Muto Premium Recessed Mount
XL150/80/120 Fixed Panel ONLY - Ceiling mount

Installation instructions
936036 – 05-2018
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1 Technical specifications

1.1 Overview

These instructions are for installation of MUTO Premium fixed door panels only for XL 150/80/120 for the following mounting and style versions:

1. Recessed mounting

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.

1.1.2 Intended use

- For fixed panel doors in indoor or covered areas 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.

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 Tempered laminate glass (TLG) and adhesive specifications

<table>
<thead>
<tr>
<th>Required parts for laminate glass with MUTO System (not included)</th>
<th>Part Number</th>
<th>Quantity</th>
<th>Usage recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>3M™ Scotch-Weld™ Urethane Adhesive, DP 605 NS</td>
<td>934.800</td>
<td>1 tube</td>
<td>1 tube per 4 roller carriers</td>
</tr>
<tr>
<td>3M™ Scotch-Weld™ EPX™ Plus II Applicator with 1:1 Plunger ²</td>
<td>934.801</td>
<td>1 applicator</td>
<td>1:1 plunger with 934.800 adhesive</td>
</tr>
<tr>
<td>3M™ Scotch-Weld™ EPX™ Plus II Mixing Square Nozzle, 5.3mm ³</td>
<td>934.805</td>
<td>Pk of 4</td>
<td>4 nozzles per 1 tube of adhesive</td>
</tr>
<tr>
<td>MUTO TLG gasket set</td>
<td>807.640</td>
<td>1 set</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Handling time frame</th>
<th>Function</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Working life (time between application and clamping of carrier)</td>
<td>5 minutes @ 75°F</td>
</tr>
<tr>
<td></td>
<td>Handling strength</td>
<td>20 minutes @ 73°F or more</td>
</tr>
<tr>
<td></td>
<td>Full cure time (normal door usage not recommended until full cure time as been met)</td>
<td>48 hours @ 73°F or more</td>
</tr>
</tbody>
</table>

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

1.1 Clean clamping area with alcohol-based standard commercial cleaning agent before mounting the glass hardware.

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

1.2 Never clamp metal fitting hardware directly to glass surface.

1.3 Never use clamping products on surfaces with self-cleaning coatings.

² Scotch-Weld™ EPX™ Plus II Applicator with 1:1 Plunger is a trademark of 3M.
³ Scotch-Weld™ EPX™ Plus II Mixing Square Nozzle is a trademark of 3M.
2.1 Overall

1.1 Drop ceiling extrusion (optional)
1.2 Cover
1.3 Recessed cover clips
1.4 View protection clips
1.5 View protection profile
1.6 Sidelite glass gasket
1.7 Track (120/150/80)
1.8 Sidelite section profile
1.9 U-channel end caps (x2)
1.10 U-channel
1.11 U-channel gasket
2.2  Securing gasket to track

Fig. 1  Sidelite gasket

2.2.1  Ensure track is cut to proper length.

NOTE: SEE DIMENSION INSTRUCTIONS ON PAGE 10.

2.2.2  Cut adhesive gasket equal to track length.

2.2.3  Adhere gasket along bottom edge of back of track.

2.3  Secure sidelite section profile to track

Fig. 2  MUTO ceiling mount track

2.3.1  Align sidelite profile screw slot with track profile holes.

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

2.3.2  Secure with provided fasteners.

NOTE: LEAVE EVERY OTHER HOLE EMPTY ONLY if securing drop ceiling extrusion.
2.4 Secure track and sidelite extrusion into ceiling
(and drop ceiling extrusion, if supplied)

Fig. 3 Drop ceiling extrusion

OPTION 1:
If recessed ON BOTH SIDES; DRYWALL VERTICALLY MOUNTED, reference the following images:

- XL150/80 = min. 3-3/4" [95]
- XL120 = min. 4-13/16" [123]

OPTION 2: If recessed ON BOTH SIDES; MAY BE DROP CEILING PROFILE OR REINFORCED DRYWALL, reference the following images:

- Drill 1/4" pilot holes through remaining empty holes in track, through sidelite profile.
- Secure drop ceiling extrusion to track and sidelite profile with 1-3/8" [35] fasteners provided.

See other Optional Applications at back of installation instructions.
2.5 Secure track to mounting surface

2.5.1 Ensure track is properly level and secure it to the header mounting surface 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 $\frac{1}{4}''$ [6] x 3'' [76] steel angle, 16 gauge metal stud, 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.

2.5.2 Use appropriate fasteners according to the following recommendations.
2.6 Door/wall dimensions

Sidelite mount: XL150/XL80

Sidelite mount: XL120
2.7 Installing U-channel for sidelite

Fig. 4 U-channel

Orient gasket(s) as shown.

2.7.1 Install gaskets as shown. Trim to correct length.
2.7.2 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.

⚠️ ACTUAL SIDELITE GLASS INSTALLED IN STEP 2.13.
2.8 Secure drop ceiling extrusion to cover

**APPLICATION OPTION:**
Drop ceiling on inside AND outside of door panel.

See Optional Applications section for more choices.

2.8.1 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
2.9  Install drop ceiling cover clips

Fig. 6  Drop ceiling extrusion cover clips

2.9.1  Slide cover clips on from end of cover.
2.9.2  Tighten with screw. **Be sure not to damage cover.**

NOTE: 1 clip per 2 feet of cover extrusion.

2.10  Cover spacers

Fig. 7  Cover spacers

2.10.1  Tip cover spacers into outer most edge of track.
2.10.2  Place one at each end of track as shown.
2.10.3  Tighten at at 0.7 ft lb [1Nm] or hand tighten.

<table>
<thead>
<tr>
<th>Hex key size</th>
<th>XL150</th>
<th>2.5mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>L80</td>
<td>2.5mm</td>
<td></td>
</tr>
</tbody>
</table>
2.11 Install view protection clips

TO BE USED WITH ONE OR MULTIPLE SIDELITE APPLICATIONS.

2.11.1 Measure and cut view protection profile to fit into empty sliding portion of track - 3/16" [5].

2.11.2 Snap view protection clips onto inside of cover as shown.

2.11.3 Use minimum 1 clip per foot of profile. Exception: If profile is minimum of 1 foot in length, use 2 clips.
2.12 Install cover and view protection profile

Fig. 9 Cover and profile

2.12.1 **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.

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

2.12.3 Snap down into cover and onto track as shown.

View protection clip removed for easier viewing of cover installation.

Note: If necessary, engage clip to track with flat screw driver (minimum 3/16" wide blade) until snapped into place.
2.13 Installing sidelite glass

Fig. 10  Sidelite glass

2.13.1 Place setting blocks into u-channel.
2.13.2 Spray inside of u-channel with glass cleaner.
2.13.3 Lift glass up and into sidelite profile.
2.13.4 Lower glass down into u-channel.
2.13.5 Ensure there is 1/8" [3] gap between wall and edge of sidelite glass.

2.13.6 NOTE: 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.

NOTE: If using multiple sidelite panels, ensure there is an adequate gap between each panel of glass.

2.14 Installing sidelite glass gasket

Fig. 11  Sidelite gasket

2.14.1 Cut gasket to length.
2.14.2 Press gasket in between sidelite glass and sidelite profile.
3 Optional applications

Fig. 12 Drop ceiling applications

Option 3 - Recessed both sides; drop ceiling profile one side/flush vertical drywall other side.

Option 4 - Recessed one side only; drop ceiling profile one side/vertical drywall above.

Option 5 - Recessed both sides; drop ceiling profile one side/reinforced drywall other side.

Option 6 - Recessed one side only; drop ceiling profile cover side/reinforced drywall above side lite profile.

Option 7 - Recessed one side only; drop ceiling profile one side/reinforced drywall above cover.

NOTE: Required blocking for proper securing of drywall not shown.