MUNDUS Premium PT41
Transom and Sidelite Connector fittings with one or two fins

Installation instructions
942004 – 05-2018
Table of contents

1 Technical specifications 3
1.1 Overview 3
  1.1.1 General information 3
  1.1.2 Intended use 3
  1.1.3 Glass requirements/fittings/mounting 3
  1.1.4 Requirements for glass panel 3
  1.1.5 Safety instructions 3
  1.1.6 Symbols used - Safety/Installation 3
  1.1.7 Maintenance, care, repair 3
  1.1.8 Disposal 3
1.2 Door dimensions 4
1.3 Glass thickness/pivot point angle specifications 5
1.4 Tempered laminate glass (TLG) and adhesive specifications 6

2 Installation instructions 7
2.1 Overall 7
2.2 Install gaskets 7
2.3 Install plates and remaining fitting parts 8
2.4 Plumb and level the fitting 8
2.5 Secure the fitting 9
2.6 Setting the pivot/blank/stop 9
2.7 Door alignment 10
2.8 Door adjustments 10
2.9 Apply adhesive: (For TLG applications ONLY.) 11
2.10 Install covers 11
2.11 Install fin plate(s) and fasteners 12
2.12 Plumb and level the fin fitting 13
2.13 Secure the fin fitting 13
2.14 Apply adhesive: (For TLG applications ONLY.) 14
2.15 Install covers 14
1 Technical specifications

1.1 Overview

These instructions are for installation of the PT41 Transom Connector Fittings with fin(s) for the following mounting and style versions:

1. Glass 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.
- Do not swing doors with excessive force. Install limiting stop to prevent door from opening too far.

1.1.2 Intended use

- For pivoting doors in indoor or covered areas only.
- For manual slowly 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 optional 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.

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**

**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.)
- Function of fittings is recommended to be inspected every 500,000 movements by a specialist.

1.1.8 Disposal

Disposal in accordance with local, state and national regulations.
1.2 Door dimensions

Fig. 1

PT41 with Pivot

PT41 with Blank

PT41 with Stop

* NOTE: Pivot point adjustable 2-3/16" - 2-3/4" [55-70]
1.3 Glass thickness/pivot point angle specifications

**NOTICE**

Observe the opening angle of the door. The opening angle for your installation, according to glass thickness, pivot point and patch fitting for transom and sidelite PT41, can be found in the table. Use a door stop to avoid damages to the patch fittings.

<table>
<thead>
<tr>
<th>Glass thickness [mm]</th>
<th>2-9/16&quot; [65]</th>
<th>2-3/4&quot; [70]</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/2&quot; [12]</td>
<td>147°</td>
<td>149°</td>
</tr>
<tr>
<td>5/8&quot; [16]</td>
<td>144°</td>
<td>147°</td>
</tr>
<tr>
<td>3/4&quot; [19]</td>
<td>141°</td>
<td>144°</td>
</tr>
<tr>
<td>7/8&quot; [22]</td>
<td>139°</td>
<td>141°</td>
</tr>
</tbody>
</table>

Fig. 2
1.4 Tempered laminate glass (TLG) and adhesive specifications

<table>
<thead>
<tr>
<th>Required parts for laminate glass with MUNDUS System (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 10 fittings</td>
</tr>
<tr>
<td>3M™ Scotch-Weld™ EPX™ Plus II Mixing Square Nozzle, 5.3mm</td>
<td>934.802</td>
<td>1 tip nozzle</td>
<td>1 nozzle per 2 fittings</td>
</tr>
<tr>
<td>MUNDUS gasket for TLG</td>
<td>842.821</td>
<td>1 set</td>
<td></td>
</tr>
<tr>
<td></td>
<td>842.825</td>
<td></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 has been met)</td>
<td>48 hours @ 73°F or more</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Required parts for laminate glass with MUNDUS System (NOT INCLUDED)</th>
<th>Part Number</th>
<th>Quantity</th>
<th>Usage recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>3M™ Scotch-Weld™ EPX™ Plus II Applicator with 1:1 Plunger</td>
<td>934.801</td>
<td>1 applicator</td>
<td></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. |
| 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 Installation instructions

## 2.1 Overall

Fig. 3 Overall exploded view of entire system

2.1 Fin covers  
2.2 Patch covers  
2.3 Fin gasket (standard or TLG)  
2.4 Patch gasket (standard or TLG)  
2.5 Fin plate  
2.6 Patch plate  
2.7 Pivot/blank/stop (application dependent)  
2.8 Fasteners (5x included)  
2.9 Glass grommets (5x included)  
2.10 Sleeve nuts (5x included)

## 2.2 Install gaskets

Fig. 4

**STANDARD PLATES AND GASKETS**

* THIS GASKET IS SECURED TO THE PLATE DURING STEP 2.11.*

**TLG (Tempered laminate glass) PLATES AND GASKETS**

* THIS GASKET IS SECURED TO THE PLATE DURING STEP 2.11.*

Tempered monolithic glass:
2.2.1 Install Standard gaskets using the pre-adhered double-sided tape strip.

Tempered laminate glass:
2.2.2 Install TLG gaskets using the pre-adhered double-sided tape strip.
2.3 Install plates and remaining fitting parts

Fig. 5

2.3.1 Disassemble patch fitting.
2.3.2 Reassemble patch fittings on glass with appropriate insert (pivot/blank/stop).

- Use a 4mm hex key. Hand tighten only.

NOTE: Use upper hole in plate.

2.4 Plumb and level the fitting

Fig. 6

2.4.1 Ensure patch fitting is properly aligned and level.
2.5 Secure the fitting

2.5.2 Fully tighten fasteners.
- Use a 4mm hex bit and torque wrench at the listed torque value.

Legend (torque values)

<table>
<thead>
<tr>
<th>Monolithic glass/TLG</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Hex bit size</strong></td>
</tr>
<tr>
<td>4mm</td>
</tr>
</tbody>
</table>

9ft lbs / 7.4ft lbs [12Nm] / [10Nm]

2.6 Setting the pivot/blank/stop

2.6.1 Set the pivot/blank/stop location for your application.
- Lightly tighten using a 4mm hex key.
### 2.7 Door alignment

#### Fig. 9

**NOTE:** Ensure doors and patch fittings are level and plumb

![Diagram showing correct alignment of doors]

### 2.8 Door adjustments

#### Fig. 10

**NOTE:** If required, adjust the Z-axis.

2.8.1 Loosen screws to adjust.

2.8.2 Then fully tighten.

- Torque if required.

(See images below.)

<table>
<thead>
<tr>
<th>Glass thickness</th>
<th>Tolerance</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Glass thickness</th>
<th>Tolerance</th>
</tr>
</thead>
<tbody>
<tr>
<td>5/8&quot; [16]</td>
<td>± 0&quot; [.5]</td>
</tr>
<tr>
<td>3/4&quot; [19]</td>
<td>± 1/16&quot; [1.5]</td>
</tr>
<tr>
<td>7/8&quot; [22]</td>
<td>± 1/8&quot; [3]</td>
</tr>
</tbody>
</table>

Hex key size:

- Pivot: 4mm
- Blank: 2mm
- Stop: 2.5mm

Hex key size: 4mm

Hand tight only: 11 ft lbs [15Nm]
2.9 Apply adhesive: (For TLG applications ONLY.)

**Fig. 11**

- **NOTE:** THE RECOMMENDED ADHESIVE’S SET-UP TIME IS 20 MINUTES FOR THE DUO-PAK CARTRIDGES.
- **NOTE:** USE 1:1 RATIO PLUNGER WITH THE 3M™ Scotch-Weld™ Urethane Adhesive.
- **NOTE:** FULLY CLEAN SURFACE OF GLASS WITH AN ALCOHOL-BASED MILD GLASS AND SURFACE CLEANER. ENSURE NO DEBRIS IS ON THE GASKET.

**NOTE:** Onto scrap material, first dispense approximately 12” of 3M™ Scotch-Weld™ Urethane Adhesive prior to application prevent mixing errors and ensure optimal hardening.

2.9.1 Dispense into holes on both sides of fitting.

**Fig. 12**

- **NOTE:** Stop application when adhesive can be seen past end of fitting plate.
- **NOTE:** DO NOT WIPE any excess adhesive from glass surface. Allow adhesive to dry and scrape off glass surface with a beveled-edge chisel or putty knife.
- **NOTE:** See chart in Specifications section for appropriate curing time.

2.10 Install covers

2.10.1 Snap covers onto patch fittings.
2.11 Install fin plate(s) and fasteners

Fig. 13

Application 1: PT41 with one fin

Application 2: PT41 with two fins

2.11.1 Secure fin plate to fin bracket with included fastener.

2.11.2 Secure fin gasket to fin plate with pre-installed adhesive strip.

2.11.3 Hold fin glass in place.

2.11.4 Insert fin grommets.

2.11.5 Secure second fin plate to fin glass with included fasteners.

2.11.6 Use a 4mm hex key. Hand tighten only!
2.12  Plumb and level the fin fitting

Fig. 14

2.12.1  Ensure patch fitting is properly aligned and level.
- Hand tighten using a 4mm hex key.

2.13  Secure the fin fitting

Fig. 15

2.13.2  Fully tighten fasteners.
- Use a 4mm hex bit and torque wrench at the listed torque value.
2.14  Apply adhesive: (For TLG applications ONLY)

![Image of adhesive application](image)

**NOTE:** THE RECOMMENDED ADHESIVE’S SET-UP TIME IS 20 MINUTES FOR THE DUO-PAK CARTRIDGES.

**NOTE:** USE 1:1 RATIO PLUNGER WITH THE 3M™ Scotch-Weld™ Urethane Adhesive.

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

**NOTE:** Onto scrap material, first dispense approximately 12” of 3M™ Scotch-Weld™ Urethane Adhesive prior to application prevent mixing errors and ensure optimal hardening.

2.14.1 Dispense into holes on both sides of fitting.

Stop when adhesive can be seen past end of fitting plate.

![Image of adhesive application](image)

**NOTE:** See chart in Specifications section for appropriate curing time.

2.15  Install covers

![Image of cover installation](image)

2.15.1 Snap covers onto patch fittings.

2.15.2 **To remove:**

- Use the plastic prybar to remove the cover.