

### General information about completion of delivery:

- If possible, windows 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.

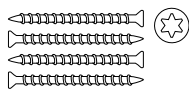
**NB!** If the product is delivered without mounted glass, see the manual for fitting glass in fire products.

### Installation material:



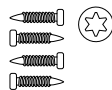
#### 1. Brackets (12100)

Required quantity included in delivery



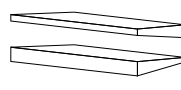
#### 2. Screws

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



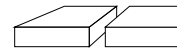
#### 3. Screws (12165)

For fastening brackets.  
Required quantity included in delivery.



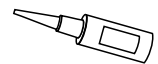
#### 4. Wedges

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



#### 5. Bearing pads

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



#### 6. Sealing compound

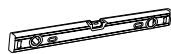
for fire rated products P/N 12222.  
Included in delivery.

### Installation tools:

Not included in delivery.



#### 1. Cordless screwdriver



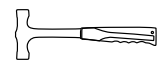
#### 2. Spirit level



#### 3. Magnetic bits



#### 4. Drill

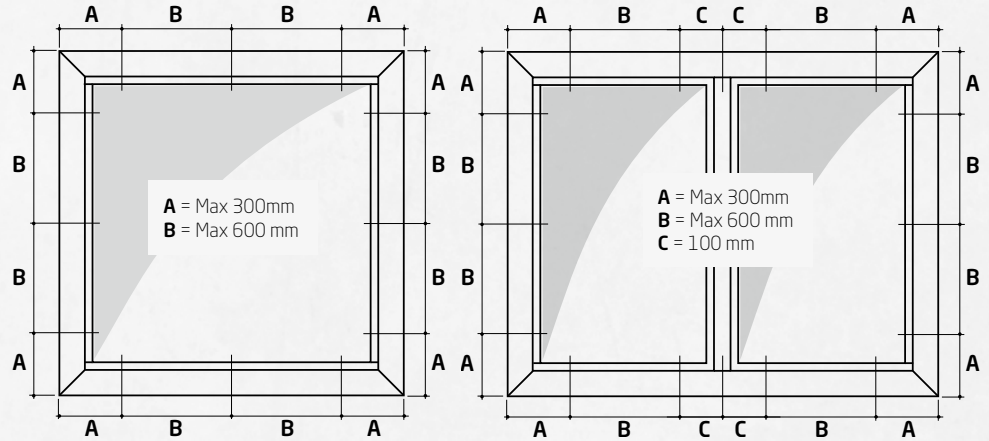


#### 5. Light hammer

## Window preparation

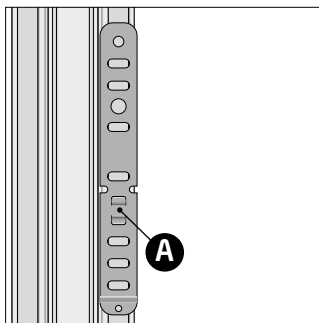
Fix all required brackets to the frame according to the instructions below:

- A = 100 mm for window height under 800mm (Applies only to the Left/Right sides)

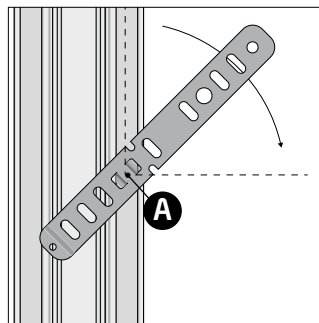


## Step 1. Bracket mounting steps

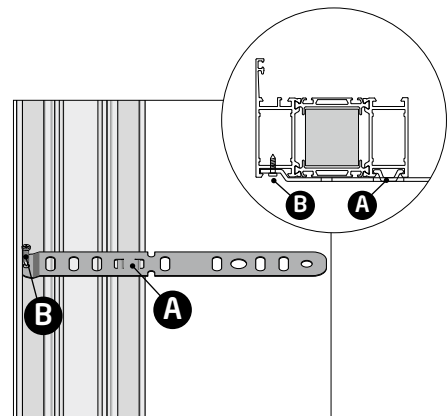
Fasten mounting brackets (12100) to the frame by screws 12165.



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



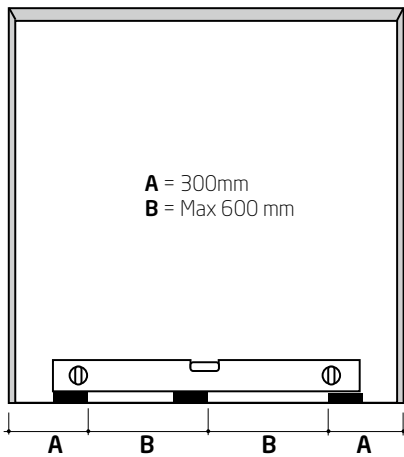
**Step 1.2** Turn the bracket in 90 degrees.



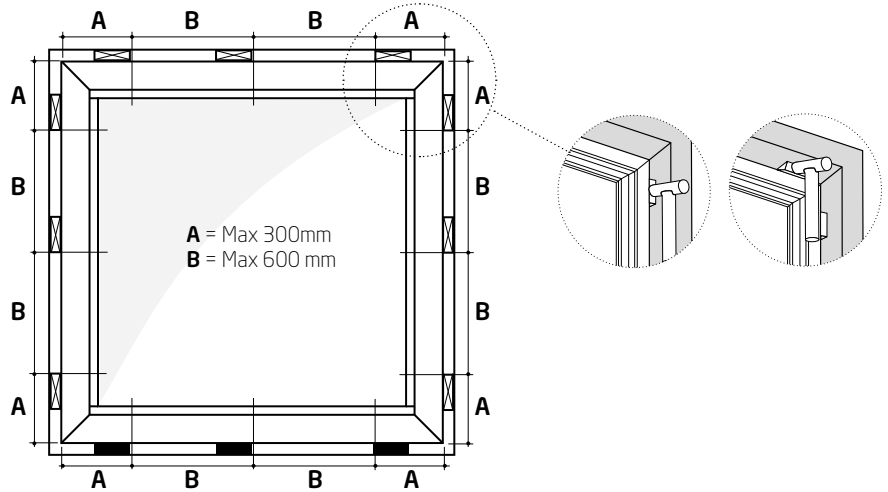
**Step 1.3** The bracket should be fastened to the frame with screw (12165). One pc./bracket (B).

**NB!** Before fastening, bottom screws have to be sealed with fire rated compound P/N 12222



## Step 2. Window installation to the opening with brackets



**Step 2.1** Place bearing pads at the bottom of the opening next to each fixing point on the window (A) and (B). If window width is less than 1000 mm, bearing pads are only needed in position (A). Ensure they are level.

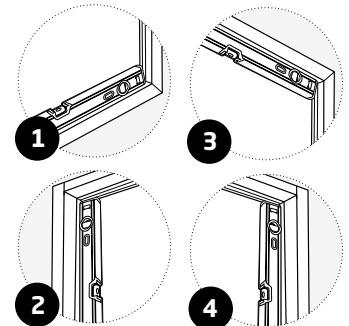
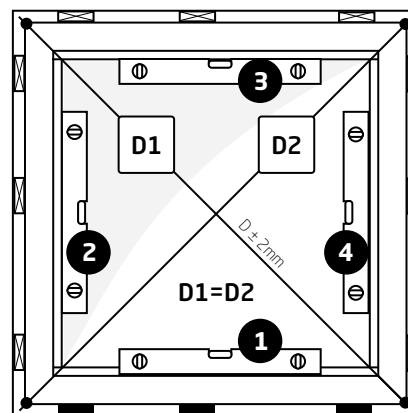


**Step 2.2** Fix the frame with wedges into the wall opening. Wedges must be positioned next to each fixing point on the window.

 = Wedges  
 = Bearing pads

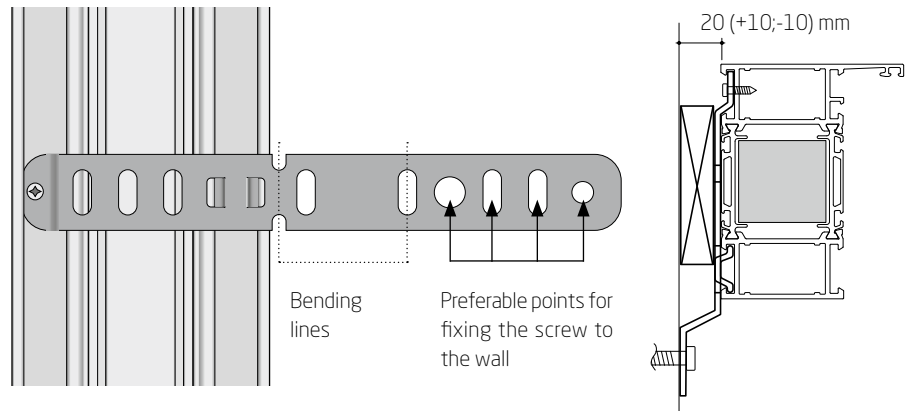
**NB!** The gap between the frame and the wall is recommended to leave: 20 (+10;-10) mm

**Step 2.3** Ensure the window is level.

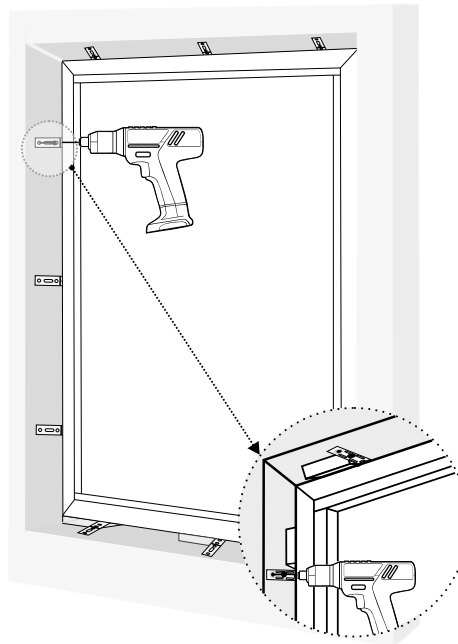


## Step 3. Fasten the window to the wall with brackets

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



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

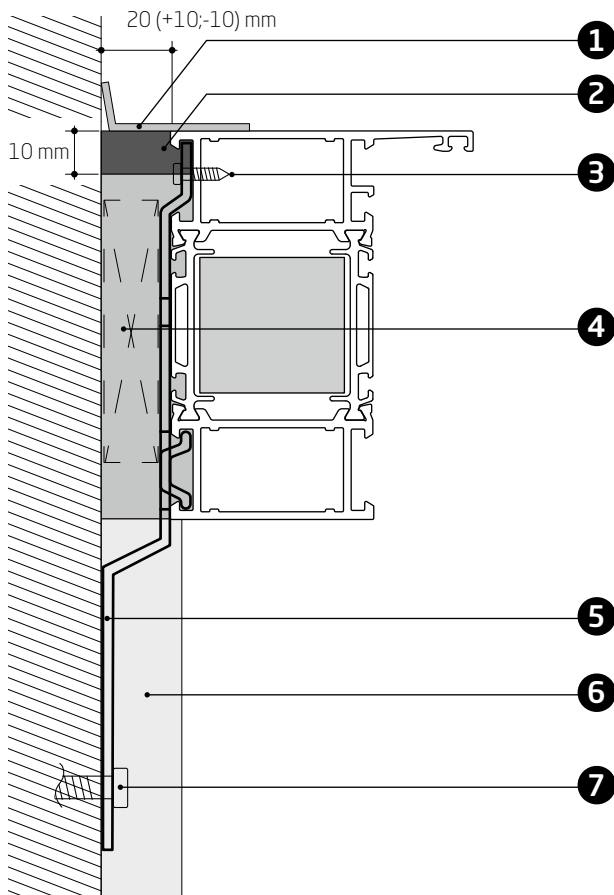


**Step 3.3** Ensure horizontal and vertical levelling of the frame (according to Step 2.3).

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

## Step 4. Seal the window

**Step 4.1** Ensure the gap between installation hole and window 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 window 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