

FACT SHEET
V1.1

FOLDING DOORS

NEW:
Aluminum
folding door 46 AF
with certified
U-value up to
2,4 W/m²K



BN TorTechnik



GREAT FLEXIBILITY AND LOW-MAINTENANCE

FOLDING DOORS

Folding doors are characterized by very flexible design and application options, especially when space inside the room is limited. At the same time, our modern aluminum doors can be a real design element for demanding architectural projects.

SMART DESIGN

Folding doors have a small space requirement on the desired stop side. This refers to both the side space and the required lintel space. The clear width remains fully usable in a design with 180° opening or profile doubling.

The door type 46 AF is based on a robust aluminum frame and rung construction. Various types of fittings allow use in almost all building and space conditions. With externally hinged doors, the interior remains fully usable.

In the standard configuration, the folding door is designed with a closed floor panel made of e.g. stucco or sheet metal panels. The remaining panels can be equipped with panels with insulating plastic double-glazing for optimal light incidence. In order to achieve a special longevity, different types of real glass can be used.

The door leaf consists of several vertically arranged, laterally sliding and rotating wings, which are connected to each other with 3-part aluminum door hinges. The door hinges can be individually adjusted in all axes. The leaf packages are guided smoothly in a special rail mounted above the door leaf by roller units with double-pair ball-bearing track rollers. The leaves are locked in their final position by means of invisible drive bolts integrated in

the profile. These can be designed to be lockable from the inside as well as from the outside. The door frame profiles are made of extruded aluminum hollow profiles and are designed for the corresponding door sizes and static requirements. The sealing between the individual leaves as well as to the frame tube is realized by durable rubber seals with a special overlap, which also ensures finger pinch protection. The fillings are held in place on the inside by PVC or aluminum clamping strips and sealed on the outside with UV-resistant three-lip rubber profiles. The profiles are available in alu E6/EV1 and can be powder-coated in any RAL color on request.

EASY ACCESS

The use of wicket doors is possible in any desired door leaf. In the standard version, the threshold height is 135 mm. On request, a low threshold is also possible, which has a threshold height of 30 mm. In case of an odd number of leaves or also in case of single leaves, it is possible to choose a walking leaf. The pedestrian leaf enables a barrier-free passage with a large passage width at the same time and is thus an ideal solution for passenger and goods traffic. In the case of high door leaves, the active leaf can also be designed in a split version.



◀ Wicked door assembly

NEW

Aluminum folding door 46 AF now with a tested U-value of up to 2.4 W/m²K, Reference gate 4 x 4 m, division 2:2, attached on the outside

FILLING	U-value [W/m ² K]	WITH WICKED DOORS
Ecotop (double glazing)	3,1	3,4
Energy (triple glazing)	2,9	3,1
Real glass (U-value 2,6 W/m ² K)	3,4	3,6
Real glass (U-Wert 1,1 W/m ² K)	2,5	2,8
Stucco or sheet metal panels	2,4	2,7

The wicket doors and pedestrian leaves can be optionally equipped with an overhead door closer. Furthermore, various lock and fitting combinations are available. In electric operation, the wicket door is protected by magnetic contacts.

The door can be operated manually or electrically. If necessary, a weather protection roof can be used. The exact dimensions depend on the opening angle or the equipment of the door system. The track is attached by means of adjustable screw mounting on the supplied suspension brackets.



APPLICATIONS

- Car washes
- Fire brigade stations
- Machine housings / plant engineering
- Large openings, e.g. hangars
- Etc.

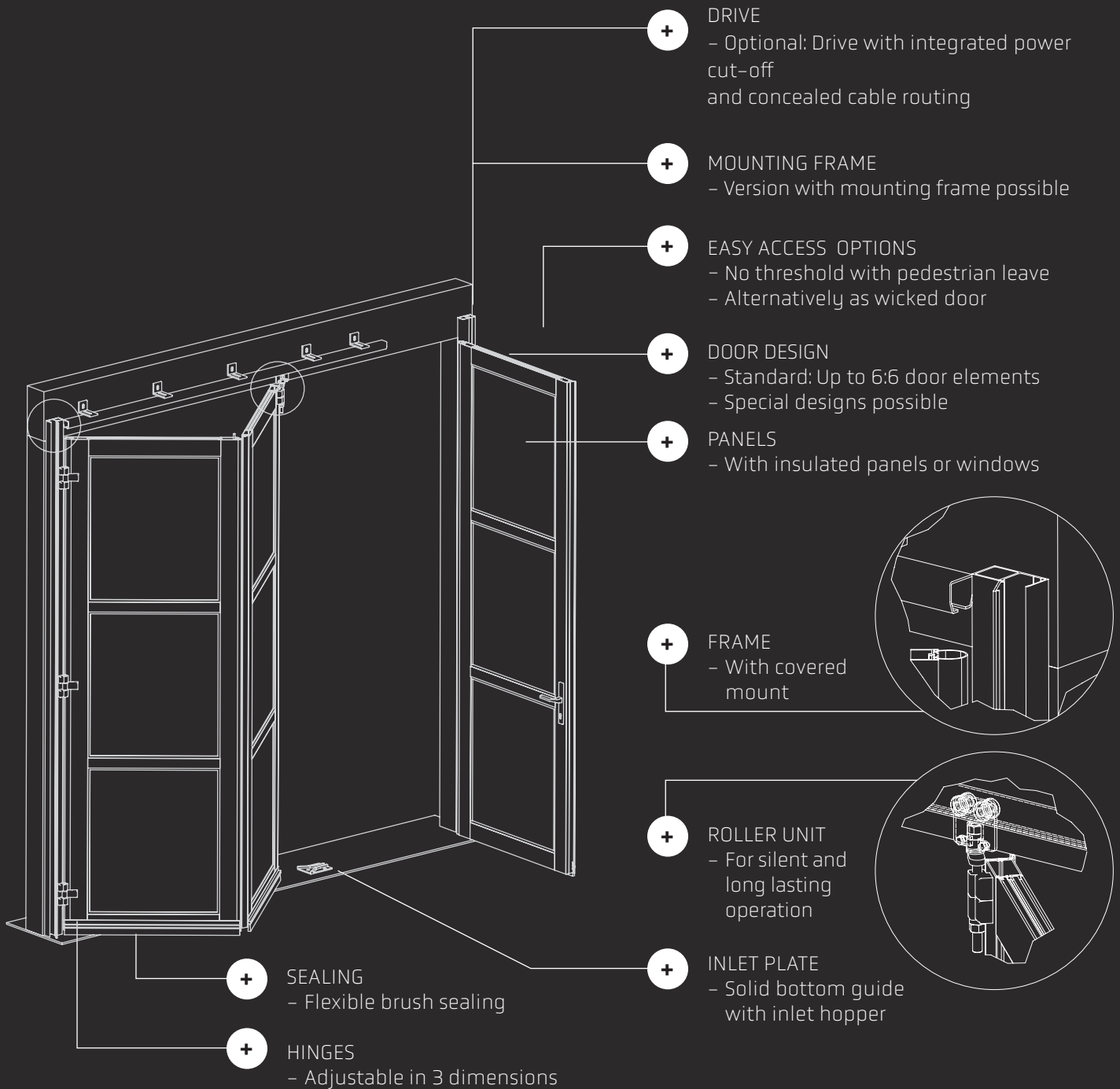


TIP

- Particularly suitable for car washes by preventing dripping wetness
- In a form that is flush with the facade it can be integrated well into the building envelope

FOLDING DOORS

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SHORT FACTS

WIDTH/HEIGHT



Other sizes are possible within the scope of special designs.

OPERATION

- Manual
- Electric
- Fire brigade fast opener

LEAVE DESIGN AND DOORS



Door leaf divided in standard up to 6:6; Wicket doors opening inwards and outwards; Alternatively, threshold-free pedestrian leaf

COLORS

Aluminium E6/EV1, optional: RAL choice

DOOR TYPES

46 AF

WINDOW / PANEL OPTIONS

Further information → p. 5

QUITE SOME OPTIONS.

In addition to the functionality of the doors, of course, we also want your new door to adapt perfectly to the local conditions.

COLORS

OPTIONS

Aluminum frames are anodized in E6/EV1 as standard.

Optionally, depending on the type of door, e.g. frames, fillings and panels can be executed in all colors of the RAL palette.

WINDOW OPTIONS

ECOTOP [Standard]

Ecotop double glazing is the optimal pane for narrow budgets.

This pane is used as standard glazing.

PEARL [optional]

The beaded surface lets light in, but not prying eyes from outside.

It diffuses light and provides high glare protection in direct sunlight.

ENERGY [optional]

With the energy triple glazing you minimize your energy costs.

It is a future-proof solution that helps increase the energy efficiency of the building.



+ **HARD surface coating:** All panes can optionally receive a nano-surface coating that results in a glass-like, highly scratch-resistant surface and increased chemical resistance as well as optical brilliance - our HARD coating closes the gap to real glass systems.

SELECTED PANEL OPTIONS (FURTHER ON DEMAND)

ALUMINUM-STUCCO-PANEL [Standard]

Double-sided aluminum sheet with stucco designated surface-embossing and internal insulation core made of polystyrene.



ALUMINUM-METAL SHEET-PANEL [optional]

Double-sided aluminum sheet with internal polystyrene insulation core. Anodized in E6/EV1 as standard.



GRID METAL [optional]

Steel including powder coating or aluminum, incl. aluminum clamping strips.



LATTICE BAR FILLING [optional]

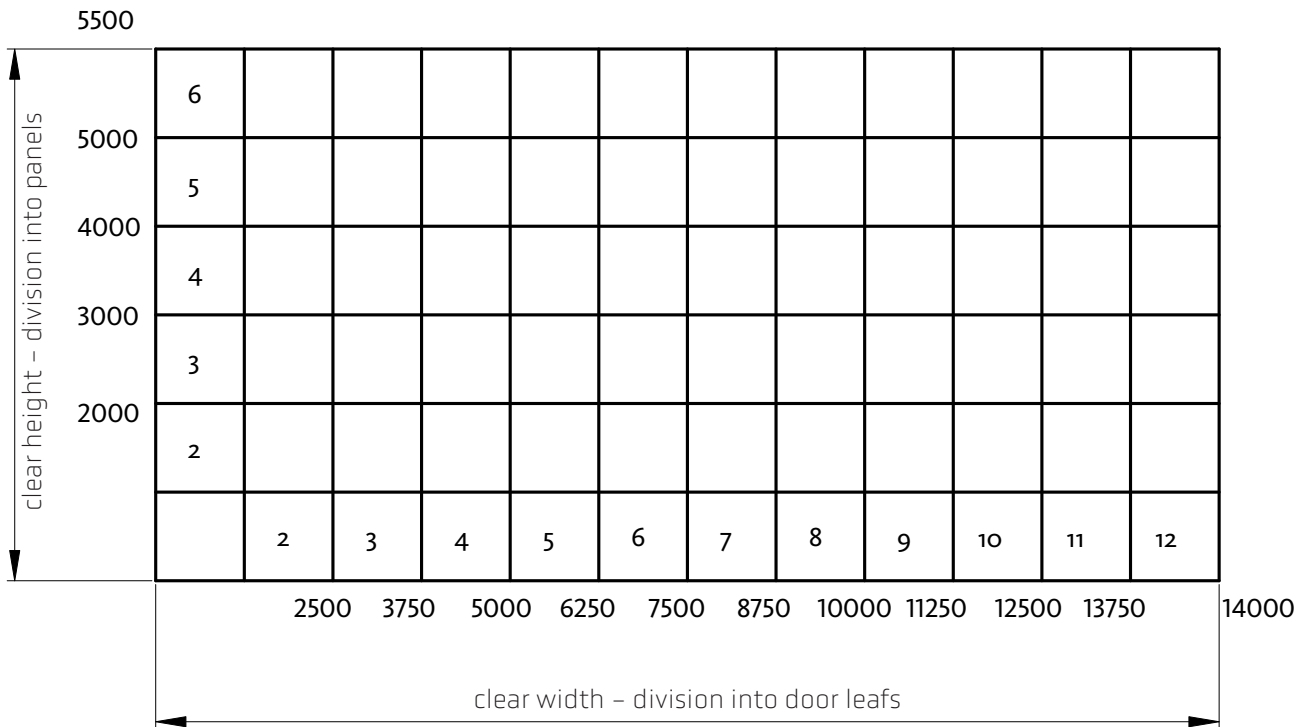
When using the lattice bar filling, a retraction safety device is required. This is to prevent persons from being pulled in when the door is raised.

PERFORATED METAL SHEET [optional]

The perforated sheet filling is an aluminum sheet with square perforation. Can be powder coated in natural aluminum or according to the RAL palette.

TECHNICAL DATA

Door leaf division

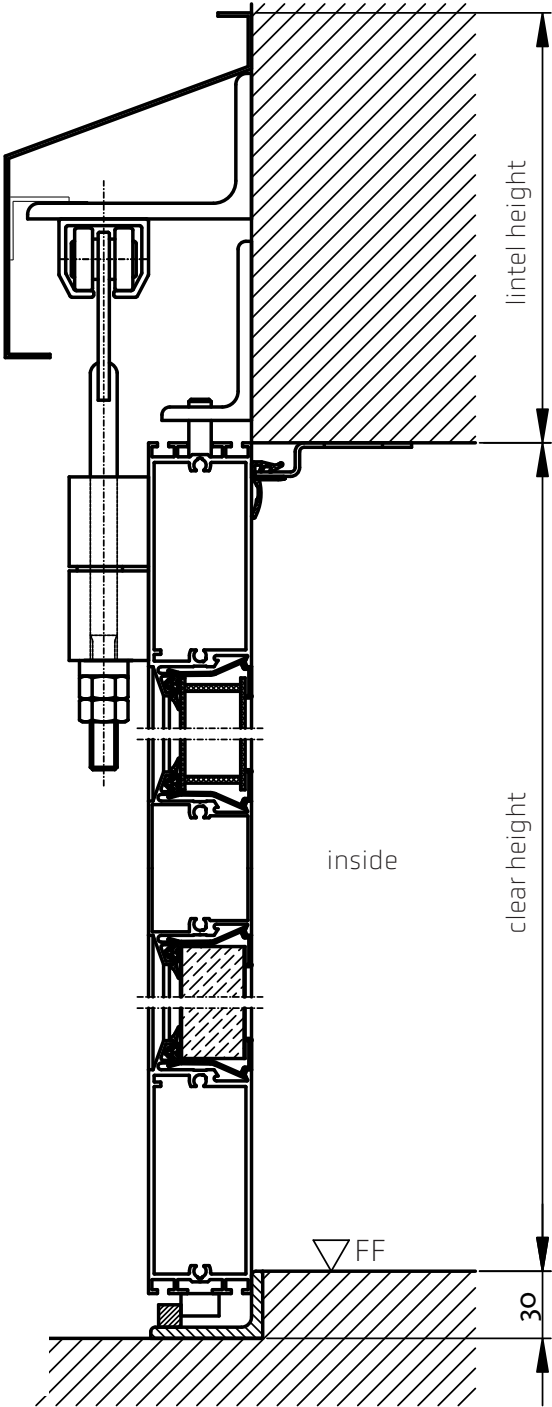


Required space

Mounting	Stroke type	Side space 90° opening	Side space 180° opening	Side space fire brigade fast opener	Side space profile doubling	Side space electric drive	Lintel height 90° opening	Lintel height 180° opening	Lintel height electric drive
from the outside	A with weather protection roof	100	leaf width+80		275	170	220	250	250
from the outside in the reveal	A with weather protection roof	0	leaf width+20			110	220	250	250
from the inside	B	100	leaf width+80	160	275	170	175 (150)	195 (150)	195 (150)
from the inside in the reveal	B	0	leaf width+20			110	175 (150)	195 (150)	195 (150)
in the reveal (inside)	mounting frame	0				160	190 (160)		210 (160)
in the reveal (outside)	mounting frame + weather protection roof	0				160	190 (160)		210 (160)

Stroke type A
mounted from the outside

Upper connection
for 90° opening angle
with weather protection roof

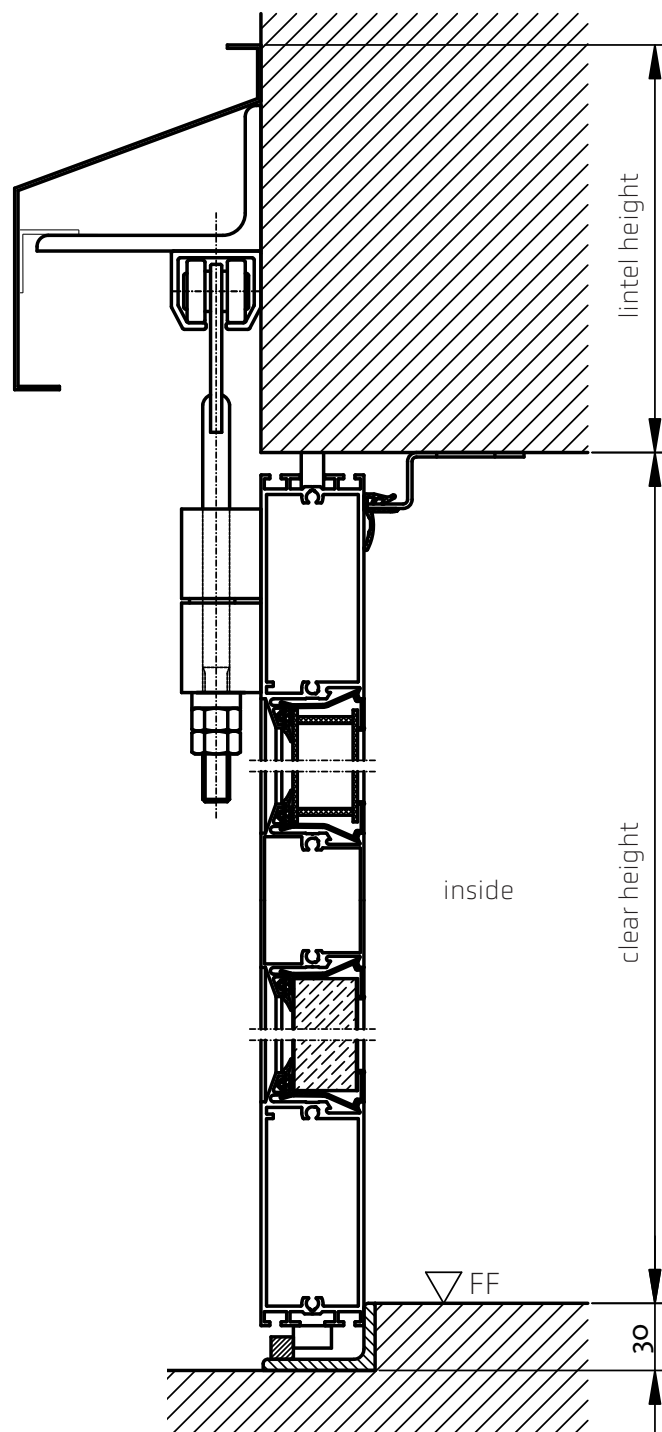


Bottom connection
with floor bracket

Stroke type A

mounted from the outside in the reveal

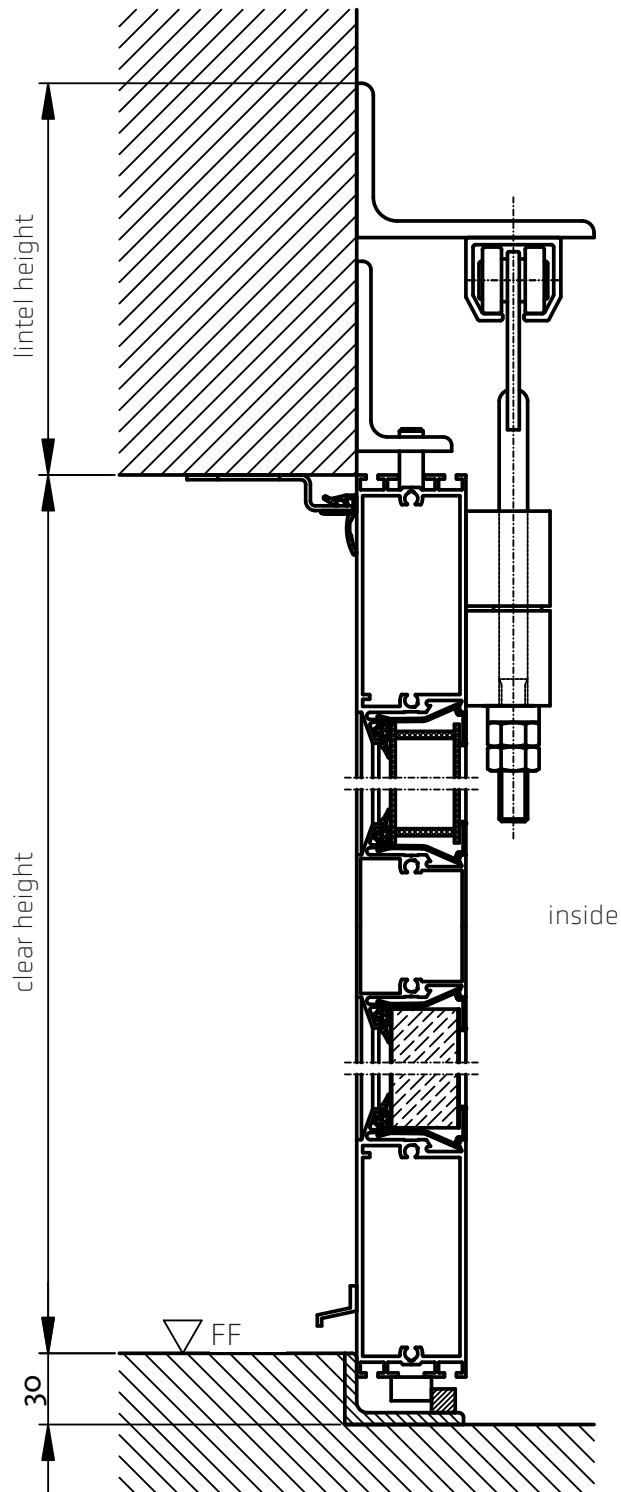
Upper connection
for 90° opening angle
with weather protection roof



Bottom connection
with floor bracket

Stroke type B
mounted from the inside

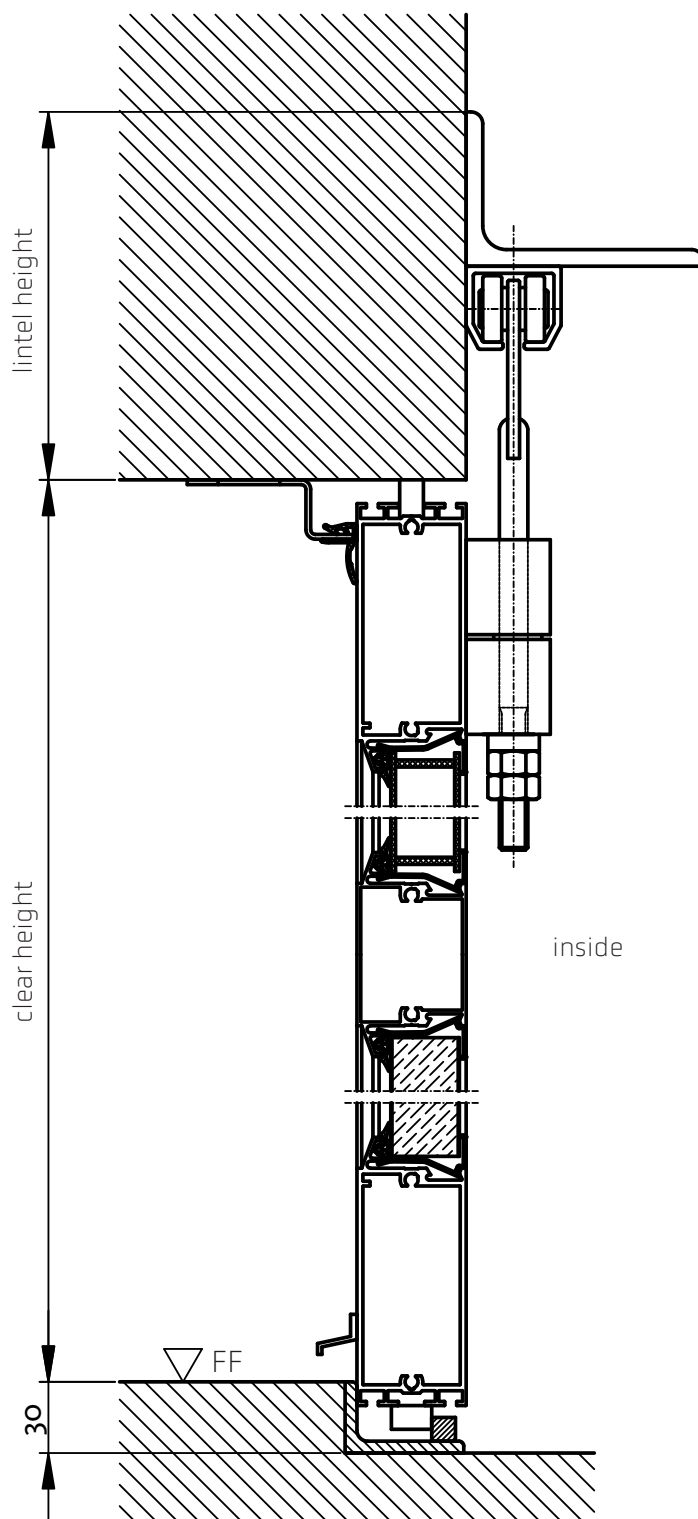
Upper connection
for 90° opening angle



Bottom connection
with floor bracket

Stroke type B
mounted from the inside in the reveal

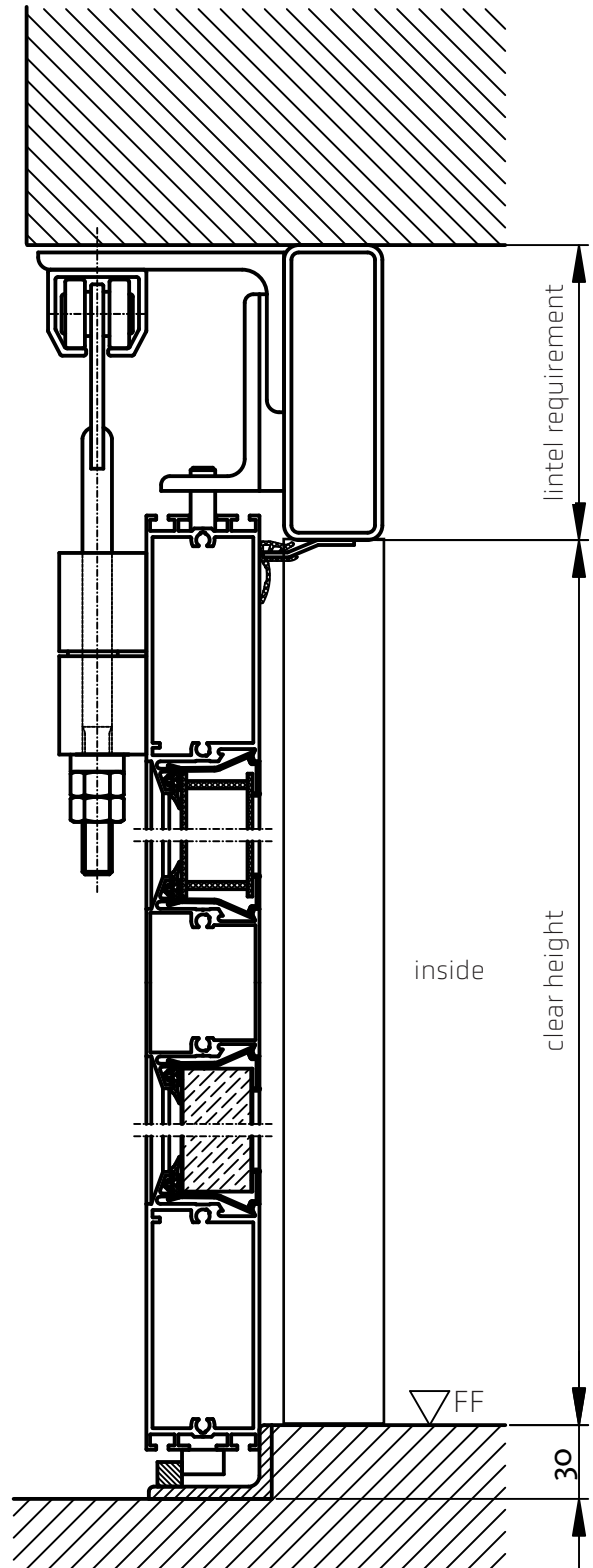
Upper connection
for 90° opening angle



Bottom connection
with floor bracket

**Mounting frame
mounted in the reveal (outside)**

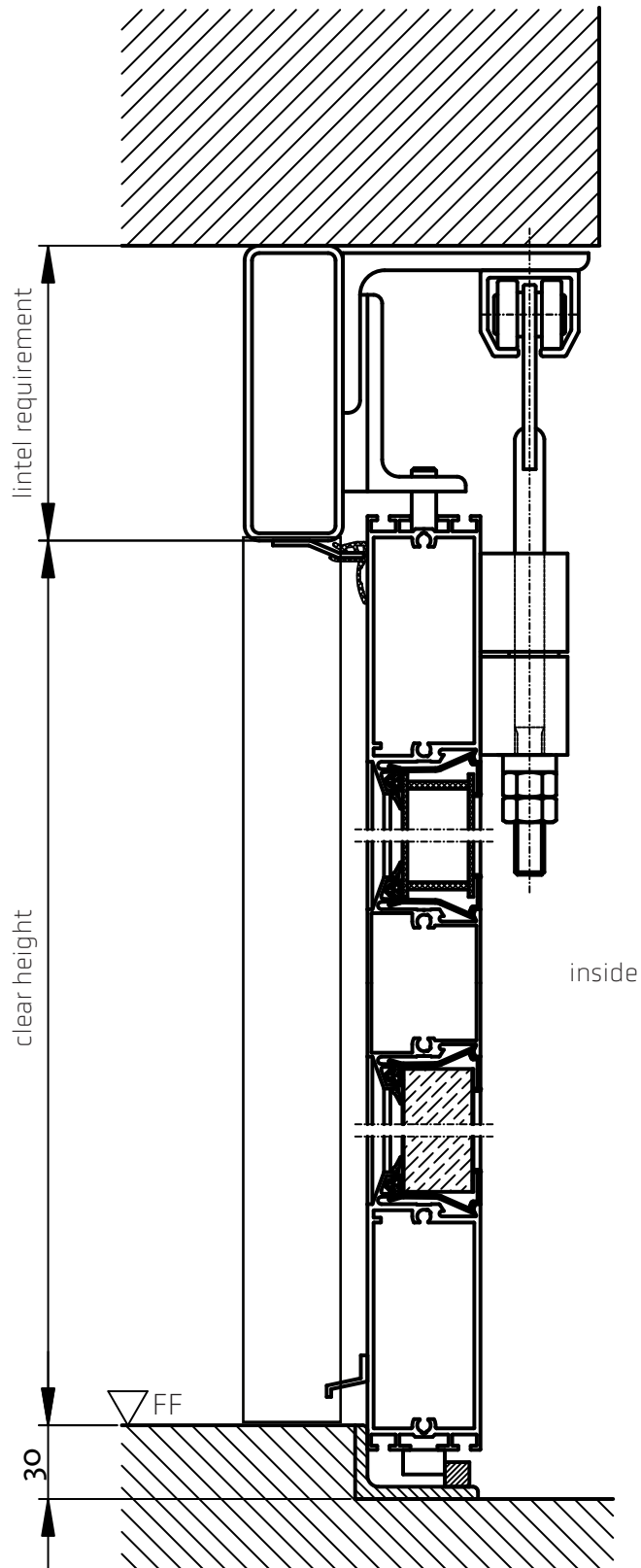
Upper connection
for 90° opening angle



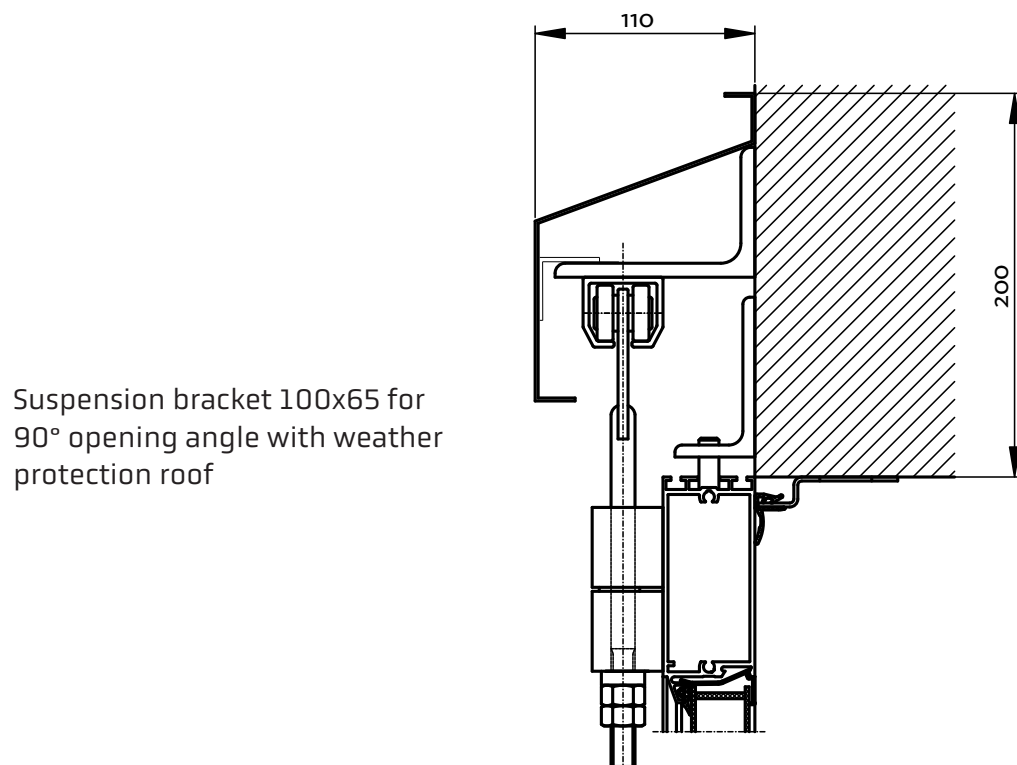
Bottom connection
with floor bracket

Mounting frame
mounted from in the reveal (inside)

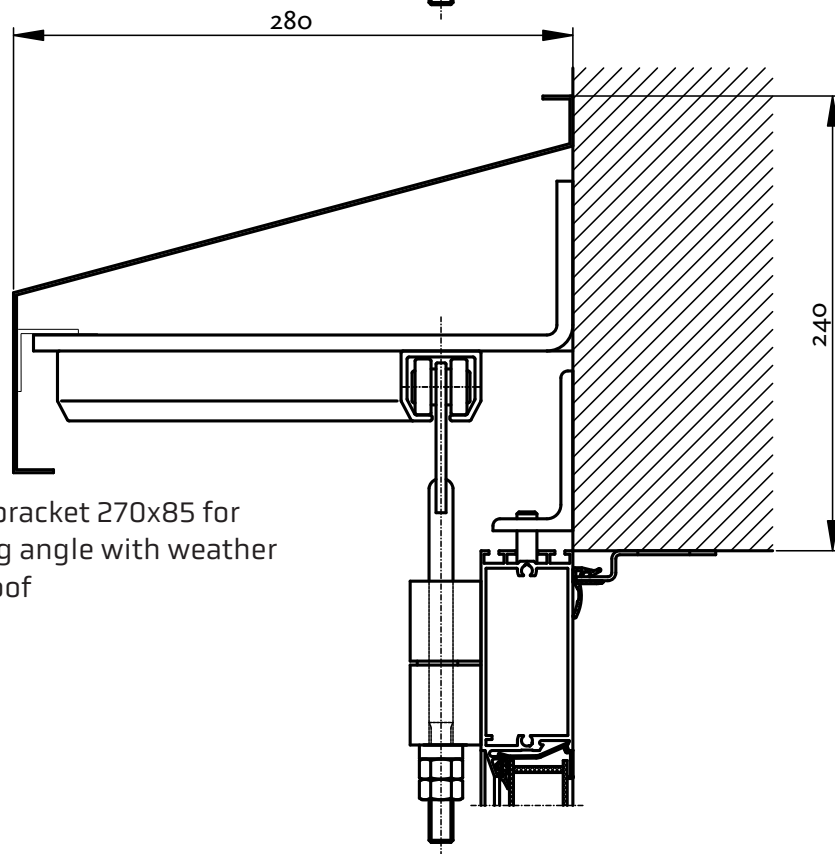
Upper connection
for 90° opening angle



Bottom connection
with floor bracket



Suspension bracket 100x65 for 90° opening angle with weather protection roof

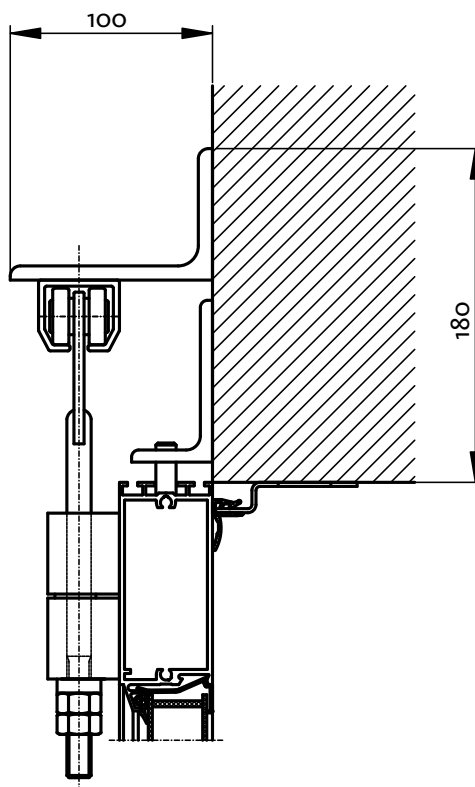


Suspension bracket 270x85 for 180° opening angle with weather protection roof

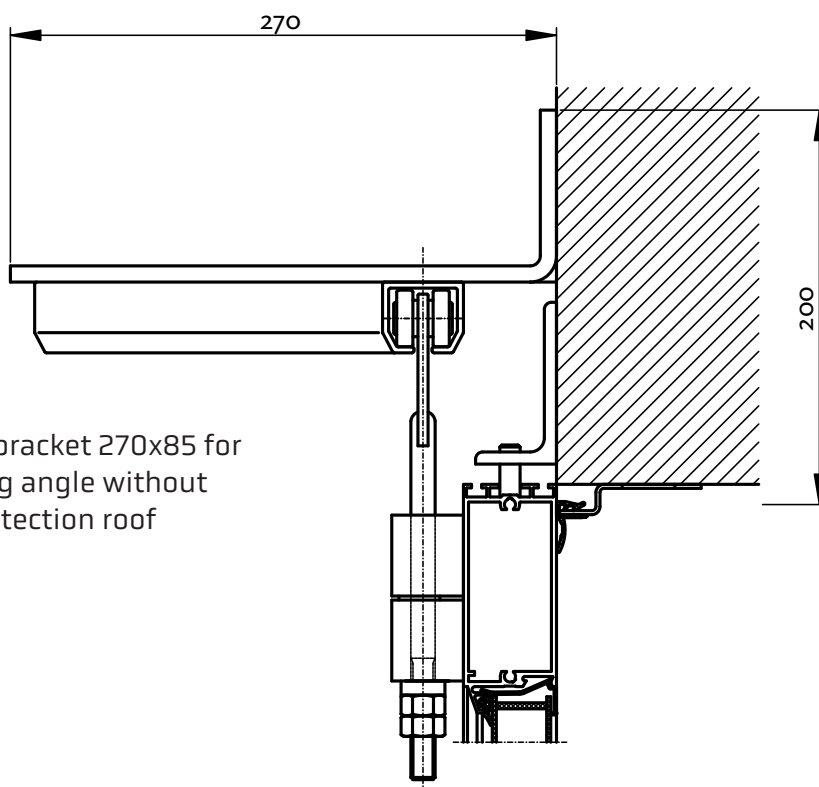
Top connectors

mounted from in the reveal (inside)

Suspension bracket 100x65 for
90° opening angle without
weather protection roof

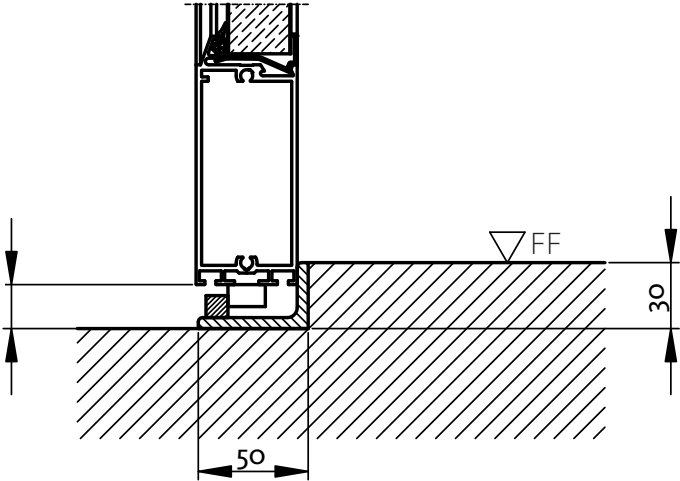


Suspension bracket 270x85 for
180° opening angle without
weather protection roof

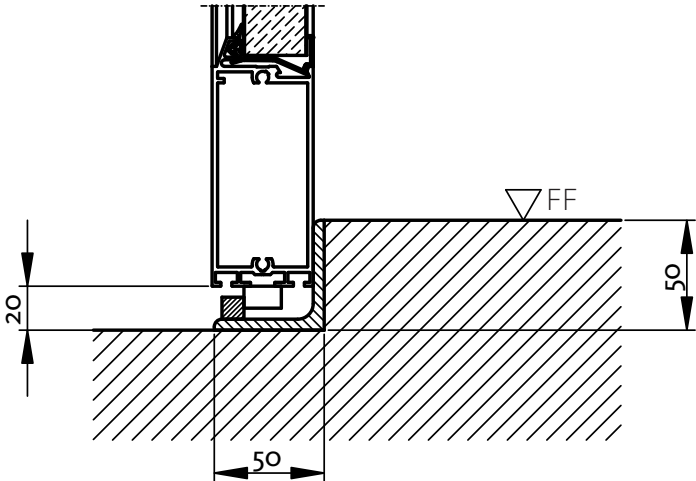


Lower connections

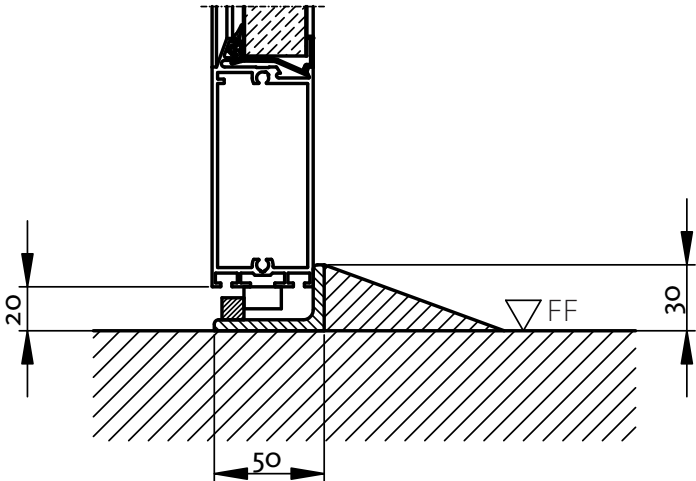
Floor bracket 50x30
with locking bolts



Floor bracket 50x50
with locking bolts

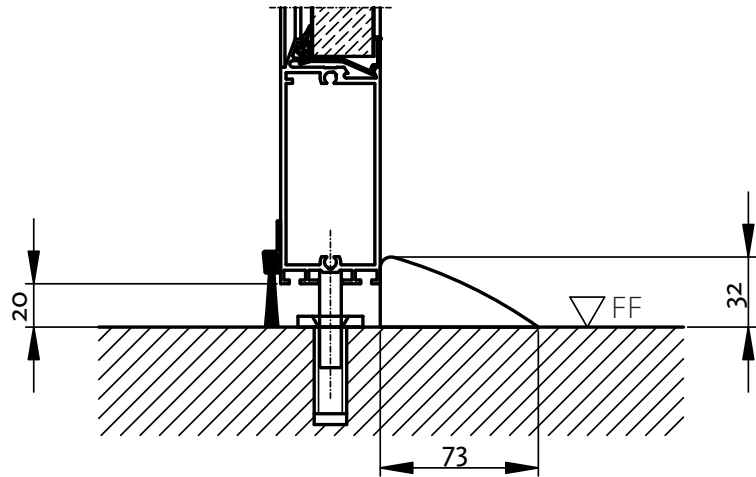


Floor bracket 50x30 with
locking bolts mounted on
the finished floor

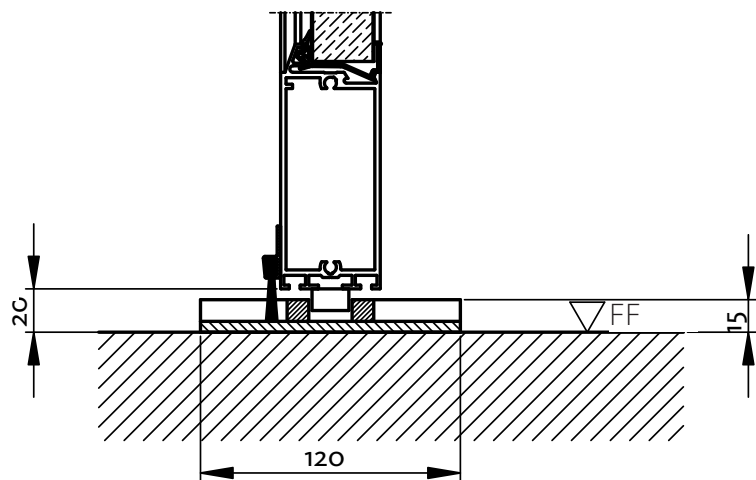


Lower connections

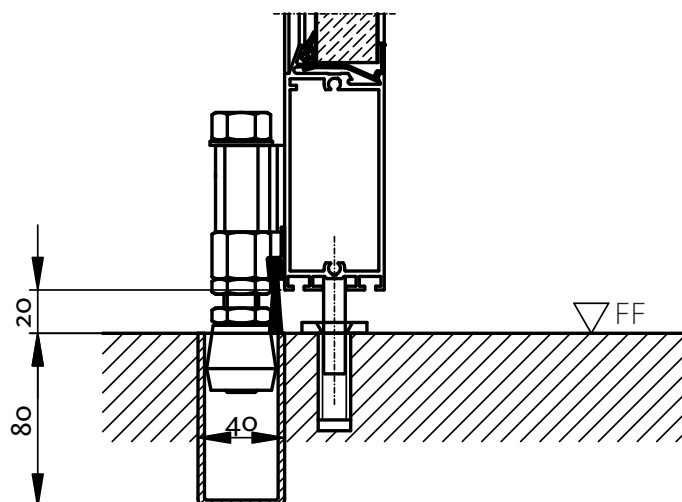
Ground turtle with rod lock and brush seal



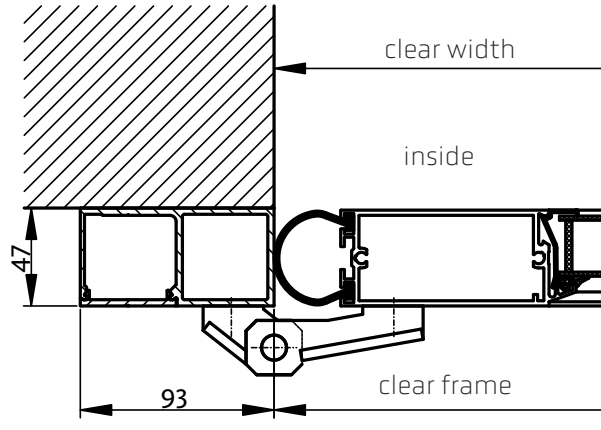
Inlet plate with locking bolt and brush seal



Bottom track with rod lock and brush seal



Aluminum frame tube 93x47 mounted in front of the reveal (mounting type A)



Aluminum frame tube 93x47 mounted flush with the outer wall in the reveal (mounting type A in the reveal)

