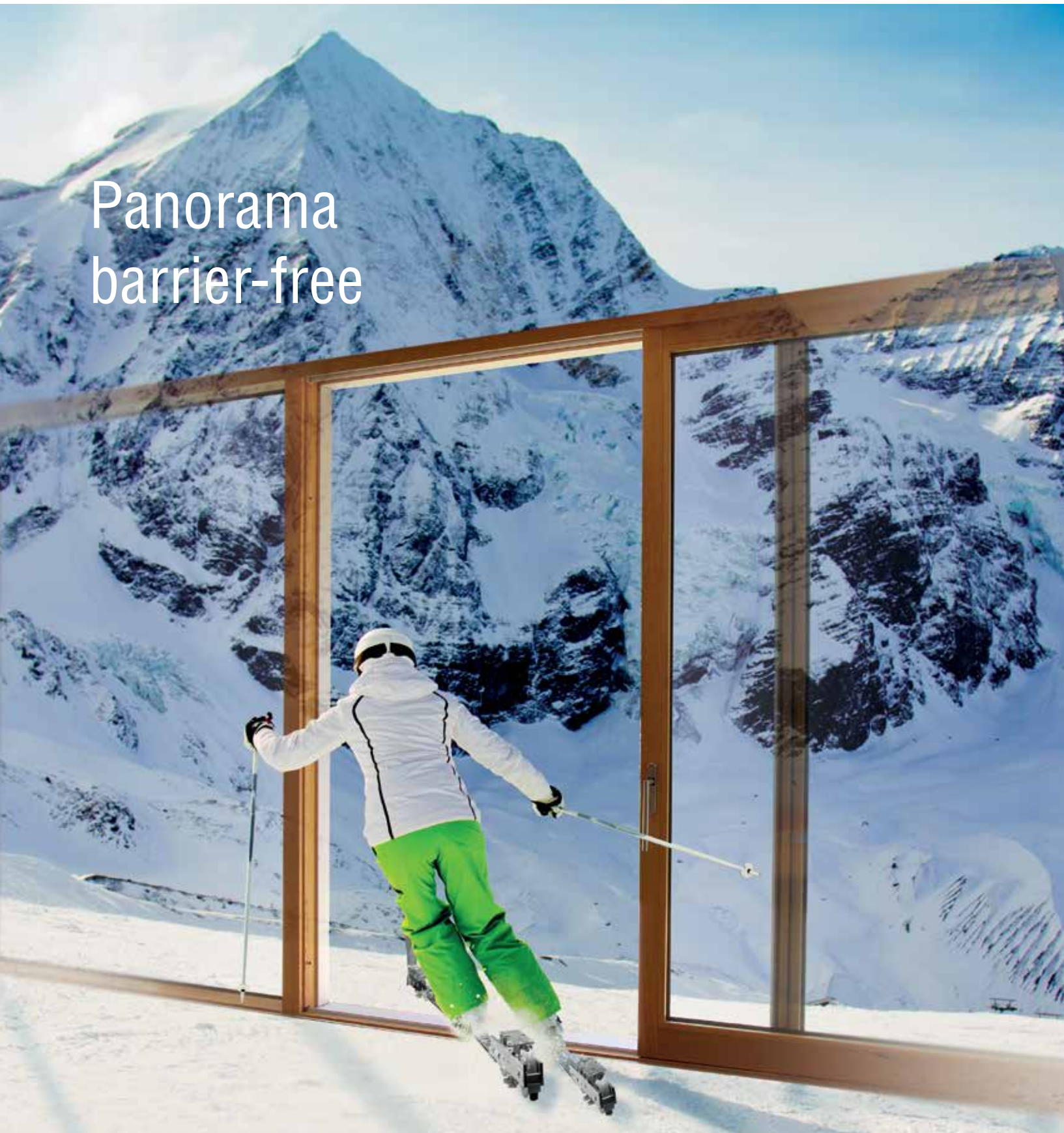


TECHNOLOGY IN MOTION



Panorama  
barrier-free



**QUALITY HARDWARE  
FOR SLIDING DOORS**



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## MACO RAIL SYSTEMS

The lift&slide and slide&tilt hardware for ceiling-height, large-area elements offers deluxe operation and large opening angles. The sliding of multi-leaf structures is also

effortless, opening up the interior with an almost level passage surface. The range is completed with stylish, functional handles



## Lift&slide hardware

- For lift&slide units made of PVC, timber and timber/aluminium up to a sash weight of 400 kg
- Several sash levels possible
- Length-dependent: Profiles can be coupled
- Width dependent due to extension profiles
- Applicable for all systems
- Thermally separated threshold system (GFRP threshold)
- RC-2-capable depending on the individual unit equipment from the door producer
- CE-capable depending on the individual unit equipment from the door producer
- Effortless, convenient operation
- Optimal heat insulation
- Maximum possible daylight
- Accessibility
- Hardware available in TRICOAT

## Parallel stop slide hardware

- Suitable for PVC, timber and timber/aluminium for sash weights up to 200 kg
- Scissors design with parallelogram geometry and integrated damper
- Uniform peripheral ventilation with parallel-stop sash
- Parallel retraction, hardly visible from the outside
- Effortless operation with integrated energy store
- Fail-safe operation
- Modular system and centre-fastened components for simplest possible installation
- RC 2 possible in parallel setting

## Slide&tilt hardware

- Three designs: SKB-S, SKB-SE, SKB-Z
- Suitable for PVC, timber and timber/aluminium for sash weights up to 200 kg
- RC-2-capable depending on the individual unit equipment from the door producer
- CE-capable depending on the individual unit equipment from the door producer
- Effortless, convenient operation
- Hardware available in TRICOAT



## LIFT&SLIDE HARDWARE INNOVATIONS



## Steel hook drive gear

Lift&slide drive gear with concealed lock: The striker plates are inserted flush into a PVC or timber stop profile on the frame side. The locking hook made of steel retracts completely into the lift&slide sash via the handle position when the unit is opened.

- Retractable steel hook
- Non-contact entry
- Flush striker plates
- PVC stop profile with pre-positioned striker plate routing
- For PVC, timber and timber/aluminium systems
- Sash weight up to 400 kg
- Stackable up to 3600 mm high
- Tested to RC2
- Available in the colours silver, brown and bronze



## Steel hook drive gear



## Advantages for door production

- Combinable with the existing lift&slide components: L&S roller, sealing strip and GFRP threshold
- Gasket compression can be regulated
- Best possible seal between sash and frame
- Pre-assembled PVC stop profile, precise positioning on the hook mechanism
- Less work when PVC stop profile is used

## Benefits for the end user

- The locking hook retracts completely into the lift&slide sash via the handle position when the unit is opened.
- No protruding closure parts, nothing disturbs the aesthetics
- The locking hook runs into the striker plate without contact when the door closes



## Drive gear damper

The MACO drive gear damper ensures deluxe handle operation for any MACO L&S drive gear, particularly of very heavy lift&slide doors – irrespective of the make of handle used

The MACO drive gear damper reduces the resistance force and produces a soft, delayed return of the handle.

The drive gear damper that is invisible when installed is ideal for retrofitting at the turn of a hand.

- Recommended from a sash weight of 250 kg
- High convenience with heavy sashes



At the turn of a hand – controlled smooth handle return motion



## Advantages for door production

- Quick and easy installation
- Retrofit whenever needed
- Additional sale

## Benefits for the end user

- Reduces the resistance force and produces a soft, delayed return of the handle
- Convenience handle operation, especially for very heavy lift&slide doors
- Not visible



## Sealing rail

The sealing rail can be used in timber and timber/aluminium systems with 28 mm clearance. The space-saving design with 48 mm allows vertical and horizontal installation of the sealing rail in extremely slim profiles. To achieve optimal thermal separation, the multi-chamber body is made of PVC.

- Excellent thermal separation
- High resistance to wind and heavy rain
- No condensation
- Track colours silver, white and black
- Seal colours silver and black



## Sealing rail



## Advantages for door production

- Variable installation with clips, screws or adhesive
- Screw holes designed as elongated holes
- Lateral adjustment +/- 3 mm
- Unrivalled aesthetics - no visible screws
- Space-saving design (48 mm)
- Can be used vertically and horizontally

## Benefits for the end user

- Excellent thermal separation
- High resistance to wind and heavy rain
- No condensation



## Flush top guide track

The concealed guide track can be used with timber and timber/ aluminium systems.

Depending on the sash, it guarantees every user safe and easy operation of the lift&slide door.

- Flush guide track
- Matches all RAIL-SYSTEMS lift&slide hardware
- Available in the colours silver and brown

- Guide components in two versions
  - Standard version with integrated buffer
  - Deluxe solution with end stop damping
- Concealed stop
- Smooth operation thanks to special guide components



## Flush top guide track



## Advantages for door production

- Guide component makes installation easy when hinging and unhinging the sash
- 15 mm air gap between frame and sash for structural balance
- Standard and damped versions available
- Guide component with integrated buffer

## Benefits for the end user

- Convenient quiet closing of the sash thanks to the optional end stop damper
- Unhindered view, no protruding hardware



## GFRP threshold 240 mm

Building future-proof in the long term above all means building with a view to energy efficiency. The perfect insulation to save heating costs at the bottom of the door on large-scale list&slide doors with very wide profiles is the GFRP threshold.

- Single-section sill
- Extension profiles for variable widths
- Variable length from 3000 up to 9000 mm
- New connector plate 240 mm
- Wheelchair-suitable solution, only 17 mm high
- Flat roller and high in asymmetric and symmetric design
- High stability
- High insulation
- Energy saving



## GFRP threshold 240 mm



## Advantages for door production

- Avoids the need for expansion of the threshold needed previously for many profile widths
- Variable application of the GFRP threshold to profile strengths from 56 to 98 mm
- New croppable connector plate
- Profile widths of 68 mm and 88 mm can always be manufactured flush on the inside
- Reduced installation effort thanks to single-piece threshold
- Lower installation height of 42 mm
- Asymmetric roller design
- Extremely low material expansion due to fibre-reinforced plastic
- Can be individually extended
- Separate drilling jig

## Benefits for the end user

- Resistant to corrosion and chemicals
- Effective insulation against cold and heat
- Optional insert profiles for enhanced thermal insulation
- Colour matching



## Entrance step

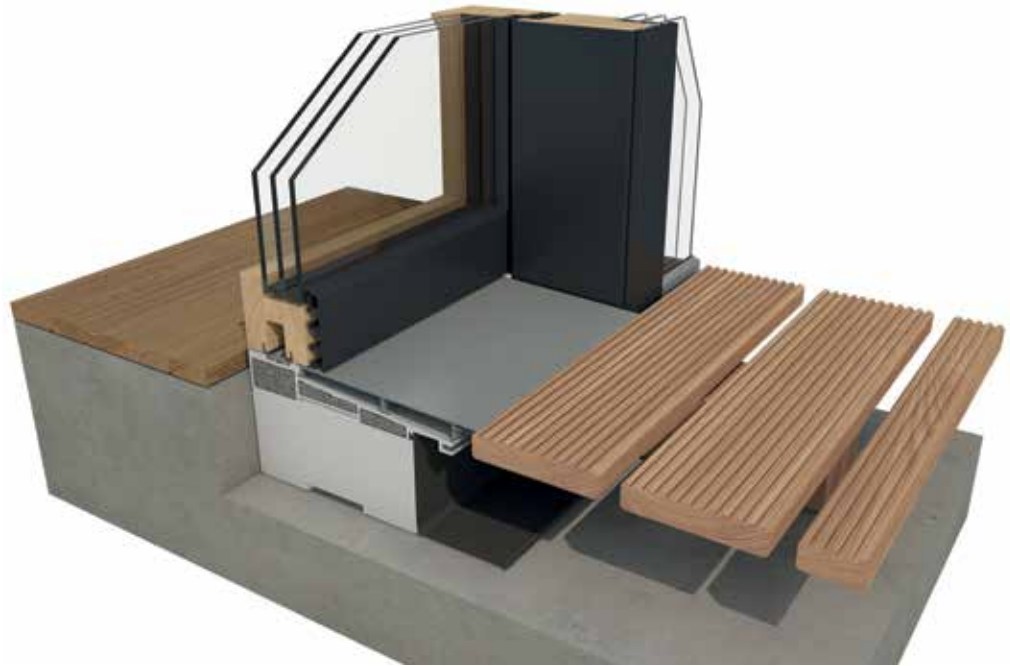
The entrance step is an aesthetically elegant solution that produces ideally compensates the level difference between the inside and out. Combined with the roller track it makes the lift&slide solution suitable for the handicapped.

- For 180 and 240 mm GFRP threshold
- Supplementary connection profile for the fixed component

- Entrance step and connection profile have a clip-on design and can be replaced whenever necessary
- Flush with the floor over the entire unit length
- Available in the colour silver



## Entrance step



## Advantages for door production

- Optimal floor connection
- Can be exchanged at any time
- Integrated drainage

## Benefits for the end user

- Unrestricted access thanks to flush-to-floor design
- Suitable for the disabled when combined with roller track
- Lift&slide door as design element in the living space



## Narrow frame frieze

- Extremely slim sash profiles for ceiling-height lift&slide units with largest possible glass surface area
- For timber and timber/aluminium units up to 300 kg sash weight
- Applicable for all systems
- Sash profile height up to 76 mm
- Improved U value due to large glass surface area
- Maximum possible daylight



## Narrow frame frieze



## Advantages for door production

- Suitable for all standard lift&slide hardware
- Requires only two additional components
- Lift&slide door as design element in the living space

## Benefits for the end user

- Maximum possible daylight due to large glass surface area
- Improved U value due to narrow frieze



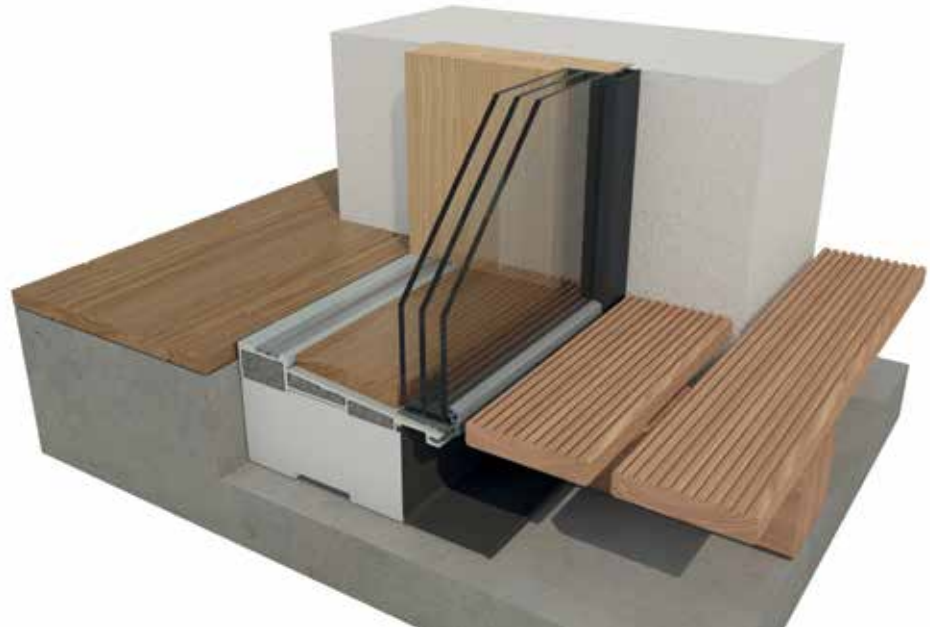
## Frameless fixed glazing

For ceiling-height lift&slide combinations, comprising a movable lift&slide sash and a fixed glazing.

- Thermally separated compensation profile to accommodate the fixed glazing
- Improved U values and material savings with frameless fixed glazing
- Clip-on aluminium profile in silver or in bright finish
- New centre gasket plate



## Frameless fixed glazing



## Advantages for door production

- Lift&slide door as design element in the living space
- Direct installation on the GFRP threshold
- No second sash frame needed
- Straightforward and rapid installation

## Benefits for the end user

- Maximum possible daylight due to large glass surface area
- Improved U values due to fixed glazing



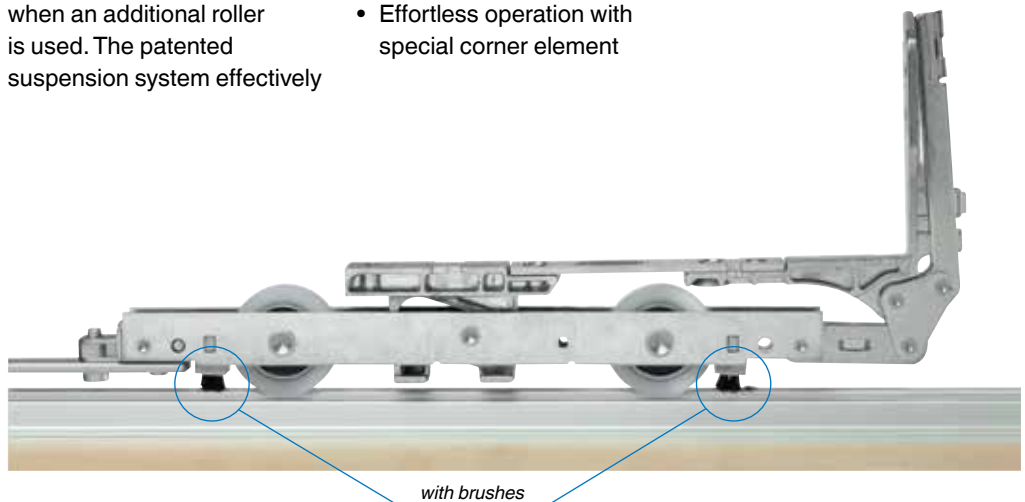
## Lift&Slide roller

The standard 150 lift&slide roller can be used for sash weights up to 150 kg; the 300 lift&slide roller up to a maximum of 300 kg.

Sash weights up to 400 kg move like feather-weights when an additional roller is used. The patented suspension system effectively

reduces the manual effort required. One additional roller can lift up approx. 80 kg of sash weight.

- Maintenance-friendly thanks to permanent greased roller components
- Effortless operation with special corner element





## Lift&Slide roller



*Integrated brush technology  
for permanently clean rollers*

## Advantages for door production

- For timber and PVC units
- For sash weights up to 400 kg
- From 250 kg sash weight, additional roller with patented suspension system

## Benefits for the end user

- Brushes keep the rollers clean
- Low-noise



## Rhapsody lift&slide handle

All details of function and form are matched perfectly. The RHAPSODY extended handle body lies well in the hand. The handle can be combined with all MACO lift&slide drive gears.

- Innovative design matches the existing RHAPSODY window handles
- Enhanced look and feel
- Available in the colours brushed brass and chrome



*Brushed brass*



*Brushed chrome*



**LIFT&SLIDE HARDWARE FOR PVC UNITS**



## The lift&slide hardware system for units made of PVC

With its main product group RAIL SYSTEMS, MACO has been setting the pace for high-performance, deluxe Lift&Slide solutions for timber units for years now.

The lift&slide hardware is now also available for lift&slide units made of plastic for sash weight up to 400 kg.

Lift&slide hardware, standard rollers and the unique performance

characteristics of the GFRP threshold are in-house MACO developments.

Lift&slide drive gears and roller, including accessories, are manufactured at MACO's Austrian location in Trieben according to DIN EN ISO 9001:2008 quality standards.

### **Unique surface finish**

Sliding and locking module design in silver-look and extremely corrosion-

resistance TRICOAT. Wide range of colours for optimal adaptation of the handles to the profile surface finishes: Bronze, champagne, black/brown, silver, Titanium and white.

### **Security**

The standard hardware design already provides the basic security level RC 2 and upgrades without any problem.



## For a harmonic confluence inside and out

### New steel hook drive gear

No protruding closure parts, nothing disturbs the aesthetics. Due to its special shape, the steel locking hook

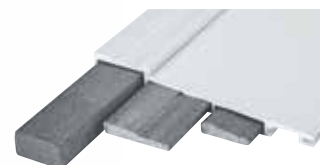
runs into the striker plate without contact when the door closes.



### GFRP threshold

The simple design of the threshold, which is made of robust fibre-glass plastic material with insulation profile inserts, offers thermal

insulation beyond the requirements of the directives on energy savings



### Barrier-free access

Absolutely barrier-free with retrofit and replaceable entrance steps. Theoretical

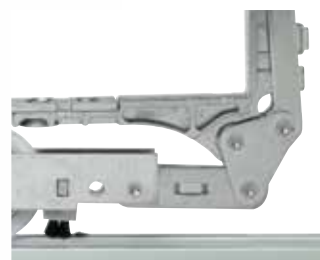
threshold height of only 5 mm, suitable for the disabled acc. to DIN 18025.



### Effortless operation

The special corner element adapts the lifting mechanism of the roller optimally to the particular requirements. In combination with the lift&slide drive gear, the lifting

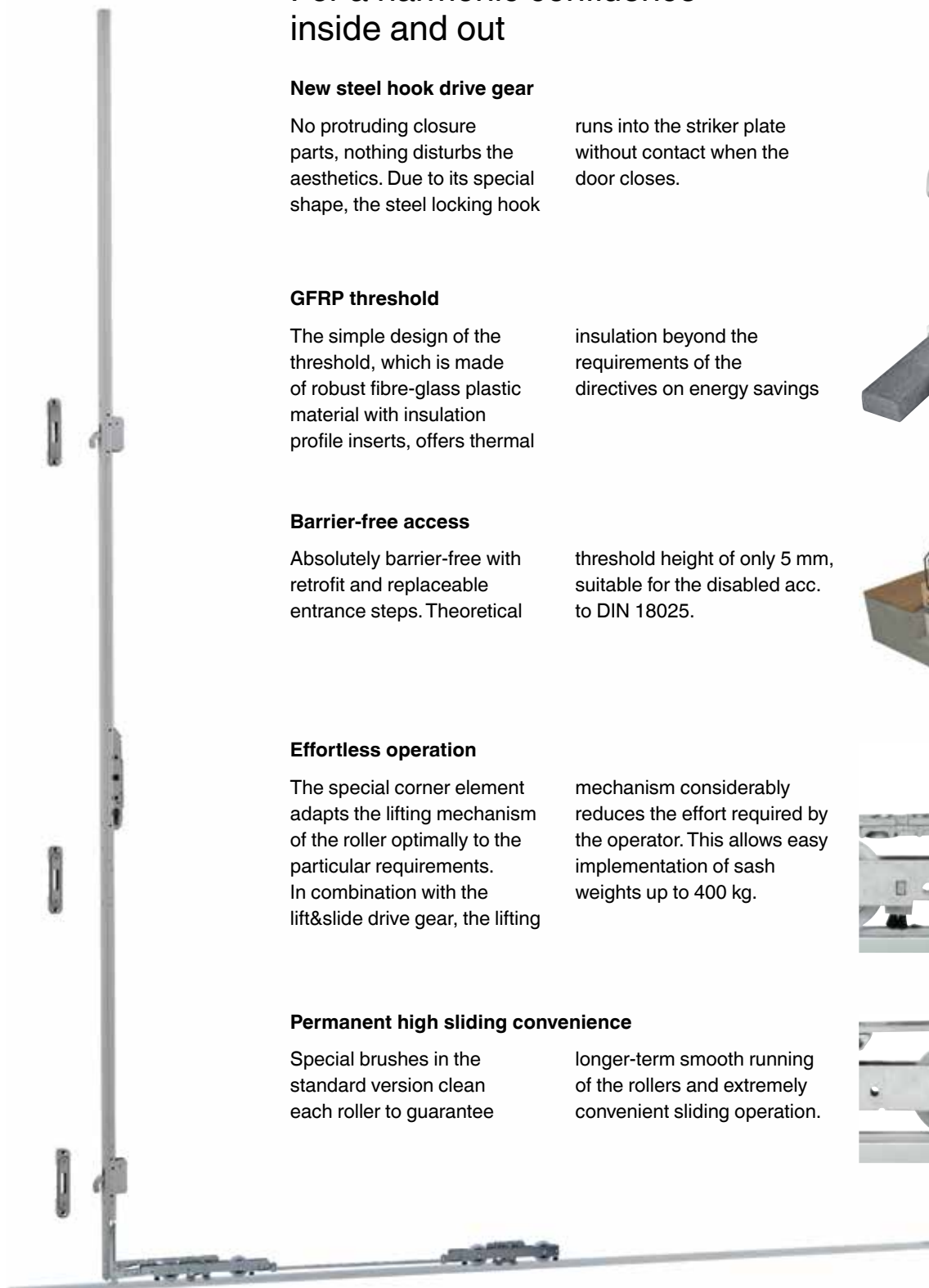
mechanism considerably reduces the effort required by the operator. This allows easy implementation of sash weights up to 400 kg.



### Permanent high sliding convenience

Special brushes in the standard version clean each roller to guarantee

longer-term smooth running of the rollers and extremely convenient sliding operation.





## Advantages for door production

- Maintenance-friendly thanks to permanent greased drive gear and roller components
- Threshold made of GRP (glass-fibre reinforced polymers)
- Push-fit accessories
- New brush technology for long roller service life
- Modular system and centre-fastened components for simplest possible hardware installation

## Benefits for the end user

- Barrier-free access
- Insert profiles for enhanced energy savings
- No protruding lock components – no risk of injury
- Extremely corrosion-resistant TRICOAT
- Upgrades easily to security class RC 2



**PARALLEL STOP SLIDE HARDWARE**



## Parallel stop slide hardware

The new PAS hardware in the RAIL SYSTEMS series is a high-grade sliding solution with parallel retract functionality that complements the product range.

It is based on the proven roller technology of the MACO

slide&tilt hardware. The variety of striker plates offered for the various profile types mean that PAS can be used for timber and PVC units.

In addition to effortless operation of the sash units that can weigh up to 200 kg,

the even peripheral ventilation at parallel stop, plus the corrosion-resistant TRICOAT finish is the top feature of the system.

## Advantages for door production

- Modular system and centre-fastened components for simplest possible installation
- Possible for windows and French doors
- In parallel retraction, RC 2

## Benefits for the end user

- Intuitive operation, rules out mishandling even with changing users
- Healthy indoor climate with all-round ventilation in 5-mm parallel retraction
- In parallel retraction, security class RC 2
- Extremely corrosion-resistant TRICOAT
- Effortless operation with integrated energy store units
- For windows and French windows in timber, timber/aluminium and PVC



## Superior operation and ventilation for passive house applications

- **Unique surface finish**  
Design in silver-look and extremely corrosion-resistance surface finish TRICOAT

- **Security**
  - i.S. security cam as standard
  - RC 2 in parallel stop position
  - Parallel stop hardly visible from the outside

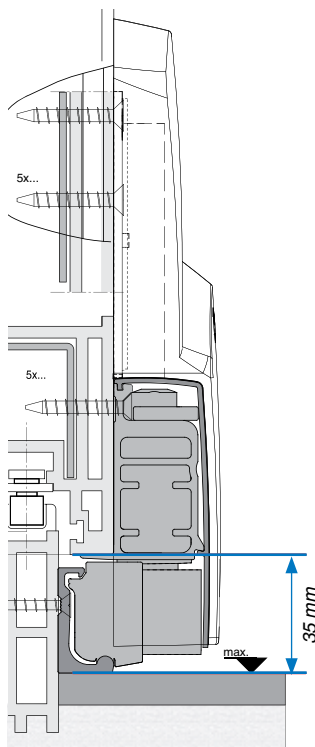
- **Healthy indoor climate**  
For peripheral ventilation in the parallel position, the sash retracting distance is 5 mm. This position allows the free exchange

of draught-free air: The advantage of the parallel stop compared to tilted or opened windows is that the room does not cool down abruptly

- **Effortless intuitive operation**  
In the closed position, the handle points down. To open, turn the handle 90 degrees to the horizontal position; for parallel stop, turn the handle 180 degrees upwards. Handle settings as for turn&tilt windows  
Fail-safe operation



- **Unhindered access**  
35 mm frame clearance reduces threshold height



- **Permanent high sliding convenience**
  - Scissors design in parallelogram geometry with integrated energy store and damper
  - Roller with integrated energy store and special cleaning brushes

- **Application also for passive house and as zero-energy house**
  - Stop width 125 mm
  - Load capacity up to 200 kg



Energy store

**MACO  
SLIDING DOORS**




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