

Teckentrup DW 62 1/2 Swing Secure single-leaf and double-leaf doors

Planning, Installation and Maintenance Instructions

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2. Symbol Explanation



Caution! Risk of personal injuries!



Attention! Risk of material damages!



Note



Reference

3. General Information



Caution!

Read and follow all the instructions in this manual as well as the information specified below to ensure safe installation and correct operation. Non-adherence to warnings may result in personal injury and property damage.

3.1 Target group

Installation should only be carried out by fully qualified specialists.

Qualified and trained door installation specialists have:

- Knowledge of general and special safety and accident prevention regulations.
- Knowledge of the standards and regulations required for installation.
- Participated in training courses for the application of safety equipment.
- Been trained in the safe use of hand and electric tools.
- Regularly participated in courses provided by the manufacturer.

3.2 Warranty

A warranty that regards functioning and safety can only be provided if:

- The safety and warning notices have been adhered to.
- Installation has been carried out correctly and in the order specified in the instructions.
- Only authorized accessories are used.
- The supplied parts have not been adjusted or adapted.
- Regular door maintenance has been carried out.
- The operator has been provided with all the relevant operating instructions.



3.3 General safety instructions

Caution!

- Any enclosed drawings take priority over this manual.
- Documents supplied with accessories take priority over this manual.
- Installation must occur in the sequence specified in this manual.
- Cordon off the danger zone prior to installation.
- Ensure that people who are not involved with installation are kept away from the danger zone.
- Installation must be carried out by at least two people.
- During the entire installation process, ensure that the door leaves and frame parts cannot fall down or be knocked down.
- Only use approved original spare parts for the door.
- Never modify components.
- Installation must be carried out from a secure position.
- The door must be mounted to adjoining components tightly enough to ensure that:
 - Expected forces are permanently supported when the door closes automatically.
 - Forces resulting from a fire are permanently absorbed.
 - The expected forces do not endanger the stability of adjoining components (wall, ceiling and floor).
- Only use intact as well as certified and tested lifting devices (assembly cranes, fork lifts) which are suitable for the intended load.
- Prevent draughts (wind load) during installation.
- Always use scaffolding or lifting platforms to carry out installation work at heights above 2m.
- Welding and cutting should only be carried out if:
 - They have been expressly approved and - if the subsurface is free of dust and flammable materials.
 - When using mortar, wait for the mortar to cure before commencing the next installation step.
- Always wear suitable protective clothing during installation.
- It is not allowed to weld in the area of the foaming material.

3. General Information

3.4 General requirements

Installation company

The owner or the client is entitled to a declaration of conformity signed by the installation company (also see last page of the respective approval). The CE marking, if the door falls within the scope of the harmonized European product standard, is indicated on a label placed in the rebate area of the door (hinge side).

Installation site

This product should only be installed and operated in countries in which the approval, the test certificate and further relevant documents are valid. The door should only be installed on substructures which are approved for the static loading conditions. The height of the finished floor must be specified. Alternative arrangements that regards the door height must be documented in writing prior to installation.

3.5 Wall types and required fixings

Table 1: Block Frame

Wall Type	Fixing Type	Fixing Material	
		Standard Door	Secured by Design
Timber	6 x 100 Wood Screw	Zinc Plated	A2 SS
Block	M10 x 100 Frame Fixing	Zinc Plated	A2 SS
Steel	M8 x 80 Counter Sunk Machine Screws	Zinc Plated	A2 SS

* Standard fixings not supplied - Secured by Design fixings included.

Table 2: Corner Frame

Wall Type	Fixing Type	Fixing Material	
		Standard Door	Secured by Design
Timber	6 x 150 Wood Screw	Zinc Plated	A2 SS
Block	M10 x 160 Frame Fixing	Zinc Plated	A2 SS
Steel	M8 x 50 Counter Sunk Machine Screws	Zinc Plated	A2 SS

* Standard fixings not supplied - Secured by Design fixings included.

3.6 Anchor Positions



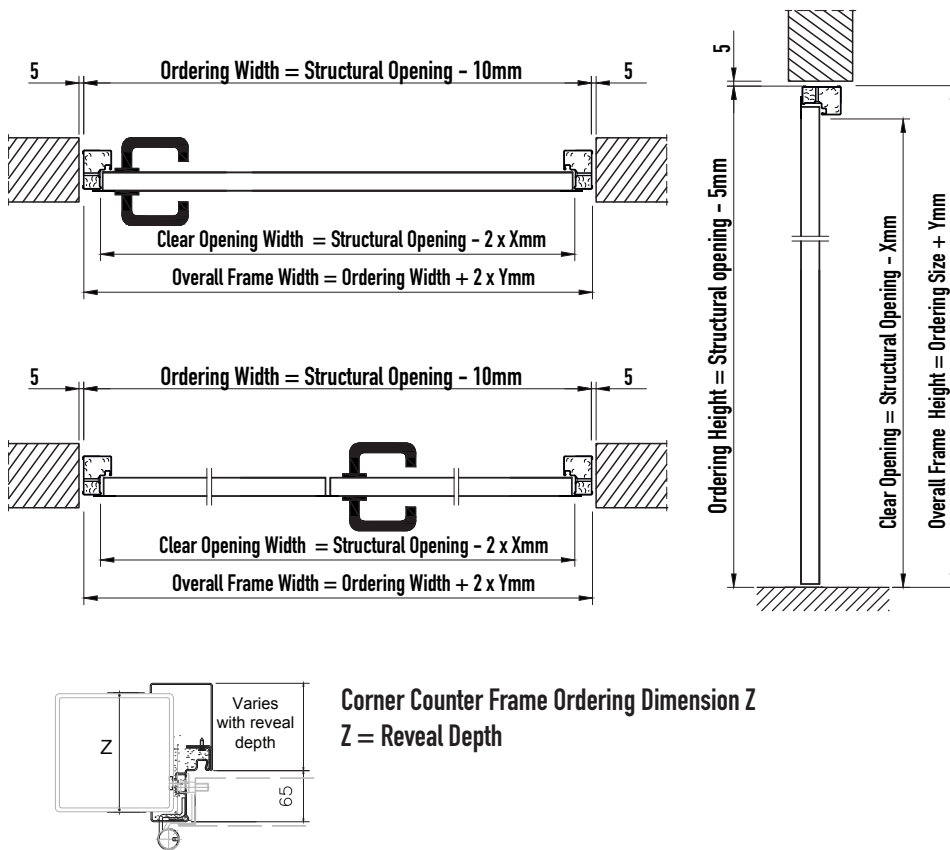
Note:

Each frame has pre prepared holes for fixing. When installing the door, all fixing points must be used to ensure a safe installation and comply with security certification.

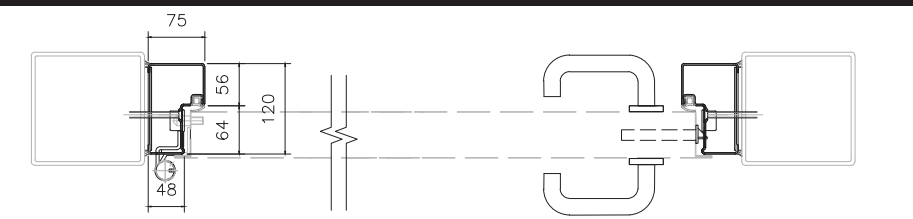
3. General Information

3.7 Dimensions

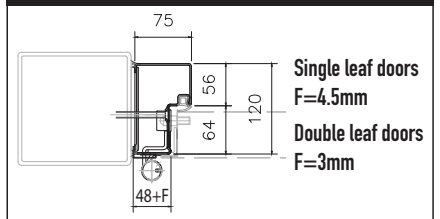
Ordering Size



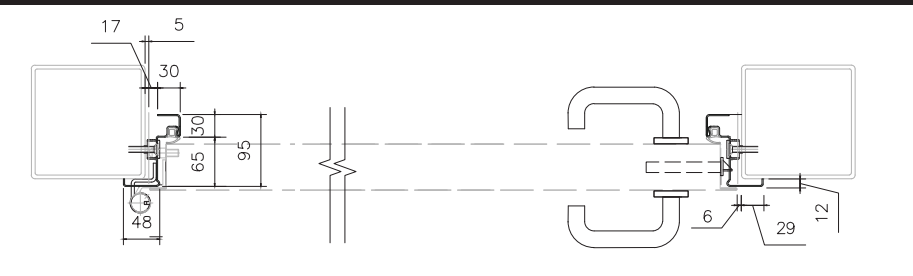
DW62 1/2 Swing Secure Block Frame (Classic)



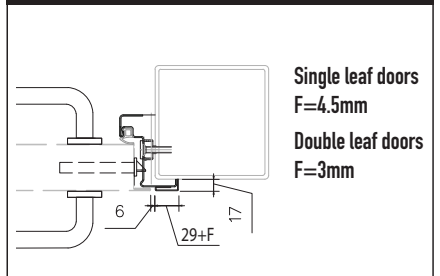
Block Frame FB Detail



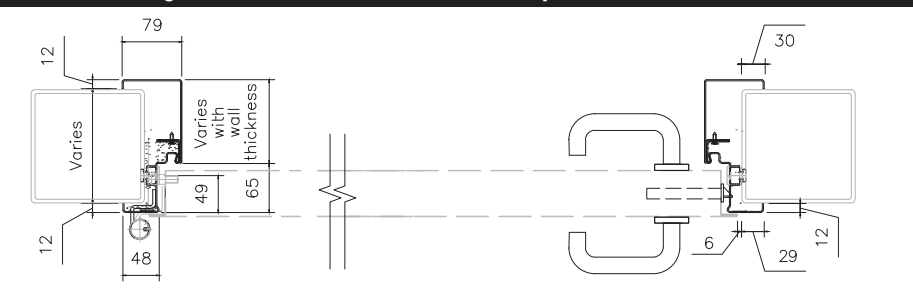
DW62 1/2 Swing Secure Corner Frame (Wrap)



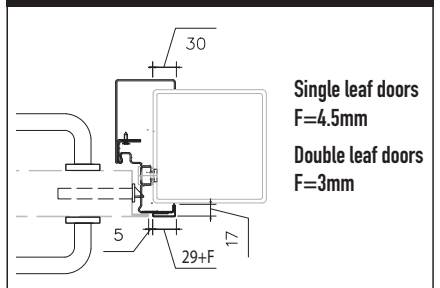
Corner Frame FB Detail



DW62 1/2 Swing Secure Corner Counter Frame (Wrap)



Corner Counter Frame FB Detail



3. General Information

**Attention!**

Sunlight can result in sheet steel doors in a temporary deformation of the door leaf (bi-metal effect). Dark shades increase the heat absorption on the door leaf surface considerably.

This physical thermal expansion is no reason for complaint!

To prevent damage should be chosen bright, reflective shades or taken structural measures to prevent direct sunlight.

3.8 Protection classes

General

- Burglar resistant doors are labelled with a name plate.

**Note:**

The desired protection class can only be achieved if the specified requirements are fulfilled during installation. You must use the fixings specified/provided.

Security doors (SBD)

- The burglar resistance of the door is only guaranteed when all the lock bolts are fully closed.
- The attack side must be determined prior to installation.
- The door must be equipped with hardware, glazing and cylinders provided by Teckentrup UK.
- Use the supplied seal profiles.

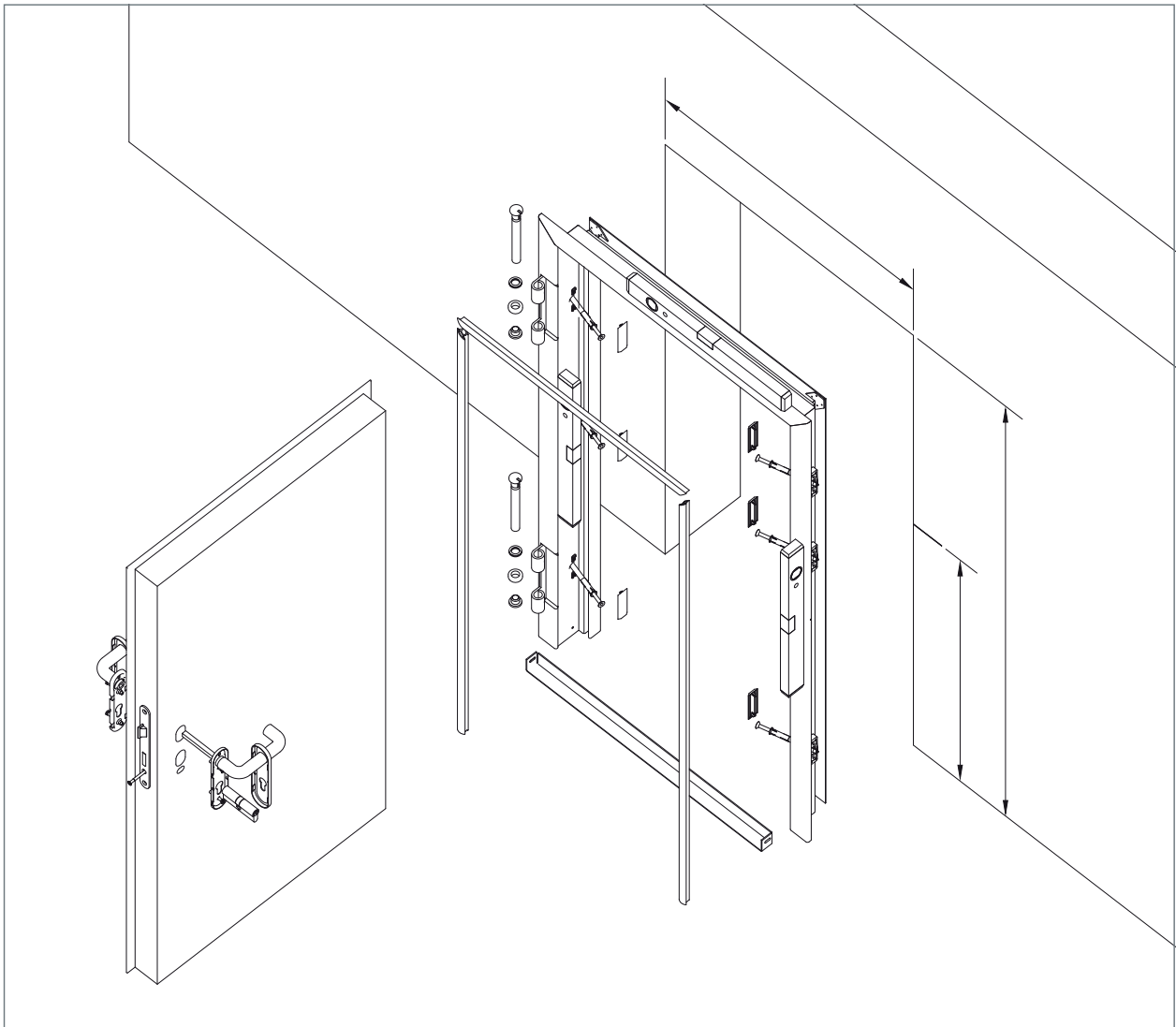
4. Installation Process

4.1 Installation sequence single-leaf doors

The standard installation sequence is described below.

Any alternative installation methods are described in the individual installation steps.

4.1 / 1



Order	Process	Reference
①	Marking the one metre level	Section 5.1
②	Frames parts factory connected	
③	Installaing the frame	Section 5.5
④	Connecting the door and the frame	Section 5.4
⑤	Backfilling the frame/filling with foam	Section 5.6
⑥	Inserting the seals	Section 5.7
⑦	Installing and adjusting the floor connection/bottom seal	Section 5.8
⑧	Installing hardware	Section 5.9

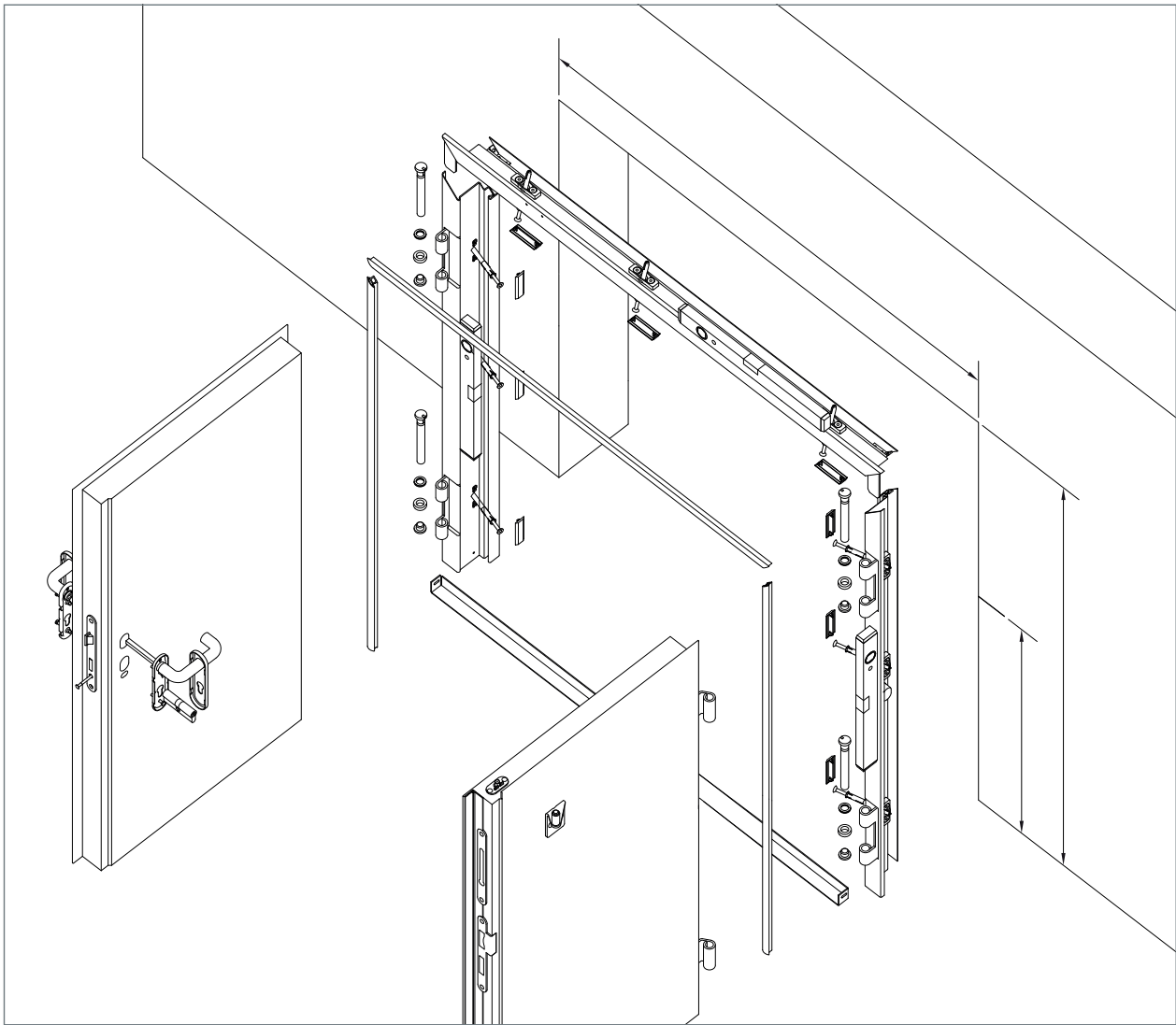
4. Installation Process

4.2 Installation sequence double-leaf doors

The standard installation sequence is described below.

Any alternative installation methods are described in the individual installation steps.

4.2 / 1



Order	Process	Reference
①	Marking the one metre level	Section 5.1
②	Screwing together the frame	Section 5.2
③	Installaing the frame	Section 5.5
④	Connecting the door and the frame	Section 5.4
⑤	Backfilling the frame/filling with foam	Section 5.6
⑥	Inserting the seals	Section 5.7
⑦	Installing and adjusting the floor connection/bottom seal	Section 5.8
⑧	Installing hardware	Section 5.9

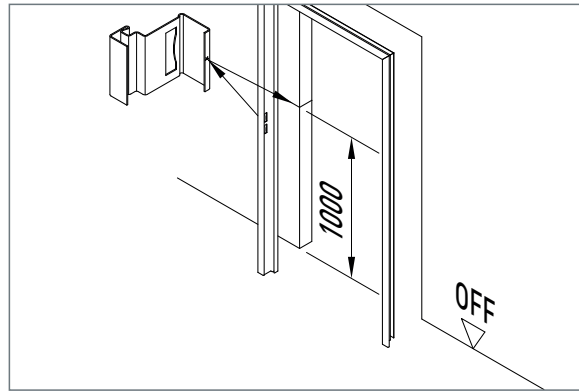
5. Installation

5.1 Marking the one metre level

The metre level specified by the customer must be transferred to the wall opening.

- Mark the one metre level in the opening.
- When mounting the frame, align the marking on the frame (on the frame edgefolding) with the drawn metre level.

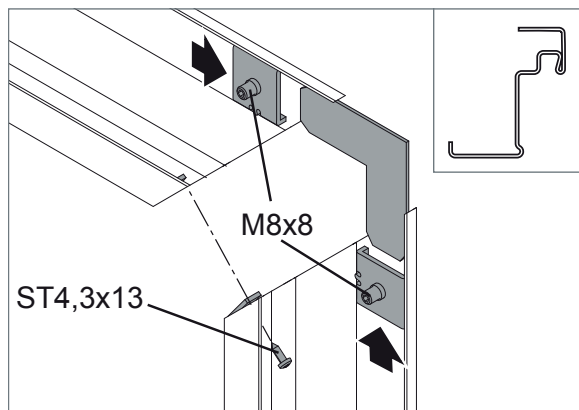
5.1 / 1



5.2 Screwing together the frame

Corner frame

5.2 / 1



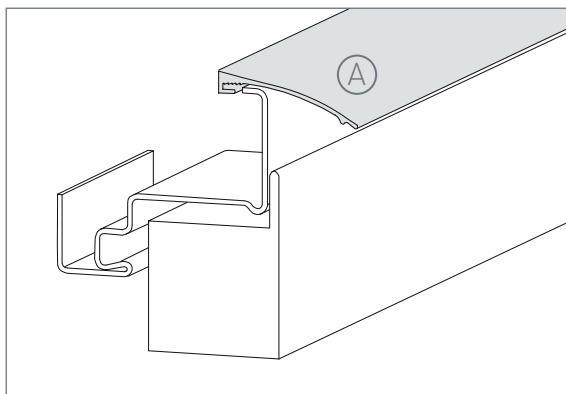
5.3 Rain guard

External doors must be equipped with a rain guard.

Doors without top door closer

- Clamp the aluminium rain guard (A) onto the upper frame part prior to installing the door.

5.3 / 1

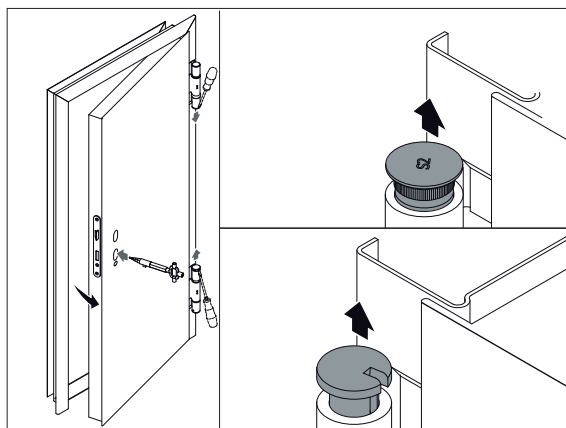


5.4 Door and frame disassemble / assemble

Disassembly of 1-leaf doors

- Doors in 1-leaf version are delivered with mounted frame to save space. Before fixing the frame to the masonry, it must be separated from the door leaf.

5.4 / 1



5. Installation

Hinge bolt (hollow/solid (flat head))

- Place the ball bearings (A) on the frame hinges (B).
- Place the door leaves (C) on the ball bearings (A). Slide the hinge bolts (D) into the frame hinges (B).
- To lift the door leaf, place the required number of washers (F) directly onto the bearing (A) during assembly. Place unneeded washers over the inner hinge section (reserve).
- Attach cover (E).

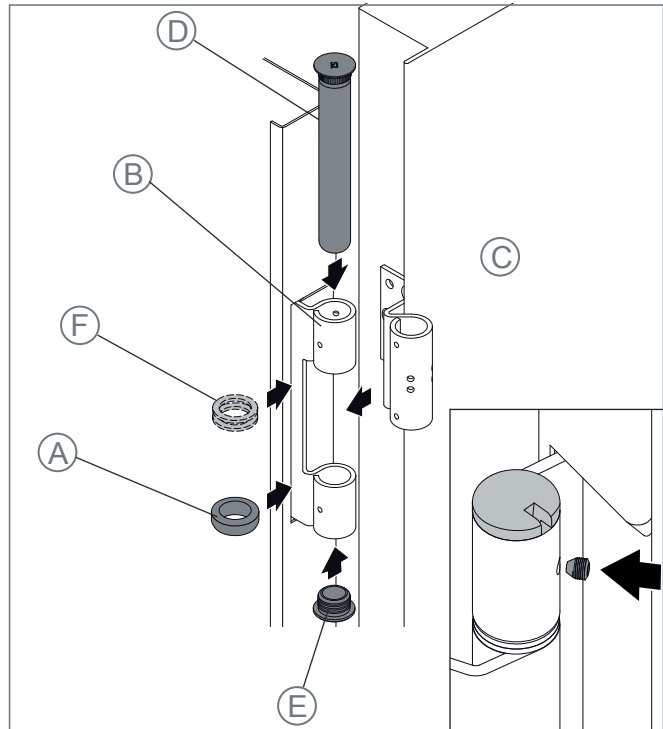


Note:

Depending on the available space, the hinge bolt can also be inserted into the frame hinge (B) from the bottom.

- Additional hinge bolt safety threaded pin Hollow hinge bolts do not need to be secured because they are self-locking.

5.4 / 2

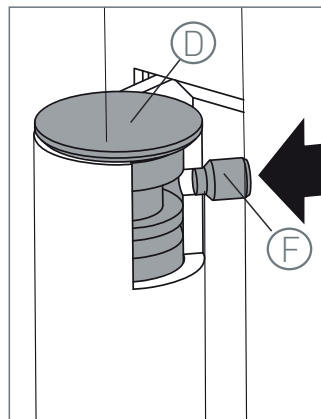


Security door hinge bolts do not have to be additionally secured.

Construction hinge (KO)

- Insert the set screw (F) until it engages in the hinge bolt (D).

5.4 / 3



It must be ensured that the set screw cannot be removed from security door hinges.

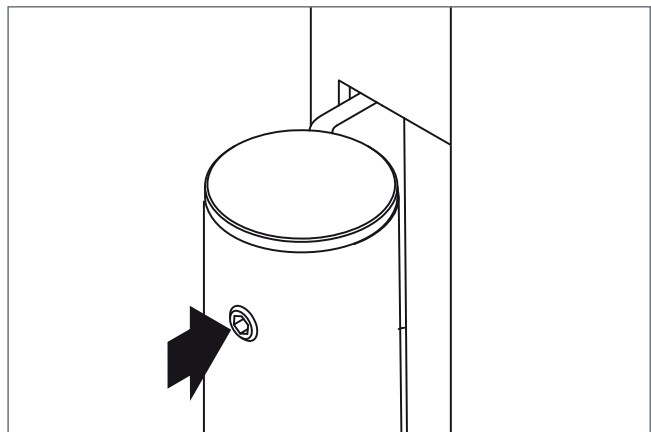


Note:

Secure the set screw against removal by tapping a brass pin/steel ball into the set screw or by applying a weld spot.

- Secure the set screw.

5.4 / 4



5. Installation

3D-hinges (VN)

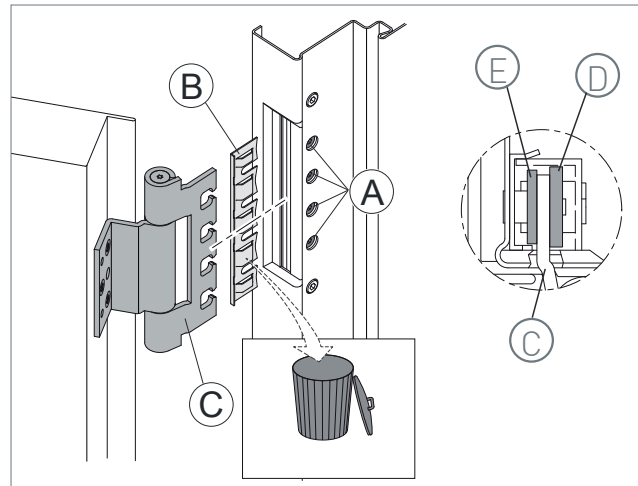
- Slightly loosen the clamping screws (A)
- Remove the spacer (B).
- Insert the frame part (C) into the hinge retainers.
- Screw the clamping screws (A).



Attention!

The frame part (C) must be inserted between the clamping pieces (D) and (E).

5.4 / 5



5. Installation

5.5 Installing the frame

- Position the frame in the opening.


Reference:

At the meter level (see section 5.1) align.


Reference:

Note section 3.4.

- Attach the frame to the marked points.

- Align the frame to all sides.
- Secure the position with wedges or adjusting screws.
- Install the door leaves.
- Check the required distances and gap dimensions.
- Place the door leaf against the frame.

- Attach the aligned frame to the remaining attachment points.

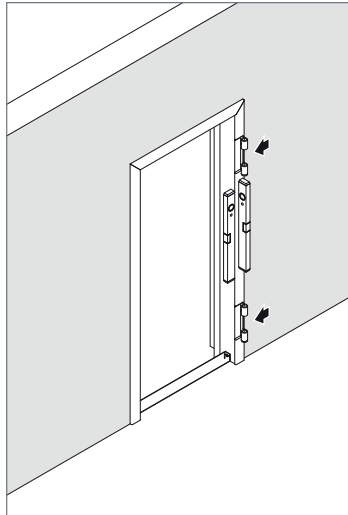

Reference:

Refer to Section 3.5 for wall plug installation.

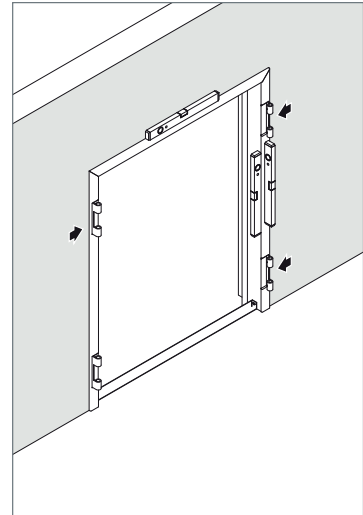

Note:

The wall plug must expanded parallel to the opening edge.

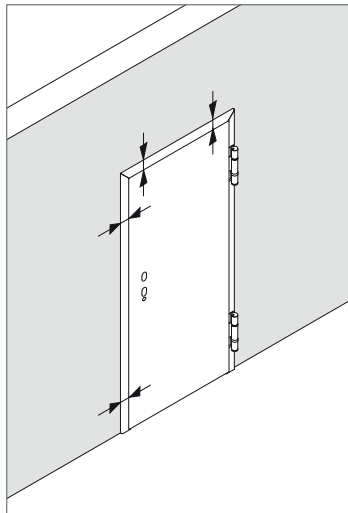
5.5 / 1



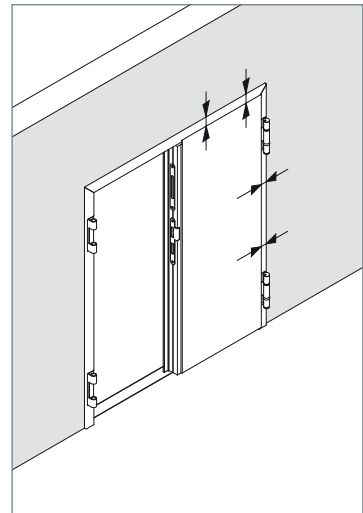
5.5 / 2



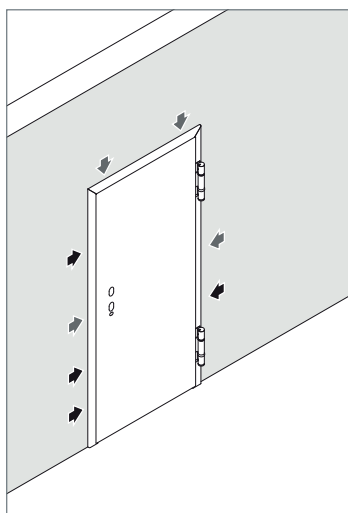
5.5 / 3



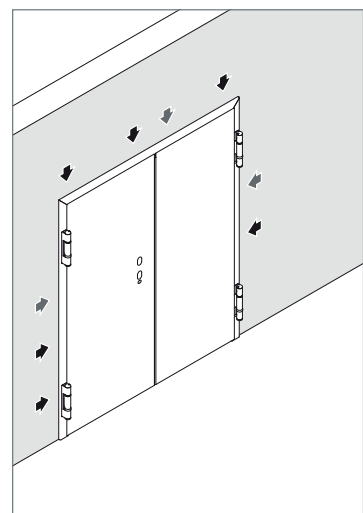
5.5 / 4



5.5 / 5



5.5 / 6

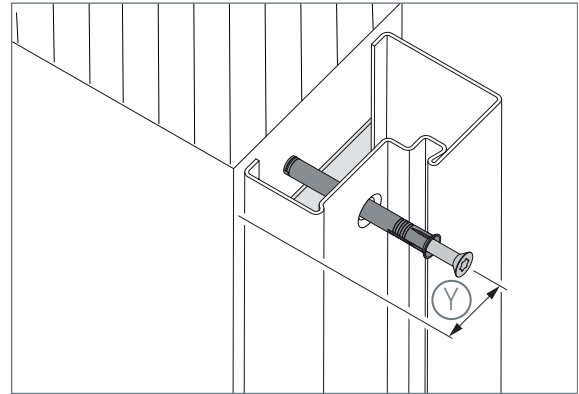


5. Installation Block Frame

5.5.1 Block frame

- Screw the frame to the wall in the specified sequence.

5.5.1 / 1



5. Installation in masonry, concrete and autoclaved aerated concrete

5.5.2 Corner frame



SMW (Type 1)

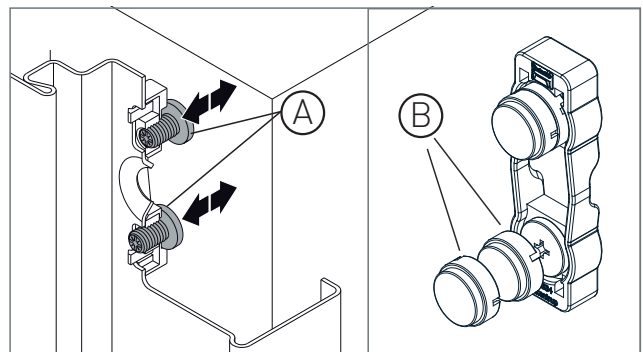
- Use adjusting screws (A) to fix the frame.



Note:

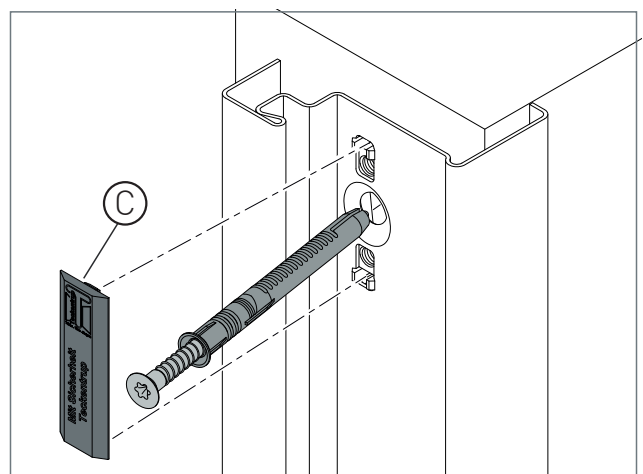
- If necessary, use the adjusting screw extensions (B).
- Always observe the factory set anchor positions.

5.5.2 / 1



- Screw the frame to the wall in the correct sequence at the specified fixing points.
- Minimum wall plug length:
 - masonry/concrete: 100mm
 - autoclaved aerated concrete: 160mm
- Place the cover (C) over the frame holes.

5.5.2 / 2



Reference:

- The anchor positions are described in Table 3.
- The sequence is described in Section 5.5.
- The recommended wall plugs are described in Section 3.4.

5. Installation - Assembly 2-shell frames

5.5.3 Counter frame and corner frame assembly

Screwed counter frame



Note:

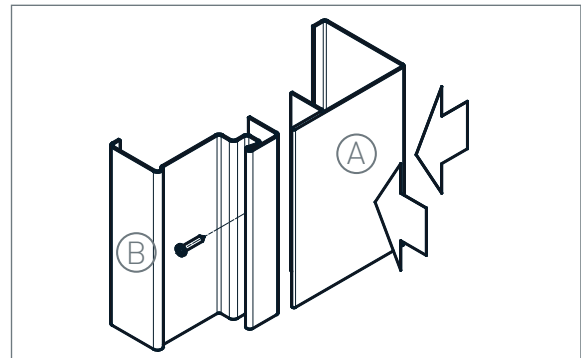
When using mineral wool or gypsum board, it must be inserted prior to connection.
When using mortar, it is applied after screwing parts together.

- Position the counter frame (A) in the opening.
- Align the counter frame (A) to the corner frame (B).
- Connect the counter frame (A) to the corner frame (B).

Fastening material

4.8 x 38 sheet metal screws at 62-door leaf thickness

5.5.3 / 1

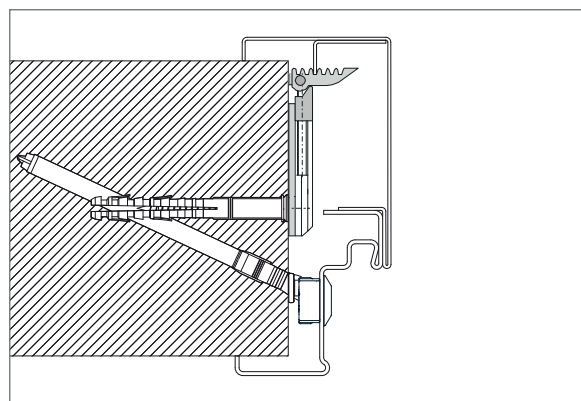


5. Installation in masonry / concrete and installation wall

5.5.4 Installation at widened counter frame

- Screw the fold anchor to the wall.
- Open the fold anchors (1).
- Adjust the fold anchor.
- Position the counter frame on the corner frame and connect them.

5.5.4 / 1



5. Installation TSM- frame in masonry and concrete

5.5.5 Corner frame TSM


Note:

Always observe the factory set anchor positions.

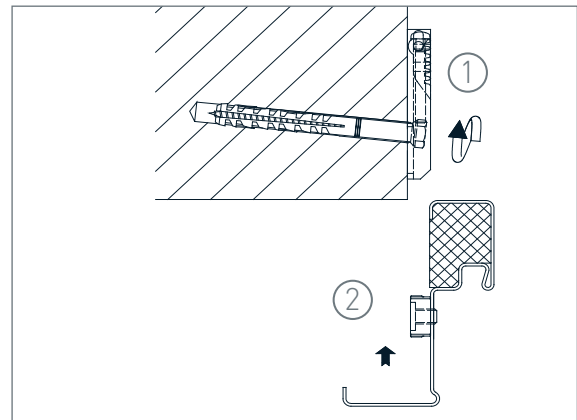

Reference:

- The anchor positions are described in Table 3.
- The sequence is described in Section 5.5.
- The recommended wall plugs are described in Section 3.4.

The corner frame TSM can be mounted in a few steps as a mortar-free frame attachment.

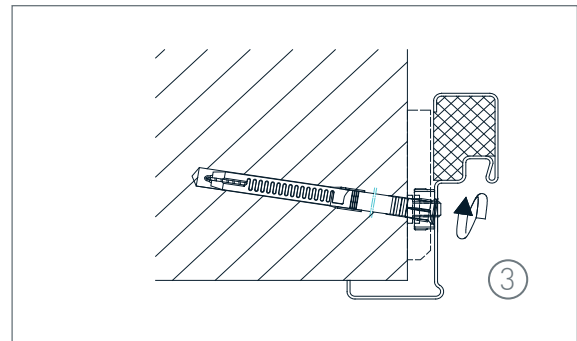
- Dowelling the special frame anchor (1).
- Slide the frame (2) into the wall opening.

5.5.5 / 1



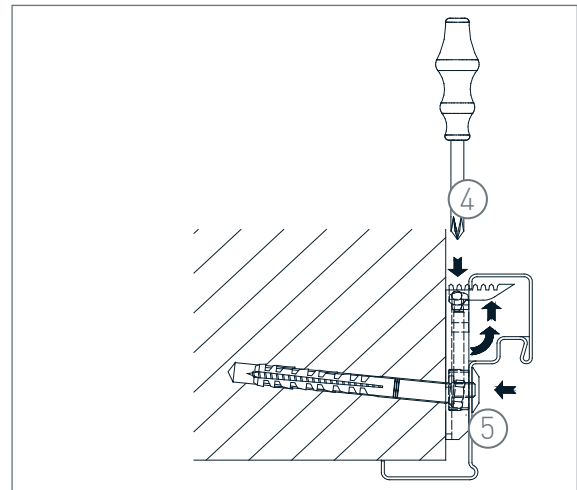
- Fix the frame by means of adjusting screws and bolt it to the factory-prepared anchor positions (3).

5.5.5 / 2


Reference:

- Fixed by means of screws see also Figure 5.5.2 .

5.5.5 / 3



- Align the hinged anchor on (4) so that they snap into the frame.
- Adjust the hinged anchors.
- Place the cover (5) over the frame holes.

5. Installation in masonry / concrete and installation wall

5.5.6 Counter frame and closed frame installation


Note:

The section describes the installation of the rear frame piece.

Fold anchor
Installation in masonry / concrete / autoclaved aerated concrete

- Screw the fold anchor to the wall.

Fastening material

10 mm plastic wall plug with corresponding screw.

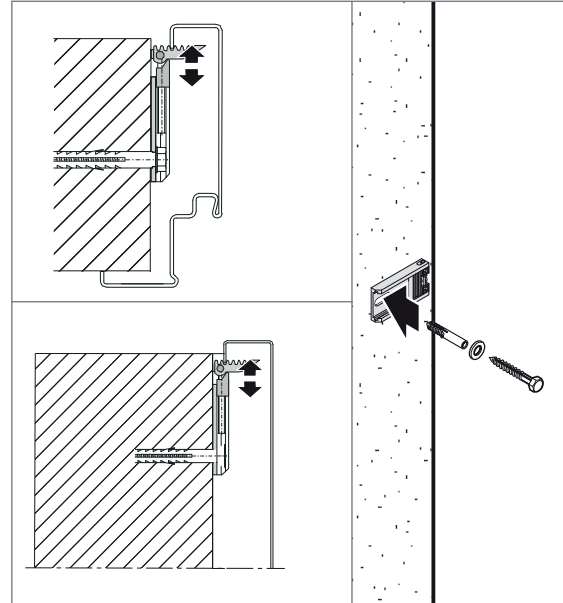
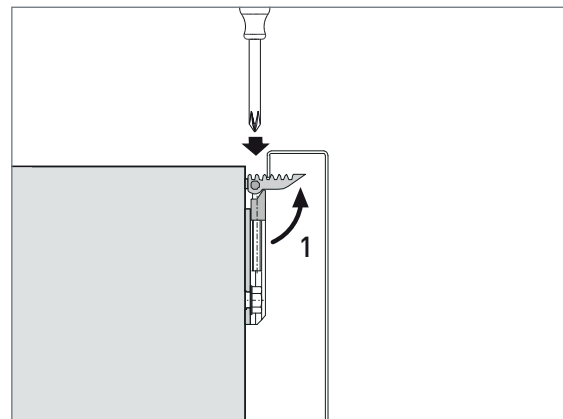

Reference:

The anchor positions are described in Table 3.

- Install the closed frame (only if closed frame is available).
- Adjust the fold anchor so that it snaps into place in the plaster angle.
- Open the fold anchors (1).
- Position the counter frame on the corner frame and connect them (only if counter frame is available).


Reference:

The counter frame and corner frame connection is described in Section 5.5.3.

5.5.6 /1

5.5.6 /2


5. Installation - Frame backfilling

5.6 Corner frame and corner counter frame

- Frames must be backfilled with foam (non-fire rated expanding foam).
- Or grout [Tarmac Poziment PPM18] - Available from Teckentrup UK, pumps also available.

5. Installation - Seal

5.7 Inserting seals

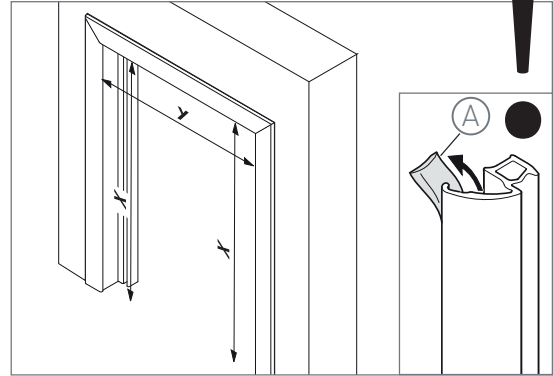


Attention!

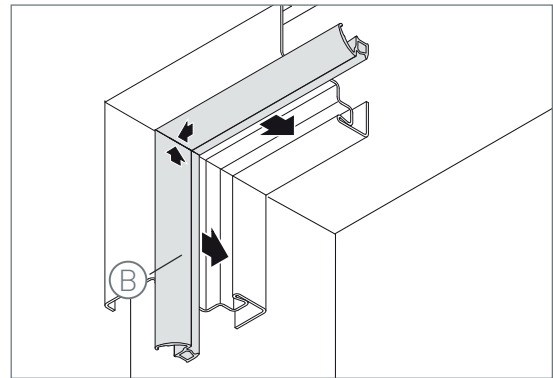
To ensure correct functioning of the seals, do not paint over them. Remove seals prior to painting and only reinsert them once the paint is fully dry. Only use original seals.

- **Remove the strip (A). If strip (A) is not removed the door will not close!**
- Cut the seals to the correct length.

5.7 / 1



5.7 / 2

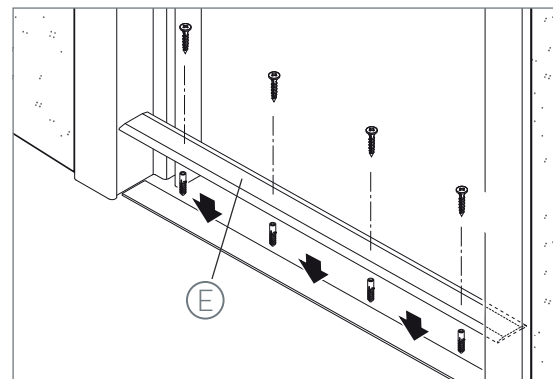


- Press the seals (B) into the grooves.

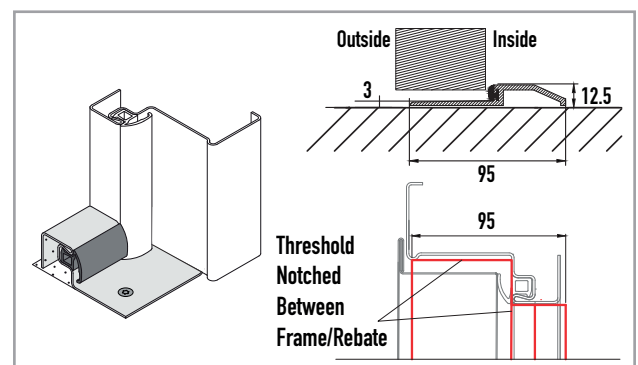
5. Installation - Floor connection

5.8 Installing and adjusting the floor connection / bottom seal Threshold detail

5.8 / 1



5.8.1 / 1



5.8.1 Floor connection with bottom buffer seal

- Place the door element in the opening.
- Align the door element.
- Ensure the buffer is also embedded when plastering the frame with mortar.
- Use wall plugs to fix the bottom buffer strip into position.

5. Installation - Equipment and settings

5.9 Installing hardware

5.9.1 Security hardware

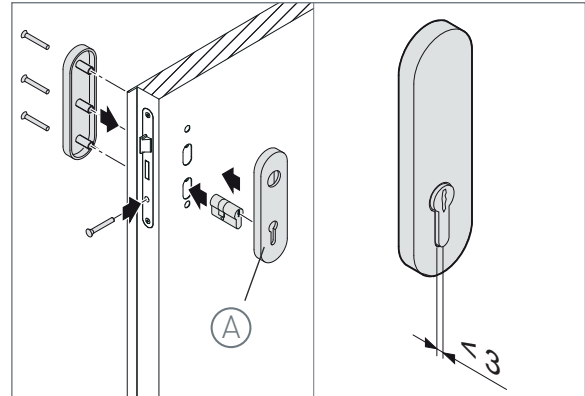


Security doors

The following conditions must be fulfilled in order to achieve the desired protection class:

- The plate with anti drilling protection (A) must be attached on the danger side.
- The supplied security hardware and profile cylinders must be used.
- The profile cylinder should not protrude more than 3 mm from the outer plate.
- Install the security hardware.

5.9.1 / 1



5.9.2 Height adjustment of the door

With some doors, the door height can be adjusted using spacer rings.



Note:

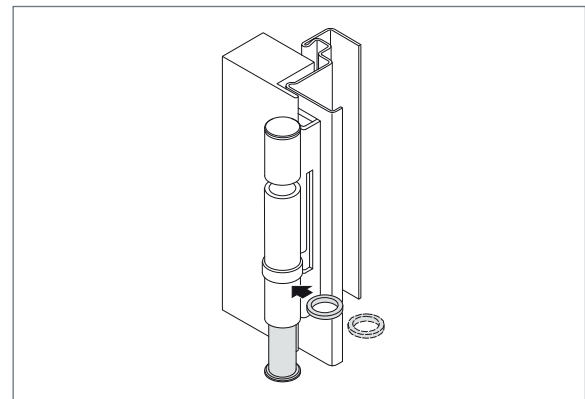
- A maximum of 2 spacer rings (each 2 mm thick) should be used.
- The permissible clearances must be observed.



Reference:

The required clearances are described in Section 3.4.

5.9.2 / 1

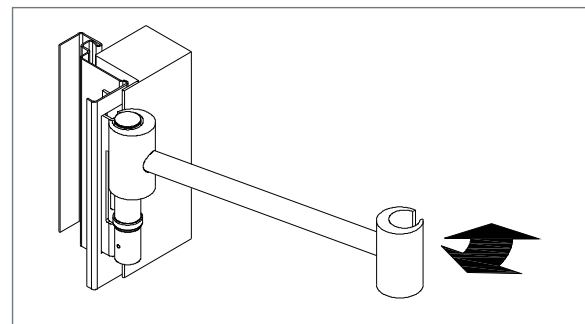


Standard Hinges:

5.9.3 Aligning the door leaves

- The horizontal position of the door leaves (fine adjustment of the gap between the door leaf and the frame) can be done by means of hinge bar available as an assembly tool.

5.9.3 / 1



5. Installation - Equipment and settings

3D Hinges:

5.9.4 Adjust the 3-dimensional hinges



Note:

The hinges have a three-dimensional, continuous adjustment (page +/- 3.0 mm; height +/- 3 mm; depth +/- 2 mm), the gap dimensions must be observed.

Adjustments

- Open the door.
- Secure the door with wedges.
- Bring door in the correct position.
- Remove the wedges.



Note:

Adjust both screws evenly, to avoid tension on the hinge axis.

Lateral adjustment:

- Turn the spindle screws (B) in the corresponding direction.



Note:

Adjust both screws evenly, to avoid tension on the hinge axis.

Pressing / height adjustment:

- Slightly loosen the clamping screws (A) per mounting element.
- Bring door in the correct position.
- Tighten clamping screws (A).

5.9.5 Security doors

The maximum clearance between the door leaf and the upper edge of the floor sleeve (E) is 2 mm.

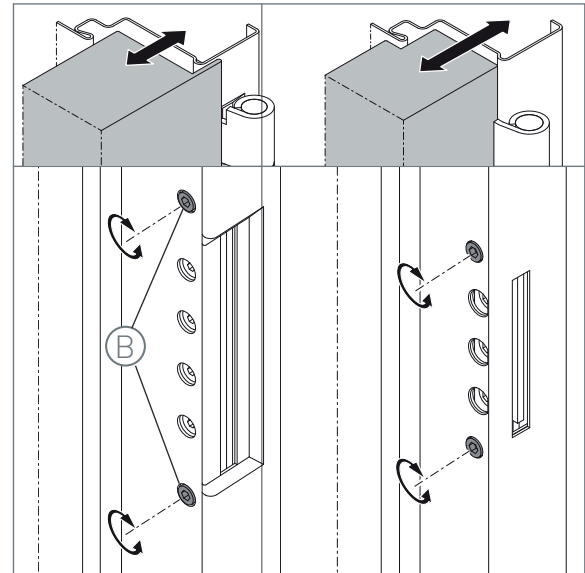


Use the supplied spacer plates (H) to adjust the height of the floor sleeves.

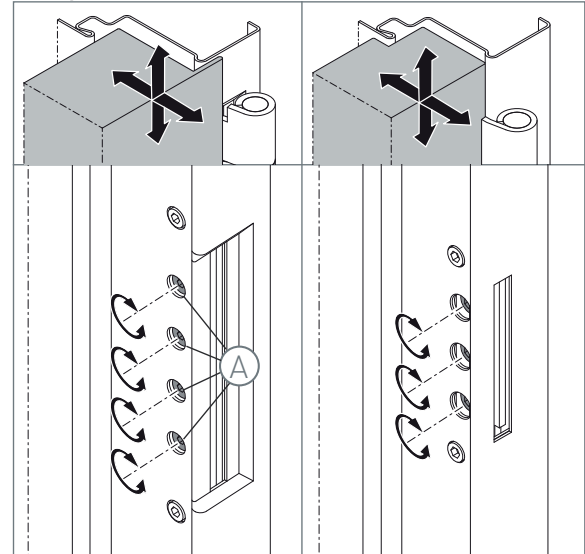
Setting the floor sleeve

- Slightly loosen the countersunk screws.
- Close the door.
- Extract the locking bar.
- The sleeve is subsequently centred on the bar.
- Carefully open the door.
- Tighten the countersunk screws.
- Check whether the door closes properly.
- The bars should enter the sleeves easily.

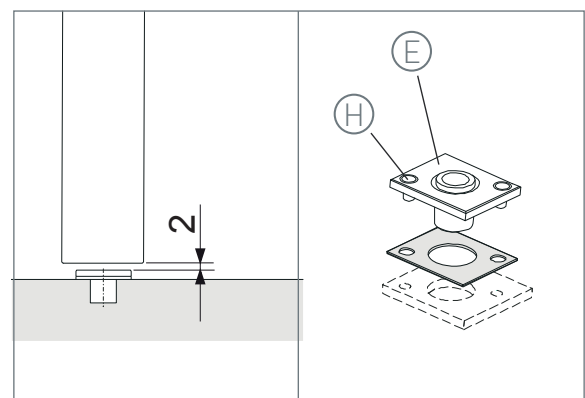
5.9.4 / 1



5.9.4 / 2



5.9.5 / 1



6. Maintenance tasks

6.1 General

- To ensure correct functioning of the fire, smoke protection, security, sound insulated and multi-purpose doors, professional maintenance should be carried out every 12 months (more often for frequently used doors).



Attention!

Detected faults must be eliminated immediately to guarantee safe operation. Only suitable cleaning agents should be used for cleaning. Not suitable are:

- Cleaning agent with corrosion promoting or harmful contents.
- Scouring agents, abrasive cleaning agents, wire wool or similar products.
- Petrol, benzene, turpentine or similar products.
- Use acid-free graphite, grease or resin-free oil for lubrication purposes.

- Clean seal profiles with a clean cloth, warm water and a rinsing agent.

Table 4: Maintenance Tasks

Door components	Required maintenance tasks					
	Function check	Clean	Lubricate / Oil	Tighten fastening screw	Rectify	Comment
Door design						
Frame		x		x	x	Repair surface defects (cracks)
Wall connection				x	x	Repair defects (loose masonry, cracks)
Door leaf	x				x	Repair surface defects (cracks)
Infill (glass, ventilation)	x			x	x	Repair sealing defects (silicone), clean ventilation slots
Upper part (fixed)		x		x	x	Repair surface defects (cracks) Check and lubricate locking system (e.g. catches and hinges)
Upper part (fixed glazing)		x		x	x	
Upper part (opening glazing)	x	x	x	x	x	
Bottom threshold	x	x		x	x	Repair surface defects (cracks) (to ensure correct sealing)
Hardware						
Seals	x		x		x	Replace brittle or damaged seals
Hinges	x	x	x	x	x	Replace defective parts
Handle, knob		x		x		
Mortice lock (latch, bolt)	x	x	x	x	x	Check the double-rotating connection of the bolt, replace defective locks, if necessary
Lock plate	x	x	x	x		Check the adjustable latch parts, if available, re-adjust, if necessary
Additional locking without profile cylinder	x	x	x	x		
Additional locking with profile cylinder	x	x	x	x		
Top door closer (OTS)	x	x	x	x	x	Check the closing speed (approx. 6 sec from 90°) and the limit stop
Retractable bottom seal	x	x		x	x	Ensure sealing along the entire width (regulate via wedges), replace brittle or damaged seals
Spyhole		x				

7. Appendix

Declaration of performance (for doors in exterior applications) (in compliance with the Construction Products regulation 305/2011)

Detected faults must be eliminated immediately to guarantee safe operation. Only suitable cleaning agents should be used for cleaning. Not suitable are:

Manufacturer:

Teckentrup GmbH & Co. KG Industriestrasse 50 . D- 33415 Verl-Sürenheide

When intended for use as external doors, the steel multi-purpose doors have been developed, designed and manufactured in accordance with the EC Construction Products Regulation no 305/2011 of the European Parliament and Council of 9 March 2011.

Applied standards:

EN 14351-1:2006 + A1:2010 Windows and doors – Product standard, performance characteristics – Windows and external pedestrian doorsets without resistance to fire and/or smoke leakage characteristics.

The door should not be used until it has been asserted that the door has been installed according to our specifications and its operability has been checked. If the product is modified without our approval, this declaration is no longer valid.



Note:

The declaration of performance only applies for doors with CE mark. The allocation takes place via the ID no. printed at the door leaf (label).