# User manual High Speed door SR Strong Outdoor



# User manual Rapid roll door SpeedRoller Strong Outdoor

# **English**

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#### Dear Customer,

Thank you for choosing a Novoferm product. We hope that you are satisfied and that it exceeds your expectations.

- Should the door fail to operate correctly (stiff to move or other faults), you should immediately contact a specialist to arrange for the door to be fixed.
- This user manual must be kept within easy reach during the entire period of use!

## 1 Order-specific details

This user manual applies to the following SpeedRoller Strong Outdoor door:

Type:
Order number:
Delivery date:
Service centre:

The type plate is on one of the columns and/or on the control box. The type plate indicates the door order number. Please specify this when you contact your dealer.

# $\triangle$

#### Note!

Depending on the ordered accessories, the delivery may contain additional manuals, for example for the control of the door. Please read these instructions carefully and thoroughly. Please read the comments carefully and make sure you keep to the safety instructions and warning guidelines provided in these manuals.

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#### 2 Introduction - Read this first!

Read this user manual thoroughly before using your SpeedRoller Strong Outdoor. Correct use of the door will increase your safety and result in a long useful service life and lower service costs.

This user manual describes the use of a door that has been installed and configured by an authorised dealer or a suitably qualified engineer.

Your SpeedRoller Strong Outdoor has been designed and produced in accordance with the ISO-9001 quality system standards. An electrically powered door can only be commissioned after it has been issued with a Certificate of Conformity (CE marking affixed).

As from 1 July 2013 a declaration of performance in accordance with EU Regulation No. 305/2011 Annex III (the construction products regulation) must be handed to users as a separate document.



# Warning

When commissioning the door, the qualified expert must check for potential hazards and satisfy himself that the door is functioning properly and can be operated by hand. (EN 12604 and EN 12453).

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This manual is intended for the day-to-day user of the door and must be kept in the immediate vicinity of the door.

- Instruct all users on how to operate the SpeedRoller Strong Outdoor.
- Do not allow third parties (e.g. visitors) to operate the door.

The manufacturer accepts no responsibility for damage and/or injury as a result of failing to follow the instructions in this manual.

The product may only be modified or expanded by the supplier.

#### Intended use

This SpeedRoller Strong Outdoor should be integrated into the access range for persons, to ensure a safe passage of goods and vehicles whether or not accompanied by people in both industrial, business and residential environments. The scope of this door is determined by **EN 13241**.



# Important!

- The area of application of this Speedroller door is set out in EN 13241.
- The installation, repair, maintenance and dismantling of the door must be carried out by a qualified expert, in accordance with EN 12635

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#### Operation of the SpeedRoller Strong Outdoor

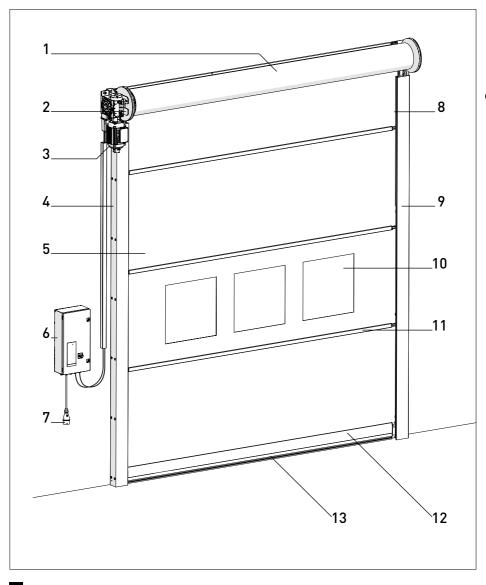
The door is opened by rolling the door panel upwards (see chapter 8). An electric drive drives the shaft. Both sides of the door panel have columns that guide the door panel.

#### 3 Improper use

- Never place objects against the door panel or against the top roller.
- Never attach any components to the door panel which could increase its weight.
- Never use the door as a hoist.
- Never open and close the door using any other switches than those fitted for that purpose.

#### 4 Warranty conditions

Novoferm conditions, filed at the Chamber of Commerce under no. 06067599. Version 2.0 dated March 1, 2017.



#### 5 Door parts

- Top roller 2 Console
- 3 Drive
- Column
- 5 Door panel 0,7 mm or 1,2 mm\* thick
- 6 Control
- 400V connection\* 7

- Sliding Strip
- Safety light curtain in the column
- 10 Transparent window sections\*
- 11 Aluminum stiffener profile
- 12 HardEdge bottom beam 13 Soft bottom rubber
  - \* Depending on the chosen configuration.

#### 6 Product description

The SpeedRoller Strong Outdoor is a door with electrical drive. It is applied in industrial and commercial buildings. It has energy saving, draught excluding and climate control functions.

#### 6.1 Specification, construction

The Strong Outdoor is a SpeedRoller door without balance springs, consisting of an electrically driven door curtain rolled up on a roller above the opening. The door curtain is made ofhorizontal sections of extremely durable polyester-reinforced PVC. The sections are fitted with aluminium reinforcement profiles with integrated EndLocks, and can be equipped with a viewing section between approx. 1,000 and 2,000 mm in height. The bottom of the door curtain has a solid HardEdge bottom beam. U-shaped columns with HardEdge bottom beam. U-shaped columns with the bearing plates for secure fastening to the roller and drive.

#### 6.2 Materials

The columns are composed of a solid steel skeleton, surrounded by sendzimir galvanized steel profiles. The front covers are removable for fast and simple installation and maintenance. Unique side seals are made of highly wear-resistant plastic. The horizontal roller is aluminium. The HardEdge bottom beam is aluminium. The door curtain is a 0.7 mm thick PVC with a polyester reinforcement inlay. 1.2 mm fabric optionally available 1.

#### 6.3 Colour

The door curtain is available in the colours blue, orange, yellow, black, grey, red or white and is provided as standard with a window section.

#### 6.4 Drive

The door is driven by an electric motor with gearbox. The top roller is driven directly. Drive side either right (standard) or left.

#### 6.5 Operation/control

 The door is supplied with push-buttons (open-stop-close) at the front of the switch box.

# Other operation types which can be connected to the standard control are:

- Push button, pull switch or radiographic operation with 1-button hand-held transmitter. These all operate as follows: first time operation, the door opens; second time operation, the door closes.
- Radiographic operation using 3-button hand-held transmitter with the function up-stop-down.

#### 6.6 Safety devices

- In the event of power failure the door can be opened manually.
- The bottom beam is fitted with a selftesting safety edge which stops the door or immediately causes it to re-open if an obstacle is encountered when closing. This safety device is moisture-proof.
- Safety light curtain (IP67 and up to 2,500 mm (height)). If this screen is interrupted by an obstacle, the door will automatically open fully until the screen is released again. This does not apply when the door is in the closed position.

# 6.7 Mounting structure requirements and connection

- Under normal conditions, no special (construction) structures are required to assemble and mount a Speedroller door.
- The switch box requires a wall socket within a 500 mm radius of that switch box (CEEform 3-NPE/ 400V/50 Hz /16 A with fuses, slow 16 A.) When a frequency converter is used, the socket must be equipped with a residual current device (RCD) of at least 300 mA. As standard the switch box is installed at approximately 1500 mm height from the floor on the drive side.

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#### 6.8 Extras

#### Control and operation

- Operation using push buttons, pull switches, light curtain, radar, induction loop or radiographic operation. Other types of actuators on request.
- 'Halfway up' stop (to allow people entry)
- Interlock switching in combination with another door.
- Electrical supply specifications other than 3N~400 V/50 Hz/16 A

#### Safety devices

 Connection of traffic lights (red/green or red and green)

#### Implementation

- Stiffener profiles into the door plate
- Reinforcement brackets around the guides
- Plastic cover over top roller
- Plastic cover over top roller and drive
- Full colour of the door panel (on request)

#### 7 Technical specifications

#### 7.1 Dimensions

Max. width
 Max. height
 6000 mm
 6000 mm

• Max. surface 36 m<sup>2</sup>

Space required, non-drive side (roller height)
 Space required, drive side
 345 / 360\* mm

Space required, drive side for built in equipment
 545 / 560\* mm

• Space required, columns 145 mm

Headroom

#### 7.2 Drive

Standard mains voltage: 3NPE~400V/50Hz/16A

• Protection class IP65

Power consumption
 max. 3 kW

#### 7.3 Performance

Control without frequency controller, for which:

Max. openingssnelheid 1,0 m/s
Max. sluitsnelheid 1,0 m/s

• Control using frequency controller, for which:

Max. opening speed 1,5\* m/s
Max closing speed 0,5 m/s

\* depending on the door type and dimensions.

650 / 700\* mm

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#### 8 Operating and using the door



# Warning

A faulty door can cause injuries or damage objects. Use the door only when it does not indicate faults or errors.

Persons can be injured or objects damaged by the door movement.

- Make sure that when the door moves, there are no persons or objects within the range of the door.
- Do not grab the column or the top roller when the door is in motion.
- Never place objects against the door panel or against the top roller.
- Do not attach any components to the door panel which could make the door panel heavier or thicker
- Never use the door to lift persons or objects.

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The control system enables a number of different operating modes:





# 8.1 Dead-man switch OPEN [介]/Dead-man switch CLOSE [↓]

Keep the  $[\uparrow]$  button pressed to open the door until the OPEN end position is reached, or stop the movement of the door by releasing the button. To close the door, keep the  $[\downarrow]$  button pressed (dead-man switch) until the end position is reached. The door stops closing immediately if the  $[\downarrow]$  button is released when the door is closing.

#### 8.2 Impulse OPEN/Dead-man button CLOSE

Briefly press the  $[\uparrow]$  button or use the external impulse emitter to open the door until the OPEN end position is reached or press the [O] button to stop the opening of the door. Press the  $[\uparrow]$  button to open the door further. Keep the  $[\downarrow]$  button pressed (dead man button function) to close the door until the door end position is reached. Releasing the  $[\downarrow]$  button when closing the door will immediately stop the closing of the door.

#### 8.3 Impulse OPEN / Impulse CLOSE

Briefly press the **[**\forall button or use the external impulse emitter to open the door until the OPEN position is reached or until button is pressed again to stop the opening of the door. Briefly press the **[\forall ]** button to close the door until the CLOSE end position is reached.

A closing side protection (menu 35) must be reached to activate this operating mode.

When the closing edge protection is activated during the closing movement, the door will stop closing and reverse the direction of the movement. Activating this protection during the opening of the door does not affect the door movement. In the event of a failure, the door can be closed using the  $\[ \] \]$  button.

#### 8.4 Automatic Return operation

Briefly press the **[** $\uparrow$ **]** button (or use the external impulse emitter) to open the door until the OPEN position is reached or until the **[O]** button is pressed to stop the opening of the door. Once the set open time expires, a warning period is timed during 10 seconds after which the door closes automatically.

If the **[O]** button is pressed when the door is in the OPEN position or when CLOSING, the door remains in the current position until another impulse is emitted.

If menu 36 is set to "5" or "6", the door stops during the movement of the door. The door open timer is again started.

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#### 8.5 "OPEN/CLOSE" mode

In the same operation mode as the 1 track regulations using red/green traffic light (optional traffic light operation (A800), but the receiver remains connected to the driver.

Progress of the operation for external impulse generators:

- Impulse emitted in "CLOSED" position: Drive starts and brings door to the "OPEN" position.
- Impulse emitter during the movement to the "OPEN" position: Without influence, the door continues to open.
- Impulse emitted in "OPEN" position: Door is closed
- Impulse emitted during the movement to the "CLOSED" position: Door stops and starts to open.

#### 8.6 Automatic Return operation shortened by light curtain

This function operates as described above, but the interruption of the light curtain circuit breaks the set opening time and the warning period starts. At the end of the warning period the door closes automatically.

#### 8.7 Door half open

Press the [1/2] button to control the door to the ½ open position (menu 32). This function is not available in the dead-man button OPEN/dead-man button CLOSE operation mode.

#### 8.8 Lighting and/or warning light

The control has 2 relay outputs that switches the lighting or the warning light (menus 45 and 46).

#### 8.9 Key switch function (option)

The control has an input for a key switch. This gives you the option to activate the following functions (menu 50):

- 1. Impulse emitter "OPEN - STOP - CLOSE"
- 2 The operation of the control is blocked
- 3. All external operation elements are blocked
- 4. The operation of the control and all the external operation elements are blocked
- During a period of 10 seconds, the operation of the control and all external operation elements are enabled
- Switching the operating mode to Impulse 6 OPEN/Dead-man button CLOSE
- 7. Only 1/2 open door

#### 8.10 External command units/impulse emitters

The door can be opened and closed via external command units/impulse emitters.

#### 8.11 Wireless hand-held transmitter (option)

- Key: 'Start' Emit first impulse: The drive starts and moves the door to the set OPEN or CLOSE end position.
- Emit impulse during the movement: The door stops.
- Emit another impulse: The door continues to move in the opposite direction.

#### Automatic Return operation:

Impulse: Door open.

Key for door half open:

Function as for the Start key, the door is, however, only half opened to the preset position.

Key: Lighting function

The lighting function is related to a continuous light that can be switched "on" and "off" independently of the movement of the door.

# 8.12 Service message



When the control detects that a check is performed, the service message is lighted. Contact your specialist company in that case.

#### 9 Safeguards

The door is according to regulation equipped with a drive with built-in anti-roll-off device and safety light curtain.

#### 9.1 Safety light curtain

The safety light curtain has a height of 2500 mm. When the infrared beam is interrupted by an object in the door opening when closing the door, the door stops moving and subsequently opens fully. After the set time has elapsed and if the safety light curtain is free, the door will close again. In the closed position or when opening, the safety light curtain has no effect.

#### 10 Adjustments

#### 10.1 Setting the timer

The timer is set using parameter 44 as described in the Control manual

#### 10.2 Settings Safety light curtain

If the beam of the light curtain is not interrupted a red LED is lighted. If the LED does not light when the beam is not interrupted (no object in the opening), the light curtain is probably not properly aligned in relation to the sensors. In this case the light curtain must be re-directed to the sensors. If the sensors of the light curtain is contaminated, or if the light curtain is directed towards the edge of the sensors, the red LED flashes on the light curtain to indicate it should be adjusted.

All other adjustments should by performed by qualified technicians!

#### 11 Maintenance

#### General

All rotation points are self-lubricating, these do not require maintenance. Under extreme conditions (aggressive environment) we recommend lubricating all rotation points every six months (or when required).

#### 11.1 Daily

Remove all dirt and obstacles that could prevent the operation of the door. Make sure there is no dirt on the light curtain. This can influence the functioning of the light curtain.

#### 11.2 Weekly

Check the drive for leaks.

Check the door for damage.

Check that the door is operating properly.

#### 11.3 Monthly

Check the operation of the engine brake. It should click audibly when opening and closing the door.

#### 11.4 At 100,000 cycles

The elastic bands should be replaced preventively before 100,000 cycles. Your maintenance engineer should take this into account during his maintenance duties.

#### 11.4 Annually

The operation and structural condition of the door must be checked once per year by a qualified technician. A maintenance contract can be concluded for the service work. Under extreme conditions, in consultation with Novoferm, the checks can be performed more often.



# Important!

Annual maintenance that is not carried out by a qualified service centre using original parts, will void the warranty. (Please ask your dealer).

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#### 11.5 Door plate cleaning

The door plate is made of plastic. Do not use caustic substances, but water, neutral soap or special door plate cleaner.

#### 11.6 Wear to parts

In order to keep the door permanently in good condition, the following parts subject to wear should be replaced once a year or every 100,000 door movements, whichever occurs first:

For the SpeedRoller Strong Outdoor:

- The drive brake
- The plastic sliding strips
- · The elastic bands

The elastic bands that provide the required tension to the door panel should be replaced preventively every two years, or before reaching 100,000 door movements, whichever occurs first. Your maintenance engineer should take this into account during his maintenance duties.

If a frequency controller is used, the motor brake must be replaced after 500,000 door movements. The plastic sliding strips should also be replaced after 500,000 door movements.

#### 12 Faults

#### 12.1 Faults you can restore yourself

- The door is completely unresponsive.
- Check the voltage, i.e. whether it is connected to the mains power.
- Refer to the error code on the display of the control. Look up the error code in the manual of the control to find out what it signified and whether you can restore the system. If that is not the case, please provide the error code to your service centre.

#### The door no longer closes

- Check the connection and adjustment of the safety light curtain (see item 9 of section 5).
- Has an external control been activated? (For instance, there may be a metal object on an induction loop!)

#### 12.2 Faults you CANNOT fix yourself

Have the following information at hand before you contact your service centre:

- The serial number (s/n) as indicated on the nameplate. The information is located on one of the columns or on the control cabinet.
- The control cabinet has a display that shows error codes. Please provide this error code to your service centre.

Tip: This error code you can also found in the manual of the control cabinet. The error code can be used to restore simple faults without assistance.



# Important!

The brake and the sliding strips should be replaced annually or after 100,000 door movements. Also the elastic bands should be replaced every two years or before reaching 100,000 door movements, whichever occurs first. See 11.6

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# **Delivery check**

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CHECK



- Check all safety devices of the door and if necessary readjust them.
- Check all door functions against the checklist and sign off the completed list.
- The CE declaration of conformity must be completed by the technician and handed over in accordance with the CE directives.
   (The CE declaration of conformity can be found as an appendix to the door documentation).

## Checklist

Location of the door:		Commissioned on:			
1	Door plate	approved	4	Drive	approved
1.	Condition of door panel		14.	Attachment	
2.	Attachment to door roller		15.	Leaks	
3.	Attachment to bottom beam		16.	Engine brake (audible click)	
4.	Welds in door panel		17.	Setting end positions	
5.	Securing balls *				
6.	Reinforcement profiles *		5	Tensioning and balancing system	approved
2	Bottom beam	approved	18.	Tension belt / elastic <sup>1</sup>	
7.	Guides	·· 🗖	19.	Fastening tension belt / elastic	
8.	Bottom seal *		20.	Return pulleys	
9.	Break-Away *		21.	Roll-up disks	
	•		22.	Tension spring *	
3	Column	approved	23.	Buckle loops *	
10.	Securing the column on the wall		24.	Buckle tightened *	
11.	Securing consoles to the wall				
12.	Dents / scratches		1 The	e elastic tensioning belt should be	e replaced
12	Fixed side seal			eventively before 100 000 evelor	p.uccu

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<b>6</b> 25.	Control Push buttons on the box	approved	<b>8</b> 36.	Security Safety photocell *	approved
26.	Stop switch		37.	Safety edge protection *	
27.	General cabling		38.	Light screen *	
			39.	Infrared *	
7	Operation	approved			
28.	Push buttons *		9	Hood *	approved
29.	Pull switch*		40.	Attachment	
30.			41.	Seal tightness	
31.	Radar *		_		
32.	Induction loop *		10	Miscellaneous	approved 
33.	Receiver *		42.	Maintenance sticker	
34.			43.	Type plate	
35.	Key switch *			* if applicable	
EN com doo	ructions in accordance with 13241 Industrial, Imercial and garage rs and gates IIA. allation company:		Pla	Com ce of delivery:	npany stamp
· Stre	eet and property number:		· Dat	e:	
· Pos	tcode / Place:		·	ne of engineer:	
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