

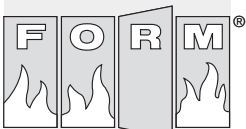
Sliding door systems

Content

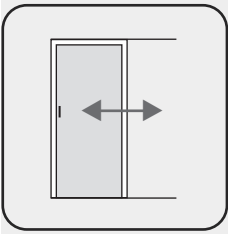
7

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Wooden special doors



Schörghuber



Sliding door systems

7.1

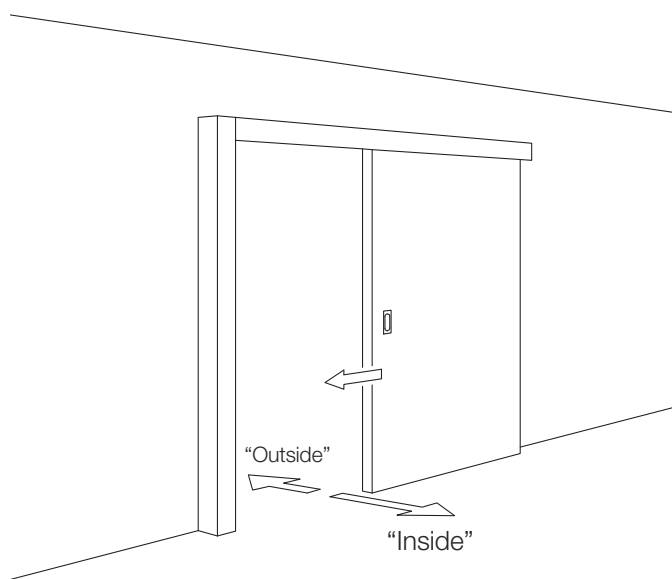
Definition

Schörghuber has defined the terms: “inside”, “outside”, “door closing to the left”, “door closing to the right” for sliding doors running in front of the wall according to following definition.

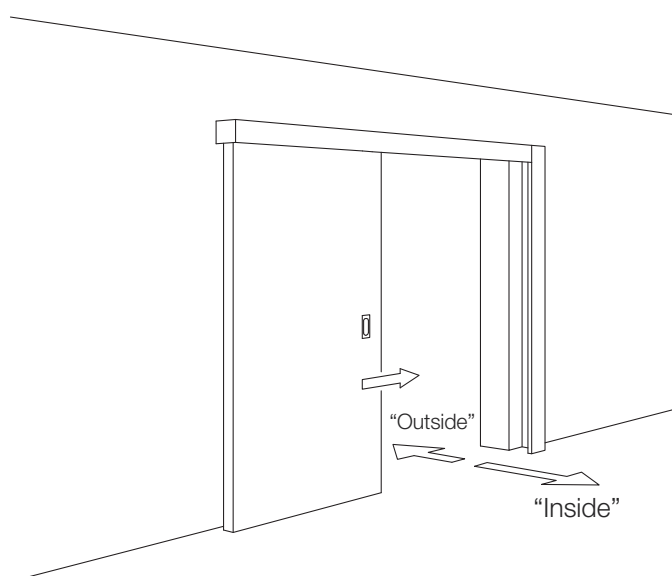
Sliding doors running within the wall are by default destined in the middle of the wall. If any other position within the wall is desired a drawing would be preferable.

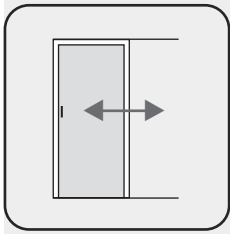
The front door leaf edge (lock edge) is described as **main closing edge** and the rear door leaf edge (equivalent to the hinge edge of standard doors) as **secondary closing edge**.

Door closing to the left side



Door closing to the right side





Sliding door systems

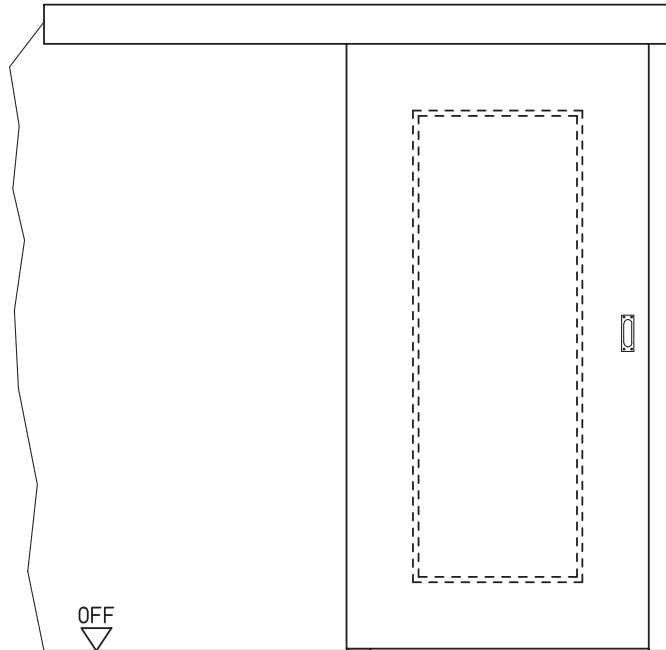
Configuration options

7.2

Wooden special doors

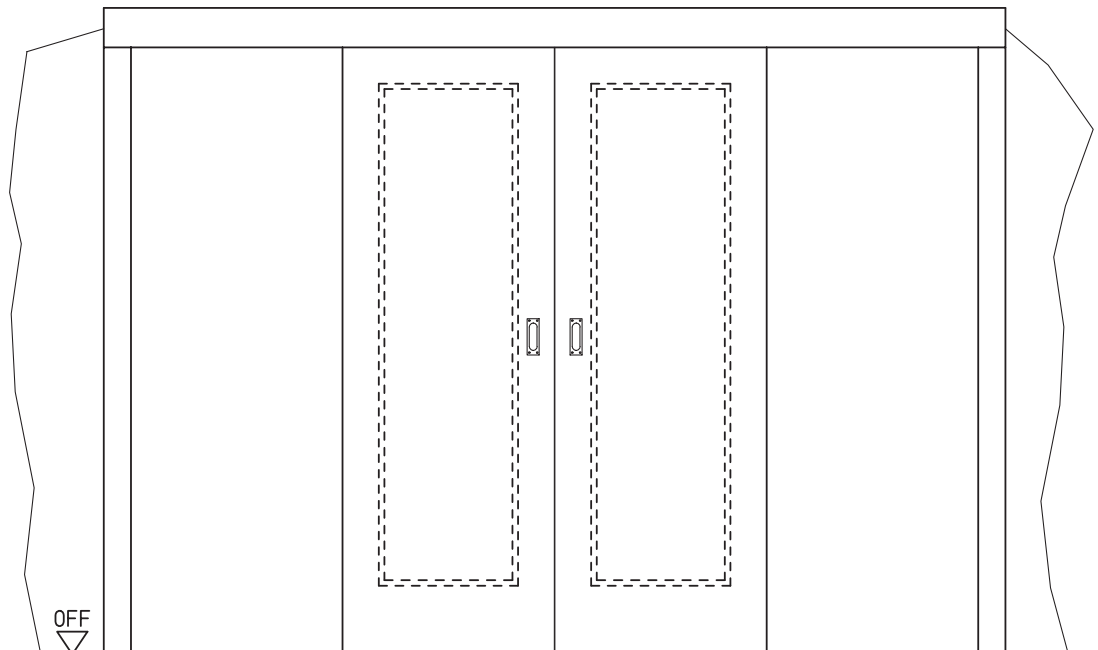
1-leaf sliding door running in front of the wall

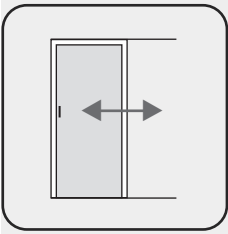
On request with vision panel
Type 1 N-ST, 3 N-ST, 25 N-ST



2-leaf sliding door running in front of the wall

On request with vision panel
Type 4 N-ST, 27 N-ST





Sliding door systems

Configuration options

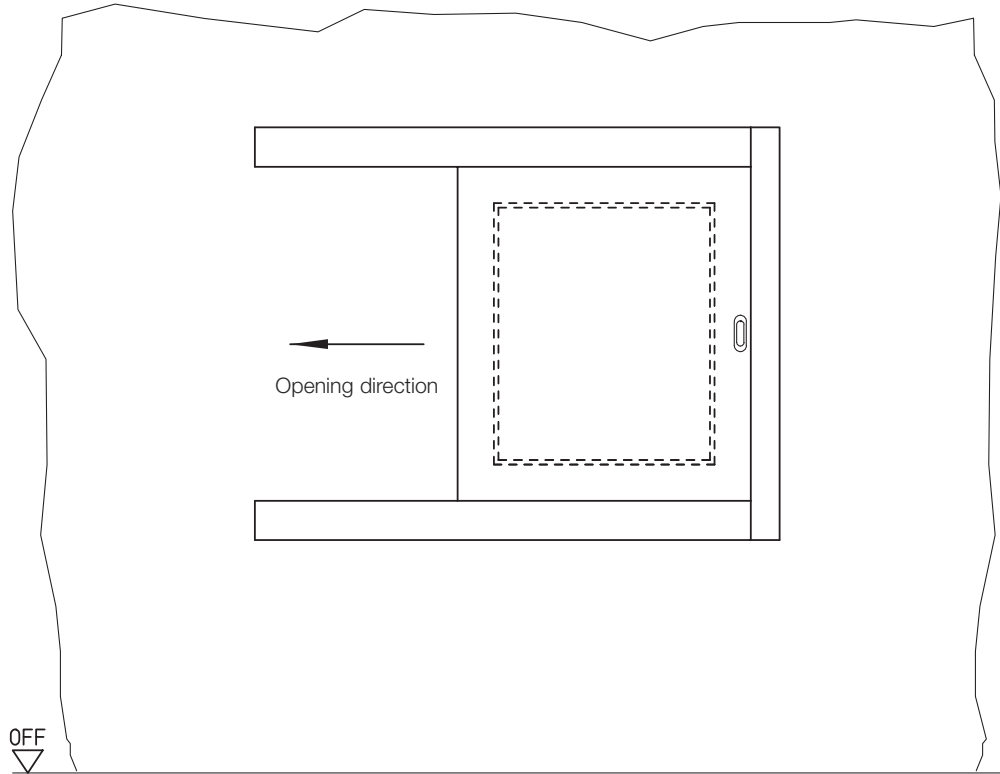
7.2

7
Wooden special doors

1-leaf sliding door running in front of the wall

On request with vision panel

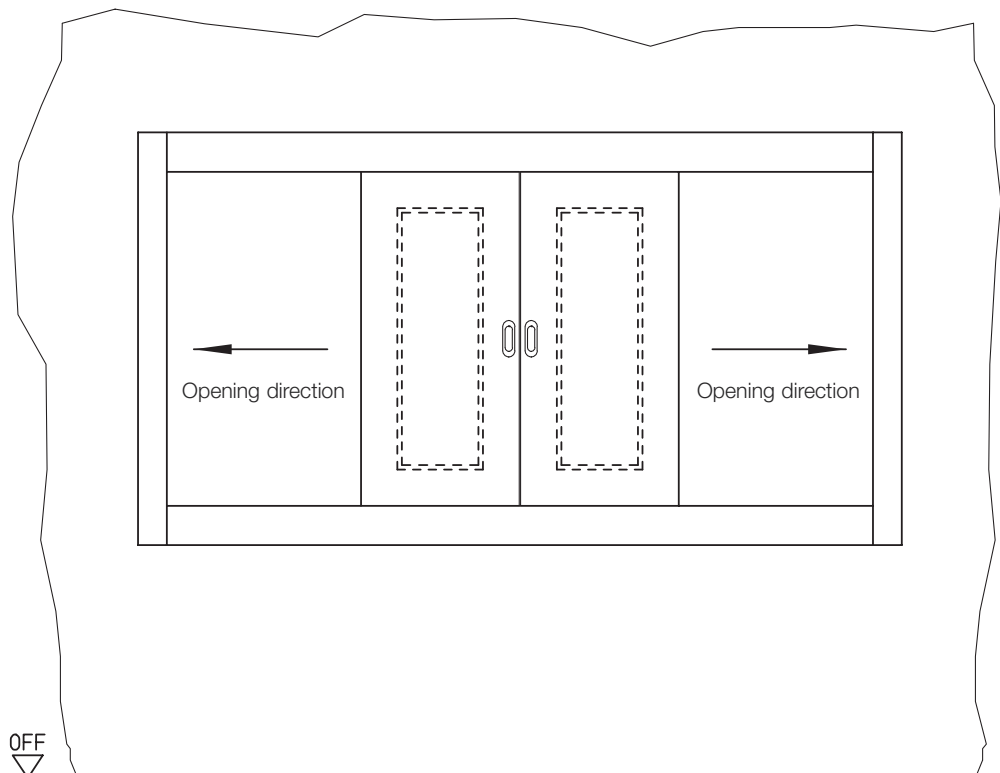
Type 1 N-ST KL, 3 N-ST KL, 25 N-ST KL

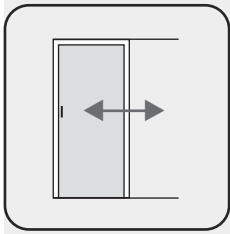


2-leaf sliding door running in front of the wall

On request with vision panel

Type 4 N-ST KL, 27 N-ST KL





Sliding door systems

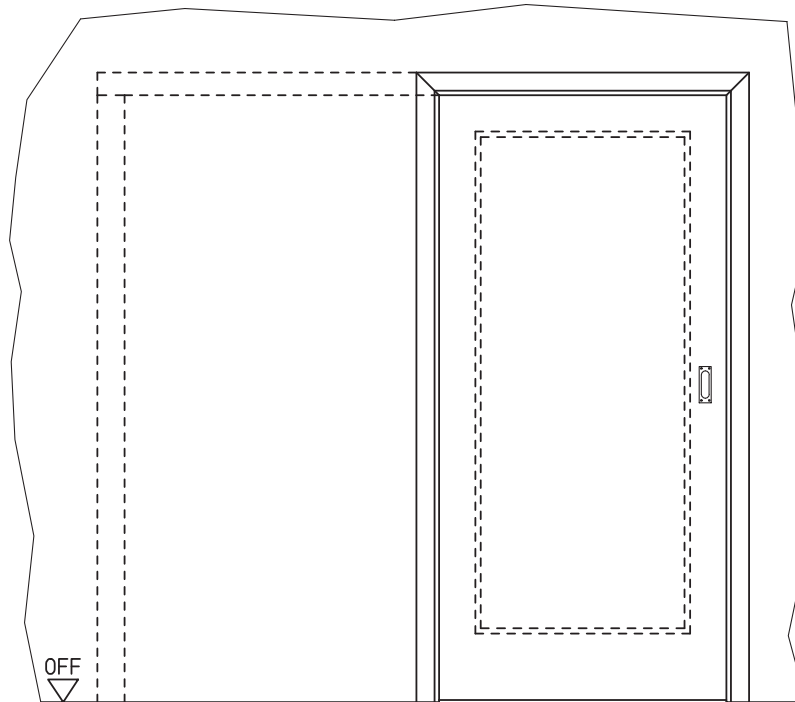
Configuration options

7.2

Wooden special doors

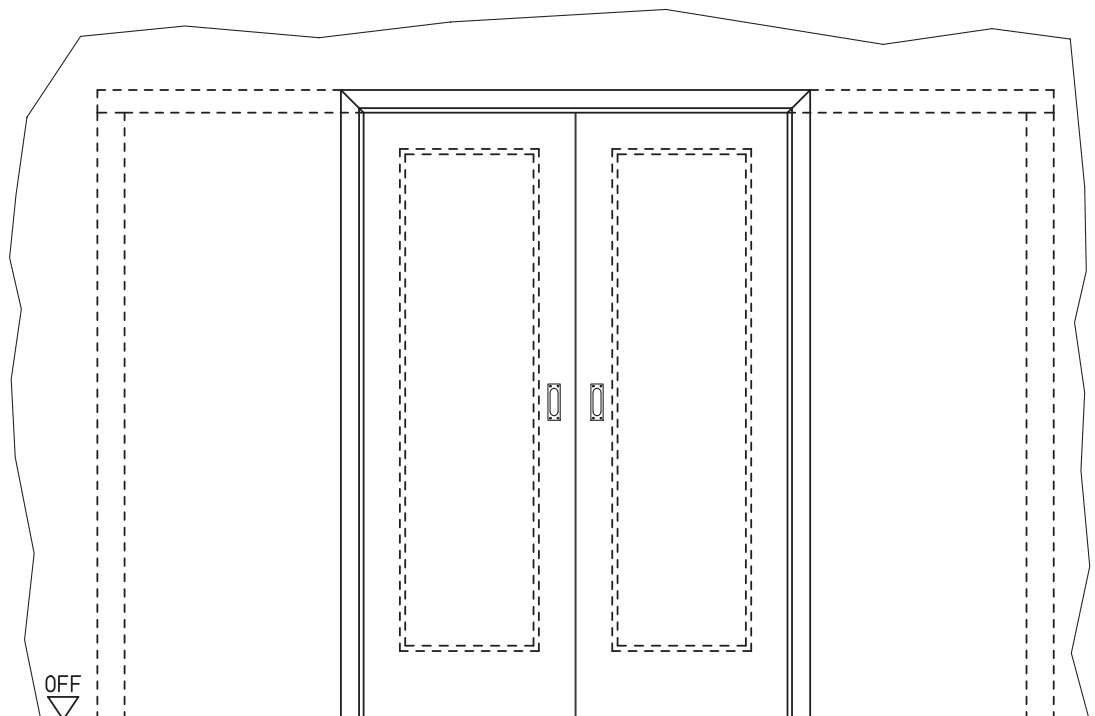
1-leaf sliding door running within the wall

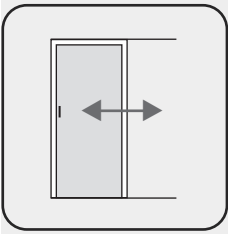
On request with vision panel
Type 1 N-ST, 3 N-ST, 25 N-ST



2-leaf sliding door running within the wall

On request with vision panel
Type 4 N-ST, 27 N-ST





Sliding door systems

Multiple function

7.3

Wooden special doors

1-leaf doors

Door type	Dimension BR-width BR-height	T 30	RS	PB	NT	VT
1 N-ST	625 - 1250 1750 - 2250			○	○	○
1 N-ST KL	625 - 1250 625 - 2000			○	○	○
3 N-ST	625 - 1500 1750 - 3000	○ *	○ **	○	○ ***	○
3 N-ST KL	625 - 1000 625 - 2000	○ *	○ **	○	○ ***	○
25 N-ST	625 - 1500 1750 - 3000	○ **	○ **			○
25 N-ST KL	625 - 1000 625 - 2000	○ **	○ **			○

2-leaf doors

Door type	Dimension BR-width BR-height	T 30	RS	PB	NT	VT
4 N-ST	1000 - 2852 1750 - 3000	○ *	○ **	○	○ ***	○
4 N-ST KL	1000 - 2250 625 - 2000	○ *	○ **	○	○ ***	○
27 N-ST	1000 - 2852 1750 - 3000	○ **	○ **			○
27 N-ST KL	1000 - 2250 625 - 2000	○ **	○ **			○

* Applied for approval, max. door leaf weight 120 kg (approval for the individual case possible)

** In preparation

*** Not T 30

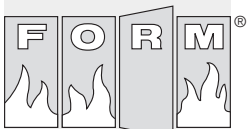
T 30 = T 30 Fire-Protection

RS = Smoke-Protection

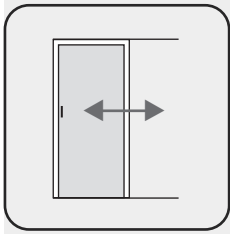
PB = Radiation-Protection

NT = Wet Room

VT = Heavy-Duty



Schörhuber



Sliding door systems

Door leaf

7.4

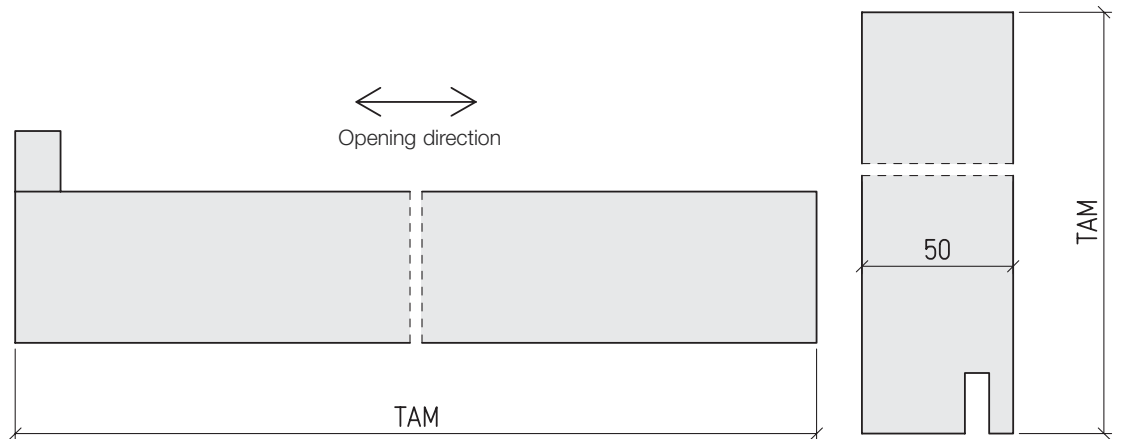
The door leaves of Schörghuber sliding doors are in accordance with the standard Schörghuber doors and meet both the high constructive and visual requirements.

For the panel doors Type 1 N-ST, 3 N-ST and 4 N-ST the door leaf construction with solid wooden edge band, special plywood frame, intermediate layer cover plate and top layer is identical with the doors Type 1 N, 3 N and 4 N. All versions of solid wooden edge bands, battens, veneered edges, plastic material edges are possible (➔ Chapter "Door leaf").

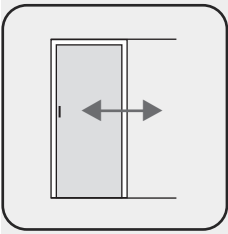
The door leaves of the Types 25 N-ST and 27 N-ST are in accordance with the standard Schörghuber doors 25 N and 27 N, but they are constructed in 54 mm thickness.

1-leaf doors

Model 3 N-ST (T 30)



Wooden special doors



Sliding door systems

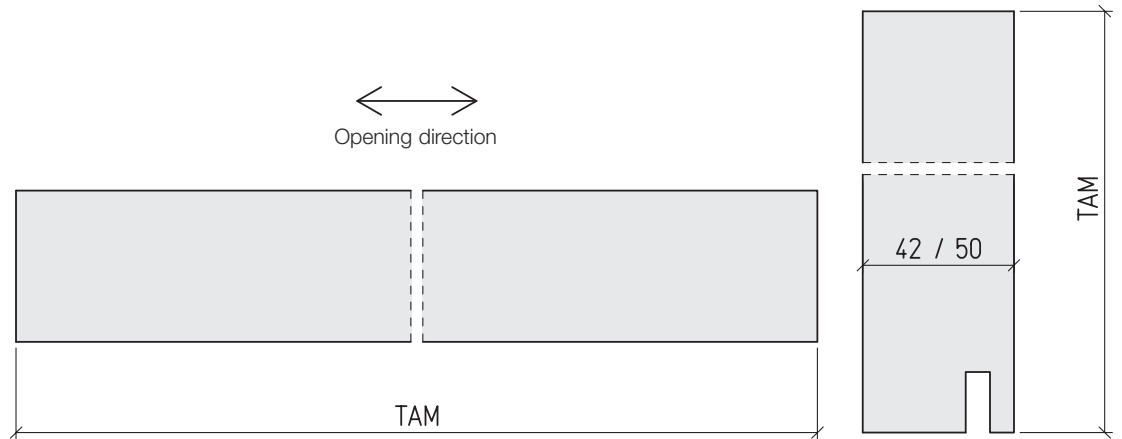
Door leaf

7.4

Wooden special doors

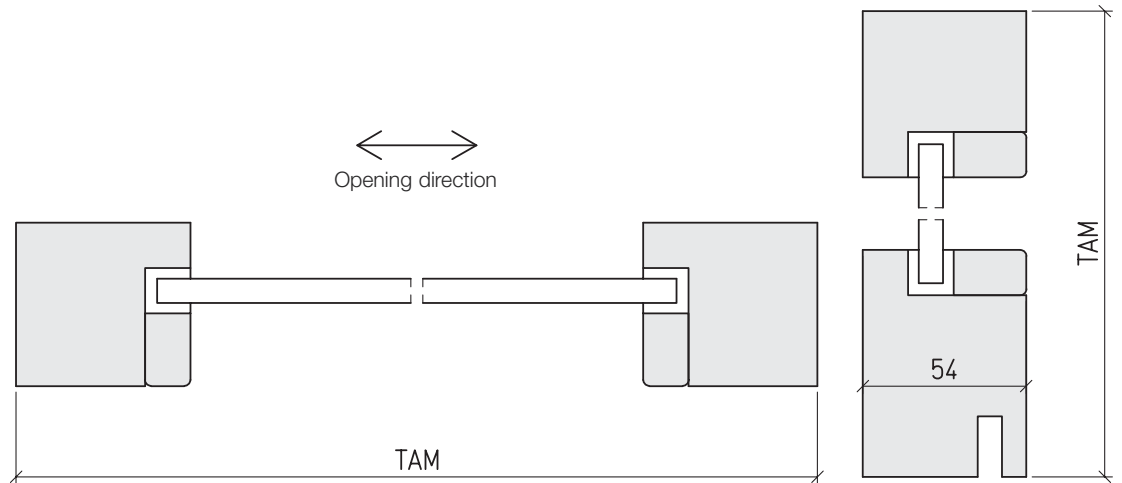
1-leaf doors

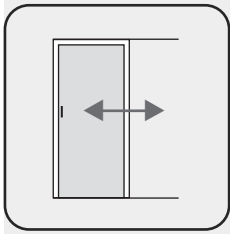
Model 1 N-ST, 3 N-ST (VT)



1-leaf doors

Model 25 N-ST (VT)





Sliding door systems

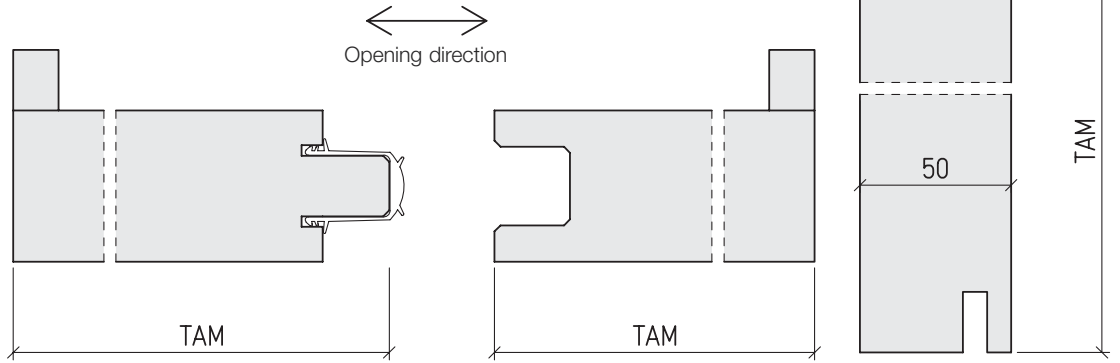
Door leaf

7.4

Wooden special doors

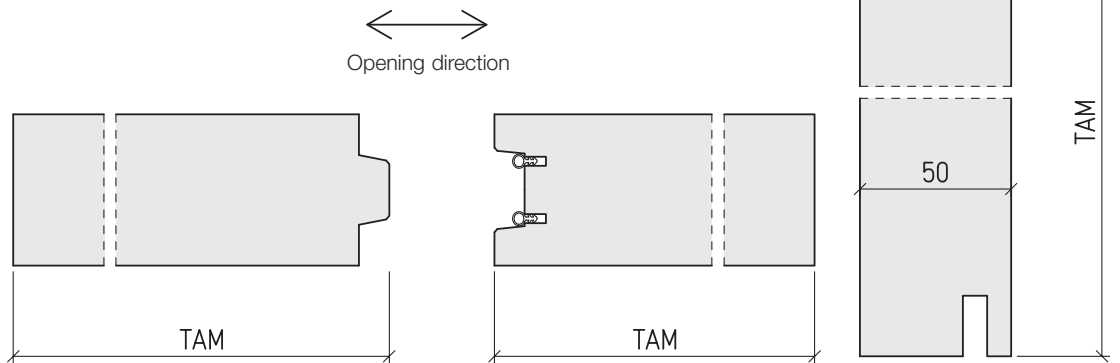
2-leaf doors

Model 4 N-ST (T 30)



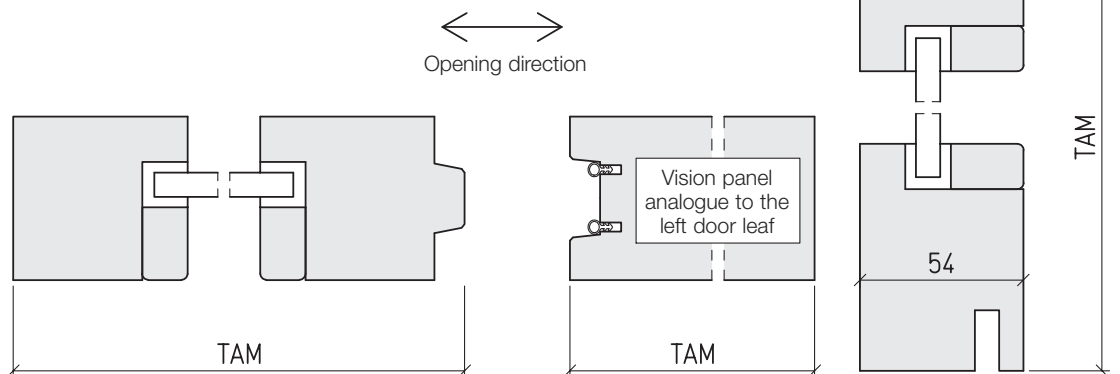
2-leaf doors

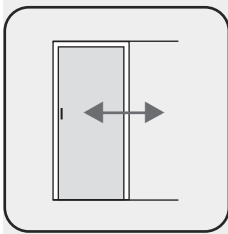
Model 4 N-ST (VT)



2-leaf doors

Model 27 N-ST (VT)





Sliding door systems

Glazings/Fillings

7.4

Glazings/Fillings of sliding doors always require flush glazing and panel cross bars or flat aluminium cross bars. For automatically operated sliding doors, due to safety reasons, the glass respectively the panel have to be, at least on one side (outside), embedded flush into the door leaf (➔ Chapter "Individual solutions").

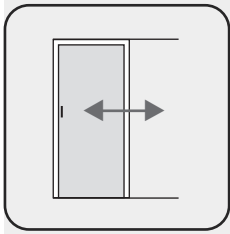
Wooden special doors

Types of glass and fillings	T 30	RS	PB	NT	VT
Pyrostop 30-10, clear glass 15 mm	○	○*			
Pyrostop 30-12, patterned glass 17 mm	○	○*			
Contraflam 30 N2	○	○*			
Promaglas 30 Type 1	○	○*			
ESG, clear glass 8 mm			○*		○ ○
ESG, patterned glass 8 mm		○*		○	○
ESG, Chinchilla blanc 8 mmm		○*		○	○
DSG, clear glass 7 mm			○*		○ ○
VSG, clear glass 8 mm			○*		○ ○
VSG, patterned glass 8 mm		○*		○	○
Radiation-Protection-Glass		○*	○		
Panel, D = 25 mm	○	○*		○**	○

* In preperation

** Not T 30

- T 30** = T 30 Fire-Protection
- RS** = Smoke-Protection
- PB** = Radiation-Protection
- NT** = Wet Room
- VT** = Heavy-Duty

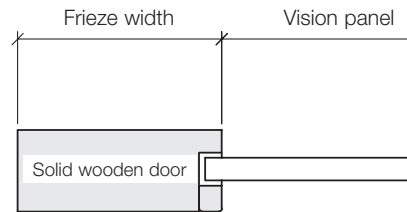
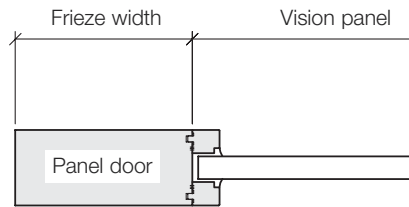


Sliding door systems

Glazings/Fillings

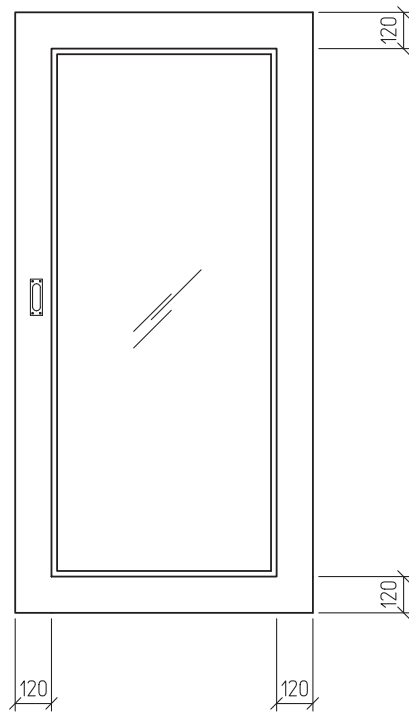
7.4

The minimum frieze width for the Types 1 N-ST, 3 N-ST and 4 N-ST is circumferentially 120 mm, for the Types 25 N-ST and 27 N-ST 70 mm.

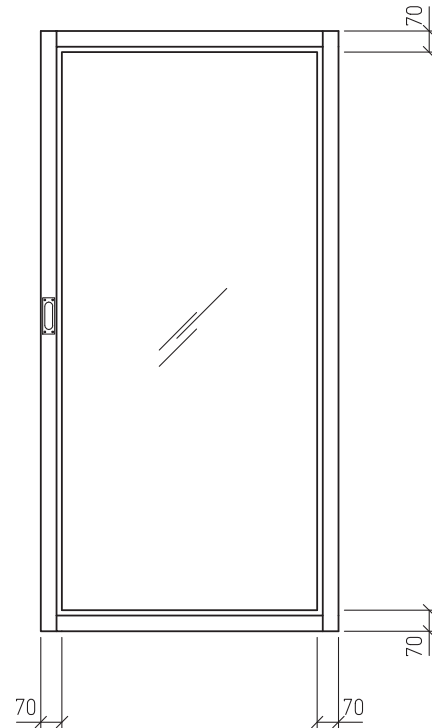


Wooden special doors

Model 1 N-ST, 3 N-ST, 4 N-ST

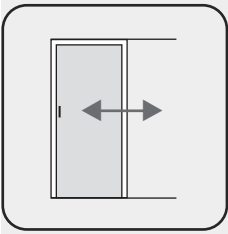


Model 25 N-ST, 27 N-ST



Sliding door systems

Special equipment



Lock

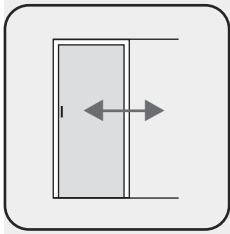
1- and 2- leaf sliding doors can be equipped with a hook latch lock or a circular lock (► Chapter "Locks"). T 30 respectively Smoke-Protection-Doors can be equipped with a circular lock.

Flush handle

In order to operate a manually operated sliding door it can be equipped with flush handles. If flush handles are used in combination with locks, the suitable flush handle would be the one with cylinder punch hole.

Electromagnet

Mechanically operated, self-closing sliding doors, e.g. in T 30 configuration, can be held open with electromagnets. The electromagnets of T 30- and Smoke-Protection-Door sets have to be controlled by an approved switch control unit and release the door in the case of a fire. Schörghuber offers suitable systems.



Sliding door systems

7.6

Manually operated sliding doors

Sliding door fittings

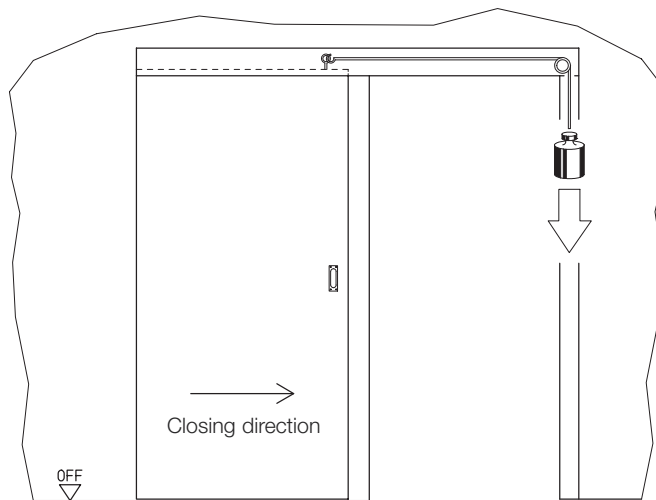
The sliding door fittings consist of the sliding rail, per door leaf at least two roller carriages and stoppers. The fittings have to bear the door weight over the whole opening range, should be low noise level and smooth-running as well as show a low abrasive wear. Schörghuber therefore uses especially on the door weight and dimensions adjusted sliding door fittings. These fittings always allow an adjustment of the height the door leaf runs at as well as the door leaf position. These values can be adjusted on the points of suspension of the roller carriages, using adjusting screws respectively slotted holes.

For 1- and 2-leaf T30-sliding doors the standard fitting is the GEZE Perlan 120, which was tested on longterm reliability (200000 opening cycles) and is therefore used for all T 30 door sets.

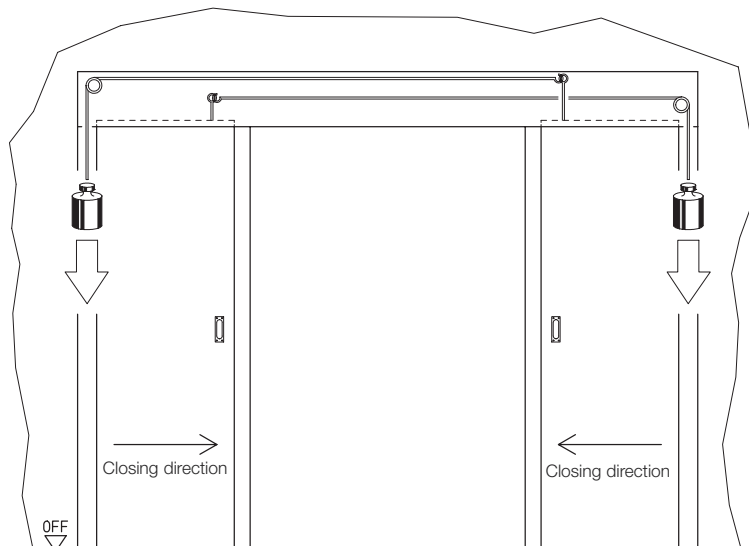
Self-closing function

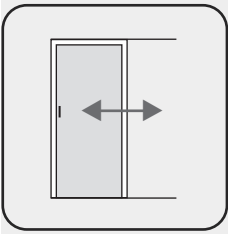
A Fire-Protection-Door has to be closed in the case of a fire, therefore it is necessary to install an approved door closer. The door closer has to be adjustable so it can safely close from any opening position. Therefore Schörghuber uses a mechanism which guarantees a safe closing even after years of use and potential fouling of the slide rail, by using a cable pull and exchangeable pulling weights. The weights can be adjusted according to requirements. An air pressure attenuator guarantees a low noise and smooth running-in the final position of the door.

1-leaf door set, self-closing by weight force (schematic representation)



2-leafs door set, self-closing by weight force (schematic representation)





Sliding door systems

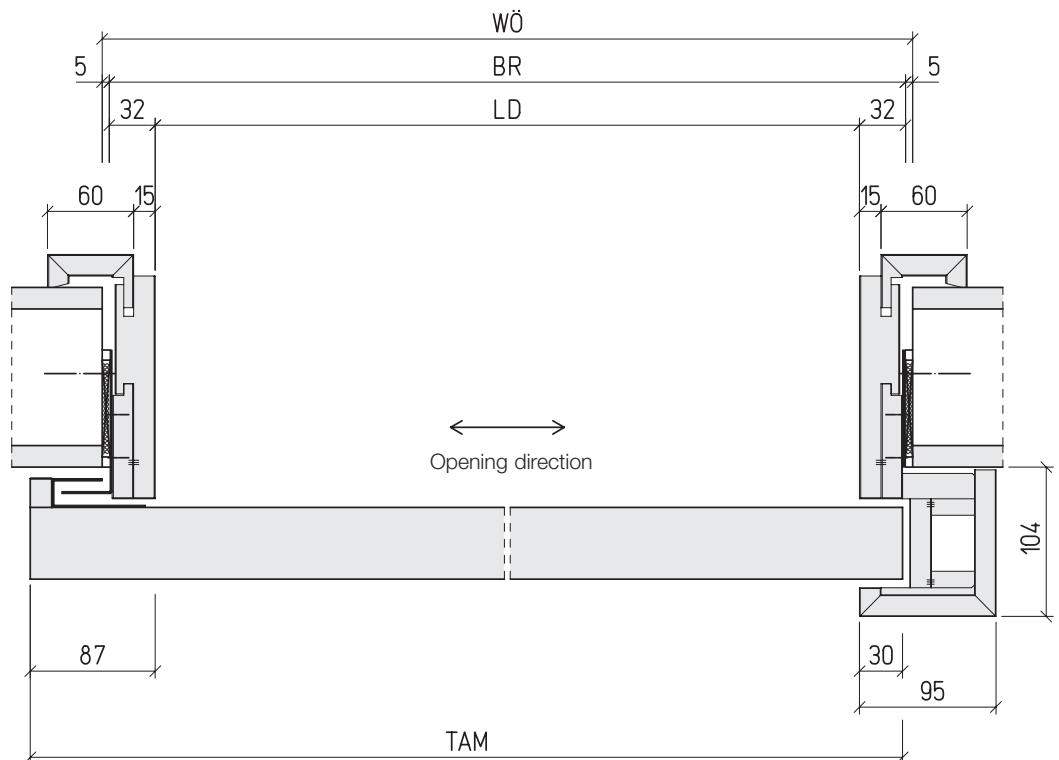
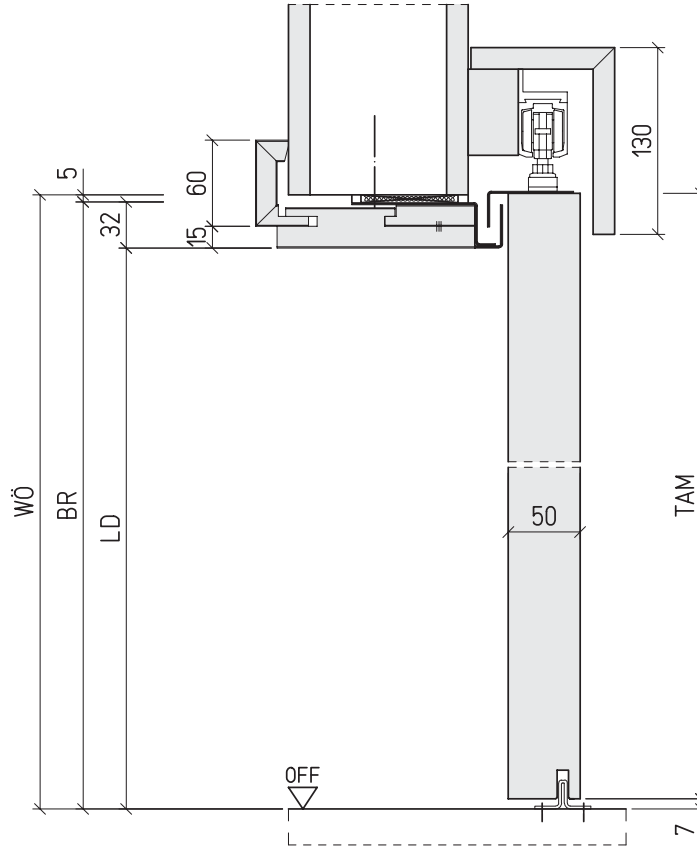
7.6

Manually operated sliding doors

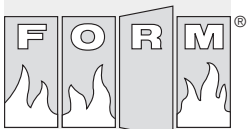
Details / Installation situations running in front of the wall

Model 3 N-ST, wooden frame, solid wall

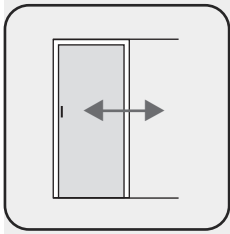
T 30



Wooden special doors



Schörghuber



Sliding door systems

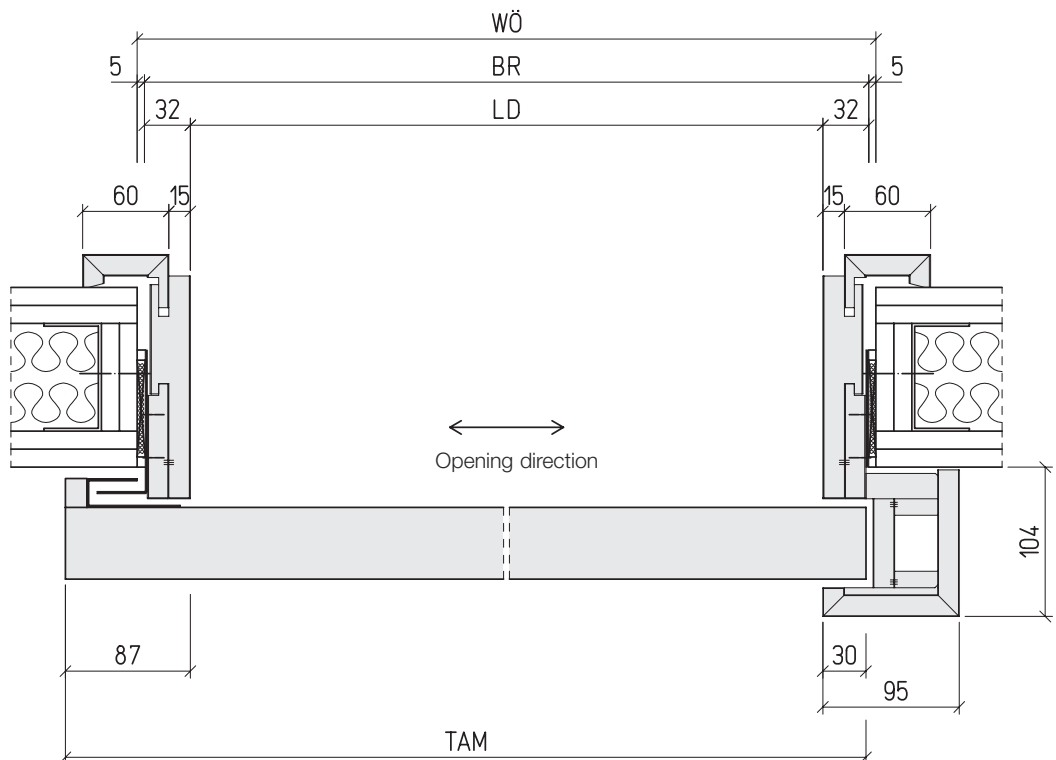
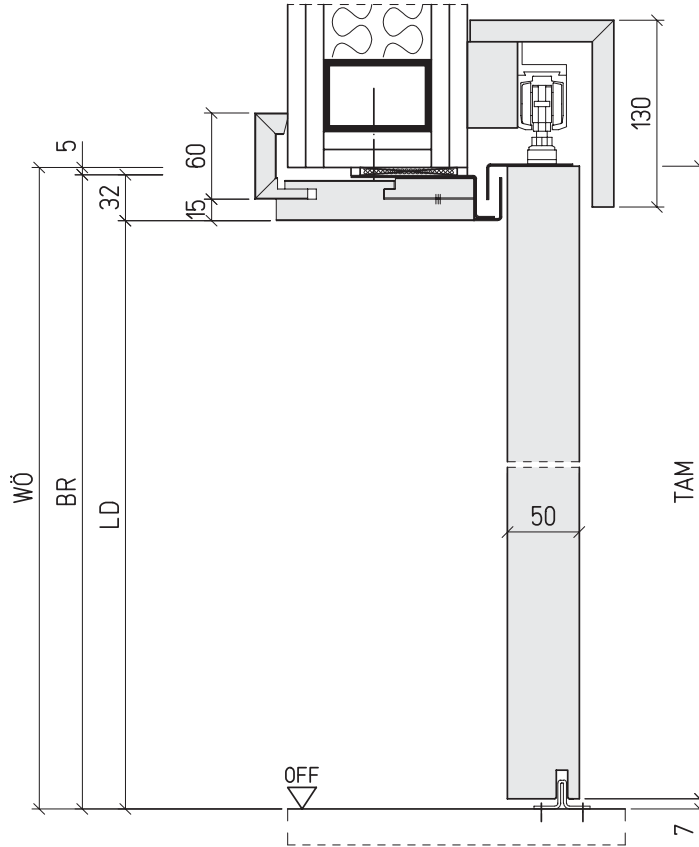
7.6

Manually operated sliding doors

Details / Installation situations running in front of the wall

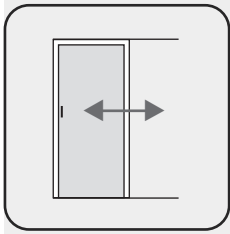
Model 3 N-ST, wooden frame, gypsum plasterboard wall

T 30



Wooden special doors





Sliding door systems

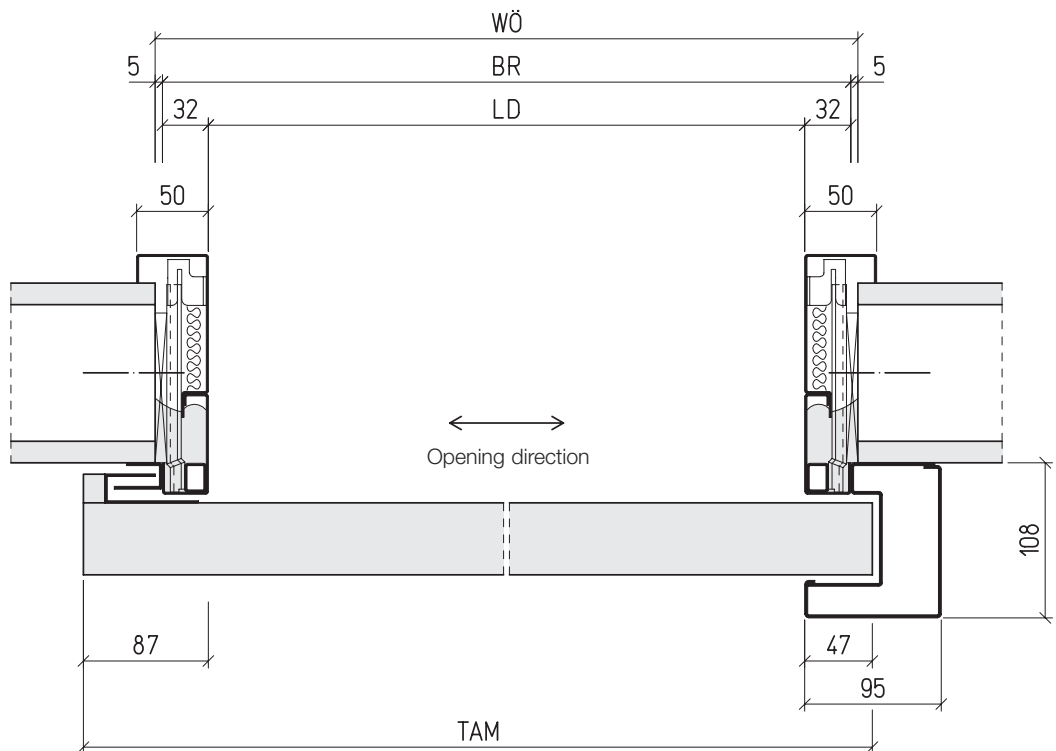
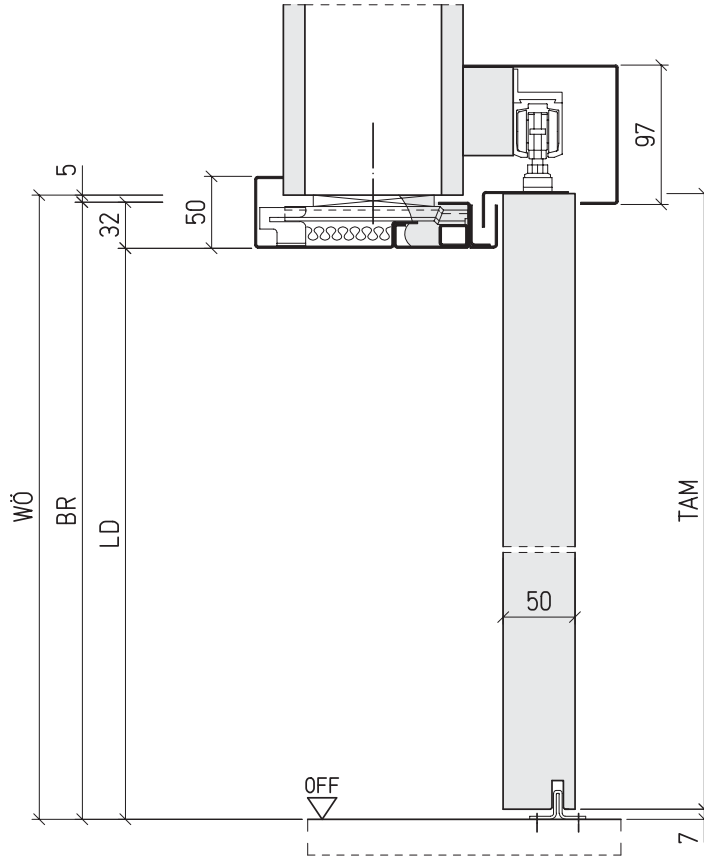
7.6

Manually operated sliding doors

Details / Installation situations running in front of the wall

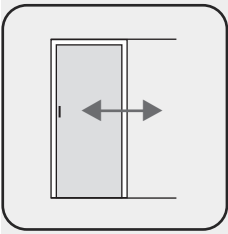
Model 3 N-ST, steel frame, solid wall

T 30



Wooden special doors





Sliding door systems

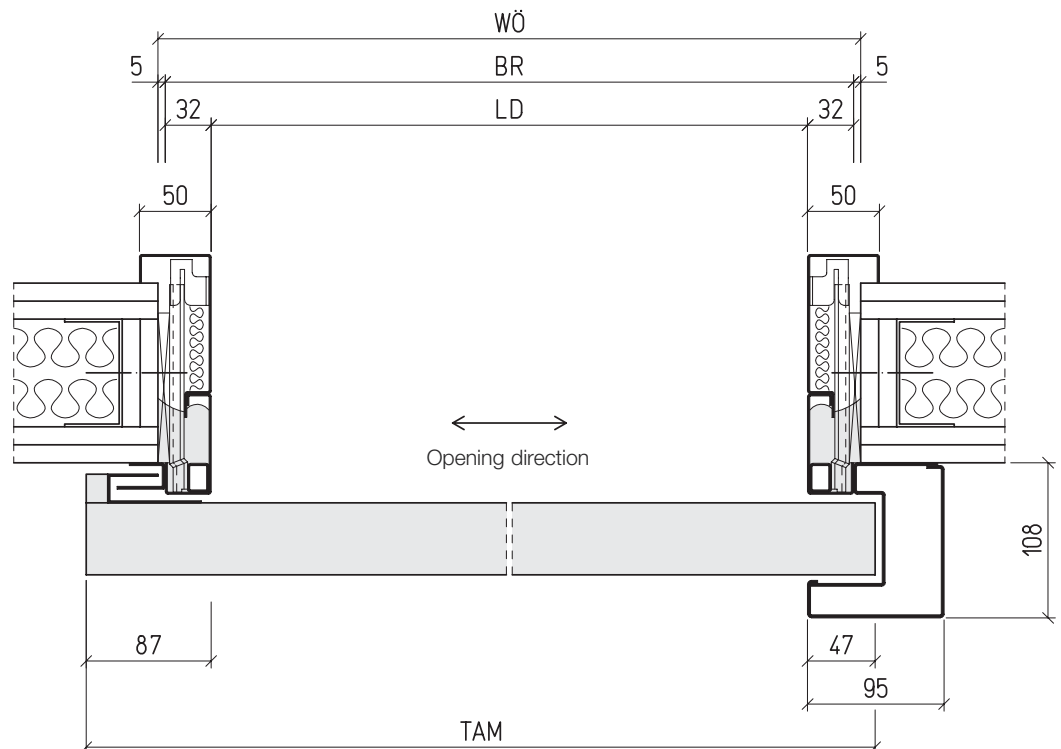
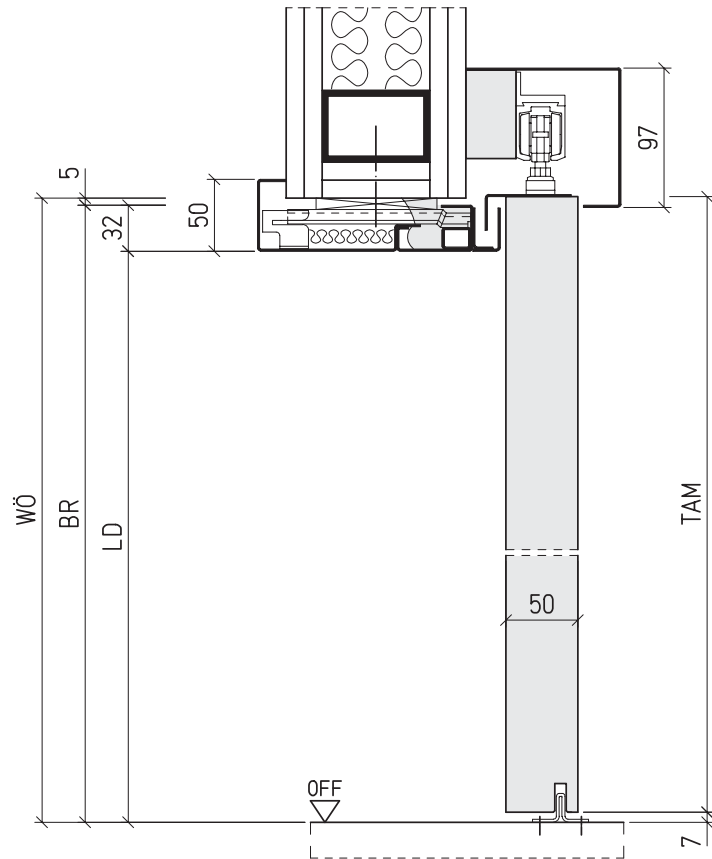
7.6

Manually operated sliding doors

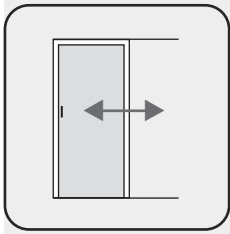
Details / Installation situations running in front of the wall

Model 3 N-ST, steel frame, gypsum plasterboard wall

T 30



Wooden special doors



Sliding door systems

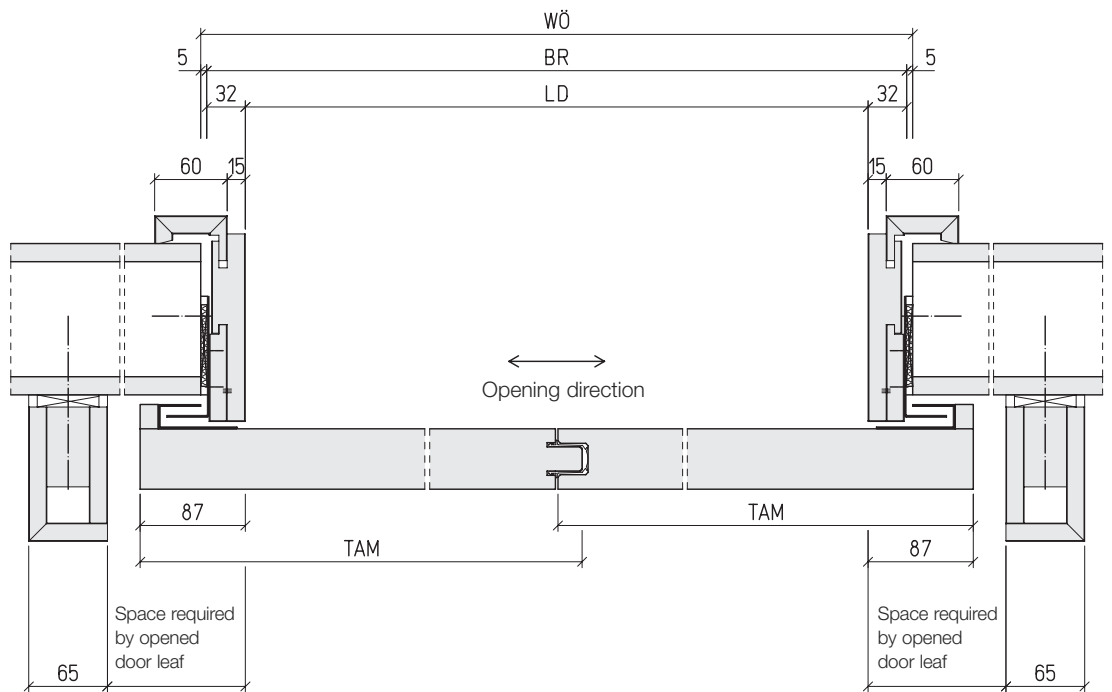
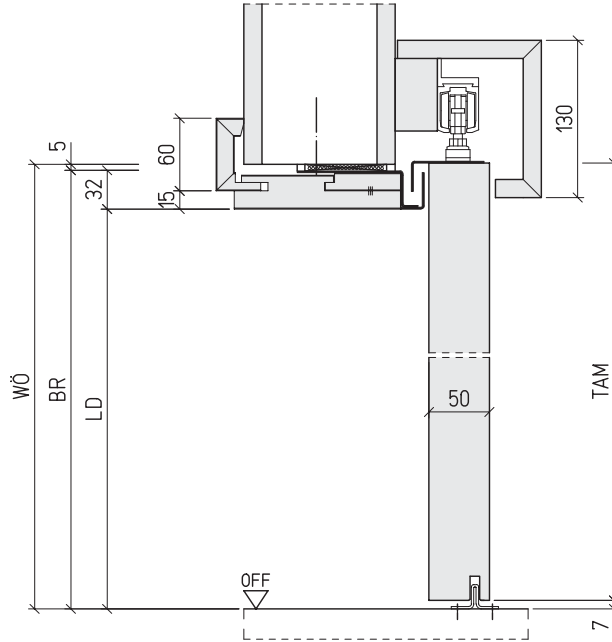
7.6

Manually operated sliding doors

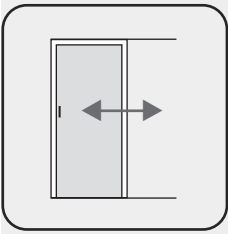
Details / Installation situations running in front of the wall

Model 4 N-ST, wooden frame, solid wall

T 30



Wooden special doors



Sliding door systems

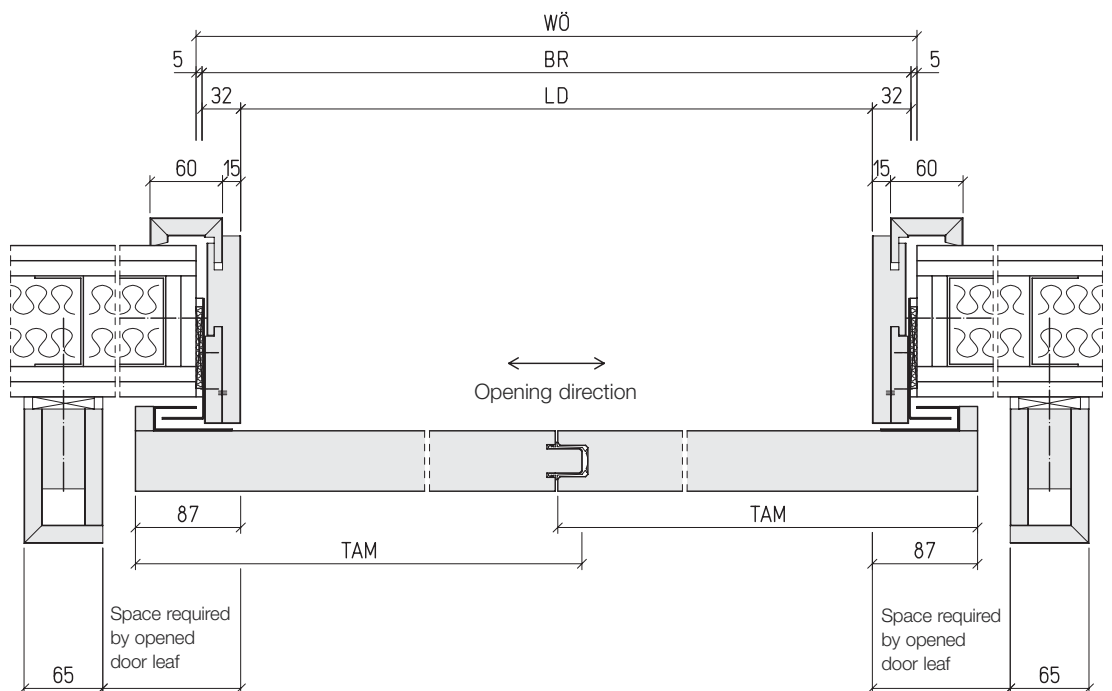
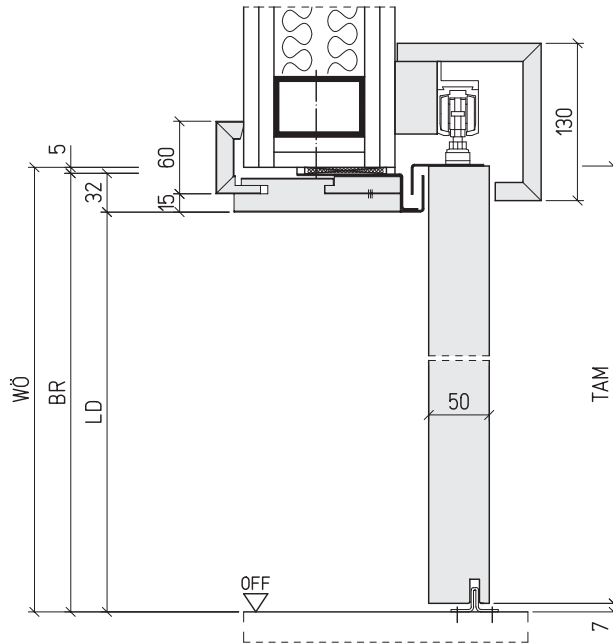
7.6

Manually operated sliding doors

Details / Installation situations running in front of the wall

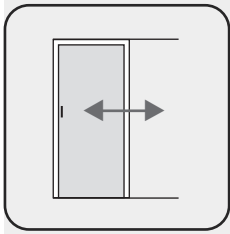
Model 4 N-ST, wooden frame, gypsum plasterboard wall

T 30



Wooden special doors





Sliding door systems

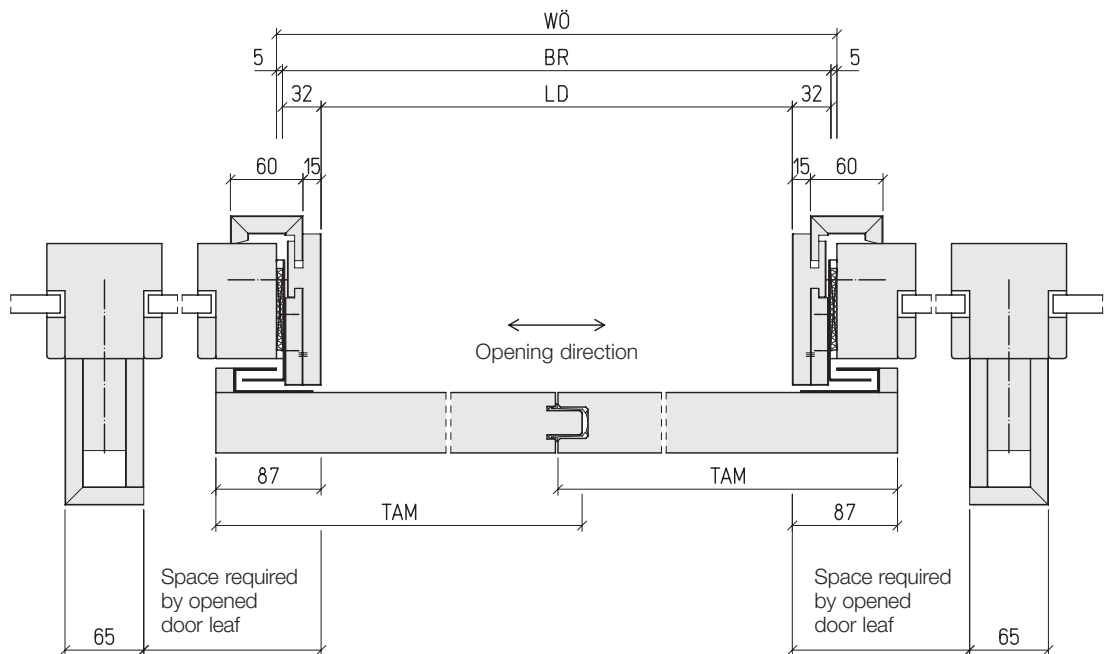
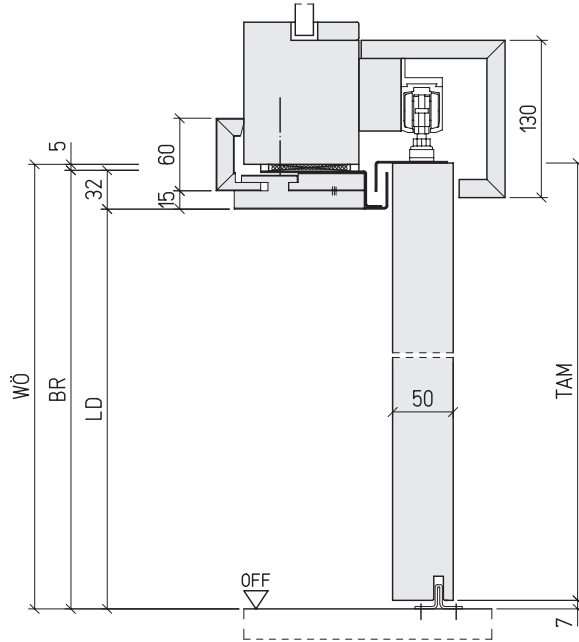
7.6

Manually operated sliding doors

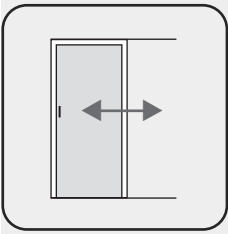
Details / Installation situations running in front of the wall

Model 4 N-ST, wooden frame, fixed glazing Model 25V

T 30



Wooden special doors



Sliding door systems

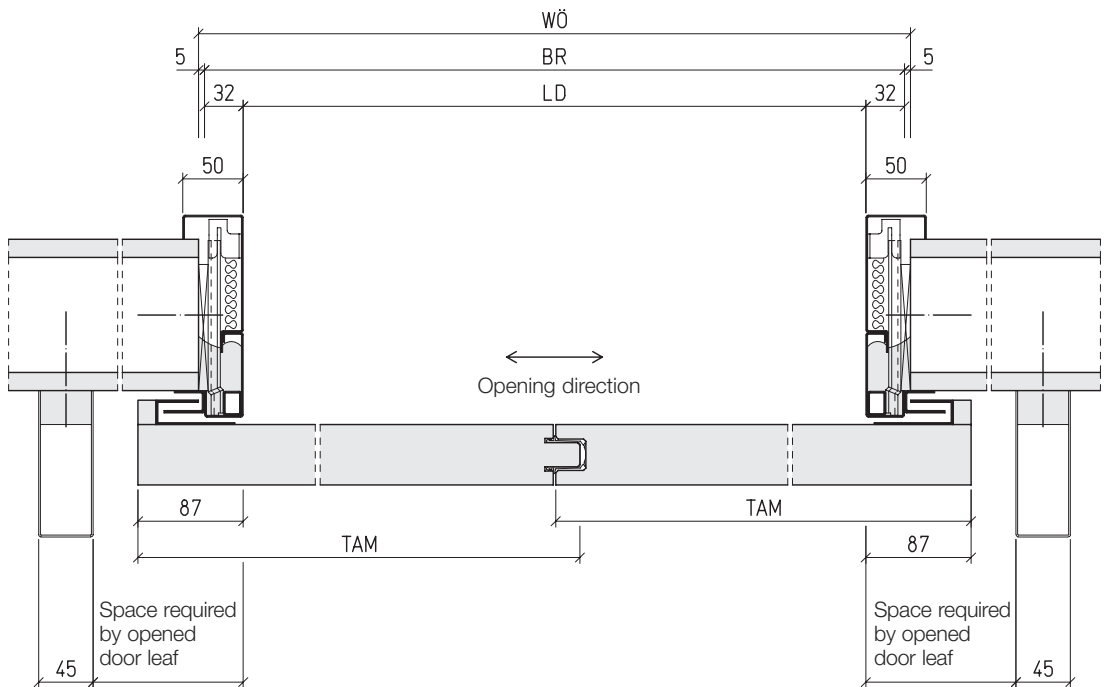
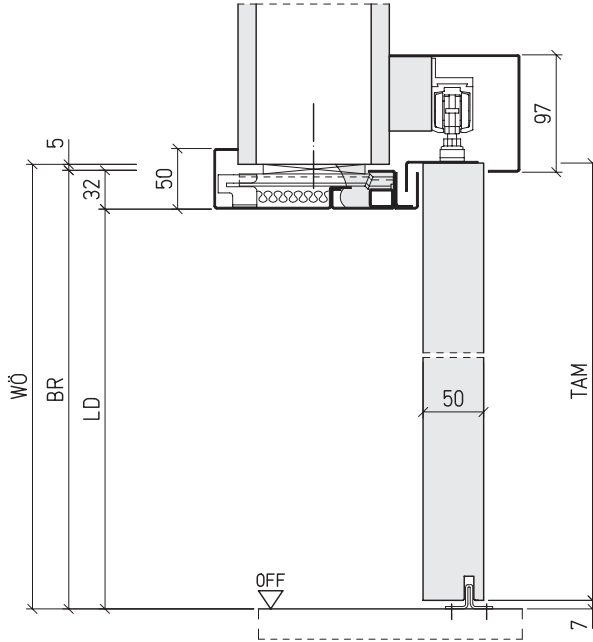
7.6

Manually operated sliding doors

Details / Installation situations running in front of the wall

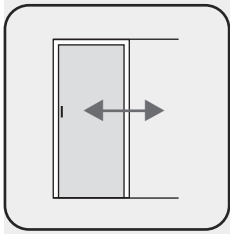
Model 4 N-ST, steel frame, solid wall

T 30



Wooden special doors





Sliding door systems

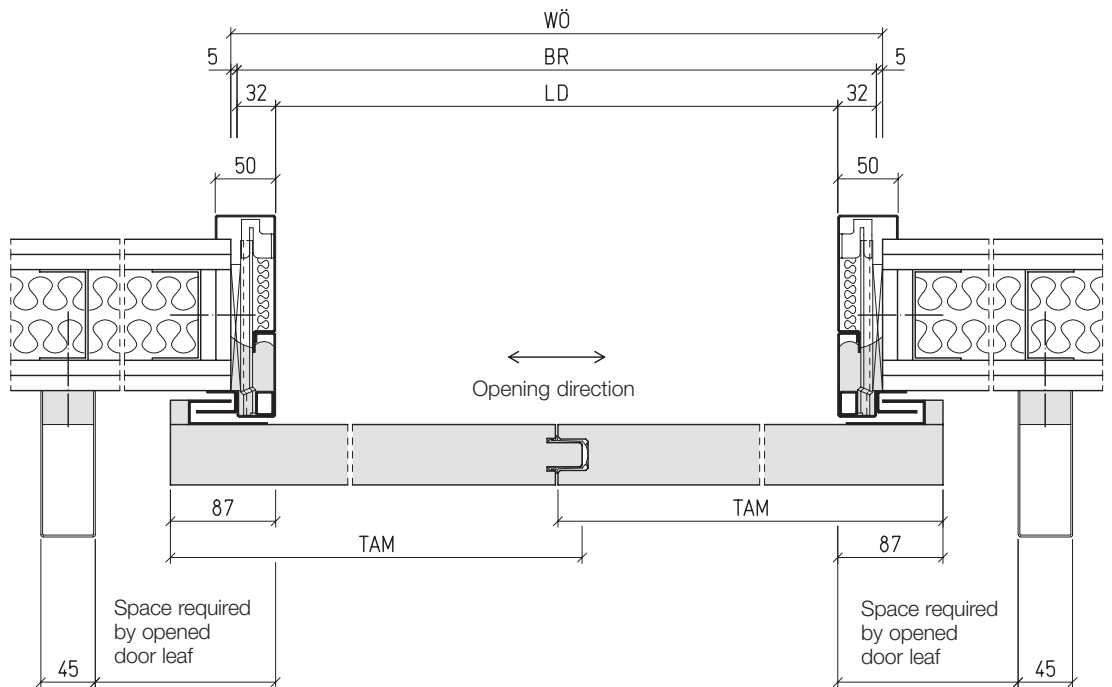
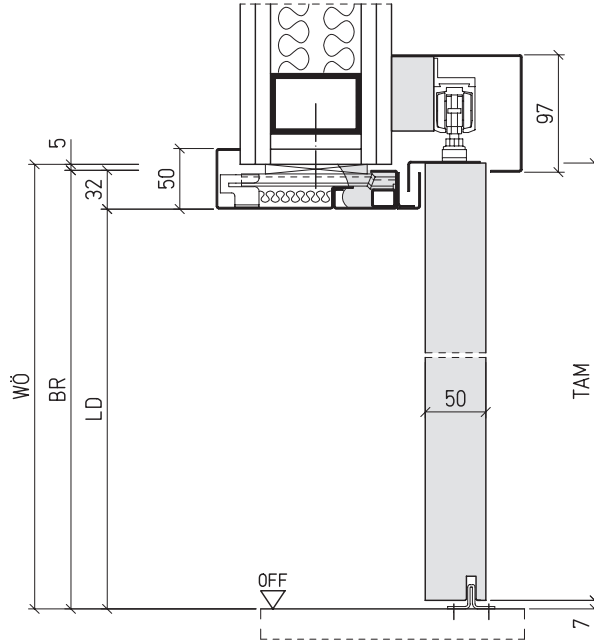
7.6

Manually operated sliding doors

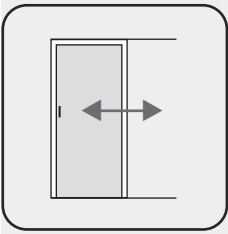
Details / Installation situations running in front of the wall

Model 4 N-ST, steel frame, gypsum plasterboard wall

T 30



Wooden special doors



Sliding door systems

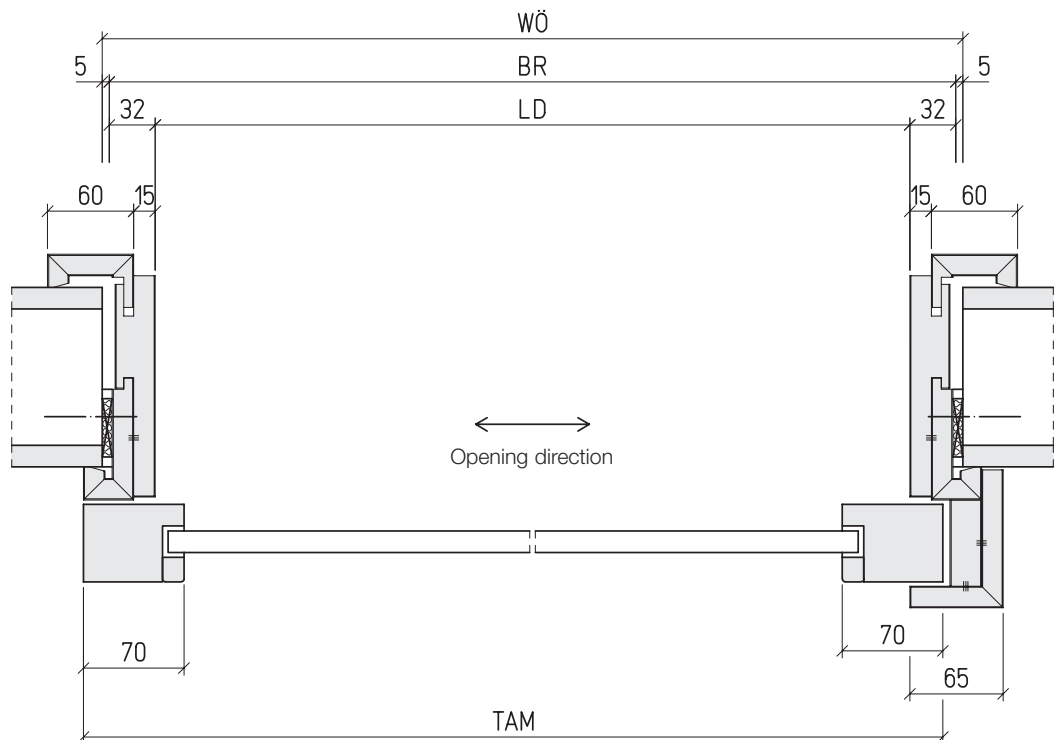
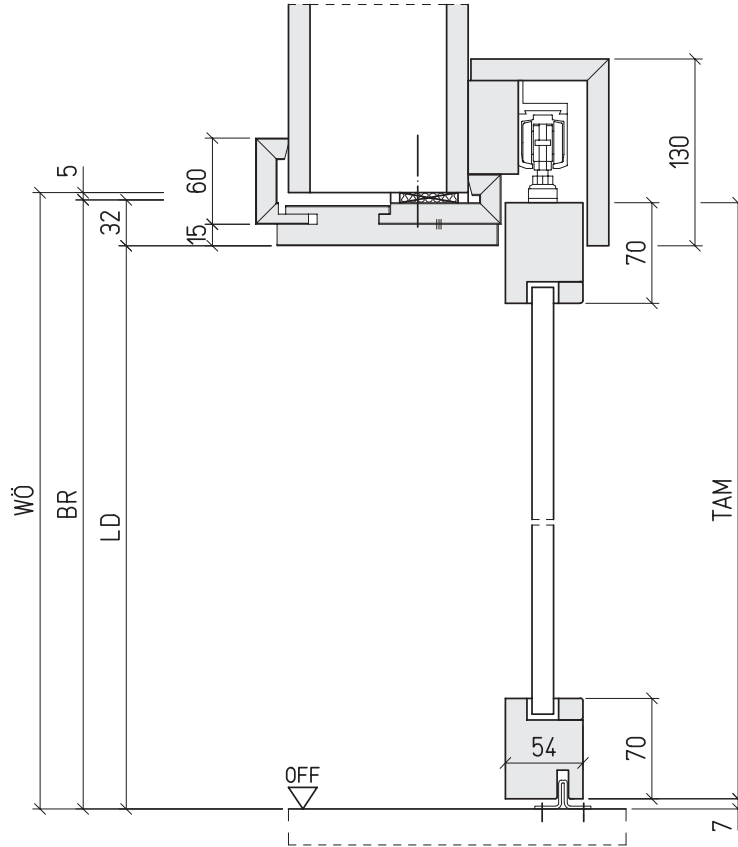
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Manually operated sliding doors

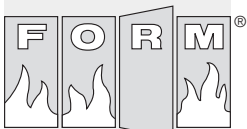
Details / Installation situations running in front of the wall

Model 25 N-ST, wooden frame, solid wall

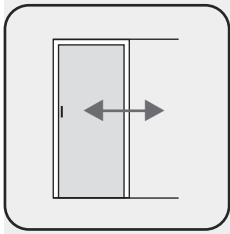
VT



Wooden special doors



Schörghuber



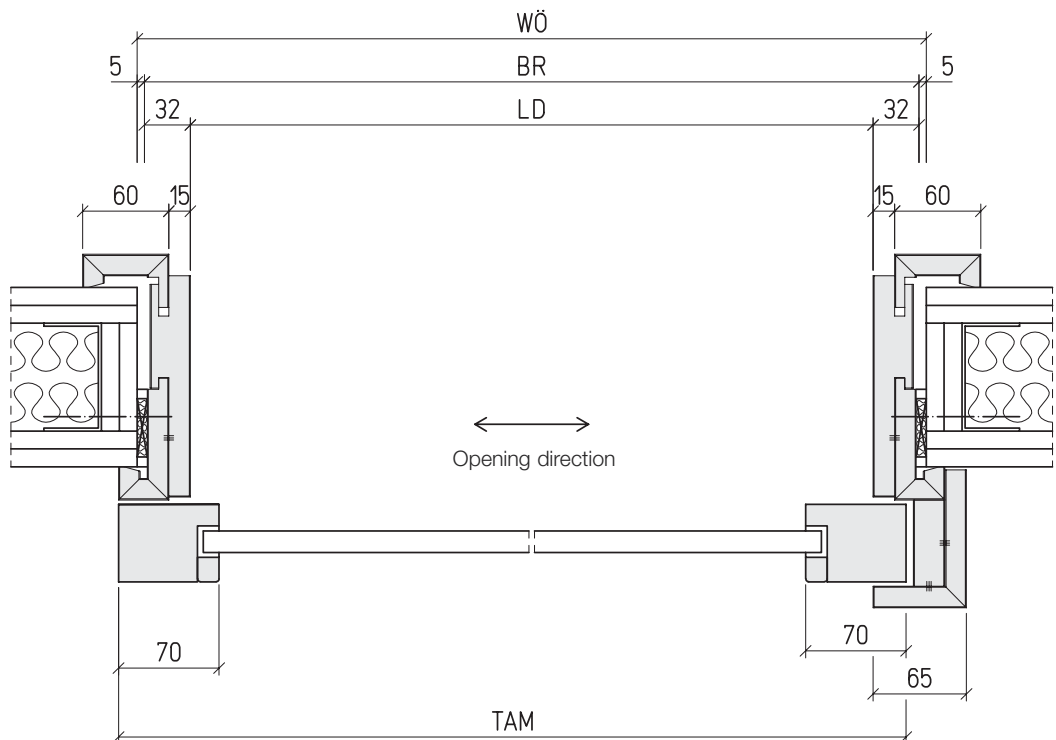
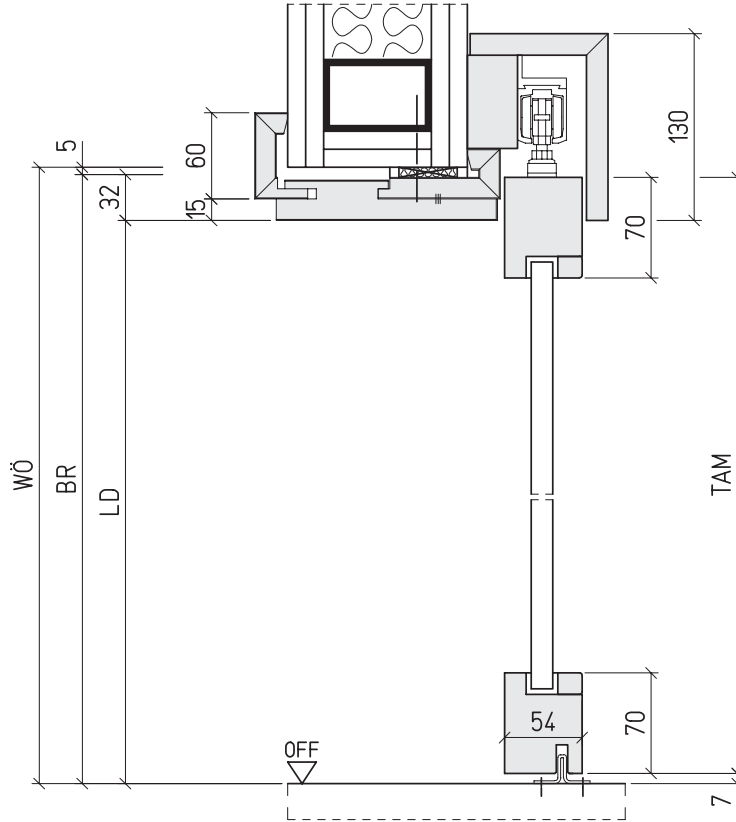
Sliding door systems

7.6

Manually operated sliding doors

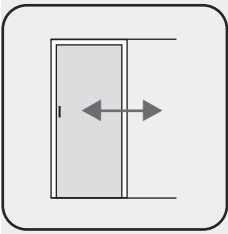
Details / Installation situations running in front of the wall

Model 25 N-ST, wooden frame, gypsum plasterboard wall
VT



Wooden special doors





Sliding door systems

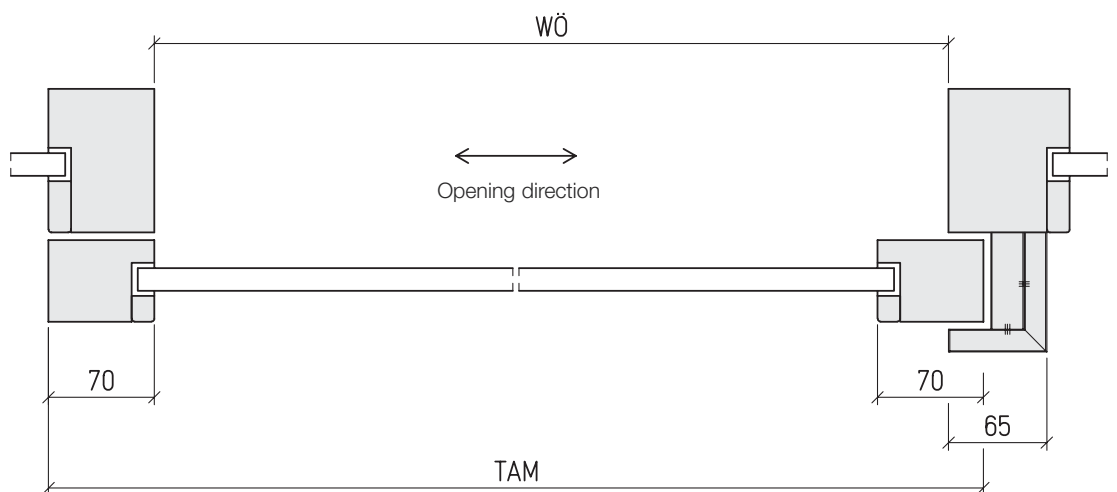
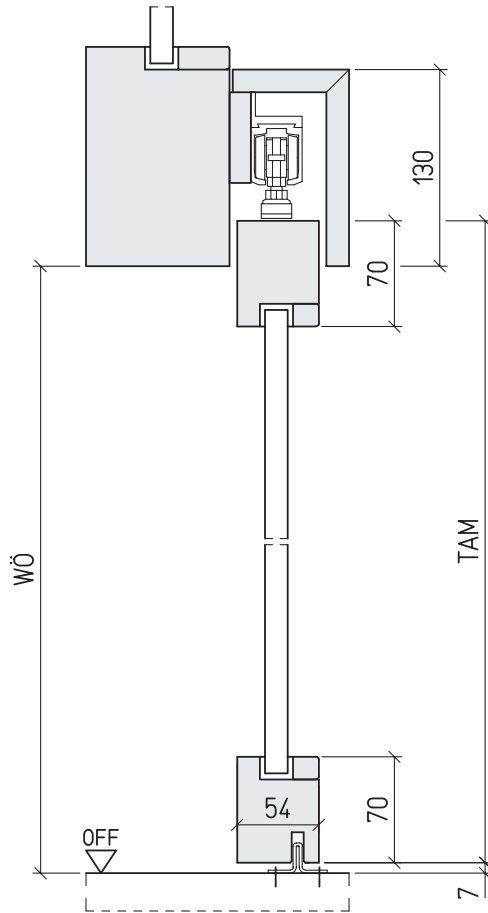
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Manually operated sliding doors

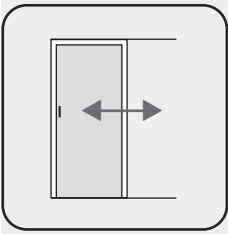
Details / Installation situations running in front of the wall

Model 25 N-ST, wooden frame, fixed glazing Model 25V

VT



Wooden special doors



Sliding door systems

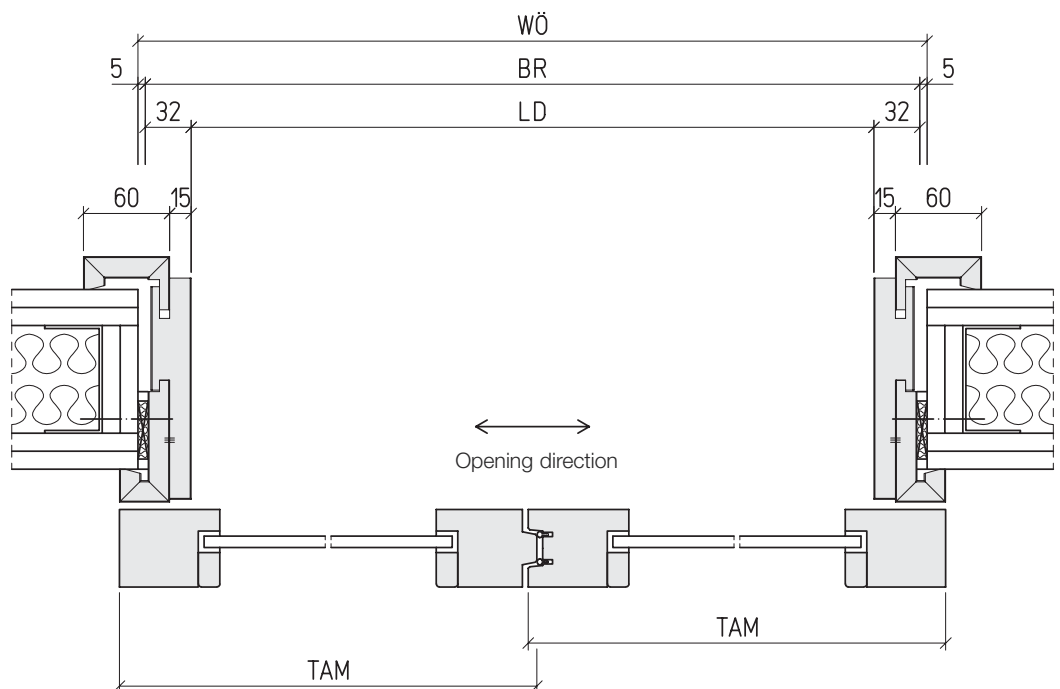
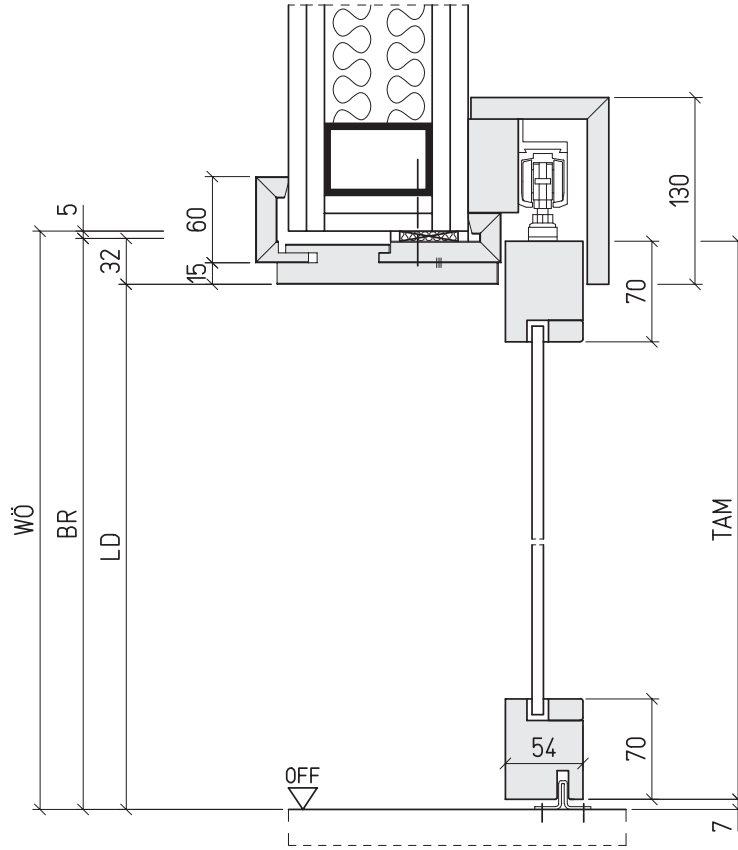
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Manually operated sliding doors

Details / Installation situations running in front of the wall

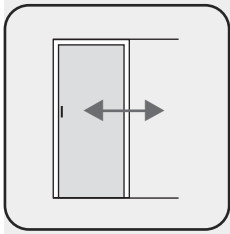
Details / Installation situations running in front of the wall

Model 27 N-ST, wooden frame, gypsum plasterboard wall
VT



Wooden special doors





Sliding door systems

7.6

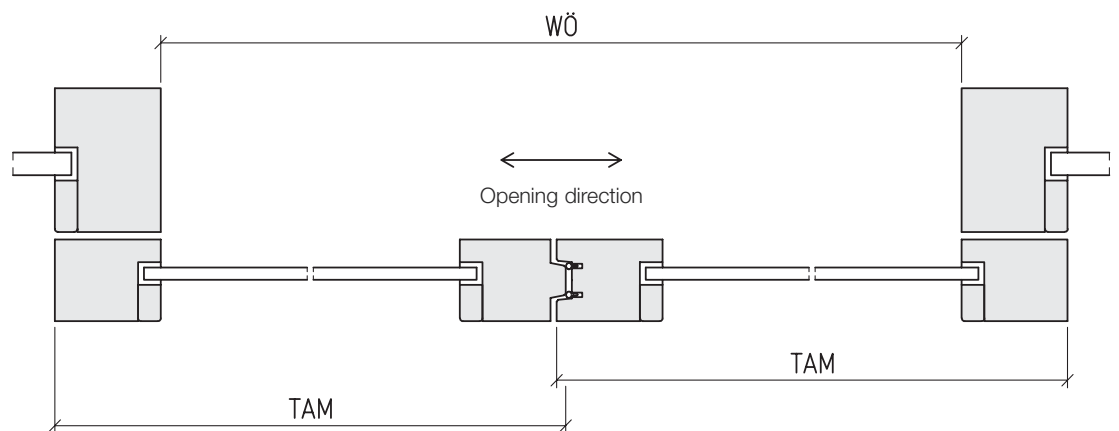
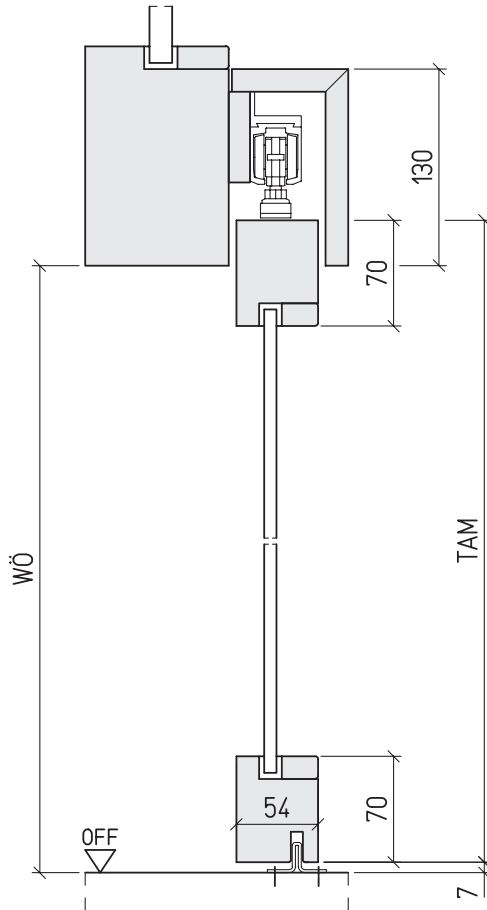
Sliding doors/flaps

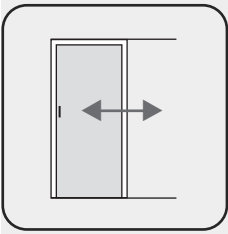
Manually operated sliding doors

Details / Installation situations running in front of the wall

Model 27 N-ST, wooden frame, fixed glazing Model 25V

VT





Sliding door systems

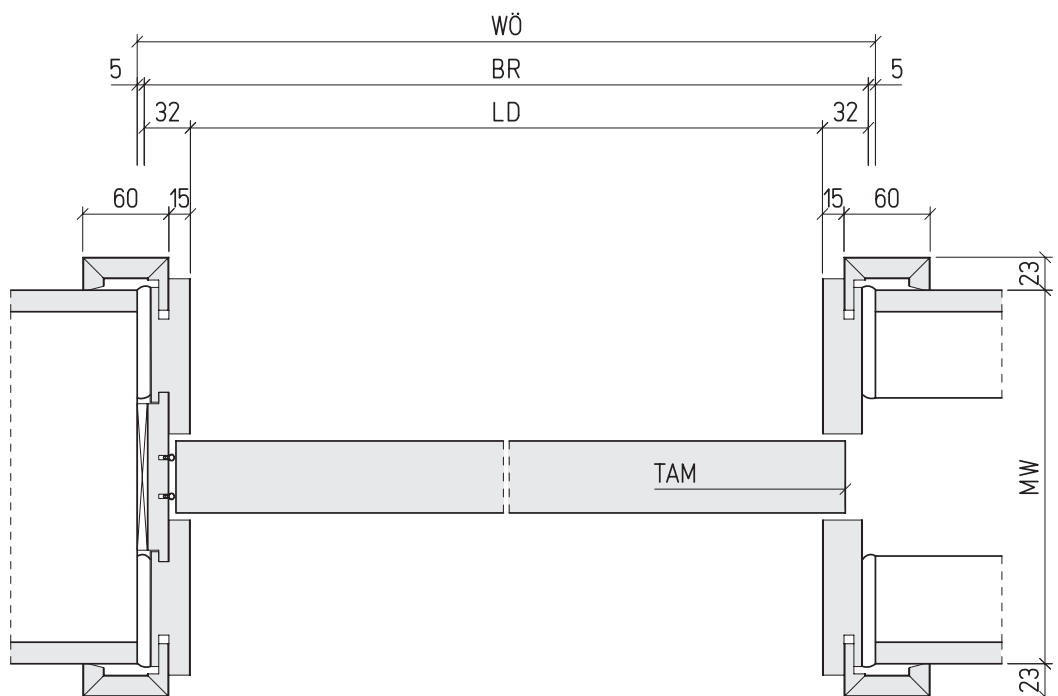
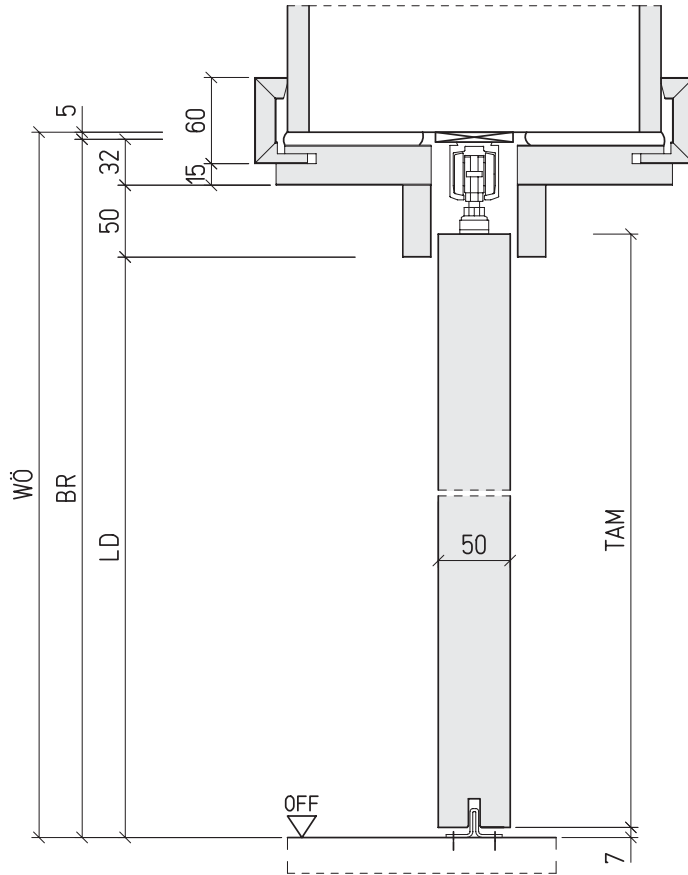
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Manually operated sliding doors

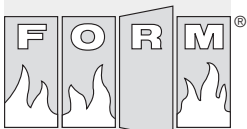
Details / Installation situations running within the wall

Model 3 N-ST, wooden frame, solid wall

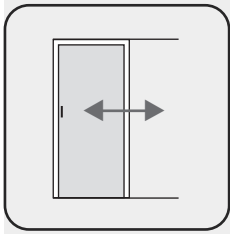
VT



Wooden special doors



Schörghuber



Sliding door systems

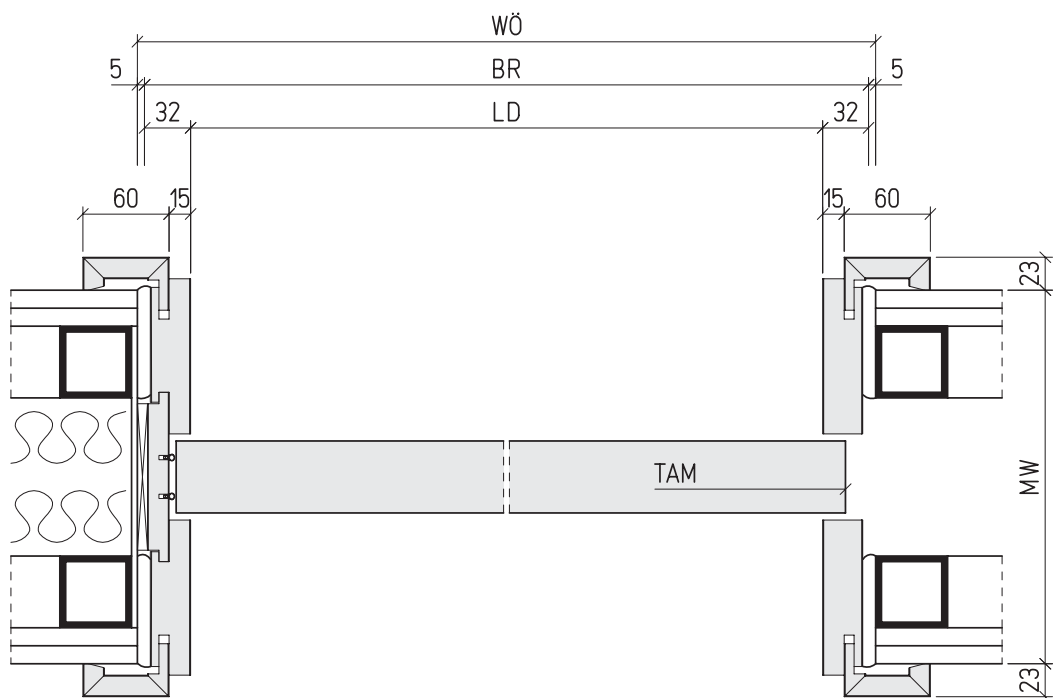
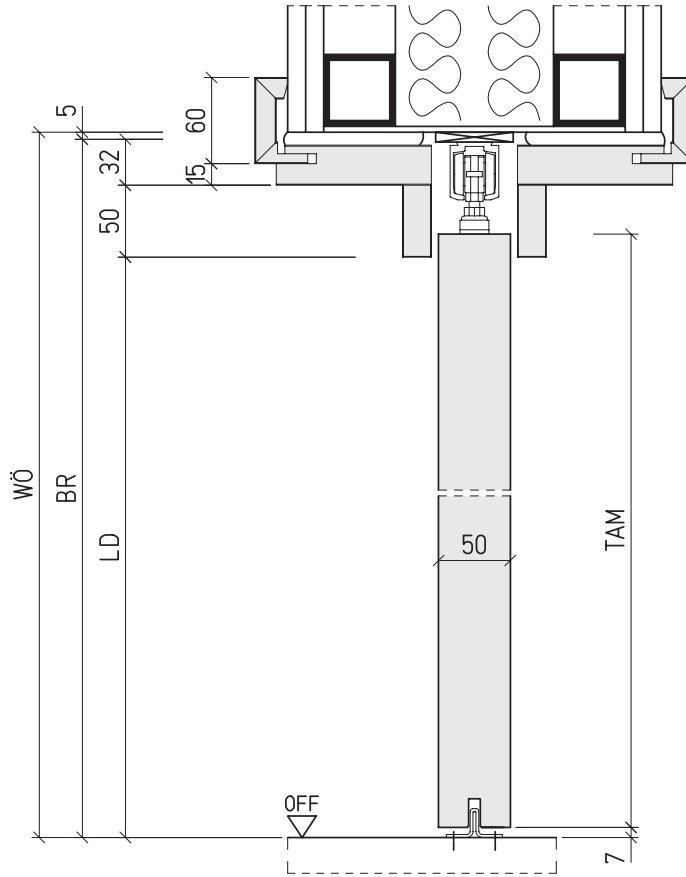
7.6

Manually operated sliding doors

Details / Installation situations running within the wall

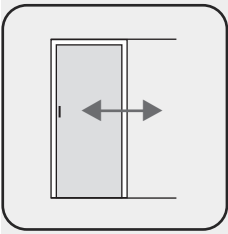
Model 3 N-ST, wooden frame, gypsum plasterboard wall

VT



Wooden special doors





Sliding door systems

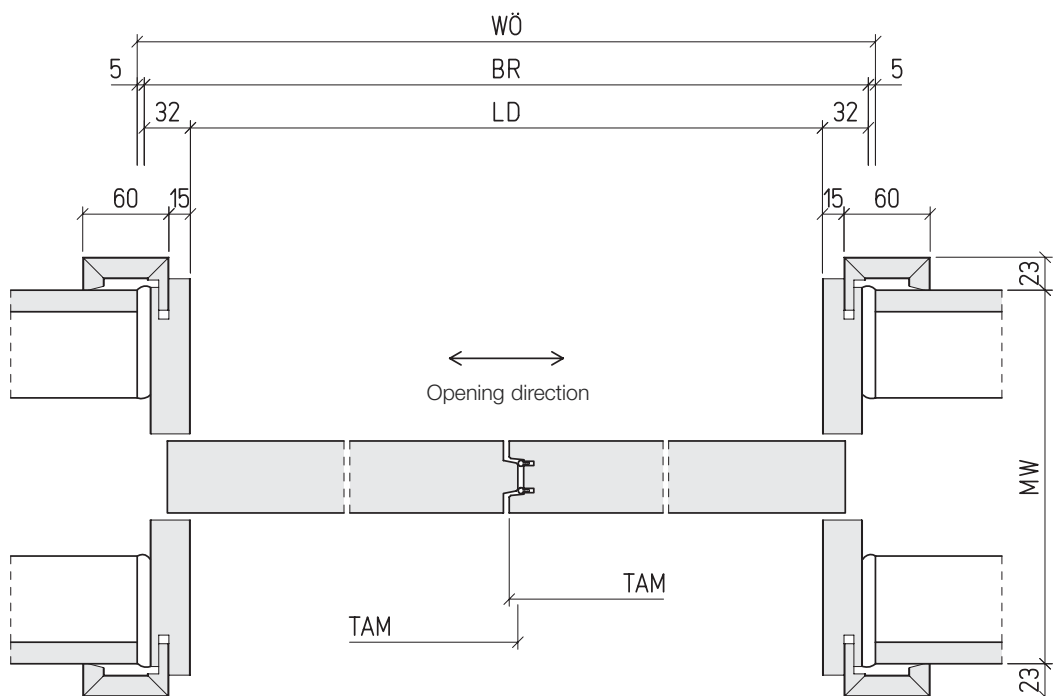
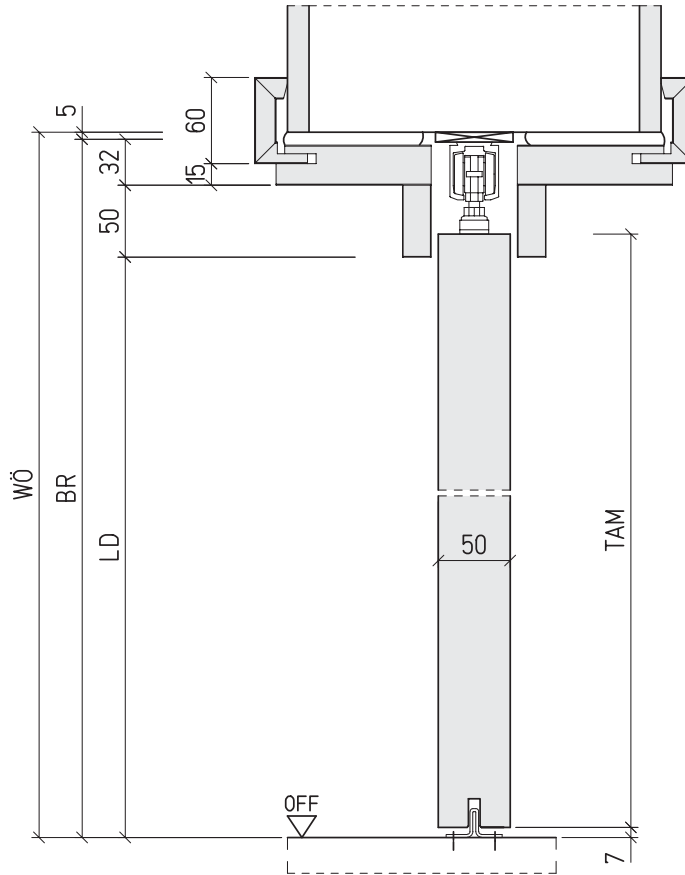
7.6

Manually operated sliding doors

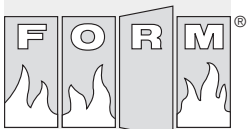
Details / Installation situations running within the wall

Model 4 N-ST, wooden frame, solid wall

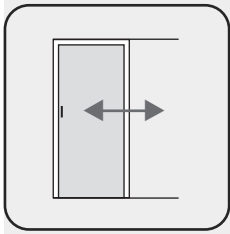
VT



Wooden special doors



Schörghuber



Sliding door systems

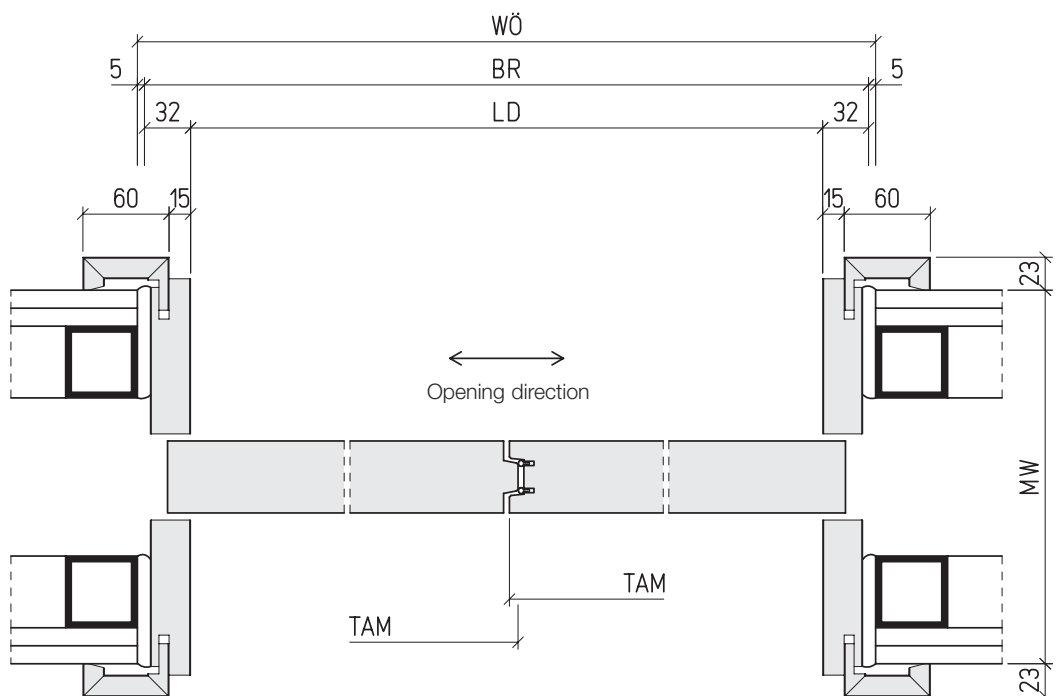
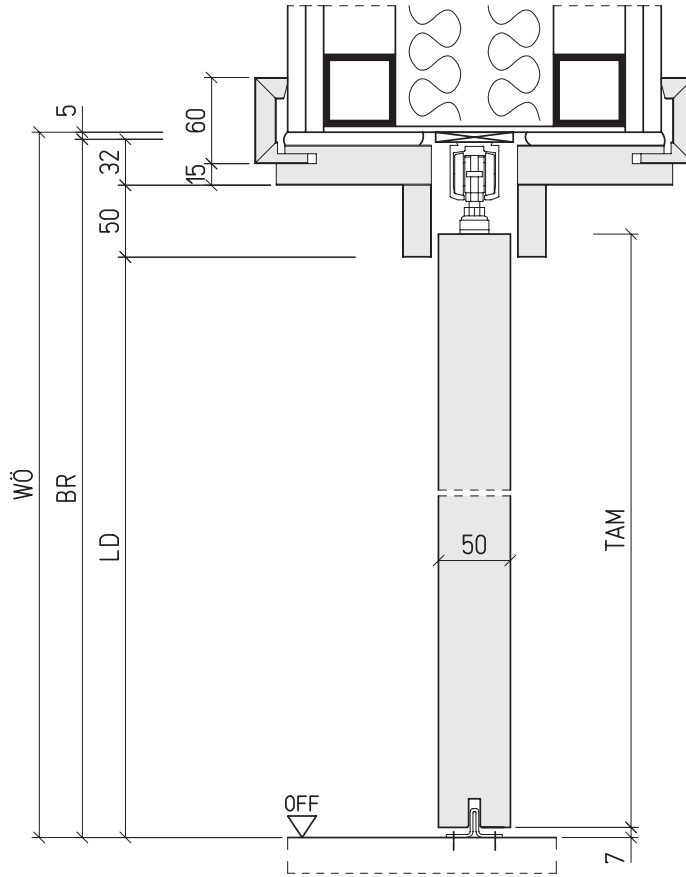
7.6

Manually operated sliding doors

Details / Installation situations running within the wall

Model 4 N-ST, wooden frame, gypsum plasterboard wall

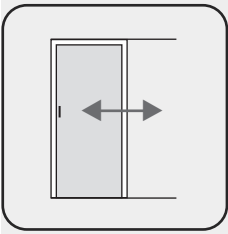
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Wooden special doors



7



Sliding door systems

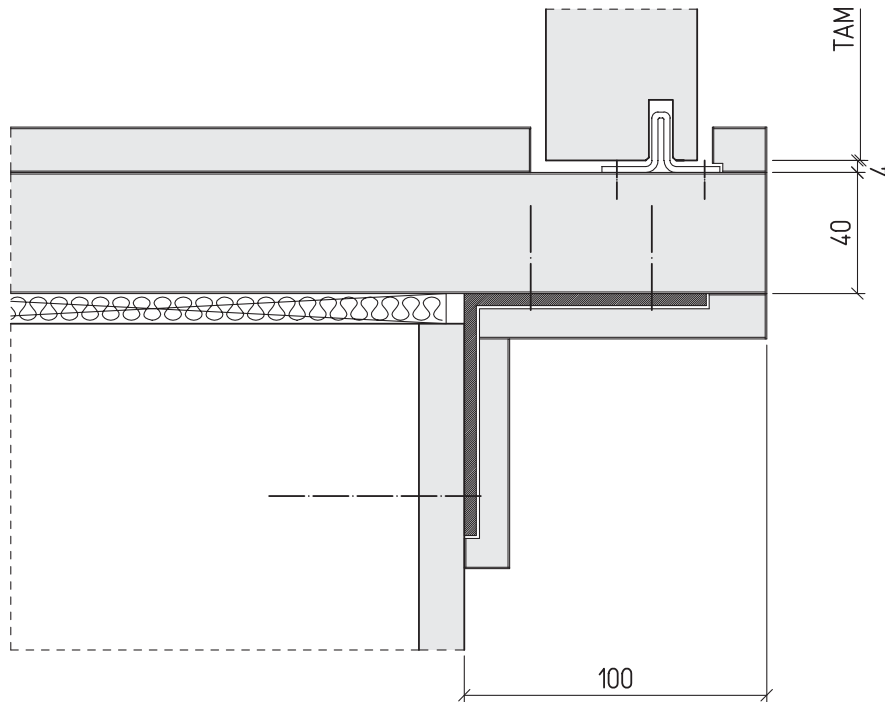
7.6

Manually operated sliding doors

Details / Installation situations running within the wall

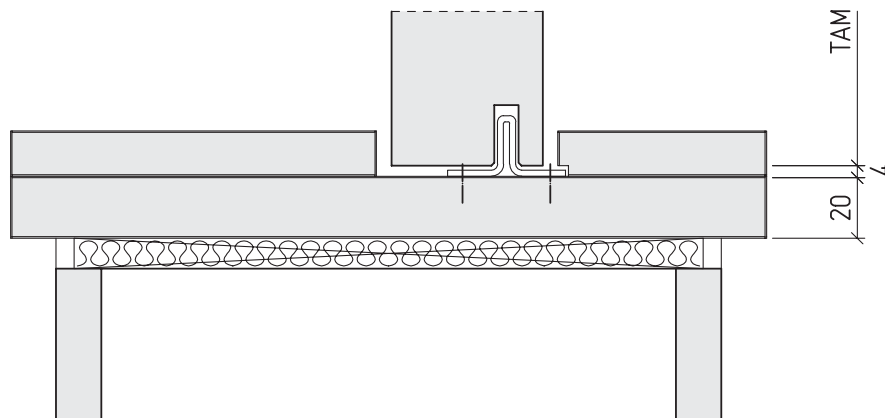
Model 3 N-ST, 4 N-ST, Vertical cross section bottom edge of flap in front of socket

T 30



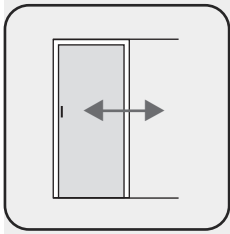
Model 3 N-ST, 4 N-ST, vertical cross section bottom edge of flap in front of socket

T 30



7

Wooden special doors



Sliding door systems

7.7

Automatically operated sliding doors

Areas of use

Automatically operated sliding doors for internal areas are used for example in hospitals, airports, hotels or guest houses. The user especially values the quick clearance of the passageway, as well as the small amount of required space, the low-noise operation and the elegant visual appearance of a sliding door.

Additional areas of use are for example in combination with an automatic conveyor handling system (CHS). The opening signal for the sliding door can therefore be given by the CHS control.

Functions

Fire-Protection T 30

The function of a Fire-Protection-Door is only given if it is closed in the case of a fire.

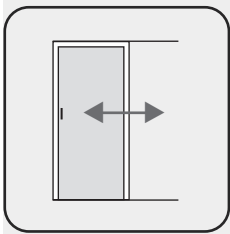
The sliding door operator GEZE Slimdrive SL-T 30 tested by Schörghuber (200 000 opening cycles) meets all the requirements by using a rubber string integrated in the door operator which is strait during the opening procedure of the door leaf. It assures a safe closing of the door in the case of a fire, even during a blackout. The closing speed is therefore reduced to minimize the risk of an injury.

In order to be able to detect fire and smoke a smoke switch control unit is by default installed. The door set can of course also be connected to a fire detection system with external smoke detectors.

Escape and emergency exits

An automatically operated sliding door in escape and emergency routes has to open and stay open in the appropriate events.

The sliding door operator GEZE Slimdrive SL-FR used by Schörghuber is tested and approved for this use. In the case of a blackout an integrated battery supplies enough energy for multiple opening cycles.



Sliding door systems

7.7

Automatically operated sliding doors

Security requirements

When automatically operated sliding doors are installed it is required that dangers which derive from automatically operated door leaves, for example jamming, bruising or crushing, are eliminated or minimised. In Germany DIN 18650 has to be taken into account (➔ Chapter "Door closer").

Schörghuber was especially keen on meeting the security requirements during the development of the automatically operated sliding doors. Special effort was made in order to minimize the clearance on the door leaf edges and the vertical secondary closing edges (rear door leaf edges) as well as the flush glazings, in order to avoid the dangers of bruising or jamming.

The best protection is nevertheless to assure that no person enters the dangerous area of a door leaf in operation. This is by default realised for automatically operated Schörghuber sliding doors by using infrared light curtains. The door leaf movement is stopped and reversed as soon as a person enters the dangerous area of the door leaf in operation. Hereby are monitored, the main closing edge (front door leaf edge) while closing and the secondary closing edge (rear door leaf edge) while opening the door.

The sliding door operator GEZE Slimdrive SL is approved by German TÜV according to security relevant norms and guidelines.

Additional equipment

Control systems

Automatically operated Schörghuber sliding doors with the sliding door operator GEZE Slimdrive SL-T30 or Slimdrive SL-FR are usually equipped with radar motion detectors. After entering the signal area the motion detector opens the door. Radar motion detectors can be installed as a single unit e.g. on the ceiling or as part of a set with the infrared light curtain which is necessary to assure the door safeguarding.

The control of the opening motion can also be realised by pushbuttons. For this purpose several options are available, for example pushbuttons, area pushbuttons, key pushbuttons, foot contact pushbuttons etc.

The opening motion can also be controlled via remote control.

Multiple options for the monitoring of the access control such as code card readers or keyboards are possible.

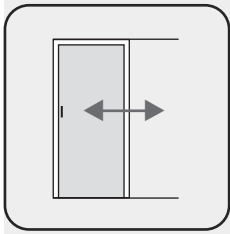
Alterable switch

The GEZE Display Alterable Switch allows to change the programme to different scenarios: automatic, permanently open, shop closing time, night and reduced opening width. Furthermore the hold-open time can be adjusted. The sliding door operators GEZE Slimdrive SL-T 30 and Slimdrive SL-FR which are equipped with the Display Alterable Switch are always combined with a key pushbutton in order to allow an authorised person to lock the current programme. In the case of a fire the T 30 configuration overrules the current programme by forcing the door to close, which it does automatically.

Bolting

If requested the sliding door can be electronically bolted when in the closed state.

Additional equipment such as emergency switches, main switches etc. are possible on request as well.



Sliding door systems

7.7

Automatically operated sliding doors

Required space

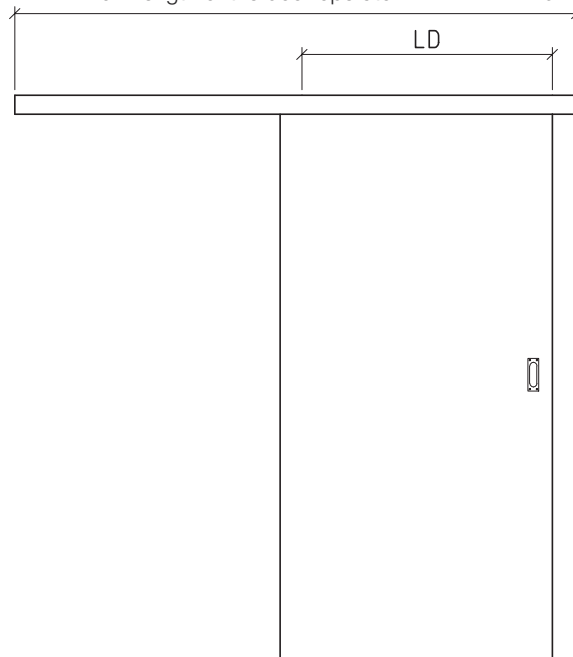
The minimum length of the sliding door operator GEZE Slimdrive SL-T 30 and GEZE Slimdrive SL-FR are calculated for 1- and 2- leaf doors sets using the formula:

$$\text{Minimum length of the door operator} = 2 \times \text{LD} + 225 \text{ mm}$$

The sliding door operator can therefore be elongated on both sides on site, in order to stretch out and realise for example a flush connection to a partition wall.

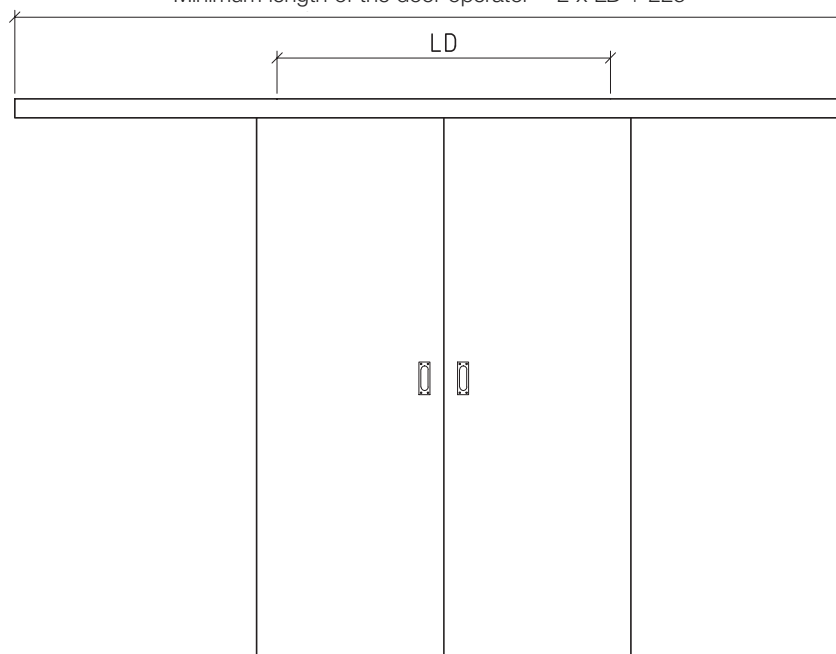
1-leaf sliding door

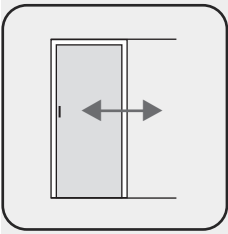
$$\text{Minimum length of the door operator} = 2 \times \text{LD} + 225$$



2-leaf sliding door

$$\text{Minimum length of the door operator} = 2 \times \text{LD} + 225$$





Sliding door systems

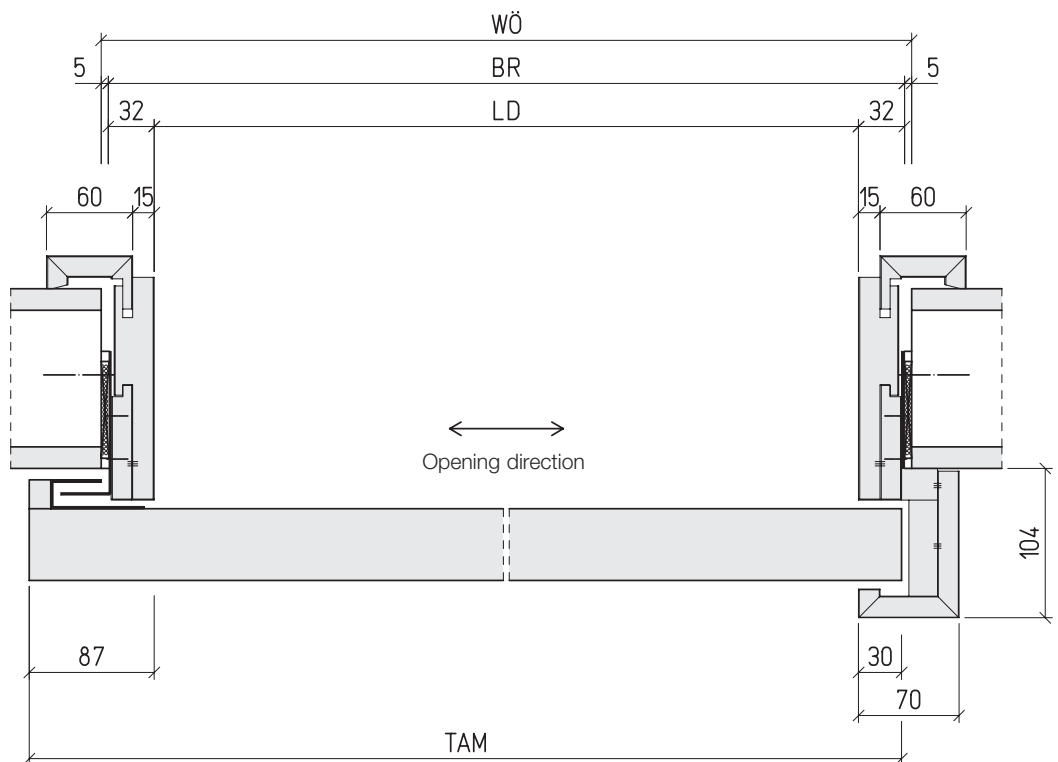
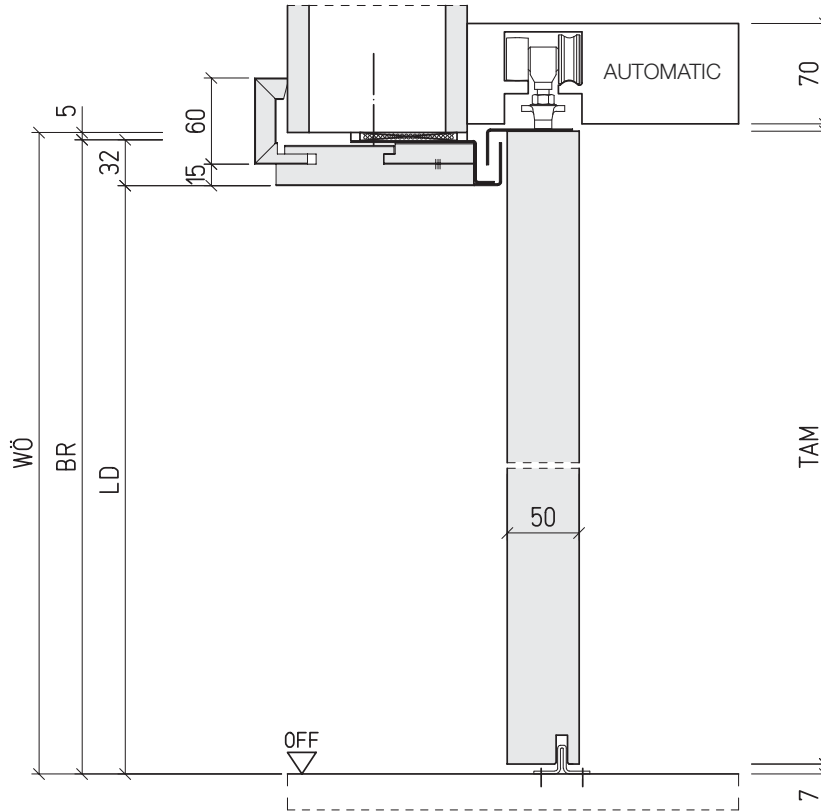
7.7

Automatically operated sliding doors

Details / Installation situations

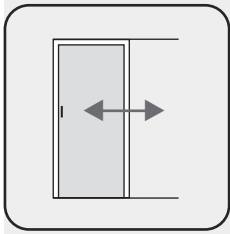
Model 3 N-ST, wooden frame, solid wall

T 30



Wooden special doors





Sliding door systems

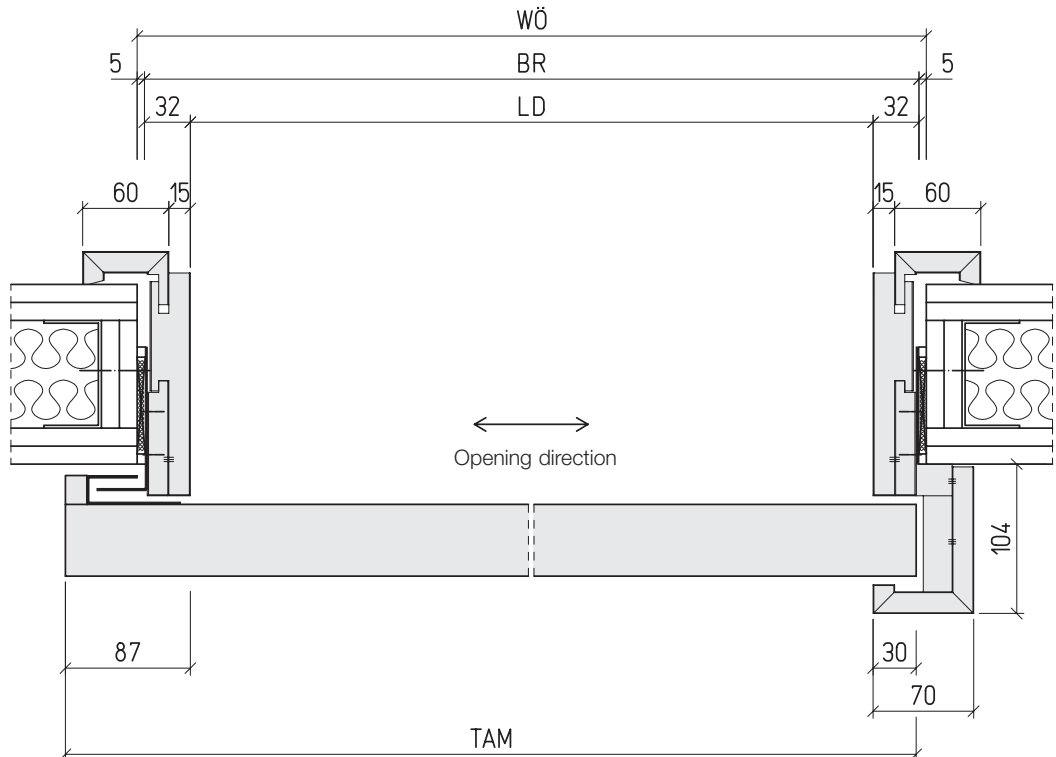
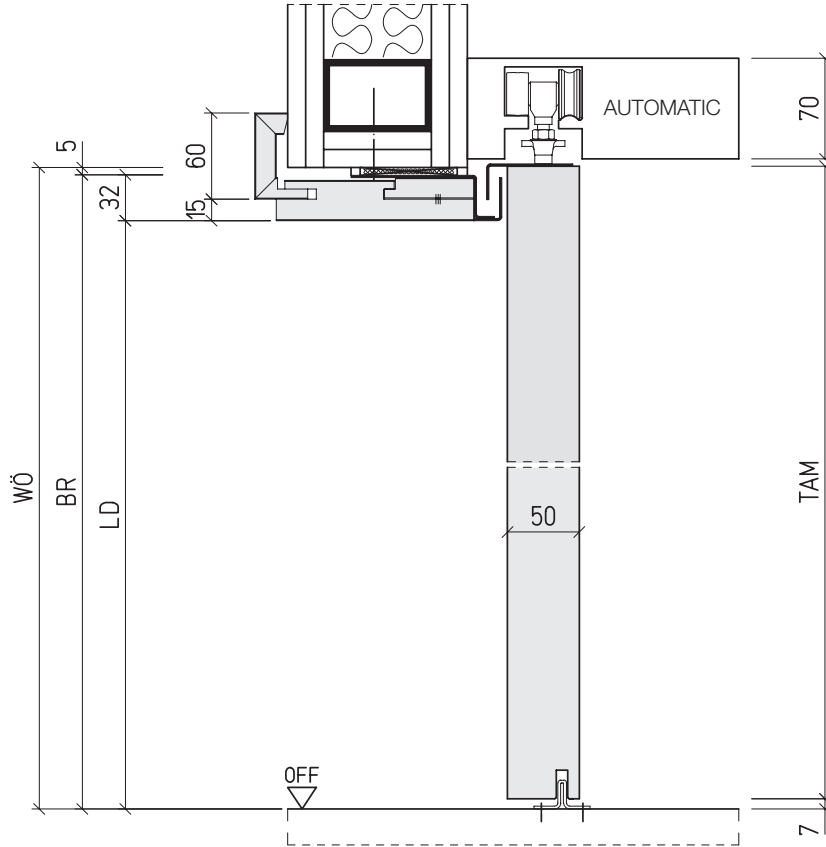
7.7

Automatically operated sliding doors

Details / Installation situations

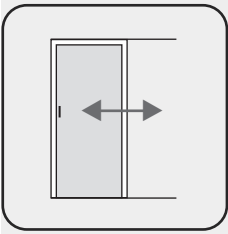
Model 3 N-ST, wooden frame, gypsum plasterboard wall

T 30



Wooden special doors





Sliding door systems

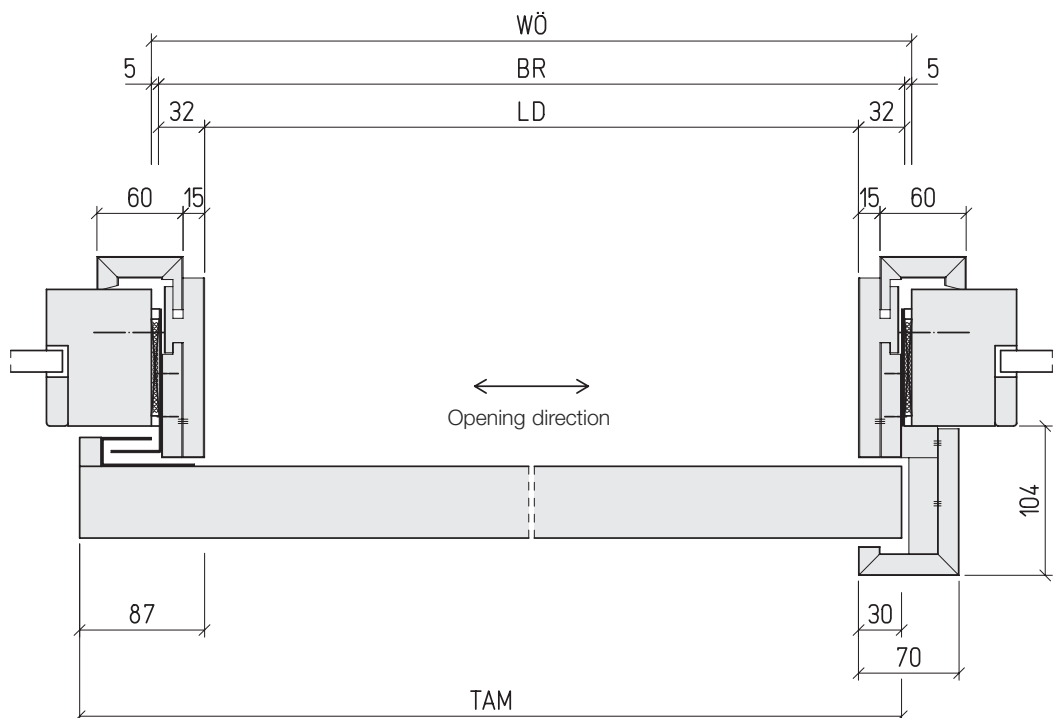
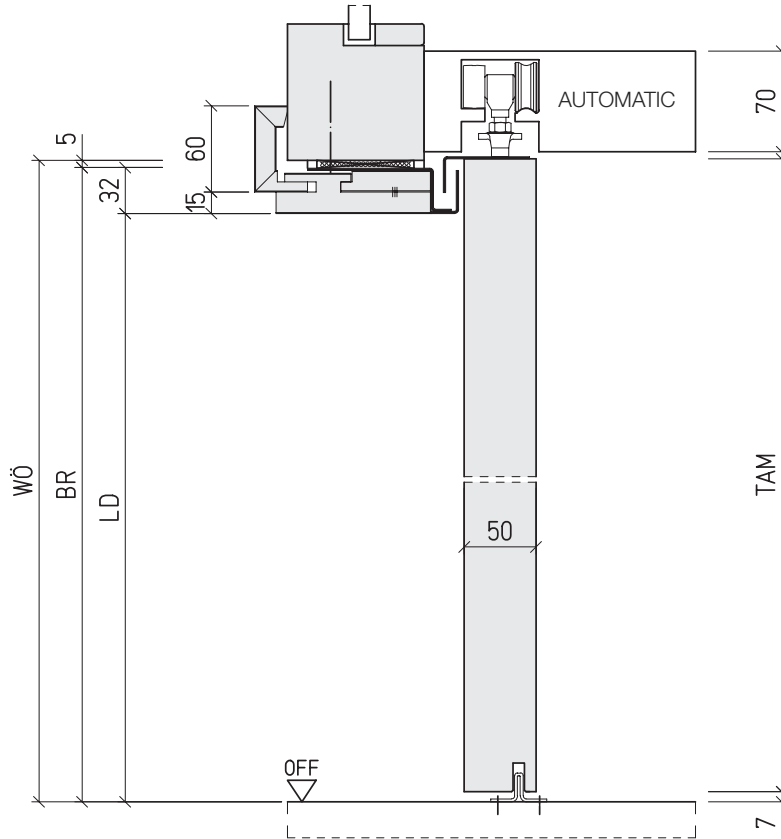
7.7

Automatically operated sliding doors

Details / Installation situations

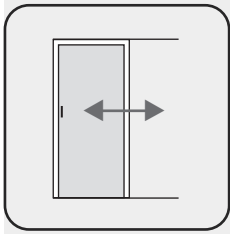
Model 3 N-ST, wooden frame, fixed glazing Type 25V

T 30



Wooden special doors





Sliding door systems

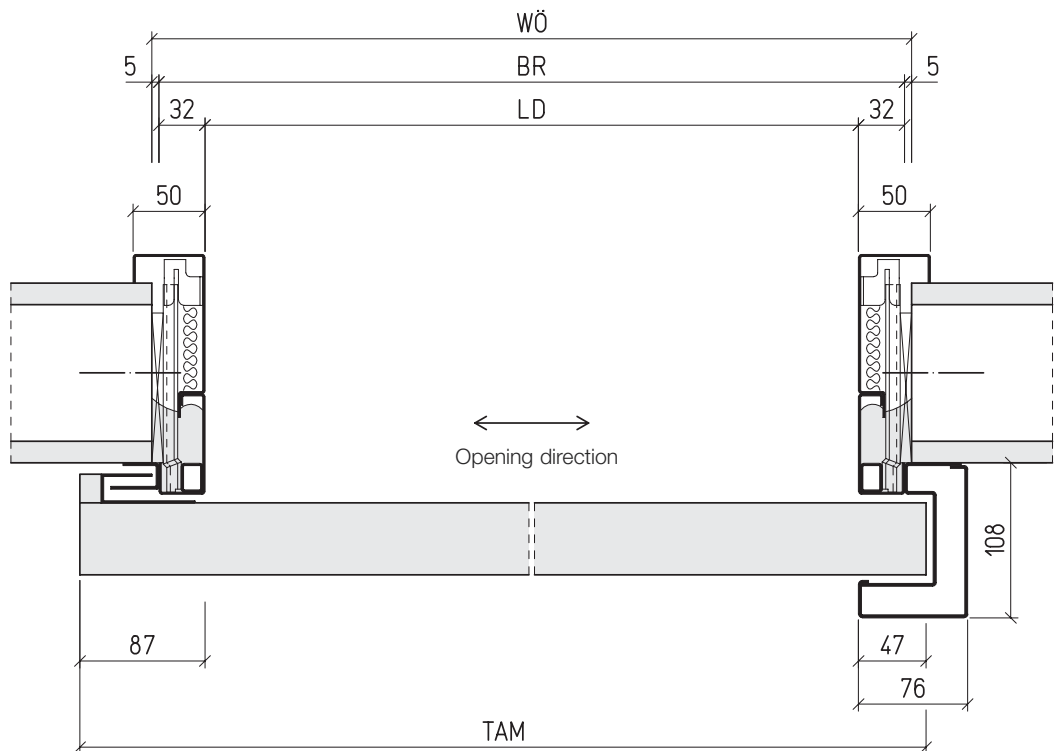
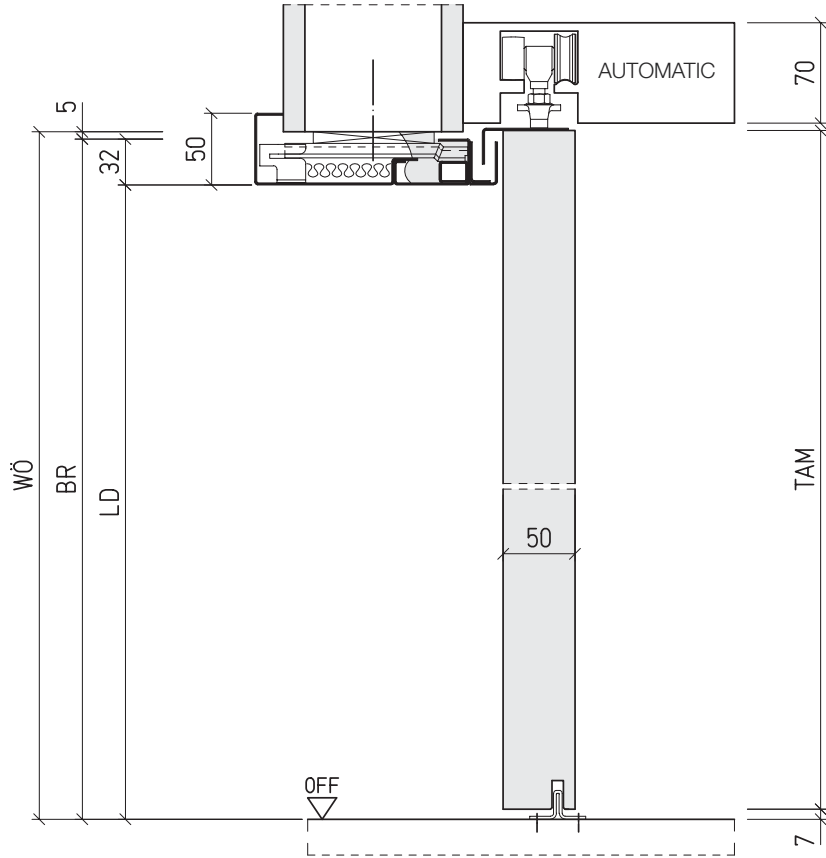
7.7

Automatically operated sliding doors

Details / Installation situations

Model 3 N-ST, steel frame, solid wall

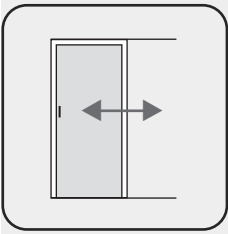
T 30



Wooden special doors



7



Sliding door systems

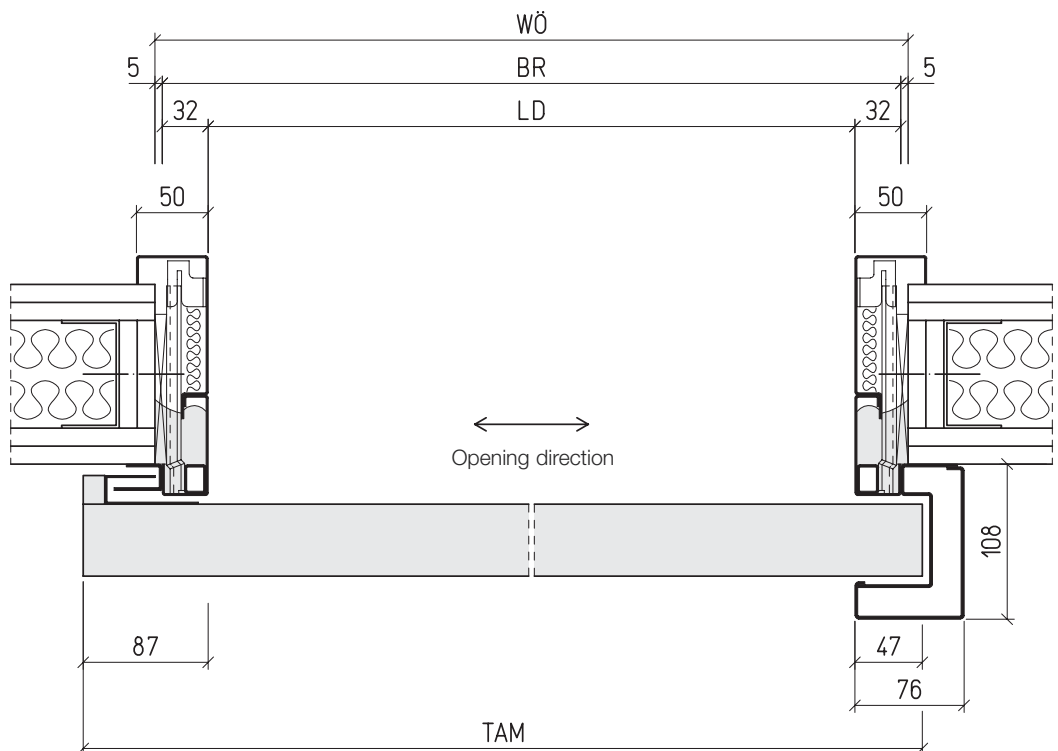
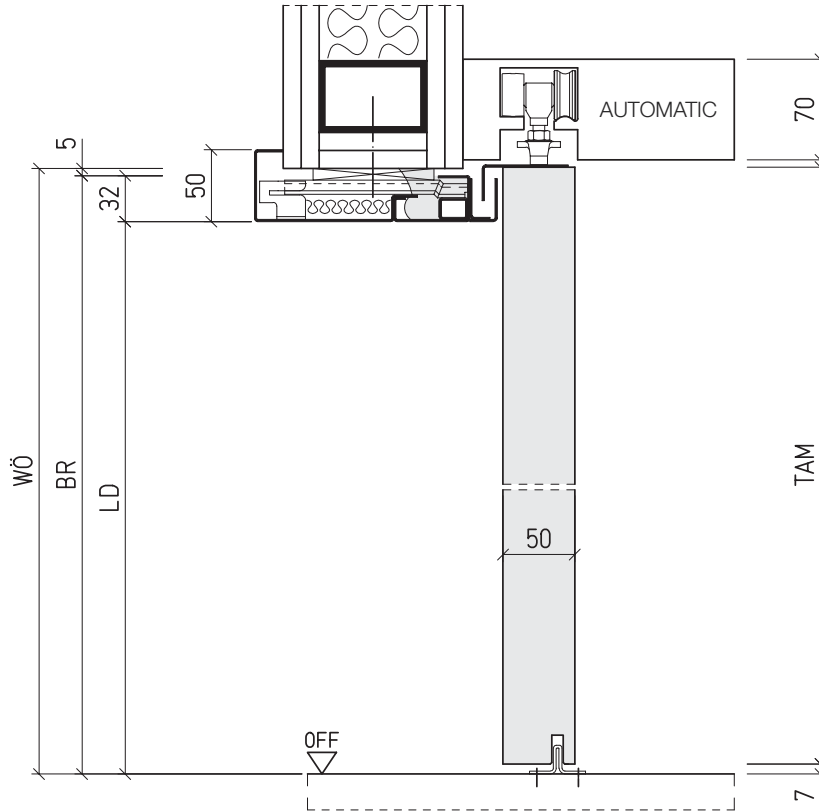
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Automatically operated sliding doors

Details / Installation situations

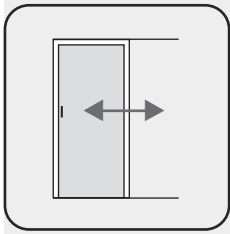
Model 3 N-ST, steel frame, gypsum plasterboard wall

T 30



Wooden special doors





Sliding door systems

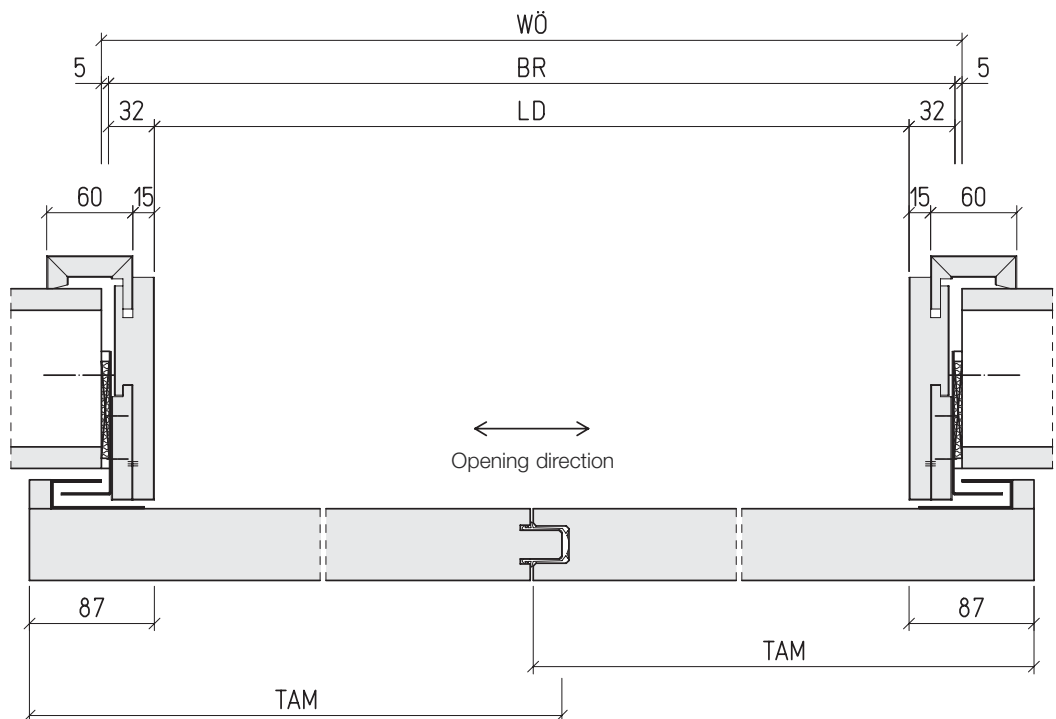
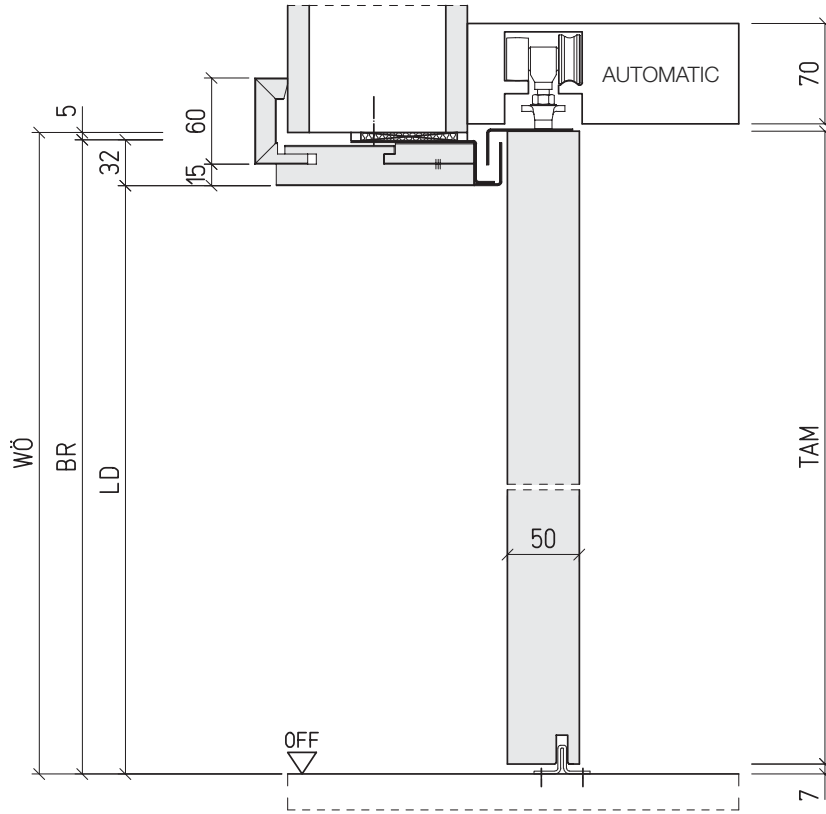
7.7

Automatically operated sliding doors

Details / Installation situations

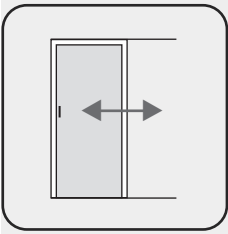
Model 4 N-ST, wooden frame, solid wall

T 30



Wooden special doors





Sliding door systems

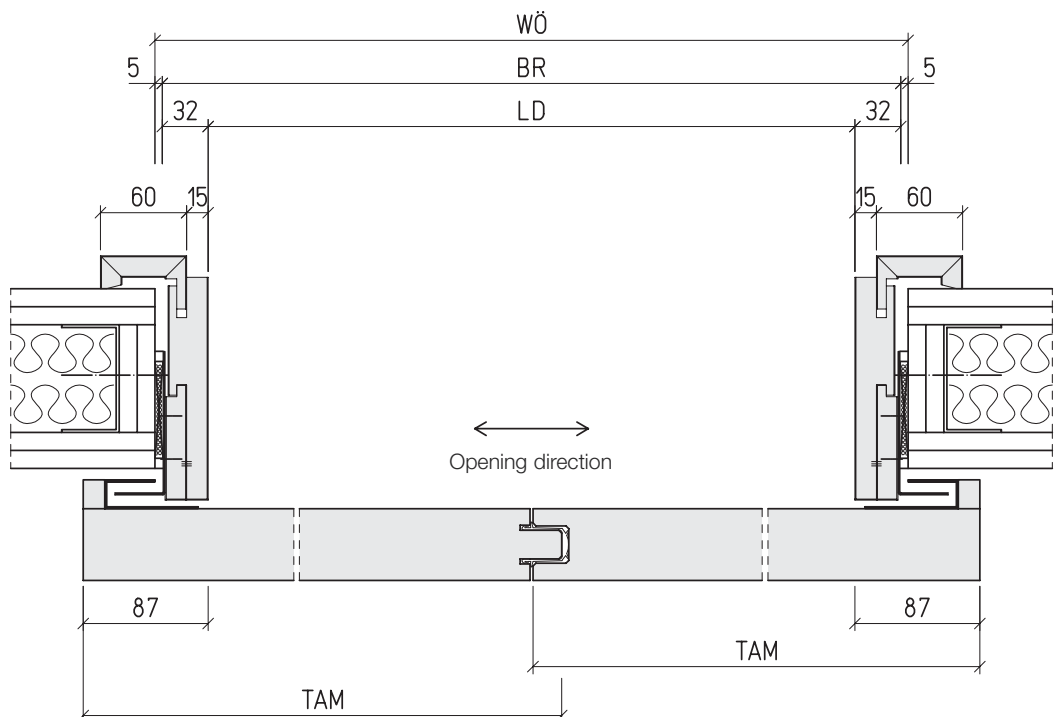
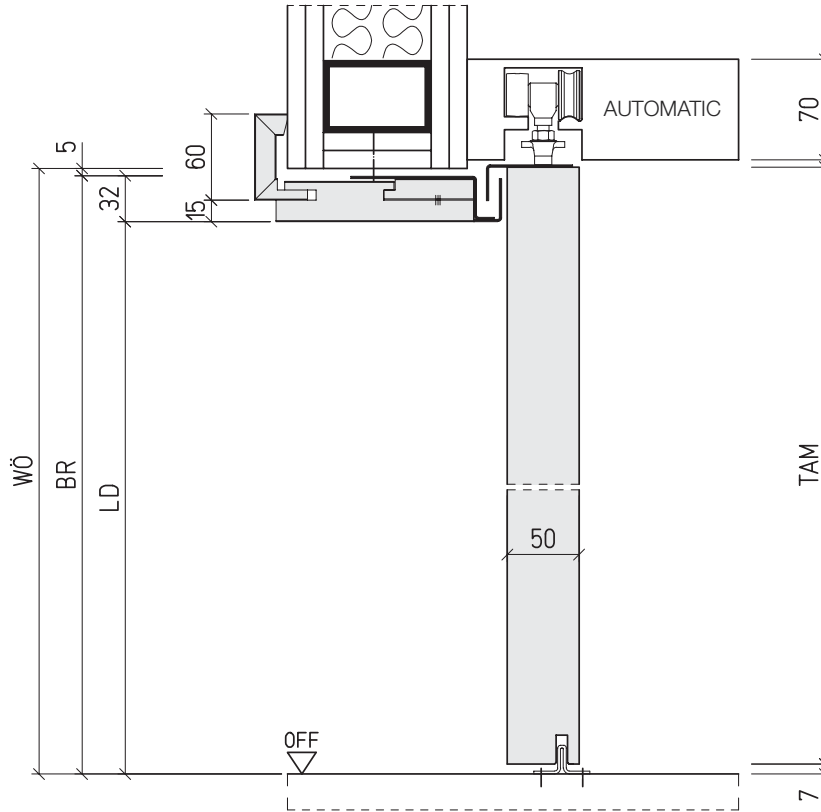
7.7

Automatically operated sliding doors

Details / Installation situations

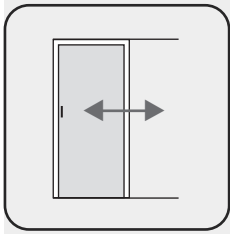
Model 4 N-ST, wooden frame, gypsum plasterboard wall

T 30



Wooden special doors





Sliding door systems

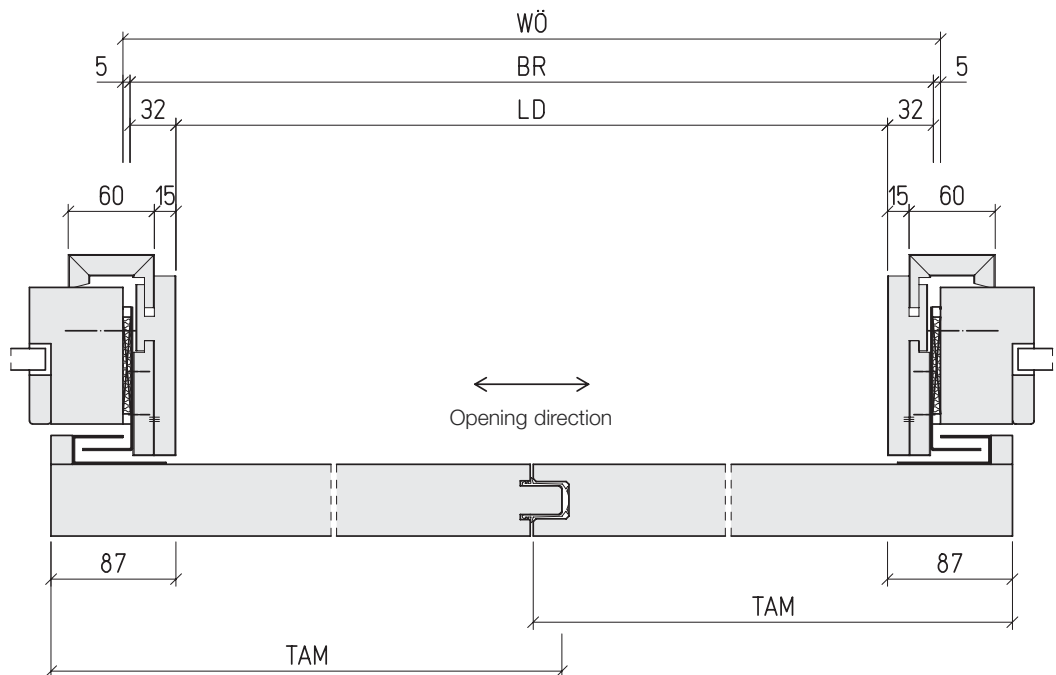
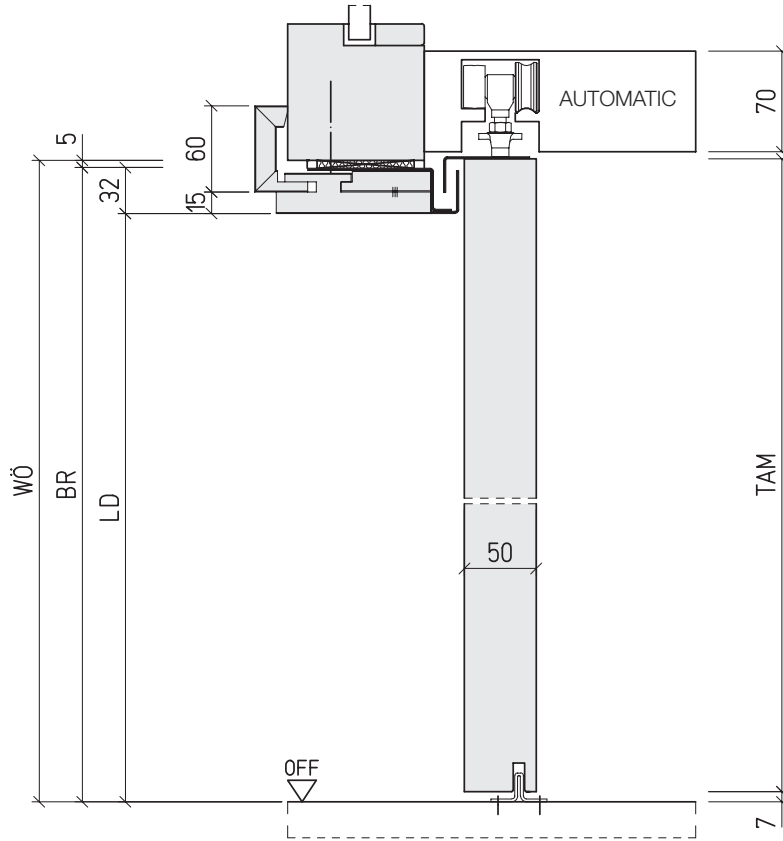
7.7

Automatically operated sliding doors

Details / Installation situations

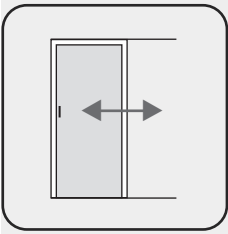
Model 4 N-ST, wooden frame, fixed glazing Type 25V

T 30



Wooden special doors





Sliding door systems

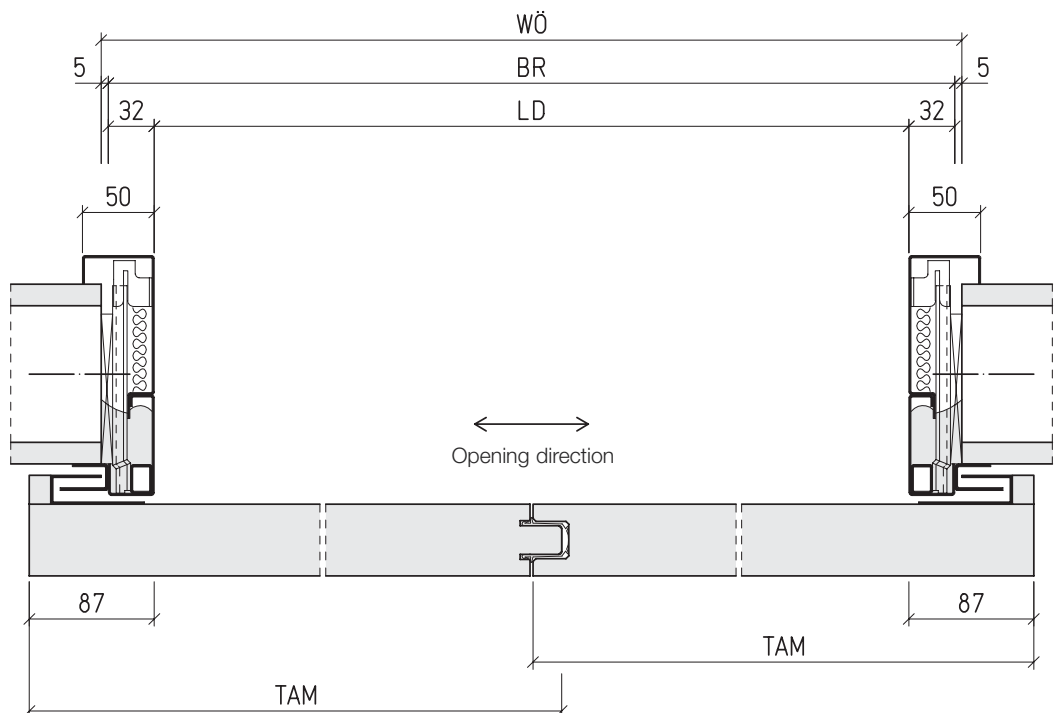
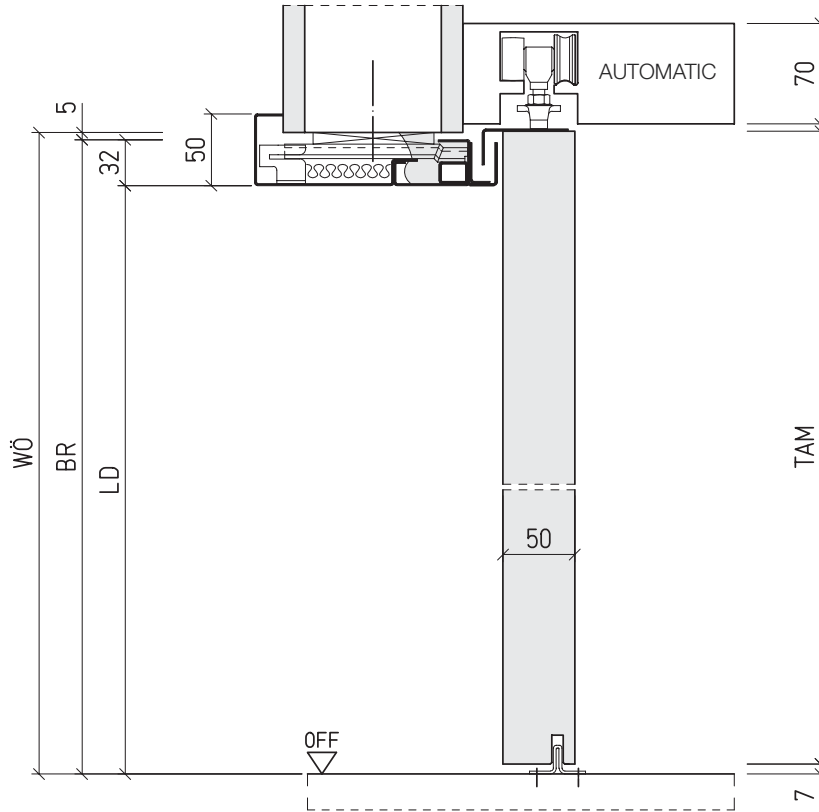
7.7

Automatically operated sliding doors

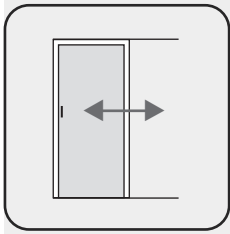
Details / Installation situations

Model 4 N-ST, steel frame, solid wall

T 30



Wooden special doors



Sliding door systems

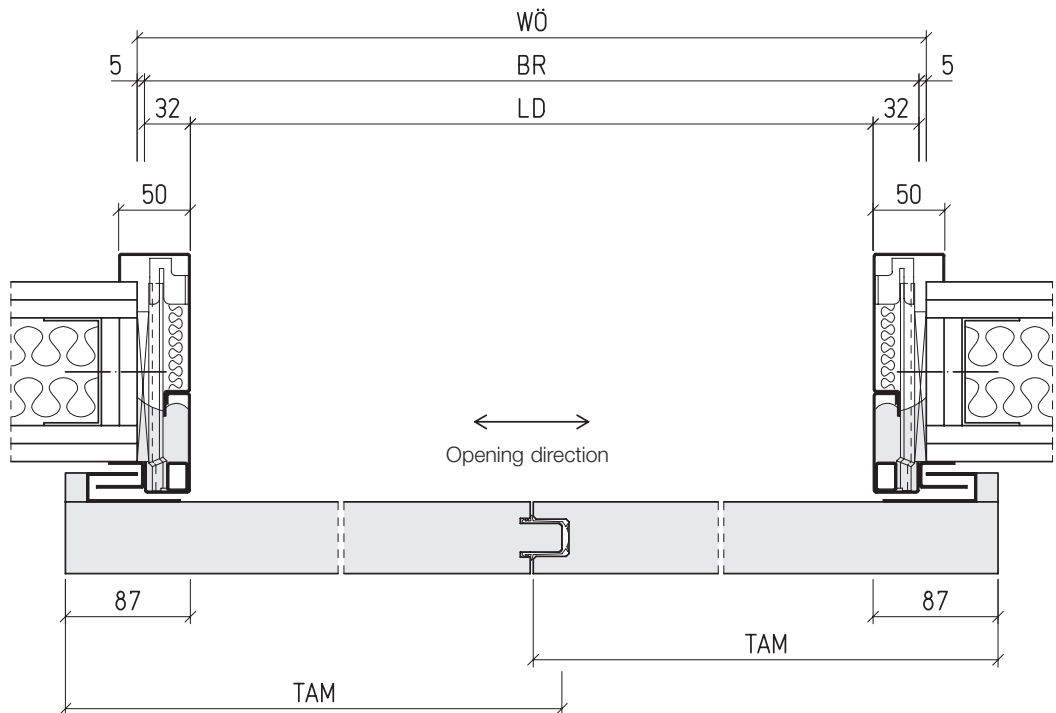
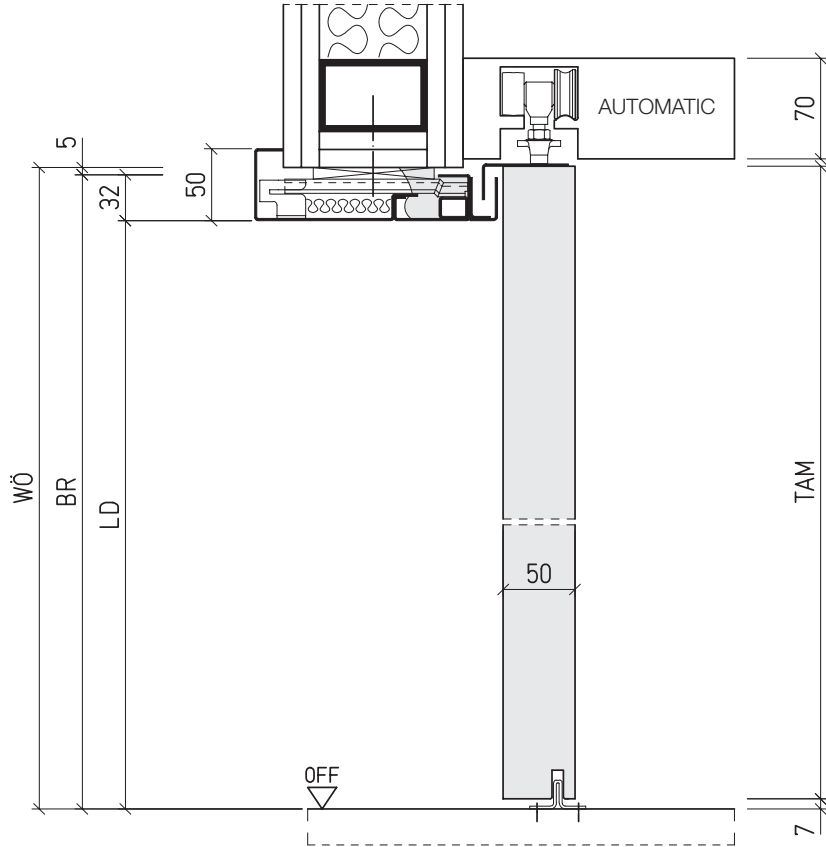
7.7

Automatically operated sliding doors

Details / Installation situations

Model 4 N-ST, steel frame, gypsum plasterboard wall

T 30



Wooden special doors



