

Doordec OÜ	Compiled: Marianne Purge	Mark: P07J09v3
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INSTALLATION OF FLUSH STEEL DOORS WITH FIRE RATING (*instruction*)

1.1 Fire rated product and installation material verification

- 1.1.1 Fire rated flush steel door set includes doorblade, frame (with gasket, intumescent and mounting hole covers), lock frame (depending on the order also the cylinder, handle, door closer).
- 1.1.2 Necessary materials for door installation: non-combustible material (e.g. Gypsum board) strips to fix the door; steel frame anchors (at least 10mm diameter); rock wool.
- 1.1.3 In case of any doubts about the completeness of the door set, contact the door supplier. Incomplete or evidently defective fire rated door must not be installed.

1.2 Verification of installation hole and dimensions

- 1.2.1 When the frame is placed inside the installation hole, it must have 10-30mm installation space on either side and above for fixing, the installation hole must have straight edges. Only then the installation space can be properly compressed.
- 1.2.2 The masonry must be strong. Lightweight construction walls must have reinforcements for installation (e.g. wood beam for gypsum wall).
- 1.2.3 If the above requirements are not met, the door must not be installed.

1.3 Installation

- 1.3.1 Place the product in the installation hole, fix the location (with gypsum strips). Drill holes in the masonry through the mounting holes in the door frame.
- 1.3.2 Flush steel doors should have mountings on the sides and above – 4 on both sides and 2 on top. Threshold is mounted from the middle. The mounting holes are prepared by the manufacturer.
- 1.3.3 Product must be mounted inside the installation hole with fasteners that provide solid and rigid installation for a particular type of wall. Steel 10mm diameter frame anchors are recommended (for concrete, brick and lightweight construction walls). Different anchors or concrete screws may be used in concrete walls (with minimum diameter of 7,5mm). In the case of gypsum wall, which installation hole edges are reinforced with wood beam, the door frame can also be mounted with wood screws with minimum diameter of 6mm. Only fasteners made from steel can be used in installation.
- 1.3.4 Make sure that the construction is not stretched during tightening the screws/anchors.
- 1.3.5 Also welding can be used when product is mounted in steel construction. Welds can only be made in the frame area where the mounting plates are. Pay attention to corrosion protection and maintenance of fire protection of steel constructions after the welding.
- 1.3.6 Fire rated flush steel door without threshold can be installed if the floor is made from non-combustible material in 100mm range from both sides. For transportation, a stainless steel sheet has been attached instead of the threshold, which must be removed when installed. Stainless steel sheet is point welded under the frame, it can be removed by striking the sheet downwards or by cutting it. The gap between the door leaf and floor is 10mm in a

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closed position. If the floor is not level, then the frame might need submerging in the floor or the floor must be leveled. In no case the frame should be installed leveled off or the gap between door leaf and floor left more than 10mm.

1.4 Tightening installation space

1.4.1 Installation space between the frame and wall must be filled and tightened with rock wool or installation foam. If the gap inbetween is 0-20mm, it may be filled with fire rated installation foam, but if the gap is bigger than 20mm, the door must be installed with rock wool. In case the installation gap is not refinished with plaster afterwards, they must be covered with steel trims.

1.5 Doorblade installation

- 1.5.1 Verify the existence of hinge bearings. Lift the doorblade on the hinges.
- 1.5.2 Make sure that the door frame is leveled and the doorblade opens and closes unhindered.
- 1.5.3 Check operating of the lock from both sides.