

Roto NX

One hardware system – limitless possibilities

An investment in the future that pays off



The Tilt&Turn hardware system for windows and balcony doors that is shaping the industry

Roto NX is the new, future-proof hardware system, with a wide range of new features and functions that set it apart from the competition. Its innovative construction combines efficiency, security, comfort and design – many points in favour of a safe investment and sustainable success.

We transform customer orientation into customer understanding. While Smart Home, burglary protection, comfort requirements, sound insulation and energy efficiency are the topics preoccupying the sector, we continue to develop our components and assemblies to provide the crucial advantages that ensure they are fit for the future and its particular challenges. Roto NX is based on Roto NT, the world's best selling Tilt&Turn hardware system for windows and balcony doors, and makes crucial enhancements to the design.

The modern hardware system for PVC, timber and aluminium windows with a 16 mm hardware groove and a sash weight of up to 150 kg offers tangible benefits for retailers, fabricators and end consumers.

- Increased security thanks to efficient components.
- Greater comfort thanks to improved room climate.
- Contemporary design and perfect appearance right down to the last detail.
- Maximum corrosion resistance.



Everything is better

Efficiency

Roto NX stands for a high level of efficiency. The system guarantees simple and fast assembly during production and installation and reduces the storage and logistics expenditure. This saves time and money. In addition, Roto NX ensures a high product quality and long-term functionality. This all makes Roto a reliable partner – now and in the future.



Security

Roto NX stands for a high level of security. The new TiltSafe components offer advanced burglary protection – now even in the tilt position (burglary inhibition in accordance with RC 2). Working with the hardware itself is also becoming safer and permits higher loads even in the standard version, for example. The product quality and the breadth and depth of the range additionally ensure maximum reliability and decision making certainty.



Comfort

Roto NX stands for increased comfort. The system impresses with a high level of operating convenience, simple handling and ideal functionality. Roto NX also improves the living comfort – for example by optimised ventilation properties for a balanced room climate or through incorporation into the home automation system.



Design

Roto NX stands for contemporary design and ensures an attractive appearance from all angles, for example due to elegant cover caps, sophisticated powder coatings and concealed screws on the hinge side. In addition, the system allows a modern room design with large glass surfaces thanks to its high loads.

Perfection for all, in every aspect

Home is a personal oasis of peace and a safe haven – but only if it is actually secure. Roto NX soothes worries about home security with a sophisticated security concept which is tailored to provide increased burglary protection for windows and balcony doors. An additional side effect is that heavy and large windows are already secured in the standard versions.

Innovative technologies offer greater comfort by automating window operation and optimising ventilation. Windows and balcony doors are even easier to open and close.

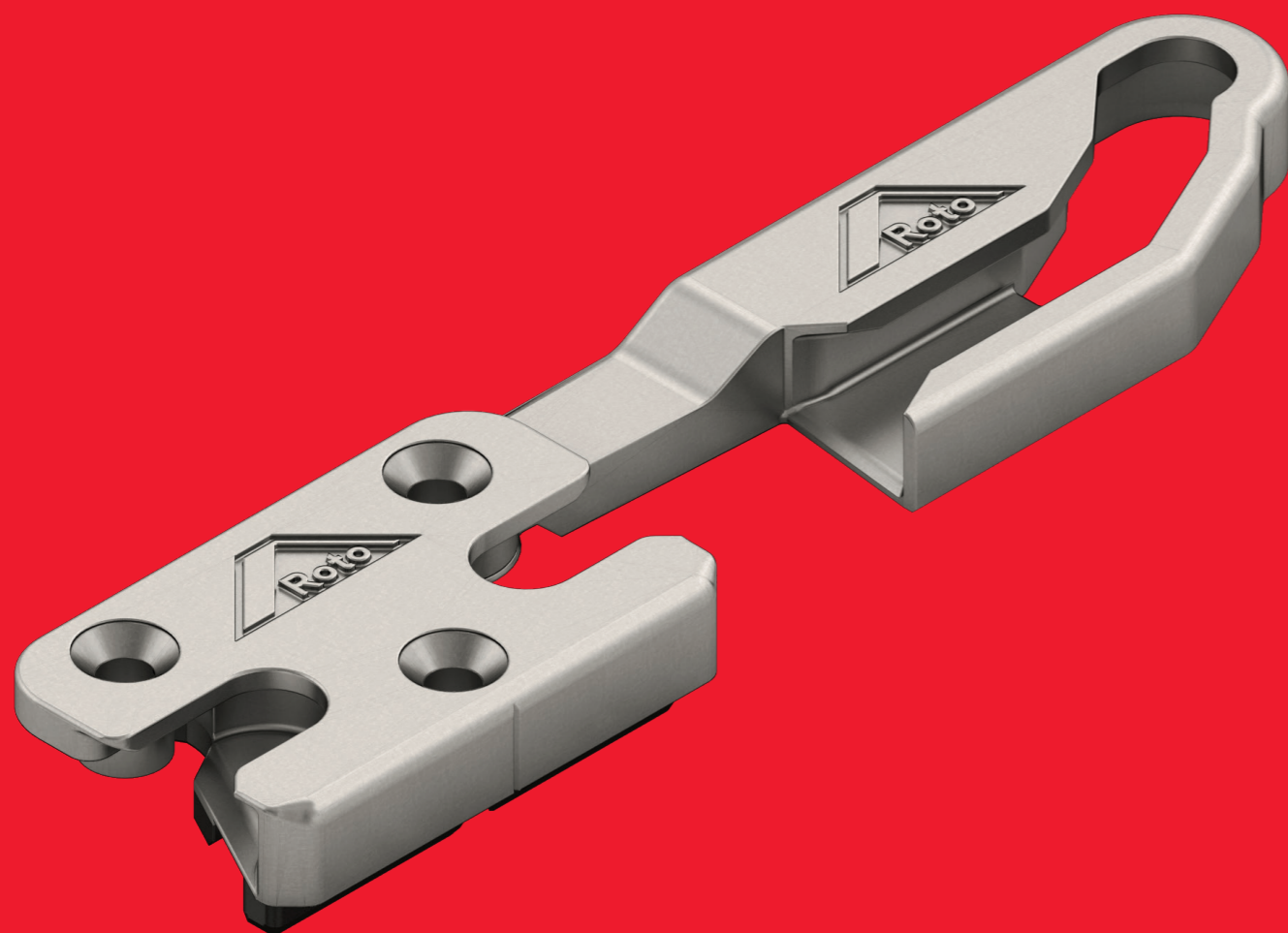
An attractive house should be paired with an attractive window design. It holds true that the less you see, the better. For this reason, screws are hidden from the critical eyes of builders by elegant cover caps.

Roto also focuses on efficiency above all. This means innovative solutions for partners that save time and money.

Intelligent responses to new requirements

The approach Roto takes to modern window technology always involves creating innovations to respond to the requirements of industry and architecture. The most important examples at a glance:

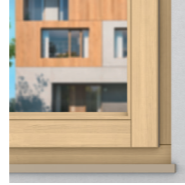
- TiltSafe: the security hardware for tilted windows – the lockable handle means that uncontrolled opening is no longer possible.
- Stay arm: integrated night ventilation is automatically activated at a handle position of 135° and ensures a better room climate.
- High backset espagnolette: this innovative espagnolette is perfect for wide sash frames with the handle positioned centrally.
- Mechanical balcony door bullet catch: the innovative spring structure that keeps the door closed even when it is not locked.
- Hinge side P: strong and aesthetically pleasing – thanks to concealed screws and high weight stability up to 150 kg.



Hinge sides

Hinge side P

For PVC windows with night ventilation. High level of efficiency thanks to fast processing in production, simple adjustment during installation and low storage and logistics expenditure.



Hinge side C

For timber and PVC windows with a 13 mm hardware axis. The hinge side disappears into a variety of window profiles so that it cannot be seen. Narrow, tall formats and flush windows are becoming increasingly common, especially in modern detached houses. The hinge side is perfect for use with these.

Hinge side T

For timber windows with night ventilation. The hinge side T also boasts clear benefits in terms of efficiency, security, comfort and design.



Hinge side Designo

For attractive timber and PVC windows. The concealed hinge side of the high-quality hardware ensures a clean appearance in the room and offers a wide range of style options thanks to its exclusive design.

Hinge side A16

For aluminium and PVC windows. The new rebate corner hinge makes it possible to enjoy the benefits of Roto NX for producing aluminium windows as well.



Hinge side Designo A16

For aluminium windows with a 16 mm hardware groove. It holds true that the less you see of the technology, the better. No hinges visible from the outside, no cover caps that could come loose. Nothing spoils the appearance of the window, as only the handle is visible.

Hinge side Power Hinge

For heavy, floor-to-ceiling windows and balcony doors made of timber and aluminium shells. The aesthetically pleasing hinge solution for windows with large glass surfaces and extremely high sash weights, such as energy-saving windows with multiple glazing.



Hinge side Royal

For windows made of timber, e.g. in old buildings. The excellent turn-out curve is ideal for applications where the reveal is very close to the sash. The simple design also complements the high quality of the window here.



	PVC	Timber	Aluminium (16 mm)	H2*	H3*
Surface-mounted hinge sides					
Hinge side P	■				■
Hinge side T		■			■
Hinge side A16	■		■		■
Hinge side Power Hinge		■			■
Concealed hinge sides					
Hinge side C	■	■			■
Hinge side Designo	■	■		■	
Hinge side Designo A16			■		■
Hinge side Royal		■		■	

H2* – Certification programme for hardware in accordance with EN 13126 8:2017 class H2 – 10,000 cycles
H3* – Certification programme for hardware in accordance with EN 13126 8:2017 class H3 – 20,000 cycles

Surface-mounted hinge sides



Hinge side P

The all-rounder for PVC windows with night ventilation: quick to produce, easy to adjust and minimal storage and logistics costs.

- Added security thanks to a sash weight of 130 kg even in the standard version (can be increased to 150 kg).
- Night ventilation function in the 135° handle position without an additional frame component.
- High level of operating convenience: the staged taper action of the integrated night ventilation harmoniously distributes the necessary operating force throughout the closing process. This effect is even more pronounced in large windows.
- The stay bearing is flush with the overlap of the sash, which enables more possible combinations with different window types, such as fanlights.
- Attractive appearance thanks to concealed screws on the stay bearing and the individual choice of colours for cover caps and surfaces, e.g. titanium powder coating.

Hinge side T

The cutting-edge solution for timber windows with night ventilation: impressive efficiency, security, comfort and design.

- Increased security thanks to efficient components up to a sash weight of 150 kg.
- Night ventilation function in the 135° handle position without an additional frame component.
- High level of operating convenience: the staged taper action of the integrated night ventilation harmoniously distributes the necessary operating force throughout the closing process. This effect is even more pronounced in large windows.
- The stay bearing is flush with the overlap of the sash, which enables more possible combinations with different window types, such as fanlights.
- Contemporary design and perfect appearance thanks to concealed screws and cover caps with an optimised shape, as well as powder-coated surfaces in a wide range of colour variants, such as titanium powder coating.

Hinge side A16

The solution for aluminium windows with a 16 mm hardware groove and night ventilation: with all the benefits of the Roto NX PVC modular system proven over its years of use.

- Added security thanks to a sash weight of 150 kg even in the standard version.
- Sash rebate height up to 2800 mm, enabling the construction of tall window and balcony door formats.
- Special formats such as arched and pitched windows with and without threshold can be implemented.
- Can be used in conjunction with the Roto NX modular system – ensuring that everything fits together perfectly.
- The design is adapted to the existing Roto NX product range and harmonised for use with all elements.

Power Hinge

Guarantees extensive outside views. This aesthetically pleasing heavyweight is a unique solution designed specifically for floor-to-ceiling timber and timber-aluminium windows and balcony doors. Unbeatable on the market: can be used with sash weights up to 300 kg.

- High sash weights of up to 200 kg with Tilt&Turn sashes and up to 300 kg with Turn-Only sashes.
- Can be used to implement floor-to-ceiling windows and balcony doors up to a sash rebate height of 3000 mm and a sash rebate width of 1600 mm.
- All of the equipment and installation benefits due to integration into the Roto NX modular system.
- It can also be equipped as a TiltFirst version, e.g. for child protection in public buildings.
- Wide range of design options thanks to custom colour choice.
- Additional comfort when used in conjunction with threshold.

Concealed hinge sides



Hinge side C

Roto NX | C is the concealed hinge side for Tilt&Turn windows made from timber and PVC with a 13 mm hardware axis. It offers various ways to turn a standard window into a design-oriented one, as it disappears into the window profile so that it cannot be seen. For the demands of today's modern architecture.

- Rapid processing in production.
- Ease of installation on the construction site.
- Varied possible uses including large window elements and high sash weights (up to 180 kg for timber profiles).
- Perfect for modern, slim formats and flush windows.

Hinge side Designo

An attractive home deserves an attractive window design. It holds true that the less you see of the technology, the better. Roto NX Designo sets the standard when it comes to elegance in room design and is the ideal solution for attractive timber and PVC windows in premium private, residential and construction projects.

- Exclusive design and clean appearance thanks to concealed hinges.
- High sash weights of up to 150 kg can be implemented with a high level of security.
- Reduced installation effort: all adjustments can be carried out with just a size 4 hex key.
- Simplified production thanks to modular design.

Hinge side Designo A16

Large window formats, high sash weights – with the pioneering Roto NX Designo aluminium 16 mm Tilt&Turn hardware system, any requirements can be implemented. The ideal solution for premium projects with a 16 mm hardware groove.

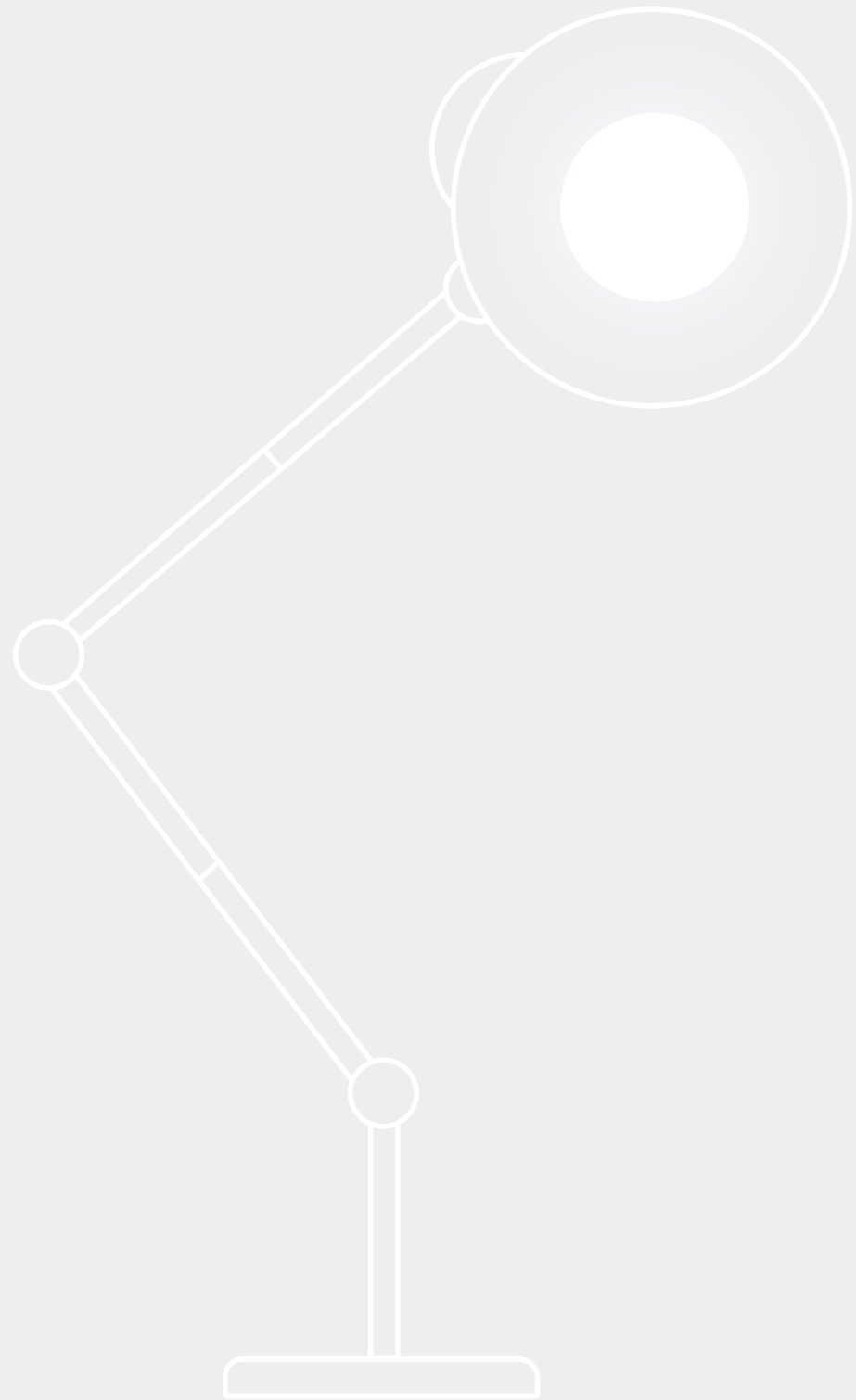
- Implementation of aluminium windows and balcony doors with a sash weight of up to 150 kg.
- The concealed hardware creates an attractive appearance in the living space.
- Economical fabrication of aluminium windows thanks to assembly and installation in record time.

Hinge side Royal

Listed buildings have very specific and unique requirements when it comes to renovating windows, particularly when the reveal is very close to the sash. Roto NX Royal is in its element here: its excellent turn-out curve makes it the ideal choice for concealed hardware in the historic preservation segment.

- The ideal addition to concealed hinge sides Designo and Designo A16 in the historical preservation segment.
- Maximum benefits in terms of equipment and installation, since it is perfectly aligned with the Roto NX modular system.
- Production of sash weights of up to 80 kg is possible.

Highlights



V locking cam



For Roto, innovation means always going the extra mile. For example, the rebate-clearance tolerances of the new V locking cams have been further improved. The impressive result is that the windows are particularly tightly sealed and protected against burglary – and are also quick to install.

- Installation is easy as more rebate-clearance tolerances can be absorbed without needing to perform adjustment.
- The robust design ensures consistent gasket compression and therefore permanently tightly sealed windows.
- The V locking cam engages behind the security striker across a large area, which largely thwarts burglary attempts.
- A marking on the cam helps with adjustment of the gasket compression.
- A 4 mm hex key is all that is needed to precisely adjust the gasket compression.



Lever-operated espagnolette Plus



The Roto NX hardware system has been designed to enable windows to be installed easily and effortlessly. The lever-operated espagnolette Plus reduces the working time and complexity of the operation steps.

- Uniform position of the strikers in the first opening and second opening sashes as a result of the synchronous movement of the connecting rod and lever – just one jig for both sashes.
- It is delivered in the open position, ensuring it can be quickly cropped and installed in the sash.
- Increased comfort due to improved operation: simple and easy opening and closing as well as minimal risk of injury, as the lever does not protrude in the opening position at virtually 180°.



Steel frame components



Modern window technologies provide improved security: security tilt strikers and security strikers ensure burglary inhibition up to RC 3 and provide the reassuring feeling of being completely protected when at home.

- High product quality thanks to steel frame components made of hardened steel with PVC bottom part.
- Secure connection between top and bottom parts ensures high stability.
- Increased operating convenience thanks to optimised run-in curve.
- Perfectly set up for the Roto E-Tec Control monitoring system.



Tilt striker



Striker

High backset espagnolette



This innovative espagnolette is perfect for wide sash frames with the handle positioned centrally. The benefit: minimised storage and logistics costs for retailers and fabricators.

- Compatible configuration and minimal storage requirements: faceplate and gearbox or lock casing are disconnected at a backset of 25 and above.
- EasyMix system: faceplate and gearbox or lock casing can be clipped into place easily.

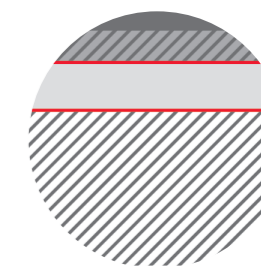


Roto Sil surface



Windows are exposed to wind and weather. This is not a problem for the particularly corrosion-resistant and therefore durable Roto Sil surface. It boasts ideal qualities that comply with class 5 corrosion protection in accordance with DIN EN 1670.

- With regular maintenance and care, Roto Sil is also suitable for coastal areas in temperate regions.
- Exception: properties that are directly next to the sea and are exposed to sea spray require a special surface with higher corrosion resistance.



Structure of Roto Sil

- Optical seal
- Chromium VI-free and cobalt-free passivation
- Zinc layer
- Base material: steel

Space solutions



TiltSafe windows



Living securely

A ground floor window left tilted even at night and when nobody is at home? A window equipped with the Roto NX | TiltSafe hardware makes this possible. These windows give a reassuring feeling of security thanks to burglary inhibition in accordance with RC 2, even when the sash is tilted.

TiltFirst windows



Intelligent safeguarding for children and vulnerable persons

Windows that are open wide or close unintentionally can present a number of dangers. The Roto NX | TiltFirst window minimises these risks. Thanks to its intelligent “tilt before turn” protective mechanism, it blocks complete opening if the window handle is locked. At the same time, the tilted sash is locked in place when the handle is in the horizontal position. An optional feature: TiltFirst windows are equipped with Com-Tec sensors that monitor the window and report its opening status directly to the Smart Home central unit.

Accessible



Living independently in old age

Elderly people with physical limitations can live comfortably in their home by converting it for accessibility. Accessible balcony doors do not feature high steps or thresholds, enabling them to be easily traversed by people using wheelchairs or walking frames. These accessible thresholds are created using reverse-action hooks with corresponding strikers from the Roto NX product range.

Smart Home



Intelligently networked housing technical services
The Roto Com-Tec Sensor achieves particularly impressive results. Unlike conventional sensors, it is screwed onto the corner drive and is integrated into the rebate, where it is concealed. This means that it knows exactly whether the window is tilted, opened or locked. Another benefit of its position is that it is also optimally protected, less susceptible to wear and seamlessly blends into the design of premium windows.

Comfort windows



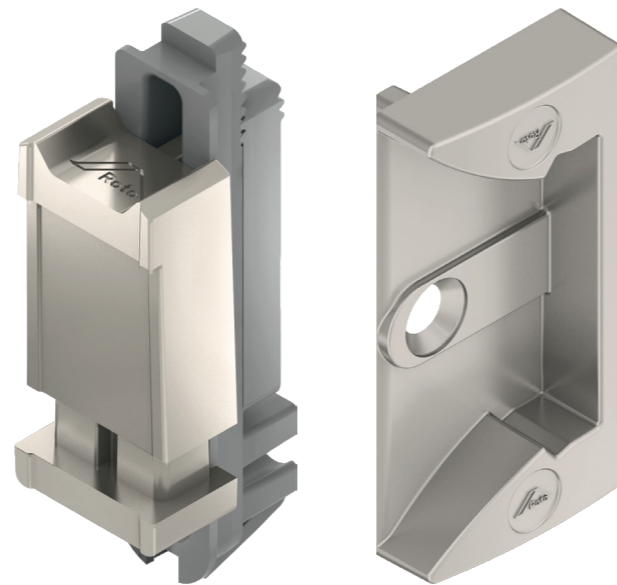
Easy to use
These windows can be opened and closed without physical exertion. The special feature of comfort windows is their long handle, which acts as an improved lever, as well as the integrated forced control, which enables the window to be tilted and turned more easily than conventional versions. The handle is also easier to reach, as it is positioned at the bottom of the window and not to the side as is usual.

Accessories



Lifting mishandling device

This innovation ensures flexible installation and long-term functionality: thanks to the adaptable spring (left/right), quick correction is possible in the event of incorrect release. An additional benefit is that the spring mechanism is extraordinarily robust and therefore durable.



Mechanical balcony door bullet catch

A small but mighty component: the door is kept closed without being locked. This enables the door to be opened from the outside by simply pressing against the door leaf. It always works: the robust spring structure ensures long-term functional safety and a high level of durability. It also provides exceptional comfort: the frame and sash can always be optimally positioned thanks to the height adjustment of up to 7 mm on the sash component.



Arrestable brake stay

The arrestable brake stay enables patio doors and balcony doors to be conveniently locked in place at any turn position between 15° and 90°. Simply move the handle into the vertical locked position.



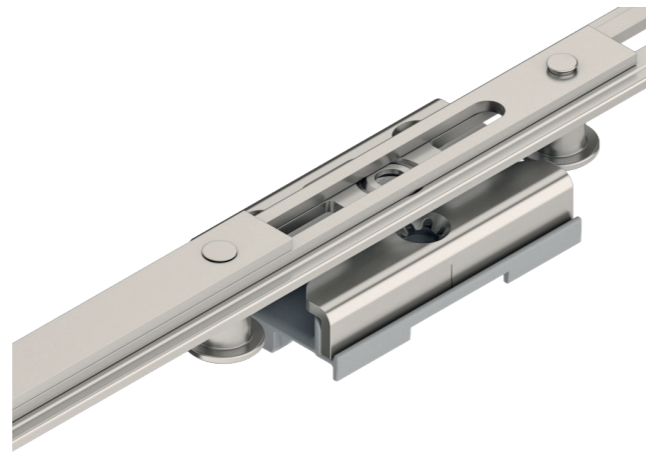
TiltSafe

Security even when tilted: three security strikers, security locking cams and a lockable handle make burglary extremely difficult. It is easy to use as a manual version (in accordance with RC 2) or electro-mechanically with the Roto E-Tec Drive.



Anti-jimmy device

Additional burglary protection: the Roto NX anti-jimmy device for timber and PVC windows provides additional security for windows and balcony doors with burglary protection in accordance with RC 1 N, RC 2, RC 2 N or RC 3; it is easy to retrofit.



Reverse-action centre lock

Burglars don't stand a chance: any attempt to forcibly slide the window to the side and jimmy it will cause the reverse-action centre lock to engage.



Wired contact elements

Ideal monitoring: the concealed Roto E-Tec Control contact elements monitor closed windows and balcony doors. Whenever they are opened, a notification is sent to alarm or control systems. This is secure, convenient and energy-efficient.



Electric window drive-unit

Intelligent control: the concealed Roto E-Tec Drive electric window drive-unit integrated into the hardware can automatically tilt and lock the windows. This is controlled by sensors, timer switches, BUS systems or Smart Home systems.





**From a single source:
Optimum hardware systems to meet all challenges.**

Window

Hardware systems for windows and balcony doors

Sliding

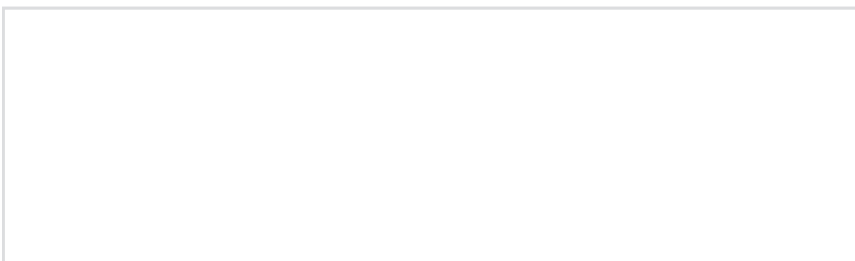
Hardware systems for large sliding windows and sliding doors

Door

Matching hardware technology everything about doors

Equipment

Additional technology for windows and doors



Location finder

