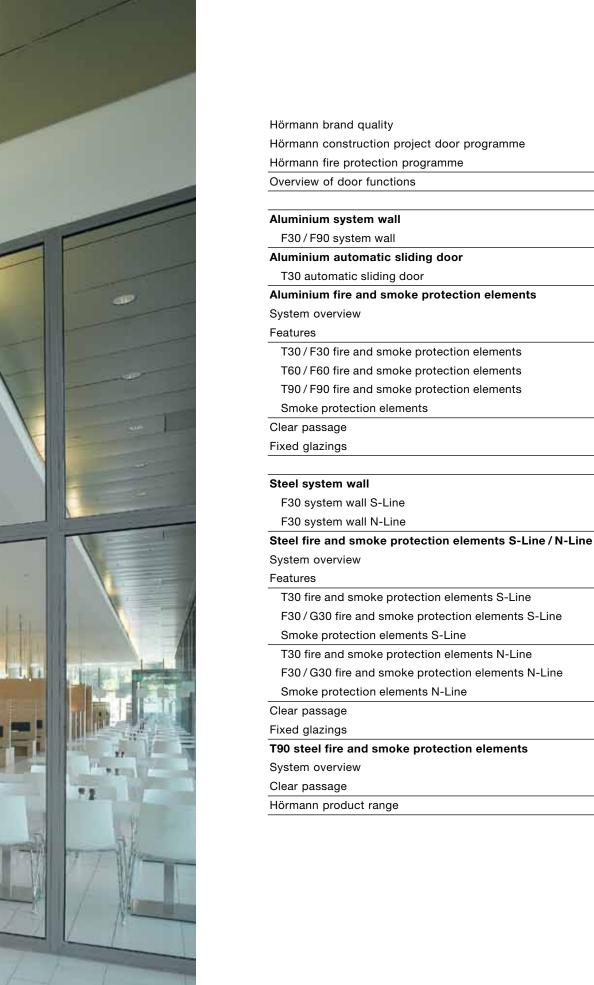


## Fire-Rated Doors and Smoke-Tight Door Assemblies

Fully glazed tubular frame parts for construction projects







The colours and surface finishes shown are subject to the limitations of the printing process and cannot be regarded as binding.

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Figure to the left: ThyssenKrupp Q2 canteen, Essen Figure on cover page: Citadeles Moduli, Riga; Interior design: m-plus design, Hamburg 

## Hörmann brand quality

Top safety and reliability



"The Squaire" in Frankfurt am Main 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

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



In the course of several decades, Hörmann has continuously developed its fire protection programme into today's complete range. In addition to this multifarious range of products for construction projects, Hörmann also offers individual solutions with case by case approval.

Highly-specialised factories develop and produce construction components that are marked by excellent quality, functional safety and a long service life.

Our presence in the global economy's key regions makes us a strong, futureoriented partner for industrial and public construction projects.



#### Fire testing at own fire test chamber

Our new and further developments are constantly tested for the required fire resistance and smoke-tightness through in-house fire tests at our fire testing centre. The knowledge gained from these tests ensures 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 accompany 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 project door programme

The right solution for any requirement





#### **Function doors**

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



#### Steel and stainless steel multi-function doors

Steel multi-function doors offer crucial advantages for architects and building owners: doors with different functional requirements that are fitted in the same storey match perfectly thanks to their identical look. STS / STU steel and stainless steel doors feature a flush-fitting, elegant appearance.



#### Automatic sliding doors

Hörmann's AD 100 automatic sliding doors open reliably and safely in every situation. They are characterised by robustness, functional safety and sustainability. In addition, the automatic sliding doors are used in barrier-free construction and as escape route doors.



#### **Visibility windows**

Hörmann visibility glazings are used as windows or room-high elements to provide more light and better visibility. Visibility glazing is available for requirements like heat and acoustic insulation or radiation protection. All versions are offered in fire-retarding F30 and fire-resistant F90 variants. Individual solutions can be implemented using rail divisions and angles.

Figure to the left: Skyline Tower, Munich with Hörmann products

## Hörmann fire protection programme

Variety is our strength







#### F30 / F90 system wall

The system wall combines a maximum of light with ideal fire protection without any transom or post profiles interrupting the view. The F30 system wall can be easily combined with matching Hörmann T30 aluminium doors and S-Line and N-Line T30 steel doors.





#### T30 aluminium automatic sliding door

The T30 automatic sliding door expands your design possibilities. Combine the convenience and transparency of a fully glazed automatic sliding door with optimum fire protection.



#### **Aluminium fire protection elements**

Hörmann's aluminium 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.



## Steel fire protection elements S-Line and N-Line

Hörmann provides both systems as T30 / F30 fire-rated doors and matching smoke-tight door assemblies. The S-Line system appears very delicate thanks to a fine frame structure. Narrow profiles enhance the look and passage width. The N-Line system is very robust and recommended for construction projects where the doors will be subjected to heavy strain.

Figure on the left: Q1 ThyssenKrupp Megacube, Essen, with Hörmann products

## Overview of door functions

Everything is possible



T30Fire-retarding DIN 4102 / DIN EN 1634T60High fire resistance DIN 4102 / DIN EN 1634T90Fire-proof DIN 4102 / DIN EN 1634	Fire-retarding fire protection elements 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) or 90 minutes (T90).	<figure></figure>
RS Smoke-tight DIN 18095	Smoke protection elements are approved according to DIN 18095 or DIN EN 1634-3. The surface edges of the frame must be permanently sealed to both sides of the building structure.	
dB Acoustic-rated DIN EN ISO 717-1	Acoustic-rated doors and glazings are approved according to DIN EN ISO 717-1. The stated acoustic values are laboratory values. The calculated acoustic value that can be achieved for the object is the laboratory value – 5 dB.	
Ordered in correlation with the resistance class	Break-in-resistant according to DIN EN 1627	
DIN EN V 1627 DIN EN 1627	The DIN EN 1627ff series of standards took effect doors. Hörmann break-in-resistant doors have bee with the European specifications of the prestandar They are also voluntarily subjected to quality moni certification authority and are recommended by the	n tested and classified in accordance ds DIN V ENV 1627 to 1630 since 1999. toring by an accredited test and
WK 2 RC 2	<ul> <li>RC 2 (WK 2) optional extras</li> <li>Triple lock</li> <li>Aluminium FS lever/knob handle set DIN 18257, and pull-off protection</li> <li>3-way adjustable hinges</li> <li>P4A glazing</li> </ul>	, class ES 1, with long escutcheon
External door	Fire-rated and smoke-tight doors for outside use include thermally insulated outer doors as well as approved fire-rated and smoke-tight doors.	The compliance proofs of e.g. resistance to wind loads, water-tightness under heavy rain, air permeability, etc. are based on EN 14351-1.
Anti-fall safeguard glazing	The German state building codes require protection from lateral falls for circulation areas that are used by persons such as galleries, pedestals or stairways with a minimum height difference of 1000 mm (500 mm in Bavaria).	These directives can be complied with for example by a separately installed railing or, better yet, by a fixed glazing according to TRAV from Hörmann.

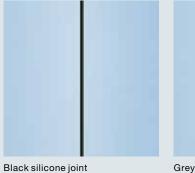
## F30 / F90 aluminium system wall

Fire protection with maximal transparency for the most discerning demands



#### **Discreet glazing joint**

The individual glass panes are jointed with silicone (joint width 5 mm). Available in black as standard and on request in grey.

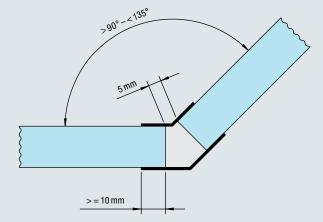




Grey silicone joint

#### **Corner connector**

In corner areas with any type of angle, this system glazing does not require corner posts for aluminium F30. The joint with fire-rated silicone is elegantly concealed on the inside and the outside by a glued-on slim metal angle profile only. A technically and visually appealing solution.



#### HE 331 SW HE 931 SW Unlimited Unlimited ≤ 1200 mm Up to 3080 mm Up to 2800 mm Main functions HE 331 SW HE 931 SW Version Fixed glazing Fixed glazing **Profile system** Aluminium Aluminium 70 70 Viewed width Depth 80 80 **Bottom section height** 70/150 70/150 Fitting in Brickwork ≥115 ≥240 ≥100 ≥140 Concrete Gas concrete ≥175 ≥240 ≥100 ≥100 Partition wall Wall requirements based on size can be found in the fitting instructions at www.hoermann.com

The compliance proofs of e.g. resistance to wind loads, water-tightness under heavy rain, air permeability, etc. are based on EN 14351-1.

	HE 331 SW		HE 931 SW	
Size range	Width	Height	Width	Height
With fascia frame				
Overall frame dimension (ordering size)	Unlimited	3080	Unlimited	2800
Maximum door height		3000		Not available

Fixed glazings **Design variations** 

**T30** 

**T90** 

RS

**Fire-retarding** HE 331 SW

Fire-proof

HE 931 SW

Smoke-tight

Page 31

## T30 RS aluminium automatic sliding door

Perfection and transparency in the most limited space – with general official approval







Recommended for barrier-free construction

#### At a glance:

- T30 aluminium fire-rated door
- Smoke-tight according to DIN 18095
- Single-leaf and double-leaf and with side elements and transom lights
- Matching the Hörmann aluminium fire protection programme
- Maximum clear passage width up to 1200 mm (single-leaf), 2600 mm for double-leaf, maximum clear passage height up to 2500 mm
- No guide rail in the passage area
- GEZE operator Slimdrive
   SL-T30 with only 70 mm
   installation height
- Fitting in brickwork / concrete and in light blockwork
- Door element TÜV approved, operator VDS approved
- General official approval by the DIBt





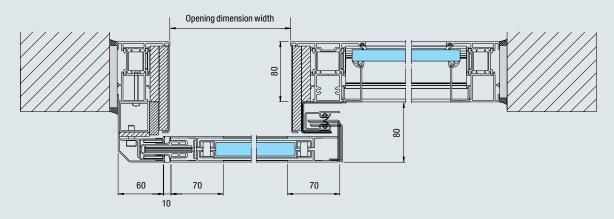


Narrow profile view of the operator with only 70 mm installation height

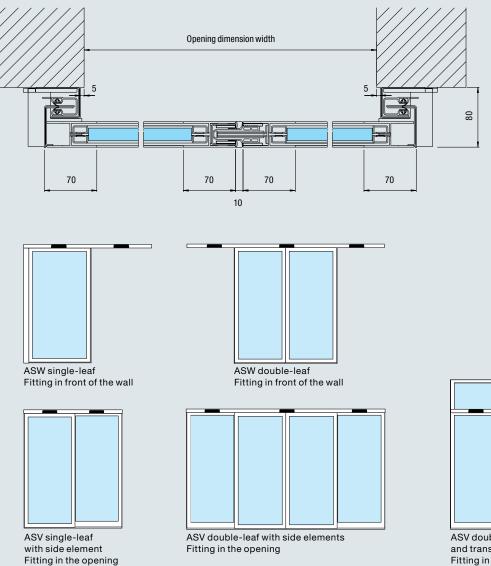
## T30 aluminium automatic sliding door ASW-1, ASW-2, ASV-1, ASV-2

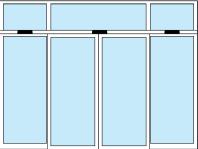
Single and double-leaf doors

ASV -1 Fitting in the opening









ASV double-leaf with side elements and transom light Fitting in the opening

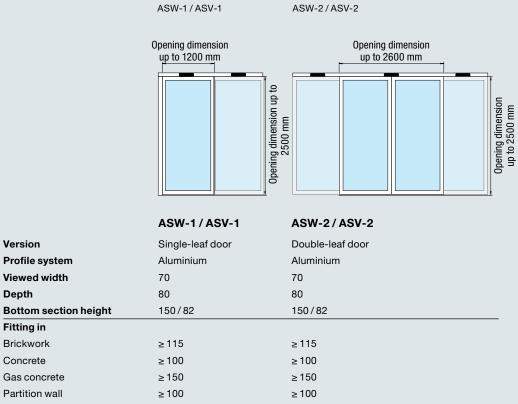
#### Main functions

**Fire-retarding** 

T30

RS

Smoke-tight



Wall requirements based on size can be found in the fitting instructions at www.hoermann.com

	ASW-1/ASV-1		ASW-2/ASV-2	
Size range	Width	Height	Width Height	
Opening dimension	sion			
Bottom section height 82 mm	900 – 1200	1800 – 2500	1300 - 2500 1800 - 25	
			1270	
Bottom section height 150 mm	900 – 1200	1800 – 2500	1300-2600 1800-2	
	1190		1270	

Clear passage	Width	Height
ASW-1	= Opening dimension – 10	= Opening dimension
ASW-2	= Opening dimension – 30	= Opening dimension
ASV-1	= Opening dimension – 10	= Opening dimension – 150 – gap
ASV-2	= Opening dimension – 30	= Opening dimension – 150 – gap

Fixed glazings Design variations

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## Aluminium fire and smoke protection elements

System overview



<b>T30</b>	<b>Fire-retarding</b> HE 311 HE 321	Single-leaf door with fascia frame
<b>F30</b>	Fire-retarding HE 331 HE 331 SW	
<b>T60</b>	<b>High fire resistance</b> HE 611 HE 621	View T30 aluminium
<b>F60</b>	<b>High fire resistance</b> HE 631	Double-leaf door with steel frame
<b>T90</b>	<b>Fire-proof</b> HE 911 HE 921	Wider clear passage width
<b>F90</b>	<b>Fire-proof</b> HE 931	View T30 aluminium
RS	<b>Smoke-tight</b> A/RS 100/150 A/RS 200/250 A/RS 300/350	Fixed glazing
dB	Acoustic-rated	Overall frame     Overall frame     Division     Division       dimension     dimension     dimension     dimension       Fixed element     3     Door     Fixed element     Door
<mark>WK 2</mark>	<b>Break-in-resistant</b> HE 311 HE 321 A/RS 100 A/RS 200	
*	<b>External door</b> (In approval process) HE 311 HE 321	3     223       Door / fixed element coupled     Door / fixed element vertical profile construction
TRAI/	Anti-fall safeguard glazing	

#### All dimensions in mm

A/RS 300 A/RS 350

### Aluminium fire and smoke protection elements Features

#### 1 Uniform colour scheme

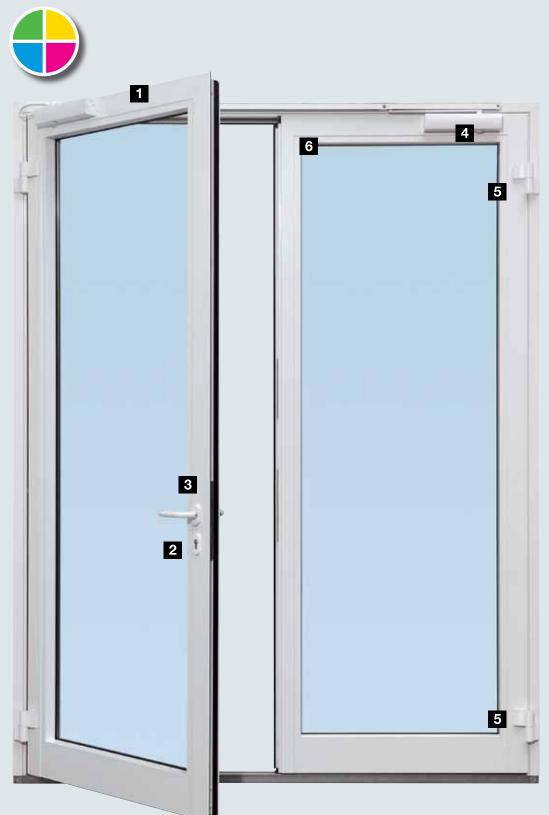
Hörmann offers you doors, frames, fittings, hinges and closing devices in a uniform colour scheme. This allows the door to fit harmoniously into the room concept. As standard, we offer the steel fire and smoke protection elements with a powdercoated primer in Traffic white (RAL 9016). Optionally, the elements are available in natural finish aluminium EV 1, bronze and all RAL colours.

#### 2 Lock

As standard, all Hörmann fire-rated and smoke-tight doors are equipped with a latch catch lock. Doors with resistance class 2 are equipped with a triple lock. The fixed leaf is secured by a rebate espagnolette lock. Optionally, we offer anti-panic locks, also self-locking.

#### 3 Lever handle set

As standard, we offer all door sets with an offset aluminium lever/lever handle set with a steel core including a cylinder rose escutcheon. Break-in-resistant doors are additionally equipped with a protective fitting. Optionally, you can also choose lever handles and lever/knob handle sets as well as aluminium and stainless steel anti-panic bars.





#### 4 Closing devices

As standard, all fire-rated and smoke-tight doors are equipped according to DIN EN 1154 with a slide rail overhead door closer on the hinge side, with an integrated door leaf selector for double-leaf doors. Integrated overhead door closers are also available for a particularly harmonious look of the door.



Slide rail overhead door closer

#### 5 Hinges

The standard 3D hinge for fire-rated and smoke-tight doors is three-way adjustable, either with a pivot point of 20 or 36 mm. This aluminium hinge is available anodised, powder-coated in all colours or with a stainless steel finish.

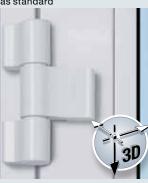
The elegant and also precisely adjustable guide roller (pivot point 16 mm) is available as an alternative to the 3-way adjustable hinge. It is available in painted steel matching the door surface finish or in polished stainless steel.

The 3-part 3-way adjustable hinges of T90 fire-rated doors (pivot point 20 or 36 mm) can be optimally aligned and are available in the door surface finish. For a matching look, we also offer you T30 and RS doors with these hinges.

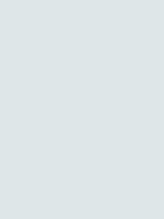




2-part 3-way adjustable hinge as standard



3-way adjustable hinge, 3-part (T90)





#### 6 Glazing beads

Glazing beads are not only a functional but also a style element for the overall look of a door. As standard we offer the doors with rectangular glazing beads.

If required, we offer the doors with rounded Softline glazing beads in which the precise mitre of frame and leaf is continued along a single line.





Rectangular glazing beads as standard

Softline glazing beads

### Office towers, Hamburg Architect: BRT Architekten LLP, Hamburg





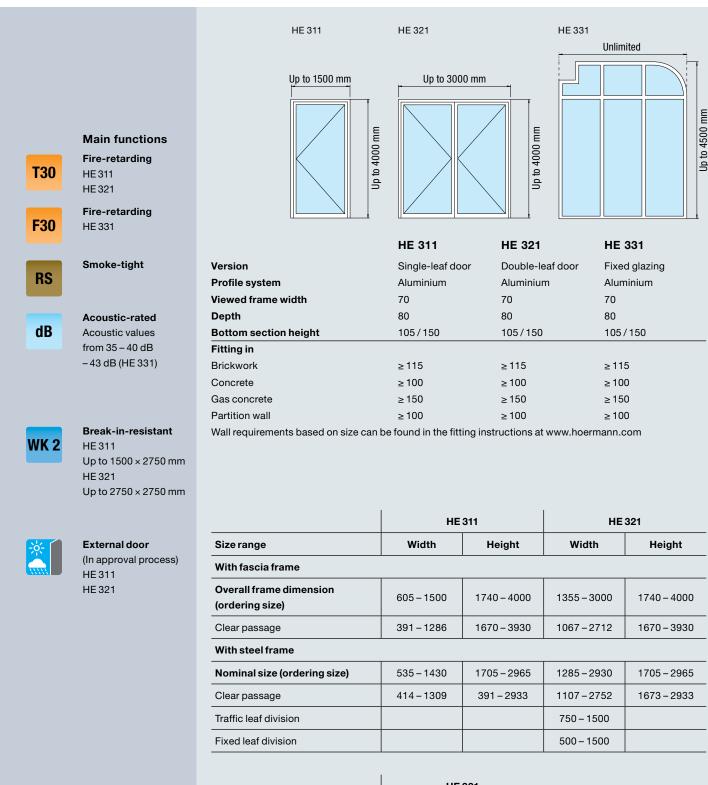


- Hörmann products T30 aluminium fire-rated doors HE 311 T30 aluminium smoke-tight doors A/RS 150



## T30 / F30 aluminium fire and smoke protection elements HE 311, HE 321, HE 331

Single and double-leaf doors, fixed glazing



	HE 331		
Size range	Width	Height	
With fascia frame			
Overall frame dimension (ordering size)	Unlimited	4500 / 4000*	
Maximum door height*		3000	

Clear passage Fixed glazings Design variations

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\* For combination of door (HE 311, HE 321) and fixed glazing (HE 331)

### "Sign" Harbour Office, Düsseldorf Architect: Murphy / Jahn, Chicago - Berlin







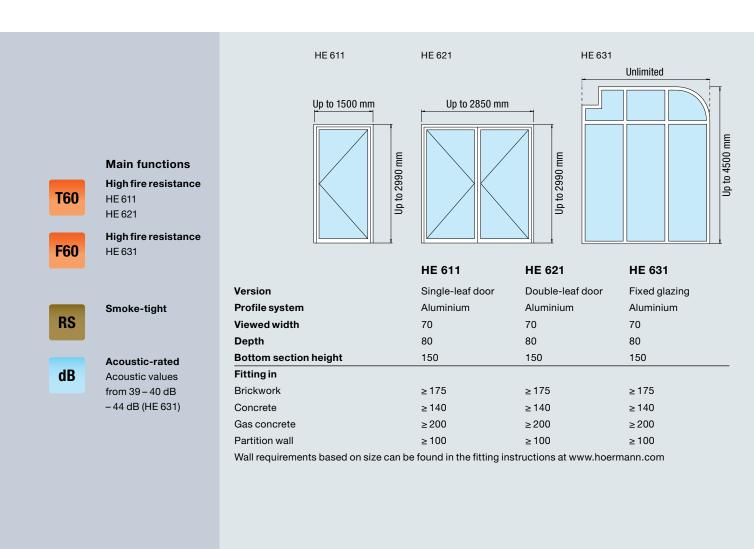
#### Hörmann products

- T30 aluminium fire-rated and smoke-tight doors HE 311/331
- T90 aluminium fire-rated and smoke-tight doors HE 921 • F90 fire-resistant glazing HE 931
- T30 steel fire-rated doors STS
- T30 steel fire-rated doors H3D
- T90 steel fire-rated doors H16
  Industrial rolling grille



## T60 / F60 aluminium fire and smoke protection elements HE 611, HE 621, HE 631

Single and double-leaf doors, fixed glazing



	HE 611		HE	621
Size range	Width	Height	Width Height	
With fascia frame				
Overall frame dimension (ordering size)	605 – 1500	1740 - 2990	1355 – 2850	1740 – 2990
Clear passage	391 – 1286	1720–2780	1167 – 2562	1720–2780
Traffic leaf division			500 - 1425	
Fixed leaf division			500 - 1425	

	HE 631		
Size range	Width	Height	
Overall frame dimension (ordering size)	Unlimited	4500 / 4000*	
Maximum door height*		2800	

Clear passage Fixed glazings

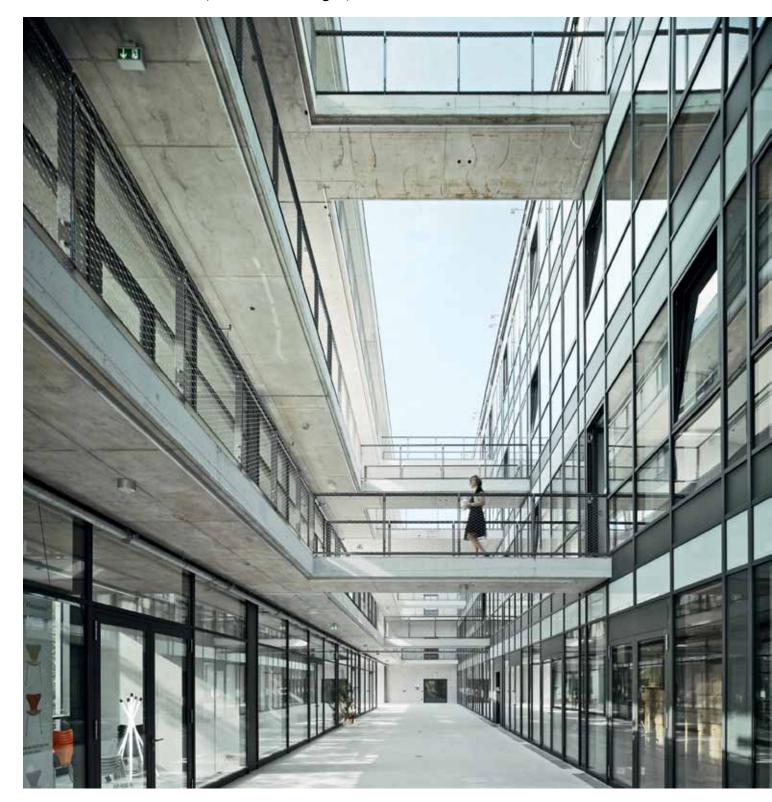
Design variations

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\* For combination of door (HE 611, HE 621) and fixed glazing (HE 631)

### Aufbau Haus in Berlin Architects: Clarke und Kuhn, freie Architekten BDA, Berlin Thinkbuild architecture, Jason Danzinger, Berlin







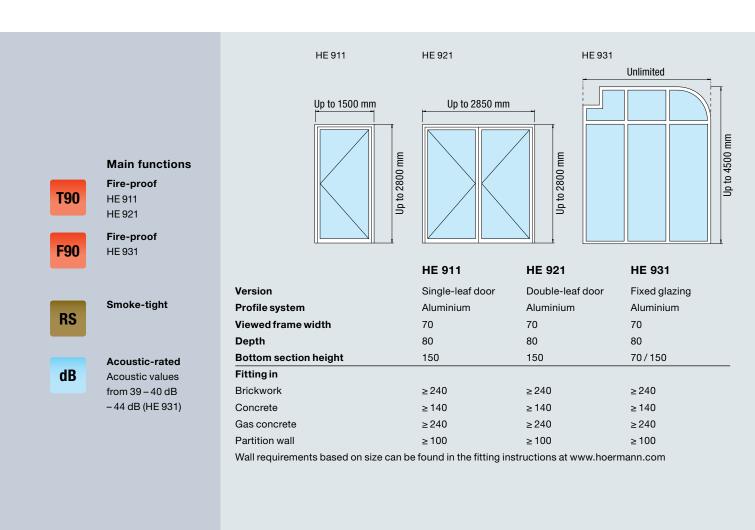


#### Hörmann products

- T30 aluminium fire-rated doors HE 311 and HE 321
  T30 steel fire-rated doors H3
  Industrial rolling grille Classic HG-A

## T90 / F90 aluminium fire and smoke protection elements HE 911, HE 921, HE 931

Single and double-leaf doors, fixed glazing



	HE 911		HE	921
Size range	Width	Height	Width	Height
With fascia frame				
Overall frame dimension (ordering size)	605 – 1500	1740–2800	1355 – 2850	1740 - 2800
Clear passage	391 – 1286	1720-2730	1167 - 2562	1720 - 2730

	HE 931		
Size range	Width	Height	
Overall frame dimension (ordering size)	Unlimited	4500 / 4000*	
Maximum door height*		2800	

Clear passage

Fixed glazings Design variations

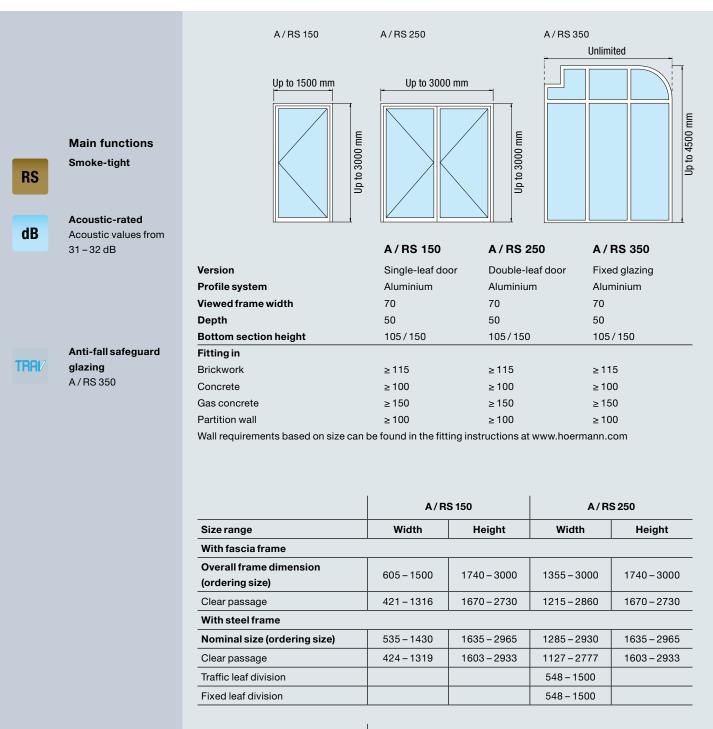
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 $^{\ast}~$  For combination of door (HE 911, HE 921) and fixed glazing (HE 931)

## Aluminium smoke protection elements A / RS 150, A / RS 250, A / RS 350

Single and double-leaf doors, fixed glazing



	A/RS350		
Size range	Width	Height	
Overall frame dimension (ordering size)	Unlimited	Unlimited	
Maximum door height*		3000	
TRAV			
Max. element size	Unlimited	4500	
Min. pane size	800	1000	
Max. pane size	Depending on glass type according to table 2 TRAV		

Clear passage

Fixed glazings Design variations Page 30

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 $^{*}\,$  For combination of door (A / RS 150, A / RS 250) and fixed glazing (A / RS 350)

# Aluminium smoke protection elements, insulated A / RS 100, A / RS 200, A / RS 300

Single and double-leaf doors, fixed glazing

		A/RS 100	A / RS 200		A / RS 300 Unlir	nited
RS	Main functions Smoke-tight Acoustic-rated Acoustic values 34 dB	Up to 1500 mm		Up to 4000 mm		Up to 4500 mm
			A/RS 100	A/RS 2	200 A /	' RS 300
		Version	Single-leaf do	oor Double-le	eaf door Fix	ed glazing
		Profile system	Aluminium	Aluminiu	m Alu	ıminium
		Viewed width	70	70	70	
		Depth	80	80	80	
	<b>_</b>	Bottom section height	70/150	70/150	70	/ 150
WK 2	<b>Break-in-resistant</b> A / RS 100 Up to 1500 × 2750 mm	Fitting in Brickwork Concrete	≥ 115 ≥ 100	≥115 ≥100	≥1 ≥1	
	A/RS 200	Gas concrete	≥ 150	≥ 150	≥1	
	Up to 2750 × 2750 mm	Partition wall	≥ 100	≥ 100	≥1	00
TRAI/	<b>Anti-fall safeguard glazing</b> A/RS 300		A/R	S 100	A/F	RS 200
		Size range	Width	Height	Width	Height
		With fascia frame				
		Overall frame dimension (ordering size)	605 – 1500	1740 - 4000	1355 – 3000	1740 - 4000
		Clear passage	391 – 1286	1670 – 3930		
		With steel frame				
		Nominal size (ordering size)	535 – 1430	1705 – 2965*	1285 – 2930	1750 – 2965*
		Clear passage	424 – 1319	1673 – 3933	1127 – 2777	1673 –3933
		Traffic leaf division			500 - 1500	
		Fixed leaf division			500 – 1500	
		* With transom light 3500	A / D	S 300		
				T		
		Size range Overall frame dimension	Width	Height		
		(ordering size)	Unlimited	Unlimited		
		Maximum door height**		3000		
		TRAV		1000		
		Max. element size	Unlimited	4500		
Clear pass	sage Page 30	Min. pane size	800	1000		
Clear pass	Fage SU	Max. pane size	Depending	on glass type		

Fixed glazings Design variations

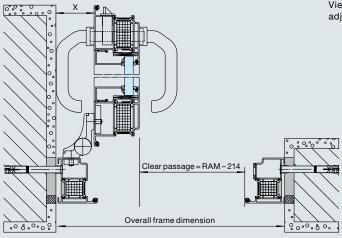
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\*\* For combination of door (A / RS 100, A / RS 200) and fixed glazing (A / RS 300)

according to table 2 TRAV

## **Clear passage** With door leaf opened by 90° and without fittings

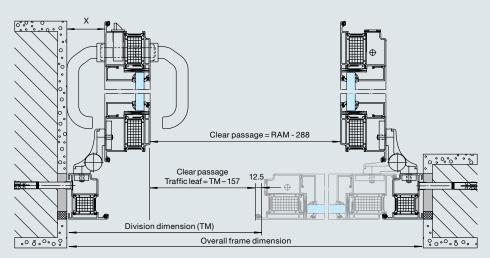
Single-leaf door



View of T30 aluminium fire-rated door, single-leaf with 3-way adjustable hinge with 20 mm pivot point

### Double-leaf door

View of T30 aluminium fire-rated door, double-leaf with 3-way adjustable hinge with 20 mm pivot point



Hinge system	Single-leaf door		Double-leaf door, overall		Double-leaf door, traffic leaf		Distance leaf / wall (x)
Door type	A/RS 150	HE 311 HE 611 HE 911 A/RS 100	A/RS 250	HE 321 HE 621 HE 921 A/RS 200	A/RS 250	HE 321 HE 621 HE 921 A/RS 200	
Depth	50	80	50	80	50	80	
3-way adjustable hinge, pivot point 20 mm	RAM – 184	RAM-214	RAM – 228	RAM – 288	Division dimension – 127	Division dimension – 157	64
3-way adjustable hinge, pivot point 36 mm	RAM – 200	RAM – 230	RAM – 260	RAM – 320	Division dimension - 143	Division dimension - 173	80
Guide roller*, pivot point 16 mm	RAM – 179	RAM – 209	RAM-218	RAM – 278	Division dimension – 117	Division dimension – 152	52

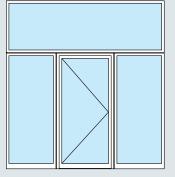
All dimensions refer to element assemblies

\* Only for HE 611, HE 621, HE 911, HE 921

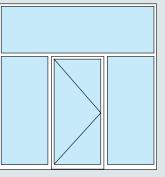
### **Fixed glazings** Design variations

Hörmann aluminium fire-rated doors are available either as a coupling construction for simple connection on location, or as complete elements with a vertical/horizontal profile construction. Thus they can be easily matched to the fitting situation at the construction site.

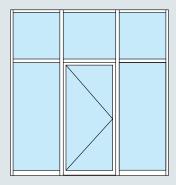
With the Hörmann plug-in system, the slim vertical/horizontal profile construction can also be assembled into walls of any size.



Coupling construction

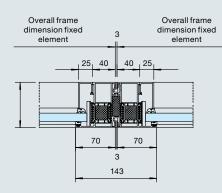


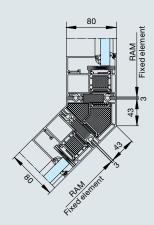
Vertical / horizontal profile construction as a complete element



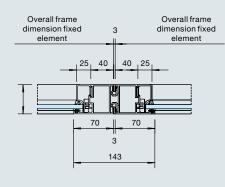
Vertical / horizontal profile construction as a plug-in system

#### **Coupling construction variants**





Aluminium F30 coupling 180°

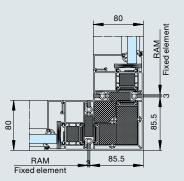


Aluminium RS-3 coupling 180°

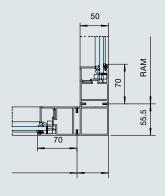
Aluminium F30 coupling 135°

50

BAN



Aluminium F30 coupling 90°



Aluminium RS-3 coupling 90°

## Hafencity, Hamburg

Hörmann projects in one of Europe's largest urban development areas



Projects with Hörmann products incl. Dalmann-Carrée, Kühne + Nagel, Coffee Plaza, Marco-Polo-Tower, 25h Hotel, Unilever building, Oval am Kaiserkai





#### Hörmann products

- T30 aluminium fire-rated doors HE 311
- T90 aluminium fire-rated doors HE 911
- Aluminium smoke-tight doors A / RS 150
- T30 steel fire-rated doors H3
  T90 steel fire-rated doors H16
- T30 steel fire-rated doors STS





**Spiegel building** Architect: Henning Larsen Architects, Copenhagen, DK





**CC01** Commercial Center Architect: Baumschlager Eberle Ziviltechniker GmbH, Lochau, AT





- Hörmann products
  T30 aluminium fire protection elements HE 311, HE 321, HE 331
  Aluminium smoke-tight doors A / RS 150, A / RS 250
  T30 step1 fire reted doors

- T30 steel fire-rated doors HL 310 S, HL 320 S
  T90 aluminium fire-rated doors
- HE 911, HE 921
- F90 aluminium fire protection elements HE 931



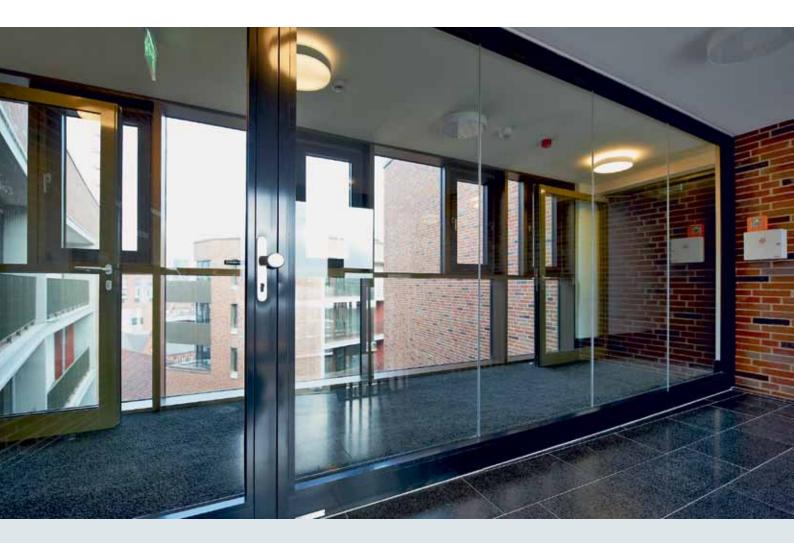
Elbphilharmonie under construction Architect: © Herzog & de Meuron, Basel (Switzerland)





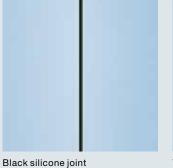
## F30 steel system wall

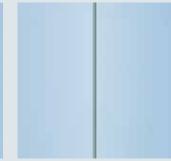
Matching the S-Line and N-Line steel fire-rated and smoke-tight doors



#### **Discreet glazing joint**

The individual glass panes are jointed by silicone (joint width 5 mm). Available in black as standard and on request in transparent.

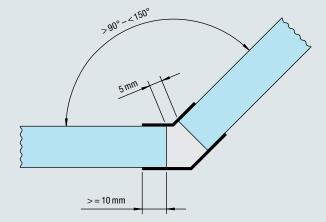




Transparent silicone joint

#### **Corner connector**

In corner areas with any angle, this system glazing does not require corner posts. The joint with fire-rated silicone is elegantly concealed on the inside and the outside by a glued-on slim metal angle profile only. A technically and visually appealing solution.



#### HL 330 S / SW, HL 330 SW

HL 330 S/SW

Double-leaf door

Steel S-Line

134

60

70/81

≥115

≥100

≥150

≥100

Wall requirements based on size can be found in the fitting instructions at www.hoermann.com

Unlimited

HL 330 SW

Steel N-Line

168

60

84/150

≥115

≥100

≥150

≥100

Double-leaf door

	HL 330 S/	SW S-Line	HL 330 SW N-Line		
Sizerange	Width	Height	Width	Height	
With fascia frame				•	
Overall frame dimension (ordering size)	Unlimited	2886	Unlimited	2900	
Maximum door height		2886		2900	

Fixed glazings Design variations

Page 49

RS

F30

Main functions Fire-retarding

Smoke-tight

Version

Depth

**Fitting in** Brickwork

Concrete Gas concrete

Partition wall

**Profile system** 

Viewed width

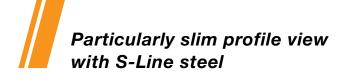
**Bottom section height** 

Up to 2886 mm (S-Line) Up to 2900 mm (N-Line)

## Steel fire and smoke protection elements

System overview

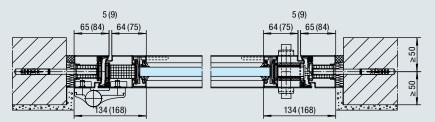




**Steel S-Line** 

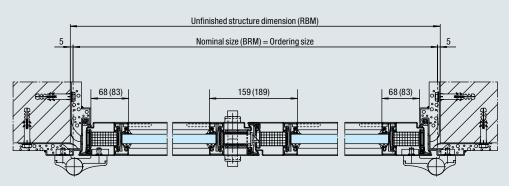
# Single-leaf S-Line steel door with fascia frame

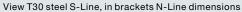




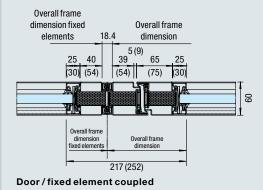
View T30 steel S-Line, in brackets N-Line dimensions

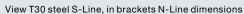
# Double-leaf S-Line steel door with steel frame

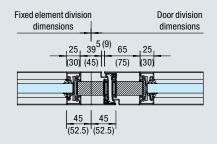




# Fixed glazing steel S-Line







Door / fixed element vertical profile construction

# Steel fire and smoke protection elements **Features**

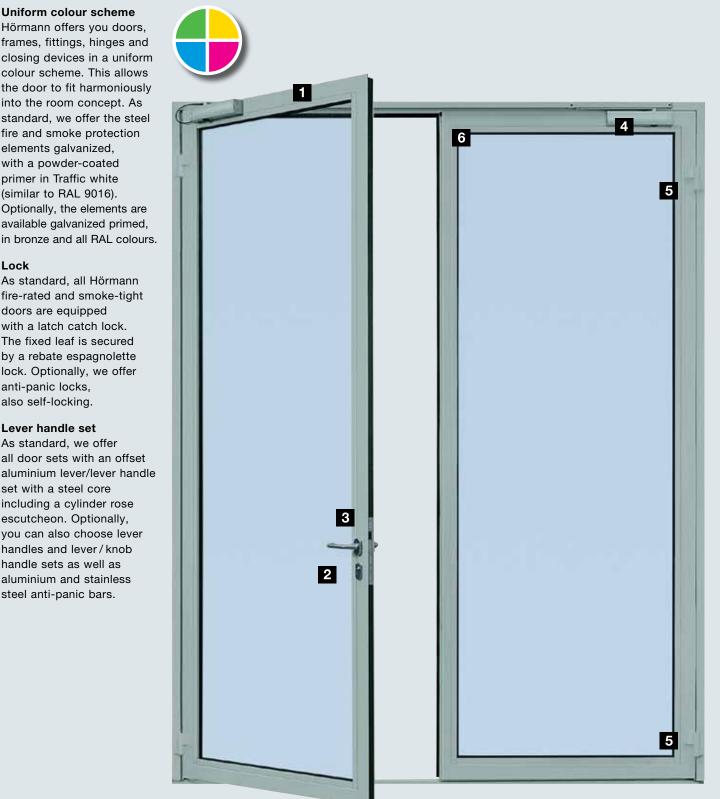
**1** Uniform colour scheme Hörmann offers you doors, frames, fittings, hinges and closing devices in a uniform colour scheme. This allows the door to fit harmoniously into the room concept. As standard, we offer the steel fire and smoke protection elements galvanized, with a powder-coated primer in Traffic white (similar to RAL 9016). Optionally, the elements are available galvanized primed,

### 2 Lock

As standard, all Hörmann fire-rated and smoke-tight doors are equipped with a latch catch lock. The fixed leaf is secured by a rebate espagnolette lock. Optionally, we offer anti-panic locks, also self-locking.

### 3 Lever handle set

As standard, we offer all door sets with an offset aluminium lever/lever handle set with a steel core including a cylinder rose escutcheon. Optionally, you can also choose lever handles and lever / knob handle sets as well as aluminium and stainless steel anti-panic bars.





### 4 Closing devices

As standard, all fire-rated and smoke-tight doors are equipped according to DIN EN 1154 with a slide rail overhead door closer on the hinge side, with an integrated door leaf selector for double-leaf doors. Integrated overhead door closers are also available for a particularly harmonious look of the door.

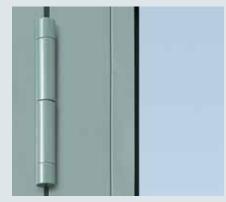


Slide rail overhead door closer

### 5 Hinges



The standard 3D hinge for T30 and RS doors is three-way adjustable, either with a pivot point of 20 or 36 mm. This aluminium hinge is available anodised, powder-coated in all colours or with a stainless steel finish.



For the slim S-Line profiles alternatively the slim steel guide roller is also available as a version for welding or screwing on (pivot point 12 mm). It highlights the vertical line and is available with the same surface as the door or in stainless steel.



The concealed hinges are integrated in the fascia frame and door leaf. This is coupled with an integrated closing system and thus the all-round profile is not interrupted by a surfacemounted element.

### 6 Glazing beads



As standard, the doors are equipped all-round and on both sides of the door with rectangular steel glazing beads. This detail gives the door an elegant overall appearance.



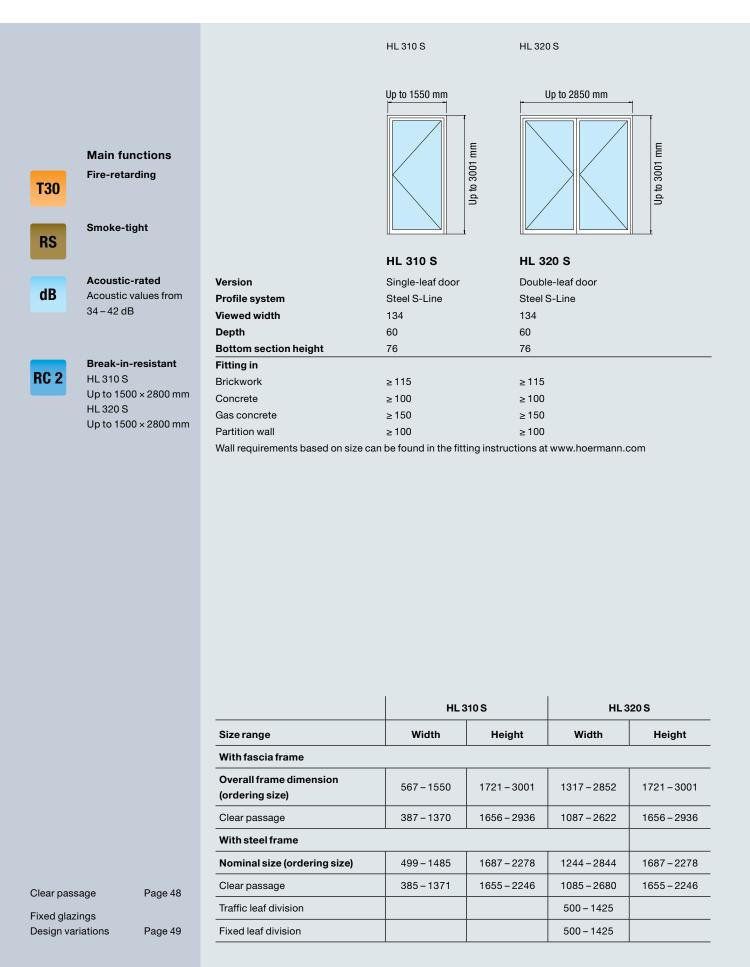
For an exclusive industrial look you can also choose screwed angle glazing beads for both sides of the door.



We also offer a screwed angle glazing bead with edge recess, which is fitted on both sides of the door, giving the door a delicate filigree touch.

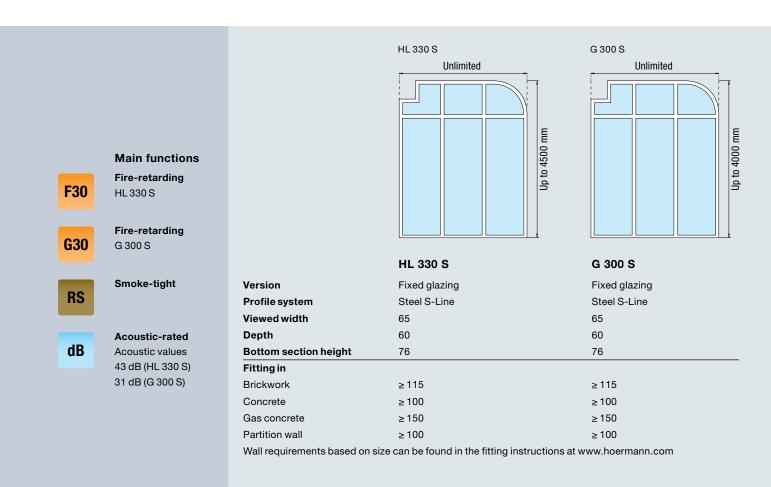
# T30 steel fire and smoke protection elements S-Line HL 310 S, HL 320 S

Single and double-leaf doors



# F30 steel fire and smoke protection elements S-Line HL 330 S, G 300 S

**Fixed glazings** 



	HL 330 S		G 3(	00 S
Size range	Width	Height	Width	Height
With fascia frame				
Overall frame dimension (ordering size)	Unlimited	4500	Unlimited	4000
Maximum door height*		3001		Not available

Fixed glazings Design variations

Page 49

\* For combination of door (HL 310 S, HL 320 S) and fixed glazing (HL 330 S, G 300 S)

# Drägerwerk AG, Lübeck Architect: Goetz Hootz Castorph Architekten und Stadtplaner, Munich







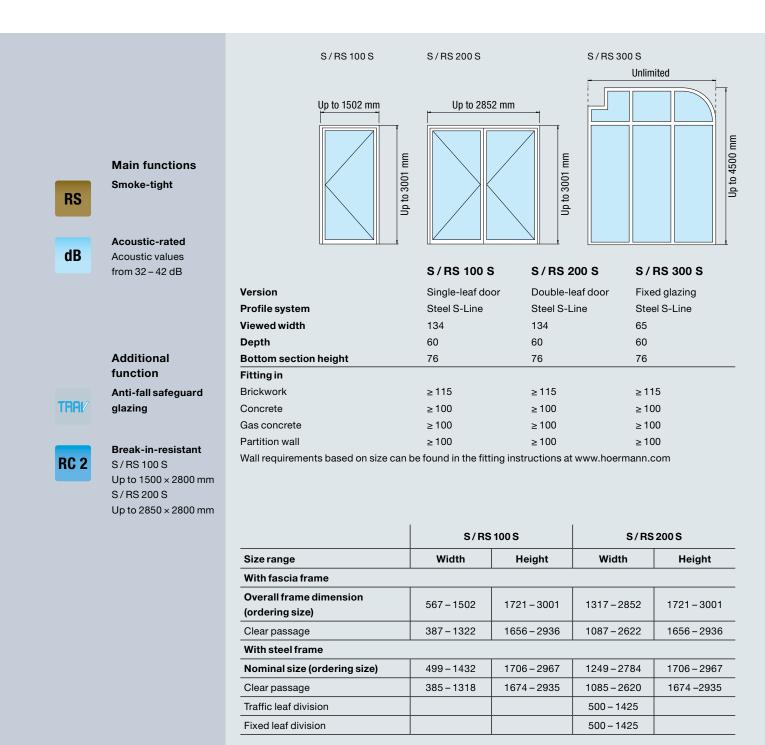


### Hörmann products

- T30 fire-rated and smoke-tight doors HL 310, HL 320, HL 330
   Steel smoke-tight doors S/
- Steel smoke-tight doors S/ RS 100, S/RS 200, S/RS 300
  T30 Fire-rated doors H3, H3D
- T90 Fire-rated doors H 16
- Classic rolling grille HG-S
- Steel folding doors KSM

# Steel smoke protection elements S-Line S / RS 100 S, S / RS 200 S, S / RS 300 S

Single and double-leaf doors, fixed glazing



	S/RS 300 S				
Sizerange	Width Height				
Overall frame dimension (ordering size)	Unlimited	4500			
Maximum door height*	3001				
TRAV					
Max. element size	Unlimited	4500			
Min. pane size	800	1000			
Max. pane size	Depending on glass type according to table 2 TRAV				

Clear passage Fixed glazings

Design variations

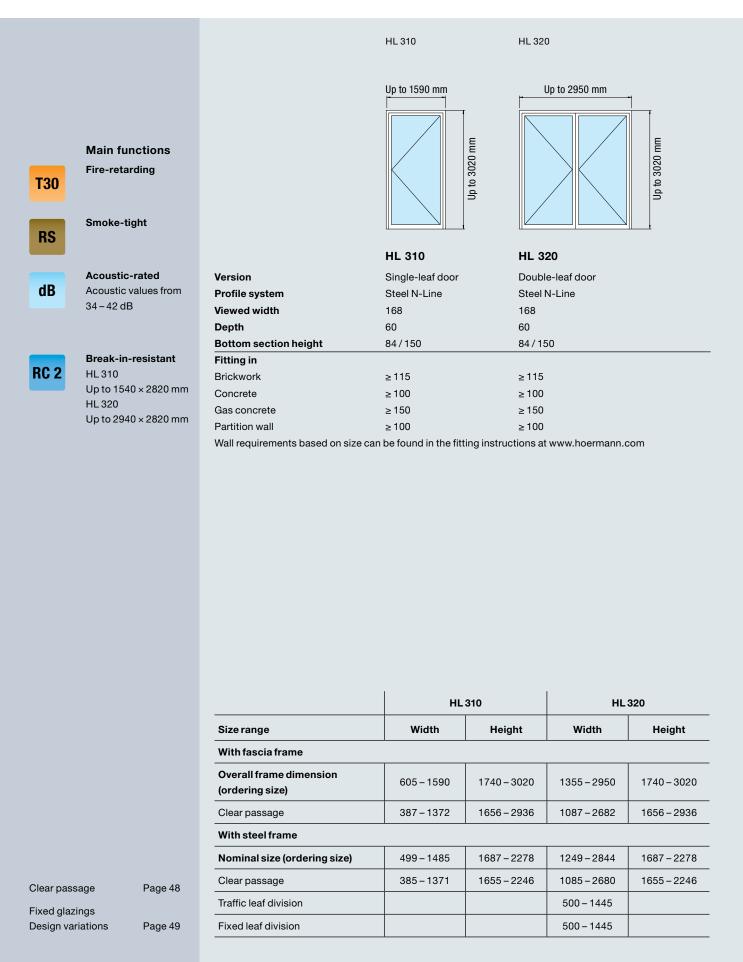
Page 49

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 $^{\star}\,$  For combination of door (S / RS 100 S, S / RS 200 S) and fixed glazing (S / RS 300 S)

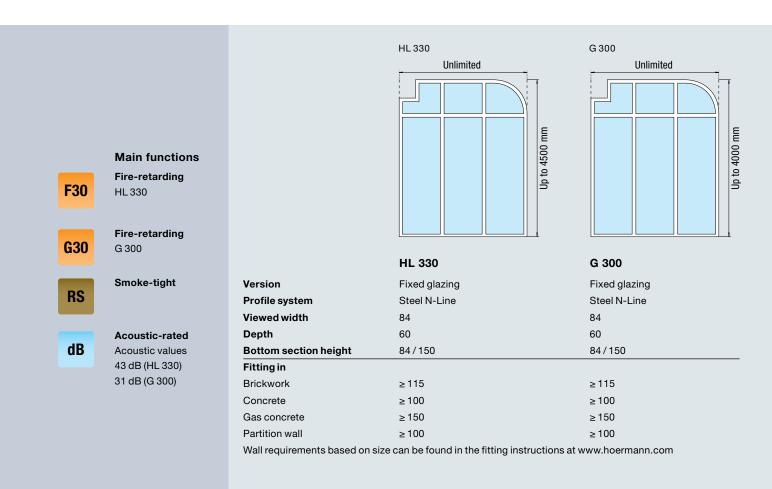
# T30 steel fire and smoke protection elements N-Line HL 310, HL 320

Single and double-leaf doors



# F30 steel fire and smoke protection elements N-Line HL 330, G 300

**Fixed glazings** 



	HL 330		Ga	300
Size range	Width	Height	Width	Height
With fascia frame				
Overall frame dimension (ordering size)	Unlimited	4500	Unlimited	4000
Maximum door height*		3020		Not available

Fixed glazings Design variations

Page 49

For combination of door (HL 310, HL 320) and fixed glazing (HL 330)

University Medical Centre Hamburg-Eppendorf Architect: Nickl & Partner Architekten AG, Munich, Berlin









### Hörmann products

- T30 steel fire-rated and smoketight doors HL 310 / HL 320, partial automatic operation
- T30 steel fire and smoke-tight glazing HL 330 S
- Steel smoke-tight doors S/RS 100
- Steel fire and smoke-tight glazing S / RS 300

# Steel smoke protection elements N-Line S / RS 100, S / RS 200, S / RS 300

Single and double-leaf doors, fixed glazing

		S / RS 100	S / RS 200		S/RS 300 Unlin	nited
RS	Main functions Smoke-tight Acoustic-rated	Up to 3020 mm		Up to 3020 mm		4500
ub	Acoustic values from 32 – 42 dB		S/RS 100	S/RS 2	00 S/	RS 300
	101132 - 42 00	Version	Single-leaf doo	or Double-le	eaf door Fixe	ed glazing
		Profile system	Steel N-Line	Steel N-L		el N-Line
		Viewed width	168	168	84	
		Depth	60	60	60	
	Additional	Bottom section height	84/150	84/150	84 /	150
	function	Fitting in				
7001/	Anti-fall safeguard	Brickwork	≥115	≥115	≥1	
TRAV	glazing	Concrete	≥100	≥ 100	≥10	
		Gas concrete	≥ 150	≥ 150	≥15	
	Break-in-resistant	Partition wall	≥ 100	≥ 100	≥10	
RC 2	S / RS 100 Up to 1540 × 2820 mm S / RS 200 Up to 2940 × 2820 mm	Wall requirements based on size can	S/RS	-		S 200
		Size range	Width	Height	Width	Height
		With fascia frame				
		Overall frame dimension (ordering size)	605 – 1590	1740 – 3020	1355 – 2950	1740 - 3020
		Clear passage	387 – 1372	1656 – 2936	1087 – 2682	1656 – 2936
		With steel frame				
		Nominal size (ordering size)	499 – 1432	1706 – 2967	1249-2784	1706 - 2967
		Clear passage	385 – 1318	1674 – 2935	1085 - 2620	1674 –2935
		Traffic leaf division			500 - 1445	
		Fixed leaf division			500 - 1445	

	S/RS 300			
Size range	Width Height			
Overall frame dimension (ordering size)	Unlimited	4500		
Maximum door height*	3020			
TRAV				
Max. element size	Unlimited	4500		
Min. pane size	800 1000			
Max. pane size	Depending on glass type according to table 2			

Clear passage Fixed glazings

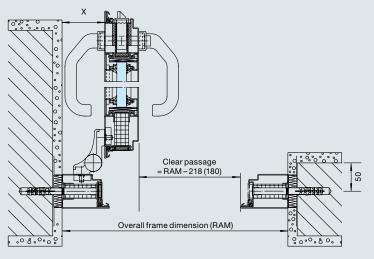
Design variations Page 49

Page 48

\* For combination of door (S / RS 100, S / RS 200) and fixed glazing (S / RS 300)

# **Clear passage** With door leaf opened by 90° and without fittings

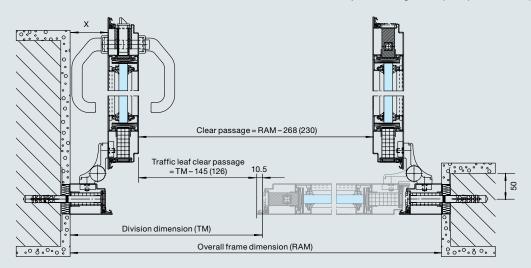
# Single-leaf door



View of T30 steel fire and smoke-tight door N-Line, single-leaf with 3-way adjustable hinges with pivot point 20 mm. (S-Line)

# **Double-leaf door**

View of T30 steel fire and smoke-tight door N-Line, double-leaf with 3-way adjustable hinges with pivot point 20 mm. (S-Line)



|--|

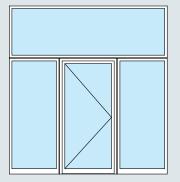
Hinge system	Single-leaf door	Double-leaf door, overall	Double-leaf door, traffic leaf	Distance leaf / wall (x)
3-way adjustable hinge, pivot point 20 mm	RAM – 180	RAM – 230	Division dimension – 126	56
3-way adjustable hinge, pivot point 36 mm	RAM – 196	RAM – 262	Division dimension – 142	72
Guide roller, pivot point 12 mm	RAM – 179	RAM – 227	Division dimension – 125	54
Concealed hinge, pivot point 9.5 mm	RAM – 140	RAM – 150	Division dimension – 85	15

## N-Line

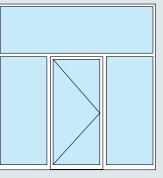
Hinge system	Single-leaf door	Double-leaf door, overall	Double-leaf door, traffic leaf	Distance leaf / wall (x)
3-way adjustable hinge, pivot point 20 mm	RAM – 218	RAM – 268	Division dimension – 145	75
3-way adjustable hinge, pivot point 36 mm	RAM – 234	RAM – 300	Division dimension – 161	91
Guide roller, pivot point 12 mm	RAM – 215	RAM – 262	Division dimension – 142	71
Concealed hinge, pivot point 9.5 mm	RAM – 178	RAM – 188	Division dimension – 104	34

# **Fixed glazings** Design variations

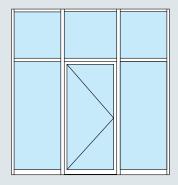
Hörmann aluminium fire-rated doors are available either as a coupling construction for simple connection on location, or as complete elements with a vertical/horizontal profile construction. Thus they can be easily matched to the fitting situation at the construction site. With the Hörmann plug-in system, the slim vertical/horizontal profile construction can also be assembled into walls of any size.



**Coupling construction** 

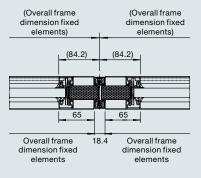


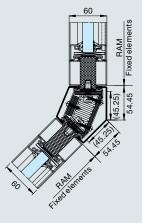
Vertical/horizontal profile construction as a complete element

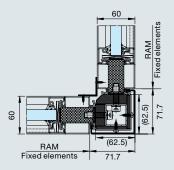


Vertical/horizontal profile construction as a plug-in system

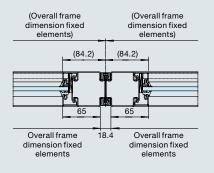
# **Coupling construction variants**





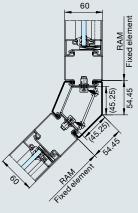


# Steel S-Line F30 180° coupling (N-Line)

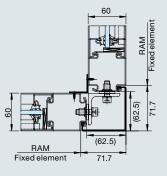


Steel S-Line RS/G30 180° coupling (N-Line)

Steel S-Line F30 135° coupling (N-Line)



Steel S-Line RS/G30 135° coupling (N-Line) Steel S-Line F30 90° coupling (N-Line)



Steel S-Line RS/G30 90° coupling (N-Line)



# T90 / F90 steel fire and smoke protection elements HL 910 F, HL 920 F, HL 930 F

Single and double-leaf doors, fixed glazing



# Unlimited Up to 1540 mm Up to 2490 mm Up to 2570 mm Up to 2570 mm Main functions

HL 920 F

HL 930 F

Up to 4000 mm

HL 910 F

HL 910 F	HL 920 F	HL 930 F
Single-leaf door	Double-leaf door	Fixed glazing
Steel	Steel	Steel
70	70	70
70	70	70
90	90	90
≥ 175	≥ 175	≥ 175*
≥ 140	≥140	≥ 140
≥240	≥240	≥240
≥ 100	≥ 100	≥100
	Single-leaf door Steel 70 70 90 $\geq 175$ $\geq 140$ $\geq 240$	Single-leaf doorDouble-leaf doorSteelSteel707070909090 $\geq 175$ $\geq 175$ $\geq 140$ $\geq 140$ $\geq 240$

Wall requirements based on size can be found in the fitting instructions at www.hoermann.com

\* Overall frame dimension height > 2600 mm: minimum wall thickness  $\ge$  240 mm

	HL 910 F		HL 9	20 F	
Size range	Width	Height	Width	Height	
With fascia frame					
Overall frame dimension (ordering size)	700 – 1540	1725-2570	1400–2490	1725 – 2570	
Clear passage	560 - 1400	1655 – 2500	1260 - 2350	1655 – 2500	

	HL 930 F			
Size range	Width	Height		
Overall frame dimension (ordering size)	Unlimited	4000**		
Maximum door height**		2570		

 $^{\star\star}$  For combination of door (HL 910 F, HL 920 F) and fixed glazing (HL 930 F)

### Fire-proof **T90** HL 910 F

HL 920 F Fire-proof

HL 930 F

Smoke-tight

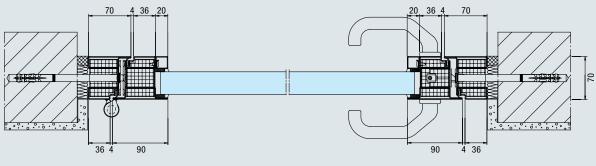
**F90** 

RS

# T90 / F90 steel fire and smoke protection elements

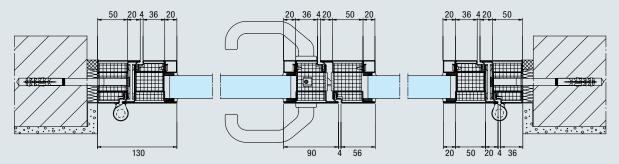
System overview

# Single-leaf door with fascia frame



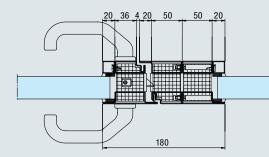
View of T90 steel

# Double-leaf door with fascia frame



View of T90 steel

# **Fixed glazing**



Door / fixed element coupled

Door / fixed element vertical profile construction

View of T90 steel

# **Clear passage** With door leaf opened by 90° and without fittings

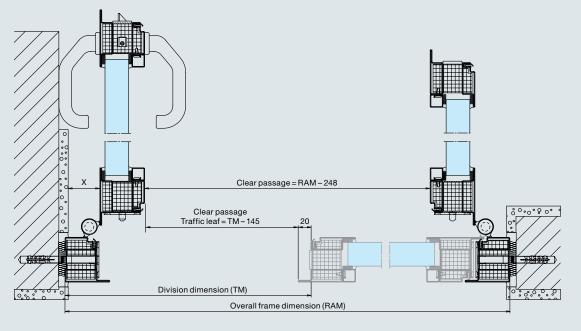
Single-leaf door pivot point 17 mm

Overall frame dimension (RAM)

View of T90 steel fire and smoke-tight door, single-leaf with guide roller, pivot point 17  $\rm mm$ 

# Double-leaf door

View of T90 steel fire and smoke-tight door, double-leaf with guide roller, pivot point 17  $\rm mm$ 



Hinge system	Single-leaf door	Double-leaf door, overall	Double-leaf door, traffic leaf	Distance leaf / wall (x)
3-way adjustable hinge, pivot point 20 mm	RAM – 196	RAM – 252	Division dimension – 146	66
3-way adjustable hinge, pivot point 36 mm	RAM – 212	RAM – 284	Division dimension – 162	82
Guide roller, pivot point 17 mm, fitting by welding	RAM – 194	RAM – 248	Division dimension – 145	65

# Hörmann product range

# Everything from a single source for your construction project

### 1 Sectional doors

These space-saving door systems can be adapted to different industrial facilities using various track applications. Hörmann offers you tailored solutions for every application.

## **2** Rolling shutters and rolling grilles

Thanks to a simple construction with just a few components, rolling shutters are both economical and sturdy. Hörmann supplies rolling shutters in widths and heights of up to 11.75 m and 9 m respectively, or as special doors which are even larger.

## **3** High-speed doors

Hörmann high-speed doors are used both inside and as exterior doors to optimise the flow of traffic, improve room conditions and save energy. The Hörmann programme includes vertically and horizontally opening transparent doors with flexible curtains.

### 4 Loading technology

Hörmann offers you complete loading systems for the logistics sector. The advantages: reliable planning, dependable execution of construction work and high functionality thanks to precisely matched components.

# **5** Fire and multi-purpose sliding doors

Hörmann can provide you with single or double-leaf sliding door solutions suitable for all areas and required fire protection classes, or without fire protection.

## 6 Multi-function doors and reinforced internal doors

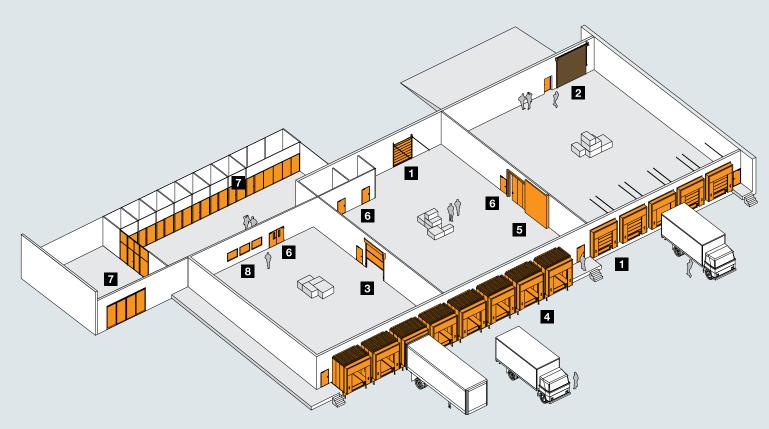
Hörmann multi-function doors and reinforced internal doors are suitable for indoor and outdoor use. Our single and double-leaf doors can be used wherever robust door elements are required. With numerous additional functions, such as fire and smoke protection, acoustic insulation or burglar protection.

### 7 Box frame parts

For areas in which appearance is important, such as administrative buildings, Hörmann offers you fire and smoke protection doors as well as steel and aluminium fixed glazing and automatic sliding doors, also suited for special fire protection requirements.

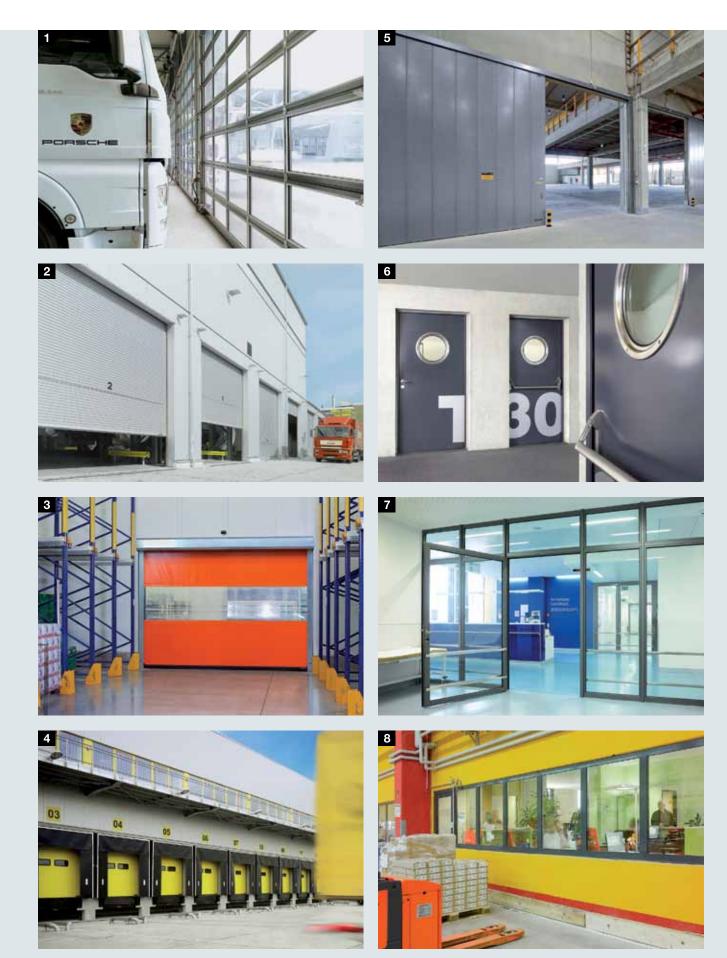
## 8 Visibility windows

Hörmann visibility glazings are used as windows or room-high elements to provide more light and better visibility.





Quick service with testing, maintenance and repairs Our extensive service network means that we are always nearby and at your service around the clock.



# Hörmann: Quality without Compromise



Hörmann KG Amshausen, Germany



Hörmann KG Dissen, Germany



Hörmann KG Antriebstechnik, Germany



Hörmann KG Freisen, Germany



Hörmann KG Brockhagen, Germany



Hörmann KG Ichtershausen, Germany



Hörmann KG Werne, Germany



Hörmann KG Eckelhausen, Germany

Hörmann Genk NV, Belgium





Hörmann Alkmaar B.V., Netherlands

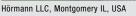


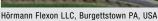
Hörmann Legnica Sp. z o.o., Poland



Hörmann Beijing, China

Hörmann Tianjin, China





Hörmann is the only manufacturer worldwide that offers you a complete range of all major building products from one source. We manufacture in highly-specialised factories using the latest production technologies. The close-meshed network of sales and service companies throughout Europe, and activities in the USA and China, make Hörmann your strong partner for first-class building products, offering "Quality without Compromise".

GARAGE DOORS **OPERATORS** INDUSTRIAL DOORS LOADING EQUIPMENT HINGED DOORS DOOR FRAMES

