

### Industrial Steel Sliding Doors

**Exceptionally Robust and Extremely Efficient** 



#### A wide range of different types and appearances

Hörmann steel sliding doors can be supplied single and double-skinned in an overall width up to 8000 mm, with solid sheet steel infill panels or with areas of glazing.

For double-skinned doors five different glazing shapes are available: rectangular, square, circular, triangular or rhomboid.

Single-skinned sliding doors are offered with sheet steel infills in a ribbed, smooth or raised panel design or, for example, fitted with ventilation louvers. Site-fitted timber boarding is also possible. Extremely practical is an integral wicket door or a matching side door to provide a separate access for pedestrian traffic.





### Hörmann Manually Operated Steel Sliding Doors for Hall Openings up to 8 Metres Wide

#### Types of fitting

Sliding doors can be fitted externally or internally. But fitting the doors to an external wall as opposed to an internal wall has one distinct advantage: there is no loss of usable space on the inside wall of the building. Further benefits of sliding doors: minimum headroom is required and no additional load is placed on the roof.

#### Efficient in use

Hörmann steel sliding doors are designed for tough everyday operation and are therefore the ideal choice for builders' yards, sports aircraft hangars, industrial facilities, vehicle depots, maintenance halls and agricultural buildings. The doors are built with very few individual components and wearing parts, are highly reliable and require virtually no maintenance.



#### **Certified safety**

Hörmann steel sliding doors are manufactured according to the Quality Management System EN ISO 9001 as well as to stringent safety requirements.

Despite the fact that many production processes today are computer-controlled, at Hörmann a highly qualified and responsible workforce still forms the basis for the high quality standard of its products - throughout production and in carrying out quality-assurance checks.



Hörmann steel sliding doors are incredibly robust, impact-resistant and offer effective protection against corrosion. Because the doors incorporate very few wearing parts, they hardly ever need repairing and are straightforward to maintain.



# Automobin 0 P23

#### Competent advice

Experienced specialists within our customer-oriented sales organization accompany you from the planning stage, through technical clarification up to the final building inspection. Complete working documentation is not only available in print but is also continually updated on the Internet at **www.hoermann.com** 

#### **Efficient service**

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



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.





### LSP

## The Double-skinned Sliding Door with U Sections

### The double-skinned door leaf is highly rigid

The high stability of the 42 mm thick door leaf is achieved by the strong insulating core made of 100% CFC-free polyurethane rigid foam to which the steel outer skins (125 mm distance between ribs) are evenly bonded.

#### Material/surface

The hot galvanized material and the adhering polyester primer coating offer optimum protection against the adverse effects of the environment. The stucco embossing on both sides of the door leaf makes the surface resistant to scratches. Colour: door leaf, track and rain canopy in grey-white (similar to RAL 9002). RAL to choice on request.

### Designed for manual operation and a smooth, safe door action

The high-grade tubular track section comprises a galvanized steel track, two pairs of twin rollers on ball bearings, end stops and track supports which are anchored to the lintel. At the bottom the door is reliably guided on both sides via plastic rollers (as shown on bottom left). On the outside the door features a surface-mounted handle, on the inside a recessed handle.

The standard closing device (see below) and the shoot bolt (available on request) are prepared for a site padlock.

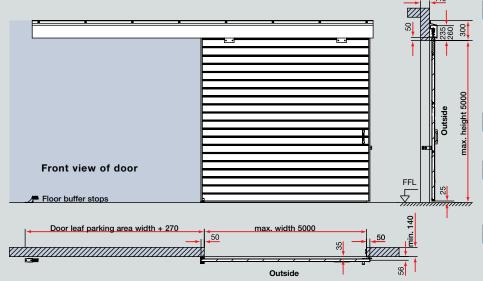






# **Door versions (examples)**

On request with compound windows type A. Window size 635 x 245 mm  $\,$ Black plastic frame with 33 mm clear perspex double panes.



The door is fitted internally or externally at a distance of 35 mm to the wall without sealing and overlaps the structural opening on 3 sides by 50 mm.

#### Size range

Single-leaf doors: Width up to 5000 mm Height up to 5000 mm Double-leaf doors: Width up to 7000 mm Height up to 5000 mm

#### Types of fitting

Externally in front of the external wall Internally (internal or external wall)

#### Headroom

For internal fitting: 235-260 mm without rain canopy For external fitting: at least 300 mm, with rain canopy as standard feature

#### Wind pressure EN 12424

Class 2

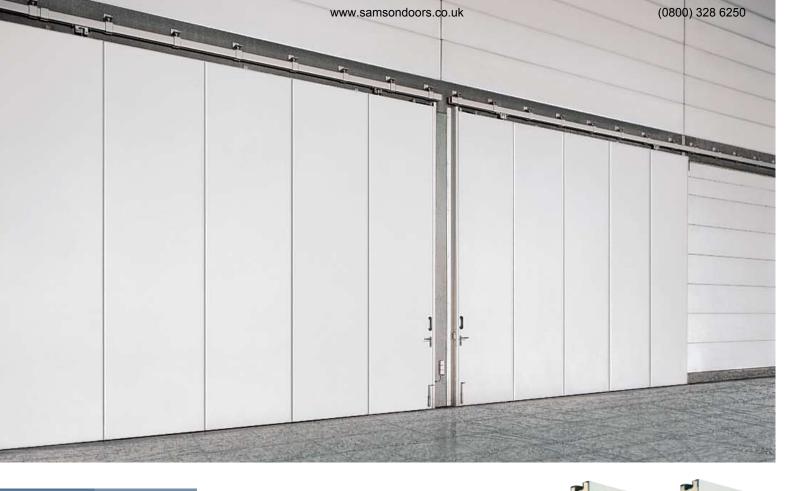
#### Behaviour in fire DIN 4102

Door leaf building materials class B2 (normal flammability)

#### Own weight of door leaf

14 kg/m<sup>2</sup>

(0800) 328 6250



### KSP KSM The Double-skinned Doors with Two Types of Insulation

#### KSP door type: With PUR rigid foam core, thermally insulating

The outer skins are bonded together with the 100 % CFC-free rigid foam core, so there is no risk of delamination. This material composite produces an extremely rigid component offering a high resistance to distortion and outstanding durability.

The insulating core also gives the door leaf good thermal insulation properties.

#### Material/surface

The hot galvanized material and adhering primer coating (2-component PUR) protect the door against the adverse effects of the environment.

As standard with stucco-embossed surface on both sides, on request with smooth finish both sides.

Colour: inside and outside in grey-white (similar to RAL 9002).

#### KSM door type: wth mineral wool insulation to reduce noise levels

The welded shell construction of 1.5 mm thick sheet steel, the inner reinforcement and the mineral wool insulation make the flush-fitting door leaves highly robust.

With a door leaf weight of 35 kg/m<sup>2</sup> this heavy door version is not only a tough contender but also helps to reduce noise levels.

#### Material/surface

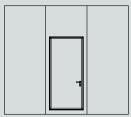
Hot galvanized material with adhering primer coating (2-component PUR) as the optimum protection against the adverse effects of the environment. With smooth surface on both sides. Inside and outside in grey-white (similar to RAL 9002). RAL to choice on request.

55 mm SM with mineral wool insulation KSP with PUR rigid foam core

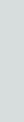
### With Attractive Windows as Light-transmitting Design Elements

Two robust constructions

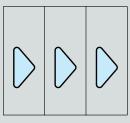
#### Door versions (examples)



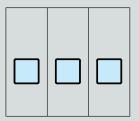
Door version with wicket door



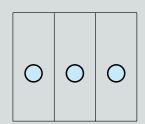
Door version with triangular glazing



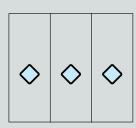
Door version with square glazing



Door version with rectangular glazing



Door version with circular glazing Ø 500 mm



Door version with rhomboid glazing

#### Size range

Single and double-leaf doors Width up to 7000 mm Height up to 5000 mm

#### Types of fitting

Externally in front of the external wall Internally (internal or external wall)

#### Headroom

Depending on door size 260-380 mm

#### Wind pressure EN 12424

Class 2

#### Behaviour in fire DIN 4102

KSP door leaf: building materials class B2 (normal flammability) KSM door leaf: building materials class A2 (non-flammable)

#### Own weight of door leaf

KSP:  $25 \text{ kg/m}^2$ KSM:  $35 \text{ kg/m}^2$ 

#### Ventilation

All door versions on request with ventilation slots or sliding covers.

(0800) 328 6250



# **KSE** The Single-skinned Sliding Door Outstanding Stability and No Distortion

### The inexpensive solution for unheated buildings

Hörmann single-skinned steel sliding doors present a sound economic investment when robustness is the priority and heating is not a factor. As is the case, for example, in utility sheds, vehicle depots, factory yards and at beverage wholesalers.

#### Material/surface

The doors in a galvanized material with a high-grade powder coating are well protected against the adverse effects of the environment. Surface inside and outside: traffic white (similar to RAL 9016).

RAL to choice on request.

#### Sturdily built for a long service life

The sliding door leaf consists of vertically arranged, welded tubular frame elements which are additionally reinforced by horizontal rails. This affords the entire door leaf a high degree of stability and resistance to distortion. The integral profile rebate to all four sides ensures secure retention of the various infills. Overall thickness 55 mm, profile view 70 mm.

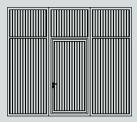
### Choose the infill to characterize the appearance of your door

On the right you can get an idea of what your sliding door could look like. Further infills and arrangements are possible over and above the examples shown here.

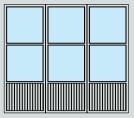


# With Numerous Infill Options We Accommodate Your Requirements

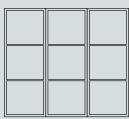
#### Door versions (examples)



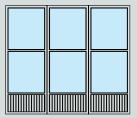
Ribbed sheet steel infill with wicket door



Ribbed sheet steel infill with square partial glazing



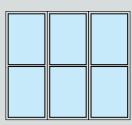
Smooth sheet steel infill Sheet thickness 1.5 mm



Ribbed sheet steel infill with rectangular partial glazing Panes factory or site-fitted



Raised panel sheet steel infill Sheet thickness 1.5 mm



Prepared for site infill (max.16 kg/m²) resting within the frame Frame in terra brown (RAL 8028)

#### Size range

Single and double-leaf doors Width up to 7000 mm

Height up to 5500 mm

Height up to 6000 mm (with ribbed sheet steel infill)

#### **Types of fitting**

Externally in front of the external wall Internally (internal or external wall)

#### Headroom

Depending on door size 260 -380 mm

#### Wind pressure EN 12424

Class 2

#### Behaviour in fire DIN 4102

Door leaf building materials class A2 (non-flammable)

#### Own weight of door leaf

25 kg/m<sup>2</sup> (door leaf with ribbed sheet steel infill)

#### Ventilation:

Door versions on request with ventilation slots, with double-skinned bottom section with sliding covers.



# **Sliding Doors with Windows For Increased Light and Good Visual Contact**

#### Rectangular glazing

#### For KSP and KSM

Plastic or metal glazing frame, graphite black (based on RAL 9011) with EPDM seal on both sides.

Fastened with screws from the inside to resist intruders.

Window size depends on leaf width:

Standard sizes

473/523/573 x 773 mm (W x H)

Special sizes

Width depends on leaf width Max. height up to 1250 mm

# Distance between pane and edge of leaf/height between rows of windows for KSP and KSM:

Distance between pane and edge of leaf at sides at least 180 mm, Height between rows of windows:

KSP = 208 mm

KSP = 108 mm

#### Square glazing

#### for KSP and KSM

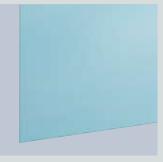
Glazing frame as for rectangular window. Window size depending on leaf width from approx. 350 x 350 mm to 850 x 850 mm.

#### Circular glazing

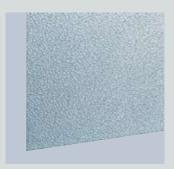
#### For KSP and KSM

Retained within an EPDM clamping profile, graphite black (based on RAL 9011) or paintable aluminium ring, Ø 500 mm: with 6 mm clear perspex panes or with 18 mm clear perspex double panes. Site glazing (provided by the customer) is not possible.

In choosing the pane types, you determine whether you want more light or less, good visual contact and increased security.



Perspex panes Clear glass 4 or 5 mm



Perspex panes Crystal structure 6 mm



Perspex double panes Clear glass 18 mm

#### On-site glazing (provided by the customer)

On request also prepared for on-site glazing: KSP and KSM types pane up to 18 mm thick, KSE type pane up to 20 mm thick.



Depending on the requirement profile or your individual needs, Hörmann steel sliding doors can be equipped with the glazing types shown.

#### **Rhomboid glazing**

#### for KSP and KSM

Plastic or metal glazing frame, graphite black (based on RAL 9011) with EPDM seal on both sides.

Fastened with screws from the inside to resist intruders.

Window size depending on leaf width from approx. 300 x 300 mm to 650 x 650 mm.

#### Triangular glazing

850 x 625 mm horizontal

#### for KSP and KSM

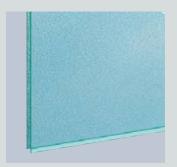
Retained within an EPDM clamping profile, graphite black (based on RAL 9011).
Standard size (window size):
350 x 600 mm vertical
600 x 350 mm horizontal
Special size (window size):
625 x 1250 mm vertical

#### Prepared for glazing

#### for KSE

Panes retained by: aluminium glazing bars, paintable, with rebate for putty (view 17 mm) for single panes thick or in aluminium frame, paintable, for double panes up to 20 mm thick. Height of the individual apertures for glazing max. 1250 mm.

Width of the glazing depends on the leaf width. Height between rows of windows: Single pane 79 mm thick, double pane 127 mm thick.



Perspex double panes Crystal structure 18 mm



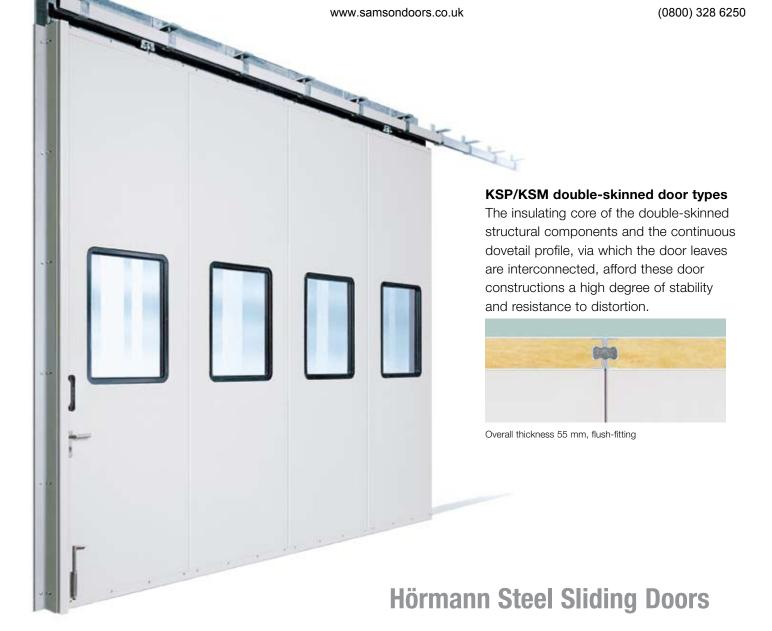
Polycarbonate panes Clear glass 6 mm



Polycarbonate perspex Double panes Clear glass 18 mm Impact-resistant, burglar-retardant



Double-moulded unit 18 mm Exceptionally sturdy panes





#### Top door guidance

The top track section ensures a safe, smooth door action at all times. It comprises a track, two pairs of twin rollers on ball bearings, end stops and track supports which are anchored to the lintel.



#### Lintel attachment

The door assembly is attached to the lintel via a U-shaped profile extending across the entire width.



### Wall attachment on the opening side

The door assembly is attached to the wall on the opening side via an angular profile spanning the entire door height.

#### Firmly anchored to the building structure

The door is firmly anchored via sturdy connecting profiles on all three sides. The profiles can be plugged into masonry or welded onto steel.





### Wall attachment on the closing side

On the closing side the door runs into a U-shaped profile (on the KSE door type the leaf rebate closes against a rectangular hollow section). On the opposite side the door is equipped with a surfacemounted floor bolt to hold the door securely in place.



#### Hooked mortise lock

On the closing side: Hooked mortise lock with lever/knob function, prepared for profile cylinder, backset 65 mm (KSP/KSM types), backset 40 mm (KSE type). Profile cylinder flush on the outside, can be fitted at the factory or on site.

Cylinder length: 35.5 + 35.5



#### Lever handle on the wall side

Aluminium flat-style lever handle stained in natural colour (E6/EV1) and fitted black plastic recessed handle.



Lever handle on the fitted side

Aluminium half lever handle stained in natural colour (E6/EV1) and surface-mounted black plastic handle.

(71) mm

The bottom row of illustrations shows the technical details of the double-skinned door type.

# Overview of Door Types Technical Details

Design and quality features  ● = standard, ○ = on request		LSP	KSP	KSM	KSE
Application	External door	•	•	•	•
	Internal door	•	•	•	•
Door sizes	Max. width mm	5000/8000	8000	8000	8000
	Max. height	5000	5000	5000	5500
Distance back	Opening width+100 mm (LSP+270 mm)	_	-	-	_
Headroom	see Technical Manual; min., mm	300	260	260	260
Clearance	Sideroom on the wall, see Technical Manual	_	-	_	
Number of door leaves	up to 3 leaves (LSP up to 2 leaves)	0	0	0	0
Door opening	to left, to right, both sides	_	-	-	-
Frame profile	60 x 60 mm and U-frame as run-in	_	•	•	•
Overall thickness	mm	42	55	55	55
Type of fitting	Sideroom on the wall(see Technical Manual)	•	•	•	•
	Fitted in the opening (see Technical Manual)	_	0	0	0
Track	Top tubular track	•	•	•	•
Wind pressure EN 12424	Class 2	•	•	•	•
Behaviour in fire DIN 4102	Building materials class A2 (non-flammable)	_	-	•	•
Door leaves	Building materials class B2 (normal flammability)	•	•	_	_
Material/surface	Hot galvanized material	•	•	•	•
Leaves and frame	Powder-coated with a primer	•	_	_	•
	Wet-coated with a 2-component PUR primer	_	•	•	_
Own weight of door leaf	kg/m²	14	25	35	25
Wicket door	Max. door height 2500 mm	_	0	0	0
	Threshold height, mm	_	225	125	145
Side door in matching design	Max. door height 2500 mm	_	0	0	0
Infills	Double-skinned	•	•	•	_
	Single-skinned	_	-	_	•
	Perspex panes / single / insulated	0	0	0	0
Ventilation	Ventilation slots in the sheet steel infill	_	0	0	0
	Sliding cover on the inside	_	0	0	_
Glazing frame	Plastic frame	•	•	•	_
	Metal frame	_	0	0	_
	Aluminium glazing bars / Aluminium glazing frame	_	_	_	•
Glazing shapes	Rectangular	0	0	0	0
	Square	-	0	0	0
	Circular	-	0	0	-
	Rhomboid	_	0	0	_
	Triangular	_	0	0	_
Door latching	Hooked lever/knob lock (LSP, lock on site)	_	•	•	•
View of KSE	Door profile width, mm	_	-	_	70
	Rail profile height, mm	_	-	-	43
Fixing options	Concrete, steel, masonry	•	•	•	•



# Sound Planning with A Strong Partner

#### Rolling shutters and rolling grilles



Thanks to a simple construction with just a few components, rolling shutters and rolling grilles are both economical and sturdy.

#### **High-speed doors**



High-speed doors are used both inside and as exterior doors to optimise the flow of traffic, improve room conditions and save energy.

#### Loading technology



Hörmann offers complete loading systems for the logistics sector. Your advantage: Everything comes from just one source.

#### Sliding fire doors



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