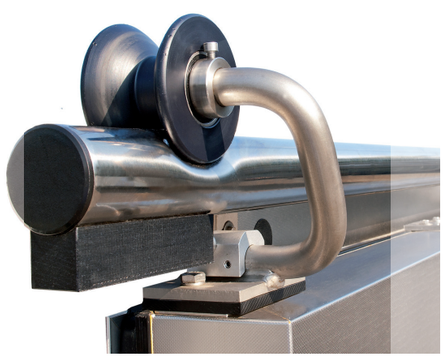
Simply brilliant –
brilliantly simple...



Product Catalog 2024

ems DOORS
AIR LEC

insulated doors

The perfect solution for high demands in insulation, functionality and durability.

Every company in which efficient insulation plays an essential role in ensuring a smooth production sequence is aware of the importance of the right insulated doors. In addition to thermal features required, the door must also provide excellent functionality and long service life, must be user-friendly and ensure operational safety, and be of use in both the Food and Non-Food sector.

We are aware of these high demands which motivate us to continuous improvement. Since 1970 the engineers of ems engineering have developed isolated doors for freezer, cold, service and clean rooms. Our customers' demands have grown continuously, and our services have improved

ems hinged doors are available in single-leaf and double-winged design in door leaf thicknesses of 40 mm to 120 mm. If required, we can also supply fast-freezing room doors with 160 mm door leaf thickness. The hinged doors are used in cold rooms, stores and cells up to 0 °C (type KTM). Freezer room hinged doors (GTM) can be used in freezing rooms, stores up to -28 °C, are optional available for fast-freezing rooms up to -40°C. Service room doors (type BTM) are used in service rooms and internal logistics.

ems sliding doors are available in single-leaf and double-winged design in door leaf thicknesses of 80 mm to 140 mm. If required, we can also supply fast-freezing room sliding doors with 200 mm door leaf thickness. The sliding doors are used in cold rooms, stores and cells up to 0°C (type KSL / KS). Freezer room sliding doors (Type GSL / GS) can be used in freezing rooms, stores and cells up to -28°C, and are optionally available for fast-freeze rooms up to -40°C. Service room sliding doors (Type BS) are used in service rooms and internal logistics.

ems lifting gates create new design and planning space where optimization of useful space and tightness combined with the best technical reliability are required! Space-saving, universal in use and fitting for every installation. The ems lifting gates meet all requirements of commercial hall construction: They can be used in service rooms, cold rooms and freezer rooms as well as in the CA/ULO sector. They are available in door leaf thicknesses of 100 to 200 mm.

ems high speed doors ems latest development in door technology is the ems SLT. Thanks to the fast opening, ems high-speed doors save time and reduce energy costs! The operating costs for the SLT are reduced to a minimum due to the low power consumption of the motor and the integrated compensation technology. Using the patented brake allows an even more space-saving design. The gate is sealed by the ems-magnetic-technology. A smooth and rapid door operation is achieved by a frequency converter in the controller. The new intelligent light grid guarantees high security for the traffic of goods and persons. In the event of a power failure, the door can be opened with an emergency key manually or (optionally) opens automatically. The use of the ems-SLT is versatile: from operating rooms to refrigerated and freezer rooms (0 ° C to -40 ° C) to heat chambers (up to +100 ° C).

Application area

Service rooms, internal logistics

Features

U value door leaf in W/m²K 0,58

Dimensions

Clear width (CW): max. 1.100 mm
Clear height (CH): max. 2.500 mm

Please enquire concerning further dimensions.

Details of the ems service room hinged door BTM 40:

Door leaf

Door leaf thickness 40 mm, foamed with PU rigid foam, foaming agent CFC-free and HCFC-free

Sealing

Silicone sealant fastened on door frame, inside on three sides, grease-resistant EPDM abrasive rubber sealing

Door frames installed in brickwork

Brickwork frame made of corrosion resistant steel sheets grain 180, thickness 1,5 mm, flush with the door leaf; ready to install with assembly material and installation instructions

Door frame with panel installation

Clamp frame made of corrosion resistant steel sheets grain 180, thickness 1,5 mm, flush with the door leaf; prepared ready to install for the respective panel thickness, with assembly material and installation instructions

Covering sheet steel design

Galvanized Quality Class Z275 pursuant to corrosive protection class III pursuant to DIN 55928
Polyester coating, 25 µm in industrial colours pursuant to ems colour table

Covering stainless steel design

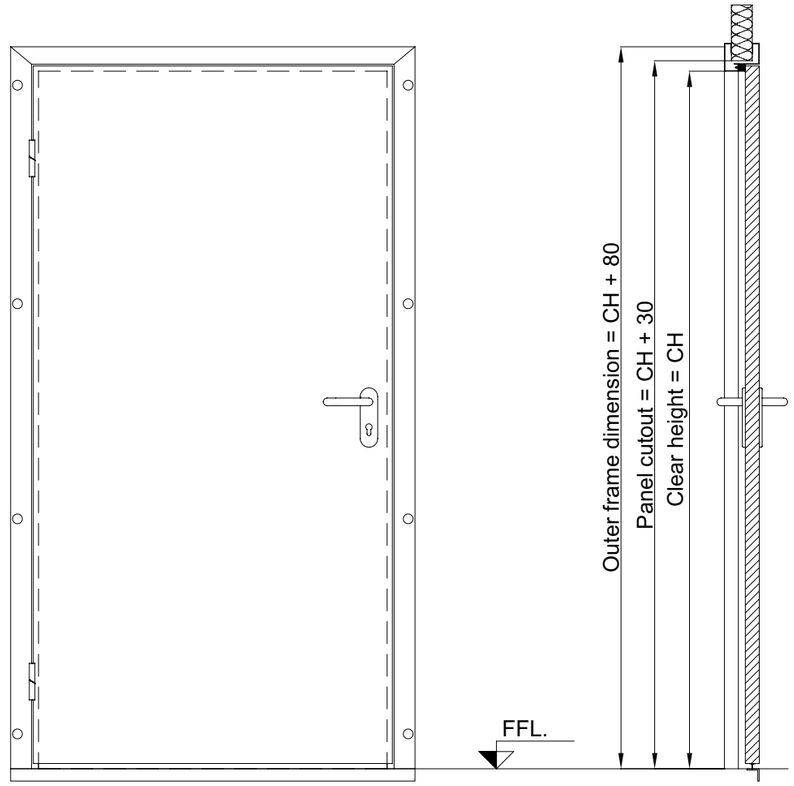
Nickel-chromium steel 1.4301, non-rusting pursuant to DIN 17440; circular-matted, grounded, brushed or pattern-rolled lengthwise (5WL)

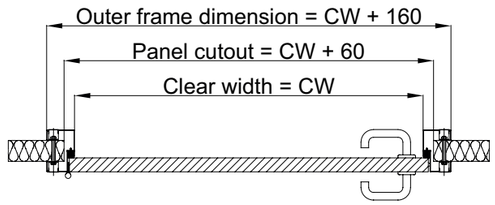
Door hardware

Standard design: Rising hinges made of CNS 1.4305
Mortise lock with stainless-steel shield
stainless-steel door handle set, with profile cylinder, with three keys

Options door leaf (on request) i.a.:

. Door leaf and frame 4-sided
. Window W x H = 400 x 600 mm
. Fender
. Overhead door closer
. WC door handle set
. Panic mortise lock
. CNS corner frame 60 x 80 mm
. Stainless steel panic bar





Important note: All surfaces are masked with protective assembly foil which must be removed immediately after installation or before.

Figure DIN left! DIN right mirror-inverted!
The exact details for the type of the door frame as well as the threshold installation of the ems service room hinged door BTM 40 see pages 20 and 21. Other details on request.

Application area

Service rooms, internal logistics

Features

U value door leaf in W/m²K 0,30

Dimensions

Clear width (CW): max. 1.500 mm
Clear height (CH): max. 3.000 mm

Please enquire concerning further dimensions.

Details of the ems service room hinged door BTM 80:

Door leaf

Door leaf thickness 80 mm foamed with PU rigid foam, foaming agent CFC-free and HCFC-free
Vertical butt joint from CW › 1.100 mm

Sealing

Three-sided held in plastic profiles, grease-resistant EPDM insert sealing; EPDM abrasive rubber sealing; all sealings can be easily replaced; Option: Silicone sealing black or white

Door frames installed in brickwork

Flat frame (100 x 45 mm) metal-sheeted in the design of the door leaf, foamed with PU rigid foam; with and without threshold; ready to install with assembly material and installation instructions

Door frame with panel installation

Clamp frame (100 x 45 mm) metal-sheeted in the design of the door leaf, foamed with PU rigid foam; with and without threshold; prepared ready to install for the respective panel thickness; with assembly material and installation instructions

Covering sheet steel design

Galvanized Quality Class Z275 pursuant to corrosive protection class III pursuant to DIN 55928
Polyester coating, 25 µm in industrial colours pursuant to ems colour table

Covering stainless steel design

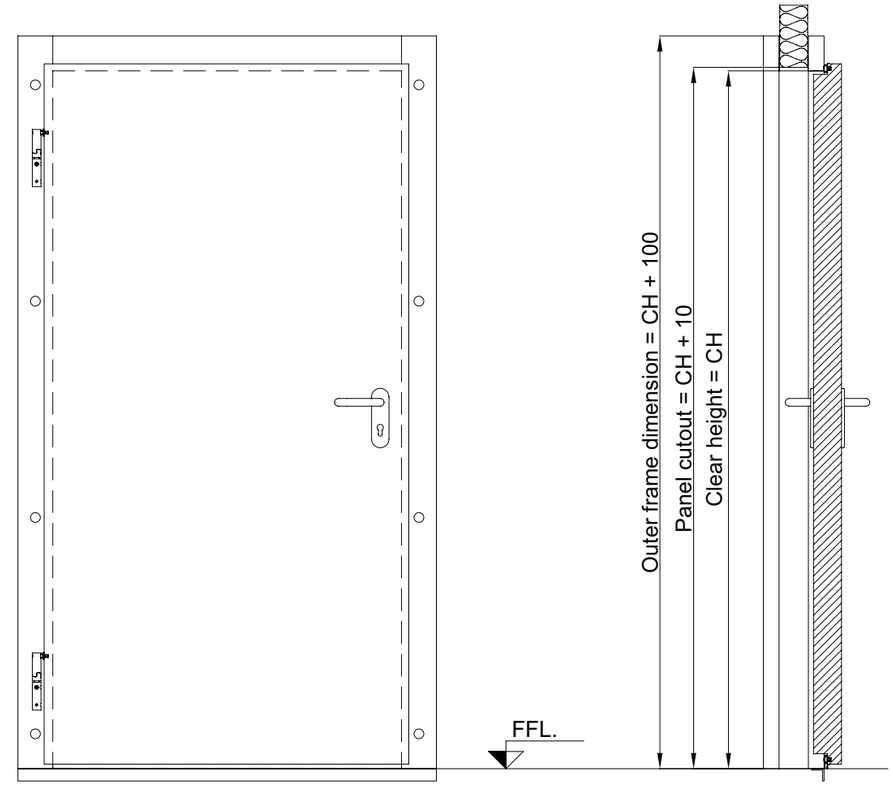
Nickel-chromium steel 1.4301, non-rusting pursuant to DIN 17440; circular-matted, grounded, brushed or pattern-rolled lengthwise (5WL)

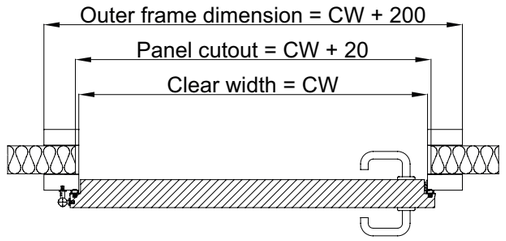
Door hardware

Standard design: Rising hinges made of CNS 1.4305, three-dimensional adjustment
Mortise lock with stainless-steel shield, stainless-steel door handle set, with profile cylinder, with three keys

Options door leaf (on request) i.a.:

. Door leaf and frame 4-sided
. Window W x H = 400 x 600 mm
. Fender
. 2-winged type
. Overhead door closer
. Tubular track lead-through
. Door contact switch
. Door coordinator, by 2-winged type
. Door catch
. CNS corner frame 75 x 52 mm
. Stainless steel threshold
. Mortise lock completely made of CNS
. Panic mortise lock
. Stainless steel panic bar
. WC door handle set





Important note: All surfaces are masked with protective assembly foil which must be removed immediately after installation or before.

Figure DIN left! DIN right mirror-inverted!
The exact details for the type of the door frame as well as the threshold installation of the ems service room hinged door BTM 80 see pages 22 and 23. Other details on request.

Application area

Cold rooms, cold stores, cold cells up to 0°C

Features

U value door leaf in W/m²K 0,30

Dimensions

Clear width (CW): max. 1.500 mm
Clear height (CH): max. 3.000 mm

Please enquire concerning further dimensions.

Details of the ems cold room hinged door KTM 80:

Door leaf

Door leaf thickness 80 mm foamed with PU rigid foam, foaming agent CFC-free and HCFC-free
Vertical butt joint from CW › 1.100 mm

Sealing

Three-sided held in plastic profiles, grease-resistant EPDM insert sealing; EPDM abrasive rubber sealing; all sealings can be easily replaced; Option: Silicone sealing black or white

Door frames installed in brickwork

Brickwork frame (100 x 45 mm) metal-sheeted in the design of the door leaf, foamed with PU rigid foam; with and without threshold; ready to install with assembly material and installation instructions

Door frame with panel installation

Clamp frame (100 x 45 mm) metal-sheeted in the design of the door leaf, foamed with PU rigid foam; with and without threshold; prepared ready to install for the respective panel thickness; with assembly material and installation instructions

Covering sheet steel design

Galvanized Quality Class Z275 pursuant to corrosive protection class III pursuant to DIN 55928
Polyester coating, 25 µm in industrial colours pursuant to ems colour table

Covering stainless steel design

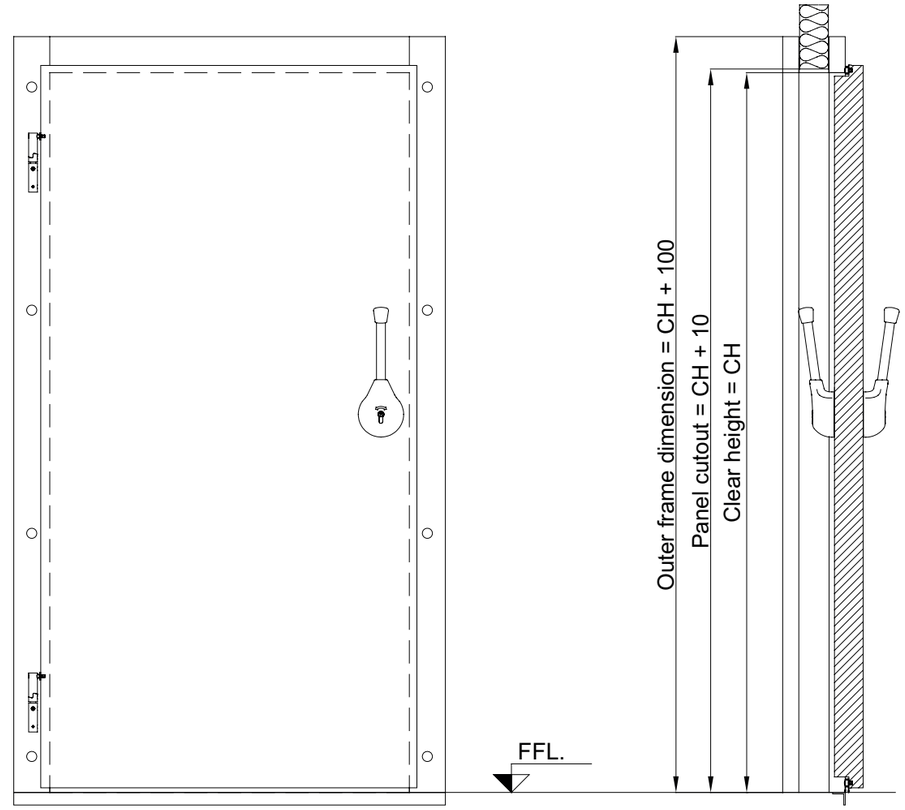
Nickel-chromium steel 1.4301, non-rusting pursuant to DIN 17440; circular-matted, grounded, brushed or pattern-rolled lengthwise (5WL)

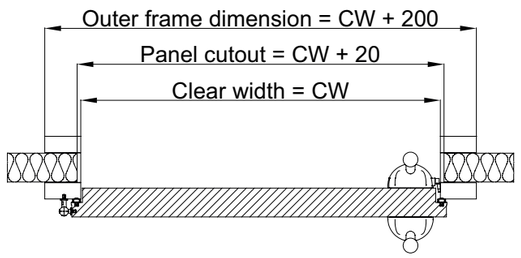
Door hardware

Standard design: Rising hinges made of CNS 1.4305, three-dimensional adjustment
ems Press lock with three keys

Options door leaf (on request) i.a.:

. Door leaf and frame 4-sided
. Window W x H = 400 x 600 mm (Iso-Glass/stainless steel ledges)
. Fender
. 2-winged type
. Door coordinator, by 2-winged type
. Overhead door closer
. Tubular track lead-through
. Door contact switch
. Pressure compensation valve
. Three-point locking
. Door catcher





Important note: All surfaces are masked with protective assembly foil which must be removed immediately after installation or before.

Figure DIN left! DIN right mirror-inverted!
The exact details for the type of the door frame as well as the threshold installation of the ems cold room hinged door KTM 80 see pages 24 and 25. Other details on request.

Application area

Freezer rooms, freezer stores, freezer cells up to -28°C; optional for blast freezer until -40°C

Features

U value door leaf in W/m²K 0,20

Dimensions

Clear width (CW): max. 1.500 mm
Clear height (CH): max. 3.000 mm

Please enquire concerning further dimensions.

Details of the ems freezer room hinged door GTM 120:

Door leaf

Door leaf thickness 120 mm (blast freezer 160 mm), foamed with PU rigid foam, foaming agent CFC-free and HCFC-free; Vertical butt joint from CW › 1.100 mm

Sealing

Three-sided held in plastic profiles, grease-resistant EPDM insert sealing; EPDM abrasive rubber sealing; all sealings can be easily replaced; Option: Silicone sealing black or white

Door frames installed in brickwork

Brickwork frame (100 x 45 mm) metal-sheeted in the design of the door leaf, foamed with PU rigid foam, Fitted, ground level light metal profile threshold with electrical frame and sill heating ready to install with assembly material and installation instructions

Door frame with panel installation

Clamp frame (100 x 45 mm) metal-sheeted in the design of the door leaf with cold interruption profile, foamed with PU rigid foam, Fitted, ground level light metal profile threshold with electrical frame and sill heating; prepared ready to install for the respective panel thickness, with assembly material and installation instructions

Covering sheet steel design

Galvanized Quality Class Z275 pursuant to corrosive protection class III pursuant to DIN 55928 Polyester coating, 25 µm in industrial colours pursuant to ems colour table

Covering stainless steel design

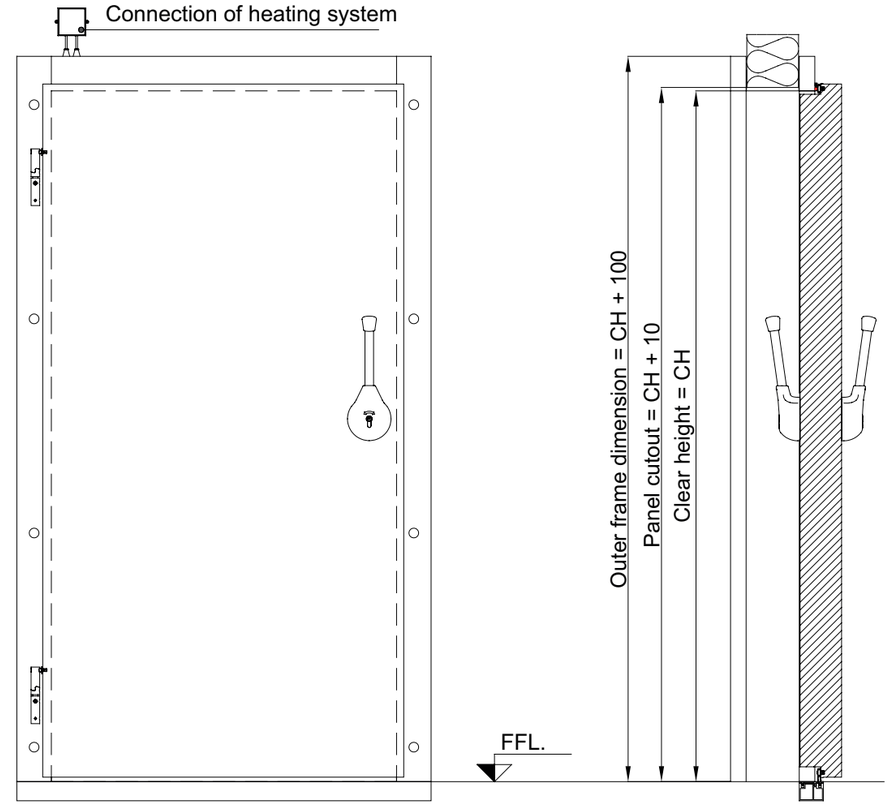
Nickel-chromium steel 1.4301, non-rusting pursuant to DIN 17440; circular-matted, grounded, brushed or pattern-rolled lengthwise (5WL)

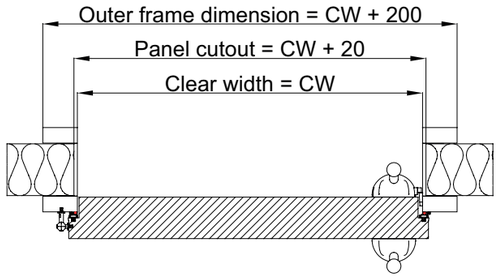
Door hardware

Standard design: Rising hinges made of CNS 1.4305, three-dimensional adjustment
ems Press lock with three keys

Options door leaf (on request) i.a.:

. Door leaf and frame 4-sided
. Window W x H = 400 x 600 mm (Iso 3-fold/stainless steel ledges)
. Fender
. 2-winged type
. Overhead door closer
. Door coordinator, by 2-winged type
. Heated bottom seal
. Three-point locking
. Door contact switch
. Heated pressure compensation valve
. Window frame heated
. Panel-heated window
. Blast freezer room application
. Door catcher





Important note: All surfaces are masked with protective assembly foil which must be removed immediately after installation or before.

Figure DIN left! DIN right mirror-inverted!
The exact details for the type of the door frame as well as the threshold installation of the ems freezer room hinged door GTM 120 see pages 26 and 27. Other details on request.

Application area

cold rooms, cold stores, cold cells up to 0°C

Features

U value door leaf in W/m²K 0,30

Dimensions

Clear width (CW): max. 1.000 mm
Clear height (CH): max. 1.200 mm

Please enquire concerning further dimensions.

Details of the ems cold room hatch KLM 80:

Hatch leaf

Hatch leaf thickness 80 mm foamed with PU rigid foam; foaming agent CFC-free and HCFC-free

Sealing

all-round held in plastic profiles, grease-resistant EPDM insert sealing
all sealings can be easily replaced; Option: Silicone sealing black or white

Hatch frames installed in brickwork

Brickwork frame (100 x 45 mm) metal-sheeted in the design of the hatch leaf, foamed with PU rigid foam; ready to install with assembly material and installation instructions

Hatch frame with panel installation

Clamp frame (100 x 45 mm) metal-sheeted in the design of the hatch leaf, foamed with PU rigid foam prepared ready to install for the respective panel thickness; with assembly material and installation instructions

Covering sheet steel design

Galvanized Quality Class Z275 pursuant to corrosive protection class III pursuant to DIN 55928
Polyester coating, 25 µm in industrial colours pursuant to ems colour table

Covering stainless steel design

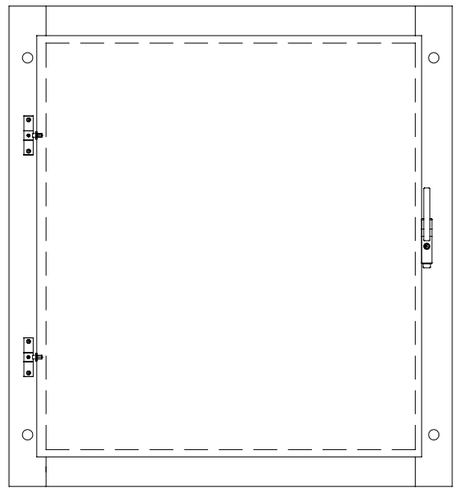
Nickel-chromium steel 1.4301, non-rusting pursuant to DIN 17440; circular-matted, grounded, brushed or pattern-rolled lengthwise (5WL)

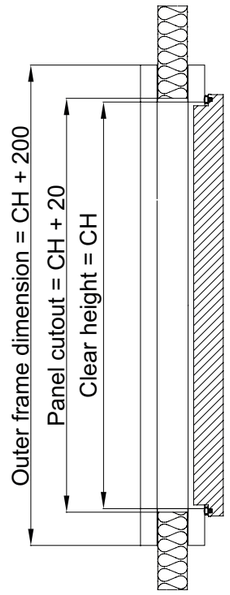
Door hardware

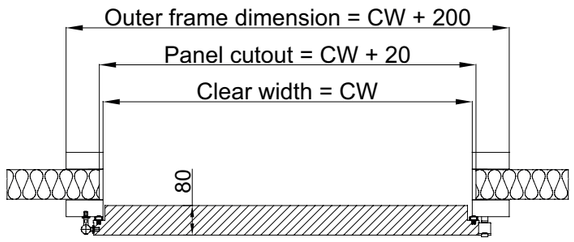
Standard design: Hatch hinges made of CNS 1.4305
Hatch locking with two keys

Options (on request) i.a.:

. ems-Press lock with three keys
. Sash lock
. Safety chain (when used as overhead hatch), 2 pieces
. Designed as smoke extraction hatch







Important note: All surfaces are masked with protective assembly foil which must be removed immediately after installation or before.

Figure DIN left! DIN right mirror-inverted!
Please find the exact details for the design of the door frame of the ems cold room hatch KLM 80 see pages 24 and 25. These correspond to the execution of KTM 80. Other details on request.

Application area

Freezer rooms, freezer stores, freezer cells up to -28°C

Features

U value door leaf in W/m²K 0,20

Dimensions

Clear width (CW): max. 1.000 mm
Clear height (CH): max. 1.200 mm

Please enquire concerning further dimensions.

Details of the ems freezer room hatch GLM 120:

Hatch leaf

Hatch leaf thickness 120 mm foamed with PU rigid foam; foaming agent CFC-free and HCFC-free

Sealing

all-round held in plastic profiles, grease-resistant EPDM insert sealing;
all sealings can be easily replaced; Option: Silicone sealing black or white

Hatch frames installed in brickwork

Brickwork frame (100 x 45 mm) metal-sheeted in the design of the hatch leaf, foamed with PU rigid foam; with electrical heating system; ready to install with assembly material and installation instructions

Hatch frame with panel installation

Clamp frame (100 x 45 mm) metal-sheeted in the design of the hatch leaf, foamed with PU rigid foam, with electrical heating system; prepared ready to install for the respective panel thickness, with assembly material and installation instructions

Covering sheet steel design

Galvanized Quality Class Z275 pursuant to corrosive protection class III pursuant to DIN 55928
Polyester coating, 25 µm in industrial colours pursuant to ems colour table

Covering stainless steel design

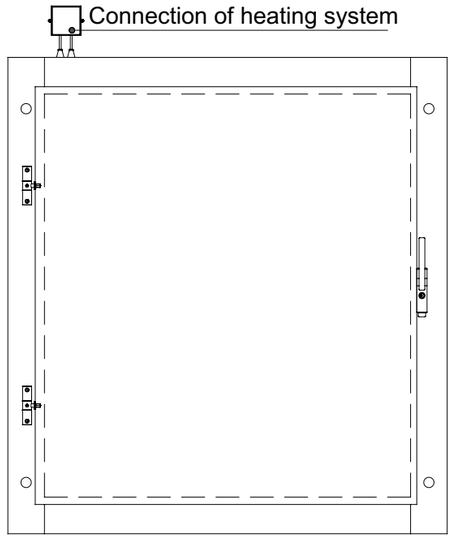
Nickel-chromium steel 1.4301, non-rusting pursuant to DIN 17440; circular-matted, grounded, brushed or pattern-rolled lengthwise (5WL)

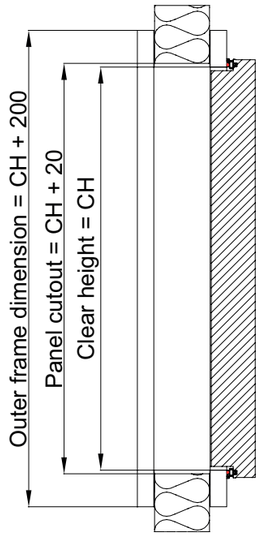
Door hardware

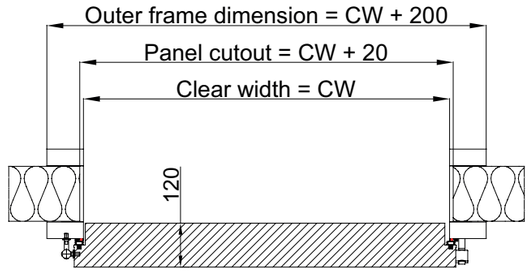
Standard design: Hatch hinges made of CNS 1.4305
Hatch locking with two keys

Options (on request) i.a.:

. ems-Press lock with three keys
. Sash lock
. Safety chain (when used as overhead hatch), 2 pieces
. Designed as smoke extraction hatch







Important note: All surfaces are masked with protective assembly foil which must be removed immediately after installation or before.

Figure DIN left! DIN right mirror-inverted!
Please find the exact details for the design of the door frame of the ems freezer room hatch GLM 120 see pages 26 and 27. These correspond to the execution of GTM 120. Other details on request.

Application area
Service rooms, internal logistics

Dimensions
Clear width (CW): max. 1.200 mm
Clear height (CH): max. 2.300 mm

Please enquire concerning further dimensions.

Details of the ems metal swing door MPT:

Door leaf
Door leaf thickness 40 mm, foamed with PU rigid foam, foaming agent CFC-free and HCFC-free
Vertical butt joint from CW › 1.100 mm; with Bull's eye Ø480 mm, with rubber edging profile

Sealing
Cold-resistant PTK lip seal embedded in door leaf on lock- and hinge side

Door frames installed in brickwork
Ready to install with stainless steel mounting panel, assembly material and installation instructions

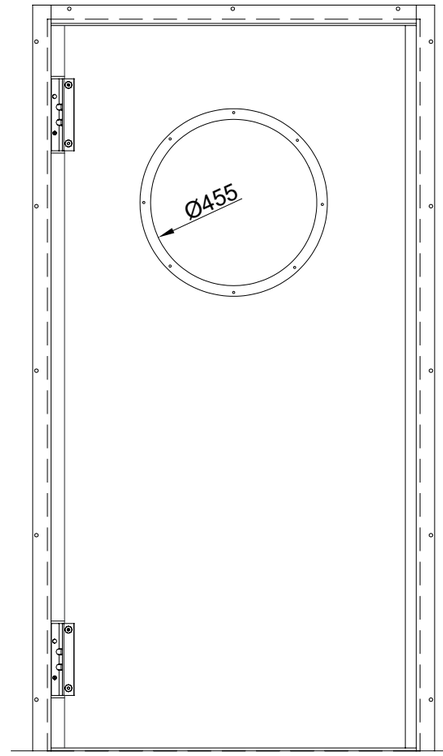
Door frame with panel installation
U-shape clamp frame made of corrosion resistant steel sheets grain 180, thickness 1,5 mm prepared ready to install for the respective panel thickness, with assembly material and installation instructions

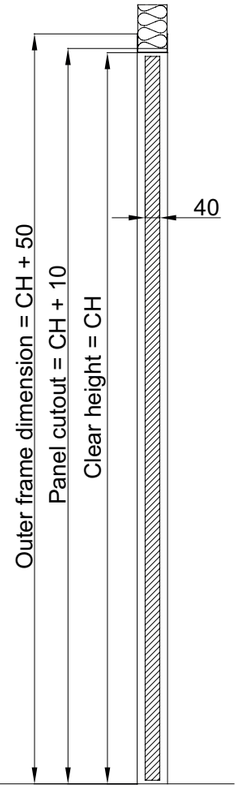
Covering sheet steel design
Galvanized Quality Class Z275 pursuant to corrosive protection class III pursuant to DIN 55928
Polyester coating, 25 µm in industrial colours pursuant to ems colour table

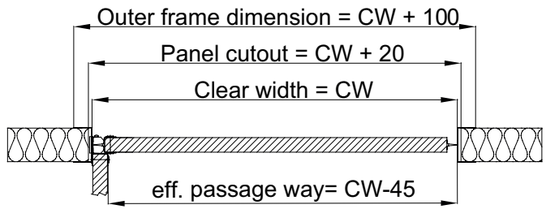
Covering stainless steel design
Nickel-chromium steel 1.4301, non-rusting pursuant to DIN 17440, circular-matted, grounded, brushed or pattern-rolled lengthwise (5WL)

Door hardware
Standard design: CNS 1.4301 hinges acting on two sides in plastic compound with or without 90°- stop mechanism, adjustable

Options (on request) i.a.:
. Bolt lock with profile cylinder and 3 keys
. Fender
. 2-winged type
. Window W x H = 400 x 600 mm (stainless steel glass ledges)
. Push/Pull handle (stainless steel)







Important note: All surfaces are masked with protective assembly foil which must be removed immediately after installation or before.

Please find the exact details for the design of the door frame of the ems hinge door MPT see page 28. Other details on request.

Application area

Service rooms, internal logistics

Dimensions

Clear width (CW): max. 1.300 mm
Clear height (CH): max. 2.500 mm

Please enquire concerning further dimensions.

Details of the ems polyethylene swing door PPT:

Door leaf

Door leaf thickness 15 mm, grease-resistant plastic material (polyethylene); with window made of acrylic glass
W x H = 350 x 600 mm

PE standard colors in RAL, Door leaf tints:

- similar to RAL 5010 gentian blue
- similar to RAL 3000 flame red
- white
- similar to RAL 7046 tele grey

. Deviations of the colour program displayed to original colours are caused by printing and are unavoidable.
. Deviations of the original colours to RAL original colours are unavoidable for technical reasons.
. Only ems original colour patterns are decisive for surface effect and level of gloss on delivery.

Door frames installed in brickwork

ready to install with stainless-steal assembly plate, assembly material and installation instructions

Door frame with panel installation

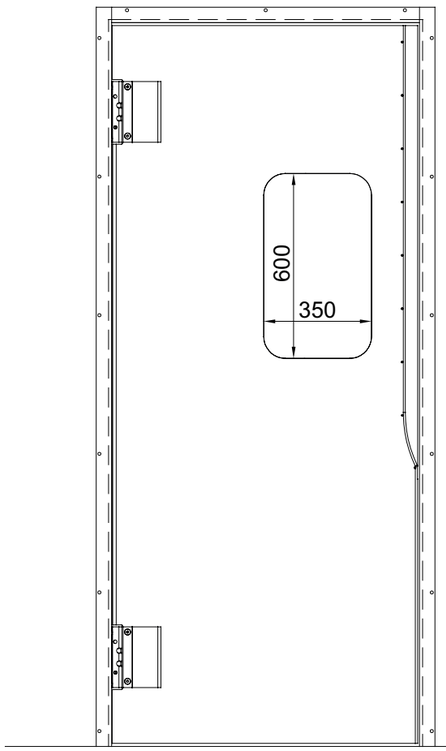
U-shape clamp frame made of corrosion resistant steel sheets grain 180, thickness 1,5 mm; prepared ready to install for the respective panel thickness; with assembly material and installation instructions

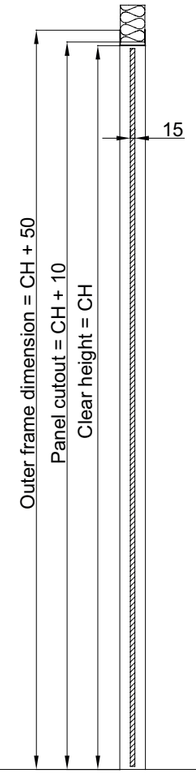
Door hardware

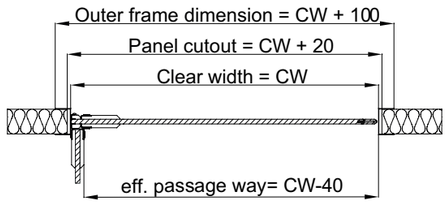
Standard design: CNS 1.4301 hinges acting on two sides in plastic compound, with or without 90°- stop mechanism, adjustable

Options (on request) i.a.:

. 2-winged type
. continuous stainless steel flat profile 80 x 6 mm
. Fender
. Finger protection







Important note: All surfaces are masked with protective assembly foil which must be removed immediately after installation or before.

Please find the exact details for the design of the door frame of the ems polyethylene swing door PPT see page 29. Other details on request.

Application area

Service rooms, internal logistics

Dimensions

Clear width (CW): max. 1.500 mm
Clear height (CH): max. 2.100 mm

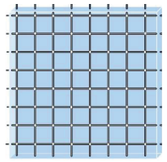
Please enquire concerning further dimensions.

Details of the ems pvc swing door:

Door leaf

UV-resistant soft PVC transparent in door thickness 7 mm

Transparent



Transnet

in cold-resistant application, can be used until -45°C

Door frames installed in brickwork

ready to install with stainless-steel assembly plate, assembly material and installation instructions

Door frame with panel installation

U-shape clamp frame made of corrosion resistant steel sheets grain 180, thickness 1,5 mm; prepared ready to install for the respective panel thickness; with assembly material and installation instructions

Door hardware

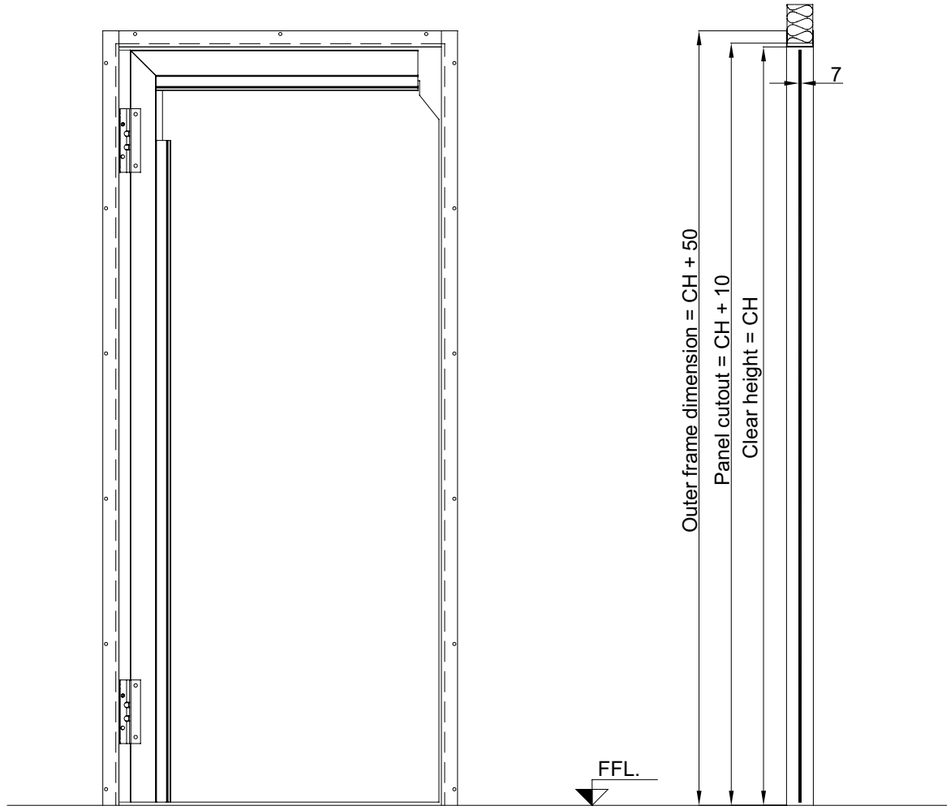
Standard design: CNS 1.4301 hinges acting on two sides in plastic compound, with or without 90°- stop mechanism, adjustable

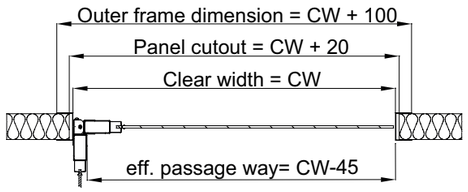
Options (on request) i.a.:

. Fender
. 2-winged type

Other types of strip curtains (on request) i.a.:

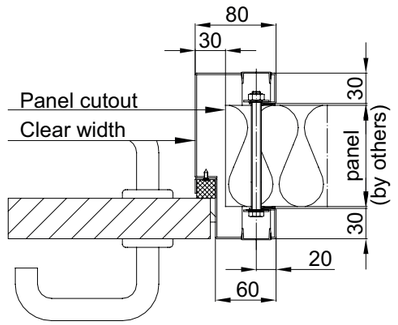
. ems strip curtain made of UV-resistant, transparent, cold-resistant soft PVC in the strip dimensions 200 x 2 mm, for wall or lintel installation (see Details page 31)





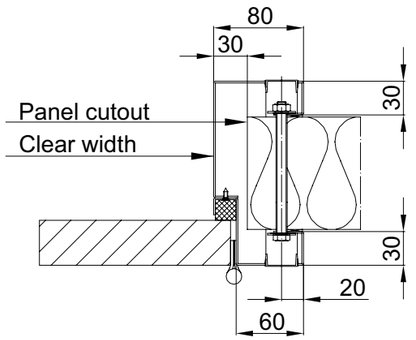
Important note: All surfaces are masked with protective assembly foil which must be removed immediately after installation or before.

Please find the exact details for the design of the door frame of the ems pvc swing door PVC-PT see pages 30. Other details on request.



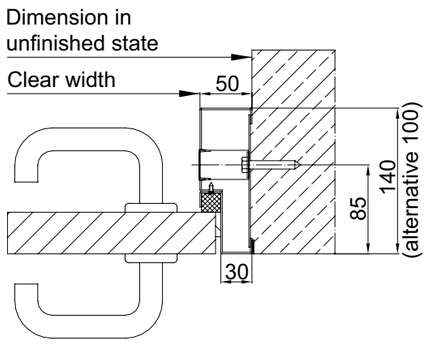
Clamp frame for ems service room hinged door BTM 40:

. only suitable for panels
. for service rooms
. ready to install prepared for the corresponding panel thickness
. Panel cutout:
Width = Clear width (CW) + 60 mm
Height = clear height (CH) + 30 mm (from FFL)
. represented situation: **lock side**



Clamp frame for ems service room hinged door BTM 40:

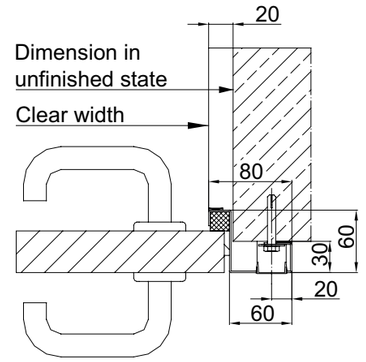
. represented situation: **hinge side**



Brickwork frame for ems service room door BTM 40:

Block frame

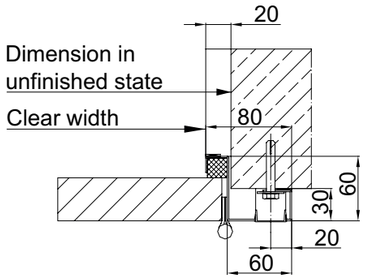
. only suitable for brickwork
. for service rooms
. Opening in the brickwork:
Width = Clear width (CW) + 100 mm
Height = Clear height (CH) + 50 mm (from FFL)



Brickwork frame for ems service room door BTM 40:

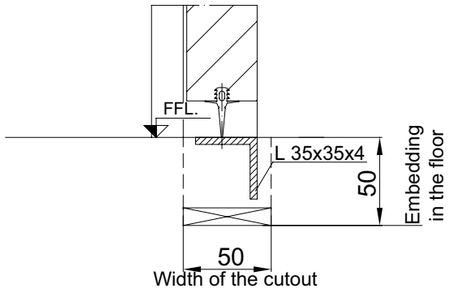
Corner frame

. only suitable for brickwork
. for service rooms
. Opening in the brickwork:
Width = Clear width (CW) + 40 mm
Height = Clear height (CH) + 20 mm (from FFL)
. represented situation: **lock side**



Brickwork frame for ems service room door BTM 40:

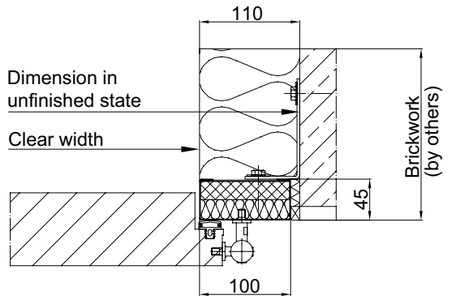
. represented situation: **hinge side**



Threshold installation for ems service room door BTM 40:

Example

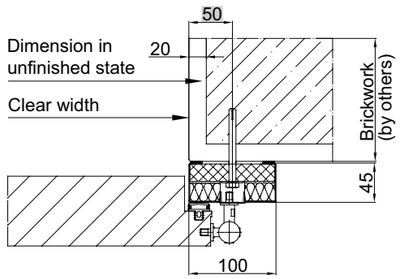
. represented installation situation:
before laying the finished floor
. alternatively it might be possible to correspondingly leave out the floor in the door area, what also allows a subsequent installation of the door into the existing opening
(W x H of the floor recess = 50 x 50 mm)



Brickwork frame for ems service room door BTM 80:

Flat frame 100x45 mm (bracket mounting)

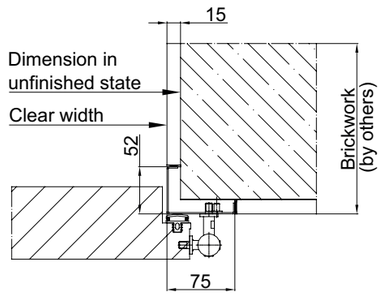
. represented installation situation: **in the brickwork**
. for service rooms
. Opening in the brickwork:
Width = Clear width (CW) + 220 mm
Height = Clear height (CH) + 110 mm (from FFL)



Brickwork frame for ems service room door BTM 80:

Flat frame 100x45 mm (with pocket holes)

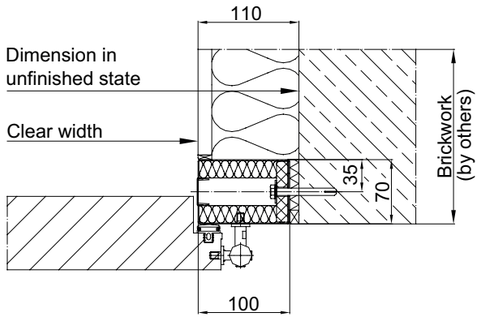
. represented installation situation: **on the brickwork**
. for service rooms
. Opening in the brickwork:
Width = Clear width (CW) + 40 mm
Height = Clear height (CH) + 20 mm (from FFL)



Brickwork frame for ems service room door BTM 80:

Corner frame BTM doors (with brickwork anchor)

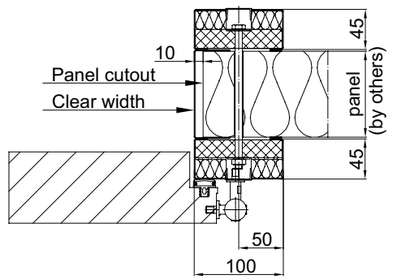
. only suitable for brickwork
. for service rooms
. also subsequent installation of the door case is possible
. Opening in the brickwork:
Width = Clear width (CW) + 40 mm
Height = Clear height (CH) + 20 mm (from FFL)



Brickwork frame for ems service room door BTM 80:

Block frame 100x70 mm (pocket holes in the reveal area)

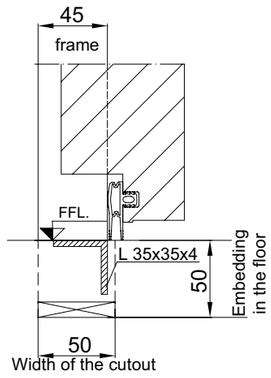
. represented installation situation: **in the brickwork**
. for service rooms
. Opening in the brickwork:
Width = Clear width (CW) + 220 mm
Height = Clear height (CH) + 110 mm (from FFL)



Clamp frame for service room hinged door BTM 80:

Panel installation

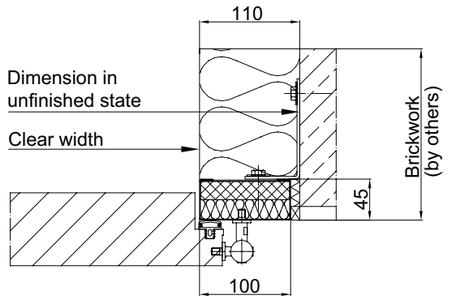
. only suitable for panel installation
. for service rooms
. ready to install prepared for the corresponding panel thickness
. Panel cutout:
Width = Clear width (CW) + 20 mm
Height = Clear height (CH) + 10 mm (from FFL)



Threshold installation for ems service room hinged door BTM 80:

Example

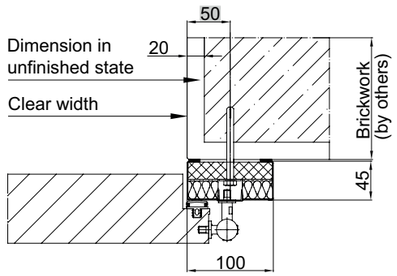
. represented installation situation:
before laying the finished floor
. alternatively it might be possible to correspondingly leave out the floor in the door area, what also allows a subsequent installation of the door into the existing opening
(W x H of the floor recess = 50 x 50 mm)



Brickwork frame for ems cold room hinged door KTM 80:

Flat frame 100x45 mm (bracket mounting)

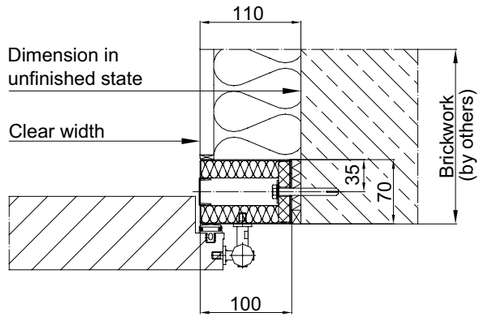
. represented installation situation: **in the brickwork**
. for cold rooms
. Opening in the brickwork:
Width = Clear width (CW) + 220 mm
Height = Clear height (CH) + 110 mm (from FFL)



Brickwork frame for ems cold room hinged door KTM 80:

Flat frame 100x45 mm (with pocket holes)

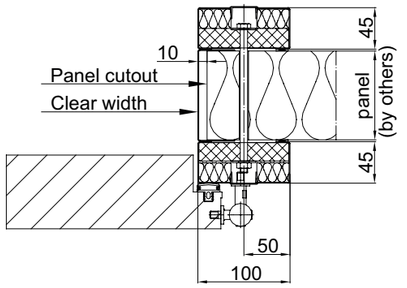
. represented installation situation: **on the brickwork**
. for cold rooms
. Opening in the brickwork:
Width = Clear width (CW) + 40 mm
Height = Clear height (CH) + 20 mm (from FFL)



Brickwork frame for ems cold room hinged door KTM 80:

Block frame 100x70 mm (pocket holes in the reveal area)

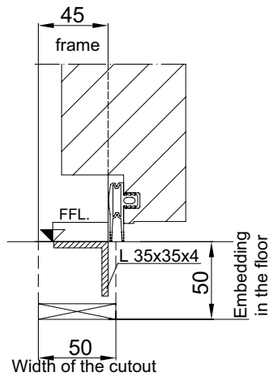
. represented installation situation: **in the brickwork**
. for cold rooms
. Opening in the brickwork:
Width = Clear width (CW) + 220 mm
Height = Clear height (CH) + 110 mm (from FFL)



Clamp frame for cold room hinged door KTM 80:

Panel installation

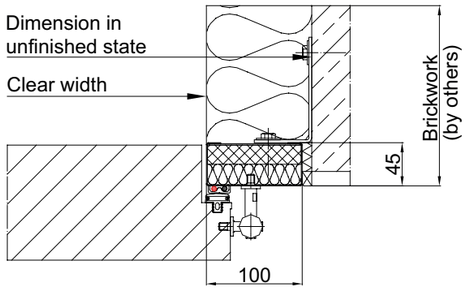
. only suitable for panel installation
. for cold rooms
. ready to install prepared for the corresponding panel thickness
. Panel cutout:
Width = Clear width (CW) + 20 mm
Height = Clear height (CH) + 10 mm (from FFL)



Threshold installation for ems cold room hinged door KTM 80:

Example

. represented installation situation:
before laying the finished floor
. alternatively it might be possible to correspondingly leave out the floor in the door area, what also allows a subsequent installation of the door into the existing opening
(W x H of the floor recess = 50 x 50 mm)



Brickwork frame for ems cold room hinged door GTM 120:

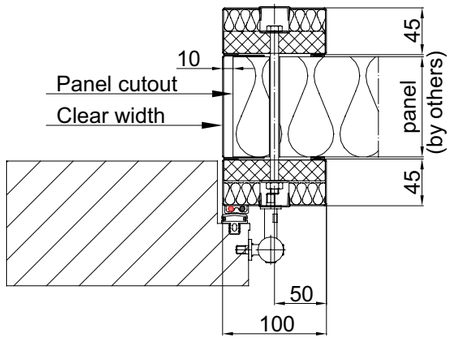
Flat frame 100x45 mm (bracket mounting)

. represented installation situation: **in the brickwork**
. for freezer or fast freezing rooms
. Opening in the brickwork:
Width = Clear width (CW) + 220 mm
Height = Clear height (CH) + 110 mm (from FFL)

Brickwork frame for ems cold room hinged door GTM 120:

Block frame 100x70 mm (pocket holes in the reveal area)

. represented installation situation: **in the brickwork**
. Opening in the brickwork:
Width = Clear width (CW) + 220 mm
Height = Clear height (CH) + 110 mm (from FFL)



Clamp frame for cold room hinged door GTM 120:

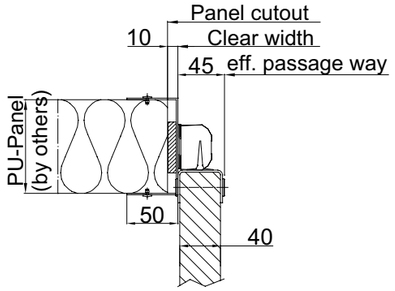
Panel installation

. only suitable for panel installation
. for freezer or blast freezer rooms
. ready to install prepared for the corresponding panel thickness
. Panel cutout:
Width = Clear width (CW) + 20 mm
Height = Clear height (CH) + 10 mm (from FFL)

Threshold installation for ems cold room hinged door GTM 120:

Example

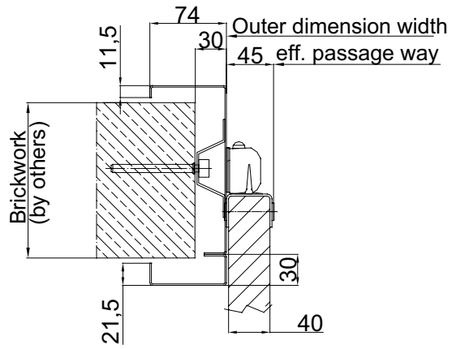
. represented installation situation:
before laying the finished floor
. alternatively it might be possible to correspondingly leave out the floor in the door area, what also allows a subsequent installation of the door into the existing opening
(W x H of the floor recess = 80 x 60 mm)



Door frame
for ems swing door MPT:

U-Clamp frame

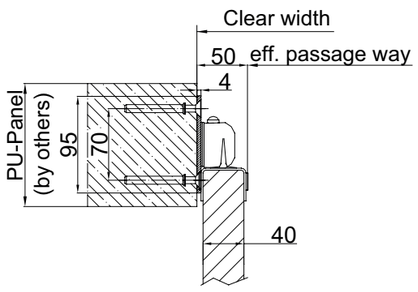
. only suitable for panel installation
. for service or equally tempered rooms
. ready to install prepared for the corresponding
panel thickness
. Panel cutout:
Width = Clear width (CW) + 20 mm
Height = Clear height (CH) + 10 mm (from FFL)



Door frame
for ems swing door MPT:

U-frame, divided

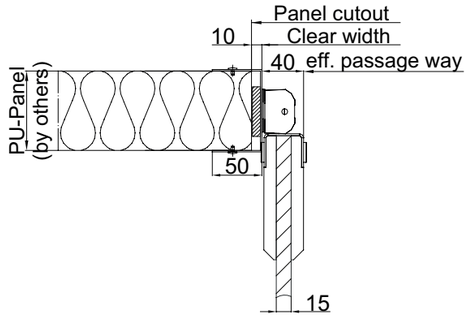
. only suitable for panel installation
. for service or equally tempered rooms
. ready to install prepared for the corresponding
panel thickness
. Panel cutout:
Width = Clear width (CW) + 60 mm
Height = Clear height (CH) + 30 mm (from FFL)



Door frame
for ems swing door MPT:

Brickwork frame

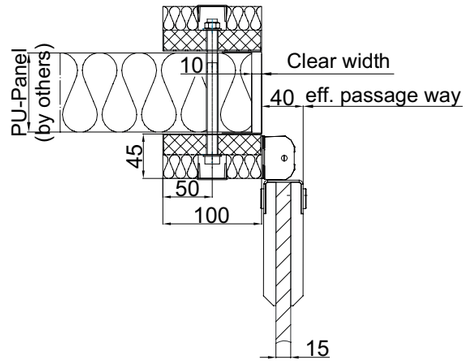
. only suitable for brickwork
. for service or equally tempered rooms
. Opening in the brickwork:
Width = Clear width
Height = Clear height (from FFL)



Door frame for
ems polyethylene swing door PPT:

U-Clamp frame

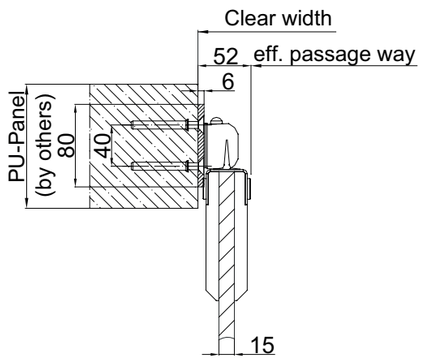
. only suitable for panel installation
. for service or equally tempered rooms
. ready to install prepared for the corresponding
panel thickness
. Panel cutout:
Width = Clear width (CW) + 20 mm
Height = Clear height (CH) + 10 mm (from FFL)



Door frame for
ems polyethylene swing door PPT:

Clamp frame

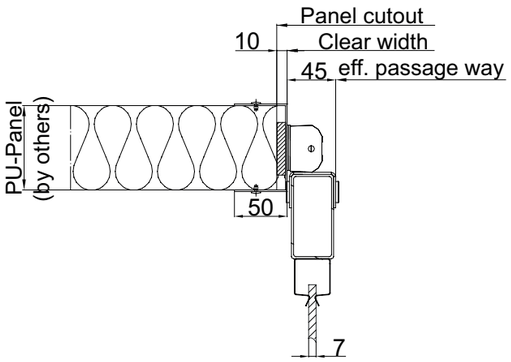
. only suitable for panel installation
. for service or equally tempered rooms
. ready to install prepared for the corresponding
panel thickness
. Panel cutout:
Width = Clear width (CW) + 20 mm
Height = Clear height (CH) + 10 mm (from FFL)



Door frame for
ems polyethylene swing door PPT:

Brickwork frame

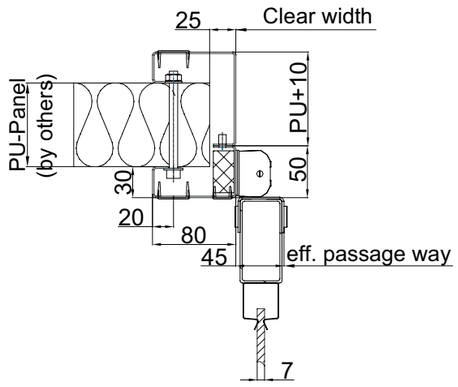
. only suitable for brickwork
. for service or equally tempered rooms
. Opening in the brickwork:
Width = Clear width
Height = Clear height (from FFL)



Door frame
for ems swing door PVC-PT:

U-Clamp frame

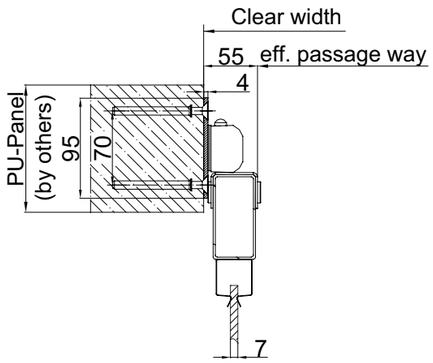
. only suitable for panel installation
. for service or equally tempered rooms
. ready to install prepared for the corresponding
panel thickness
. Panel cutout:
Width = Clear width (CW) + 20 mm
Height = Clear height (CH) + 10 mm (from FFL)



Door frame
for ems swing door PVC-PT:

Clamp frame shared

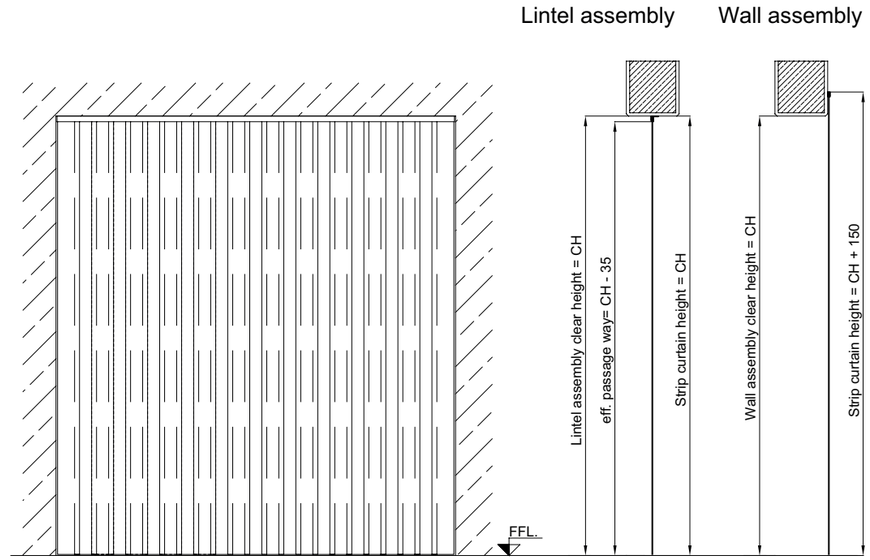
. only suitable for panel installation
. for service or equally tempered rooms
. ready to install prepared for the corresponding
panel thickness
. Panel cutout:
Width = Clear width (CW) + 50 mm
Height = Clear height (CH) + 25 mm (from FFL)



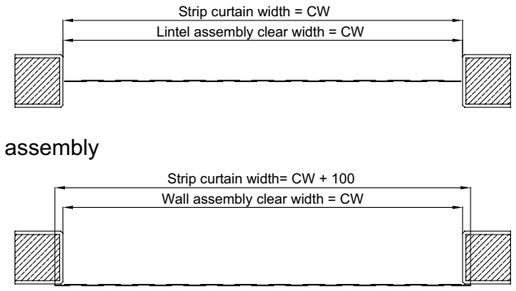
Door frame for
for ems swing door PVC-PT:

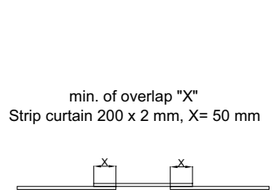
Brickwork frame

. only suitable for brickwork
. for service or equally tempered rooms
. Opening in the brickwork:
Width = Clear width
Height = Clear height (from FFL)

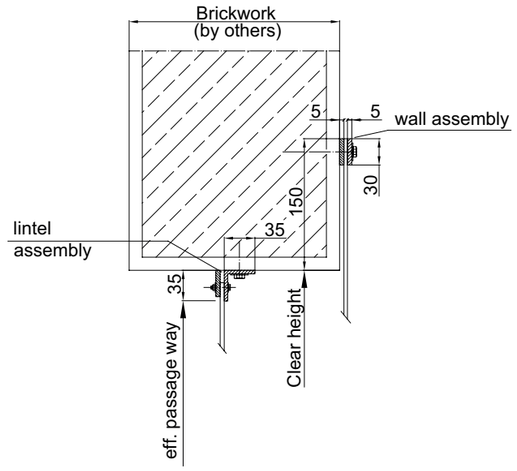


Lintel assembly





Wall assembly



Details of the ems strip curtain STV:

Strips
. UV-resistant soft PVC (PTK35) transparent
in strip dimensions 200 x 2

Fastening to lintel assembly
. L-profile 35 x 35 x 4 mm and flat material 30 x 5 mm
of aluminium or CNS 1.4301,
ready to install with assembly material

Fastening to wall assembly
. Flats material 30 x 5 mm of aluminium or CNS 1.4301,
ready to install with assembly material

Application area
Service rooms, internal logistics

Features
U value door leaf in W/m²K 0,30

Dimensions
Clear width (CW): max. 3.500 mm
Clear height (CH): max. 3.500 mm

Please enquire concerning further dimensions.

Details of the ems service room sliding door BS 80:

Door leaf
Door leaf thickness 80 mm, foamed with PU rigid foam, foaming agent CFC-free and HCFC-free

Sealing
On three sides with grease-resistant APTK foam rubber lip insertion seal, held in plastic profiles; all sealings can be easily replaced

Door frames installed in brickwork
Flat frame for the brickwork assembly, metal-sheeted in the design of the door leaf; with and without threshold; ready to install with assembly material and installation instructions

Door frame with panel installation
Clamp frame for panel installation, metal-sheeted in the design of the door leaf; with and without threshold; prepared ready to install for the respective panel thickness, with assembly material and installation instructions

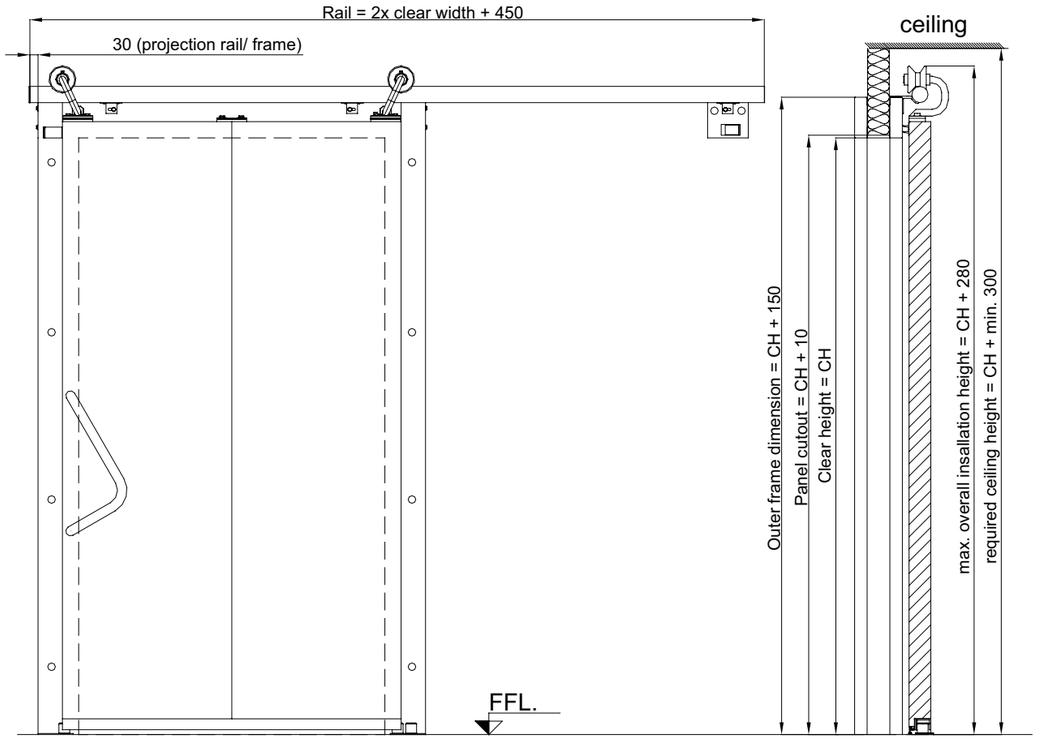
Covering sheet steel design
Galvanized Quality Class Z275 pursuant to corrosive protection class III pursuant to DIN 55928
Polyester coating, 25 µm in different colours pursuant to ems colour table

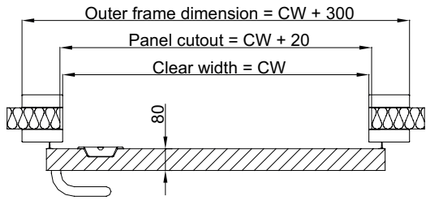
Covering stainless steel design
Nickel-chromium steel 1.4301, non-rusting pursuant to DIN 17440; circular-matted, grounded, brushed or pattern-rolled lengthwise (5WL)

Mounting suspension
Easy to clean, reliable running and simple handling are special features of the patented hygiene guide rails processed completely from polished special steel LS 3000 (DE 100 11 245.5). The rail designed without roller lowering allows easy opening and closing of the door. The type without roller cover grants easy cleaning even at places that are difficult to access. The design which has no corners and edges and no hidden components enables simple, and above all, swift assembly.

Door hardware
Standard design: Stainless steel tubular handle

Options (on request) i.a.:
. Bolt lock with integrated emergency release
. Window W x H = 400 x 600 mm
. Fender
. Tubular track lead-through
. Lever handle
. Safety light curtain
. E-automatic
. Pull switch





Important note: All surfaces are masked with protective assembly foil which must be removed immediately after installation or before.

Figure DIN right! DIN left mirror-inverted!
The exact details for the type of the door frame as well as the threshold installation of the ems service room sliding door BS 80 see page 42. Other details on request.

Application area

Cold rooms, cold stores, cold cells up to 0°C

Features

U value door leaf in W/m²K 0,30

Dimensions

Clear width (CW): max. 2.500 mm
Clear height (CH): max. 2.800 mm

Please enquire concerning further dimensions.

Details of the ems cold room sliding door KSL 80:

Door leaf

Door leaf thickness 80 mm, foamed with PU rigid foam, foaming agent CFC-free and HCFC-free

Sealing

On three sides with grease-resistant APTK foam rubber lip insertion seal, held in plastic profiles; all sealings can be easily replaced

Door frames installed in brickwork

Flat frame for the brickwork assembly, metal-sheeted in the design of the door leaf; with and without threshold; ready to install with assembly material and installation instructions

Door frame with panel installation

Clamp frame for panel installation, metal-sheeted in the design of the door leaf; with and without threshold; prepared ready to install for the respective panel thickness, with assembly material and installation instructions

Covering sheet steel design

Galvanized Quality Class Z275 pursuant to corrosive protection class III pursuant to DIN 55928
Polyester coating, 25 µm in different colours pursuant to ems colour table

Covering stainless steel design

Nickel-chromium steel 1.4301, non-rusting pursuant to DIN 17440; circular-matted, grounded, brushed or pattern-rolled lengthwise (5WL)

Mounting suspension

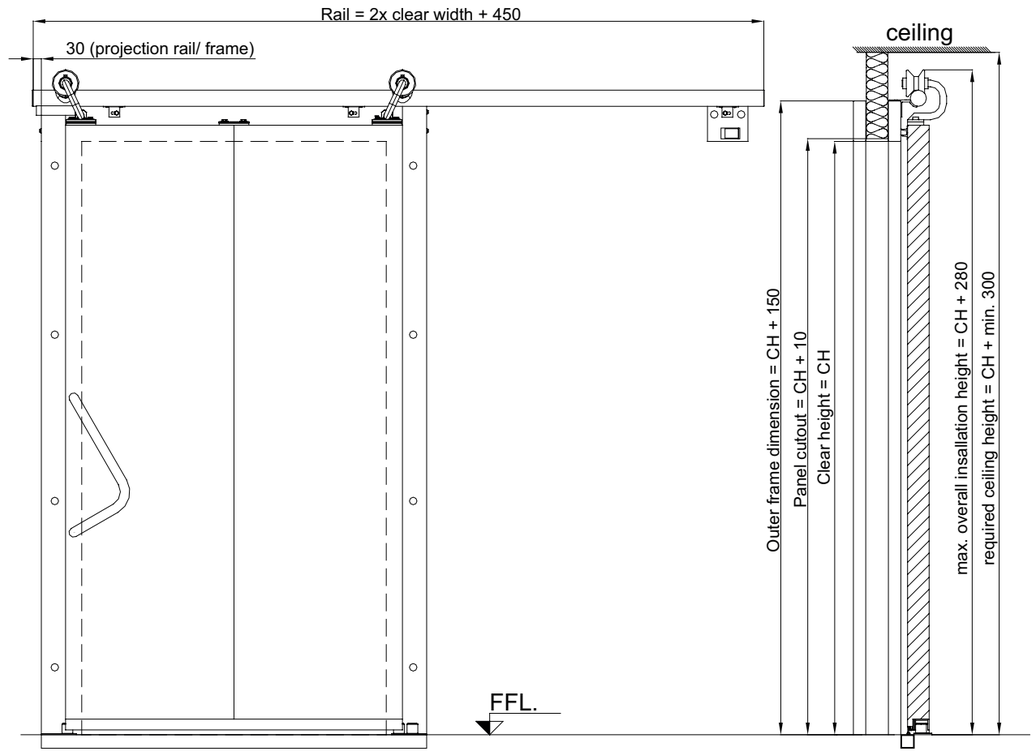
Easy to clean, reliable running and simple handling are special features of the patented hygiene guide rails processed completely from polished special steel LS 3000 (DE 100 11 245.5). The type without roller cover grants easy cleaning even at places that are difficult to access. The design which has no corners and edges and no hidden components enables simple, and above all, swift assembly.

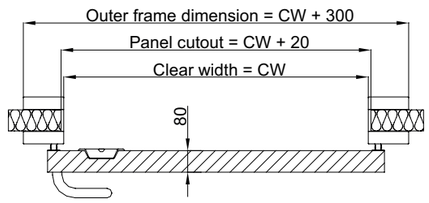
Door hardware

Standard design: Stainless steel tubular handle

Options (on request) i.a.:

. Bolt lock with integrated emergency release
. Window W x H = 400 x 600 mm
. Fender
. Tubular track lead-through
. Lever handle
. Safety light curtain
. E-automatic
. Pull switch





Important note: All surfaces are masked with protective assembly foil which must be removed immediately after installation or before.

Figure DIN right! DIN left mirror-inverted!
The exact details for the type of the door frame as well as the threshold installation of the ems cold room sliding door KSL 80 see pages 43 and 44. Other details on request.

Application area

Cold rooms, cold stores, cold cells up to 0°C

Features

U value door leaf in W/m²K 0,24

Dimensions

Clear width (CW): max. 3.500 mm
Clear height (CH): max. 3.500 mm

Please enquire concerning further dimensions.

Details of the ems cold room sliding door KS 100:

Door leaf

Door leaf thickness 100 mm, foamed with PU rigid foam, foaming agent CFC-free and HCFC-free

Sealing

On three sides with grease-resistant APTK foam rubber lip insertion seal, held in plastic profiles;
Fitted extruded seal in lower section; all sealings can be easily replaced

Door frames installed in brickwork

ready to install with brick angles for brickwork assembly, metal-sheeted in the design of the door leaf; with and without threshold, with assembly material and installation instructions

Door frame with panel installation

Clamp frame for panel installation, metal-sheeted in the design of the door leaf; with and without threshold; prepared ready to install for the respective panel thickness, with assembly material and installation instructions

Covering sheet steel design

Galvanized Quality Class Z275 pursuant to corrosive protection class III pursuant to DIN 55928
Polyester coating, 25 µm in different colours pursuant to ems colour table

Covering stainless steel design

Nickel-chromium steel 1.4301, non-rusting pursuant to DIN 17440; circular-matted, grounded, brushed or pattern-rolled lengthwise (5WL)

Mounting suspension

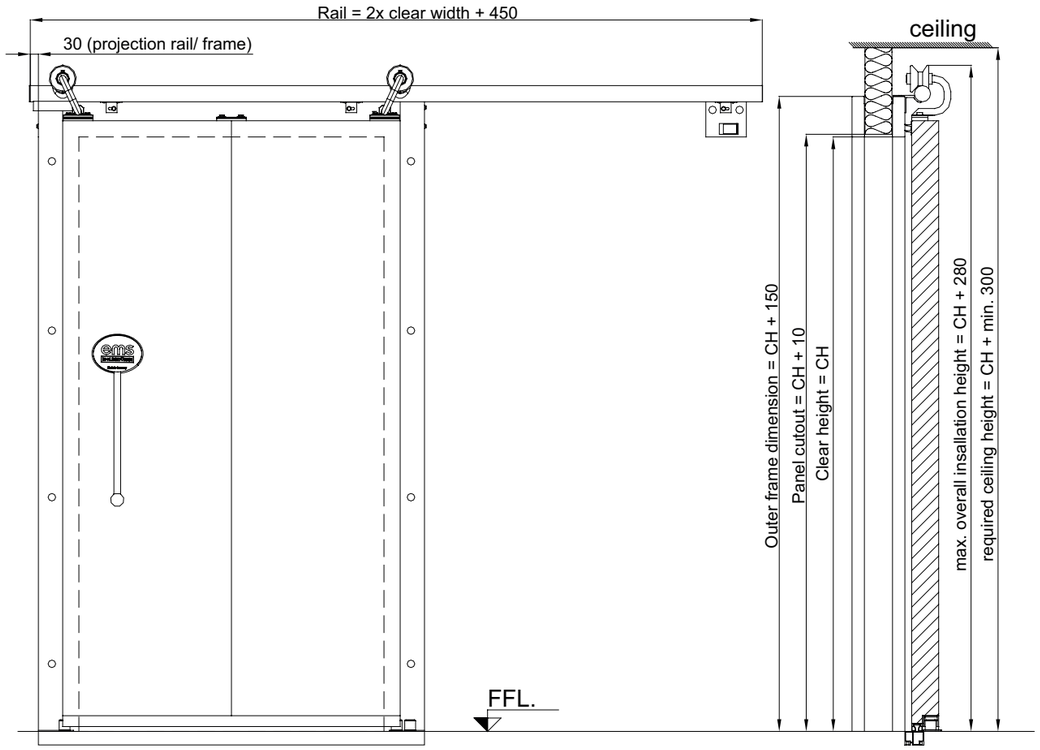
Easy to clean, reliable running and simple handling are special features of the patented hygiene guide rails processed completely from polished special steel LS 3000 (DE 100 11 245.5). The type without roller cover grants easy cleaning even at places that are difficult to access. The design which has no corners and edges and no hidden components enables simple, and above all, swift assembly.

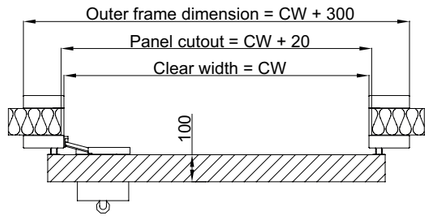
Door hardware

Standard design: ems stainless steel lever handle

Options (on request) i.a.:

. Bolt lock with integrated emergency release
. Window W x H = 400 x 600 mm
. 2-winged type
. Tubular track lead-through
. Fender
. E-automatic
. Pull switch
. Safety light curtain





Important note: All surfaces are masked with protective assembly foil which must be removed immediately after installation or before.

Figure DIN right! DIN left mirror-inverted!
The exact details for the type of the door frame as well as the threshold installation of the ems cold room sliding door KS 100 see pages 43 and 44. Other details on request.

Application area

freezer rooms, freezer stores, freezer cells up to -28°C

Features

U value door leaf in W/m²K 0,20

Dimensions

Clear width (CW): max. 2.500 mm
Clear height (CH): max. 2.800 mm

Please enquire concerning further dimensions.

Details of the ems freezer room sliding door GSL 120:

Door leaf

Door leaf thickness 120 mm, foamed with PU rigid foam, foaming agent CFC-free and HCFC-free

Sealing

On three sides with grease-resistant APTK foam rubber lip insertion seal, held in plastic profiles; Fitted dual extruded seal in lower section; all sealings can be easily replaced

Door frames installed in brickwork

ready to install with brick angles for brickwork assembly, metal-sheeted in the design of the door leaf, with and without threshold; with electrical frame and sill heating, with assembly material and installation instructions

Door frame with panel installation

Clamp frame for panel installation, metal-sheeted in the design of the door leaf; with and without threshold; prepared ready to install for the respective panel thickness, with assembly material and installation instructions

Covering sheet steel design

Galvanized Quality Class Z275 pursuant to corrosive protection class III pursuant to DIN 55928 Polyester coating, 25 µm in different colours pursuant to ems colour table

Covering stainless steel design

Nickel-chromium steel 1.4301, non-rusting pursuant to DIN 17440; circular-matted, grounded, brushed or pattern-rolled lengthwise (5WL)

Mounting suspension

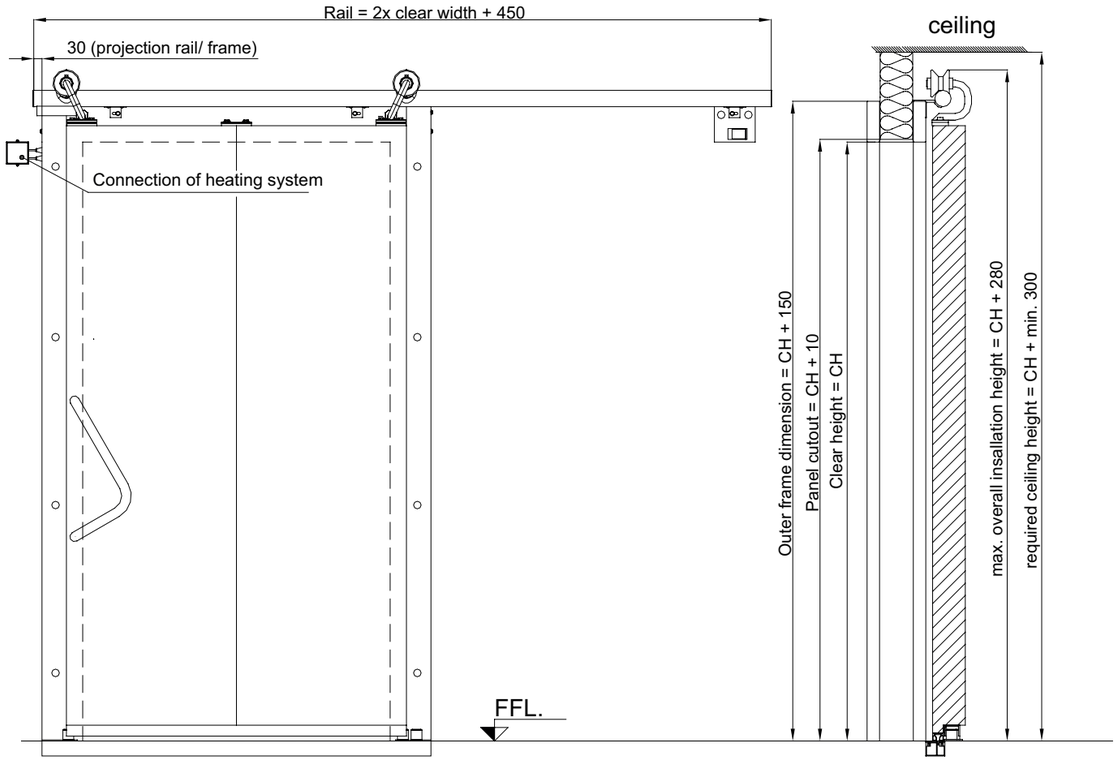
Easy to clean, reliable running and simple handling are special features of the patented hygiene guide rails processed completely from polished special steel LS 3000 (DE 100 11 245.5). The type without roller cover grants easy cleaning even at places that are difficult to access. The design which has no corners and edges and no hidden components enables simple, and above all, swift assembly.

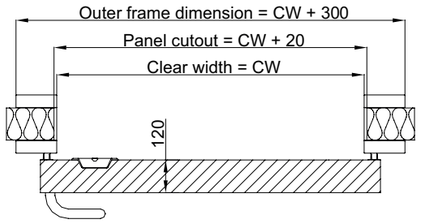
Door hardware

Standard design: Stainless steel tubular handle

Options (on request) i.a.:

. Bolt lock with integrated emergency release
. Window W x H = 400 x 600 mm
. 2-winged type
. pressure compensating valves
. Lever handle
. Fender
. E-automatic
. Pull switch
. Safety light curtain





Important note: All surfaces are masked with protective assembly foil which must be removed immediately after installation or before.

Figure DIN right! DIN left mirror-inverted!
The exact details for the type of the door frame as well as the threshold installation of the ems freezer room sliding door GSL 120 see page 45. Other details on request.

Application area

freezer rooms, freezer stores, freezer cells up to -28°C; optional for blast freezer rooms up to -40° C

Features

U value door leaf in W/m²K 0.17 (0.12 for blast freezer application)

Dimensions

Clear width (CW): max. 3.500 mm
Clear height (CH): max. 3.500 mm

Please enquire concerning further dimensions.

Details of the ems freezer room sliding door GS 140:

Door leaf

Door leaf thickness 140 mm (fast-freezing room 200 mm), foamed with PU rigid foam, foaming agent CFC-free and HCFC-free

Sealing

On three sides with dual, grease-resistant APTK foam rubber lip insertion seal, held in plastic profiles; fitted dual extruded seal in lower section; all sealings can be easily replaced

Door frames installed in brickwork

Flat frame for the brickwork assembly, metal-sheeted in the design of the door leaf; with and without threshold; ready to install with assembly material and installation instructions

Door frame with panel installation

ready to install with brick angles for brickwork assembly, metal-sheeted in the design of the door leaf, with and without threshold, with electrical frame and sill heating, with assembly material and installation instructions

Covering sheet steel design

Galvanized Quality Class Z275 pursuant to corrosive protection class III pursuant to DIN 55928 Polyester coating, 25 µm in different colours pursuant to ems colour table

Covering stainless steel design

Nickel-chromium steel 1.4301, non-rusting pursuant to DIN 17440; circular-matted, grounded, brushed or pattern-rolled lengthwise (5WL)

Mounting suspension

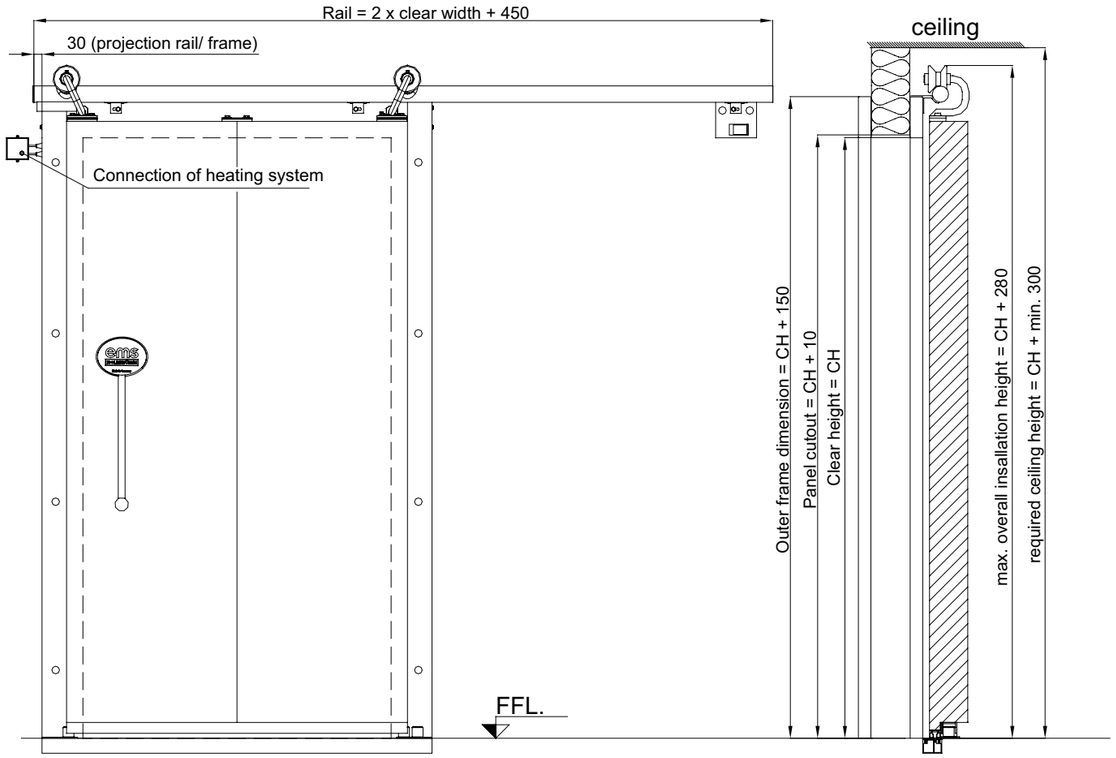
Easy to clean, reliable running and simple handling are special features of the patented hygiene guide rails processed completely from polished special steel LS 3000 (DE 100 11 245.5). The type without roller cover grants easy cleaning even at places that are difficult to access. The design which has no corners and edges and no hidden components enables simple, and above all, swift assembly.

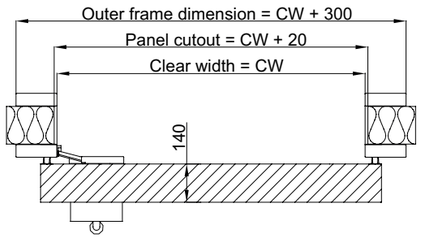
Door hardware

Standard design: ems stainless steel lever handle

Options (on request) i.a.:

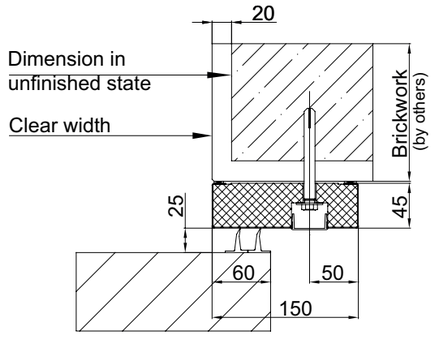
. Bolt lock with integrated emergency release
. Window W x H = 400 x 600 mm
. 2-winged type
. pressure compensating valves
. Fender
. E-automatic
. Pull switch
. Safety light curtain





Important note: All surfaces are masked with protective assembly foil which must be removed immediately after installation or before.

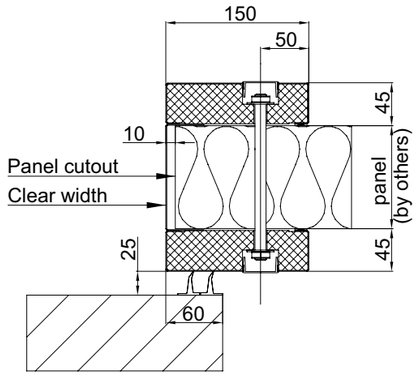
Figure DIN right! DIN left mirror-inverted!
The exact details for the type of the door frame as well as the threshold installation of the ems freezer room sliding door GS 140 see page 45. Other details on request.



Brickwork frame for ems service room sliding door BS 80:

Flat frame 150x45 mm (with pocket holes)

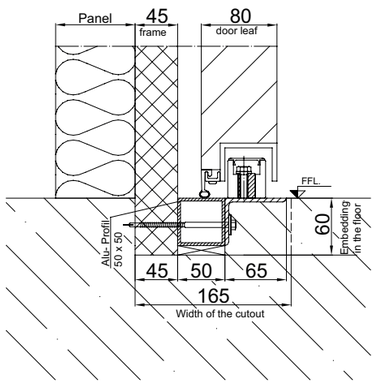
. represented installation situation: **on the brickwork**
. for service rooms
. Opening in the brickwork:
Width = Clear width (CW) + 40 mm
Height = Clear height (CH) + 20 mm (from FFL)



Clamp frame for ems service room sliding door BS 80:

Panel installation

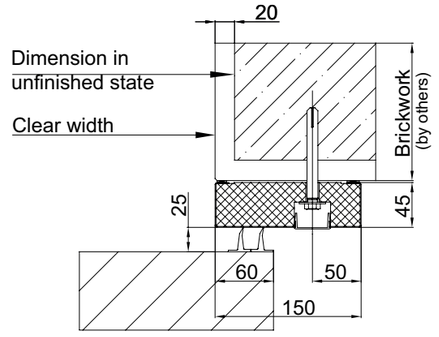
. only suitable for panel installation
. for service rooms
. ready to install prepared for the corresponding panel thickness
. Panel cutout:
Width = Clear width (CW) + 20 mm
Height = Clear height (CH) + 10 mm (from FFL)



Threshold installation for ems service room sliding door BS 80:

Example

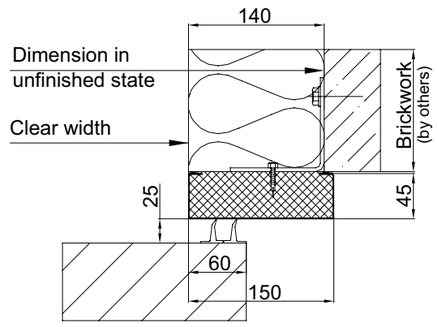
. represented installation situation:
before laying the finished floor
. alternatively it might be possible to correspondingly leave out the floor in the door area, what also allows a subsequent installation of the door into the existing opening
(W x H of the floor recess = 165 x 60 mm)



Brickwork frame for ems cold room sliding doors KSL 80 and KS100:

Flat frame 150x45 mm (with pocket holes)

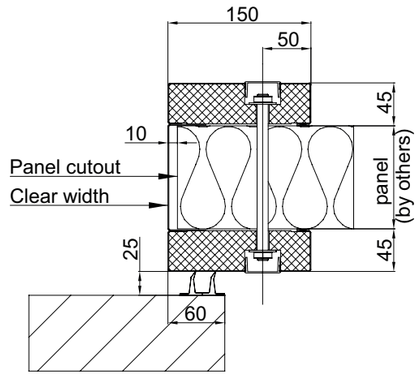
. represented installation situation: **on the brickwork**
. for cold rooms
. Opening in the brickwork:
Width = Clear width (CW) + 40 mm
Height = Clear height (CH) + 20 mm (from FFL)



Brickwork frame for ems cold room sliding doors KSL 80 and KS100:

Flat frame 150x45 mm (bracket mounting)

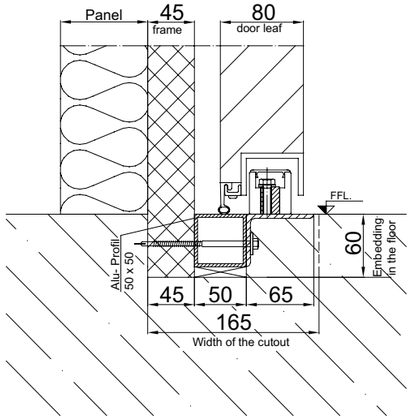
. represented installation situation: **on the brickwork**
. for cold rooms
. Opening in the brickwork:
Width = Clear width (CW) + 280 mm
Height = Clear height (CH) + 140 mm (from FFL)



Clamp frame for ems cold room sliding doors KSL 80 and KS 100:

Panel installation

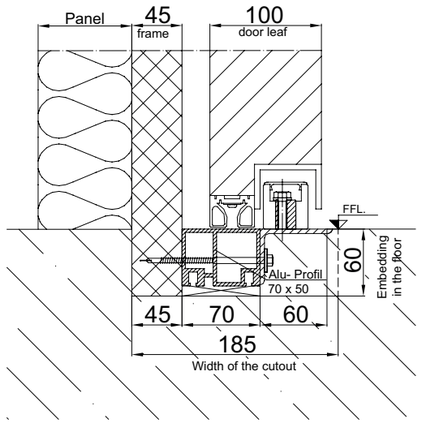
. only suitable for panel installation
. for cold rooms
. ready to install prepared for the corresponding panel thickness
. Panel cutout:
Width = Clear width (CW) + 20 mm
Height = Clear height (CH) + 10 mm (from FFL)



Threshold installation for ems cold room sliding door KSL 80:

Example

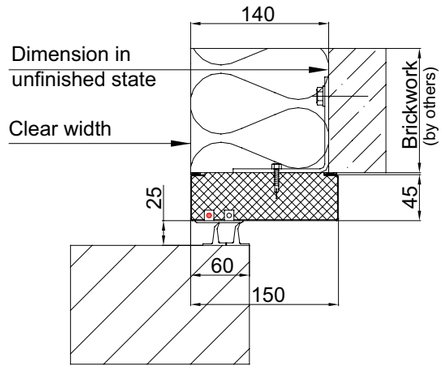
. represented installation situation:
before laying the finished floor
. alternatively it might be possible to correspondingly leave out the floor in the door area, what also allows a subsequent installation of the door into the existing opening
(W x H of the floor recess = 165 x 60 mm)



Threshold installation for ems cold room sliding door KS 100:

Example

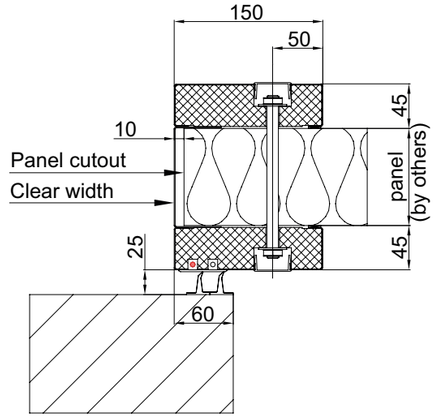
. represented installation situation:
before laying the finished floor
. alternatively it might be possible to correspondingly leave out the floor in the door area, what also allows a subsequent installation of the door into the existing opening
(W x H of the floor recess = 185 x 60 mm)



Brickwork frame for ems freezer room sliding doors GSL 120 and GS 140:

Flat frame 150x45 mm (bracket mounting)

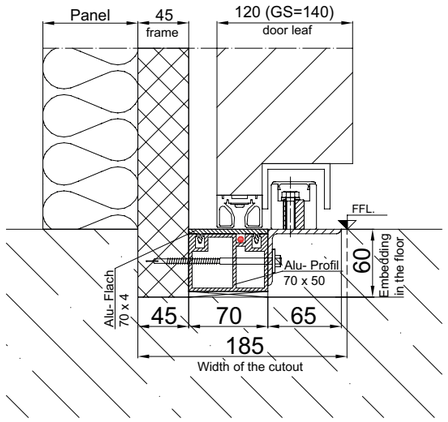
. represented installation situation: **on the brickwork**
. for freezer or blast freezer rooms
. Opening in the brickwork:
Width = Clear width (CW) + 280 mm
Height = Clear height (CH) + 140 mm (from FFL)



Clamp frame for ems freezer room sliding doors GSL 120 and GS 140:

Panel installation

. only suitable for panel installation
. for freezer or blast freezer rooms
. ready to install prepared for the corresponding panel thickness
. Panel cutout:
Width = Clear width (CW) + 20 mm
Height = Clear height (CH) + 10 mm (from FFL)



Threshold installation for ems cold room sliding doors GSL 120 and GS 140:

Example

. represented installation situation:
before laying the finished floor
. alternatively it might be possible to correspondingly leave out the floor in the door area, what also allows a subsequent installation of the door into the existing opening
(W x H of the floor recess = 185 x 60 mm)

Application area

Cold rooms, cold stores, cold cells up to 0°C

Features

U value door leaf in W/m²K 0,24

Dimensions

Clear width (CW): max. 3.000 mm
Clear height (CH): max. 3.000 mm

Please enquire concerning further dimensions.

Details of the ems cold room vertical lift KH 100:

Door leaf

Door leaf thickness 100 mm, foamed with PU rigid foam, foaming agent CFC-free and HCFC-free

Sealing

on three sides with dual, grease-resistant APTK foam rubber lip insertion seal, held in plastic profiles; fitted dual extruded seal in lower section; all sealings can be easily replaced

Door frames

Ready to install with brickwork brackets for brickwork assembly, alternative fixture on steel structure provided by the customer or with clamp frames for panel installation; the frames can be easily replaced in case of mechanical damage
Flush-type light metal hollow chamber threshold; alternatively without threshold

Covering sheet steel design

Galvanized Quality Class Z275 pursuant to corrosive protection class III pursuant to DIN 55928
Polyester coating, 25 µm in different colours pursuant to ems colour table

Covering stainless steel design

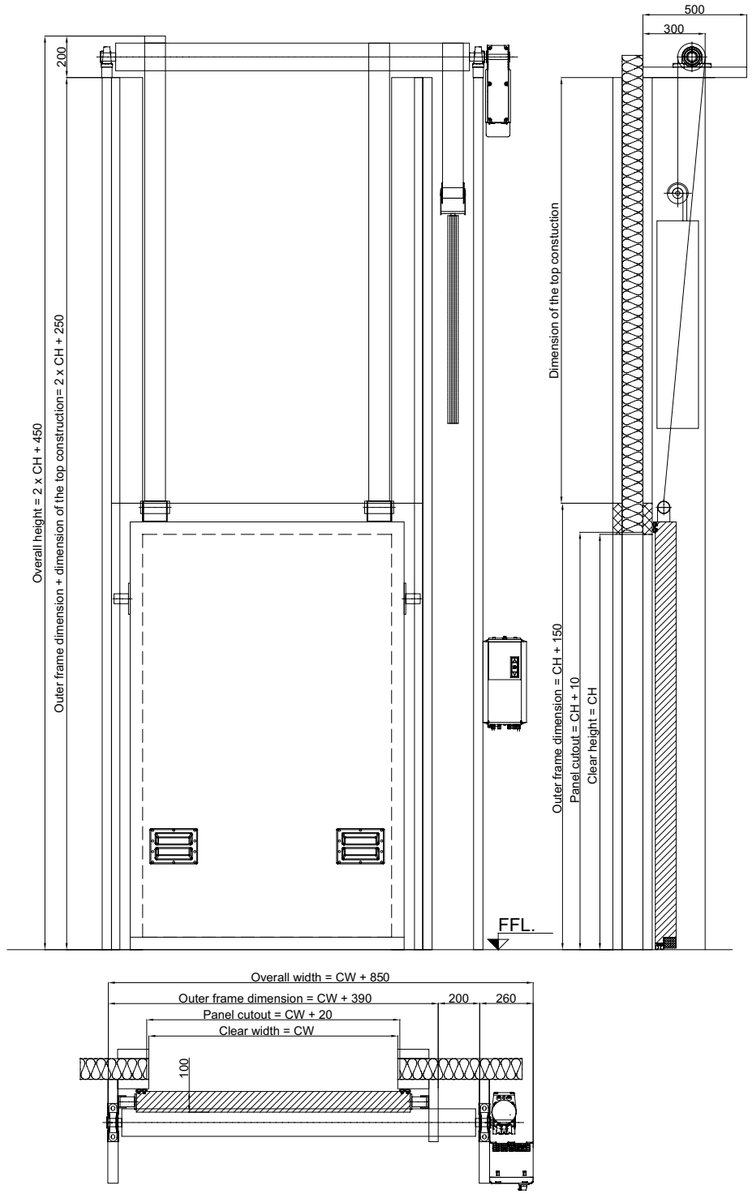
Nickel-chromium steel 1.4301, non-rusting pursuant to DIN 17440; circular-matted, grounded, brushed or pattern-rolled lengthwise (5WL)

Fittings / Automatic

Standard type: with shell-type handles on both sides, with E-automatic, included safety light curtain

Options (on request) i.a.:

. Window W x H = 400 x 600 mm
. Dead man's control
. Heavy duty drive (counterweight is being omitted)
. Fender
. manually operated
. Pull switch



Important note: All surfaces are masked with protective assembly foil which must be removed immediately after installation or before.

The exact details for the type of the door frame as well as the threshold installation of the ems cold room vertical lift KH 100 see page 54. Other details on request.

Application area

Cold rooms, cold stores, cold cells up to 0°C

Features

U value door leaf in W/m²K 0,24

Dimensions

Clear width (CW): max. 3.000 mm
Clear height (CH): max. 3.000 mm

Please enquire concerning further dimensions.

Details of the ems cold room lifting gate KH 100 deflected:

Door leaf

Door leaf thickness 100 mm, foamed with PU rigid foam, foaming agent CFC-free and HCFC-free

Sealing

on three sides with dual, grease-resistant APTK foam rubber lip insertion seal, held in plastic profiles; fitted dual extruded seal in lower section; all sealings can be easily replaced

Door frames

Ready to install with brickwork brackets for brickwork assembly, alternative fixture on steel structure provided by the customer or with clamp frames for panel installation; the frames can be easily replaced in case of mechanical damage
Flush-type light metal hollow chamber threshold; alternatively without threshold

Covering sheet steel design

Galvanized Quality Class Z275 pursuant to corrosive protection class III pursuant to DIN 55928
Polyester coating, 25 µm in different colours pursuant to ems colour table

Covering stainless steel design

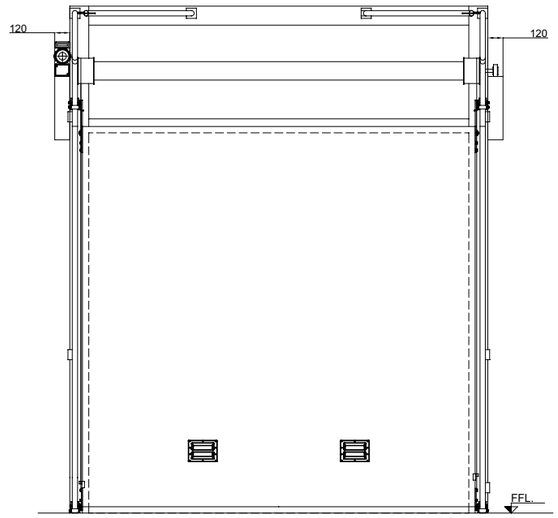
Nickel-chromium steel 1.4301, non-rusting pursuant to DIN 17440; circular-matted, grounded, brushed or pattern-rolled lengthwise (5WL)

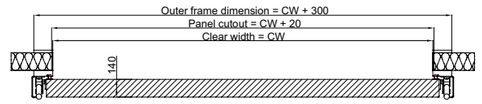
Fittings / Automatic

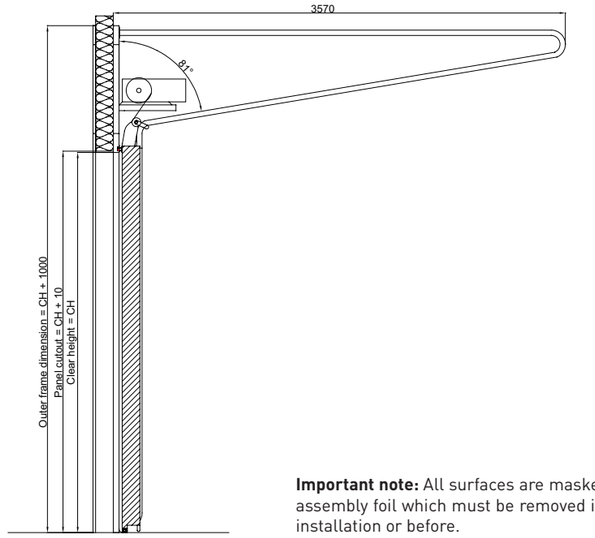
Standard type: with heavy-duty drive

Options (on request) i.a.:

. Window W x H = 400 x 600 mm
. Dead man's control
. Fender
. Pull switch
. Safety light curtain







Important note: All surfaces are masked with protective assembly foil which must be removed immediately after installation or before.

The dimensions indicated in the drawing as well as the degree of the deflection are applicable for lifting gates with LW x LH = 3 m x 3 m. The exact details for the type of the door frame as well as the threshold installation of the ems cold room lifting gate KH 100 deflected see page 55. Other details on request.

Application area

Freezer rooms, freezer stores, freezer cells up to -28°C; optional for blast freezer rooms up to -40°C

Features

U value door leaf in W/m²K 0.17 (0.12 for blast freezer application)

Dimensions

Clear width (CW): max. 3.000 mm
Clear height (CH): max. 3.000 mm

Please enquire concerning further dimensions.

Details of the ems freezer room vertical lift GH 140:

Door leaf

Door leaf thickness 140 mm (fast freezing room 200 mm), foamed with PU rigid foam; foaming agent CFC-free and HCFC-free

Sealing

on three sides with dual, grease-resistant APTK foam rubber lip insertion seal, held in plastic profiles; fitted dual extruded seal in lower section; all sealings can be easily replaced

Door frames

Ready to install with brickwork brackets for brickwork assembly, alternative fixture on steel structure provided by the customer or with clamp frames for panel installation, with electrical frame and threshold heating; the frames can be easily replaced in case of mechanical damage
Flush-type light metal hollow chamber threshold; alternatively without threshold

Covering sheet steel design

Galvanized Quality Class Z275 pursuant to corrosive protection class III pursuant to DIN 55928
Polyester coating, 25 µm in different colours pursuant to ems colour table

Covering stainless steel design

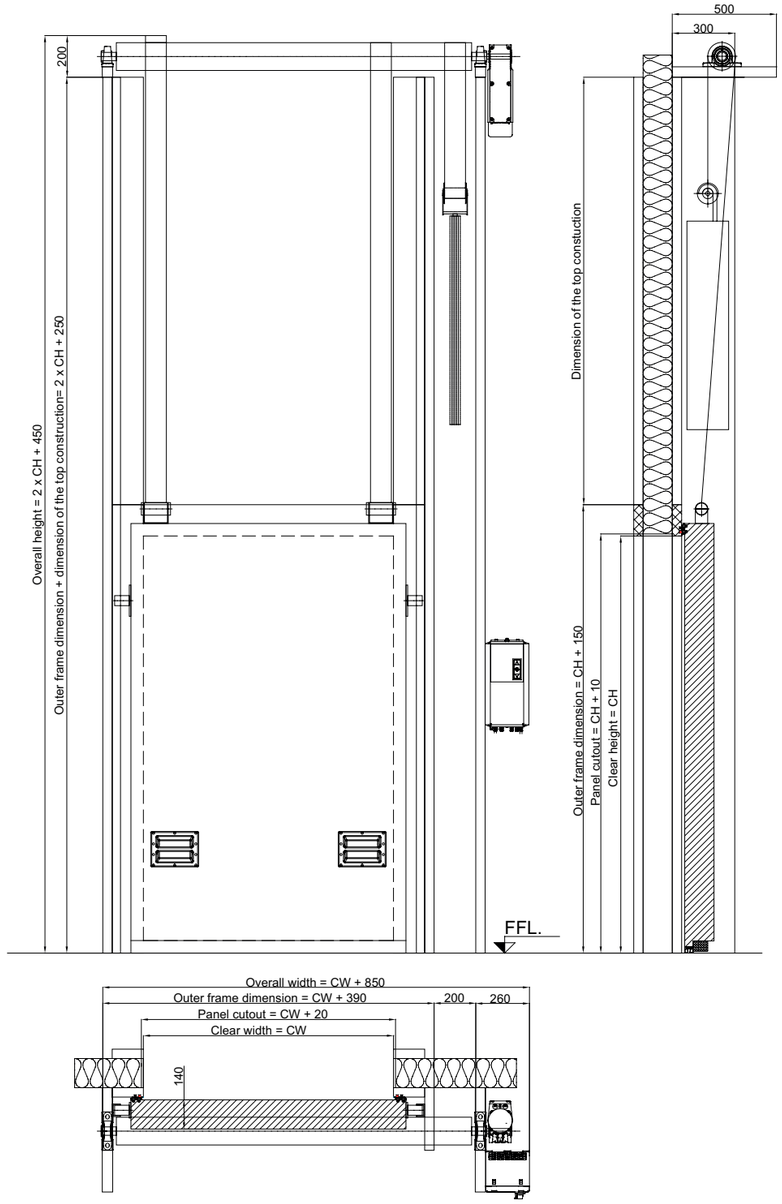
Nickel-chromium steel 1.4301, non-rusting pursuant to DIN 17440; circular-matted, grounded, brushed or pattern-rolled lengthwise (5WL)

Fittings / Automatic

Standard type: with shell-type handles on both sides, with E-automatic, included safety light curtain

Options (on request) i.a.:

. Window W x H = 400 x 600 mm
. Dead man's control
. Heavy duty drive (counterweight is being omitted)
. Fender
. manually operated
. Pull switch



Important note: All surfaces are masked with protective assembly foil which must be removed immediately after installation or before.

The exact details for the type of the door frame as well as the threshold installation of the ems freezer room vertical lift GH 140 see page 56. Other details on request.

Application area

Freezer rooms, freezer stores, freezer cells up to -28°C; optional for blast freezer rooms up to -40°C

Features

U value door leaf in W/m²K 0.17 (0.12 for blast freezer application)

Dimensions

Clear width (CW): max. 3.000 mm
Clear height (CH): max. 3.000 mm

Please enquire concerning further dimensions.

Details of the ems freezer room lifting gate GH 140 deflected:

Door leaf

Door leaf thickness 140 mm (fast freezing room 200 mm), foamed with PU rigid foam, foaming agent CFC-free and HCFC-free

Sealing

on three sides with dual, grease-resistant APTK foam rubber lip insertion seal, held in plastic profiles; fitted dual extruded seal in lower section; all sealings can be easily replaced

Door frames

Ready to install with brickwork brackets for brickwork assembly, alternative fixture on steel structure provided by the customer or with clamp frames for panel installation, with electrical frame and threshold heating; the frames can be easily replaced in case of mechanical damage
Flush-type light metal hollow chamber threshold; alternatively without threshold

Covering sheet steel design

Galvanized Quality Class Z275 pursuant to corrosive protection class III pursuant to DIN 55928
Polyester coating, 25 µm in different colours pursuant to ems colour table

Covering stainless steel design

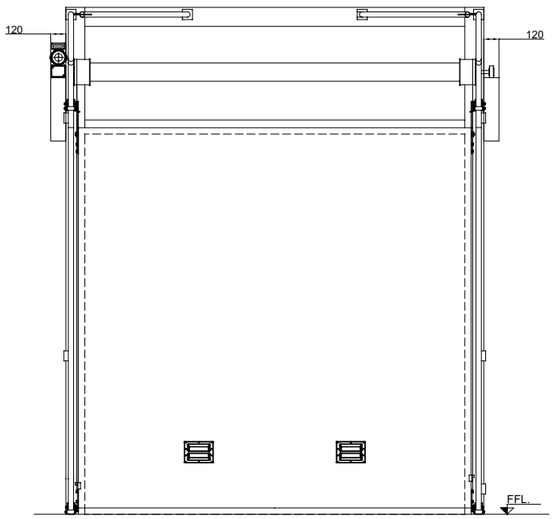
Nickel-chromium steel 1.4301, non-rusting pursuant to DIN 17440; circular-matted, grounded, brushed or pattern-rolled lengthwise (5WL)

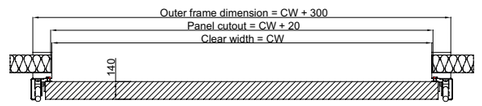
Fittings / Automatic

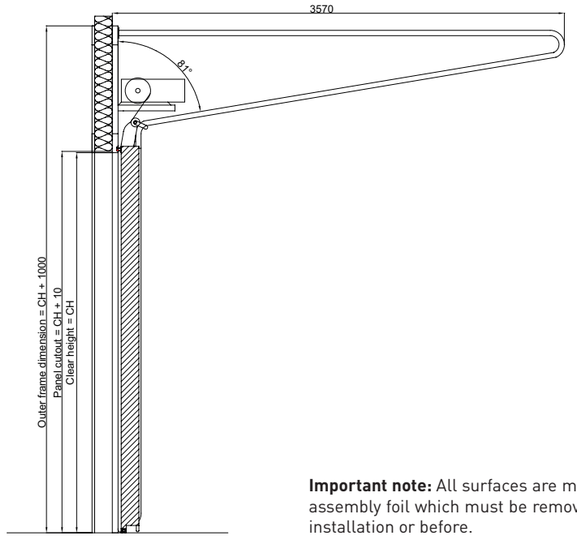
Standard type: with heavy-duty drive

Options (on request) i.a.:

. Window W x H = 400 x 600 mm
. Dead man's control
. Fender
. Pull switch
. Safety light curtain

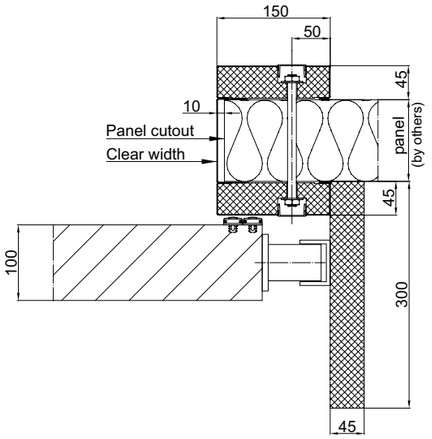






Important note: All surfaces are masked with protective assembly foil which must be removed immediately after installation or before.

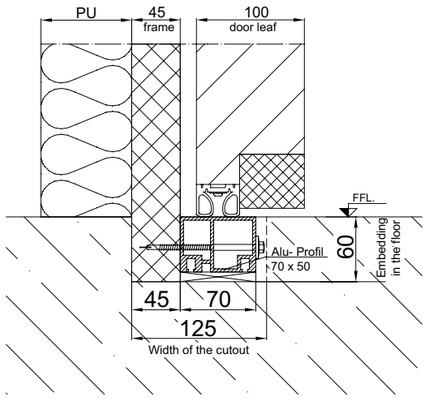
The dimensions indicated in the drawing as well as the degree of the deflection are applicable for lifting gates with LW x LH = 3 m x 3 m. The exact details for the type of the door frame as well as the threshold installation of the ems freezer room lifting gate GH 140 deflected see page 57. Other details on request.



Clamp frame for ems cold room vertical lift KH 100:

Panel installation

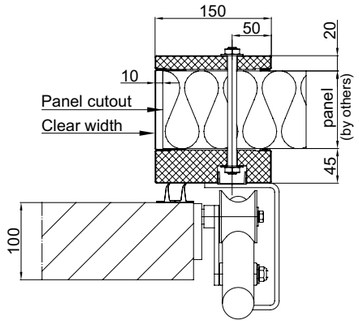
. only suitable for panel installation
. for cold rooms
. ready to install prepared for the corresponding panel thickness
. Panel cutout:
Width = Clear width (CW) + 20 mm
Height = Clear height (CH) + 10 mm (from FFL)



Threshold installation for ems cold room vertical lift KH 100:

Example

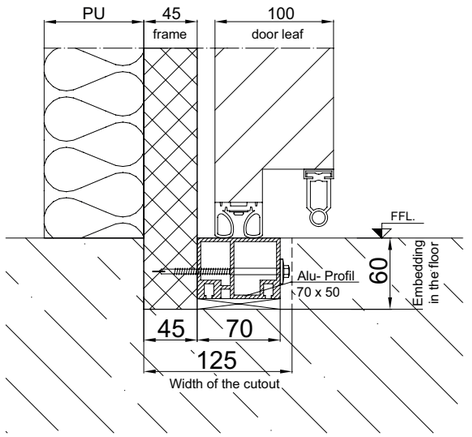
. represented installation situation:
before laying the finished floor
. alternatively it might be possible to correspondingly leave out the floor in the door area, what also allows a subsequent installation of the door into the existing opening
(W x H of the floor recess = 125 x 60 mm)



Clamp frame for ems cold room lifting gate KH 100 deflected:

Panel installation

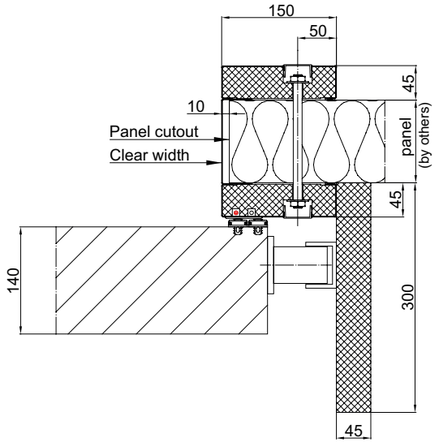
. only suitable for panel installation
. for cold rooms
. ready to install prepared for the corresponding panel thickness
. Panel cutout:
Width = Clear width (CW) + 20 mm
Height = Clear height (CH) + 10 mm (from FFL)



Threshold installation for ems cold room lifting gate KH 100 deflected:

Example

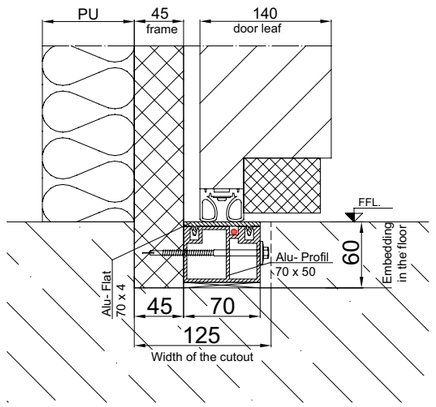
. represented installation situation:
before laying the finished floor
. alternatively it might be possible to correspondingly leave out the floor in the door area, what also allows a subsequent installation of the door into the existing opening
(W x H of the floor recess = 125 x 60 mm)



Clamp frame for ems freezer room vertical lift GH 140:

Panel installation

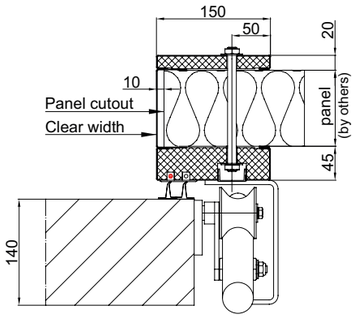
. only suitable for panel installation
. for freezer rooms
. ready to install prepared for the corresponding panel thickness
. Panel cutout:
Width = Clear width (CW) + 20 mm
Height = Clear height (CH) + 10 mm (from FFL)



Threshold installation for ems freezer room vertical lift GH 140:

Example

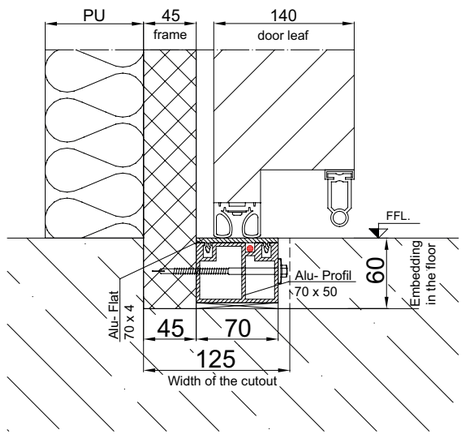
. represented installation situation:
before laying the finished floor
. alternatively it might be possible to correspondingly leave out the floor in the door area, what also allows a subsequent installation of the door into the existing opening
(W x H of the floor recess = 125 x 60 mm)



Clamp frame for ems freezer room lifting gate GH 140 deflected:

Panel installation

. only suitable for panel installation
. for freezer rooms
. ready to install prepared for the corresponding panel thickness
. Panel cutout:
Width = Clear width (CW) + 20 mm
Height = Clear height (CH) + 10 mm (from FFL)



Threshold installation for ems freezer room lifting gate GH 140 deflected:

Example

. represented installation situation:
before laying the finished floor
. alternatively it might be possible to correspondingly leave out the floor in the door area, what also allows a subsequent installation of the door into the existing opening
(W x H of the floor recess = 125 x 60 mm)

Application area

Service rooms, internal logistics

Dimensions

Clear width (CW): max. 5.000 mm
Clear height (CH): max. 5.000 mm

Please enquire concerning further dimensions.

Details of the ems service room high speed door SLT-BT:

Hangings

PVC, RAL 1018 (yellow)

Sealing

complete tight side sealing with new magnet technology

Door frames installed in brickwork

Flat frame for the brickwork assembly;
With and without threshold; ready to install with assembly material and installation instructions

Door frames with panel installation

Clamp fram for panel installation; With and without threshold; prepared ready to install for the respective panel thickness, with assembly material and installation instructions

Roll shaft

made out of 1.4301 (316 S/S) tube, diameter = 133 mm. Roll is stored with 2 S/S storages

Motor

Completely closed gear engine with integrated incremental encoder for the position capture of the gate. The door can be opened manually with a 22 wrench (when power to control board is disconnected).

Controller

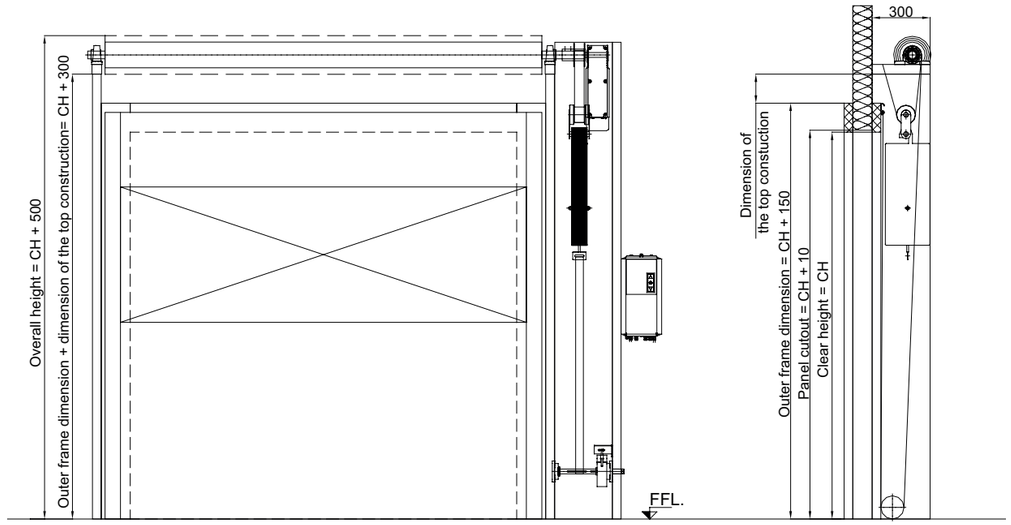
The device described below is an electronic control system for motor-driven industrial or commercial doors in accordance with EN 13241. A fully integrated frequency converter with power output stage can gently control the door with variable opening and closing speeds. The control system TST FUZ2 is designed to handle electrical induction motors with a power consumption of up to 1,5 kW and a 230 V supply. TST FUZ2 (standard) with OPEN / CLOSE button on the controller.

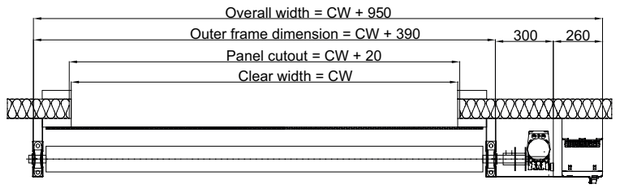
Safety light curtain

With the new intelligent safety light curtain the customer receives in future an optimal package of „control-unit and light curtain" for object protection and personal protection. This means an entire integration of the safety light curtain in the control-unit. The safety light curtain can diagnose sensibly and realise a differentiation of security and object protection areas. Therefore safety edges and light barriers which were necessary in the past are no longer needed.

Options (on request) i.a.:

. by pressing the inside switch or in the event of a power failure, the door automatically moves up (panic function)
. Pull switch
. Window: clear width x 700 mm
. Ultrasonic sensor
. Radar motion detector
. 1-point pushbutton inside
. without counterweight (with patented brake)





Important note: Frame and bezels are masked with protective assembly foil which must be removed immediately after installation or before.

The exact details for the type of the door frame as well as the threshold installation of the ems service room high speed door SLT-BT see page 66. Other details on request.

Application area

Cold rooms, cold stores, cold cells up to 0°C

Dimensions

Clear width (CW): max. 3.000 mm
Clear height (CH): max. 4.000 mm

Please enquire concerning further dimensions.

Details of the ems cold room high speed door SLT-NK:

Hangings

Thermo E glass fabric

Sealing

complete tight side sealing with new magnet technology

Door frames installed in brickwork

Flat frame for the brickwork assembly;
With and without threshold; ready to install with assembly material and installation instructions

Door frames with panel installation

Clamp fram for panel installation; With and without threshold; prepared ready to install for the respective panel thickness, with assembly material and installation instructions

Roll shaft

made out of 1.4301 (316 S/S) tube, diameter = 133 mm. Roll is stored with 2 S/S storages

Motor

Completely closed gear engine with integrated incremental encoder for the position capture of the gate. The door can be opened manually with a 22 wrench (when power to control board is disconnected).

Controller

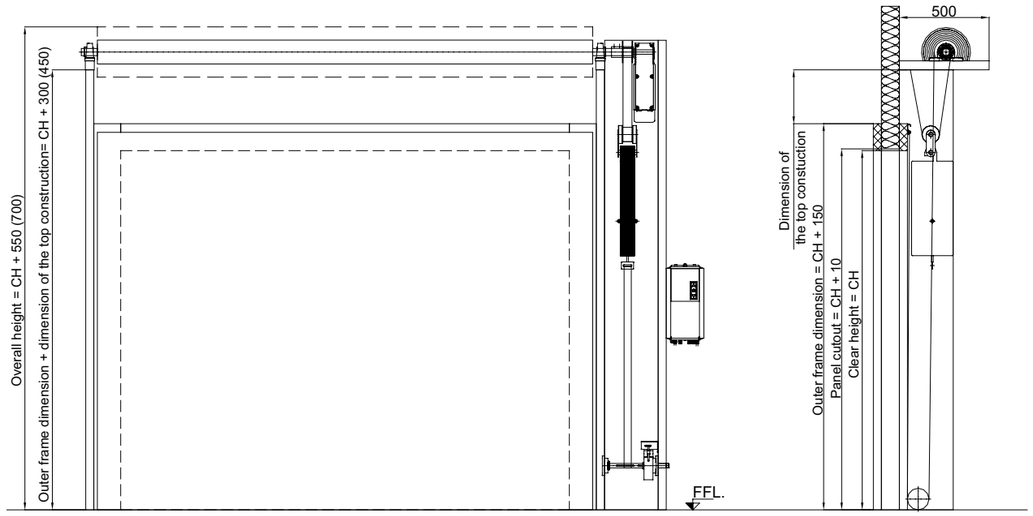
The device described below is an electronic control system for motor-driven industrial or commercial doors in accordance with EN 13241. A fully integrated frequency converter with power output stage can gently control the door with variable opening and closing speeds. The control system TST FUZ2 is designed to handle electrical induction motors with a power consumption of up to 1,5 kW and a 230 V supply. TST FUZ2 (standard) with OPEN / CLOSE button on the controller.

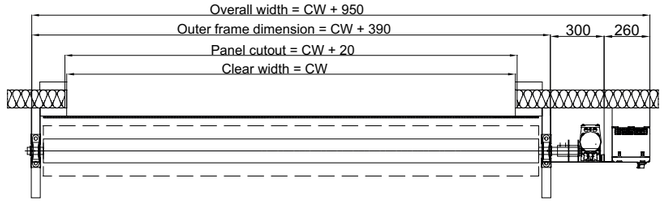
Safety light curtain

With the new intelligent safety light curtain the customer receives in future an optimal package of „control-unit and light curtain" for object protection and personal protection. This means an entire integration of the safety light curtain in the control-unit. The safety light curtain can diagnose sensibly and realise a differentiation of security and object protection areas. Therefore safety edges and light barriers which were necessary in the past are no longer needed.

Options (on request) i.a.:

. by pressing the inside switch or in the event of a power failure, the door automatically moves up (panic function)
. Pull switch
. Ultrasonic sensor
. Radar motion detector
. 1-point pushbutton inside
. without counterweight (with patented brake)





Important note: Frame and bezels are masked with protective assembly foil which must be removed immediately after installation or before.

The exact details for the type of the door frame as well as the threshold installation of the ems cold room high speed door SLT-NK see page 67. Other details on request.

Application area

Freezer rooms, freezer stores, freezer cells up to –28°C

Dimensions

Clear width (CW): max. 3.000 mm
Clear height (CH): max. 4.000 mm

Please enquire concerning further dimensions.

Details of the ems freezer room high speed door SLT-TK:

Hangings

Thermo E glass fabric, heated

Sealing

complete tight side sealing with new magnet technology

Door frames installed in brickwork

Flat frame for the brickwork assembly;
With and without threshold; ready to install with assembly material and installation instructions

Door frames with panel installation

Clamp fram for panel installation; With and without threshold; prepared ready to install for the respective panel thickness, with assembly material and installation instructions

Roll shaft

made out of 1.4301 (316 S/S) tube, diameter = 133 mm. Roll is stored with 2 S/S storages

Motor

Completely closed gear engine with integrated incremental encoder for the position capture of the gate. The door can be opened manually with a 22 wrench (when power to control board is disconnected).

Controller

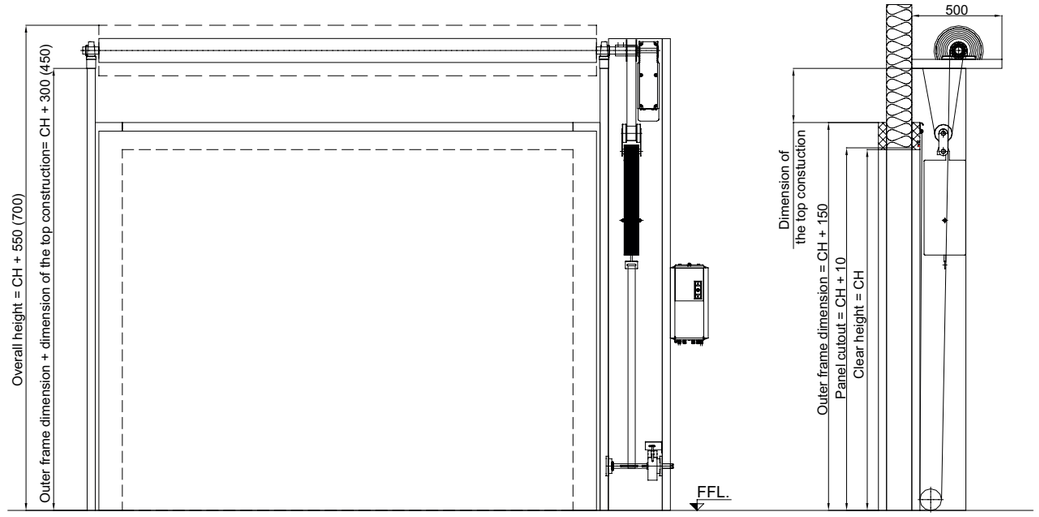
The device described below is an electronic control system for motor-driven industrial or commercial doors in accordance with EN 13241. A fully integrated frequency converter with power output stage can gently control the door with variable opening and closing speeds. The control system TST FUZ2 is designed to handle electrical induction motors with a power consumption of up to 1,5 kW and a 230 V supply. TST FUZ2 (standard) with OPEN / CLOSE button on the controller.

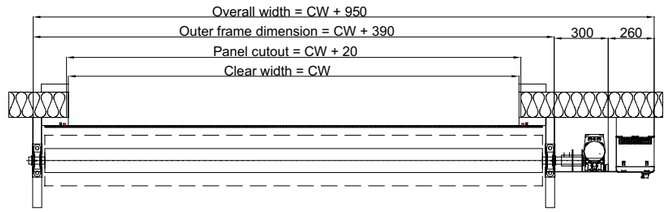
Safety light curtain, heated

With the new intelligent safety light curtain the customer receives in future an optimal package of „control-unit and light curtain" for object protection and personal protection. This means an entire integration of the safety light curtain in the control-unit. The safety light curtain can diagnose sensibly and realise a differentiation of security and object protection areas. Therefore safety edges and light barriers which were necessary in the past are no longer needed.

Options (on request) i.a.:

. by pressing the inside switch or in the event of a power failure, the door automatically moves up (panic function)
. Pull switch, heated
. Ultrasonic sensor, heated
. Radar motion detector, heated
. 1-point pushbutton inside
. without counterweight (with patented brake)





Important note: Frame and bezels are masked with protective assembly foil which must be removed immediately after installation or before.

The exact details for the type of the door frame as well as the threshold installation of the ems freezer room high speed door SLT-TK see page 68. Other details on request.

Application area

Heat cells up to +100°C

Dimensions

Clear width (CW): max. 3.000 mm
Clear height (CH): max. 4.000 mm

Please enquire concerning further dimensions.

Details of the ems heat cell high speed door SLT-HK:

Hangings

Thermo E glass fabric

Sealing

complete tight side sealing with new magnet technology

Door frames installed in brickwork

Flat frame for the brickwork assembly;
With and without threshold; ready to install with assembly material and installation instructions

Door frames with panel installation

Clamp fram for panel installation; With and without threshold; prepared ready to install for the respective panel thickness, with assembly material and installation instructions

Roll shaft

made out of 1.4301 (316 S/S) tube, diameter = 133 mm. Roll is stored with 2 S/S storages

Motor

Completely closed gear engine with integrated incremental encoder for the position capture of the gate. The door can be opened manually with a 22 wrench (when power to control board is disconnected).

Brake (SLT with dimensions less than 2000 x 2000 mm)

Patented EMS brake system for compact solutions, replaces balancing technology with counter-weights.

Controller

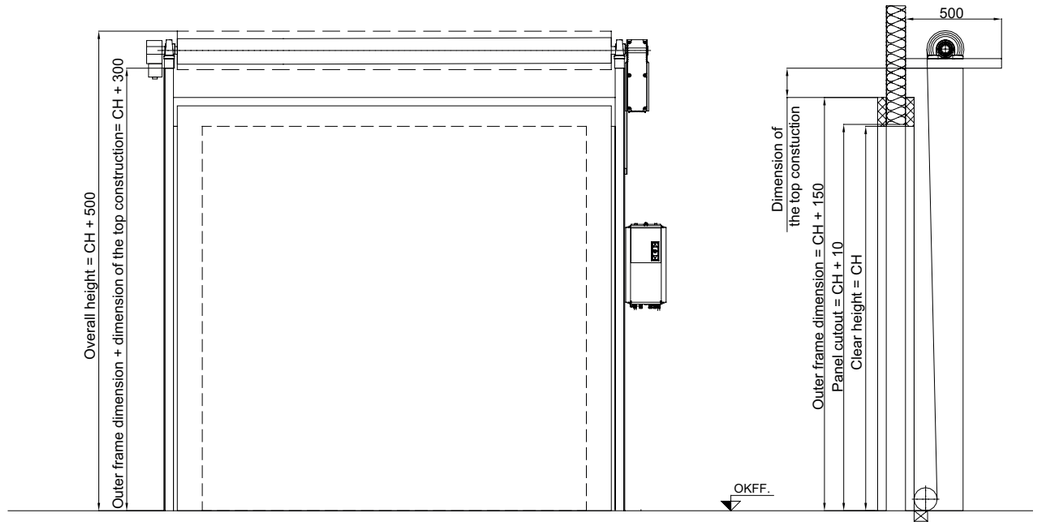
The device described below is an electronic control system for motor-driven industrial or commercial doors in accordance with EN 13241. A fully integrated frequency converter with power output stage can gently control the door with variable opening and closing speeds. The control system TST FUZ2 is designed to handle electrical induction motors with a power consumption of up to 1,5 kW and a 230 V supply. TST FUZ2 (standard) with OPEN / CLOSE button on the controller.

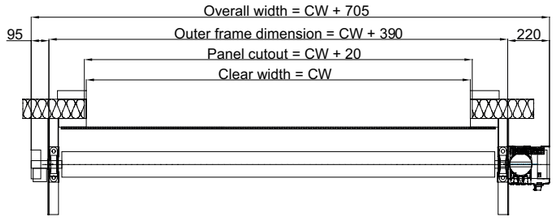
Safety light curtain

With the new intelligent safety light curtain the customer receives in future an optimal package of „control-unit and light curtain" for object protection and personal protection. This means an entire integration of the safety light curtain in the control-unit. The safety light curtain can diagnose sensibly and realise a differentiation of security and object protection areas. Therefore safety edges and light barriers which were necessary in the past are no longer needed.

Options (on request) i.a.:

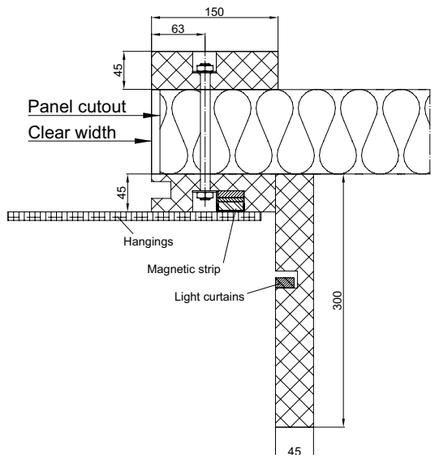
. with counterweight by pressing the inside switch or in the event of a power failure, the door automatically moves up (panic function)
. Pull switch
. Ultrasonic sensor
. Radar motion detector
. 1-point pushbutton inside





Important note: Frame and bezels are masked with protective assembly foil which must be removed immediately after installation or before.

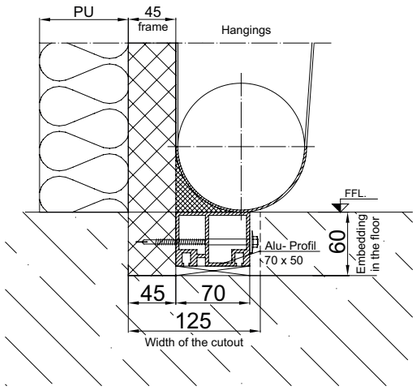
The exact details for the type of the door frame as well as the threshold installation of the ems heat cell high speed door SLT-HK see page 69. Other details on request.



Clamp frame for ems service room high speed door SLT-BT:

Panel installation

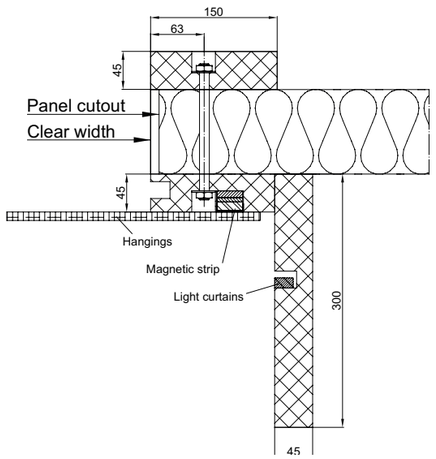
. only suitable for panel installation
. for service rooms
. ready to install prepared for the corresponding panel thickness
. Panel cutout:
Width = Clear width (CW) + 20 mm
Height = Clear height (CH) + 10 mm (from FFL)



Threshold installation for ems service room high speed door SLT-BT:

Example

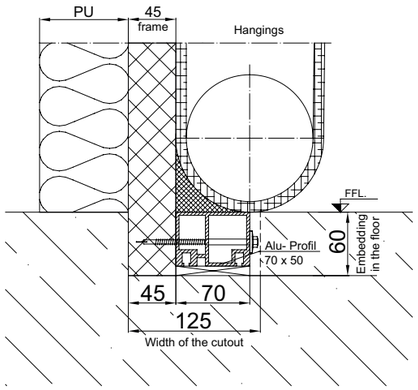
. represented installation situation:
before laying the finished floor
. alternatively it might be possible to correspondingly leave out the floor in the door area, what also allows a subsequent installation of the door into the existing opening
(W x H of the floor recess = 125 x 60 mm)



Clamp frame for ems cold room high speed door SLT-NK:

Panel installation

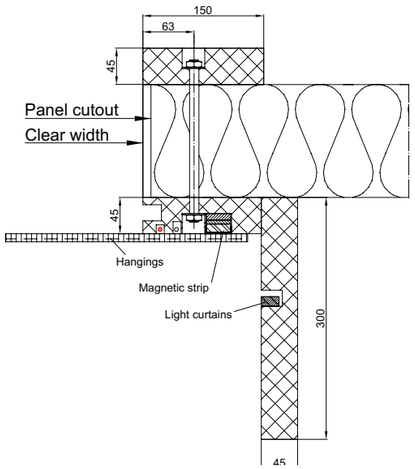
. only suitable for panel installation
. for cold rooms
. ready to install prepared for the corresponding panel thickness
. Panel cutout:
Width = Clear width (CW) + 20 mm
Height = Clear height (CH) + 10 mm (from FFL)



Threshold installation for ems cold room high speed door SLT-NK:

Example

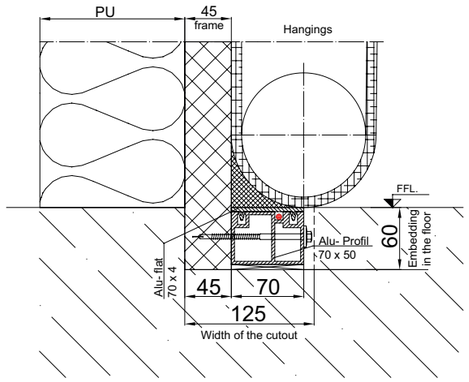
. represented installation situation:
before laying the finished floor
. alternatively it might be possible to correspondingly leave out the floor in the door area, what also allows a subsequent installation of the door into the existing opening
(W x H of the floor recess = 125 x 60 mm)



Clamp frame for ems freezer room high speed door SLT-TK:

Panel installation

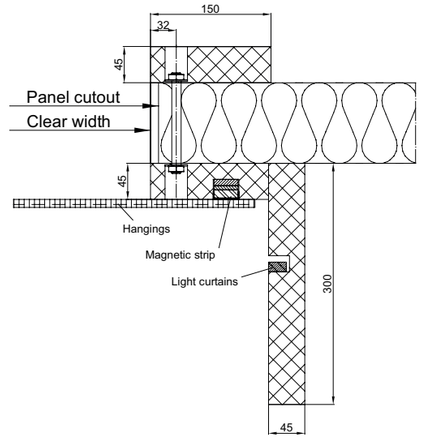
. only suitable for panel installation
. for freezer rooms
. ready to install prepared for the corresponding panel thickness
. Panel cutout:
Width = Clear width (CW) + 20 mm
Height = Clear height (CH) + 10 mm (from FFL)



Threshold installation for ems freezer room high speed door SLT-TK:

Example

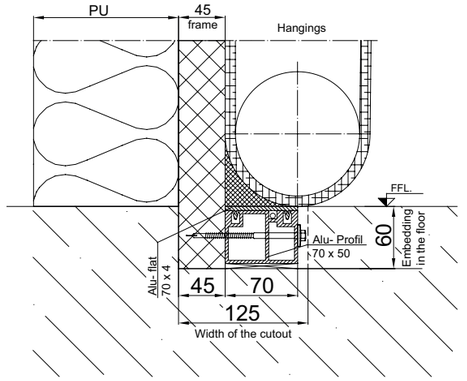
. represented installation situation:
before laying the finished floor
. alternatively it might be possible to correspondingly leave out the floor in the door area, what also allows a subsequent installation of the door into the existing opening
(W x H of the floor recess = 125 x 60 mm)



Clamp frame for ems heat cell high speed door SLT-HK:

Panel installation

. only suitable for panel installation
. for heat cells
. ready to install prepared for the corresponding panel thickness
. Panel cutout:
Width = Clear width (CW) + 20 mm
Height = Clear height (CH) + 10 mm (from FFL)



Threshold installation for ems heat cell high speed door SLT-HK:

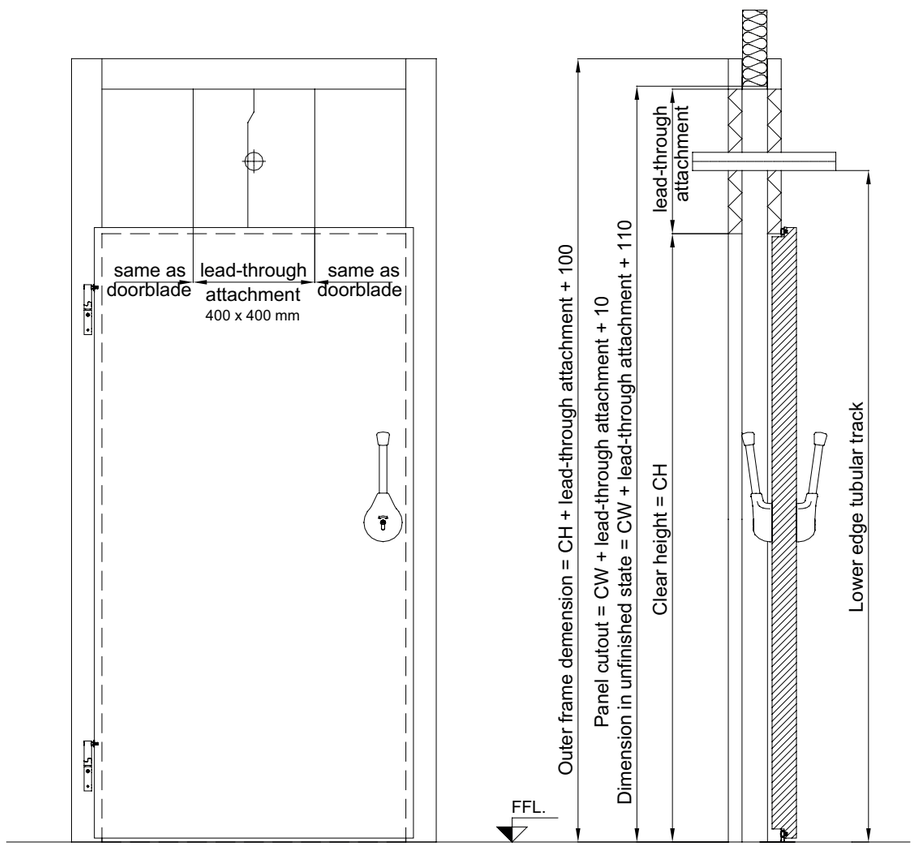
Example

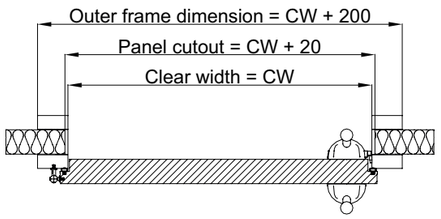
. represented installation situation:
before laying the finished floor
. alternatively it might be possible to correspondingly leave out the floor in the door area, what also allows a subsequent installation of the door into the existing opening
(W x H of the floor recess = 125 x 60 mm)

Option

Tubular track lead - through hinged doors

Example panel installation

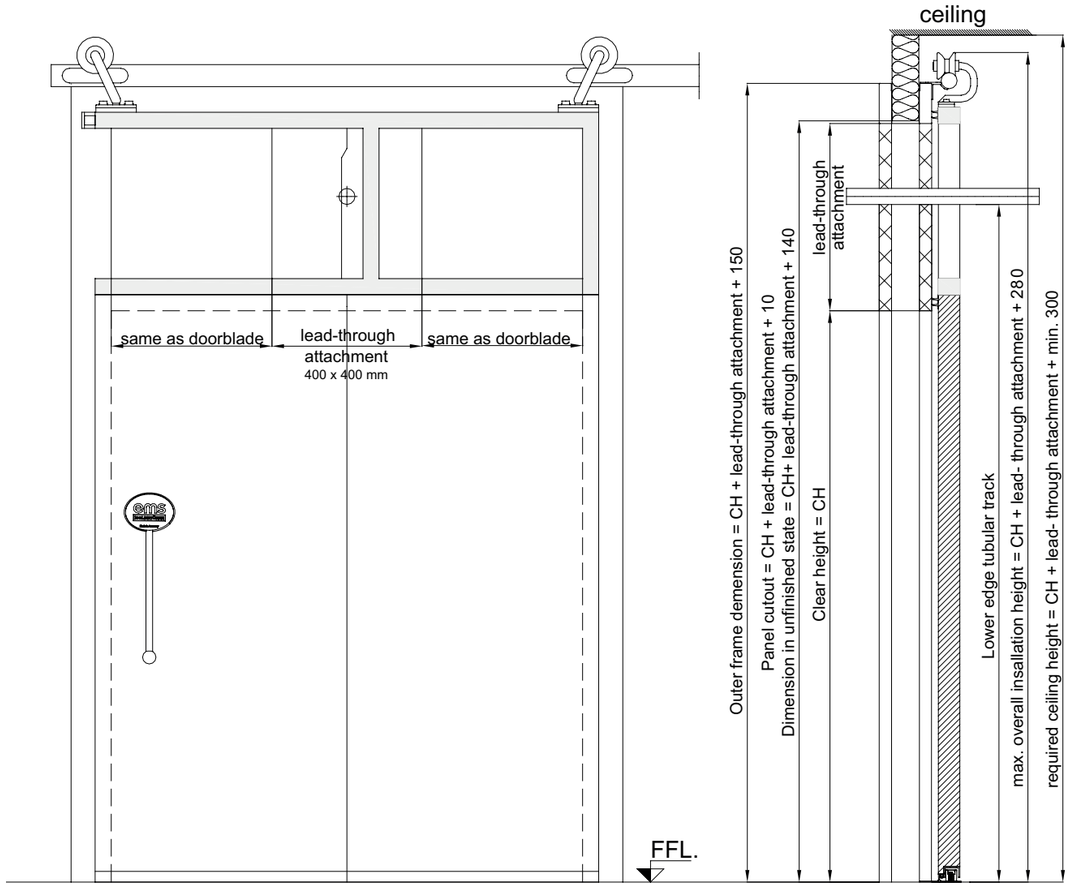


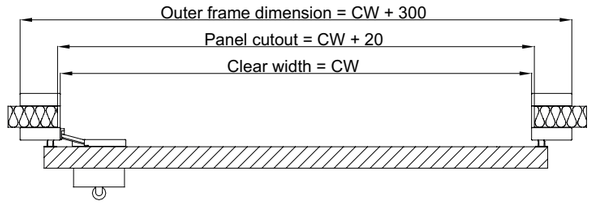


Tubular track lead - through sliding doors

Option

Example panel installation

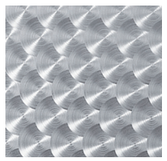




ems **colour table and accessories**

Light ivory	similar to RAL 1015
Traffic yellow	similar to RAL 1023
Flame red	similar to RAL 3000
Enzian blue	similar to RAL 5010
Light blue	similar to RAL 5012

Anthracite grey	similar to RAL 7016
Light grey	similar to RAL 7035
Creme white	similar to RAL 9001
Grey white	similar to RAL 9002
White aluminium	similar to RAL 9006
Grey aluminium	similar to RAL 9007
Pure white	similar to RAL 9010



Niro
circular-matted

Niro
grounded

Niro
brushed

Niro
pattern-rolled
lengthwise (5WL)

The colour tints similar to RAL 7035, similar to RAL 9001, similar to RAL 9002, similar to RAL 9006, similar to RAL 9010 are included in the ems standard colour tints. Other colour tints on request.

Deviations of the colour program displayed to original colours are caused by printing and are unavoidable. Deviations of the original colours to RAL original colours are unavoidable for technical reasons.

Only ems original colour patterns are decisive for surface effect and level of gloss on delivery. An uneven colour impression cannot be excluded for 15 µm coatings as well as all coatings of colours equivalent to RAL 9006 and equivalent to RAL 9010.

Different coating systems (FS3000®, LMF) lead to different colour impressions, also in the case of equivalent RAL colours.