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# **ASSEMBLY MANUAL FOR FIREPROOF SLIDING GATE N150 CLASS EI 120**

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**MECHANICAL ASSEMBLY MANUAL FOR FIREPROOF SLIDING GATE  
N150 EI 120**

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. 2).

### **1. Gate leaf – installation**

Gate leaf installation should be done according to drawing no. 1. 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 vertical edges of gate's both sides from pivot 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 rubber stopping device. (drawing 1b).

### **2. Installation of PROMATECT plates around the opening**

Strips made of fireproof PROMATECT plates in width 100mm are installed directly to the wall according to drawing no. 3 – 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.

### **3. 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. 4 (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. 1c).

### **4. Installation of upper guiding track supporting and roll elements**

Elements should be installed according to drawing no. 5, keeping the distance between elements 1000mm and their position regarding upper edge of gate's opening (installation height). Guiding track's consoles have to be installed on 365mm 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 on pivot's side according to drawing.

Guide rail consoles and also roll console have to be installed with ring anchors 14x120.

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 (drawing no. 5).

### **5. Installation of support for gate's pivot casing**

Support for gate's pivot casing are installed according to drawing no. 6, with paying special attention to installation these supporting VERTICALLY (have to be installed just behind PROMATECT strips). Supporting elements are screwed to the wall with frame anchors 10/72 or ring anchors M8.

### **6. Mounting of gate's leaf and track to the console**

Gate leaf that had been put together has to be lifted so that in gate's vertical position it would be possible to screw guiding trolleys and then put the track according to drawing no. 7. Because of the big weight of the gate (approx. 1500 kgs) two 180 C-profiles were used to avoid breaking of gate's leaf during lifting it up. It has to be lifted up with belts so that the track could be pushed into the console (drawing 8). After the installation of track it has to be LEVELLED immediately.

It has to be installed perfectly HORIZONTAL. No descends are acceptable. On the upper fitting the profile 1x53x64 has to be installed according to drawing no. 1a, sealed with PROMASEAL gaskets according to

drawing no. 1c. Afterwards when proper distance between gate leaf and wall is kept on track's consoles and after fixing side positions of gate (gate completely open/ completely closed) immediately secure with slide limiters which are installed on guiding track by M8 screws.

#### **7. Installation of lines and speed limiter**

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

Then according to drawing no. 9 the lines have to be connected from "L-shaped"-1 flat profile to counterweight and then from "L-2" to electro holder which was previously installed to "L-3". Electro-holder's line has to be connected with Gall chain by press/hard squeeze so that chain's length was adequate to gate's width. The counterweight should be in top position when gate is completely opened.

#### **8. Installation of slide cover above opening**

Instruction how to install slideway cover is shown at drawing 9. Elements made of Promatect plates should be screwed to supporting brackets with self-drilling screws 4,2 x 25 (first layer) and 5,5 x 50 (second layer). Four screws are enough for each plate. After finishing the installation, spaces between plates should be filled with gypsum-based plaster and properly finished.

#### **9. Door stop casing**

Door stop casing (drawing no. 10) is made of curved metal sheet's elements ( internal & external elements). Internal elements have to be installed to flat profiles with self-drilling screws 4,2x25. After placing external casing element, its edge has to be also screwed to the wall with frame anchors 10/72. on metal sheet's edges( internal & external) special finishing strip has to be pulled on. (Drawing no.10a).

**WARNING!** Edges of steel plates must adhere to Promatect plates – to avoid gate's jamming inside the door stop casing.