

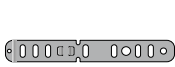
### General information about completion of delivery:

- If possible, doors arrive fully assembled with installed glass from the factory.
- Required quantity of mounting brackets (art. nr. 12100) are packed separately in a box together with screws for fastening to the frame (art. nr. 12165). Screws of steel for brackets fastening to the wall are not included.
- Preparation and insulation of openings of the building should be defined before installation works. It is responsibility of the customer, architect and dealer.
- Installation principles applied in supporting constructions:
  - Flexible (wood/steel studs), min. thickness of wall 95 mm
  - Light rigid (light weight concrete), density: 650 kg/m<sup>3</sup> (for EI30) or 550 kg/m<sup>3</sup> (for EI60) ± 200 kg/m<sup>3</sup>
  - Heavy rigid, density min. 850 kg/m<sup>3</sup>

**NB!** Read the general guidelines for correct handling of fire rated products.

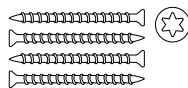
**NB!** If the product is delivered without mounted glass, see the manual for fitting glass in fire products.

## Installation material



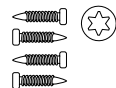
### 1. Brackets (12100)

Required quantity included in delivery



### 2. Screws

Screws of steel for fastening brackets to the wall.  
Not included in delivery.



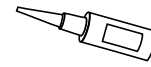
### 3. Screws (12165)

For fastening brackets.  
Required quantity included in delivery.



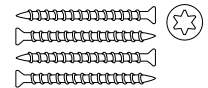
### 4. Wedges

Wedges - Oak or other wood with similar density.  
Not included in delivery.



### 6. Sealing compound

for fire rated products P/N 12222.  
Included in delivery.



### 6. Screws for threshold fastening.

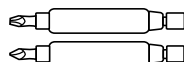
Stainless steel, A2 M5, 100 mm  
Required quantity included in delivery

## Installation tools

Not included in delivery.



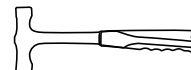
### 1. Cordless screwdriver



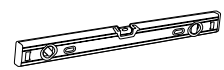
### 2. Magnetic bits



### 3. Drill



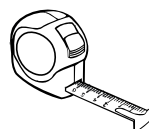
### 4. Light hammer



### 5. Spirit level



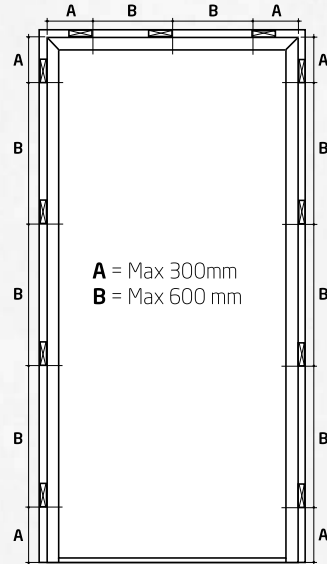
### 6. Angle



### 7. Tape-measure

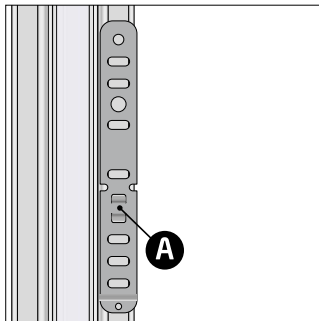
## Door preparation

Fix all required brackets to the frame according to the instructions below.

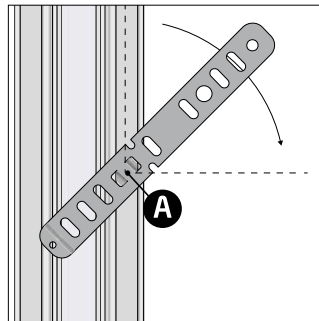


## Step 1. Bracket mounting steps

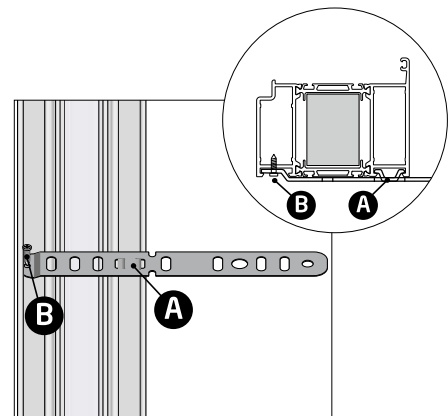
Fasten mounting brackets (12100) to the frame by screws 12165.



**Step 1.1** Bracket should be fitted in one line of the profile. Bracket "knobs" should be fitted in the grooves (A)



**Step 1.2** Turn the bracket in 90 degrees.

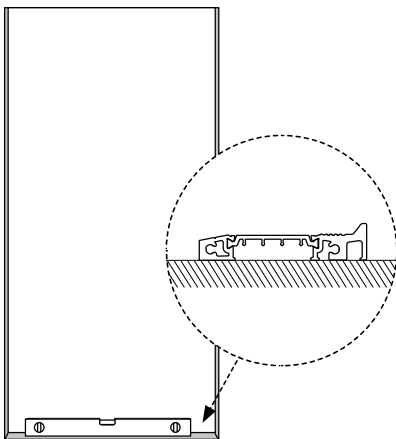


**Step 1.3** The bracket should be fastened to the frame with screw (12165). One pc./bracket (B).

## Step 2

### Door installation to the opening

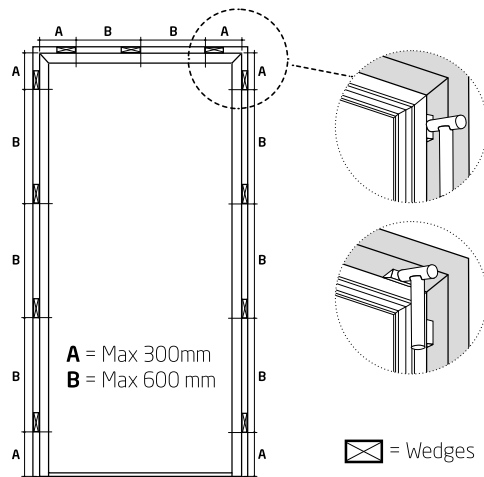
If possible, depending on situation on site, while fixing the frame, opened doorleaf can be supported with no need to remove it out of the frame. If there is no support possibility, please follow doorleaf removal instruction.



#### Step 2.1 Prepare the opening for installation.

The entire base under threshold must be flat and level. If it will be decided to use bearing support beneath the threshold it must be in level and continuous end-to-end.

**NB!** Water and thermo sealing below the threshold must be considered before installation! Follow recommendations in page 6.

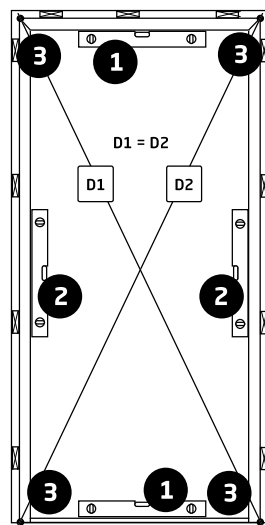


#### Step 2.2 Fix the frame with wedges.

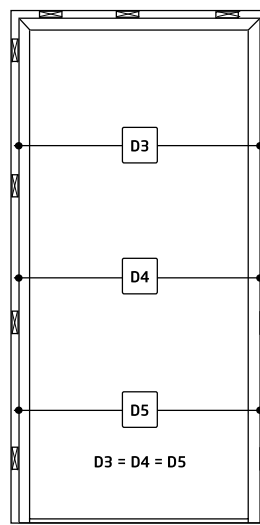
Wedges must be positioned next to each fixing point on the frame and should not be sticking out of the construction's mounting depth.

**NB!** The gap between the frame and the wall is recommended to leave: 20 (+10;-10) mm

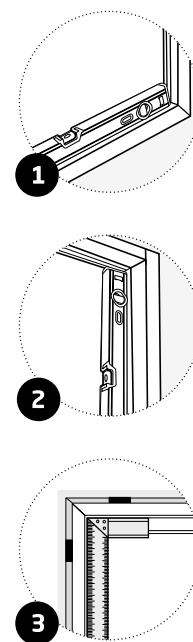
#### Step 2.3 Ensure horizontal and vertical leveling of the frame.



Frame jambs must be square and plumb in both directions and the diagonals (D1 and D2) should be identical.



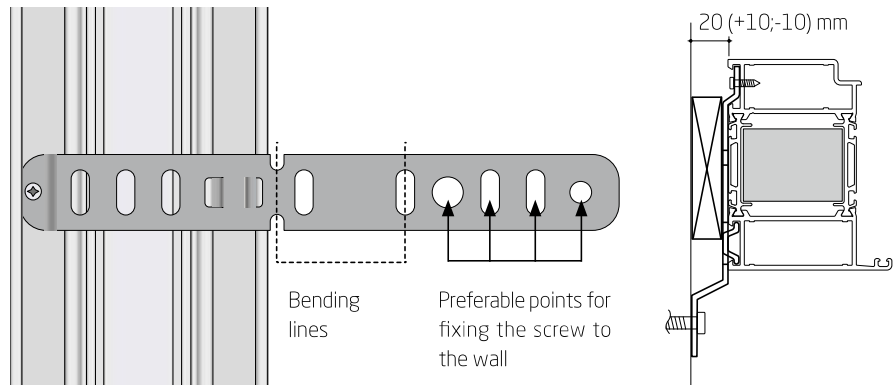
Check the rebate widths are equal across the hinge and locking points (D3, D4 and D5).



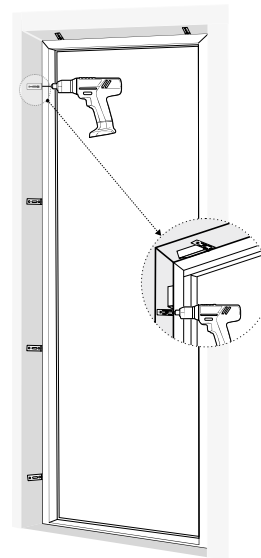
### Step 3.

## Fasten the door to the wall with brackets

**Step 3.1** Bend all the brackets in an required angle to fit the distance to the wall.



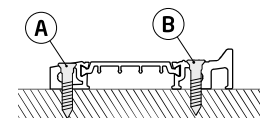
**Step 3.2** Fasten the door with the screws of steel to the wall.



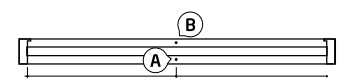
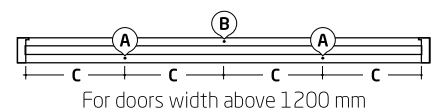
**Step 3.3** Ensure horizontal and vertical levelling of the frame (according to Step 2.3).

**NB!** All the wedges should be left in places and should not be sticking out of the construction's mounting depth!

**Step 3.4** Fasten the threshold. Screw bolts through predrilled holes on the threshold (8 mm holes will be predrilled in the factory) according to the schemes. At external doors, seal the screws with sealing compound for fire rated doors P/N 12222, between screw and threshold.



C = 300 mm



For doors width under 1200 mm

**Step 3.5** Install the doorleaf back to the frame if it was removed before installation. Follow the sash installation instruction.

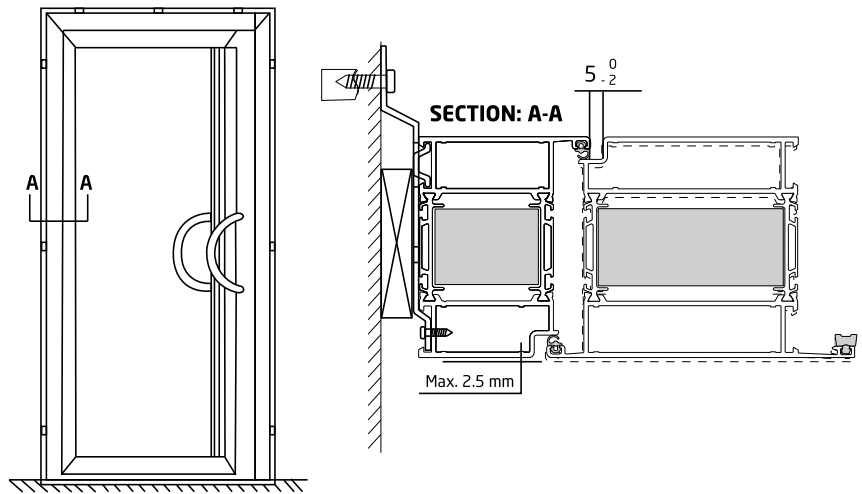
**Step 3.6** Adjust tightness of the sash:

**Check door leaf and frame**

Make sure door leaf and frame flush with each other.

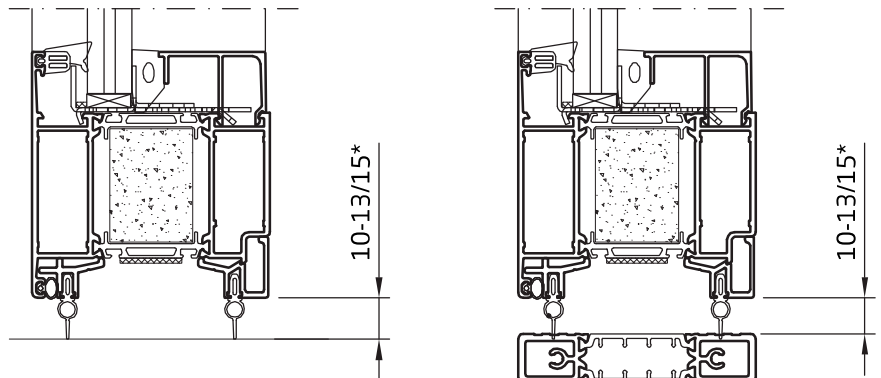
The distance should be 5 (0;-2) mm on all edges of the door leaf.

In order to get the right gasket pressure striking plate has to be adjusted to limit the deflection of the door leaf to max 2,5 mm.

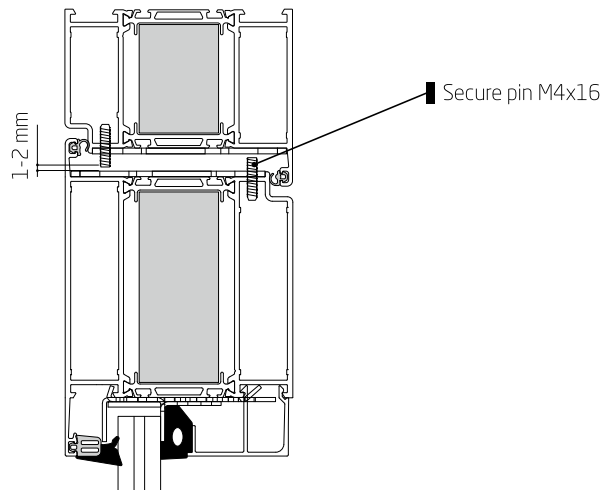


**Step 3.7** If door is produced with smoke protection class Sa/S200, Please follow maximum height limitations between door leaf and threshold/floor. Adjust if needed.

\*Height 10-15 mm for Sa  
Height 10-13 mm for S200

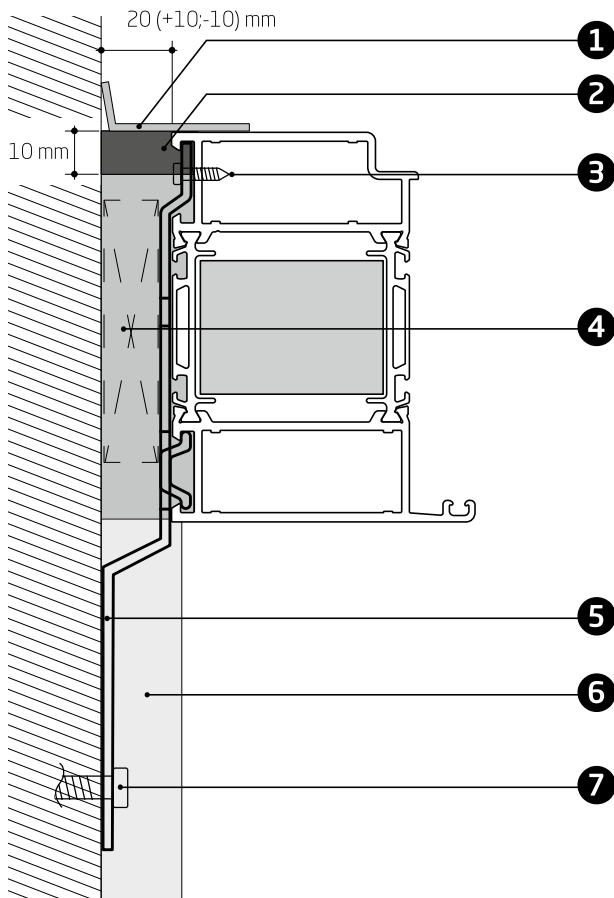


**Step 3.8** Adjust top secure pins M4x16. Check the functionality of sash. Adjust if needed.



## Step 4. Seal the frame

**Step 4.1** Ensure the gap between installation hole and door frame is sealed according to the sketch.

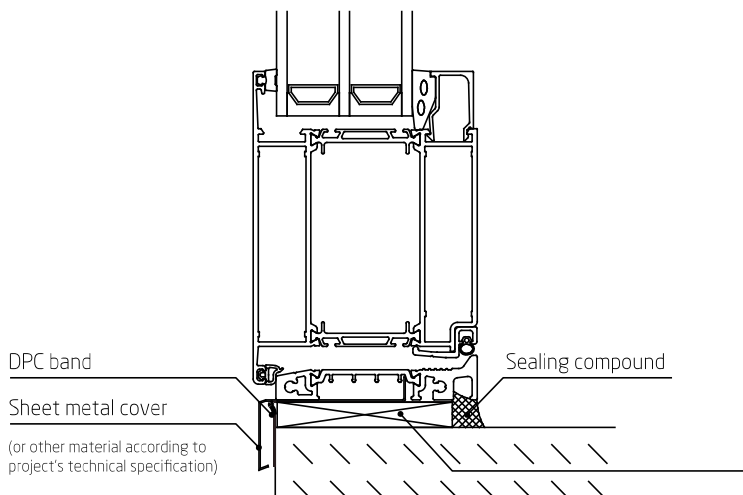


1. Sheet metal cover or other material according to project's technical specification
2. 10 mm sealing compound for fire rated products P/N 12222 (used in case door is installed in an external wall of the building)\*
3. Screws 12165 for fastening brackets to frame
4. Joint filling with stone wool with density 40 kg/m<sup>3</sup>
5. Mounting bracket 12100
6. Free choice of coverage. Finishing material according to project's technical specification.
7. Fastener – screw of steel

\* For partitions with class Sa/S200 sealing compound should be used from expected fire spreading side as well (Applies to internal and external constructions)

**NB!** Combined installation method (brackets and adjufix) for combinations of fixed frames with doors is possible. Please follow installation manuals according to each mounting method.

In a case if window is combined together with door with class Sa/S200, sealing should be done according Sa/S200 requirements



**NB!** If it will be decided to use bearing support beneath the threshold it must be in level and continuous end-to-end.