



Roto AL Designo

Concealed hardware for aesthetic aluminium windows and balcony doors

Beauty from its best side

Large window sizes, aesthetical shapes, slimline profile views; the requirements in the project sector are increasing. Requirements that AL Designo fulfils: A fully concealed hinge side, that is to say, no visible hinges from the outside that need to be colour-matched – nothing detracts from the window's aesthetics. All components are fully integrated in the window frame and sash and not visible from the outside. Moreover extraordinary: The large opening – a 100° opening angle makes it possible.

High sash weights of up to 150 kg is not a problem!

Large sashes and soundproofed window surface areas are aesthetically beautiful, but are heavy at the same time. Sash weights of over 100 kg are not uncommon. Unobtrusive hardware is therefore in demand for these "elegant heavyweights". The solution: Roto AL Designo – the completely concealed hardware system for large and heavy aluminium windows up to 150 kg. Your advantage: only one additional special component (also invisible from the outside), is enough to achieve the highest weight stability in conjunction with the standard hardware.

Lots of space for additional security.

Concealed hardware and outstanding burglary protection – not a contradiction with the top model AL Designo. By integrating it into the modular AL locking system, a high level of security can be achieved (up to RC3 in accordance with DIN EN 1627-1630). The small compact pivot rests provide a lot of space for additional security components and warrant increased anti-jemmy protection.



Roto AL Designo

Turn-Only and Tilt&Turn hardware for aluminium windows and balcony doors.

Concealed hinge side with concealed central locking system and one-hand-operation.

General hardware characteristics

- Applicable with aluminium profiles with:
Overlap width from 21.5 mm up to 22 mm,
Clearance: from 11.5 mm up to 12 mm, Hardware axis: 10 mm
- Hardware certified according to QM 328
- Hinge side / sash stay clampable in the frame groove by means of preassembled clamp-strips with clamping-blocks
- Integrated piercing screw protects against horizontal slipping
- Preassembled sash stay with integrated anti-slam device and lateral adjustment
- Hinging of the sash in tilted position
- Optional load transfer device for sash weights of 80 – 150 kg
- Sash stay 390: Lateral adjustment at the scissor-stay rod (-1.5 mm)
- Sash stay 500 / 735: Lateral adjustment at the scissor-stay guide (± 2 mm)
- Turn-Only sash with rebate hinge and integrated lateral adjustment (± 2 mm), passive concealed locking points on the hinge side
- Turn-Only sash with coupleable rebate hinge and integrated lateral adjustment (± 2 mm) for active locking points (in combination with CL corner drive) at the hinge side
- Height adjustment (+2 mm/-0.5 mm) as well as lateral adjustment (+2 mm/-1 mm) at the corner hinge when installed
- Centre locks can be randomly located due to insertable locking cams
- Gasket-compression adjustable via eccentric cams (± 1 mm)
- Burglary inhibition possible up to RC3 (DIN EN 1627-1630)
- Geared-handle (window handles lockable as an option)
- Geared-handle with separate service handle
- Flush-encased gearbox with/without integrated mishandling device (window handles lockable as an option 40/100 Nm)
- Escutcheonless handle for flush-encased gearbox (optionally lockable)
- Concealed dummy-mullion hardware (sash with floating mullion) in the versions:
Concealed lever-operated espagnolette for dummy mullion (DM)
Dummy mullion with shootbolts (DM-SB)
Lever-operated espagnolette (dummy mullion), surface-mounted (DM-SM)
Dummy mullion with slider (DM-SL)
- Application of the turn-restrictor $SW \geq 1200$ mm
- Application of the turn-restrictor (damped/arrestable) $SW \geq 1200$ mm
- Child safety lock with cylinder locking, lockable
- Night-vent
- Bullet catch



Opening types & application ranges:

Tilt&Turn hardware

Tilt-First hardware

Tilt-Only hardware with handle on side

with load transfer device

Sash width SW..... 390 – 1600 mm

Sash height SH..... 555 – 2700 mm

Sash weight S.kg max. 80* / 100 kg

* With sash stay 390

Tilt&Turn hardware

Tilt-First hardware

Tilt-Only hardware with handle on side

without load transfer device

Sash width SW..... 500 – 1600 mm

Sash height SH..... 555 – 2700 mm

Sash weight S.kg max. 100 kg

Tilt&Turn hardware

Tilt-First hardware

Turn-Only hardware

Tilt-Only hardware with handle on side

with load transfer device

Sash width SW..... 735 – 1600 mm

Sash height SH..... 1000 – 2700 mm

Sash weight S.kg max. 150 kg

Turn-Only hardware

with load transfer device

Sash width SW..... 250 – 1600 mm

Sash height SH..... 520 – 2700 mm

Sash weight S.kg max. 80 kg

Tilt-Only hardware with handle on top

Sash width SW..... 520 – 1600 mm

Sash height SH..... 500 – 1300 mm

Sash weight S.kg max. 100 kg

