



lindab | we simplify construction



Lindab **Industrial Doors**

Reliable, environmentally friendly,
door solutions





14



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Form, function and finish are all key to the perfect door. Protecting goods, production and employees may be the main goal but the door should also look good from the outside. Lindab Industrial Doors are made to measure in Denmark so you can rest assured that the quality, design and dimensions will be a perfect fit for your building.





Lindab

Industrial Doors

There are plenty of advantages in choosing a door solution from Lindab. Here are just a few:

- EPD environmental product declaration with cradle to grave analysis
- Unique extruded polystyrene core material that can be recycled and emits 50% less CO₂ during production compared to polyurethane foam doors
- Many design options
- Customised and flexible door solutions that are just right for your building



Lindab Industrial Doors - Giving your building just the right finish

Lindab offers a complete variety of doors suitable for industrial and agricultural use as well as for the service industry and in sports centres.

The variety of doors we offer, are all produced at our own factory in Denmark where we put to use our many years of experience and our extensive knowledge to ensure that we find the right solution for you, regardless of your requirements or the nature of your project.

We are happy to offer advice on safety, environment and design. We will assist you selecting the ideal door solution. Lindab Industrial Doors draws upon many years of experience, and we we have learned through understanding customer requirements in terms of safety, environment, quality and design. Your door should both complement the facade of your building as well as the surroundings with the right properties to keep the goods and employees behind it secure. We help you choose the right door solution through recognising your needs.

One solution – one supplier. Lindab Industrial Doors are manufactured to measure and our range includes both insulated and panoramic doors, with steel and aluminium exteriors as well as a wide range of shades to choose from.

Our doors are easily combined with Lindabs facade panels to obtain a perfect visual appearance. Function, high quality, design and finish. From one supplier.

Choose the right door solution. Choosing correctly is easy when you understand what is needed. This can also be said about choosing a door solution for your building, and here at Lindab we are already on the right track.

We look first of all at what requirements the door must fulfil, taking into account the conditions of the building itself and its surroundings.

For example, in a heated production hall, insulation would be crucial to avoid heat loss and condensation.



At Lindab, we set high standards for ourselves and for the quality of our solutions. We take the advice that we give to you as a customer even more seriously. We are happy to help you through the entire process from design to installation.



10 GOOD REASONS to choose Lindab

- 1** We are available for consultations throughout the entire building process, from project planning to choosing the design and materials.
- 2** We offer made to measure door solutions from our factory in Denmark with short delivery times.
- 3** We use special seals which reduce heat loss and draughts and eliminate thermal bridges.
- 4** Our doors have water-repellent, insulation and have a structurally strong core made from extruded polystyrene.
- 5** An environmentally friendly solution that makes the doors 98 percent recyclable.
- 6** We offer industrial doors to match Lindab's facade panels and interior doors.
- 7** Freedom to choose between aluminium and steel sections in a wide range of colours.
- 8** Optimum safety with finger-protection all approved to the latest standards.
- 9** Lindab has drawn up an Environmental Product Declaration so developers and contractors can rest assured that we adhere to sustainable construction principles, including DGNB and BREEAM, and we ensure that our environmental impact is minimal - from cradle to grave. The core material in our doors ensures optimal resource consumption and our production uses green energy out of respect for the environment.
- 10** Extended warranty option with service agreement.





Door type LDI - insulated

Get the best insulation



Door type LDI - insulated

Get the best insulation

If insulation is the most important requirement for your door solution, then choose an LDI door. They are constructed of 46 mm thick insulated sections of extruded polystyrene with either a steel or aluminium surface.

The wide range of standard colours and options for fitting windows and wicket doors also provide countless possibilities in designing just the door for your individual building.

Should you have any special requirements or wishes that fall outside our standard product range, we have plenty of options to fulfil them.

Our in-house production at our factory in Denmark guarantees fast delivery as well as custom painting or any other special requests.

LDI doors from Lindab provide optimal insulation and heat loss and draughts around the door are reduced to an absolute minimum. Choose between steel and aluminium surfaces and from many different colours.

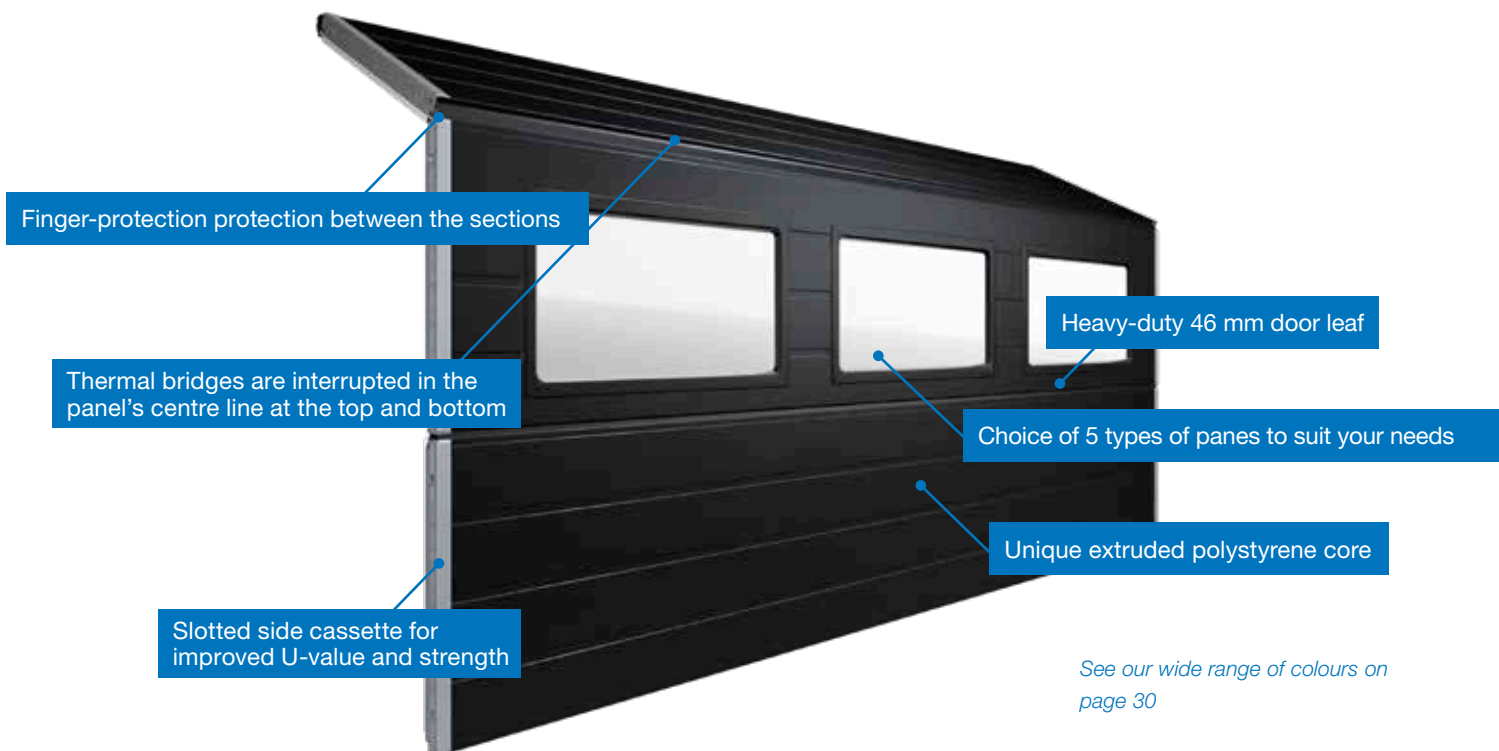




LDI doors offer maximum insulation. The insulated sections are 46 mm thick and really retain the heat in the warehouse, workshop or wherever it's needed to be effective. These sections can be combined in various ways, so it is always possible to adapt a LDI door to your individual building to suit both size and overall appearance.

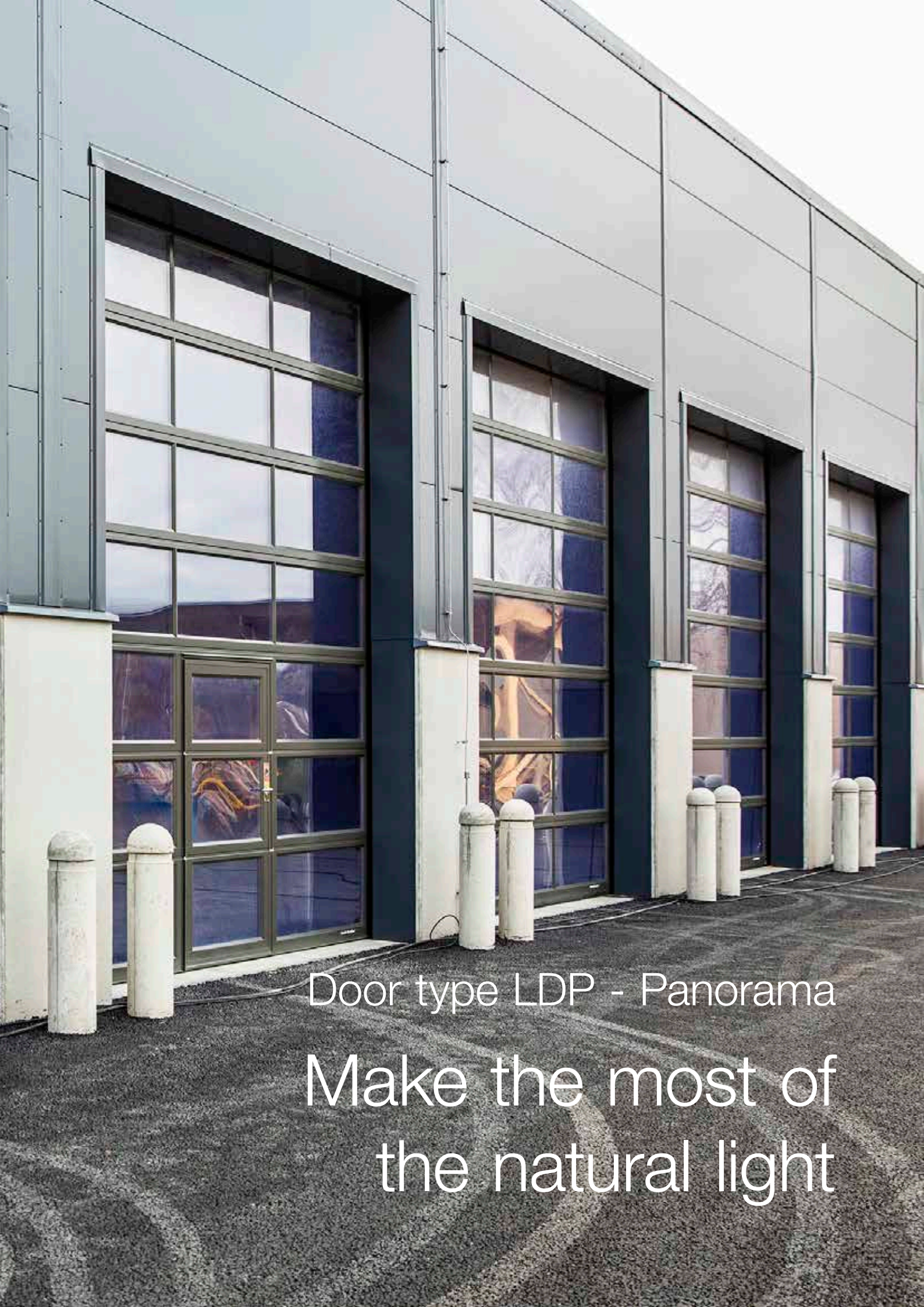


The insulated sections of LDI doors can be combined in countless ways



See our wide range of colours on page 30





Door type LDP - Panorama

Make the most of
the natural light



Door type LDP - Panorama

Make the most of the natural light

While a door should protect everything and everyone behind it, this does not mean that everything outside it must be kept out of view. LDP doors offer you a solution which allows light into the building and providing a view. The beautiful architectural finish is also to be appreciated.

LDP panoramic doors are ideal for buildings where employees or visitors will benefit from natural light, such as for displays or exhibitions. They are made of extruded aluminium profiles, and you can choose freely from our wide range of window types and adjustable section heights. You can also add a wicket door and sections with closed, insulated panels to the otherwise transparent solution.

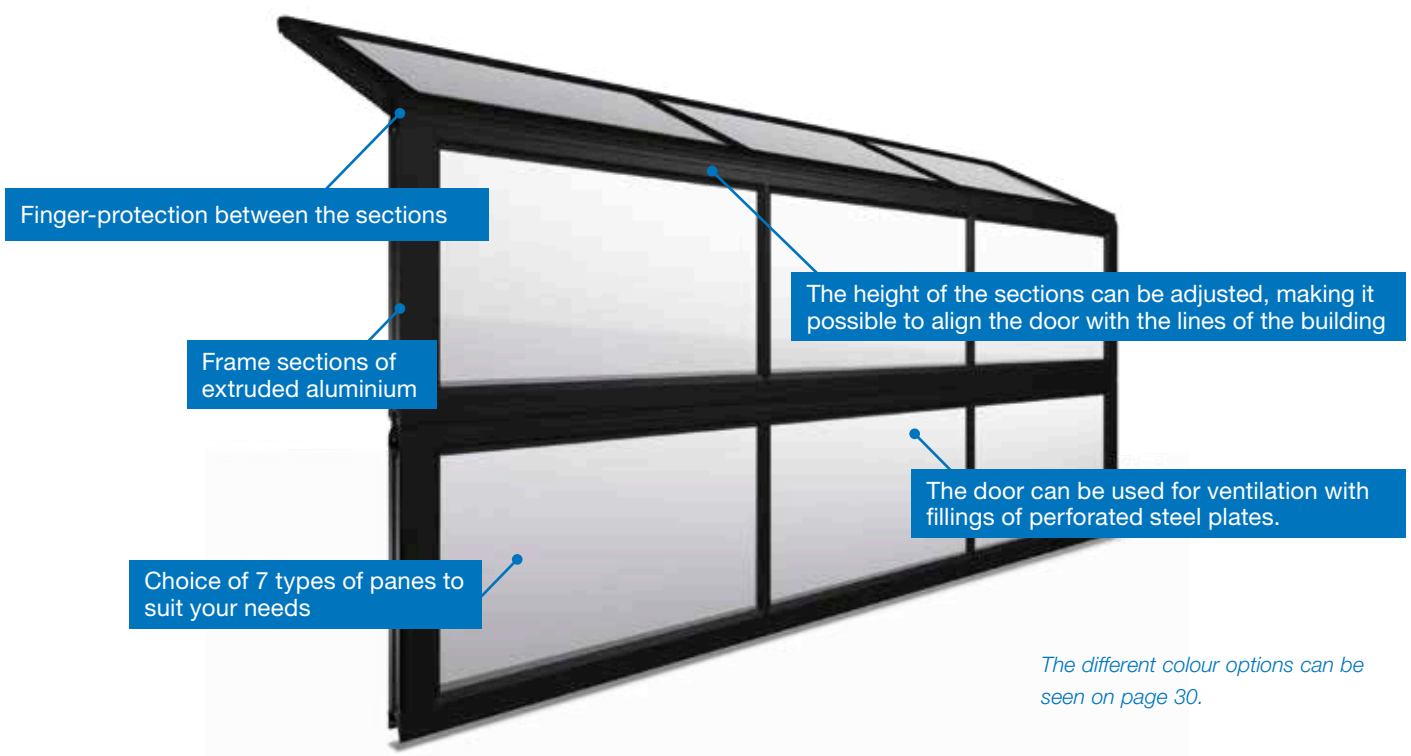
LDP doors from Lindab are a useful solution, allowing natural sunlight indoors while still being sealed off from the elements. The LDP solution also gives an attractive finish to your facade and building.





In many buildings, the door doesn't just have to keep the heat in. It also needs to let natural sunlight in to the people working behind it, and it may also need to give people outside the opportunity to see what's going on inside. LDP doors can be a great architectural finish in any industrial building.

The LDP door sections can be arranged to meet your requirements for natural sunlight.





Door type LDC – combination

The best combination of insulation and natural light





Port 2



Port 3





Door type LDC – combination

The best combination for insulation and natural light

LDC doors are a combination of LDI and LDP doors types, creating an incredibly harmonious union. Good insulation is achieved while letting in natural light at the same time.

You can choose from a wide range of colour options for the insulated sections with several different designs for the window sections.

How you choose to arrange the sections of the finished door is also completely up to you.

The patented finger-protection and the effective sealings are standard throughout the range of Lindab industrial doors

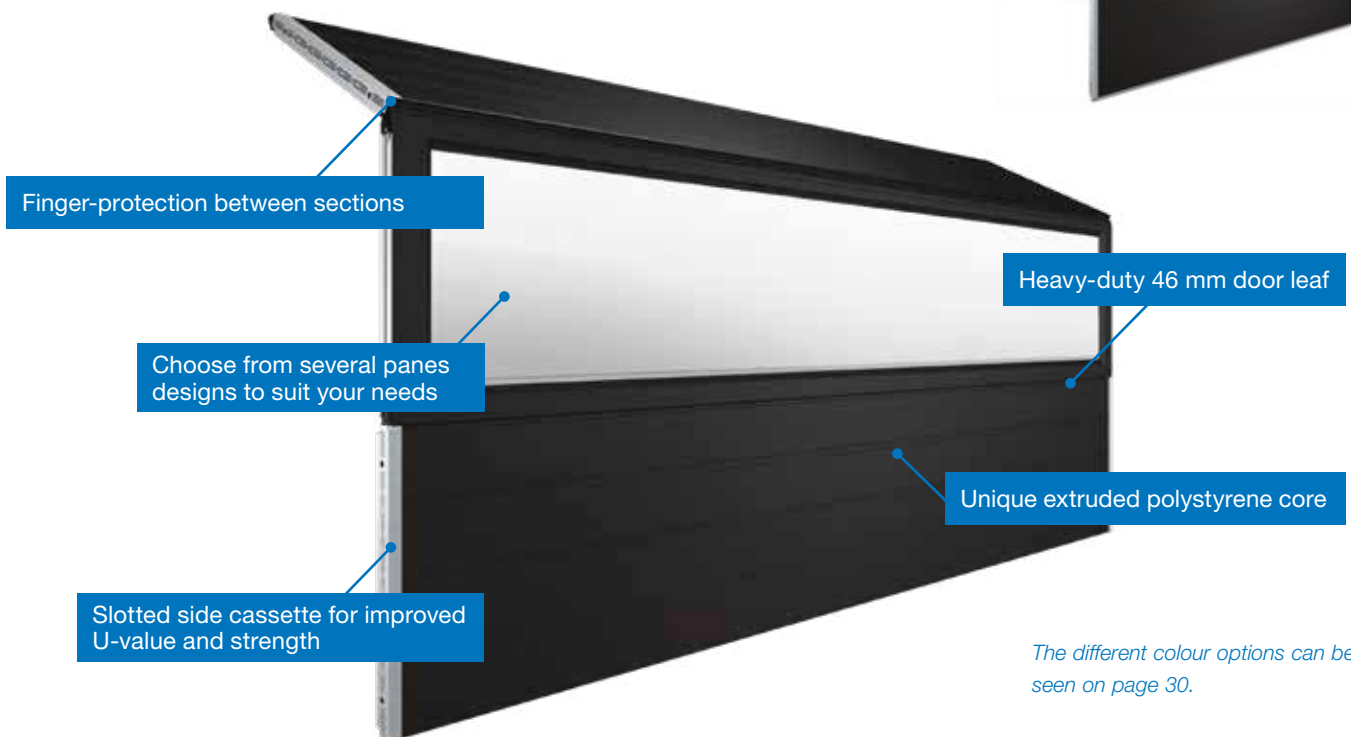


In many buildings, the door doesn't just have to keep the heat in. It also needs to let natural sunlight in to the people working behind it, and it may also need to give people outside the opportunity to see what's going on inside. LDC doors can be a great architectural finish in any industrial building.



When both insulation and natural light are equally important, LDC doors are without doubt the right choice. In LDC doors, you combine insulated sections with window sections to meet both needs best. There are plenty of colour options for the insulated sections with different designs for the window sections, so LDC doors truly allow you to customise the solution to suit your individual building.

LDC doors combine insulated LDI sections with LDP sections.



Finger-protection between sections

Choose from several panes designs to suit your needs

Slotted side cassette for improved U-value and strength

Heavy-duty 46 mm door leaf

Unique extruded polystyrene core

The different colour options can be seen on page 30.

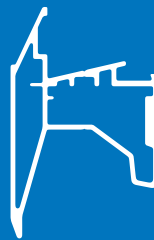


Door type LDC – combination

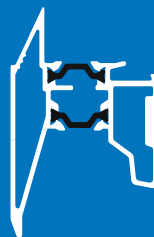
NEW!
Thermal
Fullvision



Traditional profiles in continuous aluminium



Aluminium profiles with interrupted thermal bridge



Fullvision can be selected with or without interrupting the thermal bridge. The difference can be seen to the left.

The profiles with interrupted thermal bridges provide an improved U-value and help reduce the building's heat loss. Thermal Fullvision can reduce line loss by up to 44%. This solution is ideal for heated buildings.

All of the profile types have identical outer dimensions, thus providing greater flexibility in construction.



Experience Fullvision inside and out. This exclusive window section is used specifically in buildings where people are situated behind the door.

Improved
U-value
with Fullvision

You can achieve a unique architectural appearance with Fullvision

Fullvision is an exclusive window section, free of glazing bars for maximum light admission.

With its modern design and clean lines, it has an architecturally stunning appearance.

Fullvision also results in a lower U-value since it reduces the building's heat loss in comparison to traditional panoramic window sections.

Available as double- or triple-pane.



Maximum seal and high insulation performance

Your door should complement the facade as well as the rest of the building. Above all, it should remain tightly sealed to protect what's behind it.

Maximum seal. A wide and pliable top seal, four flexible bottom sealing strips and effective centre and side seals break the thermal bridges, reducing heat loss and eliminating draughts.

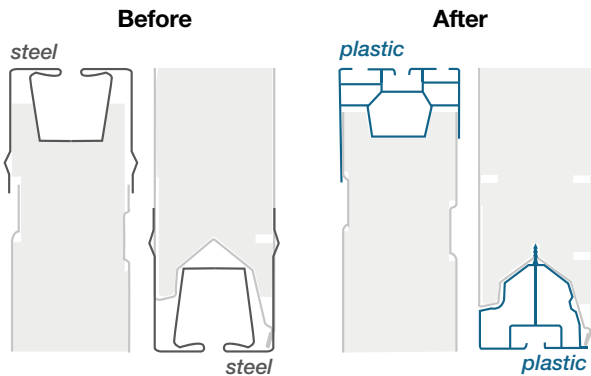
High insulation performance. The LDI panels keep the heat in and the cold out with an insulation performance (U-value) of 0.6 W/m² K. Panels and seals can withstand high winds and protect against draughts.

Robust construction. Extruded polystyrene cores make Lindab Industrial Doors 40% stronger than doors with polyurethane cores. The polystyrene core is water-repellent, which makes the doors frost-proof. The adhesive power between the core and coating panels is twice as strong as before, which increases the door's durability.

Environmentally friendly materials. Lindab doors are built to last but when you do come to choose a new one, the old one can be removed with a clean conscience. Our production methods and materials are environmentally friendly – the extruded polystyrene core material will simply melt down into water in the event of fire and, unlike polyurethane foam, it doesn't emit lethal gases. 98% of the components can be reused, which helps to offset your carbon footprint.

Maximum safety. We have also taken occupational health and safety into consideration. Finger Protection is a profile connector that prevents fingers from getting pinched when the door is closing and it provides an extra tight seal for the joints between the sections. All Lindabs doors are fitted with Finger Protection, which meets both EU standards and the Danish Working Environment Authority requirement.

Up to
17.9%
better insulation performance



The new and energy-saving plastic solution has a cleaner visual appearance and a lower U-value.

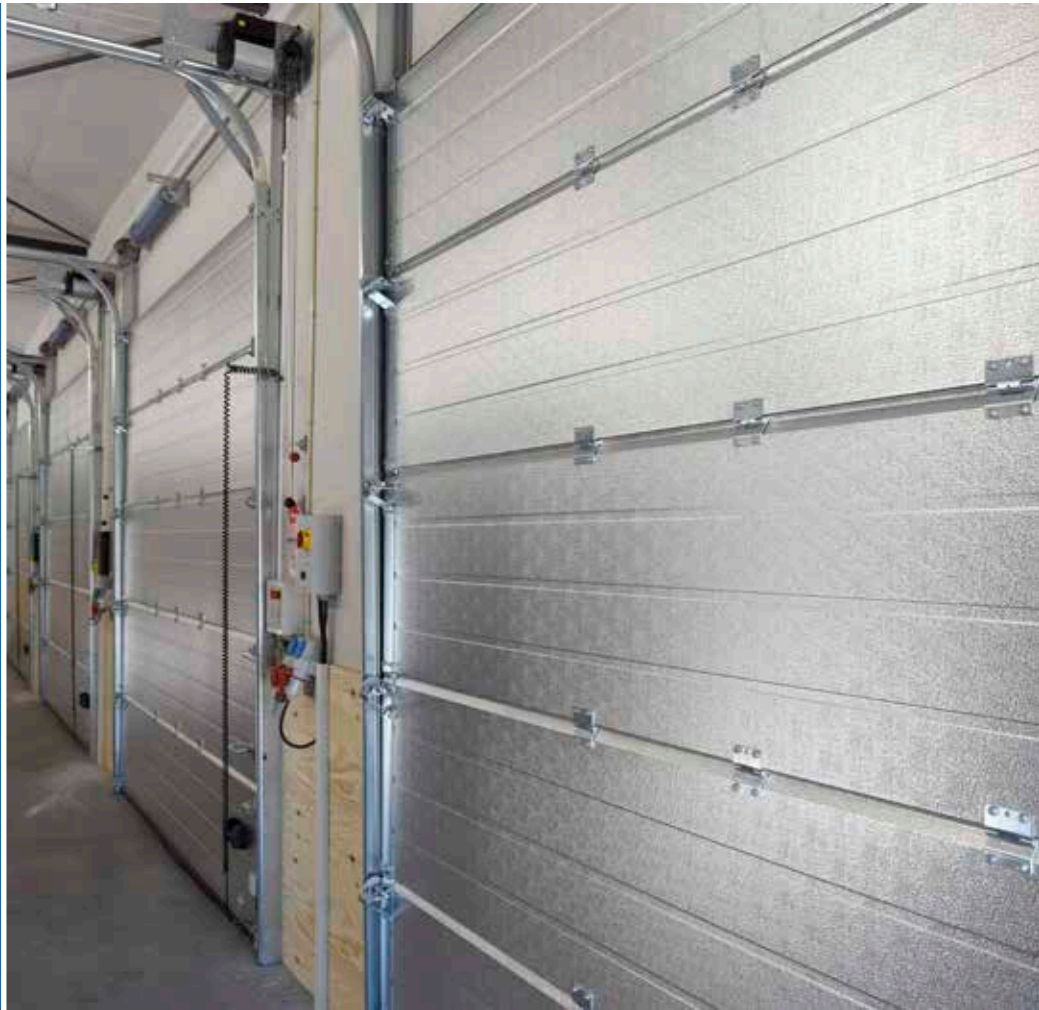
LDI Section	
Before	After
1.07 W/m ² K	0.95 W/m² K

LDI steel door, 4x4 m Before and after, thermal frame and plastic bottom and top	
Before	After
1.40 W/m ² K	1.15 W/m² K

LDC steel door, 4x4 m with two rows of windows Before and after, thermal Fullvision, thermal frame and plastic bottom and top	
Before	After
1.84 W/m ² K	1.55 W/m² K

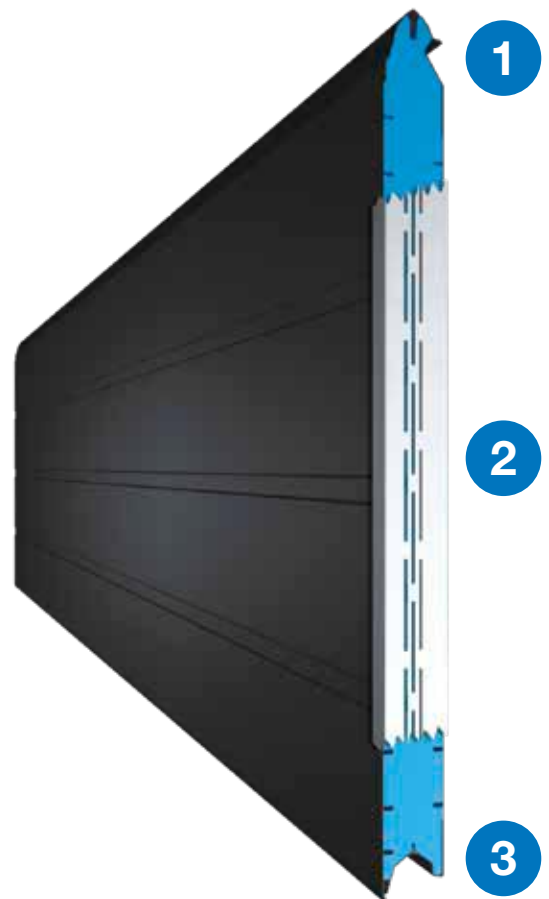
Unique panel solutions packed with advantages

The cores of Lindab Industrial Doors have exceptionally unique properties - all the way around. And we can prove it. We have drawn up an EPD, an Environmental Product Declaration so developers and contractors can rest assured that we follow sustainable construction principles, including DGNB and BREEAM. Minimal environmental impact is assured, from cradle to grave. Our production facilities are ISO 14001 certified and are located in Denmark, where Lindab has produced doors with a polystyrene core since 1995.



Effective thermal bridge interruption

- 1 Thermal bridging at the top of LDI panels is interrupted with a stable, effective intermediate seal.
- 2 The side cassettes of LDI sections are slotted, which reduces the transfer of cold from the outside to the inside.
- 3 Thermal bridging at the base of LDI panels is interrupted by a "Y" shaped intermediate seal.





Lives up to extreme demands, day after day

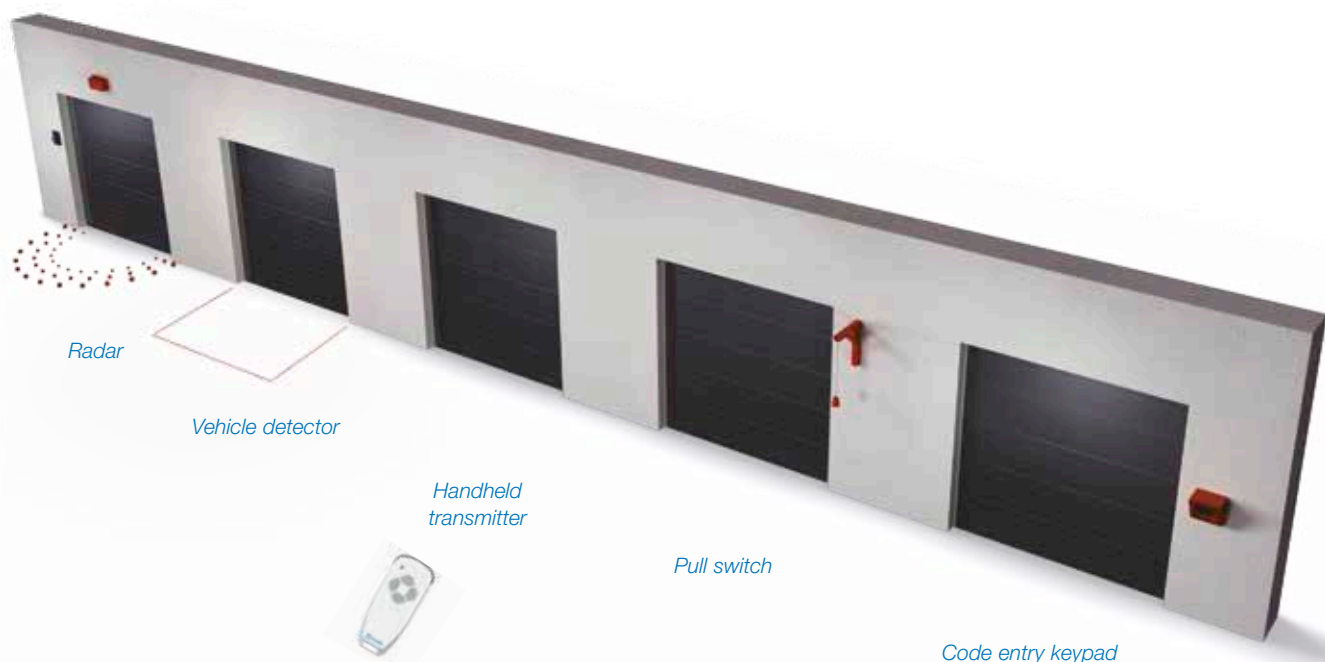
A car wash can be a self-contained business. If the door doesn't work, no money comes in, so the often unmanned facilities need a door that is reliable and requires minimal maintenance. In addition, water, chemicals and fluctuating temperatures can quickly wear away at a door.

Lindab has developed a special solution from environmentally friendly materials which protects the door from these extreme conditions. The construction and carefully selected materials, including a unique core that does not absorb water, result in less downtime, minimal maintenance and a longer service life.

Lindab spring system has a spring cover as well as extra strong flange bearings, that is designed for constant use. Rails, frames, shafts, brackets and bearing plates are all made of galvanised steel. The door leaf is also constructed with stainless steel fittings. Lindab's specially developed car wash control system is equipped with a built-in thermostat-controlled heating element and terminal block for connecting the washing system, which minimises connection errors. Motor and control come with ingress protection class IP65. The door comes with DTHD scratch- and chemical-resistant windows.

In car washes, doors are subjected to extreme causes of wear such as water and chemicals. This places high demands on the materials, and Lindab Industrial Doors meet this challenge head on.





A remote-control door is both easier to use and more efficient. There are several different control options for your electrically operated Lindab Industrial Door. We help you find the control system that makes your workday most efficient.

What do you need? – We have the right solution

An electrically operated door can make daily work much easier, but it requires the right control system.

The control system you need

For example, if you need the door to open automatically when a car or lorry approaches, then a vehicle detector or radar may be the obvious solution.

If the door is accessible to the public, such as in a car wash, there will be special safety requirements to consider.

If there are restrictions on access to the warehouse where the door is situated, then a remote control, keypad or smartphone control may be the right solution.



Whatever your needs, we have the right solution

Intelligent door operation with a high degree of comfort



Electric control type **EHC**

High-end electric control unit with clear text display and emergency stop. It can be supplied with a frequency converter with soft start/stop and speed optimisation. The control system software can be updated when new functions are available.



NEW

Electric control type **HSI**

Control unit with frequency converter for sectional doors. Opens the door up to 5 times faster than a traditional control unit. The solution minimises draughts and reduces the building's energy consumption.



Electric control type **BA2**

Control unit with frequency converter that meets the requirements for replacement air controls in Denmark, including DBI guideline 027 and EN 12101-10.



Electric control type **Nice Soon**

Shaft-mounted basic electric control for doors with less traffic. Soft start/stop and built-in power monitoring.

Electric operation accessories



BK motor

Standard motor with chain for emergency opening in case of power failure.



BF motor

Motor with release clutch for emergency opening in case of power failure. Suitable for evacuation route solutions.



Push button box **BT1**
External keys UP-STOP-DOWN.



Key switch **BN4**
Key switch ON-OFF.
Comes with 2 keys.



Marantec handheld transmitter **DIG572**
2-channel. 868 MHz handheld transmitter.



Marantec handheld transmitter **DIG564**
4-channel. 868 MHz 2 channel handheld transmitter.



Radar **RA1**
Can distinguish pedestrians, vehicles and cross-traffic.



Keypad **DIG525**
Used for opening without remote control or key.



Rail system

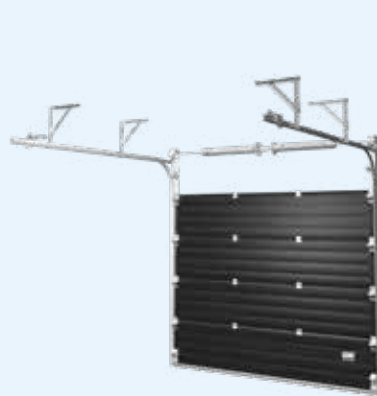
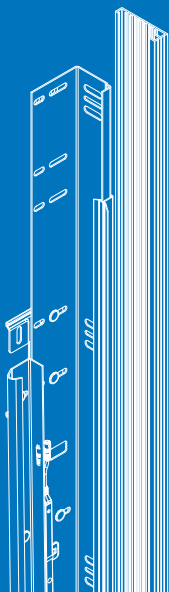
The right track system is important for the functionality, safety, operation and maintenance of your door solution. Lindab Industrial Doors have a range of different track systems, taking into account the available installation space, load and the type of construction.

We will of course advise you on the possibilities and limitations of the various systems and work with you to find the optimal solution for your building. As a general rule, we always recommend having the door leaf run as high as possible in order to take full advantage of the vertical space.

Selecting the right rail system depends on the headroom (O) above the door opening. This is measured from the top edge of the door opening up to the first obstacle, e.g. ceiling, ventilation ducts, etc.

Lindab's standard, high-lift and low-lift rail systems can all be delivered with a roof pitch for optimal use of the room height.

All Lindab rail systems can be delivered with plastic thermal underlay to eliminate the thermal bridge between the outer wall and vertical rails.



Standard rail system

HR = 430-560 mm



High-lift rail system

HR = > 690 mm



Low-lift rail system

HR = 200-250 mm



Vertical rail system

HR = height of opening + 320 mm

Doors



Low-threshold

As a new feature, Lindab can supply overhead doors with wicket doors constructed with a low threshold. The solution is architecturally pleasing whilst providing increased user comfort. The solution is also approved for use in evacuation routes since the threshold is not higher than 25 mm. The integrated light curtain monitors the entire door opening and is one of the most reliable solutions on the market.



Wicket doors

If you do not have separate door by the overhead door, a wicket door can be an ideal solution. We can offer wicket doors for all types of industrial overhead doors and many combinations in terms of both design and colour.



Facade doors

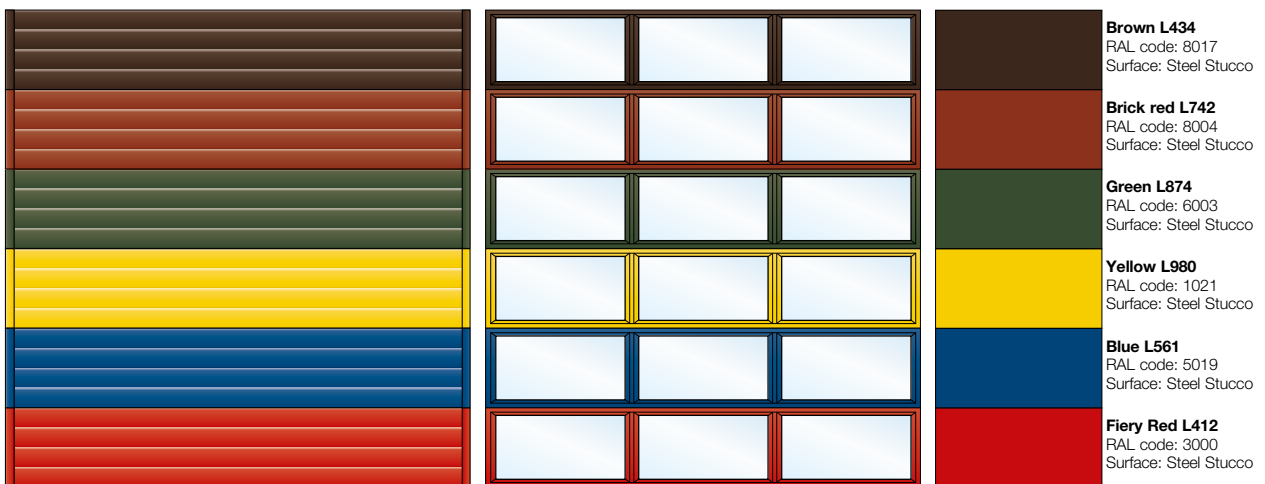
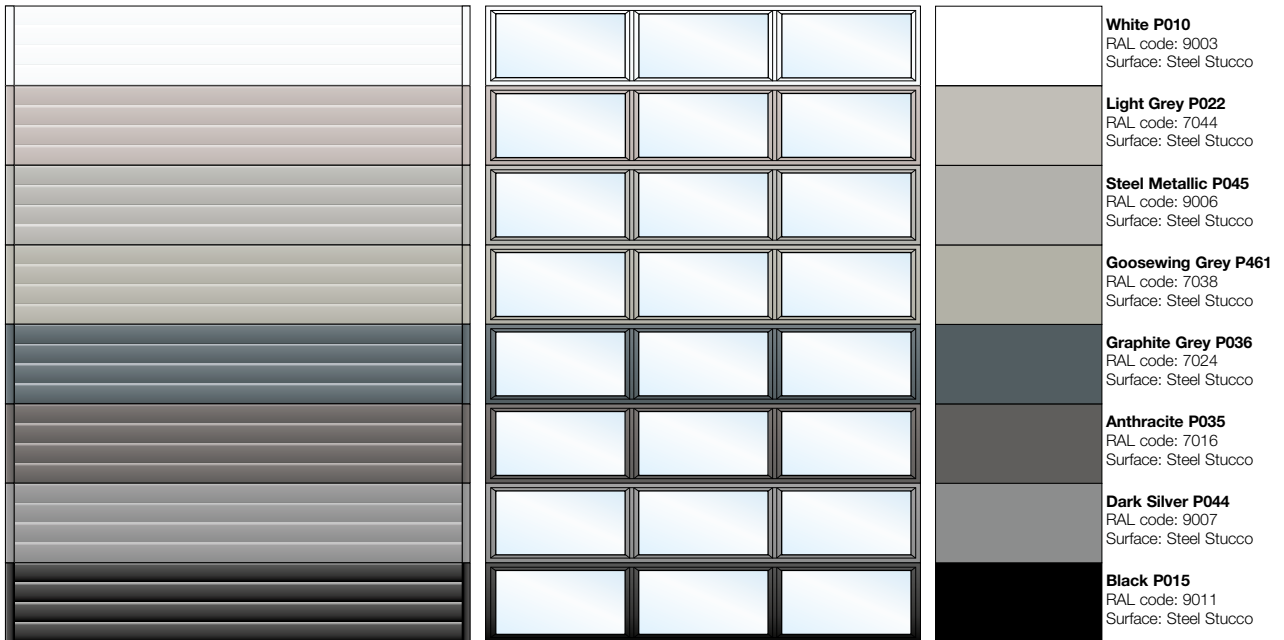
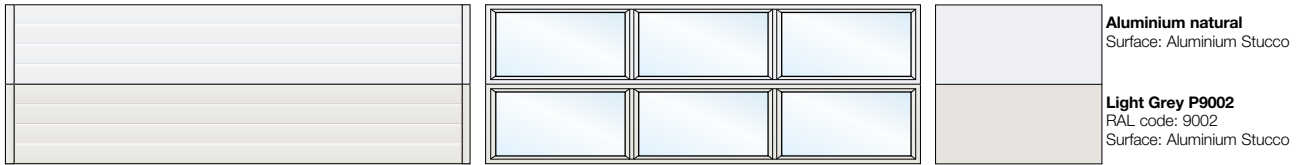
If you want a uniform appearance, a facade door from Lindab is the right choice. The door can be designed to follow the lines of the overhead door. Like the overhead door, the facade doors are CE-marked.

As a new feature, Lindab now offers a thermal facade door, which is the ideal solution for heated buildings. The door is constructed of aluminium profiles with interrupted thermal bridging, which improves the U-value and reduces heat loss.

New
Thermal



Colour programme



The six colours above have a surcharge and delivery time is one week longer.

Note: The printed colours and RAL codes are indicative only. Contact Lindab for a colour sample to find the right colour before ordering. Subject to change. For an additional fee, you can get coloured frame sections and additional special colours are available.

Technical form



		LDI	LDP	LDC
Size:	Width in mm (min. - max.)	950-8000	950-6000	950-8000
	Height in mm (min. - max.)	1250-7850	1250-7850	1250-7850
Material (door leaf):	Aluminium	●	●	●
	Steel	●	-	●
Section size:	Height in mm	600	600	600
	Thickness in mm	46	46	46
U-value W/m ² K (Steel)		0.95		
U-value W/m ² K (Aluminium)		1.11		
Wind resistance (steel)	In accordance with EN 13241-1/EN 12424 (class)	4	4	4
Wind resistance (aluminium)	In accordance with EN 13241-1/EN 12424 (class)	3	4	3
Insulation performance (steel)	In accordance with EN 13241-1/EN 12428 (W/m ² K)	1.2	-	1.6
Insulation performance (aluminium)	In accordance with EN 13241-1/EN 12428 (W/m ² K)	1.4	3.6	1.8
Water resistance	In accordance with EN 13241-1/EN 12424 (class)	3	3	3
Air tightness	In accordance with EN 13241-1/EN 12424 (class)	3	3	3
Wicket door:	Normal step height	●	●	●
	Low threshold (evacuation route)	○	○	○
Colours/surfaces:	Pre-painted standard colour	●	-	●
	Anodised aluminium (frame section)	-	●	●
	All RAL colours	○	○	○
Safety equipment:	Finger-protection	●	●	●
	Cable break safety device	○	○	○
	Spring break safety device	●	●	●
	Safety rollers	●	●	●
	Photocells for electrically operated doors	○	○	○
	Light curtain	○	○	○
	Windows/fillings	○	○	○
Seals:	Side seal	●	●	●
	Side seal with interrupted thermal bridge	○	○	○
	Intermediate seals for sections	●	●	●
	Top sealing	●	●	●
	Bottom sealing	●	●	●
	Interrupted thermal bridge	●	-	-*

● Standard ○ Option - Not possible

* Does not apply to frame section



High speed doors

High speed doors advantages in general: The high opening and closing speed provides the advantage of increased user comfort as well as improved indoor climate. With a high speed door, you avoid unnecessary draught and it's easier to maintain the temperature you want benefiting both your energy bill and your staff.

General product information: Lindab's DR+ high speed door is a fast, self-correcting roll-up door with a flexible PVC curtain, designed for use in all types of installations. It has a self-correcting system which automatically guides the curtain back into the running track after being deployed. This ensures a high level of operational stability with low operating costs. The DR+ is available in a wide range of models with different options and specifications.

The "plug and play" concept allows for easier and faster installation.

The standard casing and roller cover are galvanised in a durable and wear-resistant frame. They are also available in stainless steel at additional cost.

Windows: Choose from several window types: oval, rectangular or full-vision for optimum light influx and comfort. The high speed door is certified and CE marked in accordance with the EN-13241-1 norm.

Controls: Door control in metal housing with frequency converter and programmable parameters. Motor 3x400V, IP55 ingress protection class with powerful motor. Opening speed up to 2.5 m/sec





Attractive solution

Lindab High speed doors are a financially attractive solution. The doors are noise-dampening, maintain stable temperatures and minimise draughts.



Quality product features

Lindab High speed doors are suitable for all types of applications where you need quick-closing doors between two building sections or between indoors and out.

Quality indoor climate, energy savings and user comfort are some of the keywords that apply to this product type.

Standard curtain colours

for 1100 g/m² fabric



White
Like RAL 9010



Red
Like RAL 3002



Orange
Like RAL 2004



Beige
Like RAL 1015



Yellow
Like RAL 1003



Green
Like RAL 6018



Green
Like RAL 6026



Light blue
Like RAL 5012



Blue
Like RAL 5010



Dark blue
Like RAL 5002



Grey
Like RAL 7035



Grey
Like RAL 7037



Grey
Like RAL 7042



Grey
Like RAL 9006



Brown
Like RAL 8014



Black
Like RAL 9005

* = can be delivered insulated



Model DR+

100% safe

- no rigid bottom edge
- durable curtain - 1100 g/m²
- sand ballast in bottom edge

Customised solutions

- company logo on the curtain
- door frame in stainless steel or RAL colour

Speed

- up to 2.5 m/sec
- automatic closing
- inverter for soft start and stop
- high performance

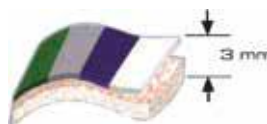
100% self-correcting

- the curtain pops out upon impact
- the curtain is self-correcting and moves back into place automatically
- high performance

Flexible

- wide range of accessory packages

Insulated curtain

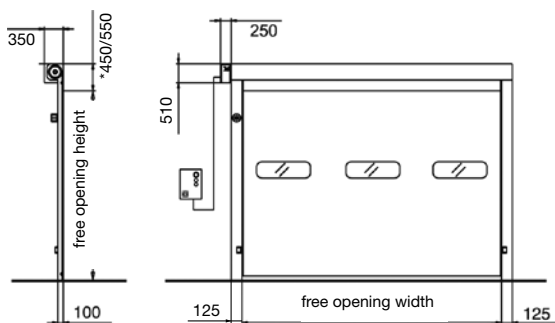


Product specification – DR+

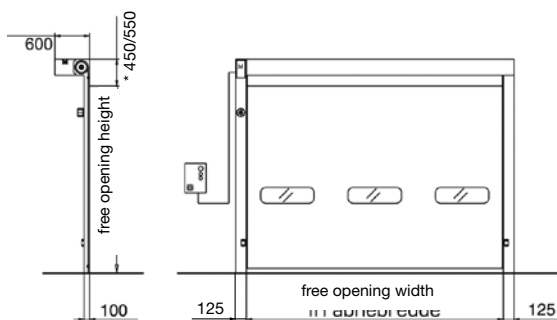
Door dimensions

(Standard)

Gear motor - side



Gear motor - front



*) 450 mm = opening height < 4000 mm
450 mm = opening width < 4500 mm

550 mm = opening height > 4000 mm
550 mm = opening width > 4500 mm

Technical specification

Galvanised frame - self-supporting design.

“Zipper” system with self-lubricating teeth for proper control and tightening of the curtain.

400 V gear motor, automatic brake, suitable for intensive, continuous operation, controlled by inverter with end stop for soft start and stop.

End stop mechanical or encoder

Electrical control in accordance with EU norm in steel cabinet (dim. 300 x 400 x 150 mm) IP55.

Photoelectric safety, infra-red.

Safety photocell built in

Self-correcting safety bottom edge

Technical specifications

Speed up to 2.5 m/sec

Wind load class 2

Operating temperature from -30 °C up to +70 °C.



Good Thinking

At Lindab, good thinking is a philosophy that guides us in everything we do. We have made it our mission to create a healthy indoor climate – and to simplify the construction of sustainable buildings. We do that by designing innovative products and solutions that are easy to use, as well as offering efficient availability and logistics. We are also working on ways to reduce our impact on our environment and climate. We do that by developing methods to produce our solutions using a minimum of energy and natural resources, and by reducing negative effects on the environment. We use steel in our products. It's one of few materials that can be recycled an infinite number of times without losing any of its properties. That means less carbon emissions in nature and less energy wasted.

We simplify construction