

Dedicated to People Flow™



AN ATTRACTIVE AND DURABLE SOLUTION FOR ANY INDUSTRIAL PREMISES

KONE Sectional Overhead doors

High-quality, hard-wearing doors

KONE Sectional Overhead doors are durable products for warehouses, showrooms, logistics centers, retail and industrial premises.

Available with a wide range of colours, windows and finishes, they are easy to integrate into modern architectural designs.

The KONE Sectional door leaf provides good sound and thermal insulation as an outer door for industrial buildings and warehouses. The KONE Full Vision door leaf, for showrooms or buildings where many people are working, provides good visibility and allows in natural light.

Safety

KONE Sectional Overhead doors are built in full accordance with EN-13241. They have the latest safety features to ensure the safe and smooth movement of users and goods.

Energy-efficient

The sandwich panel construction of the KONE Sectional door leaf provides excellent thermal insulation. KONE Sectional Overhead doors can also improve energy efficiency with advanced drive technology. A high-speed drive shortens opening and closing times. This saves time for warehouse staff, for example, and reduces heat losses. Heat losses can also be reduced considerably with a separate pedestrian door (wicket door).

Durable and functional in any weather

KONE Sectional Overhead doors are built with durable, scratch-resistant materials. The periphery of the door is sealed to prevent rainwater and draughts from entering through the gap between the door leaf and the opening support structure. Strengthening braces ensure that the door cannot distort excessively under load, even when exposed to high winds.

KONE - your dedicated partner

- People Flow® expertise to ensure safe and efficient movement of people and goods in buildings
- Automatic building door, elevator and escalator equipment and services, all from one place
- Total life-cycle knowhow: design, installation, maintenance and modernization
- Quality products (e.g. TÜV, ISO approved), built in accordance with all applicable norms and legislation
- Energy-efficient and modern-looking doors for every building
- Preventive maintenance with dedicated and trained technicians, fast delivery of spare parts

Preventive maintenance

KONE services the full range of overhead sectional doors, gates and shutters used in industrial buildings and warehouses. KONE Care maintenance is based on preventive maintenance, to detect and repair minor faults before they can cause disruptions. Well-trained and dedicated KONE service technicians are at your service. The KONE Customer Care Center is available to serve you 24 hours a day, 365 days a year.





The KONE
Sectional door
provides good
thermal and
sound
insulation.



The KONE
Full Vision
sectional door
provides good
visibility and
lets in natural
light.

Selecting a KONE Sectional Overhead door

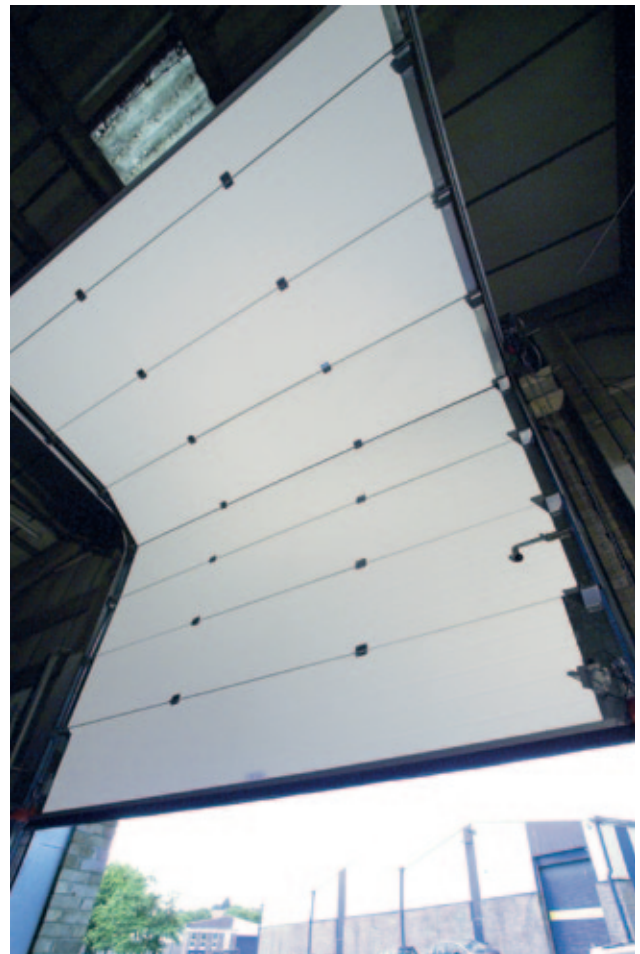
- 1. Choose the track system.**
This is determined by the headroom available above the door opening.
- 2. Choose the sectional door type and leaf options.**
The KONE Sectional door leaf provides thermal and sound insulation. The KONE Full Vision door leaf provides good visibility and lets in natural light.
- 3. Choose the type of operation.**
This depends on the size of the door and frequency of operation.
- 4. Choose the safety options.**
These depend on the type of door operation and on your requirements.
- 5. Choose a pass door.**
This reduces usage of the main door, saving time and energy, and reducing heat loss from the building.

STEP 1 - CHOOSE THE TRACK SYSTEM

Track systems

The choice of track system is determined by the headroom available above the door opening and the client's requirements.

The shape and dimensions of the space required for installation are determined by the type of track system. The track system should be selected to minimise the loss of space in the building. In practical terms, this means that the track system should be mounted as close to the wall and roof as possible. The opening should be completely unobstructed when the door is in the fully open position.

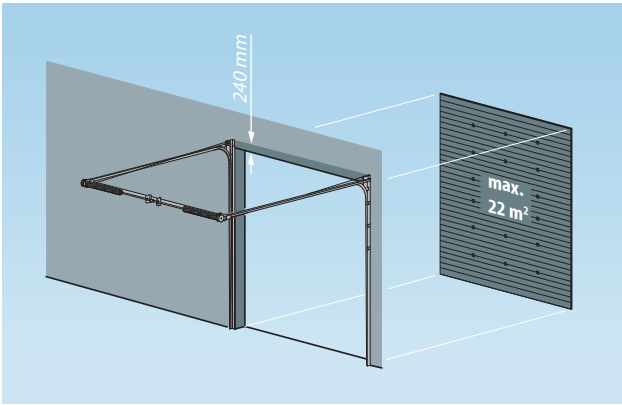


Track system	T240	T 340	T 450	T 400	T 400hF	T 500	T 500 hF
Headroom above the opening	240 mm	340 mm	430 - 700 mm	700 - 4500 mm	1775- 4500 mm	CH* + 500	CH* + 500
Max. door surface area	22 m ²	22 m ²	50 m ²	50 m ²	20 m ²	28 m ²	20 m ²
Roof angle	0° - 15°	0° - 30°	0° - 30°	0° - 30°	0° - 30°		
Spring assembly mounted to the wall	No***	No***	Yes	Yes	No**	Yes	No**

*CH=Clear opening height

**Mounted on top of the track

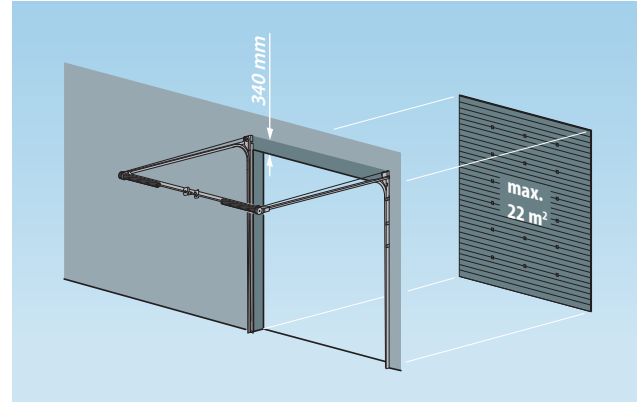
*** Mounted behind the track



T240 track system

Available headroom: **240 mm.**

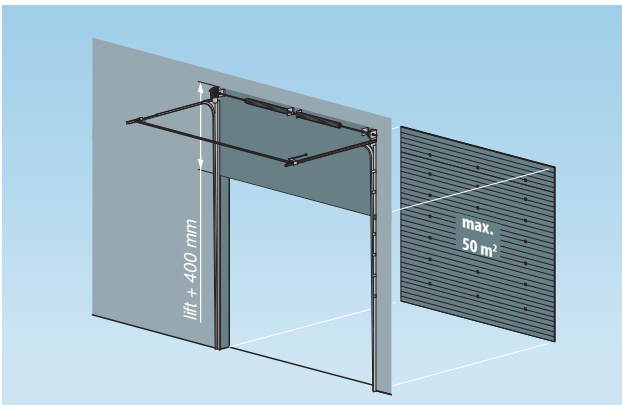
This system can also be used if the headroom is less than 240 mm. In such cases, the sectional door will remain visible in the clear opening when the door is fully open.



T340 track system

Available headroom: **340 mm.**

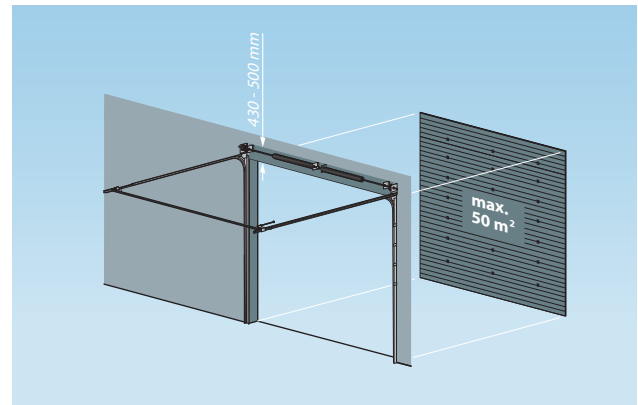
This is an excellent solution in cases when the available headroom of 340 mm is not suitable for other track systems, for example if a glazed element is located above the clear opening or the wall above the opening is cellular concrete.



T400 track system

Available headroom: **700 to 4500 mm.**

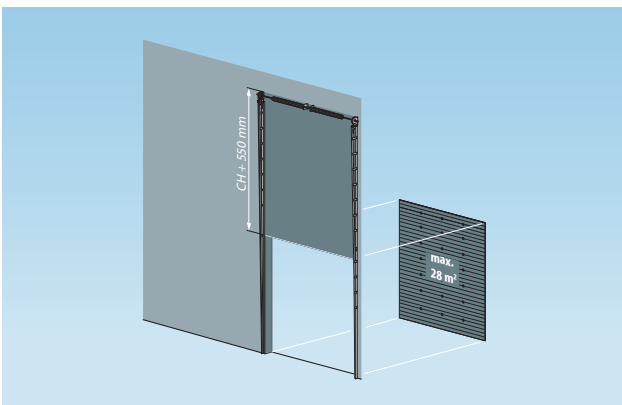
The vertical tracks follow the wall line and then curve to lie parallel to the roof. The spring assembly is mounted to the vertical wall just under the roof.



T450 track system

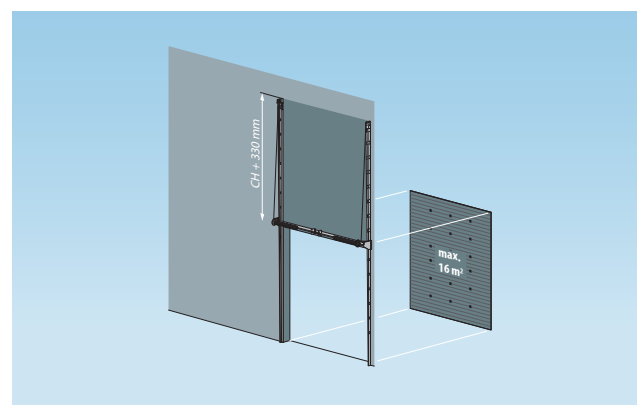
Available headroom: **430 to 510 mm.**

The spring assembly is fixed to the building wall in this case.



T500 track system

This track system is used when the available headroom allows the sectional door to open vertically. The spring assembly is fixed to the wall at the top of the tracks.



T500hF track system

This track system is used when the available headroom allows the sectional door to open vertically. The spring assembly is fixed to a mounting arrangement at approx. 500 mm above the clear opening. The door width may not exceed 4500 mm when this system is used.

STEP 2 - CHOOSE THE SECTIONAL DOOR TYPE

KONE Sectional door

The KONE Sectional door leaf provides good sound and thermal insulation as an outer door for industrial buildings and warehouses.

Panel construction

The KONE panels are constructed of high density CFC free foam sandwiched between two steel sheets to ensure maximum acoustic and thermal performance. The steel sheets are thermally galvanized on both faces and primed for corrosion resistance.

Selecting a door

The first consideration is typically the insulation requirements, as thicker doors provide better sound and thermal insulation to reduce heating or cooling costs and minimize noise transfer.

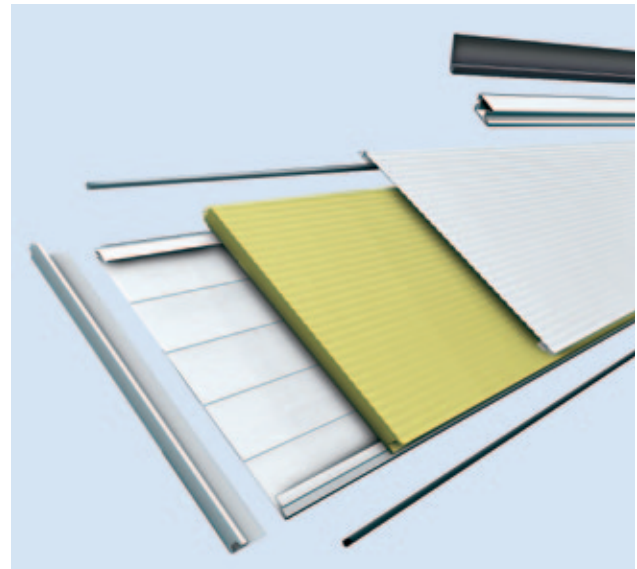
KONE Sectional door

KONE Sectional Overhead doors, with a 40 mm panel thickness, are available in 3 different panel heights: 488 mm, 610 mm and 732 mm.

The standard sizes range from 2000 to 8000 mm in width and from 2250 mm to 6000 mm in height.

KONE Sectional Eco doors

The lower u-value provided by the extra insulation in the 60 mm thick KONE Eco door is ideal for industrial environments that are subject to wide fluctuations in temperature, for example in the Nordic countries. The section panels are available in a height of 610 mm. KONE Sectional Eco doors are available with the same standard range of sizes as KONE Sectional doors.



Panel thickness (mm)	U-value panel	U-value door leaf	U-value door 5000 mm x 5000 mm
40 mm sandwich	0.51	0.78	1.02
60 mm sandwich	0.34	0.66	0.91



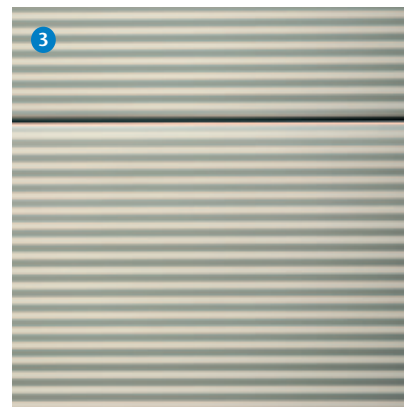
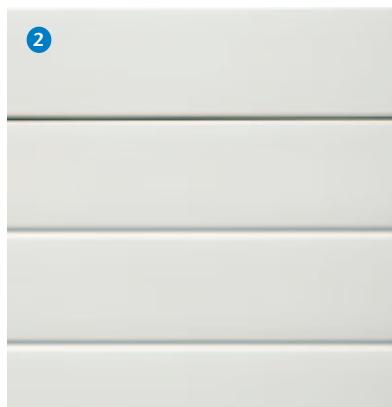
Choose the dimensions, colour and windows

Micro profiled panel structure

The panel skin design of KONE Sectional Overhead doors gives the building design a unique extra cachet. The micro profiling finish of the outer skin creates a stylish optical effect. The steel outer skins can be powder-coated in an extensive range of RAL colours. The panel is highly resistant to weathering.

The right colour for every architectural requirement

KONE Sectional doors can be painted to suit individual corporate colour schemes. When ordered with standard micro profiled panels, doors are available in 20 standard RAL colours. The doors can also be supplied in a wide variety of RAL colours at extra cost. Colours that are not available in the RAL system can also be made to order if a colour sample is available.



Three finishes are available:

1) Standard stucco outside with ribs 2) Smooth with ribs (standard inside), 3) Micro profile.

STEP 2 - CHOOSE THE DOOR LEAF CONSTRUCTION

KONE Sectional door leaf options

Choosing a window type

When choosing a window, there are four criteria to be considered. If people are working inside, large windows create a more pleasant working environment. In hot or cold weather, thermal insulation is important. In this case, smaller windows and the insulated standard door leaf are a good choice. If protection from intruders is a consideration, smaller windows with restricted height are the best choice. In cases where appearance is important, round windows can add a distinctive character to the door.

Windows and glazing

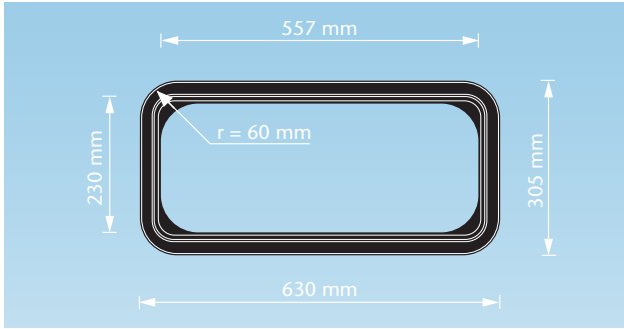
The standard plastic windows are rectangular with either rounded or 90 degree corners. The windowpane is double-glazed. We can also supply high-security rectangular windows with rounded corners. These windows are only 150 mm in height. The standard transparent panels are made of anodized aluminium and feature rectangular window partitions with either single- or double-glazed transparent windowpanes (frosted finish optionally available). Round windows are optionally available for doors where more a modern design is required.

KONE Sectional Overhead doors can be fitted with separate windows or window sections for natural light and vision.



ISO window with rounded corners

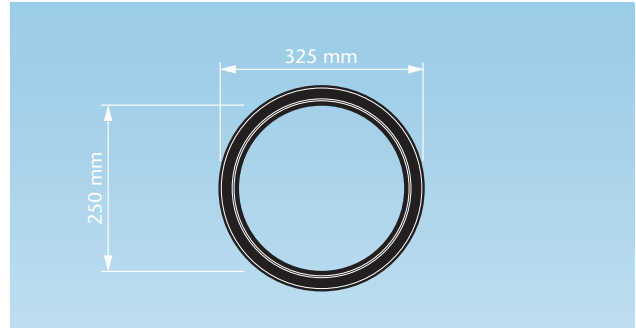
630 x 305 mm, r=60 mm



Pane design: **Double pane**
Pane thickness: **2 - 25 - 3 mm**
Pane material: **Plastic**
Window frame material: **Moulded black plastic**
Insulation value: **k= 2.8 W/ m²K**
Transparency: **100%**
Transparent surface area: **0.15 m²**

Round ISO windows

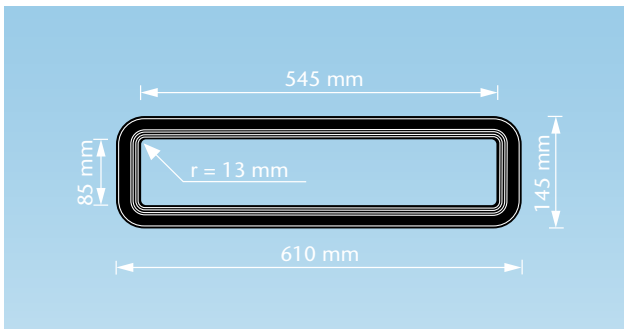
Ø 325 mm



Pane design: **Double pane**
Pane thickness: **2 - 25 - 3 mm**
Pane material: **Plastic**
Window frame material: **Moulded black plastic**
Insulation value: **k= 2.8 W/ m²K**
Transparency: **100%**
Transparent surface area: **0.051 m²**

Restricted-height ISO windows,

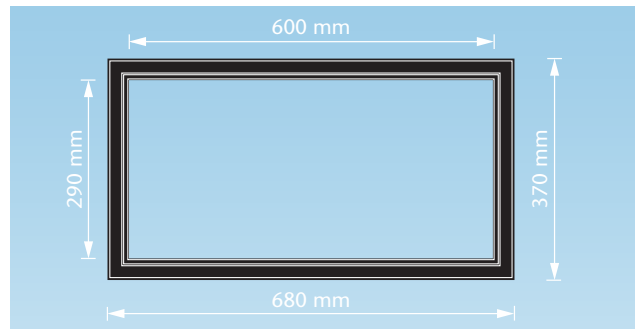
610 x 145 mm, r=43 mm



Pane design: **Double pane**
Pane thickness: **2 - 25 - 3 mm**
Pane material: **Plastic**
Window frame material: **Moulded black plastic**
Insulation value: **k= 2.8 W/ m²K**
Transparency: **100%**
Transparent surface area: **0.046 m²**

ISO window with rectangular corners

680 x 370 mm

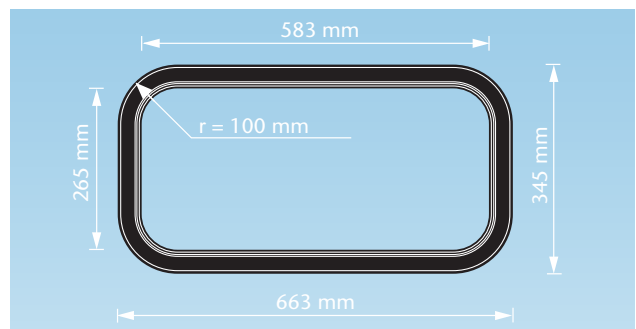


Pane design: **Double pane**
Pane thickness: **2 - 25 - 3 mm**
Pane material: **Plastic**
Window frame material: **Moulded black plastic**
Insulation value: **k= 2.8 W/ m²K**
Transparency: **100%**
Transparent surface area: **0.17 m²**

ISO window with rounded corners

663 x 345 mm, r=100 mm

Pane design: **Double pane**
Pane thickness: **2 - 25 - 3 mm**
Pane material: **Plastic**
Window frame material: **Moulded black plastic**
Insulation value: **k= 2.8 W/ m²K**
Transparency: **100%**
Transparent surface area: **0.15 m²**



STEP 2 - CHOOSE THE SECTIONAL DOOR TYPE

KONE Full Vision sectional door leaf



The KONE Full Vision sectional door leaf, for showrooms or buildings where many people are working, provides good visibility and allows in natural light.

Improved visibility and natural light

The KONE Full Vision door lets in plenty of natural light, for a more pleasant working environment inside. With many colours and finishes available, it is suitable for any building façade. By providing better visibility in and out, it can improve traffic flow and prevent collisions, since drivers can see traffic coming from the other direction.

Aluminium profiles

Specially dimensioned aluminium profiles create a framework that can accept a variety of infill materials. There are almost no styling and specification limitations as the range of panel infill options includes translucent or opaque, partitioned or non-partitioned, tinted or transparent, insulated or with ventilation openings. A wide variety of materials and designs is available to suit specific customer and application requirements.

KONE Full Vision Eco doors

The KONE Full Vision Eco door is constructed with 60 mm panels with double or triple glazed windows. This provides maximum insulation while protecting against condensation and minimizing noise transfer.

The KONE Full Vision Eco panels are constructed from two aluminium profiles that are thermally insulated from each other using special double rubber profiles. This high-quality seal ensures that the inner and outer skins are not in direct contact, preventing condensation from forming on the inner skin and providing maximum insulation properties.



Double bottom seal for optimum sealing to the surface of the floor.



Triple glazing, plastic panel material, total thickness of 40 mm.



Panel joint between ISO panels; a good seal/joint is also important here. The inner and outer skins are not in direct contact with each other, leading to good insulation performance and preventing the formation of condensation on the inner skin.



Glazing materials

The transparent windowpanes are made of acrylic or polycarbonate, available in single pane and double glazed configurations. These materials have a high degree of transparency and are resistant to scratching. In the double glazed polycarbonate/acrylic configuration, the polycarbonate pane is placed on the outside because of its high impact resistance.

KONE sets new industry standards with its innovative 5-pane polycarbonate glazing. This material offers outstanding impact resistance, high flexural strength and excellent dimensional stability. Five attractive colours make it easy to create a suitable colour combination for all types of façade cladding.

Colours

The aluminium sections for these full vision door panels are supplied with a silver-anodised finish as standard. This is an attractive, corrosion-resistant finish with excellent weather resistance. The panels can also be painted in different colours upon request.

Door measurements

The KONE Full Vision sectional overhead doors are available in a width range from 2000 to 8000 mm, with heights from 2250 up to 6000 mm.

STEP 2 - CHOOSE THE DOOR LEAF CONSTRUCTION

KONE Full Vision sectional door window element options



Single pane transparent infill material

Infill design: **Single pane**
Infill material: **Acrylic/polycarbonate*/safety glass***
Infill material thickness: **2.5, 3.0 or 4.0 mm**
Window bead: **Aluminium**
Section material: **Anodised aluminium profile (E6/EV1)**
Section height: **488 – 732 mm**
Insulation value: **$k = 5.5 \text{ W/m}^2\text{K}$**
Transparent surface area: **Depends on section height**
Transparency: **100%**



Double pane transparent infill material

Infill design: **Double pane**
Infill material: **Acrylic/polycarbonate***
Infill material thickness: **2.5 - 15 - 2.5 or 3 - 14 - 3 mm**
Window bead: **Aluminium**
Section material: **Anodised aluminium profile (E6/EV1)**
Section height: **488 – 732 mm**
Insulation value: **$k = 3.5 \text{ W/m}^2\text{K}$**
Transparent surface area: **Depends on section height**
Transparency: **2 x 100%**

**Optional*



Double pane partially transparent infill material

Infill design: **Double pane**
 Infill material: **Acrylic**
 Infill material thickness: **2.5 - 15 - 2.5 mm**
 Window bead: **Aluminium**
 Section material: **Anodised aluminium profile (E6/EV1)**
 Section height: **488 – 732 mm**
 Insulation value: **$k = 3.5 \text{ W/m}^2\text{K}$**
 Transparent surface area: **Depends on section height**
 Transparency: **outer pane frosted, inner pane 100% transparent**



Single wall perforated infill (round hole)

Infill design: **Single wall sheet**
 Infill material: **Smooth perforated aluminium sheet**
 Sheet thickness: **2 mm**
 Perforations: **Ø10 mm, pitch 15 mm, open surface area 40%**
 Bead material: **Aluminium**
 Section material: **Anodised aluminium profile (E6/EV1)**
 Section height: **488 – 732 mm**



Single wall perforated infill (square hole)

Infill design: **Single wall sheet**
 Infill material: **Smooth perforated aluminium sheet**
 Sheet thickness: **2 mm**
 Perforations: **square 10 x 10 mm, open surface area 70%**
 Bead material: **Aluminium**
 Section material: **Anodised aluminium profile (E6/EV1)**
 Section height: **488 – 732 mm**



Double walled opaque infill

Infill design: **'Sandwich' construction**
 Infill material: **Stucco**
 Infill thickness: **20 mm**
 Bead material: **Aluminium**
 Section material: **Anodised aluminium profile (E6/EV1)**
 Section height: **488 – 732 mm**
 Insulation value: **$k = 3.1 \text{ W/m}^2\text{K}$**

STEP 3 - CHOOSE THE TYPE OF OPERATION

Drives and door operation

You can choose between various electric drive systems, a chain hoist and a pull-cord for door operation. The sectional door is fitted with mechanical and electrical safety devices that comply with the EN13241-1, EN12453-1 and EN12604 norms.

High-speed drive

A high-speed drive expands the range of applications for sectional doors. Short opening and closing times reduce heat losses and substantially increase transit speed. The system is available with pushbutton control and variable speed control, and is suitable for remote operation. This system can be used with door leaf areas of up to 25 m².

Electric drive with fully automatic operation (Impulse)

Drives with impulse operation are suitable for sectional doors that are operated very frequently. During opening and closing, the door automatically moves to the appropriate end position. When in the fully open position, the entire door opening is available. An obstacle

detection system (safety edge) is incorporated in the bottom seal of the door. When the photocell beam of the safety edge system is broken by contact between the seal and an obstacle, the sectional door will stop and reverse. This system is suitable for a door leaf area of up to 50 m².

Electric drive with semi-automatic operation (Dead man)

This is a good choice for sectional doors that are not operated very frequently. The upward movement of the door is initiated by pressing and releasing a button. The sectional door opens and stops when it reaches the upper end position. The button for the downward movement has to be pushed and held down (dead man operation). This type of operation is suitable for sectional doors of up to 50 m² door leaf area.

Chain hoist operation (1:4 ratio)

Chain hoist operation is suitable for sectional doors that are not operated very frequently. A chain tensioner is included, further optimising ease of operation and safety. This type of operation is suitable for medium-sized sectional doors of up to 25 m² door leaf area.

Pull-cord operation

Pull-cord operation is suitable for smaller sectional doors that are only used rarely. This type of operation is suitable for sectional doors of up to 12 m² door leaf area.



Impulse drive



Standard operator for dead man as well as impulse motor



Chain hoist operation



Pull-cord operation

STEP 4 - CHOOSE THE SAFETY OPTIONS

Safety devices

Electrical safety devices

Obstacle detection system (standard on Impulse motor system)

The maximum force the obstacle detection system (safety edge) may exert is defined in the EN13241-1 norm.



Stationary photocell

If a door has been automated to the extent that the door opening is not in the operator's direct line of sight when the door is being operated, the system must be equipped with an extra stationary safety photocell.



Running ahead optical obstacle detection system (for the pass door with low still, 15 mm)

The bottom of the sectional door is protected with an optical obstacle detector running ahead of it, with double sensors. This detector ensures contact-free reversal of motion as soon as any obstacle is detected in the door opening.



Slack cable safety (standard for all motor systems)

This safety device is fitted to both wire cables and immediately switches the electric drive off if one of the wire cables breaks or slackens. This complies with EN13241-1 & EN12453-1.



Mechanical safety devices

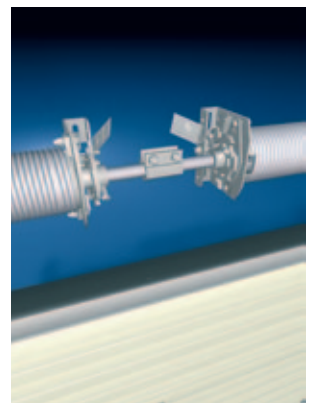
Cable break safety

The cable break safety is constructed in such a way that the door is immobilised in the tracks if one of the cables breaks. This prevents the door leaf from dropping down uncontrollably.



Spring break safety

The spring break safety immobilises the spring shaft if a torsion spring breaks. This prevents the door leaf from dropping down uncontrollably.



STEP 5 - CHOOSE A PASS DOOR

Pass doors, for unimpeded access and energy saving

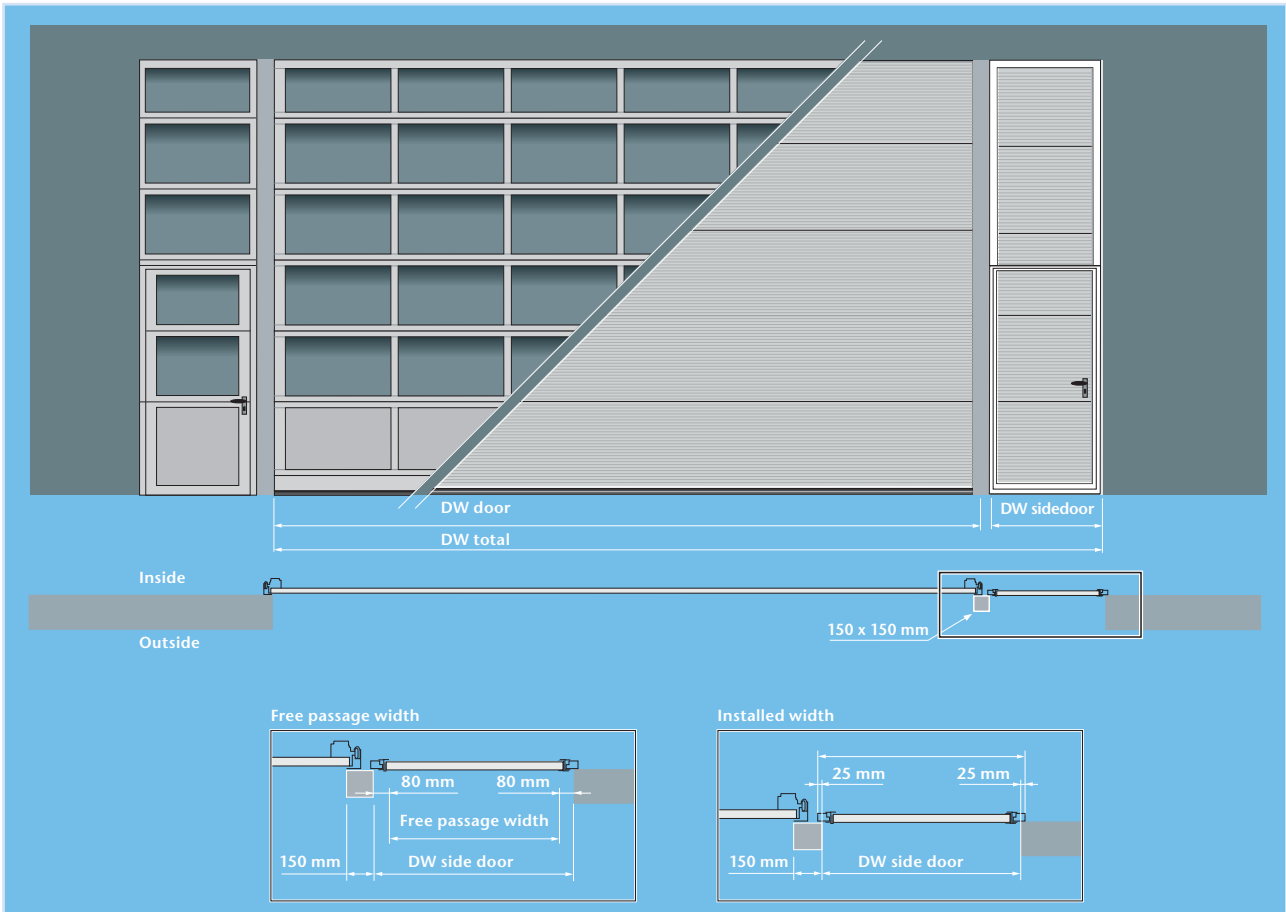
A pass door can be either in the main sectional overhead door or mounted as a separate door beside the main door in a permanent door frame.

The pass door (wicket door) or side door reduces usage of the main sectional door, reducing heat losses from the building and saving energy.

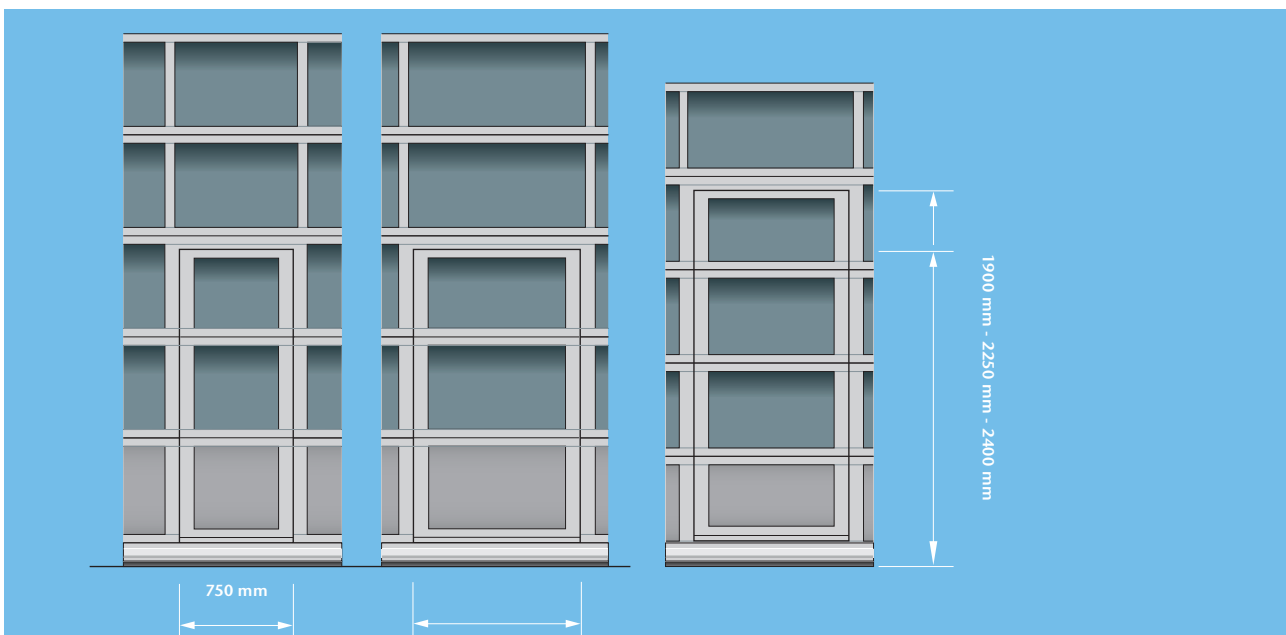
Integral pass doors, which always open outwards and are fitted with automatic door closers, are supplied either in DIN-left or DIN-right configuration. Side doors are supplied either in DIN-left or DIN-right configuration, can open either outward or inward and are fitted with an automatic door closer if required.



A built-in pedestrian door is also available as an option with a sill lowered to 20 mm. The new, virtually sill-free pedestrian doors offer safe unimpeded access for pedestrians. The sill, which is bevelled on either side, provides access for equipment on wheels.



Side doors are not fitted with a threshold. The recommended minimum height is 2000 mm. The recommended width is 1000 - 1250 mm.



The height of the wicket door depends on the height of the sections. The minimum height is 1900 mm. The width can be 750 - 1200 mm. The maximum height is 2250 mm for KONE Sectional doors and 2400 mm for KONE Full Vision doors.

KONE – your dedicated partner

With our wide range of door solutions, we can be your trusted partner from planning to installation and to maintenance, for the lifetime of your building.

Right from the start

The solution begins with our wide selection of doors. In addition to sectional overhead doors, we also supply loading bays, gates and barriers. Our sales people can give advice when selecting the best solution for you, including information about current and coming norms and regulations.

We can also help when planning the smooth flow of people and goods in your building, as well as providing several energy-saving solutions.

We supply DWG drawings, as well as sustainability certifications and energy-class information. From our broad range of solutions and colours, it is easy to select doors that will provide a similar look and feel throughout the building.

Over 100 years of People Flow expertise

Founded in 1910, KONE manufactures, installs, maintains and modernizes elevators, escalators and automatic building doors. We have over 34,000 employees in 50 countries.

When you choose KONE products, you get the highest standards in quality, safety, design and durability. KONE door solutions are based on quality materials and expertise achieved during 35 years of experience. These doors meet CE norms, ISO 9001 and ISO 14001, and they are TÜV approved.

We keep thousands of parts in stock, available for dispatching within 24 hours. For minimum downtime, the most frequently used parts are available in the technician's van.

Service for 350,000 doors globally

We provide service for 350,000 doors - and for the millions of people who use them. Spare parts for KONE doors and other brands' doors are available from KONE global spare parts operations, ready for dispatching within 24 hours. The most frequently used parts are available in the technician's van, for faster service and minimal downtime.

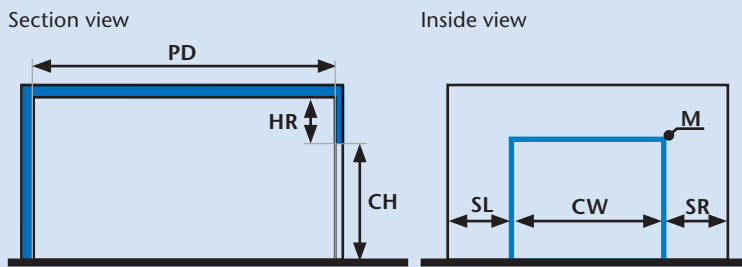
KONE in XX Country

In XX Country, we have offices in XX Cities, with xx employees. We maintain all brands of doors, including those from other suppliers. Our service is based on preventive maintenance, to solve problems before they cause problems for you. If you need assistance or spare parts, the KONE Customer Care Center is open 24/7.



ORDERING OPTIONS

Measurements (mm)



- CH Clear Height
- CW Clear Width
- PD Projection Dim.
- HR Headroom
- SL Space Left
- SR Space Right

- M Mounting Frame
- Wood Concrete Briqs Steel

Panel

Panel type

- 60 mm
- 40 mm

Panel color

- | | |
|-----------------------------------|-----------------------------------|
| <input type="checkbox"/> RAL 1013 | <input type="checkbox"/> RAL 7016 |
| <input type="checkbox"/> RAL 2001 | <input type="checkbox"/> RAL 7022 |
| <input type="checkbox"/> RAL 1021 | <input type="checkbox"/> RAL 7044 |
| <input type="checkbox"/> RAL 3000 | <input type="checkbox"/> RAL 8014 |
| <input type="checkbox"/> RAL 5003 | <input type="checkbox"/> RAL 9002 |
| <input type="checkbox"/> RAL 5010 | <input type="checkbox"/> RAL 9005 |
| <input type="checkbox"/> RAL 5002 | <input type="checkbox"/> RAL 9006 |
| <input type="checkbox"/> RAL 6002 | <input type="checkbox"/> RAL 9007 |
| <input type="checkbox"/> RAL 6009 | <input type="checkbox"/> RVS |
| <input type="checkbox"/> RAL 7005 | |

Number of panels

<input type="checkbox"/> 7	
<input type="checkbox"/> 6	
<input type="checkbox"/> 5	
<input type="checkbox"/> 4	
<input type="checkbox"/> 3	
<input type="checkbox"/> 2	
<input type="checkbox"/> 1	



window

- 680x370
- 563x345 R=100
- 563x305 R=60
- 510x145 R=13
- ø325
- 680x370



full vision panel

- Double acrylic
- Double anti scratch
- Double polycarbonate
- Double acrylic, frosted finish

Not possible

Operator

- Deadman 400V / 230V
- Impulse 400V / 230V
- Handchain
- Cord



KONE provides innovative and eco-efficient solutions for elevators, escalators and automatic building doors. We support our customers every step of the way; from design, manufacturing and installation to maintenance and modernization. KONE is a global leader in helping our customers manage the smooth flow of people and goods throughout their buildings.

Our commitment to customers is present in all KONE solutions. This makes us a reliable partner throughout the life cycle of the building. We challenge the conventional wisdom of the industry. We are fast, flexible, and we have a well-deserved reputation as a technology leader, with such innovations as KONE MonoSpace®, KONE MaxiSpace®, and KONE InnoTrack™. You can experience these innovations in architectural landmarks such as Capital City in Moscow, Hongqiao Transport Hub in Shanghai, North LaSalle in Chicago and Tour First in Paris.

KONE employs on average 35,000 dedicated experts to serve you globally and locally in over 50 countries.

KONE Corporation
www.kone.com