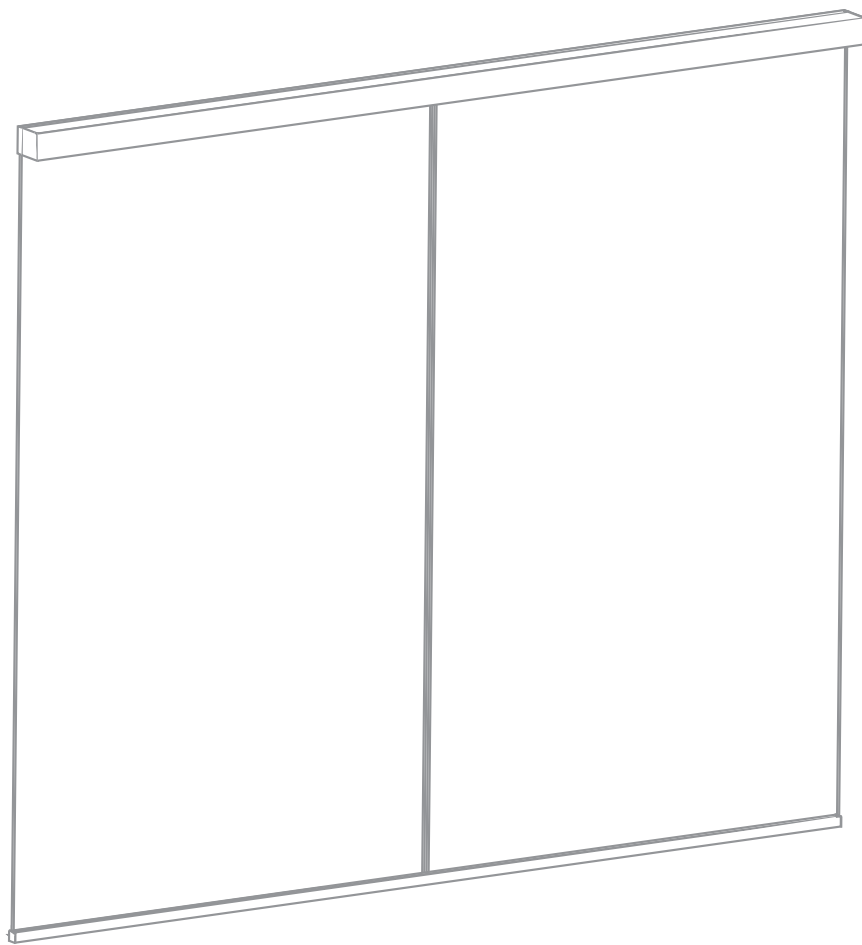


# MUTO Premium XL120

Recessed mount

Ceiling mount with Dormotion and Self-close (Glass door)

Installation Manual



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# 1 Technical specifications

## 1.1 Overview

These instructions are for installation of MUTO Premium XL 120 Self-Closing panels for wood doors for the following mounting and style versions:

### 1. Recessed mount

#### 1.1.1 General information

- dormakaba requires use of tempered laminated or tempered monolithic glass.
- dormakaba glass hardware is not suitable for harsh environment; for example, applications where chemicals (e.g. chlorine) are used such as indoor swimming pools, saunas, or salt-water pools.
- Never move sliding panels faster than walking speed and always stop the door manually before it reaches end position.
- Do not slide doors with excessive force. Ensure proper installation of limiting stop to prevent door from opening too far.

#### 1.1.2 Intended use

- For sliding doors in dry indoor areas only.
- For manual slow opening and closing only.

#### 1.1.3 Glass requirements/fittings/mounting

- The substructure/wall must be able to bear permanent loads, be level (max. tolerance: 1/16" [2] per 39" [1m]).
- Fasteners must be sufficiently dimensioned for the substructure/wall and weight of the door.
- When adjusting glass components, always stick to the required clearance for the respective hardware. Adjust clearance so glass does not come in contact with any hard surfaces such as glass, metal or concrete.
- Do not use excessive force when installing the glass (avoid over tightening screws.)

#### 1.1.4 Requirements for glass panel

- dormakaba requires use of fully tempered glass, which complies with ASTM C 1036 and ASTM C 1048. Secondary heat soaking processes are recommended but not required. This applies to both tempered monolithic and tempered laminated glass.
- Clamping area must be flat and uncoated (no self-cleaning coating!)
- Never use glass with conchoidal fractures and/or damaged edges.

#### 1.1.5 Safety instructions

- Installation requires two people.
- Always wear protective clothing.
- Only properly qualified and specially trained staff are authorized to mount dormakaba glass hardware.
- Due to crushing hazards and possible injury caused by breakage of glass during mounting, corresponding protective clothing (especially gloves and protective goggles) is required.
- Never clamp metal fitting hardware directly to glass surface.

#### 1.1.6 Symbols used - Safety/Installation



##### CAUTION

Mounting components must meet the requirements of substructure/wall and door weight. Please read the technical information for fittings.



##### WARNING

Risk of breaking glass. When installing the door, support the door panel with a block of wood or similar object.



##### TIPS AND RECOMMENDATIONS

Information note



##### CLOSING EDGE OF DOOR

#### 1.1.7 Maintenance, care, repair

- Immediately replace damaged parts.
- Always use original dormakaba parts.
- Clean clamping area with alcohol-based standard commercial cleaning agent before mounting the glass hardware.
- Use a damp cloth for occasional cleaning.
- Always use silicone - and oil-free cleaners (e.g. acetone).
- Check glass hardware at regular intervals for proper positioning, smooth operation and correct adjustment.
- High traffic door systems require inspection by properly qualified staff (specialized companies or installation firms.)

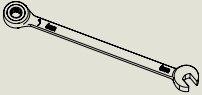
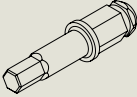
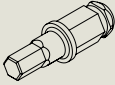
#### 1.1.8 Disposal

Disposal in accordance with local, state and national regulations.

## 1.2 Specification - technical data

		Single door	Double door
		XL120	XL120
<b>Ceiling mount</b>	Door leaf weight lbs [kg]	≤264lbs [≤120]	2 x ≤264lbs [2 x ≤120]

## 1.3 Tools required

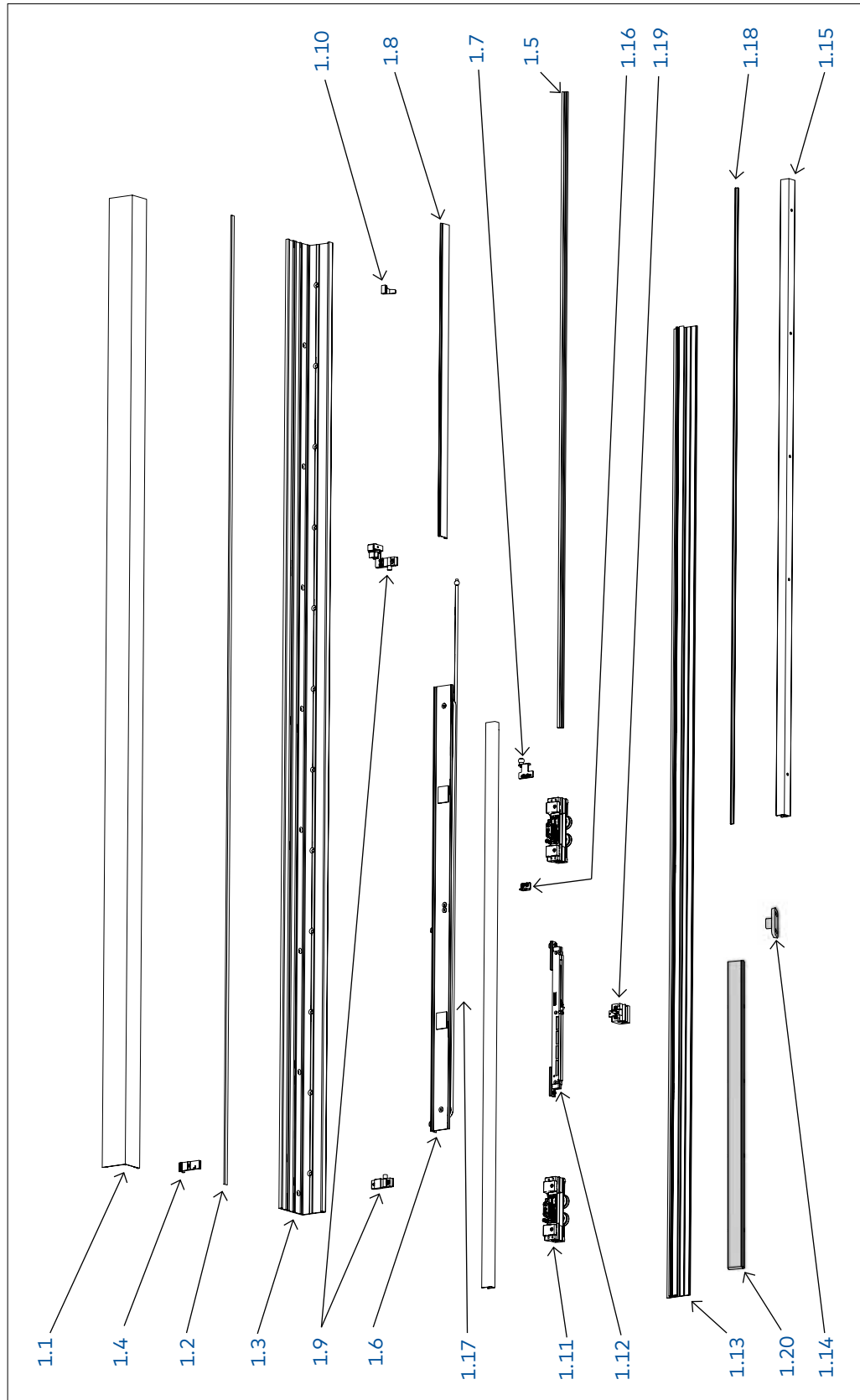
	6 mm Ratching/ combo (optional)	Metric hex key set	
	M4 long bit	Tape measure	Flat head screw driver
	M4 short bit	Drill	5/16 drill bit (for floor guide installation)



# 2 Installation instructions

## 2.1 Overall

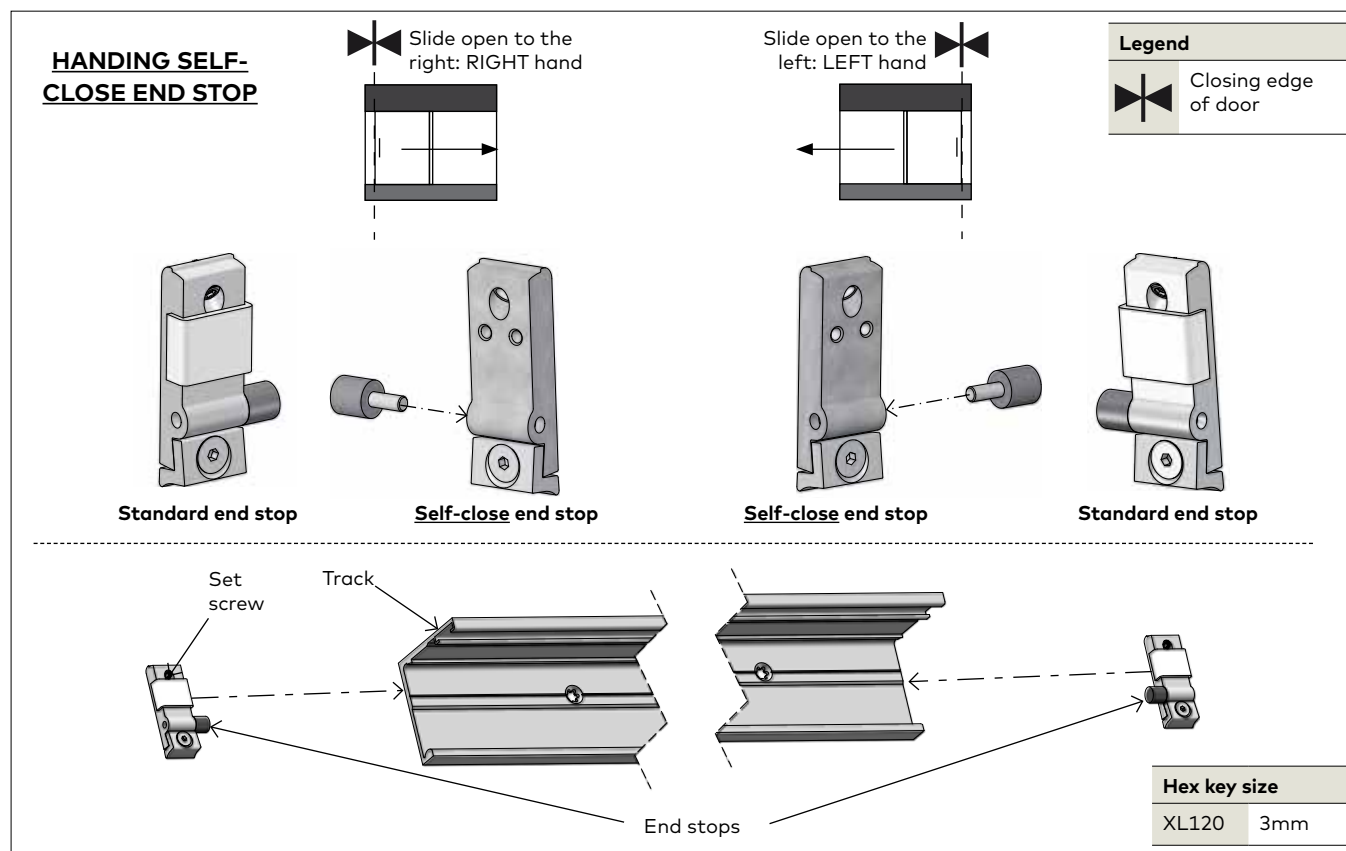
Fig. 1



- |      |                         |      |                          |      |                            |
|------|-------------------------|------|--------------------------|------|----------------------------|
| 1.1  | Cover                   | 1.11 | Carriers                 | 1.16 | Self-close hold open ball  |
| 1.2  | Brush strip             | 1.12 | Dormotion unit           | 1.17 | Self-close cable connector |
| 1.3  | Track                   | 1.13 | Sidelite section profile | 1.18 | U-channel gasket           |
| 1.4  | Recessed cover clip     | 1.14 | Floor guide              | 1.19 | Start/stop                 |
| 1.5  | Sidelite gasket         | 1.15 | U-channel                | 1.20 | Wood door adaptor          |
| 1.6  | Self-close cable unit   |      |                          |      |                            |
| 1.7  | Filler panel            |      |                          |      |                            |
| 1.8  | View protection profile |      |                          |      |                            |
| 1.9  | End stops               |      |                          |      |                            |
| 1.10 | View protection clip    |      |                          |      |                            |

## 2.2 Installing end stops

Fig. 2



### Handing the [opening side] end stop:

- 2.2.1 Determine closing edge of door.
- **SELF-CLOSE END STOP WILL BE USED ON OPENING SIDE OF DOOR.**
- 2.2.2 Hand self-close end stop by inserting bumper on appropriate side of end stop.

### Install both end stops:

- 2.2.3 Slide self-close end stop into opening side of track.
- 2.2.4 Slide appropriate standard end stop into closing side of track.

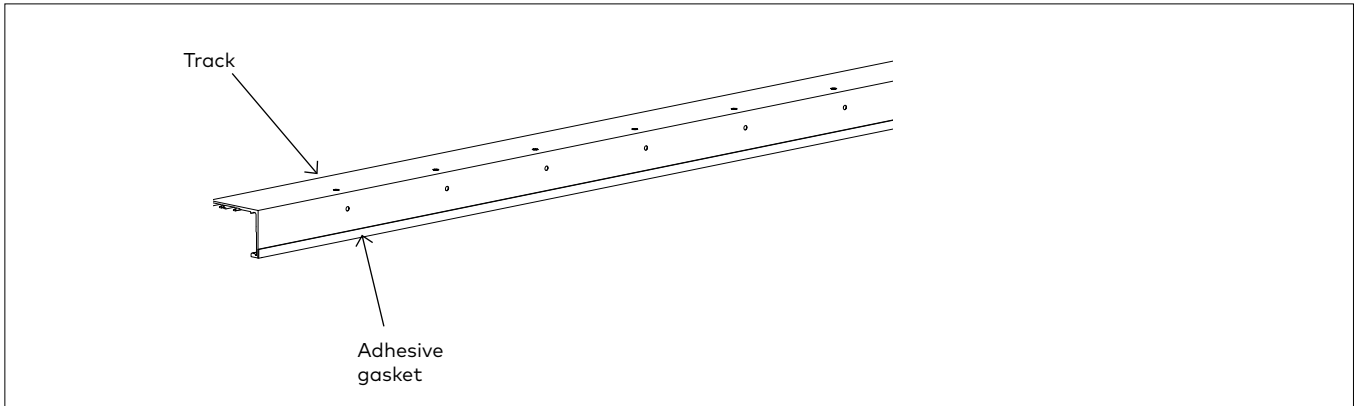
**NOTE:** Loosen bottom section of end stop for easier install.

**NOTE:** Be sure set screw is flush with back of bumper.

**NOTE:** Exact location/adjustments will be determined in Adjustment End Stop location..

## 2.3 Securing sidelite adhesive gasket to track

Fig. 3



2.3.1 Ensure the track is cut to proper length.

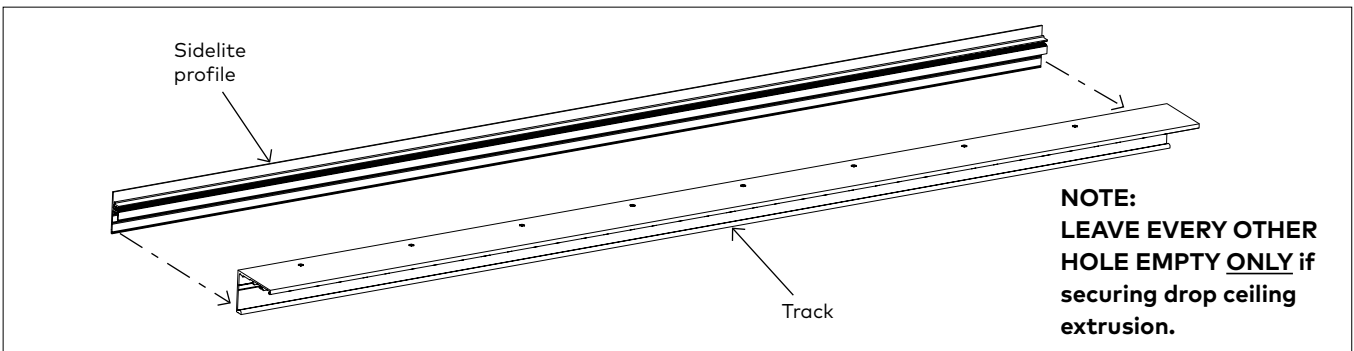
**NOTE: SEE DIMENSION INSTRUCTIONS ON PAGE 10.**

2.3.2 Cut adhesive gasket equal to sidelite glass width.

2.3.3 Adhere gasket along bottom edge of back of track.

## 2.4 Securing sidelite section profile to track

Fig. 4



2.4.1 Align sidelite profile holes with track profile holes.

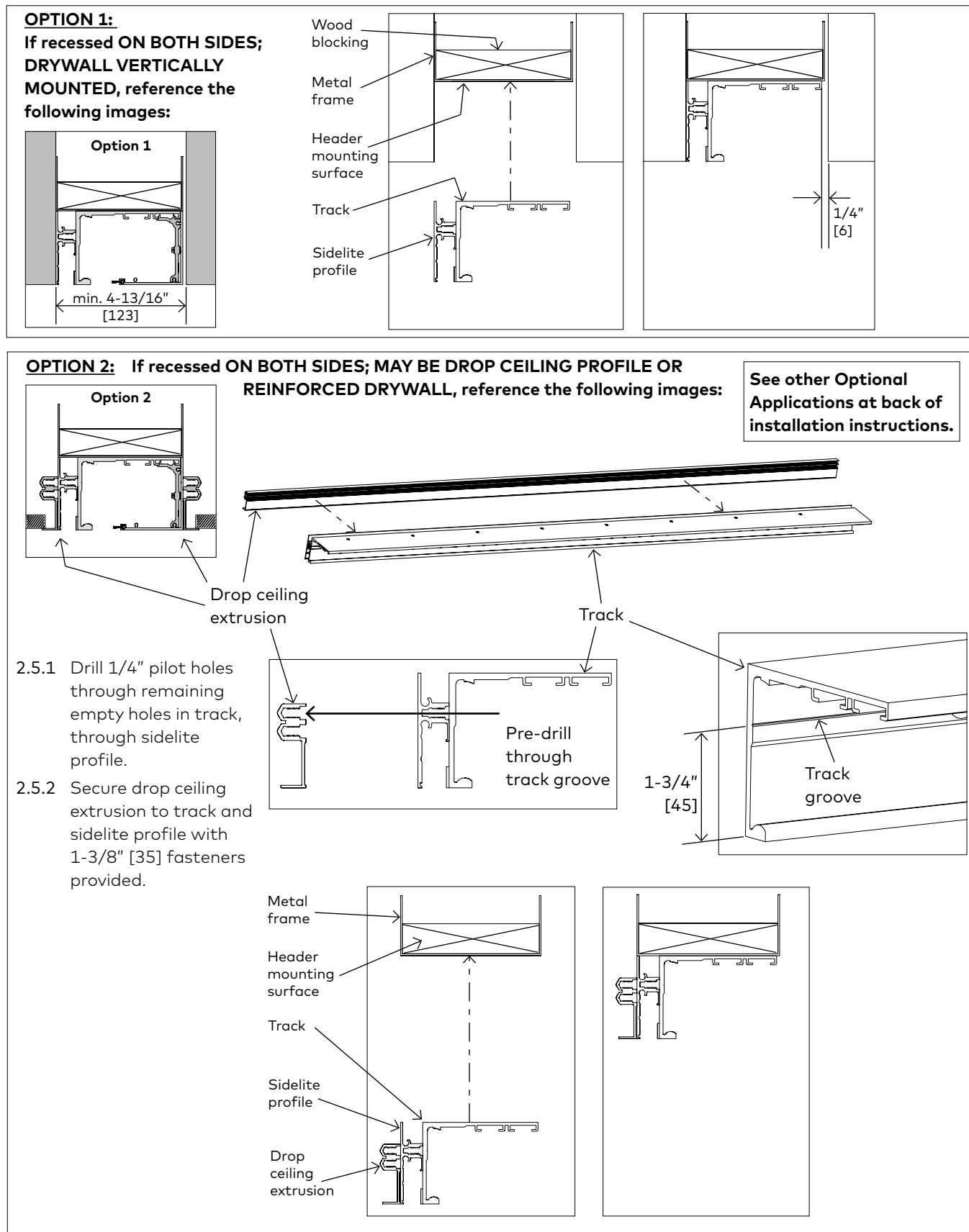
**NOTE: Holes will be predrilled every 7-7/8" [200].**

2.4.2 Secure with 9/16" [14] fasteners provided.

**NOTE: Be sure fastener heads are flush with track to avoid rollers catching protruding fasteners.**

## 2.5 Secure track and sidelite extrusion into ceiling (and drop ceiling extrusion, if supplied)

Fig. 5



## 2.6 Specifications for securing track to mounting surface

2.6.1 Ensure track is properly level and secure it to the header mounting surface per the appropriate measurements on the following page.

2.6.2 Use appropriate fasteners according to the following recommendations.

**NOTE: SEE DIMENSION INSTRUCTIONS ON NEXT PAGE FOR REFERENCE.**

**NOTE:**

**OVERHEAD REINFORCEMENT:**

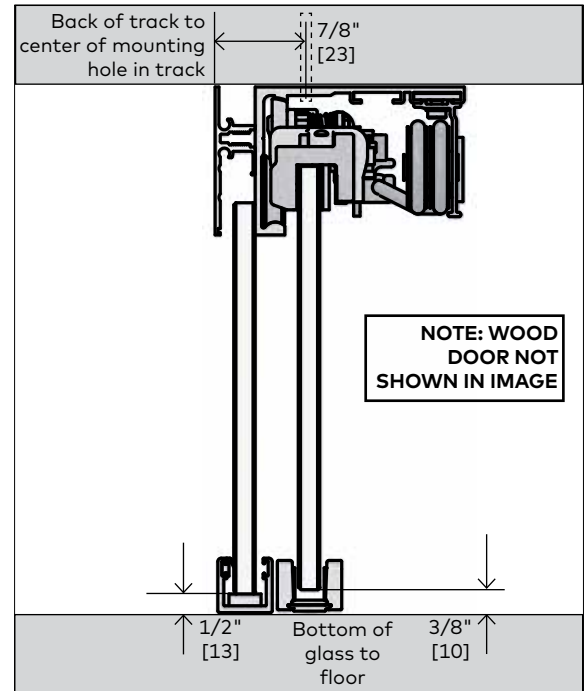
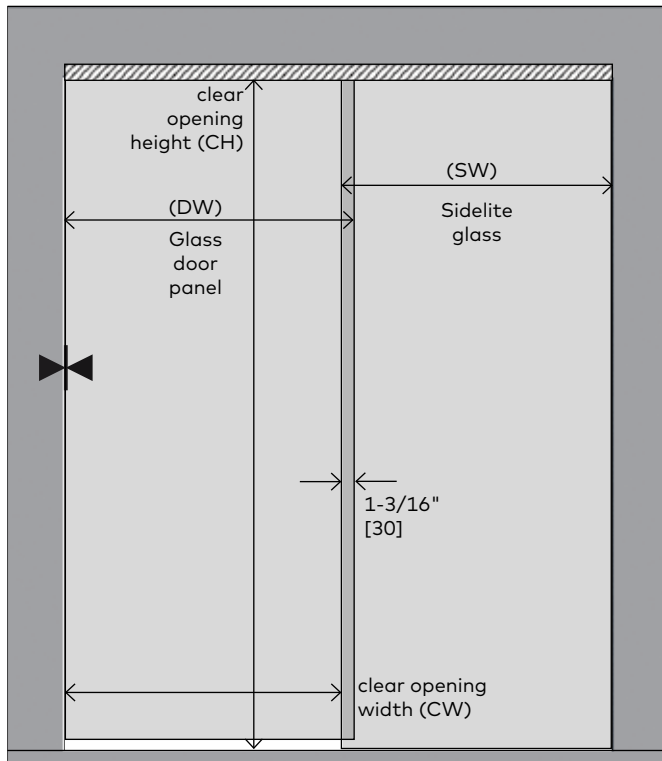
The overhead reinforcement must be a minimum of 1/4" [6] x 3" [76] steel angle, 16 gauge metal stud with wood blocking, or two pieces of 1 1/2" [38] thick wood blocking (double stacked), secured to studs or joists on a maximum 16" [406] centers for the length of the track. The overhead reinforcement may be flush on the overhead surface or on the interior of this surface.

Track mounting screws must fully penetrate the steel angle, metal stud, or at a minimum of 2" [51] into wood blocking, utilizing the predrilled holes in the MUTO track.

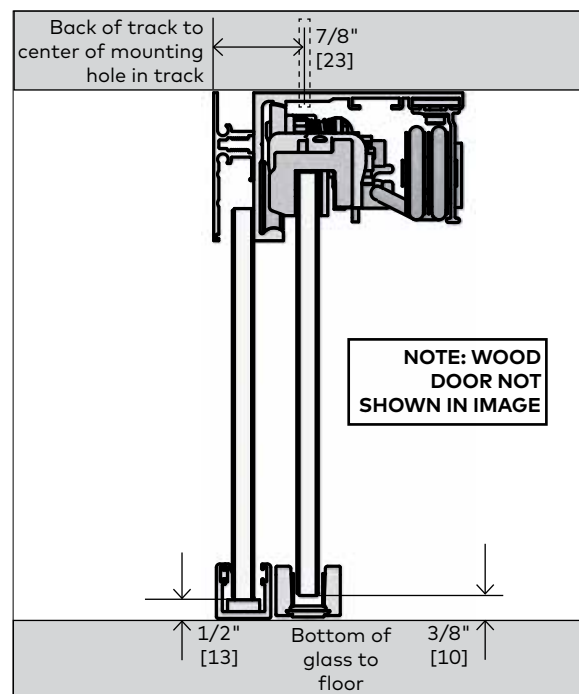
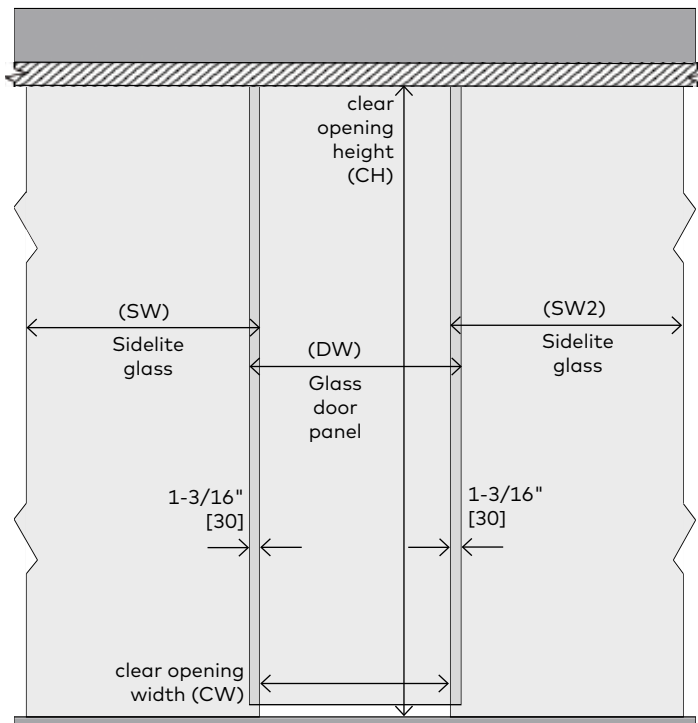
Consult with a structural engineer to determine if reinforcement is adequate for your specific application or to meet specific codes in your location.

## 2.7 Door/wall dimensions

Single sidelite mount

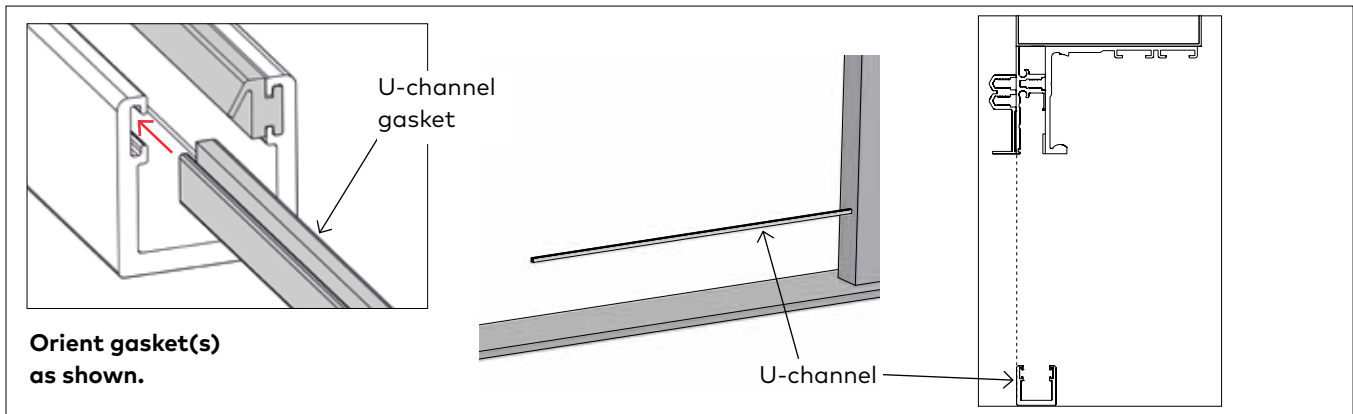


Double door mount



## 2.8 Installing u-channel

Fig. 6



**Orient gasket(s)  
as shown.**

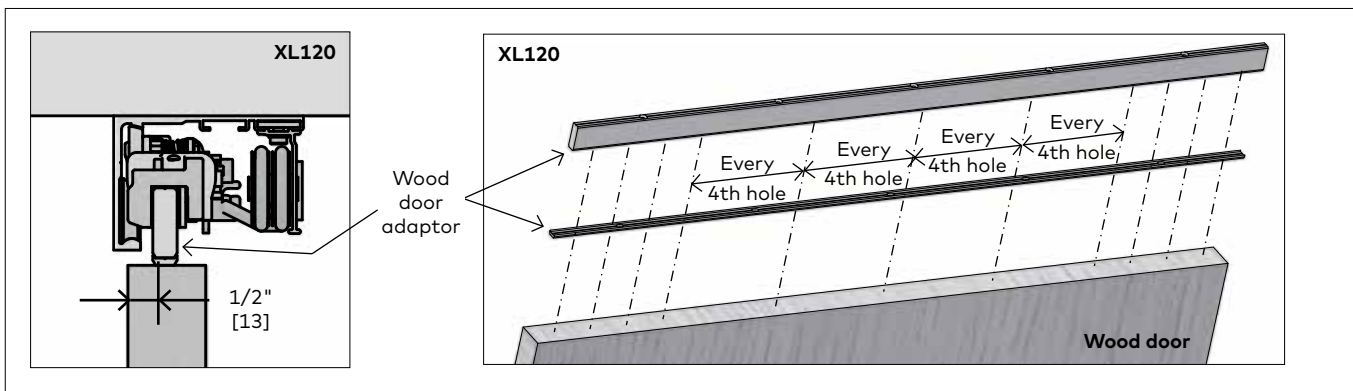
- 2.8.1 Install gaskets as shown. Trim to correct length.
- 2.8.2 Secure u-channel to floor using appropriate fasteners.

**NOTE: Ensure u-channel is plumb and the back of the u-channel profile aligns with back of sidelite profile.**

**NOTE: Gaskets are pre-installed.**

## 2.9 Securing wood door adaptor

Fig. 7



**NOTE: Top of door must be reinforced to secure wood door adaptor.**

- 2.9.1 Prepare door properly for wood door adaptor.

**NOTE: Seal top and bottom of door to minimize warping (use wood door manufacturer's recommendations).**

- 2.9.2 Cut wood door adaptor to be equal width of door.

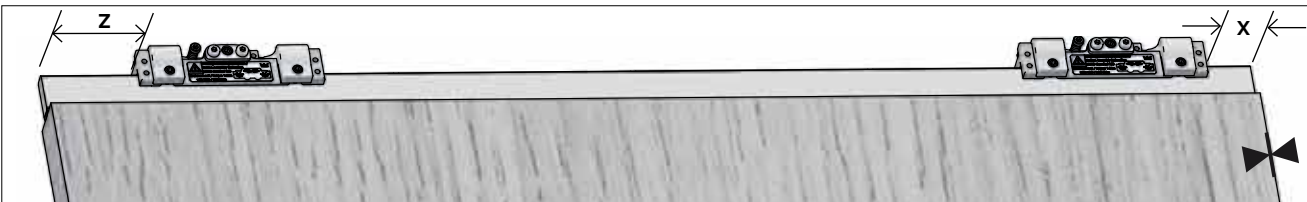
- 2.9.3 Secure the two wood door adaptor pieces to top of wood door with #10 x 3" wood screws.

**NOTE: Be sure screws are always secured in the first four and last four holes of the adaptor, along with every fourth hole in between.**

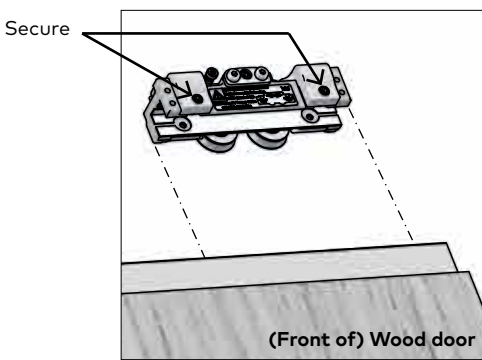
## 2.10 Install roller carriers

Fig. 8

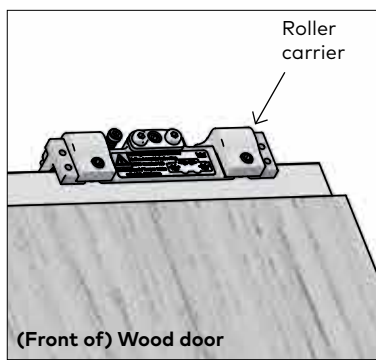
**DETERMINE THE LEADING (X) VERSUS TRAILING (Z) EDGE OF THE GLASS.**  
"LEADING IS SIDE CLOSEST TO LATCH CLOSED."



Roller location on glass with DORMOTION unit		
		XL120
Single door	X	2-3/8" [60]
Single door	Z	3-1/8" [80]
Double door	X	2-3/8" [60]
Double door	Z	3-1/8" [80]



(Front of) Wood door



(Front of) Wood door

Legend	
	Closing edge of door

Hex key size	
XL120	4mm

Torque value:	
XL120	10.3ft lbs [14Nm]

**NOTE: FULLY CLEAN SURFACE OF ADAPTOR WITH AN ALCOHOL-BASED MILD GLASS AND SURFACE CLEANER.**

**ENSURE GASKET IS FREE OF DEBRIS.**

**ENSURE ROLLER CARRIER WHEELS ARE FREE OF DEBRIS.**

2.10.1 Slide roller carriers onto wood door adaptor.

2.10.2 Slide gasket and metal shim between adaptor and roller carrier.

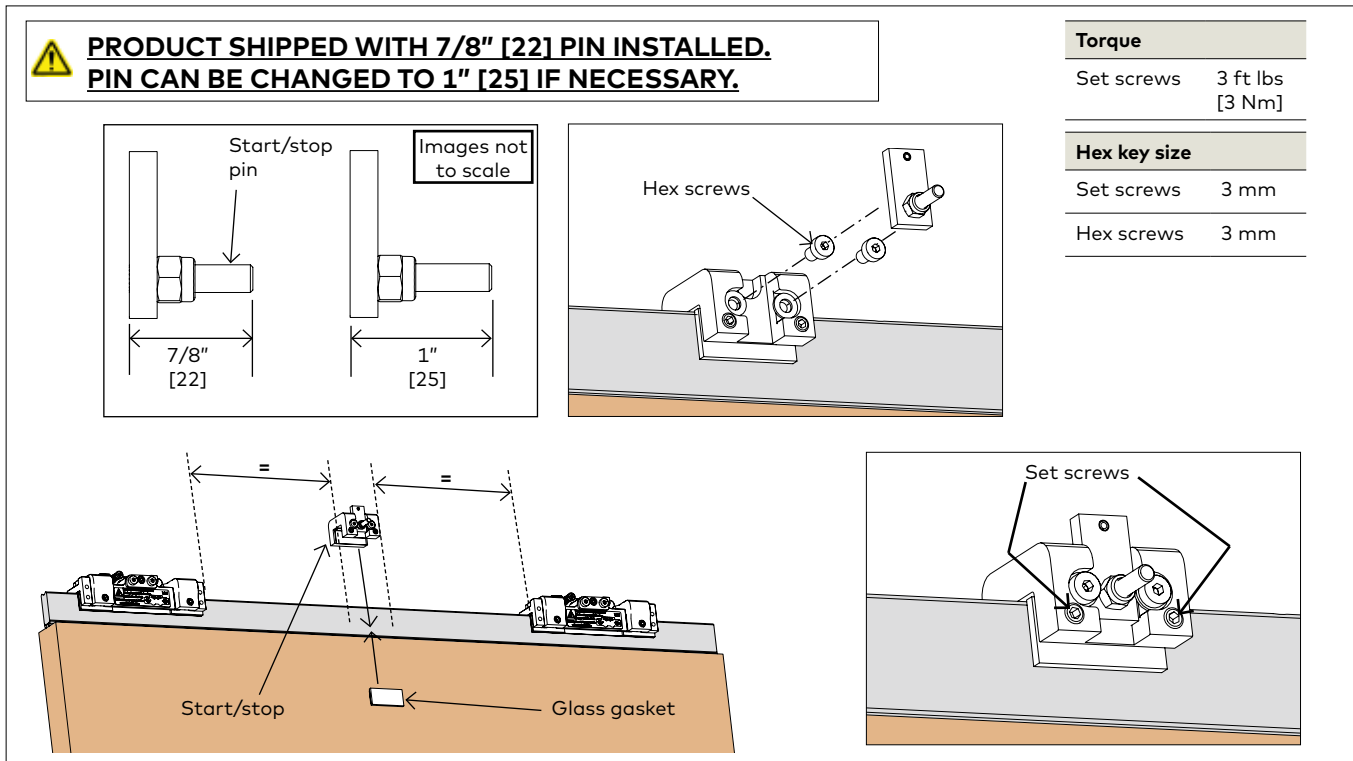
**NOTE: Orient with gasket facing the adaptor.**

2.10.3 Secure roller carriers to wood door adaptor using appropriate-size hex key at 10ft lbs (14 Nm).



## 2.11 Install DORMOTION start/stop

Fig. 9



**NOTE: Determine a pin length based upon how square and plumb the opening is.**

2.11.1 If required, change pin in start/stop assembly.

- Remove hex screws.
- Remove existing pin and plate.
- Swap in appropriate pin and plate.
- Replace hex screws.

2.11.2 Slide start/stop onto glass.

2.11.3 Center equally between the carriers.

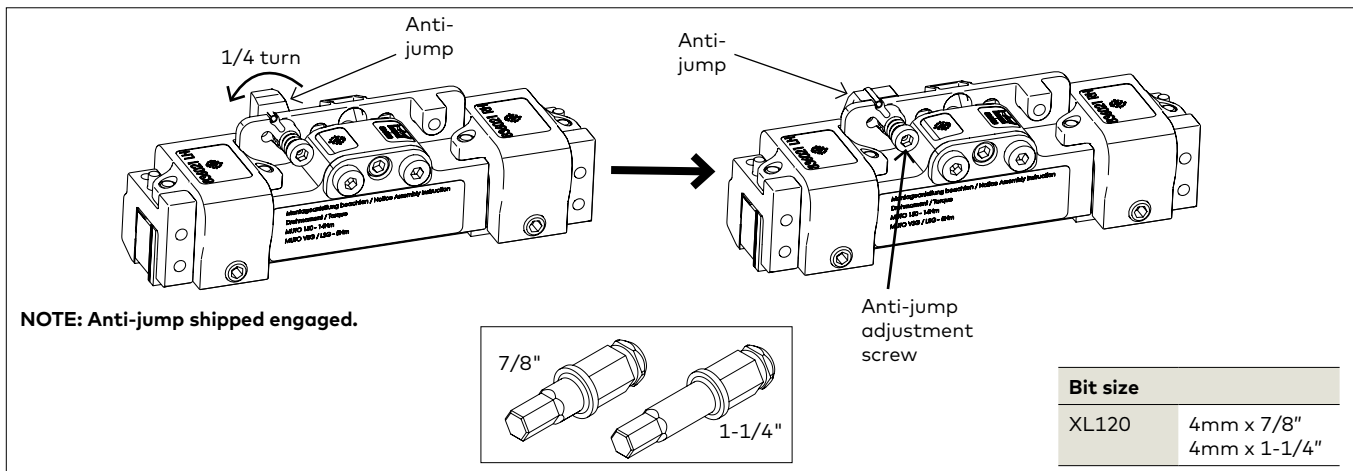
2.11.4 Slide glass gasket between start/stop and wood door adaptor.

**NOTE: Orient with gasket facing adaptor.**

2.11.5 Secure start/stop via set screws.

## 2.12 Disengaging the anti-jump

Fig. 10

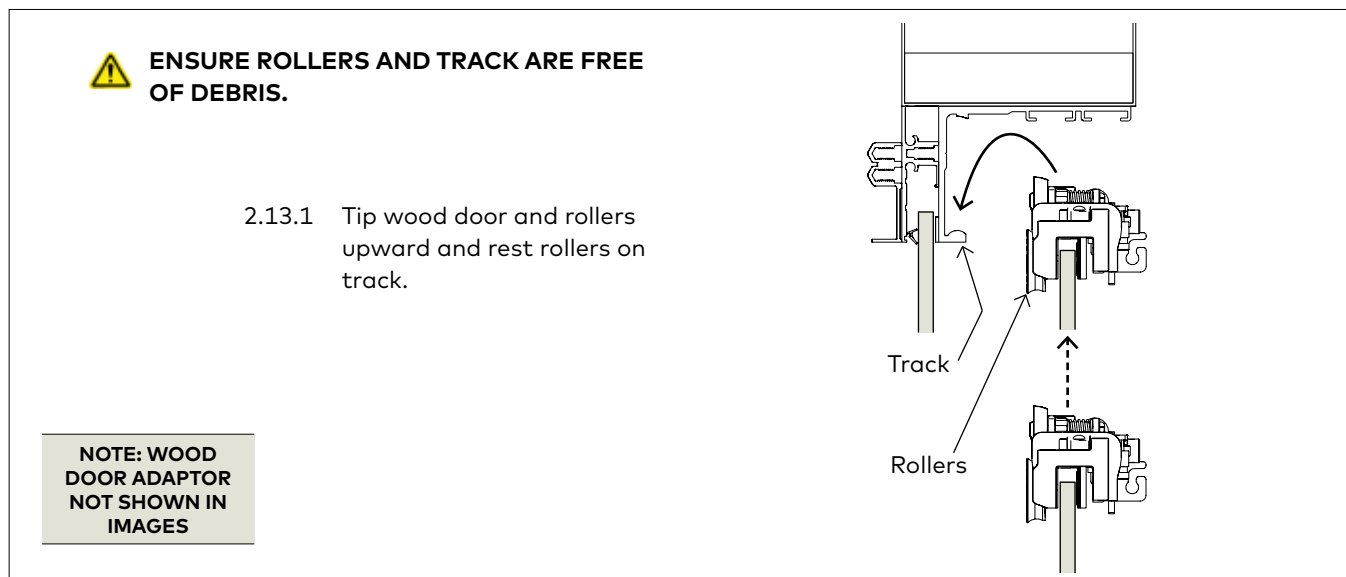


2.12.1 Disengage the anti-jump on roller carrier.

**NOTE: Using optional ratchet and [one of the] provided bits, push anti-jump adjustment screw IN and turn COUNTER-CLOCKWISE 90° to disengage anti-jump.**

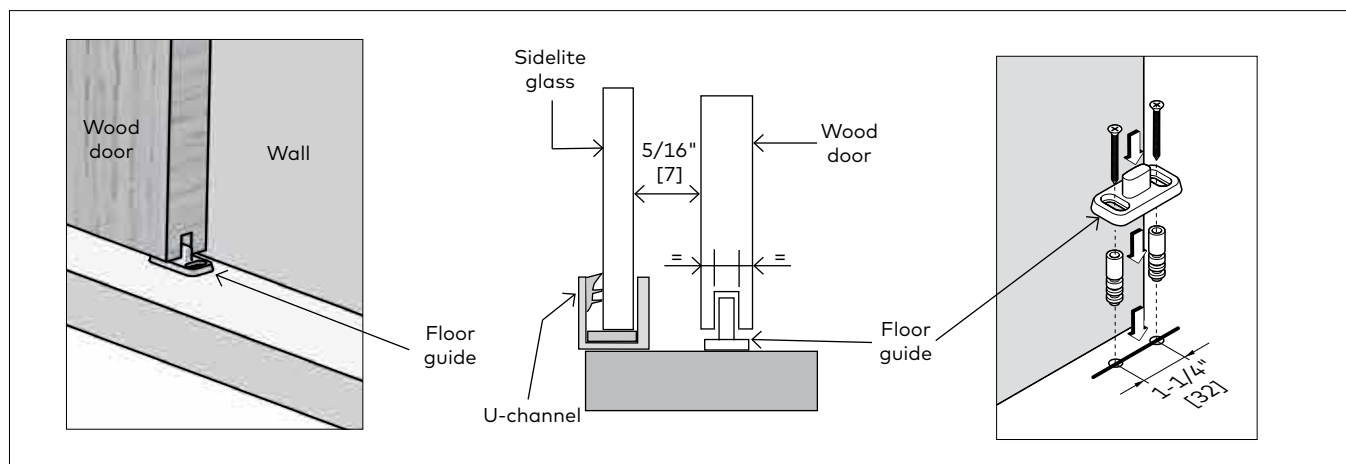
## 2.13 Install door/rollers on track

Fig. 11



## 2.14 Install floor guide

Fig. 12



**⚠ REMEMBER ANTI-JUMP IS DISENGAGED!**

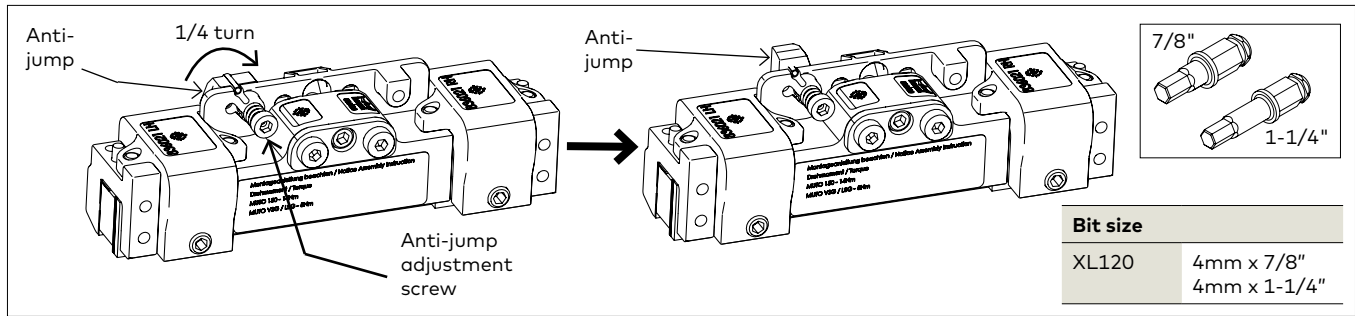
- 2.14.1 Temporarily slide floor guide into bottom groove of wood door.
- 2.14.2 Be sure the door is plumb.
- 2.14.3 Mark appropriate floor guide measurements.

2.14.4 **TEMPORARILY REMOVE WOOD DOOR AND ROLLERS FROM TRACK (TO ALLOW FOR DRILLING SPACE).**

- 2.14.5 Pre-drill into mounting surface using a 5/16" drill bit.
- 2.14.6 Secure floor guide with included fasteners.
- 2.14.7 **SET WOOD DOOR AND ROLLERS BACK ONTO TRACK.**

## 2.15 Engaging anti-jump

Fig. 13

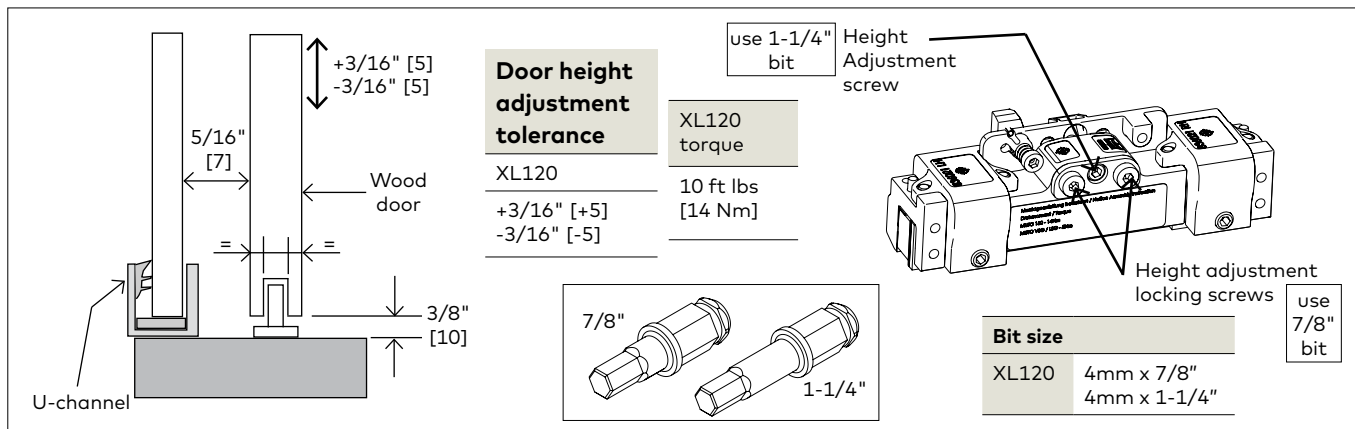


2.15.1 Engage anti-jump on roller carrier.

NOTE: Using the optional ratchet and [one of the] provided bits, push anti-jump adjustment screw IN and turn **CLOCKWISE** 90° to **engage** anti-jump.

## 2.16 Adjustment door height

Fig. 14



2.16.1 Set height of glass door.

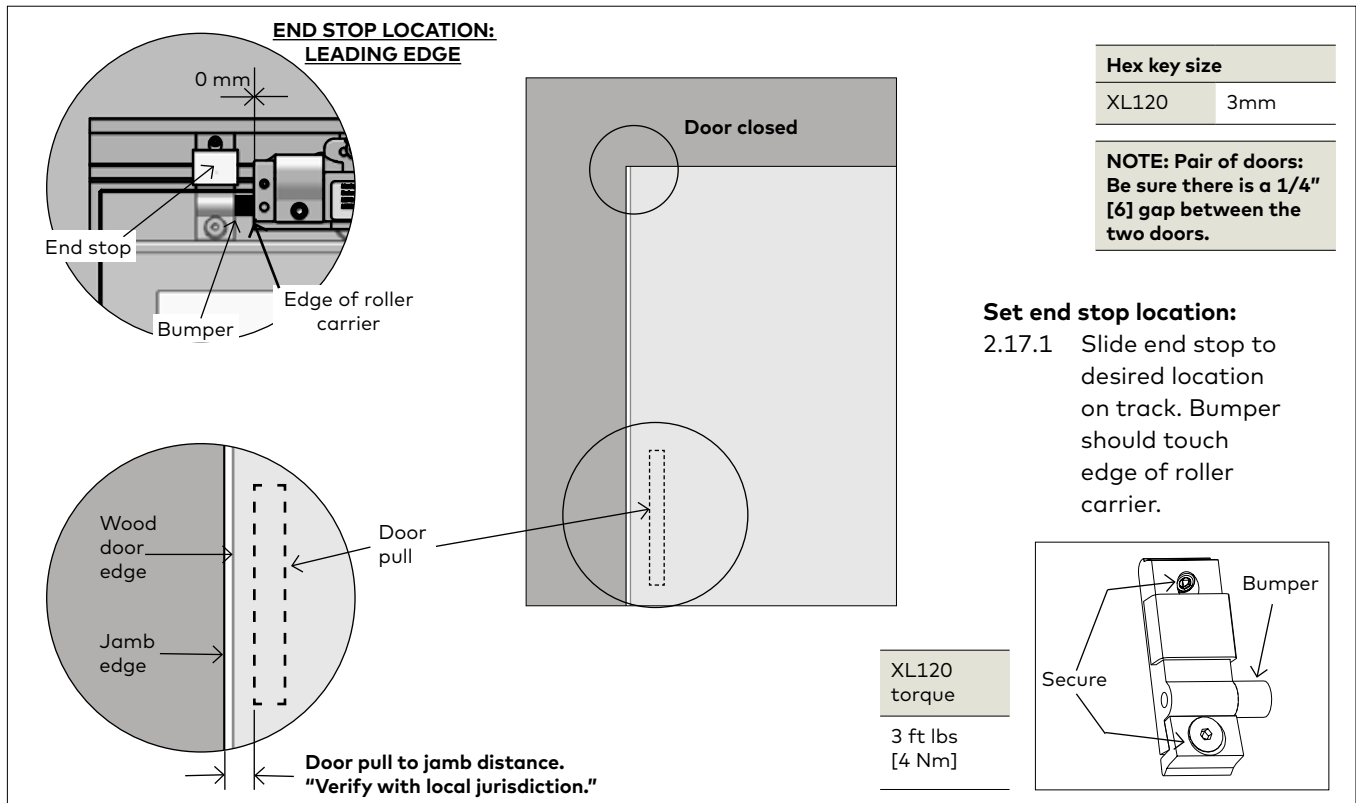
2.16.2 Using the optional ratchet and [one of the] provided bits, loosen height adjustment locking screws of carrier.

2.16.3 Using optional ratchet and [one of the] provided bits, turn height adjustment screw **CLOCKWISE** or **COUNTER-CLOCKWISE** to raise or lower door.

NOTE: Be sure wood door is level during this adjustment.

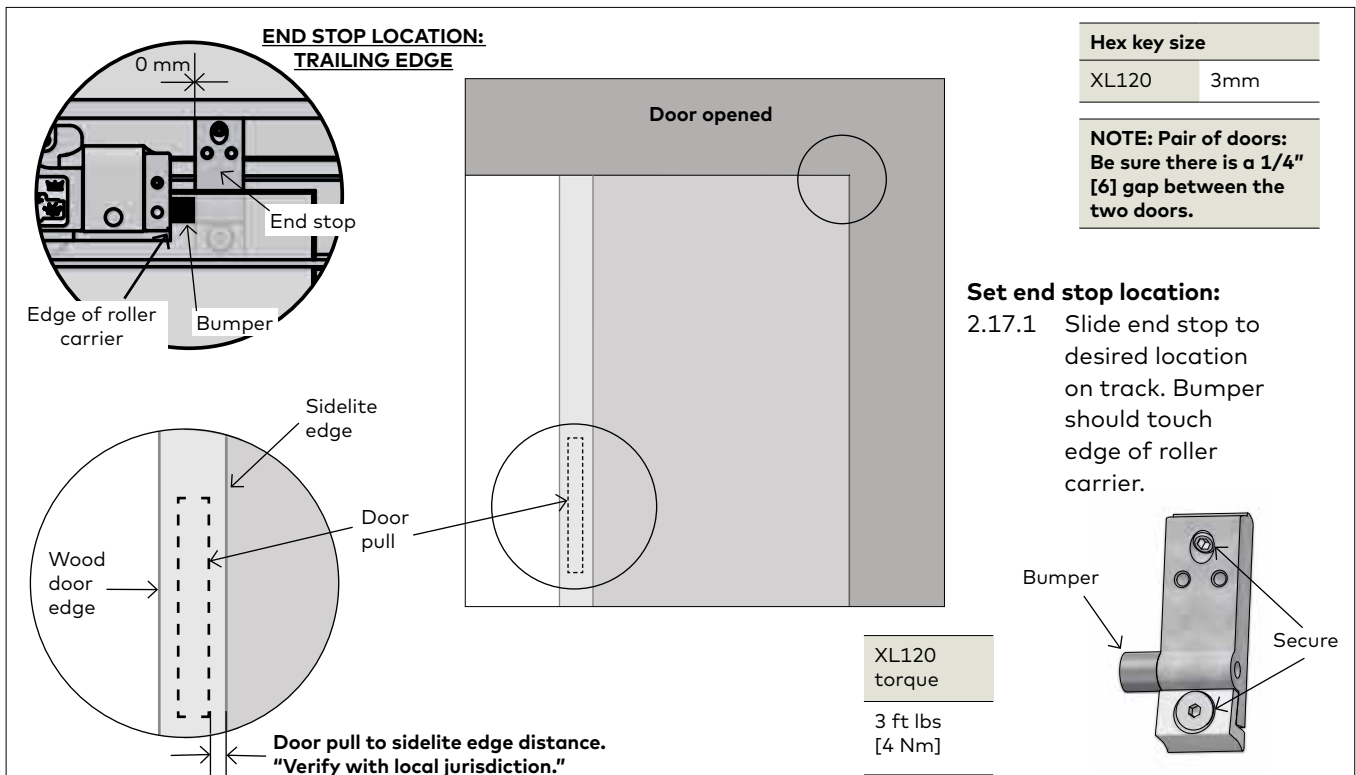
## 2.17 Adjustment end stop location: LEADING end stop

Fig. 15



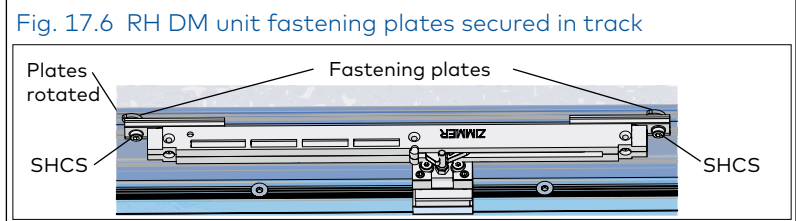
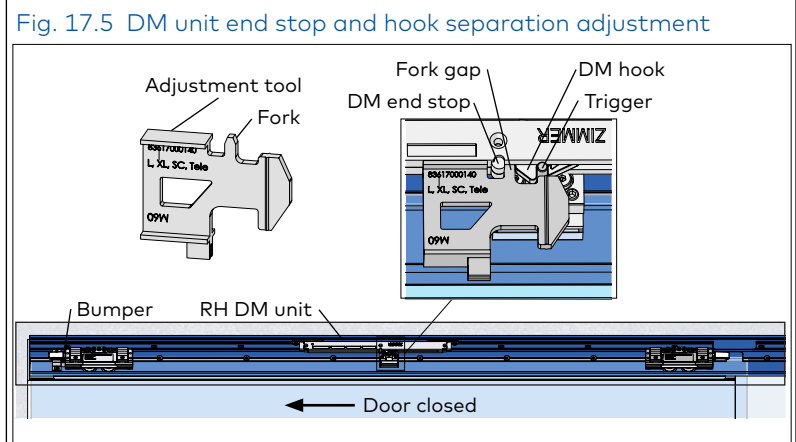
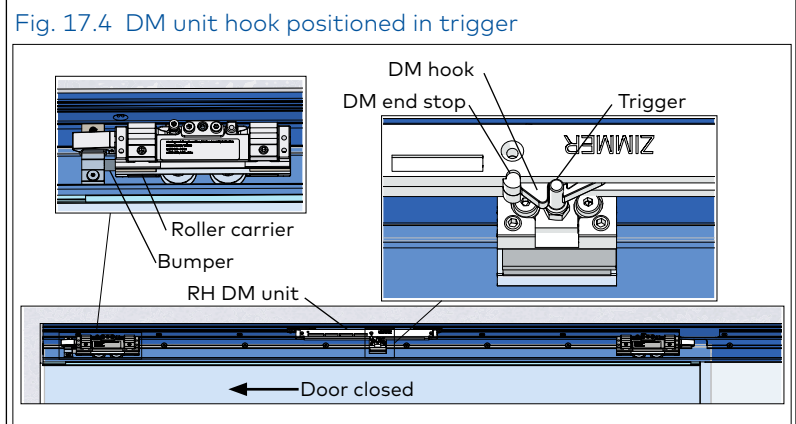
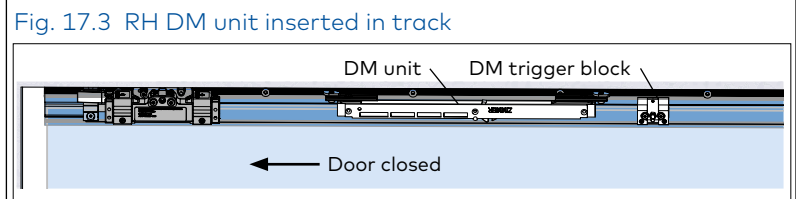
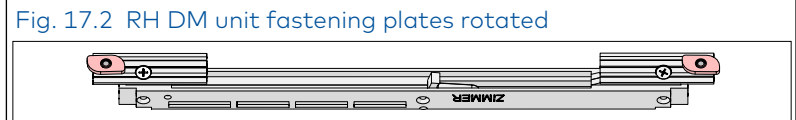
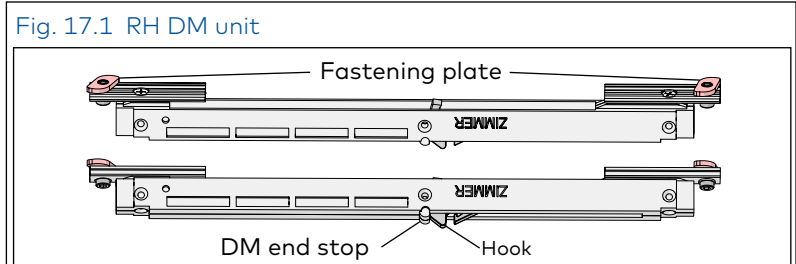
## Adjustment end stop location: TRAILING end stop

Fig. 16



## 2.18 Install DORMOTION unit

Fig. 17

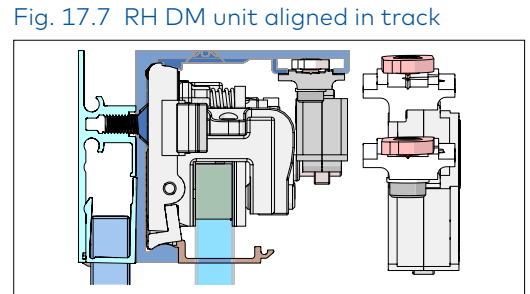


### 2.18.1 Rotate RH DM fastening plates.

- Using 4 mm hex key, loosen fastening plate hex screws.
- Rotate fastening plates until they are parallel to the DM unit (Fig. 17.2)
- Snug hex screws.

### 2.18.2 Move door to close position.

- For installation of RH DM unit, door must be in the closed position against bumper.



### 2.18.3 Align DM unit in track, engage DM hook in DM trigger.

- Align DM unit in track (Fig. 17.7).
- Slide DM unit over the DM trigger block until the DM hook engages the DM trigger (Fig. 17.4)

### 2.18.4 Use adjustment tool to set DM unit final position.

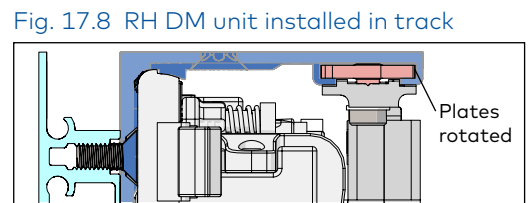
- Place adjustment tool flat against DM unit with fork between DM hook and DM end stop (Fig. 17.5).
- Slide DM unit over until hook and DM end stop are against the fork. This sets 5 mm gap (fork gap).
- **Trigger height:** Adjust so trigger sets on top of adjustment tool (Para. 2.20).

### 2.18.5 Secure the DM unit in position.

- NOTE: Insure door is fully closed against bumper before performing this step.
- Using 4 mm hex key, tighten DM unit fastening plate socket head cap screws . Fastening plates must engage the track (Fig. 17.6 and .8).

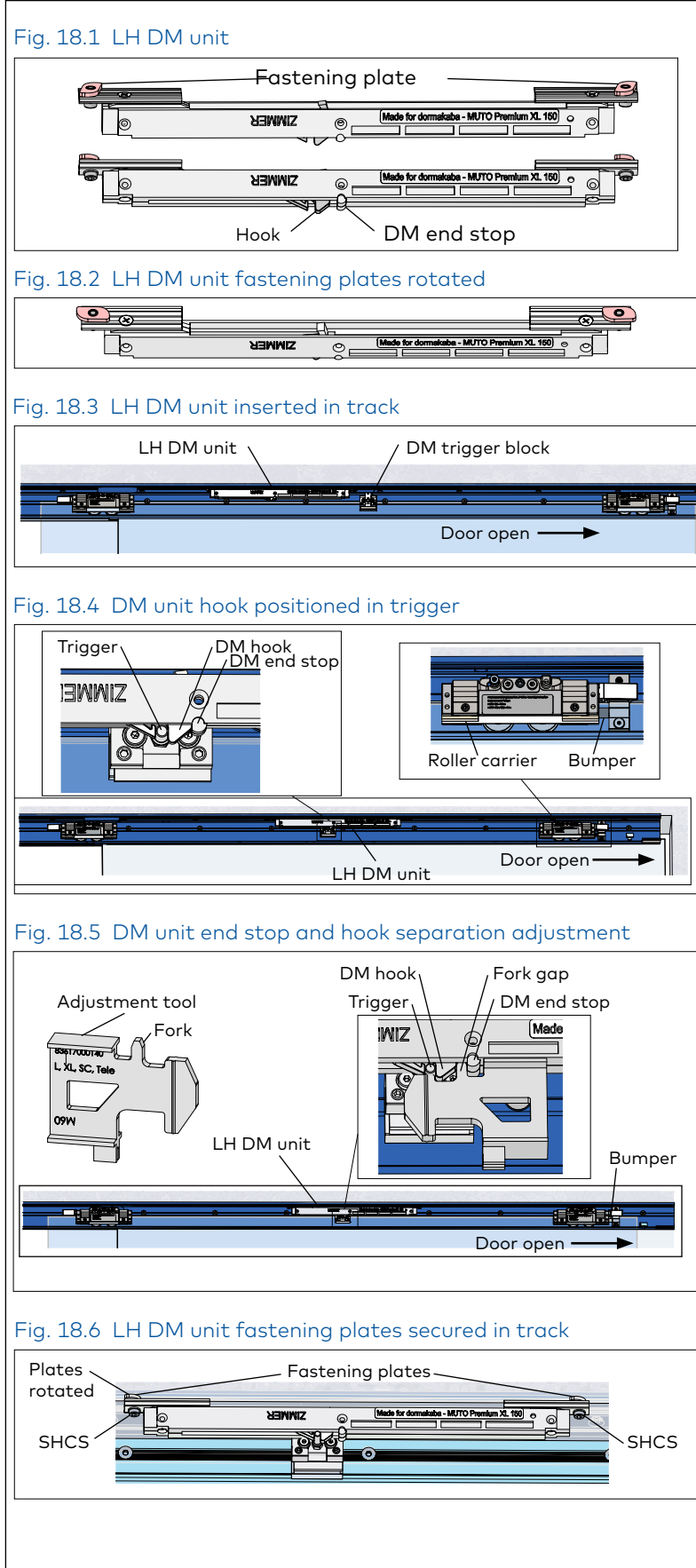
#### Torque

Socket head cap screws 3 ft lbs [4 Nm]



## 2.19 Install optional DORMOTION unit in opening cycle

Fig. 18



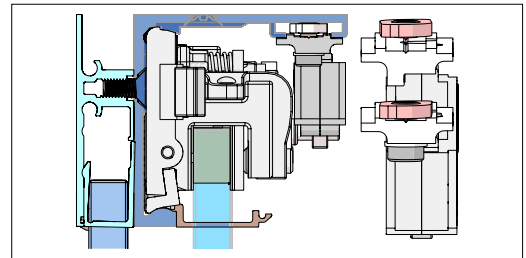
### 2.19.1 Rotate DM fastening plates.

- Using 4 mm hex key, loosen fastening plate hex screws.
- Rotate fastening plates until they are parallel to the DM unit (Fig. 18.2)
- Snug hex screws.

### 2.19.2 Move door to open position.

- For installation of LH DM unit, door must be in the open position against bumper.

Fig. 18.7 LH DM unit aligned in track



### 2.19.3 Align DM unit in track, engage DM hook in DM trigger.

- Align DM unit in track (Fig. 18.7).
- Slide DM unit over the DM trigger block until the DM hook engages the DM trigger (Fig. 18.4)

### 2.19.4 Set DM unit final position.

- Place adjustment tool flat against DM unit with fork between DM hook and DM end stop (Fig. 18.5).
- Slide DM unit over until hook and DM end stop are against the fork. This sets 5 mm gap (fork gap).
- **Trigger height:** Adjust so trigger sets on top of adjustment tool (Para. 2.20).

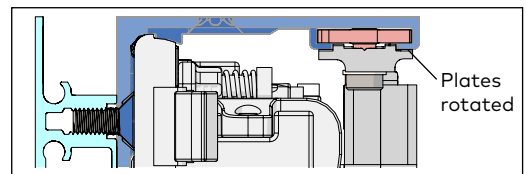
### 2.19.5 Secure the DM unit in position.

- NOTE: Insure door is fully open against bumper before performing this step.
- Using 4 mm hex key, tighten DM unit fastening plate socket head cap screws. Fastening plates must engage the track (Fig. 18.8).

#### Torque

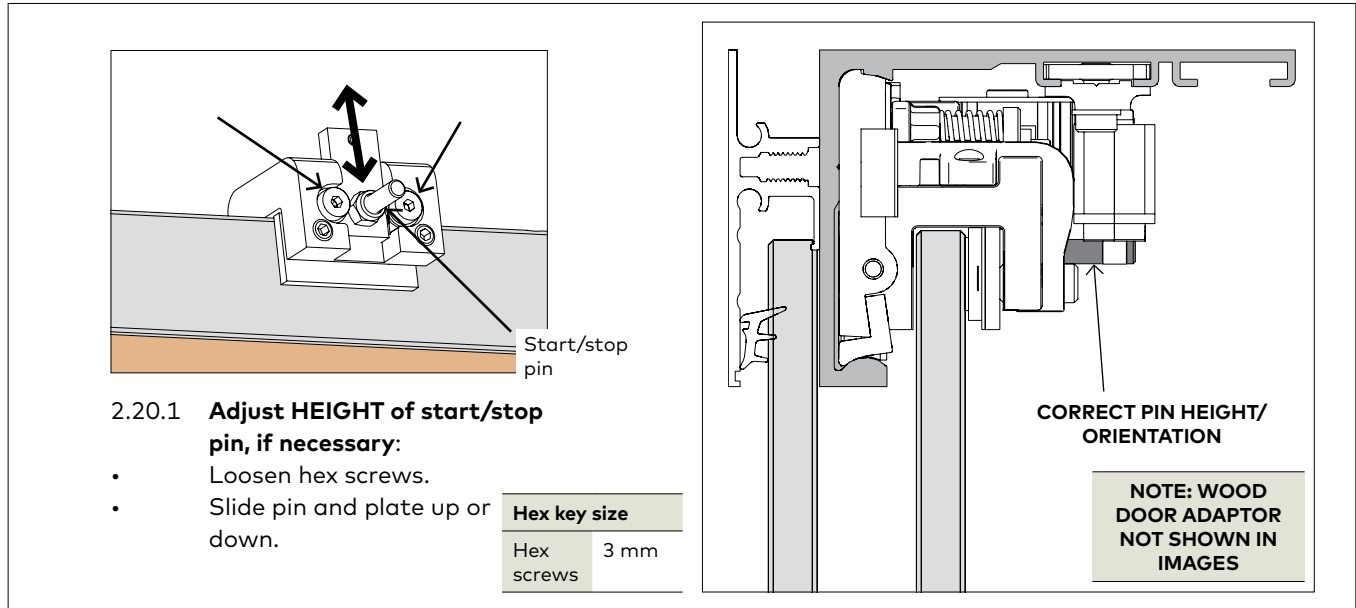
Socket head cap screws 3 ft lbs [4 Nm]

Fig. 18.8 LH DM unit installed in track



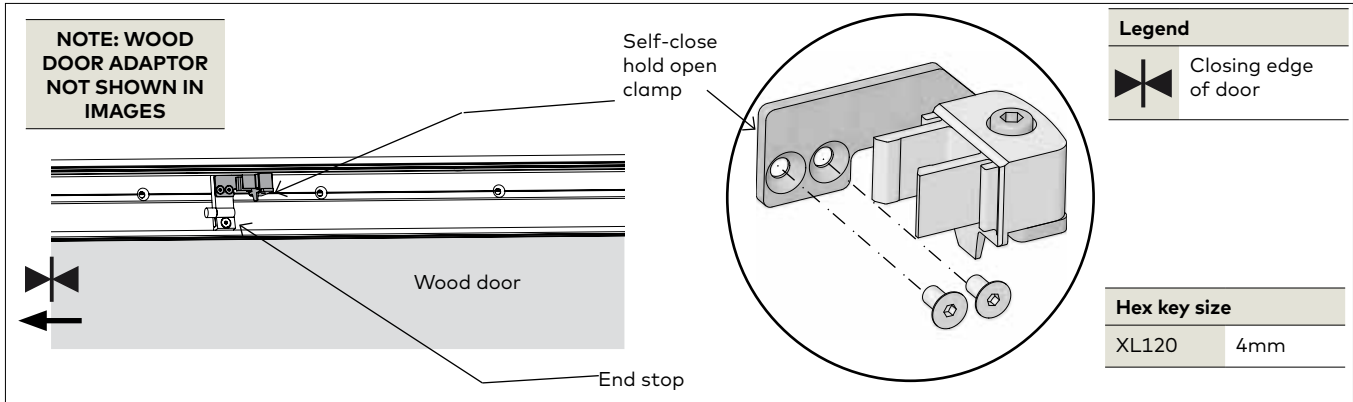
## 2.20 Adjust start/stop pin height (if necessary)

Fig. 19



## 2.21 Self-close unit: install self-close hold open clamp

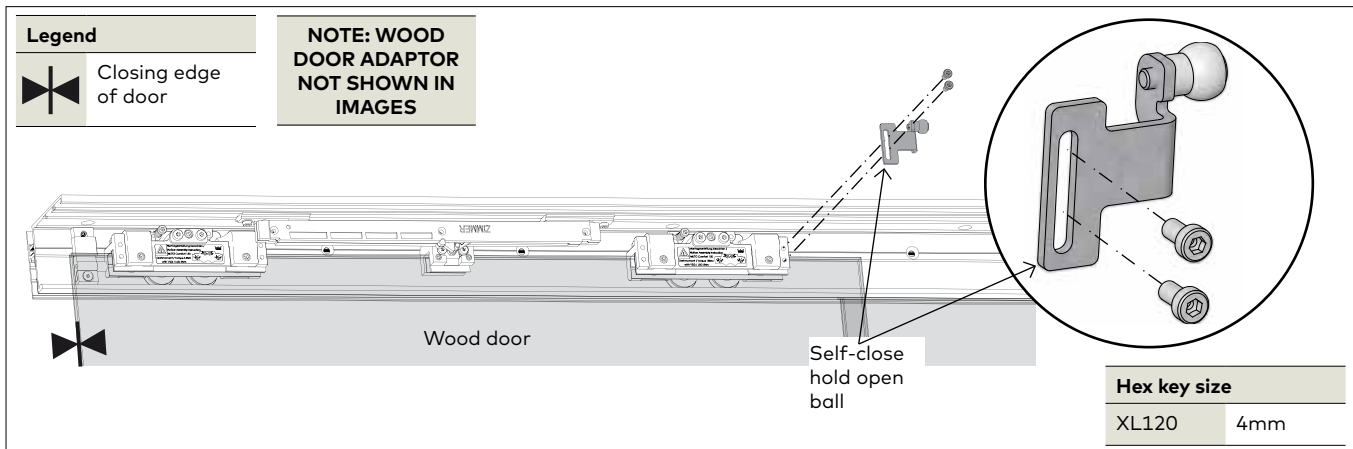
Fig. 20



- 2.21.1 Secure self-close hold open clamp to the end stop furthest from latch [closing side].
- Use two screws and tighten to 2.5 ft lbs (3Nm).

## 2.22 Self-close unit: install self-close hold open ball

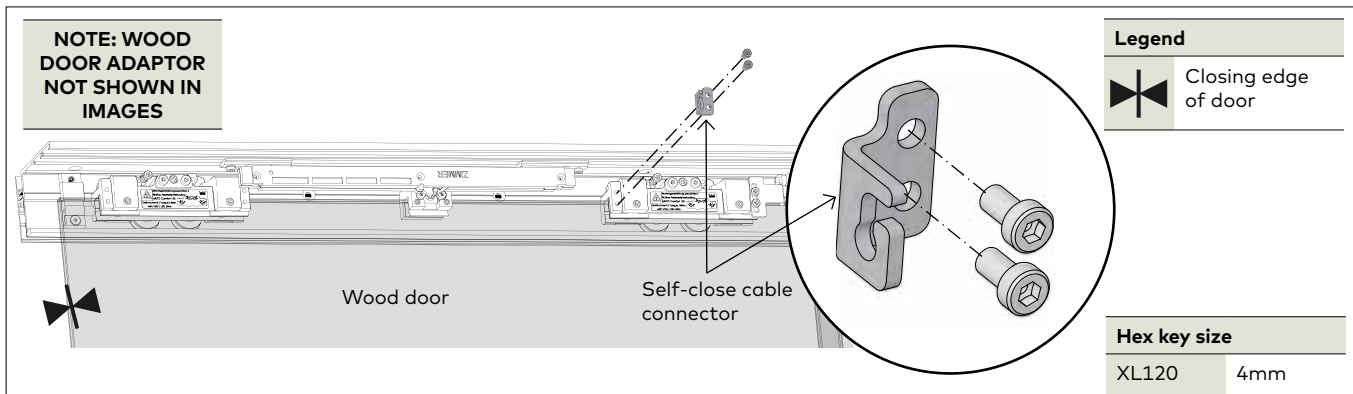
Fig. 21



- 2.22.1 Secure self-close hold open ball to carrier furthest from latch [closing side].
- Use two screws and tighten at 2.5 ft lbs [3Nm].

## 2.23 Install self-close unit cable connector

Fig. 22

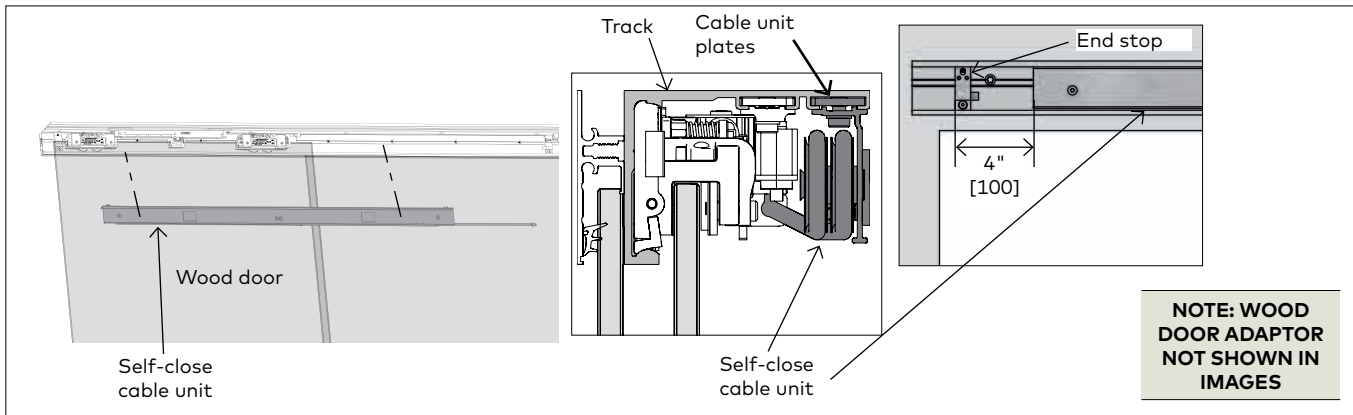


- 2.23.1 Secure self-close cable connector to opposite end of carrier, furthest from latch [closing side].
- Use two screws and tighten at 2.5 ft lbs (3Nm).



## 2.23 Self-close unit: install self-close unit cable connector

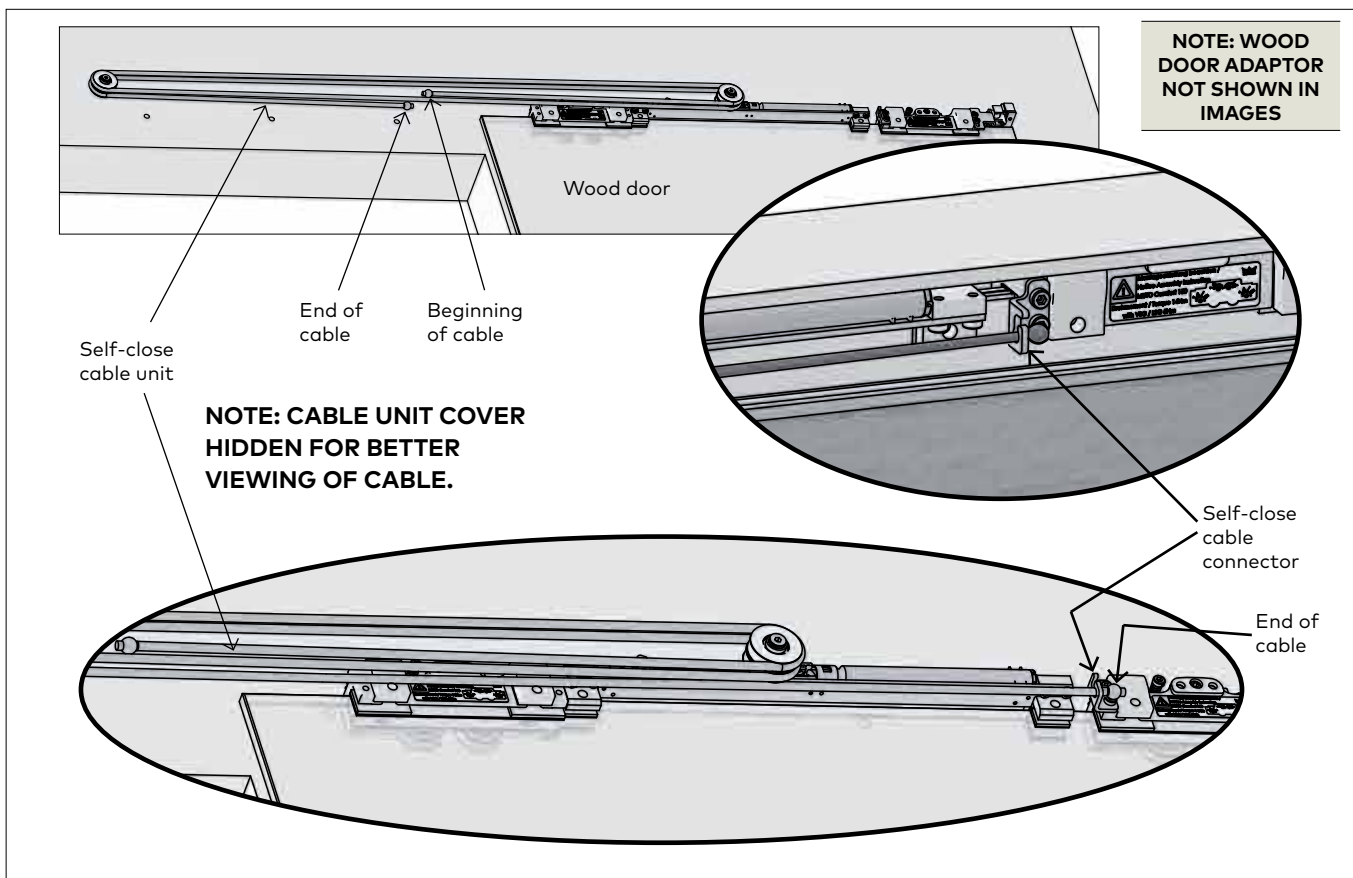
Fig. 23



- 2.24.1 Secure self-close cable unit into first groove of MUTO track.
  - 2.24.2 Rotate plates inside track channel to engage.
- Use three screws/plates and tighten at 3 ft lbs (4 Nm).

## 2.24 Self-close unit: install self-close cable unit

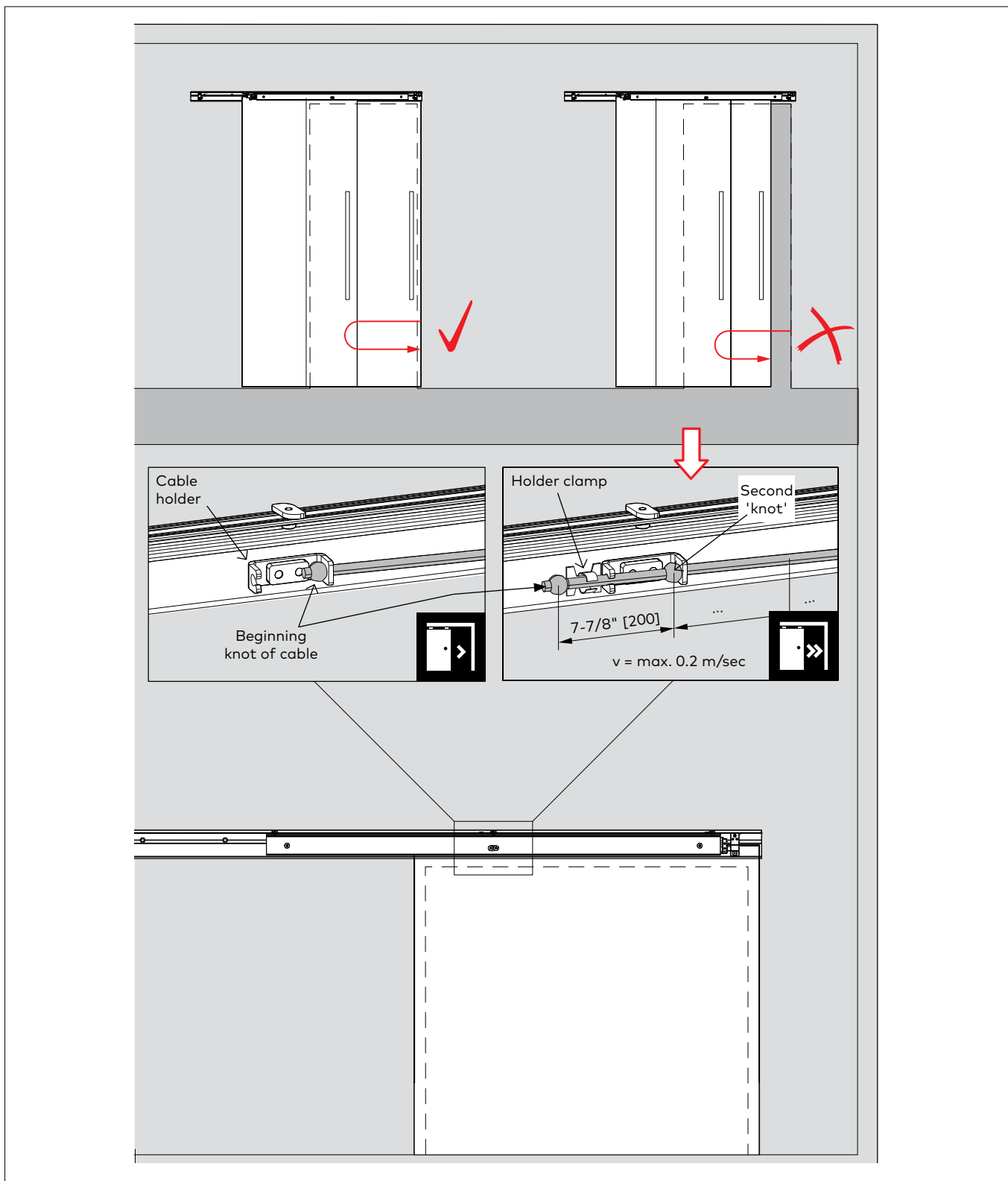
Fig. 24



- 2.25.1 Pull "end of cable" over to connect with cable connector.
- 2.25.2 Continue to pull cable through connector to either increase or decrease self-closing tension.

## 2.25 Self-close unit: adjust tension in self-close cable

Fig. 25



2.26.1 To adjust tension in cable unit cord if necessary, pull 'beginning knot of cable' through cable holder.

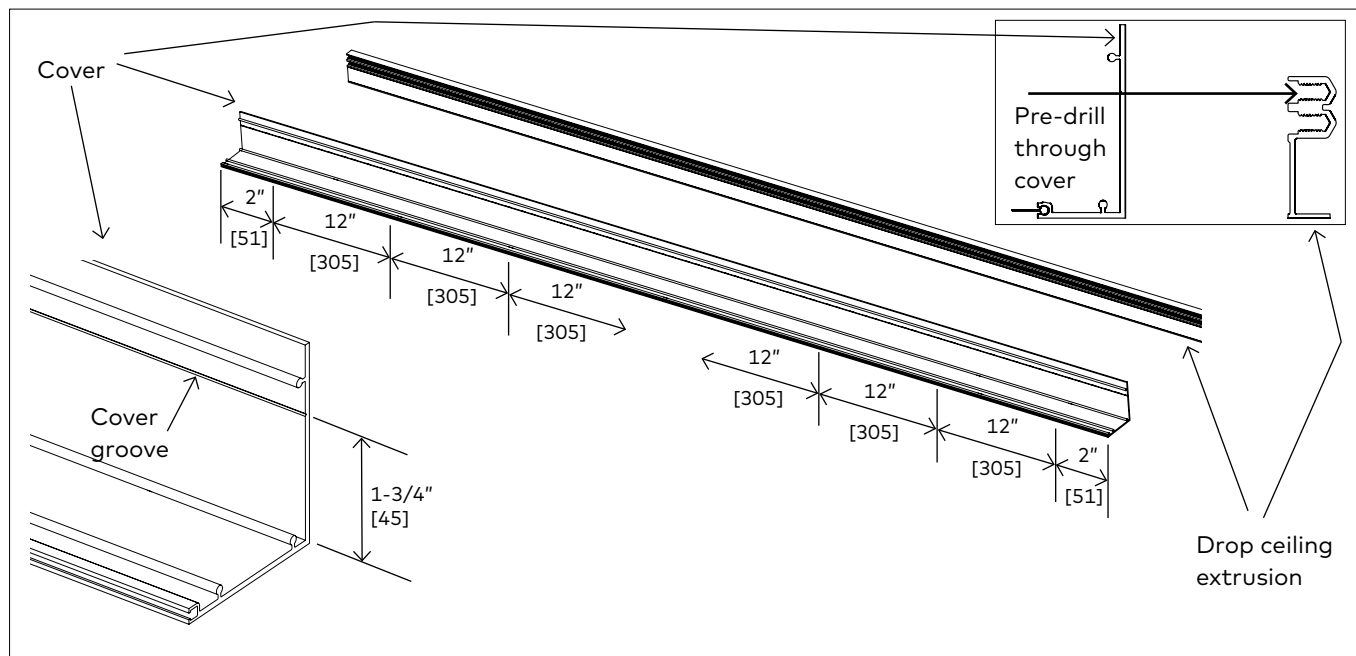
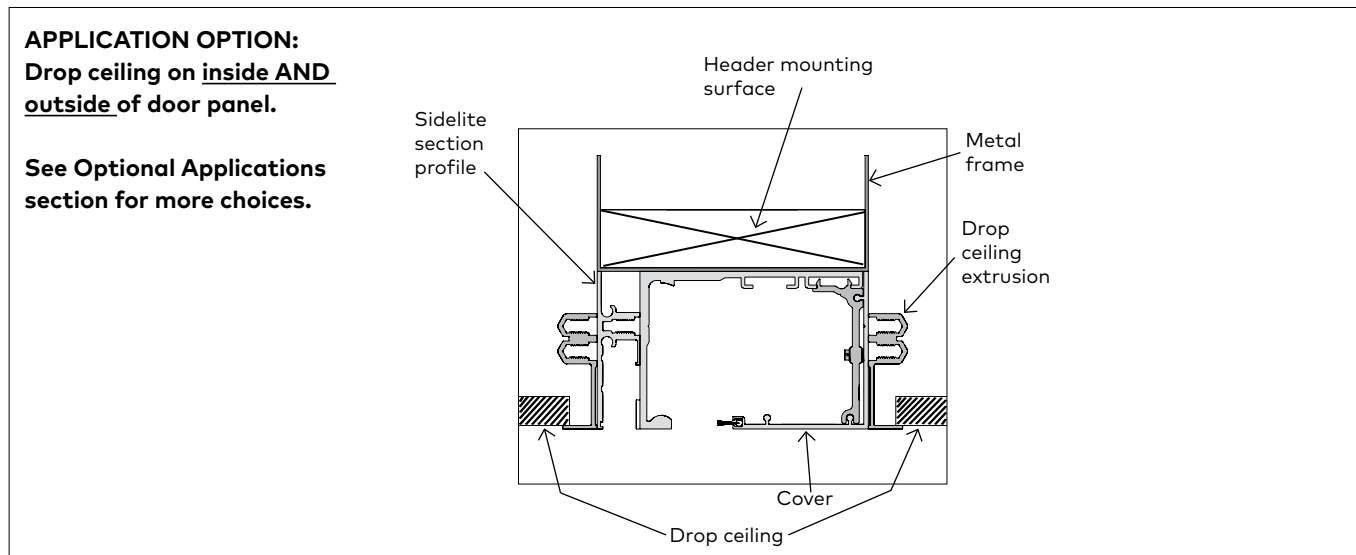
2.26.2 Secure another 'knot' and pull cable through holder as show in image above.

2.26.3 Secure beginning 'knot' in holder clamp.

**NOTE: Be sure there is a 7-7/8" [200] gap between each new 'knot' in the cord.**

## 2.26 Secure drop ceiling extrusion to cover

Fig. 26

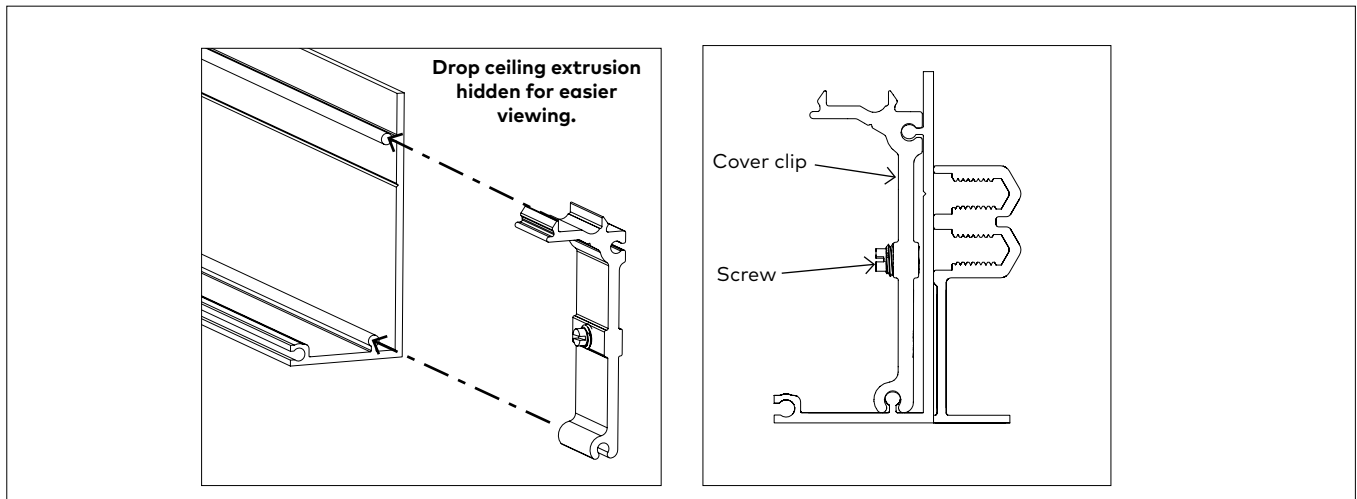


2.26.1 Pre-drill holes through cover groove into drop ceiling extrusion.

- **End holes:** approximately  $2''$  [51] from end of cover
- **All other holes:** approximately  $12''$  [305] apart

## 2.27 Install recessed mount cover clips

Fig. 27

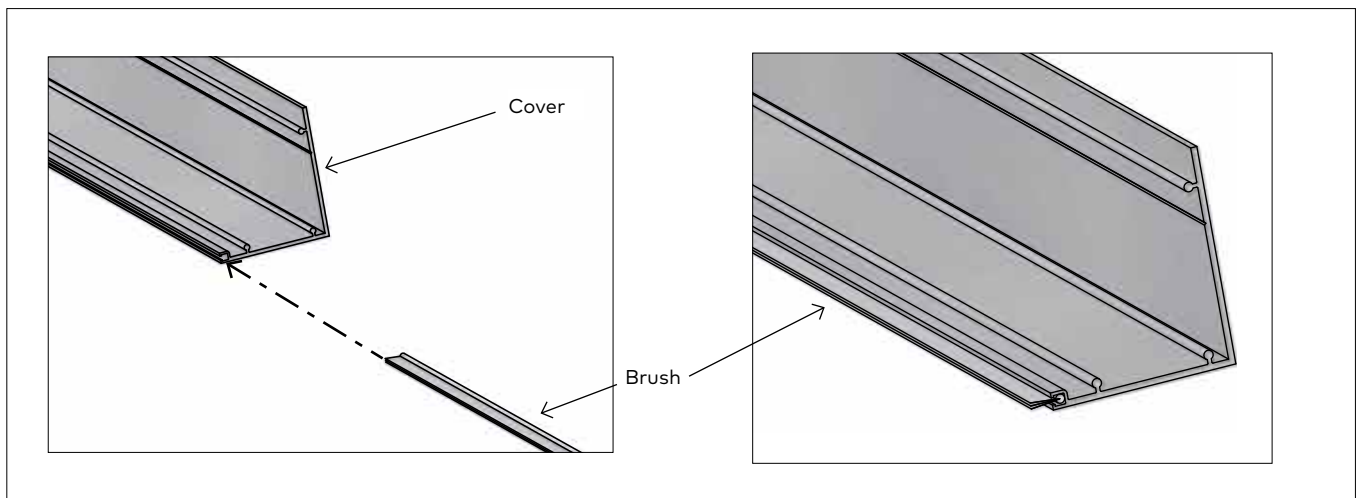


- 2.27.1 Slide cover clips on from end of cover.
- 2.27.2 Tighten with screw. **Be sure not to damage cover.**

**NOTE: 1 clip per 2 feet of cover extrusion.**

## 2.28 Install brush profile

Fig. 28

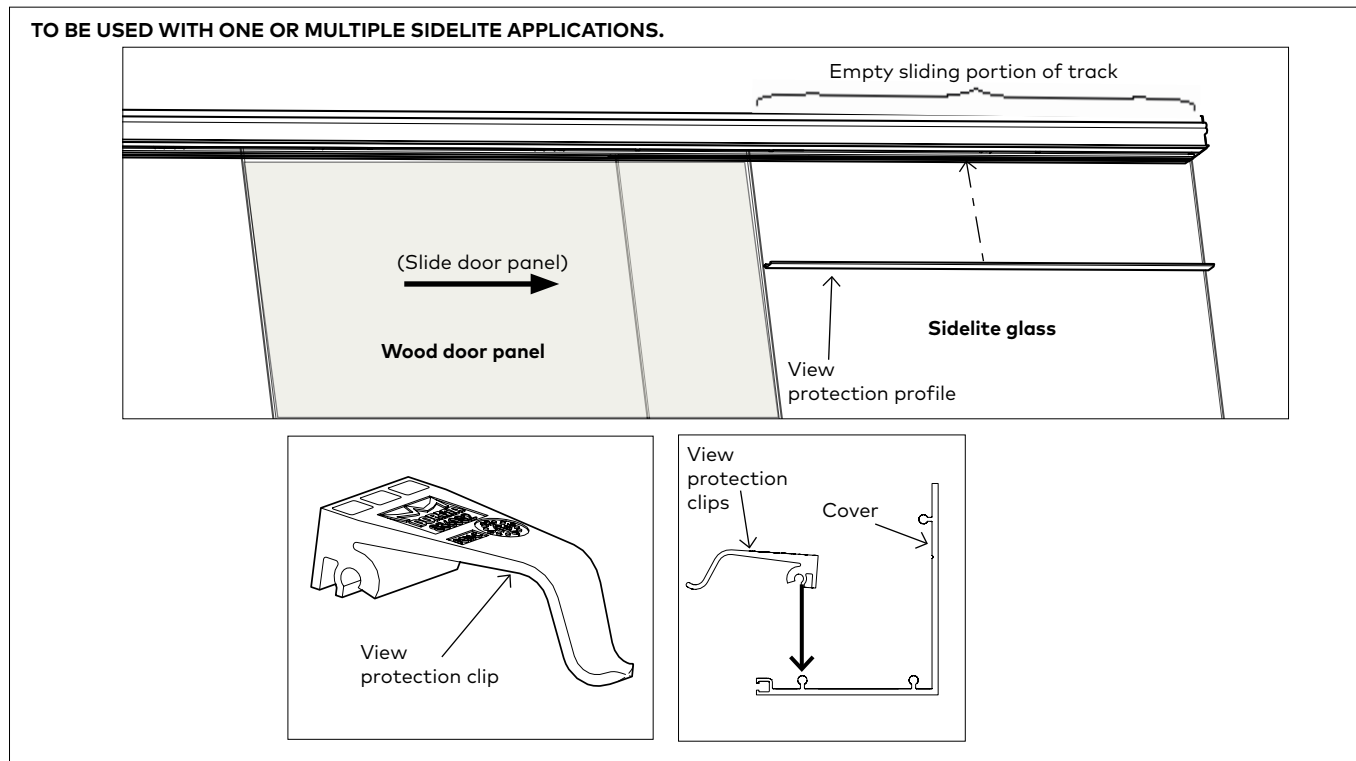


- 2.28.1 Measure and cut brush to appropriate length.

- 2.28.2 Slide brush into cover.

## 2.29 Install view protection profile clips

Fig. 29

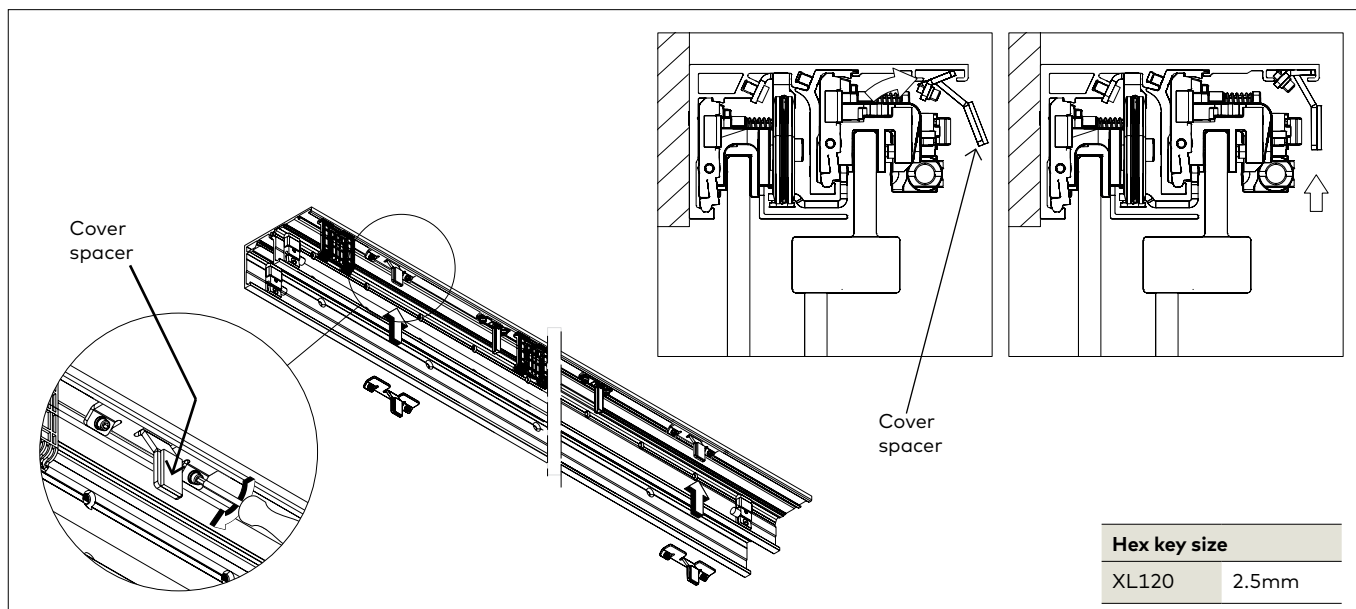


- 2.29.1 Measure and cut view protection profile to fit into empty sliding portion of track - 3/16" [5].
- 2.29.2 Snap view protection clips onto inside of cover as shown.

- 2.29.3 Use minimum 1 clip per foot of profile.  
**Exception: If profile is minimum of 1 foot in length, use 2 clips.**

## 2.30 Cover spacers

Fig. 30

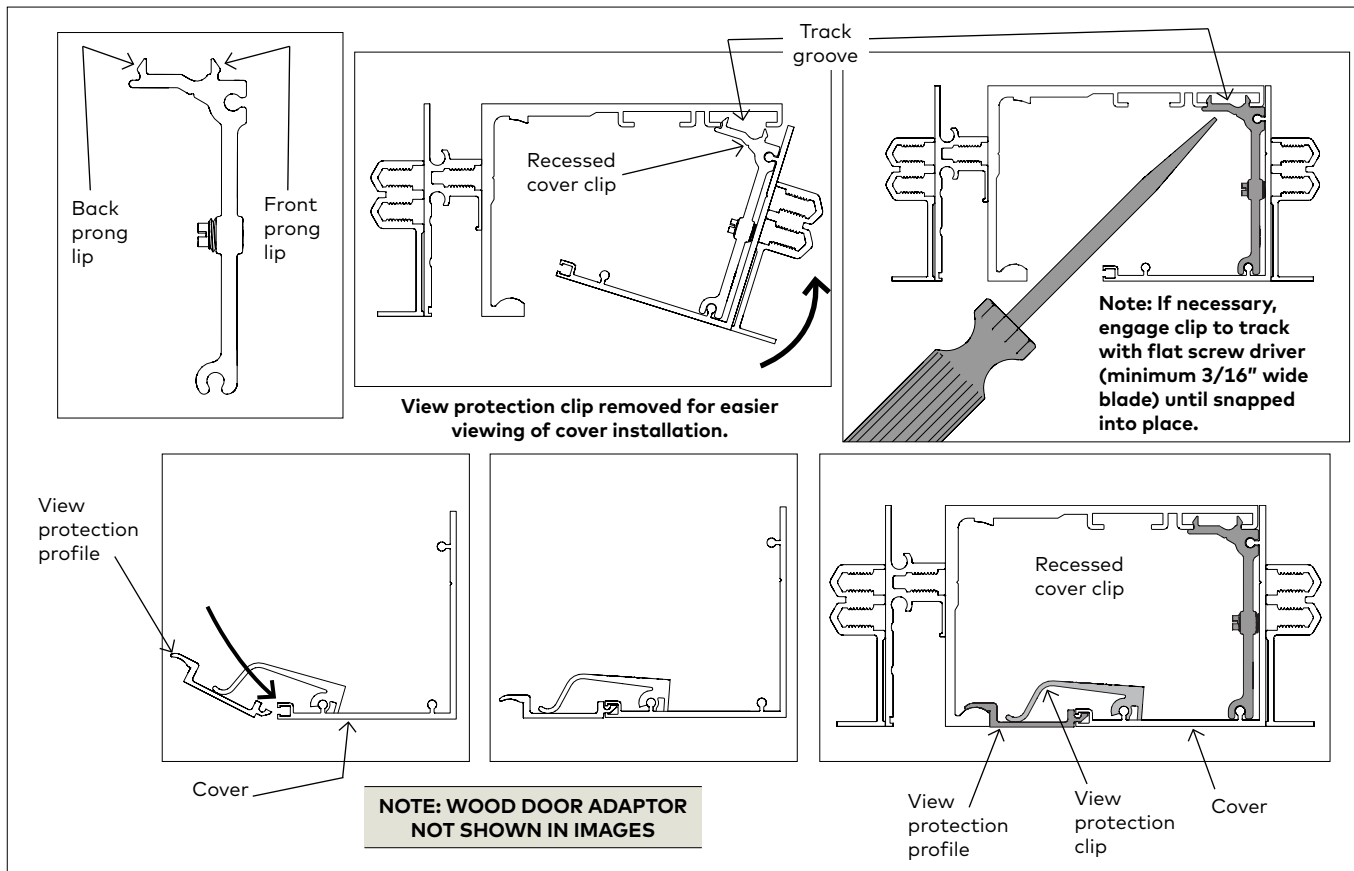


- 2.30.1 Tip cover spacers into outer most edge of track.

- 2.30.2 Place one at each end of track as shown.
- 2.30.3 Tighten at at 1 ft lbs [1Nm] or hand tighten.

## 2.31 Install cover and view protection profile

Fig. 31



### 2.31.1 Install cover:

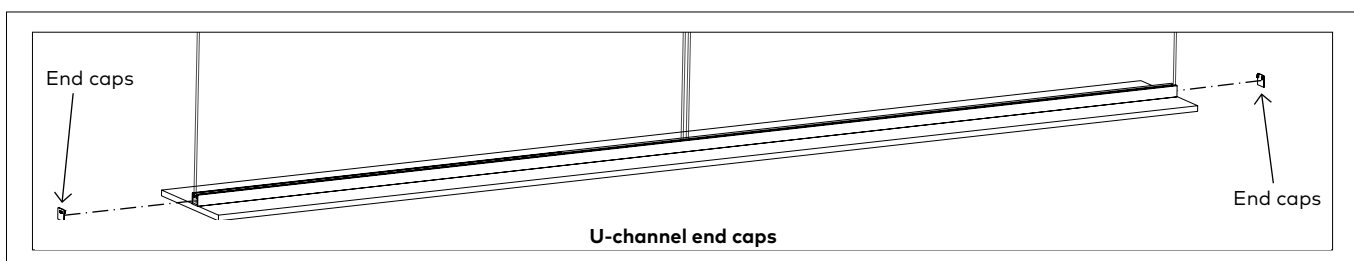
- Insert back prong lip of recessed cover clip into groove first.
- Rotate cover assembly up and then snap front prong lip of clip into track groove.

2.31.2 Once cover is in place, tip view protection profile up in between track and cover.

2.31.3 Snap down into cover and onto track as shown.

## 2.32 Install u-channel end caps

Fig. 32



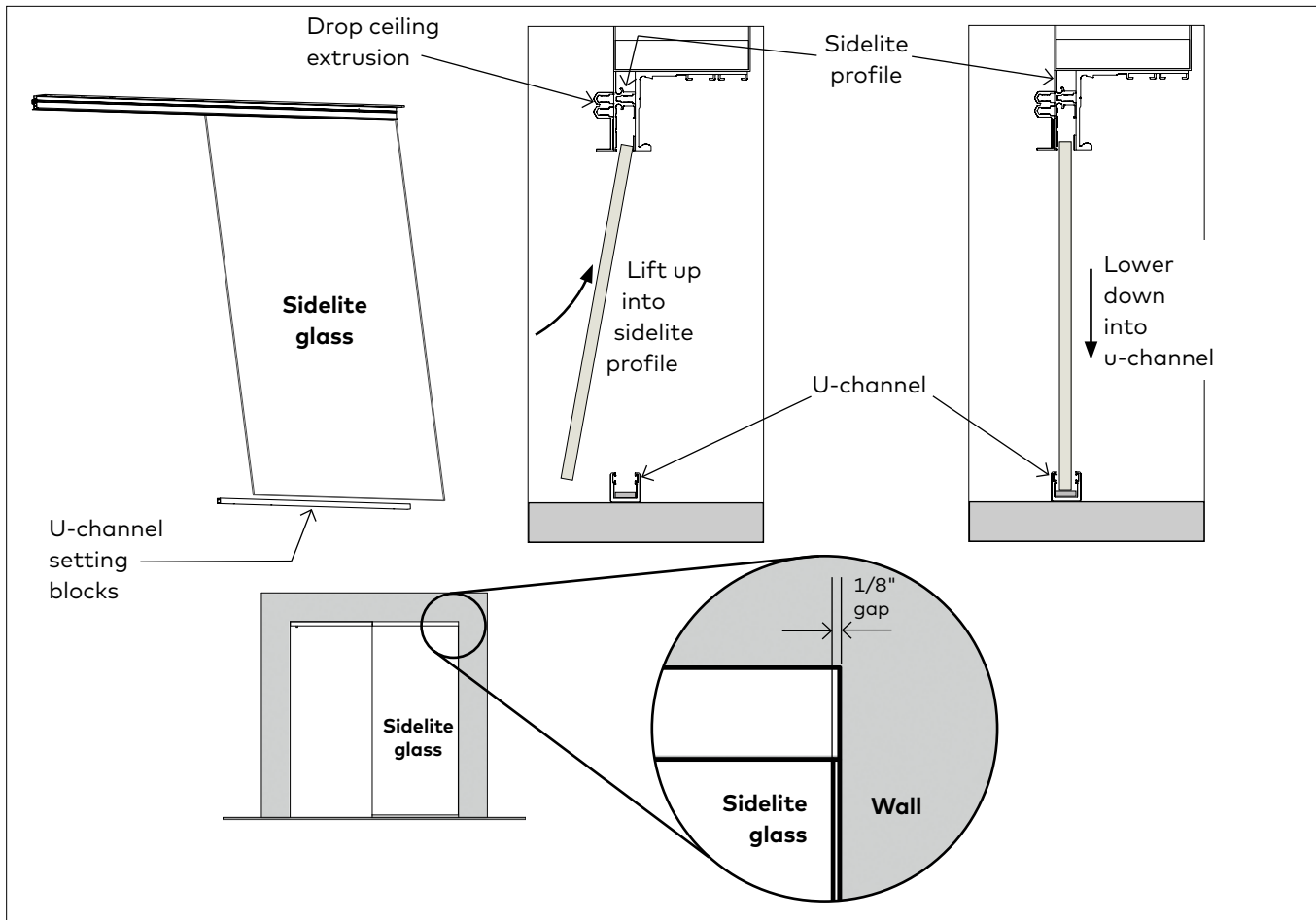
2.32.1 Snap end caps into cover.

2.32.2 Snap end caps into ends of sidelite profile.

2.32.3 Snap end caps into ends of u-channel.

## 2.33 Install sidelite glass

Fig. 33

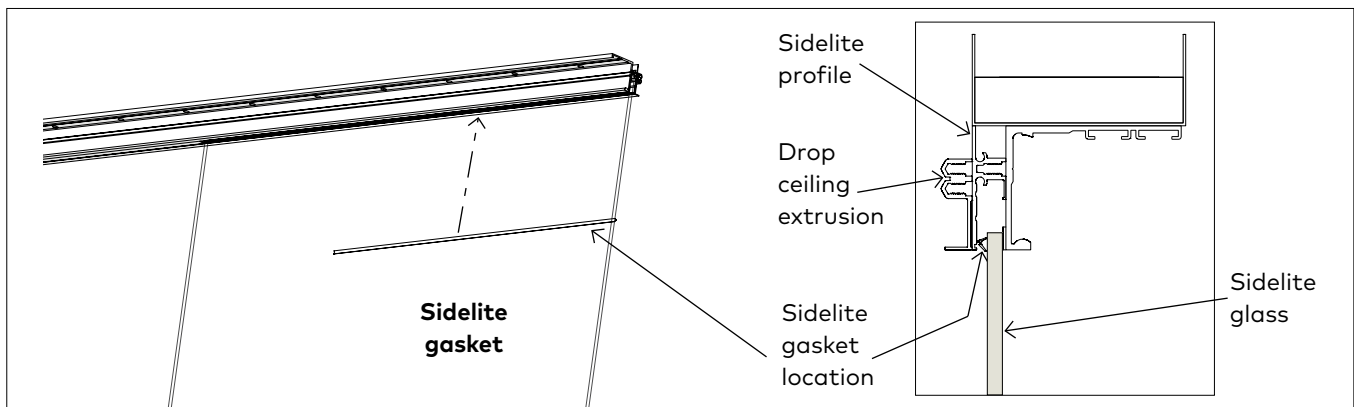


- 2.33.1 Place setting blocks into u-channel.
- 2.33.2 Spray inside of u-channel with glass cleaner.
- 2.33.3 Lift glass up and into sidelite profile.
- 2.33.4 Lower glass into u-channel.

- 2.33.5 Ensure there is 1/8" [3] gap between wall and edge of sidelite glass.
- 2.33.6 If using tempered laminated glass, gently press glass against u-channel gasket, and dispense silicone along full length of non-gasket side of u-channel.

## 2.34 Install sidelite glass gasket

Fig. 34

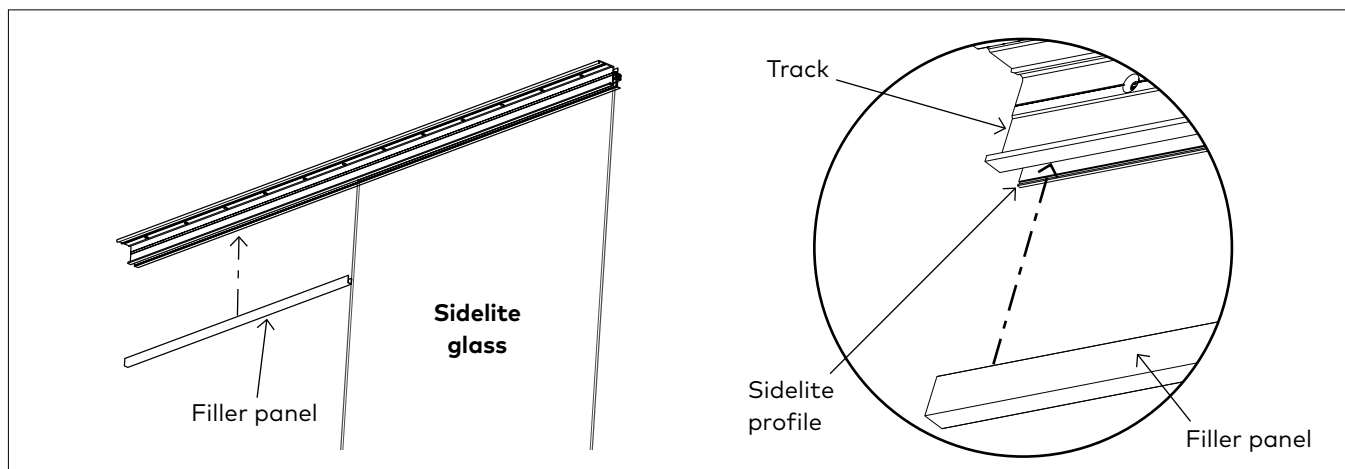


- 2.34.1 Cut gasket to length.

- 2.34.2 Press gasket in between sidelite glass and sidelite profile.

## 2.35 Install sidelite glass filler panel

Fig. 35

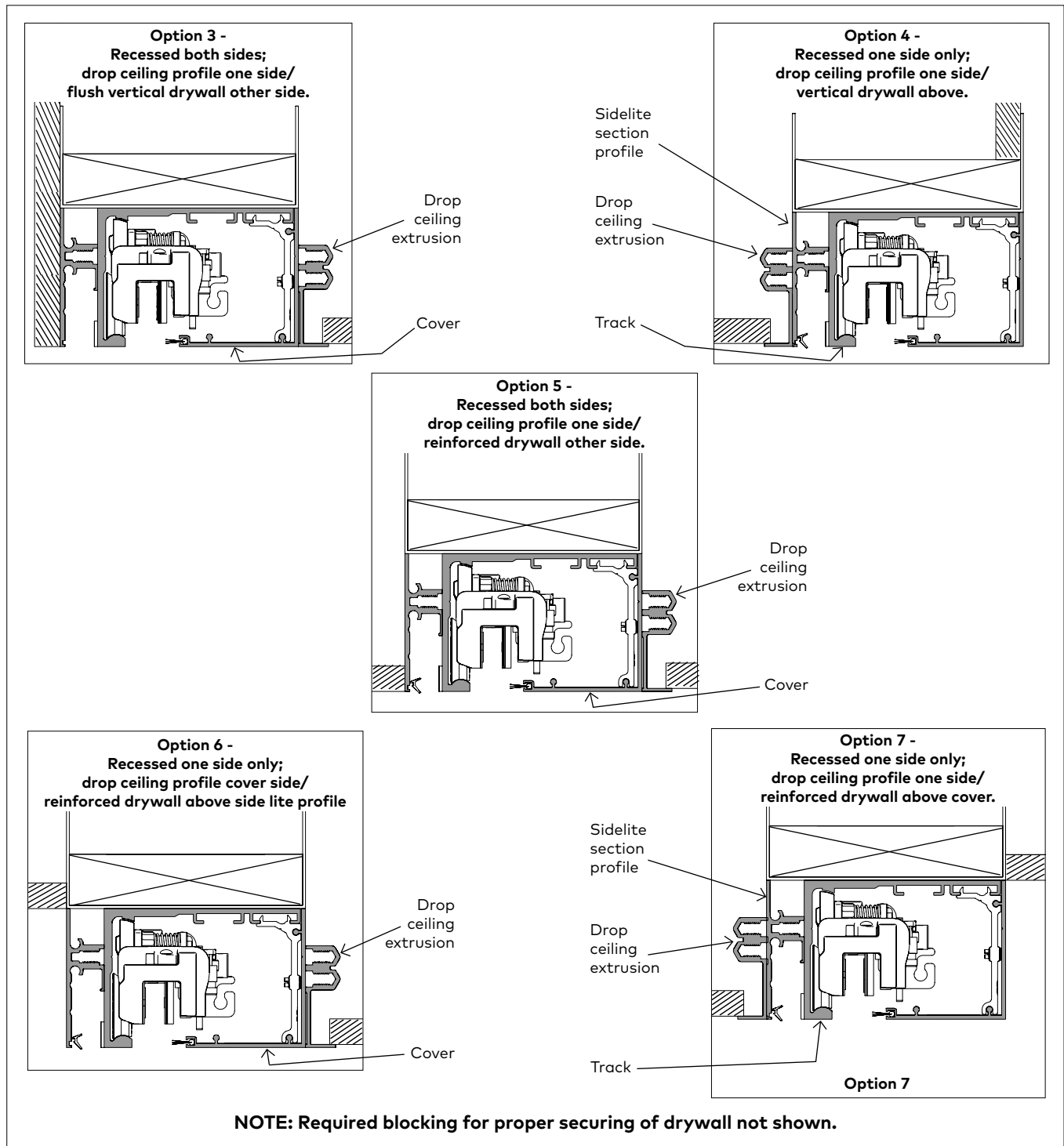


- 2.35.1 Fit filler panel between empty section of track and sidelite profile, on door side.



# 3 Optional applications

Fig. 36





**Scan for product details and downloads.**

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