

# TUBELITE®

**DEPENDABLE**

LEADERS IN ECO-EFFICIENT STOREFRONT,  
CURTAINWALL AND ENTRANCE SYSTEMS



## TERRAPORTE 7600 TERRACE DOORS

# INSTALLATION INSTRUCTIONS

3056 Walker Ridge Dr. NW, Suite G • Walker, MI 49544 • 800-866-2227



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## GENERAL CONSTRUCTION NOTES

1. These instructions cover typical product application, fabrication, installation and standard conditions and are general in nature. They provide useful guidelines, but the final shop drawings may include additional details specific to the project. Any conflict or discrepancies must be clarified prior to execution.
2. Materials stored at the job site must be kept in a safe place protected from possible damage by other trades. Stack with adequate separation so materials will not rub together and store off the ground. Cardboard or paper wrapped materials must be kept dry. Check arriving materials for quantity and keep a record of where various materials are stored.
3. All field welding must be done in accordance with AISC guidelines. All aluminum and glass should be shielded from field welding to avoid damage from weld splatter. Results will be unsightly and may be structurally unsound. Advise general contractor and other trades accordingly.
4. Coordinate protection of installed work with general contractor and/or other trades.
5. Coordinate sequence of other trades which affect framing installation with the general contractor (e.g. fire proofing, back up walls, partitions, ceilings, mechanical ducts, HVAC, etc.).
6. General contractor should furnish and guarantee bench marks, offset lines and opening dimensions. These items should be checked for accuracy before proceeding with erection. Make certain that all adjacent substrate construction is in accordance with the contract documents and/or approved shop drawings. If not, notify the general contractor in writing before proceeding with installation because this could constitute acceptance of adjacent substrate construction by others.
7. Isolate all aluminum to be placed directly in contact with masonry or other incompatible materials with a heavy coat of zinc chromate or bituminous paint. Fasteners attaching framing to building structure are typically not provided by Tubelite.
8. Sealant selection is the responsibility of the erector, installer and/or glazing contractor and must be approved by the sealant manufacturer with regard to application and compatibility for its intended use. All sealants must be used in strict accordance with the manufacturer's instructions and applied only by trained personnel to surfaces that have been properly prepared.
9. Sealant must be compatible with all materials with which they have contact, including other sealant surfaces. Consult the sealant manufacturer for recommendations relative to shelf life, compatibility, cleaning of substrate, priming, tooling adhesion, etc. Recommend sealant manufacturer perform adhesion "pull test" at "wet" glazing for quality assurance.
10. Drainage gutters and weep holes must be kept clean at all times. Tubelite will not accept responsibility for improper drainage as a result of clogged gutters and weep holes.
11. This product requires clearances at the head, sill and jambs to allow for thermal expansion and contraction as well as construction tolerances. Refer to final distribution drawings for joint sizes. Joints smaller than 1/4" may be subject to failure. Consult the sealant manufacturer for proper sizing of joints.
12. All framing members, entrances and other materials are to be installed plumb, level and true with regard to established bench marks, column center lines or other working points established by the general contractor and checked by the erector, installer and/or glazing contractor.
13. After sealant is set and a representative amount of the wall has been glazed (500 square feet or more), run a water hose test to check installation. On large projects, a hose test should be repeated during glazing operation. This testing should be conducted in accordance with AAMA 501.2 specifications.
14. Cleaning of exposed aluminum surfaces should be done per AAMA recommendations.
15. Check [www.tubeliteinc.com](http://www.tubeliteinc.com) for any installation instruction updates.

## QUICK REFERENCE CHECKLIST

1. For stand alone installation allow 1/4" minimum shim and sealant space at sides and top of door frame.
2. Door opening must be plumb, square, level and true.
3. System to structure fasteners are not supplied by Tubelite. Due to the varying perimeter conditions and performance requirements, perimeter anchor fasteners are not specified in these instructions or by Tubelite.
4. Anchor pocket covers should be snapped in place only after all anchor fasteners are installed and door frame is shimmed to maintain equal gap width around entire door.

## GLASS SIZE CALCULATION

### Entrance Doors (Single):

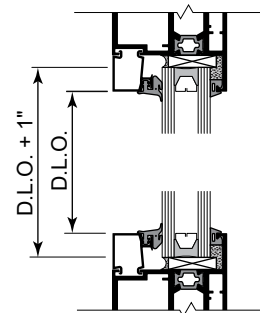
Glass Width = D.L.O. plus 1"

Glass Height = D.L.O. plus 1"








### Entrance Doors (Pair):




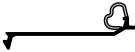




Glass Width = D.L.O. plus 1"



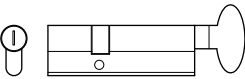
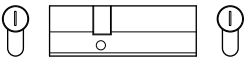
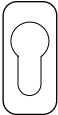
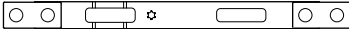
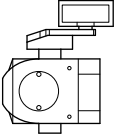
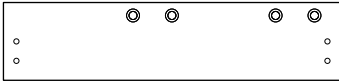
Glass Height = D.L.O. plus 1"



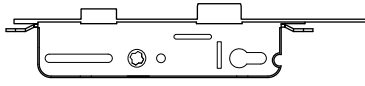
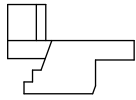
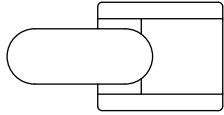
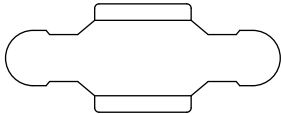
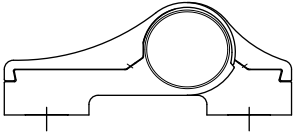
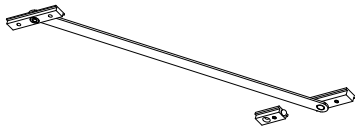
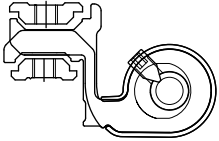
**Fig. 5.1**

SHAPE	DESCRIPTION	PART No.	
	Connecting Bar	11740	
	Door Sill Cover	79000	
	Open-Out Glazing Stop	Clear Anodize	1437041
		Color Anodize	1437073
		Painted	1437009
	Frame Pocket Filler	Clear Anodize	781041
		Color Anodize	781073
		Painted	781009
	Frame Step Cover	Clear Anodize	780041
		Color Anodize	780073
		Painted	780009
	Sweep Cover	Clear Anodize	7760441
		Color Anodize	7760473
		Painted	7760409
	Door Sweep	Clear Anodize	7760341
		Color Anodize	7760373
		Painted	7760309

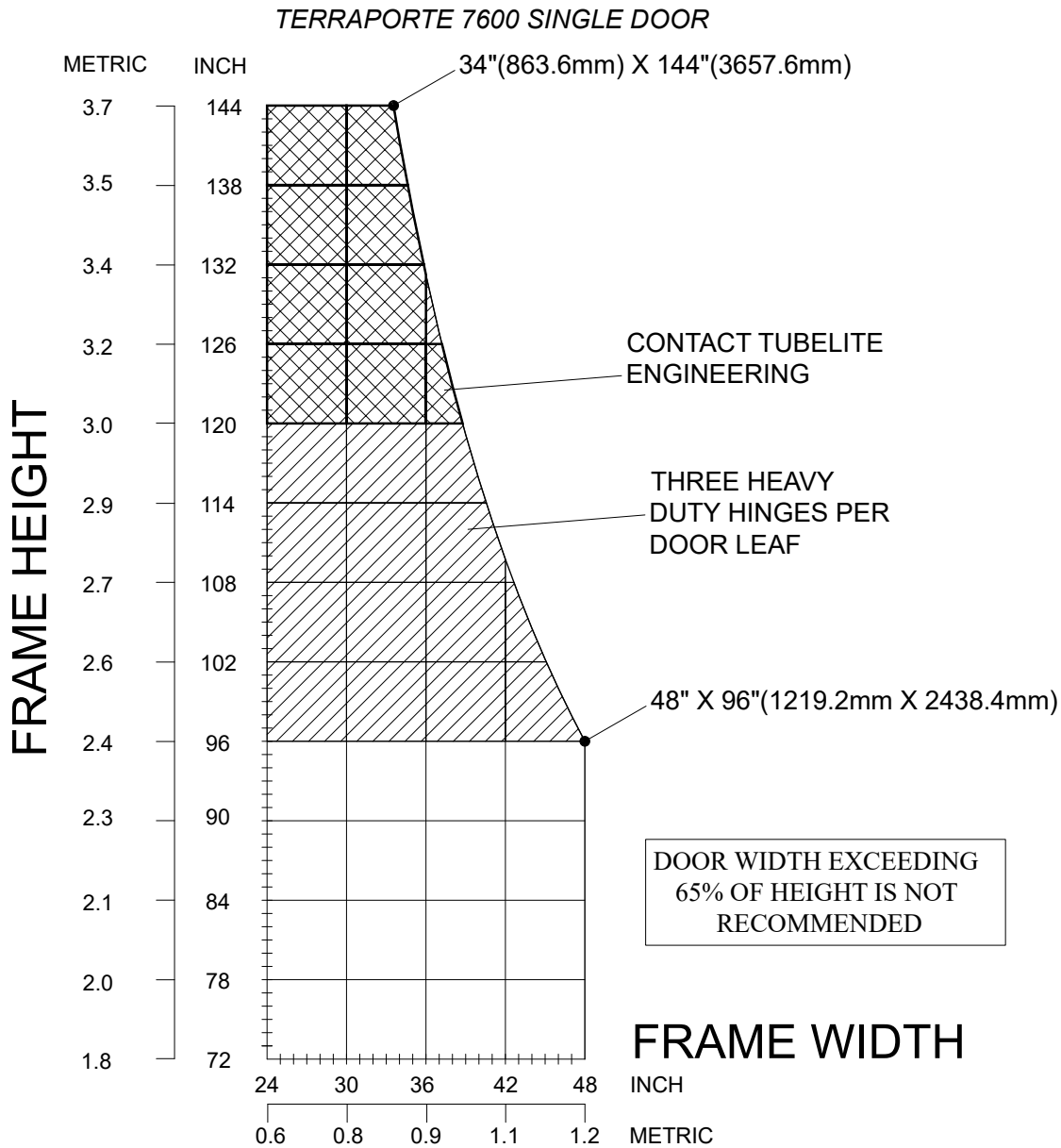
SHAPE	DESCRIPTION	PART No.
	Perimeter Bulb Gasket Air/Water Seal	<b>14621</b>
	Top Load Glazing Gasket	<b>18410</b>
	Preset Glazing Gasket	<b>27605</b>
	ADA Threshold Gasket	<b>76802</b>
	Sill Weather Strip	<b>50301</b>
	Weather Strip For Sweep	<b>77805</b>
	Setting Block - Silicone 1.125" x 4" x .25"	<b>2250703</b>
	Setting Block - EPDM 1.125" x 5" x .24"	<b>2770603</b>

SHAPE	DESCRIPTION		PART No.
	Handle - painted	Grey	7403501
		White	7403601
		Black	7403703
	.314" (8mm) x .314" (8mm) x 4.72" (120mm) Square Pin, AKA Spindle		74030
	Europrofile Cylinder With Key & Thumb Turn		74010
	Europrofile Cylinder With Key & Key		74012
	Cover Plate For Europrofile Cylinder (Set Of Two)	Grey	7402101
		White	7402201
		Black	7402103
	Strike Plate		74006
	Dorma 8616 Closer C/W Push Side Track	Clear Anodize	5506101
		Bronze Anodize	5506202
	8616 TerraPorte Drop Plate Use With 55060	Clear Anodize	5624041
		Bronze Anodize	5624073



SHAPE	DESCRIPTION	PART No.
	Giesse Gearbox Lockset	<b>74005</b>
	Adjustable Keeper (Max 100 KG Load)	<b>11726</b>
	End Locking Bolt	<b>11727</b>
	Intermediate Locking Bolt (Optional)	<b>11730</b>
	In-Swing Hinge	<b>Clear Anodize</b> <b>7408101</b>
		<b>White</b> <b>7408201</b>
		<b>Black</b> <b>7408303</b>
	Concealed Door Stop	<b>74040</b>
	Out-Swing Hinge	<b>Grey</b> <b>7406001</b>
		<b>Black</b> <b>7406003</b>

**SIZE CHART**



**USING THIS CHART:**

- Ensure your largest maximum door size falls within the above size limitation chart
- Maximum sizes 48" (1219.2 mm) wide x 96" (2438.4 mm) high or 38" (965.2 mm) wide x 120" (3048 mm) high. For doors taller than 120" contact Tubelite Engineering.

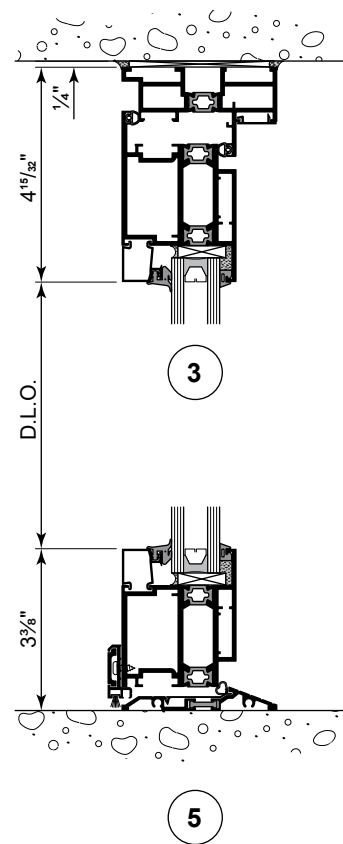
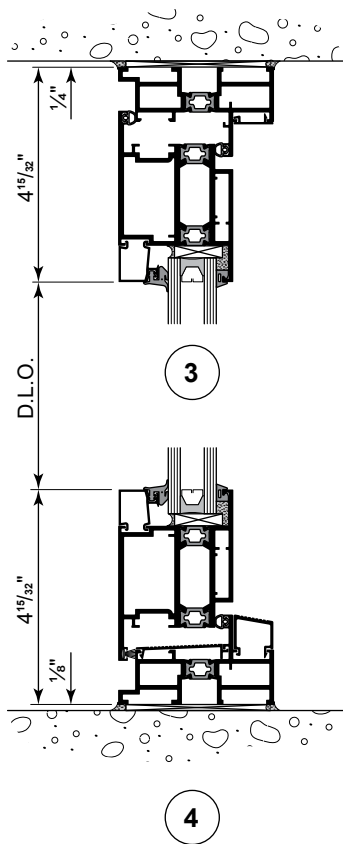
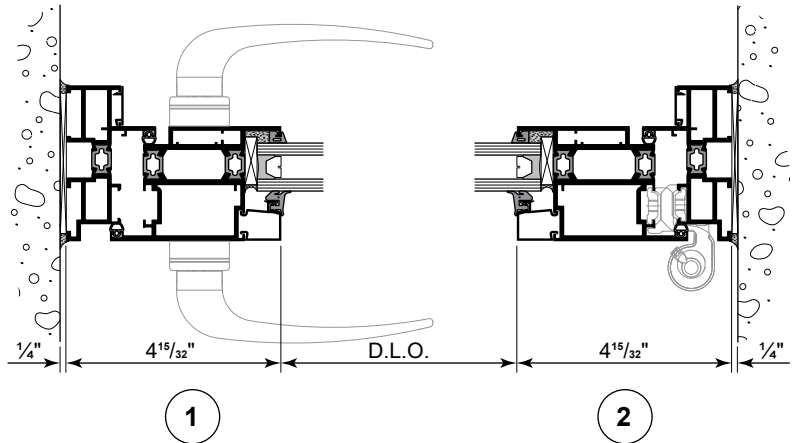
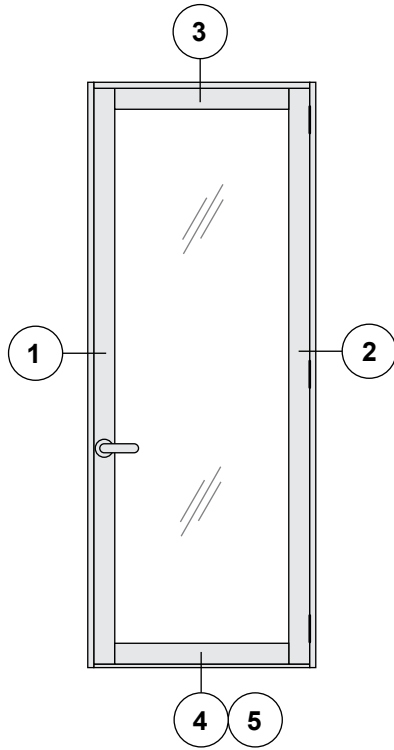
**STANDARD DOOR HARDWARE INCLUDES THE FOLLOWING:**

- Lever handle operated multipoint lockset and strike plate
- Five point locking
- Europrofile cylinder c/w key, thumbturn and covers
- 1 pair handles
- 2 pair heavy duty hinges

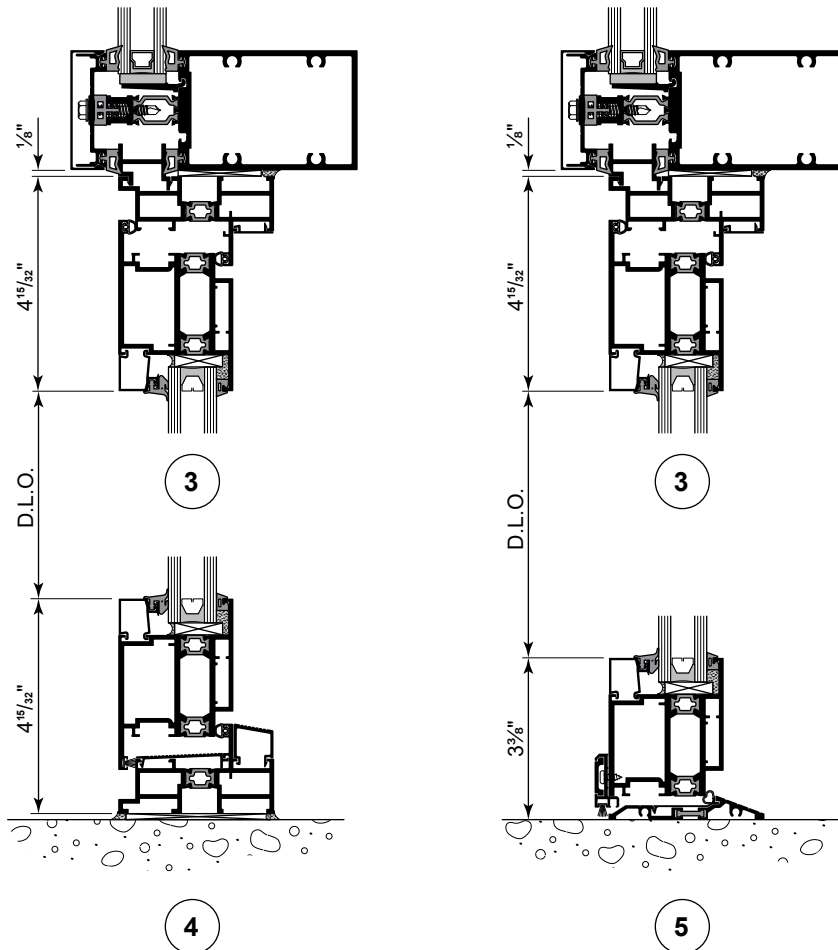
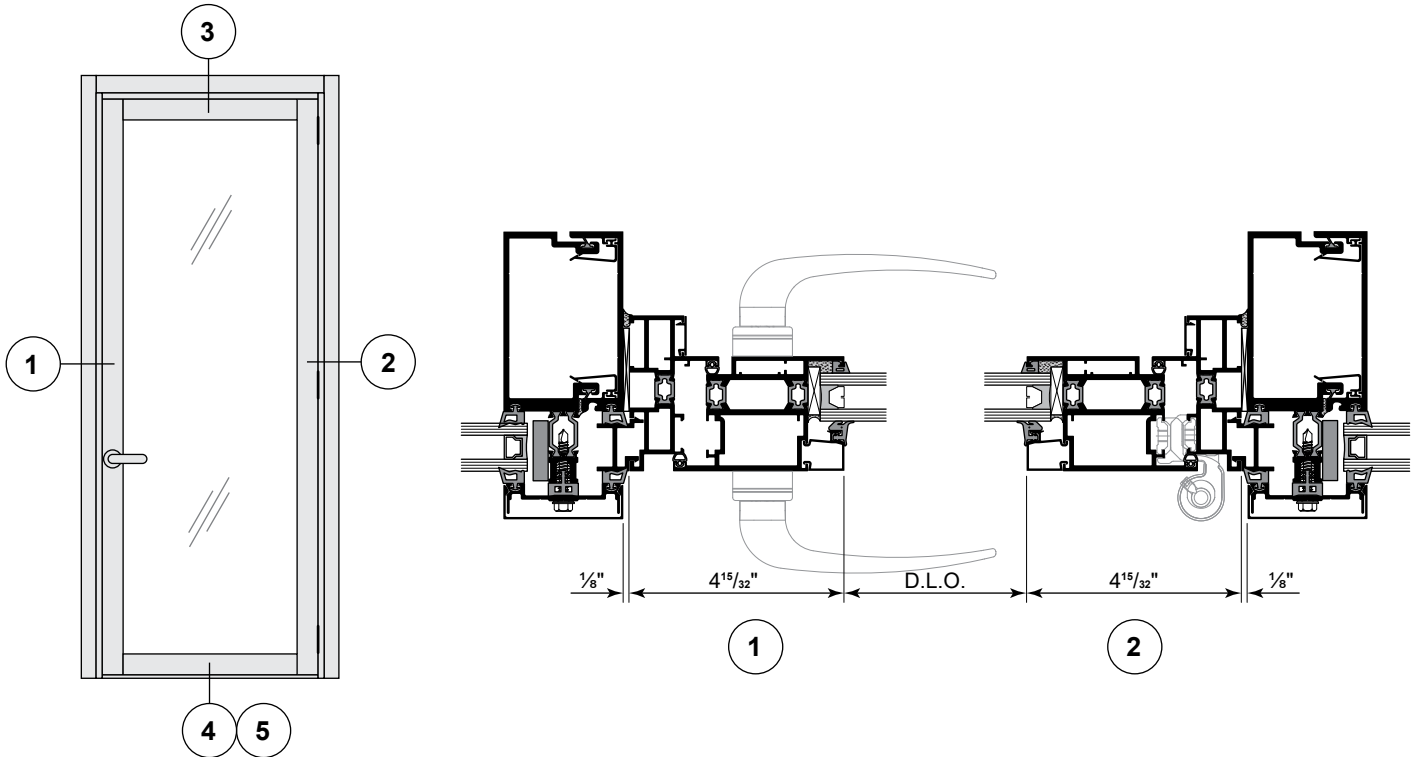
**OPTIONAL EXTRAS (MUST BE SPECIFIED AT TIME OF ORDERING OR QUOTATION)**

- Concealed door stop
- Closer and drop plate

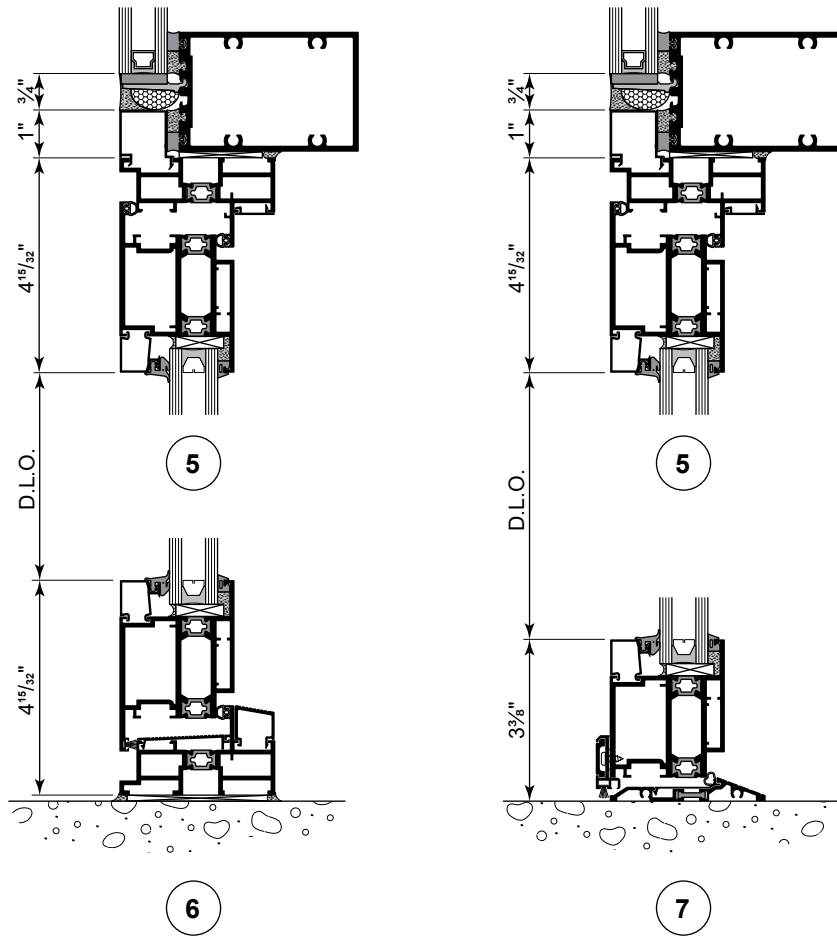
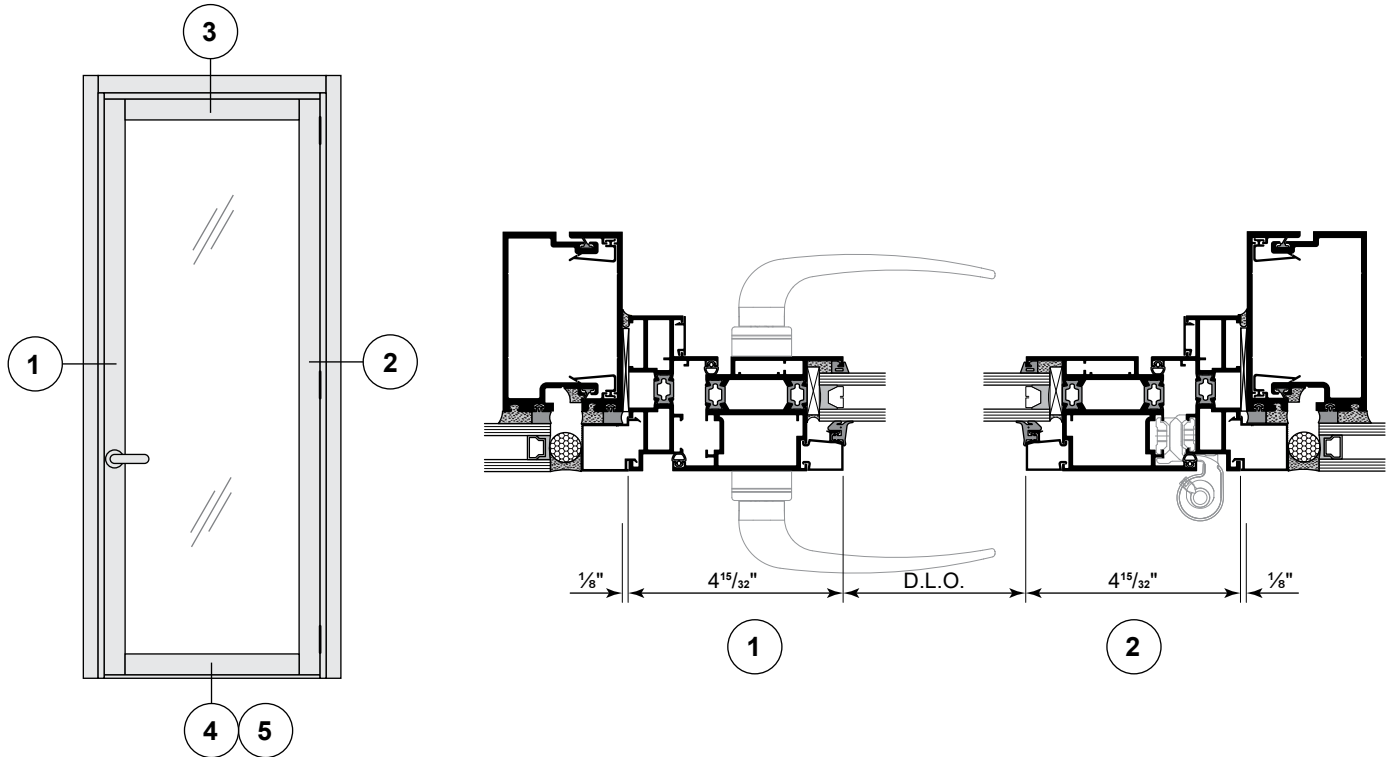
## ELEVATION DETAILS OUT-SWING STAND ALONE INSTALLATION



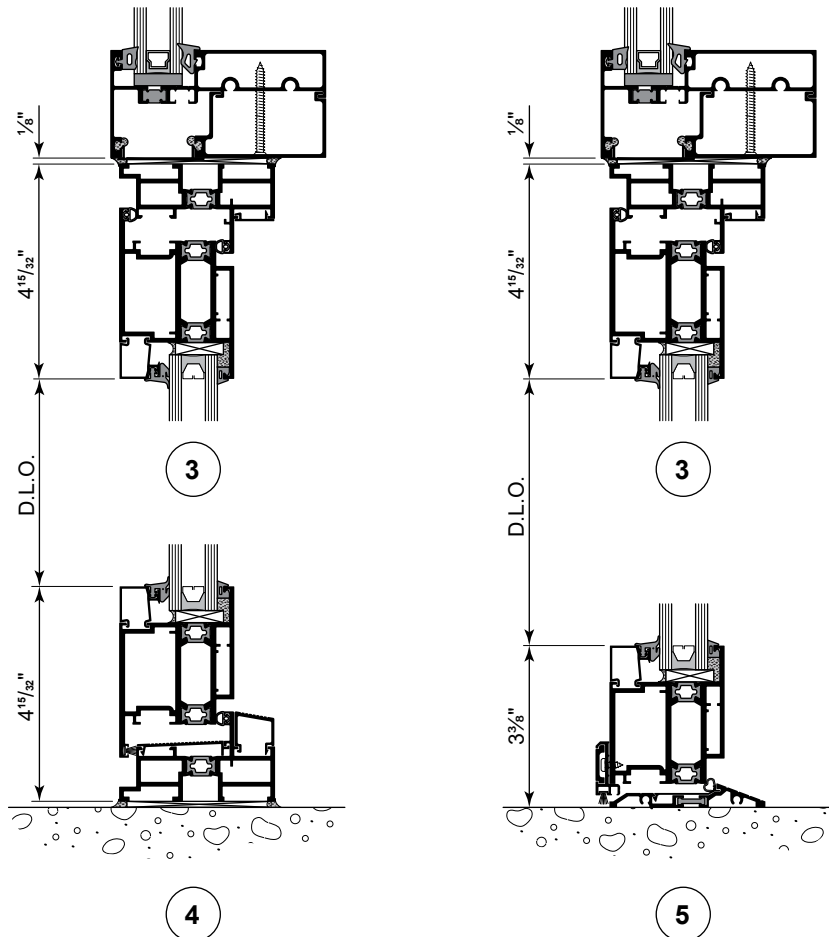
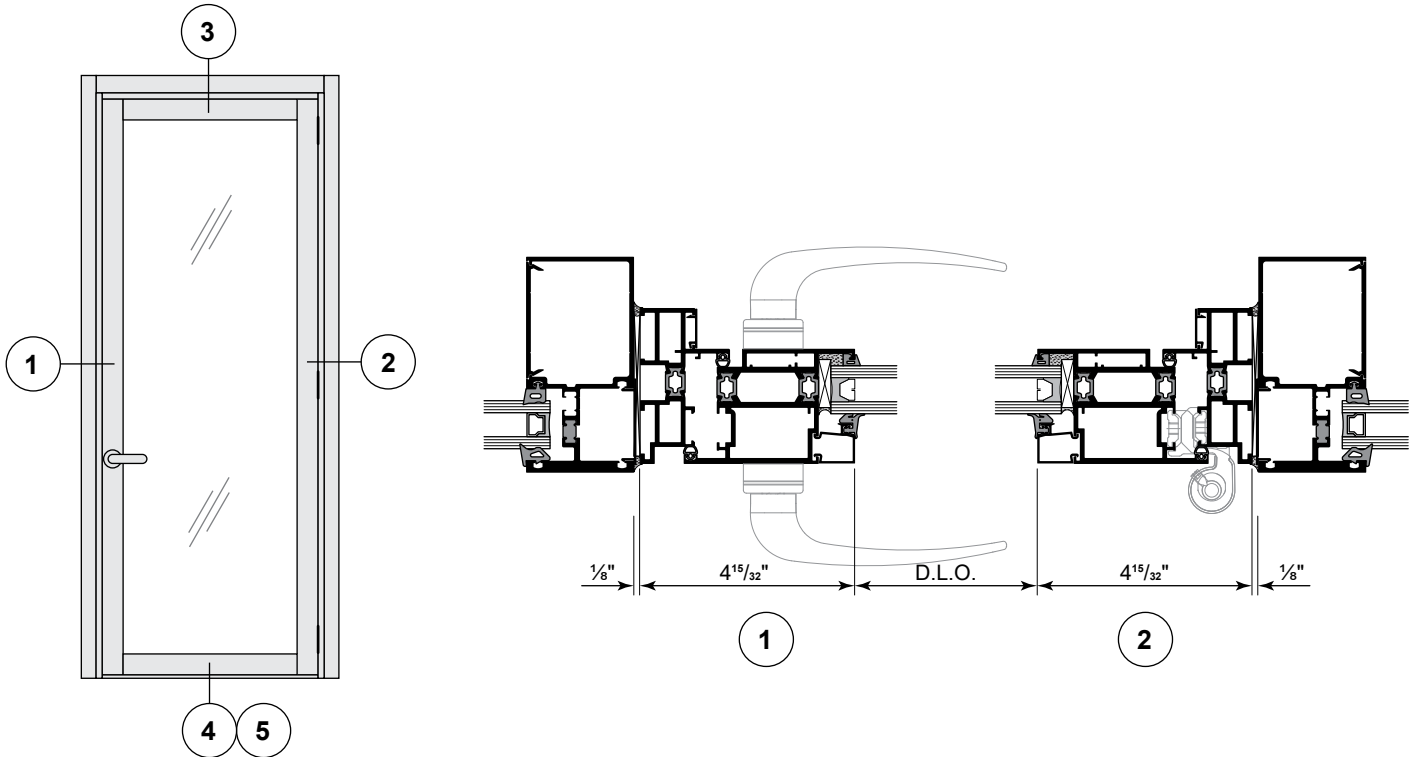
**ELEVATION DETAILS  
OUT-SWING CAPTURED INSTALLATION**



## ELEVATION DETAILS OUT-SWING SSG INSTALLATION



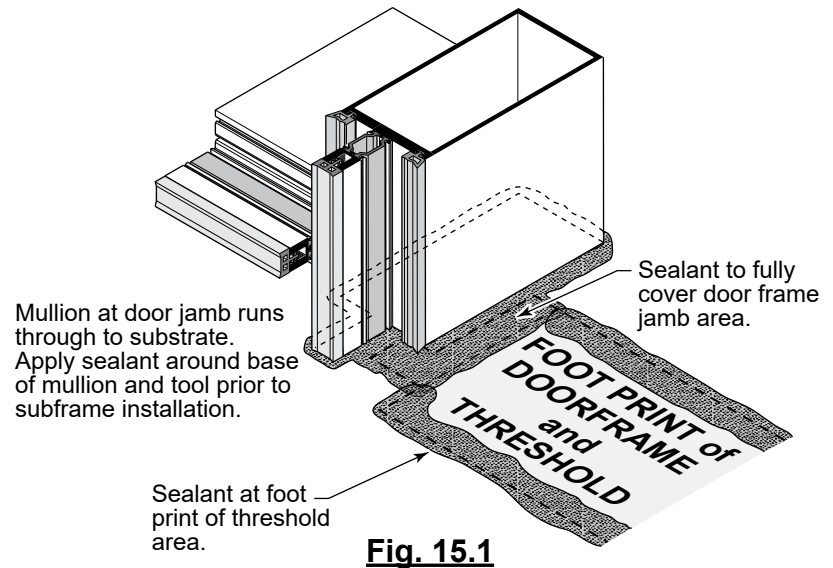
**ELEVATION DETAILS  
OUT-SWING FLATBACK INSTALLATION**



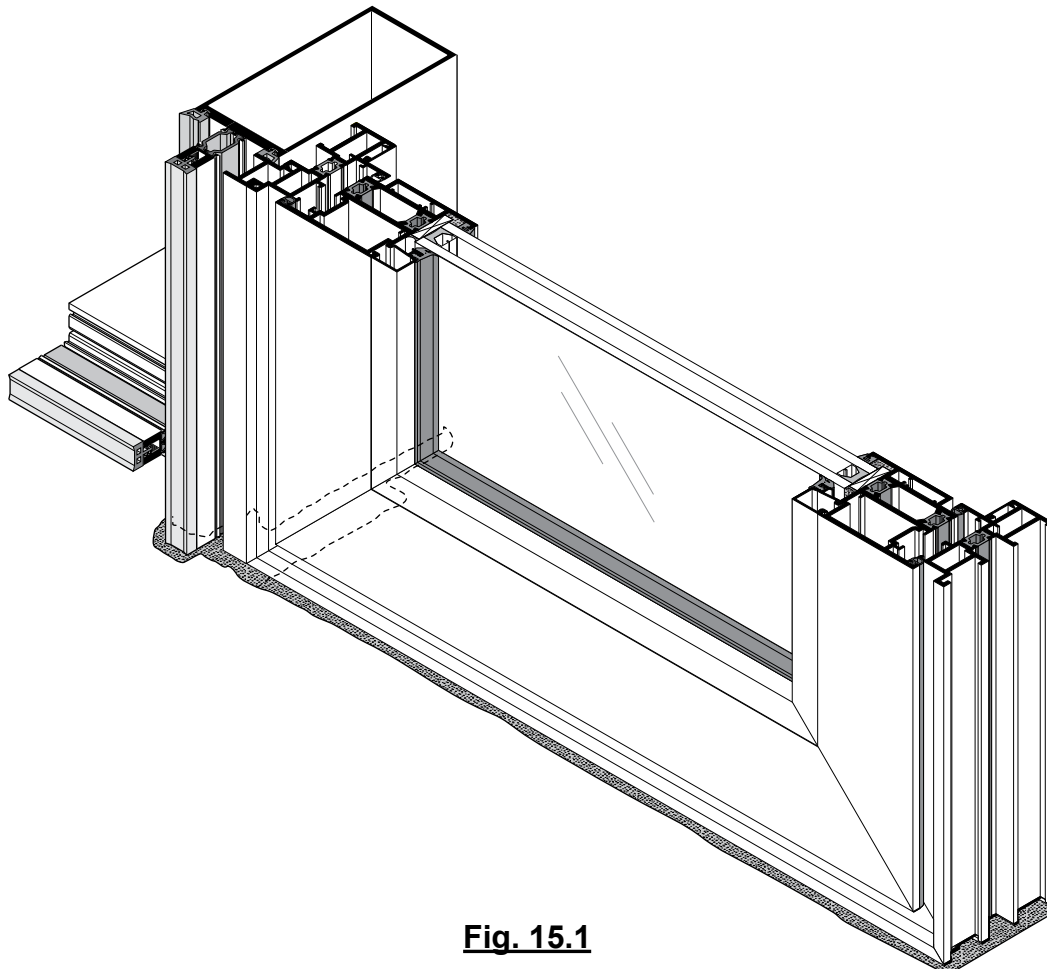
## DOOR and FRAME INSTALLATION

### Step 1: Install Door and Frame

1. Drill anchor holes in the frame at locations per the approved shop drawings.
2. If using the captured or SSG installation details, using the IPA two-wipe method, clean each corner around the gaskets on the curtain wall sections.
3. Using the specified sealant, seal 2" vertically around the gasket corners. Tool the sealant around the gaskets to ensure a good bond. **SEE Fig. 15.1**



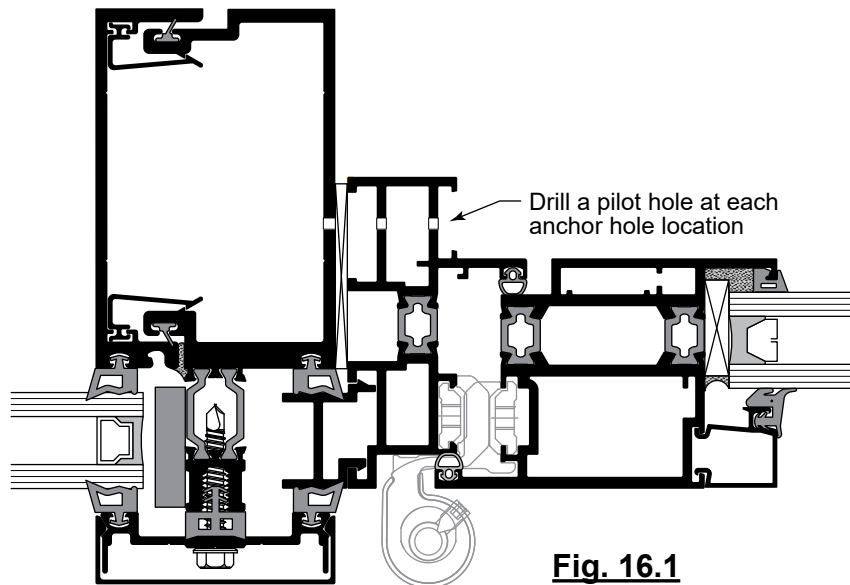
4. Insert the door frame into the opening making sure it's in the correct location. If using the captured or SSG installation details, care must be taken to ensure the frame is pushed tight to the gaskets. Clamps or temporary glazing clips may be required to ensure good gasket compression. **SEE Fig. 15.2**



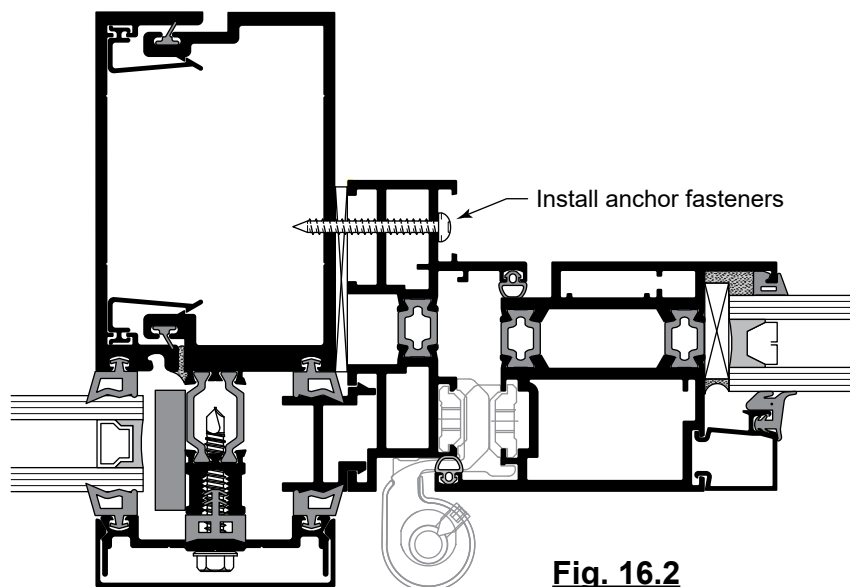
## DOOR and FRAME INSTALLATION

### **Step 2: Anchor Door Frames**

1. Slide a 1/8" shim into the void at each anchoring location. Check gap between door leaf and frame, adjusting shims as required to establish a uniform gap
2. Using the correct size drill bit for the anchor size and substrate, drill a pilot hole through the substrate at each anchor hole location. **SEE Fig. 16.1**



3. Install the anchor fasteners into each anchoring hole. Do not over tighten the fasteners.
4. Do a final check of the gap between the door leaf and frame. Adjust shims as required and then tighten anchor fasteners. **SEE Fig. 16.2**

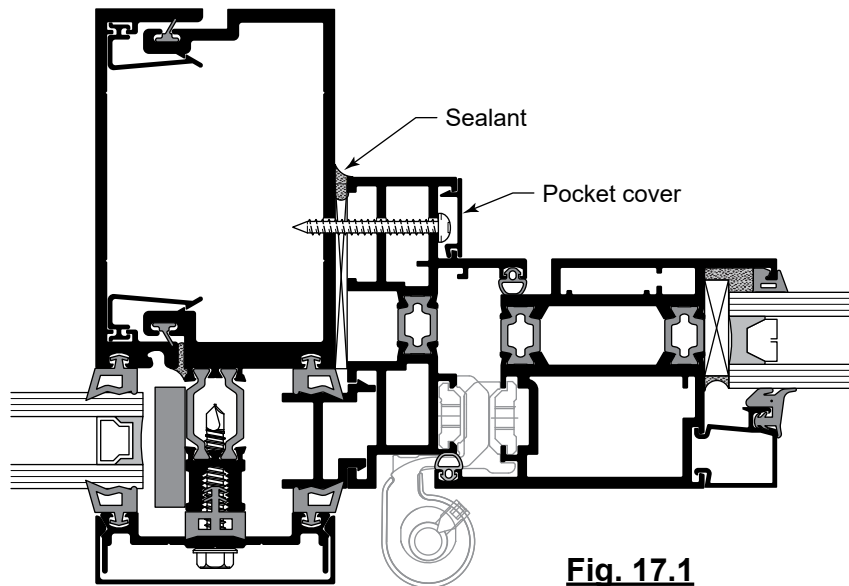




## DOOR and FRAME INSTALLATION

### **Step 3: Install Pocket Covers and Sealant**

1. Install the anchoring pocket covers into the receivers, starting with the vertical covers.
2. Using the specified sealant, run a continuous bead around the perimeter of the door frame. **SEE Fig. 17.1**

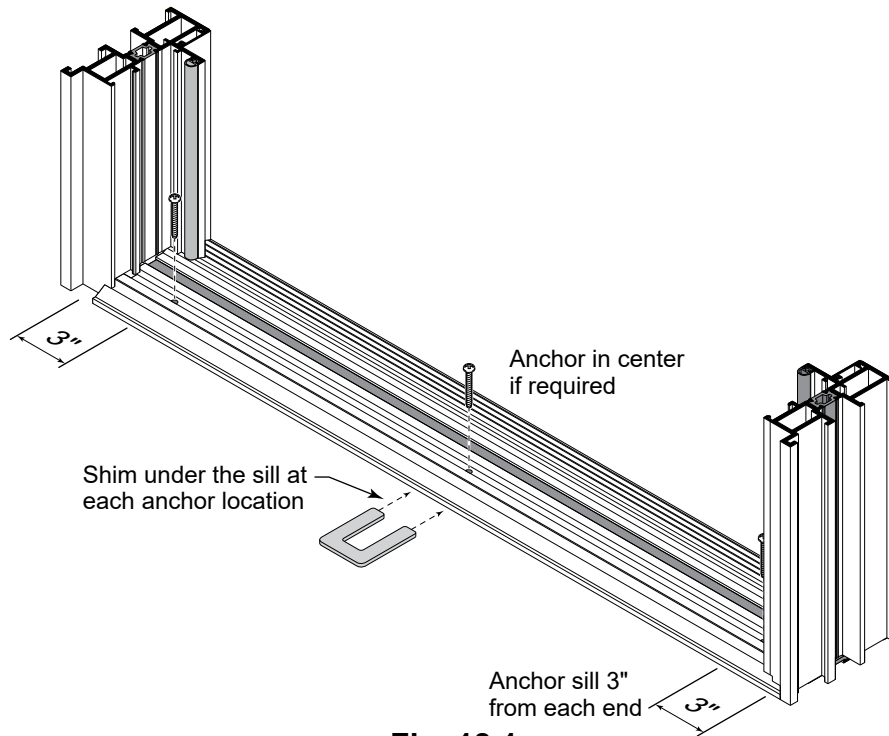


**Fig. 17.1**

## DOOR and FRAME INSTALLATION

### Step 1: accessABLE<sup>™</sup> Sill Installation

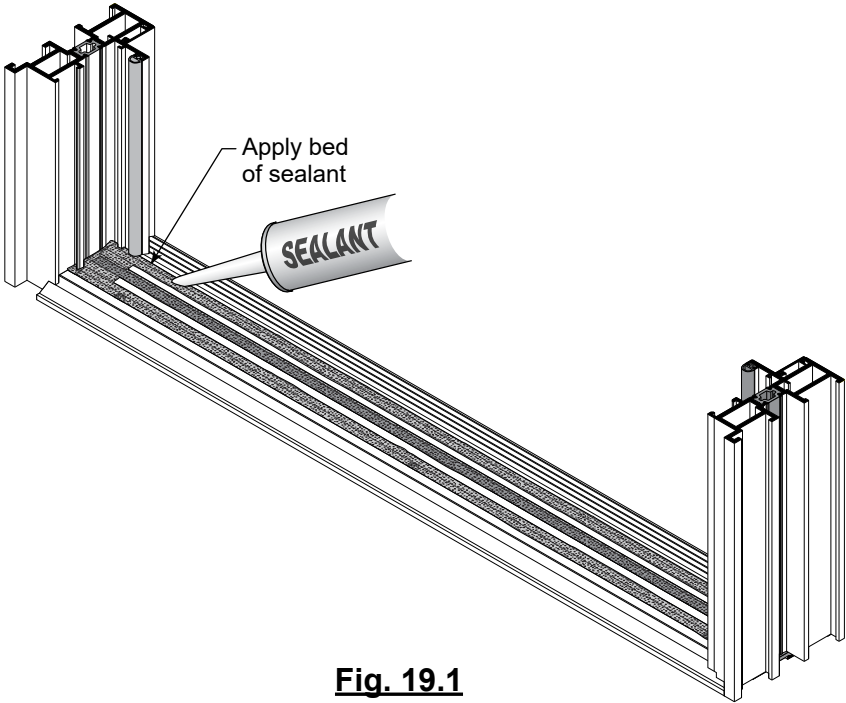
1. Drill anchoring holes into the reveal of the sill section 3 inches from each end and one at the center if required. Shim the sill at the anchoring hole locations being careful not to create a bow. Install #10 PH screws. Clean the sill section interior and exterior using isopropyl alcohol. Using a paint brush clean across both indents of the sill including the ends being sure all areas are clean. **SEE Fig. 18.1**



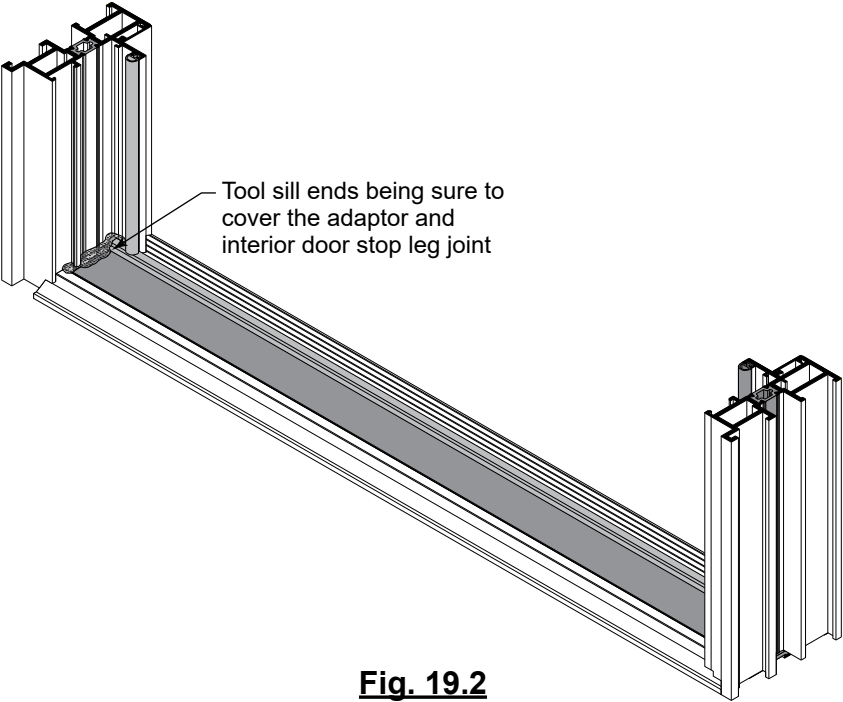
**Fig. 18.1**

2. Cut the PVC adaptor 1/16 shorter than the DLO of the length of the sill.
3. Apply a bed of sealant into the vertical to sill corner and a 1 inch wide bed onto the sill bottom and interior joint. Cover the anchoring screw head with sealant and tool around the head. Repeat this at the opposite end. Apply sealant across the length of the sill on both interior and the exterior PVC snap in voids and across the entire thermal break. **SEE Fig. 19.1**
4. Clean the back side of the adaptor with alcohol and carefully set the adaptor onto the sill and slide the adaptor gasket under the vertical gasket and carefully snap it into place starting at the center of the adaptor and working toward the ends. A small block of wood may aid into the positioning of the adaptor.
5. Tool the sill ends using a tooling stick being sure to cover the top of the adaptor and the interior door stop leg joint. Clean any sealant squeeze out along the adaptor edges. **SEE Fig. 19.2**

## DOOR and FRAME INSTALLATION



**Fig. 19.1**

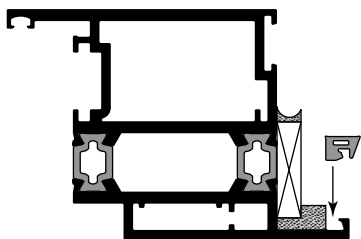


**Fig. 19.2**

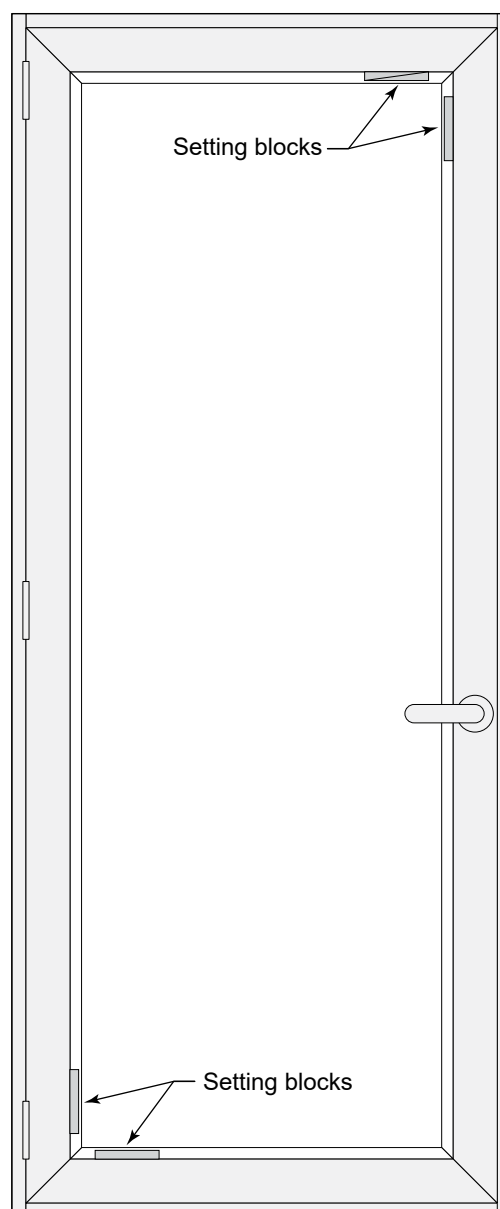
## GLAZING

### **Step 1: Install Gasket and Setting Blocks**

1. Install #27605 gasket into door leaf **SEE Fig. 18.1**
2. Clean the perimeter sealing pocket with isopropyl alcohol two-wipe method.
3. Using a lint free paper towel, wipe clean with isopropyl alcohol, 2" of the exterior perimeter of the glass lite using the two-wipe method.
4. Apply a small amount of sealant onto each gasket corner joint.
5. Install two silicone compatible setting blocks outboard of the glass stop receivers at the hinge side corner. One located 1" from the corner on the vertical and located 1" from the corner on the sill. **NOTE:** apply a dab of sealant on the setting blocks to hold them in place. Repeat the instructions for the opposite corner at the door leaf head. **SEE Fig. 18.2**



**Fig. 20.1**

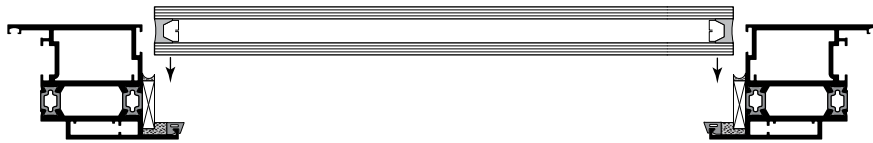


**Fig. 20.2**

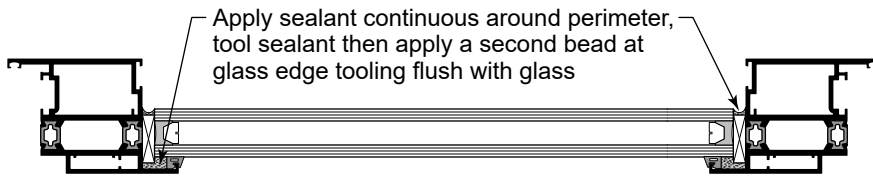
## GLAZING

### Step 2: Install Glass and Apply Sealant

1. Set the glass lite into the door opening making sure the glass is pushed tight to the gasket. **SEE Fig. 19.1**
2. Check the door leaf to the frame to ensure a consistent sightline from the edge of the door leaf and the frame.
3. If sag has occurred, place 1/32" shims on the top of the glass lite between the setting block and door leaf. Repeat this instruction until the door leaf sightline is correct.
4. Using the specified sealant and a fine nozzle, pump the sealant as far into the glass perimeter void as possible. Tool the sealant around the perimeter to fill the exterior void at the gasket location. Be sure to seal the ends of the setting blocks.
5. Apply a second bead of sealant around the glass perimeter flush to the glass edge and then tool the perimeter. **SEE Fig. 19.2**
6. Install the glass stops, starting with the horizontal ones and then the vertical ones. Take care not to scratch the horizontal glass stops when installing the vertical ones. **SEE Fig. 19.3**
7. Starting with the verticals, install the top loading gasket #18140. **SEE Fig. 19.4**



**Fig. 21.1**



**Fig. 21.2**



**Fig. 21.3**



**Fig. 21.4**