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1 Technical specifications

1.1 Overview

These instructions are for installation of MUTO COMFORT sliding door system M50 for the following mounting and style versions:

1. Ceiling mount

1.1.1 General information

- dormakaba requires use of tempered monolithic or tempered laminated glass.
- dormakaba 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.
- 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. Install limiting stop to prevent door from opening too far.

1.1.2 Intended use

- For sliding door in dry indoor areas only
- For manual slowly opening and closing only

1.1.3 Glass requirements and fittings

- The substructure/wall must be able to bear permanent loads and 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.

- 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

<table>
<thead>
<tr>
<th>CAUTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mounting components must meet the requirements of substructure/wall and door weight. Please read the technical information for fittings.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>WARNING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risk of breaking glass. When installing the door, support the door panel with a block of wood or similar object.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TIPS AND RECOMMENDATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information note</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CLOSING EDGE</th>
</tr>
</thead>
</table>

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, especially the track.
- Always use silicone - and oil-free cleaners (e.g. acetone).
- 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.)

1.1.8 Disposal

Disposal in accordance with local, state and national regulations.
2 Installation instructions

2.1 Overall
2.2 Securing track to mounting surface

Fig 1

2.2.1 Ensure the track is properly level and secure it to the ceiling per the appropriate measurements on the following page.

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

2.2.2 Use appropriate fasteners according to the following recommendations.

NOTE:
OVERHEAD REINFORCEMENT:
The overhead reinforcement must be a minimum of ¼” [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.
2.3  Door/wall dimensions

2.4  Specifications - technical data

<table>
<thead>
<tr>
<th>Ceiling mount</th>
<th>Single Door M50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Door leaf weight lbs [kg] *</td>
<td>≤110lbs [≤50]</td>
</tr>
</tbody>
</table>

* Including weight of auxiliary hardware.
2.5 Installing roller carriers: on monolithic glass ONLY

**Fig 2**

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

**NOTE:** ENSURE GASKET IS FREE OF DEBRIS.

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

2.5.1 Slide roller carriers onto glass.
2.5.2 Slide glass gasket and metal shim between glass and roller carrier.

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

2.5.3 Secure roller carriers to glass using appropriate-size hex key at 10 ft lbs [14 Nm].

---

2.6 Installing end stops

**Fig 3**

**NOTE:** DO NOT FULLY TIGHTEN.

2.6.1 Slide end stops into each end of the track.

**NOTE:** Exact location/adjustments will be determined in “Adjustment End Stop Location” step.
2.7 Install glass/rollers in track

Fig 4

![Diagram showing installation process]

**ENSURE ROLLERS AND TRACK ARE FREE OF DEBRIS.**

2.7.1 Place glass on setting blocks on floor for stability.

2.7.2 Tip glass and rollers upward and rest rollers on track.

2.8 Engaging anti-jump

Fig 5

![Diagram showing anti-jump engagement]

<table>
<thead>
<tr>
<th>Hex key size</th>
<th>M50 2mm</th>
</tr>
</thead>
</table>

2.8.1 Temporarily engage anti-jump on roller carrier.

2.8.2 Using appropriate-size ball-end hex key, turn adjustment screw **CLOCKWISE** to engage anti-jump.
2.9  Install floor guide

Fig 6

2.9.1  Align centerline of glass with centerline of floor guide.
2.9.2  Be sure the glass is plumb.
2.9.3  Mark appropriate floor guide measurements.
2.9.4  DISENGAGE ANTI-JUMP.

2.9.5  TEMPORARILY REMOVE GLASS AND ROLLERS FROM TRACK.

2.9.6  Pre-drill into mounting surface using a 5/16" drill bit.

2.9.7  Secure floor guide anchor with included fasteners.

2.10  Install floor guide: continued

Fig 7

<table>
<thead>
<tr>
<th>Hex key size</th>
<th>M50</th>
<th>1.5mm</th>
</tr>
</thead>
</table>

2.10.1  SET GLASS AND ROLLERS BACK ONTO TRACK.
2.10.2  Slide floor guide over floor guide anchor and tighten with set screws.

2.10.3  Remove setting blocks.

NOTE: Be sure glass is centered in floor guide.

2.10.4  Adjust using set screws.
2.11 Adjustment door height

2.11.1 Set height of glass door.
2.11.2 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.

2.11.3 Re-engage anti-jump by turning anti-jump adjustment screw CLOCKWISE.

**NOTE:** Anti-jump should NOT touch track.
2.12  Adjustment end stop location: LEADING end stop

Fig 9

NOTE: bi-folding: Be sure there is a 1/4" [6] gap between the right and left hand sets.

Set end stop locations:
2.12.1  Slide end stop to desired location on track. Bumper should touch edge of roller carrier.

Hex key size
M50  2mm, 2.5mm

3 ft lbs  [4 Nm]

Door pull to jamb distance.
*Verify with local jurisdiction.*

END STOP LOCATION: LEADING EDGE

Door closed

END STOP LOCATION: TRAILING EDGE

Door opened

Set end stop locations:
2.12.1  Slide end stop to desired location on track. Bumper should touch edge of roller carrier.

Hex key size
M50  2mm, 2.5mm

3 ft lbs  [4 Nm]

Door pull to jamb distance.
*Verify with local jurisdiction.*
2.13  Cover clips

Fig 11

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

2.14  Install brush profile

Fig 12

2.14.1 Measure and cut brush to appropriate length.  
2.14.2 Slide brush into track.
2.15  Install cover

Fig 13

2.15.1  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.

2.16  Install end caps

Fig 14

2.16.1  Snap end caps onto track.