



Novo Door Solutions

Beautiful, efficient and affordable solutions



Novoform International Operations

- Novoform production site
- Novoform sales office



Novoform International

Novoform is part of the Sanwa Group. Founded in 1956, now with annual sales in over 60 countries totalling more than € 2 billion and with more than 8,700 employees, Sanwa is the world's largest producer of metal door systems. Sanwa provides everything from: industrial doors, fire protection doors, garage doors, roller shutters and automation. Our products are used around the world in industrial, commercial and residential applications.

For over thirty years Novoform has specialised in many forms of access systems for industrial, commercial and residential buildings.

With a wide choice of different designs, finishes, operation and installation possibilities you get a bespoke solution every time. We take care of the complete process from technical advice to solution development, production, assembly and support on site. All aspects of the project including complete compliance with all relevant standards and legislation are always kept sharply in focus, which saves you a great deal of work.

In addition to industrial doors, draught excluding and fire-excluding doors, Novoform has a full range of Dock Equipment. Our modern dock levellers and shelters guarantee efficient and draught-free loading and unloading of freight vehicles.

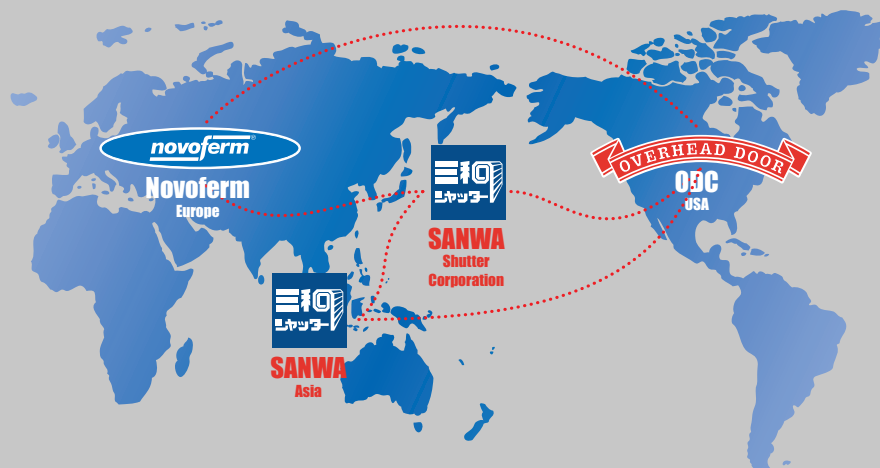




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Attention for the environment

Novoform environmental commitment. In 2009 Novoform signed the Group Charter "Green Solutions". This concerns a package of specific measures for reducing CO2 emissions when producing, delivering, installing and maintaining industrial doors.

Safer doors

All automatic doors fall under the European standard EN 13241-1. Novoform develops and produces new products strictly in accordance with this standard. This will ensure safer operation during installation, daily use and maintenance.



Developed based on demand

All Novoferm industrial doors and services have for a significant part been designed by users. This is the consequence of many years of collaborating with basically all industries in Europe. It applies to industrial doors that the correct choice of brand, type and design is essential. Correctly chosen products can optimise logistics processes and reduce costs. The sectional door is the most commonly used solution to close off an opening of an industrial property. The sectional door offers an attractive appearance, a robust closure mechanism, excellent insulation value and, should we forget, a safe and user-friendly operation for any industrial or commercial property.



Industrial park

Nowadays, visitors to modern industrial and commercial parks are surprised by the elegant design of the buildings. The appearance of commercial premises is not only determined by functionality and efficiency. Special design and exclusive materials that are used are now the norm, rather than the exception. That is why people prefer to call their place of work an industrial *park* rather than industrial *estate*! Municipalities often set additional requirements with regard to the image because industrial parks often border on to residential areas.

The new line of Novoferm sectional doors fits in perfectly with this trend. They provide the modern architect with all the resources and design solutions to make something special from industrial openings.

Non-residential building sector

Novoferm sectional doors are, however, also often used in the non-residential building sector. You will find our doors at fire stations, showrooms, garage workshops, bus depots and distribution centres. Depending on the use and function of the room behind, a fully closed and well-insulated door to a door that is completely made of glass sections when the highest level of natural daylight ingress is needed are selected. An enormous diversity of appearances is created from which to choose due to the combination with colours, panels and infill options.

Thermo sectional door



45 mm panel thickness!

When energy is the determining factor

The Thermo sectional door is made up of 45 mm thick steel sandwich panels. They have excellent thermal insulation. The Thermo sectional door, therefore, offers a good solution for heated warehouse and storage areas. The panels can be provided with different windows. Problem free combinations with Novolux glazed panels can also be created. An integrated wicket door is also an option.

Features

- The insulation coefficient $k = 1.14 \text{ W/m}^2\text{K}$ (for a 4000 x 4000 mm door)
- Noise insulation $R = 24 \text{ dB}$
- Panel heights of 625 and 500 mm with horizontal ribs every 125 mm, supplied in smooth or stucco profiles
- Core made of polyurethane foam, free from CFCs
- Exterior side made of 0.4 mm thick steel plate finished with Galfan® ZA185
- Draught excluders in-between the panels made of UV- and weather resistant EPDM
- Exterior side with 25 μ polyester coating in RAL 9002 as standard
- Interior side with 10 μ polyester coating in RAL 9002 as standard.



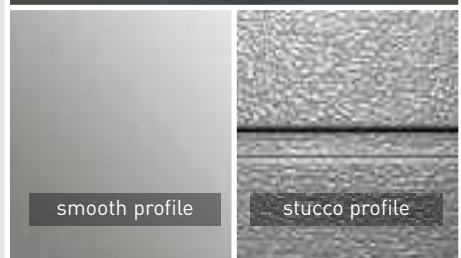
Oval window



Square window



Port-hole



smooth profile

stucco profile

Novolux sectional door



Doors to no less than 8000 x 6155 mm are possible! *

When light is the determining factor

The Novolux sectional door consists of a framework made of completely newly designed aluminium profiles. The panel is stronger than ever before. Fewer mullions ensure a maximum ingress of light. A large diversity of infills are possible including lockable ventilation grilles. The Novolux panel can be combined with the Thermo panel without problems.

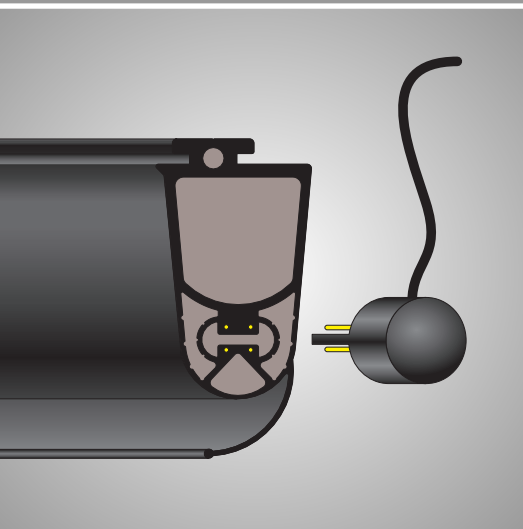
Features

- Class 6 “exceptional” air permeability
- “Exceptional” watertightness class 3
- The insulation coefficient $k = 2,1 \text{ W/m}^2\text{K}$ (for a 25 mm SAN ISO filling)
- Noise insulation $R = 19 \text{ dB}$
- The maximum width or height is 8000 mm
- 45 mm panel thickness that can be supplied in heights ranging from 360 to 730 mm
- Draught excluders in-between the panels made of UV- and weather resistant EPDM
- Standard in anodised version or RAL 9002.

* With a wicket door 6000 mm wide at most.



Details determine quality



Bottom seal

The bottom seal provides a perfect fit with the floor. The bottom seal also serves as a safety edge with electrically driven doors.



Wicket door

Side hinges are used as standard with these tracks up to a door width of 5000 mm. These tracks with ball bearings with a nylon contact area ensures they operate quietly.



Double furniture

Double side hinges and long stem guide rollers are used when doors are wider than 5000 mm to increase the load-bearing capacity and to give the door the required stability.



Wicket door hinges

These extremely beautifully designed aluminium hinges ensure the wicket door turns without effort.



Wicket door lock

Different locks can be used in the wicket door that vary from locks with standard euro cylinders to panic locks with a push bar.



Auxiliary lock

The option is available to include auxiliary locks for those who find door security extremely important.



Burglary prevention

Windows can, if required, be secured against burglary through an internal grille fitted on the inside of the door.



Ant-lift lock

This anti-lift device can be supplied as an option for manually operated doors in combination with a fall safety device. This can be very easily unlocked by placing your foot on it.



Outside lock

When a manually operated sectional door is the only access to the building, an outside lock is integrated.



Wicket door safety interlock

The wicket door is secured against accidental opening with regard to an electrically operated sectional door. When the wicket door has not been closed properly or is opened during the running, the power supply will be interrupted.



Wind bars

Wind bars are installed to limit panels from bending. Whether this is required is determined by wind pressure, dimensions, rail system or colour.



Ventilation grilles

Sectional doors can be provided with ventilation grilles in different designs including this lockable version (air flow is 210 cm²) as an option.



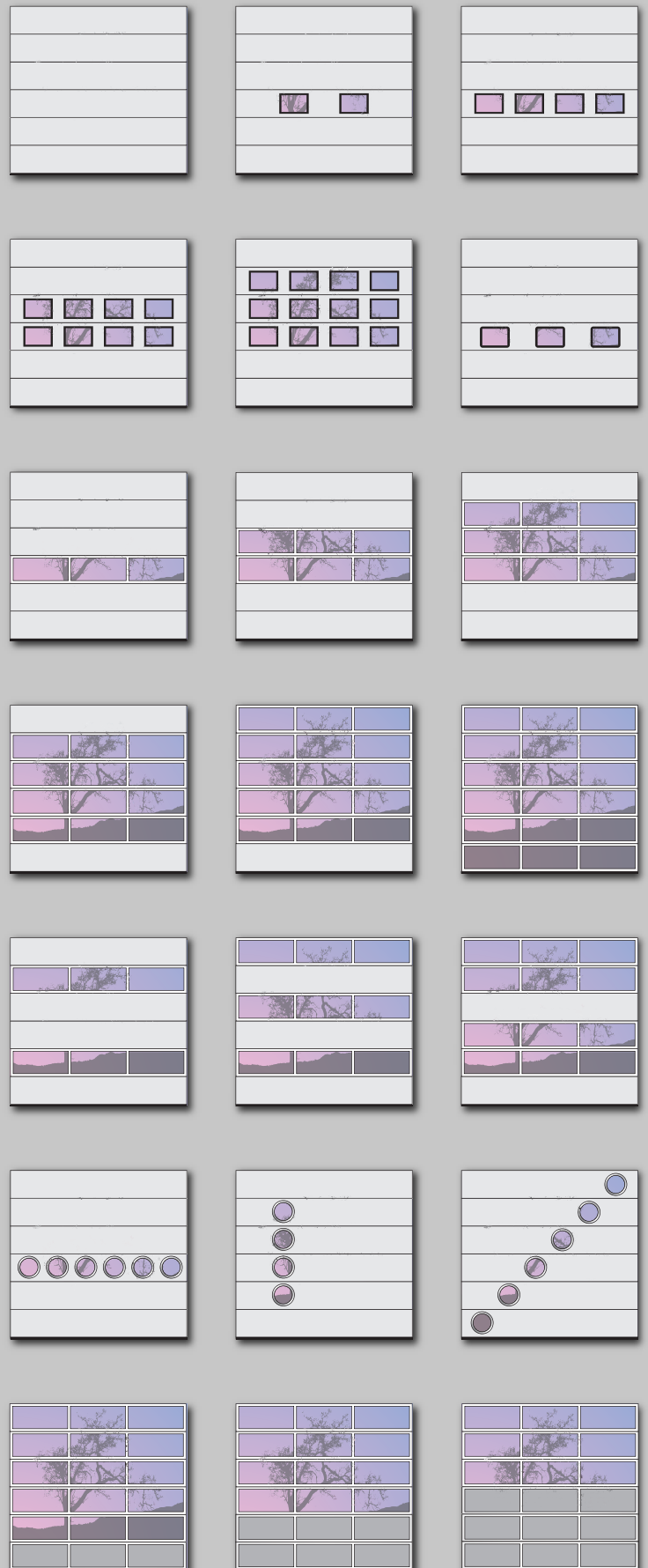
Depending on the intended usage of a building, the need for daylight can influence the design of the door. Usually, as much light as possible is required in garage workshops, bus depots and fire stations. Companies that are situated by main roads may require solid panels without windows. If thermal insulation is an important factor; double glazed insulated glass can be supplied.

Combinations

A range of combinations is possible between fully glazed and solid panels. The Thermo panel can be easily be combined with one or more Novolux panels without problems.

Architectural fantasy

With these combination options you can let your fantasy run free to put together a door panel combination based on your own creativity and style. If your choice is technically possible, we can make it.



Panel infill's



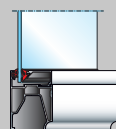
A large range of
panel infill's

The Novolux panel can be infilled with a variety of material thicknesses that vary from just a few millimetres up to 25 mm. These do not necessarily have to be solid panels. Open structures such as perforated aluminium plates or meshed metal can be used for flats with an underground communal car park in relation to the need for ventilation.

Basic construction

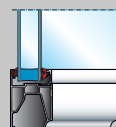
The basic panel of the Novolux is a framework made of aluminium profiles. This framework is streamlined and exceedingly strong. Novoform supplies an extensive package of possible panel infill's.

We can supply a Novolux door without infill that is clad or filled based on your own design. We can show you examples of doors clad with hardwood beads or acrylic plastic smoked glass.



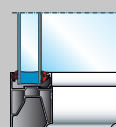
SAN glass or polycarbonate - 3 mm

Single glazing



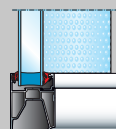
SAN ISO - 25 mm

Double scratch-resistant SAN glazing filled with inert gas.
k-value = 1.5 W/m²K



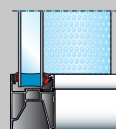
SAN Thermo - 25 mm

Transparent double glazing in clear, pearl, opal or specially made for the washing facility.



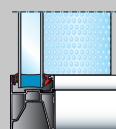
SAN Thermo Optic - 25 mm

Transparent scratch-resistant double glazing



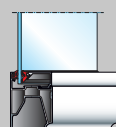
PC Protect - 25 mm

Transparent double glazing made of polycarbonate



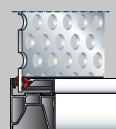
PMMA glazing - 25 mm

Transparent double glazing of polycarbonate in clear, blue, brown or green colour.



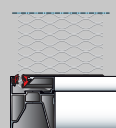
Toughened glass - 4 mm

Toughened glass in clear, bruin, blue, green or arctic blue



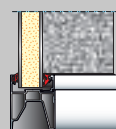
Perforated aluminium plate

3 mm thickness, holes around 6 mm, 15 mm pitch. For ventilation.



Meshed metal in stainless steel

3 mm thickness. For ventilation.



Stucco BRUT or Stucco FLUSH - 25 mm

Double-walled insulation panel, inside/outside wall brut or flush.

Colour



Colour can provide a corporate contribution to your company. Coloured doors are the best proof of this. You can choose from 8 standard colours and approx. 200 RAL colours at Novoferm for all industrial sectional doors.

Colour as required

The Novolux panels are supplied as standard as anodised panels or sprayed in RAL 9002. They can, however, also be sprayed in nearly every RAL colour. The anodised wicket door sections can also be sprayed in the colour of the door. The aluminium glazing beads on the interior side are, however, never sprayed.





Standard colours



Nearly all RAL colours can be supplied

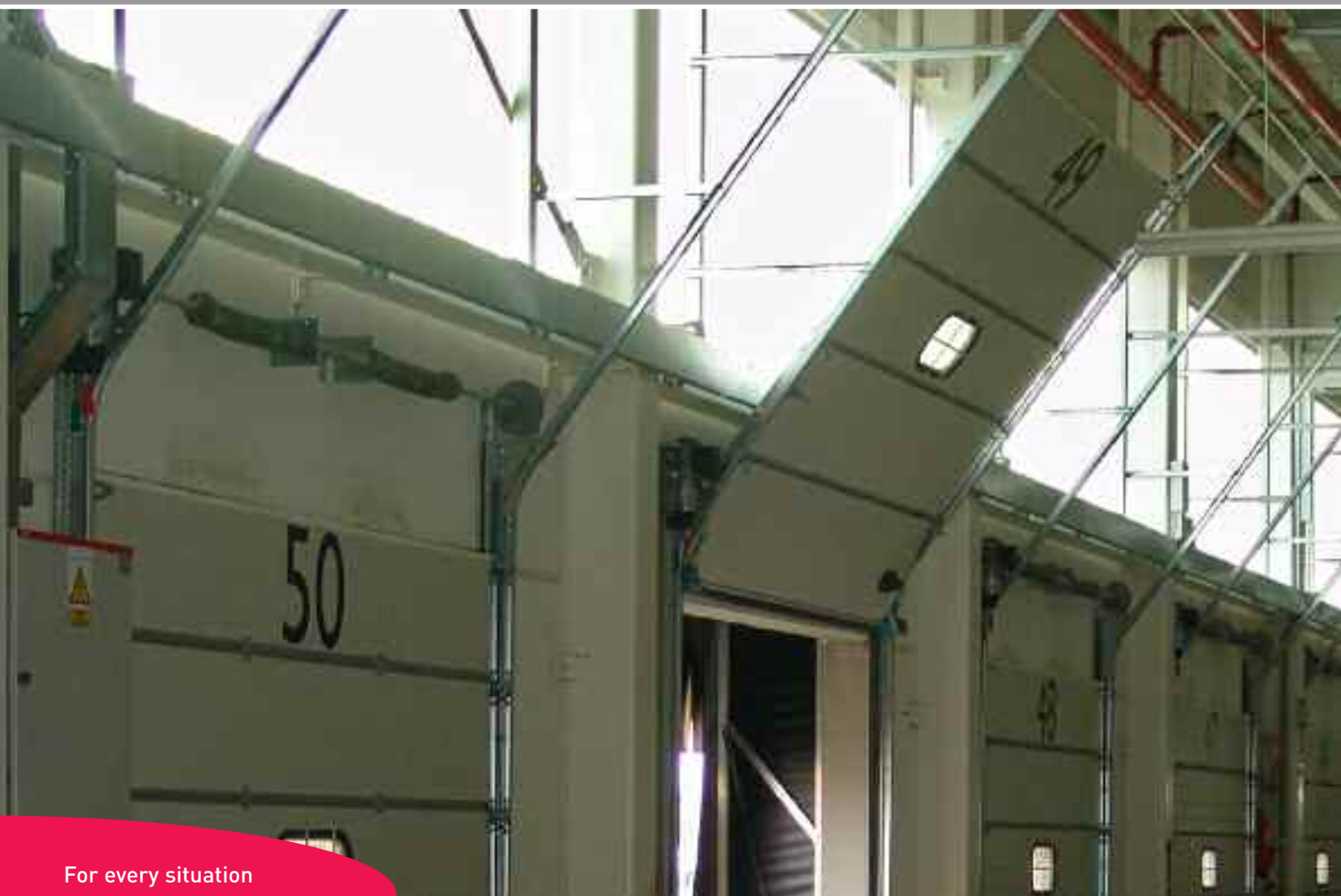


Tip!

Avoid dark colours in doors that will be fully exposed to sunlight. Dark colours absorb heat more easily. The panels of wider doors may twist due to the large temperature difference between inside and outside. Have our technical specialists assist you with information.



Inside view of a door in the RAL 5010 standard colour



For every situation
a solution

Once you have selected a door with the right features to achieve the correct appearance it is, of course, important that it can also be installed. The available interior space and possible obstacles such as pipe work, cable trays, wiring or crane tracks may make this difficult. Novoferm has a suitable solution for nearly every situation.

An ample range of rail systems

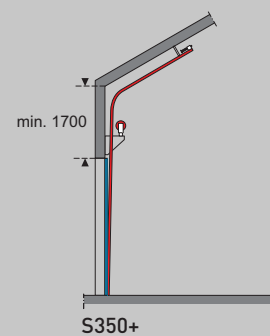
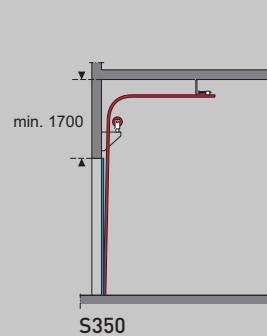
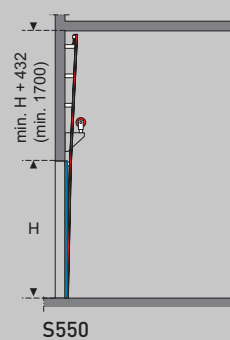
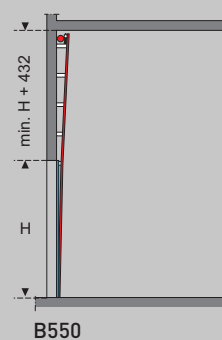
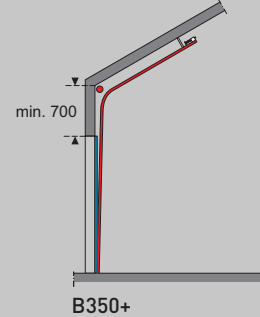
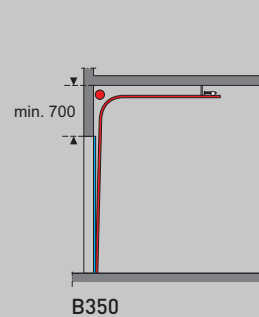
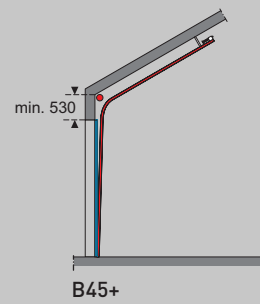
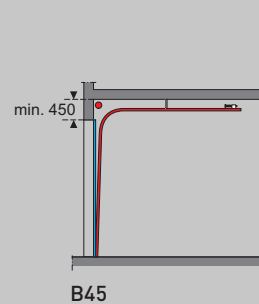
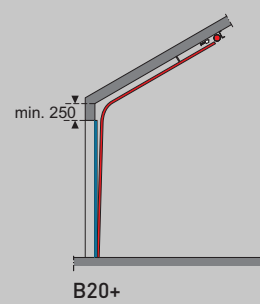
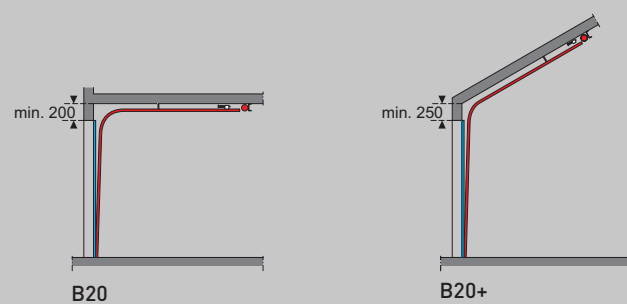
The available space for the installation of an industrial door can sometimes be limited due to there being limited available headroom, insufficient installation depth, pipework or wiring that may be present, ventilation and heating channels, roof trusses or crane tracks.

You can select from a very large number of rail systems at Novoferm with which a suitable solution can be found for nearly every situation.

In addition, Novoferm has the S package where the spring system and drive are installed immediately above the clearance opening. These offer great advantages during installation and maintenance because an access platform will, in most cases, not be required.



Installation and maintenance become very easy with the low level spring beam because the system is installed immediately above the clearance opening.



Wicket door with low threshold



The strongest wicket door threshold

Until recently, integrated wicket doors were only used by people; hand and pallet trucks could never access the high threshold. This, however, is now possible with the new low-threshold wicket door and the sectional door can remain closed and, therefore, unnecessary heat loss can be avoided. The need for a separate wicket door in addition to the sectional door for hand and pallet trucks, therefore, no longer applies.



Continues to be active down to floor level



The leading safety beam will disappear completely in the sill when the door closes

Strong and wide

- The threshold is only 28 mm high and can withstand the hard wheels of pallet trucks. The threshold is strong and can easily bear the full weight of a person if the door is not fully closed!
- The wicket door has a wider passageway so that hand and pallet trucks can also pass without the goods getting caught behind the doorposts.
- The wicket door is supplied as standard with a mechanical door closer to ensure that the wicket door is automatically closed after use.

Separate wicket side door

Features

- Self-closing with door closer
- Only 28 mm high
- Not the lowest but the strongest!
- Aluminium threshold
- Good seal on the floor
- Wide passageway of up to 1050 mm



The leading safety beam

The “wicket door adjacently”

An integrated wicket door is no longer possible with sectional doors that are wider than 6000 mm. In this case, you may elect to have a separate wicket door next to the sectional door should the situation allow this. The design of the wicket door can be fully matched to the one of the sectional door. The panels will match each other by doing this.

Another solution would be to provide a fixed panel side screen with an integrally fitted wicket door system to match the adjacent sectional door.

Features

- Aluminium frame
- Supplied with a door closer as standard
- Door furniture with euro cylinder lock.

Optional

- Panic devices
- Ventilation grille
- Fixed top panel.

Designed with regard to every detail

- The threshold of the wicket door has exactly the same height as the seal of a door without wicket door. Two doors next to each other of which one has a wicket door will also match with each other with regard to the panels.
- The sill of the electrically driven sectional door with wicket door runs over the full width of the sectional door and is equipped with a leading safety beam as standard.
- The door will disappear completely into the threshold when it is closed and, therefore, it is protected against collision.



Safety facilities

Safety and security are always the focus of attention. Not only must injury and damage to people or goods be reduced to a minimum but burglary or working disruptions due to a door malfunctions must be prevented. The European safety and security standards offer a safe basis but do not always provide for all of these requirements.

European safety and security standards

In accordance with the European EN 13241-1 standard, industrial doors must meet a large number of safety requirements. These focus on preventing that people and goods should not suffer injury or damage when the door is used. The risk of being trapped must be limited to a minimum and a door may not suddenly free fall because a cable or spring has broken or because the motor or controls have failed.

Novoferm develops and produces the doors in strict compliance with these standards. Needless to say, we can provide the relevant certificates and test reports.



In accordance with the

Spring breakage protection

If a rocking bar spring should break, the spring breakage protection will ensure that the door is fixed in the position that it is currently in.

Fall protection

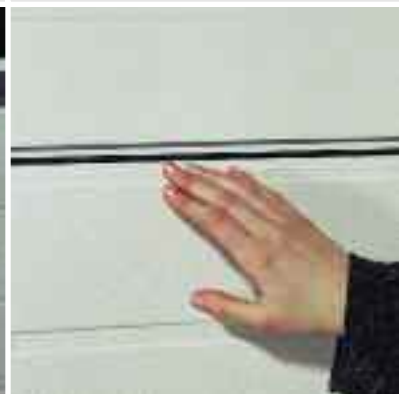
If one of the steel cables used to suspend the door breaks or becomes slack for whatever reason, a safety mechanism will ensure that the door cannot drop further.

Intervention protection

The steel cables used to suspend the door panel are hidden in the vertical rail system. This basically ensures that you cannot become trapped when the door opens or closes.

Protection against fingers becoming trapped

The profiling of all Novoferm panels is such that it is impossible to have your fingers become trapped.



Novoferm goes further

Developing and building in accordance with the relevant safety standards does make the door safer to use but does not provide burglary prevention features or for working interruptions due to an unexpected operational door failure. A workflow that is interrupted can lead to much inconvenience. Novoferm, therefore, offers a number of additional features that are related to the above. Burglary prevention features, closing side protection, wicket door protection and clearance opening protection are part of our standard options.



Additional safety facilities regulations

Lift safety device

The door can be protected against burglary in different ways. This lift safety device is provided as standard for electrically driven doors.

Closing side protection

If the door identifies an object when it is closing, it will immediately stop. Next, it will * open completely or partially. By resetting, the door will be returned to normal use.

* Depending on the selected setting.

Wicket door protection

A sensor is installed with regard to an integrated wicket door that is electrically driven that will prevent the industrial door from closing when the wicket door has not been closed (correctly).

Clearance opening protection

By installing a safety beam in the clearance opening, you can prevent that the door closing should an object remain in the clearance opening.





Deadmans control

The simplest control is what is commonly referred to as the deadman's control. The door will open after pressing the "Up" push button once. The "Down" push bottom must be constantly pressed to close the door until the door has completely closed. If your finger is removed at any time during closing, the door will stop.

Impulse control

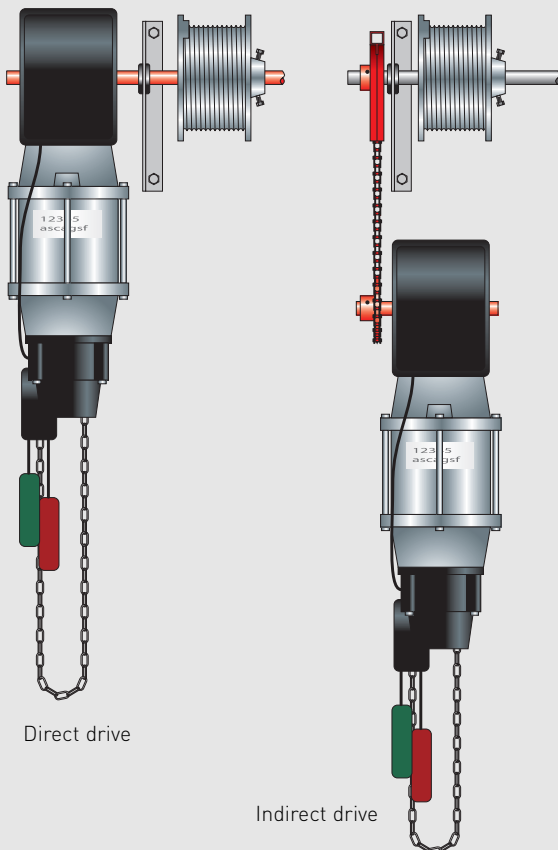
The door will open fully after pressing the "Up" push button and the door will again close fully when the "Down" push button is pressed with regard to impulse control.

Automatic closing after an adjustable time delay setting

Automatic closing after an adjustable time delay setting is only possible in combination with a safety edge and safety beam protection in the doorway.

Expansions

- Remote control (up to 99 channels)
- Traffic regulation
- Interlocking on both sides with another door(s)
- External operation components such as radar, key switch, induction loop, etc.

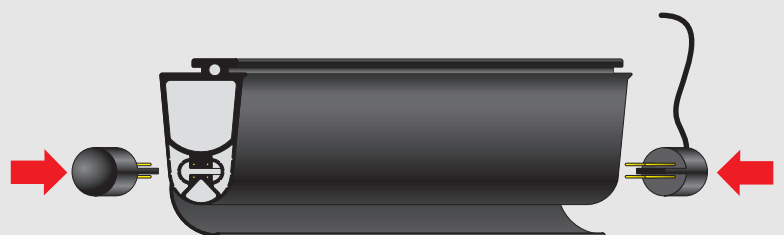


Fixing methods

In principle, there are two fixing methods. Directly on the shaft or indirectly through chain transmission.

Safety edge

The closing side of the door is equipped with a self-testing safety edge that is insensitive to moisture and is protected against mechanical damage with regard to impulse control. The installation is extremely simple (push fit).





i-Vision T100

Standard control for a sectional door.

- Mode for constant energy saving
- Standard "halfway up stop"
- Two volt free contacts
- Equipped with a CCE plug connector
- Control panel rating IP54 *
- Can be supplied as 240 V or 400 V models
- Ergonomic design.

* When directly connected to the power supply IP65



i-Vision HAD

Control for a sectional door in combination with a dock leveller provided with a hinged lip.

- Mode for energy saving
- Integrated door control
- Integrated leveller control
- "Auto Return" function
- "Auto Dock" function
- Illuminated control buttons
- Interlocking on both sides between the door and leveller
- Control panel rating IP65
- Lockable isolator switch
- Ergonomic design.



i-Vision TAD

Control for a sectional door in combination with a leveller equipped with a telescopic lip.

- Mode for energy saving
- Integrated door control
- Integrated leveller control
- "Auto Return" function
- "Auto Dock" function
- Illuminated control buttons
- Interlocking on both sides between the door and leveller
- Control panel rating IP65
- Lockable isolator switch
- Ergonomic design.

Opens at 0.8 m/s!



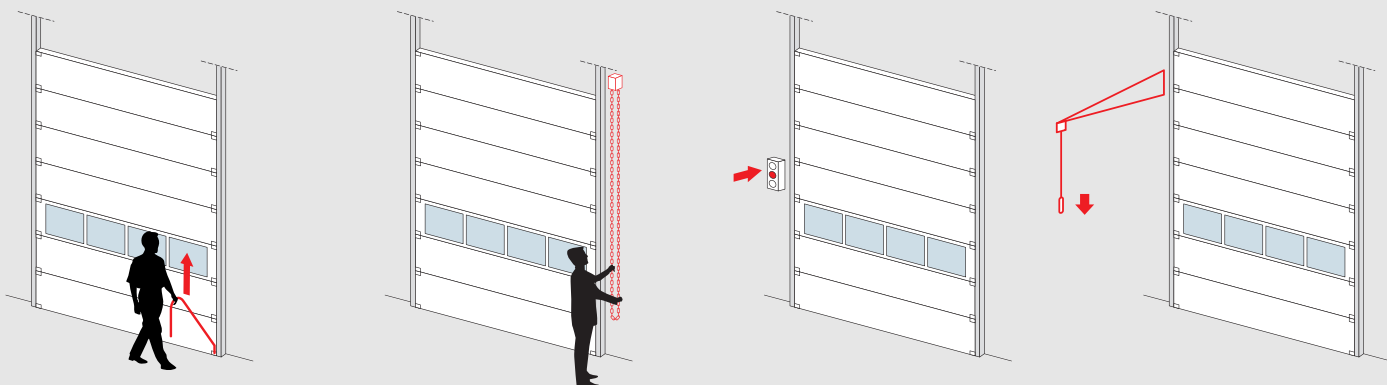
ISO Highspeed

The ISO-High-speed is a special model that has an electric drive without counter-balance springs and with the following features:

- Energy saving through shorter opening time of the door
- Drive with a frequency controller
- The counter-balance springs are not required
- Drive system mounted on low level beam assembly just above the clear opening
- Easy accessible drive assembly

Combining it with a rapid roller door is not required due to the high opening speed of the door and suitable for frequent opening. A considerable saving in costs!

Operation



Manual operation

Sectional doors can be opened manually up to a specific dimension and weight by using a pull cord or manual chain hoist.

Chain hoist

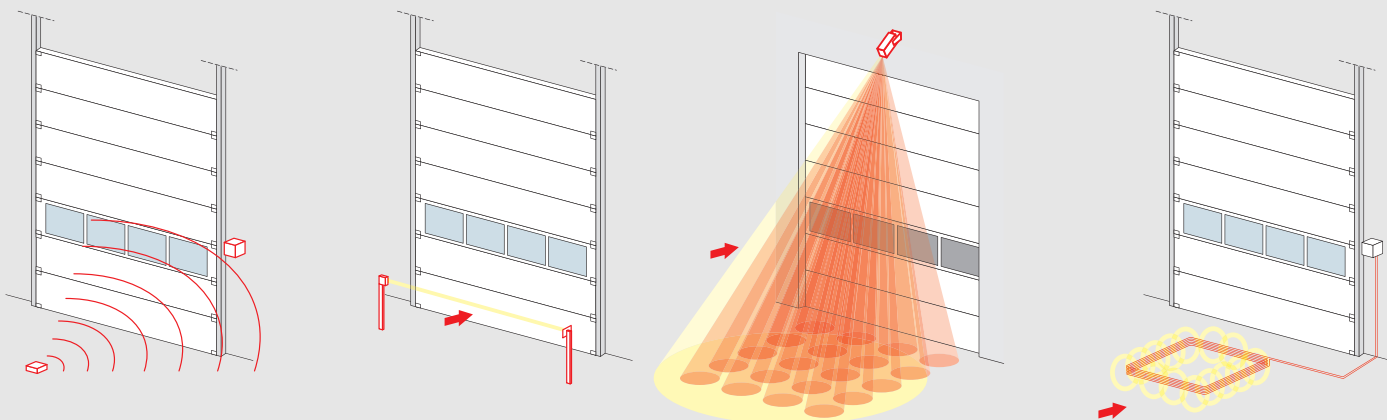
The chain hoist is a manual operation that can also be used for larger doors.

Push button

Push buttons are used predominantly for personnel traffic. In situations where the hands are not always free mushroom head push buttons are a solution.

Pull switches

The pull switch is used mainly for forklift truck traffic so that the driver can operate the switch without getting out of the vehicle.



Radar

Only vehicles or personnel with a transmitter can open or shut the door. The transmitters may have one or more channels.

Photocell

It is mainly used for monitoring the threshold of the door way. As long as the photocell beam is broken the door will not close. There are designs with reflector and designs with transmitter and receiver.

Radar

The standard radar only detects moving objects (operation). A model can be supplied as an option with active infrared that also detects stationary objects (safety).

Induction loop

An induction loop creates a magnetic field. A metal object within this field will be detected and it is, therefore, suitable as a control or additional protection with regard to forklift truck manoeuvres.

Accessories



Push button
(construction)



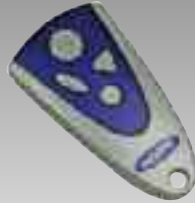
Manual transmitter
2-channels



Pull switches



Push button set
Up-Stop-Down
(construction)



Hand transmitter
4-channels



Key switch



Up-Stop-Down push button set
Key switch
(construction)



Receiver for remote control
(can also be supplied in the housing)



Induction loop detector
In separate housing



Flashing light



Safety beam
With reflector



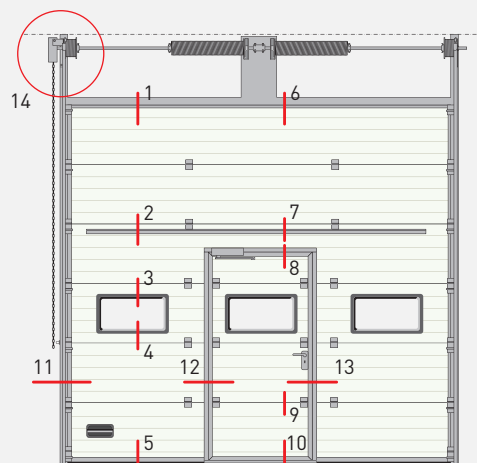
Traffic light
Red/green



THERMO in detail

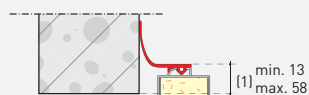


THERMO outside view

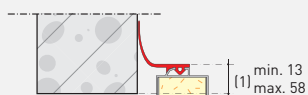


THERMO inside view

For detail 14 see pages
22-23



Detail 1



Detail 6

Detail 2

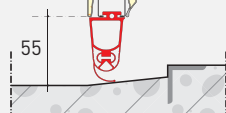
Detail 7

Detail 3

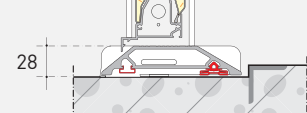
Detail 8

Detail 4

Detail 9

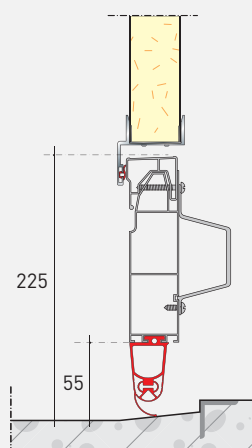


Detail 5

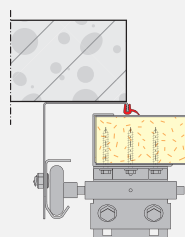
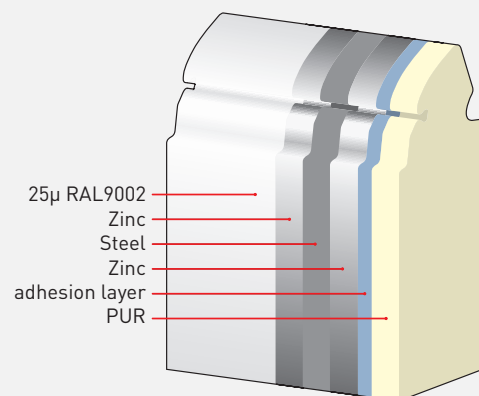


Detail 10b
design with low threshold

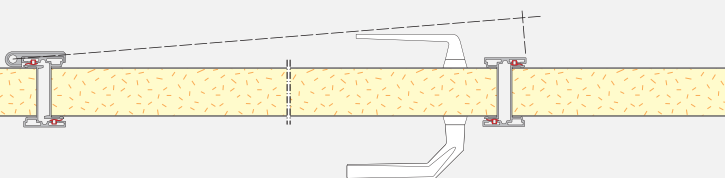
bottom seal with
manually operated
doors



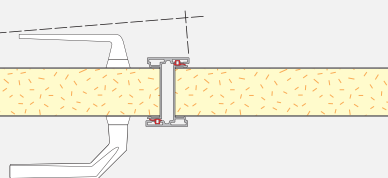
Detail 10a
design with high threshold



Detail 11

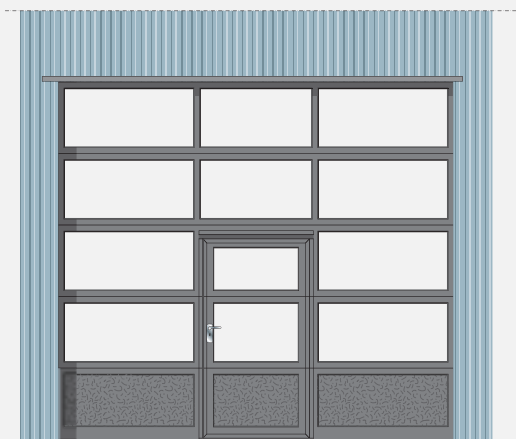


Detail 12

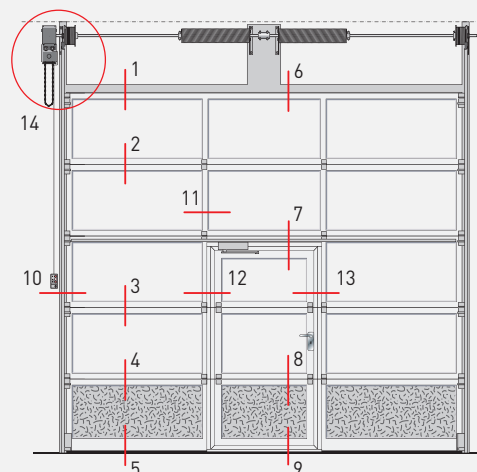


Detail 13

NOVOLUX in detail

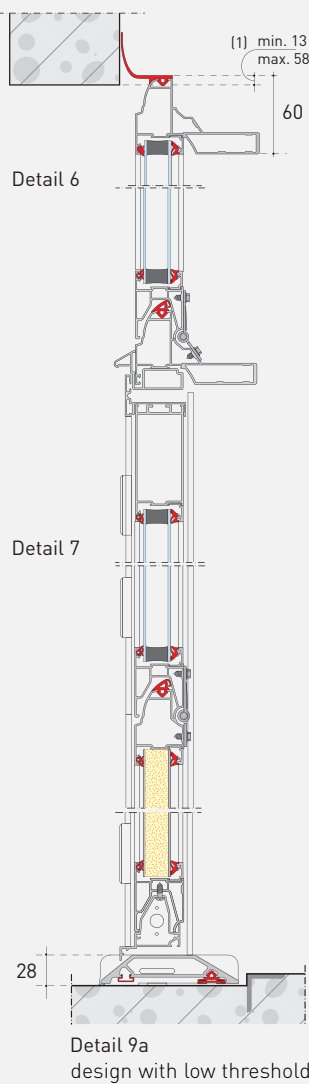
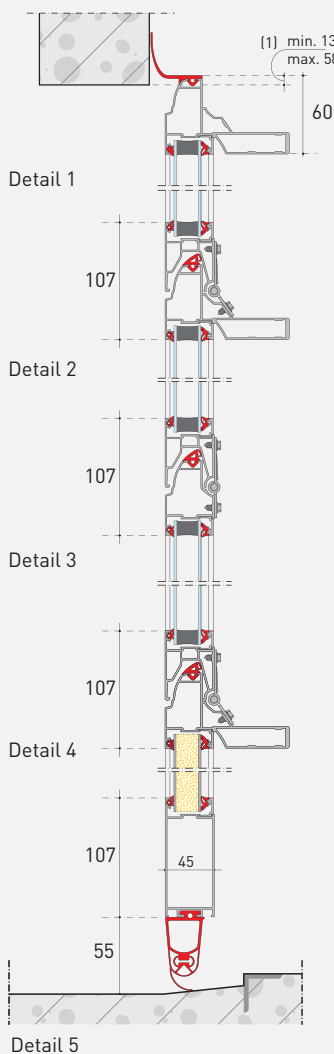


NOVOLUX outside view

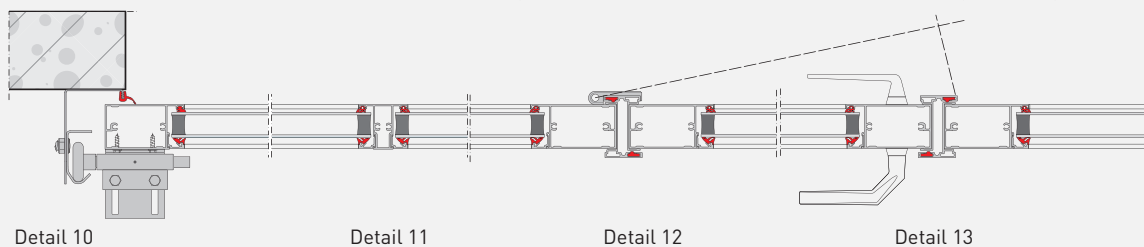
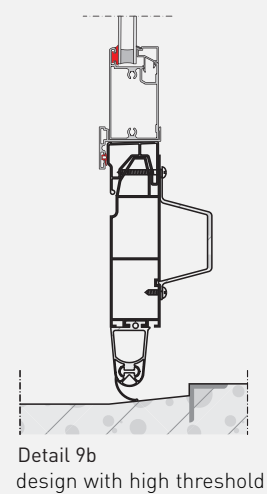


NOVOLUX inside view

for detail 14 see pages
22-23



bottom seal with
manually operated
doors



Aluminium roller doors



The rapid aluminium roller door!

Novo Speed Alu

The Novo Speed Alu thermally rated, burglary resistant and, in contrast to traditional commercial doors, incredibly fast. A combination with a rapid roller door is, therefore, no longer required. Only one door offers all the features for quick logistics with a minimum of heat loss and work time interruption!

- Wind resistant up to 8 Beaufort
- Control with a frequency controller as standard
- Standard door panel balancing with with a tensioning system
- Guide columns with hinged covers
- An opening speed up to 2 metres per second
- The noise level when opening is minimal when compared to normal roller doors due to the special sections.

Novo Speed Alu A

The Novo Speed Alu A has an opening speed of 1 metre per second and can be installed on the inside or the outside of an opening. Without a door panel balance and tensioning system, the guides and drive can be provided as a lighter version and the door have smaller side and headroom installation requirements in comparison to the Novo Speed Alu. This simplified design does not take away from the door's soundness and reliability but it does make it a lot more affordable. A few special features are:

- The appearance of the door panel is the same as that of the Novo Speed Alu;
- Wind resistant up to 8 Beaufort
- Control with a frequency controller as standard
- U-shaped guide columns.



Thermorix TH80/TH100

Flexible insulated aluminium roller door for universal use in industry and non-residential building.

- Double-walled aluminium filled with PUR hard foam
- The special design of the section ensures a small barrel coil diameter
- Working section height of 80/100 mm
- The section thickness is 20/23 mm
- Can also be supplied with window sections
- Sendzimir galvanised steel side guides
- Wear-resistant plastic seals all around
- Maintenance-free 400 V slip-on drive
- Integrated brake and fall protection
- Up-stop-down buttons with deadmans control.



TH80



TH100

Other Novoferm products



Draught excluding

- Rapid roller doors
- Roller doors
- Hinged doors
- Strip curtains

Dock equipment

- Levellers
- Shelters
- Seals
- Units
- Air locks

Fire resistant

- Fire-resistant wicket doors
- Fire-resistant roller doors
- Fire-resistant sliding doors



One producer and one supplier

Novoferm does not just supply draught excluding products but offers a full range of industrial doors, multifunctional wicket doors, fire doors and dock equipment. A Novoferm quality product fits in every opening of a modern industrial building. Doing business with one partner has the following advantages:

- Only one point of contact for all products, installation, maintenance and after sales;
- Products that have been produced to match;
- Product delivery will take place in the correct order automatically;
- Engineers who are familiar with all products.

www.novoferm.com

www.novospeedsolutions.com

Available brochures



Novo Speed Solutions

- fast action roller doors
- roller shutters
- swing doors
- strip curtains



Novo Dock Solutions

- dock levellers
- dock shelters
- dock seals
- dock units
- air locks

Novoferm, always near-by throughout Europe

The Novoferm Group is a leading company in the area of industrial doors, wicket doors, frames and drives. We offer an extensive range for private customers and companies. All our products are designed and produced in accordance with the highest quality standards and the state-of-the-art. In addition, we guarantee the best possible functionality and innovative design. We produce at different locations within Europe and an extensive dealer network ensures that you will always be assisted locally.

Novoferm dealer:

Novoferm Europe Limited

Brooke Park
Epsom Avenue
Handforth Dean
Wilmslow
Cheshire
SK9 3PW

Industrial Door Division

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Website: www.novoferm.co.uk

