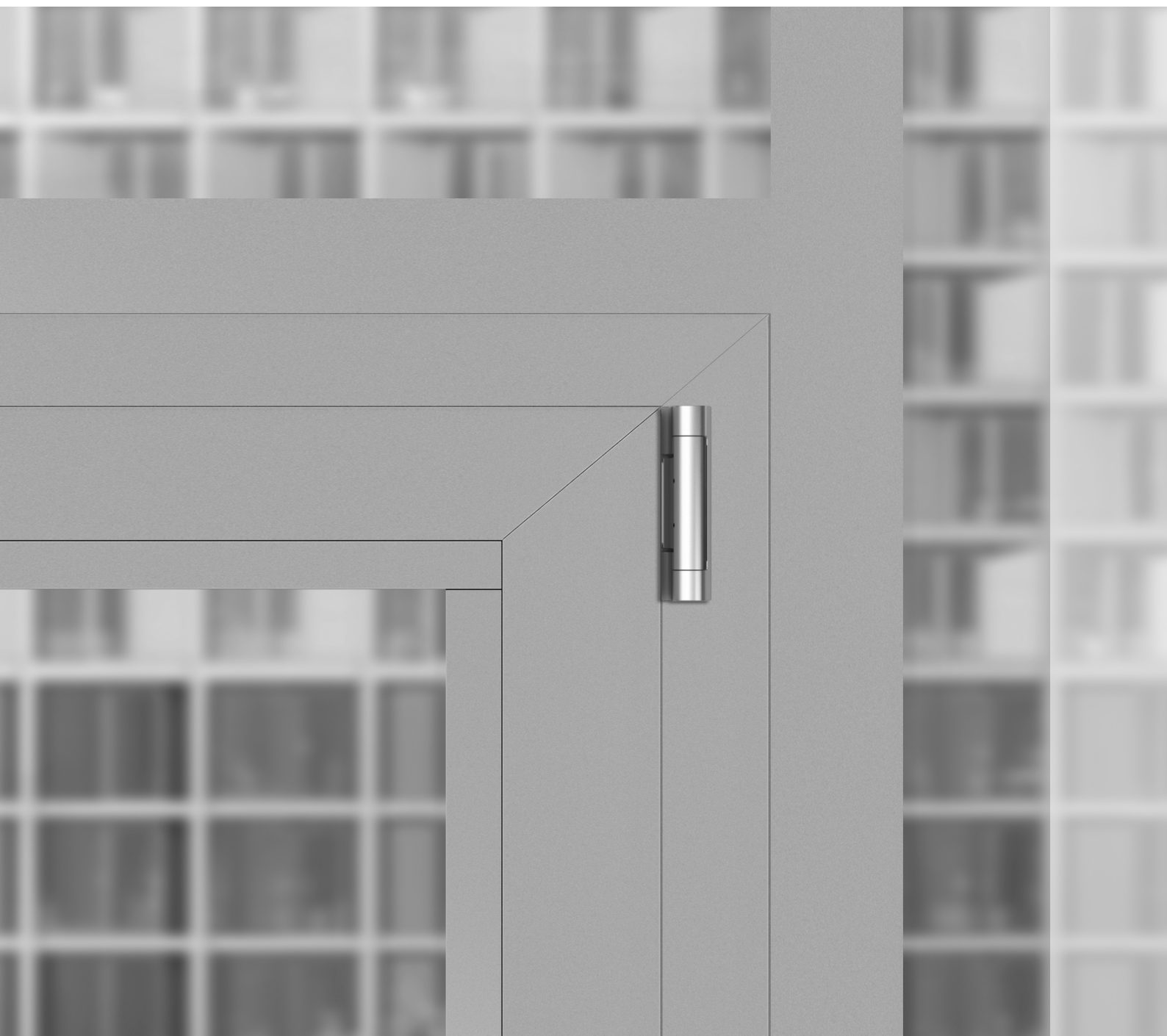


Roto NX

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

Hinge side A16

Installation, maintenance and operation instructions for aluminium profiles with a 16 mm hardware groove



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1 General information

1.1 Version history

Version	Date	Changes
v0	15/11/2011	Publication
v1	31/08/2023	New rebate corner hinge → <i>from page 44</i> T&T espagnolette, VT added → <i>from page 46</i> Hardware overview for RC 2 / RC 2 N added → <i>from page 44</i> Hardware overview for TiltSafe RC 2 / RC 2 N added → <i>from page 44</i> Lever-operated espagnolette Plus added → <i>from page 44</i> New item numbers for frame components → <i>from page 175</i> Application diagrams extended → <i>from page 28</i> New drilling jig for rebate corner hinge → <i>from page 187</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:

- Catalogue: CTL_107
- Handles catalogue: CTL_1

The following guidelines also apply:

Gütegemeinschaft Schlösser und Beschläge e.V.

- Directive TBDK: Attachment of supporting fitting components for turn-only and tilt&turn fittings
- Directive VHBE: Hardware for windows and balcony doors – Guidelines/ advice for end-users
- Directive VHBH: Hardware for windows and balcony doors – Guidelines/ advice on the product and on liability

VFF (German Window and Facade Association)

- TLE.01: Correct handling of ready-to-install windows and external doors during transport, storage and installation
- WP.01: Maintenance of windows, facades and external doors – Maintenance, care and inspection – Information for sales
- WP.02: Maintenance of windows, facades and external doors – Maintenance, care and inspection – Measures and documents
- WP.03: Maintenance of windows, facades and external doors – Maintenance, care and inspection – Maintenance agreement

Additional guidelines

- Instructions and information issued by profile manufacturers, e.g. manufacturers of windows and balcony doors
- Instructions and information issued by screw manufacturers
- The applicable regulations, directives and national laws

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
1	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
⇨	Requirement

1.4 Pictographs

Symbol	Meaning
	Sash rebate width
	Sash rebate height
	Sash weight

Symbol	Meaning
	Aluminium

1.5 Product features

Symbol	Meaning
	Hardware axis
	Description
	Base
	DIN left / right
	Corner drive, integrated
	Rebate clearance
	Sash rebate width
	Sash rebate height
	Sash weight
	Fixed handle height
	Centred / variable handle height
	Size
	Information
	Fixed toggle lever position
	Centred / variable toggle lever position
	Couplable
	Length

Symbol	Meaning
	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
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

Abbreviation	Meaning
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, carbolic 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 12*.

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 12.*

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 leaves improperly poses the risk of injury and property damage.

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

- ▶ When moving the sash, ensure that it will not slam against the frame or other leaves 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 A16 for aluminium 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.
- 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.
- 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

To install hardware components in aluminium profiles with a 16 mm hardware groove, Roto recommends using electrogalvanised and passivated steel self-tapping screws. Use screws with additional sealing in more challenging climatic conditions.

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

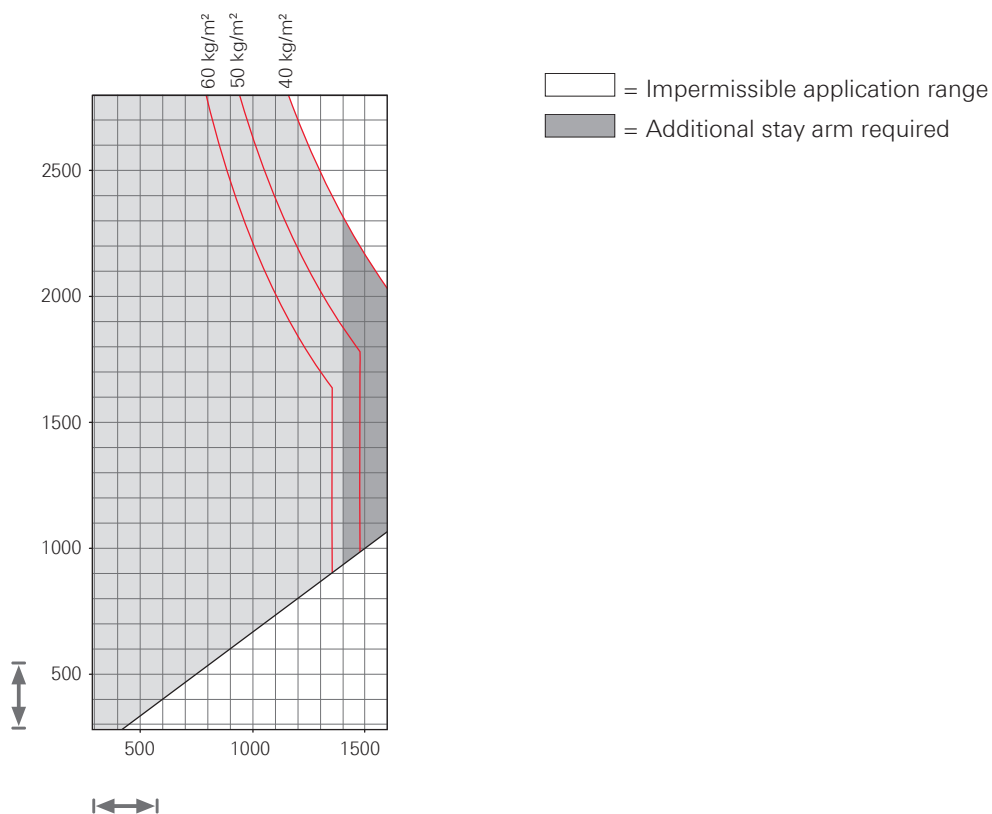
The individual application diagrams must strictly be complied with.

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
	Sash rebate width	290 – 1600 mm	400 – 1600 mm	490 – 1400 mm
	Sash rebate height	280 – 2800 mm	280 – 2800 mm	600 – 2800 mm
	Sash weight	Max. 130 kg	Max. 130 kg	Max. 130 kg



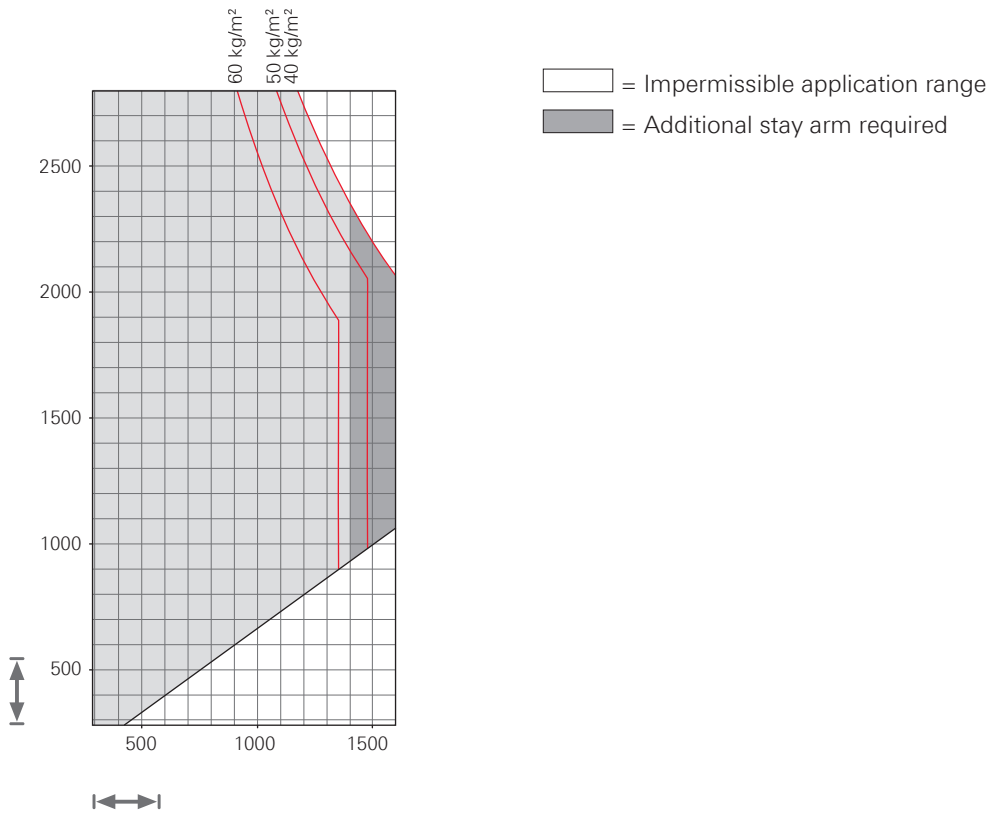
INFO

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
	Sash rebate width	290 – 1600 mm	400 – 1600 mm	490 – 1400 mm
	Sash rebate height	280 – 2800 mm	280 – 2800 mm	600 – 2800 mm
	Sash weight	Max. 150 kg	Max. 150 kg	Max. 150 kg



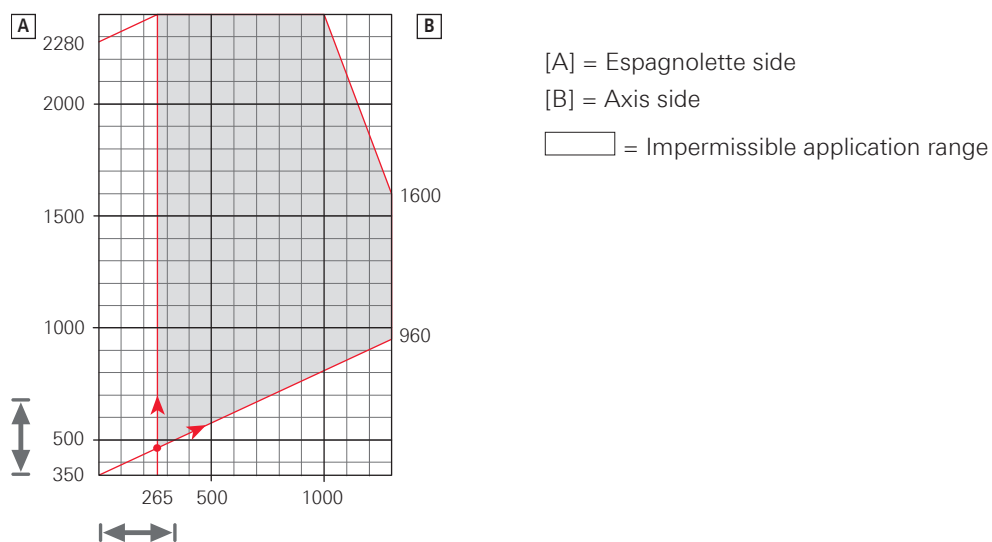
INFO

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



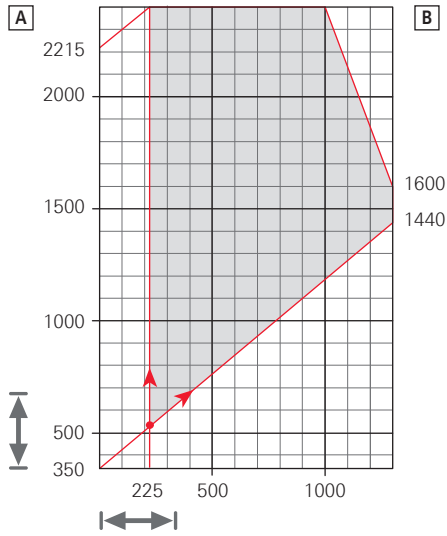
INFO

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°



[A] = Espagnolette side
 [B] = Axis side
 = Impermissible application range

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

Application range

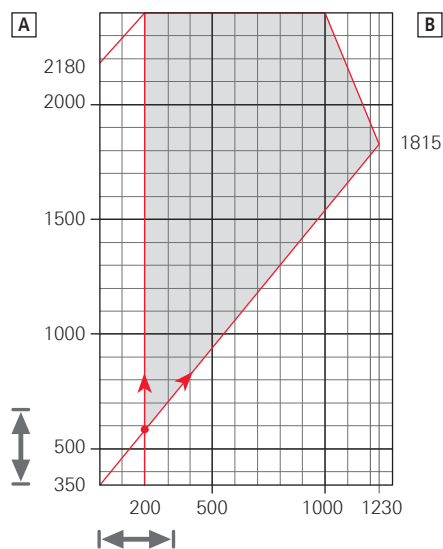
Basic security		
	Sash rebate width	See diagram
	Sash rebate height	See diagram
	Sash weight	Max. 80 kg



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°



[A] = Espagnolette side
 [B] = Axis side
 [] = Impermissible application range

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



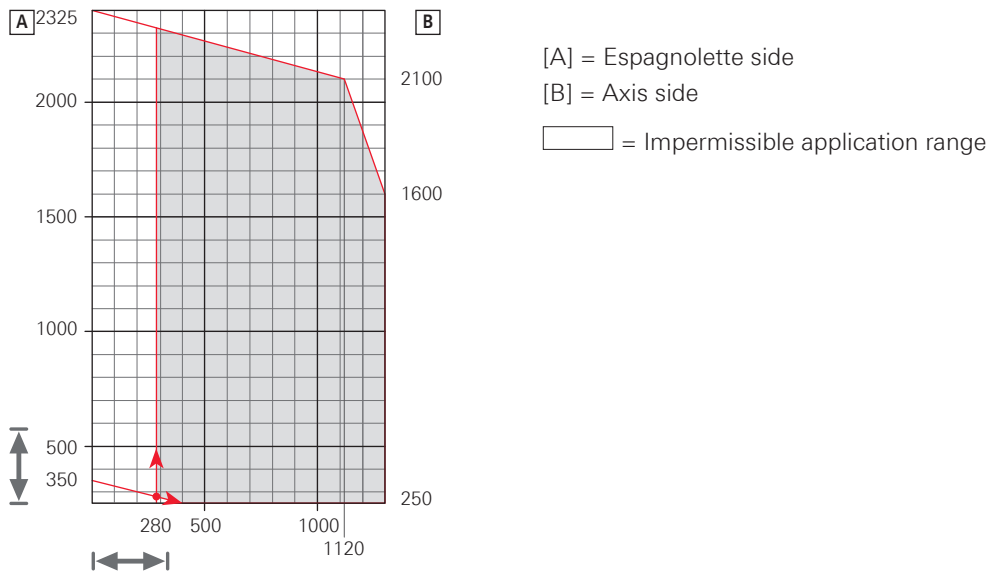
INFO

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

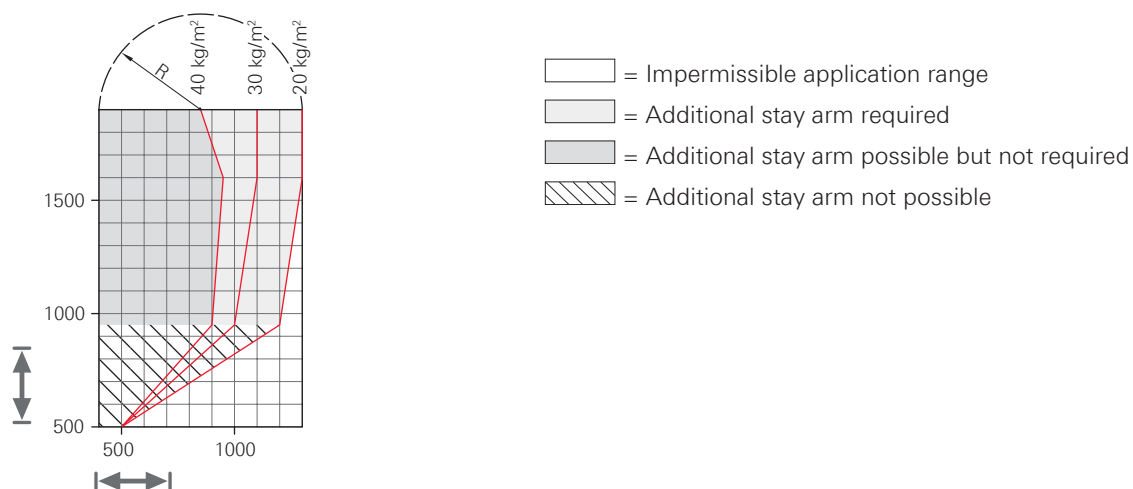
Basic security		
	Sash rebate width	See diagram
	Sash rebate height	See diagram
	Sash weight	Max. 80 kg



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



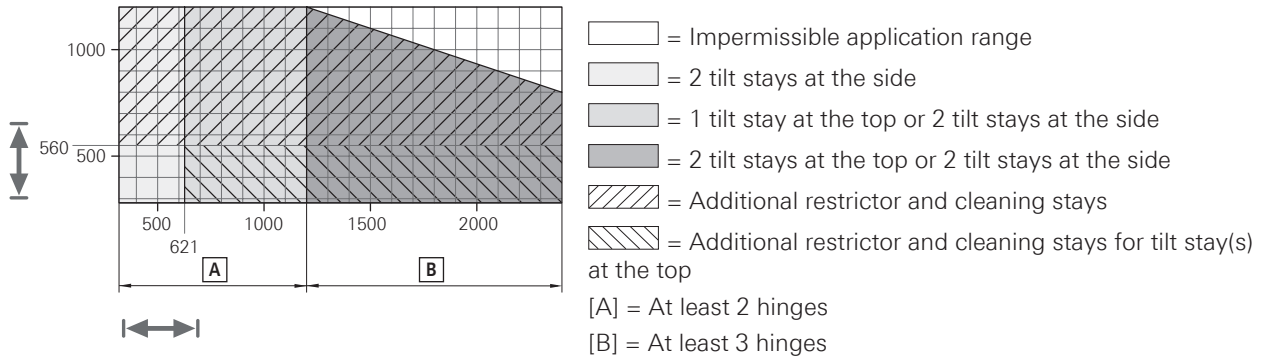
INFO

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.

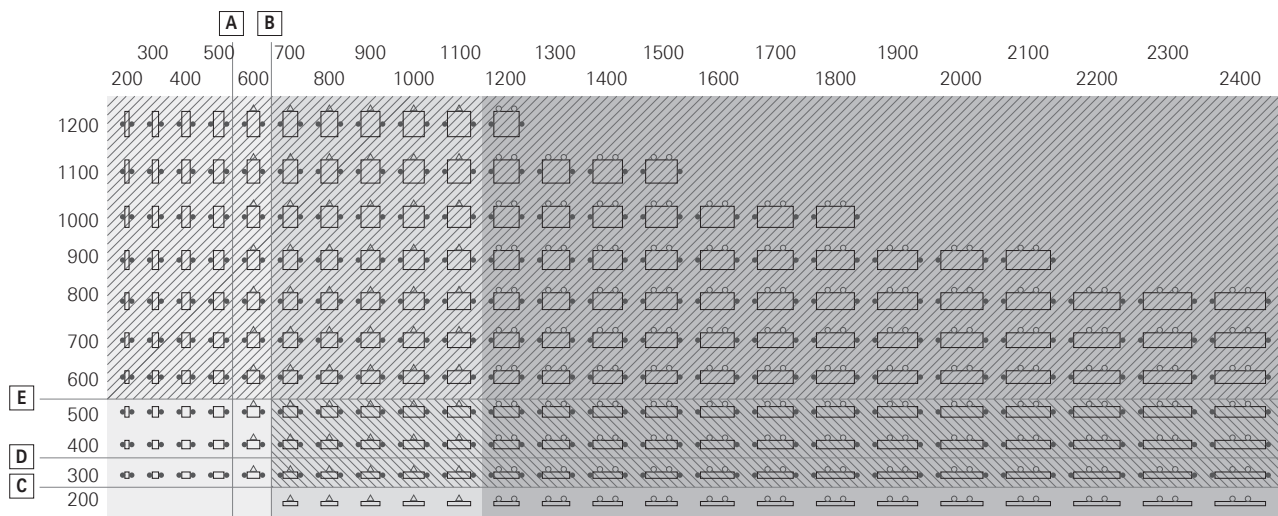


INFO

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



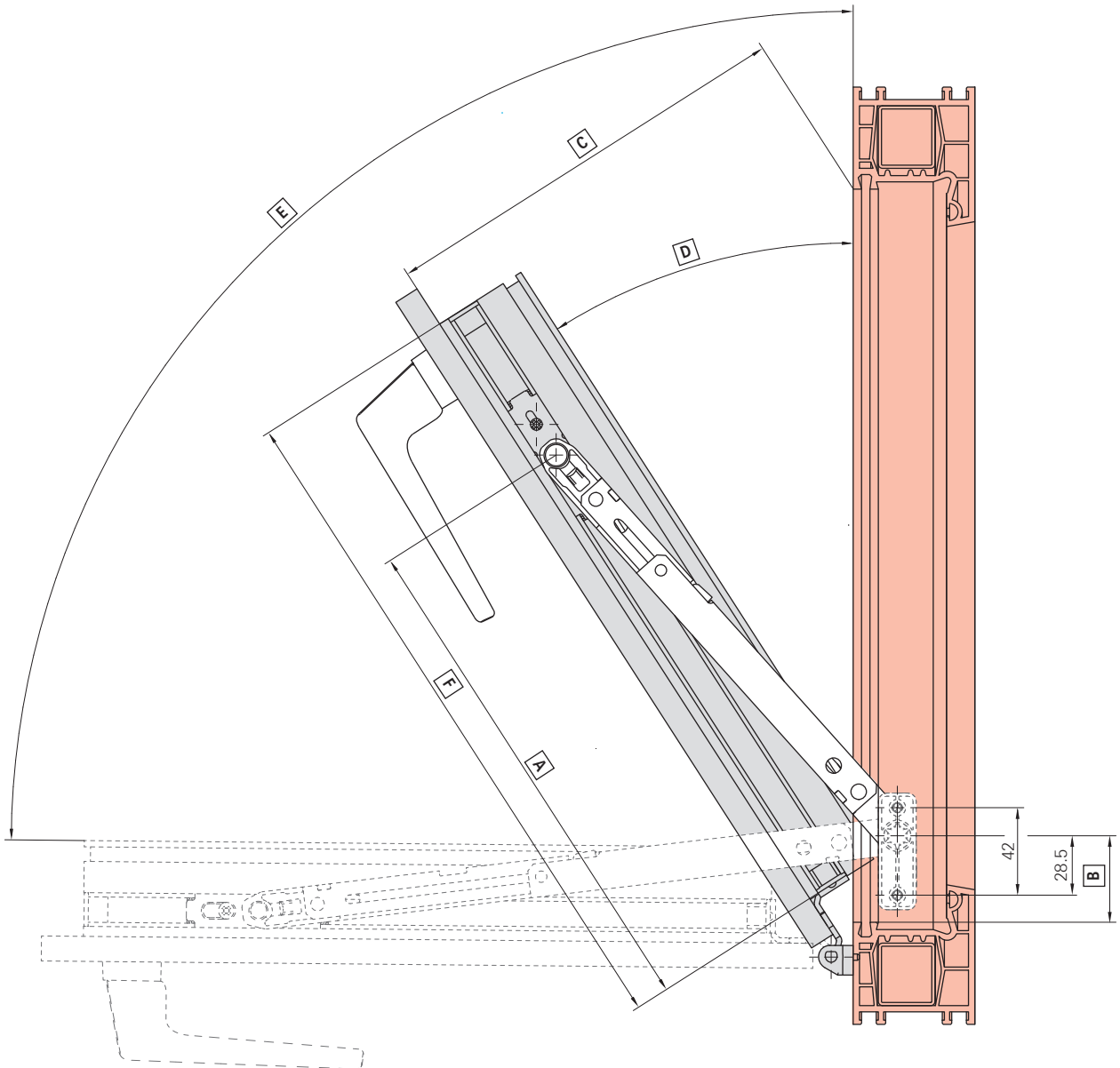
- [A] From 501 mm tilt stay at the top is only possible with Turn-Only / Tilt-Only espagnolette
- [B] From 621 mm tilt stay at the top is possible with Turn-Only / Tilt-Only espagnolette and T&T espagnolette
- [C] From **260 mm** K, E5, P, T, A
- [D] From **360 mm** K, E5, P, T, A, Designo, Alu
- [E] 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.



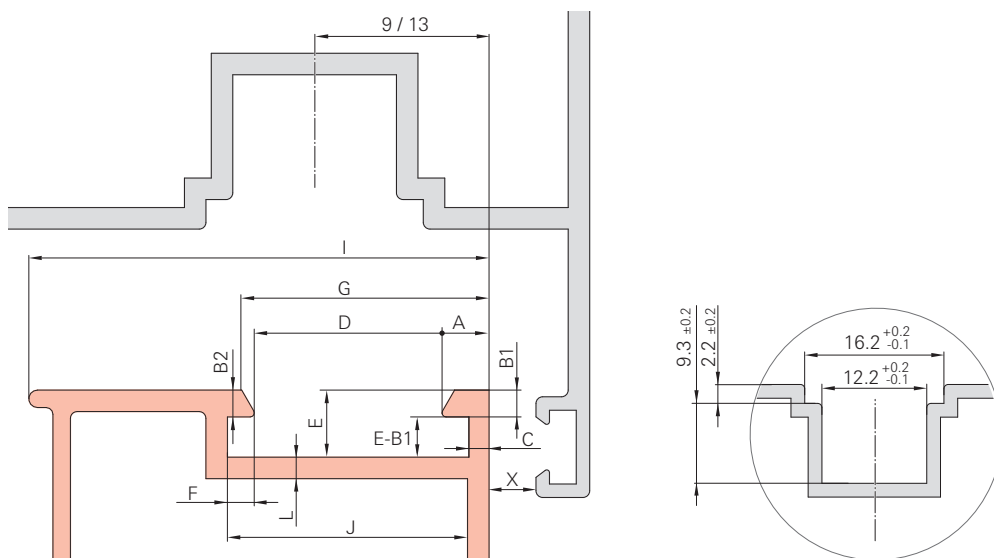
- [A] Position of sash bearing
- [B] Position of frame bearing
- [C] Tilt distance restrictor position
- [D] Opening angle restrictor position
- [E] Opening angle cleaning position
- [F] Sash rebate height (SRH)

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°

3.4 Profile cross section

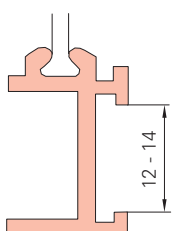
Roto can assist with the generally recommended profile assessments if you contact the Roto sales representative in charge of this.

Hardware axis 9 / 13

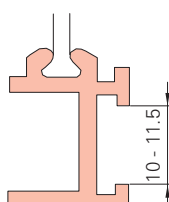


Assignment	Meaning	Min.	Max.
[A]	Flange width, front	3.5	4.3
[B1]	Flange thickness, front	1.5	2.0
[B2]	Flange thickness, rear	1.5	2.0
[C]	Profile leg thickness, front	1.5	2.0
[D]	Groove width	10.0	14.0
[E]	Groove depth	4.5	5.0
[F]	Rear flange overhang	1.7	2.5
[G]	Pivot rest supporting surface	13.2	18.5
[I]	Installation space (frame)	21.0	-
[J]	Groove inside width	14.4	18.6
[L]	Groove base thickness	1.5	2.0
[X]	Hinge passage	3.5	-

Groove versions



Groove version V.01



Groove version V.02



INFO

When ordering profile-related frame components, note the information about the groove versions → *from page 175.*



3.5 Cam lengths

Stay bearing

P 3		P 6	
[1]	P 3/130: 4 mm	[2]	P 6/130: 9 mm P 6/150: 9 mm

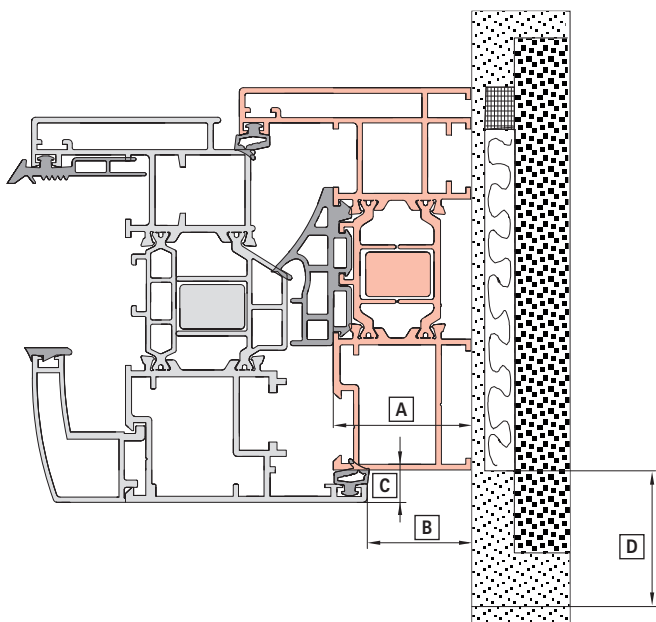
Stay bearing, adjustable

P 3 / P 6	
[1]	P 3/130: 4 mm P 6/130: 4 mm

Pivot rest

P 3		P 6	
[1]	P 3/130: 3 mm	[2]	P 6/130: 3 mm P 6/150: 3 mm
		[3]	P 6/130: 9 mm P 6/150: 19 mm

3.6 Frame clearance



- [A] Frame width
- [B] Frame clearance
- [C] Overlap height
- [D] Free area

Required frame width [A]

Stay bearing	Required frame width [A]		Free area [D]	Opening angle
	System 12/18-9, 12/18-13	System 12/20-9, 12/20-13		
P 3/130, P 6/130	≥ 27.0 mm	≥ 29.0 mm	100 mm	Max. 180°
P 6/150	≥ 32.5 mm	≥ 34.5 mm	100 mm	Max. 150°
P 3/130, P 6/130 Adjustable arch and central hinge	≥ 31.0 mm	≥ 33.0 mm		Max. 90°
P 3/130, P 6/130 Adjustable Tilt-Only sash	≥ 29.0 mm	≥ 31.0 mm		Max. 90°

Required frame clearance [B]*

Stay bearing	Required frame clearance [B]*		Free area [D]
	System 12/18-9, 12/18-13, 12/20-9, 12/20-13		
P 3/130, P 6/130	≥ 21.0 mm		100 mm
P 6/150	≥ 26.5 mm		100 mm
P 3/130, P 6/130 Adjustable arch and central hinge	≥ 25.0 mm		
P 3/130, P 6/130 Adjustable Tilt-Only sash	≥ 23.0 mm		

* Up to an overlap height [C] of 21 mm.



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 [C] 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 [D], 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.



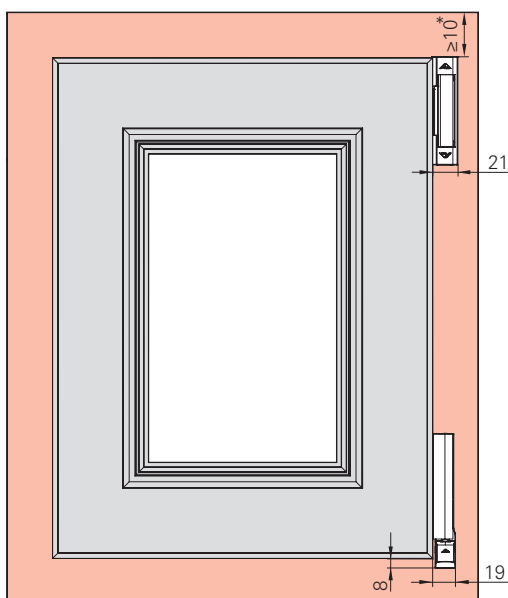
ATTENTION

Property damage caused by damage to bearing components!

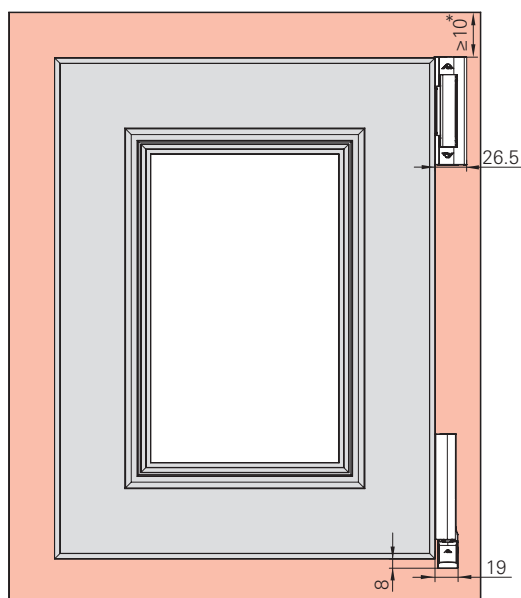
Large overlap heights [C] or components near the reveal (such as skirting boards) may result in excessive leverage on the hinge side. This can damage the bearing components and cause the sash to fall.

- ▶ In the free area [D], 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



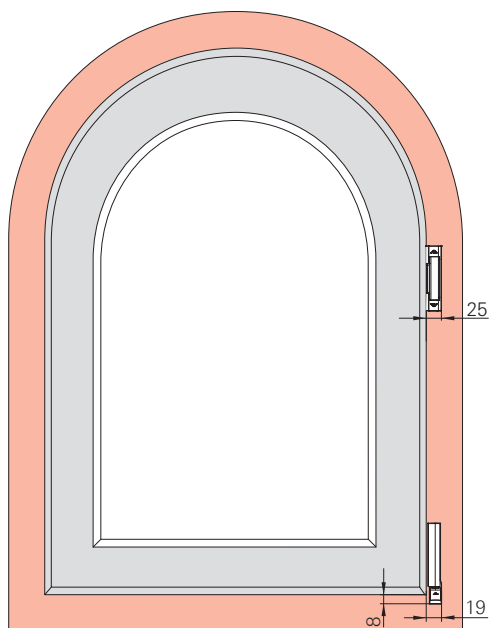
Sash weight 150 kg



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

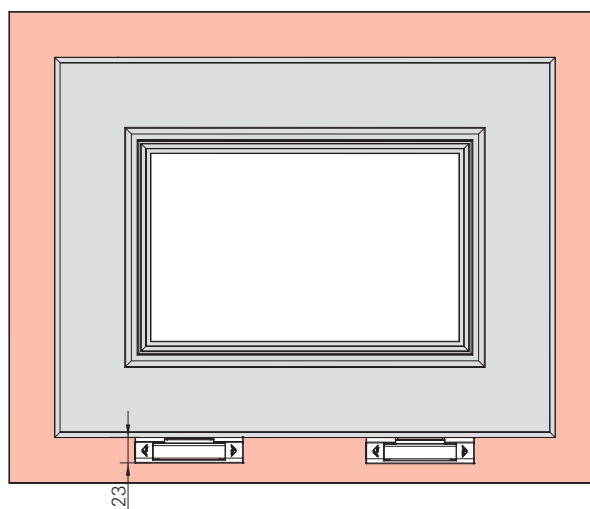
Arch

Sash weight 80 kg

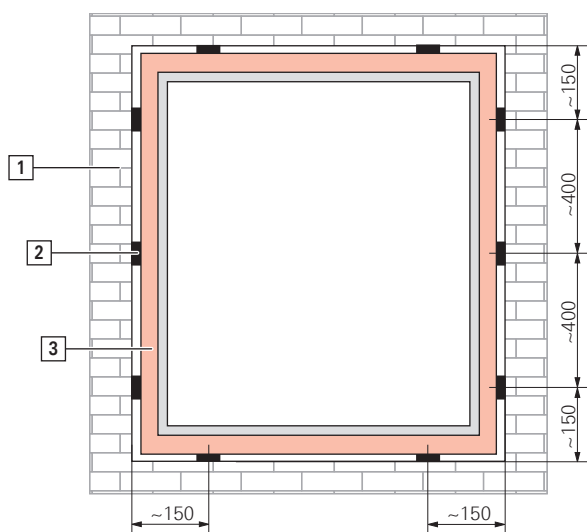


Tilt-Only hardware

Sash weight 80 kg



3.7 Mounting 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

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	2	E	–	795280
2201 – 2400	1000	2290	N	Y	2	E	–	795282
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] Centre lock, multipart, (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	Top	260280
1	P	Top Bottom	260282

For use with SRH ≤ 370 mm.

[14] Sash stay corner drive

		Nº
1	P	260286

INFO

No sash stay corner drive is possible with SRH 280 – 320.

INFO

With SRH 321 – 350 mm, crop the sash stay corner drive.

[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
1101 – 1600	1101 – 1800	600	1	E	–	255281
		1801 – 2400	600 KU	1	E	255282
	2401 – 2600	600	1	E	–	255281
		600 KU	1	E	–	255282
		600 KU	1	E	–	255282
		400	1	E	–	255280
2601 – 2800	600 KU	1	E	–	255282	
	600	1	E	–	255281	

[23] Striker → from page 178

[28] Tilt striker → from page 175

[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 182

[33] Lifting mishandling device sash component

	Nº
Sash component for lifting mishandling device	795927

[34] Lifting mishandling device frame component → from page 183

[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	–	–	–	787348
1001 – 1200	500	1090	–	–	–	787350
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).



INFO

With a size 150 sash stay, the tilt distance is 80 mm.

[39] Stay bearing

		Nº
P 3/130	max. 130 kg	859171
P 6/130	max. 130 kg	859172
P 6/150	max. 150 kg	859173

[40] Stay-bearing pin

		Nº
Stay-bearing pin	86	834705

[41] Sash stay cover caps → CTL_107

[44] Rebate corner hinge

				Nº
12/20-13	Height adjustable	max. 150 kg	Left	2007203
12/20-13	Height adjustable	max. 150 kg	Right	2007204

[45] Pivot rest

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

[46] Rebate corner hinge / pivot rest cover caps → CTL_107

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

		Nº
Frame and sash component	200	255237

[49] Packer → from page 182

[54] Handle → CTL_1

Optional

[57] Rebate corner hinge extension

	Nº
Extension	2026631

[63] Night vent, SRW ≥ 601 mm → from page 184



INFO

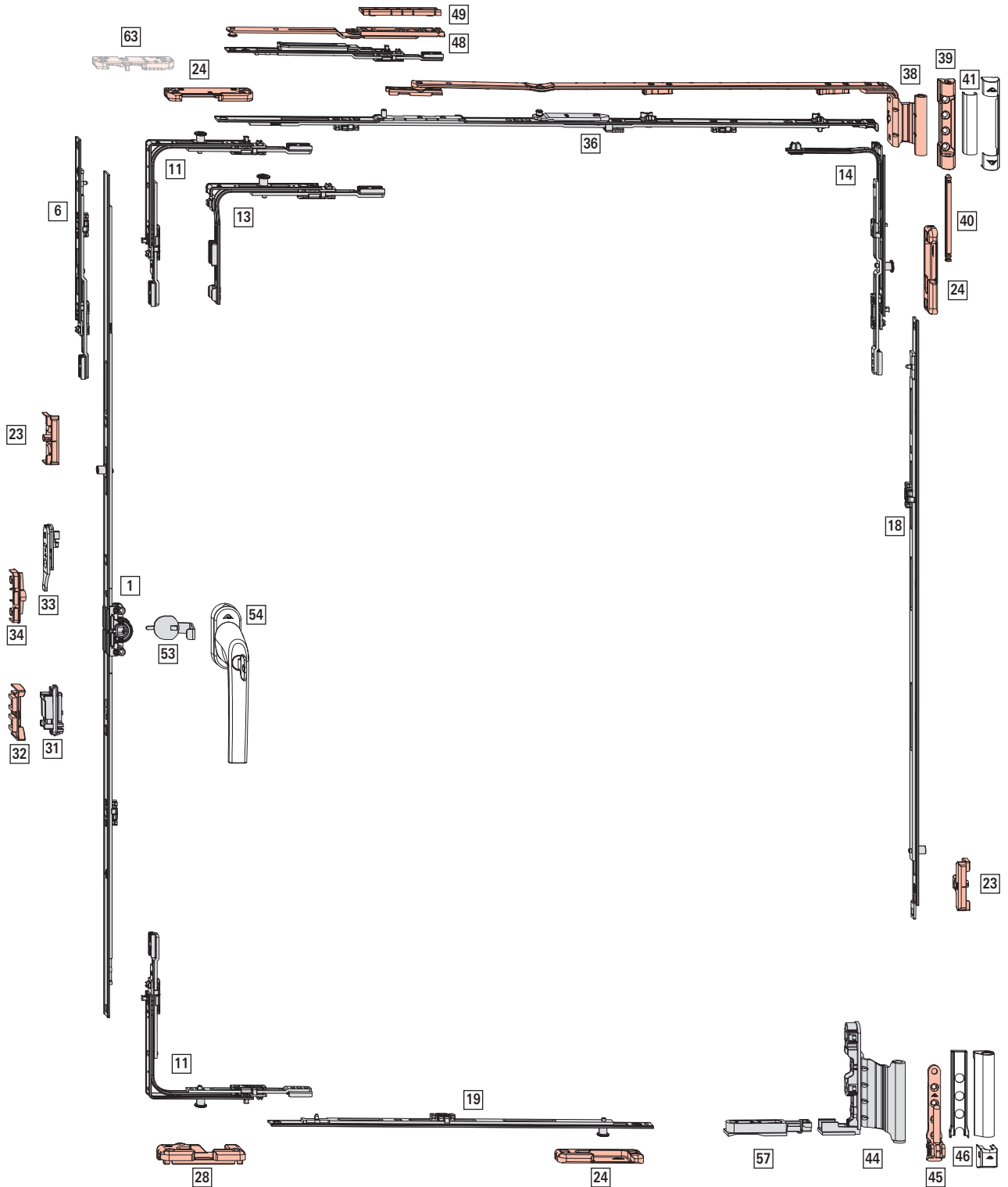
Only for use in conjunction with P or V cam.

Sash lifter → CTL_107

Arrestable brake stay → CTL_107



4.1.1.2 RC 1 N





Application range

SRW: 400 – 1600 mm

SRH: 280 – 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	2	E	–	795280
2201 – 2400	1000	2290	N	Y	2	E	–	795282
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] Centre lock, multipart, (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	P	260282

For use with SRH ≤ 370 mm.

[14] Sash stay corner drive

		Nº
1	P	260286



INFO

No sash stay corner drive is possible with SRH 280 – 320.



INFO

With SRH 321 – 350 mm, crop the sash stay corner drive.

[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
1101 – 1800	600	1	E	–	255281
1801 – 2400	600 KU	1	E	–	255282
	600	1	E	–	255281
2401 – 2600	600 KU	1	E	–	255282
	600 KU	1	E	–	255282
	400	1	E	–	255280
2601 – 2800	600 KU	1	E	–	255282
	600 KU	1	E	–	255282
	600	1	E	–	255281

[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
400 – 600	200	1	P	–	255284
601 – 800	400	1	P	–	255285
801 – 1000	600 [2]	1	P	–	255286
1001 – 1200	600 KU	1	E	–	255282
	200	1	P	–	255284
1201 – 1400	600 KU	1	E	–	255282
	400	1	P	–	255285
1401 – 1600	600 KU	1	E	–	255282
	600 [3]	1	P	–	255286

[2] With SRW 801 – 814 mm, crop centre lock 600.

[3] With SRW 1401 – 1414 mm, crop centre lock 600.

[23] Striker → from page 178

[24] Security striker → from page 179


[28] Tilt striker → from page 175

[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 182

[33] Lifting mishandling device sash component




	Nº
Sash component for lifting mishandling device	795927

[34] Lifting mishandling device frame component → from page 183

[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	–	–	787348
1001 – 1200	500	1090	–	–	787350
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).



INFO

With a size 150 sash stay, the tilt distance is 80 mm.

[39] Stay bearing


		Nº
P 3/130	max. 130 kg	859171
P 6/130	max. 130 kg	859172
P 6/150	max. 150 kg	859173

[40] Stay-bearing pin

		Nº
Stay-bearing pin	86	834705

[41] Sash stay cover caps → CTL_107

[44] Rebate corner hinge

				Nº
12/20-13	Height adjustable	max. 150 kg	Left	2007203
12/20-13	Height adjustable	max. 150 kg	Right	2007204

[45] Pivot rest

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


[46] Rebate corner hinge / pivot rest cover caps → CTL_107

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

		Nº
Frame and sash component	200	255237

[49] Packer → from page 182

[53] Drilling protection

	Nº
Drilling protection	797819

[54] Handle, lockable → CTL_1

Optional

[57] Rebate corner hinge extension

	Nº
Extension	2026631

[63] Night vent, SRW ≥ 601 mm → from page 184



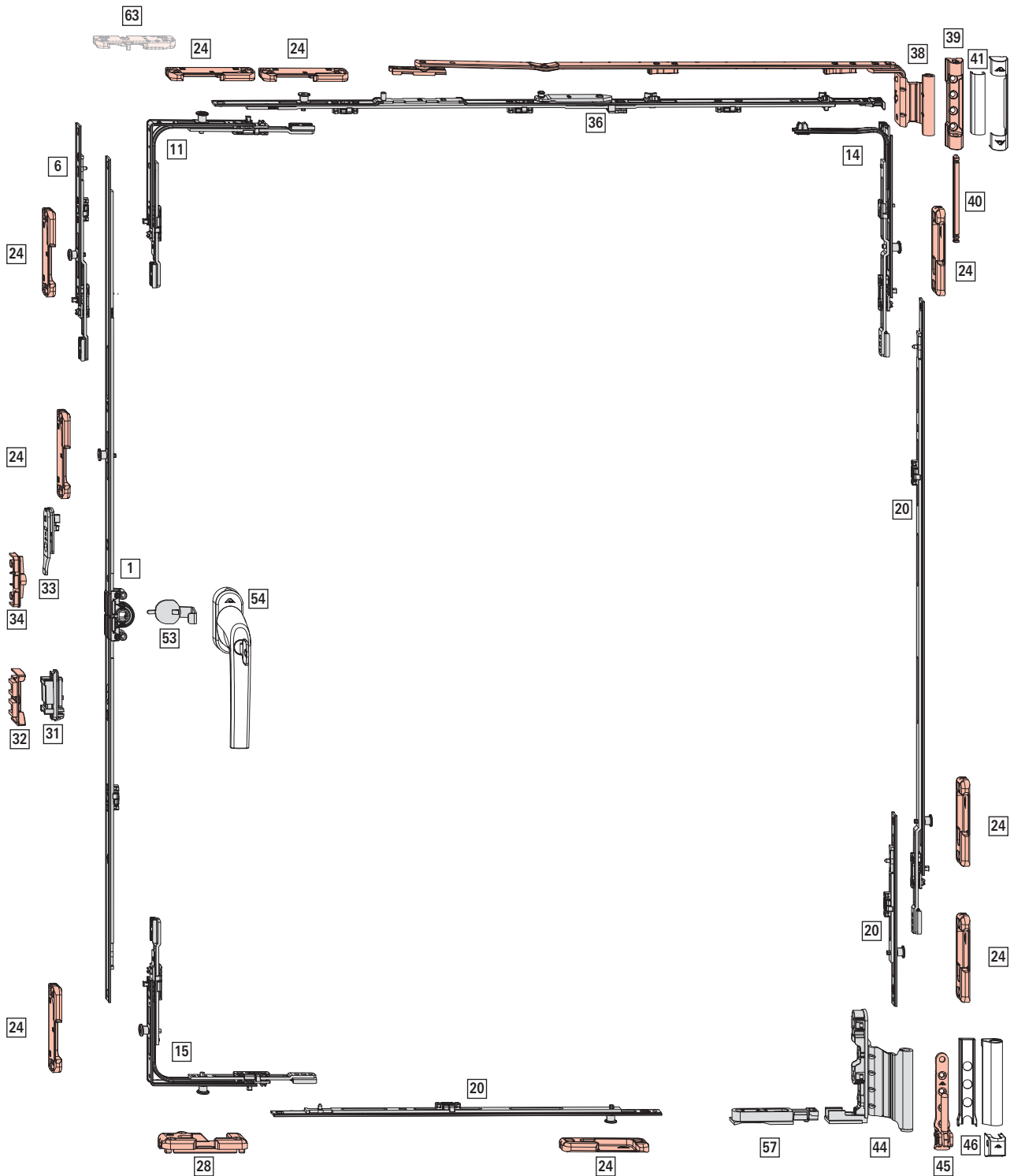
INFO

Only for use in conjunction with P or V cam.

Sash lifter → CTL_107



4.1.1.3 RC 2 / RC 2 N





Application range

SRW: 490 – 1400 mm

SRH: 600 – 2800 mm

S.kg: max. 150 kg

[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	–	–	626542
1001 – 1200	513	1090	N	Y	1	–	–	626543
1201 – 1400	563	1290	N	Y	1	–	–	626544
1401 – 1600	563	1490	N	Y	2	–	–	626575
1601 – 1800	563	1690	N	Y	2	–	–	626576
1601 – 1800	1000	1690	N	Y	2	–	–	838324
1801 – 2000	1000	1890	N	Y	2	–	–	794641
2001 – 2200	1000	2090	N	Y	3	–	–	794642
2201 – 2400	1000	2290	N	Y	3	–	–	794643

[6] Centre lock, multipart, (SRH ≥ 2401 mm)

					Nº
200	Y	–	1	–	337708
400	Y	–	1	–	337710

Size-specific combinations:

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

[11] Standard corner drive

			Nº
1	–	V	260272

[14] Sash stay corner drive

			Nº
1	–	V	260284

[15] Corner drive, standard (security)

			Nº
2	–	V	260274

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

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

Size-specific combinations:

						Nº
490 – 690	–	600 – 800	200	1	–	296853
691 – 890	–	801 – 1000	400	1	–	296854

						Nº
891 – 1090	–	1001 – 1200	600	1	–	296855
1091 – 1290	–	1201 – 1400	600 KU	1	–	337711
			200	1	–	296853
1291 – 1400	–	1401 – 1600	600 KU	1	–	337711
			400	1	–	296854
		1601 – 1800	600 KU	1	–	337711
			600	1	–	296855
		1801 – 2000	600 KU	1	–	337711
			600 KU	1	–	337711
			200	1	–	296853
		2001 – 2200	600 KU	1	–	337711
			600 KU	1	–	337711
			400	1	–	296854
		2201 – 2400	600 KU	1	–	337711
			600 KU	1	–	337711
			600	1	–	296855
		2401 – 2600	600 KU	1	–	337711
			600 KU	1	–	337711
			600 KU	1	–	337711
			200	1	–	296853
		2601 – 2800	600 KU	1	–	337711
			600 KU	1	–	337711
			600 KU	1	–	337711
			400	1	–	296854

[24] Security striker → from page 179

[28] Tilt striker → from page 175

[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 182

[33] Lifting mishandling device sash component




	Nº
Sash component for lifting mishandling device	795927

[34] Lifting mishandling device frame component → from page 183



[36] Stay guide – security

						Nº
411 – 600	–	250	490	–	–	787346
601 – 800	–	350	690	–	–	787347
801 – 1000	–	500	890	1	–	787360
1001 – 1200	–	500	1090	1	–	787361
1201 – 1400	–	500	1290	1	–	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	max. 130 kg	859171
P 6/130	max. 130 kg	859172
P 6/150	max. 150 kg	859173

[40] Stay-bearing pin

		Nº
Stay-bearing pin	86	834705

[41] Sash stay cover caps → CTL_107

[44] Rebate corner hinge


				Nº
12/20-13	Height adjustable	max. 150 kg	Left	2007203
12/20-13	Height adjustable	max. 150 kg	Right	2007204

[45] Pivot rest

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

[46] Rebate corner hinge / pivot rest cover caps → CTL_107

[53] Drilling protection

	Nº
Drilling protection	797819

[54] Handle, lockable → CTL_1

Optional

[57] Rebate corner hinge extension

	Nº
Extension	2026631

[63] Night vent, SRW ≥ 601 mm → from page 184



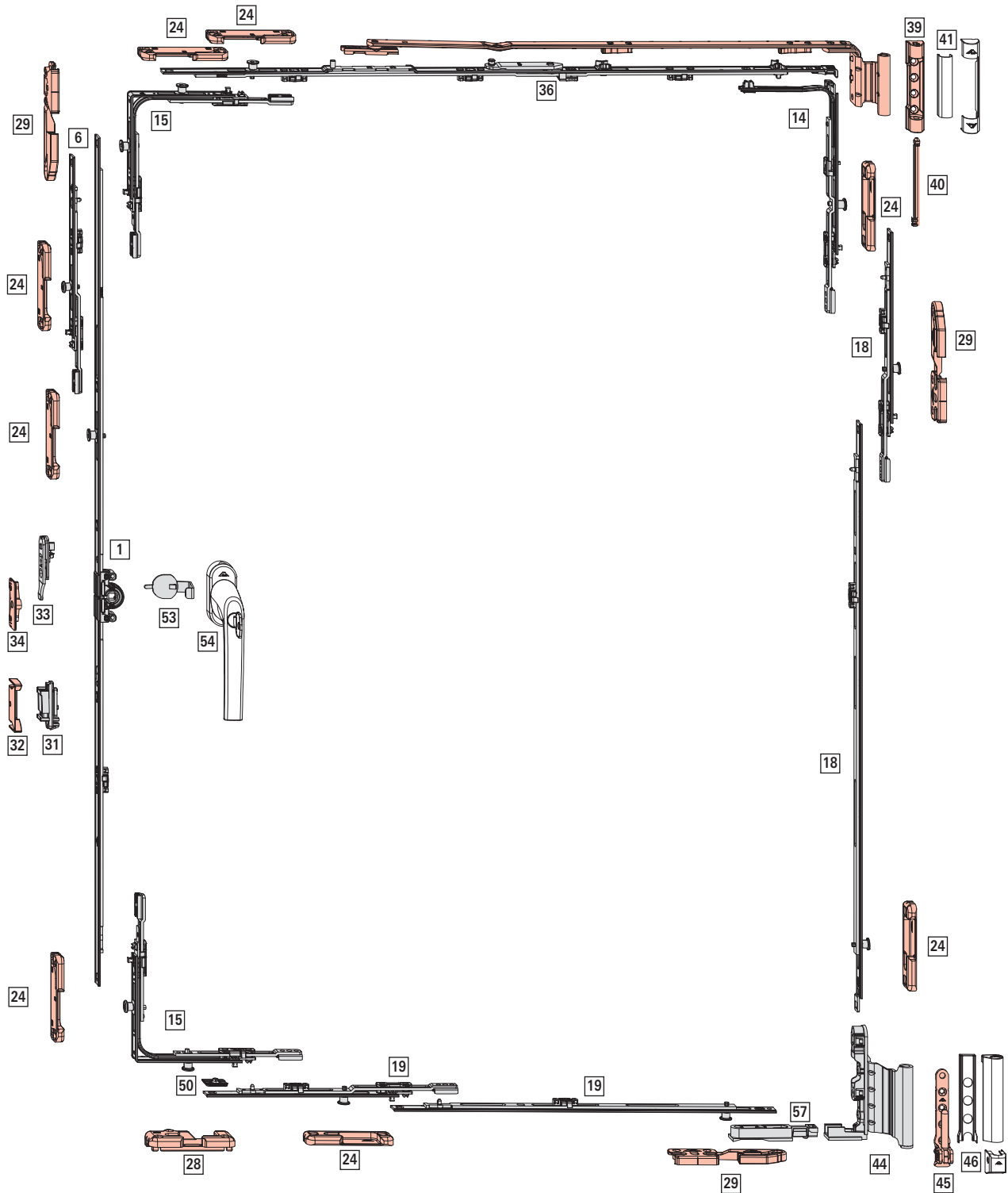
INFO

Only for use in conjunction with P or V cam.

Sash lifter → CTL_107



4.1.1.4 TiltSafe RC 2 / RC 2 N





Application range

SRW: 490 – 1400 mm

SRH: 600 – 2800 mm

S.kg: max. 150 kg



INFO

Only for hardware axis 13.

[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	1	V	626542
1001 – 1200	513	1090	N	Y	1	1	V	626543
1201 – 1400	563	1290	N	Y	1	1	V	626544
1401 – 1600	563	1490	N	Y	2	2	V	626575
1601 – 1800	563	1690	N	Y	2	2	V	626576
1601 – 1800	1000	1690	N	Y	2	2	V	838324
1801 – 2000	1000	1890	N	Y	2	2	V	794641
2001 – 2200	1000	2090	N	Y	3	3	V	794642
2201 – 2400	1000	2290	N	Y	3	3	V	794643

[6] Centre lock, multipart, (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] Corner drive, standard (security)

		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
600 – 800	200	1	V	296853

				Nº
801 – 1000	200 KU	1	V	337708
	200	1	V	296853
1001 – 1200	200 KU	1	V	337708
	400	1	V	296854
1201 – 1400	200 KU	1	V	337708
	600	1	V	296855
1401 – 1600	200 KU	1	V	337708
	600 KU	1	V	337711
	200	1	V	296853
1601 – 1800	200 KU	1	V	337708
	600 KU	1	V	337711
1801 – 2000	200 KU	1	V	337708
	600 KU	1	V	337711
2001 – 2200	600	1	V	296855
	200 KU	1	V	337708
	600 KU	1	V	337711
2201 – 2400	600 KU	1	V	337711
	200 KU	1	V	337708
	400	1	V	296854
2401 – 2600	600 KU	1	V	337711
	200 KU	1	V	337708
	600 KU	1	V	337711
2601 – 2800	600 KU	1	V	337711
	200 KU	1	V	337708
	600 KU	1	V	337711
2801 – 3000	600 KU	1	V	337711
	200 KU	1	V	337708
	600 KU	1	V	337711

[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
490 – 690	200	1	V	296853
691 – 890	200 KU	1	V	337708
	200	1	V	296853
891 – 1090	200 KU	1	V	337708
	400 KU	1	V	337710
1091 – 1290	200 KU	1	V	337708
	400 KU	1	V	337710
	200	1	V	296853

				Nº
1291 – 1400	200 KU	1	V	337708
	400 KU	1	V	337710
	400 KU	1	V	337710

[24] Security striker → from page 179

[28] Tilt striker → from page 175

[29] Security striker for tilt ventilation

				Nº
Screw-on	V.01	Roto Sil	Left	837088
		Roto Sil	Right	837089
	V.02	Roto Sil	Left	837155
		Roto Sil	Right	837156

[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 182

[33] Lifting mishandling device sash component

	Nº
Sash component for lifting mishandling device	795927

[34] Lifting mishandling device frame component → from page 183

[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	max. 130 kg	859171
P 6/130	max. 130 kg	859172
P 6/150	max. 150 kg	859173

[40] Stay-bearing pin

		Nº
Stay-bearing pin	86	834705

[41] Sash stay cover caps → CTL_107

[44] Rebate corner hinge

				Nº
12/20-13	Height adjustable	max. 150 kg	Left	2007203
12/20-13	Height adjustable	max. 150 kg	Right	2007204

[45] Pivot rest

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

[46] Rebate corner hinge / pivot rest cover caps → CTL_107

[53] Drilling protection

	Nº
Drilling protection	797819

[54] Handle, lockable → CTL_1

Optional

[57] Rebate corner hinge extension

	Nº
Extension	2026631

Sash lifter → CTL_107



4.1.1.5 Arched window





Application range

SRW: 400 – 1300 mm

SRH: 565 – 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

[6] Centre lock, multipart

				Nº
200	Y	–	–	308267

Size-specific combinations:

↓			Nº
1765 – 1900	200 KU	–	308267

[11] Standard corner drive

		Nº
1	P	260277

[23] Striker → from page 178

[28] Tilt striker → from page 175

[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 182

[33] Lifting mishandling device sash component

	Nº
Sash component for lifting mishandling device	795927

[34] Lifting mishandling device frame component → from page 183

[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_107

[44] Rebate corner hinge for arched windows / pitched windows

			Nº
12/20-13	max. 80 kg	Left	2007213
12/20-13	max. 80 kg	Right	2007214

[45] Pivot rest

			Nº
P 3/130	Laterally adjustable	max. 130 kg	787207
P 6/130	Laterally adjustable	max. 130 kg	787208

[46] Rebate corner hinge / pivot rest cover caps → CTL_107

[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
565 – 764	380	–	–	812595
764 – 964	690	–	–	774165
965 – 1164	890	1	E	774174
1165 – 1364	1090	1	E	774175
1365 – 1564	1290	1	E	774176
1565 – 1764	1490	2	E	774177

[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

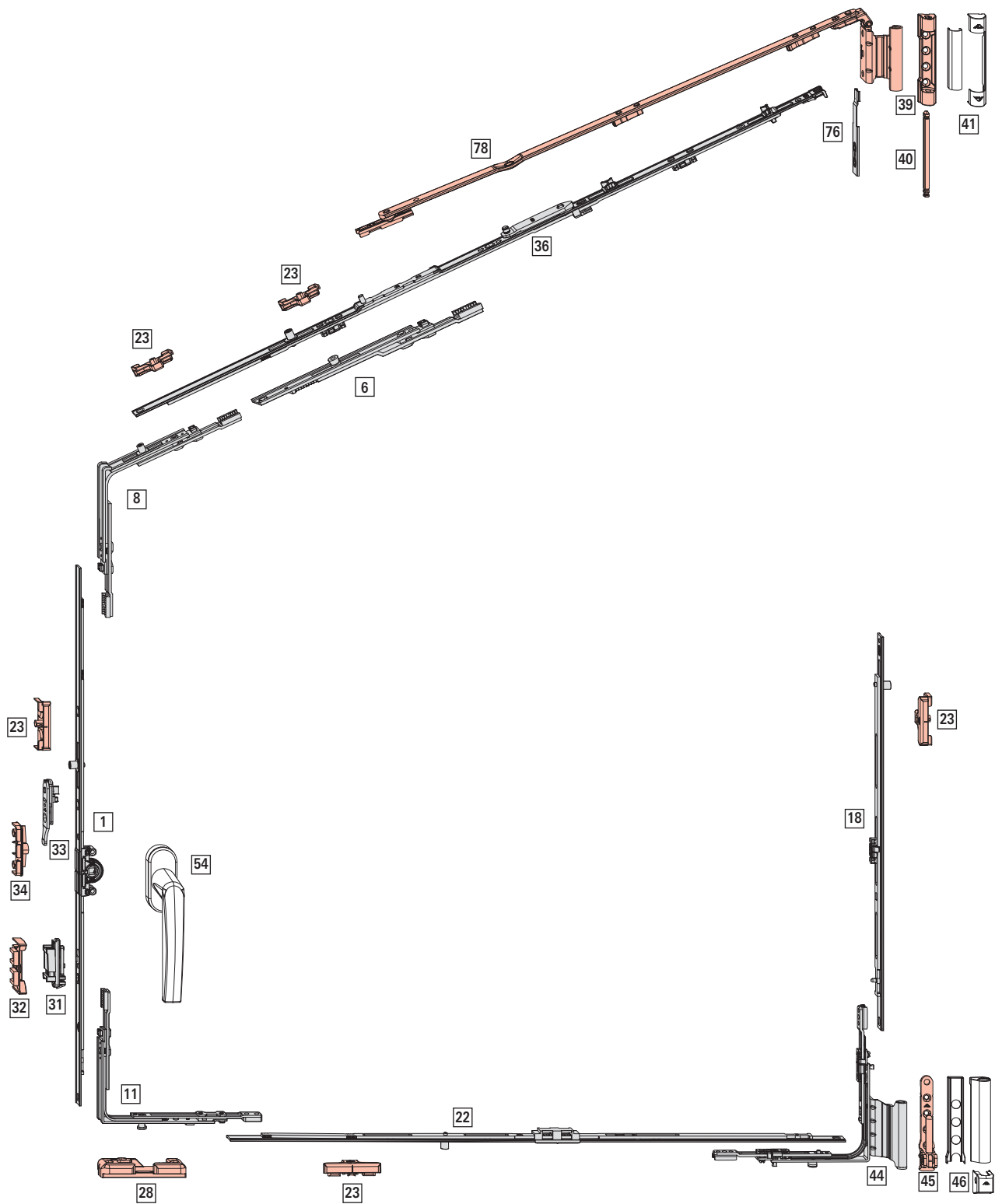
			Nº
Roto Sil	1	V	896118

consisting of:

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



4.1.1.6 Pitched window





Application range

SRW: 400 – 1300 mm

SRH 361 – 2400 mm

S.kg: max. 80 kg

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

SRW	SRH	Y	N	#	E	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] Centre lock, multipart

SRW	Y	#	E	Nº
200	Y	1	E	450821
400	Y	1	E	280346

Size-specific combinations:

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

[8] Corner drive for pitched windows

#	E	Nº
1	E	260279

[11] Standard corner drive

#	P	Nº
1	P	260277

[18] Multipart centre lock – standard, vertical

SRW	Y	#	E	Nº
600	N	1	E	255281
600	Y	1	E	255282

Size-specific combinations:

SRW	SRH	#	E	Nº
1101 – 1800	600	1	E	255281
1801 – 2400	600 KU	1	E	255282
	600	1	E	255281

[22] Arched component, vertical

SRW	SRH	Y	#	E	Nº
400 – 600	380	Y	–	–	812595

SRW	SRH	Y	#	E	Nº
601 – 800	629	N	1	E	774165
801 – 1000	890	N	1	E	774174
1001 – 1200	1090	N	1	E	774175
1201 – 1300	1290	N	2	E	774176

[23] Striker → from page 178

[28] Tilt striker → from page 175

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

SRH	Nº
Bullet catch sash component	788363

[32] Bullet-catch frame component (optional SRH ≥ 1601 mm) → from page 182

[33] Lifting mishandling device sash component

SRH	Nº
Sash component for lifting mishandling device	795927

[34] Lifting mishandling device frame component → from page 183

[36] Stay guide – basic security

SRW	SRH	#	E	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

SRH	Nº
P 3/130	859171
P 6/130	859172

[40] Stay-bearing pin

SRH	Nº	
Stay-bearing pin	86	834705

[41] Sash stay cover caps → CTL_107

[44] Rebate corner hinge for arched windows / pitched windows

SRH	Weight	Direction	Nº
12/20-13	max. 80 kg	Left	2007213
12/20-13	max. 80 kg	Right	2007214

[45] Pivot rest

SRH	Adjustability	Weight	Nº
P 3/130	Laterally adjustable	max. 130 kg	787207
P 6/130	Laterally adjustable	max. 130 kg	787208

[46] Rebate corner hinge / pivot rest cover caps →
CTL_107

[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



4.1.2 TiltFirst hardware

4.1.2.1 Basic security





Application range

SRW: 290 – 1600 mm

SRH: 280 – 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	2	E	–	795280
2201 – 2400	1000	2290	N	Y	2	E	–	795282
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] Centre lock, multipart, (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	Top	260280
1	P	Top Bottom	260282

For use with SRH ≤ 370 mm.

[14] Sash stay corner drive

		Nº
1	P	260286



INFO

No sash stay corner drive is possible with SRH 280 – 320.



INFO

With SRH 321 – 350 mm, crop the sash stay corner drive.

[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
1101 – 1600	1101 – 1800	600	1	E	–	255281
		1801 – 2400	600 KU	1	E	255282
	2401 – 2600	600	1	E	–	255281
		600 KU	1	E	–	255282
		600 KU	1	E	–	255282
		400	1	E	–	255280
2601 – 2800	600 KU	1	E	–	255282	
	600	1	E	–	255281	

[23] Striker → from page 178

[28] Tilt striker TiltFirst → from page 177

[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 182

[33] Lifting mishandling device sash component

	Nº
Sash component for lifting mishandling device	795927

[34] Lifting mishandling device frame component → from page 183

[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	–	–	–	787348
1001 – 1200	500	1090	–	–	–	787350
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).



INFO

With a size 150 sash stay, the tilt distance is 80 mm.

[39] Stay bearing

		Nº
P 3/130	max. 130 kg	859171
P 6/130	max. 130 kg	859172
P 6/150	max. 150 kg	859173

[40] Stay-bearing pin

		Nº
Stay-bearing pin	86	834705

[41] Sash stay cover caps → CTL_107

[44] Rebate corner hinge

					Nº
12/20-13	Height adjustable	max. 150 kg	Left	2007203	
12/20-13	Height adjustable	max. 150 kg	Right	2007204	

[45] Pivot rest

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

[46] Rebate corner hinge / pivot rest cover caps → CTL_107

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

	Nº
Frame and sash component	292022

[49] Packer → from page 182

[54] Handle → CTL_1



INFO

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

Optional

[57] Rebate corner hinge extension

	Nº
Extension	2026631

Sash lifter → CTL_107





Application range

SRW: 290 – 1600 mm

SRH: 280 – 2800 mm

S.kg: max. 150 kg

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

SRH	SRW	Y	N	#	E	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	2	E	795280
2201 – 2400	1000	2290	N	Y	2	E	795282
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] Centre lock, multipart, (SRH ≥ 2401 mm)

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

Size-specific combinations:

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

[11] Standard corner drive

#	E	Top/Bottom	Nº
1	E	Top	260275
1	P	Top/Bottom	260277

[13] Special short corner drive

#	E	Top/Bottom	Nº
1	E	Top	260280
1	P	Top/Bottom	260282

For use with SRH ≤ 370 mm.

[19] Multipart centre lock – standard, horizontal

SRW	Y	#	E	Nº
600	N	1	E	255281

Size-specific combinations:

SRH	SRW	#	E	Nº
1101 – 1600	600	1	E	255281

[23] Striker → from page 178

[24] Security striker → from page 179

[26] Centre closer, concealed, frame component → from page 185

[27] Centre closer, concealed, sash component → from page 185

[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 182

[33] Lifting mishandling device sash component

Nº	
Sash component for lifting mishandling device	795927

[34] Lifting mishandling device frame component → from page 183

[39] Stay bearing

SRW	max. weight	Nº
P 3/130	max. 130 kg	859171
P 6/130	max. 130 kg	859172
P 6/150	max. 150 kg	859173

[40] Stay-bearing pin

SRW	Nº	
Stay-bearing pin	86	834705

[41] Sash stay cover caps → CTL_107





[42] Rebate stay guide

Nº	
Rebate stay guide for hinge side P / T / A16	331488

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

Nº	
Left	787375
Right	787376

[44] Rebate corner hinge


				Nº
12/20-13	Height adjustable	max. 150 kg	Left	2007203
12/20-13	Height adjustable	max. 150 kg	Right	2007204

[45] Pivot rest

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

[46] Rebate corner hinge / pivot rest cover caps →
CTL_107

[52] 90° travel restrictor

	Nº
Travel restrictor	264603

[54] Handle → CTL_1

Optional

[57] Rebate corner hinge extension

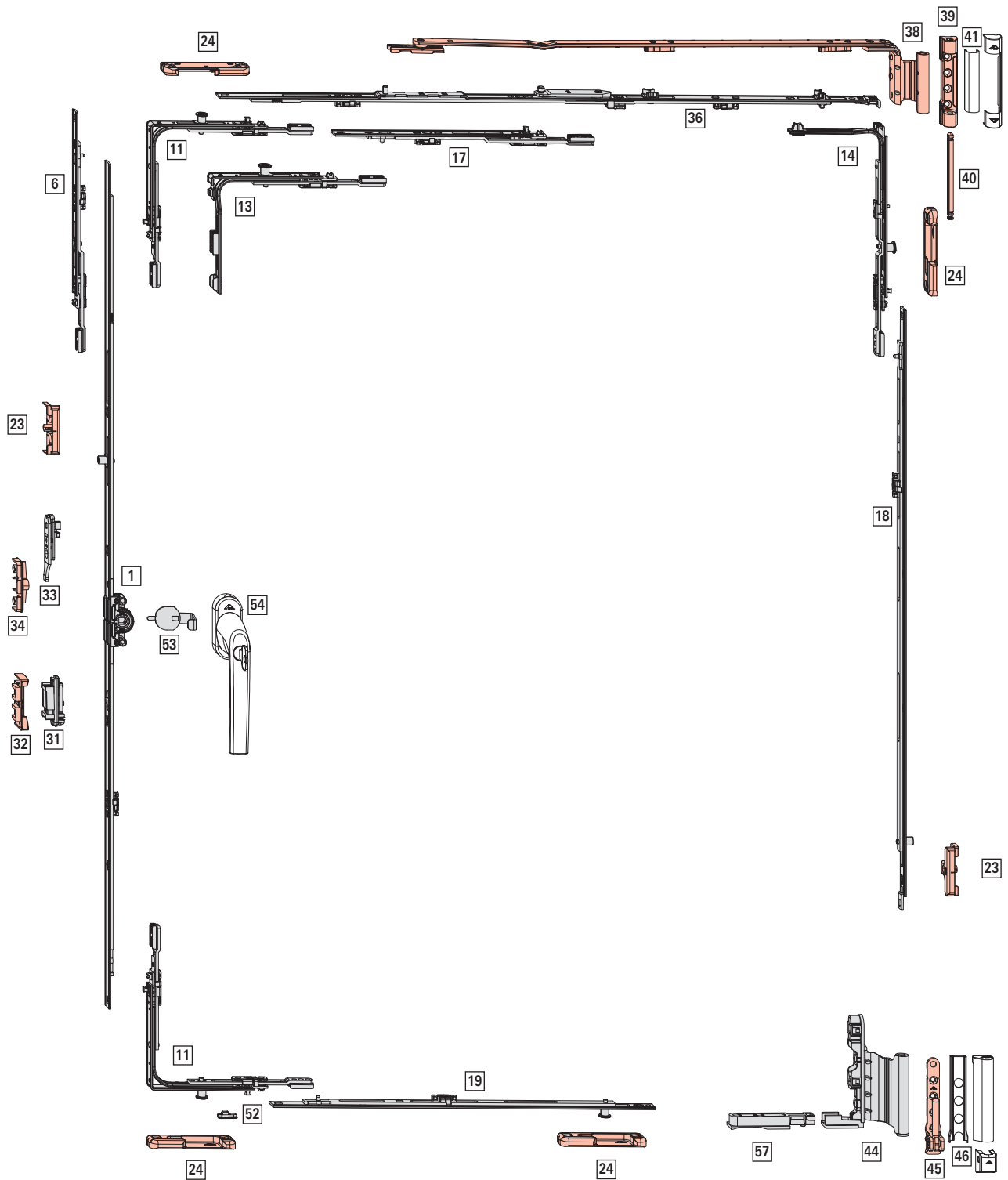
	Nº
Extension	2026631

Sash lifter → CTL_107

Arrestable brake stay → CTL_107



4.1.3.2 RC 1 N





Application range

SRW: 400 – 1600 mm

SRH: 280 – 2800 mm

S.kg: max. 150 kg

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

SRW	SRH	Y	N	#	E	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	2	E	795280
2201 – 2400	1000	2290	N	Y	2	E	795282
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] Centre lock, multipart, (SRH ≥ 2401 mm)

SRW	SRH	#	E	Nº
200	Y	–	–	308267
400	Y	1	E	280346

Size-specific combinations:

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

[11] Standard corner drive

#	E	Nº
1	P	260277

[13] Special short corner drive

#	E	Nº
1	P	260282

For use with SRH ≤ 370 mm.

[14] Sash stay corner drive

#	E	Nº
1	P	260286



INFO

No sash stay corner drive is possible with SRH 280 – 320.



INFO

With SRH 321 – 350 mm, crop the sash stay corner drive.

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

SRW	SRH	#	E	Nº
200	Y	–	–	308267

Size-specific combinations:

SRW	SRH	#	E	Nº
1401 – 1600	200 KU	–	–	308267

[18] Multipart centre lock – standard, vertical

SRW	SRH	#	E	Nº
400	N	1	E	255280
600	N	1	E	255281
600	Y	1	E	255282

Size-specific combinations:

SRW	SRH	#	E	Nº
1101 – 1800	600	1	E	255281
1801 – 2400	600 KU	1	E	255282
	600	1	E	255281
2401 – 2600	600 KU	1	E	255282
	600 KU	1	E	255282
	400	1	E	255280
2601 – 2800	600 KU	1	E	255282
	600 KU	1	E	255282
	600	1	E	255281

[19] Multipart centre lock – security, horizontal

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

Size-specific combinations:

SRW	SRH	#	E	Nº
400 – 600	200	1	P	255284
601 – 800	400	1	P	255285
801 – 1000	600 [4]	1	P	255286
1001 – 1200	600 KU	1	E	255282
	200	1	P	255284

[4] With SRW 801 – 814 mm, crop centre lock 600.



				Nº
1201 – 1400	600 KU	1	E	255282
	400	1	P	255285
1401 – 1600	600 KU	1	E	255282
	600 [5]	1	P	255286

[23] Striker → from page 178

[24] Security striker → from page 179

[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 182

[33] Lifting mishandling device sash component

	Nº
Sash component for lifting mishandling device	795927

[34] Lifting mishandling device frame component → from page 183

[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	–	–	787348
1001 – 1200	500	1090	–	–	787350
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	max. 130 kg	859171
P 6/130	max. 130 kg	859172
P 6/150	max. 150 kg	859173

[40] Stay-bearing pin

		Nº
Stay-bearing pin	86	834705

[5] With SRW 1401 – 1414 mm, crop centre lock 600.

[41] Sash stay cover caps → CTL_107

[44] Rebate corner hinge

				Nº
12/20-13	Height adjustable	max. 150 kg	Left	2007203
12/20-13	Height adjustable	max. 150 kg	Right	2007204

[45] Pivot rest

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

[46] Rebate corner hinge / pivot rest cover caps → CTL_107

[52] 90° travel restrictor

	Nº
Travel restrictor	264603

[53] Drilling protection

	Nº
Drilling protection	797819

[54] Handle, lockable → CTL_1

Optional

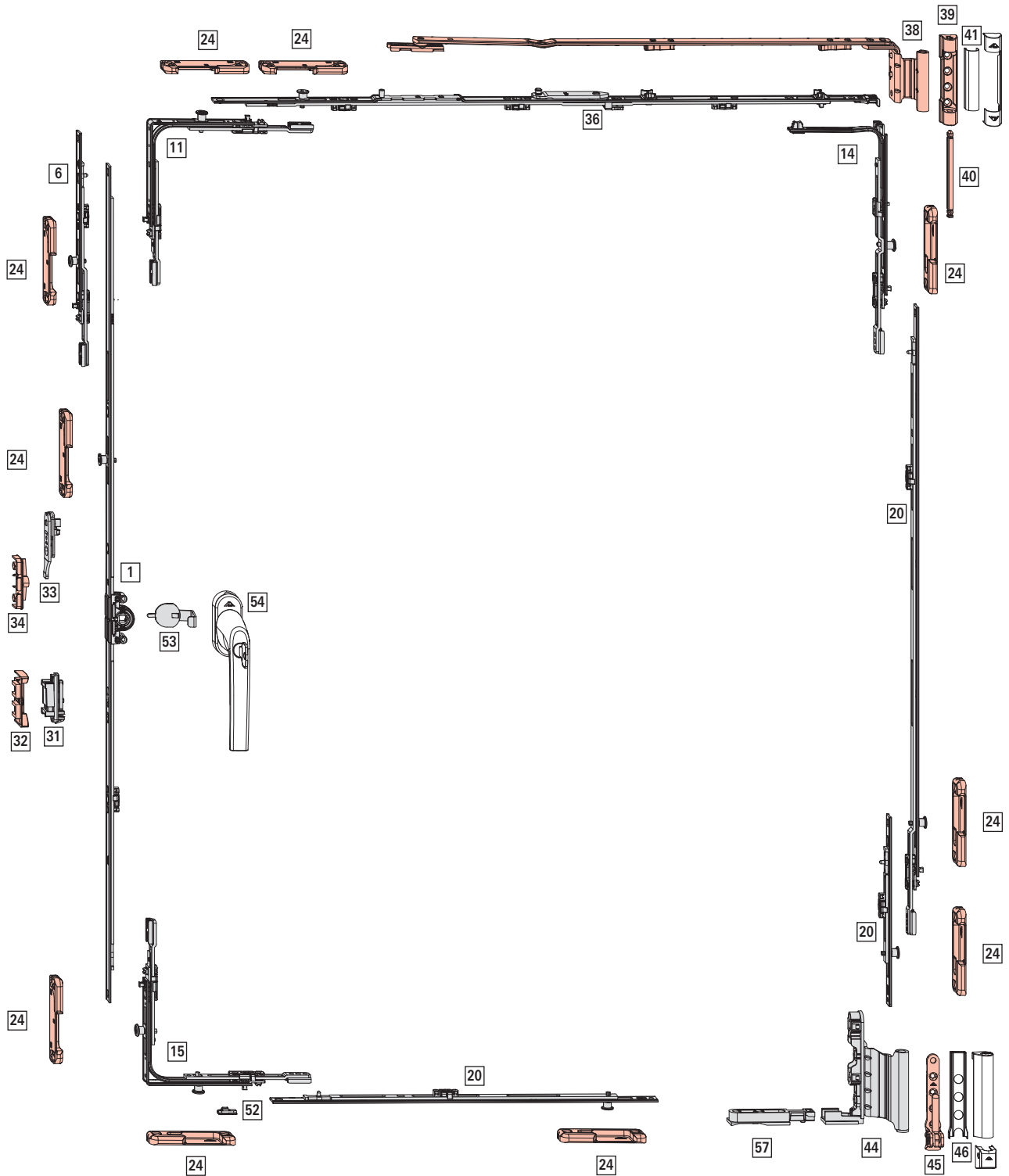
[57] Rebate corner hinge extension

	Nº
Extension	2026631

Sash lifter → CTL_107



4.1.3.3 RC 2 / RC 2 N





Application range

SRW: 490 – 1400 mm

SRH: 600 – 2800 mm

S.kg: max. 150 kg

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

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] Centre lock, multipart, (SRH ≥ 2401 mm)

200	Y	1	V	337708	
400	Y	1	V	337710	

Size-specific combinations:

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

[11] Standard corner drive

1	V	260272	

[14] Sash stay corner drive

1	V	260284	

[15] Corner drive, standard (security)

2	V	260274	

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

200	N	1	V	296853	
400	N	1	V	296854	
600	N	1	V	296855	
600	Y	1	V	337711	

Size-specific combinations:

490 – 690	600 – 800	200	1	V	296853
691 – 890	801 – 1000	400	1	V	296854

891 – 1090	1001 – 1200	600	1	V	296855
1091 – 1290	1201 – 1400	600 KU	1	V	337711
		200	1	V	296853
1291 – 1400	1401 – 1600	600 KU	1	V	337711
		400	1	V	296854
	1601 – 1800	600 KU	1	V	337711
		600	1	V	296855
	1801 – 2000	600 KU	1	V	337711
		600 KU	1	V	337711
		200	1	V	296853
	2001 – 2200	600 KU	1	V	337711
		600 KU	1	V	337711
		400	1	V	296854
	2201 – 2400	600 KU	1	V	337711
		600 KU	1	V	337711
		600	1	V	296855
	2401 – 2600	600 KU	1	V	337711
		600 KU	1	V	337711
		600 KU	1	V	337711
		200	1	V	296853
	2601 – 2800	600 KU	1	V	337711
		600 KU	1	V	337711
		600 KU	1	V	337711
		400	1	V	296854

[24] Security striker → from page 179

[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 182

[33] Lifting mishandling device sash component

Sash component for lifting mishandling device	795927	




[34] Lifting mishandling device frame component → from page 183

[36] Stay guide – security

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



411 – 600	250	Left	787235	

			Nº
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	max. 130 kg	859171
P 6/130	max. 130 kg	859172
P 6/150	max. 150 kg	859173

[40] Stay-bearing pin

		Nº
Stay-bearing pin	86	834705

[41] Sash stay cover caps → CTL_107

[44] Rebate corner hinge


				Nº
12/20-13	Height adjustable	max. 150 kg	Left	2007203
12/20-13	Height adjustable	max. 150 kg	Right	2007204

[45] Pivot rest


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

[46] Rebate corner hinge / pivot rest cover caps → CTL_107

[52] 90° travel restrictor

	Nº
Travel restrictor	264603

[53] Drilling protection

	Nº
Drilling protection	797819

[54] Handle, lockable → CTL_1

Optional

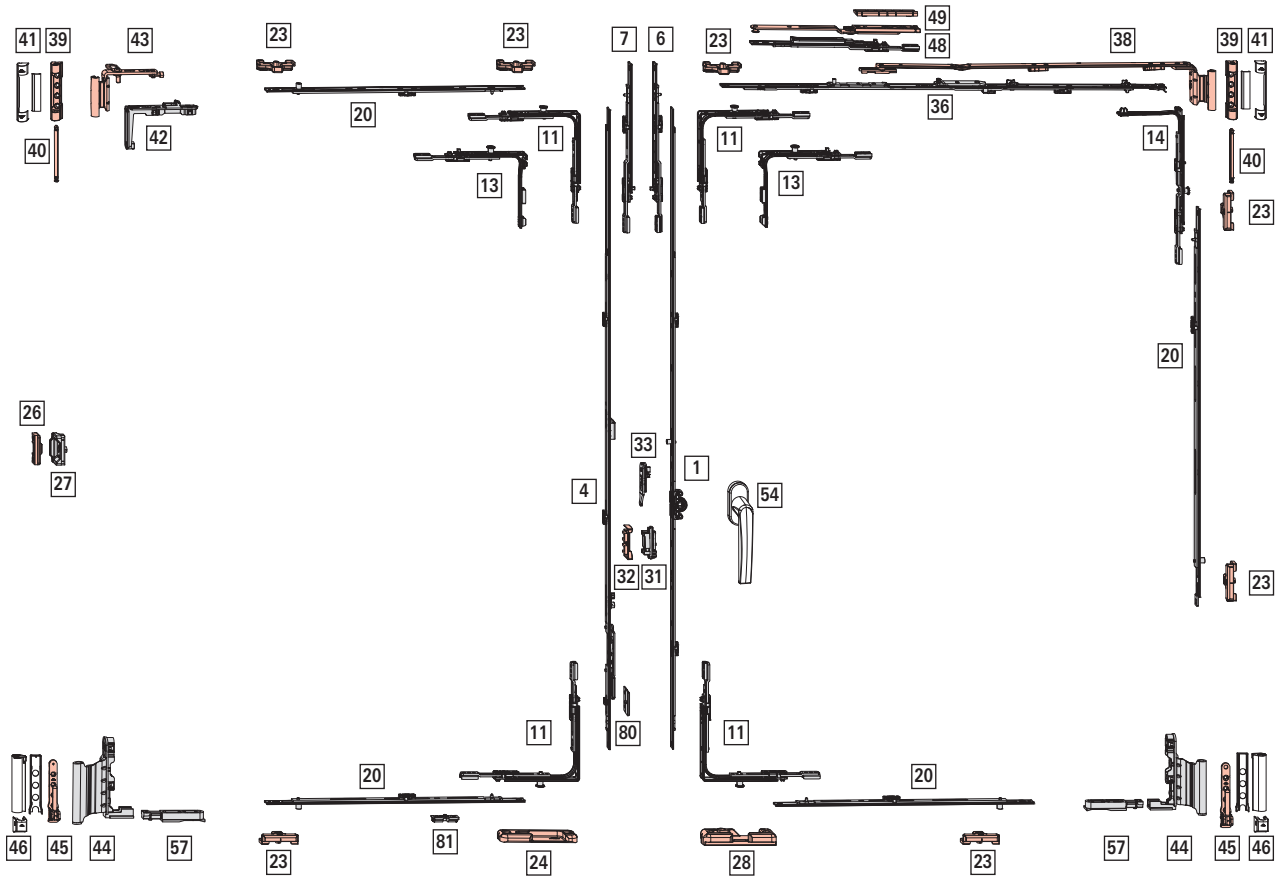
[57] Rebate corner hinge extension

	Nº
Extension	2026631



4.1.4 Floating-mullion hardware

4.1.4.1 Standard – basic security





Application range

SRW: 290 – 1600 mm

SRH: 280 – 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	2	E	795280
2201 – 2400	1000	2290	N	Y	2	E	795282
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	N	2003815
431 – 710	195	600	–	Y	Y	Y	795462
601 – 800	300	690	–	N	Y	Y	763116
801 – 1000	490	890	1	N	Y	Y	763117
1001 – 1200	335	1090	1	N	Y	Y	763118
1201 – 1400	335	1290	1	N	Y	Y	763119
1401 – 1600	335	1490	2	N	Y	Y	763120
1601 – 1800	335	1690	2	N	Y	Y	795474
1801 – 2000	640	1890	2	N	Y	Y	795476
2001 – 2200	640	2090	3	N	Y	Y	795478
2201 – 2400	640	2290	3	N	Y	Y	795480

Lever-operated espagnolette 2003815 must be secured with a fastening plate 255211.

[6] Centre lock, multipart, (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] Centre lock, multipart – floating mullion, (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	Top	260280
1	P	Top Bottom	260282

Use → 5.1.1.1 “Possible combinations” from page 167

[14] Sash stay corner drive

		Nº
1	P	260286



INFO

No sash stay corner drive is possible with SRH 280 – 320.



INFO

With SRH 321 – 350 mm, crop the sash stay corner drive.

[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
1101 – 1600	1101 – 1800	600	1	E	255281
		1801 – 2400	600 KU	1	E
	2401 – 2600	600	1	E	255281
		600 KU	1	E	255282
	2601 – 2800	600 KU	1	E	255282
		400	1	E	255280
		600 KU	1	E	255282
		600 KU	1	E	255282
		600	1	E	255281
		600	1	E	255281

[23] Striker → from page 178

[24] Security striker → from page 179



INFO

Lever-operated espagnolette, standard: A left second opening sash with asymmetrical strikers always requires right strikers horizontally at the bottom – and vice versa.

[26] Centre closer, concealed, frame component → from page 185

[27] Centre closer, concealed, sash component → from page 185

[28] Tilt striker → from page 175

[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	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	–	–	787348
1001 – 1200	500	1090	–	–	787350
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).



INFO

With a size 150 sash stay, the tilt distance is 80 mm.

[39] Stay bearing

		Nº
P 3/130	max. 130 kg	859171
P 6/130	max. 130 kg	859172
P 6/150	max. 150 kg	859173

[40] Stay-bearing pin

		Nº
Stay-bearing pin	86	834705

[41] Sash stay cover caps → CTL_107

[42] Rebate stay guide

	Nº
Rebate stay guide for hinge side P / T / A16	331488

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

	Nº
Left	787375
Right	787376

[44] Rebate corner hinge

				Nº
12/20-13	Height adjustable	max. 150 kg	Left	2007203
12/20-13	Height adjustable	max. 150 kg	Right	2007204

[45] Pivot rest

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

[46] Rebate corner hinge / pivot rest cover caps → CTL_107

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

		Nº
Frame and sash component	200	255237



[49] Packer → *from page 182*

[54] Handle → CTL_1

[80] Fastening plate



Nº

Fastening plate with cam

255211



INFO

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

[81] Run-up block → CTL_107

The run-up block depends on the striker used.

Optional

[57] Rebate corner hinge extension

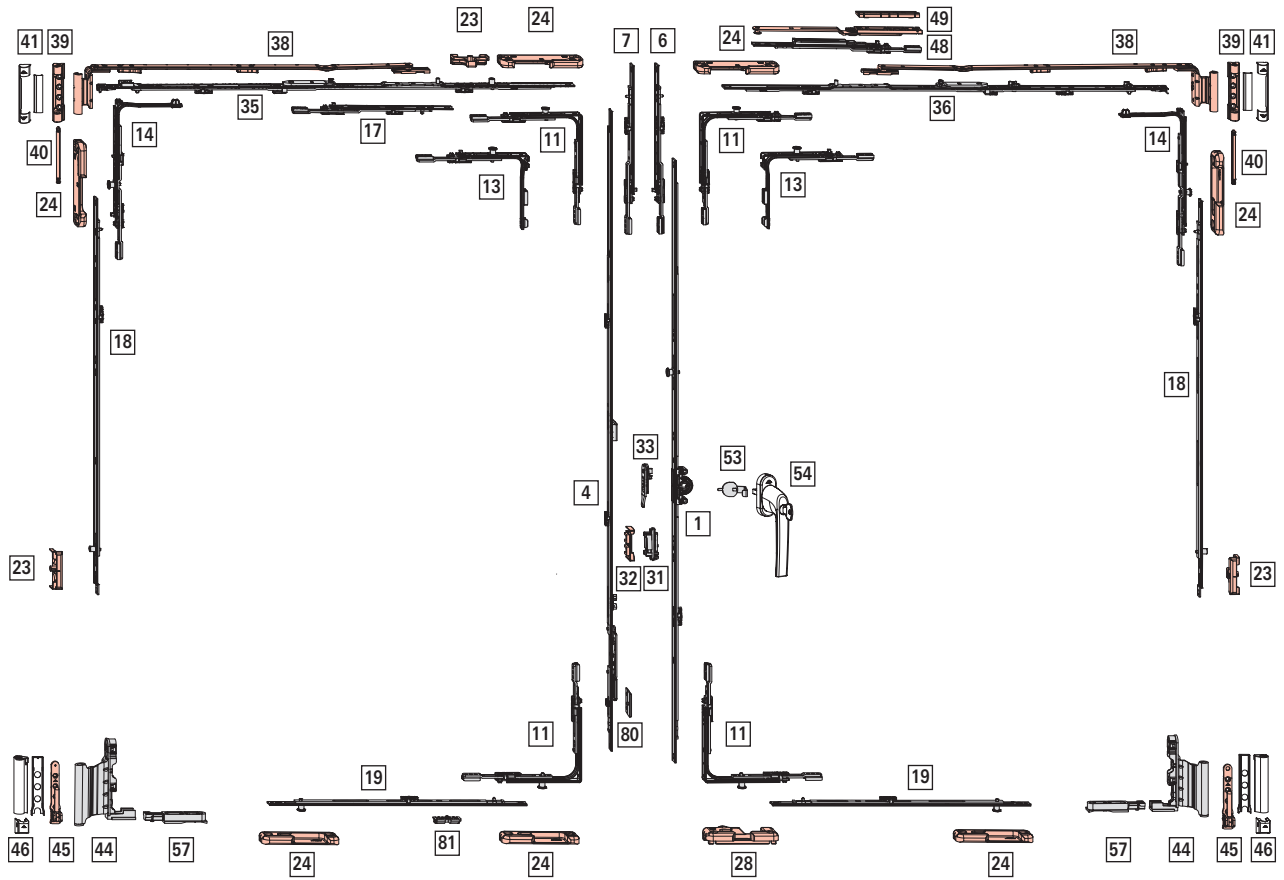


Nº

Extension

2026631

4.1.4.2 Standard – RC 1 N





Application range

SRW: 400 – 1600 mm

SRH: 280 – 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	2	E	795280
2201 – 2400	1000	2290	N	Y	2	E	795282
2201 – 2400	1000	2290	N	Y	3	E	794639

i 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

Lever-operated espagnolette 2003815 must be secured with a fastening plate 255211.

[6] Centre lock, multipart, (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] Centre lock, multipart – floating mullion, (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	P	260277

[13] Special short corner drive

		Nº
1	P	260282

Use → 5.1.1.1 “Possible combinations” from page 167

[14] Sash stay corner drive

		Nº
1	P	260286

i INFO

No sash stay corner drive is possible with SRH 280 – 320.

i INFO

With SRH 321 – 350 mm, crop the sash stay corner drive.

[17] Centre lock, multipart – 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 KU	–	–	308267
1201 – 1400	400 KU	1	E	280346
1401 – 1600	600 KU	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
1101 – 1800	600	1	E	255281
1801 – 2400	600 KU	1	E	255282
	600	1	E	255281
2401 – 2600	600 KU	1	E	255282
	600 KU	1	E	255282
	400	1	E	255280
2601 – 2800	600 KU	1	E	255282
	600 KU	1	E	255282
	600	1	E	255281

[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
400 – 600	200	1	P	255284
601 – 800	400	1	P	255285
801 – 1000	600 [6]	1	P	255286
1001 – 1200	600 KU	1	E	255282
	200	1	P	255284
1201 – 1400	600 KU	1	E	255282
	400	1	P	255285
1401 – 1600	600 KU	1	E	255282
	600 [7]	1	P	255286

[23] Striker → from page 178

[24] Security striker → from page 179




INFO



Lever-operated espagnolette, standard: A left second opening sash with asymmetrical strikers always requires right strikers horizontally at the bottom – and vice versa.

[28] Tilt striker → from page 175


[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	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	–	–	787348
1001 – 1200	500	1090	–	–	787350
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).





INFO

With a size 150 sash stay, the tilt distance is 80 mm.

[39] Stay bearing

		Nº
P 3/130	max. 130 kg	859171
P 6/130	max. 130 kg	859172
P 6/150	max. 150 kg	859173

[40] Stay-bearing pin

		Nº
Stay-bearing pin	86	834705





[6] With SRW 801 – 814 mm, crop centre lock 600.

[7] With SRW 1401 – 1414 mm, crop centre lock 600.



[41] Sash stay cover caps → CTL_107

[44] Rebate corner hinge



					Nº
12/20-13	Height adjustable	max. 150 kg	Left	2007203	
12/20-13	Height adjustable	max. 150 kg	Right	2007204	

[45] Pivot rest

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


[46] Rebate corner hinge / pivot rest cover caps → CTL_107

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

			Nº
Frame and sash component	200	255237	


[49] Packer → from page 182

[53] Drilling protection

		Nº
Drilling protection	797819	

[54] Handle, lockable → CTL_1

[80] Fastening plate

		Nº
Fastening plate with cam	255211	

INFO

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

[81] Run-up block → CTL_107

The run-up block depends on the striker used.

Optional

[57] Rebate corner hinge extension

		Nº
Extension	2026631	



Application range

SRW: 490 – 1400 mm

SRH: 600 – 2800 mm

S.kg: max. 150 kg

[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] Centre lock, multipart, (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] Centre lock, multipart – floating mullion, (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] Corner drive, standard (security)

			Nº
2	V	–	260274

[17] Centre lock, multipart – standard, horizontal – top, Turn-Only sash

					Nº
200	Y	–	–	–	308267
400	Y	1	V	–	337710

					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
490 – 690	600 – 800	200	1	V	–	296853
691 – 890	801 – 1000	400	1	V	–	296854
891 – 1090	1001 – 1200	600	1	V	–	296855
1091 – 1290	1201 – 1400	600 KU	1	V	–	337711
		200	1	V	–	296853

					Nº
1291 – 1400	1401 – 1600	600 KU	1	V	337711
		400	1	V	296854
	1601 – 1800	600 KU	1	V	337711
		600	1	V	296855
	1801 – 2000	600 KU	1	V	337711
		600 KU	1	V	337711
		200	1	V	296853
		600 KU	1	V	337711
	2001 – 2200	600 KU	1	V	337711
		400	1	V	296854
	2201 – 2400	600 KU	1	V	337711
		600 KU	1	V	337711
	600	1	V	296855	
	600 KU	1	V	337711	
2401 – 2600	600 KU	1	V	337711	
	600 KU	1	V	337711	
	600 KU	1	V	337711	
	200	1	V	296855	
2601 – 2800	600 KU	1	V	337711	
	600 KU	1	V	337711	
	600 KU	1	V	337711	
	400	1	V	296854	

[24] Security striker → from page 179



INFO

Lever-operated espagnolette, standard: A left second opening sash with asymmetrical strikers always requires right strikers horizontally at the bottom – and vice versa.

[28] Tilt striker → from page 175

[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	788378

[33] Lifting mishandling device sash component

	Nº
Sash component for lifting mishandling device	795927

[35] Turn-Only sash stay guide – security

					Nº
411 – 600	250	490	–	–	787367
601 – 800	350	690	–	–	787368
801 – 1000	500	890	1	V	787370

[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	max. 130 kg	859171
P 6/130	max. 130 kg	859172
P 6/150	max. 150 kg	859173

[40] Stay-bearing pin

		Nº
Stay-bearing pin	86	834705

[41] Sash stay cover caps → CTL_107

[44] Rebate corner hinge

				Nº
12/20-13	Height adjustable	max. 150 kg	Left	2007203
12/20-13	Height adjustable	max. 150 kg	Right	2007204

[45] Pivot rest

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

[46] Rebate corner hinge / pivot rest cover caps → CTL_107

[53] Drilling protection

	Nº
Drilling protection	797819

[54] Handle, lockable → CTL_1

[81] Run-up block → CTL_107

The run-up block depends on the striker used.

[85] Retainer clasp

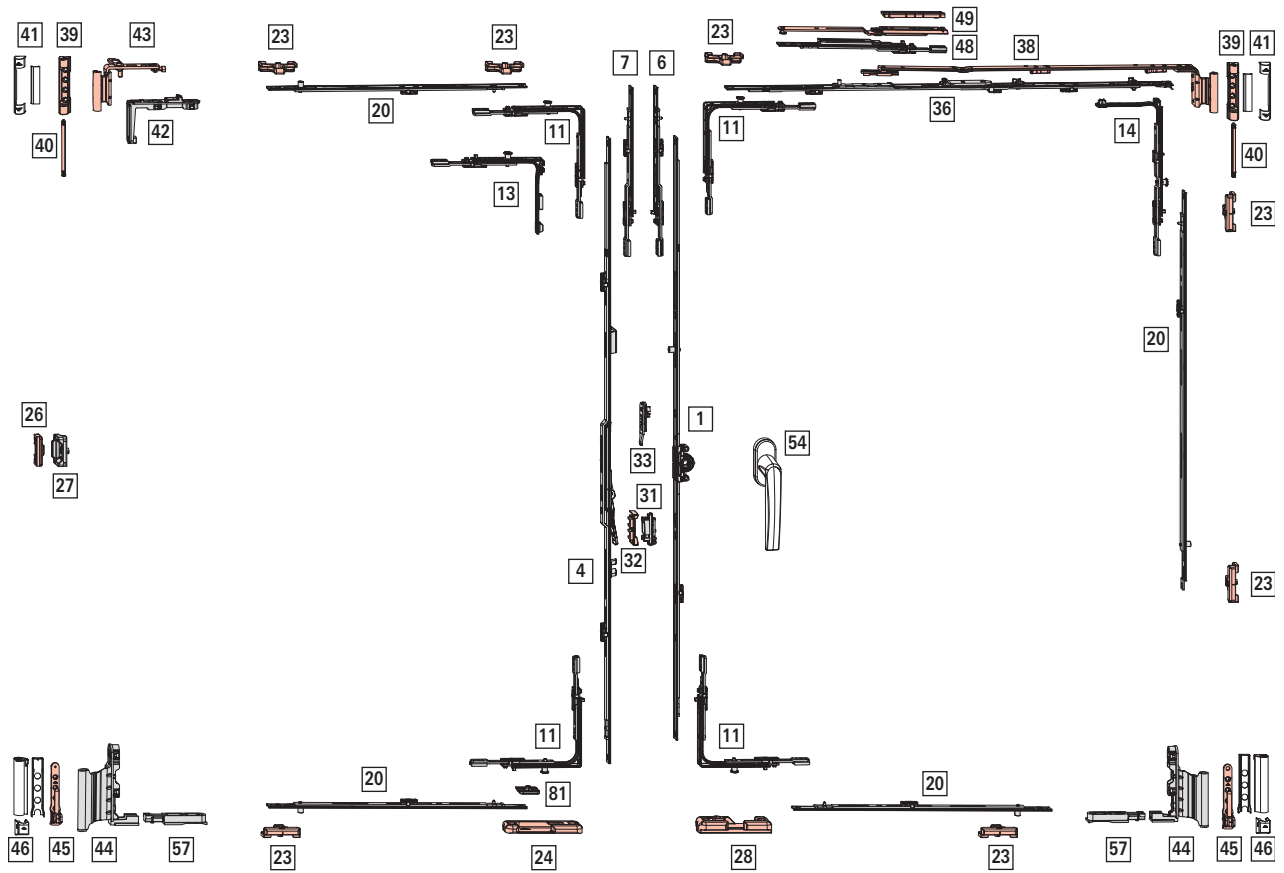
	Nº
Retainer clasp for lever-operated espagnolette, standard	314203



Optional

[57] Rebate corner hinge extension	
	Nº
Extension	2026631

4.1.4.4 Plus – basic security





Application range

SRW: 290 – 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	2	E	795280
2201 – 2400	1000	2290	N	Y	2	E	795282
2201 – 2400	1000	2290	N	Y	3	E	794639

[4] Lever-operated 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] Centre lock, multipart, (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] Centre lock, multipart – floating mullion, (SRH ≥ 2401 mm)

			Nº
200	Y	–	308267
400	Y	1	280345

Size-specific combinations:

			Nº
2401 – 2600	200 KU	–	308267

			Nº
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	Top	260280
1	P	Top Bottom	260282

Use → 5.1.1.1 “Possible combinations” from page 167

[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	
1101 – 1600	1101 – 1800	600	1	E	255281
	1801 – 2400	600 KU	1	E	255282
		600	1	E	255281
	2401 – 2600	600 KU	1	E	255282
		600 KU	1	E	255282
		400	1	E	255280
	2601 – 2800	600 KU	1	E	255282
		600 KU	1	E	255282
		600	1	E	255281

[23] Striker → from page 178

[24] Security striker → from page 179

[26] Centre closer, concealed, frame component → from page 185



[27] Centre closer, concealed, sash component → from page 185

[28] Tilt striker → from page 175


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

	Nº
Bullet catch sash component	788363

[32] Bullet catch (optional SRH \geq 1601 mm)

		Nº
Bullet catch for lever-operated espagnolette	Screw-on	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	–	–	–	787348
1001 – 1200	500	1090	–	–	–	787350
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 SRW < 500 mm, set the tilt depth to 80 mm (with sash stay from size 250 and above).





INFO

With a size 150 sash stay, the tilt distance is 80 mm.

[39] Stay bearing


		Nº
P 3/130	max. 130 kg	859171
P 6/130	max. 130 kg	859172
P 6/150	max. 150 kg	859173

[40] Stay-bearing pin


		Nº
Stay-bearing pin	86	834705

[41] Sash stay cover caps → CTL_107

[42] Rebate stay guide

	Nº
Rebate stay guide for hinge side P / T / A16	331488

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

	Nº
Left	787375
Right	787376

[44] Rebate corner hinge


				Nº
12/20-13	Height adjustable	max. 150 kg	Left	2007203
12/20-13	Height adjustable	max. 150 kg	Right	2007204

[45] Pivot rest

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

[46] Rebate corner hinge / pivot rest cover caps → CTL_107

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

		Nº
Frame and sash component	200	255237

[49] Packer → from page 182


[54] Handle → CTL_1

[81] Run-up block → CTL_107

The run-up block depends on the striker used.

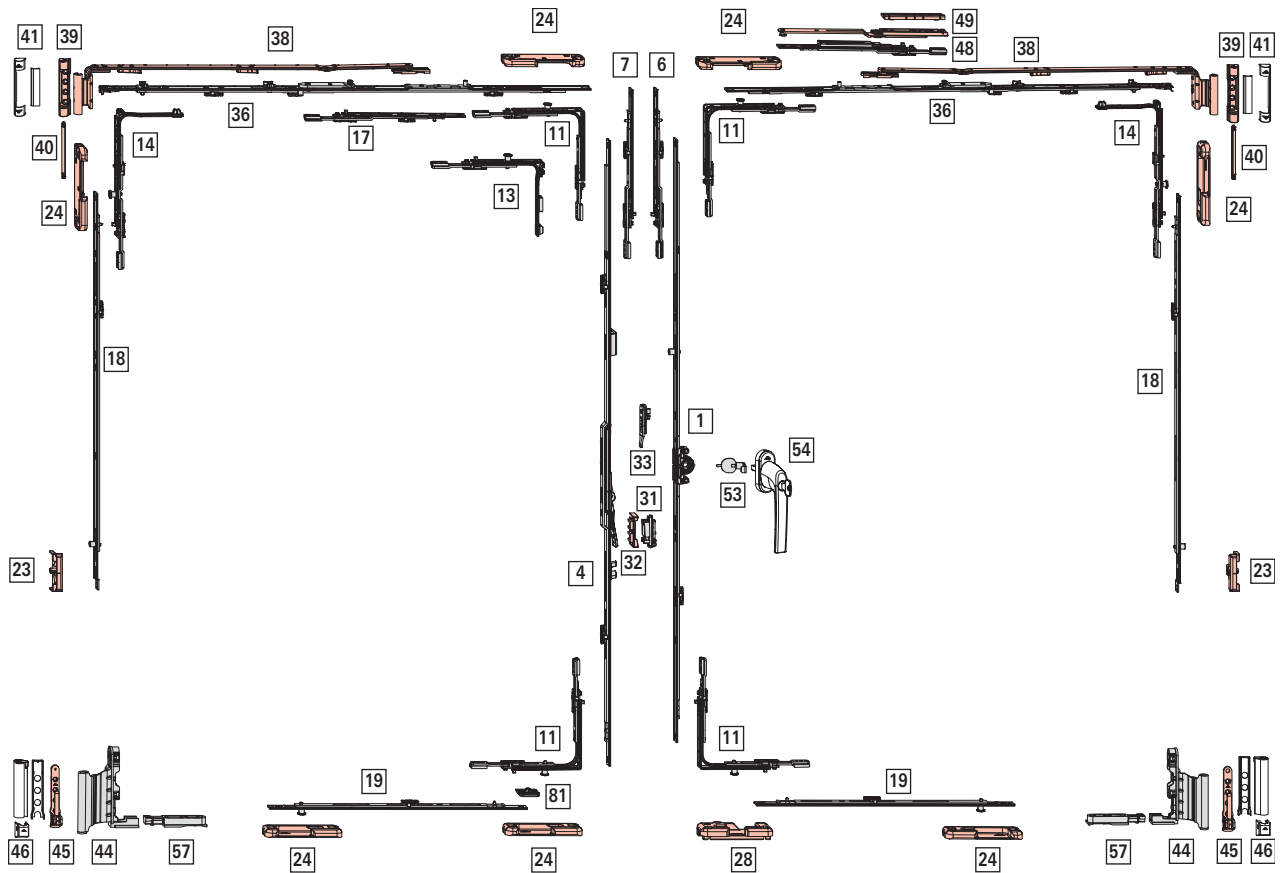
Optional

[57] Rebate corner hinge extension

	Nº
Extension	2026631



4.1.4.5 Plus – RC 1 N





Application range

SRW: 400 – 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	2	E	795280
2201 – 2400	1000	2290	N	Y	2	E	795282
2201 – 2400	1000	2290	N	Y	3	E	794639

[4] Lever-operated 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] Centre lock, multipart, (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] Centre lock, multipart – floating mullion, (SRH ≥ 2401 mm)

			Nº
200	Y	–	308267
400	Y	1	280345

Size-specific combinations:

			Nº
2401 – 2600	200 KU	–	308267

			Nº
2601 – 2800	400 KU	1	280345

[11] Standard corner drive

		Nº
1	P	260277

[13] Special short corner drive

		Nº
1	P	260282

Use → 5.1.1.1 “Possible combinations” from page 167

[14] Sash stay corner drive

		Nº
1	P	260286

[17] Centre lock, multipart – 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
1101 – 1800	600	1	E	255281
1801 – 2400	600 KU	1	E	255282
	600	1	E	255281
2401 – 2600	600 KU	1	E	255282
	600 KU	1	E	255282
	400	1	E	255280
2601 – 2800	600 KU	1	E	255282
	600 KU	1	E	255282
	600	1	E	255281

[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
400 – 600	200	1	P	255284

					Nº
601 – 800	400		1	P	255285
801 – 1000	600 [8]		1	P	255286
1001 – 1200	600 KU		1	E	255282
	200		1	P	255284
1201 – 1400	600 KU		1	E	255282
	400		1	P	255285
1401 – 1600	600 KU		1	E	255282
	600 [9]		1	P	255286

[23] Striker → from page 178

[24] Security striker → from page 179

[28] Tilt striker → from page 175

[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	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	–	–	–	787348
1001 – 1200	500	1090	–	–	–	787350
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).

[8] With SRW 801 – 814 mm, crop centre lock 600.

[9] With SRW 1401 – 1414 mm, crop centre lock 600.



INFO

With a size 150 sash stay, the tilt distance is 80 mm.

[39] Stay bearing

			Nº
P 3/130		max. 130 kg	859171
P 6/130		max. 130 kg	859172
P 6/150		max. 150 kg	859173

[40] Stay-bearing pin

			Nº
Stay-bearing pin		86	834705

[41] Sash stay cover caps → CTL_107

[44] Rebate corner hinge

					Nº
12/20-13	Height adjustable		max. 150 kg	Left	2007203
12/20-13	Height adjustable		max. 150 kg	Right	2007204

[45] Pivot rest

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

[46] Rebate corner hinge / pivot rest cover caps → CTL_107

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

			Nº
Frame and sash component		200	255237

[49] Packer → from page 182

[53] Drilling protection

		Nº
Drilling protection		797819

[54] Handle, lockable → CTL_1

[81] Run-up block → CTL_107

The run-up block depends on the striker used.

Optional

[57] Rebate corner hinge extension

		Nº
Extension		2026631





Application range

SRW: 490 – 1400 mm

SRH: 600 – 2800 mm

S.kg: max. 150 kg

[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 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] Centre lock, multipart, (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] Centre lock, multipart – floating mullion, (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] Corner drive, standard (security)

							Nº
2	V	–	–	–	–	–	260274

[20] Multipart centre lock – standard, 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
490 – 690	600 – 800	200	1	V	–	–	–	–	296853
691 – 890	801 – 1000	400	1	V	–	–	–	–	296854
891 – 1090	1001 – 1200	600	1	V	–	–	–	–	296855
1091 – 1290	1201 – 1400	600 KU	1	V	–	–	–	–	337711
		200	1	V	–	–	–	–	296853
1291 – 1400	1401 – 1600	600 KU	1	V	–	–	–	–	337711
		400	1	V	–	–	–	–	296854
	1601 – 1800	600 KU	1	V	–	–	–	–	337711
		600	1	V	–	–	–	–	296855
	1801 – 2000	600 KU	1	V	–	–	–	–	337711
		600 KU	1	V	–	–	–	–	337711
		200	1	V	–	–	–	–	296853
	2001 – 2200	600 KU	1	V	–	–	–	–	337711
		600 KU	1	V	–	–	–	–	337711
		400	1	V	–	–	–	–	296854
	2201 – 2400	600 KU	1	V	–	–	–	–	337711
		600 KU	1	V	–	–	–	–	337711
		600	1	V	–	–	–	–	296855
	2401 – 2600	600 KU	1	V	–	–	–	–	337711
		600 KU	1	V	–	–	–	–	337711
		600 KU	1	V	–	–	–	–	337711
		200	1	V	–	–	–	–	296853
	2601 – 2800	600 KU	1	V	–	–	–	–	337711
		600 KU	1	V	–	–	–	–	337711
		600 KU	1	V	–	–	–	–	337711
		400	1	V	–	–	–	–	296854



[24] Security striker → from page 179

[28] Tilt striker → from page 175


[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	788378




[33] Lifting mishandling device sash component

	Nº
Sash component for lifting mishandling device	795927



[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	max. 130 kg	859171
P 6/130	max. 130 kg	859172
P 6/150	max. 150 kg	859173

[40] Stay-bearing pin




		Nº
Stay-bearing pin	86	834705




[41] Sash stay cover caps → CTL_107

[44] Rebate corner hinge

				Nº
12/20-13	Height adjustable	max. 150 kg	Left	2007203
12/20-13	Height adjustable	max. 150 kg	Right	2007204


[45] Pivot rest

			Nº
P 3/130	Laterally adjustable	max. 130 kg	787207
P 6/130	Laterally adjustable	max. 130 kg	787208

			Nº
P 6/150	Laterally adjustable	max. 150 kg	787209

[46] Rebate corner hinge / pivot rest cover caps → CTL_107

[53] Drilling protection

	Nº
Drilling protection	797819





[54] Handle, lockable → CTL_1

[81] Run-up block → CTL_107

The run-up block depends on the striker used.


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.

[57] Rebate corner hinge extension

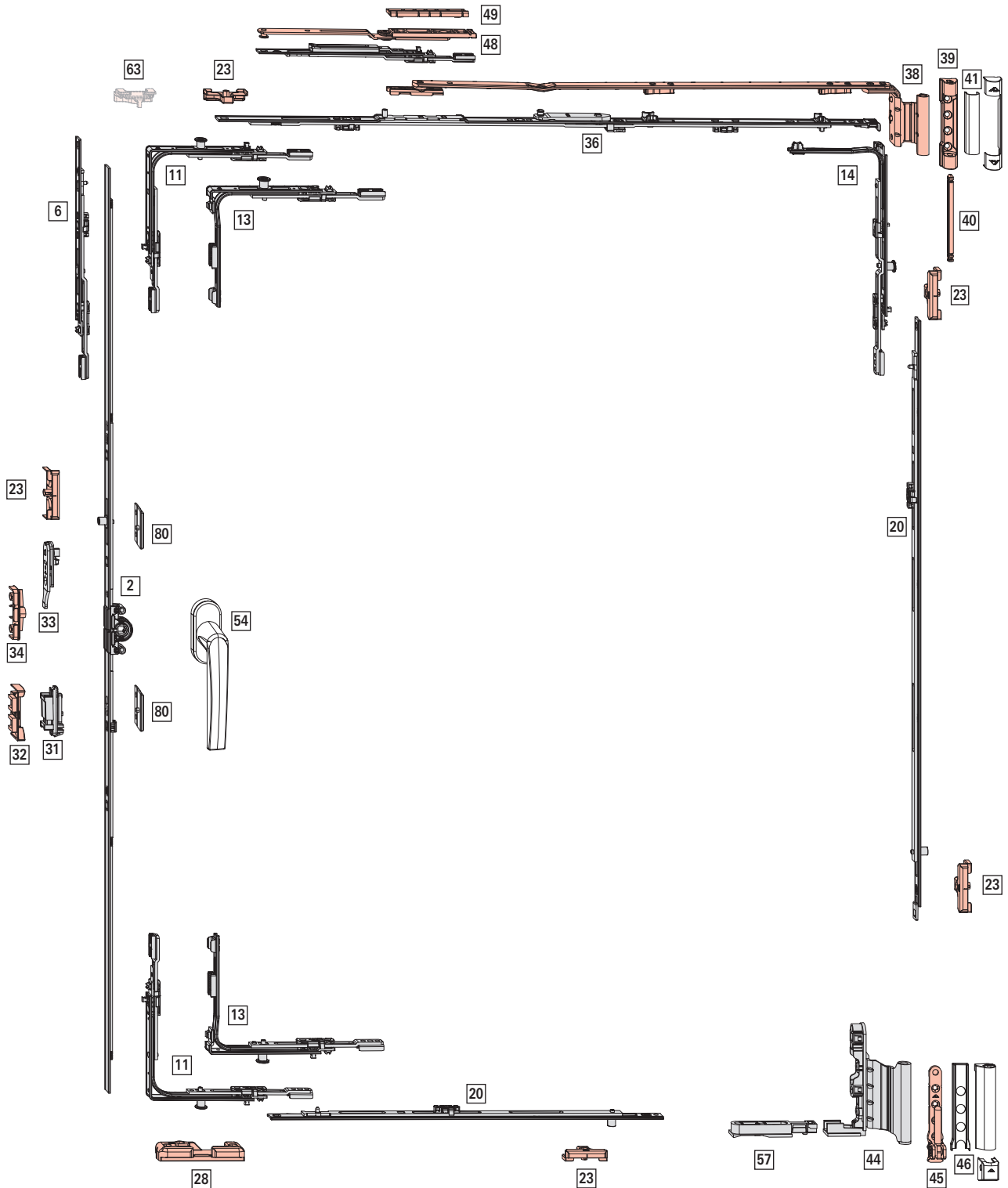
	Nº
Extension	2026631



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

S.kg: max. 150 kg

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

SRW	SRH	SRW	SRH	SRW	SRH	SRW	SRH	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

T&T espagnolette 259717 must be secured with two fastening plates 255211.

[6] Centre lock, multipart, (SRH ≥ 2401 mm)

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

Size-specific combinations:

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

[11] Standard corner drive

SRW	SRH	SRW	SRH	SRW	SRH	Nº
1	E	–	–	–	–	260275
1	P	–	–	–	–	260277

[13] Special short corner drive

SRW	SRH	SRW	SRH	SRW	SRH	Nº
1	E	–	–	–	–	260280
1	P	–	–	–	–	260282

For use with SRH ≤ 620 mm.

[14] Sash stay corner drive

SRW	SRH	SRW	SRH	Nº
1	P	–	–	260286

INFO
No sash stay corner drive is possible with SRH 280 – 320.

INFO
With SRH 321 – 350 mm, crop the sash stay corner drive.

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

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

Size-specific combinations:

SRW	SRH	SRW	SRH	SRW	SRH	Nº
1101 – 1600	1101 – 1800	600	1	E	–	255281
		600 KU	1	E	–	255282
	1801 – 2400	600	1	E	–	255281
		600 KU	1	E	–	255282
	2401 – 2600	600 KU	1	E	–	255282
		600 KU	1	E	–	255282
	2601 – 2800	400	1	E	–	255280
		600 KU	1	E	–	255282
		600 KU	1	E	–	255282
		600	1	E	–	255281

[23] Striker → from page 178

[28] Tilt striker → from page 175

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

SRW	SRH	Nº
Bullet catch sash component	–	788363

[32] Bullet-catch frame component (optional SRH ≥ 1601 mm) → from page 182

[33] Lifting mishandling device sash component

SRW	SRH	Nº
Sash component for lifting mishandling device	–	795927

[34] Lifting mishandling device frame component → from page 183




[36] Stay guide – basic security

SRW	SRH	SRW	SRH	SRW	SRH	Nº
290 – 410	150	300	–	–	–	787345
411 – 600	250	490	–	–	–	787346
601 – 800	350	690	–	–	–	787347
801 – 1000	500	890	–	–	–	787348
1001 – 1200	500	1090	–	–	–	787350
1201 – 1400	500	1290	1	E	–	787351

INFO
With SRW < 310 mm, remove the assembly clip.

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

SRW	SRH	SRW	SRH	Nº
290 – 410	150	Left	–	787233
290 – 410	150	Right	–	787234

			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



INFO

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





INFO

With a size 150 sash stay, the tilt distance is 80 mm.

[39] Stay bearing

		Nº
P 3/130	max. 130 kg	859171
P 6/130	max. 130 kg	859172
P 6/150	max. 150 kg	859173

[40] Stay-bearing pin




		Nº
Stay-bearing pin	86	834705

[41] Sash stay cover caps → CTL_107

[44] Rebate corner hinge



				Nº
12/20-13	Height adjustable	max. 150 kg	Left	2007203
12/20-13	Height adjustable	max. 150 kg	Right	2007204

[45] Pivot rest

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

[46] Rebate corner hinge / pivot rest cover caps → CTL_107


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

		Nº
Frame and sash component	200	255237

[49] Packer → from page 182

[54] Handle → CTL_1


[80] Fastening plate

	Nº
Fastening plate with cam	255211

Can only be used in combination with T&T espagnolette 259717.

Optional

[57] Rebate corner hinge extension

	Nº
Extension	2026631

[63] Night vent, SRW ≥ 601 mm → from page 184



INFO

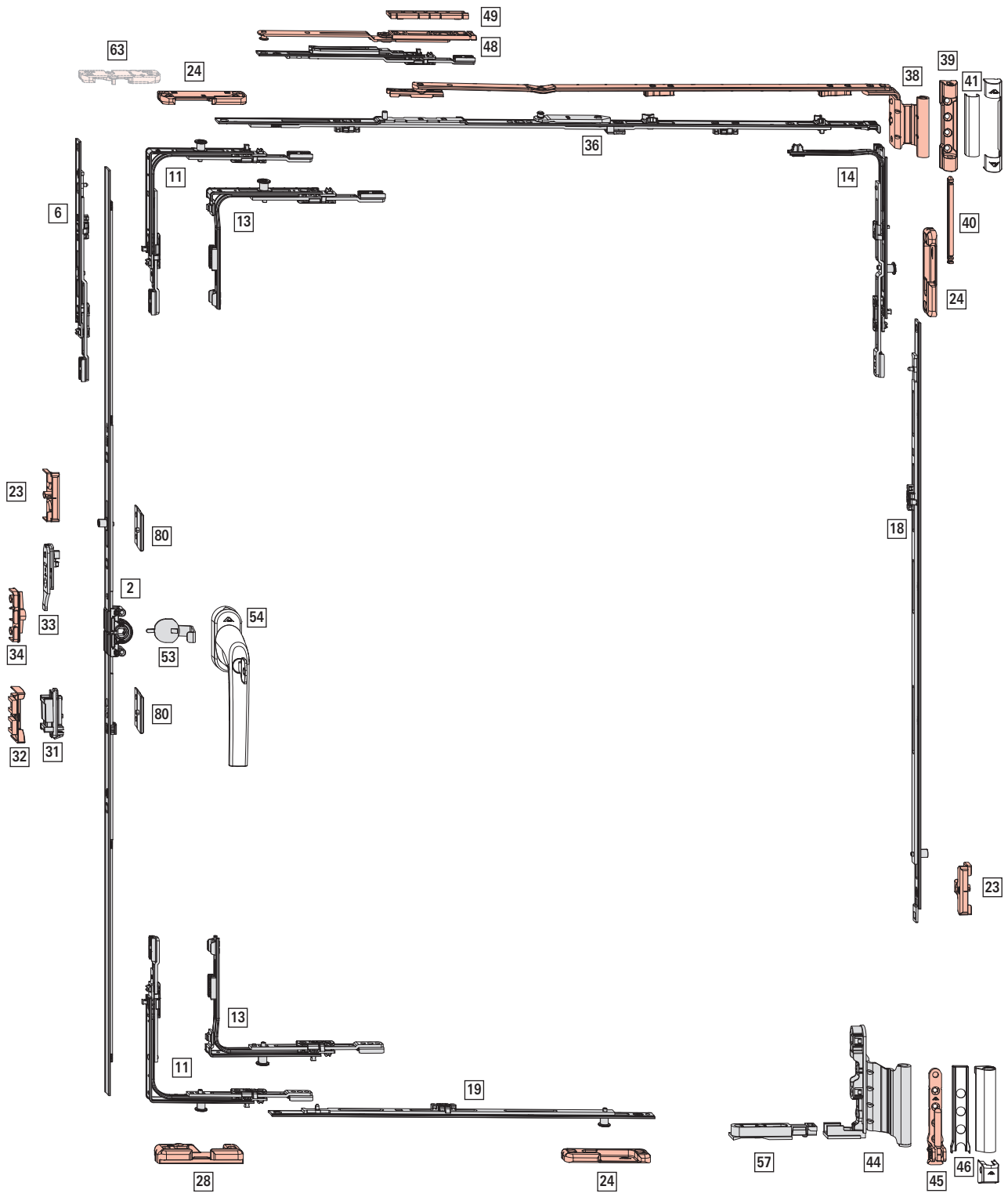
Only for use in conjunction with P or V cam.

Sash lifter → CTL_107

Arrestable brake stay → CTL_107



4.2.1.2 RC 1 N





Application range

SRW: 400 – 1600 mm

SRH: 310 – 2800 mm

S.kg: max. 150 kg

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

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

T&T espagnolette 259717 must be secured with two fastening plates 255211.

[6] Centre lock, multipart, (SRH ≥ 2401 mm)

				N ^o
200	Y	–	–	308267
400	Y	1	E	280346

Size-specific combinations:

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

[11] Standard corner drive

		N ^o
1	P	260277

[13] Special short corner drive

		N ^o
1	P	260282

For use with SRH ≤ 620 mm.

[14] Sash stay corner drive

		N ^o
1	P	260286

INFO

No sash stay corner drive is possible with SRH 280 – 320.

INFO

With SRH 321 – 350 mm, crop the sash stay corner drive.

[18] Multipart centre lock – standard, vertical

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

Size-specific combinations:

				N ^o
1101 – 1800	600	1	E	255281
1801 – 2400	600 KU	1	E	255282
	600	1	E	255281
2401 – 2600	600 KU	1	E	255282
	600 KU	1	E	255282
	400	1	E	255280
2601 – 2800	600 KU	1	E	255282
	600 KU	1	E	255282
	600	1	E	255281

[19] Multipart centre lock – security, horizontal

				N ^o
200	N	1	P	255284
400	N	1	P	255285
600	N	1	P	255286
600	Y	1	E	255282

Size-specific combinations:

				N ^o
400 – 600	200	1	P	255284
601 – 800	400	1	P	255285
801 – 1000	600 ^[10]	1	P	255286
1001 – 1200	600 KU	1	E	255282
	200	1	P	255284
1201 – 1400	600 KU	1	E	255282
	400	1	P	255285
1401 – 1600	600 KU	1	E	255282
	600 ^[11]	1	P	255286

[23] Striker → from page 178

[24] Security striker → from page 179

[28] Tilt striker → from page 175

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


	N ^o
Bullet catch sash component	788363

[10] With SRW 801 – 814 mm, crop centre lock 600.

[11] With SRW 1401 – 1414 mm, crop centre lock 600.





[32] Bullet-catch frame component (optional SRH ≥ 1601 mm) → *from page 182*

[33] Lifting mishandling device sash component



	Nº
Sash component for lifting mishandling device	795927

[34] Lifting mishandling device frame component
→ *from page 183*

[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	–	–	787348
1001 – 1200	500	1090	–	–	787350
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).





INFO

With a size 150 sash stay, the tilt distance is 80 mm.

[39] Stay bearing





		Nº
P 3/130	max. 130 kg	859171
P 6/130	max. 130 kg	859172
P 6/150	max. 150 kg	859173

[40] Stay-bearing pin

		Nº
Stay-bearing pin	86	834705

[41] Sash stay cover caps → CTL_107

[44] Rebate corner hinge

				Nº
12/20-13	Height adjustable	max. 150 kg	Left	2007203
12/20-13	Height adjustable	max. 150 kg	Right	2007204

[45] Pivot rest

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

[46] Rebate corner hinge / pivot rest cover caps → CTL_107

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

		Nº
Frame and sash component	200	255237


[49] Packer → *from page 182*

[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 T&T espagnolette 259717.

Optional

[57] Rebate corner hinge extension

	Nº
Extension	2026631

[63] Night vent, SRW ≥ 601 mm → *from page 184*



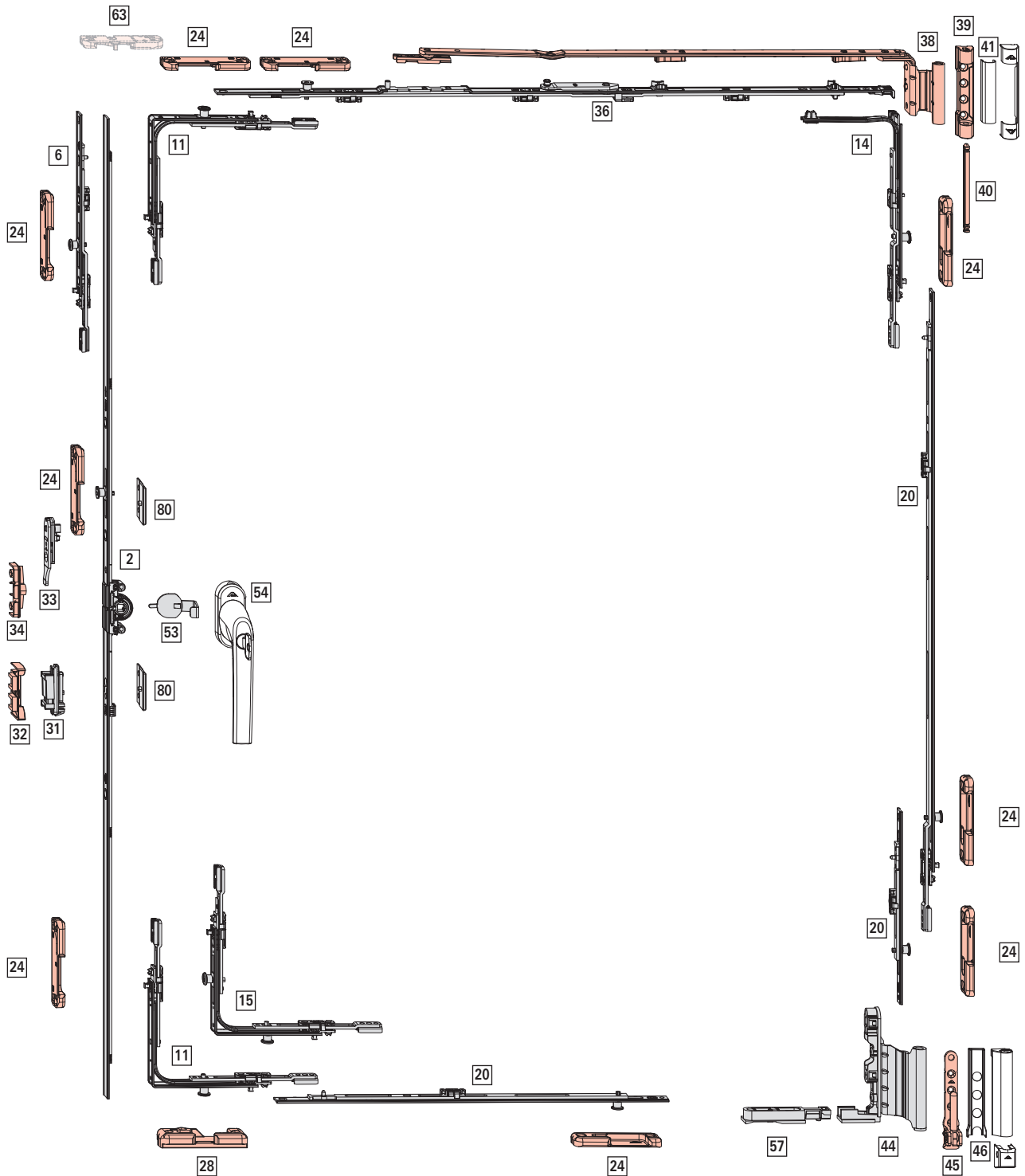
INFO

Only for use in conjunction with P or V cam.

Sash lifter → CTL_107



4.2.1.3 RC 2 / RC 2 N





Application range

SRW: 490 – 1400 mm

SRH: 490 – 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

T&T espagnolette 259717 must be secured with two fastening plates 255211.

[6] Centre lock, multipart, (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] Corner drive, standard (security)

		Nº
2	V	260274

For use below SRH ≤ 621 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
490 – 690	490 – 800	200	1	V	–	296853
691 – 890	801 – 1000	400	1	V	–	296854

						Nº
891 – 1090	1001 – 1200	600	1	V	–	296855
1091 – 1290	1201 – 1400	600 KU	1	V	–	337711
		200	1	V	–	296853
1291 – 1400	1401 – 1600	600 KU	1	V	–	337711
		400	1	V	–	296854
	1601 – 1800	600 KU	1	V	–	337711
		600	1	V	–	296855
	1801 – 2000	600 KU	1	V	–	337711
		600 KU	1	V	–	337711
		200	1	V	–	296853
	2001 – 2200	600 KU	1	V	–	337711
		600 KU	1	V	–	337711
		400	1	V	–	296854
	2201 – 2400	600 KU	1	V	–	337711
		600 KU	1	V	–	337711
		600	1	V	–	296855
	2401 – 2600	600 KU	1	V	–	337711
		600 KU	1	V	–	337711
		600 KU	1	V	–	337711
		200	1	V	–	296853
	2601 – 2800	600 KU	1	V	–	337711
		600 KU	1	V	–	337711
		600 KU	1	V	–	337711
		400	1	V	–	296854

[24] Security striker → from page 179

[28] Tilt striker → from page 175

[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 182

[33] Lifting mishandling device sash component




		Nº
Sash component for lifting mishandling device	–	795927

[34] Lifting mishandling device frame component → from page 183

[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	max. 130 kg	859171
P 6/130	max. 130 kg	859172
P 6/150	max. 150 kg	859173

[40] Stay-bearing pin

		Nº
Stay-bearing pin	86	834705

[41] Sash stay cover caps → CTL_107

[44] Rebate corner hinge


				Nº
12/20-13	Height adjustable	max. 150 kg	Left	2007203
12/20-13	Height adjustable	max. 150 kg	Right	2007204

[45] Pivot rest

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


[46] Rebate corner hinge / pivot rest cover caps → CTL_107

[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 T&T espagnolette 259717.

Optional

[57] Rebate corner hinge extension

	Nº
Extension	2026631

[63] Night vent, SRW ≥ 601 mm → from page 184



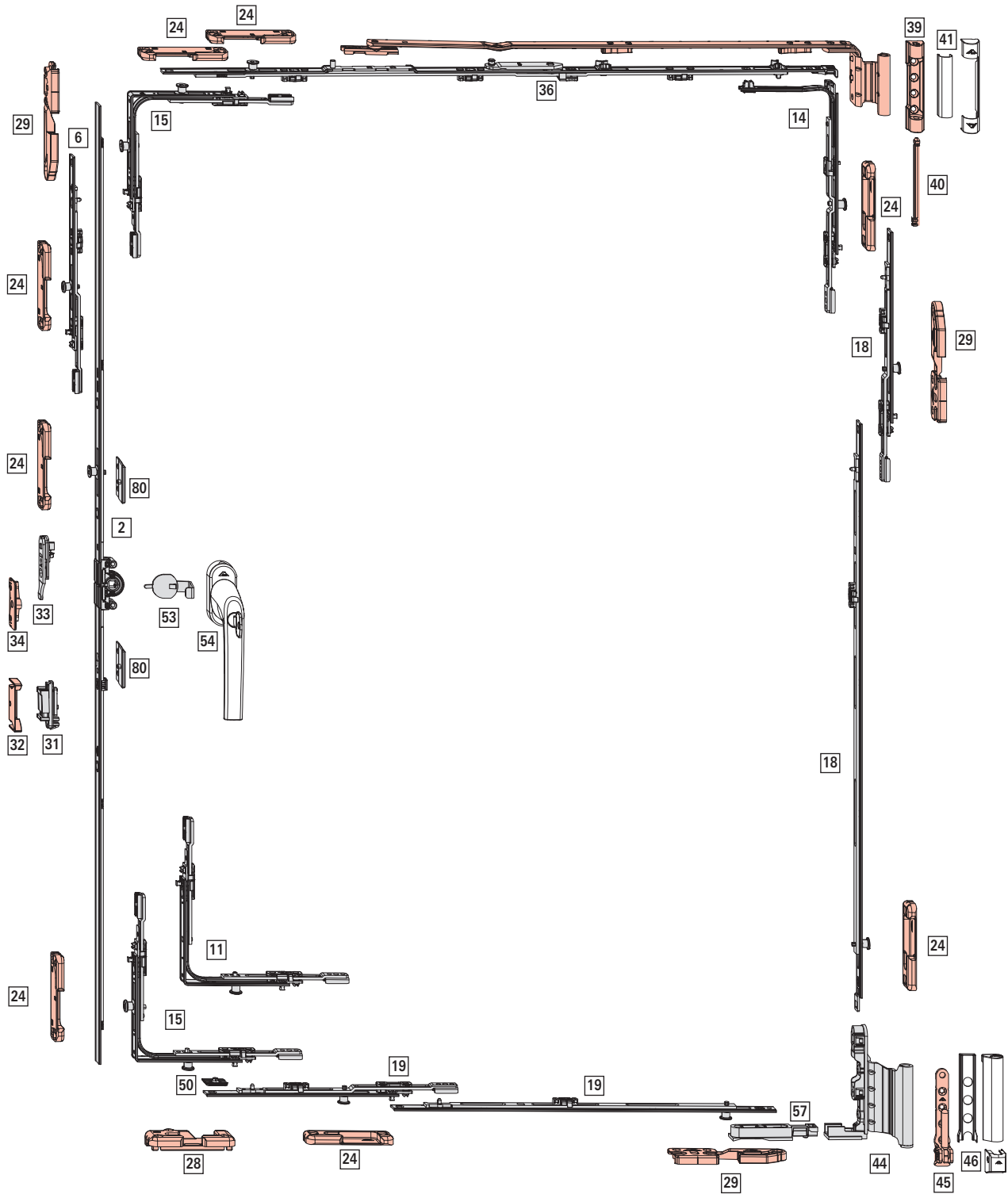
INFO

Only for use in conjunction with P or V cam.

Sash lifter → CTL_107



4.2.1.4 TiltSafe RC 2 / RC 2 N





Application range

SRW: 490 – 1400 mm

SRH: 490 – 2800 mm

S.kg: max. 150 kg



INFO

Only for hardware axis 13.

[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

T&T espagnolette 259717 must be secured with two fastening plates 255211.

[6] Centre lock, multipart, (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	V	260272

[14] Sash stay corner drive

			Nº
1	V	V	260284

[15] Corner drive, standard (security)

			Nº
2	V	V	260274

For use below SRH ≤ 621 mm.

[18] Multipart centre lock – security, vertical

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

Size-specific combinations:

					Nº
490 – 800	200	1	V	V	296853
801 – 1000	200 KU	1	V	V	337708
	200	1	V	V	296853
1001 – 1200	200 KU	1	V	V	337708
	400	1	V	V	296854
1201 – 1400	200 KU	1	V	V	337708
	600	1	V	V	296855
1401 – 1600	200 KU	1	V	V	337708
	600 KU	1	V	V	337711
	200	1	V	V	296853
1601 – 1800	200 KU	1	V	V	337708
	600 KU	1	V	V	337711
	400	1	V	V	296854
1801 – 2000	200 KU	1	V	V	337708
	600 KU	1	V	V	337711
	600	1	V	V	296855
2001 – 2200	200 KU	1	V	V	337708
	600 KU	1	V	V	337711
	600 KU	1	V	V	337711
	200	1	V	V	296853
2201 – 2400	200 KU	1	V	V	337708
	600 KU	1	V	V	337711
	600 KU	1	V	V	337711
	400	1	V	V	296854
2401 – 2600	200 KU	1	V	V	337708
	600 KU	1	V	V	337711
	600 KU	1	V	V	337711
	600	1	V	V	296855
2601 – 2800	200 KU	1	V	V	337708
	600 KU	1	V	V	337711
	600 KU	1	V	V	337711
	600 KU	1	V	V	337711
	200	1	V	V	296853

[19] Multipart centre lock – security, horizontal

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

Size-specific combinations:

					Nº
490 – 690	200	1	V	V	296853
691 – 890	200 KU	1	V	V	337708
	200	1	V	V	296853
891 – 1090	200 KU	1	V	V	337708
	400 KU	1	V	V	337710
1091 – 1290	200 KU	1	V	V	337708
	400 KU	1	V	V	337710
	200	1	V	V	296853

					Nº
1291 – 1400	200 KU	1	V		337708
	400 KU	1	V		337710
	400 KU	1	V		337710

[24] Security striker → from page 179

[28] Tilt striker → from page 175

[29] Security striker for tilt ventilation

					Nº
Screw-on	V.01	Roto Sil	Left		837088
		Roto Sil	Right		837089
	V.02	Roto Sil	Left		837155
		Roto Sil	Right		837156

[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 182

[33] Lifting mishandling device sash component

		Nº
Sash component for lifting mishandling device		795927

[34] Lifting mishandling device frame component → from page 183

[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		max. 130 kg	859171
P 6/130		max. 130 kg	859172
P 6/150		max. 150 kg	859173

[40] Stay-bearing pin

		Nº
Stay-bearing pin	86	834705

[41] Sash stay cover caps → CTL_107

[44] Rebate corner hinge

					Nº
12/20-13	Height adjustable		max. 150 kg	Left	2007203
12/20-13	Height adjustable		max. 150 kg	Right	2007204

[45] Pivot rest

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

[46] Rebate corner hinge / pivot rest cover caps → CTL_107

[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 T&T espagnolette 259717.

Optional

[57] Rebate corner hinge extension

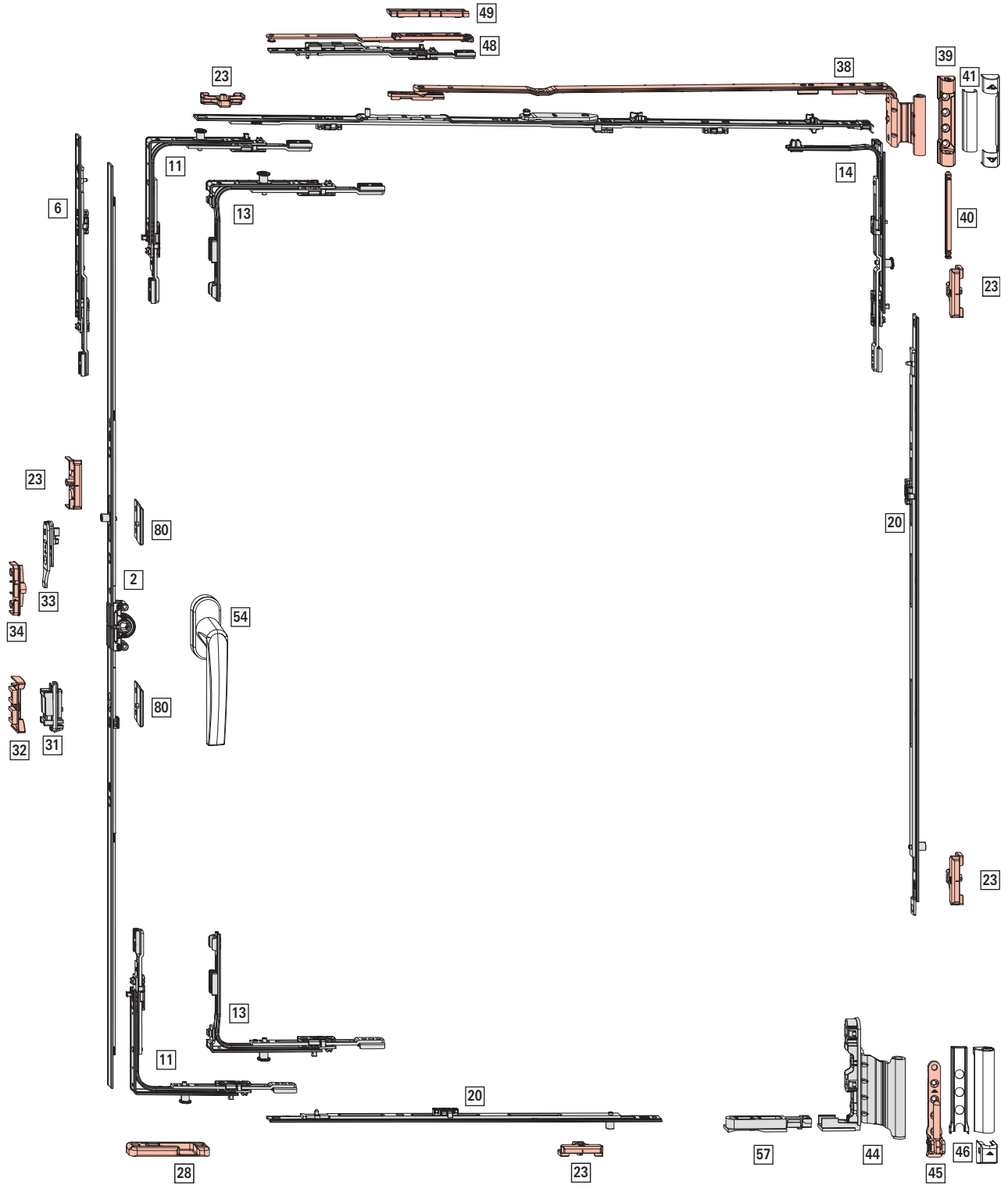
		Nº
Extension		2026631

Sash lifter → CTL_107



4.2.2 TiltFirst hardware

4.2.2.1 Basic security





Application range

SRW: 290 – 1600 mm

SRH: 310 – 2800 mm

S.kg: max. 150 kg

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

SRW	SRH	SRW	SRH	SRW	SRH	SRW	SRH	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

T&T espagnolette 259717 must be secured with two fastening plates 255211.

[6] Centre lock, multipart, (SRH ≥ 2401 mm)

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

Size-specific combinations:

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

[11] Standard corner drive

SRW	SRH	SRW	SRH	SRW	SRH	Nº
1	E	–	–	–	–	260275
1	P	–	–	–	–	260277

[13] Special short corner drive

SRW	SRH	SRW	SRH	SRW	SRH	Nº
1	E	–	–	–	–	260280
1	P	–	–	–	–	260282

For use with SRH ≤ 620 mm.

[14] Sash stay corner drive

SRW	SRH	SRW	SRH	Nº
1	P	–	–	260286

INFO
No sash stay corner drive is possible with SRH 280 – 320.

INFO
With SRH 321 – 350 mm, crop the sash stay corner drive.

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

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

Size-specific combinations:

SRW	SRH	SRW	SRH	SRW	SRH	Nº	
1101 – 1600	1101 – 1800	600	1	E	–	255281	
		600 KU	1	E	–	255282	
	2401 – 2600	600	600	1	E	–	255281
			600 KU	1	E	–	255282
		2601 – 2800	600 KU	1	E	–	255282
			600	1	E	–	255281

[23] Striker → from page 178

[28] Tilt striker TiltFirst → from page 177

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

SRW	SRH	SRW	SRH	Nº
–	–	–	–	788363

[32] Bullet-catch frame component (optional SRH ≥ 1601 mm) → from page 182

[33] Lifting mishandling device sash component

SRW	SRH	SRW	SRH	Nº
–	–	–	–	795927

[34] Lifting mishandling device frame component → from page 183

[36] Stay guide – basic security




SRW	SRH	SRW	SRH	SRW	SRH	Nº
290 – 410	150	300	–	–	–	787345
411 – 600	250	490	–	–	–	787346
601 – 800	350	690	–	–	–	787347
801 – 1000	500	890	–	–	–	787348
1001 – 1200	500	1090	–	–	–	787350
1201 – 1400	500	1290	1	E	–	787351

INFO
With SRW < 310 mm, remove the assembly clip.

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

SRW	SRH	SRW	SRH	Nº
290 – 410	150	Left	–	814711
290 – 410	150	Right	–	814712



			Nº
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).





INFO

With a size 150 sash stay, the tilt distance is 80 mm.

[39] Stay bearing

		Nº
P 3/130	max. 130 kg	859171
P 6/130	max. 130 kg	859172
P 6/150	max. 150 kg	859173

[40] Stay-bearing pin

		Nº
Stay-bearing pin	86	834705

[41] Sash stay cover caps → CTL_107

[44] Rebate corner hinge


				Nº
12/20-13	Height adjustable	max. 150 kg	Left	2007203
12/20-13	Height adjustable	max. 150 kg	Right	2007204

[45] Pivot rest

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

[46] Rebate corner hinge / pivot rest cover caps → CTL_107

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

	Nº
Frame and sash component	292022

[49] Packer → from page 182

[54] Handle → CTL_1



INFO

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


[80] Fastening plate

	Nº
Fastening plate with cam	255211

Can only be used in combination with T&T espagnolette 259717.

Optional

[57] Rebate corner hinge extension

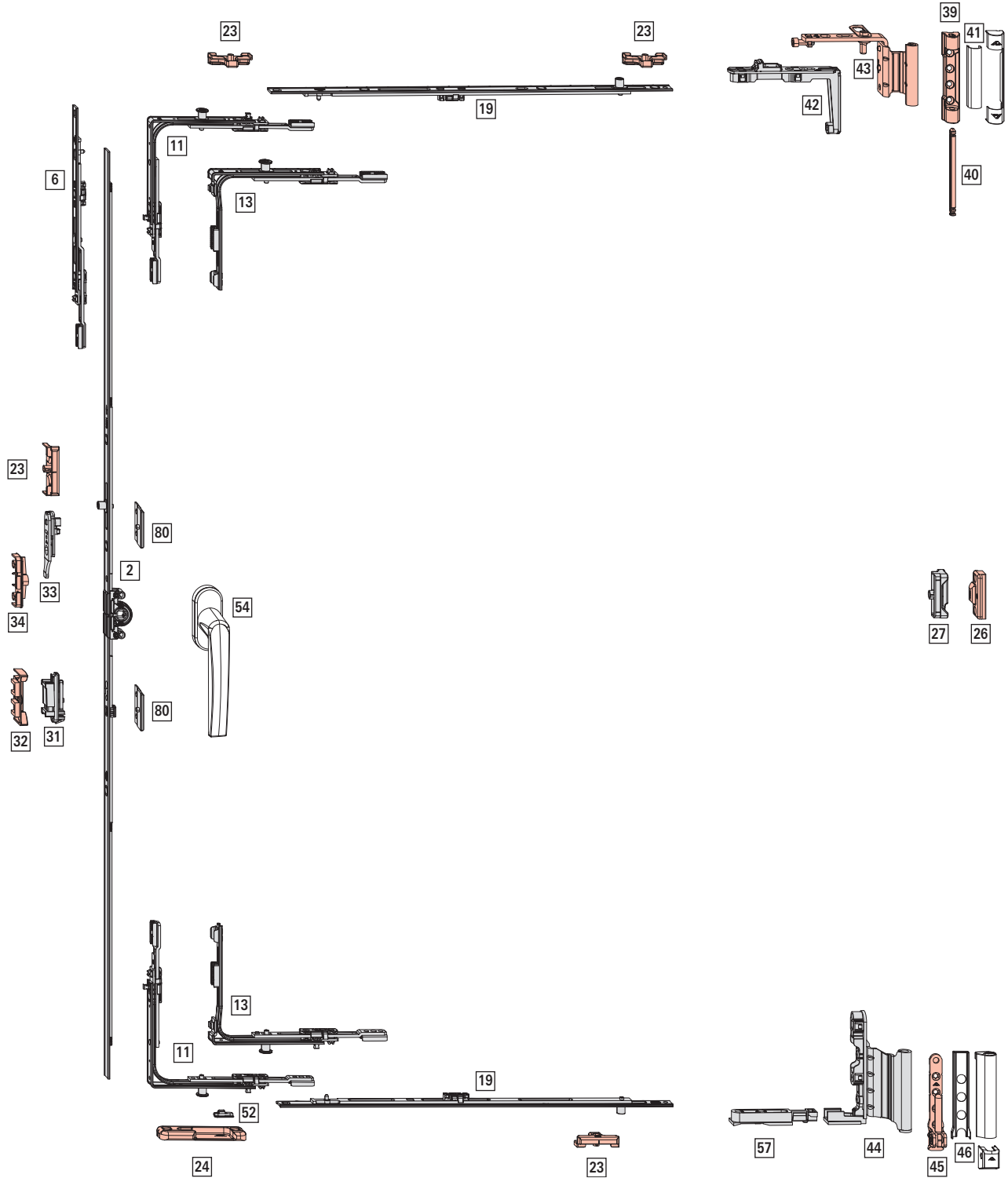
	Nº
Extension	2026631

Sash lifter → CTL_107



4.2.3 Turn-Only hardware

4.2.3.1 Basic security





Application range

SRW: 290 – 1600 mm

SRH: 310 – 2800 mm

S.kg: max. 150 kg

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

SRW	SRH	SRW	SRH	SRW	SRH	SRW	SRH	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

T&T espagnolette 259717 must be secured with two fastening plates 255211.

[6] Centre lock, multipart, (SRH ≥ 2401 mm)

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

Size-specific combinations:

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

[11] Standard corner drive

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

[13] Special short corner drive

SRW	SRH	SRW	SRH	Nº
1	E	Top	–	260280
1	P	Top Bottom	–	260282

For use with SRH ≤ 620 mm.

[19] Multipart centre lock – standard, horizontal

SRW	SRH	SRW	SRH	Nº
600	N	1	E	255281

Size-specific combinations:

SRW	SRH	SRW	SRH	Nº
1101 – 1600	600	1	E	255281

[23] Striker → from page 178

[24] Security striker → from page 179

[26] Centre closer, concealed, frame component → from page 185

[27] Centre closer, concealed, sash component → from page 185

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

SRW	SRH	Nº
Bullet catch sash component	–	788363

[32] Bullet-catch frame component (optional SRH ≥ 1601 mm) → from page 182

[33] Lifting mishandling device sash component

SRW	SRH	Nº
Sash component for lifting mishandling device	–	795927

[34] Lifting mishandling device frame component → from page 183

[39] Stay bearing

SRW	SRH	Nº
P 3/130	max. 130 kg	859171
P 6/130	max. 130 kg	859172
P 6/150	max. 150 kg	859173

[40] Stay-bearing pin

SRW	SRH	Nº
Stay-bearing pin	86	834705

[41] Sash stay cover caps → CTL_107

[42] Rebate stay guide

SRW	SRH	Nº
Rebate stay guide for hinge side P / T / A16	–	331488

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

SRW	SRH	Nº
Left	–	787375
Right	–	787376

[44] Rebate corner hinge

SRW	SRH	SRW	SRH	Nº
12/20-13	Height adjustable	max. 150 kg	Left	2007203
12/20-13	Height adjustable	max. 150 kg	Right	2007204

[45] Pivot rest

SRW	SRH	SRW	SRH	Nº
P 3/130	Laterally adjustable	max. 130 kg	–	787207
P 6/130	Laterally adjustable	max. 130 kg	–	787208

Hardware overviews

T&T espagnolette – centred / variable handle height

Turn-Only hardware



Nº

P 6/150

Laterally adjustable

max. 150 kg

787209

[46] Rebate corner hinge / pivot rest cover caps →
CTL_107

[52] 90° travel restrictor



Nº

Travel restrictor

264603

[54] Handle → CTL_1

[80] Fastening plate



Nº

Fastening plate with cam

255211

Can only be used in combination with T&T espagnolette 259717.

Optional

[57] Rebate corner hinge extension



Nº

Extension

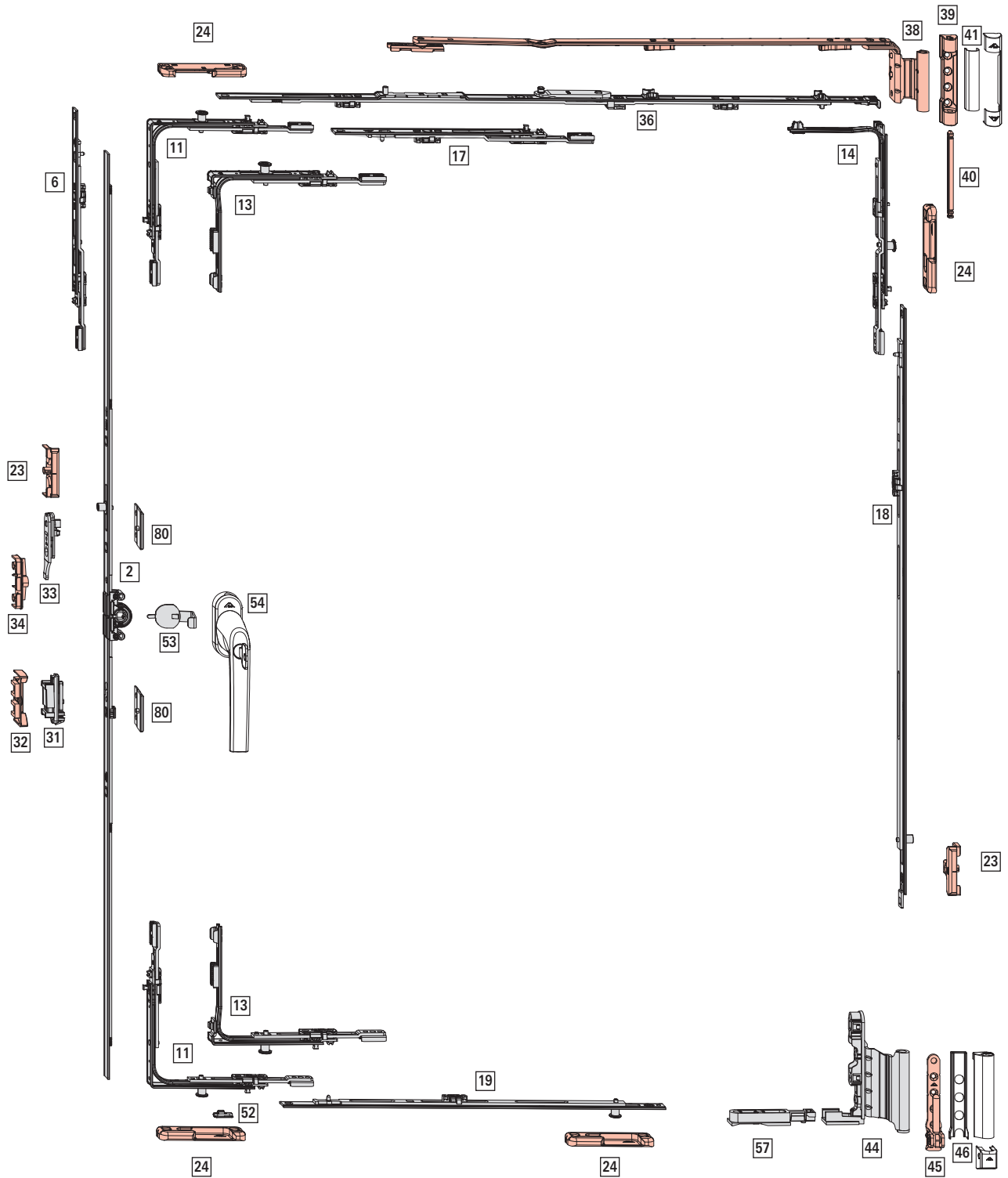
2026631

Sash lifter → CTL_107

Arrestable brake stay → CTL_107



4.2.3.2 RC 1 N





Application range

SRW: 400 – 1600 mm

SRH: 310 – 2800 mm

S.kg: max. 150 kg

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

												N ^o
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

T&T espagnolette 259717 must be secured with two fastening plates 255211.

[6] Centre lock, multipart, (SRH ≥ 2401 mm)

								N ^o
200	Y	–	–	–	–	–	–	308267
400	Y	1	E	–	–	–	–	280346

Size-specific combinations:

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

[11] Standard corner drive

				N ^o
1	P	–	–	260277

[13] Special short corner drive

				N ^o
1	P	–	–	260282

For use with SRH ≤ 620 mm.

[14] Sash stay corner drive

				N ^o
1	P	–	–	260286

INFO

No sash stay corner drive is possible with SRH 280 – 320.

INFO

With SRH 321 – 350 mm, crop the sash stay corner drive.

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

								N ^o
200	Y	–	–	–	–	–	–	308267

Size-specific combinations:

								N ^o
1401 – 1600	200 KU	–	–	–	–	–	–	308267

[18] Multipart centre lock – standard, vertical

								N ^o
400	N	1	E	–	–	–	–	255280
600	N	1	E	–	–	–	–	255281
600	Y	1	E	–	–	–	–	255282

Size-specific combinations:

								N ^o
1101 – 1800	600	1	E	–	–	–	–	255281
1801 – 2400	600 KU	1	E	–	–	–	–	255282
	600	1	E	–	–	–	–	255281
2401 – 2600	600 KU	1	E	–	–	–	–	255282
	600 KU	1	E	–	–	–	–	255282
	400	1	E	–	–	–	–	255280
2601 – 2800	600 KU	1	E	–	–	–	–	255282
	600 KU	1	E	–	–	–	–	255282
	600	1	E	–	–	–	–	255281

[19] Multipart centre lock – security, horizontal

								N ^o
200	N	1	P	–	–	–	–	255284
400	N	1	P	–	–	–	–	255285
600	N	1	P	–	–	–	–	255286
600	Y	1	E	–	–	–	–	255282

Size-specific combinations:

								N ^o
400 – 600	200	1	P	–	–	–	–	255284
601 – 800	400	1	P	–	–	–	–	255285
801 – 1000	600 [12]	1	P	–	–	–	–	255286
1001 – 1200	600 KU	1	E	–	–	–	–	255282
	200	1	P	–	–	–	–	255284
1201 – 1400	600 KU	1	E	–	–	–	–	255282
	400	1	P	–	–	–	–	255285
1401 – 1600	600 KU	1	E	–	–	–	–	255282
	600 [13]	1	P	–	–	–	–	255286

[12] With SRW 801 – 814 mm, crop centre lock 600.

[13] With SRW 1401 – 1414 mm, crop centre lock 600.

[23] Striker → from page 178

[24] Security striker → from page 179

[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 182

[33] Lifting mishandling device sash component

	Nº
Sash component for lifting mishandling device	795927

[34] Lifting mishandling device frame component → from page 183

[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	–	–	–	787348
1001 – 1200	500	1090	–	–	–	787350
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	max. 130 kg	–	859171
P 6/130	max. 130 kg	–	859172
P 6/150	max. 150 kg	–	859173

[40] Stay-bearing pin

		Nº
Stay-bearing pin	86	834705

[41] Sash stay cover caps → CTL_107

[44] Rebate corner hinge

					Nº
12/20-13	Height adjustable	max. 150 kg	Left	–	2007203
12/20-13	Height adjustable	max. 150 kg	Right	–	2007204

[45] Pivot rest

				Nº
P 3/130	Laterally adjustable	max. 130 kg	–	787207
P 6/130	Laterally adjustable	max. 130 kg	–	787208
P 6/150	Laterally adjustable	max. 150 kg	–	787209

[46] Rebate corner hinge / pivot rest cover caps → CTL_107

[52] 90° travel restrictor

		Nº
Travel restrictor	–	264603

[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 T&T espagnolette 259717.

Optional

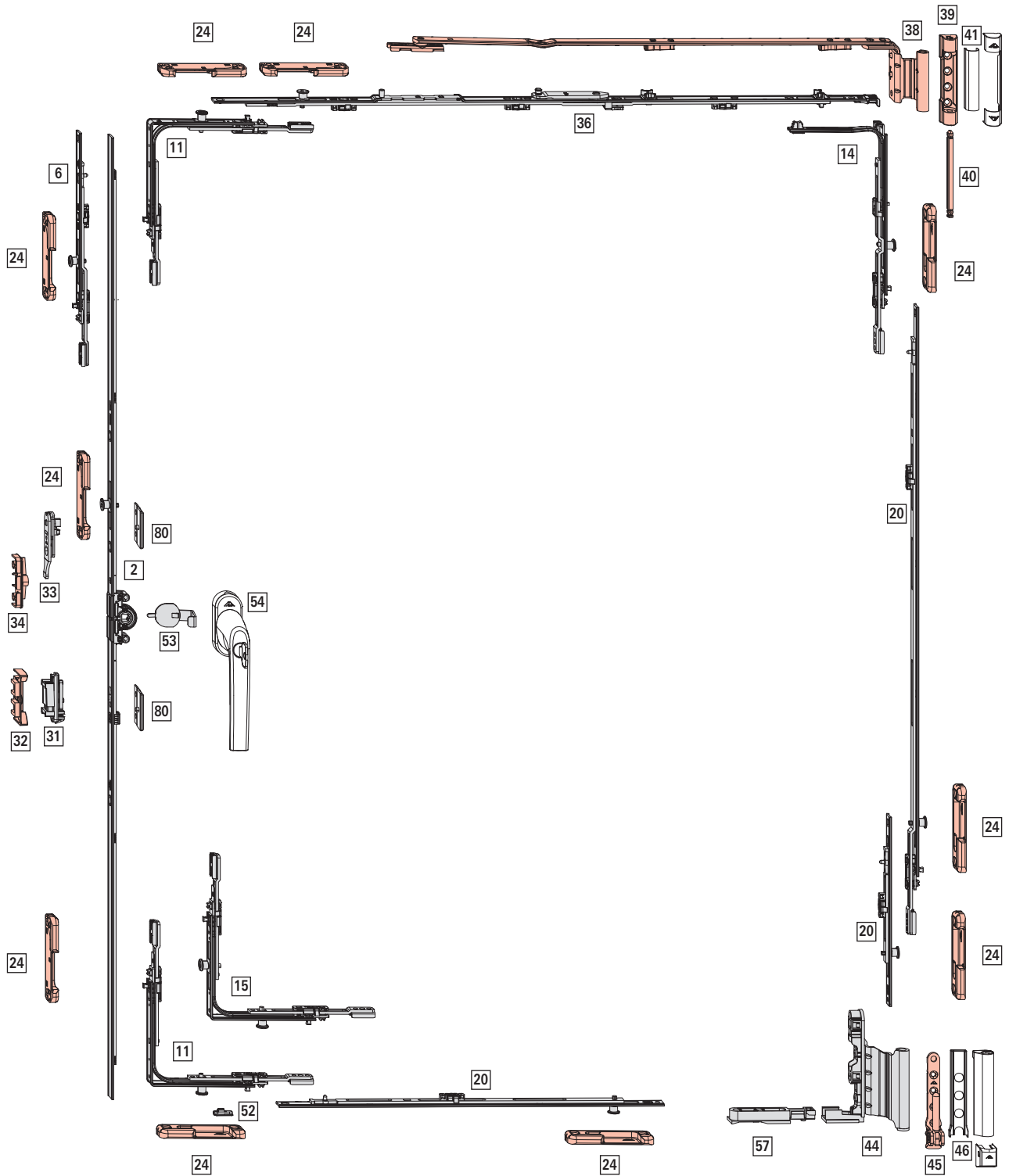
[57] Rebate corner hinge extension

		Nº
Extension	–	2026631

Sash lifter → CTL_107



4.2.3.3 RC 2 / RC 2 N





Application range

SRW: 490 – 1400 mm

SRH: 490 – 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

T&T espagnolette 259717 must be secured with two fastening plates 255211.

[6] Centre lock, multipart, (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] Corner drive, standard (security)

		Nº
2	V	260274

For use below SRH ≤ 621 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
490 – 690	490 – 800	200	1	V	–	296853
691 – 890	801 – 1000	400	1	V	–	296854

						Nº
891 – 1090	1001 – 1200	600	1	V	–	296855
1091 – 1290	1201 – 1400	600 KU	1	V	–	337711
		200	1	V	–	296853
1291 – 1400	1401 – 1600	600 KU	1	V	–	337711
		400	1	V	–	296854
	1601 – 1800	600 KU	1	V	–	337711
		600	1	V	–	296855
	1801 – 2000	600 KU	1	V	–	337711
		600 KU	1	V	–	337711
		200	1	V	–	296853
	2001 – 2200	600 KU	1	V	–	337711
		600 KU	1	V	–	337711
		400	1	V	–	296854
	2201 – 2400	600 KU	1	V	–	337711
		600 KU	1	V	–	337711
		600	1	V	–	296855
	2401 – 2600	600 KU	1	V	–	337711
		600 KU	1	V	–	337711
		600 KU	1	V	–	337711
		200	1	V	–	296853
	2601 – 2800	600 KU	1	V	–	337711
		600 KU	1	V	–	337711
		600 KU	1	V	–	337711
		400	1	V	–	296854

[24] Security striker → from page 179

[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 182

[33] Lifting mishandling device sash component

		Nº
Sash component for lifting mishandling device	–	795927




[34] Lifting mishandling device frame component → from page 183

[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

			Nº
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	max. 130 kg	859171
P 6/130	max. 130 kg	859172
P 6/150	max. 150 kg	859173

[40] Stay-bearing pin

		Nº
Stay-bearing pin	86	834705

[41] Sash stay cover caps → CTL_107

[44] Rebate corner hinge

				Nº
12/20-13	Height adjustable	max. 150 kg	Left	2007203
12/20-13	Height adjustable	max. 150 kg	Right	2007204

[45] Pivot rest


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

[46] Rebate corner hinge / pivot rest cover caps → CTL_107

[52] 90° travel restrictor

	Nº
Travel restrictor	264603

[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 T&T espagnolette 259717.

Optional

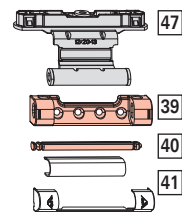
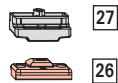
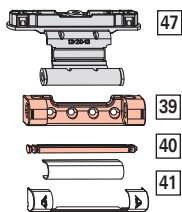
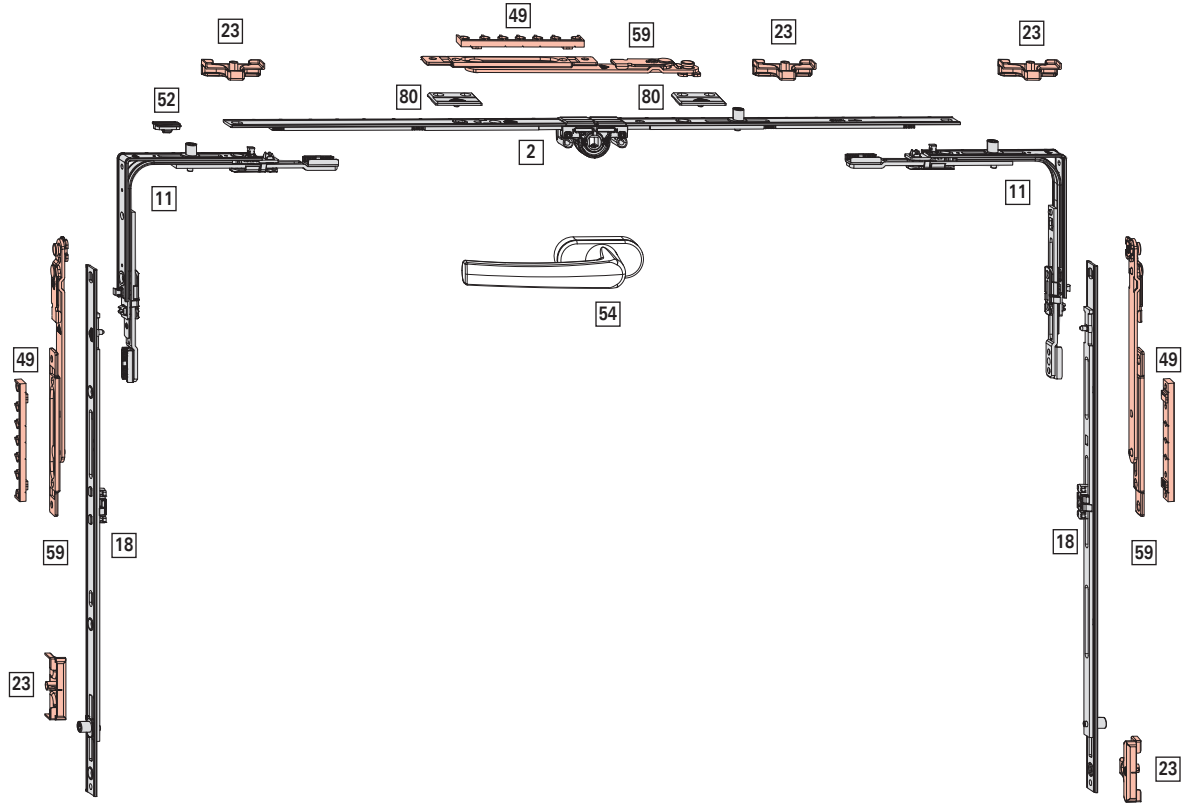
[57] Rebate corner hinge extension

	Nº
Extension	2026631



4.2.4 Tilt-Only hardware

4.2.4.1 Basic security





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

T&T espagnolette 259717 must be secured with two fastening plates 255211.

[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

Size-specific combinations:

				Nº
801 – 1200	400	1	E	255280

[23] Striker → from page 178

[26] Centre closer, concealed, frame component → from page 185

[27] Centre closer, concealed, sash component → from page 185

[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_107

[47] Turn-Only / Tilt-Only rebate hinge, system 12/20-13

		Nº
With compensation	±3.0 mm	787387

		Nº
Without compensation	–	787388

[49] Packer → from page 182

[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

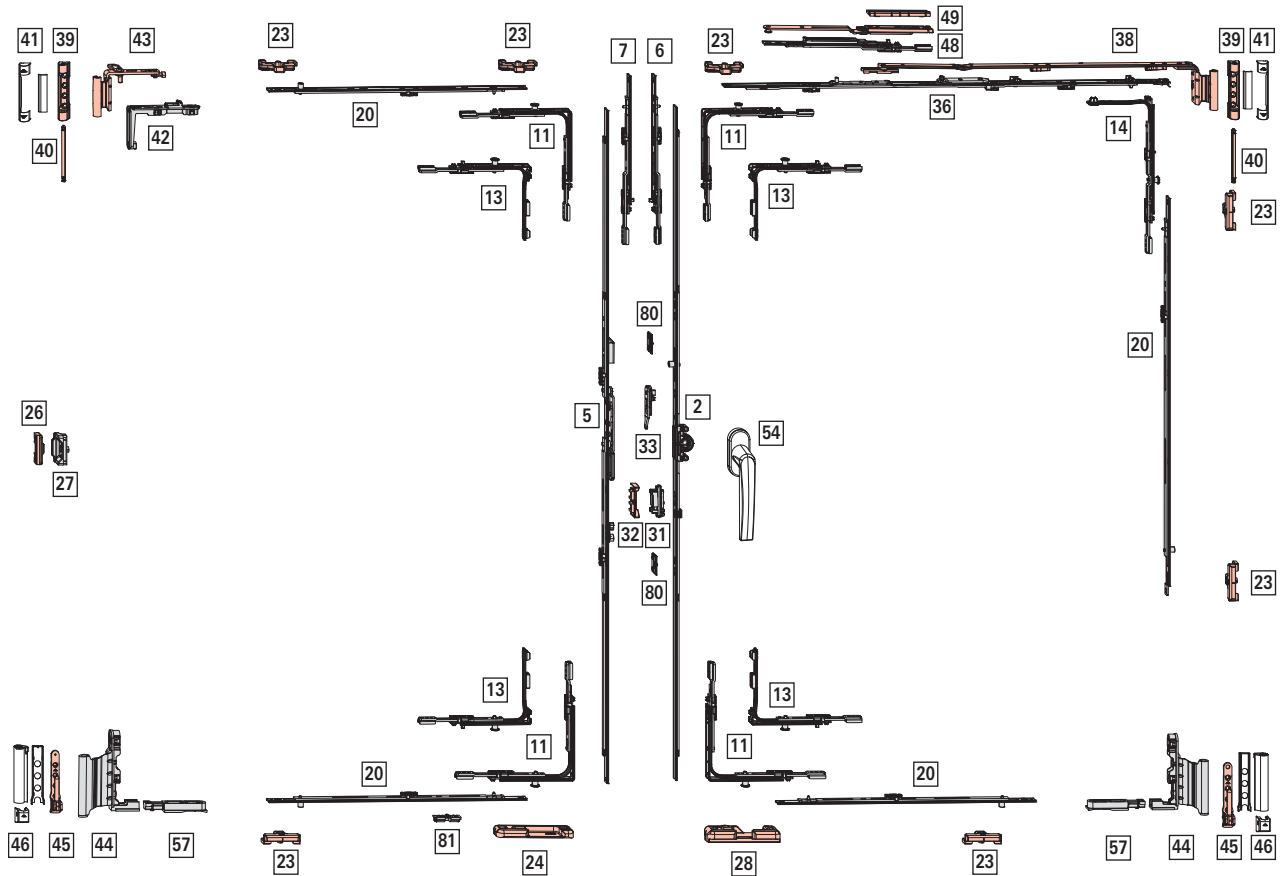
[80] Fastening plate

	Nº
Fastening plate with cam	255211

Can only be used in combination with T&T espagnolette 259717.

4.2.5 Floating-mullion hardware

4.2.5.1 Standard – basic security





Application range

SRW: 290 – 1600 mm

SRH: 370 – 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

T&T espagnolette 259717 must be secured with two fastening plates 255211.

[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] Centre lock, multipart, (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] Centre lock, multipart – floating mullion, (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	Top	260280
1	P	Top Bottom	260282

Use → 5.1.1.1 “Possible combinations” from page 167

[14] Sash stay corner drive

		Nº
1	P	260286

INFO

No sash stay corner drive is possible with SRH 280 – 320.

INFO

With SRH 321 – 350 mm, crop the sash stay corner drive.

[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
1101 – 1600	1101 – 1800	600	1	E	255281
	1801 – 2400	600 KU	1	E	255282
2401 – 2600	600	1	E	255281	
	600 KU	1	E	255282	
2601 – 2800	400	1	E	255280	
	600 KU	1	E	255282	
	600 KU	1	E	255282	
	600	1	E	255281	

[23] Striker → from page 178

[24] Security striker → from page 179

INFO


Lever-operated espagnolette, standard: A left second opening sash with asymmetrical strikers always requires right strikers horizontally at the bottom – and vice versa.

[26] Centre closer, concealed, frame component →
from page 185



[27] Centre closer, concealed, sash component →
from page 185

[28] Tilt striker → from page 175


[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	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	–	–	787348
1001 – 1200	500	1090	–	–	787350
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).



INFO

With a size 150 sash stay, the tilt distance is 80 mm.

[39] Stay bearing

		Nº
P 3/130	max. 130 kg	859171
P 6/130	max. 130 kg	859172
P 6/150	max. 150 kg	859173

[40] Stay-bearing pin


		Nº
Stay-bearing pin	86	834705

[41] Sash stay cover caps → CTL_107

[42] Rebate stay guide

	Nº
Rebate stay guide for hinge side P / T / A16	331488

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

	Nº
Left	787375
Right	787376

[44] Rebate corner hinge



				Nº
12/20-13	Height adjustable	max. 150 kg	Left	2007203
12/20-13	Height adjustable	max. 150 kg	Right	2007204

[45] Pivot rest

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

[46] Rebate corner hinge / pivot rest cover caps →
CTL_107


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

		Nº
Frame and sash component	200	255237

[49] Packer → from page 182

[54] Handle → CTL_1

[80] Fastening plate

	Nº
Fastening plate with cam	255211

Can only be used in combination with T&T espagnolette 259717.

[81] Run-up block → CTL_107

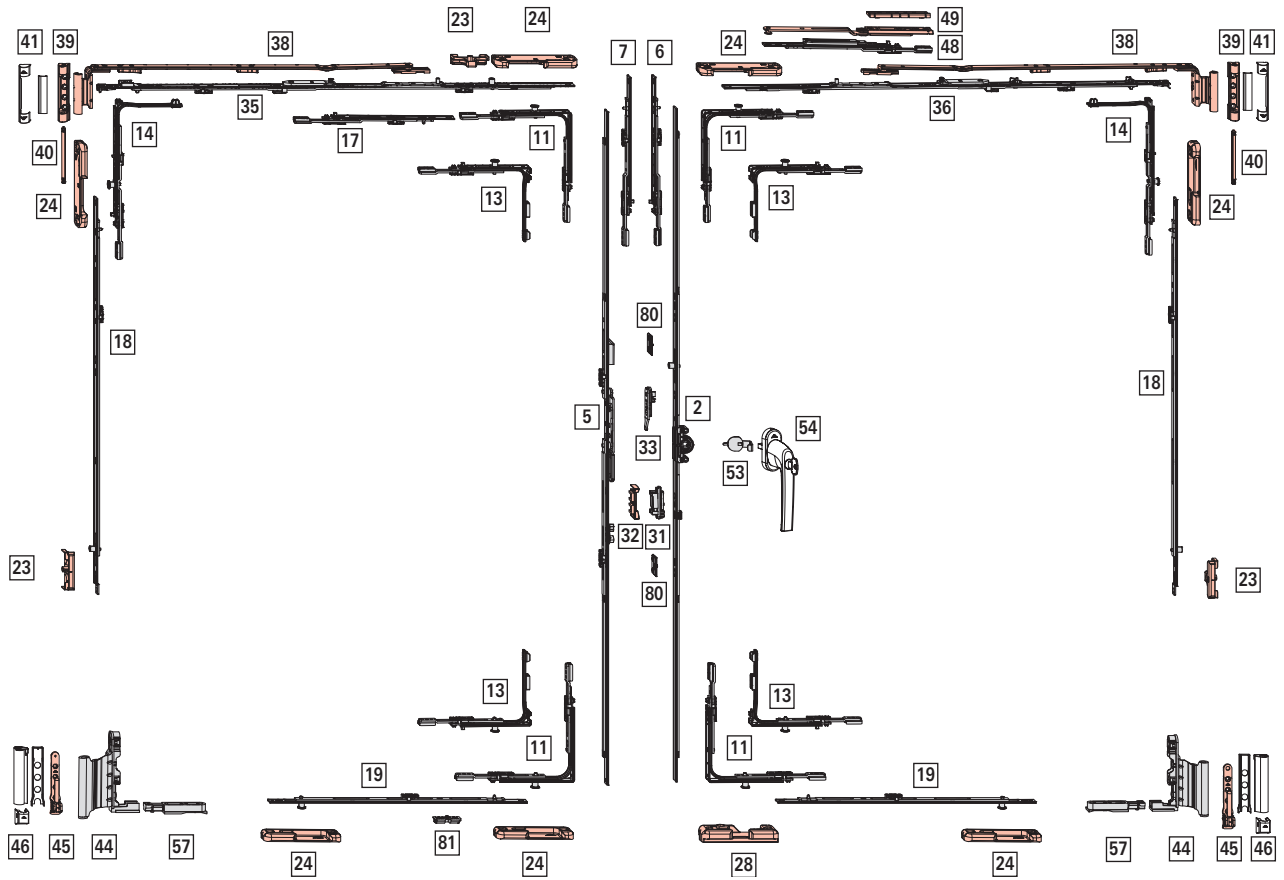
The run-up block depends on the striker used.



Optional

[57] Rebate corner hinge extension	
	N°
Extension	2026631

4.2.5.2 Standard – RC 1 N





Application range

SRW: 400 – 1600 mm

SRH: 370 – 2800 mm

S.kg: max. 150 kg

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

SRW	SRH	SRW	SRH	SRW	SRH	SRW	SRH	SRW	SRH	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				

T&T espagnolette 259717 must be secured with two fastening plates 255211.

[5] Floating-mullion espagnolette – centred / variable handle height, backset 15 mm

SRW	SRH	SRW	SRH	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] Centre lock, multipart, (SRH ≥ 2401 mm)

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

Size-specific combinations:

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

[7] Centre lock, multipart – floating mullion, (SRH ≥ 2401 mm)

SRW	SRH	SRW	SRH	Nº
200	Y	–	–	308267
400	Y	1		280345

Size-specific combinations:

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

[11] Standard corner drive

SRW	SRH	Nº
1	P	260277

[13] Special short corner drive

SRW	SRH	Nº
1	P	260282

Use → 5.1.2 “Centred / variable handle height” from page 169

[14] Sash stay corner drive

SRW	SRH	Nº
1	P	260286

[17] Centre lock, multipart – standard, horizontal – top, Turn-Only sash

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

Size-specific combinations:

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

[18] Multipart centre lock – standard, vertical

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

Size-specific combinations:

SRW	SRH	SRW	SRH	Nº
1101 – 1800	600	1	E	255281
1801 – 2400	600 KU	1	E	255282
	600	1	E	255281
2401 – 2600	600 KU	1	E	255282
	600 KU	1	E	255282
	400	1	E	255280
2601 – 2800	600 KU	1	E	255282
	600 KU	1	E	255282
	600	1	E	255281

[19] Multipart centre lock – security, horizontal

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

Size-specific combinations:

SRW	SRH	SRW	SRH	Nº
400 – 600	200	1	P	255284
601 – 800	400	1	P	255285
801 – 1000	600 [14]	1	P	255286

[14] With SRW 801 – 814 mm, crop centre lock 600.

					N°
1001 – 1200	600 KU	1	E		255282
	200	1	P		255284
1201 – 1400	600 KU	1	E		255282
	400	1	P		255285
1401 – 1600	600 KU	1	E		255282
	600 [15]	1	P		255286

[23] Striker → from page 178

[24] Security striker → from page 179



INFO

Lever-operated espagnolette, standard: A left second opening sash with asymmetrical strikers always requires right strikers horizontally at the bottom – and vice versa.

[28] Tilt striker → from page 175

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

	N°
Bullet catch sash component	788363

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

		N°
Bullet catch for lever-operated espagnolette	Screw-on	788378

[33] Lifting mishandling device sash component

	N°
Sash component for lifting mishandling device	795927

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

						N°
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

						N°
290 – 410	150	300	–	–		787345
411 – 600	250	490	–	–		787346
601 – 800	350	690	–	–		787347
801 – 1000	500	890	–	–		787348
1001 – 1200	500	1090	–	–		787350
1201 – 1400	500	1290	1	E		787351

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

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

[15] With SRW 1401 – 1414 mm, crop centre lock 600.

				N°
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).



INFO

With a size 150 sash stay, the tilt distance is 80 mm.

[39] Stay bearing

		N°
P 3/130	max. 130 kg	859171
P 6/130	max. 130 kg	859172
P 6/150	max. 150 kg	859173

[40] Stay-bearing pin

		N°
Stay-bearing pin	86	834705

[41] Sash stay cover caps → CTL_107

[44] Rebate corner hinge

				N°
12/20-13	Height adjustable	max. 150 kg	Left	2007203
12/20-13	Height adjustable	max. 150 kg	Right	2007204

[45] Pivot rest

			N°
P 3/130	Laterally adjustable	max. 130 kg	787207
P 6/130	Laterally adjustable	max. 130 kg	787208
P 6/150	Laterally adjustable	max. 150 kg	787209

[46] Rebate corner hinge / pivot rest cover caps → CTL_107

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

		N°
Frame and sash component	200	255237

[49] Packer → from page 182

[53] Drilling protection

	N°
Drilling protection	797819



[54] Handle, lockable → CTL_1

[81] Run-up block → CTL_107

The run-up block depends on the striker used.

Optional

[57] Rebate corner hinge extension



Nº

Extension

2026631

[80] Fastening plate



Nº

Fastening plate with cam

255211

Can only be used in combination with T&T espagnolette 259717.



Application range

SRW: 490 – 1400 mm

SRH: 520 – 2800 mm

S.kg: max. 150 kg

[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	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

T&T espagnolette 259717 must be secured with two fastening plates 255211.

[5] Floating-mullion espagnolette – centred / variable handle height, backset 15 mm

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] Centre lock, multipart, (SRH ≥ 2401 mm)

200	Y	1	V	337708
400	Y	1	V	337710

Size-specific combinations:

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

[7] Centre lock, multipart – floating mullion, (SRH ≥ 2401 mm)

200	Y	1	450822
400	Y	1	280345

Size-specific combinations:

2401 – 2600	200 KU	1	450822
2601 – 2800	400 KU	1	280345

[10] Floating mullion corner drive

Second opening sash	Bottom	1	1	V 367227

[11] Standard corner drive

1	V	260272

[13] Special short corner drive

1	V	281288

Use → 5.1.1.1 “Possible combinations” from page 167

[14] Sash stay corner drive

1	V	260284

[15] Corner drive, standard (security)

2	V	260274

[17] Centre lock, multipart – standard, horizontal – top, Turn-Only sash

200	Y	–	–	308267
400	Y	1	V	337710

1001 – 1200	200 KU	–	–	308267
1201 – 1400	400 KU	1	V	337710

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

200	N	1	V	296853
400	N	1	V	296854
600	N	1	V	296855
600	Y	1	V	337711

Size-specific combinations:

490 – 690	520 – 800	200	1	V 296853
691 – 890	801 – 1000	400	1	V 296854
891 – 1090	1001 – 1200	600	1	V 296855
1091 – 1290	1201 – 1400	600 KU	1	V 337711
		200	1	V 296853

					Nº
1291 – 1400	1401 – 1600	600 KU	1	V	337711
		400	1	V	296854
	1601 – 1800	600 KU	1	V	337711
		600	1	V	296855
	1801 – 2000	600 KU	1	V	337711
		600 KU	1	V	337711
		200	1	V	296853
		2001 – 2200	600 KU	1	V
		600 KU	1	V	337711
		400	1	V	296854
	2201 – 2400	600 KU	1	V	337711
		600 KU	1	V	337711
	600	1	V	296855	
	2401 – 2600	600 KU	1	V	337711
	600 KU	1	V	337711	
	600 KU	1	V	337711	
	200	1	V	296855	
	2601 – 2800	600 KU	1	V	337711
		600 KU	1	V	337711
		600 KU	1	V	337711
		400	1	V	296854

[24] Security striker → from page 179



INFO

Lever-operated espagnolette, standard: A left second opening sash with asymmetrical strikers always requires right strikers horizontally at the bottom – and vice versa.

[28] Tilt striker → from page 175

[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	788378

[33] Lifting mishandling device sash component

	Nº
Sash component for lifting mishandling device	795927

[35] Turn-Only sash stay guide – security

					Nº
411 – 600	250	490	–	–	787367
601 – 800	350	690	–	–	787368
801 – 1000	500	890	1	V	787370

[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
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	max. 130 kg	859171
P 6/130	max. 130 kg	859172
P 6/150	max. 150 kg	859173

[40] Stay-bearing pin

		Nº
Stay-bearing pin	86	834705

[41] Sash stay cover caps → CTL_107

[44] Rebate corner hinge

				Nº
12/20-13	Height adjustable	max. 150 kg	Left	2007203
12/20-13	Height adjustable	max. 150 kg	Right	2007204

[45] Pivot rest

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

[46] Rebate corner hinge / pivot rest cover caps → CTL_107

[53] Drilling protection

	Nº
Drilling protection	797819

[54] Handle, lockable → CTL_1

[81] Run-up block → CTL_107

The run-up block depends on the striker used.



[85] Retainer clasp



Nº

Retainer clasp for lever-operated espagnolette, standard

314203

Optional

[57] Rebate corner hinge extension



Nº

Extension

2026631

[80] Fastening plate



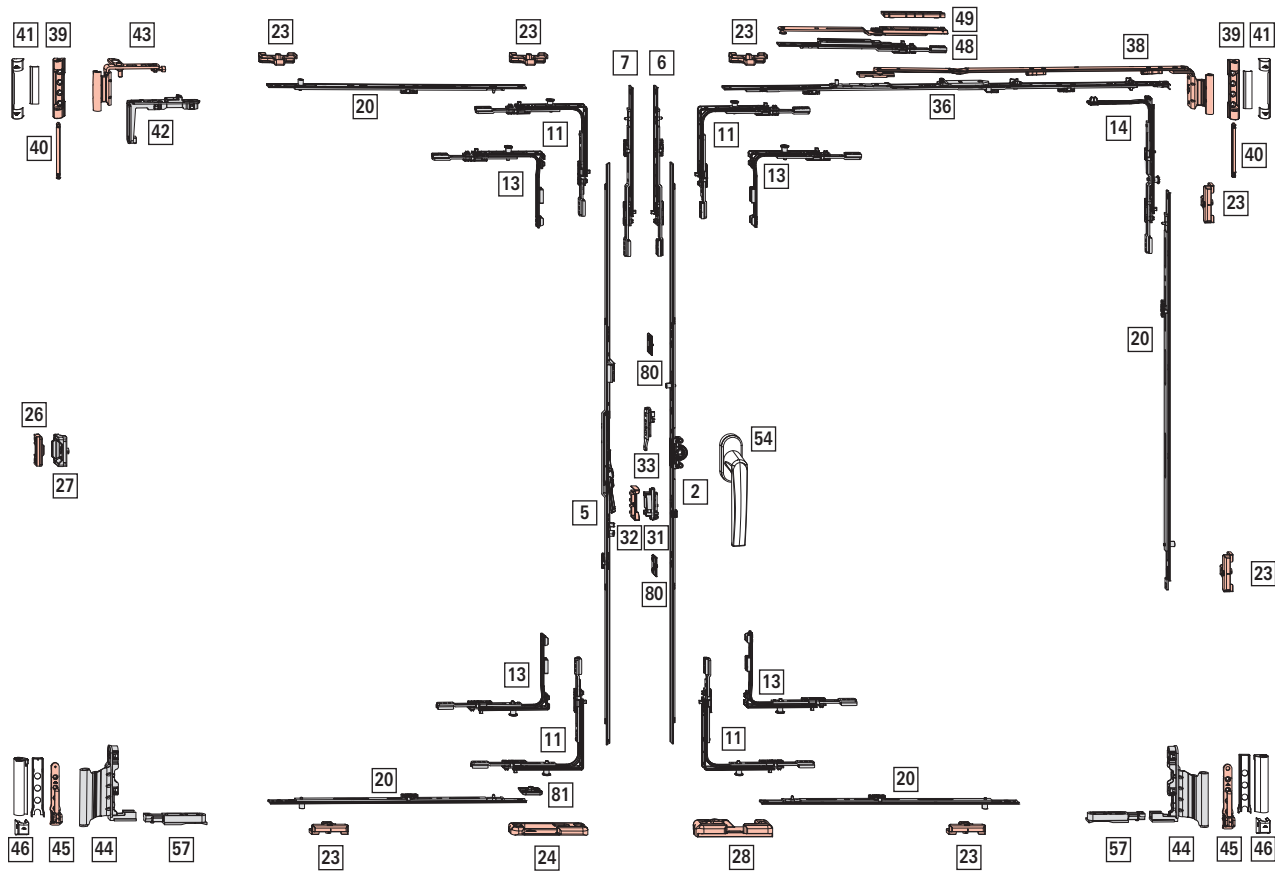
Nº

Fastening plate with cam

255211

Can only be used in combination with T&T espagnolette 259717.

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

T&T espagnolette 259717 must be secured with two fastening plates 255211.

[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] Centre lock, multipart, (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] Centre lock, multipart – floating mullion, (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

🔑	🔑	🔑	Nº
1	P	Top Bottom	260277

[13] Special short corner drive

🔑	🔑	🔑	Nº
1	E	Top	260280
1	P	Top Bottom	260282

Use → 5.1.1.1 "Possible combinations" from page 167

[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
1101 – 1600	1101 – 1800	600	1	E	255281
		1801 – 2400	600 KU	1	E
	2401 – 2600	600	1	E	255281
		600 KU	1	E	255282
	2601 – 2800	600 KU	1	E	255282
		400	1	E	255280
	2601 – 2800	600 KU	1	E	255282
		600 KU	1	E	255282
		600	1	E	255281

[23] Striker → from page 178

[24] Security striker → from page 179

[26] Centre closer, concealed, frame component → from page 185

[27] Centre closer, concealed, sash component → from page 185

[28] Tilt striker → from page 175

[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	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	–	–	787348
1001 – 1200	500	1090	–	–	787350
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).



INFO

With a size 150 sash stay, the tilt distance is 80 mm.

[39] Stay bearing

		Nº
P 3/130	max. 130 kg	859171
P 6/130	max. 130 kg	859172
P 6/150	max. 150 kg	859173

[40] Stay-bearing pin

		Nº
Stay-bearing pin	86	834705

[41] Sash stay cover caps → CTL_107

[42] Rebate stay guide

	Nº
Rebate stay guide for hinge side P / T / A16	331488

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

	Nº
Left	787375
Right	787376

[44] Rebate corner hinge

				Nº
12/20-13	Height adjustable	max. 150 kg	Left	2007203
12/20-13	Height adjustable	max. 150 kg	Right	2007204

[45] Pivot rest

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

[46] Rebate corner hinge / pivot rest cover caps → CTL_107

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

		Nº
Frame and sash component	200	255237

[49] Packer → from page 182

[54] Handle → CTL_1

[81] Run-up block → CTL_107

The run-up block depends on the striker used.

Optional

[57] Rebate corner hinge extension

	Nº
Extension	2026631

[80] Fastening plate

	Nº
Fastening plate with cam	255211

Can only be used in combination with T&T espagnolette 259717.





Application range

SRW: 400 – 1600 mm

SRH: 420 – 2800 mm

S.kg: max. 150 kg

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

SRW	SRH	SRW	SRH	SRW	SRH	SRW	SRH	SRW	SRH	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				

T&T espagnolette 259717 must be secured with two fastening plates 255211.

[5] Floating-mullion espagnolette, Plus – centred / variable handle height, backset 15 mm

SRW	SRH	SRW	SRH	SRW	SRH	SRW	SRH	SRW	SRH	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] Centre lock, multipart, (SRH ≥ 2401 mm)

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

Size-specific combinations:

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

[7] Centre lock, multipart – floating mullion, (SRH ≥ 2401 mm)

SRW	SRH	SRW	SRH	SRW	SRH	Nº
200	Y	–	–	308267		
400	Y	1	E	280345		

Size-specific combinations:

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

[11] Standard corner drive

SRW	SRH	SRW	SRH	Nº
1	P	260277		

[13] Special short corner drive

SRW	SRH	SRW	SRH	Nº
1	P	260282		

Use → 5.2.2.1 “Possible combinations” from page 173

[14] Sash stay corner drive

SRW	SRH	SRW	SRH	Nº
1	P	260286		

[17] Centre lock, multipart – standard, horizontal – top, Turn-Only sash

SRW	SRH	SRW	SRH	SRW	SRH	Nº
200	Y	–	–	308267		

Size-specific combinations:

SRW	SRH	SRW	SRH	SRW	SRH	Nº
1401 – 1600	200 KU	–	–	308267		

[18] Multipart centre lock – standard, vertical

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

Size-specific combinations:

SRW	SRH	SRW	SRH	SRW	SRH	Nº
1101 – 1800	600	1	E	255281		
1801 – 2400	600 KU	1	E	255282		
	600	1	E	255281		
2401 – 2600	600 KU	1	E	255282		
	600 KU	1	E	255282		
	400	1	E	255280		
2601 – 2800	600 KU	1	E	255282		
	600 KU	1	E	255282		
	600	1	E	255281		

[19] Multipart centre lock – security, horizontal

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

Size-specific combinations:

SRW	SRH	SRW	SRH	SRW	SRH	Nº
400 – 600	200	1	P	255284		
601 – 800	400	1	P	255285		
801 – 1000	600 ^[16]	1	P	255286		
1001 – 1200	600 KU	1	E	255282		
	200	1	P	255284		
1201 – 1400	600 KU	1	E	255282		
	400	1	P	255285		

[16] With SRW 801 – 814 mm, crop centre lock 600.

				Nº
1401 – 1600	600 KU	1	E	255282
	600 [17]	1	P	255286

[23] Striker → from page 178

[24] Security striker → from page 179

[28] Tilt striker → from page 175

[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	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	–	–	787348
1001 – 1200	500	1090	–	–	787350
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

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

i INFO
With a size 150 sash stay, the tilt distance is 80 mm.

[17] With SRW 1401 – 1414 mm, crop centre lock 600.

[39] Stay bearing

		Nº
P 3/130	max. 130 kg	859171
P 6/130	max. 130 kg	859172
P 6/150	max. 150 kg	859173

[40] Stay-bearing pin

		Nº
Stay-bearing pin	86	834705

[41] Sash stay cover caps → CTL_107

[44] Rebate corner hinge

				Nº
12/20-13	Height adjustable	max. 150 kg	Left	2007203
12/20-13	Height adjustable	max. 150 kg	Right	2007204

[45] Pivot rest

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

[46] Rebate corner hinge / pivot rest cover caps → CTL_107

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

		Nº
Frame and sash component	200	255237

[49] Packer → from page 182

[53] Drilling protection

	Nº
Drilling protection	797819

[54] Handle, lockable → CTL_1

[81] Run-up block → CTL_107

The run-up block depends on the striker used.

Optional

[57] Rebate corner hinge extension

	Nº
Extension	2026631

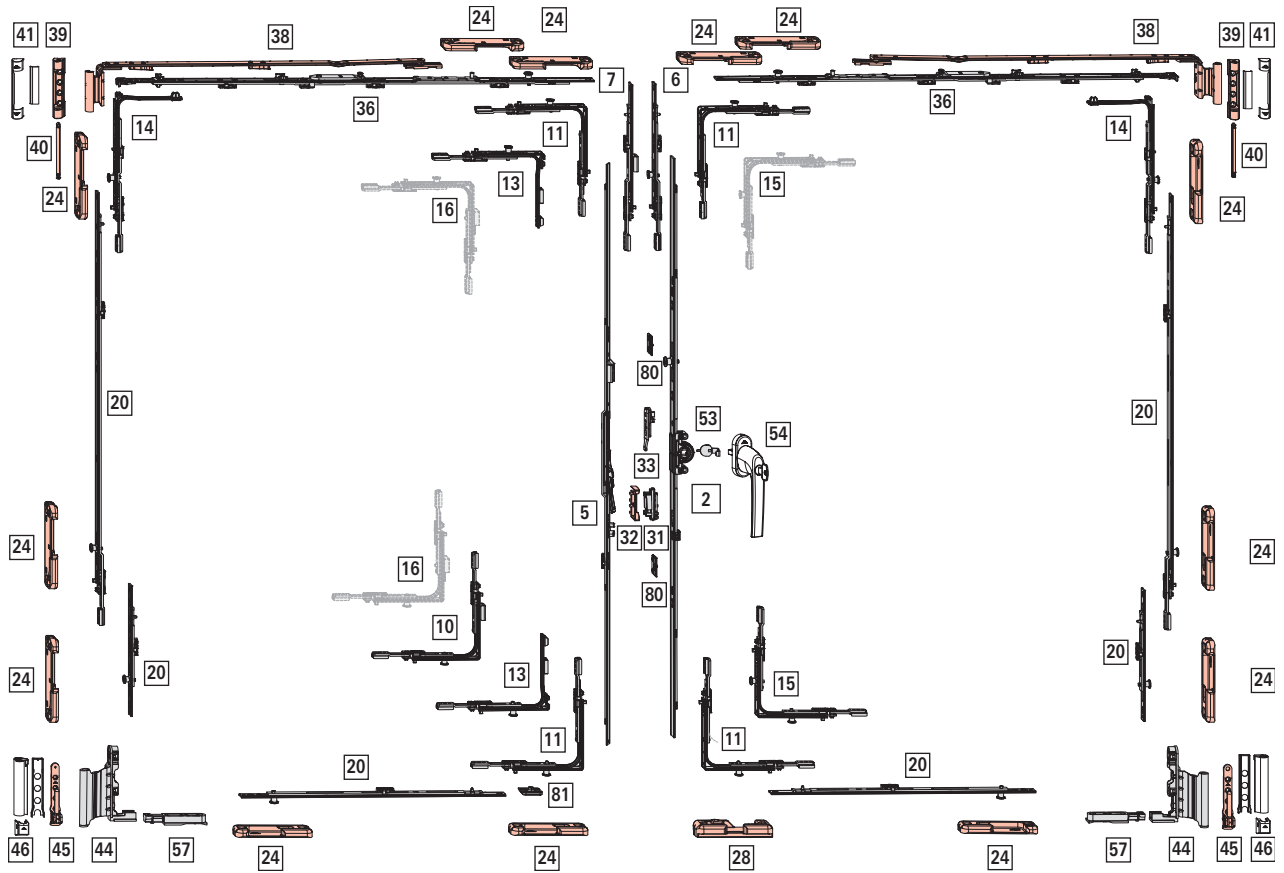
[80] Fastening plate

	Nº
Fastening plate with cam	255211

Can only be used in combination with T&T espagnolette 259717.



4.2.5.6 Plus – RC 2 / RC 2 N





Application range

SRW: 490 – 1600 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

T&T espagnolette 259717 must be secured with two fastening plates 255211.

[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] Centre lock, multipart, (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] Centre lock, multipart – floating mullion, (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 → 5.2.2.1 “Possible combinations” from page 173

[14] Sash stay corner drive

			Nº
1	V	–	260284

[15] Corner drive, standard (security)

			Nº
2	V	–	260274

For use with SRH ≤ 800 mm.

[20] Multipart centre lock – standard, 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
490 – 690	520 – 800	200	1	V	296853
691 – 890	801 – 1000	400	1	V	296854
891 – 1090	1001 – 1200	600	1	V	296855
1091 – 1290	1201 – 1400	600 KU	1	V	337711
		200	1	V	296853

					Nº
1291 – 1400	1401 – 1600	600 KU	1	V	337711
		400	1	V	296854
	1601 – 1800	600 KU	1	V	337711
		600	1	V	296855
	1801 – 2000	600 KU	1	V	337711
		600 KU	1	V	337711
		200	1	V	296853
	2001 – 2200	600 KU	1	V	337711
		600 KU	1	V	337711
		400	1	V	296854
	2201 – 2400	600 KU	1	V	337711
		600 KU	1	V	337711
600		1	V	296855	
2401 – 2600	600 KU	1	V	337711	
	600 KU	1	V	337711	
	600 KU	1	V	337711	
	200	1	V	296853	
2601 – 2800	600 KU	1	V	337711	
	600 KU	1	V	337711	
	600 KU	1	V	337711	
		400	1	V	296854

[24] Security striker → from page 179

[28] Tilt striker → from page 175

[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	788378

[33] Lifting mishandling device sash component

	Nº
Sash component for lifting mishandling device	795927

[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

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

[39] Stay bearing

		Nº
P 3/130	max. 130 kg	859171
P 6/130	max. 130 kg	859172
P 6/150	max. 150 kg	859173

[40] Stay-bearing pin

		Nº
Stay-bearing pin	86	834705

[41] Sash stay cover caps → CTL_107

[44] Rebate corner hinge

				Nº
12/20-13	Height adjustable	max. 150 kg	Left	2007203
12/20-13	Height adjustable	max. 150 kg	Right	2007204

[45] Pivot rest

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

[46] Rebate corner hinge / pivot rest cover caps → CTL_107

[53] Drilling protection

	Nº
Drilling protection	797819

[54] Handle, lockable → CTL_1

[81] Run-up block → CTL_107

The run-up block depends on the striker used.

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.

[57] Rebate corner hinge extension

	Nº
Extension	2026631

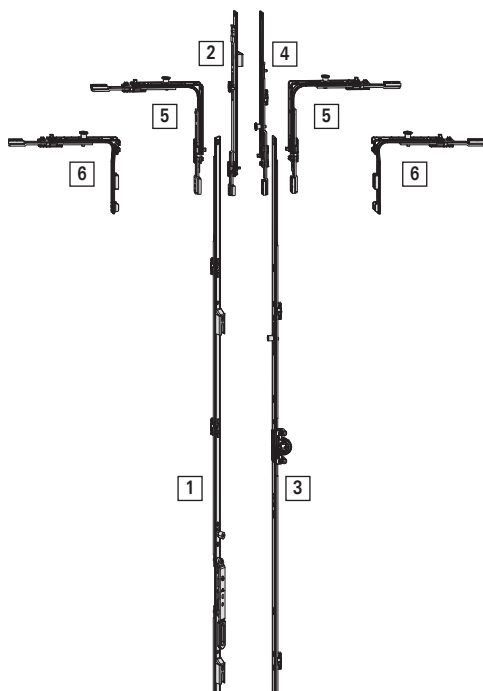


5 T&T espagnolette / floating-mullion sash espagnolette

5.1 Standard

5.1.1 VT – fixed handle height

5.1.1.1 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

- Determine the element's sash rebate height (SRH).



INFO

Refer to the tables below for possible combinations and the required corner drive [5] + [6].

- 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].

- 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, standard 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, standard VT			T&T espagnolette, VT			
	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



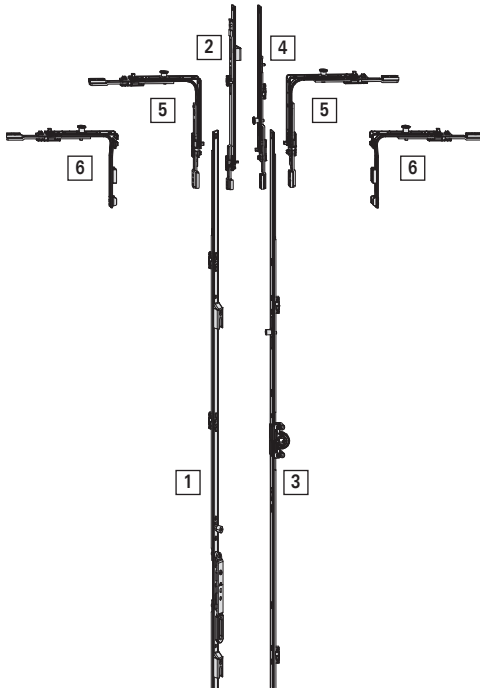
INFO

A centre lock is required from SRH 2401 mm.



5.1.2 Centred / variable handle height

5.1.2.1 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].

T&T espagnolette / floating-mullion sash espagnolette

Standard

Centred / variable handle height

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

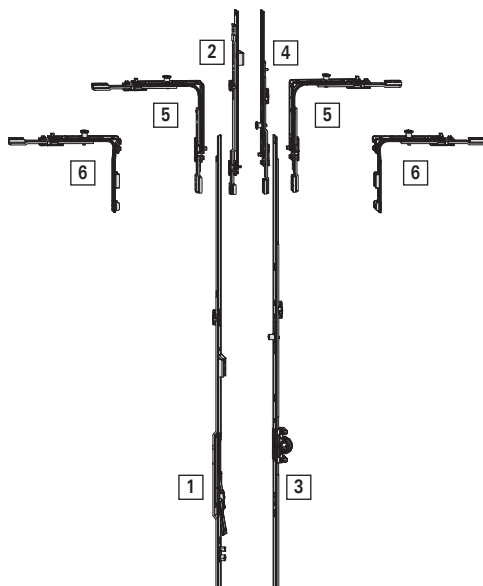
A centre lock is required from SRH 2401 mm.



5.2 Plus

5.2.1 VT – fixed handle height

5.2.1.1 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



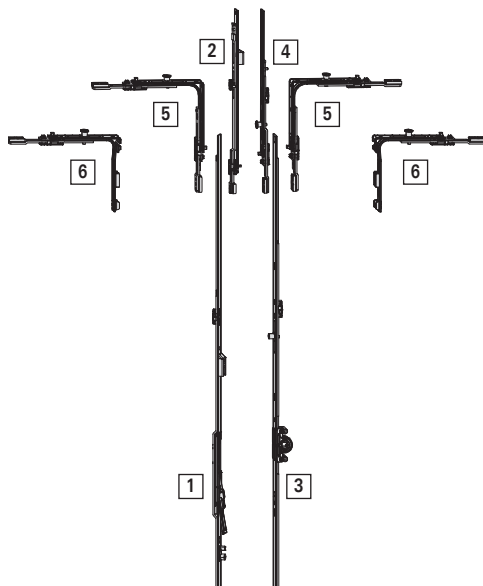
INFO

A centre lock is required from SRH 2401 mm.



5.2.2 Centred / variable handle height

5.2.2.1 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].

T&T espagnolette / floating-mullion sash espagnolette**Plus**

Centred / variable handle height

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.



6 Frame components



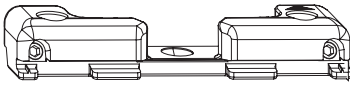
INFO

Further frame components are available upon request.

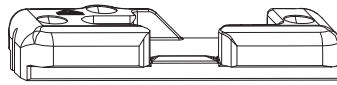
6.1 Tilt strikers

6.1.1 Standard

6.1.1.1 Zinc



A



B

Assignment	Meaning
[A]	Clampable
[B]	Screw-on

								N ^o
Aliplast Benelux Elvial 4600 AD (W59 S12) AluK b-Quick Deceuninck Decalu	9	Screw-on	-	-	-	Left	Roto Sil	260523
			-	-	-	Right	Roto Sil	260524
HansenMillenium			-	-	-	Left	Roto Sil	260479
			-	-	-	Right	Roto Sil	260480
Exlabesa RS-65 Sapa Avantis van Beveren Optima	13		-	with packer	-	Left	Roto Sil	261943
			-	with packer	-	Right	Roto Sil	262927
Aluminco 570 Dynamic Aluminco 570 Dynamic Plus			-	-	-	Left	Roto Sil	451092
			-	-	-	Right	Roto Sil	451007
heroyal W 72 Kawneer RT heroyal W 65			-	-	-	Left	Roto Sil	284235
			-	-	-	Right	Roto Sil	284236
AluK 67FR Reynaers IndusLine 68			V.02	-	-	-	Roto Sil	860966
Aliplast Benelux Alumil Ecoflex Aluminco 450 Brisa Aluminios Sistema NT 18/9 Aluprof MB-60 Aluprof MB-70 Aluprof MB-86 Aluron AS 75 Elvial Iconic W77 AI2 Elvial 4600 AD (W59 S12) Ponzio PE78 Sapa 70FPI Sapa 4150 HV AluK b-Quick Deceuninck Decalu AluK 58BW	9	Clampable	V.01	-	-	-	Roto Sil	627150
			V.02	-	-	-	Roto Sil	629914
heroyal W 72 Kawneer RT heroyal W 65			V.02	-	-	-	Roto Sil	629914
Aluminco 570 Dynamic Aluminco 570 Dynamic Plus Exlabesa RS-65 Sapa Avantis van Beveren Optima	13		V.01	-	-	-	Roto Sil	494938

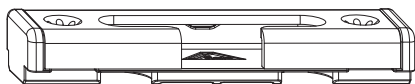








INFO

Other versions are available upon request.

Compatible packers → *from page 182.*

6.1.1.2 Steel



						Nº
Aliplast Benelux Aluprof MB-60 Aluprof MB-70 Aluprof MB-86 Aluron AS 75 Elvial Iconic W77 AI2 Elvial 4600 AD (W59 SI2) Ponzio PE78 Sapa 4150 HV AluK b-Quick Deceuninck Decalu	9	Screw-on	–	–	Roto Sil	2003961
heroal W 72 heroal W 65			–	–	Roto Sil	856826
HansenMillenium			–	–	Roto Sil	856827

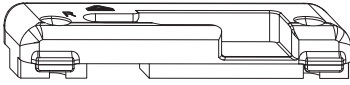








INFO

Other versions are available upon request.



6.1.2 TiltFirst (TF)









						Nº		
Aliplast Benelux Alumil Ecoflex Alumincó 450 Brisa Aluminios Sistema NT 18/9 Aluprof MB-60 Aluprof MB-70 Aluprof MB-86 Aluron AS 75 Elvial Iconic W77 Al2 Elvial 4600 AD (W59 SI2) Ponzio PE78 Sapa 70FPI Sapa 4150 HV AluK b-Quick Deceuninck Decalu	9	Screw-on	-	Left	Roto Sil	473190		
			-	Right	Roto Sil	473189		
			-	Left	Roto Sil	737709		
			-	Right	Roto Sil	737710		
			AluK 58BW	-	Left	Roto Sil	838045	
				-	Right	Roto Sil	838046	
			HansenMillenium	-	Left	Roto Sil	287915	
				-	Right	Roto Sil	287916	
			Alumincó 570 Dynamic Alumincó 570 Dynamic Plus Sapa Avantis van Beveren Optima	13	-	Left	Roto Sil	774799
					-	Right	Roto Sil	774800

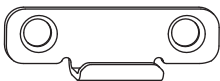







INFO

Other versions are available upon request.

Steel

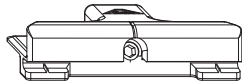
						Nº
Aliplast Benelux Aluprof MB-60 Aluprof MB-70 Aluprof MB-86 AluK b-Quick Deceuninck Decalu HansenMillenium	9	Screw-on	-	Left	Roto Sil	2009238
			-	Right	Roto Sil	2009237
			-	Left	Roto Sil	856982
			-	Right	Roto Sil	856981



					Nº
Aliplast Benelux AluK b-Quick Aluprof MB-60 Aluprof MB-70 Aluprof MB-86 Deceuninck Decalu HansenMillenium	TiltFirst adapter for security strikers (steel)		9	Roto Sil	456941

6.2 Strikers

6.2.1 Standard



					
Aliplast Benelux Aluprof MB-60 Aluprof MB-70 Aluprof MB-86 Aluron AS 75 Elvial Iconic W77 AI2 Elvial 4600 AD (W59 SI2) Sapa 4150 HV AluK b-Quick Deceuninck Decalu	9	Screw-on	–	Roto Sil	346971
heroyal W 72 Kawneer RT			–	Roto Sil	891331
heroyal W 72 Kawneer RT heroyal W 65			–	Roto Sil	284233
AluK 58BW			–	Roto Sil	260363
AluK 67FR Reynaers IndusLine 68			–	Roto Sil	860949
HansenMillenium			–	Roto Sil	260360
Exlabesa RS-65	13		–	Roto Sil	491060
Aluminco 570 Dynamic Aluminco 570 Dynamic Plus Exlabesa RS-65 Sapa Avantis van Beveren Optima			–	Roto Sil	451008
Aliplast Benelux Alumil Ecoflex Aluminco 450 Brisa Aluminios Sistema NT 18/9 Aluprof MB-60 Aluprof MB-70 Aluprof MB-86 Aluron AS 75 Elvial Iconic W77 AI2 Elvial 4600 AD (W59 SI2) Ponzio PE78 Sapa 70FPI Sapa 4150 HV AluK b-Quick Deceuninck Decalu AluK 58BW	9	Clampable	V.01	Roto Sil	627148
heroyal W 72 Kawneer RT heroyal W 65			V.02	Roto Sil	629913
Aluminco 570 Dynamic Aluminco 570 Dynamic Plus Exlabesa RS-65 Sapa Avantis van Beveren Optima	13		V.01	Roto Sil	494937



INFO

Other versions are available upon request.



6.2.2 Security

6.2.2.1 Zinc









A



B

Assignment	Meaning
[A]	Striker, right / left
[B]	Striker, symmetrical

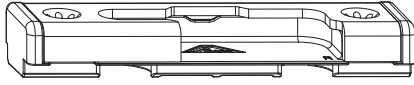
							N ^o
Aliplast Benelux Aluprof MB-60 Aluprof MB-70 Aluprof MB-86 Elvial 4600 AD (W59 S12) Sapa 4150 HV AluK b-Quick Deceuninck Decalu	9	Screw-on	-	-	Roto Sil	346972	
heroyal W 72 Kawneer RT heroyal W 65			-	-	Roto Sil	284234	
HansenMillenium	13		-	Left	Roto Sil	260382	
			-	Right	Roto Sil	260383	
Aluminco 570 Dynamic Aluminco 570 Dynamic Plus			-	-	Roto Sil	451009	
Exlabesa RS-65 Sapa Avantis van Beveren Optima			-	Left	Roto Sil	261935	
			-	Right	Roto Sil	262930	









INFO

Other versions are available upon request.

6.2.2.2 Steel



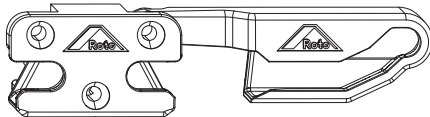
						Nº
Aliplast Benelux Aluprof MB-60 Aluprof MB-70 Aluprof MB-86 Aluron AS 75 Elvial Iconic W77 Al2 Elvial 4600 AD (W59 Si2) Ponzio PE78 Sapa 4150 HV AluK b-Quick Deceuninck Decalu	9	Screw-on	V.01	Left	Roto Sil	2003963
		Screw-on	V.01	Right	Roto Sil	2003962
	AluK 58BW	Screw-on	V.01	Left	Roto Sil	856764
		Screw-on	V.01	Right	Roto Sil	856765
	heroal W 72 Kawneer RT heroal W 65	Screw-on	V.02	–	Roto Sil	856759
	HansenMillenium	Screw-on	–	Left	Roto Sil	856982
Screw-on		–	Right	Roto Sil	856981	







INFO

Other versions are available upon request.

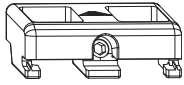
6.2.2.3 TiltSafe








				Nº
Screw-on	V.01	Roto Sil	Left	837088
		Roto Sil	Right	837089
	V.02	Roto Sil	Left	837155
		Roto Sil	Right	837156



6.2.3 Striker for double-sashed window



					Nº
Aliplast Benelux Alumil Ecoflex Aluminco 450 Brisa Aluminios Sistema NT 18/9 Aluprof MB-60 Aluprof MB-70 Aluprof MB-86 Aluron AS 75 Elvial Iconic W77 AI2 Elvial 4600 AD (W59 SI2) Ponzio PE78 Sapa 70FPI Sapa 4150 HV AluK b-Quick Deceuninck Decalu	9	Clampable	V.01	Roto Sil	627149
Aluminco 570 Dynamic Aluminco 570 Dynamic Plus Exlabesa RS-65 Sapa Avantis van Beveren Optima	13		–	Roto Sil	494940
Alumil Ecoflex Aluprof MB-60 Aluprof MB-70 Aluprof MB-86 Elvial 4600 AD (W59 SI2) Ponzio PE78	9		V.01	Roto Sil	339438
Aliplast Benelux AluK b-Quick Deceuninck Decalu		Screw-on	–	Roto Sil	346976
AluK 67FR	13		V.02	Roto Sil	860965






INFO

Other versions are available upon request.

6.3 Packers

6.3.1 Packers



			Nº
Aliplast Benelux Alumil Ecoflex Aluminco 450 Brisa Aluminios Sistema NT 18/9 Aluprof MB-60 Aluprof MB-70 Aluprof MB-86 Aluron AS 75 Elvial Iconic W77 A12 Elvial 4600 AD (W59 SI2) Ponzio PE78 Sapa 70FPI Sapa 4150 HV AluK b-Quick Deceuninck Decalu	Frame	9	348148
heroal W 72 Kawneer RT AluK 67FR heroal W 65			294541
AluK 58BW			838047
Aluminco 570 Dynamic Aluminco 570 Dynamic Plus Exlabesa RS-65 Sapa Avantis van Beveren Optima		13	491064
Exlabesa RS-65 Sapa Avantis			599215

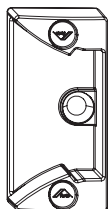






INFO

Other versions are available upon request.

6.4 Bullet catches

6.4.1 Bullet catch



				Nº
Aliplast Benelux AluK b-Quick Deceuninck Decalu	9	Clampable	Roto Sil	897075
HansenMillenium		Screw-on	Roto Sil	788365
Aluminco 570 Dynamic Aluminco 570 Dynamic Plus Sapa Avantis van Beveren Optima	13		Roto Sil	839393

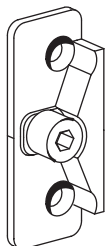








INFO

Other versions are available upon request.

6.5 Lifting mishandling devices

6.5.1 Frame component



					
Aliplast Benelux Elvial 4600 AD (W59 SI2) AluK b-Quick Deceuninck Decalu	Screw-on	9	-	Roto Sil	260561
heroyal W 72 Kawneer RT heroyal W 65			-	Roto Sil	284237
AluK 58BW			V.01	Roto Sil	260543
AluK 67FR Reynaers IndusLine 68			V.02	Roto Sil	860967
HansenMillenium			-	Roto Sil	260540
Aluminco 570 Dynamic Aluminco 570 Dynamic Plus Exlabesa RS-65 Sapa Avantis van Beveren Optima		13	-	Roto Sil	451006
Aliplast Benelux Alumil Ecoflex Aluminco 450 Brisa Aluminios Sistema NT 18/9 Aluprof MB-60 Aluprof MB-70 Aluprof MB-86 Aluron AS 75 Elvial Iconic W77 AI2 Elvial 4600 AD (W59 SI2) Ponzio PE78 Sapa 70FPI Sapa 4150 HV AluK b-Quick Deceuninck Decalu AluK 58BW	Clampable	9	V.01	Roto Sil	339436
heroyal W 72 Kawneer RT heroyal W 65			V.02	Roto Sil	629925
Aluminco 570 Dynamic Aluminco 570 Dynamic Plus Exlabesa RS-65 Sapa Avantis van Beveren Optima		13	V.01	Roto Sil	494942

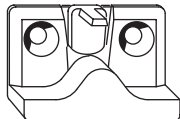









INFO

Other versions are available upon request.

6.6 Night vents

6.6.1 Single-stepped



							Nº
Aliplast Benelux Alumil Ecoflex Aluprof MB-60 Aluprof MB-70 Elvial Iconic W77 A12 Elvial 4600 AD (W59 S12) AluK b-Quick Deceuninck Decalu	Screw-on	9	–	–	–	Roto Sil	259255
heroal W 72 Kawneer RT heroal W 65			–	–	–	Roto Sil	348365
HansenMillenium			–	–	–	Roto Sil	256633
Aluminco 570 Dynamic Aluminco 570 Dynamic Plus Exlabesa RS-65 Sapa Avantis		13	–	with packer	Left	Roto Sil	261945
Aluminco 570 Dynamic Aluminco 570 Dynamic Plus Exlabesa RS-65 Sapa Avantis van Beveren Optima			–	with packer	Right	Roto Sil	262932
Aliplast Benelux Alumil Ecoflex Aluminco 450 Brisa Aluminios Sistema NT 18/9 Aluprof MB-60 Aluprof MB-70 Aluprof MB-86 Aluron AS 75 Elvial Iconic W77 A12 Elvial 4600 AD (W59 S12) Ponzio PE78 Sapa 70FPI Sapa 4150 HV AluK b-Quick Deceuninck Decalu	Clampable	9	V.01	–	–	Roto Sil	339437



INFO

Only for use in conjunction with P or V cam.



INFO

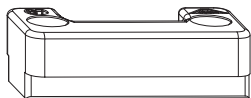
Other versions are available upon request.




Compatible packers → *from page 182.*



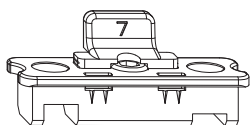
6.7 Centre closers




6.7.1 Frame component



			N ^o
Aliplast Benelux Aluprof MB-60 Aluprof MB-70 Aluprof MB-86 Aluron AS 75 Elvial 4600 AD (W59 SI2) Ponzio PE78 Sapa 4150 HV AluK b-Quick Deceuninck Decalu	9	Screw-on	486009
heroal W 72 Kawneer RT heroal W 65		Screw-on	284238
Aluminco 570 Dynamic Aluminco 570 Dynamic Plus	13	Screw-on	494943

6.7.2 Sash component

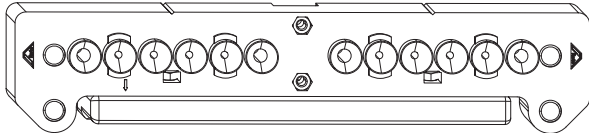


			N ^o
Aluminco 450 Aluprof MB-60 Aluprof MB-70 Aluprof MB-86 Aluron AS 75 Elvial 4600 AD (W59 SI2) Ponzio PE78 Sapa 4150 HV Aluminco 570 Dynamic Aluminco 570 Dynamic Plus	9 13	Screw-on	331483
Aliplast Benelux Aluprof MB-60 Aluprof MB-70 Aluprof MB-86 Ponzio PE78 heroal W 72 Kawneer RT AluK b-Quick Deceuninck Decalu heroal W 65	9	Screw-on	333121

7 Jigs

7.1 Drilling jigs

7.1.1 Stay bearing, standard, and pivot rest



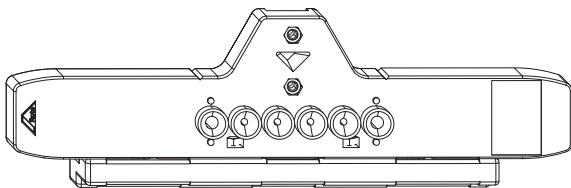
INFO

Drilling jig for systems 12-20/9 and 12-20/13.

Conversion to systems 12-18/9 and 12-1813 possible.

			N ^o
Stay bearing, standard, and pivot rest		P 3/130	230727
		P 6/130	788436
		P 6/150	

7.1.2 Stay bearing, adjustable



INFO

Drilling jig for systems 12-20/9 and 12-20/13.

Conversion to systems 12-18/9 and 12-18/13 possible.

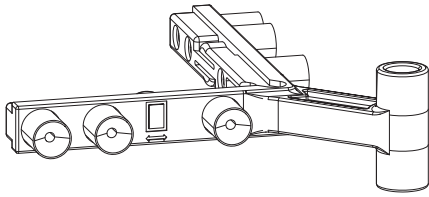
			N ^o
Stay bearing, adjustable – arched window		P 3/100	2002405
		P 6/100	2002406
Stay bearing, adjustable – Tilt-Only sash		P 3/100	2002103
		P 6/100	2002404

Installation (change of system)

			N ^o
Stop for arched windows		12/18-9 12/18-13	2032487
Stop for Tilt-Only sashes		12/18-9 12/18-13	2032488



7.1.3 Rebate corner hinge

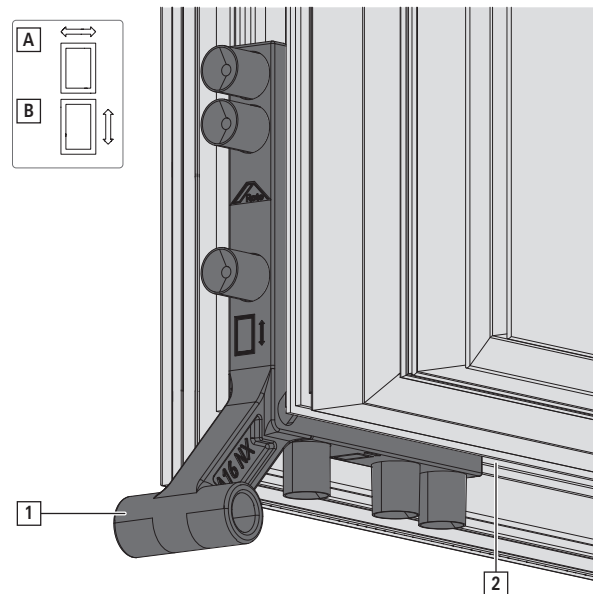


		Nº
	Rebate corner hinge, standard	2026795

7.1.4 Drilling jig – rebate corner hinge

1. Place the drilling jig [1] in the hardware groove [2].
Pay attention to the alignment of the drilling jig:

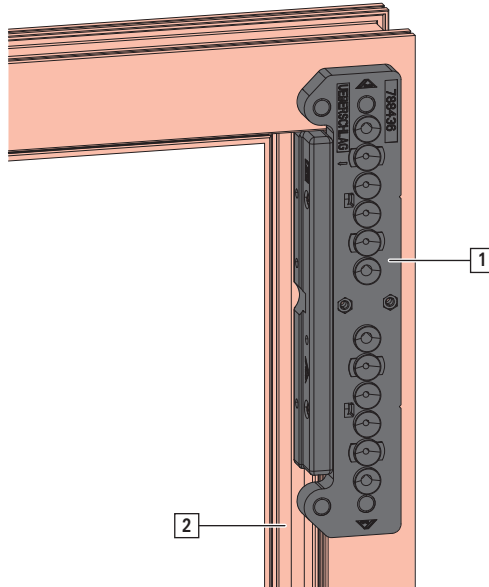
- [A] Horizontal hardware groove
- [B] Vertical hardware groove



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 Adjusting system 12/20-13

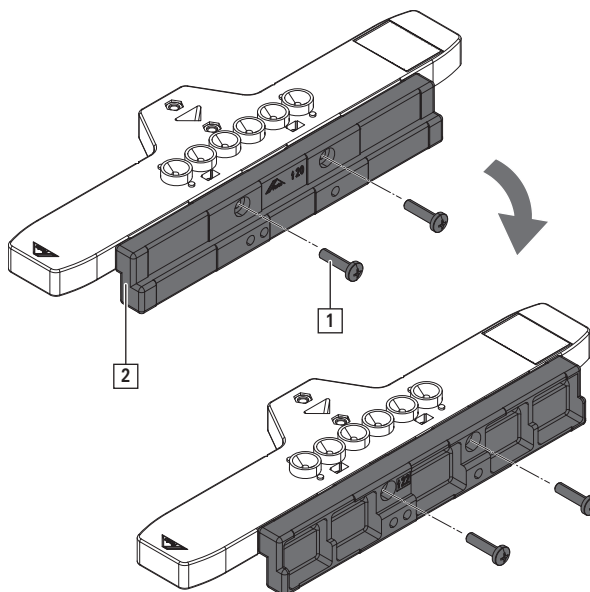


INFO

System 12/20-13 is preset. Conversion is only necessary if a different system is used.

Shown using a drilling jig for Tilt-Only sash as an example.

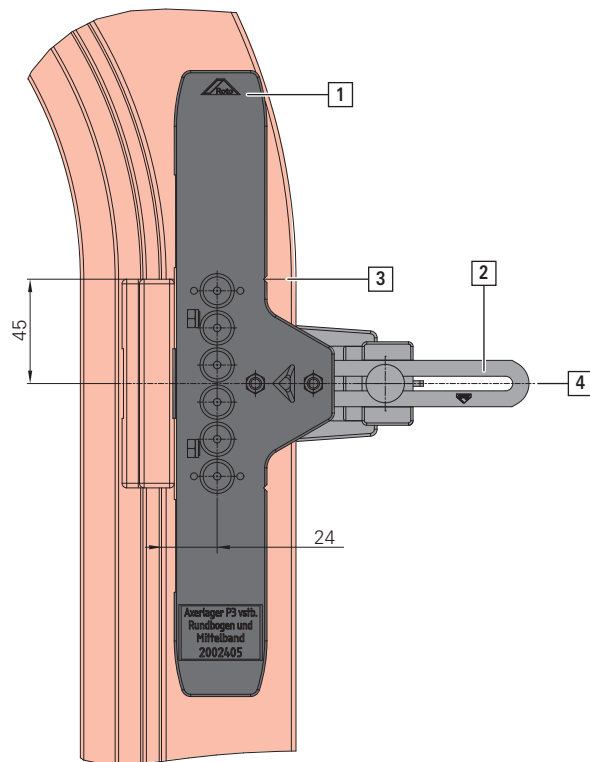
1. Undo the screws [1].



2. Turn the drilling plate [2]. Adjust system 12/20-13.
3. Secure the screws.

7.1.6.2 Drilling jig – arched stay bearing

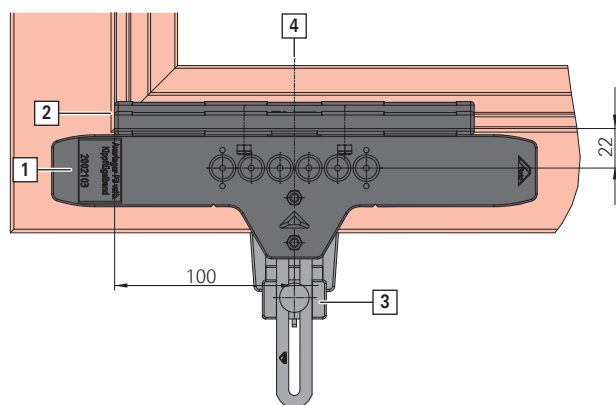
1. Position the drilling jig [1] including clamping retainer [2] on the frame with the marking at the start of the arch [3].
 [4] = centre of stay bearing



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

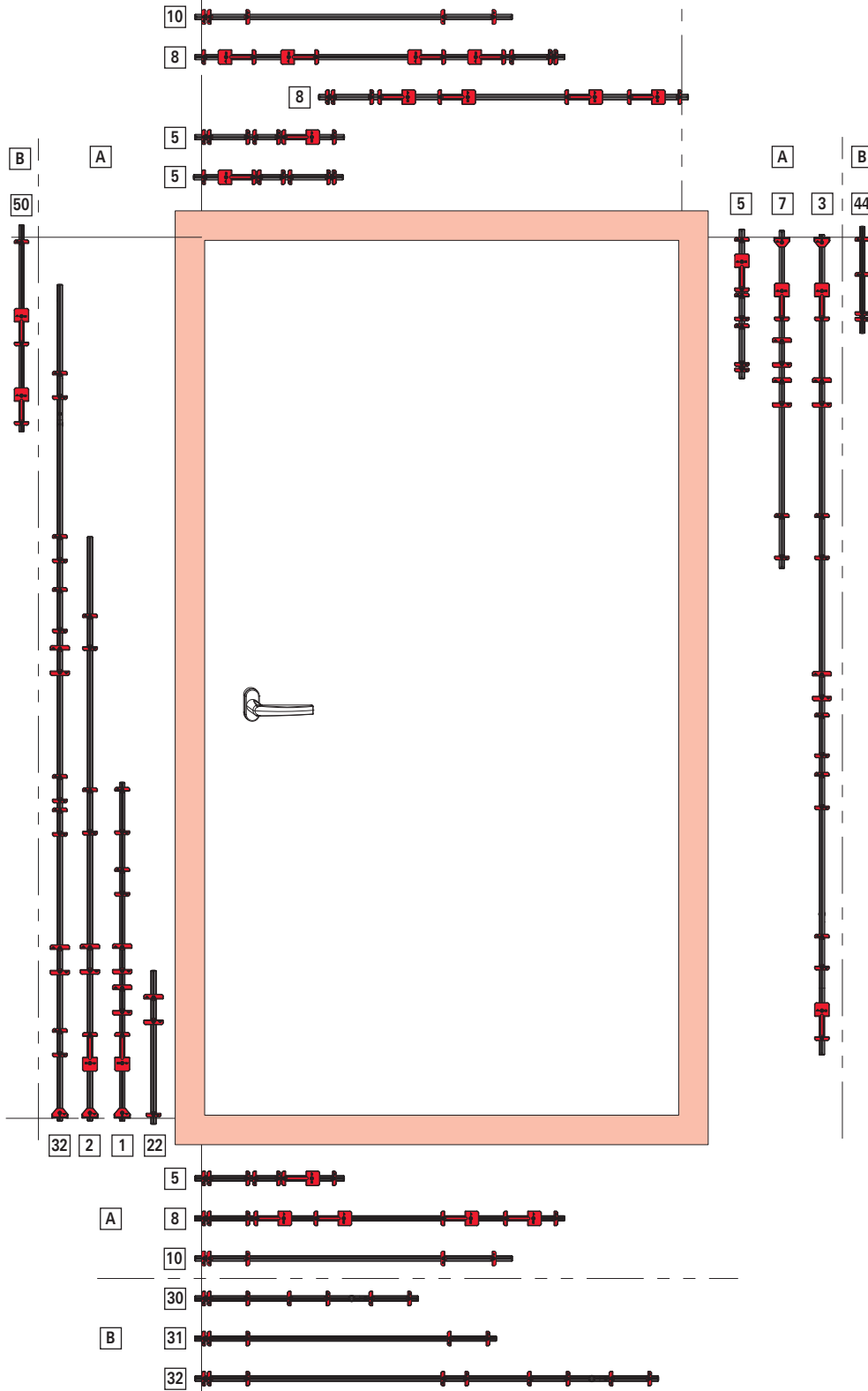


2. Optional: secure the clamping retainer.
3. Drill holes.



7.2 Positioning jigs

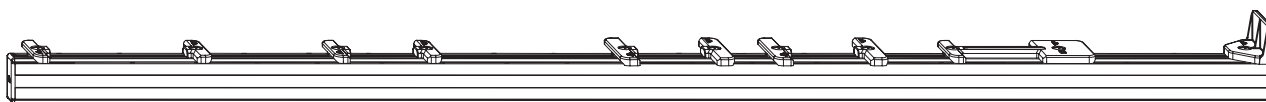
7.2.1 T&T espagnolette – fixed handle height



[A] BSec
[B] RC 1 N

Assignment	Position	Application range	T&T		T-O	Single jig
			BSec	RC 1 N	BSec	
[22]	Espagnolette side	SRH 511 – 600 mm	■	■	■	Standard → <i>from page 192</i>
[1]		SRH 801 – 1400 mm	■	■	■	
[2]		SRH 1401 – 1600 mm	■	■	■	
[32]		SRH 1601 – 2800 mm	■	■	■	
[50]		SRH 2601 – 2800 mm	■	-	■	
[5]	Hinge side	SRH 315 – 1100 mm	■	■	-	Tilt striker / corner drive → <i>from page 192</i>
[7]		SRH 1101 – 1800 mm	■	■	-	Standard
[3]		SRH 1801 – 2800 mm	■	■	■	
[44] ^[18]		SRH 320 – 2800 mm	-	■	-	
[5]	Horizontal at the top	SRW 315 – 1200	■	■	■	Tilt striker / corner drive → <i>from page 192</i>
[8]		BSec: SRW 1201 – 1600 mm	■	■	-	Centre lock → <i>from page 193</i>
		RC 1 N: SRW 1201 – 1400 mm				
[10]		SRW 1101 – 1600 mm	-	-	■	Turn-Only sash → <i>from page 193</i>
[5]	Horizontal at the bottom	SRW 315 – 1100 mm	■	-	■	Tilt striker / corner drive → <i>from page 192</i>
[8]		SRW 1101 – 1600 mm	■	-	-	Centre lock → <i>from page 193</i>
[10]		SRW 1101 – 1600 mm	-	-	■	Turn-Only sash → <i>from page 193</i>
[30]		SRW 400 – 800 mm	-	■	-	RC 1 N centre lock → <i>from page 193</i>
[31]		SRW 801 – 1000 mm	-	■	-	
[32]		SRW 1001 – 1400 mm	-	■	-	

7.2.1.1 Standard



Espagnolette side

					Nº
	Standard	511 – 710		No. 22	808677
	Standard	801 – 1400		No. 1	290048
	Standard	1401 – 1600		No. 2	290049
	Standard	1601 – 2800		No. 32	798211
	Standard	2401 – 2800		No. 55	808454

Hinge side

					Nº
	Tilt striker / corner drive	320 – 2600		No. 44	640450
	Standard	801 – 1600		No. 7	290074
	Standard	1601 – 2600		No. 3	290050

7.2.1.2 Tilt striker / corner drive

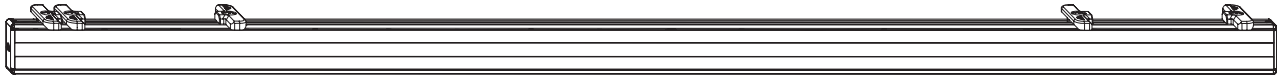


					Nº
	Tilt striker / corner drive	315 – 1100	315 – 1200	Top Bottom Hinge side	No. 5 290072

[18] Is used for the top locking point only.

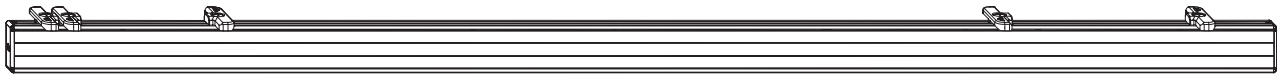


7.2.1.3 Centre lock



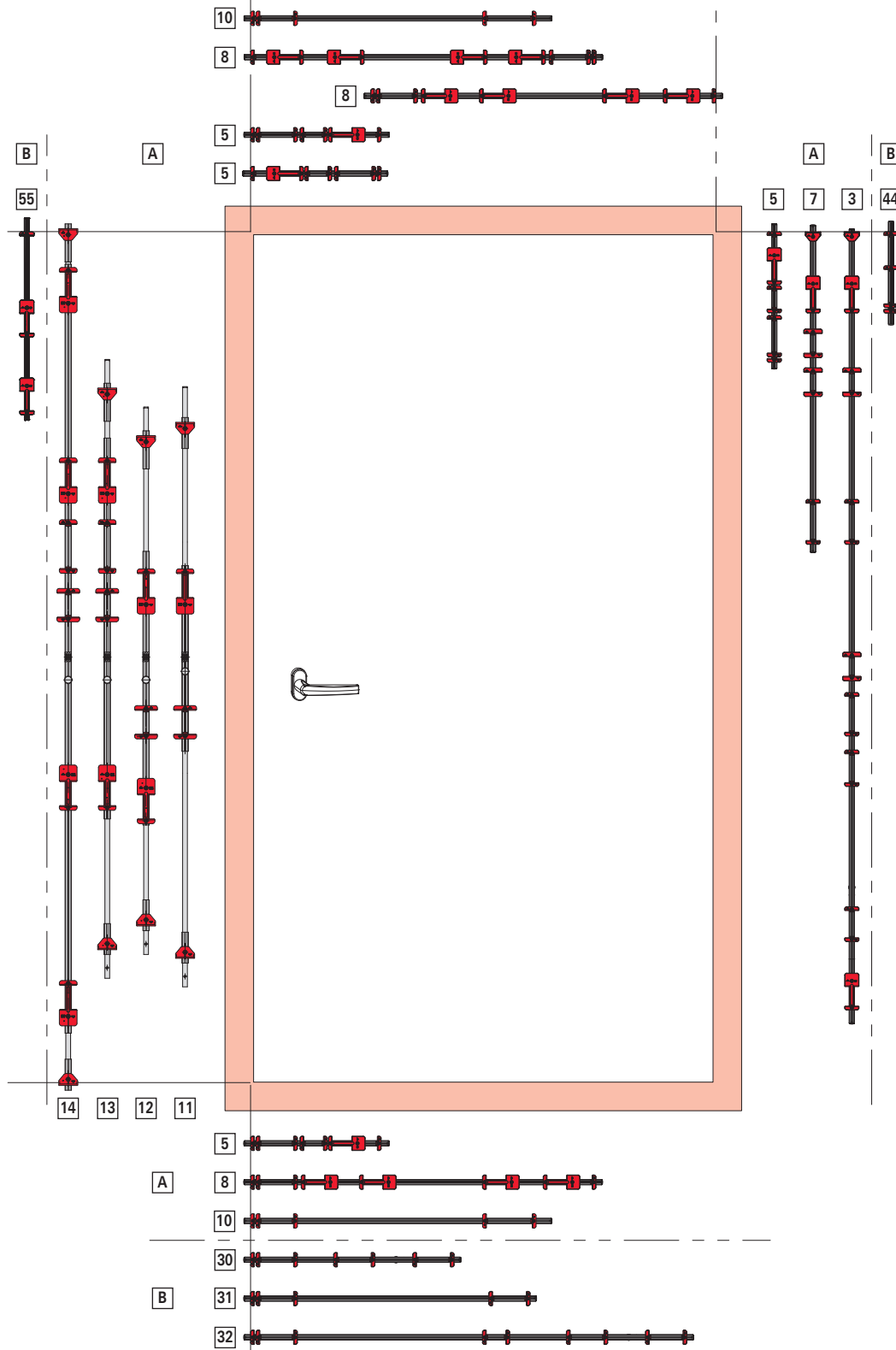
					Nº
Centre lock	Basic security RC 1 N	1201 – 1600	Top Bottom	No. 8	290075
		400 – 800	Bottom	No. 30	268931
	801 – 1000	Bottom	No. 31	268932	
	1001 – 1400	Bottom	No. 32	268933	

7.2.1.4 Turn-Only sash



				Nº
Turn-Only sash	1101 – 1600	Top Bottom	No. 10	290081

7.2.2 T&T espagnolette – centred / variable handle height

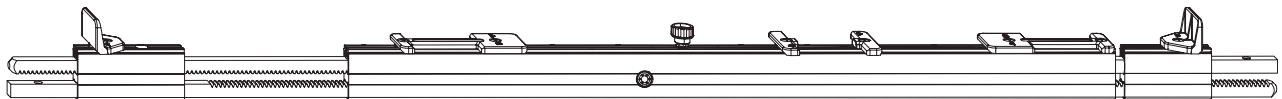


[A] BSec
[B] RC1 N



Assignment	Position	Application range	T&T		T-O	Single jig
			BSec	RC1 N	BSec	
[11]	Espagnolette side	SRH 621 – 1200 mm	■	■	■	Standard
[12]		SRH 1201 – 1600 mm	■	■	■	
[13]		SRH 1601 – 2000 mm	■	■	■	
[14]		SRH 2001 – 2400 mm	■	■	■	
[55]		SRH 2401 – 2800 mm	-	■	-	
[5]	Hinge side	SRH 315 – 1100 mm	■	■	-	Tilt striker / corner drive → <i>from page 192</i>
[7]		SRH 1101 – 1800 mm	■	■	-	Standard
[3]		SRH 1801 – 2800 mm	■	■	■	
[44] [19]		SRH 320 – 2800 mm	-	■	-	
[5]	Horizontal at the top	SRW 315 – 1200	■	■	■	Tilt striker / corner drive → <i>from page 192</i>
[8]		BSec: SRW 1201 – 1600 mm	■	■	-	Centre lock → <i>from page 193</i>
		RC1 N: SRW 1201 – 1400 mm				
[10]		SRW 1101 – 1600 mm	-	-	■	Turn-Only sash → <i>from page 193</i>
[5]	Horizontal at the bottom	SRW 315 – 1100 mm	■	-	■	Tilt striker / corner drive → <i>from page 192</i>
[8]		SRW 1101 – 1600 mm	■	-	-	Centre lock → <i>from page 193</i>
[10]		SRW 1101 – 1600 mm	-	-	■	Turn-Only sash → <i>from page 193</i>
[30]		SRW 400 – 800 mm	-	■	-	RC1 N centre lock → <i>from page 193</i>
[31]		SRW 801 – 1000 m	-	■	-	
[32]		SRW 1001 – 1400 mm	-	■	-	

7.2.2.1 Standard



Espagnolette side

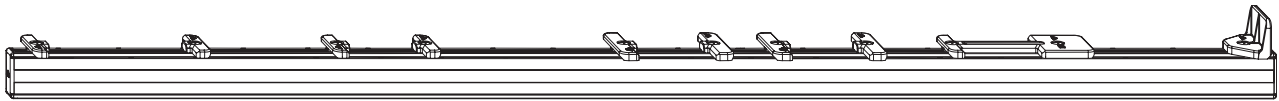
					N ^o
Standard	Basic security RC 1 N	621 – 1200	Espagnolette side	No. 11	268943
	Basic security RC 1 N	1001 – 1600	Espagnolette side	No. 12	798480
	Basic security RC 1 N	1601 – 2000	Espagnolette side	No. 13	787401
	Basic security RC 1 N	2001 – 2400	Espagnolette side	No. 14	787402
	Basic security RC 1 N	2401 – 2800	Espagnolette side	No. 55	808454

[19] Is used for the top locking point only.

Jigs

Positioning jigs

T&T espagnolette – centred / variable handle height



Hinge side

					Nº
Tilt striker / corner drive	RC 1 N	320 – 2600	Hinge side	No. 44	640450
Standard	Basic security RC 1 N	801 – 1600	Espagnolette side Hinge side	No. 7	290074
	Basic security RC 1 N	1601 – 2600	Espagnolette side Hinge side	No. 3	290050



INFO

With T&T espagnolettes – centred / variable handle height, use jigs on the hinge side only.

7.2.2.2 Tilt striker / corner drive



					Nº
Tilt striker / corner drive	315 – 1100	315 – 1200	Top Bottom Hinge side	No. 5	290072

7.2.2.3 Centre lock



					Nº
Centre lock	Basic security RC 1 N	1201 – 1600	Top Bottom	No. 8	290075
		400 – 800	Bottom	No. 30	268931
	RC 1 N	801 – 1000	Bottom	No. 31	268932
		1001 – 1400	Bottom	No. 32	268933

7.2.2.4 Turn-Only sash



				Nº
Turn-Only sash	1101 – 1600	Top Bottom	No. 10	290081



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.

Profile corners must be right-angled, and free from burr and adhesive.

Corner connector cams must not protrude.

8.2 Screw fixing

Use electrogalvanised and passivated steel self-tapping screws. Use screws with additional sealing in more challenging climatic conditions.

Predrill holes and use self-tapping screws.

If using self-drilling screws, only screw through one wall.

Do not create screw fixings in the corner connectors.

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 [20]
60	1650
70	1900
80	2200
90	2450
100	2700
110	3000
120	3250
130	3500
140	3900
150	4200



INFO

Observe directive TBDK 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.
- ▶ Only screw self-drilling screws through one wall.
- ▶ 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.

- ▶ Use electrogalvanised 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.
- ▶ Ensure that the hardware components are adequately secured; contact the screw manufacturer if necessary.

[20] Permissible tolerance -10%



ATTENTION

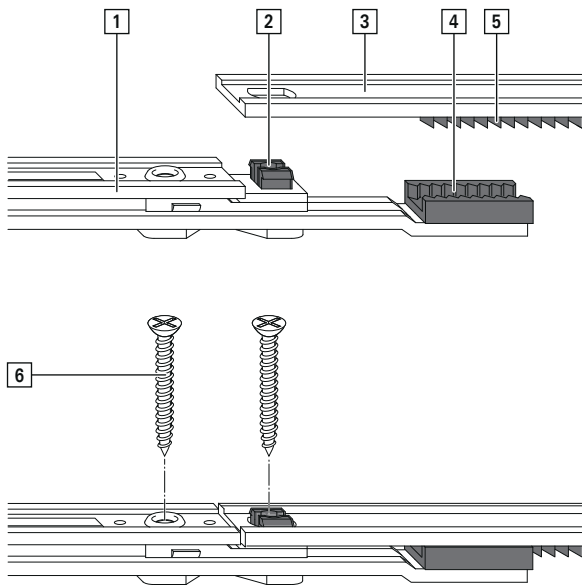
Improper screw fixings may cause property damage.

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-related torques on the basis of the demo assembly.
- ▶ Use the recommended screws.
- ▶ Select the length of the screws according to the profiles used.
- ▶ Do not create screw fixings in the corner connectors.

8.4 Force-fit connection

Couplable 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.

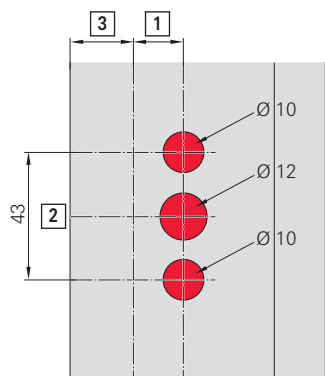


INFO

All couplable components are delivered attached in the centre.

8.5 Drilling and routing dimensions

8.5.1 T&T espagnolette



Drill holes for sprocket and handle lugs

- [1] Backset
- [2] Handle height
- [3] Overlap width
- [4] Overlap height

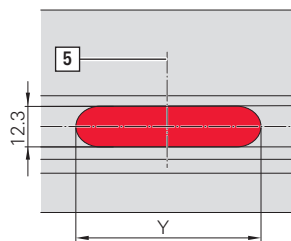
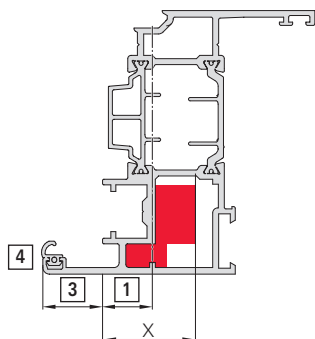
16 to 22 mm

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

- [X] Routing depth

X min. = backset + 12.5 mm



Gearbox routing

- [Y] Routing length

Backset 8 = min. 30 mm

Backset 15 = min. 65 mm

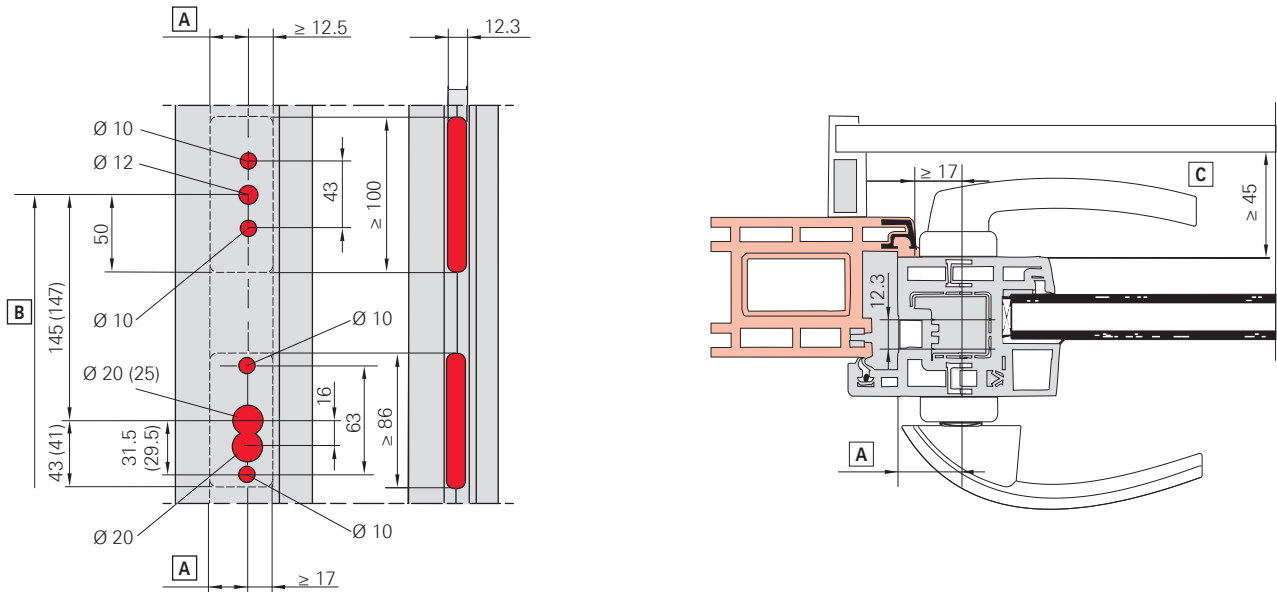
Backset 25 to backset 50 = min. 100 mm

- [5] Centre of gearbox

Routing depth min. 28 mm



8.5.2 High backset espagnolette



Values in brackets for round cylinder.

Assignment	Meaning
[A]	Backset
[B]	Handle height
[C]	On roller shutters

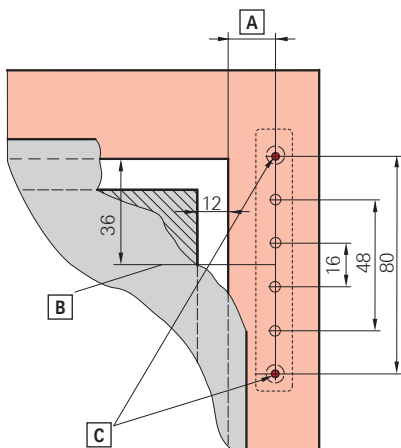


INFO

Cross section: doors (inward opening).

8.5.3 Stay bearing

Standard – P 3/130 | P 6/130

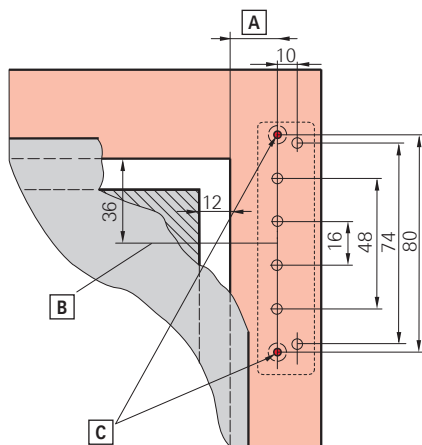


Assignment	Meaning	System
[A]	16.5 mm	12/18-9, 12/18-13
	18.5 mm	12/20-9, 12/20-13
[B]	Stay bearing centre	-

Installation
Drilling and routing dimensions
 Stay bearing

Assignment	Meaning	System
[C]	Stay bearing P 3/130, drill hole Ø 3 mm, 4 mm deep Stay bearing P 6/130, drill hole Ø 6 mm, 9 mm deep	-

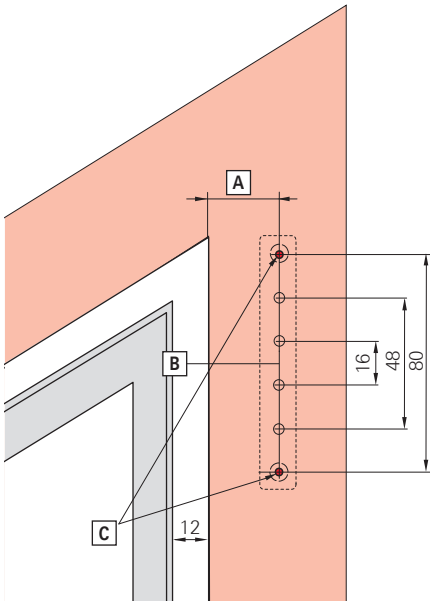
Standard – P 6/150



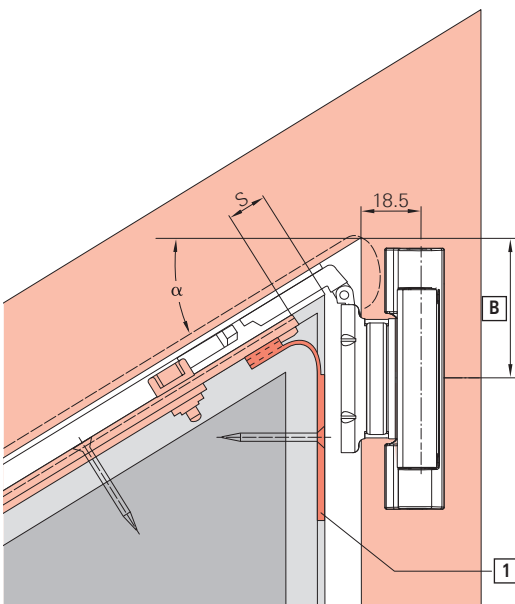
Assignment	Meaning	System
[A]	16.5 mm 18.5 mm	12/18-9, 12/18-13 12/20-9, 12/20-13
[B]	Stay bearing centre	-
[C]	Stay bearing P 6/150, drill hole Ø 6 mm, 9 mm deep	-



8.5.4 Stay bearing – pitched window

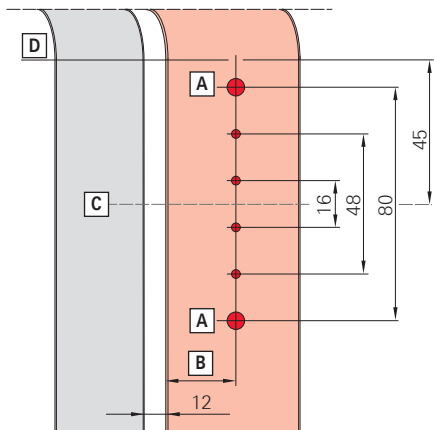


Assignment	Meaning	System
[A]	16.5 mm	12/18-9, 12/18-13
	18.5 mm	12/20-9, 12/20-13
[B]	Stay bearing centre	-
[C]	Stay bearing P 3/130, drill hole Ø 3 mm, 4 mm deep	-
	Stay bearing P 6/130, drill hole Ø 6 mm, 9 mm deep	-



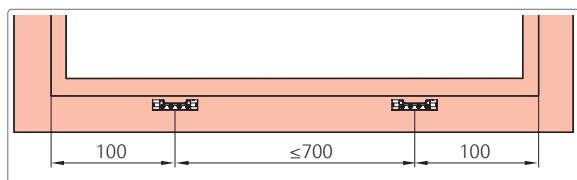
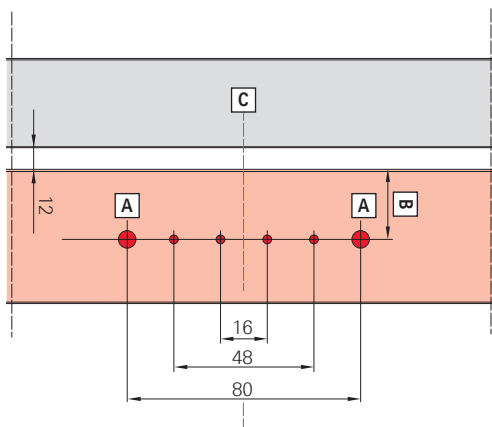
Pitched angle α	50°	45°	40°	35°	30°	25°	20°	15°	10°	5°	0°	-5°	-10°	-15°
Floating-mullion position S	13	13.5	13.8	14	14.1	14.1	14.1	14	13.8	13.6	13.4	12.9	12.5	12
Connection bracket	without	without	without	without	without	without	without	without	without	without	with	without	without	without
End piece [1]	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

8.5.5 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	-

8.5.6 Tilt-Only sash

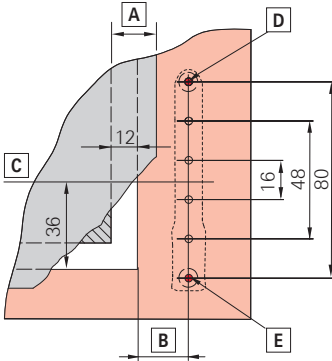


Assignment	Meaning	System
[A]	Stay bearing, adjustable P 3/100, drill hole Ø 3 mm, 4 mm deep Stay bearing, adjustable P 6/100, drill hole Ø 6 mm, 9 mm deep	-
[B]	20 mm 22 mm	12/18-9, 12/18-13 12/20-9, 12/20-13
[C]	Stay bearing centre	-



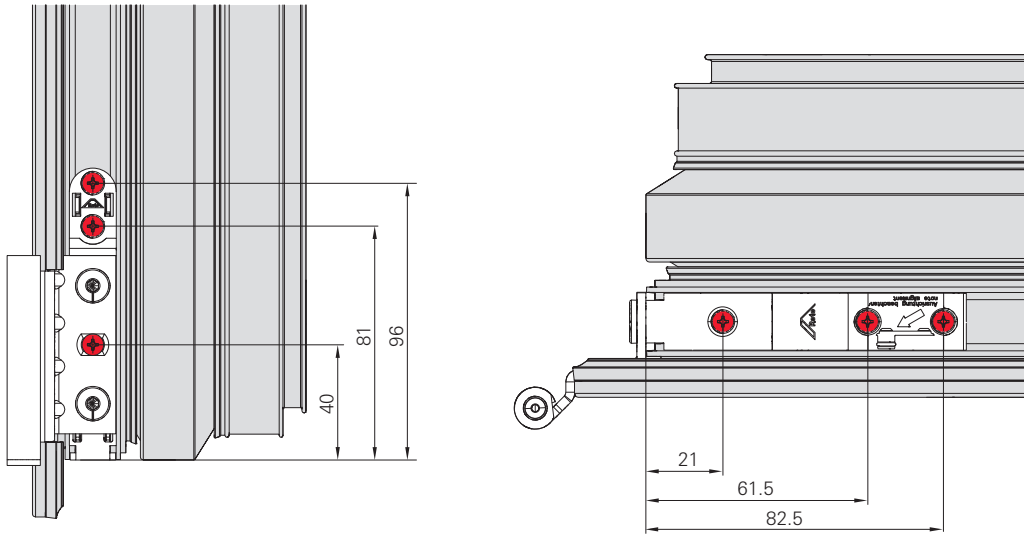
8.5.7 Pivot rest

P 3/130 | P 6/130 | P 6/150

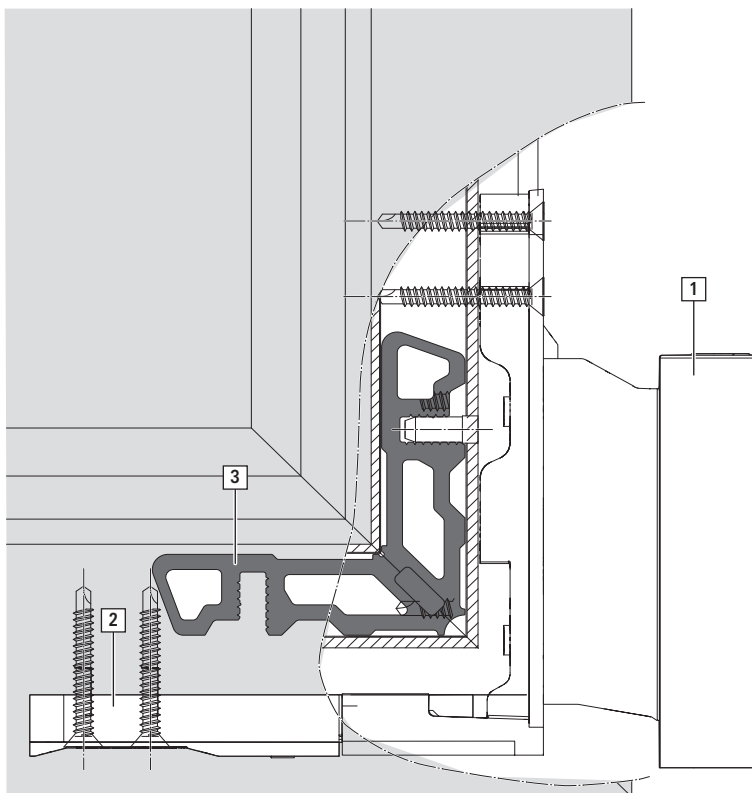


Assignment	Meaning	System
[A]	Overlap width	-
[B]	16.5 mm	12/18-9, 12/18-13
	18.5 mm	12/20-9, 12/20-13
[C]	Pivot rest centre	-
[D]	Pivot rest P 3/130, drill hole Ø 3 mm, 3 mm deep Pivot rest P 6/130, drill hole Ø 6 mm, 3 mm deep Pivot rest P 6/150, top drill hole Ø 6 mm, 3 mm deep	-
[E]	Pivot rest P 3/130, drill hole Ø 3 mm, 3 mm deep Pivot rest P 6/130, drill hole Ø 6 mm, 9 mm deep Pivot rest P 6/150, drill hole Ø 6 mm, 19 mm deep	-

8.5.8 Rebate corner hinge



Example of rebate corner hinge screw fixing



[1] Rebate corner hinge

[2] Extension

[3] Corner connector

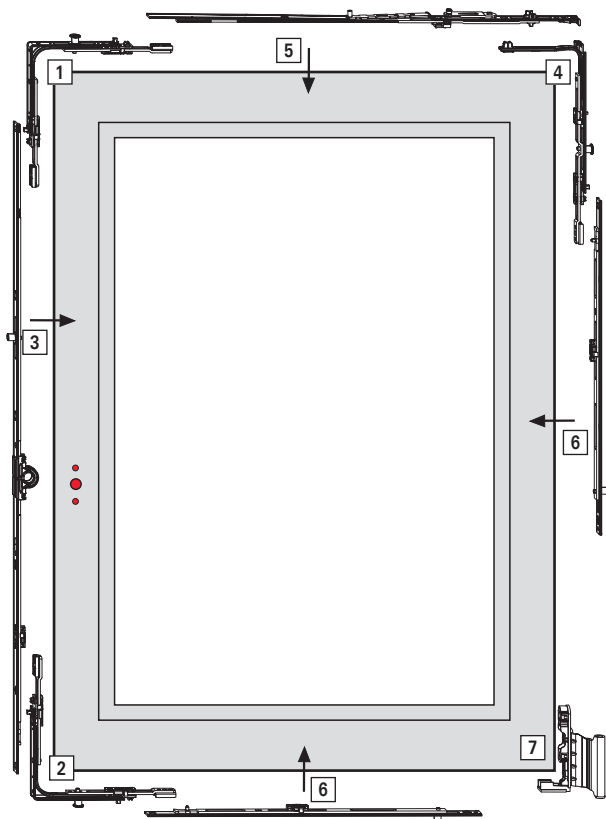


8.6 Sash

8.6.1 Installation sequence

Rectangular window

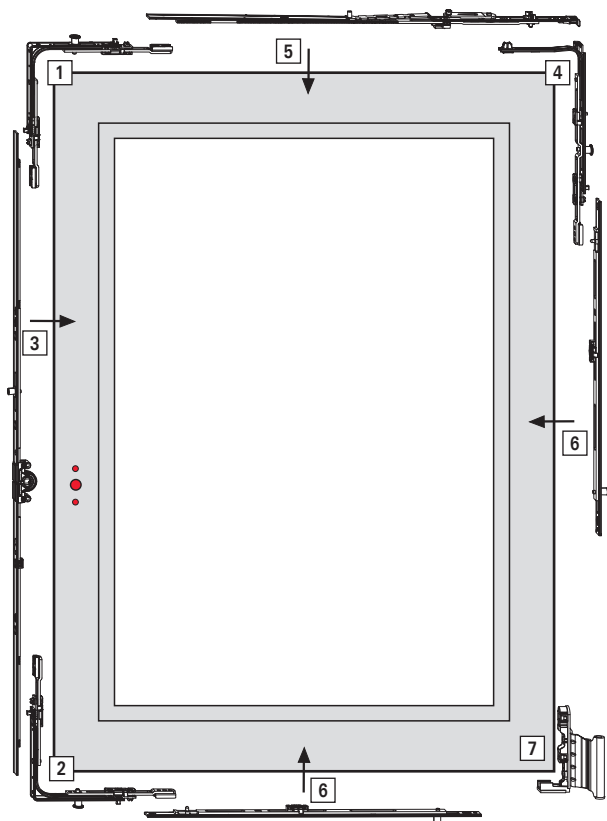
T&T espagnolette, VT – fixed handle height



Installation sequence (suggestion)

- | | | |
|----------------------|----------------------------|--|
| [1] Corner drive | [4] Sash stay corner drive | [6] Centre lock, vertical and horizontal |
| [2] Corner drive | [5] Stay guide | [7] Rebate corner hinge |
| [3] T&T espagnolette | | |

T&T espagnolette – centred / variable handle height



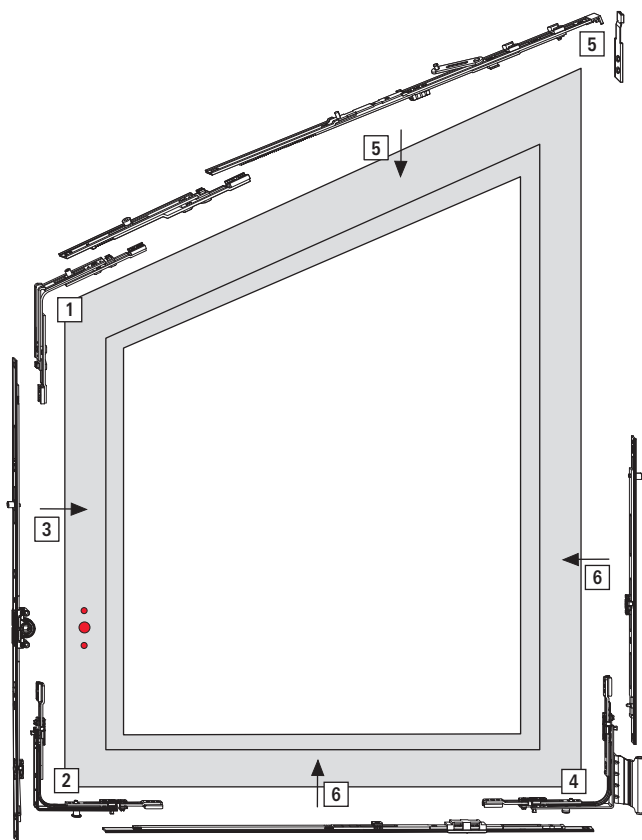
Installation sequence (suggestion)

- | | | |
|----------------------|----------------------------|--|
| [1] Corner drive | [4] Sash stay corner drive | [6] Centre lock, vertical and horizontal |
| [2] Corner drive | [5] Stay guide | [7] Rebate corner hinge |
| [3] T&T espagnolette | | |



Pitched window

T&T espagnolette, VT – fixed handle height

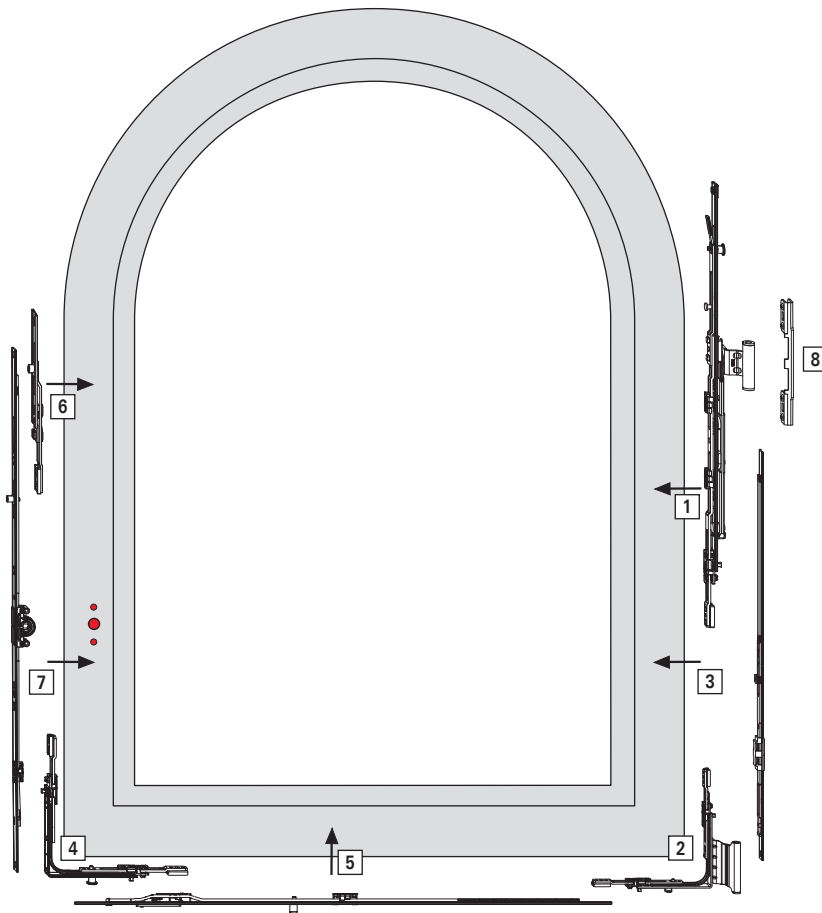


Installation sequence (suggestion)

- | | |
|--------------------------------------|--|
| [1] Corner drive for pitched windows | [4] Rebate corner hinge for arched windows |
| [2] Corner drive | [5] Stay guide with pitched stay guide end piece |
| [3] T&T espagnolette | [6] Centre lock, vertical and horizontal |

Arched window

T&T espagnolette, VT - fixed handle height



Installation sequence (suggestion)

- | | | |
|--|-----------------------------------|----------------------|
| [1] Arched sash stay | [4] Corner drive | [7] T&T espagnolette |
| [2] Rebate corner hinge for arched windows | [5] Arched component, horizontal | [8] Retainer |
| [3] Centre lock | [6] Arched espagnolette connector | |

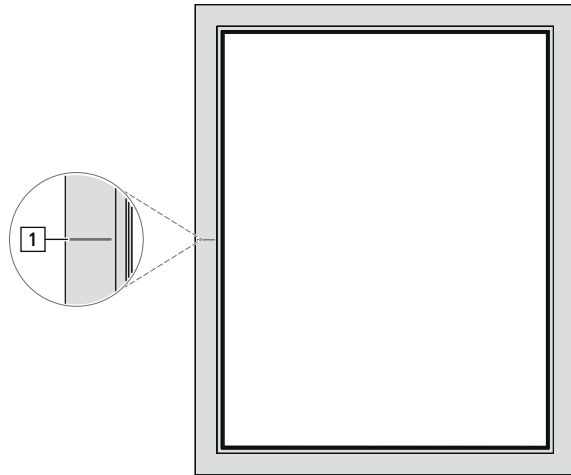


8.6.2 Preparing the sash for the T&T espagnolette

8.6.2.1 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. → 8.5
“Drilling and routing dimensions” from page 200
3. Deburr the drill holes.

8.6.2.2 Gearbox cutout

Routing the gearbox cutout

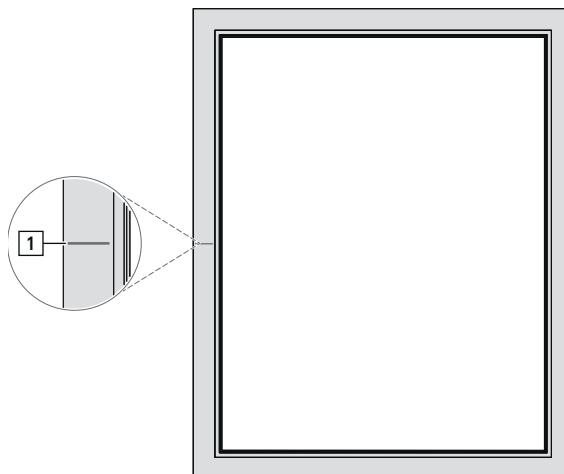
1. Route the espagnolette cutout.
Observe the routing dimensions. → 8.5 *“Drilling and routing dimensions” from page 200*
2. Deburr the espagnolette cutout.

8.6.3 Preparing the sash for a lockable T&T espagnolette

8.6.3.1 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. → 8.5
"Drilling and routing dimensions" from page 200
3. Deburr the drill holes.

8.6.3.2 Gearbox cutout with lock casing

Routing the gearbox cutout with lock casing

1. Route the espagnolette cutout.
Observe the routing dimensions. → 8.5 *"Drilling and routing dimensions" from page 200*
2. Deburr the espagnolette cutout.



8.6.4 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.

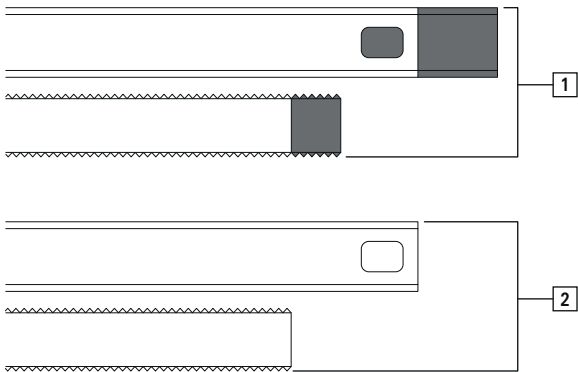
- ▶ Only lay out the hardware components and do not insert them into the sash before they have been cropped.

The following hardware components are cropped:

- Espagnolettes
- Stay guide

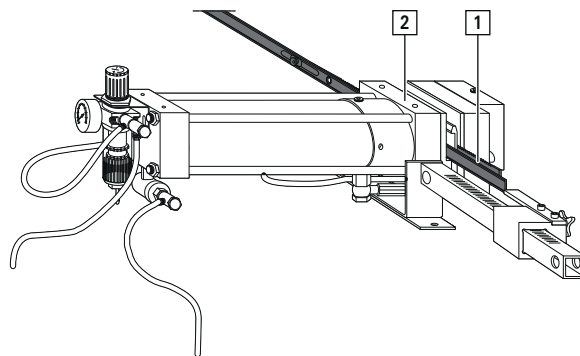
Cropping with a pneumatic punch (hole punching)

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.

8.6.5 Cropping the lever-operated espagnolette, standard

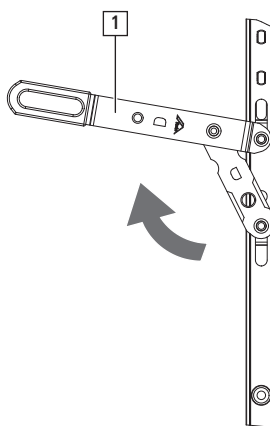
**INFO**

The figure shows the lever-operated espagnolette, VT – fixed handle height.

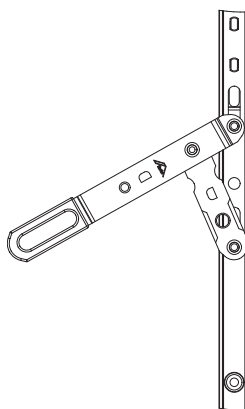
Crop the lever-operated espagnolette – centred / variable handle height in the same way.

⇒ Hardware is fully installed.

1. Open the lever-operated espagnolette, standard.
To do so, move the red toggle lever [1] upwards.



2. Crop the lever-operated espagnolette, standard.
3. With the red toggle lever closed at the bottom and open at the top, connect it to the corner drives →
8.4 "Force-fit connection" from page 199.



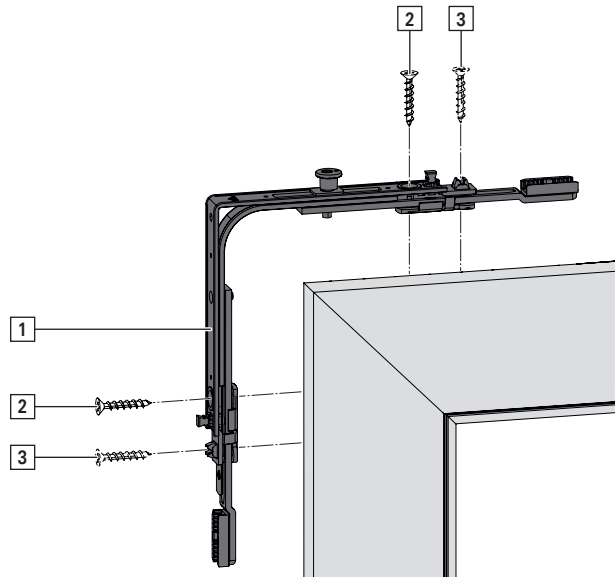
4. Close the lever-operated espagnolette, standard.



8.6.6 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]. → 8.4 "Force-fit connection" from page 199

8.6.7 T&T espagnolettes

8.6.7.1 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. → 8.4 "Force-fit connection" from page 199



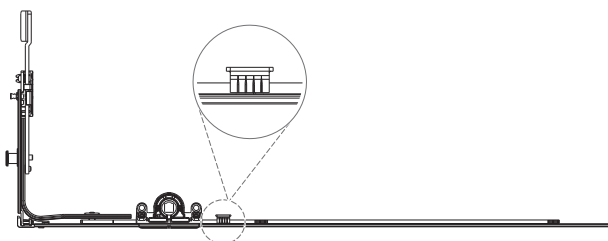
PRECONDITION

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

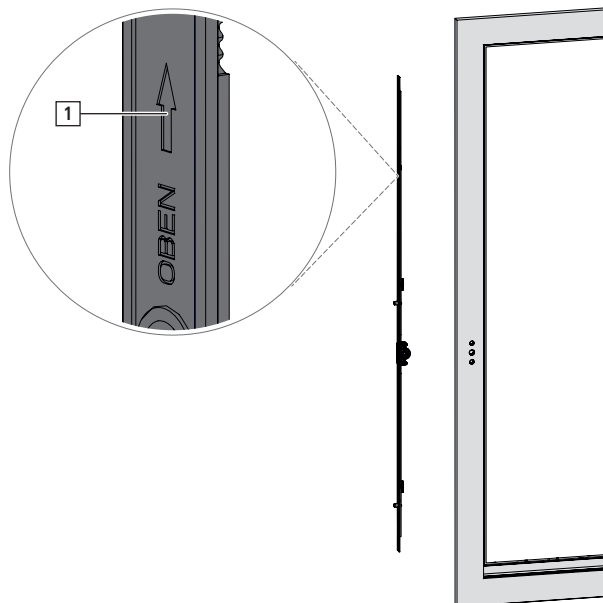
With SRH 280 – 290 mm, the screw guide must be removed (e.g. using pliers).



8.6.7.2 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. → 8.4 "Force-fit connection" from page 199



PRECONDITION

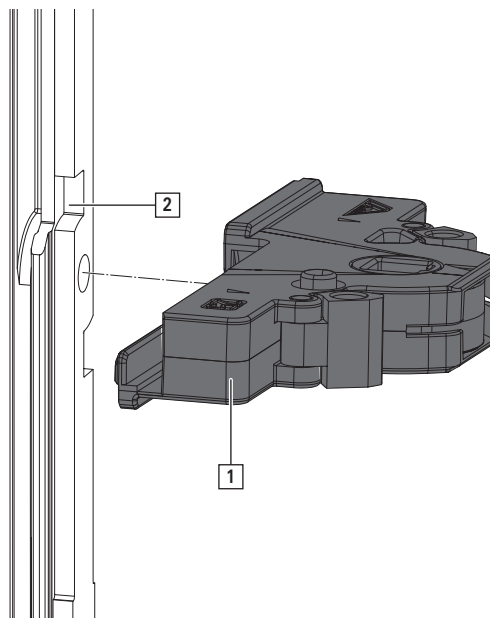
With SRH > 2400 mm, insert the centre lock, multipart, at the top on the locking side and create a force-fit connection.



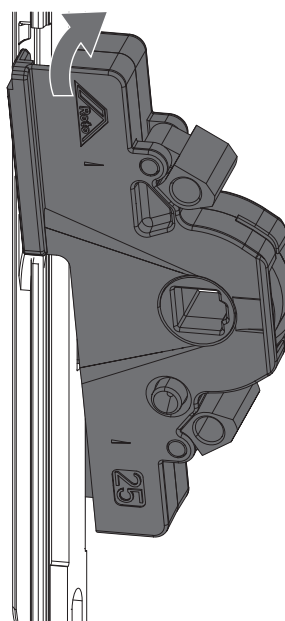
8.6.8 High backset espagnolette

Gearbox

1. Insert the gearbox [1] into the espagnolette faceplate [2] rotated by 90°. While doing so, insert the cam into the hole provided.



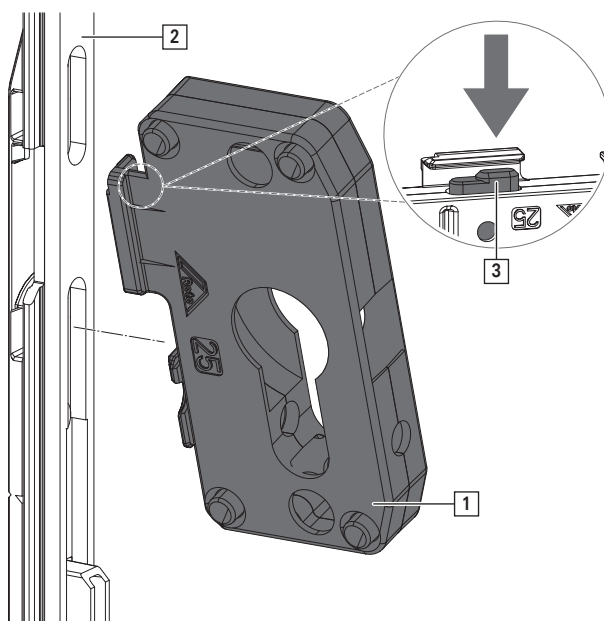
2. Turn the gearbox clockwise until the gearbox clicks into place.
The gearbox is positioned flush with the espagnolette faceplate.



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].



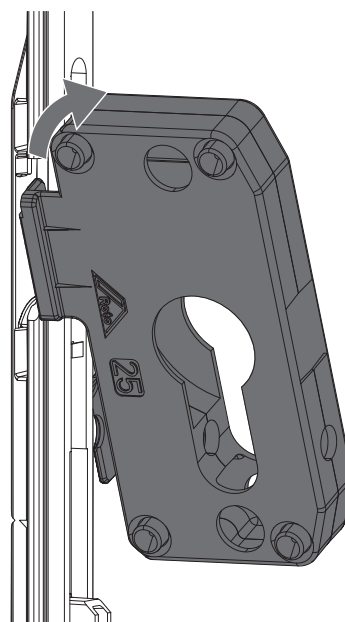
2. Insert the lock casing into the groove and turn clockwise until the lock casing clicks into place.
The lock casing is positioned flush with the espagnolette faceplate.



ATTENTION
Improper installation of the lock casing may cause property damage.

Turning the lock casing in incorrectly can damage the links.

- ▶ Ensure ease of movement when turning in.
- ▶ Reposition the lock casing if excessive force is required.

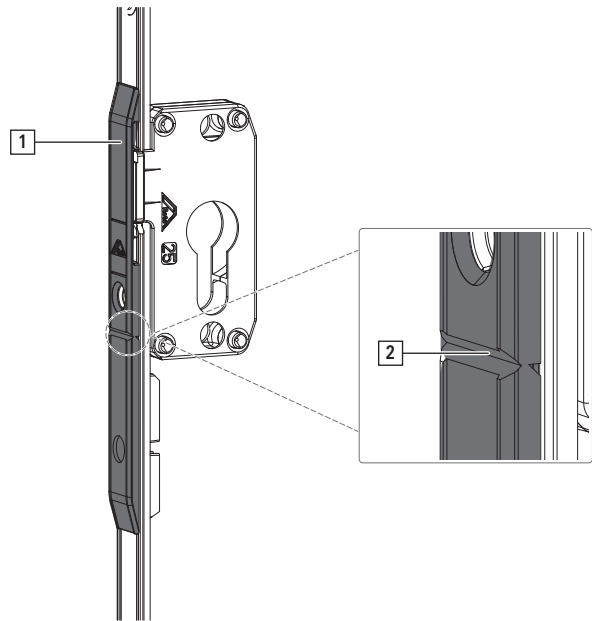


3. For dismantling, turn the lock casing anticlockwise until the lock casing comes out of the groove.
Remove from the espagnolette faceplate.

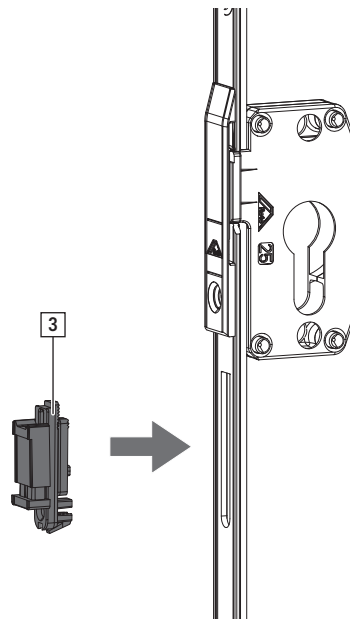


Bullet catch

1. Snap the cover [1] apart at the notch [2].
Remove the lower part of the cover.



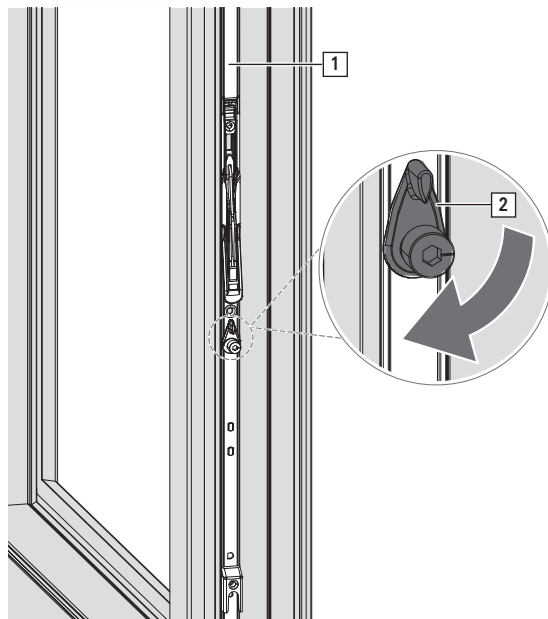
2. Insert the bullet catch [3].



8.6.9 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°.

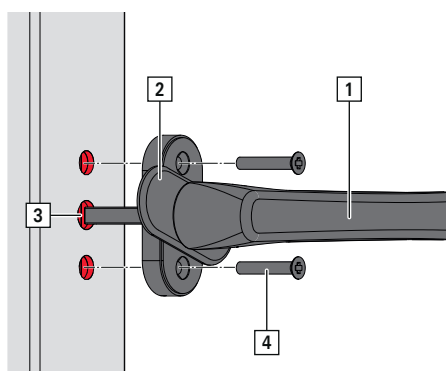


2. Mount the second opening sash with the lever-operated espagnolette open (as delivered).

8.6.10 Handle

8.6.10.1 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°.



8.6.10.2 Centre fixing



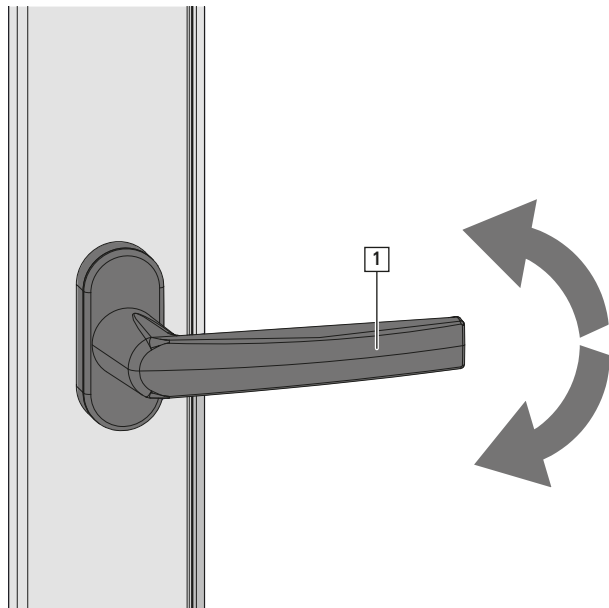
INFO

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.

8.6.11 Stay guide

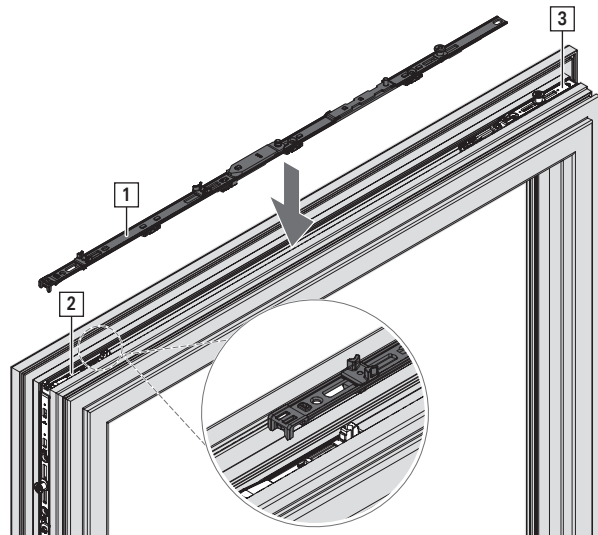
8.6.11.1 Installing the stay guide



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 199*



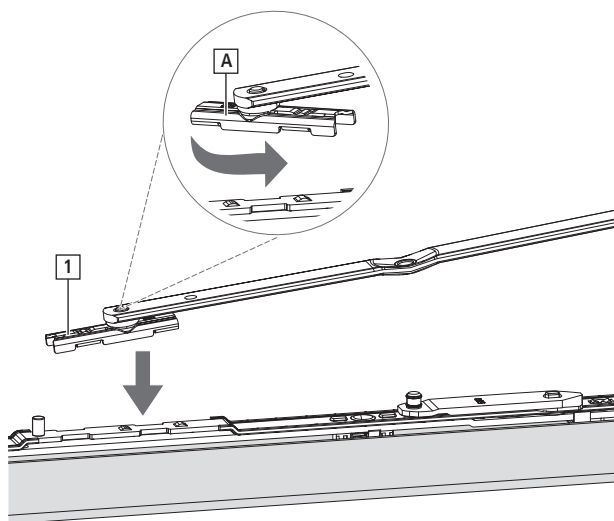
8.6.11.2 Mounting the stay arm

1. Position the slider [1] of the stay arm on the stay guide.

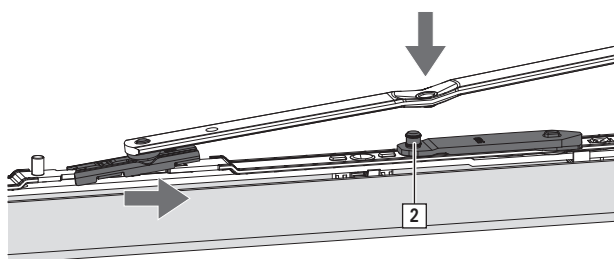


INFO

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].



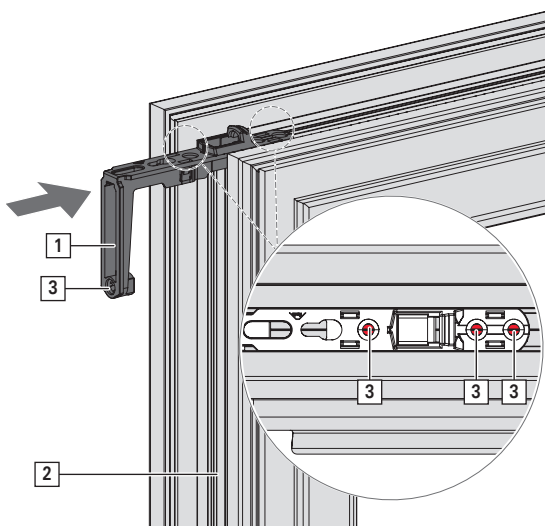
INFO

Anti-slam protection is achieved automatically by tilting the sash.

8.6.12 Rebate sash stay

Installing the rebate stay guide

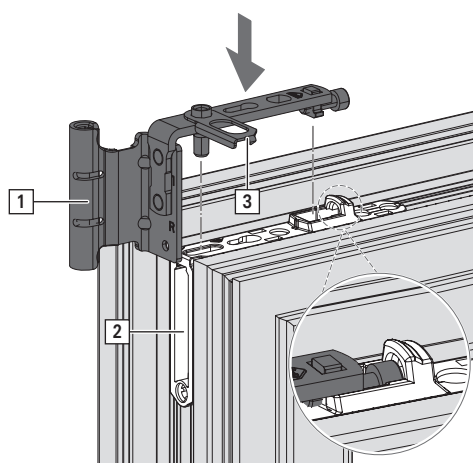
1. Insert the rebate stay guide [1] into the sash groove [2].
Check that it is seated flush.



2. Fasten with four 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°.





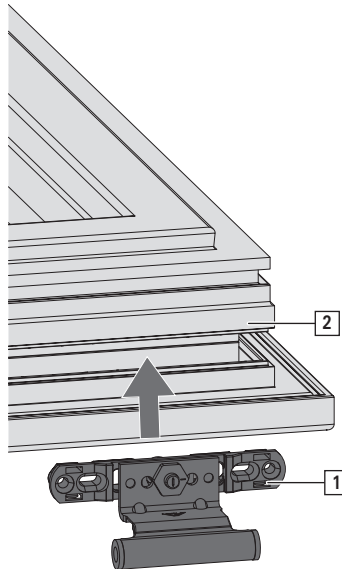
8.6.13 Turn-Only / Tilt-Only rebate hinge



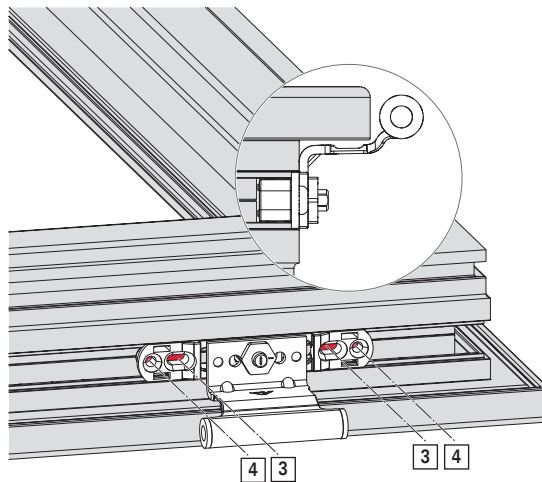
INFO

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. Fasten with two screws [3].
If required, align the Turn-Only / Tilt-Only rebate hinge with the stay bearing at the slots.



3. Then screw in another two screws [4].
Tighten all four screws.



INFO

At least three hinges are required from SRW 1200 mm.

8.6.14 Arched sash stay

**INFO**

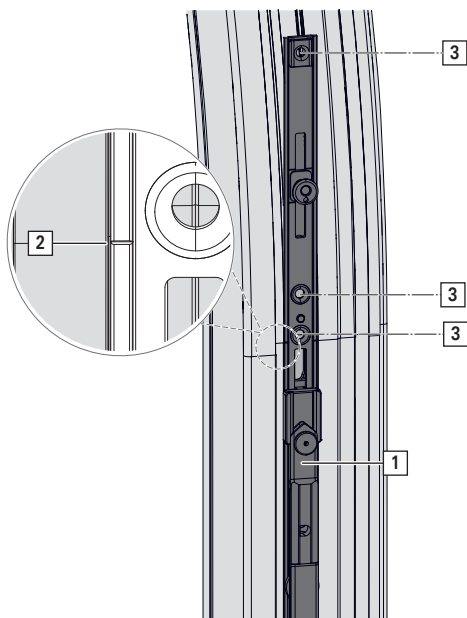
The frame (wall connection) should be attached with several screws in the area of the sash stay.

**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.

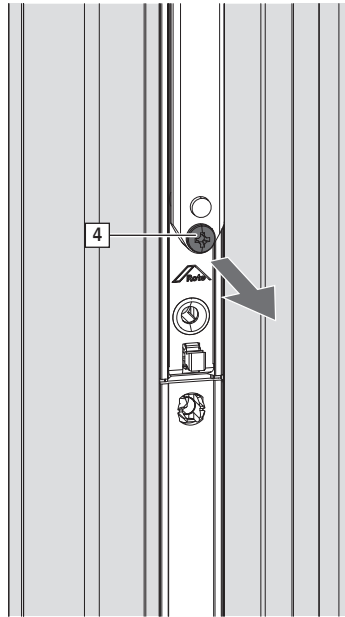
1. Install the arched sash stay [1] with notch [2] at the start of the arch and fasten with three screws [3].



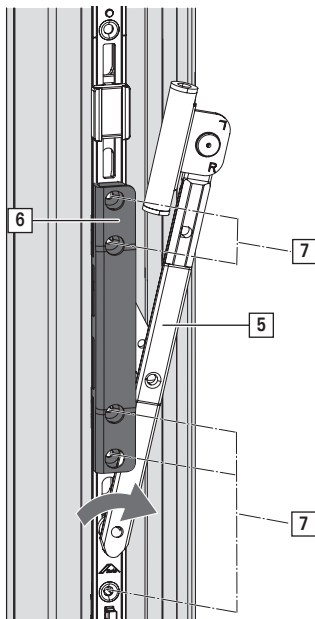
2. Install the hardware in its entirety. Note the installation sequence → *from page 207*.



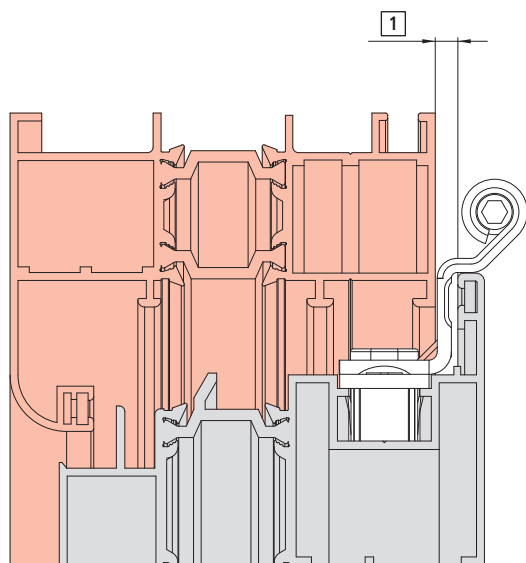
3. Remove the locking screw [4] from the arched sash stay.



4. Fold out the stay arm [5] and fit the retainer [6]. Fasten the remaining screws [7].



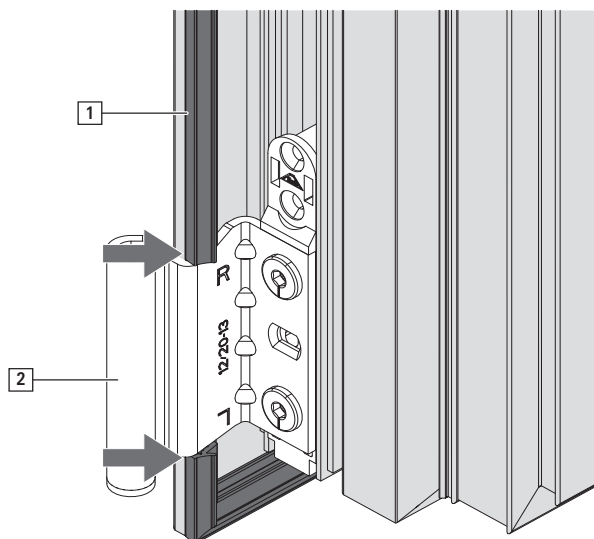
8.6.15 Hinge passage



[1] Hinge passage

- 3 – 4 mm Cut out the gasket in the area of the hinge roller.
Only partial gasket compression adjustment possible.
- > 4 mm Gasket does not have to be cut out.
Complete gasket compression adjustment possible.

1. Cut out the gasket [1] in the area of the rebate corner hinge [2].





8.6.16 Rebate corner hinge

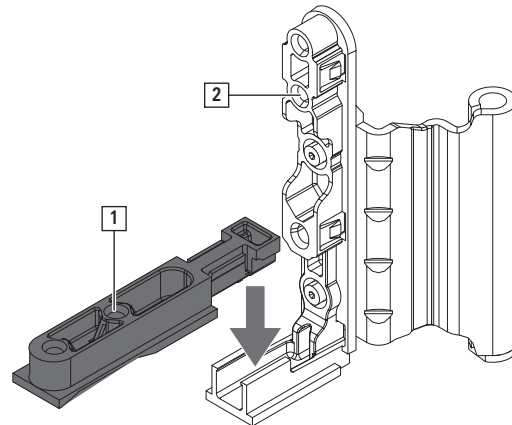
Rebate corner hinge extension



INFO

If the lower screw on the rebate corner hinge cannot be used, the extension is mandatory.

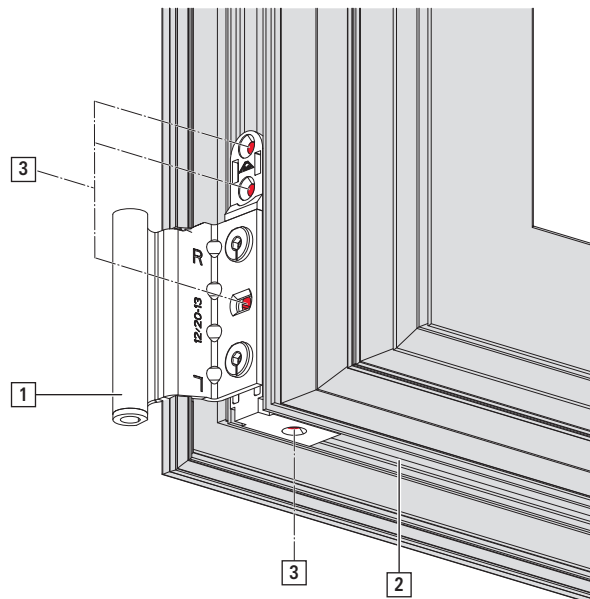
1. Push the extension [1] into place in the rebate corner hinge [2].



Installing the rebate corner hinge

Without extension

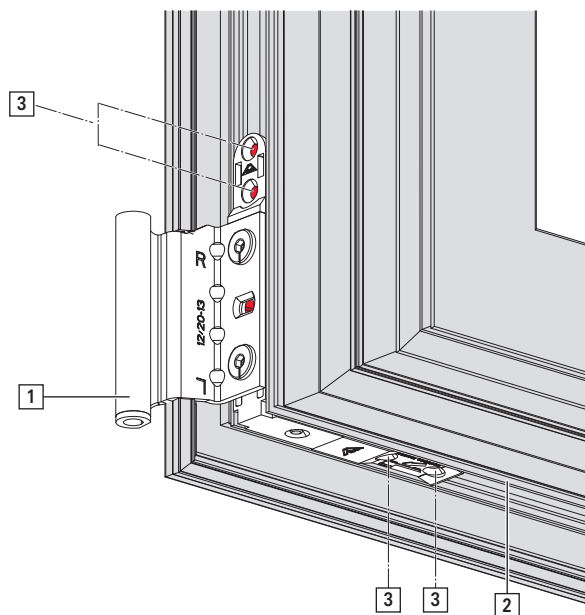
1. Place the rebate corner hinge [1] on the sash [2].



2. Fasten the rebate corner hinge with four screws [3].

With extension

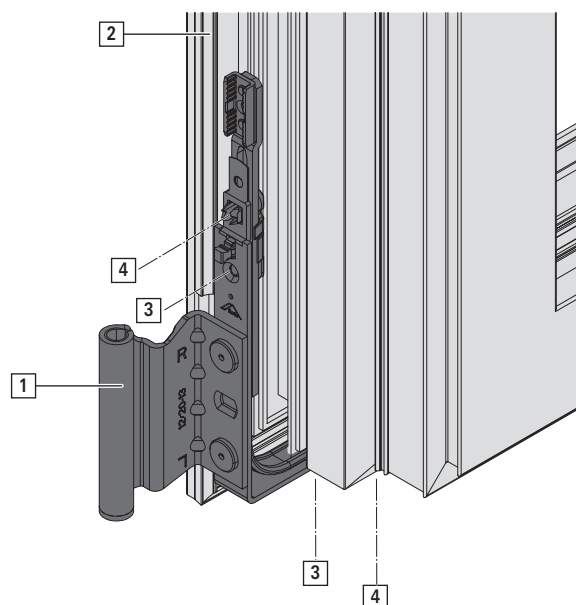
1. Place the rebate corner hinge with extension [1] on the sash [2].



2. Fasten the corner hinge with four screws [3].

8.6.17 Rebate corner hinge for arched windows / pitched windows

1. Slide the rebate corner hinge for arched windows / pitched windows [1] into the sash groove [2] and fasten with two screws [3].



2. After all of the connector components have been installed, fasten them with a further two screws [4] → 8.4 "Force-fit connection" from page 199.



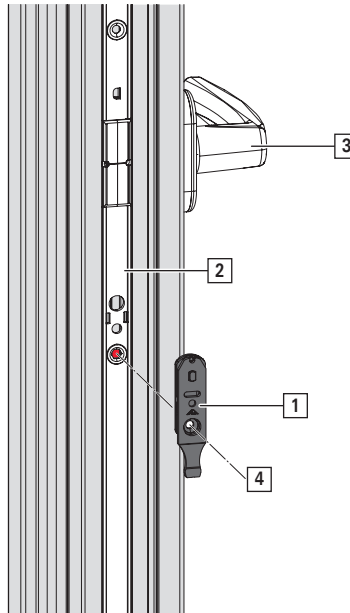
8.6.18 Lifting mishandling device / sash lifter



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.

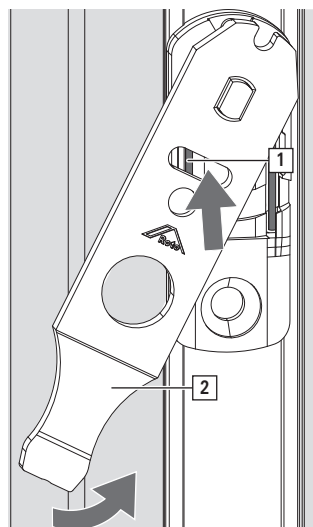
1. Clip the lifting mishandling device [1] into the hole pattern provided in the espagnolette [2]. Position near the handle [3].



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.



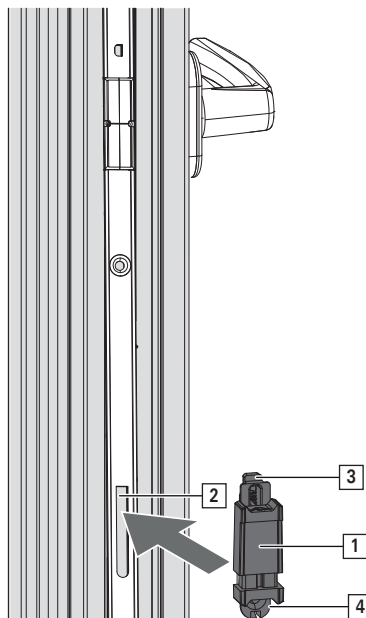
2. Keep the spring held down and turn the arm [2] back to 0°.

The lifting mishandling device returns to the neutral position and can be reactivated.

8.6.19 Bullet catch

1. Insert the bullet-catch sash component [1] into the espagnolette recess [2].

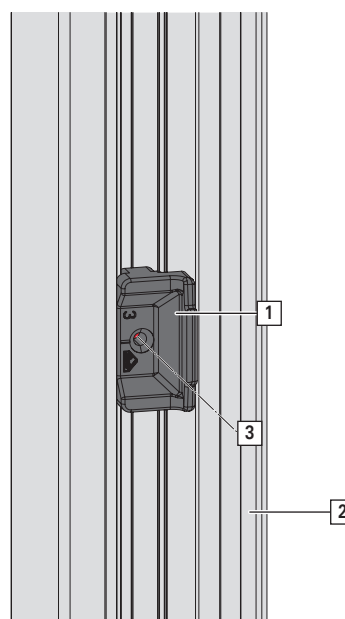
To do so, insert the nose of the bullet catch [3] into the flat side of the espagnolette recess and clip the bullet catch into place.



2. Secure with screw [4].

8.6.20 Centre closer, concealed

1. Place the centre closer [1] in the sash groove [2].
For positioning, see → *from page 246*



2. Fasten with a screw [3].

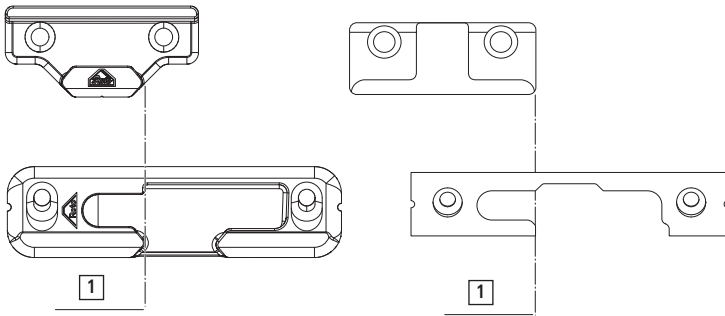


8.7 Frame

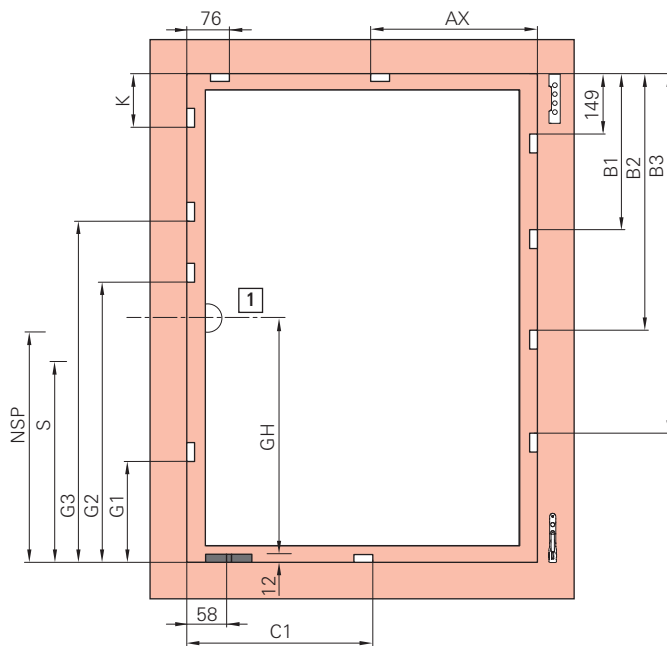
8.7.1 Position of strikers and tilt strikers

8.7.1.1 Striker positions and tilt strikers

Positioning of the strikers and tilt strikers on the basis of the point of entry [1] of the cams:



8.7.1.2 Tilt&Turn hardware / TiltFirst hardware – basic security



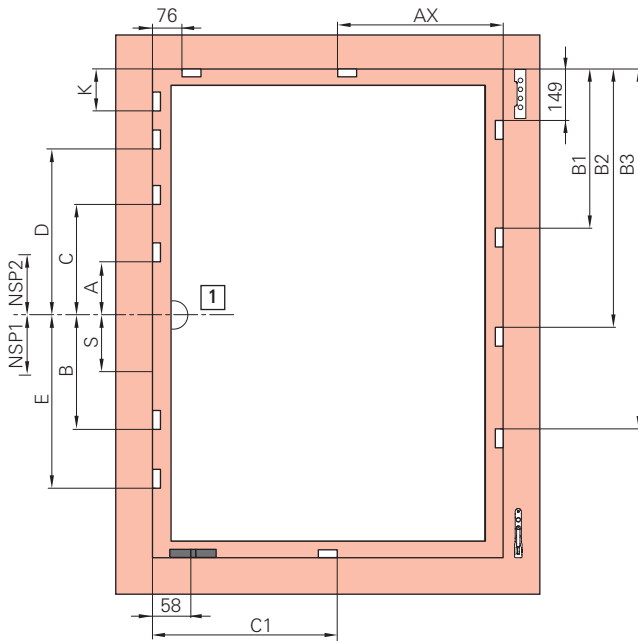
[1] Handle centre

□ Striker e.g. 

■ Tilt striker e.g. 

T&T espagnolette, VT – fixed handle height

SRH [mm]	GH	G1	G2	G3	K	NSP	S
280 – 570	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 – 2400	1000	700	1370	–	–	1121	807
2401 – 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 – 2400	–	312	358	758	740	–	–	109	395
2401 – 2600	–	312	358	758	740	–	–	109	395
2601 – 2800	–	312	358	758	740	458	–	109	395

Stay guide

SRW [mm]	AX	Size
1201 – 1400	750	500 / 1290
1401 – 1600	750	500 / 1290 ^[21]

Centre lock, vertical

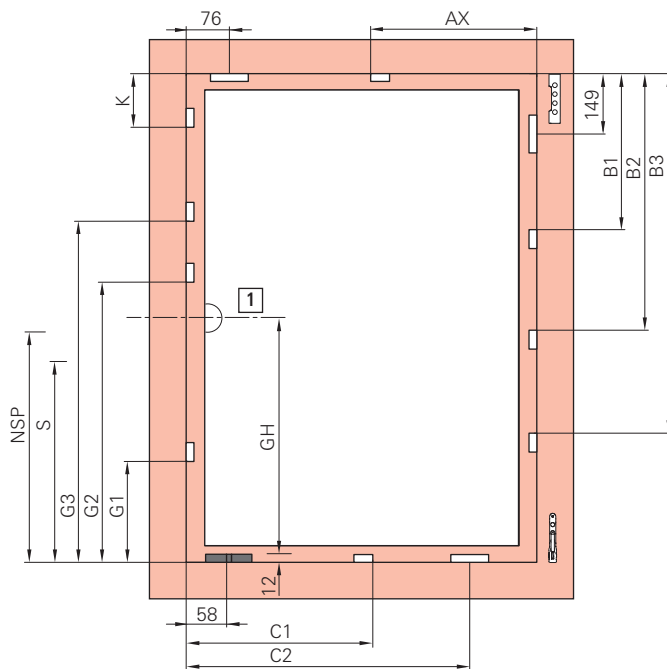
SRH [mm]	B1	B2	B3	Centre lock
1101 – 1800	746	–	–	CL 600 E
1801 – 2400	746	1346	–	CL 600 E KU + CL 600 E
2401 – 2600	746	1346	1750	2x CL 600 E KU + CL 400 E
2601 – 2800	746	1346	1946	2x CL 600 E KU + CL 600 E

Centre lock, horizontal

SRW [mm]	C1	Centre lock
1101 – 1600	658	CL 600 E

[21] with additional stay arm

8.7.1.3 Tilt&Turn hardware – RC 1 N



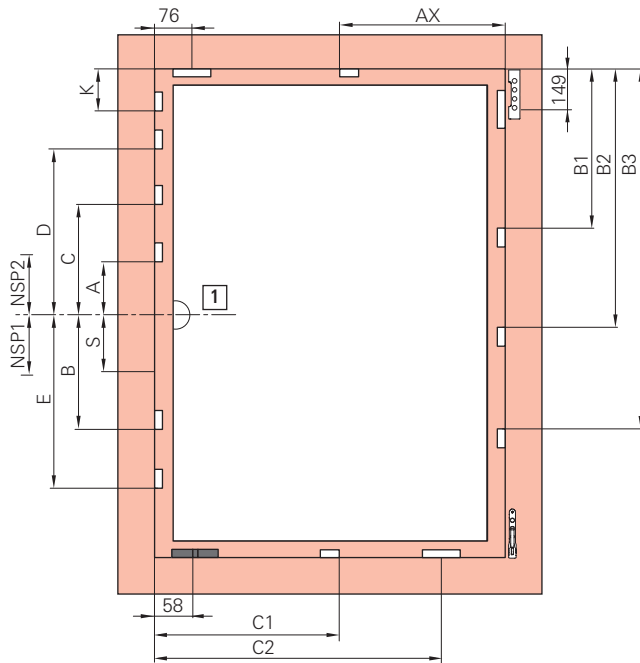
[1] Handle centre

□ Striker e.g. 

■ Tilt striker e.g. 

T&T espagnolette, VT – fixed handle height

SRH [mm]	GH	G1	G2	G3	K	NSP	S
280 – 570	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	–	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 – 2400	–	312	358	758	740	–	–	109	395
2401 – 2600	–	312	358	758	740	–	–	109	395
2601 – 2800	–	312	358	758	740	458	–	109	395

Stay guide

SRW [mm]	AX	Size
1201 – 1400	750	500 / 1290
1401 – 1600	750	500 / 1290 ^[22]

Centre lock, vertical

SRH [mm]	B1	B2	B3	Centre lock
1101 – 1800	746	–	–	CL 600 E
1801 – 2400	746	1346	–	CL 600 E KU + CL 600 E
2401 – 2600	746	1346	1750	2x CL 600 E KU + CL 400 E
2601 – 2800	746	1346	1946	2x CL 600 E KU + CL 600 E

Centre lock, horizontal

SRH [mm]	C1	C2	Centre lock
400 – 600	258	–	CL 200 P
601 – 800	462	–	CL 400 P
801 – 1000	658	–	CL 600 P

[22] with additional stay arm

Installation

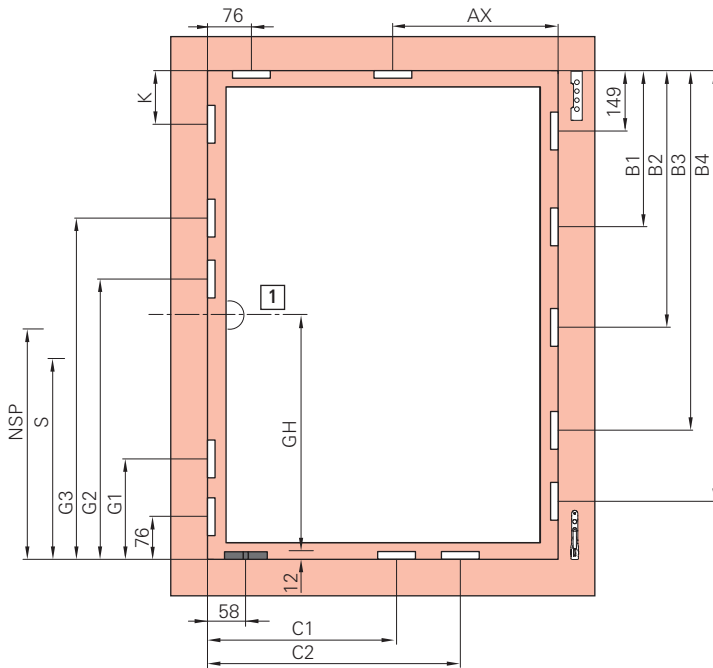
Frame

Position of strikers and tilt strikers

SRH [mm]	C1	C2	Centre lock
1001 – 1200	658	858	CL 600 E KU + CL 200 P
1201 – 1400	658	1062	CL 600 E KU + CL 400 P
1401 – 1600	658	1258	CL 600 E KU + CL 600 P



8.7.1.4 Tilt&Turn hardware – RC 2 / RC 2 N



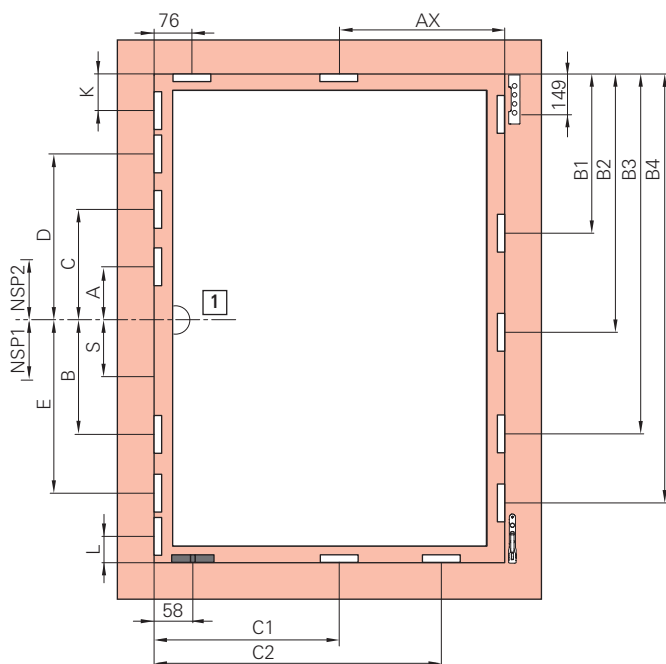
[1] Handle centre

□ Striker e.g. 

■ Tilt striker e.g. 

T&T espagnolette, VT – fixed handle height

SRH [mm]	GH	G1	G2	G3	K	NSP	S
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	–
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

□ Striker e.g. 

■ Tilt striker e.g. 

T&T espagnolette – centred / variable handle height

SRH [mm]	A	B	C	D	E	K	L	NSP 1	NSP 2	S
490 – 620	–	–	–	–	–	–	76	–	–	–
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

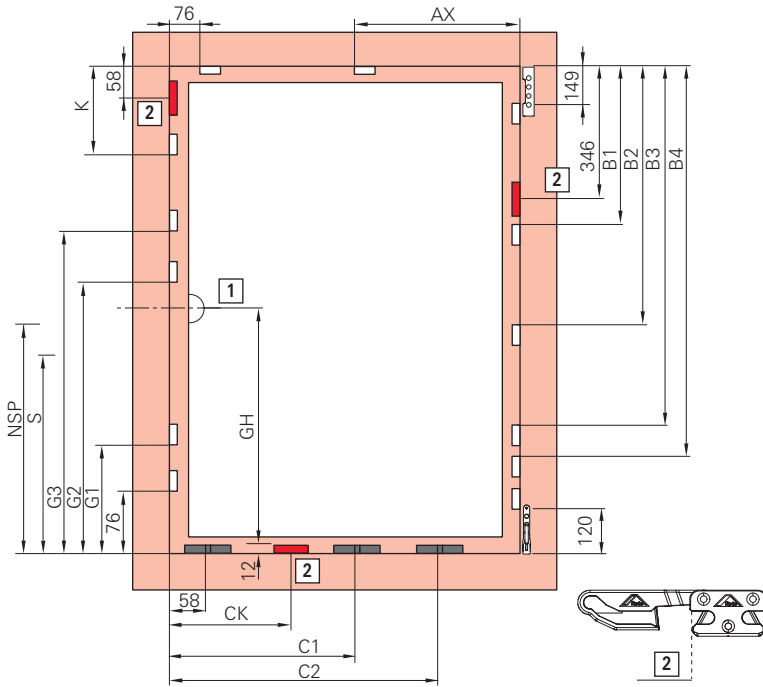
SRH [mm]	B1	B2	B3	B4	Centre lock
490 – 800	346	–	–	–	CL 200 V
801 – 1000	550	–	–	–	CL 400 V
1001 – 1200	746	–	–	–	CL 600 V
1201 – 1400	746	946	–	–	CL 600 V KU + CL 200 V
1401 – 1600	746	1150	–	–	CL 600 V KU + CL 400 V
1601 – 1800	746	1346	–	–	CL 600 V KU + CL 600 V
1801 – 2000	746	1346	1546	–	2x CL 600 V KU + CL 200 V
2001 – 2200	746	1346	1750	–	2x CL 600 V KU + CL 400 V
2201 – 2400	746	1346	1946	–	2x CL 600 V KU + CL 600 V
2401 – 2600	746	1346	1946	2146	3x CL 600 V KU + CL 200 V
2601 – 2800	746	1346	1946	2350	3x CL 600 V KU + CL 400 V



Centre lock, horizontal

SRH [mm]	C1	C2	Centre lock
490 – 690	258	–	CL 200 V
691 – 890	462	–	CL 400 V
891 – 1090	658	–	CL 600 V
1091 – 1290	658	858	CL 600 V KU + CL 200 V
1291 – 1400	658	1062	CL 600 V KU + CL 400 V

8.7.1.5 Tilt&Turn hardware – TiltSafe RC 2 / RC 2 N



[1] Handle centre

[2] Striker's point of entry

□ Striker e.g.

■ Tilt striker e.g.

■ Security striker for tilt ventilation

T&T espagnolette, VT – fixed handle height

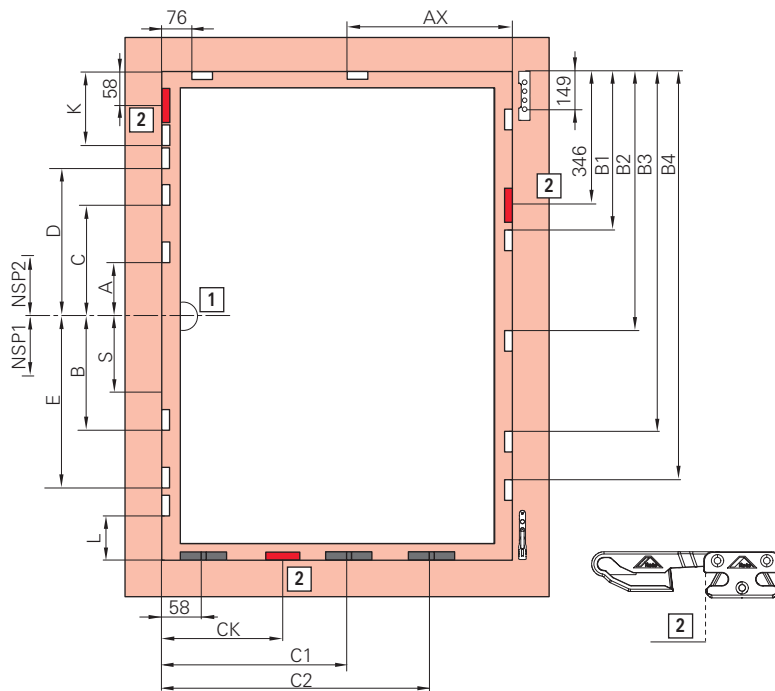
SRH [mm]	GH	G1	G2	G3	K	NSP	S
600 – 800	263	–	–	–	–	350	–
801 – 1000	413	550	–	–	–	288	–
1001 – 1200	513	700	–	–	–	388	–
1201 – 1400	563	700	–	–	–	388	–
1401 – 1600	563	700	1170	–	–	388	–
1601 – 1800	563	700	1370	–	–	388	–
1601 – 1800	1000	700	1370	–	–	1121	807
1801 – 2000	1000	700	1370	–	–	1121	807
2001 – 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

[2] Striker's 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	L	NSP 1	NSP 2	S
490 – 620	–	–	–	–	–	–	76	–	–	–
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 – 800	–	–	–	–	CL 200 KU
801 – 1000	546	–	–	–	CL 200 V KU + CL 200 V
1001 – 1200	750	–	–	–	CL 200 V KU + CL 400 V
1201 – 1400	946	–	–	–	CL 200 V KU + CL 600 V
1401 – 1600	946	1146	–	–	CL 200 V KU + CL 600 V KU+ CL 200 V

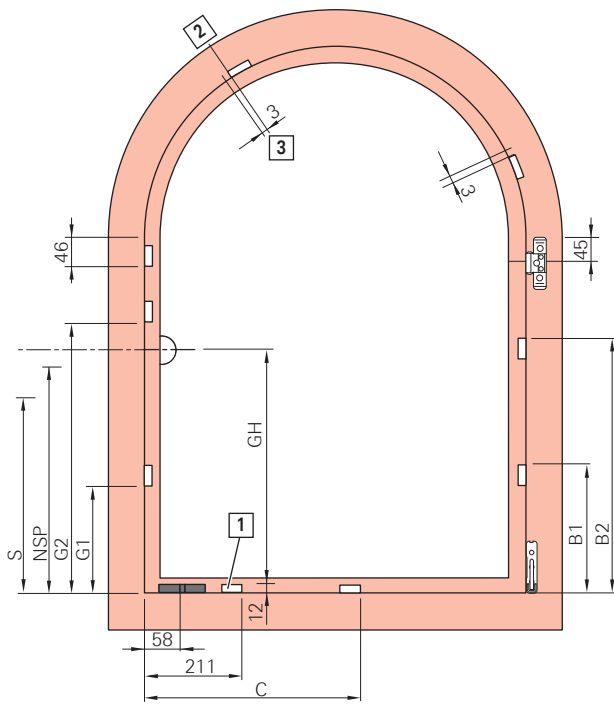


SRH [mm]	B1	B2	B3	B4	Centre lock
1601 – 1800	946	1350	–	–	CL 200 V KU + CL 600 V KU+ CL 400 V
1801 – 2000	946	1546	–	–	CL 200 V KU + CL 600 V KU+ CL 600 V
2001 – 2200	946	1546	1746	–	CL 200 V KU + 2x CL V 600 KU + CL 200 V
2201 – 2400	946	1546	1950	–	CL 200 V KU + CL 600 V KU + CL 400 V KU + CL 400 V
2401 – 2600	946	1546	2146	–	CL 200 V KU + 2x CL 600 V KU+ CL 600 V
2601 – 2800	946	1546	2146	2346	CL 200 V KU + 3x CL 600 V KU + CL 200 V

Centre lock, horizontal

SRW [mm]	CK	C1	C2	Centre lock
490 – 690	258	–	–	CL 200 KU
691 – 890	258	458	–	CL 200 V KU + CL 200 V
891 – 1090	658	258	–	CL 200 V KU + CL 400 V KU
1091 – 1290	658	258	858	CL 200 V KU + CL 400 V KU + CL 200 V
1291 – 1400	658	258	1058	CL 200 V KU + 2x CL 400 V KU

8.7.1.6 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

Installation

Frame

Position of strikers and tilt strikers

SRH [mm]	GH	G1	G2	NSP	S
1801 – 2000	1000	700	1370	1121	807

T&T espagnolette – fixed handle height, with additional stay arm

SRH [mm]	GH	G1	G2	NSP	S
985 – 1184	413	550	–	288	–
1185 – 1384	513	700	–	388	–
1385 – 1584	563	700	–	388	–
1585 – 1784	563	700	1170	388	–
1785 – 1900	563	700	1370	388	–
1785 – 1900	1000	700	1370	1121	807

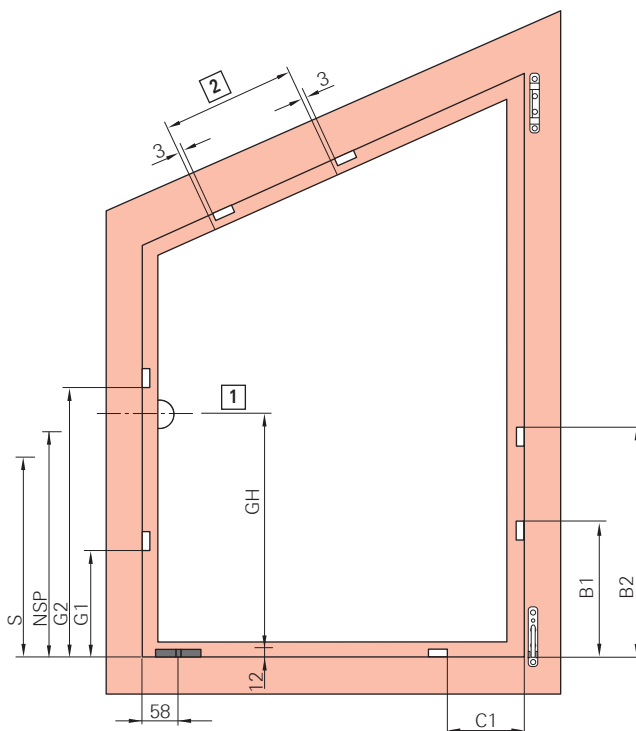
Centre lock, vertical

SRH [mm]	B1	B2
565 – 764	–	–
765 – 964	–	–
965 – 1164	532	–
1165 – 1364	682	–
1365 – 1564	682	–
1565 – 1764	682	1152
1765 – 1900	682	1152

Centre lock, horizontal

SRW [mm]	C
400 – 500	–
501 – 700	–
701 – 900	350
901 – 1100	480
1101 – 1300	680

8.7.1.7 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	NSP	S
370 – 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	1121	807
2201 – 2400	1000	700	1370	1121	807

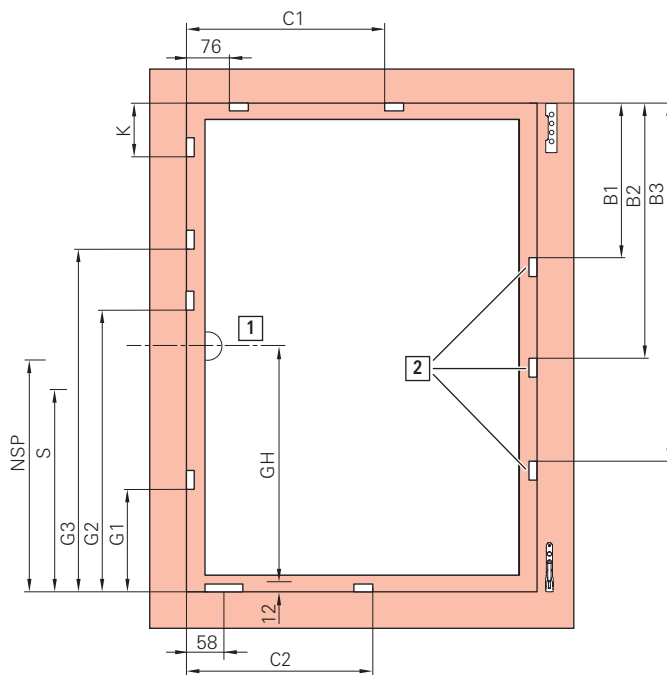
Centre lock, vertical

SRH [mm]	B1	B2	B3	Centre lock
1101 – 1800	658	–	–	CL 600 E
1801 – 2400	658	1258	–	CL 600 E KU + CL 600 E

Centre lock, horizontal

SRW [mm]	C1	Centre lock
400 – 600	–	RB 380
601 – 800	–	CL 690
801 – 1000	550	CL 890 E
1001 – 1200	700	CL 1090 E
1201 – 1300	700	CL 1290 E

8.7.1.8 Turn-Only hardware – basic security

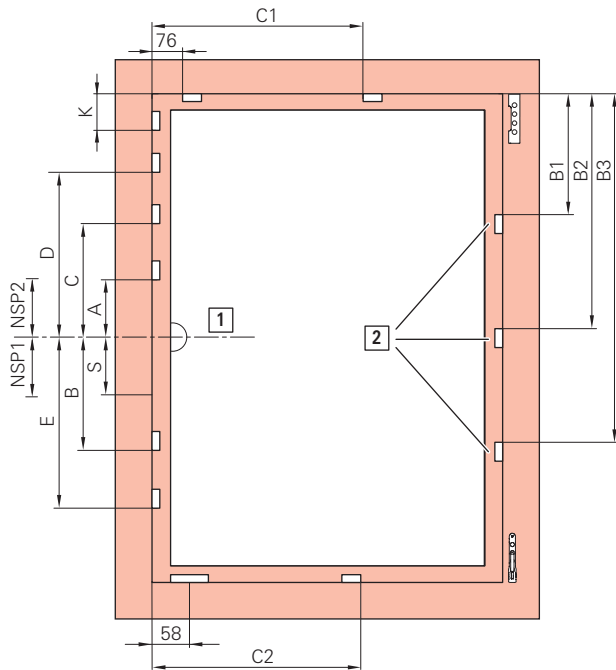


[1] Handle centre

[2] 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 – 2400	1000	700	1370	–	–	1121	807
2401 – 2600	1000	700	1370	1770	–	1121	807
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 – 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

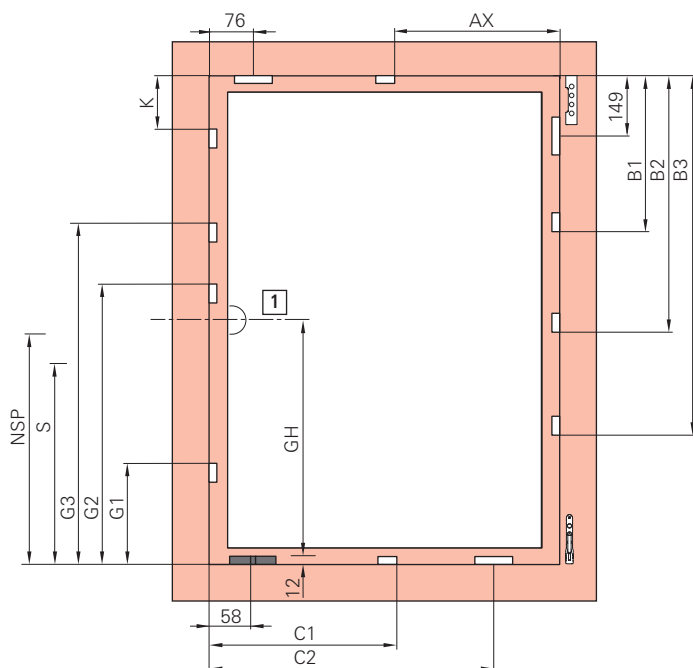
Centre lock, vertical, concealed

SRH [mm]	B1	B2	B3
1101 – 1800	746	–	–
1801 – 2400	746	1346	–
2401 – 2600	746	1346	1750
2601 – 2800	746	1346	1946

Centre lock, horizontal

SRW [mm]	C1	C2	Bottom / top
1101 – 1600	676	658	CL 600 E

8.7.1.9 Turn-Only hardware – RC 1 N

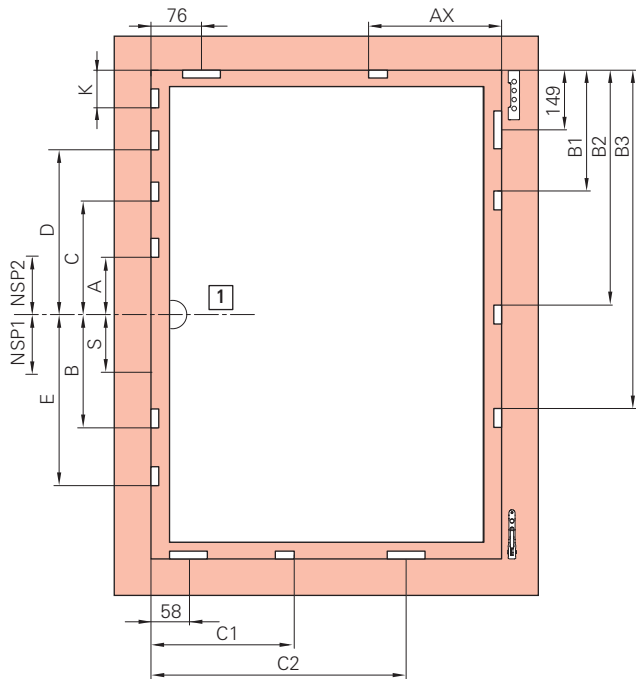


[1] Handle centre

□ 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	–	–	1121	807
2201 – 2400	1000	700	1370	–	–	1121	807
2401 – 2600	1000	700	1370	1770	–	1121	807
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	–	–	109	395
2601 – 2800	–	312	358	758	740	458	–	109	395

Stay guide

SRW [mm]	AX	Size
1201 – 1400	750	500 / 1290
1401 – 1600	750	500 / 1290 ^[23]

Centre lock, vertical

SRH [mm]	B1	B2	B3	Centre lock
1101 – 1800	746	–	–	CL 600 E
1801 – 2400	746	1346	–	CL 600 E KU + CL 600 E
2401 – 2600	746	1346	1750	2x CL 600 E KU + CL 400 E
2601 – 2800	746	1346	1946	2x CL 600 E KU + CL 600 E

Centre lock, horizontal

SRW [mm]	C1	C2	Centre lock
400 – 600	258	–	CL 200 P
601 – 800	462	–	CL 400 P
801 – 1000	658	–	CL 600 P

[23] with centre lock

Installation

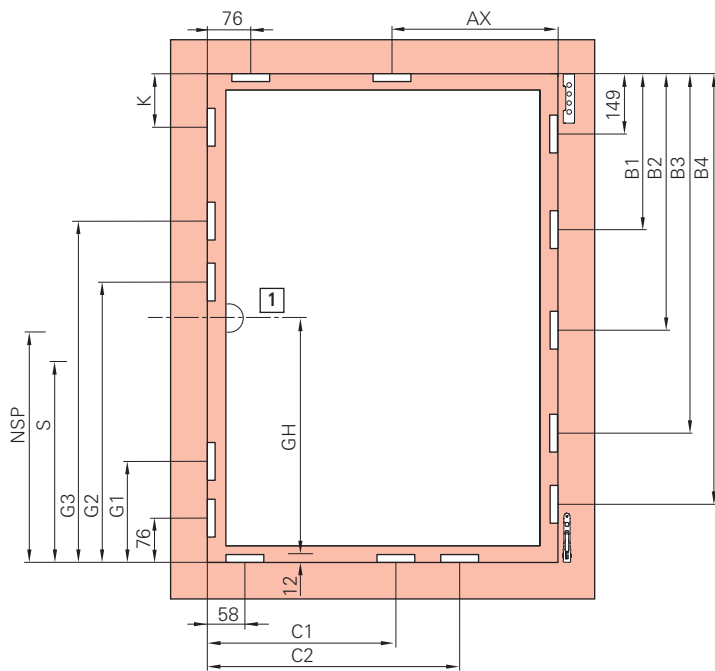
Frame

Position of strikers and tilt strikers

SRW [mm]	C1	C2	Centre lock
1001 – 1200	658	858	CL 600 E KU + CL 200 P
1201 – 1400	658	1062	CL 600 E KU + CL 400 P
1401 – 1600	658	1258	CL 600 E KU + CL 600 P



8.7.1.10 Turn-Only hardware – RC 2 / RC 2 N

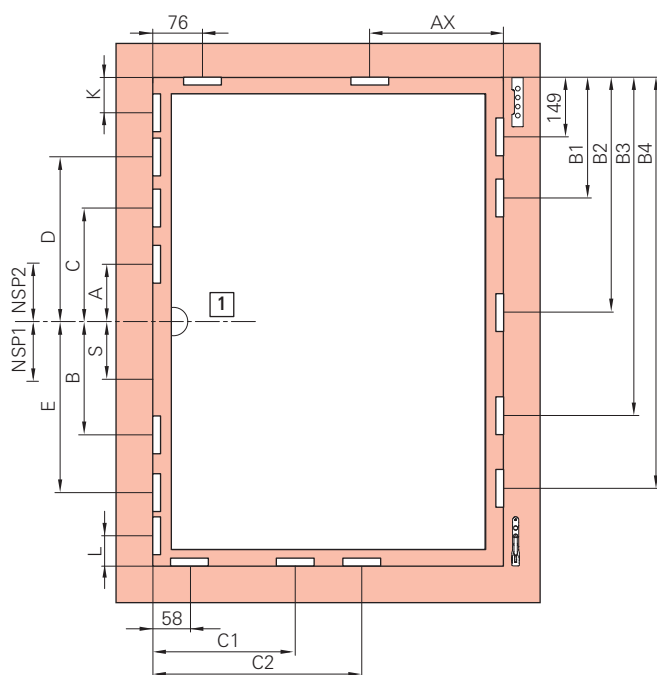


[1] Handle centre

□ 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	–
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

□ Striker e.g. 

T&T espagnolette – centred / variable handle height

SRH [mm]	A	B	C	D	E	K	L	NSP 1	NSP 2	S
490 – 620	–	–	–	–	–	–	76	–	–	–
621 – 800	125	–	–	–	–	–	–	137	–	–
801 – 1200	125	–	–	–	–	–	–	137	–	–
1201 – 1600	125	340	–	–	–	–	–	137	–	–
1601 – 2000	–	312	358	–	–	–	–	–	109	398
2001 – 2400	–	312	358	758	740	258	–	–	109	398
2401 – 2800	–	312	358	758	740	458	–	–	109	398

Stay guide

SRW [mm]	AX	Size
801 – 1000	600	500 / 890
1001 – 1200	600	500 / 1090
1201 – 1400	600	500 / 1290

Centre lock, vertical

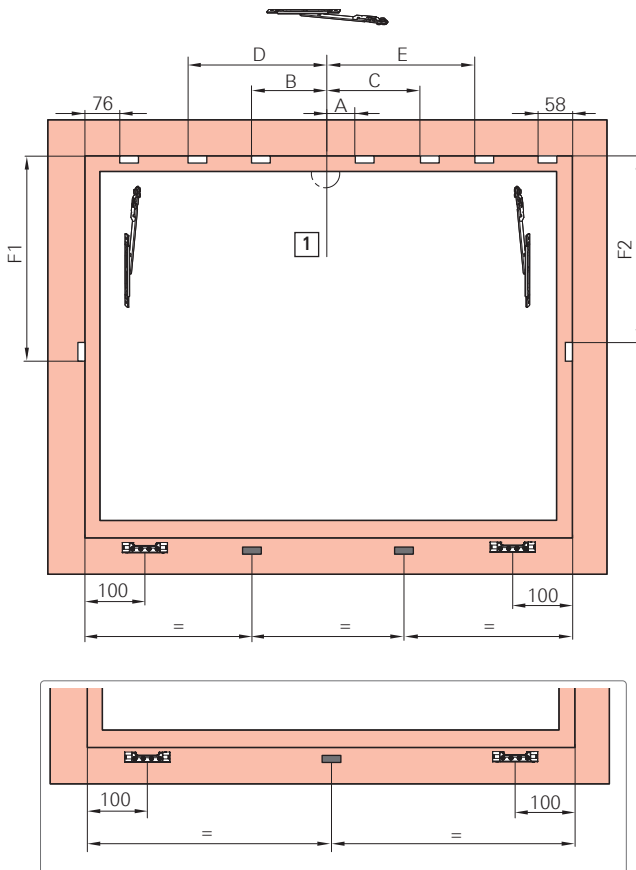
SRH [mm]	B1	B2	B3	B4	Centre lock
490 – 800	346	–	–	–	CL 200 V
801 – 1000	550	–	–	–	CL 400 V
1001 – 1200	746	–	–	–	CL 600 V
1201 – 1400	746	946	–	–	CL 600 V KU + CL 200 V
1401 – 1600	746	1150	–	–	CL 600 V KU + CL 400 V
1601 – 1800	746	1346	–	–	CL 600 V KU + CL 600 V
1801 – 2000	746	1346	1546	–	2x CL 600 V KU + CL 200 V
2001 – 2200	746	1346	1750	–	2x CL 600 V KU + CL 400 V
2201 – 2400	746	1346	1946	–	2x CL 600 V KU + CL 600 V
2401 – 2600	746	1346	1946	2146	3x CL 600 V KU + CL 200 V
2601 – 2800	746	1346	1946	2350	3x CL 600 V KU + CL 400 V



Centre lock, horizontal

SRH [mm]	C1	C2	Centre lock
490 – 690	258	–	CL 200 V
691 – 890	462	–	CL 400 V
891 – 1090	658	–	CL 600 V
1091 – 1290	658	858	CL 600 V KU + CL 200 V
1291 – 1400	658	1062	CL 600 V KU + CL 400 V

8.7.1.11 Tilt-Only hardware – basic security



[1] Handle centre

[2] Concealed centre closer

□ Striker e.g.

With SRW ≥ 1201, place the centre closer in the middle

With SRW ≥ 2201, 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	–	–
2001 – 2400	–	312	358	740	758

Centre lock, vertical

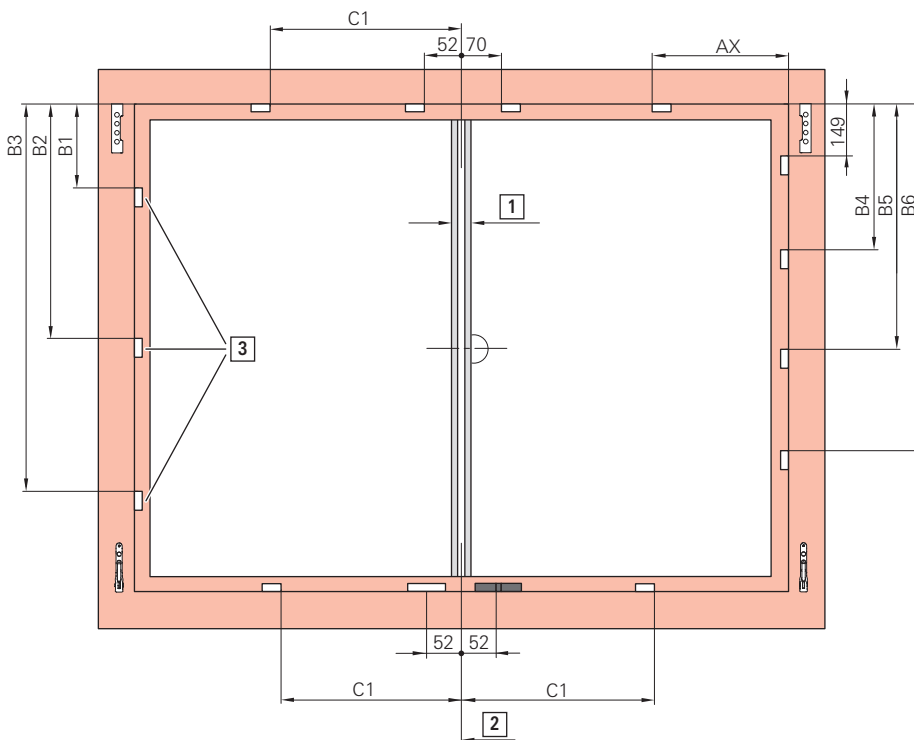
SRH [mm]	F1	F2	Left / right
801 – 1200	462	480	CL 400 E



INFO

Put pressure-proof packers between glass and frame in the area of the centre lock.

8.7.1.12 Floating-mullion hardware, standard – basic security



[1] 12 mm rebate clearance between the sashes

[2] Rebate clearance centre

□ Striker e.g.

■ Tilt striker e.g.

Centre closer, vertical, concealed

SRH [mm]	B1	B2	B3
1101 – 1800	746	–	–
1801 – 2400	746	1346	–
2401 – 2600	746	1346	1750
2601 – 2800	746	1346	1946

Centre lock, vertical

SRH [mm]	B4	B5	B6	Centre lock
1101 – 1800	746	–	–	CL 600 E
1801 – 2400	746	1346	–	CL 600 E KU + CL 600 E
2401 – 2600	746	1346	1750	2x CL 600 E KU + CL 400 E
2601 – 2800	746	1346	1946	2x CL 600 E KU + CL 600 E



Centre lock, horizontal

SRW [mm]	C1	Top / bottom
1101 – 1600	652	CL 600 E

Stay guide

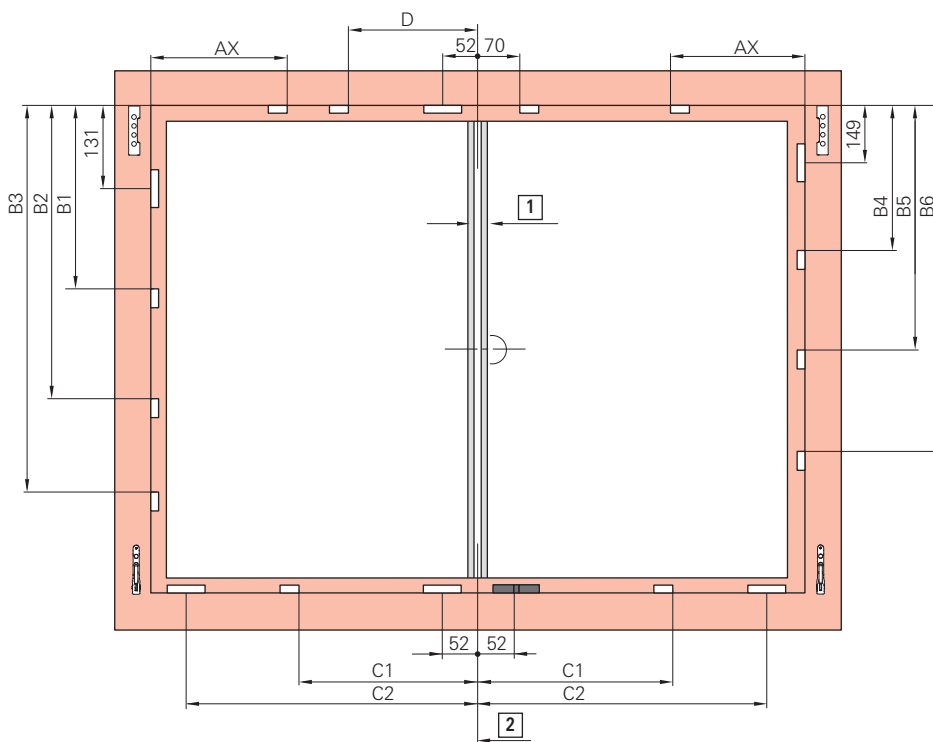
SRW [mm]	AX	Size
1201 – 1400	750	500 / 1090
1401 – 1600	750	500 / 1290



INFO

Mount the second opening sash with the lever-operated espagnolette open.

8.7.1.13 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.

Centre lock, vertical

SRH [mm]	B1	B2	B3	B4	B5	B6	Centre lock
1101 – 1800	728	–	–	746	–	–	CL 600 E
1801 – 2400	728	1328	–	746	1346	–	CL 600 E KU + CL 600 E
2401 – 2600	728	1328	1732	746	1346	1750	2x CL 600 E KU + CL 400 E
2601 – 2800	728	1328	1928	746	1346	1946	2x CL 600 E KU + CL 600 E

Centre lock, horizontal

SRW [mm]	C1	C2	Centre lock
400 – 600	252	–	CL 200 P

SRW [mm]	C1	C2	Centre lock
601 – 800	456	–	CL 400 P
801 – 1000	652	–	CL 600 P
1001 – 1200	652	852	CL 600 E KU + CL 200 P
1201 – 1400	652	1056	CL 600 E KU + CL 400 P
1401 – 1600	652	1252	CL 600 E KU + CL 600 P

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

Stay guide

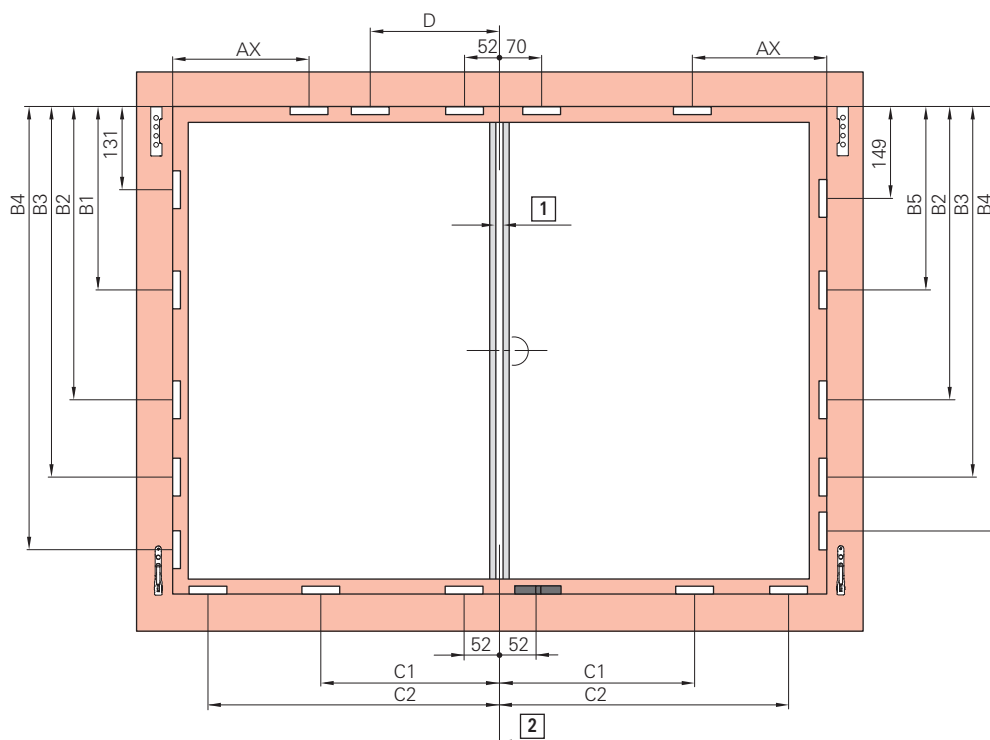
SRW [mm]	AX	Size
1201 – 1600	750	500 / 1290



INFO

Mount the second opening sash with the lever-operated espagnolette open.

8.7.1.14 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.



Centre lock, vertical

SRH [mm]	B1	B2	B3	B4	B5	B6	B7	B8	Centre lock
600 – 800	328	–	–	–	346	–	–	–	CL 200 V
801 – 1000	532	–	–	–	550	–	–	–	CL 400 V
1001 – 1200	728	–	–	–	746	–	–	–	CL 600 V
1201 – 1400	728	928	–	–	746	946	–	–	CL 600 V KU + CL 200 V
1401 – 1600	728	1132	–	–	746	1150	–	–	CL 600 V KU + CL 400 V
1601 – 1800	728	1328	–	–	746	1346	–	–	CL 600 V KU + CL 600 V
1801 – 2000	728	1328	1528	–	746	1346	1546	–	2x CL 600 V KU + CL 200 V
2001 – 2200	728	1328	1732	–	746	1346	1750	–	2x CL 600 V KU + CL 400 V
2201 – 2400	728	1328	1928	–	746	1346	1946	–	2x CL 600 V KU + CL 600 V
2401 – 2600	728	1328	1928	2128	746	1346	1946	2146	3x CL 600 V KU + CL 200 V
2601 – 2800	728	1328	1928	2332	746	1346	1946	2350	3x CL 600 V KU + CL 400 V

Centre lock, horizontal

SRW [mm]	C1	C2	Centre lock
490 – 690	252	–	CL 200 V
691 – 890	456	–	CL 400 V
891 – 1090	652	–	CL 600 V
1091 – 1290	652	852	CL 600 V KU + CL 200 V
1291 – 1400	652	1056	CL 600 V KU + CL 400 V

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

Stay guide

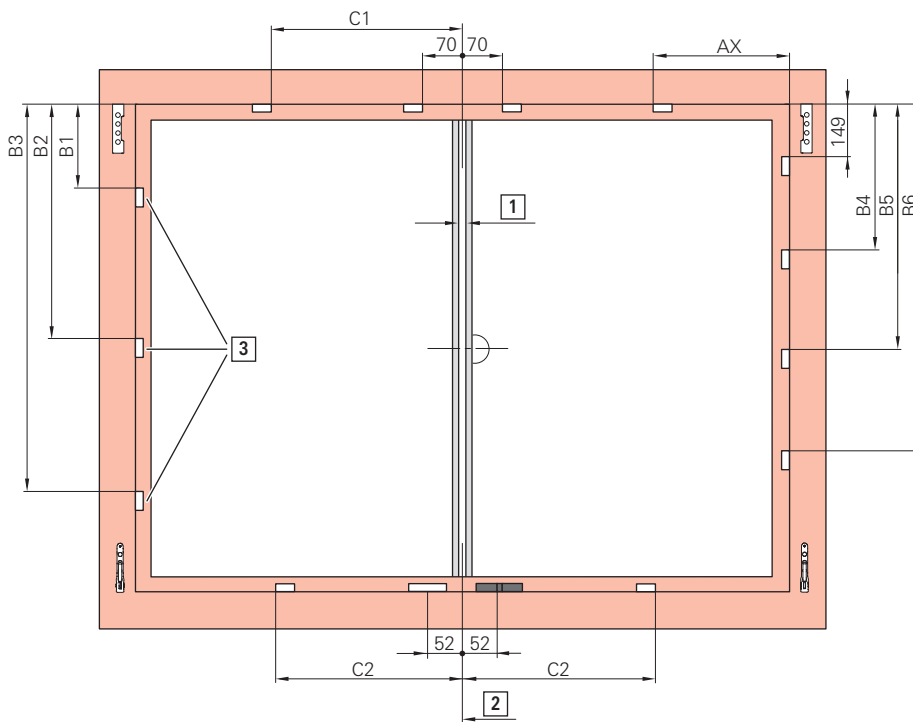
SRW [mm]	AX	Size
801 – 1000	600	500 / 890
1001 – 1200	600	500 / 1090
1201 – 1400	600	500 / 1290



INFO

Mount the second opening sash with the lever-operated espagnolette open.

8.7.1.15 Floating-mullion hardware Plus – basic security



[1] 12 mm rebate clearance between the sashes

[2] Rebate clearance centre

□ Striker e.g. 

■ Tilt striker e.g. 

Centre closer, vertical, concealed

SRH [mm]	B1	B2	B3
1101 – 1800	746	–	–
1801 – 2400	746	1346	–
2401 – 2600	746	1346	1750
2601 – 2800	746	1346	1946

Centre lock, vertical

SRH [mm]	B4	B5	B6	Centre lock
1101 – 1800	746	–	–	CL 600 E
1801 – 2400	746	1346	–	CL 600 E KU + CL 600 E
2401 – 2600	746	1346	1750	2x CL 600 E KU + CL 400 E
2601 – 2800	746	1346	1946	2x CL 600 E KU + CL 600 E

Centre lock, horizontal

SRW [mm]	C1	Top
1101 – 1600	670	CL 600 E

Centre lock, horizontal

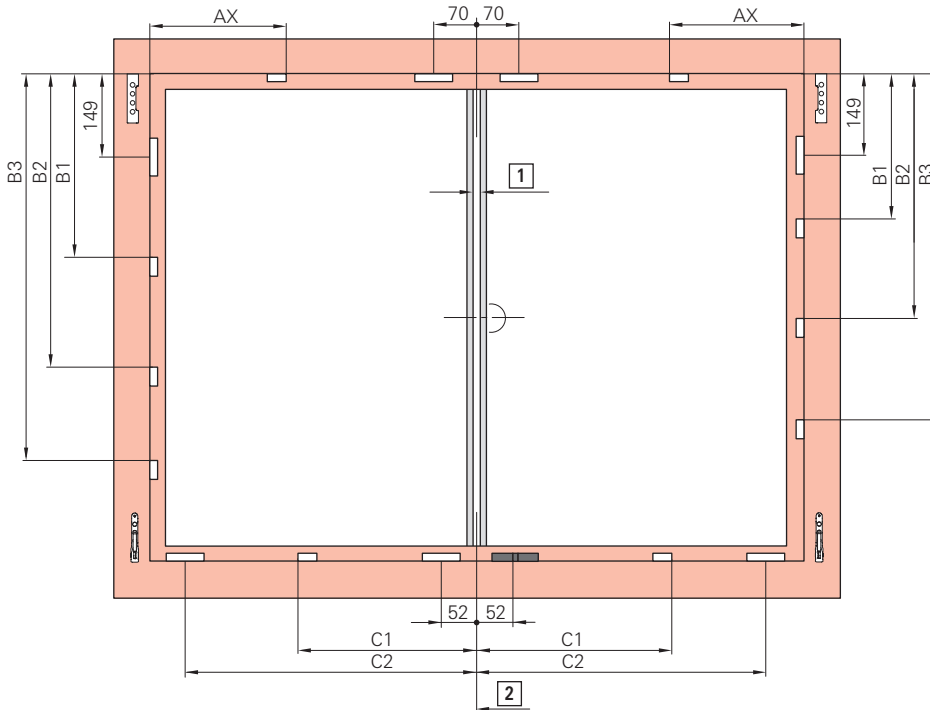
SRW [mm]	C2	Bottom
1101 – 1600	652	CL 600 E



Stay guide

SRW [mm]	AX	Size
1201 – 1600	750	500 / 1290

8.7.1.16 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.

Centre lock, vertical

SRH [mm]	B1	B2	B3	Centre lock
1101 – 1800	746	–	–	CL 600 E
1801 – 2400	746	1346	–	CL 600 E KU + CL 600 E
2401 – 2600	746	1346	1750	2x CL 600 E KU + CL 400 E
2601 – 2800	746	1346	1946	2x CL 600 E KU + CL 600 E

Centre lock, horizontal

SRH [mm]	C1	C2	Centre lock
400 – 600	252	–	CL 200 P
601 – 800	456	–	CL 400 P
801 – 1000	652	–	CL 600 P
1001 – 1200	652	852	CL 600 E KU + CL 200 P
1201 – 1400	652	1056	CL 600 E KU + CL 400 P

Stay guide

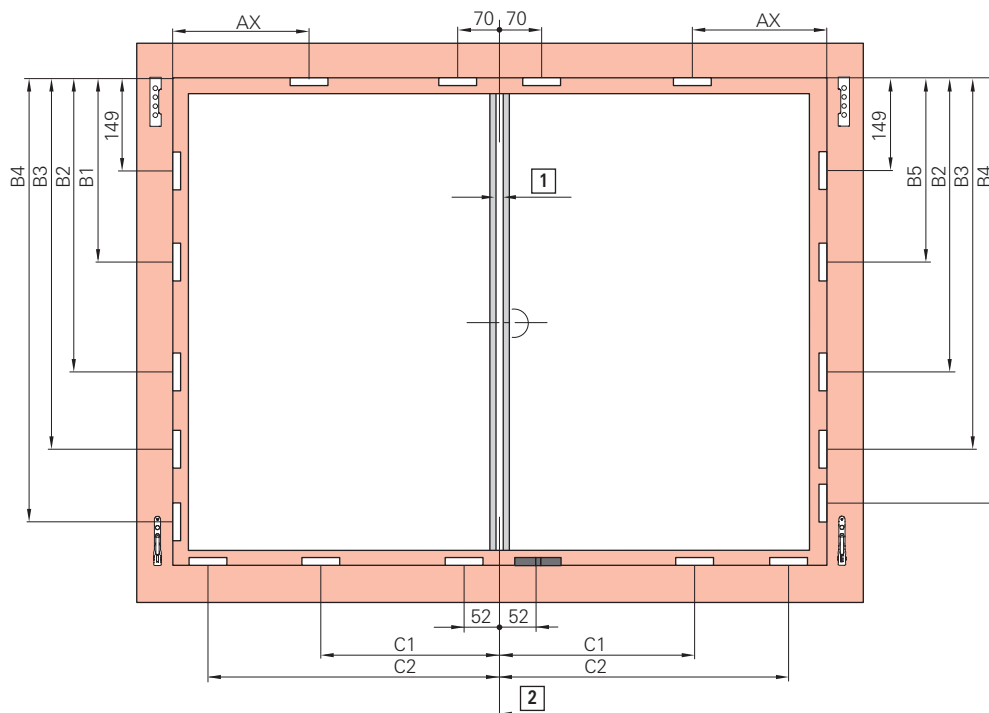
SRW [mm]	AX	Size
1201 – 1600	750	500 / 1290



INFO

Mount the second opening sash with the lever-operated espagnolette open.

8.7.1.17 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.

Centre lock, vertical

SRH [mm]	B1	B2	B3	B4	Centre lock
600 – 800	346	–	–	–	CL 200 V
801 – 1000	550	–	–	–	CL 400 V
1001 – 1200	746	–	–	–	CL 600 V
1201 – 1400	746	946	–	–	CL 600 V KU + CL 200 V
1401 – 1600	746	1150	–	–	CL 600 V KU + CL 400 V
1601 – 1800	746	1346	–	–	CL 600 V KU + CL 600 V
1801 – 2000	746	1346	1546	–	2x CL 600 V KU + CL 200 V
2001 – 2200	746	1346	1750	–	2x CL 600 V KU + CL 400 V
2201 – 2400	746	1346	1946	–	2x CL 600 V KU + CL 600 V
2401 – 2600	746	1346	1946	2146	3x CL 600 V KU + CL 200 V
2601 – 2800	746	1346	1946	2350	3x CL 600 V KU + CL 400 V

Centre lock, horizontal

SRH [mm]	C1	C2	Centre lock
490 – 690	252	–	CL 200 V
691 – 890	456	–	CL 400 V
891 – 1090	652	–	CL 600 V
1091 – 1290	652	852	CL 600 V KU + CL 200 V



SRH [mm]	C1	C2	Centre lock
1291 – 1400	652	1056	CL 600 V KU + CL 400 V

Stay guide

SRW [mm]	AX	Size
801 – 1000	600	500 / 890
1001 – 1200	600	500 / 1090
1201 – 1400	600	500 / 1290

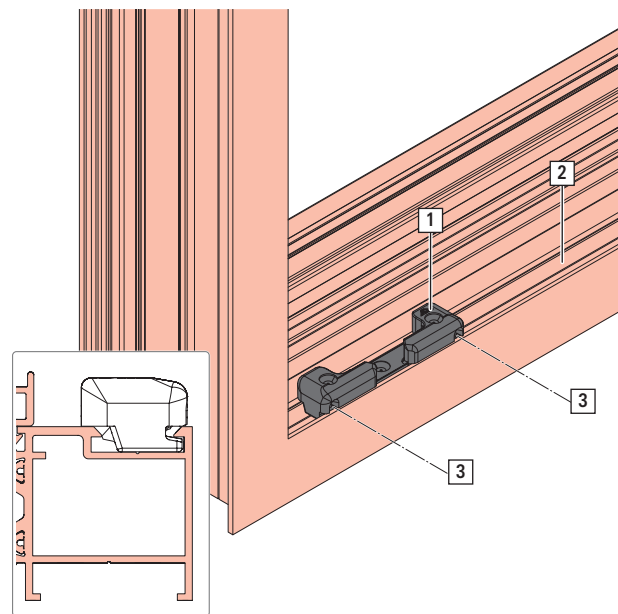


INFO

Mount the second opening sash with the lever-operated espagnolette open.

8.7.2 Tilt striker (clampable)

1. Determine the tilt striker position → *from page 233*.
2. Position the tilt striker [1] in the frame groove [2].
The tilt striker must engage behind the profile.



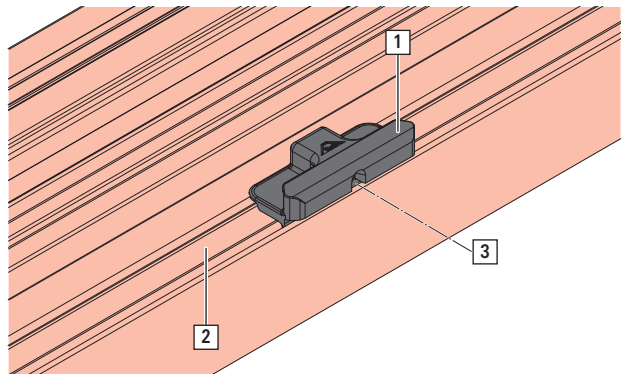
3. Tighten the threaded pins [3].
Tool: hex key size 2.5
Torque: 2 – 2.5 Nm
Check that the tilt striker is fitted securely.

8.7.3 Striker, standard (clampable)

**INFO**

Security strikers are not clamped, but screwed into place.

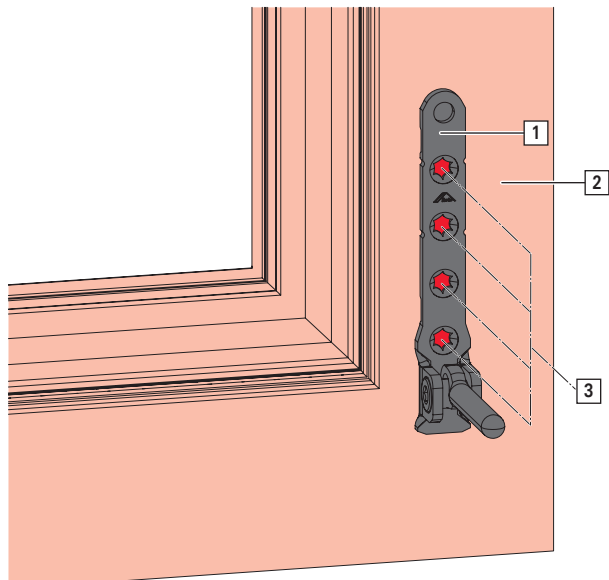
1. Determine the striker position → *from page 233*.
2. Position the striker [1] in the frame groove [2]. The striker must engage behind the profile.



3. Tighten the threaded pin [3].
Tool: hex key size 2.5
Torque: 2 – 2.5 Nm
Check that the striker is fitted securely.

8.7.4 Pivot rest

1. Place the pivot rest [1] on the frame [2].



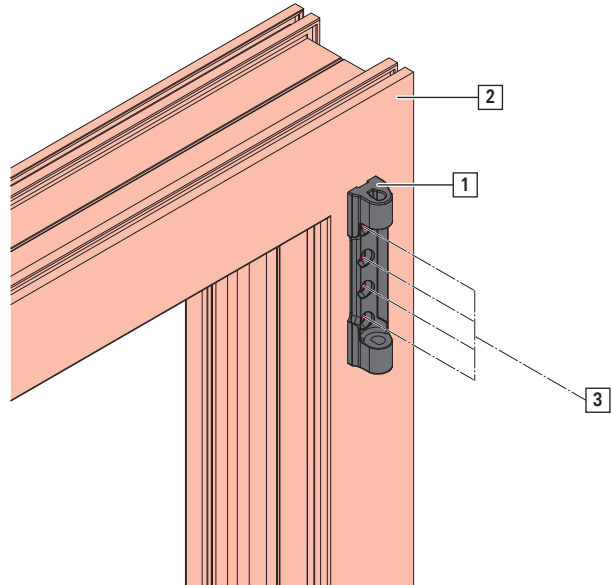
2. Secure with four screws [3].



8.7.5 Stay bearing, standard

130 kg

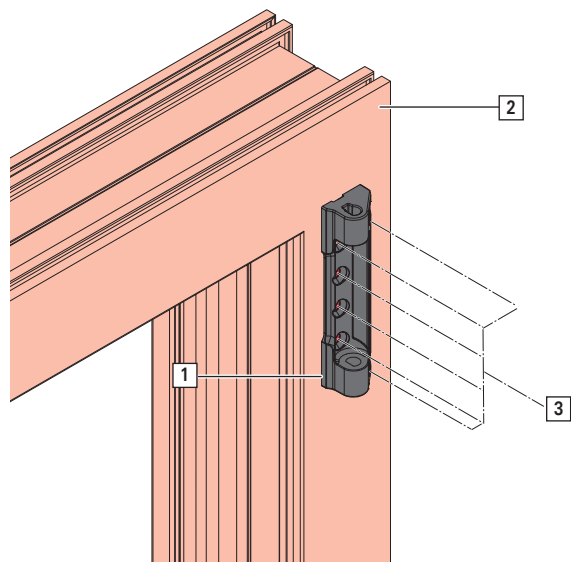
1. Place the stay bearing [1] on the frame [2].



2. Fasten with four screws [3].

150 kg

1. Place the stay bearing [1] on the frame [2].

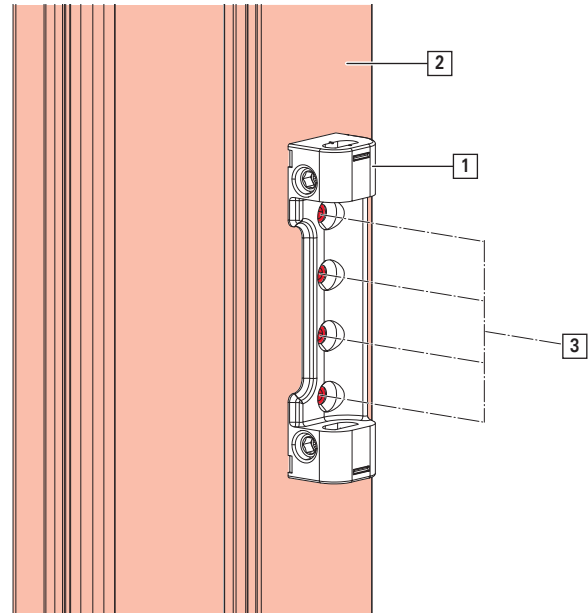


2. Fasten with six screws [3].

8.7.6 Arch

Stay bearing, adjustable

1. Place the stay bearing [1] on the frame [2].

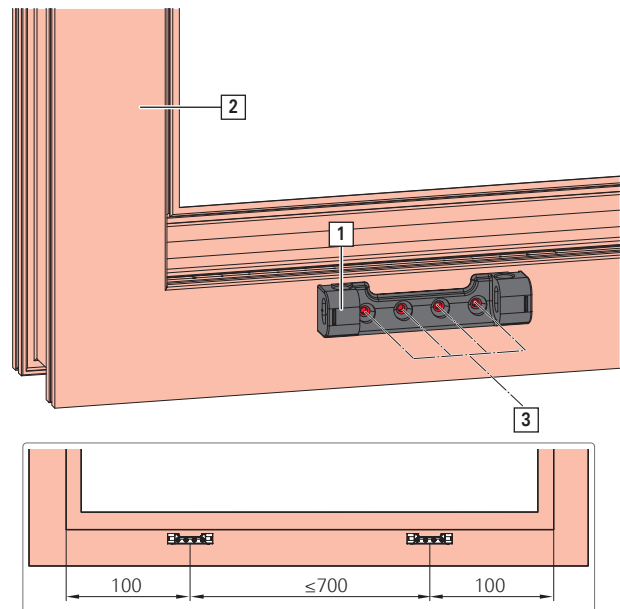


2. Fasten with four screws [3].

8.7.7 Tilt-Only sash

Stay bearing, adjustable

1. Place the stay bearing [1] on the frame [2].

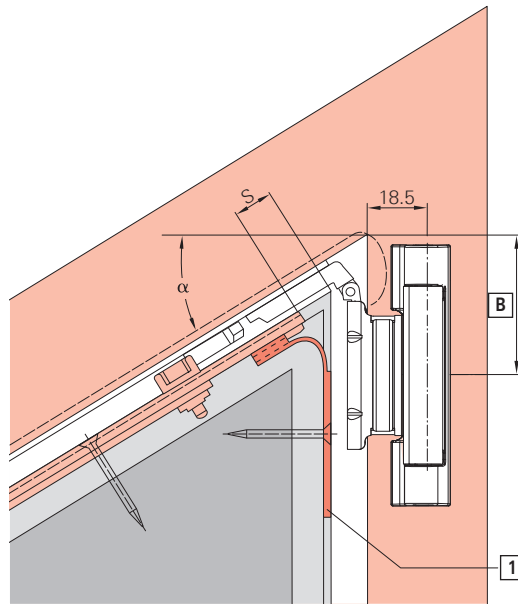


2. Fasten with four screws [3].

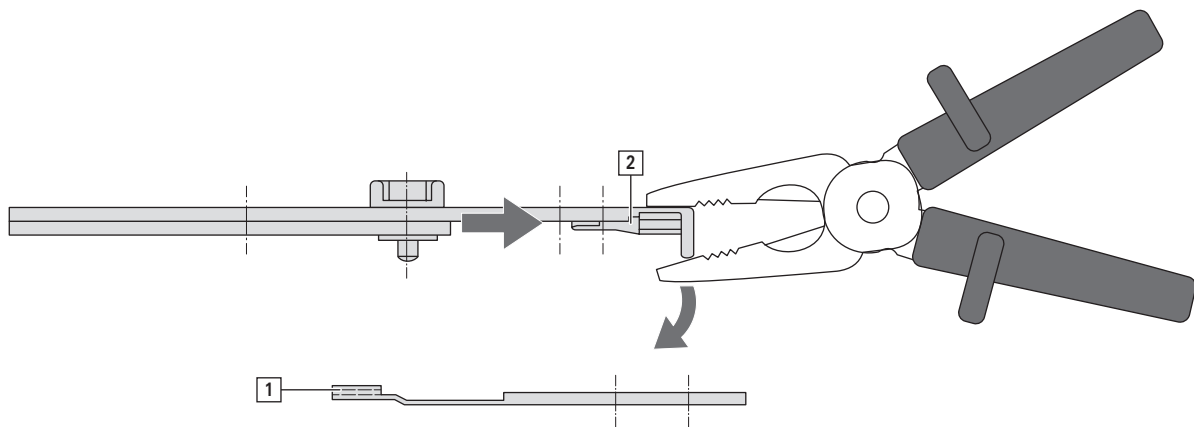


8.7.8 Pitched stay arm

1. Stay arm routing = pitched angle α , for additional values, see
For a deep sash rebate, chamfer this near the corner.
Clear the corner area for negative pitched angles.

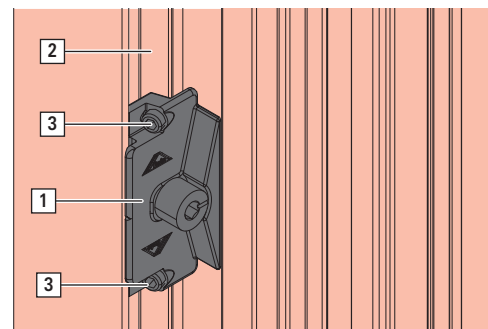


2. Insert the end piece [1] in the direction of the arrow and bend it according to the pitched angle.
Break the connection bracket [2] **in a downwards direction** at every sash angle using pliers.



8.7.9 Lifting mishandling device

1. Position the lifting mishandling device frame component [1] in the frame groove [2]. The frame component must engage behind the profile.



2. Tighten the threaded pins [3].

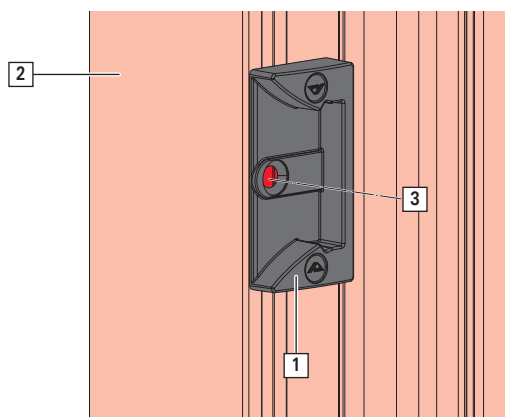
Tool: hex key size 2.5

Torque: 2 – 2.5 Nm

Check that the lifting mishandling device is fitted securely.

8.7.10 Bullet catch

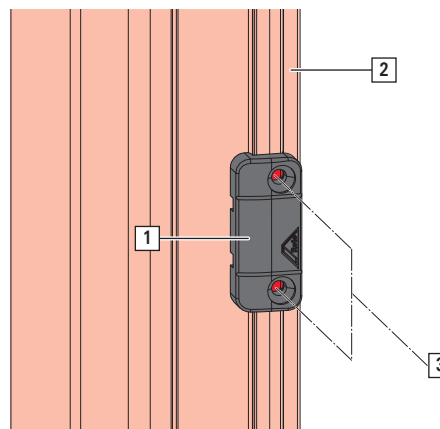
1. Position the bullet-catch frame component [1] in the frame [2].



2. Fasten with a screw [3].

8.7.11 Centre closer, concealed

1. Position the centre closer [1] in the frame groove [2].



2. Fasten with two screws [3].



INFO

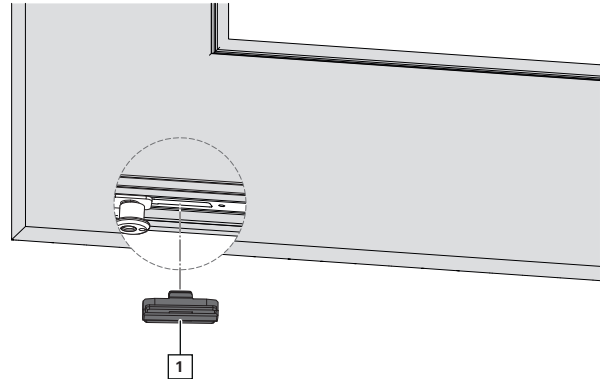
Put pressure-proof packers between glass and frame in the area of the centre closers.



8.8 Accessories

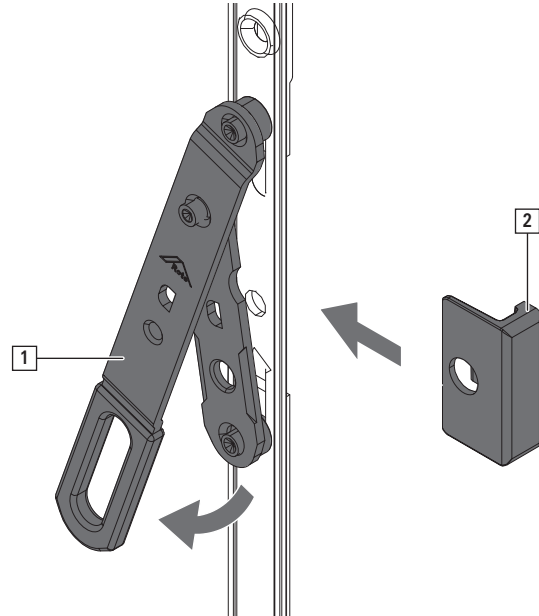
8.8.1 Travel restrictor

1. Clip the travel restrictor [1] into the locking cam groove.

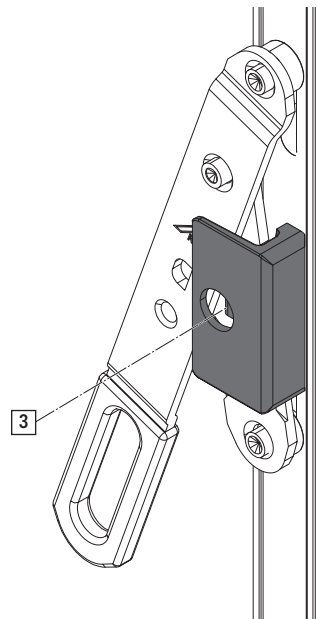


8.8.2 Retainer clasp

1. Open the red toggle lever [1].
2. Insert the retainer clasp [2].



3. Fasten the retainer clasp with a screw [3].



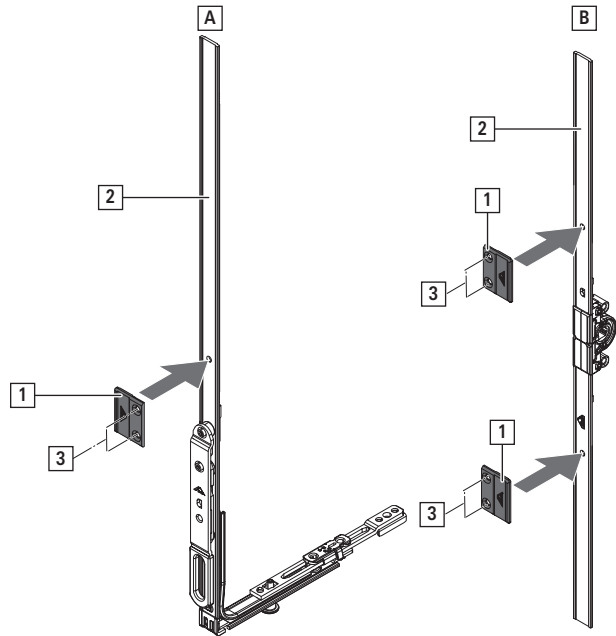
4. Close the red toggle lever.



8.8.3 Fastening plate

In conjunction with lever-operated espagnolette, standard 2003815 [A] or with T&T espagnolette, centred / variable handle height 259717 [B].

1. Fit the fastening plate [1] to the espagnolette faceplate [2].



2. Fasten with two screws [3].

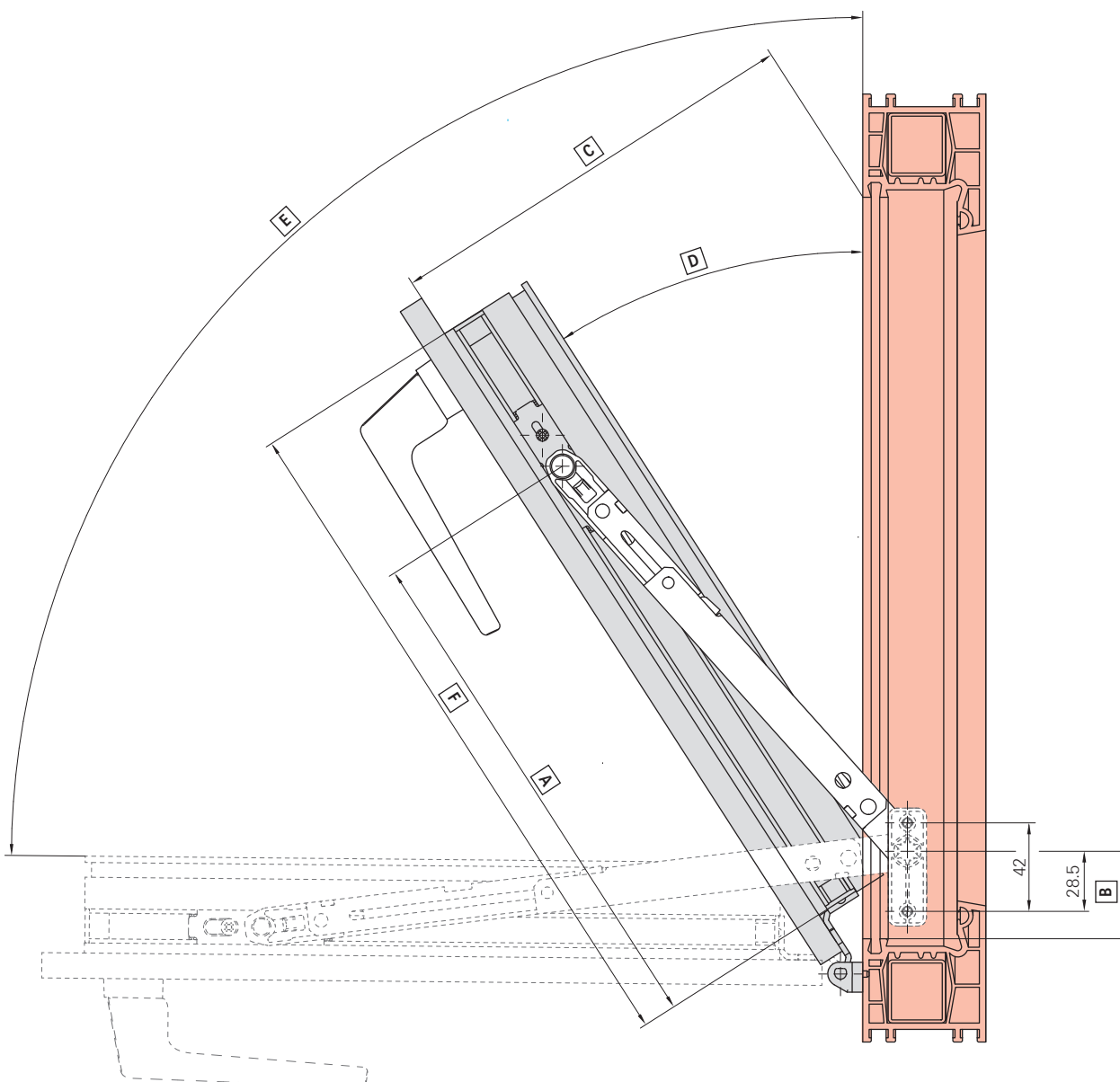
8.8.4 Restrictor and cleaning stay



INFO

A restrictor and cleaning stay must be installed for fanlights.

8.8.4.1 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	1	250	45	180 – 245	33°	90°
401 – 560	1	280	75	205 – 275	27°	67°
561 – 700	2	525	170	225 – 277	22°	88°
701 – 850	2	575	220	244 – 292	19°	72°
851 – 1200	2	625	270	261 – 363	17°	62°

8.8.4.2 Sash component

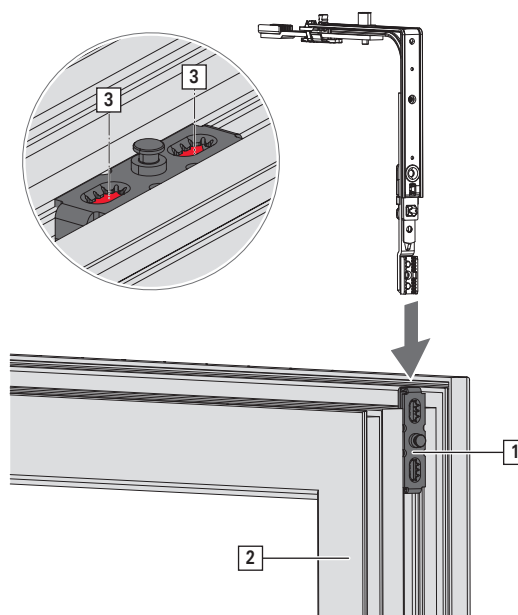
1. Sash installation

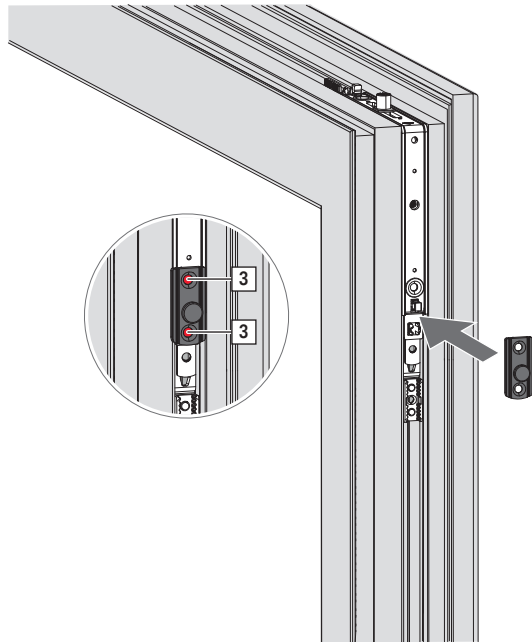
Insert the sash bearing [1] into the sash groove [2].

Position the sash bearing correctly.

Floating-mullion installation

When installing the floating mullion, place the sash bearing on the corner drive.



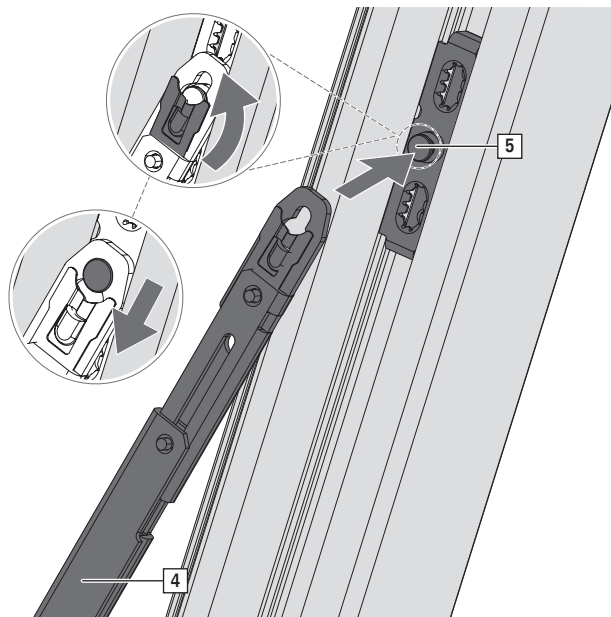


2. Fasten with two screws [3].

3. Install the scissor stay on the frame and secure it in position .

Press the arm [4] of the scissor stay onto the bolt [5].

Move the arm until the bolt locks into place.





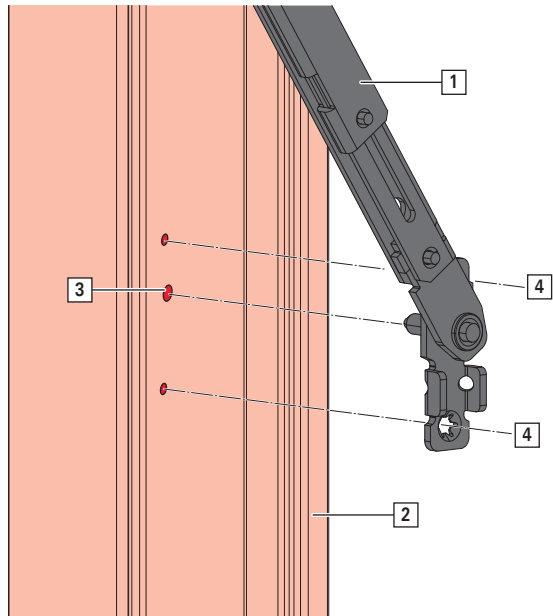
8.8.4.3 Frame component



INFO

Tilt stays and tilt restrictors may still have to be used even when restrictor and cleaning stays are used.
 Two scissor stays must always be used per sash.

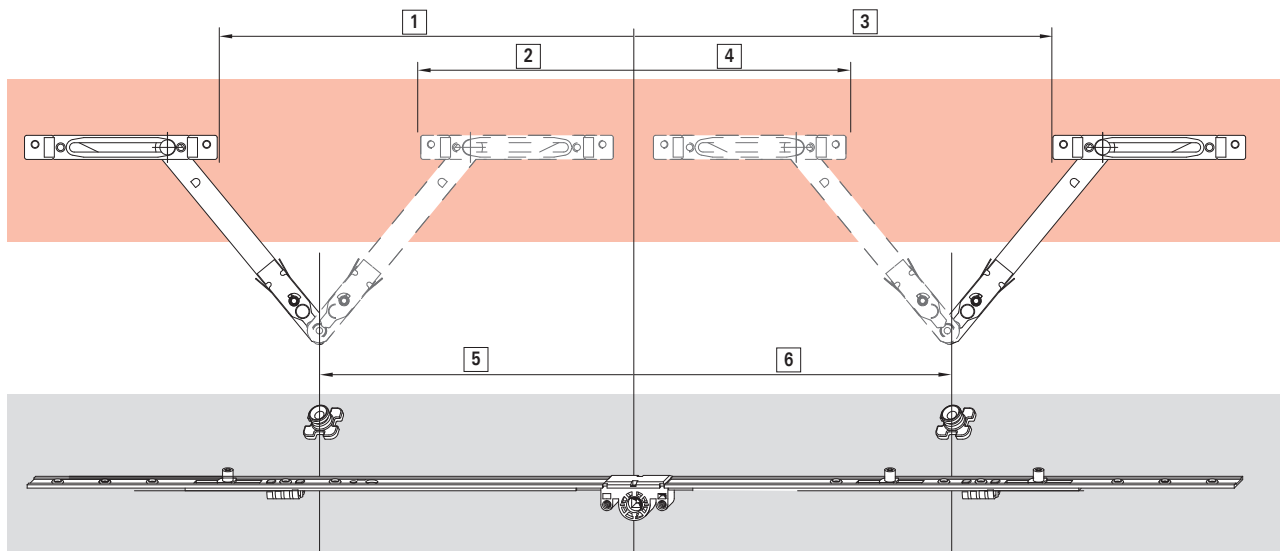
1. Position the restrictor and cleaning stay [1] on the frame [2].



2. Insert the cam into the predrilled hole $\varnothing 6$ [3].
3. Fasten with two screws [4].

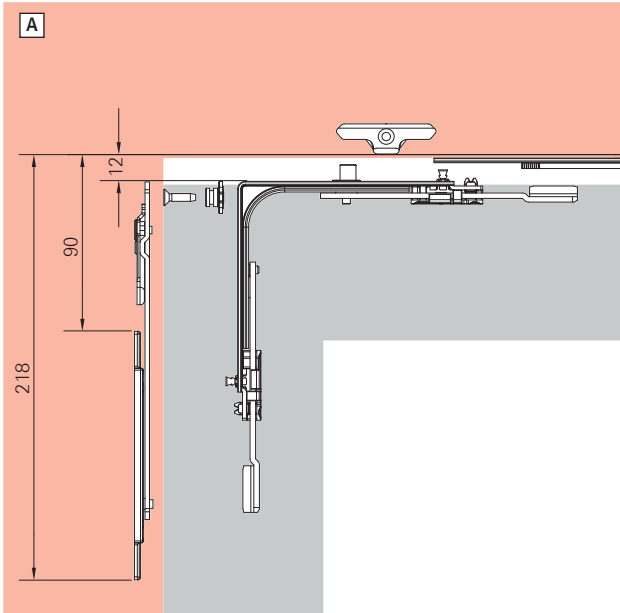
8.8.5 Tilt stay

8.8.5.1 Installation dimensions

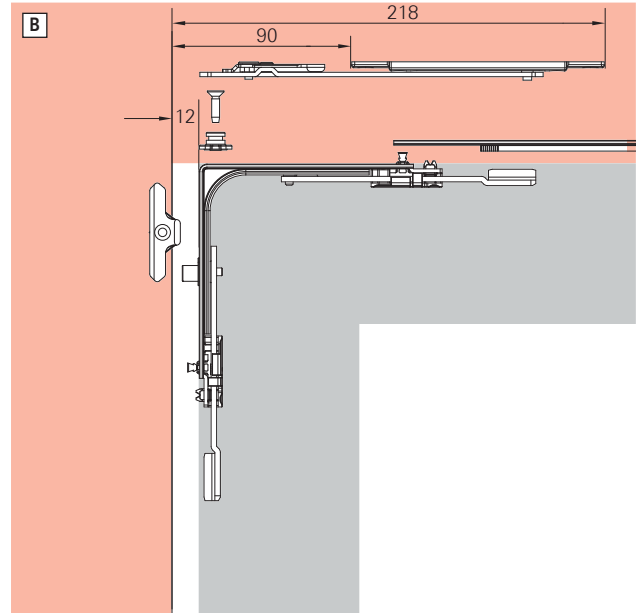


SRW	[1]	[2]	[3]	[4]	[5]	[6]	BS
621 – 800	–	–	–	4	–	73	15

SRW	[1]	[2]	[3]	[4]	[5]	[6]	BS
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

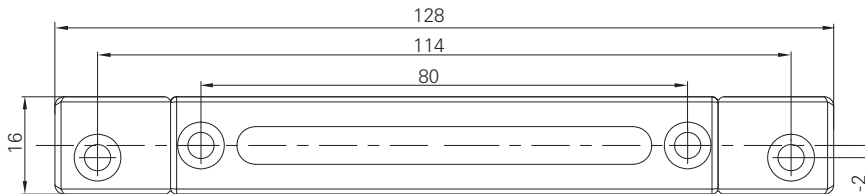


[A] Installation of tilt stay at the side



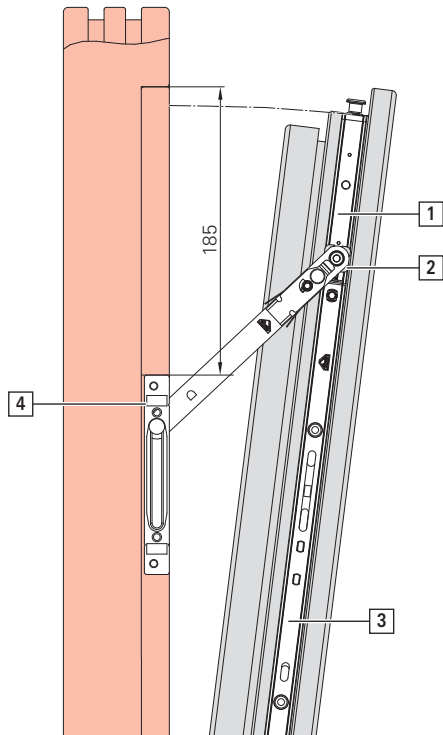
[B] Installation of tilt stay at the top

Frame component dimensions



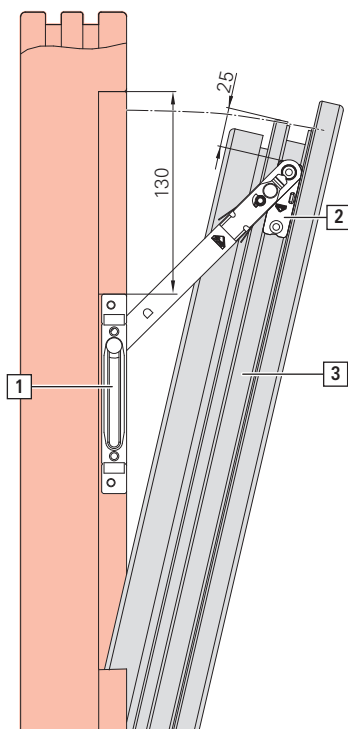


Installation at the side with sash bearing cam at the coupling point



- [1] Corner drive
- [2] Sash bearing cam
- [3] Centre lock
- [4] Tilt stay frame component

Installation, groove mounting

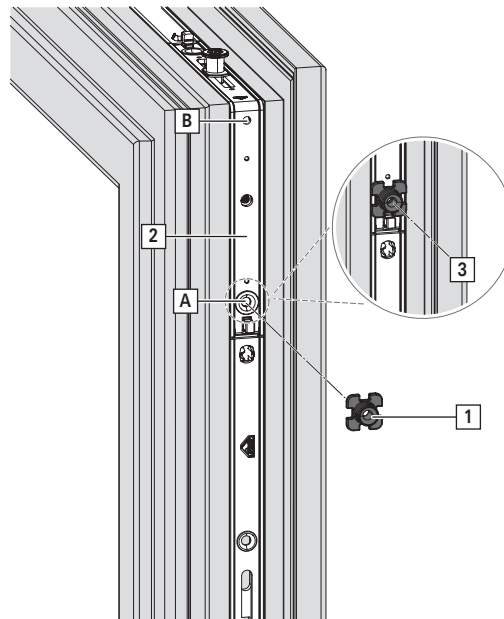


- [1] Tilt stay frame component
- [2] Tilt stay sash component
- [3] Sash groove

8.8.5.2 Sash component

Position at the side

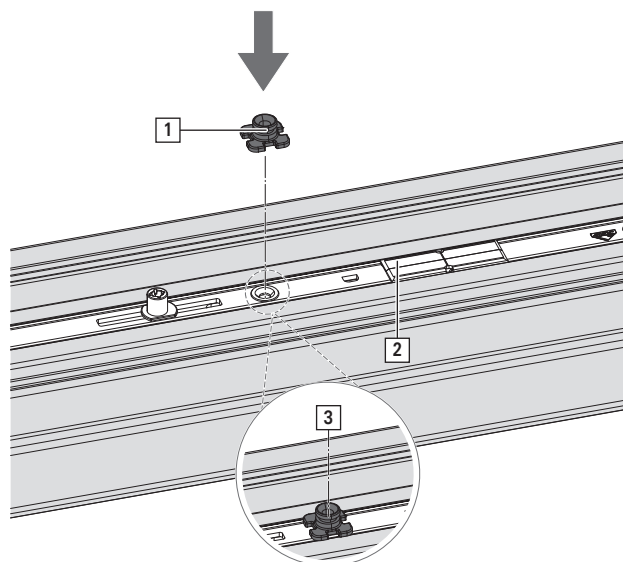
1. Place the sash component [1] on the corner drive [2] (position [A] or [B]).



2. Secure with screw [3].

Position at the top

1. Place the sash component [1] on the espagnolette [2].



2. Secure with screw [3].



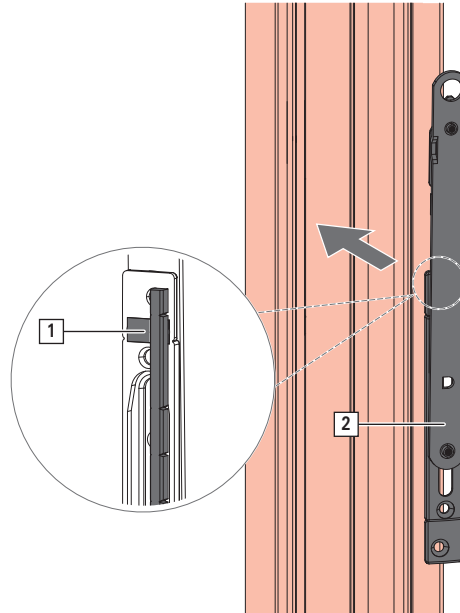
8.8.5.3 Frame component

1. Break the packer [1] apart in the centre.
2. Push the tilt stay [2] onto the packer.

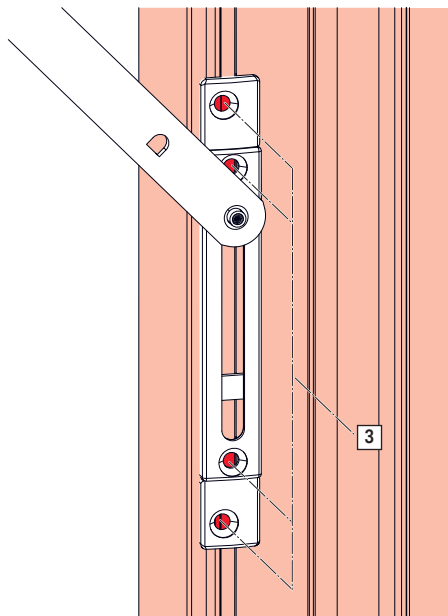


INFO

With a smooth rebate, no packers are required.

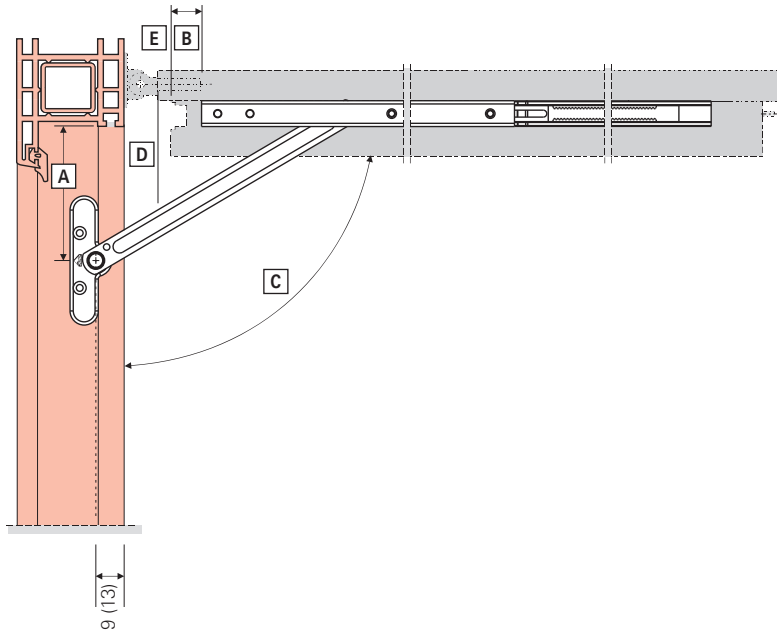


3. Position the tilt stay in the rebate.
4. Secure with four screws [3].



8.8.6 Arrestable brake stay

8.8.6.1 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.

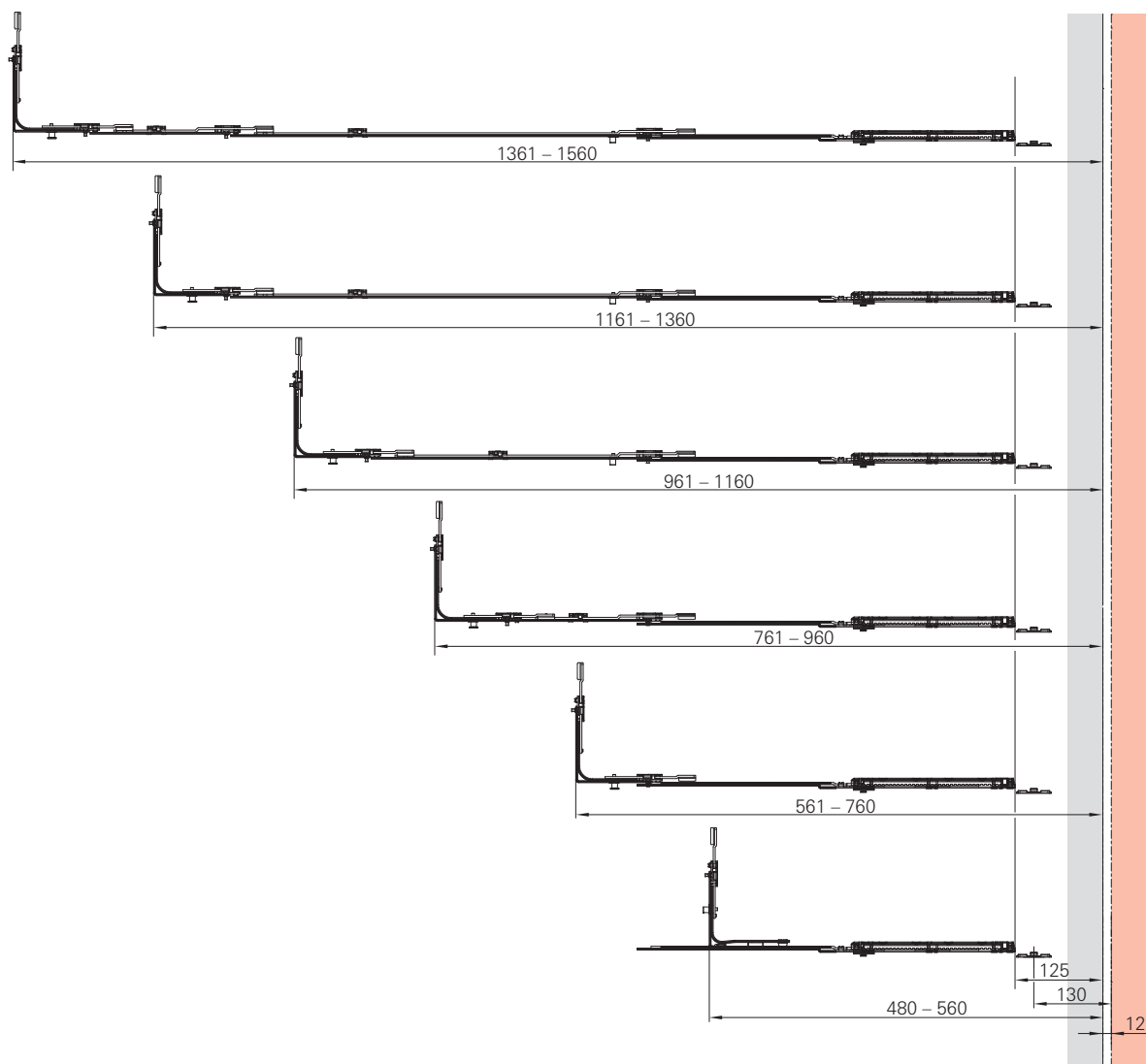


8.8.6.2 Application range 480 – 1560 mm



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
480 – 560	Special corner drive	–	486820	492757	130	125
561 – 760	Corner drive, standard	–	486820	492757	130	125
761 – 960	Corner drive, standard	CL 200 KU	486820	492757	130	125
961 – 1160	Corner drive, standard	CL 400 KU	486820	492757	130	125
1161 – 1360	Corner drive, standard	CL 600 KU	486820	492757	130	125
1361 – 1560	Corner drive, standard	CL 200 KU CL 600 KU	486820	492757	130	125

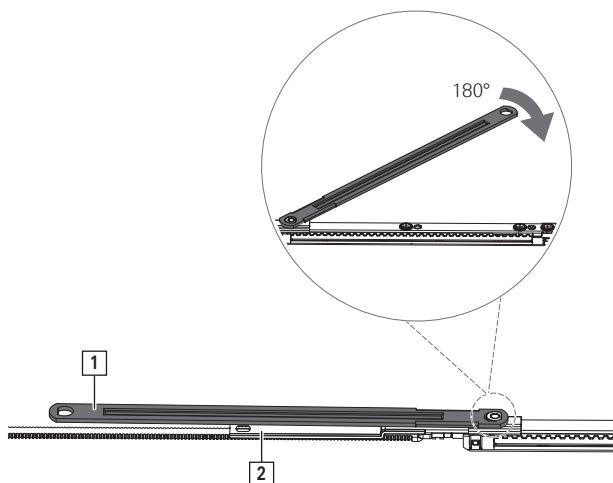
8.8.6.3 Sash component



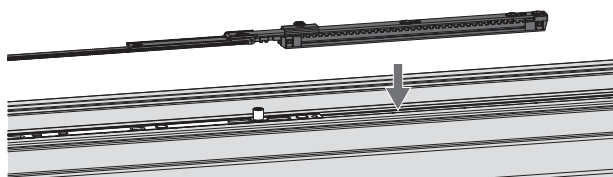
INFO

Only the sash lifter and not the lifting mishandling device can be used in conjunction with the arrestable brake stay.

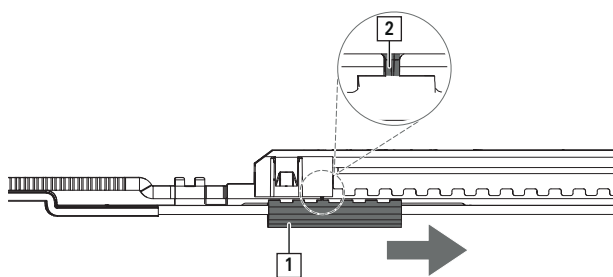
1. Place the scissor stay arm [1] on the arrestable brake stay [2].
 Turn the arm 180°. The arm is fixed in position.



2. Position the arrestable brake stay on the sash and connect it to the centre lock or corner drive. For dimensions, see → *from page 278*.



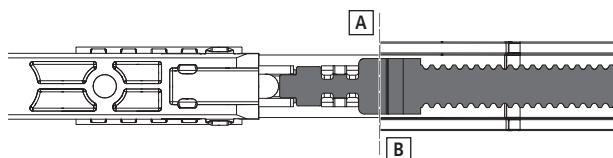
3. Move the slider [1] in jerks to move the assembly fixture out of the final position. While doing so, strike the cam [2].



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

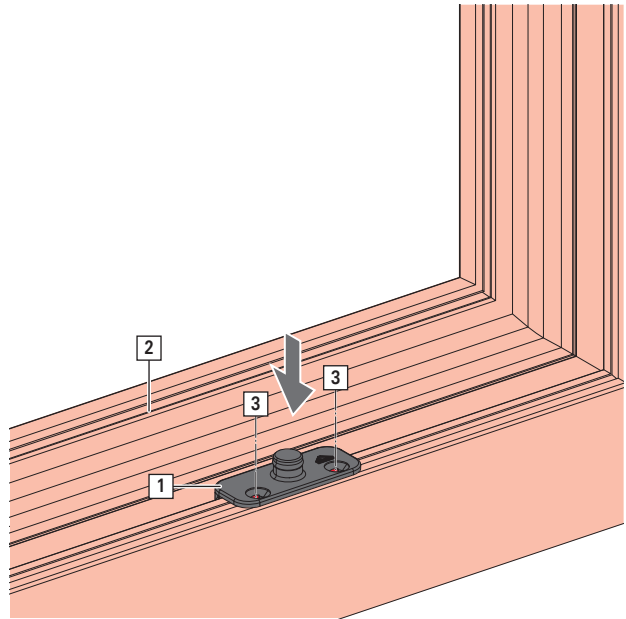
[B] Bend of the push rod





8.8.6.4 Frame component

1. Position the frame component [1] in the frame groove [2].

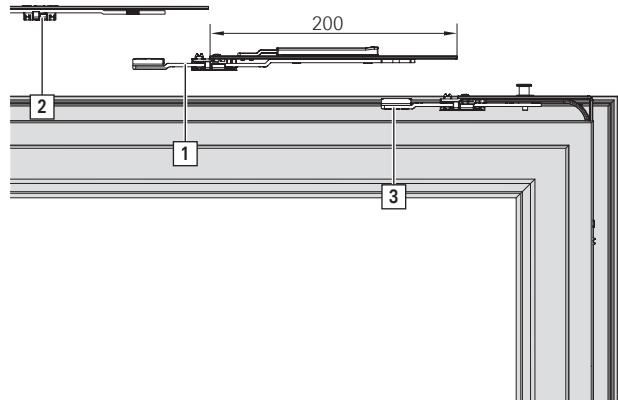


2. Fasten with two screws [3].

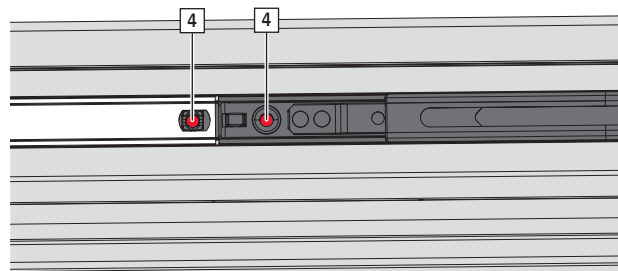
8.8.7 Additional stay arm

8.8.7.1 Sash component

1. Connect the additional stay arm sash component [1] to the corner drive [3]. Creating a force-fit connection → *from page 199*



2. Fit the stay guide [2].
3. Secure with two screws [4].





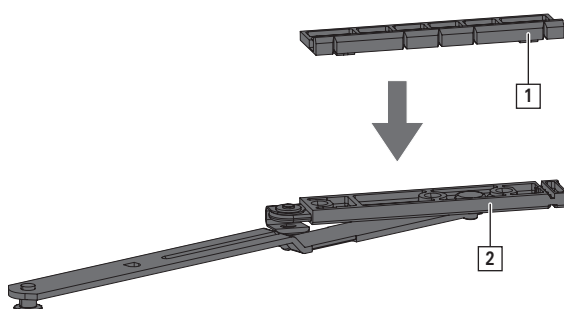
8.8.7.2 Frame component

1. Push the packer [1] into the frame component [2].
Ensure that it is firmly seated.

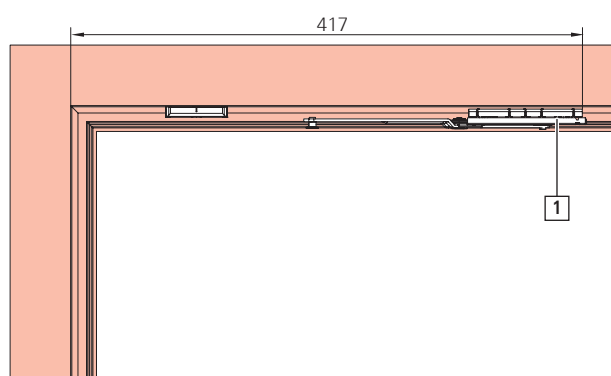


INFO

With a smooth rebate, no packers are required.



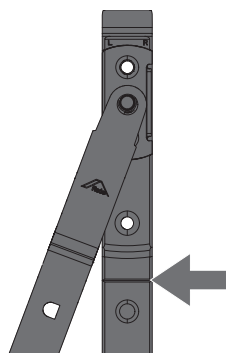
2. Insert the frame component with packer [1] into the frame profile.
The distance between the frame rebate and frame component is 417 mm.



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.

8.9 Joining the sash and frame



CAUTION

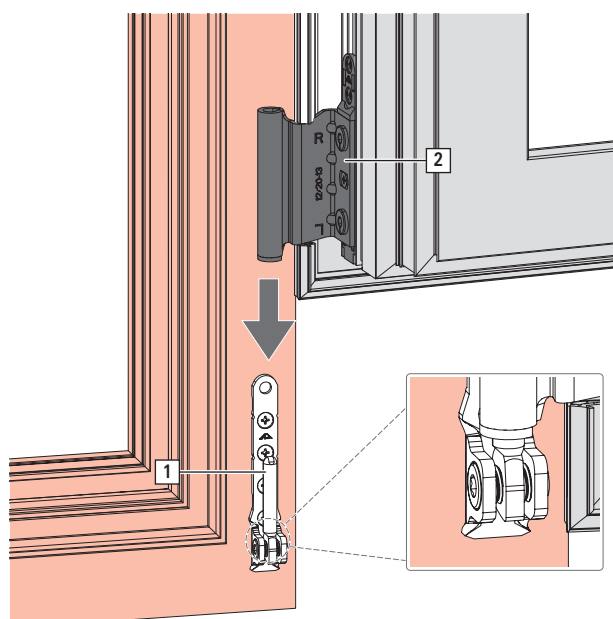
Heavy loads pose the risk of injury and property damage.

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 308

8.9.1 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].



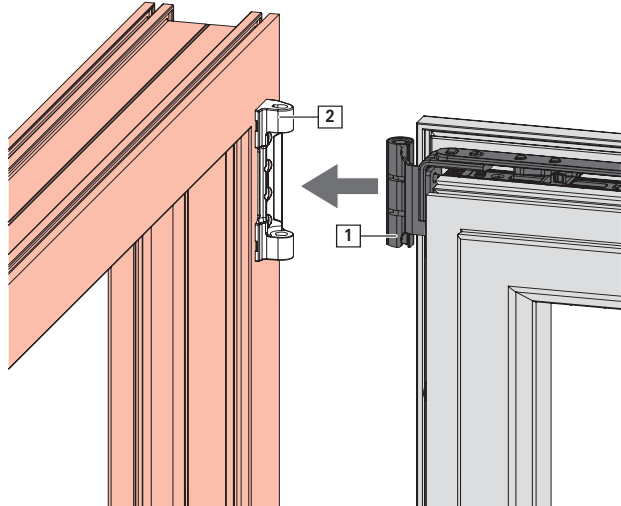
INFO

The frame grooves and sash grooves, as well as the components installed in them, must be free from construction materials.



8.9.2 Connecting the stay hinge to the stay bearing

1. Insert the sash with stay hinge [1] into the stay bearing [2].

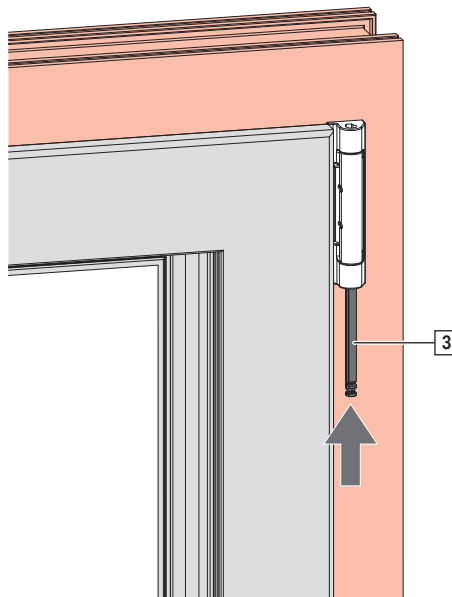


Installing the stay-bearing pin

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.

- ▶ Secure the sash to prevent it from falling, e.g. by using two people.
- ▶ Check that the pin is seated flush with the bearing.

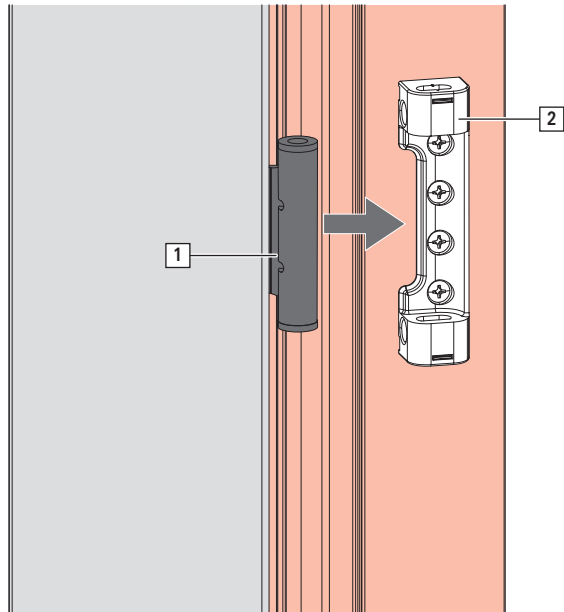
Installation

Joining the sash and frame

Arch – connecting the stay hinge to the stay bearing

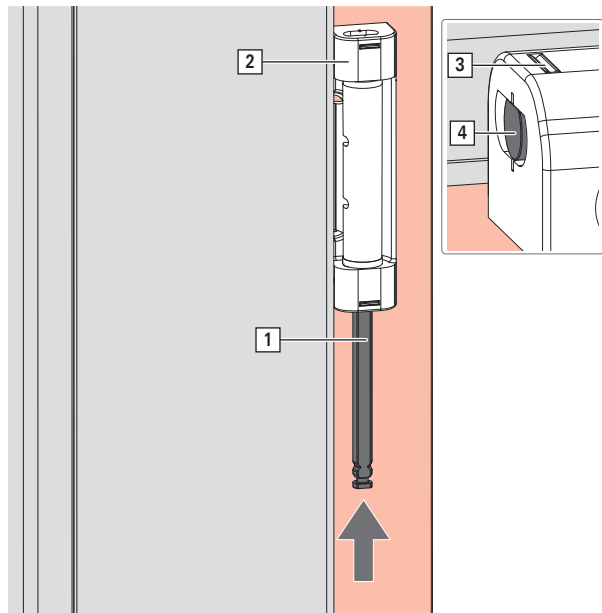
8.9.3 Arch – connecting the stay hinge to the stay bearing

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

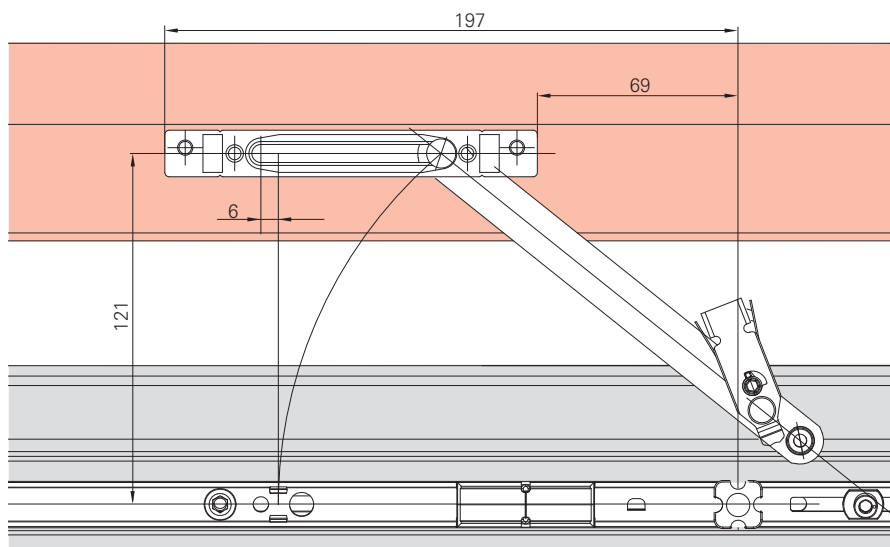
An unsecured sash may pose a risk of death!

The sash may fall if the stay-bearing pin joining the stay bearing and the stay hinge is not secure.

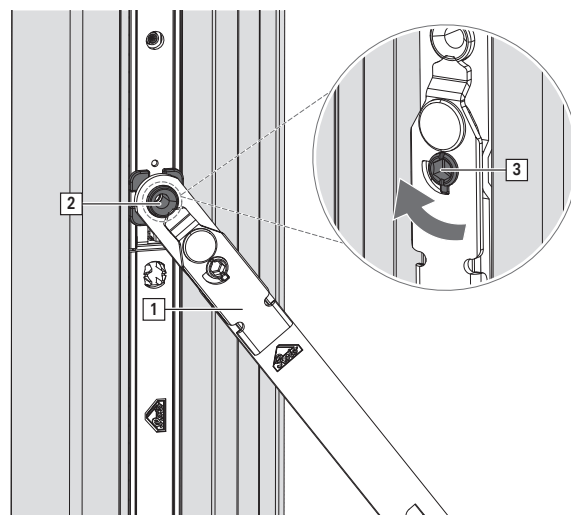
- ▶ Secure the sash to prevent it from falling, e.g. by using two people.
- ▶ Check that the pin is seated flush with the bearing.



8.9.4 Tilt stay



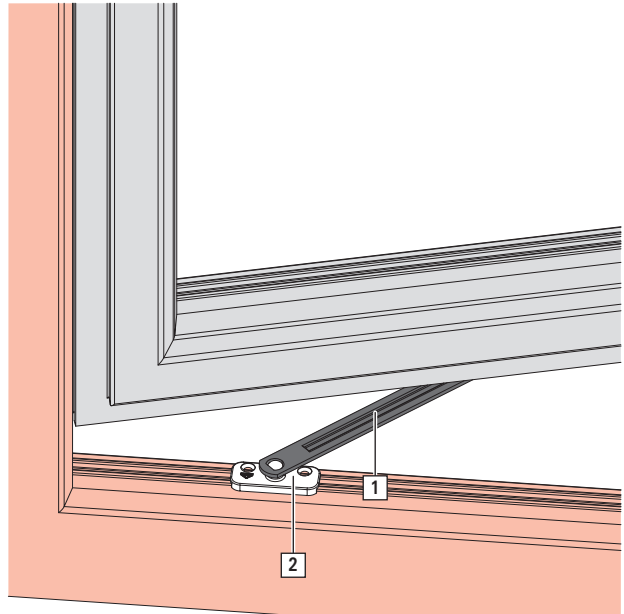
1. Mount the tilt stay frame component [1] in the sash component [2].



2. Turn the locking screw [3] 90° to lock the mounting mechanism.

8.9.5 Arrestable brake stay

1. Mount the scissor stay arm [1] in the frame component [2].



8.9.6 Cover caps

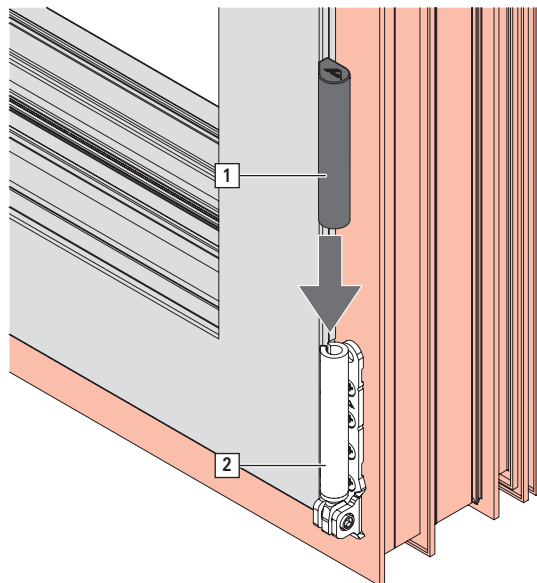
8.9.6.1 Rebate corner hinge



INFO

Carry out the necessary adjustments before installing the cover cap .

1. Slide the rebate corner hinge cover cap [1] onto the rebate corner hinge [2] as far as it will go.





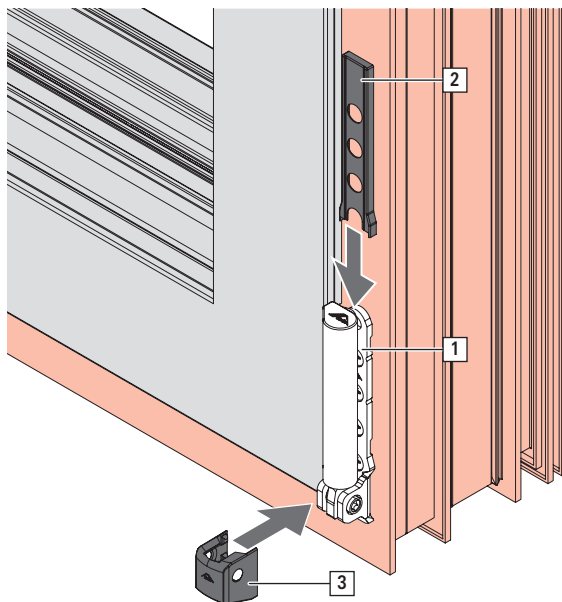
8.9.6.2 Pivot rest



INFO

Carry out the necessary adjustments before installing the cover cap .

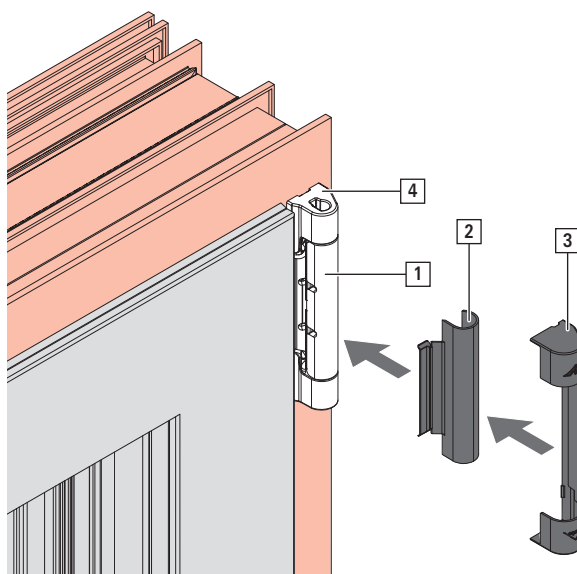
1. Attach the pivot rest cover cap [2] to the pivot rest link [1].



2. Attach the pivot rest cover [3] to the pivot rest from the front.

8.9.6.3 Stay bearing cover

1. Attach the cover cap [2] to the sash stay [1].



2. Attach the cover cap [3] to the stay bearing [4].

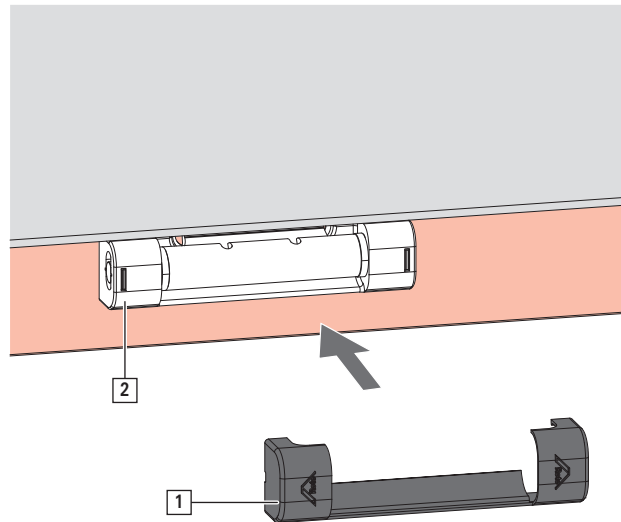
8.9.6.4 Cover for stay bearing, adjustable



INFO

Carry out the necessary adjustments before installing the cover cap .

1. Attach the cover cap [1] to the stay bearing, adjustable [2].
Shown using a Tilt-Only sash as an example.





9 Adjustment

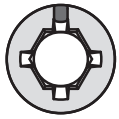
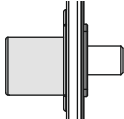
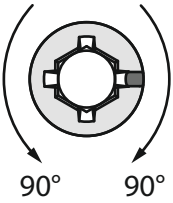
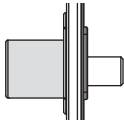


INFO

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
				
	 90° 90°	±0.8 mm		

P cam

P cam	Adjustment distance	Gasket compression adjustment [mm]	Height	Side view
				
	 90° 90°	±0.8 mm		

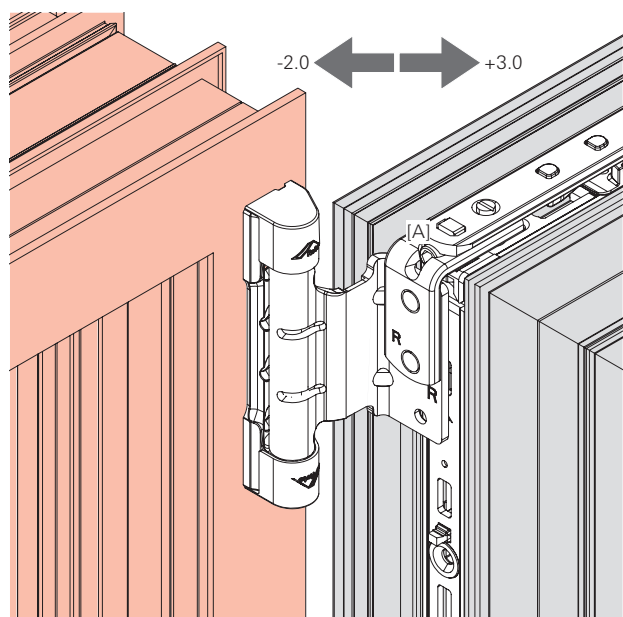
V cam

V cam	Adjustment distance	Gasket compression adjustment [mm]	Height adjustment [mm]	Side view
			+1.5 mm -0.8 mm	
	90° 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° 180°		±0.25 mm	
	270° 270°	±0.8 mm	±0.375 mm	
	360° 360°		±0.5 mm	

9.2 Sash stay

Lateral adjustment

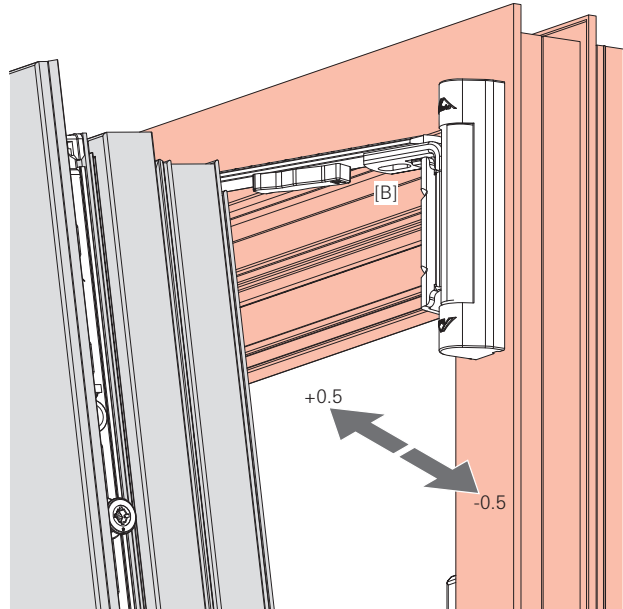
1. Open the sash.
2. Lateral adjustment -2.0 / +3.0 mm via screw [A] in the sash stay.
Tool: size 4 hex key





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.

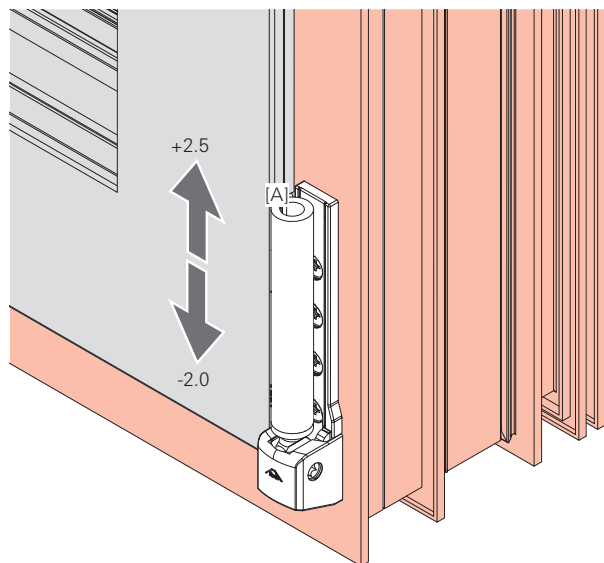


3. Gasket compression adjustment ± 0.5 mm via eccentric [B] in the sash stay.
Tool: size 4 hex key

9.3 Pivot rest and rebate corner hinge

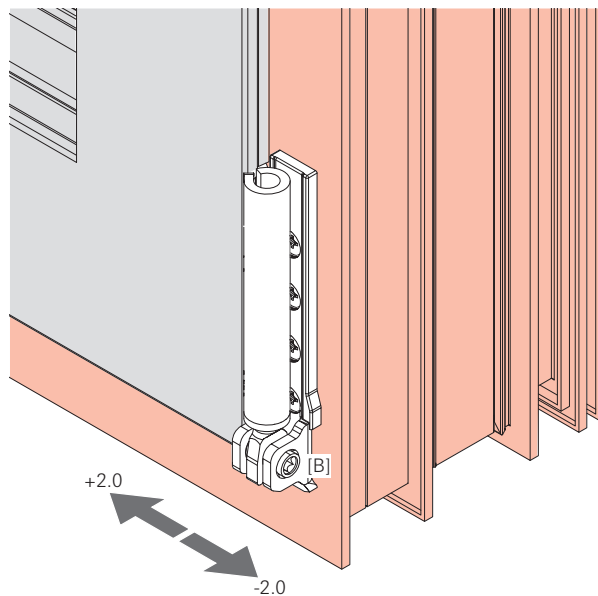
Height adjustment

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 rebate corner hinge.
Tool: size 4 hex key



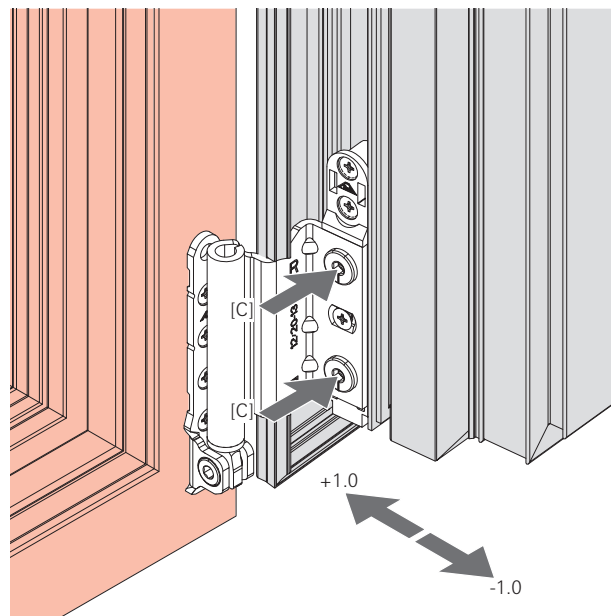
Lateral adjustment

1. Move the handle to the turn position.
2. Lateral adjustment ± 2.0 mm via screw [B] in the pivot rest.
Tool: size 4 hex key



Gasket compression adjustment

1. Open the sash.
2. Gasket compression adjustment ± 1.0 mm via eccentric [C] in the corner hinge.
Tool: size 4 hex key



9.4 Stay bearing, adjustable

Lateral adjustment

1. Open the sash.

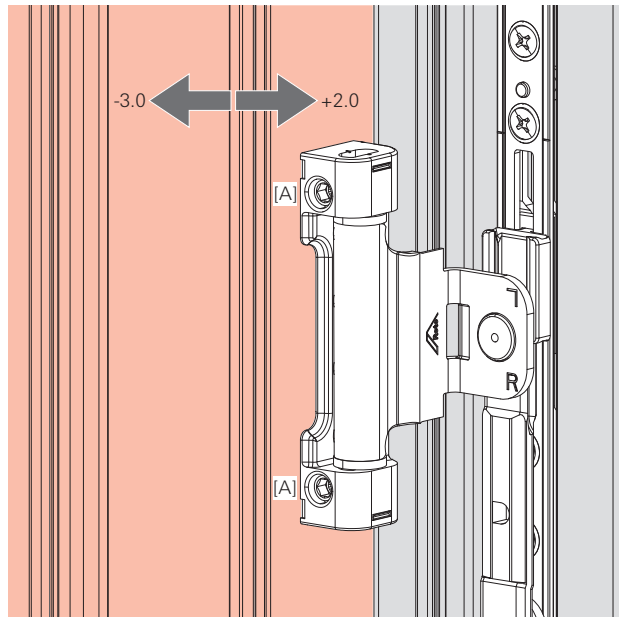


2. Lateral adjustment $-3.0 / +2.0$ mm via screws in the stay bearing [A].
Tool: hex key size 4.



INFO

Ensure that the adjustment is equal.




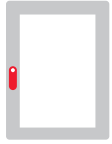

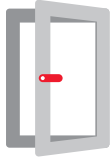

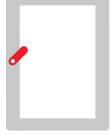

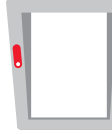
10 Operation

10.1 Operating information


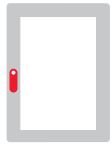

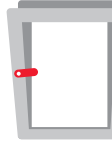

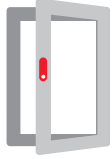
The windows and balcony doors are operated using a handle.

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


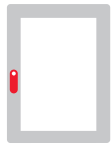

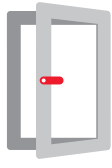

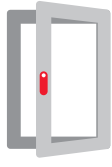

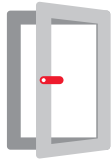

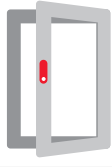
Handle position	Sash position	Meaning
		Sash in closed position.
		Sash in turned, open position.
		Sash in night ventilation position.
		Sash in tilted, open position.

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.

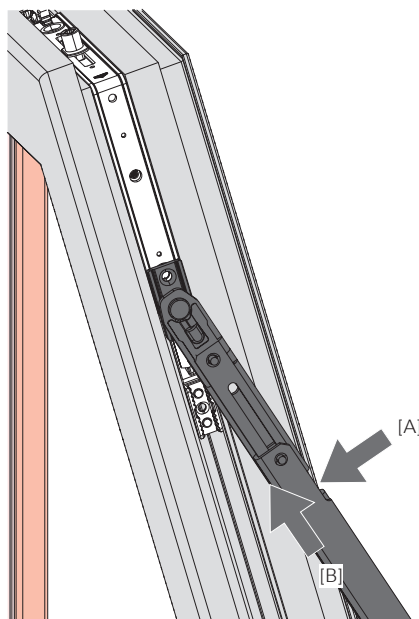


10.1.3 Handle position for arrestable brake stay

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!

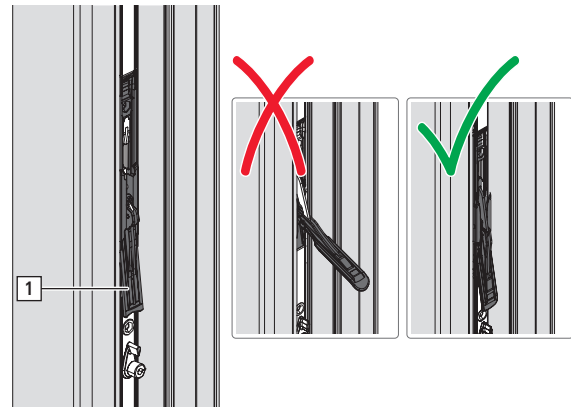
If the operating lever is not opened fully, it protrudes into the window's opening area and may cause damage to the first and second opening sashes.

- ▶ Always open the operating lever fully.
- ▶ Always close the operating lever fully.



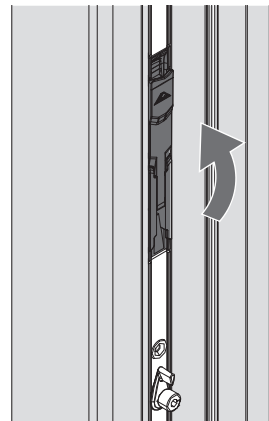
Opening

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 → <i>from page 303</i> .	<input type="checkbox"/>
	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 → <i>from page 233</i> .	■
Handle cannot be turned 180°.	Sash stay gasket compression is too strong (build-up on gasket).	Adjust the sash stay gasket compression (→ <i>from page 292</i>) or clean the gasket.	■
	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 rebate corner hinge → <i>from page 206</i> .	■
		Check the fit of the pivot rest → <i>from page 205</i> .	■
		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	<input type="checkbox"/>	→ from page 301
Cleaning		→ from page 302
Clean hardware	<input type="checkbox"/>	
Care		→ from page 302
Lubricate movable parts	<input type="checkbox"/>	
Lubricate locking points	<input type="checkbox"/>	
Performance test		→ from page 304
Check that hardware components are fitted securely	<input type="checkbox"/>	
Inspect hardware components for wear	<input type="checkbox"/>	
Check that movable parts work properly	<input type="checkbox"/>	
Check that locking points work properly	<input type="checkbox"/>	
Check ease of movement	<input checked="" type="checkbox"/>	
Repair		→ from page 304
Retighten screws	<input checked="" type="checkbox"/>	
Replace damaged components	<input checked="" type="checkbox"/>	

= 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, carbolic 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 302
- ▶ 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

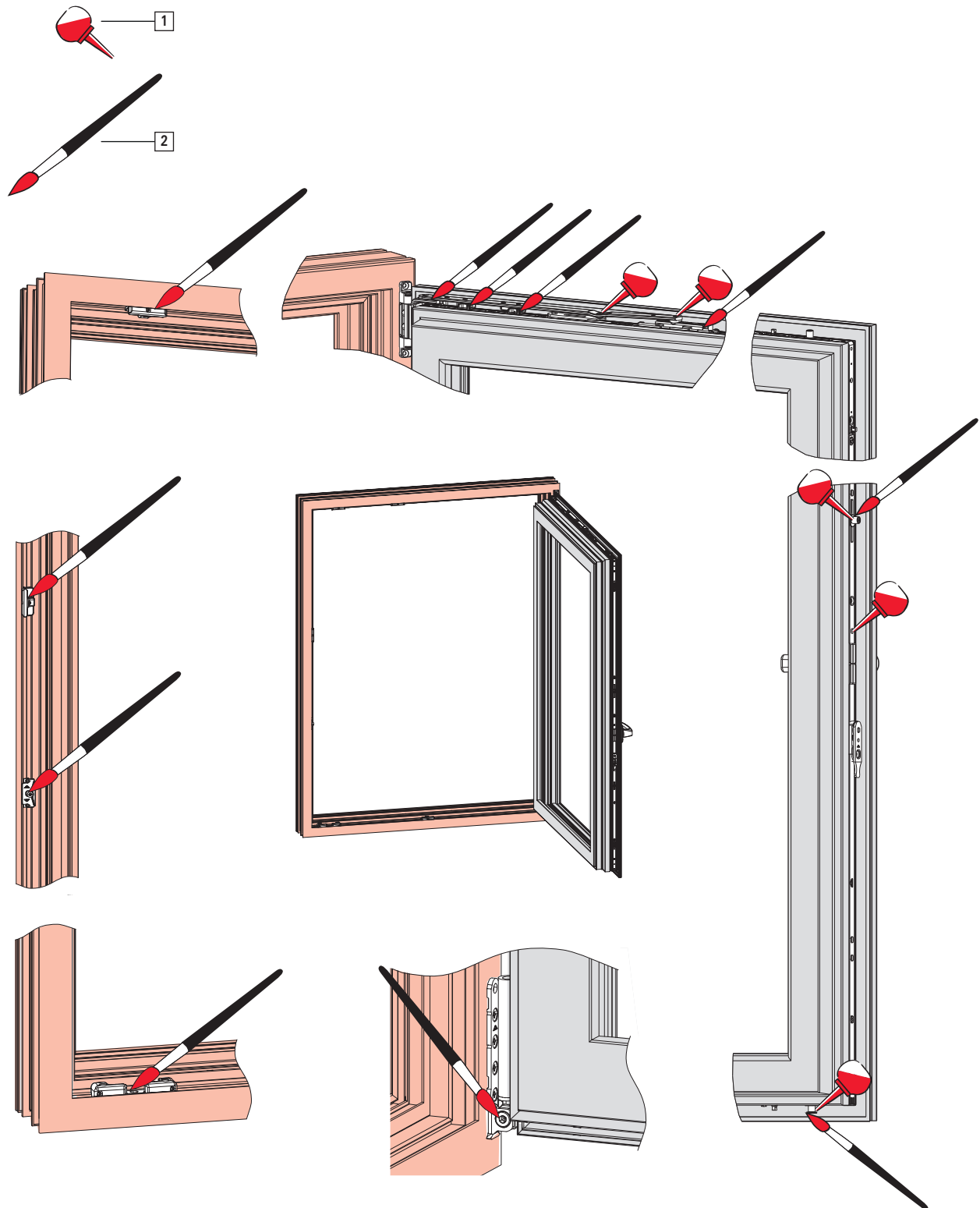


INFO

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 308

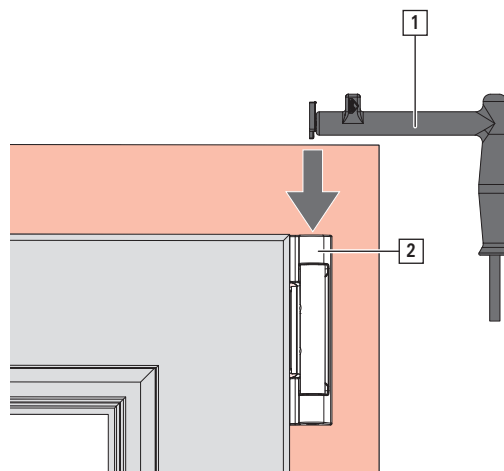
Unhinging the sash

1. Close the window.
2. Use the pulling tool [1] to gently push the stay-bearing pin [2] downwards from above.

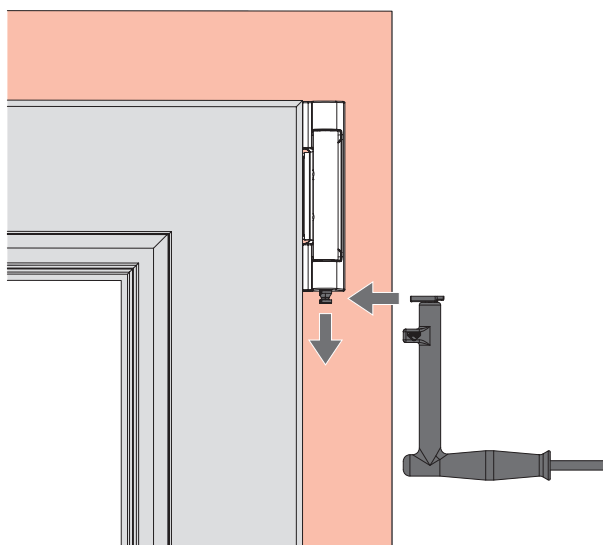


INFO

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.

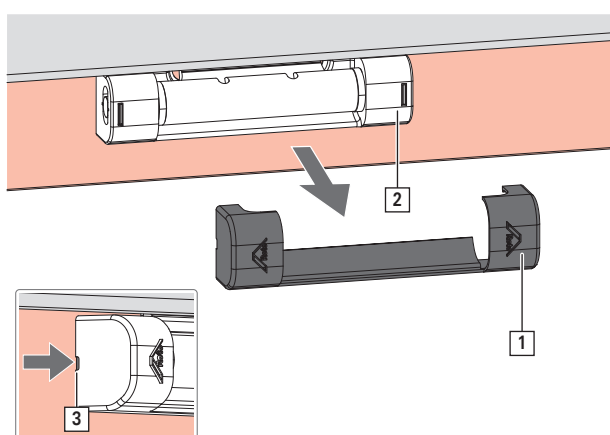
12.2 Hardware components

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 308

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.



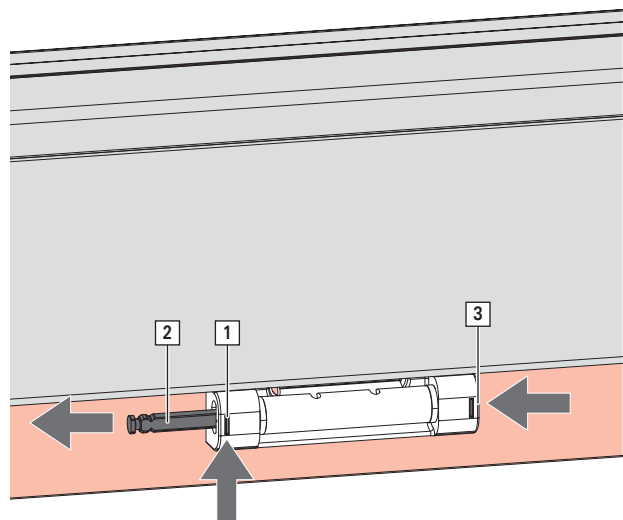
INFO

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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