

Installation Instruction ó Single Door, Double Door and Shutter. Frame type A, B & C

For doors labeled with SSF 1078 protection class 2, special regulations concerning hardware shall be met to obtain protection class 2. See separate installation instruction on our website. www.robust.se

Assembly instructions are also available on our website:
www.robust.se/downloads/monteringsanvisningar

Equipment for installation:

- Leveler
- Drill diam. 8 mm (and 6mm, only for solid oak threshold)
- Hexagonal key 12 mm (jacking screw) and hexagonal key 3 mm (hinges)
- Caulking e.g. mineral wool (see pt.10)
- Electric drill / screw driver
- Screw and if necessary plug for wall mounting
- Elastic sealant (e.g. Sikakryl ó HM)

Check the content of the delivery:

- Door leaf and frame according to the delivery notes.
- Mounting kit containing frame insulation, mounting accessories and installation instruction.
- Frame type A - three separate steel cover profiles covering the inside wall.
See separate installation instruction.

Suggestions for fasteners

Concrete	Adjufix PL TRT 860 60 (screw + plug) Screw Spax TFT 6x90 + nylon plug 8x80. Esse concrete screw 7,5x72
Airbrick, lightweight concrete, Leca	Screw Spax TFT 6x90 + nylon plug 8x80
Wood	Adjufix-screw TRT 665, Screw Spax TFT 6x90,
Metal profile high strength steel	Adjufix Self drilling screw 5,4x32/50 (max thickness 2,5 mm)
Steel beam	TAPTITE MFT-TT 6x40
Steel threshold	Screw TKFX SPAX 5x40 mm + nylon plug 6x30mm. Mounting screw TSC 4,2+45 + nylon plug 5,5x35

Mounting accessories:

- Standard - 1 bag with 26 plastic plugs and 2 cover plugs to the top edge of the frame.
- Additional - 1 bag with 14 plastic plugs for wide / high single doors and double doors.
- Additional - 1 bag with 1 screw and 1 plug (only for solid oak threshold)

Manufacturing assurance

- If the door has a Type Approval label Robust Ståldörrar AB testify that it is manufactured according to this Approval and the drawings and other documentation to which it refers.
- If alterations are made to the doorset, Robust Ståldörrar AB cannot ensure the declared performance and properties.

Mounting:

Note. The wall construction must withstand mounting of doors. If the wall are inferior the door function will be impaired.

1. Check the wall opening in relation to the required sizes of the door set. For frames prepared with electric strike, the wall opening may need to be modified. See separate installation instruction electric strike plate on our website.

If the wall opening exceeds the specified tolerances it should be adjusted without compromising fire and sound reduction characteristics.

F.O.D = frame outer dimension inside.	F.O.D Height (MH):	Tolerance wall opening:	F.O.D Width (MB):	F.O.D including jacking screw
Frame, with standard threshold	2100 (mm)	MH +10 / 0, MB + 20 / 0 (mm)	MB - 10 (mm)	MB +20 / 0 (mm)
Frame, with solid oak threshold Note! Frame height increase 5 mm	2100 (mm)	MH +15 / 0, MB + 20 / 0 (mm)	MB - 10 (mm)	MB +20 / 0 (mm)


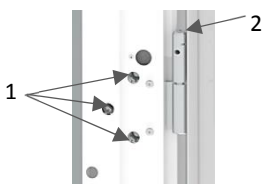
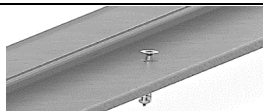
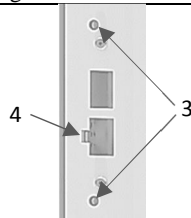
2. Unhook the door leaf / door leaves from the frame.

3. Insulate the frame with the insulation supplied.

Some door types are delivered with already insulated frames.

4.
 - 4.1 Check the floor surface, it must be horizontal and free from dirt and unevenness.
 - 4.2 Place the frame in the wall opening and center it. Ensure that the frame is positioned vertically and horizontally in correct position.(cross-measurement)
 - 4.3 Rotate/screw the jacking screws carefully to the wall with the hexagonal key (12 mm). Not too tight, as the frame can bend.
 - 4.4 Drill diameter 8 mm hole through the jacking screw (screw + plug). Start with the upper (1) and lower (3) attachments on the hinge side. Ensure that the frame is positioned vertically and horizontally in correct position. Fasten the frame with screw/plug appropriate for the current wall type. Continue with the 2 (3) other fastening points in the same c/l on the hinge side. For heavier doors it is also recommended to attach the frame to the points (5) and (6)
 - 4.5 The frame has double jacking screws to provide more flexibility for mounting. The most vital attachment points are the hinges and the locks. We recommend using at least two jacking screws at the hinges. The attachment points at (1) and (3) and also the attachment points at (2) and (4) It is not a requirement for classification, but the adjustment is facilitated by more screws.
 - 4.6 If the wall opening isn't perpendicular to the wall, you can use the fixing points (2) & (4) to twist the frame slightly, which facilitates parallelity between the lock and hinge side.
 - 4.7 The tilt of the door leaf can be adjusted slightly if the attachment points (5) and (6) are used. (cannot be performed after the frame is attached to the wall with elastic sealant)



5.	<p>5.1 Place the door leaf in the frame.</p> <p>5.2 Check the function of the door and the gap between the frame and door leaf, gap width of 4 +/- 1 mm.</p> <p>5.3 Single door - the door blade leading edge and frame lock side must be parallel, adjust the screw jack positions if necessary.</p> <p>5.4 Double door - the active and passive door leaf leading edges must be parallel, adjust the jacking screws positions if necessary.</p>	 <p>Upper front edge single door Lower front edge single door</p>
6.	<p>6.1 Make sure the gap between the front edge of the door leaf and the lock side is equal to the upper and lower edges.</p> <p>6.2 Drill and mount the upper and lower attachment points on the lock side. Choose in firsthand attachment points that are hidden when door is closed. Check that the front edge of the door leaf and the frame lock side still are parallel.</p> <p>6.3 Continue with the middle attachment points. At the lock side, only one jacking screw per plate is required. However, in order to facilitate the adjustment of the frame and to increase burglary protection, we recommend that the two rear jacking screws at the main lock are also used. However, this is not a requirement for the security classification but a recommendation.</p> <p>6.4 For double doors, drill and install two fixing points in the over panel. Do not tighten the jacking screws to hard, it can reduce the clear opening.</p> <p>6.5 Check the door frame by control measuring the clear opening. Adjust the jacking screws if needed. Make sure that the frame don't bend.</p> <p>6.6 Check the function of the door and the gaps between the frame and door leaf, gap width 4 +/- 1 mm at the lock side, hinge side and frame header.</p>	
7.	<p>7.1 Door leaf lateral position can be adjusted slightly by means of the attachment points of the hinges, see (4.6).</p> <p>7.2 The elevation of the door leaf can be adjusted with the screws in the hinges (2). We recommend a gap width of 4 mm between the frame header and the top edge of door leaf. Ensure that all adjustment screws (2) are resting on the frame hinge pins.</p> <p>Adjustment can be done using an allen key (3 mm)</p>	
8.	<p>Threshold: All threshold models require flat surfaces throughout the threshold width.</p>	
8.1	<p>Steel threshold: Attached to the floor with a screw/plug.</p> <p>Oak threshold with steel plate. Doesn't require screw/plug fixing to the floor.</p>	<p>If the door is located outdoors, use silicon in the joint between the threshold and the sides of the frame and in the joint between the threshold and the floor.</p>
8.2	<p>Solid oak threshold: Fasten the oak threshold to the floor by drilling a 6mm whole. Use the supplied screw and plug.</p>	
9.	<p>Caulk between frame and wall with insulation that meets fire class A1 or A2, this is a prerequisite for fulfilling the door fire rating</p>	<p>If the clearance between the wall and frame is large, it may need a cover strip of steel.</p>
10.	<p>For frame type A, wall frame extension, install this when caulking between wall and frame. Cut a slit parallel to the frame where the wall cover is to be placed, deep enough to be able to mount the wall frame extension.</p>	<p>See separate installation instruction. Frame type A = frame type B + wall frame extension.</p>
11.	<p>Install the supplied plastic cover over the holes in the frame. For frame type A and B , covers also to be fitted at the upper edge of the frame sides</p>	
12.	<p>Double door. Ensure that the bolts run freely in the cut out in the frame header and threshold at full locking.</p>	
13.	<p>Adjustment of strike plate:</p> <p>13.1 For security door; tighten the security screws towards the wall to secure from leverage (3).</p> <p>13.2 Check that the latch moves freely in the cut out. Adjust the door leaf vertically for best locking engagement.</p> <p>13.3 The steel lip can easily be adjusted with a screwdriver or similar tool to adjust the door leaf in depth (4).</p>	
14.	<p>After the door leaf and frame have been installed; Check the sealing function. If the sealing strip's lip rest against the base of the list, it must be released. Use a blunt device. Lubricate the lock/s piston/s on the outside with grease intended for the purpose</p>	
15.	<p>Sealant pointing requirements:</p> <p>15:1 Smoke control class door: The frame to be sealed all around (4 sides) on the inside- or outside of the frame. Towards the threshold, sealant can be placed outside or below the threshold.</p> <p>15:2 Acoustic reduction single/double door and shutter: The frame to be sealed all around (4 sides) on the inside- or outside of the frame. Towards the threshold, sealant can be placed outside or below the threshold.</p> <p>15:3 Acoustic reduction door, single door with a window; The frame to be sealed all around (4 sides) on inside and outside of the frame. Towards the threshold, sealant can be placed outside or below the threshold.</p>	