

# **NovoSpeed Solutions**

Fast logistic solutions





# Novoferm: your access partner for industrial buildings

Novoferm has specialised in many forms of access and exit door systems for industrial buildings and homes for more than thirty years. An extensive choice of designs, finishes, controls and installation options means that you always benefit from a customised solution. We take responsibility for the whole process from initial specification advice to development, production, assembly and even assistance with construction coordination if required. Obviously, we also monitor aspects such as the associated standards and legislation very closely; — something that saves you significant work and extra effort.

In addition to industrial doors, draught-excluding and fire rated doors Novoferm also offers products for thegoods delivery and despatch areas in industrial and commercial buildings. Novoferm is part of the Sanwa Shutter Corporation, a leading producer of doors, garage doors and other products for equipping buildings worldwide, so choosing a Novoferm product not only guarantees you the most modern and up-to-date technology available, you also benefit from maximum quality, reliability, comfort and design at minimum cost!







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# Safe doors

All automatic doors must comply with European Directive EN 13241. Novoferm develops and produces its new products strictly in line with these standards. As a result, you are guaranteed safe operation during daily use, assembly and maintenance.













www.novoferm.co.uk

# Why choose a Novoferm rapid roll door?

## Different situations demand different solutions



Working efficiently means working economically. Novoferm rapid roll doors help you improve your logistic performance. Novoferm offers a customized solution for almost every situation. Our in-house research and development departments respond alertly to changes in the requirements that rapid roll doors have to satisfy.

Industrial buildings already have to comply with increasingly stringent energy saving requirements and this trend is forecast to continue. Research performed by the Technical Unversity of Munich has shown that rapid roll doors have a significant effect on the amount of energy consumed in industrial buildings. The study shows that the interior temperature of a building or room plummets when the door is left open (depending on the temperature differential and type of building). Consequently, the shorter the period of time that a door remains open, the lower the drop in interior temperature. Draughts are also significantly reduced, which helps maintain a more comfortable environment in the building and reduces sickness absenteeism.

# Working efficiently means working economicaly

When a door is used infrequently, insulation is of great importance. However, when a door is used frequently, the speed at which it opens and closes, and the height to which it opens, are much more significant. The latest generation of Novoferm control units features an adjustable half-height stop setting as standard. In combination with the "Auto-close" function, this feature allows you to achieve considerable energy savings.

Regardless of the type of door, the energy loss through an open door will always far exceed the degree of energy loss due to heat transfer and air leakage through a closed door. Research at the Technical University of Munich has shown that installing fast-action (roller) doors and avoiding long periods spent in the open position can reduce the additional energy requirements by as much as 30%! Interlocking two doors to create an air lock results in even greater savings and can improve the interior climate by up to 90%.

# Efficient use of energy, also during produktion

Novoferm signed the group's 'Green Solutions' Charter In 2009. This consists of a package of concrete measures designed to reduce CO<sup>2</sup>-emissions during production, delivery, assembly and maintenance of industrial doors.

## 100 % recyclable materials



This is a goal that we consistently pursue. As a result, we select our raw materials and resources with great care, adding our own sustainable in-house development procedures into the equation. For instance, our control units are completely lead-

free and comply with RoHS requirements. So we have already assumed a leading role in this area.

## Single-source manufacturer and supplier

Novoferm not only supplies draught excluding products, we also offer a full range of industrial doors, multifunctional passdoors, fire doors and dock equipment. There is a highquality Novoferm product for every opening in a modern industrial building. Doing business with a single partner has the following advantages:

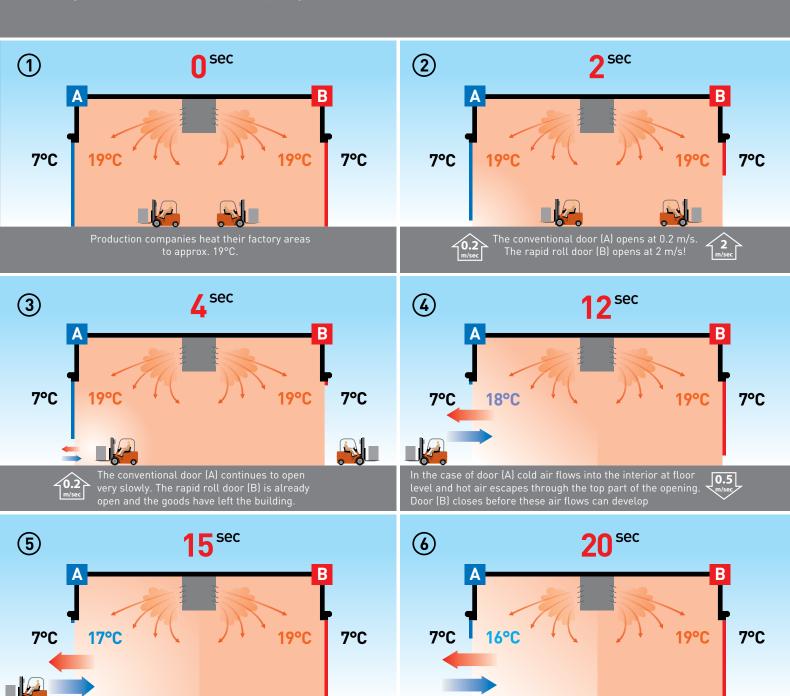
- Single point of contact for all products, installation, maintenance and after sales
- Products are designed for optimum compatibility with each other
- Products are automatically delivered in the correct sequence
- Installers / fitters who are familiar with all of the productst

# **Energy loss**

The illustrations below show how air flow through a conventional outside door (A) results in energy loss. When a high tech rapid roll door from Novoferm (B) is used, the door has already closed again before the air flow reaches the opening.

This maintains the interior temperature at a constant value, saves energy, guarantees pleasant working conditions and reduces sickness absenteeism as an added bonus.

temperature drops very quick, leading to unnecessarily high heating bills.



### Customer service

The open door (A) results in significant energy loss

When you deal with Novoferm, projects do not simply stop after product installation. Service and maintenance are vital for ensuring continuous product availability, quality and durability. Novoferm offers effective 24-hour service, back-up and a selection of maintenance packages to guarantee your business continuity.

# **Applications**

The extensive range of draught-excluding solutions from Novoferm is used in just about all market sectors. The exact type of door depends on the specific application and the conditions in which it is to operate. Our standard range offers solutions for most situations. Based on your input, we can also engineer and supply custom-made solutions to satisfy any special requirements you may have.









Light and heavy industry

The light and heavy industry sectors require a wide variety of draught-excluding solutions.

Novoferm's extensive range of doors includes suitable solutions for practically any situation in these sectors. These products are easy to assemble, operate reliably for extended periods and require little maintenance. So our products guarantee you operating reliability, business continuity and safety.



Food

in the food industry. In Europe we have a long history of supplying our products to major food producers and processors.

We also have extensive experience with cold store manufacturers. We know from experience that this sector involves more than simply using materials such as stainless steel and compliance with strict hygiene requirements, there is also strong demand for custom-made solutions. These usually focus on cost efficiency and ensuring production process continuity.



Retail

are always well stocked with an extensive range of products. Intensive traffic between the storeroom and the retail shop space is required to keep the shelves filled.

In view of this level of traffic, a rapid roll door is often chosen to separate the retail space from the storeroom. It operates at high speed, opens and closes automatically, is safe for users, hardly takes up any space and is a low-noise product. Novoferm designs and manufactures custommade doors for various retailers, and currently supplies its products to most leading chain stores in Europe.









### **Automotive**

A typical car factory produces approximately one thousand cars a day on average. This level of production requires an immense flow of goods and timely delivery is of vital importance.

As a result, the doors used in this logistics flow also have to satisfy demanding requirements. Novoferm offers products that operate dependably under these conditions, day-in and day-out. Novoferm also supports its products with 24/7 service to minimise downtime in the unlikely event of a breakdown.



Pharmaceutical and chemical industry

industries require suppliers to meet challenging standards in the areas of hygiene, sealing, operating reliability, fitting and providing efficient aftersales service.

Not only does Novoferm offer custom-made solutions for these sectors, it also invests significant amounts of time and money in training production staff and technicians. Our technicians and the companies assembling our products for us are SCC certified. So they comply with all of the requirements that apply when working in a strictly regulated operating environment.



Logistics

When products are ready, need to be transported to the end customer as quickly and efficiently as possible. Consequently, many European companies subcontract warehousing, transhipment and delivery to large logistics distribution contract

The doors involved in these logistic flows often open and close many times a day. Using a top-class product alone is not enough however! Even the best product fails occasionally when used intensively. As preventive maintenance minimises failures of this type, Novoferm offers a range of maintenanceand service contracts.

# **Product overview**





## NovoSpeed **Retail**

- developed for Retail
- max. 5.85 m<sup>2</sup>
- class 1 wind resistance
- opening speed: 2 m/s with frequency control
- option for photo print on door curtain



## NovoSpeed Flex 2.0

- developed for frequently used doorways
- max. 20 m<sup>2</sup>
- class 0 wind resistance
- opening speed: 2 m/s with frequency control



## SpeedRoller **Prime**

- developed for universal use and average wind pressure
- max. 12.25 m<sup>2</sup>
- class 0 wind resistance or at least 5 Bft
- opening speed: 1 m/s;
- opening speed: 1.5 m/s with frequency control loption



## SpeedRoller **Strong**

- developed for large doorways and average wind pressure
- max. 25 m<sup>2</sup>
- class 0 wind resistance or at least 5 Bft
- opening speed: 1 m/s
- opening speed: 1.5 m/s
   with frequency control (option



### NovoSpeed Heavy | Indoor

- developed for large, frequently used doorways
- max. 36 m²
- class 0 wind resistance
- opening speed: 1 m/s
- opening speed: 1.5 m/s with frequency control (option)



### NovoSpeed Heavy

- developed for large, frequently used doorways
- max. 36 m²
- class 0 wind resistance
- opening speed: 1 m/s
- opening speed: 1.5 m/s with frequency control (option)



### NovoSpeed Polara

- developed for extremel
- may 175 m
- class 0 wind resistance
- onening speed: 1 m/s



### Strip curtains / Swing doors

developed as an economical alternative







## NovoSpeed Thermo

- developed for exterior façades
- max. 25 m<sup>2</sup>
- class 3 wind resistance
- opening speed: 1.1 m/s with frequency control





## NovoSpeed Alu | R

- developed for exterior façades
- max. 25 m²
- class 2 wind resistance
- opening speed: 1 m/s with frequency control



## NovoSpeed **Heavy | Outdoor**

- developed for exterior facades
- max. 36 m²
- class 2 wind resistance
- opening speed: 1 m/s
- opening speed: 1.5 m/s with frequency control (option

# Specially fabricated frames

A specially fabricated frame is generally required to fit a rapid roll door behind an (existing) exterior industrial door A custom-made frame can be supplied after specification by our technical specialist. This service allows you to single-source your complete door system.



# **Inside applications** – Clever interior door solutions



# NovoSpeed **RETAIL**



These days, supermarkets also have to look attractive. The products on display need to be presented accessibly and appetisingly. The NovoSpeed **Retail** door puts the finishing touches to a successful in-store presentation. This rapid roll interior door with its opening speed of 2 m/s is not just one of the fastest of its kind, it also opens and closes in near silence.

### **Specifications**

NovoSpeed	Retail
max. width (W)	2,250 mm
max. height (H)	2,600 mm
opening speed	2 m/s
closing speed	0.5 m/s
door curtain weight	680 gr/m²
door curtain thickness	0.7 mm

#### **Product Benefits**

- Class 1 windresistance
- compact design of side guides and roller cover
- self-repairing after impact, in one direction
- a safety light curtain is standard
- supplied in the following colours as standard:

 5005
 9004
 9003
 7038
 7024
 3020
 2009
 1003

# The best solution for your store!

The standard tubular motor allows elegant styling without taking up excessive space in the store. And if you truly want to dot your i's and cross your t's in terms of presentation, you can also print your logo or a photographic image on the PVC door curtain.

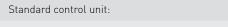
Safety is obviously the most important consideration in areas with a high customer density such as supermarkets. The NovoSpeed Retail is equipped as standard with a FlexEdge bottom beam and can be supplied with either a mechanical or an automatic emergency opening system for use in the event of a power failure.

### **Options**

- Flex-Edge instead of aluminium lower beam
- counterweight instead of spring for balancing
- industrial integrated drive
- multiple photocells in the side guides
- mechanical release in the event of powerfailure
- door curtain featuring a print of your choice



T100R FU





## NovoSpeed

# FLEX 2.0 | HARD EDGE



The NovoSpeed Flex HardEdge an electrically operated rapid roll door for the retail sector, general industry and commercial and industrial buildings. The Flex is neatly finished and combines high speed with low noise.

### **Specifications**

NovoSpeed	Flex HardEdge
max. surface area (W x H)	20 m²
max. width (W)	4,000 mm
max. height (H)	5,000 mm
opening speed	2 m/s
closing speed	0.5 m/s
door curtain weight	1,400 gr/m²
door curtain thickness	1.2 mm

### **Product Benefits**

- Class 0 windresistance
- self-supporting construction
- 100% self-resetting in both directionstion
- a safety light curtain is standard
- supplied in the following colours as standard:

5005 9004 9003 7038 3020 2009 1023

# Attractive, fast and silent

## Universal solution

The NovoSpeed Flex is an interior door for universal use in industry. The door is fast and strikingly silent in operation. An industrial drive unit integrated in the roller keeps the side space requirement to a minimum. The advanced control panel is equipped with frequency control as standard, offering many functions and connection possibilities.

### Presence detection

An active light curtain is supplied to a maximum height of 2,500 mm. When the door is open, the safety light curtain detects both moving and stationary objects in the opening and prevents the door from closing.

This new generation of NovoSpeed Flex is equipped with two extension springs for door curtain balancing, resulting in a considerably extended service interval.

Options: see page 13 for details of all the options offered for the NovoSpeed Flex



T100R FU



Silent integrated drive



Mechanical emergency release

Standard control unit:

# **NovoSpeed**

# FLEX 2.0 | FLEX EDGE



The NovoSpeed Flex **FlexEdge** is an electrically operated rapid roll door for interior applications in the retail sector, general industry and commercial buildings. The flexible bottom beam can not damage your products.

### Specifications

NovoSpeed	Flex FlexEdge
max. surface area (W x H)	17.5 m²
max. width (W)	3,500 mm
max. height (H)	5,000 mm
opening speed	2 m/s
closing speed	0.5 m/s
door curtain weight	1,400 gr/m²
door curtain thickness	1.2 mm

#### **Product Benefits**

- Class 0 windresistance
- self-supporting construction
- 100% self-resetting in both directionstion
- a safety light curtain is standard
- supplied in the following colours as standard:

 5005
 9004
 9003
 7038
 3020
 2009
 1023

# If your goods are fragile

No damage when collisions occur







100% self-repairing in both directions



# Soft and flexible bottom beam

When closing a rapid roll door in relatively low openings, contact may occur between the bottom beam and the goods being transported. A hard bottom beam might cause damage. The 'FlexEdge' is flexible and soft, thereby increasing safety. Persons or goods that 'accidentally' come into contact with the 'FlexEdge' will suffer little or no damage.

The door opening is monitored in the same way as the 'HardEdge' door.

The following options are available for the NovoSpeed Flex **HardEdge / FlexEdge**:

Option 1: mechanical emergency release

**Option 2:** protective cover in galvanised steel / stainless steel painted in a choice of RAL colours

**Option 3:** guide columns in costumer-specified RAL colour (powder coating)



Standard control unit:

T100R FU

# SpeedRoller **PRIME**



The SpeedRoller **Prime** is an electrically operated rapid roll door that combines good quality with excellent value for money.

### **Specifications**

SpeedRoller	Prime
max. surface area (W x H)	12.25 m²
max. width (W)	3,500 mm
max. height (H)	3,500 mm
opening speed	1 m/s
opening speed with frequency control	1.5 m/s
closing speed	1 m/s
closing speed with frequency control	0.5 m/s
door curtain weight	680 gr/m²
door curtain thickness	0.7 mm

### **Product Benefits**

- Class 0 windresistance or at least 5 Beaufort
- light curtain in the door opening
- suitable for small interior openings and normal wind loads
- supplied in the following colours as standard:

 5005
 9004
 9003
 7038
 7024
 3020
 2009
 1003

# Appearance and performance in perfect harmony

# The fast and quiet solution

The SpeedRoller Prime is a cost-effective solution for small openings up to  $12.25 \, \text{m}^2$  and normal use. Ideal for openings used by pedestrians and materials handling equipment. This door is suitable for a wide range of applications, due in part to its very competitive price.

### Specific features:

- robust steel guide side columns fitted with brush seals guide the door curtain
- aluminium bottom beam with a rubber floor profile
- steel U-shaped side guide with brush seals
- light curtain as standard

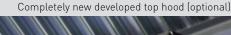
### Options

- available with a FlexEdge bottom beam
- all construction parts in stainless steel
- cover over roller in steel, stainless steel or plastic
- door curtain featuring a print of your choice





T100R FU





FlexEdge bottom beam



# SpeedRoller STRONG





The SpeedRoller **Strong** is the innovative standard rapid roll door for intensively used openings. Proven technology guarantees many years of trouble-free operation. Designed for use in general industry and commercial buildings.

### **Specifications**

SpeedRoller	Strong
max. surface area (W x H)	25 m²
max. width (W)	5,000 mm
max. height (H)	5,000 mm
opening speed	1 m/s
opening speed with frequency control	1.5 m/s
closing speed	1 m/s
closing speed with frequency control	0.5 m/s
door curtain weight	680 gr/m²
door curtain thickness	0.7 mm

### **Product Benefits**

- Class 0 windresistance or at least 5 Beaufort
- light curtain in the door opening
- suitable for smaller interior openings and normal wind load
- supplied in the following colours as standard:

 5005
 9004
 9003
 7038
 7024
 3020
 2009
 1003

# The most reliable basis for intensive use

## Best basis for intensive use

The SpeedRoller Strong is the basic high speed roller door model for intensive use. The door curtain is made of horizontal sections of extremely durable polyester-reinforced PVC. All aspects of the door are robustly designed and well-engineered for every day energy saving, draught exclusion and climate control.

### Specific features:

- robust steel guide side columns fitted with brush seals guide the door curtain
- the sections are connected to each other by aluminium stiffener/hinge profiles
- standard vision section
- aluminium bottom beam with rubber floor seal
- light curtain as standard

### Options

- available with a FlexEdge bottom beam
- all construction parts in stainless steel
- cover over roller in steel, stainless steel or plastic
- plastic cover over drive







T100R FU 3 kW

Reinforcement brackets for higher windresistance



Integrated curtain stiffener/hinge profiles



# NovoSpeed HEAVY Indoor



The **Heavy Indoor** is a high-speed, electrically operated rapid roll door, specifically designed for interior openings in industrial and commercial buildings.

### **Specifications**

NovoSpeed	Heavy Indoor
max. surface area (W x H)	36 m²
max. width (W)	6,000 mm
max. height (H)	6,000 mm
opening speed	1 m/s
opening speed with frequency control	1,5 m/s
closing speed	1 m/s
closing speed with frequency control	0.5 m/s
door curtain weight	1,400 gr/m²
door curtain thickness	1.2 / 3 mm

### **Product Benefits**

- Class 0 windresistance
- safety photocell in the door opening
- completely transparent 'Full Vision' door curtain optional
- supplied in the following colours as standard:

5005 9004

9003

7038 3020

2009

1023

transparent

# A tower of strength

## Workhorse for large openings

The NovoSpeed Heavy Indoor has been specially developed for large interior openings up to 36 m². All structural components and the curtain are robustly designed and engineered. Overpressure and underpressure can exert considerable forces on the door curtain. With its 1.2 mm thick door curtain and strong aluminium stiffener/hinge profiles, the Heavy Outdoor is capable of withstanding wind loads of up to 5 Beaufort (28 - 38 km/h). Specific features:

- extra strong, fabricated steel side columns with brushes to seal and guide the door
- a bottom beam with a self-testing bottom safety edge and cast aluminium end pieces of as standard
- the aluminium lower beam is available with a 'BreakAway' crash-protection system, which prevents damage in a collision and allows the door curtain to be repositioned in the guides without having to use special tools
- safety light curtains in the guide

T100R T100R FU T100R FU 3 kW







# NovoSpeed **HEAVY**



An exterior door should be left open for the shortest possible period of time. A traditional exterior door opens and closes relatively slowly, leading to considerable energy loss. However, energy loss can be minimised by combining a 'slow' exterior door with a rapid roll door.

### **Specifications**

NovoSpeed	Heavy
max. surface area (W x H)	36 m²
max. width (W)	6,000 mm
max. height (H)	6,000 mm
opening speed	1 m/s
opening speed with frequency control	1.5 m/s
closing speed	1 m/s
closing speed with frequency control	0.5 m/s
door curtain weight	3,000 gr/m²
door curtain thickness	3 mm

### **Product Benefits**

- Class 0 windresistance
- heavy duty product for high wind loads
- supplied in the following colours as standard:

**5010 7023 2002 1021** 

# Robust and energy-efficient

# Proven reliability

Available control units:

Wide side columns in combination with a sophisticated tensioning system make a major contribution to the excellent stability offered by the NovoSpeed Heavy. The robust aluminium bottom beam, heavy-duty aluminium stiffener/hinge profiles and 3 mm thick door curtain complete this door's impressive specifications.





# NovoSpeed

# **POLARA**



The **Polara** door provides an effective seal in freezer cell openings. All components are heated. The door opens automatically every 15 minutes to prevent icing.

### **Specifications**

NovoSpeed	Polara
max. surface area (W x H)	17.5 m²
max. width (W)	3,500 mm
max. height (H)	5,000 mm
opening speed	1 m/s
closing speed	1 m/s
door curtain weight	680 gr/m²
door curtain thickness	0.7 mm

### **Product Benefits**

- Class 0 windresistance
- safety photocell in the door opening
- operates down to -30 ° C
- dual radar for detecting ice
- bottom beam with multilene end pieces
- supplied in the following colours as standard:

 5005
 9004
 9003
 7038
 7024
 3020
 2009
 1003

# Resistant to extreme cold

# When hygiene is vital at low temperatures

The Polara is suitable for use in the food industry where stringent hygiene and safety requirements apply when producing and processing fresh foods. Specific features:

- heated side guides
- heated control unit
- heated photocells
- rubber seals instead of brush seals
- IP65 drive and control unit





heated control unit





# Additional applications

## **Swing doors**

## Old-fashioned reliability

A swing door is a manually operated interior door for industrial use. This door system is available in a range of sizes up to 9  $\text{m}^2$ . It owes its continuing popularity today to the following features:

- flexible door curtain in black, grey, transparent or combinations thereof
- simple construction, tried-and-tested design
- mechanical, spring-operated closing mechanism
- no drive unit or controls required
- always opens, also in emergency situations
- easy to maintain and simple to clean
- fast and simple assembly



# Easy to fit and inexpensive



## **EasyClip**

Are you looking for an easy-to-install draught-exclusion system for an infrequently used opening? A strip curtain may be the perfect solution.

The ideal strip width and degree of overlap can be selected based on the size of the opening and the type of materials handling equipment. Even though this type of draught exclusion system has been used for decades, its unique benefits still make it a popular choice today:

- flexible strips with good transparency
- effective noise reduction to 30 dB
- simple strip hanging system
- fast and simple assembly
- strips are easy to replace
- orange end strips (option)
- also available for freezer cell applications down to -30°C (optional)

# Minimise unnecessary energy loss



An exterior door should be left open for the shortest possible period of time. A traditional exterior door opens and closes relatively slowly, leading to considerable energy loss. However, energy loss can be minimised by combining a 'slow' exterior door with a rapid roll door.

The traditional sectional door is opened in the morning and closed at night. The rapid roll door seals the opening during the working day. The high speeds at which it opens and closes minimise the air flows that cause energy loss. The NovoSpeed range of exterior doors has obviously been designed to withstand the extreme conditions in which these doors operate.

# An investment that pays for itself!



# NovoSpeed

# THERMO



Novoferm sets itself ambitious targets in the areas of insulation, noise and pricing. Our research & development department has succeeded in developing a very fast sectional door that also offers excellent insulation performance: The NovoSpeed Thermo. Specially designed rollers keep noise to a minimum. This patented system also contributes to the sleek design of the NovoSpeed Thermo. The Directly driven ALU torsion tube and guidance based on a continuous chain/ belt system is virtually maintenance free.

## **Specifications**

NovoSpeed	Thermo
max. surface area (W x H)	25 m²
max. width (W)	5,000 mm
max. height (H)	5,000 mm
opening speed	1,1 m/s
closing speed	0.5 m/s
pannel thickness	40 mm
finish	galvanized steel

### Product Benefits

- Class 3 / 4 windresistance
- high insulation value  $U = 1,77 \text{ W} / \text{m}^2\text{K}$ when the door is fully closed (up to 5 x 5 m)
- high opening speed
- low noise due to vibration-free operation

# The fast, space-saving spiral door

## Fast all-in-one exterior door

The NovoSpeed Thermo is a contemporary innovation that hardly takes up any space thanks to the innovative spiral wind-up system. The door is not folded but rolled up as it were, in a way that prevents the laths from making contact with each other. This prevents door wear. A NovoSpeed Thermo is an ideal solution in areas where the structural ceiling arrangement does not offer enough space for a sectional overhead door. Also available as \$600 version, with horizontal rails insead of a spiral.

### **Energy-conscious**

You can easily reduce energy costs by opening and closing exterior doors at high speed. The NovoSpeed Thermo opens at a speed between 1.1 m/s.

### Panel surface finishes and colours

Available in a micro line profiled finish. The door is offered in RAL 9002 as standard, but can optionally be painted in any (approximation of a) RAL colour.







New development by Novoferm!



Spiral wind-up system

Compact hinge design

Standard control unit:

# NovoSpeed

# **ALU R**



The NovoSpeed Alu R is a high-speed exterior door that offers good insulation.

### **Specifications**

NovoSpeed	Alu R
max. surface area (W x H)	25 m²
max. width (W)	5,000 mm
max. height (H)	5,000 mm
opening speed	1 m/s
closing speed	0.5 m/s
slat height (visible)	80 mm
slat thickness	20 mm
slat wall thickness	0.66 mm
slat material	anodised aluminium E6/EV1

### **Product Benefits**

- Class 2 wind resistance (EN 12424) up to a door size of 5 x 5 m
- frequency control included as standard
- compact size for easy installation
- U-shaped side guides
- supplied in the following colours as standard:

7016 9007 9006 9002 9010

# Cost-effective aluminium roller shutter

## Universal roller shutter door

When speed is not a decisive factor, the NovoSpeed Alu R is an ideal solution.

Besides offering an attractive appearance, this door's opening speed of 1 m/s makes it suitable for universal use in interior and exterior openings. As door panel balancing is not required, the NovoSpeed Alu R is compactly dimensioned with smaller side quides and a less powerful drive. This simplified design approach significantly reduces the cost of the door without affecting reliability. Specific features:

- opening speed of 1 metre per second
- · one or multiple viewing slats are optionally available

### Colours

The door is offered in a standard range of RAL colours and can optionally be painted in any (approximation) RAL colour.









Standard control unit:

# NovoSpeed **HEAVY** Outdoor



The NovoSpeed **Heavy Outdoor** is a rapid rolling door with electric drive. Applications are in industry and public utilities with exterior openings.

### **Specifications**

NovoSpeed	Heavy Outdoor
max. surface area (W x H)	36 m²
max. width (W)	6,000 mm
max. height (H)	6,000 mm
opening speed	1 m/s
opening speed with frequency control	1.5 m/s
closing speed with frequency control	0.5 m/s
closing speed	1 m/s
door curtain weight	3,000 gr/m²
door curtain thickness	3 mm

### **Product Benefits**

- Class 2 windresistance
- aluminium reinforcing profile with guide wheels at the ends
- heavy duty product for outdoor use and high wind loads
- supplied in the following colours as standard:

**5010 7023 2002 1021** 

# For large, heavily used corridors

## The fast and reliable exterior door

When fitted behind a sectional door or roller shutter, the NovoSpeed Heavy Outdoor creates a more pleasant working environment and saves energy.

The traditional sectional door is opened in the morning and closed at night. The rapid roll door seals the opening during the working day. The high speeds at which it opens and closes minimise the air flows that cause energy loss. The NovoSpeed range of exterior doors has obviously been designed to withstand the extreme conditions in which these doors operate.



T100R FU 3 kW





Larger wind resistance with guide wheels!

# NovoSpeed Control units Technical Specifications

	items	
controls	push-buttons open-stop-close	
	external push-buttons (open-stop-close or timer)	
	pull switch	
	radar	
	receiver (keeloq) / multibit	
	infrared detector	
	2 channel infrared detector	
	2 channel induction loop detector (separate)	
use	NovoSpeed door control unit for use with:	Prime
		Strong
		Retail
		Heavy
		Heavy Indoor
		Heavy Outdoor
		Flex
connection for pulse generator	DES	
	NES	
optional extras	paired door interlock with control transfer function	
	flashing light	
	traffic light red/green (A800 option)	
	door position detection	
	acoustic signal when closing (option)	
options	3 voltage-free relays	
	receiver (keeloq) / multibit (built in)	
	infrared detector for zone safety monitoring in front of the door opening	
	light screen for safety monitoring in the door area	
wiring	400 VAC ± 10%, Connection for 5-pin CEE plug	
	230 VAC ± 10%, Connection for 3-pin CEE plug	
serial	two additional voltage-free contacts	
	socket for induction loop detector (pre-wired)	
	2 x mounting profile 70 mm	
housing and power supply	steel housing with membrane push-buttons (open-stop-close)	
	plastic housing with membrane push-buttons (open-stop-close)	
	power supply 1x230VAC, slow-blow fuse 10A, 1m CEE-plug, 16A	
	power supply 3x400VAC, slow-blow fuse 10A, 1m CEE-plug, 16A	
	IP65 housing	







T100R	T100R FU 1,5 kW	T100R FU 3 kW
*	*	*
*	*	*
*	*	*
*	*	*
*	*	*
*	*	*
*	*	*
*	*	*
*	*	
*	*	*
	*	
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*		*
<b>→</b>	<b>→</b>	<b>→</b>







# **Accessories**



**Push-button** mushroom head (face-fit)



Safety photocell with Housing with reflector



Ixio S





Push-button set up-stop-down (face-fit)



Pull switch

**Ixio D** infrared and movement sensor for interior use to H = 3,5 m





Push-button set up-stop-down key-operated switch (face-fit)



Key-operated switch



Radar detector movement sensor for interior and exterior use to H = 6 m



Hand transmitter 2-channel or 4-channel



Adjustable photocell bracket galvanized steel



Condor
infrared and
movement sensor
for interior and
exterior use to
H = 6 m



**ClearWave** switches without touching



**Support bracket** for radar or traffic lights



Induction loop detector in separate housing



Light curtain presence detection in the door opening to a maximum height of 2,500 mm



**Console** protects the guides in the event of a collision



Traffic light red



Receiver for remote control (also available in housing)

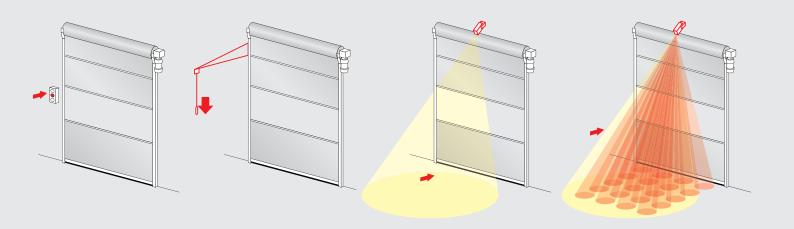


Protective Bollards lalvanized or powdercoated, bolted or cast in concrete



Traffic light red/green

# **Additional Controls**



### **Push-button**

Push-buttons are used predominantly for pedestrian traffic. In situations where the hands are not always free, mushroomhead push-buttons offer a solution.

## Pull switch

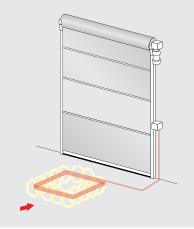
The pull switch is used mainly for forklift truck traffic so the driver can operate the door without getting out of the vehicle.

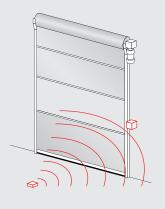
## Radar detector

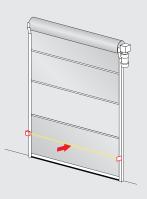
Radar devices only detect moving objects. The radar detector has a conical detection area and is direction-sensitive. The size, direction and sensitivity of the radar detection field are adjustable.

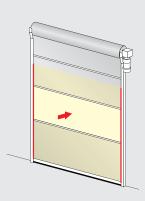
### Condor

The Condor combines two functions in one appliance. Radar for the detection of moving objects (door command) and active infrared for the detection of stationary objects (safety).









### Induction loop

An induction loop creates a magnetic field. When metal objects enter the field, they are detected. Consequently, the induction loop detector is suitable for forklift truck traffic as a door control or extra safety device to prevent the door from closing.

### Remote control

Radio remote control operation (transmitter and receiver) allows selective operation. Only vehicles or personnel with a transmitter can open or shut the door. The transmitters may have one or more channels.

## Photocell

Photocells are mainly used to monitor the door opening. The door will not close when the photocell beam is interrupted. Designs with a reflector and with a transmitter and receiver are available

### Light curtain

Because a light curtain has a larger detection range, it offers greater safety than a photocell. This form of detection is highly suited to a large variety of vehicle and load sizes.

# Technical data

# Rapid roll doors with a flexible door curtain



	items	units	Retail
application	interior door		*
	exterior door		
speed	T100R Control unit	opens in m/sec (approx.)	
		closes in m/sec (approx.)	
	T100R FU mit Frequenzregelung	opens in m/sec (approx.)	2
		closes in m/sec (approx.)	0.5
safety equipment			*
wind-resistance			3 (12 - 19 km/h)
			Class 1
	blocks / stiffener - hinge profile		<b>*</b> / -
door sizes	****	maximum in mm	2,250
	height	maximum in mm	2,600
	maximum surface area	maximum m²	5.85
overall size	4.170 6.40	clear width + mm	55 / 335
	bearing side	clear width + mm	55 / 150
	height	clear height + mm	400
	width with protective cover	clear width + mm	140 / 235
	height with protective cover	clear height + mm	440
	depth	from the wall = mm	
	depth with protective cover	from the wall = mm	420
	T100R control unit, plastic housing [IP65]	$w \times h \times d = 219 \times 256 \times 117 \text{ mm}$	
	T100R large control unit with add-on [IP65]	$w \times h \times d = 219 \times 550 \times 117 \text{ mm}$	
	T100R FU 1,5 kW [IP65]	w x h x d = 219 x 550 x 117 mm	*
	T100R FU 3 kW	w x h x d = 300 x 600 x 160 mm	
'break-away'-system			
	auto 're-feed' (self-repairing)		★ (1 side)
			*
door curtain	•	0.8 / 3 mm	0.8 mm
	coloured Synthetic thickness	0.7 / 1.2 / 3 mm	0.7 mm
	tensioning system		
	galvanised steel		*
surface finish	Statilitess steet VZA, sillootilea (504)		0
	aluminium		
	painted in a choice of RAL colours		0
drive and control	mechanical cam-type limit switch		
	electronic limit switch DES		*
	mains supply		1 x 230V, N, PE
	fuse		16A slow
	supply voltage (single phase) 230V		*
	supply voltage (three-phase) 400V		
	main switch		*
	emergency stop		*
	presence detection in the door opening	photocell + safety edge	
		light screen	*
		radar detector	0
	safety edge device	wireless signal transfer	
		coil cable	
emergency opening			
	emergency hand chain		_
	counterweight / spring		0
	B-Brake		0
	mechanical emergency release		0
	UPS with frequency control, 230V	with frequency control only	0
voltage-free contacts			2
	★ = Standard		

<sup>★ =</sup> Standard
O = Optional















Flex Hard Edge	Flex Flex Edge	Prime	Strong	Polara	Heavy Indoor	Heavy	Heavy Outdoor
*	*	*	*	*	*	*	
							*
		1	1	1	1	1	
		1	1	1	1	1	
2	2	1,5	1,5		1,5	1,5	1,5
0.5	0.5	0.5	0.5		0.5	0.5	0.5
*	*	*	*	*	*	*	*
5 (29 - 38 km/h)	3 (12 - 19 km/h)	5 (29 - 38 km/h)	8 (62 - 74 km/h)	10 (max. 90 km/h)			
Class 0	Class 2						
<b>*</b> / -	<b>*</b> / -	0 / -	0/*	-/*	-/*	-/ <del>*</del>	-/*
4,000	3,500	3,500	5,000	3,500	6,000	6,000	6,000
5,000	5,000	3,500	5,000	5,000	6,000	6,000	6,000
20	17.5	12.25	25	17.5	36	36	36
210	210	300	300	290	470	470	470
210 450	210 450	170 350	170 350	160 850	275 710	275 710	250 660
320	320	410	410	630	775	775	750
500	450	460	460		750	750	660
300	430	325	325	350	400	400	380
420	420	430	430	330	400	400	410
420	420	*	*	SMD*	*	*	*
		0	0	31-15	0	0	0
*	*	0	0		0		- C
^	^		0		0	0	*
				*	0	O (≤ 4500 wide)	
*	*			^	_	C (1 4000 Mide)	
*	*						
0.8 mm	3 mm	3 mm					
1.2	1.2	0.7 / 1.2 mm	0.7 / 1.2 mm	1.2 mm	1.2 / 3 mm	3 mm	3 mm
						*	*
		*	*		*	*	*
		0	0	0			
*	*						
0	0			0	0	0	0
				*			
*	*	*	*		*	*	*
1 x 230V, N, PE	1 x 230V, N, PE	3 x 400V, N, PE					
16A slow							
*	*	0	0	0	0		
		*	*	*	*	*	*
*	*	0	0	0	0	0	0
0	0	0	0	0	0		
					*	*	*
*	*	*	*	-	0	0	0
0	0	0	0	0	0	0	0
							0
		*			*	*	*
		*	*	*	*	*	*
		0	0		0	0	0
-/0	- /0						
0	0						
0	0						
0	0	0	0		0	on request	on request
2	2	2	2	2	2	2	2

# Technical data

# Rapid roll doors with rigid door panels





	item	units	Thermo	Alu R
application	inside door			
	outside door		*	*
speed	motor contactor control	opens in m/sec. (approx.)		
		closes in m/sec. (approx.)		
	frequency control	opens in m/sec. (approx.)	1.1	1
		closes in m/sec. (approx.)	0.5	0.7
safety equipment	DIN EN 13241		*	*
wind load class	DIN EN 12424		Class 3/4	Class 2
resistance penetrating water	DIN EN 12425		Class 2	Class 2
air permeability	DIN EN 12426		Class 2	Class 2
heat transfer	DIN EN 12428		0	0
noise-attenuation		dB	20	20
dimensions		maximum in mm	5,000	5,000
	height	maximum in mm	5,000	5,000
overall size		clear width + mm	350	300
	bearing side	clear width + mm	120	170
	lintel	clear width + mm	240	450
	Height	clear height + mm	1100	850
	drive side with protective cover	clear width + mm		350
	bearing side with protective cover	clear width + mm		250
	lintel with protective cover	clear width + mm		600
	height with protective cover	clear height + mm w x h x d = 300 x 350 x 150 mm		730
	frequency control FUE 1,5 kW	w x h x d = 300 x 350 x 150 mm		
	frequency control FUE3-C 4 kW GFA TS971	w x h x d = 355 x 380 x 80 mm	*	*
door construction	self-supporting	W X II X U = 133 X 300 X 00 IIIIII	×	*
door curtain	profiles, double-walled, thickness in mm		40	20
door cartain	thermally insulated profile		*	*
door curtain material				*
addr eartain material	aluminium with RAL powder coating	colour of choice	0	0
glazing	·	cotodi oi cilolec	0	0
ventilation	ventilation opening			
guide material /	galvanised steel / aluminum		<del>*</del> /-	<b>*</b> / -
surface finish			0	0
drive and control			*	*
	supply voltage ( single phase )			*
	supply voltage (triple-phase)		*	> 16 m²
	membrane push-buttons, Open-Stop-Close		*	*
	frequency control, main switch, switches off all poles		*	*
	fuse		16A T	16A T
	protection class	drive control	IP 65	IP 65
	emergency stop		0	0
	presence detection in door opening	photocell		*
		light screen	*	0
	safety edge device	with articulated cable carrier		
		with coil cable		*
		with wireless signal transfer	*	0
	electronic limit switch DES		*	*
emergency opening	crank		*	*
	emergency hand chain		0	0
	counterweight/spring			
Valtaga free control	UPS with frequency control, 230V			
voltage-free contacts			2	2

# References

