

# SHIELD

with PT90 Edge Fitting

## Installation instructions

935002 – 09-2020

| EN |

dormakaba 

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# 1 Technical specifications

## 1.1 Overview

These instructions are for installation of the SHIELD with PT90 Edge Fittings for the following mounting and style versions:

### 1. Glass mounting

#### 1.1.1 General information

- dormakaba requires use of 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 stationary glass panels in indoor areas only.

#### 1.1.3 Glass requirements/fittings/mounting

- 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 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.
- 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.
- 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.



##### 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 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.

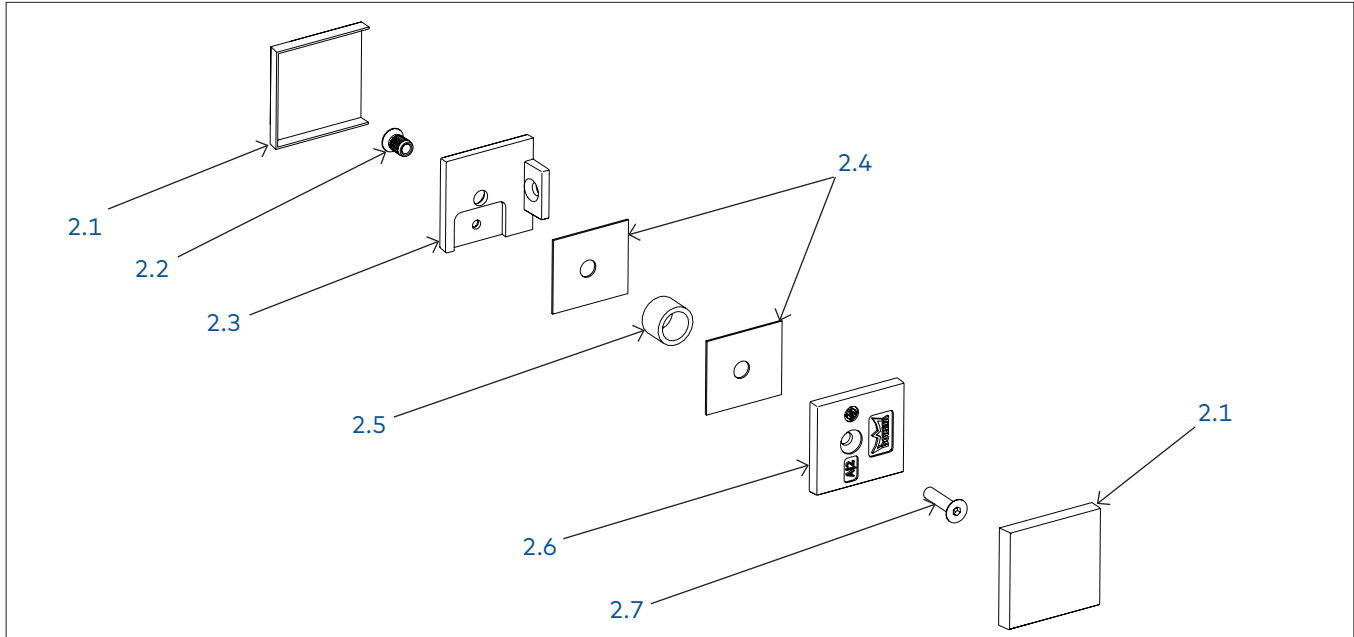
#### 1.1.8 Disposal

Disposal in accordance with local, state and national regulations.

## 2 Installation instructions

### 2.1 Overall

Fig. 1



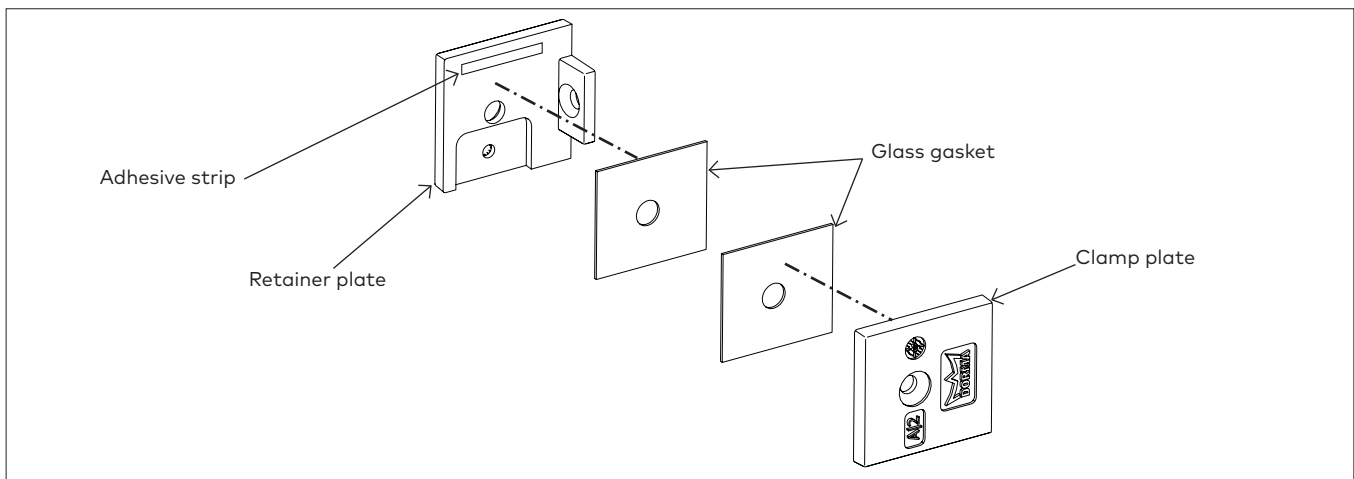
- 2.1 Covers
- 2.2 Threaded sleeve
- 2.3 Retainer plate

- 2.4 Glass gaskets
- 2.5 Bushing

- 2.6 Clamp plate
- 2.7 Bolt/fastener

### 2.2 Secure glass gaskets

Fig. 2

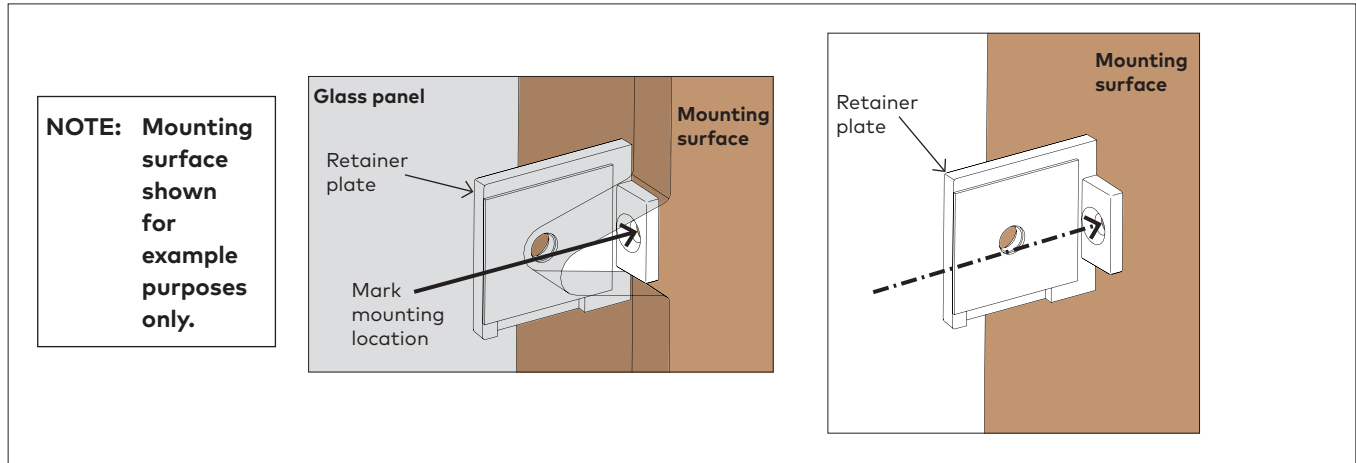


- 2.2.1 Remove protective foil from adhesive strip on retainer plate and clamp plate.

- 2.2.2 Press 1 glass gasket to inside of each plate.

## 2.3 Mark and drill mounting hole locations

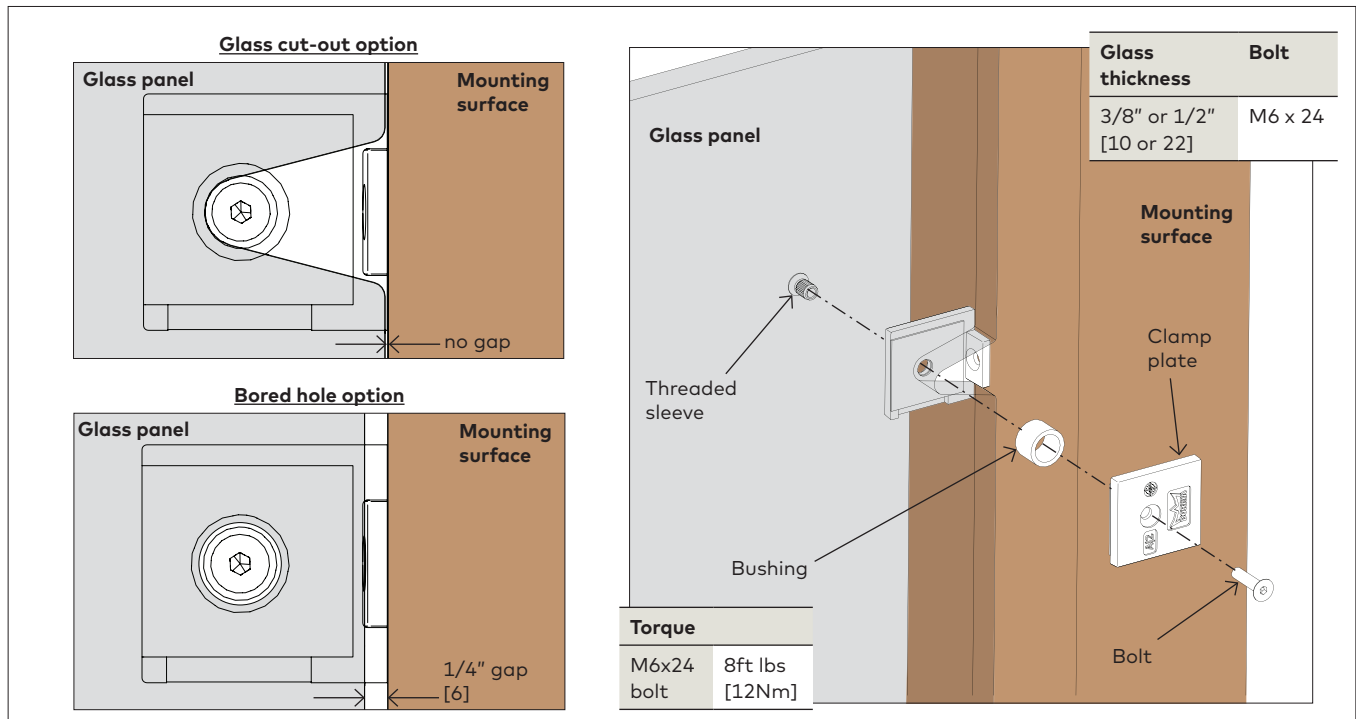
Fig. 3



- 2.3.1 Temporarily align ALL retainer plates against the glass panel and mounting surface to determine the plates' mounting locations.
- 2.3.2 Mark mounting hole locations.
- 2.3.3 Remove glass panel and set aside.
- 2.3.4 Ensure retainer plates are plumb.
- 2.3.5 Secure all retainer plates to marked mounting locations.
  - Use fasteners appropriate to mounting surface material.

## 2.4 Position glass panel and secure to mounting surface

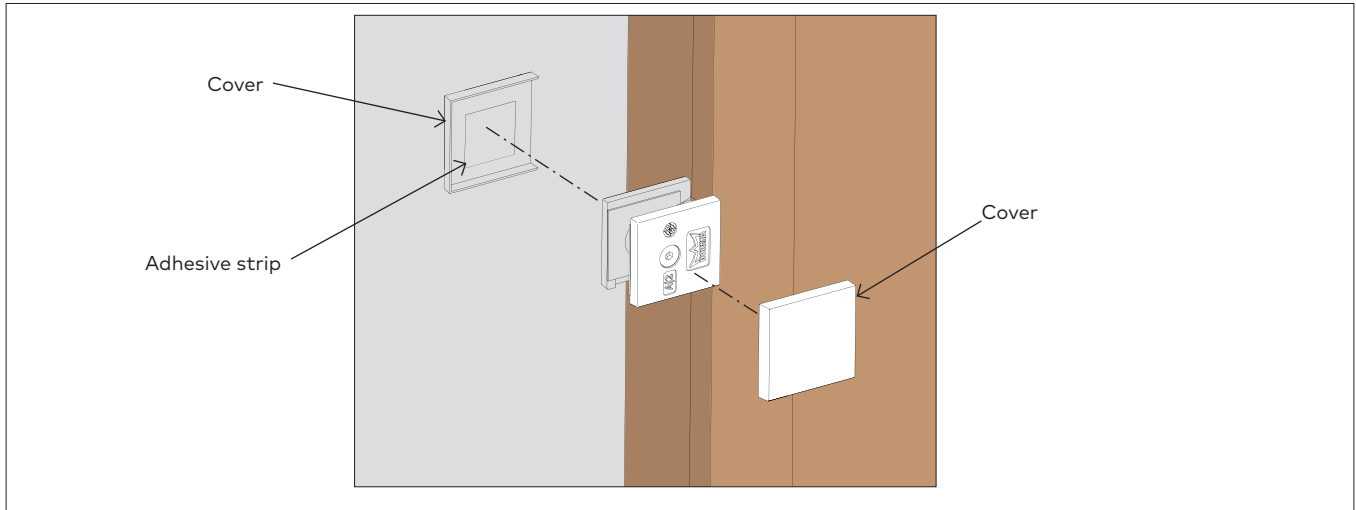
Fig. 4



- 2.4.1 Replace the glass panel against the retainer plates.
- 2.4.2 Position the glass panel according to the appropriate glass fabrication.
  - **Glass cut-out** = no gap between mounting surface and edge of glass
  - **Bored hole** = 1/4" [6] gap between mounting surface and edge of glass.
- NOTE: Ensure glass is plumb and aligned.**
- 2.4.3 Once in position, press threaded sleeve into retainer plate.
- 2.4.4 Insert bushing into hole in glass.
- 2.4.5 Place clamp plate against glass.
- 2.4.6 Secure to retainer plate via included bolt.
  - Torque with 8 ft lbs [12Nm].

## 2.5 Install patch fitting covers

Fig. 5



2.5.1 Remove protective foil from adhesive strips on the inside of the covers.

2.5.2 Press covers against retainer plates and clamp plates.

