

**// NEW: wicket door with trip-free threshold**



# Industrial Sectional Doors

Reliable for the Future







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## Reliable for the Future Thanks to the Know-How of the Specialist



### **In-house product development**

At Hörmann new products, further development and detailed improvements represent an on-going process of our highly qualified development team.

**This gives rise to patents and exclusive rankings in the marketplace.**



### **Qualified personnel**

Many production processes today are computer-assisted, but as far as Hörmann is concerned, a responsible and conscientious workforce is equally important - throughout the course of production and in carrying out quality-assurance checks.



### **In-house production of door and operator systems**

All the essential door and operator components, such as sections, frames, fittings, operators and control systems are developed and produced by Hörmann in-house. This guarantees a high degree of compatibility between the door, operator and controls.

In order to ensure that the quality of production remains at a consistently high level, we use special production systems based on our own ideas.

When developing our products, we make sure that the door and operator form a perfectly matched system. Long duration tests ensure fully developed series products that you can rely on.

**This is Hörmann quality – made in Germany.**





**For over four decades Hörmann has built up the industrial sectional door sector into a unique range, setting standards for the future in the process.**



#### **Modern colour coating**

The colour of doors is playing an ever greater role in the design of buildings. Individuality is to be encouraged, but it must not result in a lesser surface quality nor extend the delivery periods. Here too Hörmann doesn't make any compromises. Thanks to an ultra-modern coating system we can guarantee maximum brilliance of colour supplied within the shortest possible delivery time.



#### **Tested foaming process**

In order to attain a high level of stability and thermal insulation, the double-skinned sections are absolutely evenly filled with CFC-free polyurethane rigid foam in a continuous computer-controlled process.

**This guarantees highly rigid sandwich elements in RAL-tested quality.**



#### **Protecting the environment**

Hörmann shows respect for the environment not only by using 100 % CFC-free PU rigid foam, but also with regard to its colour coating. Thanks to an ultra-modern regenerative exhaust air decontamination system, energy consumption is greatly reduced compared with previously used processes and the more stringent limit values of the future are already complied with today.



#### **Quality management**

First-rate products demand optimum conditions at every stage of the industrial process. The certified Quality Management System guarantees the highest level of quality from development, through production to shipping.

#### **A space-saving door system**

Sectional doors open vertically upwards, creating space in front of and behind the door.

In the building too, useful space is not wasted because the door sections are parked underneath the ceiling, parallel to the ceiling or vertically on the wall. Since the doors are fitted behind the opening, the clear passage width can be used in full. This virtually excludes the risk of damage.

#### **Top door design**

The uniquely broad range means that in terms of both function and design Hörmann sectional doors blend superbly into modern industrial architecture.

From the standardised all-purpose hall to the highly individual designer-style building.



## **Hörmann Industrial Sectional Doors Are Simply Perfect!**



#### **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 is not only available in printed form but is always accessible and up to date at **[www.hoermann.com](http://www.hoermann.com)**.



#### **Sensible planning**

Due to the variety of track applications, Hörmann sectional doors can be adapted to suit any type of building, whether new or old. Plan with Hörmann and you plan wisely.



#### **Quickly delivered, safely packed**

The door and operator systems are perfectly prepared for installation and are sensibly packed to ensure safe transportation. Thanks to the short delivery times, the door systems are delivered to your construction site in next to no time.





### State-of-the-art operator technology

The operators and controls Hörmann offers are the outcome of its own in-house development and production. Perfectly matched components, subjected to long duration testing, give you the assurance that your door will perform well in continued use. The control system with a uniform operating concept and general 7-segment display facilitates daily use. Identical housing sizes and cable sets not only simplify installation but also the addition of further functions at a later date.



**Forward-looking technology, detailed quality and reliable long-term functionality are crucial. Hörmann industrial sectional doors give you the assurance you are looking for right from the word go.**



### Door fitting

The doors are installed by Hörmann's own expert fitters or by trained specialist personnel. This is your guarantee that each and every Hörmann industrial door system will operate with absolute reliability.



### An efficient service

Our extensive service network means that we are never far away. This is a major advantage in respect of inspections, maintenance and repairs.

# 10 YEARS

**GUARANTEED AVAILABILITY**

### Original spare parts

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.**



## STE 40

## The Single-Skinned Robust Steel Door for Tough Everyday Use

### The low-cost option for unheated buildings

This sturdy door consisting of single-skinned steel sections is a popular choice for machine halls, warehouses, agricultural buildings and similar facilities that do not necessarily require heating. The door is weather-proof thanks to the galvanized material, coated with a polyester primer on both sides, as well as highly durable, due to the stucco embossed surface. Surface inside and outside as standard: off-white (based on RAL 9002). Other colours to RAL on request.

### Absolutely even spacing of sections

The steel sections are horizontally profiled at 125 mm intervals, so the STE 40 door is always in perfect alignment with the TPU 40 and SPU 40 double-skinned steel doors.

### High stability thanks to reinforcement profiles

The single-skinned steel sections are reinforced with extremely sturdy profiles using a special adhesion technique. It leaves the surface undamaged and the anti-drumming effect produces a quiet door action.



Specially bonded reinforcement profiles

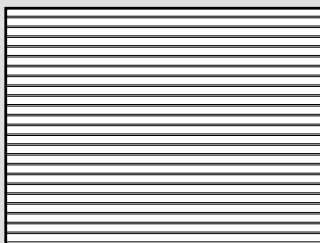




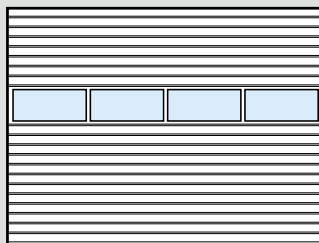


**Single-skinned**  
The low-cost option

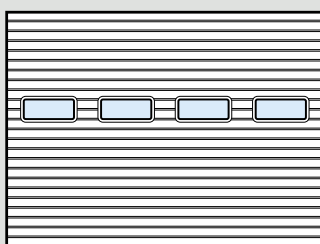
#### Door versions (examples)



Door version without glazing  
Section heights: 375, 500 mm



With aluminium glazing frames  
Frame height 500 mm



With vision panels type A  
Window size: 635 x 245 mm  
Section height: 500 mm

#### Technical Data

##### Size range

Width up to 7000 mm  
Height up to 7000 mm

##### Resistance to wind pressure

Class 2

1)

##### Water-tightness

Class D

2)

##### Air permeability

Class D

3)

##### Sound insulation

R = 20 dB

4)

##### Thermal insulation to EN 13241, annex B EN 12428

U = 6.2 W/m<sup>2</sup>K\*

\*The value refers to a door area of approx. 25 m<sup>2</sup>

1) EN 12424; 2) EN 12425; 3) EN 12426; 4) EN 717-1

**Safety features and performance criteria**  
to EN 13241-1, page 36-39



## TPU 40

## The Economic Steel Door: Double-Skinned and Thermally-Insulated

### The doors for extreme wear and tear.

#### Day-in, day-out

The double-skinned sandwich sections make TPU 40 doors a good long-term economic investment - even in hardest everyday use. The high level of stability is achieved by the sandwich construction and the 42 mm thick edge profiles.

The insulating core of **100 % CFC-free** polyurethane rigid foam produces a good thermal insulation value.

### Resistant to weathering and extremely durable

Because the material is hot galvanized, adhesion-coated with a polyester primer and then additionally stucco embossed.

The surface: inside and outside in off-white (based on RAL 9002).

Other colours to RAL on request.

### Practical ground lock for manually operated doors

Quick and secure latching with convenient foot release. **At last, no more bending down.**

Particularly beneficial for frequently used doors. The ideal daytime lock. The new ground lock is available on request for all Hörmann industrial sectional doors - **at no extra cost!**



The practical ground lock



20 mm

42 mm

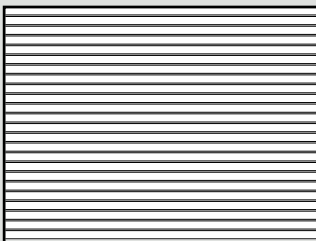




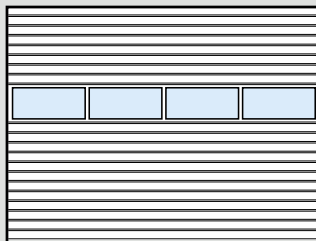
## Particularly Interesting for Logistics Companies and Hall Builders

**High in performance  
Low in price**

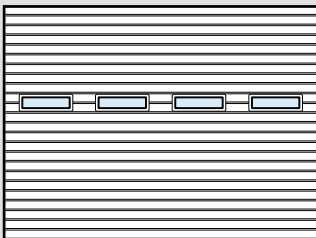
### Door versions (examples)



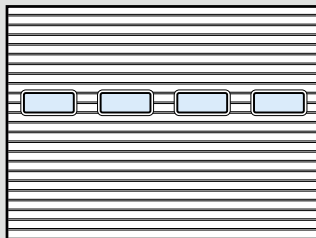
Door version without glazing  
Door section heights: 625 and 750 mm



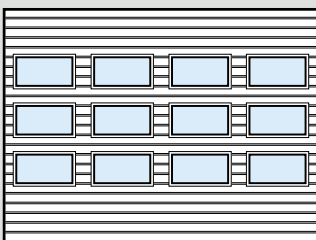
With aluminium glazing frames  
Frame height: 625, 750 mm



With compound window type D  
Window size: 602 x 132 mm  
For door section heights:  
625, 750 mm



With compound window type A  
Window size: 635 x 245 mm  
For door section heights:  
625, 750 mm



With compound window type E  
Window size: 725 x 370 mm  
For door section heights:  
625, 750 mm

### The E-window

#### for transparency

These large windows are an optical and above all low-cost alternative to the large aluminium glazing frames.

### Technical Data

#### Size range

Width up to 5000 mm  
Height up to 7000 mm

#### Resistance to wind pressure

Class 3

1)

#### Water-tightness

Class 3

2)

#### Air permeability

Class 2

3)

#### Sound insulation

R = 21 dB

4)

#### Thermal insulation to EN 13241, annex B EN 12428

U = 1.5 W/m<sup>2</sup>K\*

(Section U = 1.0 W/m<sup>2</sup>K)

\*The value refers to a door area of approx. 25 m<sup>2</sup>

1) EN 12424; 2) EN 12425; 3) EN 12426; 4) EN 717-1

#### Thermal insulation to DIN 4108

U = 1.64 W/m<sup>2</sup>K\*

\*The value refers to a 4 x 4 m door without glazing

**Safety features and performance criteria  
to EN 13241-1, page 36-39**



## SPU 40

## The Double-Skinned Steel Door with High Thermal Insulation

### The right decision for heated buildings

On SPU 40 doors the double-skinned sections are 42 mm thick throughout.

The strong insulating core of **100 %**

**CFC-free** polyurethane rigid foam produces an exceptionally good insulating value.

### Door sections with perfect long-term protection

Hot galvanized material and the adhering polyester primer coating offer the best possible protection against the adverse effects of the elements. And the additional stucco embossing of the surface makes the door sections considerably less susceptible to damage and wear than is the case with a smooth surface.

Surface: inside and outside in off-white (based on RAL 9002).

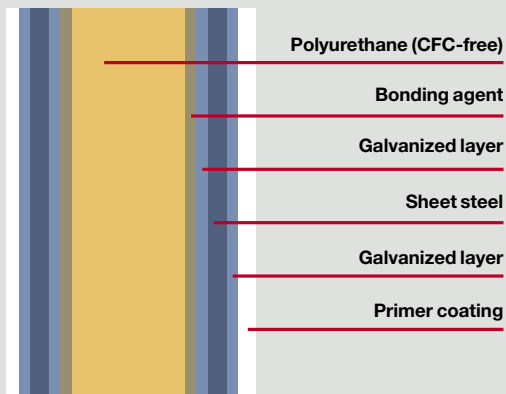
Other colours to RAL on request.

### Quality in every layer

The structure of the door sections is built up to guarantee utmost stability and robustness.

The thick insulating core of high-grade polyurethane rigid foam is absolutely evenly foamed in a continuous computer-controlled process.

**The result: a material composite that will guarantee a long service life.**



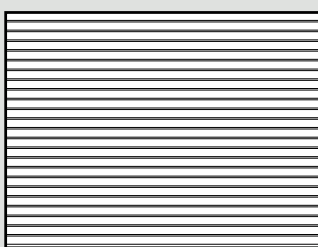
42 mm



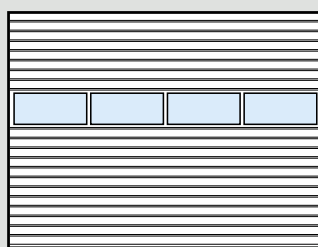


# Good for the Energy Balance - Even Better for the Working Environment

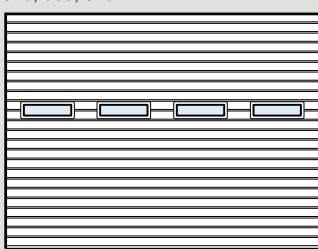
## Door versions (examples)



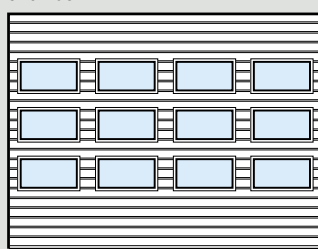
Door version without glazing  
Door section heights:  
375, 500, 625 mm



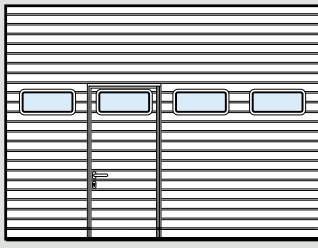
With aluminium glazing frames  
Frame height: 375, 500, 625  
and 750 mm



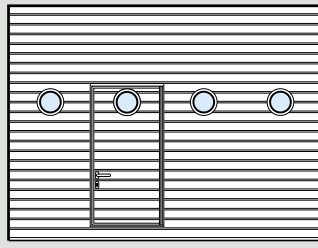
With compound window type D  
Window size: 602 x 132 mm  
For door section heights:  
500, 625, 750 mm



With compound window type E  
Window size: 725 x 370 mm  
For door section heights:  
625, 750 mm



With compound window type A  
Window size: 635 x 245 mm For door  
section heights: 500 x 625, 750 mm  
(wicket door with trip-free threshold)



With compound window type C  
Window size: Ø 244 mm  
For door section heights: 500 x 625, 750 mm  
(wicket door with threshold)

## Technical Data

<b>Size range</b>	
Width up to 8000 mm Height up to 7000 mm	
<b>Resistance to wind pressure</b>	1)
Class 3	
<b>Water-tightness</b>	2)
Class 3	
<b>Air permeability</b>	3)
Class 2 (with wicket door class 1)	
<b>Sound insulation</b>	4)
R = 22 dB	
<b>Thermal insulation to EN 13241, annex B EN 12428</b>	
U = 1.0 W/m²K*	
(with wicket door U = 1.2 W/m²K*, Section U = 0.5 W/m²K)	
*The values refer to a door area of approx. 25 m²	
1) EN 12424; 2) EN 12425; 3) EN 12426; 4) EN 717-1	
<b>Thermal insulation to DIN 4108</b>	
U = 0.95 W/m²K*	
*The value refers to a 4 x 4 m door without glazing	

## Safety features and performance criteria to EN 13241-1, page 36-39



## APU 40

## The Steel/Aluminium Combination for Maximum Light and Stability

### The strength of this door lies in its combination

In practice the double-skinned bottom section in steel and the glazing frame in anodized aluminium have proven a winning combination, designed for robustness.

The double glazing adds the positive effect of thermal insulation.

### Harmony of colour for a modern building architecture

With Hörmann the door section elements harmonize perfectly even in the standard colours: white aluminium (based on RAL 9006) for the bottom section in steel, stained in a natural colour (E6/EV1) for the aluminium extrusions, anodized to DIN 17611. Special colours to RAL are available on request.

### The bottom section: the basis of a door with high stability

The high stability of the APU 40 door is essentially due to the 750 mm high and 42 mm thick bottom section which is already a standard feature. Its thick insulating core of **100 % CFC-free** polyurethane rigid foam produces a robustness that is exemplary. The outer and inner sheet steel is galvanized, coated with a polyester primer and additionally stucco embossed to afford protection against rust and the negative effects of the environment.

A further pluspoint: in the event of collision damage, the low-cost bottom section can be easily replaced.

### An attractive appearance

The glazed door sections above the bottom section are always evenly spaced. APU 40 doors always have a bottom section, 500, 750, 1000 or 1500 mm high.



Sturdy bottom section



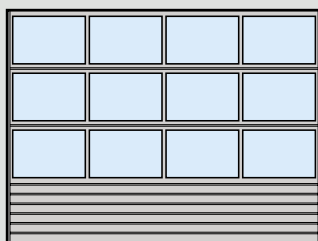




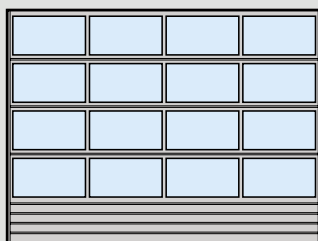
**APU 40 B with  
wider glazings**

## For Light and Friendly Workshop Halls

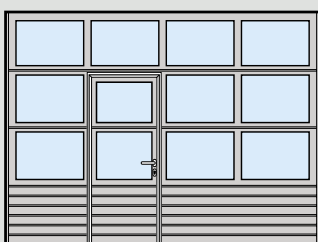
### Door versions N and B (examples)



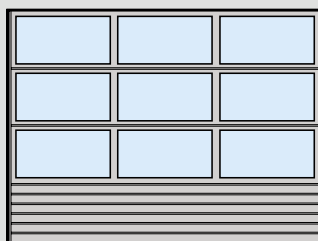
Version APU 40 N  
Rail profile 52 mm  
Bottom section, height 750 mm  
Glazed door sections max. 750 mm



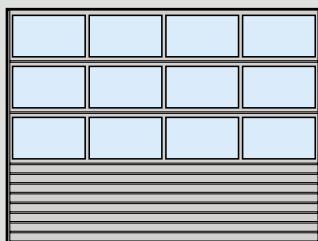
Version N with bottom section  
Height 500 mm on request



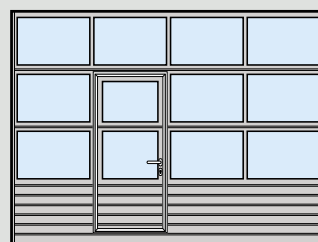
Version including wicket door  
with trip-free threshold



Version APU 40 B  
Rail profile 91 mm  
Bottom section, height 750 mm  
Glazed door sections max. 750 mm



Version N with bottom section  
Height 1000 mm on request



Version including wicket door  
with threshold

### Technical Data

#### Size range

Width up to 8000 mm  
Height up to 7000 mm

#### Resistance to wind pressure

Class 3

1)

#### Water-tightness

Class 3

2)

#### Air permeability

Class 2 (with wicket door class 1)

3)

#### Sound insulation

R = 19 dB

4)

#### Thermal insulation to EN 13241, annex B EN 12428

U = 3.8 W/m<sup>2</sup>K\*  
(with wicket door U = 4.0 W/m<sup>2</sup>K\*)

\*The values refer to a door area of approx. 25 m<sup>2</sup>

1) EN 12424; 2) EN 12425; 3) EN 12426; 4) EN 717-1

#### Thermal insulation to DIN 4108

U = 3.2 W/m<sup>2</sup>K\*

\*The value refers to a 4 x 4 m door with 16 mm synthetic double panes

### Safety features and performance criteria to EN 13241-1, page 36-39



## TAP 40

## The Steel/Aluminium Thermal Door with Insulating Glazing

### The all-important factor with TAP 40 doors

If maximum use of daylight, good thermal insulation and a high level of stability are called for, the TAP door can meet these requirements threefold: On account of the cold-repelling 16 mm thick double glazing, the aluminium extrusions with thermal breaks and the double-skinned PU foam-insulated steel bottom section **(100 % CFC-free)**.

This combination produces a remarkable thermal insulation value.

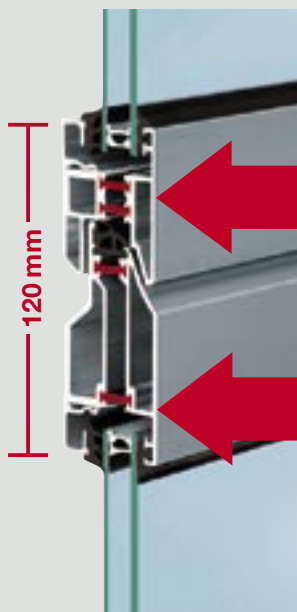
### The combination gets the colour right too

The bottom section in steel: white aluminium (based on RAL 9006).

The glazing frames in aluminium: anodized to DIN 17611, stained in a natural colour (E6/EV1). Besides this standard surface finish, it goes without saying that we can also supply the doors in special colours to RAL.

### The thermal extrusion: for greater stability and thermal insulation

The aluminium extrusion has an overall thickness of 42 mm. The outer and inner shells incorporate thermal breaks with glass fibre reinforced polyamide ribs and are at the same time positively bonded. This ensures a high degree of stability and protects the structural fabric.

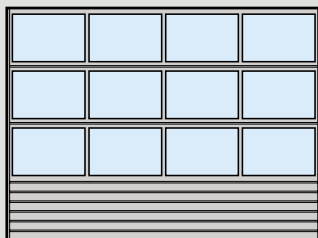




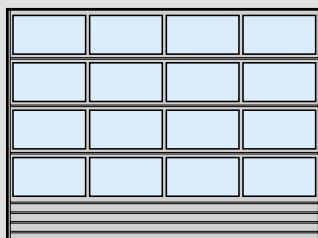


## Maximum Use of Daylight with Good Thermal Insulation

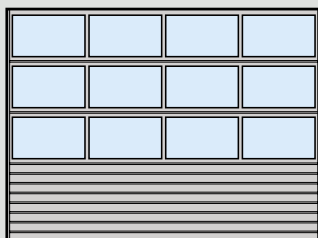
### Door versions (examples)



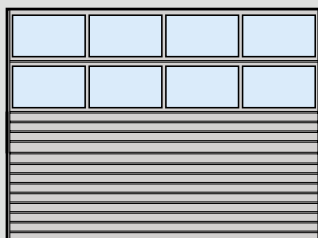
Version with bottom section  
Height 750 mm as standard  
Glazed door sections max. 750 mm



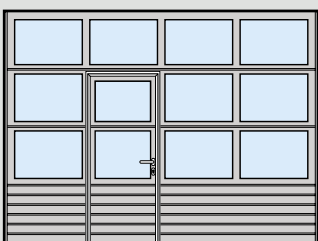
Version with bottom section  
Height 500 mm on request



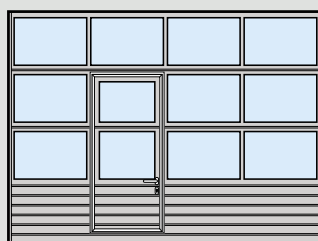
Version with bottom section  
Height 1000 mm on request



Version with bottom section  
Height 1500 mm on request



Version including wicket door  
with threshold



Version including wicket door  
with trip-free threshold

### Technical Data

#### Size range

Width up to 7000 mm  
Height up to 7000 mm

#### Resistance to wind pressure

Class 3

1)

#### Water-tightness

Class 3

2)

#### Air permeability

Class 2 (with wicket door class 1)

3)

#### Sound insulation

R = 19 dB

4)

#### Thermal insulation to EN 13241, annex B EN 12428

U = 3.3 W/m<sup>2</sup>K\*

(with wicket door U = 3.5 W/m<sup>2</sup>K\*)

\*The values refer to a door area of approx. 25 m<sup>2</sup>

1) EN 12424; 2) EN 12425; 3) EN 12426; 4) EN 717-1

#### Thermal insulation to DIN 4108

U = 2.8 W/m<sup>2</sup>K\*

\*The value refers to a 4 x 4 m door with 16 mm synthetic double panes

#### Safety features and performance criteria to EN 13241-1, page 36-39



## ALR 40

## Elegant in Aluminium to Create the Right Image

### **This is what high-quality aluminium doors look like**

Transparency determines the design: Aluminium-light extrusions, generously apportioned glazing. A design that marks the architectural style of today's industrial buildings.

### **Every door a treat for the eyes**

The aluminium surface stained in a natural colour (E6/EV1) makes for an extremely elegant appearance. Special colours to RAL can be individually matched to the corporate design. For the door sections we use anodized aluminium extrusions to DIN 17611. The bottom area is filled with 16 mm thick, stucco-embossed, Aluman-clad PU sandwich infills (**100 % CFC-free**). The other sections are glazed with **16 mm** thick synthetic double panes.

### **Light-weight yet extremely sturdy and weather-resistant**

Although the extrusions are extremely narrow, maximum stability is still achieved thanks to the 120 mm profile height.

This is important in order to ensure reliable long-term functionality. Coupled with this is the quality of the weather-resistant surface. Because it's not enough for the doors to simply look good - they have to be long-lasting too.

### **With Hörmann nothing is pieced on!**

Every door can boast an absolutely even spacing of sections from top to bottom.

And it goes without saying that the glazing bars are made of high-grade aluminium extrusions.

No plastic here!



Inside  
view



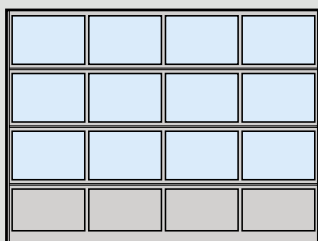




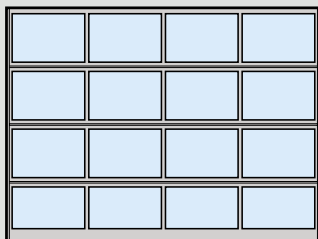
**ALR 40 B with  
wider glazings**

## Complementing Modern Architecture, Transparency and Light-Weight Aesthetics

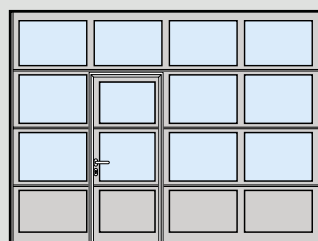
### Door versions N and B (examples)



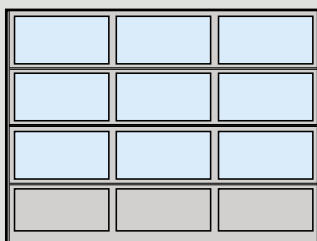
Version ALR 40 N  
Rail profile 52 mm. Door sections  
evenly spaced. Bottom section and  
other door sections max. 750 mm high



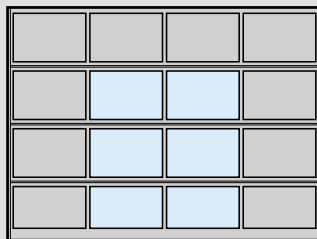
Version N with maximum glazing



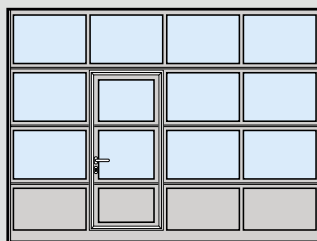
Version including wicket door  
with trip-free threshold



Version ALR 40 B  
Rail profile 91 mm. Door sections  
evenly spaced. Bottom section and  
other door sections max. 750 mm high.



Version N with individual arrangement  
of glass panes and panel infills



Version including wicket door  
with threshold

### Technical Data

#### Size range

Width up to 8000 mm  
Height up to 7000 mm

#### Resistance to wind pressure

Class 3

1)

#### Water-tightness

Class 3

2)

#### Air permeability

Class 2 (with wicket door class 1)

3)

#### Sound insulation

R = 19 dB

4)

#### Thermal insulation to EN 13241, annex B EN 12428

U = 4.2 W/m<sup>2</sup>K\*

(with wicket door U = 4.4 W/m<sup>2</sup>K\*)

\*The values refer to a door area of approx. 25 m<sup>2</sup>

1) EN 12424; 2) EN 12425; 3) EN 12426; 4) EN 717-1

#### Thermal insulation to DIN 4108

U = 3.5 W/m<sup>2</sup>K\*

\*The value refers to a 4 x 4 m door with 16 mm synthetic double panes

### Safety features and performance criteria to EN 13241-1, page 36-39



# ALS 40

## The Aluminium Door for Maximum Visibility

### Large areas of glazing invite you to take a closer look

Showing from the outside what's on offer on the inside, coupled with the attraction of a light and airy showroom. These are the benefits of the new Hörmann "display window" door with its slim-line aluminium profiles and the generously apportioned glazing. For example, in car showrooms, yacht and boatyards and at camper van and caravan dealers.

### Aluminium will retain its good looks for many years to come

The door sections of anodized aluminium extrusions to DIN 17611 are stained as standard in a natural colour (E6/EV1) and on request can be obtained in colours of the RAL colour spectrum. For example, in your company's colours to complement your corporate design.

### Equal-height infills in genuine tempered safety glass

A good display window door should have the same effect as a showroom window. Hörmann achieves this impression by employing large areas of glazing with panes of exactly the same height. For this we use 6 mm laminated glass because a "showroom window" in an exposed location must be easy to clean and always look spick and span. On request the door is available with double panes in 16 mm thick "Sekurit" safety glass.

### A sturdy construction with slender aluminium extrusions

The construction with an overall thickness of 42 mm and profile view of 120 mm offers solid stability for safe, reliable function. For stability reasons doors over 3330 mm wide are divided in the centre by a 91 mm wide vertical rail.





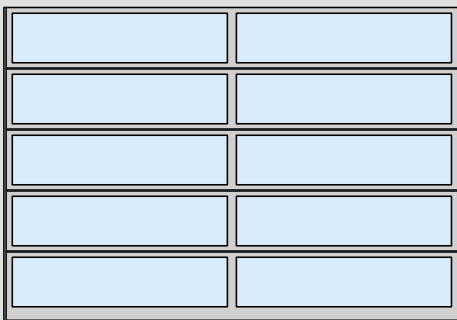


## This Display Window Door Attracts Clients to Your Premises

### Door versions (examples)



Door version  
up to 3330 mm wide



Door version  
over 3330 mm wide with vertical rail (91 mm)

### Technical Data

#### Size range

Width up to 5500 mm  
Height up to 4000 mm

#### Resistance to wind pressure

Class 3

1)

#### Water-tightness

Class 3

2)

#### Air permeability

Class 2

3)

#### Sound insulation

R = 19 dB

4)

#### Thermal insulation to EN 13241, annex B EN 12428

U = 6.2 W/m<sup>2</sup>K\*

\*The value refers to a door area of approx. 25 m<sup>2</sup>

1) EN 12424; 2) EN 12425; 3) EN 12426; 4) EN 717-1

**Safety features and performance criteria  
to EN 13241-1, page 36-39**



## TAR 40

## The Aluminium Thermal Door for the Highest Standards

### Inviting aesthetics and the comfort of thermal insulation

High transparency, sound stability, good thermal insulation and modern design all speak in favour of this top aluminium door.

### A good long-term investment

Aluminium is the best guarantee for a weather-resistant, good-looking surface that will retain these qualities for decades. The door sections are anodized in a natural colour (E6/EV1) to DIN 17611. Special colours to RAL on request. The bottom section:

**26 mm** thick PU sandwich infills  
**(100 % CFC-free)**, clad on both sides  
with stucco-embossed aluminium sheets.

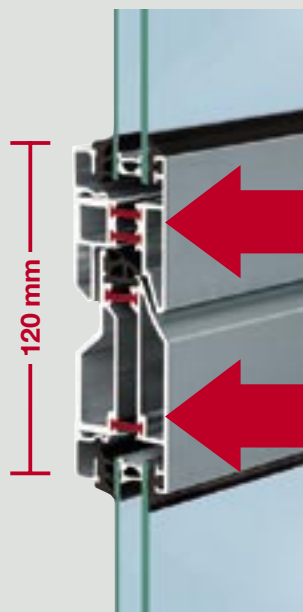
The top door sections:

Glazed with 16 mm synthetic double panes.  
These thermal components produce a good thermal insulation value.

### The strong thermal extrusion

Glass fibre reinforced polyamide ribs ensure an effective thermal break between the outer and inner shells, thereby eliminating cold bridges.

The positive material composite (overall thickness 42 mm, profile height 120 mm) produces a high level of stability for a long service life. This thermal-break door also protects the building structure.



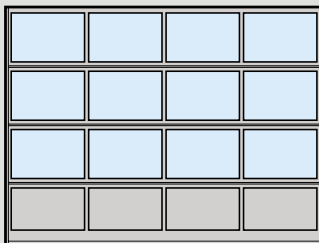




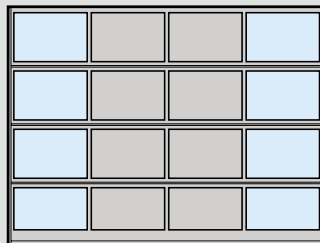
**3x TOP MARKS**  
for light, visual contact  
and thermal insulation

## The Best Criteria For a First-Class Presentation

### Door versions (examples)



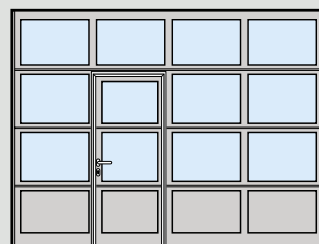
Door sections evenly spaced  
Bottom section and other door sections  
max. 750 mm high



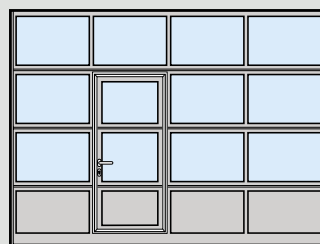
Version with individual arrangement  
of glass panes and panel infills



Version with maximum glazing



Version including wicket door with  
trip-free threshold



Version including wicket door  
with threshold

### Technical Data

#### Size range

Width up to 7000 mm  
Height up to 7000 mm

#### Resistance to wind pressure

Class 3

1)

#### Water-tightness

Class 3

2)

#### Air permeability

Class 2 (with wicket door class 1)

3)

#### Sound insulation

R = 19 dB

4)

#### Thermal insulation to EN 13241, annex B EN 12428

U = 3.6 W/m<sup>2</sup>K\*

(with wicket door U = 3.8 W/m<sup>2</sup>K\*)

\*The values refer to a door area of approx. 25 m<sup>2</sup>

1) EN 12424; 2) EN 12425; 3) EN 12426; 4) EN 717-1

#### Thermal insulation to DIN 4108

U = 2.9 W/m<sup>2</sup>K\*

\*The value refers to a 4 x 4 m door with 16 mm perspex/synthetic double panes

### Safety features and performance criteria to EN 13241-1, page 36-39

**NEW:  
wicket doors with  
trip-free threshold**



#### **Wicket doors with trip-free threshold**

To ensure that the main door does not always have to be opened to allow personnel traffic to pass through, wicket pass doors present a practical solution. Hörmann's new wicket door with trip-free threshold reduces the risk of tripping up and wheeled items can be rolled through with ease. Power-operated doors feature a VL 2 leading photocell 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. For reasons of stability, the rail profile on these doors is supplied 91 mm wide.

**On observing the relevant regulations, these sectional doors with wicket doors meet the requirements of an escape door.**

For existing sectional doors and in-line arrangements we also still supply the wicket door with the normal threshold.

## **Sectional doors including a wicket door with trip-free threshold**



**Wicket door with trip-free threshold**  
Now with a flat stainless steel threshold, 10 mm high in the centre and only 5 mm high at the edges.



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



**Continuous hinge strip**  
Inconspicuously integrated into the sectional door frame.



**Wicket doors as standard with slide rail door closer.**





**Side door on request with 3-point locking**

If there is adequate space next to the hall door, then a matching side door is a low-cost and safe way of keeping personnel traffic and vehicle traffic separate. For your safety, side doors also serve as escape doors in emergency situations.



**Incorporate into the planning:  
side doors and wicket pass doors**

**Side doors:  
matching the sectional door**

#### **Equipment of wicket doors and side doors**

All door frames are made of aluminium extrusions, anodized to DIN 17611 and stained in a natural colour (E6/EV1). As standard with all-round seals made of non-ageing, weather-resistant EPDM.

#### **Fittings:**

Mortise lock with profile cylinder, lever handle set, with black synthetic oval roses, on request also with lever/knob handle sets. Also available in natural-coloured cast aluminium, polished stainless steel or brushed stainless steel.

#### **Overhead door closer**

As standard on wicket doors with slide rail, optional for side doors.

Side doors open inwards or outwards and are available with LH or RH hinging.

Side door on request with 3-point locking (latch and lock pawl). Retrofit not possible.





RAL 9016 Traffic White

RAL 9010 Pure White

RAL 9006 White Aluminium

RAL 9002 Off-White

RAL 8028 Terra Brown

RAL 7016 Anthracite Grey NEW

RAL 6002 Leaf Green

RAL 6005 Moss Green NEW

RAL 5010 Gentian Blue

RAL 5009 Azure Blue

RAL 3000 Flame Red

RAL 1021 Rape Yellow

**12 factory colours:  
at no extra cost on double-  
skinned steel sections.  
Take advantage of the price  
benefit!**

The glazing frames of section and compound windows are generally black.

Not coated at the factory: the galvanized frame surround, the anodized wicket door extrusions, the door leaf reinforcements as well as all fittings.

Slight colour deviations are possible. Due to the limitations of the printing process, the colours shown in this catalogue cannot be regarded as binding.

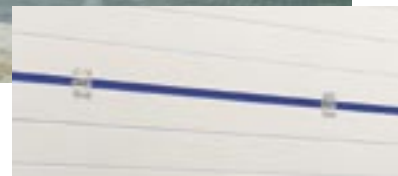
## Coloured Doors Also Promote the Corporate Design

Colours are increasingly being used to fly the company flag. In this regard, coloured hall doors prove an ideal vehicle. That's why Hörmann supplies all its sectional doors in around 200 different colours of the RAL spectrum.

With double-skinned steel sections and aluminium door sections with thermal breaks, however, darker shades should be avoided, since exposure to strong sunlight can lead to expansion cracks and bowing.



Doors with double-skinned steel sections in any of the 12 factory colours are Off-White on the inside (based on RAL 9002).









**Vision panel type D**  
**Too narrow to climb through**

Glazing size: 602 x 132 mm  
 Synthetic frame: black  
 Door section heights: 500, 625, 750 mm  
 (for door types TPU, SPU)

**Vision panel type A**  
**Uses daylight**

Glazing size: 635 x 245 mm  
 Synthetic frame: black (for door types TPU, SPU)  
 Zinc die-cast frame: black (for door types STE, SPU)  
 Door section heights: 500 mm (for door type STE)  
 500, 625, 750 mm (for door types TPU, SPU)

**Section window type E**  
**The alternative to an aluminium-glazing frame**

Glazing size: 725 x 370 mm  
 Synthetic frame: black  
 Door section heights: 625, 750 mm (for door types TPU, SPU)

# Use Light as a Design Element

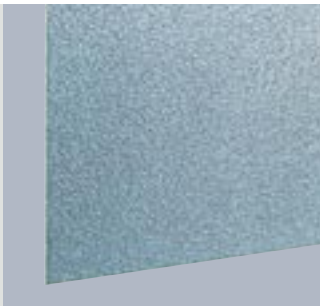


It goes without saying that with Hörmann the glazing bars on aluminium glazing frames are made of high-grade aluminium extrusions, in contrast to the plastic versions frequently offered.

With the type of pane you choose, you can determine just how much/ little light or visual contact you prefer.



**Synthetic pane 3 mm clear glass**  
 For section window with zinc die-cast frame as well as for aluminium glazing frame (standard extrusion)



**Synthetic pane 3 mm crystal structured**  
 For plastic window with zinc die-cast frame as well as for aluminium glazing frame (standard extrusion).



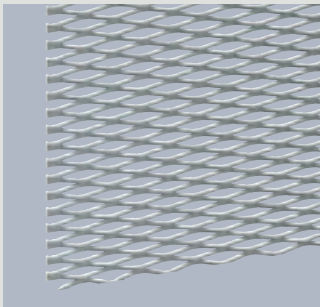
**6 mm clear laminated safety glass**  
 For aluminium glazing frame (standard profile)



**Double panes in 16 mm clear Sekurit safety glass**  
 For aluminium glazing frame (standard profile)



**Double-moulded unit 16 mm extremely sturdy panes**  
 For aluminium glazing frame (standard or thermal-break extrusion)



**Expanded mesh galvanized steel, powder-coated**  
**Ventilation area 58 % of the door area**  
 For aluminium glazing frame (standard extrusion)





Rail profile 52 mm

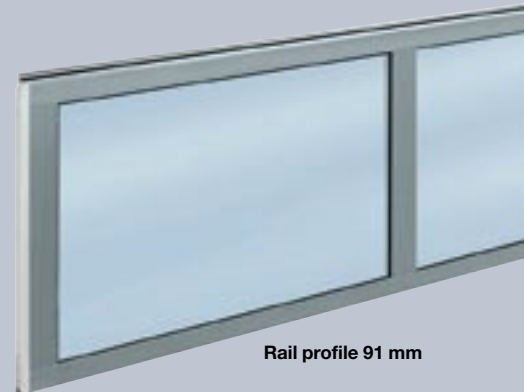
### Vision panel type C

To round things off!

Glazing size: 244 mm dia.  
Synthetic frame: black  
Door section heights: 500, 625, 750 mm  
(for door type SPU)

### Aluminium glazing frame for maximum use of daylight

Glazing size: maximum  
Glazing frame: anodized aluminium  
(E6/EV1)  
Door section heights: max. 750 mm  
(for all door types)  
Bottom section heights: 500, 750, 1000,  
1500 mm (for door  
types APU, TAP)  
Bottom section height: max. 750 mm  
(for door types  
ALR, TAR)



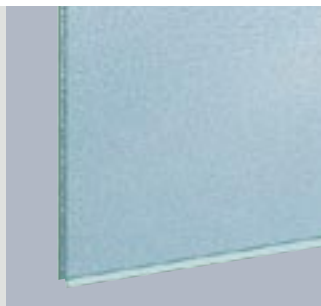
Rail profile 91 mm

Depending on your requirement profile or your individual wishes, Hörmann industrial sectional doors can be equipped with any of the infills shown below:



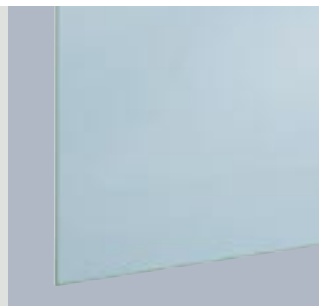
#### Synthetic double panes, clear glass

For compound window with synthetic frame (11, 16, 29, 31 or 33 mm), for compound window with zinc die-cast frame: 29 mm, for aluminium glazing frame (standard or thermal-break extrusions): 16 mm



#### Synthetic double panes crystal structured

For compound windows with zinc die-cast frame: 29 mm, for aluminium glazing frame (standard or thermal-break extrusions): 16 mm



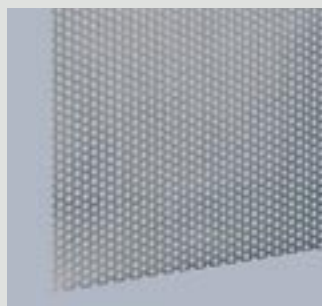
#### Polycarbonate pane clear glass 6 mm impact-resistant, burglar-retardant

For aluminium glazing frame (standard extrusion)



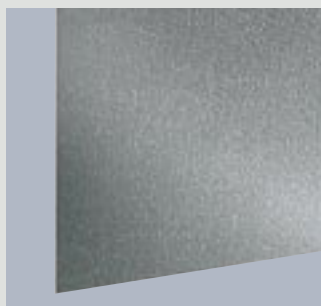
#### Polycarbonate double panes clear glass 16 mm impact-resistant, burglar-retardant

For compound window with zinc die-cast frame: 29 mm, for aluminium glazing frame (standard or thermal extrusion)



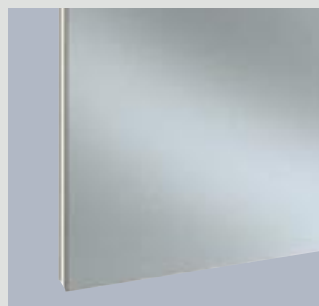
#### Perforated sheet Smooth stainless steel

Ventilation area:  
40 % of the infill area  
For aluminium glazing frame (normal profile)



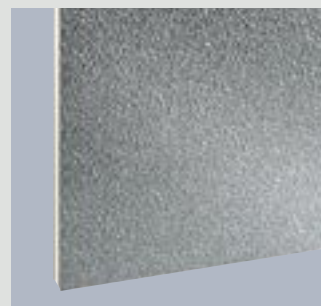
#### Aluman sheet infill 1.5 mm Stucco embossed

For aluminium glazing frame (standard extrusion)



#### PU sandwich infill Aluminium sheet cladding 16 mm Anodized both sides, smooth finish

For aluminium glazing frame (standard or thermal extrusion)



#### PU sandwich infill Aluman sheet clad, Both sides stucco embossed, 16 or 26 mm

For aluminium glazing frame (standard or thermal extrusion)

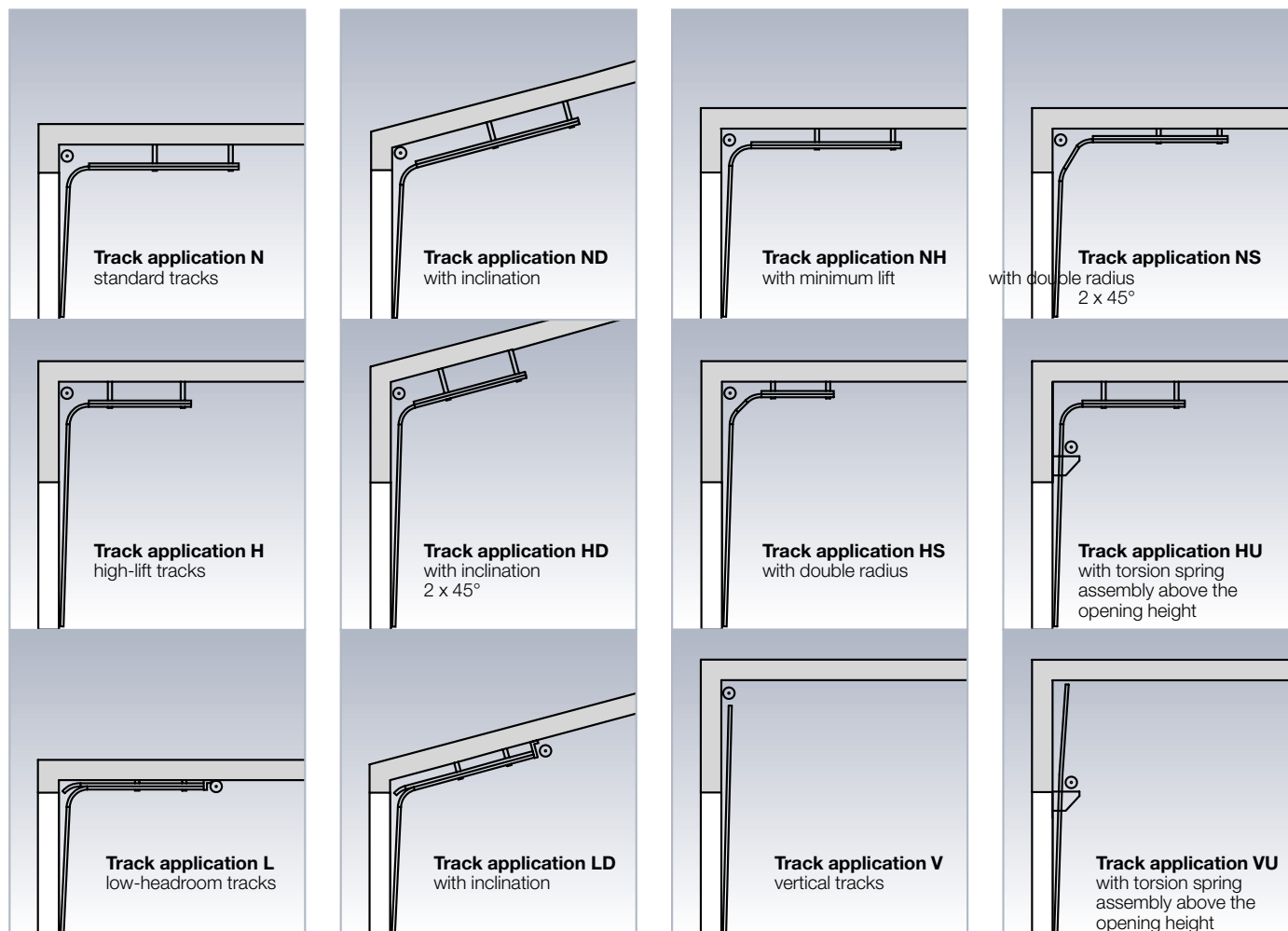
In addition to the infills shown, on request Hörmann industrial sectional doors can also be supplied with special infills.

### Sound planning for old buildings and new ones

The door's guidance system should in no way impede the workflow within the building. That's why choosing the correct track application is important at the planning stage. With Hörmann all the different track applications are available for all door types.



## Hörmann Sectional Doors Can Be Adapted to Each and Every Building





### Optimised roller guide

An optimum solution has been found for guiding the door. This allows the use of low-headroom tracks following the inclination of the roof, also with an angle of less than 10°.



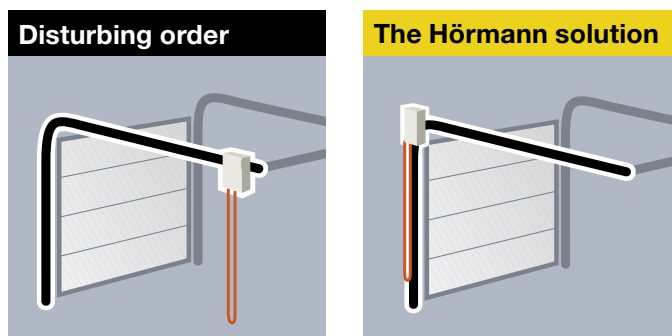
## Low-headroom Tracks

### Operator and chain where they belong

All the operational controls are on the front of the door.

A disturbing chain no longer dangles down.

**It's worthwhile making a comparison!**



### Minimum headroom clearance

Manual operation	200 mm
Power-driven WA 400	200 mm
Power-driven ITO 400	260 mm

### Minimum sideroom clearance

Hand pulley with rope	125 mm
Hand chain hoist	165 mm
Power-driven WA 400	200 mm





## The Best Proof of Quality: Advanced Technology in Every Detail



### Quiet door action

Side hinge roller brackets (galvanized steel) with adjustable, ball bearing mounted synthetic rollers ensure a precise, low-noise door operation.



### Strong-holding connections

Sturdy central hinges of galvanized steel precisely connect the individual door sections. The edge profiling of the door sections is designed in such a way that the screws are inserted through steel sheet four times. **That makes for a reliable hold!**



### Prefabricated track suspension

Special track supports of galvanized steel with slotted holes provide accurate support from the ceiling. To the greatest possible extent these are prefabricated for the individual building situation.



### Particularly service-friendly

In the event of collision damage in the region of the frame, the **screw-down tracks** can be easily replaced at minimum cost.





**Top end of frame  
with connecting bracket**

Pre-defined positions of the spring shaft bracket facilitate installation of the entire spring shaft.



**Flexible shaft coupling**

The flexibility of the shaft coupling makes it easy to compensate for minor variations in the axial alignment.



**Connection of spring shaft  
to cable drum**

No separate feather key but a secure connection from a single cast. This not only increases the functional safety but is more installation friendly too.



**Articulated roller holder**

This reduces the required headroom and prevents buckling of the top door section when the door is open.

## What Good Are Doors That Are Not Securely Latched?

Only secure latching systems can reliably protect property and valuables.

**That's why, as general rule, Hörmann industrial sectional doors include security latching as a standard feature.** Whether manually operated or power-driven.

### Internal latches

Each door features internal latching as standard which can be selected according to your individual requirements.



#### Ground lock

Extremely practical for frequently used doors. Quick and reliable latching with comfortable foot release. The latch engages with a click.



#### Shoot bolt

Prepared for a site padlock to provide night security locking. For power-driven doors the shoot bolt comes with an electric interrupter contact which prevents the operator from being used when the door is latched.



#### Rotary latch

An automatic latching spring disc (European patent) securely retains the door. Not suitable for doors using track applications VU and HU (with torsion spring assembly above the opening height).



### Door security kit:

#### A standard feature on doors up to 5 m high with shaft operator

Very few manufacturers offer this high level of security as standard. Without this security kit, lighter doors can generally be pushed open with very little effort. Not so with Hörmann!

#### It's worthwhile making a comparison!

Doors over 5 m high are burglar-retardant anyway due to their weight alone. And doors with a chain drive operator cannot be pushed open either on account of the self-locking gears.



**Forced entry pointless  
Even on power-driven doors**



### Internal and external latches

If doors also need to be operated from the outside, we recommend these two latches with additional external handle set and profile cylinder.



#### Handle sets

Ergonomically positioned handle sets in black synthetic. With release handle and profile cylinder on the outside, and T-handle and security pin on the inside.

**The profile cylinder can also be integrated into master locking systems.**



#### Shoot bolt

Here the shoot bolt can also be operated from the outside together with the profile cylinder and grip handle for opening and closing.



#### Rotary latch

Here the rotary latch can also be operated from the outside together with the profile cylinder and grip handle for opening and closing. Not suitable for doors using track applications VU and HU (with torsion spring assembly above the opening height).



Expanded mesh for ventilation,  
e.g. in underground garages

## Maximum Safety for Your Protection No Trapped Fingers, No Door Crashing to the Floor!

### Anti-crash safeguard



#### Reliable door guidance

The rollers are precision-guided in the special **safety tracks** developed by Hörmann. That's why there is no risk of the door sections leaving the tracks, neither during the turning phase nor when parked under the ceiling.



#### Optimum weight counterbalancing

The torsion spring assembly with grooved spring shaft ensures perfect weight counterbalancing of the door as well as a smooth door action at every stage of opening and closing. The shaft is galvanized, **while the springs are shot-blasted with steel balls and coated.** All other parts are zinc die-cast.



#### European Patent

#### Cable/spring safety device

A load-dependent latching device, integrated into the bearing system, safeguards against cable and spring failure.



#### European Patent

#### Spring safety device

This device stops the torsion spring shaft in the event of spring failure and holds the door securely in position.



#### Regulated safety

For power-driven doors please observe the compulsory inspection.





## Safety features to the European Standard 13241-1

Mandatory since 1st May 2005

With Hörmann tested and certified:

### Anti-crash safeguard

### Trap protection

Hörmann industrial sectional doors are safe at every stage of opening and closing. Whether manually operated or power-driven. On doors featuring impulse-controlled operators, an optoelectronic closing edge safety device and the track-dependent speed adjustment facility ensure that the dynamic closing forces (max. 400 N) are strictly observed. A leading photocell for non-contact reversing is available as an optional extra. A microprocessor additionally monitors the force limit in the opening phase and automatically causes the operator to cut out if the forces exceed the permitted ceiling. It goes without saying that Hörmann doors and operators are precisely matched and for your safety are tested by the TÜV (German Technical Inspectorate) and for conformity with the relevant standards.

**It's worthwhile making a comparison!**



**With Hörmann tested and certified: doors must comply with the safety requirements of the European Standard 13241-1! Make sure other manufacturers show you their certificate of approval!**

### Trap protection



#### Finger-trap protection

Thanks to the special shape of the door sections (European Patent), trap zones are eliminated on both the inside and outside of the door. This also applies to the hinges. Only Hörmann offers reliable finger-trap protection of this kind.



#### Side hand guards

The side frames are completely enclosed. From the top to the bottom. This prevents the risk of injury in this area of the door.



#### Internally guided cables

The carrying cables are guided internally between the door sections and the frame. And there are no protruding structural components. This excludes the risk of injury. For doors incorporating low-headroom tracks the bearing system consists of a carrying chain/carrying cable.



#### Operational safety

A leading photocell provides the new level of safety on industrial sectional doors. In this system the sensors are no longer located in the bottom rubber profile but in a leading swivel arm construction. This piece of equipment is optional.

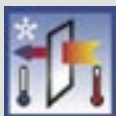
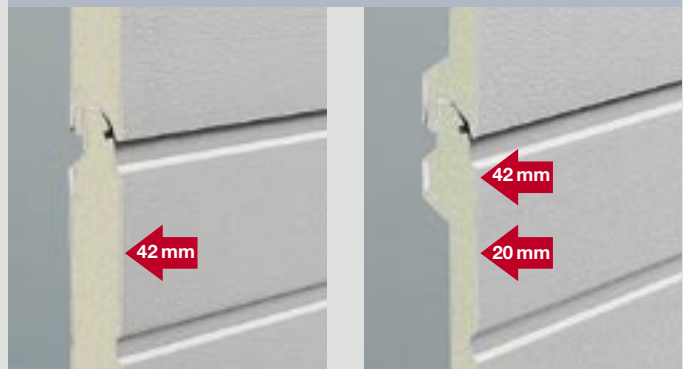


## Well Thought-out Designs with Convincing Performance Properties

**Thermal insulation**



**Sound insulation**



### **Thermal insulation**

Hörmann industrial sectional doors achieve a high level of thermal insulation thanks to the PU foam-insulated steel sections and the aluminium extrusions with thermal breaks.



### **Sound insulation**

The strong material composite comprising rigid foam sandwiched between steel reduces the noise level not only from the outside but also from the inside.





## Safety features to the European Standard 13241-1

Mandatory since 1st May 2005

At Hörmann tested and certified:

### Thermal insulation

### Sound insulation

### Sealing

### Wind pressure

Hörmann is certified as meeting the performance criteria laid down in the European Standard EN 13241-1.

We prove this black and white with tested and certified values that are convincing. It's worthwhile making a comparison.

See pages 52-53.

### Sealing



Lintel seal



Side seal, bottom edge seal

### Wind pressure



Reinforcing profiles



Door leaf reinforcement



#### Sealing

The high-grade seals are flexible and weather-resistant. A triple-chamber hollow profile seal with flexible lip along the bottom door edge affords protection against dirt and rain. A frost-proof dual-chamber hollow profile seal along the bottom door edge affords protection against dirt and rain. Together with the side seals with contract strip, the lintel seal and intermediate seals between the individual door sections, reliable all-round sealing is ensured.



#### Wind pressure

Depending on the door type, reinforcing profiles, double-skinned sections, aluminium extrusions or door leaf reinforcements on wider doors ensure a high degree of stability.

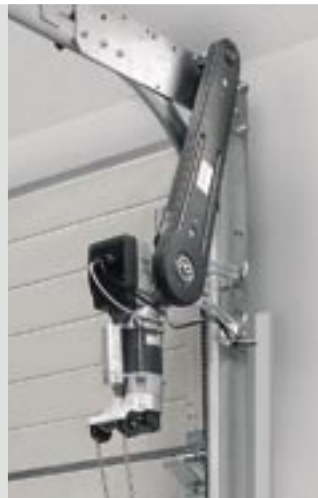


## System Solutions Pay Off: in Operational Sequences and in Safety



### Options for operating manual doors

As standard with hand rope or pull pole. On request: Hand pulley with rope/round steel chain or hand chain hoist, also with chain tensioner.



Chain tensioner

### Operator with chain box

In situations offering minimum sideroom, we recommend the WA 400 operator which is suitable for all door types up to 7000 mm high. For the track applications L, LD and H8 an operator with chain box is required. Due to the indirect transmission of forces, the door is subjected to minimum wear and friction.

Standard fitting position: vertical or alternatively horizontal.

### Frame-mounted operator

This patented frame-mounted version is simple and quick to fit to the spring shaft and requires considerably less sideroom than the slip-on solutions of other manufacturers.

Standard fitting position: vertical or alternatively horizontal.





**We offer a wide range of operators, controls and impulse generators.**



Version with two sensors for sectional doors including wicket door with trip-free threshold

**NEW**

## Increased safety – the leading photocell

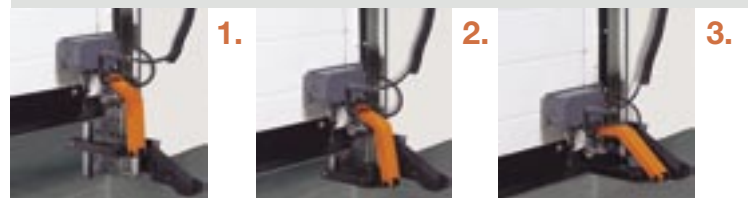


### Centrally mounted operator

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.

### Door speeds (WA 400/WA 400 M)

Chain drive	Opening speed m/s	Closing speed m/s
Chain Drive ITO 400	0.15	0.15
Shaft operator WA 400 depending on track application	0.19-0.23	0.19-0.23
Shaft operator WA 400 FU depending on track application	with singel roller 0.3	with singel roller up to 3000 above FFL 0.2-0.3 from 3000 above FFL 0.2
*except for doors with vertical tracks	with tandem roller* 0.3-0.54	with tandem roller* up to 3000 above FFL 0.3-0.54 from 3000 above FFL 0.2



### Leading photocell

Increases safety on Hörmann industrial sectional doors thanks to the VL 1 leading photocell, available as an optional extra. Contrary to the standard opto-electronic closing edge safety device, a sensor monitors the bottom edge of the door. As a result, obstructions and persons are detected at an early stage and the door starts to reverse before contact is made. Thanks to this technology, Hörmann sectional doors can be operated at higher speeds without the permissible closing forces being exceeded. On sectional doors incorporating a wicket door with trip-free threshold the VL 2 leading photocell is a standard feature and the bottom door edge is monitored by two sensors. The anti-crash protection at the sides prevents the swivel arm from being damaged when the door is closed.

# Powerful Operators

**All the 3-phase current operators offer:**

- quiet running
- high duty
- quick door action



**Shaft Operator WA 400**  
for frame-mounting with emergency hand chain  
(can be operated from the ground)

Can be combined with controls  
A/B 440, A/B 445, A/B 460, B 460 FU



Standard fitting position: vertical

**Shaft Operator WA 400**  
with chain box and emergency hand chain  
(can be operated from the ground)

Can be combined with controls  
A/B 440, A/B 445, A/B 460, B 460 FU

## From Hörmann as standard features:

- Solid metal gears
- Maintenance provision
- Door security kit up to a door height of 5000 mm
- Generally available as a frequency converter version

### Maintenance provision as a standard feature

For the compulsory annual inspection there's no need to dismantle the operator from the door shaft. This saves time and money. The maintenance provision can be converted to a secured release at any time.



### Secured release

This allows you to conveniently unlatch the operator from the ground (Hörmann patent). With emergency hand chain as a standard feature (except WA 400 M)



**When sideroom is lacking.**



**Shaft Operator WA 400 M  
for central mounting  
with secured release**

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

- IP 65 (hose water protected)
- Slack cable safety device



**Secured release, outside  
(ASE)**

To unlatch the door from the outside (required for buildings without a second entrance). Lockable zinc die-cast housing with profile half-cylinder. Dimensions: 83 x 133 x 50 mm (W x H x D) Housing material: zinc die-casting

**Options for manual operation in an emergency**



**Secured release with emergency hand chain**

This patented system can be operated from the ground. Mandatory for fire-fighting services, rescue stations etc. to European Standard 14092.



**Maintenance provision with emergency crank handle**

The low-cost option, available in two versions. As a fixed crank handle or articulated emergency crank handle.



**Maintenance release with cover cap**

The inexpensively priced alternative without emergency hand chain or emergency crank handle. After the operator has been disengaged, the door must be moved manually. That's why we only recommend its use up to a maximum door height of 3000 mm.

Operators with cover cap or emergency crank handle can be converted to an emergency hand chain at any time.

# The Space-Saving Operator



## **ITO 400 chain drive with boom guidance**

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

- No sideroom required
- Emergency release via Bowden cable on the carriage
- Emergency release from the outside possible
- IP 65 (hose water protected)
- For normal tracks and low-headroom tracks
- **NEW:** Also available as a frequency converter







**Dead man's controls**  
**A/B 440 (400/230 V)**

- Controls and operator can be mounted separately
- Controls and door leaf components in protection class IP 65 (hose water protected)  
A connection with CEE phase-changer plug corresponds to protection class IP 44
- 7-segment display, viewable from the outside
- Function lock via miniature lock (convertible to profile half-cylinder)
- Can be upgraded to impulse controls A/B 445, A/B 460



**Impulse controls**  
**A/B 445 (400/230 V)**

- Controls and operator can be mounted separately
- Controls and door leaf components in protection class IP 65 (hose water protected)  
A connection with CEE phase-changer plug corresponds to protection class IP 44
- Menu readout via an integral double 7-segment display on the outside, so there's no need to remove the housing cover
- Adjustments are no longer made on the motor but conveniently from the control unit via an electronic door position sensor.
- Service menu with maintenance, door cycle and operating hours counter as well as fault/error analysis
- Collective malfunction signalling with individual on-site display (acoustic, optical or, for example, via mobile phone)
- Function lock via miniature lock (convertible to profile half-cylinder)
- Can be upgraded to A/B 460 controls so there is no need to replace entire module



**Deluxe controls**  
**A/B 460 (400/230 V)**

- Controls and operator can be mounted separately
- Additional button on housing cover for 2nd opening height and integral connecting terminals for further command units
- Controls and door leaf components in IP 65 protection class (hose water protected)  
A connection with CEE phase-changer plug corresponds to protection class IP 44
- Menu readout via an integral double 7-segment display on the outside, so there's no need to remove the housing cover
- Adjustments are no longer made on the motor but conveniently from the control unit via an electronic door position sensor.
- Service menu with maintenance, door cycle and operating hours counter as well as fault/error analysis
- Collective malfunction signalling with individual on-site display (acoustic, optical or, for example, via mobile phone)
- Function lock via miniature lock (convertible to profile half-cylinder)



**Frequency converter controls**  
**B 460 (230 V)**

- Controls and operator can be mounted separately
- Additional button on housing cover for 2nd opening height and integral connecting terminals for further command units
- Controls and door leaf components in IP 65 protection class (hose water protected)  
A connection with CEE phase-changer plug corresponds to protection class IP 44
- Menu readout via an integral double 7-segment display on the outside, so there's no need to remove the housing cover
- Adjustments are no longer made on the motor but conveniently from the control unit via an electronic door position sensor.
- Service menu with maintenance, door cycle and operating hours counter as well as fault/error analysis
- Collective malfunction signalling with individual on-site display (acoustic, optical or, for example, via mobile phone)
- Function lock via miniature lock (convertible to profile half-cylinder)
- Saves wear and tear on the door thanks to "soft" start and "soft" stop
- High-speed opening and closing possible (depending on tracks)



**Stand post**  
**STI 1**

For installing a maximum of 2 control units with additional housing.  
Colour: RAL 9006 (white aluminium)  
Dimensions:  
200 x 60 mm,  
Height 1660 mm



**Optional for all controls:**  
Profile half-cylinder  
or master switch



**Meets the requirements of the**  
**Fire Service Standard**  
**EN 14092**

## Receiver units



### Single-channel receiver unit HEI 1

In a separate housing with 7.0 m long 3-core connection cable

Function: impulse

Frequency: 868.3 MHz

Protection

category: IP 65



### Two-channel receiver unit HE1 2

In a separate housing with 7.0 m long 4-core connection cable

Function: impulse or  
OPEN/CLOSE  
(per channel)

Frequency: 868.3 MHz

Protection

category: IP 65



### Single-channel receiver unit HER 1

with floating relay output

in a separate housing without connection cable.

Functions: impulse, 3-minute light, ON/OFF

Frequency: 868.3 MHz

Protection category: IP 65

Operating voltage: 24 V DC/230 V AC

Contact load: 24 V DC : 2.5 A/ 50 W  
230 V AC : 2.5 A/500 W



### Two-channel relay receiver unit HER 2

Technically as HER 1, but with 2 potential-free contacts.

As a result, two devices can be controlled.

Separate aerial for outdoor use in tamper-proof aluminium housing with 7.0 m long 3-core connection cable.

Decoder unit for indoors.



### Four-channel relay receiver unit HER 4

Technically as HER 1, but with 4 potential-free contacts.

As a result, up to 4 devices can be controlled.

**All the receiver units shown are suitable for controls A/B 445, A/B 460, B 460 FU**

## Hand transmitters for impulse controls



**Hand transmitter HS 4 with 4 buttons**  
including hand transmitter holder



**Mini hand transmitter HSM 4 with 4 buttons**  
including key-ring



**Micro hand transmitter HSE 2 with 2 buttons**  
including key-ring



**Backup hand transmitter HSS 4 with 4 buttons**  
Additional function:  
Copy protection for hand transmitter coding. Includes hand transmitter controls



**Hand transmitter HS 16**  
with 16 buttons  
for 16 functions  
Pouch available as an accessory.





### Push-button DT 02

Opening or closing via the same button, separate STOP button.

Dimensions:

65 x 112 x 68 mm W x H x d

Protection category: IP 65

**For control units:**

**A/B 445, A/B 460, B 460 FU**



### Push-button DT 03

For separate control of both operational directions, with separate STOP button.

Dimensions:

66 x 145 x 68 mm W x H x d

Protection category: IP 65

**For control units:**

**A/B 440, A/B 445, A/B 460, B 460 FU**



### Push-button DT 04

For separate control of both operational directions, with separate STOP button.

Opening of door fully or partially (via separate button)

Dimensions:

69 x 185 x 91 mm W x H x d

Protection category: IP 65

**For control units:**

**A/B 460, B 460 FU**



### Push-button DTNA 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. Further operation is then only possible once the STOP button has been unlocked with the key. (2 keys included in the supply package)

Dimensions:

66 x 145 x 85 mm W x H x d

Protection category: IP 65

**For control units:**

**A/B 440, A/B 445, A/B 460, B 460 FU**

**The lockable function serves to isolate the control voltage and immobilises the function of the command units. Profile half-cylinders are not included in the supply package of the push-buttons.**



### Push-button DTP 02

Opening or closing via the same button. Separate STOP button and operation control light for control voltage. Lockable with profile half-cylinder, available as an accessory.

Dimensions:

86 x 260 x 85 mm W x H x d

Protection category: IP 44

**For control units:**

**A/B 445, A/B 460, 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.

Dimensions:

68 x 290 x 74 mm W x H x d

Protection category: IP 44

**For control units:**

**A/B 440, A/B 445, A/B 460, B 460 FU**



### Emergency-STOP button DTN 10

To quickly immobilise operation of the door. Push-to-lock button (mushroom type)

Surface-mounted

Dimensions:

93 x 93 x 95 mm W x H x d

Protection category: IP 65

**For control units:**

**A/B 440, A/B 445, A/B 460, B 460 FU**



### Emergency-STOP button DTNG 10

To quickly immobilise operation of the door.

Oversize push-to-lock button

Surface-mounted

Dimensions:

93 x 93 x 95 mm W x H x d

Protection category: IP 65

**For control units:**

**A/B 440, A/B 445, A/B 460, B 460 FU**

## Key switches, key switch posts



**Key switch ESA 30**  
with 2 keys  
**Surface-mounted version**

Function: impulse or  
OPEN/CLOSE selectable  
Dimensions:  
73 x 73 x 50 mm W x H x D  
Protection category: IP 54



**Key switch ESU 30**  
with 2 keys  
**Recessed version**

Function: impulse or  
OPEN/CLOSE selectable  
Dimensions of recessed part:  
60 x 58 mm (d x D)  
Dimensions of face plate:  
90 x 100 mm (W x H)  
Wall recess:  
65 x 60 mm (d x D)  
Protection category: IP 54



**Key switch STAP**  
with 2 keys  
**Surface-mounted version**

**Function: impulse or**  
OPEN/CLOSE selectable  
Dimensions:  
80 x 110 x 68 mm W x H x D  
Protection category: IP 54



**Key switch STUP**  
with 2 keys  
**Recessed version**

**Function: impulse or**  
OPEN/CLOSE selectable  
Dimensions of recessed part:  
60 x 58 mm (d x D)  
Dimensions of face plate:  
80 x 110 mm (W x H)  
Wall recess:  
65 x 65 mm (d x D)  
Protection category: IP 54

### Stand post STS 1

With adapter for installing TTR 1, FCT 10 b, CTR 1/CTR 3 or STUP.  
The command units must be ordered separately.  
Top and base in RAL 7015 (slate grey).  
Upright tube in RAL 9006 (white aluminium) stove enamelled.  
Dimensions:  
300 x 1250 mm (d x H)  
Protection category: IP 44



Illustration shows version  
with installed key switch  
STUP  
(available as accessory)

## Photocells, pull switch



### Photocell RL 50

Reflection photocell with  
transmitter/receiver unit and  
reflector.  
The photocell is tested by the  
control unit prior to each closing  
cycle. Connection via system  
cable (length 2.0 m).  
Range approx. 6.0 m  
Dimensions:  
68 x 97 x 33 mm W x H x D  
Reflector:  
85 x 85 mm (W x H)  
Protection category: IP 65



### One-way photocell EL 51

One-way photocell with  
separate transmitter and  
receiver.  
The photocell is tested by the  
control unit prior to each  
closing cycle.  
Connection via system cable  
Range approx. 8.0 m  
Dimensions with mounting  
bracket:  
60 x 165 x 43 mm W x H x D  
Protection category: IP 65



### Pull switch ZT 1 with cord

Impulse generation to open  
or close the door.  
Dimensions:  
60 x 90 x 55 mm W x H x D  
Length of pull cord: 3.2 m  
Protection category: IP 65

### Cantilever arm KA 1 (not shown)

Projection 1680 x 3080 mm  
Can be used with ZT 1



## Digital coders

With an FCT 10 b code modulator you can transmit up to 10 radio codes (868.3 MHz). No laying of cables required.  
With illuminated key field (lights up when first key pressed).



### Code modulator FCT 10 b

Dimensions:  
80 x 110 x 39 mm (W x H x D)  
Protection category:  
Keypad: IP 65

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



### Digital coder CTR 1b with opened decoder

Dimensions:  
80 x 110 x 17 mm (W x H x D)  
Decoder housing (closed):  
140 x 130 x 50 mm (W x H x D)  
Protection category:  
Keypad: IP 65  
Decoder housing: IP 54  
Switching capacity: 2.5A/ 30 DC  
500 W/250V AC

With the CTR 3b deluxe version you can open a second door and also switch on the outside lighting or operate a door with direction selector.



### Digital coder CTR 3b with opened decoder

Dimensions:  
80 x 110 x 17 mm (W x H x D)  
Decoder housing (closed):  
140 x 130 x 50 mm (W x H x D)  
Protection category:  
Keypad: IP 65  
Decoder housing: IP 54  
Switching capacity: 2.5A/ 30 DC  
500 W/250V AC

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 a maximum of 100 transponder keys.



### Transponder key switch TTR 1 with opened decoder

Dimensions:  
80 x 110 x 17 mm (W x H x D)  
Decoder housing (closed):  
140 x 130 x 50 mm (W x H x D)  
Protection category:  
Transponder pad: IP 65  
Decoder housing: IP 54  
Switching capacity: 2.5A/ 30 DC  
500 W/250V AC



## Signal lights connections

### Signal lights connection

#### In a separate additional housing or for installing into an existing housing incl. 2 amber signal lights

Unit to extend the function of  
control units A/B 445, A/B 460,  
B 460 FU.

The signal lights connection serves as a  
visual indicator while the door is moving.  
(Shown with week timer, optional)

Application fields:

- Approach warning  
(for A/B 445, A/B 460,  
B 460 FU)
- Automatic timer  
(for A/B 460, B 460 FU)

After the set open phase has elapsed  
(0-480 s), the signal lights flash during  
the set warning phase (0-70 s).

Dimensions of the lights: 180 x 250 x  
290 mm (W x H x D)

Dimensions of additional housing:  
202 x 164 x 130 mm (W x H x D)

Contact load: 250 V AC :

2.5 A/ 500 W

Protection category: IP 65



### Traffic lane control

#### In a separate additional housing or for installing into an existing housing incl. 2 red/green signal lights

Unit to extend the function of  
control units A/B 460, B 460 FU.

The signal lights connection serves  
as a visual indicator for regulating the  
entrance and exit (week timer optional).

Duration of green phase:

Adjustable from 0-480 s

Duration of clearance phase:

Adjustable from 0-70 s

Dimensions of lights:

180 x 410 x 290 mm W x H x d

Dimensions of the

additional housing:

202 x 164 x 130 mm W x H x d

Contact load:

250 V AC : 2.5 A/500 W

Protection category: IP 65

Material of lights:

High-grade powder-coated  
aluminium housing





**PCB for end-of-travel positions in a separate additional housing**

or for installing in an existing housing

Extension module for A/B 440 controls

Dimensions of additional housing:

202 x 164 x 130 mm (W x H x D)

Protection category: IP 65

A PCB can be mounted in the control unit, optional.



**Multi-function PCB in a separate additional housing**

or for installing in an existing housing

End-of-travel signalling, momentary impulse, collective malfunction signalling

Extension module for controls A/B 445, A/B 460 B 460 FU

Dimensions of additional housing:

202 x 164 x 130 mm (W x H x D)

Protection category: IP 65

A PCB can be mounted in the control unit, optional.



**Digital week timer in a separate additional housing**

The timer can switch command units on and off via a floating contact.

Extension module for controls A/B 460, B 460 FU

Switching capacity: 230 V AC : 2.5 A/ 500 W

Can be switched over to summer/winter time

Manual switching: automatic operation, switching of preset times for ON/OFF

Dimensions of additional housing:

202 x 164 x 130 mm (W x H x D)

Protection category: IP 65



**Summer/winter connection module in an additional housing**

Function for full opening of door and individually programmable intermediate end-of-travel position

Extension module for controls A/B 460, B 460 FU

Dimensions of additional housing:

202 x 164 x 130 mm (W x H x D)

Protection category: IP 65



**Radar movement detector RBM 1**

For "OPEN" impulse

with directional recognition

Max. installation height: 6 m

Dimensions:

155 x 132 x 58 mm (W x H x D)

Contact load:

24 AC/DC, 1 A with resistive load

Protection category: IP 65



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

Suitable for an induction loop.

The detector has a closer 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 floating closers.

Can be set for impulse or press and hold.

Directional recognition possible.

Dimensions of additional housing:

202 x 164 x 130 mm (W x H x D)

Switching capacity:

DI1: low voltage 2A, 125V A/60W

DI2: 250V AC, 4A, 1000 VA, (resistive load AC)

Supplied without loop cable



**Loop cable for induction loop DI 200**

50 m Roll

Cable designation: SIAF

Cross-section : 1.5 mm<sup>2</sup>

Colour: brown



**Remote control for radar movement detector optional**

**Special controls to customer specifications on request.**

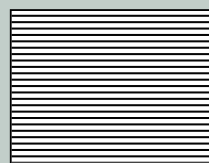
# Overview of Door Types

## Technical Data

### Design and quality features

● = Standard, ○ = on request


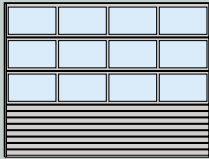
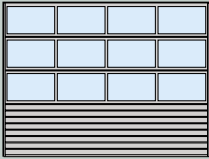
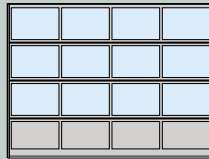


Higher classes and improved thermal and/or sound insulation values on request!



		STE	TPU	
<b>Resistance to wind pressure</b>	Class	2	3	
<b>Water-tightness EN 12425</b>	Door without wicket pass door	0	3 (70 Pa)	
<b>Air permeability</b>	Door without wicket pass door	0	2	
<b>EN 12426</b>	Door with wicket pass door	–	–	
<b>Sound insulation EN 717-1</b>	R = . . . dB	20	21	
<b>Thermal insulation</b>	Door approx. 25 sqm., fitted with wicket pass door	–	–	
<b>to EN 13241 (annex B)</b>	Door approx. 25 sqm., fitted without wicket pass door	6.2	1.5	
(U = W/m²K)	Single door section	–	1.00	
<b>Thermal insulation to DIN 4108</b>	4 x 4 m fitted door (U = W/m²K)	–	1.64	
<b>Behaviour in fire DIN 4102</b>	Building materials class A2 (non-flammable)	●	–	
Door section elements	Building materials class B2 (normal flammability)	–	●	
<b>Design</b>	Cantilever	●	●	
	Overall depth, mm	42	42/20	
<b>Door sizes</b>	Width (LZ) max. mm	7000	5000	
	Height (RM) max. mm*	7000	7000	
<b>Clearances</b>	See Technical Manual			
<b>Material, door sections</b>	Steel single-skinned	●	–	
	Steel double-skinned 42/20 mm	–	●	
	Steel double-skinned 42 mm	–	–	
	Aluminium (standard extrusion)	–	–	
	Aluminium (thermal extrusion)	–	–	
<b>Surface, door sections</b>	Galvanized steel, coated RAL 9002	●	●	
	Galvanized steel, coated RAL 9006	○	○	
	Galvanized steel, coated RAL to choice	○	○	
	Aluminium anodized E6/EV1	○	○	
	Aluminium coated RAL to choice	○	○	
<b>Wicket pass door</b>	With trip-free threshold	–	–	
<b>Side door</b>	Matching in design the main sectional door	○	○	
<b>Glazings</b>	Window section type A	○	○	
	Window section type C	–	–	
	Window section type D	–	○	
	Window section type E	–	○	
	Aluminium glazing frame	○	○	
<b>Seals</b>	To all 4 sides	●	●	
	Intermediate seal between individual door sections	–	●	
<b>Latching systems</b>	Internal latches	●	●	
	External/internal latches	○	○	
<b>Door security kit</b>	For doors up to 5 m high with shaft operator	●	●	
<b>Safety equipment</b>	Finger-trap protection	●	●	
	Side hand guards	●	●	
	Spring safety device for manual operation	●	●	
	Anti-fall safeguard for doors with shaft operator	●	●	
<b>Fixing options</b>	Concrete	●	●	
	Steel	●	●	
	Masonry	●	●	
	Others on request			

\*Door height over 6000 mm on request (not with door type ALS 40)



					
SPU	APU	TAP	ALR	ALS	TAR
3	3	3	3	3	3
3 (70 Pa)	3 (70 Pa)	3 (70 Pa)	3 (70 Pa)	3 (70 Pa)	3 (70 Pa)
2	2	2	2	2	2
1	1	1	1	–	1
22	19	19	19	19	19
1.2	4.0	3.5	4.4	–	3.8
1.0	3.8	3.3	4.2	6.2	3.6
0.50	–	–	–	–	–
0.95	3.2	2.8	3.5	–	2.9
–	–	–	–	●	–
●	●	●	●	–	●
●	●	●	●	●	●
42	42	42	42	42	42
8000	8000	7000	8000	5500	7000
7000	7000	7000	7000	4000	7000
–	–	–	–	–	–
–	–	–	–	–	–
●	●	●	–	–	–
–	●	–	●	●	–
–	–	●	–	–	●
●	○	○	–	–	–
○	●	●	–	–	–
○	○	○	–	–	–
○	●	●	●	●	●
○	○	○	○	○	○
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○	–	–	–	–	–
○	●	●	●	●	●
●	●	●	●	●	●
●	●	●	●	●	●
●	●	●	●	●	●
●	●	●	●	●	●
○	○	○	○	–	○
●	●	●	●	●	●
●	●	●	●	●	●
●	●	●	●	●	●
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●	●	●	●	●	●
●	●	●	●	●	●
●	●	●	●	●	●
●	●	●	●	●	●



## Sound Planning with a Strong Partner



### **Hörmann sectional doors**

In steel and aluminium, single and double-skinned.  
Also as speed sectional doors and T30 sliding fire doors.



### **Hörmann rolling shutters**

In steel and aluminium, single and double-skinned,  
with operator as standard. Also as speed rolling shutters.



### **Hörmann loading technology**

Dock levellers, dock shelters and loading houses.



### **Hörmann high-speed doors**

With flexible curtain, opening vertically or horizontally.





Hörmann offers an economic door and loading solution for every purpose.



#### Hörmann rolling grilles

In steel, stainless steel and aluminium. With operator as standard.



#### Hörmann folding doors

In steel and aluminium, single and double-skinned. Also as aluminium speed folding doors.



#### Hörmann fire doors

As sliding doors T 30 and T 90, single and double-skinned and as sectional door T 30.



#### Hörmann sliding gates

In steel, self-supporting. Also with matching side gates and fencing.

Also in the range: sliding doors, double-swing doors and strip curtains



## Hörmann: Quality without compromise



Hörmann KG Amshausen



Hörmann KG Antriebstechnik



Hörmann KG Brandis



Hörmann KG Brockhagen



Hörmann KG Dissen



Hörmann KG Eckelhausen



Hörmann KG Freisen



Hörmann KG Ichtershausen



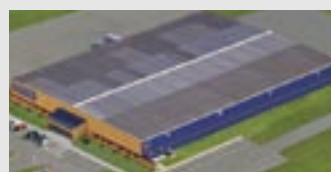
Hörmann KG Werne



Hörmann Genk NV, Belgien



Hörmann Beijing, China



Hörmann Inc. Vonore TN, USA

Hörmann is the only manufacturer worldwide that offers you a complete range of all major building products from one source. We are manufacturing in highly-specialized factories using the latest production technologies.

The close-knit network of sales- and service companies throughout Europe, and the 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 TECHNOLOGY**

### **HINGED DOORS**

### **DOOR FRAMES**

