











## Installation manual for fire-resistant security steel door FQ EI30



### Attention! General warnings!

A Series of precautions must be taken to install this door. For safety reasons pay attention to following warnings and instructions! In case of doubt contact the supplier. This manual is meant for experienced installer.

-  This manual only covers the door installation. Additional elements require separate instructions.
-  Read this manual carefully before installation.
-  Certain parts of this product may have sharp edges. Protective gloves are recommended.
-  Parts of the door are heavy.
-  All parts needed for the installation of this door are included in the package except insulation material between the wall and the frame and support blocks. Adding other elements may affect safety and warranty.
-  Ensure sufficient lighting in the installation area. Remove unnecessary items and dirt. Unauthorized persons (especially children!) may get hurt if present.
-  Make sure that the wall is strong enough for the installation. In case of any doubts contact the constructor.
-  If the installation is not in accordance with the instructions and if locks and materials not specified by the manufacturer are used for the door set, the door will lose its performance properties. In this case, the door does not meet its certification and declared properties, and the marking referring to the certificate must be removed from the door by the responsible of the works.

In case of questions contact AS Saku Metall Uksetehas.



### 1 TOOLS AND FASTNERS

For levelling and attaching the frame adjustable sleeves are located at the fixing points. The sleeves are adjusted with a 10 mm hex key. Plastic caps D=19 mm are used to cover the installation holes in the frame. Only special TORX 30 fasteners intended for use with TEMA sleeves may be used:

- Concrete: concrete screws ESSVE art. 105267 (7,5x65), predrilled hole  $\text{Ø}6 \times 100$
- Lightweight concrete: lightweight concrete screws ESSVE art. 105232 (8,0x120), no predrilling necessary
- Wood: wood screws ESSVE art. 105294 (6,0x65), no predrilling necessary
- Steel profile, self-drilling screws ESSVE art. 105379 (7,0x45), no predrilling necessary

### 2 INSTALLATION OPTIONS

Figure 1.  
Frame type YS

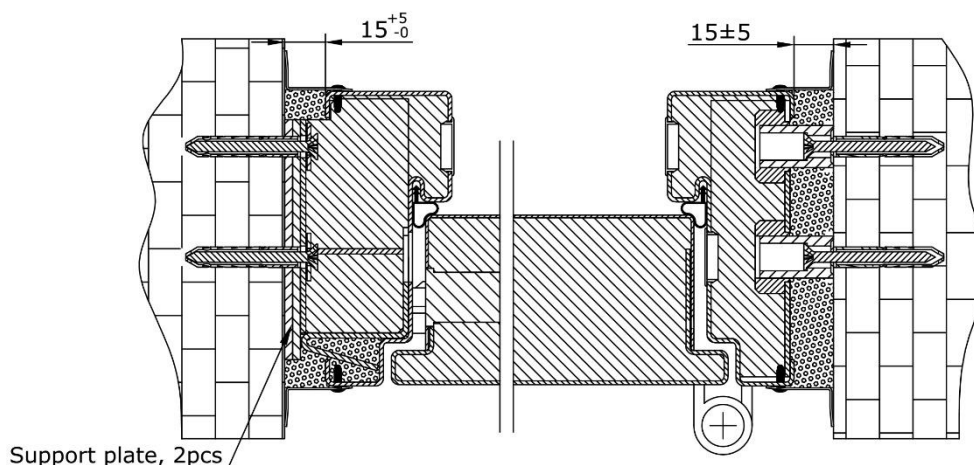
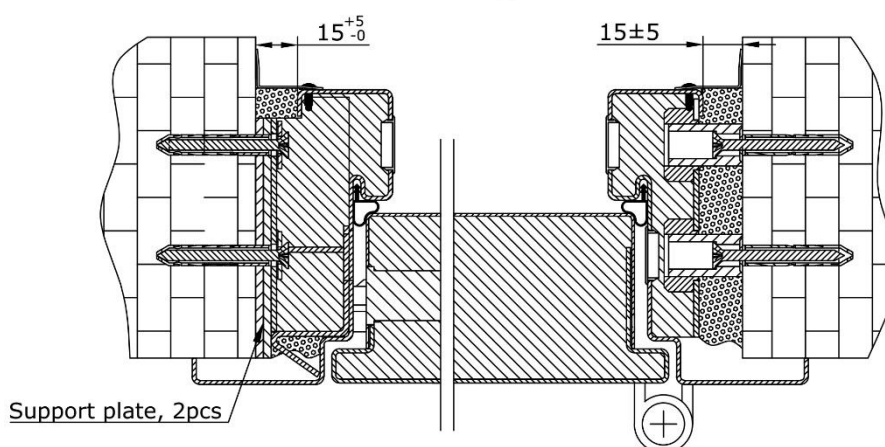


Figure 2.  
Frame type YM



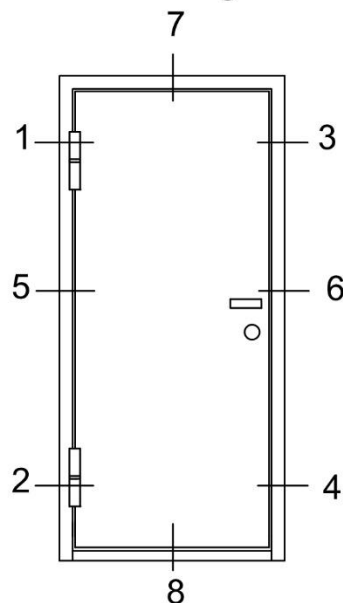
Described door is allowed to be installed in vertically opening orientation only!



### 3 ORDER OF INSTALLATION

1. Upon placing the door on the floor or on the ground use rubber, cardboard, wood or plastic material to protect the paint layer.
2. Check the presence of fixings and tools.
3. Check the construction aperture accordance to requirements. The greatest allowed width of construction aperture from frame is +30 mm and height +15 mm. In case of larger gaps make the construction aperture into compliance with the required dimensions. Ensure that frame and fixing devices do not interfere with possible public utility networks inside the wall.
4. Threshold tenons on the external side from door seal on the frames of external doors that are assembled on site are to be siliconized. Permitted silicones are Soudal Soudaflex 40FC, Soudal Silirub 2/S and Penosil General Silicone.
5. Place the frame without the door sheet in the construction aperture at the specified distance from the external surface of the wall. Move the frame so that the two support plates located at the nearest fixing point to the lock are in contact with the construction aperture. Ensure that the bottom end support points of the frame remain under the side profiles to prevent later sinking of the door. Ensure that the upper profile of the frame is level. Support the threshold as close as possible to the fixing point to avoid excessive deformation under loaded conditions. Use metal plates as bearing support blocks.
6. Level the hinge side of the frame and start fixing the frame from fixing apertures 1, 2 and 3 (figure 3.) Tighten the sleeves against the wall. Frames with sleeves do not require support blocks between the frame and the wall. The sleeves can protrude maximum 15 mm. If the sleeves do not extend to the wall, use additional fire-resistant plates. Use proper fixings for ESSVE sleeves (refer to section 1 Tools and fasteners). Tighten the screws.
7. Ensure that there is lubricant on hinges and support bearings. Lift the door sheet on hinges. Check parallelism of gaps between door sheet and frame and external door surface and the frame surface. If necessary adjust the frame by loosening the screw and correcting the gaps by adjusting the sleeves with a hex key. Retighten the screws.
8. Fix the frame in all of the other remaining fixing points, ensuring parallelism of gaps and support of fixing points with sleeves.
9. Check with induction tester that the product is not under live electric voltage. Otherwise switch off the power and perform grounding of the product. Electrical work may be performed only by qualified electrician.
10. Insert plastic caps Ø19 mm into the frame installation holes.
11. Siliconize the gaps between the floor and threshold of external doors. External and internal side must be sealed. Permitted silicones are Soudal Soudaflex 40FC, Soudal Silirub 2/S and Penosil General Silicone.

**Figure 3.**  
Frame fixing order



#### **4 FILLING THE GAP BETWEEN THE FRAME AND THE WALL. FINISHING.**

1. Fill side gaps between the frame and the wall with fire resistant foam Soudafoam FR or mineral wool with density  $>70\text{kg/m}^3$ .
2. After tightening of external gaps of the frame check free movement of the door.
3. Filled gaps should be finished with construction plate, plaster mixture or covered with metal slats fixed with rivets.

NB! Door package does not include infilling and support block materials!

#### **5 HARDWARE INSTALLATION**

1. Install locks according to installation manuals of locks. It is forbidden to remove the blocks of mineral wool located at the sides of the lock openings! Use self-drilling screws for fastening the lock.
2. Fix handles to the lock and check closure and operation of lock tumbler (and latch bolt) with opening and closing of door. Check opening of lock with keys.
3. Check the operation of additional hardware (door closers, etc.).