
ASSEMBLY MANUAL FOR FIREPROOF SLIDING GATE N80 CLASS EI30

MECHANICAL ASSEMBLY MANUAL FOR FIREPROOF SLIDING GATE N80 EI30

Assembly of N80 EI 30 Fireproof Gate has been presented on the sample 3000x3000mm. In case of other dimensions the assembly has to be executed in similar way with keeping the same main dimensions.

1. Gate leaf – installation

Gate leaf installation should be done according to drawing no. 1 and 1a. Gate leaf should be prepared to be erected in the opening with grey side towards the wall.

Before starting to install fittings all panels/sections have to be tightened with belts then screwed together with upper and bottom fittings – upper fittings with longer screws 4,2x28, remaining with short screws 4,2x13, then after taking off belts screw together each panels with self-drilling screws Ø4,2x28 placed every approx. 500mm and in the 7mm distance from panel's edge. Only after this stage outer vertical fittings can be installed. (WARNING! VERTICAL fittings should be screwed to gate leaf with screws every 220-300mm, HORIZONTAL fittings – bottom: every 150-180mm, upper HORIZONTAL every 75mm.

On grey side of gate leaf and height equal to opening's height extended with 150mm (just below top fitting and just in before the rear fitting) screw together labyrinth sealing with the same screws (screws placed every 150 – 180 mm, maximum distance from sealing's edge is 50mm). While installing labyrinths please remember about putting on both sides elements made of PROMASEAL intumescent gasket (drawing 1b).

On vertical edges of gate's both sides from doorstep area (just behind the fitting, on the whole gate's height) self-glued intumescent gasket PROMASEAL 20 x 2mm should be placed.

On upper edges install (with screws 5,5 x 50) fixing elements of counterweight's line and screw guiding rollers (drawing 2 – 2c).

2. Preparation of opening area

It is necessary to prepare the wall properly before starting the assembly of the gate. Wall must be flat, plain without any projections and defects in gate elements assembly range. It is also important to prepare the floor in gate working area. It is strictly required to check all dimensions of opening (drawing no. 3).

3. Installation of PROMATECT plates around the opening

Strips made of fireproof plates in width 100mm are installed directly to the wall according to drawing no. 4 – on door stop side stripes 230mm width - with frame anchors 10/72. The whole element in dimension 100x1200mm should be installed with 3 anchors, shorter elements (cut) have to be installed with minimum 2 anchors (to avoid spinning around). It is very important to fit proper elements.

4. Installation of labyrinth sealing

The next stage in gate assembly is installation of labyrinth sealing around the opening. Labyrinth sealing are installed to the wall with frame anchors 10/72 according to drawing no. 5 (only on upper and rear edge of the opening) placed every max.400mm distance and also in the distance from sealing's end not bigger than 25mm.

It is important to prepare earlier sealing elements with PROMASEAL strips (drawing no.1b).

5. Installation of upper guiding track supporting and roll elements

Elements should be installed according to drawing no. 6, keeping the distance between elements 1000 – 1300 mm and their position regarding upper edge of gate's opening (installation height). Guiding track's consoles have to be installed on 380mm height above upper opening's edge. In case if the floor is not perfectly flat and deflections in floor level are more than 5mm on openings width, the height should be increased.

Next stage of the assembly in the installation of roll consoles at door-stop's side according to drawing. Slideway consoles, electro-holder's elements and roll console are installed with ring anchors M10.

WARNING! In standard we deliver ring anchors with gate can be used to install in concrete, reinforced concrete or full brick. If the assembly will not be done to concrete wall but for example to Silca blocks, empty light bricks etc. going-through installation have to be done with the help of long bolts and nut on one end.

In this stage bottom rolls that support gate leaf can be installed by screwing them into the floor.

6. Installation of slideway

Next stage of gate's assembly is installation of slideway. After it's done, it has to be perfectly leveled. No deflections or descends are allowed.

7. Installation of support for gate's pivot casing

Support for gate's pivot casing are installed according to drawing no.7, just behind the fireproof light plate, by screwing with frame anchors 10/72 or ring anchors.

8. Gate leaf installation on rail

After installing all door-stop casing supporting elements it is necessary to insert the gate leaf onto the rail and then after adjusting on consoles proper distance off the wall and after adjusting gate's top, bottom & both sides position (gate completely open/closed) secure with slide-limiters installed on guiding track with M8 screws.

9. Installation of counterweight and its lines

The next stage is installation of electro holder / speed limiter of closing according to drawing no. 5 with ring anchors M10.

Installation of steel lines according to drawings no. 9 to 11. To have clear view of drawing, we presented separately the guiding of counterweight line and spring line.

10. Installation of slideway casing

Installation according to drawing no. 12. Casing elements manufactured of light fireproof plates have to be screwed to brackets with self-drilling screws 4,2x25 (first layer) and 5,5x50 (second layer). Four screws are enough for each plate.

All gaps between plates have to be filled with building plaster.

11. Installation of counterweight casing – Promatect and metal plates

Casing is made of profiles, assembled according to drawings no. 13 & 14. Made of 2 types of bent metal plates (external & internal). Internal elements are mounted to flat profiles with self-drilling screws 4,2 x 25. After installation of external elements, the edge has to be screwed directly to the wall with 10/72 frame anchors.