novoferm

Garage door systems and hinged doors Project hinged doors and frames Industrial door systems Docking and logistics systems

Intelligent Door Solutions

# **NOVOFERM SPEEDROLLERS**

HIGH-SPEED ROLLER DOORS

113

SMART SOLUTIONS THAT KEEP YOUR BUILDING, YOUR CLIMATE AND YOUR INVESTMENTS HEALTHY

## WELCOME TO NOVOFERM

....

0

Naturally, you would like to work with a reliable partner who offers you everything you need:

- An extensive product portfolio that meets all your requirements and wishes
- Expert employees who think along with you, supervise your projects and deliver them perfectly.
- 35 years of experience and a proven track record throughout Europe



Intelligent Door Solutions

## CONTENTS

Welcome to Novoferm The Novoferm Group What is a SpeedRoller? How does a SpeedRoller work? Why choose a SpeedRoller from Novoferm? What do you need to look out for?

#### SPEEDROLLERS FOR INDOORS

Product overvi	ew
SpeedRoller	PRIME
${\sf SpeedRoller}$	PRIME-XF
${\sf SpeedRoller}$	STRONG-E
${\sf SpeedRoller}$	STRONG-FV
SpeedRoller	STRONG
SpeedRoller	NOVOZIP

#### 2 SPEEDROLLERS FOR OUTDOORS

- 42 4 Product overview 6 SpeedRoller NOVOZIP 44 8 Sectional door NS THERMO 48 12 STRONG-OUTDOOR 52 SpeedRoller 14 Folding door NOVOFOLD 56
  - Ű.

#### ADDITIONAL INFORMATION

16 Control units 60 62 18 Operation and safety 22 Technical Details 64 26 References 66 30 Contact information 72 34

38

## THE NOVOFERM GROUP

The Novoferm Group is one of the largest manufacturers and suppliers of doors, garage doors industrial doors and associated products in Europe. We have been specialists in many forms of access and exits for industrial buildings and residential construction for more than 35 years.



#### SANWA HOLDINGS CORPORATION

Since 2003, we have been part of Sanwa Holdings Corporation, a leading global manufacturer of doors, garage doors and other building equipment products. Sanwa Holdings Corporation has an annual turnover of 348 million euros and branches in 26 countries.

The headquarters of the Novoferm Group are in Germany. In addition, we have sales offices in almost every European country. We manufacture our products in 14 production locations spread over 9 countries.

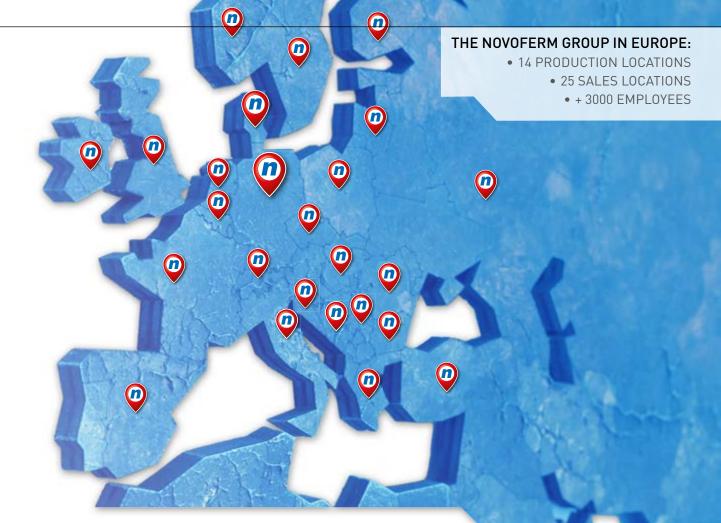
## NOVOFERM IS BASED ON THE SIMPLE PRINCIPLE OF QUALITY, NOT QUANTITY.

We ensure that our products meet the maximum quality, safety, comfort and aesthetics at minimum cost. This is why we give generous long-term guarantees on our products and, of course, the corresponding customer service. We are passionate about offering safety, security and user convenience.

Novoferm's expert staff are ready for you. We are pleased to help you!

OPENING DOORS TO A SAFE AND SECURE TOMORROW





The Novoferm Group has branches all over Europe. Among others:



**GERMANY** Novoferm Vertriebs GmbH

10	5-	13-		
2				ŀ
	8			L
	A	-11	0/0	l

THE NETHERLANDS Novoferm Nederland BV



**BELGIUM** Novoferm Industrie België



**DENMARK** Novoferm Danmark ApS









ITALY Novoferm Schievano S.r.l.



AUSTRIA Novoferm Austria GmbH

**POLAND** Novoferm Polska Sp. z o.o.



**ROMANIA** Histria International

**SPAIN** 

Novoferm Alsal

**CZECH REPUBLIC** 

Novoferm ČR S.R.O.







**TURKEY** FGİ Kapı ve Yükleme Teknolojileri A.Ş.

SN NO

SWITZERLAND Novoferm Schweiz AG



## WHAT IS A SPEEDROLLER?

Novoferm SpeedRollers are particularly fast, electrically driven doors. The speed with which they open and close ensures that the passage is not interrupted while draughts do not have a chance. This has great advantages for you:

- PLEASANT INDOOR CLIMATE: The door is closed before any draught can occur. Warm air stays inside, cold air stays outside. The climate in your building is much easier to maintain.
- YOU NEED MUCH LESS ENERGY to keep your building at temperature, which significantly reduces your energy costs.
- LESS SICK LEAVE: Because there are hardly any draughts and the indoor temperature remains pleasant, your staff are less likely to become ill. A healthy and constant indoor climate ensures healthy employees.

- EFFICIENT: Unauthorised persons will not walk in, while staff can continue their work quickly. Ideal in the retail and logistics sector!
- CONVENIENT: Through clever placement and operating sequence of your SpeedRollers, you can determine the access and routing routing within your building.
- AN EXTRA ADVANTAGE: noise is reduced. The sound from the adjacent room is experienced as much less disturbing.
- THERE ARE MANY POSSIBILITIES in terms of operation, design and colour. Even a photo print is possible. There is always a SpeedRoller that fits your situation.

#### CONSTRUCTION

(1) The door curtain is made of synthetic fabric with a polyester reinforcement insert. When operated, the door curtain is quickly rolled up onto the top roll (2) above the door opening.

(3) The stable columns are made of sendzimir-galvanised steel profiles. The integrated side seals are matched specifically to your application and ensure draught-free guiding of the door curtain. The columns form a solid, pre-assembled construction with the roller and operator suspension.

(4) The underside of the door curtain has a solid HardEdge bottom beam or a flexible FlexEdge bottom beam. The door curtain can be equipped with several reinforcement options. (5) Windows or vision sections are also possible. All these options have their own advantages.

See pages 14 and 15 for all available options.

#### 6 CONTROL / OPERATION

The door is supplied as standard with up-stop-down buttons on the control system. The control system regulates a multitude of functions, such as:

- Adjustable open time, half-height stop, operating or service position, etc.
- Many different control options are available to operate a SpeedRoller, such as radar and/or motion detector, remote control, traffic lights, lock control and many more.

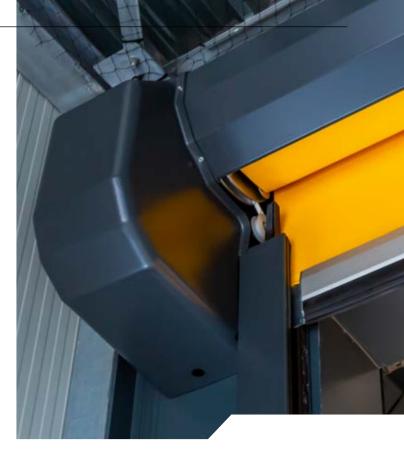
#### 7 DRIVE

Each SpeedRoller is electrically driven by an electric motor with gearbox. The roller is driven directly. Drive side either right or left.

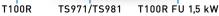
Depending on your requirements and the situation, we will always put together the most suitable combination of drive and control options for you, so that you can be sure of a SpeedRoller that performs optimally.

#### SECURITY

Novoferm SpeedRollers are secured as standard with roll-down protection and a safety light curtain. This fully secures the passage to a height of 2,500 mm. More information on optional safety and operating systems can be found on pages 62-63.







T100R FU 3 kW

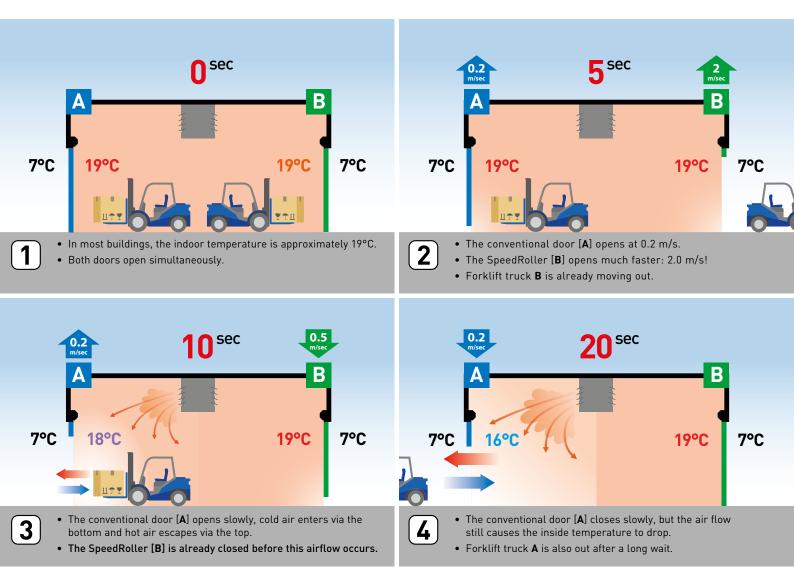


GFA slip-on drive



## HOW DOES A SPEEDROLLER WORK?

As you can see in the illustration below, with a conventional outside door [A] air flows start building up which cause energy losses. With a fast SpeedRoller from Novoferm [B] the door is already closed before these air flows start.



## THE HEAT LOSS DUE TO OPEN DOORS IS ALWAYS MANY TIMES GREATER THAN THE HEAT LOSS DUE TO HEAT TRANSMISSION OR LEAKAGE THROUGH A CLOSED DOOR.

Research has shown that the inside temperature of a building or room with an open door - depending on the outside temperature and the type of building - drops very quickly. This means that if a door is open for a shorter period of time, the inside temperature drops much less. Draughts are also much less likely to occur if the door closes quickly. Studies by TU Munich have shown that by using fast doors and avoiding long opening times, the additional heat requirement can be reduced by up to **30%**!

The use of an airlock can provide even greater savings and improve the indoor climate by up to **90%**.



#### BY KEEPING THE INDOOR CLIMATE AT CONSTANT TEMPERATURE, A SPEEDROLLER SIGNIFICANTLY REDUCES YOUR ENERGY COSTS!

8 | NOVOFERM



#### WORKING EFFICIENTLY MEANS WORKING ECONOMICALLY

When an exterior door is not used very often, the insulation value is of great importance. However, when an outside door is opened frequently the speed with which it opens and closes and especially the open time are much more important. The latest generation of Novoferm controls have a freely programmable half-height stop as standard. In combination with the "automatic closing" function this produces a considerable energy saving.



## SPEED ROLLERS IN USE

The multifunctional fast action Novoferm doors can be used in practically all market sectors. The design of the door is thereby strongly dependent on its use and the conditions under which it must operate. Our standard range offers solutions for most situations but we always offer custom-made solutions for special circumstances.



#### LIGHT / HEAVY INDUSTRY

Light and heavy industry require a wide variety of draught-excluding solutions. Products that are easy to install, continue to function without problems and require hardly any maintenance. With our products, you are therefore assured of operational reliability, continuity and safety.





#### RETAIL

In the modern supermarket, the shelves are usually well stocked with a wide range of products. In order to keep the shelves well stocked,

intensive traffic between the warehouse and the shop area is necessary.

A rapid roll door is therefore often chosen as a partition door between shop and warehouse. This is fast, opens and closes automatically, is safe for the user, takes up hardly any space and is particularly quiet.

Novoferm has developed custom-made doors for various retailers and can now include the most prominent retail chains in Europe among its regular customers.



#### **FOOD INDUSTRY**

Novoferm is fully at home in the food industry. Within Europe we have been working with

major names in the field of food production and processing for years.

We also have extensive experience with cold store builders. We have learned that in this sector it is not only about materials such as stainless steel and strict strict requirements with regard to hygiene, but that there is a great demand for custom solutions. This often revolves around cost efficiency and the continuity of production processes.





#### AUTOMOTIVE

In a typical car factory, an average of a thousand cars are produced every day. This

generates a huge flow of goods, where delivery on time is crucial. This is why high requirements are set for the reliability of doors included in this logistical flow.

Novoferm offers products that can and continue to function without problems under the set conditions.

Novoferm also offers various options for maintenance and service contracts. Your continuity is thus guaranteed.



#### PHARMACY AND CHEMISTRY

Pharmacy and chemistry make high demands with respect to hygiene, sealing, operational reliability, ease of use and a problem-free after sales service.

Novoferm offers custom-made solutions for these requirements and also invests a lot of time and money in training and educating its own production staff and mechanics. Our own mechanics and companies that assemble for us are fully certified. They therefore meet all requirements to be able and allowed to work in strictly regulated operating conditions.







#### LOGISTICS

When products are ready, they must reach the end customer as quickly and efficiently

as possible. European companies therefore often and gladly work with large logistic distribution centres for storage and transhipment. Doors that are set up in these logistic flows must be able to open and close many times a day.

However, a good product alone is not enough! Even a good product can sometimes malfunction due to intensive use. Preventive maintenance can limit this to a minimum. Novoferm therefore offers various options for maintenance and service contracts.



#### REFERENCES

We know all types of doors inside out. We have many years of experience with the most diverse organisations throughout Europe and beyond. We work together with most of the major brands in the automotive industry, the food industry, logistics, retail and many other well-known and lesser-known companies.

For many chains, such as supermarket or retail chains, Novoferm is the first choice for the supply of all SpeedRollers, overhead doors, loading docks, interior doors and/or fire-resistant doors.

## WHY CHOOSE A SPEEDROLLER FROM NOVOFERM?



Customers can look forward to some exiting highlights! Novoferm is presenting an extensive range of new or improved SpeedRollers. Together with all our new and updated Industrial products, we can offer the best solutions for your needs. Whether you are looking for attractive architecture, smart applications, security or efficiency, you can be sure to find the right solution at Novoferm. Dealers, processors, architects and planners will also appreciate our digital services. The Novoferm apps, videos and specialist portals offer practical working aids that are available anywhere and at any time.

In logistics, time is money, and both should be saved wherever possible. Novoferm helps you to identify and exploit potential savings, with doors that need to be serviced less frequently and that open more quickly.

#### OUR EMPLOYEES ARE OUR GREATEST ASSET:

- Enthusiastic R&D teams are constantly developing new, innovative products.
- Expert sales people accompany you at every step, from initial orientation to complete construction support if you wish.
- The production departments consist of committed, motivated employees who are focused on quality and efficiency.
- In most countries, we use well known, experienced assembly teams
- Our Customer Service is one of our top priorities, so that you can rest assured that your projects are carried out perfectly.
- All our employees work together to provide you with the best possible service.

You can be certain of getting the best solution for your situation and we will achieve the best results together.

#### **TESTED AND APPROVED**

All automatic doors are covered by British Standard BS EN13241:2003+A2:2016. Novoferm develops and produces its products strictly in accordance with these standards.

You are assured of safe operation during daily use, assembly and maintenance. Naturally, Novoferm also complies with all other relevant guidelines.

#### ONE MANUFACTURER, ONE SUPPLIER

Novoferm does not just supply draught excluding products but offers you a complete 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 naturally offers you advantages:

- Only one point of contact for all products, assembly, maintenance and after-sales
- All products are perfectly matched to each other
- Production, delivery and assembly in the correct order
- Our mechanics know all the products through and through.

#### AFTER SALES CUSTOMER SERVICE

After our products have been installed, the project is not yet complete for Novoferm. Service and maintenance are important, to guarantee the use, quality and life span of the products.

Novoferm offers excellent service in most countries, with a network of maintenance engineers that can guarantee your continuity day in and day out.

## EFFICIENT USE OF ENERGY, ALSO DURING PRODUCTION AND LOGISTICS

In 2009 Novoferm signed the 'Green Solutions' Group Charter. This concerns a package of strict measures for reducing CO<sup>2</sup> emissions when producing, supplying, installing and maintaining industrial doors.



#### **100 % RECYCLABLE MATERIALS**

This is a goal that we consistently pursue. Therefore, we are very careful in the selection of our raw materials and sources and complement these with our own sustainable developments. For example, our control technology is completely lead-free and therefore complies with RoHS. This has already earned us a top position in this area.



## WHAT SHOULD YOU BE AWARE OF?

The choice of the type of SpeedRoller depends on several factors: the size of the passageway and the speed are obvious, but also how often the door has to open and close in one day, the maximum wind pressure that can occur in the passageway, or the way you want to operate the door.

Security and appearance also play a role. But also, for example, whether a door is easy to keep clean, as is required in the nutrition or pharmaceutical industry. Do you have a lot of fast forklift traffic? Then our Easy-Repair or EasyReplace option will come in handy.

We even have SpeedRollers that are self-repairing. If the curtain is driven out of the guide track, the door will repair itself automatically and your business process will continue with minimal interruption.

## INSIDE OR OUTSIDE DOOR?

Novoferm SpeedRollers are available for inside and outside passageways but maximum wind resistance and speed are not always required.

Depending on the maximum wind pressure, an extra reinforcement may already be sufficient. We also have models that are fully developed for very high wind pressure and/or installation in the outer wall. These are mounted on the These are mounted on the inside of the façade.

## WIND LOAD CLASSIFICATION

The minimum wind resistance is indicated in Beaufort, the maximum wind load class in accordance with EN 12424. The EN 12424 is mainly intended for external doors, which is why we also indicate Beaufort for our (internal) doors. The exception to this is the NovoFold, which can also be mounted on the outside. Have one of our sales persons explain to you which doors are most suitable for your situation, without any obligation.

We are happy to help!



i.

Wind force in Beaufort	Wind pressure in Pascal	Wind speed	Classification DIN EN 12424	Application
<b>0</b> - Silent	0,0 - 0,0	< 1 km/h		Low wind pressure
<b>1</b> - Slight draught	0,0 - 0,1	1 - 5 km/h		Smaller passage
<b>2</b> - Light breeze	2,0 - 5,9	6 - 11 km/h		Smaller spaces
<b>3</b> - Weak breeze	6,9 - 17,7	12 - 19 km/h		Occasional use
4 - Moderate breeze	18,6 - 38,3	20 - 28 km/h		Moderate
<b>5</b> - Fresh breeze	39,2 - 70,6	29 - 38 km/h		wind pressure
<b>6</b> - Strong breeze	71,6 - 116,7	39 - 49 km/h		Larger passage
7 - Strong wind	117,7 - 179,5	50 - 61 km/h		Larger spaces
8 - Stormy wind	180,5 - 262,9	62 - 74 km/h		Regular use
<b>9</b> - Storm	263,9 - 365,9	75 - 88 km/h	Class 1 - 300 N/m²	High
10 - Severe storm	366,9 - 495,4	89 - 102 km/h	Class 2 - 450 N/m²	wind pressure
11 - Very severe storm	496,4 - 652,4	103 - 117 km/h	Class 3 - 700 N/m²	Large passageway
12 - Hurricane	653,3 - 836,8	118 - 133 km/h	Class 4 - 1000 N/m²	Large rooms
13 - Hurricane	837,8 - 1039,9	134 - 149 km/h	Class 5 > 1000 N/m²	In exterior facade
<b>14</b> - Hurricane	1049,7 - 1294,9	150 - 166 km/h		Intensive use
<b>15</b> - Hurricane	1304,7 - 1579,4	167 - 183 km/h		

## WHICH OPTIONS ARE USEFUL FOR YOU?

There are numerous options available to tailor your SpeedRoller to your requirements and wishes. Here is an overview:



## FREQUENCY CONTROL

A control unit with a frequency converter optimally adjusts the speed of the drive to the door. By starting slowly, then accelerating sharply and decelerating in a controlled manner, maximum performance of your SpeedRoller is guaranteed.

Frequency control also increases maximum service life by reducing abrupt acceleration and deceleration. If you have a lot of fast traffic, this is the ideal option to get the most out of your SpeedRoller.



Novoferm SpeedRollers comply with all international safety requirements as standard. In addition, you can opt for extra security options. For example because you have very fast forklift trucks or because you have very fragile goods that cannot withstand the touch of a Hard-Edge.

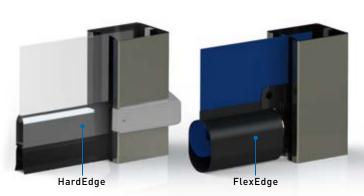
A safety light curtain provides maximum security when the door is open, but there are also options that combine security and control, such as a motion detector. All options are explained in more detail on page **62**.



### HARD-EDGE OR FLEX-EDGE?

A HardEdge bottom beam is stiff and solid, able to withstand greater wind pressure. But do you have a smaller door where staff constantly walk in and out with fragile goods? Then a **FlexEdge** bottom beam is a good choice.

If someone accidentally runs into the door, it will be completely painless. Vulnerable goods are also not affected by the soft Flex-Edge.



## FOOD VERSIONS

In the food industry, there cannot be any accumulation of dirt. In addition, everything must be easy to clean, for example with a water hose. For this purpose there are



#### WHAT'S YOUR COLOUR?

SpeedRollers with a one-piece door curtain can be printed with any imprint of your choice. Your logo? A nice picture of your business, the environment or your product? Several well-known supermarket chains chains use the printed SpeedRoller as standard and thus increase the atmosphere and the image in the shops.

stainless steel columns, hinges with envelope technology and special sealing profiles. Dirt is rinsed away in this way and does not adhere between the hinges and brushes.





## WINDLOAD OPTIMISER

The WindLoad Optimiser consists of a number of smart measures that significantly increase the maximum wind resistance of a door



The EasyRepair end pieces make it possible to quickly click a collapsed door leaf back into the column without the need for tools

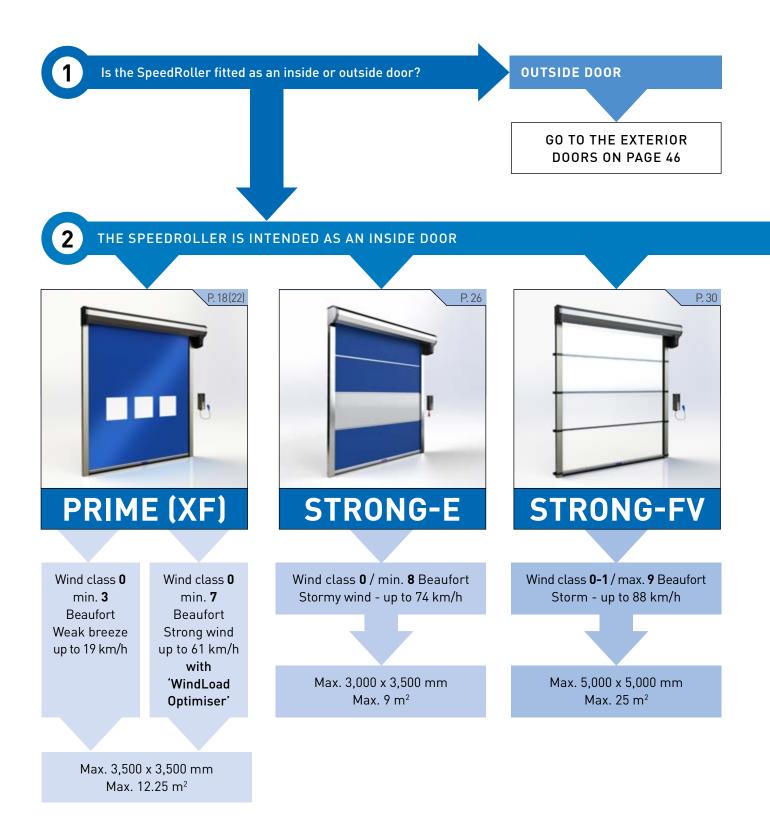


SelfRepair automatically guides the door leaf back into the column after a collision. EasyReplace makes the replacement of very large parts easier.

## SPEEDROLLERS FOR INDOOR USE

SpeedRollers for indoor use are designed to be mounted inside a building. This can be in a passageway between rooms or on the inside of an exterior wall. Which door is most suitable for your situation depends on many factors. Firstly, the size and wind pressure in the passageway. Often, smaller spaces will have less wind pressure than between large halls or in an airlock.

With the help of the diagram on this page, you can determine which door is most suitable for you. Would you prefer a personal explanation? Please contact one of our sales persons or ditributors in your area.







The suggestion obtained by completing this diagram is not binding. No rights can be derived from it.



# PRIME

## THE QUICK, SILENT SOLUTION TO DRAUGHT

The SpeedRoller **Prime** is a good solution for medium-sized openings up to 12.25 m<sup>2</sup> and normal use. Ideal for the daily passage of people and light goods. The one-piece door curtain is extremely quiet and can be printed with any required imprint. Novoferm SpeedRollers are used in many supermarkets because they are practical in use, save a lot of energy and improve the atmosphere in the shopping area with their beautiful, clear print.

18 | NOVOFERM







**1.5** m/s Max. opening speed with frequency control

#### APPLICATION

- SUPERMARKETS
- FOOD INDUSTRY
- LABORATORIES
- LIGHT INDUSTRY

#### PROPERTIES

#### PRIME

12.25 m²
3,500 mm
3,500 mm
3 / 7* Bft
0
1.5 m/s
0.5 m/s
1 m/s
0.7/1.2mm
680/1400 gr/m²
No

#### FEATURES

- WIND RESISTANT up to at least **3** Bft or even up to **7** Bft with WindLoad Optimiser. Class 0 according to EN12424
- SILENT the door curtain is manufactured in one piece and is therefore virtually noise-free
- SAFE equipped with a safety light curtain as standard, optionally with a soft FlexEdge bottom beam
- ROBUST steel guide columns guide the door curtain made of polyester-reinforced plastic fabric
- DRAUGHT-FREE the door curtain is sealed with sliding strips, the bottom beam has a rubber sealing profile
- CHIQUE the door leaf can be provided with a fullcolour print of your own design! How about a nice photo of your products, or your logo or your logo, or a photo that fits nicely into your interior??



Extra safe: the soft FlexEdge bottom bar (option)

\*Depending on configuration. For full technical details, please see pages 64-65 or visit www.novoferm.nl.

00200113					Available in the	following RAL col	ours as standard:
5005	9004	9003	7038	7024	3020	2009	1003
			Optiona	Illy available with	n 1.2 mm door c	urtain in the follov	ving RAL colours:
5002	9004	9003	70	38	3020	2009	1023

#### APPLICATION EXAMPLES



SpeedRoller Prime: Handig en mooi in elke situatie!

SUPERMARKETS must be continuously restocked from the warehouse. It is crucial that shop personnel can enter and exit the warehouse very quickly with trolleys or carts carrying fresh products. By using a large push button or card reader, the shop personnel can guickly enter and exit the warehouse, but the shoppers cannot. Because the Prime opens quickly and closes relatively quickly, the climate in your shop remains pleasant.

The one-piece door curtain can be printed with any desired imprint. An ideal opportunity to turn a closed passage into a beautiful eye-catcher. All in all, enough reasons to ensure that Novoferm SpeedRollers have been used as standard in all branches of many wellknown supermarket chains for many years!



Fast, practical and hygienic

THE FOOD INDUSTRY often needs small. fast doors that are easy to keep clean and can be operated with a pull cord, for example from a small forklift or pump truck. If the wind pressure in the passageway is not very high, a Prime is very well suited to this situation.



By using motion detectors or a ClearWave control, the staff does not need to touch anything to open the door quickly, which keeps their hands clean. The Ixio-D is a radar and motion detector in one. It opens the door and monitors the passage at the same time.



More control and safety options on page 62.

### PRIME

		OPTIONS	$\checkmark$ = Standard $\bigcirc$ = 0	ptional
HardEdge bottom beam Stability and wind resistance	~	Frequency control Rapid control with soft	start/stop	0
<b>Safety light curtain</b> Securing the passageway up to 2.5m high	~	FlexEdge bottom bean Added safety for person		0
Cover in PVC, metal or stainless steel (Drive hood in PVC only)	0	EasyRepair Repair the door withou	t tools / assistance	0

For full technical details, please see pages 64-65 or visit www.novoferm.nl.





₿+

Stain - less

Full colour print
Your own design on the door curtain

WindLoad Optimiser Increases the maximum wind resistance

Stainless steel columns Easy to clean and never rust

#### CONTROLS

Ο

Ο

0

Standard: Tormatic T100R

Optional:

Tormatic T100R FU







# **PRIME-XF**

## THE EXTRA FAST, SILENT SOLUTION AGAINST DRAUGHTS

The fast SpeedRoller Prime-XF is designed for high speed in intensive use. Ideal for fast passage of people and light goods. This innovative door is very widely applicable for openings up to 12.25 m<sup>2</sup>. The one-piece door curtain is extremely quiet and can be printed with any required imprint. Especially the high speed makes this door very suitable for passages that are used very frequently. With a cord switch or motion detector, your staff can pass through in no time.







**2.3 m/s** Max. opening speed with frequency control

#### APPLICATION

- SUPERMARKETS
- FOOD INDUSTRY
- LABORATORIES
- LIGHT INDUSTRY

#### PROPERTIES

PRIME-XF

Max. surface area (W x H)	12.25 m²
Max. width (W)	3,500 mm
Max. height (H)	3,500 mm
Minimum wind load [* with WindLoad Optimiser]	3/7* Bft
Max. wind load class - EN 12424	0
Opening speed with frequency control	<b>2.3</b> m/s
Closing speed with frequency control	0.5 m/s
Opening/closing speed with standard control	1 m/s
Door curtain thickness	1.2 mm
Fabric weight	1,400 gr/m²
Suitable as an outside door	No

#### FEATURES

- WIND RESISTANT up to at least **3** Bft or even up to **7** Bft with WindLoad Optimiser. Class 0 according to EN12424
- WALKING or driving through the door in a hurry is a breeze with the PRIME-XF. With a motion detector or remote control for example the door opens so fast that traffic hardly has to slow down
- SILENT the door curtain is manufactured in one piece and is therefore virtually noise-free
- SAFE equipped with a safety light curtain as standard, optionally with a soft FlexEdge bottom beam
- ROBUST steel guide columns guide the door curtain made of polyester-reinforced plastic fabric
- DRAUGHT-FREE the door curtain is sealed with sliding strips, the bottom beam has a rubber sealing profile



The aluminium top roller is light and fast

\*Depending on configuration. For full technical details, please see pages 64-65 or visit www.novoferm.nl.

COLOURS						
		Av	ailable as standard	in 1.2 mm thick doo	r curtain in the follo	wing RAL colours:
5002	9004	9003	7038	3020	2009	1023

#### APPLICATION EXAMPLES

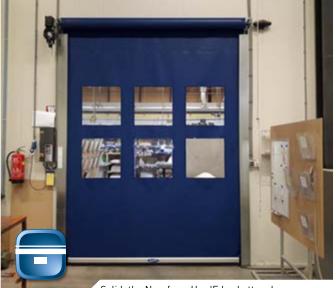


Modern top cover and a personalised imprint

SUPERMARKETS need super-fast access to their warehouse, so that the shop can be replenished quickly at any time. The Prime-XF is even faster than the regular Prime. Only shop personnel are allowed to enter the warehouse. In addition, the door must not remain open for long periods of time or there will be draughts, which would prevent a pleasant indoor environment for the customers.

The Prime-XF meets all these requirements:

- Super fast (up to 2.3 m/s!)
- Only accessible with entrance card or access code\*
- Closes draught-proof again in super-fast time
- With a nice personal imprint of your choice, the Prime-XF also looks great, like a life-size canvas painting in your shop!



Solid: the Novoferm HardEdge bottom beam

LOGISTICS COMPANIES have precisely coordinated cargo flows. By using fast SpeedRollers with smart controls, these flows can also take place between several halls as efficiently as possible. Especially in large halls with many personnel, it is difficult to maintain a good indoor climate if there are small to medium-sized passageways that open and close frequently. The Prime-XF is ideal for this situation: fast, reliable and above all quiet, which is also important in a large hall where every sound reverberates.

## **PRIME-XF**

	,	OPTIONS	$\checkmark$ = Standard $\bigcirc$ = 0	ptional
<b>HardEdge bottom beam</b> Stability and wind resistance	~	Cover in PVC, metal o (Drive hood in PVC onl		0
<b>Safety light curtain</b> Securing the passageway up to 2.5m high	~	FlexEdge bottom bear Added safety for perso		0
Frequency control Rapid control with soft start/stop	~	EasyRepair Repair the door withou	ut tools / assistance	0

For full technical details, please see pages 64-65 or visit www.novoferm.nl.



PRETAFYA

Frequency control
Super fast with pull cord operation!



₿•

## Full colour print Your own design on the door curtain

**WindLoad Optimiser** Increases the maximum wind resistance



**Stainless steel columns** Easy to clean and never rust

### CONTROLS

Ο

Ο

0

Standard: Tormatic T100R FU





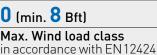
# STRONG-E

## ALL ESSENTIAL FUNCTIONS IN AN ECONOMY PACKAGE

The SpeedRoller Strong-E is a good solution for openings up to 9 m<sup>2</sup> with moderate wind pressure. Ideal for the daily passage of people and light goods. The reinforcement profiles provide additional stability. The opening speed of 1.8 m/s makes this door practical even in heavy traffic. Useful for production processes that run quickly and where downtimes are not tolerated. This innovative door has a very wide range of use.









#### APPLICATION

- DISTRIBUTIE CENTRA
- WAREHOUSES
- VOEDINGSMIDDELEN INDUSTRIE
- LICHTE TOT ZWARE INDUSTRIE

#### PROPERTIES

#### STRONG-E

Max. surface area (W x H)	9 m²
Max. width (W)	3,000 mm
Max. height (H)	3,500 mm
Minimum wind load in Beaufort	8 Bft
Max. wind load class - EN 12424	0
Opening speed with frequency control	1.8 m/s
Closing speed with frequency control	0.5m/s
Opening/closing speed with standard control	1m/s
Door curtain thickness	0.7mm
Fabric weight	680gr/m²
Suitable as an outside door	No

#### **FEATURES**

- WIND RESISTANT up to at least 8 Bft. Class 0 according to EN12424
- FAST the Strong-E is ideal for fast walking or driving through, even in situations with slightly higher wind pressure, such as production halls. If your production process needs to run quickly, the Strong-E gives you the continuity you need.
- SAFE equipped with a safety light curtain as standard, optionally with a soft FlexEdge bottom beam
- ROBUST steel guide columns guide the door curtain made of plastic fabric with reinforcement profiles
- DRAUGHT-FREE the door curtain is sealed with sliding strips, the bottom beam has a rubber sealing profile



Reinforcement profiles for stability and speed

For full technical details, please see pages 64-65 or visit www.novoferm.nl.

OOLOON	0						
					Available in the fo	llowing RAL colo	urs as standard:
5005	9004	9003	7038	7024	3020	2009	1003

#### APPLICATION EXAMPLES



Your warehouse closed quickly and securely



Stable with reinforcing profiles and Hard-Edge

A WAREHOUSE has to be quickly and easily accessible, but equally free from draughts.

A large push button or a radar control allows your personnel through guickly. This keeps your warehouse at the right temperature and the products still easily accessible. With a code panel, your employees can get in and out quickly, but customers are simply but effectively kept out of your warehouse. This is very useful in busy shops. That is why SpeedRollers are frequently used in the retail sector.

When the wind pressure in the doorway exceeds 3 Bft, a **Prime** may not be enough, but when a large and sturdy Strong is not needed either, the SpeedRoller Strong-E is the right choice for you.

SPECIAL ROOMS that need to be closed quickly and draught-free, but which also need to be opened easily, for example with a remote control, can be closed perfectly with a Strong-E.

Thanks to its ease of use, reliability and low purchase price, the SpeedRoller Strong-E is the right choice in many situations.

## **STRONG-E**

		OPTIONS	$\checkmark$ = Standard $\bigcirc$ = 0	ptional
<b>HardEdge bottom beam</b> Stability and wind resistance	~	Frequency control Rapid control with soft	start/stop	0
<b>Safety light curtain</b> Securing the passageway up to 2.5m high	~	FlexEdge bottom bear Added safety for perso		0
<b>Cover in PVC, metal or stainless steel</b> (Drive hood in PVC only)	0	EasyRepair Repair the door withou	t tools / assistance	0

For full technical details, please see pages 64-65 or visit www.novoferm.nl.



Just drive on without stopping with frequency control



Stain - less

#### Food version

Ο Dirt and bacteria do not stand a chance WindLoad Optimiser Ο Increases the maximum wind resistance Stainless steel columns Ο Easy to clean and never rust

#### CONTROLS

Standard: Tormatic T100R

Optional: Tormatic T100R FU







# STRONG FULL VISION

 Wind load\*

 Up to 3,000 mm width
 Class 1

 Up to 5,000 mm width
 Class 0 (7 Bft)

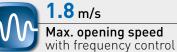
## A CLEAR SOLUTION FOR BUSY PASSAGES

The **SpeedRoller Strong-FullVision** is the transparent version of the standard rapid roll door for indoors: reliable technology for years of trouble-free operation and a good view. Ideal for passages that are frequently used from several directions. It is immediately obvious when someone is coming from the other side of the door, so accidents caused by poor visibility are prevented.









#### APPLICATION

- LIGHT TO HEAVY INDUSTRY
- WORKSHOPS WITH HEAVY TRAFFIC FROM BOTH DIRECTIONS
- SITUATIONS WHERE HIGH VISIBILITY IS REQUIRED
- DRIVE-THROUGH AREAS

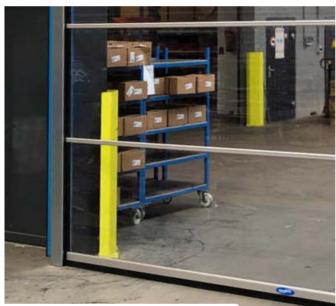
#### PROPERTIES

#### STRONG-FV

Max. surface area (W x H)	25	m²
Max. width (W)	5,000	mm
Max. height (H)	5,000	mm
Minimum wind load in Beaufort	7	Bft
Max. wind load class - EN 12424	1	*
Opening speed with frequency control	1.8	m/s
Closing speed with frequency control	0.5	m/s
Opening / closing speed with standard control	1	m/s
Door curtain thickness	0.8	mm
Suitable as an outside door	Ye	S

#### **FEATURES**

- WIND RESISTANT up to at least **7** Bft. (5,000x5,000 mm) Class 1 according to EN12424 (up to 3,000 mm wide)
- COMPLETELY TRANSPARENT the traffic on the other side of the door is clearly visible
- NOISE REDUCTION the door leaf is fitted with additional sound insulation as standard and is almost noise-free
- SAFE equipped with a safety light curtain as standard
- ROBUST steel guide columns guide the door curtain made of highly flexible transparent plastic
- DRAUGHT-FREE the door curtain is sealed with sliding strips, the bottom beam has a rubber sealing profile
- INSTALLATION in any passageway up to 25 m<sup>2</sup> inside the building, not suitable for installation in the outer wall



A clear view of what is happening in the other room



#### APPLICATION EXAMPLES



Fast: also available with frequency control!

PRODUCTION COMPANIES with heavy forklift traffic from both directions can improve internal security and speed up their production process with a transparent high-speed door. When oncoming traffic can see each other, it is immediately clear whether the forklift can drive through or not. or not.

With fast frequency control and smart With a fast frequency controller and a smart control - such as an induction loop or a pull cord - the door opens so quickly that the forklift truck can drive through virtually unimpeded if the passage is visibly free.

If the aisle is heavily used by forklift trucks from multiple from several directions, the Strong-FV will make the passage much safer. And you will save time and energy!



Compact but sturdy: the HardEdge bottom beam

GARAGE OWNERS who want to give their customers a view into the workshop can keep the showroom and workshop strictly separated with the Strong-FV. Everyone can see into the workshop, which gives your customers more confidence in your mechanics. However, customers cannot enter the workshop, which means your mechanics can continue their work undisturbed. The Strong-FV also allows you to control the climate difference between the showroom and the workshop much better. Draughts and noise do not pass from one area to the other. In short, a must for every modern garage.

DRIVE-THROUGH areas want their visitors to wait for their turn, but also give them the chance to see how long they have to wait. Here too, the Strong-FV is the ideal solution!

## STRONG FullVision

	OPTIONS 🗸		🖌 = Standard 🔘 = C	🖌 = Standard 🛛 = Optional	
<b>HardEdge bottom beam</b> Stability and higher wind resistance	~	Frequency control Rapid control with so	ft start/stop	0	
<b>Safety light curtain</b> Securing the passageway up to 2.5m high	~	WindLoad Optimiser Increases maximum		0	
<b>Cover in PVC, metal or stainless steel</b> (Drive hood in PVC only)	0	EasyRepair Repair the door witho	out tools / assistance	0	

For full technical details, please see pages 64-65 or visit www.novoferm.nl.

Safety light curtain the door never closes on interruption

Stain - less

**Stainless steel columns** Easy to clean and never rust

0

36

.

CONTROLS

Standard: Tormatic T100R

Tormatic T100R FU

Optional:





Karto



# STRONG

 Wind load\*

 Up to 3,000 mm width
 Class 2

 Up to 4,000 mm width
 Class 1

 Up to 5,000 mm width
 Class 0 (7 Bft)

## APPEARANCE AND PERFORMANCE IN PERFECT HARMONY

The SpeedRoller STRONG is designed for high speed and intensive use. Ideal for the fast passage of people and goods, also in situations with high wind pressure. Applicable for openings up to  $25 \text{ m}^2$ . The reinforcing profiles provide additional stability. The opening speed of 1.8 m/s makes this door practical even for heavy traffic and large passages. Ideal for large production processes that run quickly and where breakdowns are not allowed to occur.









#### APPLICATION

- DISTRIBUTION CENTRES
- WAREHOUSES
- LARGE INDUSTRIAL HALLS
- HEAVY INDUSTRY

PRO	PFR		5
110		$(     \square )$	-

#### STRONG

Max. surface area (W x H)	25 m²
Max. width (W)	5,000 mm
Max. height (H)	5,000 mm
Minimum wind load in Beaufort	7 Bft
Max. wind load class - EN 12424	2 *
Opening speed with frequency control	1.8 m/s
Closing speed with frequency control	0.5 m/s
Opening/closing speed with standard control	1 m/s
Door curtain thickness (standard / optional)	0.7/1.2mm
Fabric weight (standard / optional)	680/1400gr/m²
Suitable as an outside door	No

#### FEATURES

- WIND RESISTANT up to at least **7** Bft. (5,000x5,000 mm) Class **2** according to EN12424 (up to 3,000 mm wide)
- FAST opening and closing fast, and doing so very often, is the strength of the SpeedRoller STRONG.
- MAXIMUM reliability under all conditions with this SpeedRoller for indoor use
- NOISE REDUCTION the door leaf is provided with additional sound insulation as standard
- DRAUGHT-FREE the door curtain is sealed with sliding strips, the bottom beam has a rubber sealing profile
- SAFE equipped with a safety light curtain as standard, optionally with a soft FlexEdge bottom beam
- ROBUST with the WindLoadOptimiser the Strong becomes even sturdier and more stable in high wind loads



WindLoad Optimiser<sup>1</sup>: maximum wind resistance

<sup>1</sup> Option
*Depending on configuration. For full technical details, please see pages 64-65 or visit www.novoferm.nl.

COLOURS							
Available in the following RAL colours as standard:							
5005	9004	9003	7038	7024	3020	2009	1003
			Optiona	Ily available with	1.2 mm door cur	tain in the follow	ving RAL colours:
5002	9004	9003	70	38	3020	2009	1023

#### APPLICATION EXAMPLES



Resistant to high wind pressure in large warehouses

IN LARGE WAREHOUSES, heating and/or air-cleaning systems can create a difference in air pressure with the adjacent warehouse or with outside. Every door in the warehouse must be able to withstand the enormous wind load that can occur when all the accumulated air pressure from the entire warehouse is forced through the relatively small door opening.

A solid sectional door can withstand this wind load but opens and closes slowly. As a result, you lose a lot of heat, create a strong draught and hold up your production process unnecessarily.

The SpeedRoller Strong is ideal in this situation!



Hygienic: concealed hinges (option)

LOGISTICS SERVICE PROVIDERS operate most efficiently if all traffic between the various halls runs smoothly and quickly. By using the right controls, you can determine exactly who can and cannot pass through which door. The traffic then not only runs quickly, but also in a highly structured manner. This enables you to precisely control the logistical flows within your buildings, which in turn makes even greater efficiency possible.

THE FOOD INDUSTRY needs doors that are fast, reliable and hygienic. The SpeedRoller Strong is perfect for this situation: Fast with the optional Frequency Control. Reliable due to the solid base construction with additional reinforcement profiles. Hygienic with the optional stainless steel columns, shielded hinges and mould-resistant seals.

## STRONG

		OPTIONS	🖌 = Standard 🔘 = C	)ptional
<b>HardEdge bottom beam</b> Stability and high wind resistance	~	Frequency control Rapid control with so	ft start/stop	0
<b>Safety light curtain</b> Securing the passageway up to 2.5m high	~	FlexEdge bottom bea Added safety for pers		0
Cover in PVC, metal or stainless steel (Drive hood in PVC only)	0	EasyRepair Repair the door withd	out tools / assistance	0

For full technical details, please see pages 64-65 or visit www.novoferm.nl.



16

SA

Frequecy control fast opening = minimal delay

**TOYOTA** 

Res .	<b>Food version</b> Dirt and bacteria do not stand a chance	0
	WindLoad Optimiser Increases the maximum wind resistance	0
Stain - less	<b>Stainless steel columns</b> Easy to clean and never rust	0

## CONTROLS

ð

Standard: Tormatic T100R

Optional: Tormatic T100R FU







# NOVOZIP

# SELF-REPAIRING RAPID ROLL DOOR

The self-repairing SpeedRoller NovoZip is the ideal solution for openings of up to 20.25 m<sup>2</sup> and intensive use. The self-repairing operation of the self-lubricating track reduces interruptions and ensures minimum delay in the production process. The NovoZip is intended as a fast, user-friendly room divider and provides very good draught exclusion and climate control. This results in significant energy savings.









## APPLICATION

- SUPERMARKETS
- FOOD INDUSTRY
- LABORATORIES
- INDUSTRY

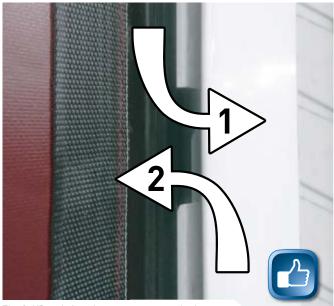
## PROPERTIES

NOVOZIP

Max. surface area (W x H)		20.25	m²
Max. width (W)		4,500	mm
Max. height (H)		4,500	mm
Minimum wind load in Beaufort		11	Bft
Max. wind load class - EN 1242	4	3	*
Opening speed with frequency of	control	2.0	m/s
Closing speed with frequency c	ontrol	0.5	m/s
Door curtain thickness		1.0	mm
Fabric weight	Class M2	900	gr/m²
Fabric weight (option)		1050	gr/m²
Suitable as an outside door			S

## FEATURES

- WIND RESISTANT up to at least **11** Bft. Class **3** according to EN12424
- SELF-REPAIRING the door curtain automatically returns into the columns after a collision
- SILENT the door curtain is manufactured in one piece and is therefore virtually noise-free
- SAFE equipped with a safety light curtain and a soft FlexEdge bottom beam as standard
- ROBUST steel guide columns guide the door curtain made of polyester-reinforced plastic fabric
- DRAUGHT PROOF the zip fastener technology ensures a good draught proofing, as does the rubber sealing.
- INSTALLATION in every passageway up to 20.25 m<sup>2</sup> in the building and on the inside of the external facade



The SelfRepair function guarantees continuity

\*Depending on configuration. For full technical details, please see pages 64-65 or visit www.novoferm.nl.

COLOUR	S							
			ł	Available as star	ndard in 900 gr/	m² door curtair	n in the following	g RAL colours:
5002	5005	9005	9016	7038	3002	2004	1003	6026
					Optionally av	ailable with 1,0	50 gr/m² door ci	urtain in white

#### APPLICATION EXAMPLES



Heavy-duty zip system and FlexEdge bottom beam

IN LIGHT AND HEAVY INDUSTRY, it is crucial that the production processes continue and that there are no delays. If production takes place in several buildings, transport must take place from one location to another. This transport may not be interrupted by a faltering or even broken door.

The NovoZip is super-fast, very reliable even under high wind loads and also self-repairing. Should it happen that someone hits this fast door, the door curtain automatically returns to the guide track. The chance of an interruption in your production process is therefore minimal. While you still save a lot of energy and the indoor climate remains pleasant.



Practical and low-maintenance: stainless steel cover

IN THE FOOD INDUSTRY, a door must be fast, reliable and easy to clean. Hinges and bottom beams in which dirt can accumulate are not always permitted. Considerable wind pressure often occurs between the various halls. The NovoZip is perfectly able to cope with these conditions.

THE AUTOMOTIVE INDUSTRY often has production lines that run from one hall into the next hall. The highspeed roll-up doors regulate the climate and the energy requirement in the halls but also keep the departments separated so that no dirt, dust and noise can get from one hall to the next. The high-speed doors are controlled from the production process, so that continuity is guaranteed. With the smart controls from Novoferm we can match every door to every situation.

## NOVOZIP

		OPTIONS	🖌 = Standard 🔾 =	Optional
FlexEdge bottom beam Added safety for personnell and goods	~	SelfRepair The door curtain	repairs itself	~
<b>Safety light curtain</b> Securing the passageway up to 2.5m high	~	<b>1.050 gr/m<sup>2</sup> whi</b> gr/m <sup>2</sup> For clean room a		0
Frequency control Rapid control with soft start/stop	~	Stain Iess Stainless steel of Easier to clean a		0

40 | NOVOFERM

For full technical details, please see pages 64-65 or visit www.novoferm.nl.

**1.050 gr/m<sup>2</sup> door curtain** with ClearWave: hygiene guaranteed



1.050

gr/m<sup>2</sup>

#### CLEARWAVE | Control

The ClearWave does the same as a normal push button, but does not need to be actually touched. This is of great value in environments where hygiene is important, such as the food industry.

#### CONTROLS

2

Standard: GFA TS971

Optional: GFA TS981



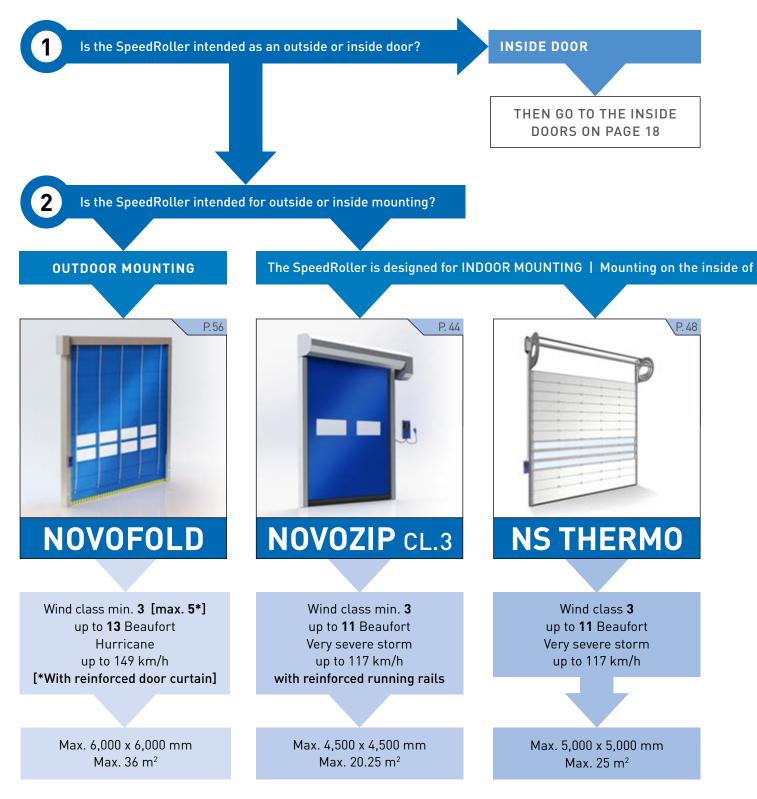
# SPEEDROLLERS FOR OUTDOOR USE

SpeedRollers for outdoor use are designed to be mounted on the façade of a building. This can be done on the inside, but also on the outside of the façade.

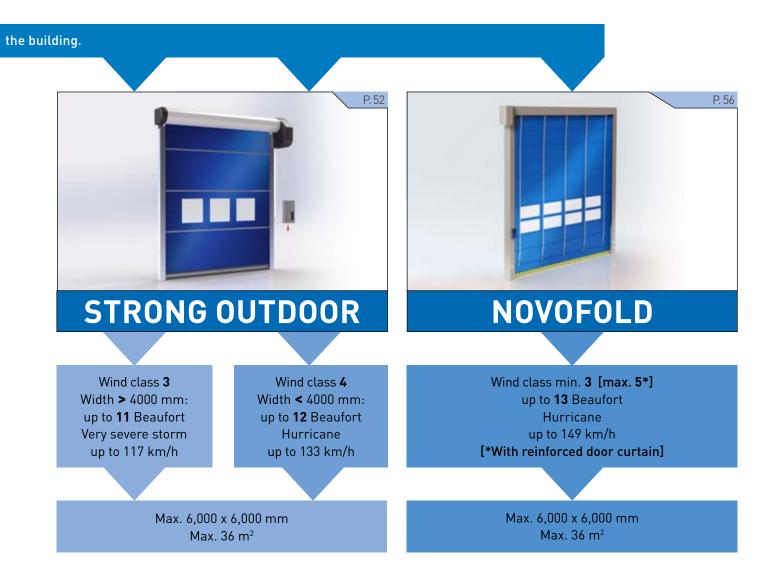
Which door is most suitable for your situation depends on many factors. Firstly, the size and the wind pressure in the passageway.

With the help of the diagram on this page, you can determine which door is most suitable for you. Would you prefer a personal explanation? Please contact one of our sales persons or ditributors in your area.

The suggestion obtained by filling in this chart is not binding. No rights can be derived from it.









# SELF-REPAIRING RAPID ROLL DOOR, ALSO FOR OUTDOORS

The self-repairing SpeedRoller NovoZip is the ideal solution for openings of up to 20.25 m<sup>2</sup> and intensive use. The self-repairing operation of the self-lubricating track reduces interruptions and ensures minimum delay in the production process. The NovoZip is intended as a fast, user-friendly room divider and provides very good draught exclusion and climate control. This results in significant energy savings.









## APPLICATION

- SUPERMARKETS
- FOOD INDUSTRY
- LABORATORIES
- INDUSTRY

## PROPERTIES

NOVOZIP

Max. surface area (W x H)		20.25	m²
Max. width (W)		4,500	mm
Max. height (H)		4,500	mm
Minimum wind load in Beaufort		11	Bft
Max. wind load class - EN 12424	, ł	3	*
Opening speed with frequency c	ontrol	2.0	m/s
Closing speed with frequency co	ontrol	0.5	m/s
Door curtain thickness		1.0	mm
Fabric weight	Class M2	900	gr/m²
Fabric weight (option)		1,050	gr/m²
Suitable as an outside door		Ye	S

## FEATURES

- WIND RESISTANT up to at least **11** Bft. Class **3** according to EN12424
- SELF-REPAIRING the door curtain automatically returns into the columns after a collision
- SILENT the door curtain is manufactured in one piece and is therefore virtually noise-free
- SAFE equipped with a safety light curtain and a soft FlexEdge bottom beam as standard
- ROBUST steel guide columns guide the door curtain made of polyester-reinforced plastic fabric
- DRAUGHT PROOF the zip fastener technology ensures a good draught proofing, as does the rubber sealing.
- INSTALLATION in every passageway up to 20.25 m<sup>2</sup> in the building and on the inside of the external facade



Guide rail with zip system and FlexEdge bottom bar

\*Depending on configuration. For full technical details, please see pages 64-65 or visit www.novoferm.nl.

COLOUR	S							
			Д	vailable as stan	dard in 900 gr/	m² door curtain	in the followin	g RAL colours:
5002	5005	9005	9016	7038	3002	2004	1003	6026
Optionally available with 1,050 gr/m <sup>2</sup> door curtain in white								

#### APPLICATION EXAMPLES



Available in many colours, always fits your building

IN LIGHT AND HEAVY INDUSTRY, it is crucial that the production processes continue and that there are no delays. If production takes place in several buildings, transport must take place from one location to another. This transport may not be interrupted by a faltering or even broken door.

The NovoZip is super-fast, very reliable even under high wind loads and also self-repairing. Should it happen that someone hits this fast door, the door curtain automatically returns to the guide track. The chance of an interruption in your production process is therefore minimal. While you still save a lot of energy and the indoor climate remains pleasant.



Up to 2.0 m/sec. with the standard frequency control

IN THE FOOD INDUSTRY, a door must be fast, reliable and easy to clean. Hinges and bottom beams in which dirt can accumulate are not always permitted. Considerable wind pressure often occurs between the various halls. The NovoZip is perfectly able to cope with these conditions.

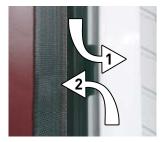
THE AUTOMOTIVE INDUSTRY often has production lines that run from one hall into the next hall. The highspeed roll-up doors regulate the climate and the energy requirement in the halls but also keep the departments separated so that no dirt, dust and noise can get from one hall to the next. The high-speed doors are controlled from the production process, so that continuity is guaranteed. With the smart controls from Novoferm we can match every door to every situation.

## NOVOZIP CLASS 3

		OPTIONS	🖌 = Standard 🔘 =	Optional
Added safety for personnell and goods	~	SelfRepair The door curtain	repairs itself	~
<b>Safety light curtain</b> Securing the passageway up to 2.5m high	~	<b>1.050 gr/m² white</b> gr/m² For clean room ap		0
Frequency control Rapid control with soft start/stop	~	Stain less Stainless steel co Easier to clean ar		0

For full technical details, please see pages 64-65 or visit www.novoferm.nl.





#### SelfRepair | Option

The SelfRepair option ensures that the door curtain is automatically pulled back into the guide when the door is opened.

### CONTROLS

Standard: GFA TS971

Optional: GFA TS981



.

T



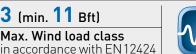
# STHERMO FAST SPIRAL-DOOR

# THE SUPER FAST, SPACE-SAVING SPIRAL DOOR

The **NovoSpeed Thermo** spiral door opens 6 times faster than comparable sectional doors and is therefore ideally suited for environments where many logistical movements take place daily. The fact that the door opens so quickly means a real energy saving - just like a SpeedRoller. The patented track system is directly driven by an ingenious chain/steel cable system. Various finishes and controls contribute to the sleek design of the NovoSpeed Thermo.









## APPLICATION

- LOGISTICS
- AUTOMOTIVE
- MECHANICAL ENGINEERING
- METAL AND ELECTRICAL INDUSTRY
- CHEMICAL AND PHARMACEUTICAL INDUSTRY

## PROPERTIES

## SR-THERMO

Max. surface area (W x H)		25	m²
Max. width (W)		5,000	mm
Max. height (H)		5,000	mm
Minimum wind load in Beaufort	11	Bft	
Max. wind load class - EN 12424			
Opening speed with frequency control			m/s
Closing speed with frequency control			m/s
Door curtain thickness	lso panels	40	mm
U-value with 5000 x 5000 mm ISO panels			/m²K
NovoLux window sections available			S
Suitable as an outside door		Ye	S

## **FEATURES**

- WIND RESISTANT up to at least 11 Bft. Class **3** according to EN12424
- FAST the door leaf is driven directly with a patented chain/steel cable system, which ensures the unprecedented speed of the NovoSpeed Thermo
- INNOVATIVE the new spiral system also has newly developed hinges and rollers
- INSULATING with the 40 mm thick door panels, the Thermo has an excellent insulation value of 1.77 W/m<sup>2</sup>K
- SHORT INSTALLATION TIME the rail / drive system is pre-assembled in the columns
- LOW MAINTENANCE the drive system is without springs
- EXTERIOR supplied as standard in RAL 9002 or RAL 9006, other colours on request



Innovative, fast and space-saving

For full technical details, please see pages 64-65 or visit www.novoferm.nl.



- Also available with NovoLux window sections with insulated double glazing
- In addition to the spiral rail system, you can also opt for the S600 rail system if you have the required space available

## STANDARD COLOURS

Exterior available in these RAL colours:



The inside is supplied in RAL colour: 9002

#### APPLICATION EXAMPLES



The NovoSpeed Thermo is elegant, fast and insulated

FREQUENTLY USED DOORWAYS were often equipped with two doors: a sewctional door for night-time closure and a rapid roll door for frequent daytime use. The new NovoSpeed Thermo / S600 makes the use of a rapid roll door behind the sectional door or rollershutter door superfluous. This door is fast, well protected against burglary and is well insulated too.

The NovoSpeed Thermo offers the advantages of a SpeedRoller and an overhead door in one! You can make considerable savings on energy costs, throughput speed and health costs due to the rapid opening time. With the additional advantages that the NovoSpeed Thermo is excellently insulated and can be closed at night. An investment that pays for itself quickly!



A light curtain continuously monitors the passageway

#### SPACE-SAVING

The NovoSpeedThermo spiral door is a contemporary innovation that takes up hardly any installation space thanks to innovations such as the spiral system and the chain drive. The door is not folded but rolls up, with the panels not touching each other. This prevents wear of the door. A NovoSpeed Thermo particularly offers a solution in spaces where the ceiling construction does not provide room for an overhead door.

The NovoSpeed Thermo is cheap to maintain thanks to a guaranteed low-maintenance period of 200,000 cycles. The springless drive system means no extra maintenance is required. Moreover, the uprights consist of two parts, so that in the event of damage, the panels can be exchanged easily and guickly.

# NOVOSPEED THERMO FAST SPIRAL-DOOR

		OPTIONS	🖌 = Standard 🛛 = 0	ptional
<b>40 mm Iso panels</b> Good insulation and stability	~	Finger trap protec You cannot reach b	<b>tion</b> etween the panels	~
<b>Safety light curtain</b> Securing the passageway up to 2.5m high	~	Springless drive sy Pre-assembled an		~
Frequency control Rapid control with soft start/stop	~	Available with Nov Pre-assembled and	oLux window sections d low maintenance	0

50 | NOVOFERM

For full technical details, please see pages 64-65 or visit www.novoferm.nl.

40 mm Iso panels that open and close safely and quickly



In addition to the standard colours, the door leaf is available in any desired RAL colour (with the exception of fluorescent and traffic colours)

## CONTROLS

Standard: GFA TS971 Optional:

GFA TS981



17



# THE HEAVY DUTY SOLUTION FOR DEMANDING SITUATIONS

The **Strong Outdoor** is the ultimate SpeedRoller for the really tough stuff: robust components and reliable technology ensure years of trouble-free use. The SpeedRoller Strong Outdoor has been developed especially for mounting on outer walls and in particularly large openings with high wind loads. The stable columns with integrated seals keep all draughts out and your indoor climate comfortable. The electronic control can open this large door at 1.8 m/s\*.







## APPLICATION

- INSTALLATION IN THE OUTSIDE WALL (INSIDE)
- DISTRIBUTION CENTRES
- WAREHOUSES
- LARGE INDUSTRIAL BUILDINGS
- HEAVY INDUSTRY

## PROPERTIES

## STRONG OUTDOOR

36 m²
6,000 mm
6,000 mm
12 Bft
4 *
1.8 m/s
0.5 m/s
1.2 mm

## FEATURES

- WIND RESISTANT up to 12 Bft (up to 4,000 mm wide) Min. Class 3 according to EN12424 (> 4,000 mm wide) Min. Class 4 according to EN12424 (≤ 4,000 mm wide)
- NOISE REDUCTION the door curtain is provided with additional sound insulation as standard
- SAFE equipped with a safety light curtain as standard
- ROBUST steel rails in the columns and new EndLocks at the hinges guide the door curtain
- SHORT INSTALLATION TIME the new rail / tensioning system is completely pre-assembled in the columns
- DRAUGHT-FREE the door leaf is sealed with sliding strips, the bottom beam has a rubber sealing profile.
- INSTALLATION in every **large** passageway up to 36 m<sup>2</sup> in the building and on the inside of the exterior facade



Sturdy and stable: the new EndLocks end pieces

\*Depending on configuration. For full technical details, please see pages 64-65 or visit www.novoferm.nl.

COLOURS						
		Av	ailable as standard i	in 1.2 mm thick doo	r curtain in the follo	owing RAL colours:
5002	9004	9003	7038	3020	2009	1023

#### **APPLICATION EXAMPLES:**



Fast but safe, with a safety light curtain as standard

INDUSTRY often uses large buildings where large forklift trucks or lorries are driven in and out. This requires a large, fast SpeedRoller that keeps the indoor climate pleasant, is easy to operate, does not hinder traffic and will last for years. The Strong Outdoor was developed for this very situation. Thanks to the clever tensioning system, the door curtain always remains neatly under tension, even in the event of very high wind pressure. All the relevant parts are much more solidly constructed to ensure years of reliable performance under all conditions.



Large and yet fast, thanks to frequency control

## STRONG OUTDOOR

		OPTIONS	🖌 = Standard 🔘 = 0	ptional
<b>HardEdge bottom beam</b> Stability and high wind resistance	~	Cover in PVC or g	<b>galvanised steel</b> /C only]	0
<b>Safety light curtain</b> Securing the passageway up to 2.5m high	~			<u> </u>
Frequency control Rapid control with soft start/stop	~			

54 | NOVOFERM



Standard: Tormatic T100R FU 3 kW



# NOVOFOLD

# LONG SERVICE LIFE WITH VERY LOW MAINTENANCE

The **NovoFold** folding door has been developed for intensive use in outdoor openings up to 36 m<sup>2</sup> in size. Ideal for the fast daily passage of forklift trucks and large goods. The door curtain is equipped with a large number of reinforcement profiles and a unique folding technique, as a result of which it remains extremely stable even under high wind pressure. The fully closed covers and the materials used make the NovoFold suitable for long-term use under all conditions.









## APPLICATION

- INSTALLATION IN THE EXTERNAL WALL (INSIDE AND OUTSIDE)
- DISTRIBUTION CENTRES
- WAREHOUSES
- LARGE INDUSTRIAL BUILDINGS
- HEAVY INDUSTRY

## PROPERTIES

## NOVOFOLD

Max. surface area (W x H)	36	m²	
Max. width (W)		6,000	mm
Max. height (H)		6,000	mm
Minimum wind load in Beaufort	13	Bft	
Max. wind load class - EN 12424	5	*	
Opening speed with frequency co	1.1	m/s	
Closing speed with frequency co	0.5	m/s	
Opening / closing speed with stand	ard control	0.9	m/s
Fabric weight	Class M2	900	gr/m²
Suitable as an outside door			S

able as an outside dooi

## **FEATURES**

- WIND RESISTANT to min. 13 Bft Min. Class **3** according to EN12424 (standard) Min. Class **5** according to EN12424 (with reinforcement)
- SOLID the guide columns and the drive are completely encased in watertight steel caps. This makes the NovoFold suitable for outside mounting.
- EXTREME the unique folding construction and the materials used make the Novofold extremely reliable and robust, even under harsh conditions. The NovoFold is not affected by high wind pressure, rain, dust, etc.
- SAFE fitted as standard with Opto-sensors in the lower beam: As soon as the lower beam touches something, the door opens immediately. The door opening is secured with safety photocells.
- DRAUGHT SEAL the bottom beam has a soft rubber sealing profile, additional draught brushes are available as an option.
- OUTSIDE powder-coated in RAL 7011 as standard.



EasyReplace: easier maintenance and repair

		*[	)epending on cor	nfiguration. For fi	ull technical detail	s, please see page	es 64-65 or visit v	vww.novoferm.nl.
COLOUR	S							
			А	vailable as sta	ndard in 900 gr/	m² door curtain	in the following	g RAL colours:
5002	5005	9005	9016	7038	3002	2004	1003	6026
The NovoFold has a Class M2 door curtain of 900 gr/m². Just like the entire door construction, virtually indestructible. For years of trouble-free use under all conditions.								

#### POTENTIAL APPLICATIONS



#### DO YOU HAVE AN EXISTING SECTIONAL DOOR? If so,

you can save a lot on energy costs, processing speed and absenteeism. If you leave the sectional door open during the day, you will lose a lot of energy. The draught will not do your employees any good. If you open and close the sectional door every time someone has to pass through it, you will lose a lot of valuable production time.

Moreover, your personnel will be waiting in the draught for a long time until the passageway is free. By fitting the NovoFold on the outside against the façade you can easily do away with the disadvantages of the existing, slower sectional door.



Dust? Dirt? Lots of wind? No problem for the NovoFold

WASTE PROCESSING COMPANIES are often confronted with dust and dirt. This makes the frequent use of highspeed roll-up doors difficult, because dust and dirt get stuck in the fabric while it is being rolled up. The curtain in the guide track can also can be damaged if too much debris accumulates. With the NovoFold this is not possible due to the folding method. Moreover, the extra strong door curtain is virtually unaffected by dust or dirt. The rest of the construction is also not affected. This makes the NovoFold ideal for waste processing companies and all other companies where a lot of dust and dirt accumulates.

YOU CAN close all large passages with a NovoFold. Heavy traffic, high wind pressure, weather conditions, dust and dirt - the NovoFold will continue to function reliably.

# NOVOFOLD

		OPTIONS	🖌 = Standard 🔘 = C	ptional
<b>HardEdge bottom beam</b> Stability and wind resistance	~	Frequency control Rapid control with	soft start/stop	0
<b>Safety photocell</b> Secures the passage at a height of ± 25 cm	~	Safety light curtain Securing the passa	<b>n</b> geway up to 2.5m high	0
<b>Underrun protection with opto sensors</b> The door stops immediately upon contact	~	EasyReplace Easier replacemen	t of large components	0

For full technical details, please see pages 64-65 or visit www.novoferm.nl.



EasyReplace Damaged parts are quickly replaced



#### EasyReplace | Option

The EasyReplace option makes it easier to replace a damaged door curtain or parts of it.

Columns with removable covers provide easy acces.

### CONTROLS

0

0

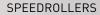
4

11

Standard: **GFA TS971** Optional:

Optional: GFA TS981 0

0



# **CONTROL UNITS**

All Novoferm controls are fitted as standard with up-stop-down operation that can be set in several ways. All operating options shown on the next page can be connected. There are also numerous extension and security options. Novoferm doors are suitable for almost every situation.



CE

## **CONTROL OPTIONS**

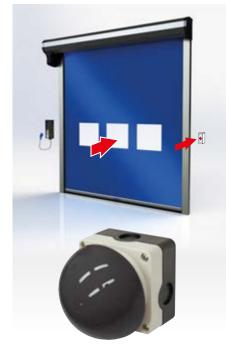
All common types of operation can be connected to the Novoferm controllers. A small selection from the many possibilities is shown here. The SpeedRoller controls can be programmed in many different ways depending on the chosen version. For example, the speed, opening time, half-height stop etc. can be set according to your wishes.

Controlling traffic lights, lock control and many other options are possible. Another very important aspect is security. There are many safety features available to make your SpeedRollers work as efficiently and safely as possible in your situation. Would you like to discuss which options are most suitable for your situation? Please contact one of our sales persons or ditributors in your area.

	CONTROL UNIT SPECIFICATIONS	T100R	T100R FU 1,5 kW	T100R FU3kW	TS971/TS981
VERSION	Plastic housing [IP54] 219 x 256 x 117 mm				
	Plastic housing [IP54] met uitbreiding 219 x 550 x 117 mm	0			
	Plastic housing [IP65] 155 x 380 x 80 mm				
	Steel housing [IP54] 300 x 600 x 160 mm				
CONNECTION	LNPE~230V/50Hz/16AT ± 10%, 3-pin CEE plug				
	<b>3N~400V/50Hz/16A</b> ± 10%, 5-pin CEE plug				
	DES pulse generator connection				
	Two additional voltage-free relais				
OPERATION	Push-buttons (membrane switches) open-stop-close				
	External push-buttons (open-stop-close or timer))	0	0	0	0
	Remote control type Keelog / Multibit (built in)	0	0	0	0
	ClearWave Switch panel, switches without touching	0	0	0	0
	Key switch you determine who is allowed to pass through	0	0	0	0
	Pull switch can be operated on foot or from a forklift truck	0	0	0	0
	Induction loop detector 2 channels (separate)	0	0	0	0
	<b>Ixio S</b> Infrarood detector voor binnen tot H = 3,5 m	0	0	0	0
	<b>Ixio D</b> Infrared & motion detector for indoors up to H = 3.5 m	0	0	0	0
	<b>Radar</b> indoor & outdoor motion detector up to H = 6 m	0	0	0	0
	<b>Condor</b> Infrared & movement detector indoors/outdoors to H = 6 m	0	0	0	0
SECURITY	<b>Safety light curtain</b> protection of the entire doorway up to H = 2500m	0	0	0	0
	Safety photocell protecting the passageway at knee height	0	0	0	0
	<b>Ixio D</b> Infrared & movement detector for indoors up to H = 3.5 m	0	0	0	0
	<b>Condor</b> Infrared & movement detector indoors/outdoors to H = 6 m	0	0	0	0
	Traffic light red/green (extension A800)	0	0	0	0
	Flashing light	0	0	0	0
	Door position indicator	0	0	0	0
	Acoustic signal when closing (option)	0	0	0	0
EXTRAS	3 voltage-free relays	0	0	0	
	Two-way blocking function	0	0	0	0
	Interlock control				-/0
	Socket for induction loop detector (pre-wired)				
	Mounting profile 2 x 70 mm				
CONTROL			0		
SpeedRoller					
opeeditetter	Strong-E		0		
	Strong-FV		0		
	Strong		0		
	NovoZip		0		•/0
	NovoSpeed Thermo		_		•/0
= standard	Strong Outdoor				
O = optional	NovoFold				•/0
				1	



## **OPERATION AND SAFETY**



#### PUSH-BUTTONS | Operation

Pushbuttons are mainly used in personnel traffic. For situations where one's hands are not always free, a mushroom push button or a contactless ClearWave button is a solution.



PULL SWITCH | Operation

The pull switch has a long cable hanging a few metres in front of the door. It can be operated on foot or from a forklift truck without the driver having to get out. Very efficient when there is a lot of forklift traffic.



#### **REMOTE CONTROL |** Operation

A remote control (with transmitter and receiver) offers the possibility of selective operation. Only those persons and vehicles that have a remote control can operate the door. Available with one or several channels.



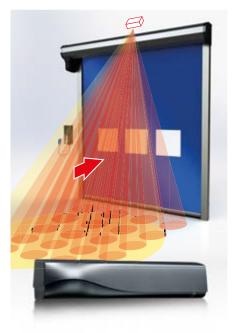
CLEARWAVE | Operation

The ClearWave is similar to an ordinary push button, with the difference that it does not need to be actually touched. Ideal in food environments or clean rooms



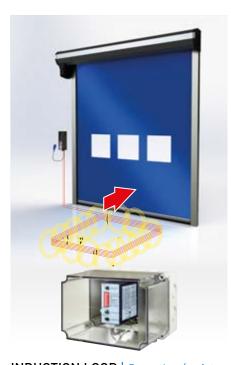
#### IXIO S | Operation and safety

The IXIO-S is a smart presence detector with active infrared technology. The three-dimensional infrared curtain protects persons from contact with the door. For indoor applications up to H = 3,500 mm



#### IXIO D | Operation and safety

The IXIO-D is a sensor that combines radar technology for opening the door with infrared technology for the protection of people against contact with the door. For indoor applications up to H = 3,500 mm



**INDUCTION LOOP** Operation / safety An induction loop detector produces a magnetic field. Every metal object within this field is detected. Suitable as a control, but also as an extra

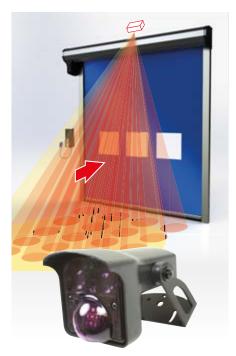
security in case of high speed forklift

transport.



RADAR | Operation and safety

Radars can only detect moving objects. The radar has a conical detection area and is direction-sensitive. The size, direction and sensitivity of the radar field are adjustable. Also for outdoor use



**CONDOR |** Operation and safety

The condor combines two functions in one device. The radar for detecting moving objects (operation) and an active infrared for detecting stationary objects (safety). Also suitable for outdoor use.



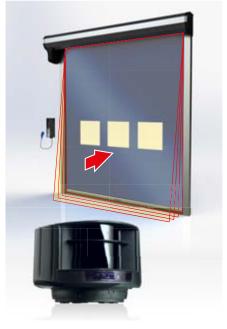
#### PHOTOCELL | Operation and safety

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 | Safety

A light curtain has a larger detection range and thus provides greater safety than a photocell. This form of detection is particularly suitable for a wide range of transport sizes.



#### LZR LASERSCANNER | Safety

The LZR®-I100 / I110 features highprecision technology: the dynamic direction of the laser beams on four levels provides optimum protection of the door threshold and surroundings. Maximum detection area 9.9 m x 9.9 m.

# **TECHNICAL DATA**

	DESCRIPTION	UNITS	PRIME
Application	interior door		
	exterior door		
Speed	Standard control unit	opens in m/sec (approx.)	1
	1	closes in m/sec (approx.)	1
	Control unit with frequency control	opens in m/sec (approx.)	1,5
		closes in m/sec (approx.)	0,5
Safety equipment	EN 13241		•
	minimal, in Beaufort	[with WindLoad Optimiser]	3 [7] ( - 61 km/h)
Windload class	maximal, according to EN 12424		Class O
Door sizes	width	maximum in mm	3.500
	height	maximum in mm	3.500
	maximum surface area	maximum m²	12,25
Overall sizes	width drive side	clear width + mm	300
	width bearing side	clear width + mm	170
	height	clear height + mm	410
	depth	vanuit de muur = mm	325
	width with protective cover drive side	clear width + mm	410
	width with protective cover bearing side	clear width + mm	170
	height with protective cover	clear height + mm	460
		from the wall = mm	430
		b x h x d = 219 x 256 x 117 mm	400
l		b x h x d = 219 x 250 x 117 himb x h x d = 219 x 550 x 117 mm	0
l	T100R FU 3 kW larger control unit [3 x 400V, N, PE - IP65]		
l	GFA TS971	b x h x d = 300 x 600 x 160 mm b x h x d = 155 x 386 x 90 mm	
l		b x h x d = 155 x 386 x 90 mm b x h x d = 190 x 300 x 115 mm	
'EasyRepair'	manual re-feed		0
	auto 're-feed' (self-repairing)	1	
Door construction		<u> </u>	
		0,8 / 20 mm	0,8 mm
DUUL CUITAIN		0,8 / 20 mm 0,7 / 1,0 / 1,2 mm	0,8 mm 0,7 / 1,2 mm
· · · · · · · · · · · · · · · · · · ·			U,//I,2 mm
	thickness iso pannels	40 mm	<b>↓</b> /
Curtain tensioning		t	
	Continuous chain / steel cable drive system	<u> </u>	
	galvanised steel / powder coated	<u> </u>	• / -
Surface finish	stainless steel V2A, polished (cf. RVS 304)	<u> </u>	0
	painted / powder-coated in a RAL colour of your choice	<u> </u> '	0
Drive and control	electronic limit switch DES	<u> </u>	1 x 230V /
l	mains supply	1	3 x 400V, N, PE
l	fuse		16 A Slow
	main switch	 	0
	emergency stop	 	0
· · · · · · · · · · · · · · · · · · ·	presence detection in the door opening	light screen	
<b> </b> '	· · · · · · · · · · · · · · · · · · ·	photocell + safety edge	0
· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	radar detector	0
· · · · · · · · · · · · · · · · · · ·	safety edge device	wireless signal transfer	
Emergency opening	· · ·		
J J	emergency hand chain		0
· · · · · · · · · · · · · · · · · · ·	UPS, 230V	only with 230V frequency control	0

B.



PRIME-XF	STRONG-E	STRONG-FV	STRONG	NOVOZIP	THERMO	STRONG Outdoor	NOVOFOLD
	•	•		•			
					•	•	
	1	1	1				0,9
2,3	1,8	1,8	1,8	2,0	1,1	1,8	1,1
0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5
0,0	•	0,5	0,0	•	0,0	0,0	0,0
3 [7] ( - 61 km/h)	8 ( - 74 km/h)	7 ( - 61 km/h)	7 ( - 61 km/h)	11 ( - 117 km/h	11 ( - 117 km/h	12 ( - 133 km/h	13 ( - 149 km/h
Class 0	Class 0	Class 1 (≼ 3 m B.)	Class 2 (≼ 3 m B.)	Class 3	Class 3	Class 4 (≤ 4 m B.)	Class 5
3.500	3.000	5.000	5.000	4.500	5.000	6.000	6.000
3.500	3.500	5.000	5.000	4.500	5.000	6.000	6.000
12,25	9	25	25	20,25	25	36	36
300	300	300	300	310	470	345/360	520
170	170	170	170	120	150	195	220
410	410	410	410	500	1100	650	1.070
325	325	325	325	370	1200	435	400
410	410	410	410	310	350	430	520
170	170	170	170	120	150	240	220
460	460	460	460	500	1100	700	1070
430	430	430	430	370	1200	570	400
	•						
•	0	0	0			•	
				•			
							0
0		0	0	0			<u> </u>
				•			
				•			
0,8 mm	0,8 mm	0,8 mm	0,8 mm	0,8 mm	20 mm	0,8 mm	0,8 mm
1,2 mm	0,7 mm		1,2 mm	1,0 mm		1,2 mm	1,2 mm
i					40 mm		
• / -	• / -	• / -	• / -	• / -	• / -	• / -	• / •
0	0	0	0	0		0	0
0	0	0	0	0		0	0
				•	•		•
1 x 230V, N, PE	1 x 230V / 3 x 400V, N, PE	1 x 230V / 3 x 400V, N, PE	1 x 230V / 3 x 400V, N, PE	1 x 230V, N, PE	3 x 400V, N, PE	3 x 400V, N, PE	3 x 400V, N, PE
16 A Slow	16 A Slow	16 A Slow	16 A Slow	16 A Slow	16 A Slow	16 A Slow	16 A 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		I	

# REFERENCES

#### EACH PROJECT IS UNIQUE AND REQUIRES CUSTOM-MADE SOLUTIONS. THIS IS THE STANDARD FOR NOVOFERM.

We know all types of doors inside out. We have years of experience with the most diverse parties throughout Europe and beyond. We work together with most of the major brands in the automotive industry, the food industry, logistics, retail and many large and less large companies that are committed to saving energy.



Our development and service departments are unrivalled in this industry. For you, this means that we are able to tailor our products and services to your needs as efficiently as possible.

Our products contribute in the best possible way to the indoor climate, the business process and the internal logistics within your building. The greatest strength of our SpeedRollers is to keep the indoor climate pleasant while greatly reducing the energy demand. Good for you, your employees and ultimately for all of us. CLIMATE UP, ENERGY DOWN!



# DOMINO'S WAREHOUSE NIEUWEGEIN (NL)

#### **PROJECT DESCRIPTION**

Domino's Pizza is an American restaurant chain that specialises in pizzas. The company was founded in 1960 with one restaurant. In 1978, the 200th branch was opened. In 2006, the company had more than 8,000 branches.

The first Dutch branch was opened in Breda. In 1989. Now they are market leader with over 300 branches, which together make more than 20 million (!) pizzas a year.

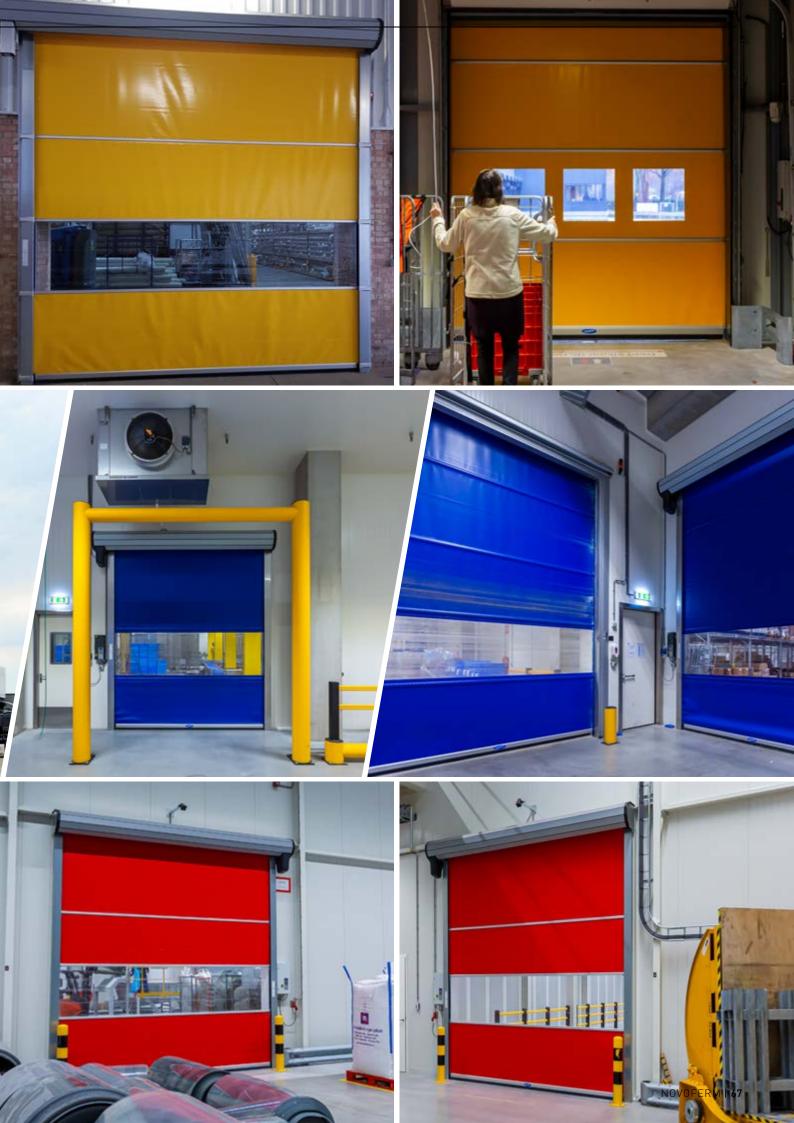
Domino's has opened both a new head office and distribution centre in Nieuwegein (NL). The distribution centre measures  $2,500 \text{ m}^2$ , the office space  $1,300 \text{ m}^2$ .

#### PRODUCTS SUPPLIED BY NOVOFERM

• STRONG FOOD SpeedRollers for food industry

• Thermo 80

- Overheaddoors
- Novodock L320
- Hydraulic dock levellers with rotating lip • Novoseal S420E Soft aluminium dock shelters
- Novoseal S 620 Inflatable dock shelter type quay model







#### Online on the move for you:

- n www.novoferm.co.uk
- www.youtube.com/NovofermVideos
- in www.linkedin.com/company/novoferm-uk-ltd
- Ø www.instagram.com/novofermuk
- www.facebook.com/novofermuk f

#### Novoferm Ltd UK

Phone: E-mail:

+44 (0) 1582 563 777 info@novoferm.co.uk Internet: www.novoferm.co.uk