

## Sectional garage door systems Welcome home



# Contents



Why opt for sectional garage doors by Novoferm?



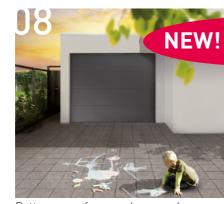
Novoferm quality



Vertical extension spring for sectional garage doors



NovoPort®- operator system



Patterns, surfaces, colours and structures



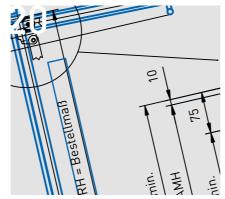
Pass doors and side doors



DuoPort



Garage door finder



Technology



All Novoferm garage doors and operators are manufactured according to the strict quality management system

- All Novoferm sectional garage door systems meet the high safety requirements for the European garage doors oduct standard EN 13241-1.
- All Novoferm garage doors and operators are tested by recognized institutes both individually and in combination.
- What does "TÜV-tested burglar resistance" mean in terms of your safety? The German industry association for garage doors, doors and frames (Industrieverband Tore Türen Zargen (ttz)) has drawn up a guideline that defines burglar resistance based on the existing standards. Tests are performed, and the results certified, by TÜV NORD CERT GmbH. Which means: certified garage doors made by Novoferm guarantee the highest levels of safety that have been tested by an impartial organization
- There is an optional installation kit for Novoferm sectional garage doors that provides additional burglar resistance and has been tested in accordance with the Dutch standard NEN 5096 at SKG. The burglar resistance has been certified under the standard's

The 10-year warranty on all steel sectional garage doors, the 5-year warranty on our film-covered garage doors (Golden oak, Dark oak, Mahogany, Winchester, Black oak und Moor oak) and our structural surfaces (Satin White, Satin Grey, Satin Dark Grey and Satin Brown) as well as the 5-year warranty on the mechanical components of the NovoPort® system ensure that you will have many years of pleasure and satisfaction with your new garage door.

## Why opt for sectional garage doors by Novoferm?



#### High-quality appearance and durability of our surface finishes

All sectional garage doors and sectional garage side doors with coated (Super-Color or RAL of your choice), film-covered (Golden oak, Dark oak, Mahogany, Winchester, Black oak und Moor oak) and structural surfaces (Satin White, Satin Grey, Satin Dark Grey and Satin Brown) are top coated at Novoferm. These high-quality surface finishes enhance the ability to withstand external influences while at the same time giving your garage an air of sophistication that you will enjoy for a long time to come.



#### Premium quality backed up by our warranty

All Novoferm sectional garage doors bear the Novoferm seal of quality. The garage doors and operators are manufactured in accordance with the ISO 9001 quality management system and comply with the stringent safety requirements of European garage door standard EN 13241-1. In addition we give a ten year warranty on all steel sectional garage doors with our seal of quality. Film-covered garage doors (Golden oak, Dark oak,

WHY LED?

Mahogany, Winchester, Black oak und Moor oak), our garage doors with structural surfaces (Satin White, Satin Grey, Satin Dark Grey and Satin Brown) and the mechanical, motor and motor control components of our garage door operators are protected by a five-year warranty.



#### Insulation and energy efficiency

Our sectional garage doors are fitted with a PUR rigid foam core that is between 20 and 45 mm thick to ensure good to maximum heat insulation. All of our garage door operators and additional hardware (e.g. light strips) are fitted with modern, energy-saving LED lighting for added brightness, cost and energy efficiency. A further benefit in terms of energy savings is that many of our operators only consume 0.5 W in standby. Added to which, the new Thermo frame set guarantees up to 15%\* improved heat insulation.

\* Depending on the door motif and size



#### Modernize your garage with an automatic sectional garage door system

Regardless of whether your garage was built from scratch or ready-made: your Novoferm partner can replace the old door with an automatic sectional garage door. Why is the replacement so quick? Since Novoferm renovation garage doors are perfectly matched to most old garage door dimensions, there is no need for elaborate modifications to the garage opening or for costly made-to-measure garage doors. If the new sectional garage door is mounted behind the garage opening, you will also gain more passage width. If space constraints necessitate installation of the sectional garage door in front of the garage opening, we can provide a high-quality aluminium rebate enclosure.



#### Tested security

Sectional garage doors made by Novoferm guarantee the highest levels of security! In addition to their functional reliability and the protection they offer friends and family with their anti-pinch protection (inside and out) and torsion spring with spring fracture safety device on both sides (iso 45), their elaborate design is also able to withstand intrusion attempts. Sectional garage doors are protected against possible break-ins with features that include the TÜV-tested burglar resistance\*, electronic push-up protection and a self-locking gear. There is an optional installation kit for Novoferm sectional garage doors that provides additional burglar resistance and has been tested in accordance with the Dutch standard NEN 5096 at SKG. The burglar resistance has been certified under the standard's class 2 They are joined by manipulation proof hand transmitters protected by multi-part rolling codes. \* for all standard design garage doors (excluding additional features, such as pass doors, emergency unlocking mechanisms, windows, etc.)

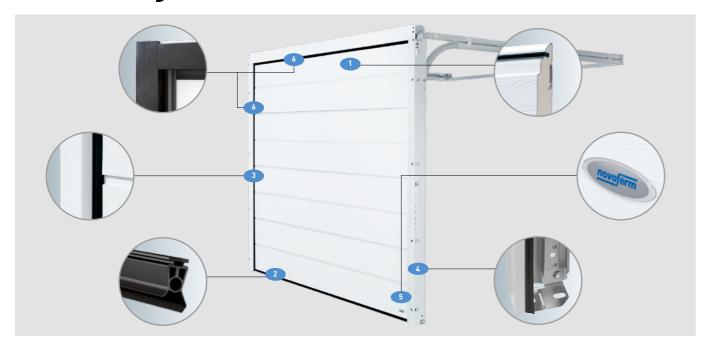
**NEW:** The new hand transmitters are equipped with AES 128-bit encryption to offer maximum



0800 328 6250 www.samsondoors.co.uk

www.samsondoors.co.uk

# Quality





Double-skinned and insulated

Our steel sections are exclusively manufactured in a double-skinned sandwich construction and filled with an insulating rigid PUR foam core. This ensures improved soundproofing and heat insulation, and quieter door operation compared with single-skinned garage doors. The flexible lip seals between the sections fit softly even at low temperatures. They prevent any heat losses and keep the dust out.

2 Frost-proof floor seal

A rubber profile on the bottom edge of the garage door guarantees optimum protection from water and dirt, evens out slight floor unevenness and prevents damage and injuries. The floor seal is made of high-quality EPDM (ethylene propylene diene monomer), which is known for its high elasticity, weather resistance and durability.

Lip seals on the frame

Extra wide lip seals on the side frame provide even better heat insulation and protection against dirt.

Adaptable frame base

Novoferm sectional garage doors are fitted with a weatherproof frame base made of hot-dip galvanized steel. So water and accumulated moisture can drain off freely and the frame will not start to rust, even after long periods. The stepped design is ideal for renovation projects that involve the installation of a sectional garage door to replace an up-and-over door with floor track.

The Novoferm quality seal

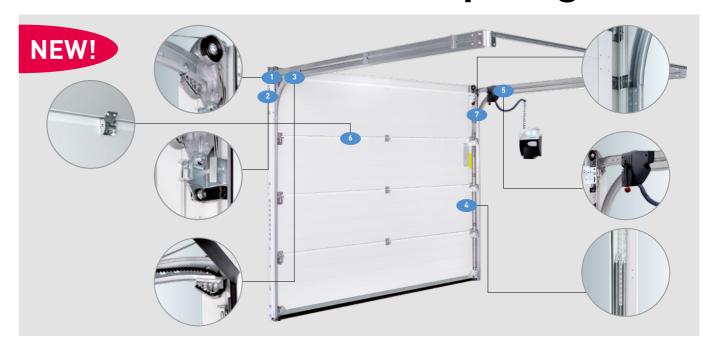
Since quality is definitely not something to be hidden, all Novoferm sectional garage doors bear the Novoferm seal of quality, which guarantees the use of the best materials and a top-class finish!

Thermo frame set

The new optional sealing and insulating strip system further improves the already excellent performance of the double-skinned Novoferm E® sectional garage doors. The 3-sided thermal optimization of the frame offers up to 15%\* better heat insulation when mounted behind the opening. A plug and clip profile ensures quick and easy installation; the frame can be used on all Novoferm E® sectional doors. The Thermo frame set actively supports the optimization of building performance.

\* Depending on the door motif and size

# Vertical extension spring



Novoferm is now supplying its iso 20 and iso 45 sectional garage doors in widths up to 3,000 mm and heights up to 2,500 mm (smooth) or 2,750 mm (Woodgrain) with a standard vertical extension spring system.

1 Interference-protected deflection pulley

The steel cables run vertically into the angular frame on interference-protected deflection pulleys mounted on ball bearings with U-shaped caster holders. This reduces the height requirement compared to the front-mounted torsion spring.

New cable mount

Together with the new steel cable holder, the newly designed cable mount with integrated door guide keeps the steel cables running smoothly in the angular frame without them touching the sections.

Integrated belt fastening

The newly designed moulded end piece contains an integrated fastener for the NovoPort® belt. The maintenance-free belt is fastened securely in the holder.

Multiple extension spring assemblies

The extension spring garage doors are equipped with sturdy multiple extension spring assemblies. The springs are adjusted at the top end of the assembly. The vertical extension springs require less installation depth and open up new possibilities when space is confined.

#### 5 NovoPort® - unique and flexible

The NovoPort® operator system not only offers maximum convenience during operation, but also during installation. After all, the motor is not fixed to the ceiling like conventional operators, but simply integrated into the side garage door track - either on the left or the right depending on the structural conditions. Therefore no ceiling assembly is required.

6 Anti-pinch inside and out

The special design of the sections and hinges prevents pinching on the door leaf from the outset.

7 Interference protection and cables channelled down the inside

The angular frames make it almost impossible to reach between the door leaf and the frame. Suspension cables arranged inside minimize the risk of injury and guarantee maximum operational reliability.

#### Torsion springs for iso 45

For a modest surcharge, our high-quality iso 45 sectional garage doors (up to 3,000 x 2,750 mm (WxH))\* can be supplied with torsion springs with maintenance-free spring fracture safety device that is tested to EN 12604. All larger versions are standard equipped with our sturdy torsion springs, thus ensuring that the garage door is held firmly and can be pushed up, even if a spring breaks.



\* For models with Woodgrain finish. The size restriction for models with smooth surfaces is max. 3,000 x 2,500 mm.

## The advantages at a glance

- Easy to install; low installation height
- The spring is easy to adjust
- The horizontal tracks are shorter (and regiure less space)
- NovoPort® is easy and fast to install
- Lower standard headroom requirement
- Added to which, the vertical extension spring system on iso 45 sectional garage doors is cheaper than the torsion spring version

4

www.samsondoors.co.uk



# The advantages at a glance

- The operating element is fitted with modern and energy-saving LED lighting that shines 13 times brighter than a conventional bulb of identical wattage.
- The lighting (1.6 W), which is now integrated in the control unit, switches on automatically when the garage is opened; the lighting duration can be programmed from 1 to 4 minutes.
- The remote control unit has automatic signal encryption to ensure the utmost protection against manipulation. The receiver lies protected in the operator housing.
- Quick and easy operation via a 2-channel rolling code hand transmitter. Apart from the hand transmitter, the operator can also be operated via a push button, key switch or coded key pad, which are mounted on the garage wall. Radio controlled, not a wire anywhere. That saves costs!
- Soft start and stop function.
- An integrated fault diagnosis system facilitates potential service work.
- Air vent setting for garage ventilation.

Five-year manufacturer's warranty on all mechanical, motor and motor control components.



## Exclusive ease of use: The NovoPort® system

If you are renovating your garage, you don't just want it to look better, but to also open more easily and save electricity. With the combined NovoPort® system consisting of garage door, operator and hand transmitter, you can raise the level of comfort in your garage at the push of a button and also shut out any inconveniences. You'll never have to get out in the rain or cold and open and close the garage door by hand! Garage door and operator are perfectly matched to one another and certified by independent institutes in accordance with the latest safety guidelines. So you can rest assured that you are not just making life easier: you are also maximizing security.

With a 5 year warranty on all the mechanical, motor and motor control components included!

# **NovoPort®**



#### Menu-guided programming

Programming is convenient and easy with three buttons and a clear 7-segment display. You are guided systematically through the menu to ensure that no settings are overlooked while programming. All settings are infinitely saved, even in case of a power cut. The operating state is always visible. Clear error coding allows for quick and safe troubleshooting if required.



#### Wall switches

A push button for opening the garage from the inside is directly integrated into the control unit and does not have to be purchased and mounted separately as an accessory.



#### New LED lighting

In addition to the new, integrated LED lighting (1.6 W), the NovoPort® also has easily accessible connections for wired accessories, such as external lights or signal lamps controlled by hand transmitter or switch.

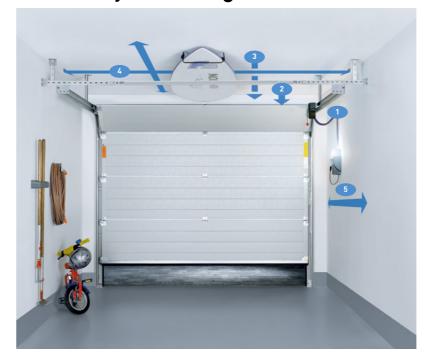




#### Belt

The belt is embedded in the garage door track, maintenance-free and protected.

## Assembly advantages



#### 1 No additional operator track

The NovoPort® operator is directly integrated into the side garage door track. This saves on the cost of materials, installation and maintenance.

#### No extra space required

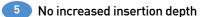
Operator requires no extra space above the garage door so you can use the space for storage purposes. No on-site related installation problems.

#### 3 No lowering of the ceiling or drive unit

Special lowering constructions often have to be manufactured in case of high garage ceilings in order to be able to mount the operator. This is not necessary with the NovoPort® system.

#### 4 No ceiling assembly

No installation problems in the ceiling area: lighting, beams or drainpipes do not have to be dismantled or bypassed. No difficult drilling into reinforced concrete ceilings, no use of special wall plugs in gypsum plasterboards, no danger of through drilling with thin ceilings, no dirt from operator components through bore dust.



Track-guided operators protrude approx. 30–40 cm outwards beyond the garage door and often have to be shortened on the building site. NovoPort® fits straight away!

www.samsondoors.co.uk 0800 328 6250 www.samsondoors.co.uk

# Door patterns

# For single garages For double garages up to 5.50 m in width Horizontal rib Large rib Flush Microline (Flush)

#### Raised panel finish

Illustrations show garage leaf door size 2,500 x 2,125 mm for single garages and garage leaf door size 4,500 x 2,125 mm for double garages. Other garage door sizes can deviate from the illustration shown.

## Surfaces, structures and colours

#### Experience more colour and enhanced individualism

Our iso 20 and iso 45 sectional garage doors are available on request in a subtly grained Woodgrain wood structure or in the elegant smooth surface Noblesse, which simply repels dust and moisture. For further individualisation, you can choose from 11 top-coated, attractively priced Super-Color colours/ preferred colours and nearly all RAL colours (iso 45).



#### Super-Color colours/ preferred colours







#### RAL colours for iso 45



Pass doors can also be supplied in the RAL colour of your choice for a small additional

#### Rustic wood effects

Grey aluminium,





Anthracite,



Ochre brown,







Golden oak (smooth) Dark oak (smooth) Mahogany (smooth) Black oak (smooth) Winchester (smooth) Moor oak (smooth) Our iso 45 sectional garage doors are available with six different weather-resistant, top-coated film laminates in authentic, rustic wood effects with a smooth surface. In addition to the large rib pattern, you can now also order all the wood effects in the flush and some in the panel pattern (not Winchester, Black oak and Moor oak).

#### Benefit from our new structural surfaces!







Satin brown



In addition to the existing Satin grey, our iso 45 sectional garage doors are now available in three more decorative, top-coated satin matt structural surfaces with reduced dirt retention and exceptional weather resistance.

#### New Microline pattern (Flush) in Satin white and Satin grey



Exclusively for the flush pattern for iso 45 sectional garage doors, our popular industrial door profiled finish Microline (Flush) is

## Pass doors



## Perfectly integrated: Pass doors with matching design

If your garage is too narrow for a side door, but you don't want to have to do without that convenience, then we recommend an integrated pass door. Pass doors are available for all iso 45 exclusive garage doors up to a width of 5 m. They offer a practical passage width of 85 cm (raised panel designs: 60 cm) and are fitted with double-skinned insulation to ensure perfect heat insulation.

#### Pass doors are arranged centrally or asymmetrically depending on the garage door width

	Symmetrica
	arrangemei
	for garage
-	door widths
	up to 3.50 m

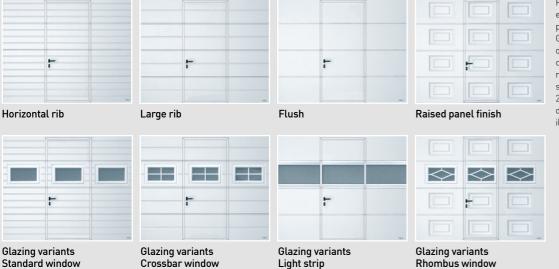
10





Asymmetrical arrangement for garage door widths above 3.50 m - either left or right

## Pass door panels with and without glazing



exclusive garage doors in the patterns shown on the left. Glazing variants for all garage door patterns: standard windows, crossbar windows, light strip or rhombus windows. Illustrations show garage door leaf size 2,500 x 2,125 mm. Other garage door sizes can deviate from the illustration shown

#### The door sill area

The robust garage door leaf frame ensures that the garage door cannot be bent even when opened. The anodized aluminium sill is levelled towards the edges and only 24 mm high.



### Door closes automatically

The standard door closer is responsible for automatic closing. This is especially practical when you've got your hands full, e.g. if you are taking your bicycle, moped or lawn mower out of the garage. A hold-open mechanism (at 90°) is available for a small additional charge.



### Softline profiles

Softline profiles (rounded) and concealed hinges ensure an aesthetic overall appearance of the garage door. The frame of the leaf is standard painted in traffic white, similar to RAL 9016. It can be varnished in the same colour as the door leaf using any other RAL colour. In the case of coated door leaves (wood shades, Satin grey, Satin white, Satin Dark grey and Satin brown), the door leaf frame is varnished in a matching shade for a surcharge.





## Secure multiple locking mechanism

Protect yourself and your property. A multiple locking mechanism on the pass door is highly recommended if your garage offers direct access to the house, or is used as a hobby room or to store an expensive mountain bike. This mechanism locks each of the pass door sections individually and can be centrally activated from both inside and out using the profile cylinder lock.

#### Available colours and surfaces

#### Surfaces



NEW!

Satin (structural surfaces)



Wood effects (smooth)





RAL-Farben







or a small additional

# Side doors



## Letting life into the house

Don't want to always have to raise and lower the door for your bike, lawn mower or screwdriver? Then Novoferm has the practical solution for you: we offer matching side doors with all sectional garage doors - for going in and out in no time and for an all-round harmonious appearance, too. And the processing is something to be proud of as well: All of our side doors are made of high-quality aluminium profiles. The door leaves are filled with double-skinned, hot galvanized sheet steel with a core of rigid PUR foam.

## Patterns for 1-leaf side doors, garage door type iso 20/ iso 45



1. Horizontal rib



5. Raised panel traffic white similar to RAL 9016



similar to RAL 9016



6. Flush Moss green similar to RAL 6005



7. Flush

Golden oak (only iso 45)



(only iso 45) Satin white similar to RAL 9016



## All door leaf frames are made Precise of aluminium and guarantee processing maximum weather resistance, while robust hinges provide reliable long-term, dimensionally accurate opening and closing. operation Hinge lock (optional)

0800 328 6250

# **DuoPort**



## The solution for more scope

In addition to providing high insulation values, our insulated Duo-Port leaf doors offer you the possibility to use your garage as a utility room, for leisure time or hobbies. You can choose whether to open both door leaves or only the active leaf, depending on your particular requirements. The use of high-quality and durable materials, top-quality processing and a wide variety of additional fittings give your garage a classic appearance in keeping with the style of your house and your personal taste.

## Patterns for 2-leaf side doors, garage door type iso 45



1. Horizontal rib Traffic white, similar to RAL 9016



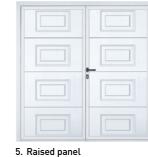
Traffic white, similar to RAL 9016



Traffic white, similar to RAL 9016



4. Microline (Flush)



Novoferm side doors are available in a wide range of door patterns, surfaces and colours. They are supplied as standard with a black rounded handle set and security lock. Note: With film-covered colour shades and structural surfaces, the aluminium profiles of the side doors are produced in a suitably toning shade.

Note: With film-covered colour shades and structural surfaces, the aluminium profiles of the 2-leaf side doors are produced in a suitably toning shade

Side doors

#### Garage door facts

- For private garages up to 3 m in width
- Smooth running and stable, with double-skinned, galvanized steel sections
- High degree of safety with anti-pinch feature inside and out (according to EN 12604) as well as interference-protected triple safety extension spring assemblies
- Good heat insulation with 20 mm rigid PUR foam core (heat insulation value K = 1.0 W/m2K)
- Inside door leaf: polyester-based base coat, grey white, similar to RAL 9002
- Outside door leaf, standard: traffic white, similar to RAL 9016 (base coat)
- Door leaf outside: Super-Color colour/ preferred colour for an additional charge (top-coated)



Our iso 20 sectional garage doors with a vertical extension spring system are fitted with multiple safety extension spring assemblies.

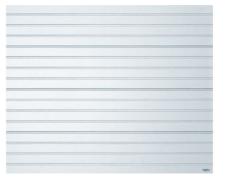


#### Insulation thickness



Iso 20 is filled with a 20-mm rigid foam core, which

#### Door patterns



Horizontal rib

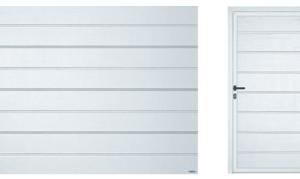




Illustration shows garage door leaf size 2,500 x 2,125 mm. Other garage door sizes can deviate from the illustration shown.

#### Windows



Variant 1: Standard window



Variant 2: Elegant rhombus pattern



Variant 3: Classic cross bar window

inside: approx. 392 x 192 mm outside: approx. 460 x 260 mm

#### Window thickness:

• Large rib pattern: 16 mm double acrylic glazing, transparent or crystal

#### Handles



Plastic handle, black [optional] You can find additional handles on page 18.

#### Surfaces for iso 20



#### Standard colour





Super-Color colours/ preferred colours



0800 328 6250









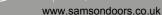












#### Garage door facts

- Suitable for private garages with a width of between 2,250 and 5,500 mm
- Widest range of models and equipment:
- individual design garage door
- with side door or integrated pass door of the same design
- Smooth running, superbly durable and stable thanks to a sturdy design that is extremely distortion-resistant
- Spring technology either with a vertical extension spring system or with stable torsion spring shafts
- Perfect functional reliability and easy operation with torsion spring with spring break safety feature on both sides
- Maximum personal safety with anti-pinch feature inside and out (according to EN 12604)
- Maximum heat insulation with 45 mm rigid PUR foam core (heat insulation value K = 0.5 W/ m²K)
- Inside door leaf: polyester-based base coat, grey white, similar to RAL 9002
- Outside door leaf, standard: traffic white, similar to RAL 9016 (base coat)
- Outside door leaf: Super-Color or RAL of choice at additional cost (top-coated)



Our iso 45 sectional garage doors are available with either a vertical extension spring system or stable torsion springs (depending on size) with a maintenance-free spring fracture safety device tested to DIN EN 12604.





#### Insulation thickness



Iso 45 is filled with a 45-mm rigid foam core, which provides max. heat insulation and top soundproofing values.

#### Door patterns

#### Side doors 1-leaf



NEW!

#### Horizontal rib







#### Microline (Flush)\*



#### Raised panel

Illustrations show garage door leaf size 2,500 x 2,125 mm. Other garage door sizes can deviate from the illustration shown.

\* Available only in the structured surfaces listed for Microline

## Pass doors









Illustrations show garage door leaf size 2,500 x 2,125 mm. Other garage door sizes can deviate from the illustration shown

#### Wood effects (smooth)







#### Satin (structural surfaces)



NEW!







#### Microline (Flush)\*





#### RAL colours (top coated)



#### Surfaces for iso 45



colour

Standard



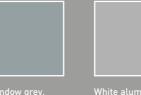
Super-Color colours/ preferred colours







0800 328 6250











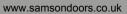












#### Additional accessories for iso 45

#### Handles



Door handle, plasticcoated, in Super Color or RAL



colour anodized



Aluminium new-silver colour anodized



Aluminium brass colour anodized



Aluminium with rustic structured effect



Aluminium, PVC-coated, traffic white



Matching door handles are available in all 11 Super-Colors and numerous RAL shades.

#### Windows



Standard window



Cross bar pattern



Rhombus pattern

Sunrise pattern

Dimensions: inside: approx. 392 x 192 mm outside: approx. 460 x 260 mm

Window thicknesses:

- Horizontal rib, large rib and flush: 25 mm acrylic double glazing, transparent or crystal.
- Raised panel pattern: 20 mm double acrylic glazing, transparent or crystal.

#### Window cutouts



Rectangular, wide, with transparent double acrylic glazing\* Dimensions: inside: approx. 651 x 251 mm



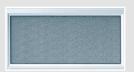
Rectangular, narrow, with transparent double acrylic glazing\* inside: approx. 568 x 135 mm outside: approx. 638 x 205 mm



Porthole with stainless steel frame with 10-mm double acrylic glazing\* inside: approx. ø 290 mm outside: approx. ø 350 mm

- outside: approx. 726 x 326 mm \*Only for horizontal rib, large rib and flush garage door patterns.
- \*\*Only for large rib and flush garage door patterns

#### Light strip



Pane thickness 16 mm



Acrylic glass with





Polycarbonate cross bar double plate

The light strip is also available in expanded grating format with PVC coating. Note: With film-covered colour shades and structural surfaces, all windows are produced in a suitably toning shade.

#### Accessories

#### Hand transmitters



Mini-Novotron 522 Design hand transmitter 2-channel, 433 MHz, KeeLoq rolling code



Mini-Novotron 524 Design hand transmitter 4-channel, 433 MHz, KeeLoq rolling code



Mini-Novotron 522 hand transmitter Mini-Novotron 524 hand transmitter 2-channel, 433 MHz, 4-channel, 433 MHz, KeeLog rolling code



KeeLog rolling code



Mini-Novotron 502 hand transmitter

2-channel, 433 MHz,

KeeLoq rolling code

Mini-Novotron 504 hand transmitter 4-channel, 433 MHz, KeeLog rolling code



Mini-Novotron 504 hand transmitter 4-channel, 433 MHz, KeeLoq rolling code



Micro-Novotron 512 hand transmitter Design 2-channel, 433 MHz, KeeLog rolling code

#### Wall mounting



Wall mounting/ silicon case Suitable for use as case and wall mounting for Mini-Novotron 522 Design/524 Design and for Mini-Novotron 522/ 524

#### Remote switches



Signal 111 remote wall switch 2-channel, 433 MHz, KeeLog rolling code for controlling 2 operators or 1 operator and 1 outside lighting in UV-resistant material



Signal 218 remote coded key pad 10 codes, 433 MHz, Keel og rolling code with stainless steel cover, backlit in UV-resistant material

#### Switches



Signal 112 wall switch Start key, holiday switch, continuous light (on/ off), 24 V connection to the operator in UV-resistant material



Coded key pad signal 213 3 signals, metal key pad, 230 V connection

#### Opto sensors



Extra 625 one-way opto sensor

- 24 V DC, IP 54
- Range: 8 m
- Suitable for: all operator models



Extra 626 one-way opto sensor

- 20-28 V, IP 50, 2 wire
- Range: 8 m Suitable for:
- Novomatic 423/563 S NovoPort®



Extra 628 reflection light opto sensor • 24-240 V AC, 12-240 V DC, IP 54

- Range: 5 m
- Can only be used as a pulse generator



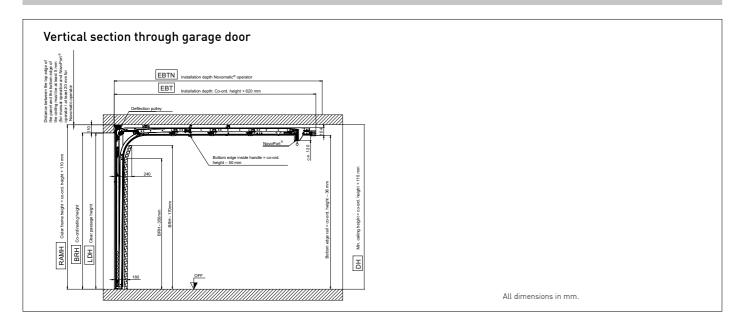
**Emergency unlocking** 

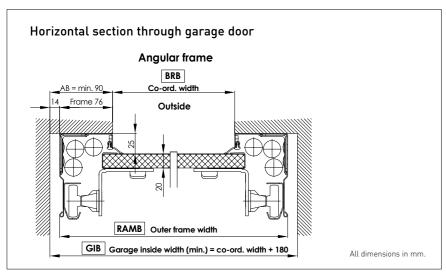
Extra 315 emergency unlocking · With safety profile half cylinder

All our new and existing hand transmitters are compatible with all our new and existing operators. Ask your dealer to show you our full range of accessories.

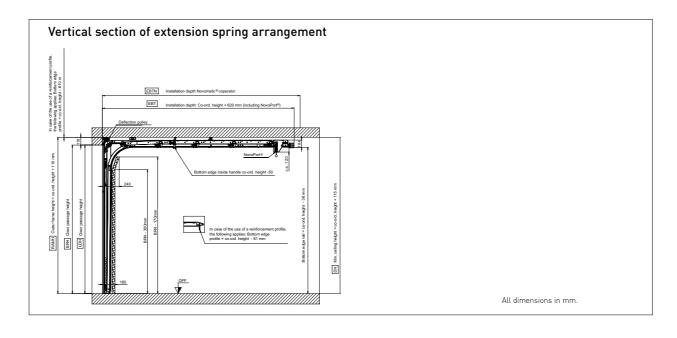
## Novoferm E® sectional garage door

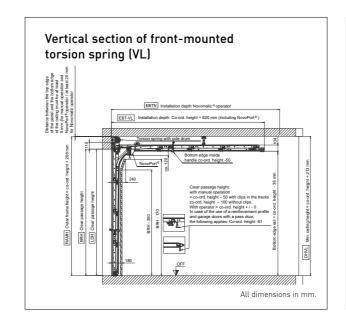
#### Required installation dimensions = Coordinating width (order size) BRB BRH = Coordinating height (order size) DH = Ceiling height (minimum dimension) GIB = Interior garage width (minimum dimension) EBT = Installation depth of the door EBT/EBTN EBTN = Installation depth of garage door with Novomatic operators RAMB = Outer frame width = Outer frame height RAMH 0FF = Upper-edge finished floor LDH = Clear passage height BRB Please consult the "Coordinating widths and heights" chart or calculate the dimensions based on the drawings. If the structure does not have the required minimum dimensions, it can be compensated by fitting panels and profiles. Space needed for assembly at floor level All dimensions in mm. Assembly on finished floor

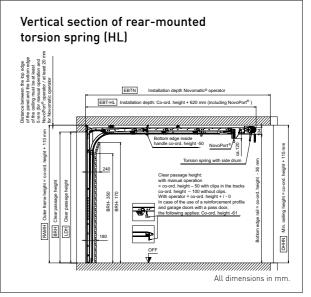


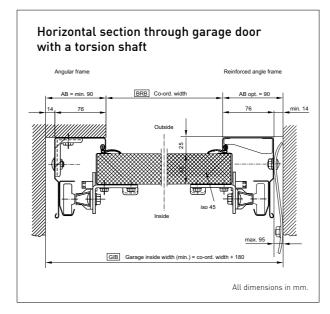


## Novoferm E® sectional garage door

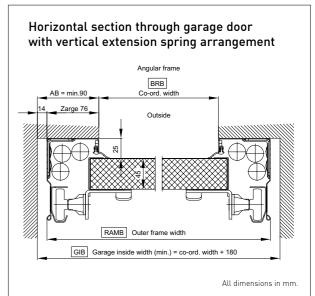








0800 328 6250



21

### Novoferm E® side doors

# Block frame (opens inwards or outwards) Horizontal section/ Installation in the opening Horizontal section/ Installation behind the opening Clear passage dimensions Clear passage dimensions Opening dimension = Coordinating size 40 Width and height of frame Opening dimension = Coordinating size Width and height of frame Vertical section/ Installation behind the opening Vertical section/ Installation in the opening 55 Width and height of frame All dimensions in mm.

Side door design matched to iso 45

## Novoferm E® sectional garage door

#### Installation dimensions for iso 20 sectional doors

BRM (Order size)	Maximum wall opening size/ garage wall opening size	Width and height of frame (RAM)	Interior garage dimension (GIB) Installation depth		Ceiling height (DH)			
Width x Height	Width x Height	Width x Height	min.		min.	Manual operation (with brace)	Drive	
2250 x 1875	2340 x 1965	2402 x 1985	2430	2495	1990	1825	1875	
2250 x 2000	2340 x 2090	2402 x 2110	2430	2620	2115	1950	2000	
2250 x 2125	2340 x 2215	2402 x 2235	2430	2745	2240	2075	2125	
2375 x 1875	2465 x 1965	2527 x 1985	2555	2495	1990	1825	1875	
2375 x 2000	2465 x 2090	2527 x 2110	2555	2620	2115	1950	2000	
2375 x 2075	2465 x 2165	2527 x 2185	2555	2695	2190	2025	2075	
2375 x 2125	2465 x 2215	2527 x 2235	2555	2745	2240	2075	2125	
2375 x 2250	2465 x 2340	2527 x 2360	2555	2870	2365	2200	2250	
2375 x 2375	2465 x 2465	2527 x 2485	2555	2995	2490	2325	2375	
2500 x 1875	2590 x 1965	2652 x 1985	2680	2495	1990	1825	1875	
2500 x 2000	2590 x 2090	2652 x 2110	2680	2620	2115	1950	2000	
2500 x 2075	2590 x 2165	2652 x 2185	2680	2695	2190	2025	2075	
2500 x 2125	2590 x 2215	2652 x 2235	2680	2745	2240	2075	2125	
2500 x 2250	2590 x 2340	2652 x 2360	2680	2870	2365	2200	2250	
2500 x 2375	2590 x 2465	2652 x 2485	2680	2995	2490	2325	2375	
2500 x 2500	2590 x 2590	2652 x 2610	2680	3120	2615	2450	2500	
2500 x 2750	2590 x 2840	2652 x 2860	2680	3370	2865	2700	2750	
2625 x 2125	2715 x 2215	2777 x 2235	2805	2745	2240	2075	2125	
2750 x 2000	2840 x 2090	2902 x 2110	2930	2620	2115	1950	2000	
2750 x 2125	2840 x 2215	2902 x 2235	2930	2745	2240	2075	2125	
3000 x 2000	3090 x 2090	3152 x 2110	3180	2620	2115	1950	2000	
3000 x 2125	3090 x 2215	3152 x 2235	3180	2745	2240	2075	2125	
3000 x 2250	3090 x 2340	3152 x 2360	3180	2870	2365	2200	2250	
3000 x 2375	3090 x 2465	3152 x 2485	3180	2995	2490	2325	2375	
3000 x 2500	3090 x 2590	3152 x 2610	3180	3120	2615	2450	2500	

All dimensions in mm.

Order sizes (= opt. clear finished dimension) Coordinating sizes (BRM)	Maximum clear finished dimension	Width and height of frame (RAM) (ZF)	Width and height of frame (RAM) (VL)	Width and height of frame (RAM) (HL)	Installati- on depth (EBT) (ZF)		Installation depth (EBT) (HL)		Ceiling height (DH) (ZF	Ceiling height (DH) (VL)	Ceiling height (DH) (HL)	Clear passage height (LDH)	
Width x Height	Width x Height	Width x Height	Width x Height	Width x Height				Width	min.	min.	min.	Manual operation	Drive
2250 x 1875	2340 x 1965	2402 x 1985	2402 x 2083	2402 x 1985	2495	2495	2625	2430	1990	2088	1990	1825	1875
2250 x 2000	2340 x 2090	2402 x 2110	2402 x 2208	2402 x 2110	2620	2620	2750	2430	2115	2213	2115	1950	2000
2250 x 2125	2340 x 2215	2402 x 2235	2402 x 2333	2402 x 2235	2745	2745	2875	2430	2240	2338	2240	2075	2125
2375 x 1875	2465 x 1965	2527 x 1985	2527 x 2083	2527 x 1985	2495	2495	2625	2555	1990	2088	1990	1825	1875
2375 x 2000	2465 x 2090	2527 x 2110	2527 x 2208	2527 x 2110	2620	2620	2750	2555	2115	2213	2115	1950	2000
2375 x 2125	2465 x 2215	2527 x 2235	2527 x 2333	2527 x 2235	2745	2745	2875	2555	2240	2338	2240	2075	2125
2375 x 2250	2465 x 2340	2527 x 2360	2527 x 2458	2527 x 2360	2870	2870	3000	2555	2365	2463	2365	2200	2250
2500 x 1875	2590 x 1965	2652 x 1985	2652 x 2083	2652 x 1985	2495	2495	2625	2680	1990	2088	1990	1825	1875
2500 x 2000	2590 x 2090	2652 x 2110	2652 x 2208	2652 x 2110	2620	2620	2750	2680	2115	2213	2115	1950	2000
2500 x 2125	2590 x 2215	2652 x 2235	2652 x 2333	2652 x 2235	2745	2745	2875	2680	2240	2338	2240	2075	2125
2500 x 2250	2590 x 2340	2652 x 2360	2652 x 2458	2652 x 2360	2870	2870	3000	2680	2365	2463	2365	2200	2250
2500 x 2375	2590 x 2465	2652 x 2485	2652 x 2583	2652 x 2485	2995	2995	3125	2680	2490	2588	2490	2325	2375
2500 x 2500	2590 x 2590	2652 x 2610	2652 x 2708	2652 x 2610	3120	3120	3250	2680	2615	2713	2615	2450	2500
2500 x 2750	2590 x 2840	2652 x 2860	2652 x 2958	2652 x 2860	3370	3370	3500	2680	2865	2963	2865	2700	2750
2625 x 2125	2715 x 2215	2777 x 2235	2777 x 2333	2777 x 2235	2745	2745	2875	2805	2240	2338	2240	2075	2125
2750 x 2000	2840 x 2090	2902 x 2110	2902 x 2208	2902 x 2110	2620	2620	2750	2930	2115	2213	2115	1950	2000
2750 x 2125	2840 x 2215	2902 x 2235	2902 x 2333	2902 x 2235	2745	2745	2875	2930	2240	2338	2240	2075	2125
2750 x 2750	2840 x 2840	2902 x 2860	2902 x 2958	2902 x 2860	3370	3370	3500	2930	2865	2963	2865	2700	2750
3000 x 2000	3090 x 2090	3152 x 2110	3152 x 2208	3152 x 2110	2620	2620	2750	3180	2115	2213	2115	1950	2000
3000 x 2125	3090 x 2215	3152 x 2235	3152 x 2333	3152 x 2235	2745	2745	2875	3180	2240	2338	2240	2075	2125
3000 x 2250	3090 x 2340	3152 x 2360	3152 x 2458	3152 x 2360	2870	2870	3000	3180	2365	2463	2365	2200	2250
3000 x 2375	3090 x 2465	3152 x 2485	3152 x 2583	3152 x 2485	2995	2995	3125	3180	2490	2588	2490	2325	2375
3000 x 2500	3090 x 2590	3152 x 2610	3152 x 2708	3152 x 2610	3120	3120	3250	3180	2615	2713	2615	2450	2500
3000 x 3000	3090 x 3090		3152 x 3208	3152 x 3110		3620	3750	3180		3213	3115	2950	3000
3250 x 2000	3340 x 2090		3402 x 2208	3402 x 2110		2620	2750	3430		2213	2115	1950	2000
3250 x 2125	3340 x 2215		3402 x 2333	3402 x 2235		2745	2875	3430		2338	2240	2075	2125
3250 x 2250	3340 x 2340		3402 x 2458	3402 x 2360		2870	3000	3430		2463	2365	2200	2250
3500 x 2000	3590 x 2090		3652 x 2208	3652 x 2110		2620	2750	3680		2213	2115	1950	2000
3500 x 2125	3590 x 2215		3652 x 2333	3652 x 2235		2745	2875	3680		2338	2240	2075	2125
3500 x 2250	3590 x 2340		3652 x 2458	3652 x 2360		2870	3000	3680		2463	2365	2200	2250
3750 x 2000	3840 x 2090		3902 x 2208	3902 x 2110		2620	2750	3930		2213	2115	1950	2000
3750 x 2125	3840 x 2215		3902 x 2333	3902 x 2235		2745	2875	3930		2338	2240	2075	2125
3750 x 2250	3840 x 2340		3902 x 2458	3902 x 2360		2870	3000	3930		2463	2365	2200	2250
4000 x 2000	4090 x 2090		4152 x 2208	4152 x 2110		2620	2750	4180		2213	2115	1950	2000
4000 x 2125	4090 x 2215		4152 x 2333	4152 x 2235		2745	2875	4180		2338	2240	2075	2125
4000 x 2250	4090 x 2340	İ	4152 x 2458	4152 x 2360		2870	3000	4180		2463	2365	2200	2250
4250 x 2000	4340 x 2090		4402 x 2208	4402 x 2110		2620	2750	4430		2213	2115	1950	2000
4250 x 2125	4340 x 2215		4402 x 2333	4402 x 2235		2745	2875	4430		2338	2240	2075	2125
4250 x 2250	4340 x 2340		4402 x 2458	4402 x 2360		2870	3000	4430		2463	2365	2200	2250
4500 x 2000	4590 x 2090		4652 x 2208	4652 x 2110		2620	2750	4680		2213	2115	1950	2000
4500 x 2125	4590 x 2215		4652 x 2333	4652 x 2235		2745	2875	4680		2338	2240	2075	2125
4500 x 2250	4590 x 2340		4652 x 2458	4652 x 2360		2870	3000	4680		2463	2365	2200	2250
4750 x 2000	4840 x 2090		4902 x 2208	4902 x 2110		2620	2750	4930		2213	2115	1950	2000
4750 x 2125	4840 x 2215		4902 x 2333	4902 x 2235		2745	2875	4930		2338	2240	2075	2125
4750 x 2250	4840 x 2340		4902 x 2458	4902 x 2360		2870	3000	4930		2463	2365	2200	2250
5000 x 2000	5090 x 2090		5152 x 2208	5152 x 2110		2620	2750	5180		2213	2115	1950	2000
5000 x 2125	5090 x 2215		5152 x 2333	5152 x 2235		2745	2875	5180		2338	2240	2075	2125
5000 x 2123	5090 x 2340		5152 x 2458	5152 x 2360		2870	3000	5180		2463	2365	2200	2250
5500 x 2000	5590 x 2090		5652 x 2208	5652 x 2110		2620	2750	5680		2213	2115	1950	2000
			5652 x 2333		<del>                                     </del>					2338	2240	2075	2125
5500 x 2125	5590 x 2215		1 2027 X 7333	5652 x 2235	I	2745	2875	5680					

All dimensions in mm.

0800 328 6250

23