



Sectional overhead doors

Strong piece of technology

Quality has a new name



PROM STAHL



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Distinctive, Dependable, Durable

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ISO and ALU sectional doors

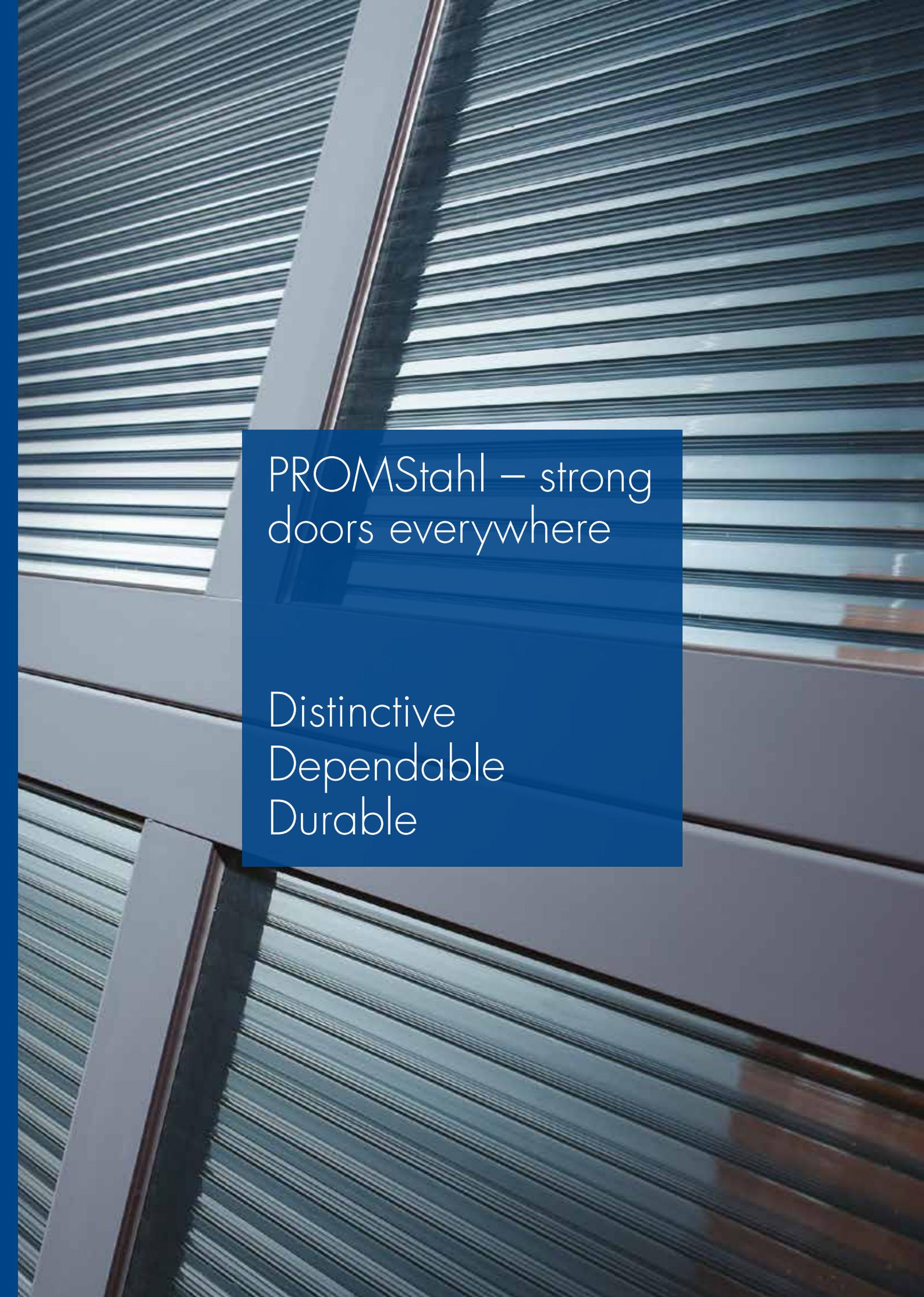
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A close-up, low-angle shot of a corrugated metal door. The door is composed of several panels, each with a distinct ribbed texture. The panels are separated by dark, possibly black, seals. The lighting is dramatic, with strong highlights and deep shadows, emphasizing the metallic texture and the geometric lines of the door's construction. A semi-transparent blue rectangular box is overlaid on the center of the image, containing white text.

PROMStahl – strong
doors everywhere

Distinctive
Dependable
Durable

Our doors are always open

PROMStahl GmbH opens up a world of opportunities when it comes to industrial sectional doors. A PROMStahl door stands out from all other doors for its design, working, detailing and its versatility. PROMStahl doors are distinctive, dependable and durable, a fine example of the innovative strength you've come to expect from PROMStahl doors.

Quality in every detail

At PROMStahl we don't think in terms of doors, but in terms of solutions. It is your specific requirements and wishes that are at the forefront of the design and manufacturing process, resulting in doors characterized by their quality and individuality, right down to the smallest detail. These are the doors the market demands and that can be found in any sector and building. In fact, wherever you go you're likely to run into a PROMStahl door.

Active worldwide

PROMStahl GmbH stands for a full and high-quality product range, a service-oriented approach and very competitive prices. PROMStahl offers all-in packages that attract and retain an ever-increasing number of designers, builders and entrepreneurs. Our clients who are located in over 30 countries worldwide, feel at home at PROMStahl because we always give them a warm welcome: Our doors are always open.



Distinctive, Dependable, Durable

ISO and ALU sectional doors

Track systems, Safety devices, Accessories

HELIX spiral door



The benchmark
for sectional
doors

Tested
Secured
Checked



TUV NORD
Zertifizierung

Baumuster geprüft

Certified safety

PROMStahl doors are subject to constant and intensive durability tests. In these tests, the prototypes open and close 30,000 times and are then assessed by experts. This constant attention to quality and safety has borne fruit: the sectional doors and their physical qualities are fully EN13241-1 compliant and integrally TÜV Nord certified.

Physical qualities

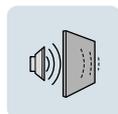
Numerous mechanical and electronic qualities of the PROMStahl sectional doors are checked in thorough tests. These tests, performed by TÜV Nord, the stringent German certification and inspection body, mean that each tested physical quality receives its own classification, making it easier to compare similar products from different manufacturers.

Assessment criteria

PROMStahl sectional doors are tested for:



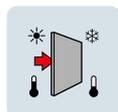
Wind load



Sound absorption



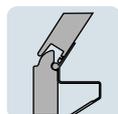
Waterproofness



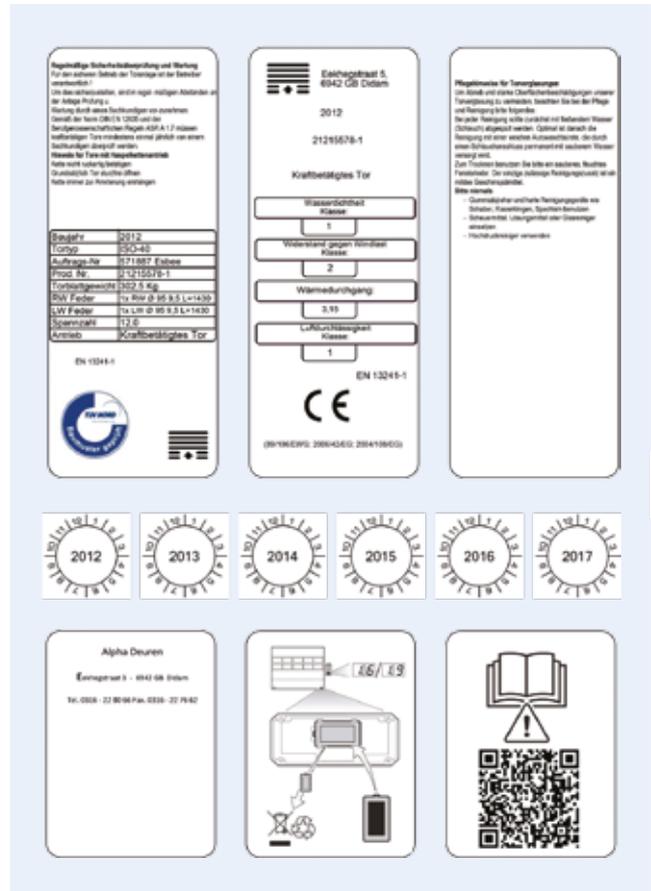
Heat insulation



Air permeability



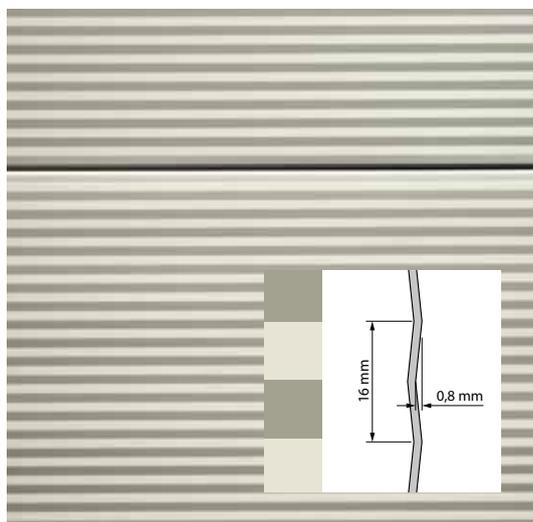
User safety



ISO 40 mm

PROMStahl's
all-rounder

The ISO 40 mm sectional door is PROMStahl's most popular door, a modern design that unifies excellent thermal insulation and sound absorbing qualities in its micro-profiled panels. The choice of design and materials are endless, which means the door can always be perfectly configured to meet your wishes. Numerous types of built-in windows as well as different heights and widths make up the ISO 40 mm range, as well as a variety of 10 standard PROMStahl's in-house RAL colours.

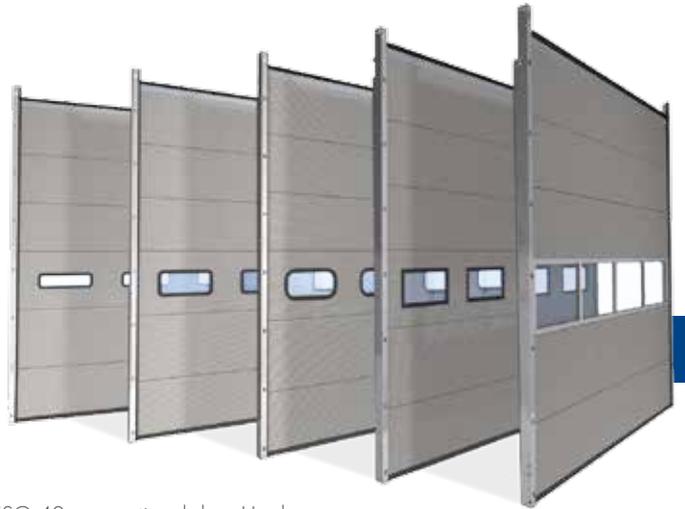


Micro-profiling, it's the standard!
10 standard colours without any extra charge.



ISO 40 mm panel Sandwich structure

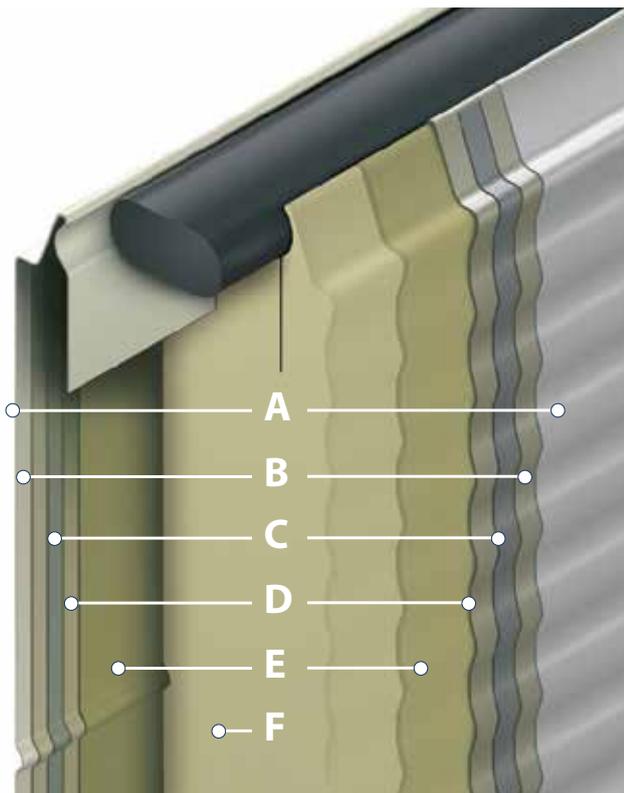
Panel thickness: 40 mm
 Thermal conductivity: $\lambda = 0.025 \text{ W/mK}$
 Insulation value: $U = 0.52 \text{ W/m}^2\text{K}$
 Density PU foam: 40 kg/m^3



ISO 40 mm sectional door U-value:
 5,000 x 5,000 mm: $1.5 \text{ W/m}^2\text{K}$

Flexibility is everything

ISO 40 mm sectional doors are designed and manufactured using the very latest technology. Their finish is robust and detailed, as demonstrated by the metal or aluminium end caps, the reinforcement profiles and the anodized aluminium sub-profiles which cannot be seen from the outside. Flexibility is everything in the manufacturing process, and it is a true all-rounder that perfectly combines price, performance and application options.

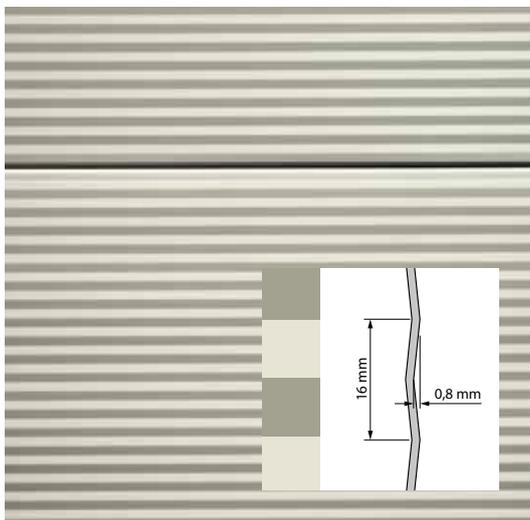


A	Paint layer:	10 standard colours (outside)
B	Zinc coating:	275 g/m ²
C	Steel sheet:	0.5 mm
D	Zinc coating:	275 g/m ²
E	Primer coating	
F	PU high density foam:	$g = 40 \text{ kg/m}^3$, and HCFC-free
D	Zinc coating:	275 g/m ²
C	Steel sheet	0.5 mm
B	Zinc coating:	275 g/m ²
A	Paint layer:	RAL 9002 (inside)

ISO 60 mm



The effective separation between climate zones



ISO 60 mm sectional doors are overhead doors with extra-insulating and sealing properties that are mainly used in locations where the separation between different climate zones is important. If you need to keep your production hall or storage area at a constant temperature, the ISO 60 mm door is the right one for you. The micro-profiled steel plate panels have excellent sound-absorbing and heat-insulating properties and they can withstand all the elements. The panels of the ISO sectional doors are manufactured using what is known as the sandwich method, a process that entails a layer of CFC-free rigid polyurethane foam being inserted between two zinc-coated steel plate sheets and glued in place. The doors are available in 10 standard colours. The steel plate sheets can also be spray painted in a RAL colour of your choice.



Micro-profiling, it's the standard!
10 standard colours without any extra charge.



ISO 60 mm panel Sandwich structure

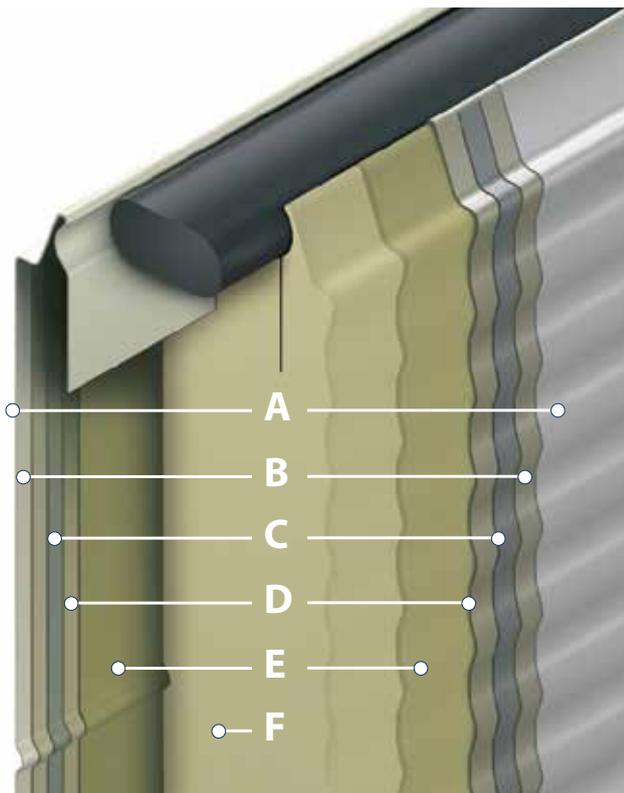
Panel thickness: 60 mm
 Thermal conductivity: $\lambda = 0.025 \text{ W/mK}$
 Insulation value: $U = 0.35 \text{ W/m}^2\text{K}$
 Density PU foam: 40 kg/m^3



ISO 60 mm sectional door U-value:
 5,000 x 5,000 mm: $0.77 \text{ W/m}^2\text{K}$

Very high insulation value

The panels of the ISO sectional doors are manufactured using what is known as the sandwich method, a process that entails a layer of CFC-free rigid polyurethane foam being inserted between two zinc-coated steel plate sheets and glued in place. The doors are available in 10 standard colours. The steel plate sheets can also be spray painted in a RAL colour of your choice.



A Paint layer:	10 standard colours (outside)
B Zinc coating:	275 g/m ²
C Steel sheet:	0.5 mm
D Zinc coating:	275 g/m ²
E Primer coating	
F PU high density foam:	$g = 40 \text{ kg/m}^3$, and HCFC-free
E Primer coating	
D Zinc coating:	275 g/m ²
C Steel sheet	0.5 mm
B Zinc coating:	275 g/m ²
A Paint layer:	RAL 9002 (inside)

ISO 40 mm ISO 60 mm

Interior view



Panel seal

The panels of the ISO 40/60 door are specially sealed to make them completely wind and waterproof using Compriband, a polyurethane sealing strip that is attached between the panels. Additionally, the ISO 40/60 doors are fully insulated, because the inner and outer door panels are not attached to each other.

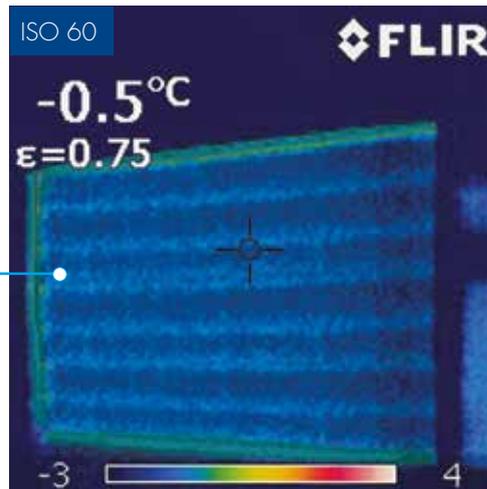
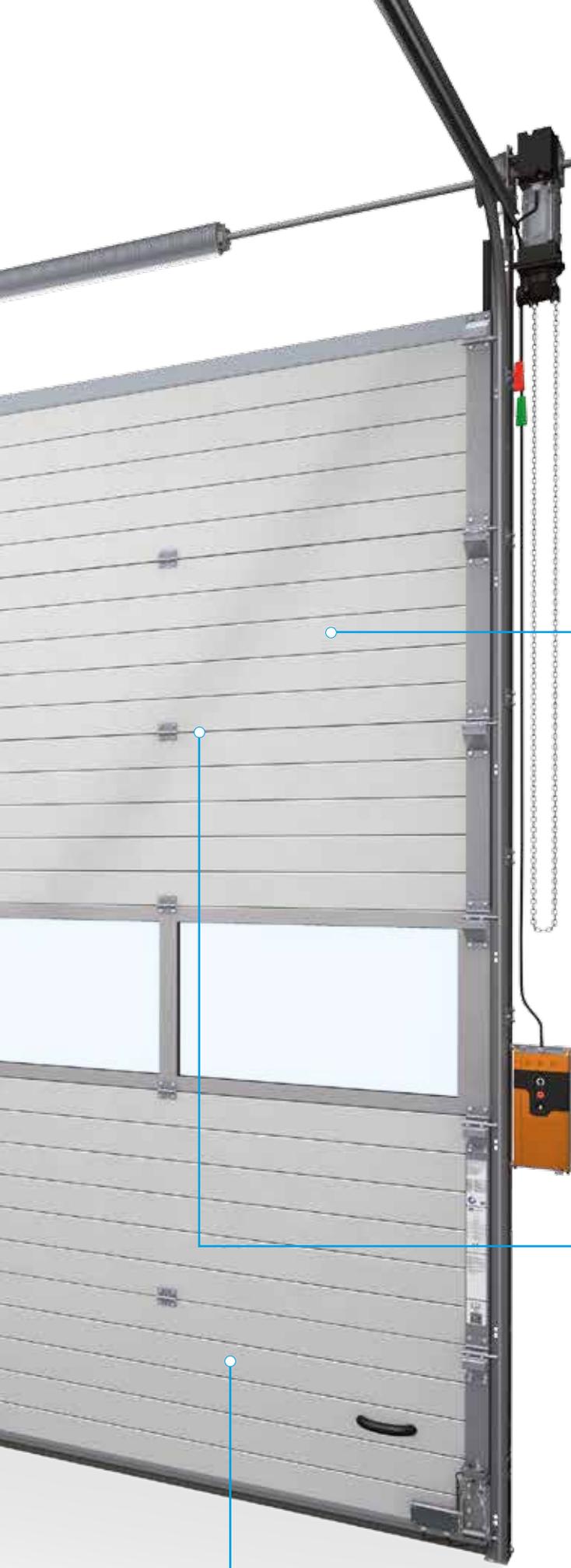


Standard frame

The standard frame between the door and the vertical railing ensures that the sides of the door seal properly.

Heavy-duty frame

We use this type of frame for doors with a dark colour. Due to the heat of the sun, the door may expand in the middle against the upper lintel. This is prevented by means of the heavy-duty frame.



Infrared imaging

The ISO 60 mm sectional door insulates even more effectively than the ISO 40 mm door. We check this feature by taking infrared images of the assembled doors. Any light spots indicate energy losses, whereas the dark regions are well-insulated.



ISO 40/60

Wind load

Depending on the width of the door, PROMStahl will install reinforcing profiles on the door. Thanks to these, the door is able to withstand a heavy wind load in accordance with the applicable rules and standards.



ISO 40/60

The interior

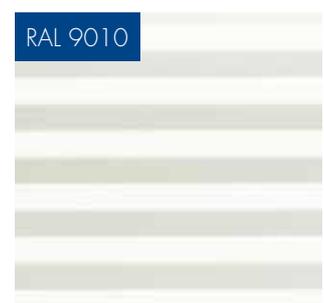
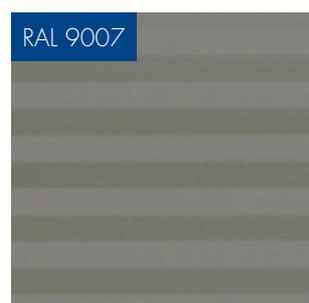
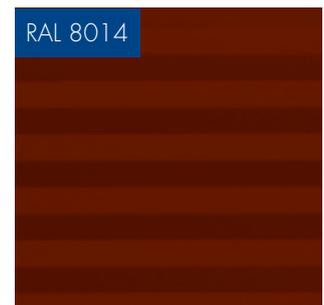
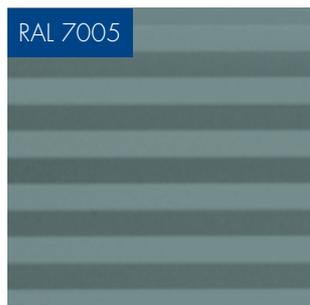
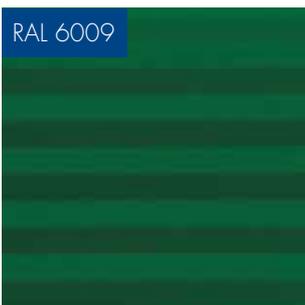
The interior of the ISO 40 mm and ISO 60 mm sectional door is horizontally profiled and coated in RAL 9002 as a standard. Other colours are available on request at an additional cost.

Colour range

PROMStahl

PROMStahl provides 10 standard colours (no extra charge)

PROMStahl sectional doors offer architects an nearly endless variety in design and colour combinations. The optical properties of the microprofiled sheet plate make the doors perfectly suited to modern industrial architecture. PROMStahl's range offers 10 common RAL colours to give each door its very own personality – at no extra cost. Thanks to this selection of colourfast coil coatings, the doors can always be seamlessly integrated into your company's look. Do you have special requirements when it comes to colour? PROMStahl can offer you a whole rainbow of colours.



Types of windows



The light yield of the various windows

The purpose of windows



ISO sectional doors can be fitted with Plexiglas windows for increased natural light and improved visibility. The standard windows are oblong, with straight or rounded corners containing single or insulating double glazing. For additional security against intruders, narrow rectangular windows with rounded corners are also available. Are you looking for a one-of-a-kind design? Then go for the rounded windows or a creative pattern made up of windows.



Lots of light and great visibility



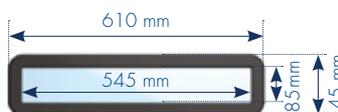
Rounded corners ($r = 60$ mm), excellent insulative value



Rounded corners ($r = 100$ mm), excellent insulative value



Straight corners, excellent insulative value



Narrow, burglar-proof windows



Attractive round windows



ALU 40 mm

When natural
light and
visibility matter

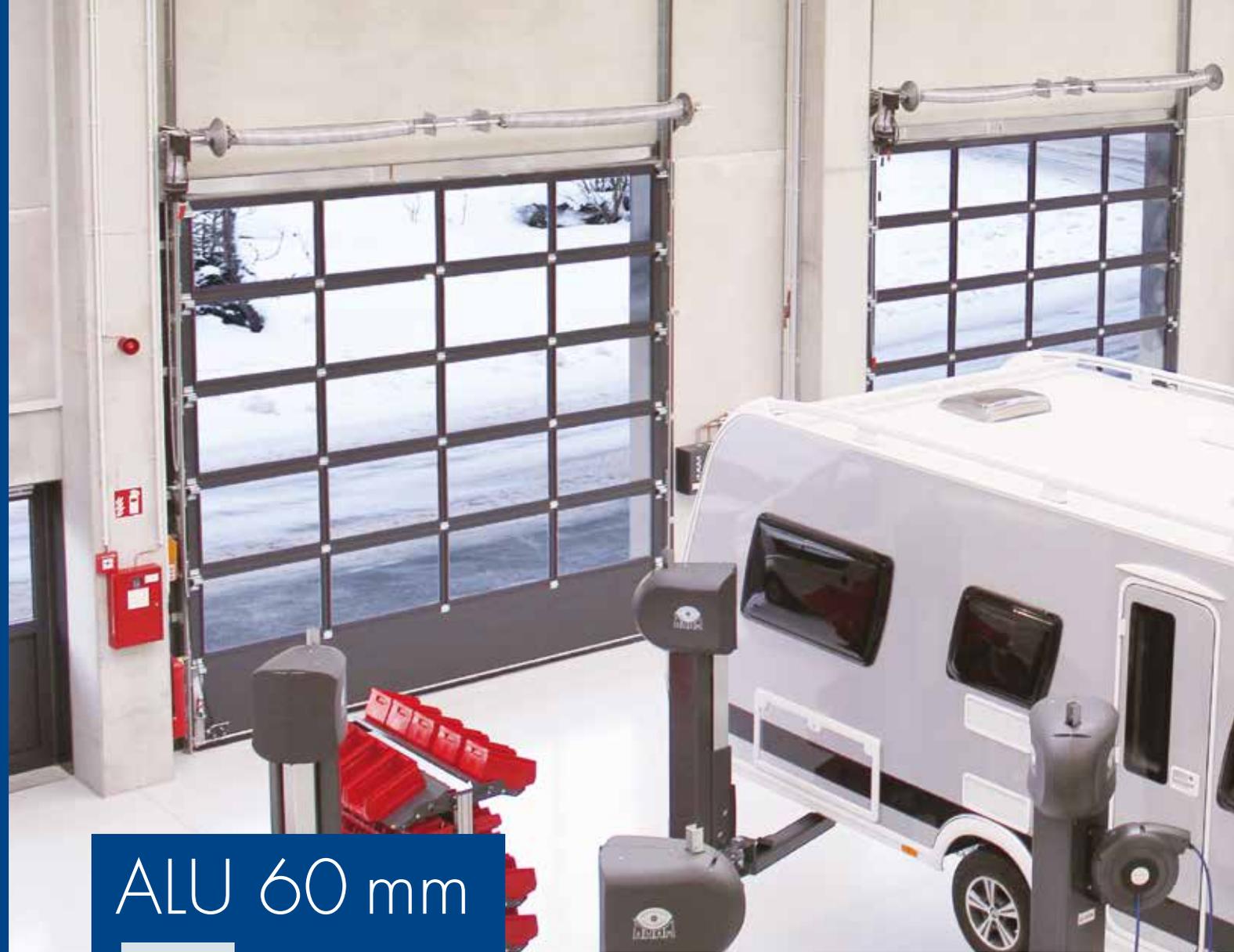
In industrial environments where light and visibility are of paramount importance, the PROMStahl ALU 40 mm sectional door proves to be indispensable. The door panel of an ALU door consists of multiple sections, and thanks to the special-sized aluminium profiles, frames can be manufactured that have a very wide range of uses. Be bold and combine transparent, coloured, insulating or air-permeable windows with aluminium cassette panels. Anything is possible.

Be adventurous with windows

ALU 40 mm sectional doors can be equipped with plastic window frames of various levels of quality and with different insulation values, colours and structures. Go for coloured glass or hollow-core plates, play with the divisions or combine various ISO panels with the ALU sections for a great result. Thanks to the plethora of design and application options, the ALU 40 mm sectional door is particularly useful if you want to combine an attractive design with optimal light transmittance.



U-value of the ALU 40 mm sectional door: 5,000 x 5,000 mm: 4.25 W/m²K



ALU 60 mm



The innovative door with even more insulation

The ALU 60 mm sectional door is a modern innovation that excels in terms of design, function and ease of assembly. The 60 mm thick ALU sectional door comes with triple glazing and guarantees excellent heat insulation, anti-condensation and sound-absorbing properties. It's the perfect solution for rooms where light, visibility and a constant indoor climate are essential.

Special insulation profiles

The ALU 60 mm door is twice as thick as the ALU 40 mm door and consists of two aluminium profiles that are thermally separated by special insulation profiles. The door has an extremely low U-value, even though it is fitted with glazing. The ALU 60 mm sectional door is particularly suited to industrial facilities where illumination is of the utmost importance, as are excellent insulation and optimal energy savings.



U-value of the ALU 60 mm sectional door: 5,000 x 5,000 mm: 2.35 W/m²K, with triple glazing

Direkt-Annahme

1

Direk

Panorama door 40/60 mm

Maximum
transparency
without vertical
profiles

The Panorama door is an ALU door available in 40 mm or 60 mm versions. What makes the door so special is that panels do not have vertical dividers, providing a wide panoramic view. The high-quality Plexiglas is extra thick and extra strong, hardly distorts and looks just like real glass. All these features result in the windows being naturally reflective and looking highly attractive.





ISO 40
 Panorama door 40 mm
 Double Plexiglas
 Optical 20 mm
 (4-12-4 mm)
**U-value of the
 Panorama door 40:**
4,000 x 4,000 mm:
4.35 W/m²K



ISO 60
 Panorama door 60 mm
 Triple Plexiglas
 Optical 40 mm
 (4-14,75-2,5-14,75-4 mm)
**U-value of the
 Panoramic door 60:**
4,000 x 4,000 mm:
2.45 W/m²K

Plexiglas Optical

The Panorama door is available in a maximum width of 4,000 mm and a maximum height of 4,500 mm. The Panorama doors look particularly good in buildings that are designed to be appealing, but are just as important where light and visibility matter. The special thing about the high-quality Plexiglas Optical is that it looks just like real glass but has the added safety of plastic. The Plexiglas Optical windows are available in 20 mm double glazing and in 40 mm triple glazing.



Highest scratch resistance

– so that you do not
 lose the vista

ALU 40 mm ALU 60 mm

Interior view



ALU 40

Section connection

The sections of an ALU 40 door are specially sealed to make them completely wind and waterproof using an EPDM rubber door seal.



ALU 40

Aluminium glazing beads

Aluminium glazing beads stay perfectly sealed and retain their high-quality appearance, even in wide temperature fluctuations.



ALU 40/60

Wind load

Depending on the width, the ALU sectional door is fitted with integrated single-piece reinforcement profiles. Thanks to the reinforcement profiles, the door is able to withstand a heavy wind load. Depending on the door configuration chosen, we use thicker and/or longer profiles. For a door of 4,200 mm and wider, every other panel has a profile, while for a door of 5,000 mm and wider, each section has a reinforcement profile.

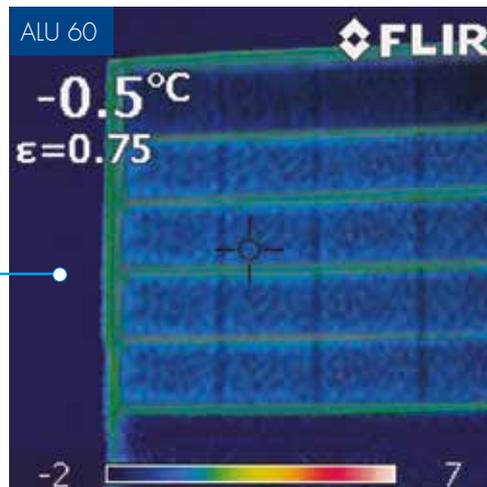


Condensation

Condensation will soon appear on the inside of a standard ALU 40 door at low outdoor temperatures and a high indoor atmospheric humidity. This is because condensation forms on the coldest surface in the room which is the door. If you wish to stop condensation on your doors, the ALU 60 door is the one for you. Condensation will never be an issue – even if indoor humidity levels are high – thanks to the fact that the door is equipped with special insulation profiles.

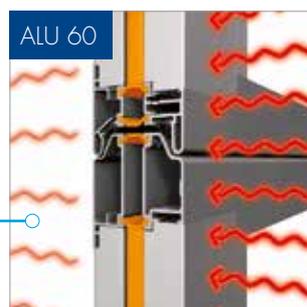


ALU 40/60



Infrared imaging

The ALU 60 guarantees you a very high insulation value. We check this feature by taking infrared images of the assembled doors. Any light spots indicate energy losses where as the dark regions are well-insulated.



Section seals

The sections of the ALU 60 door are specially sealed to make them completely wind and waterproof. Any heat transmission is prevented by the special insulation profiles.



Triple synthetic glazing

The ALU 60 door is fitted with triple glazing as a standard for additional insulation. The windows are fitted in thermally separated insulation profiles. Double synthetic glazing is also available, although that means the insulative value will be lower.

ALU 40 mm ALU 60 mm

Window frames



Aluminium glazing beads

PROMStahl is one of the few companies to always use anodised aluminium glazing beads. You will often see windows fixed in place using a black plastic bead, which is not only less attractive and less durable, but also has a different coefficient of expansion than aluminium. If it is warm outside, the plastics is more likely to expand, resulting in bulging glazing beads, this will not happen with our aluminium glazing beads. Another advantage is that our glazing beads are available in any colour you wish.

Different options

PROMStahl offers limitless choices in glazing for ALU doors. Windows of various levels of quality, colours, degrees of transparency and styles are available, giving architects all the room they need to get creative with the design of your ALU doors. Choose from single-plate acrylic or 4 mm tempered glass, double-plate acrylic windows or structural glass, or from perforated single panels or high-impact plastic. The possibilities are endless.



Combining colours

The standard ALU door comes in white anodised aluminium. This does not mean that there are no alternative colour options. We can spray-paint the aluminium in any colour you wish. And by combining the aluminium with Rodeca glazing or ISO panels in one of the 10 colours from PROMStahl's colour range, the design options are limitless.





Double-glazed transparent plate

(20 mm) in: acrylic, polycarbonate, Plexiglas Optical (light transmittance 100 %)

(40 mm) in: acrylic, polycarbonate, Plexiglas Optical (light transmittance 100 %)

Triple glazing transparent plate

(40 mm) in: Plexiglas Optical (light transmittance 100 %)

Double-glazed partially transparent plate

(20 mm) in: structural glass (SAN) (light transmittance 80 %)

(40 mm) in: structural glass (SAN) (light transmittance 80 %)



5-core polycarbonate hollow-core plate

(20 mm) transparent (light transmittance 63 %)

(20 mm) green (light transmittance 50 %)

(20 mm) grey (light transmittance 42 %)

(20 mm) blue (light transmittance 38 %)

(20 mm) anthracite (light transmittance 5 %)



Single-walled perforated ALU plate

(20 mm) round perforation (air transmittance 40 %)

(20 mm) square perforation (air transmittance 70 %)

Double-wall closed sandwich version

(20 mm), smooth plate on the outside and plaster on the inside

(40 mm), smooth plate on the outside and plaster on the inside

Double-wall closed sandwich version

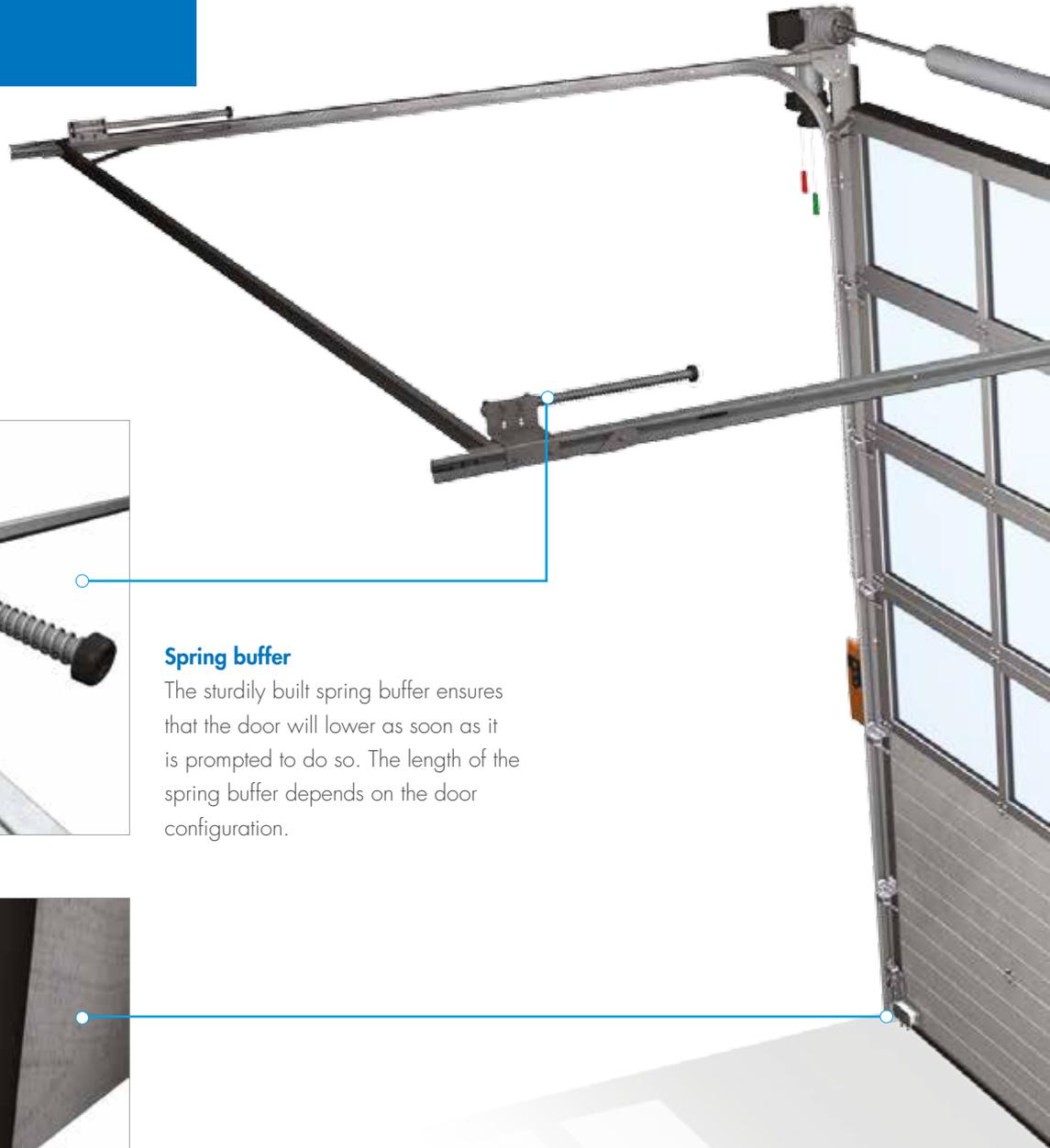
(20 mm), plaster on the inside and outside

(40 mm), plaster on the inside and outside

Track systems

High-quality
modular ease
of assembly

PROMStahl rail systems are modular and largely pre-assembled and can be used for both ISO and ALU doors, such as the Panorama door. Certified quality and durability are at the forefront of the design and assembly of our track systems and suspension packages.



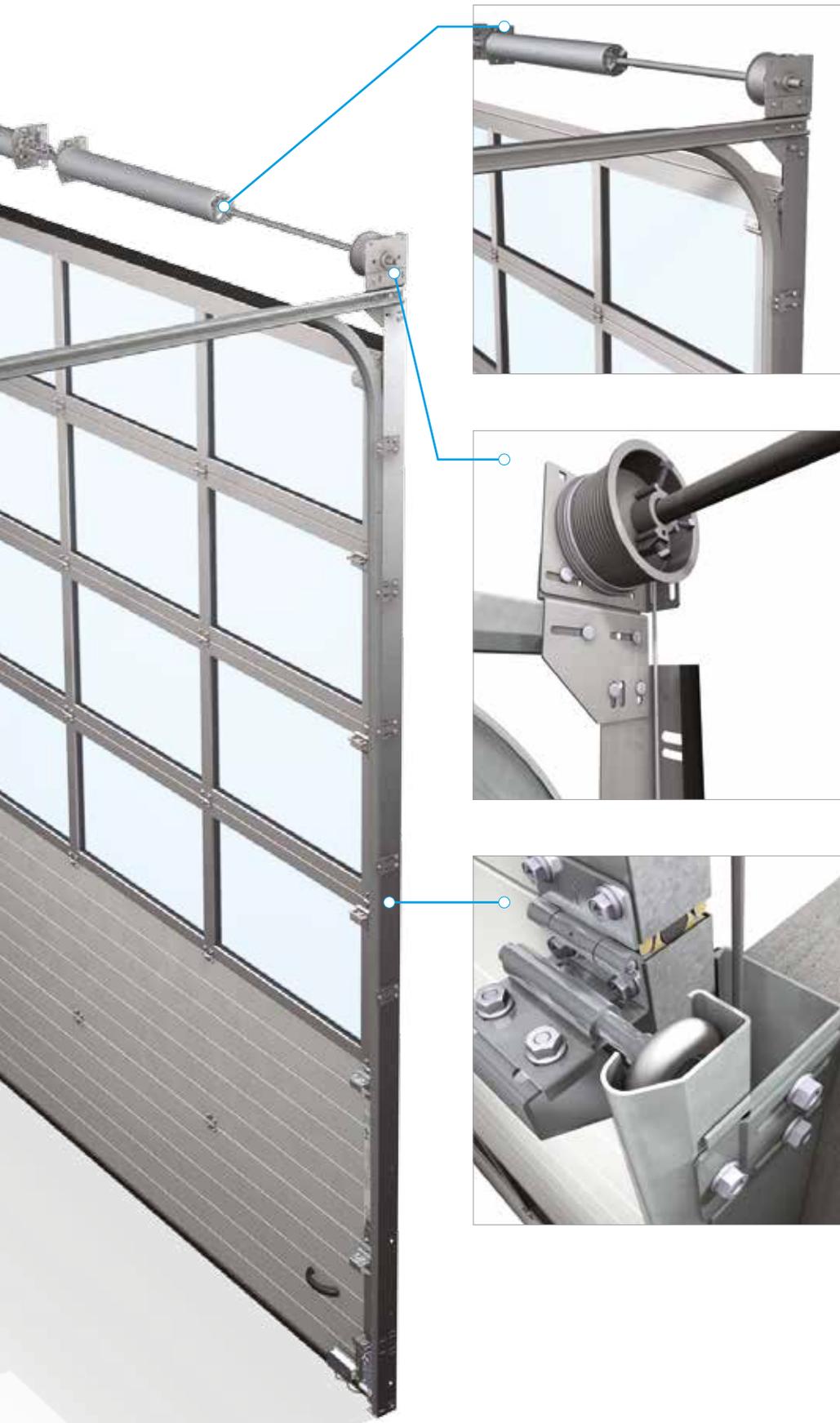
Spring buffer

The sturdily built spring buffer ensures that the door will lower as soon as it is prompted to do so. The length of the spring buffer depends on the door configuration.



Floor plate

The floor plate ensures that the rail connects to the floor and, together with the expansion joint profile, sets the correct distance between the guides.



M8 bolts

We always use M8 bolts to join the sheet metal sections and rail profiles. That means that, together with the carefully pre-assembled components, assembly time is very short.

Cable position

Thanks to the modular structure of our rail systems and sheet metal components, we can ensure the perfect cable position in relation to the vertical rails, which results in optimal safety and reliability.

Safety tracks

The safety guide guarantees that the rollers do not become derailed. The cable is safely encapsulated in the construction as an additional safety measure.

Interior view

ALU 40



Top seal

The upper door panel of the ALU 40 door is equipped with a rubber door seal which provides additional insulation and ensures the best possible connection to the upper lintel. The door fits seamlessly and no energy is lost.

ALU 60



Top seal

The upper door panel of the ALU 60 door is equipped with a rubber door seal which provides additional insulation and ensures the best possible connection to the upper lintel. The door fits seamlessly and no energy is lost.

ALU 40/60



Single side hinge

PROMStahl uses single side hinges for doors that open up to 5 meters. They are sturdily built and ensure that the door hangs well and closes properly.

ALU 40/60



Double side hinge

PROMStahl uses double side hinges for doors that open more than 5 meters. This ensures that even the heaviest of doors hang well.

ALU 40



Floor seal

PROMStahl uses double rubber sealing strips to ensure that the door is flush with the floor. Together with a concrete strip, this will prevent water from seeping under the door.



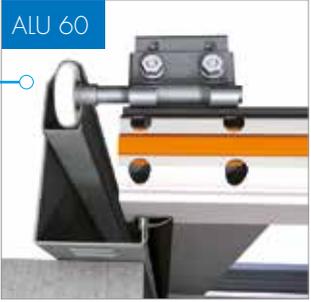
ALU 40



Standard frame

The standard frame between the door and the vertical railing ensures that the sides of the door seal properly.

ALU 60



Heavy-duty frame

We use this type of frame for doors with a dark colour. Due to the heat of the sun, the door may expand in the middle against the upper lintel. This is prevented by means of the heavy-duty frame prevents.

ALU 40



ALU 60



ALU 60

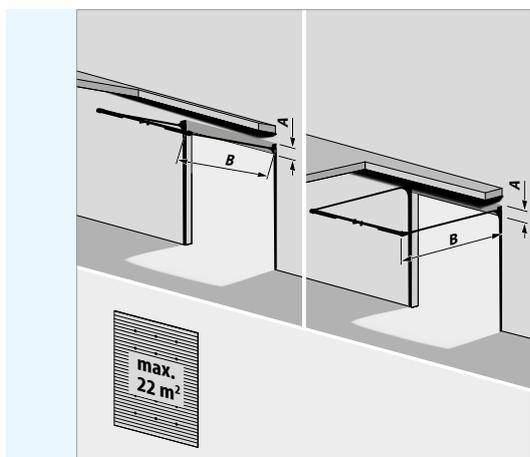


Floor seal

PROMStahl uses double rubber sealing strips to ensure that the door is flush with the floor. Together with a concrete strip, this will prevent water from seeping under the door.

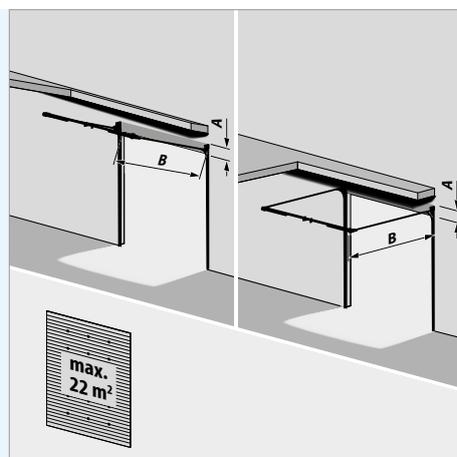
Overview of rail systems

Of course the space available for the door and structural issues are decisive factors when it comes to installing a door, that's why PROMStahl offers different rail systems that can be customised to suit any scenario.



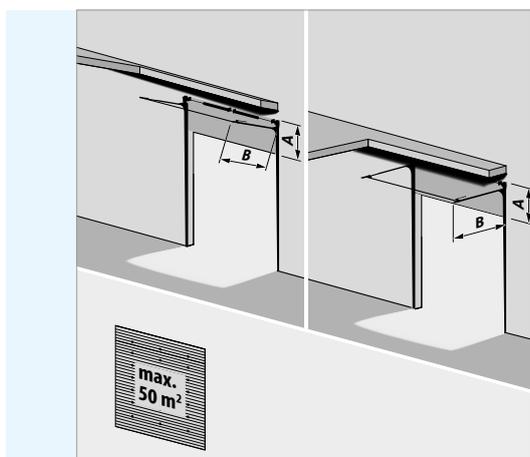
T 240
low built-in rail system, incorporated cables + steel support profile

A = 240 mm, B = open height + 1,000 mm
 Width max. 6,500 mm



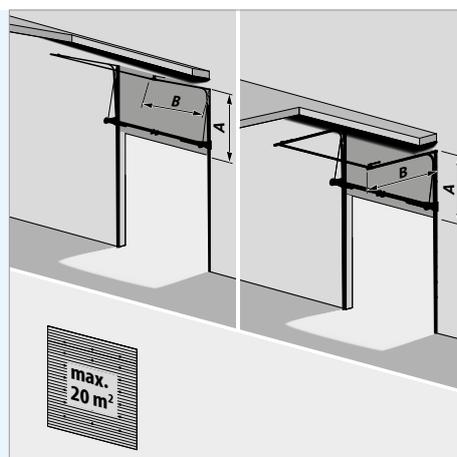
T 340
standard rail system, rear suspension package + steel support profile

A = 340 mm, B = open width + 750 mm
 Width max. 6,500 mm



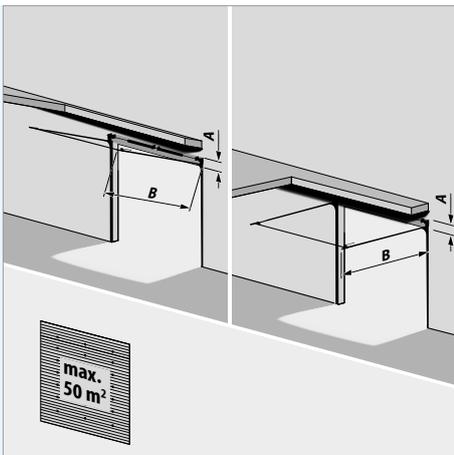
T 400
elevated rail system

A = hoisting + 400 mm,
 B = open height - hoisting + 600 mm



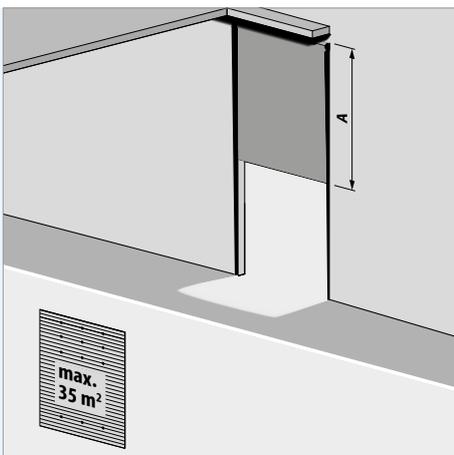
T 400 hF
elevated rail system with low spring axis + steel support profile

A = hoisting + 200 mm, B = open height - hoisting + 600 mm,
 Width max. 4,500 mm, Lift min. 1,450 mm



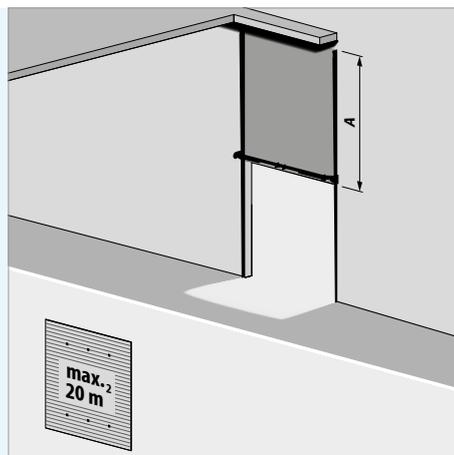
T 450
standard rail system (comes standard)

A = 430 – 700 mm, B = open height + 650 mm



T 500
vertical rail system

A = open height + 550 mm, B = n/a



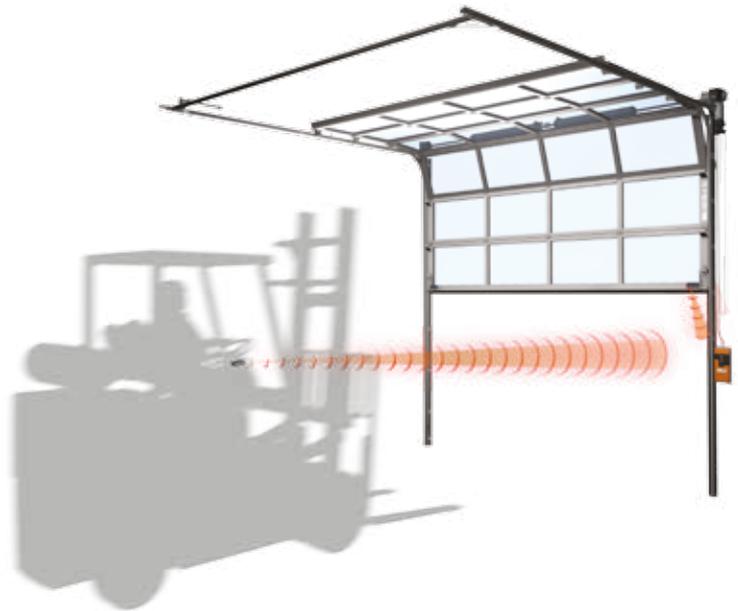
T 500 hF
vertical rail system with low spring axis
+ steel support profile

A = open height + 400 mm, B = n/a

Width max. 4,500 mm

Power

Operators



PROMStahl offers a variety of operators for powering sectional doors. A manual system is ideal for doors that are not used frequently, whereas an electrically powered system with touch control is best for doors that are in constant use. Depending on the door configuration and your requirements, there is always a type of drive to suit your needs. All our drive systems and operators meet the European EN-13241-1 standard.



Pull cord – manually operated

If your door is smaller than 16 m² and you use it only sporadically, then your best option is the pull-cord mechanism. However, the system requires physical exertion (1:1 ratio) and there is a risk the door will not open sufficiently which may result in damage.



Chain hoist – manually operated

The chain hoist requires less physical exertion than a pull-cord (1:4 ratio). The system – suitable for sectional doors up to 30 m² – ensures that the door can be secured in the uppermost position.



Deadman control unit – electric

This system is an excellent choice when a door is used infrequently. One push of the button is all that's needed to open the door, although you have to keep it depressed to close the door. This enables the person operating the controls to keep an eye out for any dangerous situations that may arise while the door is closing.



Touch control unit – electric

If the doors are in constant use then go for a touch control system. The door raises or lowers automatically to a set position, which can be electronically adjusted without having to keep the button depressed. An obstacle detection system is built into the door's bottom seal.



One touch with remote control

The touch control system is also perfect for remote operation and can save a lot of time because it allows the forklift driver to remain seated while the door is opened or closed remotely. This option includes a stationary photoelectric safety sensor, which is fitted to the door.



Touch control with remote control and high speed motor

If the doors are in constant use then go for a touch control system. The door raises or lowers automatically to a set position which can be electronically adjusted without having to keep the button depressed. An obstacle detection system has been built into the door's bottom seal.

Control box features



PROMStahl offers a wide range of top-quality control for your sectional door that can be integrated into the door system's control box. Numerous elements can also be mounted on an interior or exterior wall, a pillar or anywhere else, including safety devices, switches, remote controls, warning lights and much more.



Main switch with padlock

The main switch can be used to turn off the power so that the door system can be serviced. Securing this switch with a padlock prevents unauthorised people from accidentally turning the power on while the service is being carried out.



Key switch

The key switch is used to disable the control box and prevent unauthorised people from operating the door. Only authorised people have a key to activate the door.



Two-setting switch

You can use this switch to configure two settings. For example, push the button once to raise the door to the height of a person and twice to open the door fully. This option is ideal if you want to save energy and don't always need to open the door completely.



Motor with emergency chain

All the drive systems have a mechanical back-up system fitted to the reduction gearbox of the electric motor so that the sectional door can be opened if the power fails. It must be activated and deactivated manually using pull cords. The reduction gearbox can then be powered using the chain.



Motor with release system

The motor can also be fitted with a release system. Cables are used to disconnect the reduction gearbox from the spring shaft which means that the sectional door can be opened faster in the event of malfunctions. It goes without saying that sectional doors with a release system are fitted with a spring break safety device.



Emergency stop

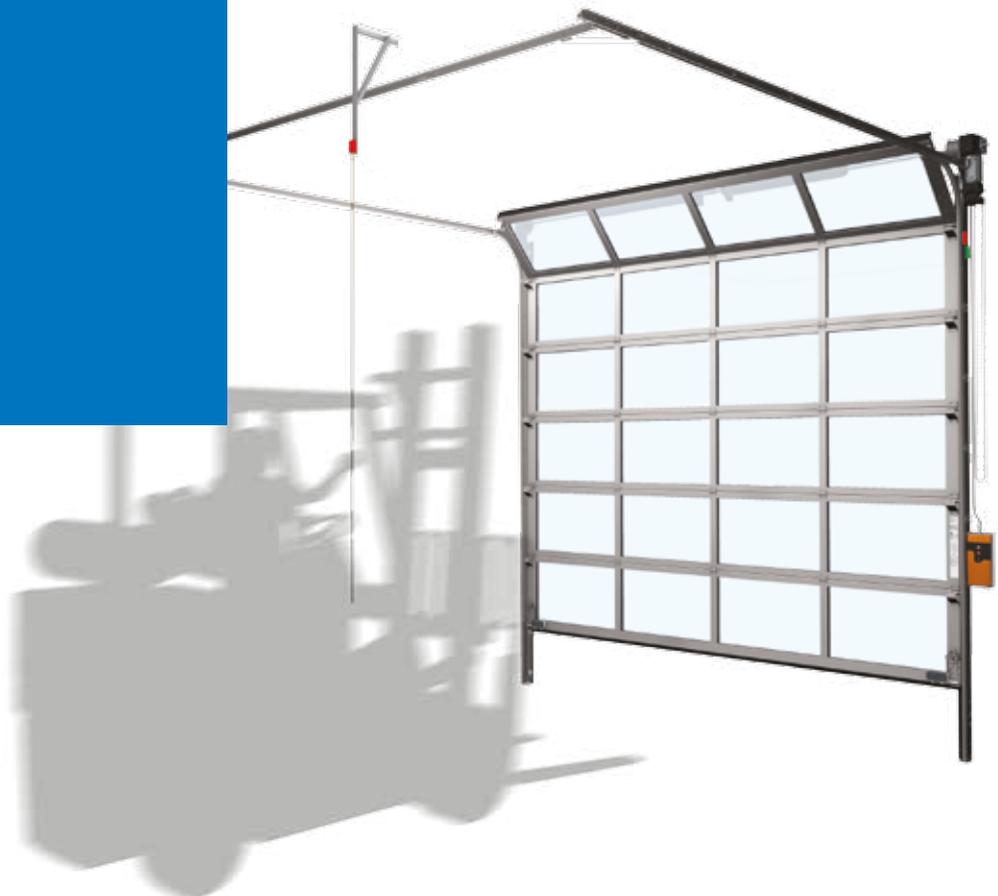
PROMStahl offers the option to have an emergency stop installed in the control box if local, national or international legislation stipulates that an electrically operated sectional door must have this safety feature.



Wireless communication

Normally, the control box and the connection box on the door panel are connected by means of a spiral cord. But this cord can get in the way and be damaged. That's why PROMStahl supplies connection boxes that are fitted with a battery and can transmit signals, such as detection messages, wirelessly to the control box.

Extra control features



Key switch

The door can be operated using a separate key switch which can be mounted on the exterior wall. There are two models: the built-in version which is used a lot in new properties, and the on-wall mounted version which can be installed during a renovation without having to break or dismantle anything.



Electronic keypad

If access to a door is required 24/7, it can be fitted with an electronic keypad. This is particularly handy if transport and courier companies need to have round-the-clock access to secure collection or delivery points.



Extra control panel

An extra control panel is the ideal solution if a door needs to be operated from multiple places or remotely, such as from a guardhouse. This handy 'up-stop-down' box features all the buttons in the standard control box.



Traffic lights and warning lights

Traffic lights and warning lights installed on either side of a door are an effective way of preventing injury to people and damage to the sectional doors and goods. Warning lights alert people and light up before a door opens, while traffic lights control the traffic and prevent damage to the doors.



Pull switch

The forklift driver can use the pull switch to operate the door while staying seated. This is the ideal solution if you have a lot of employees, but don't want to give all of them a hand transmitter for the door. The pull switch is often mounted on a frame a few metres in front of or behind the door.



Remote control

PROMStahl has included a receiver in your door's control box, making it easy to upgrade the door system to a remote-controlled one. You can choose between one, two or four-channel transmitters, which can operate four different doors.

Mechanical safety devices



Safety is important when it comes to the frequently heavy vertical sectional doors, so PROMStahl offers mechanical and electric safety devices that prevent the door from coming into contact with people, vehicles and obstacles, and causing injury or damage to the doors and/or goods. Excessively safeguarding a sectional door is often unnecessary and could be disadvantageous, as it requires extra space for installation and use and could result in components obstructing or even damaging each other.

That's why PROMStahl recommends you always observe the applicable safety rules. We provide optimum safety systems that are certified by TÜV Nord and meet the very strictest requirements and standards.



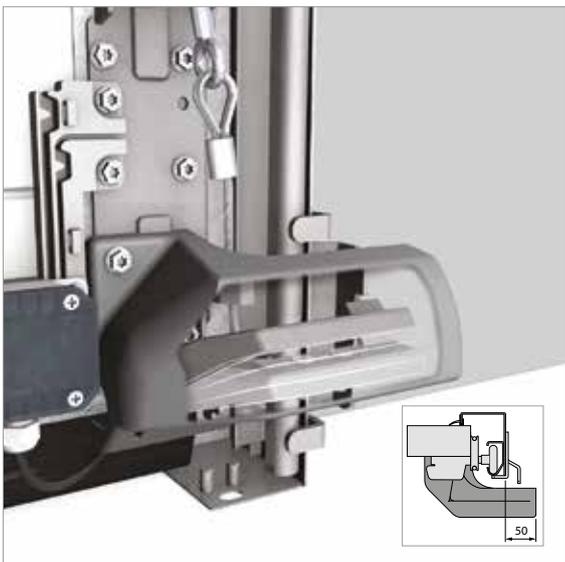
Spring break safety device

The European EN-13241-1 standard stipulates that a sectional door may never descend without being controlled. All manually operated sectional doors must therefore be fitted with a spring break safety device. This device blocks the spring shaft in the event of a spring breaking and prevents the door from crashing down. With motor driven sectional doors, instead of a spring break safety device there is a self-locking gearbox. This means a spring break safety device is unnecessary, as it is only required for a motor with a release system.



Cable break safety device

The TÜV sets out that the breaking load of both hoisting cables must be six times the weight of a balanced door panel. A cable break safety device is not required if the hoisting cables comply with this breaking load requirement. If that safety margin cannot be guaranteed, then the door must be fitted with a cable break safety device. This device guides safety cables through a system to prevent the door from crashing down should the cable break. An extra 50 mm is required alongside the rail to install a cable break safety device.



Locking device

Sectional doors are suspended on flexible cables, making it possible to raise them when they are unlocked. Designed especially for light, electrically operated doors, the locking device prevents this, because without it sectional doors are more vulnerable to break-ins. Manually operated doors are fitted with a spring-loaded mechanical slide lock as a standard. An extra 50 mm is required alongside the rail to install the locking device.

Electronic safety devices



Slack cable device

This safety device is installed on both hoisting cables and immediately disconnects the motor if one of the cables breaks or becomes slack.



Standard safety edge

The safety edge device is integrated together with a transmitter and receiver in the door's bottom rubber seal. If the signal is interrupted by an object or person, the door will stop and retract. The maximum contact pressure for the rubber seal is 40 kg. Choose the predictive obstacle safety edge if you have products that cannot withstand that level of pressure.



Predictive safety edge

The predictive safety edge is located 8 cm ahead of the door. If the bottom of the door approaches an obstacle, a signal is immediately sent to the motor and the door stops and reopens. This means the safety edge works without coming into contact with people, goods or transport vehicles.



Stationary photoelectric safety sensor

Motors with touch control must have a photoelectric safety sensor if the door opening is not visible to users while they are operating the door. There are two types: a model with a transmitter and reflector and a model with a transmitter and receiver. In both systems there is a transmitter attached to the rail on the control box side and a reflector or receiver attached to the opposite rail. If the beam between the transmitter and the reflector/receiver is interrupted, a signal is sent to the motor to stop and reverse the movement. While the reflector system is sensitive to dust and moisture, this is not the case for the receiver model.

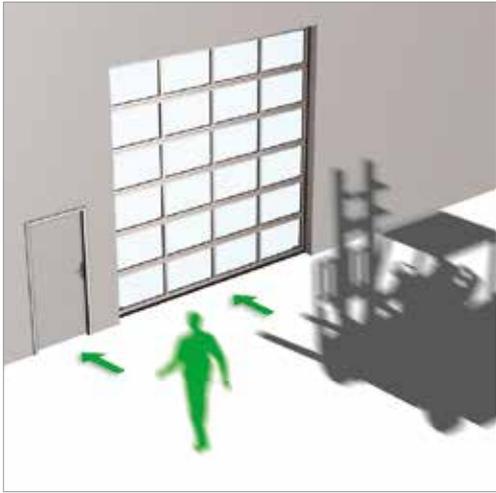




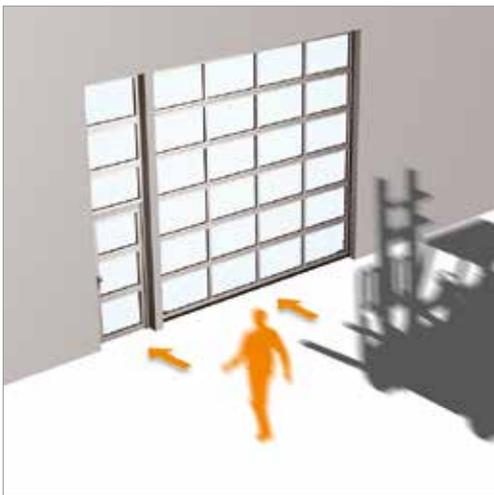
Wicket and Side doors 40/60 mm

For keeping people and goods apart

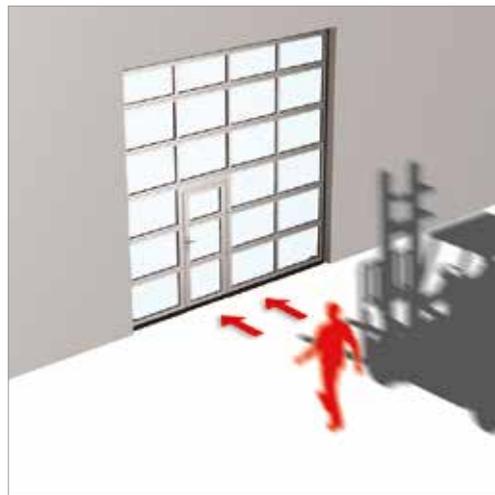
While a wicket door can be built into an ALU or ISO PROMStahl door, we recommend that wherever possible pedestrian traffic and goods traffic be kept apart. In other words, a permanent wicket door in the façade, separate from the sectional door, or a permanent wicket door next to the sectional door. The wicket door can be built into the sectional door, but this may affect the door's stability. It also presents limitations in terms of the door's width, height and threshold height, as a result of which the gate may not meet the current legal requirements for an emergency exit. Always discuss your plans with the local authorities so you can be sure you're choosing the right wicket door.



Completely separate doors for pedestrians and goods.



Separate doors for pedestrians and goods, but in the same opening structure.



Wicket door for people built into a sectional door for goods.

Permanent wicket door next to the sectional door

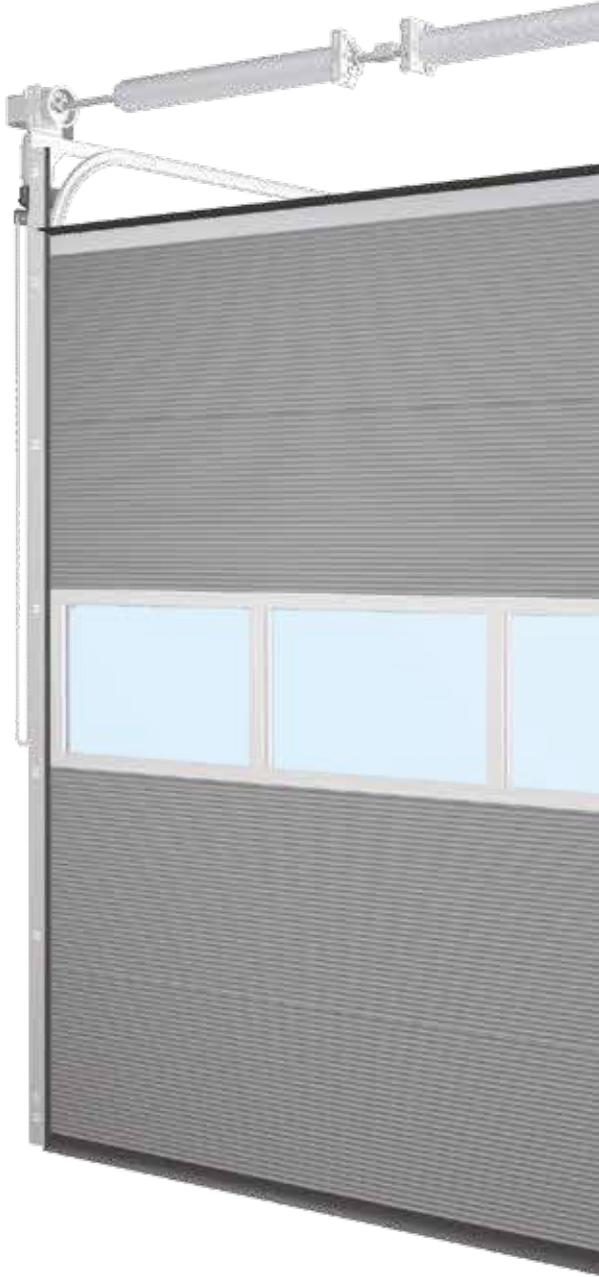
The advantage of a permanent wicket door is that the doors for pedestrians and goods are completely separate. This increases safety, ease-of-use and the stability of the sectional door. A permanent wicket door is installed in the façade next to the sectional door, where the design and panel structure of the wicket door and top panel match the structure of the sectional door, unifying them and making them both architecturally and aesthetically pleasing.

Section seals

The sections of the ALU 60 door are specially sealed to make them completely wind and waterproof. Any heat transmission is prevented by the special insulation profiles.

Choose the right door

A permanent wicket door can open both inwards and outwards and you can choose between a left-hinged DIN standard door or a right-hinged DIN standard door. If the wicket door is also to be used as an emergency exit, the door must open outwards.



DIN Left

DIN Right



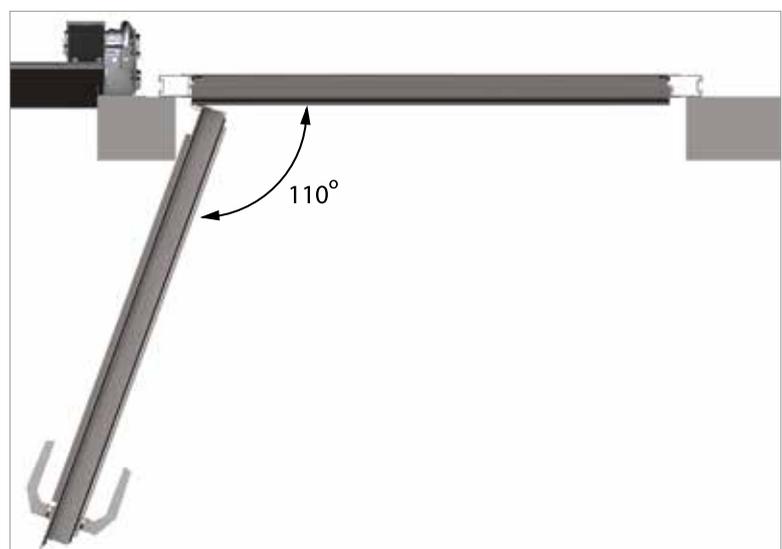
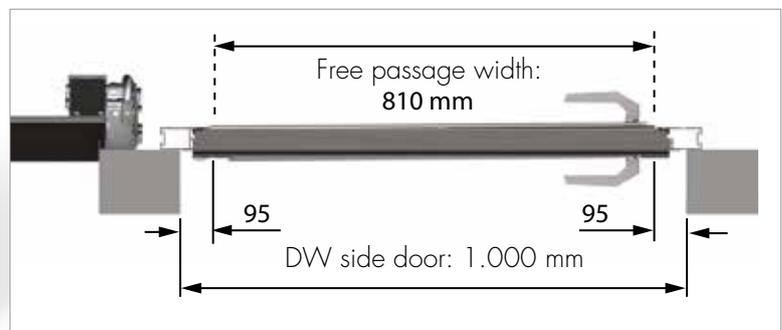
DIN Right

DIN Left



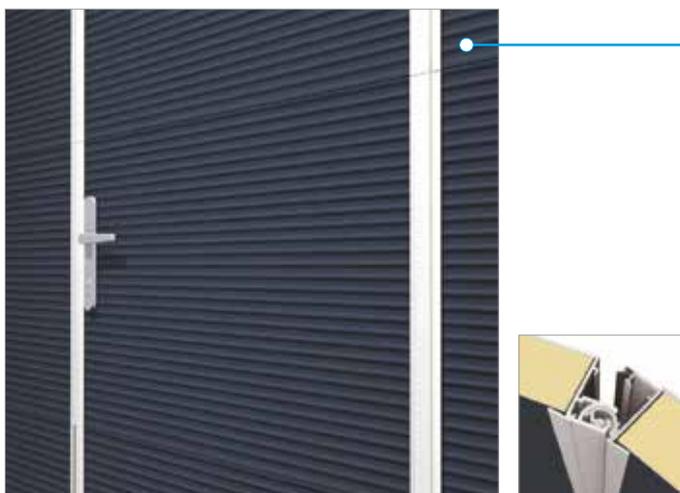
Installation onto or in the opening

A sectional door is always built against the interior side of the opening, so if you wish to install a permanent door in the same façade, PROMStahl will likewise always install it behind the opening. This has two advantages: firstly the doors are aligned, and secondly the width of the wicket door is 810 mm ($1,000 + 50 - 240 = 810$ mm) for a 1,000 mm opening. The first aspect is aesthetically pleasing, while the second means a gain of 60 mm compared to when it is installed in the actual opening. If the wicket doorway is installed in the opening itself, the wicket door will stand forward from the sectional door and its width will only be 750 mm ($1,000 - 10 - 240 = 750$ mm) in the same 1,000 mm opening.



Wicket door built into the sectional door

If you cannot install a permanent wicket door in the façade of your building, PROMStahl can build a wicket door into the sectional door. We offer various options for this, all of which meet the very highest structural, aesthetic and safety requirements. The built-in wicket door has a sophisticated integrated hinge system, an accurately aligned locking system with stabilising pins and an integrated safety switch. Three choices are available for the threshold height: 22, 110 and 195 mm.

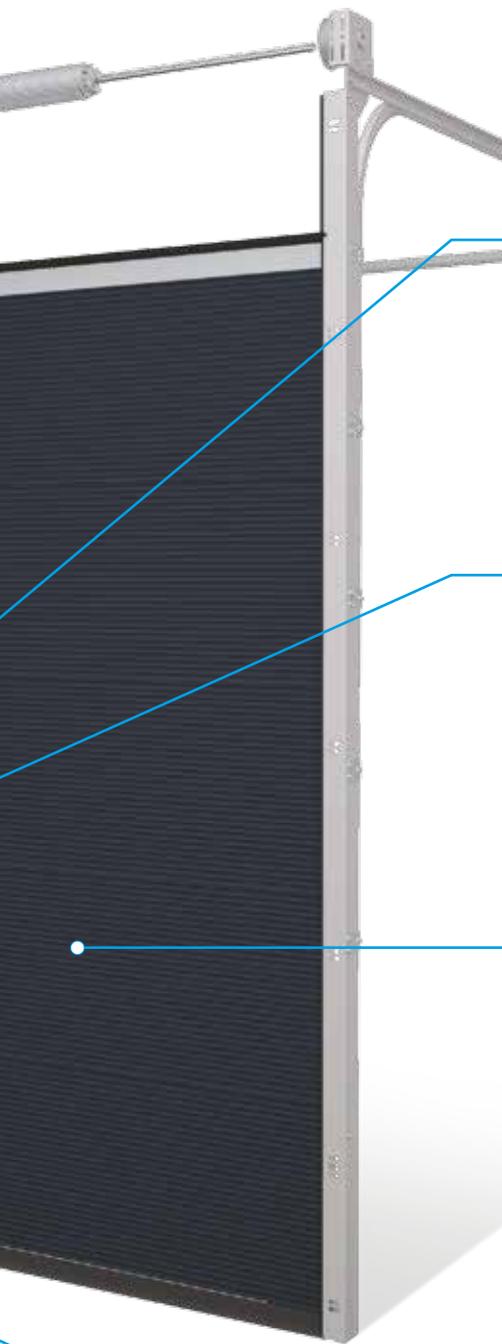


Aesthetically appealing wicket door

PROMStahl has recently made significant improvements to its wicket door design, the main one being the integration of the hinge system into the sectional door. This means the fastenings are no longer visible on the exterior and the standard ALU wicket door profiles do not protrude as much.

Optional extra: coloured wicket door profiles

If you choose a coloured ISO or ALU sectional door with a built-in wicket door, the wicket door profiles do not have to have the same colour as the door. This option is up to you, and while some people prefer a clearly visible wicket door, others like theirs to be less conspicuous. PROMStahl offers you both options.



Integrated wicket door switch

The wicket door switch, which is fitted under the safety catch, is an integrated safety device that prevents the sectional door from being operated when the wicket door is open.



Stabilising pins

The wicket door is held in perfect position by the stabilising pins. This means that the door will never "droop". The pins also create a more effective seal between the wicket door and the door. The magnetic contact of the wicket door switch is fitted beneath the pin.



Divider

A wicket door can never be positioned in the outermost parts of a sectional door, as this would affect its stability. The picture shows where the door can and cannot be installed. Wicket doors can be installed in sectional doors with a maximum door panel width of 6,000 mm. If you have a wider door, you will have to consider alternative options.



22 mm threshold

To restrict the risk of tripping when evacuating the building, PROMStahl has created a low 22 mm threshold such a low threshold meets on certain conditions the national directives on emergency exits.

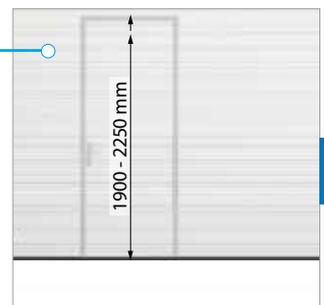
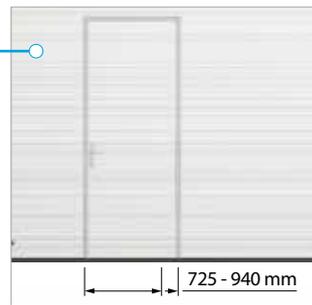
Integrated wicket door as an emergency exit

If you intend to use the built-in wicket door as an emergency exit, talk to the local authorities first and enquire about the regulations. The authorities stipulate the conditions that the wicket door must meet, depending on the number of people working or otherwise being present in the building. As a rule, four aspects determine whether a wicket door is suitable as an emergency exit: the type of lock, the door width, the door height and the threshold height. Lastly, an integrated wicket door must always open outwards, as is required for any door that serves as an emergency exit.



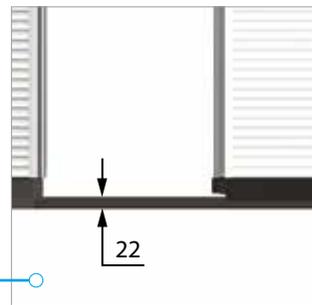
Panic lock

A wicket door that is to function as an emergency exit must be fitted with a panic lock. Various types of panic locks are available. A wicket door with a panic lock can always be opened using the latch on the inside, even when the deadbolt is secured.



Door width and height

The legislative and inspection bodies stipulate that a wicket door which is to serve as an emergency exit must be of a minimum width and height, according to local or national regulations. The maximum width of an integrated wicket door is 940 mm and the maximum height is 2,250 mm. Talk to your local authorities if your wicket door is to serve as an emergency exit.

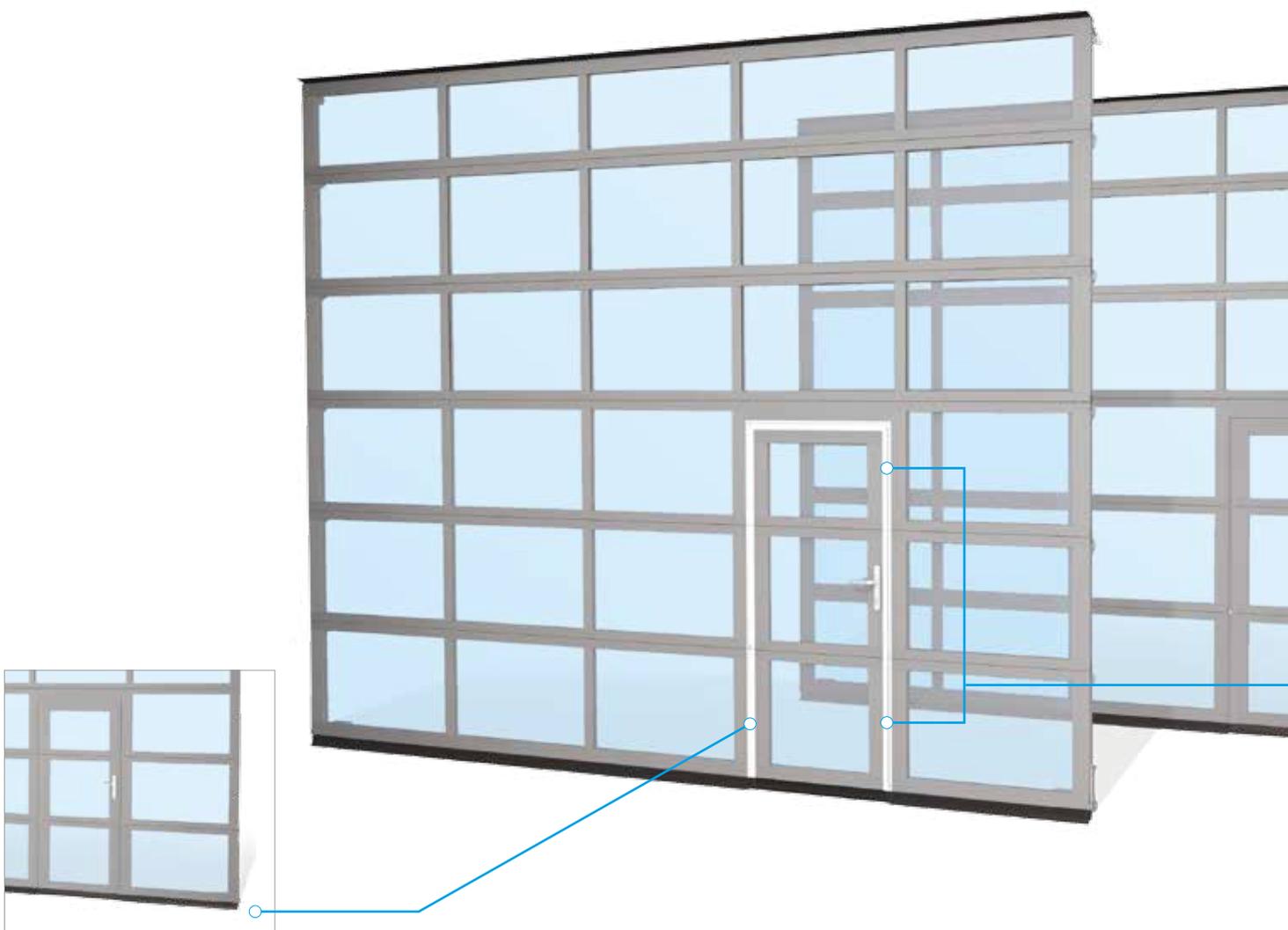


22 mm threshold

To restrict the risk of tripping when evacuating the building, PROMStahl has created a low 22 mm threshold such a low threshold meets on certain conditions the national directives on emergency exits.

Wicket door accessories and options

PROMStahl invests heavily in creating options for the optimum integration of wicket doors into sectional doors. One of the main areas of attention is safety and ease-of-use, with special consideration given to making hinges, switches, security locks and locks as aesthetically pleasing as possible. We would also be happy to provide you with detailed individual advice on the available options for threshold heights, the direction in which the door opens, its dimensions and its position.



Coloured wicket door profiles

If you choose a coloured ISO or ALU sectional door with a built-in wicket door, the wicket door profiles do not have to be the same colour as the door. This is a matter of personal preference, and while some people prefer a clearly visible wicket door, others like theirs to be less conspicuous. PROMStahl offers you both options.

The PROMStahl wicket door lock range comprises six locks:
two standard locks and four panic locks (if the wicket door also functions as an emergency exit).

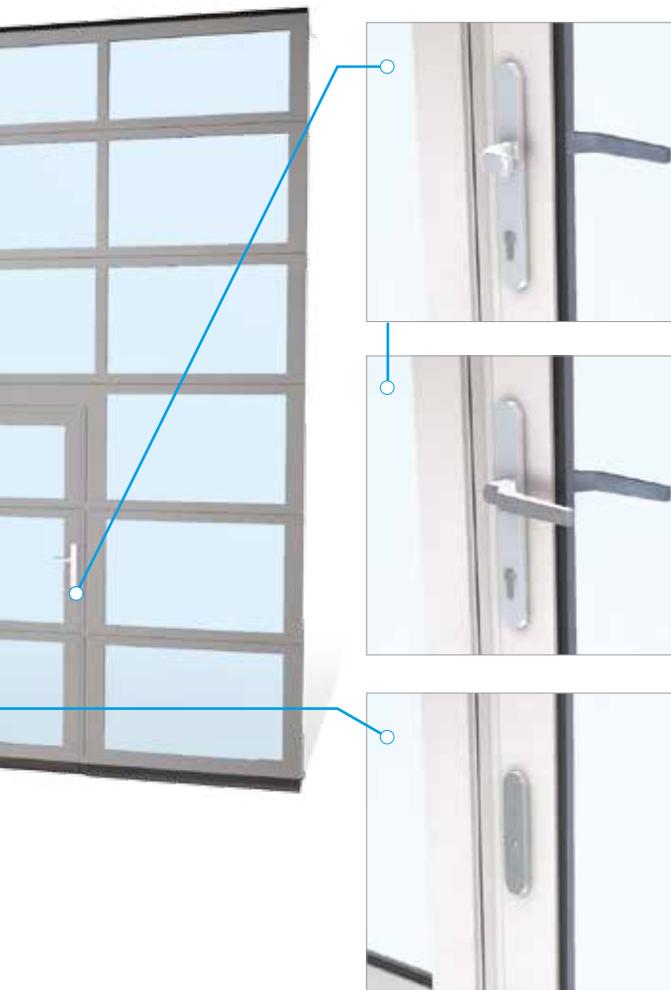
Standard locks

- Lock with a handle on either side
- Lock with a fixed panel on the outside and a handle on the inside

Panic locks

- Panic lock with a fixed door panel on the outside and a handle on the inside (panic function E)
- Panic lock with a handle on either side (split tumbler, panic function B)
- Panic lock with a fixed panel on the outside and push bar on the inside (panic function E)
- Panic lock with a handle on the outside (split tumbler) and push bar on the inside (panic function B)

Depending on the situation, the fire brigade may stipulate that panic locks be installed.



Panic lock, with panic function E

With the type E panic lock, the door can always be locked with a key from inside. When the interior handle is turned, the latch and deadbolt are simultaneously retracted into the lock.

The panic release function can only be used when there is no key in the cylinder. The latch and deadbolt can only be opened from outside with a key. The deadbolt stays in the lock after the panic function has been used.

Use this lock if the wicket door is to serve as an emergency exit, but not as an entrance during the day.

Panic lock, with panic function B

The type B panic lock is operated from inside in the same way as the type E panic lock, but there is a handle on the outside that can be locked and unlocked. This means that, if required, the door can serve as an entrance during the day.

The lock works as follows: the wicket door can always be locked and unlocked from the outside with a key; when the deadbolt is locked using the key, the exterior handle will disengage and nothing will happen when it is turned.

The exterior handle will remain disengaged even when the panic function has been used and the deadbolt has been retracted into the lock. The night bolt stays in the lock after the panic function has been used. The lock can only be used with the exterior handle when the key is inserted into the cylinder, which re-engages the exterior handle.

Additional security locks

For added safety, you can have two extra security locks fitted to the top and bottom sections of the wicket door. The same key can be used for all cylinder locks. The additional security locks have handles, so they can be opened without a key.

Helix / S600



The superfast and space-saving spiral door

The Helix ist brand-new in our product range: It is a superfast highly insulated sectional door equipped with special rolls that reduce operation noise to a minimum.

Traditionally, two doors are often mounted in frequently used exterior openings; an insulated door for use at night and a high speed door that is used during the day. The new Helix / S600 combines the best of both worlds in a single product. An investment that pays for itself in next to no time!

The S600 has the identical drive system as the Helix Spiral door but has a standard track system. This door opens 6 times faster than a similar sectional door but can be installed into a headroom of only 600 mm. The Helix and S600 have a standard section height of 366 mm.

If you have insufficient back room for the S600 you have the solution of the Helix with a faster speed!



The best of all worlds, the Helix and S600

Speed

The Helix spiral door opens 6 times faster than similar sectional doors and is therefore extremely suitable in an environment where you have intensive logistic movements. This door opens fast and depending on the door size up to 1.1 mls and real savings on the energy cost can be achieved.

Energy-saving

The door leaf has a thickness of 40 mm and a U-value of 1.5 W/m²K (ISO panels / door leaf 5,000 mm x 5,000 mm). Additionally if requested we can provide high-quality, full-width ALU vision sections.

Space-saving

The Helix spiral door is a revolutionary innovation and thanks to the spiral system and chain drive does not require extended backroom. To minimize wear and tear, the spiral action of the door means the panels do not touch, roll or fold upon themselves. The Helix offers a solution in a room where the ceiling construction does not allow track hangers for a regular sectional door.

Durability

Because of the intelligent drive system without counterbalance, the Helix spiral door does hardly need any service up to 200,000 cycles.

Fields of application

- Logistics
- Automotive industry
- Machine building
- Metal and electrical industry
- Food industry
- Chemical and pharmaceutical industry



U-value Helix/ S600 ISO 40 mm sectional door: 5,000 x 5,000 mm: 1.5 W/m²K
 U-value Helix/ S600 ALU 40 mm sectional door: 5,000 x 5,000 mm: 4.25 W/m²K

Helix / S600

Technical details



Helix / S600

Section joint

The joint between the ISO and ALU sections is wind and watertight (class 3 wind load).



Helix / S600

Sicherheit

The Helix as the S600 can be equipped with pre-running safety-edge or a light-grid. The light-grid is consisting of a receiver and transmitter, mounted into the track system, and therefore no wiring is required on the door leaf. This improves the operational reliability of this superfast door.

Specifications	Helix	S600
Max. Door leaf-surface	25 m ² (350 kg)	25 m ² (350 kg)
Max. Width	5,000 mm	5,000 mm
Max. height	5,000 mm	5,000 mm
Opening speed	1,1 m/s	1,1 m/s
Closing speed	0,5 m/s	0,5 m/s
Section-thickness	40 mm	40 mm
Section-joint	Finger-protection	Finger-protection
ALU-sections option	yes	yes
U Value at 5,000 x 5,000 mm	1,5 W/m ² K (complete ISO)	1,5 W/m ² K (complete ISO)

Features and benefits

- Low maintenance (200,000 cycles) springless system
- Pre-running safety edge or light-grid (no wiring on the door leaf)
- Class 3 wind load
- High insulation value
- Quick and simple installation because of pre-assembled track and drive system
- High opening speed



Helix

Torque tube

The Helix spiral door and the S600 are equipped with a direct drive aluminium torque tube without spring assistance.



Helix

Installation space

The Helix spiral door coils itself up against the interior facade of the building, space requirement at the head: 1,100 mm x 1,200 mm, 350 mm on the drive side and 120 mm on the non drive side.



Helix / S600

Compact Side hinges

For extra safety the panel connecting hinges are almost flat and ensure a perfect seal with the vertical side seals.



Helix / S600

Drive concept

The uninterrupted chain-/ steel cable system ensures precise and controlled door movement even at high speed.



Doorleaf configuration

The doorleaf for Helix and S600 are configured as mentioned in the overview below. The bottom section of the ALU doorleaf will always be an ISO section.

Helix / S600	ALU		ISO	
	Min.	Max	Min.	Max.
Bottom section	-	-	366 mm	610 mm
Intermediate section	250 mm	366 mm	366 mm	366 mm
Top section	275 mm	366 mm	250 mm	366 mm



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