ALU 40 MM

WHEN LIGHT AND VISIBILITY MATTER

In industrial settings where light and visibility are key, the Ascot Doors ALU 40 mm sectional door excels. The door leaf is crafted from multiple sections, utilizing specially designed aluminium profiles that allow for a wide range of field fillings. This enables the integration of windows, aluminium cassette panels, and various types of glazing, including translucent, coloured, insulating, or air-permeable options. The versatility of the ALU 40 mm door allows nearly endless possibilities.

Customising with Windows

The ALU 40 mm sectional doors can be equipped with a variety of plastic windows in different qualities, insulation values, colours, and patterns. Choose from coloured glass, perforated plates, or play with surface divisions to achieve the perfect design. For optimal results, combine ISO panels with the ALU sections to create a unique visual impact. Whether you need to maximize light for workspaces or enhance the overall aesthetics, the ALU 40 door offers endless customization opportunities, combining functionality with design flexibility.

U-VALUE ISO 40mm 5000X5000 MM:
- sectional door: 3.70 W/M2K
- sectional door **with insulation ++package:** 3.12 W/m ^{2}K

Clima Profiles for ALU 40 mm Sectional Doors

Clima industrial doors play a key role in maintaining the separation of different temperature zones. In response to this need, Ascot Doors utilise the specialised Alpha ALU Clima profiles for its 40 mm sectional doors, in addition to the 60 and 80 mm versions. These doors feature a continuous window rubber, ensuring optimal performance and sealing.

The thermal door also incorporates PVC glass strips with a seal, while the seals between the sections have been specifically designed for high performance and thermal efficiency. Focused on improving insulation, Ascot Doors use only thermal fillings which further enhance the door's energy-saving capabilities, making it an ideal choice for environments requiring precise temperature control.

ALU 60 MM

ENHANCED INSULATION AT AN AFFORDABLE PRICE

The ALU 60 mm sectional door is a modern innovation, offering exceptional performance in terms of form, function, and ease of installation. Standard features include triple glazing, ensuring outstanding heat insulation, anti-condensation, and soundproofing properties. This makes it ideal for spaces where light, visibility, and temperature consistency are crucial.

Special Insulation Profiles

The ALU 60 door is 1.5 times thicker than the ALU 40 door, built with two aluminum profiles separated by thermal insulation profiles. This design results in an exceptionally low U-value, even with the inclusion of glazing. The ALU 60 mm sectional door is particularly suitable for industrial environments where both light ingress and energy efficiency are essential.

U-VALUE ISO 60mm 5000X5000 MM:
- sectional door: 2.39 W/M2K
- sectional door **with insulation ++package:** 2.34 W/m ^{2}K

PANORAMA DOOR 40-60 MM

OPTIMAL VIEW - NO VERTICAL PROFILES

The Panorama door is an ALU door available in both 40 mm and 60 mm variants, designed to offer an uninterrupted view with no vertical dividers between panels. This unique design allows for expansive glass surfaces, making it ideal for showcasing products or providing excellent visibility in workshops. The high-quality, extra-thick plexiglass used is almost indistinguishable from real glass, offering both durability and optical clarity, with minimal distortion.

Areas of application

Thanks to their exceptional transparency, Panorama doors allow abundant natural light to flood interior spaces, making them an ideal choice for showrooms, workshops and other environments where both light and aesthetic appeal are important. These doors create a bright and welcoming atmosphere, enhancing the visual appeal of the building while providing functional benefits.

ALU 40

ALU40 Clima*

ALU 60

Plexiglas Optical
The Panorama door is available in widths of up to 4000 mm and heights of up to 4500 mm. Especially in environments where an appealing appearance of the building is important, as well as light and visibility in the hall, the Panorama door comes into its own perfectly.
What is special about the high-quality "Plexiglas Optical" applied is that it has the looks of real glazing combined with the safety of plastic.
The Plexiglas Optical windows are available in 20 mm double glazing and in 40 mm triple glazing.

Optimal Scratch Resistance
Ensures long-lasting clarity

ALU 40/60

Panorama door 40 mm
- Double Plexiglass
- Optical 20mm (4-12-4 mm)

U-value Panorama door 40mm 4000x4000 mm:
- sectional door: 4.18 W/m²K
- sectional door with insulation ++ package: 4.04 W/m²K

Panorama door 40 mm Clima
- Double Plexiglass
- Optical 20 mm (4-12-4 mm)

*Thermally separated

U-value Panorama door 40mm Clima 4000x4000 mm:
- sectional door: 3.16 W/m²K
- sectional door with insulation ++ package: 3.04 W/m²K

Panorama door 60 mm
- Triple Plexiglass
- Optical 40 mm (4-14.75-2.5-14.75-4 mm)

U-value Panorama door 60 mm 4000x4000 mm:
- sectional door: 2.47 W/m²K
- sectional door with insulation ++ package: 2.40 W/m²K

U-VALUE Panorama 60 mm 4000x4000 mm **sectional door Clima 2.39 W/m2K, with triple glazing**

PARTICULARS

ALU 40 | 60

ALU 40

Connection Sections
The connection between the panels of an ALU 40 door is wind- and waterproof, ensured by EPDM sealing rubber.

ALU 40

Aluminum Glazing Beads
These glazing beads provide a neat connection and maintain a high-quality appearance, even with large temperature fluctuations.

ALU 40 Clima

Thematically separated
The thermal door is equipped with plastic glass slats fitted with a seal. The seals between the sections are also optimally designed for high performance values.

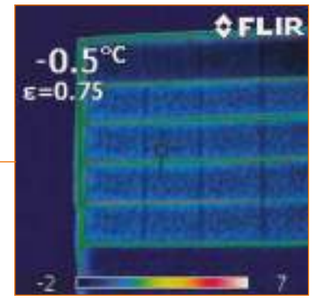
Wind Load
For stability against heavy wind loads, the ALU door features integrated reinforcement profiles, varying in thickness or height depending on the door configuration. For doors over 4200 mm (ALU 40) or 5000 mm (ALU 60), every second panel is reinforced. For doors over 5000 mm (ALU 40) or 5800 mm (ALU 60), every section is reinforced.

ALU 40/60

ALU 60

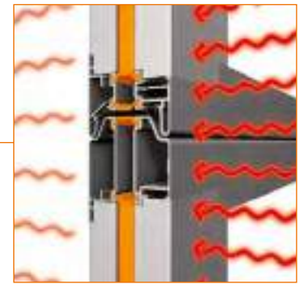
Condensation
On standard ALU 40 doors, condensation may form under cold conditions and high humidity. If you wish to prevent condensation, the ALU 60 door, with special insulation profiles, is the ideal solution, as it prevents moisture buildup even in high-humidity environments.

ALU 60



Infrared recording
The ALU 60 offers superior insulation, minimizing energy loss. The light areas in the image indicate where some energy is lost, while the darker areas represent well-insulated sections. This ensures optimal insulation performance, even in challenging conditions.

ALU 60



Connection sections
The connection between the sections of an ALU 60 door is wind and watertight. Heat transmission is stopped by the special insulation profiles.

ALU 60

Triple glazing
The ALU 60 door comes standard with triple windows for extra good insulation value. The windows are placed in thermally decoupled insulation profiles.

ALU 60

Double plastic glazing
is available. However, this option has lower insulation value.

ALU WINDOW TYPES

ALU 40 | 60

Different fillings
Ascot Doors offers limitless options for glazing in ALU doors, allowing architects to fully customise the design. The windows come in a wide range of qualities, colours, transparency levels and styles, offering a fixed selection for various aesthetic and functional needs. Choose from materials such as single-walled acrylic, 4 mm tempered glass, double-walled acrylic, structured glass, single-walled perforated options with air vents, or impact-resistant plastics. The possibilities for customisation are virtually endless!

UNIQUE IN THE MARKET

Combine with colour
The ALU door comes standard in clear anodized aluminium but can be customised with a wide range of colour options. The aluminium can be coated in any colour of your choice using wet lacquer, and when combined with Rodeca glazing or ISO panels in one of 10 colours from the Ascot standard range, it offers endless design possibilities.

Aluminum glazing beads
Ascot help your Bmmpq to stand out for Glazed arrangements, by using anodized aluminium glazing beads as a standard, unlike other suppliers who often rely on black plastic strips. This choice not only enhances the aesthetic appeal and durability but also avoids the issue of differing expansion rates between materials. In warm weather, plastic strips tend to expand faster, causing distortion, while aluminium glazing beads remain stable.

Additionally, the glazing system allows for easy replacement of individual windows where damage occurs, without needing to replace the entire panel. As an added benefit, these aluminium glazing beads can be custom-coloured to suit the design. For the ALU40 Clima model, thermally separated plastic glazing beads are used.

TRANSPARENT

Double-glazed filling transparent
(20 mm) in: Acrylic, Polycarbonate, Structured glass,
4 mm tempered glass
(light transmission 100%)
Aluminium glazing beads

Double-glazed filling transparent with thermally separated
(20 mm) in: Acrylic, Polycarbonate, Structured glass,
4 mm tempered glass
(light transmission 100%)
Plastic glazing beads

Double-glazedtransparent filling
(40 mm) in: Acrylic, Polycarbonate, Plexiglas
(light transmission 100%)

Triple glazing transparent filling
(40 mm) in: Plexiglass (light transmission 100%)

Four glazing transparent filling
(60 mm) in: Plexiglass
(light transmission 100%)

COLOURED

Coloured outside, transparent inside

Double-glazed filling coloured smoke
(20 mm) in: Acrylic, Polycarbonate,
(light transmission 14.5%)

Double-glazed filling coloured anthracite
(20 mm) in: Acrylic, Polycarbonate,
(light transmission 53%)

Double-glazed filling coloured brown
(20 mm) in: Acrylic, Polycarbonate,
(light transmission 52%)

Double-glazed filling coloured milk white
(20 mm) in: Acrylic, Polycarbonate,
(light transmission 20%)

Triple glazing coloured smoke
(40 mm) in: Acrylic, Polycarbonate,
(light transmission 14.5%)

Triple glazing coloured anthracite
(40 mm) in: Acrylic, Polycarbonate,
(light transmission 53%)

Triple glazing coloured brown
(40 mm) in: Acrylic, Polycarbonate,
(light transmission 52%)

Triple glazing coloured milk white
(40 mm) in: Acrylic, Polycarbonate,
(light transmission 20%)

POLYCARBONATE

5-core Polycarbonate hollow-core plate
(20 mm) transparent
(light transmission 63%)

(20 mm) opal tinted
(light transmission 42%)

PERFORATED

Single-walled perforated ALU sheet
(2 mm) round perforation
(air permeability 40%)

(2 mm) square perforation
(air permeability 70%)

FILLED

Double-walled closed sandwich filling
(20 mm), outside with smooth plate and inside with stucco design

(40 mm), outside with smooth plate and inside with stucco design

Double-walled closed sandwich filling
(**20 mm**), inside and outside with stucco design.

(**40 mm**), inside and outside with stucco design.

PERFORATED

Single-walled perforated ALU sheet
(2 mm) round perforation
(air permeability 40%)

(2 mm) square perforation
(air permeability 70%)

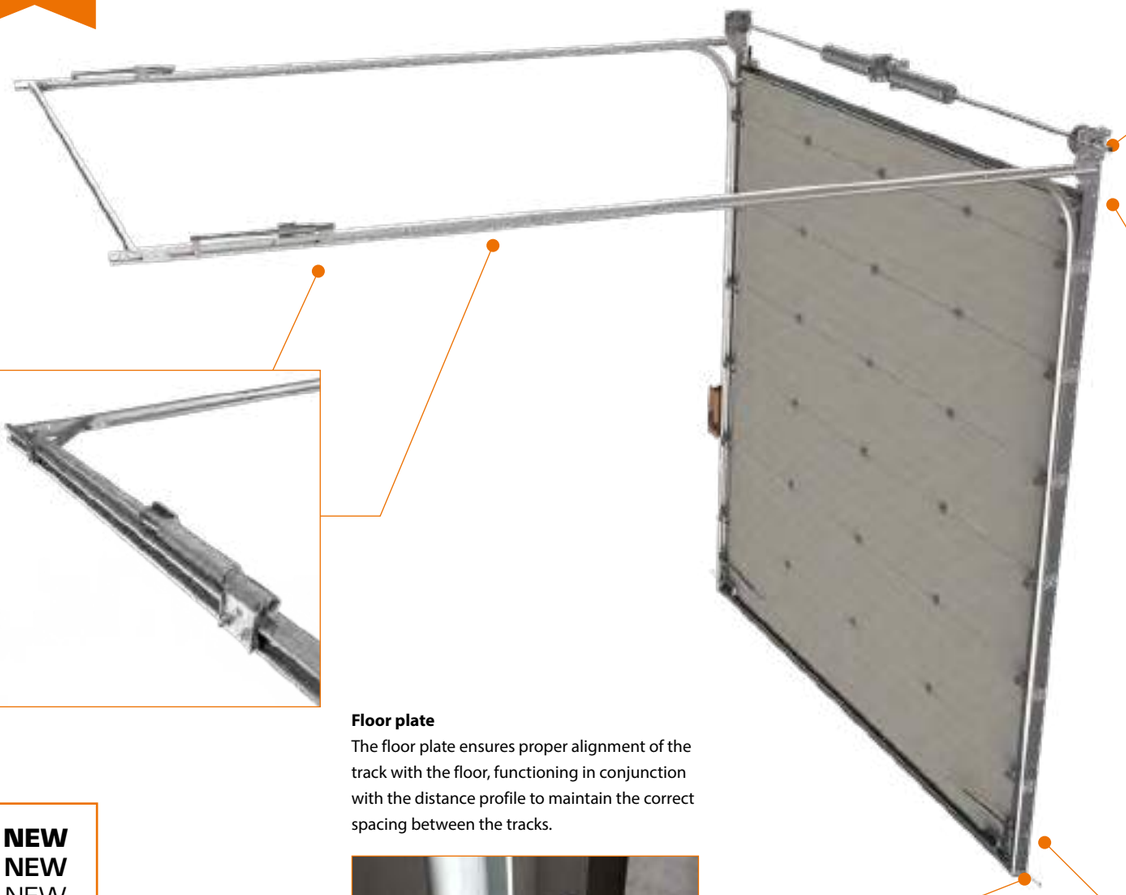
TRACK SYSTEMS

HIGH QUALITY MODULAR ASSEMBLY

Ascot track systems are designed to be modular and versatile, suitable for ISO, ALU, and Panorama doors. The focus on certified quality and durability ensures that both the track systems and spring packages meet high standards, providing reliable performance over time.

Spring buffer
The spring buffer, mounted robustly, provides an initial push for the door to lower from its horizontal position. Depending on the door configuration, either a door stop or a spring buffer of varying lengths will be supplied to ensure smooth operation. This feature helps manage the door's movement and contributes to its durability.

OPTIONS



Floor plate
The floor plate ensures proper alignment of the track with the floor, functioning in conjunction with the distance profile to maintain the correct spacing between the tracks.

M8 bolt connections
The standard connections between the sheet metal parts and track profiles are made with M8 bolt connections. This approach, combined with the carefully pre-assembled components, allows for faster installation times.

Cable position
The modular structure of our track systems and sheet metal components allows us to always ensure an ideal cable position in relation to the vertical tracks. This ensures optimum safety and operational reliability.

NEW
NEW
NEW

We offer track systems and additional components made of stainless steel in European AISI304 quality.
- Track systems T450, T400, T500 in stainless steel
- Fixing sets in stainless steel
- Track hangers in stainless steel
- Bearing plates in stainless steel

Safety track
A safety running track ensures that the wheels cannot run out of the track. For extra safety, the cable is safely encapsulated in the construction.

PARTICULARS

TRACK SYSTEMS

ALU 40

Top seal
The top panel of the ALU 40 door is fitted with a sealing rubber that provides additional insulation and an optimal connection to the top lintel. As a result, the door does not gape, preventing energy loss.

ALU 60

Top seal
The top panel of the ALU 60 door is equipped with double EPDM sealing rubbers, which enhance insulation and ensure a tight seal with the top lintel. This design prevents the door from remaining ajar, effectively minimizing energy loss and optimizing thermal efficiency.

ALU 40/60

Single side hinge
Ascot Doors utilise single side hinges to doors up to an opening width of about 5 metres. It is a robust construction that ensures the door runs smoothly and seals well.

ALU 40/60

Double side hinge
Double side hinges on doors from an opening width of circa 5 metres. This ensures that even heavier doors run beautifully.

ALU 40

ALU 60

Floor sealing
To ensure a solid connection between the door and the floor, Ascot's doors use a sealing rubber. Combined with a bracket and a water barrier cast into the concrete by the contractor, this system effectively prevents water ingress. The sealing rubber is consistent across models: one is used for the ALU 40, while two are used for the ALU 60, depending on door thickness.

ALU 40

ALU 60

Standard corner frame
The connection of the door leaf to the vertical tracks on a standard corner frame ensures a firm and good seal between the side of the door and the property.

ALU 40

ALU 60

Heavy coner frame
We apply this frame to doors with a dark colour. Due to heating of the sun, the door expands and can hit the upper lintel in the middle. The heavy corner frame prevents this.

Insulation ++ package
Extra insulation is possible with the Insulation ++ package. A PVC profile fitted with a Foam band behind the steel frame ensures thermal separation between wall and track system.

TRACK SYSTEMS

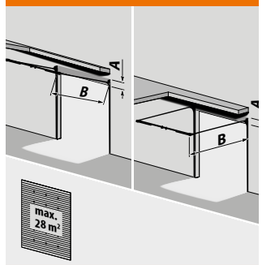
Ascot Door's track systems are designed to adapt to various installation requirements, ensuring that doors can be mounted securely in different building types. With varying available space and construction constraints, Ascot offers a range of track variants that can be customized to fit any situation.

T 200

Low-profile track system, internal cables + steel support profile

A= 200 mm
B= opening height + 1.000 mm
Width max. 5.500 mm

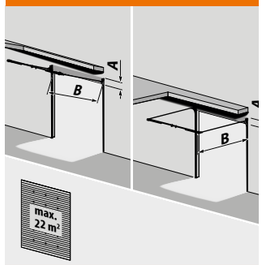
T 240



Low-profile track system, internal cables + steel support profile

A= 240 mm
B= opening height + 1.000 mm
Width max. 7.000 mm

T 340

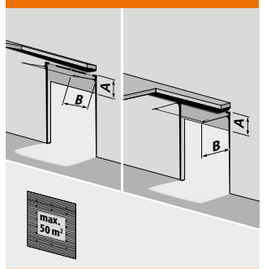


Normal track system, spring package rear + steel support profile

A= 350 mm
B= opening height + 750 mm
Width max. 6.500 mm

A solution for every variant

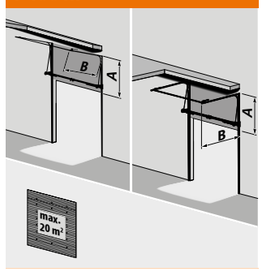
T 400



Raised track system

A= levy + 400 mm
B: Pull cord = DH - levy + 650 mm
Manual hoist = DH - levy + 850 mm
Electric hoist = DH - levy + 850 mm

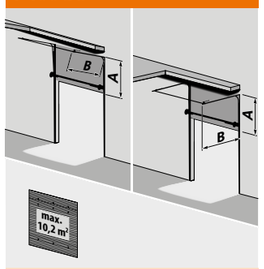
T 400 hF



Elevated track system with low-lying spring axle + steel support profile

A= levy + 200 mm,
B: Pull cord = DH- heffing+ 650mm
Manual hoist = DH- levy+ 850mm
Electric hoist = DH- levy+ 850mm
Width max. 4.500 mm
Minimum levy 1.450 mm

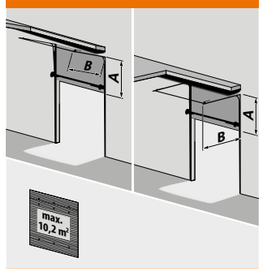
T 400 DS



Elevated track system with low-lying spring axle

A= levy + 200 mm
B: Pull cord = DH - levy + 650 mm
Manual hoist= DH - levy + 850 mm
Electric hoist = DH - levy + 850 mm
Width max.. 3.200 mm
Minimum levy 1.700 mm

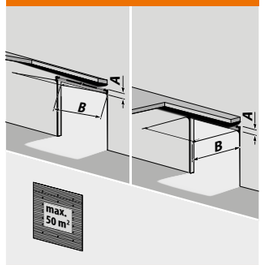
T 400 DDE



Pre-assembled spring axle

A= levy + 200 mm
B: Pull cord = DH - levy+ 650 mm
Manual hoist = DH - levy + 850 mm
Electric hoist = DH - levy + 850 mm
Width max.. 3.200 mm
Minimum levy. 1.700 mm

T 450



Normal track system (standard)

A = 430-510 mm
B: Pull cord = DH + 650 mm
Manual hoist = DH + 850 mm
Electric hoist = DH + 850 mm

T 450 DDE

Details normal track system with low-lying pre-assembled spring axle

A = 825 mm
B: Pull cord = DH + 650 mm
Manual hoist = DH + 850 mm
Electric hoist = DH + 850 mm
Width max 3.200 mm

Helix

Details normal track system with low-lying pre-assembled Helix spiral

A= 1100 mm
B= 1200 mm
Width max 5000 mm
Height min. 2500 mm

T 600

Helix S600 Horizontal track system

A= 600 mm
B= daghoogte + 265 mm
Width max 5000 mm

T 500

Vertical track system

A= opening height + 560 mm

T 500 hF

Vertical track system with low-lying spring axle + steel support profile

A= opening height+ 400 mm
Width max. 4.500 mm

T 500 DS

Vertical track system with low-lying spring axle

A= opening height + 400 mm
Width max. 3.200 mm

T 500 DDE

Pre-assembled spring axle

A= opening height+ 400 mm
Width max. 3.200 mm

CONTROLS

ON THE CONTROL PANEL

T75 Basic Control
T75 control is a basic control for industrial sectional doors. The T75 is equipped with a 3-button control and connections for closing strips, light curtains, cable breakage switches and wicket door switches (not with low threshold). In addition, the T75 can optionally be equipped with a 433 MHz radio module. It is a deadman control, which is expandable to a limited extent to an impulse control..

T100 Premium Control
T100 control is a comfortable premium control. The T100 features a display integrated in the cover, a 3-button control, a half-opening button and all the necessary connections for locking tracks, light curtains, cable-break switches and wicket door switches. In addition, functions such as automatic closing or door locking can be programmed. The controller is suitable for a motor power of 3 kW. There are also connection options for additional controls.

For operating your sectional doors, Ascot offers a wide range of high-quality control elements that can be built into the control box of the door system. In addition, many elements can also be mounted on the inside or outside wall or on a column, for example. These include safety devices, switches, remote controls, flashing lights and more.

Emergency stop
When current legislation requires it, it is possible to equip the console with an emergency stop button.

Key switch
You can disable the key switch on the control cabinet to prevent unauthorized operation of the door. Only authorized individuals possess a key, which, when activated, allows them to operate the door.

DCC 80 Drive
Introducing the latest innovation in drive technology: the new DCC 80 drive, powered by DC technology for industrial doors. The DCC 80 combines the benefits of various drive and control types in a highly cost-effective solution, making it the ideal foundation for your service. The DCC 80 is suitable for all types of sectional doors (40/60/80 mm) and compatible with all standard hardware types.

Motor with emergency chain
All drive systems come standard with a mechanical emergency control on the reduction gear of the electric motor. This allows the sectional door to be opened even in the event of a power failure. The function must be activated and deactivated manually using switch cords, after which the reduction gear can be operated by the emergency chain.

Motor with decoupling
A drive with a decoupling device is also available. In this case, the reduction gear is disconnected from the spring shaft using cables, allowing the sectional door to be opened more quickly by hand in the event of a malfunction. Of course, a sectional door with a decoupling device is also equipped with spring break protection for added safety.

2 position switch
This switch allows you to select between two preset positions. For example, switch it once will open the door to person-height, while switch it twice will open the door fully. This option is ideal for energy savings, as the door doesn't always need to be opened completely.

Main Switch with Padlock
When servicing the door system, the main switch can be used to disconnect the power. By securing the switch with a padlock, you prevent third parties from accidentally restoring power while maintenance is in progress.

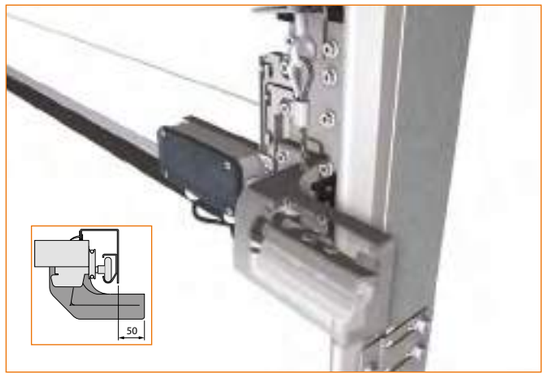
Signaling and Detection via Wireless Transmission

Wireless Communication
Typically, the control box and the connection box on the door leaf are connected by a flexible spiral cable, which can be inconvenient and prone to damage. To address this, Ascot Doors offers connection boxes with an integrated battery that wirelessly transmits signals, such as those from detection devices, to the control cabinet.

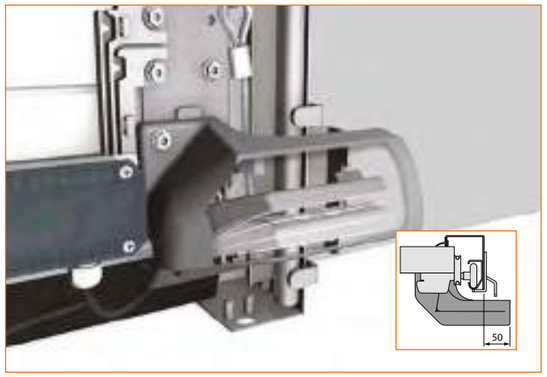
MECHANICAL SAFETY SYSTEMS

Safety is crucial when operating vertically moving, often heavy sectional doors. That's why Ascot Doors offers both mechanical and electrical safety systems to prevent the door from hitting people, vehicles, or obstacles, thus avoiding personal injury or damage to the door and/or goods. However, excessive security measures can often be unnecessary and counterproductive, as they may require additional installation and space, and components can interfere with or damage each other. Ascot advises focusing on compliance with the relevant regulations, ensuring optimal security systems that are TÜV Nord certified and meet the highest standards.

Spring break protection
The European standard EN-13241 requires that a sectional door must never fall uncontrollably. Therefore, a manually operated sectional door should be equipped with spring break protection as standard. This protection blocks the spring shaft in the event of a spring failure, preventing the door from falling uncontrollably.
In sectional doors with a drive, the function of spring break protection is provided by a self-locking gearbox, so no additional spring break protection is needed. However, if a motor with decoupling is selected, spring break protection must be used.



Cable break protection
TÜV regulations state that the breaking load of both lifting cables must be six times the weight of the balanced door leaf. If the lifting cables meet this requirement, cable break protection is not necessary. However, if this safety margin cannot be guaranteed, the door will be equipped with cable break protection as standard. In the event of a cable break, this protection activates catch blades in the guide to prevent an uncontrolled closing movement. When cable break protection is used, an additional 50 mm of space is required beside the track.



Anti-Lift Protection
Since a sectional door is suspended on flexible cables, an unlocked door can potentially be lifted. The anti-lift protection, particularly for light electrically operated doors, prevents this. Without anti-lift protection, this type of door can be more susceptible to burglary. Manually operated doors are equipped as standard with a spring-loaded mechanical sliding bolt and a lock in the trackl. When anti-lift protection is used, an additional 50 mm of space is required beside the track.

ELECTRONIC SAFETY SYSTEMS

Electric contact strip

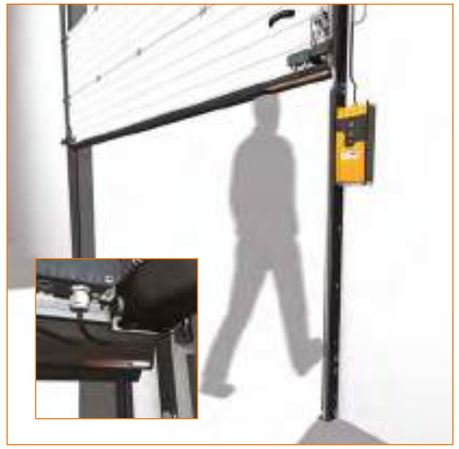
The electrical contact strip is perfect for moisture-sensitive environments, featuring a compact, insulated switching chamber that helps reduce condensation. It is also resistant to lateral deflection, making it less affected by wind load and ensuring reliable performance during heavy rain or thunderstorms. With an IP 67 rating for durability, the contact strip is made from 100% recyclable TPE material, which is UV-resistant, lightweight, and resistant to aggressive chemicals, ensuring a long lifespan.

Slack cable protection

This protection is installed on both lifting cables and immediately shuts off the electric motor if one of the cables breaks or sags.

Safety

Sectional doors can be optionally equipped with a light curtain.
The light screen is formed with transmitter and receiver sensors in the tracks, so the cabling is in the tracks and not on the door leaf.



Standard safety edge protection

The safety edge protection is integrated into the door's sealing rubber, featuring a transmitter and receiver. If the signal transmission is interrupted by an object or person, the door stops and reverses. The maximum contact pressure with the rubber is 40 kg. If products cannot withstand this pressure, the leading under-run protection should be selected instead.

Leading Edge protection

With this option, the leading edge protection extends 8 cm in front of the door. If the bottom of the door comes close to an obstacle, a signal is immediately sent to the motor, halting the door's movement and causing it to reverse. This protection works without making contact with people, goods, or vehicles.

Stationary photocell protection

Photocell protection is required for motors with impulse control, where the user cannot see the door movement while operating it. There are two types: one with a transmitter and reflector, and one with a transmitter and receiver. In both systems, the transmitter is mounted on the track near the control cabinet, with the reflector or receiver placed on the opposite track. If the beam between the transmitter and reflector/receiver is interrupted by an object, a signal is sent to the motor to stop and reverse the movement. The reflector system is sensitive to dust and moisture contamination, while the receiver version is not.