

Roto NX

The Tilt&Turn hardware system for windows and balcony doors shaping the industry once again

Hinge side P

Installation, maintenance and operation instructions for PVC profiles



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1 General information

1.1 Version history

Version	Date	Changes
v0	15/12/2017	Publication
v1	09/03/2018	Floating-mullion hardware overview Drawing of stay bearing → <i>from page 228</i>
v2	27/07/2018	Changes to the product range
v3	10/01/2019	Changes to the application range
v4	25/03/2019	Lever-operated espagnolette Plus added
v5	02/06/2020	RC 3 hardware overview added → <i>from page 54</i> TiltFirst hardware overview added → <i>from page 74</i> Adjustment of new V cams added
v6	19/02/2021	Application diagrams changed → <i>from page 25</i> Stay bearing item numbers changed → <i>from page 40</i>
v7	27/03/2023	Stay bearing, adjustable, added → <i>from page 40</i> New item numbers for lever-operated espagnolette Plus → <i>from page 40</i> Installation of safety device for floating-mullion sash → <i>from page 300</i> Dimensions of round hole cylinder for high backset espagnolette → <i>from page 227</i> Operating the lever-operated espagnolette Plus → <i>from page 333</i>

1.2 Instructions

This manual contains important information, instructions, application diagrams (max. sash sizes and weights) and assembly instructions for the installation, maintenance and operation of hardware.

The information and instructions contained in this document refer to products belonging to the Roto hardware system named on the front page.

All steps must be completed in sequence.

The following documents apply in addition to these instructions:

- Roto NX catalogue: CTL_105
- Handles catalogue: CTL_1

The following guidelines also apply:

- Guideline TBDK issued by the Gütegemeinschaft Schlösser und Beschläge e. V. quality assurance association (Attachment of supporting fitting components for turn-only and tilt&turn fittings),
- Directive VHBE issued by the Gütegemeinschaft Schlösser und Beschläge e. V. quality assurance association (Hardware for windows and balcony doors – Guidelines / advice for end-users),
- Directive VHBH issued by the Gütegemeinschaft Schlösser und Beschläge e. V. quality assurance association (Hardware for windows and balcony doors – Guidelines / advice on the product and on liability),
- Directive FPKF issued by the Gütegemeinschaft Schlösser und Beschläge e. V. quality assurance association (Restrictor and cleaning stays for Tilt-Only sashes and Tilt-Only fanlights),
- Instructions and information issued by profile manufacturers (e.g. manufacturers of windows and balcony doors),
- The applicable regulations, directives and national laws.

Compliance with the following guidelines is additionally recommended:

- TLE.01 by the VFF (German Window and Facade Association) Correct handling of ready-to-install windows and external doors during transport, storage and installation,
- WP.01 by the VFF (German Window and Facade Association) Maintenance of windows, facades and external doors – Maintenance, care and inspection – Information for sales,
- WP.02 by the VFF (German Window and Facade Association) Maintenance of windows, facades and external doors – Maintenance, care and inspection – Measures and documents,
- WP.03 by the VFF (German Window and Facade Association) Maintenance of windows, facades and external doors – Maintenance, care and inspection – Maintenance agreement.

Storing the instructions

These instructions are an important part of the product. The instructions must be stored so that they are always to hand.

Explanation of the markings

The manual uses the following markings for emphasis (e.g. in figures or instructions):

Marking	Meaning
	Sash
	Frame
	Drill holes, routing or screw positions
	Unaffected components / indirectly affected components
	Components, arrows or movements that have just been described
	Item number
[1]	Legend
[A]	Steps



INFO

Any dimensions without a unit in the instructions are given in millimetres (mm). Other units of measurement are clearly indicated by the presence of the differing unit.



INFO

Figures are provided in the right-hand version (DIN 107).

1.3 Symbols

Symbol	Meaning
■	First-level list
□	Second-level list
→	(Cross-)reference
▷	Result
▶	Unnumbered step
1.	Numbered step
a.	Numbered second-level step

Symbol	Meaning
	Requirement

1.4 Pictographs

Symbol	Meaning
	Sash rebate width
	Sash rebate height
	Sash weight
	PVC

1.5 Product features

Symbol	Meaning
	Hardware axis
	Description
	Base
	DIN left / right
	Integrated corner drive
	Rebate clearance
	Sash rebate width
	Sash rebate height
	Sash weight
	Fixed handle height
	Centred / variable handle height
	Size

Symbol	Meaning
	Information
	Fixed toggle lever position
	Centred / variable toggle lever position
	Couplable
	Length
Nº	Material number
	Lifting mishandling device
	Surface
	Position
	Profile
	Number of welded-on strikers
	Number of locking cams
	Type of locking cams
	Bullet catch
	Security class
	System
	Adjustment

1.6 Abbreviations

Abbreviation	Meaning
GC	Gasket compression
approx.	approximately
CTL	Catalogue
DIN L / R	DIN left / right

Abbreviation	Meaning
d _k	Screw head diameter
T&T	Tilt&Turn
BS	Backset
SRW	Sash rebate width
SRH	Sash rebate height
S.kg	Sash weight
HH	Handle height
BSec	Basic security
IMO	Installation instructions
Y	Yes
kg	Kilograms
KU	Couplable
Max.	Maximum
mm	Millimetres
CL	Centre lock
N	No
Nm	Torque in newton metres
LMD	Lifting mishandling device
RC	Resistance class
BC	Bullet catch
SEC	Security
ST	Striker
e.g.	For example

1.7 Target groups

The information in this document is directed at the following target groups:

Hardware dealers

The “hardware dealers” target group includes all companies and individuals that purchase hardware from hardware manufacturers for resale, without modifying or further processing the hardware.

Window and balcony door manufacturers

The “window and balcony door manufacturers” target group includes all companies and individuals that purchase hardware from hardware manufacturers or hardware dealers and further process the hardware by integrating it in windows and balcony doors.

Building element dealers or installation companies

The “building element dealers or installation companies” target group includes all companies and individuals that purchase windows and balcony doors from window and balcony door manufacturers for resale and for installation in construction projects, without modifying the windows or balcony doors.

Builders

The “builders” target group includes all companies and individuals who place orders for the manufacture of windows and balcony doors for installation in their construction projects.

End users

The “end users” target group includes all individuals who use the installed windows and balcony doors.

1.8 Target groups' obligation to give instructions



INFO

Each target group must fulfil their obligation to give instructions in full.

Unless specified otherwise in the text below, documents and information can be passed on as a printed document, on a data storage device or via the Internet.

Responsibility of hardware dealers

Hardware dealers must pass the following documents on to the window and balcony door manufacturer:

- Catalogue
- Installation, maintenance and operation instructions
- Directive on attachment of supporting fitting components for turn-only and tilt&turn fittings (TBDK)
- Guidelines/advice on the product and on liability (VHBH)
- Guidelines/advice for end-users (VHBE)

Responsibility of the window and balcony door manufacturer

The window and balcony door manufacturer must pass the following documents on to building element dealers or the builder, even if a subcontractor (installation company) is involved:

- Installation, maintenance and operation instructions
- Directive on attachment of supporting fitting components for turn-only and tilt&turn fittings (TBDK)
- Guidelines/advice on the product and on liability (VHBH)
- Guidelines/advice for end-users (VHBE)

They must ensure that the end users are provided with the documents and information intended for them in printed format.

Responsibility of building element dealers and the installation company

Building element dealers must pass the following documents on to the builder, even if a subcontractor (installation company) is involved:

- Installation, maintenance and operation instructions (with a focus on hardware)
- Guidelines/advice on the product and on liability (VHBH)
- Guidelines/advice for end-users (VHBE)

Responsibility of the builder

The builder must pass the following documents on to the end user:

- Installation, maintenance and operation instructions (with a focus on hardware)
- Guidelines/advice for end-users (VHBE)

1.9 Copyright protection

The contents of this document are copyright-protected. This content can be used when working with the hardware. Any other use is not permitted without written permission of the manufacturer.

1.10 Limitation of liability

All information and instructions contained in this document have been compiled in consideration of the applicable standards and regulations, the latest developments in technology and many years of knowledge and experience.

The hardware manufacturer assumes no liability for damage caused by:

- Failure to comply with this document and all product-specific documents and other applicable directives (see the chapters entitled "Security" and "Stipulated use").
- Improper use / misuse (see the chapters entitled "Security" and "Stipulated use").
- Insufficient invitation to tender, non-compliance with installation specifications and non-compliance with the application diagrams (where available).
- Increased contamination.

Claims made by third parties against the hardware manufacturer on account of damage resulting from misuse or failure to comply with the obligation to give instructions on the part of hardware dealers, window, door and balcony door manufacturers and building element dealers or the builder are passed on accordingly.

The obligations agreed in the delivery contract, the general terms and conditions, the hardware manufacturer's terms and conditions of delivery and the legal provisions applicable when the contract was concluded shall apply.

The warranty only covers original Roto components.

We reserve the right to make technical changes as part of improvement to performance characteristics and further development.

1.11 Preserving the surface finish



ATTENTION

Surface treatments may cause property damage.

Surface treatments (e.g. painting and varnishing) on elements can damage components or prevent them from working properly.

- ▶ For masking, only use adhesive tape that does not damage the paint coats. Consult the manufacturer if in doubt.
- ▶ Protect components against direct contact with the surface treatment.
- ▶ Protect components against contamination.



ATTENTION

Using incorrect cleaning agents and sealing compounds may cause property damage.

Cleaning agents and sealing compounds may damage the surfaces of components and gaskets.

- ▶ Do not use aggressive or flammable liquids, acidic cleaners or abrasive cleaners.
- ▶ Only use mild, pH-neutral cleaning agents that have been diluted.
- ▶ Apply a thin protective film to the components, for example using a cloth soaked in oil.
- ▶ Avoid aggressive vapours (e.g. produced by formic acid, acetic acid, ammonia, amine compounds, ammonia compounds, aldehyde, carboic acid, chlorine, tannic acid) around the element.
- ▶ Do not use any acetic acid-crosslinking or acid-crosslinking sealing compounds or those with the aforementioned constituents as both direct contact with the sealing compound and its fumes can corrode the surface of the components.



ATTENTION

Contamination may cause property damage.

Contamination prevents components working properly.

- ▶ Remove deposits and contamination caused by construction materials (e.g. plaster, gypsum).
- ▶ Keep components free of deposits and contaminants.



ATTENTION

(Permanently) damp room air may cause property damage.

Damp room air can lead to mould growth and corrosion caused by condensation.

- ▶ Provide adequate ventilation for components, particularly during the construction phase.
- ▶ Intensively air out the room several times per day by opening all elements for approximately 15 minutes. If intensive airing is not an option, place the elements in the tilt position and provide airtight masking inside the room, e.g. if there is fresh screed that cannot be walked on or must not be exposed to draughts. Discharge any humidity present in the room air to the outside using condensation dryers.
- ▶ Establish a ventilation plan for more complex construction projects if necessary.
- ▶ Provide adequate ventilation during holiday periods as well.



2 Security

This manual contains instructions relating to safety. The principal safety information in this chapter includes information and instructions relevant to the safe use or maintaining the safe condition of the product. Warning instructions that relate to handling warn of residual risks and are located before steps that are relevant to safety.

- Follow all of the instructions in order to prevent personal injury and property and environmental damage.

2.1 Presentation and structure of warning instructions

The warning instructions relate to individual actions and are structured as follows with a warning symbol:



DANGER

Nature and source of the danger.

Explanation and description of the danger and the implications.

- Measures to take to avert the danger.

2.2 Security levels of warning instructions

The warning instructions that relate to handling are identified differently according to the severity of the associated danger. The signal words and the associated warning symbols used are clarified below.



DANGER

Immediate risk of death or serious injuries.

- Observe these warning instructions to avoid personal injuries.



WARNING

Potential risk of death or serious injuries.

- Observe these warning instructions to avoid personal injuries.



CAUTION

Risk of injuries

- Observe these warning instructions to avoid personal injuries.



ATTENTION

Reference to property or environmental damage.

- Observe these warning instructions to avoid property or environmental damage.

2.3 Stipulated use

Turn-Only and Tilt&Turn hardware components are one-hand operation, Turn-Only and Tilt&Turn hardware components for windows and balcony doors in structural engineering. This hardware is used to move window sashes and balcony door sashes to a turned position by actuating a hand lever or a tilt position which is restricted by the scissor stay version. Turn-Only and Tilt&Turn hardware components may be used on vertically installed windows and balcony doors made of timber, PVC, aluminium or steel, or corresponding combinations of the aforementioned materials. Turn-Only and Tilt&Turn hardware components in the sense of this definition close windows and balcony door sashes or move them into various ventilation positions.

During the closing process, the gasket counter force must generally be overcome.

Stipulated use also includes compliance with all safety information and specifications contained in these instructions, the other applicable documents and the applicable regulations, directives and national laws.

2.3.1 Misuse

Any use and processing of the products that goes beyond or differs from the stipulated use is considered misuse and can lead to hazardous situations.



WARNING

Misuse may pose a risk of death!

Misuse and incorrect installation of hardware can lead to serious injuries.

- ▶ Only use hardware combinations that have been approved by the hardware manufacturer.
- ▶ Only use original accessories or those that have been approved by the hardware manufacturer.
- ▶ Note the product-related documentation → *from page 9*.

2.3.2 Usage restriction

Opened sashes in windows and balcony doors, and windows and balcony door sashes that are unlocked or placed in ventilation positions, only have a shielding effect. They do not meet the following requirements:

- Joint sealing
- Driving rain impermeability
- Sound insulation
- Thermal insulation
- Burglary inhibition



INFO

Windows built with security strikers for tilt ventilation fulfil the burglary inhibition function in the tilt position.

2.4 Stipulated use for end users

For windows or balcony doors with Turn-Only or Tilt&Turn hardware, windows or balcony door sashes can be moved to a turned position by operating a hand lever or to a tilt position restricted by the scissor stay version.

When closing a sash and locking the hardware, the gasket counter force must generally be overcome.



WARNING

Opening and closing sashes in an uncontrolled manner may pose a risk of death!

Opening and closing the sash in an uncontrolled manner may lead to serious injuries.

- ▶ Ensure that the sash does not collide with the frame, opening restrictor (buffer) or other sashes when it is moved into the fully open or closed position.
- ▶ Ensure that the sash is slowly guided by hand throughout its entire movement range, until it has been brought into a fully closed or opening position.



ATTENTION

Opening and closing sashes in an uncontrolled manner may result in property damage.

Opening and closing the sash in an uncontrolled manner may cause the element to malfunction.

- ▶ Ensure that the sash does not collide with the frame, opening restrictor (buffer) or other sashes when it is moved into the fully open or closed position.
- ▶ Ensure that the sash is slowly guided by hand throughout its entire movement range, until it has been brought into a fully closed or opening position.

Any use and processing of the products that goes beyond or differs from the stipulated use is considered misuse and can lead to hazardous situations.

No claims of any kind can be made on account of damage resulting from failure to comply with the stipulated use.

2.4.1 Misuse

Any use and processing of the products that goes beyond or differs from the stipulated use is considered misuse and can lead to hazardous situations.



WARNING

Misuse may pose a risk of death!

Misuse and incorrect installation of hardware can lead to serious injuries.

- ▶ Only use hardware combinations that have been approved by the hardware manufacturer.
- ▶ Only use original accessories or those that have been approved by the hardware manufacturer.
- ▶ Note the product-related documentation → *from page 9*.

2.5 Basic safety information

The following hazards may arise when handling the product:

2.5.1 Installation

Incorrect installation poses an immediate risk of death or serious injuries.

Incorrect installation or assembly of hardware can lead to hazardous situations or property damage. Depending on the height of the fall, this can result in serious to life-threatening injuries and glass breakage.

- ▶ Only use hardware combinations that have been approved by the hardware manufacturer.
- ▶ Only use original accessories or those that have been approved by the hardware manufacturer.
- ▶ Always have installation performed by a specialist company.

Heavy loads pose a risk of injury.

Lifting and carrying heavy loads may lead to injuries in the event of a fall or physical overexertion.

- ▶ Note the applicable accident prevention regulations.

- ▶ Transport heavy loads with two people and use suitable transportation means (such as an industrial truck).

Physical overexertion may be harmful to health.

Moving heavy loads for extended periods leads to physical injury in the long term.

- ▶ When carrying and lifting by hand, comply with a maximum weight of 25 kg for men and 10 kg for women.
- ▶ Carry and lift even small loads with an ergonomically correct posture.

2.5.2 Use

Falls from open windows and balcony doors present an immediate risk of death and pose the risk of serious injuries.

Opened sashes of windows and balcony doors create a danger zone. Depending on the height of the fall, this can result in serious to life-threatening injuries and glass breakage.

- ▶ Take care when in the vicinity of open windows and balcony doors.
- ▶ Keep children and anyone unable to understand the risks away from the hazardous area.

Trapping body parts in the opening between sash and frame may lead to serious injuries.

Gripping between the sash and frame when closing windows and balcony doors poses the risk of crushing injuries.

- ▶ When closing windows and balcony doors, never grip between the sash and frame and always exercise caution.
- ▶ Keep children and anyone unable to understand the risks away from the hazardous area.

Opening and closing sashes improperly poses the risk of injury and property damage.

Incorrect opening and closing of sashes can result in serious injuries and substantial property damage.

- ▶ When moving the sash, ensure that it will not slam against the frame or other sashes once fully opened or closed.
- ▶ Ensure that the sash is slowly guided by hand throughout its entire movement range, until it has been brought into a fully closed or opening position.
- ▶ When closing a sash and locking the hardware, the gasket counter force must be overcome.

Misuse poses a risk of injury and property damage.

Misuse can lead to hazardous situations and may destroy the hardware, frame materials or other individual components within the windows or balcony doors.

- ▶ Do not introduce any obstacles in the opening area between the frame and window or balcony door sashes.
- ▶ Do not place additional loads on windows and balcony door sashes.



- ▶ Refrain from intentionally or uncontrollably slamming or pushing the window or balcony door sash against the window reveal or the opening restrictor.

Improper maintenance poses the potential risk of injury and property damage.

Windows and balcony doors, including the hardware, require expert maintenance (care, cleaning, maintenance and inspection) in order to guarantee their proper condition and safe use.

- ▶ Keep the hardware free of deposits and contaminants.
- ▶ Carry out care and cleaning tasks as specified in these instructions.
- ▶ Always have regular maintenance, adjustment and repair work carried out by a specialist company.

2.5.3 Ambient conditions

Physical and chemical influences may result in property damage.

Hardware components can be permanently damaged in a saline, aggressive or corrosive environment to the point that they can no longer function.

- ▶ Do not use the hardware components in a saline, aggressive or corrosive environment.
- ▶ Carry out care and cleaning tasks as specified in these instructions.
- ▶ Corrosion protection must be inspected by an authorised specialist company as part of regular maintenance work.

Moisture may cause property damage.

Depending on the outside temperature, relative humidity of the room air and installation situation of the windows and balcony doors, a temporary build-up of condensation may occur. This can lead to corrosion on the hardware and mould growth on the frame or wall. Ambient conditions that are too damp, particularly during the construction phase, can lead to timber elements warping.

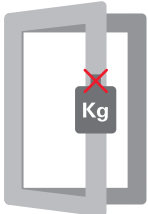
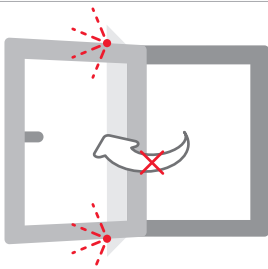
- ▶ Avoid preventing the circulation of air (e.g. due to deep reveals, curtains and unfavourable positioning of heaters or the like).
- ▶ Intensively air out the room several times per day.
Open all windows and balcony doors for approximately 15 minutes so that the air in the room can be completely replaced.
- ▶ Provide adequate ventilation during holiday periods as well.
- ▶ Create a ventilation plan for construction projects if necessary.

2.6 Operation

The safety symbols and markings and the associated warning instructions explained below apply to the safe operation of windows and balcony doors.

Safety symbols and markings

Symbol	Meaning
	<p>Falls from open windows and balcony doors present an immediate risk of death and pose the risk of serious injuries.</p> <p>Take care when in the vicinity of open windows and balcony doors.</p> <p>Keep children and anyone unable to understand the risks away from the hazardous area.</p>

Symbol	Meaning
	<p>Trapping body parts in the opening between sash and frame may lead to serious injuries.</p> <p>When closing windows and balcony doors, never grip between the sash and frame and always exercise caution.</p> <p>Keep children and anyone unable to understand the risks away from the hazardous area.</p>
	<p>Placing additional loads on the sash may lead to minor injuries and property damage.</p> <p>Avoid placing additional loads on the sash.</p>
	<p>The impact of wind may lead to minor injuries and property damage.</p> <p>Avoid exposing the open sash to wind.</p> <p>Close and lock the window and balcony door sash in windy or draughty conditions.</p>
	<p>Introducing obstacles into the opening between sash and frame may result in minor injuries and property damage.</p> <p>Avoid introducing obstacles into the opening between sash and frame.</p>
	<p>Pressing the sash against the edge of an opening (reveal) may pose a risk of minor injuries and cause property damage</p> <p>Refrain from pressing the sash against the edge of an opening (reveal).</p>



3 Information on the product

3.1 General hardware characteristics

- High loads up to 150 kg: surface-mounted hinge side P for PVC windows and doors.
- Enhanced ventilation comfort without additional installation effort thanks to night ventilation integrated in the sash stay (stay arm and stay guide) as standard.
- Simple adjustment options for lateral and height adjustment; additional gasket compression adjustment via:
 - E locking cam: gasket compression adjustable eccentric cam
 - P locking cam: gasket compression adjustable security eccentric cam
 - V locking cam: gasket compression and height adjustable security eccentric cam
- Form-fitting "Clip&Fit" connection.
- The floating mullion and gearbox / lock casing are connected simply without screws thanks to the EasyMix system with high backsets ≥ 25 mm.
- Custom options for adapting the Roto NX hardware system to different security requirements – from basic security up to tested security windows with RC classification in accordance with DIN EN 1627-1630.
- TiltSafe burglar inhibiting tilt mode in accordance with the RC 2 / RC 2 N classification.
- High-quality Roto Sil surface (matt silver) for maximum corrosion resistance (DIN EN 13126 / 8 and free from chromium VI compounds).
In combination with Roto Sil, Roto Sil Level 6 is an advanced standard for connection components subject to high stress, such as rivets, bolts and sliding elements.
- Attractive hinge side P with white and titanium surface versions (powder coating).
- Certified in accordance with QM 328.
- Ten-year warranty for the functionality of the hardware.

3.2 General information

Hardware functional safety

The following points must be noted in order to ensure the functional safety of the hardware at all times:

1. Correct installation of hardware components in accordance with the installation instructions.
2. Correct installation of elements during window installation.
3. The window manufacturer must pass the maintenance and operation instructions and the product liability guidelines (if applicable) on to the user.
4. The hardware as a whole may only consist of original Roto system components. The use of components from other manufacturers excludes any liability.

Product liability regulations

Electrogalvanised and passivated steel fenestration screws are to be used to fasten the hardware components.

The window manufacturer must ensure that the hardware components are adequately secured; the screw manufacturer must be involved if required.

When attaching security-relevant, load-bearing hardware components (hinge sides), the manufacturer of windows and balcony doors must prove the specified forces in accordance with the table below (excerpt from Directive TBDK issued by the Gütegemeinschaft Schlösser und Beschläge e. V.) by means of testing and ensure them on their product.

Sash weight	Tractive force in newtons (N)
60 kg	1650 N
70 kg	1900 N
80 kg	2200 N
90 kg	2450 N
100 kg	2700 N
110 kg	3000 N
120 kg	3250 N
130 kg	3500 N
140 kg	3900 N
150 kg	4200 N



INFO

Observe directive TBDK for tractive force values as a function of the sash weights.

Further information can be found at www.beschlagindustrie.de.

Do not use any acid cross-linked sealing compounds that could lead to corrosion of the hardware components. The spacer block guidelines for glazing methods must be complied with.

Product liability – liability exclusion

The hardware manufacturer is not liable for malfunctions or damage to the hardware, or to windows and balcony doors equipped with the hardware, if this has been caused by insufficient invitation to tender or failure to comply with the installation specifications and application diagrams, or if the hardware has been subjected to increased levels of dirt.

The warranty only covers original Roto components.

Profile classification – application ranges

The individual application diagrams must be complied with.

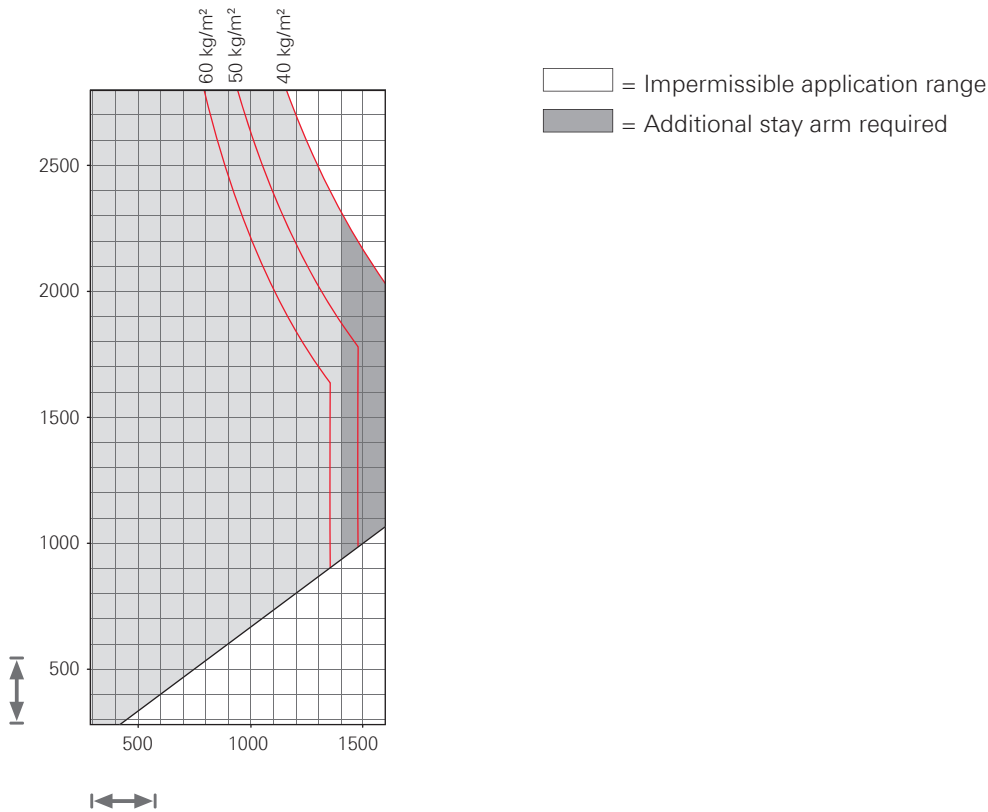
When determining the maximum permitted sash formats and sash weights, the values specified by the profile manufacturers and system owners must not be exceeded either.



3.3 Application diagrams

3.3.1 Turn-Only / Tilt&Turn hardware for rectangular windows

3.3.1.1 130 kg



The specifications in the application diagram refer to the glass weight in kg/m².

1 mm/m² glass thickness $\approx$ 2.5 kg

Application range

		Basic security	Security RC 1 N	Security RC 2 / RC 2 N	Security RC 3
	Sash rebate width	290 – 1600 mm	320 – 1600 mm	320 – 1400 mm	490 – 1400 mm
	Sash rebate height	280 – 2800 mm	280 – 2800 mm	510 – 2800 mm	600 – 2800 mm
	Sash weight	Max. 130 kg	Max. 130 kg	Max. 130 kg	Max. 130 kg

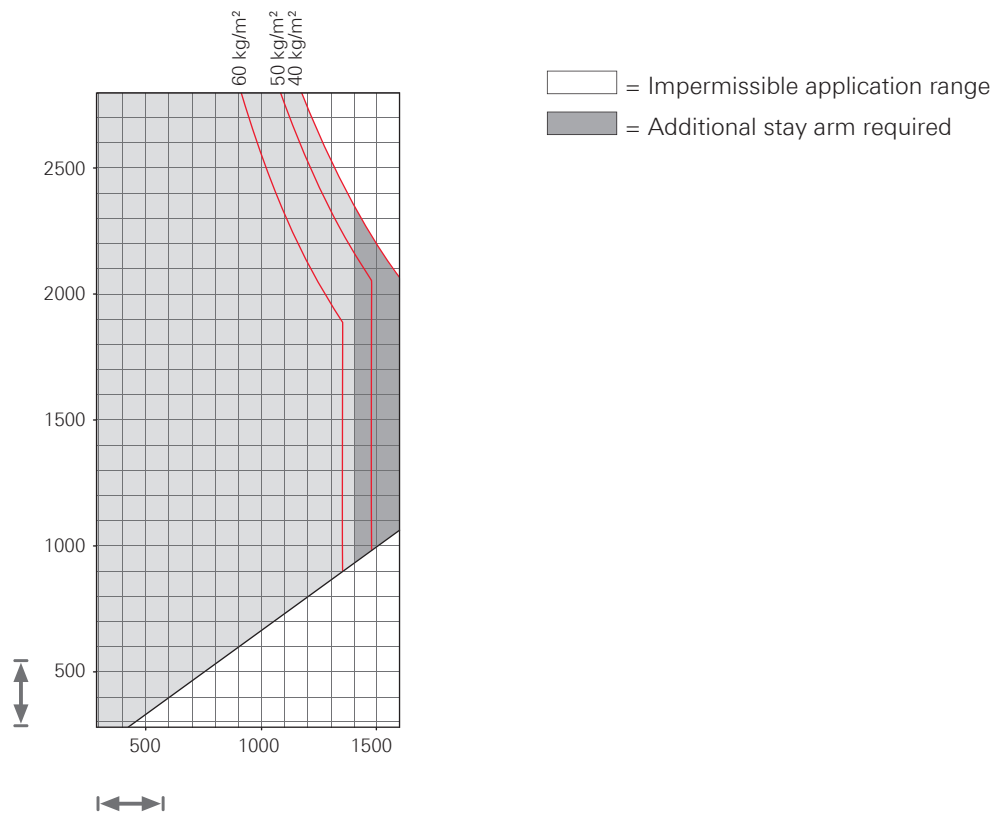


INFO

Observe directive TBDK for tractive force values as a function of the sash weights.

Further information can be found at www.beschlagindustrie.de.

3.3.1.2 150 kg



The specifications in the application diagram refer to the glass weight in kg/m².

1 mm/m² glass thickness $\approx$ 2.5 kg

Application range

		Basic security	Security RC 1 N	Security RC 2 / RC 2 N	Security RC 3
	Sash rebate width	290 – 1600 mm	320 – 1600 mm	320 – 1400 mm	320 – 1400 mm
	Sash rebate height	280 – 2800 mm	280 – 2800 mm	510 – 2800 mm	510 – 2800 mm
	Sash weight	Max. 150 kg	Max. 150 kg	Max. 150 kg	Max. 150 kg



INFO

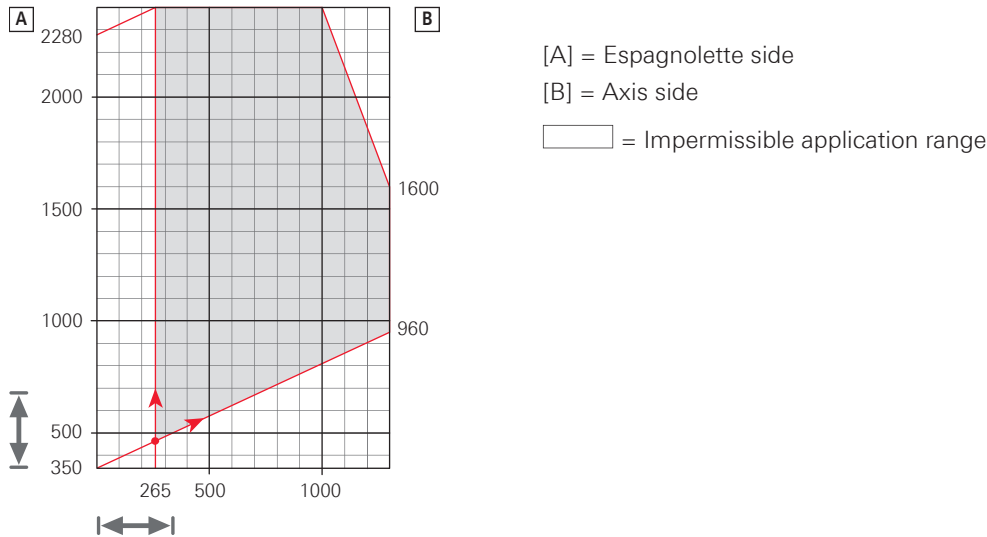
Observe directive TBDK for tractive force values as a function of the sash weights.

Further information can be found at www.beschlagindustrie.de.



3.3.2 Tilt&Turn hardware for pitched windows

3.3.2.1 Pitched angle 25°



The specifications in the application diagram refer to the glass weight in kg/m².
1 mm/m² glass thickness ≈ 2.5 kg

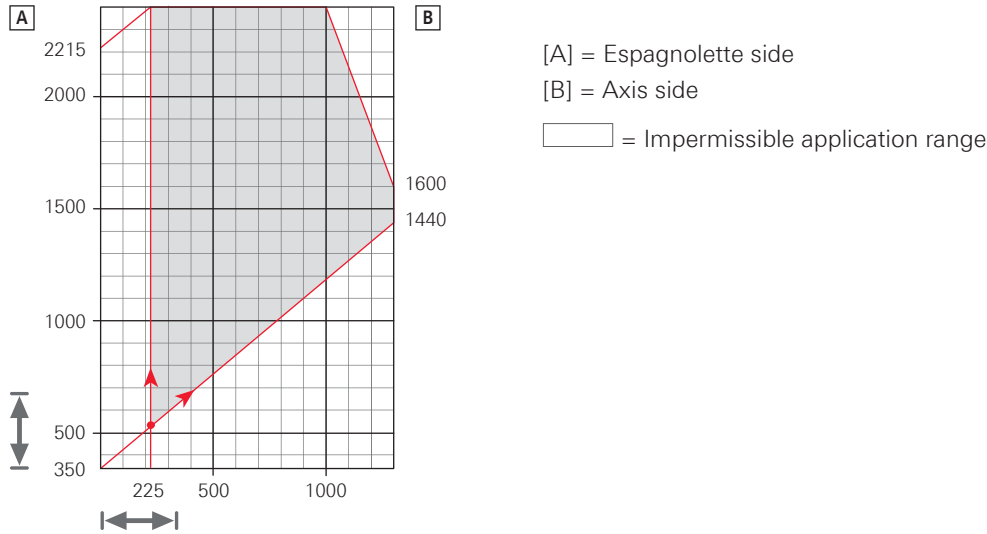
Application range

Basic security		
	Sash rebate width	See diagram
	Sash rebate height	See diagram
	Sash weight	Max. 80 kg



INFO
Observe directive TBDK for tractive force values as a function of the sash weights.
Further information can be found at www.beschlagindustrie.de.

3.3.2.2 Pitched angle 40°



The specifications in the application diagram refer to the glass weight in kg/m².
1 mm/m² glass thickness ≈ 2.5 kg

Application range

Basic security		
	Sash rebate width	See diagram
	Sash rebate height	See diagram
	Sash weight	Max. 80 kg

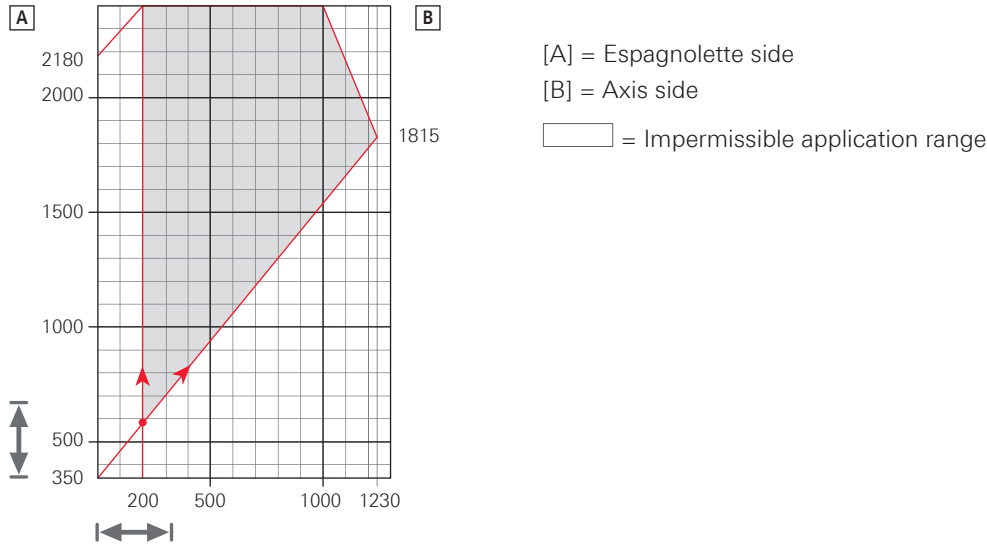


INFO

Observe directive TBDK for tractive force values as a function of the sash weights.
Further information can be found at www.beschlagindustrie.de.



3.3.2.3 Pitched angle 50°



The specifications in the application diagram refer to the glass weight in kg/m².
1 mm/m² glass thickness ≈ 2.5 kg

Application range

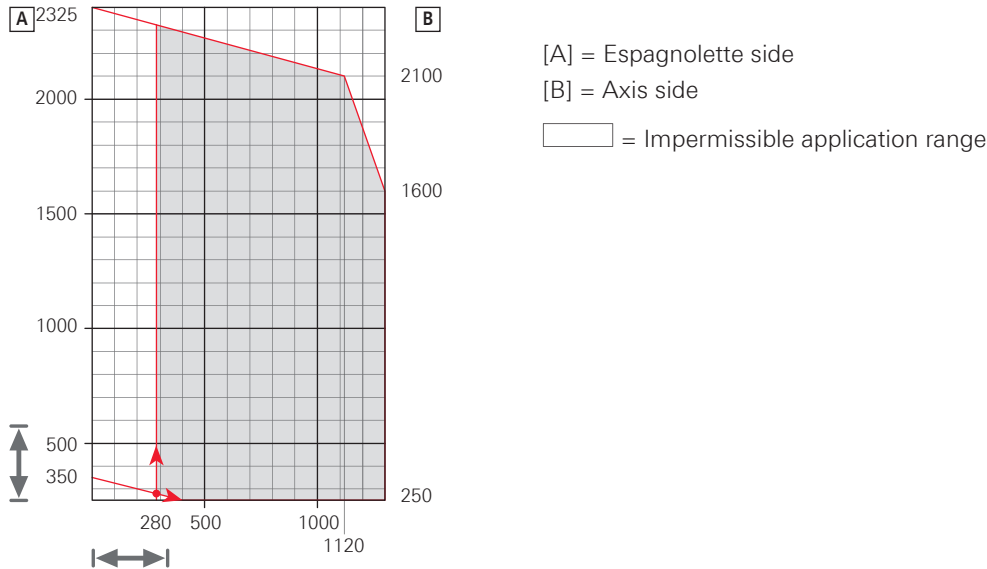
Basic security		
	Sash rebate width	See diagram
	Sash rebate height	See diagram
	Sash weight	Max. 80 kg



INFO

Observe directive TBDK for tractive force values as a function of the sash weights.
Further information can be found at www.beschlagindustrie.de.

3.3.2.4 Pitched angle -15°



The specifications in the application diagram refer to the glass weight in kg/m².
1 mm/m² glass thickness ≈ 2.5 kg

Application range

Basic security		
	Sash rebate width	See diagram
	Sash rebate height	See diagram
	Sash weight	Max. 80 kg



INFO

Observe directive TBDK for tractive force values as a function of the sash weights.
Further information can be found at www.beschlagindustrie.de.



3.3.3 Tilt&Turn hardware for arched windows



The specifications in the application diagram refer to the glass weight in kg/m².
1 mm/m² glass thickness $\approx$ 2.5 kg



INFO
The radius (R) of the arched window must be equal to half the SRW.

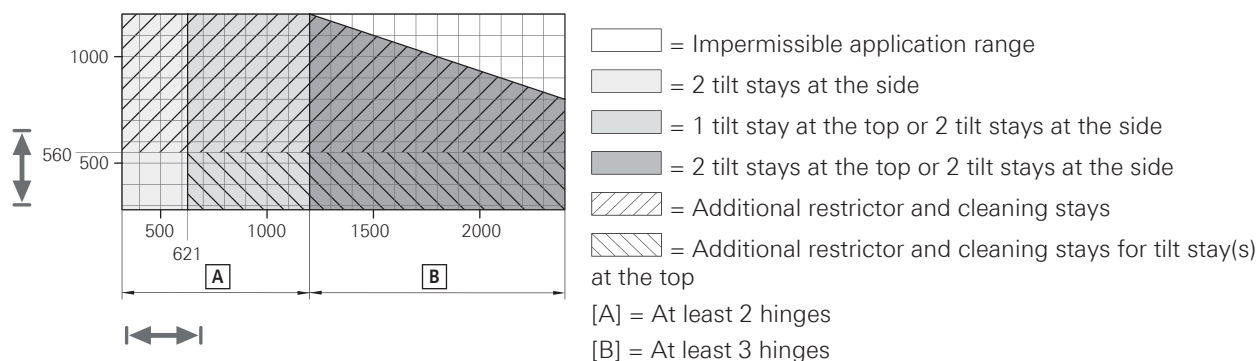
Application range

		Basic security
	SRW	400 – 1300 mm
	SRH	500 – 1900 mm
	S.kg	Max. 80 kg



INFO
Observe directive TBDK for tractive force values as a function of the sash weights.
Further information can be found at www.beschlagindustrie.de.

3.3.4 Tilt-Only hardware for rectangular windows



The specifications in the application diagram refer to the glass weight in kg/m².

1 mm/m² glass thickness $\approx$ 2.5 kg

Application range

Basic security		
	Sash rebate width	310 – 2400 mm ^[1]
	Sash rebate height	290 – 1200 mm
	Sash weight	Max. 80 kg



INFO

Observe directive TBDK for tractive force values as a function of the sash weights.

Further information can be found at www.beschlagindustrie.de.

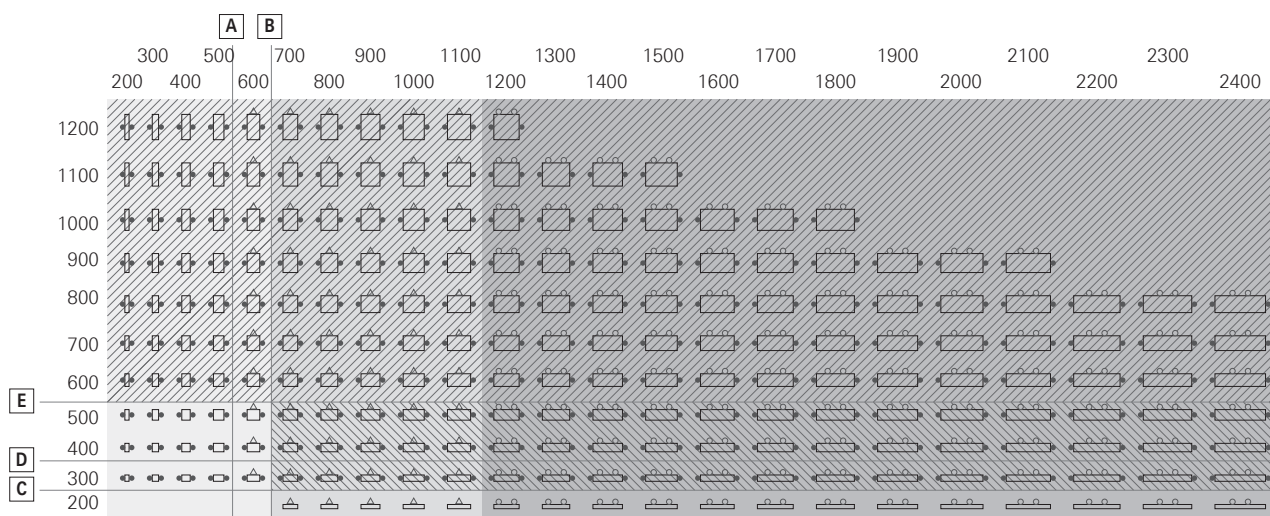


INFO

Restrictor and cleaning stays recommended; mandatory for fanlights (in accordance with RAL RG 607 / 12).

Restrictor and cleaning stays up to max. 60 kg.

[1] SRW 310 – 449 mm with Turn-Only / Tilt-Only espagnolette only



[A] From 501 mm tilt stay at the top is only possible with Turn-Only / Tilt-Only espagnolette

[B] From 621 mm tilt stay at the top is possible with Turn-Only / Tilt-Only espagnolette and T&T espagnolette

[C] From **260 mm** K, E5, P, T, A

[D] From **360 mm** K, E5, P, T, A, Designo, Alu

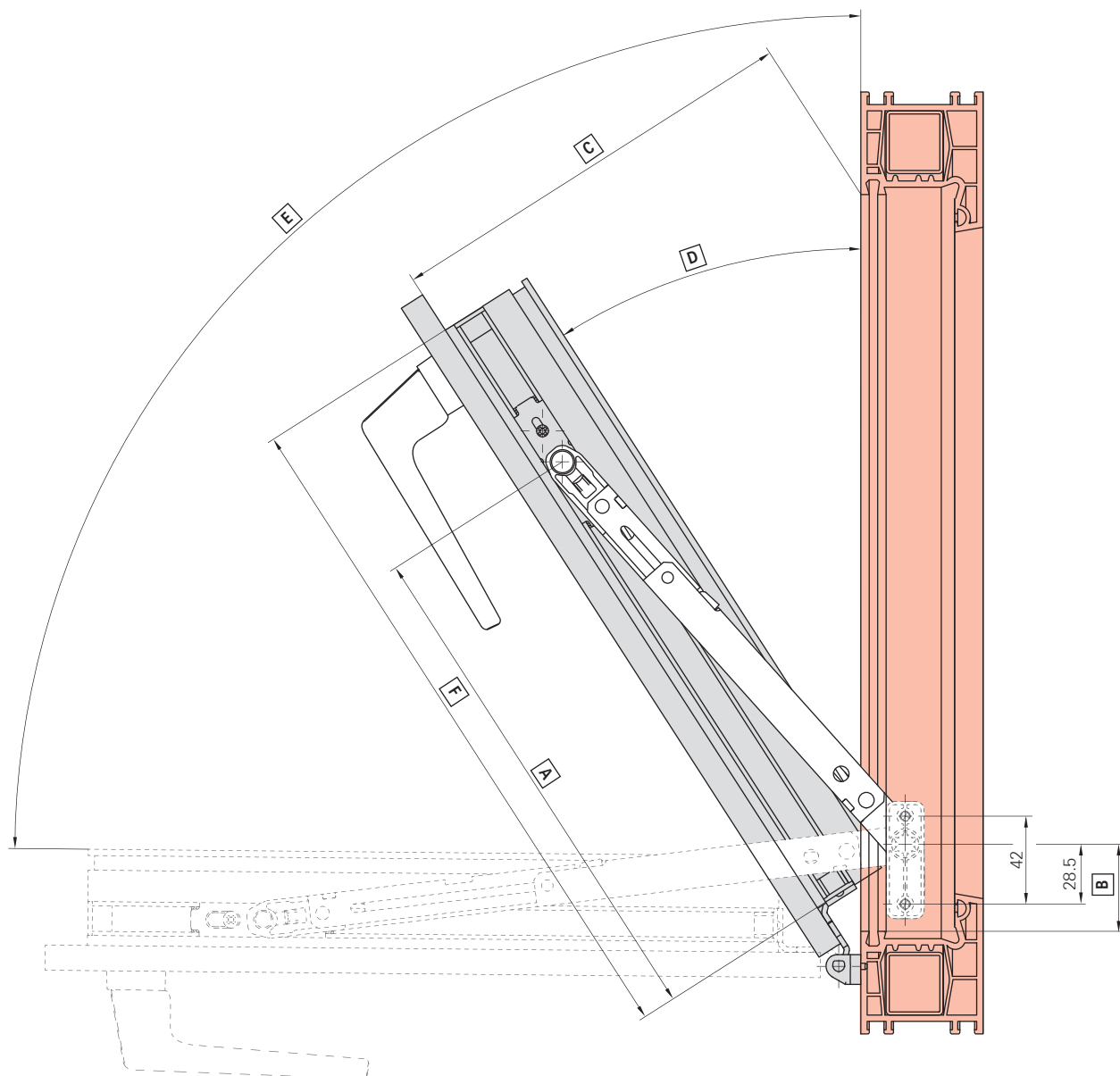
[E] From **520 mm** all hinge sides

- Possible position of tilt stay up to 80 kg
- Alternative position of tilt stay up to 80 kg
- △ Alternative position of tilt stay up to 60 kg



INFO

Tilt stays at the side cannot be used in conjunction with the CL 200 centre lock.



[A] Position of sash bearing

[B] Position of frame bearing

[C] Tilt distance restrictor position

[D] Opening angle restrictor position

[E] Opening angle cleaning position

[F] Sash rebate height (SRH)

SRH	Type	[A]	[B]	[C]	[D]	[E]
290 – 400 mm	1	250 mm	45 mm	180 – 245 mm	33°	90°
401 – 560 mm	1	280 mm	75 mm	205 – 275 mm	27°	67°
561 – 700 mm	2	525 mm	170 mm	225 – 277 mm	22°	88°
701 – 850 mm	2	575 mm	220 mm	244 – 292 mm	19°	72°
851 – 1200 mm	2	625 mm	270 mm	261 – 363 mm	17°	62°



3.3.5 Comfort windows



The specifications in the application diagram refer to the glass weight in kg/m².
1 mm/m² glass thickness $\approx$ 2.5 kg

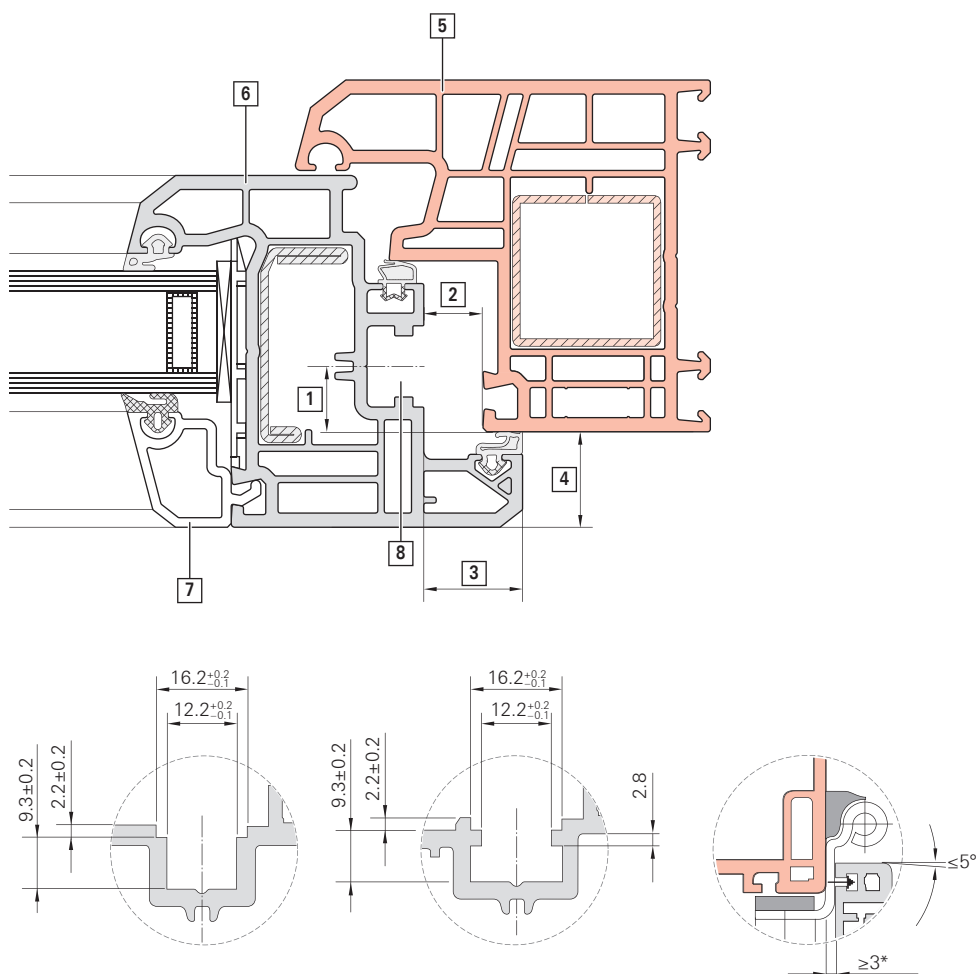
Application range

Basic security		
	Sash rebate width	520 – 1400 mm
	Sash rebate height	530 – 1600 mm
	Sash weight	Max. 50 kg



INFO
Observe directive TBDK for tractive force values as a function of the sash weights.
Further information can be found at www.beschlagindustrie.de.

3.4 Descriptions on the window element and recommendation for the profile dimensioning



[1] Axis dimension

[2] Rebate clearance

[3] Overlap width

[4] Overlap height

[5] Frame

[6] Sash

[7] Glazing bead

[8] Sash groove

[*] Required hinge passage (when the gasket is pushed down or removed).

System	Hardware axis [1]	Rebate clearance [2]	Overlap width [3]
12/18-9	9 mm	12 mm -0.5 mm / +1.5 mm	18 mm
12/18-13	13 mm		
12/20-9	9 mm		20 mm
12/20-13	13 mm		
12/21-13	13 mm		21 mm
12/22-13	13 mm		22 mm



3.5 Cam lengths

Stay bearing

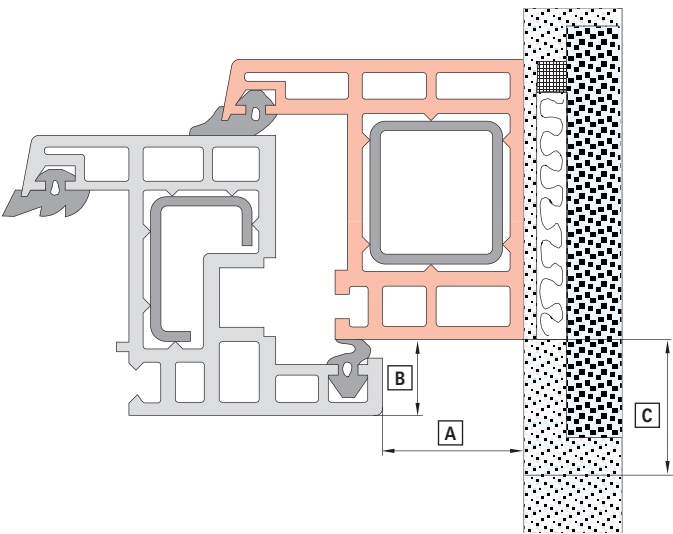
P3		P6	
[1]	P3/130: 4 mm	[2]	P6/130: 9 mm P6/150: 9 mm

Pivot rest / corner hinge

Pivot rest		Corner hinge	
P3	P6	P6	
[1]	P3/130: 3 mm	[2]	P6/130: 3 mm P6/150: 3 mm
		[3]	P6/130: 9 mm P6/150: 19 mm
		[4]	P6/150: 23 mm

3.6 Frame clearance

Frame clearances with a 20 mm overlap width.



Sash weight	Opening angle	Frame clearance [A]	Overlap height [B]	Free area [C]
130 kg	Approx. 180° [2]	≥ 21.0 mm	≥ 16 mm	100 mm
150 kg	Approx. 150° [3]	≥ 26.5 mm	≥ 16 mm	100 mm

[2] The opening angle may be less than 180° depending on the reveal.

[3] The opening angle may be less than 150° depending on the reveal.



INFO

Clearances including cover caps.

Opening angle up to 20 mm overlap height.



DANGER

Risk of death caused by damage to bearing components!

Large overlap heights [B] or components near the reveal (such as skirting boards) may result in excessive leverage on the hinge side. This can damage the bearing components and cause the sash to fall.

- ▶ In the free area [C], the sash must not come into contact with the reveal or components near the reveal.
- ▶ With a reveal depth of < 100 mm, check whether a turn restrictor is required.



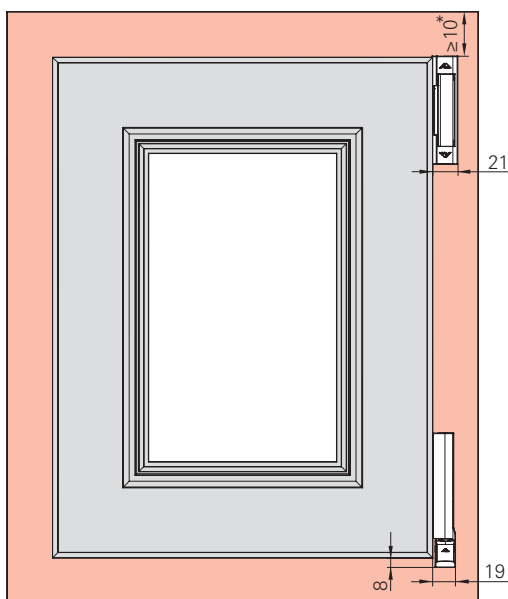
ATTENTION

Property damage caused by damage to bearing components!

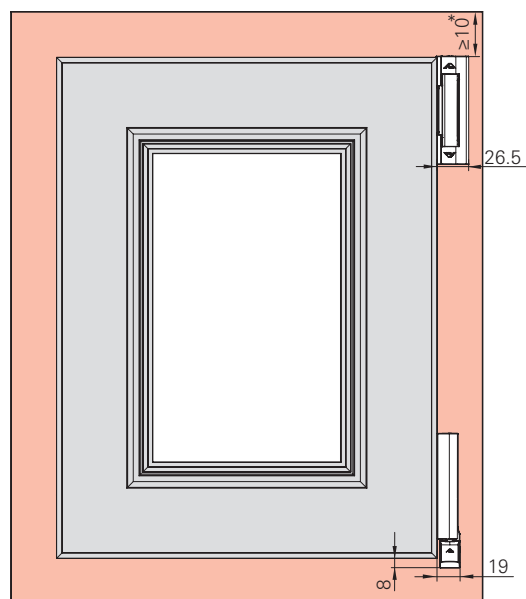
Large overlap heights [B] or components near the reveal (such as skirting boards) may result in excessive leverage on the hinge side. This can damage the bearing components and cause the sash to fall.

- ▶ In the free area [C], the sash must not come into contact with the reveal or components near the reveal.
- ▶ With a reveal depth of < 100 mm, check whether a turn restrictor is required.

Sash weight 130 kg



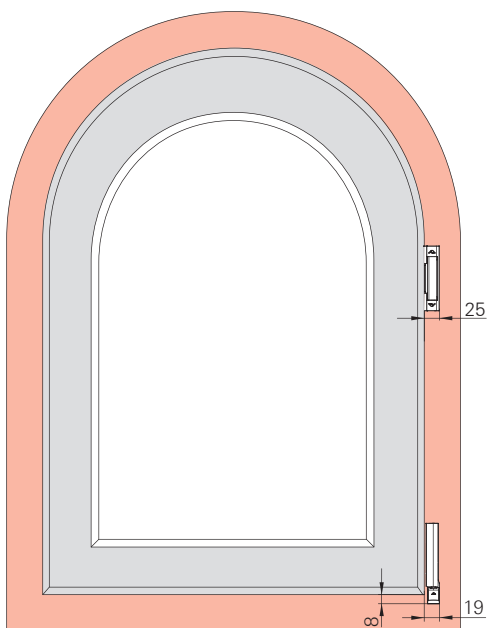
Sash weight 150 kg



* For dismantling the stay-bearing pin, leave at least 10 mm clearance from the reveal.

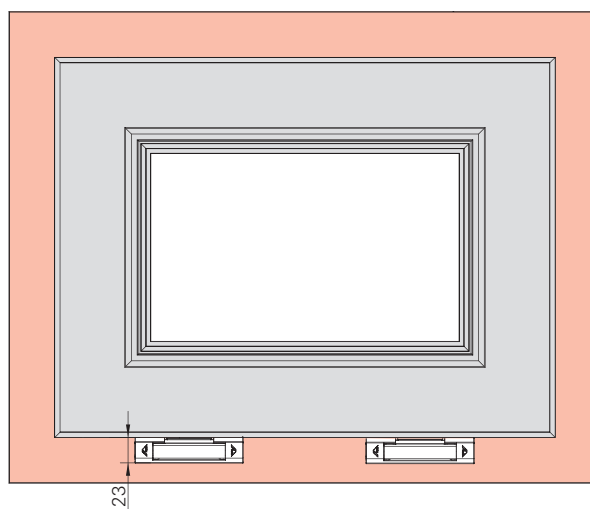
Arch

Sash weight 80 kg

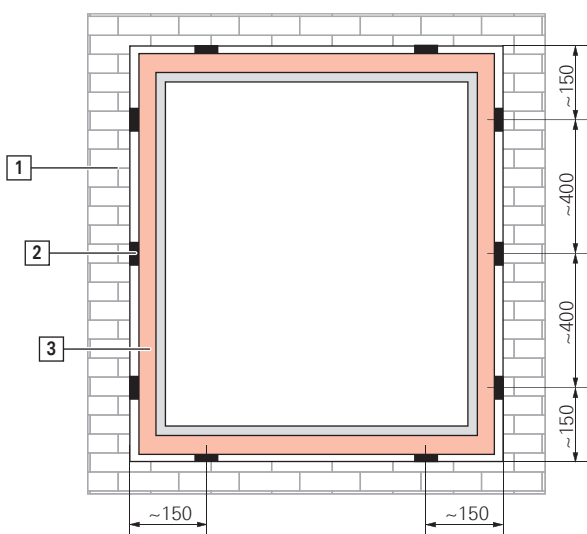


Tilt-Only hardware

Sash weight 80 kg



3.7 Fastening suggestion for security windows



- [1] Brickwork
- [2] Spacer blocks
- [3] Frame



INFO

Attach spacer blocks in the vicinity of the screw fixings for the security strikers.

Burglar inhibiting windows in accordance with DIN EN 1627–1630 may only be designated as such if installation is performed in accordance with the specified standard in all points.

4 Hardware overviews

The hardware overviews on the following pages are a recommendation on the part of Roto Frank Fenster- und Türtechnologie GmbH.

The basic page layout in the hardware overviews chapter firstly shows examples of the combination of individual hardware components, and the associated parts list can be seen on the following pages.

Additional combinations of hardware components can be found in the catalogue.

The item numbers in the squares link the hardware overview to the parts list.

The actual composition of the hardware depends on:

- the width of the element
- the height of the element
- the weight of the element
- the resistance class
- the profile system

Application range

The applicable application range [A] depends on the opening type and resistance class. The application range of the individual components [B] may differ from the applicable application range [A].

Anwendungsbereich

FFB: 290 - 1600 mm

[A] — **FFH:** 430 - 2800 mm

FG: max. 150 kg

[1] DK-Getriebe KSR – Griffsitz konstant, Dornmaß 15 mm

								Nº
[B] —	280 – 570	120	460	J	N	–	–	742199
	511 – 710	170	600	J	J	–	–	795324
	601 – 800	263	690	N	J	–	–	619591
	801 – 1000	413	890	N	J	1	E	619592
	1001 – 1200	513	1090	N	J	1	E	619593
	1201 – 1400	563	1290	N	J	1	E	619594
	1401 – 1600	563	1490	N	J	2	E	619595
	1601 – 1800	563	1690	N	J	2	E	619596
	1601 – 1800	1000	1690	N	J	2	E	838345
	1801 – 2000	1000	1890	N	J	2	E	794637
	2001 – 2200	1000	2090	N	J	3	E	794638
	2201 – 2400	1000	2290	N	J	3	E	794639

Example

The highlighted T&T espagnolette can generally be used from a SRH of min. 280 mm [B]. With this opening type and resistance class, elements are only allowed to be constructed from an SRH of 430 mm [A] and above. The highlighted T&T espagnolette is in the specified range and can therefore be installed.



INFO

Resistance classes

- The RC 1 N, RC 2, RC 2 N and RC 3 resistance classes refer to the entire system.
- The hardware combinations shown in the hardware overviews are recommendations.
- The hardware complies with the corresponding resistance classes in the required system tests.
- However, the resistance classes are only complied with if all of the other components in the system (e.g. profile system, reinforcement, glass, etc.) are also designed for this.
- Steel security locking components must generally be used in systems with a 9 mm hardware axis.

Profile-related frame components and general sets are listed in additional chapters.

Recommended handles can be found in the Roto Handles catalogue.

Determine the quantity of required hardware components with Roto Con Orders.



INFO

Roto Con Orders

Efficient online hardware configurator for the custom configuration of individual window and door hardware components. All conventional shapes and opening types can be automatically configured quickly and easily. Individual parts lists, including application ranges and an exemplary hardware overview, can be ordered from your responsible sales representative.

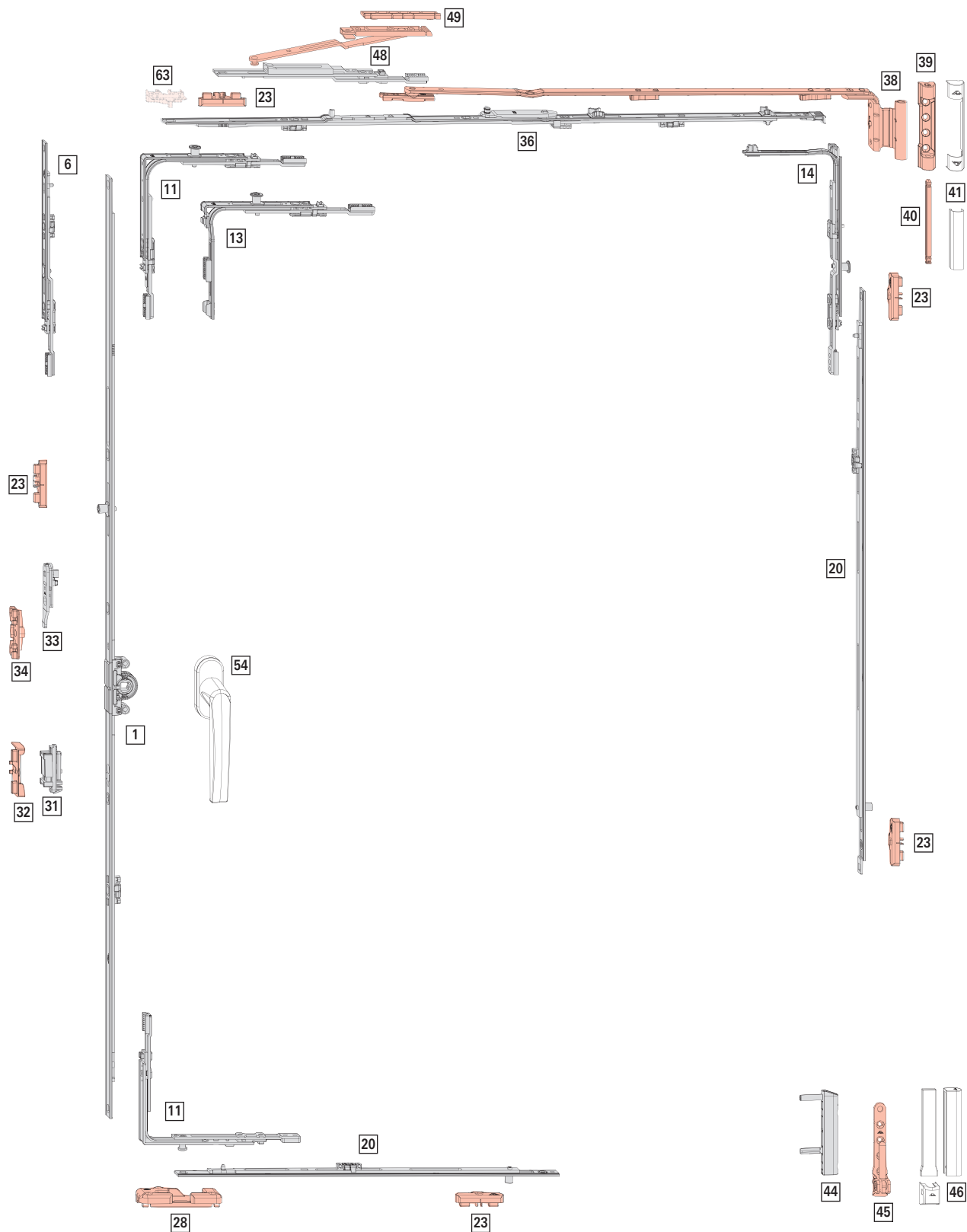


www.roto-frank.com

4.1 T&T espagnolette, VT – fixed handle height

4.1.1 Tilt&Turn hardware

4.1.1.1 Basic security





Application range

SRW: 290 – 1600 mm

SRH: 280 – 2800 mm

[1] T&T espagnolette, VT – fixed handle height, backset 15 mm

								Nº
280 – 570	120	460	Y	N	–	–	–	742199
511 – 710	170	600	Y	Y	–	–	–	795324
601 – 800	263	690	N	Y	–	–	–	619591
801 – 1000	413	890	N	Y	1	E	–	619592
1001 – 1200	513	1090	N	Y	1	E	–	619593
1201 – 1400	563	1290	N	Y	1	E	–	619594
1401 – 1600	563	1490	N	Y	2	E	–	619595
1601 – 1800	563	1690	N	Y	2	E	–	619596
1601 – 1800	1000	1690	N	Y	2	E	–	838345
1801 – 2000	1000	1890	N	Y	2	E	–	794637
2001 – 2200	1000	2090	N	Y	3	E	–	794638
2201 – 2400	1000	2290	N	Y	3	E	–	794639



INFO

With SRH 280 – 290 mm, the screw guide must be removed (e.g. using pliers).

[6] Espagnolette extension, (SRH ≥ 2401 mm)

								Nº
200	Y	–	–	–	–	–	–	308267
400	Y	1	E	–	–	–	–	280346

Size-specific combinations:

								Nº
2401 – 2600	200 KU	–	–	–	–	–	–	308267
2601 – 2800	400 KU	1	E	–	–	–	–	280346

[11] Standard corner drive

								Nº
1	E	–	–	–	–	–	–	260275
1	P	–	–	–	–	–	–	260277

[13] Special short corner drive

								Nº
1	E	–	–	–	–	–	–	260280
1	P	–	–	–	–	–	–	260282

For use with SRH ≤ 370 mm.

[14] Sash stay corner drive

								Nº
1	P	–	–	–	–	–	–	260286

[20] Multipart centre lock – standard, horizontal and vertical

								Nº
400	N	1	E	–	–	–	–	255280
600	N	1	E	–	–	–	–	255281
600	Y	1	E	–	–	–	–	255282

Size-specific combinations:

								Nº
801 – 1200	801 – 1200	400	1	E	–	–	–	255280
1201 – 1400	1201 – 1400	600	1	E	–	–	–	255281
1401 – 1600	1401 – 1800	600 KU	1	E	–	–	–	255282
		400	1	E	–	–	–	255280
	1801 – 2000	600 KU	1	E	–	–	–	255282
		600	1	E	–	–	–	255281
	2001 – 2400	600 KU	1	E	–	–	–	255282
		600 KU	1	E	–	–	–	255282
		400	1	E	–	–	–	255280
	2401 – 2600	600 KU	1	E	–	–	–	255282
		600 KU	1	E	–	–	–	255282
		600	1	E	–	–	–	255281
	2601 – 2800	600 KU	1	E	–	–	–	255282
		600 KU	1	E	–	–	–	255282
		600 KU	1	E	–	–	–	255282
		400	1	E	–	–	–	255280

[23] Striker → from page 201**[28] Tilt striker → from page 196****[31] Bullet catch sash component (optional SRH ≥ 1601 mm)**

								Nº
Bullet catch sash component	–	–	–	–	–	–	–	788363

[32] Bullet-catch frame component (optional SRH ≥ 1601 mm) → from page 209**[33] Lifting mishandling device sash component**

								Nº
Sash component for lifting mishandling device	–	–	–	–	–	–	–	795927

[34] Lifting mishandling device frame component → from page 210**[36] Stay guide – basic security**

								Nº
290 – 410	150	300	–	–	–	–	–	787345
411 – 600	250	490	–	–	–	–	–	787346
601 – 800	350	690	–	–	–	–	–	787347
801 – 1000	500	890	1	E	–	–	–	788617
1001 – 1200	500	1090	1	E	–	–	–	787349
1201 – 1400	500	1290	1	E	–	–	–	787351

**INFO**

With SRW < 310 mm, remove the assembly clip.

[38] Stay arm, system 12/20-13

			Nº
290 – 410	150	Left	787233
290 – 410	150	Right	787234
411 – 600	250	Left	787235
411 – 600	250	Right	787236
601 – 800	350	Left	787237
601 – 800	350	Right	787238
801 – 1400	500	Left	787239
801 – 1400	500	Right	787240

**INFO**

With SRH < 500 mm, set the tilt depth to 80 mm (with sash stay from size 250 and above).

[39] Stay bearing

	Nº
P 3/130	859171
P 6/130	859172
P 6/150	859173

[40] Stay-bearing pin

		Nº
Stay-bearing pin	86	834705

[41] Sash stay cover caps → CTL_105**[44] Corner hinge**

		Nº
K 6/130	Height adjustable	263858
P 6/150		
K 6/130	Height and gasket-compression adjustable	445171
P 6/150		

[45] Pivot rest

		Nº
P 3/130	Laterally adjustable	787207
P 6/130	Laterally adjustable	787208
P 6/150	Laterally adjustable	787209

[46] Corner hinge / pivot rest cover caps → CTL_105**[48] Additional stay arm (SRW ≥ 1401 mm)**

		Nº
Frame and sash component	200	255237

[49] Packer → from page 207

[54] Handle → CTL_1

Optional

[63] Night vent, SRW ≥ 601 mm → from page 212

**INFO**

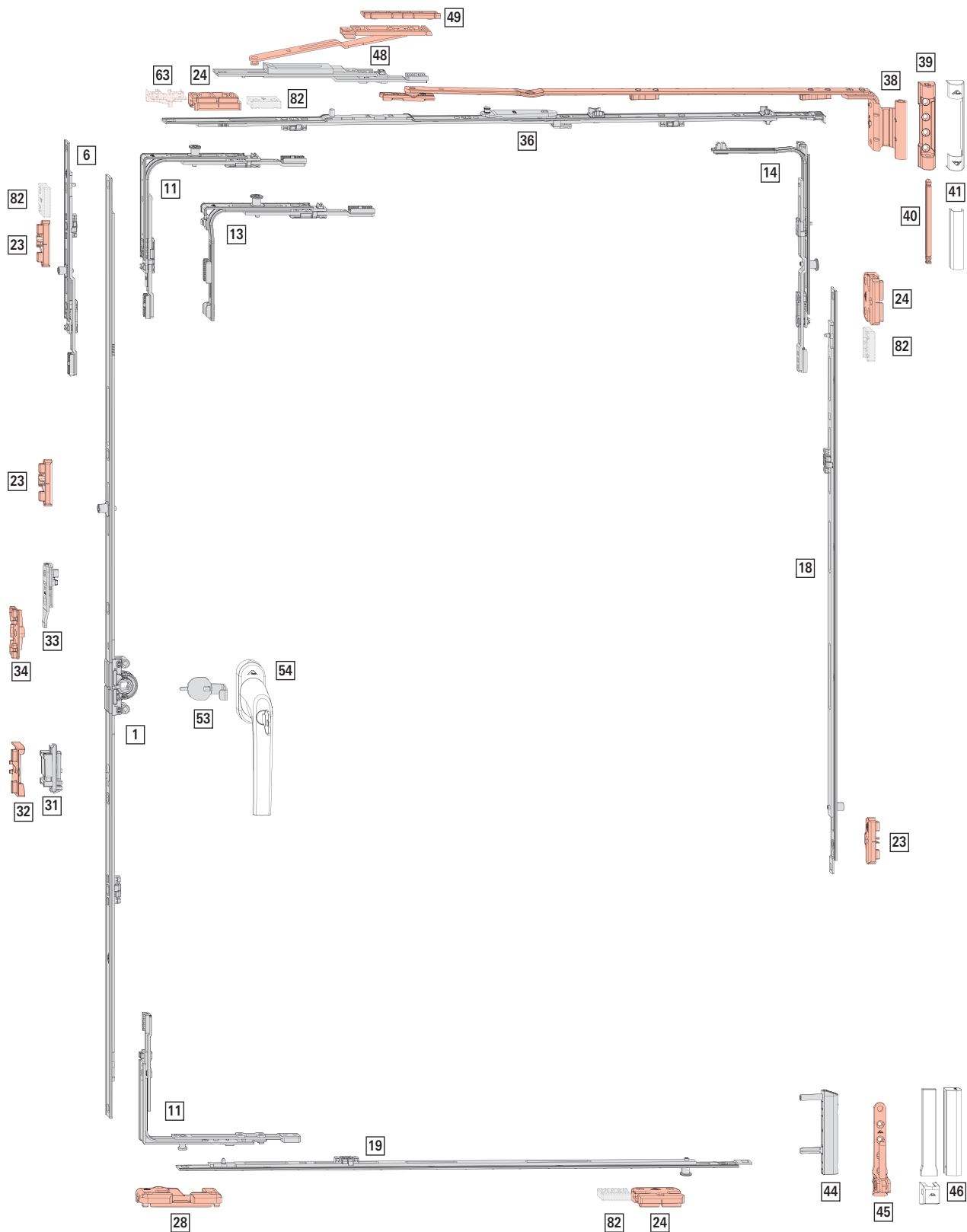
Only for use in conjunction with P or V cam.

Sash lifter → CTL_105

Arrestable brake stay → CTL_105



4.1.1.2 RC 1 N





Application range

SRW: 320 – 1600 mm

SRH: 280 – 2800 mm

[1] T&T espagnolette, VT – fixed handle height, backset 15 mm

								Nº
280 – 570	120	460	Y	N	–	–	–	742199
511 – 710	170	600	Y	Y	–	–	–	795324
601 – 800	263	690	N	Y	–	–	–	619591
801 – 1000	413	890	N	Y	1	E	–	619592
1001 – 1200	513	1090	N	Y	1	E	–	619593
1201 – 1400	563	1290	N	Y	1	E	–	619594
1401 – 1600	563	1490	N	Y	2	E	–	619595
1601 – 1800	563	1690	N	Y	2	E	–	619596
1601 – 1800	1000	1690	N	Y	2	E	–	838345
1801 – 2000	1000	1890	N	Y	2	E	–	794637
2001 – 2200	1000	2090	N	Y	3	E	–	794638
2201 – 2400	1000	2290	N	Y	3	E	–	794639



INFO

With SRH 280 – 290 mm, the screw guide must be removed (e.g. using pliers).

[6] Espagnolette extension, (SRH ≥ 2401 mm)

				Nº
200	Y	1	E	450821
400	Y	1	E	280346

Size-specific combinations:

				Nº
2401 – 2600	200 KU	1	E	450821
2601 – 2800	400 KU	1	E	280346

[11] Standard corner drive

		Nº
1	P	260277

[13] Special short corner drive

		Nº
1	P	260282

For use with SRH ≤ 370 mm.

[14] Sash stay corner drive

		Nº
1	P	260286

[18] Multipart centre lock – standard, vertical

				Nº
400	N	1	E	255280
600	N	1	E	255281
600	Y	1	E	255282

Size-specific combinations:

				Nº
801 – 1200	400	1	E	255280
1201 – 1400	600	1	E	255281
1401 – 1800	600 KU	1	E	255282
	400	1	E	255280
1801 – 2000	600 KU	1	E	255282
	600	1	E	255281
2001 – 2400	600 KU	1	E	255282
	600 KU	1	E	255282
	400	1	E	255280
2401 – 2600	600 KU	1	E	255282
	600 KU	1	E	255282
	600	1	E	255281
2601 – 2800	600 KU	1	E	255282
	600 KU	1	E	255282
	600 KU	1	E	255282
	400	1	E	255280

[19] Multipart centre lock – security, horizontal

				Nº
200	N	1	P	255284
400	N	1	P	255285
600	N	1	P	255286
600	Y	1	E	255282

Size-specific combinations:

				Nº
320 – 520	200	1	P	255284
521 – 730	400	1	P	255285
731 – 930	600	1	P	255286
931 – 1130	600 KU	1	E	255282
	200	1	P	255284
1131 – 1330	600 KU	1	E	255282
	400	1	P	255285
1331 – 1530	600 KU	1	E	255282
	600	1	P	255286
1531 – 1600	600 KU	1	E	255282
	600 KU	1	E	255282
	200	1	P	255284

[23] Striker → from page 201

[24] Security striker → from page 202

[28] Tilt striker → from page 196

[31] Bullet catch sash component (optional SRH ≥ 1601 mm)

	Nº
Bullet catch sash component	788363

[32] Bullet-catch frame component (optional SRH ≥ 1601 mm) → *from page 209***[33] Lifting mishandling device sash component**

	Nº
Sash component for lifting mishandling device	795927

[34] Lifting mishandling device frame component → *from page 210***[36] Stay guide – basic security**

					Nº
290 – 410	150	300	–	–	787345
411 – 600	250	490	–	–	787346
601 – 800	350	690	–	–	787347
801 – 1000	500	890	1	E	788617
1001 – 1200	500	1090	1	E	787349
1201 – 1400	500	1290	1	E	787351

[38] Stay arm, system 12/20-13

			Nº
290 – 410	150	Left	787233
290 – 410	150	Right	787234
411 – 600	250	Left	787235
411 – 600	250	Right	787236
601 – 800	350	Left	787237
601 – 800	350	Right	787238
801 – 1400	500	Left	787239
801 – 1400	500	Right	787240

**INFO**

With SRH < 500 mm, set the tilt depth to 80 mm (with sash stay from size 250 and above).

[39] Stay bearing

	Nº
P 3/130	859171
P 6/130	859172
P 6/150	859173

[40] Stay-bearing pin

		Nº
Stay-bearing pin	86	834705

[41] Sash stay cover caps → CTL_105**[44] Corner hinge**

		Nº
K 6/130 P 6/150	Height adjustable	263858
K 6/130 P 6/150	Height and gasket-compression adjustable	445171

[45] Pivot rest

		Nº
P 3/130	Laterally adjustable	787207
P 6/130	Laterally adjustable	787208
P 6/150	Laterally adjustable	787209

[46] Corner hinge / pivot rest cover caps → CTL_105**[48] Additional stay arm** (SRW ≥ 1401 mm)

		Nº
Frame and sash component	200	255237

[49] Packer → *from page 207***[53] Drilling protection**

	Nº
Drilling protection	797819

[54] Handle, lockable → CTL_1**Optional****[63] Night vent, SRW ≥ 601 mm** → *from page 212***INFO**

Only for use in conjunction with P or V cam.

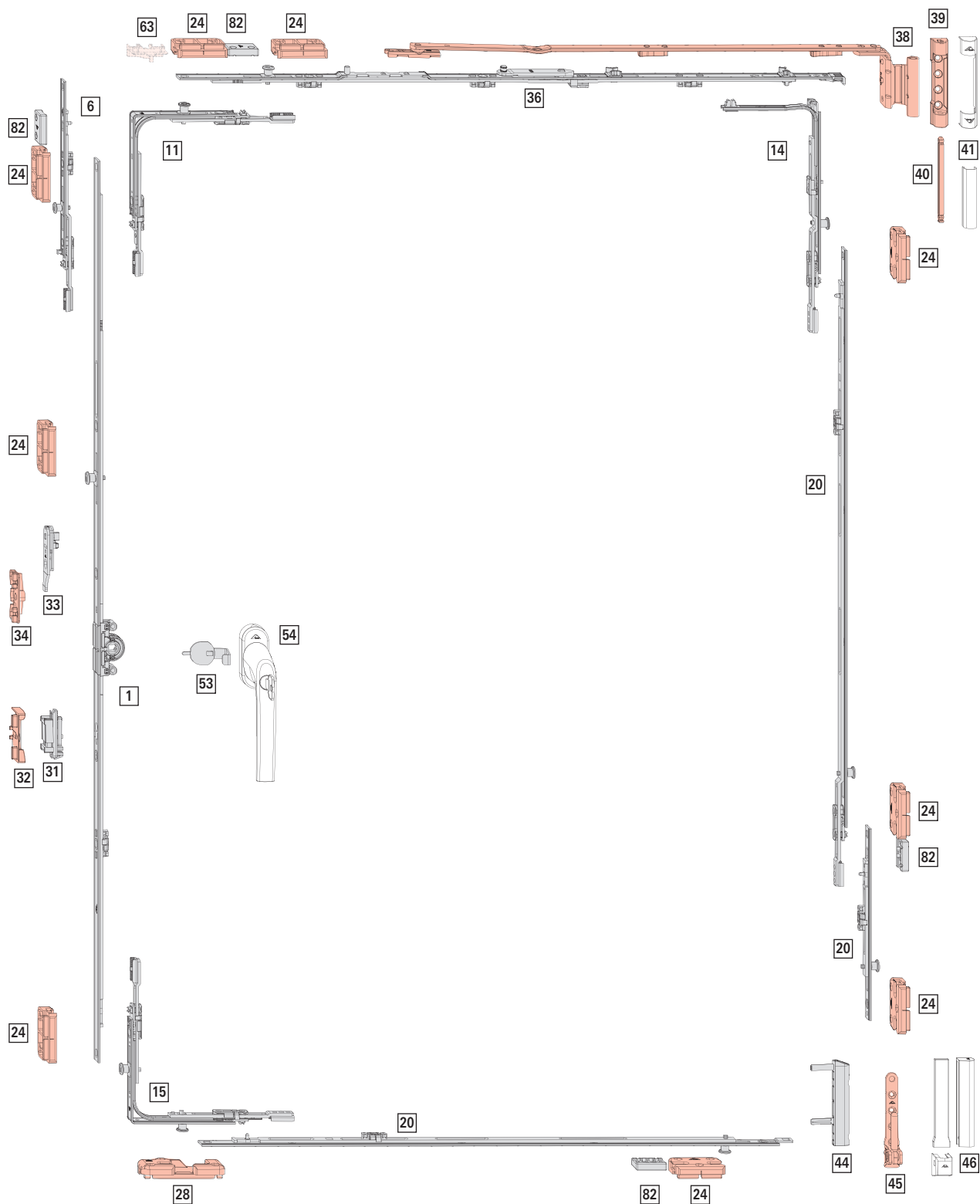
[82] Anti-jemmy device

		Nº
Anti-jemmy device	From rebate depth 26 mm	811715

Sash lifter → CTL_105



4.1.1.3 RC 2 / RC 2 N





Application range

SRW: 320 – 1400 mm

SRH: 600 – 2800 mm

[1] T&T espagnolette, VT – fixed handle height, backset 15 mm

							Nº
601 – 800	263	690	N	Y	–	–	619591
801 – 1000	413	890	N	Y	1	V	626542
1001 – 1200	513	1090	N	Y	1	V	626543
1201 – 1400	563	1290	N	Y	1	V	626544
1401 – 1600	563	1490	N	Y	2	V	626575
1601 – 1800	563	1690	N	Y	2	V	626576
1601 – 1800	1000	1690	N	Y	2	V	838324
1801 – 2000	1000	1890	N	Y	2	V	794641
2001 – 2200	1000	2090	N	Y	3	V	794642
2201 – 2400	1000	2290	N	Y	3	V	794643

[6] Espagnolette extension, (SRH ≥ 2401 mm)

				Nº
200	Y	1	V	337708
400	Y	1	V	337710

Size-specific combinations:

				Nº
2401 – 2600	200 KU	1	V	337708
2601 – 2800	400 KU	1	V	337710

[11] Standard corner drive

		Nº
1	V	260272

[14] Sash stay corner drive

		Nº
1	V	260284

[15] Standard corner drive (RC3)

		Nº
2	V	260274

[20] Multipart centre lock – security, horizontal and vertical

				Nº
200	N	1	V	296853
400	N	1	V	296854
600	N	1	V	296855
600	Y	1	V	337711

Size-specific combinations:

					Nº
320 – 600	510 – 700	200	1	V	296853
601 – 800	701 – 900	400	1	V	296854
801 – 1000	901 – 1100	600	1	V	296855

					Nº
1001 – 1200	1101 – 1300	600 KU	1	V	337711
		200	1	V	296853
1201 – 1400	1301 – 1500	600 KU	1	V	337711
		400	1	V	296854
	1501 – 1700	600 KU	1	V	337711
		600	1	V	296855
	1701 – 1900	600 KU	1	V	337711
		600 KU	1	V	337711
		200	1	V	296853
		600 KU	1	V	337711
	1901 – 2100	600 KU	1	V	337711
		600 KU	1	V	337711
		400	1	V	296854
		600 KU	1	V	337711
	2101 – 2300	600 KU	1	V	337711
		600 KU	1	V	337711
		600	1	V	296855
		600 KU	1	V	337711
	2301 – 2500	600 KU	1	V	337711
		600 KU	1	V	337711
		600 KU	1	V	337711
		200	1	V	296853
	2501 – 2700	600 KU	1	V	337711
		600 KU	1	V	337711
		600 KU	1	V	337711
		400	1	V	296854
	2701 – 2800	600 KU	1	V	337711
		600 KU	1	V	337711
		600 KU	1	V	337711
		600	1	V	296855

[24] Security striker → from page 202**[28] Tilt striker → from page 196****[31] Bullet catch sash component (optional SRH ≥ 1601 mm)**

	Nº
Bullet catch sash component	788363

[32] Bullet-catch frame component (optional SRH ≥ 1601 mm) → from page 209**[33] Lifting mishandling device sash component**

	Nº
Sash component for lifting mishandling device	795927

[34] Lifting mishandling device frame component → from page 210**[36] Stay guide – security**

					Nº
290 – 410	150	300	–	–	787345
411 – 600	250	490	–	–	787346
601 – 800	350	690	–	–	787347
801 – 1000	500	890	1	V	787360

					Nº
1001 – 1200	500	1090	1	V	787361
1201 – 1400	500	1290	1	V	787362

[38] Stay arm, system 12/20-13

			Nº
290 – 410	150	Left	787233
290 – 410	150	Right	787234
411 – 600	250	Left	787235
411 – 600	250	Right	787236
601 – 800	350	Left	787237
601 – 800	350	Right	787238
801 – 1400	500	Left	787239
801 – 1400	500	Right	787240

[39] Stay bearing

	Nº
P 3/130	859171
P 6/130	859172
P 6/150	859173

[40] Stay-bearing pin

		Nº
Stay-bearing pin	86	834705

[41] Sash stay cover caps → CTL_105

[44] Corner hinge

		Nº
K 6/130 P 6/150	Height adjustable	263858
K 6/130 P 6/150	Height and gasket-compression adjustable	445171

[45] Pivot rest

		Nº
P 3/130	Laterally adjustable	787207
P 6/130	Laterally adjustable	787208
P 6/150	Laterally adjustable	787209

[46] Corner hinge / pivot rest cover caps → CTL_105

[53] Drilling protection

	Nº
Drilling protection	797819

[54] Handle, lockable → CTL_1

[82] Anti-jemmy device

		Nº
Anti-jemmy device	From rebate depth 26 mm	811715

Optional

[63] Night vent, SRW ≥ 601 mm → *from page 212*



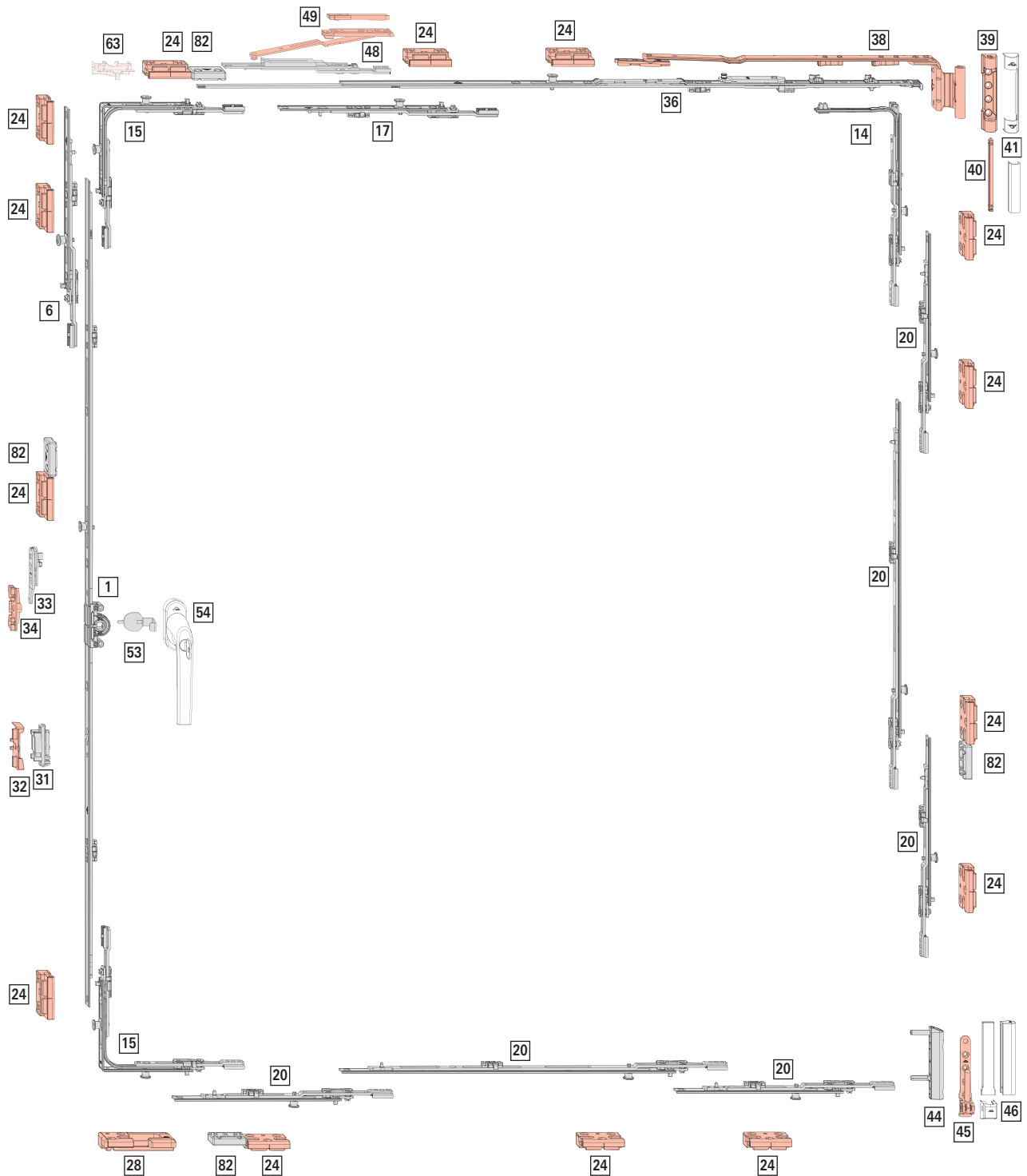
INFO

Only for use in conjunction with P or V cam.

Sash lifter → CTL_105



4.1.1.4 RC 3





Application range

SRW: 490 – 1400 mm

SRH: 600 – 2800 mm

[1] T&T espagnolette, VT – fixed handle height, backset 15 mm

							Nº
601 – 800	263	690	N	Y	–	–	619591
801 – 1000	413	890	N	Y	1	V	626542
1001 – 1200	513	1090	N	Y	1	V	626543
1201 – 1400	563	1290	N	Y	1	V	626544
1401 – 1600	563	1490	N	Y	2	V	626575
1601 – 1800	563	1690	N	Y	2	V	626576
1601 – 1800	1000	1690	N	Y	2	V	838324
1801 – 2000	1000	1890	N	Y	2	V	794641
2001 – 2200	1000	2090	N	Y	3	V	794642
2201 – 2400	1000	2290	N	Y	3	V	794643

[6] Espagnolette extension, (SRH ≥ 2401 mm)

				Nº
200	Y	1	V	337708
400	Y	1	V	337710

Size-specific combinations:

				Nº
2401 – 2600	200 KU	1	V	337708
2601 – 2800	400 KU	1	V	337710

[14] Sash stay corner drive

		Nº
1	V	260284

[15] Standard corner drive (RC3)

		Nº
2	V	260274

[17] Centre lock, multipart – standard, horizontal – top

				Nº
200	Y	1	V	337708

Size-specific combinations:

				Nº
1001 – 1400	200 KU	1	V	337708

[20] Multipart centre lock – security, horizontal and vertical

				Nº
200	Y	1	V	337708
400	Y	1	V	337710

Size-specific combinations:

					Nº
490 – 600	–	200 KU	1	V	337708
601 – 800	600 – 800	200 KU	1	V	337708
		200 KU	1	V	337708
801 – 1000	801 – 1000	200 KU	1	V	337708
		200 KU	1	V	337708
		200 KU	1	V	337708
1001 – 1200	1001 – 1200	200 KU	1	V	337708
		400 KU	1	V	337710
		200 KU	1	V	337708
1201 – 1400	1201 – 1400	200 KU	1	V	337708
		400 KU	1	V	337710
		200 KU	1	V	337708
		200 KU	1	V	337708
	1401 – 1600	200 KU	1	V	337708
		400 KU	1	V	337710
		400 KU	1	V	337710
		200 KU	1	V	337708
		200 KU	1	V	337708
	1601 – 1800	200 KU	1	V	337708
		400 KU	1	V	337710
		400 KU	1	V	337710
		200 KU	1	V	337708
		200 KU	1	V	337708
	1801 – 2000	200 KU	1	V	337708
		400 KU	1	V	337710
		400 KU	1	V	337710
		200 KU	1	V	337708
	2001 – 2200	200 KU	1	V	337708
		400 KU	1	V	337710
		400 KU	1	V	337710
		400 KU	1	V	337710
		200 KU	1	V	337708
		200 KU	1	V	337708

					Nº
1201 – 1400	2201 – 2400	200 KU	1	V	337708
		400 KU	1	V	337710
		400 KU	1	V	337710
		400 KU	1	V	337710
		400 KU	1	V	337710
		200 KU	1	V	337708
	2401 – 2600	200 KU	1	V	337708
		400 KU	1	V	337710
		400 KU	1	V	337710
		400 KU	1	V	337710
		400 KU	1	V	337710
		200 KU	1	V	337708
	2601 – 2800	200 KU	1	V	337708
		400 KU	1	V	337710
		400 KU	1	V	337710
		400 KU	1	V	337710
		400 KU	1	V	337710
		400 KU	1	V	337710
		200 KU	1	V	337708

[24] Security striker → from page 204**[28] Tilt striker → from page 198****[31] Bullet catch sash component (optional SRH ≥ 1601 mm)**

	Nº
Bullet catch sash component	788363

[32] Bullet-catch frame component (optional SRH ≥ 1601 mm) → from page 209**[33] Lifting mishandling device sash component**

	Nº
Sash component for lifting mishandling device	795927

[34] Lifting mishandling device frame component → from page 210**[36] Stay guide – security**

					Nº
411 – 600	250	490	–	–	787346
601 – 800	350	690	–	–	787347
801 – 1000	350	890	1	V	787358

[38] Stay arm, system 12/20-13

			Nº
411 – 600	250	Left	787235
411 – 600	250	Right	787236
601 – 800	350	Left	787237
601 – 800	350	Right	787238

[39] Stay bearing

	Nº
P 3/130	859171
P 6/130	859172
P 6/150	859173

[40] Stay-bearing pin

		Nº
Stay-bearing pin	86	834705

[41] Sash stay cover caps → CTL_105**[44] Corner hinge**

		Nº
K 6/130	Height adjustable	263858
P 6/150		
K 6/130	Height and gasket-compression adjustable	445171
P 6/150		

[45] Pivot rest

		Nº
P 3/130	Laterally adjustable	787207
P 6/130	Laterally adjustable	787208
P 6/150	Laterally adjustable	787209

[46] Corner hinge / pivot rest cover caps → CTL_105**[48] Additional stay arm (SRW ≥ 1201 mm)**

		Nº
Frame and sash component	200	255237

[49] Packer → from page 207**[53] Drilling protection**

	Nº
Drilling protection	797819

[54] Handle, lockable → CTL_1**[82] Anti-jemmy device**

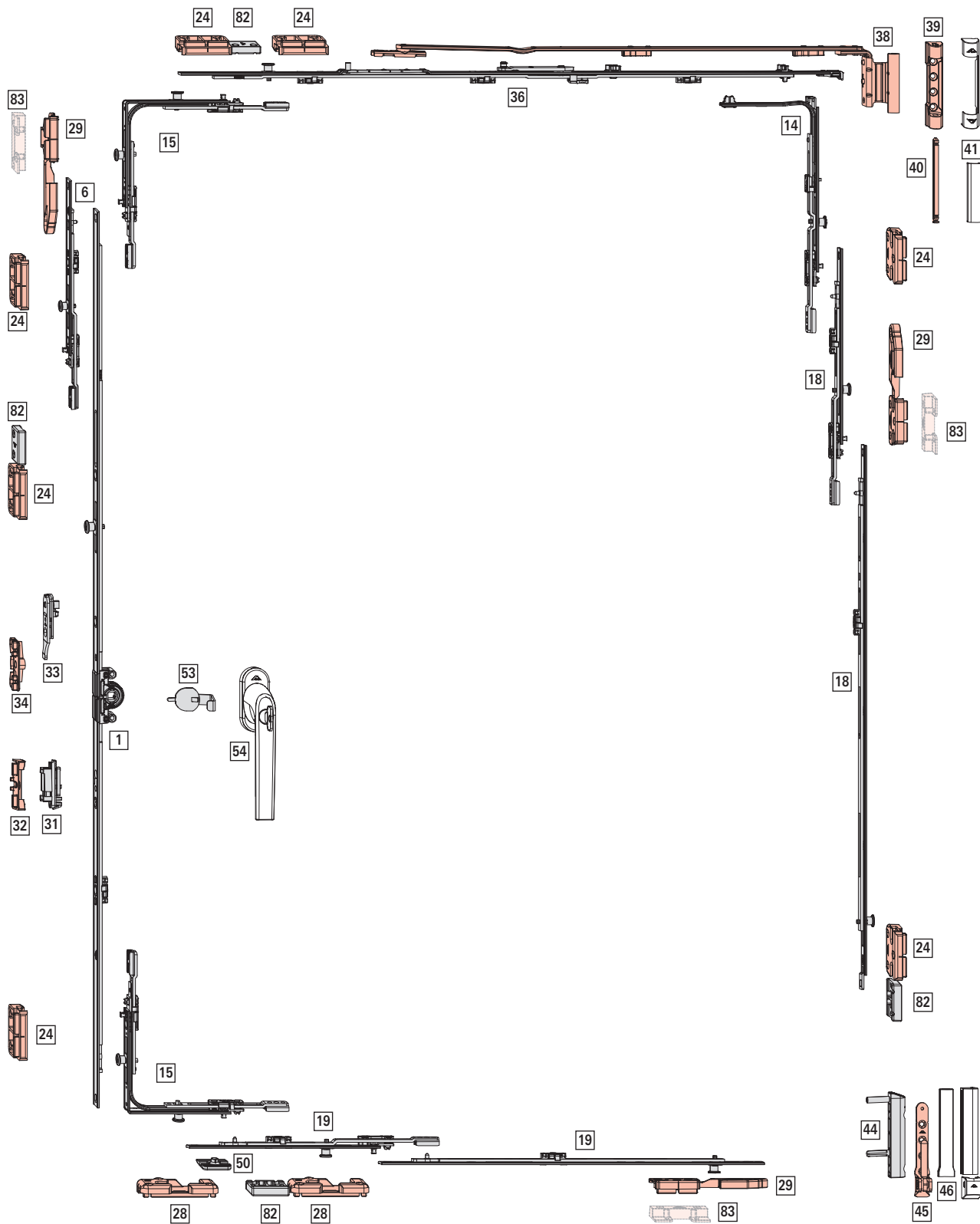
		Nº
Anti-jemmy device	From rebate depth 26 mm	811715

Optional**[63] Night vent, SRW ≥ 601 mm → from page 212****INFO**

Only for use in conjunction with P or V cam.



4.1.1.5 TiltSafe RC 2 / RC 2 N





Application range

SRW: 410 – 1400 mm

SRH: 600 – 2800 mm



INFO

Only for hardware axis 13 and rebate depth 30 mm.

[1] T&T espagnolette, VT – fixed handle height, backset 15 mm

							Nº
601 – 800	263	690	N	Y	–	–	619591
801 – 1000	413	890	N	Y	1	V	626542
1001 – 1200	513	1090	N	Y	1	V	626543
1201 – 1400	563	1290	N	Y	1	V	626544
1401 – 1600	563	1490	N	Y	2	V	626575
1601 – 1800	563	1690	N	Y	2	V	626576
1601 – 1800	1000	1690	N	Y	2	V	838324
1801 – 2000	1000	1890	N	Y	2	V	794641
2001 – 2200	1000	2090	N	Y	3	V	794642
2201 – 2400	1000	2290	N	Y	3	V	794643

[6] Espagnolette extension, (SRH ≥ 2401 mm)

				Nº
200	Y	1	V	337708
400	Y	1	V	337710

Size-specific combinations:

				Nº
2401 – 2600	200 KU	1	V	337708
2601 – 2800	400 KU	1	V	337710

[14] Sash stay corner drive

		Nº
1	V	260284

[15] Standard corner drive (RC3)

		Nº
2	V	260274

[18] Multipart centre lock – security, vertical

				Nº
200	N	1	V	296853
200	Y	1	V	337708
400	N	1	V	296854
400	Y	1	V	337710
600	N	1	V	296855
600	Y	1	V	337711

Size-specific combinations:

				Nº
510 – 700	200	1	V	296853

				Nº
701 – 900	200 KU	1	V	337708
	200	1	V	296853
901 – 1100	200 KU	1	V	337708
	400	1	V	296854
1101 – 1300	200 KU	1	V	337708
	600	1	V	296855
1301 – 1500	200 KU	1	V	337708
	600 KU	1	V	337711
	200	1	V	296853
1501 – 1700	200 KU	1	V	337708
	600 KU	1	V	337711
	400	1	V	296854
1701 – 1900	200 KU	1	V	337708
	600 KU	1	V	337711
	600	1	V	296855
1901 – 2100	200 KU	1	V	337708
	600 KU	1	V	337711
	600 KU	1	V	337711
	200	1	V	296853
2101 – 2300	200 KU	1	V	337708
	600 KU	1	V	337711
	600 KU	1	V	337711
	400	1	V	296854
2301 – 2500	200 KU	1	V	337708
	600 KU	1	V	337711
	600 KU	1	V	337711
	600	1	V	296855
2501 – 2700	200 KU	1	V	337708
	600 KU	1	V	337711
	600 KU	1	V	337711
	600 KU	1	V	337711
2701 – 2800	200	1	V	296853
	200 KU	1	V	337708
	600 KU	1	V	337711
	600 KU	1	V	337711
	600 KU	1	V	337711
	600 KU	1	V	337711
	400	1	V	296854

[19] Multipart centre lock – security, horizontal

				Nº
200	N	1	V	296853
200	Y	1	V	337708
400	Y	1	V	337710

Size-specific combinations:

				Nº
410 – 600	200	1	V	296853
601 – 800	200 KU	1	V	337708
	200	1	V	296853

				Nº
801 – 1000	200 KU	1	V	337708
	400 KU	1	V	337710
1001 – 1200	200 KU	1	V	337708
	400 KU	1	V	337710
	200	1	V	296853
1201 – 1400	200 KU	1	V	337708
	400 KU	1	V	337710
	400 KU	1	V	337710

[24] Security striker → from page 202

[28] Tilt striker → from page 196

[29] Security striker for tilt ventilation → from page 206

[31] Bullet catch sash component (optional SRH ≥ 1601 mm)

	Nº
Bullet catch sash component	788363

[32] Bullet-catch frame component (optional SRH ≥ 1601 mm) → from page 209

[33] Lifting mishandling device sash component

	Nº
Sash component for lifting mishandling device	795927

[34] Lifting mishandling device frame component → from page 210

[36] Stay guide – security

					Nº
411 – 600	250	490	–	–	787346
601 – 800	350	690	–	–	787347
801 – 1000	500	890	1	V	787360
1001 – 1200	500	1090	1	V	787361
1201 – 1400	500	1290	1	V	787362

[38] Stay arm, system 12/20-13

			Nº
411 – 600	250	Left	787235
411 – 600	250	Right	787236
601 – 800	350	Left	787237
601 – 800	350	Right	787238
801 – 1400	500	Left	787239
801 – 1400	500	Right	787240

[39] Stay bearing

	Nº
P 3/130	859171
P 6/130	859172
P 6/150	859173

[40] Stay-bearing pin

		Nº
Stay-bearing pin	86	834705

[41] Sash stay cover caps → CTL_105

[44] Corner hinge

		Nº
K 6/130 P 6/150	Height adjustable	263858
K 6/130 P 6/150	Height and gasket-compression adjustable	445171

[45] Pivot rest

		Nº
P 3/130	Laterally adjustable	787207
P 6/130	Laterally adjustable	787208
P 6/150	Laterally adjustable	787209

[46] Corner hinge / pivot rest cover caps → CTL_105

[50] Rebate run-up block

	Nº
Sash	350403

[53] Drilling protection

	Nº
Drilling protection	797819

[54] Handle, lockable → CTL_1

[82] Anti-jemmy device

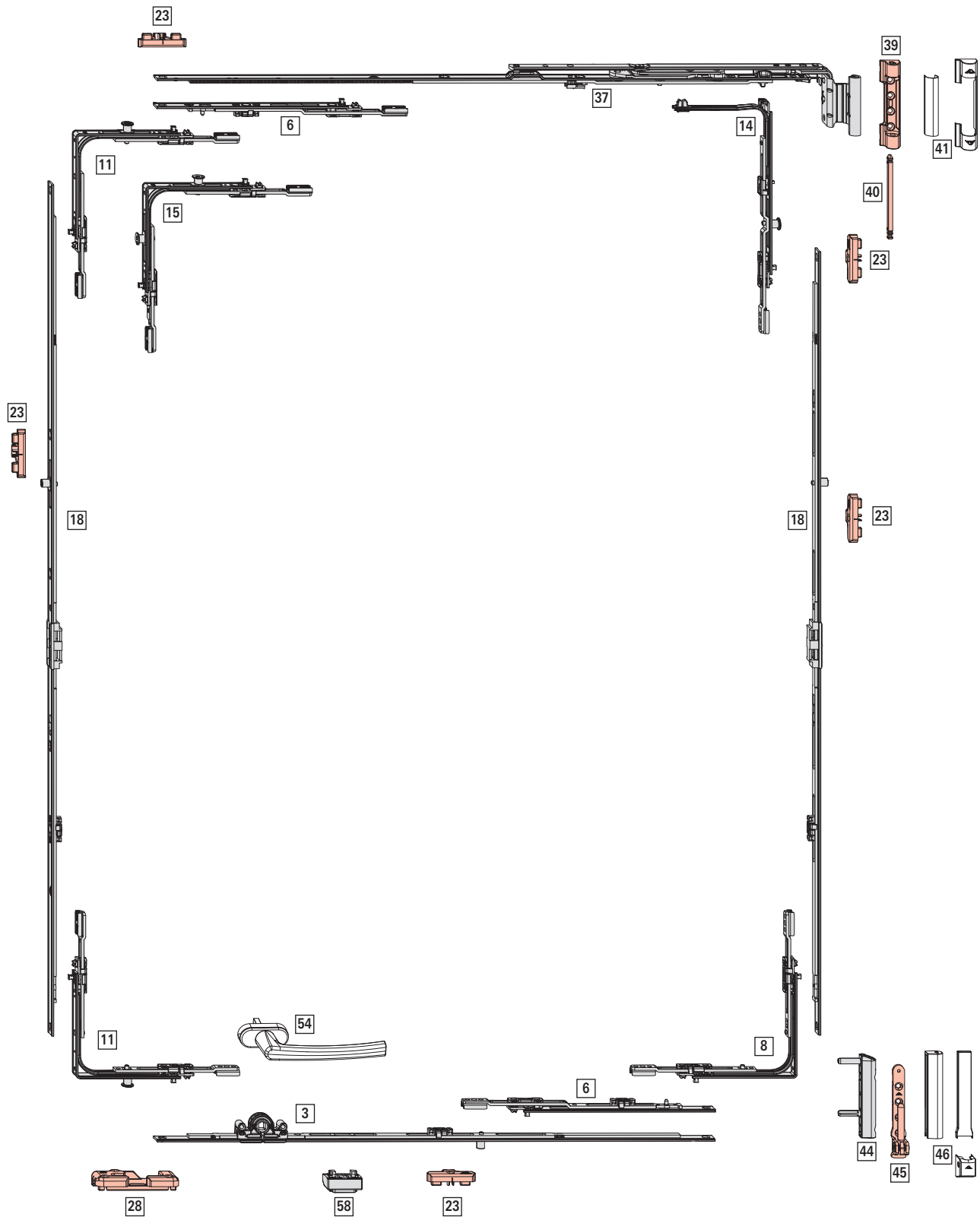
		Nº
Anti-jemmy device	From rebate depth 26 mm	811715

Optional

[83] TiltSafe protective support → from page 206



4.1.1.6 Comfort – basic security



**Application range****SRW:** 520 – 1400 mm**SRH:** 530 – 1600 mm**S.kg:** max. 50 kg**[3] T&T espagnolette – comfort, fixed handle height**
backset 15 mm

				Nº
520 – 700	490	–	–	307029
701 – 900	690	1	E	307030

[6] Espagnolette extension, horizontal

				Nº
200	Y	–	–	308267
400	Y	1	E	260193

Size-specific combinations:

					Nº
bottom	top				
901 – 1100	1001 – 1200	200	–	–	308267
1101 – 1300	1201 – 1400	400	1	E	260193
1301 – 1400	–	200	–	–	308267
		400	1	E	260193

[8] Corner drive, standard, without cam

		Nº
–	–	339785

[11] Standard corner drive

			Nº
1	E	Top	260275
1	P	Top Bottom	260277

[14] Sash stay corner drive

		Nº
1	P	260286

[15] Standard corner drive (RC3)

		Nº
2	V	260274

For use with SRH ≤ 601 mm.

[18] Multipart centre lock – standard, vertical

			Nº
380	–	–	812595
690	–	–	774165
890	1	E	774174
1090	1	E	774175
1290	1	E	774176
1490	2	E	774177

Size-specific combinations:

					Nº
	Hinge side				
530 – 600	530 – 670	380	–	–	812595
601 – 800	671 – 870	690	–	–	774165
801 – 1000	871 – 1070	890	1	E	774174
1001 – 1200	1071 – 1270	1090	1	E	774175
1201 – 1400	1271 – 1470	1290	1	E	774176
1401 – 1600	1471 – 1600	1490	2	E	774177

[23] Striker → from page 201**[28] Tilt striker → from page 196****[37] Scissor stay, forcibly controlled, system**
12/20-13

					Nº
460 – 600	490	Left	–	–	795032
		Right	–	–	795033
601 – 800	690	Left	–	–	795036
		Right	–	–	795037
801 – 1000	890	Left	1	E	795040
		Right	1	E	795041

[39] Stay bearing

	Nº
P 3/130	859171
P 6/130	859172
P 6/150	859173

[40] Stay-bearing pin

		Nº
Stay-bearing pin	86	834705

[41] Sash stay cover caps → CTL_105**[44] Corner hinge**

		Nº
K 6/130	Height adjustable	263858
P 6/150		
K 6/130	Height and gasket-compression adjustable	445171
P 6/150		

[45] Pivot rest

		Nº
P 3/130	Laterally adjustable	787207
P 6/130	Laterally adjustable	787208
P 6/150	Laterally adjustable	787209

[46] Corner hinge / pivot rest cover caps →
CTL_105**[54] Handle → CTL_1**Handle 160 mm under Roto Patio Alversa,
Roto Patio Inowa: Roto Line design

[58] Run-up block with mishandling device



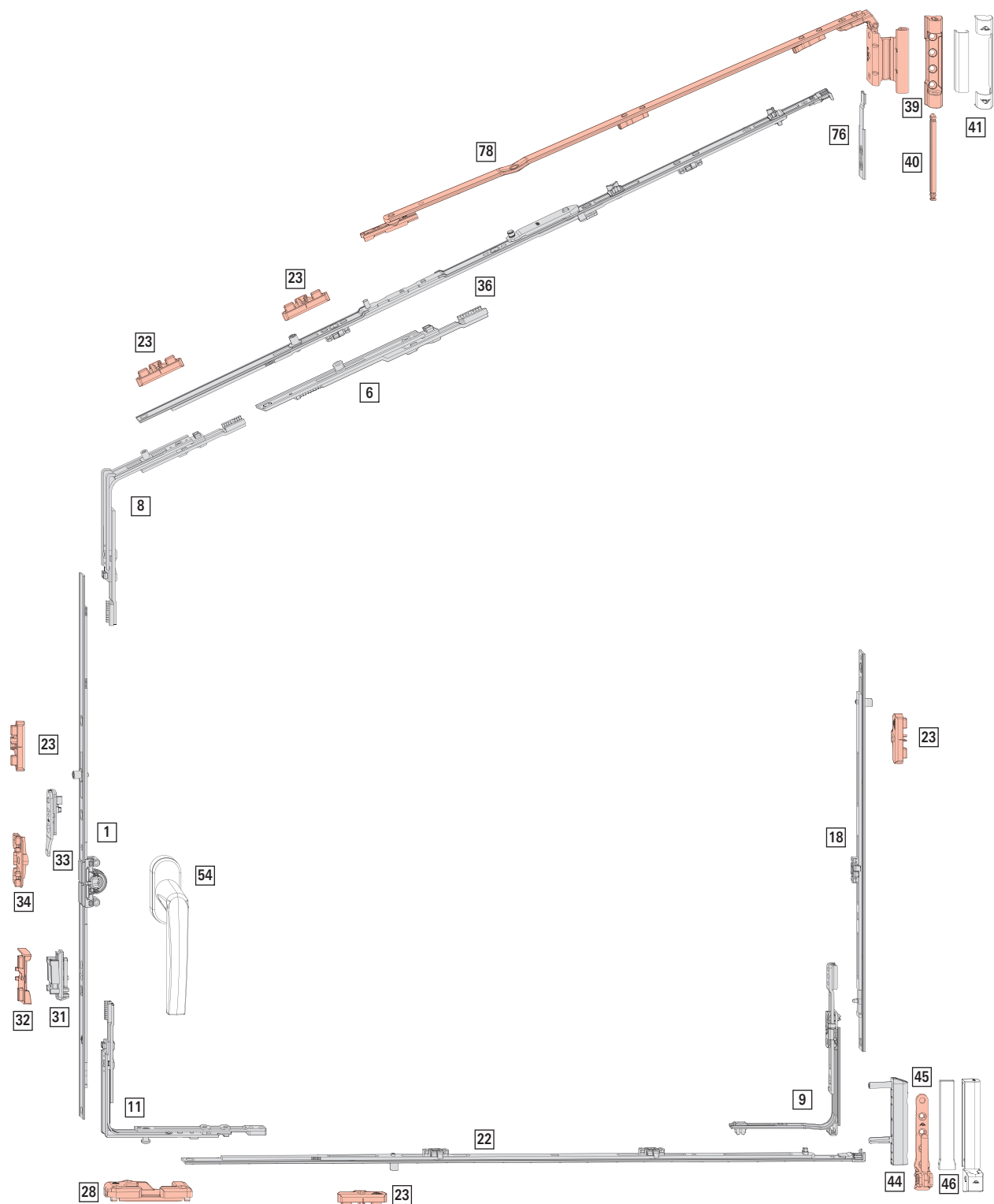
Nº

Sash

307050



4.1.1.7 Pitched window – basic security



**Application range****SRW:** 340 – 1300 mm**SRH:** 361 – 2400 mm**S.kg:** max. 80 kg**[1] T&T espagnolette, VT – fixed handle height, backset 15 mm**

							Nº
280 – 570	120	460	Y	N	–	–	742199
511 – 710	170	600	Y	Y	–	–	795324
601 – 800	263	690	N	Y	–	–	619591
801 – 1000	413	890	N	Y	1	E	619592
1001 – 1200	513	1090	N	Y	1	E	619593
1201 – 1400	563	1290	N	Y	1	E	619594
1401 – 1600	563	1490	N	Y	2	E	619595
1601 – 1800	563	1690	N	Y	2	E	619596
1601 – 1800	1000	1690	N	Y	2	E	838345
1801 – 2000	1000	1890	N	Y	2	E	794637
2001 – 2200	1000	2090	N	Y	3	E	794638
2201 – 2400	1000	2290	N	Y	3	E	794639

[6] Espagnolette extension

				Nº
200	Y	1	E	450821
400	Y	1	E	280346

Size-specific combinations:

				Nº
1401 – 1600	200 KU	1	E	450821
1601 – 1800	400 KU	1	E	280346

[8] Corner drive for pitched windows

		Nº
1	E	260279

[9] Corner drive for arched windows

	Nº
Standard	255273

[11] Standard corner drive

		Nº
1	P	260277

[18] Multipart centre lock – standard, vertical

				Nº
400	N	1	E	255280
600	N	1	E	255281
600	Y	1	E	255282

Size-specific combinations

				Nº
801 – 1200	400	1	E	255280
1201 – 1400	600	1	E	255281

				Nº
1401 – 1800	600 KU	1	E	255282
	400	1	E	255280
1801 – 2000	600 KU	1	E	255282
	600	1	E	255281
2001 – 2400	600 KU	1	E	255282
	600 KU	1	E	255282
	400	1	E	255280

[22] Arched component, vertical

					Nº
340 – 530	420	Y	–	–	245715
531 – 730	620	N	1	E	245717
731 – 930	820	N	1	E	245719
931 – 1130	1020	N	1	E	245721
1131 – 1330	1220	N	2	E	245723

[23] Striker → from page 201**[28] Tilt striker → from page 196****[31] Bullet catch sash component (optional SRH ≥ 1601 mm)**

	Nº
Bullet catch sash component	788363

[32] Bullet-catch frame component (optional SRH ≥ 1601 mm) → from page 209**[33] Lifting mishandling device sash component**

	Nº
Sash component for lifting mishandling device	795927

[34] Lifting mishandling device frame component → from page 210**[36] Stay guide – basic security**

							Nº
290 – 410	150	300	–	–	–	–	787345
411 – 600	250	490	–	–	–	–	787346
601 – 800	350	690	–	–	–	–	787347
801 – 1000	500	890	1	E	–	–	788617
1001 – 1200	500	1090	1	E	–	–	787349
1201 – 1400	500	1290	1	E	–	–	787351

[39] Stay bearing

	Nº
P 3/130	859171
P 6/130	859172
P 6/150	859173

[40] Stay-bearing pin

		Nº
Stay-bearing pin	86	834705

[41] Sash stay cover caps → CTL_105

[44] Corner hinge

		Nº
K 6/130	Height adjustable	263858
P 6/150		
K 6/130	Height and gasket-compression adjustable	445171
P 6/150		

[45] Pivot rest

		Nº
P 3/130	Laterally adjustable	787207
P 6/130	Laterally adjustable	787208
P 6/150	Laterally adjustable	787209

[46] Corner hinge / pivot rest cover caps → CTL_105

[54] Handle → CTL_1

[76] Pitched stay guide end piece

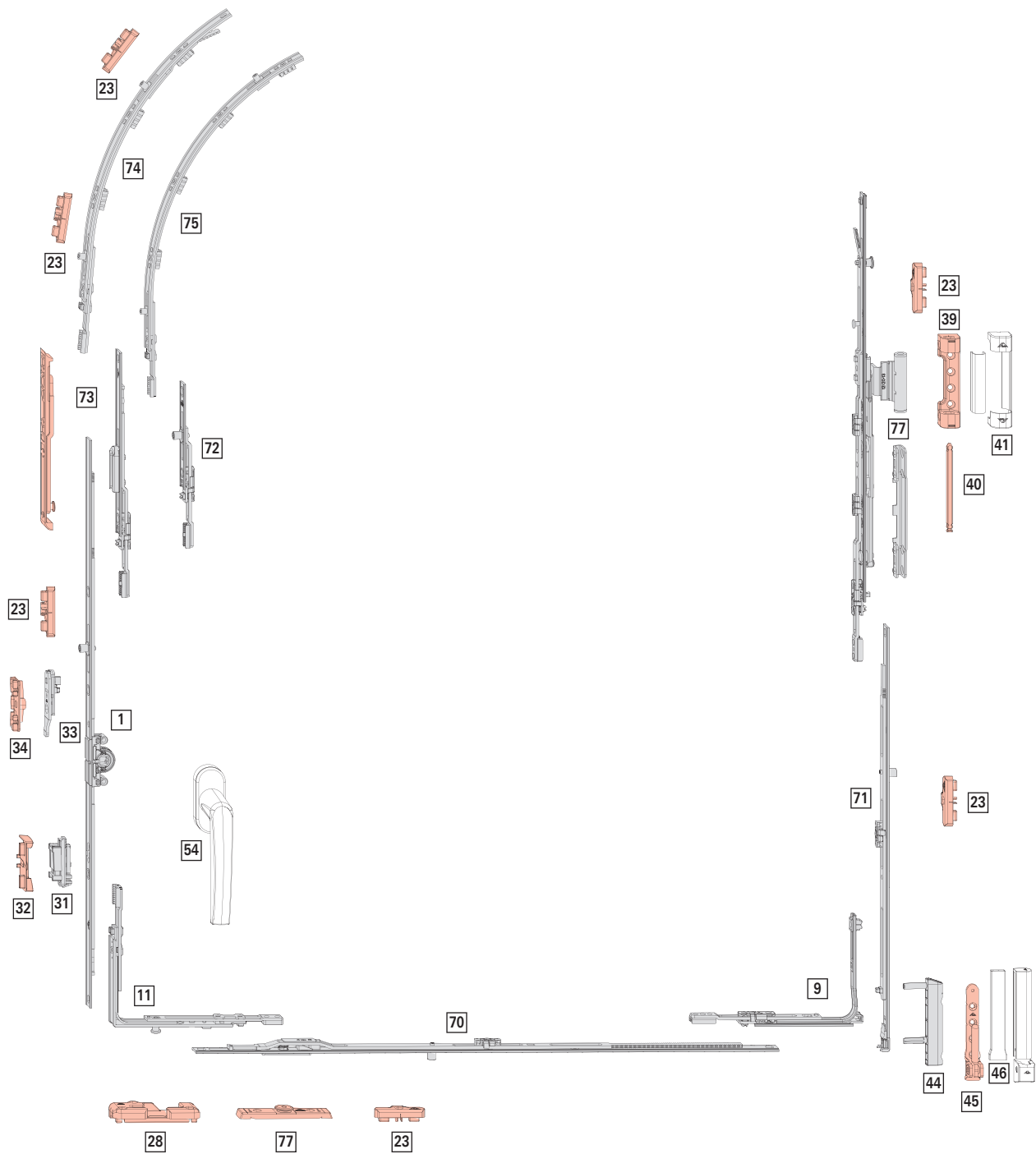
	Nº
Pitched stay guide end piece	246734

[78] Pitched window stay arm, system 12/20-13

			Nº
290 – 410	150	Left	795164
290 – 410	150	Right	795165
411 – 600	250	Left	795166
411 – 600	250	Right	795167
601 – 800	350	Left	795168
601 – 800	350	Right	795169
801 – 1400	500	Left	795170
801 – 1400	500	Right	795171



4.1.1.8 Arched window – basic security



**Application range**

SRW: 400 – 1300 mm

SRH: 510 – 1900 mm

S.kg: max. 80 kg

[1] T&T espagnolette, VT – fixed handle height, backset 15 mm

						Nº
511 – 710	170	600	Y	–	–	795324
601 – 800	263	690	N	–	–	619591
801 – 1000	413	890	N	1	E	619592
1001 – 1200	513	1090	N	1	E	619593
1201 – 1400	563	1290	N	1	E	619594
1401 – 1600	563	1490	N	2	E	619595
1601 – 1800	563	1690	N	2	E	619596
1601 – 1800	1000	1690	N	2	E	838345
1801 – 2000	1000	1890	N	2	E	794637

[1] T&T espagnolette, VT – fixed handle height, with additional stay arm, (SRW > 900 mm), backset 15 mm

					Nº
985 – 1184	413	890	1	E	619592
1185 – 1384	513	1090	1	E	619593
1385 – 1584	563	1290	1	E	619594
1585 – 1784	563	1490	2	E	619595
1785 – 1900	563	1690	2	E	619596
1785 – 1900	1000	1690	2	E	838345

[9] Corner drive for arched windows

	Nº
Standard	255273

[11] Standard corner drive

		Nº
1	P	260277

[23] Striker → from page 201**[28] Tilt striker → from page 196****[31] Bullet catch sash component (optional SRH ≥ 1601 mm)**

	Nº
Bullet catch sash component	788363

[32] Bullet-catch frame component (optional SRH ≥ 1601 mm) → from page 209**[33] Lifting mishandling device sash component**

	Nº
Sash component for lifting mishandling device	795927

[34] Lifting mishandling device frame component → from page 210**[39] Stay bearing, adjustable**

	Nº
P 3/100	840384
P 6/100	840403

[40] Stay-bearing pin

	Nº
Stay-bearing pin 86	834705

[41] Sash stay cover caps → CTL_105**[44] Corner hinge**

	Nº
K 6/130 Height adjustable	263858
P 6/150 Height and gasket-compression adjustable	445171

[45] Pivot rest

	Nº
P 3/130 Laterally adjustable	787207
P 6/130 Laterally adjustable	787208
P 6/150 Laterally adjustable	787209

[46] Corner hinge / pivot rest cover caps → CTL_105**[54] Handle → CTL_1****[70] Arched component, horizontal**

				Nº
400 – 500	380	–	–	812595
501 – 700	480	–	–	245729
701 – 900	680	1	E	245730
901 – 1100	880	1	E	245731
1101 – 1300	1080	1	E	245732

[71] Arched component, vertical

					Nº
500 – 700	420	Y	–	–	245715
701 – 900	620	N	1	E	245717
901 – 1100	820	N	1	E	245719
1101 – 1300	1020	N	1	E	245721
1301 – 1500	1220	N	2	E	245723
1501 – 1700	1420	N	2	E	245725
1701 – 1900	1620	N	2	E	245727

[72] Arched espagnolette connector

		Nº
1	E	245688

[73] Arched additional stay arm
(optional SRH > 985 mm)

		Nº
Frame and sash component	SRW from 900	245764

[74] Arched centre lock

					Nº
601 – 1000	750	N	2	E	245736

[75] Arched centre lock, couplable

					Nº
1001 – 1300	590	Y	2	E	245734

Size-specific combinations:

				Nº
601 – 1000	750	2	E	245736
1001 – 1300	590 KU	2	E	245734
	750	2	E	245736

[77] Arched window set, system 12/20-13

			Nº
Roto Sil	1	V	896118

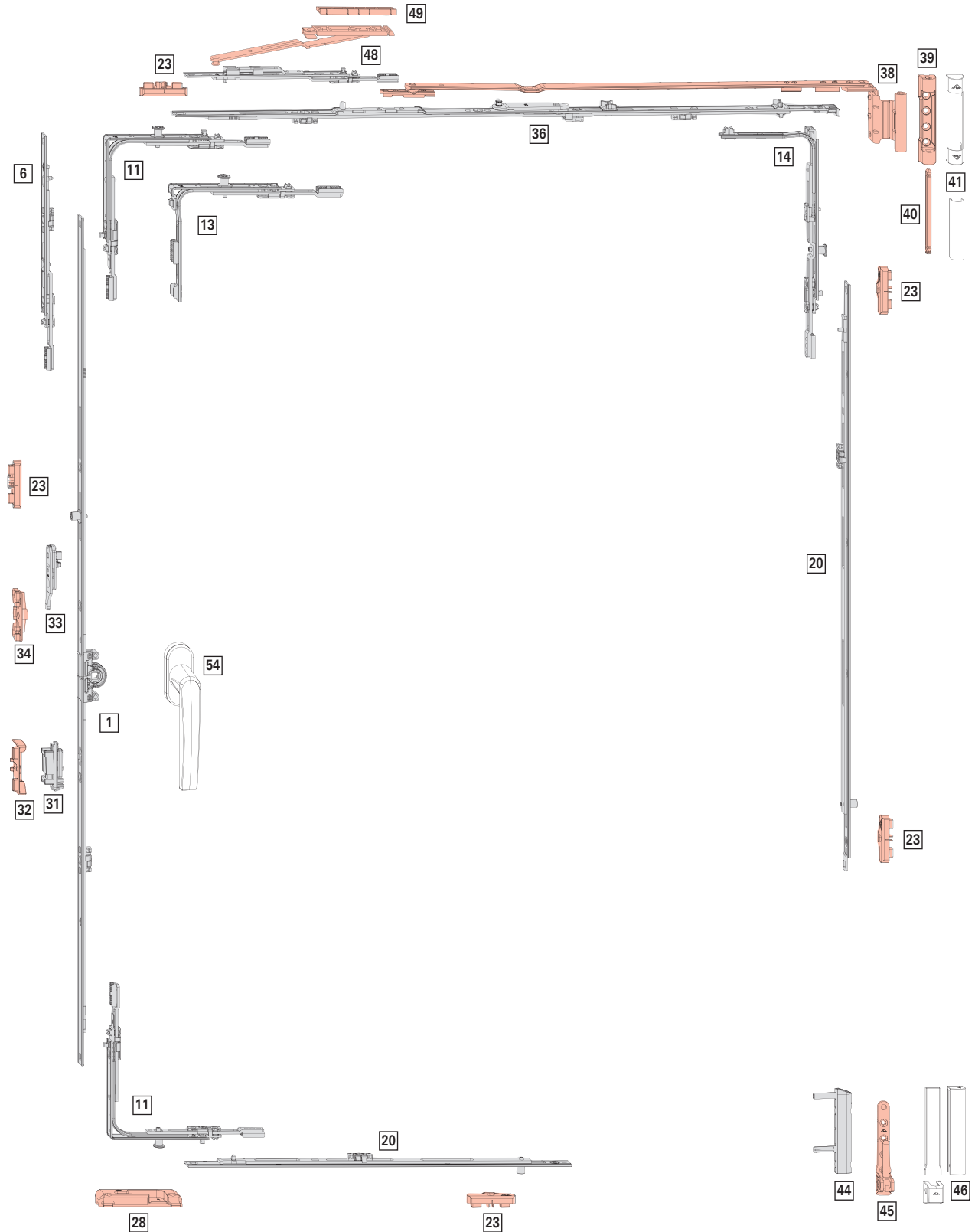
consisting of:

- 1 Arched sash stay P
- 1 Retainer
- 1 Rebate run-up block



4.1.2 TiltFirst hardware

4.1.2.1 Basic security



**Application range**

SRW: 290 – 1600 mm

SRH: 280 – 2800 mm

[1] T&T espagnolette, VT – fixed handle height, backset 15 mm

								Nº
280 – 570	120	460	Y	N	–	–	–	742199
511 – 710	170	600	Y	Y	–	–	–	795324
601 – 800	263	690	N	Y	–	–	–	619591
801 – 1000	413	890	N	Y	1	E	–	619592
1001 – 1200	513	1090	N	Y	1	E	–	619593
1201 – 1400	563	1290	N	Y	1	E	–	619594
1401 – 1600	563	1490	N	Y	2	E	–	619595
1601 – 1800	563	1690	N	Y	2	E	–	619596
1601 – 1800	1000	1690	N	Y	2	E	–	838345
1801 – 2000	1000	1890	N	Y	2	E	–	794637
2001 – 2200	1000	2090	N	Y	3	E	–	794638
2201 – 2400	1000	2290	N	Y	3	E	–	794639

**INFO**

With SRH 280 – 290 mm, the screw guide must be removed (e.g. using pliers).

[6] Espagnolette extension, (SRH ≥ 2401 mm)

					Nº
200	Y	–	–	–	308267
400	Y	1	E	–	280346

Size-specific combinations:

					Nº
2401 – 2600	200 KU	–	–	–	308267
2601 – 2800	400 KU	1	E	–	280346

[11] Standard corner drive

				Nº
1	E	Top	–	260275
1	P	Top Bottom	–	260277

[13] Special short corner drive

			Nº
1	E	–	260280
1	P	–	260282

For use with SRH ≤ 370 mm.

[14] Sash stay corner drive

			Nº
1	P	–	260286

[20] Multipart centre lock – standard, horizontal and vertical

					Nº
400	N	1	E	–	255280
600	N	1	E	–	255281
600	Y	1	E	–	255282

Size-specific combinations:

					Nº
801 – 1200	801 – 1200	400	1	E	255280
1201 – 1400	1201 – 1400	600	1	E	255281
1401 – 1600	1401 – 1800	600 KU	1	E	255282
		400	1	E	255280
	1801 – 2000	600 KU	1	E	255282
		600	1	E	255281
	2001 – 2400	600 KU	1	E	255282
		600 KU	1	E	255282
		400	1	E	255280
	2401 – 2600	600 KU	1	E	255282
		600 KU	1	E	255282
		600	1	E	255281
	2601 – 2800	600 KU	1	E	255282
		600 KU	1	E	255282
		600 KU	1	E	255282
		400	1	E	255280

[23] Striker → from page 201**[28] Tilt striker TiltFirst → from page 199****[31] Bullet catch sash component (optional SRH ≥ 1601 mm)**

	Nº
Bullet catch sash component	788363

[32] Bullet-catch frame component (optional SRH ≥ 1601 mm) → from page 209**[33] Lifting mishandling device sash component**

	Nº
Sash component for lifting mishandling device	795927

[34] Lifting mishandling device frame component → from page 210**[36] Stay guide – basic security**

					Nº
290 – 410	150	300	–	–	787345
411 – 600	250	490	–	–	787346
601 – 800	350	690	–	–	787347
801 – 1000	500	890	1	E	788617
1001 – 1200	500	1090	1	E	787349
1201 – 1400	500	1290	1	E	787351

**INFO**

With SRW < 310 mm, remove the assembly clip.

[38] Stay arm TiltFirst, system 12/20-13

			Nº
290 – 410	150	Left	814711
290 – 410		Right	814712
411 – 600	250	Left	814713
411 – 600		Right	814714
601 – 800	350	Left	814715
601 – 800		Right	814716
801 – 1400	500	Left	814717
801 – 1400		Right	814718

**INFO**

With SRH < 500 mm, set the tilt depth to 80 mm (with sash stay from size 250 and above).

[39] Stay bearing

	Nº
P 3/130	859171
P 6/130	859172
P 6/150	859173

[40] Stay-bearing pin

		Nº
Stay-bearing pin	86	834705

[41] Sash stay cover caps → CTL_105**[44] Corner hinge**

		Nº
K 6/130	Height adjustable	263858
P 6/150		
K 6/130	Height and gasket-compression adjustable	445171
P 6/150		

[45] Pivot rest

		Nº
P 3/130	Laterally adjustable	787207
P 6/130	Laterally adjustable	787208
P 6/150	Laterally adjustable	787209

[46] Corner hinge / pivot rest cover caps → CTL_105**[48] Additional stay arm** TiltFirst (SRW ≥ 1401 mm)

	Nº
Frame and sash component	292022

[49] Packer → from page 207**[54] Handle → CTL_1****INFO**

Use the lockable TiltFirst handle for child safe windows, see CTL_1.

Optional**Sash lifter → CTL_105****Arrestable brake stay → CTL_105**



4.1.3 Turn-Only hardware

4.1.3.1 Basic security





Application range

SRW: 290 – 1600 mm

SRH: 280 – 2800 mm

[1] T&T espagnolette, VT – fixed handle height, backset 15 mm

							Nº
280 – 570	120	460	Y	N	–	–	742199
511 – 710	170	600	Y	Y	–	–	795324
601 – 800	263	690	N	Y	–	–	619591
801 – 1000	413	890	N	Y	1	E	619592
1001 – 1200	513	1090	N	Y	1	E	619593
1201 – 1400	563	1290	N	Y	1	E	619594
1401 – 1600	563	1490	N	Y	2	E	619595
1601 – 1800	563	1690	N	Y	2	E	619596
1601 – 1800	1000	1690	N	Y	2	E	838345
1801 – 2000	1000	1890	N	Y	2	E	794637
2001 – 2200	1000	2090	N	Y	3	E	794638
2201 – 2400	1000	2290	N	Y	3	E	794639



INFO

With SRH 280 – 290 mm, the screw guide must be removed (e.g. using pliers).

[6] Espagnolette extension, (SRH ≥ 2401 mm)

				Nº
200	Y	–	–	308267
400	Y	1	E	280346

Size-specific combinations:

				Nº
2401 – 2600	200 KU	–	–	308267
2601 – 2800	400 KU	1	E	280346

[11] Standard corner drive

		Nº
1	P	260277

[13] Special short corner drive

		Nº
1	E	260280
1	P	260282

For use with SRH ≤ 370 mm.

[19] Multipart centre lock – standard, horizontal

				Nº
400	N	1	E	255280
600	N	1	E	255281

				Nº
600	Y	1	E	255282

Size-specific combinations:

				Nº
801 – 1200	400	1	E	255280
1201 – 1400	600	1	E	255281
1401 – 1600	600 KU	1	E	255282
	400	1	E	255280

[23] Striker → from page 201

[24] Security striker → from page 202

[26] Concealed centre closer frame component → CTL_105

[27] Concealed centre closer sash component → CTL_105

[31] Bullet catch sash component (optional SRH ≥ 1601 mm)

	Nº
Bullet catch sash component	788363

[32] Bullet-catch frame component (optional SRH ≥ 1601 mm) → from page 209

[33] Lifting mishandling device sash component

	Nº
Sash component for lifting mishandling device	795927

[34] Lifting mishandling device frame component → from page 210

[39] Stay bearing

	Nº
P 3/130	859171
P 6/130	859172
P 6/150	859173

[40] Stay-bearing pin

		Nº
Stay-bearing pin	86	834705

[41] Sash stay cover caps → CTL_105

[42] Rebate stay guide

	Nº
Rebate stay guide on the hinge side P / T / K / A / E5	331488

[43] Rebate stay arm, system 12/20-13

	Nº
Left	787375
Right	787376

[44] Corner hinge

		Nº
K 6/130 P 6/150	Height adjustable	263858
K 6/130 P 6/150	Height and gasket-compression adjustable	445171

[45] Pivot rest

		Nº
P 3/130	Laterally adjustable	787207
P 6/130	Laterally adjustable	787208
P 6/150	Laterally adjustable	787209

[46] Corner hinge / pivot rest cover caps →
CTL_105

[52] 90° travel restrictor

	Nº
Travel restrictor	264603

[54] Handle → CTL_1

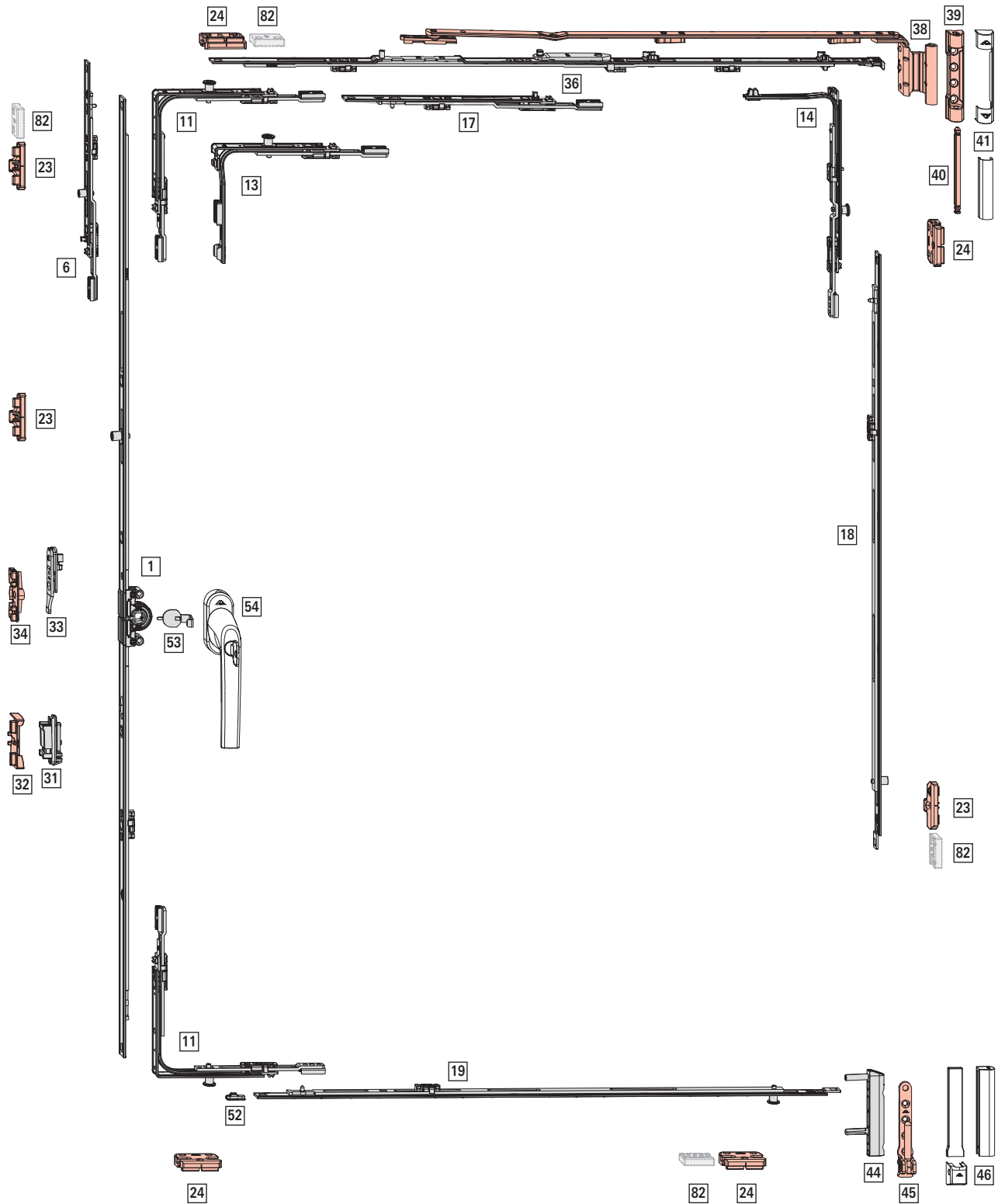
Optional

Sash lifter → CTL_105

Arrestable brake stay → CTL_105



4.1.3.2 RC 1 N





Application range

SRW: 320 – 1600 mm

SRH: 280 – 2800 mm

[1] T&T espagnolette, VT – fixed handle height, backset 15 mm

							Nº
280 – 570	120	460	Y	N	–	–	742199
511 – 710	170	600	Y	Y	–	–	795324
601 – 800	263	690	N	Y	–	–	619591
801 – 1000	413	890	N	Y	1	E	619592
1001 – 1200	513	1090	N	Y	1	E	619593
1201 – 1400	563	1290	N	Y	1	E	619594
1401 – 1600	563	1490	N	Y	2	E	619595
1601 – 1800	563	1690	N	Y	2	E	619596
1601 – 1800	1000	1690	N	Y	2	E	838345
1801 – 2000	1000	1890	N	Y	2	E	794637
2001 – 2200	1000	2090	N	Y	3	E	794638
2201 – 2400	1000	2290	N	Y	3	E	794639



INFO

With SRH 280 – 290 mm, the screw guide must be removed (e.g. using pliers).

[6] Espagnolette extension, (SRH ≥ 2401 mm)

				Nº
200	Y	1	E	450821
400	Y	1	E	280346

Size-specific combinations:

				Nº
2401 – 2600	200 KU	1	E	450821
2601 – 2800	400 KU	1	E	280346

[11] Standard corner drive

		Nº
1	P	260277

[13] Special short corner drive

		Nº
1	E	260280
1	P	260282

For use with SRH ≤ 370 mm.

[14] Sash stay corner drive

		Nº
1	P	260286

[17] Centre lock, multipart – standard, horizontal – top

				Nº
200	Y	–	–	308267

Size-specific combinations:

				Nº
1401 – 1600	200 KU	–	–	308267

[18] Multipart centre lock – standard, vertical

				Nº
400	N	1	E	255280
600	N	1	E	255281
600	Y	1	E	255282

Size-specific combinations:

				Nº
801 – 1200	400	1	E	255280
1201 – 1400	600	1	E	255281
1401 – 1800	600 KU	1	E	255282
	400	1	E	255280
1801 – 2000	600 KU	1	E	255282
	600	1	E	255281
2001 – 2400	600 KU	1	E	255282
	600 KU	1	E	255282
	400	1	E	255280
2401 – 2600	600 KU	1	E	255282
	600 KU	1	E	255282
	600	1	E	255281
2601 – 2800	600 KU	1	E	255282
	600 KU	1	E	255282
	600 KU	1	E	255282
	400	1	E	255280

[19] Multipart centre lock – security, horizontal

				Nº
200	N	1	P	255284
400	N	1	P	255285
600	N	1	P	255286
600	Y	1	E	255282

Size-specific combinations:

				Nº
320 – 520	200	1	P	255284
521 – 730	400	1	P	255285
731 – 930	600	1	P	255286
931 – 1130	600 KU	1	E	255282
	200	1	P	255284
1131 – 1330	600 KU	1	E	255282
	400	1	P	255285
1331 – 1530	600 KU	1	E	255282
	600	1	P	255286
1531 – 1600	600 KU	1	E	255282
	600 KU	1	E	255282
	200	1	P	255284

[23] Striker → from page 201

[24] Security striker → from page 202

[31] Bullet catch sash component (optional SRH ≥ 1601 mm)



Nº

Bullet catch sash component	788363
-----------------------------	--------

[32] Bullet-catch frame component (optional SRH ≥ 1601 mm) → from page 209

[33] Lifting mishandling device sash component



Nº

Sash component for lifting mishandling device	795927
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[34] Lifting mishandling device frame component
→ from page 210

[36] Stay guide – basic security

						Nº
290 – 410	150	300	–	–	–	787345
411 – 600	250	490	–	–	–	787346
601 – 800	350	690	–	–	–	787347
801 – 1000	500	890	1	E	–	788617
1001 – 1200	500	1090	1	E	–	787349
1201 – 1400	500	1290	1	E	–	787351

[38] Stay arm, system 12/20-13

			Nº
290 – 410	150	Left	787233
290 – 410	150	Right	787234
411 – 600	250	Left	787235
411 – 600	250	Right	787236
601 – 800	350	Left	787237
601 – 800	350	Right	787238
801 – 1400	500	Left	787239
801 – 1400	500	Right	787240

[39] Stay bearing



Nº

P 3/130	859171
P 6/130	859172
P 6/150	859173

[40] Stay-bearing pin



Nº

Stay-bearing pin	86	834705
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[41] Sash stay cover caps → CTL_105

[44] Corner hinge



Nº

K 6/130	Height adjustable	263858
P 6/150		
K 6/130	Height and gasket-compression adjustable	445171
P 6/150		

[45] Pivot rest



Nº

P 3/130	Laterally adjustable	787207
P 6/130	Laterally adjustable	787208
P 6/150	Laterally adjustable	787209

[46] Corner hinge / pivot rest cover caps → CTL_105

[52] 90° travel restrictor



Nº

Travel restrictor	264603
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[53] Drilling protection



Nº

Drilling protection	797819
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[54] Handle, lockable → CTL_1

Optional

[82] Anti-jemmy device

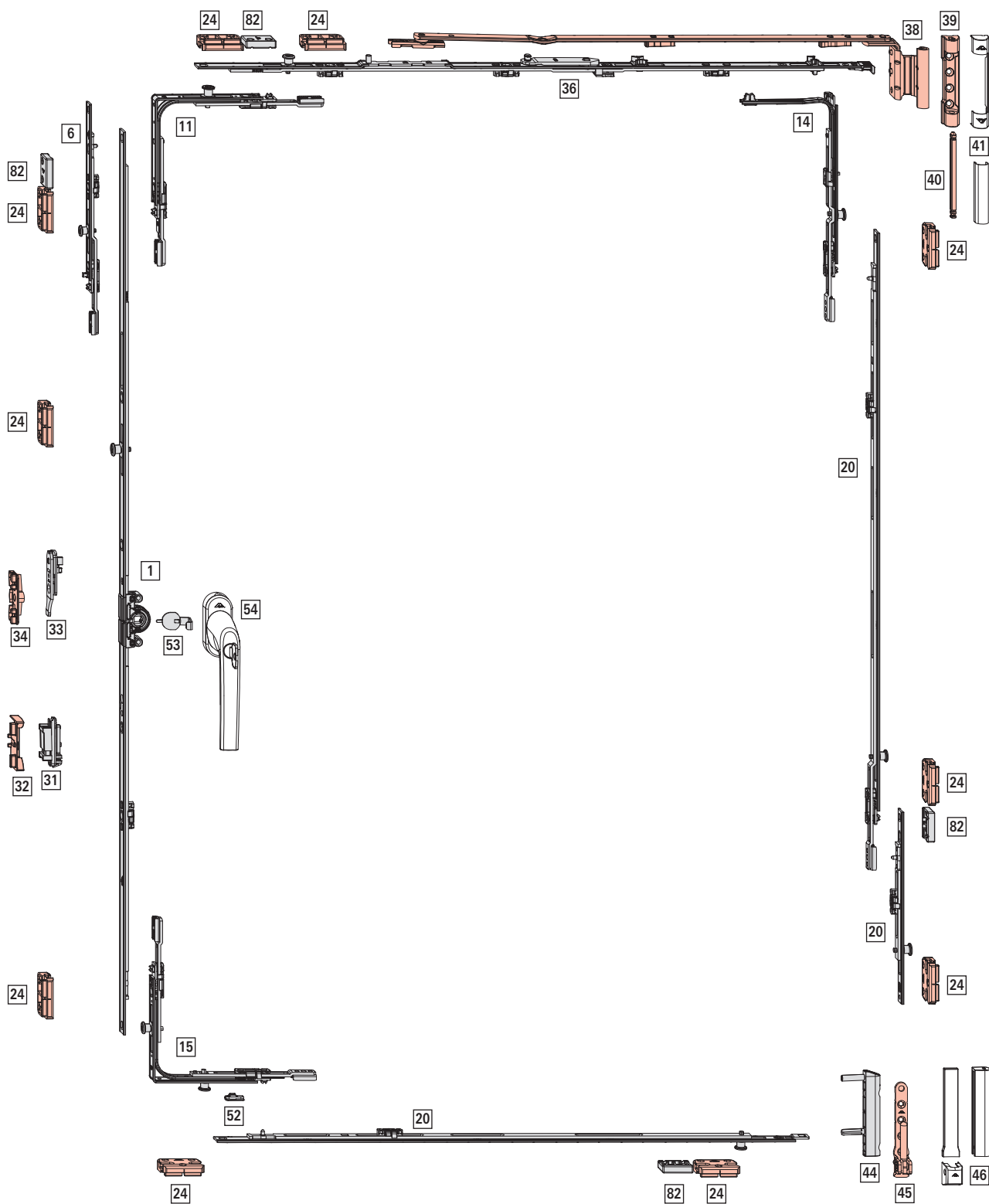


Nº

Anti-jemmy device	From rebate depth 26 mm	811715
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4.1.3.3 RC 2 / RC 2 N





Application range

SRW: 320 – 1400 mm

SRH: 600 – 2800 mm

[1] T&T espagnolette, VT – fixed handle height, backset 15 mm

							Nº
601 – 800	263	690	N	Y	–	–	619591
801 – 1000	413	890	N	Y	1	V	626542
1001 – 1200	513	1090	N	Y	1	V	626543
1201 – 1400	563	1290	N	Y	1	V	626544
1401 – 1600	563	1490	N	Y	2	V	626575
1601 – 1800	563	1690	N	Y	2	V	626576
1601 – 1800	1000	1690	N	Y	2	V	838324
1801 – 2000	1000	1890	N	Y	2	V	794641
2001 – 2200	1000	2090	N	Y	3	V	794642
2201 – 2400	1000	2290	N	Y	3	V	794643

[6] Espagnolette extension, (SRH ≥ 2401 mm)

				Nº
200	Y	1	V	337708
400	Y	1	V	337710

Size-specific combinations:

				Nº
2401 – 2600	200 KU	1	V	337708
2601 – 2800	400 KU	1	V	337710

[11] Standard corner drive

		Nº
1	V	260272

[14] Sash stay corner drive

		Nº
1	V	260284

[15] Standard corner drive (RC3)

		Nº
2	V	260274

[20] Multipart centre lock – security, horizontal and vertical

				Nº
200	N	1	V	296853
400	N	1	V	296854
600	N	1	V	296855
600	Y	1	V	337711

Size-specific combinations:

					Nº
320 – 600	510 – 700	200	1	✓	296853
601 – 800	701 – 900	400	1	✓	296854
801 – 1000	901 – 1100	600	1	✓	296855

					Nº
1001 – 1200	1101 – 1300	600 KU	1	V	337711
		200	1	V	296853
1201 – 1400	1301 – 1500	600 KU	1	V	337711
		400	1	V	296854
	1501 – 1700	600 KU	1	V	337711
		600	1	V	296855
	1701 – 1900	600 KU	1	V	337711
		600 KU	1	V	337711
		200	1	V	296853
	1901 – 2100	600 KU	1	V	337711
		600 KU	1	V	337711
		400	1	V	296854
	2101 – 2300	600 KU	1	V	337711
		600 KU	1	V	337711
		600	1	V	296855
	2301 – 2500	600 KU	1	V	337711
		600 KU	1	V	337711
		600 KU	1	V	337711
		200	1	V	296853
	2501 – 2700	600 KU	1	V	337711
		600 KU	1	V	337711
		600 KU	1	V	337711
		400	1	V	296854
	2701 – 2800	600 KU	1	V	337711
		600 KU	1	V	337711
		600 KU	1	V	337711
		600	1	V	296855

[24] Security striker → from page 202**[31] Bullet catch sash component (optional SRH ≥ 1601 mm)**

	Nº
Bullet catch sash component	788363

[32] Bullet-catch frame component (optional SRH ≥ 1601 mm) → from page 209**[33] Lifting mishandling device sash component**

	Nº
Sash component for lifting mishandling device	795927

[34] Lifting mishandling device frame component → from page 210**[36] Stay guide – security**

					Nº
290 – 410	150	300	–	–	787345
411 – 600	250	490	–	–	787346
601 – 800	350	690	–	–	787347
801 – 1000	500	890	1	V	787360
1001 – 1200	500	1090	1	V	787361
1201 – 1400	500	1290	1	V	787362

[38] Stay arm, system 12/20-13

			Nº
290 – 410	150	Left	787233
290 – 410	150	Right	787234
411 – 600	250	Left	787235
411 – 600	250	Right	787236
601 – 800	350	Left	787237
601 – 800	350	Right	787238
801 – 1400	500	Left	787239
801 – 1400	500	Right	787240

[39] Stay bearing

	Nº
P 3/130	859171
P 6/130	859172
P 6/150	859173

[40] Stay-bearing pin

		Nº
Stay-bearing pin	86	834705

[41] Sash stay cover caps → CTL_105

[44] Corner hinge

		Nº
K 6/130 P 6/150	Height adjustable	263858
K 6/130 P 6/150	Height and gasket-compression adjustable	445171

[45] Pivot rest

		Nº
P 3/130	Laterally adjustable	787207
P 6/130	Laterally adjustable	787208
P 6/150	Laterally adjustable	787209

[46] Corner hinge / pivot rest cover caps → CTL_105

[52] 90° travel restrictor

	Nº
Travel restrictor	264603

[53] Drilling protection

	Nº
Drilling protection	797819

[54] Handle, lockable → CTL_1

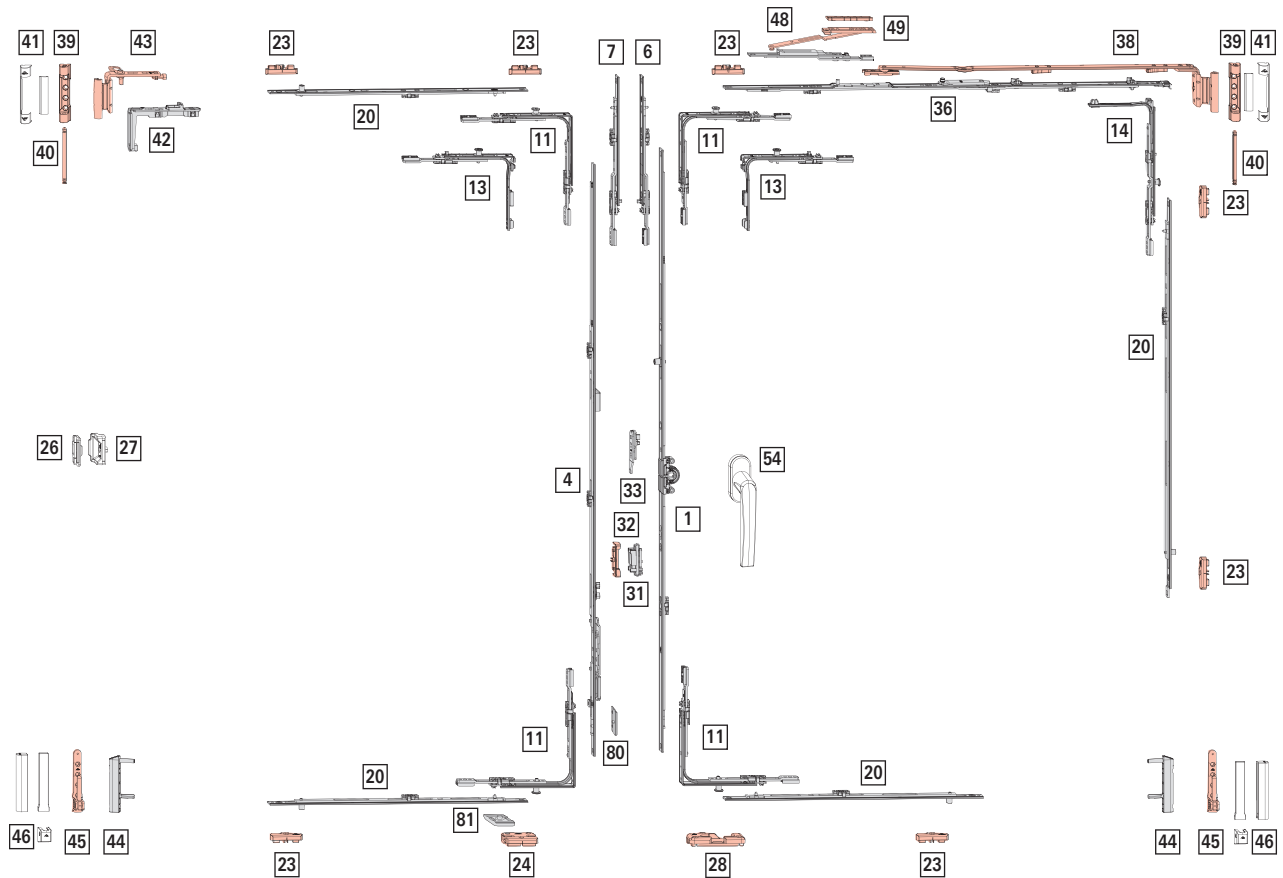
[82] Anti-jemmy device

		Nº
Anti-jemmy device	From rebate depth 26 mm	811715



4.1.4 Floating-mullion hardware

4.1.4.1 Standard – basic security





Application range

SRW: 290 – 1600 mm

SRH: 280 – 2800 mm

[1] T&T espagnolette, VT – fixed handle height, backset 15 mm

							Nº
280 – 570	120	460	Y	N	–	–	742199
511 – 710	170	600	Y	Y	–	–	795324
601 – 800	263	690	N	Y	–	–	619591
801 – 1000	413	890	N	Y	1	E	619592
1001 – 1200	513	1090	N	Y	1	E	619593
1201 – 1400	563	1290	N	Y	1	E	619594
1401 – 1600	563	1490	N	Y	2	E	619595
1601 – 1800	563	1690	N	Y	2	E	619596
1601 – 1800	1000	1690	N	Y	2	E	838345
1801 – 2000	1000	1890	N	Y	2	E	794637
2001 – 2200	1000	2090	N	Y	3	E	794638
2201 – 2400	1000	2290	N	Y	3	E	794639



INFO

With SRH 280 – 290 mm, the screw guide must be removed (e.g. using pliers).

[4] Lever-operated espagnolette, VT – fixed handle height, backset 15 mm

							Nº
280 – 555	156	445	–	Y	N	–	2003815
431 – 710	195	600	–	Y	Y	–	795462
601 – 800	300	690	–	N	Y	–	763116
801 – 1000	490	890	1	N	Y	–	763117
1001 – 1200	335	1090	1	N	Y	–	763118
1201 – 1400	335	1290	1	N	Y	–	763119
1401 – 1600	335	1490	2	N	Y	–	763120
1601 – 1800	335	1690	2	N	Y	–	795474
1801 – 2000	640	1890	2	N	Y	–	795476
2001 – 2200	640	2090	3	N	Y	–	795478
2201 – 2400	640	2290	3	N	Y	–	795480

[6] Espagnolette extension, (SRH ≥ 2401 mm)

				Nº
200	Y	–	–	308267
400	Y	1	E	280346

Size-specific combinations:

				Nº
2401 – 2600	200 KU	–	–	308267
2601 – 2800	400 KU	1	E	280346

[7] Floating mullion espagnolette extension, (SRH ≥ 2401 mm)

			Nº
200	Y	–	308267
400	Y	1	280345

Size-specific combinations:

			Nº
2401 – 2600	200 KU	–	308267
2601 – 2800	400 KU	1	280345

[11] Standard corner drive

			Nº
1	E	Top	260275
1	P	Top Bottom	260277

[13] Special short corner drive

		Nº
1	E	260280
1	P	260282

Use → “Possible combinations” from page 184

[14] Sash stay corner drive

		Nº
1	P	260286

[20] Multipart centre lock – standard, horizontal and vertical

				Nº
400	N	1	E	255280
600	N	1	E	255281
600	Y	1	E	255282

Size-specific combinations:

					Nº
801 – 1200	801 – 1200	400	1	E	255280
1201 – 1400	1201 – 1400	600	1	E	255281
1401 – 1600	1401 – 1800	600 KU	1	E	255282
		400	1	E	255280
	1801 – 2000	600 KU	1	E	255282
		600	1	E	255281
	2001 – 2400	600 KU	1	E	255282
		600 KU	1	E	255282
		400	1	E	255280
	2401 – 2600	600 KU	1	E	255282
		600 KU	1	E	255282
		600	1	E	255281
	2601 – 2800	600 KU	1	E	255282
		600 KU	1	E	255282
		600 KU	1	E	255282
		400	1	E	255280

[23] Striker → from page 201**[24] Security striker → from page 202****[26] Concealed centre closer frame component → CTL_105****[27] Concealed centre closer sash component → CTL_105****[28] Tilt striker → from page 196****[31] Bullet catch sash component (optional SRH ≥ 1601 mm)**

	Nº
Bullet catch sash component	788363

[32] Bullet catch (optional SRH ≥ 1601 mm)

			Nº
Bullet catch for lever-operated espagnolette	Screw-on	Roto Sil	788378

[33] Lifting mishandling device sash component

	Nº
Sash component for lifting mishandling device	795927

[36] Stay guide – basic security

					Nº
290 – 410	150	300	–	–	787345
411 – 600	250	490	–	–	787346
601 – 800	350	690	–	–	787347
801 – 1000	500	890	1	E	788617
1001 – 1200	500	1090	1	E	787349
1201 – 1400	500	1290	1	E	787351

**INFO**

With SRW < 310 mm, remove the assembly clip.

[38] Stay arm, system 12/20-13

			Nº
290 – 410	150	Left	787233
290 – 410	150	Right	787234
411 – 600	250	Left	787235
411 – 600	250	Right	787236
601 – 800	350	Left	787237
601 – 800	350	Right	787238
801 – 1400	500	Left	787239
801 – 1400	500	Right	787240

**INFO**

With SRH < 500 mm, set the tilt depth to 80 mm (with sash stay from size 250 and above).

[39] Stay bearing

	Nº
P 3/130	859171
P 6/130	859172
P 6/150	859173

[40] Stay-bearing pin

		Nº
Stay-bearing pin	86	834705

[41] Sash stay cover caps → CTL_105**[42] Rebate stay guide**

	Nº
Rebate stay guide on the hinge side P / T / K / A / E5	331488

[43] Rebate stay arm, system 12/20-13

	Nº
Left	787375
Right	787376

[44] Corner hinge

		Nº
K 6/130	Height adjustable	263858
P 6/150		
K 6/130	Height and gasket-compression adjustable	445171
P 6/150		

[45] Pivot rest

		Nº
P 3/130	Laterally adjustable	787207
P 6/130	Laterally adjustable	787208
P 6/150	Laterally adjustable	787209

[46] Corner hinge / pivot rest cover caps → CTL_105**[48] Additional stay arm (SRW ≥ 1401 mm)**

		Nº
Frame and sash component	200	255237

[49] Packer → from page 207**[54] Handle → CTL_1****[80] Fastening plate**

	Nº
Fastening plate with cam	255211

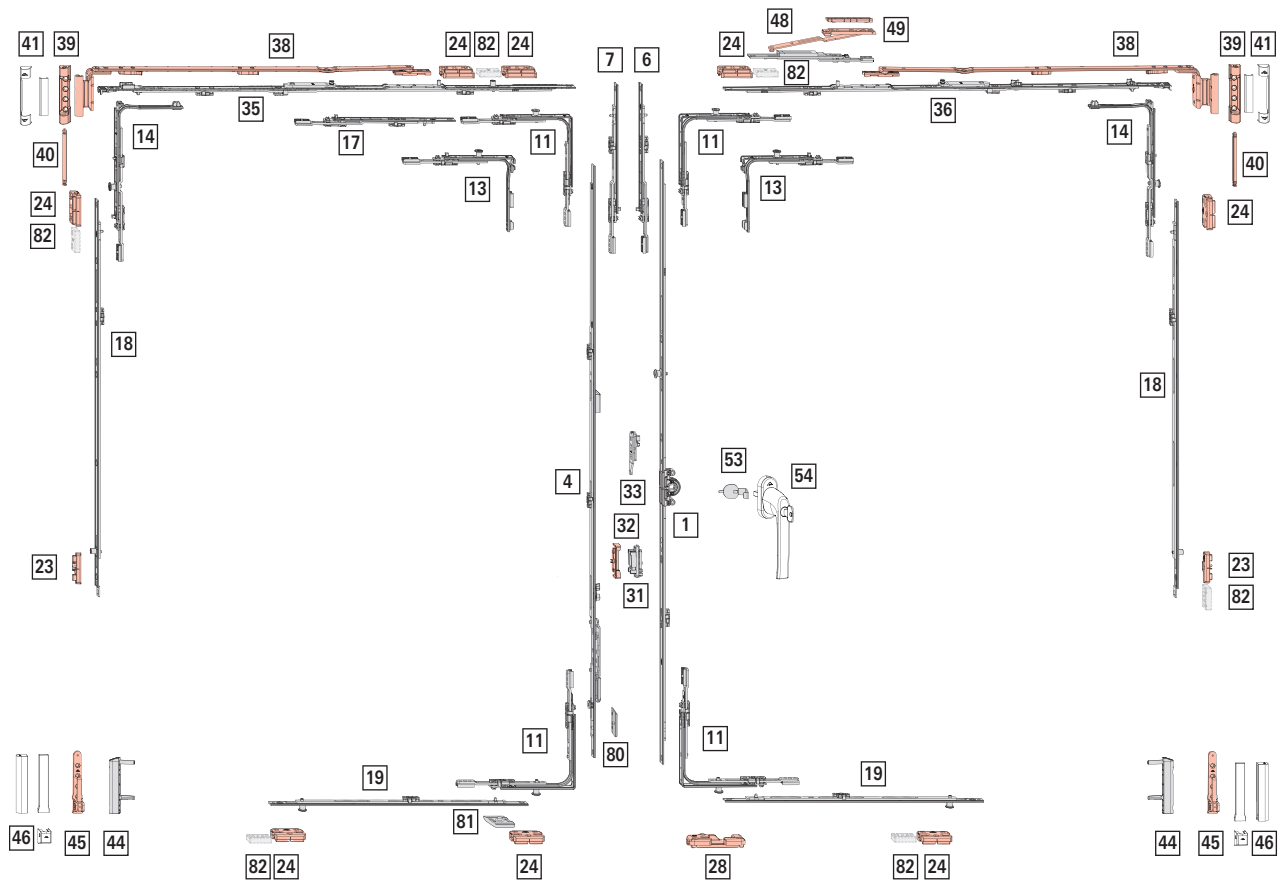
Can only be used in combination with lever-operated espagnolette 2003815.

[81] Run-up block

	Nº
Sash	350403



4.1.4.2 Standard – RC 1 N





Application range

SRW: 320 – 1600 mm

SRH: 280 – 2800 mm

[1] T&T espagnolette, VT – fixed handle height, backset 15 mm

							Nº
280 – 570	120	460	Y	N	–	–	742199
511 – 710	170	600	Y	Y	–	–	795324
601 – 800	263	690	N	Y	–	–	619591
801 – 1000	413	890	N	Y	1	E	619592
1001 – 1200	513	1090	N	Y	1	E	619593
1201 – 1400	563	1290	N	Y	1	E	619594
1401 – 1600	563	1490	N	Y	2	E	619595
1601 – 1800	563	1690	N	Y	2	E	619596
1601 – 1800	1000	1690	N	Y	2	E	838345
1801 – 2000	1000	1890	N	Y	2	E	794637
2001 – 2200	1000	2090	N	Y	3	E	794638
2201 – 2400	1000	2290	N	Y	3	E	794639



INFO

With SRH 280 – 290 mm, the screw guide must be removed (e.g. using pliers).

[4] Lever-operated espagnolette, VT – fixed handle height, backset 15 mm

							Nº
280 – 555	156	445	–	Y	N	–	2003815
431 – 710	195	600	–	Y	Y	–	795462
601 – 800	300	690	–	N	Y	–	763116
801 – 1000	490	890	1	N	Y	–	763117
1001 – 1200	335	1090	1	N	Y	–	763118
1201 – 1400	335	1290	1	N	Y	–	763119
1401 – 1600	335	1490	2	N	Y	–	763120
1601 – 1800	335	1690	2	N	Y	–	795474
1801 – 2000	640	1890	2	N	Y	–	795476
2001 – 2200	640	2090	3	N	Y	–	795478
2201 – 2400	640	2290	3	N	Y	–	795480

[6] Espagnolette extension, (SRH ≥ 2401 mm)

				Nº
200	Y	1	E	450821
400	Y	1	E	280346

Size-specific combinations:

				Nº
2401 – 2600	200 KU	1	E	450821
2601 – 2800	400 KU	1	E	280346

[7] Floating mullion espagnolette extension, (SRH ≥ 2401 mm)

			Nº
200	Y	1	450822
400	Y	1	280345

Size-specific combinations:

			Nº
2401 – 2600	200 KU	1	450822
2601 – 2800	400 KU	1	280345

[11] Standard corner drive

		Nº
1	P	260277

[13] Special short corner drive

		Nº
1	P	260282

Use → “Possible combinations” from page 184

[14] Sash stay corner drive

		Nº
1	P	260286

[17] Multipart centre lock – standard, horizontal – top, Turn-Only sash

				Nº
200	Y	–	–	308267
400	Y	1	E	280346
600	Y	1	E	255282

Size-specific combinations:

				Nº
1001 – 1200	200	–	–	308267
1201 – 1400	400	1	E	280346
1401 – 1600	600	1	E	255282

[18] Multipart centre lock – standard, vertical

				Nº
400	N	1	E	255280
600	N	1	E	255281
600	Y	1	E	255282

Size-specific combinations:

				Nº
801 – 1200	400	1	E	255280
1201 – 1400	600	1	E	255281
1401 – 1800	600 KU	1	E	255282
	400	1	E	255280
1801 – 2000	600 KU	1	E	255282
	600	1	E	255281
2001 – 2400	600 KU	1	E	255282
	600 KU	1	E	255282
	400	1	E	255280
2401 – 2600	600 KU	1	E	255282
	600 KU	1	E	255282
	600	1	E	255281

				Nº
2601 – 2800	600 KU	1	E	255282
	600 KU	1	E	255282
	600 KU	1	E	255282
	400	1	E	255280

[19] Multipart centre lock – security, horizontal

				Nº
200	N	1	P	255284
400	N	1	P	255285
600	N	1	P	255286
600	Y	1	E	255282

Size-specific combinations:

				Nº
320 – 520	200	1	P	255284
521 – 730	400	1	P	255285
731 – 930	600	1	P	255286
931 – 1130	600 KU	1	E	255282
	200	1	P	255284
1131 – 1330	600 KU	1	E	255282
	400	1	P	255285
1331 – 1530	600 KU	1	E	255282
	600	1	P	255286
1531 – 1600	600 KU	1	E	255282
	600 KU	1	E	255282
	200	1	P	255284

[23] Striker → from page 201**[24] Security striker → from page 202****[28] Tilt striker → from page 196****[31] Bullet catch sash component (optional SRH ≥ 1601 mm)**

	Nº
Bullet catch sash component	788363

[32] Bullet catch (optional SRH ≥ 1601 mm)

			Nº
Bullet catch for lever-operated espagnolette	Screw-on	Roto Sil	788378

[33] Lifting mishandling device sash component

	Nº
Sash component for lifting mishandling device	795927

[35] Turn-Only sash stay guide – basic security

					Nº
290 – 410	150	300	–	–	787366
411 – 600	250	490	–	–	787367
601 – 800	350	690	–	–	787368
801 – 1000	500	890	1	E	787369

[36] Stay guide – basic security

					Nº
290 – 410	150	300	–	–	787345
411 – 600	250	490	–	–	787346
601 – 800	350	690	–	–	787347
801 – 1000	500	890	1	E	788617
1001 – 1200	500	1090	1	E	787349
1201 – 1400	500	1290	1	E	787351

[38] Stay arm, system 12/20-13

			Nº
290 – 410	150	Left	787233
290 – 410	150	Right	787234
411 – 600	250	Left	787235
411 – 600	250	Right	787236
601 – 800	350	Left	787237
601 – 800	350	Right	787238
801 – 1400	500	Left	787239
801 – 1400	500	Right	787240

**INFO**

With SRH < 500 mm, set the tilt depth to 80 mm (with sash stay from size 250 and above).

[39] Stay bearing

	Nº
P 3/130	859171
P 6/130	859172
P 6/150	859173

[40] Stay-bearing pin

		Nº
Stay-bearing pin	86	834705

[41] Sash stay cover caps → CTL_105**[44] Corner hinge**

		Nº
K 6/130	Height adjustable	263858
P 6/150		
K 6/130	Height and gasket-compression adjustable	445171
P 6/150		

[45] Pivot rest

		Nº
P 3/130	Laterally adjustable	787207
P 6/130	Laterally adjustable	787208
P 6/150	Laterally adjustable	787209


[46] Corner hinge / pivot rest cover caps →
 CTL_105

[48] Additional stay arm (SRW $\geq$ 1401 mm)


Nº

Frame and sash component

200

255237

[49] Packer → from page 207
[53] Drilling protection


Nº

Drilling protection

797819

[54] Handle, lockable → CTL_1
[80] Fastening plate


Nº

Fastening plate with cam

255211

Can only be used in combination with lever-operated espagnolette 2003815.

[81] Run-up block


Nº

Sash

350403

Optional
[82] Anti-jemmy device

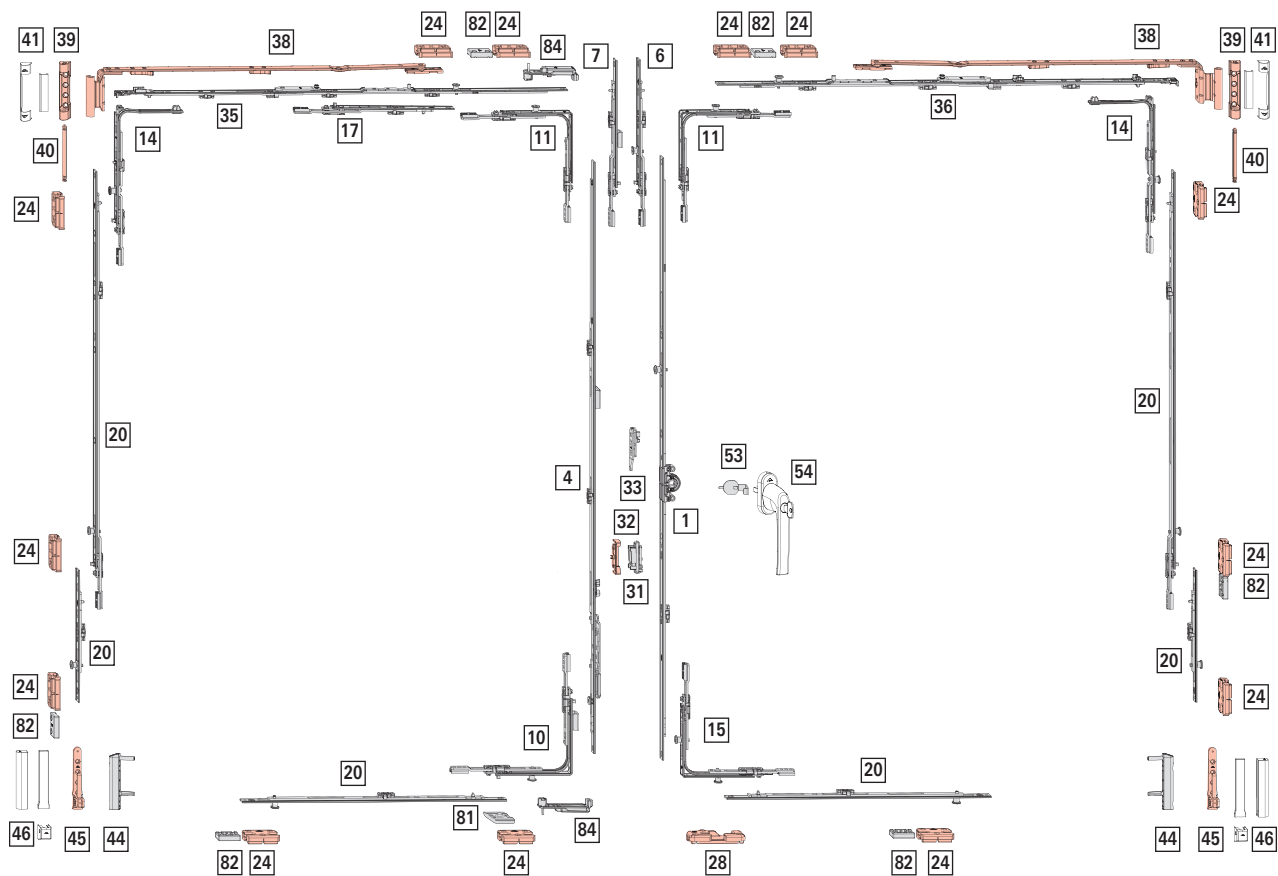

Nº

Anti-jemmy device

From rebate depth 26 mm

811715

4.1.4.3 Standard – RC 2 / RC 2 N





Application range

SRW: 400 – 1400 mm

SRH: 600 – 2800 mm

[1] T&T espagnolette, VT – fixed handle height, backset 15 mm

							Nº
601 – 800	263	690	N	Y	–	–	619591
801 – 1000	413	890	N	Y	1	V	626542
1001 – 1200	513	1090	N	Y	1	V	626543
1201 – 1400	563	1290	N	Y	1	V	626544
1401 – 1600	563	1490	N	Y	2	V	626575
1601 – 1800	563	1690	N	Y	2	V	626576
1601 – 1800	1000	1690	N	Y	2	V	838324
1801 – 2000	1000	1890	N	Y	2	V	794641
2001 – 2200	1000	2090	N	Y	3	V	794642
2201 – 2400	1000	2290	N	Y	3	V	794643

[4] Lever-operated espagnolette, VT – fixed handle height, backset 15 mm

						Nº
601 – 800	300	690	–	N	Y	763116
801 – 1000	490	890	1	N	Y	763117
1001 – 1200	335	1090	1	N	Y	763118
1201 – 1400	335	1290	1	N	Y	763119
1401 – 1600	335	1490	2	N	Y	763120
1601 – 1800	335	1690	2	N	Y	795474
1801 – 2000	640	1890	2	N	Y	795476
2001 – 2200	640	2090	3	N	Y	795478
2201 – 2400	640	2290	3	N	Y	795480

[6] Espagnolette extension, (SRH ≥ 2401 mm)

				Nº
200	Y	1	V	337708
400	Y	1	V	337710

Size-specific combinations:

				Nº
2401 – 2600	200 KU	1	V	337708
2601 – 2800	400 KU	1	V	337710

[7] Floating mullion espagnolette extension, (SRH ≥ 2401 mm)

			Nº
200	Y	1	450822
400	Y	1	280345

Size-specific combinations:

			Nº
2401 – 2600	200 KU	1	450822
2601 – 2800	400 KU	1	280345

[10] Floating mullion corner drive

					Nº
Second opening sash	Bottom	1	1	V	367227

[11] Standard corner drive

		Nº
1	V	260272

[14] Sash stay corner drive

		Nº
1	V	260284

[15] Standard corner drive (RC3)

		Nº
2	V	260274

[17] Multipart centre lock – standard, horizontal – top, Turn-Only sash

				Nº
200	Y	–	–	308267
400	Y	1	V	337710

Size-specific combinations:

				Nº
1001 – 1200	200 KU	–	–	308267
1201 – 1400	400 KU	1	V	337710

[20] Multipart centre lock – security, horizontal and vertical

				Nº
200	N	1	V	296853
400	N	1	V	296854
600	N	1	V	296855
600	Y	1	V	337711

Size-specific combinations:

					Nº
400 – 600	600 – 700	200	1	V	296853
601 – 800	701 – 900	400	1	V	296854
801 – 1000	901 – 1100	600	1	V	296855
1001 – 1200	1101 – 1300	600 KU	1	V	337711
		200	1	V	296853

					Nº
1201 – 1400	1301 – 1500	600 KU	1	V	337711
		400	1	V	296854
	1501 – 1700	600 KU	1	V	337711
		600	1	V	296855
	1701 – 1900	600 KU	1	V	337711
		600 KU	1	V	337711
		200	1	V	296853
	1901 – 2100	600 KU	1	V	337711
		600 KU	1	V	337711
		400	1	V	296854
	2101 – 2300	600 KU	1	V	337711
		600 KU	1	V	337711
		600	1	V	296855
	2301 – 2500	600 KU	1	V	337711
		600 KU	1	V	337711
		600 KU	1	V	337711
		200	1	V	296853
	2501 – 2700	600 KU	1	V	337711
		600 KU	1	V	337711
		600 KU	1	V	337711
		400	1	V	296854
	2701 – 2800	600 KU	1	V	337711
		600 KU	1	V	337711
		600 KU	1	V	296855

[24] Security striker → from page 202

[28] Tilt striker → from page 196

[31] Bullet catch sash component (optional SRH ≥ 1601 mm)

	Nº
Bullet catch sash component	788363

[32] Bullet catch (optional SRH ≥ 1601 mm)

			Nº
Bullet catch for lever-operated espagnolette	Screw-on	Roto Sil	788378

[33] Lifting mishandling device sash component

	Nº
Sash component for lifting mishandling device	795927

[35] Turn-Only sash stay guide – security

					Nº
290 – 410	150	300	–	–	787366
411 – 600	250	490	–	–	787367
601 – 800	350	690	–	–	787368
801 – 1000	500	890	1	V	787370

[36] Stay guide – security

					Nº
290 – 410	150	300	–	–	787345
411 – 600	250	490	–	–	787346
601 – 800	350	690	–	–	787347
801 – 1000	500	890	1	V	787360
1001 – 1200	500	1090	1	V	787361
1201 – 1400	500	1290	1	V	787362

[38] Stay arm, system 12/20-13

			Nº
290 – 410	150	Left	787233
290 – 410	150	Right	787234
411 – 600	250	Left	787235
411 – 600	250	Right	787236
601 – 800	350	Left	787237
601 – 800	350	Right	787238
801 – 1400	500	Left	787239
801 – 1400	500	Right	787240

[39] Stay bearing

	Nº
P 3/130	859171
P 6/130	859172
P 6/150	859173

[40] Stay-bearing pin

		Nº
Stay-bearing pin	86	834705

[41] Sash stay cover caps → CTL_105

[44] Corner hinge

		Nº
K 6/130	Height adjustable	263858
P 6/150		
K 6/130	Height and gasket-compression adjustable	445171
P 6/150		

[45] Pivot rest

		Nº
P 3/130	Laterally adjustable	787207
P 6/130	Laterally adjustable	787208
P 6/150	Laterally adjustable	787209

[46] Corner hinge / pivot rest cover caps → CTL_105

[53] Drilling protection

	Nº
Drilling protection	797819



[54] Handle, lockable → CTL_1

[81] Run-up block



Nº

Sash

350403

[82] Anti-jemmy device



Nº

Anti-jemmy device

From rebate depth 26 mm

811715

[84] Safety device for floating-mullion sashes

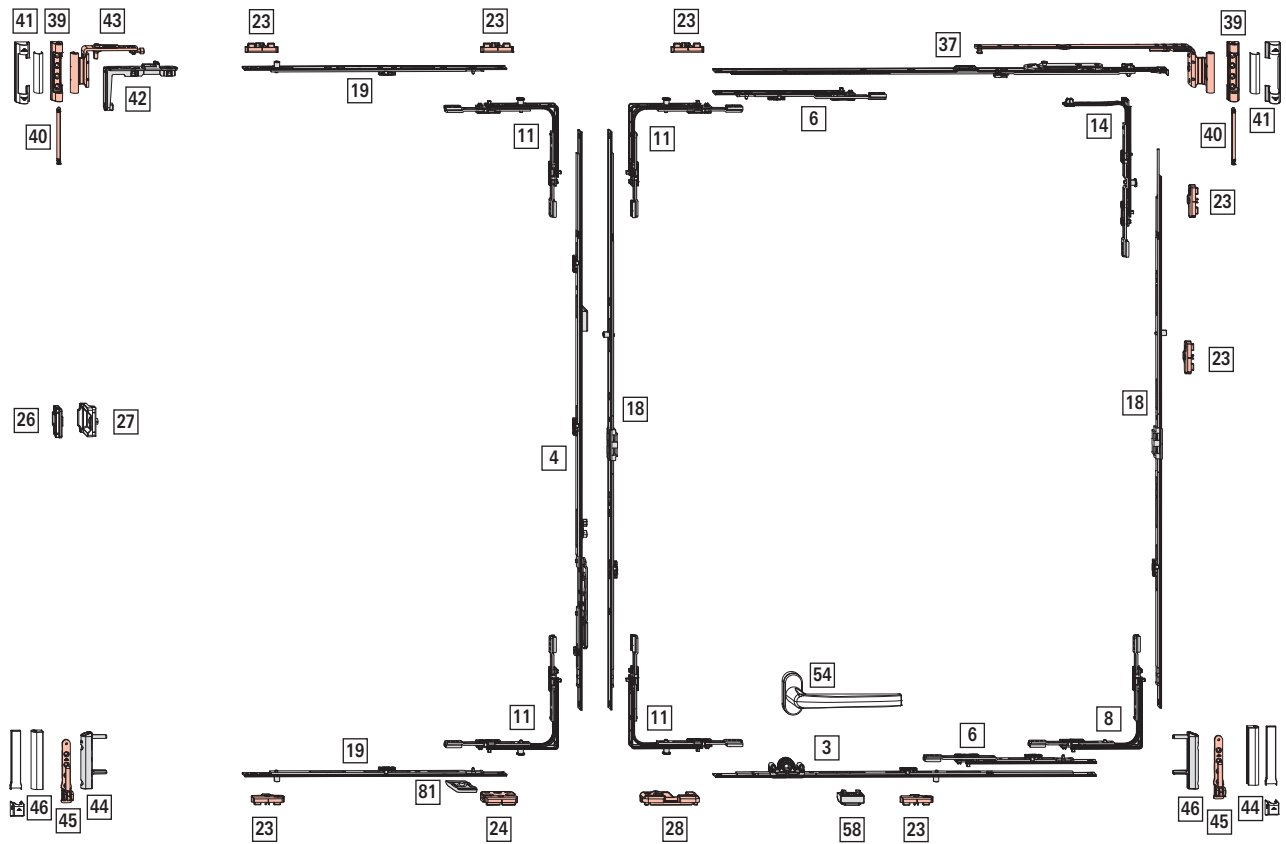


Nº

Retaining element for floating-mullion sash

552392

4.1.4.4 Standard – comfort – basic security





Application range

SRW: 520 – 1400 mm

SRH: 800 – 1600 mm

S.kg: max. 50 kg

[3] T&T espagnolette – comfort, fixed handle height backset 15 mm

				Nº
520 – 700	490	–	–	307029
701 – 900	690	1	E	307030

[4] Floating-mullion espagnolette – fixed handle height, backset 15 mm

				Nº
801 – 1000	490	890	1	763117
1001 – 1200	335	1090	1	763118
1201 – 1400	335	1290	1	763119
1401 – 1600	335	1490	2	763120

[6] Espagnolette extension, horizontal

				Nº
200	Y	–	–	308267
400	Y	1	E	280346

Size-specific combinations:

				Nº
bottom	top			
901 – 1100	1001 – 1200	200	–	308267
1101 – 1300	1201 – 1400	400	1	260193
1301 – 1400	–	200	–	308267
		400	1	260193

[8] Corner drive, standard, without cam

			Nº
–	–	–	339785

[11] Standard corner drive

			Nº
1	E	Top	260275
1	P	Top Bottom	260277

[14] Sash stay corner drive

#		Nº
1	P	260286

[18] Multipart centre lock – standard, vertical

	 #		Nº
690	—	—	774165
890	1	E	774174
1090	1	E	774175
1290	1	E	774176
1490	2	E	774177

Size-specific combinations:

				Nº
–	800 – 870	690	–	774165
800 – 1000	871 – 1070	890	1	774174
1001 – 1200	1071 – 1270	1090	1	774175
1201 – 1400	1271 – 1470	1290	1	774176
1401 – 1600	1471 – 1600	1490	2	774177

[19] Multipart centre lock – standard, horizontal

				Nº
400	N	1	E	255280
600	N	1	E	255281

Size-specific combinations:

				Nº
801 – 1200	400	1	E	255280
1201 – 1400	600	1	E	255281

[23] Striker → from page 201**[24] Security striker → from page 202****[26] Concealed centre closer frame component →**
CTL_105**[27] Concealed centre closer sash component →**
CTL_105**[28] Tilt striker → from page 196****[37] Scissor stay, forcibly controlled, system**
12/20-13

					Nº
460 – 600	490	Left	–	–	795032
		Right	–	–	795033
601 – 800	690	Left	–	–	795036
		Right	–	–	795037
801 – 1000	890	Left	1	E	795040
		Right	1	E	795041

[39] Stay bearing

	Nº
P 3/130	859171
P 6/130	859172
P 6/150	859173

[40] Stay-bearing pin

		Nº
Stay-bearing pin	86	834705

[41] Sash stay cover caps → CTL_105**[42] Rebate stay guide**

	Nº
Rebate stay guide on the hinge side P / T / K / A / E5	331488

[43] Rebate stay arm, system 12/20-13

	Nº
Left	787375
Right	787376

[44] Corner hinge

		Nº
K 6/130	Height adjustable	263858
P 6/150		
K 6/130	Height and gasket-compression adjustable	445171
P 6/150		

[45] Pivot rest

		Nº
P 3/130	Laterally adjustable	787207
P 6/130	Laterally adjustable	787208
P 6/150	Laterally adjustable	787209

[46] Corner hinge / pivot rest cover caps →
CTL_105

[54] Handle → CTL_1

Handle under Roto Patio Alversa, Roto Patio Inowa:
Roto Line design

[58] Run-up block with mishandling device

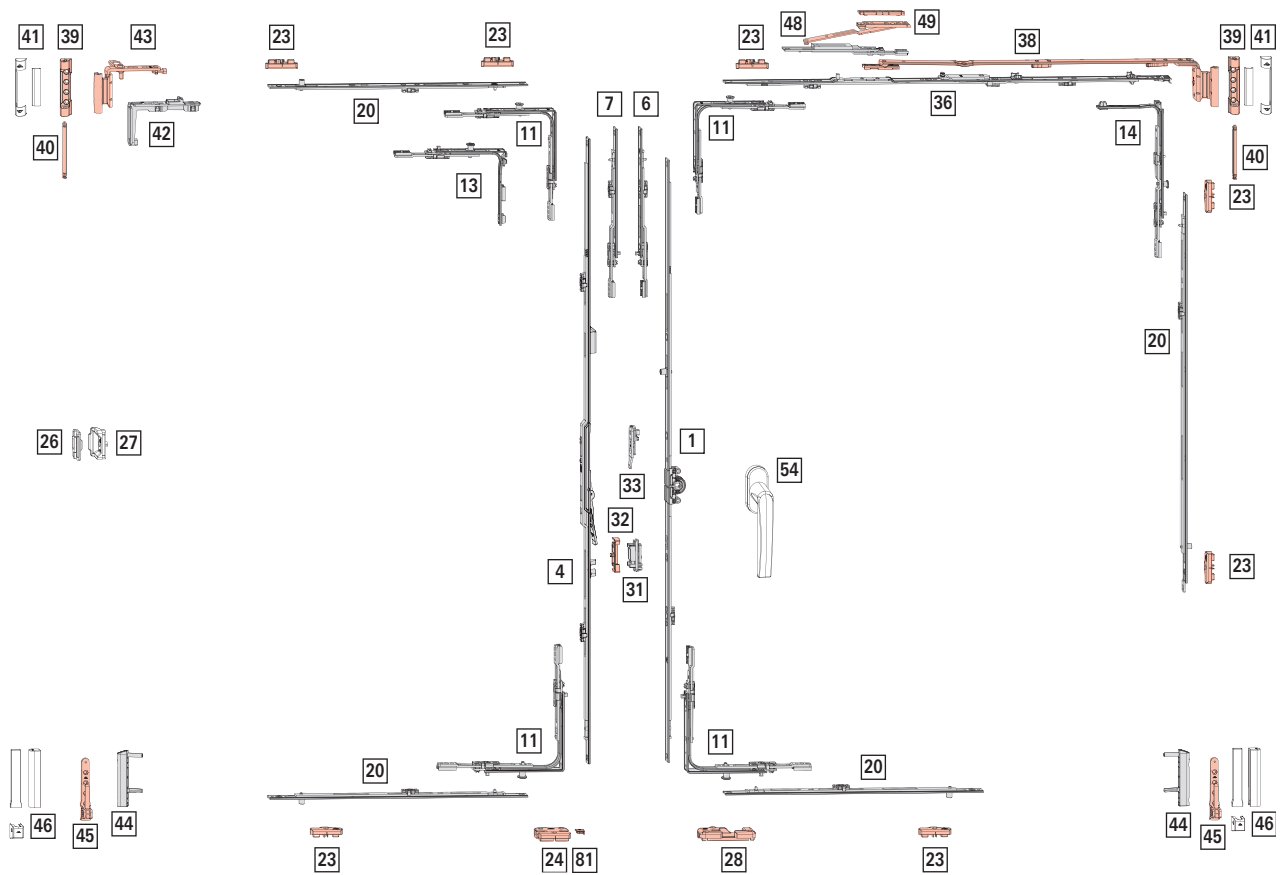
	Nº
Sash	307050

[81] Run-up block

	Nº
Sash	350403



4.1.4.5 Plus – basic security





Application range

SRW: 290 – 1600 mm

SRH: 430 – 2800 mm

[1] T&T espagnolette, VT – fixed handle height, backset 15 mm

							Nº
280 – 570	120	460	Y	N	–	–	742199
511 – 710	170	600	Y	Y	–	–	795324
601 – 800	263	690	N	Y	–	–	619591
801 – 1000	413	890	N	Y	1	E	619592
1001 – 1200	513	1090	N	Y	1	E	619593
1201 – 1400	563	1290	N	Y	1	E	619594
1401 – 1600	563	1490	N	Y	2	E	619595
1601 – 1800	563	1690	N	Y	2	E	619596
1601 – 1800	1000	1690	N	Y	2	E	838345
1801 – 2000	1000	1890	N	Y	2	E	794637
2001 – 2200	1000	2090	N	Y	3	E	794638
2201 – 2400	1000	2290	N	Y	3	E	794639

[4] Floating-mullion espagnolette, Plus – VT, backset 15 mm

							Nº
431 – 710	144	600	Y	N	–	Y	2007106
601 – 800	234	690	Y	N	–	–	2007116
801 – 1000	496	890	Y	N	1	–	2007117
1001 – 1200	496	1090	Y	N	1	–	2007118
1201 – 1400	546	1290	Y	N	1	–	2007119
1401 – 1600	546	1490	Y	N	2	–	2007120
1601 – 1800	546	1690	Y	Y	2	–	2007121
1801 – 2000	546	1890	Y	Y	2	–	2007122
2001 – 2200	546	2090	Y	Y	3	–	2007123
2201 – 2400	546	2290	Y	Y	3	–	2007124

[6] Espagnolette extension, (SRH ≥ 2401 mm)

					Nº
200	Y	–	–	–	308267
400	Y	1	E	–	280346

Size-specific combinations:

					Nº
2401 – 2600	200 KU	–	–	–	308267
2601 – 2800	400 KU	1	E	–	280346

[7] Floating mullion espagnolette extension, (SRH ≥ 2401 mm)

			Nº
200	Y	–	308267
400	Y	1	280345

Size-specific combinations:

			Nº
2401 – 2600	200 KU	–	308267
2601 – 2800	400 KU	1	280345

[11] Standard corner drive

			Nº
1	E	Top	260275
1	P	Top Bottom	260277

[13] Special short corner drive

		Nº
1	E	260280
1	P	260282

Use → “Possible combinations” from page 190

[14] Sash stay corner drive

		Nº
1	P	260286

[20] Multipart centre lock – standard, horizontal and vertical

					Nº
400	N	1	E	–	255280
600	N	1	E	–	255281
600	Y	1	E	–	255282

					Nº
801 – 1200	801 – 1200	400	1	E	255280
1201 – 1400	1201 – 1400	600	1	E	255281
1401 – 1600	1401 – 1800	600 KU	1	E	255282
		400	1	E	255280
	1801 – 2000	600 KU	1	E	255282
		600	1	E	255281
	2001 – 2400	600 KU	1	E	255282
		600 KU	1	E	255282
		400	1	E	255280
	2401 – 2600	600 KU	1	E	255282
		600 KU	1	E	255282
		600	1	E	255281
	2601 – 2800	600 KU	1	E	255282
		600 KU	1	E	255282
		600 KU	1	E	255282
		400	1	E	255280

[23] Striker → from page 201**[24] Security striker → from page 202****[26] Concealed centre closer frame component → CTL_105****[27] Concealed centre closer sash component → CTL_105****[28] Tilt striker → from page 196****[31] Bullet catch sash component (optional SRH ≥ 1601 mm)**

	Nº
Bullet catch sash component	788363

[32] Bullet catch (optional SRH ≥ 1601 mm)

			Nº
Bullet catch for lever-operated espagnolette	Screw-on	Roto Sil	788378

[33] Lifting mishandling device sash component

	Nº
Sash component for lifting mishandling device	795927

[36] Stay guide – basic security

					Nº
290 – 410	150	300	–	–	787345
411 – 600	250	490	–	–	787346
601 – 800	350	690	–	–	787347
801 – 1000	500	890	1	E	788617
1001 – 1200	500	1090	1	E	787349
1201 – 1400	500	1290	1	E	787351

**INFO**

With SRW < 310 mm, remove the assembly clip.

[38] Stay arm, system 12/20-13

			Nº
290 – 410	150	Left	787233
290 – 410	150	Right	787234
411 – 600	250	Left	787235
411 – 600	250	Right	787236
601 – 800	350	Left	787237
601 – 800	350	Right	787238
801 – 1400	500	Left	787239
801 – 1400	500	Right	787240

**INFO**

With SRH < 500 mm, set the tilt depth to 80 mm (with sash stay from size 250 and above).

[39] Stay bearing

	Nº
P 3/130	859171
P 6/130	859172
P 6/150	859173

[40] Stay-bearing pin

		Nº
Stay-bearing pin	86	834705

[41] Sash stay cover caps → CTL_105**[42] Rebate stay guide**

	Nº
Rebate stay guide on the hinge side P / T / K / A / E5	331488

[43] Rebate stay arm, system 12/20-13

	Nº
Left	787375
Right	787376

[44] Corner hinge

		Nº
K 6/130	Height adjustable	263858
P 6/150		
K 6/130	Height and gasket-compression adjustable	445171
P 6/150		

[45] Pivot rest

		Nº
P 3/130	Laterally adjustable	787207
P 6/130	Laterally adjustable	787208
P 6/150	Laterally adjustable	787209

[46] Corner hinge / pivot rest cover caps → CTL_105**[48] Additional stay arm (SRW ≥ 1401 mm)**

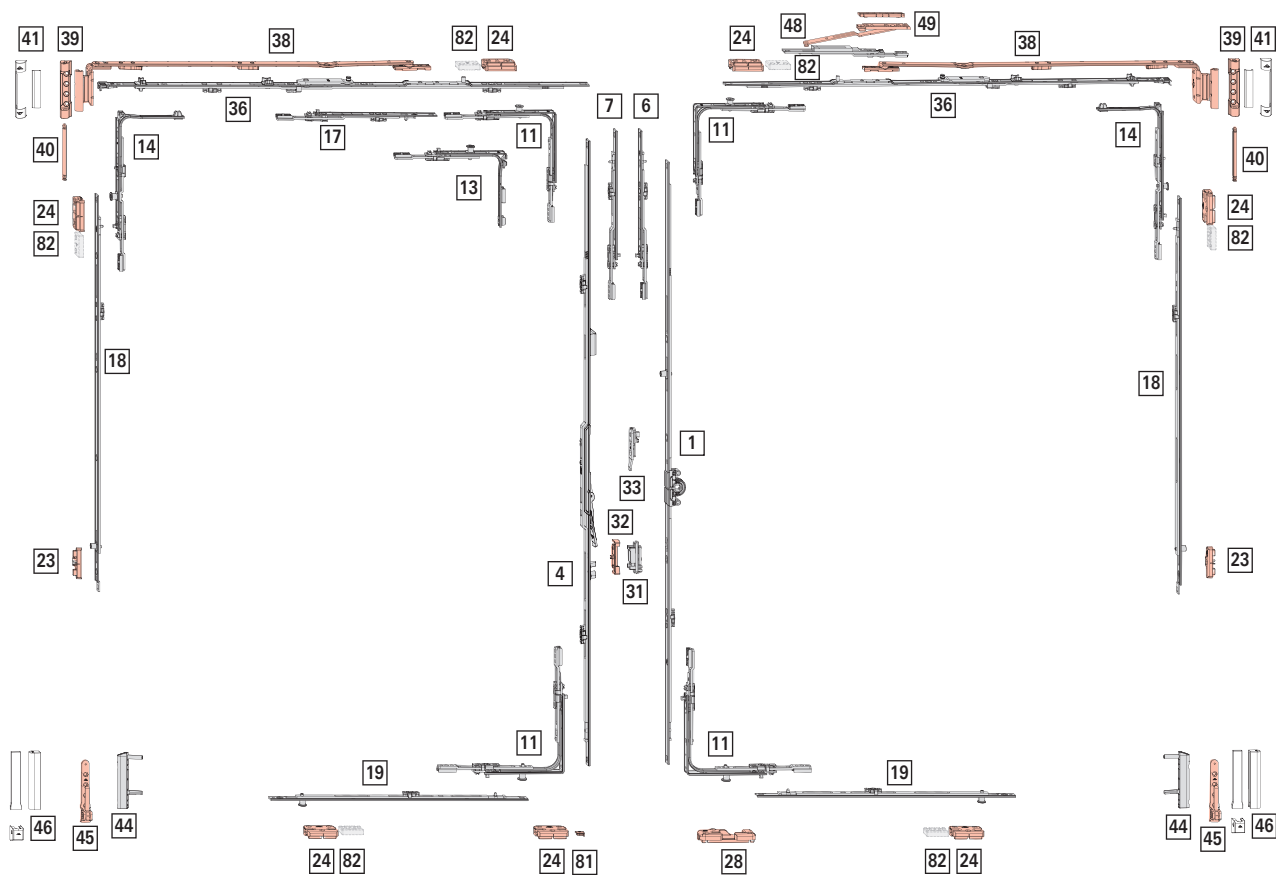
		Nº
Frame and sash component	200	255237

[49] Packer → from page 207**[54] Handle → CTL_1****[81] Run-up block**

			Nº
Rebate run-up block	Frame	Insertable	609211



4.1.4.6 Plus – RC 1 N





Application range

SRW: 320 – 1600 mm

SRH: 430 – 2800 mm

S.kg: max. 150 kg

[1] T&T espagnolette, VT – fixed handle height, backset 15 mm

							Nº
280 – 570	120	460	Y	N	–	–	742199
511 – 710	170	600	Y	Y	–	–	795324
601 – 800	263	690	N	Y	–	–	619591
801 – 1000	413	890	N	Y	1	E	619592
1001 – 1200	513	1090	N	Y	1	E	619593
1201 – 1400	563	1290	N	Y	1	E	619594
1401 – 1600	563	1490	N	Y	2	E	619595
1601 – 1800	563	1690	N	Y	2	E	619596
1601 – 1800	1000	1690	N	Y	2	E	838345
1801 – 2000	1000	1890	N	Y	2	E	794637
2001 – 2200	1000	2090	N	Y	3	E	794638
2201 – 2400	1000	2290	N	Y	3	E	794639

[4] Floating-mullion espagnolette, Plus – VT, backset 15 mm

							Nº
431 – 710	144	600	Y	N	–	Y	2007106
601 – 800	234	690	Y	N	–	–	2007116
801 – 1000	496	890	Y	N	1	–	2007117
1001 – 1200	496	1090	Y	N	1	–	2007118
1201 – 1400	546	1290	Y	N	1	–	2007119
1401 – 1600	546	1490	Y	N	2	–	2007120
1601 – 1800	546	1690	Y	Y	2	–	2007121
1801 – 2000	546	1890	Y	Y	2	–	2007122
2001 – 2200	546	2090	Y	Y	3	–	2007123
2201 – 2400	546	2290	Y	Y	3	–	2007124

[6] Espagnolette extension, (SRH ≥ 2401 mm)

					Nº
200	Y	1	E		450821
400	Y	1	E		280346

Size-specific combinations:

					Nº
2401 – 2600		200 KU	1	E	450821
2601 – 2800		400 KU	1	E	280346

[7] Floating mullion espagnolette extension, (SRH ≥ 2401 mm)

				Nº
200	Y	1		450822
400	Y	1		280345

Size-specific combinations:

				Nº
2401 – 2600		200 KU	1	450822
2601 – 2800		400 KU	1	280345

[11] Standard corner drive

			Nº
1	P		260277

[13] Special short corner drive

			Nº
1	P		260282

Use → “Possible combinations” from page 190

[14] Sash stay corner drive

			Nº
1	P		260286

[17] Multipart centre lock – standard, horizontal – top, Turn-Only sash

					Nº
200	Y	–	–		308267

Size-specific combinations:

					Nº
1401 – 1600		200 KU	–	–	308267

[18] Multipart centre lock – standard, vertical

					Nº
400	N	1	E		255280
600	N	1	E		255281
600	Y	1	E		255282

Size-specific combinations:

					Nº
801 – 1200		400	1	E	255280
1201 – 1400		600	1	E	255281
1401 – 1800		600 KU	1	E	255282
		400	1	E	255280
1801 – 2000		600 KU	1	E	255282
		600	1	E	255281
2001 – 2400		600 KU	1	E	255282
		600 KU	1	E	255282
		400	1	E	255280
2401 – 2600		600 KU	1	E	255282
		600 KU	1	E	255282
		600	1	E	255281
2601 – 2800		600 KU	1	E	255282
		600 KU	1	E	255282
		600 KU	1	E	255282
		400	1	E	255280

[19] Multipart centre lock – security, horizontal

					Nº
200	N	1	P		255284
400	N	1	P		255285
600	N	1	P		255286

				Nº
600	Y	1	E	255282

Size-specific combinations:

				Nº
320 – 520	200	1	P	255284
521 – 730	400	1	P	255285
731 – 930	600	1	P	255286
931 – 1130	600 KU	1	E	255282
	200	1	P	255284
1131 – 1330	600 KU	1	E	255282
	400	1	P	255285
1331 – 1530	600 KU	1	E	255282
	600	1	P	255286
1531 – 1600	600 KU	1	E	255282
	600 KU	1	E	255282
	200	1	P	255284

[23] Striker → from page 201

[24] Security striker → from page 202

[28] Tilt striker → from page 196

[31] Bullet catch sash component (optional SRH ≥ 1601 mm)

	Nº
Bullet catch sash component	788363

[32] Bullet catch (optional SRH ≥ 1601 mm)

			Nº
Bullet catch for lever-operated espagnolette	Screw-on	Roto Sil	788378

[33] Lifting mishandling device sash component

	Nº
Sash component for lifting mishandling device	795927

[36] Stay guide – basic security

					Nº
290 – 410	150	300	–	–	787345
411 – 600	250	490	–	–	787346
601 – 800	350	690	–	–	787347
801 – 1000	500	890	1	E	788617
1001 – 1200	500	1090	1	E	787349
1201 – 1400	500	1290	1	E	787351

[38] Stay arm, system 12/20-13

			Nº
290 – 410	150	Left	787233
290 – 410	150	Right	787234
411 – 600	250	Left	787235
411 – 600	250	Right	787236
601 – 800	350	Left	787237
601 – 800	350	Right	787238

			Nº
801 – 1400	500	Left	787239
801 – 1400	500	Right	787240

INFO
With SRH < 500 mm, set the tilt depth to 80 mm (with sash stay from size 250 and above).

[39] Stay bearing

	Nº
P 3/130	859171
P 6/130	859172
P 6/150	859173

[40] Stay-bearing pin

		Nº
Stay-bearing pin	86	834705

[41] Sash stay cover caps → CTL_105

[44] Corner hinge

		Nº
K 6/130	Height adjustable	263858
P 6/150		
K 6/130	Height and gasket-compression adjustable	445171
P 6/150		

[45] Pivot rest

		Nº
P 3/130	Laterally adjustable	787207
P 6/130	Laterally adjustable	787208
P 6/150	Laterally adjustable	787209

[46] Corner hinge / pivot rest cover caps → CTL_105

[48] Additional stay arm (SRW ≥ 1401 mm)

		Nº
Frame and sash component	200	255237

[49] Packer → from page 207

[53] Drilling protection

	Nº
Drilling protection	797819

[54] Handle, lockable → CTL_1

[81] Run-up block

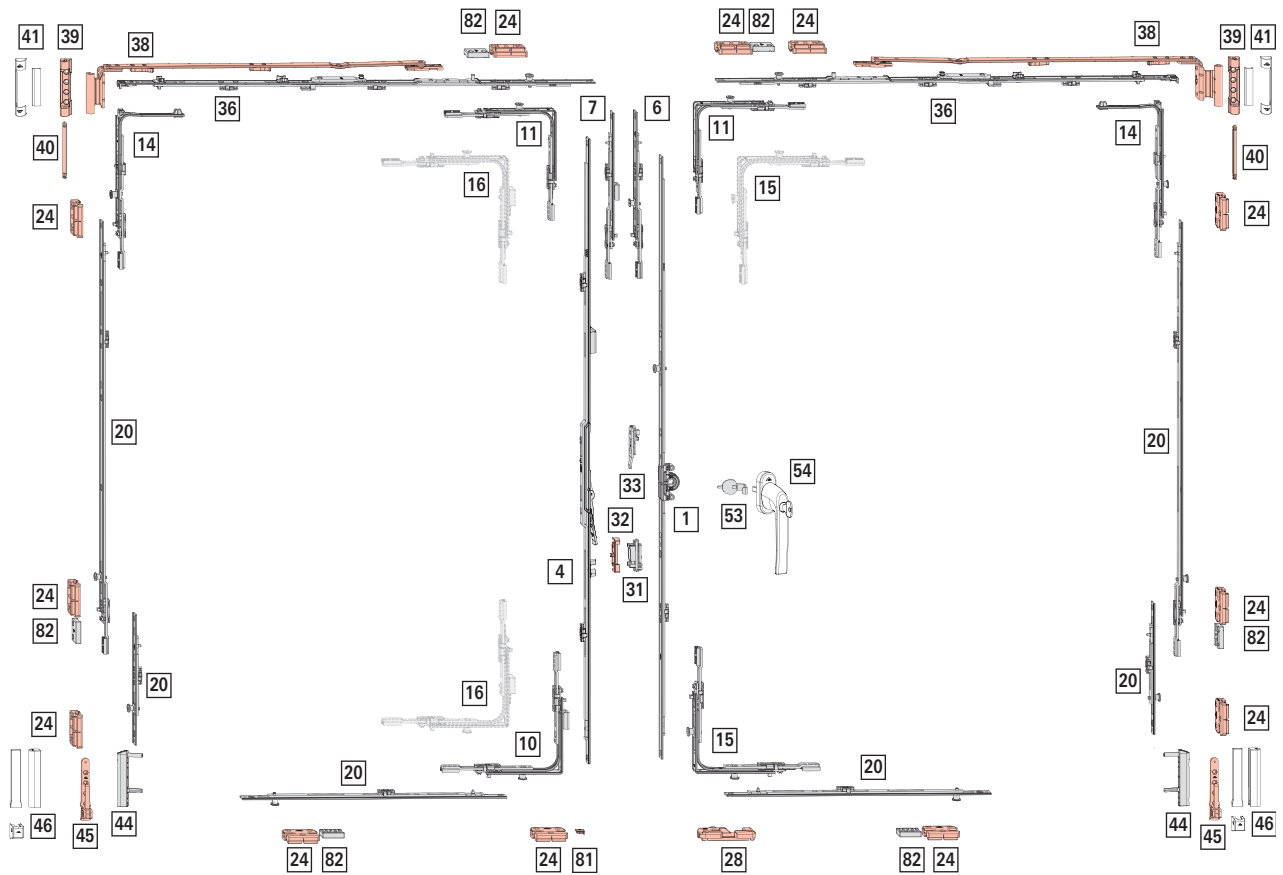
			Nº
Rebate run-up block	Frame	Insertable	609211



Optional

[82] Anti-jemmy device		
		Nº
Anti-jemmy device	From rebate depth 26 mm	811715

4.1.4.7 Plus – RC 2 / RC 2 N





Application range

SRW: 400 – 1400 mm

SRH: 600 – 2800 mm

[1] T&T espagnolette, VT – fixed handle height, backset 15 mm

							Nº
601 – 800	263	690	N	Y	–	–	619591
801 – 1000	413	890	N	Y	1	V	626542
1001 – 1200	513	1090	N	Y	1	V	626543
1201 – 1400	563	1290	N	Y	1	V	626544
1401 – 1600	563	1490	N	Y	2	V	626575
1601 – 1800	563	1690	N	Y	2	V	626576
1601 – 1800	1000	1690	N	Y	2	V	838324
1801 – 2000	1000	1890	N	Y	2	V	794641
2001 – 2200	1000	2090	N	Y	3	V	794642
2201 – 2400	1000	2290	N	Y	3	V	794643

[4] Floating-mullion espagnolette, Plus – VT, backset 15 mm

							Nº
431 – 710	144	600	Y	N	–	Y	2007106
601 – 800	234	690	Y	N	–	–	2007116
801 – 1000	496	890	Y	N	1	–	2007117
1001 – 1200	496	1090	Y	N	1	–	2007118
1201 – 1400	546	1290	Y	N	1	–	2007119
1401 – 1600	546	1490	Y	N	2	–	2007120
1601 – 1800	546	1690	Y	Y	2	–	2007121
1801 – 2000	546	1890	Y	Y	2	–	2007122
2001 – 2200	546	2090	Y	Y	3	–	2007123
2201 – 2400	546	2290	Y	Y	3	–	2007124

[6] Espagnolette extension, (SRH ≥ 2401 mm)

				Nº
200	Y	1	V	337708
400	Y	1	V	337710

Size-specific combinations:

				Nº
2401 – 2600	200 KU	1	V	337708
2601 – 2800	400 KU	1	V	337710

[7] Floating mullion espagnolette extension, (SRH ≥ 2401 mm)

			Nº
200	Y	1	450822
400	Y	1	280345

Size-specific combinations:

			Nº
2401 – 2600	200 KU	1	450822
2601 – 2800	400 KU	1	280345

[10] Floating mullion corner drive

					Nº
Second opening sash	Bottom	1	1	V	367227

[11] Standard corner drive

		Nº
1	V	260272

[14] Sash stay corner drive

		Nº
1	V	260284

[15] Standard corner drive (RC3)

		Nº
2	V	260274

[20] Multipart centre lock – security, horizontal and vertical

				Nº
200	N	1	V	296853
400	N	1	V	296854
600	N	1	V	296855
600	Y	1	V	337711

Size-specific combinations:

					Nº
400 – 600	600 – 700	200	1	V	296853
601 – 800	701 – 900	400	1	V	296854
801 – 1000	901 – 1100	600	1	V	296855
1001 – 1200	1101 – 1300	600 KU	1	V	337711
		200	1	V	296853

					Nº
1201 – 1400	1301 – 1500	600 KU	1	V	337711
		400	1	V	296854
	1501 – 1700	600 KU	1	V	337711
		600	1	V	296855
	1701 – 1900	600 KU	1	V	337711
		600 KU	1	V	337711
		200	1	V	296853
		600 KU	1	V	337711
	1901 – 2100	600 KU	1	V	337711
		600 KU	1	V	337711
		400	1	V	296854
	2101 – 2300	600 KU	1	V	337711
		600 KU	1	V	337711
		600	1	V	296855
	2301 – 2500	600 KU	1	V	337711
		600 KU	1	V	337711
		600 KU	1	V	337711
		200	1	V	296853
	2501 – 2700	600 KU	1	V	337711
		600 KU	1	V	337711
		600 KU	1	V	337711
		400	1	V	296854
	2701 – 2800	600 KU	1	V	337711
		600 KU	1	V	337711
		600 KU	1	V	337711
		600	1	V	296855

[24] Security striker → from page 202**[28] Tilt striker → from page 196****[31] Bullet catch sash component** (optional SRH ≥ 1601 mm)

	Nº
Bullet catch sash component	788363

[32] Bullet catch (optional SRH ≥ 1601 mm)

			Nº
Bullet catch for lever-operated espagnolette	Screw-on	Roto Sil	788378

[33] Lifting mishandling device sash component

	Nº
Sash component for lifting mishandling device	795927

[36] Stay guide – security

					Nº
290 – 410	150	300	–	–	787345
411 – 600	250	490	–	–	787346
601 – 800	350	690	–	–	787347
801 – 1000	500	890	1	V	787360
1001 – 1200	500	1090	1	V	787361
1201 – 1400	500	1290	1	V	787362

[38] Stay arm, system 12/20-13

			Nº
290 – 410	150	Left	787233
290 – 410	150	Right	787234
411 – 600	250	Left	787235
411 – 600	250	Right	787236
601 – 800	350	Left	787237
601 – 800	350	Right	787238
801 – 1400	500	Left	787239
801 – 1400	500	Right	787240

[39] Stay bearing

	Nº
P 3/130	859171
P 6/130	859172
P 6/150	859173

[40] Stay-bearing pin

		Nº
Stay-bearing pin	86	834705

[41] Sash stay cover caps → CTL_105**[44] Corner hinge**

		Nº
K 6/130	Height adjustable	263858
P 6/150		
K 6/130	Height and gasket-compression adjustable	445171
P 6/150		

[45] Pivot rest

		Nº
P 3/130	Laterally adjustable	787207
P 6/130	Laterally adjustable	787208
P 6/150	Laterally adjustable	787209

[46] Corner hinge / pivot rest cover caps → CTL_105**[53] Drilling protection**

	Nº
Drilling protection	797819

[54] Handle, lockable → CTL_1**[81] Run-up block**

			Nº
Rebate run-up block	Frame	Insertable	609211

[82] Anti-jemmy device

		Nº
Anti-jemmy device	From rebate depth 26 mm	811715

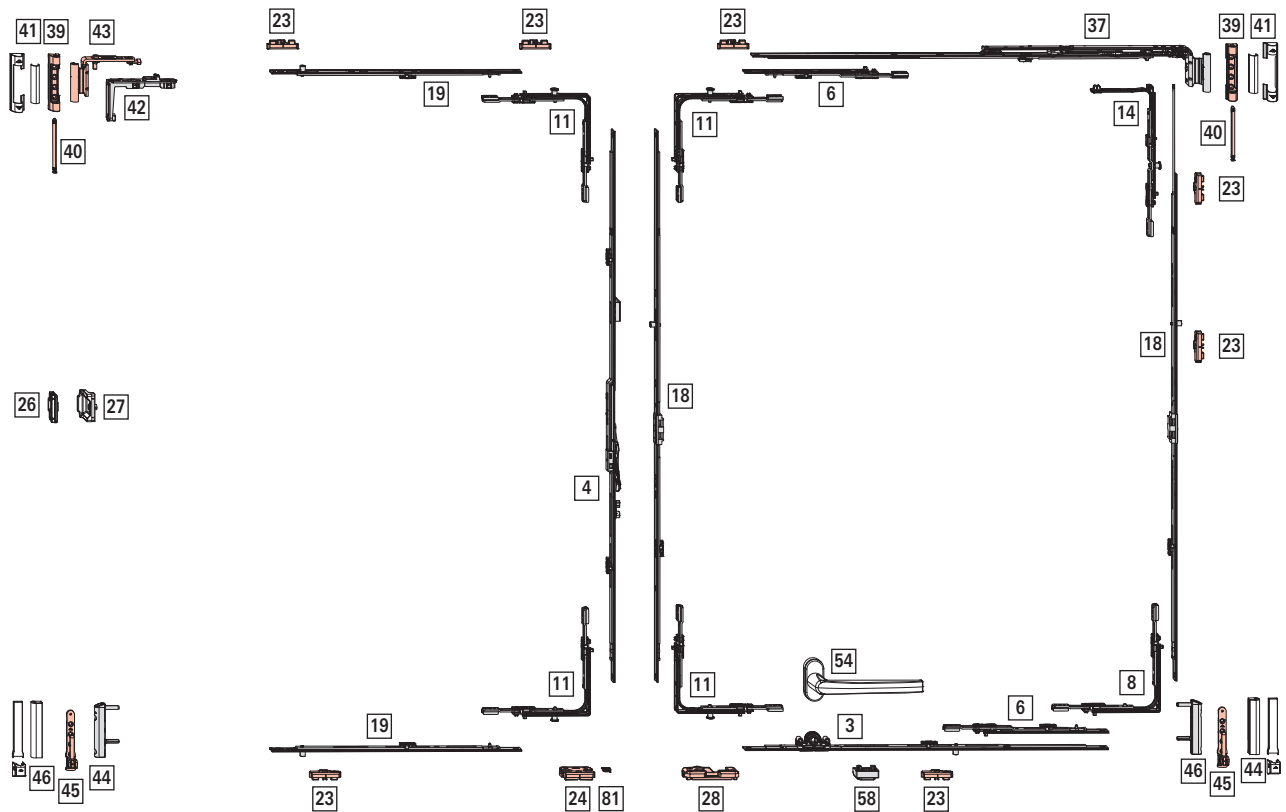


Optional

[16] Corner drive, slide guard				
				Nº
Second opening sash / slide guard	Top	1	V	839223
Second opening sash / slide guard	Bottom	1	V	839224

When using a corner drive with a slide guard, a standard corner drive (RC 3) is required on the first opening sash.

4.1.4.8 Plus – comfort – basic security





Application range

SRW: 520 – 1400 mm

SRH: 800 – 1600 mm

S.kg: max. 50 kg

[3] T&T espagnolette – comfort, fixed handle height
backset 15 mm

				Nº
520 – 700	490	–	–	307029
701 – 900	690	1	E	307030

[4] Floating-mullion espagnolette, Plus – VT,
backset 15 mm

				Nº
801 – 1000	496	890	1	2007117
1001 – 1200	496	1090	1	2007118
1201 – 1400	546	1290	1	2007119
1401 – 1600	546	1490	2	2007120

[6] Espagnolette extension, horizontal

				Nº
200	Y	–	–	308267
400	Y	1	E	280346

Size-specific combinations:

				Nº
bottom	top			
901 – 1100	1001 – 1200	200	–	308267
1101 – 1300	1201 – 1400	400	1	260193
1301 – 1400	–	200	–	308267
		400	1	260193

[8] Corner drive, standard, without cam

			Nº
–	–	–	339785

[11] Standard corner drive

			Nº
1	E	Top	260275
1	P	Top Bottom	260277

[14] Sash stay corner drive

			Nº
1	P	–	260286

[18] Multipart centre lock – standard, vertical

				Nº
690	–	–	–	774165
890	1	E	–	774174
1090	1	E	–	774175
1290	1	E	–	774176
1490	2	E	–	774177

Size-specific combinations:

				Nº
–	800 – 870	690	–	774165
800 – 1000	871 – 1070	890	1	774174
1001 – 1200	1071 – 1270	1090	1	774175
1201 – 1400	1271 – 1470	1290	1	774176
1401 – 1600	1471 – 1600	1490	2	774177

[19] Multipart centre lock – standard, horizontal

				Nº
400	N	1	E	255280
600	N	1	E	255281

Size-specific combinations:

				Nº
801 – 1200	400	1	E	255280
1201 – 1400	600	1	E	255281

[23] Striker → from page 201**[24] Security striker → from page 202****[26] Concealed centre closer frame component →**
CTL_105**[27] Concealed centre closer sash component →**
CTL_105**[28] Tilt striker → from page 196****[37] Scissor stay, forcibly controlled, system**
12/20-13

					Nº
460 – 600	490	Left	–	–	795032
		Right	–	–	795033
601 – 800	690	Left	–	–	795036
		Right	–	–	795037
801 – 1000	890	Left	1	E	795040
		Right	1	E	795041

[39] Stay bearing

		Nº
P 3/130	–	859171
P 6/130	–	859172
P 6/150	–	859173

[40] Stay-bearing pin

		Nº
Stay-bearing pin	86	834705

[41] Sash stay cover caps → CTL_105**[42] Rebate stay guide**

		Nº
Rebate stay guide on the hinge side P / T / K / A / E5	–	331488

[43] Rebate stay arm, system 12/20-13

	Nº
Left	787375
Right	787376

[44] Corner hinge

		Nº
K 6/130	Height adjustable	263858
P 6/150		
K 6/130	Height and gasket-compression adjustable	445171
P 6/150		

[45] Pivot rest

		Nº
P 3/130	Laterally adjustable	787207
P 6/130	Laterally adjustable	787208
P 6/150	Laterally adjustable	787209

[46] Corner hinge / pivot rest cover caps →
CTL_105

[54] Handle → CTL_1

Handle under Roto Patio Alversa, Roto Patio Inowa:
Roto Line design

[58] Run-up block with mishandling device

	Nº
Sash	307050

[81] Run-up block

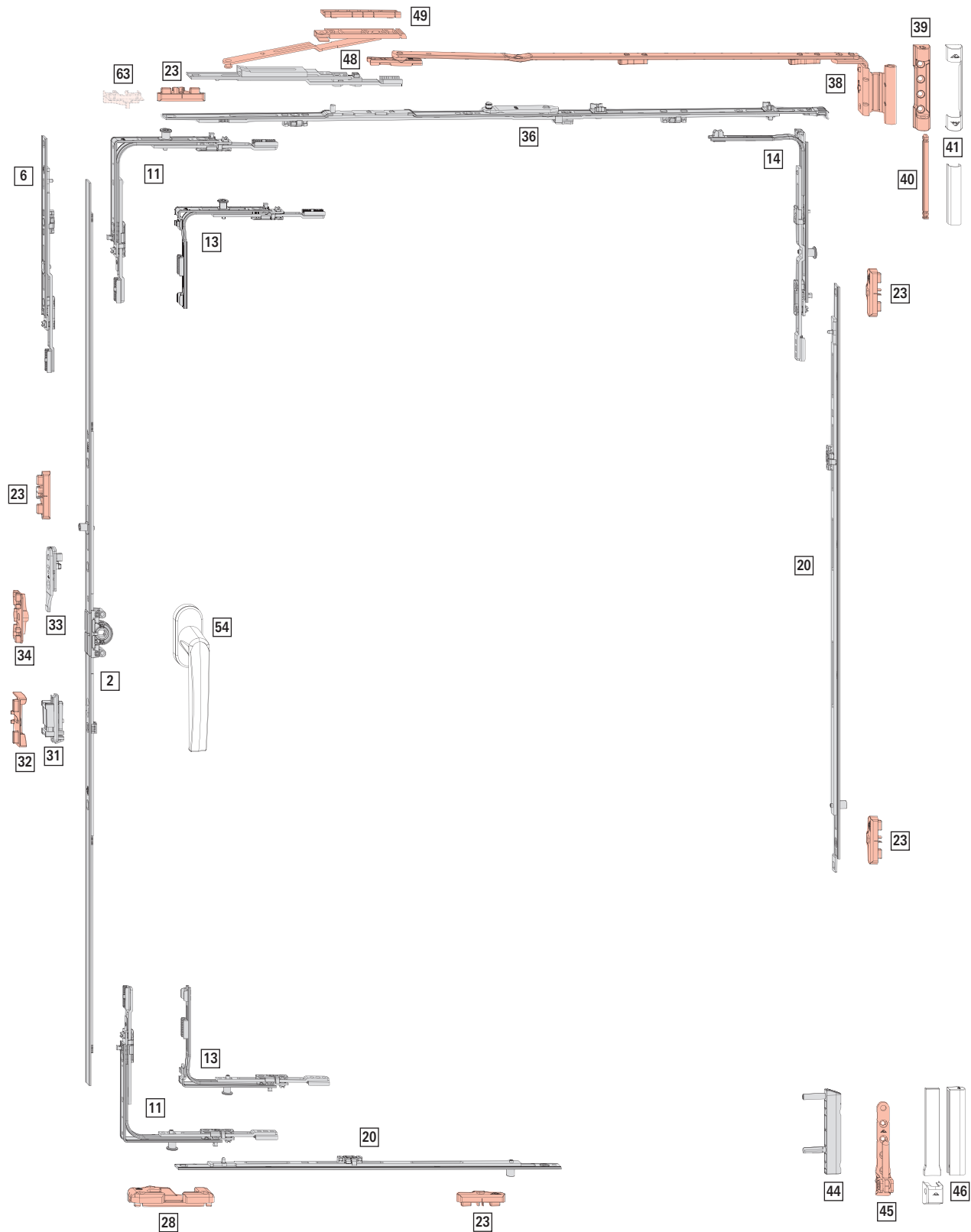
			Nº
Rebate run-up block	Frame	Insertable	609211



4.2 T&T espagnolette – centred / variable handle height

4.2.1 Tilt&Turn hardware

4.2.1.1 Basic security





Application range

SRW: 290 – 1600 mm

SRH: 310 – 2800 mm

[2] T&T espagnolette – centred / variable handle height, backset 15 mm

310 – 620	155 – 225	430	N	–	259717
621 – 800	311 – 400	580	Y	1	259719
801 – 1200	401 – 600	980	Y	1	259720
1201 – 1600	601 – 800	1380	Y	2	259721
1601 – 2000	801 – 1000	1780	Y	2	795389
2001 – 2400	1001 – 1200	2180	Y	4	795392

[6] Espagnolette extension, (SRH ≥ 2401 mm)

200	Y	–	–	308267
400	Y	1	E	280346

Size-specific combinations:

2401 – 2600	200 KU	–	–	308267
2601 – 2800	400 KU	1	E	280346

[11] Standard corner drive

1	E	Top	260275
1	P	Top Bottom	260277

[13] Special short corner drive

1	E	260280
1	P	260282

For use with SRH ≤ 450 mm.

[14] Sash stay corner drive

1	P	260286

[20] Multipart centre lock – standard, horizontal and vertical

400	N	1	E	255280
600	N	1	E	255281
600	Y	1	E	255282

Size-specific combinations:

			 #		Nº
801 – 1200	801 – 1200	400	1	E	255280
1201 – 1400	1201 – 1400	600	1	E	255281

1401 – 1600	1401 – 1800	600 KU	1	E	255282
		400	1	E	255280
	1801 – 2000	600 KU	1	E	255282
		600	1	E	255281
	2001 – 2400	600 KU	1	E	255282
		600 KU	1	E	255282
		400	1	E	255280
	2401 – 2600	600 KU	1	E	255282
		600 KU	1	E	255282
		600	1	E	255281
	2601 – 2800	600 KU	1	E	255282
		600 KU	1	E	255282
		600 KU	1	E	255282
		400	1	E	255280

[23] Striker → from page 201

[28] Tilt striker → from page 196

[31] Bullet catch sash component (optional SRH ≥ 1601 mm)

Bullet catch sash component		788363

[32] Bullet-catch frame component (optional SRH ≥ 1601 mm) → from page 209

[33] Lifting mishandling device sash component

Sash component for lifting mishandling device		795927

[34] Lifting mishandling device frame component → from page 210

[36] Stay guide – basic security

290 – 410	150	300	–	–	787345
411 – 600	250	490	–	–	787346
601 – 800	350	690	–	–	787347
801 – 1000	500	890	1	E	788617
1001 – 1200	500	1090	1	E	787349
1201 – 1400	500	1290	1	E	787351



INFO

With SRW < 310 mm, remove the assembly clip.

[38] Stay arm, system 12/20-13

290 – 410	150	Left	787233
290 – 410	150	Right	787234
411 – 600	250	Left	787235
411 – 600	250	Right	787236

			Nº
601 – 800	350	Left	787237
601 – 800	350	Right	787238
801 – 1400	500	Left	787239
801 – 1400	500	Right	787240



INFO

With SRH < 500 mm, set the tilt depth to 80 mm (with sash stay from size 250 and above).

[39] Stay bearing

	Nº
P 3/130	859171
P 6/130	859172
P 6/150	859173

[40] Stay-bearing pin

		Nº
Stay-bearing pin	86	834705

[41] Sash stay cover caps → CTL_105

[44] Corner hinge

		Nº
K 6/130	Height adjustable	263858
P 6/150		
K 6/130	Height and gasket-compression adjustable	445171
P 6/150		

[45] Pivot rest

		Nº
P 3/130	Laterally adjustable	787207
P 6/130	Laterally adjustable	787208
P 6/150	Laterally adjustable	787209

[46] Corner hinge / pivot rest cover caps → CTL_105

[48] Additional stay arm (SRW ≥ 1401 mm)

		Nº
Frame and sash component	200	255237

[49] Packer → from page 207

[54] Handle → CTL_1

Optional

[63] Night vent, SRW ≥ 601 mm → from page 212



INFO

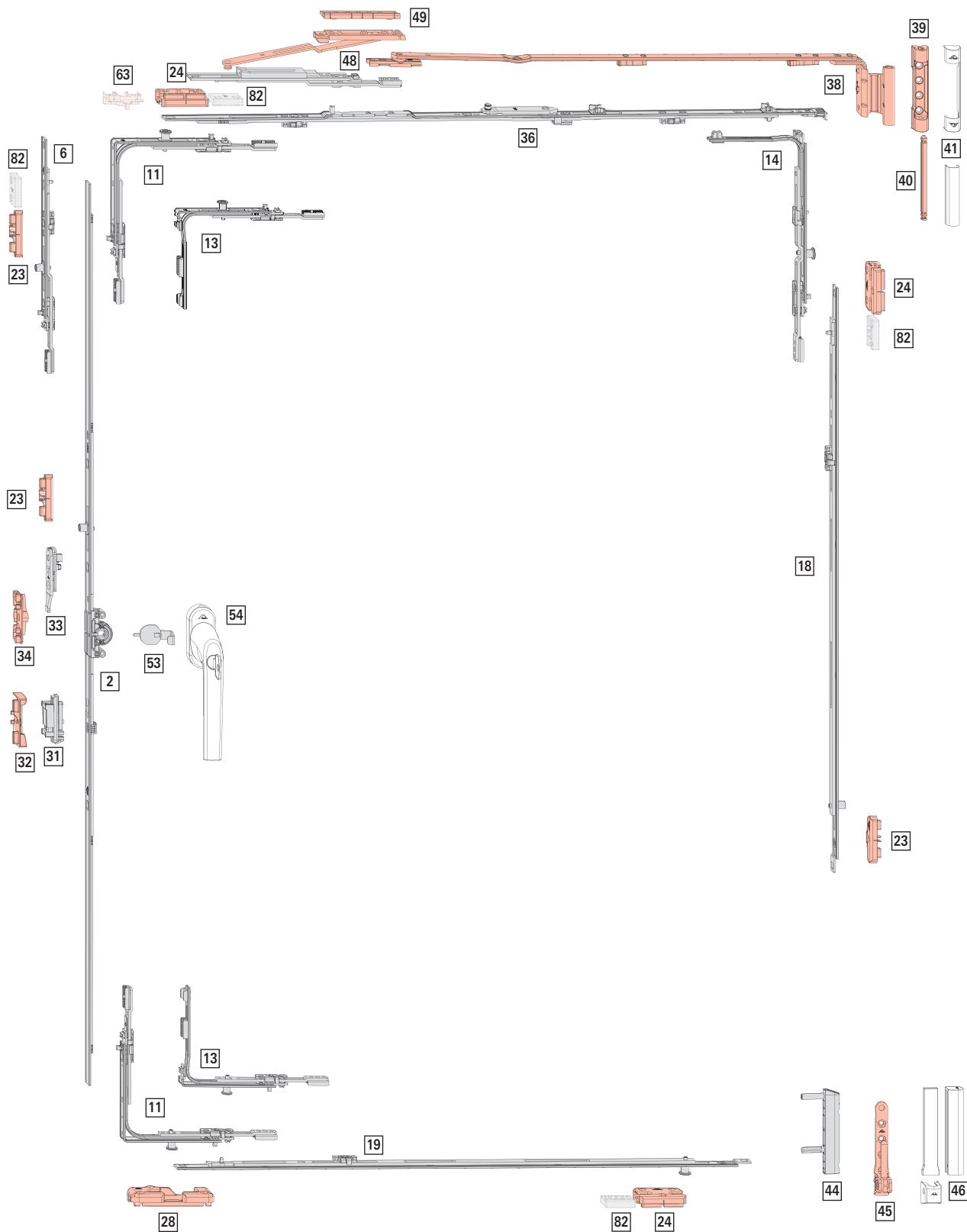
Only for use in conjunction with P or V cam.

Sash lifter → CTL_105

Arrestable brake stay → CTL_105



4.2.1.2 RC 1 N





Application range

SRW: 320 – 1600 mm

SRH: 310 – 2800 mm

[2] T&T espagnolette – centred / variable handle height, backset 15 mm

						Nº
310 – 620	155 – 225	430	N	–	–	259717
621 – 800	311 – 400	580	Y	1	E	259719
801 – 1200	401 – 600	980	Y	1	E	259720
1201 – 1600	601 – 800	1380	Y	2	E	259721
1601 – 2000	801 – 1000	1780	Y	2	E	795389
2001 – 2400	1001 – 1200	2180	Y	4	E	795392

[6] Espagnolette extension, (SRH ≥ 2401 mm)

				Nº
200	Y	1	E	450821
400	Y	1	E	280346

Size-specific combinations:

				Nº
2401 – 2600	200 KU	1	E	450821
2601 – 2800	400 KU	1	E	280346

[11] Standard corner drive

		Nº
1	P	260277

[13] Special short corner drive

		Nº
1	P	260282

For use with SRH ≤ 450 mm.

[14] Sash stay corner drive

		Nº
1	P	260286

[18] Multipart centre lock – standard, vertical

				Nº
400	N	1	E	255280
600	N	1	E	255281
600	Y	1	E	255282

Size-specific combinations:

				Nº
801 – 1200	400	1	E	255280
1201 – 1400	600	1	E	255281
1401 – 1800	600 KU	1	E	255282
	400	1	E	255280
1801 – 2000	600 KU	1	E	255282
	600	1	E	255281

				Nº
2001 – 2400	600 KU	1	E	255282
	600 KU	1	E	255282
	400	1	E	255280
2401 – 2600	600 KU	1	E	255282
	600 KU	1	E	255282
	600	1	E	255281
2601 – 2800	600 KU	1	E	255282
	600 KU	1	E	255282
	600 KU	1	E	255282
	400	1	E	255280

[19] Multipart centre lock – security, horizontal

				Nº
200	N	1	P	255284
400	N	1	P	255285
600	N	1	P	255286
600	Y	1	E	255282

Size-specific combinations:

				Nº
320 – 520	200	1	P	255284
521 – 730	400	1	P	255285
731 – 930	600	1	P	255286
931 – 1130	600 KU	1	E	255282
	200	1	P	255284
1131 – 1330	600 KU	1	E	255282
	400	1	P	255285
1331 – 1530	600 KU	1	E	255282
	600	1	P	255286
1531 – 1600	600 KU	1	E	255282
	600 KU	1	E	255282
	200	1	P	255284

[23] Striker → from page 201

[24] Security striker → from page 202

[28] Tilt striker → from page 196

[31] Bullet catch sash component (optional SRH ≥ 1601 mm)

	Nº
Bullet catch sash component	788363

[32] Bullet-catch frame component (optional SRH ≥ 1601 mm) → from page 209

[33] Lifting mishandling device sash component

	Nº
Sash component for lifting mishandling device	795927

[34] Lifting mishandling device frame component
→ from page 210**[36] Stay guide – basic security**

					Nº
290 – 410	150	300	–	–	787345
411 – 600	250	490	–	–	787346
601 – 800	350	690	–	–	787347
801 – 1000	500	890	1	E	788617
1001 – 1200	500	1090	1	E	787349
1201 – 1400	500	1290	1	E	787351

[38] Stay arm, system 12/20-13

			Nº
290 – 410	150	Left	787233
290 – 410	150	Right	787234
411 – 600	250	Left	787235
411 – 600	250	Right	787236
601 – 800	350	Left	787237
601 – 800	350	Right	787238
801 – 1400	500	Left	787239
801 – 1400	500	Right	787240

**INFO**

With SRH < 500 mm, set the tilt depth to 80 mm (with sash stay from size 250 and above).

[39] Stay bearing

	Nº
P 3/130	859171
P 6/130	859172
P 6/150	859173

[40] Stay-bearing pin

		Nº
Stay-bearing pin	86	834705

[41] Sash stay cover caps → CTL_105**[44] Corner hinge**

		Nº
K 6/130	Height adjustable	263858
P 6/150		
K 6/130	Height and gasket-compression adjustable	445171
P 6/150		

[45] Pivot rest

		Nº
P 3/130	Laterally adjustable	787207
P 6/130	Laterally adjustable	787208
P 6/150	Laterally adjustable	787209

[46] Corner hinge / pivot rest cover caps →
CTL_105**[48] Additional stay arm (SRW ≥ 1401 mm)**

		Nº
Frame and sash component	200	255237

[49] Packer → from page 207**[53] Drilling protection**

	Nº
Drilling protection	797819

[54] Handle, lockable → CTL_1**Optional****[63] Night vent, SRW ≥ 601 mm → from page 212****INFO**

Only for use in conjunction with P or V cam.

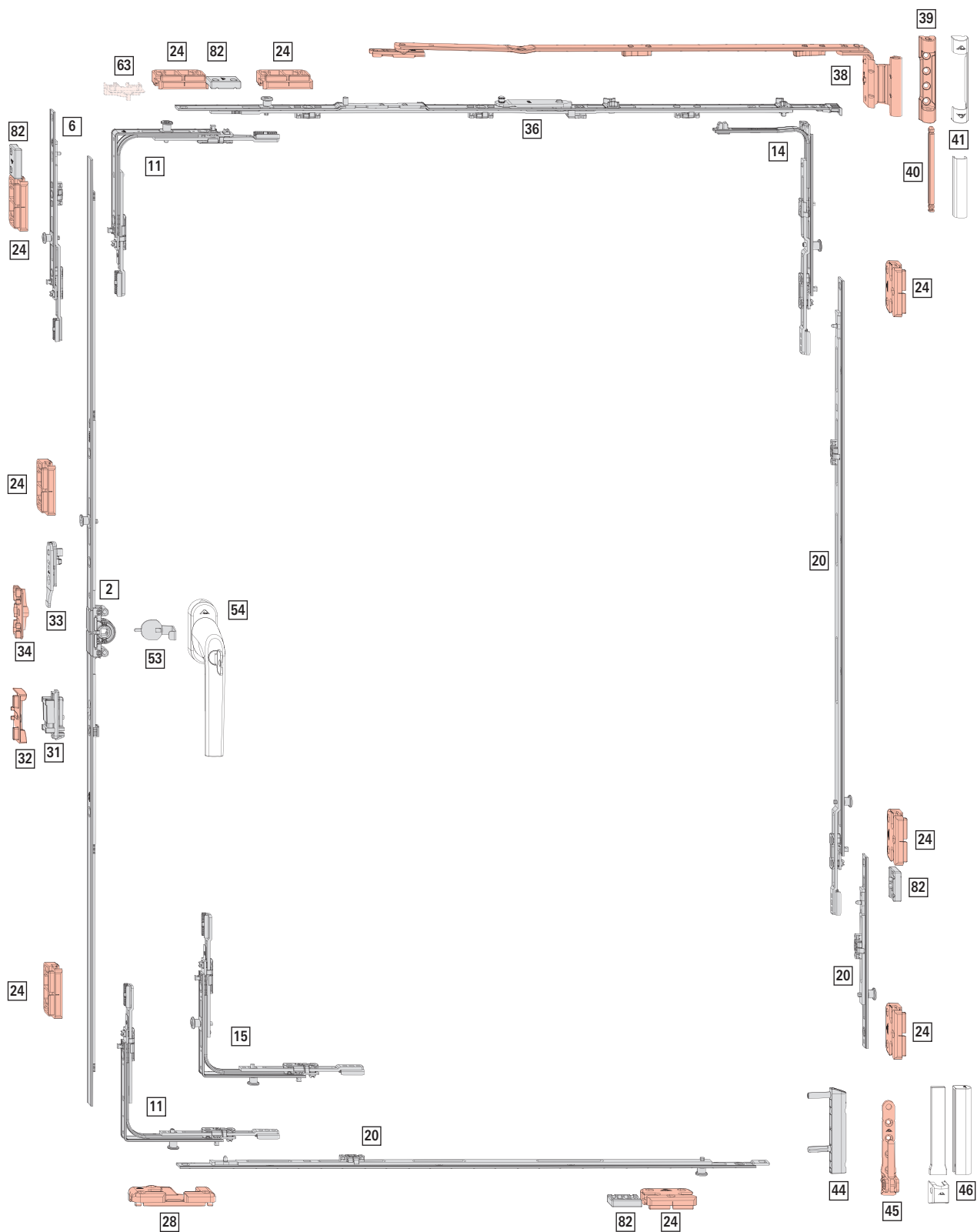
[82] Anti-jemmy device

		Nº
Anti-jemmy device	From rebate depth 26 mm	811715

Sash lifter → CTL_105



4.2.1.3 RC 2 / RC 2 N





Application range

SRW: 320 – 1400 mm

SRH: 490 – 2800 mm

[2] T&T espagnolette – centred / variable handle height, backset 15 mm

						Nº
310 – 620	155 – 225	430	N	–	–	259717
621 – 800	311 – 400	580	Y	1	V	355743
801 – 1200	401 – 600	980	Y	1	V	355744
1201 – 1600	601 – 800	1380	Y	2	V	355745
1601 – 2000	801 – 1000	1780	Y	2	V	795390
2001 – 2400	1001 – 1200	2180	Y	4	V	795393

[6] Espagnolette extension, (SRH ≥ 2401 mm)

					Nº
200	Y	1	V	V	337708
400	Y	1	V	V	337710

Size-specific combinations:

					Nº
2401 – 2600	200 KU	1	V	V	337708
2601 – 2800	400 KU	1	V	V	337710

[11] Standard corner drive

		Nº
1	V	260272

[14] Sash stay corner drive

		Nº
1	V	260284

[15] Standard corner drive (RC3)

		Nº
2	V	260274

For use with SRH ≤ 620 mm.

[20] Multipart centre lock – security, horizontal and vertical

					Nº
200	N	1	V	V	296853
400	N	1	V	V	296854
600	N	1	V	V	296855
600	Y	1	V	V	337711

Size-specific combinations:

					Nº
320 – 600	490 – 700	200	1	V	296853
601 – 800	701 – 900	400	1	V	296854
801 – 1000	901 – 1100	600	1	V	296855
1001 – 1200	1101 – 1300	600 KU	1	V	337711
		200	1	V	296853

					Nº
1201 – 1400	1301 – 1500	600 KU	1	V	337711
		400	1	V	296854
	1501 – 1700	600 KU	1	V	337711
		600	1	V	296855
	1701 – 1900	600 KU	1	V	337711
		600 KU	1	V	337711
		200	1	V	296853
	1901 – 2100	600 KU	1	V	337711
		600 KU	1	V	337711
		400	1	V	296854
	2101 – 2300	600 KU	1	V	337711
		600 KU	1	V	337711
		600	1	V	296855
	2301 – 2500	600 KU	1	V	337711
		600 KU	1	V	337711
		600 KU	1	V	337711
		200	1	V	296853
	2501 – 2700	600 KU	1	V	337711
		600 KU	1	V	337711
		600 KU	1	V	337711
		400	1	V	296854
	2701 – 2800	600 KU	1	V	337711
		600 KU	1	V	337711
		600	1	V	296855

[24] Security striker → from page 202

[28] Tilt striker → from page 196

[31] Bullet catch sash component (optional SRH ≥ 1601 mm)

	Nº
Bullet catch sash component	788363

[32] Bullet-catch frame component (optional SRH ≥ 1601 mm) → from page 209

[33] Lifting mishandling device sash component

	Nº
Sash component for lifting mishandling device	795927

[34] Lifting mishandling device frame component → from page 210

[36] Stay guide – security

					Nº
290 – 410	150	300	–	–	787345
411 – 600	250	490	–	–	787346
601 – 800	350	690	–	–	787347
801 – 1000	500	890	1	V	787360
1001 – 1200	500	1090	1	V	787361
1201 – 1400	500	1290	1	V	787362

[38] Stay arm, system 12/20-13

			Nº
290 – 410	150	Left	787233
290 – 410	150	Right	787234
411 – 600	250	Left	787235
411 – 600	250	Right	787236
601 – 800	350	Left	787237
601 – 800	350	Right	787238
801 – 1400	500	Left	787239
801 – 1400	500	Right	787240



INFO

With SRH < 500 mm, set the tilt depth to 80 mm (with sash stay from size 250 and above).

[39] Stay bearing

	Nº
P 3/130	859171
P 6/130	859172
P 6/150	859173

[40] Stay-bearing pin

		Nº
Stay-bearing pin	86	834705

[41] Sash stay cover caps → CTL_105

[44] Corner hinge

		Nº
K 6/130 P 6/150	Height adjustable	263858
K 6/130 P 6/150	Height and gasket-compression adjustable	445171

[45] Pivot rest

		Nº
P 3/130	Laterally adjustable	787207
P 6/130	Laterally adjustable	787208
P 6/150	Laterally adjustable	787209

[46] Corner hinge / pivot rest cover caps → CTL_105

[53] Drilling protection

	Nº
Drilling protection	797819

[54] Handle, lockable → CTL_1

[82] Anti-jemmy device

		Nº
Anti-jemmy device	From rebate depth 26 mm	811715

Optional

[63] Night vent, SRW ≥ 601 mm → from page 212



INFO

Only for use in conjunction with P or V cam.

Sash lifter → CTL_105



This diagram illustrates the exploded view of a rectangular metal frame assembly. The main structure is composed of four long side rails (15, 17, 14, 20) and four corner brackets (2, 14, 15, 20). Various fasteners, including screws (24, 32, 34, 44, 45), nuts (82), and washers (31, 33), are shown in their respective positions. A central handle assembly (53, 54) is attached to the left side rail. The diagram uses a color-coding system: orange for structural components, grey for fasteners, and white for the handle and corner brackets.



Application range

SRW: 490 – 1400 mm

SRH: 490 – 2800 mm

[2] T&T espagnolette – centred / variable handle height, backset 15 mm

						Nº
310 – 620	155 – 225	430	N	–	–	259717
621 – 800	311 – 400	580	Y	1	V	355743
801 – 1200	401 – 600	980	Y	1	V	355744
1201 – 1600	601 – 800	1380	Y	2	V	355745
1601 – 2000	801 – 1000	1780	Y	2	V	795390
2001 – 2400	1001 – 1200	2180	Y	4	V	795393

[6] Espagnolette extension, (SRH ≥ 2401 mm)

				Nº
200	Y	1	V	337708
400	Y	1	V	337710

Size-specific combinations:

				Nº
2401 – 2600	200 KU	1	V	337708
2601 – 2800	400 KU	1	V	337710

[14] Sash stay corner drive

		Nº
1	V	260284

[15] Standard corner drive (RC3)

		Nº
2	V	260274

[17] Centre lock, multipart – standard, horizontal – top

				Nº
200	Y	1	V	337708

Size-specific combinations:

				Nº
1001 – 1400	200 KU	1	V	337708

[20] Multipart centre lock – security, horizontal and vertical

				Nº
200	Y	1	V	337708
400	Y	1	V	337710

Size-specific combinations:

					Nº
490 – 600	490 – 600	200 KU	1	V	337708
601 – 800	600 – 800	200 KU	1	V	337708
		200 KU	1	V	337708

					Nº
801 – 1000	801 – 1000	200 KU	1	V	337708
		200 KU	1	V	337708
		200 KU	1	V	337708
1001 – 1200	1001 – 1200	200 KU	1	V	337708
		400 KU	1	V	337710
		200 KU	1	V	337708
1201 – 1400	1201 – 1400	200 KU	1	V	337708
		400 KU	1	V	337710
		200 KU	1	V	337708
		200 KU	1	V	337708
		200 KU	1	V	337708
		200 KU	1	V	337708
	1401 – 1600	200 KU	1	V	337708
		400 KU	1	V	337710
		400 KU	1	V	337710
		200 KU	1	V	337708
		200 KU	1	V	337708
		200 KU	1	V	337708
	1601 – 1800	200 KU	1	V	337708
		400 KU	1	V	337710
		400 KU	1	V	337710
		200 KU	1	V	337708
		200 KU	1	V	337708
		200 KU	1	V	337708
	1801 – 2000	200 KU	1	V	337708
		400 KU	1	V	337710
		400 KU	1	V	337710
		400 KU	1	V	337710
		200 KU	1	V	337708
		200 KU	1	V	337708
	2001 – 2200	200 KU	1	V	337708
		400 KU	1	V	337710
		400 KU	1	V	337710
		400 KU	1	V	337710
		200 KU	1	V	337708
		200 KU	1	V	337708

					Nº
1201 – 1400	2201 – 2400	200 KU	1	V	337708
		400 KU	1	V	337710
		400 KU	1	V	337710
		400 KU	1	V	337710
		400 KU	1	V	337710
		200 KU	1	V	337708
	2401 – 2600	200 KU	1	V	337708
		400 KU	1	V	337710
		400 KU	1	V	337710
		400 KU	1	V	337710
		400 KU	1	V	337710
		200 KU	1	V	337708
		200 KU	1	V	337708
	2601 – 2800	200 KU	1	V	337708
		400 KU	1	V	337710
		400 KU	1	V	337710
		400 KU	1	V	337710
		400 KU	1	V	337710
		400 KU	1	V	337710
		200 KU	1	V	337708
					337708

[24] Security striker → from page 202

[28] Tilt striker → from page 196

[31] Bullet catch sash component (optional SRH ≥ 1601 mm)

	Nº
Bullet catch sash component	788363

[32] Bullet-catch frame component (optional SRH ≥ 1601 mm) → from page 209

[33] Lifting mishandling device sash component

	Nº
Sash component for lifting mishandling device	795927

[34] Lifting mishandling device frame component → from page 210

[36] Stay guide – security

					Nº
411 – 600	250	490	–	–	787346
601 – 800	350	690	–	–	787347
801 – 1000	350	890	1	V	787358

[38] Stay arm, system 12/20-13

			Nº
411 – 600	250	Left	787235
411 – 600	250	Right	787236
601 – 800	350	Left	787237

			Nº
601 – 800	350	Right	787238

[39] Stay bearing

	Nº
P 3/130	859171
P 6/130	859172
P 6/150	859173

[40] Stay-bearing pin

		Nº
Stay-bearing pin	86	834705

[41] Sash stay cover caps → CTL_105

[44] Corner hinge

		Nº
K 6/130	Height adjustable	263858
P 6/150		
K 6/130	Height and gasket-compression adjustable	445171
P 6/150		

[45] Pivot rest

		Nº
P 3/130	Laterally adjustable	787207
P 6/130	Laterally adjustable	787208
P 6/150	Laterally adjustable	787209

[46] Corner hinge / pivot rest cover caps → CTL_105

[48] Additional stay arm (SRW ≥ 1201 mm)

		Nº
Frame and sash component	200	255237

[49] Packer → from page 207

[53] Drilling protection

	Nº
Drilling protection	797819

[54] Handle, lockable → CTL_1

[82] Anti-jemmy device

		Nº
Anti-jemmy device	From rebate depth 26 mm	811715

Optional

[63] Night vent, SRW ≥ 601 mm → from page 212

	INFO
	Only for use in conjunction with P or V cam.



4.2.1.5 TiltSafe RC 2 / RC 2 N





Application range

SRW: 410 – 1400 mm

SRH: 490 – 2800 mm



INFO

Only for hardware axis 13 and rebate depth 30 mm.

[2] T&T espagnolette – centred / variable handle height, backset 15 mm

310 – 620	155 – 225	430	N	–	259717
621 – 800	311 – 400	580	Y	1	355743
801 – 1200	401 – 600	980	Y	1	355744
1201 – 1600	601 – 800	1380	Y	2	355745
1601 – 2000	801 – 1000	1780	Y	2	795390
2001 – 2400	1001 – 1200	2180	Y	4	795393

[6] Espagnolette extension, (SRH ≥ 2401 mm)

200	Y	1	337708
400	Y	1	337710

Size-specific combinations:

2401 – 2600	200 KU	1	337708
2601 – 2800	400 KU	1	337710

[14] Sash stay corner drive

1	260284

[15] Standard corner drive (RC3)

2	260274

[18] Multipart centre lock – security, vertical

200	N	1	296853
200	Y	1	337708
400	N	1	296854
400	Y	1	337710
600	N	1	296855
600	Y	1	337711

Size-specific combinations:

490 – 700	200	1	296853
701 – 900	200 KU	1	337708
	200	1	296853
901 – 1100	200 KU	1	337708
	400	1	296854

1101 – 1300	200 KU	1	337708
	600	1	296855
1301 – 1500	200 KU	1	337708
	600 KU	1	337711
	200	1	296853
1501 – 1700	200 KU	1	337708
	600 KU	1	337711
	400	1	296854
1701 – 1900	200 KU	1	337708
	600 KU	1	337711
	600	1	296855
1901 – 2100	200 KU	1	337708
	600 KU	1	337711
	600 KU	1	337711
	200	1	296853
2101 – 2300	200 KU	1	337708
	600 KU	1	337711
	600 KU	1	337711
	400	1	296854
2301 – 2500	200 KU	1	337708
	600 KU	1	337711
	600 KU	1	337711
	600	1	296855
2501 – 2700	200 KU	1	337708
	600 KU	1	337711
	600 KU	1	337711
	600 KU	1	337711
	200	1	296853
2701 – 2800	200 KU	1	337708
	600 KU	1	337711
	600 KU	1	337711
	600 KU	1	337711
	400	1	296854

[19] Multipart centre lock – security, horizontal

200	N	1	296853
200	Y	1	337708
400	Y	1	337710

Size-specific combinations:

410 – 600	200	1	296853
601 – 800	200 KU	1	337708
	200	1	296853
801 – 1000	200 KU	1	337708
	400 KU	1	337710
1001 – 1200	200 KU	1	337708
	400 KU	1	337710
	200	1	296853

				Nº
1201 – 1400	200 KU	1	V	337708
	400 KU	1	V	337710
	400 KU	1	V	337710

[24] Security striker → from page 202

[28] Tilt striker → from page 196

[29] Security striker for tilt ventilation → from page 206

[31] Bullet catch sash component (optional SRH ≥ 1601 mm)

	Nº
Bullet catch sash component	788363

[32] Bullet-catch frame component (optional SRH ≥ 1601 mm) → from page 209

[33] Lifting mishandling device sash component

	Nº
Sash component for lifting mishandling device	795927

[34] Lifting mishandling device frame component → from page 210

[36] Stay guide – security

					Nº
411 – 600	250	490	–	–	787346
601 – 800	350	690	–	–	787347
801 – 1000	500	890	1	V	787360
1001 – 1200	500	1090	1	V	787361
1201 – 1400	500	1290	1	V	787362

[38] Stay arm, system 12/20-13

			Nº
411 – 600	250	Left	787235
411 – 600	250	Right	787236
601 – 800	350	Left	787237
601 – 800	350	Right	787238
801 – 1400	500	Left	787239
801 – 1400	500	Right	787240

[39] Stay bearing

	Nº
P 3/130	859171
P 6/130	859172
P 6/150	859173

[40] Stay-bearing pin

		Nº
Stay-bearing pin	86	834705

[41] Sash stay cover caps → CTL_105

[44] Corner hinge

		Nº
K 6/130	Height adjustable	263858
P 6/150		
K 6/130	Height and gasket-compression adjustable	445171
P 6/150		

[45] Pivot rest

		Nº
P 3/130	Laterally adjustable	787207
P 6/130	Laterally adjustable	787208
P 6/150	Laterally adjustable	787209

[46] Corner hinge / pivot rest cover caps → CTL_105

[50] Rebate run-up block

	Nº
Sash	350403

[53] Drilling protection

	Nº
Drilling protection	797819

[54] Handle, lockable → CTL_1

[82] Anti-jemmy device

		Nº
Anti-jemmy device	From rebate depth 26 mm	811715

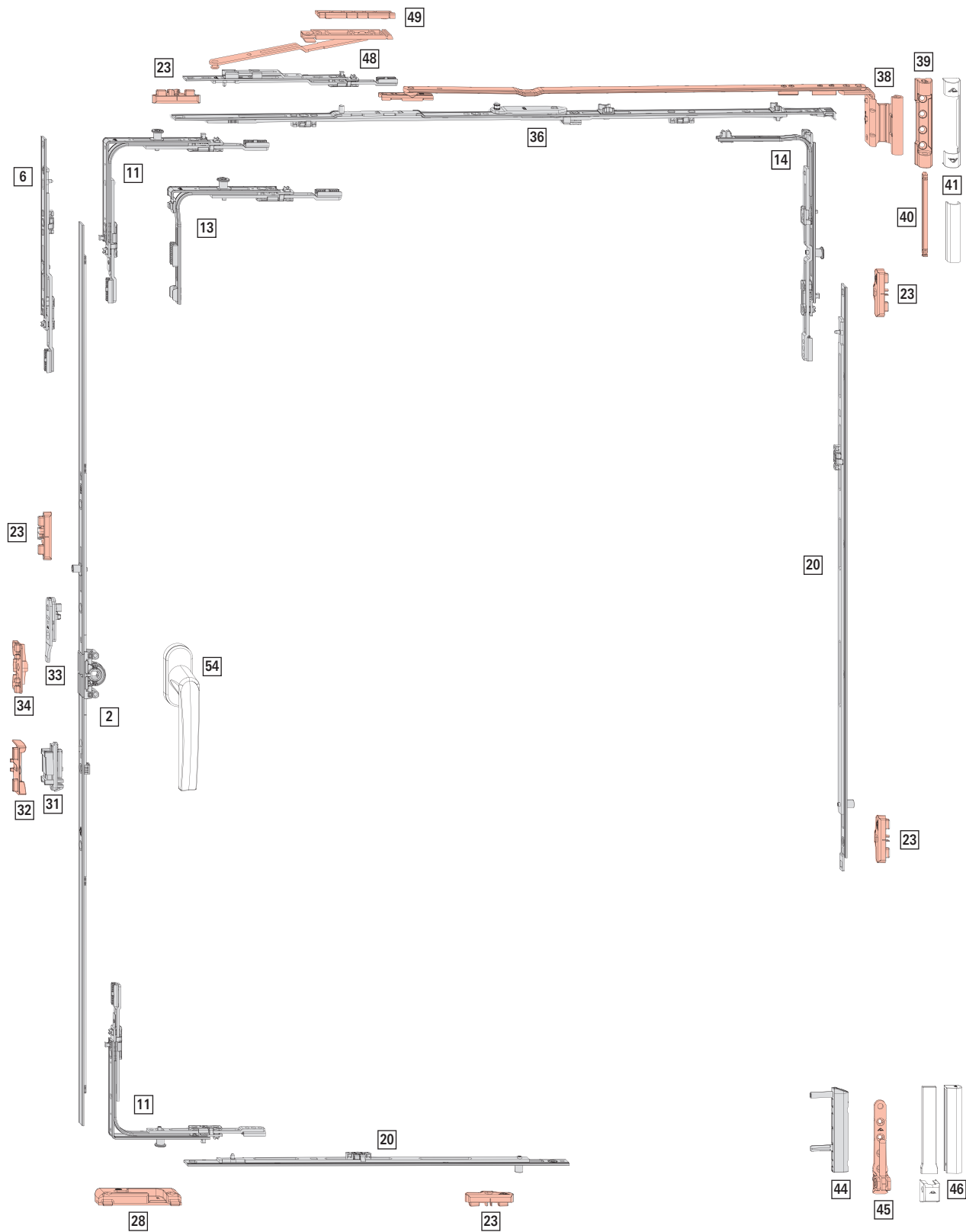
Optional

[83] TiltSafe protective support → from page 206



4.2.2 TiltFirst hardware

4.2.2.1 Basic security





Application range

SRW: 290 – 1600 mm

SRH: 310 – 2800 mm

[2] T&T espagnolette – centred / variable handle height, backset 15 mm

310 – 620	155 – 225	430	N	–	259717
621 – 800	311 – 400	580	Y	1	259719
801 – 1200	401 – 600	980	Y	1	259720
1201 – 1600	601 – 800	1380	Y	2	259721
1601 – 2000	801 – 1000	1780	Y	2	795389
2001 – 2400	1001 – 1200	2180	Y	4	795392

[6] Espagnolette extension, (SRH ≥ 2401 mm)

200	Y	–	–	308267
400	Y	1	E	280346

Size-specific combinations:

2401 – 2600	200 KU	–	–	308267
2601 – 2800	400 KU	1	E	280346

[11] Standard corner drive

1	E	Top	260275
1	P	Top Bottom	260277

[13] Special short corner drive

1	E	260280
1	P	260282

For use with SRH ≤ 450 mm.

[14] Sash stay corner drive

1	P	260286

[20] Multipart centre lock – standard, horizontal and vertical

400	N	1	E	255280
600	N	1	E	255281
600	Y	1	E	255282

Size-specific combinations:

					
801 – 1200	801 – 1200	400	1	E	255280
1201 – 1400	1201 – 1400	600	1	E	255281

1401 – 1600	1401 – 1800	600 KU	1	E	255282
		400	1	E	255280
	1801 – 2000	600 KU	1	E	255282
		600	1	E	255281
	2001 – 2400	600 KU	1	E	255282
		600 KU	1	E	255282
	2401 – 2600	400	1	E	255280
		600 KU	1	E	255282
	2601 – 2800	600 KU	1	E	255282
		600	1	E	255281
		600 KU	1	E	255282
		400	1	E	255280

[23] Striker → from page 201

[28] Tilt striker TiltFirst → from page 199

[31] Bullet catch sash component (optional SRH ≥ 1601 mm)

Bullet catch sash component		788363

[32] Bullet-catch frame component (optional SRH ≥ 1601 mm) → from page 209

[33] Lifting mishandling device sash component

Sash component for lifting mishandling device		795927

[34] Lifting mishandling device frame component → from page 210

[36] Stay guide – basic security

290 – 410	150	300	–	–	787345
411 – 600	250	490	–	–	787346
601 – 800	350	690	–	–	787347
801 – 1000	500	890	1	E	788617
1001 – 1200	500	1090	1	E	787349
1201 – 1400	500	1290	1	E	787351



INFO

With SRW < 310 mm, remove the assembly clip.

[38] Stay arm TiltFirst, system 12/20-13

290 – 410	150	Left		814711
290 – 410		Right		814712
411 – 600	250	Left		814713
411 – 600		Right		814714

			Nº
601 – 800	350	Left	814715
601 – 800		Right	814716
801 – 1400	500	Left	814717
801 – 1400		Right	814718

**INFO**

With SRH < 500 mm, set the tilt depth to 80 mm (with sash stay from size 250 and above).

[39] Stay bearing

	Nº
P 3/130	859171
P 6/130	859172
P 6/150	859173

[40] Stay-bearing pin

		Nº
Stay-bearing pin	86	834705

[41] Sash stay cover caps → CTL_105**[44] Corner hinge**

		Nº
K 6/130	Height adjustable	263858
P 6/150		
K 6/130	Height and gasket-compression adjustable	445171
P 6/150		

[45] Pivot rest

		Nº
P 3/130	Laterally adjustable	787207
P 6/130	Laterally adjustable	787208
P 6/150	Laterally adjustable	787209

[46] Corner hinge / pivot rest cover caps → CTL_105**[48] Additional stay arm** TiltFirst (SRW ≥ 1401 mm)

	Nº
Frame and sash component	292022

[49] Packer → from page 207**[54] Handle → CTL_1****INFO**

Use the lockable TiltFirst handle for child safe windows, see CTL_1.

Optional

Sash lifter → CTL_105

Arrestable brake stay → CTL_105



4.2.3 Turn-Only hardware

4.2.3.1 Basic security





Application range

SRW: 290 – 1600 mm

SRH: 310 – 2800 mm

[2] T&T espagnolette – centred / variable handle height, backset 15 mm

						Nº
310 – 620	155 – 225	430	N	–	–	259717
621 – 800	311 – 400	580	Y	1	E	259719
801 – 1200	401 – 600	980	Y	1	E	259720
1201 – 1600	601 – 800	1380	Y	2	E	259721
1601 – 2000	801 – 1000	1780	Y	2	E	795389
2001 – 2400	1001 – 1200	2180	Y	4	E	795392

[6] Espagnolette extension, (SRH ≥ 2401 mm)

				Nº
200	Y	–	–	308267
400	Y	1	E	280346

Size-specific combinations:

				Nº
2401 – 2600	200 KU	–	–	308267
2601 – 2800	400 KU	1	E	280346

[11] Standard corner drive

		Nº
1	P	260277

[13] Special short corner drive

		Nº
1	E	260280
1	P	260282

For use with SRH ≤ 450 mm.

[19] Multipart centre lock – standard, horizontal

				Nº
400	N	1	E	255280
600	N	1	E	255281
600	Y	1	E	255282

Size-specific combinations:

				Nº
801 – 1200	400	1	E	255280
1201 – 1400	600	1	E	255281
1401 – 1600	600 KU	1	E	255282
	400	1	E	255280

[23] Striker → from page 201

[24] Security striker → from page 202

[26] Concealed centre closer frame component → CTL_105

[27] Concealed centre closer sash component → CTL_105

[31] Bullet catch sash component (optional SRH ≥ 1601 mm)

	Nº
Bullet catch sash component	788363

[32] Bullet-catch frame component (optional SRH ≥ 1601 mm) → from page 209

[33] Lifting mishandling device sash component

	Nº
Sash component for lifting mishandling device	795927

[34] Lifting mishandling device frame component → from page 210

[39] Stay bearing

	Nº
P 3/130	859171
P 6/130	859172
P 6/150	859173

[40] Stay-bearing pin

		Nº
Stay-bearing pin	86	834705

[41] Sash stay cover caps → CTL_105

[42] Rebate stay guide

	Nº
Rebate stay guide on the hinge side P / T / K / A / E5	331488

[43] Rebate stay arm, system 12/20-13

	Nº
Left	787375
Right	787376

[44] Corner hinge

		Nº
K 6/130	Height adjustable	263858
P 6/150		
K 6/130	Height and gasket-compression adjustable	445171
P 6/150		

[45] Pivot rest

		Nº
P 3/130	Laterally adjustable	787207



Nº

P 6/130

Laterally adjustable

787208

P 6/150

Laterally adjustable

787209

[46] Corner hinge / pivot rest cover caps →
CTL_105

[52] 90° travel restrictor



Nº

Travel restrictor

264603

[54] Handle → CTL_1

Optional

Sash lifter → CTL_105

Arrestable brake stay → CTL_105



4.2.3.2 RC 1 N





Application range

SRW: 320 – 1600 mm

SRH: 310 – 2800 mm

[2] T&T espagnolette – centred / variable handle height, backset 15 mm

						Nº
310 – 620	155 – 225	430	N	–	–	259717
621 – 800	311 – 400	580	Y	1	E	259719
801 – 1200	401 – 600	980	Y	1	E	259720
1201 – 1600	601 – 800	1380	Y	2	E	259721
1601 – 2000	801 – 1000	1780	Y	2	E	795389
2001 – 2400	1001 – 1200	2180	Y	4	E	795392

[6] Espagnolette extension, (SRH ≥ 2401 mm)

				Nº
200	Y	1	E	450821
400	Y	1	E	280346

Size-specific combinations:

				Nº
2401 – 2600	200 KU	1	V	337708
2601 – 2800	400 KU	1	V	337710

[11] Standard corner drive

		Nº
1	P	260277

[13] Special short corner drive

		Nº
1	P	260282

For use with SRH ≤ 450 mm.

[14] Sash stay corner drive

		Nº
1	P	260286

[17] Centre lock, multipart – standard, horizontal – top

				Nº
200	Y	–	–	308267

Size-specific combinations:

				Nº
1401 – 1600	200 KU	–	–	255284

[18] Multipart centre lock – standard, vertical

				Nº
400	N	1	E	255280
600	N	1	E	255281
600	Y	1	E	255282

Size-specific combinations:

				Nº
801 – 1200	400	1	E	255280
1201 – 1400	600	1	E	255281
1401 – 1800	600 KU	1	E	255282
	400	1	E	255280
1801 – 2000	600 KU	1	E	255282
	600	1	E	255281
2001 – 2400	600 KU	1	E	255282
	600 KU	1	E	255282
	400	1	E	255280
2401 – 2600	600 KU	1	E	255282
	600 KU	1	E	255282
	600	1	E	255281
2601 – 2800	600 KU	1	E	255282
	600 KU	1	E	255282
	600 KU	1	E	255282
	400	1	E	255280

[19] Multipart centre lock – security, horizontal

				Nº
200	N	1	P	255284
400	N	1	P	255285
600	N	1	P	255286
600	Y	1	E	255282

Size-specific combinations:

				Nº
320 – 520	200	1	P	255284
521 – 730	400	1	P	255285
731 – 930	600	1	P	255286
931 – 1130	600 KU	1	E	255282
	200	1	P	255284
1131 – 1330	600 KU	1	E	255282
	400	1	P	255285
1331 – 1530	600 KU	1	E	255282
	600	1	P	255286
1531 – 1600	600 KU	1	E	255282
	600 KU	1	E	255282
	200	1	P	255284

[23] Striker → from page 201

[24] Security striker → from page 202

[31] Bullet catch sash component (optional SRH ≥ 1601 mm)

	Nº
Bullet catch sash component	788363

[32] Bullet-catch frame component (optional SRH ≥ 1601 mm) → *from page 209*

[33] Lifting mishandling device sash component

	Nº
Sash component for lifting mishandling device	795927

[34] Lifting mishandling device frame component
→ *from page 210*

[36] Stay guide – basic security

					Nº
290 – 410	150	300	–	–	787345
411 – 600	250	490	–	–	787346
601 – 800	350	690	–	–	787347
801 – 1000	500	890	1	E	788617
1001 – 1200	500	1090	1	E	787349
1201 – 1400	500	1290	1	E	787351

[38] Stay arm, system 12/20-13

			Nº
290 – 410	150	Left	787233
290 – 410	150	Right	787234
411 – 600	250	Left	787235
411 – 600	250	Right	787236
601 – 800	350	Left	787237
601 – 800	350	Right	787238
801 – 1400	500	Left	787239
801 – 1400	500	Right	787240

[39] Stay bearing

	Nº
P 3/130	859171
P 6/130	859172
P 6/150	859173

[40] Stay-bearing pin

		Nº
Stay-bearing pin	86	834705

[41] Sash stay cover caps → CTL_105

[44] Corner hinge

		Nº
K 6/130	Height adjustable	263858
P 6/150		
K 6/130	Height and gasket-compression adjustable	445171
P 6/150		

[45] Pivot rest

		Nº
P 3/130	Laterally adjustable	787207
P 6/130	Laterally adjustable	787208
P 6/150	Laterally adjustable	787209

[46] Corner hinge / pivot rest cover caps → CTL_105

[52] 90° travel restrictor

	Nº
Travel restrictor	264603

[53] Drilling protection

	Nº
Drilling protection	797819

[54] Handle, lockable → CTL_1

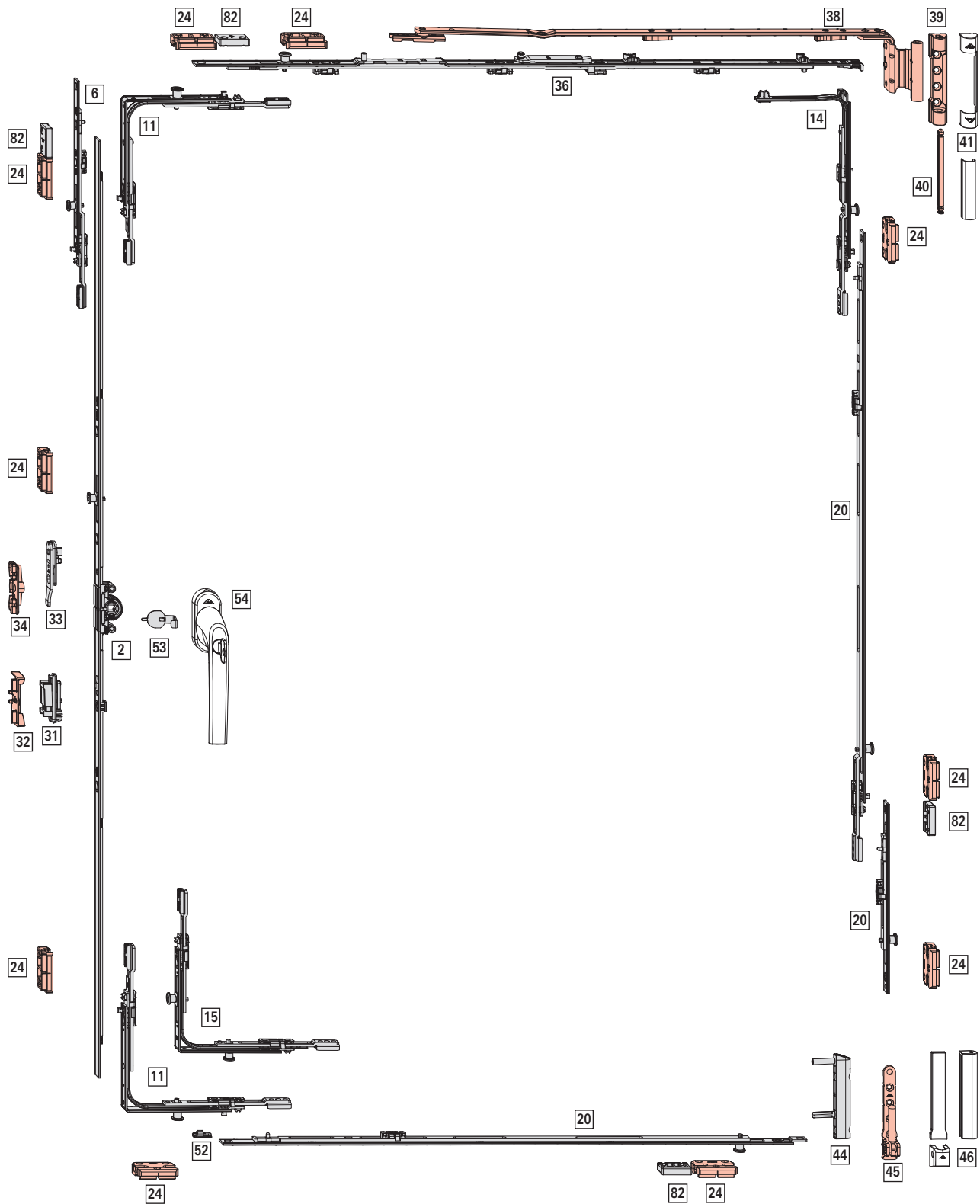
Optional

[82] Anti-jemmy device

		Nº
Anti-jemmy device	From rebate depth 26 mm	811715



4.2.3.3 RC 2 / RC 2 N





Application range

SRW: 320 – 1400 mm

SRH: 490 – 2800 mm

[2] T&T espagnolette – centred / variable handle height, backset 15 mm

						Nº
310 – 620	155 – 225	430	N	–	–	259717
621 – 800	311 – 400	580	Y	1	V	355743
801 – 1200	401 – 600	980	Y	1	V	355744
1201 – 1600	601 – 800	1380	Y	2	V	355745
1601 – 2000	801 – 1000	1780	Y	2	V	795390
2001 – 2400	1001 – 1200	2180	Y	4	V	795393

[6] Espagnolette extension, (SRH ≥ 2401 mm)

					Nº
200	Y	1	V		337708
400	Y	1	V		337710

Size-specific combinations:

					Nº
2401 – 2600	200 KU	1	V		337708
2601 – 2800	400 KU	1	V		337710

[11] Standard corner drive

		Nº
1	V	260272

[14] Sash stay corner drive

		Nº
1	V	260284

[15] Standard corner drive (RC3)

		Nº
2	V	260274

For use with SRH ≤ 620 mm

[20] Multipart centre lock – security, horizontal and vertical

				Nº
200	N	1	V	296853
400	N	1	V	296854
600	N	1	V	296855
600	Y	1	V	337711

Size-specific combinations:

					Nº
320 – 600	490 – 700	200	1	V	296853
601 – 800	701 – 900	400	1	V	296854
801 – 1000	901 – 1100	600	1	V	296855
1001 – 1200	1101 – 1300	600 KU	1	V	337711
		200	1	V	296853

					Nº
1201 – 1400	1301 – 1500	600 KU	1	V	337711
		400	1	V	296854
	1501 – 1700	600 KU	1	V	337711
		600	1	V	296855
	1701 – 1900	600 KU	1	V	337711
		600 KU	1	V	337711
		200	1	V	296853
	1901 – 2100	600 KU	1	V	337711
		600 KU	1	V	337711
		400	1	V	296854
	2101 – 2300	600 KU	1	V	337711
		600 KU	1	V	337711
		600	1	V	296855
	2301 – 2500	600 KU	1	V	337711
		600 KU	1	V	337711
		600 KU	1	V	337711
		200	1	V	296853
	2501 – 2700	600 KU	1	V	337711
		600 KU	1	V	337711
		600 KU	1	V	337711
		400	1	V	296854
	2701 – 2800	600 KU	1	V	337711
		600 KU	1	V	337711
		600 KU	1	V	337711
		600	1	V	296855

[24] Security striker → from page 202

[31] Bullet catch sash component (optional SRH ≥ 1601 mm)

	Nº
Bullet catch sash component	788363

[32] Bullet-catch frame component (optional SRH ≥ 1601 mm) → from page 209

[33] Lifting mishandling device sash component

	Nº
Sash component for lifting mishandling device	795927

[34] Lifting mishandling device frame component → from page 210

[36] Stay guide – security

					Nº
290 – 410	150	300	–	–	787345
411 – 600	250	490	–	–	787346
601 – 800	350	690	–	–	787347
801 – 1000	500	890	1	V	787360
1001 – 1200	500	1090	1	V	787361
1201 – 1400	500	1290	1	V	787362

[38] Stay arm, system 12/20-13

			Nº
290 – 410	150	Left	787233
290 – 410	150	Right	787234
411 – 600	250	Left	787235
411 – 600	250	Right	787236
601 – 800	350	Left	787237
601 – 800	350	Right	787238
801 – 1400	500	Left	787239
801 – 1400	500	Right	787240

[39] Stay bearing

	Nº
P 3/130	859171
P 6/130	859172
P 6/150	859173

[40] Stay-bearing pin

		Nº
Stay-bearing pin	86	834705

[41] Sash stay cover caps → CTL_105

[44] Corner hinge

		Nº
K 6/130 P 6/150	Height adjustable	263858
K 6/130 P 6/150	Height and gasket-compression adjustable	445171

[45] Pivot rest

		Nº
P 3/130	Laterally adjustable	787207
P 6/130	Laterally adjustable	787208
P 6/150	Laterally adjustable	787209

[46] Corner hinge / pivot rest cover caps → CTL_105

[52] 90° travel restrictor

	Nº
Travel restrictor	264603

[53] Drilling protection

	Nº
Drilling protection	797819

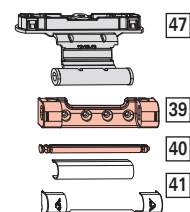
[54] Handle, lockable → CTL_1

[82] Anti-jemmy device

		Nº
Anti-jemmy device	From rebate depth 26 mm	811715



4.2.4.1 Standard





Application range

SRW: 450 – 2400 mm

SRH: 290 – 1200 mm

S.kg: max. 80 kg

[2] T&T espagnolette – centred / variable handle height, backset 15 mm

					Nº
310 – 620	155 – 225	430	–	–	259717
621 – 800	311 – 400	580	1	E	259719
801 – 1200	401 – 600	980	1	E	259720
1201 – 1600	601 – 800	1380	2	E	259721
1601 – 2000	801 – 1000	1780	2	E	795389
2001 – 2400	1001 – 1200	2180	4	E	795392

[11] Standard corner drive

			Nº
1	E	Top	260275
1	P	Top Bottom	260277

[18] Multipart centre lock – standard, vertical

				Nº
N	400	1	E	255280

[23] Striker → from page 201

[26] Concealed centre closer frame component → CTL_105

[27] Concealed centre closer sash component → CTL_105

[39] Stay bearing, adjustable

	Nº
P 3/100	840384
P 6/100	840403

[40] Stay-bearing pin

		Nº
Stay-bearing pin	86	834705

[41] Sash stay cover caps → CTL_105

[47] Turn-Only / Tilt-Only rebate hinge, system 12/20-13

		Nº
With compensation	±3.0 mm	787387
Without compensation	–	787388

[49] Packer → from page 207

[52] 90° travel restrictor

	Nº
Travel restrictor	264603

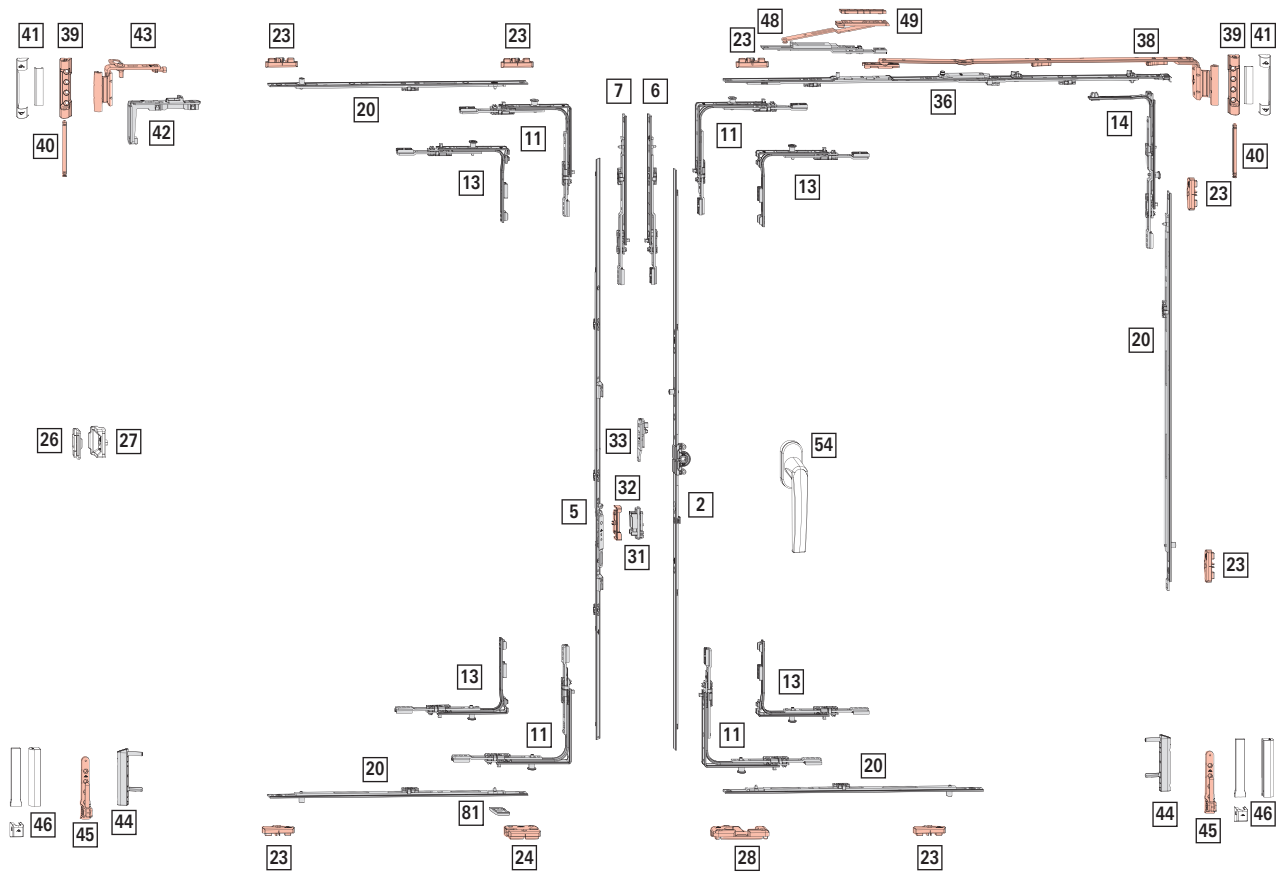
[54] Handle → CTL_1

[59] Tilt stay set for floating-mullion installation

	Nº
Floating-mullion installation	482823

4.2.5 Floating-mullion hardware

4.2.5.1 Standard – basic security



**Application range**

SRW: 290 – 1600 mm

SRH: 370 – 2800 mm

[2] T&T espagnolette – centred / variable handle height, backset 15 mm

						Nº
310 – 620	155 – 225	430	N	–	–	259717
621 – 800	311 – 400	580	Y	1	E	259719
801 – 1200	401 – 600	980	Y	1	E	259720
1201 – 1600	601 – 800	1380	Y	2	E	259721
1601 – 2000	801 – 1000	1780	Y	2	E	795389
2001 – 2400	1001 – 1200	2180	Y	4	E	795392

[5] Floating-mullion espagnolette – centred / variable handle height, backset 15 mm

			Nº
431 – 620	225 – 350	500	233418
621 – 800	393 – 482	630	763125
801 – 1200	482 – 682	980	763126
1201 – 1600	448 – 658	1380	763127
1601 – 2000	680 – 880	1780	795482
2001 – 2400	880 – 1080	2180	795484

[6] Espagnolette extension, (SRH ≥ 2401 mm)

				Nº
200	Y	–	–	308267
400	Y	1	E	280346

Size-specific combinations:

				Nº
2401 – 2600	200 KU	–	–	308267
2601 – 2800	400 KU	1	E	280346

[7] Floating mullion espagnolette extension, (SRH ≥ 2401 mm)

			Nº
200	Y	1	450822
400	Y	1	280345

Size-specific combinations:

			Nº
2401 – 2600	200 KU	–	308267
2601 – 2800	400 KU	1	280345

[11] Standard corner drive

			Nº
1	E	Top	260275
1	P	Top Bottom	260277

[13] Special short corner drive

		Nº
1	E	260280



1



P

Nº

260282

Use → “Possible combinations” from page 187

[14] Sash stay corner drive

		Nº
1	P	260286

[20] Multipart centre lock – standard, horizontal and vertical

				Nº
400	N	1	E	255280
600	N	1	E	255281
600	Y	1	E	255282

Size-specific combinations:

					Nº
801 – 1200	801 – 1200	400	1	E	255280
1201 – 1400	1201 – 1400	600	1	E	255281
1401 – 1600	1401 – 1800	600 KU	1	E	255282
		400	1	E	255280
	1801 – 2000	600 KU	1	E	255282
		600	1	E	255281
	2001 – 2400	600 KU	1	E	255282
		600 KU	1	E	255282
		400	1	E	255280
	2401 – 2600	600 KU	1	E	255282
		600 KU	1	E	255282
		600	1	E	255281
	2601 – 2800	600 KU	1	E	255282
		600 KU	1	E	255282
		600 KU	1	E	255282
		400	1	E	255280

[23] Striker → from page 201**[24] Security striker → from page 202****[26] Concealed centre closer frame component → CTL_105****[27] Concealed centre closer sash component → CTL_105****[28] Tilt striker → from page 196****[31] Bullet catch sash component (optional SRH ≥ 1601 mm)**

	Nº
Bullet catch sash component	788363

[32] Bullet catch (optional SRH ≥ 1601 mm)

			Nº
Bullet catch for lever-operated espagnolette	Screw-on	Roto Sil	788378

[33] Lifting mishandling device sash component

	Nº
Sash component for lifting mishandling device	795927

[36] Stay guide – basic security

					Nº
290 – 410	150	300	–	–	787345
411 – 600	250	490	–	–	787346
601 – 800	350	690	–	–	787347
801 – 1000	500	890	1	E	788617
1001 – 1200	500	1090	1	E	787349
1201 – 1400	500	1290	1	E	787351



INFO

With SRW < 310 mm, remove the assembly clip.

[38] Stay arm, system 12/20-13

			Nº
290 – 410	150	Left	787233
290 – 410	150	Right	787234
411 – 600	250	Left	787235
411 – 600	250	Right	787236
601 – 800	350	Left	787237
601 – 800	350	Right	787238
801 – 1400	500	Left	787239
801 – 1400	500	Right	787240



INFO

With SRH < 500 mm, set the tilt depth to 80 mm (with sash stay from size 250 and above).

[39] Stay bearing

	Nº
P 3/130	859171
P 6/130	859172
P 6/150	859173

[40] Stay-bearing pin

		Nº
Stay-bearing pin	86	834705

[41] Sash stay cover caps → CTL_105

[42] Rebate stay guide

	Nº
Rebate stay guide on the hinge side P / T / K / A / E5	331488

[43] Rebate stay arm, system 12/20-13

	Nº
Left	787375
Right	787376

[44] Corner hinge

		Nº
K 6/130	Height adjustable	263858
P 6/150		
K 6/130	Height and gasket-compression adjustable	445171
P 6/150		

[45] Pivot rest

		Nº
P 3/130	Laterally adjustable	787207
P 6/130	Laterally adjustable	787208
P 6/150	Laterally adjustable	787209

[46] Corner hinge / pivot rest cover caps → CTL_105

[48] Additional stay arm (SRW ≥ 1401 mm)

		Nº
Frame and sash component	200	255237

[49] Packer → from page 207

[54] Handle → CTL_1

[81] Run-up block

	Nº
Sash	350403





Application range

SRW: 320 – 1600 mm

SRH: 370 – 2800 mm

[2] T&T espagnolette – centred / variable handle height, backset 15 mm

						Nº
310 – 620	155 – 225	430	N	–	–	259717
621 – 800	311 – 400	580	Y	1	E	259719
801 – 1200	401 – 600	980	Y	1	E	259720
1201 – 1600	601 – 800	1380	Y	2	E	259721
1601 – 2000	801 – 1000	1780	Y	2	E	795389
2001 – 2400	1001 – 1200	2180	Y	4	E	795392

[5] Floating-mullion espagnolette – centred / variable handle height, backset 15 mm

			Nº
431 – 620	225 – 350	500	233418
621 – 800	393 – 482	630	763125
801 – 1200	482 – 682	980	763126
1201 – 1600	448 – 658	1380	763127
1601 – 2000	680 – 880	1780	795482
2001 – 2400	880 – 1080	2180	795484

[6] Espagnolette extension, (SRH ≥ 2401 mm)

				Nº
200	Y	1	E	450821
400	Y	1	E	280346

Size-specific combinations:

				Nº
2401 – 2600	200 KU	1	E	450821
2601 – 2800	400 KU	1	E	280346

[7] Floating mullion espagnolette extension, (SRH ≥ 2401 mm)

			Nº
200	Y	1	450822
400	Y	1	280345

Size-specific combinations:

			Nº
2401 – 2600	200 KU	1	450822
2601 – 2800	400 KU	1	280345

[11] Standard corner drive

		Nº
1	P	260277

[13] Special short corner drive

		Nº
1	P	260282

Use → “Possible combinations” from page 187

[14] Sash stay corner drive

		Nº
1	P	260286

[17] Multipart centre lock – standard, horizontal – top, Turn-Only sash

				Nº
200	Y	–	–	308267
400	Y	1	E	280346
600	Y	1	E	255282

Size-specific combinations:

				Nº
1001 – 1200	200	–	–	308267
1201 – 1400	400	1	E	280346
1401 – 1600	600	1	E	255282

[18] Multipart centre lock – standard, vertical

				Nº
400	N	1	E	255280
600	N	1	E	255281
600	Y	1	E	255282

Size-specific combinations:

				Nº
801 – 1200	400	1	E	255280
1201 – 1400	600	1	E	255281
1401 – 1800	600 KU	1	E	255282
	400	1	E	255280
1801 – 2000	600 KU	1	E	255282
	600	1	E	255281
2001 – 2400	600 KU	1	E	255282
	600 KU	1	E	255282
	400	1	E	255280
2401 – 2600	600 KU	1	E	255282
	600 KU	1	E	255282
	600	1	E	255281
2601 – 2800	600 KU	1	E	255282
	600 KU	1	E	255282
	600 KU	1	E	255282
	400	1	E	255280

[19] Multipart centre lock – security, horizontal

				Nº
200	N	1	P	255284
400	N	1	P	255285
600	N	1	P	255286

				Nº
600	Y	1	E	255282

Size-specific combinations:

				Nº
320 – 520	200	1	P	255284
521 – 730	400	1	P	255285
731 – 930	600	1	P	255286
931 – 1130	600 KU	1	E	255282
	200	1	P	255284
1131 – 1330	600 KU	1	E	255282
	400	1	P	255285
1331 – 1530	600 KU	1	E	255282
	600	1	P	255286
1531 – 1600	600 KU	1	E	255282
	600 KU	1	E	255282
	200	1	P	255284

[24] Security striker → from page 202

[28] Tilt striker → from page 196

[31] Bullet catch sash component (optional SRH ≥ 1601 mm)

	Nº
Bullet catch sash component	788363

[32] Bullet catch (optional SRH ≥ 1601 mm)

			Nº
Bullet catch for lever-operated espagnolette	Screw-on	Roto Sil	788378

[33] Lifting mishandling device sash component

	Nº
Sash component for lifting mishandling device	795927

[35] Turn-Only sash stay guide – basic security

					Nº
290 – 410	150	300	–	–	787366
411 – 600	250	490	–	–	787367
601 – 800	350	690	–	–	787368
801 – 1000	500	890	1	E	787369

[36] Stay guide – basic security

					Nº
290 – 410	150	300	–	–	787345
411 – 600	250	490	–	–	787346
601 – 800	350	690	–	–	787347
801 – 1000	500	890	1	E	788617
1001 – 1200	500	1090	1	E	787349
1201 – 1400	500	1290	1	E	787351

[38] Stay arm, system 12/20-13

			Nº
290 – 410	150	Left	787233
290 – 410	150	Right	787234
411 – 600	250	Left	787235
411 – 600	250	Right	787236
601 – 800	350	Left	787237
601 – 800	350	Right	787238
801 – 1400	500	Left	787239
801 – 1400	500	Right	787240

INFO

With SRH < 500 mm, set the tilt depth to 80 mm (with sash stay from size 250 and above).

[39] Stay bearing

	Nº
P 3/130	859171
P 6/130	859172
P 6/150	859173

[40] Stay-bearing pin

		Nº
Stay-bearing pin	86	834705

[41] Sash stay cover caps → CTL_105

[44] Corner hinge

		Nº
K 6/130	Height adjustable	263858
P 6/150		
K 6/130	Height and gasket-compression adjustable	445171
P 6/150		

[45] Pivot rest

		Nº
P 3/130	Laterally adjustable	787207
P 6/130	Laterally adjustable	787208
P 6/150	Laterally adjustable	787209

[46] Corner hinge / pivot rest cover caps → CTL_105

[48] Additional stay arm (SRW ≥ 1401 mm)

		Nº
Frame and sash component	200	255237

[49] Packer → from page 207

[53] Drilling protection

	Nº
Drilling protection	797819



[54] Handle, lockable → CTL_1

[81] Run-up block



Nº

Sash

350403

Optional

[82] Anti-jemmy device



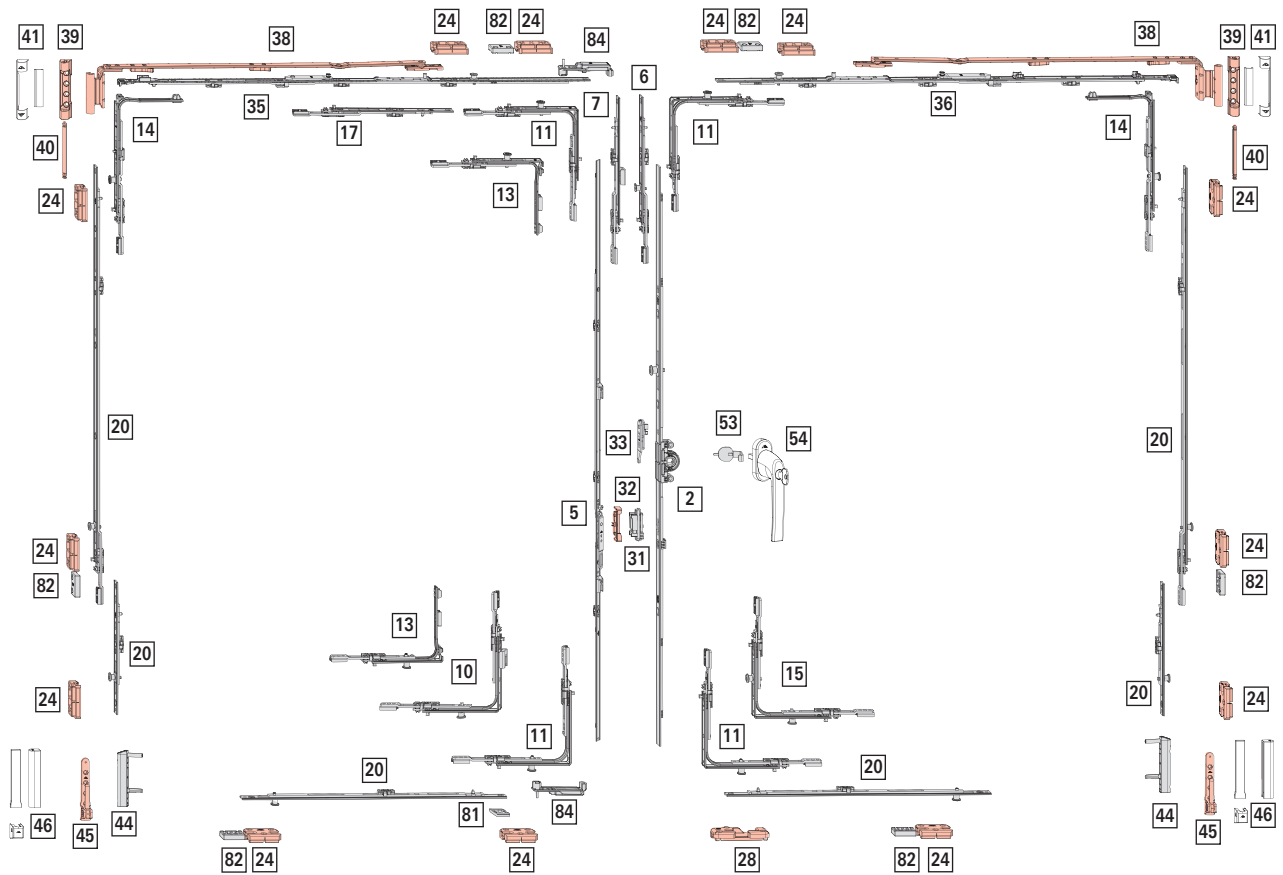
Nº

Anti-jemmy device

From rebate depth 26 mm

811715

4.2.5.3 Standard – RC 2 / RC 2 N



**Application range**

SRW: 400 – 1400 mm

SRH: 520 – 2800 mm

S.kg: max. 150 kg

[2] T&T espagnolette – centred / variable handle height, backset 15 mm

						Nº
310 – 620	155 – 225	430	N	–	–	259717
621 – 800	311 – 400	580	Y	1	V	355743
801 – 1200	401 – 600	980	Y	1	V	355744
1201 – 1600	601 – 800	1380	Y	2	V	355745
1601 – 2000	801 – 1000	1780	Y	2	V	795390
2001 – 2400	1001 – 1200	2180	Y	4	V	795393

[5] Floating-mullion espagnolette – centred / variable handle height, backset 15 mm

			Nº
431 – 620	225 – 350	500	233418
621 – 800	393 – 482	630	763125
801 – 1200	482 – 682	980	763126
1201 – 1600	448 – 658	1380	763127
1601 – 2000	680 – 880	1780	795482
2001 – 2400	880 – 1080	2180	795484

[6] Espagnolette extension, (SRH ≥ 2401 mm)

				Nº
200	Y	1	V	337708
400	Y	1	V	337710

Size-specific combinations:

				Nº
2401 – 2600	200 KU	1	V	337708
2601 – 2800	400 KU	1	V	337710

[7] Floating mullion espagnolette extension, (SRH ≥ 2401 mm)

			Nº
200	Y	1	450822
400	Y	1	280345

Size-specific combinations:

			Nº
2401 – 2600	200 KU	1	450822
2601 – 2800	400 KU	1	280345

[10] Floating mullion corner drive

					Nº
Second opening sash	Bottom	1	1	V	367227

[11] Standard corner drive

		Nº
1	V	260272

[13] Special short corner drive

		Nº
1	V	281288

Use → “Possible combinations” from page 187

[14] Sash stay corner drive

		Nº
1	V	260284

[15] Standard corner drive (RC3)

		Nº
2	V	260274

[17] Multipart centre lock – standard, horizontal – top, Turn-Only sash

				Nº
200	Y	–	–	308267
400	Y	1	V	337710

Size-specific combinations:

				Nº
1001 – 1200	200 KU	–	–	308267
1201 – 1400	400 KU	1	V	337710

[20] Multipart centre lock – security, horizontal and vertical

				Nº
200	N	1	V	296853
400	N	1	V	296854
600	N	1	V	296855
600	Y	1	V	337711

Size-specific combinations:

					Nº
400 – 600	520 – 700	200	1	V	296853
601 – 800	701 – 900	400	1	V	296854
801 – 1000	901 – 1100	600	1	V	296855
1001 – 1200	1101 – 1300	600 KU	1	V	337711
		200	1	V	296853

					Nº
1201 – 1400	1301 – 1500	600 KU	1	V	337711
		400	1	V	296854
	1501 – 1700	600 KU	1	V	337711
		600	1	V	296855
	1701 – 1900	600 KU	1	V	337711
		600 KU	1	V	337711
		200	1	V	296853
	1901 – 2100	600 KU	1	V	337711
		600 KU	1	V	337711
	2101 – 2300	400	1	V	296854
		600 KU	1	V	337711
	2301 – 2500	600 KU	1	V	337711
		600 KU	1	V	337711
	2501 – 2700	600 KU	1	V	337711
		600 KU	1	V	337711
		600 KU	1	V	337711
		400	1	V	296854
	2701 – 2800	600 KU	1	V	337711
		600 KU	1	V	337711
		600 KU	1	V	337711
		600	1	V	296855

[24] Security striker → from page 202**[28] Tilt striker → from page 196****[31] Bullet catch sash component** (optional SRH ≥ 1601 mm)

	Nº
Bullet catch sash component	788363

[32] Bullet catch (optional SRH ≥ 1601 mm)

			Nº
Bullet catch for lever-operated espagnolette	Screw-on	Roto Sil	788378

[33] Lifting mishandling device sash component

	Nº
Sash component for lifting mishandling device	795927

[35] Turn-Only sash stay guide – security

					Nº
290 – 410	150	300	–	–	787366
411 – 600	250	490	–	–	787367
601 – 800	350	690	–	–	787368
801 – 1000	500	890	1	V	787370

[36] Stay guide – security

					Nº
290 – 410	150	300	–	–	787345
411 – 600	250	490	–	–	787346
601 – 800	350	690	–	–	787347
801 – 1000	500	890	1	V	787360
1001 – 1200	500	1090	1	V	787361
1201 – 1400	500	1290	1	V	787362

[38] Stay arm, system 12/20-13

			Nº
290 – 410	150	Left	787233
290 – 410	150	Right	787234
411 – 600	250	Left	787235
411 – 600	250	Right	787236
601 – 800	350	Left	787237
601 – 800	350	Right	787238
801 – 1400	500	Left	787239
801 – 1400	500	Right	787240

**INFO**

With SRH < 500 mm, set the tilt depth to 80 mm (with sash stay from size 250 and above).

[39] Stay bearing

	Nº
P 3/130	859171
P 6/130	859172
P 6/150	859173

[40] Stay-bearing pin

		Nº
Stay-bearing pin	86	834705

[41] Sash stay cover caps → CTL_105**[44] Corner hinge**

		Nº
K 6/130	Height adjustable	263858
P 6/150		
K 6/130	Height and gasket-compression adjustable	445171
P 6/150		

[45] Pivot rest

		Nº
P 3/130	Laterally adjustable	787207
P 6/130	Laterally adjustable	787208
P 6/150	Laterally adjustable	787209


[46] Corner hinge / pivot rest cover caps →
 CTL_105

[53] Drilling protection


Nº

Drilling protection

797819

[54] Handle, lockable → CTL_1
[81] Run-up block


Nº

Sash

350403

[82] Anti-jemmy device


Nº

Anti-jemmy device

From rebate depth 26 mm

811715

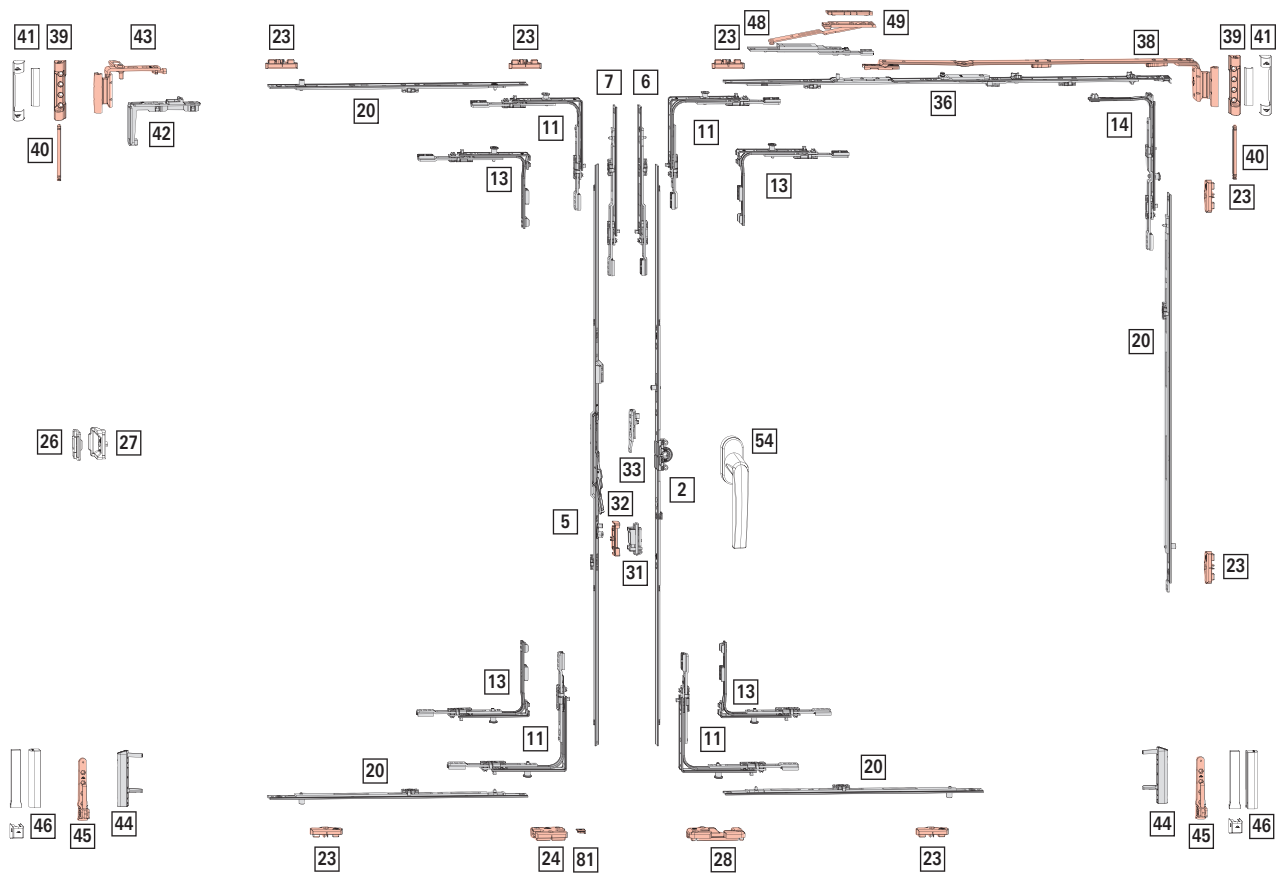
[84] Safety device for floating-mullion sashes


Nº

Retaining element for floating-mullion sash

552392

4.2.5.4 Plus – basic security



**Application range**

SRW: 290 – 1600 mm

SRH: 420 – 2800 mm

S.kg: max. 150 kg

[2] T&T espagnolette – centred / variable handle height, backset 15 mm

						Nº
310 – 620	155 – 225	430	N	–	–	259717
621 – 800	311 – 400	580	Y	1	E	259719
801 – 1200	401 – 600	980	Y	1	E	259720
1201 – 1600	601 – 800	1380	Y	2	E	259721
1601 – 2000	801 – 1000	1780	Y	2	E	795389
2001 – 2400	1001 – 1200	2180	Y	4	E	795392

[5] Floating-mullion espagnolette, Plus – centred / variable handle height, backset 15 mm

						Nº
431 – 620	194 – 289	400	N	N	–	2007128
621 – 800	290 – 379	680	Y	N	1	2007129
801 – 1200	380 – 579	980	Y	N	1	2007130
1001 – 1400	480 – 679	1180	Y	N	1	2007131
1201 – 1600	580 – 779	1380	Y	N	2	2007132
1601 – 2000	780 – 979	1780	Y	Y	2	2007133
2001 – 2400	980 – 1179	2180	Y	Y	4	2007134

[6] Espagnolette extension, (SRH ≥ 2401 mm)

				Nº
200	Y	–	–	308267
400	Y	1	E	280346

Size-specific combinations:

				Nº
2401 – 2600	200 KU	–	–	308267
2601 – 2800	400 KU	1	E	280346

[7] Floating mullion espagnolette extension, (SRH ≥ 2401 mm)

			Nº
200	Y	1	450822
400	Y	1	280345

Size-specific combinations:

			Nº
2401 – 2600	200 KU	–	308267
2601 – 2800	400 KU	1	280345

[11] Standard corner drive

			Nº
1	E	Top	260275
1	P	Top Bottom	260277

[13] Special short corner drive

		Nº
1	E	260280
1	P	260282

Use → “Possible combinations” from page 193

[14] Sash stay corner drive

		Nº
1	P	260286

[20] Multipart centre lock – standard, horizontal and vertical

				Nº
400	N	1	E	255280
600	N	1	E	255281
600	Y	1	E	255282

Size-specific combinations:

					Nº
801 – 1200	801 – 1200	400	1	E	255280
1201 – 1400	1201 – 1400	600	1	E	255281
1401 – 1600	1401 – 1800	600 KU	1	E	255282
		400	1	E	255280
	1801 – 2000	600 KU	1	E	255282
		600	1	E	255281
	2001 – 2400	600 KU	1	E	255282
		600 KU	1	E	255282
		400	1	E	255280
	2401 – 2600	600 KU	1	E	255282
		600 KU	1	E	255282
		600	1	E	255281
	2601 – 2800	600 KU	1	E	255282
		600 KU	1	E	255282
		600 KU	1	E	255282
		400	1	E	255280

[23] Striker → from page 201**[24] Security striker → from page 202****[26] Concealed centre closer frame component → CTL_105****[27] Concealed centre closer sash component → CTL_105****[28] Tilt striker → from page 196****[31] Bullet catch sash component (optional SRH ≥ 1601 mm)**

	Nº
Bullet catch sash component	788363

[32] Bullet catch (optional SRH ≥ 1601 mm)

			Nº
Bullet catch for lever-operated espagnolette	Screw-on	Roto Sil	788378

[33] Lifting mishandling device sash component

	Nº
Sash component for lifting mishandling device	795927

[36] Stay guide – basic security

					Nº
290 – 410	150	300	–	–	787345
411 – 600	250	490	–	–	787346
601 – 800	350	690	–	–	787347
801 – 1000	500	890	1	E	788617
1001 – 1200	500	1090	1	E	787349
1201 – 1400	500	1290	1	E	787351



INFO

With SRW < 310 mm, remove the assembly clip.

[38] Stay arm, system 12/20-13

			Nº
290 – 410	150	Left	787233
290 – 410	150	Right	787234
411 – 600	250	Left	787235
411 – 600	250	Right	787236
601 – 800	350	Left	787237
601 – 800	350	Right	787238
801 – 1400	500	Left	787239
801 – 1400	500	Right	787240



INFO

With SRH < 500 mm, set the tilt depth to 80 mm (with sash stay from size 250 and above).

[39] Stay bearing

	Nº
P 3/130	859171
P 6/130	859172
P 6/150	859173

[40] Stay-bearing pin

		Nº
Stay-bearing pin	86	834705

[41] Sash stay cover caps → CTL_105

[42] Rebate stay guide

	Nº
Rebate stay guide on the hinge side P / T / K / A / E5	331488

[43] Rebate stay arm, system 12/20-13

	Nº
Left	787375
Right	787376

[44] Corner hinge

		Nº
K 6/130	Height adjustable	263858
P 6/150	Height and gasket-compression adjustable	445171
K 6/130	Height and gasket-compression adjustable	445171
P 6/150	Height and gasket-compression adjustable	445171

[45] Pivot rest

		Nº
P 3/130	Laterally adjustable	787207
P 6/130	Laterally adjustable	787208
P 6/150	Laterally adjustable	787209

[46] Corner hinge / pivot rest cover caps → CTL_105

[48] Additional stay arm (SRW ≥ 1401 mm)

		Nº
Frame and sash component	200	255237

[49] Packer → from page 207

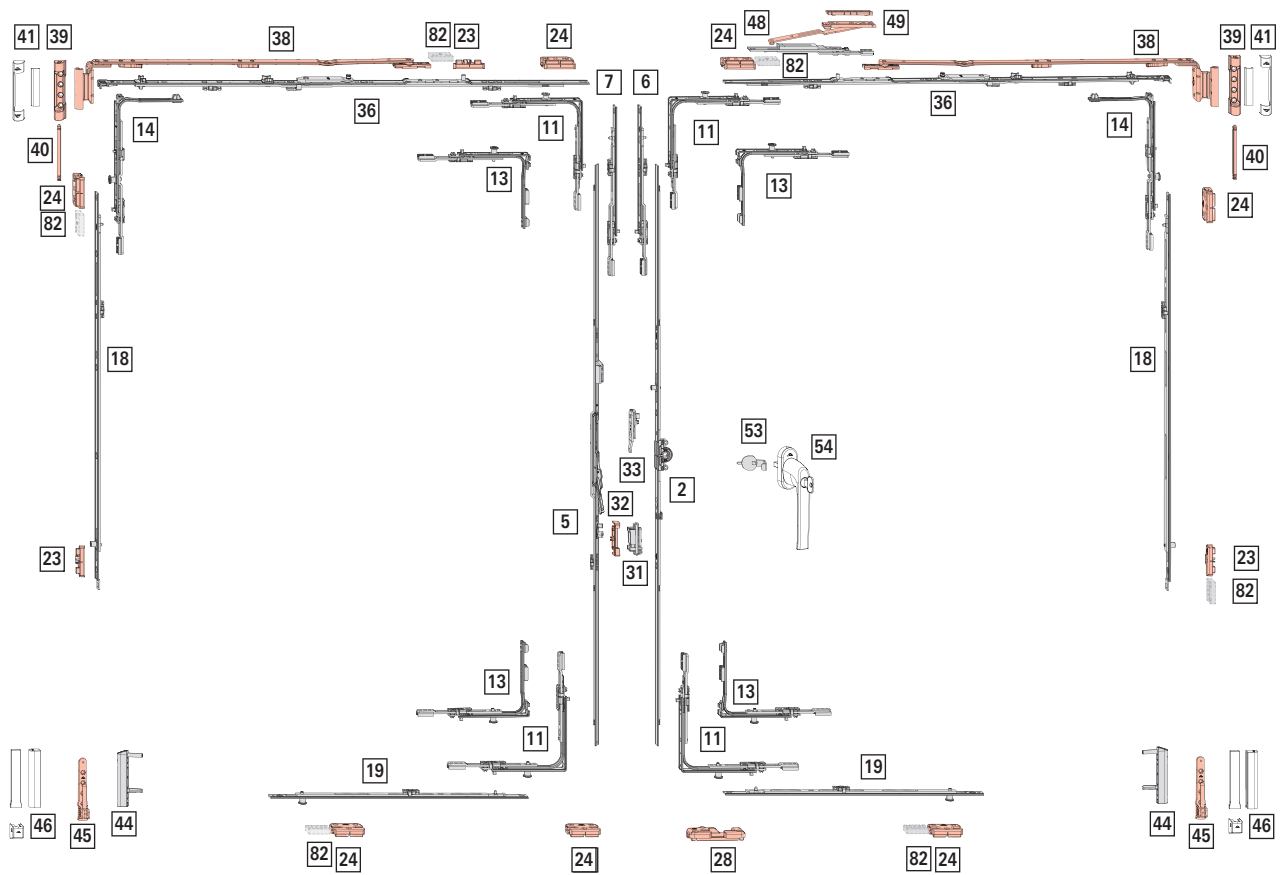
[54] Handle → CTL_1

[81] Run-up block

			Nº
Rebate run-up block	Frame	Insertable	609211



4.2.5.5 Plus – RC 1 N





Application range

SRW: 320 – 1600 mm

SRH: 420 – 2800 mm

S.kg: max. 150 kg

[2] T&T espagnolette – centred / variable handle height, backset 15 mm

						Nº
310 – 620	155 – 225	430	N	–	–	259717
621 – 800	311 – 400	580	Y	1	E	259719
801 – 1200	401 – 600	980	Y	1	E	259720
1201 – 1600	601 – 800	1380	Y	2	E	259721
1601 – 2000	801 – 1000	1780	Y	2	E	795389
2001 – 2400	1001 – 1200	2180	Y	4	E	795392

[5] Floating-mullion espagnolette, Plus – centred / variable handle height, backset 15 mm

						Nº
431 – 620	194 – 289	400	N	N	–	2007128
621 – 800	290 – 379	680	Y	N	1	2007129
801 – 1200	380 – 579	980	Y	N	1	2007130
1001 – 1400	480 – 679	1180	Y	N	1	2007131
1201 – 1600	580 – 779	1380	Y	N	2	2007132
1601 – 2000	780 – 979	1780	Y	Y	2	2007133
2001 – 2400	980 – 1179	2180	Y	Y	4	2007134

[6] Espagnolette extension, (SRH ≥ 2401 mm)

				Nº
200	Y	1	E	450821
400	Y	1	E	280346

Size-specific combinations:

				Nº
2401 – 2600	200 KU	1	E	450821
2601 – 2800	400 KU	1	E	280346

[7] Floating mullion espagnolette extension, (SRH ≥ 2401 mm)

			Nº
200	Y	1	450822
400	Y	1	280345

Size-specific combinations:

			Nº
2401 – 2600	200 KU	1	450822
2601 – 2800	400 KU	1	280345

[11] Standard corner drive

		Nº
1	P	260277

[13] Special short corner drive

		Nº
1	P	260282

Use → “Possible combinations” from page 193

[14] Sash stay corner drive

		Nº
1	P	260286

[17] Multipart centre lock – standard, horizontal – top, Turn-Only sash

				Nº
200	Y	–	–	308267

Size-specific combinations:

				Nº
1401 – 1600	200 KU	–	–	308267

[18] Multipart centre lock – standard, vertical

				Nº
400	N	1	E	255280
600	N	1	E	255281
600	Y	1	E	255282

Size-specific combinations:

				Nº
801 – 1200	400	1	E	255280
1201 – 1400	600	1	E	255281
1401 – 1800	600 KU	1	E	255282
	400	1	E	255280
1801 – 2000	600 KU	1	E	255282
	600	1	E	255281
2001 – 2400	600 KU	1	E	255282
	600 KU	1	E	255282
	400	1	E	255280
2401 – 2600	600 KU	1	E	255282
	600 KU	1	E	255282
	600	1	E	255281
2601 – 2800	600 KU	1	E	255282
	600 KU	1	E	255282
	600 KU	1	E	255282
	400	1	E	255280

[19] Multipart centre lock – security, horizontal

				Nº
200	N	1	P	255284
400	N	1	P	255285
600	N	1	P	255286

				Nº
600	Y	1	E	255282

Size-specific combinations:

				Nº
320 – 520	200	1	P	255284
521 – 730	400	1	P	255285
731 – 930	600	1	P	255286
931 – 1130	600 KU	1	E	255282
	200	1	P	255284
1131 – 1330	600 KU	1	E	255282
	400	1	P	255285
1331 – 1530	600 KU	1	E	255282
	600	1	P	255286
1531 – 1600	600 KU	1	E	255282
	600 KU	1	E	255282
	200	1	P	255284

[23] Striker → from page 201

[24] Security striker → from page 202

[28] Tilt striker → from page 196

[31] Bullet catch sash component (optional SRH ≥ 1601 mm)

	Nº
Bullet catch sash component	788363

[32] Bullet catch (optional SRH ≥ 1601 mm)

			Nº
Bullet catch for lever-operated espagnolette	Screw-on	Roto Sil	788378

[33] Lifting mishandling device sash component

	Nº
Sash component for lifting mishandling device	795927

[36] Stay guide – basic security

					Nº
290 – 410	150	300	–	–	787345
411 – 600	250	490	–	–	787346
601 – 800	350	690	–	–	787347
801 – 1000	500	890	1	E	788617
1001 – 1200	500	1090	1	E	787349
1201 – 1400	500	1290	1	E	787351

[38] Stay arm, system 12/20-13

			Nº
290 – 410	150	Left	787233
290 – 410	150	Right	787234
411 – 600	250	Left	787235
411 – 600	250	Right	787236
601 – 800	350	Left	787237
601 – 800	350	Right	787238

			Nº
801 – 1400	500	Left	787239
801 – 1400	500	Right	787240

INFO
With SRH < 500 mm, set the tilt depth to 80 mm (with sash stay from size 250 and above).

[39] Stay bearing

	Nº
P 3/130	859171
P 6/130	859172
P 6/150	859173

[40] Stay-bearing pin

		Nº
Stay-bearing pin	86	834705

[41] Sash stay cover caps → CTL_105

[44] Corner hinge

		Nº
K 6/130	Height adjustable	263858
P 6/150		
K 6/130	Height and gasket-compression adjustable	445171
P 6/150		

[45] Pivot rest

		Nº
P 3/130	Laterally adjustable	787207
P 6/130	Laterally adjustable	787208
P 6/150	Laterally adjustable	787209

[46] Corner hinge / pivot rest cover caps → CTL_105

[48] Additional stay arm (SRW ≥ 1401 mm)

		Nº
Frame and sash component	200	255237

[49] Packer → from page 207

[53] Drilling protection

	Nº
Drilling protection	797819

[54] Handle, lockable → CTL_1

[81] Run-up block

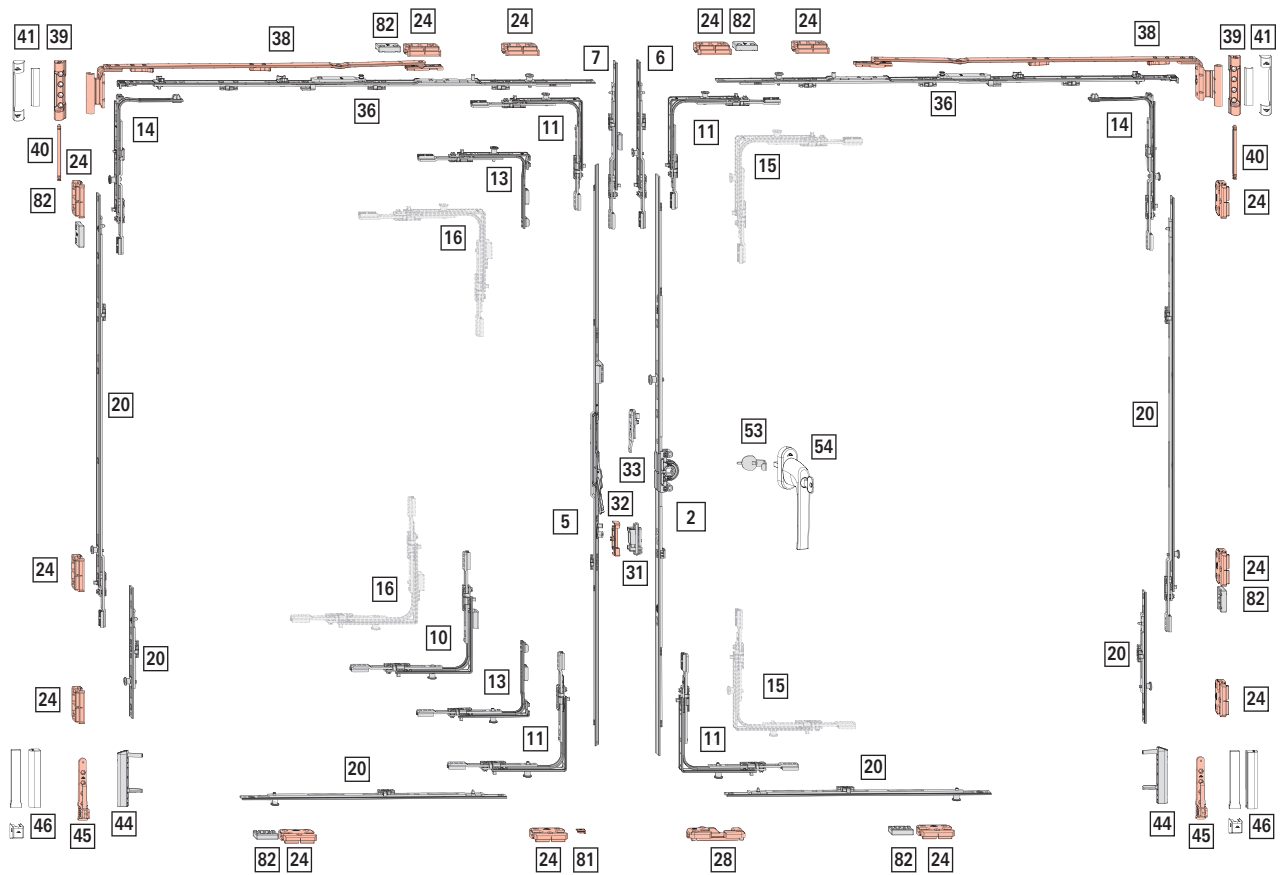
			Nº
Rebate run-up block	Frame	Insertable	609211



Optional

[82] Anti-jemmy device		
		Nº
Anti-jemmy device	From rebate depth 26 mm	811715

4.2.5.6 Plus – RC 2 / RC 2 N



**Application range**

SRW: 400 – 1400 mm

SRH: 520 – 2800 mm

S.kg: max. 150 kg

[2] T&T espagnolette – centred / variable handle height, backset 15 mm

						Nº
310 – 620	155 – 225	430	N	–	–	259717
621 – 800	311 – 400	580	Y	1	V	355743
801 – 1200	401 – 600	980	Y	1	V	355744
1201 – 1600	601 – 800	1380	Y	2	V	355745
1601 – 2000	801 – 1000	1780	Y	2	V	795390
2001 – 2400	1001 – 1200	2180	Y	4	V	795393

[5] Floating-mullion espagnolette, Plus – centred / variable handle height, backset 15 mm

						Nº
431 – 620	194 – 289	400	N	N	–	2007128
621 – 800	290 – 379	680	Y	N	1	2007129
801 – 1200	380 – 579	980	Y	N	1	2007130
1001 – 1400	480 – 679	1180	Y	N	1	2007131
1201 – 1600	580 – 779	1380	Y	N	2	2007132
1601 – 2000	780 – 979	1780	Y	Y	2	2007133
2001 – 2400	980 – 1179	2180	Y	Y	4	2007134

[6] Espagnolette extension, (SRH ≥ 2401 mm)

					Nº
200	Y	1	E		450821
400	Y	1	E		280346

Size-specific combinations:

				Nº
2401 – 2600	200 KU	1	V	337708
2601 – 2800	400 KU	1	V	337710

[7] Floating mullion espagnolette extension, (SRH ≥ 2401 mm)

			Nº
200	Y	1	450822
400	Y	1	280345

Size-specific combinations:

			Nº
2401 – 2600	200 KU	1	450822
2601 – 2800	400 KU	1	280345

[10] Floating mullion corner drive

					Nº
Second opening sash	Bottom	1	1	V	367227

[11] Standard corner drive

		Nº
1	V	260272

[13] Special short corner drive

		Nº
1	V	281288

Use → “Possible combinations” from page 193

[14] Sash stay corner drive

		Nº
1	V	260284

[15] Standard corner drive (RC3)

		Nº
2	V	260274

[20] Multipart centre lock – security, horizontal and vertical

				Nº
200	N	1	V	296853
400	N	1	V	296854
600	N	1	V	296855
600	Y	1	V	337711

Size-specific combinations:

					Nº
400 – 600	520 – 700	200	1	V	296853
601 – 800	701 – 900	400	1	V	296854
801 – 1000	901 – 1100	600	1	V	296855
1001 – 1200	1101 – 1300	600 KU	1	V	337711
		200	1	V	296853

					Nº
1201 – 1400	1301 – 1500	600 KU	1	V	337711
		400	1	V	296854
	1501 – 1700	600 KU	1	V	337711
		600	1	V	296855
	1701 – 1900	600 KU	1	V	337711
		600 KU	1	V	337711
		200	1	V	296853
		600 KU	1	V	337711
	1901 – 2100	600 KU	1	V	337711
		600 KU	1	V	337711
		400	1	V	296854
	2101 – 2300	600 KU	1	V	337711
		600 KU	1	V	337711
		600	1	V	296855
	2301 – 2500	600 KU	1	V	337711
		600 KU	1	V	337711
		600 KU	1	V	337711
		200	1	V	296853
	2501 – 2700	600 KU	1	V	337711
		600 KU	1	V	337711
		600 KU	1	V	337711
		400	1	V	296854
	2701 – 2800	600 KU	1	V	337711
		600 KU	1	V	337711
		600 KU	1	V	337711
		600	1	V	296855

[24] Security striker → from page 202**[28] Tilt striker → from page 196****[31] Bullet catch sash component** (optional SRH ≥ 1601 mm)

	Nº
Bullet catch sash component	788363

[32] Bullet catch (optional SRH ≥ 1601 mm)

			Nº
Bullet catch for lever-operated espagnolette	Screw-on	Roto Sil	788378

[33] Lifting mishandling device sash component

	Nº
Sash component for lifting mishandling device	795927

[36] Stay guide – security

					Nº
290 – 410	150	300	–	–	787345
411 – 600	250	490	–	–	787346
601 – 800	350	690	–	–	787347
801 – 1000	500	890	1	V	787360
1001 – 1200	500	1090	1	V	787361
1201 – 1400	500	1290	1	V	787362

[38] Stay arm, system 12/20-13

			Nº
290 – 410	150	Left	787233
290 – 410	150	Right	787234
411 – 600	250	Left	787235
411 – 600	250	Right	787236
601 – 800	350	Left	787237
601 – 800	350	Right	787238
801 – 1400	500	Left	787239
801 – 1400	500	Right	787240

[39] Stay bearing

	Nº
P 3/130	859171
P 6/130	859172
P 6/150	859173

[40] Stay-bearing pin

		Nº
Stay-bearing pin	86	834705

[41] Sash stay cover caps → CTL_105**[44] Corner hinge**

		Nº
K 6/130	Height adjustable	263858
P 6/150		
K 6/130	Height and gasket-compression adjustable	445171
P 6/150		

[45] Pivot rest

		Nº
P 3/130	Laterally adjustable	787207
P 6/130	Laterally adjustable	787208
P 6/150	Laterally adjustable	787209

[46] Corner hinge / pivot rest cover caps → CTL_105**[53] Drilling protection**

	Nº
Drilling protection	797819

[54] Handle, lockable → CTL_1**[81] Run-up block**

			Nº
Rebate run-up block	Frame	Insertable	609211

[82] Anti-jemmy device

		Nº
Anti-jemmy device	From rebate depth 26 mm	811715



Optional

[16] Corner drive, slide guard				
				Nº
Second opening sash / slide guard	Top	1	V	839223
Second opening sash / slide guard	Bottom	1	V	839224

When using a corner drive with a slide guard, a standard corner drive (RC 3) is required on the first opening sash.

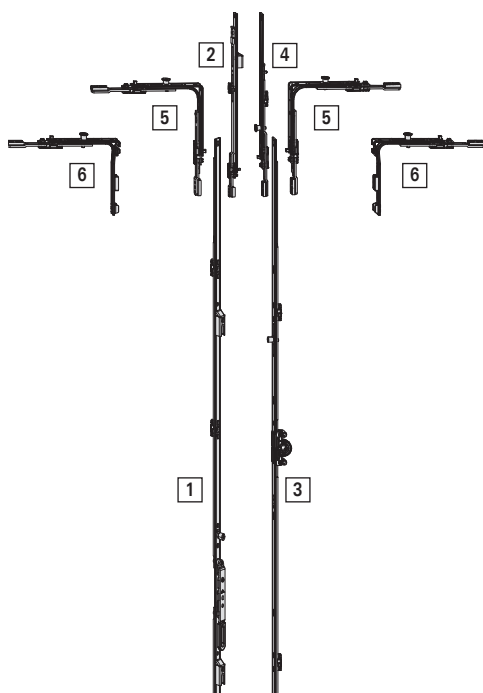
5 T&T espagnolette / floating-mullion sash espagnolette

5.1 Floating-mullion sash espagnolette

5.1.1 Standard

5.1.1.1 VT – fixed handle height

Possible combinations



Assignment	Meaning
[1]	Lever-operated espagnolette, standard VT
[2]	Floating-mullion centre lock
[3]	T&T espagnolette, VT – fixed handle height
[4]	Centre lock, standard
[5]	Corner drive, standard
[6]	Special corner drive, short

Determining the espagnolettes

1. Determine the element's sash rebate height (SRH).



INFO

Refer to the tables below for possible combinations and the required corner drive [5] + [6].

2. Select the lever-operated espagnolette, standard VT [1] using the *sash rebate height (SRH)* and *length of the component*.

Optional: determine the floating-mullion centre lock [2].

3. Select the T&T espagnolette, VT – fixed handle height [3] using the *length of the component*.

- ☐ T&T espagnolette, VT – fixed handle height, backset 8 mm
- ☐ T&T espagnolette, VT – fixed handle height, backset 15 mm



- T&T espagnolette, VT – fixed handle height, backset 25, 30, 35, 40, 45, 50 mm

Optional: determine the centre lock, standard [4] .

Backset 8 mm

Application range	Lever-operated espagnolette, standard VT			T&T espagnolette, VT			
SRH	Component length	Toggle lever position	Corner drive type	Component length	Handle height	LMD	Corner drive type
431 – 510	600	233	Special corner drive, short	490	120	N	Corner drive, standard
511 – 600			Corner drive, standard	600	170	N	Corner drive, standard
601 – 800	690	325	Corner drive, standard	690	263	N	Corner drive, standard
801 – 1000	890	335	Corner drive, standard	890	413	Y	Corner drive, standard
1001 – 1200	1090	335	Corner drive, standard	1090	513	Y	Corner drive, standard
1201 – 1400	1290	335	Corner drive, standard	1290	563	Y	Corner drive, standard
1401 – 1600	1490	335	Corner drive, standard	1490	563	Y	Corner drive, standard
1601 – 1800	1690	335	Corner drive, standard	1690	563 / 1000	Y	Corner drive, standard
1801 – 2000	1890	640	Corner drive, standard	1890	1000	Y	Corner drive, standard
2001 – 2200	2090	640	Corner drive, standard	2090	1000	Y	Corner drive, standard
2201 – 2400	2290	640	Corner drive, standard	2290	1000	Y	Corner drive, standard



INFO

A centre lock is required from SRH 2401 mm.

Backset of 15 mm and above

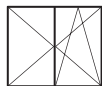
Application range	Lever-operated espagnolette, standard VT			T&T espagnolette, VT			
SRH	Component length	Toggle lever position	Corner drive type	Component length	Handle height	LMD	Corner drive type
280 – 370	445	156	Special corner drive, short	460	120	N	Special corner drive, short
371 – 555	445	156	Corner drive, standard	460	120	N	Corner drive, standard
431 – 510	600	195	Special corner drive, short	460	120	N	Corner drive, standard
511 – 600			Corner drive, standard	600	170	Y	Corner drive, standard
601 – 800	690	300	Corner drive, standard	690	263	Y	Corner drive, standard
801 – 1000	890	490	Corner drive, standard	890	413	Y	Corner drive, standard
1001 – 1200	1090	335	Corner drive, standard	1090	513	Y	Corner drive, standard
1201 – 1400	1290	335	Corner drive, standard	1290	563	Y	Corner drive, standard
1401 – 1600	1490	335	Corner drive, standard	1490	563	Y	Corner drive, standard
1601 – 1800	1690	335	Corner drive, standard	1690	563 / 1000	Y	Corner drive, standard
1801 – 2000	1890	640	Corner drive, standard	1890	1000	Y	Corner drive, standard
2001 – 2200	2090	640	Corner drive, standard	2090	1000	Y	Corner drive, standard
2201 – 2400	2290	640	Corner drive, standard	2290	1000	Y	Corner drive, standard



INFO

A centre lock is required from SRH 2401 mm.

Backset 8 to 50 mm



												Nº
8	431 – 710	600	200	233	N	N	–	Y	– / 1	– / P	Roto Sil	810974
	601 – 800	690	200	325	N	N	–	N	–	–	Roto Sil	771953
	801 – 1000	890	200	335	N	N	1	N	–	–	Roto Sil	771954
15 25 30 35 40 45 50	431 – 710	600	200	195	Y	N	–	Y	– / 1	– / P	Roto Sil	795462
	601 – 800	690	200	300	Y	N	–	N	–	–	Roto Sil	763116
	801 – 1000	890	200	490	Y	N	1	N	–	–	Roto Sil	763117
8 15 25 30 35 40 45 50	1001 – 1200	1090	200	335	Y	N	1	N	–	–	Roto Sil	763118
	1201 – 1400	1290	200	335	Y	N	1	N	–	–	Roto Sil	763119
	1401 – 1600	1490	200	335	Y	N	2	N	–	–	Roto Sil	763120
	1601 – 1800	1690	200	335	Y	Y	2	N	–	–	Roto Sil	795474
	1801 – 2000	1890	200	640	Y	Y	2	N	–	–	Roto Sil	795476
	2001 – 2200	2090	200	640	Y	Y	3	N	–	–	Roto Sil	795478
	2201 – 2400	2290	200	640	Y	Y	3	N	–	–	Roto Sil	795480



INFO

Lifting mishandling device (stop for floating-mullion sash espagnolette) preassembled as standard.



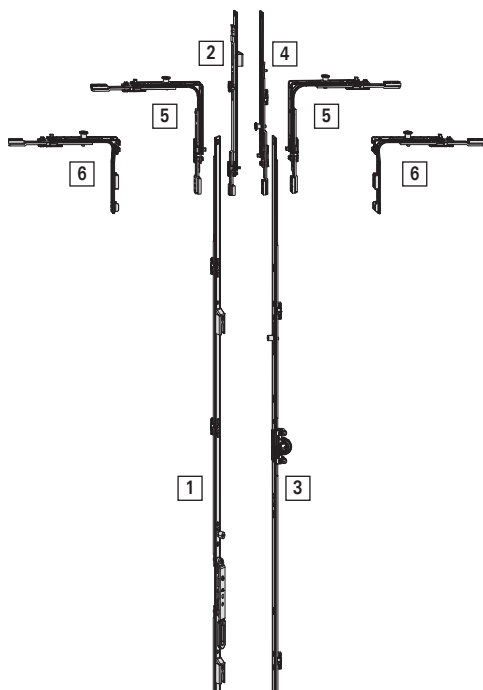
INFO

When using the lever-operated espagnolette, standard (RC 1 N, RC 2, RC 2 N), fit the stay guide for Turn-Only sashes



5.1.1.2 Centred / variable handle height

Possible combinations



Assignment	Meaning
[1]	Lever-operated espagnolette, standard
[2]	Floating-mullion centre lock
[3]	T&T espagnolette – centred / variable handle height
[4]	Centre lock, standard
[5]	Corner drive, standard
[6]	Special corner drive, short

Determining the espagnolettes

1. Determine the element's sash rebate height (SRH).



INFO

Refer to the tables below for possible combinations and the required corner drive [5] + [6].

2. Select the lever-operated espagnolette, standard [1] using the *sash rebate height (SRH)* and *length of the component*.

Optional: determine the floating-mullion centre lock [2].

3. Select the T&T espagnolette – centred / variable handle height [3] using the *length of the component*.

- ☐ T&T espagnolette – centred / variable handle height, backset 8 mm
- ☐ T&T espagnolette – centred / variable handle height, backset 15 mm
- ☐ T&T espagnolette – centred / variable handle height, backset 25, 30, 35, 40, 45, 50 mm

Optional: determine the centre lock, standard [4].

Backset 8 mm

Application range	Lever-operated espagnolette, standard			T&T espagnolette			
SRH	Component length	Toggle lever position	Corner drive type	Component length	Handle height	LMD	Corner drive type
621 – 800	680	235 – 275	Special corner drive, short	800	311 – 510	N	Corner drive, standard
801 – 900		276 – 335	Corner drive, standard	980	351 – 400	N	Corner drive, standard
901 – 1200	980	249 – 448	Corner drive, standard		401 – 600	Y	Corner drive, standard
1201 – 1600	1380	448 – 658	Corner drive, standard	1380	601 – 800	Y	Corner drive, standard
1601 – 2000	1780	680 – 880	Corner drive, standard	1780	801 – 1000	Y	Corner drive, standard
2001 – 2400	2180	880 – 1080	Corner drive, standard	2180	1001 – 1200	Y	Corner drive, standard



INFO

A centre lock is required from SRH 2401 mm.

Backset of 15 mm and above

Application range	Lever-operated espagnolette, standard			T&T espagnolette			
SRH	Component length	Toggle lever position	Corner drive type	Component length	Handle height	LMD	Corner drive type
370 – 450	400	255 – 265	Special corner drive, short	430	215 – 225	N	Special corner drive, short
451 – 520		266 – 300	Special corner drive, short		226 – 260	N	Corner drive, standard
521 – 620		301 – 350	Corner drive, standard		261 – 310	N	Corner drive, standard
621 – 650	680	393 – 407	Special corner drive, short	510	311 – 400	Y	Corner drive, standard
651 – 800		408 – 482	Corner drive, standard				
801 – 1200	980	482 – 682	Corner drive, standard	980	401 – 600	Y	Corner drive, standard
1201 – 1600	1380	448 – 648	Corner drive, standard	1380	601 – 800	Y	Corner drive, standard
1601 – 2000	1780	680 – 880	Corner drive, standard	1780	801 – 1000	Y	Corner drive, standard
2001 – 2400	2180	880 – 1080	Corner drive, standard	2180	1001 – 1200	Y	Corner drive, standard



INFO

A centre lock is required from SRH 2401 mm.

Backset 8 to 50 mm



8	621 – 900	680	125 / 120	236 – 375	N	N	1	Roto Sil	242726
	901 – 1200	980	200 / 200	298 – 448	Y	N	1	Roto Sil	791986



									Nº
15	431 – 620	500	100 / 100	225 – 350	N	N	–	Roto Sil	233418
25	621 – 800	630	100 / 100	393 – 482	Y	N	1	Roto Sil	763125
30	801 – 1200	980	200 / 200	482 – 682	Y	N	1	Roto Sil	763126
35									
40									
45									
50									
8	1201 – 1600	1380	200 / 200	448 – 658	Y	N	2	Roto Sil	763127
15	1601 – 2000	1780	200 / 200	680 – 880	Y	Y	2	Roto Sil	795482
25	2001 – 2400	2180	200 / 200	880 – 1080	Y	Y	4	Roto Sil	795484
30									
35									
40									
45									
50									



INFO

A retainer clasp is mandatory for lever-operated espagnolettes on RC 2 / RC 2 N double-sashed windows.
See .



INFO

Lifting mishandling device (stop for floating-mullion sash espagnolette) preassembled as standard.



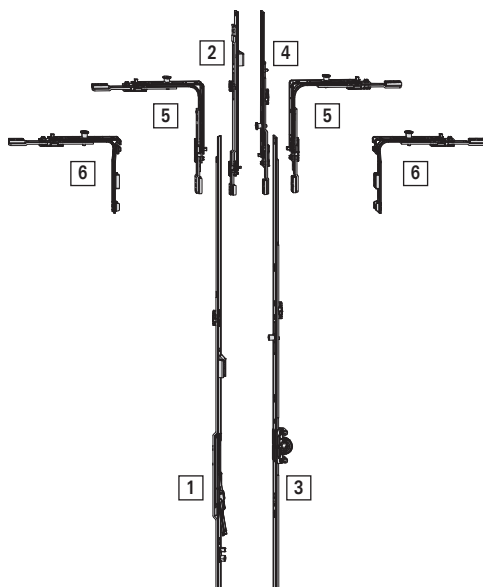
INFO

When using the lever-operated espagnolette, standard (RC 1 N, RC 2, RC 2 N), fit the stay guide for Turn-Only sashes

5.1.2 Plus

5.1.2.1 VT – fixed handle height

Possible combinations



Assignment	Meaning
[1]	Lever-operated espagnolette Plus, VT
[2]	Floating-mullion centre lock
[3]	T&T espagnolette, VT – fixed handle height
[4]	Centre lock, standard
[5]	Corner drive, standard
[6]	Special corner drive, short

Determining the espagnolettes

1. Determine the element's sash rebate height (SRH).



INFO

Refer to the tables below for possible combinations and the required corner drive [5] + [6].

2. Select the lever-operated espagnolette Plus, VT [1] using the *sash rebate height (SRH)* and *length of the component*.

Optional: determine the floating-mullion centre lock [2].

3. Select the T&T espagnolette, VT – fixed handle height [3] using the *length of the component*.

- ☐ T&T espagnolette, VT – fixed handle height, backset 8 mm
- ☐ T&T espagnolette, VT – fixed handle height, backset 15 mm
- ☐ T&T espagnolette, VT – fixed handle height, backset 25, 30, 35, 40, 45, 50 mm

Optional: determine the centre lock, standard [4].



Backset 8 mm

Application range SRH	Lever-operated espagnolette Plus, VT			T&T espagnolette, VT			
	Component length	Toggle lever position	Corner drive type	Component length	Handle height	LMD	Corner drive type
431 – 510	600	233	Special corner drive, short	490	120	N	Corner drive, standard
511 – 600			Corner drive, standard	600	170	N	Corner drive, standard
601 – 800	690	325	Corner drive, standard	690	263	N	Corner drive, standard
801 – 1000	890	335	Corner drive, standard	890	413	Y	Corner drive, standard
1001 – 1200	1090	335	Corner drive, standard	1090	513	Y	Corner drive, standard
1201 – 1400	1290	335	Corner drive, standard	1290	563	Y	Corner drive, standard
1401 – 1600	1490	335	Corner drive, standard	1490	563	Y	Corner drive, standard
1601 – 1800	1690	335	Corner drive, standard	1690	563 / 1000	Y	Corner drive, standard
1801 – 2000	1890	640	Corner drive, standard	1890	1000	Y	Corner drive, standard
2001 – 2200	2090	640	Corner drive, standard	2090	1000	Y	Corner drive, standard
2201 – 2400	2290	640	Corner drive, standard	2290	1000	Y	Corner drive, standard



INFO

A centre lock is required from SRH 2401 mm.

Backset of 15 mm and above

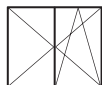
Application range SRH	Lever-operated espagnolette Plus, VT			T&T espagnolette, VT			
	Component length	Toggle lever position	Corner drive type	Component length	Handle height	LMD	Corner drive type
431 – 510	600	195	Special corner drive, short	460	120	N	Corner drive, standard
511 – 600			Corner drive, standard	600	170	Y	Corner drive, standard
601 – 800	690	300	Corner drive, standard	690	263	Y	Corner drive, standard
801 – 1000	890	490	Corner drive, standard	890	413	Y	Corner drive, standard
1001 – 1200	1090	335	Corner drive, standard	1090	513	Y	Corner drive, standard
1201 – 1400	1290	335	Corner drive, standard	1290	563	Y	Corner drive, standard
1401 – 1600	1490	335	Corner drive, standard	1490	563	Y	Corner drive, standard
1601 – 1800	1690	335	Corner drive, standard	1690	563 / 1000	Y	Corner drive, standard
1801 – 2000	1890	640	Corner drive, standard	1890	1000	Y	Corner drive, standard
2001 – 2200	2090	640	Corner drive, standard	2090	1000	Y	Corner drive, standard
2201 – 2400	2290	640	Corner drive, standard	2290	1000	Y	Corner drive, standard



INFO

A centre lock is required from SRH 2401 mm.

Backset 8 to 50 mm



8	431 – 710	600	200	144	Y	N	–	Y	– / 1	– / P	Roto Sil	2007106
15	601 – 800	690	200	234	Y	N	–	–	–	–	Roto Sil	2007116
25	801 – 1000	890	200	496	Y	N	1	–	–	–	Roto Sil	2007117
30	1001 – 1200	1090	200	496	Y	N	1	–	–	–	Roto Sil	2007118
35	1201 – 1400	1290	200	546	Y	N	1	–	–	–	Roto Sil	2007119
40	1401 – 1600	1490	200	546	Y	N	2	–	–	–	Roto Sil	2007120
45	1601 – 1800	1690	200	546	Y	Y	2	–	–	–	Roto Sil	2007121
50	1801 – 2000	1890	200	546	Y	Y	2	–	–	–	Roto Sil	2007122
	2001 – 2200	2090	200	546	Y	Y	3	–	–	–	Roto Sil	2007123
	2201 – 2400	2290	200	546	Y	Y	3	–	–	–	Roto Sil	2007124



INFO

Lifting mishandling device (stop for floating-mullion sash espagnolette) preassembled as standard.

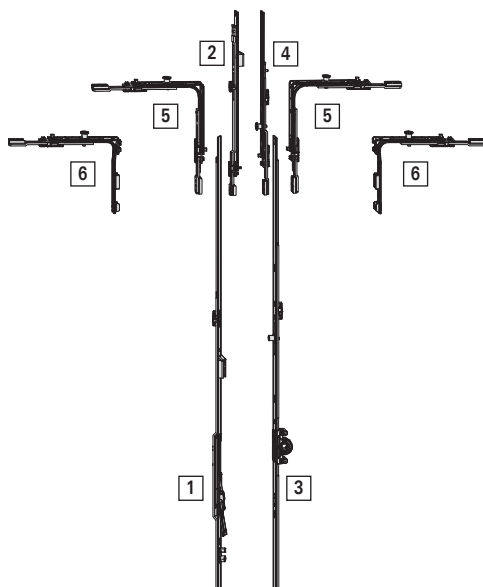


INFO

When using the lever-operated espagnolette Plus (RC 1 N, RC 2, RC 2 N), fit the basic security stay guide (Tilt&Turn) or security stay guide (Tilt&Turn)

5.1.2.2 Centred / variable handle height

Possible combinations



Assignment	Meaning
[1]	Lever-operated espagnolette Plus
[2]	Floating-mullion centre lock
[3]	T&T espagnolette – centred / variable handle height
[4]	Centre lock, standard
[5]	Corner drive, standard
[6]	Special corner drive, short

Determining the espagnolettes

1. Determine the element's sash rebate height (SRH).



INFO

Refer to the tables below for possible combinations and the required corner drive [5] + [6].

2. Select the lever-operated espagnolette Plus [1] using the *sash rebate height (SRH)* and *length of the component*.
Optional: determine the floating-mullion centre lock [2].
3. Select the T&T espagnolette – centred / variable handle height [3] using the *length of the component*.
 - ☐ T&T espagnolette – centred / variable handle height, backset 8 mm
 - ☐ T&T espagnolette – centred / variable handle height, backset 15 mm
 - ☐ T&T espagnolette – centred / variable handle height, backset 25, 30, 35, 40, 45, 50 mm**Optional:** determine the centre lock, standard [4].

Backset 8 mm

Application range		Lever-operated espagnolette Plus		T&T espagnolette			
SRH	Component length	Toggle lever position	Corner drive type	Component length	Handle height	LMD	Corner drive type
431 – 520	400	194 – 239	Special corner drive, short	500	215 – 260	N	Special corner drive, short
521 – 620		240 – 289	Corner drive, standard		261 – 310	N	Corner drive, standard
621 – 720	680	290 – 329	Special corner drive, short	800	311 – 510	Y	Corner drive, standard
721 – 800		330 – 379	Corner drive, standard				
801 – 1200	980	380 – 579	Corner drive, standard	980	401 – 600	Y	Corner drive, standard
1201 – 1600	1380	580 – 779	Corner drive, standard	1380	601 – 800	Y	Corner drive, standard
1601 – 2000	1780	780 – 979	Corner drive, standard	1780	801 – 1000	Y	Corner drive, standard
2001 – 2400	2180	980 – 1179	Corner drive, standard	2180	1001 – 1200	Y	Corner drive, standard



INFO

A centre lock is required from SRH 2401 mm.

Backset of 15 mm and above

Application range		Lever-operated espagnolette Plus		T&T espagnolette			
SRH	Component length	Toggle lever position	Corner drive type	Component length	Handle height	LMD	Corner drive type
431 – 450	400	194 – 204	Special corner drive, short	430	215 – 225	N	Special corner drive, short
451 – 520		205 – 239	Special corner drive, short		226 – 260	N	Corner drive, standard
521 – 620		240 – 289	Corner drive, standard		261 – 310	N	Corner drive, standard
621 – 700	680	290 – 329	Special corner drive, short	580	311 – 400	Y	Corner drive, standard
701 – 800		330 – 379	Corner drive, standard				
801 – 1200	980	380 – 579	Corner drive, standard	980	401 – 600	Y	Corner drive, standard
1201 – 1600	1380	580 – 779	Corner drive, standard	1380	601 – 800	Y	Corner drive, standard
1601 – 2000	1780	780 – 979	Corner drive, standard	1780	801 – 1000	Y	Corner drive, standard
2001 – 2400	2180	980 – 1179	Corner drive, standard	2180	1001 – 1200	Y	Corner drive, standard

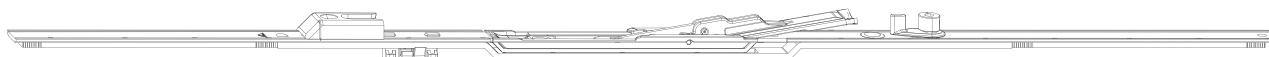


INFO

A centre lock is required from SRH 2401 mm.



Backset 8 to 50 mm



										Nº
8	431 – 620	400	100 / 100	194 – 289	N	N	–	Roto Sil	2007128	
15	621 – 800	680	100 / 100	290 – 379	Y	N	1	Roto Sil	2007129	
25	801 – 1200	980	200 / 200	380 – 579	Y	N	1	Roto Sil	2007130	
30	1001 – 1400	1180	200 / 200	480 – 679	Y	N	1	Roto Sil	2007131	
35	1201 – 1600	1380	200 / 200	580 – 779	Y	N	2	Roto Sil	2007132	
40	1601 – 2000	1780	200 / 200	780 – 979	Y	Y	2	Roto Sil	2007133	
45	2001 – 2400	2180	200 / 200	980 – 1179	Y	Y	4	Roto Sil	2007134	



INFO

Lifting mishandling device (stop for floating-mullion sash espagnolette) preassembled as standard.



INFO

When using the lever-operated espagnolette Plus (RC 1 N, RC 2, RC 2 N), fit the basic security stay guide (Tilt&Turn) or security stay guide (Tilt&Turn)

6 Frame components



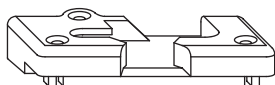
INFO

Further frame components are available upon request.

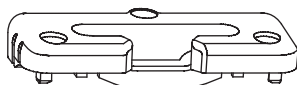
6.1 Tilt strikers

6.1.1 Standard

6.1.1.1 Zinc



A



B

Assignment	Meaning	Security
[A]	With base	RC 1 N, RC 2 / RC 2 N
[B]	Without base	Basic security

					Nº
Aluplast Ideal 2000	13	N	Roto Sil	–	331487
Schüco Corona CT70 MD	13	Y	Roto Sil	Left	260501
Schüco Corona SI82 MD	13	Y	Roto Sil	Right	260502
LB Profile Pad					
Schüco Living 82					
Aluplast Ideal 4000	13	N	Roto Sil	–	350190
Aluplast Ideal 5000	13	Y	Roto Sil	Left	257364
Schüco Corona AD	13	Y	Roto Sil	Right	257365
Aluplast energeto 5000					
Aluplast energeto 5000 view					
Aluplast energeto 7000					
Aluplast energeto 8000					
Aluplast Ideal 8000					
Aluplast Ideal 7000					
Brüggmann AD 13	13	Y	Roto Sil	Left	292195
Brüggmann MD 13	13	Y	Roto Sil	Right	292196
Schüco Corona CT70 AD	13	N	Roto Sil	–	338019
Veka Alphaline 90					
Veka Softline 70 AD					
Veka Softline 70 MD					
Salamander BluEvolution 73					
Salamander BluEvolution 82					
Salamander GreenEvolution 76					
Veka Softline 82 MD					
Veka Softline 76 AD					
Veka Softline 76 MD					
Schüco Corona CT70 AD	13	Y	Roto Sil	Left	256783
Veka Softline 70 AD	13	Y	Roto Sil	Right	256784
Veka Softline 70 MD					
Salamander BluEvolution 73					
Salamander BluEvolution 82					
Salamander GreenEvolution 76					
Veka Softline 76 AD					
Veka Softline 76 MD					
Deceuninck Klassiek	13	Y	Roto Sil	Left	281599
Deceuninck Mondial VK	13	Y	Roto Sil	Right	281600
Deceuninck Zendow	13	Y	Roto Sil	Left	370073
	13	Y	Roto Sil	Right	370074
Gealan Kubus	13	N	Roto Sil	–	807518
	13	Y	Roto Sil	Left	807515
	13	Y	Roto Sil	Right	807516



					Nº
Gealan S3000	13	N	Roto Sil	–	367200
Gealan S7000	13	Y	Roto Sil	Left	260497
Gealan S8000	13	Y	Roto Sil	Right	260498
Gealan S9000					
Gealan Linear					
Deceuninck Prestige MD	13	N	Roto Sil	–	729039
Inoutic AD 13					
Deceuninck Eforte	13	Y	Roto Sil	Left	260499
Deceuninck Prestige AD	13	Y	Roto Sil	Right	260500
Inoutic AD 13					
Inoutic MD 100					
Deceuninck Prestige MD	13	Y	Roto Sil	Left	288117
	13	Y	Roto Sil	Right	288118
KBE 70 AD	13	N	Roto Sil	–	338071
KBE 70 MD	13	Y	Roto Sil	Left	289973
	13	Y	Roto Sil	Right	289974
KBE 76	13	N	Roto Sil	–	738472
Kömmerring 76	13	Y	Roto Sil	Left	780787
Panorama 3000	13	Y	Roto Sil	Right	780788
Trocal 76					
KBE 88 MD					
Kömmerring 88 MD					
Trocal 88 MD					
KBE AD	9	Y	Roto Sil	Left	260493
	9	Y	Roto Sil	Right	260494
KBE MD	9	Y	Roto Sil	Left	260505
Trocal S900	9	Y	Roto Sil	Right	260506
Kömmerring 88 Plus	13	N	Roto Sil	–	334954
Kömmerring Eurofutur Classic					
Kömmerring Eurofutur Elegance					
Kömmerring Eurodur 3S	13	Y	Roto Sil	Left	260489
	13	Y	Roto Sil	Right	260490
Panorama 2000	9	Y	Roto Sil	Left	261794
	9	Y	Roto Sil	Right	281710
Plus Plan Plus Tec	13	Y	Roto Sil	Left	264420
	13	Y	Roto Sil	Right	264421
Rehau S 735 MD	13	N	Roto Sil	–	338021
Rehau S 788					
Rehau S 799 Brilliant Design (S 730)					
Rehau S 969 Synego					
Rehau S 986 EuroDesign 86					
Rehau S 735 MD	13	Y	Roto Sil	Left	316939
Rehau S 788	13	Y	Roto Sil	Right	316940
Rehau S 799 Brilliant Design (S 730)					
Rehau S 986 EuroDesign 86					
Rehau S 980 Geneo	13	Y	Roto Sil	Left	496018
	13	Y	Roto Sil	Right	496017
Roplasto 4K	13	Y	Roto Sil	Left	260507
Roplasto 7001 AD	13	Y	Roto Sil	Right	260508
Roplasto 7001 MD					
Salamander 2D	13	N	Roto Sil	–	561212
Salamander 3D	13	Y	Roto Sil	Left	261724
Salamander Streamline 76	13	Y	Roto Sil	Right	261725
Salamander BluEvolution 92	13	N	Roto Sil	–	604887
	13	Y	Roto Sil	Left	599778
	13	Y	Roto Sil	Right	599779
Trocal 88+	13	Y	Roto Sil	Left	290131
Trocal InnoNova 2000	13	Y	Roto Sil	Right	290152
Trocal InnoNova 70.A5 AD	13	N	Roto Sil	–	336808
Trocal InnoNova 70.M5 MD					
Veka Softline AD 9	9	Y	Roto Sil	Left	260495
	9	Y	Roto Sil	Right	260496

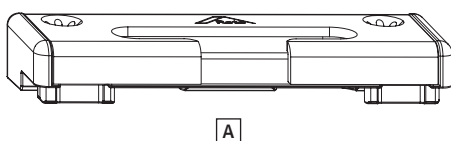
					Nº
Wymar 2500	13	Y	Roto Sil	Left	254468
	13	Y	Roto Sil	Right	294893
Wymar 3000	13	Y	Roto Sil	Left	373964
	13	Y	Roto Sil	Right	373963



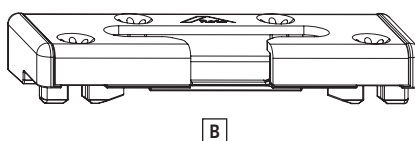
INFO

Other versions are available upon request.

6.1.1.2 Steel



A



B

Assignment	Meaning
[A]	Hardware axis 9 mm
[B]	Hardware axis 13 mm

					Nº
Aluplast Ideal 2000 Schüco Corona CT70 MD Schüco Corona SI82 MD Schüco LivIng 82 Veka Softline 82 MD	13	Y	Roto Sil	–	856773
Aluplast energeto 5000 Aluplast energeto 5000 view Aluplast energeto 7000 Aluplast Ideal 4000 Aluplast energeto 8000 Aluplast Ideal 5000 Aluplast Ideal 7000 Aluplast Ideal 8000 Schüco Corona AD	13	Y	Roto Sil	–	856789
Brüggmann AD 13 Brüggmann MD 13	13	Y	Roto Sil	–	856786
Salamander BluEvolution 73 Salamander BluEvolution 82 Schüco Corona CT70 AD Veka Softline 70 AD Veka Softline 76 AD Veka Softline 76 MD Veka Softline 82 MD Veka Topline AD 13 Veka Topline MD 13	13	Y	Roto Sil	–	856782
Deceuninck Zendow	13	Y	Roto Sil	–	856783
Gealan Linear Gealan S3000 Gealan S7000 Gealan S8000 Gealan S9000	13	Y	Roto Sil	–	856781
Inoutic AD 13 Deceuninck Eforte Inoutic MD 100 Deceuninck Prestige AD	13	Y	Roto Sil	–	856797
KBE AD	9	Y	Roto Sil	–	856800
KBE 70 AD	13	Y	Roto Sil	–	856787



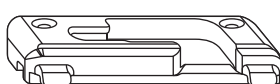
					Nº
KBE 76 KBE 88 MD Kömmerling 76 Kömmerling 88 MD Trocal 76 Trocal 88 MD	13	Y	Roto Sil	–	856799
Kömmerling 88 Plus Kömmerling Eurofutur Classic Kömmerling Eurofutur Elegance	13	Y	Roto Sil	–	857009
Kömmerling Eurodur 3S Kömmerling Eurofutur Classic Kömmerling Eurofutur Elegance Wymar 3000	13	Y	Roto Sil	–	857008
Rehau S 735 MD Rehau S 788 Rehau S 799 Brillant Design (S 730) Rehau S 969 Synego Rehau S 980 Geneo Rehau S 986 EuroDesign 86	13	Y	Roto Sil	–	856785
Plus Plan Plus Tec Roplasto 4K Roplasto 7001 AD Roplasto 7001 MD	13	Y	Roto Sil	–	856788
Salamander Design 2D Salamander Design 3D Salamander Streamline 76	13	Y	Roto Sil	–	857131
Schüco Corona CT70 MD	13	Y	Roto Sil	–	856774
Trocal 88+ Trocal InnoNova 2000 Trocal S900	13	Y	Roto Sil	–	856796
Veka Softline AD 9	9	Y	Roto Sil	–	856801



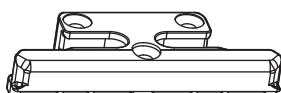
INFO

Other versions are available upon request.

6.1.2 TiltFirst (TF)



A



B

Assignment	Meaning
[A]	Right / left tilt striker
[B]	Symmetrical tilt striker

					Nº
Aluplast Ideal 2000	13	Y	Roto Sil	Left	891744
Schüco Corona CT70 AD	13	Y	Roto Sil	Right	891743
Schüco Corona CT70 MD					
Schüco Corona SI82 MD					
Aluplast energeto 5000	13	Y	Roto Sil	Left	891747
Aluplast energeto 5000 view	13	Y	Roto Sil	Right	891748
Aluplast energeto 7000					
Aluplast energeto 8000					
Aluplast Ideal 4000					
Aluplast Ideal 5000					
Aluplast Ideal 7000					
Aluplast Ideal 8000					
Schüco Corona AD					

					Nº
Brüggmann AD 13	13	Y	Roto Sil	Left	320608
Brüggmann MD 13	13	Y	Roto Sil	Right	320609
Salamander BluEvolution 73	13	Y	Roto Sil	Left	891741
Salamander BluEvolution 82	13	Y	Roto Sil	Right	891742
Veka Softline 76 AD					
Veka Softline 76 MD					
Veka Topline AD 13					
Veka Topline MD 13					
Gealan Kubus	13	Y	Roto Sil	Left	807519
	13	Y	Roto Sil	Right	807520
Gealan S3000	13	Y	Roto Sil	Left	280122
Gealan S7000	13	Y	Roto Sil	Right	280123
Gealan S8000					
Deceuninck Zendow	13	Y	Roto Sil	Left	493547
	13	Y	Roto Sil	Right	493426
Deceuninck Eforte	13	Y	Roto Sil	Left	493840
Deceuninck Prestige AD	13	Y	Roto Sil	Right	493839
Deceuninck Prestige MD					
Inoutic AD 13					
KBE 70 AD	13	Y	Roto Sil	Left	891745
KBE 76	13	Y	Roto Sil	Right	891746
KBE 88 MD					
Kömmerling 76					
Kömmerling 88 MD					
Trocal 76					
Trocal 88 MD					
KBE AD	9	Y	Roto Sil	Left	317004
	9	Y	Roto Sil	Right	317005
Kömmerling 88 Plus	13	Y	Roto Sil	Left	309132
Kömmerling Eurodur 3S	13	Y	Roto Sil	Right	309133
Kömmerling Eurofutur Classic					
Kömmerling Eurofutur Elegance					
Rehau S 735 MD	13	Y	Roto Sil	Left	891718
Rehau S 788	13	Y	Roto Sil	Right	891719
Rehau S 799 Brillant Design (S 730)					
Rehau S 969 Synego					
Rehau S 980 Geneo					
Salamander 2D	13	Y	Roto Sil	Left	316977
Salamander 3D	13	Y	Roto Sil	Right	316978
Salamander Streamline 76					
Trocal 88+	13	Y	Roto Sil	Left	606635
Trocal InnoNova 2000	13	Y	Roto Sil	Right	606636
Trocal S900	9	Y	Roto Sil	Left	309136
	9	Y	Roto Sil	Right	309137
Trocal InnoNova 70.A5 AD	13	Y	Roto Sil	Left	336107
Trocal InnoNova 70.M5 MD	13	Y	Roto Sil	Right	336108
Veka Softline 70 AD	13	N	Roto Sil	–	617391
Veka Topline AD 13					
Veka Softline 76 AD					
Veka Softline 76 MD					
Veka Softline AD 9	9	Y	Roto Sil	Left	328015
	9	Y	Roto Sil	Right	328016



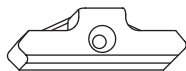
INFO

Other versions are available upon request.



6.2 Strikers

6.2.1 Standard



				Nº
Aluplast Ideal 2000 LB Profile Pad Schüco Corona CT70 AD Schüco Corona CT70 MD Schüco Corona SI82 MD Schüco LivIng 82	13	N	Roto Sil	331489
Aluplast Ideal 4000 Aluplast Ideal 5000 Aluplast Ideal 8000 Schüco Corona AD Schüco Corona MD Aluplast energeto 5000 Aluplast energeto 5000 view Aluplast energeto 7000 Aluplast energeto 8000 Aluplast Ideal 7000	13	N	Roto Sil	350192
Brüggmann AD 13	13	N	Roto Sil	341485
Brüggmann MD 13	13	Y	Roto Sil	292193
Salamander BluEvolution 82 Schüco Corona CT70 AD Veka Alphaline 90 Veka Softline 70 AD Veka Softline 70 MD Veka Topline AD 13 Veka Topline MD 13 Salamander BluEvolution 73 Veka Softline 82 MD Veka Softline 76 AD Veka Softline 76 MD	13	N	Roto Sil	332438
Deceuninck Klassiek Deceuninck Mondial VK	13	Y	Roto Sil	281601
Deceuninck Zendow	13	N	Roto Sil	370071
Gealan Kubus	13	N	Roto Sil	796675
Gealan S3000 Gealan S7000 Gealan S8000 Gealan S9000 Gealan Linear	13	N	Roto Sil	319744
Deceuninck Eforte Deceuninck Prestige AD Deceuninck Prestige MD Inoutic AD 13 Inoutic MD 100	13	Y	Roto Sil	260370
KBE AD	9	Y	Roto Sil	260367
KBE MD Trocal S900	9	Y	Roto Sil	260373
KBE 70 AD KBE 70 MD	13	N	Roto Sil	338070
KBE 76 Kömmerling 76 Trocal 76 KBE 88 MD Kömmerling 88 MD Panorama 3000 Trocal 88 MD	13	N	Roto Sil	738470
Kömmerling Eurodur 3S	13	N	Roto Sil	457090
	13	Y	Roto Sil	260365
Kömmerling 88 Plus Kömmerling Eurofutur Classic Kömmerling Eurofutur Elegance	13	N	Roto Sil	334957
Panorama 2000	9	Y	Roto Sil	281723

				Nº
Plus Plan Plus Tec	13	Y	Roto Sil	264316
Rehau S 735 MD Rehau S 788 Rehau S 799 Brillant Design (S 730) Rehau S 969 Synego Rehau S 980 Geneo Rehau S 986 EuroDesign 86	13	N	Roto Sil	332439
Roplasto 4K Roplasto 7001 AD Roplasto 7001 MD	13	N	Roto Sil	482541
Salamander 2D Salamander 3D Salamander BluEvolution 92 Salamander Streamline 76	13	N	Roto Sil	486195
Trocal 88+ Trocal InnoNova 2000	13	Y	Roto Sil	290127
Trocal InnoNova 70.A5 AD Trocal InnoNova 70.M5 MD	13	N	Roto Sil	336797
Veka Softline AD 9	9	N	Roto Sil	260368
Wymar 2500	13	N	Roto Sil	380088
Wymar 3000	13	N	Roto Sil	374157

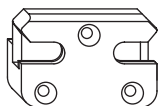


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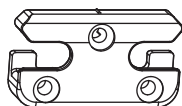
Other versions are available upon request.

6.2.2 Security

6.2.2.1 Zinc



A



B

Assignment	Meaning	Security
[A]	With base	RC 1 N, RC 2 / RC 2 N
[B]	Without base	Basic security

					Nº
Aluplast Ideal 2000 Schüco Corona CT70 MD Schüco Corona SI82 MD Schüco LivIng 82	13	N	Roto Sil	–	331490
Aluplast Ideal 2000 LB Profile Pad Schüco Corona CT70 MD Schüco Corona SI82 MD Schüco LivIng 82	13	Y	Roto Sil	–	260395
Aluplast Ideal 4000	13	N	Roto Sil	–	350191
Aluplast Ideal 5000 Schüco Corona AD Aluplast energeto 5000 Aluplast energeto 5000 view Aluplast energeto 7000 Aluplast energeto 8000 Aluplast Ideal 7000 Aluplast Ideal 8000	13	Y	Roto Sil	–	257357
Brüggmann AD 13 Brüggmann MD 13	13	Y	Roto Sil	–	292194



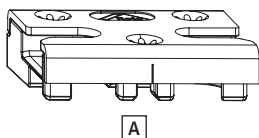
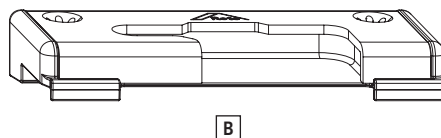
					Nº
Deceuninck Klassiek Deceuninck Mondial VK	13	Y	Roto Sil	–	281632
Deceuninck Zendow	13	Y	Roto Sil	–	370072
Gealan Kubus	13	N	Roto Sil	–	807521
Gealan S3000	13	N	Roto Sil	–	367201
Gealan S7000	13	Y	Roto Sil	–	260393
Gealan S8000					
Gealan Linear					
Gealan S9000					
Deceuninck Eforte Deceuninck Prestige AD Deceuninck Prestige MD Inoutic AD 13 Inoutic MD 100	13	Y	Roto Sil	–	260394
KBE 70 AD	13	Y	Roto Sil	–	289941
KBE 76 Kömmerling 76 Trocac 76 KBE 88 MD Kömmerling 88 MD Trocac 88 MD	13	Y	Roto Sil	–	738471
KBE AD	9	Y	Roto Sil	–	260391
KBE MD	9	Y	Roto Sil	Right	260398
Trocac S900	9	Y	Roto Sil	Left	260397
Kömmerling Eurodur 3S	13	Y	Roto Sil	–	258303
Kömmerling 88 Plus Kömmerling Eurofutur Classic Kömmerling Eurofutur Elegance	13	N	Roto Sil	–	334958
Panorama 3000	13	Y	Roto Sil	–	281768
Plus Plan Plus Tec	13	Y	Roto Sil	–	264327
Rehau S 735 MD	13	Y	Roto Sil	–	316942
Rehau S 788	13	N	Roto Sil	–	348407
Rehau S 799 Brillant Design (S 730) Rehau S 969 Synego Rehau S 986 EuroDesign 86					
Rehau S 980 Geneo	13	Y	Roto Sil	–	496019
Roplasto 4K Roplasto 7001 AD Roplasto 7001 MD	13	Y	Roto Sil	–	260399
Salamander 2D Salamander 3D Salamander Streamline 76	13	Y	Roto Sil	–	365385
Salamander BluEvolution 92	13	Y	Roto Sil	–	601574
Salamander BluEvolution 82 Schüco Corona CT70 AD Veka Topline AD 13 Veka Topline MD 13 Salamander BluEvolution 73 Veka Softline 82 MD Veka Softline 76 AD Veka Softline 76 MD	13	Y	Roto Sil	–	260396
Salamander BluEvolution 82 Schüco Corona CT70 AD Veka Alphaline 90 Veka Softline 70 AD Veka Softline 70 MD Veka Topline AD 13 Veka Topline MD 13 Salamander BluEvolution 73 Veka Softline 76 AD Veka Softline 76 MD	13	N	Roto Sil	–	348410
Trocac 88+ Trocac InnoNova 2000	13	N	Roto Sil	–	290128
Veka Softline AD 9	9	Y	Roto Sil	–	260392
Wymar 2500	13	Y	Roto Sil	–	284091
Wymar 3000	13	Y	Roto Sil	–	374194



INFO

Other versions are available upon request.

6.2.2.2 Steel



Assignment	Meaning
[A]	Striker, symmetrical
[B]	Striker, right / left

					Nº
Aluplast Ideal 2000 LB Profile Pad Schüco Corona CT70 MD Schüco Corona SI82 MD Schüco LivIng 82	13	Y	Roto Sil	–	856737
Aluplast energeto 5000 Aluplast energeto 5000 view Aluplast energeto 7000 Aluplast Ideal 4000 Aluplast energeto 8000 Aluplast Ideal 5000 Aluplast Ideal 7000 Aluplast Ideal 8000 Schüco Corona AD	13	Y	Roto Sil	–	856753
Brügmann AD 13	13	Y	Roto Sil	Left	856757
Brügmann MD 13	13	Y	Roto Sil	Right	856756
Salamander BluEvolution 73 Salamander BluEvolution 82 Schüco Corona CT70 AD Veka Alphaline 90 Veka Softline 70 AD Veka Softline 76 AD Veka Softline 76 MD Veka Softline 82 MD Veka Topline AD 13 Veka Topline MD 13	13	Y	Roto Sil	–	856738
Deceuninck Zendow	13	Y	Roto Sil	–	856751
Gealan Linear Gealan S3000 Gealan S7000 Gealan S8000 Gealan S9000	13	Y	Roto Sil	–	856749
Inoutic AD 13 Deceuninck Eforte Inoutic Favorite AD 13 Inoutic MD 100 Deceuninck Prestige AD Deceuninck Prestige MD	13	Y	Roto Sil	–	856752
KBE AD	9	N	Roto Sil	–	857007
KBE 70 AD	13	Y	Roto Sil	Left	857004
	13	Y	Roto Sil	Right	857005
KBE 76 KBE 88 MD Kömmerling 76 Kömmerling 88 MD Trocal 76 Trocal 88 MD	13	Y	Roto Sil	–	856754
Kömmerling 88 Plus Kömmerling Eurofutur Classic Kömmerling Eurofutur Elegance	13	Y	Roto Sil	–	857003



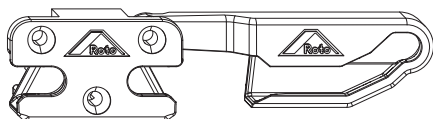
						Nº
Kömmerling Eurodur 3S Wymar 3000	13	Y	Roto Sil	–		857006
Rehau S 735 MD Rehau S 788 Rehau S 799 Brillant Design (S 730) Rehau S 969 Synego Rehau S 980 Geneo Rehau S 986 EuroDesign 86	13	Y	Roto Sil	–		856748
Plus Plan Plus Tec Roplasto 4K Roplasto 7001 AD Roplasto 7001 MD	13	Y	Roto Sil	–		856750
Salamander Design 2D	13	Y	Roto Sil	Left		858209
Salamander Design 3D	13	Y	Roto Sil	Right		858210
Salamander Streamline 76						
Trocal 88+	13	Y	Roto Sil	Left		856763
Trocal InnoNova 2000	13	Y	Roto Sil	Right		856762
Trocal S900						
Trocal InnoNova 70.A5 AD Trocal InnoNova 70.M5 MD	13	Y	Roto Sil	–		858211
Veka Softline AD 9	9	N	Roto Sil	–		856761



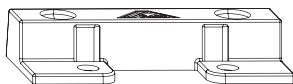
INFO

Other versions are available upon request.

6.2.2.3 TiltSafe



				Nº
Aluplast Ideal 2000	13	Roto Sil	Left	816132
Schüco Corona CT70 AD	13	Roto Sil	Right	816131
Schüco Corona CT70 MD				
Schüco Corona SI82 MD				
Schüco Living 82				
Aluplast energeto 5000	13	Roto Sil	Left	795447
Aluplast energeto 5000 view	13	Roto Sil	Right	795448
Aluplast energeto 7000				
Aluplast Ideal 4000				
Aluplast Ideal 5000				
Aluplast energeto 8000				
Aluplast Ideal 8000				
Aluplast Ideal 7000				
Gealan S8000	13	Roto Sil	Left	795450
Gealan Linear	13	Roto Sil	Right	795451
Deceuninck Eforte	13	Roto Sil	Left	839325
Deceuninck Prestige AD	13	Roto Sil	Right	839327
Deceuninck Prestige MD				
KBE 76	13	Roto Sil	Left	795445
KBE 88 MD	13	Roto Sil	Right	795446
Kömmerling 76				
Kömmerling 88 MD				
Trocal 76				
Trocal 88 MD				
Rehau S 730 AD	13	Roto Sil	Left	794922
Rehau S 735 MD	13	Roto Sil	Right	795449
Rehau S 788				
Rehau S 799 Brillant Design (S 730)				
Rehau S 986 EuroDesign 86				
Salamander Streamline 76	13	Roto Sil	Left	828260
	13	Roto Sil	Right	828261
Veka Topline AD 13	13	Roto Sil	Left	795443
Veka Softline 82 MD	13	Roto Sil	Right	795444
Veka Softline 76 AD				
Veka Softline 76 MD				



				Nº
TiltSafe protective support	Aluplast Ideal 2000 Aluplast energeto 5000 view Aluplast energeto 7000 Aluplast Ideal 4000 Aluplast Ideal 5000 Aluplast Ideal 8000 Aluplast Ideal 7000 Gealan S8000 KBE 76 KBE 88 MD Kömmerling 76 Kömmerling 88 MD Rehau S 730 AD Rehau S 799 Brillant Design (S 730) Rehau S 986 EuroDesign 86 Schüco Corona CT70 AD Schüco Corona SI82 MD Schüco Living 82 Trocal 76 Trocal 88 MD Veka Softline 82 MD Veka Topline AD 13	13	RC 2 RC 2 N	816934



INFO
Recommended component for system testing (RC 2 / RC 2 N)

The TiltSafe protective support minimises the engagement area on the TiltSafe security strikers.

6.3 Packers



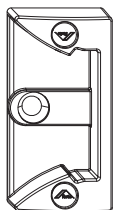
		Nº
Frame	Alphacan Master AD 13 Deceuninck Klassiek Salamander 2D Salamander 3D Salamander Streamline 76 Schüco Corona AD Aluplast energeto 5000 Aluplast energeto 8000 Aluplast Ideal 8000 Gealan Kubus	294365
	Aluplast Ideal 2000 Brüggmann AD 13 Salamander BluEvolution 82 Schüco Corona CT70 AD Schüco Corona CT70 MD Schüco Corona SI82 MD Trocal InnoNova 70.A5 AD Trocal InnoNova 70.M5 MD Veka Topline AD 13 Veka Topline MD 13 Salamander BluEvolution 73 Salamander GreenEvolution 76	294364
	Aluplast energeto 5000 view Aluplast energeto 7000 Aluplast Ideal 4000 Aluplast Ideal 5000 Aluplast Ideal 7000	773527
	Brüggmann MD 13 Wymar 2500	287070
	Deceuninck Mondial VK	477327
	Deceuninck Zendow Rehau S 735 MD Rehau S 788 Rehau S 799 Brillant Design (S 730) Rehau S 980 Geneo Roplasto 4K Roplasto 7001 AD Roplasto 7001 MD	294469
	–	292201
Frame	Gealan S3000 Gealan S7000 Gealan S8000 KBE 76 Kömmerling 76 Trocal 76 KBE 88 MD Kömmerling 88 MD Trocal 88 MD	294370
	Deceuninck Eforte Deceuninck Prestige Inoutic AD 13 Inoutic Favorite AD 13 Inoutic MD 100	294369
	KBE AD	294439
	KBE MD Trocal 88+ Trocal InnoNova 2000 Trocal S900	294463
	KBE 70 AD Kömmerling 88 Plus Kömmerling Eurodur 3S Kömmerling Eurofutur Classic Kömmerling Eurofutur Elegance	294464
	Veka Softline MD 9	294537
	–	–



6.4 Bullet catches

6.4.1 Bullet catch

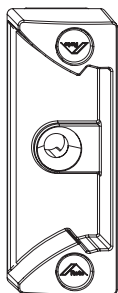
Standard



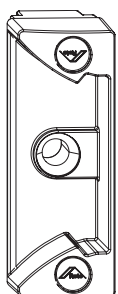
			Nº
Aluplast Ideal 2000 Aluplast energeto 5000 Aluplast energeto 5000 view Aluplast energeto 7000 Aluplast Ideal 4000 Aluplast Ideal 5000 Aluplast energeto 8000 Aluplast Ideal 7000 Aluplast Ideal 8000 Rehau S 735 MD Rehau S 788 Rehau S 799 Brillant Design (S 730) Rehau S 969 Synego Rehau S 980 Geneo Rehau S 986 EuroDesign 86 Salamander 2D Salamander 3D Salamander Streamline 76 Schüco Corona AD Schüco Corona CT70 AD Schüco LivIng 82	13	Roto Sil	788572
Salamander BluEvolution 73 Salamander BluEvolution 82 KBE 70 AD KBE 76 KBE 88 MD Kömmerling 76 Kömmerling 88 Plus Kömmerling 88 MD Kömmerling Eurodur 3S Kömmerling Eurofutur Classic Kömmerling Eurofutur Elegance Plus Plan Plus Tec Roplasto 4K Roplasto 7001 AD Roplasto 7001 MD Trocal 76 Trocal 88 MD Veka Softline 70 AD Veka Softline 70 MD Salamander GreenEvolution 76 Veka Topline AD 13 Veka Topline MD 13 Veka Softline 76 AD Veka Softline 76 MD	13	Roto Sil	788615
Gealan Kubus	13	Roto Sil	812365
Gealan S3000 Gealan S7000 Gealan S8000 Gealan Linear Gealan S9000 Wymar 2500	13	Roto Sil	788574
Deceuninck Arcade Deceuninck Eforte Deceuninck Prestige	13	Roto Sil	788616

			Nº
KBE AD Veka Softline AD 9	9	Roto Sil	788573

6.4.2 Floating mullion



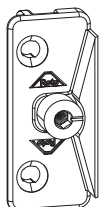
			Nº
Bullet catch for lever-operated espagnolette	Screw-on	Roto Sil	788378



		Nº
Bullet catch for opposite hardware groove	Roto Sil	788507

6.5 Lifting mishandling devices

6.5.1 Lifting mishandling device

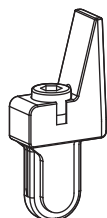


			Nº
Aluplast Ideal 2000 Schüco Corona CT70 AD Schüco Corona CT70 MD Schüco Corona SI82 MD	13	Roto Sil	260551



			Nº
Aluplast Ideal 4000 Aluplast Ideal 5000 Salamander 2D Salamander 3D Salamander BluEvolution 92 Salamander Streamline 76 Schüco Corona AD Aluplast energeto 5000 Aluplast energeto 5000 view Aluplast energeto 7000 Aluplast energeto 8000 Aluplast Ideal 7000 Aluplast Ideal 8000	13	Roto Sil	260557
Brüggmann AD 13 Brüggmann MD 13	13	Roto Sil	483117
Veka Alphaline 90 Veka Softline 70 AD Veka Softline 70 MD Veka Topline AD 13 Veka Topline MD 13 Wymar 3000 Salamander BluEvolution 73 Salamander BluEvolution 82 Salamander GreenEvolution 76 Veka Softline 76 AD Veka Softline 76 MD	13	Roto Sil	260552
Deceuninck Klassiek Deceuninck Mondial VK	13	Roto Sil	281636
Deceuninck Zendow	13	Roto Sil	370175
Gealan Kubus	13	Roto Sil	807517
Gealan S3000 Gealan S7000 Gealan S8000 Gealan S9000	13	Roto Sil	380118
Deceuninck Arcade Deceuninck Eforte Deceuninck Prestige AD Deceuninck Prestige MD Inoutic AD 13 Inoutic Favorite AD 13 Inoutic MD 100	13	Roto Sil	260550
KBE AD	9	Roto Sil	260547
KBE MD Trocal S900	9	Roto Sil	260553
KBE 70 AD KBE 76 Kömmerling 76 Roplasto 4K Roplasto 7001 AD Roplasto 7001 MD Trocal 76 KBE 88 MD Kömmerling 88 MD Trocal 88 MD	13	Roto Sil	260554
Kömmerling Eurodur 3S	13	Roto Sil	260545
Kömmerling 88 Plus Kömmerling Eurofutur Classic Kömmerling Eurofutur Elegance Plus Plan Plus Tec	13	Roto Sil	264523
Panorama 2000	9	Roto Sil	281728
Rehau S 735 MD Rehau S 788 Rehau S 799 Brillant Design (S 730) Rehau S 969 Synego Rehau S 980 Geneo Rehau S 986 EuroDesign 86	13	Roto Sil	260546
Trocal 88+ Trocal InnoNova 2000	13	Roto Sil	290155
Trocal InnoNova 70.A5 AD Trocal InnoNova 70.M5 MD	13	Roto Sil	336813

			Nº
Veka Softline AD 9	9	Roto Sil	260548



	Nº
Insert part	534908

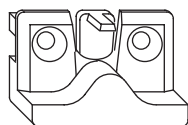


INFO

Only in conjunction with SEC striker with base (hardware axis 13).

6.6 Night vents

6.6.1 Frame components



			Nº
Aluplast Ideal 2000 Deceuninck Zendow Roplasto 4K Roplasto 7001 AD Roplasto 7001 MD Veka Softline 70 AD Veka Softline 70 MD Veka Topline AD 13 Veka Topline MD 13 Salamander BluEvolution 73 Salamander BluEvolution 82 Salamander GreenEvolution 76 Veka Softline 76 AD Veka Softline 76 MD	13	Roto Sil	260532



			Nº
Aluplast Ideal 4000 Aluplast Ideal 5000 Deceuninck Klassiek Deceuninck Mondial VK Rehau S 735 MD Rehau S 788 Rehau S 799 Brillant Design (S 730) Rehau S 980 Geneo Rehau S 986 EuroDesign 86 Salamander 2D Salamander 3D Salamander BluEvolution 92 Salamander Streamline 76 Schüco Corona AD Schüco Corona CT70 AD Schüco Corona CT70 MD Schüco Corona SI82 MD Aluplast energeto 5000 Aluplast energeto 8000 Aluplast Ideal 6000 Aluplast Ideal 8000	13	Roto Sil	260534
Brüggmann AD 13 Brüggmann MD 13	13	Roto Sil	292198
Gealan S3000 Gealan S7000 Gealan S8000 Gealan Linear	13	Roto Sil	260530
Deceuninck Eforte Deceuninck Prestige AD Deceuninck Prestige MD Inoutic AD 13 Inoutic MD 100	13	Roto Sil	260531
KBE AD Veka Softline AD 9	9	Roto Sil	260529
KBE MD	9	Roto Sil	260533
KBE 70 AD KBE 76 Kömmerling 76 Plus Plan Plus Tec Tropical 76 KBE 88 MD Kömmerling 88 MD Tropical 88 MD	13	Roto Sil	263232
Kömmerling 88 Plus Kömmerling Eurodur 3S	13	Roto Sil	260528
Tropical InnoNova 70.A5 AD Tropical InnoNova 70.M5 MD	13	Roto Sil	336815
Tropical 88+ Tropical InnoNova 2000 Tropical S900	9 13	Roto Sil	451418
Wymar 2500	13	Roto Sil	284627
Wymar 3000	13	Roto Sil	374159



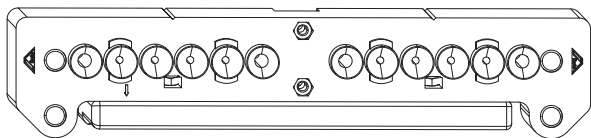
INFO

The component can only be used in conjunction with a corner drive (P or V cam).

7 Jigs

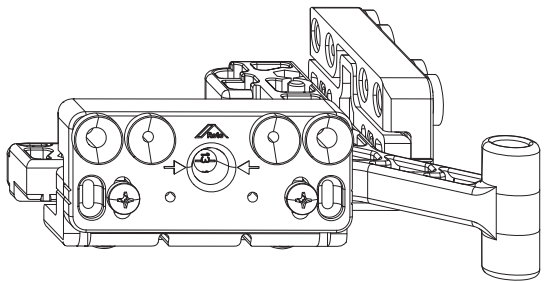
7.1 Drilling jigs

7.1.1 Stay bearing and pivot rest



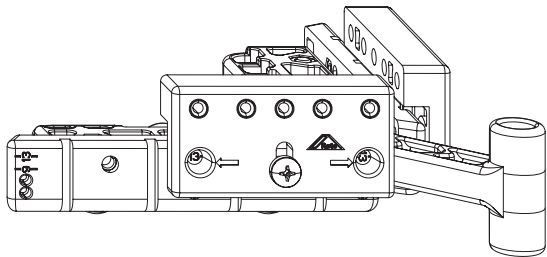
		Nº
	Stay bearing and pivot rest K3	230727
	P6 stay bearing and pivot rest	788436

7.1.2 Corner hinges



		Nº
	P6 corner hinge, height adjustable	788438
	P6 corner hinge, height and gasket-compression adjustable	788503

7.1.3 Turn-Only / Tilt-Only overlap hinge

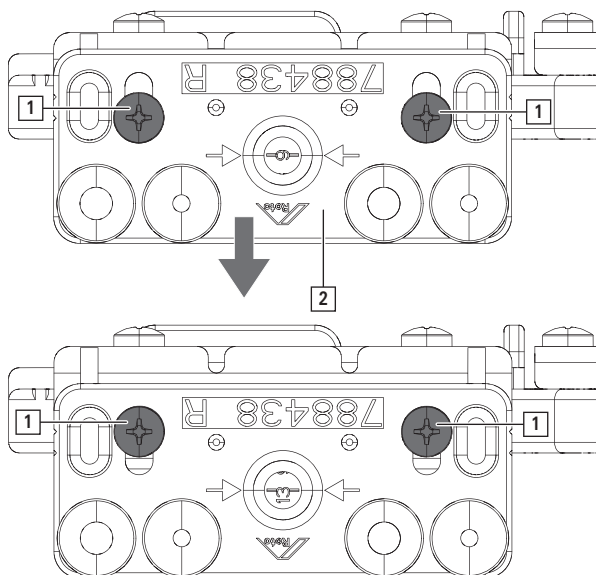


		Nº
	Turn-Only / Tilt-Only overlap hinge	795268

7.1.4 Drilling jig – corner hinge

Adjusting the 9 mm or 13 mm axis

1. Undo the screws [1].

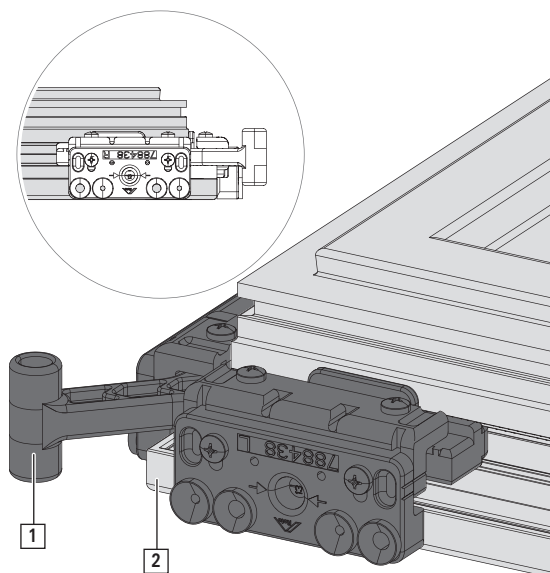


2. Move the drilling plate [2]. Adjust the required axis.

3. Secure the screws [1].

Positioning the drilling jig

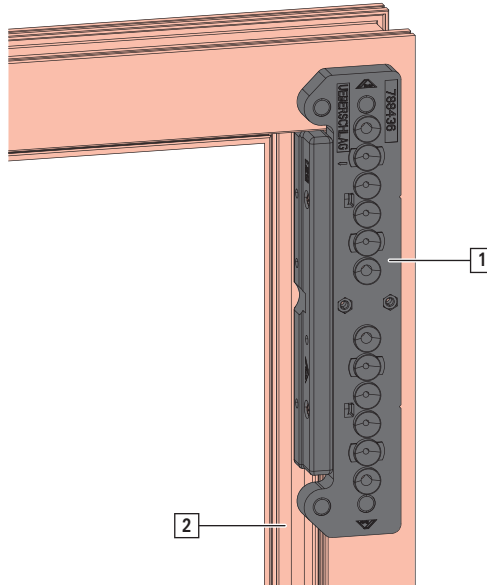
1. Position the drilling jig [1] on the lower edge of the sash [2].



2. Drill holes.

7.1.5 Drilling jig – stay bearing and pivot rest

1. Place the drilling jig [1] on the frame [2].



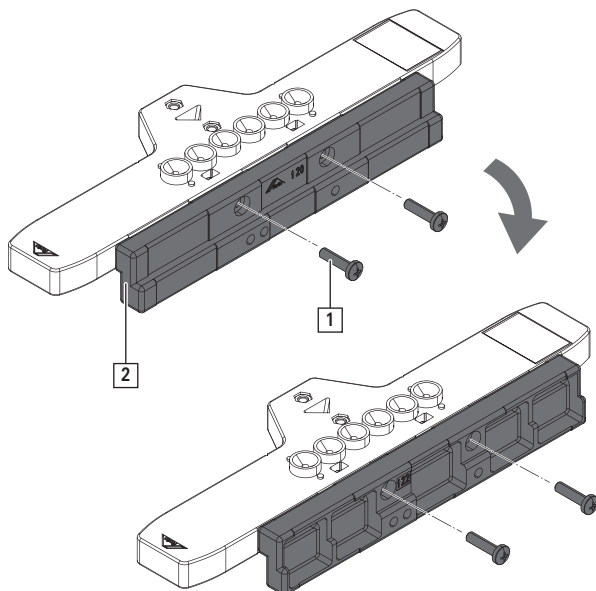
2. Drill holes.

7.1.6 Stay bearing, adjustable

7.1.6.1 Setting system 12/20-13 or 12/22-13

Shown using a drilling jig for Tilt-Only sash as an example.

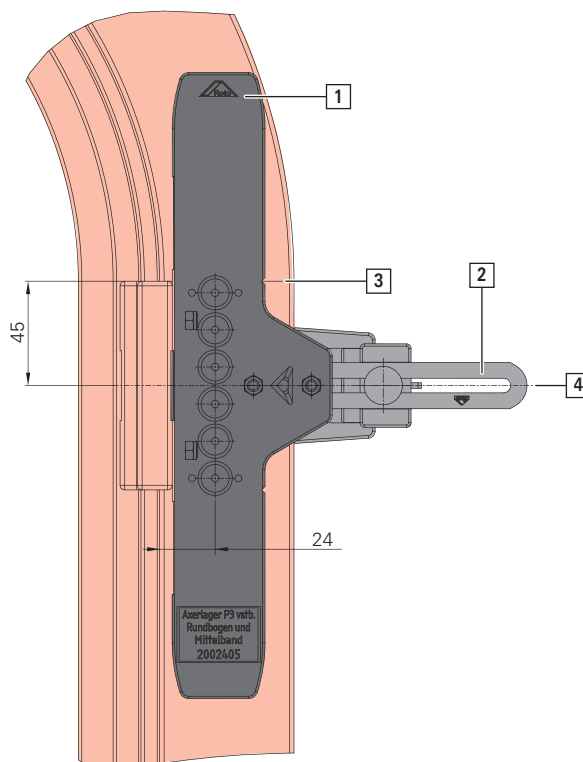
1. Undo the screws [1].



2. Turn the drilling plate [2]. Set the required system.
3. Secure the screws.

7.1.6.2 Drilling jig – arched stay bearing

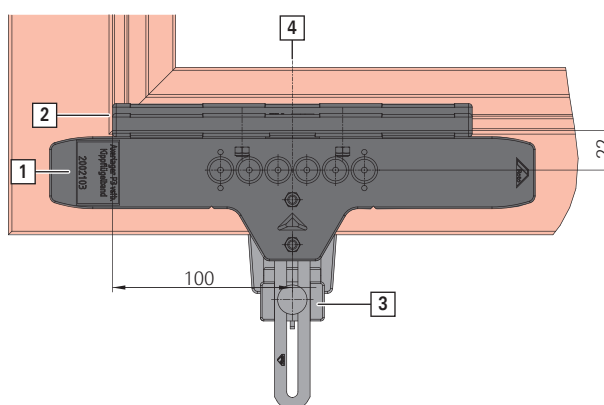
1. Position the drilling jig [1] including clamping retainer [2] on the frame with the marking at the start of the arch [3].
 [4] = centre of stay bearing



2. Secure the clamping retainer.
3. Drill holes.

7.1.6.3 Drilling jig – Tilt-Only sash stay bearing

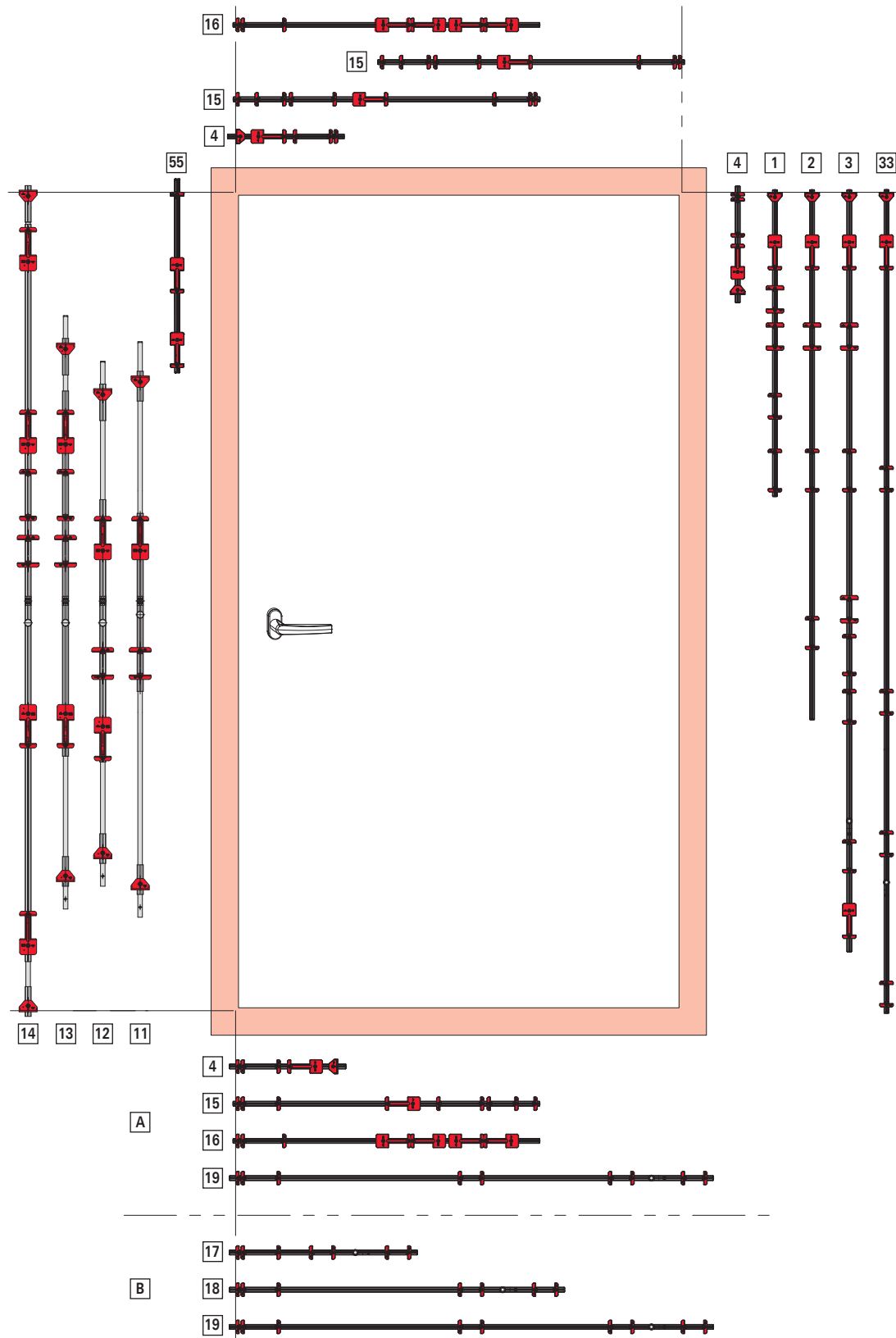
1. Position the drilling jig [1] (optionally with clamping retainer [3]) on the lower edge of the frame [2].
 [4] = centre of stay bearing



2. Optional: secure the clamping retainer.
3. Drill holes.

7.2 Positioning jigs

7.2.1 T&T espagnolette – centred / variable handle height



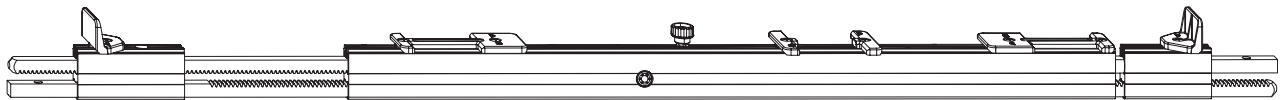
[A] BSec



[B] RC 1 N

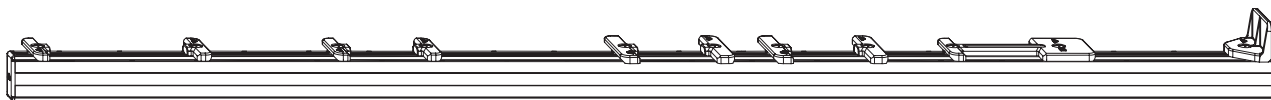
Assignment	Position	Application range	T&T		T-O	Single jig
			BSec	RC 1 N	BSec	
[11]	Espagnolette side	SRH 621 – 1200 mm	■	■	■	Standard → <i>from page 219</i>
[12]		SRH 1201 – 1600 mm	■	■	■	
[13]		SRH 1601 – 2000 mm	■	■	■	
[14]		SRH 2001 – 2400 mm	■	■	■	
[55]		SRH 2401 – 2800 mm	■	■	■	
[4]	Hinge side	SRH 280 – 800 mm	■	■	–	Tilt striker / corner drive → <i>from page 220</i>
[1]		SRH 801 – 1400 mm	■	■	■	Standard → <i>from page 219</i>
[2]		SRH 1401 – 1800 mm	■	■	■	
[3]		SRH 1801 – 2800 mm	■	■	■	
[33]		SRH 2601 – 2800 mm	■	■	■	
[4]	Horizontal at the top	SRW 290 – 800	■	■	■	Tilt striker / corner drive → <i>from page 220</i>
[15]		SRW 801 – 1600 mm	■	■	–	Centre lock → <i>from page 220</i>
[16]		SRW 801 – 1400 mm	–	–	■	Turn-Only sash → <i>from page 220</i>
[4]	Horizontal at the bottom	SRW 290 – 800 mm	■	–	–	Tilt striker / corner drive → <i>from page 220</i>
[15]		SRW 801 – 1200 mm	■	–	–	Centre lock → <i>from page 220</i>
[19]		SRW 1131 – 1600 mm	■	■	–	
[16]		SRW 801 – 1400 mm	–	–	■	Turn-Only sash → <i>from page 220</i>
[17]		SRW 320 – 730 mm	–	■	–	Centre lock RC 1 N → <i>from page 220</i>
[18]		SRW 731 – 1130 mm	–	■	–	

7.2.1.1 Standard



Espagnolette side

				Nº
Standard	621 – 1200	Espagnolette side	No. 11	268943
	1001 – 1600	Espagnolette side	No. 12	798480
	1601 – 2000	Espagnolette side	No. 13	787401
	2001 – 2400	Espagnolette side	No. 14	787402
	2401 – 2800	Espagnolette side	No. 55	808454



Hinge side

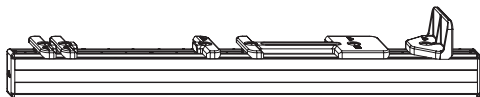
				Nº
Standard	801 – 1400	Espagnolette side Hinge side	No. 1	290048
Standard	1401 – 1600	Espagnolette side Hinge side	No. 2	290049
Standard	1601 – 2600	Espagnolette side Hinge side	No. 3	290050
Standard	2601 – 2800	Hinge side	No. 33	808678



INFO

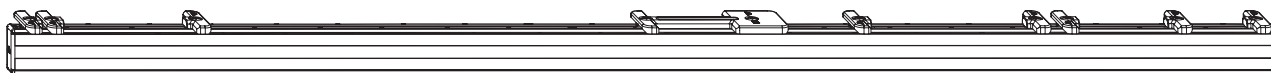
With T&T espagnolettes – centred / variable handle height, use jigs on the hinge side only.

7.2.1.2 Tilt striker / corner drive



					Nº
Tilt striker / corner drive	280 – 800	290 – 800	Top Bottom Hinge side	No. 4	290051

7.2.1.3 Centre lock



					Nº
Centre lock	Basic security RC 1 N	801 – 1600	Top Bottom	No. 15	311892
		1201 – 1600	Bottom	No. 19	263337
	RC 1 N	320 – 730	Bottom	No. 17	263335
		731 – 1130	Bottom	No. 18	263336

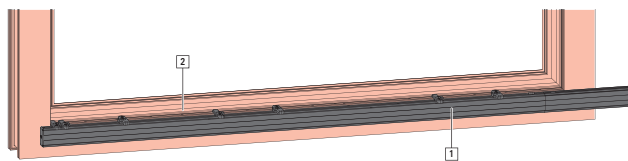
7.2.1.4 Turn-Only sash



				Nº
Turn-Only sash	801 – 1400	Top Bottom	No. 16	311893

7.2.2 Positioning jigs

1. Place the positioning jig [1] on the frame [2].



2. Position the frame components.

8 Installation

8.1 Processing instructions

Maximum sash sizes and weights

The specifications, application diagrams and component assignments which can be found in the hardware manufacturer's product-specific documents provide information on the maximum permitted sash sizes and weights. The component with the lowest permitted load bearing capacity determines the maximum permitted sash weight.

- Before using electronic data records and implementing them in window fabrication programs in particular, check that they match the specifications, application diagrams and component assignments.
- Never exceed the maximum permitted sash sizes and weights. If any points are unclear, contact the hardware manufacturer.

Specifications from profile manufacturers

The element manufacturer must comply with all specified system dimensions (e.g. gasket gap dimensions or locking distances).

They must continue to ensure and check this on a regular basis, especially when new hardware components are used for the first time, during production and on a continuous basis, up to and including element installation.



INFO

The hardware components are always designed in such a way that any system dimensions affected by the hardware can be adjusted. The hardware manufacturer shall not be liable for any additional expenses incurred if a deviation from these dimensions is not discovered until after the element has been installed.

Combining hardware

Burglar inhibiting elements need hardware which meets special requirements.

Elements for wet rooms and those for use in environments with aggressive, corrosive constituents in the air require hardware that meets special requirements.

The resistance of elements to wind loads when they are closed and locked depends on the individual design of the element. The hardware system is capable of handling wind loads specified by legislation and standards (for example in accordance with EN 12210 – especially test pressure P3).

Coordinate suitable hardware combinations and installation procedures in elements with the hardware manufacturer and profile manufacturer for the areas listed above, and conclude a separate agreement for them.



INFO

The hardware manufacturer's specifications on the combination of hardware (e.g. the use of additional scissor stays, the design of hardware for burglar-inhibiting elements, etc.) are binding.

In general, the hardware defined in this document is capable of meeting statutory and normative requirements for accessible dwellings.

Installation surfaces

The frame and sash grooves must be free from construction materials (such as plaster, gypsum). The sash groove must be free from welding residue to ensure an optimum supporting surface for the hardware components.

8.2 Screw fixing

Electrogalvanised and passivated steel fenestration screws (Ø 3.9 – 4.2 x ...) are to be used to fasten the hardware components; in more challenging climatic conditions, use fenestration screws with additional sealing.

When attaching security-relevant, load-bearing hardware components (hinge sides), the manufacturer of windows and balcony doors must prove the specified forces in accordance with the table below (excerpt from Directive TBDK issued by the Gütegemeinschaft Schlösser und Beschläge e. V.) by means of testing and ensure them on their product.



Sash weight in kg	Tractive force in N [4]
60	1650
70	1900
80	2200
90	2450
100	2700
110	3000
120	3250
130	3500
140	3900
150	4200



INFO

Observe directive TDBK for tractive force values as a function of the sash weights.

Further information can be found at www.beschlagindustrie.de.

The spacer block guidelines for glazing methods must be complied with.

8.3 Screw connections



DANGER

Incorrectly installed or screwed-in hardware components present a risk of death.

Incorrectly installed and screwed-in hardware components may lead to hazardous situations and cause serious or fatal accidents.

- ▶ During installation and screwdriving work, observe the specifications provided by the profile manufacturer; contact the profile manufacturer if necessary.
- ▶ Use the recommended screws.
- ▶ Select the length of the screws according to the profiles used.
- ▶ Ensure that the hardware components are adequately secured; contact the screw manufacturer if necessary.



ATTENTION

Using incorrect screw material may cause property damage.

Using the wrong screws may damage the components.

- ▶ Only use galvanised zinc-plated and passivated steel screws.
- ▶ Use screws with additional sealing in more challenging climatic conditions.
- ▶ Use stainless-steel screws on stainless-steel components only.
- ▶ For aluminium components, use screws made of steel (coated with zinc-nickel or zinc flakes) or stainless steel.



ATTENTION

Improper screw fixings may cause property damage.

Improper screw fixings may damage the components and the element as a whole, and stop them from working properly.

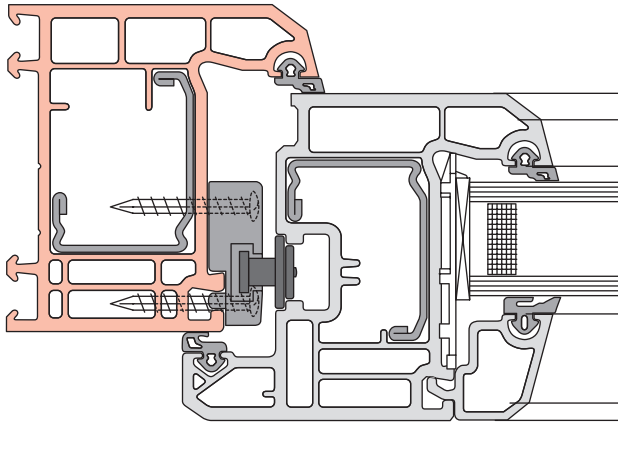
- ▶ Unless stated otherwise, turn screws in straight.
- ▶ Tighten screw heads until they are flush with the surface.
- ▶ Do not over-tighten screws. Note the torque. Choose a torque that will not deform the hardware and profile. Define profile-specific torques on the basis of the demo assembly.
- ▶ Use the recommended screws.
- ▶ Select the length of the screws according to the profiles used.

[4] Permissible tolerance -10%

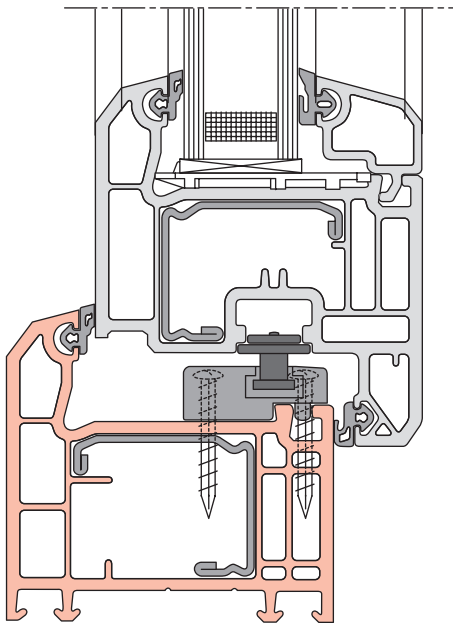
8.4 Fastening suggestion for security windows

Fastening SEC strikers

3x screws 4x ... Through all walls if attachment through steel reinforcement is not possible.



Horizontal cross section M 1:2



Vertical cross section M 1:2

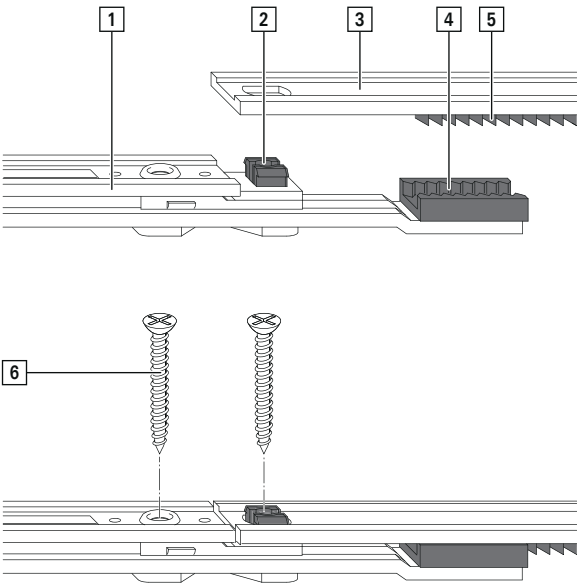
Glazing bead attachment

With screws if required.



8.5 Force-fit connection

Coupleable hardware components always require a force-fit connection.



Assignment	Description
[1]	Component A
[2]	Screw guide with clamp
[3]	Component B
[4]	Component A toothed segment
[5]	Component B toothed segment
[6]	Screw

Force-fit connections are formed by screwing down components A and B so that forces and movements are transferred without loss.

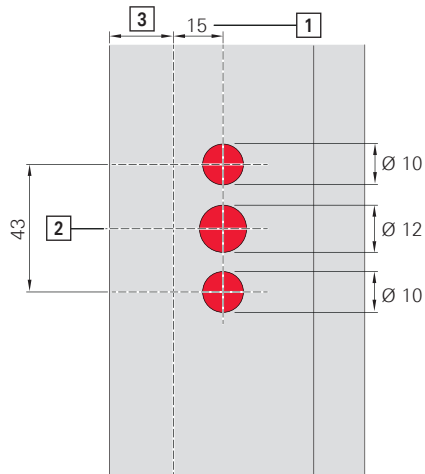


INFO

All coupleable components are delivered attached in the centre.

8.6 Drilling and routing dimensions

8.6.1 T&T espagnolette



Drill holes for sprocket and handle cam

[1] Backset

[2] Handle height

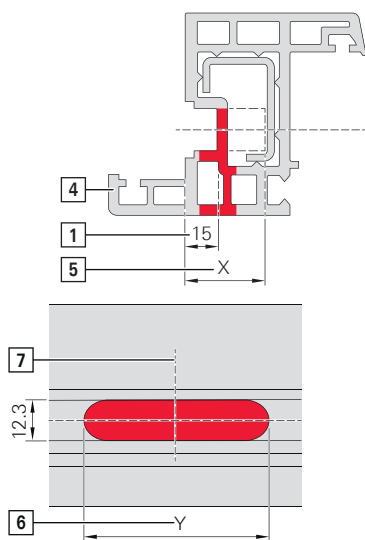
[3] Overlap width

[4] Overlap height: 16 to 22 mm

Drill hole Ø 10: drilling depth = overlap height + 17 mm for countersunk screws (ISO 7046-1 M5 x ...)

Drill hole Ø 12: drilling depth = overlap height + 17 mm

[5] Routing depth (X) min. = backset + 12.5 mm



Gearbox routing

[6] Routing length (Y)

Backset 8 = min. 30 mm

Backset 15 = min. 65 mm

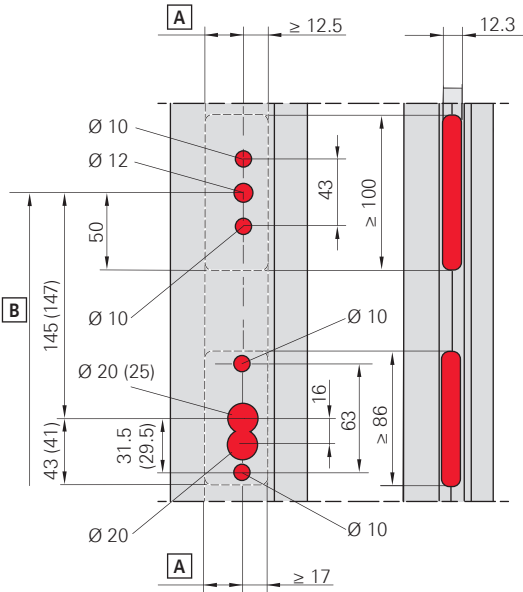
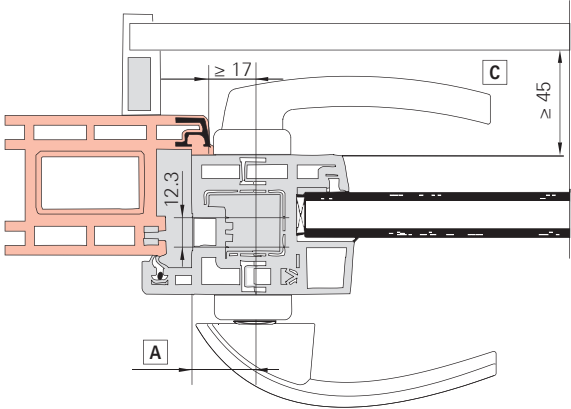
Backset 25 to backset 50 = min. 100 mm

[7] Centre of gearbox

Routing depth min. 28 mm



8.6.2 High backset espagnolette



Values in brackets for round cylinder.

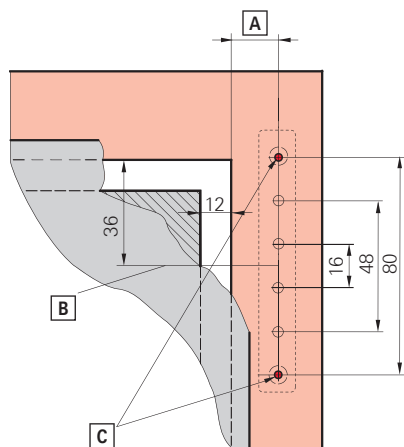
Assignment	Meaning
[A]	Backset
[B]	Handle height
[C]	On roller shutters



INFO
 Cross section: doors (inward opening).

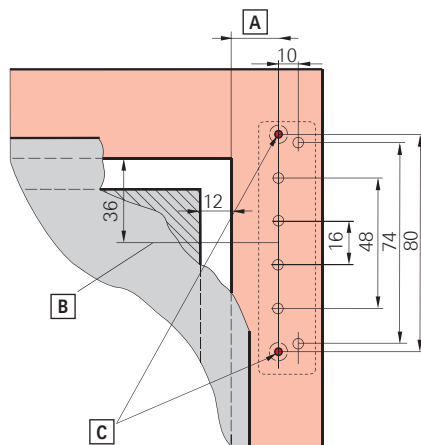
8.6.3 Stay bearing

Standard – P 3/130 | P 6/130



Assignment	Meaning	System
[A]	16.5 mm	12/18–9, 12/18–13
	18.5 mm	12/20–9, 12/20–13
	19.5 mm	12/21–13
	20.5 mm	12/22–13
[B]	Stay bearing centre	–
[C]	P 3/130 stay bearing, drill hole Ø 3 mm, 4 mm deep	–
	P 6/130 stay bearing, drill hole Ø 6 mm, 9 mm deep	

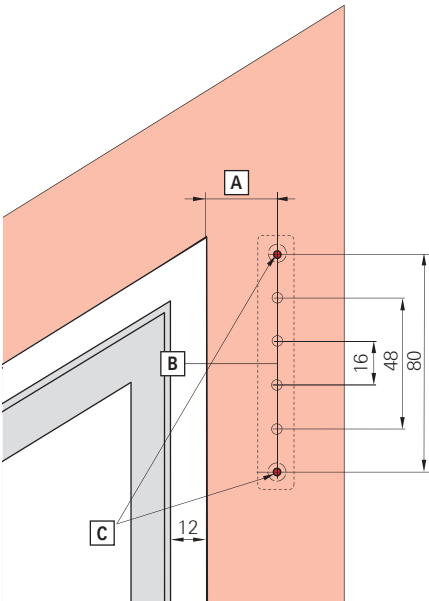
Standard – P 6/150



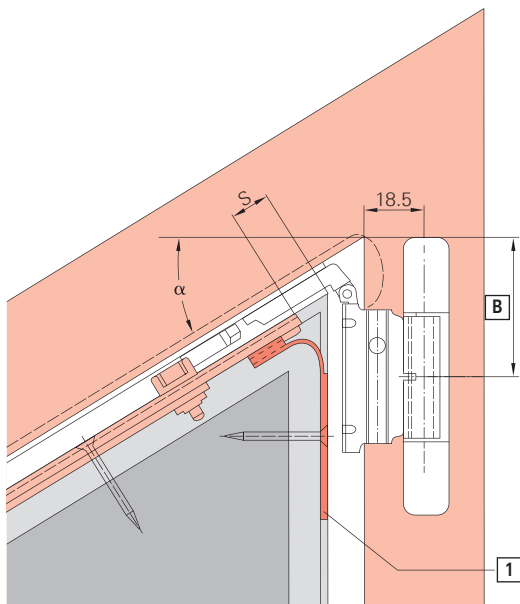
Assignment	Meaning	System
[A]	16.5 mm	12/18–9, 12/18–13
	18.5 mm	12/20–9, 12/20–13
	19.5 mm	12/21–13
	20.5 mm	12/22–13
[B]	Stay bearing centre	–
[C]	P 6/150 stay bearing, drill hole Ø 6 mm, 9 mm deep	–



8.6.4 Stay bearing – pitched window

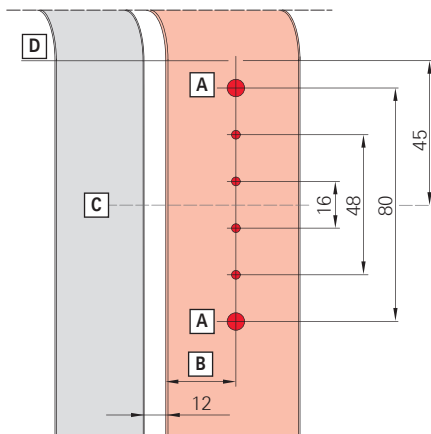


Assignment	Meaning	System
[A]	16.5 mm	12/18–9, 12/18–13
	18.5 mm	12/20–9, 12/20–13
	19.5 mm	12/21–13
	20.5 mm	12/22–13
[B]	Stay bearing centre	–
[C]	P 3/130 stay bearing, drill hole Ø 3 mm, 4 mm deep	–
	P 6/130 stay bearing, drill hole Ø 6 mm, 9 mm deep	



Pitched angle α	50°	45°	40°	35°	30°	25°	20°	15°	10°	5°	0°	-5°	-10°	-15°
Floating-mullion position S	13	13.5	13.8	14	14.1	14.1	14.1	14	13.8	13.6	13.4	12.9	12.5	12
Connection bracket	without	without	without	without	without	without	without	without	without	without	with	without	without	without
End piece [1]	with	with	with	with	with	with	with	without	without	without	without	without	without	without
Stay bearing centre [B]	59.6	56.7	54.3	52.5	51	49.8	48.8	48	47.3	46.8	46.4	46.1	46	45.9

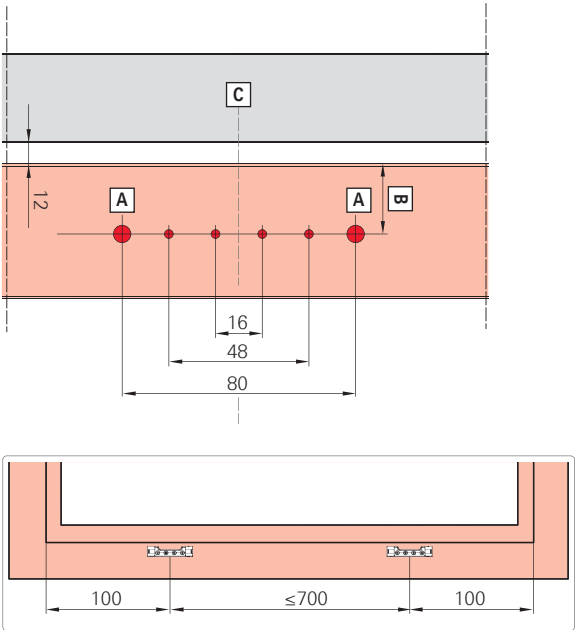
8.6.5 Arch



Assignment	Meaning	System
[A]	Stay bearing P3/100, drill hole Ø 3 mm, 4 mm deep Stay bearing P6/100, drill hole Ø 6 mm, 9 mm deep	-
[B]	24 mm	12/20-13
[C]	Stay bearing centre	-
[D]	Start of arch	-



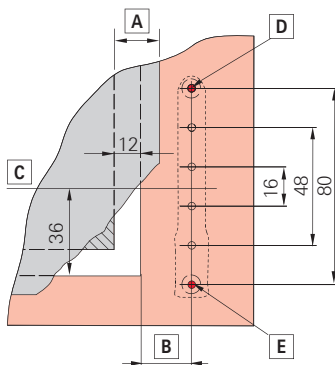
8.6.6 Tilt-Only sash



Assignment	Meaning	System
[A]	Stay bearing, adjustable P3/100, drill hole Ø 3 mm, 4 mm deep Stay bearing, adjustable P6/100, drill hole Ø 6 mm, 9 mm deep	-
[B]	20 mm	12/18-9, 12/18-13
	22 mm	12/20-9, 12/20-13
	23 mm	12/21-13
	24 mm	12/22-13
[C]	Stay bearing centre	-

8.6.7 Pivot rest

P 3/130 | P 6/130 | P6/150

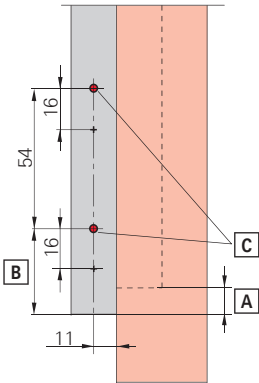


Assignment	Meaning	System
[A]	Overlap width	-
[B]	16.5 mm	12 / 18-9, 12 / 18-13
	18.5 mm	12 / 20-9, 12 / 20-13
	19.5 mm	12 / 21-13
	20.5 mm	12 / 22-13
[C]	Pivot rest centre	-
[D]	P 3 / 130 pivot rest, drill hole Ø 3 mm, 3 mm deep	-
	P 6 / 130 pivot rest, drill hole Ø 6 mm, 3 mm deep	
	P 6 / 150 pivot rest, top drill hole Ø 6 mm, 3 mm deep	
[E]	P 3 / 130 pivot rest, drill hole Ø 3 mm, 3 mm deep	-
	P 6 / 130 pivot rest, drill hole Ø 6 mm, 9 mm deep	
	P 6 / 150 pivot rest, drill hole Ø 6 mm, 19 mm deep	

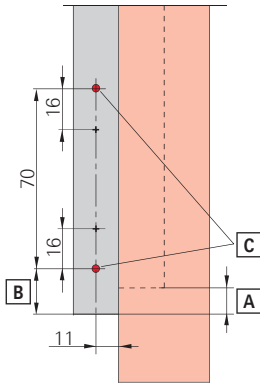


8.6.8 Corner hinge

P 6/150



Height adjustable



Height and gasket-compression adjustable

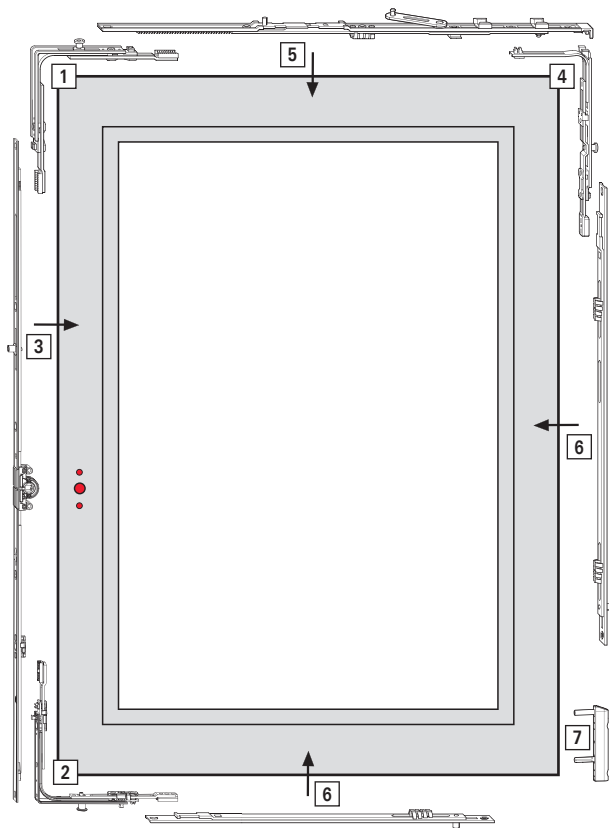
Assignment	Meaning	System
[A]	Overlap width	-
[B]	Height adjustable: 40.5 mm	12/18-9, 12/18-13
	Height and gasket-compression adjustable: 24.5 mm	
	Height adjustable: 42.5 mm	12/20-9, 12/20-13
	Height and gasket-compression adjustable: 26.5 mm	
	Height adjustable: 43.5 mm	12/21-13
	Height and gasket-compression adjustable: 27.5 mm	
	Height adjustable: 44.5 mm	12/22-13
	Height and gasket-compression adjustable: 28.5 mm	
[C]	P 6/150 corner hinge, drill hole Ø 6 mm, 23 mm deep	-

8.7 Sash

8.7.1 Installation sequence

Rectangular window

T&T espagnolette, VT – fixed handle height

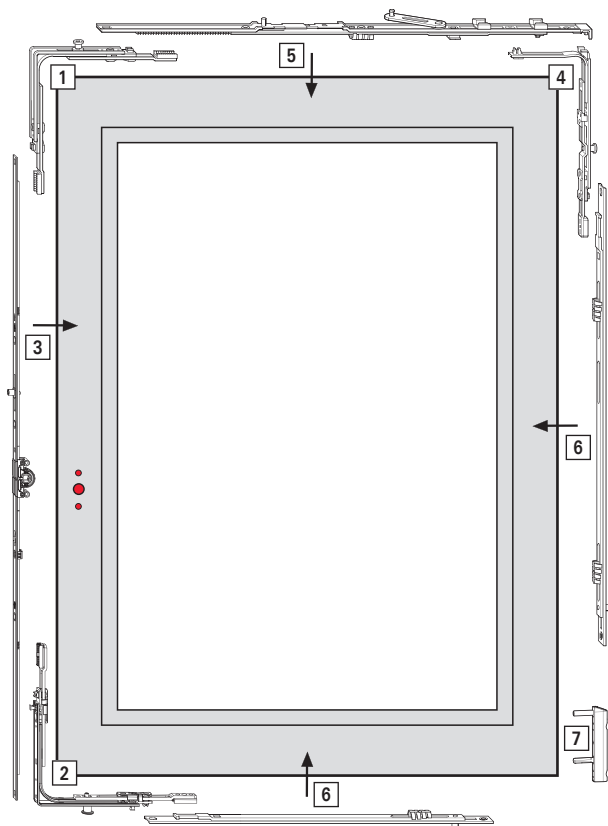


Installation sequence (suggestion)

- | | | |
|----------------------|----------------------------|--|
| [1] Corner drive | [4] Sash stay corner drive | [6] Centre lock, vertical and horizontal |
| [2] Corner drive | [5] Stay guide | [7] Corner hinge |
| [3] T&T espagnolette | | |



T&T espagnolette – centred / variable handle height

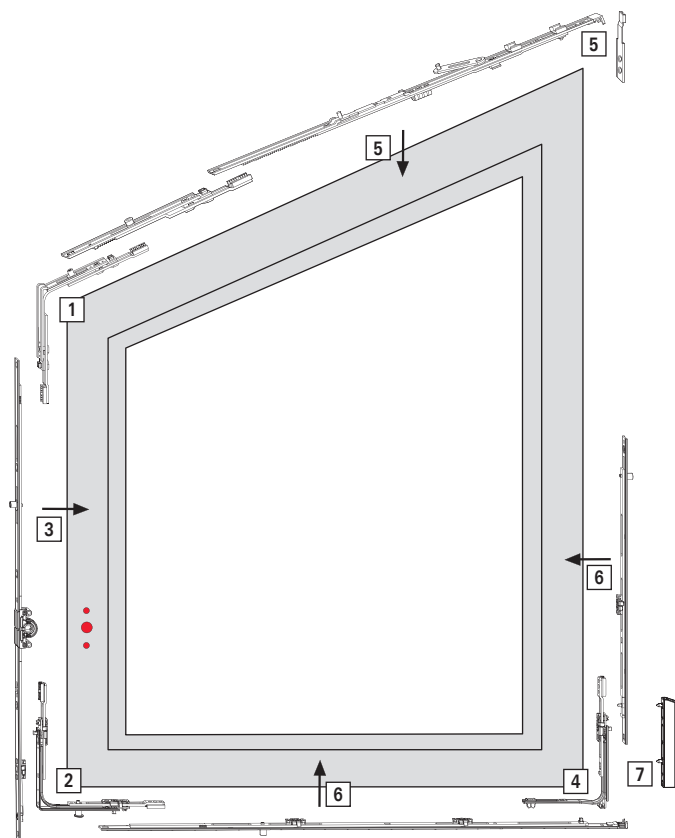


Installation sequence (suggestion)

- | | | |
|----------------------|----------------------------|--|
| [1] Corner drive | [4] Sash stay corner drive | [6] Centre lock, vertical and horizontal |
| [2] Corner drive | [5] Stay guide | [7] Corner hinge |
| [3] T&T espagnolette | | |

Pitched window

T&T espagnolette, VT – fixed handle height



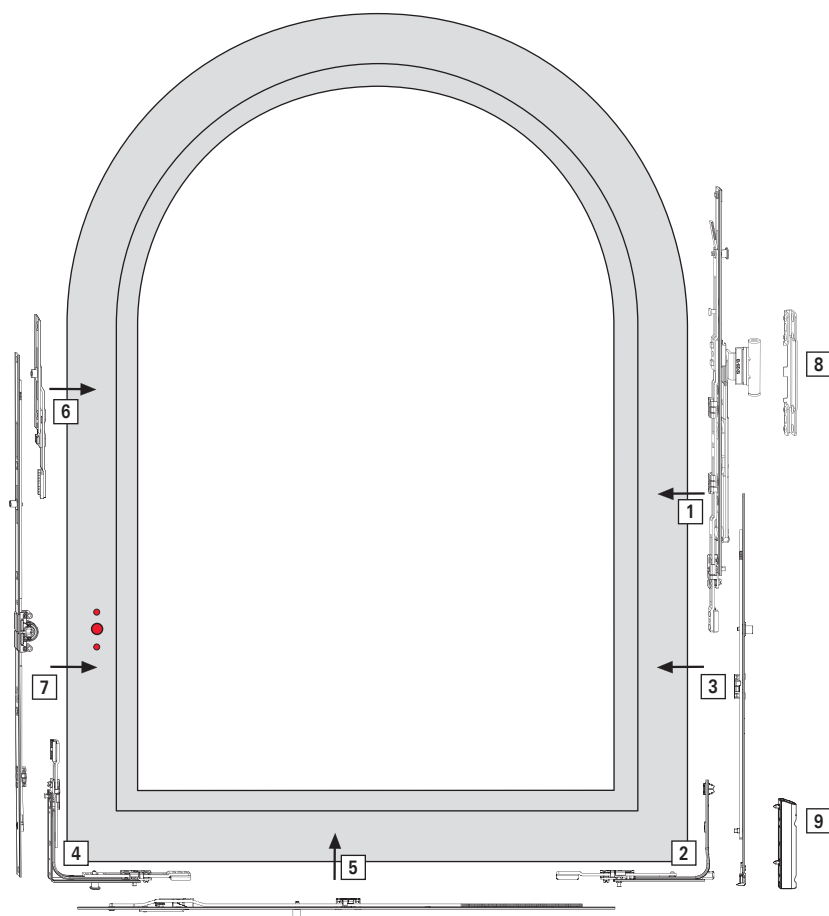
Installation sequence (suggestion)

- | | | |
|--------------------------------------|--|--|
| [1] Corner drive for pitched windows | [4] Arched corner drive | [6] Centre lock, vertical and horizontal |
| [2] Corner drive | [5] Stay guide with pitched stay guide end piece | [7] Corner hinge |
| [3] T&T espagnolette | | |



Arched window

T&T espagnolette, VT – fixed handle height



Installation sequence (suggestion)

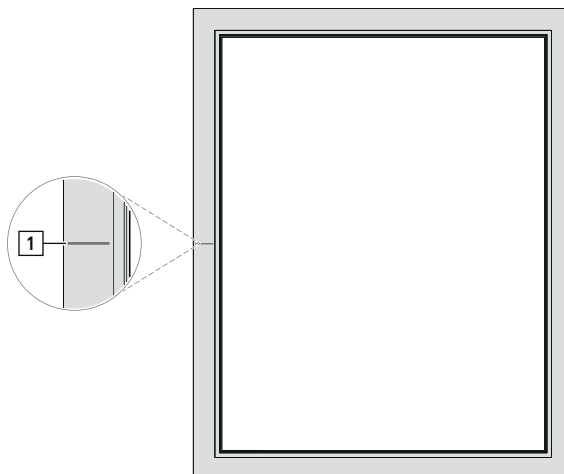
- | | | |
|--------------------------------|-----------------------------------|----------------------|
| [1] Arched sash stay | [4] Corner drive | [7] T&T espagnolette |
| [2] Arched corner drive | [5] Arched component, horizontal | [8] Retainer |
| [3] Arched component, vertical | [6] Arched espagnolette connector | [9] Corner hinge |

8.7.2 Preparing the sash for the T&T espagnolette

8.7.2.1 Handle drill holes

Drilling the holes for the handle

1. Mark the handle height on the inside of the sash [1].



2. Drill holes.
Note any different drilling dimensions. → 8.6
"Drilling and routing dimensions" from page 226
3. Deburr the drill holes.

8.7.2.2 Gearbox cutout

Routing the gearbox cutout

1. Route the espagnolette cutout.
Observe the routing dimensions. → 8.6 *"Drilling and routing dimensions" from page 226*
2. Deburr the espagnolette cutout.

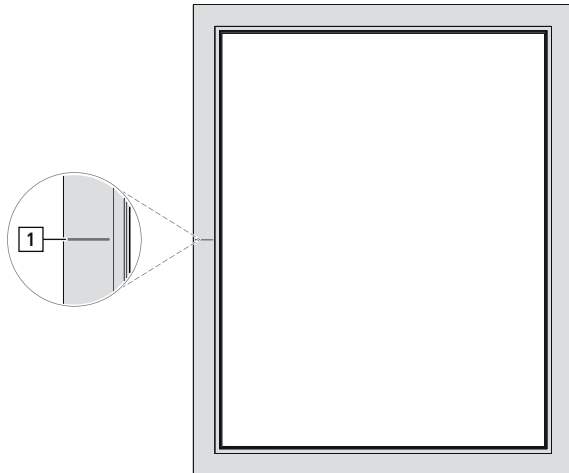


8.7.3 Preparing the sash for a lockable T&T espagnolette

8.7.3.1 Handle drill holes

Drilling the holes for the handle

1. Mark the handle height on the inside of the sash [1].



2. Drill holes.
Note any different drilling dimensions. → 8.6
"Drilling and routing dimensions" from page 226
3. Deburr the drill holes.

8.7.3.2 Gearbox cutout with lock casing

Routing the gearbox cutout with lock casing

1. Route the espagnolette cutout.
Observe the routing dimensions. → 8.6 *"Drilling and routing dimensions" from page 226*
2. Deburr the espagnolette cutout.

8.7.4 Cropping the hardware components



ATTENTION

Incorrect cropping methods may result in property damage.

Do not insert the hardware components into the sash before they have been cropped. The screw guide engages and can be destroyed when it is removed.

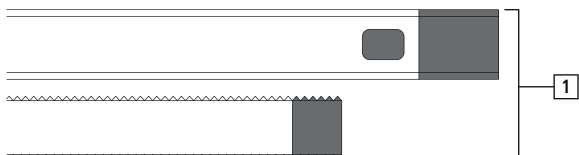
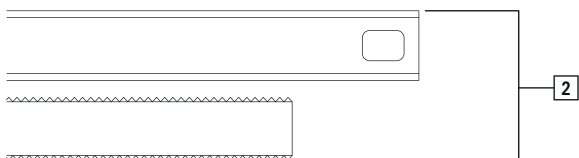
- Only lay out the hardware components and do not insert them into the sash before they have been cropped.

The following hardware components are cropped:

- Espagnolettes
- Stay guide

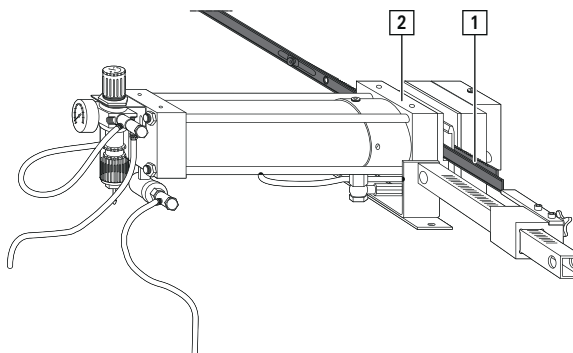
Cropping with a pneumatic punch (hole punching)

Hardware components are delivered 10 mm longer than the nominal dimension.



Assignment	Description
[1]	Hardware delivery state
[2]	Hardware, cropped

1. Place the hardware component in the required position.
2. Mark the length on the hardware component.
3. Insert the hardware component [1] into the pneumatic punch [2].



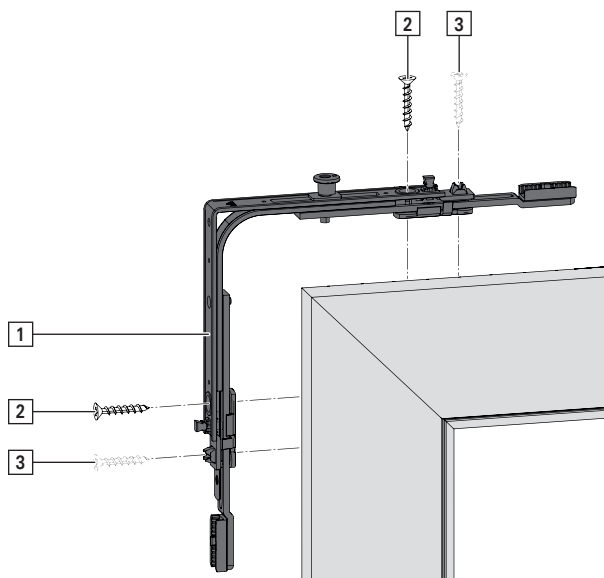
4. Align the hardware component.
5. Crop the hardware component.



8.7.5 Corner drive

Installing the corner drive

1. Insert the corner drives [1] and screw them down with two screws [2].



2. After all of the connector components have been installed, screw down the corner drives with a further two screws [3]. → 8.5 "Force-fit connection" from page 225

8.7.6 T&T espagnolettes

8.7.6.1 Fixed handle height

Installing the T&T espagnolette

1. Place the espagnolette in the required position, mark the length on one side and crop it .
2. Insert the espagnolette with the cropped side facing upwards and create a force-fit connection. → 8.5 "Force-fit connection" from page 225



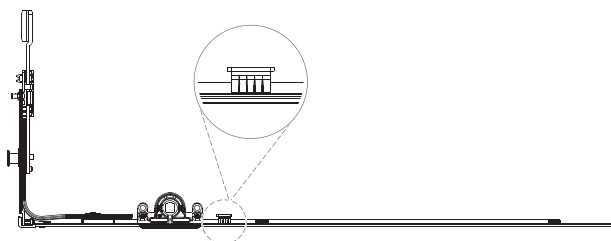
PRECONDITION

At an SRH of > 2400 mm, insert the multipart centre lock at the top on the locking side and create a force-fit connection.



INFO

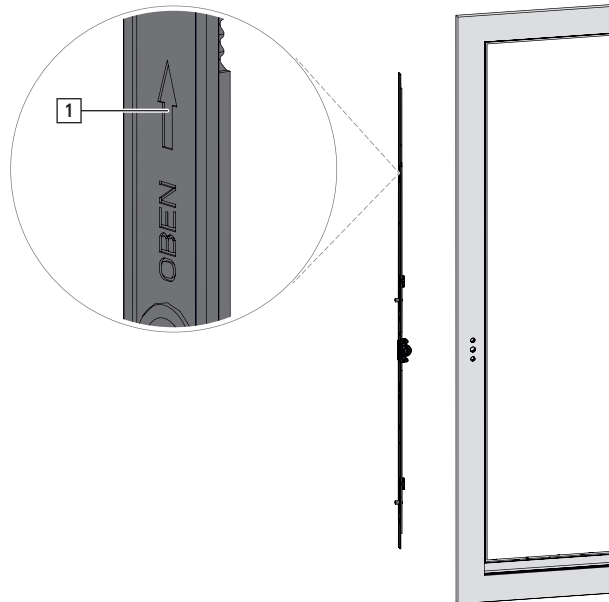
With SRH 280 – 290 mm, the screw guide must be removed (e.g. using pliers).



8.7.6.2 Centred / variable handle height

Installing the T&T espagnolette

1. Place the espagnolette in the required position, mark the length on both sides, remove it and crop it .
2. Insert the espagnolette. Ensure it is installed in the correct direction, with the arrow [1] pointing upwards.
Create a force-fit connection. → 8.5 "Force-fit connection" from page 225



PRECONDITION

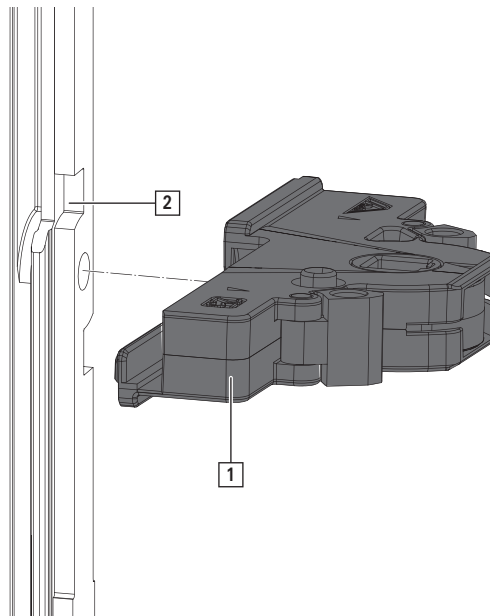
With SRH > 2400 mm, insert the centre lock, multipart, at the top on the locking side and create a force-fit connection.



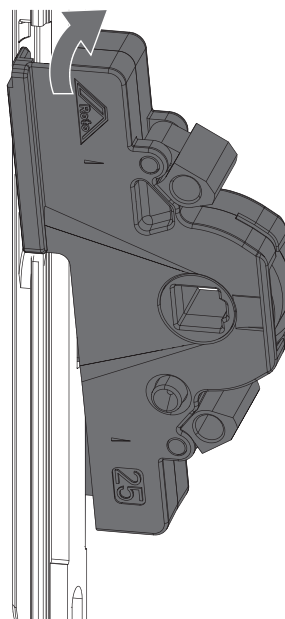
8.7.7 High backset espagnolette

Gearbox

1. Insert the gearbox [1] into the espagnolette faceplate [2] rotated by 90°. While doing so, insert the cam into the hole provided.



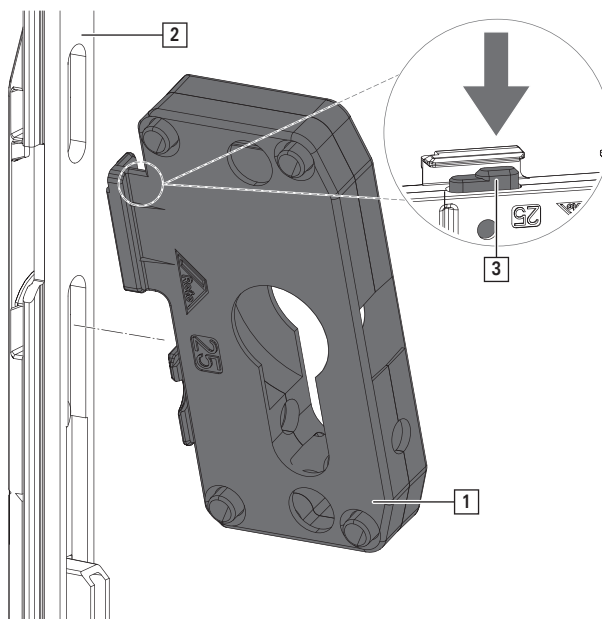
2. Turn the gearbox clockwise until the gearbox clicks into place.
The gearbox is positioned flush with the espagnolette faceplate.



3. For dismantling, turn the gearbox anticlockwise until the gearbox comes out of the groove.
Remove from the espagnolette faceplate.

Lock casing

1. If the locking lug [3] is protruding, push it back into the lock casing [1].
Turn the lock casing slightly before inserting it into the espagnolette faceplate [2].



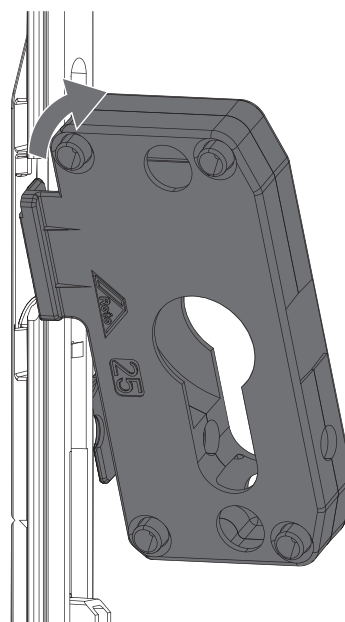
2. Insert the lock casing into the groove and turn clockwise until the lock casing clicks into place.
The lock casing is positioned flush with the espagnolette faceplate.



ATTENTION
Improper installation may cause property damage.

Turning the lock casing in incorrectly can damage the links.

- ▶ Ensure ease of movement.
- ▶ Reposition the lock casing if excessive force is required.

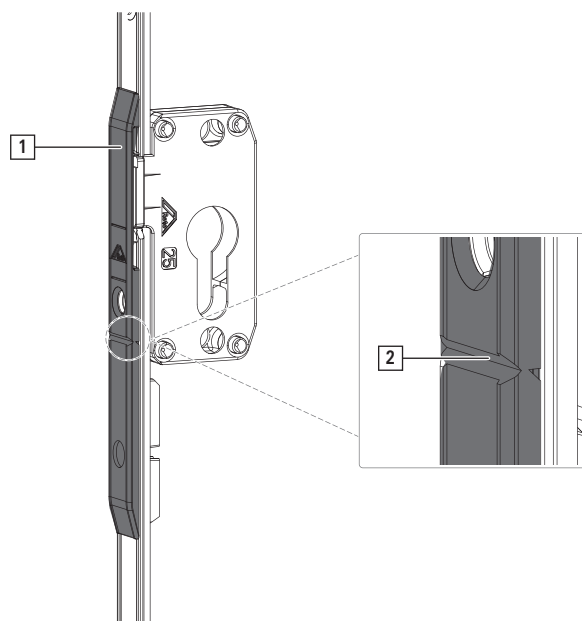


3. For dismantling, turn the lock casing anticlockwise until the lock casing comes out of the groove.
Remove from the espagnolette faceplate.

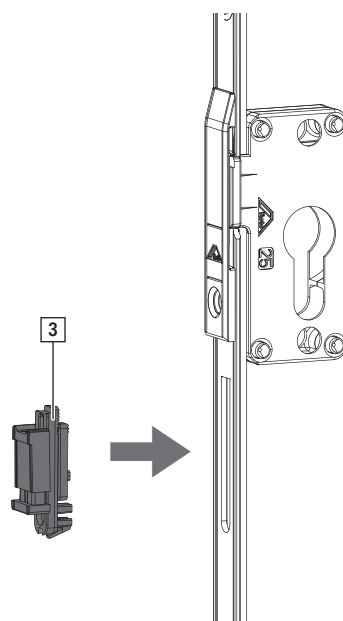


Bullet catch

1. Snap the cover [1] apart at the notch [2].
Remove the lower part of the cover.



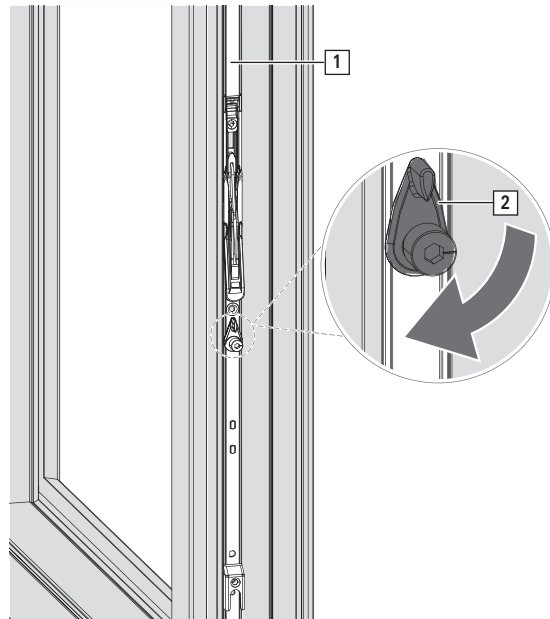
2. Insert the bullet catch [3].



8.7.8 Lever-operated espagnolette Plus

1. Insert the lever-operated espagnolette [1] into the sash groove.

For installation in the right-hand sash, turn the eccentric bolt [2] 180°.

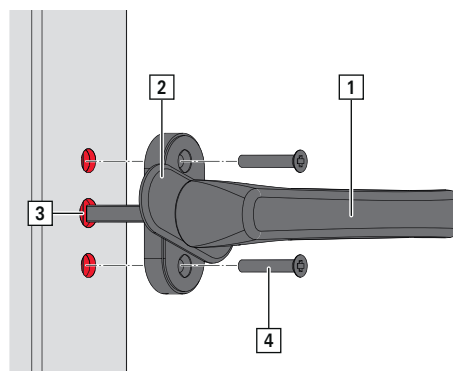


2. Mount the second opening sash with the lever-operated espagnolette open (as delivered).

8.7.9 Handle

8.7.9.1 Handle – T&T espagnolette

1. Move the handle [1] to the turn position (horizontally aligned with the escutcheon).
2. Rotate the cover [2] on the handle 90°.



3. Insert the handle into the sash [3].
4. Screw down the handle using screws [4].
5. Rotate the cover on the handle back 90°.



8.7.9.2 Centre fixing



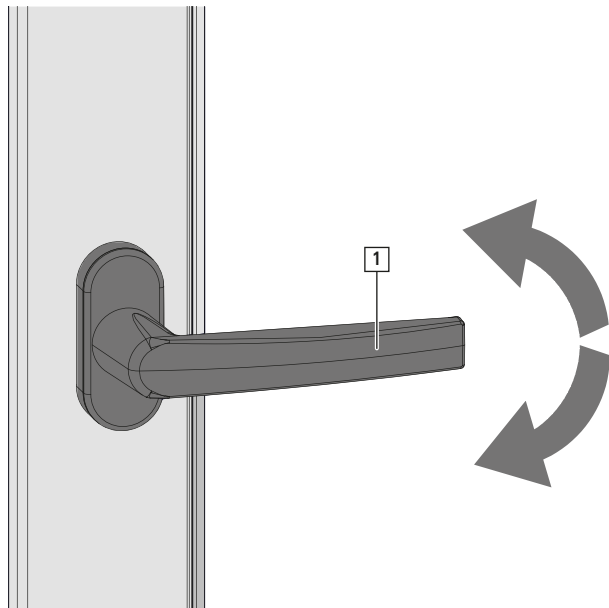
INFO

All coupleable components are delivered attached in the centre.

Undoing the centre fixing

Turning the handle undoes the centre fixing of the hardware components. Undo the centre fixing with the sash open.

1. Turn the handle [1] in one direction as far as it will go.
Audible cracking noise.



2. Turn the handle in the opposite direction as far as it will go.
Audible cracking noise.
3. Turn the handle in both directions again and check for ease of movement.

8.7.10 Stay guide

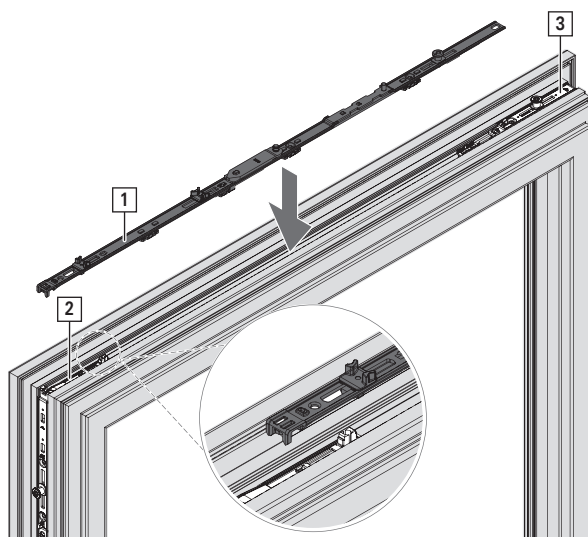
8.7.10.1 Installing the stay guide



INFO

With $SRW < 310$ mm, the assembly clip must be removed.

1. Insert the stay guide [1] into the sash groove and clip it into the sash stay corner drive [2].



2. Connect the stay guide to the corner drive [3].
Creating a force-fit connection → *from page 225*



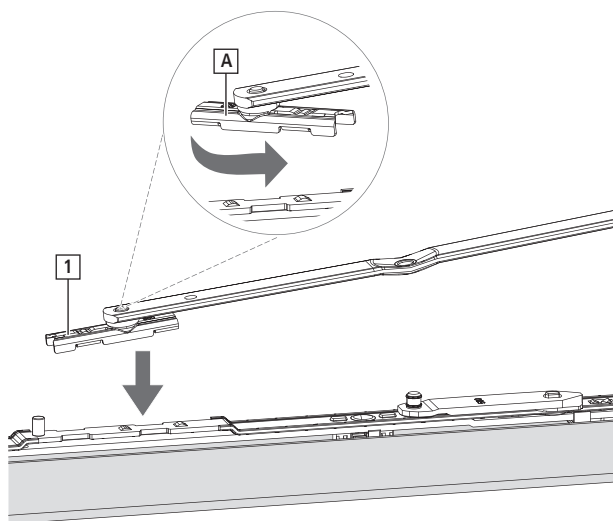
8.7.10.2 Mounting the stay arm

1. Position the slider [1] of the stay arm on the stay guide.

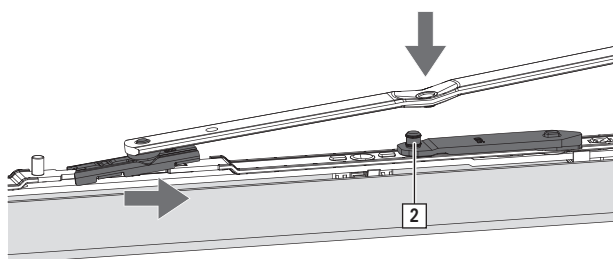


INFO

With $SRH < 500$ mm, the tilt distance must be limited to 80 mm. Turn the slider 180° to limit the tilt distance to 80 mm [A].



2. Move the stay arm and clip it onto the supporting arm bolt [2].



INFO

Anti-slam protection is achieved automatically by tilting the sash.

8.7.11 Arched sash stay



INFO

The frame (wall connection) should be attached with several screws in the area of the sash stay.

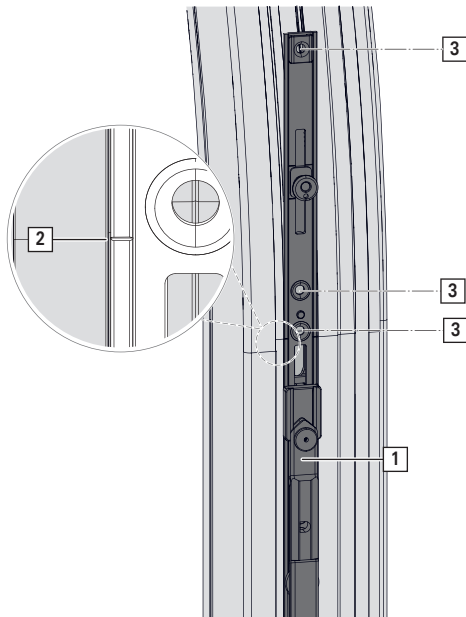


INFO

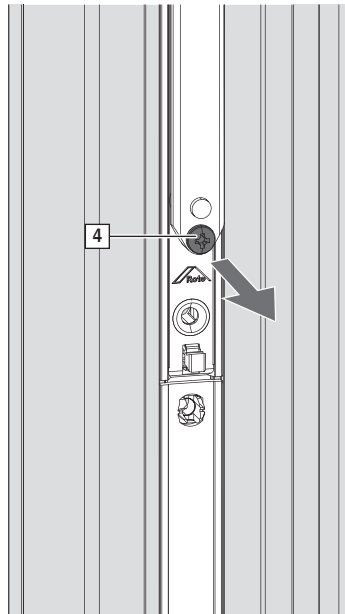
To prevent rebate clearance problems on the espagnolette side, we recommend adhering the window pane to the sash profile. If it is not possible to adhere the entire window, the hinge side must be adhered as a minimum.

For information on adhering or spacer blocking the pane, see Glazing Guide FLY_11.

1. Install the arched sash stay [1] with notch [2] at the start of the arch and fasten with three screws [3].



2. Install the hardware in its entirety. Note the installation sequence .
3. Remove the locking screw [4] from the arched sash stay.

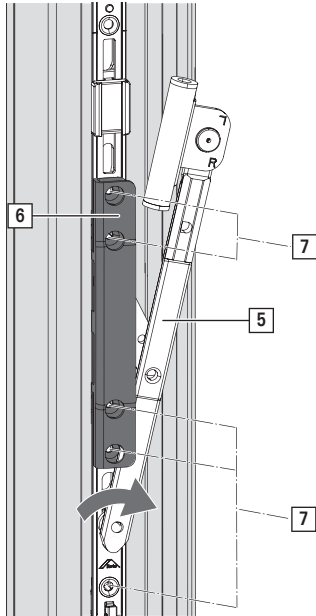


4. Fold out the stay arm [5] and fit the retainer [6]. Fasten the remaining screws [7].



INFO

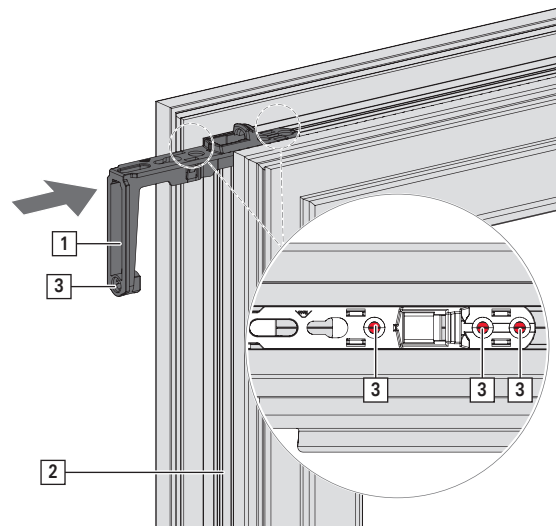
Install the retainer with screws of a maximum length.



8.7.12 Rebate sash stay

Installing the rebate stay guide

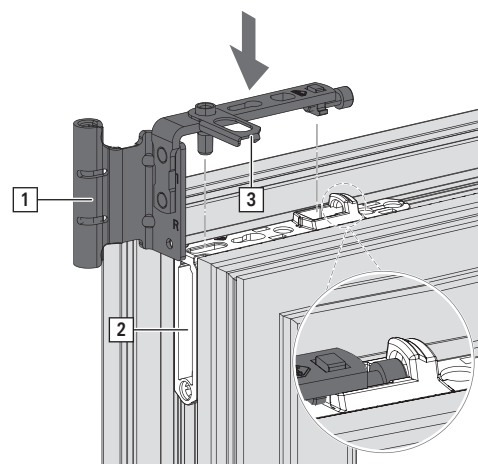
1. Insert the rebate stay guide [1] into the sash groove [2].
Check that it is seated flush.



2. Secure with three screws [3].

Installing the rebate stay arm

1. Place the rebate stay arm [1] on the rebate stay guide [2] from above at a slight angle.
Turn the lever [3] 90°.





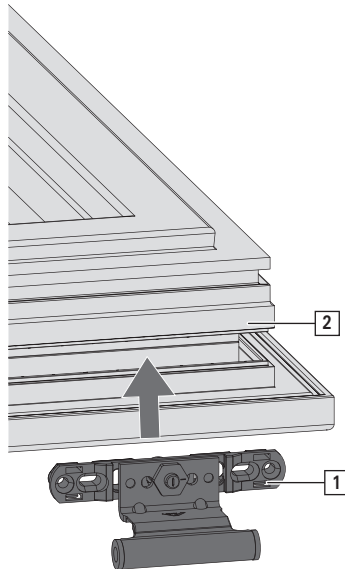
8.7.13 Turn-Only / Tilt-Only rebate hinge



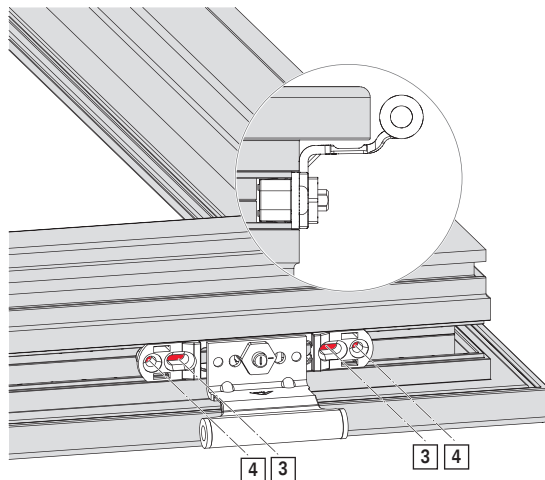
INFO

If two or more Turn-Only / Tilt-Only rebate hinges are used, only one hinge without alignment must ever be used.

1. Insert the Turn-Only / Tilt-Only rebate hinge [1] into the sash groove [2] and put it into position.



2. Secure with two screws [3].



3. If required, align the Turn-Only / Tilt-Only rebate hinge with the stay bearing and secure screws [3 + 4].

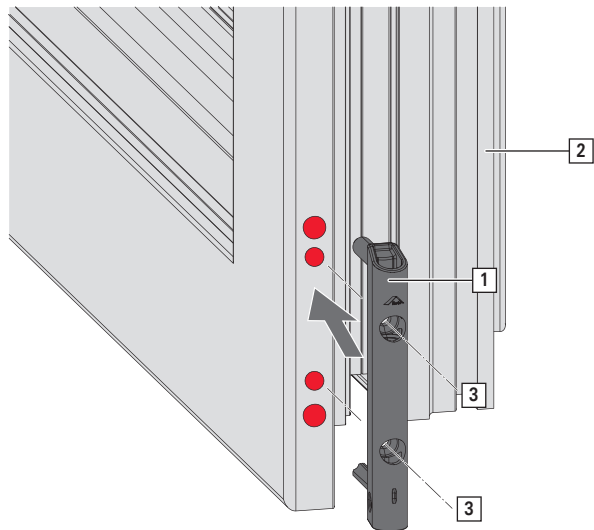


INFO

At least three hinges are required from SRW 1200 mm.

8.7.14 Corner hinge

1. Place the corner hinge [1] on the sash [2].



2. Secure with two screws [3].

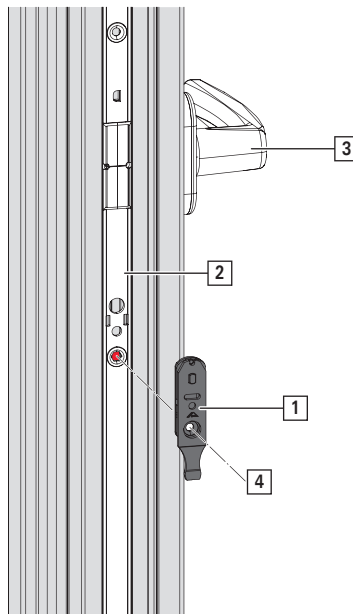
8.7.15 Lifting mishandling device / sash lifter



INFO

The sash lifter is installed in the same way as the lifting mishandling device. The installation of the lifting mishandling device is shown here.

1. Clip the lifting mishandling device [1] into the hole pattern provided in the espagnolette [2].
Position near the handle [3].



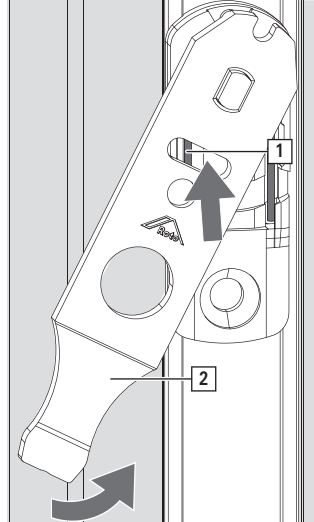
2. Fasten with a screw [4].
3. Activate the lifting mishandling device by pushing the arm in the required direction until the arm cam snaps past the spring. Do not push the arm cam



beyond the housing. The lifting mishandling device's centre fixing is undone.

Restoring the neutral position

1. Use a suitable tool, for example a screwdriver, to push down on the spring [1] beneath the slot.



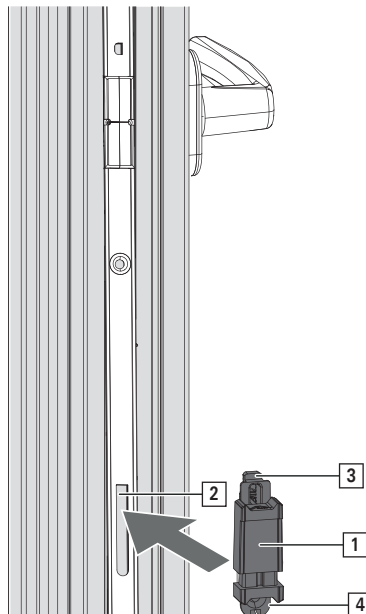
2. Keep the spring held down and turn the arm [2] back to 0°.

The lifting mishandling device returns to the neutral position and can be reactivated.

8.7.16 Bullet catch

1. Insert the bullet-catch sash component [1] into the espagnolette recess [2].

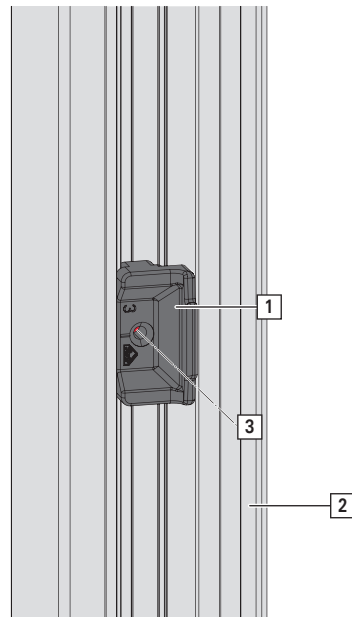
To do so, insert the nose of the bullet catch [3] into the flat side of the espagnolette recess and clip the bullet catch into place.



2. Secure with screw [4].

8.7.17 Concealed centre closer

1. Place the centre closer [1] in the sash groove [2].
For positioning, see → *from page 271*



2. Fasten with a screw [3].

8.8 Frame



INFO

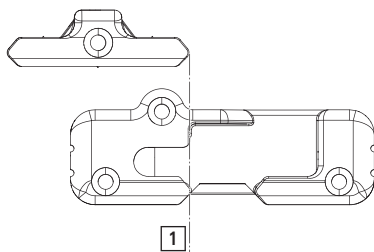
Install the frame components when the frame is horizontal (workshop).

Once the frame is fitted, the reveal may prevent frame components from being installed correctly.

8.8.1 Position of strikers and tilt strikers

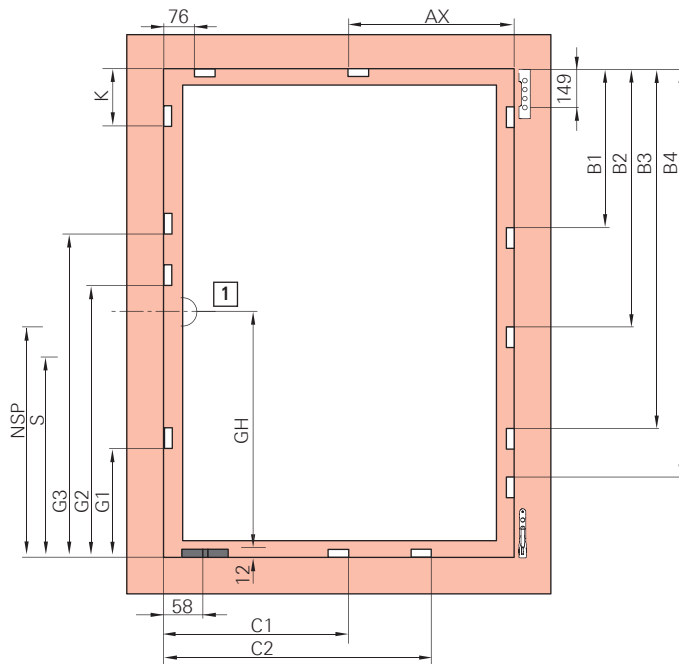
8.8.1.1 Striker positions and tilt strikers

Positioning of the strikers and tilt strikers on the basis of the point of entry [1] of the cams:





8.8.1.2 Tilt&Turn hardware / TiltFirst hardware – basic security



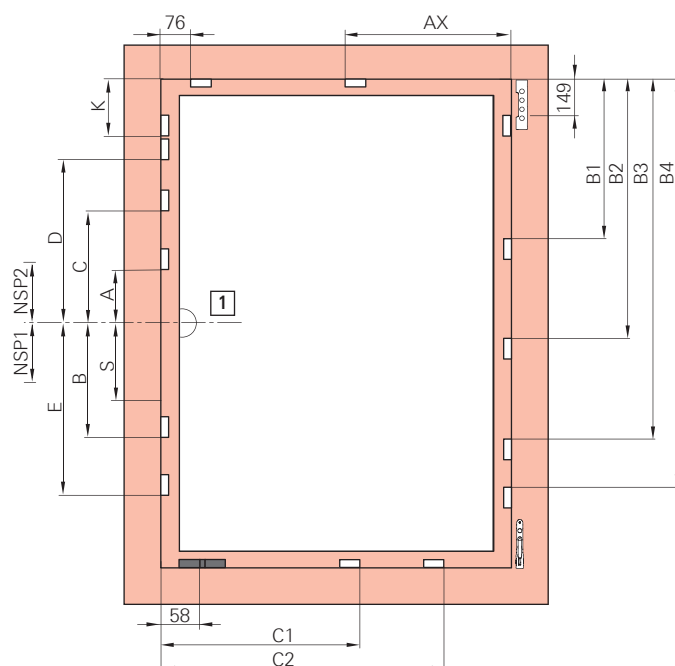
[1] Handle centre

□ Striker e.g. 1000

■ Tilt striker e.g. 1000

T&T espagnolette, VT – fixed handle height

SRH / mm	GH	G1	G2	G3	K	NSP	S
280 – 510	120	–	–	–	–	–	–
511 – 600	170	–	–	–	–	262	–
601 – 800	263	–	–	–	–	350	–
801 – 1000	413	550	–	–	–	288	–
1001 – 1200	513	700	–	–	–	388	–
1201 – 1400	563	700	–	–	–	388	–
1401 – 1600	563	700	1170	–	–	388	–
1601 – 1800	563	700	1370	–	–	388	–
1601 – 1800	1000	700	1370	–	–	1121	807
1801 – 2000	1000	700	1370	–	–	1121	807
2001 – 2600	1000	700	1370	1770	–	1121	807
2601 – 2800	1000	700	1370	1770	458	1121	807



[1] Handle centre

□ Striker e.g. 

■ Tilt striker e.g. 

T&T espagnolette – centred / variable handle height

SRH / mm	A	B	C	D	E	K	NSP 1	NSP 2	S
310 – 620	–	–	–	–	–	–	–	–	–
621 – 800	125	–	–	–	–	–	137	–	–
801 – 1200	125	–	–	–	–	–	137	–	–
1201 – 1600	125	340	–	–	–	–	137	–	–
1601 – 2000	–	312	358	–	–	–	–	109	395
2001 – 2600	–	312	358	758	740	–	–	109	395
2601 – 2800	–	312	358	758	740	458	–	109	395

Stay guide

SRW / mm	AX	Size
801 – 1000	600	500 / 890
1001 – 1200	750	500 / 1090
1201 – 1600	750	500 / 1290

Centre lock, vertical

SRH / mm	B1	B2	B3	B4	Centre lock
801 – 1200	550	–	–	–	CL 400 E
1201 – 1400	746	–	–	–	CL 600 E
1401 – 1800	746	1150	–	–	CL 600 E KU + CL 400 E
1801 – 2000	746	1346	–	–	CL 600 E KU + CL 600 E
2001 – 2400	746	1346	1750	–	2x CL 600 E KU + CL 400 E
2401 – 2600	746	1346	1946	–	2x CL 600 E KU + CL 600 E
2601 – 2800	746	1346	1946	2350	3x CL 600 E KU + CL 400 E

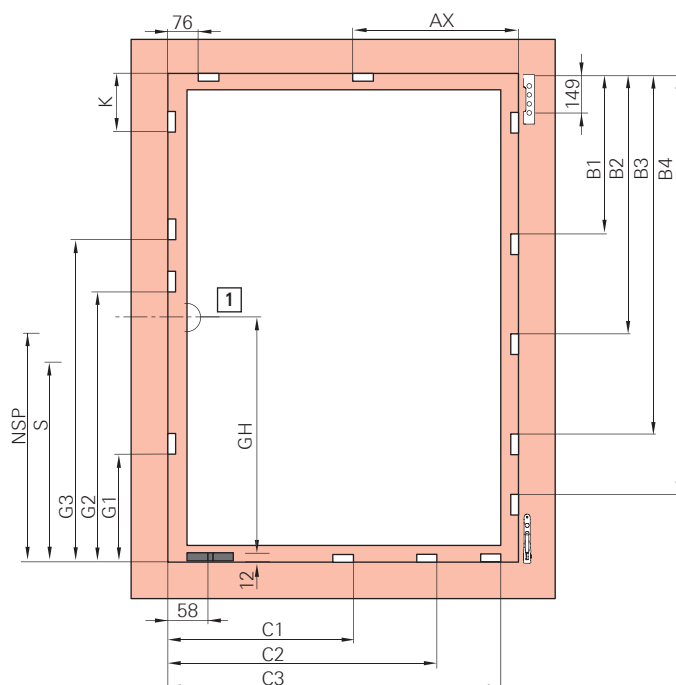
Centre lock, horizontal

SRW / mm	C1	C2	Centre lock
801 – 1200	462	–	CL 400 E
1201 – 1400	658	–	CL 600 E



SRW / mm	C1	C2	Centre lock
1401 – 1600	658	1062	CL 600 E KU + CL 400 E

8.8.1.3 Tilt&Turn hardware – RC 1 N



[1] Handle centre

□ Striker e.g. 

■ Tilt striker e.g. 

T&T espagnolette, VT – fixed handle height

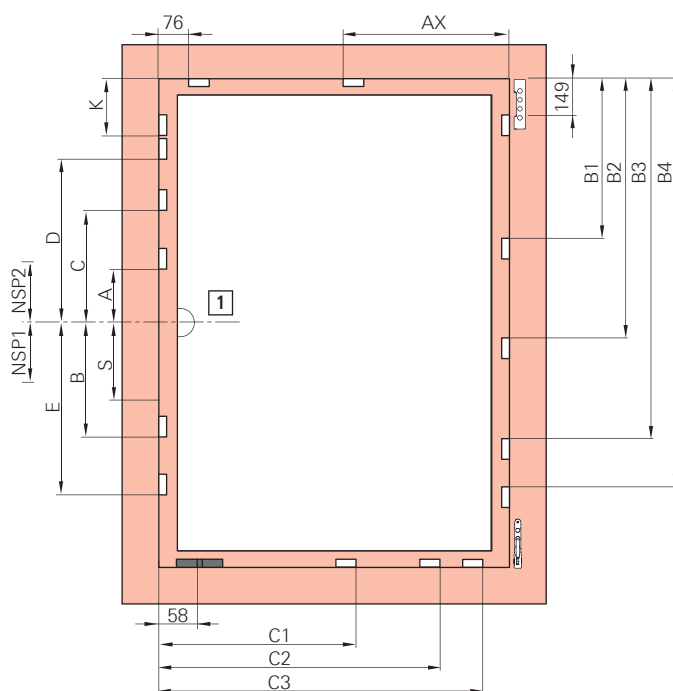
SRH [mm]	GH	G1	G2	G3	K	NSP	S
280 – 510	120	–	–	–	–	–	–
511 – 600	170	–	–	–	–	262	–
601 – 800	263	–	–	–	–	350	–
801 – 1000	413	550	–	–	–	288	–
1001 – 1200	513	700	–	–	–	388	–
1201 – 1400	563	700	–	–	–	388	–
1401 – 1600	563	700	1170	–	–	388	–
1601 – 1800	563	700	1370	–	–	388	807
1601 – 1800	1000	700	1370	–	–	1121	807
1801 – 2000	1000	700	1370	–	–	1121	807
2001 – 2200	1000	700	1370	1770	–	1121	807
2201 – 2400	1000	700	1370	1770	–	1121	807
2401 – 2600	1000	700	1370	1770	258	1121	807

Installation

Frame

Position of strikers and tilt strikers

SRH [mm]	GH	G1	G2	G3	K	NSP	S
2601 – 2800	1000	700	1370	1770	458	1121	807



[1] Handle centre

□ Striker e.g. 

■ Tilt striker e.g. 

T&T espagnolette – centred / variable handle height

SRH [mm]	A	B	C	D	E	K	NSP 1	NSP 2	S
310 – 620	–	–	–	–	–	–	–	–	–
621 – 800	125	–	–	–	–	–	137	–	–
801 – 1200	125	–	–	–	–	–	137	–	–
1201 – 1600	125	340	–	–	–	–	137	–	–
1601 – 2000	–	312	358	–	–	–	–	109	395
2001 – 2400	–	312	358	758	740	–	–	109	395
2401 – 2600	–	312	358	758	740	258	–	109	395
2601 – 2800	–	312	358	758	740	458	–	109	395

Stay guide

SRW [mm]	AX	Size
800 – 1000	600	500 / 890
1001 – 1200	750	500 / 1090
1201 – 1600	750	500 / 1290

Centre lock, vertical

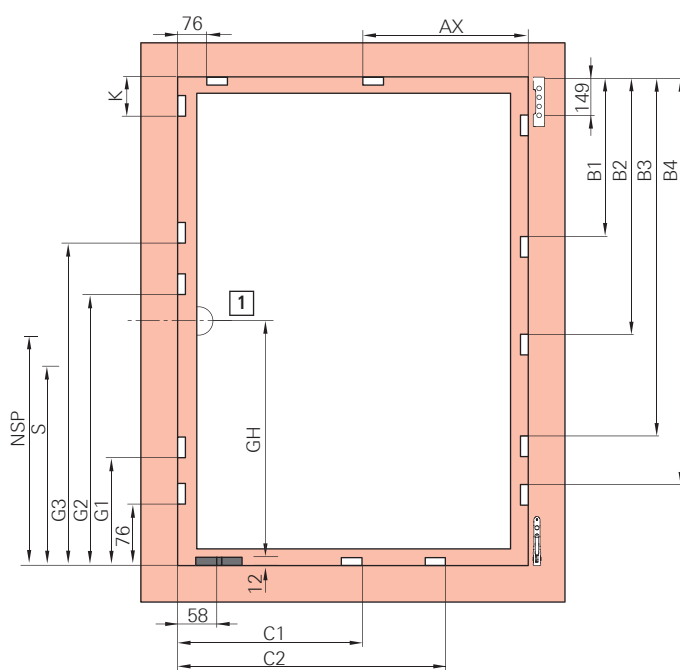
SRH [mm]	B1	B2	B3	B4	Centre lock
801 – 1200	550	–	–	–	CL 400 E
1201 – 1400	746	–	–	–	CL 600 E
1401 – 1800	746	1150	–	–	CL 600 E KU + CL 400 E
1801 – 2000	746	1346	–	–	CL 600 E KU + CL 600 E
2001 – 2400	746	1346	1750	–	2x CL 600 E KU + CL 400 E
2401 – 2600	746	1346	1946	–	2x CL 600 E KU + CL 600 E
2601 – 2800	746	1346	1946	2350	3x CL 600 E KU + CL 400 E



Centre lock, horizontal

SRW [mm]	C1	C2	C3	Centre lock
320 – 520	258	–	–	CL 200 P
521 – 730	462	–	–	CL 400 P
731 – 930	658	–	–	CL 600 P
931 – 1130	658	858	–	CL 600 E KU + CL 200 P
1131 – 1330	658	1062	–	CL 600 E KU + CL 400 P
1331 – 1530	658	1258	–	CL 600 E KU + CL 600 P
1531 – 1600	658	1258	1458	2x CL 600 E KU + CL 200 P

8.8.1.4 Tilt&Turn hardware – RC 2 / RC 2 N



[1] Handle centre

□ Striker e.g.

■ Tilt striker e.g.

T&T espagnolette, VT – fixed handle height

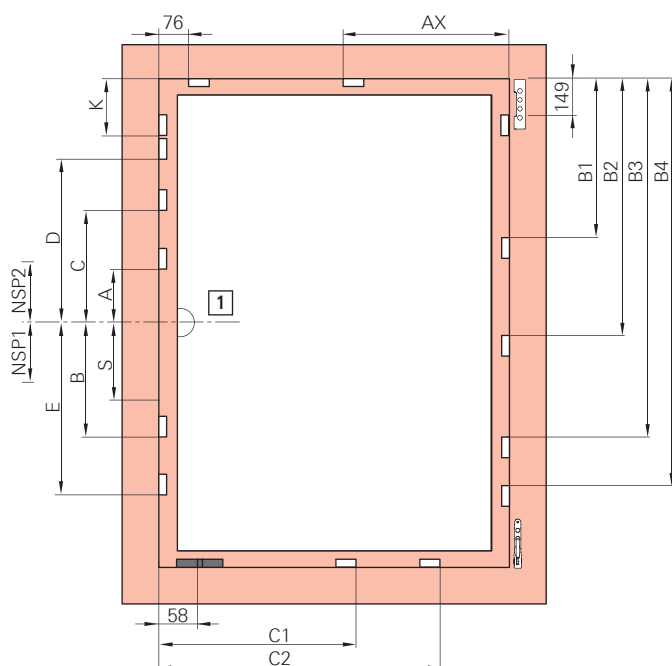
SRH [mm]	GH	G1	G2	G3	K	NSP	S
601 – 800	263	–	–	–	–	350	–
801 – 1000	413	550	–	–	–	288	–
1001 – 1200	513	700	–	–	–	388	–
1201 – 1400	563	700	–	–	–	388	–
1401 – 1600	563	700	1170	–	–	388	–
1601 – 1800	563	700	1370	–	–	388	807
1601 – 1800	1000	700	1370	–	–	1121	807
1801 – 2000	1000	700	1370	–	–	1121	807
2001 – 2200	1000	700	1370	1770	–	1121	807
2201 – 2400	1000	700	1370	1770	–	1121	807
2401 – 2600	1000	700	1370	1770	258	1121	807

Installation

Frame

Position of strikers and tilt strikers

SRH [mm]	GH	G1	G2	G3	K	NSP	S
2601 – 2800	1000	700	1370	1770	458	1121	807



[1] Handle centre

□ Striker e.g.

■ Tilt striker e.g.

T&T espagnolette – centred / variable handle height

SRH [mm]	A	B	C	D	E	K	NSP 1	NSP 2	S
490 – 620	–	–	–	–	–	–	–	–	–
621 – 800	125	–	–	–	–	–	137	–	–
801 – 1200	125	–	–	–	–	–	137	–	–
1201 – 1600	125	340	–	–	–	–	137	–	–
1601 – 2000	–	312	358	–	–	–	–	109	395
2001 – 2400	–	312	358	758	740	–	–	109	395
2401 – 2600	–	312	358	758	740	258	–	109	395
2601 – 2800	–	312	358	758	740	458	–	109	395

Stay guide

SRW [mm]	AX	Size
801 – 1000	600	500 / 890
1001 – 1200	600	500 / 1090
1201 – 1400	600	500 / 1290

Centre lock, vertical

SRH [mm]	B1	B2	B3	B4	Centre lock
490 – 700	346	–	–	–	CL 200 V
701 – 900	550	–	–	–	CL 400 V
901 – 1100	746	–	–	–	CL 600 V
1101 – 1300	746	946	–	–	CL 600 V KU + CL 200 V
1301 – 1500	746	1150	–	–	CL 600 V KU + CL 400 V
1501 – 1700	746	1346	–	–	CL 600 V KU + CL 600 V
1701 – 1900	746	1346	1546	–	2x CL 600 V KU + CL 200 V
1901 – 2100	746	1346	1750	–	2x CL 600 V KU + CL 400 V
2101 – 2300	746	1346	1946	–	2x CL 600 V KU + CL 600 V

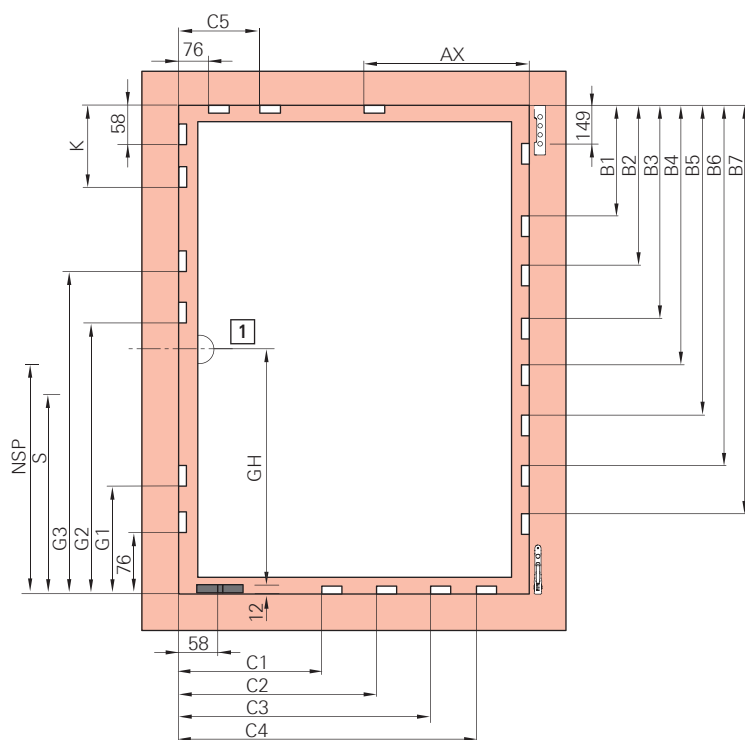


SRH [mm]	B1	B2	B3	B4	Centre lock
2301 – 2500	746	1346	1946	2146	3x CL 600 V KU + CL 200 V
2501 – 2700	746	1346	1946	2350	3x CL 600 V KU + CL 400 V
2701 – 2800	746	1346	1946	2546	3x CL 600 V KU + CL 600 V

Centre lock, horizontal

SRW [mm]	C1	C2	Centre lock
320 – 600	258	–	CL 200 V
601 – 800	462	–	CL 400 V
801 – 1000	658	–	CL 600 V
1001 – 1200	658	858	CL 600 V KU + CL 200 V
1201 – 1400	658	1062	CL 600 V KU + CL 400 V

8.8.1.5 Tilt&Turn hardware – RC 3



[1] Handle centre

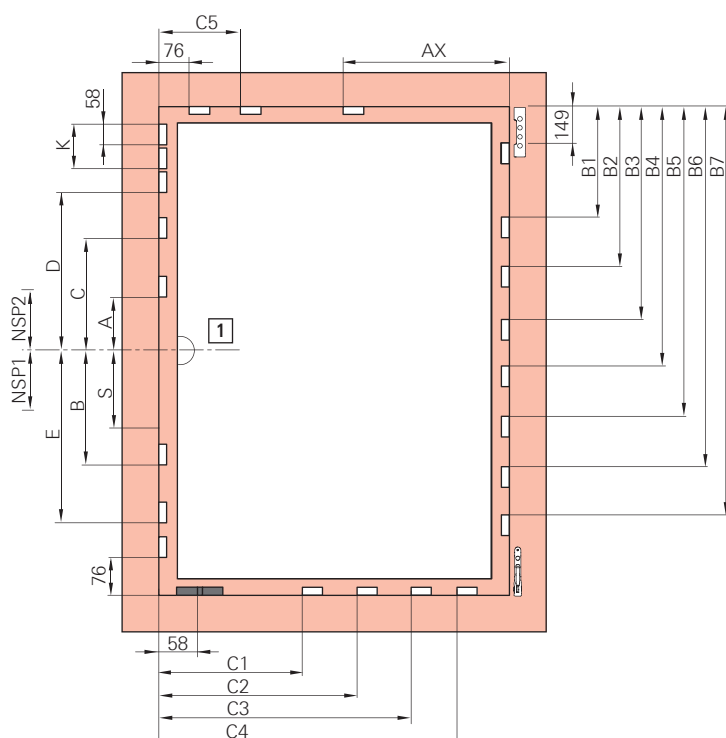
□ Striker e.g.

■ Tilt striker e.g.

T&T espagnolette, VT – fixed handle height

SRH [mm]	GH	G1	G2	G3	K	NSP	S
600 – 800	263	–	–	–	–	350	–
801 – 1000	413	550	–	–	–	288	–
1001 – 1200	513	700	–	–	–	388	–
1201 – 1400	563	700	–	–	–	388	–
1401 – 1600	563	700	1170	–	–	388	–
1601 – 1800	563	700	1370	–	–	388	807
1601 – 1800	1000	700	1370	–	–	1121	807
1801 – 2000	1000	700	1370	–	–	1121	807
2001 – 2200	1000	700	1370	1770	–	1121	807
2201 – 2400	1000	700	1370	1770	–	1121	807
2401 – 2600	1000	700	1370	1770	258	1121	807

SRH [mm]	GH	G1	G2	G3	K	NSP	S
2601 – 2800	1000	700	1370	1770	458	1121	807



[1] Handle centre

□ Striker e.g.

■ Tilt striker e.g.

T&T espagnolette – centred / variable handle height

SRH [mm]	A	B	C	D	E	K	NSP 1	NSP 2	S
490 – 620	–	–	–	–	–	–	–	–	–
621 – 800	125	–	–	–	–	–	137	–	–
801 – 1200	125	–	–	–	–	–	137	–	–
1201 – 1600	125	340	–	–	–	–	137	–	–
1601 – 2000	–	312	358	–	–	–	–	109	395
2001 – 2400	–	312	358	758	740	–	–	109	395
2401 – 2600	–	312	358	758	740	258	–	109	395
2601 – 2800	–	312	358	758	740	458	–	109	395

Stay guide

SRW [mm]	AX	Size
801 – 1000	444	350 / 890
1001 – 1200	444	350 / 890
1201 – 1400	444	350 / 890

Centre lock, vertical

SRH [mm]	B1	B2	B3	B4	B5	B6	B7	Centre lock
490 – 600	346	–	–	–	–	–	–	CL 200 KU
601 – 800	346	546	–	–	–	–	–	2x CL 200 KU
801 – 1000	346	546	746	–	–	–	–	3x CL 200 KU
1001 – 1200	346	746	946	–	–	–	–	CL 200 V KU + CL 400 V KU + CL 200 V KU
1201 – 1400	346	746	946	1146	–	–	–	CL 200 V KU + CL 400 V KU + 2x CL 200 V KU
1401 – 1600	346	746	1146	1346	–	–	–	CL 200 V KU + 2x CL 400 V KU + CL 200 V KU



SRH [mm]	B1	B2	B3	B4	B5	B6	B7	Centre lock
1601 – 1800	346	746	1146	1346	1546	–	–	CL 200 V KU + 2x CL 400 V KU + 2x CL 200 V KU
1801 – 2000	346	746	1146	1546	1746	–	–	CL 200 V KU + 3x CL 400 V KU + CL 200 V KU
2001 – 2200	346	746	1146	1546	1746	1946	–	CL 200 V KU + 3x CL 400 V KU + 2x CL 200 V KU
2201 – 2400	346	746	1146	1546	1946	2146	–	CL 200 V KU + 4x CL 400 V KU + CL 200 V KU
2401 – 2600	346	746	1146	1546	1946	2146	2346	CL 200 V KU + 4x CL 400 V KU + 2x CL 200 V KU
2601 – 2800	346	746	1146	1546	1946	2346	2546	CL 200 V KU + 5x CL 400 V KU + CL 200 V KU

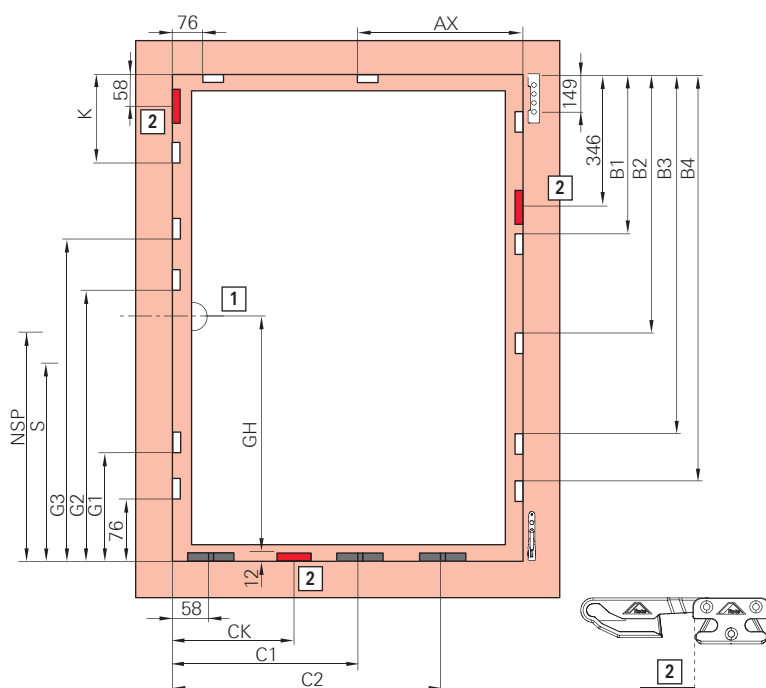
Centre lock, top horizontal

SRW [mm]	C5	Centre lock
1001 – 1200	276	CL 200 KU
1201 – 1400	476	Additional stay arm + CL 200 V KU

Centre lock, bottom horizontal

SRW [mm]	C1	C2	C3	C4	Centre lock
490 – 600	258	–	–	–	CL 200 KU
601 – 800	258	458	–	–	2x CL 200 KU
801 – 1000	258	458	658	–	3x CL 200 KU
1001 – 1200	258	658	858	–	CL 200 V KU + CL 400 V KU + CL 200 V KU
1201 – 1400	258	658	858	1058	CL 200 V KU + CL 400 V KU + 2x CL 200 V KU

8.8.1.6 Tilt&Turn hardware – TiltSafe RC 2 / RC 2 N



[1] Handle centre

[2] Striker point of entry

□ Striker e.g.

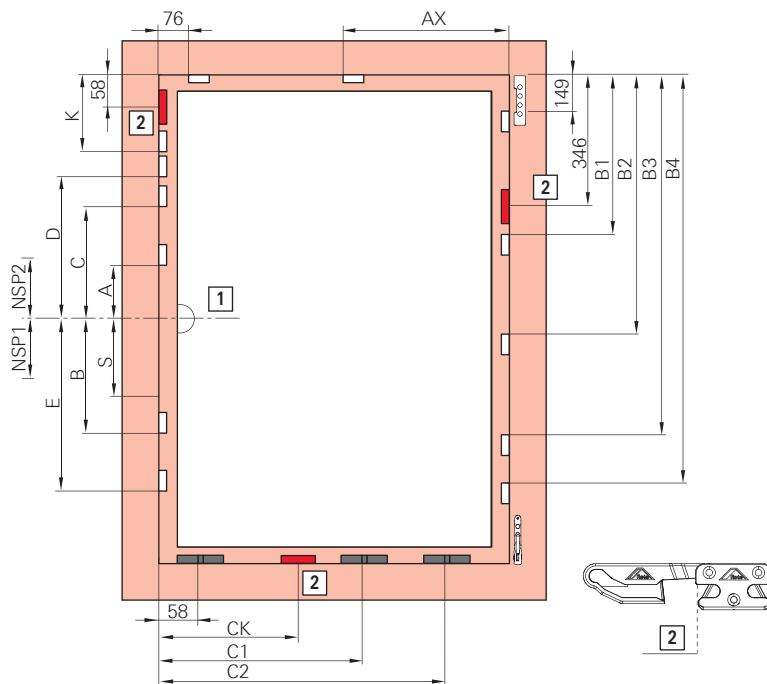
■ Tilt striker e.g.

■ Security striker for tilt ventilation

T&T espagnolette, VT – fixed handle height

SRH [mm]	GH	G1	G2	G3	K	NSP	S
601 – 800	263	–	–	–	–	350	–
801 – 1000	413	550	–	–	–	288	–
1001 – 1200	513	700	–	–	–	388	–

SRH [mm]	GH	G1	G2	G3	K	NSP	S
1201 – 1400	563	700	–	–	–	388	–
1401 – 1600	563	700	1170	–	–	388	–
1601 – 1800	563	700	1370	–	–	388	–
1601 – 1800	1000	700	1370	–	–	1121	807
1801 – 2000	1000	700	1370	–	–	1121	807
2001 – 2200	1000	700	1370	1770	–	1121	807
2201 – 2400	1000	700	1370	1770	–	1121	807
2401 – 2600	1000	700	1370	1770	258	1121	807
2601 – 2800	1000	700	1370	1770	458	1121	807



[1] Handle centre

[2] Striker point of entry

□ Striker e.g.

■ Tilt striker e.g.

■ Security striker for tilt ventilation

T&T espagnolette – centred / variable handle height

SRH [mm]	A	B	C	D	E	K	NSP 1	NSP 2	S
490 – 620	–	–	–	–	–	–	–	–	–
621 – 800	125	–	–	–	–	–	137	–	–
801 – 1200	125	–	–	–	–	–	137	–	–
1201 – 1600	125	340	–	–	–	–	137	–	–
1601 – 2000	–	312	358	–	–	–	–	109	395
2001 – 2400	–	312	358	758	740	–	–	109	395
2401 – 2600	–	312	358	758	740	258	–	109	395
2601 – 2800	–	312	358	758	740	458	–	109	395

Stay guide

SRW [mm]	AX	Size
801 – 1000	600	500 / 890
1001 – 1200	600	500 / 1090
1201 – 1400	600	500 / 1290



Centre lock, vertical

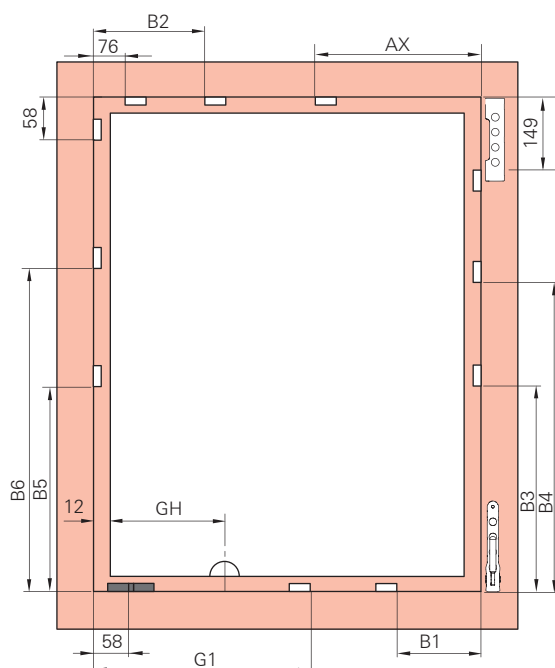
SRH [mm]	B1	B2	B3	B4	Centre lock
490 – 700	–	–	–	–	CL 200 KU
701 – 900	546	–	–	–	CL 200 V KU + CL 200 V
901 – 1100	750	–	–	–	CL 200 V KU + CL 400 V
1101 – 1300	946	–	–	–	CL 200 V KU + CL 600 V
1301 – 1500	946	1146	–	–	CL 200 V KU + CL 600 V KU+ CL 200 V
1501 – 1700	946	1350	–	–	CL 200 V KU + CL 600 V KU+ CL 400 V
1701 – 1900	946	1546	–	–	CL 200 V KU + CL 600 V KU+ CL 600 V
1901 – 2100	946	1546	1746	–	CL 200 V KU + 2x CL 600 V KU+ CL 200 V
2101 – 2300	946	1546	1950	–	CL 200 V KU + 2x CL 600 V KU+ CL 400 V
2301 – 2500	946	1546	2146	–	CL 200 V KU + 2x CL 600 V KU+ CL 600 V
2501 – 2700	946	1546	2146	2346	CL 200 V KU + 3x CL 600 V KU + CL 200 V
2701 – 2800	946	1546	2146	2550	CL 200 V KU + 3x CL 600 V KU + CL 400 V

Centre lock, horizontal

SRW [mm]	CK	C1	C2	Centre lock
410 – 600	258	–	–	CL 200 KU
601 – 800	258	458	–	CL 200 V KU + CL 200 V
801 – 1000	658	258	–	CL 200 V KU + CL 400 V KU
1001 – 1200	658	258	858	CL 200 V KU + CL 400 V KU + CL 200 V
1201 – 1400	658	258	1058	CL 200 V KU + 2x CL 400 V KU

8.8.1.7 Comfort Tilt&Turn hardware – basic security

with corner drive, standard



□ Striker e.g.

■ Tilt striker e.g.

Comfort T&T espagnolette

SRW [mm]	GH	G1
520 – 700	220	–
701 – 900	220	452
901 – 1100	220	452
1101 – 1300	220	452

SRW [mm]	GH	G1
1301 – 1400	220	452

Comfort scissor stay

SRW [mm]	AX
801 – 1000	600
1001 – 1200	600
1201 – 1400	600

Centre lock, bottom horizontal

SRH [mm]	B1	Centre lock
1101 – 1300	276	CL 400 E KU
1301 – 1400	476	CL 400 E KU + CL 200 KU

Centre lock, top horizontal

SRH [mm]	B2	Centre lock
1201 – 1400	276	CL 400 E KU

Centre lock, vertical, hinge side

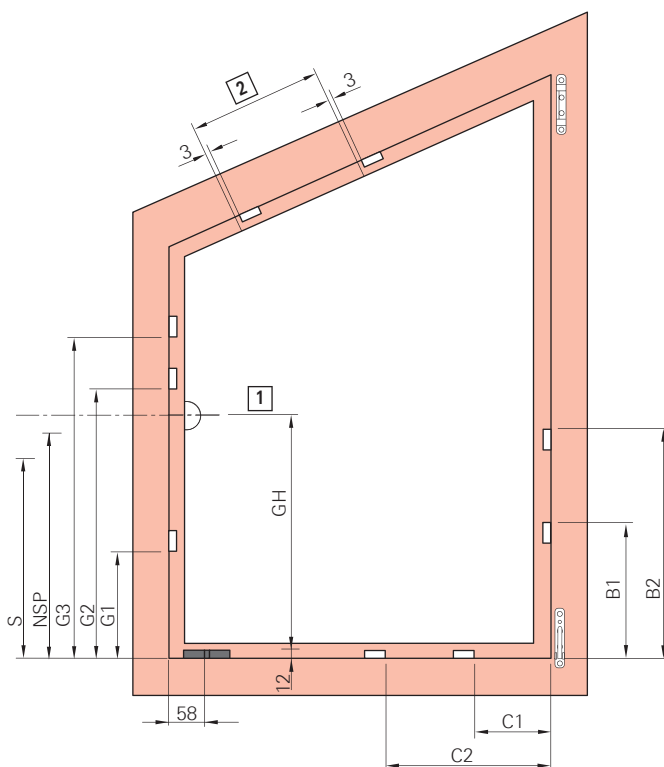
SRH [mm]	B3	B4
871 – 1070	532	–
1071 – 1270	682	–
1271 – 1470	682	–
1471 – 1600	682	1152

Centre lock, vertical

SRH [mm]	B5	B6
801 – 1000	550	–
1001 – 1200	700	–
1201 – 1400	700	–
1401 – 1600	700	1170



8.8.1.8 Pitched window – basic security



[1] Handle centre

[2] Mark the striker's point of entry

□ Striker e.g.

■ Tilt striker e.g.

T&T espagnolette, VT – fixed handle height

SRH / mm	GH	G1	G2	G3	NSP	S
370 – 510	120	–	–	–	–	–
511 – 600	170	–	–	–	262	–
601 – 800	263	–	–	–	350	–
801 – 1000	413	–	–	–	288	–
1001 – 1200	513	700	–	–	388	–
1201 – 1400	563	700	–	–	388	–
1401 – 1600	563	700	1170	–	388	–
1601 – 1800	563	700	1370	–	388	807
1801 – 1800	1000	700	1370	–	1121	807
1801 – 2000	1000	700	1370	–	1121	807
2001 – 2200	1000	700	1370	1770	1121	807
2201 – 2400	1000	700	1370	1770	1121	807

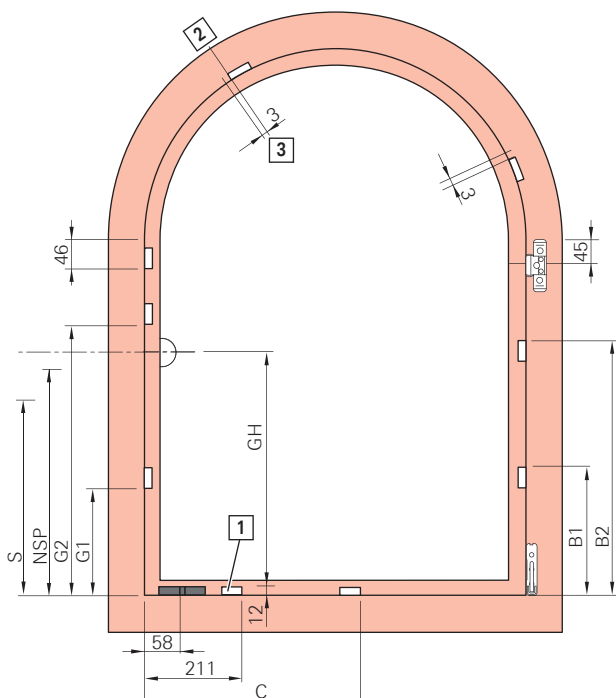
Centre lock, vertical

SRH / mm	B1	B2	B3	Centre lock
801 – 1200	462	–	–	CL 400 E
1201 – 1400	658	–	–	CL 600 E
1401 – 1800	658	1062	–	CL 600 E KU + CL 400 E
1801 – 2000	658	1258	–	CL 600 E KU + CL 600 E
2001 – 2400	658	1258	1662	2x CL 600 E KU + CL 400 E

Centre lock, horizontal

SRW / mm	C1	C2	Centre lock
340 – 530	–	–	CL 420
531 – 730	298	–	CL 620 E
731 – 930	498	–	CL 820 E
931 – 1130	698	–	CL 1020 E
1131 – 1300	298	898	CL 1220 2xE

8.8.1.9 Tilt&Turn hardware for arched windows – basic security



[1] Arched rebate run-up block

[2] Mark the striker's point of entry

[3] Radius of min. 300 mm when an arched CL is installed

□ Striker e.g. 

■ Tilt striker e.g. 

T&T espagnolette, VT – fixed handle height

SRH / mm	GH	G1	G2	NSP	S
500 – 600	170	–	–	262	–
601 – 800	263	383	–	350	–
801 – 1000	413	550	–	288	–
1001 – 1200	513	700	–	388	–
1201 – 1400	563	700	–	388	–
1401 – 1600	563	700	1170	388	–
1601 – 1800	563	700	1370	388	–
1601 – 1800	1000	700	1370	1121	807
1801 – 2000	1000	700	1370	1121	807

Centre lock, vertical

SRH / mm	B1	B2
500 – 700	–	–
701 – 900	280	–
901 – 1100	480	–

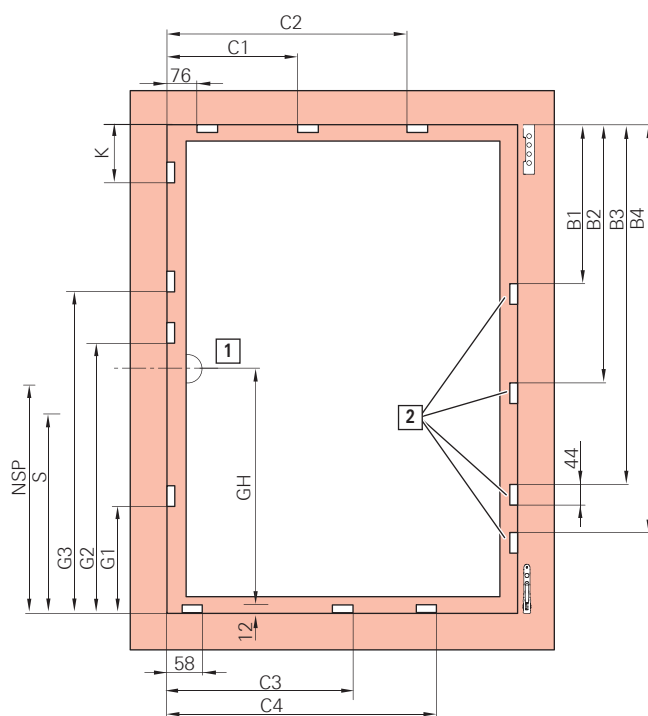


SRH / mm	B1	B2
1101 – 1300	680	–
1301 – 1500	280	880
1501 – 1700	680	1080
1701 – 1900	680	1280

Centre lock, horizontal

SRW / mm	C
400 – 500	–
501 – 700	–
701 – 900	350
901 – 1100	480
1101 – 1300	680

8.8.1.10 Turn-Only hardware – basic security



[1] Handle centre

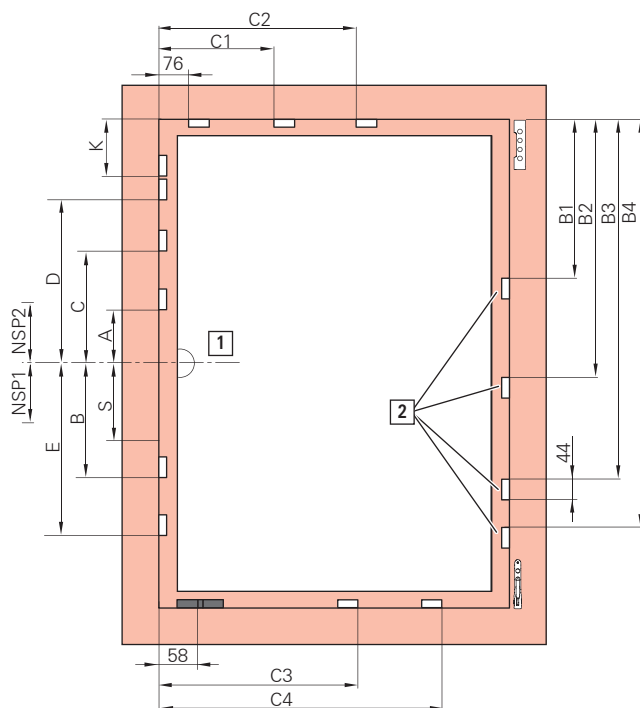
[2] Concealed centre closers

□ Striker e.g.

T&T espagnolette, VT – fixed handle height

SRH / mm	GH	G1	G2	G3	K	NSP	S
280 – 510	120	–	–	–	–	–	–
511 – 600	170	–	–	–	–	262	–
601 – 800	263	–	–	–	–	350	–
801 – 1000	413	550	–	–	–	288	–
1001 – 1200	513	700	–	–	–	388	–
1201 – 1400	563	700	–	–	–	388	–
1401 – 1600	563	700	1170	–	–	388	–
1601 – 1800	563	700	1370	–	–	388	–
1601 – 1800	1000	700	1370	–	–	1121	807
1801 – 2000	1000	700	1370	–	–	1121	807
2001 – 2600	1000	700	1370	1770	–	1121	807

SRH / mm	GH	G1	G2	G3	K	NSP	S
2601 – 2800	1000	700	1370	1770	458	1121	807



[1] Handle centre

[2] Concealed centre closers

□ Striker e.g. 

T&T espagnolette – centred / variable handle height

SRH / mm	A	B	C	D	E	K	NSP 1	NSP 2	S
310 – 620	–	–	–	–	–	–	–	–	–
621 – 800	125	–	–	–	–	–	137	–	–
801 – 1200	125	–	–	–	–	–	137	–	–
1201 – 1600	125	340	–	–	–	–	137	–	–
1601 – 2000	–	312	358	–	–	–	–	109	395
2001 – 2600	–	312	358	758	740	–	–	109	395
2601 – 2800	–	312	358	758	740	458	–	109	395

Concealed vertical centre closer

SRH / mm	B1	B2	B3	B4
801 – 1200	550	–	–	–
1201 – 1400	746	–	–	–
1401 – 1800	746	1150	–	–
1801 – 2000	746	1346	–	–
2001 – 2400	746	1346	1750	–
2401 – 2600	746	1346	1946	–
2601 – 2800	746	1346	1946	2350

Centre lock, horizontal

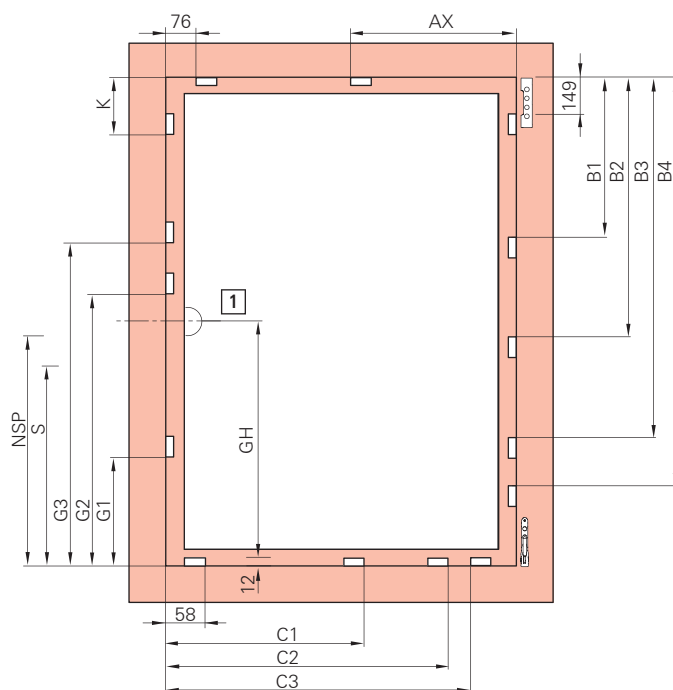
SRW / mm	C1	C2	Top
801 – 1200	480	–	CL 400 E
1201 – 1400	676	–	CL 600 E
1401 – 1600	676	1080	CL 600 E KU + CL 400 E



Centre lock, horizontal

SRW / mm	C3	C4	Bottom
801 – 1200	462	–	CL 400 E
1201 – 1400	658	–	CL 600 E
1401 – 1600	658	1062	CL 600 E KU + CL 400 E

8.8.1.11 Turn-Only hardware – RC 1 N



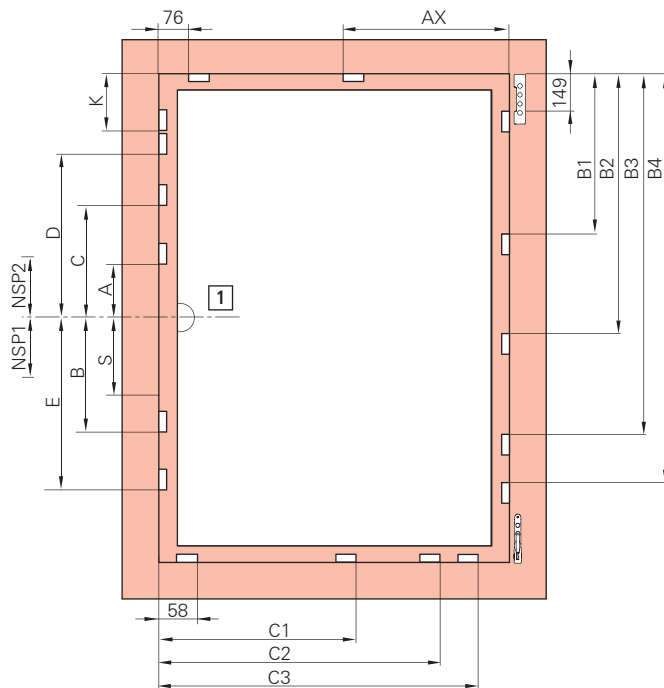
[1] Handle centre

□ Striker e.g.

T&T espagnolette, VT – fixed handle height

SRH [mm]	GH	G1	G2	G3	K	NSP	S
280 – 510	120	–	–	–	–	–	–
511 – 600	170	–	–	–	–	262	–
601 – 800	263	–	–	–	–	350	–
801 – 1000	413	550	–	–	–	288	–
1001 – 1200	513	700	–	–	–	388	–
1201 – 1400	563	700	–	–	–	388	–
1401 – 1600	563	700	1170	–	–	388	–
1601 – 1800	563	700	1370	–	–	388	–
1601 – 1800	1000	700	1370	–	–	1121	807
1801 – 2000	1000	700	1370	–	–	1121	807
2001 – 2200	1000	700	1370	1770	–	1121	807
2201 – 2400	1000	700	1370	1770	–	1121	807
2401 – 2600	1000	700	1370	1770	258	1121	807

SRH [mm]	GH	G1	G2	G3	K	NSP	S
2601 – 2800	1000	700	1370	1770	458	1121	807



[1] Handle centre

□ Striker e.g. 

T&T espagnolette – centred / variable handle height

SRH [mm]	A	B	C	D	E	K	NSP 1	NSP 2	S
310 – 450	–	–	–	–	–	–	–	–	–
451 – 620	–	–	–	–	–	–	–	–	–
621 – 800	125	–	–	–	–	–	137	–	–
801 – 1200	125	–	–	–	–	–	137	–	–
1201 – 1600	125	340	–	–	–	–	137	–	–
1601 – 2000	–	312	358	–	–	–	–	109	395
2001 – 2400	–	312	358	758	740	–	–	109	395
2401 – 2600	–	312	358	758	740	258	–	109	395
2601 – 2800	–	312	358	758	740	458	–	109	395

Stay guide

SRW [mm]	AX	Size
801 – 1000	600	500 / 890
1001 – 1200	750	500 / 1090
1201 – 1600	750	500 / 1290

Centre lock, vertical

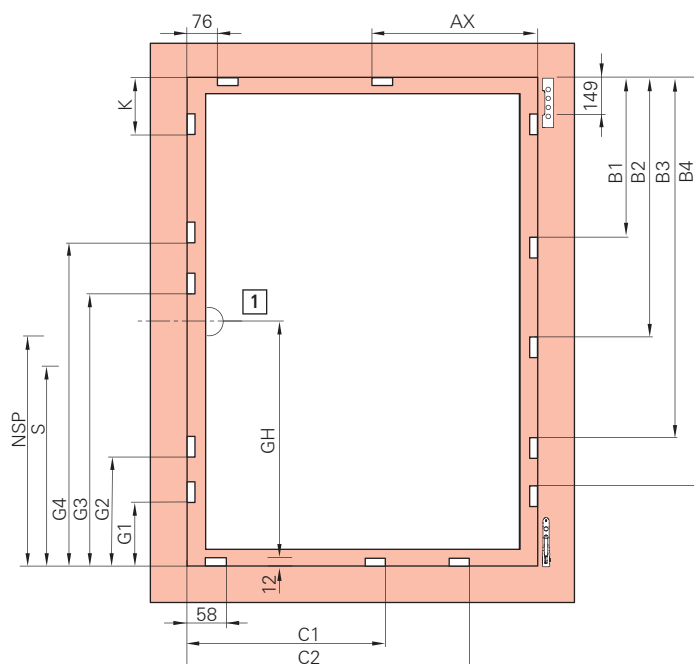
SRH [mm]	B1	B2	B3	B4	Centre lock
801 – 1200	550	–	–	–	CL 400 E
1201 – 1400	746	–	–	–	CL 600 E
1401 – 1800	746	1150	–	–	CL 600 E KU + CL 400 E
1801 – 2000	746	1346	–	–	CL 600 E KU + CL 600 E
2001 – 2400	746	1346	1750	–	2x CL 600 E KU + CL 400 E
2401 – 2600	746	1346	1946	–	2x CL 600 E KU + CL 600 E
2601 – 2800	746	1346	1946	2350	3x CL 600 E KU + CL 400 E



Centre lock, horizontal

SRW [mm]	C1	C2	C3	Centre lock
320 – 520	258	–	–	CL 200 P
521 – 730	462	–	–	CL 400 P
731 – 930	658	–	–	CL 600 P
931 – 1130	658	858	–	CL 600 E KU + CL 200 P
1131 – 1330	658	1062	–	CL 600 E KU + CL 400 P
1331 – 1530	658	1258	–	CL 600 E KU + CL 600 P
1531 – 1600	658	1258	1458	2x CL 600 E KU + CL 200 P

8.8.1.12 Turn-Only hardware – RC 2 N / RC 2



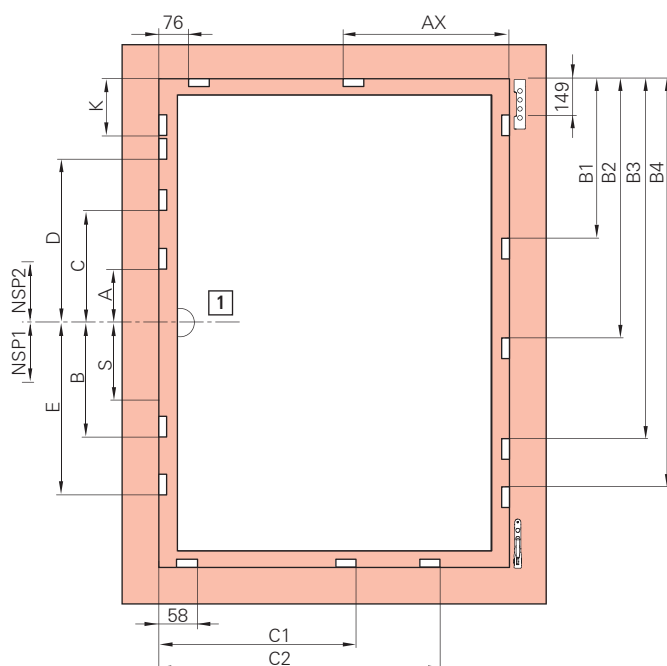
[1] Handle centre

□ Striker e.g.

T&T espagnolette, VT – fixed handle height

SRH [mm]	GH	G1	G2	G3	K	NSP	S
601 – 800	263	–	–	–	–	350	–
801 – 1000	413	550	–	–	–	288	–
1001 – 1200	513	700	–	–	–	388	–
1201 – 1400	563	700	–	–	–	388	–
1401 – 1600	563	700	1170	–	–	388	–
1601 – 1800	563	700	1370	–	–	388	807
1601 – 1800	1000	700	1370	–	–	1121	807
1801 – 2000	1000	700	1370	–	–	1121	807
2001 – 2200	1000	700	1370	1770	–	1121	807
2201 – 2400	1000	700	1370	1770	–	1121	807
2401 – 2600	1000	700	1370	1770	258	1121	807

SRH [mm]	GH	G1	G2	G3	K	NSP	S
2601 – 2800	1000	700	1370	1770	458	1121	807



[1] Handle centre

□ Striker e.g.

T&T espagnolette – centred / variable handle height

SRH [mm]	A	B	C	D	E	K	NSP 1	NSP 2	S
490 – 620	–	–	–	–	–	–	–	–	–
621 – 800	125	–	–	–	–	–	137	–	–
801 – 1200	125	–	–	–	–	–	137	–	–
1201 – 1600	125	340	–	–	–	–	137	–	–
1601 – 2000	–	312	358	–	–	–	–	109	395
2001 – 2400	–	312	358	758	740	–	–	109	395
2401 – 2600	–	312	358	758	740	258	–	109	395
2601 – 2800	–	312	358	758	740	458	–	109	395

Stay guide

SRW [mm]	AX	Size
801 – 1000	600	500 / 890
1001 – 1200	600	500 / 1090
1201 – 1400	600	500 / 1290

Centre lock, vertical

SRH [mm]	B1	B2	B3	B4	Centre lock
490 – 700	346	–	–	–	CL 200 V
701 – 900	550	–	–	–	CL 400 V
901 – 1100	746	–	–	–	CL 600 V
1101 – 1300	746	946	–	–	CL 600 V KU + CL 200 V
1301 – 1500	746	1150	–	–	CL 600 V KU + CL 400 V
1501 – 1700	746	1346	–	–	CL 600 V KU + CL 600 V
1701 – 1900	746	1346	1546	–	2x CL 600 V KU + CL 200 V
1901 – 2100	746	1346	1750	–	2x CL 600 V KU + CL 400 V
2101 – 2300	746	1346	1946	–	2x CL 600 V KU + CL 600 V
2301 – 2500	746	1346	1946	2146	3x CL 600 V KU + CL 200 V

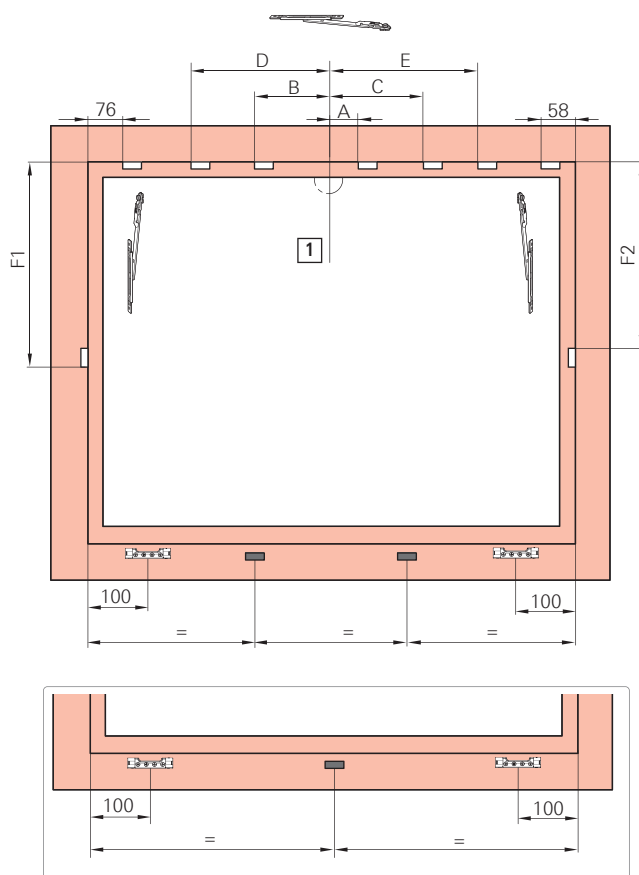


SRH [mm]	B1	B2	B3	B4	Centre lock
2501 – 2700	746	1346	1946	2350	3x CL 600 V KU + CL 400 V
2701 – 2800	746	1346	1946	2546	3x CL 600 V KU + CL 600 V

Centre lock, horizontal

SRW [mm]	C1	C2	Centre lock
320 – 600	258	–	CL 200 V
601 – 800	462	–	CL 400 V
801 – 1000	658	–	CL 600 V
1001 – 1200	658	858	CL 600 V KU + CL 200 V
1201 – 1400	658	1062	CL 600 V KU + CL 400 V

8.8.1.13 Tilt-Only hardware – basic security



[1] Tilt-Only sash with T&T espagnolette, centred / variable handle height with tilt stay

□ Striker e.g. 

● Centre closer

With SRW $\geq$ 1001, place the centre closer in the middle

With SRW $\geq$ 1801, place two centre closers at an equal distance from each other

T&T espagnolette – centred / variable handle height

SRW [mm]	A	B	C	D	E
451 – 620	–	–	–	–	–
621 – 800	125	–	–	–	–
801 – 1200	125	–	–	–	–
1201 – 1600	125	340	–	–	–
1601 – 2000	–	312	358	–	–

SRW [mm]	A	B	C	D	E
2001 – 2400	–	312	358	740	758

Centre lock, vertical

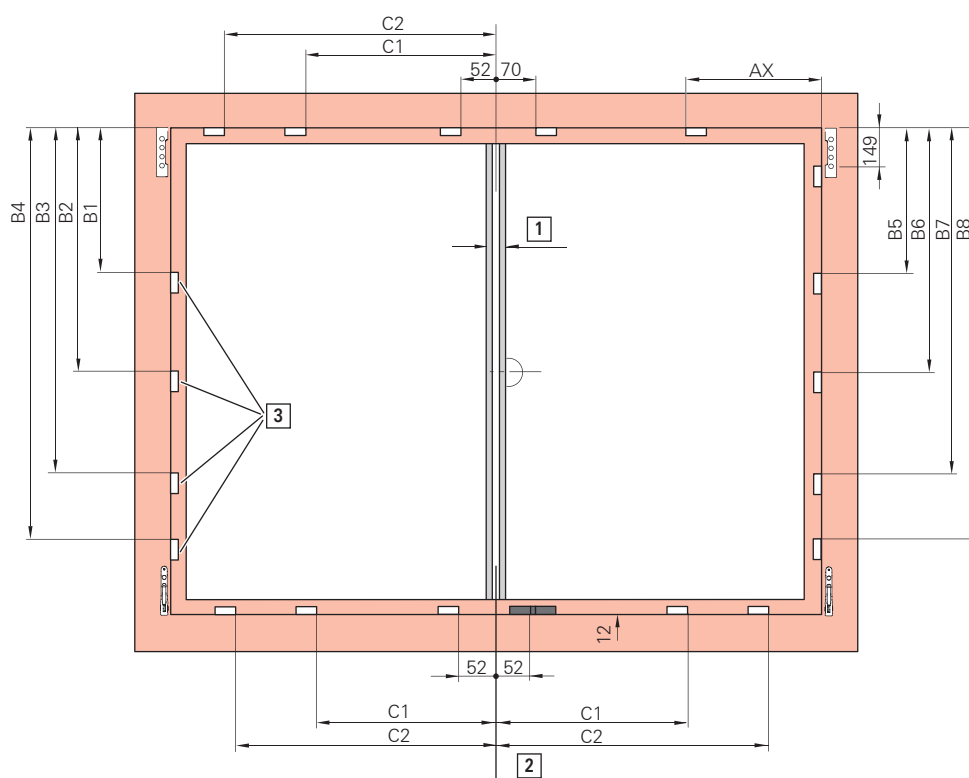
SRH [mm]	F1	F2	Left / right
801 – 1200	462	480	CL 400 E



INFO

Put pressure-proof packers between glass and frame in the area of the centre lock.

8.8.1.14 Floating-mullion hardware, standard – basic security



[1] 12 mm rebate clearance between the sashes

[2] Rebate clearance centre

[3] Concealed centre closers

□ Striker e.g.

■ Tilt striker e.g.

Stay guide

SRW [mm]	AX	Size
801 – 1000	600	500 / 890
1001 – 1200	750	500 / 1090
1201 – 1600	750	500 / 1290

Centre closer, vertical, concealed

SRH [mm]	B1	B2	B3	B4
801 – 1200	550	–	–	–
1201 – 1400	746	–	–	–
1401 – 1800	746	1150	–	–



SRH [mm]	B1	B2	B3	B4
1801 – 2000	746	1346	–	–
2001 – 2400	746	1346	1750	–
2401 – 2600	746	1346	1946	–
2601 – 2800	746	1346	1946	2350

Centre lock, vertical

SRH [mm]	B5	B6	B7	B8	Centre lock
801 – 1200	550	–	–	–	CL 400 E
1201 – 1400	746	–	–	–	CL 600 E
1401 – 1800	746	1150	–	–	CL 600 E KU + CL 400 E
1801 – 2000	746	1346	–	–	CL 600 E KU + CL 600 E
2001 – 2400	746	1346	1750	–	2x CL 600 E KU + CL 400 E
2401 – 2600	746	1346	1946	–	2x CL 600 E KU + CL 600 E
2601 – 2800	746	1346	1946	2350	3x CL 600 E KU + CL 400 E

Centre lock, horizontal

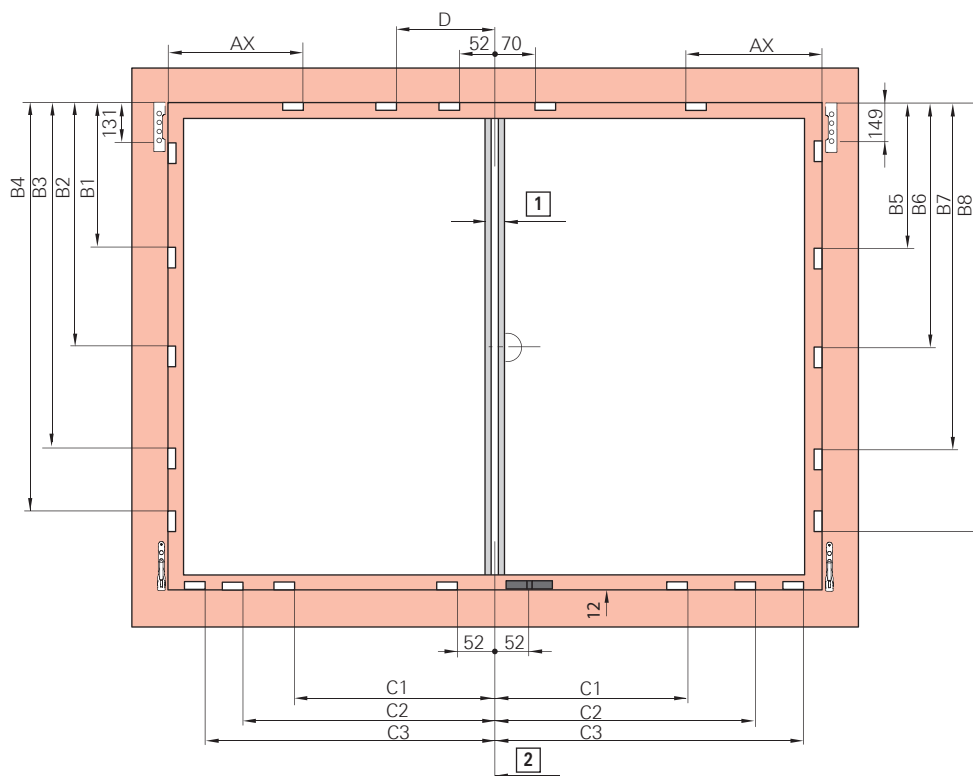
SRW [mm]	C1	C2	Top / bottom
801 – 1200	456	–	CL 400 E
1201 – 1400	652	–	CL 600 E
1401 – 1600	652	1056	CL 600 E KU + CL 400 E



INFO

Mount the second opening sash with the lever-operated espagnolette open.

8.8.1.15 Floating-mullion hardware, standard – RC 1 N



[1] 12 mm rebate clearance between the sashes

[2] Rebate clearance centre

□ Striker e.g. 

■ Tilt striker e.g. 

Stay guide

SRW [mm]	AX	Size
801 – 1000	600	500 / 890
1001 – 1200	750	500 / 1090
1201 – 1600	750	500 / 1290

Turn-Only sash stay guide

SRW [mm]	AX	D	Size	Centre lock
801 – 1000	618	–	500 / 890	–
1001 – 1200	618	–	500 / 890	CL 200 KU
1201 – 1400	618	452	500 / 890	CL 400 E KU
1401 – 1600	618	652	500 / 890	CL 600 E KU

Centre lock, vertical

SRH [mm]	B1	B2	B3	B4	B5	B6	B7	B8	Centre lock
801 – 1200	532	–	–	–	550	–	–	–	CL 400 E
1201 – 1400	728	–	–	–	746	–	–	–	CL 600 E
1401 – 1800	728	1132	–	–	746	1150	–	–	CL 600 E KU + CL 400 E
1801 – 2000	728	1328	–	–	746	1346	–	–	CL 600 E KU + CL 600 E
2001 – 2400	728	1328	1732	–	746	1346	1750	–	2x CL 600 E KU + CL 400 E
2401 – 2600	728	1328	1928	–	746	1346	1946	–	2x CL 600 E KU + CL 600 E
2601 – 2800	728	1328	1928	2332	746	1346	1946	2350	3x CL 600 E KU + CL 400 E

Centre lock, horizontal

SRW [mm]	C1	C2	C3	Centre lock
320 – 520	252	–	–	CL 200 P
521 – 730	456	–	–	CL 400 P
731 – 930	652	–	–	CL 600 P
931 – 1130	652	852	–	CL 600 E KU + CL 200 P
1131 – 1330	652	1056	–	CL 600 E KU + CL 400 P
1331 – 1530	652	1252	–	CL 600 E KU + CL 600 P
1531 – 1600	652	1252	1452	2x CL 600 E KU + CL 200 P

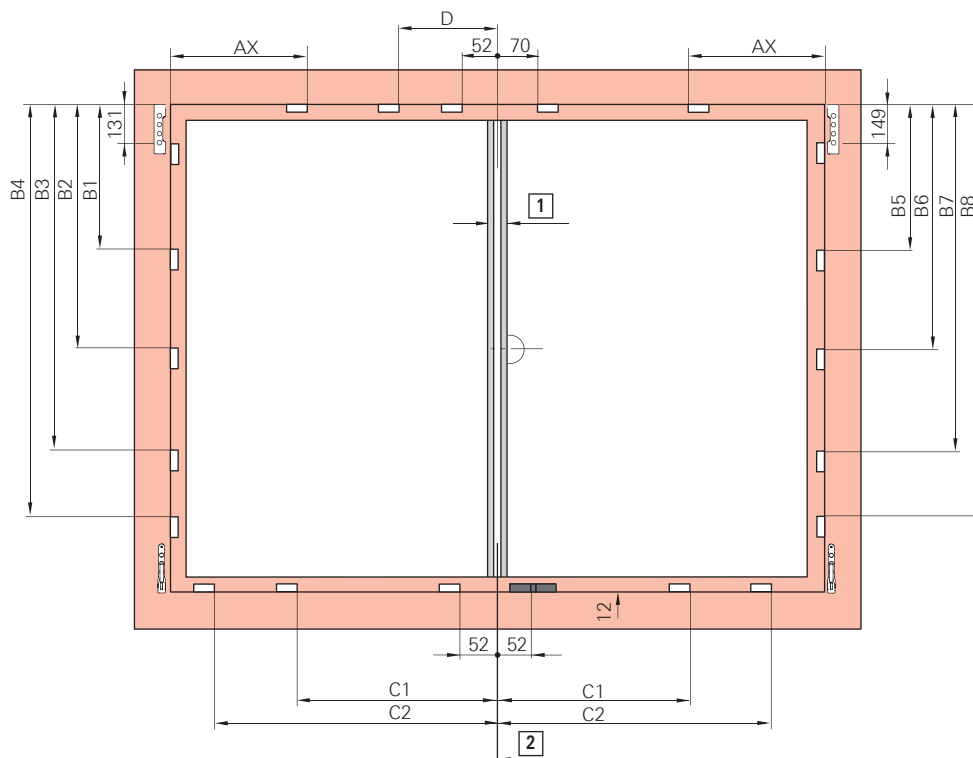


INFO

Mount the second opening sash with the lever-operated espagnolette open.



8.8.1.16 Floating-mullion hardware, standard – RC 2 / RC 2 N



[1] 12 mm rebate clearance between the sashes

[2] Rebate clearance centre

□ Striker e.g.

■ Tilt striker e.g.

Stay guide

SRW [mm]	AX	Size
801 – 1000	600	500 / 890
1001 – 1200	600	500 / 1090
1201 – 1400	600	500 / 1290

Turn-Only sash stay guide

SRW [mm]	AX	D	Size	Centre lock
801 – 1000	618	–	500 / 890	–
1001 – 1200	618	–	500 / 890	CL 200 KU
1201 – 1400	618	452	500 / 890	CL 400 V KU

Centre lock, vertical

SRH [mm]	B1	B2	B3	B4	B5	B6	B7	B8	Centre lock
490 – 700	328	–	–	–	346	–	–	–	CL 200 V
701 – 900	532	–	–	–	550	–	–	–	CL 400 V
901 – 1100	728	–	–	–	746	–	–	–	CL 600 V
1101 – 1300	728	928	–	–	746	946	–	–	CL 600 V KU + CL 200 V
1301 – 1500	728	1132	–	–	746	1150	–	–	CL 600 V KU + CL 400 V
1501 – 1700	728	1328	–	–	746	1346	–	–	CL 600 V KU + CL 600 V
1701 – 1900	728	1328	1528	–	746	1346	1546	–	2x CL 600 V KU + CL 200 V
1901 – 2100	728	1328	1732	–	746	1346	1750	–	2x CL 600 V KU + CL 400 V
2101 – 2300	728	1328	1928	–	746	1346	1946	–	2x CL 600 V KU + CL 600 V
2301 – 2500	728	1328	1928	2128	746	1346	1946	2146	3x CL 600 V KU + CL 200 V
2501 – 2700	728	1328	1928	2332	746	1346	1946	2350	3x CL 600 V KU + CL 400 V

SRH [mm]	B1	B2	B3	B4	B5	B6	B7	B8	Centre lock
2701 – 2800	728	1328	1928	2528	746	1346	1946	2546	3x CL 600 V KU + CL 600 V

Centre lock, horizontal

SRW [mm]	C1	C2	Centre lock
400 – 600	252	–	CL 200 V
601 – 800	456	–	CL 400 V
801 – 1000	652	–	CL 600 V
1001 – 1200	652	852	CL 600 V KU + CL 200 V
1201 – 1400	652	1056	CL 600 V KU + CL 400 V

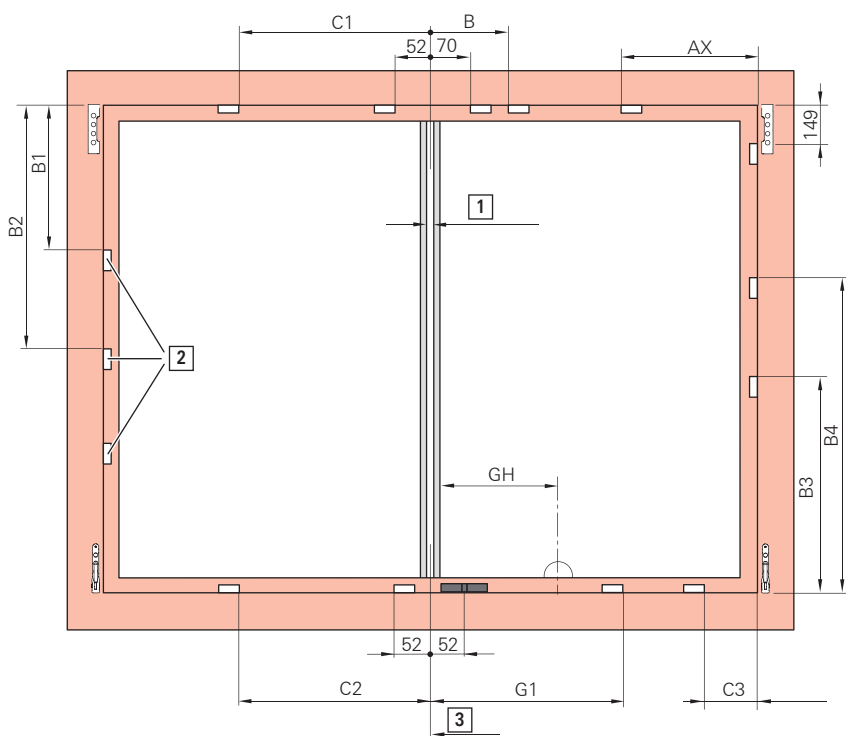


INFO

Mount the second opening sash with the lever-operated espagnolette open.

8.8.1.17 Floating-mullion hardware, standard comfort – basic security

with corner drive, standard



[1] 12 mm rebate clearance between the sashes

[2] Concealed centre closers

[3] Rebate clearance centre

□ Striker e.g.

■ Tilt striker e.g.

Comfort T&T espagnolette

SRW [mm]	GH	G1
520 – 700	220	–
701 – 900	220	446
901 – 1100	220	446
1101 – 1300	220	446
1301 – 1400	220	446



Comfort scissor stay

SRW [mm]	AX
801 – 1000	600
1001 – 1200	600
1201 – 1400	600

Centre closer, vertical, concealed

SRH [mm]	B1	B2
800 – 1200	550	–
1201 – 1400	746	–
1401 – 1600	746	1150

Centre lock, horizontal

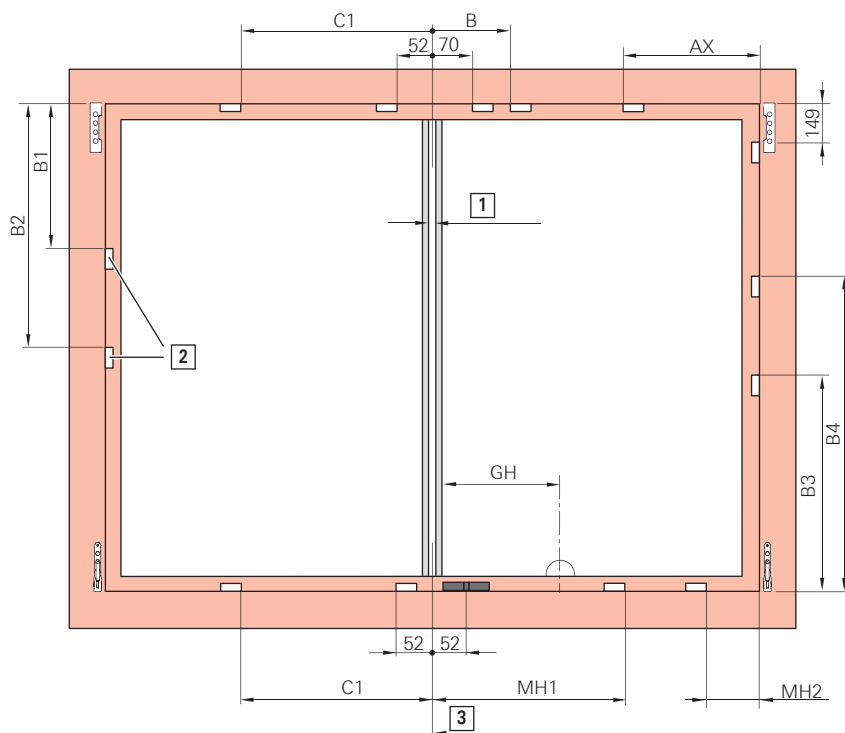
SRH [mm]	C1	C2	Centre lock
801 – 1200	456	456	CL 400 E
1201 – 1400	652	652	CL 600 E

Centre lock, bottom horizontal

SRH [mm]	C3	Centre lock
1101 – 1300	276	CL 400 E KU
1301 – 1400	476	CL 400 E KU + CL 200 KU

Centre lock, vertical, hinge side

SRH [mm]	B3	B4
871 – 1070	532	–
1071 – 1270	682	–
1271 – 1470	682	–
1471 – 1600	682	1152



[1] 12 mm rebate clearance between the sashes

[2] Concealed centre closers

[3] Rebate clearance centre

 Striker e.g. 

 Tilt striker e.g. 

Comfort T&T espagnolette

SRW [mm]	GH	MH1	MH2	Size	Cam	Centre lock
520 – 700	220	–	–	490 / 220	–	–
701 – 900	220	446	–	690 / 220	1 E	–
901 – 1100	220	446	–	690 / 220	1 E	CL 200 KU
1101 – 1300	220	446	276	690 / 220	1 E	CL 400 E KU
1301 – 1400	220	446	476	690 / 220	1 E	CL 200 KU + CL 400 E KU

Centre closer, vertical, concealed

SRH [mm]	B1	B2
801 – 1200	550	–
1201 – 1400	746	–
1401 – 1600	746	1150

Arched component

SRH [mm]	B3	B4
800 – 1000	480	–
1001 – 1200	680	–
1201 – 1400	280	880
1401 – 1600	680	1080

Centre lock, horizontal

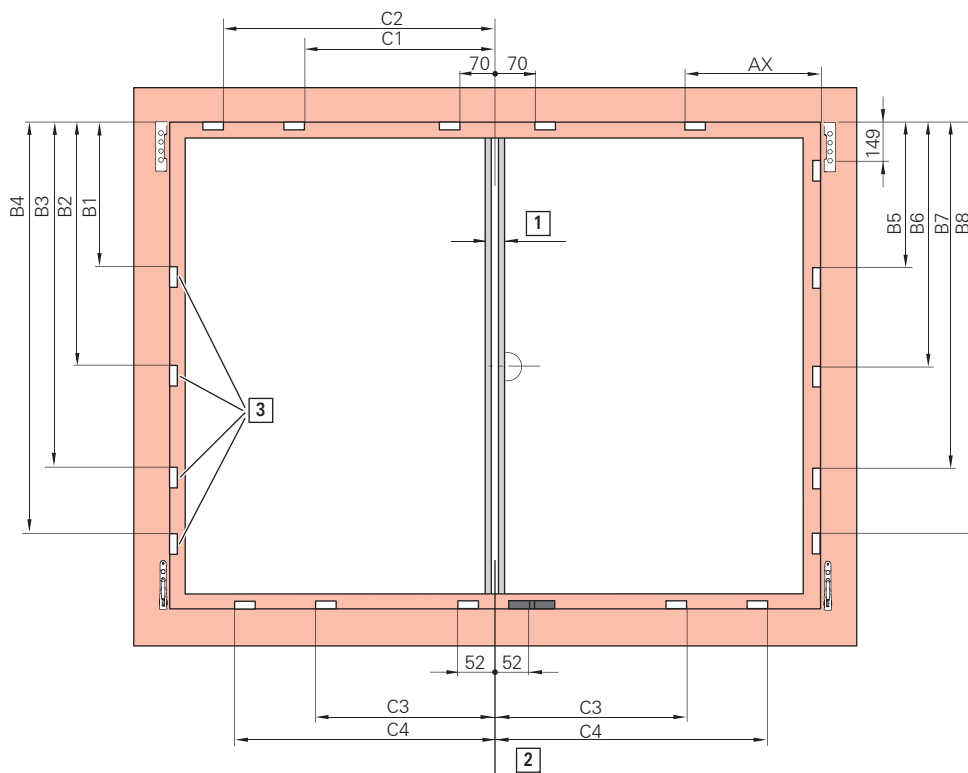
SRW [mm]	C1	Top / bottom
801 – 1200	456	CL 400 E
1201 – 1400	652	CL 600 E

Comfort scissor stay

SRW [mm]	AX	B	Size
801 – 1000	600	–	–
1001 – 1200	600	–	CL 200 KU
1201 – 1400	600	270	CL 400 E KU



8.8.1.18 Floating-mullion hardware Plus – basic security



[1] 12 mm rebate clearance between the sashes

[2] Rebate clearance centre

[3] Concealed centre closers

□ Striker e.g. 

■ Tilt striker e.g. 

Stay guide

SRW [mm]	AX	Size
801 – 1000	600	500 / 890
1001 – 1200	750	500 / 1090
1201 – 1600	750	500 / 1290

Centre closer, vertical, concealed

SRH [mm]	B1	B2	B3	B4
801 – 1200	550	–	–	–
1201 – 1400	746	–	–	–
1401 – 1800	746	1150	–	–
1801 – 2000	746	1346	–	–
2001 – 2400	746	1346	1750	–
2401 – 2600	746	1346	1946	–
2601 – 2800	746	1346	1946	2350

Centre lock, vertical

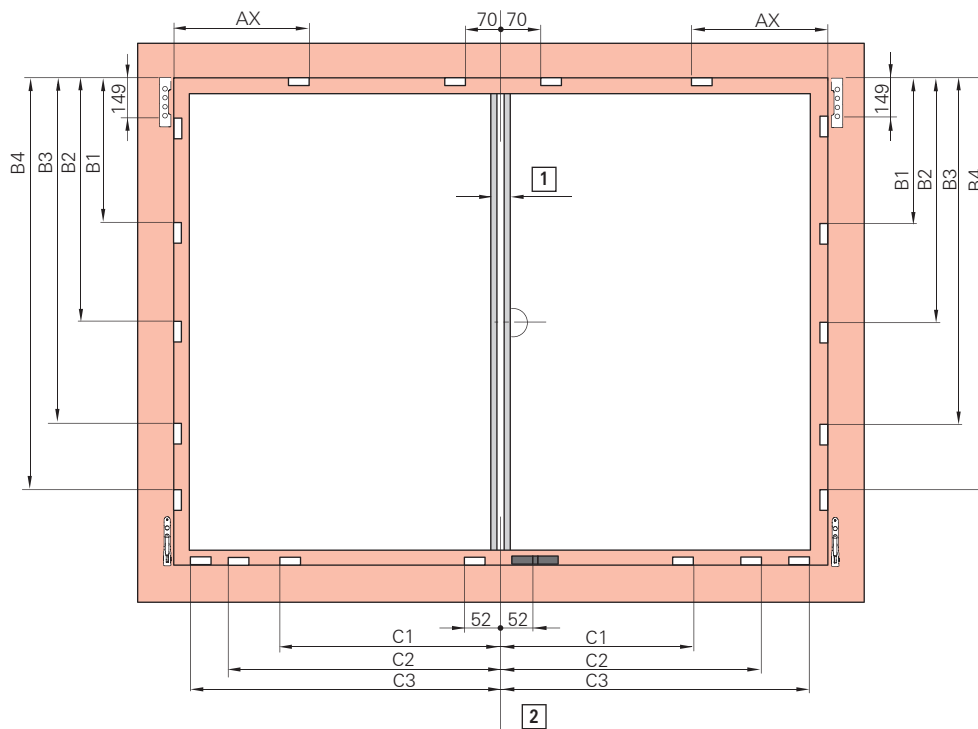
SRH [mm]	B5	B6	B7	B8	Centre lock
801 – 1200	550	–	–	–	CL 400 E
1201 – 1400	746	–	–	–	CL 600 E
1401 – 1800	746	1150	–	–	CL 600 E KU + CL 400 E
1801 – 2000	746	1346	–	–	CL 600 E KU + CL 600 E
2001 – 2400	746	1346	1750	–	2x CL 600 E KU + CL 400 E

SRH [mm]	B5	B6	B7	B8	Centre lock
2401 – 2600	746	1346	1946	–	2x CL 600 E KU + CL 600 E
2601 – 2800	746	1346	1946	2350	3x CL 600 E KU + CL 400 E

Centre lock, horizontal

SRW [mm]	C1	C2	C3	C4	Centre lock
801 – 1200	474	–	456	–	CL 400 E
1201 – 1400	670	–	652	–	CL 600 E
1401 – 1600	670	1074	652	1056	CL 600 E KU + CL 400 E

8.8.1.19 Floating-mullion hardware Plus – RC 1 N



[1] 12 mm rebate clearance between the sashes

[2] Rebate clearance centre

☐ Striker e.g. 

 Tilt striker e.g.

Stay guide

SRW [mm]	AX	Size
801 – 1000	600	500 / 890
1001 – 1200	750	500 / 1090
1201 – 1400	750	500 / 1290

Centre lock, vertical

SRH [mm]	B1	B2	B3	B4	Centre lock
801 – 1200	550	–	–	–	CL 400 E
1201 – 1400	746	–	–	–	CL 600 E
1401 – 1800	746	1150	–	–	CL 600 E KU + CL 400 E
1801 – 2000	746	1346	–	–	CL 600 E KU + CL 600 E
2001 – 2400	746	1346	1750	–	2x CL 600 E KU + CL 400 E
2401 – 2600	746	1346	1946	–	2x CL 600 E KU + CL 600 E
2601 – 2800	746	1346	1946	2350	3x CL 600 E KU + CL 400 E



Centre lock, horizontal

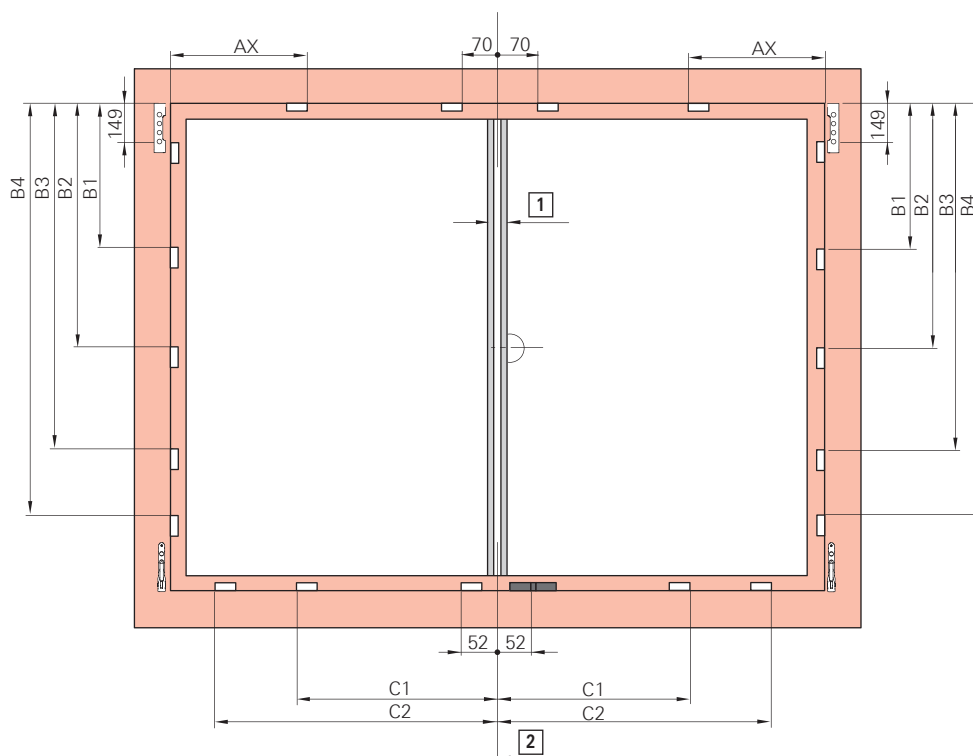
SRW [mm]	C1	C2	C3	Centre lock
320 – 520	252	–	–	CL 200 P
521 – 730	456	–	–	CL 400 P
731 – 930	652	–	–	CL 600 P
931 – 1130	652	852	–	CL 600 E KU + CL 200 P
1131 – 1330	652	1056	–	CL 600 E KU + CL 400 P
1331 – 1530	652	1252	–	CL 600 E KU + CL 600 P
1531 – 1600	658	1252	1452	2x CL 600 E KU + CL 200 P



INFO

Mount the second opening sash with the lever-operated espagnolette open.

8.8.1.20 Floating-mullion hardware Plus – RC 2 / RC 2 N



[1] 12 mm rebate clearance between the sashes

[2] Rebate clearance centre

□ Striker e.g.

■ Tilt striker e.g.

Stay guide

SRW [mm]	AX	Size
801 – 1000	600	500 / 890
1001 – 1200	600	500 / 1090
1201 – 1400	600	500 / 1290

Centre lock, vertical

SRH [mm]	B1	B2	B3	B4	Centre lock
490 – 700	346	–	–	–	CL 200 V
701 – 900	550	–	–	–	CL 400 V

SRH [mm]	B1	B2	B3	B4	Centre lock
901 – 1100	746	–	–	–	CL 600 V
1101 – 1300	746	946	–	–	CL 600 V KU + CL 200 V
1301 – 1500	746	1150	–	–	CL 600 V KU + CL 400 V
1501 – 1700	746	1346	–	–	CL 600 V KU + CL 600 V
1701 – 1900	746	1346	1546	–	2x CL 600 V KU + CL 200 V
1901 – 2100	746	1346	1750	–	2x CL 600 V KU + CL 400 V
2101 – 2300	746	1346	1946	–	2x CL 600 V KU + CL 600 V
2301 – 2500	746	1346	1946	2146	3x CL 600 V KU + CL 200 V
2501 – 2700	746	1346	1946	2350	3x CL 600 V KU + CL 400 V
2701 – 2800	746	1346	1946	2546	3x CL 600 V KU + CL 600 V

Centre lock, horizontal

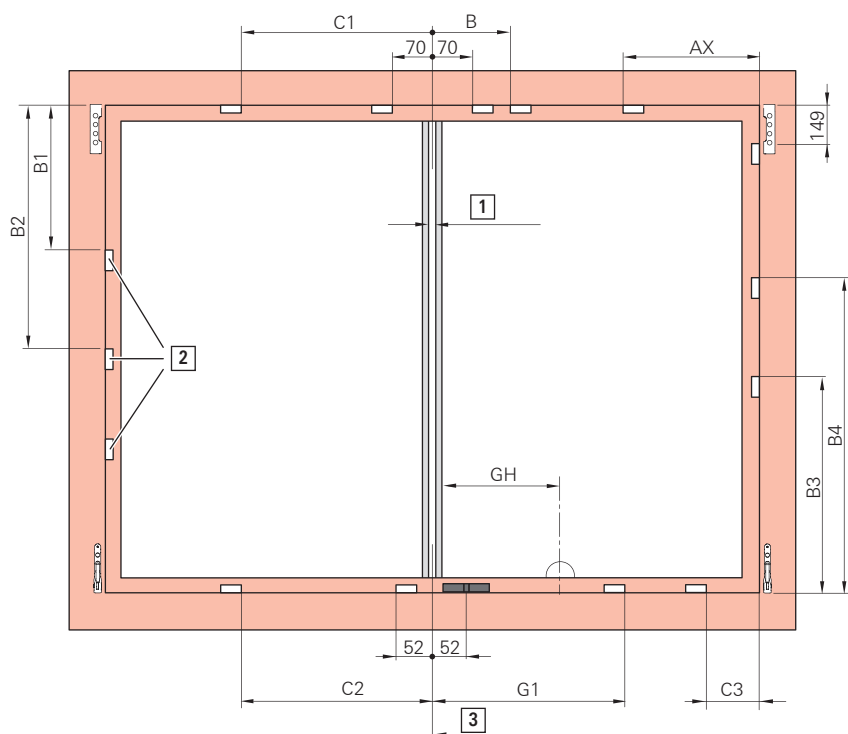
SRW [mm]	C1	C2	Centre lock
400 – 600	252	–	CL 200 V
601 – 800	456	–	CL 400 V
801 – 1000	652	–	CL 600 V
1001 – 1200	652	852	CL 600 V KU + CL 200 V
1201 – 1400	652	1056	CL 600 V KU + CL 400 V



INFO

Mount the second opening sash with the lever-operated espagnolette open.

8.8.1.21 Floating-mullion hardware Plus comfort – basic security



[1] 12 mm rebate clearance between the sashes

[2] Concealed centre closers

[3] Rebate clearance centre

□ Striker e.g.

■ Tilt striker e.g.



Comfort T&T espagnolette

SRW [mm]	GH	G1
520 – 700	220	–
701 – 900	220	446
901 – 1100	220	446
1101 – 1300	220	446
1301 – 1400	220	446

Comfort scissor stay

SRW [mm]	AX
801 – 1000	600
1001 – 1200	600
1201 – 1400	600

Centre closer, vertical, concealed

SRH [mm]	B1	B2
800 – 1200	550	–
1201 – 1400	746	–
1401 – 1600	746	1150

Centre lock, horizontal

SRH [mm]	C1	C2	Centre lock
801 – 1200	456	456	CL 400 E
1201 – 1400	652	652	CL 600 E

Centre lock, bottom horizontal

SRH [mm]	C3	Centre lock
1101 – 1300	276	CL 400 E KU
1301 – 1400	476	CL 400 E KU + CL 200 KU

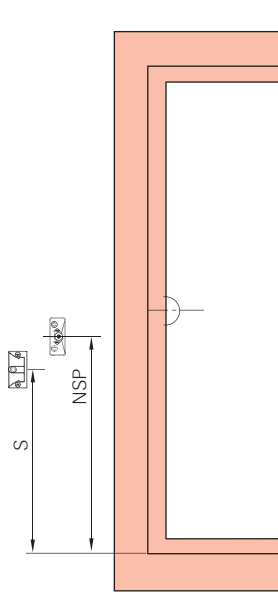
Centre lock, top horizontal

SRH [mm]	B	Centre lock
1201 – 1400	270	CL 400 E KU

Centre lock, vertical, hinge side

SRH [mm]	B3	B4
871 – 1070	532	–
1071 – 1270	682	–
1271 – 1470	682	–
1471 – 1600	682	1152

8.8.2 Position of the lifting mishandling device and bullet catch

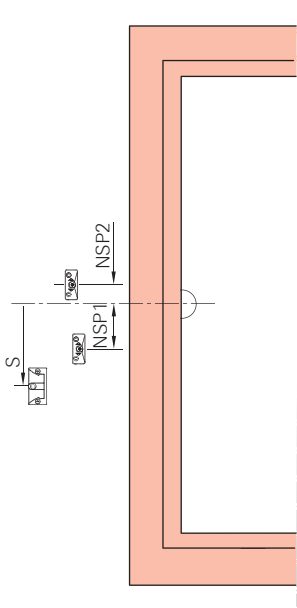


[LMD] Lifting mishandling device

[BC] Bullet catch

T&T espagnolette, VT – fixed handle height

SRH / mm	NSP	S
280 – 480	–	–
481 – 600	262	–
601 – 800	350	–
801 – 1000	288	–
1001 – 1200	388	–
1201 – 1400	388	–
1401 – 1600	388	–
1601 – 1800	388	–
1601 – 1800	1121	807
1801 – 2000	1121	807
2001 – 2600	1121	807
2601 – 2800	1121	807



[LMD] = Lifting mishandling device

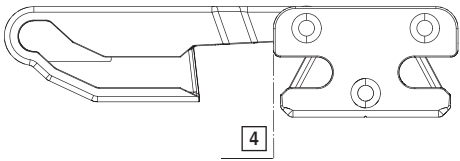
[BC] Bullet catch

T&T espagnolette – centred / variable handle height

SRH / mm	NSP 1	NSP 2	S
450 – 620	–	–	–
621 – 800	137	–	–
801 – 1200	137	–	–
1201 – 1600	137	–	–
1601 – 2000	–	109	395
2001 – 2400	–	109	395
2401 – 2600	–	109	395
2601 – 2800	–	109	395

8.8.3 Security striker for tilt ventilation (TiltSafe)

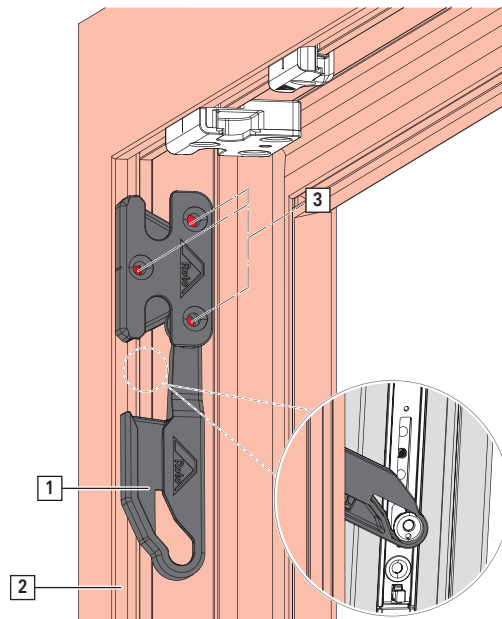
1. Position the security striker for tilt ventilation [1] on the frame [2].
In the turn position, the entering cam must be positioned in the same way as a standard striker.
Striker point of entry [4]



Installation

Frame

Security striker for tilt ventilation (TiltSafe)



2. Secure with three single-use screws [3].



INFO

Single-use screws can be tightened but not undone.



INFO

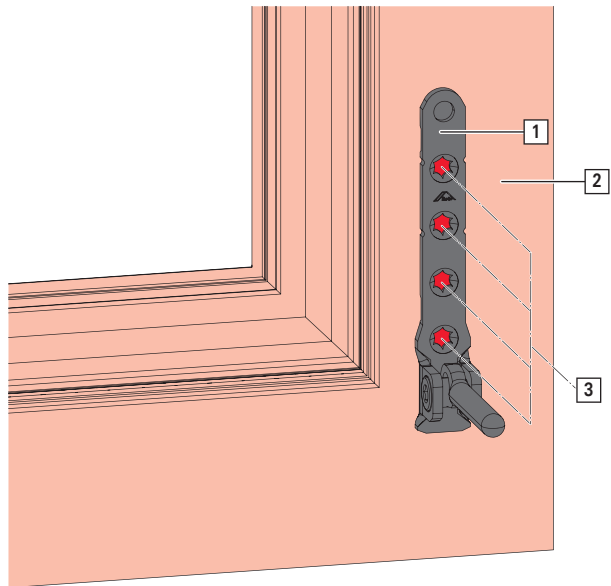
RC 2 protection cannot be achieved in the 135° handle position (night ventilation). To achieve RC 2 protection:

1. Tilt the window
2. Lock the handle
3. Remove the key.



8.8.4 Pivot rest

1. Place the pivot rest [1] on the frame [2].

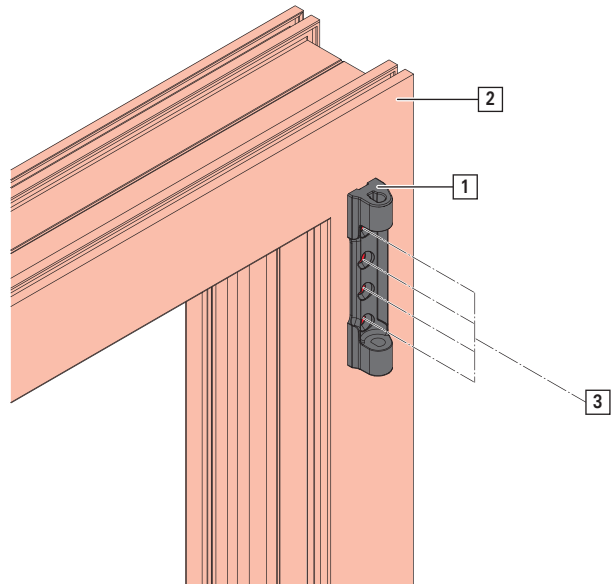


2. Secure with four screws [3].

8.8.5 Stay bearing, standard

130 kg

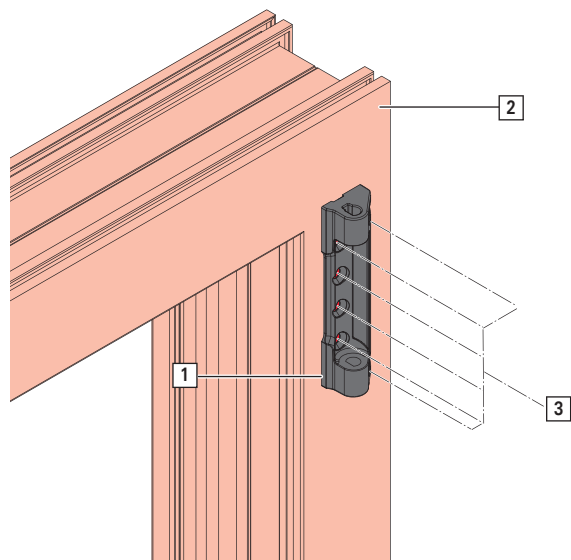
1. Place the stay bearing [1] on the frame [2].



2. Fasten with four screws [3].

150 kg

1. Place the stay bearing [1] on the frame [2].



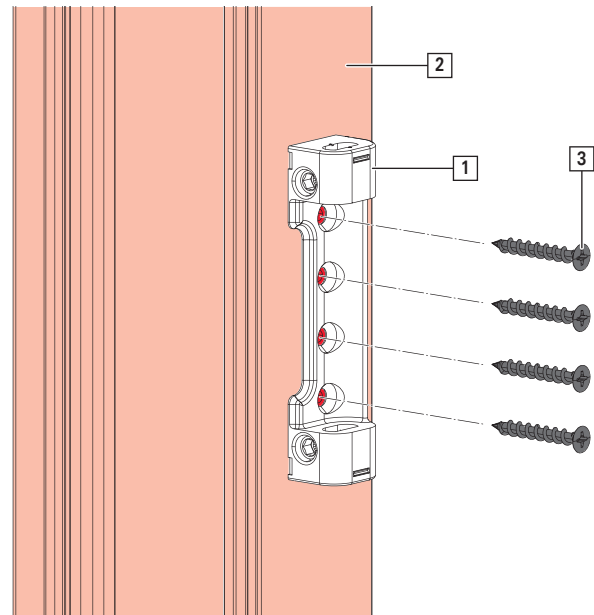
2. Fasten with six screws [3].



8.8.6 Arch

Stay bearing, adjustable

1. Place the stay bearing [1] on the frame [2].

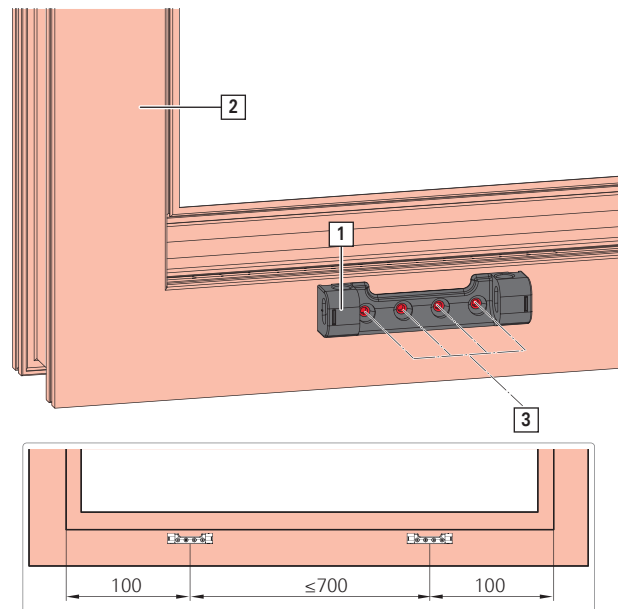


2. Fasten with four screws [3].

8.8.7 Tilt-Only sash

Stay bearing, adjustable

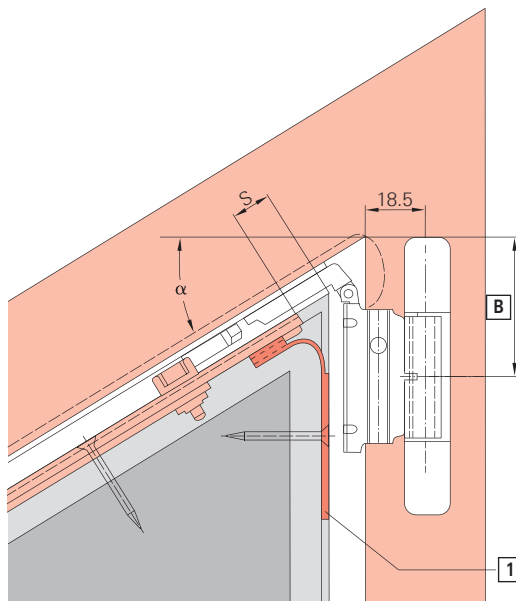
1. Place the stay bearing [1] on the frame [2].



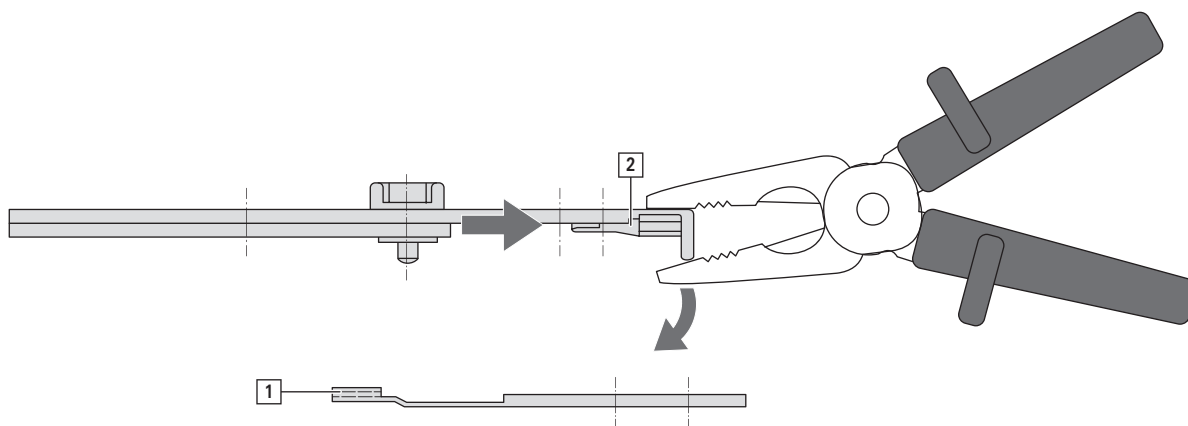
2. Fasten with four screws [3].

8.8.8 Pitched stay arm

1. Stay arm routing = pitched angle α , for additional values, see → *from page 229*
For a deep sash rebate, chamfer this near the corner.
Clear the corner area for negative pitched angles.



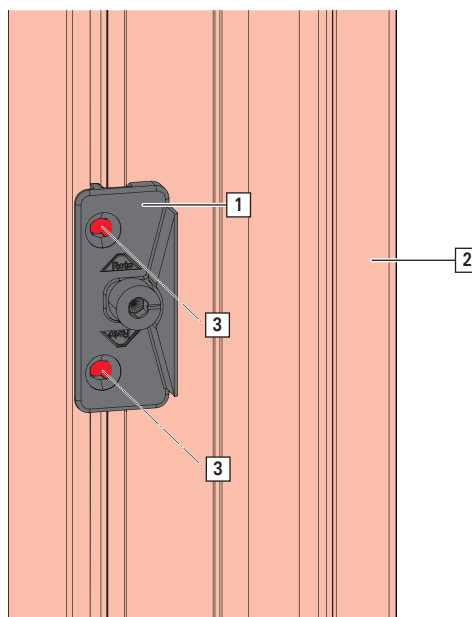
2. Insert the end piece [1] in the direction of the arrow and bend it according to the pitched angle.
Break the connection bracket [2] **in a downwards direction** using pliers at every sash angle.





8.8.9 Lifting mishandling device

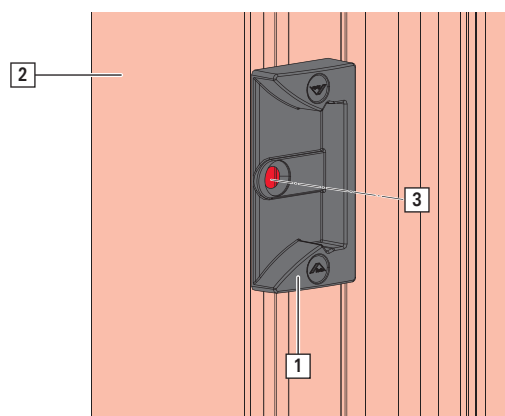
1. Position the lifting mishandling device frame component [1] in the frame [2].



2. Secure with two screws [3].

8.8.10 Bullet catch

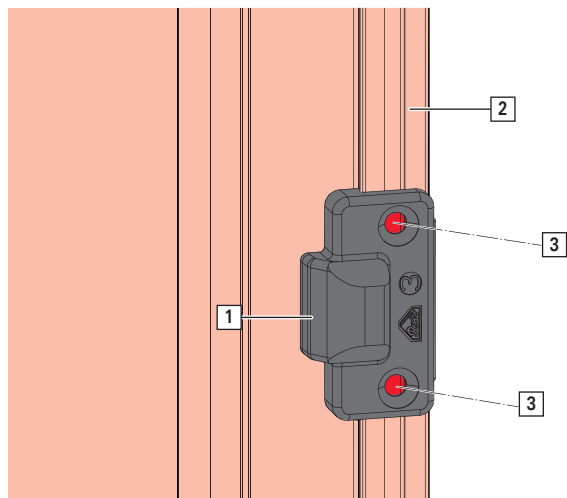
1. Position the bullet-catch frame component [1] in the frame [2].



2. Fasten with a screw [3].

8.8.11 Concealed centre closer

1. Position the centre closer [1] in the frame [2].



2. Secure with two screws [3].



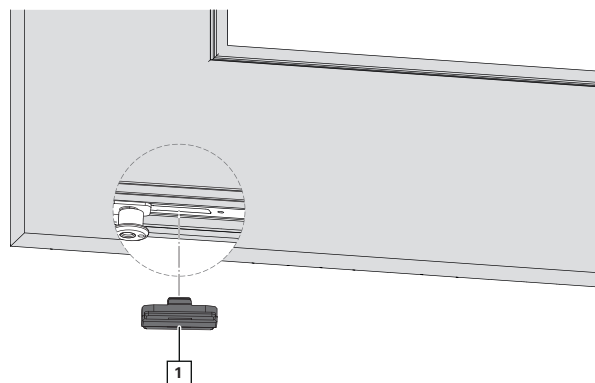
INFO

Put pressure-proof packers between glass and frame in the area of the centre closers.

8.9 Accessories

8.9.1 Travel restrictor

1. Clip the travel restrictor [1] into the locking cam groove.





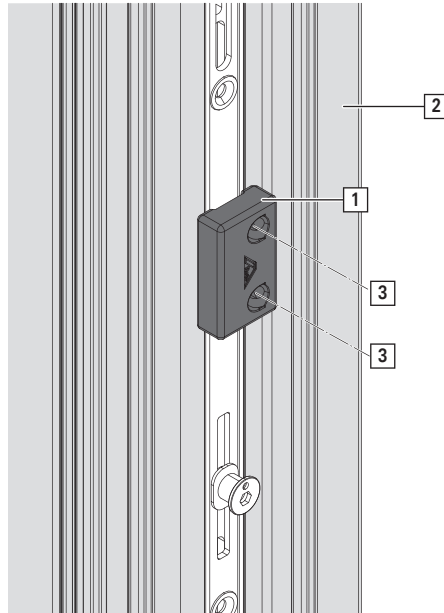
8.9.2 Anti-jemmy device



INFO

Rebate depth at least 24 mm.

1. Position the anti-jemmy device [1] on the sash [2].

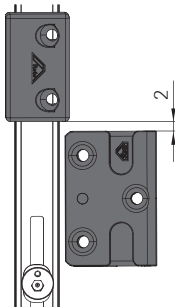


2. Fasten with two screws [3] at an angle in the direction of the overlap.

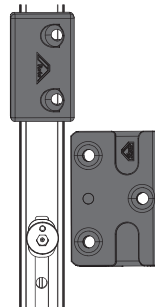
Positioning

The anti-jemmy device runs in approx. 2 mm behind the striker.

Opening position



Locked position



Fit an anti-jemmy device on four sides:

- Hinge side – second-last locking point above the pivot rest.
- Locking side – top locking point.
- Horizontally at the top – on the corner drive, standard
- Horizontally at the bottom – first locking point after the tilt striker.

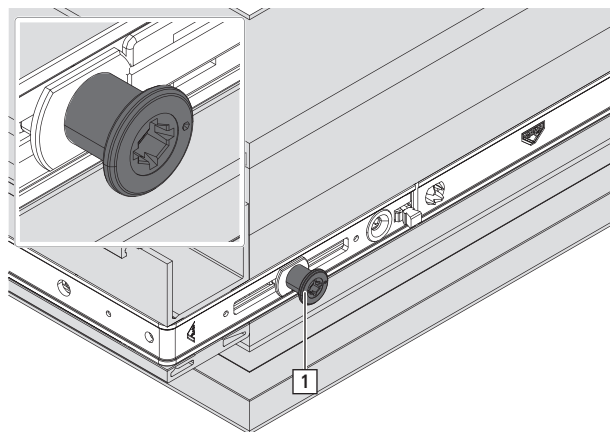
8.9.3 Safety device for lever-operated espagnolette, standard

⇒ Installation

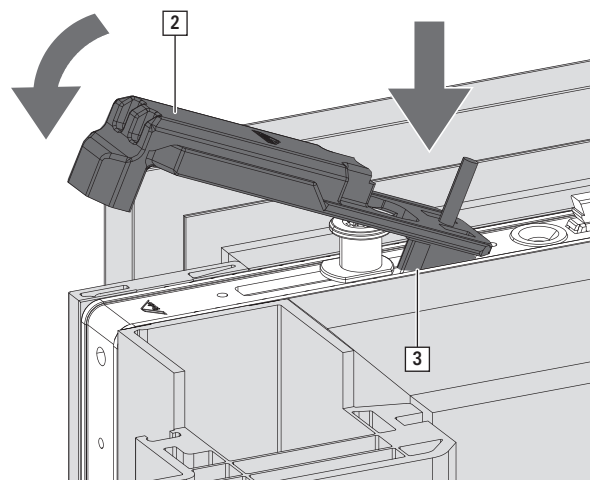
- Turn-Only sash: SEC striker 50 mm
- Tilt&Turn sash: tilt striker 86.5 mm
- Rebate clearance ≥ 10 mm

Installation at the top and bottom of the floating-mullion sash

1. The P or V cam [1] must be aligned in the direction of the hinge side.

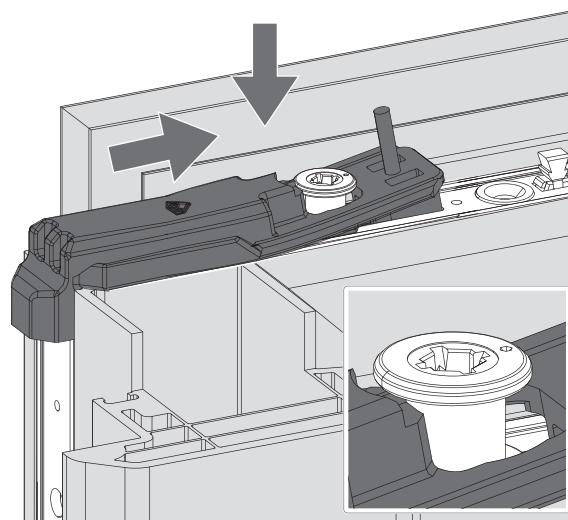


2. Press the safety device [2] into the cam groove of the corner drive [3] and move it above the P or V cam.

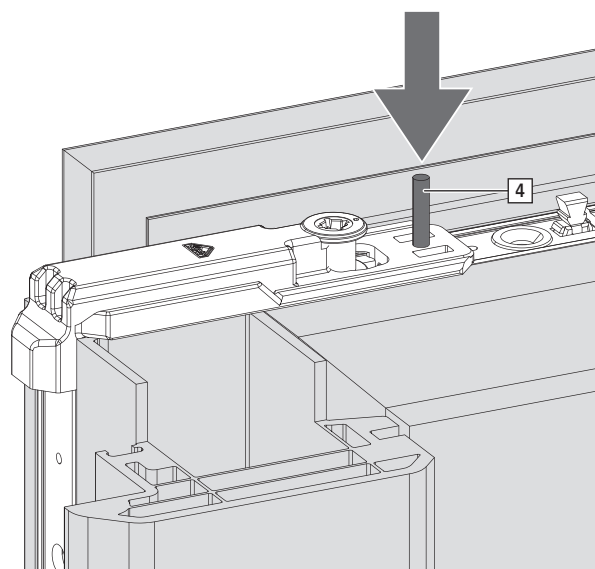




3. Press the safety device onto the floating mullion of the corner drive and slide it below the cam.



4. Press the safety device fully into the cam groove of the corner drive and insert the locking pin [4].

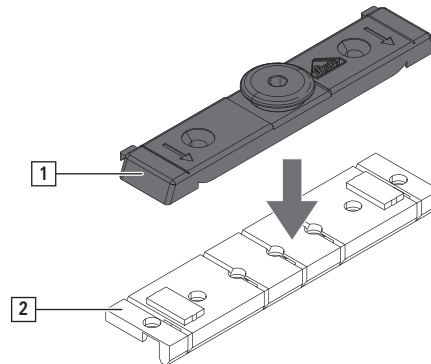


8.9.4 Rebate run-up block – arch

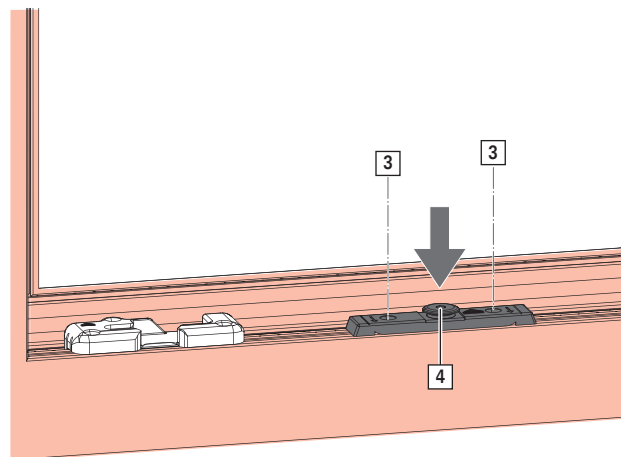
1. Press the rebate run-up block [1] onto the packer [2].

**INFO**

With a smooth rebate, no packers are required.



2. Position the rebate run-up block and packer in the frame groove.



3. Fasten with two screws [3].
4. Use the screw [4] to perform adjustments.

**INFO**

When the sash is pressed from the tilt position to the locked position, the arched sash stay must run in without coming into contact with any other components.



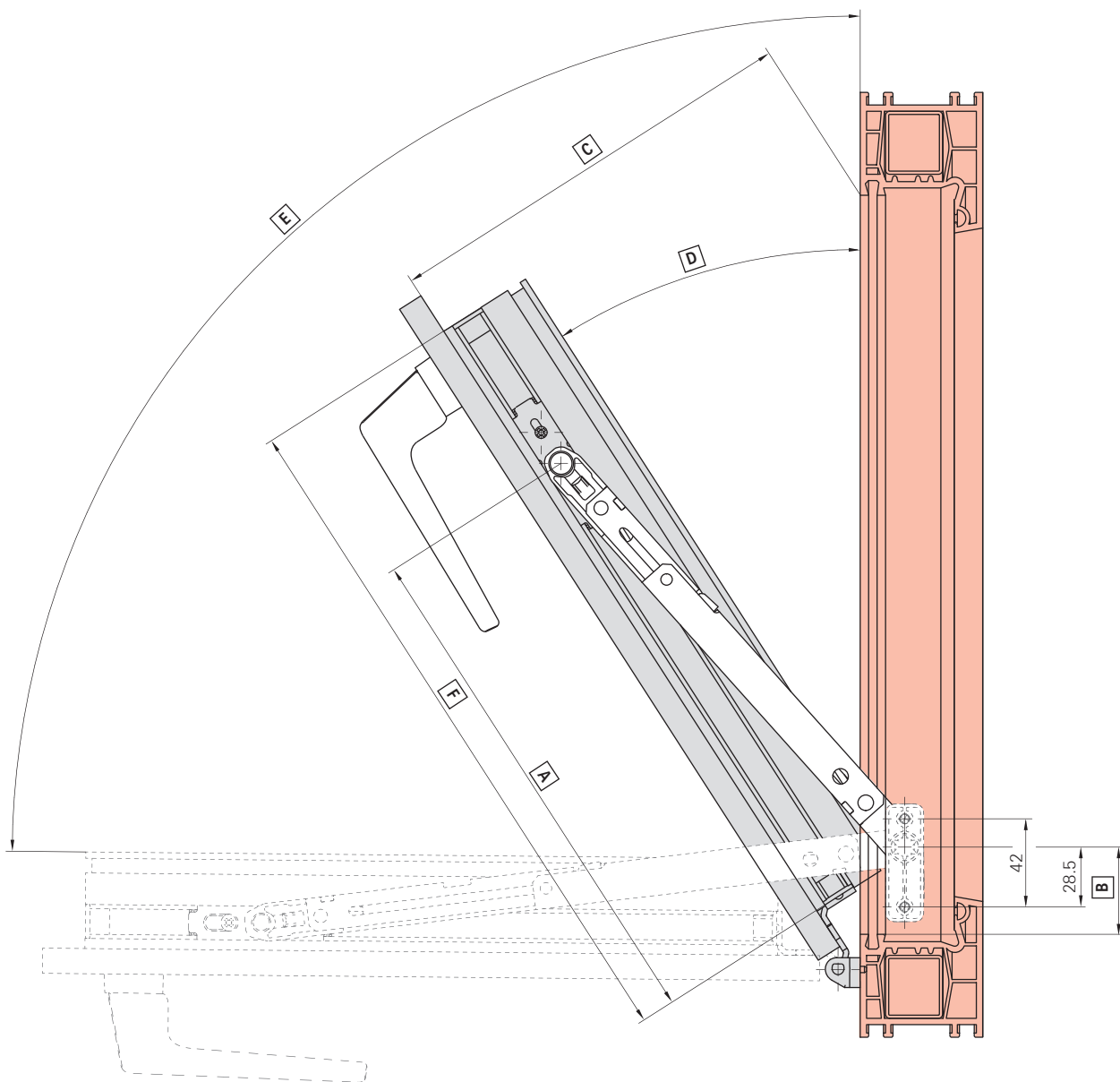
8.9.5 Restrictor and cleaning stay



INFO

A restrictor and cleaning stay must be installed for fanlights.

8.9.5.1 Overview



- [A] Position of sash bearing
- [B] Position of frame bearing
- [C] Tilt depth restrictor position
- [D] Opening angle restrictor position
- [E] Opening angle cleaning position
- [F] Sash rebate height (SRH)

SRH	Type	[A]	[B]	[C]	[D]	[E]
290 – 400 mm	1	250 mm	45 mm	180 – 245 mm	33°	90°
401 – 560 mm	1	280 mm	75 mm	205 – 275 mm	27°	67°
561 – 700 mm	2	525 mm	170 mm	225 – 277 mm	22°	88°
701 – 850 mm	2	575 mm	220 mm	244 – 292 mm	19°	72°
851 – 1200 mm	2	625 mm	270 mm	261 – 363 mm	17°	62°



8.9.5.2 Sash component

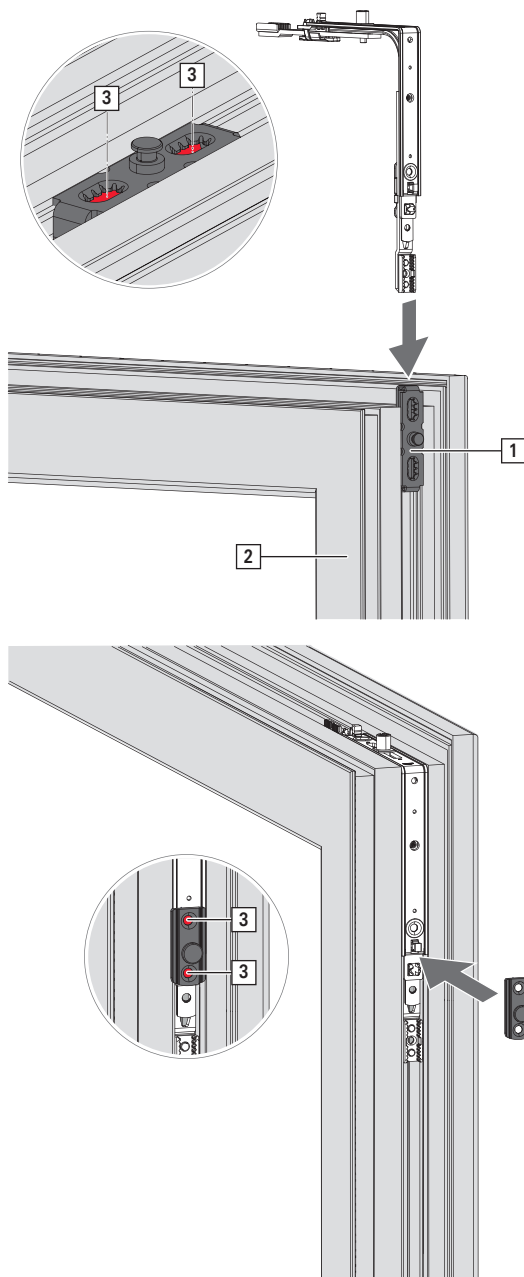
1. Sash installation

Insert the sash bearing [1] into the sash groove [2].

Position the sash bearing correctly.

Floating-mullion installation

When installing the floating mullion, place the sash bearing on the corner drive.

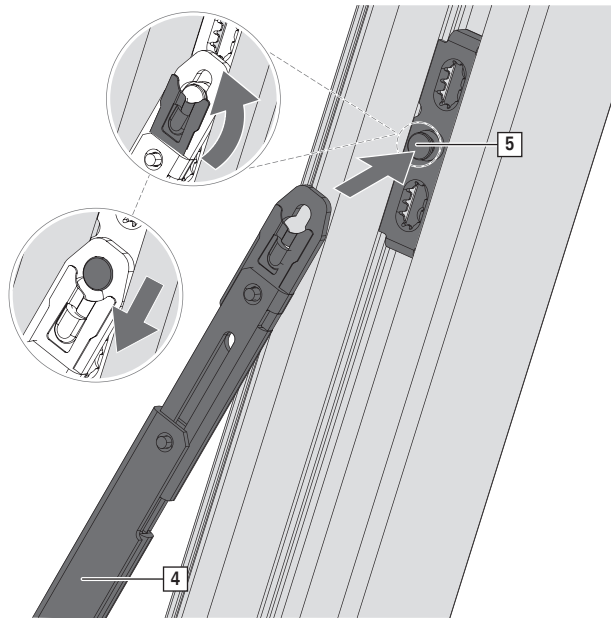


2. Fasten with two screws [3].

3. Install the scissor stay on the frame and secure it in position → *from page 306*.

Press the arm [4] of the scissor stay onto the bolt [5].

Move the arm until the bolt locks into place.



8.9.5.3 Frame component

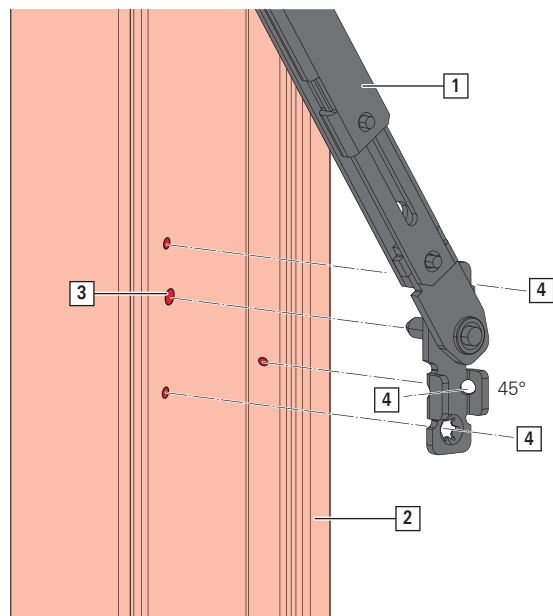


INFO

Tilt stays and tilt distance restrictors may still have to be used even when restrictor and cleaning stays are used.

Two scissor stays must always be used per sash.

1. Position the restrictor and cleaning stay [1] on the frame [2].

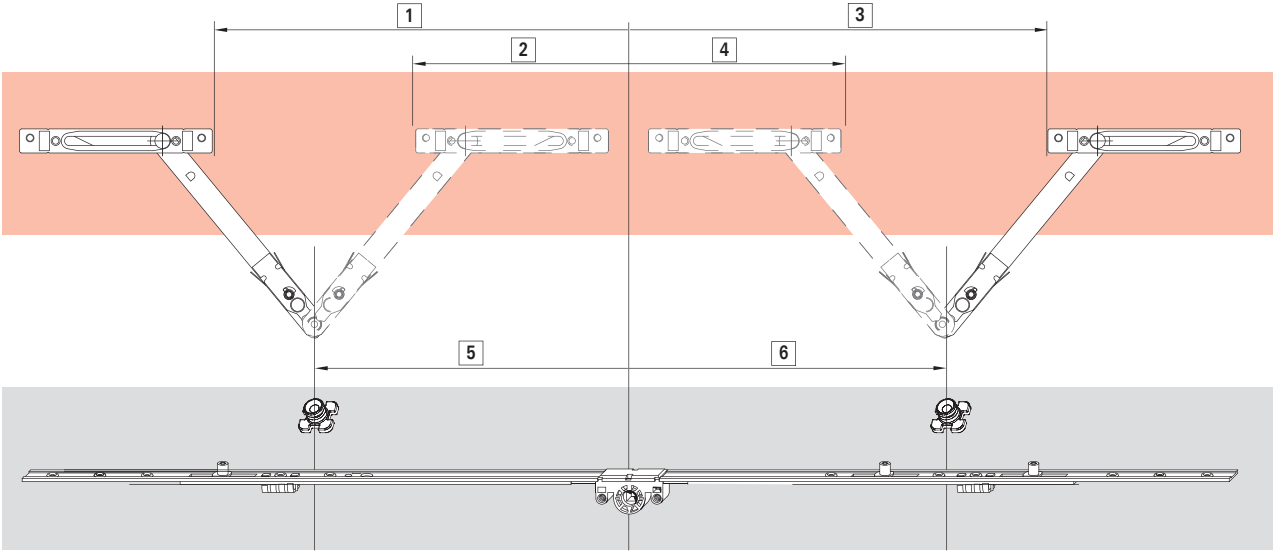


2. Insert the cam into the predrilled hole [3].
3. Fasten with three screws [4].

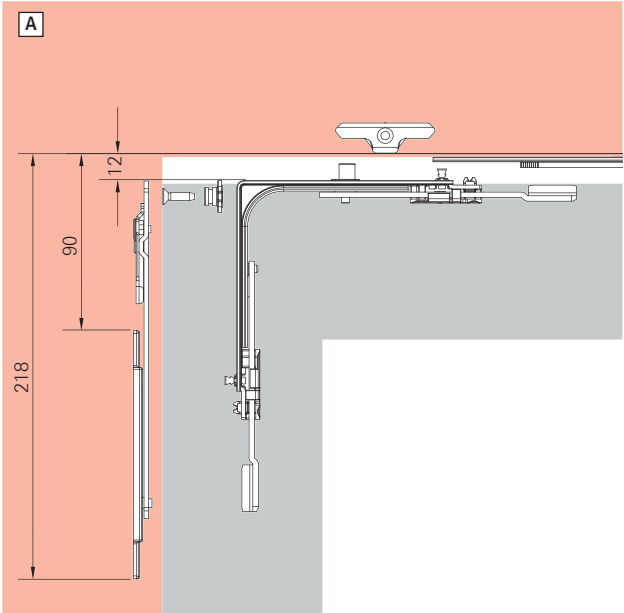


8.9.6 Tilt stay

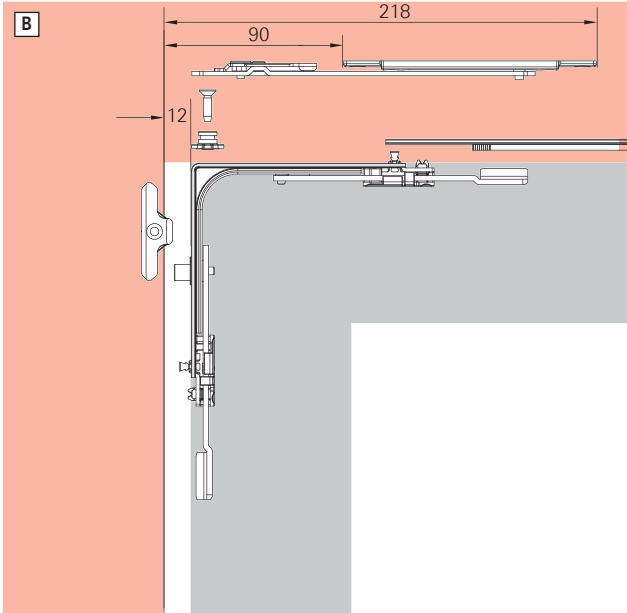
8.9.6.1 Installation dimensions



SRW	[1]	[2]	[3]	[4]	[5]	[6]	BS
621 – 800	–	–	–	4	–	73	15
801 – 1200	–	–	–	4	–	73	15
1200 – 1600	15	–	195	–	212	392	8 / 15
1601 – 2000	433	–	109	–	364	306	8 / 15
2001 – 2400	433	–	509	–	364	706	8 / 15

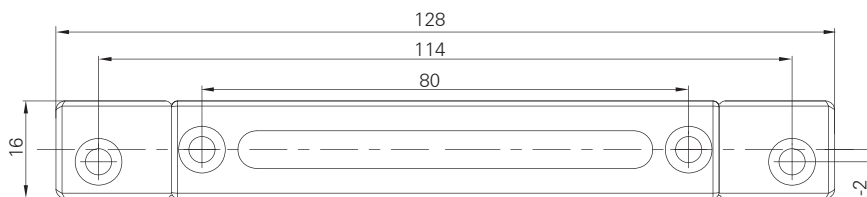


[A] Installation of tilt stay at the side

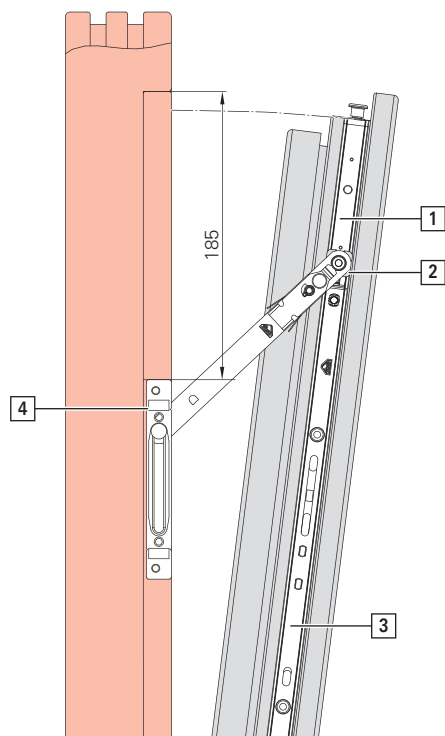


[B] Installation of tilt stay at the top

Frame component dimensions



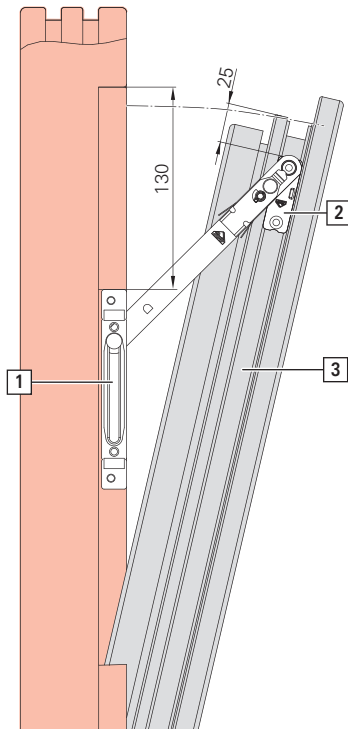
Installation at the side with sash bearing cam at the coupling point



- [1] Corner drive
- [2] Sash bearing cam
- [3] Centre lock
- [4] Tilt stay frame component



Installation, groove mounting

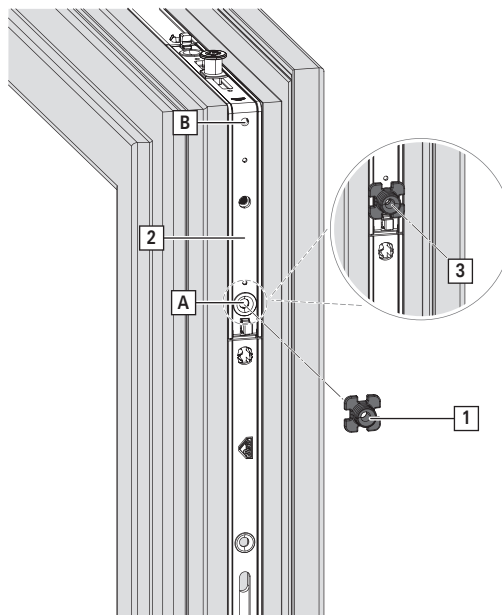


- [1] Tilt stay frame component
- [2] Tilt stay sash component
- [3] Sash groove

8.9.6.2 Sash component

Position at the side

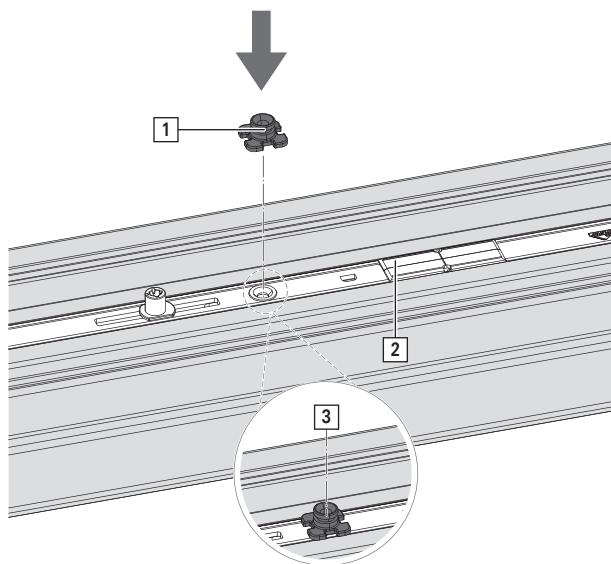
1. Place the sash component [1] on the corner drive [2] (position [A] or [B]).



2. Secure with screw [3].

Position at the top

1. Place the sash component [1] on the espagnolette [2].



2. Secure with screw [3].



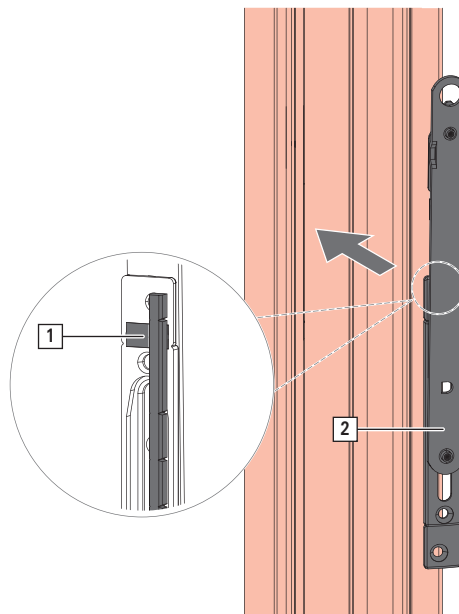
8.9.6.3 Frame component

1. Break the packer [1] apart in the centre.
2. Push the tilt stay [2] onto the packer.

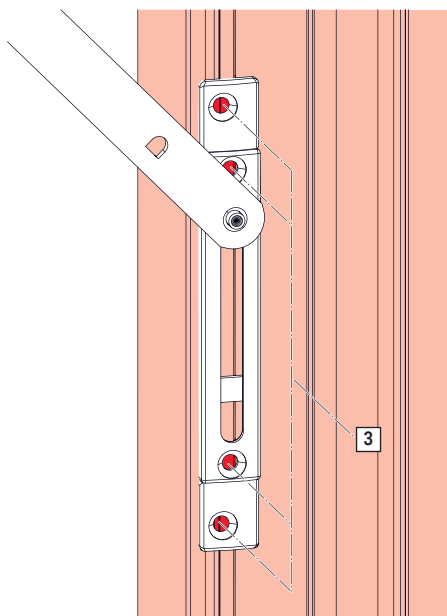


INFO

With a smooth rebate, no packers are required.

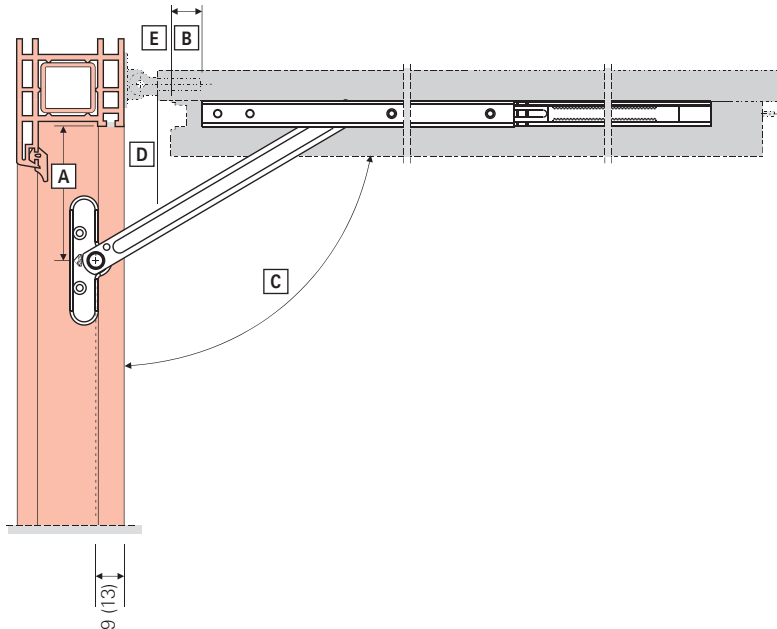


3. Position the tilt stay in the rebate.
4. Secure with four screws [3].



8.9.7 Arrestable brake stay

8.9.7.1 Installation dimensions



Assignment	Meaning
[A]	Frame dimensions
[B]	Sash dimensions
[C]	Opening angle 90°
[D]	Overlap edge
[E]	Sash rebate edge



INFO

Only the sash lifter and not the lifting mishandling device can be used in conjunction with the arrestable brake stay.

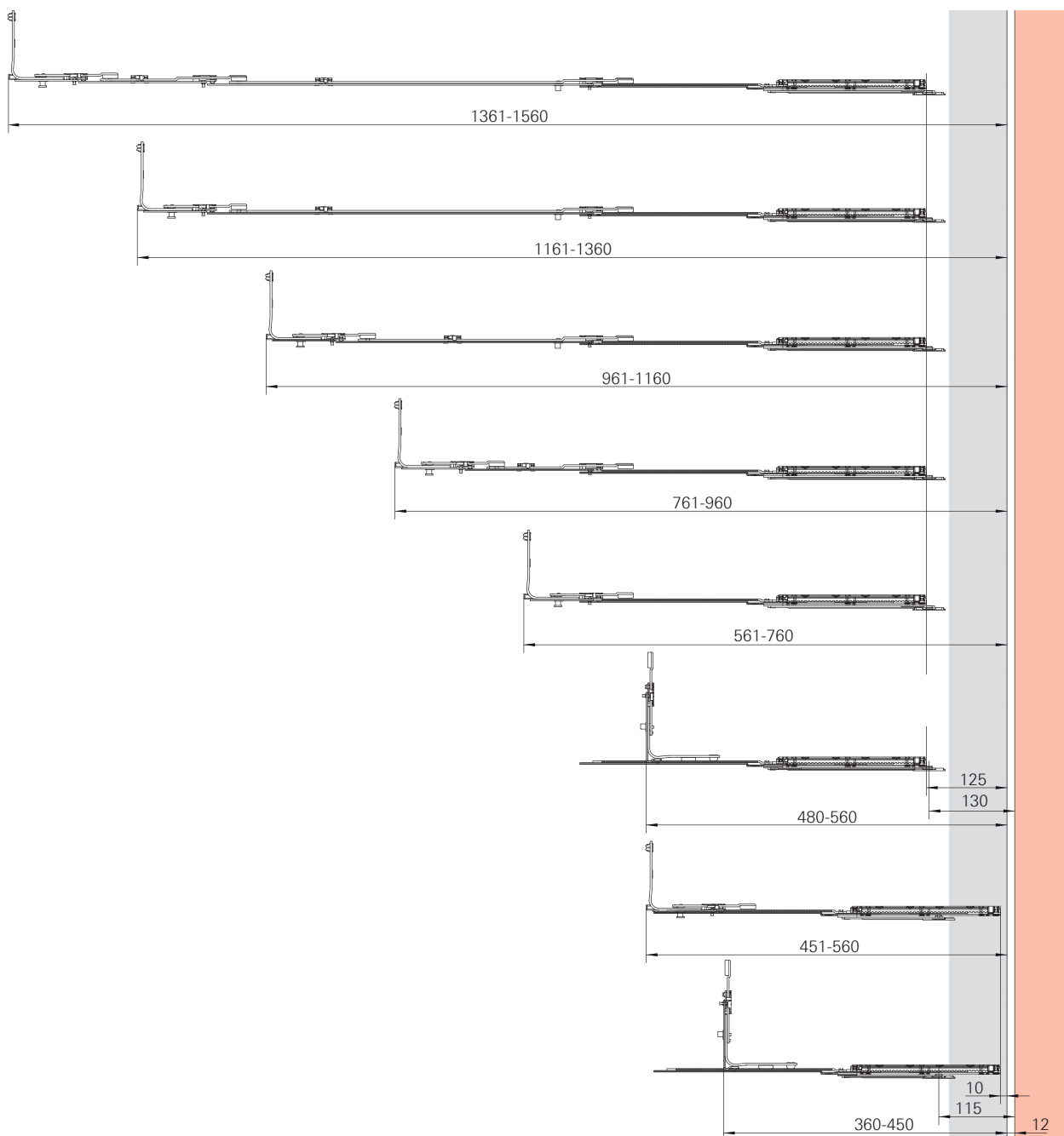


8.9.7.2 Application range 360 - 1560 mm



INFO

Check the suitability of the hinges used on a case-by-case basis depending on the available space.



Application range	Corner drive	Centre lock	Arrestable brake stay	Arm	Frame dimension	Sash dimension
360 - 450 [5][6]	Special corner drive	—	486820	486821	115	10
451 - 560 [7]	T&T corner drive – standard	—	486820	486821	115	10
480 - 560	Special corner drive	—	486820	492757	130	125
561 - 760	T&T corner drive – standard	—	486820	492757	130	125

[5] Only in conjunction with frame component with reduced installation height. Only in conjunction with hinges that are not screwed into the horizontal sash groove.

[6] Turn-Only sash only

[7] Only in conjunction with frame component with reduced installation height. Only in conjunction with hinges that are not screwed into the horizontal sash groove.

Application range	Corner drive	Centre lock	Arrestable brake stay	Arm	Frame dimension	Sash dimension
761 - 960	T&T corner drive – standard	CL 200 KU	486820	492757	130	125
961 - 1160	T&T corner drive – standard	CL 400 KU	486820	492757	130	125
1161 - 1360	T&T corner drive – standard	CL 600 KU	486820	492757	130	125
1361 - 1560	T&T corner drive – standard	CL 200 KU CL 600 KU	486820	492757	130	125

8.9.7.3 Sash component

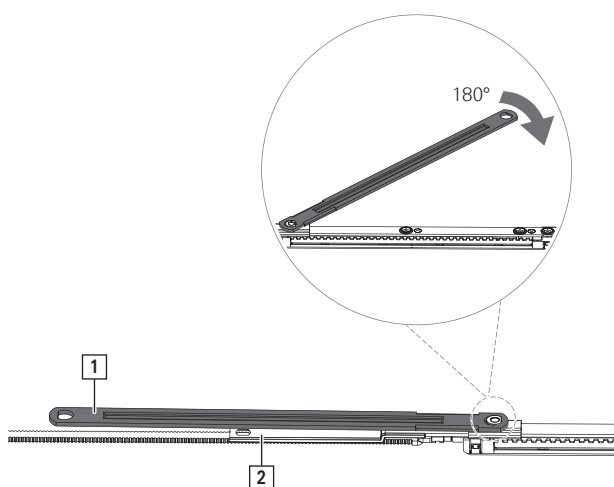


INFO

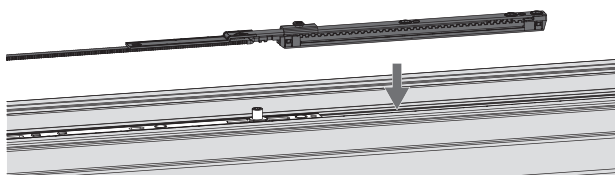
Only the sash lifter and not the lifting mishandling device can be used in conjunction with the arrestable brake stay.

1. Place the scissor stay arm [1] on the arrestable brake stay [2].

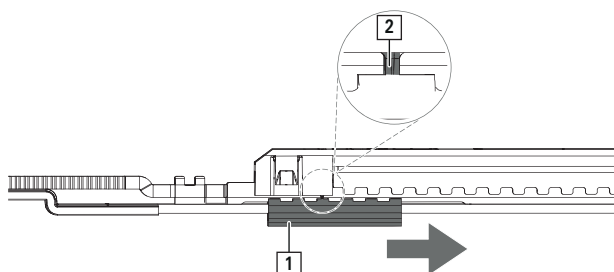
Turn the arm 180°. The arm is fixed in position.



2. Position the arrestable brake stay on the sash and connect it to the centre lock or corner drive. For dimensions, see → from page 312.



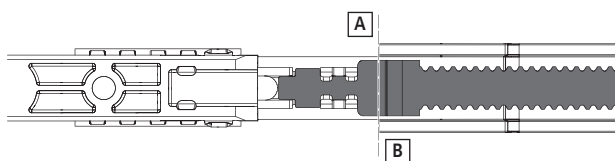
3. Move the slider [1] in jerks to move the assembly fixture out of the final position. While doing so, strike the cam [2].



4. Once the centre fixing is undone, the centre position of the push rod can be adjusted by moving the bend of the push rod to the position of the punching on the floating mullion.

[A] Punching on the floating mullion

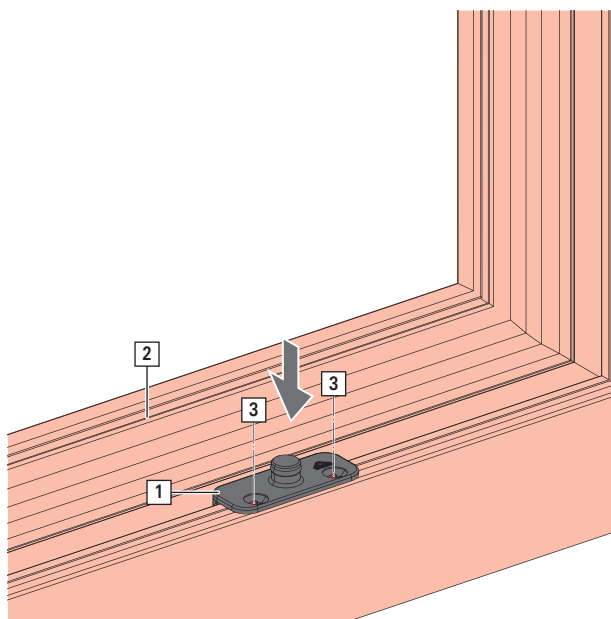
[B] Bend of the push rod





8.9.7.4 Frame component

1. Position the frame component [1] in the frame groove [2].

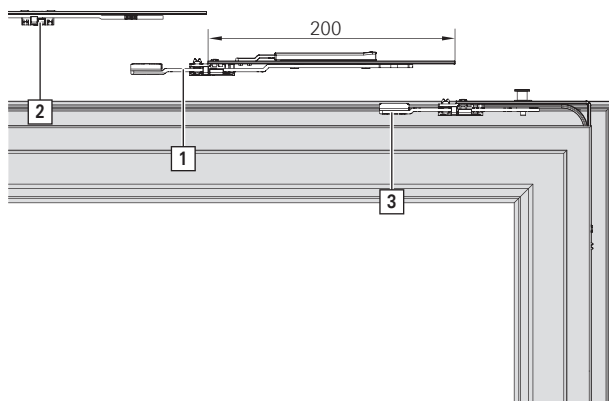


2. Fasten with two screws [3].

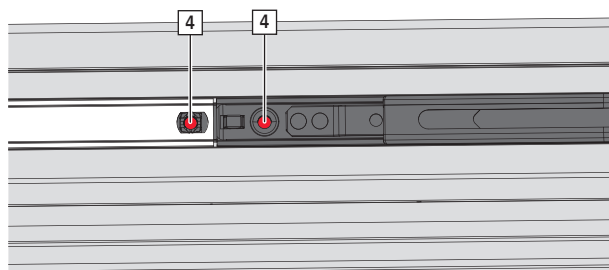
8.9.8 Additional stay arm

8.9.8.1 Sash component

1. Connect the additional stay arm sash component [1] to the corner drive [3]. Creating a force-fit connection → *from page 225*



2. Fit the stay guide [2].
3. Secure with two screws [4].





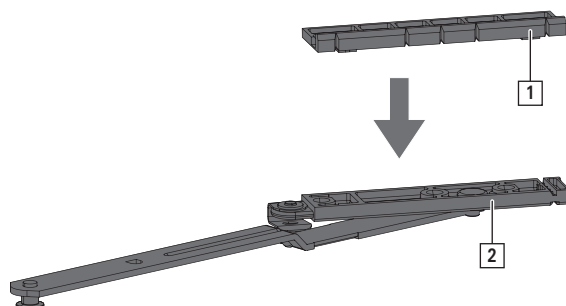
8.9.8.2 Frame component

1. Push the packer [1] into the frame component [2].
Ensure that it is firmly seated.

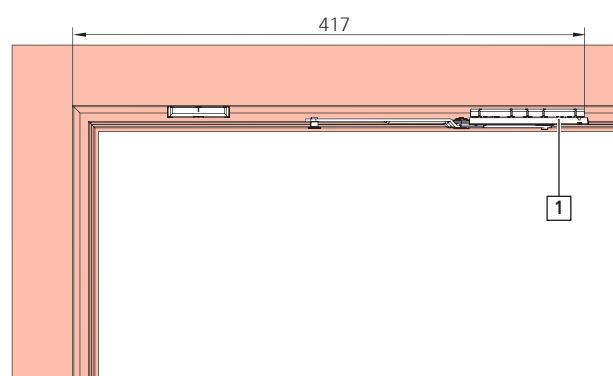


INFO

With a smooth rebate, no packers are required.



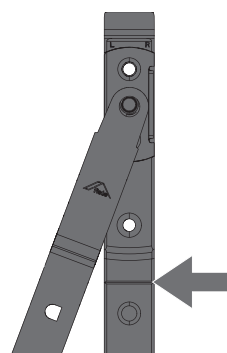
2. Insert the frame component with packer [1] into the frame profile.
The distance between the frame rebate and frame component is 417 mm.



3. Secure with three screws.

Additional stay arm for arched windows

1. Break the frame component at the notch.



2. Insert the frame component into the frame profile.
3. Secure with three screws.

8.10 Joining the sash and frame



WARNING

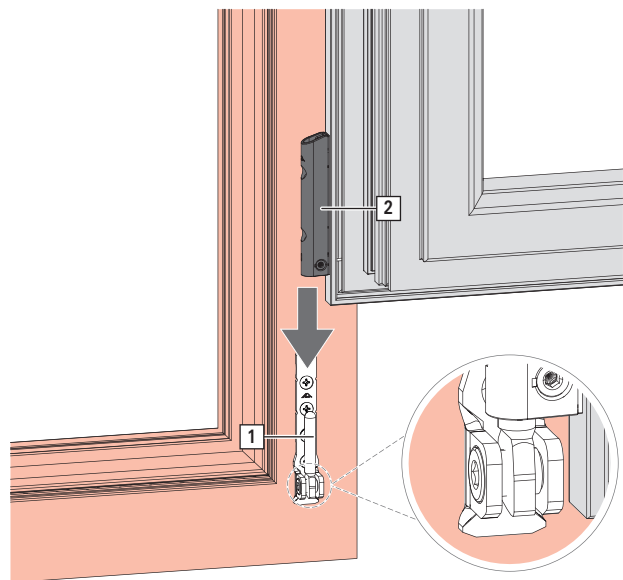
Heavy loads pose the risk of injury and property damage.

Lifting and carrying heavy loads in an uncontrolled manner may lead to physical injury and property damage.

- ▶ Transport and installation must be carried out by at least two people.
- ▶ Use transportation means. → 13 "Transport" from page 343

8.10.1 Connecting the corner hinge to the pivot rest

1. Handle in turn position.
2. With the sash slightly tilted inwards, guide it along the frame in a downwards direction until you feel the pivot-rest pin [1] engage in the corner hinge [2].



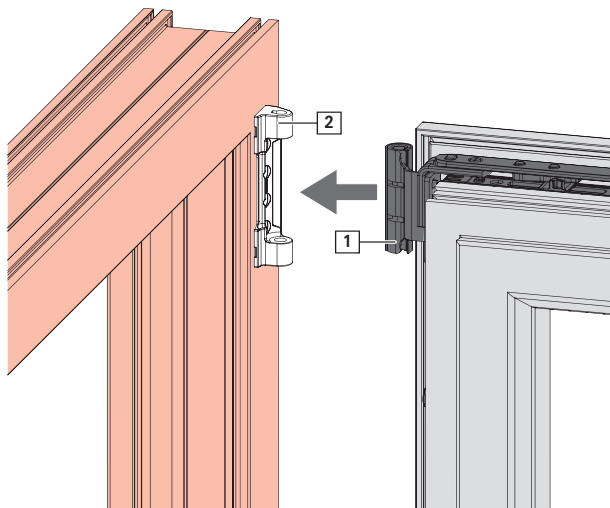
INFO

The frame grooves and sash grooves, as well as the components installed in them, must be free from construction materials.



8.10.2 Connecting the stay hinge to the stay bearing

1. Insert the sash with stay hinge [1] into the stay bearing [2].



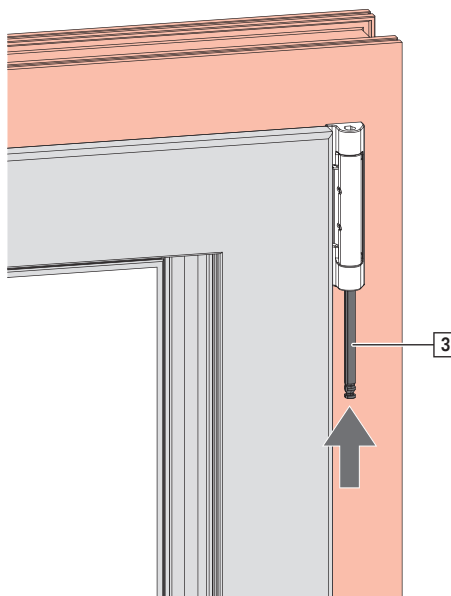
Installing the stay-bearing pin

1. Close the sash.
2. Fully insert the stay-bearing pin [3] into the stay bearing from below.



INFO

Do not hit in the stay-bearing pin using a hammer.



WARNING

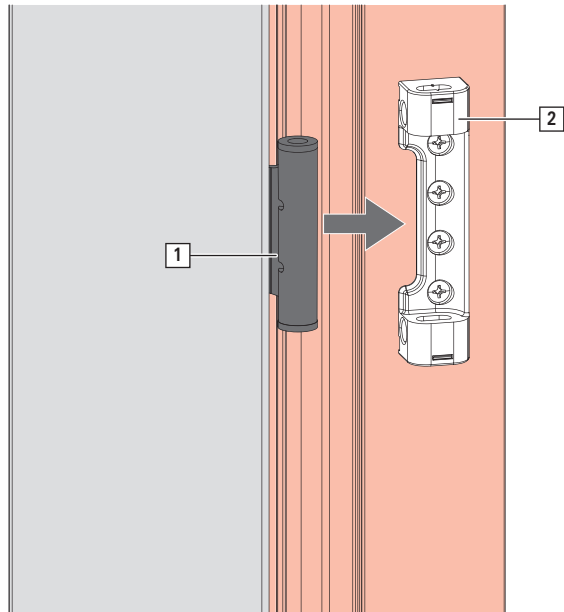
An unsecured sash may pose a risk of death!

The sash may fall if the stay-bearing pin joining the stay bearing and the stay hinge is not secure.

- Install the correct stay-bearing pin (for the assignment, see the corresponding hardware overview → *from page 40*).
-

8.10.3 Arch – connecting the stay hinge to the stay bearing

1. Insert the sash with stay hinge [1] into the stay bearing [2].



Installing the pin

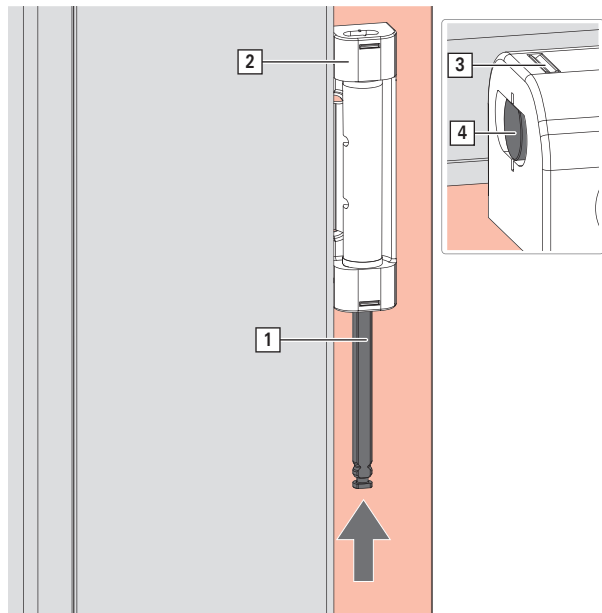
1. Close the sash.
2. Fully insert the stay-bearing pin [1] into the stay bearing [2].
The stay-bearing pin is installed correctly when the locking element [3] (position on the stay-bearing pin head [4]) is flush with the stay bearing again and the stay-bearing pin is flush with the stay bearing.

**INFO**

The lower locking element must be flush with the bearing.

**INFO**

Do not hit in the pin using a hammer.

**WARNING****An unsecured sash may pose a risk of death!**

The sash may fall if the stay-bearing pin joining the stay bearing and the stay hinge is not secure.

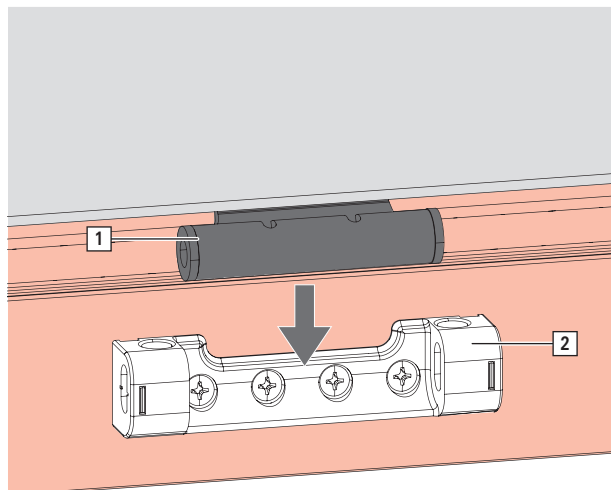
- Install the correct stay-bearing pin (for the assignment, see the corresponding hardware overview → from page 40).
-



8.10.4 Turn-Only / Tilt-Only rebate hinge

Stay bearing, adjustable

1. Insert the sash with stay hinge [1] between the stay bearings [2].



Installing the pin

1. Tilt the sash shut but do not lock it.
2. Fully insert the stay-bearing pin [1] into the stay bearing [2].
The stay-bearing pin is installed correctly when the locking element [3] (position on the stay-bearing pin head [4]) is flush with the stay bearing again and the stay-bearing pin is flush with the stay bearing.



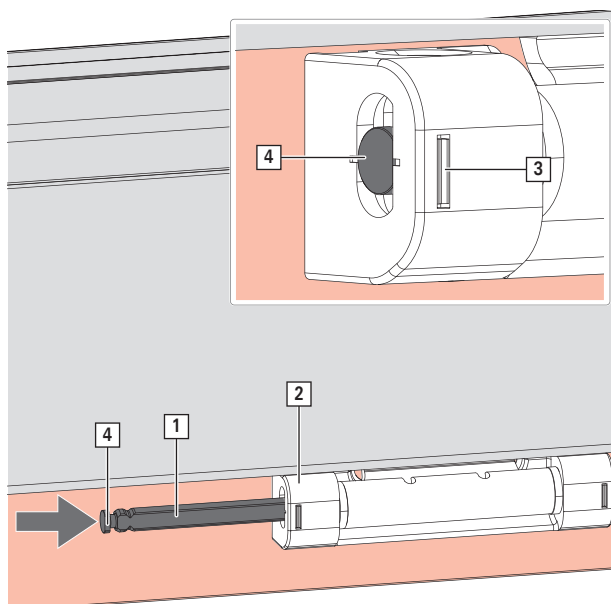
INFO

Only the locking element with the pin inserted into its side has to be flush with the bearing.

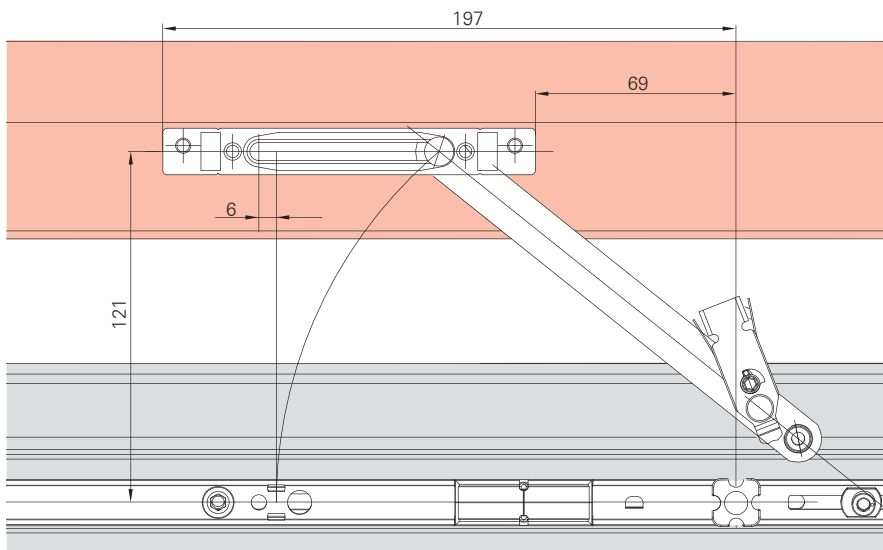


INFO

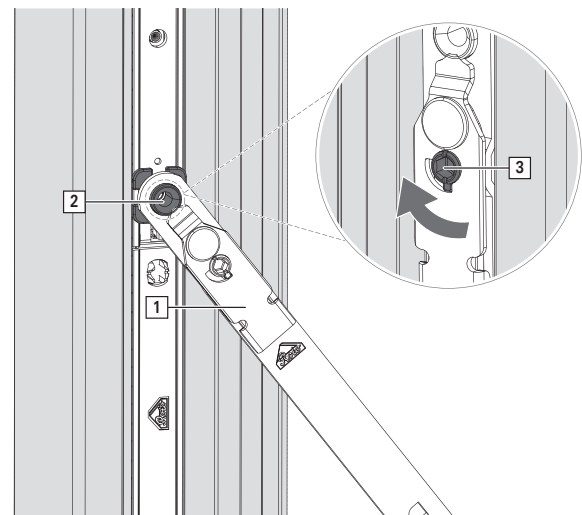
Do not hit in the pin using a hammer.



8.10.5 Tilt stay



1. Mount the tilt stay frame component [1] in the sash component [2].

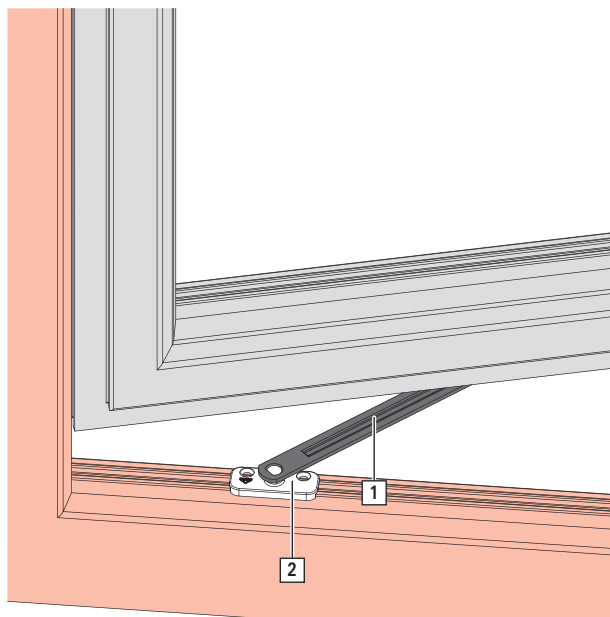


2. Turn the locking screw [3] 90° to lock the mounting mechanism.



8.10.6 Arrestable brake stay

1. Mount the scissor stay arm [1] in the frame component [2].



8.10.7 Covers

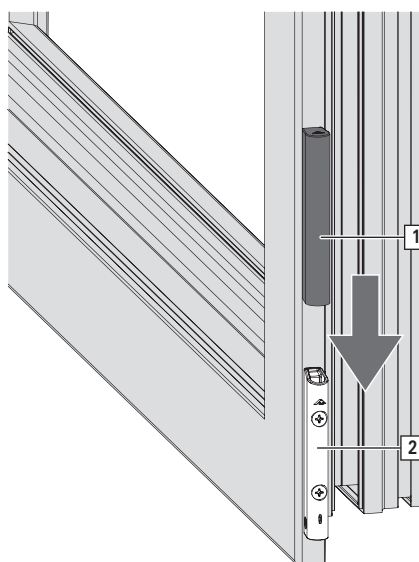
8.10.7.1 Corner hinge cover



INFO

Carry out the necessary adjustments before installing the cover cap → *from page 327*.

1. Slide the corner hinge cover cap [1] onto the corner hinge [2] as far as it will go.



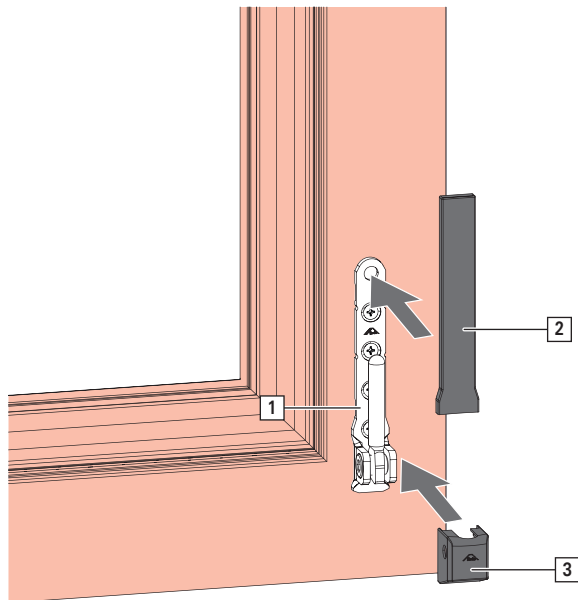
8.10.7.2 Pivot rest cover



INFO

Carry out the necessary adjustments before installing the cover cap → *from page 327*.

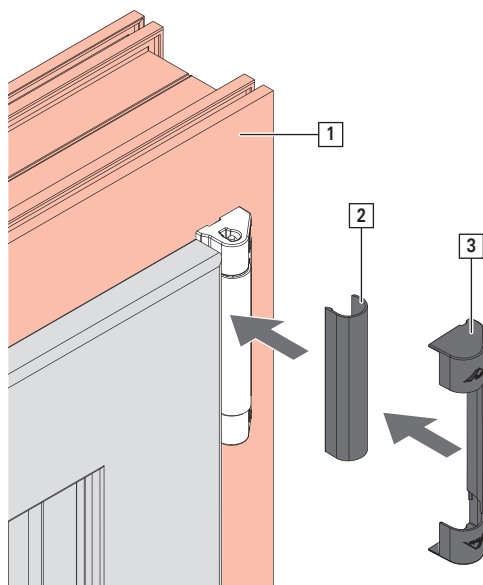
1. Secure the corner hinge cover cap [2] to the corner hinge [1].



2. Attach the pivot rest cover [3] to the front of the pivot rest.

8.10.7.3 Stay bearing cover

1. Secure the cover cap [2] to the sash stay [1].



2. Secure the cover cap [3] to the stay bearing.



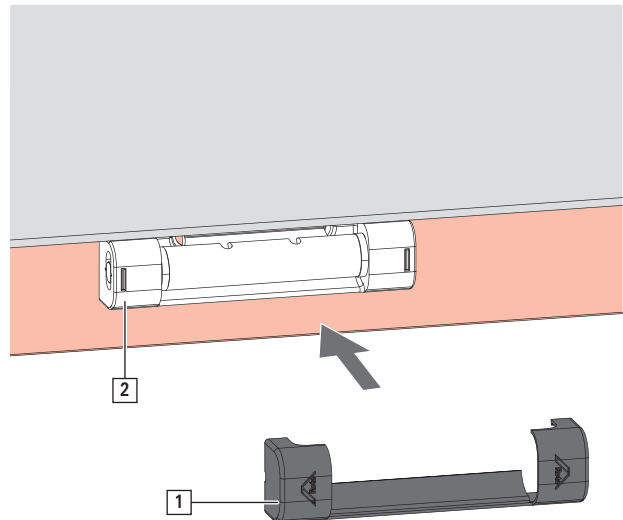
8.10.7.4 Cover for stay bearing, adjustable



INFO

Carry out the necessary adjustments before installing the cover cap → *from page 327*.

1. Clip the cover cap [1] onto the stay bearing, adjustable [2].
Shown using a Tilt-Only sash as an example.



9 Adjustment



INFO

Roto hardware components may only be adjusted by authorised professionals when the element is installed.

9.1 Locking cam

E cam

E cam	Adjustment distance	Gasket compression adjustment [mm]	Height	Side view
		±0.8 mm		

P cam

P cam	Adjustment distance	Gasket compression adjustment [mm]	Height	Side view
		±0.8 mm		



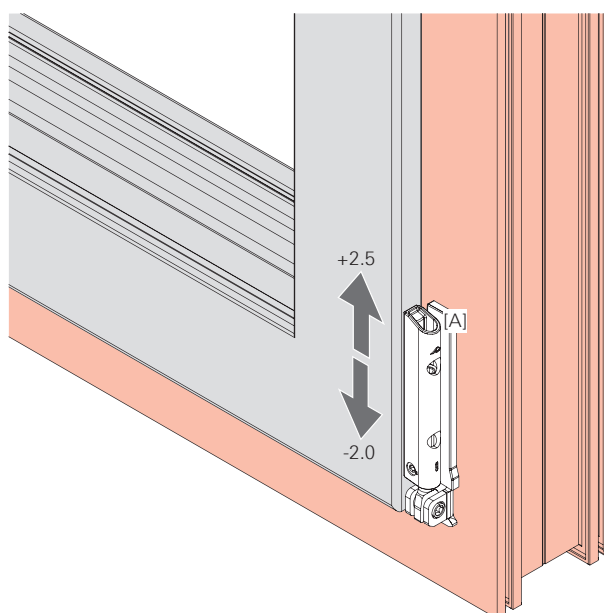
V cam

V cam	Adjustment distance	Gasket compression adjustment [mm]	Height adjustment [mm]	Side view
			+1.5 mm -0.8 mm	
	90°	±0.8 mm	±0.125 mm	<p>[1] 0 = initial position [2] -0.8 mm max. adjustment [3] +1.5 mm max. adjustment</p>
	180°		±0.25 mm	
	270°	±0.8 mm	±0.375 mm	
	360°		±0.5 mm	

9.2 Pivot rest and corner hinge

Height adjustment

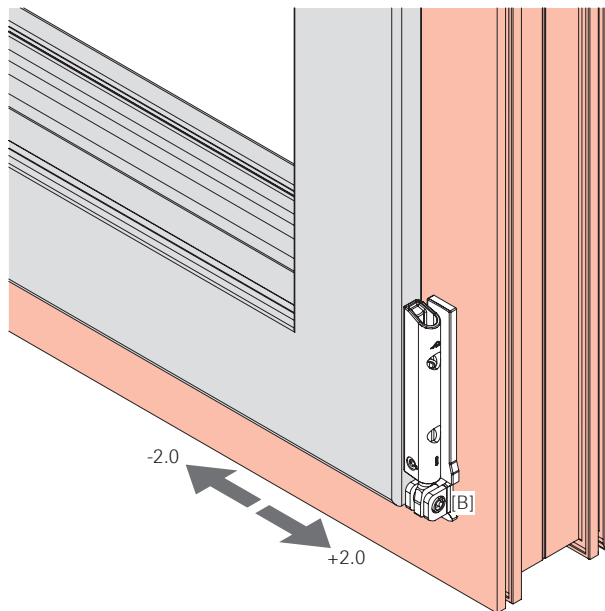
1. Remove the cover cap.
Move the handle to the turn position.
2. Height adjustment -2.0 / +2.5 mm via screw [A] in the corner hinge.
Tool: hex key WAF 4.



3. Fit the cover cap.

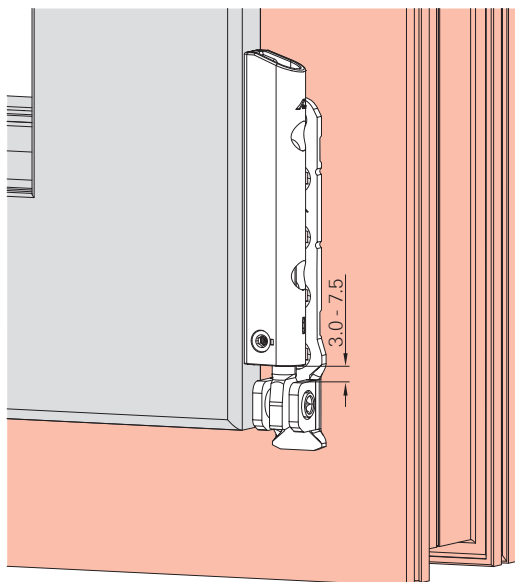
Lateral adjustment

1. Move the handle to the turn position.
2. Lateral adjustment ± 2.0 mm via screw [B] in the pivot rest.
Tool: hex key WAF 4.



Reference dimension

The height of the corner hinge can still be adapted (3.0 - 7.5 mm) even if the corner hinge has already been adjusted (-2.0 / +2.5 mm).

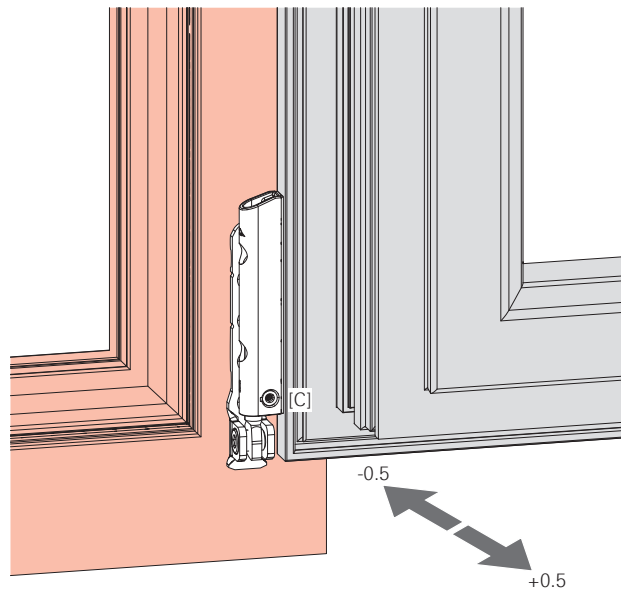


Gasket compression adjustment

1. Open the sash 180°.



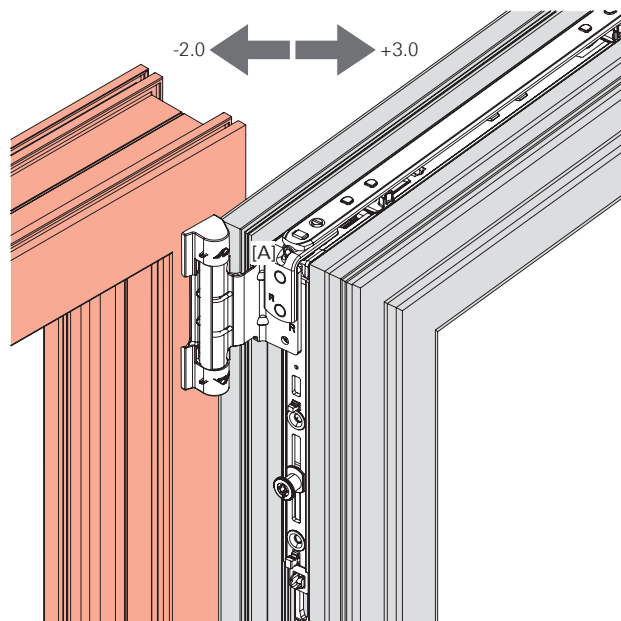
2. Lateral adjustment ± 0.5 mm via eccentric [C] in the corner hinge.
Tool: hex key WAF 2.5.



9.3 Sash stay

Lateral adjustment

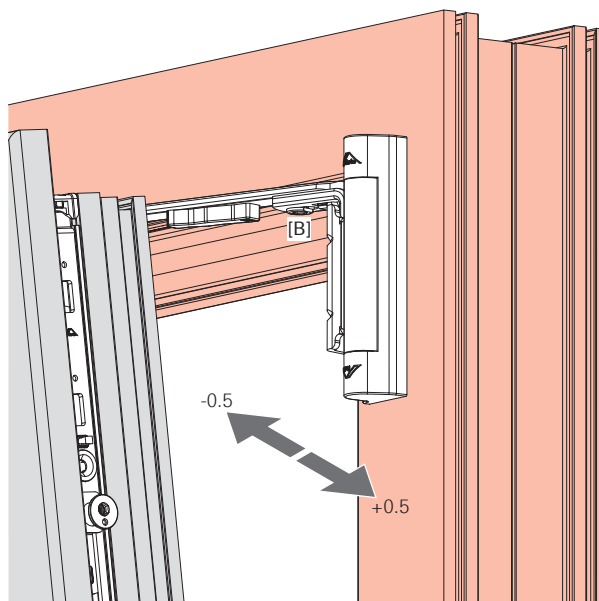
1. Open the sash.
2. Lateral adjustment $-2.0 / +3.0$ mm via screw [A] in the sash stay.
Tool: hex key WAF 4.



Gasket compression adjustment

1. Move the sash to the tilt position.
2. Open the sash.
Press down on the lifting mishandling device.
Move the handle to the tilt position.
Under normal circumstances, this constitutes incorrect operation of the hardware, but it is a necessary step in this case.

3. Gasket compression adjustment ± 0.5 mm via eccentric [B] in the sash stay.
Tool: hex key WAF 4.



9.4 Stay bearing, adjustable

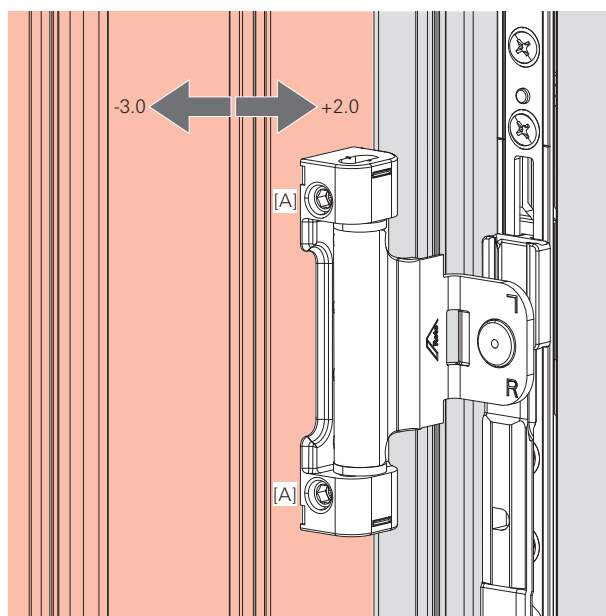
Lateral adjustment

1. Open the sash.
2. Lateral adjustment -3.0 / +2.0 mm via screws in the stay bearing [A].
Tool: hex key size 4.



INFO

Ensure that the adjustment is equal.





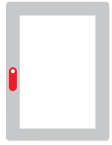
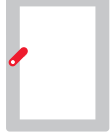
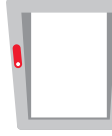
10 Operation

10.1 Operating information

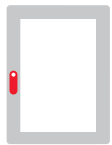
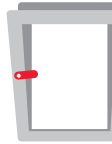
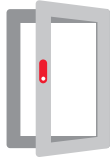
The windows and balcony doors are operated using a handle.

The following symbols illustrate the different handle positions and the resultant sash positions of the windows and balcony doors.

10.1.1 Handle position with Tilt&Turn hardware

Handle position	Sash position	Meaning
		Sash in closed position.
		Sash in turned, open position.
		Sash in night ventilation position.
		Sash in tilted, open position.

10.1.2 Handle position with TiltFirst hardware

Handle position	Sash position	Meaning
		Sash in closed position.
		Sash in tilted, open position.
		Sash in turned, open position.

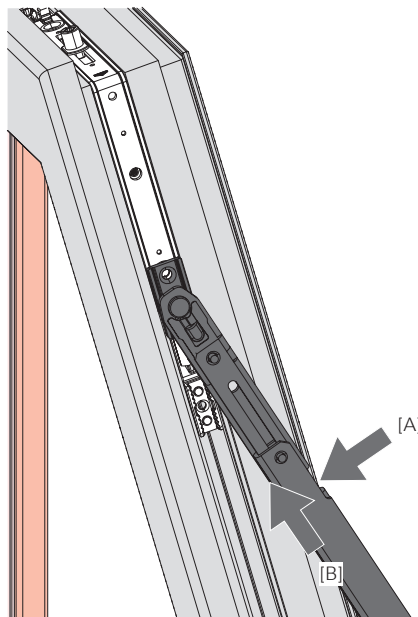
10.1.3 Handle position for arrestable brake stay

Handle position	Sash position	Meaning
		Sash in closed position.
		Sash in turned, open position.
		Sash in fixed position.
		Release the fixed position.
		Sash in turned, open position.



10.1.4 Restrictor and cleaning stay

1. Move the window to the tilt position.
2. Unhinge the tilt stay or other tilt distance restrictors.
3. Move the window to the restrictor position.
4. Push the lock-in position [A] against the restrictor and cleaning stay and move the sash to the cleaning position [B].



5. After cleaning, move the window to the tilt position and remount the tilt stay or other tilt distance restrictors.

10.2 Second opening sash



ATTENTION

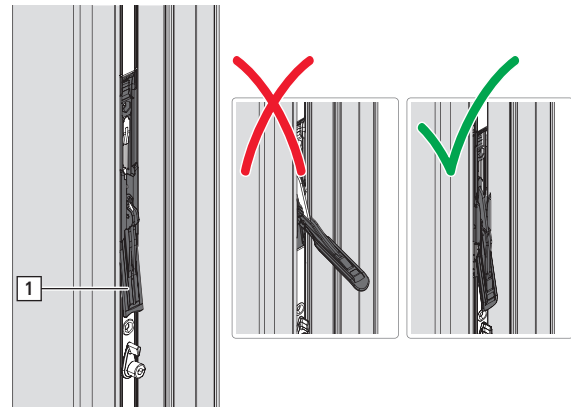
Property damage due to operating lever not being opened fully!

If the operating lever is not opened fully, it protrudes into the window's opening area and may cause damage to the first and second opening sashes.

- ▶ Always open the operating lever fully.
- ▶ Always close the operating lever fully.

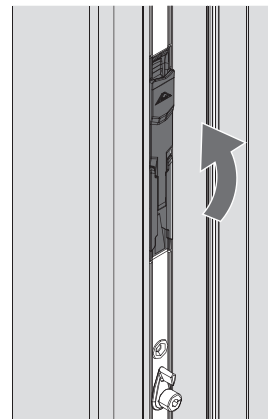
Opening

1. Guide the operating lever [1] down fully as far as it will go.



Closing

1. Place the second opening sash fully on the frame.
2. Guide the operating lever up until it is flush on the floating mullion.



10.3 Fault assistance

Fault	Cause	Corrective action	To be carried out by
Handle is difficult to turn.	Frame components have not been greased.	Grease the frame components.	☐
	Handle is damaged.	Replace the handle.	■
	Handle screwed into place too tightly.	Undo the screw fixing slightly.	■
	Sash components with slanting screws.	Screw the sash components in straight.	■
	Sash components are damaged.	Replace the sash components.	■
	Incorrect striker positions.	Adapt the striker positions.	■
	Sash stay gasket compression is too strong (accumulation of gaskets).	Adjust the sash stay gasket compression or clean the gasket.	■
Handle cannot be turned 180°.	Sash components hinged or installed incorrectly.	Check the setting in the turn position (potentially rehang – start from the T&T espagnolette).	■
Sash falls into the tilt position when in the turn position.	Excessive clearance at the top.	Check the fit of the corner hinge.	■
		Check the fit of the pivot rest.	■
		Adjust the corner hinge so that it is positioned higher (pay attention to the tilt striker).	■
Sash falls into the turn position when in the tilt position.	Tilt striker damaged.	Replace the tilt striker.	■
Sash scrapes in the tilt position.	Insufficient clearance at the top.	Lower the corner hinge (pay attention to the tilt striker).	■



Fault	Cause	Corrective action	To be carried out by
Locking cam is rubbing against the striker.	Sash mounted incorrectly.	Rehang the sash.	■
	Incorrect striker position.	Adapt the striker position.	■

□ = May be carried out by a specialist company or the end user

■ = **Must** be carried out by a specialist company

11 Maintenance



CAUTION

Performing maintenance work incorrectly can lead to injuries.

Performing maintenance incorrectly can lead to injuries.

- ▶ Ensure that there is sufficient space for installation before starting work.
- ▶ Ensure that the installation site is clean and tidy.
- ▶ Always have hardware adjustment and replacement work performed by a specialist company.
- ▶ Secure the sash against unintentionally opening or closing.
- ▶ Do not unhinge the sash for maintenance.



ATTENTION

Incorrect or improper testing may cause property damage.

Incorrect or improper testing of the hardware may cause the element to malfunction.

- ▶ Have the hardware checked by a specialist company when installed.
- ▶ If defects need to be remedied, have the element unhinged and remounted by a specialist company.



INFO

The manufacturer must draw the attention of builders and end consumers to these maintenance instructions.

Roto Frank Fenster- und Türtechnologie GmbH recommends the manufacturer conclude a maintenance agreement with their end users.

No legal claims can be derived from the following recommendations; their application is to be based on the specific individual case.

	Responsibility	
Maintenance interval	☐	→ from page 336
Cleaning		→ from page 337
Clean hardware	☐	
Care		→ from page 337
Lubricate movable parts	☐	
Lubricate locking points	☐	
Performance test		→ from page 339
Check that hardware components are fitted securely	☐	
Inspect hardware components for wear	☐	
Check that movable parts work properly	☐	
Check that locking points work properly	☐	
Check ease of movement	■	
Repair		→ from page 339
Retighten screws	■	
Replace damaged components	■	

☐ = May be carried out by a specialist company or the end user

■ = **Must** be carried out by a specialist company

11.1 Maintenance intervals



ATTENTION

Failure to adhere to maintenance intervals may cause property damage.

The maintenance interval for all tasks relating to the hardware components is **annually** at the least. In hospitals, schools and hotels, the maintenance interval is **six-monthly**.

Regular maintenance is necessary in order to maintain the proper and smooth-running operation of the hardware and to prevent premature wear or even defects.

- ▶ Determine and adhere to the appropriate maintenance interval in accordance with the ambient conditions.



11.2 Cleaning



ATTENTION

Using incorrect cleaning agents and sealing compounds may cause property damage.

Cleaning agents and sealing compounds may damage the surfaces of components and gaskets.

- ▶ Do not use aggressive or flammable liquids, acidic cleaners or abrasive cleaners.
- ▶ Only use mild, pH-neutral cleaning agents that have been diluted.
- ▶ Apply a thin protective film to the components, for example using a cloth soaked in oil.
- ▶ Avoid aggressive vapours (e.g. produced by formic acid, acetic acid, ammonia, amine compounds, ammonia compounds, aldehyde, carboic acid, chlorine, tannic acid) around the element.
- ▶ Do not use any acetic acid-crosslinking or acid-crosslinking sealing compounds or those with the aforementioned constituents as both direct contact with the sealing compound and its fumes can corrode the surface of the components.

Cleaning the hardware

- ▶ Clean deposits and contaminants off the hardware using a soft cloth.
- ▶ Lubricate movable parts and locking points after cleaning. → 11.3 "Care" from page 337
- ▶ Apply a thin protective film to the hardware, for example using a cloth soaked in oil.

11.3 Care



ATTENTION

Using incorrect lubricants may cause property damage.

Substandard lubricants can prevent the hardware from working properly.

- ▶ Use high-quality lubricants.
- ▶ Only use resin-free and acid-free lubricants.
- ▶ Use appropriate lubricant in more challenging climatic conditions. Note the manufacturer specifications.



ATTENTION

Cleaning agents and lubricants may pollute the environment.

Leaking or excess cleaning agents and lubricants may pollute the environment.

- ▶ Remove any leaking or excess cleaning agents and lubricants.
- ▶ Dispose of cleaning agents and lubricants separately and properly.
- ▶ Observe the applicable directives and national laws.

Ease of movement can be improved by lubricating or adjusting the hardware. All functional hardware components must be lubricated on a regular basis.

Recommended lubricants

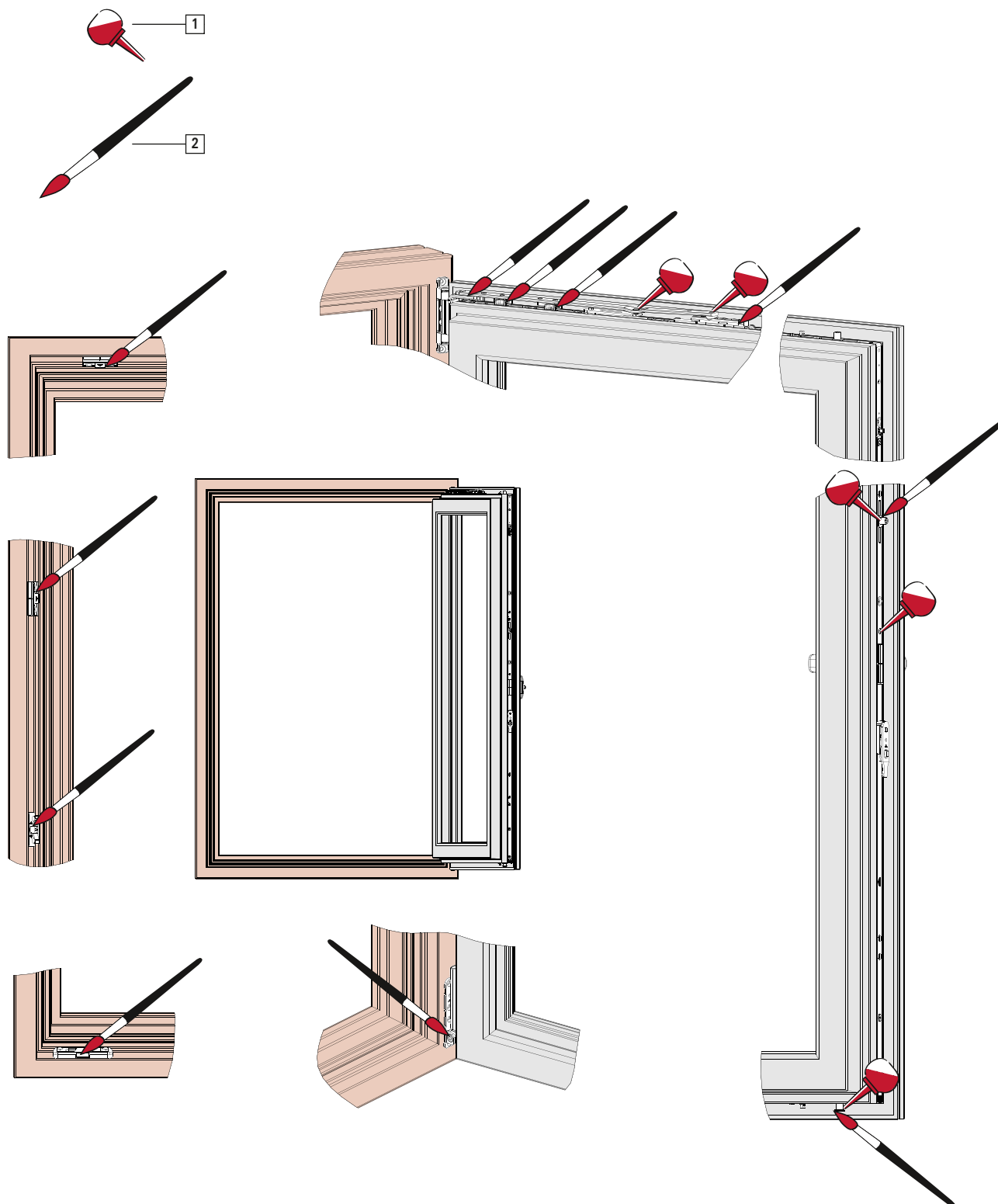
- Roto NX / NT grease



INFO

The figure displays the positioning of potential lubrication points. The figure does not necessarily match the installed hardware. The quantity of lubrication points varies depending on the size and design of the element.

11.3.1 Lubrication points



[1] Oil

[2] Grease



11.4 Performance test



WARNING

Improper repair work may pose a risk of death!

Improper maintenance may prevent the element from working properly and make it less safe to use.

- ▶ Always have repairs performed by a specialist company.

Check for proper operation:

- ▶ Inspect hardware components for damage, deformation and a firm fit.
- ▶ Check that windows or balcony doors run smoothly by opening and closing them.
- ▶ Check the window or balcony door gaskets for elasticity and fit.
- ▶ Check closed windows or balcony doors to ensure that they are leakproof.
- ▶ Locking and unlocking torque max. 10 Nm. The test can be performed using a torque wrench.

Have malfunctions remedied by a specialist company.

11.5 Repair



WARNING

Improper repair work may pose a risk of death!

Improper maintenance may prevent the element from working properly and make it less safe to use.

- ▶ Always have repairs performed by a specialist company.



ATTENTION

Improper screw fixings may cause property damage.

Loose or faulty screws can prevent the hardware from working properly.

- ▶ Check that the individual screws are secure and seated correctly.
- ▶ Tighten or replace loose or faulty screws.
- ▶ Use only the suggested screws.

Repair work includes replacing and repairing components and is only necessary if components have become damaged after wear or as a result of external circumstances. The hardware must be secured reliably in order to ensure that the element works properly and is safe to use.

The following tasks must only be performed by a specialist company:

- All adjustment work on the hardware,
- Replacing hardware or hardware components,
- Installing and removing windows, doors or balcony doors

The specialist company must observe the following:

- Perform the necessary repair work properly, according to generally recognised engineering practice and in accordance with the applicable regulations.
- Do not perform makeshift repairs on worn or damaged components.
- Only use original or approved spare parts for repairs.

12 Dismantling



WARNING

Improper dismantling may pose a risk of death!

The sash may fall during dismantling.

- ▶ Secure the sash to prevent it from falling, e.g. by using two people.
- ▶ Always have dismantling work performed by a specialist company.



CAUTION

Physical strain may cause injury and damage to health.

Carrying and lifting heavy loads for extended periods leads to physical injury in the long term.

- ▶ When carrying or lifting loads, maintain an ergonomically correct posture. The maximum permissible load is 25 kg for men and 10 kg for women.



INFO

Unless otherwise stated, dismantling is performed in reverse order to installation.

12.1 Sash



WARNING

Heavy loads pose the risk of injury and property damage.

Lifting and carrying heavy loads in an uncontrolled manner may lead to physical injury and property damage.

- ▶ Transport and removal must be carried out by at least two people.
- ▶ Use transportation means. → 13 "Transport" from page 343

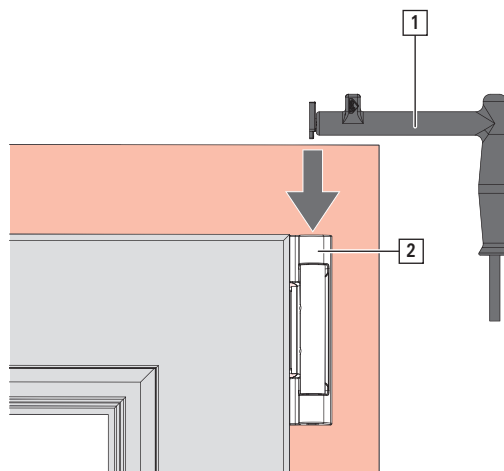
Unhinging the sash

1. Close the window.
2. Use the pulling tool [1] to gently push the stay-bearing pin [2] downwards from above.



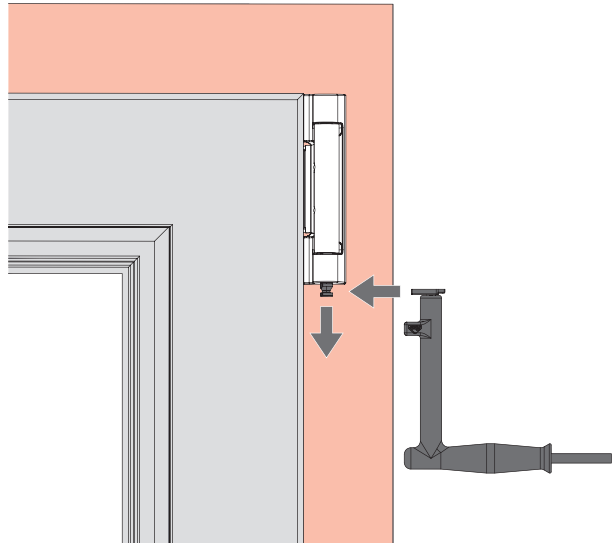
INFO

Secure the sash to prevent it from falling.





3. Place the pulling tool against the stay-bearing pin and remove the stay-bearing pin by pulling it vertically downwards.



4. Lift and unhinge the sash.

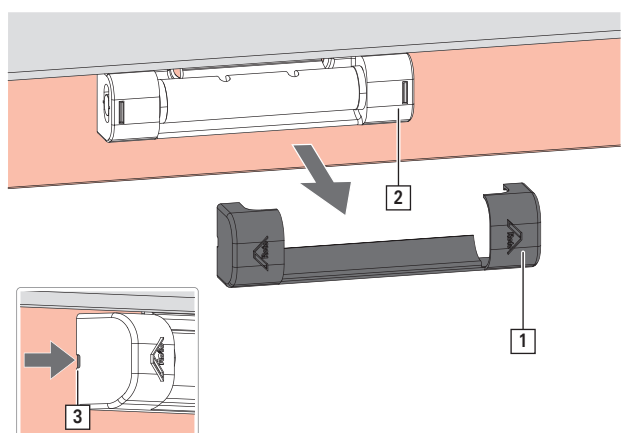
12.2 Hardware components

Removing hardware components

1. Undo all screw connections.
2. Remove the hardware components.
3. Dispose of the hardware components properly.

12.3 Stay bearing cover cap, adjustable

1. Remove the cover cap [1] from the stay bearing [2].
If this is proving difficult, insert a tool (e.g. screwdriver) into the dismantling slot [3] and jemmy the cover cap.
Shown using a Tilt-Only sash as an example.



12.4 Stay bearing, adjustable



WARNING

Heavy loads pose the risk of injury and property damage.

Lifting and carrying heavy loads in an uncontrolled manner may lead to physical injury and property damage.

- ▶ Transport and removal must be carried out by at least two people.
- ▶ Use transportation means. → 13 "Transport" from page 343

Removing the stay-bearing pin

1. Arch

Turn the window shut but do not lock it.

Tilt-Only sash

Tilt the window shut but do not lock it.

2. Push the locking element [1] in using a tool (e.g. screwdriver) while pushing the stay-bearing pin [2] out by approx. 4 mm at the stay-bearing pin point [3] using an extractor handle.

Shown using a Tilt-Only sash as an example.



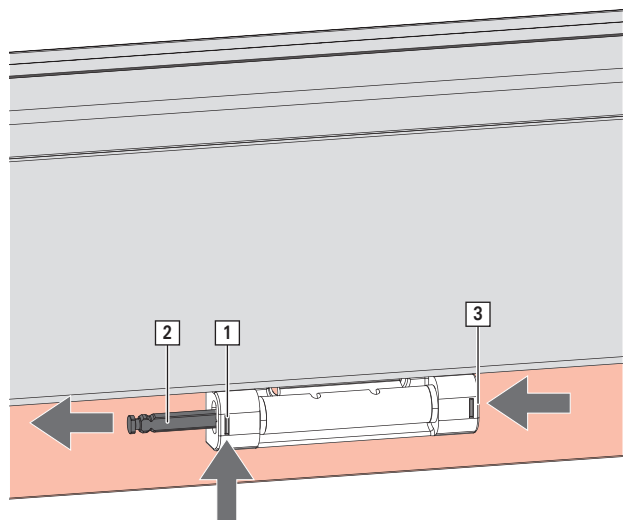
INFO

Secure the sash to prevent it from falling.



INFO

Do not hit out the pin using a hammer.



3. Fully pull out the stay-bearing pin using an extractor handle.
4. Lift and unhinge the sash.



13 Transport

13.1 Transporting elements and hardware



DANGER

Improper transport poses a risk of death!

Improper procedures for transporting, loading or unloading elements may cause serious injuries and glass breakage as a result of the elements swinging open, falling or becoming overloaded.

- ▶ Note the applicable accident prevention regulations.
- ▶ Note force application points and reaction forces.
- ▶ Prevent the sash from opening uncontrollably.
- ▶ Avoid jerky movements.
- ▶ Use suitable transportation means and protective devices.
- ▶ Watch out for protruding components.
- ▶ Transport heavy loads with two people and use suitable transportation means (such as an industrial truck).



CAUTION

Trapped limbs may result in injuries.

The transported goods can skid, open, close or fall during transportation tasks. This can result in limbs being trapped and seriously injured.

- ▶ Never reach near the scissor stays.
- ▶ Close the sash after installation and secure it in place for transport.
- ▶ Wear safety gloves and protective footwear.



CAUTION

Physical strain may cause injury and damage to health.

Carrying and lifting heavy loads for extended periods leads to physical injury in the long term.

- ▶ When carrying or lifting loads, maintain an ergonomically correct posture. The maximum permissible load is 25 kg for men and 10 kg for women.

Hardware is supplied to the specialist company as complete sets. The components are packaged accordingly for each scope of delivery. The instructions for safely transporting the hardware are described below.

Observe the following basic instructions when transporting hardware:

- ▶ Transport larger scopes of delivery using appropriate transportation means (such as industrial trucks).
- ▶ Note the transport weight in order to select appropriate transportation means.
- ▶ Ensure that the transport process is careful and appropriate for the material and that components are protected against dirt during transport.
- ▶ Immediately check the delivery for completeness and transport damage on receipt.



INFO

Submit a complaint about any defects as soon as they are identified. Claims for damages may only be made within the reclamation period.

Use the following transportation means for support when transporting, loading and unloading larger scopes of delivery:

- Industrial trucks, e.g. forklifts, telescopic handlers, pallet trucks
- Lifting equipment, e.g. transport nets, carry straps, round slings
- Protective devices, e.g. edge protection, spacer blocks



INFO

Industrial trucks and lifting devices may only be operated by qualified persons.



INFO

Lifting equipment and protective devices may only be used if they are in full working order.

13.2 Storing the hardware

Store all hardware components as follows until they are installed:

- Dry and protected
- On a level surface
- Protected against sunlight



14 Disposal



ATTENTION

Incorrect disposal may pollute the environment.

Pieces of hardware are raw materials.

- ▶ Dispose of hardware for environmentally friendly material reutilisation as mixed scrap.

14.1 Disposing of packaging

The hardware is supplied as complete sets together with the packaging. Once unpacked, the installation company or builder is responsible for disposing of the packaging properly. The packaging materials are produced in accordance with current environmental protection standards. The materials can be recycled separately.

Follow the basic instructions below for the proper disposal of packaging:

- ▶ Do not dispose of packaging in household waste.
- ▶ Hand over packaging at local waste collection points or recycling centres.
- ▶ Observe the national regulations on the disposal of recyclable materials.
- ▶ Contact the local authorities if necessary.

14.2 Disposing of hardware

Once the hardware is finished with, the end user or builder is responsible for properly disposing of the windows, doors or balcony doors and the hardware, including any accessories. Hardware is produced in accordance with current environmental protection standards. The materials can be recycled separately.

Follow the basic instructions below for the proper disposal of hardware:

- ▶ Observe the information and specifications for disposal contained in the other applicable documents.
- ▶ Separate hardware components from windows, doors or balcony doors.
- ▶ Do not dispose of hardware in household waste.
- ▶ Hand over hardware at local waste collection points or recycling centres.
- ▶ Observe the national regulations on the disposal of recyclable materials.
- ▶ Contact the local authorities if necessary.



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