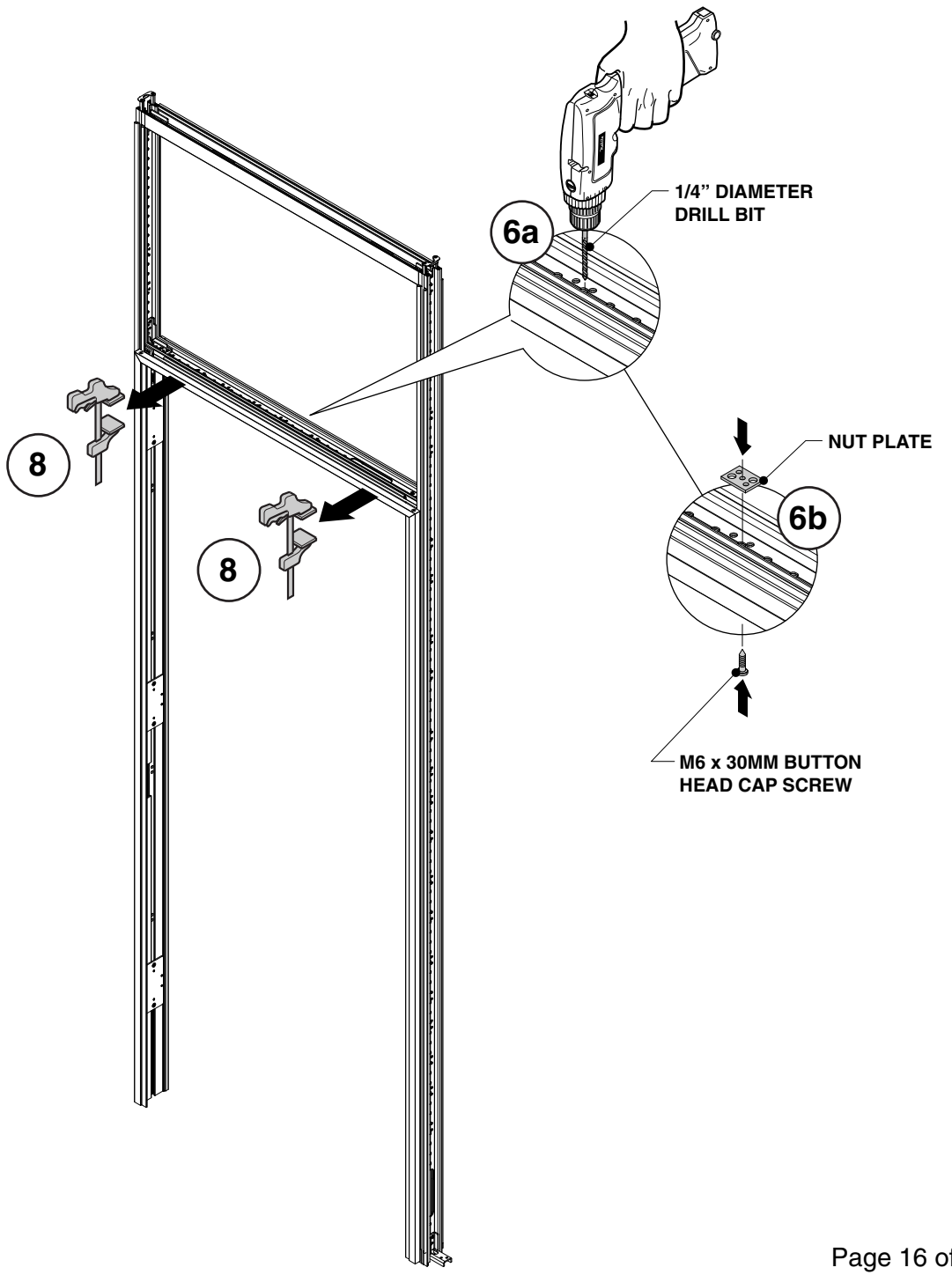
Door Vertical Installation (continued)

Transom Application

6. DOOR OPENING 40" THROUGH 60"
Drill 1/4” diameter hole through the fixed header and structural rail at the midpoint of the door opening (6a). Secure the fixed header to the structural rail with one (1) M6 x 30mm button head cap screw and nut plate (6b).

7. DOOR OPENING GREATER THAN 60"
Secure the fixed header to the structural rail with two (2) M6 x 30mm button head cap screws and nut plates equally spaced within the door opening.

8. Remove quick clamps.



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Door Vertical Installation (continued)

9. Slightly loosen the screws in the hinge door vertical to allow the hinge plate assembly to slide within the door vertical.

CAUTION: WHEN THE LAST SCREW HAS BEEN LOOSENED, THE HINGE PLATE ASSEMBLY WILL MOVE FREELY.

10. A 1/2" minimum clearance is recommended between the floor and the door bottom by positioning the lower hinge mounting hole centerline at a distance of 11-1/8" off the floor.

NOTE: Drop seal requires 1/2" floor-to-door clearance.

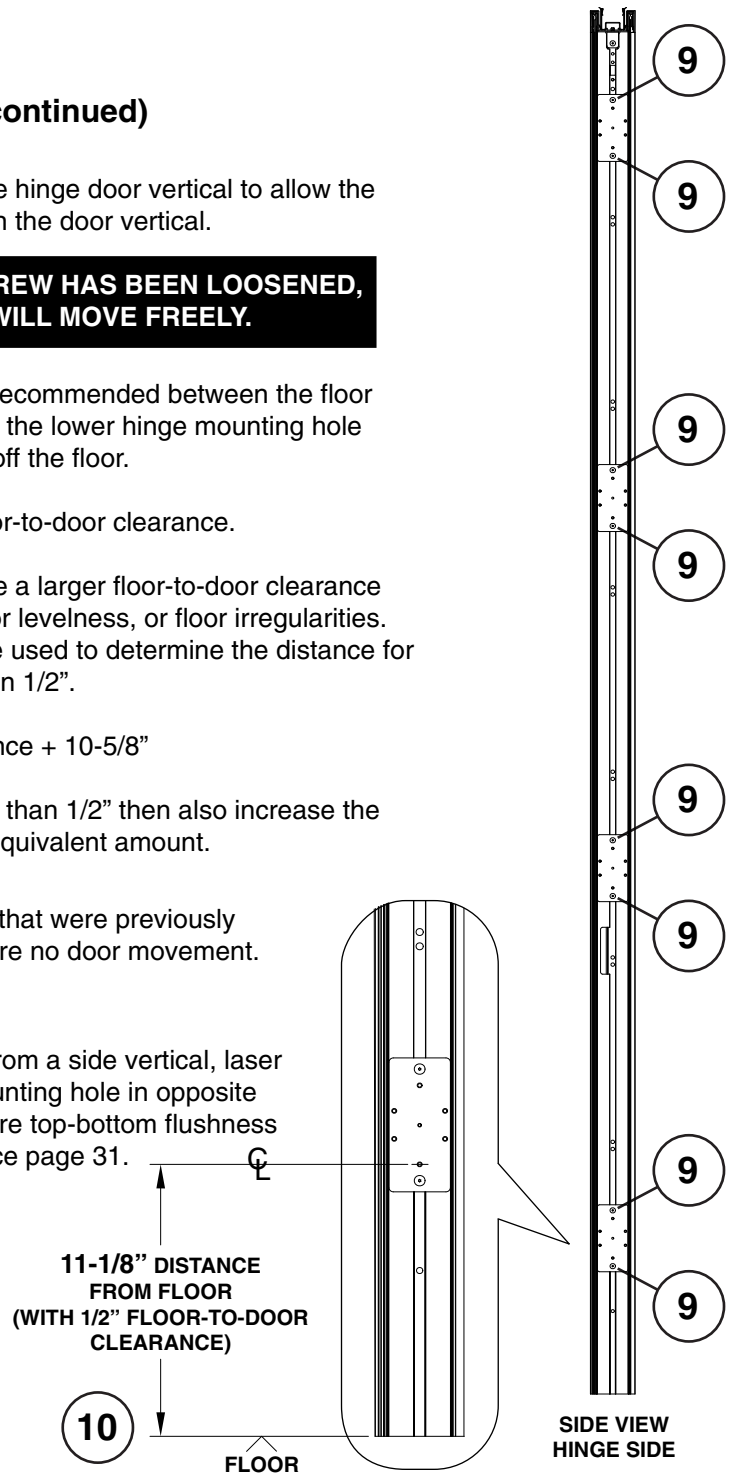
The door can be positioned to have a larger floor-to-door clearance due to customer requirements, floor levelness, or floor irregularities. The following calculation should be used to determine the distance for a floor-to-door clearance larger than 1/2".

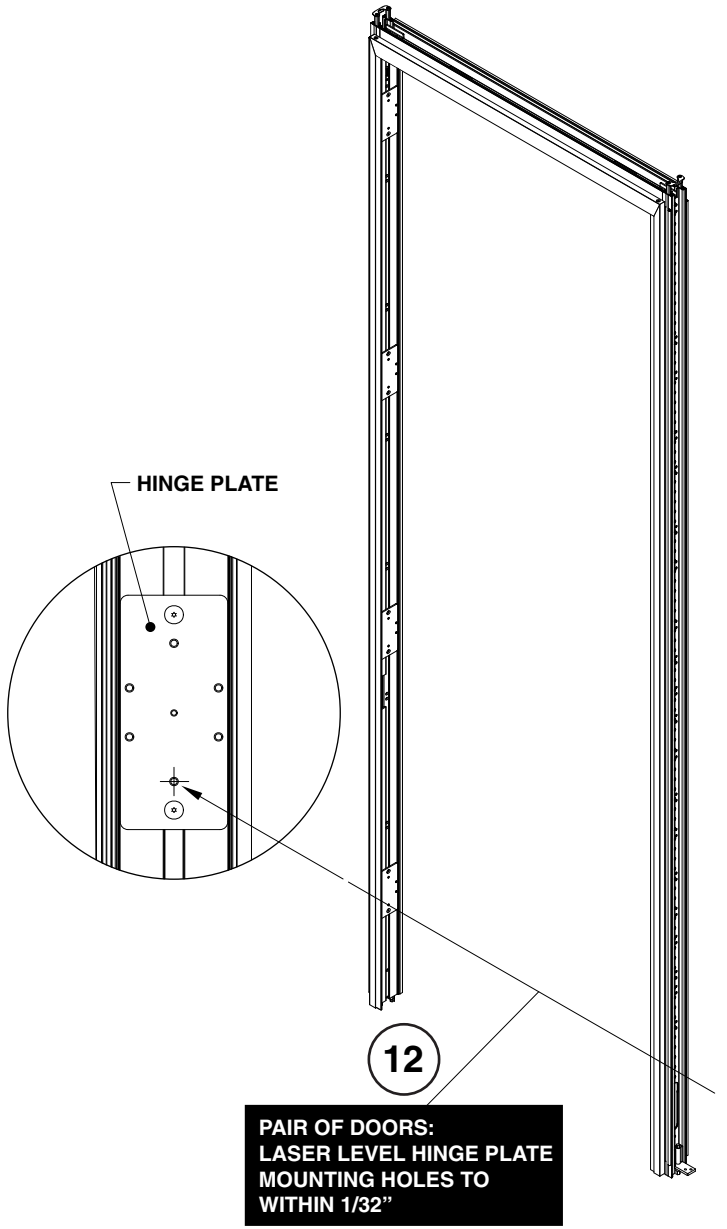
distance = floor-to-door clearance + 10-5/8"

If floor-to-door clearance is greater than 1/2" then also increase the 5/8" spacer board (page 2) by an equivalent amount.

11. Tighten **ALL** screws securely that were previously loosened in step 9 (above) to ensure no door movement.

12. Pair of Doors:
Using the floor-to-door clearance from a side vertical, laser level the lower threaded hinge mounting hole in opposite side vertical to within 1/32" to ensure top-bottom flushness between the pair of doors, reference page 31.





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Securing Hinge Side Door Vertical Assembly to Vertical Post

SINGLE DOOR: Consist of a hinge side and a strike side door vertical assembly.

PAIR OF DOORS: Consist of two (2) hinge side door vertical assemblies.

CAUTION: THE HINGE SIDE DOOR VERTICAL ASSEMBLY MUST BE SECURED TO THE VERTICAL POST ABOVE AND BELOW EACH HINGE PLATE.

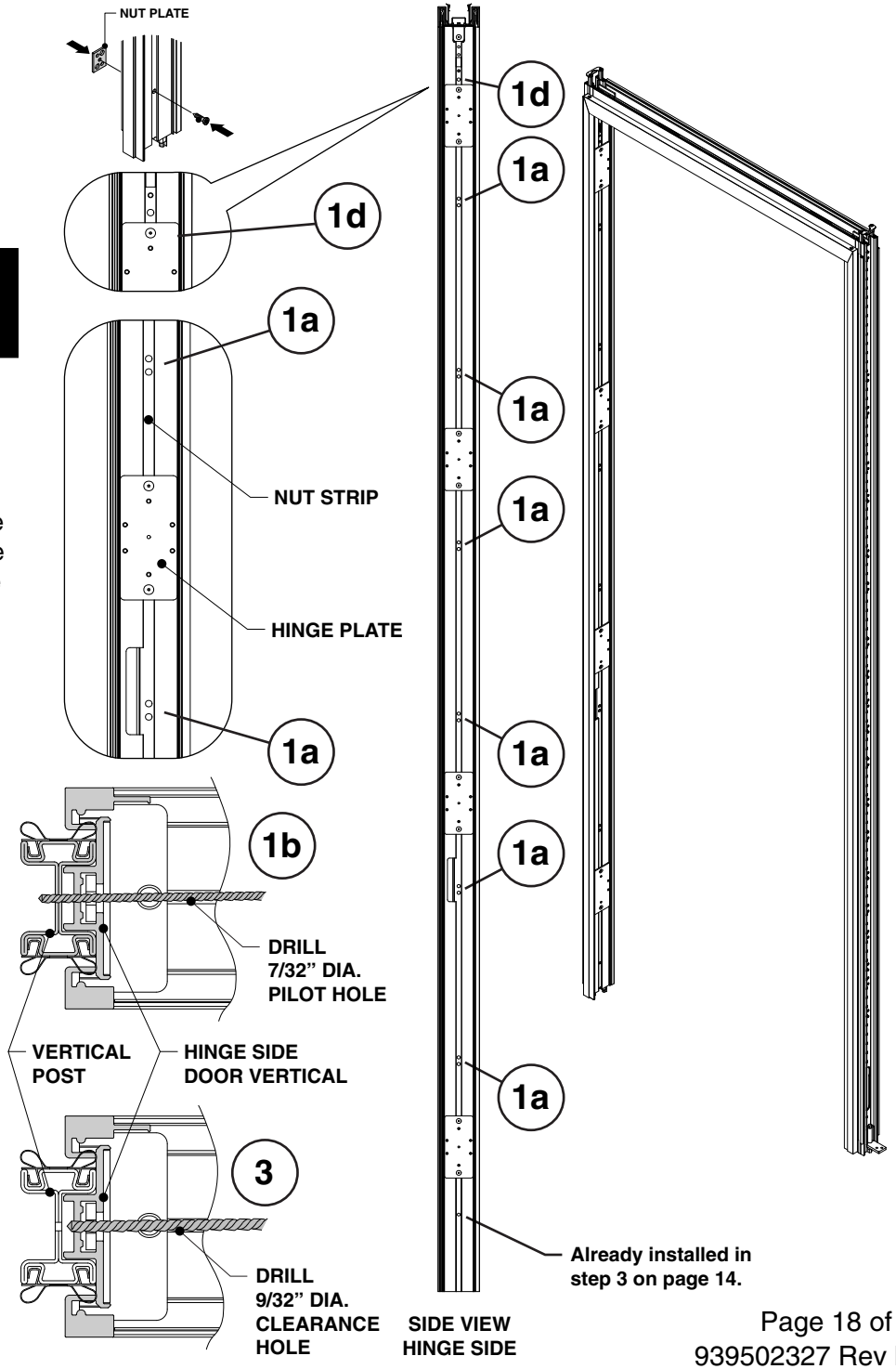
1. The nut strip provides a series of 2-hole patterns above and below each hinge plate (1a) for the purpose of securing the hinge side door vertical assembly to the vertical post. The upper most hinge plate is an exception which has 1-hole above the hinge plate (1d). Using one of the holes from each 2-hole pattern as a guide, drill 7/32" (.218) diameter hole through the aluminum vertical and through the vertical post (1b).

NOTE: The 7/32” diameter hole must not intersect a hole in the vertical post.

2. If the drilled hole intersects a hole in the vertical post then drill another hole using the remaining hole within the 2-hole pattern. If both holes within the 2-hole pattern intersect a hole in the vertical post, then drill a new hole through the nut strip, aluminum vertical, and vertical post at a location within 2" of the existing 2-hole pattern.

3. Next drill a 9/32" (.281) diameter hole through the aluminum hinge side door vertical. **DO NOT DRILL THE 9/32" HOLE INTO OR THROUGH THE STEEL VERTICAL POST.** Secure the door vertical assembly to the vertical post at each drilled hole location with M6 x 28 T30 socket head cap screw.

CAUTION: FAILURE TO DRILL THE 9/32" CLEARANCE HOLES IN THE ALUMINUM DOOR VERTICAL COULD RESULT IN FIT-UP ISSUE WITH THE DOOR.



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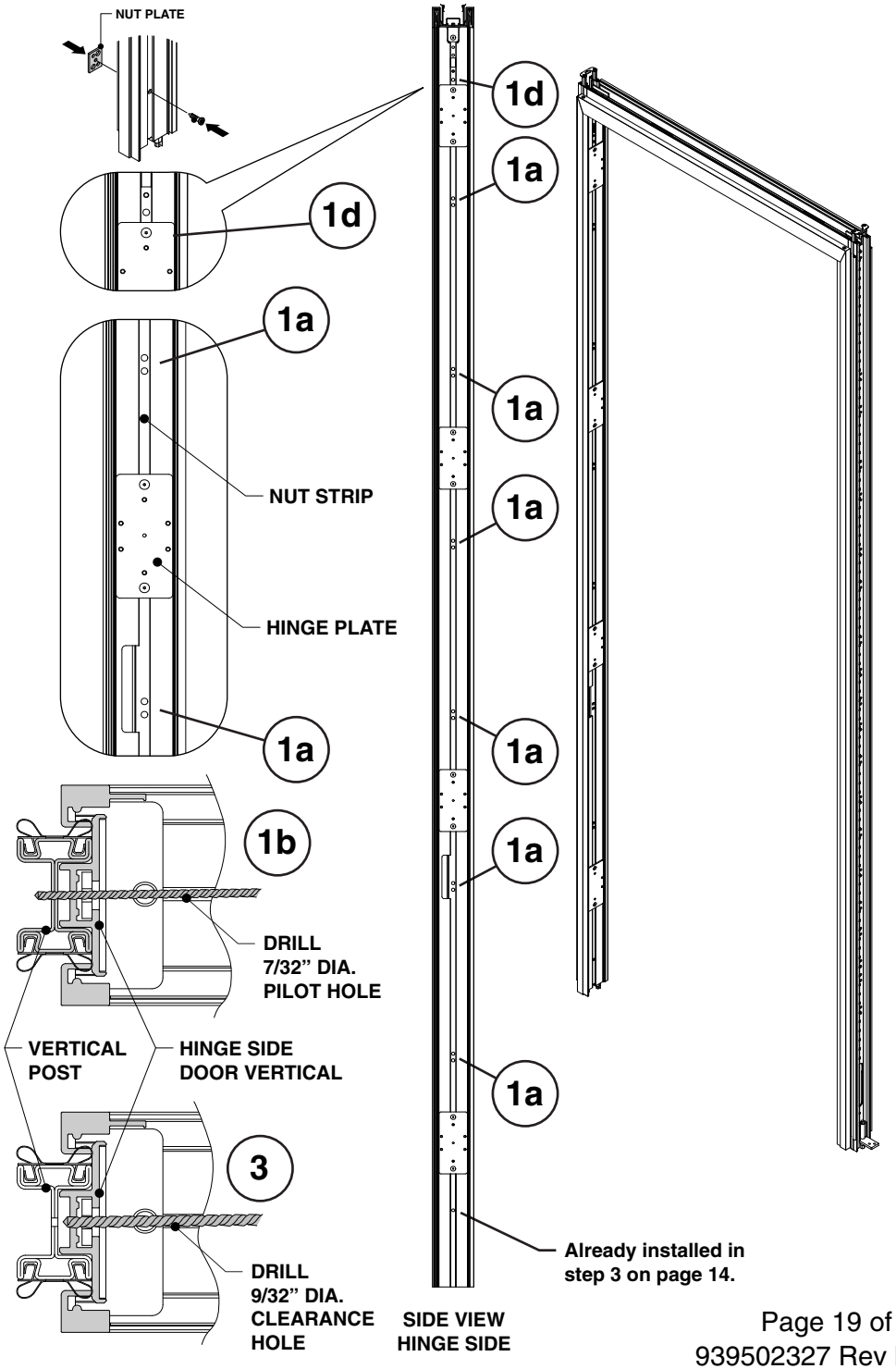
Securing Hinge Side Door Vertical Assembly to Vertical Post (continued)

4. Power bracket(s) in utility chase may interfere with the attachment of the door vertical assembly to the vertical post. Remove the chase cover to identify zones where the door vertical attachment can occur. This may require the drilling of holes (see note on previous page) as shown in steps 1b and 1c.

5. The upper most 1-hole in the nut strip has limited access and a nut plate (1d) must be used to secure the door vertical assembly to the vertical post when the 7/32" (.218) drilled hole intersects a hole in the vertical post.



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Adjustable Header Preparation & Installation

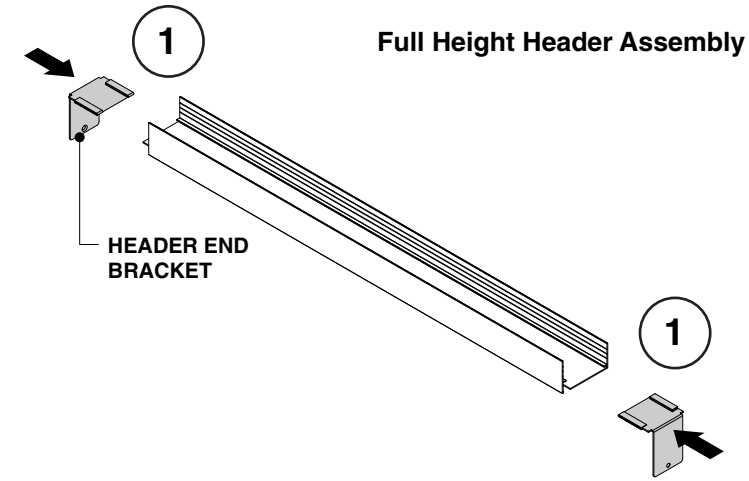
Full Height Adjustable Header

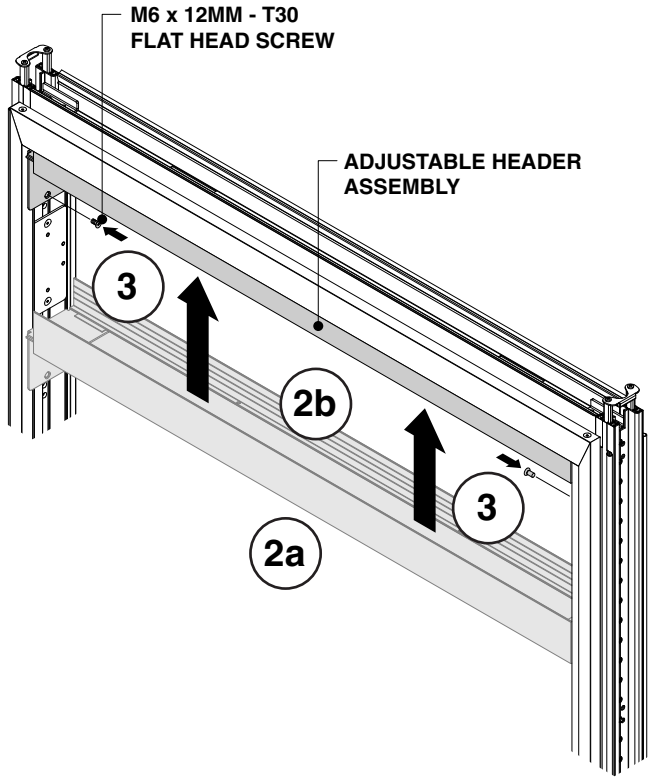
1. Install header end brackets.

2. Install adjustable header assembly in between the two (2) door vertical assemblies (2a) and slide upward into the installed position (2b).

3. Secure the header end bracket to the nut strip with M6 x 12mm T30 flat head screw at each end of the header assembly.

NOTE: If you will be installing a Door Closer, refer to DOOR CLOSER INSTALLATION starting on page 38 before installing adjustable header.





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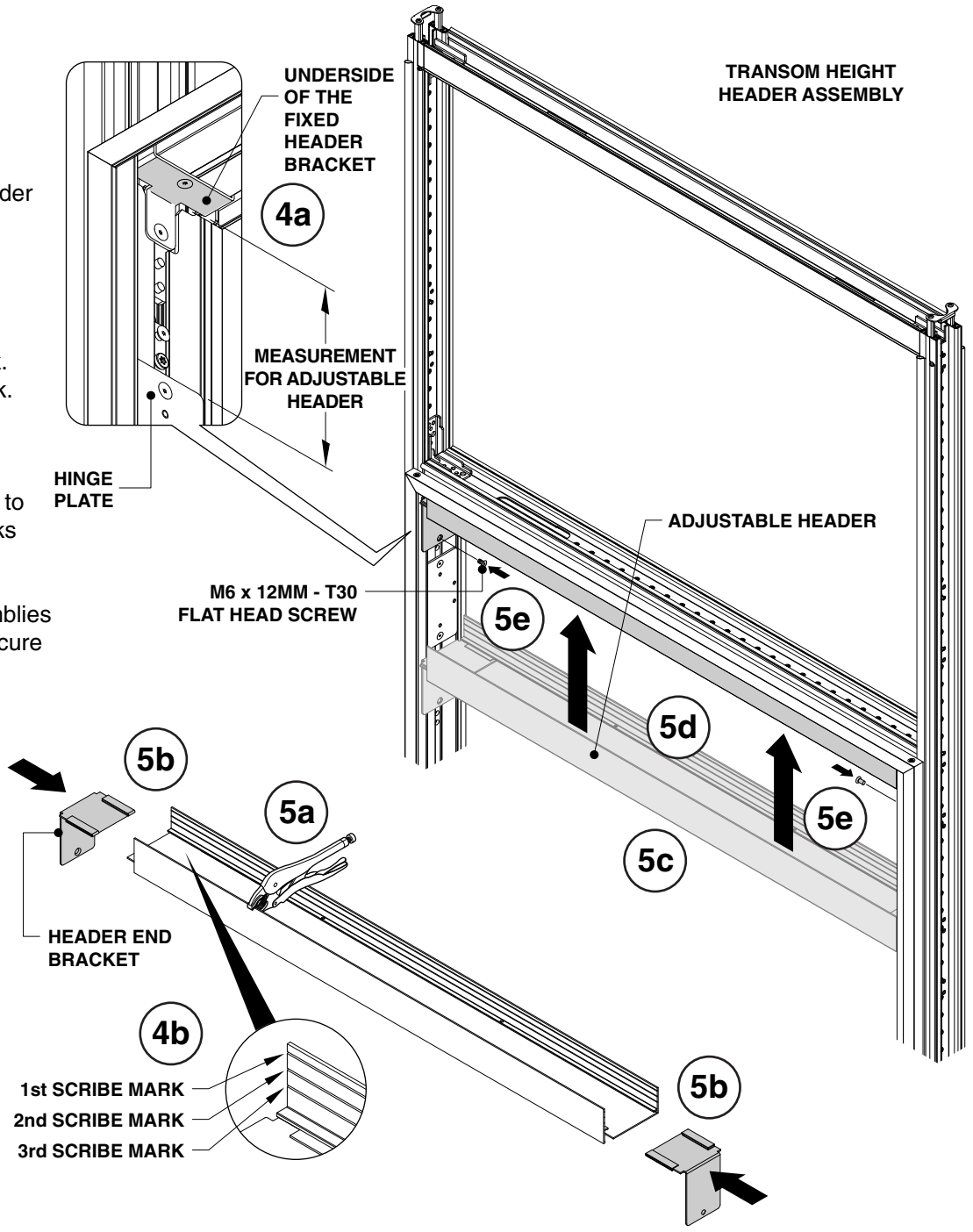
Adjustable Header Preparation & Installation (continued)

4. Transom Height Adjustable Header: The transom height header application may require field modification to the adjustable header height dimension. Measure the distance from the top of the hinge plate to the underside of the fixed header bracket (4a). Modify the adjustable header based on the measured dimensions (4b).

- 4-7/8” to 5-1/8” - Remove header flange at the 3rd scribe mark.
- 5-1/8” to 5-1/2” - Remove header flange at the 2nd scribe mark.
- 5-1/2” to 6-0” - Remove header flange at the 1st scribe mark.
- 6-0“ to 6-1/2” - No modification required.

5. Starting at part end, clamp vise grip pliers along the part scribe to be removed and move back-and-forth as the desired section breaks away, repeat along part length (both sides), deburr edges with file when complete (5a). Install header end brackets as shown (5b). Install adjustable header assembly in between door vertical assemblies as shown (5c) and slide upward into the installed position (5d). Secure with M6 x 12mm T30 flat head screw at each end as shown (5e).

NOTE: If you will be installing a Door Closer, refer to DOOR CLOSER INSTALLATION starting on page 38 before installing adjustable header.



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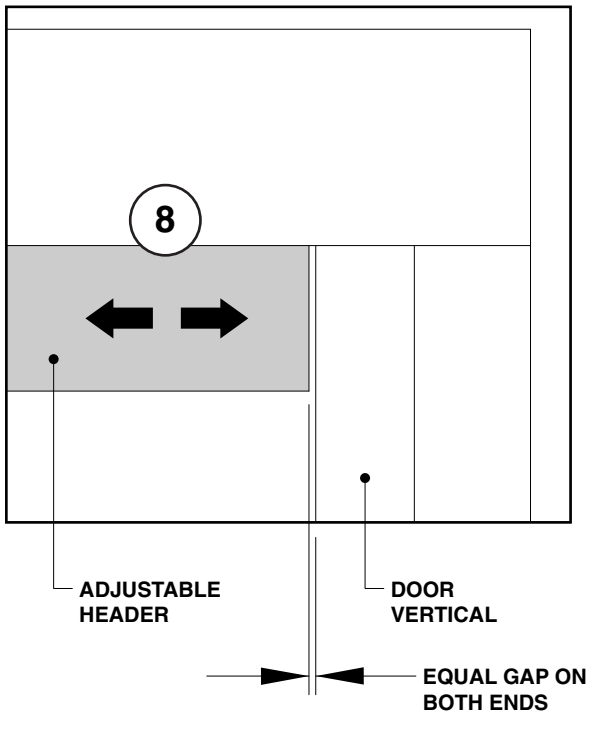
Adjustable Header Preparation & Installation (continued)

6. Slightly loosen the five (5) flat head screws (6a) to allow the strike plate assembly and the adjustable header to slide within the door vertical assembly. Adjust the adjustable header assembly on the strike side so you have an equal distance from the adjustable header to the fixed header (6b).

7. After achieving your equal distance, tighten **ALL** screws that were loosened previously.

8. Position the adjustable header within the door opening (right to left) for even gaps at ends of adjustable header.

NOTE: If you are installing a DOUBLE DOOR, continue to HINGE SIDE VERTICAL COVER PREPARATION AND INSTALLATION on page 25.



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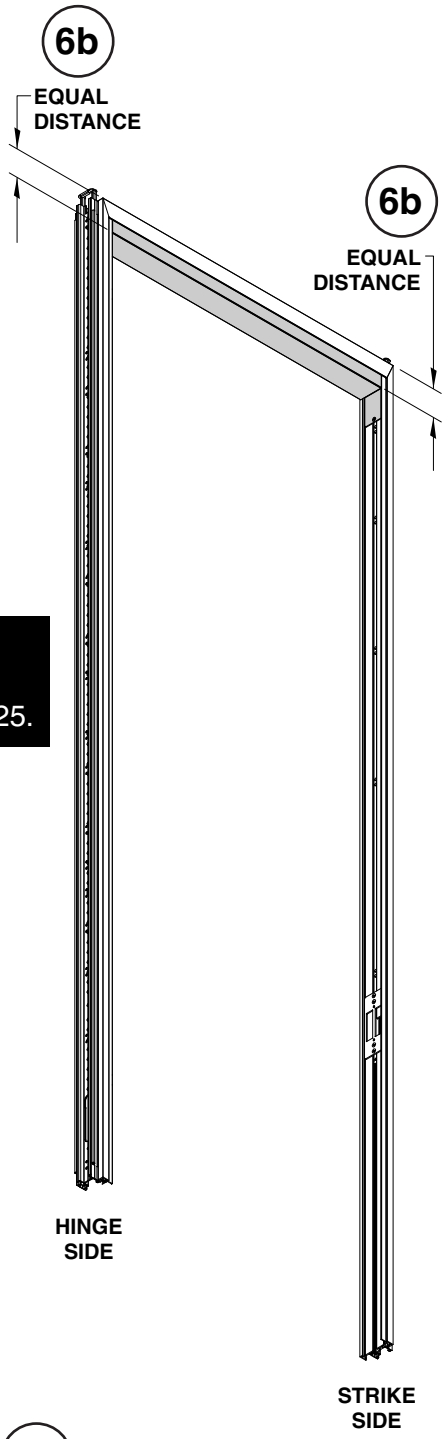
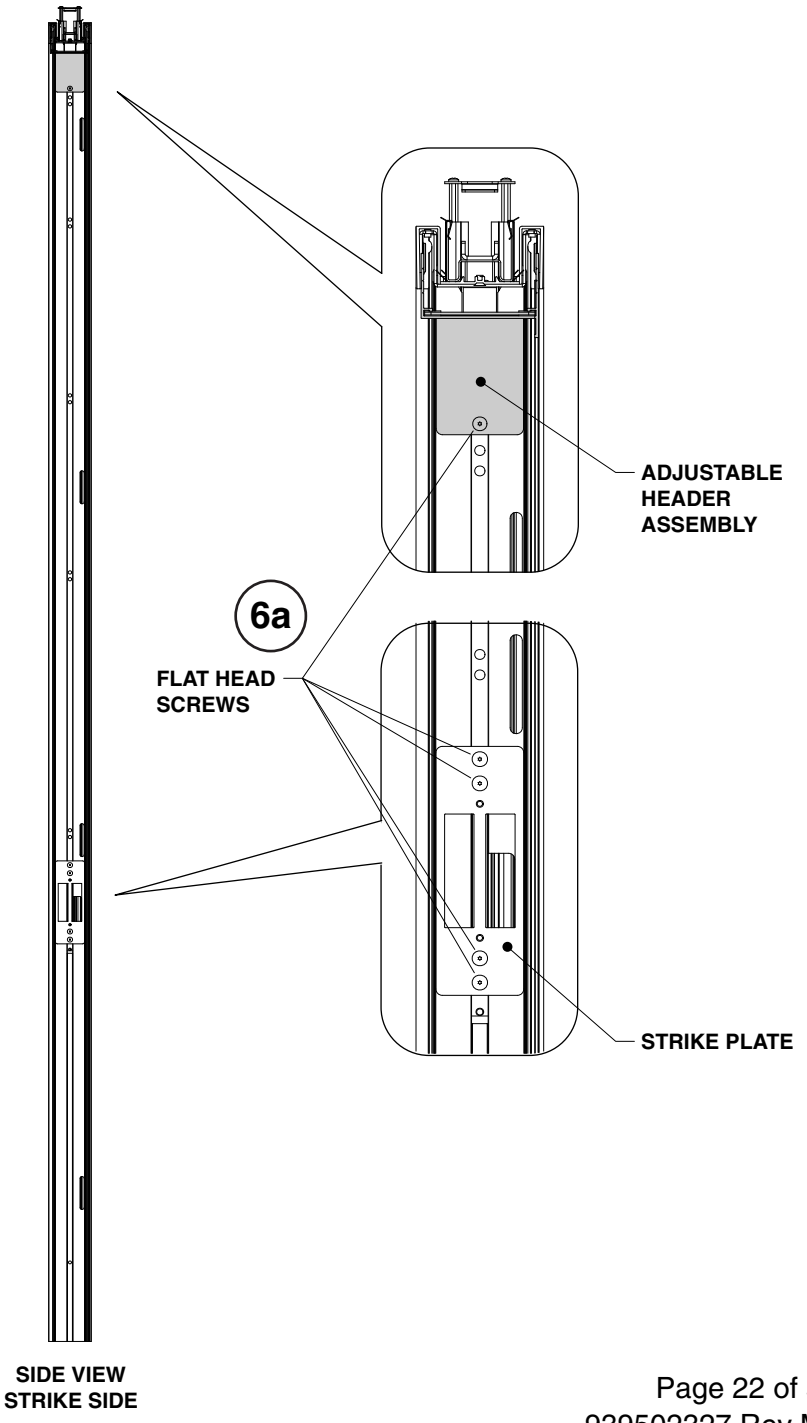




Adjustable Header Preparation & Installation (continued)

Roller Latch

The roller latch assembly is located at the top of the door and requires the fixed-adjustable header assembly be prepped for attachment of the strike plate prior to installing the adjustable header.

SINGLE DOOR

1. Position the lower header plate to the backside of the adjustable header and roller latch strike plate to the face of the adjustable header.

2. Secure the roller latch strike plate to the adjustable header with two (2) #12-24 x 1/2" flat head screws.

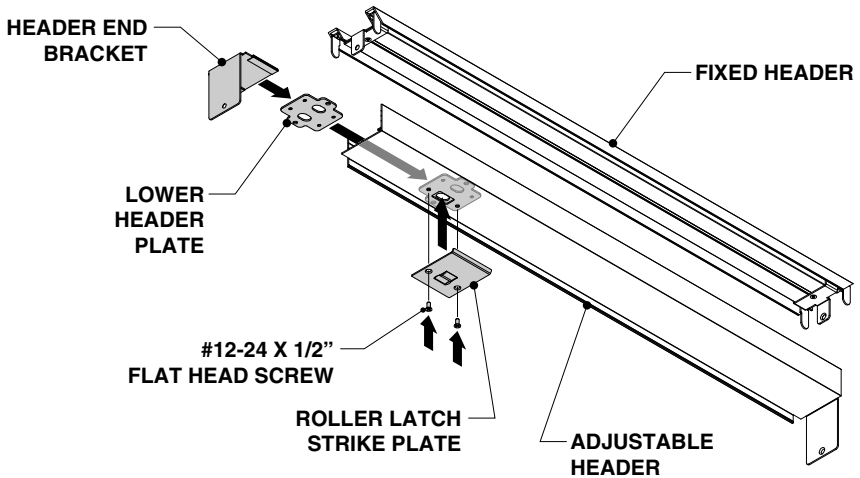
Apply Loctite 222 threadlocker to the two (2) #12-24 flat head screws to prevent strike plate loosening during the roller latch operation.

3. Install the adjustable header (see page 19).

4. Center the adjustable header right-to-left within the door opening for even gaps between the adjustable header ends and the door verticals.

5. Proceed to page 24.

SINGLE DOOR
WITH ROLLER LATCH



PAIR OF DOORS

1. Install the adjustable header (see page 19).

2. Adjust the two (2) #10-24 x 1-3/4" flat head screws within the fixed header spring assembly flush to the adjustable header surface.

NOTE: If unable to adjust the two (2) #10-24 x 1-3/4" flat head screws flush to the adjustable header surface, replace the two (2) #10-24 x 1-3/4" flat head screws with the shorter #10-24 x 1-1/4" flat head screws.

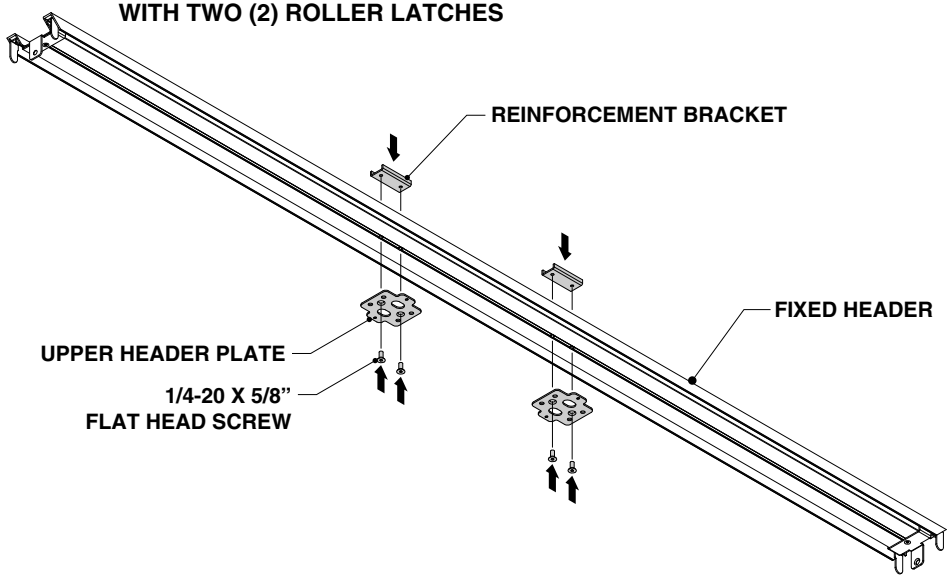
3. Secure the roller latch strike plate to the adjustable header with two (2) #12-24 x 1/2" flat head screws.

Apply Loctite 222 threadlocker to the two (2) #12-24 flat head screws to prevent strike plate loosening during the roller latch operation.

4. Center the adjustable header right-to-left within the door opening for even gaps between the adjustable header ends and the door verticals.

5. Proceed to **Hinge Side Vertical Cover Preparation & Installation** (see page 25).

PAIR OF DOORS
WITH TWO (2) ROLLER LATCHES



Adjustable Header Preparation & Installation (continued)

Flush Bolt

The flush bolt is an inactive leaf application where the flush bolt is located at the top and bottom of the door. The application requires the adjustable header assembly be prepped prior to installing the adjustable header.

1. Position the lower header plate to the backside of the adjustable header and flush bolt strike plate to the face of the adjustable header.

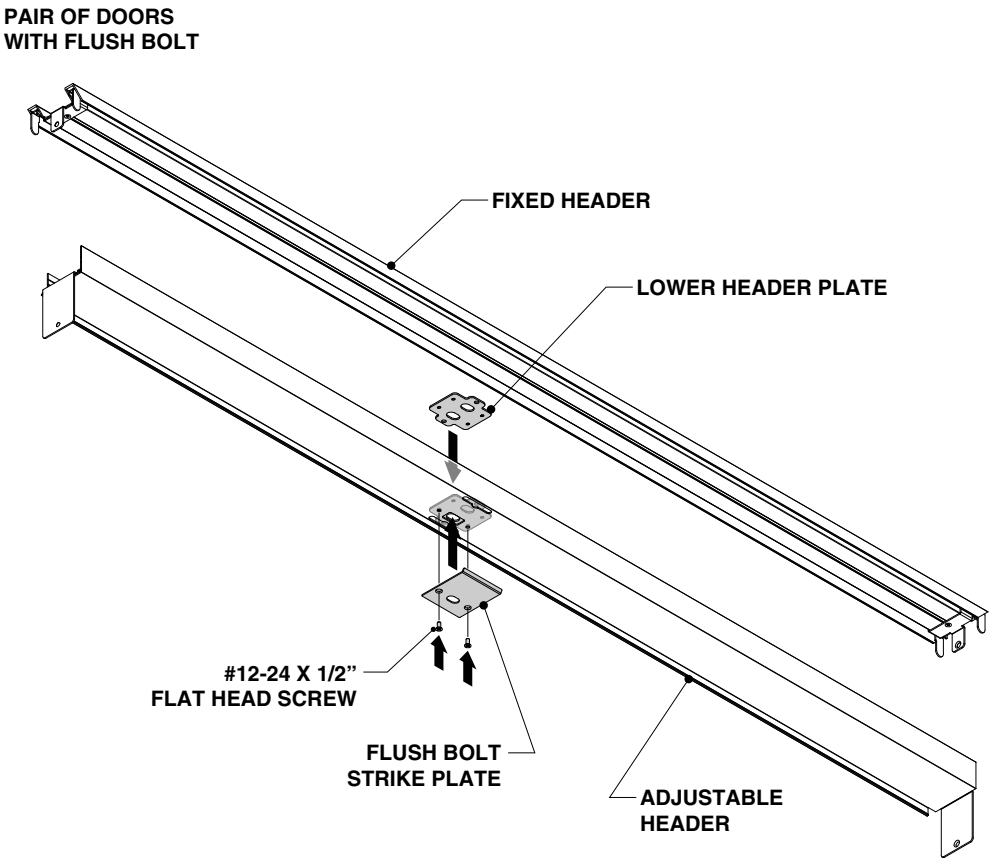
2. Secure the flush bolt strike plate to the adjustable header with two (2) #12-24 x 1/2" flat head screws.

Apply Loctite 222 threadlocker to the two (2) #12-24 flat head screws to prevent strike plate loosening during the flush bolt operation.

3. Install the adjustable header (see page 19).

4. Center the adjustable header right-to-left within the door opening for even gaps between the adjustable header ends and the door verticals.

Proceed to **Hinge Side Vertical Cover Preparation & Installation** (see page 25).



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For Single Door Installation Only

Securing Strike Side Door Vertical Assembly to Vertical Post

CAUTION: THE STRIKE SIDE VERTICAL ASSEMBLY MUST BE SECURED TO THE VERTICAL POST.

1. The nut strip provides a series of 2-hole patterns along the length of the nut strip (1a) for the purpose of securing the strike side vertical assembly to the vertical post. Using one of the holes from each 2-hole pattern as a guide, drill 7/32" (.218) diameter hole through the aluminum vertical and through the vertical post (1b).

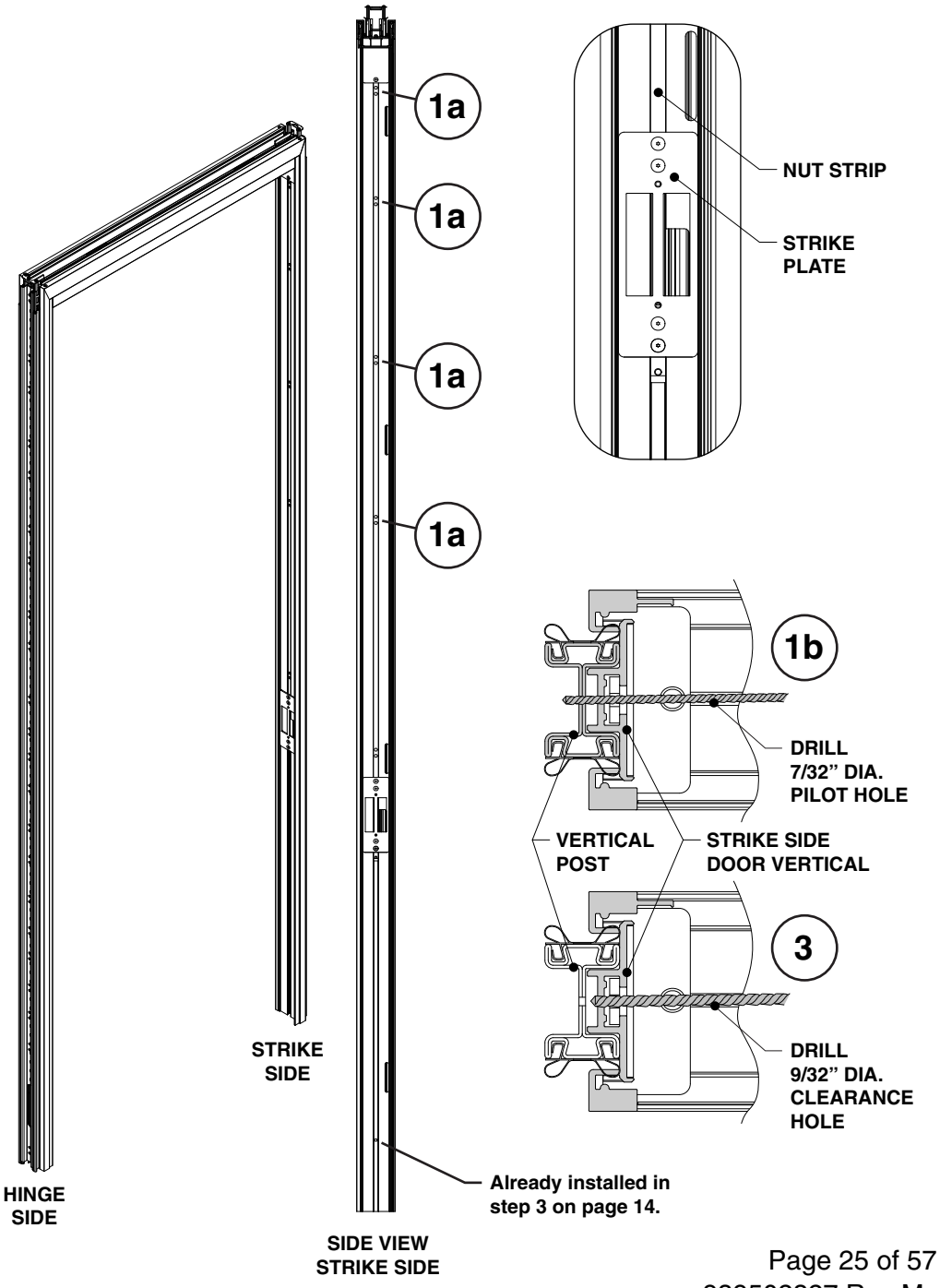
NOTE: The 7/32” diameter hole must not intersect a hole in the vertical post.

2. If the drilled hole intersects a hole in the vertical post then drill another hole using the remaining hole within the 2-hole pattern. If both holes within the 2-hole pattern intersect a hole in the vertical post, then drill a new hole through the nut strip, aluminum vertical, and vertical post at a location within 2" of the existing 2-hole pattern.

3. Next drill 9/32" (.281) diameter hole through the aluminum strike side door vertical. **DO NOT DRILL THE 9/32" HOLE INTO OR THROUGH THE STEEL VERTICAL POST.** Secure the door vertical assembly to the vertical post at each drilled hole location with M6 x 28 T30 socket cap screw.

CAUTION: FAILURE TO DRILL THE 9/32" CLEARANCE HOLES IN THE ALUMINUM DOOR VERTICAL (STEP 3) COULD RESULT IN DOOR FIT-UP ISSUES.

NOTE: Power bracket(s) in utility chase may interfere with the attachment of the door vertical assembly to the vertical post. Remove the chase cover to identify zones where the door vertical attachment can occur. This may require the drilling of holes (noted above) as shown in steps 1b and 3.



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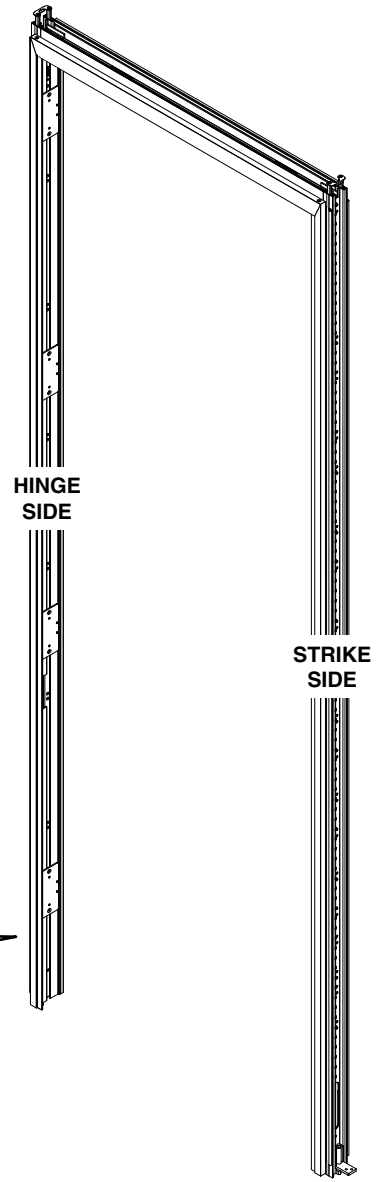
Hinge Side Vertical Cover Preparation & Installation

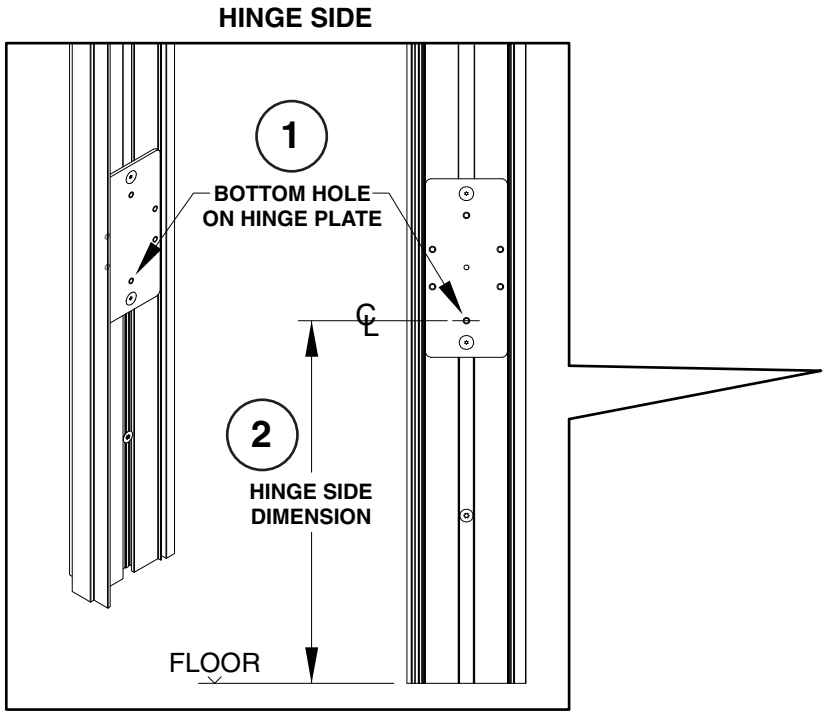
1. Locate bottom, threaded hole on bottom hinge plate on hinge side vertical.

2. Measure the distance from the centerline of threaded hole to the floor.

SINGLE DOOR: Consist of one (1) hinge side vertical cover.

PAIR OF DOORS: Consist of two (2) hinge side vertical covers.





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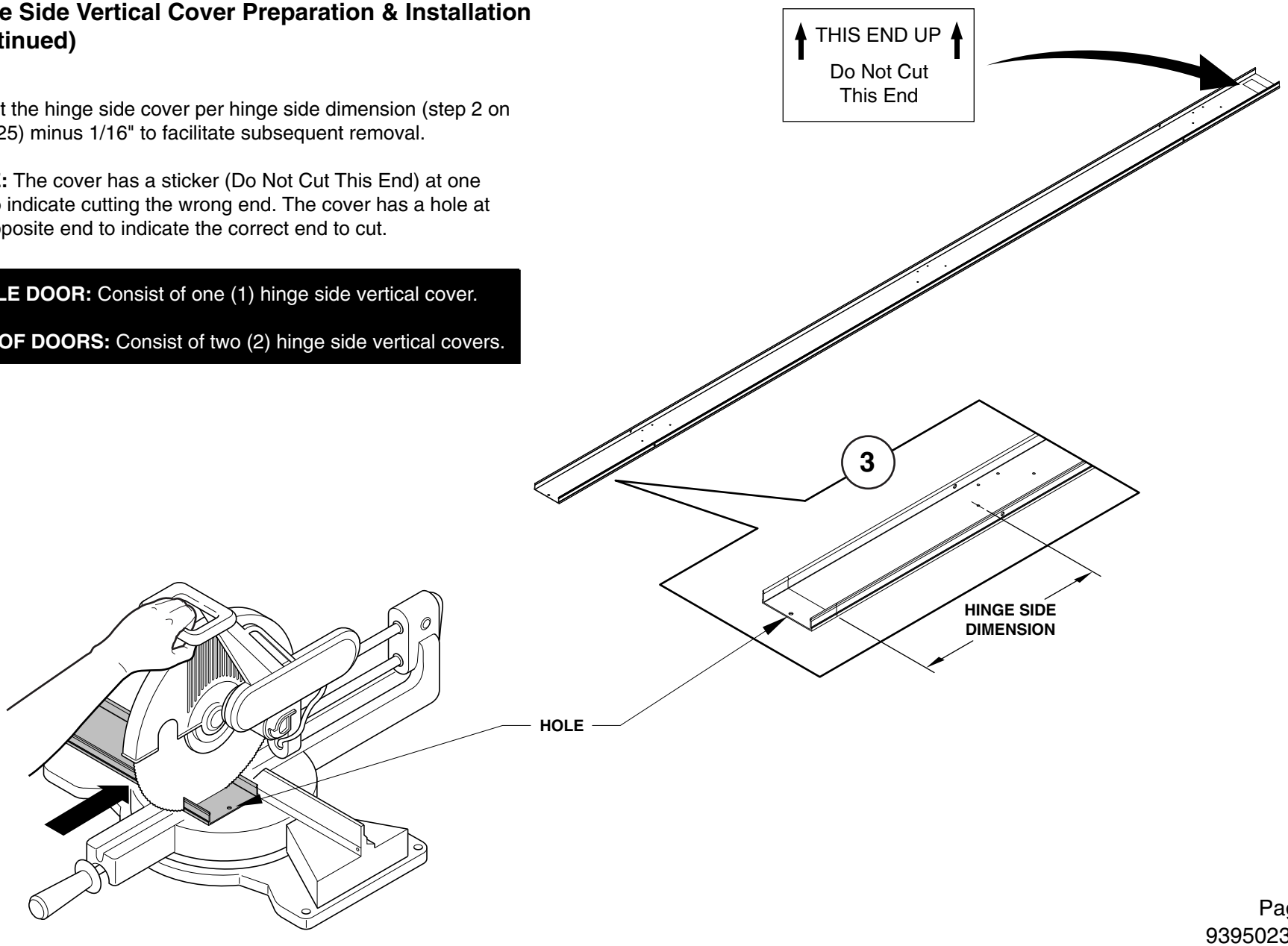
Hinge Side Vertical Cover Preparation & Installation (continued)

3. Cut the hinge side cover per hinge side dimension (step 2 on page 25) minus 1/16" to facilitate subsequent removal.

NOTE: The cover has a sticker (Do Not Cut This End) at one end to indicate cutting the wrong end. The cover has a hole at the opposite end to indicate the correct end to cut.

SINGLE DOOR: Consist of one (1) hinge side vertical cover.

PAIR OF DOORS: Consist of two (2) hinge side vertical covers.



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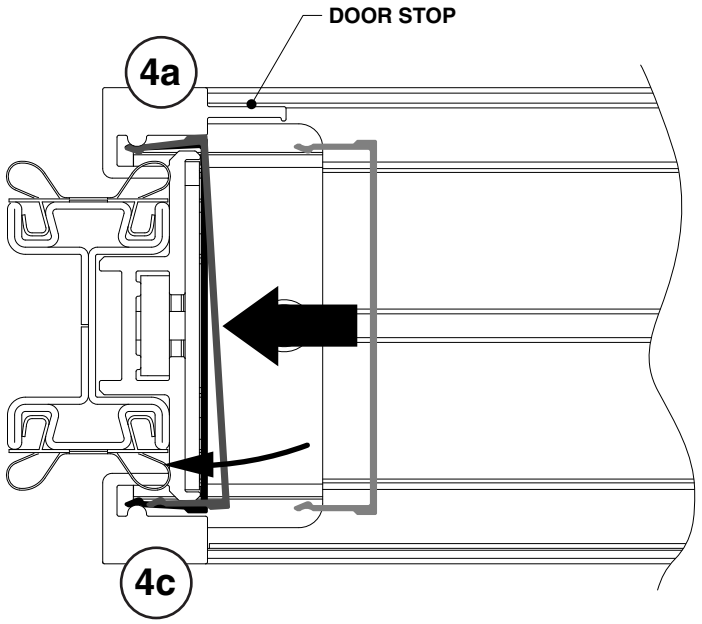
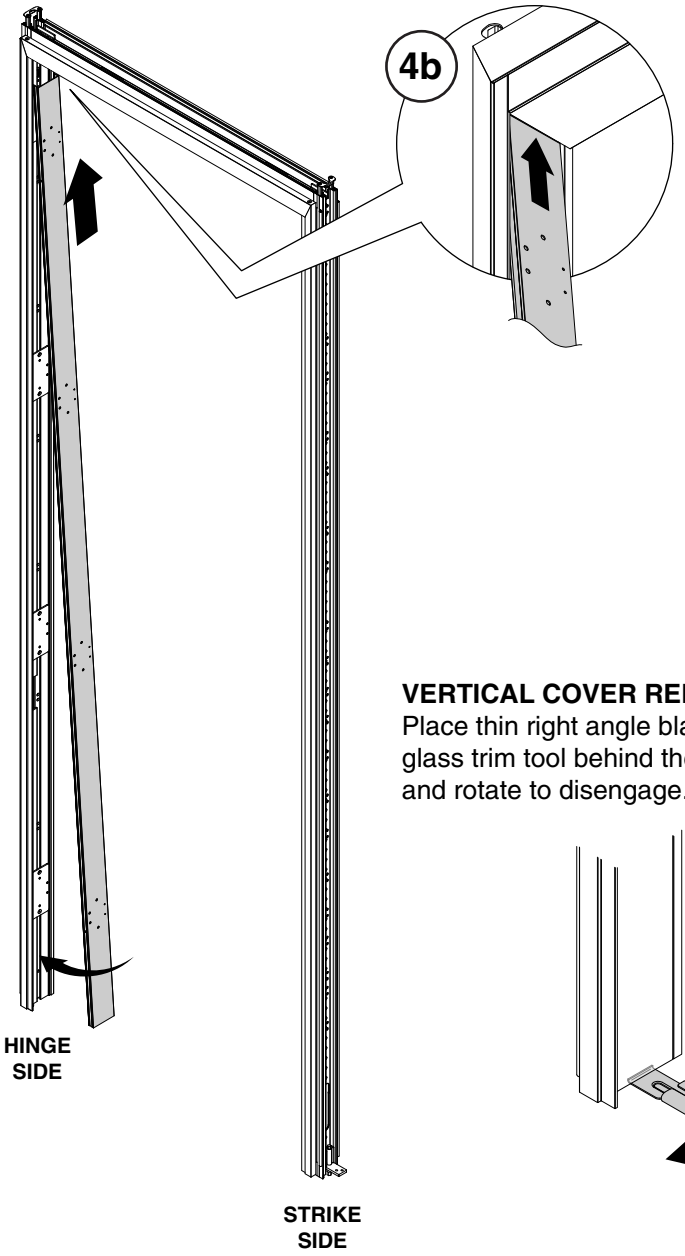
Hinge Side Vertical Cover Preparation & Installation (continued)

4. Starting at the top next to the adjustable header, apply pressure to the door stop side of the vertical cover forcing the leg detail to engage the door vertical over the top-to-bottom length (4a). Starting at the top, apply pressure to opposite vertical cover side forcing the leg detail to engage the door vertical over a short distance, apply upward pressure on vertical cover to tuck the vertical cover in behind the adjustable header (approximately 1/8") (4b). Continue to apply top-to-bottom pressure on the cover thereby **"zippering"** the vertical cover into the door vertical (4c).

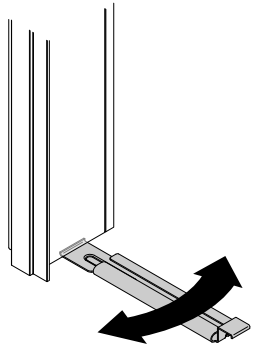
NOTE: The cut end of the vertical cover resides at the floor.

TIP: Turn both leg detail corners at the top of the vertical cover a small amount to facilitate initial engagement of cover-to-door vertical.





VERTICAL COVER REMOVAL PROCESS:
Place thin right angle blade of captured glass trim tool behind the cover, at the floor, and rotate to disengage.



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Door Preparation & Installation

Solid Door

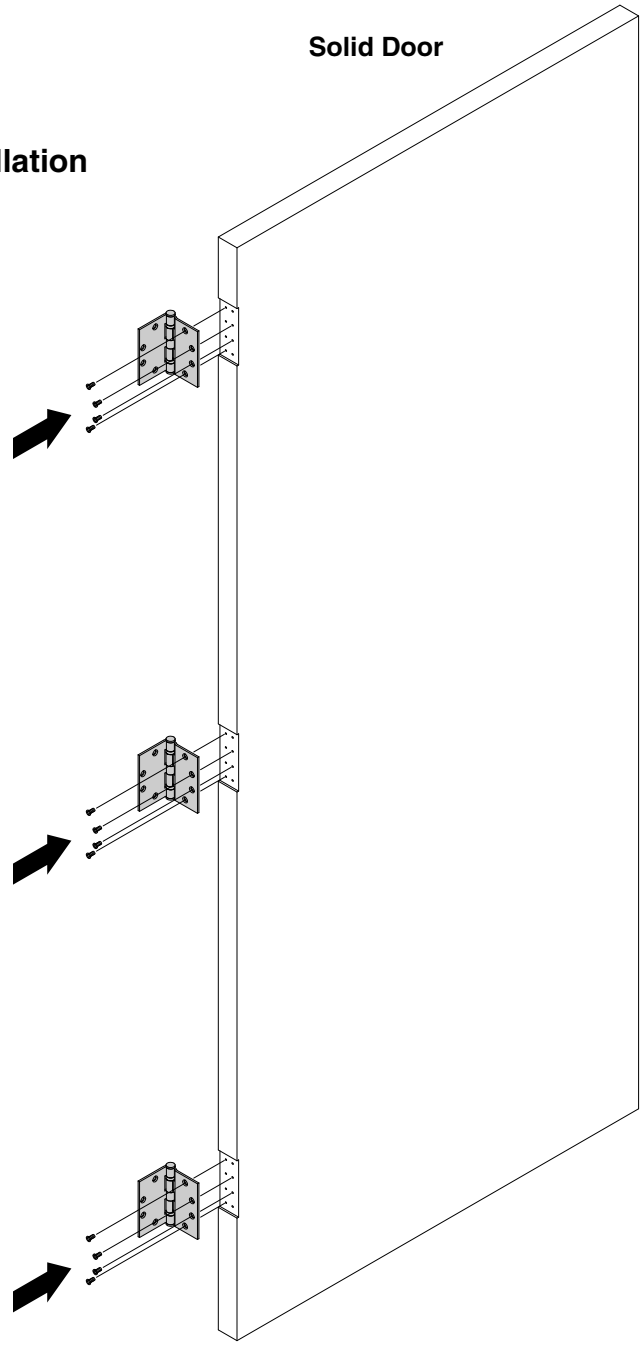
1. Install and secure hinges.

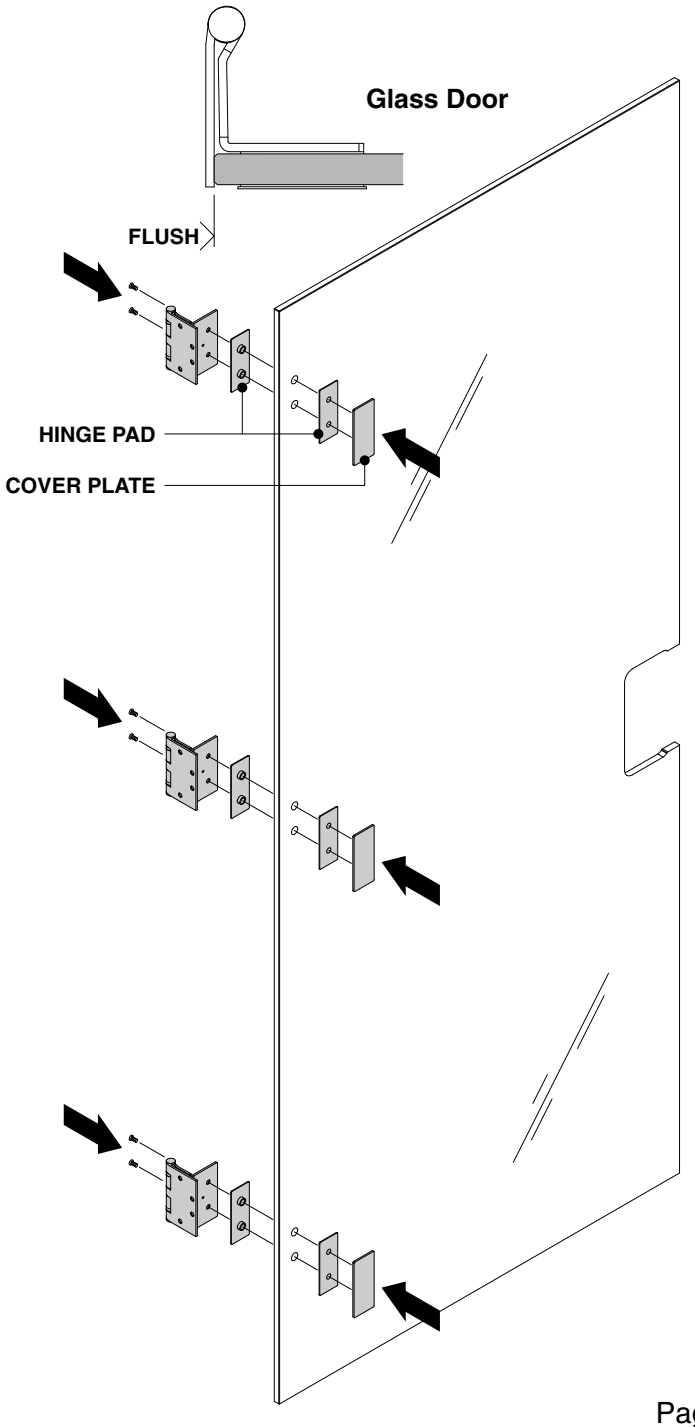
Glass Door

2. Install gaskets and cover plate.

3. Position hinge face flush to door edge.

4. Secure hinge assembly to glass door leaf.





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Door Preparation & Installation (continued)

NOTE: It is **IMPORTANT** that the following sequence be followed for securing the door to the door frame.

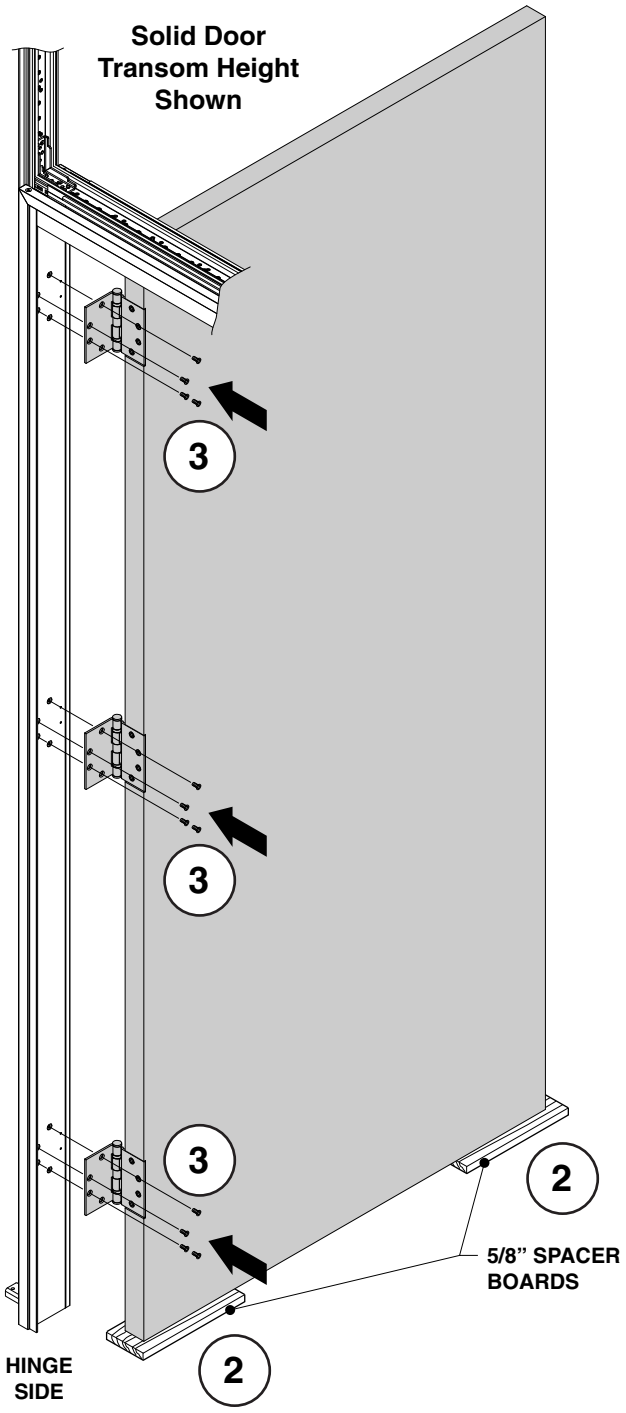
2. Place the door on two spacer boards (as shown). (Thickness defined in step 10 on page 16) Position perpendicular to the door opening.

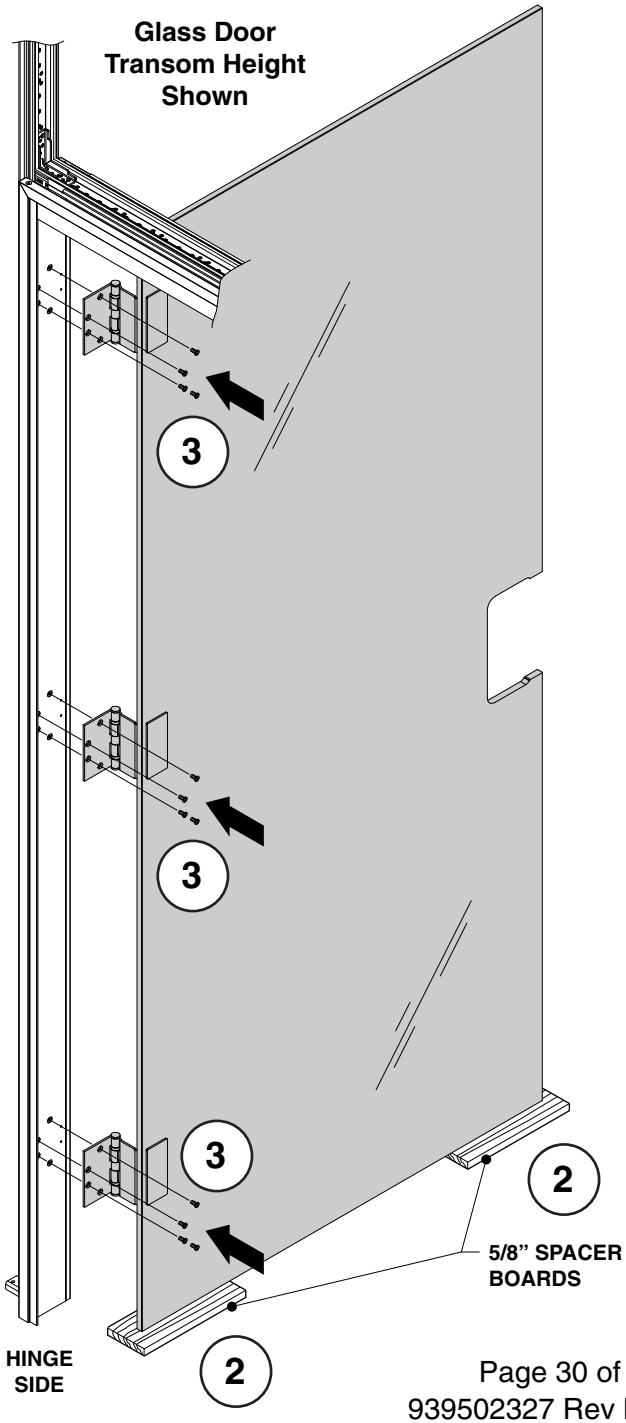
3. Secure all door hinge assemblies to the door frame vertical.

4. Rotate door and remove the two spacer boards to allow the door to move freely within the door opening.

5. Install door hardware.

NOTE: Spacer board thickness varies with the amount of floor-to-door clearance as described in step 10 on page 16. A 5/8" spacer board is required to achieve the 1/2" minimum door-to-floor clearance.





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Pair of Doors - Vertical Gap

The door gap width between a pair of doors can be field adjusted with the addition of **hinge shims** and **brush seals**. The door gap can also be adjusted to minimize the **top-to-bottom variation**.

Hinge Shims

Hinge shims decrease the door gap in .060 increments with the addition of one (1) .030 shim to each door leaf. The recommended maximum door gap reduction is .120 and is achieved with the addition of two (2) .030 shims. A minimum door gap has been defined to avoid a potential door crash condition between 2-operating door leaves. The minimum door gap for an active-active and active-inactive door configurations:

Minimum door gap:
- active-active configuration: 5/16" (8mm)
- active-inactive configuration: 7/32" (5.7mm)

1. Install the pair of door leaves as outlined under **Door Preparation & Installation, pages 28-29**.

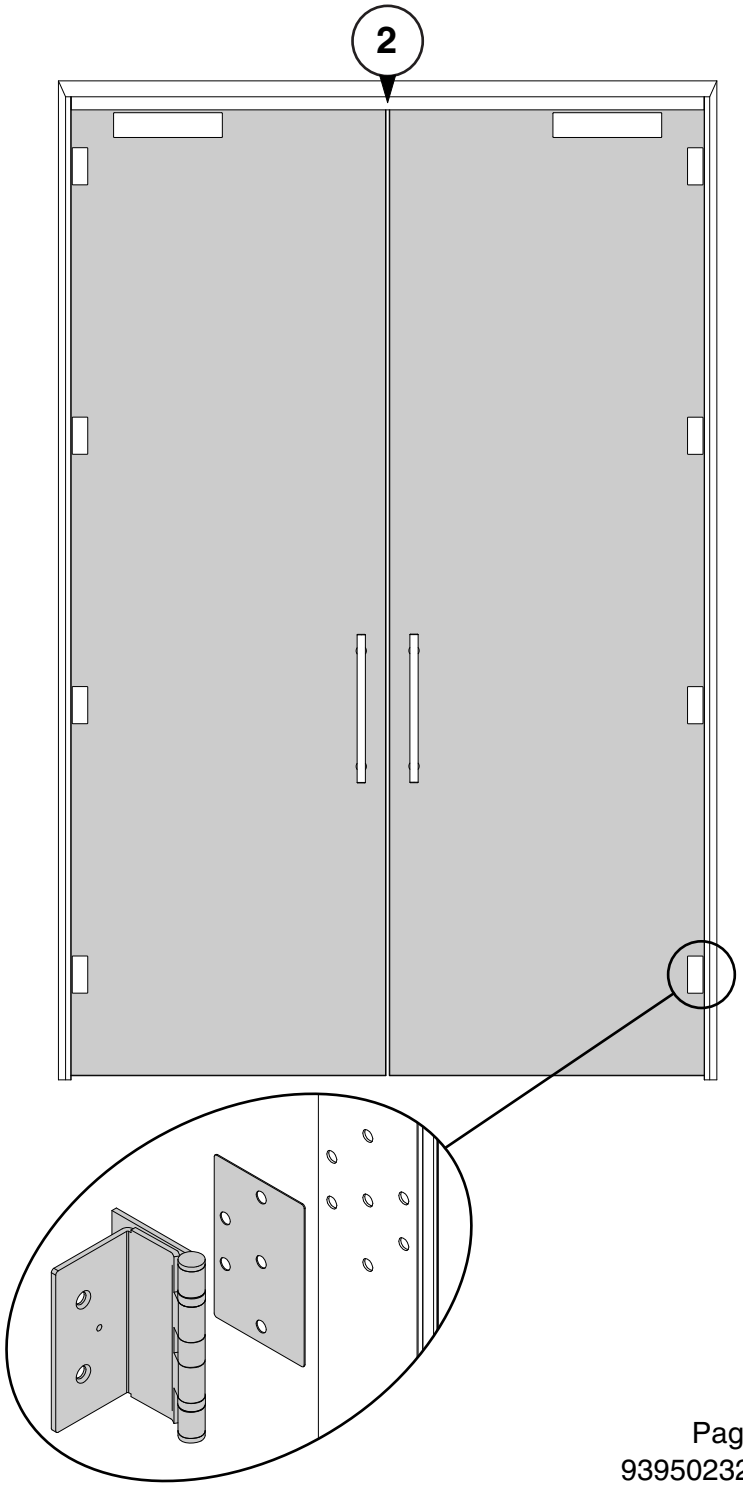
2. Measure the door gap between the 2-door leaves in the closed position. Based on the measured gap, determine the quantity one (1) or two (2) shims to be installed.

3. With the door leaf installed, remove the 4-hinge screws (1-hinge at a time) that secure the hinge to the door vertical.
NOTE: Hinge removal from the door leaf is not required.

4. Insert one (1) or two (2) shims between the hinge face and door vertical, secure to the door vertical with the four (4) screws that were just removed.

5. Repeat shim installation sequence for the remaining hinges.
NOTE: Each hinge within a pair of doors requires an equal number of hinge shims.

6. Upon completion of the shim installation, operate (open & close) the pair of doors to ensure no interference between the 2-adjacent door leaves.



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Pair of Doors - Vertical Gap (continued)

Brush Seals

Glass Door Brush Seal Installation:

1. Clean the glass edge with alcohol pad where the brush seal is to be applied.

2. Remove adhesive liner from brush seal. Apply to door edge as shown. Brush seal visually centered on door edge. Cut to length.

Solid Door Brush Seal Installation:

3. Apply seal to routed pocket feature in door edge. Cut to length.

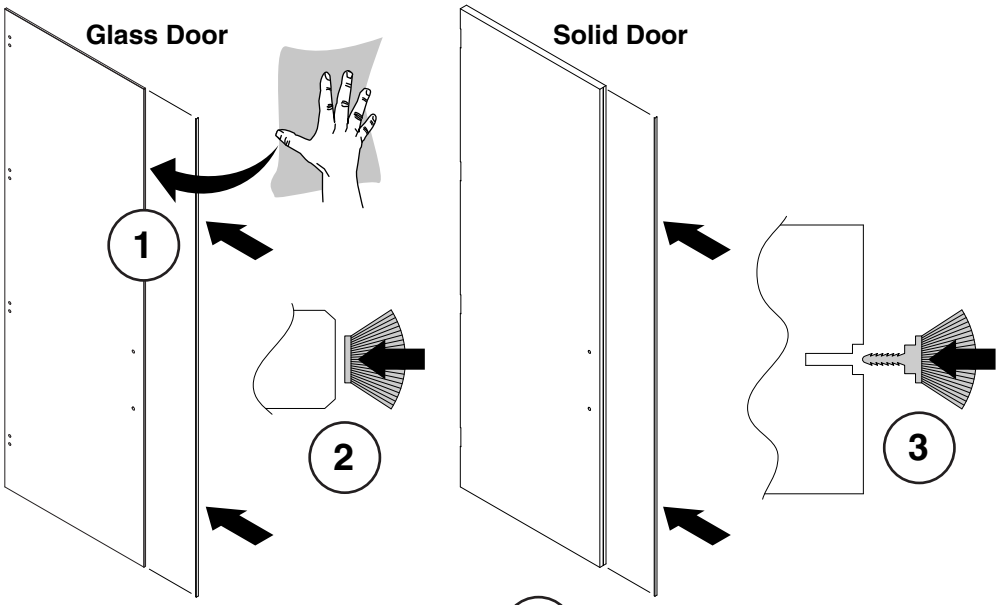
Top-to-Bottom Vertical Gap Uniformity:

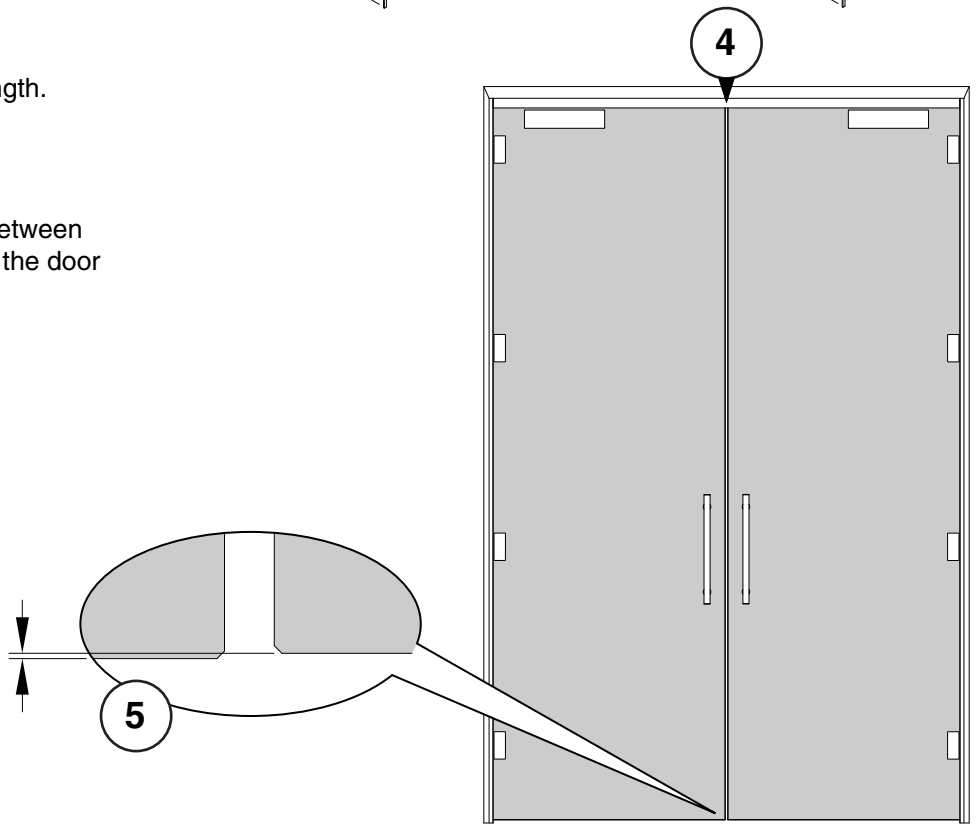
4. Small adjustments to door gap (top-to-bottom uniformity) between pair of doors can be made through **very small** adjustments to the door opening at the floor:

- Larger gap at top: Increase door opening at floor.
- Smaller gap at top: Decrease door opening at floor.

Vertical Alignment:

5. Vertical alignment of two (2) door leaves is measured by the flushness of the 2-lower door surfaces. Flushness is dependent on the relative position of the lower two (2) hinge plate assemblies as detailed in steps 9 through 12 on page 16. A small amount of adjustment can be achieved through the adjustment of an individual floor glide as detailed on page 9.





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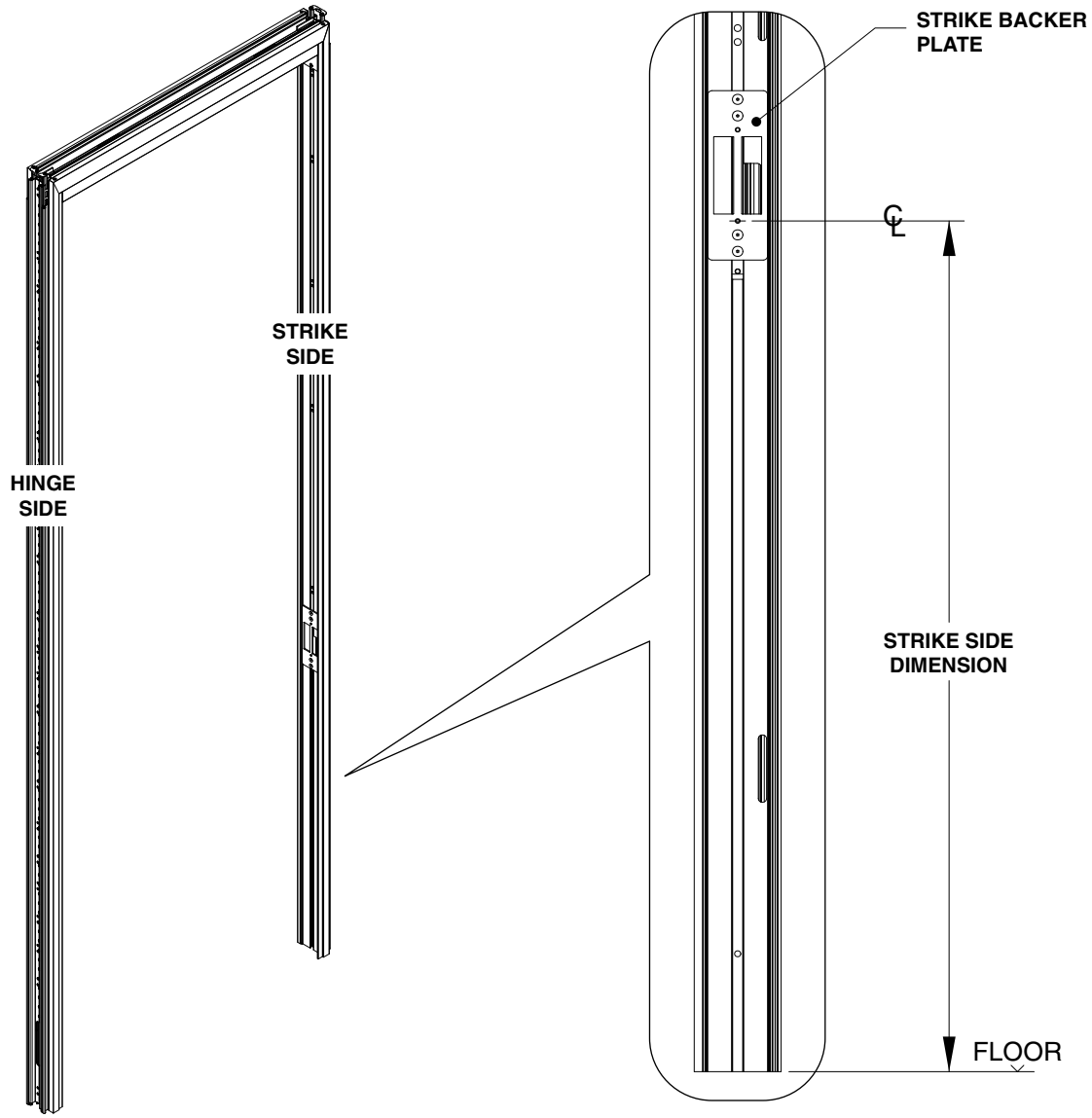
For Single Door Installation Only

NOTE: If you are installing a PAIR OF DOORS, continue to ACOUSTIC SEAL INSTALLATION Steps 1 through 3 on page 36.

Strike Side Vertical Cover Preparation & Installation

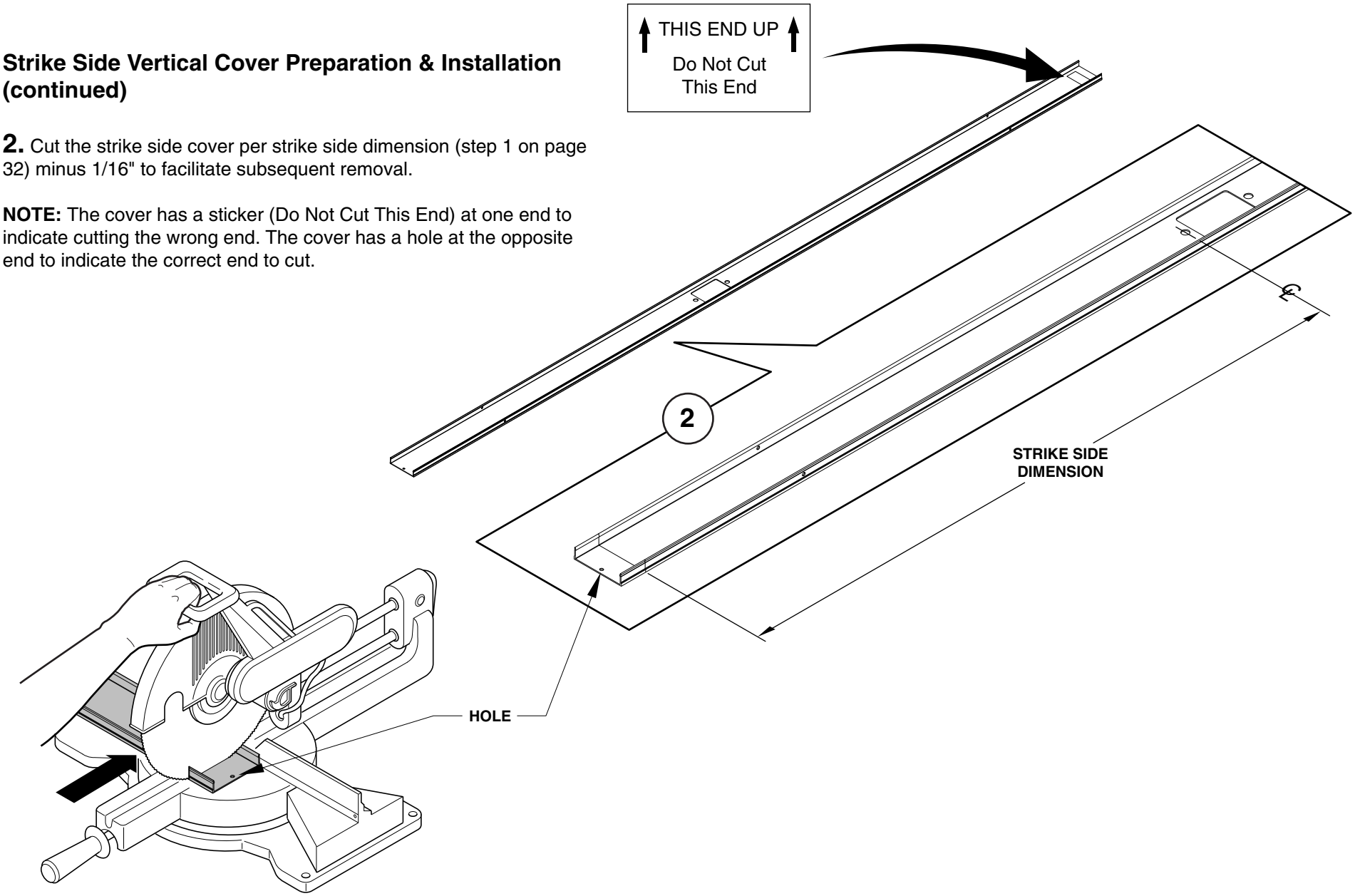
1. Locate the bottom, threaded hole on the strike backer plate. Measure the distance from the hole centerline to the floor (as shown).



Strike Side Vertical Cover Preparation & Installation (continued)

2. Cut the strike side cover per strike side dimension (step 1 on page 32) minus 1/16" to facilitate subsequent removal.

NOTE: The cover has a sticker (Do Not Cut This End) at one end to indicate cutting the wrong end. The cover has a hole at the opposite end to indicate the correct end to cut.



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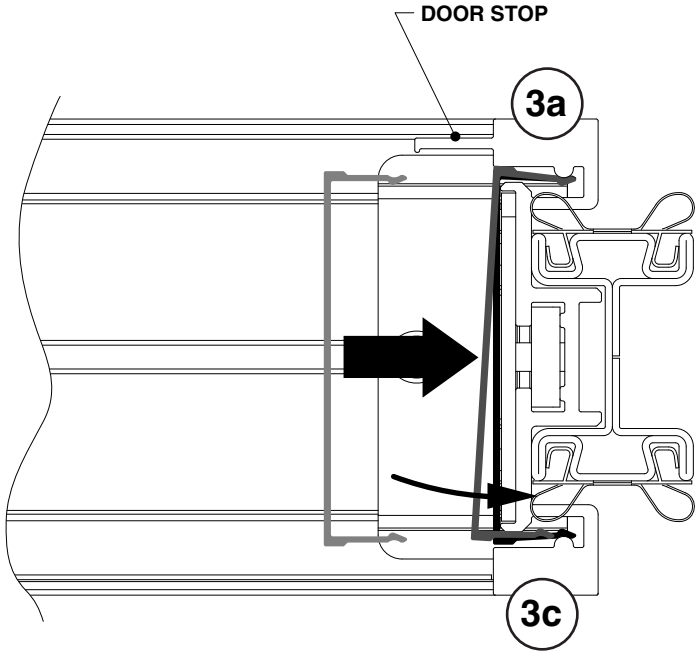
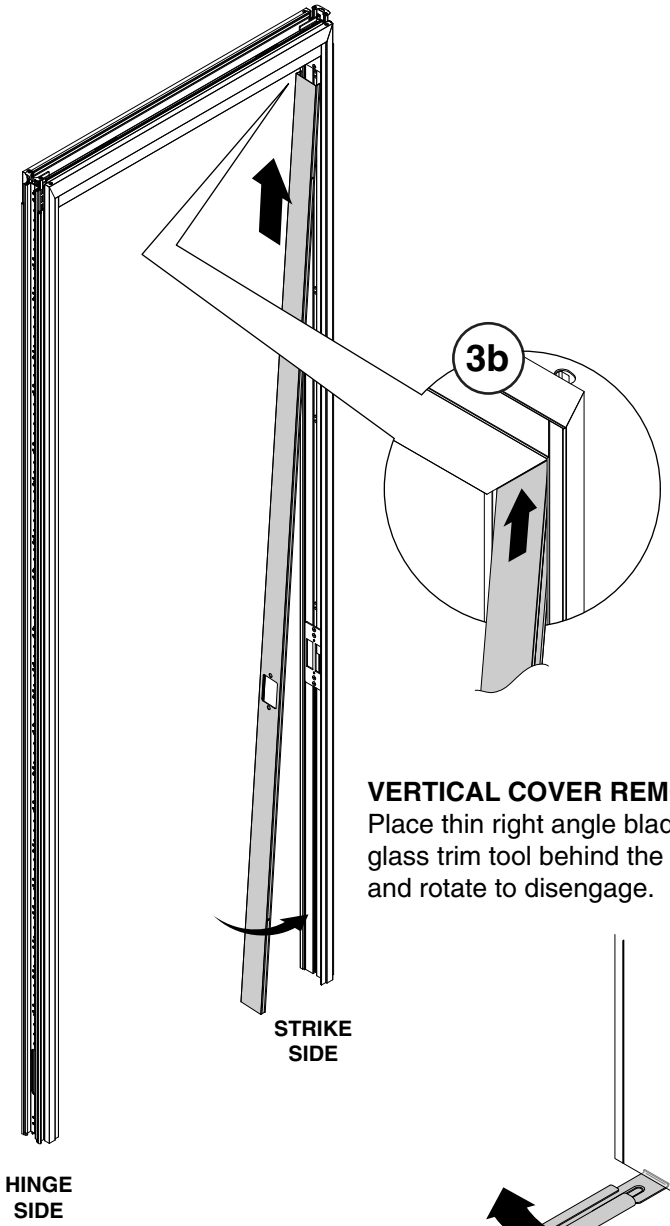
Strike Side Vertical Cover Preparation & Installation (continued)

3. Starting at the top next to the adjustable header, apply pressure to the door stop side of the vertical cover forcing the leg detail to engage the door vertical over the top-to-bottom length (3a). Starting at the top, apply pressure to opposite vertical cover side forcing the leg detail engage the door vertical over a short distance, apply upward pressure on vertical cover to tuck the vertical cover in behind the adjustable header (approximately 1/8") (3b). Continue to apply top-to-bottom pressure on the cover thereby **"zippering"** the vertical cover into the door vertical (3c).

NOTE: The cut end of the vertical cover resides at the floor.

TIP: Turn open both leg detail corners at the top of the vertical cover a small amount to facilitate initial engagement of cover-to-door vertical.





VERTICAL COVER REMOVAL PROCESS:
Place thin right angle blade of captured glass trim tool behind the cover, at the floor, and rotate to disengage.

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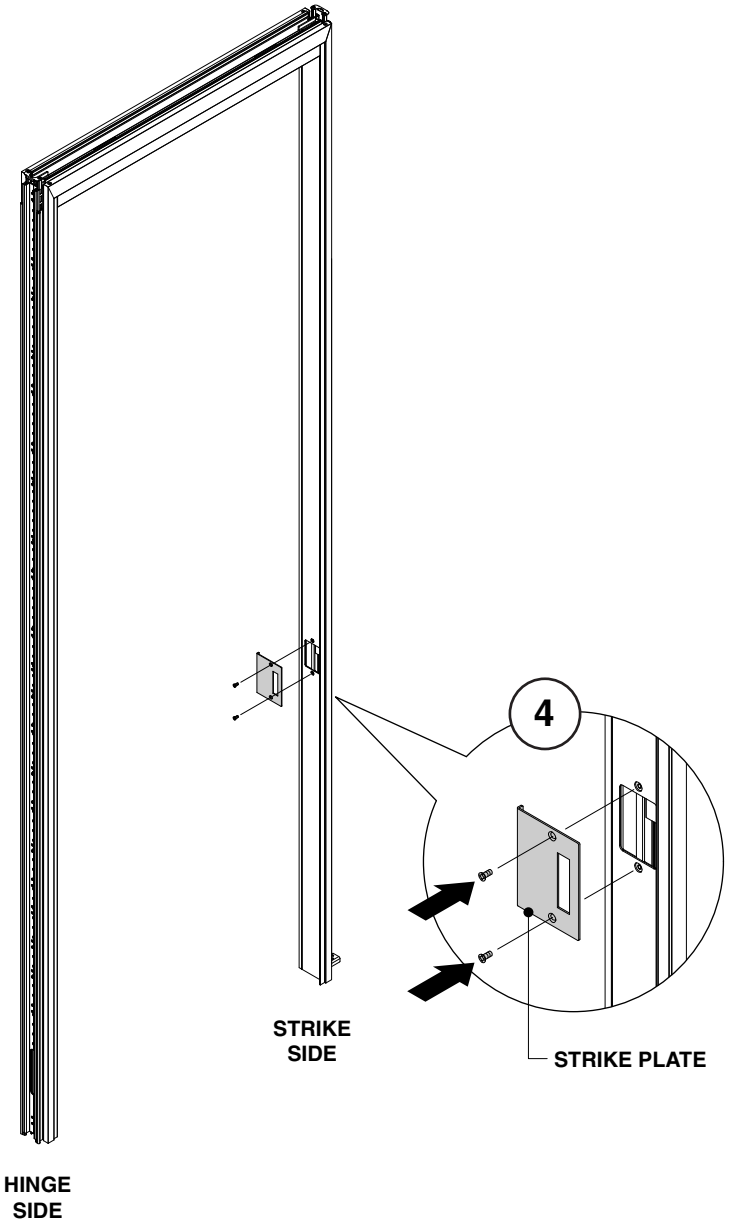
Strike Side Vertical Cover Preparation & Installation (continued)

4. Install strike plate with screws provided.

Apply Loctite 222 threadlocker to the two (2) #12-24 screws to prevent movement during operation.



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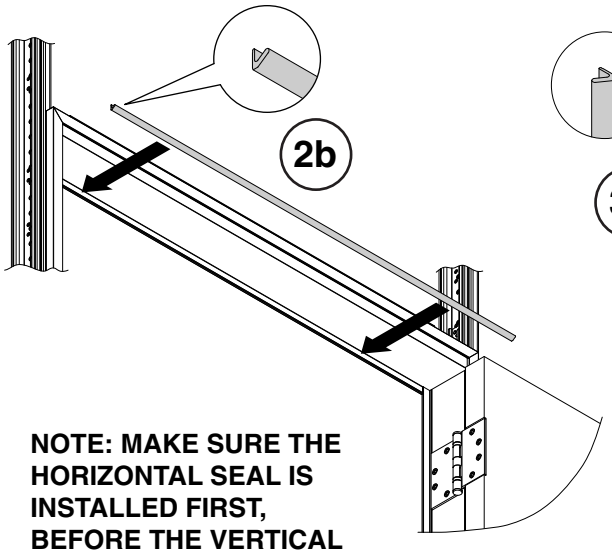
Acoustic Seal Installation

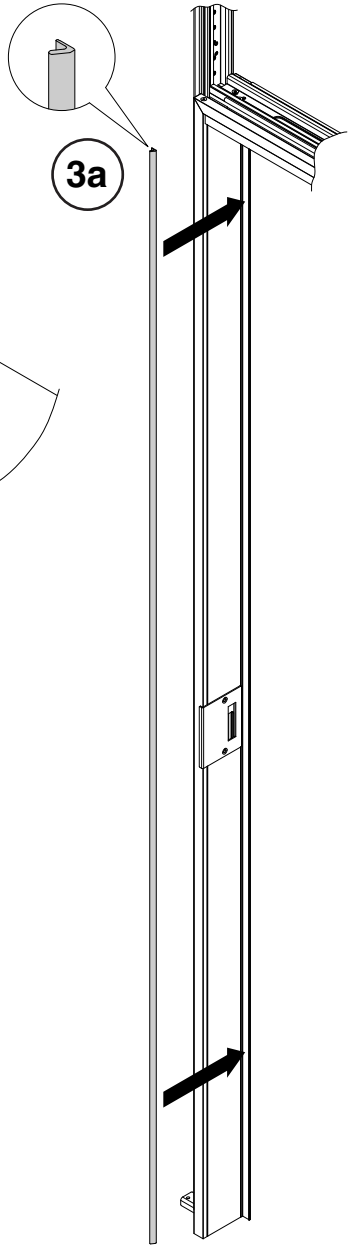
1. Cut each acoustic seal to the required length for each installation location.

2. Peel off paper on back of acoustic seal (2a) and apply to adjustable header (2b). Make sure to extend the seal across the seam between the door vertical and adjustable header.

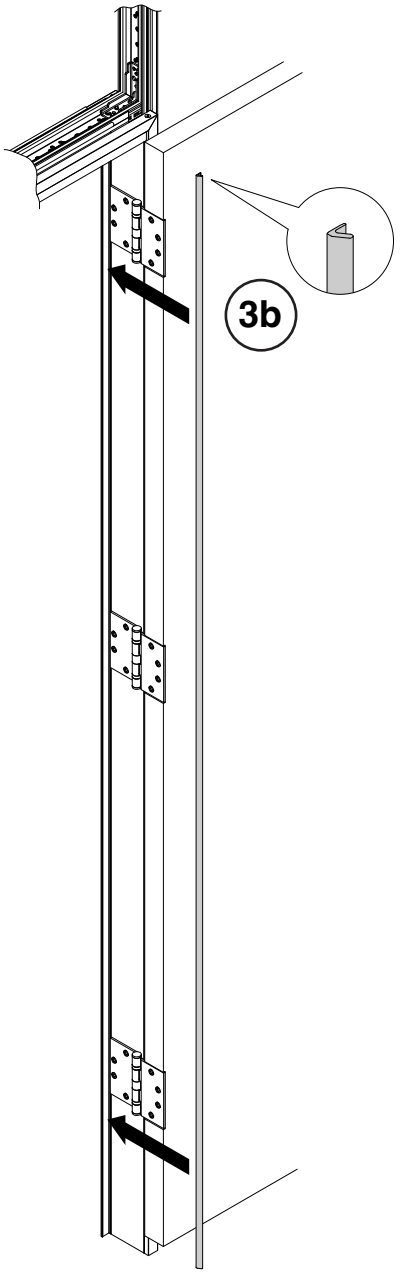
3. Peel off paper on back of acoustic seal (2a) and apply along strike side & hinge side door verticals, starting at the top and working downward (3a & 3b).



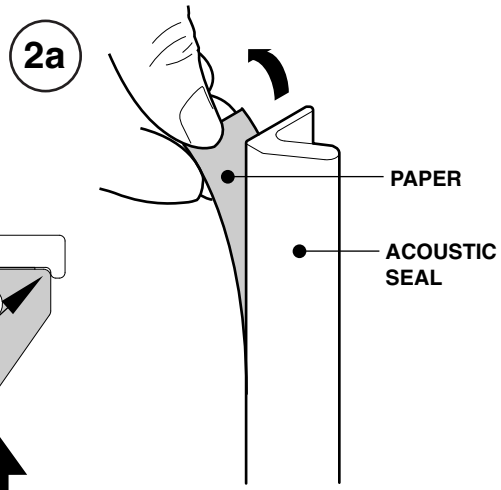
NOTE: MAKE SURE THE HORIZONTAL SEAL IS INSTALLED FIRST, BEFORE THE VERTICAL SEALS

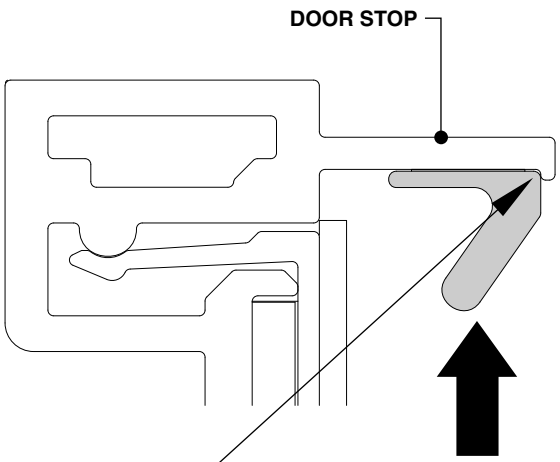


STRIKE SIDE



HINGE SIDE



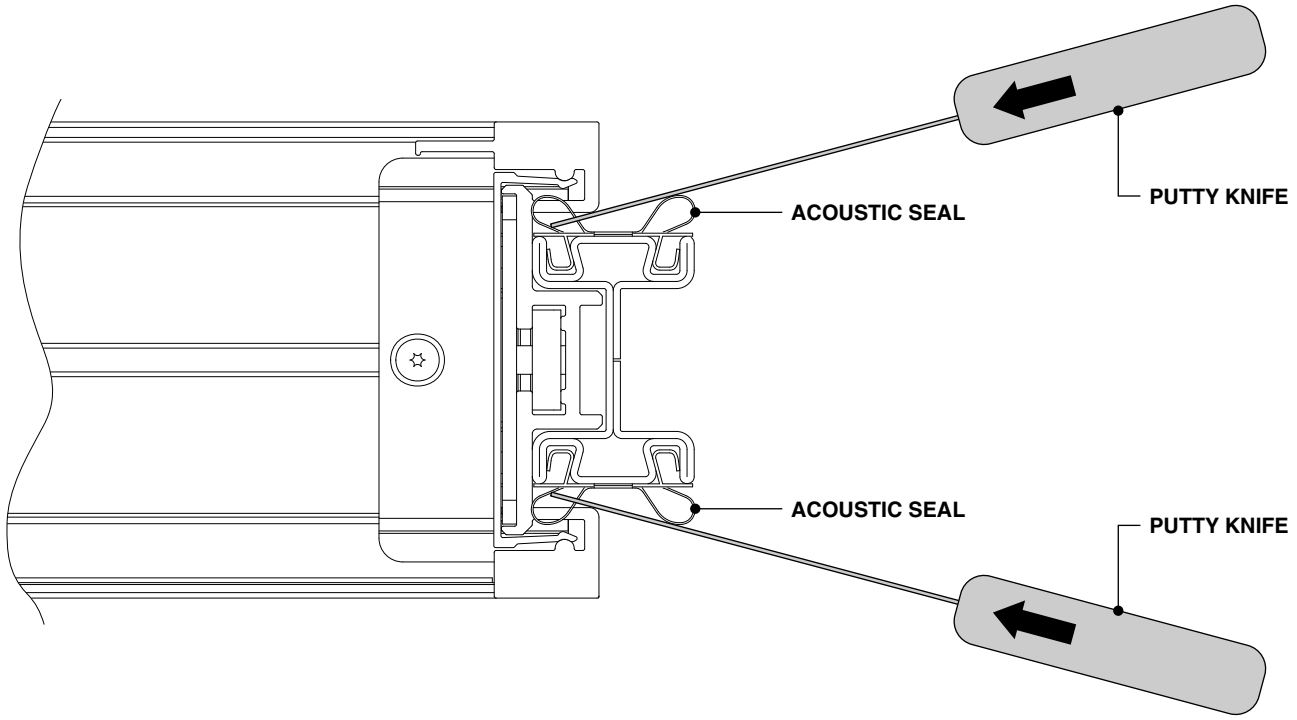


Make sure to install the acoustic seal into the corner as shown.

NOTE: TO INSURE OPTIMUM ACOUSTICAL PERFORMANCE INSTALL ACOUSTIC SEALS AS NOTED

Acoustic Seal Adjustment

1. Using a putty knife, tuck the acoustic seal between the door frame and system post around the door perimeter.



Steelcase®

Door Closer - Fixed Header Preparation & Installation

NOTE: The door closer is assembled to the inside of the door leaf and fixed header, opposite the door stop side of the door assembly.

1. Drill two (2) 5/16" diameter holes through the two walls (1a) of fixed header per dimensions shown. **NOTE:** Dimensions are referenced off hinge side of fixed header.

2. Loosely install the arm jamb bracket and the reinforcement bracket to the fixed header using two (2) 1/4-20 x 1" oval-head screws.

3. Flush the reinforcement bracket to the fixed header inner wall (3a). Drill two (2) 5/16" diameter holes on underside of fixed header using the reinforcement bracket as a template (3b).

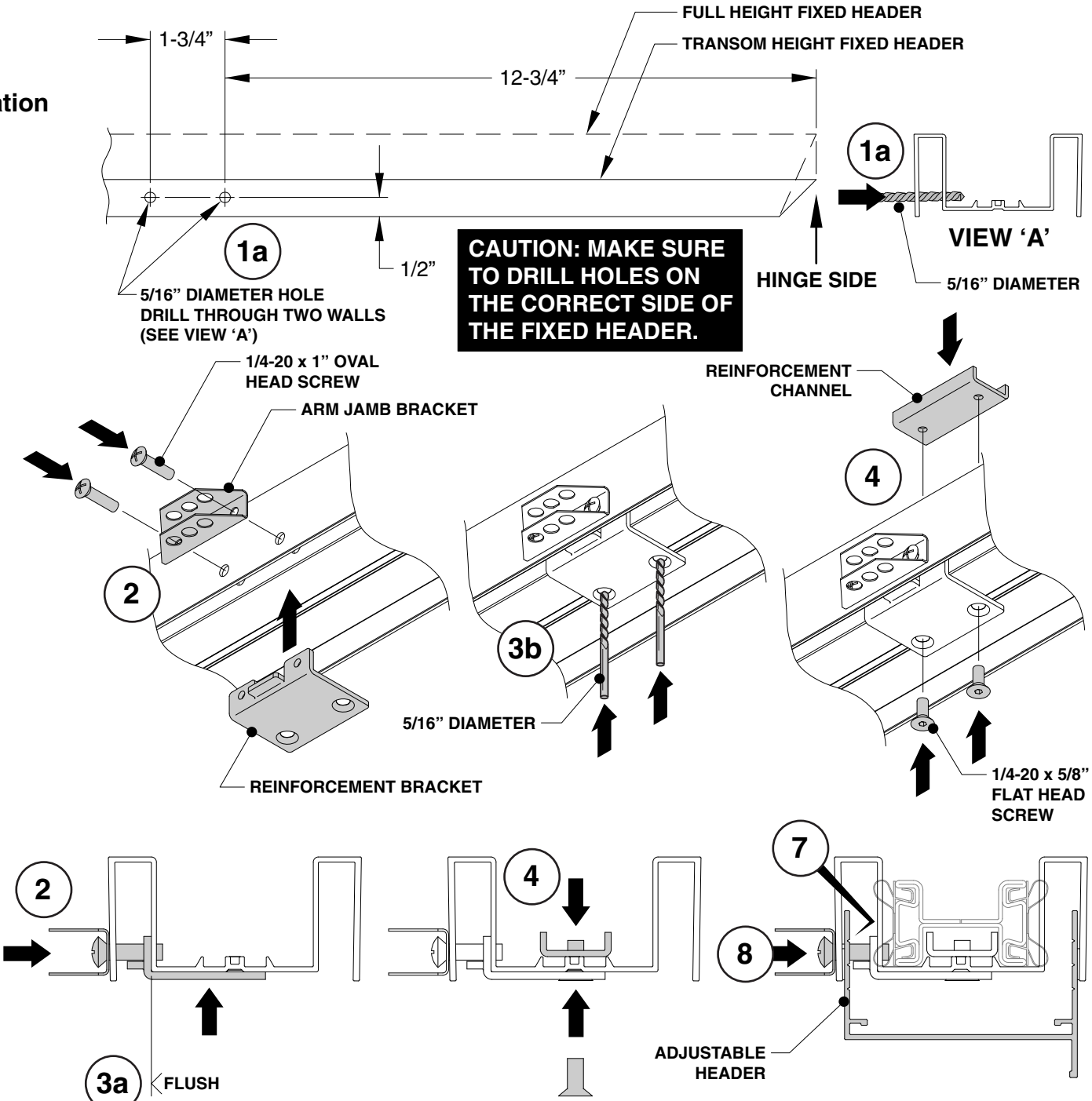
4. Secure reinforcement bracket to fixed header with two (2) 1/4-20 x 5/8" flat head screws as shown.

5. Remove the two (2) 1/4-20 x 1" oval-head screws from step 2.

6. Complete fixed header installation shown on page 11.

7. Drill two (2) 5/16" diameter holes in the adjustable header using the two 2-holes in the fixed header as a template.

8. Secure the arm jamb bracket to the fixed header using (2) 1/4-20 x 1" oval-head screws.



Steelcase®

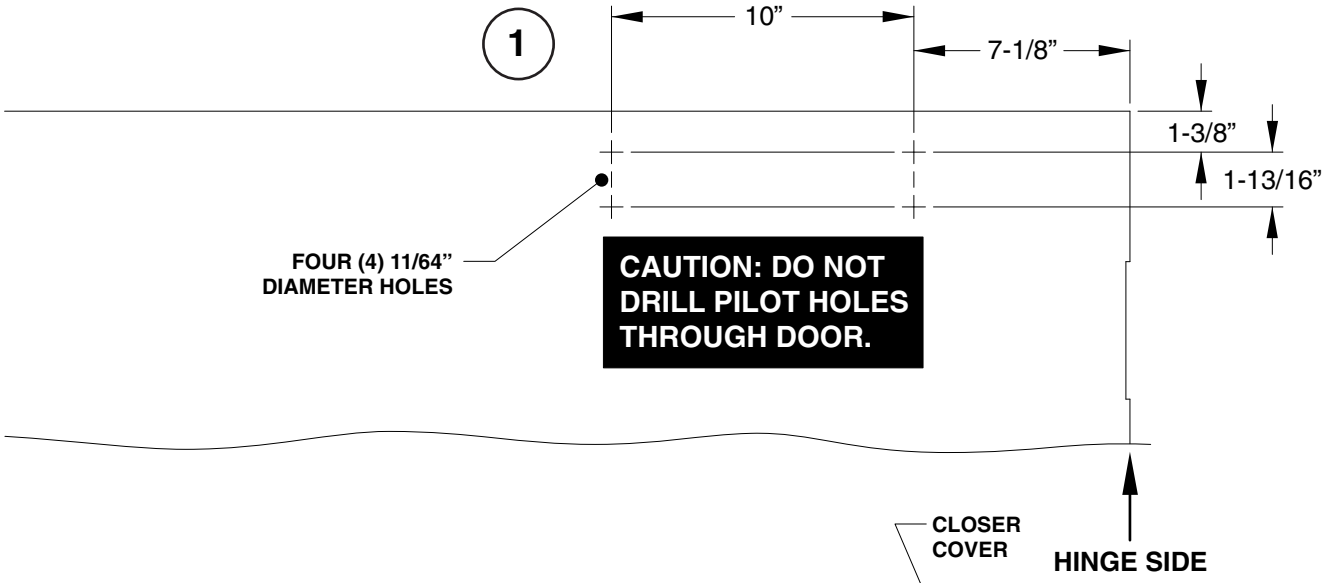
Door Closer - Solid Wood Door Preparation & Installation

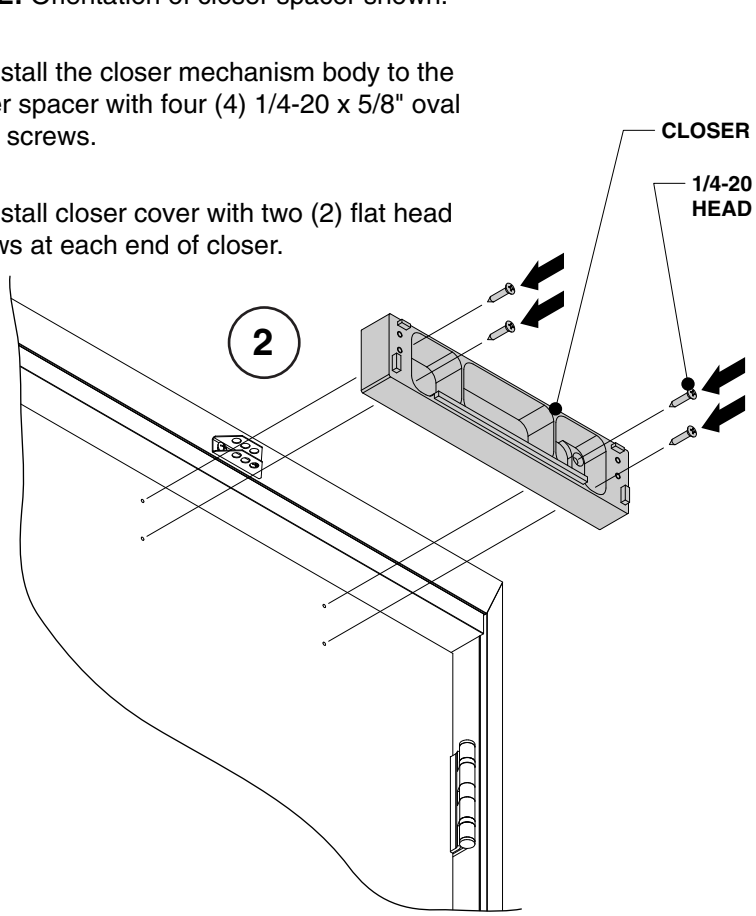
1. Drill four (4) 11/64" diameter pilot holes x 1” deep on the INSIDE (mechanism side) of the solid wood door per dimensions shown.
NOTE: Dimensions are referenced off hinge side of wood door.

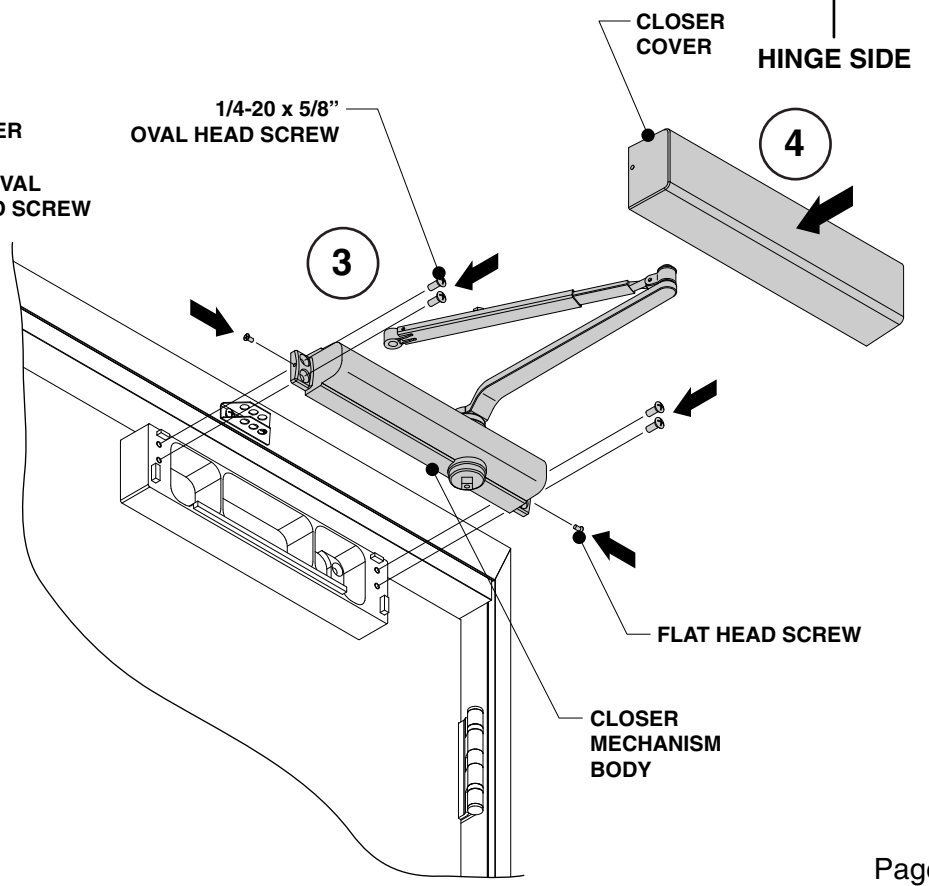
2. Install the closer spacer with four (4) 1/4-20 x 1" oval head wood screws.
NOTE: Orientation of closer spacer shown.

3. Install the closer mechanism body to the closer spacer with four (4) 1/4-20 x 5/8" oval head screws.

4. Install closer cover with two (2) flat head screws at each end of closer.







Steelcase®

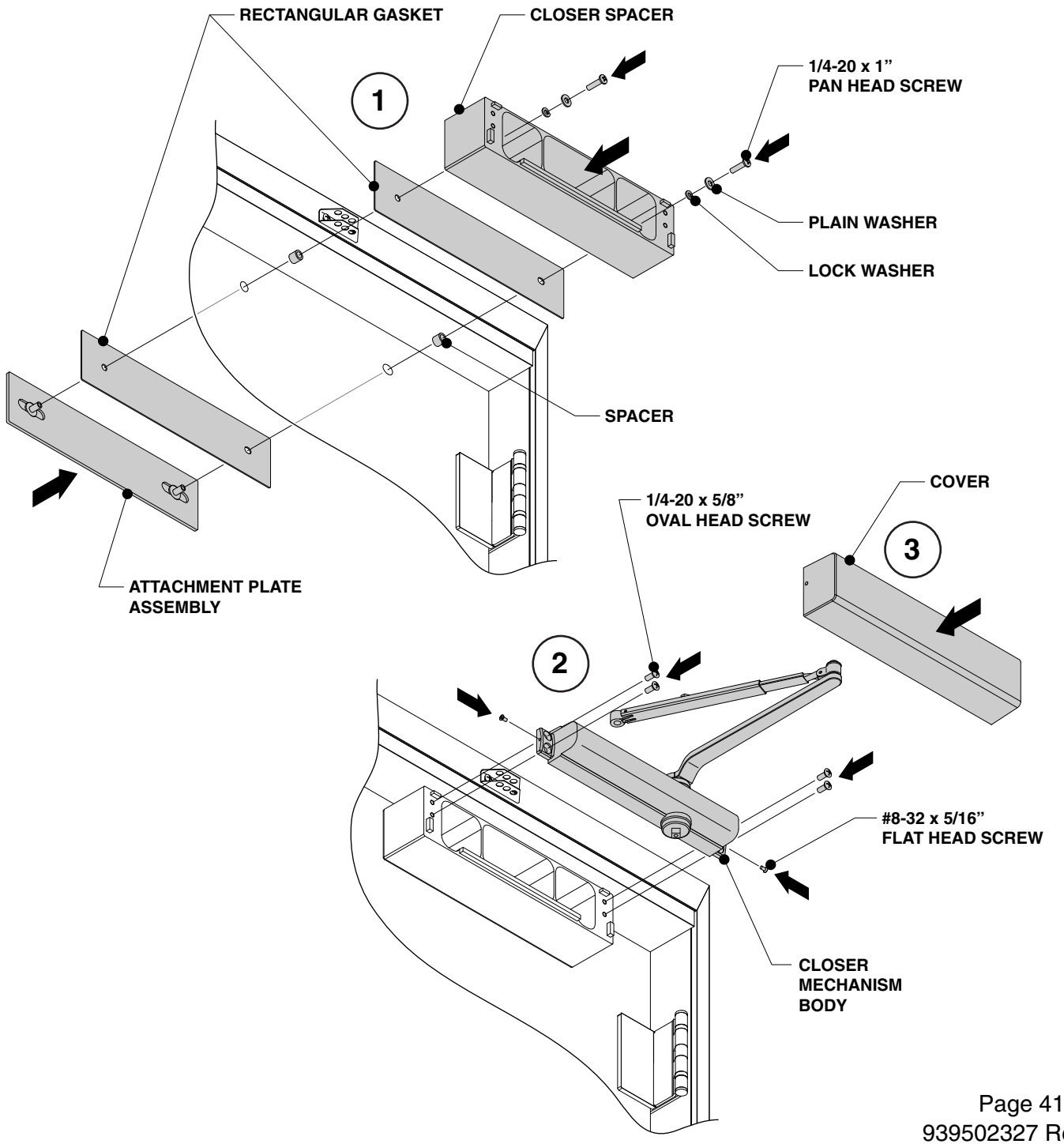
Door Closer - Glass Door Preparation & Installation

NOTE: The door closer is assembled to the door leaf and the fixed header, opposite the door stop side of the door assembly.

1. Install spacers, gaskets (one on each side of glass), mounting plate, and closure spacer using two (2) 1/4-20 x 1" pan head screws, plain washers, and lock washers as shown. **NOTE:** Orientation of closer spacer shown.

2. Install the door closer to the closer spacer with four (4) 1/4-20 x 5/8" oval head screws.

3. Install closer cover with two (2) flat head screws at each end of closer.



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Adjustments Page

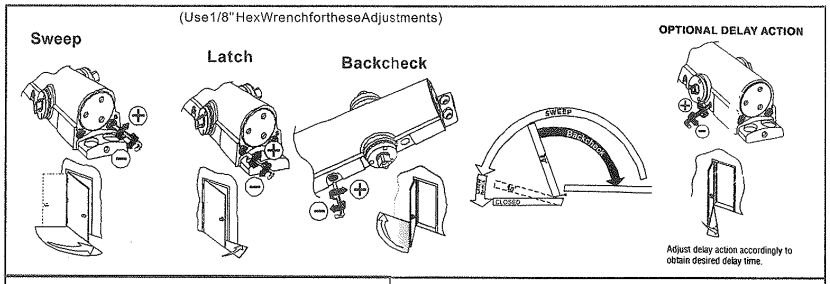
Door Closer Adjustment

1. Attach the main arm 90 degrees off the fixed header.

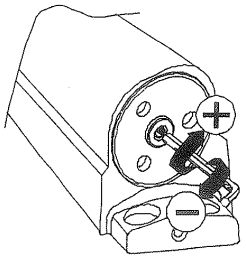
2. Attach the adjustable arm to the fixed header.

3. Adjust the adjustable arm to the desired door close position.

NOTE: Refer to manufacture's adjustments page for door closer settings.



Spring Power Adjust

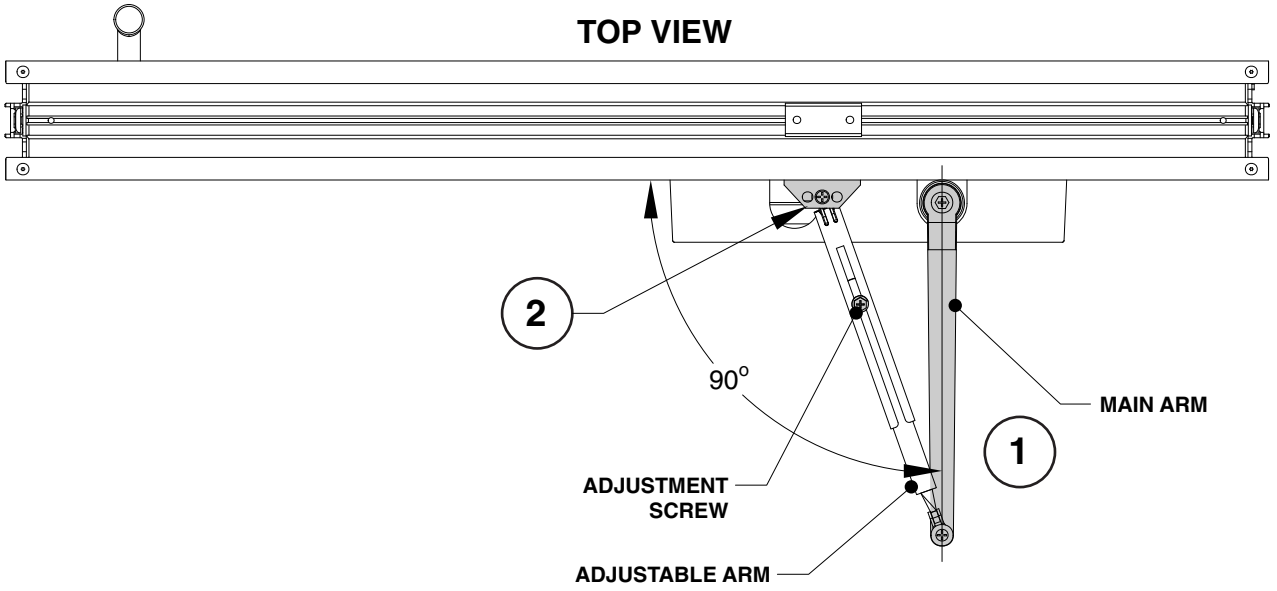


(Use1/8 HexWrenchforthisAdjustment)

POWER ADJUSTMENT CHART

MAXIMUM DOOR WIDTH		FULL TURNS REQUIRED
EXTERIOR DOORS	INTERIOR DOORS	
8.5 lb-f*	34" (864)	5 TURNS C.C.W.
30" (762)	38" (962)	0 TURNS
36" (914)	48" (1219)	5 TURNS C.W.
42" (1067)	54" (1372)	9 TURNS C.W.

*15 Full (360°) turns maximum available Closer was set down as size 3 from the factory originally.



Steelcase®

Mortise Lever Housing Preparation & Installation (Glass Door Only)

NOTE: MORTISE HOUSING PREPARATION 'ONLY' SUPPORTS MORTISE LEVER WITH 2-3/4" BACKSET.

1. Determine door handedness by facing the door, so that the door swings away from you. The side that the hinges are on defines the handing of the door.

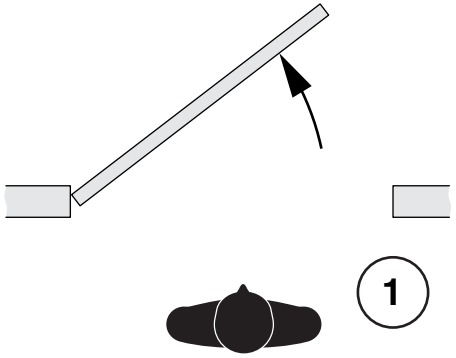
• LEFT HAND DOOR = Hinge located on the left side of the door frame.

• RIGHT HAND DOOR = Hinge located on the right side of the door frame.

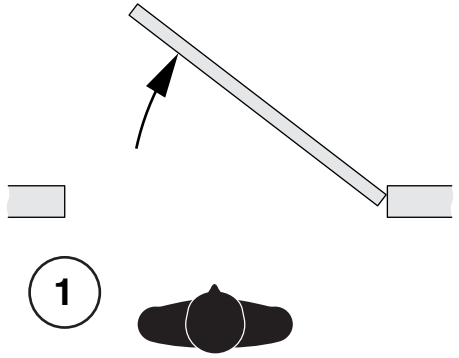
2. Determine orientation of the housing and cover to support door handedness.

• Outer cover installs next to door stop side of the glass door frame.

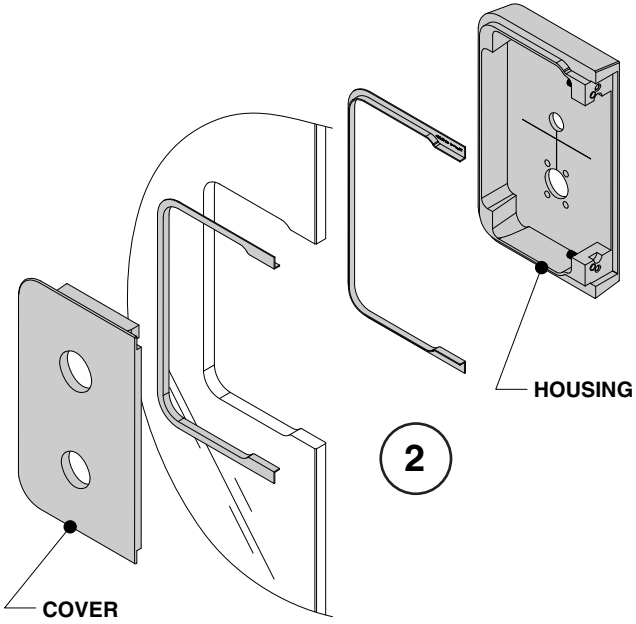
• Housing installs on non-door stop side of the glass door frame.

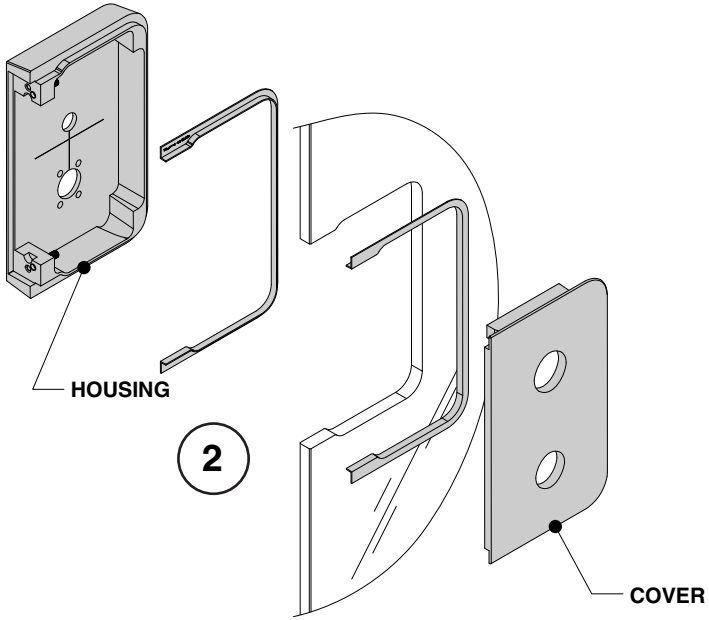


LEFT HAND



RIGHT HAND





Steelcase®

Mortise Lever Housing Preparation & Installation (Glass Door Only) (continued)

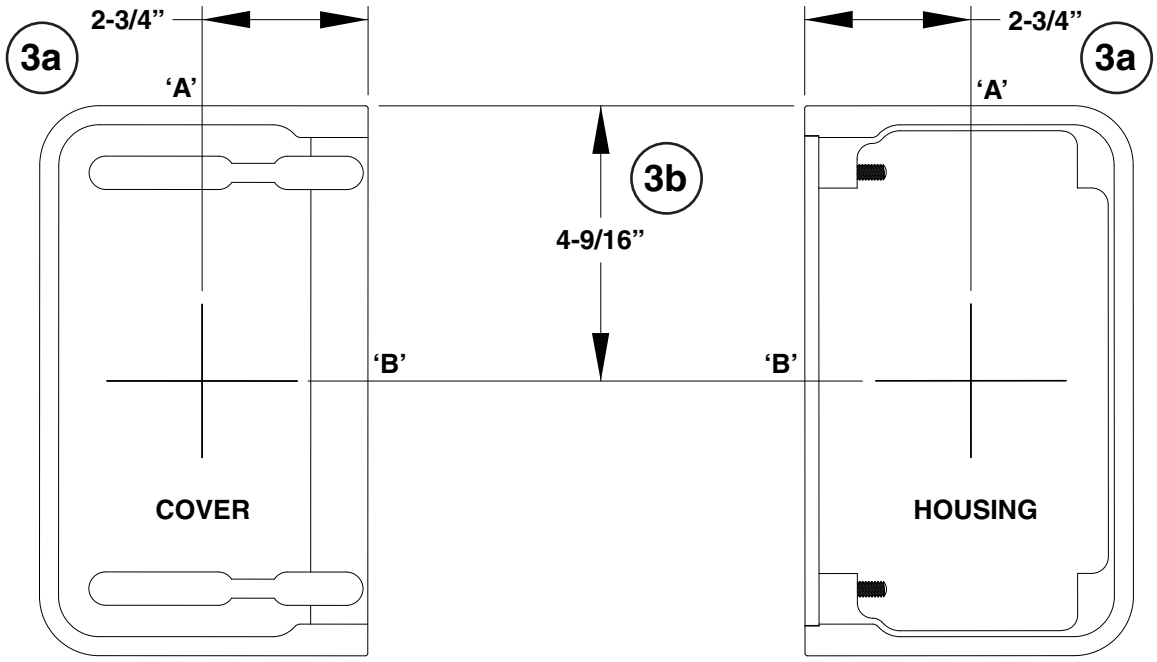
3. Mark one (1) vertical line ‘A’ at the 2-3/4” backset dimension (3a) and one (1) horizontal line ‘B’ at 4-9/16” on the inside of the cover and housing as shown (3b).

4. Align the hardware manufacturer’s template to the marked lines.

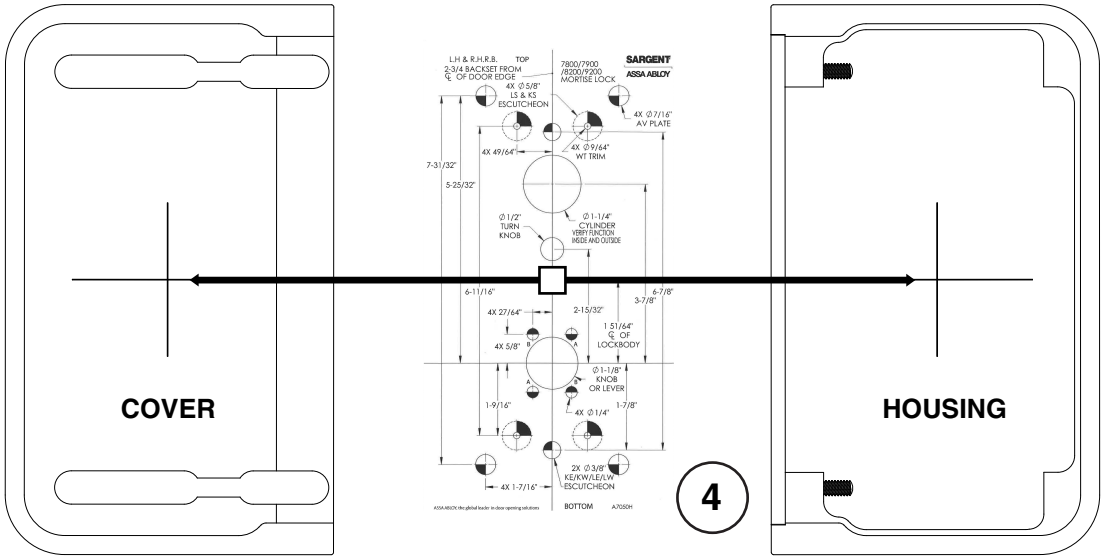
• Centerline of the lever or knob aligns with the vertical line ‘A’.

• Centerline of the lock body aligns with the horizontal line ‘B’.

NOTE: Sargent lever preparation shown. Other manufacturer’s templates and hardware may differ from that shown.



RIGHT HAND APPLICATION



Sargent Template

Steelcase®

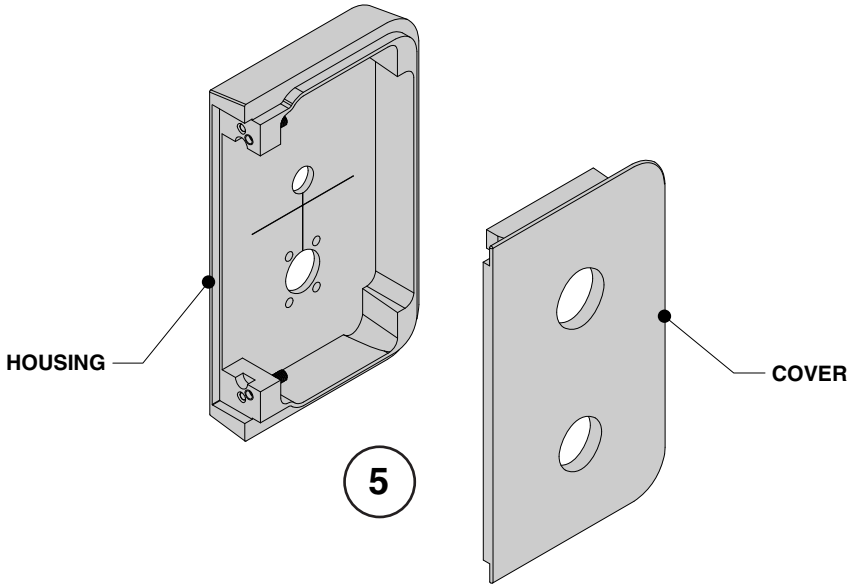
Mortise Lever Housing Preparation & Installation (Glass Door Only) (continued)

5. Determine which feature holes need to be drilled in the housing and cover. Mark all holes that apply, remove template. Drill all holes using the diameters shown on the template.

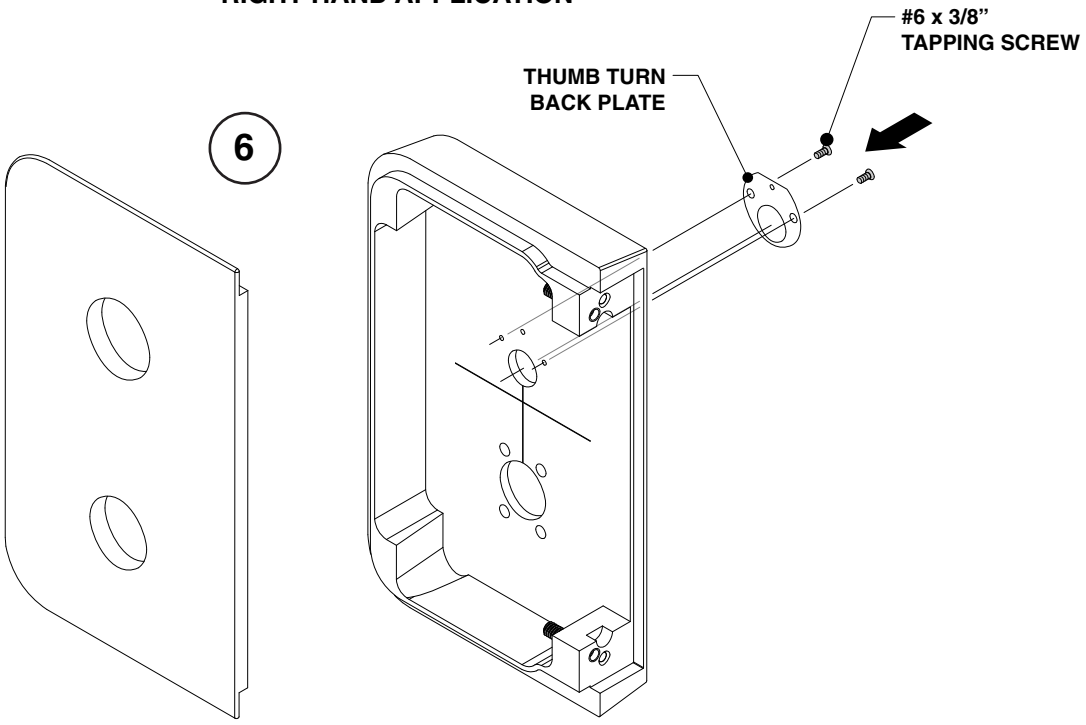
TIP: RH door, the lock cylinder preparation typically resides in the cover or the door stop side.

6. Housing lock cylinder preparation only. Use the thumb turn back plate as a template to locate and mark three (3) attachment holes. Drill three (3) 1/8” diameter holes, secure back plate with two (2) #6 x 3/8” tapping screws.

NOTE: Sargent lever preparation shown. Other manufacturer’s templates and hardware may differ from that shown.



RIGHT HAND APPLICATION



Steelcase®

Mortise Lever Housing Preparation & Installation (Glass Door Only)

7. Determine the glass orientation for installing the housing and cover. The cover installs on the glass face that shuts against the the door frame acoustic seal.

8. Assemble wedge blocks to the cover, sliding forward to retain within routed channel.

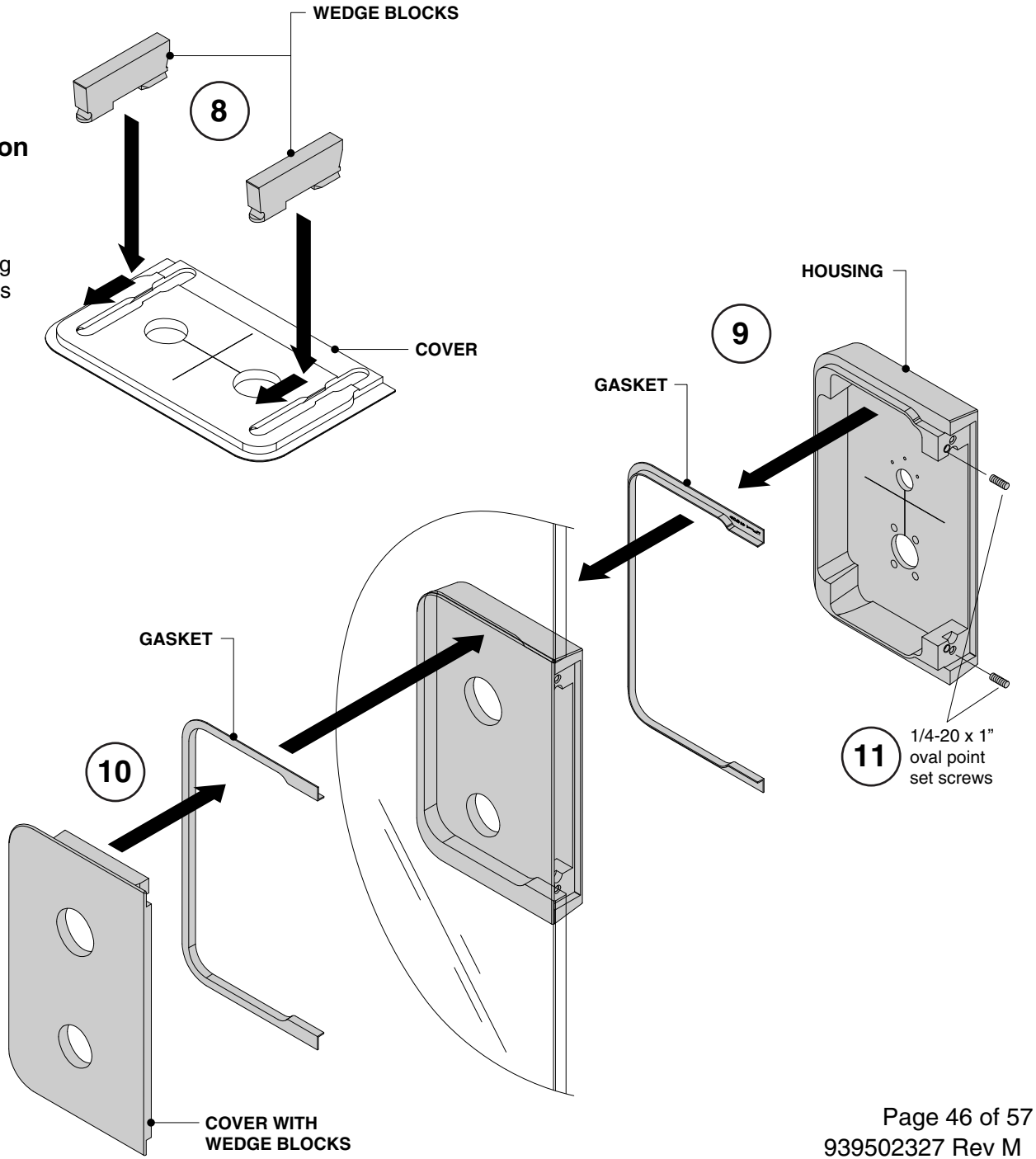
9. Place gasket and housing flush to glass cutout, align housing flush to the glass edge.

10. Place gasket and cover (wedge blocks installed) flush to glass cutout with wedge blocks contacting housing on the opposite glass side, align cover flush to the glass edge.

11. Holding the housing and cover firm against the glass and flush to glass edge, secure to glass cutout with (2) two 1/4-20 **OVAL point set screws.**

NOTE: It is important that **OVAL point set screws** be used to secure the cover and housing to the glass in order to avoid fit-up issues.

12. Install the **Mortise Lever Assembly** per the manufacturer's instructions.



Steelcase®

Cylindrical Lever Housing Installation (Glass Door Only)

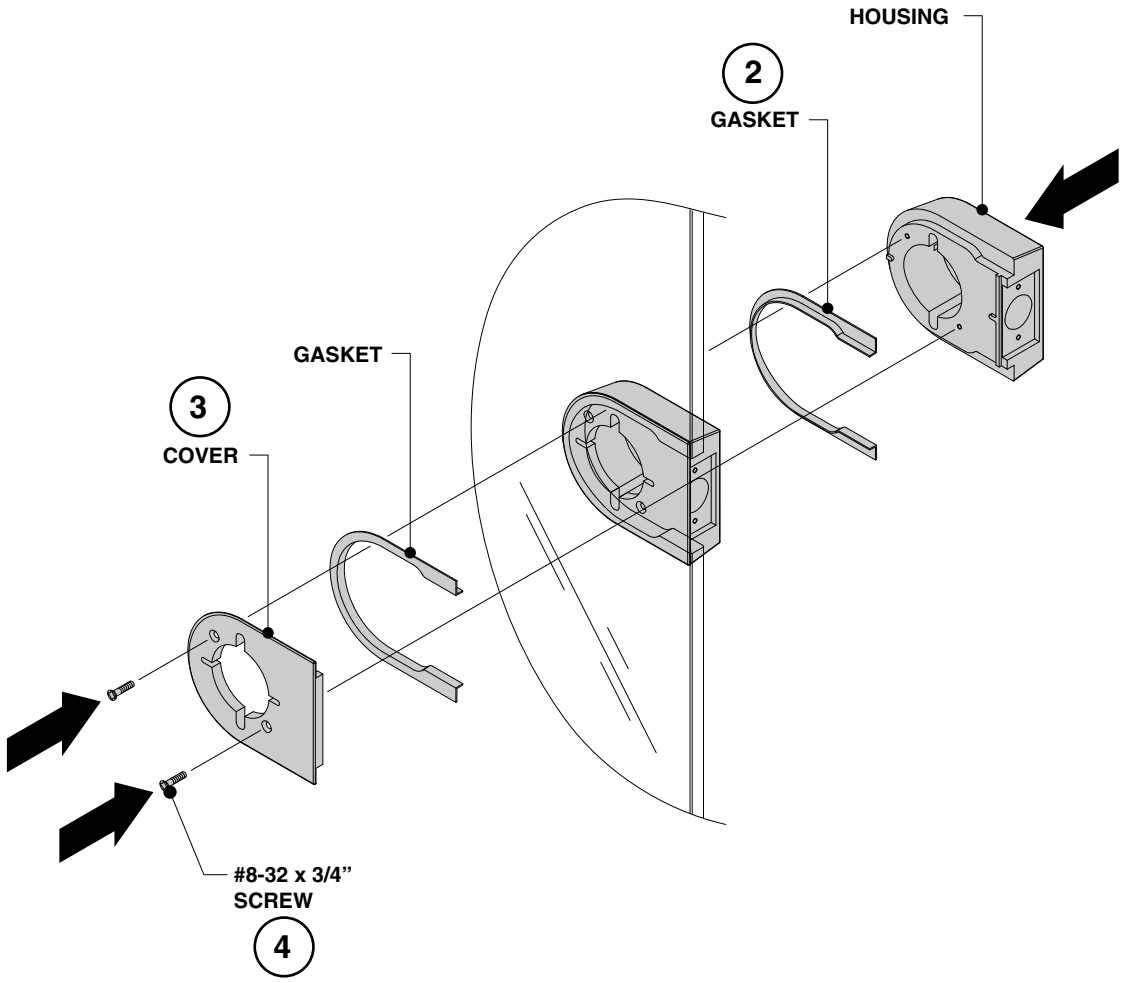
1. Determine the glass orientation for installing the housing and cover. The cover installs on the glass face that shuts against the door frame acoustic seal.

2. Place gasket and housing flush to glass cutout, align housing flush to the glass edge.

3. Place gasket and cover flush to glass cutout, align housing flush to the glass edge.

4. Holding the housing and cover firm against the glass and flush to glass edge, secure to glass cutout with (2) two #8-32 flat head screws.

5. Install the **Cylindrical Lever Assembly** per the manufacturer's instructions.



Steelcase®

Roller Latch Installation (Glass Door Only)

1. Determine the glass orientation for installing the housing and cover. The cover installs on the glass face that shuts against the door frame acoustic seal.

2. Assemble wedge blocks to the cover, sliding forward to retain within routed channel.

3. Place gasket and housing flush to glass cutout, align housing flush to the glass edge.

4. Place gasket and cover (wedge blocks installed) flush to glass cutout with wedge blocks contacting housing on the opposite glass side, align cover flush to the glass edge.

5. Holding the housing and cover firm against the glass and flush to glass edge, secure to glass cutout with (2) two 1/4-20 **OVAL point set screws.**

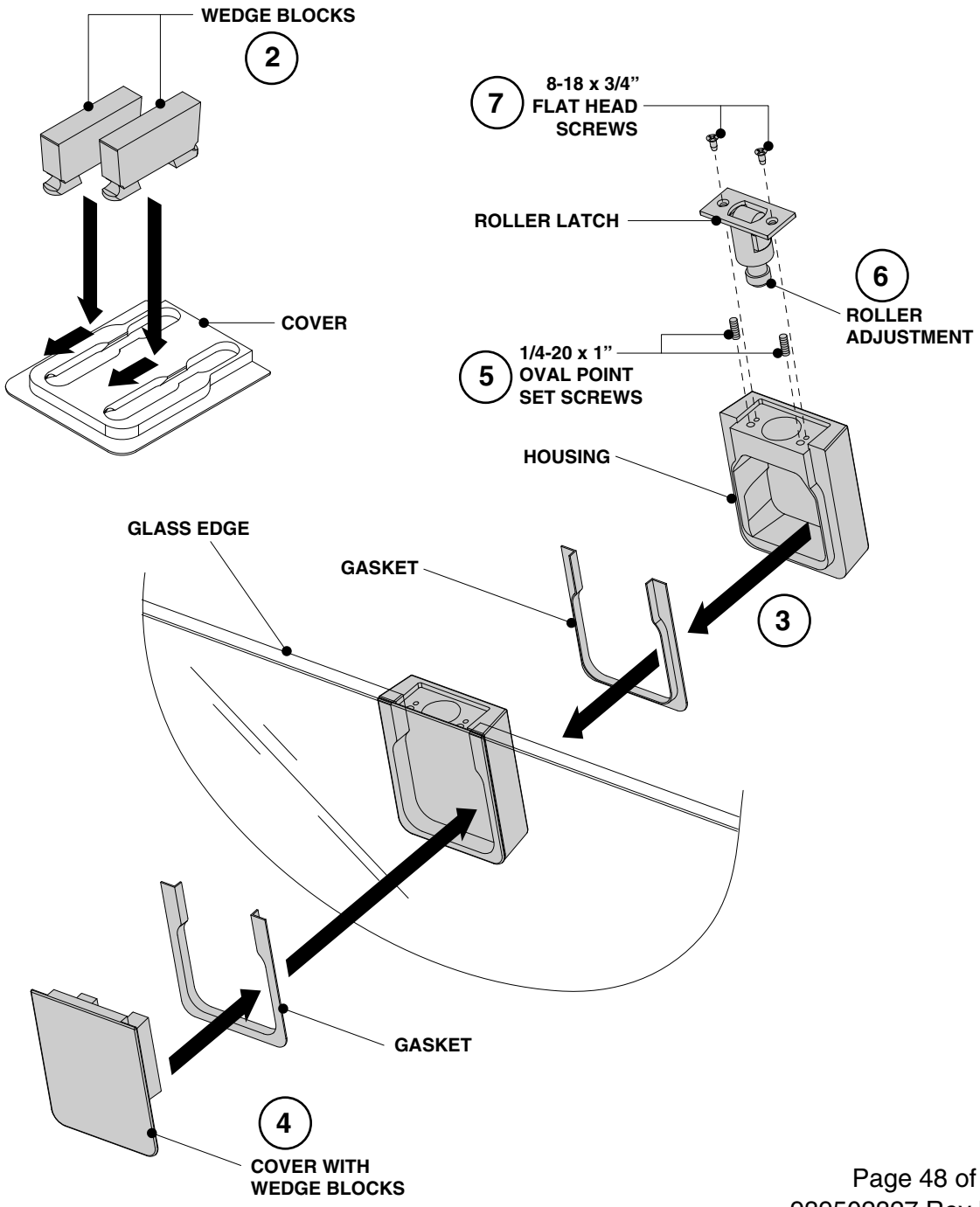
NOTE: It is important that **OVAL point set screws** be used to secure the cover and housing to the glass in order to avoid fit-up issues.

6. With the cover and housing secured to the glass, loosely (no screws) install the roller latch assembly into the housing, adjust the roller adjustment (knurled knob) to get the desired roller-to-strike plate engagement while opening/closing the door.

NOTE: The roller latch assembly consists of a spring loaded roller adjustment for varying the amount of roller engagement to the strike plate.

Apply Locite 222 threadlocker to the roller adjustment thread to prevent movement during operation.

7. Secure the roller latch assembly to the housing with two (2) #8-18 flat head screws.



Steelcase®

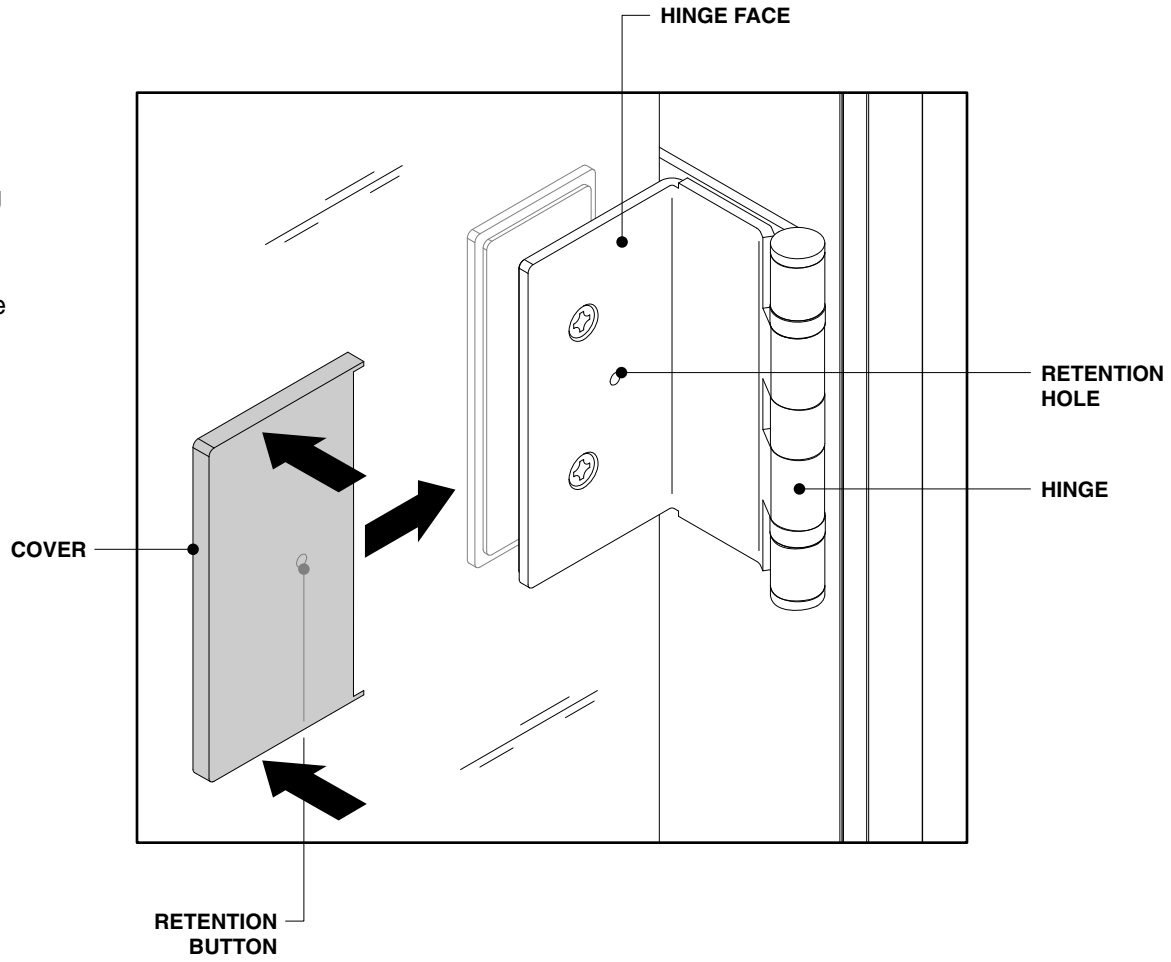
Glass Door Hinge Cover Installation

1. Align cover face to hinge face.

2. Position back side of cover top and bottom retention ribs to leading edge of hinge.

3. Gently push cover onto hinge while holding backside of cover tight to hinge face.

4. Continue until retention button on back side of cover engages hole in hinge face.



Steelcase®

Glass Door Drop Seal Installation

1. Activate drop seal to make sure that it works properly before installing it. Trim rubber seal to maximize its length without interfering with either end cap.

2. Determine the door swing direction.

3. Drop seal is applied to the inside of the door. (the side opposite the frame door stop.)

4. Activation button end of drop seal is located on the hinge side of the door.

5. Clean glass mounting surface with Isopropyl alcohol (both sides) where drop seal and door trim are to be applied.

6. Apply 3M VHB adhesive tape flush to the top and bottom edges of the drop seal, along the surface facing the glass door

7. Remove tape adhesive liner from drop seal.

8. Apply drop seal (adhesive side) visually centered over door width (8a) and flush to the bottom edge of the glass door (8b).

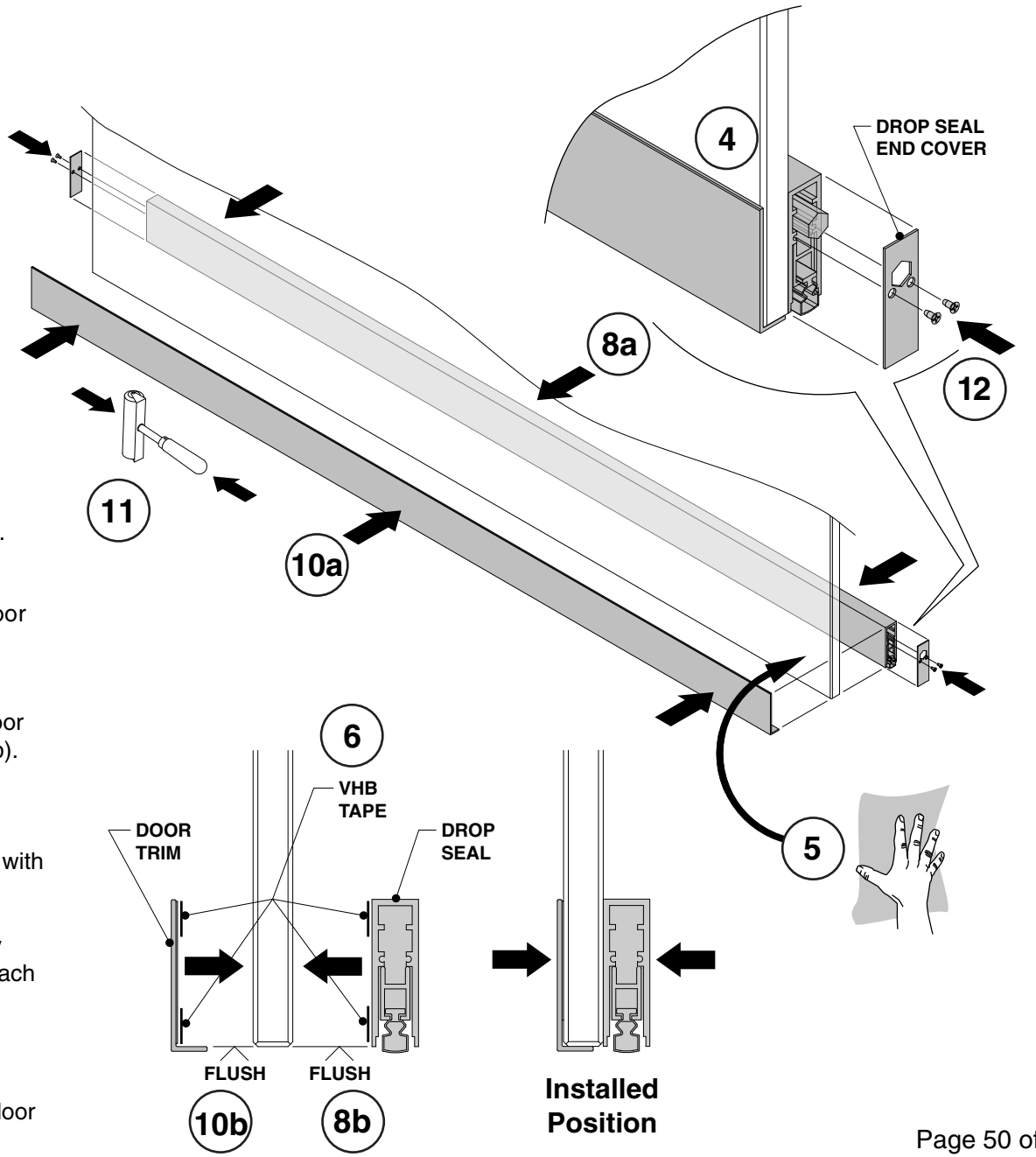
9. Remove tape adhesive liner on door trim.

10. Apply door trim visually centered over door width (10a) with 90 degree flange flush to underside of glass door (10b).

11. Secure the drop seal and door trim to the glass door by applying a roller and clamping pressure across the face of each part to ensure good adhesive bond to the glass.

12. Install end covers.

13. Follow the manufacture's instruction for completion of door seal installation.



Steelcase®

Solid Door Drop Seal Installation

1. Activate drop seal to make sure that it works properly before installing it. Trim rubber seal to maximize its length without interfering with either end cap.

2. Determine the door swing direction.

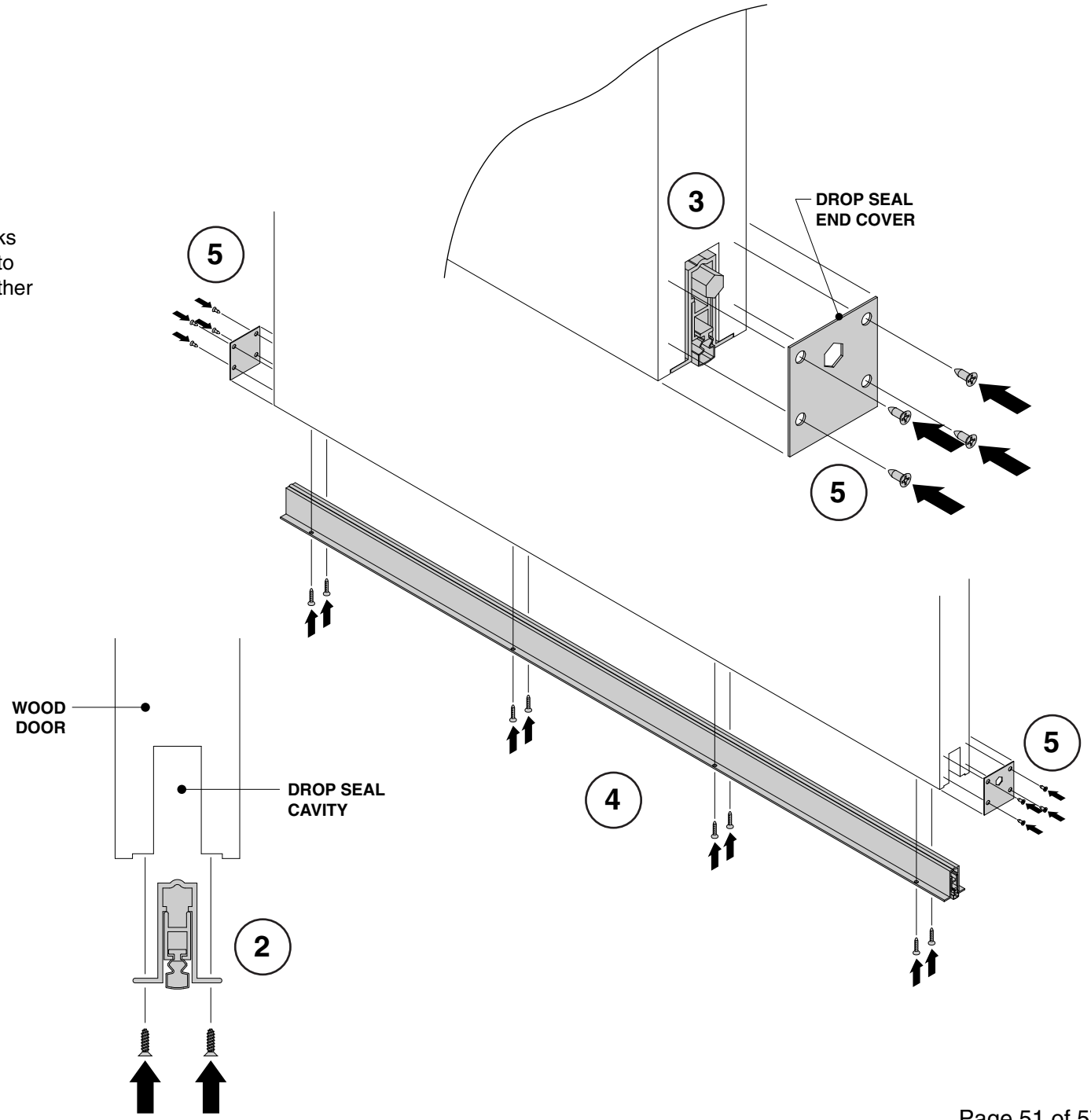
3. Drop seal is applied to routed detail at bottom of door.

4. Activation button end of drop seal is located on the hinge side of the door.

5. Center drop seal over door width, secure with screws.

6. Install end covers.

7. Follow the manufacturer's instructions for completion of door seal installation.



Steelcase®

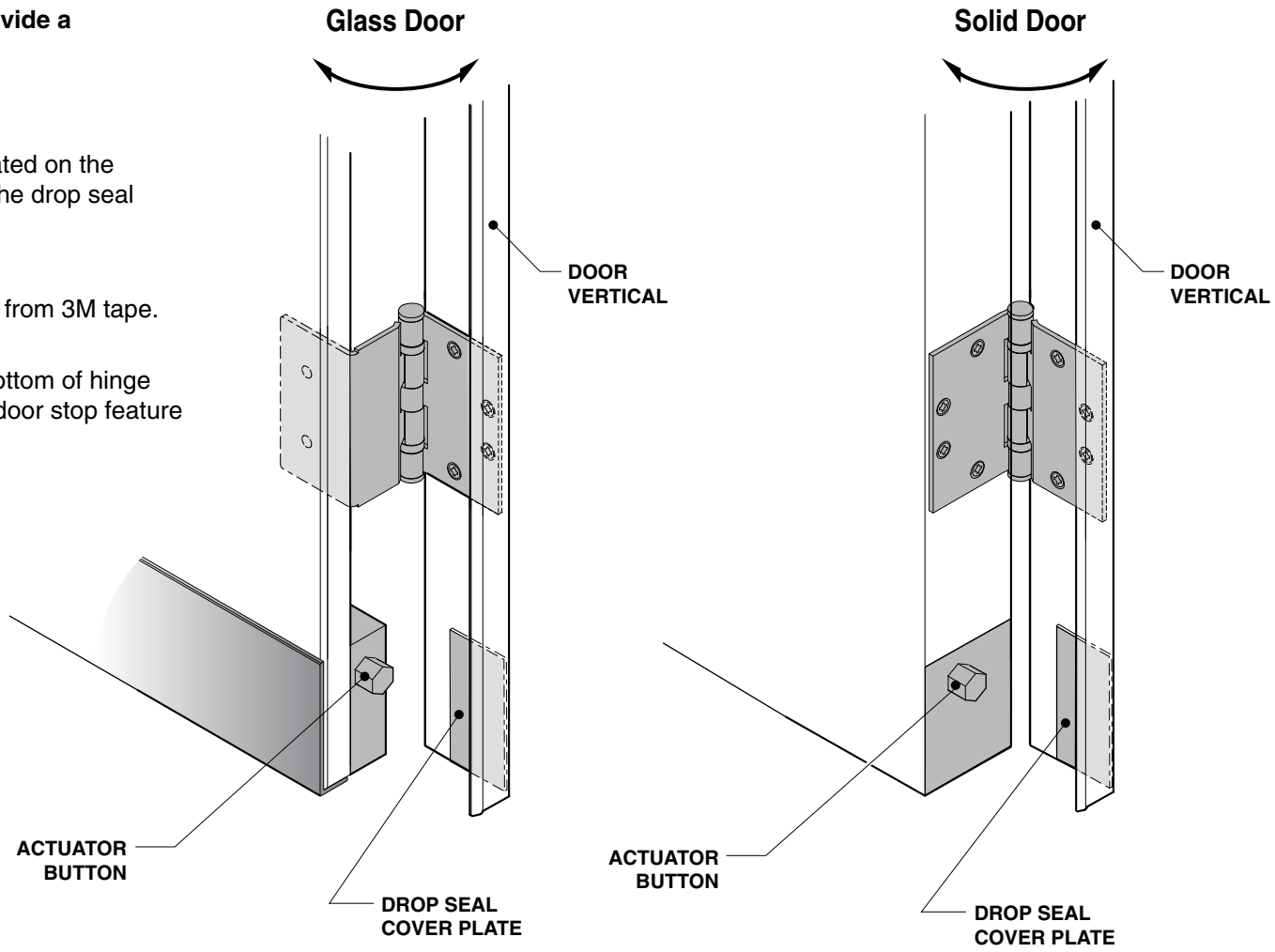
Drop Seal Cover Plate Installation

The drop seal cover plate is used with the drop seal (solid and glass) to provide a bearing surface for the drop seal activation button.

1. The drop seal cover plate is located on the hinge side vertical cover, opposite the drop seal activation button.

2. Remove 3M VHB adhesive liner from 3M tape.

3. Apply drop seal cover plate to bottom of hinge side vertical cover, flush to vertical door stop feature and flush to floor.

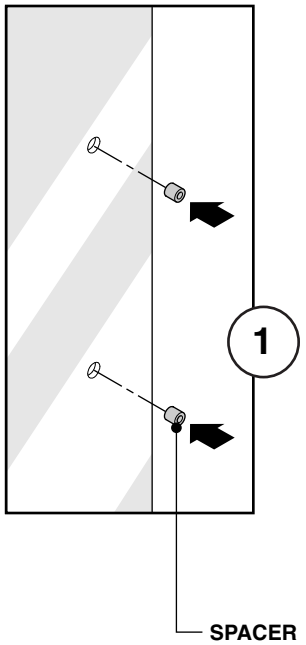


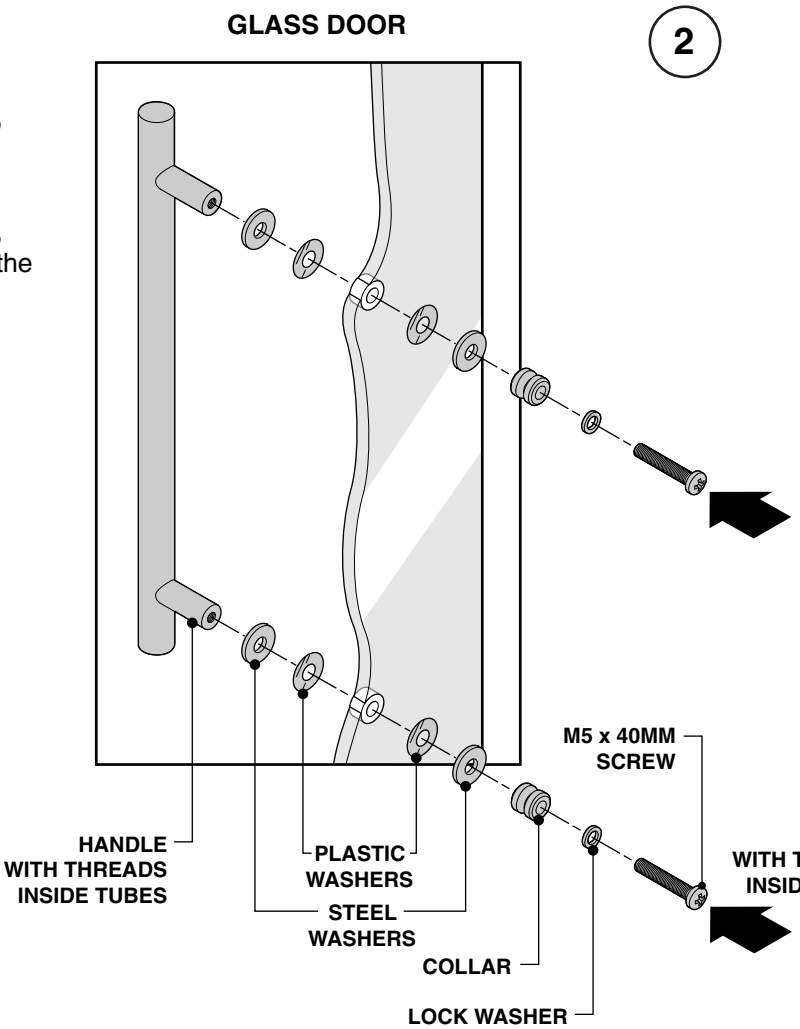
Steelcase®

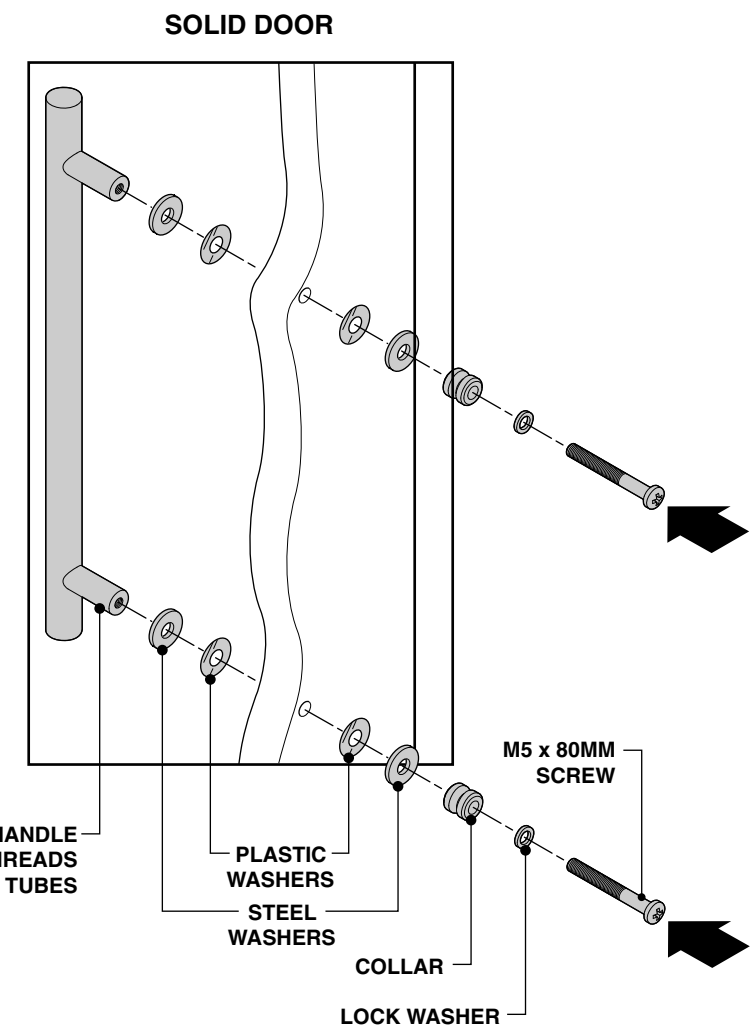
Push-Pull Handle Installation

1. For Glass Door Only:
Place the two (2) spacers into the holes on the glass door.

2. Install the plastic washers, steel washers and bolts onto the handle that has the threads inside the tubes as shown.







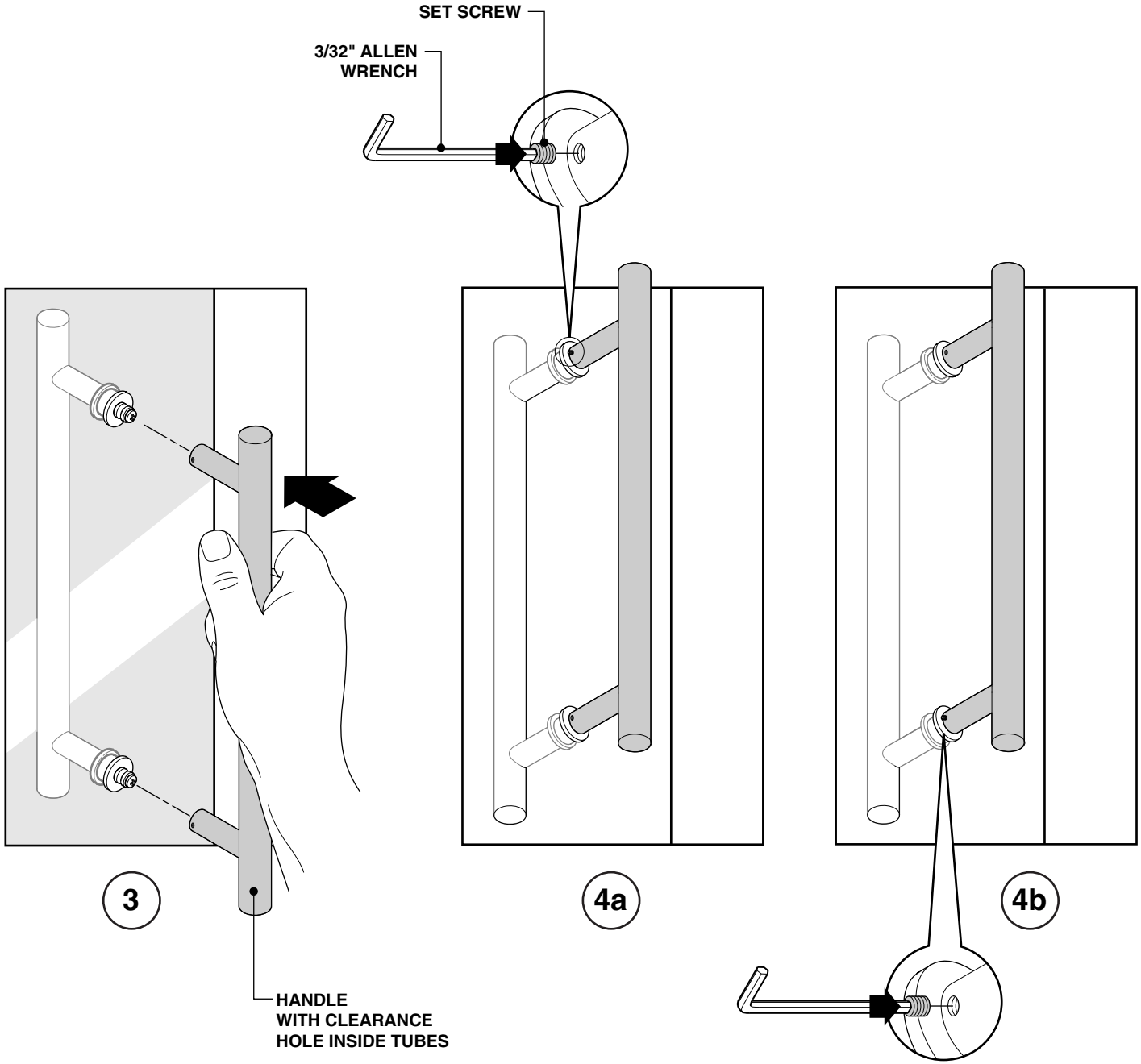
Steelcase®

Push-Pull Handle Installation (continued)

3. Place the handle with the clearance holes inside the tubes over the bolts.

4. Install the set screws on the upper (4a) and lower (4b) portion of the handle using Loctite 222.

Apply Loctite 222 threadlocker to the set screw thread to prevent movement during operation.



Steelcase®

Ladder Pull Handle Installation

Configurations:

Locking and non-locking aligned
Locking and non-locking offset

1a. Place two (2) plastic bushings into the respective mounting holes:

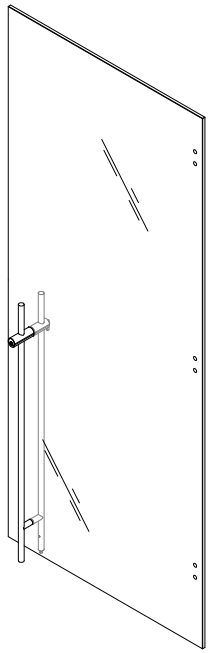
	Bushing Outside Diameter	
	A	**B**
Aligned -	18mm	12mm
Aligned Locking -	no bushing	12mm
Offset -	18mm	12mm
Offset Locking -	no bushing	12mm

1b. Complete the handle installation per manufacture's instructions.

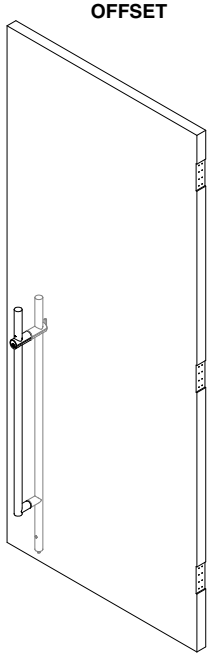
Installation Dust Floor Socket "Locking Option" Only:

2. Reference manufacture's instructions.

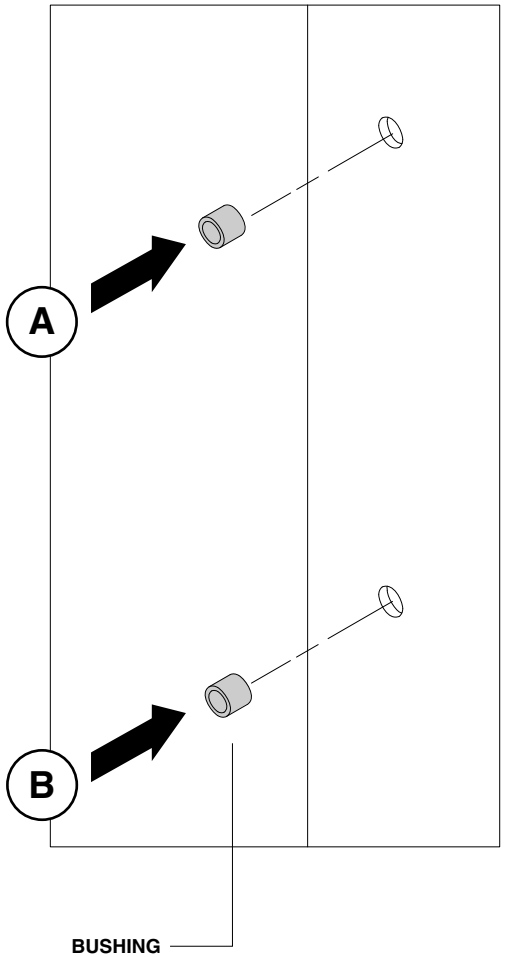
ALIGNED



OFFSET



1a GLASS DOOR AND SOLID DOOR APPLICATIONS



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Flush Bolt installation - Inactive Solid Door

1. Flush Bolt is a flush mounted dead bolt that secures the secondary door, referred to as the INACTIVE DOOR, in a pair of doors application. The flush bolt secures the inactive door in the closed position at the top and bottom of the door.

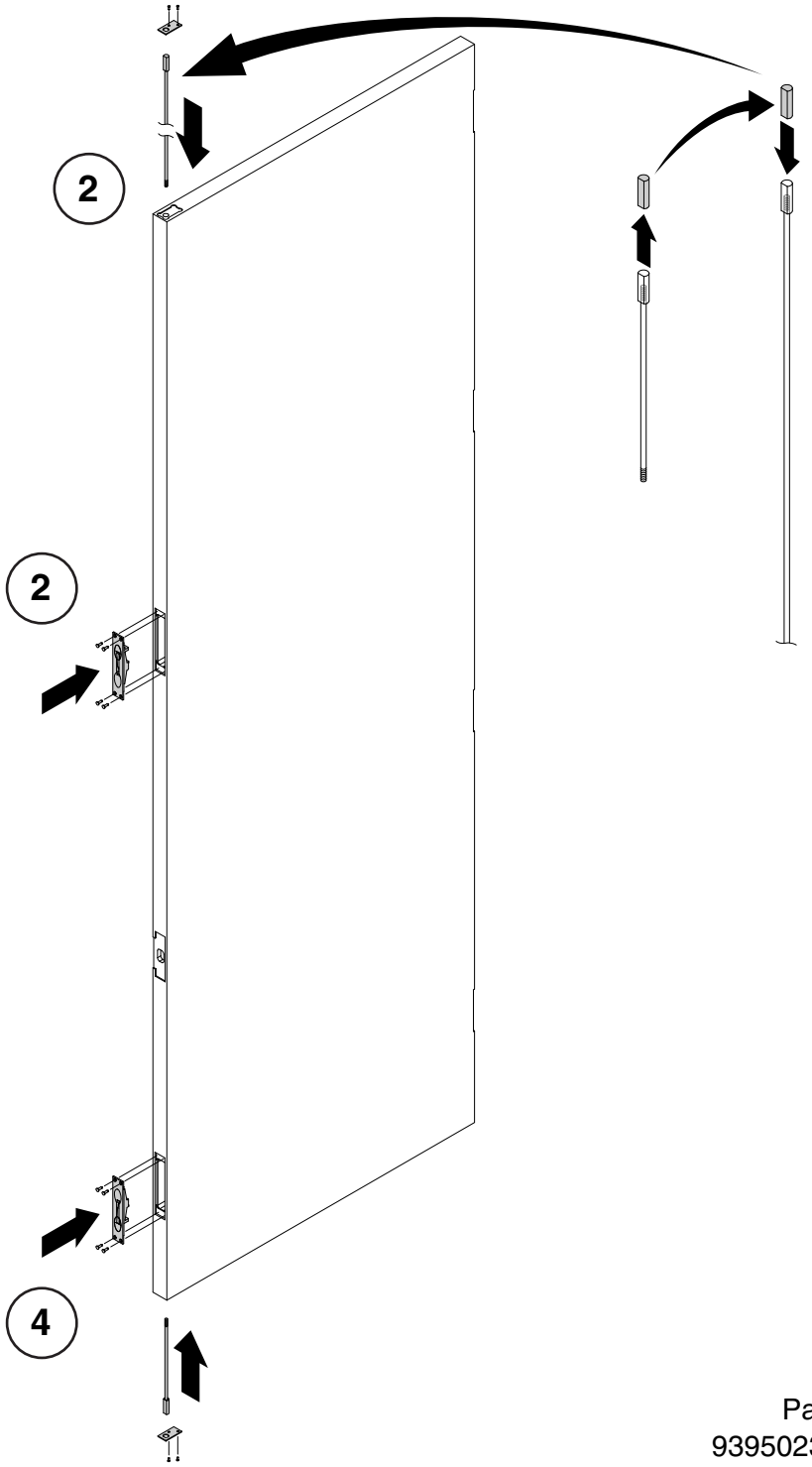
2. Loosely install top flush bolt assembly, adjust/cut the 1/4-20 threaded rod overall length so that the D-shaped threaded guide is flush to the door top surface when the flush bolt is in the retracted position **(flush bolt lever in downward orientation).**

3. Apply Loctite 222 threadlocker to threaded rod ends, secure flush bolt assembly to door vertical edge cutout and D-shaped guide plate to door top edge with #8 x 1” phillips drive flat head screws.

4. Loosely install flush bolt assembly to door bottom, adjust threaded rod so that the D-shaped guide is flush to door bottom when the flush bolt is in the retracted position **(flush bolt lever rotated in upward orientation).**

5. Apply Loctite 222 threadlocker to threaded rod ends, secure flush bolt assembly to door edge cutout and D-shaped guide plate to door bottom edge with #8 x 1” phillips drive flat head screws.

6. Reference manufacture’s instructions for additional information.



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Astragal installation - Inactive Solid Door

NOTE: An astragal is applied to the INACTIVE DOOR in a pair of doors application.

NOTE: Determine the orientation of the astragal to support right hand or left hand inactive door.

1. Position the astragal alignment feature flush along the vertical door edge (1a) and the bottom of the astragal flush to the bottom of the door (1b). Secure with quick clamps to hold in position (1c).

2. Drill 5/64” diameter x 3/8” deep pilot holes along vertical door edge using the astragal as a template for hole locations.

3. Secure astragal to door using M5 x 20mm T20 drive flat head wood screws, making sure the astragal alignment feature is flush along the vertical edge of the door.

4. Remove quick clamps.

5. Apply cover to astragal by positioning bottom of cover flush to clip at the bottom of the door.

6. Peel off paper liner on acoustic seal (6a) and apply to astragal as shown (6b), starting at top and working downward. Trim remaining portion of the seal at the bottom of the door.