



# Steel Multi-Function Doors

Fire-rated and smoke-tight doors

Acoustic-rated doors

Security doors

Multi-purpose doors







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Image on the left:  
Löhrne fire station with T30 fire-rated doors H3

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# Brand-name quality for top safety and reliability



ThyssenKrupp Quartier in Essen with Hörmann products



## In-house product development

Growing and constantly changing functional and safety requirements necessitate continuous new construction and equipment developments and improvements, especially when it comes to moveable construction components such as doors. In this area, our qualified development teams time and again prove their great specialised expertise.



## Highly sophisticated production methods

Hörmann relies on the latest production technology at our specialised factories. Computer-controlled operations ensure dimensionally accurate elements with perfectly fitted fittings and functional parts.



## Matching system appearance



### Secure solutions with international approval

Hörmann provides you with all the doors you need from a single source. With a matching appearance and precisely the functions you require for your project – fire protection in the fire protection classes T30, T60, T90. Smoke protection, acoustic insulation and burglar proofing in the resistance classes WK 2, 3 and 4. Hörmann's expertise in fire-protection is not just restricted to Germany. Several designs correspond to the "British Standard" and are thus also approved for use in large parts of the Commonwealth. Hörmann has also obtained approvals for countries like France, Italy, Austria, Switzerland, Russia, Poland, Hungary and Slovenia. We also have approvals for China, where Hörmann manufactures fire-rated doors for the local market.

Established sales organisations are available within the corresponding countries for planning and implementation. Please contact us if you would like to find out more.



### Fire testing at own fire test chamber

Our new and further developments are constantly tested for the required fire resistance through in-house fire tests at our fire testing centre. The outcomes of these tests ensure high fire protection for buildings. They also allow us to optimally prepare our innovations for the official inspections by the accredited testing centres for official approvals.



### Expert building support

Experienced specialists within our customer-oriented sales organisation support you from the planning stage, through technical clarification up to the final building inspection.

Expert fitting is guaranteed by experienced Hörmann fitters and the specialised trained staff of Hörmann's partners.

# Hörmann construction product door program

The right solution for any requirement





## Function doors

From sturdy steel internal doors and secure apartment entrance doors to fully glazed office doors through to external doors with thermal break, Hörmann offers a large programme with diverse colour and equipment variants.



## Flush-fitting steel fire-rated doors

The most obvious feature of these steel fire-rated doors is the flat, fully bonded door leaf and flush-fitting, elegant and 100 % matching appearance of the T30, T90 and smoke-tight versions.



## Fully glazed fire and smoke protection elements

Hörmann's aluminium and steel fire-rated / smoke-tight doors and glazings will convince you with certified safety, perfect function and a 100 % matching appearance. These products allow Hörmann to provide a uniform fire protection concept for use in architecturally demanding construction projects.



## Visibility window

Hörmann visibility glazings are used as windows or room-high elements to provide more light and better visibility. Visibility glazing is also available for special requirements, i.e. in heat and acoustic insulation or radiation-proof versions, as well as in the fire-retarding F30 and fire-resistant F90 variants. Individual solutions can be implemented using rail divisions and angles.

# Sustainable production for trend-setting construction



	
<b>EPD Multi-function doors</b> Environmental Product Declaration according to DIN ISO 14025 and prEN 15804	
<b>Multi-function doors (company EPD)</b> Hörmann KG Freisen	
	
	
Declaration number EPD-MF-0.1 November 2010	
	

## Sustainability documented and approved by the ift in Rosenheim

Hörmann has already received confirmation of the sustainability of all its multi-function doors through an environmental product declaration (EPD)\* in accordance with ISO 140425 from the Institut für Fenstertechnik (ift – Institute of window technology) in Rosenheim.

The inspection was based on the Product Category Rules (PCR) Doors and Gates from ift Rosenheim GmbH, issue PCR-TT-0.1.

Environmentally-friendly production was confirmed by a life-cycle analysis in accordance with DIN EN 14040 / 14044 for all doors.

## Sustainably produced multi-function doors from Hörmann

- **Environmentally friendly production**  
e.g. solvent-free powder coating at the factory, which can be fully finished on-site with a variety of limited-VOC paints or primers.
- **Regional raw materials**  
The majority of applied raw materials is purchased from Germany and central Europe.
- **Durable, low maintenance products**  
Approved in a functional test with more than 1 million closing cycles.

## Sustainable construction with Hörmann's expertise

Hörmann has already been able to gain great expertise in sustainable construction through various projects. We also apply this know-how to support your projects. Another advantage: For every project order, the required data for LEED certification are automatically generated.



**DGNB**  
Deutsche Gesellschaft für Nachhaltiges Bauen e.V.  
German Sustainable Building Council















Institut Bauen  
und Umwelt e.V.





# Hörmann: Your specialist for standard and special doors

			Functions											
														
Door description	Version	Page	Matching system appearance	T30 fire-retarding	T60 high fire resistance	T90 fire-proof	Smoke-tight	Acoustic-rated	Break-in-resistant, resistance class 2	Break-in-resistant, resistance class 3	Break-in-resistant, resistance class 4	External door	DIN EN 14351-1	ATEX
H3D	Single-leaf	19	■	■			●	●	●					●
H3D	Double-leaf	19	■	■			●	●						●
H3	Single-leaf	20	■	■			●	●	●	●	●	● <sup>1)</sup>		●
H3 G	Single-leaf	20	■	■			●							●
H3	Double-leaf	21	■	■			●	●	●					●
H3 G	Double-leaf	21	■	■			●							●
H3 hatch	Hatch	20	■	■			●	●						●
H6	Single-leaf	23	■		■		●	●	●			● <sup>1)</sup>		●
H6	Double-leaf	23	■		■		●	●	●					●
H6 hatch	Hatch	23	■		■		●	●						●
H16	Single-leaf	24	■			■	●	●	●	●	●	● <sup>1)</sup>		●
H16 G	Single-leaf	24	■			■	●							●
H16	Double-leaf	25	■			■	●	●	●					●
H16 G	Double-leaf	25	■			■	●							●
H16 hatch	Hatch	24	■			■	●	●						●
RS 55	Single-leaf	27	■				■	●						●
RS 55	Double-leaf	27	■				■	●						●
HS 75	Single-leaf	29	■				●	■	●					●
H16 S	Single-leaf	29	■			■	■	■	●					●
E45	Single-leaf	31	■					●	■			●	●	●
E45	Double-leaf	31	■					●	■			●	●	●
E55	Single-leaf	33	■				●	●	■			●	●	●
E65	Single-leaf	35	■				●	●		●	●	●	●	●
E65	Double-leaf	35	■				●	●		●		●	●	●
D45	Single/ double-leaf	37	■					●				●	●	●
D55	Single/ double-leaf	38	■					●				●	●	●
D65	Single/ double-leaf	39	■									●	●	●

■ Main function – as standard

● Additional function – with corresponding equipment (see page 11)

<sup>1)</sup> In approval process

# The Hörmann steel door range: Everything is possible

**T30**

**Fire-retarding**  
DIN 4102/  
DIN EN 1634

**T60**

**High fire resistance**  
DIN 4102/  
DIN EN 1634

**T90**

**Fire-proof**  
DIN 4102/  
DIN EN 1634

**RS**

**Smoke-tight**  
DIN 18095

**dB**

**Acoustic-rated**  
DIN EN ISO 717-1

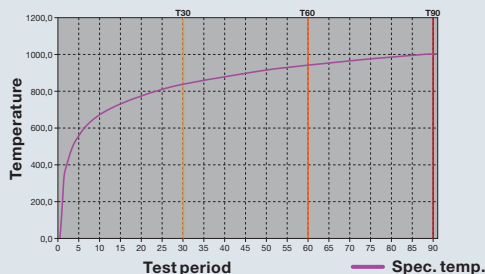
**Acoustic rating category:**  
II up to 41 dB  
III from 42 dB

Fire-retarding steel doors are tested according to DIN 4102-T5 or DIN EN 1634-1 and officially approved. In fire tests, these doors must resist temperatures according to the temperature time curve for at least 30 minutes (T30), 60 minutes (T60) and 90 minutes (T90).

Smoke-tight doors are tested in accordance with DIN 18095 or DIN EN 1634-3 and must be equipped with one of the door seals shown on the right and a door closer. Another requirement is that smoke-tight doors have to be equipped with a profile cylinder (a blind cylinder can also be used). The surface edges of the frame must be permanently sealed to both sides of the building structure. Sealing may not be necessary for plastered frames.

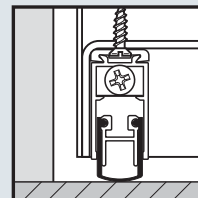
Acoustic-rated doors are tested to DIN EN ISO 717-1. They are supplied with one of the door seals featured to the right. The acoustic value reflects laboratory values. The values do not apply to doors with glazing, fixed top panel and fitting in gas concrete. The calculation formula for the acoustic value attainable on site is: lab value -5 dB. **High-acoustic-rating doors** (HS 75, H16S) can be used to attain acoustic values of up to 61 dB. For this, the doors must be equipped with a threshold rail with seal and 2 retractable bottom seals.

**Temperature / time curve according to DIN 4102 / DIN EN 1634-1**

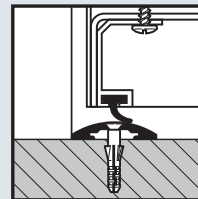


## Door bottom seals

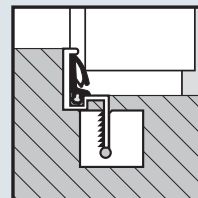
In addition to the use in smoke-tight and acoustic-rated doors, these door bottom seals are also available as special equipment for other door types.



Bottom seal retractable



Aluminium bottom profile with seal, frame with stepped threshold



Threshold rail with seal (only for acoustic-rated doors)

On top of their main function, Hörmann doors offer you additional multiple functions. Depending on their features, they offer acoustic rating and / or break-in resistance – according to your wishes.

**Ordered in correlation with the resistance class**

DIN EN V 1627      DIN EN 1627

**WK 2**

**RC 2**

**WK 3**

**RC 3**

**WK 4**

**RC 4**

**Break-in-resistant according to DIN EN 1627**

The DIN EN 1627ff series of standards for break-in-resistant doors took effect in September 2011. Hörmann break-in-resistant doors have been tested and classified in accordance with the European specifications of the prestandard DIN V ENV 1627 to 1630 since 1999. They are also voluntarily subjected to quality monitoring by an accredited test and certification institute and are recommended by the police.

Equipment	WK 2	WK 3	WK 4
Mortice lock, prepared for profile cylinder, lever / knob, DIN 18250	●		
5-point locking system as a bolt / swing bolt combination		●	
7-point locking system as a bolt / swing bolt combination			●
With double-leaf doors, fixed leaf with secured rebate bolt lock, locking upwards and downwards	●	●	
Alu-FS lever / knob handle set DIN 18257			
- Class ES 1 with short escutcheon and pull-off protection	●		
- Class ES 2 with long escutcheon and pull-off protection		●	
- Class ES 3 with long escutcheon and pull-off protection			●
Profile cylinder DIN 18252, drill-proof on both sides, 3 keys and security certificate	●	●	●
Security bolts per leaf, leverage-proof, double-leaf doors additionally with secured hinge bolts	3 – 5	5 – 7	5 – 7



**ATEX**

**Atmospheric explosion protection** serves to control explosion protection for industry and mining in Europe. According to ATEX 94/9/EC, doors represent a type of equipment that is a potential source of fire. This applies to doors as such, and also applies to all components that can be built into or attached to doors. Hörmann multi-function doors made of steel are certified to ATEX 94/9/EC and can be used in zones 1 and 21 as well as zones 2 and 22.



**External door**

External doors are suitable for installation in outer walls.

Security doors and multi-purpose doors are delivered with a CE mark according to DIN EN 14351-1. Fire-rated doors are subjected to a special approval process.



# Matching looks down to the last detail

Independent of their functions, all doors have a perfectly matched appearance. The result is a harmonious overall look.



## 1 Rebate type

Hörmann multi-function doors are available with a thin rebate (standard) or a thick rebate.



## 2 Surface

Door leaves and frames are galvanized and powder-coated in Grey white (similar to RAL 9002). Optionally available in RAL to choose. Fitting with a DryFix frame or double-shell profile frame is recommended.



## 3 Lock

Hörmann steel doors are equipped as standard with a lever / knob mortice lock and prepared for a profile cylinder in accordance with DIN 18250. Break-in resistant doors rated WK 3 and higher are fitted with a multiple locking system. With double-leaf doors, the fixed leaf is secured with a rebate latch or rebate locking bolt at the top and bottom depending on the function.

## 4 Lever handle set

Hörmann steel doors are equipped as standard with an FS round lever handle set according to DIN 18273 in black (polypropylene), with a short escutcheon, a securely fitted knob and a deadlock insert with a key. Break-in resistant doors are supplied with an FS security lever / knob handle set according to DIN 18257, class ES 1 (with short escutcheon) or ES 2 / ES 3 (with long escutcheon).



**5 Closing devices**



Fire-rated and smoke-tight doors close automatically as standard. With single-leaf doors, a spring hinge closes the door. Depending on the size, features, use or fitting style, the factory can also supply you with single-leaf doors with the exclusive slide rail door closer HDC 35 and double-leaf doors with linkage door closers and door leaf selector. Please refer to page 45 for other locking systems.



Exclusive slide rail door closer HDC 35  
For single-leaf doors (also for double-leaf doors on request).



Linkage door closer for double-leaf doors.

**6 Hinges**



Hörmann multi-function doors are supplied with heavy-duty ball-bearing hinge sets. Depending on the size of the door, each door leaf is fitted with 2 or 3 sets of hinges. Stainless steel hinge sets can also be supplied if you wish for sophisticated looks (not for resistance class WK 4).

**Optional 3-D hinges**

3-D hinges are especially suited for the fine-tuning and subsequent adjustment of the door. You can balance out minor fitting tolerances. Available galvanized, powder-coated or in stainless steel.



Standard hinge      3-D hinge galvanized and primed      3-D stainless steel hinge

**7 Security bolts**

On fire-rated and smoke-tight doors, steel security bolts on the hinge side provide additional stability in the case of a fire. Break-in-resistant door models to DIN EN 1627 are secured on the hinge side against being levered open by up to 7 solid steel security bolts per door leaf, depending on the resistance class.



Security bolts

# Frame system

Flexible, versatile and quickly fitted

The Hörmann frame system guarantees a stable wall connection for optimal and long-lasting door functionality.

## Advantages at a glance:

- Sheet thickness 2 mm
- Floor recess 30 mm\*
- Moulded sealing groove
- As standard galvanized and with powder-coated primer in Grey white (similar to RAL 9002)
- Optional in RAL to choose
- Simple and fast fitting via diagonal fixing or fixing brackets including steel spacers

## Flexible fitting

In addition to the standard corner frame, other frame variations are available for the most diverse fitting variants.

## Advance delivery

To allow flexible fitting, we can also deliver the frames for high-quality construction project doors including 3-D hinges in advance. This gives you more freedom in planning the fitting.

- The frames, as well as the 3-D hinges, can already be fitted during construction.
- The door leaf is fitted after construction, helping to avoid damage and soiling.



## Edge guard

All doors that are not provided with lock plates provided at the factory are equipped with an edge guard made of high-quality plastic as standard. This effectively protects the priming or the on-site coating. In addition, the door closes more quietly.

Edge guard as standard



## Flush-fitting cover caps

In frames that are fitted in the reveal, flush-fitting cover caps ensure the nice appearance of the frame. They can be painted over and thus completely hidden.

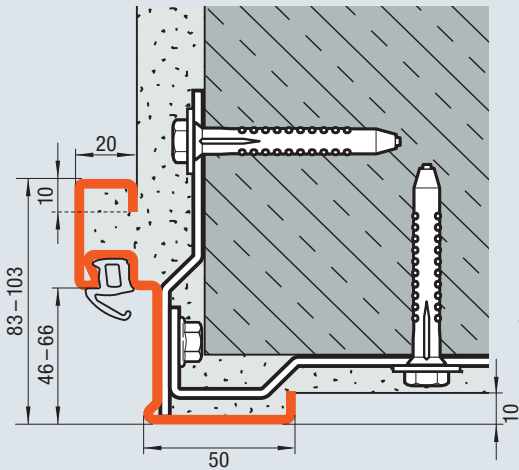
Flush-fitting cover caps

Flush-fitting cover caps for fastening holes (1), unpainted (2), painted (3) and levelled out and painted (4).

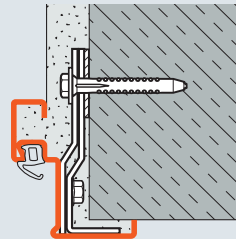
\*DryFix and dry construction frames for finished floor

### Corner frame

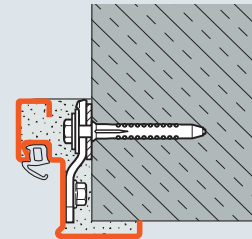
The standard frame, optionally with diagonal fixing



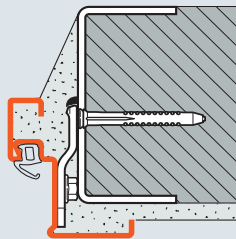
Plug-and-screw fitting (Brickwork / concrete)



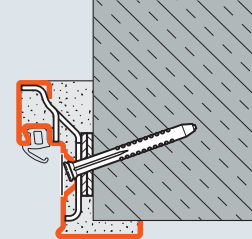
Plug-and-screw fitting in the reveal (Brickwork / concrete)



Concealed plug-and-screw fitting (Unplastered brickwork / concrete)



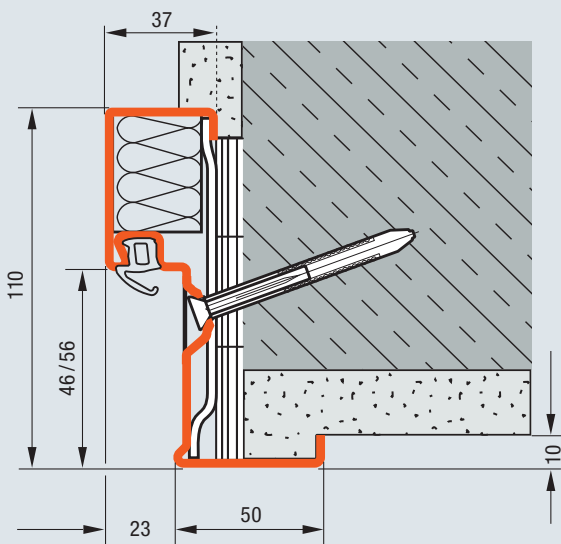
Fitting by welding (Gas concrete)



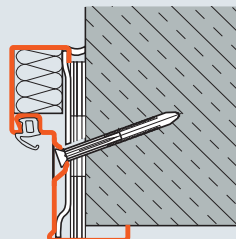
Diagonal fixing (Brickwork / unplastered brickwork / concrete)

### DryFix frame

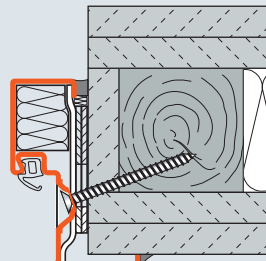
Ex factory already fully prepared for simple and fast fitting



Diagonal fixing (Brickwork)



Diagonal fixing (Unplastered brickwork / concrete)



Diagonal fixing (F90 B timber partition walls)

### Easy, fast fitting



Place the frame in the opening and align it



Tighten frame



Seal the connection gap and cover up the fastening holes

The Hörmann DryFix frame is fully prepared at the factory and already backfilled with mineral wool. **This saves up to 50 % of the required fitting time at the construction site.** Dry fitting also reduces the risk of soiling or damaging the frame or brickwork.

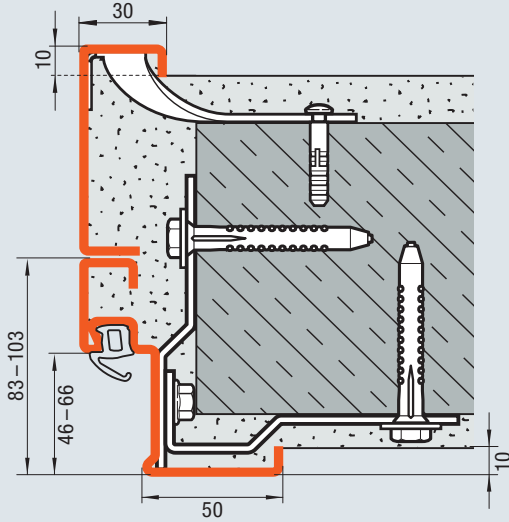
The diagonal fixing facilitates fitting and is concealed in the frame rebate. It is also easy to retrofit.

# Frame system

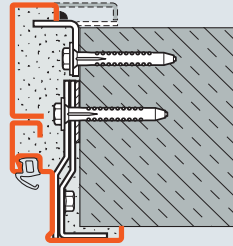
Flexible, versatile and quickly fitted

## Corner and counter frame

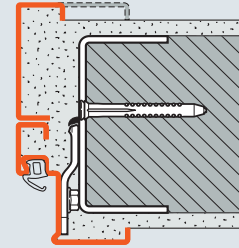
For great flexibility during fitting



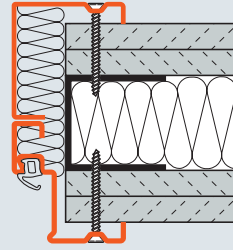
Plug-and-screw fitting (Brickwork / concrete)



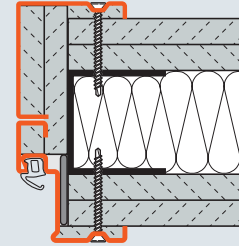
Concealed plug-and-screw fitting (Unplastered brickwork / concrete)



Fitting by welding (Gas concrete)



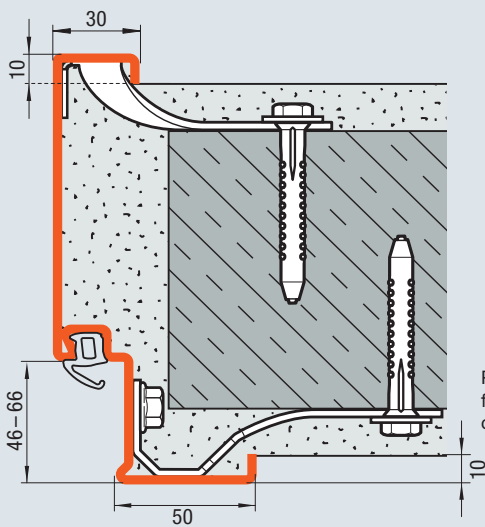
Screw fixing (T30 partition walls)



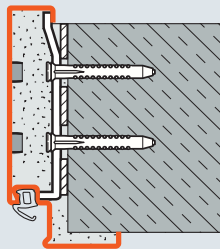
Screw fixing (T90 partition walls)

## Profile frame

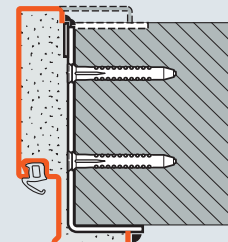
In various versions, depending on the fitting situation



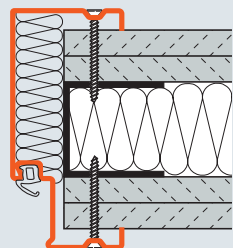
Plug-and-screw fitting (Brickwork / concrete)



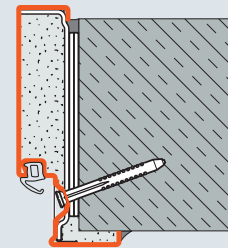
Plug-and-screw fitting through the frame reveal (Unplastered brickwork / concrete)



Fitting by welding (Gas concrete / unplastered brickwork)



Screw fixing (T30 partition wall, T90 partition wall not shown)



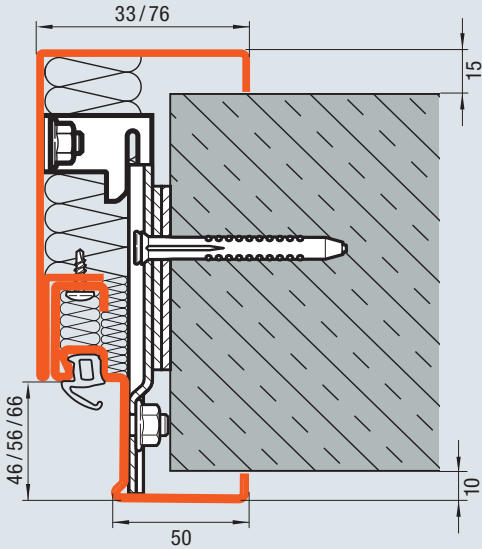
Diagonal fixing (Brickwork)

All dimensions in mm

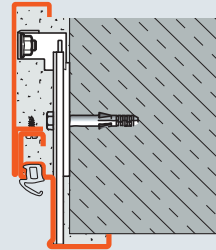


## Double-shell profile frame

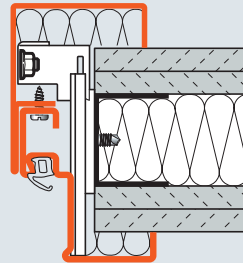
For brickwork and partition walls



Concealed plug-and-screw fitting with mineral wool backfill (Brickwork / unplastered brickwork / concrete)



Concealed plug-and-screw fitting with mortar backfill (Brickwork / unplastered brickwork / concrete)



Concealed plug-and-screw fitting with mineral wool backfill (Partition wall) F90-A and F90-B (shown: F90-A)

The double-shell frame system is particularly suited for subsequent fitting. It is fastened with screws concealed in the frame rebate. With a depth of 76 mm opposite the hinge side, the frame can be

filled with mineral wool on-site. You can optionally receive suitably shaped parts from the factory.

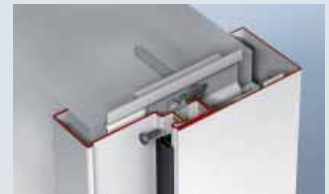
## Concealed fitting



Place profile 1 of the frame in the opening and align it



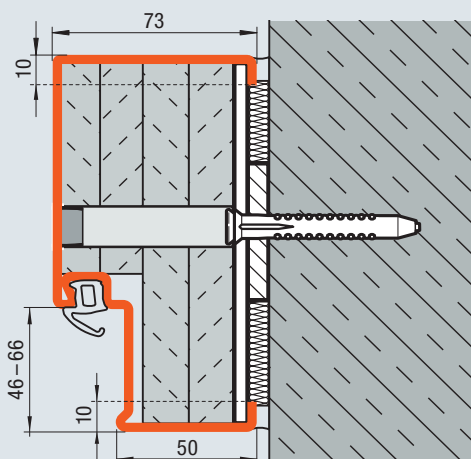
Fix profile 1 with the grouting lug



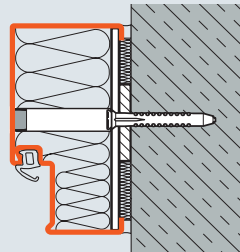
Screw profile 2 of the frame to profile 1 through the sealing groove and cover with the door sealing

## Block frame

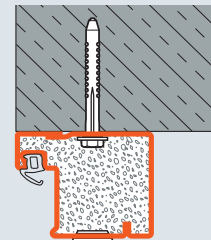
With flush-fitting cover caps as standard



Concealed plug-and-screw fitting (Brickwork / concrete)



Concealed plug-and-screw fitting in the opening (Brickwork / concrete)



Concealed plug-and-screw fitting in front of the wall (Brickwork / max. T30 doors)

All dimensions in mm

**Europapassage, Hamburg, Germany**  
**Architect: Bothe Richter Teherani, Hamburg**



**Hörmann products**

- T30 steel hollow profiled section doors HE310 and HE320
- T90 aluminium hollow profiled section doors HE911
- F30 steel fixed glazings HE330
- Steel smoke-tight doors S / RS-100 and S / RS-200
- G30 fixed glazings S / G300
- T90 steel fire-rated doors H16
- T30 steel fire-rated doors H3 and H3D
- Steel doors D45

# T30 fire-rated door

## H3D

### Single and double-leaf



**Thin rebate**  
Door leaf thickness  
45 mm



**Main function**  
Fire-retarding



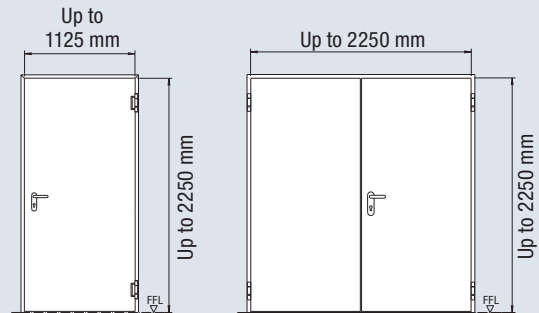
**Additional functions**  
(with corresponding equipment, see pages 10-11)



**Acoustic-rated**  
Acoustic values from 37 – 44 dB



**Break-in-resistant**  
H3 D-1



Fire-rated door	H3 D-1	H3 D-2
<b>Door leaf</b>	45 mm	45 mm
<b>Sheet thickness</b>	1.0 mm	1.0 mm
<b>Rebate type</b>	Thin rebate	Thin rebate
<b>Fitting in</b>		
Brickwork	≥ 115 mm	≥ 115 mm
Concrete	≥ 100 mm	≥ 100 mm
Gas concrete blocks	≥ 150 mm	≥ 175 mm
Gas concrete slabs	≥ 150 mm	≥ 175 mm
Partition walls	≥ 95 mm	≥ 95 mm
Size and function-dependent requirements for walls see page 50		
<b>Additional functions / performance characteristics</b>		
<b>Thermal insulation <math>U_D</math></b>	1.9 W/(m <sup>2</sup> ·K)*	2.0 W/(m <sup>2</sup> ·K)*
<b>Acoustic rating category</b>	<b>II</b>	<b>III</b>
With bottom profile with seal	41 dB	-
With retractable bottom seal	37 dB	-
With threshold rail with seal	-	44 dB

#### Optional Extras

Glazings	Page 40
Fixed top panels	Page 42
Special equipment	Page 44
Door sizing	Page 46

Size range	H3 D-1		H3 D-2	
	Width	Height	Width	Height
<b>Nominal size (ordering size)</b>	625 – 1125	1750 – 2250	1375 – 2250	1750 – 2250
Traffic leaf width			750 – 1125	
Fixed leaf width			500 – 1125	

All dimensions in mm

# T30 fire-rated door H3

Single-leaf



#### Thin rebate

Door leaf thickness  
55 / 65 mm



#### Thick rebate

Door leaf thickness  
55 mm

#### Main function

Fire-retarding

T30

#### Additional functions

(with corresponding equipment, see pages 10-11)

RS

#### Smoke-tight

dB

#### Acoustic-rated

Acoustic values from 38-46 dB

WK 2

#### Break-in-resistant

Up to  
1250 x 2500 mm

WK 3

Up to 1250 x 2500 mm,  
thick rebate, door leaf  
thickness 65 mm

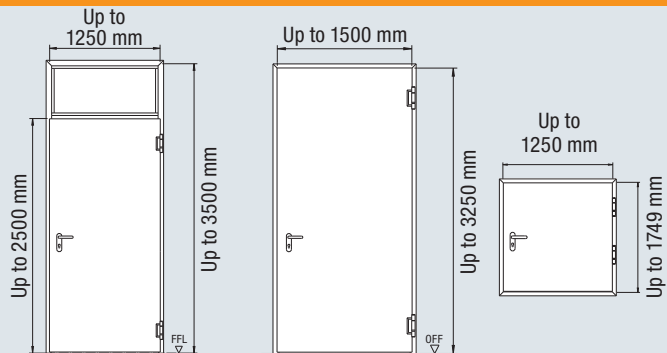
WK 4

Up to 1250 x 2500 mm,  
sheet thickness  
1.5 mm, thick rebate,  
door leaf thickness  
65 mm



#### External door

H3-1  
(in approval process)



Fire-rated door / fire hatch	H3-1	H3 G-1	H3 hatch
<b>Door leaf</b>	55 mm	65 mm	55 mm
<b>Sheet thickness</b>	1.0 / 1.5 mm	1.5 mm	1.0 mm
<b>Rebate type</b>	Thin / thick rebate	Thin rebate	Thin rebate

#### Fitting in

Brickwork	≥ 115 mm	≥ 240 mm	≥ 115 mm
Concrete	≥ 100 mm	≥ 140 mm	≥ 100 mm
Gas concrete blocks	≥ 150 mm	≥ 175 mm	≥ 150 mm
Gas concrete slabs	≥ 150 mm	≥ 175 mm	≥ 150 mm
Partition walls	≥ 95 mm	≥ 95 mm	≥ 95 mm

Size and function-dependent requirements for walls see page 50

#### Additional functions / performance characteristics

<b>Thermal insulation <math>U_D</math></b>	1.9 W/(m <sup>2</sup> ·K)*	2.0 W/(m <sup>2</sup> ·K)*	1.9 W/(m <sup>2</sup> ·K)*
<b>Acoustic rating category</b>	II	III	
With bottom profile with seal	41 dB	44 dB	-
With retractable bottom seal	38 dB	42 dB	-
With threshold rail with seal	-	46 dB	-
With all-round frame on 4 sides	-	46 dB	-

Size range	H3-1		H3 G-1	
	Width	Height	Width	Height
<b>Nominal size (ordering size)</b>	625 – 1250	1750 – 2500	875 – 1500	2000 – 3250
<b>With fixed top panel</b>		– 3500		

Size range	H3 hatch	
	Width	Height
<b>Nominal size (ordering size)</b>	500 – 999	500 – 1749
	1000 – 1124	625 – 1749
	1125 – 1250	750 – 1749

All dimensions in mm

#### Optional Extras

Glazings	Page 40
Fixed top panels	Page 42
Special equipment	Page 44
Door sizing	Page 46

# T30 fire-rated door

## H3

### Double-leaf



#### Thin rebate

Door leaf thickness  
55 mm



#### Thick rebate

Door leaf thickness  
55 mm

#### Main function

Fire-retarding



#### Additional functions

(with corresponding equipment, see pages 10-11)



#### Smoke-tight



#### Acoustic-rated

Acoustic values from 38-42 dB



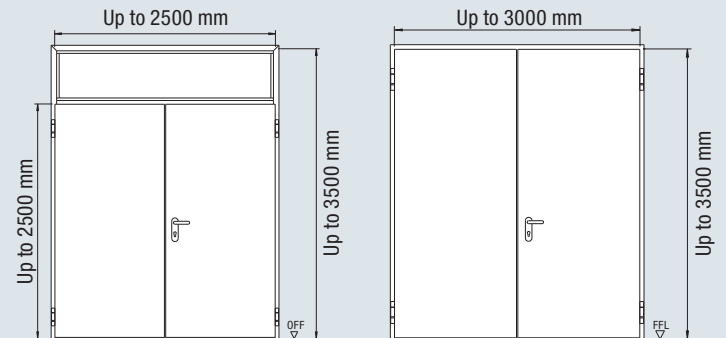
#### Break-in-resistant

Up to 2500 × 2500 mm



#### Up to

2500 × 2500 mm, sheet thickness 1.5 mm



Fire-rated door	H3-2	H3 G-2
<b>Door leaf</b>	55 mm	55 mm
<b>Sheet thickness</b>	1.0 / 1.5 mm	1.5 mm
<b>Rebate type</b>	Thin / thick rebate	Thin rebate
<b>Fitting in</b>		
Brickwork	≥ 115 mm	≥ 175 mm
Concrete	≥ 100 mm	≥ 140 mm
Gas concrete blocks	≥ 175 mm	≥ 175 mm
Gas concrete slabs	≥ 175 mm	≥ 175 mm
Partition walls	≥ 95 mm	-
Size and function-dependent requirements for walls see page 50		
<b>Additional functions / performance characteristics</b>		
<b>Thermal insulation <math>U_D</math></b>	2.0 W/(m <sup>2</sup> ·K)*	2.0 W/(m <sup>2</sup> ·K)*
<b>Acoustic rating category</b>	<b>II</b>	<b>III</b>
With bottom profile with seal	40 dB	-
With retractable bottom seal	38 dB	-
With threshold rail with seal	-	42 dB

#### Optional Extras

Glazings	Page 40
Fixed top panels	Page 42
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Size range	H3-2		H3 G-2	
	Width	Height	Width	Height
<b>Nominal size (ordering size)</b>	1375 – 2500	1750 – 2500	1500 – 3000	2000 – 3500
<b>With fixed top panel</b>		– 3500		
Traffic leaf width	750 – 1250		1000 – 1500	
Fixed leaf width	500 – 1250		500 – 1500	

All dimensions in mm

## Tower 185, Frankfurt

Architect: Christoph Mäckler Architekten, Frankfurt am Main



Pre-certified by

**DGNB**

Deutsche Gesellschaft für Nachhaltiges Bauen e.V.  
German Sustainable Building Council



### Hörmann products

- T30 steel fire-rated doors H3
- T90 steel fire-rated doors H16
- Steel smoke-tight doors RS 55
- Multi-purpose doors D65
- Multi-purpose doors D55
- T30 fire rated doors STS / STU



# T60 fire-rated door

## H6

### Single and double-leaf



**Thin rebate**  
Door leaf thickness  
65 mm



**Thick rebate**  
Door leaf thickness  
65 mm

#### Main function

**High fire resistance**



#### Additional functions

(with corresponding equipment, see pages 10-11)



#### Smoke-tight



#### Acoustic-rated

Acoustic values from 37-45 dB



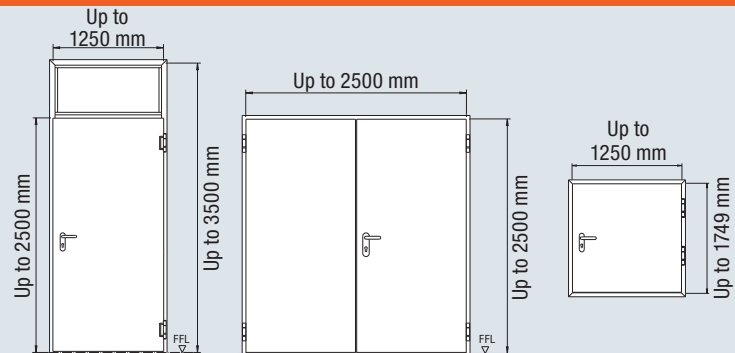
#### Break-in-resistant

Up to 2500 x 2500 mm



#### External door

H6-1 (in approval process)



Fire-rated door / fire hatch	H6-1	H6-2	H6 hatch
<b>Door leaf</b>	65 mm	65 mm	65 mm
<b>Sheet thickness</b>	1.0 / 1.5 mm	1.0 / 1.5 mm	1.0 mm
<b>Rebate type</b>	Thin / thick rebate	Thin rebate	Thin rebate

Fitting in	H6-1	H6-2	H6 hatch
Brickwork	≥ 175 mm	≥ 175 mm	≥ 115 mm
Concrete	≥ 140 mm	≥ 140 mm	≥ 100 mm*
Gas concrete blocks	≥ 200 mm	≥ 200 mm	≥ 175 mm*
Gas concrete slabs	≥ 200 mm	≥ 200 mm	≥ 175 mm*
Partition walls	≥ 100 mm	≥ 100 mm	≥ 100 mm*

Size and function-dependent requirements for walls see page 50

\*for BRB ≥ 625 mm or BRH ≥ 750 mm (for other doors, values are the same as for door H6-1)

#### Additional functions / performance characteristics

Thermal insulation $U_D$	1.8 W/(m <sup>2</sup> ·K)	1.8 W/(m <sup>2</sup> ·K)	1.8 W/(m <sup>2</sup> ·K)		
Acoustic rating category	II	III	II	III	-
With bottom profile with seal	40 dB	-	-	42 dB	-
With retractable bottom seal	38 dB	-	37 dB	-	-
With threshold rail with seal	-	43 dB	-	45 dB	-
With all-round frame on 4 sides	-	43 dB	-	-	-

Size range	H6-1		H6-2	
	Width	Height	Width	Height
<b>Nominal size (ordering size)</b>	625 – 1250	1750 – 2500	1375 – 2500	1750 – 2500
<b>With fixed top panel</b>		- 3500		- 3500
Traffic leaf width			750 – 1250	
Fixed leaf width			500 – 1250	

Size range	H6 hatch	
	Width	Height
<b>Nominal size (ordering size)</b>	500 – 999	500 – 1749
	1000 – 1124	625 – 1749
	1125 – 1250	750 – 1749

All dimensions in mm

#### Optional Extras

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Fixed top panels	Page 42
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# T90 fire-rated door

## H16

### Single-leaf



#### Thin rebate

Door leaf thickness  
65 mm



#### Thick rebate

Door leaf thickness  
65 mm

#### Main function

Fire-proof

T90

#### Additional functions

(with corresponding equipment, see pages 10-11)

RS

#### Smoke-tight

dB

#### Acoustic-rated

##### H16-1:

acoustic values from 38 – 43 dB

WK 2

#### Break-in-resistant

Up to 1250 × 2500 mm

WK 3

Up to 1250 × 2250 mm, sheet thickness 1.5 mm

WK 4

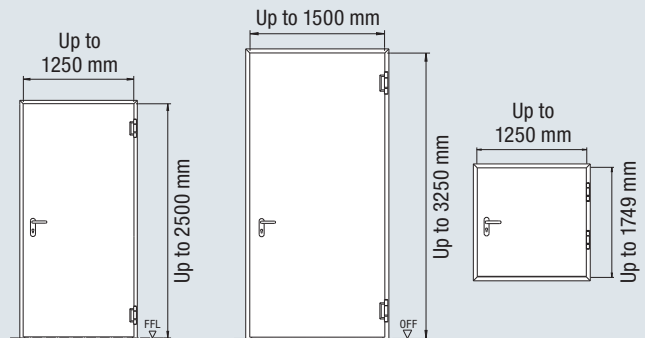
Up to 1250 × 2250 mm, sheet thickness 1.5 mm



#### External door

H16-1

(in approval process)



Fire-rated door / fire hatch	H16-1	H16 G-1	H16 hatch
<b>Door leaf</b>	65 mm	65 mm	65 mm
<b>Sheet thickness</b>	1.0 / 1.5 mm	1.5 mm	1.0 mm
<b>Rebate type</b>	Thin / thick rebate	Thin rebate	Thin rebate

Fitting in	H16-1	H16 G-1	H16 hatch
Brickwork	≥ 175 mm	≥ 240 mm	≥ 115 mm
Concrete	≥ 140 mm	≥ 140 mm	≥ 100 mm*
Gas concrete blocks	≥ 200 mm	≥ 200 mm	≥ 175 mm*
Gas concrete slabs	≥ 200 mm	≥ 200 mm	≥ 175 mm*
Partition walls	≥ 125 mm		≥ 125 mm*

Size and function-dependent requirements for walls see page 50

\*for BRB ≥ 625 mm or BRH ≥ 750 mm (for other doors, values are the same as for door H16-1)

Additional functions / performance characteristics	H16-1		H16 G-1	
	II	III		
<b>Thermal insulation <math>U_p</math></b>	1.8 W/(m <sup>2</sup> ·K)		1.8 W/(m <sup>2</sup> ·K)	
<b>Acoustic rating category</b>				
With bottom profile with seal	40 dB	-	-	-
With retractable bottom seal	38 dB	-	-	-
With threshold rail with seal	-	43 dB	-	-
With all-round frame on 4 sides	-	43 dB	-	-

Size range	H16-1		H16 G-1	
	Width	Height	Width	Height
<b>Nominal size (ordering size)</b>	625 – 1250	1750 – 2500	875 – 1500	2000 – 3250

Size range	H16 hatch	
	Width	Height
<b>Nominal size (ordering size)</b>	625 – 1250	750 – 1749

All dimensions in mm

#### Optional Extras

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Door sizing	Page 46



# T90 fire-rated door

## H16

### Double-leaf



**Thin rebate**  
Door leaf thickness  
65 / 78 mm



**Main function**  
Fire-proof



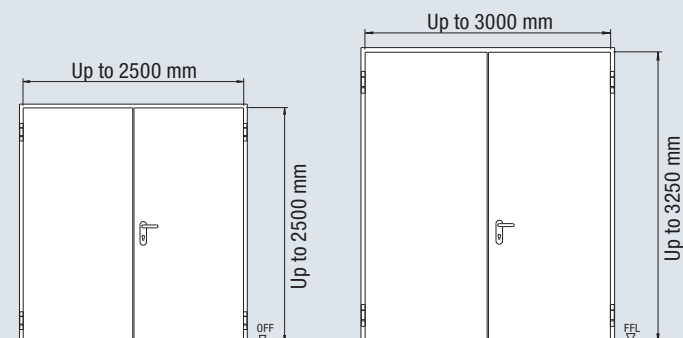
**Additional functions**  
(with corresponding equipment, see pages 10-11)



**Acoustic-rated H16-2:**  
acoustic values from 37 – 45 dB



**Break-in-resistant H16-2**



Fire-rated door	H16-2	H16 G-2	
<b>Door leaf</b>	65 mm	78 mm	
<b>Sheet thickness</b>	1.0 / 1.5 mm	1.5 mm	
<b>Rebate type</b>	Thin rebate	Thin rebate	
<b>Fitting in</b>			
Brickwork	≥ 175 mm	≥ 240 mm	
Concrete	≥ 140 mm	≥ 140 mm	
Gas concrete blocks	≥ 200 mm	≥ 200 mm	
Gas concrete slabs	≥ 200 mm	≥ 200 mm	
Partition walls	≥ 125 mm		
Size and function-dependent requirements for walls see page 50			
<b>Additional functions / performance characteristics</b>			
<b>Thermal insulation <math>U_D</math></b>	1.7 W/(m <sup>2</sup> ·K)	-	
<b>Acoustic rating category</b>	<b>II</b>	<b>III</b>	
With bottom profile with seal	-	42 dB	-
With retractable bottom seal	37 dB	-	-
With threshold rail with seal	-	45 dB	-

#### Optional Extras

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Fixed top panels	Page 42
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Size range	H16-2		H16 G-2	
	Width	Height	Width	Height
<b>Nominal size (ordering size)</b>	1375 – 2500	1750 – 2500	1500 – 3000	2000 – 3250
Traffic leaf width	750 – 1250		1000 – 1500	
Fixed leaf width	500 – 1250		500 – 1500	

All dimensions in mm

Office building at Rödingsmarkt, Hamburg  
Architect: Bothe Richter Teherani, Hamburg



**Hörmann products**

- T30 steel fire-rated doors H3
- T90 steel fire-rated doors H16
- T30 steel fire-rated doors STS
- T30 aluminium fire-rated doors HE 311

# Smoke-tight door RS 55

Single and double-leaf



**Thin rebate**  
Door leaf thickness  
55 mm



**Thick rebate**  
Door leaf thickness  
55 mm

## Main function



**Smoke-tight**  
With bottom door  
seal type 1 or 2

## Additional function

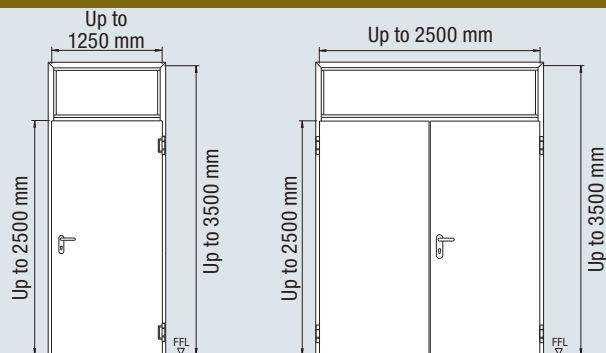
(with corresponding  
equipment,  
see pages 10-11)



**Acoustic-rated**  
Acoustic values  
from 38-41 dB



**External door**  
RS 55-1  
Labelled according  
to DIN EN 14351-1



## Smoke-tight door

	RS 55-1	RS 55-2
<b>Door leaf</b>	55 mm	55 mm
<b>Sheet thickness</b>	1.0 / 1.5 mm	1.0 / 1.5 mm
<b>Rebate type</b>	Thin / thick rebate	Thin / thick rebate

## Fitting in

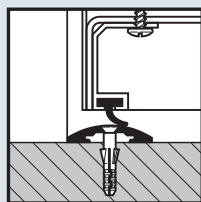
Brickwork	≥ 115 mm	≥ 115 mm
Concrete	≥ 100 mm	≥ 100 mm
Gas concrete blocks	≥ 150 mm	≥ 175 mm
Gas concrete slabs	≥ 150 mm	≥ 150 mm
Partition walls	≥ 100 mm	≥ 100 mm

Size and function-dependent requirements for walls see page 50

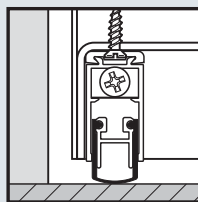
## Additional functions / performance characteristics

<b>Thermal insulation <math>U_D</math></b>	1.9 W/(m <sup>2</sup> ·K)*	2.0 W/(m <sup>2</sup> ·K)*
<b>Acoustic rating category</b>	II	II
With bottom profile with seal	41 dB	40 dB
With retractable bottom seal	38 dB	38 dB

## Door bottom seals



**Type 1**  
Aluminium bottom  
profile with seal,  
frame with stepped  
threshold



**Type 2**  
Retractable bottom  
seal

## Optional Extras

Glazings	Page 40
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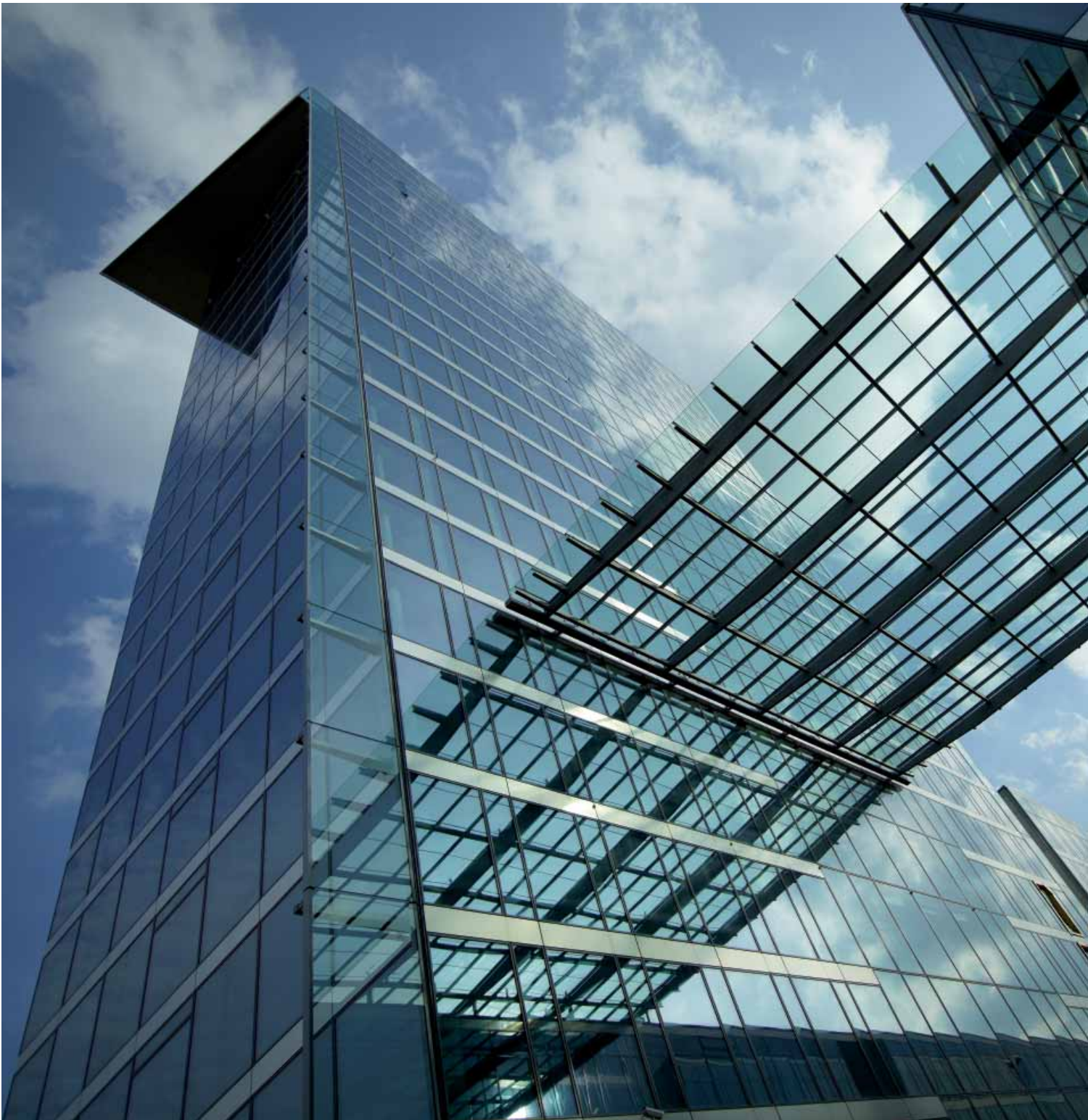
Size range	RS 55-1		RS 55-2	
	Width	Height	Width	Height
<b>Nominal size (ordering size)</b>	625 – 1250	1750 – 2500	1375 – 2500	1750 – 2500
<b>With fixed top panel</b>		– 3500		– 3500
Traffic leaf width			750 – 1250	
Fixed leaf width			500 – 1250	

All dimensions in mm

**Skyline-Tower, Munich**  
**Architects: Murphy / Jahn, Chicago – Berlin**



**Certified by**  
**DGNB®**  
Deutsche Gesellschaft für Nachhaltiges Bauen e.V.  
German Sustainable Building Council



**Hörmann products**

- T30 steel fire-rated doors H3
- T90 steel fire-rated doors H16
- Acoustic insulation door D55
- T30 aluminium fire-rated doors H320

# Acoustic insulation door HS 75 / H16 S

Single-leaf



High acoustic rating  
up to 61 dB



**Thick rebate**  
Door leaf thickness  
75 mm



**Main function**  
**High acoustic rating**  
Acoustic values  
from 50-61 dB



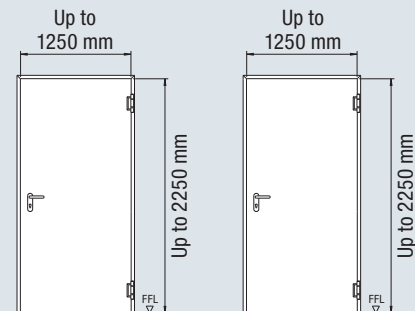
**Fire-proof**  
**H16 S**



**Smoke-tight**

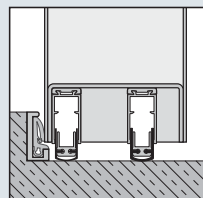


**Break-in-resistant**

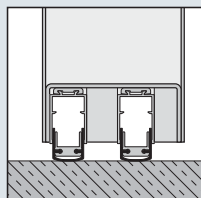


Acoustic insulation door	HS 75-1	H16 S-1
<b>Door leaf</b>	75 mm	75 mm
<b>Sheet thickness</b>	1.0 mm	1.0 mm
<b>Rebate type</b>	Thick rebate	Thick rebate
<b>Fitting in</b>		
Brickwork	≥ 115 mm	≥ 240 mm
Concrete	≥ 100 mm	≥ 140 mm
Size and function-dependent requirements for walls see page 50		
<b>Additional functions / performance characteristics</b>		
<b>Thermal insulation U<sub>D</sub></b>	2.1 W/(m <sup>2</sup> ·K)	2.1 W/(m <sup>2</sup> ·K)
<b>Acoustic rating category</b>	<b>IV</b>	<b>IV</b>
With threshold rail with seal and 2 retractable bottom seals	53 dB	53 dB
With 2 retractable bottom seals	50 dB	50 dB
With threshold rail with seal	51 dB	51 dB
<b>For high requirements</b>		
With 2 retractable bottom seals	59 dB	59 dB
2 aluminium bottom profiles with seal and stepped threshold	59 dB	59 dB
With threshold rail with seal	61 dB	61 dB

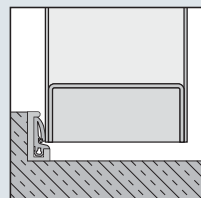
## Door bottom seals



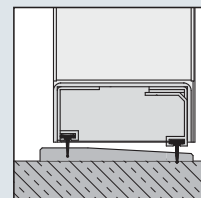
Threshold rail with seal and 2 retractable bottom seals



2 retractable bottom seals



Threshold rail with seal



Stepped threshold with seal

## Optional Extras

Glazings	Page 40
Fixed top panels	Page 42
Special equipment	Page 44
Door sizing	Page 46

Size range	HS 75-1		H16 S-1	
	Width	Height	Width	Height
<b>Nominal size (ordering size)</b>	625 – 1250	1750 – 2250	625 – 1250	1750 – 2250

All dimensions in mm

**Bauhaus University, Weimar, Germany**  
**Architect: meck architekten**



**Hörmann products**

- T30 steel fire-rated doors H3 and H3D
- T90 steel fire-rated doors H16
- Steel doors D45



# Security door E45

Single and double-leaf

T30 fire-retarding as H3 D-1

See page 19



**Thin rebate**  
Door leaf thickness  
45 mm



**Main function**  
Break-in-resistant



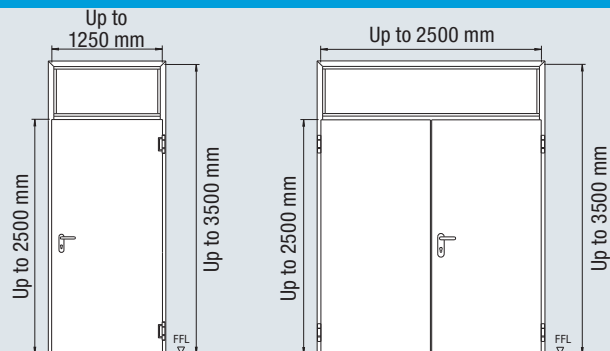
**Additional function**  
(with corresponding equipment, see pages 10-11)



**Acoustic-rated**  
Acoustic values from 37 – 44 dB



**External door**  
Labelled according to DIN EN 14351-1



Security door	E45-1	E45-2
<b>Door leaf</b>	45 mm	45 mm
<b>Sheet thickness</b>	1.0 / 1.5 mm	1.5 mm
<b>Rebate type</b>	Thin rebate	Thin rebate
<b>Fitting in</b>		
Brickwork	≥ 115 mm	≥ 115 mm
Concrete	≥ 100 mm	≥ 100 mm
Gas concrete blocks	≥ 150 mm	≥ 175 mm
Gas concrete slabs	≥ 150 mm	≥ 150 mm
Size and function-dependent requirements for walls see page 50		
<b>Additional functions / performance characteristics</b>		
<b>Thermal insulation <math>U_D</math></b>	1.9 W/(m <sup>2</sup> ·K)*	2.0 W/(m <sup>2</sup> ·K)*
<b>Acoustic rating category</b>	<b>II</b>	<b>III</b>
With bottom profile with seal	41 dB	-
With retractable bottom seal	37 dB	-
With threshold rail with seal	-	44 dB
<b>Wind load</b>	Class C4 – C5	Class C2
<b>Driving rain leaktightness</b>	Class 1A – 7A	Class 2A
<b>Air permeability</b>	Class 2 – 4	Class 2
<b>Operating forces</b>	Class 2 – 4	
<b>Mechanical strength</b>	Class 4	
<b>Differential climate behaviour</b>	Class 2(d) – 3(e)	Class 1

The listed values depend on the door features and fitting situation

## Optional Extras

Glazings	Page 40
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Door sizing	Page 46

Size range	E45-1		E45-2	
	Width	Height	Width	Height
<b>Nominal size (ordering size)</b>	625 – 1250	1750 – 2500	1375 – 2500	1750 – 2500
<b>With fixed top panel</b>		– 3500		– 3500
Traffic leaf width			750 – 1250	
Fixed leaf width			500 – 1250	

All dimensions in mm

**Unilever building, Hamburg, Germany**  
**Architect: Behnisch Architekten, Stuttgart**



**Certified by**  
**DGNB®**  
Deutsche Gesellschaft für Nachhaltiges Bauen e.V.  
German Sustainable Building Council



**Hörmann products**

- T30 aluminium hollow profiled section doors HE 311
- Aluminium smoke-tight doors A / RS-150
- T30 steel fire-rated doors H3
- Steel doors D55



# Security door E55

Single-leaf



T30 fire-retarding as H3

See pages 20 / 21



**Thick rebate**  
Door leaf thickness  
55 mm



**Main function**  
**Break-in-resistant**  
WK 2

**Additional function**  
(with corresponding equipment, see pages 10-11)



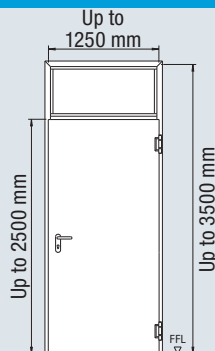
**Smoke-tight**



**Acoustic-rated**  
Acoustic values from 38-45 dB



**External door**  
Labelled according to DIN EN 14351-1



Security door	E55-1
<b>Door leaf</b>	55 mm
<b>Sheet thickness</b>	1.0 / 1.5 mm
<b>Rebate type</b>	Thick rebate

Fitting in	
Brickwork	≥ 115 mm
Concrete	≥ 100 mm
Gas concrete blocks	≥ 150 mm
Gas concrete slabs	≥ 150 mm

Size and function-dependent requirements for walls see page 50

#### Additional functions / performance characteristics

<b>Thermal insulation <math>U_D</math></b>	1.9 W/(m <sup>2</sup> ·K)*	
<b>Acoustic rating category</b>	<b>II</b>	<b>III</b>
With bottom profile with seal	41 dB	-
With retractable bottom seal	38 dB	-
With threshold rail with seal	-	45 dB

<b>Wind load</b>	Class C5
<b>Driving rain leaktightness</b>	Class 1A – 7A
<b>Air permeability</b>	Class 3 – 4
<b>Operating forces</b>	Class 2 – 4
<b>Mechanical strength</b>	Class 4
<b>Differential climate behaviour</b>	Class 2(d) – 3(e)

The listed values depend on the door features and fitting situation

#### Optional Extras

Glazings	Page 40
Fixed top panels	Page 42
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Size range	E55-1	
	Width	Height
<b>Nominal size (ordering size)</b>	625 – 1250	1750 – 2500
<b>With fixed top panel</b>		– 3500
Traffic leaf width		
Fixed leaf width		

All dimensions in mm

## BMW Welt, Munich

Architects: Coop Himmelb(l)au, Vienna



### Hörmann products

BMW Welt:

- High-acoustic-rating doors HS 75-1

BMW high rise:

- T30 steel fire-rated doors H3 D-1 and H3 D-2
- T90 steel fire-rated doors H16-1 and T90 steel fire hatches H16
- T30 security doors H3-1 / WK 4
- Steel doors D45-1 and D45-2
- Fire sliding doors
- Industrial sectional doors

# Security door E65

Single and double-leaf

**T30 fire-retarding as H3**

See pages 20 / 21



**Thick rebate**  
Door leaf thickness  
65 mm



**Main function**  
**Break-in-resistant**  
**WK 3**



**WK 4**  
E65-1

**Additional functions**  
(with corresponding equipment, see pages 10-11)



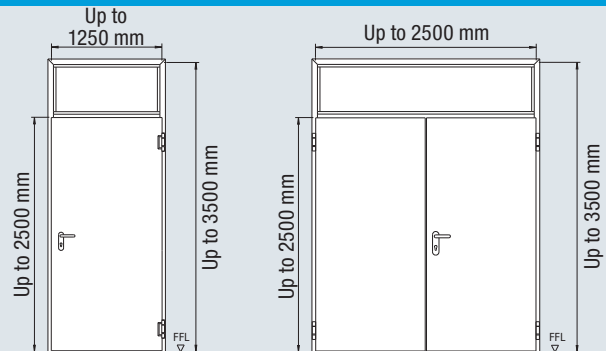
**Smoke-tight**



**Acoustic-rated**  
Acoustic values  
from 38–43 dB



**External door**  
Labelled according to  
DIN EN 14351-1



Security door	E65-1	E65-2	
<b>Door leaf</b>	65 mm	65 mm	
<b>Sheet thickness</b>	1.0 / 1.5 mm	1.5 mm	
<b>Rebate type</b>	Thick rebate	Thick rebate	
<b>Fitting in</b>			
Brickwork	≥ 115 mm	≥ 115 mm	
Concrete	≥ 100 mm	≥ 120 mm	
Gas concrete blocks	≥ 150 mm		
Gas concrete slabs	≥ 150 mm		
Size and function-dependent requirements for walls see page 50			
<b>Additional functions / performance characteristics</b>			
<b>Thermal insulation <math>U_D</math></b>	1.8 W/(m <sup>2</sup> ·K)	1.7 W/(m <sup>2</sup> ·K)	
<b>Acoustic rating category</b>	<b>II</b>	<b>III</b>	<b>II</b>
With bottom profile with seal	40 dB	-	40 dB
With retractable bottom seal	38 dB	-	38 dB
With threshold rail with seal	-	43 dB	43 dB
<b>Wind load</b>	Class C5	Class C2	
<b>Driving rain leaktightness</b>	Class 1A – 7A	Class 4A	
<b>Air permeability</b>	Class 3 – 4	Class 2	
<b>Operating forces</b>	Class 2 – 4		
<b>Mechanical strength</b>	Class 4		
<b>Differential climate behaviour</b>	Class 2(d) – 3(e)	Class 1	

The listed values depend on the door features and fitting situation

## Optional Extras

Glazings	Page 40
Fixed top panels	Page 42
Special equipment	Page 44
Door sizing	Page 46

Size range	E65-1		E65-2	
	Width	Height	Width	Height
<b>Nominal size (ordering size)</b>	625 – 1250	1750 – 2500	1375 – 2500	1750 – 2500
<b>With fixed top panel</b>		– 3500		– 3500
Traffic leaf width			750 – 1250	
Fixed leaf width			500 – 1250	

All dimensions in mm

dm combination distribution centre, Weilerswist  
Architect: BFK Architekten, Stuttgart



Certified by  
**DGNB**

Deutsche Gesellschaft für Nachhaltiges Bauen e.V.  
German Sustainable Building Council



**Hörmann products**

- T30 steel hollow profiled section doors HE310 and HE320
- T30 steel fire-rated doors H3 and H3D
- Steel doors D45
- Industrial sectional doors SPU
- High-speed doors
- Dock levellers
- Dock seals / shelters

# Steel door D45

## Single and double-leaf



**Thin rebate**  
Door leaf thickness  
45 mm



**Main function**  
Multi-purpose door

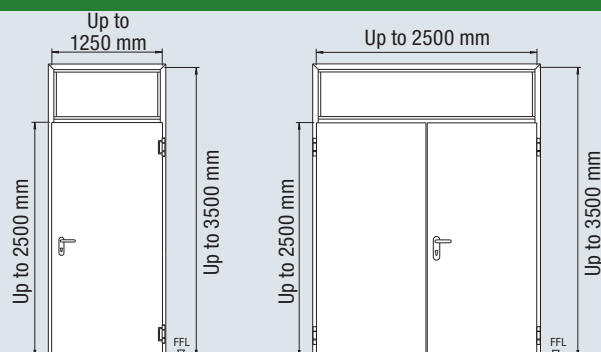
**Additional function**  
(with corresponding equipment, see pages 10-11)



**Acoustic-rated**  
Acoustic values from 37 – 44 dB



**External door**  
Labelled according to DIN EN 14351-1



Steel door	D45-1	D45-2
<b>Door leaf</b>	45 mm	45 mm
<b>Sheet thickness</b>	1.5 mm	1.5 mm
<b>Rebate type</b>	Thin rebate	Thin rebate
<b>Fitting in</b>		
Brickwork	●	●
Concrete	●	●
Gas concrete blocks	●	●
Gas concrete slabs	●	●
Partition walls	●	●
<b>Additional functions / performance characteristics</b>		
<b>Thermal insulation <math>U_D</math></b>	1.9 W/(m <sup>2</sup> ·K)*	2.0 W/(m <sup>2</sup> ·K)*
<b>Acoustic rating category</b>	II	III
With bottom profile with seal	41 dB	-
With retractable bottom seal	37 dB	-
With threshold rail with seal	-	44 dB
<b>Wind load</b>	Class C4 – C5	Class C2
<b>Driving rain leaktightness</b>	Class 1A – 7A	Class 2A
<b>Air permeability</b>	Class 2 – 4	Class 2
<b>Operating forces</b>	Class 2 – 4	
<b>Mechanical strength</b>	Class 4	
<b>Differential climate behaviour</b>	Class 2(d) – 3(e)	Class 1

The listed values depend on the door features and fitting situation

### Optional Extras

Glazings	Page 40
Fixed top panels	Page 42
Special equipment	Page 44
Door sizing	Page 46

Size range	D45-1		D45-2	
	Width	Height	Width	Height
<b>Nominal size (ordering size)</b>	500 – 1250	1500 – 2500	1250 – 2500	1750 – 2500
<b>With fixed top panel</b>		– 3500		– 3500
Traffic leaf width			750 – 1250	
Fixed leaf width			500 – 1250	

All dimensions in mm

# Steel door

## D55

### Single and double-leaf



#### Thin rebate

Door leaf thickness  
55 mm



#### Thick rebate

Door leaf thickness  
55 mm

#### Main function

Multi-purpose door

MZ

#### Additional function

(with corresponding equipment, see pages 10-11)

dB

#### Acoustic-rated

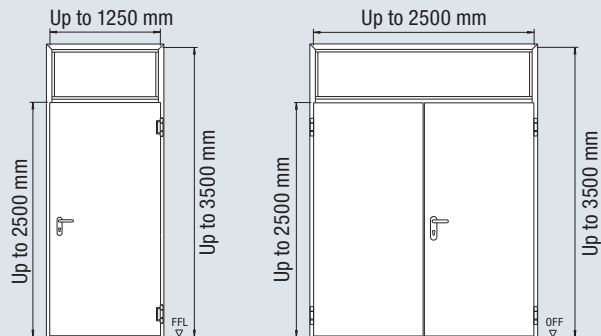
Acoustic values from 38-45 dB



#### External door

Labelled according to DIN EN 14351-1

CE



Steel door	D55-1		D55-2	
<b>Door leaf</b>	55 mm		55 mm	
<b>Sheet thickness</b>	1.5 mm / 1.0 mm		1.5 mm / 1.0 mm	
<b>Rebate type</b>	Thin / thick rebate		Thin / thick rebate	
<b>Fitting in</b>				
Brickwork	●		●	
Concrete	●		●	
Gas concrete blocks	●		●	
Gas concrete slabs	●		●	
Partition walls	●		●	
<b>Additional functions / performance characteristics</b>				
<b>Thermal insulation <math>U_D</math></b>	1.9 W/(m <sup>2</sup> ·K)*		2.0 W/(m <sup>2</sup> ·K)*	
<b>Acoustic rating category</b>	II	III	II	III
With bottom profile with seal	41 dB	-	40 dB	-
With retractable bottom seal	38 dB	-	38 dB	-
With threshold rail with seal	-	45 dB	-	42 dB
<b>Wind load</b>	Class C5		Class C2	
<b>Driving rain leaktightness</b>	Class 1A – 7A		Class 2A	
<b>Air permeability</b>	Class 3 – 4		Class 2	
<b>Operating forces</b>	Class 2 – 4			
<b>Mechanical strength</b>	Class 4			
<b>Differential climate behaviour</b>	Class 2(d) – 3(e)		Class 1	

The listed values depend on the door features and fitting situation

#### Optional Extras

Glazings	Page 40
Fixed top panels	Page 42
Special equipment	Page 44
Door sizing	Page 46

Size range	D55-1		D55-2	
	Width	Height	Width	Height
<b>Nominal size (ordering size)</b>	500 – 1250	1500 – 2500	1250 – 2500	1750 – 2500
<b>With fixed top panel</b>		– 3500		– 3500
Traffic leaf width			750 – 1250	
Fixed leaf width			500 – 1250	

All dimensions in mm

# Steel door

## D65

### Single and double-leaf



**Thin rebate**  
Door leaf thickness  
65 mm



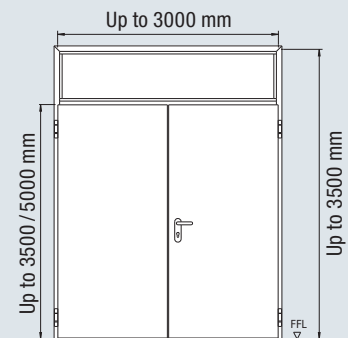
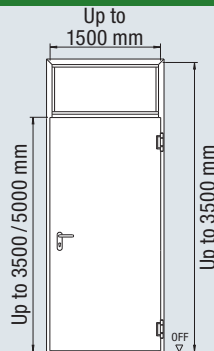
**Main function**  
Multi-purpose door



**Acoustic-rated**  
Acoustic values  
from 38–43 dB



**External door**  
Labelled according  
to DIN EN 14351-1



Steel door	D65-1	D65 G-1	D65-2	D65 G-2
<b>Door leaf</b>	65 mm	65 mm	65 mm	65 mm
<b>Sheet thickness</b>	1.5 mm	1.5 mm	1.5 mm	1.5 mm
Rebate type	Thin rebate	Thin rebate	Thin rebate	Thin rebate
<b>Fitting in</b>				
Brickwork	●	●	●	●
Concrete	●	●	●	●
Gas concrete blocks	●	●	●	●
Gas concrete slabs	●	●	●	●
Partition walls	●	●	●	●
<b>Additional functions / performance characteristics</b>				
<b>Thermal insulation <math>U_D</math></b>	1.8 W/(m <sup>2</sup> ·K)	1.8 W/(m <sup>2</sup> ·K)	1.7 W/(m <sup>2</sup> ·K)	1.7 W/(m <sup>2</sup> ·K)
<b>Acoustic rating category</b>	II III		- -	
With bottom profile with seal	40 dB	- -	- -	-
With retractable bottom seal	38 dB	- -	- -	-
With threshold rail with seal	-	43 dB	- -	-
<b>Wind load</b>	Class C5		Class C2	
<b>Driving rain leaktightness</b>	Class 1A – 7A		Class 4A	
<b>Air permeability</b>	Class 3–4		Class 2	
<b>Operating forces</b>	Class 2–4			
<b>Mechanical strength</b>	Class 4			
<b>Differential climate behaviour</b>	Class 2(d)–3(e)		Class 1	

The listed values depend on the door features and fitting situation

Size range	D65-1		D65 G-1	
	Width	Height	Width	Height
<b>Nominal size (ordering size)</b>	625 – 1500	1750 – 3500	625 – 1500	3500 – 5000
<b>With fixed top panel</b>		– 3500		

Size range	D65-2		D65 G-2	
	Width	Height	Width	Height
<b>Nominal size (ordering size)</b>	1250 – 3000	1750 – 3500	1375 – 3000	3500 – 5000
<b>With fixed top panel</b>		– 3500		
Traffic leaf width	750 – 1500		1000 – 1500	
Fixed leaf width	500 – 1500		350 – 1500	

All dimensions in mm

#### Optional Extras

Glazings	Page 40
Fixed top panels	Page 42
Special equipment	Page 44
Door sizing	Page 46

# More design options are provided by glazings in various forms



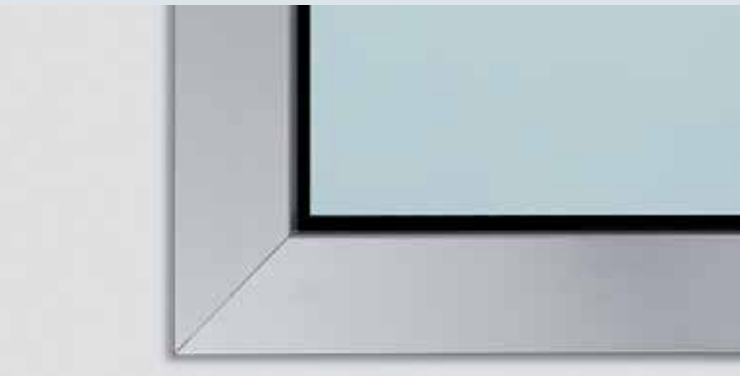
## Flush-fitting glazing for an especially elegant look



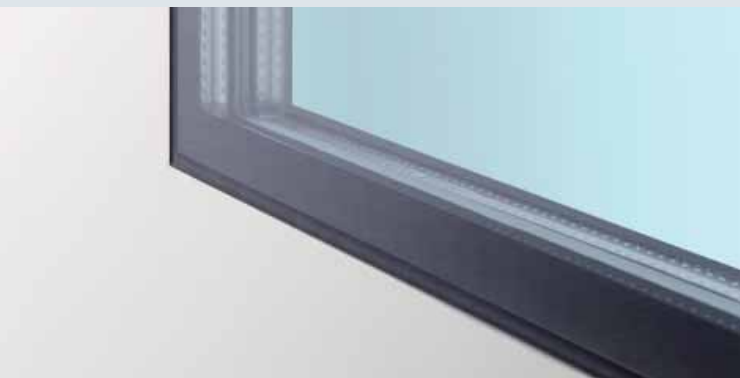
Steel profile in Grey white



Stainless steel profile



Aluminium cover profile

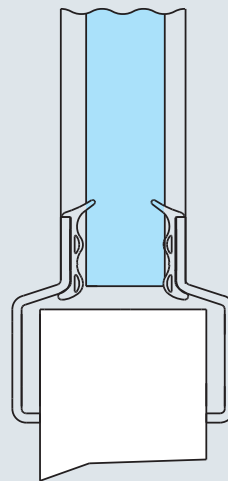
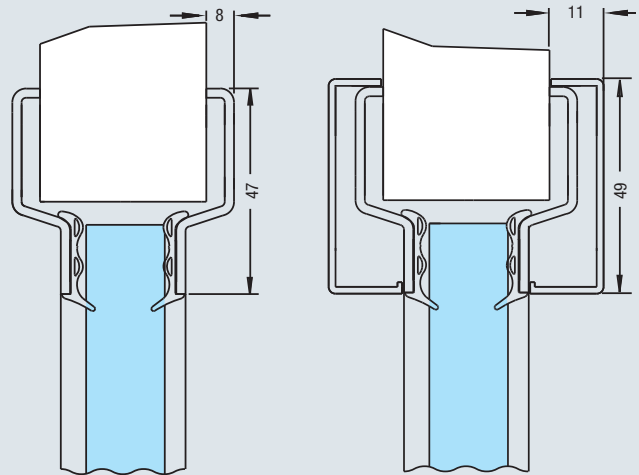


Flush-fitting glazing

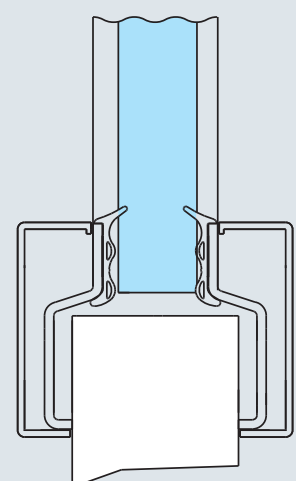
### Aluminium or steel glazing frame

As standard, glazing profiles are supplied in galvanized steel, with powder-coated primer in Grey white (similar to RAL 9002).

On request, the profiles are also available in brushed stainless steel and rectangular glazing with aluminium cover profiles anodized with a natural-finish (F1).



Steel profile



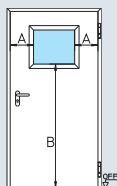
Aluminium cover profile

### Flush-fitting glazing

For H3 fire-rated and smoke-tight doors, this flush-fitting glazing provides an especially elegant look: The transition between the door leaf and frame is almost flush and without a glazing frame.

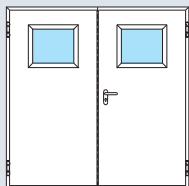


Glazing is supplied in a standard size that matches the door size proportionally and provides for an attractive look and uniform appearance with its slim profiles. Lever handles do not disturb the line of sight through the glass.



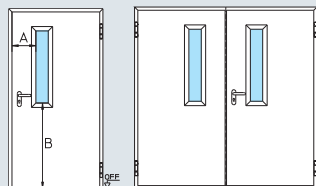
**Glazing view 0**

Distance to side A: 270 mm  
Bottom section height B: 1400 mm



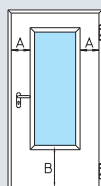
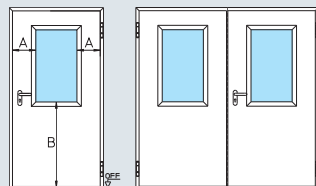
**Glazing view 1**

Distance to side A: 270 mm  
Bottom section height B: 965 mm



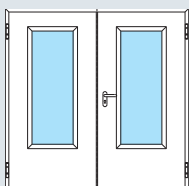
**Glazing view 2**

Distance to side A: 270 mm  
Bottom section height B: 965 mm



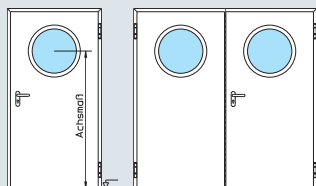
**Glazing view 3**

Distance to side A: 270 mm  
Bottom section height B: 500 mm



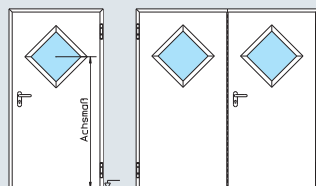
**Round glazing**

Axis dimension: Height from bottom edge of door leaf to centre of cut-out 1550 mm



**Diamond-shaped glazing**

Axis dimension: State from FFL



All dimensions in mm  
\*From BR height 2250 mm

Standard door leaf width BR	View 0	
	Clear view	Min. door leaf width
750	215 × 385 / 635*	645
875	340 × 385 / 635*	770
1000	465 × 385 / 635*	895
1062.5	528 × 385 / 635*	958
1125	590 × 385 / 635*	1020
1250	715 × 385 / 635*	1145

View 1	
Clear view	Min. door leaf width
140 × 815	570

View 2	
Clear view	Min. door leaf width
215 × 815	645
340 × 815	770
465 × 815	895
528 × 815	958
590 × 815	1020
715 × 815	1145

Standard door leaf width BR	View 3	
	Clear view	Min. door leaf width
750	215 × 1280	645
875	340 × 1280	770
1000	465 × 1280	895
1062.5	528 × 1280	958
1125	590 × 1280	1020
1250	715 × 1280	1145

Round glazing	
Clear view	Min. door leaf width
∅ 300	730
∅ 400	830
∅ 500	930

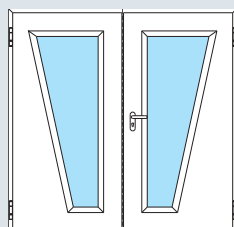
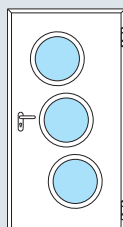
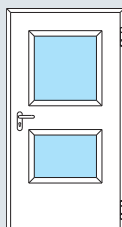
Diamond-shaped glazing	
Clear view	Min. door leaf width
300 × 300	875
400 × 400	1000
500 × 500	1125

Glazing to choose		
Door type	Bottom section height B	Maximum clear view
H3D	At least 440	695 × 1595
H3	At least 225	820 × 2060
H3 WK 2	At least 965	715 × 1315
H3 G	At least 965	1070 × 2070
H6	At least 270	820 × 2015
H6 WK 2	At least 965	715 × 1315
H16	At least 270	820 × 2015
H16 WK 2	At least 965	715 × 1315
H16 G	At least 965	1070 × 2070
RS 55	At least 225	820 × 2060
E45 / E55 / E65	At least 965	630 × 1315
D45 / D55	At least 225	820 × 2060
D65	At least 225	1070 × 1570

All dimensions in mm

**Special glazing available on request**

Besides the glazing referred to above we also supply special single or multi-pane glazing in various forms and arrangements within the permitted distances to the sides, bottom section heights and glazing size ranges.



# Room-high door view through fixed top panels

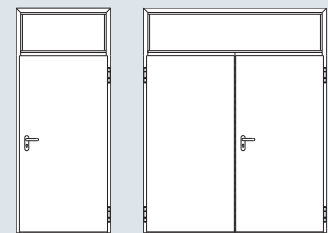
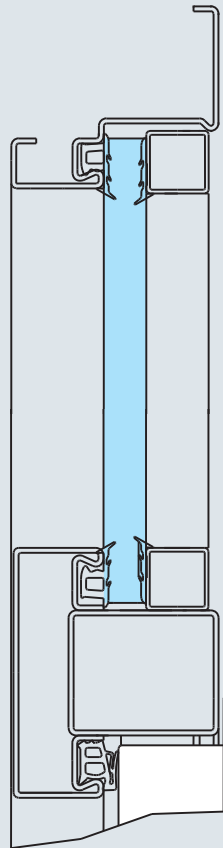


The fixed top panel allows you to individually design room-high doors for your facility. They offer a harmonious look thanks to the surrounding vertical frame profiles.



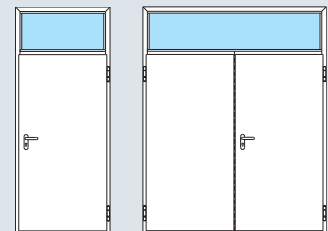
All ventilation grilles consist of safety sheet metal with an internal perforated steel sheet. They are supplied galvanized and with powder-coated primer in Grey white (similar to RAL 9002).

## Fixed top panels



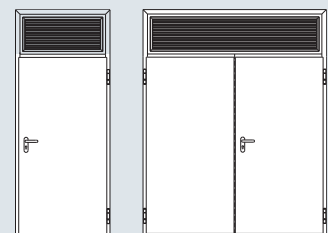
### With steel panel

Height Min. 250 mm  
Max. 1000 mm



### With glazing

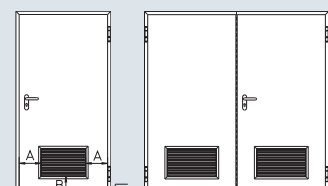
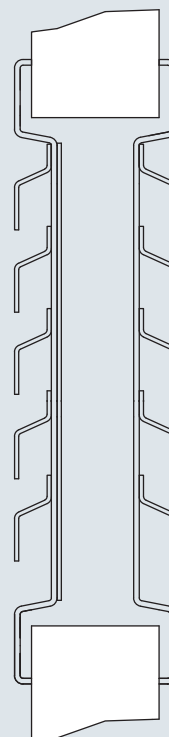
Height Min. 250 mm  
Max. 1000 mm



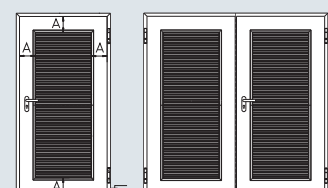
### With ventilation grille

Height Min. 250 mm  
Max. 1000 mm

## Ventilation grille



Grille height: 365 mm  
Distance to side A: 220 mm  
Bottom section height B: 180 mm



### Size to choose

Distance to side A: At least 180 mm  
Width: Min. 250 mm  
Max. 1140 mm  
Height: Min. 250 mm  
Max. 2395 mm  
For break-in-resistant doors  
Width: Max. 800 mm  
Height: Max. 1370 mm

# Overview of glazings ventilation grilles and fixed top panels

	H3D	H3	H6	H16	HS 75	H16 S	RS 55	E45	E55	E65	D45	D55	D65
<b>Glazing variations (see page 40-41)</b>													
Rectangular glazing view 0	○	○	○	○			○	○	○		●	●	●
Rectangular glazing view 1	● <sup>1)</sup>	●	●	●			●	●	●	●	●	●	●
Rectangular glazing view 2	● <sup>1)</sup>	●	●	●			●	○	○		●	●	●
Rectangular glazing view 3	● <sup>1)</sup>	● <sup>1)</sup>	● <sup>1)</sup>	● <sup>1)</sup>			●				○	○	○
Round glazing	● <sup>1)</sup>	● <sup>1)</sup>	● <sup>1)</sup>	● <sup>1)</sup>			●				●	●	●
Diamond-shaped glazing	○	○	○	○			○	○	○		●	●	●
Flush-fitting glazing to choose		○											
Glazing to choose Please note the maximum measurements on page 41	○	○	○	○			○	○	○	○	○	○	○
<b>Ventilation grille (see page 42)</b>													
Standard								●	● <sup>2)</sup>		●	●	●
Size to choose								●	● <sup>2)</sup>		●	●	●
<b>Fixed top panel (see page 42)</b>													
Steel panel / fire-proof panel		● <sup>2)</sup>						●	● <sup>2)</sup>		●	●	●
Glazing		● <sup>2)</sup>	● <sup>3)</sup>					●	●	● <sup>4)</sup>	●	●	●
Ventilation grille											●	●	●

<b>Types of glass</b>													
Promaglas 30 clear, 17 mm	●	●											
P4A Promaglas 30 clear, 21 mm (WK 2)		●											
Promaglas 60 clear, 21 mm			●										
Promaglas 90 clear, 37 mm				●									
P6B safety glass, 18 mm (WK 2)								●	●				
P7B safety glass, 28 mm (WK 3)										●			
Wired glass 6 mm							○				○	○	○
Insulated wired glass / laminated safety glass 20 mm							○				○	○	○
Laminated safety glass VSG 6 mm							●				●	●	●
Single-pane safety glass ESG 6 mm							○				○	○	○
Wired plate glass 7 mm							○				○	○	○
Wired compound security glass 6 mm							○				○	○	○
Prepared for on-site glass (6 mm or 20 mm)											○	○	○

● Standard

○ Optional by glazing to choose

<sup>1)</sup> not for break-in resistant doors

<sup>2)</sup> up to resistance class WK 2

<sup>3)</sup> only single-leaf

<sup>4)</sup> up to resistance class WK 3

Glazings, ventilation grilles or fixed top panels are not available for break-in resistant doors with resistance class 4.

Fire-rated doors with glazings must be equipped with a door closer.

A fixed top panel is not possible with DryFix frames or corner and profile frames with diagonal fixing!

Thermal insulation values do not apply to doors with glazing or fixed top panels.

# Do you have a specific requirement? Then Hörmann is the right partner for you.



## Lever handle sets



Operational requirements and individual wishes demand a comprehensive range of fittings in the facility. Fittings in the form of knobs, levers or anti-panic handle sets with short escutcheon or roses with various handle shapes is available. Surfaces are available in differently coloured plastic versions, aluminium F1 and stainless steel (break-in resistant doors can only be equipped with fittings to DIN 18257 resistance classes).

## Locks



In addition to the normal use of a door, the facility requires special lock functions or additional locks. Optional special and additional locks:

- Double cylinder lock (locked with 2 different cylinders)
- Bolt lock, additionally prepared for profile cylinder
- Block lock
- Motor lock
- Anti-panic lock self-locking

## Emergency exit closings Panic door closings



Specific hardware and lock fittings are stipulated for escape doors to DIN EN 179 and DIN EN 1125. Hörmann offers you a wide range of different equipment for your respective needs.

### Emergency exit locks according to DIN EN 179

- Fittings in the form of anti-panic or lever / knob handle sets with short escutcheon or rose with matching handles
- Anti-panic lock DIN EN 179
- Anti-panic lock self-locking

### Panic locks according to DIN EN 1125

- Fittings with a bar or a handle bar combined with a variety of lever handle sets tested to DIN EN 1125
- Anti-panic lock DIN EN 1125 with different functions

Hörmann quality means all optional extras are designed for a perfect fit and attractive look for safe and long-life performance.



#### Door closer



Modern door closer systems allow secure and low-noise closing of the door elements in everyday use.

- Overhead door closer with lever arm
- Overhead door closer with slide rail
- Integrated door closer (concealed fitting)

These systems are available in the colour silver (standard), in RAL to choose or with a stainless steel look

#### Hold-open devices / operators



Fire and smoke-protection doors must be equipped with a special means of closing that ensures that they close automatically. By using hold-open devices, automatic closing can be put out of action in a controlled manner and doors permanently held open.

- Magnets for wall or floor fitting
- Overhead door closer with lever arm and electromechanical hold-open device
- Overhead door closer with slide rail and electromagnetic hold-open device
- Integrated door closer with electromechanical hold-open device
- Hinged leaf operator

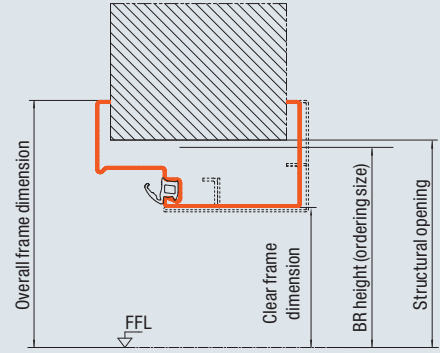
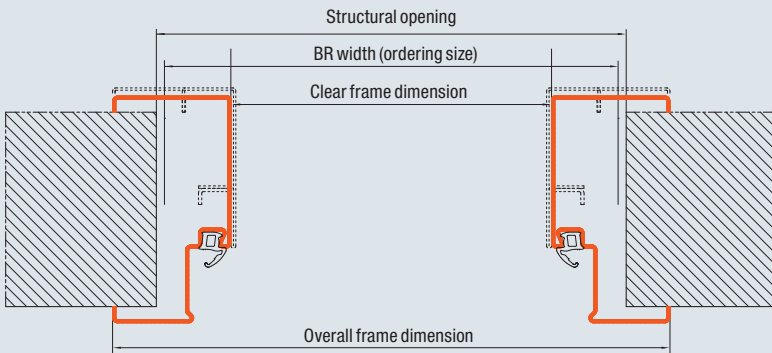
#### Electrical equipment



In the facility, door systems are often equipped with alarm, escape-route security or access control systems. Various components are available according to your needs:

- Latch contact
- Reed contact
- Electric door strike
- Escape door opener
- Alarm wire mesh
- Motor lock
- Door lock
- Concealed electro duct

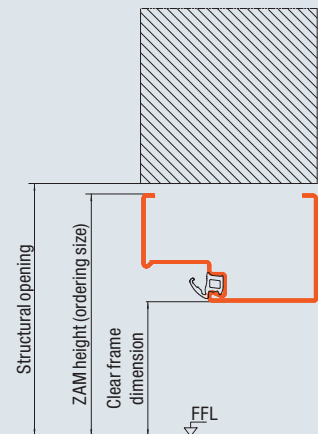
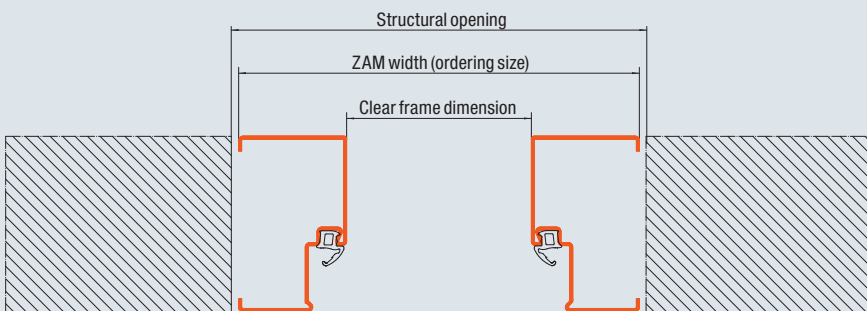
# Door sizing



	3-sided all-round frame (doors / hatches)		4-sided all-round frame (door)		4-sided all-round frame (hatch)	
	BR width	BR height	BR width	BR height	BR width	BR height
<b>Doors / hatches with corner frame / DryFix frame / corner with counter frame / 1-part profile frame</b>						
Clear frame dimension	-82	-42	-82	-70	-82	-82
Overall frame dimension	+64	+31	+64	+76	+64	+64
Structural opening	+0 to 20	+0 to 15	+0 to 20	+0 to 15	+0 to 20	+0 to 15
<b>Doors / hatches with double-shell profile frame</b>						
Clear frame dimension	-88	-45	-88	-76	-88	-88
Overall frame dimension	+64	+31	+64	+76	+64	+64
Structural opening	+0 to 20	+0 to 15	+0 to 20	+0 to 15	+0 to 20	+0 to 15

Doors and hatches with profile frames for partition walls: Nominal size = structural opening

All dimensions in mm



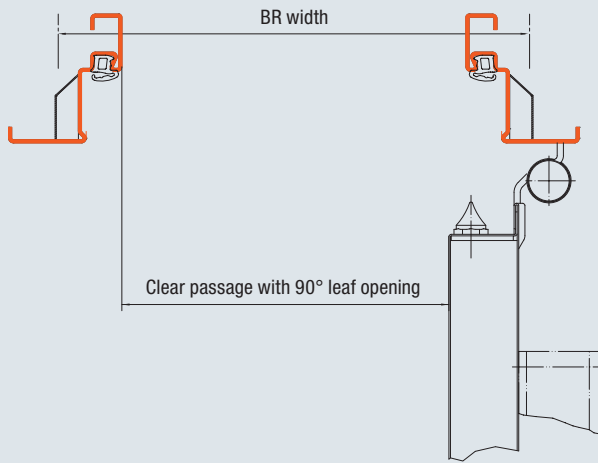
	3-sided all-round frame (doors / hatches)		4-sided all-round frame (doors / hatches)	
	ZAM width	ZAM height	ZAM width	ZAM height
<b>Doors / hatches with block frame (fitting in the opening)</b>				
Clear frame dimension	-146	-73	-146	-146
Structural opening	+10 to 20	+20	+10 to 20	+20

All dimensions in mm

# Clear passage widths

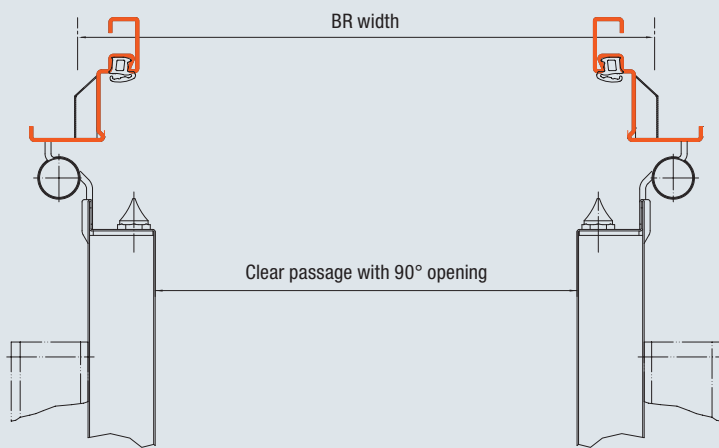
At an opening angle of 90°, without fittings

## Single-leaf door



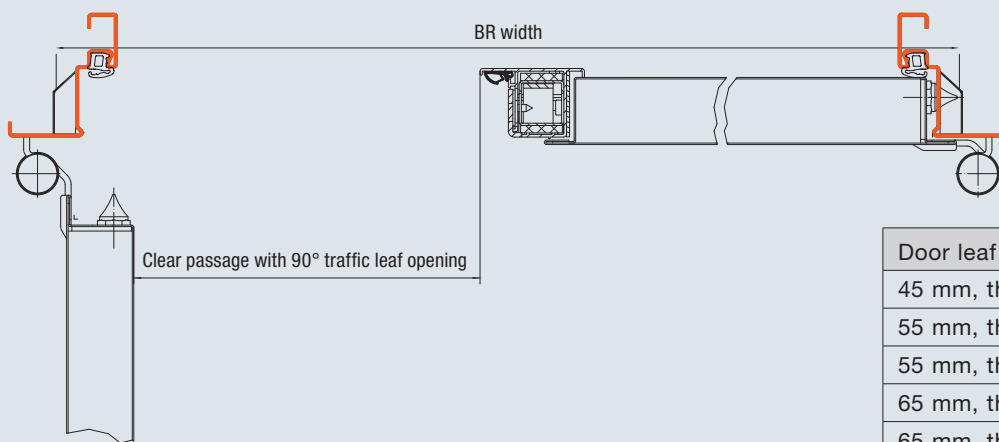
Door leaf thickness	BR width
45 mm, thin rebate	- 93 mm
55 mm, thick rebate	- 93 mm
55 mm, thin rebate	- 103 mm
65 mm, thick rebate	- 103 mm
65 mm, thin rebate	- 113 mm
75 mm, thick rebate	- 105 mm

## Double-leaf door



Door leaf thickness	BR width
45 mm, thin rebate	- 104 mm
55 mm, thick rebate	- 104 mm
55 mm, thin rebate	- 124 mm
65 mm, thick rebate	- 124 mm
65 mm, thin rebate	- 144 mm
78 mm, thin rebate	- 170 mm

## Double-leaf door, traffic leaf



Door leaf thickness	BR width
45 mm, thin rebate	- 95 mm
55 mm, thick rebate	- 95 mm
55 mm, thin rebate	- 109 mm
65 mm, thick rebate	- 109 mm
65 mm, thin rebate	- 109 mm
78 mm, thick rebate	- 122 mm

# Technical details

## Multi-function doors

	H3D		H3			H3 G		H6			H16			H16 G	
	Single-leaf door	Double-leaf door	Hatch	Single-leaf door	Double-leaf door	Single-leaf door	Double-leaf door	Hatch	Single-leaf door	Double-leaf door	Hatch	Single-leaf door	Double-leaf door	Single-leaf door	Double-leaf door
<b>Main function</b>															
Standard	T30 fire-retarding		T30 fire-retarding			T30 fire-retarding		T60 high fire resistance			T90 fire-proof			T90 fire-proof	
<b>Standard additional function</b>															
Thermal insulation $U_D = W/(m^2 \cdot K)$	1.9	2.0	1.9	1.9	2.0	2.0	2.0	1.8	1.8	1.8	1.8	1.8	1.7	1.8	
<b>Additional functions with corresponding equipment (see page 10-11)</b>															
Smoke protection	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
Acoustic rating (dB)	37–44	37–40		38–45	38–42				38–43	37–45		38–43	37–45		
Break-in-resistant (resistance class 2)	●			●	●				●	●		●	●		
Break-in-resistant (resistance class 3)				●	●							●			
Break-in-resistant (resistance class 4)				●								●			
<b>Door leaf</b>															
Leaf thickness	45	55	55/65	55/65	65	55	65	65	65	65	65	65	65	65	78
Sheet thickness	1.0	1.0	1.0/1.5	1.0/1.5	1.5		1.0	1.0/1.5		1.0	1.0/1.5		1.5	1.5	
Thin rebate type	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Thick rebate version			●	●				●			●				
<b>Frame variants</b>															
Corner frame	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
Counter frame	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
DryFix frame		●	●												
Profile frame (double-shell)		●	●					●	●	●	●	●	●		
Profile frame	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Block frame for fitting in the opening	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
<b>Approved for fitting in (see page 50):</b>															
Brickwork	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Concrete	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Gas concrete, stone slabs or concrete precision blocks	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Gas concrete slabs reinforced, horizontal or vertical	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Prefabricated walls made of gypsum boards	●	●	●	●	●	●		●	●	●	●	●	●		
<b>Nominal size</b>															
Width	625	1375	500	625	1375	875	1500	500	625	1375	625	625	1375	875	1500
	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	1125	2250	1250	1250	2500	1500	3000	1250	1250	2500	1250	1250	2500	1500	3000
height	1750	1750	500	1750	1750	2000	2000	500	1750	1750	750	1750	1750	2000	2000
	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	2250	2250	1749	2500	2500	3250	3500	1749	2500	2500	1749	2500	2500	3250	3250
<b>Door set with fixed top panel</b>															
Maximum door set height BR				3500	3500				3500						
Maximum door leaf height				2500	2500				2500						

All dimensions in mm





# Permitted minimum wall thicknesses

Door function	T30*					T60*			T90*				
		Single-leaf		Double-leaf		Single-leaf		Double-leaf	Single-leaf		Double-leaf		
Nominal size width (BRB)	< 625 and < 1750	≤ 1250 and ≤ 2500	> 1250 or > 2500	≤ 2500 and ≤ 2500	> 2500 or > 2500	< 625 and < 1750	≤ 1250 and ≤ 2500	≤ 2500 and ≤ 2500	< 625 and < 750	≤ 1250 and ≤ 2500	> 1250 or > 2500	≤ 2500 and ≤ 2500	> 2500 or > 2500
Nominal size height (BRH)	< 1750	≤ 2500	> 2500	≤ 2500	> 2500	< 1750	≤ 2500	≤ 2500	< 750	≤ 2500	> 2500	≤ 2500	> 2500
<b>Types of walls</b>													
Brickwork DIN 1053	≥ 115	≥ 115	≥ 240	≥ 115	≥ 175	≥ 115	≥ 175 <sup>1)</sup>	≥ 175	≥ 115	≥ 175 <sup>2)</sup>	≥ 240	≥ 175	≥ 240
Concrete DIN 1045	≥ 100	≥ 100	≥ 140	≥ 100	≥ 140	≥ 100	≥ 140	≥ 140	≥ 100	≥ 140	≥ 140	≥ 140	≥ 140
Gas concrete blocks: Stone slabs or precision blocks, DIN 4165, strength class 4 at least	≥ 150	≥ 150	≥ 175	≥ 175	≥ 175	≥ 175	≥ 200	≥ 200	≥ 175	≤ 200	≥ 200	≥ 200	≥ 200
Gas concrete slabs: Reinforced slabs DIN 4165, strength class 4.4 at least	≥ 150	≥ 150	≥ 175	≥ 175	≥ 175	≥ 175	≥ 200	≥ 200	≥ 175	≤ 200	≤ 200	≥ 200	≥ 200
Prefabricated walls acc. to DIN 4102-4 / table 49, timber partition wall (with DryFix frame and 2-shell profile frame) ≥ F90 B <sup>3)</sup>	≥ 130	≥ 130		≥ 130									
Prefabricated walls acc. to DIN 4102-4, table 48, metal partition wall (max. height 5000 mm) ≥ F90 A	≥ 100	≥ 100	≥ 100	≥ 100		≥ 100	≥ 100	≥ 125	≥ 125	≥ 125		≥ 125	
Prefabricated wall with general construction authority test certificate (max. height 5000 mm) ≥ F90 A	≥ 100	≥ 100	≥ 100	≥ 100		≥ 100	≥ 100	≥ 100	≥ 125	≥ 125		≥ 125	

\*Please observe the available wall thicknesses under the door function "Break-in resistant" for the break-in resistant versions of fire-rated doors!

<sup>1)</sup> With corner frame for BRB ≥ 1250 mm and BRH ≥ 2250 mm, otherwise wall thickness 240 mm

<sup>2)</sup> With corner frame for BRB ≥ 1125 mm and BRH ≥ 2125 mm, otherwise wall thickness 240 mm

<sup>3)</sup> Only door variant H3

Door function	RS		dB	WK		
	Single-leaf	Double-leaf	Up to 61 dB	WK 2	WK 3	WK 4
Nominal size width (BRB)						
Nominal size height (BRH)						
<b>Types of walls</b>						
Brickwork DIN 1053	≥ 115	≥ 115	≥ 115	≥ 115	≥ 115	≥ 240
Concrete DIN 1045	≥ 100	≥ 100	≥ 100	≥ 100	≥ 120	≥ 240
Gas concrete blocks: Stone slabs or precision blocks, DIN 4165, strength class 4 at least	≥ 175	≥ 175		≥ 150	≥ 300	
Gas concrete slabs: Reinforced slabs DIN 4165, strength class 4.4 at least	≥ 150	≥ 150		≥ 150		
Prefabricated walls acc. to DIN 4102-4 / table 49, timber partition wall (with DryFix frame and 2-shell profile frame) ≥ F90 B	≥ 130	≥ 130		Doors with break-in resistance cannot be fitted into prefabricated walls.		
Prefabricated walls acc. to DIN 4102-4, table 48, metal partition wall (max. height 5000 mm) ≥ F90 A	≥ 100	≥ 100				
Prefabricated wall with general construction authority test certificate (max. height 5000 mm) ≥ F90 A	≥ 100	≥ 100				

# Everything from a single source for your construction project



1 Sectional doors



2 Rolling shutters and rolling grilles



3 Steel and aluminium folding doors



4 High-speed doors



5 Loading technology



6 Fire sliding doors



7 Multi-function doors and reinforced internal doors



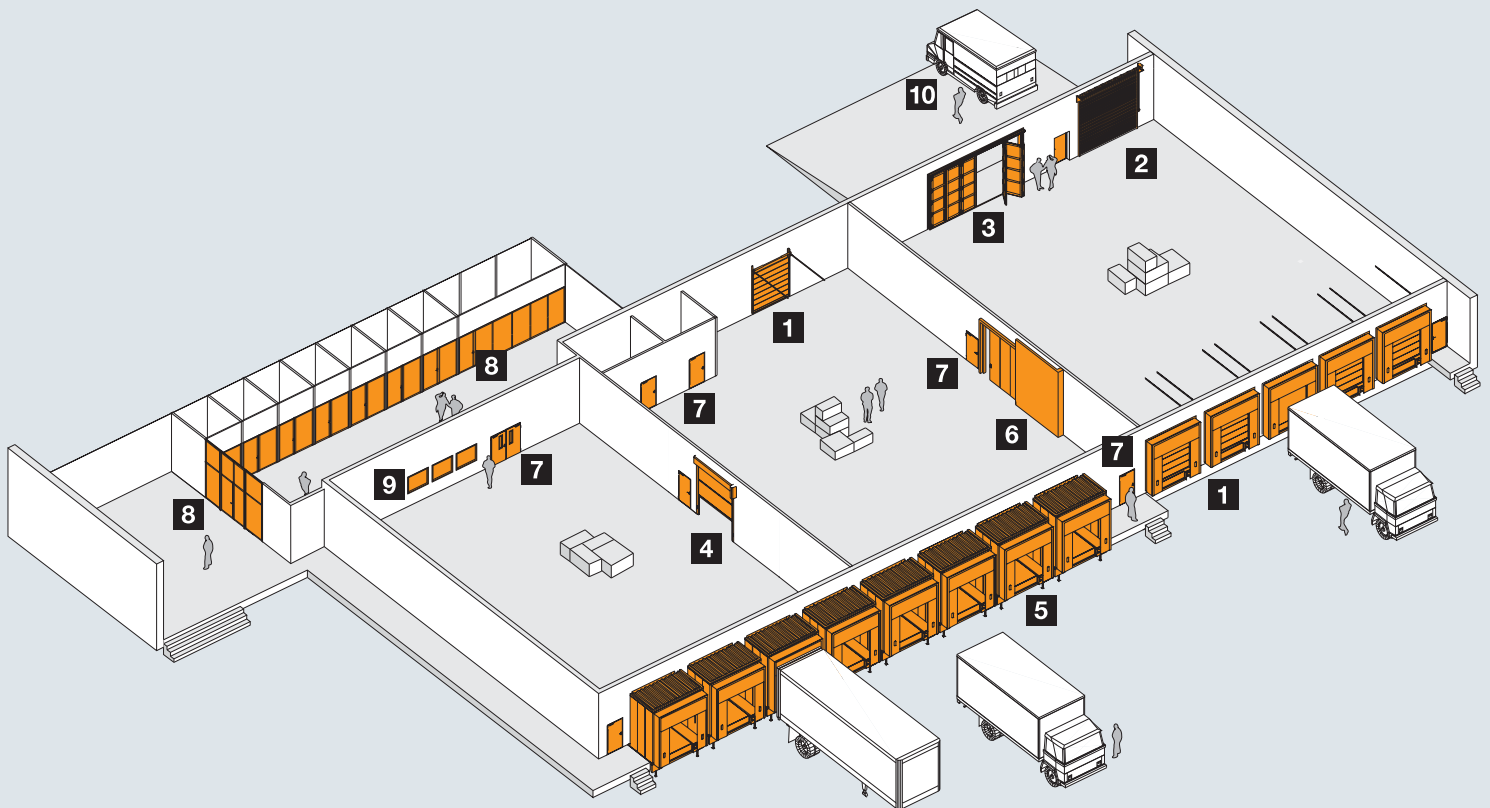
8 Fire and smoke-protection box frame parts



9 Visibility window



10 Service



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