



## Industrial Sectional Doors

with the innovative wicket door with trip-free threshold







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### Hörmann brand quality

### Reliable and oriented towards the future



VW original parts logistics, Ludwigsfelde (near Berlin)



### In-house product development

At Hörmann, innovation is produced in-house – highly qualified employees of the development departments are in charge of product optimisation and new developments. This results in market-ready, high-quality products that are very popular around the globe.





### Modern manufacturing

All of the essential door and operator components, such as sections, frames, fittings, operators and controls are developed and manufactured by Hörmann. This guarantees a high degree of compatibility between the door, operator and controls. The certified Quality Management System guarantees the highest level of quality from development, through production to shipping.

This is Hörmann quality - Made in Germany.



As Europe's leading manufacturer of doors, frames and operators, we are committed to high product and service quality. This is how we set standards on an international scale.

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

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



Energy savings compass Your interactive planning aid on the Internet at www.hoermann.com



It goes without saying that spare parts for doors, operators and controls are original Hörmann parts that come with a guaranteed availability of 10 years.



### Competent advice

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

Complete working documentation, such as technical manuals, is not only available in printed form, but it is always accessible and up-to-date at www.hoermann.com

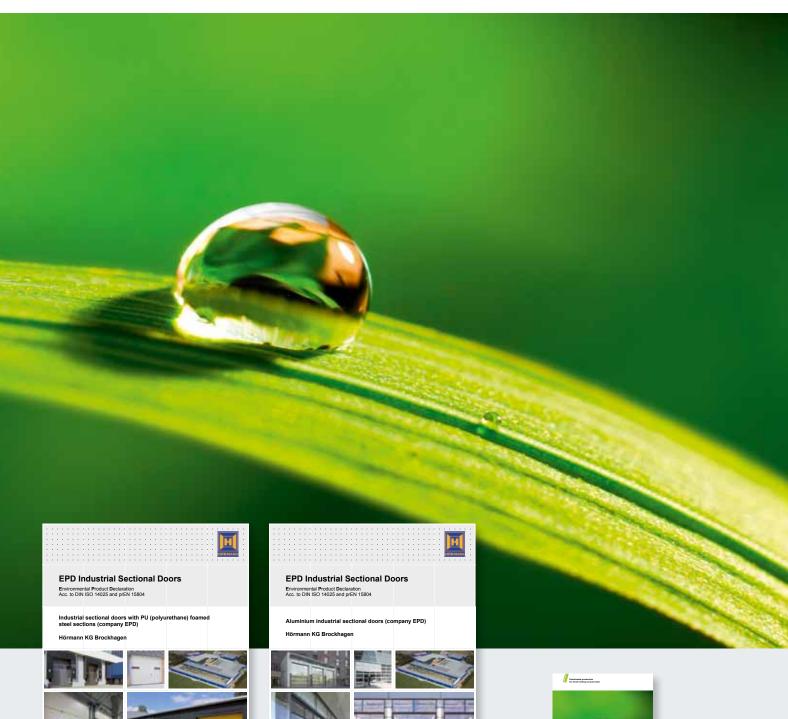


#### **Fast service**

Our extensive service network means that we are always nearby and at your service. This is a great advantage for testing, maintenance and repairs.

## **Sustainable production**

### For future-oriented construction



EPD industrial sectional doors with PU foamed steel sections

ift

Declaration numbe EPD-STPU-0.3

Declaration number EPO-STA-0.3

EPD aluminium industrial sectional doors



Find out more about Hörmann's environmental activities in the "We think green" brochure.



### Sustainable production: Industrial sectional doors from Hörmann

#### **Ecological quality**

A comprehensive energy management system ensures environmentally friendly production, e.g. by using the heat from the production systems to warm the building.

#### **Economic quality**

A long service life and low maintenance costs thanks to the use of high-quality materials, such as DURATEC glazing.

#### **Functional quality**

Large, energy-saving glazing, as well as door constructions with thermal breaks, enable optimum energy efficiency in the building.

#### **Process quality**

By further processing mono-material plastic waste from the production process, material resources are saved.

## Sustainability verified and documented by the IFT in Rosenheim

Hörmann is the only manufacturer who already received confirmation of the sustainability of all its industrial sectional doors through an environmental product declaration (EPD) in accordance with DIN ISO 14025 and prEN 15804 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". Environmentally-friendly production was confirmed by a life-cycle analysis in accordance with DIN EN ISO 14040 / 14044 for all industrial sectional doors.

## Sustainable construction with Hörmann competence

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.

### References for sustainable construction with Hörmann



ThyssenKrupp, Essen



dm logistics centre, Weilerswist



Immogate logistics centre, Munich

Nordex-Forum, Hamburg
Unilever Hafen-City, Hamburg
Deutsche Börse, Eschborn
Opernturm, Frankfurt
Skyline-Tower, Munich
Prologis Pineham Sites, Sainsbury





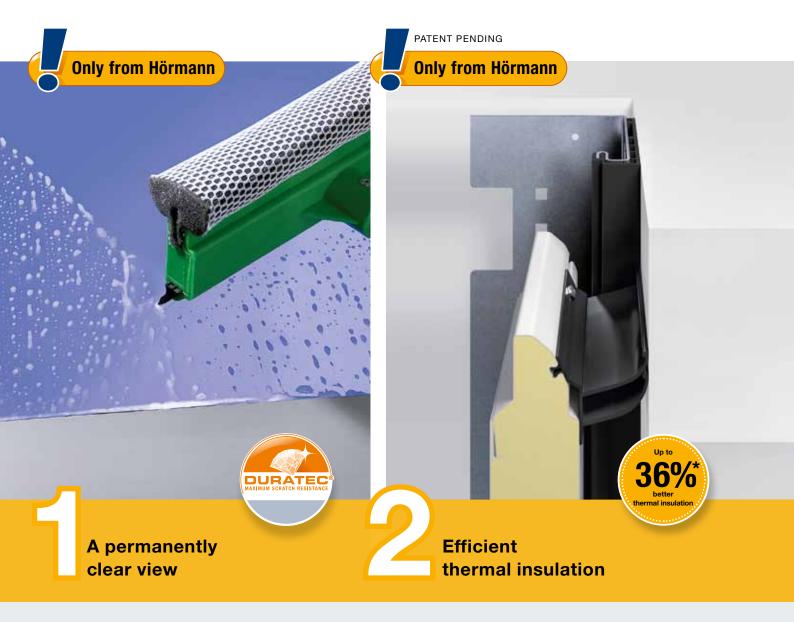






### Good reasons to try Hörmann

The market leader has the innovations



#### Maximum scratch resistance

Doors with DURATEC synthetic glazing stand up to tough demands in rough industrial environments, while maintaining their transparency. A special surface coating, similar to that used on car headlights, protects the pane over the long-term from scratches and damage caused by cleaning.

The DURATEC glazing is available as standard and at no extra charge in all sectional doors with synthetic glazing – only from Hörmann.

For further information, see pages 46 – 49.



Also take a look at the video at: www.hoermann.com

#### ThermoFrame

Well-insulated industrial sectional doors are essential in heated buildings. Hörmann industrial sectional doors are optionally available with the ThermoFrame frame connection for a thermal break between frame and brickwork. DPU doors are supplied with ThermoFrame as standard. Additionally, lip seals protect both sides of the door and in the upper area of the door from heat or cold loss, increasing the thermal insulation value by up to 36 %.

For further information, see pages 50 – 51.



#### Wicket door with trip-free threshold

The wicket door with extra-flat stainless steel threshold ensures easier passage of pedestrians. With doors with a width up to 5510 mm, the threshold rail is only 10 mm high in the middle and 5 mm high at the edges, reducing the risk of tripping considerably and making it easier to wheel things through.

Under certain circumstances, Hörmann wicket doors with trip-free threshold can even be used as escape doors and for barrier-free construction.

For further information, see pages 38 – 41.



Also take a look at the video at: www.hoermann.com

#### Components from our own factories

Hörmann has developed its own operators and controls. This means the components have been adjusted to work together, ensuring the door's functional safety.

The uniform operating concept and the 7-segment displays facilitate daily use. Fitting is also simplified thanks to uniform housing and cable sets.

For further information, see pages 60-75.

### ♦BiSecur

This operating concept is rounded off with the extremely secure BiSecur radio system.

For further information, please see page 68.

### **Door fixtures and fittings**

### Section thicknesses, surface finishes and profile types



### 2 section thicknesses

## Robust 42-mm-thick sections (SPU F42)

Hörmann doors with a 42-mm-thick PU-foamed section are especially robust, offering good thermal insulation.

## 80-mm-thick sections with improved thermal insulation (DPU)

With the 80-mm-thick section of Hörmann's DPU doors with thermal break, you benefit from a very high thermal insulation. Its excellent insulation value (up to 0.48 W/(m²-K)\* is achieved thanks to the thermal break between the exterior and interior of the steel section. This also minimises the formation of condensation water on the inside of the door.

### 2 section surface finishes

The surface finish of the sections of steel doors or doors with bottom sections is based on hot-galvanized sheet steel and a high-adhesion primer-coating (2-component PUR) that protect the door against adverse effects of the weather.

## Highly-resistant Stucco surface finishes (SPU F42, DPU, APU F42, APU F42 S-Line)

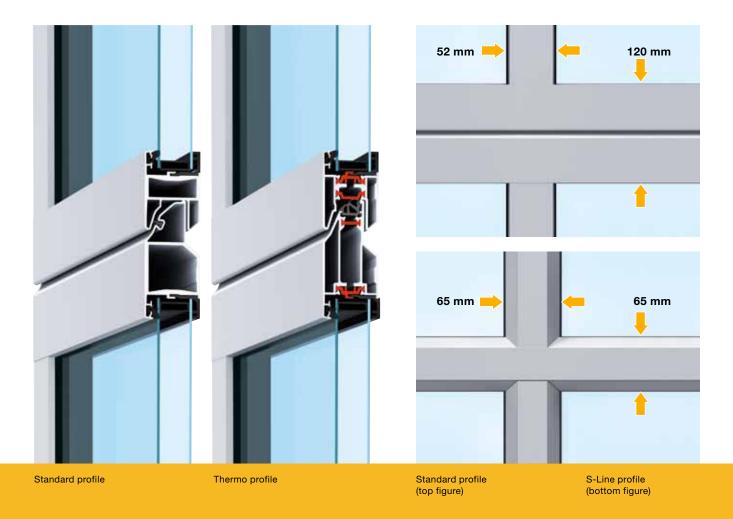
Additionally, Stucco texturing gives the door surface a uniform structure on which light scratches or traces of dirt are more difficult to see.

## Micrograin surface finishes give an elegant look

#### (SPU F42, APU F42, APU F42 S-Line)

Micrograin features a smooth surface and characteristic fine lines, harmonising door surfaces especially well with modern facades that are characterised by their clear formal structure. The inside of the door is Stucco-textured in Grey, white RAL 9002, as standard.

<sup>\*</sup> For a door size of 5000 × 5000 mm



### 2 profile types

#### Standard profile (APU F42, ALR F42, APU F42 S-Line, ALR F42 S-Line, ALR Glazing, ALR Vitraplan)

As standard, the glazing frames are produced using high-quality aluminium profiles that are designed for robust industrial and commercial day-to-day work. The standard profile without thermal break is ideal for buildings that are barely or not at all heated or cooled.

## Thermo profile with thermal break (APU F42 Thermo, ALR F42 Thermo)

The thermal break between the outside and inside of the profile ensures good thermal insulation qualities. These profiles with thermal break are the first choice everywhere where the thermal insulation of building plays a role. 3x or climatic glazing can improve energy efficiency even more.

### 2 profile views

### Standard profile / Thermo profile (APU F42, ALR F42, APU F42 Thermo, ALR F42 Thermo)

The profile width is 52 mm as standard.

The section transitions are each 120 mm wide, seals and finger trap protection are included.

### S-Line profile (APU F42 S-Line, ALR F42 S-Line)

The narrow S-Line frame construction features a vertical and horizontal profile that is only 65 mm wide in the section transitions and can be integrated inconspicuously into modern, large glass facades. Thanks to its characteristic trapezoidal symmetry with chamfered edges, the S-Line profile appears very delicate. The invisible section transitions are equipped with seals and finger trap protection.

### **Application areas**

A matching door version for every purpose

## Save energy thanks to thermal insulation

SPU F42 DPU

Double-skinned steel sectional doors

Page 14



# More light in the building

APU F42
APU F42 Thermo

Glazed aluminium doors with steel bottom section

Page 18



## Fitting in modern architecture

ALR F42
ALR F42 Thermo
Glazed aluminium doors



Page 22

### **Elegant and stylish**

**APU F42 S-Line ALR F42 S-Line** 

Glazed aluminium doors with invisible section transitions

Page 26



# Display windows and elegant eye-catchers

ALR F42 Glazing ALR F42 Vitraplan Exclusively glazed

aluminium doors

Page 30



# Door and facade design

ALR F42 for on-site cladding Aluminium doors



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### SPU F42 DPU

### **Double-skinned steel sectional doors**



### Commercial buildings and warehouses

Operator WA 300 S4 (see page 60) is an inexpensive solution if your door is not used frequently every day (SPU F42)

### Fresh logistics

The DPU door minimises temperature losses at door openings, making it ideal for use in food and cold logistics.



### Everything from one source: Industrial doors, dock levellers, dock shelters



**Agriculture**Robust thanks to 42 mm
PU-foamed panels (SPU F42)



Easy and safe passage of pedestrians thanks to a wicket door with trip-free threshold (SPU F42)



### **Double-skinned steel sectional doors**

### **SPU F42**

The 42-mm-thick PU-foamed section with finger trap protection is especially robust and offers a good thermal insulation. The door leaf is available in the surface variants Stucco-textured (figure on the left) and Micrograin (figure on the right). The Stucco-textured surface features a uniform ribbing every 125 mm in the section and in the section transition.

### **DPU**

The 80-mm-thick sections with thermal break without finger trap protection\*, in combination with double seals and the standard ThermoFrame, offer optimum thermal insulation.



<sup>\*</sup> In the available size range, these doors comply with the requirements in EN 13241-1.

	_		

Brief overview				
Door type	SPU F42 Without wicket door	SPU F42 With wicket door	<b>DPU</b> Operator WA 400	<b>DPU</b> Direct drive operator
Door size				
Max. width	8000 mm	7000 mm	6000 mm	10000 mm
Max. height	7000 mm	7000 mm	5000 mm	8000 mm
Resistance to wind load EN 12424	Class 3	Class 3*	Class 4	Class 4**
Water tightness EN 12425	Class 3 (70 Pa)			
Air permeability EN 12426	Class 2	Class 1	Class 3	Class 3
Acoustic insulation EN 717-1	R = 25 dB	R = 24 dB	R = 25 dB	R = 25 dB
Thermal insulation EN 13241-1, Appendix B EN 12428 For a door surface of 5000 × 5000 mm				
Closed door	U = 1.0 W/(m <sup>2</sup> ⋅K)	U = 1.2 W/(m <sup>2</sup> ·K)	U = 0.48 W/(m <sup>2</sup> ⋅K)	U = 0.48 W/(m <sup>2</sup> ·K)
Section	U = 0.50 W/(m <sup>2</sup> ·K)	U = 0.50 W/(m <sup>2</sup> ⋅K)	U = 0.30 W/(m <sup>2</sup> ·K)	U = 0.30 W/(m <sup>2</sup> ·K)

Safety features in acc. with EN 13241-1, page 55. Overview of the available colours, page 45 Overview of the types of glass, page 49 Overview of technical data, page 76

 $<sup>^{\</sup>star}$  Class 2 for door widths over 4000 mm

<sup>\*\*</sup> Class 3 for door widths over 8000 mm

## Particularly high thermal insulation with ThermoFrame frame connection

### **Example door versions**

### Door width up to 4500 mm

(Example 4500 × 4500 mm)



SPU F42, DPU Type A section window uniform field division



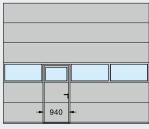
SPU F42, DPU Aluminium glazing frame uniform field division

### Door width up to 5500 mm

(Example 5500 × 4500 mm)



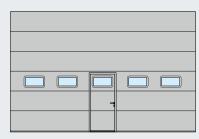
SPU F42 Type D section window wicket door to the left



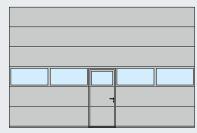
SPU F42 Aluminium glazing frame wicket door to the left

#### Door width over 5500 mm

(Example 7000 × 4500 mm)



SPU F42 Type E section window wicket door in the centre



SPU F42 Aluminium glazing frame wicket door in the centre





## DPU The energy-

# The energy-saving door for more than just fresh logistics

The exterior and interior of the steel section has a thermal break, ensuring very good thermal insulation of up to 0.48 W/(m²·K)\* and preventing the formation of condensation water on the inside of the door. Additionally, the double seals at the lintel and in the floor area as well as the standard ThermoFrame frame connection effectively minimise energy loss (additional information on pages 50 – 51).

### SPU F42 In the same appearance as sectional garage doors

On request, the SPU F42 is available in the same door styles and surface finishes as Hörmann sectional garage doors.



More information can be found in the Sectional garage door brochure.

<sup>\*</sup> For a door size of 5000 × 5000 mm

### APU F42 APU F42 Thermo

Glazed aluminium doors with steel bottom section



**Workshops**Large glazings for light in the workspace



### Commercial buildings and warehouses

The PU-foamed bottom section can be replaced easily and inexpensively if damaged, for example, by a vehicle.

### Protection bollards protect from damage

When used outside, they avoid expensive collision damage on buildings. When used inside, they protect the door tracks from collision damage.

## Especially easy to service and repair thanks to robust bottom sections





### Workshops

Easy and safe passage of pedestrians thanks to a wicket door with trip-free threshold



### **Industrial halls**

Permanent clear view thanks to standard DURATEC glazing

# Glazed aluminium doors with steel bottom section



### APU F42

Thanks to the combination of robust bottom sections and large glazings, the door is especially stable and lets a lot of light into the building.

### **APU F42 Thermo**

The APU F42 Thermo with glazing beads with thermal break is recommended if your thermal insulation requirements are high.

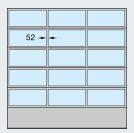


Brief overview				
Door type	APU F42 Without wicket door	APU F42 With wicket door	APU F42 Thermo Without wicket door	APU F42 Thermo
Door size				
Max. width	8000 mm	7000 mm	7000 mm	7000 mm
Max. height	7000 mm	7000 mm	7000 mm	7000 mm
Resistance to wind load EN 12424	Class 3	Class 3*	Class 3	Class 3*
Water tightness EN 12425	Class 3 (70 Pa)	Class 3 (70 Pa)	Class 3 (70 Pa)	Class 3 (70 Pa)
Air permeability EN 12426	Class 2	Class 1	Class 2	Class 1
Acoustic insulation EN 717-1	R = 23 dB	R = 22 dB	R = 23 dB	R = 22 dB
Thermal insulation EN 13241-1, Appendix For a door surface of 5000 × 5000 mm	B EN 12428			
Standard double pane	$U = 3.5 \text{ W/(m}^2 \cdot \text{K)}$	U = 3.7 W/(m <sup>2</sup> ·K)	$U = 2.9 \text{ W/(m}^2 \cdot \text{K)}$	$U = 3.1 \text{ W/(m}^2 \cdot \text{K)}$
Optional triple pane	U = 2.9 W/(m <sup>2</sup> ·K)	U = 3.1 W/(m <sup>2</sup> ·K)	$U = 2.4 \text{ W/(m}^2 \cdot \text{K)}$	$U = 2.6 \text{ W/(m}^2 \cdot \text{K)}$
Optional climatic double pane (single-pane safety glass)	$U = 2.4 \text{ W/(m}^2 \cdot \text{K)}$	-	$U = 2.0 \text{ W/(m}^2 \cdot \text{K)}$	-

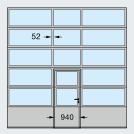
Safety features in acc. with EN 13241-1, page 55. Overview of the available colours, page 45 Overview of the types of glass, page 49 Overview of technical data, page 76 \* Class 2 for door widths over 4000 mm

### **Example door versions**

## **Door width up to 4500 mm** (Example 4500 × 4500 mm)

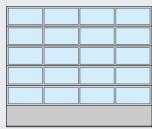


APU F42, APU F42 Thermo uniform field division



APU F42, APU F42 Thermo wicket door in the centre

## Door width up to 5500 mm (Example 5500 × 4500 mm)



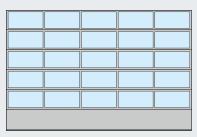
APU F42, APU F42 Thermo uniform field division



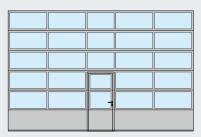
APU F42, APU F42 Thermo wicket door to the left

### Door width over 5500 mm

(Example 7000 × 4500 mm)



APU F42, APU F42 Thermo uniform field division



APU F42, APU F42 Thermo wicket door in the centre

### **Robust bottom section**

The 750-mm-high bottom section is available in Stucco or Micrograin surface finish. It is especially robust thanks to the uniform PU foaming of the 42 mm steel section and can also resist an unintentional hit. With larger damages, it can be exchanged easily and inexpensively.

On request, uniform field division is also possible with wicket door.

The field division of the wicket door arrangement is also available in doors without wicket door.

When modernising or when existing doors are to be matched, 91 mm wide rails are also possible.

### ALR F42 ALR F42 Thermo

Glazed aluminium doors



**Industrial halls** 

Aluminium profiles with thermal break and an optional triple glazing ensure that insulation is improved by up to 30 % (ALR F42 Thermo)





**Workshops**Permanent clear view thanks to standard DURATEC glazing



Collective garages
Variety of infill options, from expanded mesh
to perforated sheet infill for door and wicket door

### **Glazed aluminium doors**

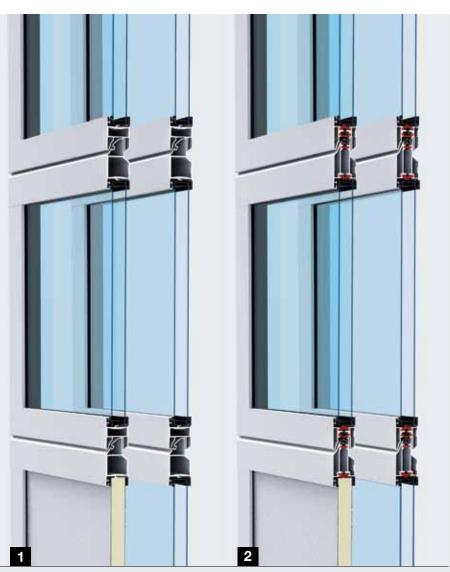


### **ALR F42**

This door features large glazings down to the bottom sections and a contemporary appearance with aluminium profile. Owing to DURATEC glazing, the view remains clear for a long time to come.

### **ALR F42 Thermo**

Thanks to glazing beads with thermal break and DURATEC synthetic glazing, the door offers maximum transparency and thermal insulation.



Brief overview				
Door type	ALR F42 Without wicket door	ALR F42 With wicket door	ALR F42 Thermo Without wicket door	ALR F42 Thermo
Door size				
Max. width	8000 mm	7000 mm	7000 mm	7000 mm
Max. height	7000 mm	7000 mm	7000 mm	7000 mm
Resistance to wind load EN 12424	Class 3	Class 3*	Class 3	Class 3*
Water tightness EN 12425	Class 3 (70 Pa)			
Air permeability EN 12426	Class 2	Class 1	Class 2	Class 1
Acoustic insulation EN 717-1	R = 23 dB	R = 22 dB	R = 23 dB	R = 22 dB
Optional climatic double pane (single-pane safety glass)	· · · · · · · · · · · · · · · · · · ·		R = 30 dB	-
Thermal insulation EN 13241-1, appendix B EN 12428 For a door surface of 5000 × 5000 mm				
Standard double pane	$U = 3.3 \text{ W/(m}^2 \cdot \text{K)}$	$U = 3.5 \text{ W/(m}^2 \cdot \text{K)}$	$U = 2.7 \text{ W/(m}^2 \cdot \text{K)}$	$U = 2.9 \text{ W/(m}^2 \cdot \text{K)}$
Optional triple pane	U = 3.0 W/(m <sup>2</sup> ·K)	U = 3.2 W/(m <sup>2</sup> ·K)	$U = 2.4 \text{ W/(m}^2 \cdot \text{K)}$	U = 2.6 W/(m <sup>2</sup> ·K)
Optional climatic double pane (single-pane safety glass)	$U = 2.6 \text{ W/(m}^2 \cdot \text{K)}$	-	$U = 2.1 \text{ W/(m}^2 \cdot \text{K)}$	-

# The best thermal insulation with ALR F42 Thermo in combination with climatic double pane and ThermoFrame

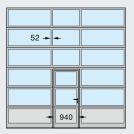
### **Example door versions**

### Door width up to 4500 mm

(Examples 4500 × 4500 mm)

52 →	+

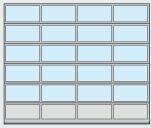
ALR F42, ALR F42 Thermo uniform field division



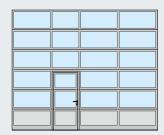
ALR F42, ALR F42 Thermo wicket door in the centre

### Door width up to 5500 mm

(Examples 5500 × 4500 mm)



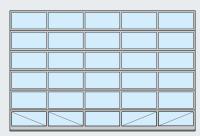
ALR F42, ALR F42 Thermo uniform field division



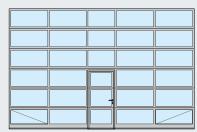
ALR F42, ALR F42 Thermo wicket door to the left

### Door width over 5500 mm

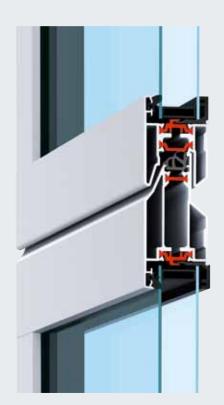
(Examples 7000 × 4500 mm)



ALR F42, ALR F42 Thermo uniform field division fully glazed



ALR F42, ALR F42 Thermo wicket door in the centre fully glazed



## The best thermal insulation

With ALR F42 Thermo, the aluminium profiles have a thermal break made of glass-fibre reinforced polyamide spacers (red) and offer optimum thermal insulation when exposed to high levels of light.

The thermal insulation value can be decreased by approx. 25 % to up to 2.0 W/(m²·K) with optional climatic double panes and ThermoFrame.

On request, uniform field division is also possible with wicket door.

The field division of the wicket door arrangement is also available in doors without wicket door.

When modernising or when existing doors are to be matched, 91 mm wide rails are also possible.

Of course, individual arrangements of the glass and panel infills are possible, as well as full glazing for wide and narrow window sections.

For full glazing from a door width of 5510 mm, the lower window sections are equipped on the inside with diagonal statics cross struts for better stability.

# **APU F42 S-Line ALR F42 S-Line**

Glazed aluminium doors with invisible section transitions



Designed facades

With invisible section transitions for perfect integration into the visual appearance of the facade



### Car showrooms

Permanent clear view thanks to standard DURATEC glazing



### Workshops

The PU-foamed bottom section can be replaced easily and inexpensively if damaged, for example, by a vehicle (APU F42 S-Line).

# Glazed aluminium doors with invisible section transitions



### **APU F42 S-Line**

The combination of narrow glazing beads and a robust bottom section let a lot of light into the building, offering the convincing robustness required for daily use.

### **ALR F42 S-Line**

The narrow frame structure with invisible section transitions offer a large view. The door can be optimally integrated into modern glass facades, barely distinguishable from fixed glass elements.



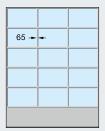
Brief overview		
Door type	APU F42 S-Line Without wicket door	ALR F42 S-Line Without wicket door
Door size		
Max. width	5000 mm	5000 mm
Max. height	7000 mm	7000 mm
Resistance to wind load EN 12424	Class 3	Class 3
Water tightness EN 12425	Class 3 (70 Pa)	Class 3 (70 Pa)
Air permeability EN 12426	Class 2	Class 2
Acoustic insulation EN 717-1	R = 23 dB	R = 22 dB
Thermal insulation EN 13241-1, Appendix B EN 12428 with a door surface of 5000 × 5000 mm		
Standard double pane	$U = 3.4 \text{ W/(m}^2 \cdot \text{K)}$	$U = 3.2 \text{ W/(m}^2 \cdot \text{K)}$
Optional triple pane	U = 2.9 W/(m <sup>2</sup> ·K)	$U = 2.8 \text{ W/(m}^2 \cdot \text{K)}$

Safety features in acc. with EN 13241-1, page 55. Overview of the available colours, page 45 Overview of the types of glass, page 49 Overview of technical data, page 76

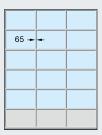
### **Example door versions**

### Door width up to 3500 mm

(Examples 3500 × 4500 mm)



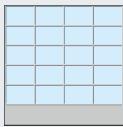
APU F42 S-Line uniform field division



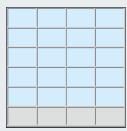
ALR F42 S-Line uniform field division

### Door width up to 4500 mm

(Examples 4500 × 4500 mm)



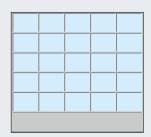
APU F42 S-Line uniform field division



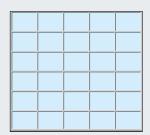
ALR F42 S-Line uniform field division

### Door width over 4500 mm

(Examples 5000 × 4500 mm)



APU F42 S-Line uniform field division



ALR F42 S-Line uniform field division fully glazed



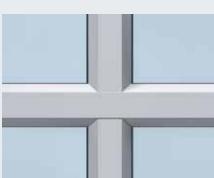
# S-Line The profile with invisible section transitions

The frame construction has a uniform vertical and horizontal width of 65 mm. This also applies to invisible section transitions that, of course, are equipped with seals and finger trap protection.

The profiles appear very delicate thanks to their trapezoidal symmetry. This allows for a harmonious door appearance that can be perfectly integrated into fixed elements of modern glass facades.

Wicket doors are not possible with APU F42 S-Line / ALR F42 S-Line doors. Information on matching side doors can be found on page 42.

Of course, individual arrangements of the glass and panel infills are possible, as well as full glazing for wide and narrow window sections.



## ALR F42 Glazing ALR F42 Vitraplan

Exclusively glazed aluminium doors



### Car showrooms

Thanks to large glazings made of real glass, the door is a display window, attracting potential customers (ALR F42 Glazing).







**Designed facades** 

A clear overall appearance thanks to the offset glazing with a fascinating mix of mirroring and transparency (ALR F42 Vitraplan with matching side doors)



**Designed facades**A permanently clear view thanks to standard DURATEC glazing (ALR F42 Vitraplan)

### **Exclusively glazed aluminium doors**

### **ALR F42 Glazing**

1 The window sections, all the exact same height, are produced without vertical rails for door widths of up to 3330 mm. Continuous window sections with real glass offer an unimpeded view into showrooms. The ideal display window door.

### **ALR F42 Vitraplan**

2 The surface-mounted, flush-fitting glazing fascinates with a mix of mirroring and transparency. The colours of the frame profiles are matched to the glazing colours in grey or brown.



Brief overview		
Door type	ALR F42 Glazing	ALR F42 Vitraplan
Door size		
Max. width	5500 mm	6000 mm
Max. height	4000 mm	7000 mm
Resistance to wind load EN 12424	Class 3	Class 3
Water tightness EN 12425	Class 3 (70 Pa)	Class 3 (70 Pa)
Air permeability EN 12426	Class 2	Class 2
Acoustic insulation EN 717-1	R = 30 dB	R = 23 dB
Thermal insulation EN 13241-1, Appendix B EN 12428 with a door surface of 5000 × 5000 mm		
Standard single pane made of laminated safety glass (ALR Glazing)	$U = 6.2 \text{ W/(m}^2 \cdot \text{K)}$	
Standard double pane (ALR Vitraplan)	-	$U = 3.2 \text{ W/(m}^2 \cdot \text{K)}$
Optional triple pane	-	$U = 3.0 \text{ W/(m}^2 \cdot \text{K)}$
Optional climatic double pane (single-pane safety glass)	U = 2.6 W/(m <sup>2</sup> ·K)	-

### **Example door versions**

Door width up to 3330 mm

(Example 3330 × 3500 mm)



ALR F42 Glazing

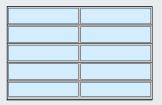
Door width over 3330 mm

(Example 4500 × 3500 mm)

91 -	+

ALR F42 Glazing with vertical rail

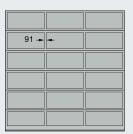
(Example 5500 × 3500 mm)



ALR F42 Glazing with vertical rail

Door width up to 4500 mm

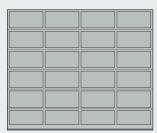
(Example 4500 × 4500 mm)



ALR F42 Vitraplan uniform field division

Door width up to 5500 mm

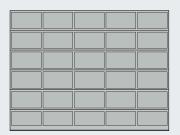
(Example 5500 × 4500 mm)



ALR F42 Vitraplan uniform field division

Door width over 5500 mm

(Example 6000 × 4500 mm)



ALR F42 Vitraplan uniform field division



# ALR F42 Vitraplan For sophisticated architecture

The ALR F42 Vitraplan is especially elegant thanks to offset, flush-fitting glazing. The frame profile is concealed, so nothing detracts from the clear overall appearance.

The uniform glazing adds an eye-catching element to modern industrial structures and prestigious private buildings.



Synthetic pane, grey



Synthetic pane, brown

The door can be harmoniously integrated in the facade with glazings in brown and grey, as well as a dark frame profile colour that harmonises with the glass.

### **ALR F42**

### Aluminium doors for on-site cladding



On-site cladding with aluminium compound board



On-site cladding with timber panels





On-site cladding with laminated timber boards

## Aluminium doors for on-site cladding

### **ALR F42**

The facade cladding door base consists of frame profiles with PU sandwich infill. The horizontal profiles are cladded. Optionally, we provide vertical fitting profiles to which the facade material can be attached simply and unseen.

You can design the on-site, flush-fitting facade cladding according to your wishes with timber, metal, ceramic, plastic and many other materials. Please observe the maximum weight per unit area of the on-site cladding. For further information, see the planning aid.



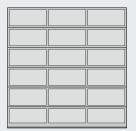
Brief overview		
Door type	ALR F42	
Door size (depending on weight of on-site cladding)		
Max. width	8000 mm	
Max. height	4500 mm	
Resistance to wind load EN 12424	Class 3	
Water tightness EN 12425	Class 3 (70 Pa)	
Air permeability EN 12426	Class 2	
Acoustic insulation EN 717-1	R = 23 dB	
Thermal insulation EN 13241-1, Appendix B EN 12428 with a door surface of 5000 $\times$ 5000 mm		
PU sandwich infill	$U = 2.6 \text{ W/(m}^2 \cdot \text{K)}$	

Safety features in acc. with EN 13241-1, page 55. Overview of the available colours, page 45 Overview of the types of glass, page 49 Overview of technical data, page 76

### **Example door versions**

### Door width up to 4500 mm

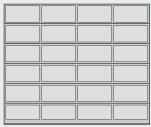
(Example 4500 × 4500 mm)



ALR F42 uniform field division

### Door width up to 5500 mm

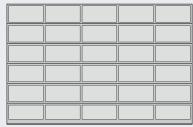
(Example 5500 × 4500 mm)



ALR F42 uniform field division

### Door width over 5500 mm

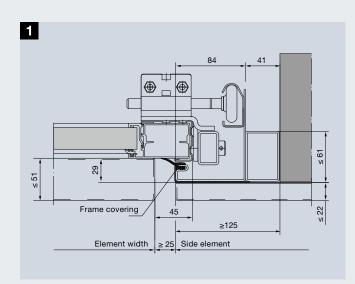
(Example 7000 × 4500 mm)

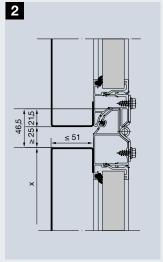


ALR F42 uniform field division

### **Excerpt from the planning aid**

Standard fitting in the opening

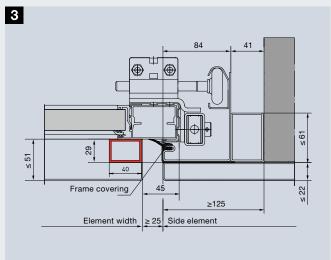


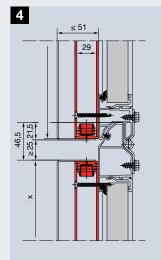


#### Standard version

Horizontal view
Door frame connection
to the facade wall

2 Vertical view Section transitions





### Version with fitting profiles (red)

Horizontal view
Door frame connection
to the facade wall

4 Vertical view Section transitions

For detailed planning documents, please visit http://www.hoermann.de/fileadmin/dokumentationen/anleitungen/garagen-sectionaltore/Fassadentor\_Planungshilfen.pdf

### Wicket doors with trip-free threshold

As a fully-fledged escape route





### **Avoid accidents**

Wicket doors with trip-free thresholds pose less of a risk for persons stumbling and injuring themselves. Tool cars or trolleys can easily pass over the very flat stainless steel threshold with rounded edges.





### **Trip-free passage**

The wicket door with trip-free threshold is provided with a 10 mm and 5 mm flat stainless-steel threshold rail in the middle and at the edges respectively. For doors with widths from 5510 mm, the threshold is approx. 13 mm.

- The garage door does not need to be opened for pedestrian traffic.
- It reduces the risk of tripping up and makes it easier to wheel things through.
- Power-driven doors feature a leading photocell VL 2 with two sensors which causes the door to reverse on encountering an obstruction well before contact is made.
- The wicket door contact ensures that the main door can only be opened when the wicket door is closed.



Also take a look at the video at: www.hoermann.com

### 940 mm clear passage width as standard

Under certain circumstances, the wicket door with trip-free threshold, with its clear passage width of 940 mm, fulfils the requirements as an escape door and for barrier-free construction.

### As an escape door

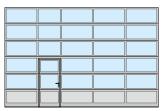
Under certain circumstances, Hörmann wicket doors with trip-free threshold up to a door width of 5500 mm fulfil the requirements of an escape door.

### As an unobstructed entrance

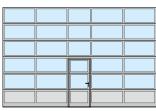
Under certain conditions, Hörmann wicket doors with trip-free thresholds fulfil the requirements for accessibility in accordance with DIN EN 18040-1 and are certified by the IFT Rosenheim.

### Freely selectable position

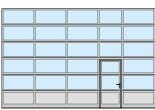
The wicket door can be positioned both to the left, right and centre (except in the two outermost fields). Its clear passage width is 940 mm. All the door's additional fields have the same width.



wicket door to the left

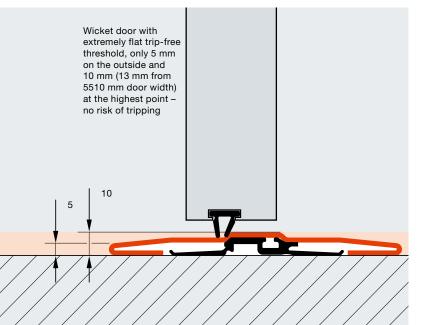


wicket door in the centre



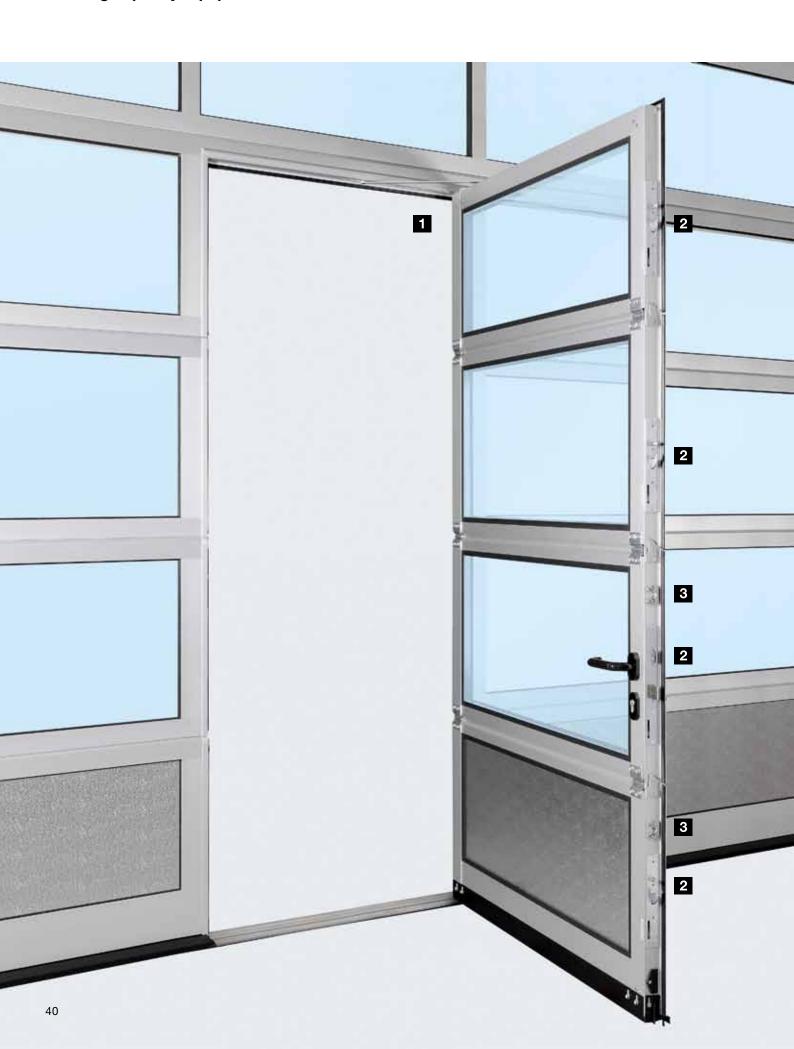
wicket door to the right

On request, doors with wicket door are also available with uniform field division and the wicket doors can be supplied in individual sizes or matching to existing doors, even with threshold rails. We recommend the wicket door with threshold rail for inclining surfaces in the opening area.



### Wicket doors with trip-free threshold

With high-quality equipment



### **NEW**As standard with concealed hinges



# Overhead door closer As standard, wicket doors are supplied with slide rail door closers (not shown). An integrated door closer, including hold-open device is optionally available for optimum protection and the best appearance (fig.).



INEW
The all-round frame consists of a flat aluminium profile, harmoniously integrating the wicket door into the door.

Flat wicket door frame



Optional multiple-point locking
The wicket door is locked
over the entire door height
with one bolt and hook bolt
per section. The advantage:
better stability and improved
break-in-resistance.



Concealed hinges
// NEW
For a uniform door style, the wicket door is available as standard with concealed hinges.



Robust door catch Prevents door-leaf drop and buckling



Finger trap protection
On both the inside and
outside of the wicket door
frame as a standard feature.



Optimally sealed
The adjustable threshold
profile with flexible seal
compensates for
unevenness in the floor.

Adjustable double seals located in the transition from the bottom edge of the door to the floor and the door leaf to the threshold optimally seal the bottom edge of the door and the wicket door opening.

Only Hörmann's wicket doors with trip-free thresholds can be used in automatic operation without any limitations, thanks to the leading photocell VL 2.

### **Side doors**

Matching the door or with a door leaf with thermal break



### Aluminium side doors matching the door

If sufficient space is available next to the door, the matching side door provides a safe way of separating employee traffic from vehicle traffic. For your safety, side doors also serve as escape routes. They open inwards and outwards and can be right or left-hand hinged.

Side doors are also available on request with 3-point locking (latch, bolt, double locking hook and security rose escutcheon).

#### Side door equipment

- Aluminium extrusions anodised according to DIN 17611, surface anodised in natural colour E6 / C0 (previously E6 / EV 1)
- As standard with all-round seals made of long-lasting, weather-resistant EPDM

#### **Fittings**

- Mortice lock with profile cylinder
- Offset lever handle set, with oval rose escutcheons made of black plastic
- On request also available as lever / knob handle sets
- Optionally available in natural finish cast aluminium, polished stainless steel or brushed stainless steel

#### Overhead door closer

• Optional with side doors

### Steel side doors with door leaf with thermal break and high thermal insulation

### MZ Thermo multi-purpose door (right)

- 46-mm-thick door leaf with thermal break and PU rigid foam infill
- Aluminium block frame with thermal break and threshold with thermal break
- High thermal insulation with a U-value = 1.2 W/(m²·K)
- Optionally available in a WK 2
   KSI Thermo version

Further information can be found in the Function doors for construction projects brochure









### Greater freedom to design with individual colour schemes



SPU F42 Thermo in Rape yellow, RAL 1021



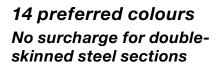
Doors with double-skinned steel sections in any of the 14 preferred colours are supplied in Grey white, RAL 9002, on the inside.



APU F42 in Grey aluminium, RAL 9007



Door leaf reinforcements and the end caps of the sections on the inside of coloured doors are supplied in Grey white, RAL 9002, as standard. With doors with wicket doors, the frame of the wicket door on the inside consists of aluminium profiles in E6 / C0 (previously E6 / EV 1).



### Colours are increasingly being used to fly the company flag. In this regard, coloured industrial doors are an ideal vehicle.

The primer-coating of all industrial sectional doors from Hörmann is available in 14 preferred colours, as well as approximately 200 colours based on RAL and NCS\*.



The wet coating on the interior and exterior sides and the coil coating procedure for double-skinned 42-mm sections in preferred colours ensure high-quality, long-lasting colour. This maintains the attractive appearance of your door.

Dark colours should not be used for double-skinned steel doors and for doors with thermal breaks that are exposed to the sun, as possible section deflection may restrict the door's function (bi-metal effect).

The galvanized subframe and fittings are not factory-coated. Anodised profiles for the wicket door and glazing beads can be optionally coated. The frames for section windows and compound window are black as standard. Door leaf reinforcements and end caps are Grey white, RAL 9002, as standard.

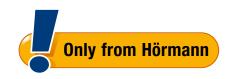
The colours shown are subject to the limitations of the printing process and cannot be regarded as binding. Contact your Hörmann specialist dealer for advice regarding coloured doors. All colours based on RAL.

Traffic white	RAL 9016
Pure white	RAL 9010
Grey aluminium	RAL 9007
White aluminium	RAL 9006
Grey white	RAL 9002
Terra brown	RAL 8028
Anthracite grey	RAL 7016
Moss green	RAL 6005
Leaf green	RAL 6002
Gentian blue	RAL 5010
Azure blue	RAL 5009
Ultramarine blue	RAL 5002
Flame red	RAL 3000
Rape yellow	RAL 1021

<sup>\*</sup> With the exception of pearl-effect and fluorescent colours. Slight colour variations are permissible.

### Maximum scratch resistance with Hörmann's sectional door glazing





### A permanently clear view

The new DURATEC glazing is available as standard and at no extra charge in all sectional doors with synthetic glazing – only from Hörmann.

With DURATEC synthetic glazing, Hörmann sectional doors retain their clear view permanently, even after multiple cleanings and heavy use.

### Better protection against scratches caused by cleaning

A special surface coating, similar to that used on car headlights, protects the pane over the long-term from scratches and damage caused by cleaning.



Also take a look at the video at: www.hoermann.com



DURATEC synthetic glazing with maximum scratch resistance



Sensitive, common synthetic glazing

### Excellent thermal insulation as standard

### **DURATEC** double pane

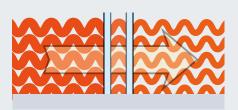
Compared with conventional 16 mm glazing, the standard 26 mm double pane improves thermal insulation by up to 20 %.

### **DURATEC** triple pane

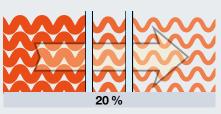
Thermal insulation is up to **30** % more effective thanks to optional triple glazing.

### Climatic double pane

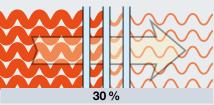
These helps to minimise heat transmission, improving thermal insulation by approx. **50** %.



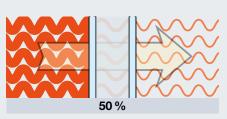
16 mm double pane







Optional DURATEC triple pane Up to 30 % better thermal insulation in comparison with 16 mm double pane



climatic double pane Up to 50 % better thermal insulation in comparison with 16 mm double pane

Optional

In the building

Exterior side

### **Glazings**, infills

• = possible	Pane thickness in mm	DURATEC	Ug = W/(m².K)	Transparency	g-value	SPU F42	DPU	APU F42	APU F42 Thermo	ALR F42	ALR F42 Thermo	APU F42 S-Line	ALR F42 S-Line	ALR F42 Glazing	ALR F42 Vitraplan
Aluminium glazing fra	ıme				'										
Synthetic panes				0001	1		I	1 _		1 _		l	I		
1x, clear	3	•		88 %		•		•		•					
1x, crystal structure	3		0.6	84 % 79 %	76.0/	•		•		•	•		•		•
2x, clear 2x, clear, grey // NEW	26 26	•	2.6	79%	76 %	•		•	•	•	•	•	•		
	_	_													
2x, clear, brown // NEW	26 26	•	2.6	60 %		•		•	•	•	•	•	•		
2x, clear, white (opal) // NEW  2x, external crystal structure	26	•	2.6	74 %		•		•	•	•	•	•	•		
2x, external crystal structure  2x, clear	45		2.7	74 70			•								
3x, clear	26	•	1.9	71 %	69 %	•		•	•	•	•	•	•		
3x, clear, grey // NEW	26	•	1.9	1 1 70	03 70	•		•		•	•	•	•		
3x, clear, brown // NEW	26	•	1.9			•		•		•	•	•	•		
3x, clear, white (opal) // NEW	26	•	1.9	60 %		•		•	•	•	•	•	•		
3x, clear	45	•	1.6	00 70			•								
4x, clear	45	•	1.3				•								
			<u> </u>		1			<u> </u>							
Polycarbonate panes, impact-resista	nt, break-	ın-resist	ant												
1x, clear	6	•				•		•		•					
2x, clear	26	•	2.6			•		•	•	•	•	•	•		•
Real glass															
1x laminated safety glass, clear	6			88 %	79 %	•		•		•				•	
2x single-pane safety glass, clear	26		2.7	81 %	76 %	•		•	•	•	•			•	
2x climatic pane, clear	26		1.1	80 %	63 %	•		•	•	•	•			•	
Infill variations									1						
	1.0		4.0	50.01	T										
Multiple-moulded panes (7x)	16		1.9	52 %		•		•	•	•	•				
Expanded mesh, stainless steel Ventilation cross section: 58 % of the infill surface						•		•		•					
Perforated steel sheet, stainless steel, smooth Ventilation cross section: 40 % of the infill surface						•		•		•					
PU sandwich infill Aluminium sheet cladding, anodised on both sides, smooth	26							•	•	•	•	•	•		
PU sandwich infill Aluminium sheet cladding, Stucco-textured both sides	26							•	•	•	•	•	•		
Compound glazings															
Synthetic panes															
2x, clear, plastic frame	16	•				D									
2x, clear, plastic frame	33	•				A, E									
2x, clear, diecast frame	26	•				Α									
2x, clear, diecast frame	64	•					Α								
3x, clear, diecast frame	64	•					Α								
4x, clear, diecast frame	64	•					Α								
Polycarbonate panes, impact-resista	nt, break-	in-resist	ant												
2x, clear	26	•				Α									
,		_													



### **Aluminium glazing frame**

### Standard profile

### Glazing frame:

Anodised E6 / C0 (previously E6 / EV 1) with / without thermal break

### Clear view:

depending on version

#### Rail extrusion:

52 mm, optional 91 mm, 100 mm (DPU)



### S-Line profile

#### Glazing frame:

Anodised E6 / C0 (previously E6 / EV 1)

#### Clear view:

depending on version

#### Rail extrusion:

65 mm



### **Compound glazings**



### Type A

### Glazing frame:

Plastic frame or diecast frame, black

### Clear view:

 $635 \times 245 \text{ mm}$ 

#### Door section height:

500 mm (DPU),

500, 625, 750 mm (SPU F42)



### Type D

### Glazing frame:

Plastic frame, black

### Clear view:

602 × 132 mm

### Door section height:

500, 625, 750 mm



### Type E

### Glazing frame:

Black plastic frame

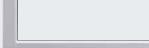
### Clear view:

 $725 \times 370 \text{ mm}$ 

### Door section height:

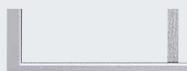
625, 750 mm





PU sandwich infill, smooth

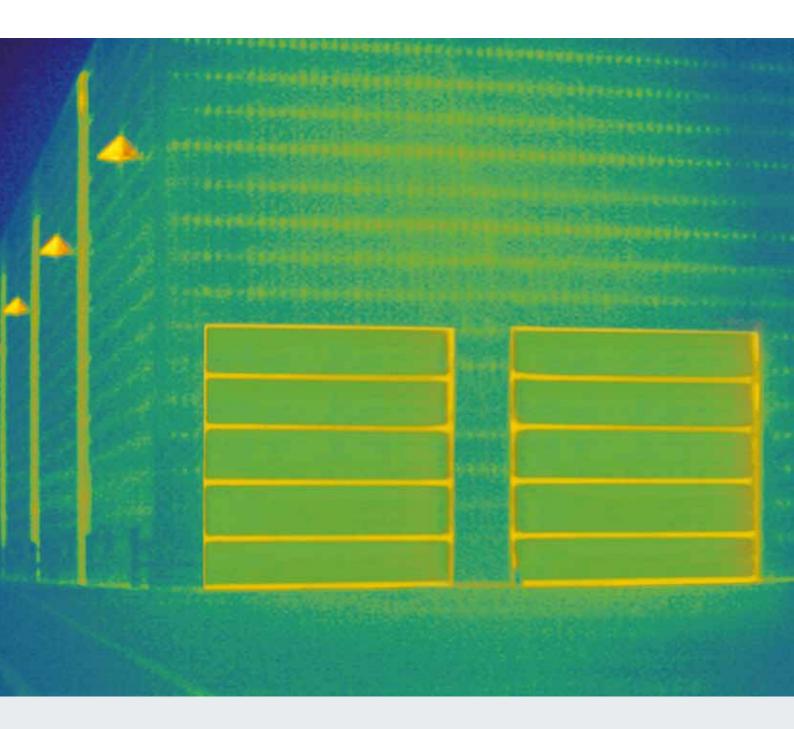
Perforated steel sheet



PU sandwich infill, Stucco

### **Efficient thermal insulation**

With a thermal break between frame and brickwork



### **ThermoFrame**

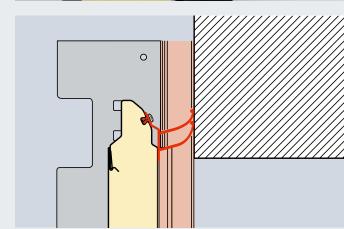
Well-insulated doors are essential in heated buildings. This is why Hörmann industrial sectional doors come, optionally, with a ThermoFrame frame connection with a thermal break between the frame and brickwork. The lip seals on both sides of the door and in the upper section of the door offer additional insulation, increasing it by up to 36 %.

### ThermoFrame As standard for all DPU industrial sectional doors

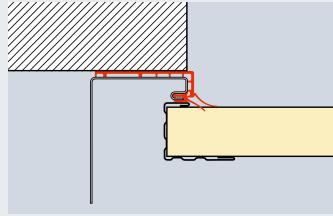
- UPVC bottom locating profile
- UPVC lintel profile with double lip
- With ThermoFrame frame connection
- Up to 36 % better thermal insulation with a door surface of 3000 × 3000 mm
- Top thermal insulation value: U = 0.48 W/(m<sup>2</sup>⋅K) with a door surface of 5000 × 5000 mm

## Only from Hörmann





Lintel fitting with ThermoFrame



Sideroom with ThermoFrame

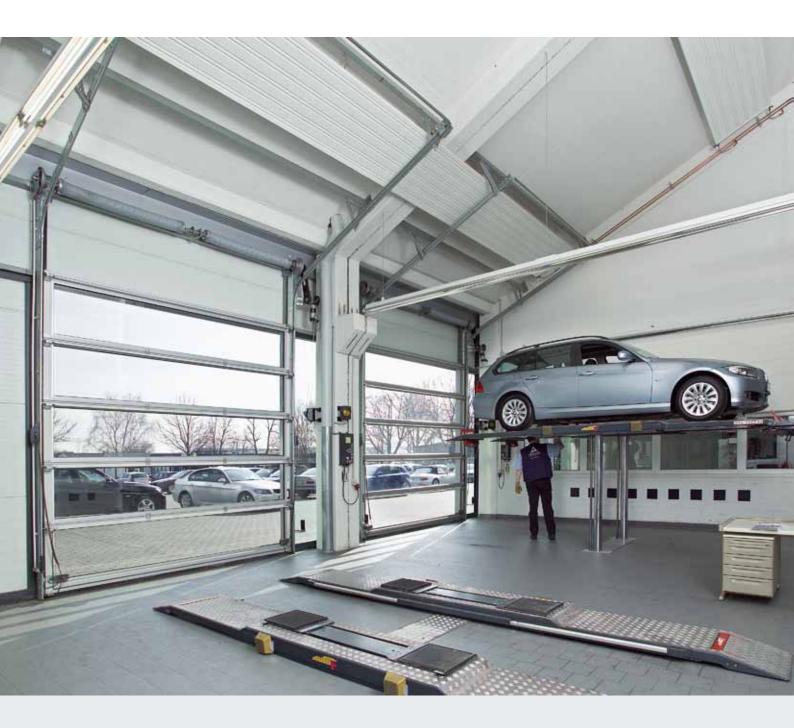
### ThermoFrame Optionally available for all industrial sectional doors

- Thermal break between the frame and brickwork
- Additional seals for improved tightness
- Easy to fit along with the door frame
- Optimum corrosion-protection of the side frame
- Up to 12 % better thermal insulation in the SPU F42 industrial sectional door, with a door surface of 3000 × 3000 mm

SPU F42 Door surface (mm)	Without ThermoFrame	With ThermoFrame	Improvement
3000 × 3000	1.22 W/(m <sup>2</sup> ·K)	1.07 W/(m <sup>2</sup> ·K)	12.3 %
4000 × 4000	1.10 W/(m <sup>2</sup> ·K)	0.99 W/(m <sup>2</sup> ·K)	10.0 %
5000 × 5000	1.03 W/(m <sup>2</sup> ·K)	0.94 W/(m <sup>2</sup> ·K)	8.7 %
DPU Door surface (mm)			
3000 × 3000	0.95 W/(m <sup>2</sup> ·K)	0.60 W/(m <sup>2</sup> ·K)	36.8 %
4000 × 4000	0.79 W/(m <sup>2</sup> ·K)	0.53 W/(m <sup>2</sup> ·K)	32.9 %
5000 × 5000	0.69 W/(m <sup>2</sup> ·K)	0.48 W/(m <sup>2</sup> ·K)	30.4 %

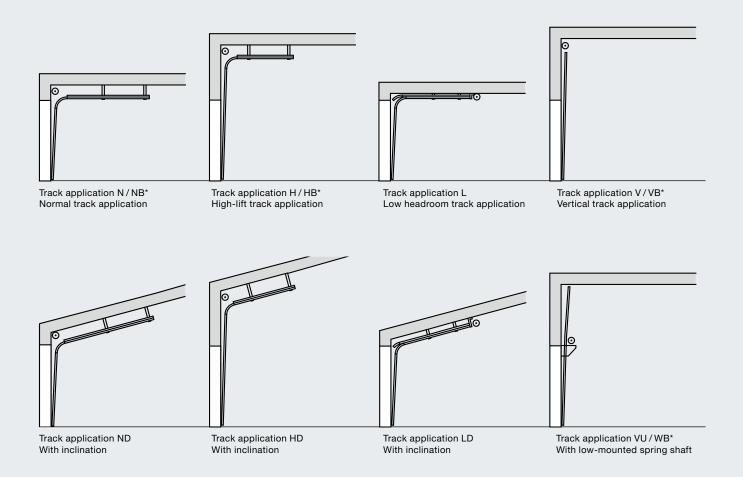
### **Examples of track versions**

Sound planning for old and new buildings



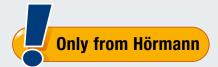
### Track applications that fit precisely to the building

Whichever door type you have selected for your building: At Hörmann, you will find the a track application to match your door. Depending on the building architecture and requirement, you can choose between standard and low headroom track applications, low headroom track applications or inclined track applications.



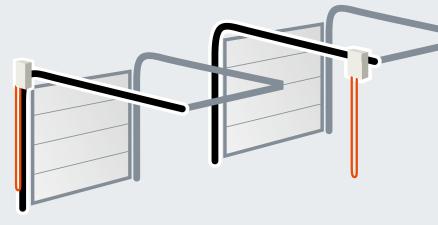
Please see the valid technical manual for all of the available track applications.

\* For door type DPU



### The low headroom track application

Operator and chain are on the front of the door. An unsightly and potentially hazardous chain no longer dangles down. It pays to compare!



Hörmann arrangement

Competitors arrangement

### The best proof of quality: sophisticated technology to the last detail





### Safety features in accordance with European standard 13241-1

Doors must comply with the safety requirements of European standard 13241-1.

Have this confirmed by other manufacturers!

### Hörmann products are tested and certified for:

### Anti-fall safeguard

### 6 Reliable door guidance

The rollers are guided precisely in a **safety track** developed by Hörmann. This is why the door leaf cannot fall out during the turning phase or when parked near the ceiling.

### 7 Optimum counterbalance

The torsion spring assembly with grooved spring shaft ensures an optimum counterbalance. As a result, the door moves easily during the entire opening and closing phase.

- Catch safety device (depending on equipment)
  This load-dependent latch device is integrated in the load carrier for protection in case a cable or spring breaks.

  European patent.
- 9 Spring safety device (depending on equipment)
  Stops the torsion spring shaft if a spring breaks and securely holds the door in this position. European patent.

### **Trap protection**

### 10 Finger trap protection

The unique form of the door sections eliminates trap points, both on the outside and inside.

#### 11 Internally guided cables

The carrying cables are guided on the inside between the door leaf and frame. No protruding components. This virtually excludes the risk of injuries. For doors with a low headroom track application, the load carrier consists of a carrying chain / carrying cable.

### 12 Side trap guards

The side frames are completely closed from top to bottom. This creates a secure side trap guard.

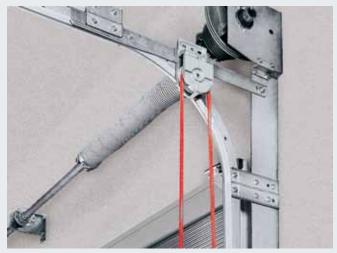
### 13 Closing edge safety device

Sensors monitor the bottom edge of the door and stop and reverse it if there is a hazard. A leading photocell ensures particularly safe monitoring of the closing edge (for further information, see page 65). Obstructions are detected before they come into contact with the door.

### **Manually operated doors**

### As standard with pull rope or pull rod

### **Optional operation options**



Optional: Hand pulley with rope or link steel chain



Optional: Chain hoist



Optional: Chain tensioner for easier operation

### Securely locked as standard



Shootbolt
Prepared for an on-site
padlock for use as a secure
night door.



Only from Hörmann

Rotary latch
An automatic latching disc securely latches the door.
On request for doors with VU/WB and HU/RB tracks (with spring shaft at bottom).



Only from Hörmann

EUROPEAN PATENT

Floor locking
Extremely practical
for frequently used doors.
Convenient foot release.
The automatic latch audibly
engages when closed.

### The door handle

### **Standard security**



### Lock operation from outside

With the handle set, the door lock can be ergonomically operated from outside. From inside, the lock is operated via T-handle and locking pin.

The profile cylinder can also be integrated into central locking systems.



Shootbolt



Rotary latch



### Recessed handle set

Vertical door guidance, ideal for logistics applications, thanks to a flat design and flexible installation height (dock doors). You can operate two functions with the locking cylinder: permanently unlocked door and automatic re-locking.

All parts on the inside are protected by cladding.



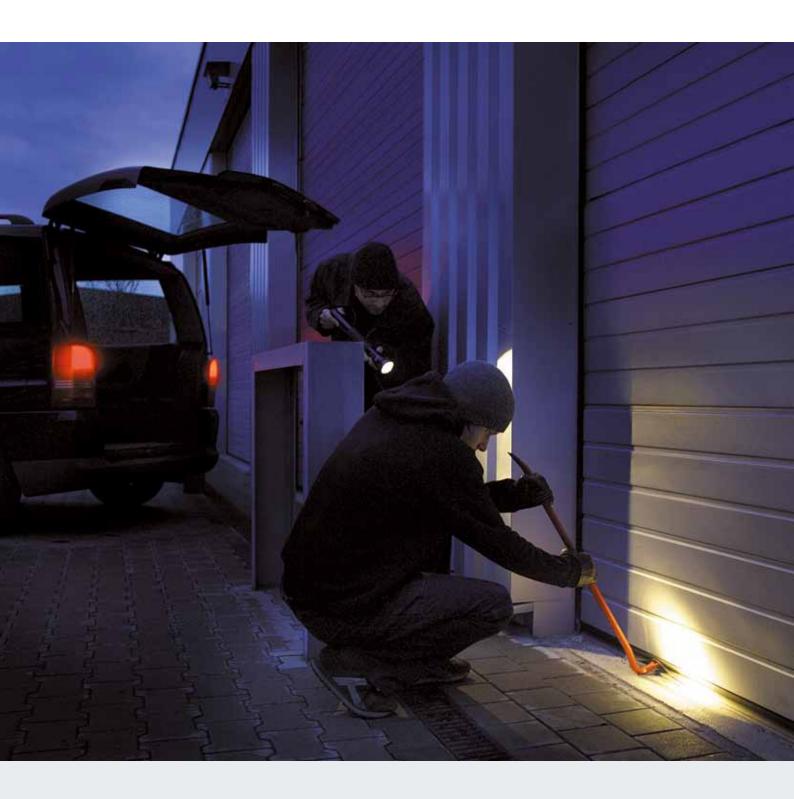
Shootbolt



Rotary latch

### **Standard security**

Thanks to a break-in-resistant arrestor kit



It is especially important for industrial doors to be reliably break-in-resistant to protect your goods and machines. All Hörmann power-driven doors up to 5 m high are equipped with a mechanical anti-lift kit. Hörmann offers optional locking systems for special protection.



The locking hook of the arrestor kit automatically latches if the door is forced upwards.

### Tightly locked and protected against forced opening

At Hörmann, all industrial sectional doors up to 5 m height equipped with operators WA 300 / WA 400 are supplied with a break-in-resistant arrestor kit as standard. This mechanical protection reliably prevents the door from being forcefully pushed open, even in case of a power failure.

Industrial sectional doors over 5 m high are break-in resistant due to their heavy weight.

In sectional doors with rail-guided operators, self-locking gearboxes protect against forced opening.

### Increased security for night doors

In power-driven doors, an additional mechanical shootbolt can be installed (see the figure on page 57). Because it is equipped with an electrical interrupter contact, the operator cannot be started if the door is locked.

### **Shaft operator WA 300 S4**

### with standard soft start and soft stop





Soft start and soft stop For gentle and quiet door travel, thereby sustainably increasing the service life of the door system.



Lower investments. lower consumption The WA 300 costs approx. 30 % less than with a 3-phase current operator, and daily power consumption is reduced by up to 75 %.



Simple and fast fitting and start-up since many components have already been preassembled and no closing edge safety devices or cable

slack switches have to be fitted.

For further information, please see the fitting data or contact your Hörmann partner.

### Advantages at a glance

### Particularly easy to fit and maintain thanks to its power limit as standard

Doors without wicket doors require no installations on the door, such as closing edge safety devices or cable slack switches, reducing the costs and risk of repair and other services.

Safe "Close" travel with reduced speed All "Open" travel as well as "Close" travel above a 2500 mm opening height takes place at a speed of approx. 19 cm/s. With an opening height below 2500 mm, "Close" travel must be set to approx. 10 cm/s for safety reasons. This restriction does not apply to optional leading photocells or closing edge safety devices, meaning the door opens and closes at approx. 19 cm/s.

### Integrated control with push button DTH R Operator WA 300 can also optionally be supplied with external control 360 (prepared for traffic control).

### Suitable for Hörmann industrial sectional doors

with standard, low headroom, high-lift and vertical track application (except for ALR F42 glazing and DPU)

#### Door sizes

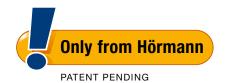
Max. door width 6000 mm Max. door height 4500 mm

### For max. 150 door cycles per day or up to 100 parking spaces in collective garages





Vertical fitting variant



### As standard with WA 300 S4

- Soft start and soft stop for gentle and quiet door travel
- Power limit in "Open"/"Close" directions
- Integrated control with push button DTH R
- Small side room of only 200 mm
- No installations or cabling required on the door\*
- Only approx. 1 watt power consumption in stand-by mode
   (if no other electrical accessories are connected)



### Maintenance release directly on the operator

The operator must not be extensively dismantled from the door shaft for the statutory annual inspection work. This saves time and money. The maintenance release can be converted to a secured release at any time.



### Optional press button control 300 U // NEW

Push button control 300 U (figure above) forms a compact unit with dock leveller controls 420 S and 420 T. Combined with a dock leveller control with the new energy-saver function, this reduces energy consumption. Push button control 300 U is also optionally available with integrated main switch (not shown).

### Optional releases



#### Secured release on inside

This allows you to conveniently release the operator from the floor (Hörmann patent).



### Secured release from outside ASE

To unlatch the door from the outside (required for buildings without a second entrance). Lockable diecast housing with profile half cylinder.

Dimensions:

 $83 \times 133 \times 50 \text{ mm (W} \times H \times D)$ 

#### Push rod

For manual operation of doors higher than 3000 mm as well as for emergency operation (see figure on page 63).

### **Emergency battery**

With this emergency power in an external housing, you can bypass network power failures for up to 18 hours and max. 5 door cycles (dependent on the temperature and situation of charge). The emergency battery recharges itself during normal operation.

<sup>\*</sup> Except for doors with wicket doors

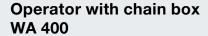
### Shaft operator WA 400, WA 400 M

### Strong and robust

### Operator to flange WA 400

This patented flange version is simple and quick to fit to the spring shaft and requires considerably less sideroom than the direct drive solutions from other manufacturers.

Can be combined with controls A / B 445, A / B 460, B 460 FU



We recommend the WA 400 operator with chain box for all types of doors up to a height of 7000 mm if there is little sideroom. For applications L and LD an operator with chain box is required. Due to the indirect transmission of forces, the door is subjected to minimum wear and friction.

Can be combined with controls A / B 445, A / B 460, B 460 FU

### Operator for central mounting WA 400 M

This version is mounted centrally on the spring shaft, as a result no additional sideroom is necessary. Note the required headroom!

The WA 400 M includes a secured release as a standard feature and is suitable for virtually any track application.

Can be combined with controls A / B 445, A / B 460, B 460 FU



Standard fitting position: horizontal, alternatively vertical, shown with an optional emergency hand chain



Standard fitting position: vertical, shown with an optional emergency hand chain



Ideal option when sideroom is lacking.



### With all 3-phase current versions:

- Exceptionally smooth running
- Long life expectancy
- Fast door travel
- Also as an FU version



### Standard maintenance release

The operator must not be extensively dismantled from the door shaft for the statutory annual inspection work. This saves time and money. The maintenance release can be converted to a secured release at any time.



### Optional emergency operation for maintenance release

#### **Emergency crank handle**

The low-cost option, available in two versions, as a fixed crank handle or jointed emergency crank handle. Retrofitting with an emergency hand chain is possible.



### **Emergency hand chain**

Through a combination of the emergency hand chain and the optional secured release, the door can be released or operated from the floor.



### **Push rod**

For doors over 3000 mm, and as an emergency opening device, particularly recommended for fire station doors. A secured release is required.

Meets the requirements of fire service directive EN 14092.

### Optional releases



Secured release on inside (As standard with WA 400 M) This allows you to conveniently release the operator from the floor (Hörmann patent).



#### Secured release from outside ASE

To unlatch the door from the outside (required for buildings without a second entrance). Lockable diecast housing with profile half cylinder. Dimensions:

 $83 \times 133 \times 50 \text{ mm } (W \times H \times D)$ 

### Operator ITO 400, SupraMatic H and SupraMatic HD

### The space-saving operators

### Chain drive with boom guidance ITO 400

- No sideroom required
- Emergency release via bowden cable on the slide carriage
- Emergency release from the outside possible
- IP 65 (jet-water protected)
- For normal track application (N, ND) and low headroom track application (L, LD)
- Max. door height 4500 mm
- Also available as FU version
- · For doors with wicket doors on request

Can be combined with controls A / B 445, A / B 460 and B 460 FU



### Operators SupraMatic H and SupraMatic HD

- Suitable for max. 100 door cycles (Open / Close) per day
- Pull and push force 1000 N, peak force 1200 N, opening speed SupraMatic H: 22 cm/s

SupraMatic H: 22 cm/s SupraMatic HD: 18 cm/s

- · Quick release operated from inside
- Connecting lead with EEC plug, second suspension for boom FS 60 and FS 6
- Integrated illumination with factory-set 2-minute light
- Anti-lift kit as safety equipment
- Expandable with additional units (for activating kits for warning lights, see page 62)
- For doors with a spring safety device
- SupraMatic H: max. width 5000 mm (5500 mm on request), max. height 3000 mm
- SupraMatic HD: max. width 6750 mm (7000 mm on request), max. height 3000 mm
- For normal track application (N) and low headroom track application (L)
- For doors with wicket doors,
   ALR F42 Glazing and real glass on request
- · Not for DPU doors



### **Leading photocells**

### More safety and high speeds





The non-contact, automatic safety cut-out protects people and property









### Leading photocell (European patent)

More safety with Hörmann industrial sectional doors thanks to the optional leading photocell VL. A sensor monitors the bottom edge of the door and, as a result, obstructions and persons are quickly detected and the door starts to reverse before contact is made.

One (VL 1) or two (VL 2) sensors are situated in a leading swivel arm construction.

DPU doors with impulse-controlled operators or doors with wicket doors with trip-free thresholds require a leading photocell VL 2.

The leading photocell VL 2 monitors the bottom edge of the door with two sensors for doors with a wicket door and trip-free threshold. The anti-crash protection at the sides prevents the swivel arm from being damaged when the door is closed.

### **Controls**

### **Compatible system solutions**

	Internal control WA 300	External control 360	Impulse control A / B 445	Comfort control A / B 460	FU control B 460 FU
Operators					
WA 300 S4	•	0			
WA 400			•	•	
WA 400 FU					•
Functions / features				1	
Control and operator can be mounted separately		•	•	•	•
Adjustments made conveniently directly on the control		•	•	•	•
Soft start and soft stop for gentle and quiet door travel	•	•			•
Adjustable high-speed opening and closing (depending on tracks)	● 3)	● 3)			•
Power limit in Open and Close directions	•	•	•	•	•
Integrated Open / Stop / Close operation		•	•	•	•
Second opening height with additional button on the housing cover	○ <sup>4)</sup>	•		•	•
Menu reading from outside with a double 7-segment display (maintenance, cycle and operating hours counters as well as error analysis)		•	•	•	•
Collective malfunction signalling with on-site individual display (acoustic, visual, or e.g. via mobile phone).		•	0	0	0
Extension possible with external radio receiver	•	•	•	•	•
Automatic timer 1)	•	•		•	•
Traffic control 1)		0		0	0
Connecting terminals for additional command units	0	•	•	•	•
Standard accessories	Push button DTH R				
Power supply	230 V	230 V	400/230 V	400/230 V	230 V
Connection cable with CEE plug <sup>2)</sup> (Protection category IP 44)	•	•	•	•	•
Main switch integrated into control housing	○ 5)	0	0	0	0
Protection category IP 65 (jet-water protected) for controls and door leaf components	•	•	•	•	•

### ● = as standard

 $\bigcirc$  = with corresponding equipment possibly with additional control

<sup>1)</sup> Only in combination with an activating kit for warning light and photocell or light grille or leading photocell VL 1 / VL 2 2) For controls with integrated main switch the connecting cable is omitted

For controls with integrated main switch the confidence death is smithed.

In the Close direction during operation without SKS / VL (during operation with SKS / VL, the door generally travels at high speed in the Close direction).

Possible in combination with UAP 300 and DTH I or DTH IM.

<sup>5)</sup> External main switch possible

### Hörmann is your partner for special solutions



Optional Profile half cylinder

For all external controls



Optional Main switch

For all external controls

### Optional

Key switch post STI 1 For installing a maximum of 2 controls with additional housing. Colour: White aluminium, **RAL 9006** Dimensions:  $200 \times 60$  mm, height 1660 mm



Hörmann offers you a complete and individual control concept from a single source. From the integration of the Hörmann special control into your control concept, via a complete central control for all functional processes, up to PC-based visualisation of all door and loading components.



Individual in-house project development



Modular solutions, compatible with the Hörmann operator technology



**Controlled processes** through visualisation on a control panel or web application



More information can be found in the Special control systems brochure.

### Radio control, receiver



### Hörmann BiSecur (BS)

### The modern radio system for industrial door operators

The bi-directional BiSecur radio system is based on future-oriented technology for the convenient and secure operation of industrial doors. The extremely secure BiSecur encryption protocol makes sure that no-one can copy your radio signal. It was tested and certified by security experts at Bochum University.

#### Your advantages

- 128-bit encryption with the same high security level as in online banking
- Interference-resistant radio signal with a stable range
- Backwards compatible, i.e. radio receivers with the radio frequency 868 MHz (2005 to June 2012) can also be operated with BiSecur control elements.





4-button hand transmitter HS 4 BS



1-button hand transmitter HS 1 BS



4-button security hand transmitter HSS 4 BS Additional function: copy protection for hand transmitter coding



2-button hand transmitter HSE 2 BS Black



2-button hand transmitter HSE 2 BS White



🕁 BiSecur







⇔BiSecur

⇔ BiSecur

**⇔** BiSecur

### Industrial hand transmitter // NEW HSI BS

This hand transmitter can control up to 1000 doors. It is equipped with a display and convenient quick selection buttons. Extra-large keys facilitate handling with work gloves. As a time-saving feature, the coding for a hand transmitter can also be transferred via cable to other transmitters.



Radio code switch FCT 3 BS with illuminated buttons 3 function codes



Radio code switch FCT 10 BS with illuminated buttons and protective cover, 10 function codes



Radio finger-scan FFL 12 BS 2 function codes and up to 12 fingerprints



**3-channel receiver HEI 3 BS**For controlling 3 functions



1-channel relay receiver HER 1 BS With volt-free relay output



2-channel relay receiver HER 2 BS With 2 volt-free relay outputs



4-channel relay receiver

HER 4 BS
With 4 volt-free relay outputs

### **Push button**



#### Push button DTH R

For separate control of both operational directions, with separate stop button. Protection category: IP 65, Dimensions: 90 × 160 × 55 mm (W × H × D)

For controls 360, A/B 445, A/B 460, B 460 FU and integrated control WA 300 S4



#### **Push button DTH RM**

For separate control of both operational directions, with separate stop button. With miniature lock: Operator is deactivated. It is not possible to move the operator (2 keys included in the scope of delivery). Protection category: IP 65 Dimensions: 90 × 160 × 55 mm (W × H × D)

For controls 360, A / B 445, A / B 460, B 460 FU and integrated control WA 300 S4



#### Push button DTH I

To move the door into the Open / Close positions. Separate stop button to stop door travel. 1/2-open button to open the door up to the programmed intermediate travel limit. Protection category: IP 65 Dimensions: 90 × 160 × 55 mm (W × H × D)

For controls 360, A / B 460, B 460 FU and integrated control WA 300 S4 (only in combination with UAP 1)



#### **Push button DTH IM**

To move the door into the Open / Close positions. Separate stop button to stop door travel. 1/2-open button to open the door up to the programmed intermediate travel limit. With miniature lock: Operator is deactivated. It is not possible to move the operator (2 keys included in the scope of delivery). Protection category: IP 65 Dimensions:  $90 \times 160 \times 55$  mm (W × H × D)

For controls 360, A / B 460, B 460 FU and integrated control WA 300 S4 (only in combination with UAP 1)



#### Push button DT 02

Open or close via a command button, separate stop button. Dimensions: 65 × 112 × 68 mm (W × H × D) Protection category: IP 65

For controls A / B 445, A / B 460 and B 460 FU



### Push button DT 04

For separate control of both operational directions, with separate stop button. Full or partial door opening (via separate button). Dimensions:

 $69 \times 185 \times 91 \text{ mm (W} \times H \times D)$ Protection category: IP 65

For controls A / B 460 and B 460 FU



### Push button DTN A 30

For separate control of both operational directions, the stop button is a push-to-lock button which, once pressed, stays depressed in order to prevent unauthorised operation. Subsequent operation is then only possible once the stop button has been unlocked with a key (2 keys included in the scope of delivery). Dimensions:  $66 \times 145 \times 85 \text{ mm (W} \times H \times D)$ 

Protection category: IP 65

For controls A / B 445, A / B 460 and B 460 FU

### Push button, key switch, key switch post



### Push button DTP 02

Open or close via a command button, separate stop button and operation control light for control voltage, lockable with profile half cylinder (available as an accessory). Dimensions:  $86 \times 260 \times 85 \text{ mm } (W \times H \times D)$ 

Protection category: IP 44

For controls A / B 445, A / B 460 and B 460 FU



#### Push button DTP 03

For separate control of both operational directions, separate stop button and operation control light for control voltage, lockable with profile half cylinder (available as an accessory). Dimensions:  $68 \times 290 \times 74 \text{ mm } (W \times H \times D)$ 

Protection category: IP 44

For controls A/B 445, A/B 460 and B 460 FU



#### **Emergency-off button DTN 10**

To quickly immobilise the door, push-to-lock button (mushroom button) Surface-mounted Dimensions:  $93 \times 93 \times 95 \text{ mm (W} \times H \times D)$ Protection category: IP 65

For controls A / B 445, A / B 460 and B 460 FU



### **Emergency-off button DTNG 10**

To quickly immobilise the door, push-to-lock mushroom button Surface-mounted Dimensions:  $93 \times 93 \times 95$  mm (W × H × D) Protection category: IP 65

For controls A / B 445, A / B 460 and B 460 FU



The lockable function serves to isolate the control voltage and immobilises the command units. Profile half cylinders



#### Key switch ESU 30 with 3 keys

Recessed version Impulse or Open / Close function selectable Protection category: IP 54 Dimensions of switch box: 60 mm (d), 58 mm (D) Dimensions of cover:  $90 \times 100 \text{ mm (W} \times \text{H)}$ Wall recess: 65 mm (d), 60 mm (D) Protection category: IP 54

Surface-mounted version ESA 30 (not shown)

Dimensions:  $73 \times 73 \times 50 \text{ mm } (W \times H \times D)$ 



#### Key switch STUP 30 with 3 keys

Recessed version Impulse or Open / Close function selectable Dimensions of switch box: 60 mm (d), 58 mm (D) Dimensions of cover: 80 × 110 mm (W × H) Wall recess: 65 mm (d), 60 mm (D) Protection category: IP 54

Surface-mounted version STAP 30 (not shown) Dimensions:  $80 \times 110 \times 68 \text{ mm (W} \times H \times D)$ 

#### Key switch post STS 1 With adapter for fitting TTR 100, FCT 10 b, CTR 1b/CTR 3b

or STUP. The command units must be ordered separately. The top and bottom ends of the post are in Slate grey, RAL 7015. The post is stove-enamelled in White aluminium, RAL 9006. Dimensions: 300 mm (d), 1250 mm (H) Protection category: IP 44

Version with fitted key switch STUP 30 (accessory).



### Code switch









#### Code switch CTR 1b, CTR 3b

The code switches CTR 1b and CTR 3b offer a high level of security against unauthorised opening. You simply enter your own personal code – a key is no longer needed.

With the CTR 3b comfort version, you can open a second door and also switch on the outside lights or operate a door in the chosen direction.

Dimensions:

 $80\times110\times17$  mm (W × H × D) Decoder housing:  $140\times130\times50$  mm (W × H × D) Keypad protection category: IP 65 Decoder housing protection category: IP 54 Switching capacity: 2.5 A/30 V DC 500 W/250 V AC

### CTV 1 / CTV 3 code switch

The code switches are especially robust and protected against vandalism. To operate, you enter your own personal code – no key is needed. With the CTV 3 comfort version, you can open a second door and also switch on the outside lights or operate a door in the chosen direction.

Dimensions:

 $75\times75\times13~mm~(W\times H\times D)$  Decoder housing:  $140\times130\times50~mm~(W\times H\times D)$  Keypad protection category: IP 65 Decoder housing protection category: IP 54 Switching capacity: 2.5 A/30 V DC 500 W/250 V AC





### Finger-scan FL 12, FL 100

A fingerprint is enough to securely and conveniently open your industrial sectional door. The finger-scan is available in two versions, as an FL 12 or FL 100 to store 12 or 100 fingerprints, respectively.

Dimensions:

80 × 110 × 39 mm (W × H × D)
Decoder housing:
70 × 275 × 50 mm (W × H × D)
Reader protection category: IP 65
Decoder housing protection category: IP 56
Switching capacity: 2.0 A / 30 V DC

### Transponder key switch TTR 100/TTR 1000

The convenient solution when several persons require access to the building. You simply hold the transponder key with your personal security code approx. 2 cm in front of the reader. A non-contact system! A major benefit in the dark. 2 keys are included. Suitable for max. 100 transponder keys (TTR 100) or 1000 transponder keys (TTR 1000).

Dimensions:

Denote the second of the secon

### Photocells, light grilles, radar movement detector



### Photocell RL 50 / RL 300

Reflection photocell with transmitter/receiver unit and reflector.

The photocell is tested by the control prior to each closing cycle. Connected via a system cable (RL 50, length 2 m) or a 2-wire cable (RL 300, length 10 m). Max. range 6 m Dimensions:  $68 \times 97 \times 33 \text{ mm (W} \times H \times D)$ Reflector:  $30 \times 60 \text{ mm (W} \times \text{H)}$ Protection category: IP 65



### One-way photocell EL 51

Photocell with separate transmitter and receiver. The photocell is tested by the control prior to each closing cycle. Connected via a system cable Max. range 8 m Dimensions with fitting bracket:  $60 \times 165 \times 43$  mm (W  $\times$  H  $\times$  D) Protection category: IP 65



#### ZT 2 pull switch with cord Impulse generation to open

or close the door Dimensions:  $60 \times 90 \times 55$  mm (W × H × D) Pull cord length: 3.2 m Protection category: IP 65

Cantilever arm KA1 (not shown) Extension 1680 - 3080 mm. Can be used with ZT 2



#### Radar movement detector RBM 2

For "Open door" impulse with directional recognition Max. fitting height: 6 m Dimensions:  $155 \times 132 \times 58 \text{ mm (W} \times H \times D)$ Contact load: 24 AC / DC, 1 A (resistivity), Protection category: IP 65

Remote control for radar movement detector optional

### Light grille ELG

The light grille monitors the entire closing zone of the door up to a height of 2500 mm. If vehicles with trailers are standing in the door area, they are reliably detected, helping to avoid damage to the vehicle and door. The light grille is easy to use since it is fitted to the doorframe and its sensors are positioned easily. In addition, the ELG 1 light grille can be easily integrated in the STL post set.

Voltage supply: 24 V DC Power consumption: 100 mA each Range: 0 to 12 m Protection category: IP 65 Sun suppression: 150,000 lux Operating temperature: -25 °C to +55 °C Resolution: 60 mm crossed Light source: LED infrared Transmitter lead length: 10 m Receiver lead length: 5 m Height: ELG 1 = 1380 mm, ELG 2 = 2460 mm

### Post set STL

The key switch post set consists of weather-resistant anodised aluminium and is prepared for installation of an ELG 1 light grille. The covers and foot cladding are made of Slate grey plastic, RAL 7015.



### Activating kit, LED warning lights



Multi-function circuit board for fitting in an existing housing or optionally in a separate extension housing. (Fig.) Limit switch reporting, momentary impulse, collective malfunction signalling Extension unit for controls 360, A/B 445, A/B 460, B 460 FU

Dimensions of additional housing: 202 × 164 × 130 mm (W × H × D), Protection category: IP 65 A circuit board can be optionally mounted in the control.



### Digital weekly timer in a separate additional housing

The timer can switch command units on and off via a volt-free contact. Extension unit for controls A/B 460, B 460 FU, 360 (no additional housing, for fitting in an existing housing) Switching capacity: 230 V AC 2.5 A/500 W Can be switched over to summer/winter time Manual switching: automated operation, switching preselection for time ON/OFF

Dimensions of additional housing:  $202 \times 164 \times 130$  mm (W  $\times$  H  $\times$  D), Protection category: IP 65



### Summer / winter activating kit in an additional housing

Function for full opening of door and individually programmable intermediate travel limit Extension unit for controls A / B 460, B 460 FU

Dimensions of additional housing:  $202 \times 164 \times 130$  mm (W  $\times$  H  $\times$  D) Protection category: IP 65



### Induction loop DI 1 in a separate additional housing

Suitable for one induction loop.
The detector has a normally open contact and a change-over contact.

#### Induction loop DI 2

(not shown) in a separate additional housing Suitable for two separate induction loops. The detector has two volt-free normally open contacts. Can be set for impulse or permanent contact. Directional recognition possible. Dimensions of additional housing: 202 × 164 × 130 mm (W × H × D) Switching capacity: DI 1: low voltage 2 A, 125 V A / 60 W DI 2: 250 V AC, 4 A, 1000 VA (resistivity AC), Supplied without loop cable



### Loop cable for induction loop

50 m roll Cable designation: SIAF, Cross-section: 1.5 mm², Colour: brown



#### UAP 300 for WA 300 S4

For impulse selection, partial opening function, limit switch reporting and activating kit for warning light With 2 m system cable Protection category: IP 65 Max. switching capacity: 30 V DC / 2.5 A (resistivity), 250 V AC / 500 W (resistivity), Dimensions: 110 × 45 × 40 mm (W × H × D)



### HOR 300 for WA 300 S4

To control limit switch reporting or warning lights With 2 m connecting lead Protection category: IP 44 Max. switching capacity: 30 V DC / 2,5 A (resistivity), 250 V AC / 500 W (resistivity) Dimensions: 110 × 45 × 40 mm (W × H × D)









Extension unit for controls 360, A/B 460, B 460 FU. The activating kit for warning lights serves as a visual indicator for regulating the entrance and exit (optional weekly timer). Duration of the green phase: Adjustable from 0 - 480 s Duration of the clearance phase: Adjustable from 0 – 70 s Traffic light dimensions:  $180 \times 410 \times 290$  mm (B × H × T), Dimensions of additional housing:  $202 \times 164 \times 130$  mm (B × H × T), Contact load: 250 V AC : 2.5 A / 500 W, Protection category: IP 65



Extension unit for controls 360, A/B 445, A/B 460, B 460 FU. The activating kit for warning lights serves as a visual indicator while the door is moving (weekly timer, optionally for 360, A/B 460, B 460 FU). Applications: approach warning (for 360, A/B 445, A/B 460, B 460 FU), automatic timer (for 360, A / B 460, B 460 FU). After the set hold-open phase has elapsed (0 - 480 s), the warning lights flash during the set pre-warning phase (0 – 70 s).

Traffic light dimensions: 180 × 250 × 290 mm (W × H × D)

Dimensions of additional housing: 202 × 164 × 130 mm (B × H × T)

Contact load: 250 V AC : 2.5 A / 500 W Protection category: IP 65





Activating kit for warning light SupraMatic H, SupraMatic HD

#### Extension unit for warning lights ES 2, incl. 2 yellow warning lights

Technically identical to ES 1. In addition, programming of the SupraMatic H or SupraMatic HD can be performed via the expansion kit. The connection of a closing edge safety device, as well as a safety or through-traffic photocell, is also possible.

Hold-open phase adjustable from 5 - 480 seconds, pre-warning phase from 1 - 170 seconds



Technically identical to ES 2. Additional impulse command, entrance and exit, entrance function has priority, limit switch reporting via an integrated relay









Activating kit for warning light SupraMatic H, SupraMatic HD

#### Extension unit for warning lights ES 1, in a separate housing, incl. 2 yellow warning lights Two relays to control warning lights, option relay (momentary impulse)

for illumination control, impulse input, hold-open phase can be shortened, emergency-off button can be connected, SupraMatic H keypad can be switched off, automatic timer can be switched off (e.g. ZSU 2)



### **Overview of Shutter Types**

### **Construction and quality features**

● = Standard ○ = Optional

		SPU F42	DPU	
Resistance to wind load EN 12424	Door without wicket door, class	3	4 1)	
	Door with wicket door, LZ ≤ 4000, class	3	-	
	Door with wicket door, LZ > 4000, class	2	-	
Water tightness EN 12425	Door without wicket door, class	3 (70 Pa)	3 (70 Pa)	
Air permeability EN 12426	Door without wicket door, class	2	3	
	Door with wicket door, class	1	-	
Acoustic insulation EN 717-1	Door without wicket door R = dB	25	25	
	Door with wicket door R = dB	24	-	
Thermal insulation	Door without wicket door, $U = W/(m^2 \cdot K)^{3}$	1.0	0.48	
EN 13241-1, Appendix B EN 12428	– Optional triple glazing, U = W/(m²·K) <sup>3)</sup>	-	-	
	<ul> <li>Optional climatic double panes (single-pane safety glass)</li> <li>U = W/(m²·K) <sup>3</sup></li> </ul>	-	-	
	Door with wicket door, $U = W/(m^2 \cdot K)^{3)}$	1.2	-	
	<ul> <li>Optional triple glazing, U = W/(m²⋅K) <sup>3)</sup></li> </ul>			
	Section, $U = W/(m^2 \cdot K)$	0.50	0.30	
Construction	Self-supporting	•	•	
	Depth, mm	42	80	
Door sizes	Max. width mm, LZ	8000	6000 (10000 <sup>5)</sup> )	
	Max. height mm, RM <sup>4)</sup>	7000	5000 (8000 <sup>5)</sup> )	
Space requirements	See the technical manual			
Material, door leaf	Steel, double-skinned, 42 mm	•	_	
	Steel, double-skinned, 80 mm	_	•	
	Aluminium, standard profile	_	_	
	Aluminium, thermal profile	_	_	
Surface, door leaf	Galvanized steel, coated RAL 9002	•	•	
	Galvanized steel, coated RAL 9006	0	0	
	Galvanized steel, coated RAL to choose	0	0	
	Anodised aluminium E6 / C0 (previously E6 / EV 1)	_	_	
	Aluminium coated in RAL to choose	_	_	
Wicket door	With trip-free threshold	0	_	
Side door	Matching the door	0	_	
Glazings	Type A section window	0	0	
	Type D section window	0	-	
	Type E section window	0	_	
	Aluminium glazing frame	0	0	
Seals	All-round on 4 sides	•	•	
	Intermediate seal between the door sections	•	•	
ThermoFrame	PVC hard / soft seal	0	•	
Locking systems	Internal latches	•	•	
•	Outside / inside locking	0	0	
Arrestor kit	For doors of up to 5 m with shaft operator	•	-	
Safety equipment	Finger trap protection	•	_	
<b>7</b> . <b>1</b> . <b>1</b>	Side trap guard	•	•	
	Safety catch for doors	•	•	
Fastening options	Concrete	•	•	
. account options	Steel	•	•	
	Brickwork			
	DIIONWOIN		•	

<sup>&</sup>lt;sup>1</sup>) Class 4 for DPU doors up to 8000 mm door width, class 3 for DPU doors over 8000 mm
<sup>2</sup>) With optional double pane (single-pane safety glass)
<sup>3</sup>) With a door surface of 5000 × 5000 mm
<sup>4</sup>) Door height over 7000 mm on request (not with door type ALR F42 Glazing)

<sup>&</sup>lt;sup>5</sup>) Doors with direct drive operator

APU F42	APU F42 Thermo	ALR F42	ALR F42 Thermo	APU F42 S-Line	ALR F42 S-Line	ALR F42 Glazing	ALR F42 Vitraplan
3	3	3	3	3	3	3	3
3	3	3	3	-	-	-	-
2	2	2	2	-	-	-	-
3 (70 Pa)	3 (70 Pa)	3 (70 Pa)	3 (70 Pa)	3 (70 Pa)	3 (70 Pa)	3 (70 Pa)	3 (70 Pa)
2	2	2	2	2	2	2	2
1	1	1	1	-	-	-	-
23	23	23 (30 <sup>2)</sup> )	23 (30 <sup>2)</sup> )	23	22	30	23
22	22	22	22	_	-	-	-
3.5	2.9	3.3	2.7	3.4	3.2	6.2	3.2
2.9	2.4	3.0	2.4	2.9	2.8	-	3.0
2.4	2.0	2.6	2.1	-	-	2.6	-
3.7	3.1	3.5	2.9	-	-	-	-
3.1	2.6	3.2	2.6	-	-	-	_
-	-	-	-	-	-	-	_
•	•	•	•	•	•	•	•
42	42	42	42	42/48.5	48.5	42	42
8000	7000	8000	7000	5000	5000	5500	6000
7000	7000	7000	7000	7000	7000	4000	7000
7000	7000	7000	7000	7000	7000	4000	7000
•	•	-	-	•	-	-	-
-	-	-	-	-	-	-	-
•	-	•	-	•	•	•	•
-	•	-	•	-	-	-	-
0	0	-	-	0	-	-	-
•	•	-	-	•	-	-	-
0	0	-	-	0	-	-	-
•	•	•	•	•	•	•	-
0	0	0	0	0	0	0	•
0	0	0	0	_	_	_	_
0	0	0	0	0	0	_	0
_	-	_	_	_	_	_	-
_	_	_	_	_	_	_	_
_	_	_	_		_	_	_
•	•	•	-	•	•	•	•
•	•	•			•	•	
•	•	•	•		•	•	•
				•		-	-
0	0	0	0	0	0	0	0
•	•	•	•	•	•	•	•
0	0	0	0	0	0	-	-
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### Hörmann Product Range

### Everything from a single source for your construction project

#### 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 higher.

#### 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 sliding doors

Hörmann can provide you with single or double-leaf sliding door solutions suitable for all areas and required fire protection classes.

### Multi-function doors and reinforced internal doors

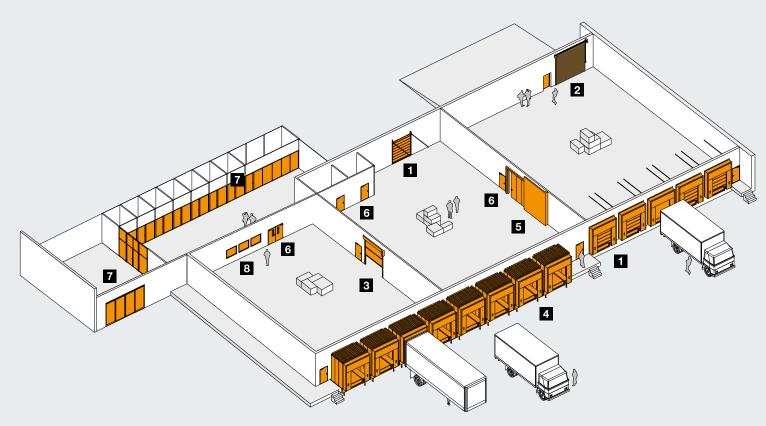
Hörmann multi-function doors and reinforced internal doors are suitable for indoor and outdoor use. Our single and double-leaf doors can be used wherever robust door elements are required. With numerous additional functions, such as fire and smoke protection, acoustic insulation or burglar protection.

### **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 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

