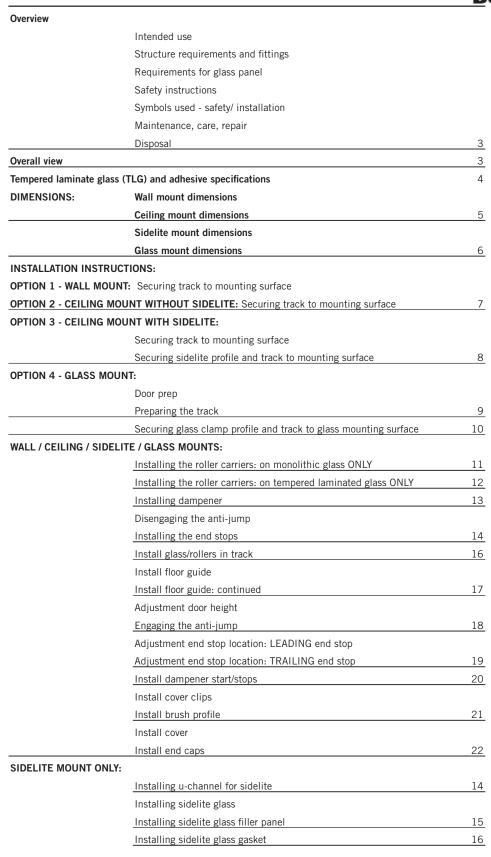


# DORMA INTERIOR

DORMA PURE<sup>®</sup> FAMELESS SLIDING Glass Wall Systems

Installation instructions For Framless Sliding Door Systems; Wall, Ceiling, Sidelite and Glass Mount Applications

### TABLE OF CONTENTS



Toll-Free: 800-523-8483 Fax: 800-274-9724



#### Overview

These instructions are for installation of the PURE® sliding door system for the following mounting and style versions:

- 1. Wall mount
- 2. Ceiling mount (with/without sidelite)
- 3. Glass mount

#### Intended use

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

#### Structure requirements and fittings

- The substructure/wall must be able to bear permanent loads, be level and perpendicular (max. tolerance: 1/16" (2 mm) per meter [39-3/8"]).
- Mounting hardware must be sufficiently dimensioned for the substructure/wall and weight of the door.

#### Requirements for glass panel

- Heat-soaked thermally tempered safety glass
- Clamping area must be level and uncoated (no self-cleaning coating!)

#### Safety instructions

- Installation requires two people
- Always wear protective clothing
  - Symbols used Safety/Installation





#### Risk of breaking glass

technical information for fittings.

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

substructure/wall and door weight. Please read the



#### Information note

Always use silicone- and oil-free cleaners (e.g. acetone).



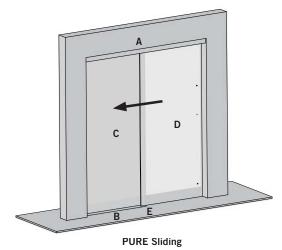
#### Maintenance, care, repair

- immediately replace damaged parts
- always use original DORMA parts
- use a damp cloth for occasional cleaning, especially the track

#### Disposal

Dispose in accordance with local, state and national regulations.

#### **Overall view**



A. PURE® header assembly with roller carriers

- B. Sidelite bottom U-channel (1x1")
- C. Sidelite glass panel
- D. Sliding door panel
- E. Floor guide

DORMA USA, Inc. 926964 11/16 Dorma Drive, Drawer AC Reamstown, PA 17567

#### Tempered laminate glass (TLG) and adhesive specifications

Required parts for laminate glass with MUTO System (not included)	Color	Part Number	Quantity	Usage recommendation
3M <sup>™</sup> Scotch-Weld <sup>™</sup> Urethane Adhesive, DP 605 NS	off white	934.800	1 tube	1 tube per 4 roller carriers
3M <sup>™</sup> Scotch-Weld <sup>™</sup> EPX <sup>™</sup> Plus II Applicator with 2:1 and 1:1 Plunger <sup>2</sup>		934.801	1 applicator	
3M <sup>™</sup> Scotch-Weld <sup>™</sup> EPX <sup>™</sup> Plus II Mixing Square Nozzle, 5.3mm <sup>3</sup>	gold	934.805	(Pk of 4)	4 nozzles per 1 tube of adhesive
Laminated glass components		807.640	1 set	
Handling time frame	Function		Time	
Working life (time between applic and clamping of carrier)		11	n 5 minutes	; @ 75°F
	Handling strength		20 minute	es @ 73°F or more
	Full cure time (time until glass may be completely installed into door)		e 48 hours	@ 73°F or more

NOTE: Door glass should not installed until the full cure time as been reached (see chart above).

Important safety-related information for the mounting and use of DORMA glass hardware.

(Follow these instructions in addition to the mounting and operating instructions in order to avoid damage of product and damage to person or property.)

Important: This document is intended to inform users of safety-related information and the mounting and operation instructions.

#### General information

- 1. DORMA requires use of tempered monlithic glass.
- DORMA glass hardware is not suitable for application in rooms where chemicals (e.g. chlorine) are used as indoor swimming pools, saunas or salt-water pools.
- **3.** Never move sliding panels faster than walking speed and always slow the door manually before it reaches end position.

#### Mounting

- 1. Only properly qualified and specially trained staff is authorized to mount DORMA glass hardware.
- 2. Never use glass with conchoidal fractures and/or damaged edges.
- Due to crushing hazards and possible injury caused by breakage of glass during mounting, corresponding protective clothing (especially gloves and protective goggles) is required.

- 4. Clean clamping area with alcohol-based standard commercial cleaning agent before mounting the glass hardware.
- 5. Never clamp metal glass fitting hardware directly to glass surface.
- **6.** Never use clamping roller carriers on self-cleaning coatings.
- 7. When adjusting glass elements, 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.
- **8.** Do not use excessive force when installing the glass (avoid over tightening screws).

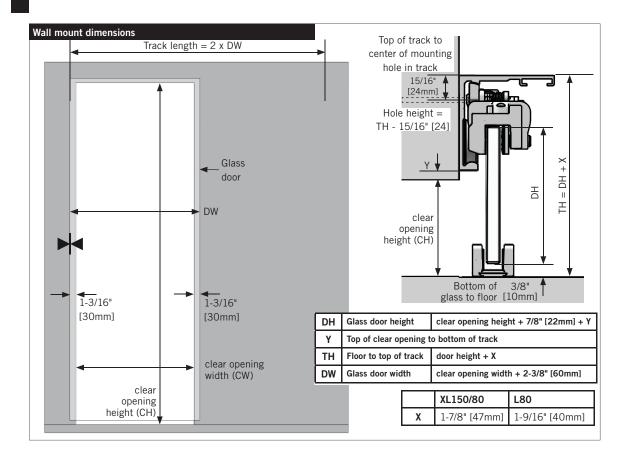
#### Maintenance

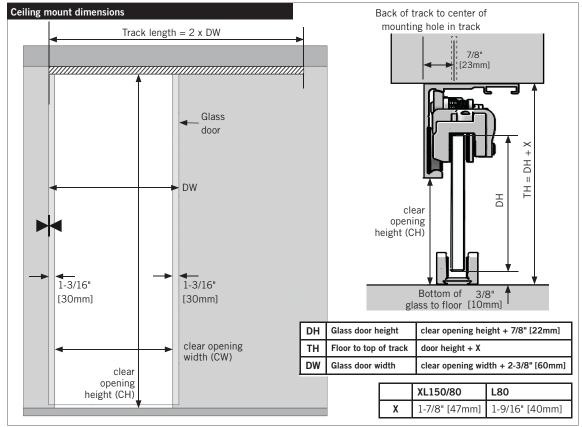
Check glass hardware at regular intervals for proper positioning and smooth operation and correct adjustment. High traffic door systems require inspection by properly qualified staff (specialized companies or installation firms). Immediately replace damaged glass elements (no glass flaking and/or conchoidal fractures)! Only use suitable cleaning and care products to clean the surfaces.

2 Scotch-Weld<sup>™</sup> EPX<sup>™</sup> Plus II Applicator with 2:1 and 1:1 Plunger is a trademark of 3M.

- 3 Scotch-Weld<sup>™</sup> EPX<sup>™</sup> Plus II Mixing Square Nozzle is a trademark of 3M.
- 4 DORMA USA, Inc. 926964 11/16

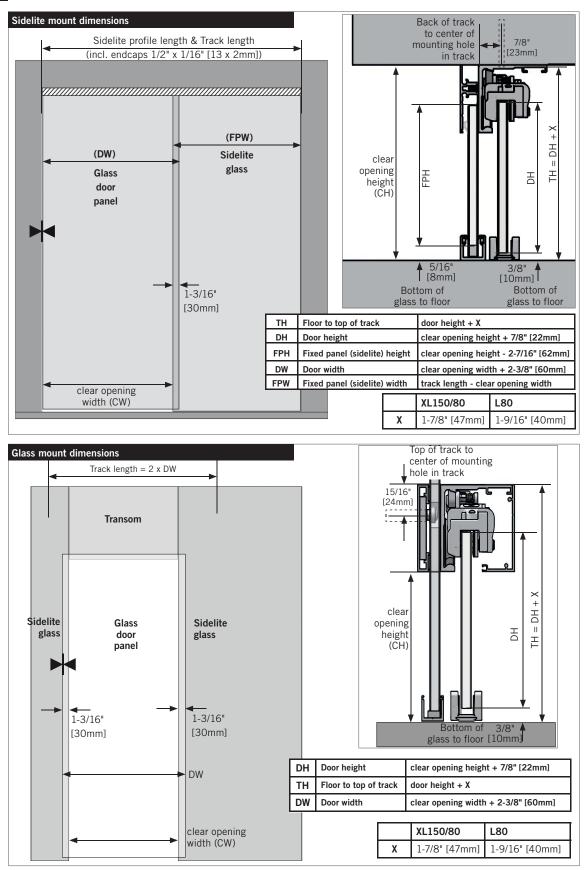
Dorma Drive, Drawer AC Reamstown, PA 17567 Toll-Free:800-523-8483Fax:800-274-9724





DORMA USA, Inc. 926964 11/16 Dorma Drive, Drawer AC Reamstown, PA 17567 Toll-Free: 800-523-8483 Fax: 800-274-9724 Website: www.dorma.com Subject to change without notice

5



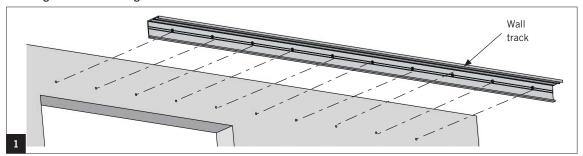
6 DORMA USA, Inc. 926964 11/16

Dorma Drive, Drawer AC Reamstown, PA 17567 Toll-Free: 800-523-8483 Fax: 800-274-9724

#### INSTALLATION INSTRUCTIONS

#### **OPTION 1 - WALL MOUNT:**

Securing track to mounting surface



- **1.1** Ensure the track is level and secure it to the wall per the appropriate measurements on the prior page.
- NOTE: SEE DIMENSION INSTRUCTIONS ON NEXT PAGE FOR REFERENCE.

#### NOTE:

#### WALL REINFORCEMENT:

The wall reinforcement must be a minimum of  $\frac{1}{4}$ " (6mm) x 3" (76mm) steel angle, 16 gauge metal stud, or 1 1/2" (38mm) thick wood blocking secured to the wall studs on a maximum 16" (406mm) centers for the length of the track. The wall reinforcement may be flush on the wall surface or on the interior of the wall. For masonry walls the track may be secured directly to the wall with lead anchors.

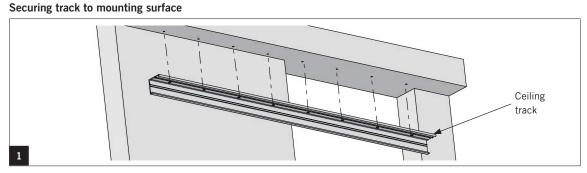
**OPTION 2 - CEILING MOUNT WITHOUT SIDELITE:** 

**1.2** Use appropriate fasteners according to the following recommendations.

NOTE: Ensure screw head is flush with track.

Track mounting screws must fully penetrate the steel angle, metal stud, or 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.



- **1.1** Ensure the track is level and secure it to the ceiling per the appropriate measurements on the following page.
- NOTE: SEE DIMENSION INSTRUCTIONS ON NEXT PAGE FOR REFERENCE.

#### NOTE:

#### OVERHEAD REINFORCEMENT:

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

**1.2** Use appropriate fasteners according to the following recommendations.

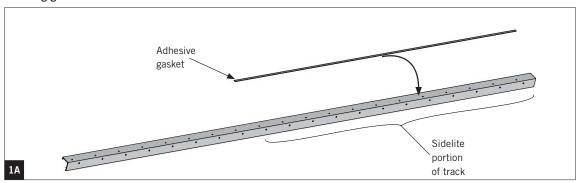
Track mounting screws must fully penetrate the steel angle, metal stud, or at a minimum of 2" (51mm) into wood blocking, utilizing the predrilled holes in the MUTO track.

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

DORMA USA, Inc. 926964 11/16 Dorma Drive, Drawer AC Reamstown, PA 17567

#### **OPTION 3 - CEILING MOUNT WITH SIDELITE:**

Securing gasket to track

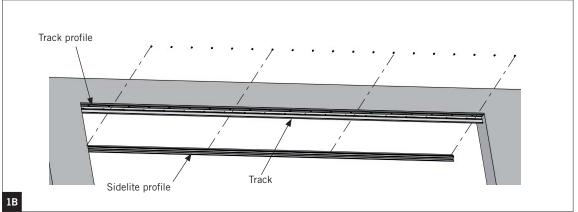


#### 1A.1 Determine handing of door.

1A.2 Ensure the track is cut to proper length.

NOTE: SEE DIMENSION INSTRUCTIONS ON NEXT PAGE FOR REFERENCE.

1A.3 Cut adhesive gasket equal to sidelite glass width. 1A.4 Adhere gasket along bottom edge of back of track.



1B.1 Secure track to mounting surface.

1B.2 Align sidelite profile holes with track profile holes.

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

#### NOTE:

#### **OVERHEAD REINFORCEMENT:**

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

1B.3 Secure with proper fasteners.

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

Track mounting screws must fully penetrate the steel angle, metal stud, or at a minimum of 2" (51mm) 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.

DORMA USA, Inc. 8 926964 11/16 Dorma Drive, Drawer AC Reamstown, PA 17567

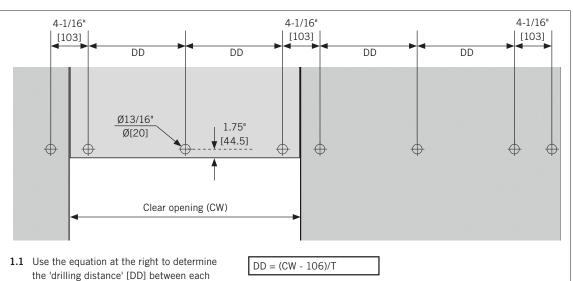
Toll-Free: 800-523-8483 Fax: 800-274-9724

Website: www.dorma.com Subject to change without notice

Securing sidelite profile and track to mounting surface

#### **OPTION 4 - GLASS MOUNT:**

Door prep



- **1.2** First find the measured 'clear opening width' [CW] on the chart at the right.
- 1.3 Determine 'T' for the equation.

hole.

- **1.4** Insert appropriate values into equation and calculate accordingly.
- SEE LEGEND BELOW FOR REFERENCE.

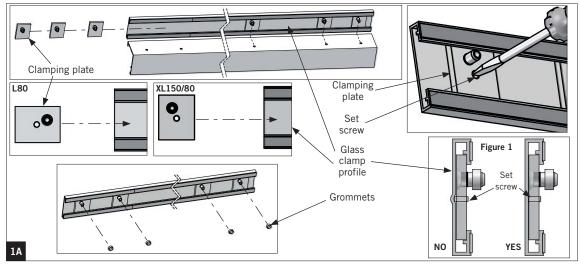
Clear opening width	Т	QHP
$\begin{array}{l} {\sf CW} \geq 23{\text{-}}5/8"[600] \\ {\sf CW} \leq 31{\text{-}}1/2"[800] \end{array}$	2	8
$\begin{array}{l} {\sf CW} > 31\text{-}1/2" \; [800] \\ {\sf CW} \leq 39\text{-}3/8" \; [1000] \end{array}$	3	10
CW > 39-3/8" [1000] CW ≤ 47-1/4" [1200]	4	12
$\begin{array}{l} {\sf CW} > 47\text{-}1/4" \; [1200] \\ {\sf CW} \leq 59\text{-}1/16" \; [1500] \end{array}$	5	14

LEGEND				
Abbreviation	Description			
CW	Clear opening width			
DD	Drilling distance			
Т	Division variable			
QHP	Qty of hole preps			

	XL 150 (with dampener)	XL 80 (with dampener)
Min. door width	40-1/8" [1020]	31-7/8" [810]
Min. clear opening width	37-13/16" [960]	29-1/2" [750]
Max. door width	57" [1450]	57" [1450]
Max. clear opening width	54-3/4" [1390]	54-3/4" [1390]

#### **OPTION 4 - GLASS MOUNT (CONTINUED):**

Preparing the track

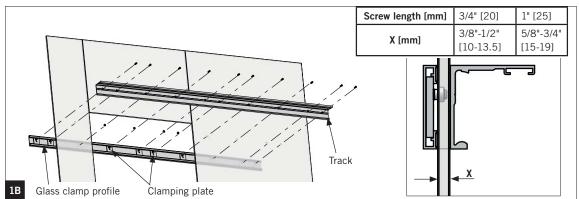


1A.1 Slide clamping plates into end of glass clamp profile.NOTE: Quantity dependent upon number of holes in track.1A.2 Orient plates properly as shown above; L80 or XL150/80.

1A.3 Secure via set screw.

NOTE: Be sure set screw does not indent back of glass clamp profile. See Figure 1 for reference.

1A.4 Secure grommets to each clamping plate peg.



#### Securing glass clamp profile and track to glass mounting surface

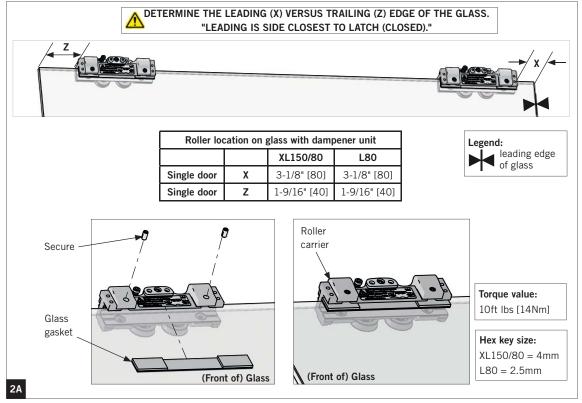
 $\label{eq:1B.1} \textbf{B.1} \ \textbf{Ensure the track is level}.$ 

**1B.2** Align glass clamp profile clamping plates and track through glass mounting surface.

**1B.3** Secure with proper fasteners per chart above. **NOTE: SEE DIMENSION INSTRUCTIONS ON PRIOR PAGE FOR REFERENCE.** 

#### WALL / CEILING / SIDELITE / GLASS MOUNTS:

Installing the roller carriers: on monolithic glass ONLY



#### **NOTE: FULLY CLEAN SURFACE OF GLASS WITH AN ALCOHOL-BASED MILD GLASS AND SURFACE CLEANER. ENSURE** NO DEBRIS IS ON THE GASKET.

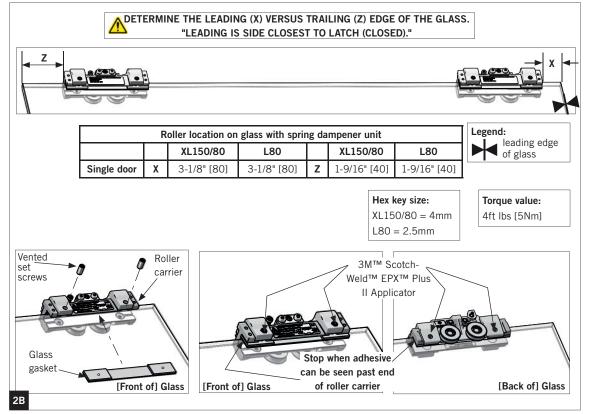
**2A.1** Slide roller carriers onto glass.

**2A.2** Slide glass gasket and metal shim between glass and roller carrier.

- NOTE: Orient gasket with rubber side facing the glass.
- **2.3** Secure roller carriers to glass using appropriate-size hex key at 10ft lbs (14 Nm).

#### WALL / CEILING / SIDELITE / GLASS MOUNTS:

Installing the roller carriers: on tempered laminate glass ONLY



NOTE: THE RECOMMENDED ADHESIVE'S SET-UP TIME IS 20 MINUTES FOR THE DUO-PAK CARTRIDGES. NOTE: FULLY CLEAN SURFACE OF GLASS WITH AN ALCOHOL-BASED MILD GLASS AND SURFACE CLEANER. ENSURE NO DEBRIS IS ON THE GASKET.

2B.1 Slide carriers onto glass.

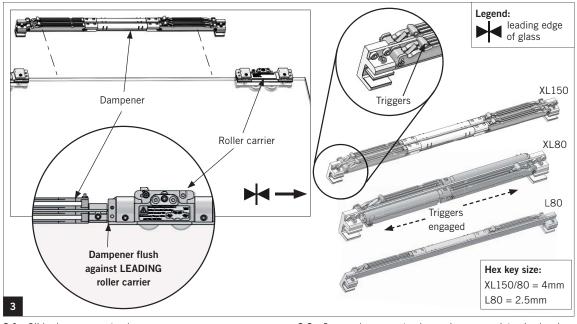
**2B.2** Slide laminated glass gasket and metal shim between glass and roller carrier.

#### NOTE: Orient gasket with rubber side facing the glass.

- **2B.3** Tighten vented set screws using a torque wrench with 4 ft-lbs [5Nm].
- NOTE: Onto scrap material, first dispense approximately 12" of 3M<sup>™</sup> Scotch-Weld<sup>™</sup> Urethane Adhesive prior to application to prevent mixing errors and ensure optimal hardening.
- Dispense adhesive into vented set screws on both sides of carrier.
- Stop application when adhesive can be seen past edge of roller carrier.
- <u>DO NOT WIPE</u> any excess adhesive from glass surface. Allow adhesive to dry and scrape off glass surface with a bevelededge chisel or putty knife.
- NOTE: Keep glass flat during curing process.
- NOTE: See chart in Specifications section for appropriate curing time.

#### WALL / CEILING / SIDELITE / GLASS MOUNTS:

Installing dampener



**3.1** Slide dampener onto glass.

NOTE: Oriented with triggers facing outward.3.2 Dampener must be flush against leading roller carrier.

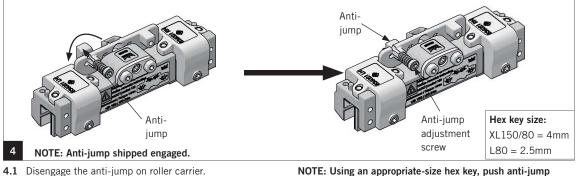
NOTE: Leading carrier is on side of glass closest to latch.

**3.3** Secure dampener to glass using appropriate-size hex key.

**3.4** Engage triggers: push out towards end of unit.

#### WALL / CEILING / SIDELITE / GLASS MOUNTS:

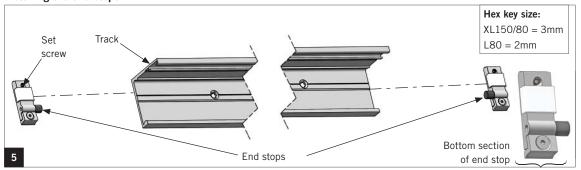
Disengaging the anti-jump



NOTE: Using an appropriate-size hex key, push anti-jump adjustment screw IN and turn COUNTER-CLOCKWISE to disengage anti-jump.

#### WALL / CEILING / SIDELITE / GLASS MOUNTS:

### Installing the end stops



5.1 Slide end stops into each end of the track. NOTE: Loosen bottom section of end stop for easier install. NOTE: FOR XL150 end stops, be sure set screw is flush with back of bumper.

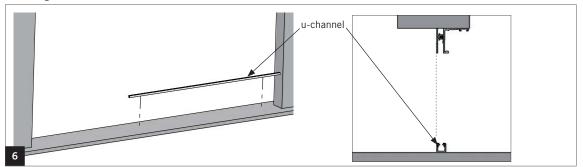
NOTE: Exact location/adjustments will be determined in step 15.

#### WALL / CEILING / GLASS MOUNTS:

If <u>NOT</u> using a sidelite application, skip to step #10.

#### SIDELITE MOUNT ONLY:

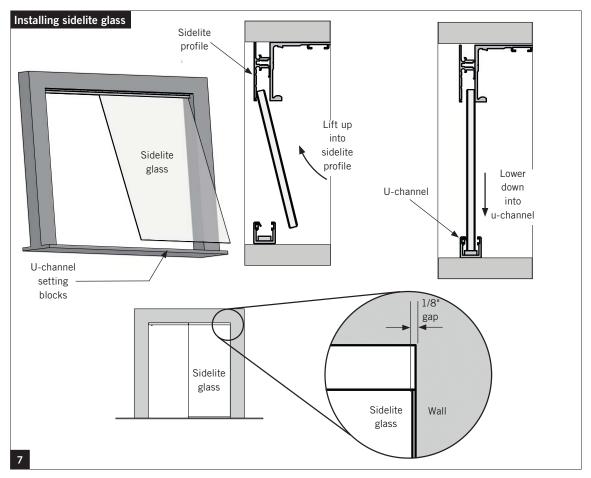
Installing u-channel for sitelite



**6.1** Secure u-channel to floor using appropriate fasteners.

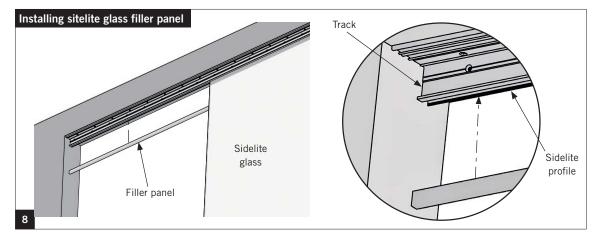
NOTE: Ensure u-channel is plumb and the back of the u-channel profile aligns with back of sidelite profile. NOTE: Gaskets are pre-installed.

14 DORMA USA, Inc. 926964 11/16 Dorma Drive, Drawer AC Reamstown, PA 17567 Toll-Free:800-523-8483Fax:800-274-9724



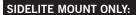
- 7.1 Place setting blocks into u-channel.
- 7.2 Spray inside of u-channel with glass cleaner.
- 7.3 Lift glass up and into sidelite profile.
- 7.4 Lower glass into u-channel.

- **7.5** Ensure there is 1/8" [3] gap between wall and edge of sidelite glass.
- **7.6** 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.

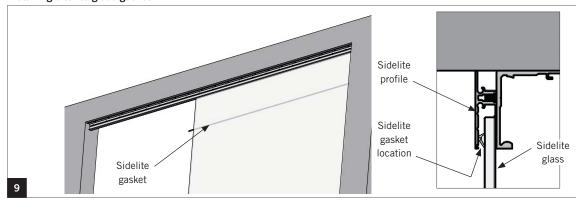


**8.1** Fit filler panel between track and sidelite profile, on door side.

DORMA USA, Inc. 926964 11/16 Dorma Drive, Drawer AC Reamstown, PA 17567

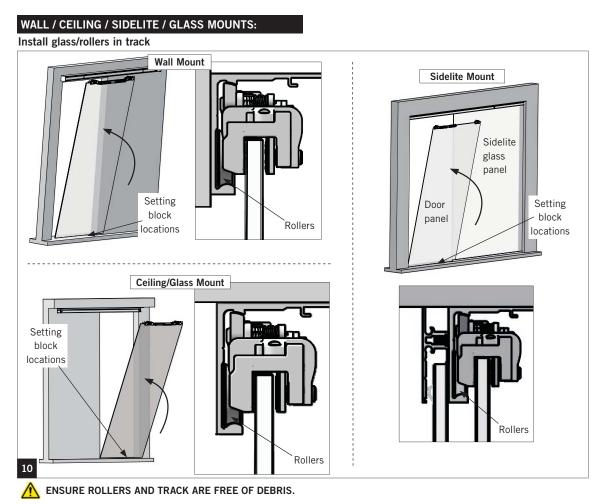


Installing sitelite glass gasket



9.1 Cut gasket to length.

**9.2** Press gasket in between sidelite glass and sidelite profile.



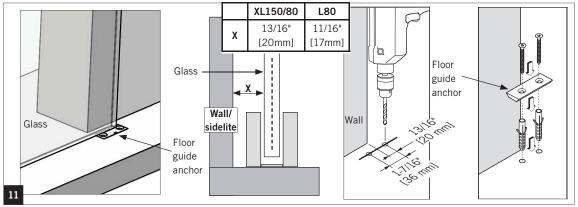
**10.1** Place glass on setting blocks on floor for stability.

**10.2** Tip glass and rollers upward and rest rollers on track.

16 DORMA USA, Inc. 926964 11/16 Dorma Drive, Drawer AC Reamstown, PA 17567 Toll-Free:800-523-8483Fax:800-274-9724

#### WALL / CEILING / SIDELITE / GLASS MOUNTS:

Install floor guide



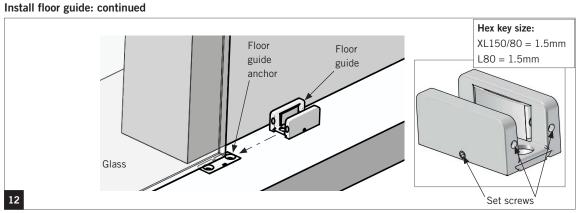
**11.1** Separate floor guide pieces.

11.1 Align centerline of glass with centerline of floor guide.11.2 Be sure glass is plumb.

WALL / CEILING / SIDELITE / GLASS MOUNTS:

NOTE: Center of floor guide should be 13/16" [20mm] off the edge of the wall.

- **11.3** Mark appropriate floor guide measurements and remove glass and rollers from track.
- **11.4** Pre-drill into mounting surface using a 5/16" drill bit.
- 11.5 Secure floor guide with anchor and fasteners.



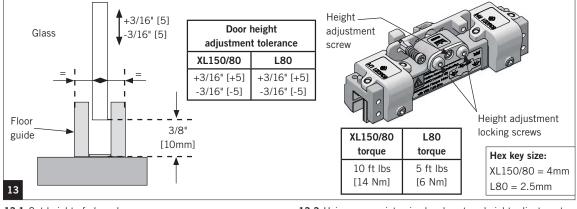
**12.1** Set glass and rollers onto track.

**12.2** Slide floor guide over floor guide anchor and tighten with set screws.

12.3 Remove setting blocks. NOTE: Be sure glass is centered in floor guide.

#### WALL / CEILING / SIDELITE / GLASS MOUNTS:

Adjustment door height



13.1 Set height of glass door.

**13.2** Using appropriate-size hex key, loosen height adjustment locking screws of carrier.

WALL / CEILING / SIDETITE / GLASS MOUNTS:

**13.3** Using appropriate-size hex key, turn height adjustment screw **CLOCKWISE** or **COUNTER-CLOCKWISE** to raise or lower glass.

NOTE: Be sure glass is level during this adjustment.

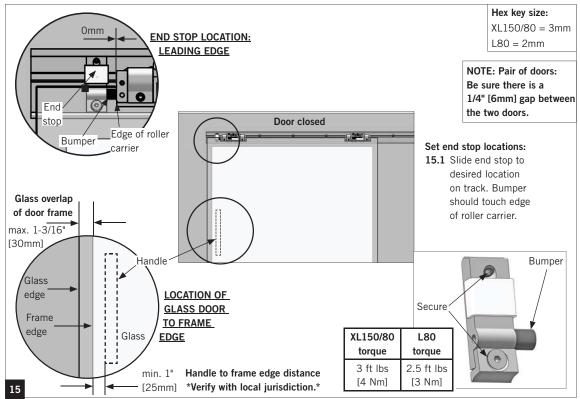
### Engaging the anti-jump Anti-jump Anti-jump adjustment screw Mex key size: XL150/80 = 4mm L80 = 2.5mm

14.1 Engage anti-jump on roller carrier.

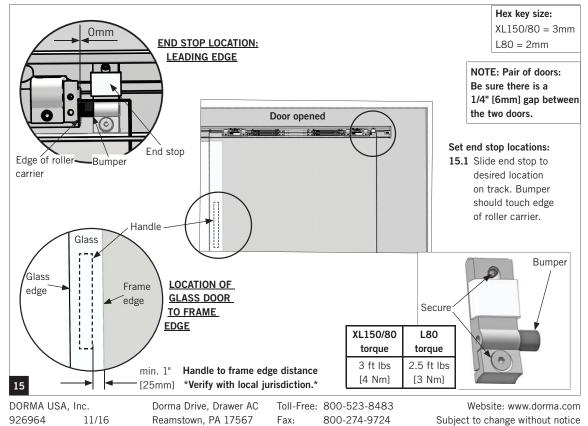
NOTE: Using appropriate-size hex key, push anti-jump adjustment screw IN and turn CLOCKWISE to engage anti-jump.

### WALL / CEILING / SIDELITE / GLASS MOUNTS:

Adjustment end stop location: LEADING END STOP



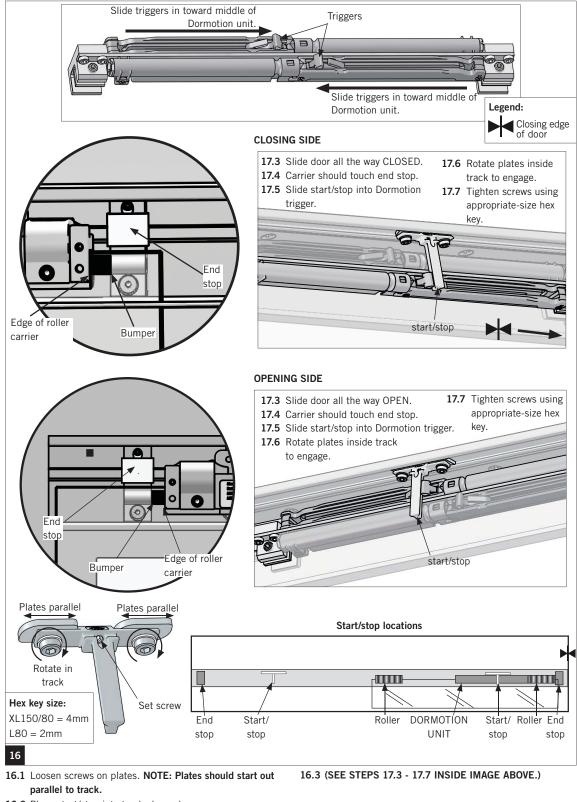
Adjustment end stop location: TRAILING END STOP



<sup>19</sup> 

#### WALL / CEILING / SIDELITE / GLASS MOUNTS:

Install dampener start/stops

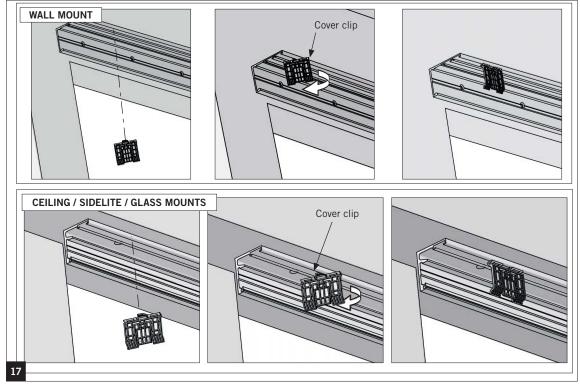


16.2 Place start/stop into track channel.

20 DORMA USA, Inc. 926964 11/16 Dorma Drive, Drawer AC Reamstown, PA 17567 Toll-Free:800-523-8483Fax:800-274-9724

#### WALL / CEILING / SIDELITE / GLASS MOUNTS:

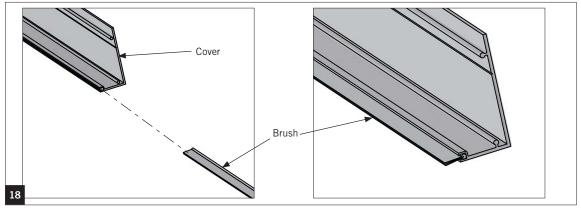
Install cover clips



- 17.1 Insert cover clips into track. (One clip per foot)
- 17.2 Insert perpendicular to track, and turn **CLOCKWISE** to snap into place.

#### WALL / CEILING / SIDELITE / GLASS MOUNTS:

Install brush profile



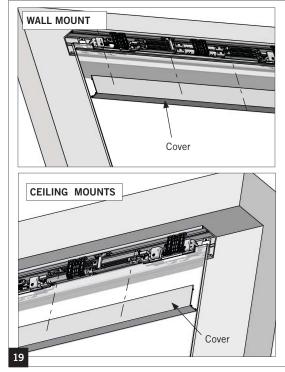
18.1 Measure and cut brush to appropriate length.

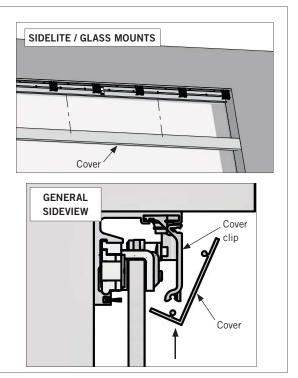
18.2 Slide brush into cover.

DORMA USA, Inc. 926964 11/16 Dorma Drive, Drawer AC Reamstown, PA 17567

#### WALL / CEILING / SIDELITE / GLASS MOUNTS:

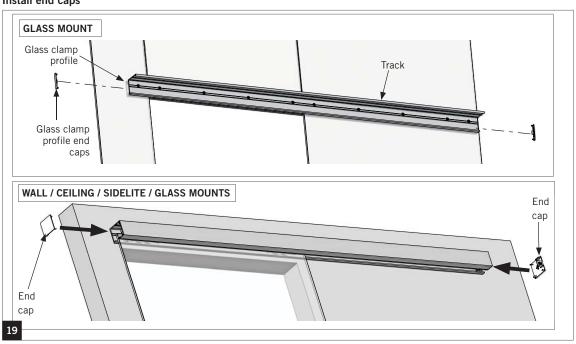
Install cover





19.1 Secure cover to clips and snap into place.

NOTE: Roll cover from the bottom upwards. Ensure the bottom of the cover is supported by the groove in the cover clip.



#### WALL / CEILING / SIDELITE / GLASS MOUNTS: Install end caps

19.1 Snap end caps onto track.

22 DORMA USA, Inc. 926964 11/16 Dorma Drive, Drawer AC Reamstown, PA 17567 Toll-Free: 800-523-8483 Fax: 800-274-9724

ends of glass clamp profile.

Website: www.dorma.com Subject to change without notice

19.2 Glass mount only: Slide glass clamp profile end caps into



DORMA USA, INC. DORMA DRIVE, DRAWER AC REAMSTOWN, PA 17567 TOLL-FREE: 800-523-8483 FAX: 800-274-9724 WEBSITE: WWW.DORMA.COM