



Roto NT

How windows make your home comfortable, secure and beautiful



Roto NT

A window offers much more than you think

Windows open space, create atmosphere and provide crystal-clear boundaries of personal living space. For this they not only have to function perfectly, but must also look as good as possible. Windows ultimately shape the aesthetics of each individual room in the house. For this reason it is worthwhile placing particular attention on the quality of the finish and on the fenestration technology. Today windows can do far more than simply open and close – they make your home secure, comfortable and save energy as well.

What window hardware must achieve.

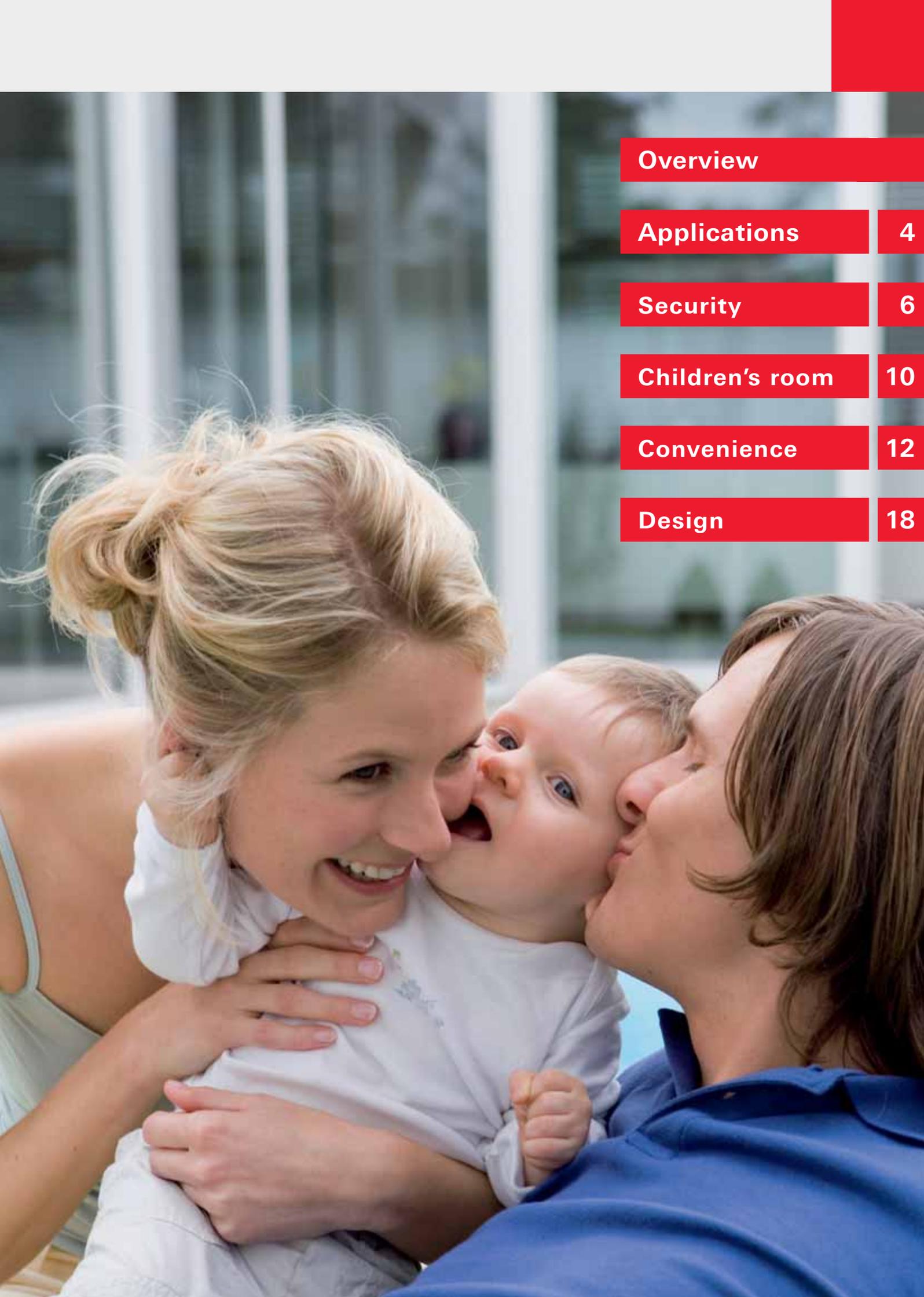
The hardware is responsible for all functions of a window: opening, tilting, locking and controlling different functions for more convenience and security. A window without hardware would be an immobile frame with a glass surface area. In the individual components of window hardware, however, state-of-the-art technology is hidden.

Roto: branded quality from the Tilt&Turn inventor.

One of the first people to be extensively involved with the technology of window hardware was Wilhelm Frank, the founder of Roto. He became a pioneer with the first industrially-produced Tilt&Turn hardware, in 1935. Roto today is synonymous with innovative convenience, security and design-orientated fenestration technology, as well as for the best-selling Tilt&Turn hardware worldwide.

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Roto has the solution for every room and every requirement

1 Ground floor: security.

The easily accessible windows on the ground floor are favourite targets for burglars. By means of hooks, reverse-action centre locks, lockable handles as well as intelligent, electromechanical solutions, burglary protection can be extended to the highest level.

2 Living room: Designo.

Hardware without visible technology fulfils the highest design requirements and enables an unbroken view through the large opening.

Convenient balcony and terrace doors.

An open balcony door means that it can easily be damaged by a gust of wind. Roto has thought about these problems and developed ideal solutions.

3 More security in the children's room.

Playing children can easily open a window and thus put themselves in danger. With the new "Tilt-First" technology, Roto offers a secure solution for your little adventurers. If the handle is locked, the window can only be tilted – not fully opened.





4 Automatic air exchange, for example in the bathroom.

Humidity levels rise in the bathroom when showering. However the morning panic often means that no time is left for ventilating. Roto E-Tec Drive enables regular, automatically controlled ventilation.

5 'Made-to-measure' ventilation in the bedroom.

With a tilted window, the room often cools down too much in winter; in summer, on the other hand, the ventilation is often not enough. With an additional hardware component, the tilt-mode becomes adjustable.

6 More convenience, for example in the study.

Arduous stretching in order to open windows is a thing of the past with Roto. Wherever a window is difficult to reach, the Roto "Convenience" window makes operation easy.

7 Sliding window in the kitchen.

In comparison to the tilted window, these allow a large opening for fast exchange of air. Less space is required for the opening of the window: no sash juts into the room.

Only a secure home creates a feeling of security

How one makes life difficult for thieves.

Your home is supposed to be a place where you can relax and feel content. That is only possible, however, when you know that uninvited visitors are kept safely out. A house or apartment is broken into every four minutes in Germany. Ground-floor windows and balcony doors are particularly at risk. In around 70% of burglaries via the window, the frame or the hardware is jemmied. The correct security measures help because unsuccessful

burglary attempts are aborted after only a few minutes. For security, you can rely on Roto.

Roto offers the best protection for windows and balcony doors.

The current security standard for "Burglar-inhibiting windows and doors" in housing construction distinguishes between three Burglary Resistance Grades. They place high requirements on the entire window system. Roto NT hardware passes the test with flying colours. Even in the basic version,

Roto NT hardware is equipped with a high measure of basic security. For higher security requirements you should consult your window specialist during the planning phase. Roto offers the suitable protective mechanisms.

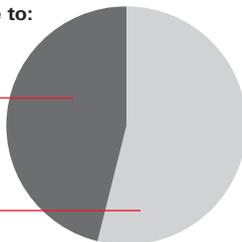
Technical security devices

are the reason why almost half of all attempted break-ins fail.

Break-in aborted due to:

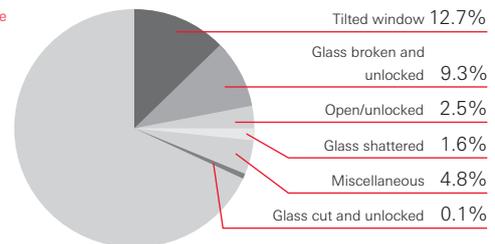
Security measures
45.3%

Other reasons
54.7%



The attack on the window during apartment break-ins.

Jemmied frame
69.0%



Preferred routes

for burglars into single-family houses.

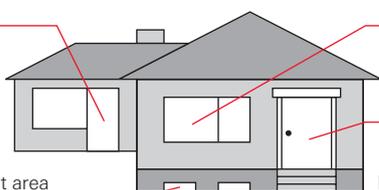
Balcony doors
52.0%

Windows
26.5%

Main doors
13.9%

Basement area
7.0%

Miscellaneous
0.6%



Protection made to measure

– the European Burglary Resistance Grades

Burglary Resistance Grade 1 (WK1): Basic protection against physical force, for example kicking & heaving.

Burglary Resistance Grade 2 (WK2): Protection against burglary tools such as screwdrivers, pliers and wedges.

Burglary Resistance Grade 3 (WK3): Additional protection against tools such as crowbars.



Roto NT: from basic-security to the highest protection

Roto NT offers a high level of security even in the basic version and thus ensures a better protection against burglary attempts. Additional mechanical and electronic security components can be integrated – creating maximum safety and protection against burglary, as well as from dangers such as fire, gas and water.

1 Steel hooks for windows and balcony doors.

The hooks of tempered steel catch like swing hooks from the top or the bottom into the robust steel strikers in the frame and firmly engage themselves. Suitable for the best possible protection. The hook design, taken from the high security “main door” field, makes windows or balcony doors as secure as main entrance doors.

2 Reverse-action centre lock.

Two mushroom cams simultaneously engage in both sides of the security striker. This locking

mechanism offers effective protection against attempts to displace the window by means of violent, lateral jemmyming.

3 Security handles.

The lockable version of the window handle provides security if somebody attempts to displace the entire hardware from the outside. The Secustik® handle (see Fig. 3) is the most attractive way to implement security on the window, as one does not see it. A special mechanism prevents manipulation of the window handle from outside. Attractive: neither push-button nor cylinder lock compromise the design.

Mechanical security systems
for different Burglary Resistance Grades





Security cam with mushroom head
 in conjunction with security strikers ensure high security



A secure children's room – simply reassuring

Windows open the world to us. For little adventurers they can, however, also represent a risk. A friend calls from outside. The child, still occupied, opens the window and leans out too far. Roto thought about this and developed a special technology – “Tilt-First”.

An intelligent safety mechanism.

The Roto child safety lock holds the sash in the tilt-mode at the horizontal handle position. The lockable handle thus prevents the possibility of switching from the tilt to the turn mode to completely

open the window. The handle can only be unlocked with a key.

Ventilating safely.

Regardless of whether the Roto children's security window is closed or tilted – only the person with the key can fully open it. And of course the key does not belong in your child's hands. This guarantees safety, and at the same time allows secure ventilation in the tilt-mode. If the child's room is to be used for a different purpose at a later date, the child safety lock can be simply removed.

- 1 Tilt ventilation
- 2 Open in turn-mode after unlocking





More convenience for balcony and terrace doors

Balcony and terrace doors are frequently used access points to the outside. With Roto NT the operating convenience of both windows and balcony doors can be further increased.

Ideal for balcony doors: the magnetic bullet catch.

A gentle push of the balcony door is enough: the sash closes independently, attracted by magnetic force. The magnetic field guarantees a firm hold, – even without the use of the handle's locking points. You will come to value this extra convenience, especially in the

summer when you frequently go outside through the balcony door. Slamming of the sash is prevented, even when windy.

No more oil stains on the curtains.

If one does not lock a conventional balcony door, the curtains can get jammed in with a sudden gust of wind and get dirty from the lubricants, or even damaged. The magnetic bullet catch from Roto on the other hand requires no lubricants and in addition is not subject to any mechanical wear and tear.

The magnetic bullet catch

The perfect closure: gentle, draught resistant and quiet





The adjustable brake-stay arrests the sash.

With this Roto NT component one can hold the balcony door in any desired turn position when the handle is brought into the vertical position – an easy and secure hold, even with a sudden gust of wind.

The adjustable brake-stay
With this you spare yourself “emergency solutions” such as this

Effortless opening – the Roto “convenience” window

It is Roto’s goal to make everyday life more convenient. Intelligent solutions were developed to realise this. A good example: the Roto NT “convenience” window. Its special handle simplifies the opening and closing of difficult to reach windows.

Tilt and close windows without arduous stretching.

In studies, large desks often complicate access to the window; in the kitchen it’s the base units or utilities. The Roto NT “convenience” window is ideal in these circumstances: from the intelligent location of the handle, its special shape and function, right up to the integrated positive control.

Easy and convenient operation.

The handle of the Roto “convenience” window is horizontal to the sash at the base. As a result it is easily accessible even when sitting down. Furthermore, it is longer than a conventional handle. This also allows larger and heavier windows to be effortlessly used. The integrated positive control automatically brings the window into the tilt-mode, considerably reducing the expenditure of energy.



“Convenience” window

The specially shaped handle is horizontal to the window at the base





Proper ventilation made easy

Ventilation of a room is important for a healthy exchange of air, but with freezing temperatures outside the balance can be difficult to get right. Roto has a solution to this problem.

Adjustable ventilation-stay: variable ventilation in the tilt- mode.

With the adjustable ventilation-stay, you can adjust the tilt range of your

windows. Using the example of a bedroom window, this means a lower risk of catching a cold in the winter and sufficient fresh air in the summer.

Integrated without additional cost: the anti-slam device.

It prevents the sudden slamming of windows due to a draught if, for example, a door is opened on the other side of the apartment.



Adjustable ventilation-stay
If one turns the handle 45°, the sash can be held in any desired tilt position. The anti-slam device automatically locks the tilted window in place.





The elegant shape of the tilt ventilator
E-Tec Drive is concealed in the hardware and cannot be seen from the outside. This way, the living surroundings remain unaffected

Automatically achieve a better room climate with E-Tec Drive. Windows that take over the ventilation, automatically – day after day, reliably and as required: E-Tec Drive makes it possible. Your window is automatically tilted at a set time and locked again when closed. It can

also be opened manually at any time and it then closes automatically after a specified time. In order to avoid the formation of mould, one should ventilate the bathroom in particular. However in the morning panic this is often forgotten. E-Tec Drive negates this task.

Elegant: Roto NT Designo, the aesthete among window hardware

With a beautiful home, the requirements for window design also increase. These days, the less one sees of window technology, the better. Here the concealed Roto NT Designo hardware sets the benchmark.

Roto NT Designo fulfils highest design requirements.

No hinges visible from the outside, no cover caps; nothing detracts from the aesthetics of the window, and on top of that you save time when cleaning it. The wide sash opening is also extraordinary: with Roto NT Designo your window can be opened up to a maximum angle of 100°, enabling an uncompromising view out.

DecoLine handle

Elegant design and through intelligent technology secure against wilful displacement of the hardware from outside



A lot of space for additional security.

Roto NT Designo is equipped with small, compact hinge-side components. This leaves space for additional security components. A security-related configuration up to Burglary Resistance Grade 2 ('WK2') is possible. An anti-jimmy device is already integrated as standard with this hardware.

A beautiful window deserves a beautiful handle.

The Tilt&Turn DecoLine handle has an elegant design, whether the standard or Secustik® version is opted for. A lockable version of the DecoLine handle is also available for even higher security.

Roto NT Designo is also available for large windows with a sash weight of up to 130kg

Wide opening

Roto NT Designo can be opened up to 100°







Creates inner values

Roto Frank AG
Window and door technology

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