Roto
Window & Door
Technology



Roto NX

Hinge side C

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

Installation, maintenance and operation instructions for timber profiles

Contact

Roto Frank
Fenster- und Türtechnologie GmbH
Wilhelm-Frank-Platz 1
70771 Leinfelden-Echterdingen
Germany
Phone +49 711 7598 0
Fax +49 711 7598 253
info@roto-frank.com
www.roto-frank.com

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1 General information

1.1 Version history

Version	Date	Changes
v0	15/05/2024	Publication

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
  - Roto NX: CTL_104
  - Roto Handles: CTL_1

The following guidelines also apply:

www.guetegemeinschaft-schloss-beschlag.de

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

Compliance with the following guidelines is additionally recommended:

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

Storing the instructions

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

Explanation of the markings

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

Marking	Meaning
	Optional / alternative components seated in the sash
	Sash / components seated in the sash
	Optional / alternative components seated in the frame
	Frame / components seated in the frame
	Drill holes, routing, 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.

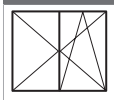
INFO

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
	Turn-Only / Tilt&Turn floating-mullion sash window
	Turn-Only window
	Tilt&Turn window

Symbol	Meaning
	Sash rebate width
	Sash rebate height
	Sash weight
	Tilt-Only window
	Timber

1.5 Product features

Symbol	Meaning
	Hardware axis
	Description
	Base
	Drill hole for supporting pin
	Supporting pin
	DIN left / right
	Corner drive, integrated
	Rebate clearance
	Rebate depth
	Sash rebate width
	Sash rebate height
	Sash weight
	Fixed handle height

Symbol	Meaning
	Centred / variable handle height
	Size
	Information
	Couplable
	Length
	Material number
	Installation type
	Lifting mishandling device
	Surface
	Item
	Profile
	Number of locking cams
	Type of locking cams
	Security class
	System
	Adjustment

1.6 Abbreviations

Abbreviation	Meaning
GC	Gasket compression
CTL	Catalogue
DIN L / R	DIN left / right
d_k	Screw head diameter
T&T	Tilt&Turn
BS	Backset
SRW	Sash rebate width

Abbreviation	Meaning
SRH	Sash rebate height
S.kg	Sash weight
HH	Handle height
BSec	Basic security
IMO	Installation instructions
Y	Yes
kg	Kilograms
KU	Couplable
m	Metres
Max.	Maximum
Min.	Minimum
mm	Millimetres
CL	Centre lock
N	No
N[1]	Newtons
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] in the context of the application diagrams

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 bal-

cony door sashes or move them into various ventilation positions. During the closing process, the gasket counter force must generally be overcome.

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

2.3.1 Misuse

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

WARNING

Misuse may pose a risk of death!

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

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

2.3.2 Usage restriction

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

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

INFO

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

2.4 Stipulated use for end users

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

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

WARNING

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

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

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



ATTENTION

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

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

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

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

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

2.4.1 Misuse

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



WARNING

Misuse may pose a risk of death!

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

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

2.5 Basic safety information

The following hazards may arise when handling the product:

2.5.1 Installation

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

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

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

Heavy loads pose a risk of injury.

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

- Note the applicable accident prevention regulations.

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

Physical overexertion may be harmful to health.

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

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

2.5.2 Use

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

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

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

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

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

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

Opening and closing 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.

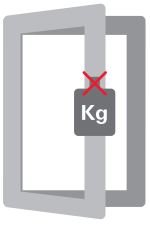
- Avoid preventing the circulation of air (e.g. due to deep reveals, curtains and unfavourable positioning of heaters or the like).
- Intensively air out the room several times per day.

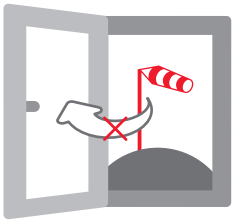
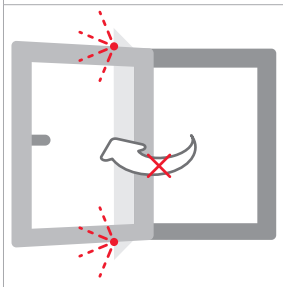
  Open all windows and balcony doors for approximately 15 minutes so that the air in the room can be completely replaced.
- Provide adequate ventilation during holiday periods as well.
- Create a ventilation plan for construction projects if necessary.

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
	**Falls from open windows and balcony doors present an immediate risk of death and pose the risk of serious injuries.** 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.** 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.
	**Placing additional loads on the sash may lead to minor injuries and property damage.** Avoid placing additional loads on the sash.

Symbol	Meaning
	**The impact of wind may lead to minor injuries and property damage.** Avoid exposing the open sash to wind. Close and lock the window and balcony door sash in windy or draughty conditions.
	**Introducing obstacles into the opening between sash and frame may result in minor injuries and property damage.** Avoid introducing obstacles into the opening between sash and frame.
	**Pressing the sash against the edge of an opening (reveal) may pose a risk of minor injuries and cause property damage** Refrain from pressing the sash against the edge of an opening (reveal).

3 Information on the product

3.1 General hardware characteristics

- Central locking system concealed in the sash rebate with single-handed operation:
  - Profiled faceplate
  - Effortless and low-wear operation thanks to adjustable locking cams guided over the surface
- Simple adjustment options for lateral and height adjustment. Additional gasket compression adjustment using:
  - 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
- Link-guided stay arm, as standard with:
  - Integrated anti-slam device (Tilt&Turn version only)
  - Safeguard against incorrect operation in the tilt position (Tilt&Turn version only)
  - Variable tilt depth restriction (80 or 140 mm, Tilt&Turn version only)
  - Turn restriction
- The centre sash is always a Turn-Only sash.
- Stay bearing and pivot rest concealed in the sash rebate.
- 3D adjustment in the stay arm / corner hinge / pivot rest.
- Lasting and reliable load relief on the pivot rest.
- Form-fitting “Clip&Fit” connection.
- With burglar inhibiting anti-jemmy device in the tilt striker as standard.
- Low-maintenance thanks to grease deposit recesses.
- Tested in accordance with DIN EN 13126-8 and EN 1191 and certified in accordance with QM 328.
- 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.
- 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 necessary) 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

Use electrogalvanised and passivated steel fenestration screws to fasten the hardware components.

The window manufacturer must ensure that the hardware components are adequately secured. Contact the screw manufacturer if necessary.

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. quality assurance association) by means of testing and ensure them on their product.

INFO

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

Further information can be found at www.guetegemeinschaft-schloss-beschlag.de.

INFO
With S.kg > 150 kg, proof in accordance with DIN EN 1191 is required.

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.

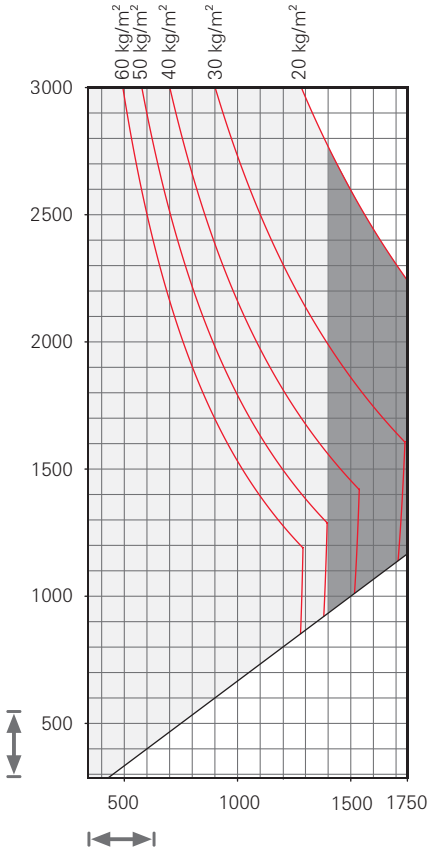
When determining the maximum permitted sash formats and sash weights, the values specified by the profile manufacturers and system owners must not be exceeded either.

3.3 Application diagrams

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

3.3.1.1 100 kg

INFO
For information on using and reading application diagrams, e.g. for interpolation (calculating missing intermediate values), see BRO_347 (Roto application diagrams).



= Impermissible application range

= Additional stay arm required

Test and calculation principles:

Tilt&Turn test in accordance with QM 328 – hardware certification programme in accordance with DIN EN 13126-8 – class H3

Deductible dimension of glass = 28 mm

(Sash) profile weight = 3.25 kg/m

Lower deductible dimensions of glass or higher profile weights require a separate assessment.

INFO
Evidence on the attachment of load-bearing components to the window system by the window manufacturer in accordance with TBDK with the following forces:

- on the stay bearing 2710 N
- on the pivot rest 2890 N

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

1 mm/m² glass thickness ≙ 2.5 kg

Glass weight max. 60 kg/m²

		Application range
⟷	Sash width	340 – 1750 mm
↕	Sash height	285 – 3000 mm
⚖	Sash weight	Max. 100 kg

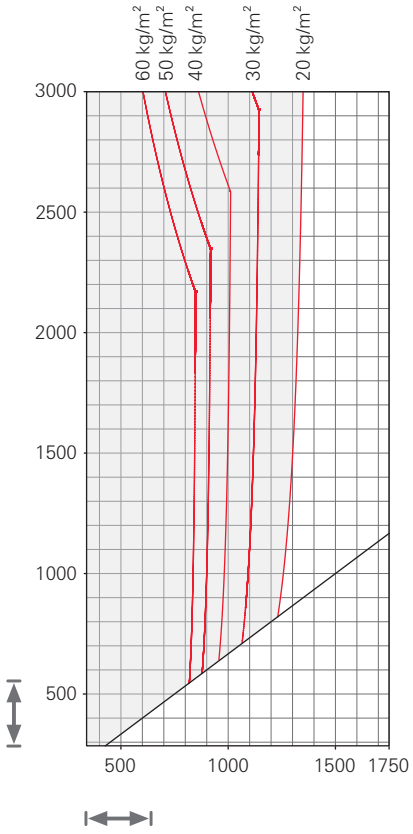
INFO
Observe directive TBDK for tractive force values as a function of the sash weights.

Further information can be found at www.guetegemeinschaft-schloss-beschlag.de.

3.3.1.2 120 kg

INFO
For information on using and reading application diagrams, e.g. for interpolation (calculating missing intermediate values), see BRO_347 (Roto application diagrams).

INFO
For balcony doors with thresholds, load transfer must be fitted at weights of 100 kg and above.



Impermissible application range

Test and calculation principles:

Tilt&Turn test in accordance with QM 328 – hardware certification programme in accordance with DIN EN 13126-8 – class H3

Deductible dimension of glass = 28 mm

(Sash) profile weight = 3.25 kg/m

Lower deductible dimensions of glass or higher profile weights require a separate assessment.

INFO
Evidence on the attachment of load-bearing components to the window system by the window manufacturer in accordance with TBDK with the following forces:

- on the stay bearing 3250 N
- on the pivot rest 3470 N

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

1 mm/m² glass thickness ≙ 2.5 kg

Glass weight max. 60 kg/m²

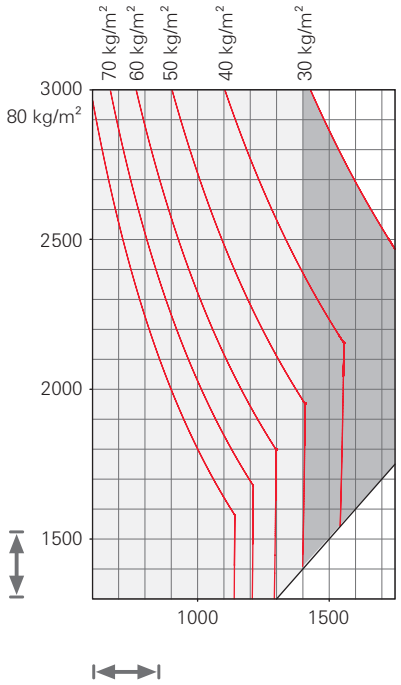
		Application range
	Sash width	340 – 1350 mm
	Sash height	285 – 3000 mm
	Sash weight	max. 120 kg

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

Further information can be found at www.guetegemeinschaft-schloss-beschlag.de.

3.3.1.3 Load transfer from 80 to 150 kg

INFO
For information on using and reading application diagrams, e.g. for interpolation (calculating missing intermediate values), see BRO_347 (Roto application diagrams).



Impermissible application range

= Additional stay arm required

Test and calculation principles:

Tilt&Turn test in accordance with QM 328 – hardware certification programme in accordance with DIN EN 13126-8 – class H3

Deductible dimension of glass = 28 mm

(Sash) profile weight = 3.25 kg/m

Lower deductible dimensions of glass or higher profile weights require a separate assessment.

INFO
Evidence on the attachment of load-bearing components to the window system by the window manufacturer in accordance with TBDK with the following forces:

- on the stay bearing 4200 N
- on the pivot rest 4340 N

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

1 mm/m² glass thickness ≙ 2.5 kg

Glass weight max. 80 kg/m²

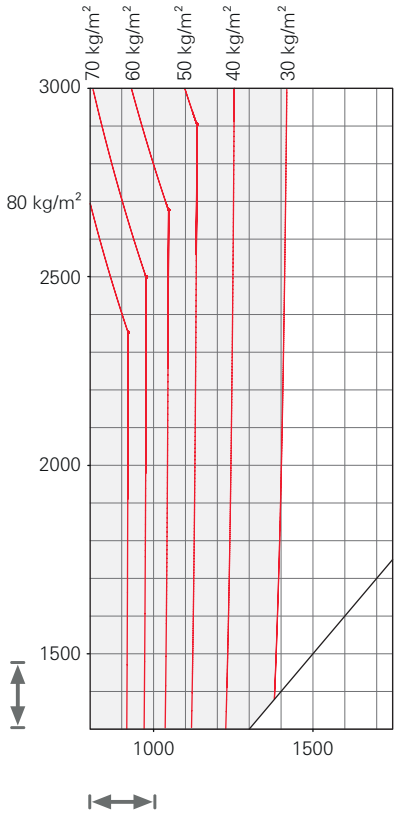
		Application range
	Sash width	601 – 1750 mm
	Sash height	1300 – 3000 mm
	Sash weight	Max. 150 kg

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

Further information can be found at www.guetegemeinschaft-schloss-beschlag.de.

3.3.1.4 Load transfer from 80 to 180 kg

INFO
For information on using and reading application diagrams, e.g. for interpolation (calculating missing intermediate values), see BRO_347 (Roto application diagrams).



= Impermissible application range

Test and calculation principles:

Tilt&Turn test in accordance with QM 328 – hardware certification programme in accordance with DIN EN 13126-8 – class H3

Deductible dimension of glass = 28 mm

(Sash) profile weight = 3.25 kg/m

Lower deductible dimensions of glass or higher profile weights require a separate assessment.

INFO
Evidence on the attachment of load-bearing components to the window system by the window manufacturer in accordance with TBDK with the following forces:

- on the stay bearing 5000 N
- on the pivot rest 5200 N

INFO
Sash weight > 150 kg

Proof of the functional durability of windows in accordance with EN 1191 is required.

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

1 mm/m² glass thickness ≙ 2.5 kg

Glass weight max. 80 kg/m²

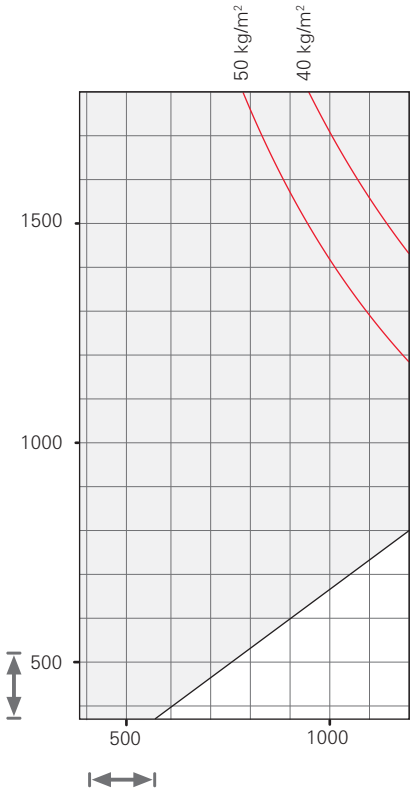
		Application range
	Sash width	801 – 1400 mm
	Sash height	1300 – 3000 mm
	Sash weight	max. 180 kg

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

Further information can be found at www.guetegemeinschaft-schloss-beschlag.de.

3.3.2 Turn-Only hardware for centre sash in a triple-sashed window

INFO
For information on using and reading application diagrams, e.g. for interpolation (calculating missing intermediate values), see BRO_347 (Roto application diagrams).



= Impermissible application range

Test and calculation principles:

Tilt&Turn test in accordance with QM 328 – hardware certification programme in accordance with DIN EN 13126-8 – class H3

Deductible dimension of glass = 28 mm

(Sash) profile weight = 3.25 kg/m

Lower deductible dimensions of glass or higher profile weights require a separate assessment.

INFO
Evidence on the attachment of load-bearing components to the window system by the window manufacturer in accordance with TBDK with the following forces:

- on the stay bearing 2200 N
- on the pivot rest 2310 N

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

1 mm/m² glass thickness ≙ 2.5 kg

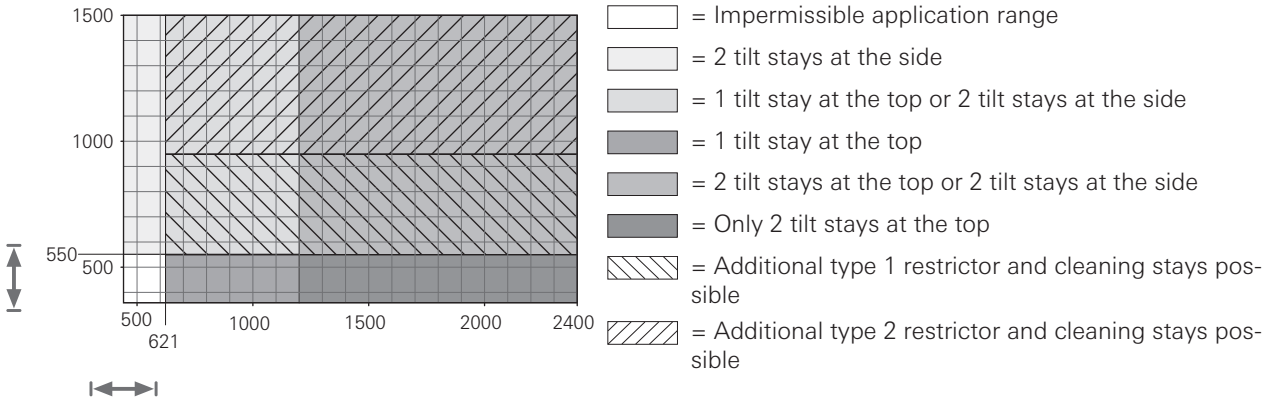
Glass weight max. 60 kg/m²

		Application range
⟷	Sash width	370 – 1200 mm
↕	Sash height	430 – 1800 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.guetegemeinschaft-schloss-beschlag.de.

3.3.3 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 ≙ 2.5 kg

Application range

Basic security		
↔	SRW	450 – 2400 mm
↕	SRH	370 – 1500 mm
	S.kg	with 1 tilt stay max. 60 kg with 2 tilt stays 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.guetegemeinschaft-schloss-beschlag.de.

INFO

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

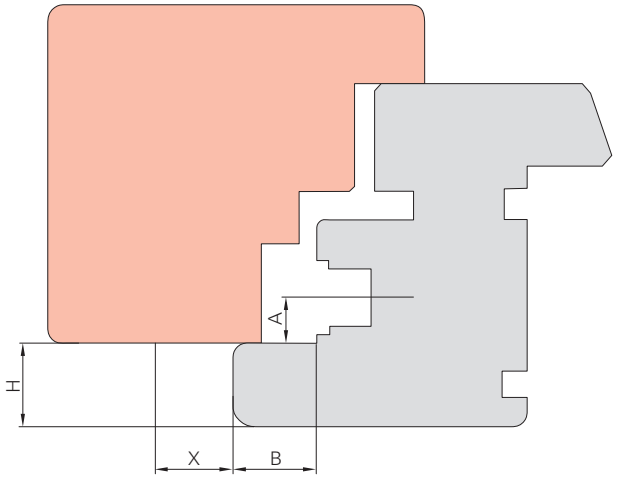
Restrictor and cleaning stays up to max. 60 kg.

Opening widths of restrictor and cleaning stays

SRH	Type	CL	Position of sash bearing from above	Position of frame bearing from above	Tilt depth with min. SRH		Tilt depth with max. SRH	
					Restrictor	Cleaning	Restrictor	Cleaning
550 – 750	1	–	105.3	335.5	151	314	136	280
751 – 950	1	200	305.3	535.5	203	420	170	350
951 – 1150	2	–	105.3	480.5	215	630	202	600
1151 – 1350	2	200	305.3	680.5	258	758	235	700
1351 – 1500	2	2x 200	505.3	880.5	300	885	275	820

3.4 Frame clearances

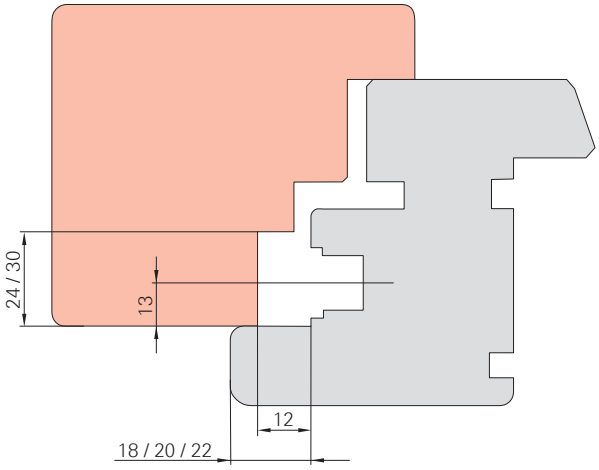
3.4.1 Frame clearances with a 90° opening angle



Axis dimension [A]	Overlap height [H]	Overlap width [B]	Frame clearance [X]
13	16	18	1.7
	20	18	5.7
	24	18	9.7
	16	20	-0.3
	20	20	3.7
	24	20	7.7
	16	22	-2.3
	20	22	1.7
	24	22	5.7

3.4.2 Dimensions

Euro-rebate system 12/18 (20/22)-13



Rebate depth: 24 / 30

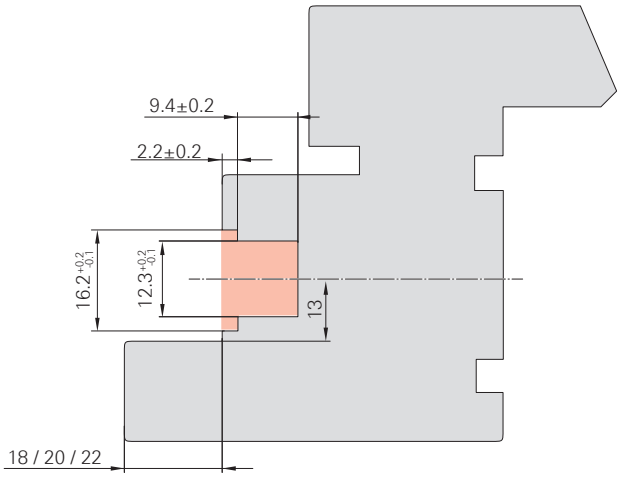
Rebate clearance, horizontal at the bottom: 11 – 14 mm

Rebate clearance at the side: 10 – 14 mm

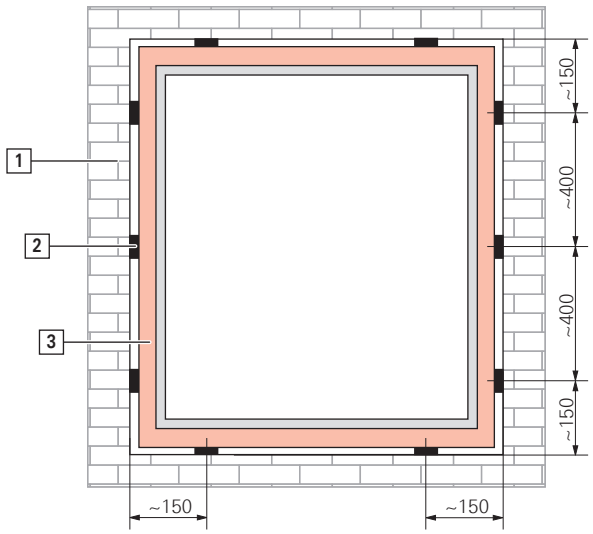
Horizontal rebate clearance at the top: 11 – 14 mm

INFO
Pivot rest preset to 12 mm rebate clearance.

Sash profile cross section



3.5 Mounting suggestion for security windows



[1] Masonry

[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 aspects.

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

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

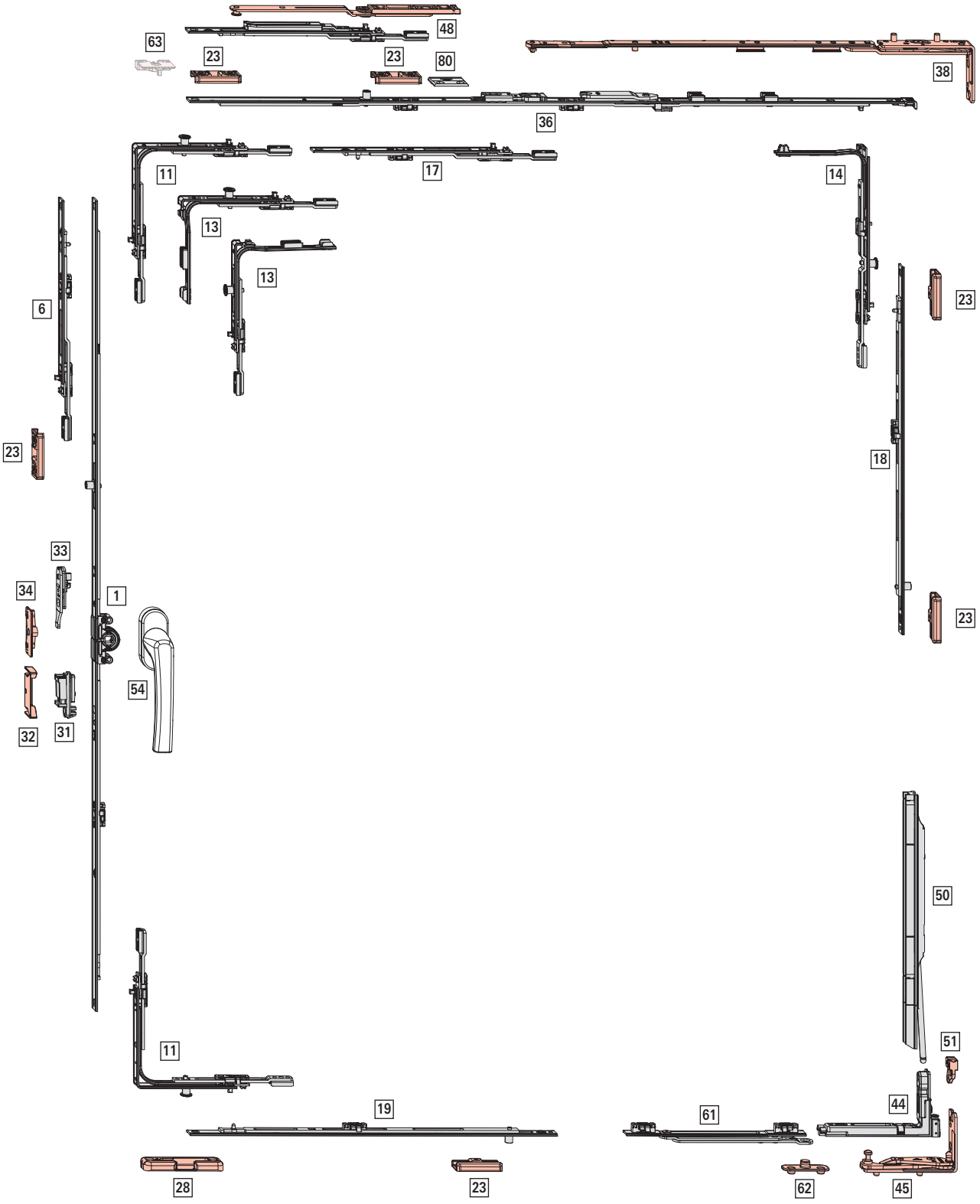
Efficient online hardware configurator for the custom configuration of individual window and door hardware components. All conventional shapes and opening types can be automatically configured quickly and easily. Individual parts lists, including application ranges and an exemplary hardware overview,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

Without load transfer	With load transfer
SRW: 340 – 1750 mm	**SRW**: 600 – 1750 mm
SRH: 285 – 3000 mm	**SRH**: 1000 – 3000 mm
S.kg: max. 120 kg	**S.kg**: max. 180 kg

INFO
SRW 340 – 450 mm from SRH 371 mm
SRH 285 – 370 mm from SRW 451 mm

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

							№
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

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

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

Size-specific combinations:

				№
2401 – 2600	200 KU	–	–	308267
2601 – 2800	400 KU	1	E	280346
2801 – 3000	600 KU	1	E	255282

[11] Standard corner drive

			№
1	E	Top	260275
1	P	Top Bottom	260277

[13] Special short corner drive

		№
1	E	260280
1	P	260282

For use with:
SRH < 371 mm
SRW < 451 mm

[14] Sash stay corner drive

		№
1	P	260286

INFO
With SRH 285 – 330 mm, crop the sash stay corner drive (to do so, extend the connecting rod fully).

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

				№
200	Y	–	–	308267

Size-specific combinations:

				№
1601 – 1750	200 KU	–	–	308267

[18] Multipart centre lock – standard, vertical

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

Size-specific combinations:

Without load transfer	With load transfer				№
–	1101 – 1150	400	1	E	255280
1101 – 1800	1151 – 1800	600	1	E	255281
1801 – 2400	1801 – 2400	600 KU	1	E	255282
		600	1	E	255281
2401 – 3000	2401 – 3000	600 KU	1	E	255282
		600 KU	1	E	255282
		600	1	E	255281

[19] Multipart centre lock – standard, horizontal

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

Size-specific combinations:

				№
1101 – 1600	600	1	E	255281
1601 – 1750	600 KU	1	E	255282
	400	1	E	255280

[23] Striker → *from page 178*

[28] Tilt striker → *from page 176*

[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 181*

[33] Lifting mishandling device sash component

	№
Lifting mishandling device sash component	795927

[34] Lifting mishandling device frame component → *from page 182*

[36] Stay guide – basic security

					№
340 – 600	250	490	–	–	2005271
601 – 800	350	690	–	–	2005272
801 – 1000	500	890	1	E	2005273
1001 – 1200	500	1090	1	E	2005274
1201 – 1400	500	1290	1	E	2005275

With S.kg > 150 kg, stay guide 500 must be mounted with fastening plate 255211.

INFO
From SRH < 600 mm, set the tilt depth to 80 mm (on windows without overlap gasket from SRH < 900 mm).

[38] Stay arm → *from page 174*

[44] Corner hinge

		№
12/18-13 12/20-13	Left	2005290
12/18-13 12/20-13	Right	2005291

[45] Pivot rest → *from page 175*

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

		№
Frame and sash component	200	255237

[50] Load transfer sash component (SRW ≥ 600 mm, SRH ≥ 1000 mm)

	№
max. 180 kg	2005293

[51] Load transfer frame component (SRW ≥ 600 mm, SRH ≥ 1000 mm)

	№
max. 180 kg	2005292

[54] Handle → CTL_1

[61] Turn restrictor 195 sash component

	№
Turn restrictor 195	2005294

INFO
Turn restrictor possible from SRW 525 mm, mandatory for SRW > 1000 mm and when load transfer is used.

Alternatively

	№
Turn restrictor 355	2037236

For use with:

SRW ≥ 600 mm

[62] Turn restrictor frame component → *from page 182*

[80] Fastening plate

	№
Fastening plate with cam	255211

Optional

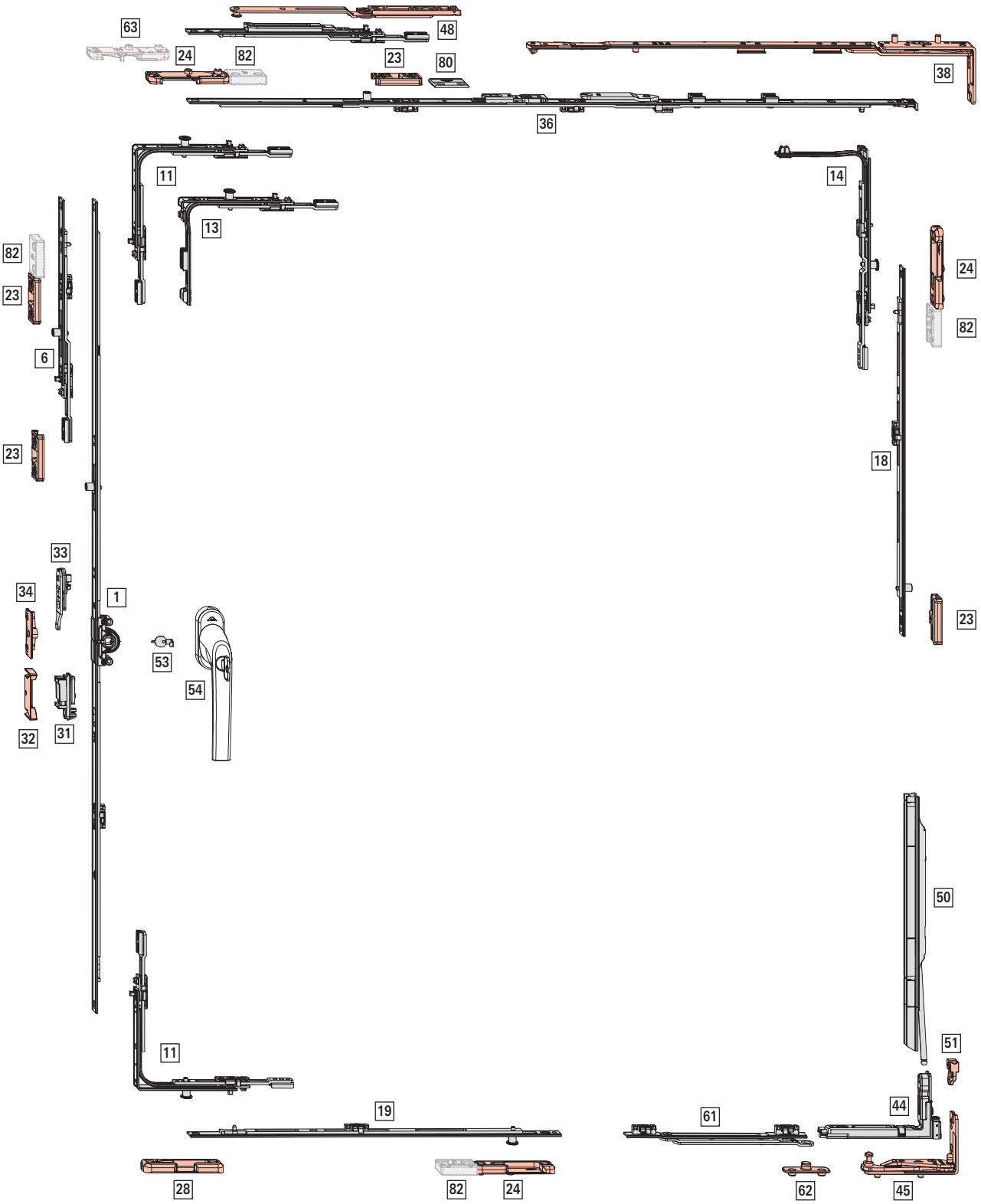
[63] Night vent, SRW ≥ 801 mm → *from page 183*

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

Arrestable brake stay → CTL_104

Sash lifter → CTL_104

4.1.1.2 RC 1 N


63
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Application range

Without load transfer	With load transfer
SRW: 450 – 1600 mm	**SRW**: 600 – 1600 mm
SRH: 285 – 2800 mm	**SRH**: 1000 – 2800 mm
S.kg: max. 120 kg	**S.kg**: max. 180 kg

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

							№
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

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

				№
200	Y	–	–	308267
400	Y	1	E	280346

Size-specific combinations:

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

[11] Standard corner drive

		№
1	P	260277

[13] Special short corner drive

		№
1	P	260282

For use with:

SRH ≤ 370 mm

[14] Sash stay corner drive

		№
1	P	260286

INFO
With SRH 285 – 330 mm, crop the sash stay corner drive (to do so, extend the connecting rod fully).

[18] Multipart centre lock – standard, vertical

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

Size-specific combinations:

Without load transfer	With load transfer				№
–	1101 – 1150	400	1	E	255280
1101 – 1800	1151 – 1800	600	1	E	255281
1801 – 2400	1801 – 2400	600 KU	1	E	255282
		600	1	E	255281
2401 – 2800	2401 – 2800	600 KU	1	E	255282
		600 KU	1	E	255282
		600	1	E	255281

[19] Multipart centre lock – security, horizontal

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

Size-specific combinations:

Without turn restrictor	With turn restrictor				№
450 – 650	650 – 850	200	1	P	255284
651 – 850	851 – 1050	400	1	P	255285
851 – 1000	1051 – 1250	600	1	P	255286
	1251 – 1450	600 KU	1	E	255282
		200	1	P	255284
	1451 – 1600	600 KU	1	E	255282
		400	1	P	255285

[23] Striker → *from page 178*

[24] Security striker → *from page 179*

[28] Tilt striker → *from page 176*

[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 181*

[33] Lifting mishandling device sash component

	№
Lifting mishandling device sash component	795927

[34] Lifting mishandling device frame component
→ *from page 182*

[36] Stay guide – basic security

					№
340 – 600	250	490	–	–	2005271
601 – 800	350	690	–	–	2005272
801 – 1000	500	890	1	E	2005273
1001 – 1200	500	1090	1	E	2005274
1201 – 1400	500	1290	1	E	2005275

With S.kg > 150 kg, stay guide 500 must be mounted with fastening plate 255211.

INFO
From SRH < 600 mm, set the tilt depth to 80 mm (on windows without overlap gasket from SRH < 900 mm).

[38] Stay arm → *from page 174*

[44] Corner hinge

		№
12/18-13 12/20-13	Left	2005290
12/18-13 12/20-13	Right	2005291

[45] Pivot rest → *from page 175*

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

		№
Frame and sash component	200	255237

[50] Load transfer sash component
(SRW ≥ 600 mm, SRH ≥ 1000 mm)

	№
max. 180 kg	2005293

[51] Load transfer frame component
(SRW ≥ 600 mm, SRH ≥ 1000 mm)

	№
max. 180 kg	2005292

[53] Drilling protection

	№
Drilling protection	797819

[54] Handle, lockable → CTL_1

[61] Turn restrictor 195 sash component

	№
Turn restrictor 195	2005294

INFO
Turn restrictor possible from SRW 525 mm, mandatory for SRW > 1000 mm and when load transfer is used.

[62] Turn restrictor frame component → *from page 182*

[80] Fastening plate

	№
Fastening plate with cam	255211

Optional

[63] Night vent, SRW ≥ 801 mm → *from page 183*

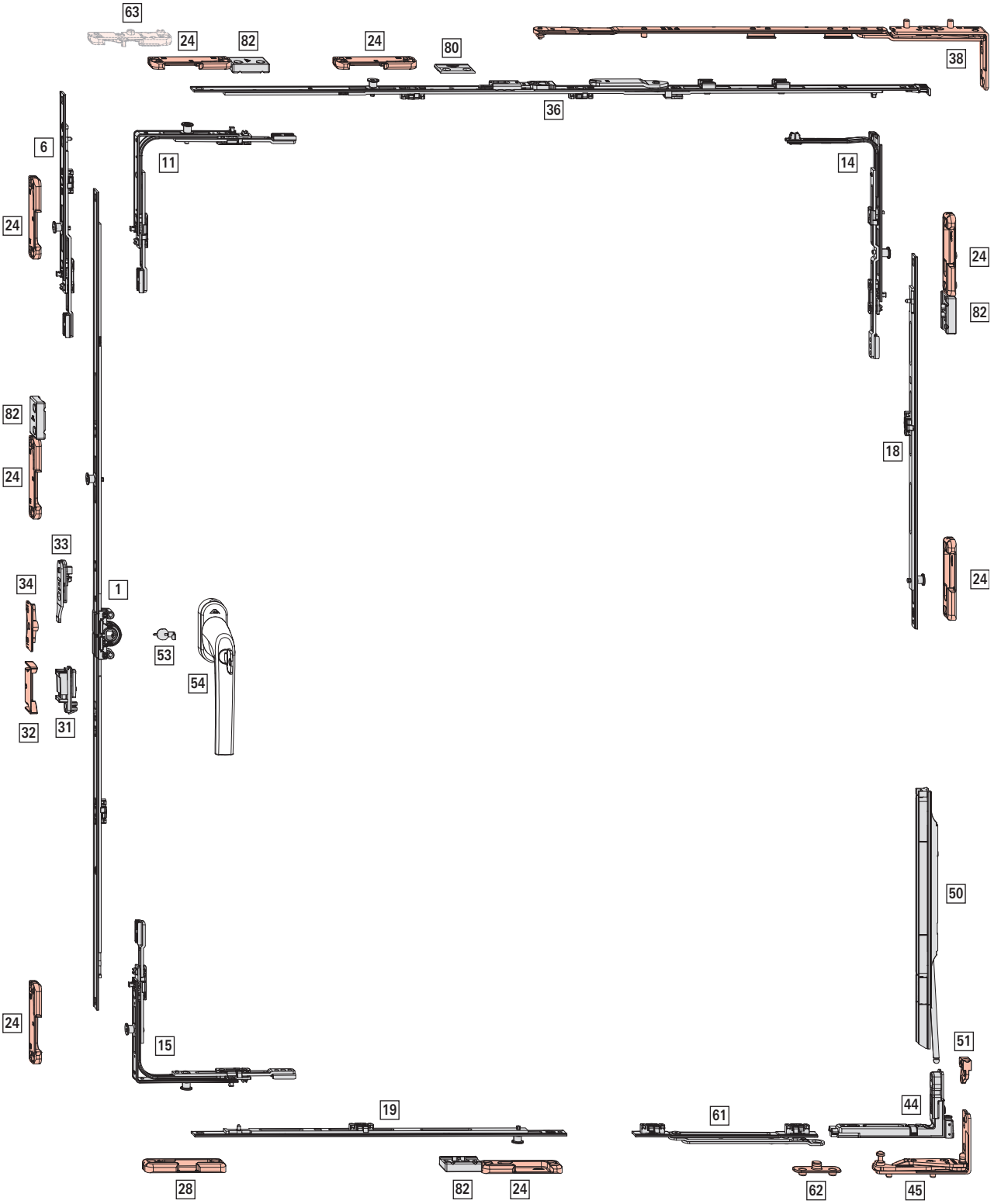
INFO
Only for use in conjunction with P or V cam.

[82] Anti-jemmy device

	№
From rebate depth 24 mm	792786
From rebate depth 26 mm	811715

Sash lifter → CTL_104

4.1.1.3 RC 2 / RC 2 N



Application range

Without load transfer	With load transfer
SRW: 450 – 1400 mm	**SRW**: 650 – 1400 mm
SRH: 601 – 2800 mm	**SRH**: 1000 – 2800 mm
S.kg: max. 120 kg	**S.kg**: max. 180 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

[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

[18] Multipart centre lock – security, 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:

Without load transfer	With load transfer				Nº
601 – 650	–	200	1	V	296853
651 – 850	1000 – 1150	400	1	V	296854
851 – 1050	1151 – 1350	600 [2]	1	V	296855
1051 – 1250	1351 – 1550	600 KU	1	V	337711
		200	1	V	296853
1251 – 1450	1551 – 1750	600 KU	1	V	337711
		400	1	V	296854
1451 – 1650	1751 – 1950	600 KU	1	V	337711
		600 [3]	1	V	296855
1651 – 1850	1951 – 2150	600 KU	1	V	337711
		600 KU	1	V	337711
		200	1	V	296853
1851 – 2050	2151 – 2350	600 KU	1	V	337711
		600 KU	1	V	337711
		400	1	V	296854
2051 – 2250	2351 – 2550	600 KU	1	V	337711
		600 KU	1	V	337711
		600 [4]	1	V	296855
2251 – 2450	2551 – 2750	600 KU	1	V	337711
		600 KU	1	V	337711
		600 KU	1	V	337711
		200	1	V	296853
2451 – 2650	2751 – 2800	600 KU	1	V	337711
		600 KU	1	V	337711
		600 KU	1	V	337711
		400	1	V	296854
2651 – 2800	–	600 KU	1	V	337711
		600 KU	1	V	337711
		600 KU	1	V	337711
		600 [5]	1	V	296855

[19] Multipart centre lock – security, horizontal

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

Size-specific combinations:

Without turn restrictor	With turn restrictor				Nº
450 – 650	650 – 850	200	1	V	296853
651 – 850	851 – 1050	400	1	V	296854
851 – 1000	1051 – 1250	600	1	V	296855
	1251 – 1400	600 KU	1	V	337711
		200	1	V	296853

[2] Without load transfer: crop CL by 15 mm up to SRH 861

[3] Without load transfer: crop CL by 15 mm up to SRH 1461

[4] Without load transfer: crop CL by 15 mm up to SRH 2061

[5] Without load transfer: crop CL by 15 mm up to SRH 2661

[24] Security striker → *from page 179*

[28] Tilt striker → *from page 176*

[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 181*

[33] Lifting mishandling device sash component

	№
Lifting mishandling device sash component	795927

[34] Lifting mishandling device frame component → *from page 182*

[36] Stay guide – security

					№
340 – 600	250	490	–	–	2005271
601 – 800	350	690	–	–	2005272
801 – 1000	500	890	1	V	2005276
1001 – 1200	500	1090	1	V	2005277
1201 – 1400	500	1290	1	V	2005278

With S.kg > 150 kg, stay guide 500 must be mounted with fastening plate 255211.

[38] Stay arm → *from page 174*

[44] Corner hinge

		№
12/18-13 12/20-13	Left	2005290
12/18-13 12/20-13	Right	2005291

[45] Pivot rest → *from page 175*

[50] Load transfer sash component (SRW ≥ 650 mm, SRH ≥ 1000 mm)

	№
max. 180 kg	2005293

[51] Load transfer frame component (SRW ≥ 650 mm, SRH ≥ 1000 mm)

	№
max. 180 kg	2005292

[53] Drilling protection

	№
Drilling protection	797819

[54] Handle, lockable → CTL_1

[61] Turn restrictor 195 sash component

	№
Turn restrictor 195	2005294

INFO
Turn restrictor possible from SRW 650 mm, mandatory for SRW > 1000 mm and when load transfer is used.

[62] Turn restrictor frame component → *from page 182*

[80] Fastening plate

	№
Fastening plate with cam	255211

[82] Anti-jemmy device

	№
From rebate depth 24 mm	792786
From rebate depth 26 mm	811715

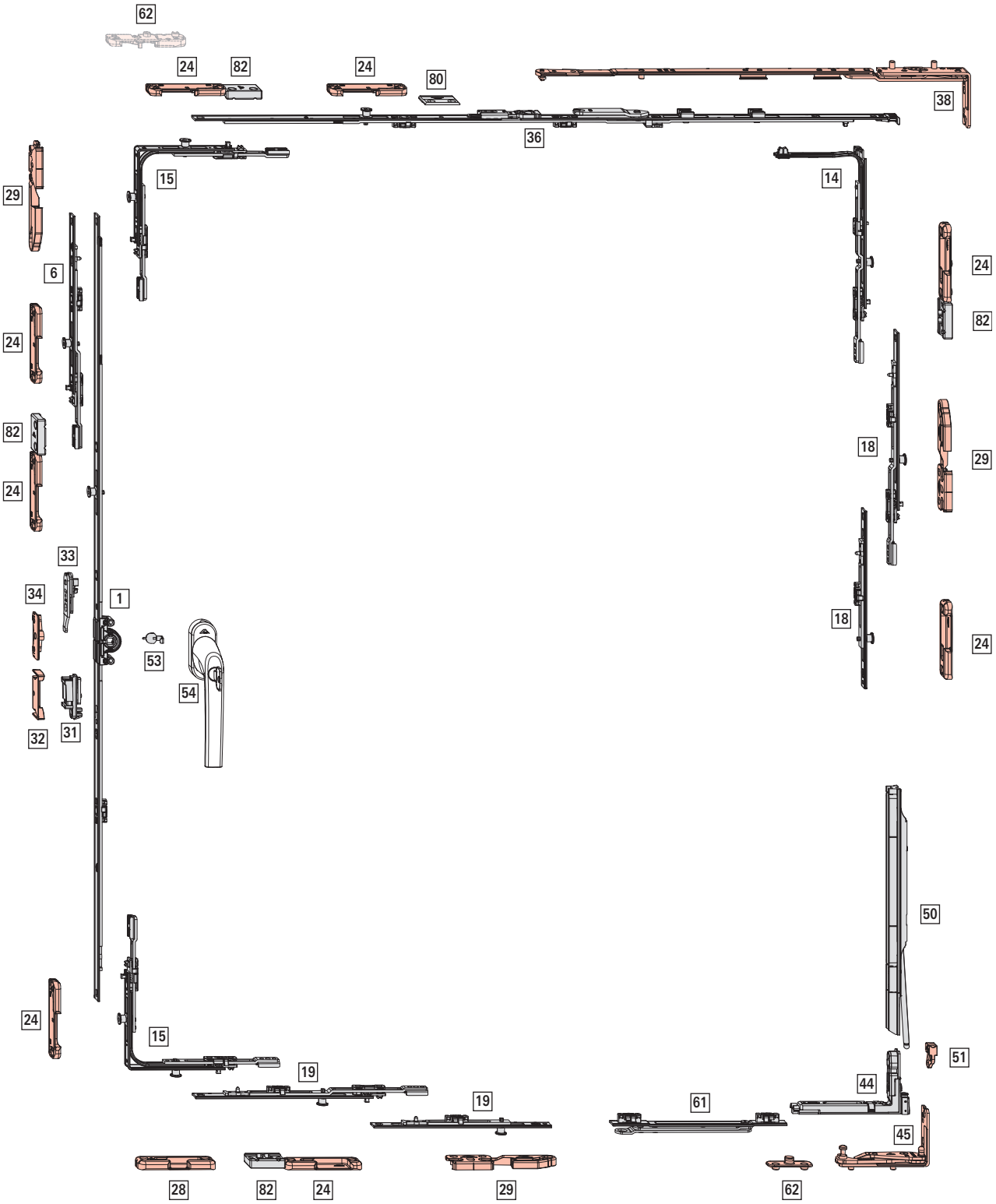
Optional

[63] Night vent, SRW ≥ 801 mm → *from page 183*

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

Sash lifter → CTL_104

4.1.1.4 TiltSafe RC 2 / RC 2 N



Application range

Without load transfer	With load transfer
SRW: 450 – 1400 mm	**SRW**: 650 – 1400 mm
SRH: 601 – 2800 mm	**SRH**: 1000 – 2800 mm
S.kg: max. 120 kg	**S.kg**: max. 180 kg

INFO
Only for hardware axis 13 and rebate depth ≥ 30 mm.

[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

[14] Sash stay corner drive

		№
1	V	260284

[15] Corner drive, standard (security)

		№
2	V	260274

[18] Multipart centre lock – security, vertical

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

Size-specific combinations:

Without load transfer	With load transfer				№
601 – 650	–	200	1	V	296853
651 – 850	1000 – 1150	200 KU	1	V	337708
		200	1	V	296853
851 – 1050	1151 – 1350	200 KU	1	V	337708
		400	1	V	296854
1051 – 1250	1351 – 1550	200 KU	1	V	337708
		600 [6]	1	V	296855
1251 – 1450	1551 – 1750	200 KU	1	V	337708
		600 KU	1	V	337711
		200	1	V	296853
1451 – 1650	1751 – 1950	200 KU	1	V	337708
		600 KU	1	V	337711
		400	1	V	296854
1651 – 1850	1951 – 2150	200 KU	1	V	337708
		600 KU	1	V	337711
		600 [7]	1	V	296855
1851 – 2050	2151 – 2350	200 KU	1	V	337708
		600 KU	1	V	337711
		600 KU	1	V	337711
		200	1	V	296853
2051 – 2250	2351 – 2550	200 KU	1	V	337708
		600 KU	1	V	337711
		600 KU	1	V	337711
		400	1	V	296854
2251 – 2450	2551 – 2750	200 KU	1	V	337708
		600 KU	1	V	337711
		600 KU	1	V	337711
		600 [8]	1	V	296855
2451 – 2650	2751 – 2800	200 KU	1	V	337708
		600 KU	1	V	337711
		600 KU	1	V	337711
		600 KU	1	V	337711
		200	1	V	296853
2651 – 2800	–	200 KU	1	V	337708
		600 KU	1	V	337711
		600 KU	1	V	337711
		600 KU	1	V	337711
		400	1	V	296854

[19] Multipart centre lock – security, horizontal

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

[6] Without load transfer: crop CL by 15 mm up to SRH 1061

[7] Without load transfer: crop CL by 15 mm up to SRH 1661

[8] Without load transfer: crop CL by 15 mm up to SRH 2261

Size-specific combinations:

Without turn restrictor	With turn restrictor				№
450 – 650	650 – 850	200	1	V	296853
651 – 850	851 – 1050	200 KU	1	V	337708
		200	1	V	296853
851 – 1000	1051 – 1250	200 KU	1	V	337708
		200 KU	1	V	337708
		200	1	V	296853
	1251 – 1400	200 KU	1	V	337708
		400 KU	1	V	337710
		200	1	V	296853

[24] Security striker → *from page 179*

[28] Tilt striker → *from page 176*

[29] Security striker for tilt ventilation → *from page 180*

[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 181*

[33] Lifting mishandling device sash component

	№
Lifting mishandling device sash component	795927

[34] Lifting mishandling device frame component → *from page 182*

[36] Stay guide – security

					№
340 – 600	250	490	–	–	2005271
601 – 800	350	690	–	–	2005272
801 – 1000	500	890	1	V	2005276
1001 – 1200	500	1090	1	V	2005277
1201 – 1400	500	1290	1	V	2005278

With S.kg > 150 kg, stay guide 500 must be mounted with fastening plate 255211.

[38] Stay arm → *from page 174*

[44] Corner hinge

		№
12/18-13 12/20-13	Left	2005290
12/18-13 12/20-13	Right	2005291

[45] Pivot rest → *from page 175*

[50] Load transfer sash component (SRW ≥ 650 mm, SRH ≥ 1000 mm)

	№
max. 180 kg	2005293

[51] Load transfer frame component (SRW ≥ 650 mm, SRH ≥ 1000 mm)

	№
max. 180 kg	2005292

[53] Drilling protection

	№
Drilling protection	797819

[54] Handle, lockable → CTL_1

[61] Turn restrictor 195 sash component

	№
Turn restrictor 195	2005294

INFO
Turn restrictor possible from SRW 650 mm, mandatory for SRW > 1000 mm and when load transfer is used.

[62] Turn restrictor frame component → *from page 182*

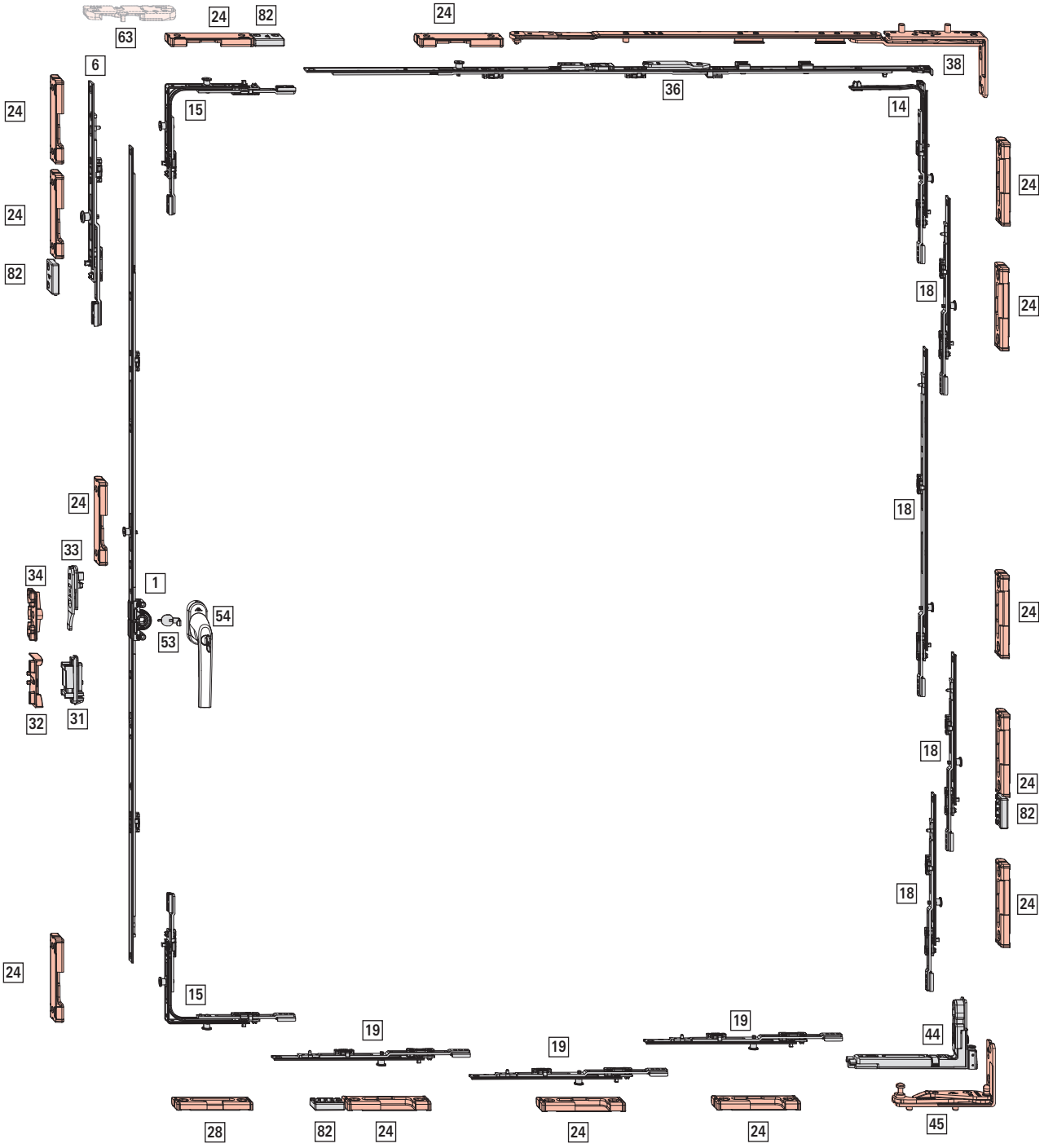
[80] Fastening plate

	№
Fastening plate with cam	255211

[82] Anti-jemmy device

	№
From rebate depth 24 mm	792786
From rebate depth 26 mm	811715

4.1.1.5 RC 3


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Application range

SRW: 490 – 1000 mm

SRH: 601 – 2800 mm

S.kg: max. 120 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

[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	Y	1	V	337708
400	Y	1	V	337710

Size-specific combinations:

				Nº
601 – 800	200 KU	1	V	337708
801 – 1000	200 KU	1	V	337708
	200 KU	1	V	337708
1001 – 1200	200 KU	1	V	337708
	200 KU	1	V	337708
	200 KU	1	V	337708
1201 – 1400	200 KU	1	V	337708
	400 KU	1	V	337710
	200 KU	1	V	337708
1401 – 1600	200 KU	1	V	337708
	400 KU	1	V	337710
	200 KU	1	V	337708
	200 KU	1	V	337708
1601 – 1800	200 KU	1	V	337708
	400 KU	1	V	337710
	400 KU	1	V	337710
	200 KU	1	V	337708
1801 – 2000	200 KU	1	V	337708
	400 KU	1	V	337710
	400 KU	1	V	337710
	200 KU	1	V	337708
	200 KU	1	V	337708
2001 – 2200	200 KU	1	V	337708
	400 KU	1	V	337710
	400 KU	1	V	337710
	400 KU	1	V	337710
	200 KU	1	V	337708
2201 – 2400	200 KU	1	V	337708
	400 KU	1	V	337710
	400 KU	1	V	337710
	400 KU	1	V	337710
	200 KU	1	V	337708
	200 KU	1	V	337708
2401 – 2600	200 KU	1	V	337708
	400 KU	1	V	337710
	400 KU	1	V	337710
	400 KU	1	V	337710
	400 KU	1	V	337710
	200 KU	1	V	337708
2601 – 2800	200 KU	1	V	337708
	400 KU	1	V	337710
	400 KU	1	V	337710
	400 KU	1	V	337710
	400 KU	1	V	337710
	200 KU	1	V	337708
	200 KU	1	V	337708

[19] Multipart centre lock – security, horizontal

				№
200	Y	1	V	337708

Size-specific combinations:

				№
490 – 690	200 KU [9]	1	V	337708
691 – 890	200 KU	1	V	337708
	200 KU[10]	1	V	337708
891 – 1000	200 KU	1	V	337708
	200 KU	1	V	337708
	200 KU[11]	1	V	337708

[24] Security striker

[28] Tilt striker

[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 181*

[33] Lifting mishandling device sash component

	№
Lifting mishandling device sash component	795927

[34] Lifting mishandling device frame component → *from page 182*

[36] Stay guide – security

					№
340 – 600	250	490	–	–	2005271
601 – 800	350	690	–	–	2005272
801 – 1000	500	890	1	V	2005276

[38] Stay arm → *from page 174*

[44] Corner hinge

		№
12/18-13 12/20-13	Left	2005290
12/18-13 12/20-13	Right	2005291

[45] Pivot rest → *from page 175*

[53] Drilling protection

	№
Drilling protection	797819

[54] Handle, lockable → CTL_1

[82] Anti-jemmy device

	№
From rebate depth 24 mm	792786
From rebate depth 26 mm	811715

Optional

[63] Night vent, SRW ≥ 801 mm → *from page 183*

Sash lifter → CTL_104

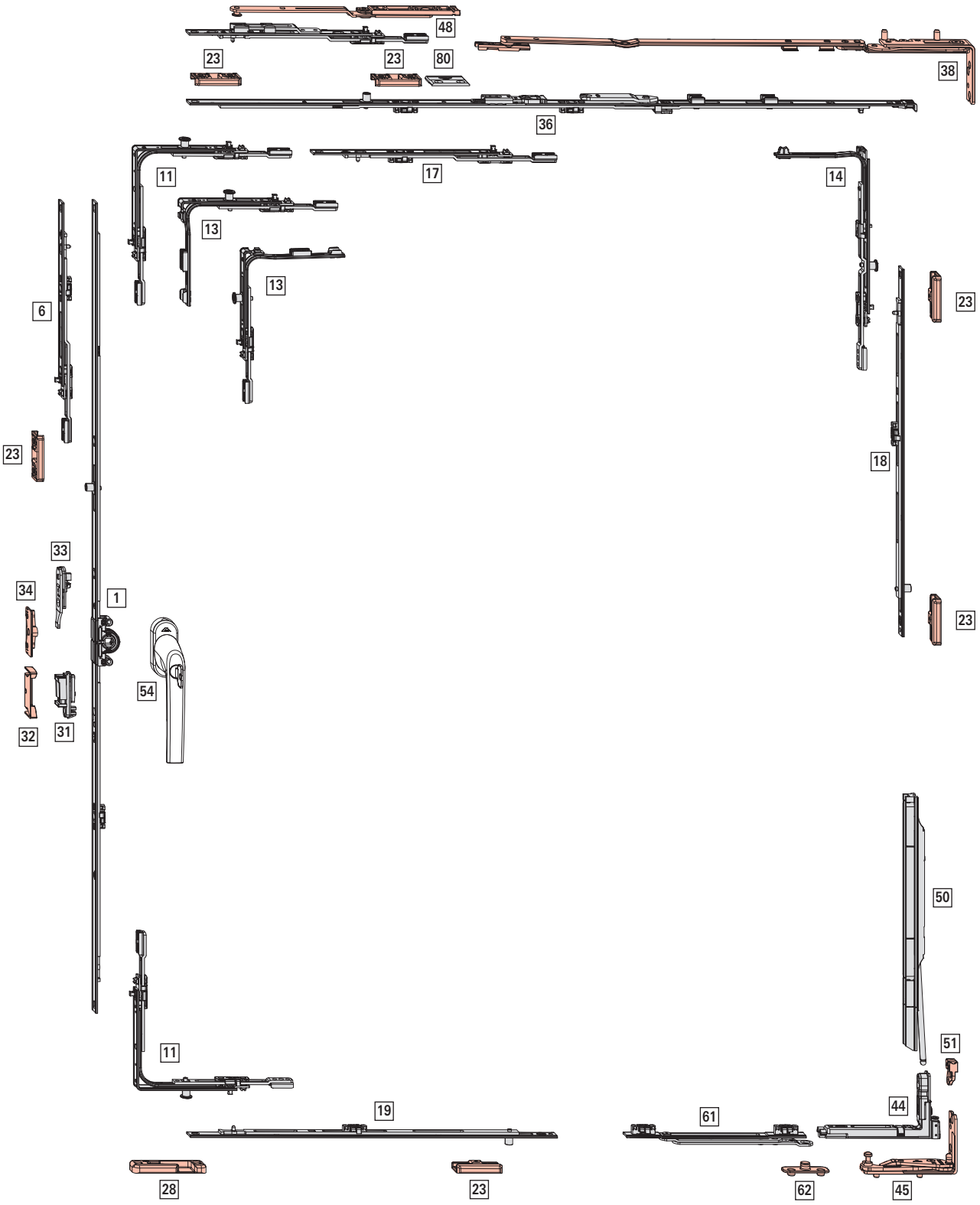
[9] Crop up to SRW 510 (max. 20 mm)

[10] Crop up to SRW 710 (max. 20 mm)

[11] Crop up to SRW 910 (max. 20 mm)

4.1.2 Tilt&Turn / TiltFirst hardware

4.1.2.1 Basic security



Application range

Without load transfer	With load transfer
SRW: 340 – 1750 mm	**SRW**: 600 – 1750 mm
SRH: 285 – 3000 mm	**SRH**: 1000 – 3000 mm
S.kg: max. 120 kg	**S.kg**: max. 180 kg

INFO
SRW 340 – 450 mm from SRH 371 mm
SRH 285 – 370 mm from SRW 451 mm

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

							№
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

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

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

Size-specific combinations:

				№
2401 – 2600	200 KU	–	–	308267
2601 – 2800	400 KU	1	E	280346
2801 – 3000	600 KU	1	E	255282

[11] Standard corner drive

			№
1	E	Top	260275
1	P	Top Bottom	260277

[13] Special short corner drive

			№
1	E	Top	260280
1	P	Top Bottom	260282

For use with:
SRH < 371 mm
SRW < 451 mm

[14] Sash stay corner drive

		№
1	P	260286

INFO
With SRH 285 – 330 mm, crop the sash stay corner drive (to do so, extend the connecting rod fully).

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

				№
200	Y	–	–	308267

Size-specific combinations:

				№
1601 – 1750	200 KU	–	–	308267

[18] Multipart centre lock – standard, vertical

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

Size-specific combinations:

Without load transfer	With load transfer				№
–	1101 – 1150	400	1	E	255280
1101 – 1800	1151 – 1800	600	1	E	255281
1801 – 2400	1801 – 2400	600 KU	1	E	255282
		600	1	E	255281
2401 – 3000	2401 – 3000	600 KU	1	E	255282
		600 KU	1	E	255282
		600	1	E	255281

[19] Multipart centre lock – standard, horizontal

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

Size-specific combinations:

				№
1101 – 1600	600	1	E	255281
1601 – 1750	600 KU	1	E	255282
	400	1	E	255280

[23] Striker → *from page 178*

[28] Tilt striker TiltFirst → *from page 176*

[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 181*

[33] Lifting mishandling device sash component

	№
Lifting mishandling device sash component	795927

[34] Lifting mishandling device frame component → *from page 182*

[36] Stay guide – basic security

					№
340 – 600	250	490	–	–	2005271
601 – 800	350	690	–	–	2005272
801 – 1000	500	890	1	E	2005273
1001 – 1200	500	1090	1	E	2005274
1201 – 1400	500	1290	1	E	2005275

With S.kg > 150 kg, stay guide 500 must be mounted with fastening plate 255211.

INFO
From SRH < 600 mm, set the tilt depth to 80 mm (on windows without overlap gasket from SRH < 900 mm).

[38] Stay arm TiltFirst → *from page 174*

[44] Corner hinge

		№
12/18-13 12/20-13	Left	2005290
12/18-13 12/20-13	Right	2005291

[45] Pivot rest → *from page 175*

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

	№
Frame and sash component	292022

[50] Load transfer sash component (SRW ≥ 600 mm, SRH ≥ 1000 mm)

	№
max. 180 kg	2005293

[51] Load transfer frame component (SRW ≥ 600 mm, SRH ≥ 1000 mm)

	№
max. 180 kg	2005292

[54] Handle → CTL_1

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

[61] Turn restrictor 195 sash component

	№
Turn restrictor 195	2005294

INFO
Turn restrictor possible from SRW 525 mm, mandatory for SRW > 1000 mm and when load transfer is used.

Alternatively

	№
Turn restrictor 355	2037236

For use with:

SRW ≥ 600 mm

[62] Turn restrictor frame component → *from page 182*

[80] Fastening plate

	№
Fastening plate with cam	255211

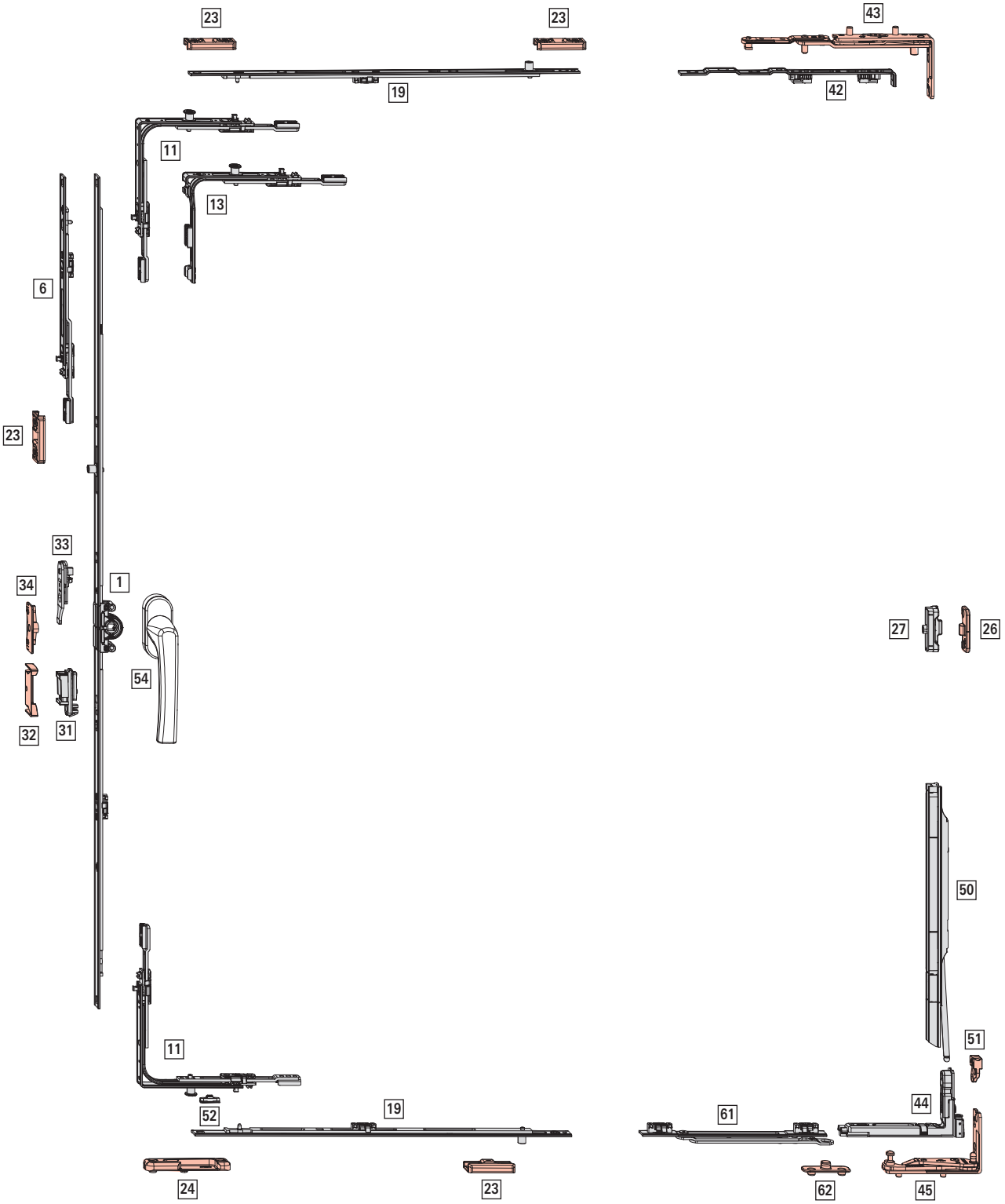
Optional

Arrestable brake stay → CTL_104

Sash lifter → CTL_104

4.1.3 Turn-Only hardware

4.1.3.1 Basic security



Application range

Without load transfer	With load transfer
SRW: 370 – 1750 mm	**SRW**: 600 – 1750 mm
SRH: 285 – 3000 mm	**SRH**: 1000 – 3000 mm
S.kg: max. 120 kg	**S.kg**: max. 180 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

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

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

Size-specific combinations:

				Nº
2401 – 2600	200 KU	–	–	308267
2601 – 2800	400 KU	1	E	280346
2801 – 3000	600 KU	1	E	255282

[11] Standard corner drive

			Nº
1	E	Top	260275
1	P	Top Bottom	260277

INFO
With SRW 370 – 415 mm, crop the corner drive, standard, at the top (to do so, extend the connecting rod fully).

[13] Special short corner drive

		Nº
1	E	260280
1	P	260282

For use with:
SRH < 371 mm

[19] Multipart centre lock – standard, horizontal

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

Size-specific combinations:

				Nº
1101 – 1600	600	1	E	255281
1601 – 1750	600 KU	1	E	255282
	400	1	E	255280

[23] Striker → *from page 178*

[24] Security striker → *from page 179*

[26] Concealed centre closer frame component → CTL_104

[27] Concealed centre closer sash component → CTL_104

[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 181*

[33] Lifting mishandling device sash component

	Nº
Lifting mishandling device sash component	795927

[34] Lifting mishandling device frame component → *from page 182*

[42] Rebate stay guide

		Nº
For Turn-Only sashes	220 / 15	2005701

[43] Rebate stay arm → *from page 175*

[44] Corner hinge

		Nº
12/18-13 12/20-13	Left	2005290
12/18-13 12/20-13	Right	2005291

[45] Pivot rest → *from page 175*

[50] Load transfer sash component (SRW ≥ 600 mm, SRH ≥ 1000 mm)

	Nº
max. 180 kg	2005293

[51] Load transfer frame component
(SRW ≥ 600 mm, SRH ≥ 1000 mm)

	№
max. 180 kg	2005292

[52] 90° travel restrictor

	№
Travel restrictor	264603

[54] Handle → CTL_1

[61] Turn restrictor 195 sash component

	№
Turn restrictor 195	2005294

INFO
Turn restrictor possible from SRW 525 mm, mandatory for SRW > 1000 mm and when load transfer is used.

Alternatively

	№
Turn restrictor 355	2037236

For use with:
SRW ≥ 600 mm

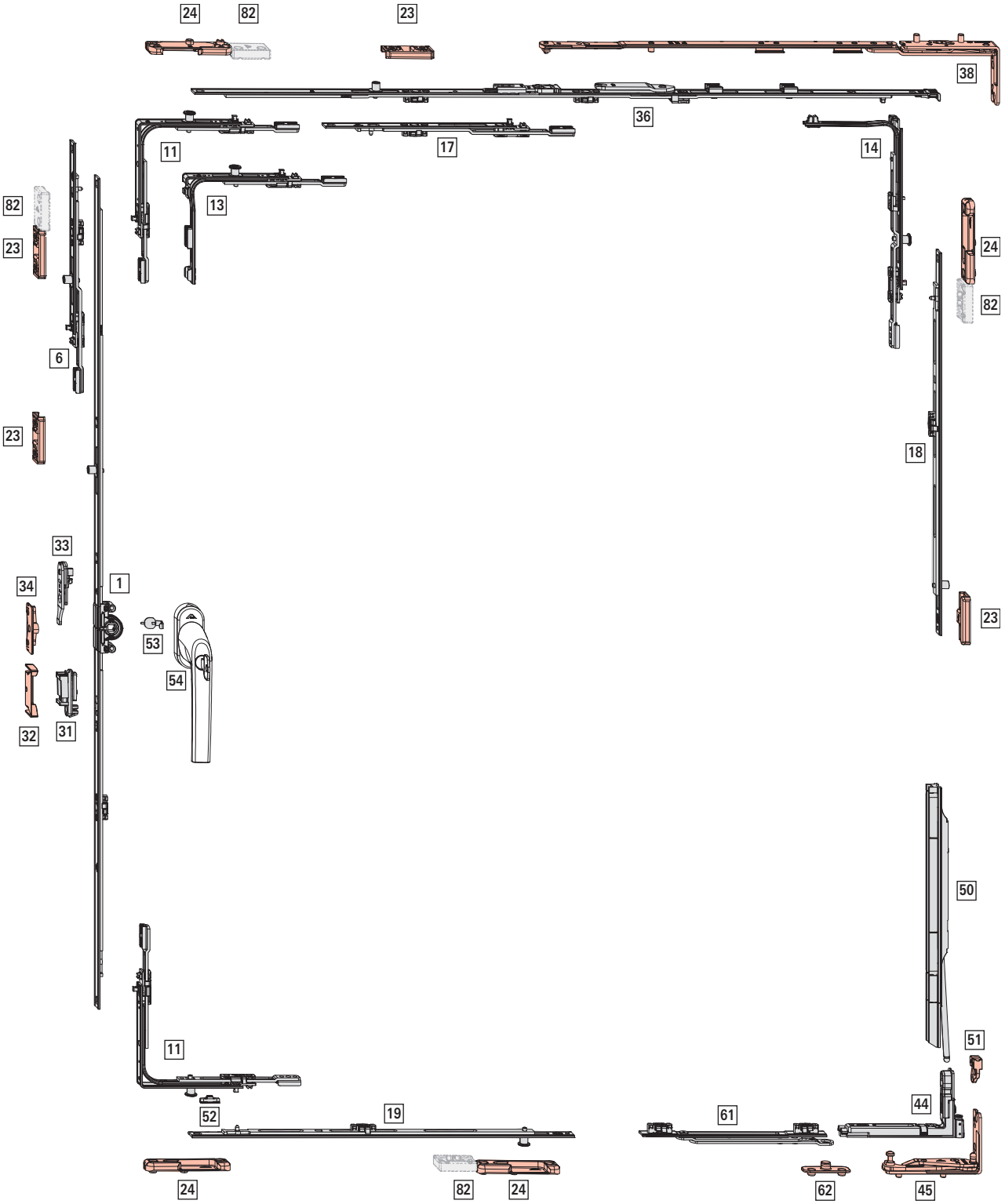
[62] Turn restrictor frame component → *from page 182*

Optional

Arrestable brake stay → CTL_104

Sash lifter → CTL_104

4.1.3.2 RC 1 N


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Application range

Without load transfer	With load transfer
SRW: 450 – 1600 mm	**SRW**: 600 – 1600 mm
SRH: 285 – 2800 mm	**SRH**: 1000 – 2800 mm
S.kg: max. 120 kg	**S.kg**: max. 180 kg

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

							№
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

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

				№
200	Y	–	–	308267
400	Y	1	E	280346

Size-specific combinations:

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

[11] Standard corner drive

		№
1	P	260277

[13] Special short corner drive

		№
1	P	260282

For use with:

SRH ≤ 370 mm

[14] Sash stay corner drive

		№
1	P	260286

INFO
With SRH 285 – 330 mm, crop the sash stay corner drive (to do so, extend the connecting rod fully).

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

				№
200	Y	–	–	308267

Size-specific combinations:

				№
1401 – 1600	200 KU	–	–	308267

[18] Multipart centre lock – standard, vertical

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

Size-specific combinations:

Without load transfer	With load transfer				№
–	1101 – 1150	400	1	E	255280
1101 – 1800	1151 – 1800	600	1	E	255281
1801 – 2400	1801 – 2400	600 KU	1	E	255282
		600	1	E	255281
2401 – 2800	2401 – 2800	600 KU	1	E	255282
		600 KU	1	E	255282
		600	1	E	255281

[19] Multipart centre lock – security, horizontal

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

Size-specific combinations:

Without turn restrictor	With turn restrictor				№
450 – 650	650 – 850	200	1	P	255284
651 – 850	851 – 1050	400	1	P	255285
851 – 1000	1051 – 1250	600	1	P	255286
	1251 – 1450	600 KU	1	E	255282
		200	1	P	255284
	1451 – 1600	600 KU	1	E	255282
		400	1	P	255285

[23] Striker → *from page 178*

[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 181*

[33] Lifting mishandling device sash component

	№
Lifting mishandling device sash component	795927

[34] Lifting mishandling device frame component → *from page 182*

[36] Stay guide – basic security

					№
340 – 600	250	490	–	–	2005271
601 – 800	350	690	–	–	2005272
801 – 1000	500	890	1	E	2005273
1001 – 1200	500	1090	1	E	2005274
1201 – 1400	500	1290	1	E	2005275

[38] Stay arm → *from page 174*

[44] Corner hinge

		№
12/18-13 12/20-13	Left	2005290
12/18-13 12/20-13	Right	2005291

[45] Pivot rest → *from page 175*

[50] Load transfer sash component (SRW ≥ 600 mm, SRH ≥ 1000 mm)

	№
max. 180 kg	2005293

[51] Load transfer frame component (SRW ≥ 600 mm, SRH ≥ 1000 mm)

	№
max. 180 kg	2005292

[52] 90° travel restrictor

	№
Travel restrictor	264603

[53] Drilling protection

	№
Drilling protection	797819

[54] Handle, lockable → CTL_1

[61] Turn restrictor 195 sash component

	№
Turn restrictor 195	2005294

INFO
Turn restrictor possible from SRW 525 mm, mandatory for SRW > 1000 mm and when load transfer is used.

[62] Turn restrictor frame component → *from page 182*

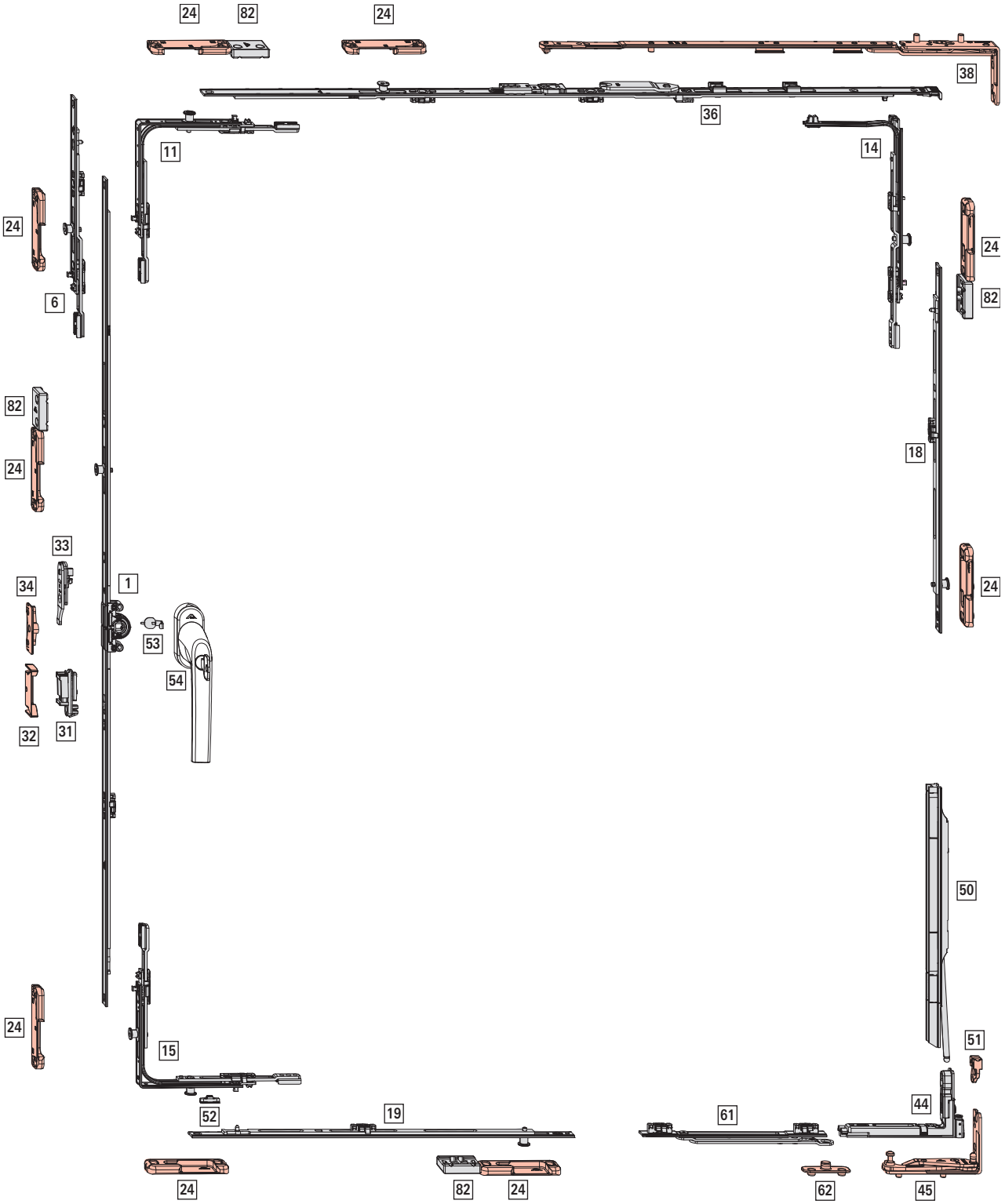
Optional

[82] Anti-jemmy device

	№
From rebate depth 24 mm	792786
From rebate depth 26 mm	811715

Sash lifter → CTL_104

4.1.3.3 RC 2 / RC 2 N



Application range

Without load transfer	With load transfer
SRW: 450 – 1400 mm	**SRW**: 650 – 1400 mm
SRH: 601 – 2800 mm	**SRH**: 1000 – 2800 mm
S.kg: max. 120 kg	**S.kg**: max. 180 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

[18] Multipart centre lock – security, vertical

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

Size-specific combinations:

Without load transfer	With load transfer				№
601 – 650	–	200	1	V	296853
651 – 850	1000 – 1150	400	1	V	296854
851 – 1050	1151 – 1350	600 [12]	1	V	296855
1051 – 1250	1351 – 1550	600 KU	1	V	337711
		200	1	V	296853
1251 – 1450	1551 – 1750	600 KU	1	V	337711
		400	1	V	296854
1451 – 1650	1751 – 1950	600 KU	1	V	337711
		600 [13]	1	V	296855
1651 – 1850	1951 – 2150	600 KU	1	V	337711
		600 KU	1	V	337711
		200	1	V	296853
1851 – 2050	2151 – 2350	600 KU	1	V	337711
		600 KU	1	V	337711
		400	1	V	296854
2051 – 2250	2351 – 2550	600 KU	1	V	337711
		600 KU	1	V	337711
		600 [14]	1	V	296855
2251 – 2450	2551 – 2750	600 KU	1	V	337711
		600 KU	1	V	337711
		600 KU	1	V	337711
		200	1	V	296853
2451 – 2650	2751 – 2800	600 KU	1	V	337711
		600 KU	1	V	337711
		600 KU	1	V	337711
		400	1	V	296854
2651 – 2800	–	600 KU	1	V	337711
		600 KU	1	V	337711
		600 KU	1	V	337711
		600 [15]	1	V	296855

[19] Multipart centre lock – security, horizontal

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

Size-specific combinations:

Without turn restrictor	With turn restrictor				№
450 – 650	650 – 850	200	1	V	296853
651 – 850	851 – 1050	400	1	V	296854
851 – 1000	1051 – 1250	600	1	V	296855
	1251 – 1400	600 KU	1	V	337711
		200	1	V	296853

[12] Without load transfer: crop CL by 15 mm up to SRH 861

[13] Without load transfer: crop CL by 15 mm up to SRH 1461

[14] Without load transfer: crop CL by 15 mm up to SRH 2061

[15] Without load transfer: crop CL by 15 mm up to SRH 2661

[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 181*

[33] Lifting mishandling device sash component

	№
Lifting mishandling device sash component	795927

[34] Lifting mishandling device frame component → *from page 182*

[36] Stay guide – security

					№
340 – 600	250	490	–	–	2005271
601 – 800	350	690	–	–	2005272
801 – 1000	500	890	1	V	2005276
1001 – 1200	500	1090	1	V	2005277
1201 – 1400	500	1290	1	V	2005278

[38] Stay arm → *from page 174*

[44] Corner hinge

		№
12/18-13 12/20-13	Left	2005290
12/18-13 12/20-13	Right	2005291

[45] Pivot rest → *from page 175*

[50] Load transfer sash component (SRW ≥ 650 mm, SRH ≥ 1000 mm)

	№
max. 180 kg	2005293

[51] Load transfer frame component (SRW ≥ 650 mm, SRH ≥ 1000 mm)

	№
max. 180 kg	2005292

[52] 90° travel restrictor

	№
Travel restrictor	264603

[53] Drilling protection

	№
Drilling protection	797819

[54] Handle, lockable → CTL_1

[61] Turn restrictor 195 sash component

	№
Turn restrictor 195	2005294

INFO
Turn restrictor possible from SRW 650 mm, mandatory for SRW > 1000 mm and when load transfer is used.

[62] Turn restrictor frame component → *from page 182*

[82] Anti-jemmy device

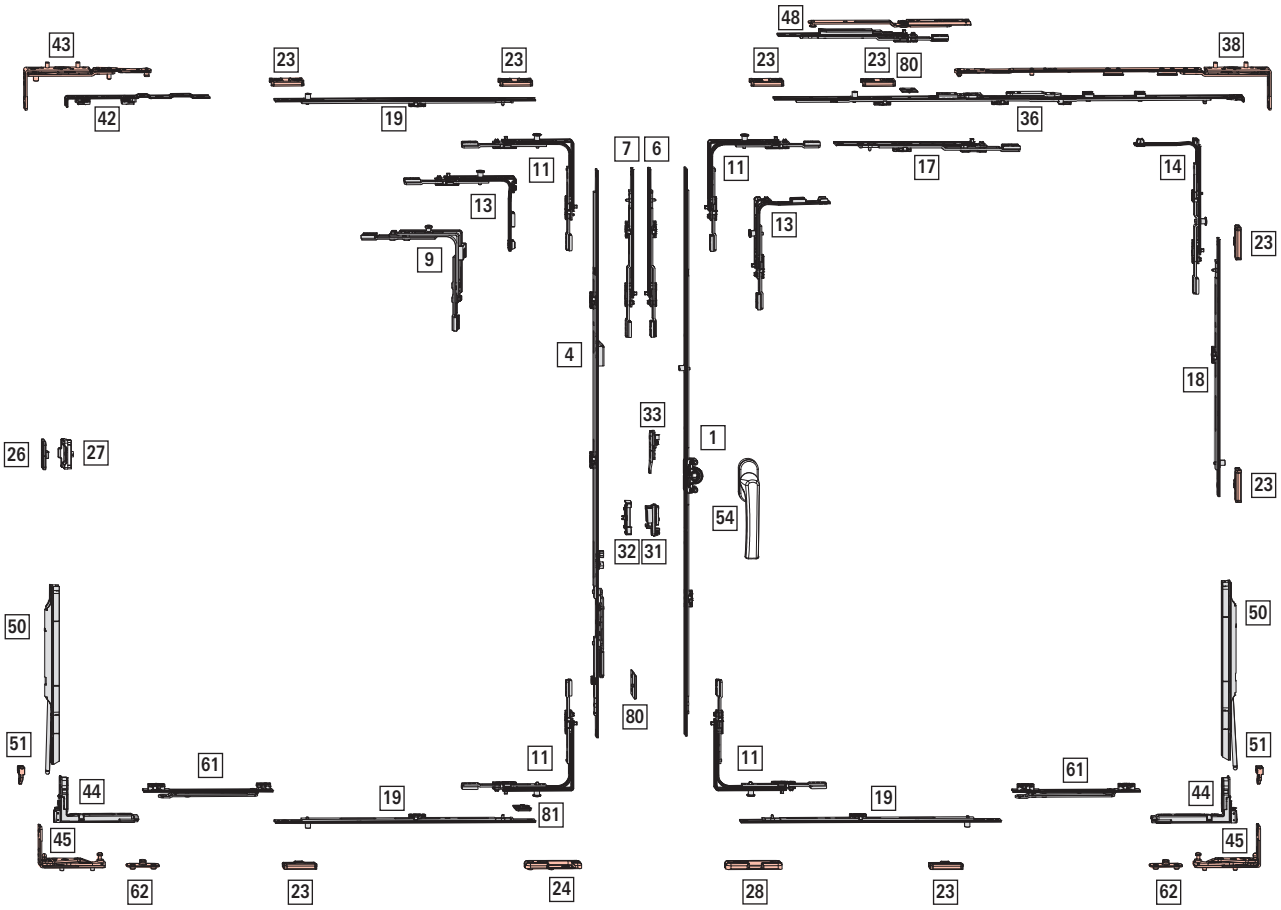
	№
From rebate depth 24 mm	792786
From rebate depth 26 mm	811715

Optional

Sash lifter → CTL_104

4.1.4 Floating-mullion hardware

4.1.4.1 Standard – basic security



Application range

Without load transfer	With load transfer
SRW: 370 – 1750 mm	**SRW**: 600 – 1750 mm
SRH: 430 – 3000 mm	**SRH**: 1000 – 3000 mm
S.kg: max. 120 kg	**S.kg**: max. 180 kg

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

							№
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, VT – fixed handle height, backset 15 mm

						№
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)

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

Size-specific combinations:

				№
2401 – 2600	200 KU	–	–	308267
2601 – 2800	400 KU	1	E	280346
2801 – 3000	600 KU	1	E	255282

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

			№
200	Y	–	308267
400	Y	1	280345
600	Y	1	280331

Size-specific combinations:

			№
2401 – 2600	200 KU	–	308267
2601 – 2800	400 KU	1	280345
2801 – 3000	600 KU	1	280331

[9] Floating-mullion corner drive with security striker

					№
Second opening sash	Top	1	1	V	313538

INFO
SRW 370 – 415 mm: For Turn-Only sashes, crop the top corner drive.

For use on the second opening sash:
if the SRW on the first opening sash is ≤ 450 mm

[11] Standard corner drive

			№
1	E	Top	260275
1	P	Top Bottom	260277

[13] Special short corner drive

		№
1	E	260280
1	P	260282

For use with: (→ *from page 166*)
First opening sash: SRW 370 – 450 mm
Second opening sash: SRH 430 – 510 mm

[14] Sash stay corner drive

		№
1	P	260286

INFO
With SRH 285 – 330 mm, crop the sash stay corner drive (to do so, extend the connecting rod fully).

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

				№
200	Y	–	–	308267

Size-specific combinations:

				Nº
1601 – 1750	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:

Without load transfer	With load transfer				Nº
–	1101 – 1150	400	1	E	255280
1101 – 1800	1151 – 1800	600	1	E	255281
1801 – 2400	1801 – 2400	600 KU	1	E	255282
		600	1	E	255281
2401 – 3000	2401 – 3000	600 KU	1	E	255282
		600 KU	1	E	255282
		600	1	E	255281

[19] Multipart centre lock – standard, horizontal

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

Size-specific combinations:

				Nº
1101 – 1600	600	1	E	255281
1601 – 1750	600 KU	1	E	255282
	400	1	E	255280

[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] Concealed centre closer frame component → CTL_104

[27] Concealed centre closer sash component → CTL_104

[28] Tilt striker → *from page 176*

[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 181*

[33] Lifting mishandling device sash component

	Nº
Lifting mishandling device sash component	795927

[36] Stay guide – basic security

					Nº
340 – 600	250	490	–	–	2005271
601 – 800	350	690	–	–	2005272
801 – 1000	500	890	1	E	2005273
1001 – 1200	500	1090	1	E	2005274
1201 – 1400	500	1290	1	E	2005275

With S.kg > 150 kg, stay guide 500 must be mounted with fastening plate 255211.

INFO

From SRH < 600 mm, set the tilt depth to 80 mm (on windows without overlap gasket from SRH < 900 mm).

[38] Stay arm → *from page 174*

[42] Rebate stay guide

		Nº
For Turn-Only sashes	220 / 15	2005701

[43] Rebate stay arm → *from page 175* → *from page 175*

[44] Corner hinge

		Nº
12/18-13 12/20-13	Left	2005290
12/18-13 12/20-13	Right	2005291

[45] Pivot rest → *from page 175*

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

		Nº
Frame and sash component	200	255237

[50] Load transfer sash component (SRW ≥ 600 mm, SRH ≥ 1000 mm)

	Nº
max. 180 kg	2005293

[51] Load transfer frame component (SRW ≥ 600 mm, SRH ≥ 1000 mm)

	Nº
max. 180 kg	2005292

[54] Handle → CTL_1

[61] Turn restrictor 195 sash component

	№
Turn restrictor 195	2005294

INFO
Turn restrictor possible from SRW 525 mm, mandatory for SRW > 1000 mm and when load transfer is used.

Alternatively

	№
Turn restrictor 355	2037236

For use with:

SRW ≥ 600 mm

[62] Turn restrictor frame component → *from page 182*

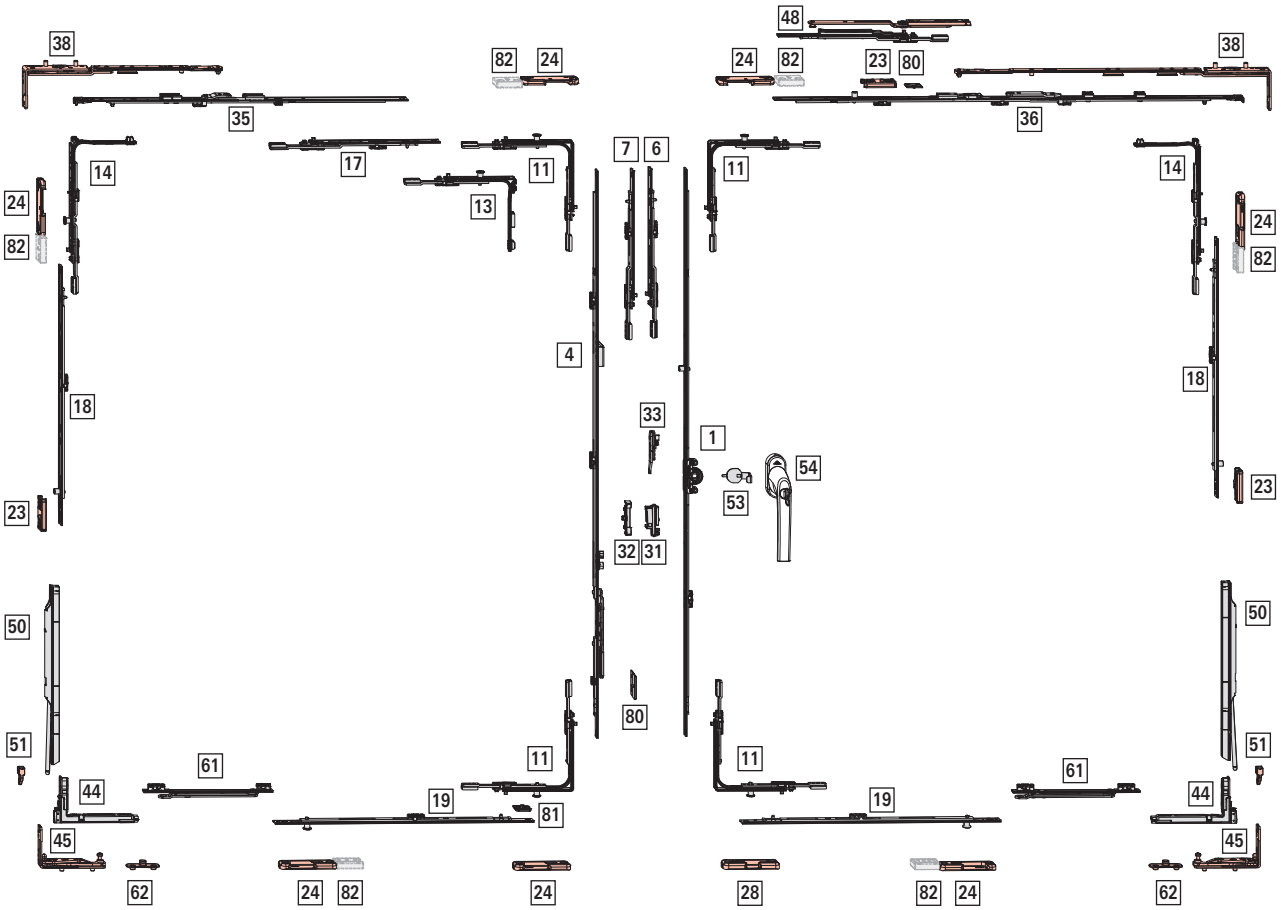
[80] Fastening plate

	№
Fastening plate with cam	255211

Only for use in conjunction with lever-operated espagnolette 2003815 and/or for stay guide 500 with S.kg > 150 kg.

[81] Run-up block
The run-up block depends on the striker used.

4.1.4.2 Standard – RC 1 N



Application range

Without load transfer	With load transfer
SRW: 450 – 1600 mm	**SRW**: 600 – 1600 mm
SRH: 430 – 2800 mm	**SRH**: 1000 – 2800 mm
S.kg: max. 120 kg	**S.kg**: max. 180 kg

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

							№
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, VT – fixed handle height, backset 15 mm

						№
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)

				№
200	Y	–	–	308267
400	Y	1	E	280346

Size-specific combinations:

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

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

			№
200	Y	–	308267
400	Y	1	280345

Size-specific combinations:

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

[11] Standard corner drive

		№
1	P	260277

[13] Special short corner drive

		№
1	P	260282

For use with (→ *from page 166*):
Second opening sash: SRH ≤ 510 mm

[14] Sash stay corner drive

		№
1	P	260286

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

				№
200	Y	–	–	308267
400	Y	–	–	297858
400	Y	1	E	280346
600	Y	1	E	255282

Size-specific combinations:

				№
711 – 910	200 KU	–	–	308267
911 – 1110	400 KU	1	E	280346
1111 – 1310	600 KU	1	E	255282
1311 – 1510	600 KU	1	E	255282
	200 KU	–	–	308267
1511 – 1600	600 KU	1	E	255282
	400 KU	1	E	280346

[18] Multipart centre lock – standard, vertical

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

Size-specific combinations:

					№
Without load transfer	With load transfer				
–	1101 – 1150	400	1	E	255280
1101 – 1800	1151 – 1800	600	1	E	255281
1801 – 2400	1801 – 2400	600 KU	1	E	255282
		600	1	E	255281
2401 – 2800	2401 – 2800	600 KU	1	E	255282
		600 KU	1	E	255282
		600	1	E	255281

[19] Multipart centre lock – standard, horizontal

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

Size-specific combinations:

					№
Without turn restrictor	With turn restrictor				
450 – 650	650 – 850	200	1	P	255284
651 – 850	851 – 1050	400	1	P	255285
851 – 1000	1051 – 1250	600	1	P	255286
	1251 – 1450	600 KU	1	E	255282
		200	1	P	255284
	1451 – 1600	600 KU	1	E	255282
		400	1	P	255285

[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 176*

[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 181*

[33] Lifting mishandling device sash component

	№
Lifting mishandling device sash component	795927

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

			№
411 – 600	250	490	2005279
511 – 710	250	600	2005280

[36] Stay guide – basic security

					№
340 – 600	250	490	–	–	2005271
601 – 800	350	690	–	–	2005272
801 – 1000	500	890	1	E	2005273
1001 – 1200	500	1090	1	E	2005274
1201 – 1400	500	1290	1	E	2005275

With S.kg > 150 kg, stay guide 500 must be mounted with fastening plate 255211.

INFO
From SRH < 600 mm, set the tilt depth to 80 mm (on windows without overlap gasket from SRH < 900 mm).

[38] Stay arm → *from page 174*

[44] Corner hinge

		№
12/18-13 12/20-13	Left	2005290
12/18-13 12/20-13	Right	2005291

[45] Pivot rest → *from page 175*

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

		№
Frame and sash component	200	255237

[50] Load transfer sash component (SRW ≥ 600 mm, SRH ≥ 1000 mm)

	№
max. 180 kg	2005293

[51] Load transfer frame component (SRW ≥ 600 mm, SRH ≥ 1000 mm)

	№
max. 180 kg	2005292

[53] Drilling protection

	№
Drilling protection	797819

[54] Handle, lockable → CTL_1

[61] Turn restrictor 195 sash component

	№
Turn restrictor 195	2005294

INFO
Turn restrictor possible from SRW 525 mm, mandatory for SRW > 1000 mm and when load transfer is used.

[62] Turn restrictor frame component → *from page 182*

[80] Fastening plate

	№
Fastening plate with cam	255211

Only for use in conjunction with lever-operated espagnolette 2003815 and/or for stay guide 500 with S.kg > 150 kg.

[81] Run-up block → CTL_107

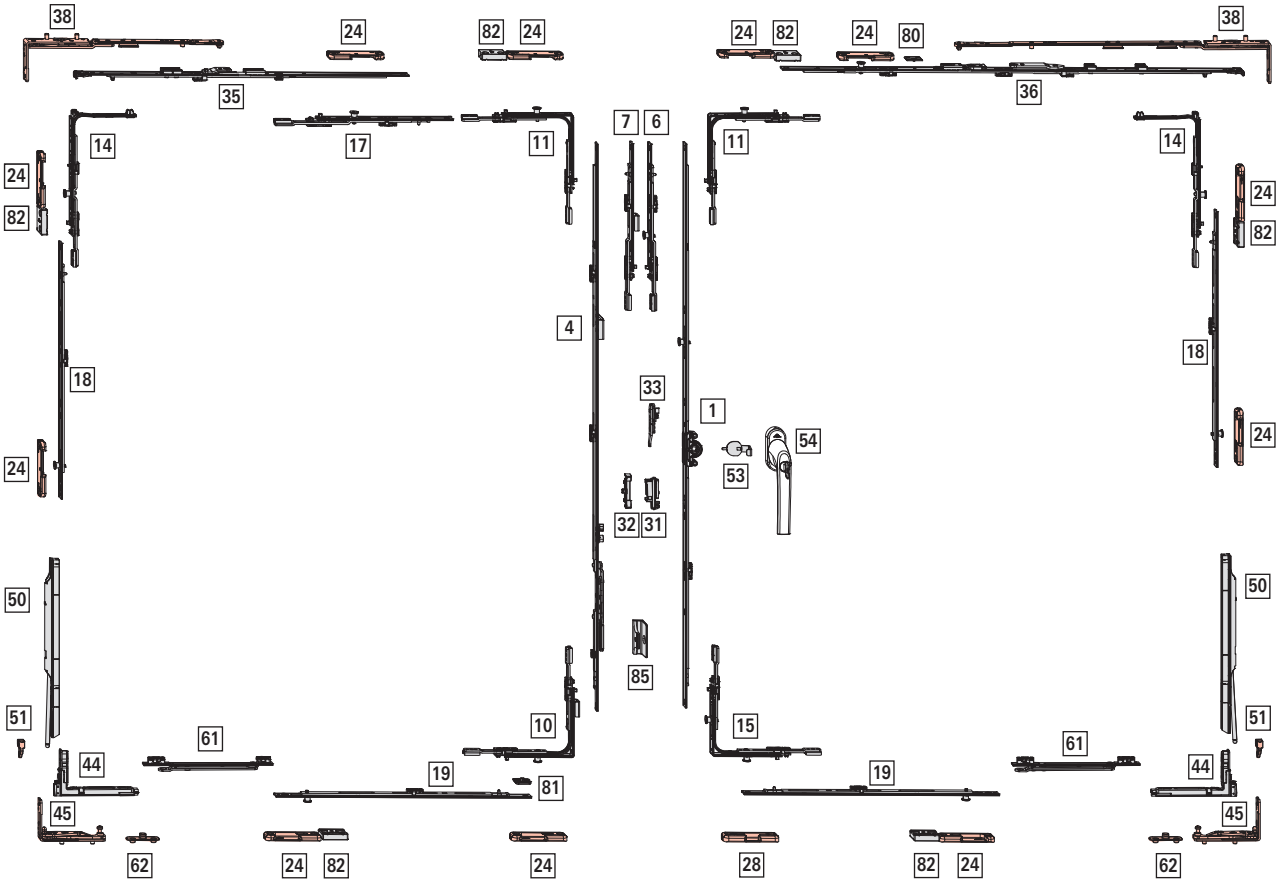
The run-up block depends on the striker used.

Optional

[82] Anti-jemmy device

	№
From rebate depth 24 mm	792786
From rebate depth 26 mm	811715

4.1.4.3 Standard – RC 2 / RC 2 N



Application range

Without load transfer	With load transfer
SRW: 450 – 1400 mm	**SRW**: 650 – 1400 mm
SRH: 601 – 2800 mm	**SRH**: 1000 – 2800 mm
S.kg: max. 120 kg	**S.kg**: max. 180 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

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

						№
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)

				№
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

[14] Sash stay corner drive

		№
1	V	260284

[15] Corner drive, standard (security)

		№
2	V	260274

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

				№
200	Y	1	V	337708
400	Y	1	V	337710
600	Y	1	V	337711

Size-specific combinations:

				№
711 – 910	200 KU	1	V	337708
911 – 1110	400 KU	1	V	337710
1111 – 1310	600 KU	1	V	337711
1311 – 1400	600 KU	1	V	337711
	200 KU	1	V	337708

[18] Multipart centre lock – security, vertical

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

Size-specific combinations:

					№
Without load transfer	With load transfer				
601 – 650	–	200	1	V	296853
651 – 850	1000 – 1150	400	1	V	296854
851 – 1050	1151 – 1350	600 [16]	1	V	296855
1051 – 1250	1351 – 1550	600 KU	1	V	337711
		200	1	V	296853
1251 – 1450	1551 – 1750	600 KU	1	V	337711
		400	1	V	296854
1451 – 1650	1751 – 1950	600 KU	1	V	337711
		600 [17]	1	V	296855

[16] Without load transfer: crop CL by 15 mm up to SRH 861

[17] Without load transfer: crop CL by 15 mm up to SRH 1461

Without load transfer	With load transfer				№
1651 – 1850	1951 – 2150	600 KU	1	V	337711
		600 KU	1	V	337711
		200	1	V	296853
1851 – 2050	2151 – 2350	600 KU	1	V	337711
		600 KU	1	V	337711
		400	1	V	296854
2051 – 2250	2351 – 2550	600 KU	1	V	337711
		600 KU	1	V	337711
		600 [18]	1	V	296855
2251 – 2450	2551 – 2750	600 KU	1	V	337711
		600 KU	1	V	337711
		600 KU	1	V	337711
		200	1	V	296853
2451 – 2650	2751 – 2800	600 KU	1	V	337711
		600 KU	1	V	337711
		600 KU	1	V	337711
		400	1	V	296854
2651 – 2800	–	600 KU	1	V	337711
		600 KU	1	V	337711
		600 KU	1	V	337711
		600 [19]	1	V	296855

[19] Multipart centre lock – security, horizontal

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

Size-specific combinations:

Without turn restrictor	With turn restrictor				№
450 – 650	650 – 850	200	1	V	296853
651 – 850	851 – 1050	400	1	V	296854
851 – 1000	1051 – 1250	600	1	V	296855
–	1251 – 1400	600 KU	1	V	337711
		200	1	V	296853

[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 176*

[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 181*

[33] Lifting mishandling device sash component

	№
Lifting mishandling device sash component	795927

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

			№
411 – 600	250	490	2005279
511 – 710	250	600	2005280

[36] Stay guide – security

					№
340 – 600	250	490	–	–	2005271
601 – 800	350	690	–	–	2005272
801 – 1000	500	890	1	V	2005276
1001 – 1200	500	1090	1	V	2005277
1201 – 1400	500	1290	1	V	2005278

With S.kg > 150 kg, stay guide 500 must be mounted with fastening plate 255211.

[38] Stay arm → *from page 174*

[44] Corner hinge

		№
12/18-13 12/20-13	Left	2005290
12/18-13 12/20-13	Right	2005291

[45] Pivot rest → *from page 175*

[50] Load transfer sash component (SRW ≥ 650 mm, SRH ≥ 1000 mm)

	№
max. 180 kg	2005293

[51] Load transfer frame component (SRW ≥ 650 mm, SRH ≥ 1000 mm)

	№
max. 180 kg	2005292

[53] Drilling protection

	№
Drilling protection	797819

[18] Without load transfer: crop CL by 15 mm up to SRH 2061

[19] Without load transfer: crop CL by 15 mm up to SRH 2661

[54] Handle, lockable → CTL_1

[61] Turn restrictor 195 sash component

	№
Turn restrictor 195	2005294

INFO
Turn restrictor possible from SRW 650 mm, mandatory for SRW > 1000 mm and when load transfer is used.

[62] Turn restrictor frame component → *from page 182*

[80] Fastening plate

	№
Fastening plate with cam	255211

[81] Run-up block→ CTL_104
The run-up block depends on the striker used.

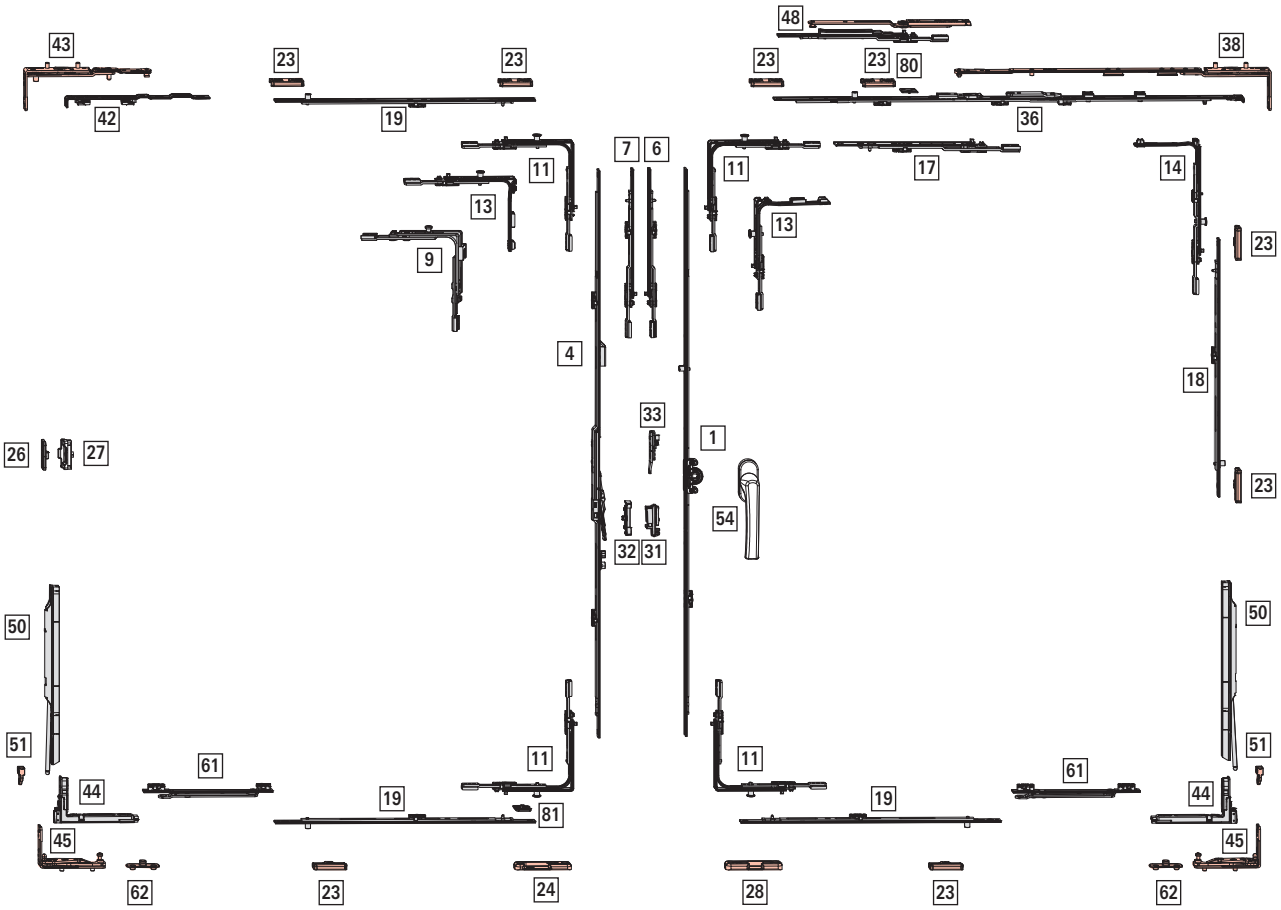
[82] Anti-jemmy device

	№
From rebate depth 24 mm	792786
From rebate depth 26 mm	811715

[85] Retainer clasp

	№
Retainer clasp for lever-operated espagnolette, standard	314203

4.1.4.4 Plus – basic security



Application range

Without load transfer	With load transfer
SRW: 370 – 1750 mm	**SRW**: 600 – 1750 mm
SRH: 430 – 3000 mm	**SRH**: 1000 – 3000 mm
S.kg: max. 120 kg	**S.kg**: max. 180 kg

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

							№
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

							№
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)

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

Size-specific combinations:

				№
2401 – 2600	200 KU	–	–	308267
2601 – 2800	400 KU	1	E	280346
2801 – 3000	600 KU	1	E	255282

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

			№
200	Y	–	308267
400	Y	1	280345
600	Y	1	280331

Size-specific combinations:

			№
2401 – 2600	200 KU	–	308267
2601 – 2800	400 KU	1	280345
2801 – 3000	600 KU	1	280331

[9] Floating-mullion corner drive with security striker

					№
Second opening sash	Top	1	1	V	313538

INFO
SRW 370 – 415 mm: For Turn-Only sashes, crop the top corner drive.

For use on the second opening sash:
if the SRW on the first opening sash is ≤ 450 mm

[11] Standard corner drive

			№
1	E	Top	260275
1	P	Top Bottom	260277

[13] Special short corner drive

		№
1	E	260280
1	P	260282

For use with (→ *from page 170*):
First opening sash: SRW ≤ 450 mm
Second opening sash: SRH 430 – 510 mm

[14] Sash stay corner drive

		№
1	P	260286

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

				№
200	Y	–	–	308267

Size-specific combinations:

				№
1601 – 1750	200 KU	–	–	308267

[18] Multipart centre lock – standard, vertical

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

Size-specific combinations:

Without load transfer	With load transfer				№
–	1101 – 1150	400	1	E	255280
1101 – 1800	1151 – 1800	600	1	E	255281
1801 – 2400	1801 – 2400	600 KU	1	E	255282
		600	1	E	255281
2401 – 3000	2401 – 3000	600 KU	1	E	255282
		600 KU	1	E	255282
		600	1	E	255281

[19] Multipart centre lock – standard, horizontal

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

Size-specific combinations:

				№
1101 – 1600	600	1	E	255281
1601 – 1750	600 KU	1	E	255282
	400	1	E	255280

[23] Striker → *from page 178*

[24] Security striker → *from page 179*

[26] Concealed centre closer frame component → CTL_104

[27] Concealed centre closer sash component → CTL_104

[28] Tilt striker → *from page 176*

[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 181*

[33] Lifting mishandling device sash component

	№
Lifting mishandling device sash component	795927

[36] Stay guide – basic security

					№
340 – 600	250	490	–	–	2005271
601 – 800	350	690	–	–	2005272
801 – 1000	500	890	1	E	2005273
1001 – 1200	500	1090	1	E	2005274
1201 – 1400	500	1290	1	E	2005275

With S.kg > 150 kg, stay guide 500 must be mounted with fastening plate 255211.

INFO
From SRH < 600 mm, set the tilt depth to 80 mm (on windows without overlap gasket from SRH < 900 mm).

[38] Stay arm → *from page 174*

[42] Rebate stay guide

		№
For Turn-Only sashes	220 / 15	2005701

[43] Rebate stay arm → *from page 175* → *from page 175*

[44] Corner hinge

		№
12/18-13 12/20-13	Left	2005290
12/18-13 12/20-13	Right	2005291

[45] Pivot rest → *from page 175*

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

		№
Frame and sash component	200	255237

[50] Load transfer sash component (SRW ≥ 600 mm, SRH ≥ 1000 mm)

	№
max. 180 kg	2005293

[51] Load transfer frame component (SRW ≥ 600 mm, SRH ≥ 1000 mm)

	№
max. 180 kg	2005292

[54] Handle → CTL_1

[61] Turn restrictor 195 sash component

	№
Turn restrictor 195	2005294

INFO
Turn restrictor possible from SRW 525 mm, mandatory for SRW > 1000 mm and when load transfer is used.

Alternatively

	№
Turn restrictor 355	2037236

For use with:

SRW ≥ 600 mm

[62] Turn restrictor frame component → *from page 182*

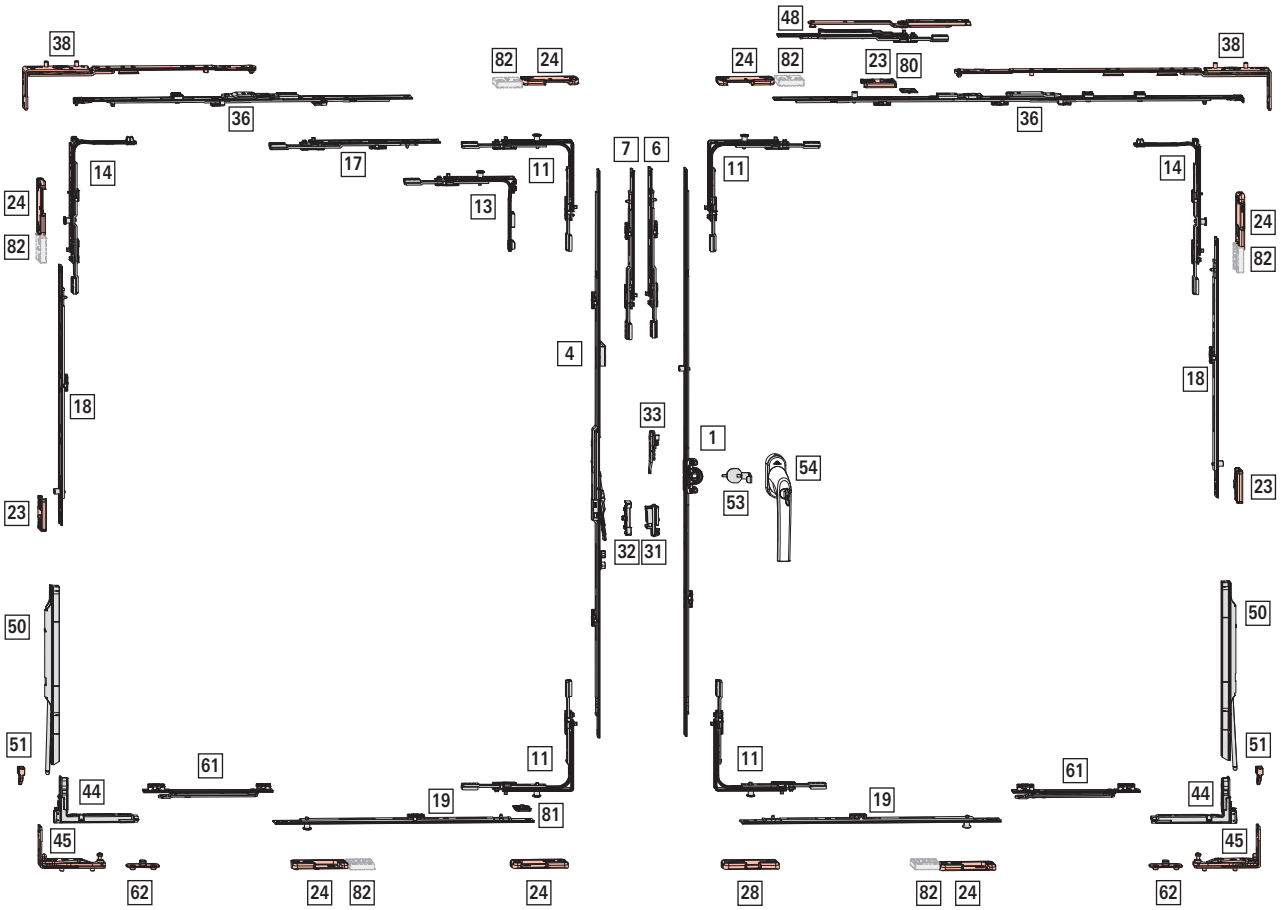
[80] Fastening plate

	№
Fastening plate with cam	255211

[81] Run-up block

The run-up block depends on the striker used.

4.1.4.5 Plus – RC 1 N



Application range

Without load transfer	With load transfer
SRW: 450 – 1600 mm	**SRW**: 600 – 1600 mm
SRH: 430 – 2800 mm	**SRH**: 1000 – 2800 mm
S.kg: max. 120 kg	**S.kg**: max. 180 kg

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

							№
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

							№
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)

				№
200	Y	–	–	308267
400	Y	1	E	280346

Size-specific combinations:

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

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

			№
200	Y	–	308267
400	Y	1	280345

Size-specific combinations:

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

[11] Standard corner drive

		№
1	P	260277

[13] Special short corner drive

		№
1	P	260282

For use with (→ *from page 170*):
Second opening sash: SRH ≤ 510 mm

[14] Sash stay corner drive

		№
1	P	260286

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

				№
200	Y	–	–	308267

Size-specific combinations:

				№
1401 – 1600	200 KU	–	–	308267

[18] Multipart centre lock – standard, vertical

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

Size-specific combinations:

Without load transfer	With load transfer				№
–	1101 – 1150	400	1	E	255280
1101 – 1800	1151 – 1800	600	1	E	255281
1801 – 2400	1801 – 2400	600 KU	1	E	255282
		600	1	E	255281
2401 – 2800	2401 – 2800	600 KU	1	E	255282
		600 KU	1	E	255282
		600	1	E	255281

[19] Multipart centre lock – security, horizontal

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

Size-specific combinations:

Without turn restrictor	With turn restrictor				
450 – 650	650 – 850	200	1	P	255284
651 – 850	851 – 1050	400	1	P	255285
851 – 1000	1051 – 1250	600	1	P	255286
	1251 – 1450	600 KU	1	E	255282
		200	1	P	255284
	1451 – 1600	600 KU	1	E	255282
		400	1	P	255285

[23] Striker → *from page 178*

[24] Security striker → *from page 179*

[28] Tilt striker → *from page 176*

[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 181*

[33] Lifting mishandling device sash component

	№
Lifting mishandling device sash component	795927

[36] Stay guide – basic security

340 – 600	250	490	–	–	2005271
601 – 800	350	690	–	–	2005272
801 – 1000	500	890	1	E	2005273
1001 – 1200	500	1090	1	E	2005274
1201 – 1400	500	1290	1	E	2005275

With S.kg > 150 kg, stay guide 500 must be mounted with fastening plate 255211.

INFO
From SRH < 600 mm, set the tilt depth to 80 mm (on windows without overlap gasket from SRH < 900 mm).

[38] Stay arm → *from page 174*

[44] Corner hinge

		№
12/18-13 12/20-13	Left	2005290
12/18-13 12/20-13	Right	2005291

[45] Pivot rest → *from page 175*

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

		№
Frame and sash component	200	255237

[50] Load transfer sash component (SRW ≥ 600 mm, SRH ≥ 1000 mm)

	№
max. 180 kg	2005293

[51] Load transfer frame component (SRW ≥ 600 mm, SRH ≥ 1000 mm)

	№
max. 180 kg	2005292

[53] Drilling protection

	№
Drilling protection	797819

[54] Handle, lockable → CTL_1

[61] Turn restrictor 195 sash component

	№
Turn restrictor 195	2005294

INFO
Turn restrictor possible from SRW 525 mm, mandatory for SRW > 1000 mm and when load transfer is used.

[62] Turn restrictor frame component → *from page 182*

[80] Fastening plate

	№
Fastening plate with cam	255211

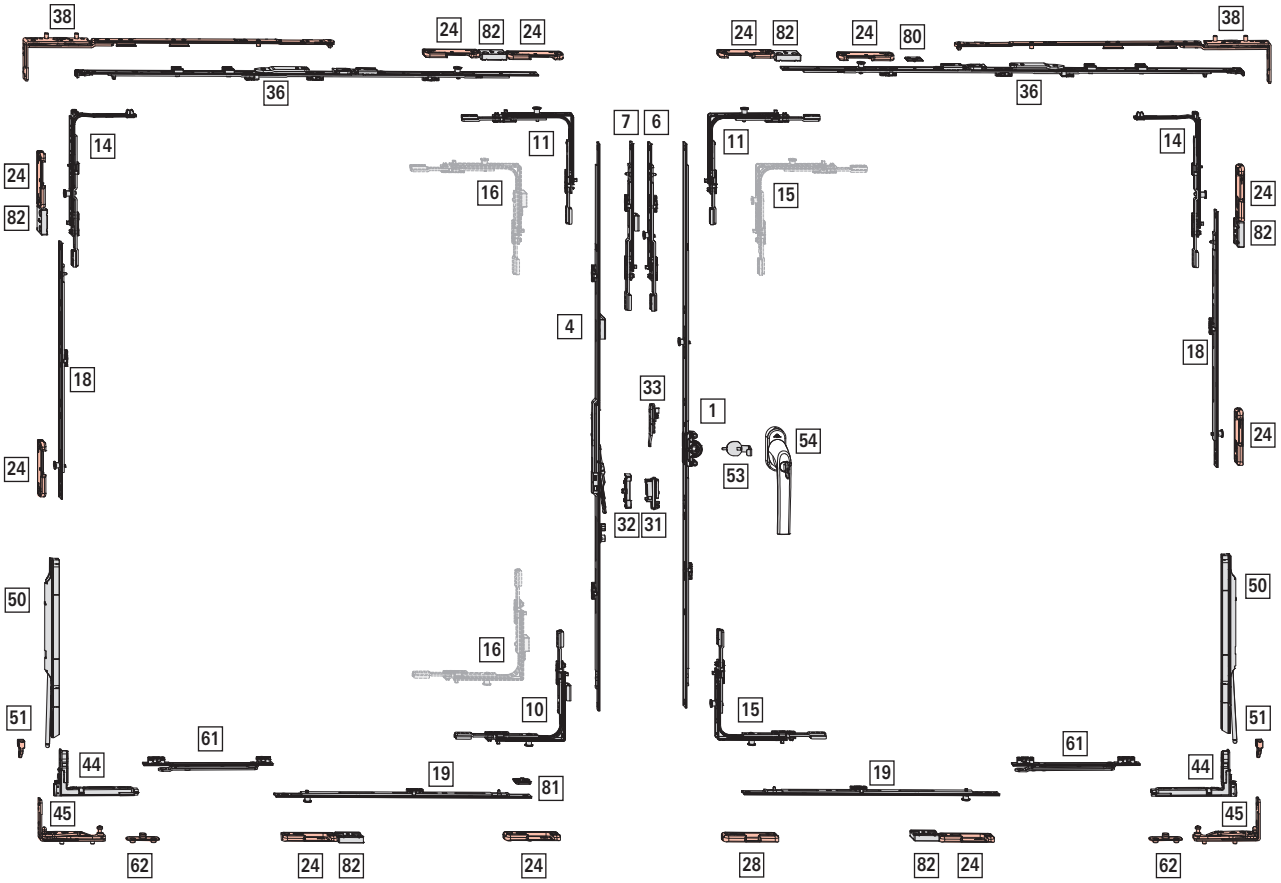
[81] Run-up block → CTL_107

The run-up block depends on the striker used.
Optional

[82] Anti-jemmy device

	№
From rebate depth 24 mm	792786
From rebate depth 26 mm	811715

4.1.4.6 Plus – RC 2 / RC 2 N



Application range

Without load transfer	With load transfer
SRW: 450 – 1400 mm	**SRW**: 650 – 1400 mm
SRH: 601 – 2800 mm	**SRH**: 1000 – 2800 mm
S.kg: max. 120 kg	**S.kg**: max. 180 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

[4] Lever-operated espagnolette Plus – VT, backset 15 mm

						№
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)

				№
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

[14] Sash stay corner drive

		№
1	V	260284

[15] Corner drive, standard (security)

		№
2	V	260274

[18] Multipart centre lock – security, vertical

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

Size-specific combinations:

					№
Without load transfer	With load transfer				
601 – 650	–	200	1	V	296853
651 – 850	1000 – 1150	400	1	V	296854
851 – 1050	1151 – 1350	600 [20]	1	V	296855
1051 – 1250	1351 – 1550	600 KU	1	V	337711
		200	1	V	296853
1251 – 1450	1551 – 1750	600 KU	1	V	337711
		400	1	V	296854
1451 – 1650	1751 – 1950	600 KU	1	V	337711
		600 [21]	1	V	296855
1651 – 1850	1951 – 2150	600 KU	1	V	337711
		600 KU	1	V	337711
		200	1	V	296853
1851 – 2050	2151 – 2350	600 KU	1	V	337711
		600 KU	1	V	337711
		400	1	V	296854
2051 – 2250	2351 – 2550	600 KU	1	V	337711
		600 KU	1	V	337711
		600 [22]	1	V	296855

[20] Without load transfer: crop CL by 15 mm up to SRH 861

[21] Without load transfer: crop CL by 15 mm up to SRH 1461

[22] Without load transfer: crop CL by 15 mm up to SRH 2061

Without load transfer	With load transfer		#		№
2251 – 2450	2551 – 2750	600 KU	1	V	337711
		600 KU	1	V	337711
		600 KU	1	V	337711
		200	1	V	296853
2451 – 2650	2751 – 2800	600 KU	1	V	337711
		600 KU	1	V	337711
		600 KU	1	V	337711
		400	1	V	296854
2651 – 2800	–	600 KU	1	V	337711
		600 KU	1	V	337711
		600 KU	1	V	337711
		600 [23]	1	V	296855

[19] Multipart centre lock – security, horizontal

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

Size-specific combinations:

Without turn restrictor	With turn restrictor		#		№
450 – 650	801 – 850	200	1	V	296853
651 – 850	851 – 1050	400	1	V	296854
851 – 1000	1051 – 1250	600	1	V	296855
–	1251 – 1400	600 KU	1	V	337711
		200	1	V	296853

[24] Security striker → *from page 179*

[28] Tilt striker → *from page 176*

[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 181*

[33] Lifting mishandling device sash component

	№
Lifting mishandling device sash component	795927

[36] Stay guide – security

			#		№
340 – 600	250	490	–	–	2005271
601 – 800	350	690	–	–	2005272
801 – 1000	500	890	1	V	2005276
1001 – 1200	500	1090	1	V	2005277
1201 – 1400	500	1290	1	V	2005278

[23] Without load transfer: crop CL by 15 mm up to SRH 2661

With S.kg > 150 kg, stay guide 500 must be mounted with fastening plate 255211.

[38] Stay arm → *from page 174*

[44] Corner hinge

		№
12/18-13 12/20-13	Left	2005290
12/18-13 12/20-13	Right	2005291

[45] Pivot rest → *from page 175*

[50] Load transfer sash component (SRW ≥ 650 mm, SRH ≥ 1000 mm)

	№
max. 180 kg	2005293

[51] Load transfer frame component (SRW ≥ 650 mm, SRH ≥ 1000 mm)

	№
max. 180 kg	2005292

[53] Drilling protection

	№
Drilling protection	797819

[54] Handle, lockable → CTL_1

[61] Turn restrictor 195 sash component

	№
Turn restrictor 195	2005294

INFO
Turn restrictor possible from SRW 650 mm, mandatory for SRW > 1000 mm and when load transfer is used.

[62] Turn restrictor frame component → *from page 182*

[80] Fastening plate

	№
Fastening plate with cam	255211

[81] Run-up block → CTL_107

The run-up block depends on the striker used.

[82] Anti-jemmy device

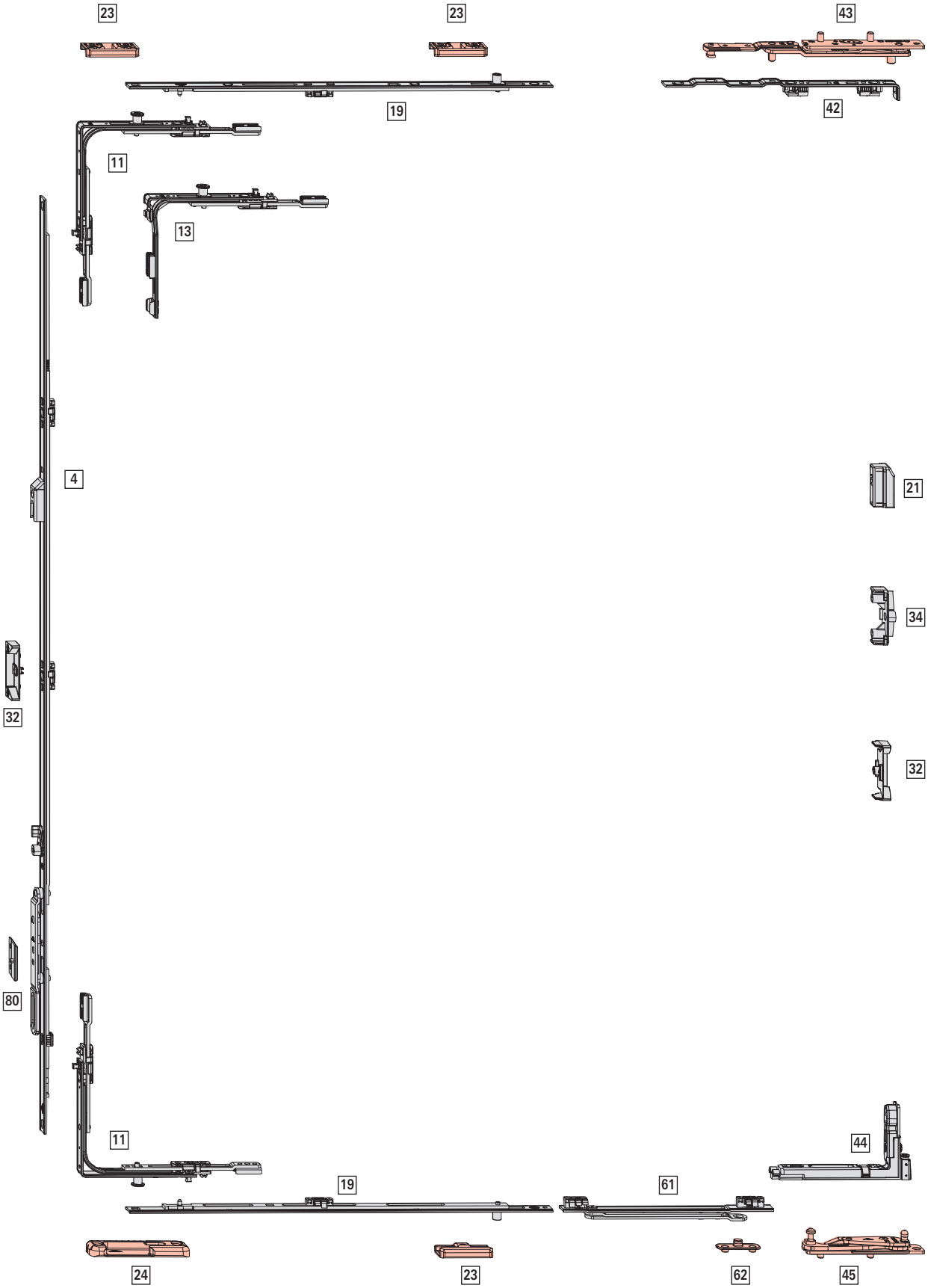
	№
From rebate depth 24 mm	792786
From rebate depth 26 mm	811715

Optional

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

4.1.5 Floating-mullion hardware – centre sash

4.1.5.1 Standard – basic security



Application range

SRW: 370 – 1200 mm

SRH: 430 – 1800 mm

S.kg: max. 80 kg

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

						№
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

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

[11] Standard corner drive

			№
1	E	Top	260275
1	P	Top Bottom	260277

[13] Special short corner drive

		№
1	E	260280
1	P	260282

Use → *from page 170*

[19] Multipart centre lock – standard, horizontal

				№
600	N	1	E	255281

Size-specific combinations:

				№
1101 – 1200	600	1	E	255281

[21] Striker for opposite hardware groove

		№
Striker for opposite hardware groove	Screw-on	328253

[23] Striker → *from page 178*

[24] Security striker → *from page 179*

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

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

		№
Bullet catch for opposite hardware groove	Screw-on	788507

[34] Lifting mishandling device frame component → *from page 182*

		№
Lifting mishandling device for opposite hardware groove	Screw-on	260539

[42] Rebate stay guide

		№
For Turn-Only sashes	220 / 15	2005701

[43] Rebate stay arm → *from page 175*→ *from page 175*

[44] Corner hinge

		№
12/18-13 12/20-13	Left	2005290
12/18-13 12/20-13	Right	2005291

[45] Pivot rest → *from page 175*

[61] Turn restrictor 195 sash component

	№
Turn restrictor 195	2005294

INFO
Turn restrictor possible from SRW 525 mm, mandatory for SRW > 1000 mm.

Alternatively

	№
Turn restrictor 355	2037236

For use with:

SRW ≥ 600 mm

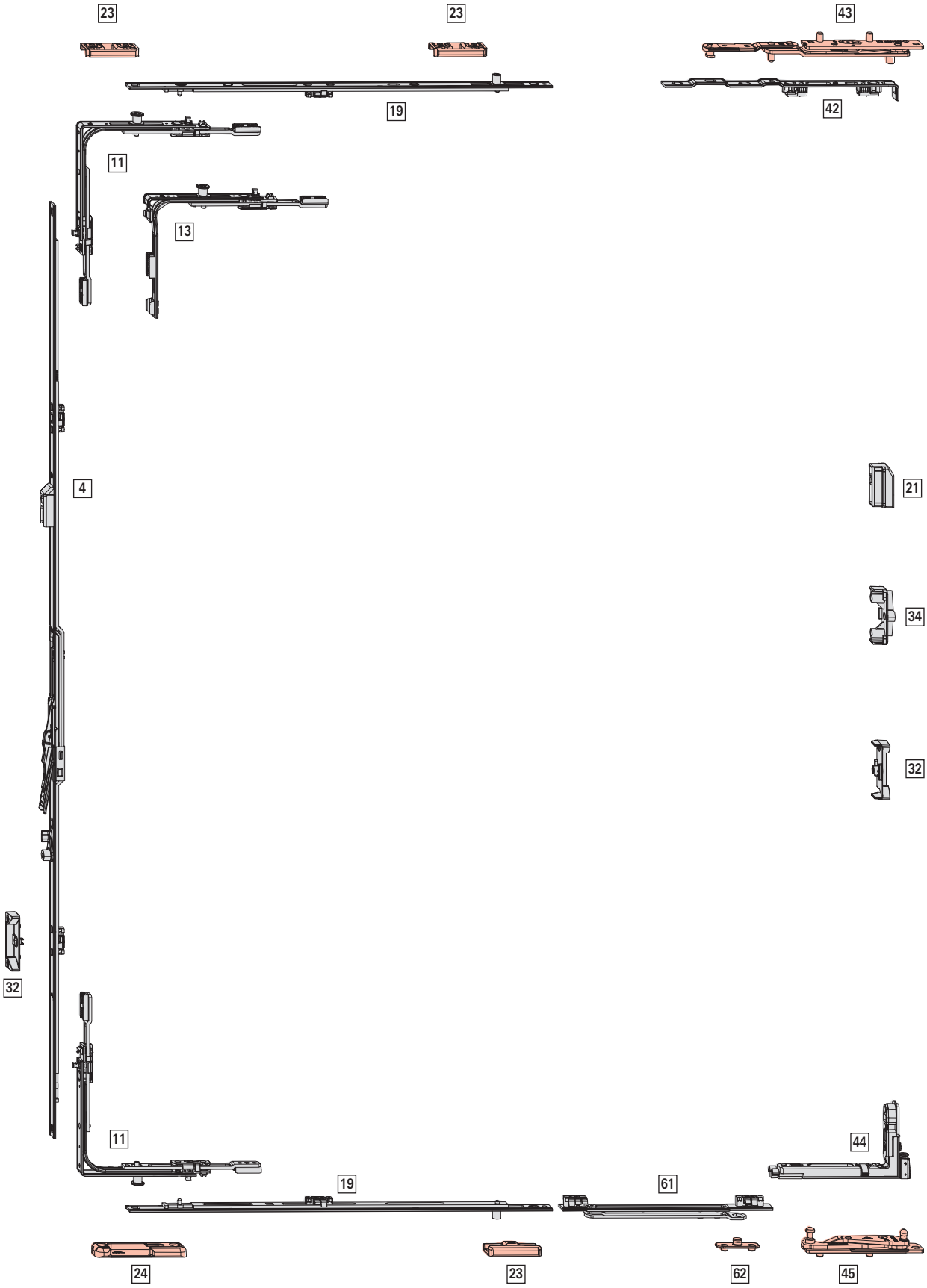
[62] Turn restrictor frame component → *from page 182*

[80] Fastening plate

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

	№
Fastening plate with cam	255211

4.1.5.2 Plus – basic security



Application range

SRW: 370 – 1200 mm

SRH: 430 – 1800 mm

S.kg: max. 80 kg

[4] Lever-operated espagnolette Plus – VT, backset 15 mm

							№
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

[11] Standard corner drive

			№
1	E	Top	260275
1	P	Top Bottom	260277

[13] Special short corner drive

		№
1	E	260280
1	P	260282

Use → *from page 170*

[19] Multipart centre lock – standard, horizontal

				№
600	N	1	E	255281

Size-specific combinations:

				№
1101 – 1200	600	1	E	255281

[21] Striker for opposite hardware groove

		№
Striker for opposite hardware groove	Screw-on	328253

[23] Striker → *from page 178*

[24] Security striker → *from page 179*

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

		№
Bullet catch for opposite hardware groove	Screw-on	788507

[34] Lifting mishandling device frame component → *from page 182*

		№
Lifting mishandling device for opposite hardware groove	Screw-on	260539

[42] Rebate stay guide

		№
For Turn-Only sashes	220 / 15	2005701

[43] Rebate stay arm → *from page 175*→ *from page 175*

[44] Corner hinge

		№
12/18-13 12/20-13	Left	2005290
12/18-13 12/20-13	Right	2005291

[45] Pivot rest → *from page 175*

[61] Turn restrictor 195 sash component

	№
Turn restrictor 195	2005294

INFO
Turn restrictor possible from SRW 525 mm, mandatory for SRW > 1000 mm.

Alternatively

	№
Turn restrictor 355	2037236

For use with:

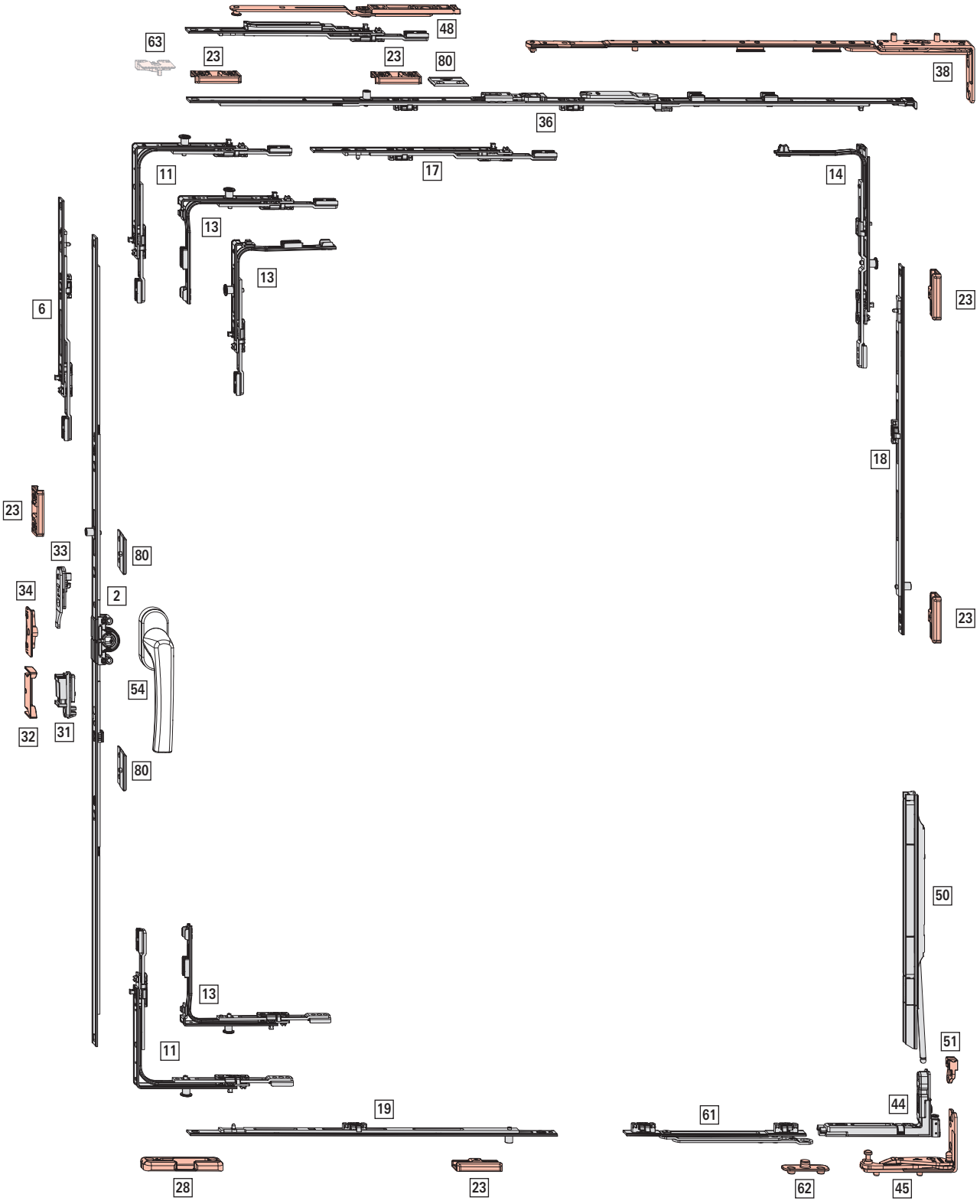
SRW ≥ 600 mm

[62] Turn restrictor frame component → *from page 182*

4.2 T&T espagnolette – centred / variable handle height

4.2.1 Tilt&Turn hardware

4.2.1.1 Basic security



Application range

Without load transfer	With load transfer
SRW: 340 – 1750 mm	**SRW**: 600 – 1750 mm
SRH: 310 – 3000 mm	**SRH**: 1000 – 3000 mm
S.kg: max. 120 kg	**S.kg**: max. 180 kg

INFO
SRW 340 – 450 mm from SRH 451 mm
SRH 310 – 450 mm from SRW 451 mm

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

				#		№
310 – 620	155 – 225	430	N	–	–	259717
621 – 800	311 – 400	580	Y	1	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)

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

Size-specific combinations:

		#		№
2401 – 2600	200 KU	–	–	308267
2601 – 2800	400 KU	1	E	280346
2801 – 3000	600 KU	1	E	255282

[11] Standard corner drive

#			№
1	E	Top	260275
1	P	Top Bottom	260277

[13] Special short corner drive

#			№
1	E	Top	260280
1	P	Top Bottom	260282

For use with:
SRH ≤ 450 mm
SRW ≤ 450 mm

[14] Sash stay corner drive

#		№
1	P	260286

INFO
With SRH 310 – 330 mm, crop the sash stay corner drive (to do so, extend the connecting rod fully).

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

		#		№
200	Y	–	–	308267

Size-specific combinations:

		#		№
1601 – 1750	200 KU	–	–	308267

[18] Multipart centre lock – standard, vertical

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

Size-specific combinations:

			#		№
Without load transfer	With load transfer				
–	1101 – 1150	400	1	E	255280
1101 – 1800	1151 – 1800	600	1	E	255281
1801 – 2400	1801 – 2400	600 KU	1	E	255282
		600	1	E	255281
2401 – 3000	2401 – 3000	600 KU	1	E	255282
		600 KU	1	E	255282
		600	1	E	255281

[19] Multipart centre lock – standard, horizontal

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

Size-specific combinations:

		#		№
1101 – 1600	600	1	E	255281
1601 – 1750	600 KU	1	E	255282
	400	1	E	255280

[23] Striker → *from page 178*

[28] Tilt striker → *from page 176*

[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 181*

[33] Lifting mishandling device sash component

	№
Lifting mishandling device sash component	795927

[34] Lifting mishandling device frame component → *from page 182*

[36] Stay guide – basic security

					№
340 – 600	250	490	–	–	2005271
601 – 800	350	690	–	–	2005272
801 – 1000	500	890	1	E	2005273
1001 – 1200	500	1090	1	E	2005274
1201 – 1400	500	1290	1	E	2005275

With S.kg > 150 kg, stay guide 500 must be mounted with fastening plate 255211.

INFO
From SRH < 600 mm, set the tilt depth to 80 mm (on windows without overlap gasket from SRH < 900 mm).

[38] Stay arm → *from page 174*

[44] Corner hinge

		№
12/18-13 12/20-13	Left	2005290
12/18-13 12/20-13	Right	2005291

[45] Pivot rest → *from page 175*

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

		№
Frame and sash component	200	255237

[50] Load transfer sash component (SRW ≥ 600 mm, SRH ≥ 1000 mm)

	№
max. 180 kg	2005293

[51] Load transfer frame component (SRW ≥ 600 mm, SRH ≥ 1000 mm)

	№
max. 180 kg	2005292

[54] Handle → CTL_1

[61] Turn restrictor 195 sash component

	№
Turn restrictor 195	2005294

INFO
Turn restrictor possible from SRW 525 mm, mandatory for SRW > 1000 mm and when load transfer is used.

Alternatively

	№
Turn restrictor 355	2037236

For use with:
SRW ≥ 600 mm

[62] Turn restrictor frame component → *from page 182*

[80] Fastening plate

	№
Fastening plate with cam	255211

Only for use in conjunction with T&T espagnolette 259717 and for stay guide 500 with S.kg > 150 kg.
Optional

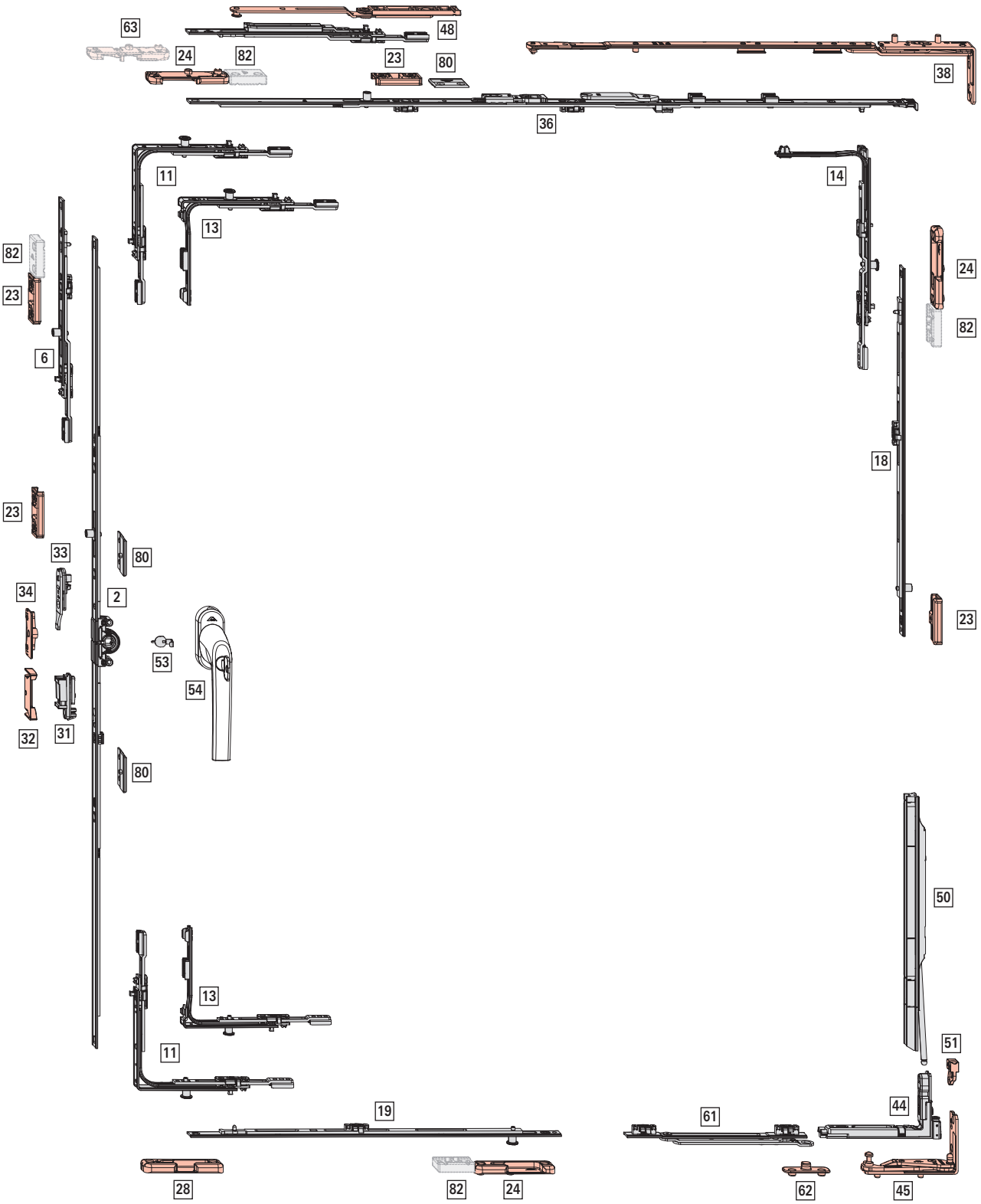
[63] Night vent, SRW ≥ 801 mm → *from page 183*

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

Arrestable brake stay → CTL_104

Sash lifter → CTL_104

4.2.1.2 RC 1 N


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Application range

Without load transfer	With load transfer
SRW: 450 – 1600 mm	**SRW**: 600 – 1600 mm
SRH: 310 – 2800 mm	**SRH**: 1000 – 2800 mm
S.kg: max. 120 kg	**S.kg**: max. 180 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	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)

				№
200	Y	–	–	308267
400	Y	1	E	280346

Size-specific combinations:

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

[11] Standard corner drive

		№
1	P	260277

[13] Special short corner drive

		№
1	P	260282

For use with:
SRH ≤ 450 mm

[14] Sash stay corner drive

		№
1	P	260286

INFO
With SRH 310 – 330 mm, crop the sash stay corner drive (to do so, extend the connecting rod fully).

[18] Multipart centre lock – standard, vertical

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

Size-specific combinations:

Without load transfer	With load transfer				№
–	1101 – 1150	400	1	E	255280
1101 – 1800	1151 – 1800	600	1	E	255281
1801 – 2400	1801 – 2400	600 KU	1	E	255282
		600	1	E	255281
2401 – 2800	2401 – 2800	600 KU	1	E	255282
		600 KU	1	E	255282
		600	1	E	255281

[19] Multipart centre lock – standard, horizontal

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

Size-specific combinations:

Without turn restrictor	With turn restrictor				№
450 – 650	650 – 850	200	1	P	255284
651 – 850	851 – 1050	400	1	P	255285
851 – 1000	1051 – 1250	600	1	P	255286
	1251 – 1450	600 KU	1	E	255282
		200	1	P	255284
	1451 – 1600	600 KU	1	E	255282
		400	1	P	255285

[23] Striker → *from page 178*

[24] Security striker → *from page 179*

[28] Tilt striker → *from page 176*

[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 181*

[33] Lifting mishandling device sash component

	№
Lifting mishandling device sash component	795927

[34] Lifting mishandling device frame component → *from page 182*

[36] Stay guide – basic security

					№
340 – 600	250	490	–	–	2005271
601 – 800	350	690	–	–	2005272
801 – 1000	500	890	1	E	2005273
1001 – 1200	500	1090	1	E	2005274
1201 – 1400	500	1290	1	E	2005275

With S.kg > 150 kg, stay guide 500 must be mounted with fastening plate 255211.

INFO
From SRH < 600 mm, set the tilt depth to 80 mm (on windows without overlap gasket from SRH < 900 mm).

[38] Stay arm → *from page 174*

[44] Corner hinge

		№
12/18-13 12/20-13	Left	2005290
12/18-13 12/20-13	Right	2005291

[45] Pivot rest → *from page 175*

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

		№
Frame and sash component	200	255237

[50] Load transfer sash component (SRW ≥ 600 mm, SRH ≥ 1000 mm)

	№
max. 180 kg	2005293

[51] Load transfer frame component (SRW ≥ 600 mm, SRH ≥ 1000 mm)

	№
max. 180 kg	2005292

[53] Drilling protection

	№
Drilling protection	797819

[54] Handle, lockable → CTL_1

[61] Turn restrictor 195 sash component

	№
Turn restrictor 195	2005294

INFO
Turn restrictor possible from SRW 525 mm, mandatory for SRW > 1000 mm and when load transfer is used.

[62] Turn restrictor frame component → *from page 182*

[80] Fastening plate

	№
Fastening plate with cam	255211

Only for use in conjunction with T&T espagnolette 259717 and for stay guide 500 with S.kg > 150 kg.

Optional

[63] Night vent, SRW ≥ 801 mm → *from page 183*

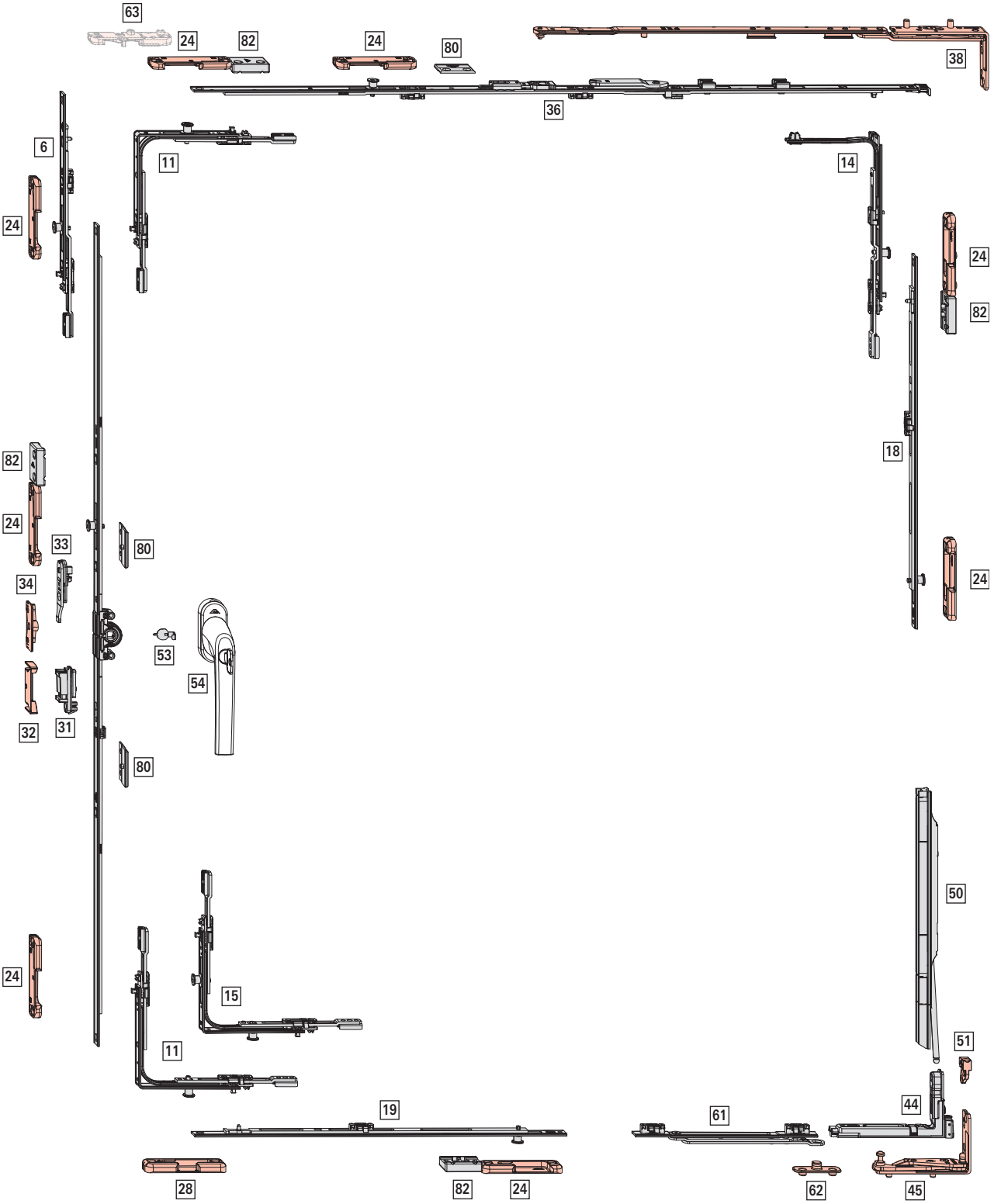
INFO
Only for use in conjunction with P or V cam.

[82] Anti-jemmy device

	№
From rebate depth 24 mm	792786
From rebate depth 26 mm	811715

Sash lifter → CTL_104

4.2.1.3 RC 2 / RC 2 N



Application range

Without load transfer	With load transfer
SRW: 450 – 1400 mm	**SRW**: 650 – 1400 mm
SRH: 490 – 2800 mm	**SRH**: 1000 – 2800 mm
S.kg: max. 120 kg	**S.kg**: max. 180 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.

[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

For use with:

SRH ≤ 620 mm

[18] Multipart centre lock – security, vertical

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

Size-specific combinations:

Without load transfer	With load transfer				№
490 – 650	–	200	1	V	296853
651 – 850	1000 – 1150	400	1	V	296854
851 – 1050	1151 – 1350	600 [24]	1	V	296855
1051 – 1250	1351 – 1550	600 KU	1	V	337711
		200	1	V	296853
1251 – 1450	1551 – 1750	600 KU	1	V	337711
		400	1	V	296854
1451 – 1650	1751 – 1950	600 KU	1	V	337711
		600 [25]	1	V	296855
1651 – 1850	1951 – 2150	600 KU	1	V	337711
		600 KU	1	V	337711
		200	1	V	296853
1851 – 2050	2151 – 2350	600 KU	1	V	337711
		600 KU	1	V	337711
		400	1	V	296854
2051 – 2250	2351 – 2550	600 KU	1	V	337711
		600 KU	1	V	337711
		600 [26]	1	V	296855
2251 – 2450	2551 – 2750	600 KU	1	V	337711
		600 KU	1	V	337711
		600 KU	1	V	337711
		200	1	V	296853
2451 – 2650	2751 – 2800	600 KU	1	V	337711
		600 KU	1	V	337711
		600 KU	1	V	337711
		400	1	V	296854
2651 – 2800	–	600 KU	1	V	337711
		600 KU	1	V	337711
		600 KU	1	V	337711
		600 [27]	1	V	296855

[19] Multipart centre lock – security, horizontal

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

Size-specific combinations:

Without turn restrictor	With turn restrictor				№
450 – 650	650 – 850	200	1	V	296853
651 – 850	851 – 1050	400	1	V	296854
851 – 1000	1051 – 1250	600	1	V	296855
	1251 – 1400	600 KU	1	V	337711
		200	1	V	296853

[24] Without load transfer: crop CL by 15 mm up to SRH 861

[25] Without load transfer: crop CL by 15 mm up to SRH 1461

[26] Without load transfer: crop CL by 15 mm up to SRH 2061

[27] Without load transfer: crop CL by 15 mm up to SRH 2661

[24] Security striker → *from page 179*

[28] Tilt striker → *from page 176*

[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 181*

[33] Lifting mishandling device sash component

	№
Lifting mishandling device sash component	795927

[34] Lifting mishandling device frame component → *from page 182*

[36] Stay guide – security

					№
340 – 600	250	490	–	–	2005271
601 – 800	350	690	–	–	2005272
801 – 1000	500	890	1	V	2005276
1001 – 1200	500	1090	1	V	2005277
1201 – 1400	500	1290	1	V	2005278

With S.kg > 150 kg, stay guide 500 must be mounted with fastening plate 255211.

[38] Stay arm → *from page 174*

INFO
From SRH < 600 mm, set the tilt depth to 80 mm (on windows without overlap gasket from SRH < 900 mm).

[44] Corner hinge

		№
12/18-13 12/20-13	Left	2005290
12/18-13 12/20-13	Right	2005291

[45] Pivot rest → *from page 175*

[50] Load transfer sash component (SRW ≥ 650 mm, SRH ≥ 1000 mm)

	№
max. 180 kg	2005293

[51] Load transfer frame component (SRW ≥ 650 mm, SRH ≥ 1000 mm)

	№
max. 180 kg	2005292

[53] Drilling protection

	№
Drilling protection	797819

[54] Handle, lockable → CTL_1

[61] Turn restrictor 195 sash component

	№
Turn restrictor 195	2005294

INFO
Turn restrictor possible from SRW 650 mm, mandatory for SRW > 1000 mm and when load transfer is used.

[62] Turn restrictor frame component → *from page 182*

[80] Fastening plate

	№
Fastening plate with cam	255211

Only for use in conjunction with T&T espagnolette 259717 and for stay guide 500 with S.kg > 150 kg.

[82] Anti-jemmy device

	№
From rebate depth 24 mm	792786
From rebate depth 26 mm	811715

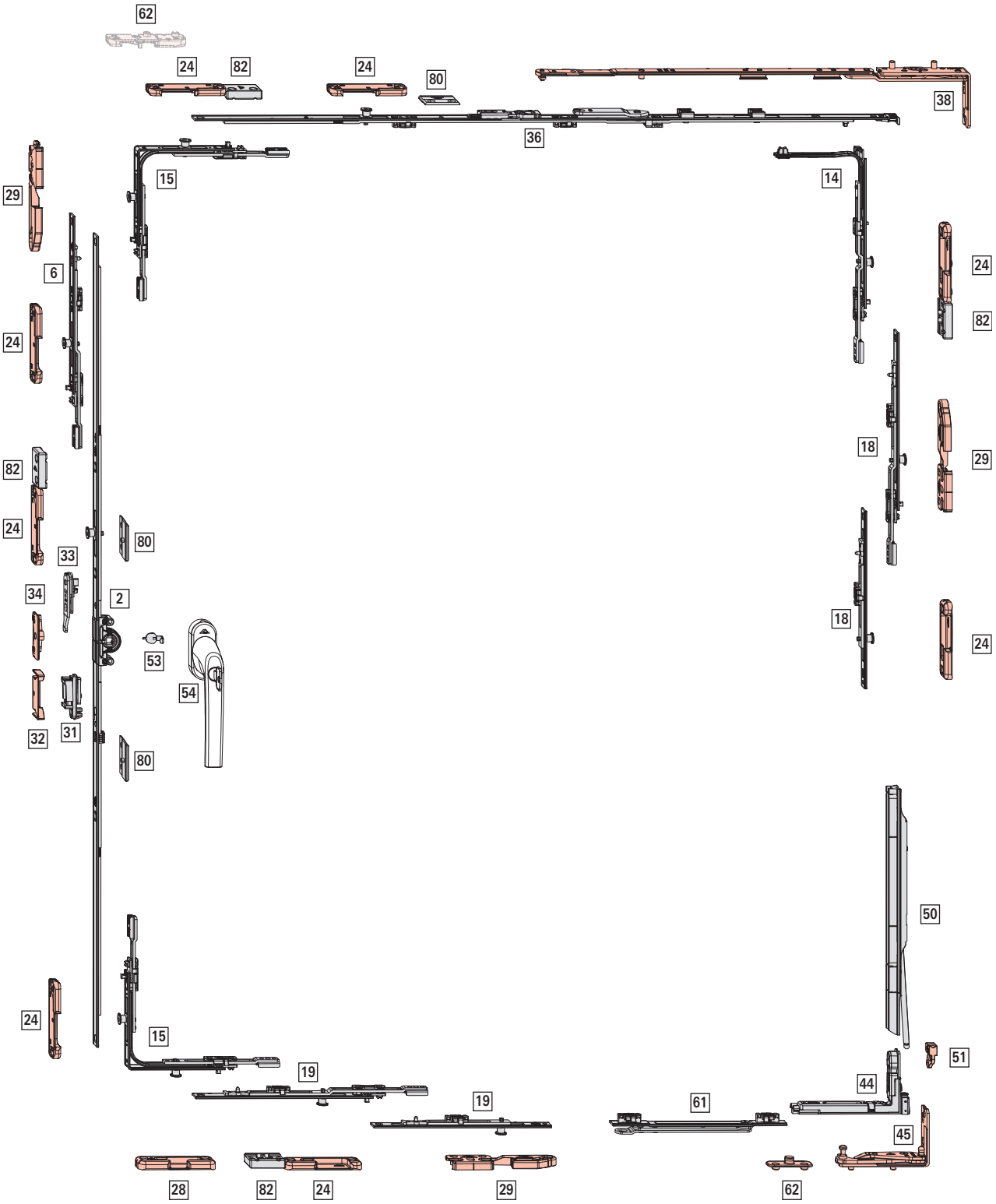
Optional

[63] Night vent, SRW ≥ 801 mm → *from page 183*

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

Sash lifter → CTL_104

4.2.1.4 TiltSafe RC 2 / RC 2 N



Application range

Without load transfer	With load transfer
SRW: 450 – 1400 mm	**SRW**: 650 – 1400 mm
SRH: 490 – 2800 mm	**SRH**: 1000 – 2800 mm
S.kg: max. 120 kg	**S.kg**: max. 180 kg

INFO
Only for hardware axis 13 and rebate depth ≥ 30 mm.

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

				#		№
310 – 620	155 – 225	430	N	–	–	259717
621 – 800	311 – 400	580	Y	1	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)

		#		№
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

[14] Sash stay corner drive

#		№
1	V	260284

[15] Corner drive, standard (security)

#		№
2	V	260274

[18] Multipart centre lock – security, vertical

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

Size-specific combinations:

			#		№
Without load transfer	With load transfer				
490 – 650	–	200	1	V	296853
651 – 850	1000 – 1150	200 KU	1	V	337708
		200	1	V	296853
851 – 1050	1151 – 1350	200 KU	1	V	337708
		400	1	V	296854
1051 – 1250	1351 – 1550	200 KU	1	V	337708
		600 [28]	1	V	296855
1251 – 1450	1551 – 1750	200 KU	1	V	337708
		600 KU	1	V	337711
		200	1	V	296853
1451 – 1650	1751 – 1950	200 KU	1	V	337708
		600 KU	1	V	337711
		400	1	V	296854
1651 – 1850	1951 – 2150	200 KU	1	V	337708
		600 KU	1	V	337711
		600 [29]	1	V	296855
1851 – 2050	2151 – 2350	200 KU	1	V	337708
		600 KU	1	V	337711
		600 KU	1	V	337711
		200	1	V	296853
2051 – 2250	2351 – 2550	200 KU	1	V	337708
		600 KU	1	V	337711
		600 KU	1	V	337711
		400	1	V	296854
2251 – 2450	2551 – 2750	200 KU	1	V	337708
		600 KU	1	V	337711
		600 KU	1	V	337711
		600 [30]	1	V	296855
2451 – 2650	2751 – 2800	200 KU	1	V	337708
		600 KU	1	V	337711
		600 KU	1	V	337711
		600 KU	1	V	337711
		200	1	V	296853
2651 – 2800	–	200 KU	1	V	337708
		600 KU	1	V	337711
		600 KU	1	V	337711
		600 KU	1	V	337711
		400	1	V	296854

[19] Multipart centre lock – security, horizontal

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

[28] Without load transfer: crop CL by 15 mm up to SRH 1061

[29] Without load transfer: crop CL by 15 mm up to SRH 1661

[30] Without load transfer: crop CL by 15 mm up to SRH 2261

Size-specific combinations:

Without turn restrictor	With turn restrictor				№
450 – 650	650 – 850	200	1	V	296853
651 – 850	851 – 1050	200 KU	1	V	337708
		200	1	V	296853
851 – 1000	1051 – 1250	200 KU	1	V	337708
		200 KU	1	V	337708
		200	1	V	296853
	1251 – 1400	200 KU	1	V	337708
		400 KU	1	V	337710
		200	1	V	296853

[24] Security striker → *from page 179*

[28] Tilt striker → *from page 176*

[29] Security striker for tilt ventilation → *from page 180*

[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 181*

[33] Lifting mishandling device sash component

	№
Lifting mishandling device sash component	795927

[34] Lifting mishandling device frame component → *from page 182*

[36] Stay guide – security

					№
340 – 600	250	490	–	–	2005271
601 – 800	350	690	–	–	2005272
801 – 1000	500	890	1	V	2005276
1001 – 1200	500	1090	1	V	2005277
1201 – 1400	500	1290	1	V	2005278

With S.kg > 150 kg, stay guide 500 must be mounted with fastening plate 255211.

[38] Stay arm → *from page 174*

[44] Corner hinge

		№
12/18-13 12/20-13	Left	2005290
12/18-13 12/20-13	Right	2005291

[45] Pivot rest → *from page 175*

[50] Load transfer sash component (SRW ≥ 650 mm, SRH ≥ 1000 mm)

	№
max. 180 kg	2005293

[51] Load transfer frame component (SRW ≥ 650 mm, SRH ≥ 1000 mm)

	№
max. 180 kg	2005292

[53] Drilling protection

	№
Drilling protection	797819

[54] Handle, lockable → CTL_1

[61] Turn restrictor 195 sash component

	№
Turn restrictor 195	2005294

INFO
Turn restrictor possible from SRW 650 mm, mandatory for SRW > 1000 mm and when load transfer is used.

[62] Turn restrictor frame component → *from page 182*

[80] Fastening plate

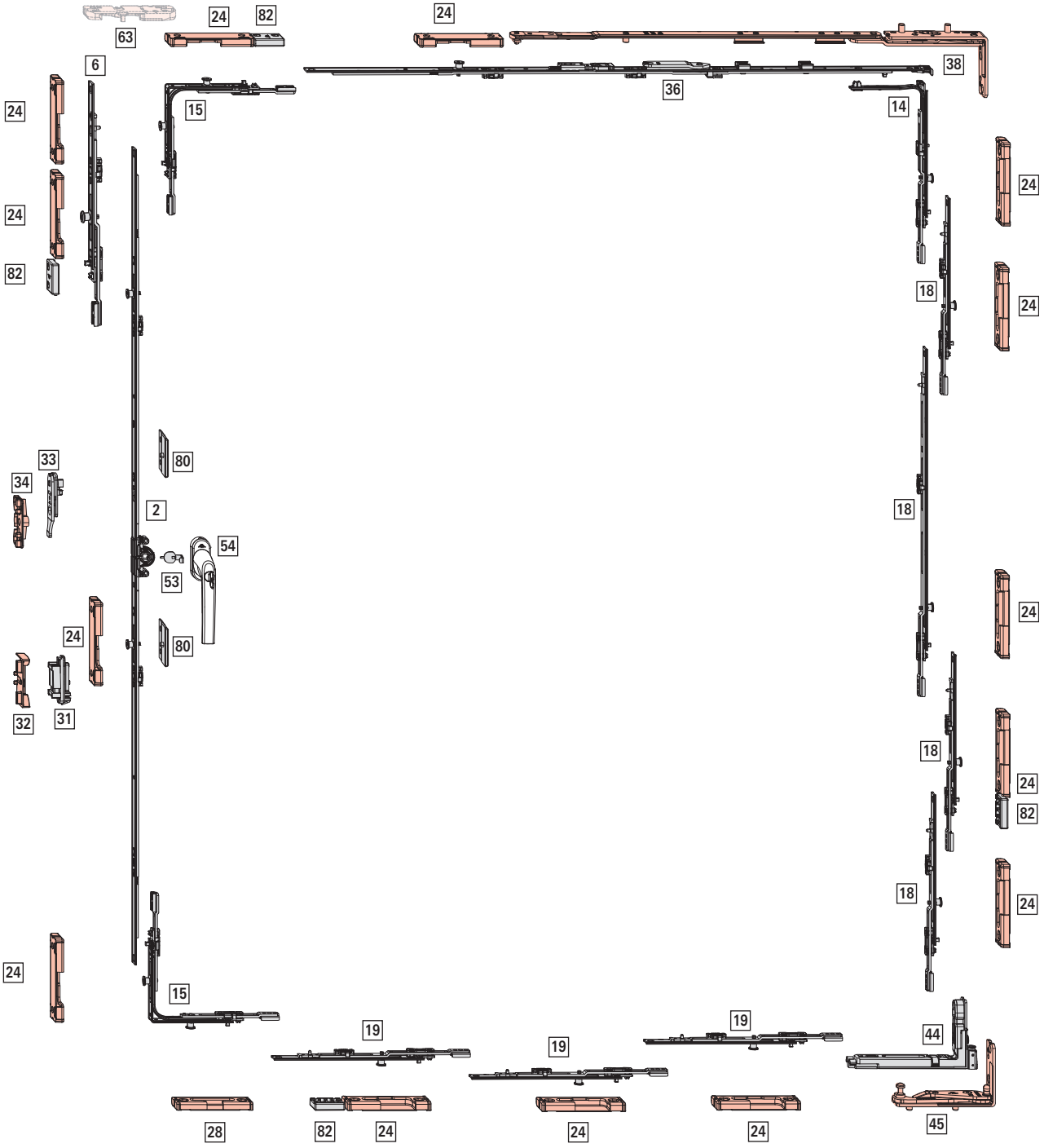
	№
Fastening plate with cam	255211

Only for use in conjunction with T&T espagnolette 259717 and for stay guide 500 with S.kg > 150 kg.

[82] Anti-jemmy device

	№
From rebate depth 24 mm	792786
From rebate depth 26 mm	811715

4.2.1.5 RC 3


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82
24
24
24

Application range

SRW: 490 – 1000 mm

SRH: 490 – 2800 mm

S.kg: max. 120 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

[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	Y	1	V	337708
400	Y	1	V	337710

Size-specific combinations:

				Nº
601 – 800	200 KU	1	V	337708
801 – 1000	200 KU	1	V	337708
	200 KU	1	V	337708
1001 – 1200	200 KU	1	V	337708
	200 KU	1	V	337708
	200 KU	1	V	337708
1201 – 1400	200 KU	1	V	337708
	400 KU	1	V	337710
	200 KU	1	V	337708
1401 – 1600	200 KU	1	V	337708
	400 KU	1	V	337710
	200 KU	1	V	337708
	200 KU	1	V	337708
1601 – 1800	200 KU	1	V	337708
	400 KU	1	V	337710
	400 KU	1	V	337710
	200 KU	1	V	337708
1801 – 2000	200 KU	1	V	337708
	400 KU	1	V	337710
	400 KU	1	V	337710
	200 KU	1	V	337708
	200 KU	1	V	337708
2001 – 2200	200 KU	1	V	337708
	400 KU	1	V	337710
	400 KU	1	V	337710
	400 KU	1	V	337710
	200 KU	1	V	337708
2201 – 2400	200 KU	1	V	337708
	400 KU	1	V	337710
	400 KU	1	V	337710
	400 KU	1	V	337710
	200 KU	1	V	337708
	200 KU	1	V	337708
2401 – 2600	200 KU	1	V	337708
	400 KU	1	V	337710
	400 KU	1	V	337710
	400 KU	1	V	337710
	400 KU	1	V	337710
	200 KU	1	V	337708
2601 – 2800	200 KU	1	V	337708
	400 KU	1	V	337710
	400 KU	1	V	337710
	400 KU	1	V	337710
	400 KU	1	V	337710
	200 KU	1	V	337708
	200 KU	1	V	337708

[19] Multipart centre lock – security, horizontal

				Nº
200	Y	1	V	337708

Size-specific combinations:

				№
490 – 690	200 KU [31]	1	V	337708
691 – 890	200 KU	1	V	337708
	200 KU[32]	1	V	337708
891 – 1000	200 KU	1	V	337708
	200 KU	1	V	337708
	200 KU[33]	1	V	337708

[24] Security striker

[28] Tilt striker

[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 181*

[33] Lifting mishandling device sash component

	№
Lifting mishandling device sash component	795927

[34] Lifting mishandling device frame component → *from page 182*

[36] Stay guide – security

					№
340 – 600	250	490	–	–	2005271
601 – 800	350	690	–	–	2005272
801 – 1000	500	890	1	V	2005276

INFO
From SRH < 600 mm, set the tilt depth to 80 mm (on windows without overlap gasket from SRH < 900 mm).

[38] Stay arm → *from page 174*

[44] Corner hinge

		№
12/18-13 12/20-13	Left	2005290
12/18-13 12/20-13	Right	2005291

[45] Pivot rest → *from page 175*

[53] Drilling protection

	№
Drilling protection	797819

[31] Crop up to SRW 510 (max. 20 mm)

[32] Crop up to SRW 710 (max. 20 mm)

[33] Crop up to SRW 910 (max. 20 mm)

[54] Handle, lockable → CTL_1

[80] Fastening plate

	№
Fastening plate with cam	255211

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

[82] Anti-jemmy device

	№
From rebate depth 24 mm	792786
From rebate depth 26 mm	811715

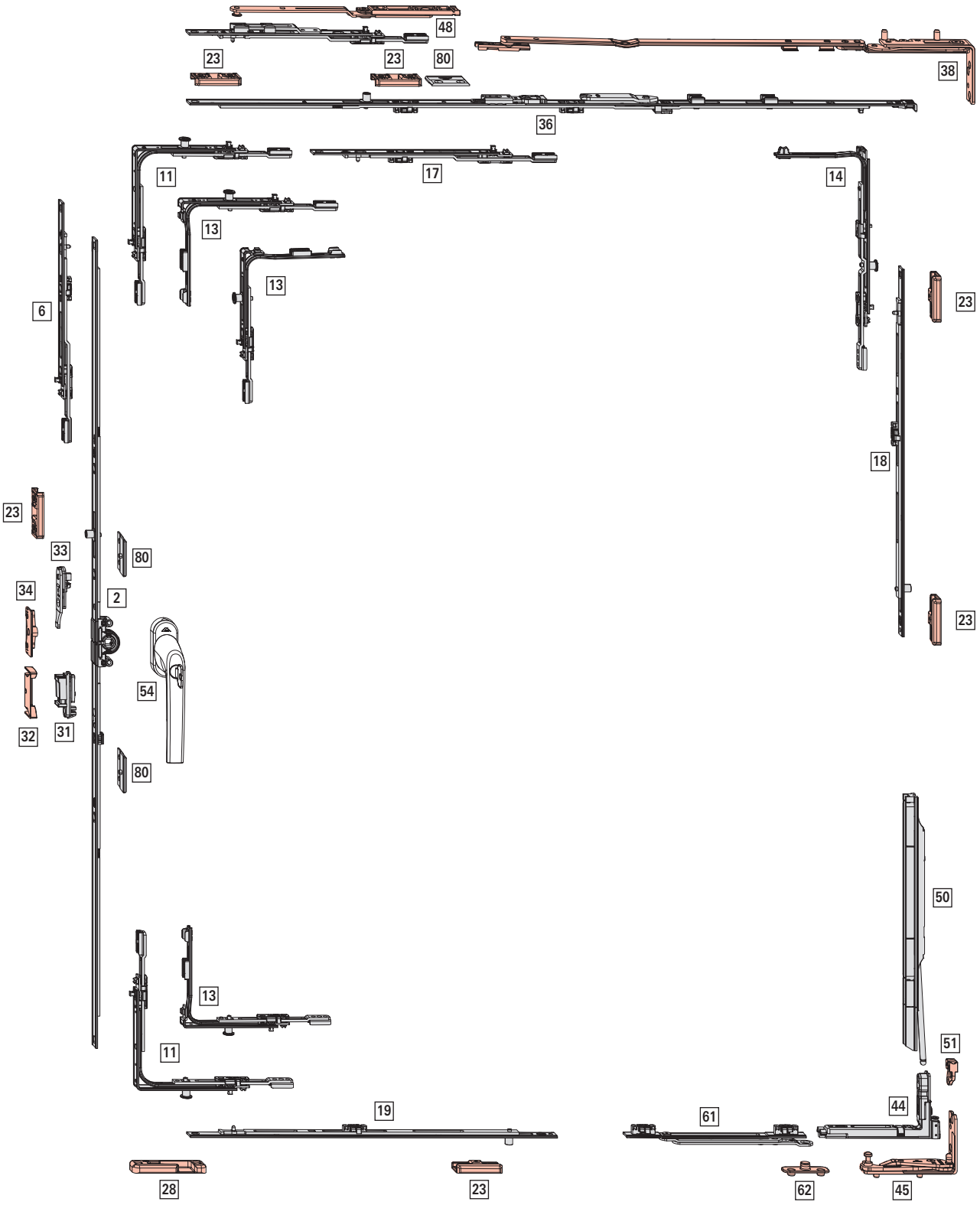
Optional

[63] Night vent, SRW ≥ 801 mm → *from page 183*

Sash lifter → CTL_104

4.2.2 Tilt&Turn / TiltFirst hardware

4.2.2.1 Basic security



Application range

Without load transfer	With load transfer
SRW: 340 – 1750 mm	**SRW**: 600 – 1750 mm
SRH: 310 – 3000 mm	**SRH**: 1000 – 3000 mm
S.kg: max. 120 kg	**S.kg**: max. 180 kg

INFO
SRW 340 – 450 mm from SRH 451 mm
SRH 310 – 450 mm from SRW 451 mm

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

				#		№
310 – 620	155 – 225	430	N	–	–	259717
621 – 800	311 – 400	580	Y	1	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)

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

Size-specific combinations:

		#		№
2401 – 2600	200 KU	–	–	308267
2601 – 2800	400 KU	1	E	280346
2801 – 3000	600 KU	1	E	255282

[11] Standard corner drive

#			№
1	E	Top	260275
1	P	Top Bottom	260277

[13] Special short corner drive

#			№
1	E	Top	260280
1	P	Top Bottom	260282

For use with:
SRH ≤ 450 mm
SRW ≤ 450 mm

[14] Sash stay corner drive

#		№
1	P	260286

INFO
With SRH 310 – 330 mm, crop the sash stay corner drive (to do so, extend the connecting rod fully).

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

		#		№
200	Y	–	–	308267

Size-specific combinations:

		#		№
1601 – 1750	200 KU	–	–	308267

[18] Multipart centre lock – standard, vertical

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

Size-specific combinations:

			#		№
Without load transfer	With load transfer				
–	1101 – 1150	400	1	E	255280
1101 – 1800	1151 – 1800	600	1	E	255281
1801 – 2400	1801 – 2400	600 KU	1	E	255282
		600	1	E	255281
2401 – 3000	2401 – 3000	600 KU	1	E	255282
		600 KU	1	E	255282
		600	1	E	255281

[19] Multipart centre lock – standard, horizontal

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

Size-specific combinations:

		#		№
1101 – 1600	600	1	E	255281
1601 – 1750	600 KU	1	E	255282
	400	1	E	255280

[23] Striker → *from page 178*

[28] Tilt striker TiltFirst → *from page 176*

[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 181*

[33] Lifting mishandling device sash component

	№
Lifting mishandling device sash component	795927

[34] Lifting mishandling device frame component → *from page 182*

[36] Stay guide – basic security

					№
340 – 600	250	490	–	–	2005271
601 – 800	350	690	–	–	2005272
801 – 1000	500	890	1	E	2005273
1001 – 1200	500	1090	1	E	2005274
1201 – 1400	500	1290	1	E	2005275

With S.kg > 150 kg, stay guide 500 must be mounted with fastening plate 255211.

INFO
From SRH < 600 mm, set the tilt depth to 80 mm (on windows without overlap gasket from SRH < 900 mm).

[38] Stay arm → *from page 174*

[44] Corner hinge

		№
12/18-13 12/20-13	Left	2005290
12/18-13 12/20-13	Right	2005291

[45] Pivot rest → *from page 175*

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

	№
Frame and sash component	292022

[50] Load transfer sash component (SRW ≥ 600 mm, SRH ≥ 1000 mm)

	№
max. 180 kg	2005293

[51] Load transfer frame component (SRW ≥ 600 mm, SRH ≥ 1000 mm)

	№
max. 180 kg	2005292

[54] Handle → CTL_1

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

[61] Turn restrictor 195 sash component

	№
Turn restrictor 195	2005294

INFO
Turn restrictor possible from SRW 525 mm, mandatory for SRW > 1000 mm and when load transfer is used.

Alternatively

	№
Turn restrictor 355	2037236

For use with:
SRW ≥ 600 mm

[62] Turn restrictor frame component → *from page 182*

[80] Fastening plate

	№
Fastening plate with cam	255211

Only for use in conjunction with T&T espagnolette 259717 and for stay guide 500 with S.kg > 150 kg.
Optional

[63] Night vent, SRW ≥ 801 mm → *from page 183*

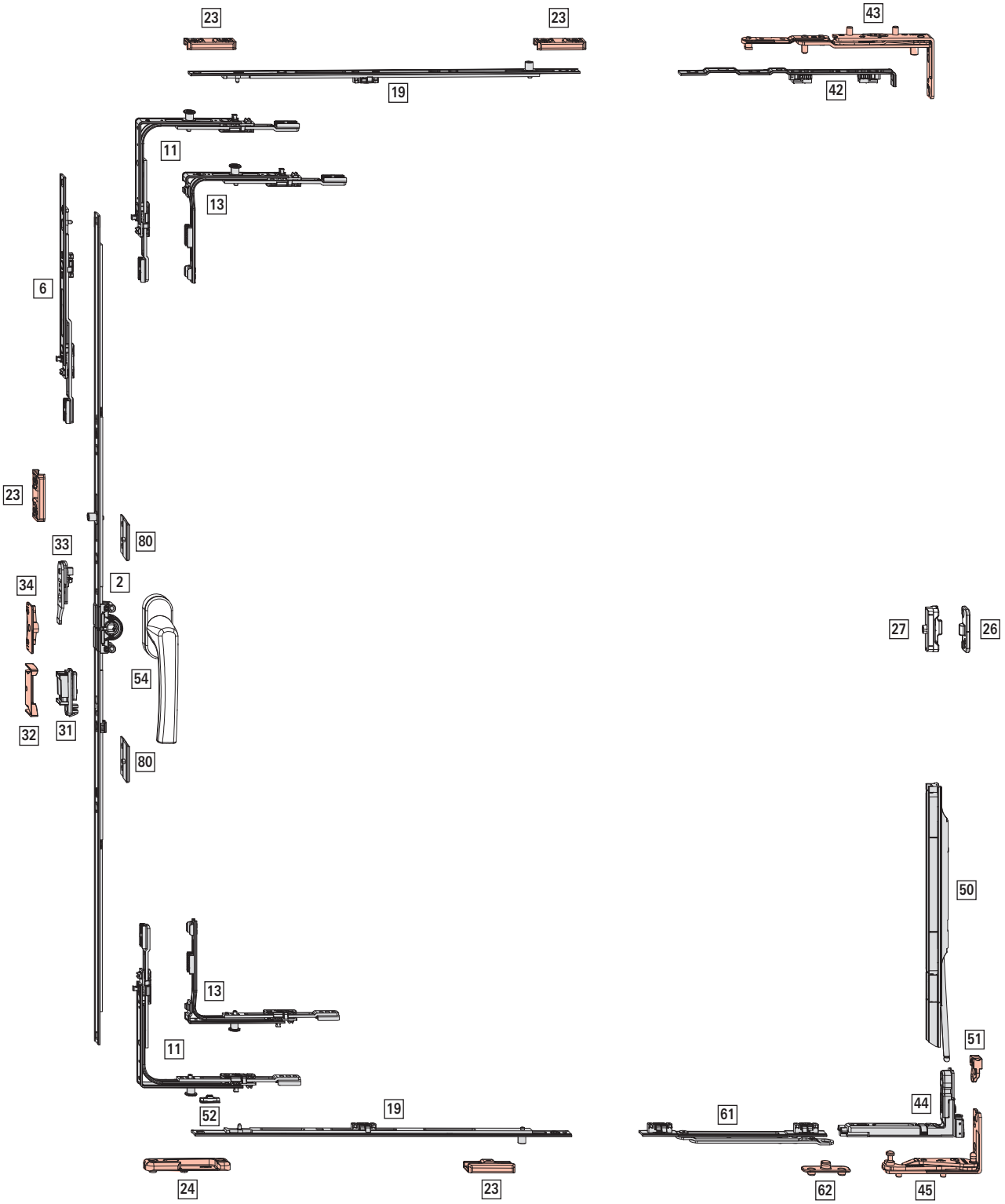
INFO
Only for use in conjunction with P or V cam.

Arrestable brake stay → CTL_104

Sash lifter → CTL_104

4.2.3 Turn-Only hardware

4.2.3.1 Basic security



Application range

Without load transfer	With load transfer
SRW: 370 – 1750 mm	**SRW**: 600 – 1750 mm
SRH: 310 – 3000 mm	**SRH**: 1000 – 3000 mm
S.kg: max. 120 kg	**S.kg**: max. 180 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	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)

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

Size-specific combinations:

				№
2401 – 2600	200 KU	–	–	308267
2601 – 2800	400 KU	1	E	280346
2801 – 3000	600 KU	1	E	255282

[11] Standard corner drive

			№
1	E	Top	260275
1	P	Top Bottom	260277

INFO
With SRH 370 – 415 mm, crop the corner drive, standard, at the top (to do so, extend the connecting rod fully).

[13] Special short corner drive

			№
1	E	Top	260280
1	P	Top Bottom	260282

For use with:
SRH ≤ 450 mm

[19] Multipart centre lock – standard, horizontal

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

Size-specific combinations:

				№
1101 – 1600	600	1	E	255281
1601 – 1750	600 KU	1	E	255282
	400	1	E	255280

[23] Striker → *from page 178*

[24] Security striker → *from page 179*

[26] Concealed centre closer frame component → CTL_104

[27] Concealed centre closer sash component → CTL_104

[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 181*

[33] Lifting mishandling device sash component

	№
Lifting mishandling device sash component	795927

[34] Lifting mishandling device frame component → *from page 182*

[42] Rebate stay guide

		№
For Turn-Only sashes	220 / 15	2005701

[43] Rebate stay arm → *from page 175*→ *from page 175*

[44] Corner hinge

		№
12/18-13 12/20-13	Left	2005290
12/18-13 12/20-13	Right	2005291

[45] Pivot rest → *from page 175*

[50] Load transfer sash component (SRW ≥ 600 mm, SRH ≥ 1000 mm)

	№
max. 180 kg	2005293

[51] Load transfer frame component
(SRW ≥ 600 mm, SRH ≥ 1000 mm)

	№
max. 180 kg	2005292

[52] 90° travel restrictor

	№
Travel restrictor	264603

[54] Handle → CTL_1

[61] Turn restrictor 195 sash component

	№
Turn restrictor 195	2005294

INFO
Turn restrictor possible from SRW 525 mm, mandatory for SRW > 1000 mm and when load transfer is used.

Alternatively

	№
Turn restrictor 355	2037236

For use with:
SRW ≥ 600 mm

[62] Turn restrictor frame component → *from page 182*

[80] Fastening plate

	№
Fastening plate with cam	255211

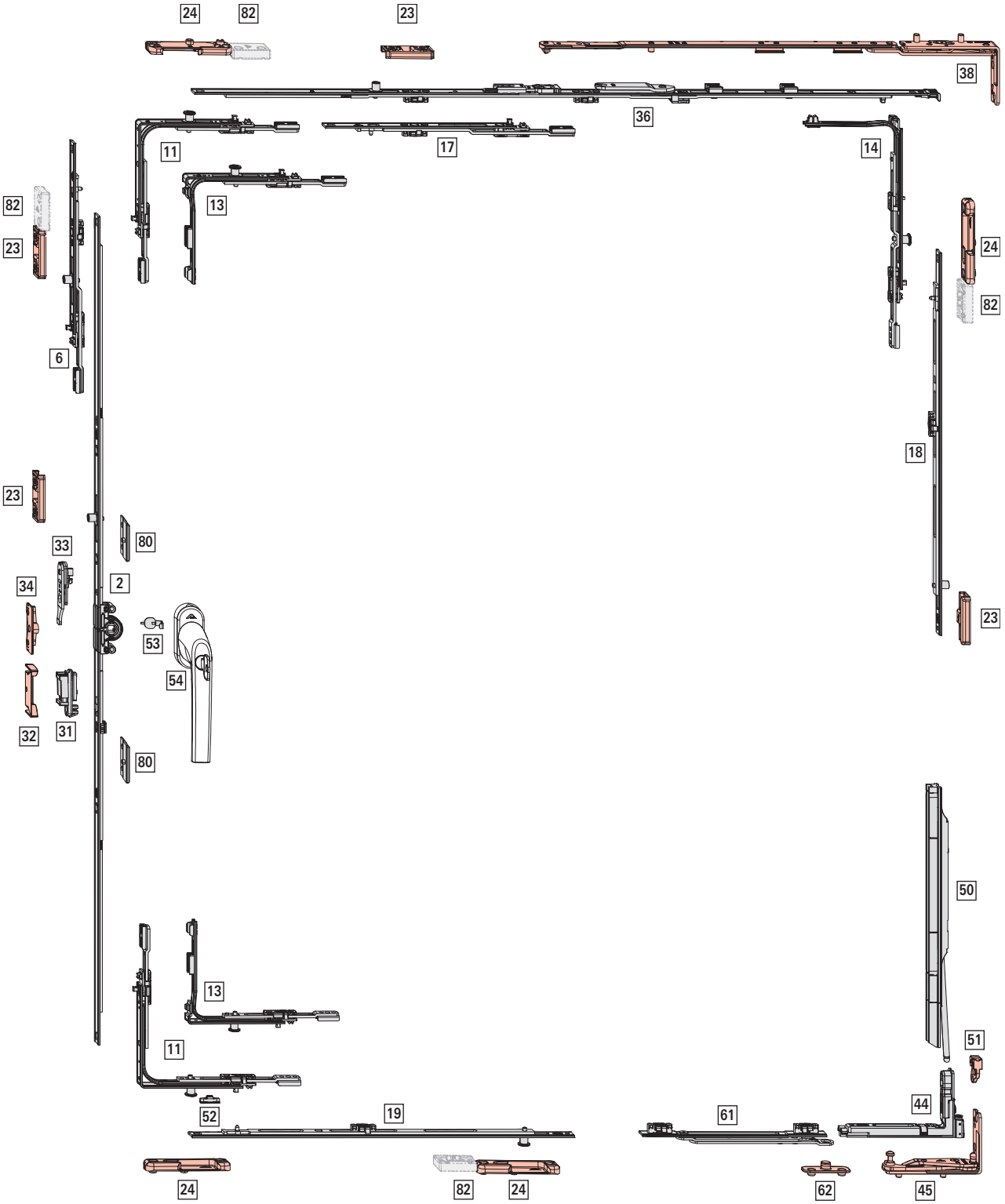
Can only be used in combination with T&T espagnolette 259717.

Optional

Arrestable brake stay → CTL_104

Sash lifter → CTL_104

4.2.3.2 RC 1 N


24
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62
45

Application range

Without load transfer	With load transfer
SRW: 450 – 1600 mm	**SRW**: 600 – 1600 mm
SRH: 310 – 2800 mm	**SRH**: 1000 – 2800 mm
S.kg: max. 120 kg	**S.kg**: max. 180 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	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)

				№
200	Y	–	–	308267
400	Y	1	E	280346

Size-specific combinations:

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

[11] Standard corner drive

		№
1	P	260277

[13] Special short corner drive

		№
1	P	260282

For use with:
SRH ≤ 450 mm

[14] Sash stay corner drive

		№
1	P	260286

INFO
With SRH 285 – 330 mm, crop the sash stay corner drive (to do so, extend the connecting rod fully).

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

				№
200	Y	–	–	308267

Size-specific combinations:

				№
1401 – 1600	200 KU	–	–	308267

[18] Multipart centre lock – standard, vertical

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

Size-specific combinations:

Without load transfer	With load transfer				№
–	1101 – 1150	400	1	E	255280
1101 – 1800	1151 – 1800	600	1	E	255281
1801 – 2400	1801 – 2400	600 KU	1	E	255282
		600	1	E	255281
2401 – 2800	2401 – 2800	600 KU	1	E	255282
		600 KU	1	E	255282
		600	1	E	255281

[19] Multipart centre lock – security, horizontal

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

Size-specific combinations:

Without turn restrictor	With turn restrictor				№
450 – 650	650 – 850	200	1	P	255284
651 – 850	851 – 1050	400	1	P	255285
851 – 1000	1051 – 1250	600	1	P	255286
	1251 – 1450	600 KU	1	E	255282
		200	1	P	255284
	1451 – 1600	600 KU	1	E	255282
		400	1	P	255285

[23] Striker → *from page 178*

[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 181*

[33] Lifting mishandling device sash component

	№
Lifting mishandling device sash component	795927

[34] Lifting mishandling device frame component → *from page 182*

[36] Stay guide – basic security

					Nº
340 – 600	250	490	–	–	2005271
601 – 800	350	690	–	–	2005272
801 – 1000	500	890	1	E	2005273
1001 – 1200	500	1090	1	E	2005274
1201 – 1400	500	1290	1	E	2005275

[38] Stay arm → *from page 174*

[44] Corner hinge

		Nº
12/18-13 12/20-13	Left	2005290
12/18-13 12/20-13	Right	2005291

[45] Pivot rest → *from page 175*

[50] Load transfer sash component (SRW ≥ 600 mm, SRH ≥ 1000 mm)

	Nº
max. 180 kg	2005293

[51] Load transfer frame component (SRW ≥ 600 mm, SRH ≥ 1000 mm)

	Nº
max. 180 kg	2005292

[52] 90° travel restrictor

	Nº
Travel restrictor	264603

[53] Drilling protection

	Nº
Drilling protection	797819

[54] **Handle**, lockable → CTL_1

[61] Turn restrictor 195 sash component

	Nº
Turn restrictor 195	2005294

INFO
Turn restrictor possible from SRW 525 mm, mandatory for SRW > 1000 mm and when load transfer is used.

[62] Turn restrictor frame component → *from page 182*

[80] Fastening plate

	Nº
Fastening plate with cam	255211

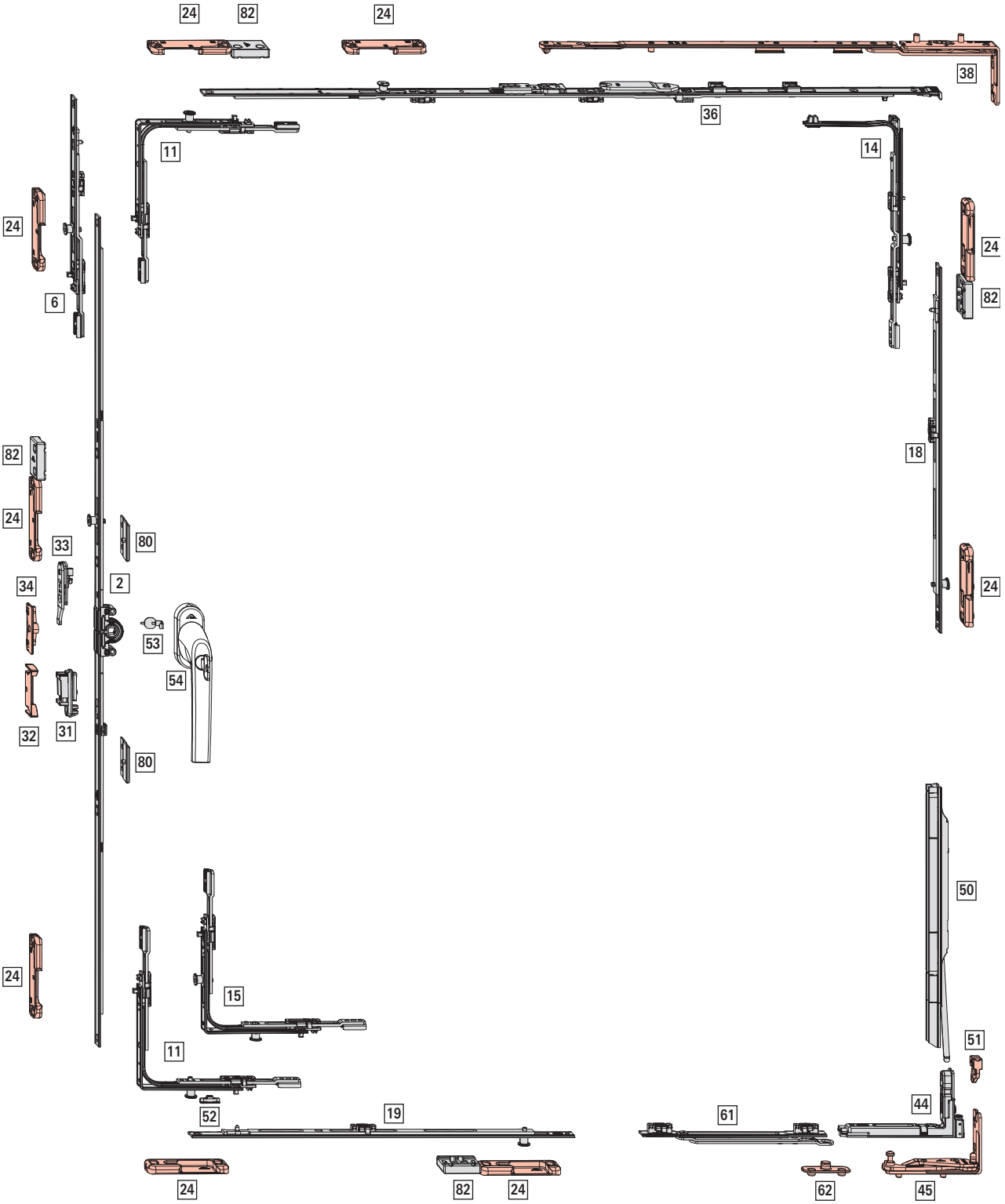
Can only be used in combination with T&T espagnolette 259717.
Optional

[82] Anti-jemmy device

	Nº
From rebate depth 24 mm	792786
From rebate depth 26 mm	811715

Sash lifter → CTL_104

4.2.3.3 RC 2 / RC 2 N



Application range

Without load transfer	With load transfer
SRW: 450 – 1400 mm	**SRW**: 650 – 1400 mm
SRH: 490 – 2800 mm	**SRH**: 1000 – 2800 mm
S.kg: max. 120 kg	**S.kg**: max. 180 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.

[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

For use with:

SRH ≤ 620 mm

[18] Multipart centre lock – security, vertical

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

Size-specific combinations:

			#		№
Without load transfer	With load transfer				
490 – 650	–	200	1	V	296853
651 – 850	1000 – 1150	400	1	V	296854
851 – 1050	1151 – 1350	600 [34]	1	V	296855
1051 – 1250	1351 – 1550	600 KU	1	V	337711
		200	1	V	296853
1251 – 1450	1551 – 1750	600 KU	1	V	337711
		400	1	V	296854
1451 – 1650	1751 – 1950	600 KU	1	V	337711
		600 [35]	1	V	296855
1651 – 1850	1951 – 2150	600 KU	1	V	337711
		600 KU	1	V	337711
		200	1	V	296853
1851 – 2050	2151 – 2350	600 KU	1	V	337711
		600 KU	1	V	337711
		400	1	V	296854
2051 – 2250	2351 – 2550	600 KU	1	V	337711
		600 KU	1	V	337711
		600 [36]	1	V	296855
2251 – 2450	2551 – 2750	600 KU	1	V	337711
		600 KU	1	V	337711
		600 KU	1	V	337711
		200	1	V	296853
2451 – 2650	2751 – 2800	600 KU	1	V	337711
		600 KU	1	V	337711
		600 KU	1	V	337711
		400	1	V	296854
2651 – 2800	–	600 KU	1	V	337711
		600 KU	1	V	337711
		600 KU	1	V	337711
		600 [37]	1	V	296855

[19] Multipart centre lock – security, horizontal

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

Size-specific combinations:

			#		№
Without turn restrictor	With turn restrictor				
450 – 650	650 – 850	200	1	V	296853
651 – 850	851 – 1050	400	1	V	296854
851 – 1000	1051 – 1250	600	1	V	296855
	1251 – 1400	600 KU	1	V	337711
		200	1	V	296853

[34] Without load transfer: crop CL by 15 mm up to SRH 861

[35] Without load transfer: crop CL by 15 mm up to SRH 1461

[36] Without load transfer: crop CL by 15 mm up to SRH 2061

[37] Without load transfer: crop CL by 15 mm up to SRH 2661

[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 181*

[33] Lifting mishandling device sash component

	№
Lifting mishandling device sash component	795927

[34] Lifting mishandling device frame component → *from page 182*

[36] Stay guide – security

			#		№
340 – 600	250	490	–	–	2005271
601 – 800	350	690	–	–	2005272
801 – 1000	500	890	1	V	2005276
1001 – 1200	500	1090	1	V	2005277
1201 – 1400	500	1290	1	V	2005278

[38] Stay arm → *from page 174*

[44] Corner hinge

		№
12/18-13 12/20-13	Left	2005290
12/18-13 12/20-13	Right	2005291

[45] Pivot rest → *from page 175*

[50] Load transfer sash component (SRW ≥ 650 mm, SRH ≥ 1000 mm)

	№
max. 180 kg	2005293

[51] Load transfer frame component (SRW ≥ 650 mm, SRH ≥ 1000 mm)

	№
max. 180 kg	2005292

[52] 90° travel restrictor

	№
Travel restrictor	264603

[53] Drilling protection

	№
Drilling protection	797819

[54] Handle, lockable → CTL_1

[61] Turn restrictor 195 sash component

	№
Turn restrictor 195	2005294

INFO
Turn restrictor possible from SRW 650 mm, mandatory for SRW > 1000 mm and when load transfer is used.

[62] Turn restrictor frame component → *from page 182*

[80] Fastening plate

	№
Fastening plate with cam	255211

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

[82] Anti-jemmy device

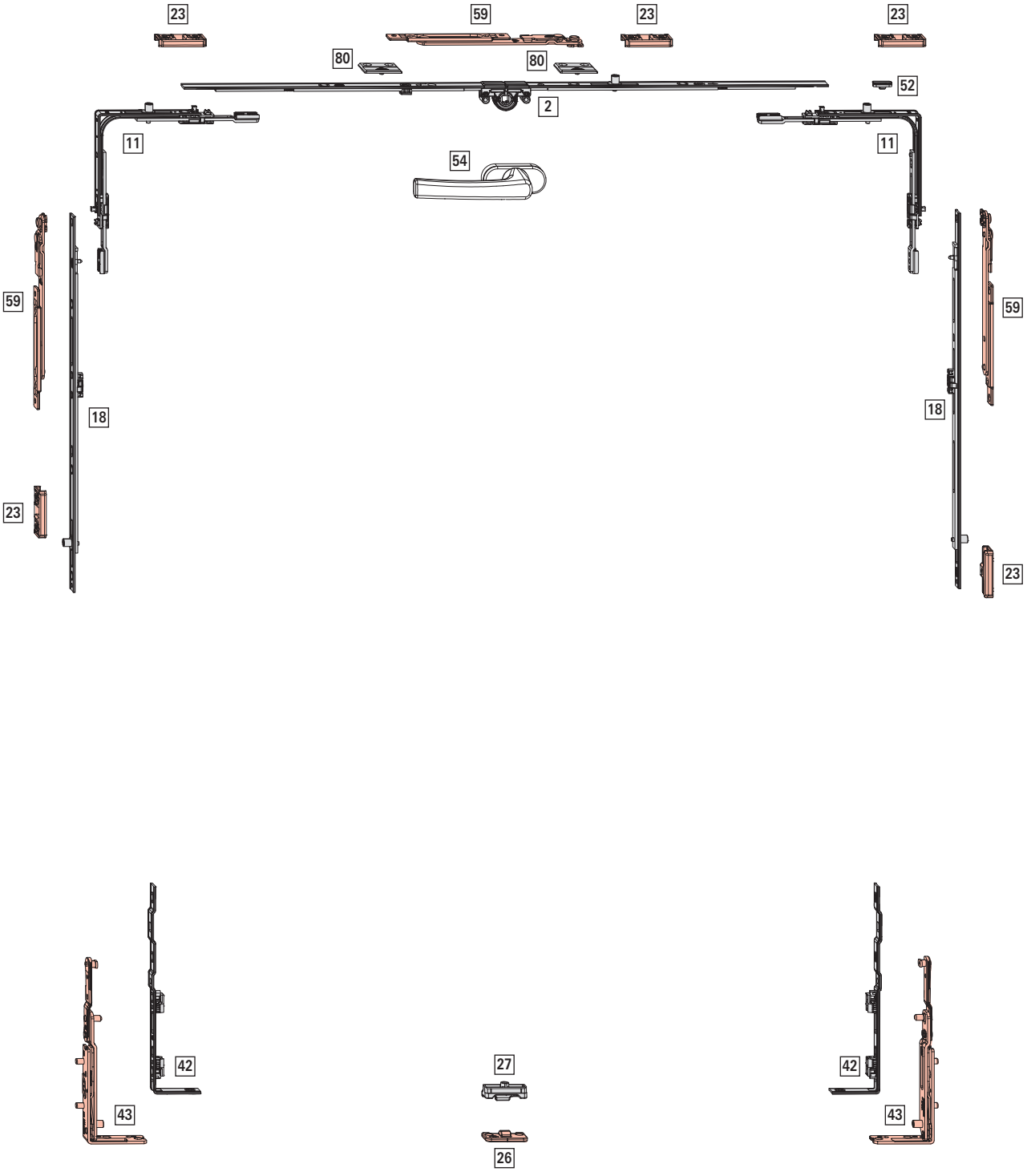
	№
From rebate depth 24 mm	792786
From rebate depth 26 mm	811715

Optional

Sash lifter → CTL_104

4.2.4 Tilt-Only hardware

4.2.4.1 Basic security



Application range

SRW: 450 – 2400 mm

SRH: 370 – 1500 mm

S.kg: max. 80 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	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.

[11] Standard corner drive

#			№
1	E	Top	260275
1	P	Top Bottom	260277

[18] Multipart centre lock – standard, vertical

		#		№
N	400	1	E	255280

Size-specific combinations:

		#		№
801 – 1500	400	1	E	255280

[23] Striker → *from page 178*

[26] Concealed centre closer frame component → CTL_104

[27] Concealed centre closer sash component → CTL_104

[42] Rebate stay guide

		№
For Tilt-Only sashes	220 / 50	2005281

[43] Rebate stay arm → *from page 175* → *from page 175*

[52] 90° travel restrictor

	№
Travel restrictor	264603

[54] Handle → CTL_1

[59] Tilt stay set for floating-mullion installation

	№
Floating-mullion installation	482823

Installation at the top: SRW > 620 mm

Installation at the side: SRH ≥ 500 mm

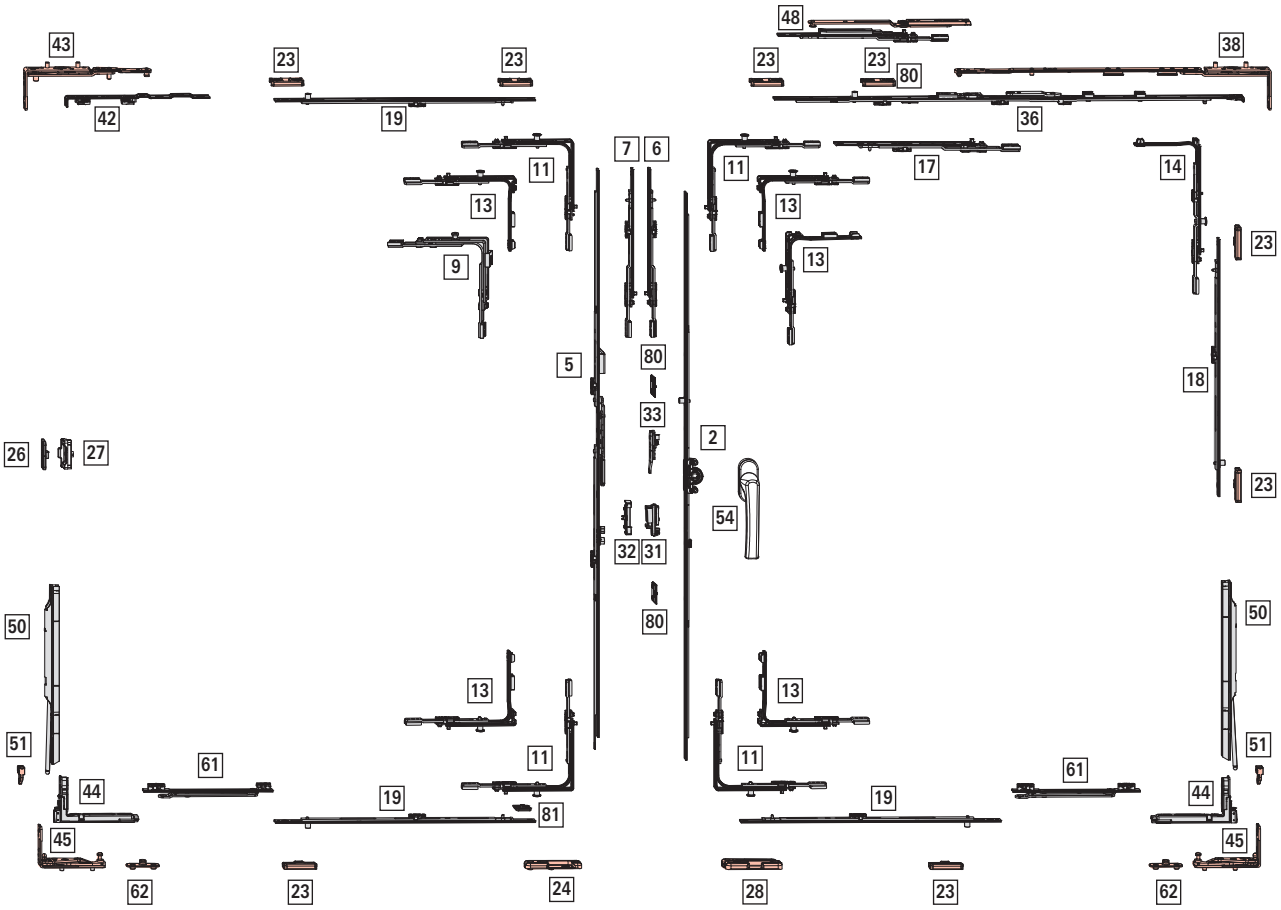
[80] Fastening plate

	№
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

Without load transfer	With load transfer
SRW: 370 – 1750 mm	**SRW**: 600 – 1750 mm
SRH: 370 – 3000 mm	**SRH**: 1000 – 3000 mm
S.kg: max. 120 kg	**S.kg**: max. 180 kg

INFO

SRW 370 – 450 mm from SRH 451 mm

First opening sash

SRH 370 – 450 mm from SRW 451 mm

Second opening sash

SRH 370 – 520 mm from SRW 451 mm

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

						№
310 – 620	155 – 225	430	N	–	–	259717
621 – 800	311 – 400	580	Y	1	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

						№
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)

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

Size-specific combinations:

				№
2401 – 2600	200 KU	–	–	308267
2601 – 2800	400 KU	1	E	280346
2801 – 3000	600 KU	1	E	255282

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

			№
200	Y	–	308267
400	Y	1	280345
600	Y	1	280331

Size-specific combinations:

			№
2401 – 2600	200 KU	–	308267
2601 – 2800	400 KU	1	280345
2801 – 3000	600 KU	1	280331

[9] Floating-mullion corner drive with security striker

					№
Second opening sash	Top	1	1	V	313538

INFO

SRW 370 – 415 mm: For Turn-Only sashes, crop the top corner drive.

For use on the second opening sash:
if the SRW on the first opening sash is ≤ 450 mm

[11] Standard corner drive

			№
1	E	Top	260275
1	P	Top Bottom	260277

[13] Special short corner drive

			№
1	E	Top	260280
1	P	Top Bottom	260282

For use with (→ *from page 168*):
First opening sash
SRH ≤ 450 mm, SRW ≤ 450 mm
Second opening sash
SRH ≤ 520 mm and 621 – 650 mm

INFO

SRW 370 – 410 mm: For Turn-Only sashes, crop the top corner drive.

[14] Sash stay corner drive

		№
1	P	260286

INFO

With SRH 285 – 330 mm, crop the sash stay corner drive (to do so, extend the connecting rod fully).

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

		#		№
200	Y	–	–	308267

Size-specific combinations:

		#		№
1601 – 1750	200 KU	–	–	308267

[18] Multipart centre lock – standard, vertical

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

Size-specific combinations:

			#		№
Without load transfer	With load transfer				
–	1101 – 1150	400	1	E	255280
1101 – 1800	1151 – 1800	600	1	E	255281
1801 – 2400	1801 – 2400	600 KU	1	E	255282
		600	1	E	255281
2401 – 3000	2401 – 3000	600 KU	1	E	255282
		600 KU	1	E	255282
		600	1	E	255281

[19] Multipart centre lock – standard, horizontal

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

Size-specific combinations:

		#		№
1101 – 1600	600	1	E	255281
1601 – 1750	600 KU	1	E	255282
	400	1	E	255280

[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] Concealed centre closer frame component → CTL_104

[27] Concealed centre closer sash component → CTL_104

[28] Tilt striker → *from page 176*

[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 181*

[33] Lifting mishandling device sash component

	№
Lifting mishandling device sash component	795927

[36] Stay guide – basic security

			#		№
340 – 600	250	490	–	–	2005271
601 – 800	350	690	–	–	2005272
801 – 1000	500	890	1	E	2005273
1001 – 1200	500	1090	1	E	2005274
1201 – 1400	500	1290	1	E	2005275

With S.kg > 150 kg, stay guide 500 must be mounted with fastening plate 255211.

INFO

From SRH < 600 mm, set the tilt depth to 80 mm (on windows without overlap gasket from SRH < 900 mm).

[38] Stay arm → *from page 174*

[42] Rebate stay guide

		№
For Turn-Only sashes	220 / 15	2005701

[43] Rebate stay arm → *from page 175*

[44] Corner hinge

		№
12/18-13 12/20-13	Left	2005290
12/18-13 12/20-13	Right	2005291

[45] Pivot rest → *from page 175*

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

		№
Frame and sash component	200	255237

[50] Load transfer sash component
(SRW ≥ 600 mm, SRH ≥ 1000 mm)

	№
max. 180 kg	2005293

[51] Load transfer frame component
(SRW ≥ 600 mm, SRH ≥ 1000 mm)

	№
max. 180 kg	2005292

[54] Handle → CTL_1

[61] Turn restrictor 195 sash component

	№
Turn restrictor 195	2005294

INFO
Turn restrictor possible from SRW 525 mm, mandatory for SRW > 1000 mm and when load transfer is used.

Alternatively

	№
Turn restrictor 355	2037236

For use with:

SRW ≥ 600 mm

[62] Turn restrictor frame component → *from page 182*

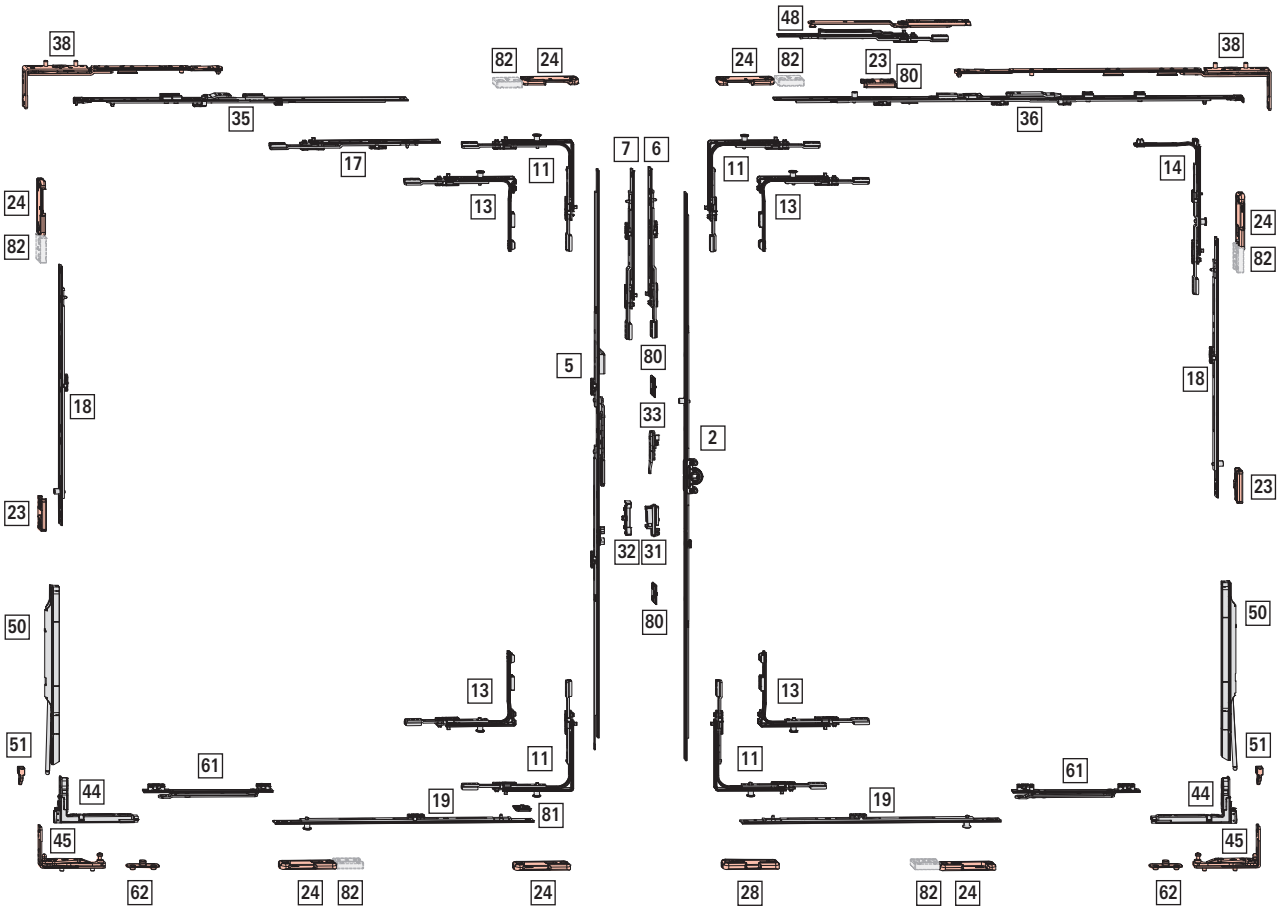
[80] Fastening plate

	№
Fastening plate with cam	255211

Only for use in conjunction with T&T espagnolette 259717 and for stay guide 500 with S.kg > 150 kg.

[81] Run-up block
The run-up block depends on the striker used.

4.2.5.2 Standard – RC 1 N



Application range

Without load transfer	With load transfer
SRW: 450 – 1600 mm	**SRW**: 600 – 1600 mm
SRH: 370 – 2800 mm	**SRH**: 1000 – 2800 mm
S.kg: max. 120 kg	**S.kg**: max. 180 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	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

						№
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)

				№
200	Y	–	–	308267
400	Y	1	E	280346

Size-specific combinations:

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

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

			№
200	Y	–	308267
400	Y	1	280345

Size-specific combinations:

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

[11] Standard corner drive

		№
1	P	260277

[13] Special short corner drive

		№
1	P	260282

For use with (→ *from page 168*):
First opening sash
SRH ≤ 450 mm
Second opening sash
SRH ≤ 520 mm and 621 – 650 mm

[14] Sash stay corner drive

		№
1	P	260286

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

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

Size-specific combinations:

				№
711 – 910	200 KU	–	–	308267
911 – 1110	400 KU	1	E	280346
1111 – 1310	600 KU	1	E	255282
1311 – 1510	600 KU	1	E	255282
	200 KU	–	–	308267
1511 – 1600	600 KU	1	E	255282
	400 KU	1	E	280346

[18] Multipart centre lock – standard, vertical

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

Size-specific combinations:

					№
Without load transfer	With load transfer				
–	1101 – 1150	400	1	E	255280
1101 – 1800	1151 – 1800	600	1	E	255281
1801 – 2400	1801 – 2400	600 KU	1	E	255282
		600	1	E	255281
2401 – 2800	2401 – 2800	600 KU	1	E	255282
		600 KU	1	E	255282
		600	1	E	255281

[19] Multipart centre lock – security, horizontal

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

Size-specific combinations:

Without turn restrictor	With turn restrictor				
450 – 650	650 – 850	200	1	P	255284
651 – 850	851 – 1050	400	1	P	255285
851 – 1000	1051 – 1250	600	1	P	255286
	1251 – 1450	600 KU	1	E	255282
		200	1	P	255284
	1451 – 1600	600 KU	1	E	255282
		400	1	P	255285

[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 176*

[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 181*

[33] Lifting mishandling device sash component

	№
Lifting mishandling device sash component	795927

[34] Lifting mishandling device frame component → *from page 182*

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

			№
411 – 600	250	490	2005279
511 – 710	250	600	2005280

[36] Stay guide – basic security

					№
340 – 600	250	490	–	–	2005271
601 – 800	350	690	–	–	2005272
801 – 1000	500	890	1	E	2005273
1001 – 1200	500	1090	1	E	2005274
1201 – 1400	500	1290	1	E	2005275

With S.kg > 150 kg, stay guide 500 must be mounted with fastening plate 255211.

INFO
From SRH < 600 mm, set the tilt depth to 80 mm (on windows without overlap gasket from SRH < 900 mm).

[38] Stay arm → *from page 174*

[44] Corner hinge

		№
12/18-13 12/20-13	Left	2005290
12/18-13 12/20-13	Right	2005291

[45] Pivot rest → *from page 175*

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

		№
Frame and sash component	200	255237

[50] Load transfer sash component (SRW ≥ 600 mm, SRH ≥ 1000 mm)

	№
max. 180 kg	2005293

[51] Load transfer frame component (SRW ≥ 600 mm, SRH ≥ 1000 mm)

	№
max. 180 kg	2005292

[53] Drilling protection

	№
Drilling protection	797819

[54] Handle, lockable → CTL_1

[61] Turn restrictor 195 sash component

	№
Turn restrictor 195	2005294

INFO
Turn restrictor possible from SRW 525 mm, mandatory for SRW > 1000 mm and when load transfer is used.

[62] Turn restrictor frame component → *from page 182*

[80] Fastening plate

	№
Fastening plate with cam	255211

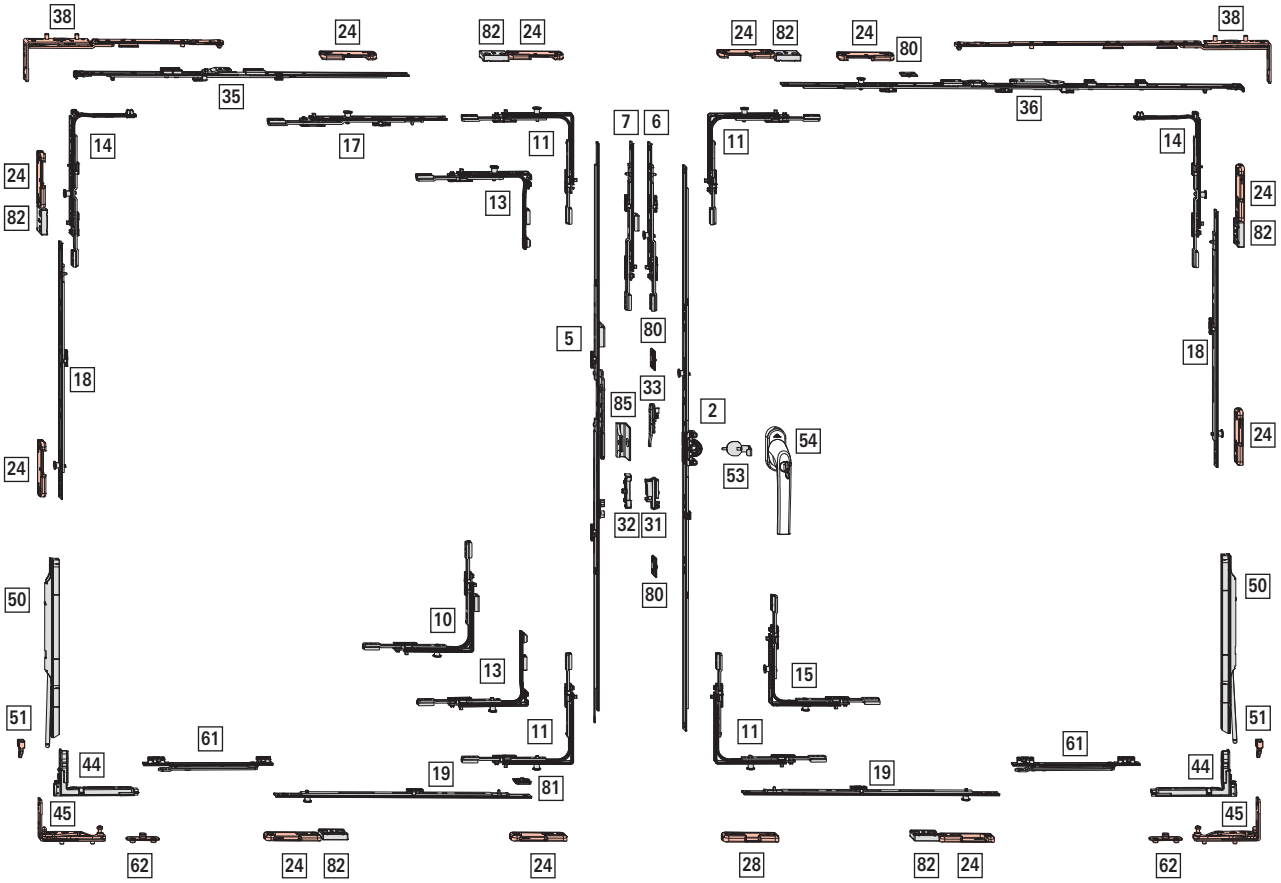
Only for use in conjunction with T&T espagnolette 259717 and for stay guide 500 with S.kg > 150 kg.

[81] Run-up block → CTL_107
The run-up block depends on the striker used.

Optional

[82] Anti-jemmy device	
i	№
From rebate depth 24 mm	792786
From rebate depth 26 mm	811715

4.2.5.3 Standard – RC 2 / RC 2 N



Application range

Without load transfer	With load transfer
SRW: 450 – 1400 mm	**SRW**: 650 – 1400 mm
SRH: 520 – 2800 mm	**SRH**: 1000 – 2800 mm
S.kg: max. 120 kg	**S.kg**: max. 180 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	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)

				№
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

[38] Without load transfer: crop CL by 15 mm up to SRH 861

For use with:

SRH ≤ 620 mm

[11] Standard corner drive

		№
1	V	260272

[13] Special short corner drive

		№
1	V	281288

For use with (→ *from page 168*):

Second opening sash

SRH 621 – 650 mm

[14] Sash stay corner drive

		№
1	V	260284

[15] Corner drive, standard (security)

		№
2	V	260274

For use at the bottom with:

SRH ≤ 620 mm

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

				№
200	Y	1	V	337708
400	Y	1	V	337710
600	Y	1	V	337711

Size-specific combinations:

				№
711 – 910	200 KU	1	V	337708
911 – 1110	400 KU	1	V	337710
1111 – 1310	600 KU	1	V	337711
1311 – 1400	600 KU	1	V	337711
	200 KU	1	V	337708

[18] Multipart centre lock – security, vertical

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

Size-specific combinations:

Without load transfer	With load transfer				№
520 – 650	–	200	1	V	296853
651 – 850	1000 – 1150	400	1	V	296854
851 – 1050	1151 – 1350	600 [38]	1	V	296855

Without load transfer	With load transfer				№
1051 – 1250	1351 – 1550	600 KU	1	V	337711
		200	1	V	296853
1251 – 1450	1551 – 1750	600 KU	1	V	337711
		400	1	V	296854
1451 – 1650	1751 – 1950	600 KU	1	V	337711
		600 [39]	1	V	296855
1651 – 1850	1951 – 2150	600 KU	1	V	337711
		600 KU	1	V	337711
		200	1	V	296853
1851 – 2050	2151 – 2350	600 KU	1	V	337711
		600 KU	1	V	337711
		400	1	V	296854
2051 – 2250	2351 – 2400	600 KU	1	V	337711
		600 KU	1	V	337711
		600 [40]	1	V	296855
2251 – 2450	2551 – 2750	600 KU	1	V	337711
		600 KU	1	V	337711
		600 KU	1	V	337711
		200	1	V	296853
2451 – 2650	2751 – 2800	600 KU	1	V	337711
		600 KU	1	V	337711
		600 KU	1	V	337711
		400	1	V	296854
2651 – 2800	–	600 KU	1	V	337711
		600 KU	1	V	337711
		600 KU	1	V	337711
		600 [41]	1	V	296855

[19] Multipart centre lock – security, horizontal

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

Size-specific combinations:

Without turn restrictor	With turn restrictor				№
450 – 650	650 – 850	200	1	V	296853
651 – 850	851 – 1050	400	1	V	296854
851 – 1000	1051 – 1250	600	1	V	296855
–	1251 – 1400	600 KU	1	V	337711
		200	1	V	296853

[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 176*

[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 181*

[33] Lifting mishandling device sash component

	№
Lifting mishandling device sash component	795927

[35] Turn-Only sash stay guide – security

			№
411 – 600	250	490	2005279
511 – 710	250	600	2005280

[36] Stay guide – security

					№
340 – 600	250	490	–	–	2005271
601 – 800	350	690	–	–	2005272
801 – 1000	500	890	1	V	2005276
1001 – 1200	500	1090	1	V	2005277
1201 – 1400	500	1290	1	V	2005278

With S.kg > 150 kg, stay guide 500 must be mounted with fastening plate 255211.

[38] Stay arm → *from page 174*

[44] Corner hinge

		№
12/18-13 12/20-13	Left	2005290
12/18-13 12/20-13	Right	2005291

[45] Pivot rest → *from page 175*

[50] Load transfer sash component (SRW ≥ 650 mm, SRH ≥ 1000 mm)

	№
max. 180 kg	2005293

[39] Without load transfer: crop CL by 15 mm up to SRH 1461

[40] Without load transfer: crop CL by 15 mm up to SRH 2061

[41] Without load transfer: crop CL by 15 mm up to SRH 2661

[51] Load transfer frame component
(SRW ≥ 650 mm, SRH ≥ 1000 mm)

	№
max. 180 kg	2005292

[53] Drilling protection

	№
Drilling protection	797819

[54] Handle, lockable → CTL_1

[61] Turn restrictor 195 sash component

	№
Turn restrictor 195	2005294

INFO
Turn restrictor possible from SRW 650 mm, mandatory for SRW > 1000 mm and when load transfer is used.

[62] Turn restrictor frame component → *from page 182*

[80] Fastening plate

	№
Fastening plate with cam	255211

Only for use in conjunction with T&T espagnolette 259717 and for stay guide 500 with S.kg > 150 kg.

[81] Run-up block → CTL_107
The run-up block depends on the striker used.

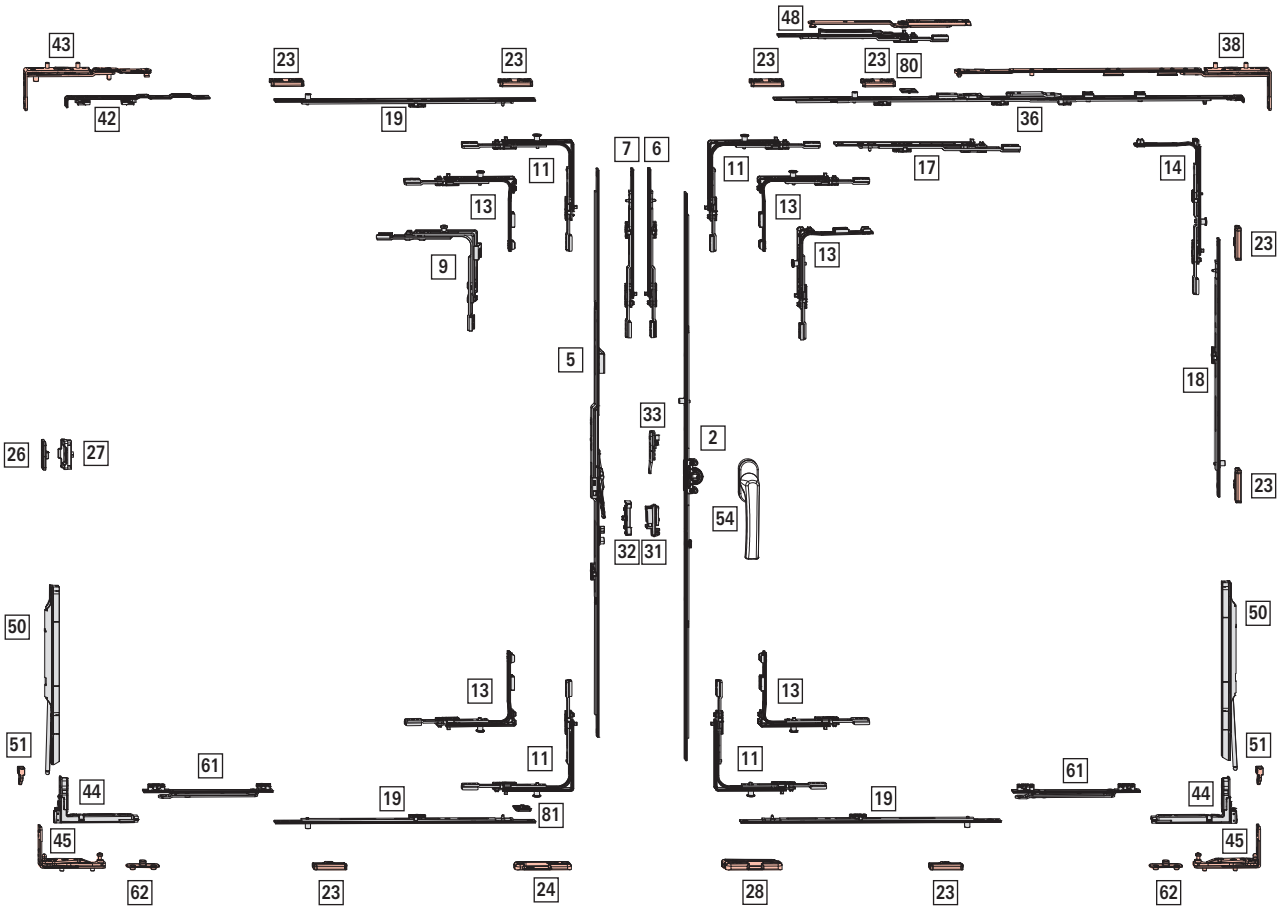
[82] Anti-jemmy device

	№
From rebate depth 24 mm	792786
From rebate depth 26 mm	811715

[85] Retainer clasp

	№
Retainer clasp for lever-operated espagnolette, standard	314203

4.2.5.4 Plus – basic security



Application range

Without load transfer	With load transfer
SRW: 370 – 1750 mm	**SRW**: 600 – 1750 mm
SRH: 420 – 3000 mm	**SRH**: 1000 – 3000 mm
S.kg: max. 120 kg	**S.kg**: max. 180 kg

INFO
SRH 420 mm from SRW 451 mm
SRW 370 mm from SRH 451 mm

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

						№
310 – 620	155 – 225	430	N	–	–	259717
621 – 800	311 – 400	580	Y	1	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

						№
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)

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

Size-specific combinations:

				№
2401 – 2600	200 KU	–	–	308267
2601 – 2800	400 KU	1	E	280346
2801 – 3000	600 KU	1	E	255282

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

			№
200	Y	–	308267
400	Y	1	280345
600	Y	1	280331

Size-specific combinations:

			№
2401 – 2600	200 KU	–	308267
2601 – 2800	400 KU	1	280345
2801 – 3000	600 KU	1	280331

[9] Floating-mullion corner drive with security striker

					№
Second opening sash	Top	1	1	V	313538

INFO
SRW 370 – 415 mm: For Turn-Only sashes, crop the top corner drive.

For use on the second opening sash:
if the SRW on the first opening sash is ≤ 450 mm

[11] Standard corner drive

			№
1	E	Top	260275
1	P	Top Bottom	260277

[13] Special short corner drive

			№
1	E	Top	260280
1	P	Top Bottom	260282

For use with (→ *from page 172*):
First opening sash
SRH ≤ 450 mm, SRW ≤ 450 mm
Second opening sash
SRH ≤ 520 mm and 621 – 700 mm

[14] Sash stay corner drive

		№
1	P	260286

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

				№
200	Y	–	–	308267

Size-specific combinations:

				№
1601 – 1750	200 KU	–	–	308267

[18] Multipart centre lock – standard, vertical

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

Size-specific combinations:

Without load transfer	With load transfer				№
–	1201 – 1150	400	1	E	255280
1201 – 1800	1151 – 1800	600	1	E	255281
1801 – 2400	1801 – 2400	600 KU	1	E	255282
		600	1	E	255281
2401 – 3000	2401 – 3000	600 KU	1	E	255282
		600 KU	1	E	255282
		600	1	E	255281

[19] Multipart centre lock – standard, horizontal

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

Size-specific combinations:

				№
1101 – 1600	600	1	E	255281
1601 – 1750	600 KU	1	E	255282
	400	1	E	255280

[23] Striker → *from page 178*

[24] Security striker → *from page 179*

[26] Concealed centre closer frame component → CTL_104

[27] Concealed centre closer sash component → CTL_104

[28] Tilt striker → *from page 176*

[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 181*

[33] Lifting mishandling device sash component

	№
Lifting mishandling device sash component	795927

[36] Stay guide – basic security

					№
340 – 600	250	490	–	–	2005271
601 – 800	350	690	–	–	2005272
801 – 1000	500	890	1	E	2005273
1001 – 1200	500	1090	1	E	2005274
1201 – 1400	500	1290	1	E	2005275

With S.kg > 150 kg, stay guide 500 must be mounted with fastening plate 255211.

INFO
From SRH < 600 mm, set the tilt depth to 80 mm (on windows without overlap gasket from SRH < 900 mm).

[38] Stay arm → *from page 174*

[42] Rebate stay guide

		№
For Turn-Only sashes	220 / 15	2005701

[43] Rebate stay arm → *from page 175*

[44] Corner hinge

		№
12/18-13 12/20-13	Left	2005290
12/18-13 12/20-13	Right	2005291

[45] Pivot rest → *from page 175*

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

		№
Frame and sash component	200	255237

[50] Load transfer sash component (SRW ≥ 600 mm, SRH ≥ 1000 mm)

	№
max. 180 kg	2005293

[51] Load transfer frame component (SRW ≥ 600 mm, SRH ≥ 1000 mm)

	№
max. 180 kg	2005292

[54] Handle → CTL_1

[61] Turn restrictor 195 sash component

	№
Turn restrictor 195	2005294

INFO
Turn restrictor possible from SRW 525 mm, mandatory for SRW > 1000 mm and when load transfer is used.

Alternatively

	№
Turn restrictor 355	2037236

For use with:

SRW ≥ 600 mm

[62] Turn restrictor frame component → *from page 182*

[80] Fastening plate

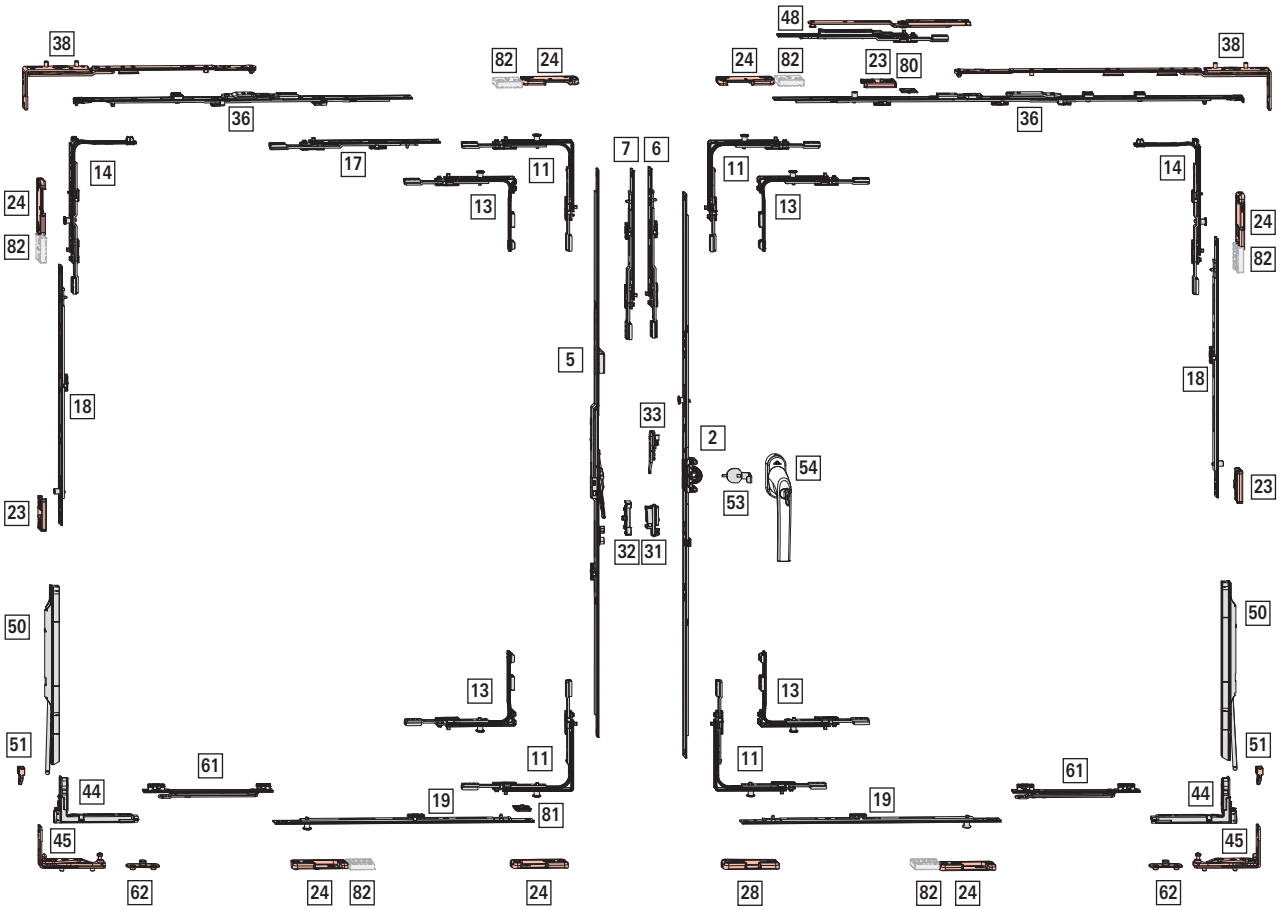
	№
Fastening plate with cam	255211

Only for use in conjunction with T&T espagnolette 259717 and for stay guide 500 with S.kg > 150 kg.

[81] Run-up block

The run-up block depends on the striker used.

4.2.5.5 Plus – RC 1 N



Application range

Without load transfer	With load transfer
SRW: 450 – 1600 mm	**SRW**: 600 – 1600 mm
SRH: 420 – 2800 mm	**SRH**: 1000 – 2800 mm
S.kg: max. 120 kg	**S.kg**: max. 180 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	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

						№
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)

				№
200	Y	–	–	308267
400	Y	1	E	280346

Size-specific combinations:

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

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

			№
200	Y	–	308267
400	Y	1	280345

Size-specific combinations:

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

[11] Standard corner drive

		№
1	P	260277

[13] Special short corner drive

		№
1	P	260282

For use with (→ *from page 172*):
First opening sash
SRH ≤ 450 mm, SRW ≤ 450 mm
Second opening sash
SRH ≤ 520 mm and 621 – 700 mm

[14] Sash stay corner drive

		№
1	P	260286

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

				№
200	Y	–	–	308267

Size-specific combinations:

				№
1401 – 1600	200 KU	–	–	308267

[18] Multipart centre lock – standard, vertical

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

Size-specific combinations:

Without load transfer	With load transfer				№
–	1101 – 1150	400	1	E	255280
1101 – 1800	1151 – 1800	600	1	E	255281
1801 – 2400	1801 – 2400	600 KU	1	E	255282
		600	1	E	255281
2401 – 2800	2401 – 2800	600 KU	1	E	255282
		600 KU	1	E	255282
		600	1	E	255281

[19] Multipart centre lock – security, horizontal

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

Size-specific combinations:

Without turn restrictor	With turn restrictor				№
450 – 650	600 – 850	200	1	P	255284
651 – 850	851 – 1050	400	1	P	255285
851 – 1000	1051 – 1250	600	1	P	255286
	1251 – 1450	600 KU	1	E	255282
		200	1	P	255284
	1451 – 1600	600 KU	1	E	255282
		400	1	P	255285

[23] Striker → *from page 178*

[24] Security striker → *from page 179*

[28] Tilt striker → *from page 176*

[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 181*

[33] Lifting mishandling device sash component

	№
Lifting mishandling device sash component	795927

[36] Stay guide – basic security

					№
340 – 600	250	490	–	–	2005271
601 – 800	350	690	–	–	2005272
801 – 1000	500	890	1	E	2005273
1001 – 1200	500	1090	1	E	2005274
1201 – 1400	500	1290	1	E	2005275

With S.kg > 150 kg, stay guide 500 must be mounted with fastening plate 255211.

[38] Stay arm → *from page 174*

INFO
From SRH < 600 mm, set the tilt depth to 80 mm (on windows without overlap gasket from SRH < 900 mm).

[44] Corner hinge

		№
12/18-13 12/20-13	Left	2005290
12/18-13 12/20-13	Right	2005291

[45] Pivot rest → *from page 175*

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

		№
Frame and sash component	200	255237

[50] Load transfer sash component (SRW ≥ 600 mm, SRH ≥ 1000 mm)

	№
max. 180 kg	2005293

[51] Load transfer frame component (SRW ≥ 600 mm, SRH ≥ 1000 mm)

	№
max. 180 kg	2005292

[53] Drilling protection

	№
Drilling protection	797819

[54] Handle, lockable → CTL_1

[61] Turn restrictor 195 sash component

	№
Turn restrictor 195	2005294

INFO
Turn restrictor possible from SRW 525 mm, mandatory for SRW > 1000 mm and when load transfer is used.

[62] Turn restrictor frame component → *from page 182*

[80] Fastening plate

	№
Fastening plate with cam	255211

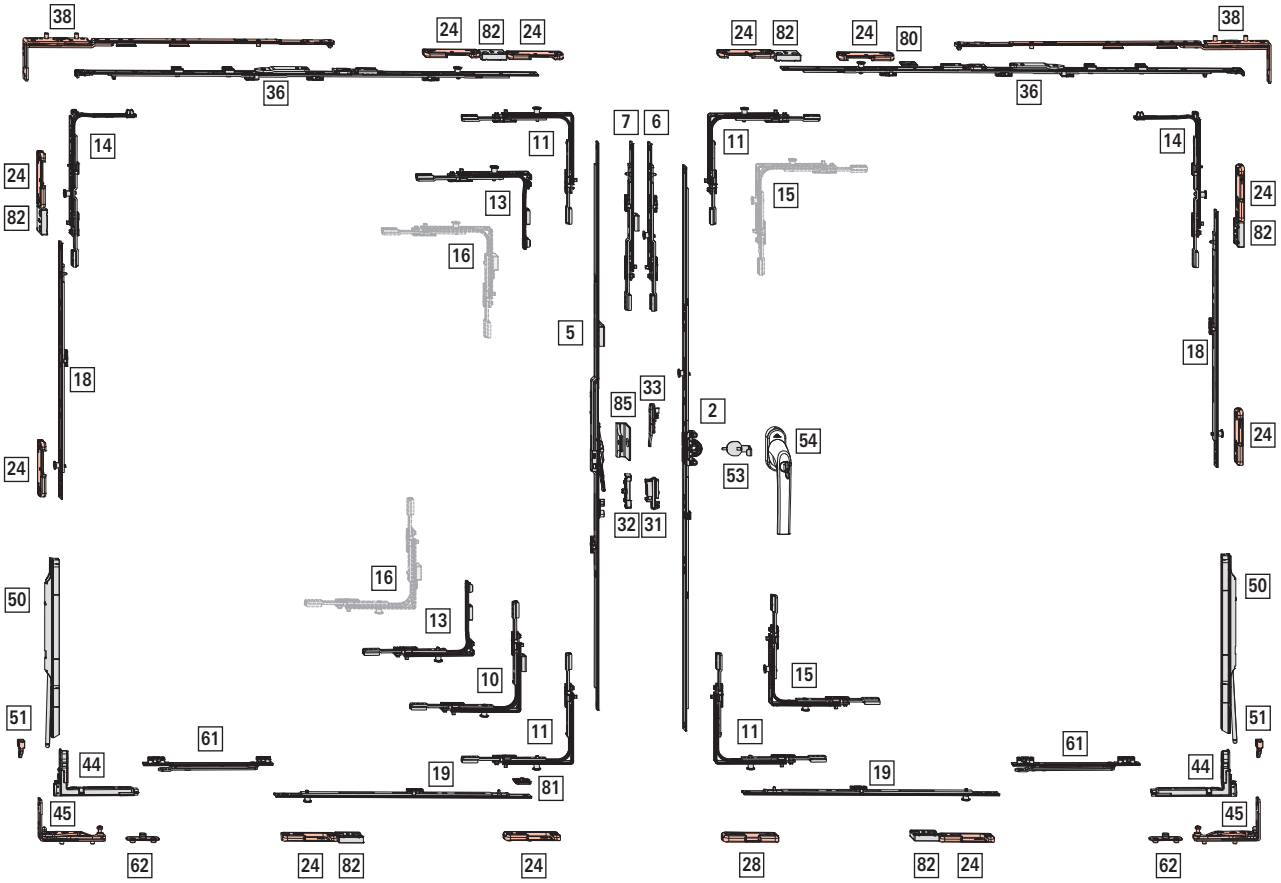
Only for use in conjunction with T&T espagnolette 259717 and for stay guide 500 with S.kg > 150 kg.

[81] Run-up block → CTL_107
The run-up block depends on the striker used.
Optional

[82] Anti-jemmy device

	№
From rebate depth 24 mm	792786
From rebate depth 26 mm	811715

4.2.5.6 Plus – RC 2 / RC 2 N



Application range

Without load transfer	With load transfer
SRW: 450 – 1400 mm	**SRW**: 650 – 1400 mm
SRH: 520 – 2800 mm	**SRH**: 1000 – 2800 mm
S.kg: max. 120 kg	**S.kg**: max. 180 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, Plus – centred / variable handle height, backset 15 mm

						№
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)

				№
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

[9] Floating-mullion corner drive with security striker

					№
Second opening sash	Top	1	1	V	313538

[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 → *5.2.2.1 "Possible combinations" from page 172*

Second opening sash: SRH 621 – 700 mm

[14] Sash stay corner drive

		№
1	V	260284

[15] Corner drive, standard (security)

		№
2	V	260274

[18] Multipart centre lock – security, vertical

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

Size-specific combinations:

Without load transfer	With load transfer				№
490 – 650	–	200	1	V	296853
651 – 850	1000 – 1150	400	1	V	296854
851 – 1050	1151 – 1350	600 [42]	1	V	296855
1051 – 1250	1351 – 1550	600 KU	1	V	337711
		200	1	V	296853
1251 – 1450	1551 – 1750	600 KU	1	V	337711
		400	1	V	296854
1451 – 1650	1751 – 1950	600 KU	1	V	337711
		600 [43]	1	V	296855
1651 – 1850	1951 – 2150	600 KU	1	V	337711
		600 KU	1	V	337711
		200	1	V	296853

[42] Without load transfer: crop CL by 15 mm up to SRH 861

[43] Without load transfer: crop CL by 15 mm up to SRH 1461

Without load transfer	With load transfer				№
1851 – 2050	2151 – 2350	600 KU	1	V	337711
		600 KU	1	V	337711
		400	1	V	296854
2051 – 2250	2351 – 2550	600 KU	1	V	337711
		600 KU	1	V	337711
		600 [44]	1	V	296855
2251 – 2450	2551 – 2750	600 KU	1	V	337711
		600 KU	1	V	337711
		600 KU	1	V	337711
		200	1	V	296853
2451 – 2650	2751 – 2800	600 KU	1	V	337711
		600 KU	1	V	337711
		600 KU	1	V	337711
		400	1	V	296854
2651 – 2800	–	600 KU	1	V	337711
		600 KU	1	V	337711
		600 KU	1	V	337711
		600 [45]	1	V	296855

[19] Multipart centre lock – security, horizontal

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

Size-specific combinations:

Without turn restrictor	With turn restrictor				№
450 – 650	801 – 850	200	1	V	296853
651 – 850	851 – 1050	400	1	V	296854
851 – 1000	1051 – 1250	600	1	V	296855
–	1251 – 1400	600 KU	1	V	337711
		200	1	V	296853

[24] Security striker → *from page 179*

[28] Tilt striker → *from page 176*

[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 181*

[33] Lifting mishandling device sash component

	№
Lifting mishandling device sash component	795927

[36] Stay guide – security

					№
340 – 600	250	490	–	–	2005271
601 – 800	350	690	–	–	2005272
801 – 1000	500	890	1	V	2005276
1001 – 1200	500	1090	1	V	2005277
1201 – 1400	500	1290	1	V	2005278

Tilt&Turn sash: With S.kg > 150 kg, stay guide 500 must be mounted with fastening plate 255211.

[38] Stay arm → *from page 174*

[44] Corner hinge

		№
12/18-13 12/20-13	Left	2005290
12/18-13 12/20-13	Right	2005291

[45] Pivot rest → *from page 175*

[50] Load transfer sash component (SRW ≥ 650 mm, SRH ≥ 1000 mm)

	№
max. 180 kg	2005293

[51] Load transfer frame component (SRW ≥ 650 mm, SRH ≥ 1000 mm)

	№
max. 180 kg	2005292

[53] Drilling protection

	№
Drilling protection	797819

[54] Handle, lockable → CTL_1

[61] Turn restrictor 195 sash component

	№
Turn restrictor 195	2005294

INFO
Turn restrictor possible from SRW 650 mm, mandatory for SRW > 1000 mm and when load transfer is used.

[62] Turn restrictor frame component → *from page 182*

[80] Fastening plate

	№
Fastening plate with cam	255211

[44] Without load transfer: crop CL by 15 mm up to SRH 2061

[45] Without load transfer: crop CL by 15 mm up to SRH 2661

Only for use in conjunction with T&T espagnolette 259717 and for stay guide 500 with S.kg > 150 kg.

[81] Run-up block → CTL_107

The run-up block depends on the striker used.

[82] Anti-jemmy device

	№
From rebate depth 24 mm	792786
From rebate depth 26 mm	811715

Optional

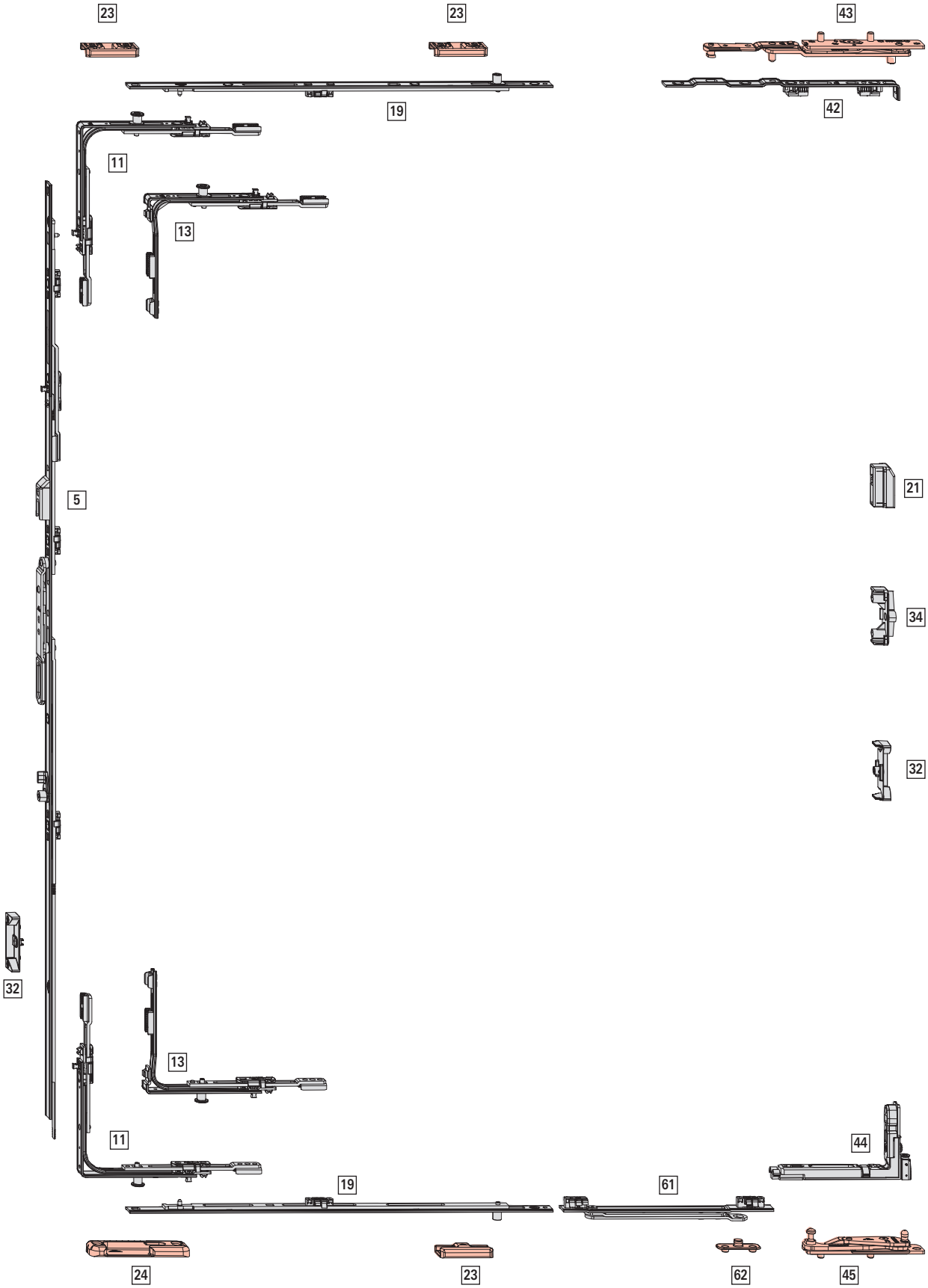
[16] Corner drive, slide guard

				№
Second opening sash / slide guard	Top	1	V	839223
	Bottom	1	V	839224

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

4.2.6 Floating-mullion hardware – centre sash

4.2.6.1 Standard – basic security



Application range

SRW: 370 – 1200 mm

SRH: 370 – 1800 mm

S.kg: max. 80 kg

[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

[11] Standard corner drive

			№
1	E	Top	260275
1	P	Top Bottom	260277

[13] Special short corner drive

		№
1	E	260280
1	P	260282

Use → *5.1.2 "Centred / variable handle height" from page 168*

SRH ≤ 520 mm and 621 – 650 mm

[19] Multipart centre lock – standard, horizontal

				№
600	N	1	E	255281

Size-specific combinations:

				№
1101 – 1200	600	1	E	255281

[21] Striker for opposite hardware groove

		№
Striker for opposite hardware groove	Screw-on	328253

[23] Striker → *from page 178*

[24] Security striker → *from page 179*

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

		№
Bullet catch for opposite hardware groove	Screw-on	788507

[34] Lifting mishandling device frame component → *from page 182*

		№
Lifting mishandling device for opposite hardware groove	Screw-on	260539

[42] Rebate stay guide

		№
For Turn-Only sashes	220 / 15	2005701

[43] Rebate stay arm → *from page 175*→ *from page 175*

[44] Corner hinge

		№
12/18-13 12/20-13	Left	2005290
12/18-13 12/20-13	Right	2005291

[45] Pivot rest → *from page 175*

[61] Turn restrictor 195 sash component

	№
Turn restrictor 195	2005294

INFO
Turn restrictor possible from SRW 525 mm, mandatory for SRW > 1000 mm.

Alternatively

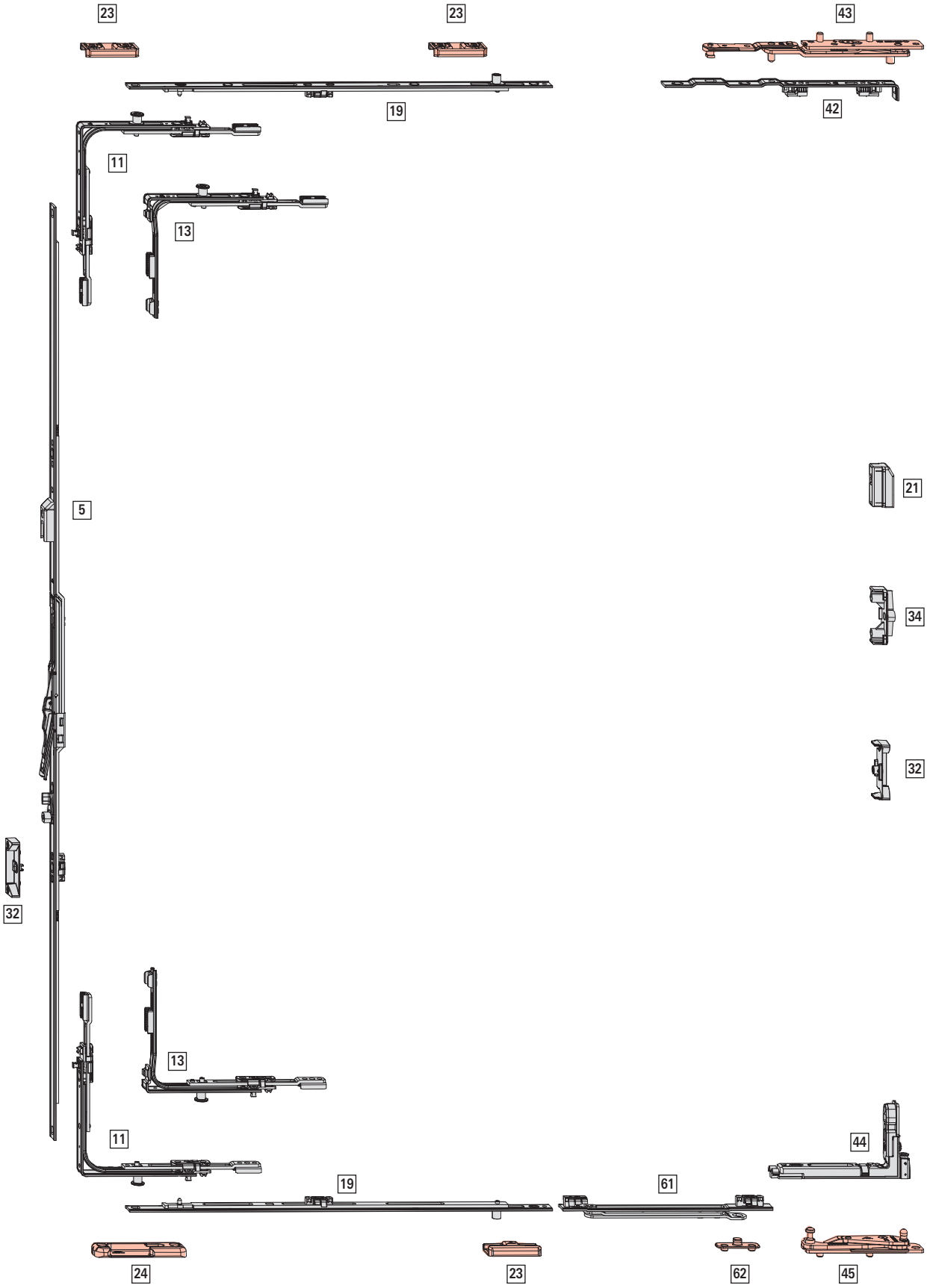
	№
Turn restrictor 355	2037236

For use with:

SRW ≥ 600 mm

[62] Turn restrictor frame component → *from page 182*

4.2.6.2 Plus – basic security



Application range

SRW: 370 – 1200 mm

SRH: 420 – 1800 mm

S.kg: max. 80 kg

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

						№
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

[11] Standard corner drive

			№
1	E	Top	260275
1	P	Top Bottom	260277

[13] Special short corner drive

		№
1	E	260280
1	P	260282

Use → *5.2.2.1 "Possible combinations" from page 172*

SRH ≤ 520 mm and 621 – 700 mm

[19] Multipart centre lock – standard, horizontal

				№
600	N	1	E	255281

Size-specific combinations:

				№
1101 – 1200	600	1	E	255281

[21] Striker for opposite hardware groove

		№
Striker for opposite hardware groove	Screw-on	328253

[23] Striker → *from page 178*

[24] Security striker → *from page 179*

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

		№
Bullet catch for opposite hardware groove	Screw-on	788507

[34] Lifting mishandling device frame component → *from page 182*

		№
Lifting mishandling device for opposite hardware groove	Screw-on	260539

[42] Rebate stay guide

		№
For Turn-Only sashes	220 / 15	2005701

[43] Rebate stay arm → *from page 175*→ *from page 175*

[44] Corner hinge

		№
12/18-13 12/20-13	Left	2005290
12/18-13 12/20-13	Right	2005291

[45] Pivot rest → *from page 175*

[61] Turn restrictor 195 sash component

	№
Turn restrictor 195	2005294

INFO
Turn restrictor possible from SRW 525 mm, mandatory for SRW > 1000 mm.

Alternatively

	№
Turn restrictor 355	2037236

For use with:

SRW ≥ 600 mm

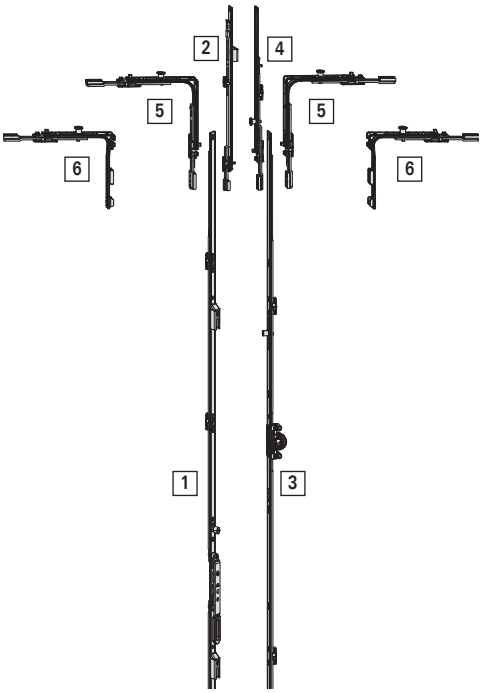
[62] Turn restrictor frame component → *from page 182*

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

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

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

2. Select the lever-operated espagnolette Standard, VT [1] using the *sash rebate height (SRH)* and *length of the component*.

   Optional: determine the floating-mullion centre lock [2].

3. Select the T&T espagnolette, VT – fixed handle height [3] using the *length of the component*.
   - T&T espagnolette, VT – fixed handle height, backset 8 mm
   - T&T espagnolette, VT – fixed handle height, backset 15 mm
   - T&T espagnolette, VT – fixed handle height, backset 25, 30, 35, 40, 45, 50 mm

   Optional: determine the centre lock, standard [4] .

Backset 8 mm

Application range	Lever-operated espagnolette, standard VT			T&T espagnolette, VT			
SRH	Component length	Toggle lever position	Corner drive type	Component length	Handle height	LMD	Corner drive type
431 – 510	600	233	Special corner drive, short	490	120	N	Corner drive, standard
511 – 600			Corner drive, standard	600	170	N	Corner drive, standard
601 – 800	690	325	Corner drive, standard	690	263	N	Corner drive, standard
801 – 1000	890	335	Corner drive, standard	890	413	Y	Corner drive, standard
1001 – 1200	1090	335	Corner drive, standard	1090	513	Y	Corner drive, standard
1201 – 1400	1290	335	Corner drive, standard	1290	563	Y	Corner drive, standard
1401 – 1600	1490	335	Corner drive, standard	1490	563	Y	Corner drive, standard
1601 – 1800	1690	335	Corner drive, standard	1690	563 / 1000	Y	Corner drive, standard
1801 – 2000	1890	640	Corner drive, standard	1890	1000	Y	Corner drive, standard
2001 – 2200	2090	640	Corner drive, standard	2090	1000	Y	Corner drive, standard
2201 – 2400	2290	640	Corner drive, standard	2290	1000	Y	Corner drive, standard

INFO
A centre lock is required from SRH 2401 mm.

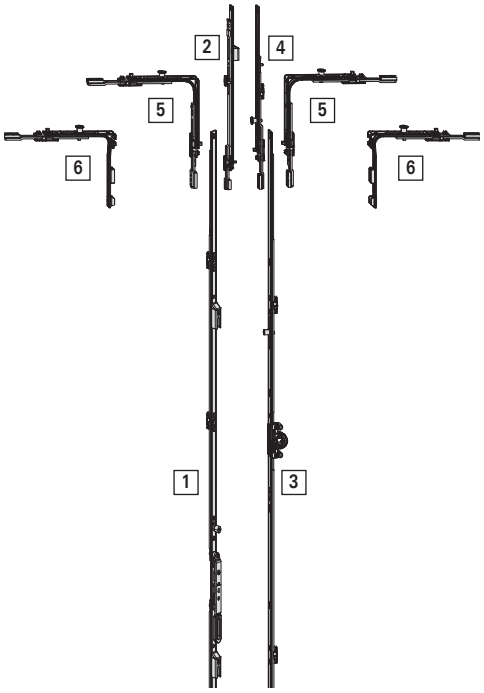
Backset of 15 mm and above

Application range	Lever-operated espagnolette Standard, VT			T&T espagnolette, VT			
SRH	Component length	Toggle lever position	Corner drive type	Component length	Handle height	LMD	Corner drive type
280 – 370	445	156	Special corner drive, short	460	120	N	Special corner drive, short
371 – 555			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].

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

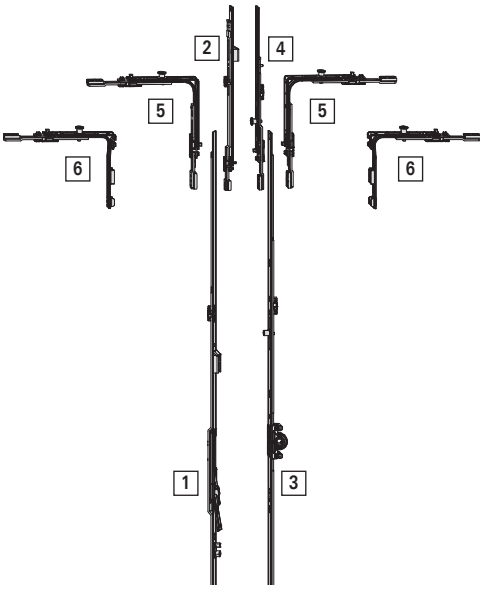
Application range	Lever-operated espagnolette, standard			T&T espagnolette			
SRH	Component length	Toggle lever position	Corner drive type	Component length	Handle height	LMD	Corner drive type
370 – 450	400	255 – 265	Special corner drive, short	430	215 – 225	N	Special corner drive, short
451 – 520		266 – 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	580	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	Lever-operated espagnolette Plus, VT			T&T espagnolette, VT			
SRH	Component length	Toggle lever position	Corner drive type	Component length	Handle height	LMD	Corner drive type
431 – 510	600	233	Special corner drive, short	490	120	N	Corner drive, standard
511 – 600			Corner drive, standard	600	170	N	Corner drive, standard
601 – 800	690	325	Corner drive, standard	690	263	N	Corner drive, standard
801 – 1000	890	335	Corner drive, standard	890	413	Y	Corner drive, standard
1001 – 1200	1090	335	Corner drive, standard	1090	513	Y	Corner drive, standard
1201 – 1400	1290	335	Corner drive, standard	1290	563	Y	Corner drive, standard
1401 – 1600	1490	335	Corner drive, standard	1490	563	Y	Corner drive, standard
1601 – 1800	1690	335	Corner drive, standard	1690	563 / 1000	Y	Corner drive, standard
1801 – 2000	1890	640	Corner drive, standard	1890	1000	Y	Corner drive, standard
2001 – 2200	2090	640	Corner drive, standard	2090	1000	Y	Corner drive, standard
2201 – 2400	2290	640	Corner drive, standard	2290	1000	Y	Corner drive, standard

INFO
A centre lock is required from SRH 2401 mm.

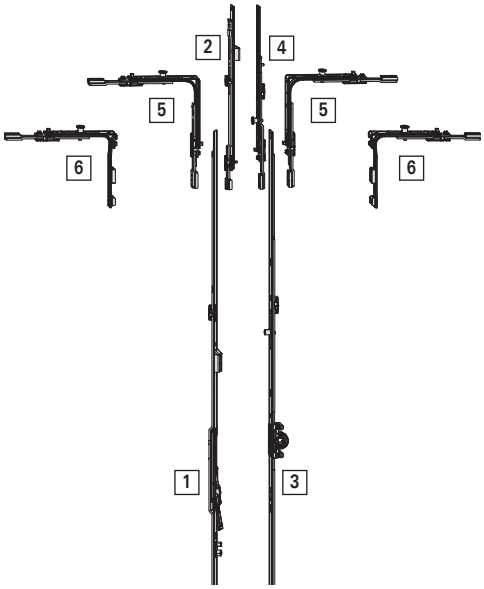
Backset of 15 mm and above

Application range	Lever-operated espagnolette Plus, VT			T&T espagnolette, VT			
SRH	Component length	Toggle lever position	Corner drive type	Component length	Handle height	LMD	Corner drive type
431 – 510	600	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].

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
420 – 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

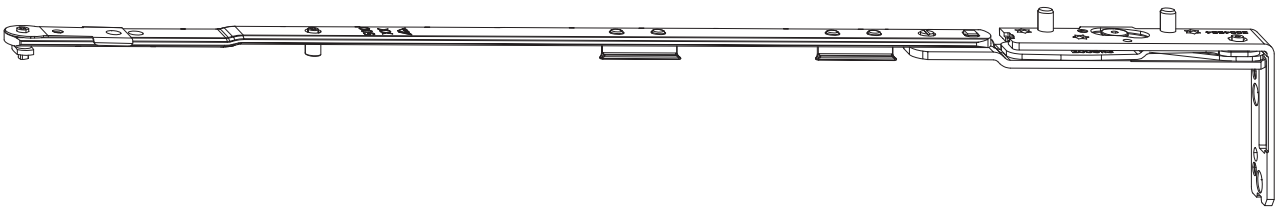
INFO
A centre lock is required from SRH 2401 mm.

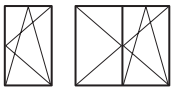
6 Frame components

INFO
Further frame components are available upon request.

6.1 Stay arm

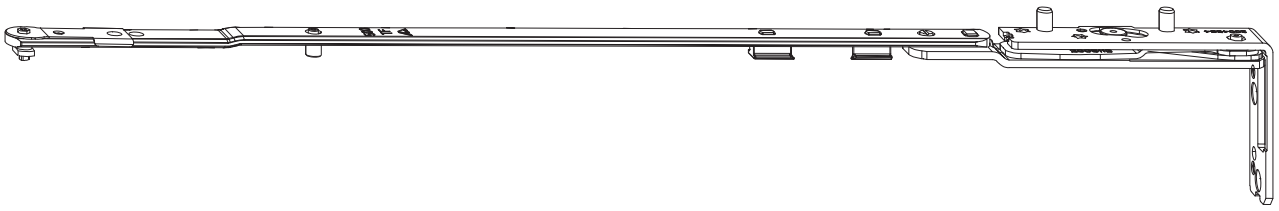
6.1.1 Standard

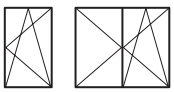




12/18-13 12/20-13 12/22-13	340 – 600	250	24	12	Roto Sil	Left	2005202
				12	Roto Sil	Right	2005203
			30	12	Roto Sil	Left	2008542
				12	Roto Sil	Right	2008543
	601 – 800	350	24	12	Roto Sil	Left	2005249
				12	Roto Sil	Right	2005250
			30	12	Roto Sil	Left	2008544
				12	Roto Sil	Right	2008545
	801 – 1750	500	24	12	Roto Sil	Left	2005251
				12	Roto Sil	Right	2005252
			30	12	Roto Sil	Left	2008546
				12	Roto Sil	Right	2008547

6.1.2 TiltFirst

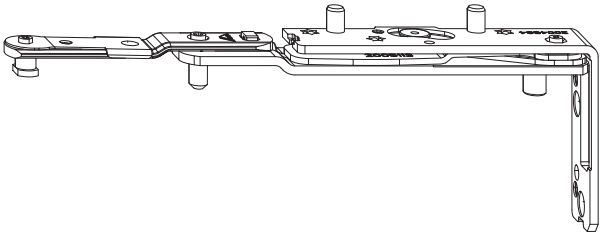


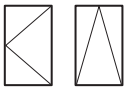


12/18-13 12/20-13 12/22-13	340 – 600	250	24	12	Roto Sil	Left	2005259
			24	12	Roto Sil	Right	2005260
	601 – 800	350	24	12	Roto Sil	Left	2005261
			24	12	Roto Sil	Right	2005262
	801 – 1750	500	24	12	Roto Sil	Left	2005263
			24	12	Roto Sil	Right	2005264

6.2 Rebate stay arm

6.2.1 Standard

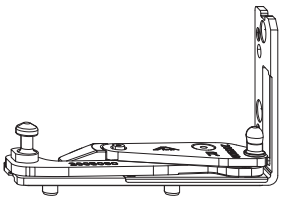




12/18-13 12/20-13 12/22-13	24	12	Roto Sil	Left	2005282
		12	Roto Sil	Right	2005283
	30	12	Roto Sil	Left	2008801
		12	Roto Sil	Right	2008802

6.3 Pivot rests

6.3.1 Standard

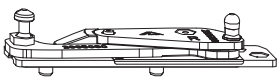


NT Designo pivot rest (HA 13)	24	12	max. 180 kg	Roto Sil	Left	2005286
		12	max. 180 kg	Roto Sil	Right	2005287
	30	12	max. 180 kg	Roto Sil	Left	2008871
		12	max. 180 kg	Roto Sil	Right	2008872

For compatible corner hinges, see → *from page 176*

For compatible load transfer, see → *from page 183*

6.3.2 Centre sash

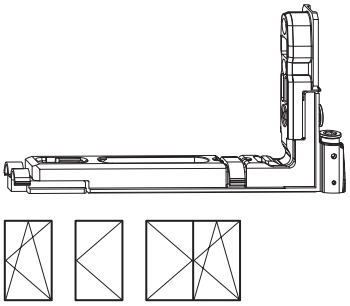


Pivot rest – centre sash	24	12	max. 80 kg	Roto Sil	Left	2008933
				Roto Sil	Right	2008934

For compatible corner hinges, see → *from page 176*

6.4 Corner hinges

6.4.1 Hinge side C (HA 13)



12/18-13 12/20-13	12 mm	Roto Sil	Left	2005290
12/18-13 12/20-13		Roto Sil	Right	2005291

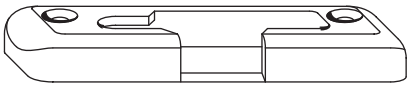
For compatible pivot rests, see → *from page 175*

For compatible load transfer, see → *from page 183*

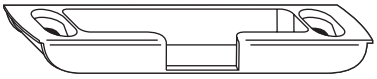
6.5 Tilt strikers

6.5.1 Standard

6.5.1.1 Zinc



A



B

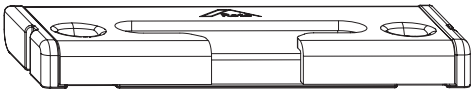
Assignment	Meaning
[A]	Tilt striker, screw-on
[B]	Tilt striker, to be routed in

–	25	5	Can be routed in	N	–	–	13	Y	Left	Roto Sil	627984
–		5	Can be routed in	N	–	–	13	Y	Right	Roto Sil	627986
Eurofalz	24	12	Screw-on	N	–	with packer	13	Y	Left	Roto Sil	261943
Eurofalz		12	Screw-on	N	–	with packer	13	Y	Right	Roto Sil	262927
Eurofalz		12	Screw-on	Y	2 x Ø 8 mm	–	13	Y	Left	Roto Sil	261944
Eurofalz		12	Screw-on	Y	2 x Ø 8 mm	–	13	Y	Right	Roto Sil	262929
Eurofalz	30	12	Screw-on	N	–	–	13	Y	Left	Roto Sil	631525
Eurofalz		12	Screw-on	N	–	–	13	Y	Right	Roto Sil	631526
Eurofalz		12	Screw-on	Y	2 x Ø 8 mm	–	13	Y	Left	Roto Sil	631502
Eurofalz		12	Screw-on	Y	2 x Ø 8 mm	–	13	Y	Right	Roto Sil	631504

Euronut 11/8	24	12	Screw-on	N	–	–	13	Y	Left	Roto Sil	378464
Euronut 11/8		12	Screw-on	N	–	–	13	Y	Right	Roto Sil	378457

INFO
Other versions are available upon request.

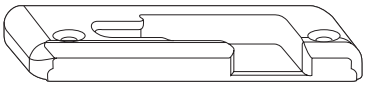
6.5.1.2 Steel



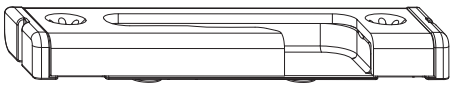
								: Eurofalz
24	12	Screw-on	N	–	13	Y	Roto Sil	858213
24	12	Screw-on	Y	2 x Ø 8 mm	13	Y	Roto Sil	856833
30	12	Screw-on	N	–	13	Y	Roto Sil	856835
30	12	Screw-on	Y	2 x Ø 8 mm	13	Y	Roto Sil	856834

INFO
Other versions are available upon request.

6.5.2 TiltFirst



A



B

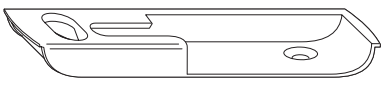
Assignment	Meaning
[A]	Zinc
[B]	Steel, with PVC packer

Eurofalz	24	12	Screw-on	Y	2 x Ø 8 mm	Made from steel, with PVC packer	13	Y	Roto Sil	Left	856830
	24	12	Screw-on	Y	2 x Ø 8 mm	Made from steel, with PVC packer	13	Y	Roto Sil	Right	856831
	24	12	Screw-on	N	–	–	13	Y	Roto Sil	Left	632132
	24	12	Screw-on	N	–	–	13	Y	Roto Sil	Right	632133
	30	12	Screw-on	N	–	Position 2 mm from the frame edge	13	Y	Roto Sil	Left	602788
	30	12	Screw-on	N	–	Position 2 mm from the frame edge	13	Y	Roto Sil	Right	602789
	30	12	Screw-on	Y	2 x Ø 8 mm	Made from steel, with PVC packer	13	Y	Roto Sil	Left	2021656
	30	12	Screw-on	Y	2 x Ø 8 mm	Made from steel, with PVC packer	13	Y	Roto Sil	Right	2021655
	30	12	Screw-on	N	–	Made from steel, with PVC packer	13	Y	Roto Sil	Left	2021659
	30	12	Screw-on	N	–	Made from steel, with PVC packer	13	Y	Roto Sil	Right	2021658
Euronut 11/8	24	12	Screw-on	N	–	–	13	Y	Roto Sil	Left	456956
	24	12	Screw-on	N	–	–	13	Y	Roto Sil	Right	456955

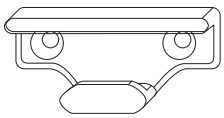
INFO
Other versions are available upon request.

6.6 Strikers

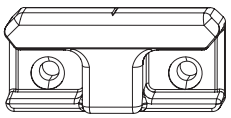
6.6.1 Standard



A



B



C

Assignment	Meaning
[A]	Can be routed in
[B]	Hardware axis 13 (Euro-rebate / Euro-groove)

Assignment	Meaning
[C]	Hardware axis 13 (Euro-rebate, reinforced version)

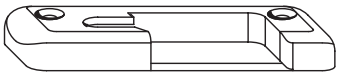
–	25	5	Can be routed in	N	–	–	13	Y	Roto Sil	Left	627988
–		5	Can be routed in	N	–	–	13	Y	Roto Sil	Right	627990
Eurofalz	24	12	Screw-on	N	–	–	13	Y	Roto Sil	–	261933
Eurofalz		12	Screw-on	Y	2 x Ø 8 mm	–	13	Y	Roto Sil	–	261934
Eurofalz		12	Screw-on	N	–	Reinforced version	13	Y	Roto Sil	–	532873
Eurofalz		12	Screw-on	Y	2 x Ø 8 mm	Reinforced version	13	Y	Roto Sil	–	624076
Eurofalz	30	12	Screw-on	N	–	–	13	N	Roto Sil	–	599651
Eurofalz		12	Screw-on	Y	2 x Ø 8 mm	–	13	N	Roto Sil	–	599652
Euronut 11/8	24	12	Screw-on	N	–	–	13	Y	Roto Sil	–	378467

INFO
Reinforced version, not compatible with existing jig system.

INFO
Other versions are available upon request.

6.6.2 Security

6.6.2.1 Zinc



A



B

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

[B] Symmetrical striker can only be used from a rebate depth of 30.

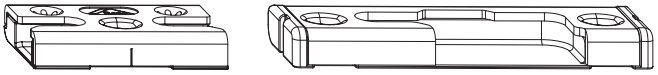
Lever-operated espagnolette Standard: a left second opening sash with asymmetrical strikers always requires right strikers horizontally at the bottom – and vice versa.

–	25	5	Can be routed in	N	–	13	Y	Roto Sil	Left	627988
		5	Can be routed in	N	–	13	Y	Roto Sil	Right	627990
Eurofalz	24	12	Screw-on	N	–	13	Y	Roto Sil	Left	261935
		12	Screw-on	N	–	13	Y	Roto Sil	Right	262930
		12	Screw-on	Y	2 x Ø 8 mm	13	Y	Roto Sil	Left	261936
		12	Screw-on	Y	2 x Ø 8 mm	13	Y	Roto Sil	Right	262931
	30	12	Screw-on	N	–	13	Y	Roto Sil	–	631527

Euronut 11/8	24	12	Screw-on	N	–	13	Y	Roto Sil	Left	378465
		12	Screw-on	N	–	13	Y	Roto Sil	Right	378466

INFO
Other versions are available upon request.

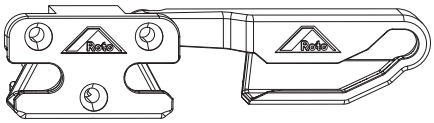
6.6.2.2 Steel



Eurofalz	24	12	Screw-on	N	–	13	Y	Roto Sil	Left	856999
		12	Screw-on	N	–	13	Y	Roto Sil	Right	856998
		12	Screw-on	Y	2 x Ø 8 mm	13	Y	Roto Sil	Left	856996
		12	Screw-on	Y	2 x Ø 8 mm	13	Y	Roto Sil	Right	856997
	30	12	Screw-on	N	–	13	Y	Roto Sil	–	856746
		12	Screw-on	Y	2 x Ø 8 mm	13	Y	Roto Sil	–	838711

INFO
Other versions are available upon request.

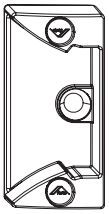
6.6.3 Tilt ventilation (TiltSafe)



Eurofalz	30	12	Screw-on	N	–	13	N	Roto Sil	Left	797026
		12	Screw-on	N	–	13	N	Roto Sil	Right	797027

6.7 Bullet catches

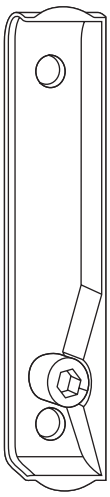
6.7.1 Frame components



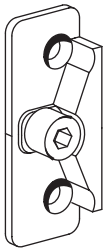
–	24	4	Can be routed in	N	–	13	Roto Sil	788377
Eurofalz		12	Screw-on	N	–	13	Roto Sil	788367
		12	Screw-on	Y	2 x Ø 8 mm	13	Roto Sil	788371
	30	12	Screw-on	N	–	13	Roto Sil	788368
		12	Screw-on	Y	2 x Ø 8 mm	13	Roto Sil	788372

6.8 Lifting mishandling devices

6.8.1 Frame components



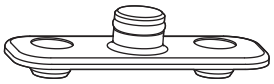
–	24	5	Can be routed in	N	–	13	Roto Sil	Left	551744
		5	Can be routed in	N	–	13	Roto Sil	Right	551743



Eurofalz	24	12	Screw-on	N	–	13	–	Roto Sil	261947
		12	Screw-on	Y	2 x Ø 8 mm	13	–	Roto Sil	261948
	30	12	Screw-on	N	–	13	–	Roto Sil	578785
		12	Screw-on	Y	2 x Ø 8 mm	13	–	Roto Sil	578786

6.9 Turn restrictors

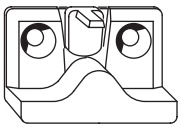
6.9.1 Frame components



Supporting pin	–	–	Roto Sil	337754
Euro-rebate	20	12	Roto Sil	491798

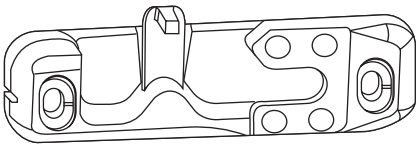
6.10 Night vents

6.10.1 Frame components



Eurofalz	12	30	N	–	13	Roto Sil	–	595679

INFO
The component can only be used in conjunction with a corner drive (P or V cam).



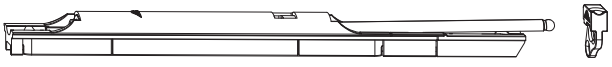
Eurofalz	24	12	N	–	13	Roto Sil	Left	261945
		12	N	–	13	Roto Sil	Right	262932
		12	Y	2 x Ø 8 mm	13	Roto Sil	Left	261946
		12	Y	2 x Ø 8 mm	13	Roto Sil	Right	262933

INFO
The component can only be used in conjunction with a corner drive (P or V cam).

INFO
Can only be used for tested security in conjunction with an asymmetrical security striker.

6.11 Load transfer

6.11.1 Hinge side C (HA 13)

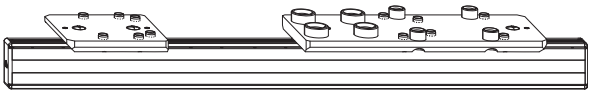


Frame component	max. 180 kg	Roto Sil	2005292
Sash component	max. 180 kg	Roto Sil	2005293

7 Jigs

7.1 Drilling jigs

7.1.1 Pivot rest, stay bearing and turn restrictor



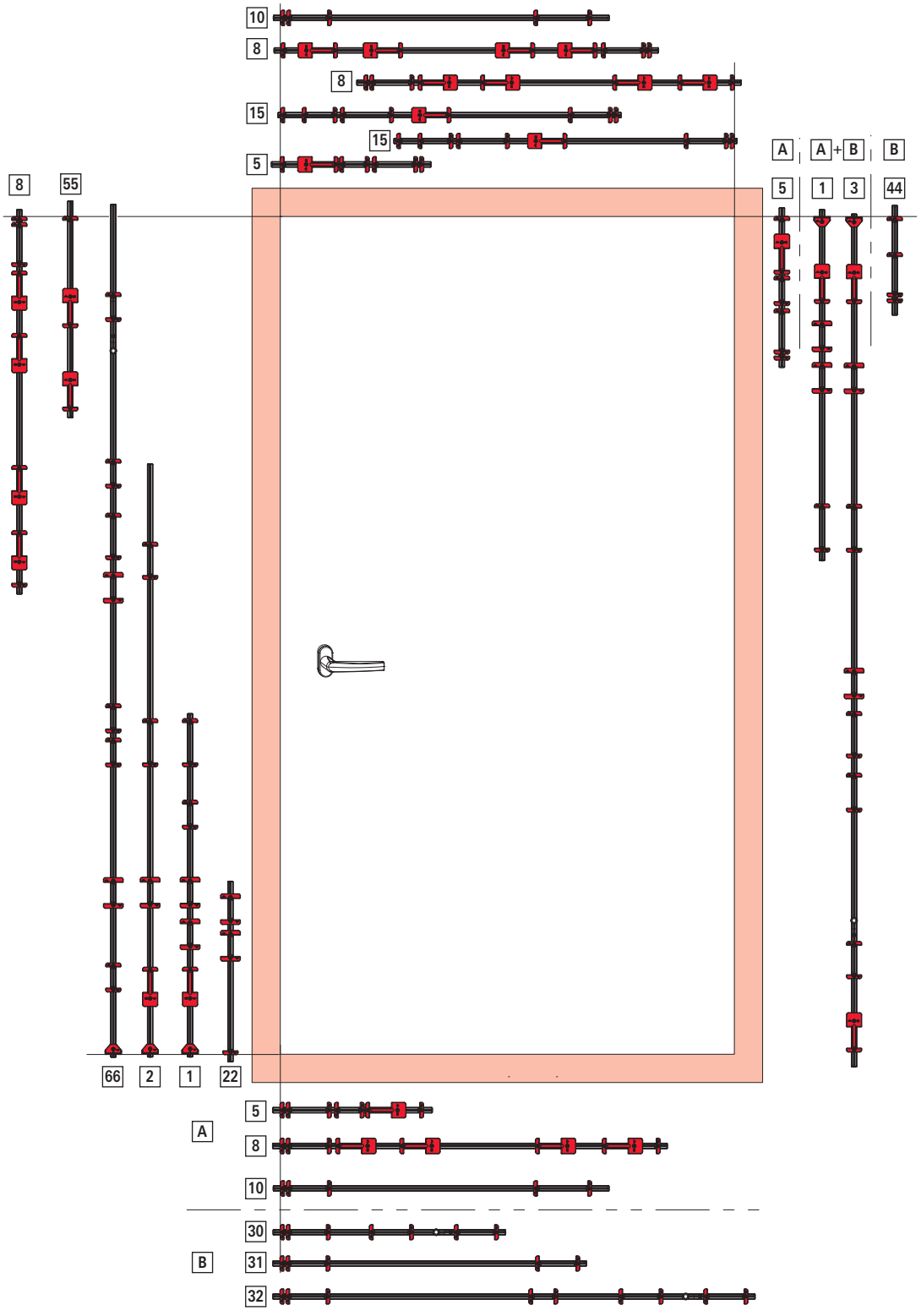
Pivot rest, stay bearing and turn restrictor	–	24	2 x Ø 7 mm	2021444
	for flush profiles	24	2 x Ø 7 mm	2029398
	–	30	2 x Ø 7 mm	2021445
	for flush profiles	30	2 x Ø 7 mm	2029799

7.2 Positioning jigs

7.2.1 T&T espagnolette – fixed handle height

The figure shows positioning jigs for short strikers (50 mm).

Turn the jigs for long strikers.

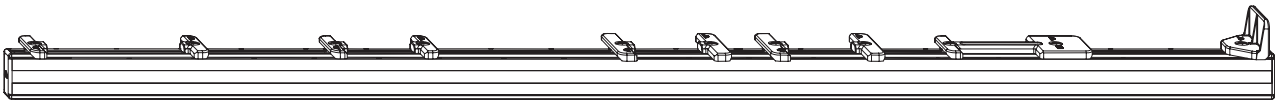


[A] BSec

[B] RC 1 N

Item	Assignment	Application range	T&T		T-O	Single jig
			BSec	RC 1 N	BSec	
Espagnolette side	[22]	SRH 511 – 800	■	■	■	Standard
	[1]	SRH 801 – 1000	■	■	■	
	[2]	SRH 1001 – 1600	■	■	■	
	[32]	SRH 1601 – 3000	■	■	■	
	[55]	SRH 2401 – 2800	■	■	■	
	[8]	SRH 2801 – 3000	■	–	■	
Hinge side	[5]	SRH 315 – 1100	■	–	–	Tilt striker / corner drive → *from page 186*
	[1]	SRH 1101 – 1800	■	■	■	Standard
	[3]	SRH 1801 – 3000	■	■	■	
	[44]	SRH 285 – 1100	–	■	–	
Horizontal at the top	[5]	SRW 340 – 1750	■	■	■	Tilt striker / corner drive → *from page 186*
	[8]	BSec: SRW 1001 – 1750 RC 1 N: SRW 1001 – 1600	■	■	–	Centre lock
	[15]	SRW 801 – 1000	■	■	–	Centre lock → *from page 187*
	[10]	SRW 1101 – 1600	–	–	■	Turn-Only sash → *from page 187*
Horizontal at the bottom	[5]	SRW 340 – 1100	■	–	■	Tilt striker / corner drive → *from page 186*
	[8]	SRW 1101 – 1750	■	–	■	Centre lock
	[10]	SRW 1101 – 1600	–	–	■	Turn-Only sash → *from page 187*
	[30]	SRW 450 – 1050	–	■	–	RC 1 N centre lock → *from page 187*
	[31]	SRW 851 – 1250	–	■	–	
	[32]	SRW 1251 – 1600	–	■	–	

7.2.1.1 Standard



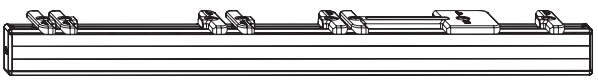
Espagnolette side

Standard	511 – 800	No. 22	2033841
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

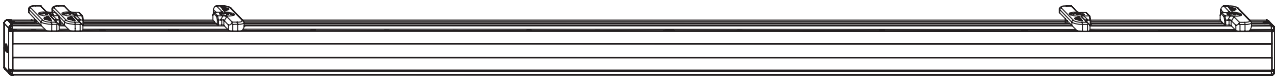
Tilt striker / corner drive	320 – 2600	No. 44	640450
Standard	1601 – 2600	No. 3	290050

7.2.1.2 Tilt striker / corner drive



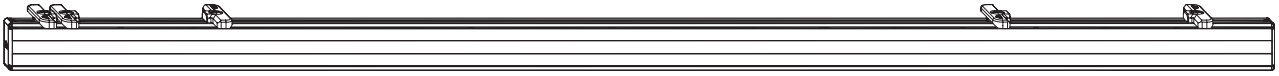
Tilt striker / corner drive	315 – 1100	315 – 1200	Top Bottom Hinge side	No. 5	290072

7.2.1.3 Centre lock



Centre lock	Bottom	RC 1 N	400 – 800	No. 30	268931
	Top Bottom	Basic security RC 1 N	801 – 1600	No. 15	311892
	Bottom	RC 1 N	801 – 1000	No. 31	268932
	Bottom	RC 1 N	1001 – 1400	No. 32	268933
	Top Bottom	Basic security RC 1 N	1201 – 1600	No. 8	290075

7.2.1.4 Turn-Only sash

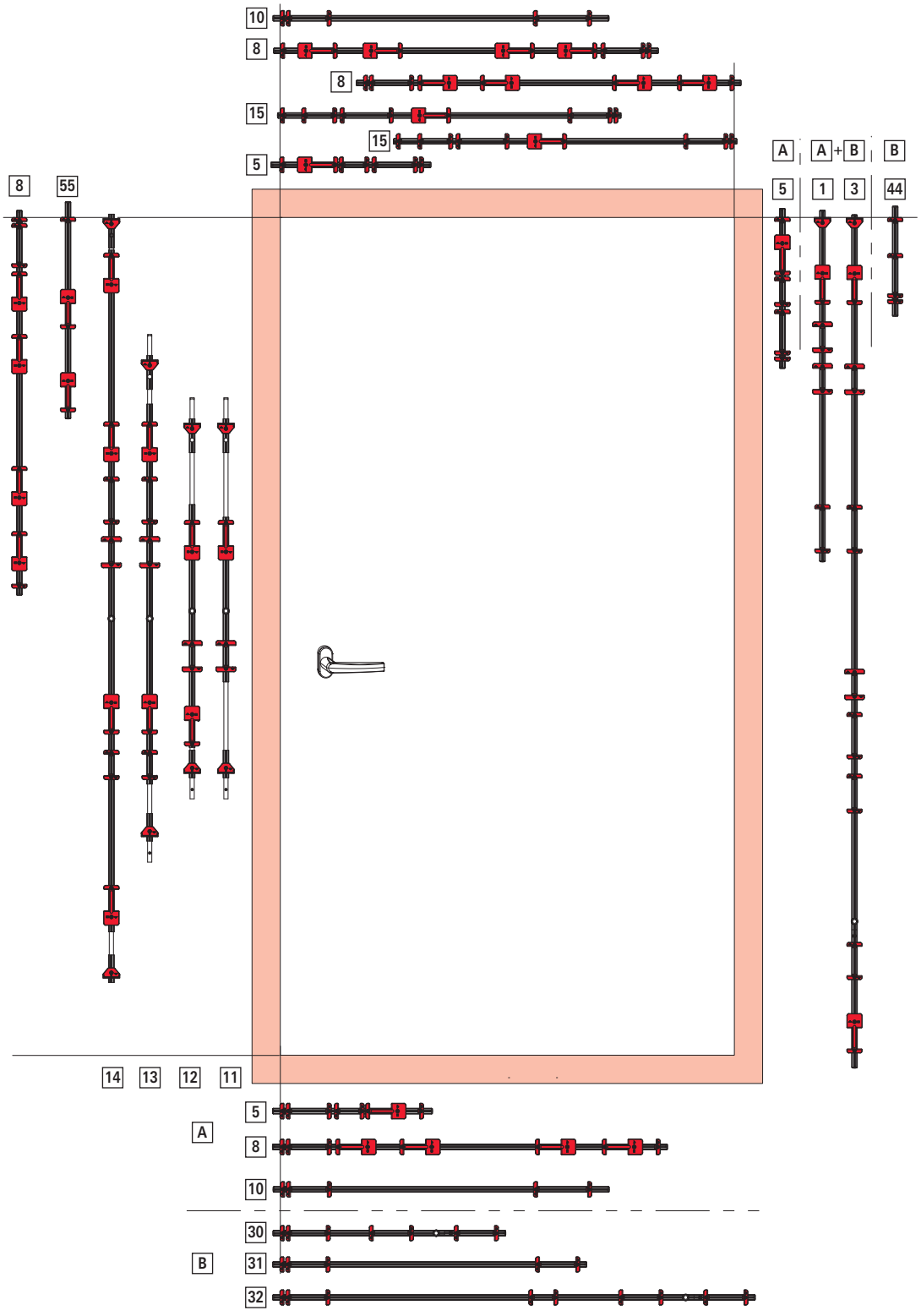


Turn-Only sash	1101 – 1600	Top Bottom	No. 10	290081

7.2.2 T&T espagnolette – centred / variable handle height

The figure shows positioning jigs for short strikers (50 mm).

Turn the jigs for long strikers.



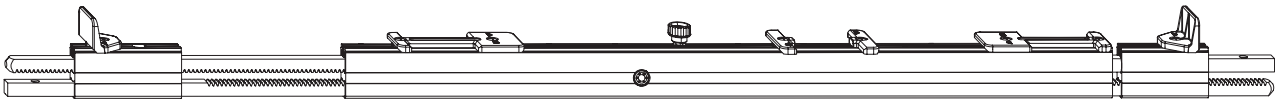
[A] BSec

[B] RC 1 N

Item	Assignment	Application range	T&T		T-O	Single jig
			BSec	RC 1 N	BSec	
Espagnolette side	[11]	SRH 621 – 1200	■	■	■	Standard
	[12]	SRH 1201 – 1600	■	■	■	
	[13]	SRH 1601 – 2000	■	■	■	
	[14]	SRH 2001 – 2400	■	■	■	
	[55]	SRH 2401 – 2800	■	■	■	
	[8]	SRH 2801 – 3000	■	–	■	
Hinge side	[5]	SRH 315 – 1100	■	■	–	Tilt striker / corner drive → *from page 186*
	[7]	SRH 1101 – 1800	■	■	–	Standard
	[3]	SRH 1801 – 2800	■	■	■	
	[44]*	SRH 320 – 2800	–	■	–	
Horizontal at the top	[5]	SRW 340 – 1750	■	■	■	Tilt striker / corner drive → *from page 186*
	[8]	BSec: SRW 1001 – 1750 RC 1 N: SRW 1001 – 1600	■	■	–	Centre lock → *from page 190*
	[15]	SRW 801 – 1000	■	■	–	
	[10]	SRW 1101 – 1600	–	–	■	Turn-Only sash → *from page 187*
Horizontal at the bottom	[5]	SRW 340 – 1100	■	–	■	Tilt striker / corner drive → *from page 186*
	[8]	SRW 1101 – 1750	■	–	■	Centre lock
	[10]	SRW 1101 – 1600	–	–	■	Turn-Only sash → *from page 187*
	[30]	SRW 450 – 1050	–	■	–	RC 1 N centre lock → *from page 190*
	[31]	SRW 851 – 1250	–	■	–	
	[32]	SRW 1251 – 1600	–	■	–	

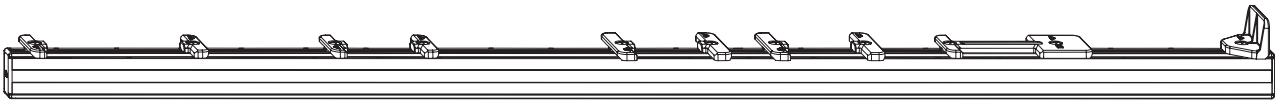
* Is used for the top locking point only.

7.2.2.1 Standard



Espagnolette side

					№
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

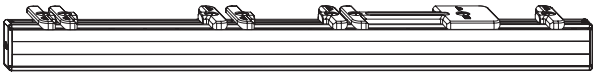


Hinge side

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



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

7.2.2.3 Centre lock



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

7.2.2.4 Turn-Only sash



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.

8.2 Screw fixing

Electrogalvanised and passivated steel fenestration screws (Ø 3.9 – 4.2 x …) are to be used to fasten the hardware components; in more challenging climatic conditions, use fenestration screws with additional sealing.

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

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

INFO
With S.kg > 150 kg, proof in accordance with DIN EN 1191 is required.

The spacer block guidelines for glazing methods must be complied with.

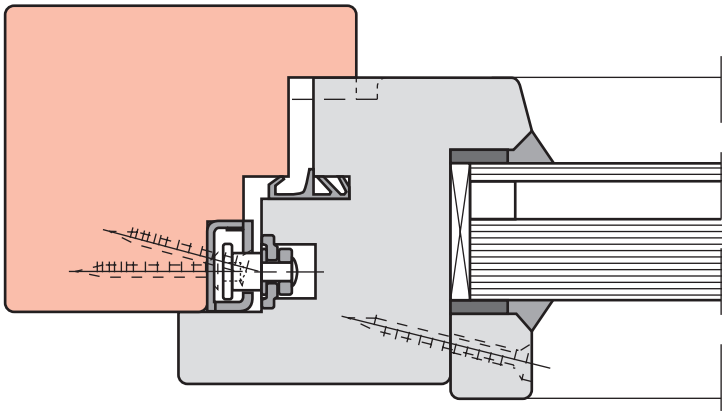
8.3 Mounting suggestion for security windows

Fastening the SEC striker

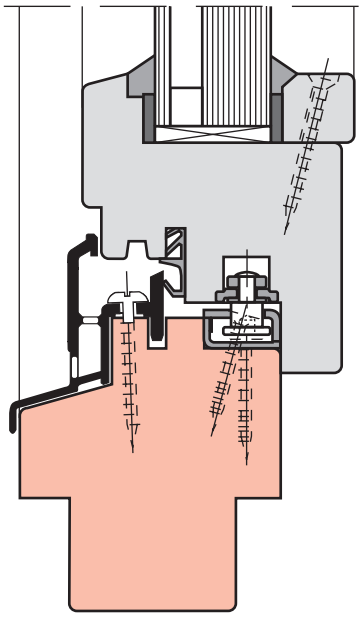
3 pcs screws 4 x …

Glazing bead mounting

With screws if required.



Horizontal cross section



Vertical cross section

8.4 Screw connections

DANGER

Incorrectly installed or screwed-in hardware components present a risk of death.

Incorrectly installed and screwed-in hardware components may lead to hazardous situations and cause serious or fatal accidents.

- During installation and screwdriving work, observe the specifications provided by the profile manufacturer; contact the profile manufacturer if necessary.
- Use the recommended screws.
- Select the length of the screws according to the profiles used.
- Ensure that the hardware components are adequately secured; contact the screw manufacturer if necessary.

ATTENTION

Using incorrect screw material may cause property damage.

Using the wrong screws may damage the components.

- Only use galvanised zinc-plated and passivated steel screws.
- Use screws with additional sealing in more challenging climatic conditions.
- Use stainless-steel screws on stainless-steel components only.
- For aluminium components, use screws made of steel (coated with zinc-nickel or zinc flakes) or stainless steel.

ATTENTION

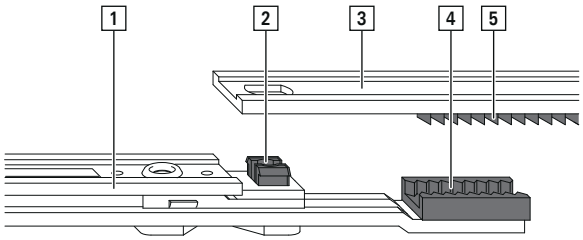
Improper screw fixings may cause property damage.

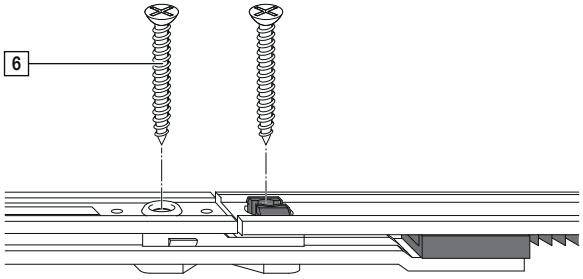
Improper screw fixings may damage the components and the element as a whole, and stop them from working properly.

- Unless stated otherwise, turn screws in straight.
- Tighten screw heads until they are flush with the surface.
- Do not over-tighten screws. Note the torque. Choose a torque that will not deform the hardware and profile. Define profile-specific torques on the basis of the demo assembly.
- Use the recommended screws.
- Select the length of the screws according to the profiles used.

8.5 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

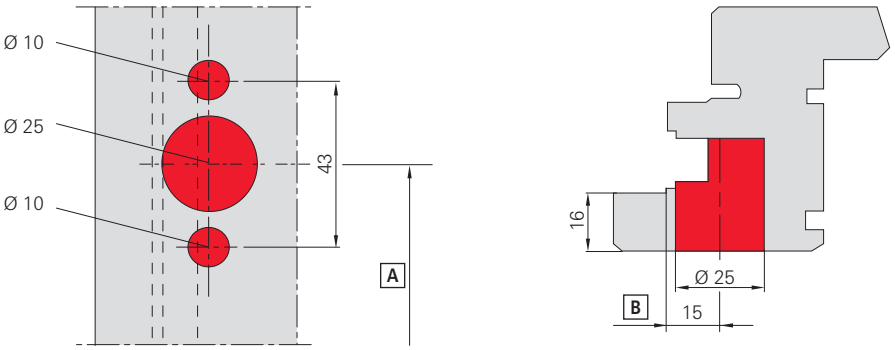
Force-fit connections are formed by screwing down components A and B so that forces and movements are transferred without loss.

INFO
All couplable components are delivered attached in the centre.

8.6 Drilling and routing dimensions

8.6.1 T&T espagnolette

8.6.1.1 Drilling and routing pattern

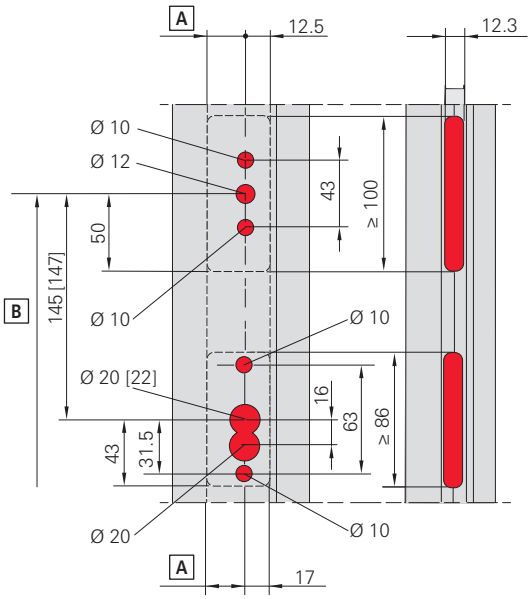


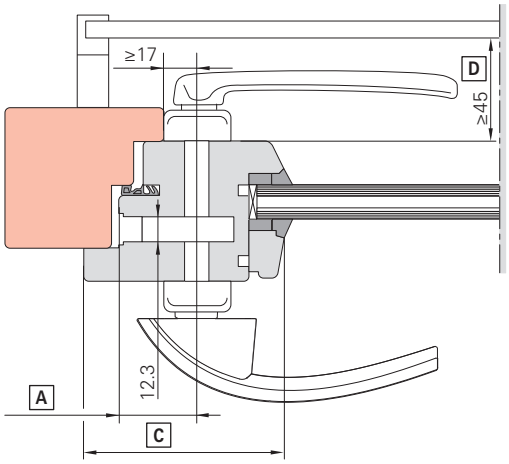
Assignment	Meaning
[A]	Handle height

Assignment	Meaning
[B]	Backset

INFO
Ø 10 drilling depth 33 mm (for 16 mm overlap) for countersunk screws M5 x ... DIN EN ISO 7046.

8.6.2 T&T espagnolette BS ≥ 25



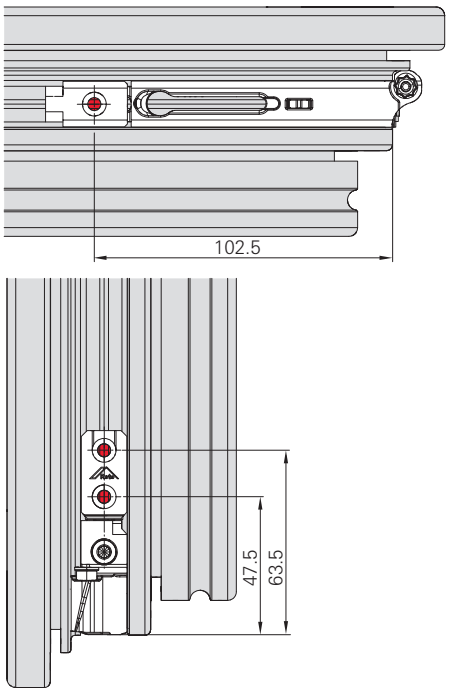


Values in brackets apply to round cylinders.

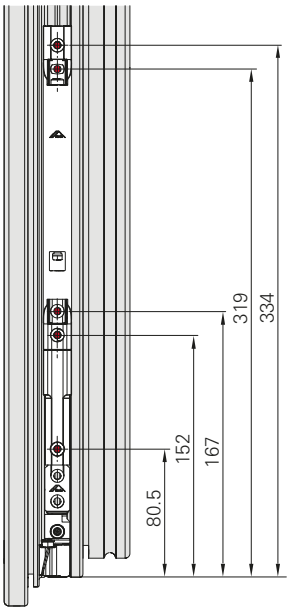
Assignment	Meaning	Profile width	Backset
[A]	Backset		–
[B]	Handle height		–
[C]	–	82 mm	25 mm
	–	87 mm	30 mm
	–	92 mm	35 mm
	–	97 mm	40 mm
	–	102 mm	45 mm
	–	107 mm	50 mm
[D]	On roller shutters		-

INFO
Cross section: balcony doors (inward opening).

8.6.3 Corner hinge

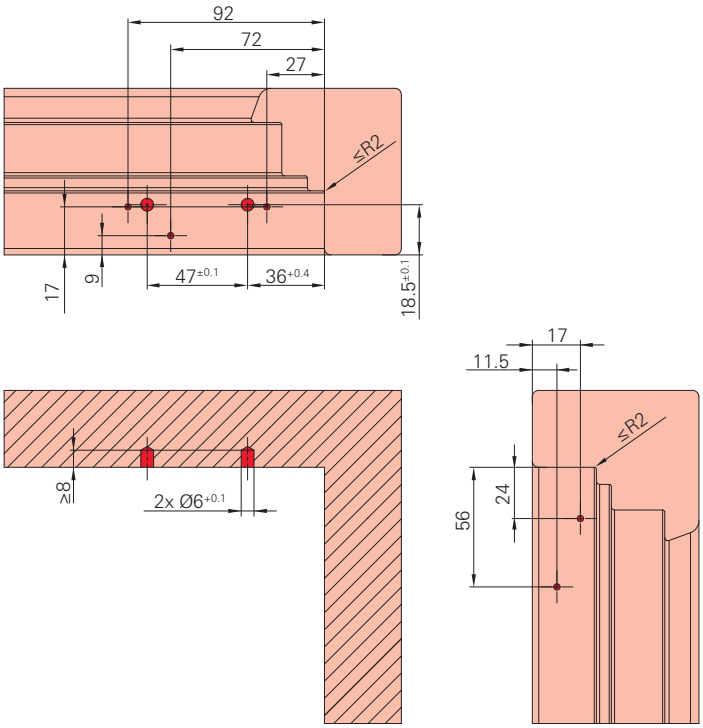


8.6.4 Load transfer

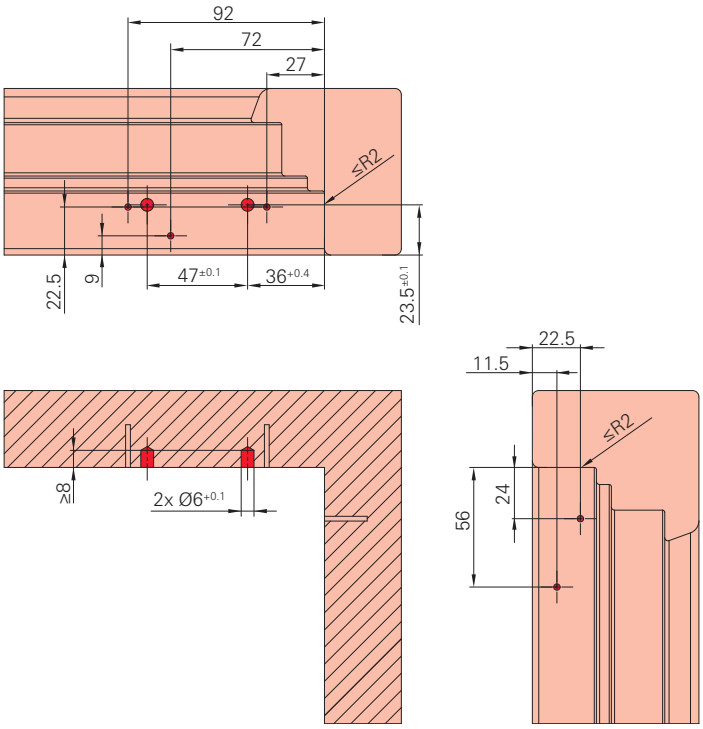


8.6.5 Sash stay / rebate sash stay

Rebate depth 24

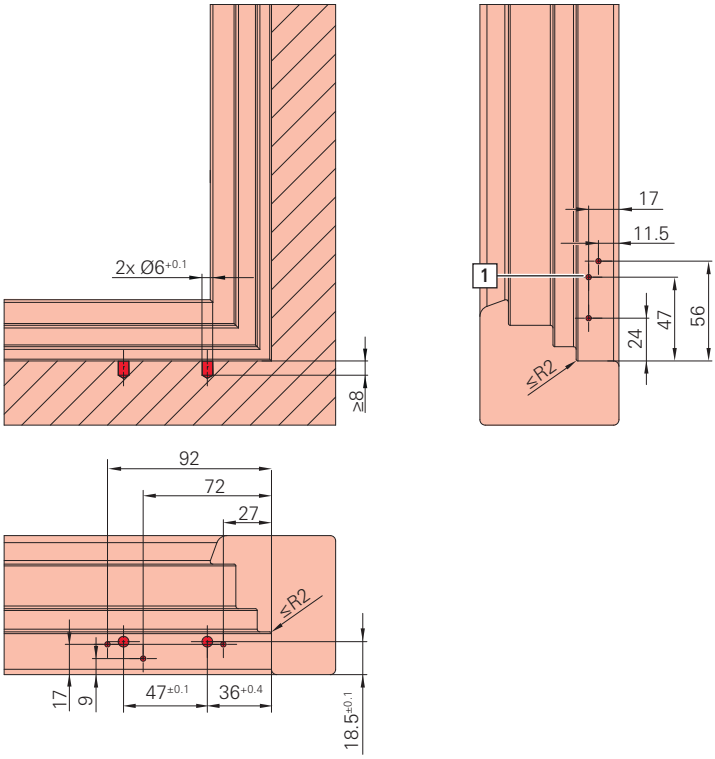


Rebate depth 30



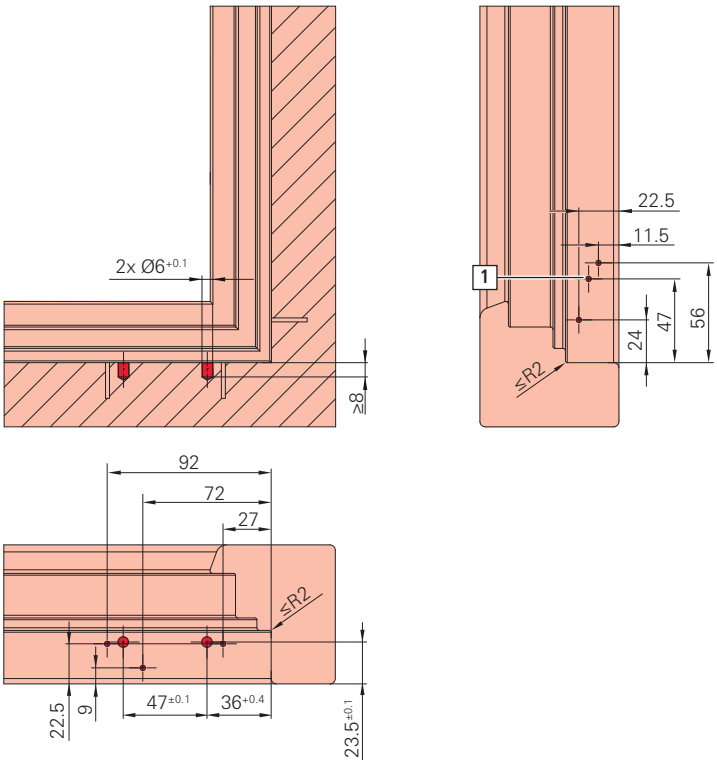
8.6.6 Pivot rest

Rebate depth 24



[1] For load transfer

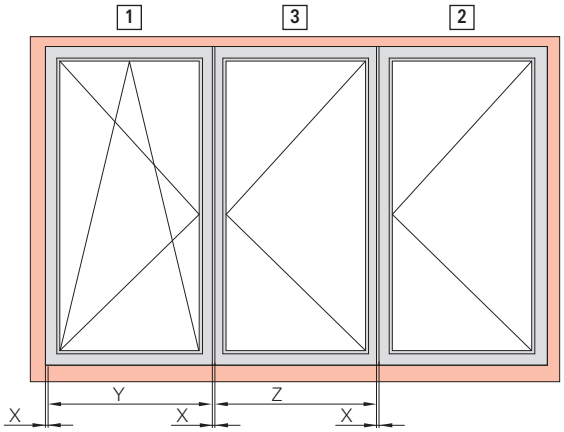
Rebate depth 30



[1] For load transfer

8.6.7 Centre sash pivot rest

8.6.7.1 With drilling jig



[1] First opening sash
[2] Second opening sash
[3] Centre sash

Position of drilling jig = X + Y + X + Z + X

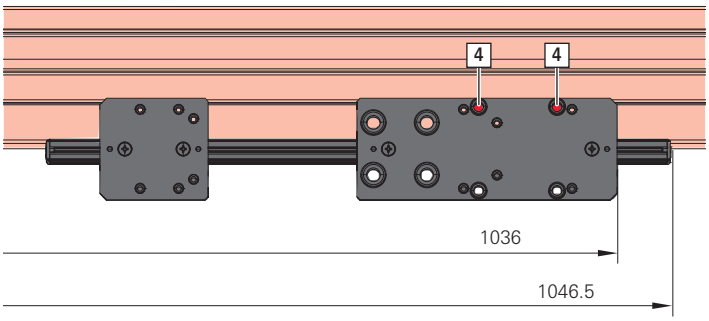
Example

X (rebate clearance) = 12

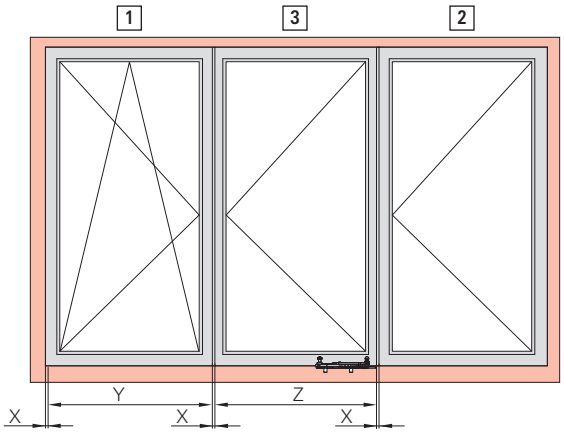
Y (SRW 1) = 500

Z (SRW 3) = 500

Position of drilling jig = 1036



8.6.7.2 Drilling position above pivot rest cam



[1] First opening sash
[2] Second opening sash
[3] Centre sash

Drilling position = X + Y + X + Z + X - 36

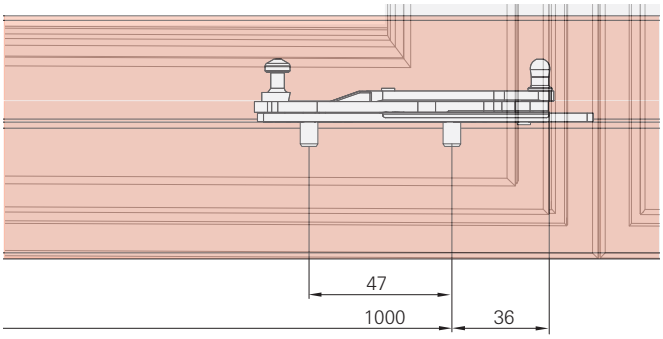
Example

X (rebate clearance) = 12

Y (SRW 1) = 500

Z (SRW 3) = 500

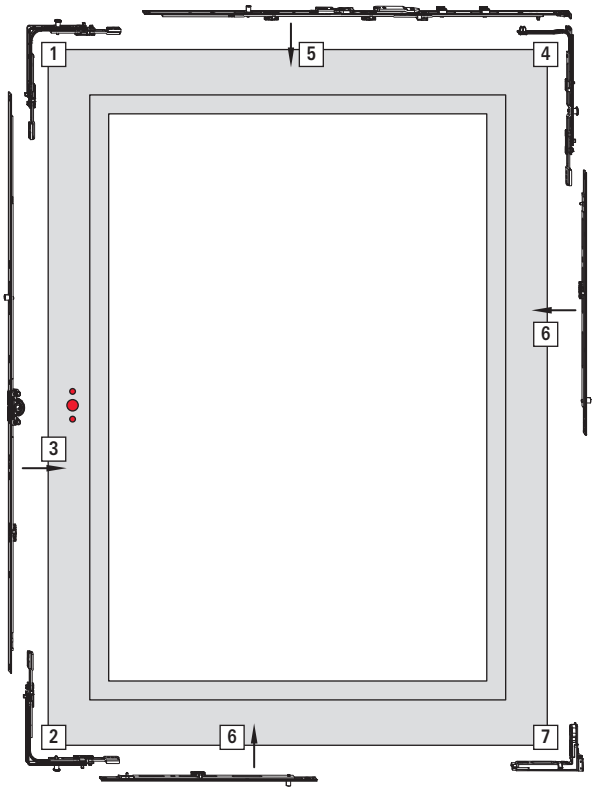
Drilling position = 1000



8.7 Sash

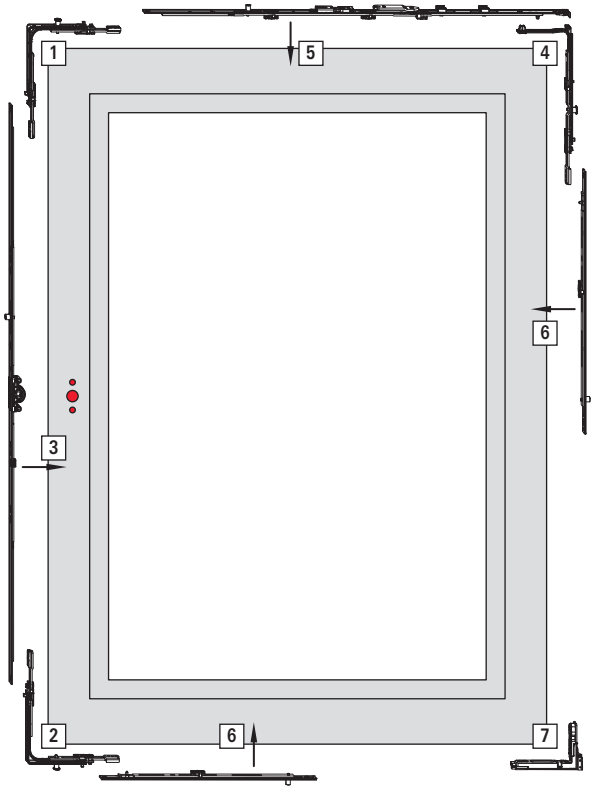
8.7.1 Installation sequence

T&T espagnolette, VT – fixed handle height



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

T&T espagnolette – centred / variable handle height



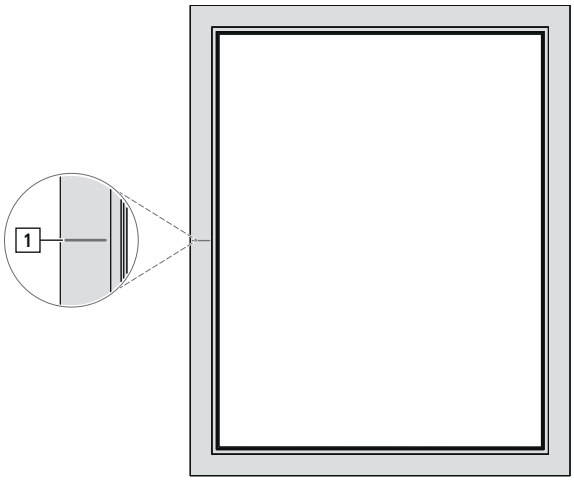
[1] Corner drive, standard
[2] Corner drive, standard
[3] T&T espagnolette
[4] Sash stay corner drive
[5] Stay guide
[6] Centre lock, vertical and horizontal
[7] Corner hinge

8.7.2 Preparing the sash for the T&T espagnolette

8.7.2.1 Handle drill holes

Drilling the holes for the handle

1. Mark the handle height on the inside of the sash [1].



2. Drill holes.
   Note any different drilling dimensions. → *8.6 "Drilling and routing dimensions" from page 194*

3. Deburr the drill holes.

8.7.2.2 Gearbox cutout

Routing the gearbox cutout

1. Route the espagnolette cutout.
   Observe the routing dimensions. → *8.6 "Drilling and routing dimensions" from page 194*

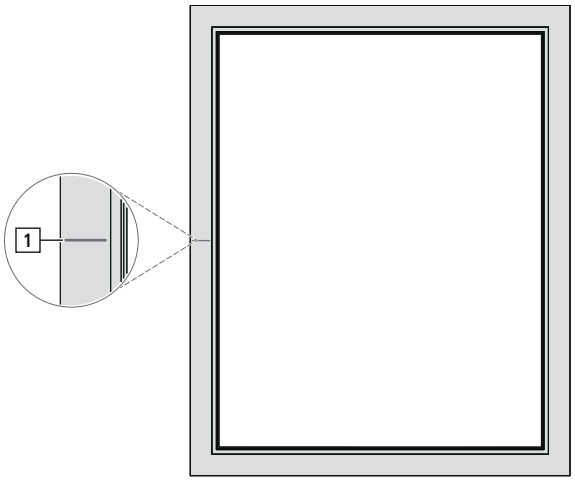
2. Deburr the espagnolette cutout.

8.7.3 Preparing the sash for a lockable T&T espagnolette

8.7.3.1 Handle drill holes

Drilling the holes for the handle

1. Mark the handle height on the inside of the sash [1].



2. Drill holes.
   Note any different drilling dimensions. → *8.6 "Drilling and routing dimensions" from page 194*

3. Deburr the drill holes.

8.7.3.2 Gearbox cutout with lock casing

Routing the gearbox cutout with lock casing

1. Route the espagnolette cutout.
   Observe the routing dimensions. → *8.6 "Drilling and routing dimensions" from page 194*

2. Deburr the espagnolette cutout.

8.7.4 Cropping the hardware components

ATTENTION

Incorrect cropping methods may result in property damage.

If the hardware components are inserted into the sash too early, the screw guide will engage and will be destroyed when removed.

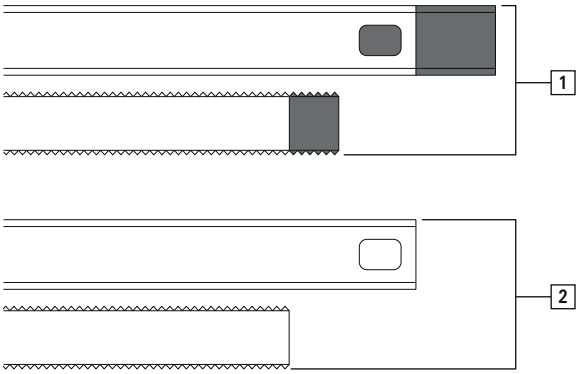
- Only lay out the hardware components and do not insert them into the sash before they have been cropped.

The following hardware components are cropped:

- Espagnolette
- Stay guide

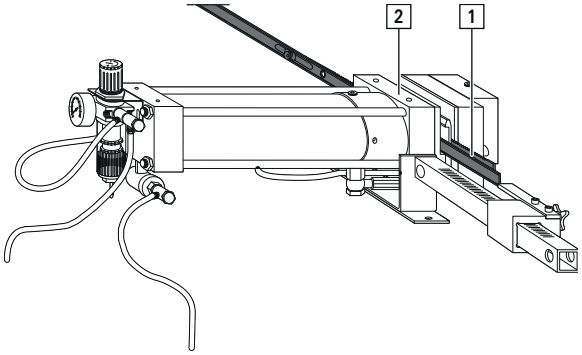
Cropping with a pneumatic cropper (hole punching)

In the delivery state, hardware components are 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 cropper [2].

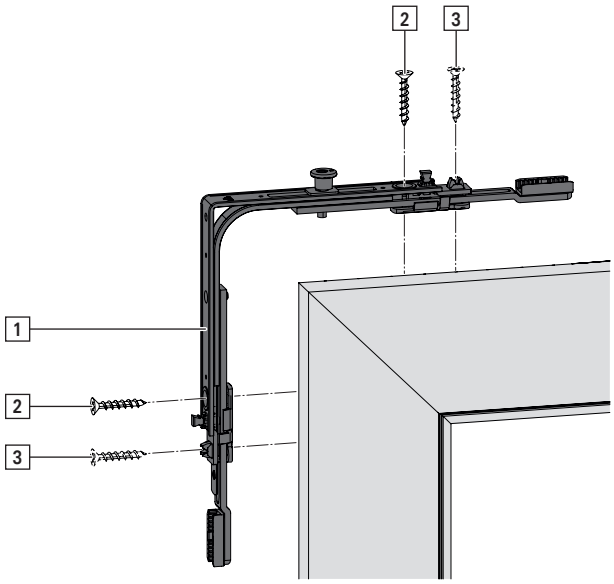


4. Align the hardware component.
5. Crop the hardware component.

8.7.5 Corner drive

Installing the corner drive

1. Insert the corner drives [1] and screw them down with two screws [2].



2. After all of the connector components have been installed, screw down the corner drives with a further two screws [3]. → *8.5 "Force-fit connection" from page 194*

8.7.6 T&T espagnolettes

8.7.6.1 Fixed handle height

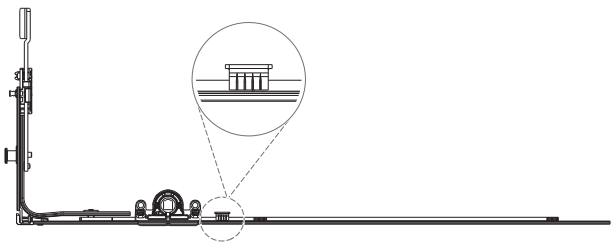
PRECONDITION
With SRH > 2400 mm, insert the centre lock, multipart, at the top on the locking side and create a force-fit connection.

Installing the T&T espagnolette

1. Place the espagnolette in the required position, mark the length on one side and crop it .

2. Insert the espagnolette with the cropped side facing upwards and create a force-fit connection. → *8.5 "Force-fit connection" from page 194*

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



8.7.6.2 Centred / variable handle height

PRECONDITION

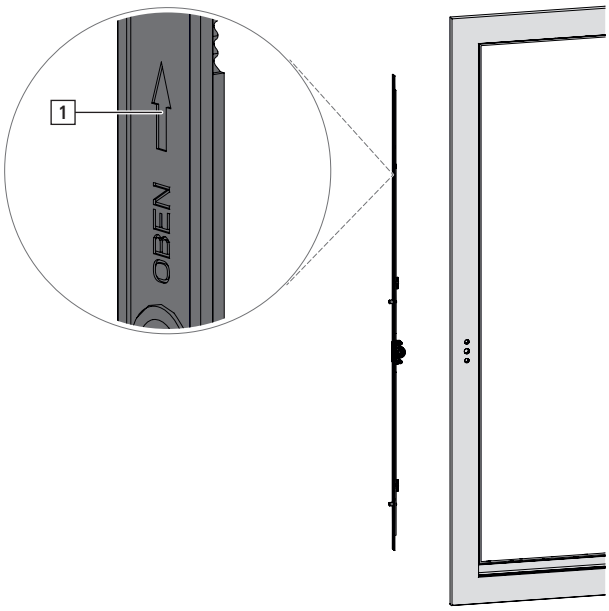
With SRH > 2400 mm, insert the centre lock, multipart, at the top on the locking side and create a force-fit connection.

Installing the T&T espagnolette

1. Place the espagnolette in the required position, mark the length on both sides, remove it and crop it .

2. Insert the espagnolette. Ensure it is installed in the correct direction, with the arrow [1] pointing upwards.

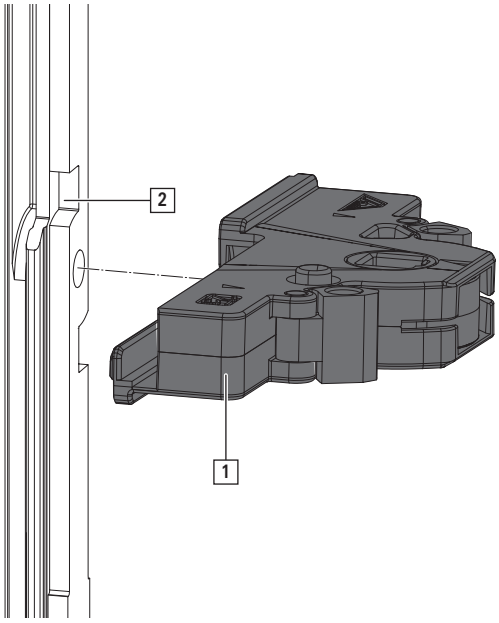
   Create a force-fit connection. → *8.5 "Force-fit connection" from page 194*



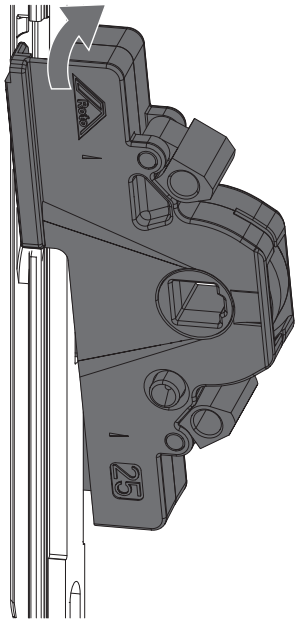
8.7.7 T&T espagnolette BS ≥ 25

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.

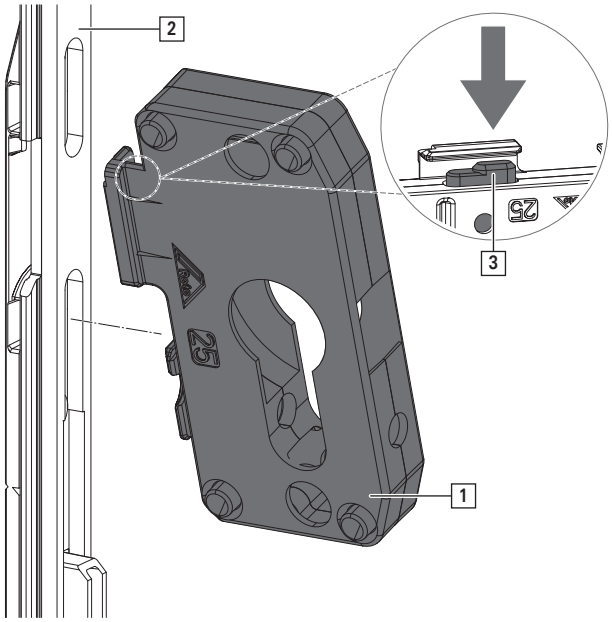


3. For dismantling, turn the gearbox anticlockwise until the gearbox comes out of the groove. Remove from the espagnolette faceplate.

Lock casing

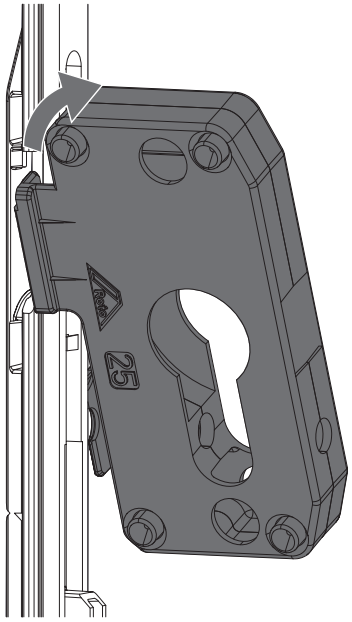
1. If the locking lug [3] is protruding, push it back into the lock casing [1].

   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.



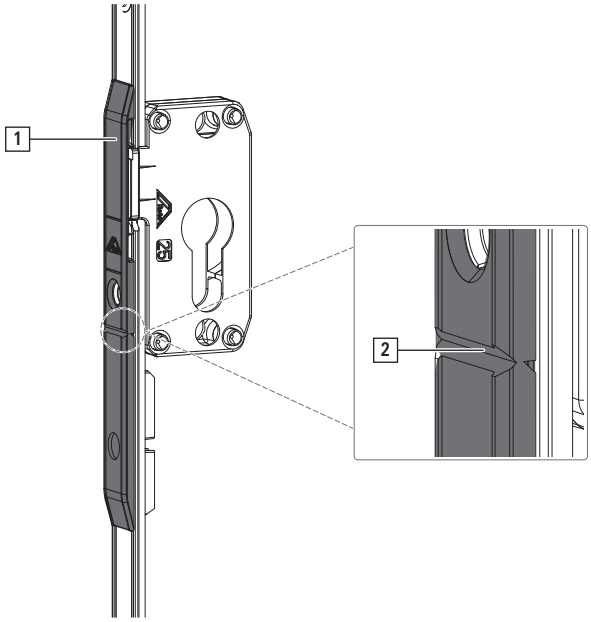
ATTENTION
Improper installation of the lock casing may cause property damage.
Turning the lock casing in incorrectly can damage the links.
- Ensure ease of movement when turning in.
- Reposition the lock casing if excessive force is required.

3. For dismantling, turn the lock casing anticlockwise until the lock casing comes out of the groove.

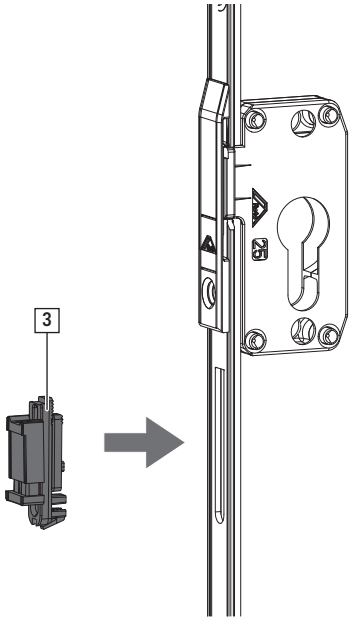
   Remove from the espagnolette faceplate.

Bullet catch

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

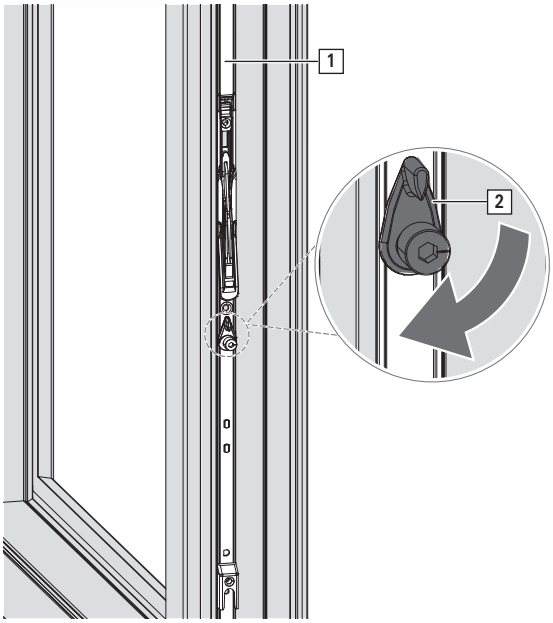


2. Insert the bullet catch [3].



8.7.8 Lever-operated espagnolette Plus

1. Insert the lever-operated espagnolette [1] into the sash groove.
   For installation in the right-hand sash, turn the eccentric bolt [2] 180°.



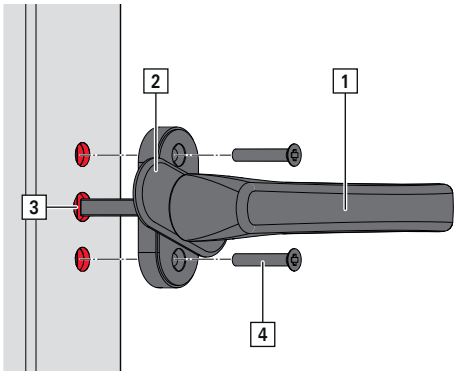
2. Mount the second opening sash with the lever-operated espagnolette open (as delivered).

8.7.9 Handle

8.7.9.1 Handle – T&T espagnolette

1. Move the handle [1] to the turn position (horizontally aligned with the escutcheon).

2. Rotate the cover [2] on the handle 90°.



3. Insert the handle into the sash [3].

4. Screw down the handle using screws [4].

5. Rotate the cover on the handle back 90°.

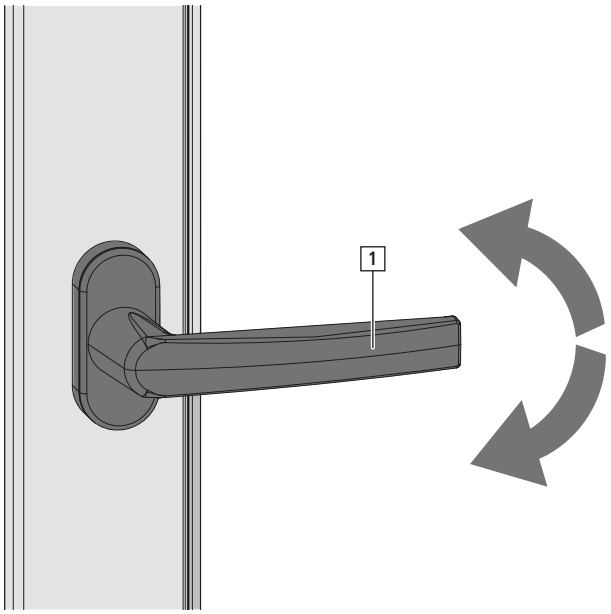
8.7.9.2 Centre fixing

INFO
All coupleable components are delivered attached in the centre.

Undoing the centre fixing

Turning the handle undoes the centre fixing of the hardware components. Undo the centre fixing with the sash open.

1. Turn the handle [1] in one direction as far as it will go.
   Audible cracking noise.



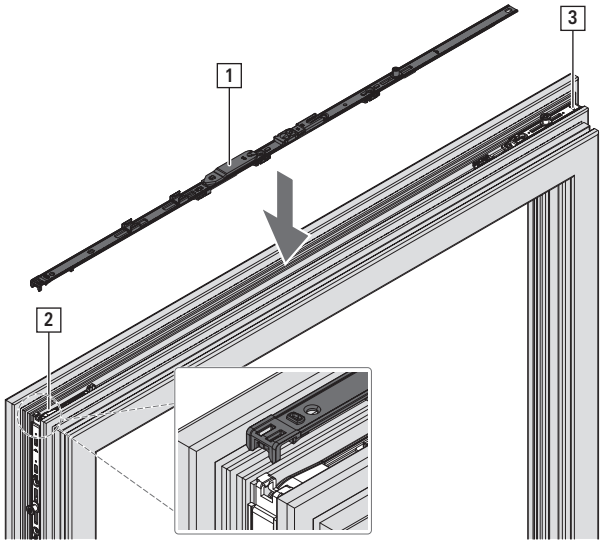
2. Turn the handle in the opposite direction as far as it will go.
   Audible cracking noise.

3. Turn the handle in both directions again and check for ease of movement.

8.7.10 Stay guide

INFO
From SRH < 600 mm, set the tilt depth to 80 mm (on windows without overlap gasket from SRH < 900 mm).

1. Insert the stay guide [1] into the sash groove and clip it into the sash stay corner drive [2].



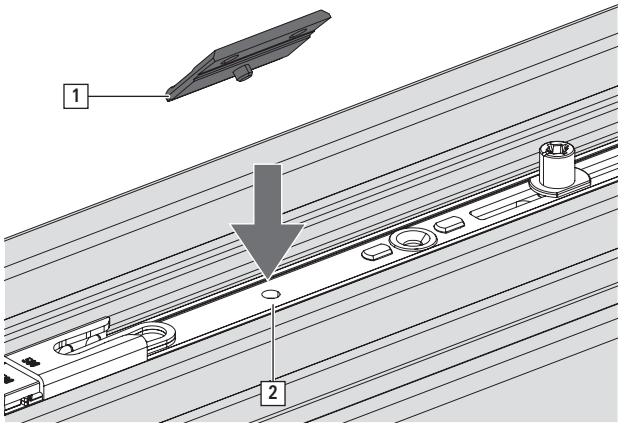
2. Connect the stay guide to the corner drive [3]. Create a force-fit connection → *from page 194*.

3. Screw down the stay guide. Use all screw positions.

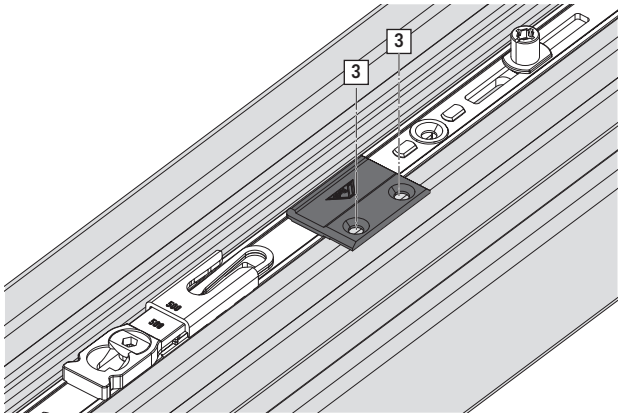
Install a fastening plate for sash weights > 150 kg

DANGER
Risk of death caused by the window falling!
If stay guide 500 is not secured by a fastening plate at a sash weight of > 150 kg, this may lead to a malfunction. This can cause the sash to fall.
- Install the fastening plate.

1. Insert the fastening plate [1] into the hole pattern provided on the stay guide [2].



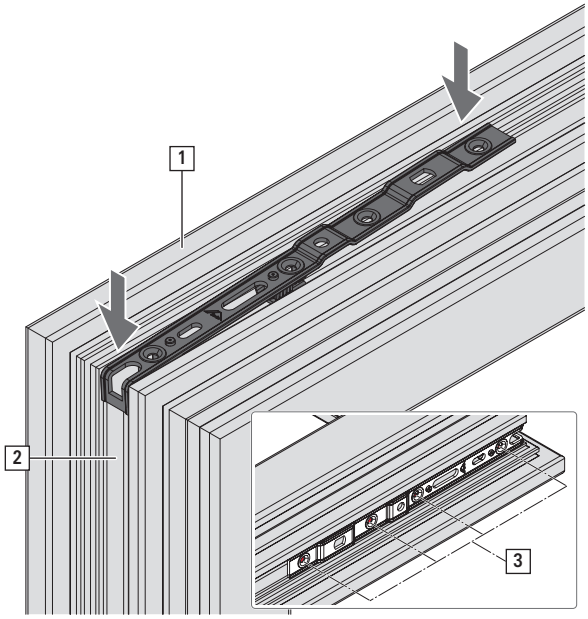
2. Fasten with two screws [3].



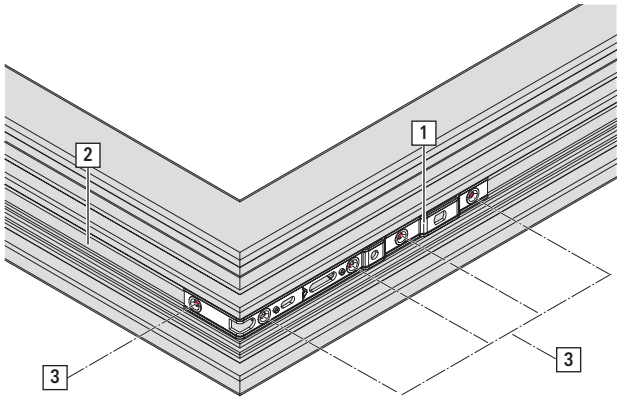
8.7.11 Rebate stay guide

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

2. **Turn-Only sash**
   Fasten with four screws [3].

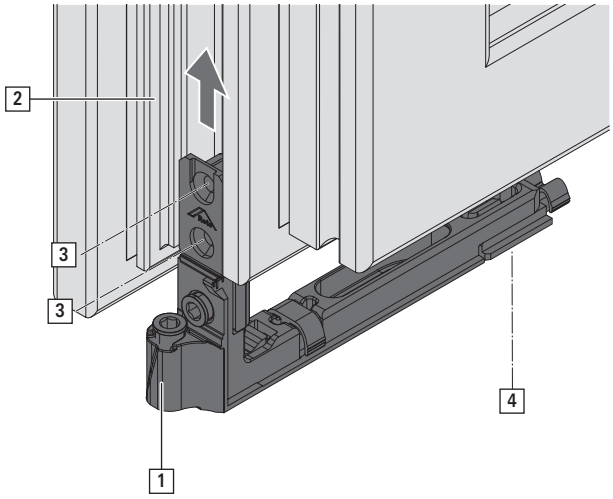


3. **Tilt-Only sash**
   Fasten with five screws [3].



8.7.12 Corner hinge

1. Place the corner hinge [1] on the sash [2] and push it upwards in the sash groove.
   Check that it is seated flush.



2. Fasten with three screws [3] + [4].

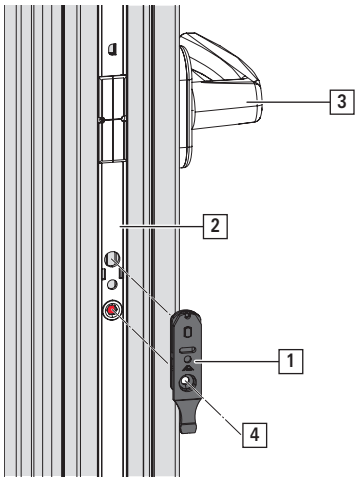
INFO
Tighten the screw [4] on the horizontal leg to a maximum torque of 2 Nm.

8.7.13 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.

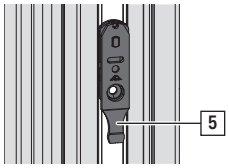
INFO
Only the sash lifter and not the lifting mishandling device can be used in conjunction with the arrestable brake stay.

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



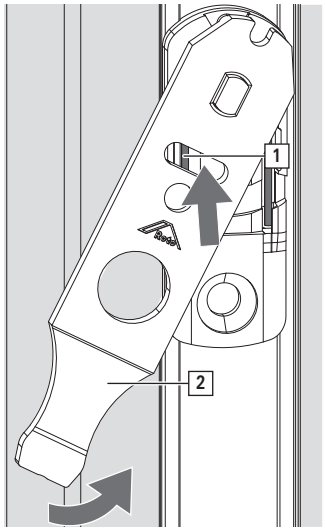
2. Fasten with a screw [4].

3. Activate the lifting mishandling device by pushing the arm [5] in the required direction until the arm cam snaps past the spring. Do not push the arm cam beyond the housing. The lifting mishandling device's centre fixing is undone.



Restoring the neutral position

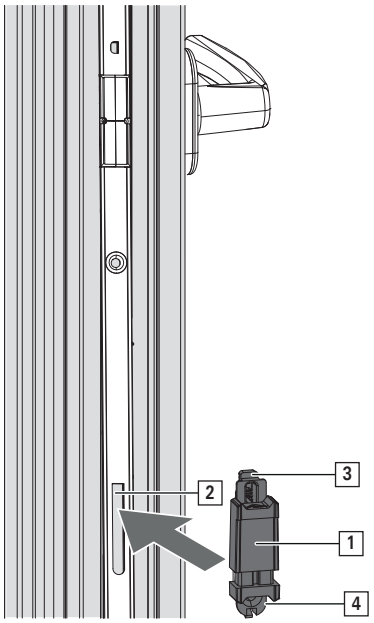
1. Use a suitable tool, for example a screwdriver, to push down on the spring [1] beneath the slot.



2. Keep the spring held down and turn the arm [2] back to 0°.
   The lifting mishandling device returns to the neutral position and can be reactivated.

8.7.14 Bullet catch

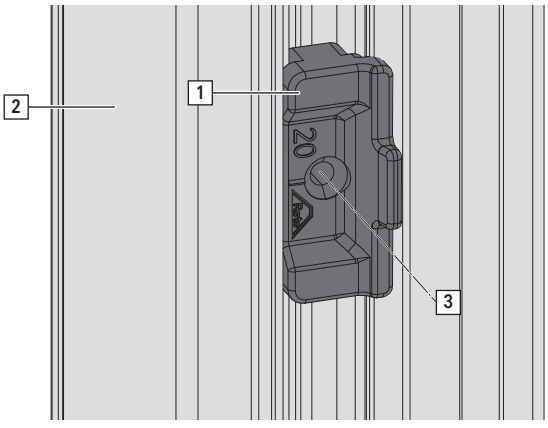
1. Insert the bullet-catch sash component [1] into the espagnolette recess [2].
   To do so, insert the nose of the bullet catch [3] into the flat side of the espagnolette recess and clip the bullet catch into place.



2. Secure with screw [4].

8.7.15 Centre closer

1. Place the centre closer [1] in the sash groove [2].
   Positioning → *from page 229*.



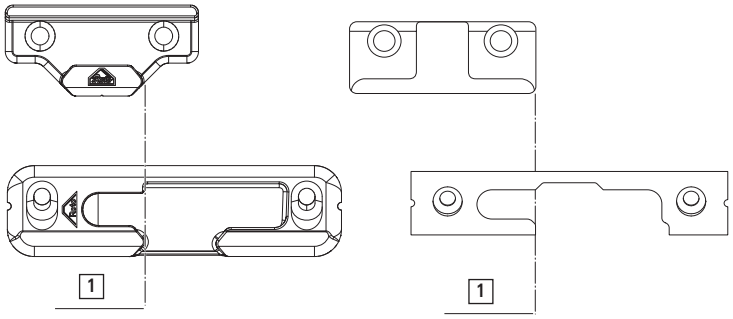
2. Fasten with one screw [3].

8.8 Frame

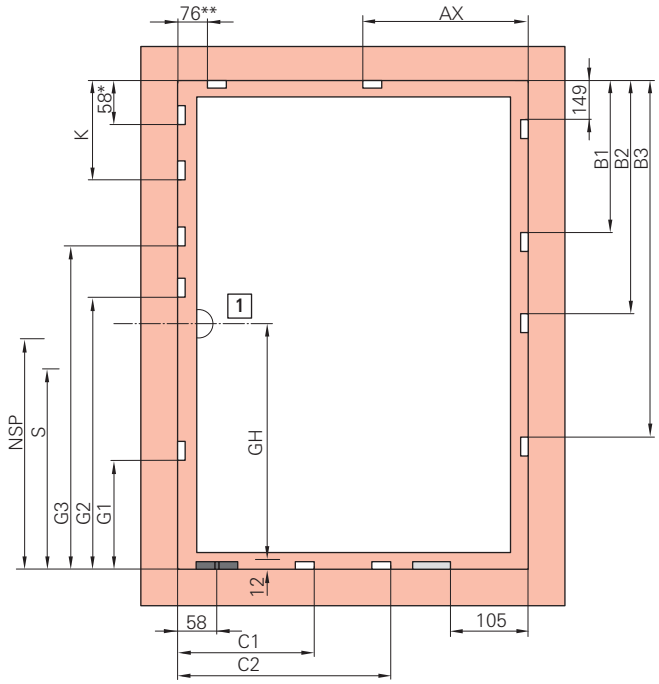
8.8.1 Position of strikers and tilt strikers

8.8.1.1 Striker positions and tilt strikers

Positioning of the strikers and tilt strikers on the basis of the point of entry [1] in the turn position:



8.8.1.2 Tilt&Turn hardware / TiltFirst hardware – basic security



[1] Handle centre

Striker e.g.

Tilt striker e.g.

Turn restrictor e.g.

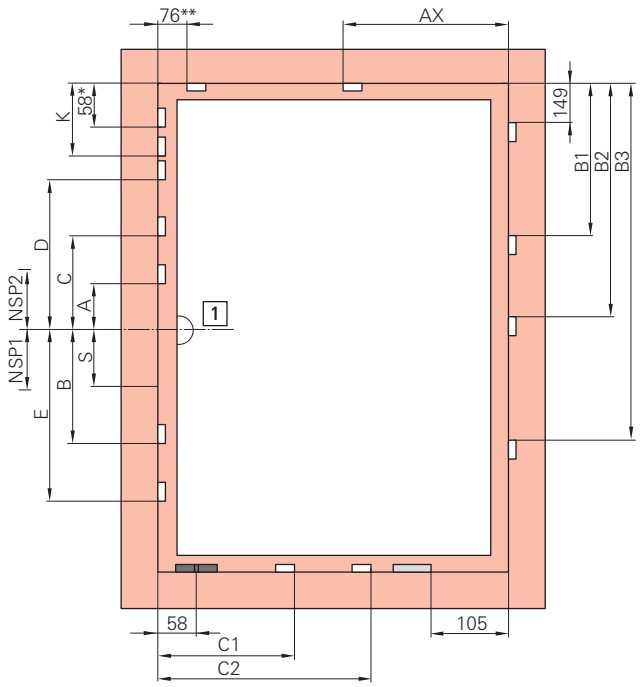
T&T espagnolette, VT – fixed handle height

SRH [mm]	GH	G1	G2	G3	K	NSP	S
285 – 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	–

SRH [mm]	GH	G1	G2	G3	K	NSP	S
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
2801 – 3000	1000	700	1370	1770	658	1121	807

* Fit a striker up to SRW 451 mm

** Fit a striker from SRW 451 mm



[1] Handle centre

Striker e.g.

Tilt striker e.g.

Turn restrictor 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 – 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
2801 – 3000	–	312	358	758	740	658	–	109	395

* Fit a striker up to SRW 451 mm

** Fit a striker from SRW 451 mm

Stay guide

SRW [mm]	AX	Size
801 – 1000	600	500 / 890
1001 – 1200	750	500 / 1090
1201 – 1400[46][47]	750	500 / 1290

Centre lock, vertical, without load transfer

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 – 3000	746	1346	1946	2x CL 600 E KU + CL 600 E

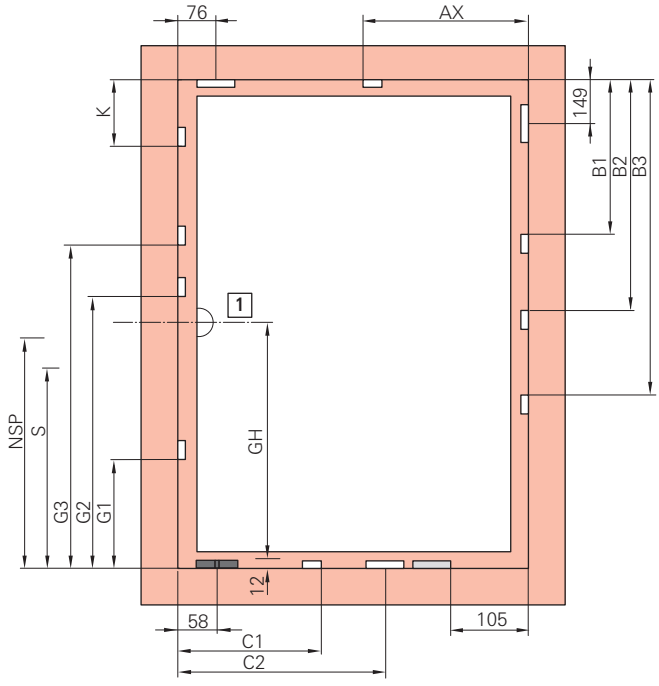
Centre lock, vertical, with load transfer

SRH [mm]	B1	B2	B3	Centre lock
1101 – 1150	550	–	–	CL 400 E
1151 – 1800	746	–	–	CL 600 E
1801 – 2400	746	1346	–	CL 600 E KU + CL 600 E
2401 – 3000	746	1346	1946	2x CL 600 E KU + CL 600 E

Centre lock, horizontal

SRW [mm]	C1	C2	Centre lock
1101 – 1600	658	–	CL 600 E
1601 – 1750	658	1062	CL 600 E KU + CL 400 E

8.8.1.3 Tilt&Turn hardware – RC 1 N



[1] Handle centre

Striker e.g.

Tilt striker e.g.

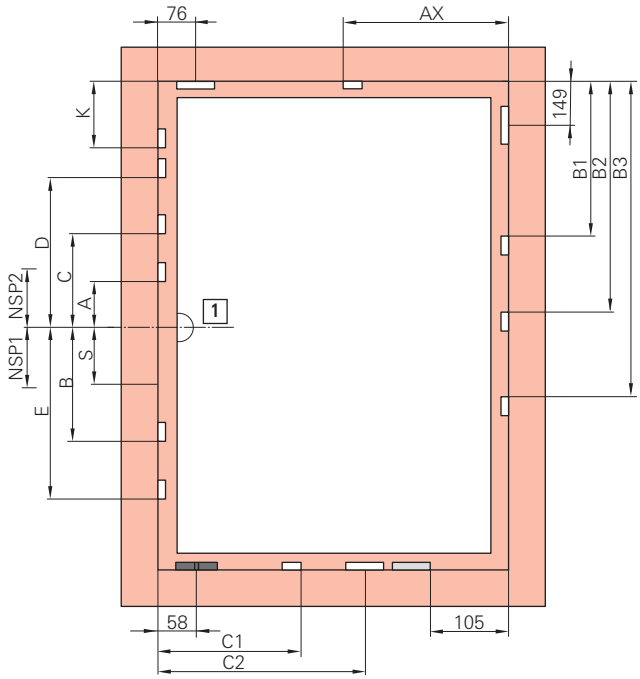
Turn restrictor e.g.

[46] from 1401 with additional stay arm

[47] from 1601 with additional stay arm and centre lock

T&T espagnolette, VT – fixed handle height

SRH [mm]	GH	G1	G2	G3	K	NSP	S
285 – 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 – 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.

Turn restrictor 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 – 1200	125	–	–	–	–	–	137	–	–
1201 – 1600	125	340	–	–	–	–	137	–	–
1601 – 2000	–	312	358	–	–	–	–	109	395
2001 – 2600	–	312	358	758	740	–	–	109	395
2601 – 2800	–	312	358	758	740	458	–	109	395

Stay guide

SRW [mm]	AX	Size
801 – 1000	600	500 / 890
1001 – 1200	750	500 / 1090
1201 – 1400[48]	750	500 / 1290

[48] from 1401 with additional stay arm

Centre lock, vertical, without load transfer

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 – 2800	746	1346	1946	2x CL 600 E KU + CL 600 E

Centre lock, vertical, with load transfer

SRH [mm]	B1	B2	B3	Centre lock
1101 – 1150	550	–	–	CL 400 E
1151 – 1800	746	–	–	CL 600 E
1801 – 2400	746	1346	–	CL 600 E KU + CL 600 E
2401 – 2800	746	1346	1946	2x CL 600 E KU + CL 600 E

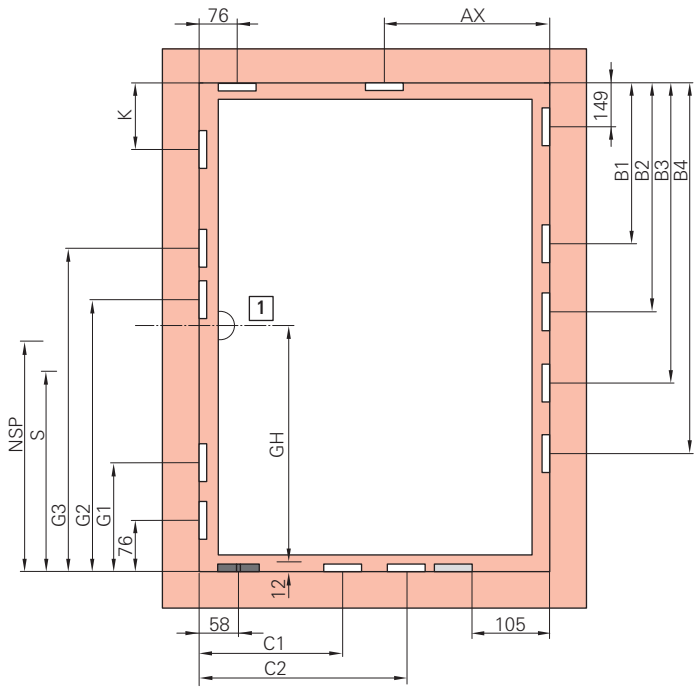
Centre lock, horizontal, without turn restrictor

SRW [mm]	C1	C2	Centre lock
450 – 650	258	–	CL 200 P
651 – 850	462	–	CL 400 P
851 – 1000	658	–	CL 600 P

Centre lock, horizontal, with turn restrictor

SRW [mm]	C1	C2	Centre lock
651 – 850	258	–	CL 200 P
851 – 1050	462	–	CL 400 P
1051 – 1250	658	–	CL 600 P
1251 – 1450	658	858	CL 600 E KU + CL 200 P
1251 – 1600	658	1062	CL 600 E KU + CL 400 P

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



[1] Handle centre

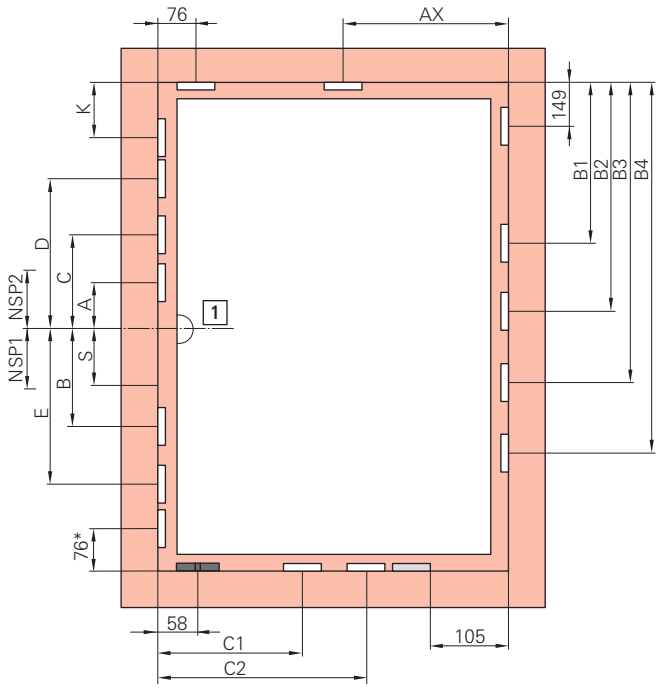
Striker e.g.

Tilt striker e.g.

Turn restrictor e.g.

T&T espagnolette, VT – fixed handle height

SRH [mm]	GH	G1	G2	G3	K	NSP	S
601 – 800	263	–	–	–	–	350	–
801 – 1000	413	550	–	–	–	288	–
1001 – 1200	513	700	–	–	–	388	–
1201 – 1400	563	700	–	–	–	388	–
1401 – 1600	563	700	1170	–	–	388	–
1601 – 1800	563	700	1370	–	–	388	–
1601 – 2000	1000	700	1370	–	–	1121	807
2001 – 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.

Turn restrictor e.g.

T&T espagnolette – centred / variable handle height

SRH [mm]	A	B	C	D	E	K	NSP 1	NSP 2	S
490 – 620	–	–	–	–	–	–	–	–	–
621 – 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

* Fit a striker up to SRH 620 mm

Stay guide

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

Centre lock, vertical, without load transfer

SRH [mm]	B1	B2	B3	B4	Centre lock
490 – 650	346	–	–	–	CL 200 V
651 – 850	550	–	–	–	CL 400 V
851 – 1050	746	–	–	–	CL 600 V
1051 – 1250	746	946	–	–	CL 600 V KU + CL 200 V
1251 – 1450	746	1150	–	–	CL 600 V KU + CL 400 V
1451 – 1650	746	1346	–	–	CL 600 V KU + CL 600 V
1651 – 1850	746	1346	1546	–	2x CL 600 V KU + CL 200 V
1851 – 2050	746	1346	1750	–	2x CL 600 V KU + CL 400 V
2051 – 2250	746	1346	1946	–	2x CL 600 V KU + CL 600 V
2251 – 2450	746	1346	1946	2146	3x CL 600 V KU + CL 200 V
2451 – 2650	746	1346	1946	2350	3x CL 600 V KU + CL 400 V
2651 – 2800	746	1346	1946	2546	3x CL 600 V KU + CL 600 V

Centre lock, vertical, with load transfer

SRH [mm]	B1	B2	B3	B4	Centre lock
1000 – 1150	550	–	–	–	CL 400 V
1151 – 1350	746	–	–	–	CL 600 V
1351 – 1550	746	946	–	–	CL 600 V KU + CL 200 V
1551 – 1750	746	1150	–	–	CL 600 V KU + CL 400 V
1751 – 1950	746	1346	–	–	CL 600 V KU + CL 600 V
1951 – 2150	746	1346	1546	–	2x CL 600 V KU + CL 200 V
2151 – 2350	746	1346	1750	–	2x CL 600 V KU + CL 400 V
2351 – 2550	746	1346	1946	–	2x CL 600 V KU + CL 600 V
2551 – 2750	746	1346	1946	2146	3x CL 600 V KU + CL 200 V
2751 – 2800	746	1346	1946	2350	3x CL 600 V KU + CL 400 V

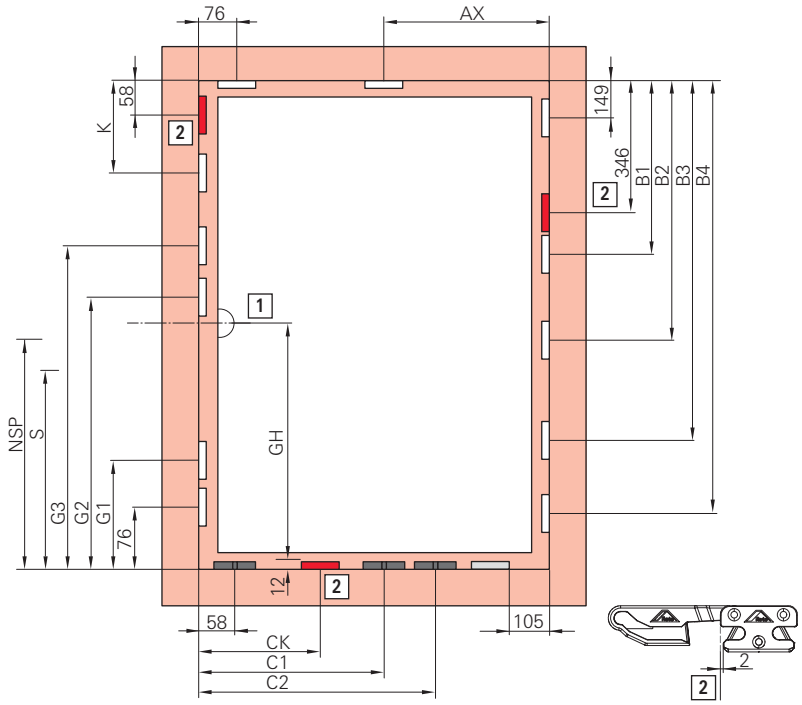
Centre lock, horizontal, without turn restrictor

SRW [mm]	C1	C2	Centre lock
450 – 650	258	–	CL 200 V
651 – 850	462	–	CL 400 V
851 – 1000	658	–	CL 600 V

Centre lock, horizontal, with turn restrictor

SRW [mm]	C1	C2	Centre lock
650 – 850	258	–	CL 200 V
851 – 1050	462	–	CL 400 V
1051 – 1250	658	–	CL 600 V
1251 – 1400	658	858	CL 600 V KU + CL 200 V

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



[1] Handle centre

[2] Point of entry

Striker e.g.

Tilt striker e.g.

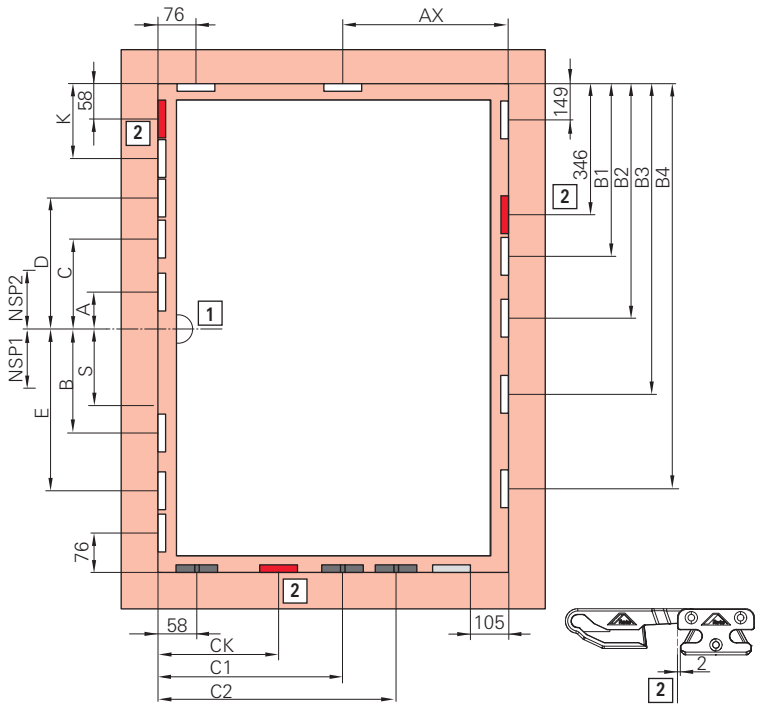
Turn restrictor e.g.

Security striker for tilt ventilation

T&T espagnolette, VT – fixed handle height

SRH [mm]	GH	G1	G2	G3	K	NSP	S
601 – 800	263	–	–	–	–	350	–
801 – 1000	413	550	–	–	–	288	–
1001 – 1200	513	700	–	–	–	388	–
1201 – 1400	563	700	–	–	–	388	–
1401 – 1600	563	700	1170	–	–	388	–
1601 – 1800	563	700	1370	–	–	388	–
1601 – 2000	1000	700	1370	–	–	1121	807
2001 – 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

Position of strikers and tilt strikers



[1] Handle centre

[2] Point of entry

Striker e.g.

Tilt striker e.g.

Turn restrictor e.g.

Security striker for tilt ventilation

T&T espagnolette – centred / variable handle height

SRH [mm]	A	B	C	D	E	K	NSP 1	NSP 2	S
490 – 620	–	–	–	–	–	–	–	–	–
621 – 800	125	–	–	–	–	–	137	–	–
801 – 1200	125	–	–	–	–	–	137	–	–
1201 – 1600	125	340	–	–	–	–	137	–	–
1601 – 2000	–	312	358	–	–	–	–	109	395
2001 – 2400	–	312	358	758	740	–	–	109	395
2401 – 2600	–	312	358	758	740	258	–	109	395
2601 – 2800	–	312	358	758	740	458	–	109	395

Stay guide

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

Centre lock, vertical, without load transfer

SRH [mm]	B1	B2	B3	B4	Centre lock
490 – 650	–	–	–	–	CL 200 V
651 – 850	546	–	–	–	CL 200 V KU + CL 200 V
851 – 1050	746	–	–	–	CL 200 V KU + CL 400 V
1051 – 1250	946	–	–	–	CL 200 V KU + CL 600 V
1251 – 1450	946	1146	–	–	CL 200 V KU + CL 600 V KU+ CL 200 V
1451 – 1650	946	1350	–	–	CL 200 V KU + CL 600 V KU+ CL 400 V
1651 – 1850	946	1546	–	–	CL 200 V KU + CL 600 V KU+ CL 600 V
1851 – 2050	946	1546	1746	–	CL 200 V KU + 2x CL 600 V KU+ CL 200 V
2051 – 2250	946	1546	1950	–	CL 200 V KU + 2x CL 600 V KU+ CL 400 V

SRH [mm]	B1	B2	B3	B4	Centre lock
2251 – 2450	946	1546	2146	–	CL 200 V KU + 2x CL 600 V KU+ CL 600 V
2451 – 2650	946	1546	2146	2346	CL 200 V KU + 3x CL 600 V KU + CL 200 V
2651 – 2800	946	1546	2146	2550	CL 200 V KU + 3x CL 600 V KU + CL 400 V

Centre lock, vertical, with load transfer

SRH [mm]	B1	B2	B3	B4	Centre lock
1000 – 1150	546	–	–	–	CL 200 V KU + CL 200 V
1151 – 1350	750	–	–	–	CL 200 V KU + CL 400 V
1351 – 1550	946	–	–	–	CL 200 V KU + CL 600 V
1551 – 1750	946	1146	–	–	CL 200 V KU + CL 600 V + CL 200 V
1751 – 1950	946	1350	–	–	CL 200 V KU + CL 600 V + CL 400 V
1951 – 2150	946	1546	–	–	CL 200 V KU + CL 600 V + CL 600 V
2151 – 2350	946	1546	1746	–	CL 200 V KU + 2x CL 600 V + CL 200 V
2351 – 2550	946	1546	1950	–	CL 200 V KU + 2x CL 600 V + CL 400 V
2551 – 2750	946	1546	2146	–	CL 200 V KU + 2x CL 600 V + CL 600 V
2751 – 2800	946	1546	2146	2346	CL 200 V KU + 3x CL 600 V + CL 200 V

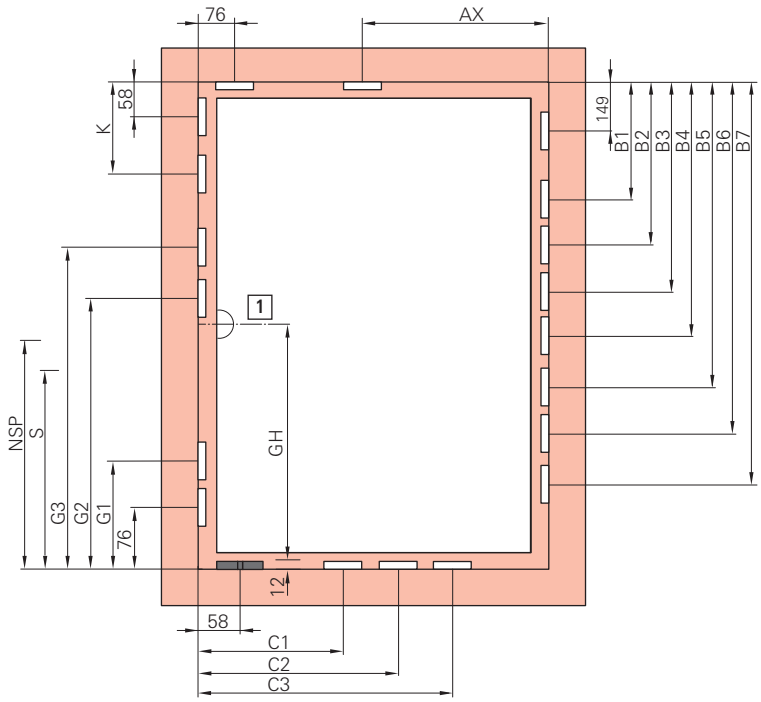
Centre lock, horizontal, without turn restrictor

SRW [mm]	CK	C1	C2	Centre lock
450 – 650	258	–	–	CL 200 V
651 – 850	258	458	–	CL 200 V KU + CL 200 V
851 – 1000	458	258	658	2x CL 200 V KU + CL 200 V

Centre lock, horizontal, with turn restrictor

SRW [mm]	CK	C1	C2	Centre lock
650 – 850	258	–	–	CL 200 V
851 – 1050	458	258	–	CL 200 V KU + CL 200 V
1051 – 1250	458	258	658	2x CL 200 V KU + CL 200 V
1251 – 1400	658	258	858	CL 200 V KU + CL 400 V KU + CL 200 V

8.8.1.6 Tilt&Turn hardware – RC 3



Position of strikers and tilt strikers

[1] Handle centre

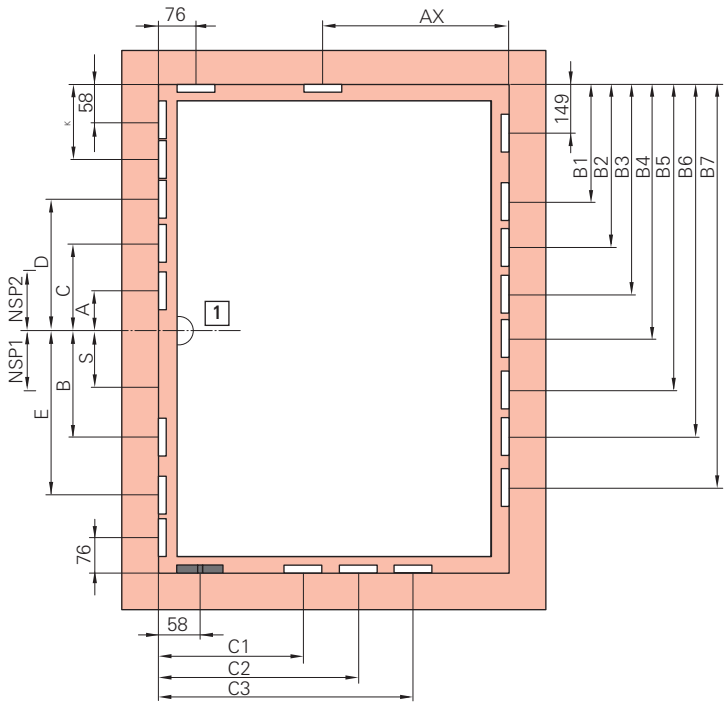
Striker e.g.

Tilt striker e.g.

Turn restrictor e.g.

T&T espagnolette, VT – fixed handle height

SRH [mm]	GH	G1	G2	G3	K	NSP	S
601 – 800	263	–	–	–	–	350	–
801 – 1000	413	550	–	–	–	288	–
1001 – 1200	513	700	–	–	–	388	–
1201 – 1400	563	700	–	–	–	388	–
1401 – 1600	563	700	1170	–	–	388	–
1601 – 1800	563	700	1370	–	–	388	–
1601 – 2000	1000	700	1370	–	–	1121	807
2001 – 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.

Turn restrictor e.g.

T&T espagnolette – centred / variable handle height

SRH [mm]	A	B	C	D	E	K	NSP 1	NSP 2	S
490 – 620	–	–	–	–	–	–	–	–	–
621 – 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

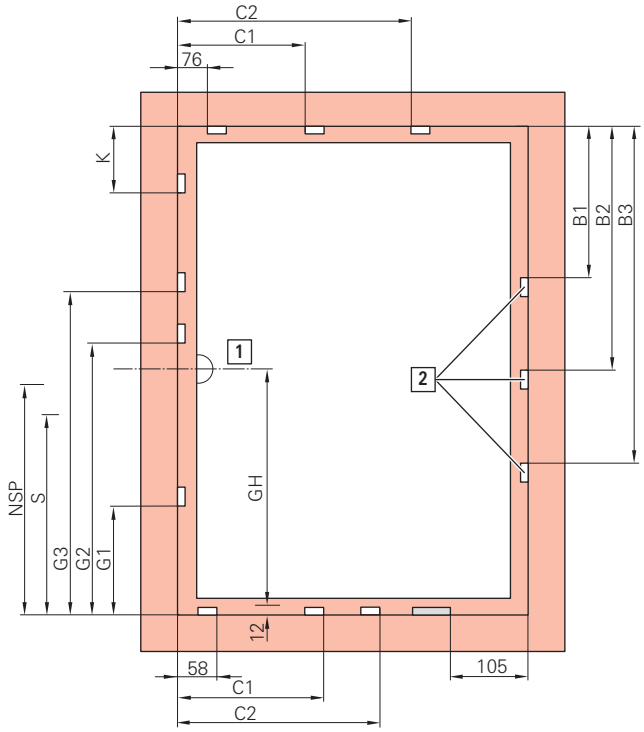
Centre lock, vertical

SRH [mm]	B1	B2	B3	B4	B5	B6	B7	Centre lock
601 – 800	346	–	–	–	–	–	–	CL 200 V KU
801 – 1000	346	546	–	–	–	–	–	2x CL 200 V KU
1001 – 1200	346	546	746	–	–	–	–	3x CL 200 V KU
1201 – 1400	346	746	946	–	–	–	–	CL 200 V KU + CL 400 V KU + CL 200 V KU
1401 – 1600	346	746	946	1146	–	–	–	CL 200 V KU + CL 400 V KU + 2x CL 200 V KU
1601 – 1800	346	746	1146	1346	–	–	–	CL 200 V KU + 2x CL 400 V KU + CL 200 V KU
1801 – 2000	346	746	1146	1346	1546	–	–	CL 200 V KU + 2x CL 400 V KU + 2x CL 200 V KU
2001 – 2200	346	746	1146	1546	1746	–	–	CL 200 V KU + 3x CL 400 V KU + CL 200 V KU
2201 – 2400	346	746	1146	1546	1746	1946	–	CL 200 V KU + 3x CL 400 V KU + 2x CL 200 V KU
2401 – 2600	346	746	1146	1546	1946	2146	–	CL 200 V KU + 4x CL 400 V KU + CL 200 V KU
2601 – 2800	346	746	1146	1546	1946	2146	2346	CL 200 V KU + 4x CL 400 V KU + 2x CL 200 V KU

Centre lock, horizontal

SRW [mm]	C1	C2	C3	Centre lock
490 – 690	258	–	–	CL 200 V KU
691 – 890	258	458	–	2x CL 200 V KU
891 – 1000	258	458	658	3x CL 200 V KU

8.8.1.7 Turn-Only hardware – basic security



[1] Handle centre

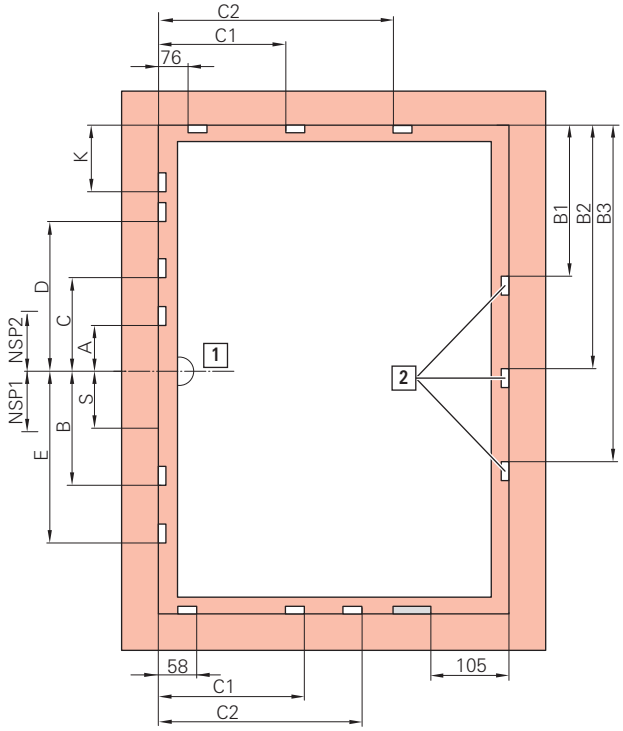
[2] Centre closer, concealed

Striker e.g.

Turn restrictor e.g.

T&T espagnolette, VT – fixed handle height

SRH [mm]	GH	G1	G2	G3	NSP	S
280 – 510	120	–	–	–	–	–
511 – 600	170	–	–	–	262	–
601 – 800	263	–	–	–	350	–
801 – 1000	413	550	–	–	288	–
1001 – 1200	513	700	–	–	388	–
1201 – 1400	563	700	–	–	388	–
1401 – 1600	563	700	1170	–	388	–
1601 – 1800	563	700	1370	–	388	807
1601 – 2400	1000	700	1370	–	1121	807
2401 – 2600	1000	700	1370	1770	1121	807



[1] Handle centre

[2] Centre closer, concealed

Striker e.g.

Turn restrictor e.g.

T&T espagnolette – centred / variable handle height

SRH [mm]	A	B	C	D	E	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

Centre closer, vertical, concealed, without load transfer

SRH [mm]	B1	B2	B3
1001 – 1201	550	–	–
1201 – 1800	746	–	–
1801 – 2400	746	1346	–
2401 – 3000	746	1346	1946

Centre closer, vertical, concealed, with load transfer

SRH [mm]	B1	B2	B3
1001 – 1201	550	–	–
1201 – 1800	746	–	–
1801 – 2400	746	1346	–
2401 – 3000	746	1346	1946

Centre lock, horizontal

SRW [mm]	C1	C2	Top
1101 – 1600	676	–	CL 600 E
1601 – 1750	676	1080	CL 600 E KU + CL 400 E

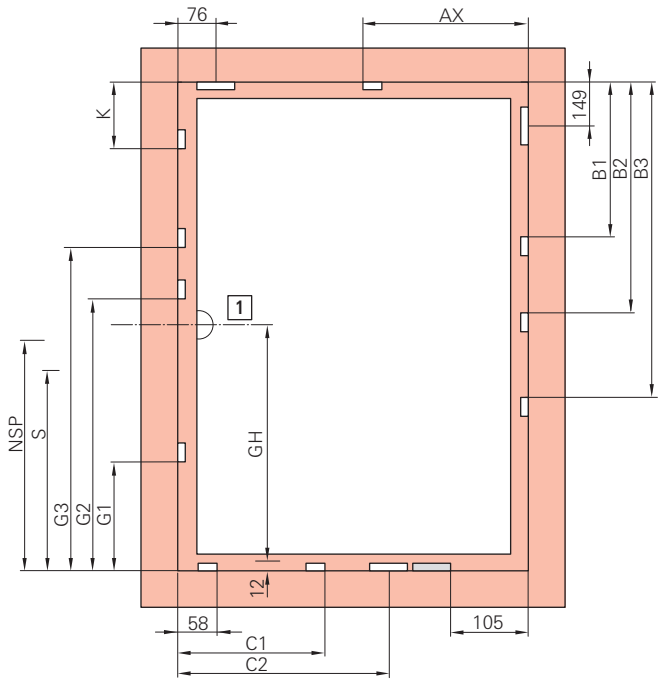
Centre lock, horizontal, without turn restrictor

SRW [mm]	C1	C2	Bottom
370 – 1000	–	–	–

Centre lock, horizontal, with turn restrictor

SRW [mm]	C1	C2	Bottom
1101 – 1600	658	–	CL 600 E
1601 – 1750	658	1062	CL 600 E KU + CL 400 E

8.8.1.8 Turn-Only hardware – RC 1 N



[1] Handle centre

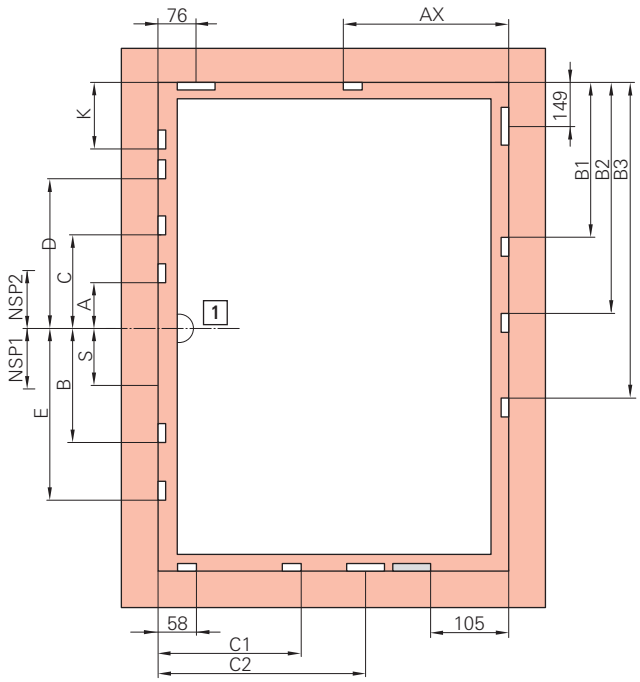
Striker e.g.

Turn restrictor e.g.

T&T espagnolette, VT – fixed handle height

SRH [mm]	GH	G1	G2	G3	K	NSP	S
285 – 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	–

SRH [mm]	GH	G1	G2	G3	K	NSP	S
1601 – 1800	563	700	1370	–	–	388	–
1601 – 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.

Turn restrictor 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 – 2600	–	312	358	758	740	–	–	109	395
2601 – 2800	–	312	358	758	740	458	–	109	395

Stay guide

SRW [mm]	AX	Size
801 – 1000	600	500 / 890
1001 – 1400[49][50]	750	500 / 1090

Centre lock, vertical, without load transfer

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 – 2800	746	1346	1946	2x CL 600 E KU + CL 600 E

[49] from 1401 with additional stay arm

[50] from 1601 with additional stay arm and centre lock

Centre lock, vertical, with load transfer

SRH [mm]	B1	B2	B3	Centre lock
1101 – 1150	550	–	–	CL 400 E
1151 – 1800	746	–	–	CL 600 E
1801 – 2400	746	1346	–	CL 600 E KU + CL 600 E
2401 – 2800	746	1346	1946	2x CL 600 E KU + CL 600 E

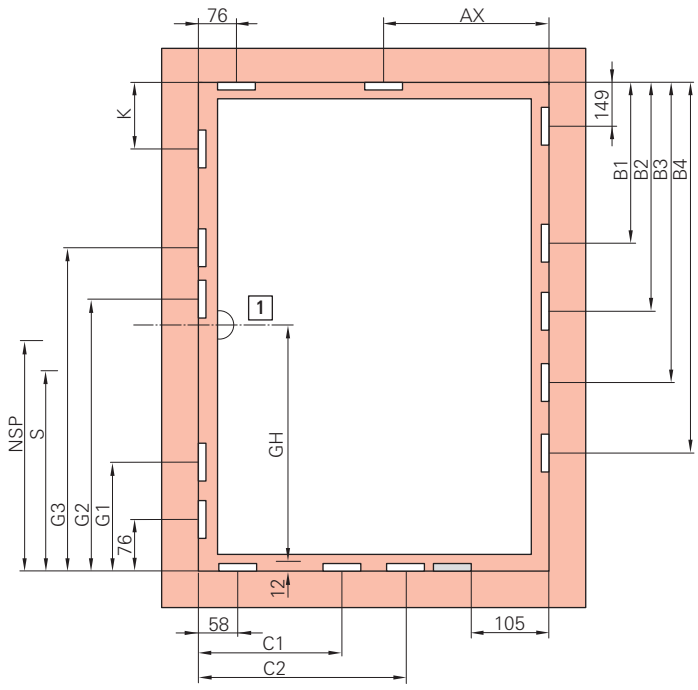
Centre lock, horizontal, without turn restrictor

SRW [mm]	C1	C2	Centre lock
450 – 650	258	–	CL 200 P
651 – 850	462	–	CL 400 P
851 – 1000	658	–	CL 600 P

Centre lock, horizontal, with turn restrictor

SRW [mm]	C1	C2	Centre lock
651 – 850	258	–	CL 200 P
851 – 1050	462	–	CL 400 P
1051 – 1250	658	–	CL 600 P
1251 – 1450	658	858	CL 600 E KU + CL 200 P
1251 – 1600	658	1062	CL 600 E KU + CL 400 P

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



[1] Handle centre

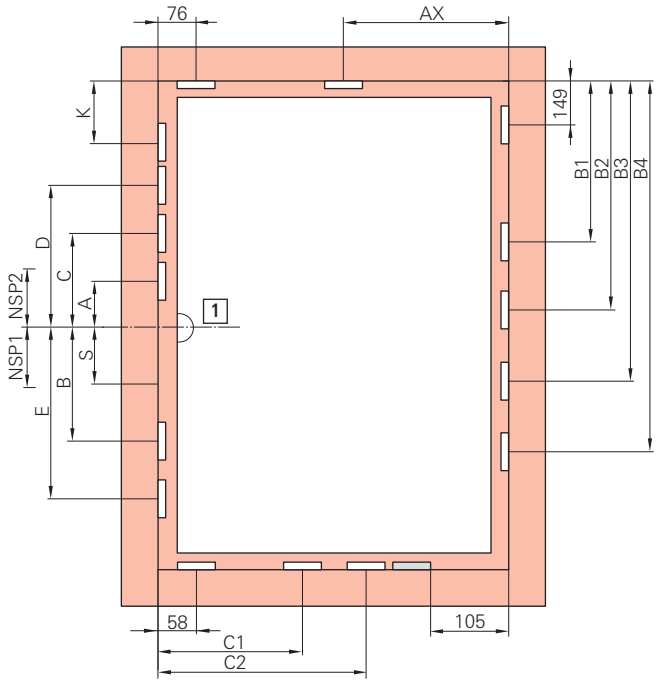
Striker e.g.

Turn restrictor e.g.

T&T espagnolette, VT – fixed handle height

SRH [mm]	GH	G1	G2	G3	NSP	S
601 – 800	263	–	–	–	350	–
801 – 1000	413	550	–	–	288	–
1001 – 1200	513	700	–	–	388	–
1201 – 1400	563	700	–	–	388	–
1401 – 1600	563	700	1170	–	388	–
1601 – 1800	563	700	1370	–	388	807
1601 – 2000	1000	700	1370	–	1121	807

SRH [mm]	GH	G1	G2	G3	NSP	S
2001 – 2200	1000	700	1370	1770	1121	807
2201 – 2400	1000	700	1370	1770	1121	807



[1] Handle centre

Striker e.g.

Turn restrictor e.g.

T&T espagnolette – centred / variable handle height

SRH [mm]	A	B	C	D	E	NSP 1	NSP 2	S
490 – 620	–	–	–	–	–	–	–	–
621 – 800	125	–	–	–	–	137	–	–
801 – 1200	125	–	–	–	–	137	–	–
1201 – 1600	125	340	–	–	–	137	–	–
1601 – 2000	–	312	358	–	–	–	109	395
2001 – 2400	–	312	358	758	740	–	109	395

Stay guide

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

Centre lock, vertical, without load transfer

SRH [mm]	B1	B2	B3	B4	Centre lock
490 – 650	346	–	–	–	CL 200 V
651 – 850	550	–	–	–	CL 400 V
851 – 1050	746	–	–	–	CL 600 V
1051 – 1250	746	946	–	–	CL 600 V KU + CL 200 V
1251 – 1450	746	1150	–	–	CL 600 V KU + CL 400 V
1451 – 1650	746	1346	–	–	CL 600 V KU + CL 600 V
1651 – 1850	746	1346	1546	–	2x CL 600 V KU + CL 200 V
1851 – 2050	746	1346	1750	–	2x CL 600 V KU + CL 400 V
2051 – 2250	746	1346	1946	–	2x CL 600 V KU + CL 600 V
2251 – 2400	746	1346	1946	2146	3x CL 600 V KU + CL 200 V
2451 – 2650	746	1346	1946	2350	3x CL 600 V KU + CL 400 V
2651 – 2800	746	1346	1946	2546	3x CL 600 V KU + CL 600 V

Centre lock, vertical, with load transfer

SRH [mm]	B1	B2	B3	B4	Centre lock
1000 – 1150	550	–	–	–	CL 400 V
1151 – 1350	746	–	–	–	CL 600 V
1351 – 1550	746	946	–	–	CL 600 V KU + CL 200 V
1551 – 1750	746	1150	–	–	CL 600 V KU + CL 400 V
1751 – 1950	746	1346	–	–	CL 600 V KU + CL 600 V
1951 – 2150	746	1346	1546	–	2x CL 600 V KU + CL 200 V
2151 – 2350	746	1346	1750	–	2x CL 600 V KU + CL 400 V
2351 – 2550	746	1346	1946	–	2x CL 600 V KU + CL 600 V
2551 – 2750	746	1346	1946	2146	3x CL 600 V KU + CL 200 V
2751 – 2800	746	1346	1946	2350	3x CL 600 V KU + CL 400 V

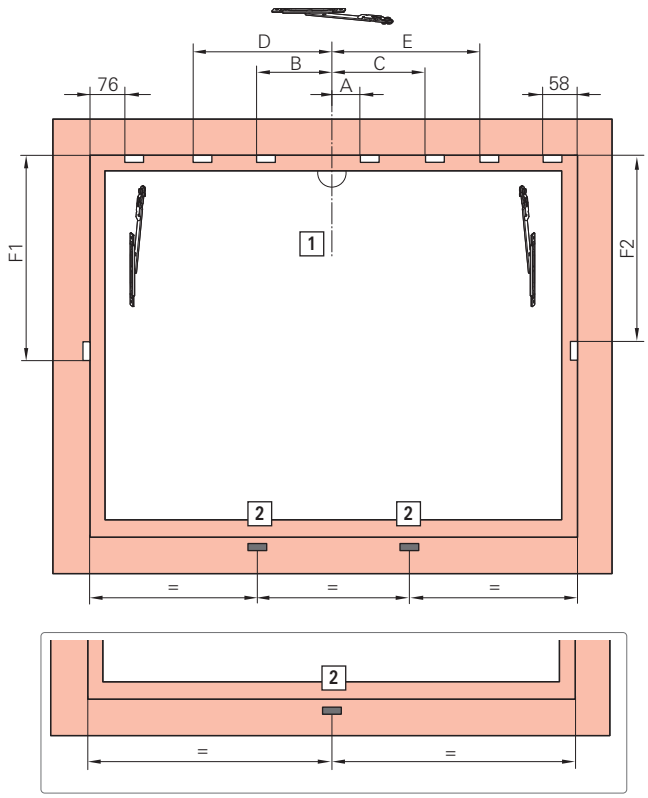
Centre lock, horizontal, without turn restrictor

SRW [mm]	C1	C2	Centre lock
450 – 650	258	–	CL 200 V
651 – 850	462	–	CL 400 V
851 – 1000	658	–	CL 600 V

Centre lock, horizontal, with turn restrictor

SRW [mm]	C1	C2	Centre lock
650 – 850	258	–	CL 200 V
851 – 1050	462	–	CL 400 V
1051 – 1250	658	–	CL 600 V
1251 – 1400	658	858	CL 600 V KU + CL 200 V

8.8.1.10 Tilt-Only hardware – basic security



[1] Tilt-Only sash with T&T espagnolette, centred / variable handle height with tilt stay

[2] Centre closer, concealed

Striker e.g.

With SRW ≥ 1000, place the centre closer in the middle

With SRW ≥ 2000, 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

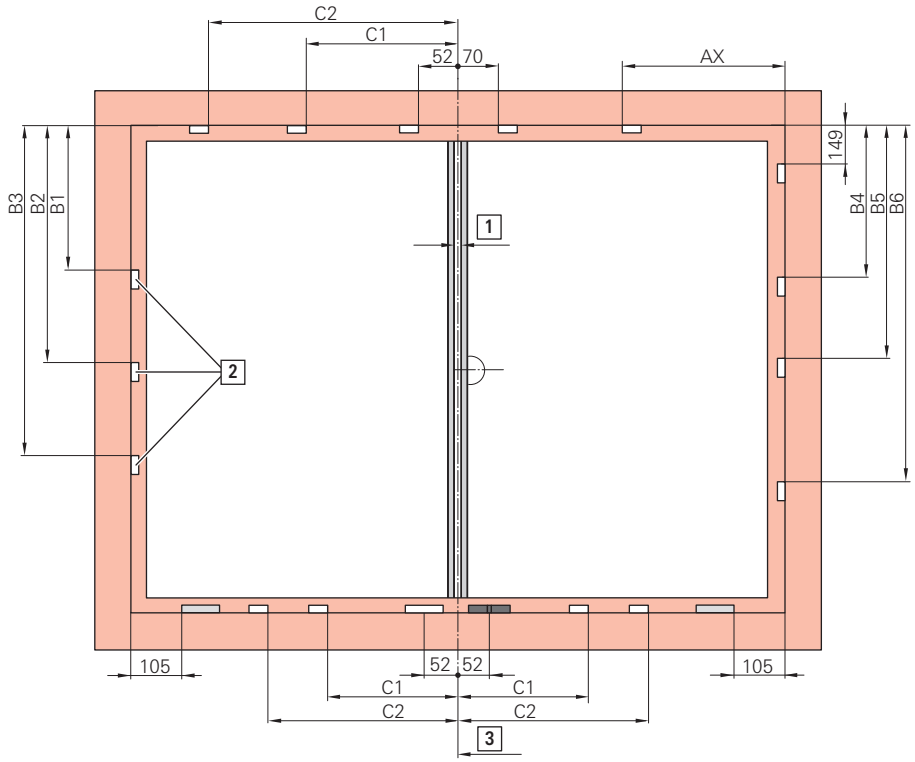
Centre lock, vertical

SRH [mm]	F1	F2	Left / right
801 – 1500	462	480	CL 400 E

INFO

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

8.8.1.11 Floating-mullion hardware, standard – basic security



[1] 12 mm rebate clearance between the sashes

[2] Concealed centre closers

[3] Rebate clearance centre

Striker e.g.

Tilt striker e.g.

Turn restrictor e.g.

Stay guide

SRW [mm]	AX	Size
801 – 1000	600	500 / 890
1001 – 1200	750	500 / 1090
1201 – 1400[51][52]	750	500 / 1290

Centre closer, vertical, concealed, without load transfer

SRH [mm]	B1	B2	B3
1001 – 1200	550	–	–
1201 – 1800	746	–	–
1801 – 2400	746	1346	–
2401 – 3000	746	1346	1946

Centre closer, vertical, concealed, with load transfer

SRH [mm]	B1	B2	B3
1001 – 1200	550	–	–
1201 – 1800	746	–	–
1801 – 2400	746	1346	–
2401 – 3000	746	1346	1946

[51] from 1401 with additional stay arm

[52] from 1601 with additional stay arm and centre lock

Centre lock, vertical, without load transfer

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 – 3000	746	1346	1946	2x CL 600 E KU + CL 600 E

Centre lock, vertical, with load transfer

SRH [mm]	B4	B5	B6	Centre lock
1101 – 1150	550	–	–	CL 400 E
1151 – 1800	746	–	–	CL 600 E
1801 – 2400	746	1346	–	CL 600 E KU + CL 600 E
2401 – 3000	746	1346	1946	2x CL 600 E KU + CL 600 E

Centre lock, horizontal

SRW [mm]	C1	C2	Top
1101 – 1600	652	–	CL 600 E
1601 – 1750	652	1056	CL 600 E KU + CL 400 E

Centre lock, horizontal, without turn restrictor

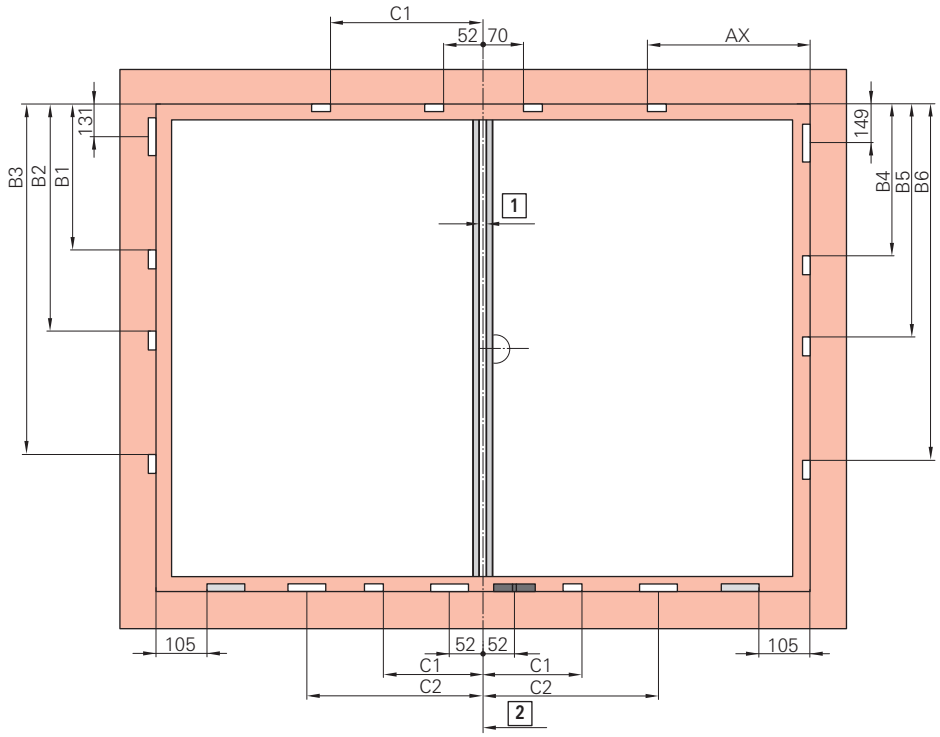
SRW [mm]	C1	Bottom
370 – 1000	–	–

Centre lock, horizontal, with turn restrictor

SRW [mm]	C1	C2	Top
1101 – 1600	652	–	CL 600 E
1601 – 1750	652	1056	CL 600 E KU + CL 400 E

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

8.8.1.12 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.

Turn restrictor e.g.

Stay guide

SRW [mm]	AX	Size
801 – 1000	600	500 / 890
1001 – 1200	750	500 / 1090
1201 – 1400[53]	750	500 / 1290

Centre lock, vertical, without load transfer

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 – 2800	728	1328	1928	746	1346	1946	2x CL 600 E KU + CL 600 E

Centre lock, vertical, with load transfer

SRH [mm]	B1	B2	B3	B4	B5	B6	Centre lock
1101 – 1150	532	–	–	550	–	–	CL 400 E
1151 – 1800	728	–	–	746	–	–	CL 600 E
1801 – 2400	728	1328	–	746	1346	–	CL 600 E KU + CL 600 E
2401 – 2800	728	1328	1928	746	1346	1946	2x CL 600 E KU + CL 600 E

Centre lock, horizontal

SRW [mm]	C1	C2	Top
911 – 1110	452	–	CL 400 E KU
1111 – 1310	652	–	CL 600 E KU
1311 – 1510	652	–	CL 600 E KU + CL 200 KU
1511 – 1600	652	1052	CL 600 E KU + CL 400 KU

[53] from 1401 with additional stay arm

Centre lock, horizontal, without turn restrictor

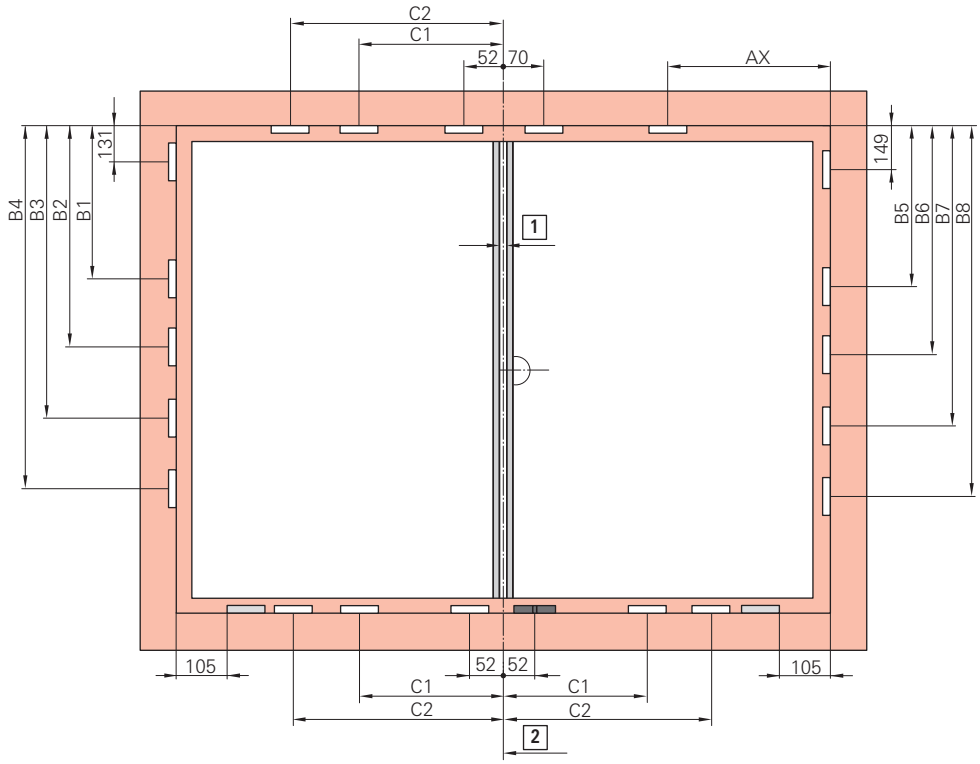
SRW [mm]	C1	Bottom
450 – 650	252	CL 200 P
651 – 850	456	CL 400 P
851 – 1000	652	CL 600 P

Centre lock, horizontal, with turn restrictor

SRW [mm]	C1	C2	Bottom
650 – 850	252	–	CL 200 P
851 – 1050	456	–	CL 400 P
1051 – 1250	652	–	CL 600 P
1251 – 1450	652	852	CL 600 E KU + CL 200 P
1451 – 1600	652	1056	CL 600 E KU + CL 400 P

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

8.8.1.13 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.

Turn restrictor e.g.

Stay guide

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

SRW [mm]	AX	Size
1201 – 1400	600	500 / 1290

Centre lock, vertical, without load transfer

SRH [mm]	B1	B2	B3	B4	B5	B6	B7	B8	Centre lock
490 – 650	328	–	–	–	346	–	–	–	CL 200 V
651 – 850	532	–	–	–	550	–	–	–	CL 400 V
851 – 1050	728	–	–	–	746	–	–	–	CL 600 V
1051 – 1250	728	928	–	–	746	946	–	–	CL 600 V KU + CL 200 V
1251 – 1450	728	1132	–	–	746	1150	–	–	CL 600 V KU + CL 400 V
1451 – 1650	728	1328	–	–	746	1346	–	–	CL 600 V KU + CL 600 V
1651 – 1850	728	1328	1528	–	746	1346	1546	–	2x CL 600 V KU + CL 200 V
1851 – 2050	728	1328	1732	–	746	1346	1750	–	2x CL 600 V KU + CL 400 V
2051 – 2250	728	1328	1928	–	746	1346	1946	–	2x CL 600 V KU + CL 600 V
2251 – 2450	728	1328	1928	2128	746	1346	1946	2146	3x CL 600 V KU + CL 200 V
2451 – 2650	728	1328	1928	2332	746	1346	1946	2350	3x CL 600 V KU + CL 400 V
2651 – 2800	728	1328	1928	2528	746	1346	1946	2546	3x CL 600 V KU + CL 600 V

Centre lock, vertical, with load transfer

SRH [mm]	B1	B2	B3	B4	B5	B6	B7	B8	Centre lock
1000 – 1150	532	–	–		550	–	–		CL 400 V
1151 – 1350	728	–	–		746	–	–		CL 600 V
1351 – 1550	728	928	–		746	946	–		CL 600 V KU + CL 200 V
1551 – 1750	728	1132	–		746	1150	–		CL 600 V KU + CL 400 V
1751 – 1950	728	1328	–		746	1346	–		CL 600 V KU + CL 600 V
1951 – 2150	728	1328	1528		746	1346	1546		2x CL 600 V KU + CL 200 V
2151 – 2350	728	1328	1732		746	1346	1750		2x CL 600 V KU + CL 400 V
2351 – 2550	728	1328	1928		746	1346	1946		2x CL 600 V KU + CL 600 V
2551 – 2750	728	1328	1928	2128	746	1346	1946	2146	3x CL 600 V KU + CL 200 V
2751 – 2800	728	1328	1928	2332	746	1346	1946	2350	3x CL 600 V KU + CL 400 V

Centre lock, horizontal

SRW [mm]	C1	C2	Top
711 – 910	252	–	CL 200 KU
911 – 1110	452	–	CL 400 KU
1111 – 1310	652	–	CL 600 V KU
1311 – 1400	652	852	CL 600 V KU + CL 200 KU

Centre lock, horizontal, without turn restrictor

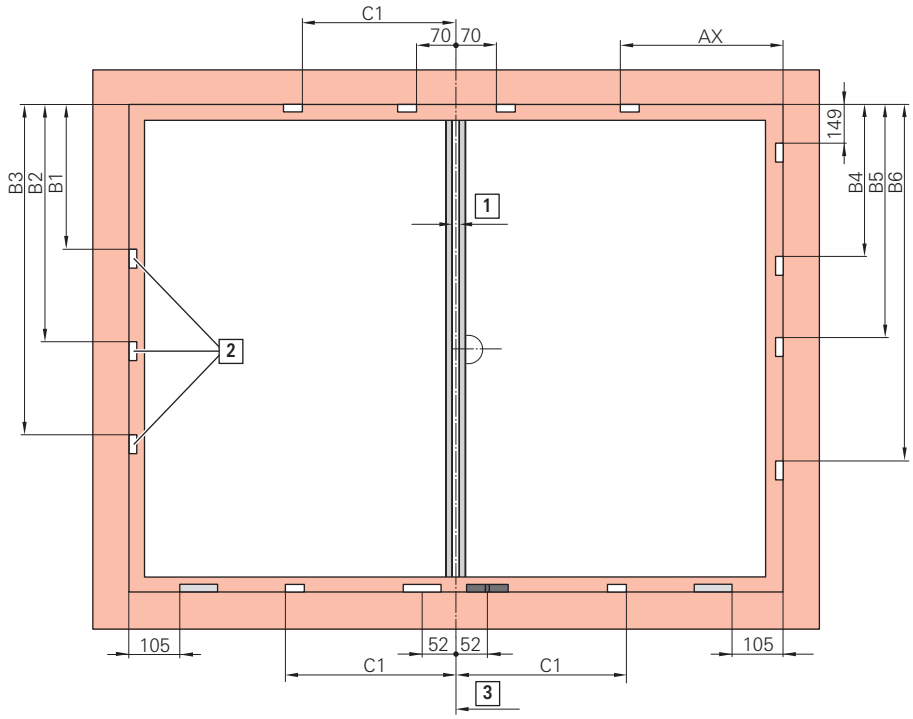
SRW [mm]	C1	Bottom
450 – 650	252	CL 200 V
651 – 850	456	CL 400 V
851 – 1000	652	CL 600 V

Centre lock, horizontal, with turn restrictor

SRW [mm]	C1	C2	Bottom
650 – 850	252	–	CL 200 V
851 – 1050	456	–	CL 400 V
1051 – 1250	652	–	CL 600 V
1251 – 1400	652	852	CL 600 V KU + CL 200 V

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

8.8.1.14 Floating-mullion hardware Plus – basic security



[1] 12 mm rebate clearance between the sashes

[2] Concealed centre closers

[3] Rebate clearance centre

Striker e.g.

Tilt striker e.g.

Turn restrictor e.g.

Stay guide

SRW [mm]	AX	Size
801 – 1000	600	500 / 890
1001 – 1200	750	500 / 1090
1201 – 1400[54][55]	750	500 / 1290

Centre closer, vertical, concealed, without load transfer

SRH [mm]	B1	B2	B3
1001 – 1200	550	–	–
1201 – 1800	746	–	–
1801 – 2400	746	1346	–
2401 – 3000	746	1346	1946

Centre closer, vertical, concealed, with load transfer

SRH [mm]	B1	B2	B3
1001 – 1200	550	–	–
1201 – 1800	746	–	–
1801 – 2400	746	1346	–
2401 – 3000	746	1346	1946

Centre lock, vertical, without load transfer

SRH [mm]	B4	B5	B6	Centre lock
1001 – 1800	746	–	–	CL 600 E
1801 – 2400	746	1346	–	CL 600 E KU + CL 600 E

[54] from 1401 with additional stay arm

[55] from 1601 with additional stay arm and centre lock 200 without cam

SRH [mm]	B4	B5	B6	Centre lock
2401 – 3000	746	1346	1946	2x CL 600 E KU + CL 600 E

Centre lock, vertical, with load transfer

SRH [mm]	B4	B5	B6	Centre lock
1101 – 1150	550	–	–	CL 400 E
1151 – 1800	746	–	–	CL 600 E
1801 – 2400	746	1346	–	CL 600 E KU + CL 600 E
2401 – 3000	746	1346	1946	2x CL 600 E KU + CL 600 E

Centre lock, horizontal

SRW [mm]	C1	C2	Top
1101 – 1600	670	–	CL 600 E
1601 – 1750	670	1074	CL 600 E KU + CL 400 E

Centre lock, horizontal, without turn restrictor

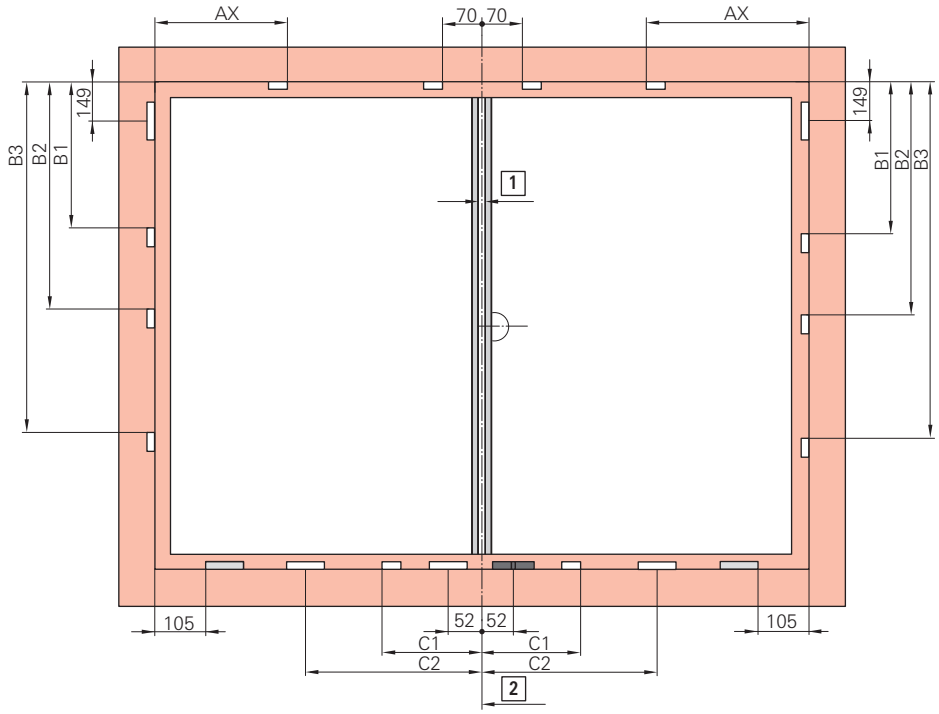
SRW [mm]	C2	Bottom
370 – 1000	–	–

Centre lock, horizontal, with turn restrictor

SRW [mm]	C1	C2	Top
1101 – 1600	652	–	CL 600 E
1601 – 1750	652	1056	CL 600 E KU + CL 400 E

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

8.8.1.15 Floating-mullion hardware Plus – RC 1 N



[1] 12 mm rebate clearance between the sashes

[2] Rebate clearance centre

Striker e.g.

Tilt striker e.g.

Turn restrictor e.g.

Stay guide

SRW [mm]	AX	Size
801 – 1000	600	500 / 890
1001 – 1200	750	500 / 1090
1201 – 1400 [56]	750	500 / 1290

Centre lock, vertical, without load transfer

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 – 2800	746	1346	1946	2x CL 600 E KU + CL 600 E

Centre lock, vertical, with load transfer

SRH [mm]	B1	B2	B3	Centre lock
1101 – 1150	550	–	–	CL 400 E
1151 – 1800	746	–	–	CL 600 E
1801 – 2400	746	1346	–	CL 600 E KU + CL 600 E
2401 – 2800	746	1346	1946	2x CL 600 E KU + CL 600 E

Centre lock, horizontal, without turn restrictor

SRW [mm]	C1	Bottom
450 – 650	252	CL 200 P
651 – 850	456	CL 400 P
851 – 1000	652	CL 600 P

Centre lock, horizontal, with turn restrictor

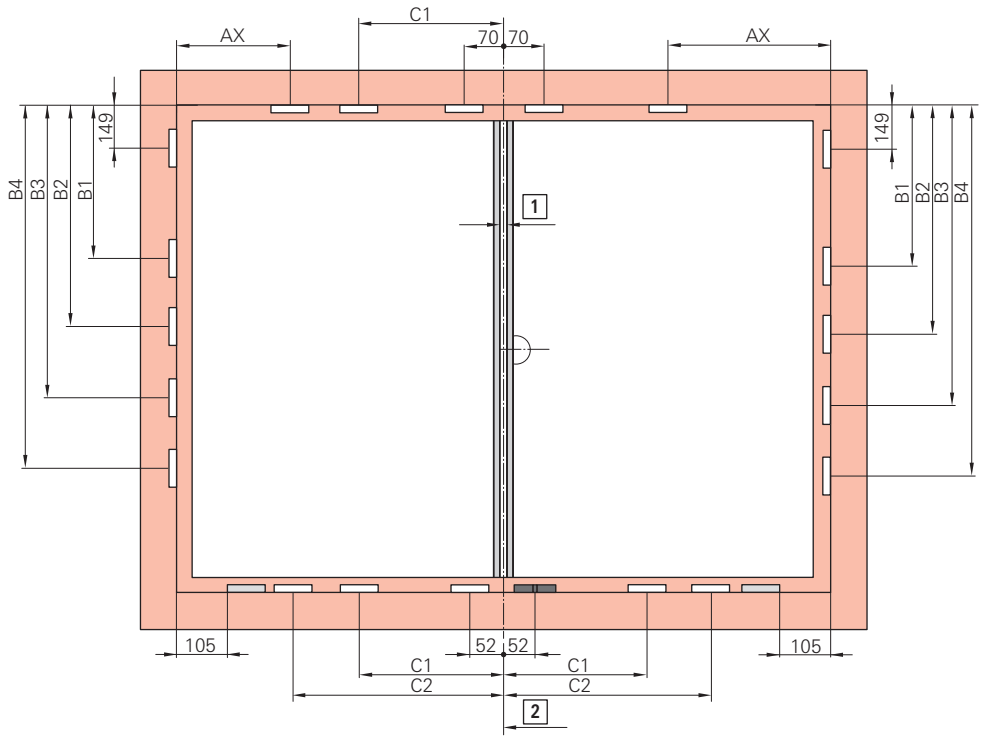
SRW [mm]	C1	C2	Bottom
650 – 850	252	–	CL 200 P
851 – 1050	456	–	CL 400 P
1051 – 1250	652	–	CL 600 P
1251 – 1450	652	852	CL 600 E KU + CL 200 P
1451 – 1600	652	1056	CL 600 E KU + CL 400 P

INFO

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

[56] from 1401 with additional stay arm

8.8.1.16 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.

Turn restrictor e.g.

Stay guide

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

Centre lock, vertical, without load transfer

SRH [mm]	B1	B2	B3	B4	Centre lock
490 – 650	346	–	–	–	CL 200 V
651 – 850	550	–	–	–	CL 400 V
851 – 1050	746	–	–	–	CL 600 V
1051 – 1250	746	946	–	–	CL 600 V KU + CL 200 V
1251 – 1450	746	1150	–	–	CL 600 V KU + CL 400 V
1451 – 1650	746	1346	–	–	CL 600 V KU + CL 600 V
1651 – 1850	746	1346	1546	–	2x CL 600 V KU + CL 200 V
1851 – 2050	746	1346	1750	–	2x CL 600 V KU + CL 400 V
2051 – 2250	746	1346	1946	–	2x CL 600 V KU + CL 600 V
2251 – 2450	746	1346	1946	2146	3x CL 600 V KU + CL 200 V
2451 – 2650	746	1346	1946	2350	3x CL 600 V KU + CL 400 V
2651 – 2800	746	1346	1946	2546	3x CL 600 V KU + CL 600 V

Centre lock, vertical, with load transfer

SRH [mm]	B1	B2	B3	B4	Centre lock
1000 – 1150	550	–	–	–	CL 400 V
1151 – 1350	746	–	–	–	CL 600 V
1351 – 1550	746	946	–	–	CL 600 V KU + CL 200 V
1551 – 1750	746	1150	–	–	CL 600 V KU + CL 400 V

SRH [mm]	B1	B2	B3	B4	Centre lock
1751 – 1950	746	1346	–	–	CL 600 V KU + CL 600 V
1951 – 2150	746	1346	1546	–	2x CL 600 V KU + CL 200 V
2151 – 2350	746	1346	1750	–	2x CL 600 V KU + CL 400 V
2351 – 2550	746	1346	1946	–	2x CL 600 V KU + CL 600 V
2551 – 2750	746	1346	1946	2146	3x CL 600 V KU + CL 200 V
2751 – 2800	746	1346	1946	2350	3x CL 600 V KU + CL 240 V

Centre lock, horizontal, without turn restrictor

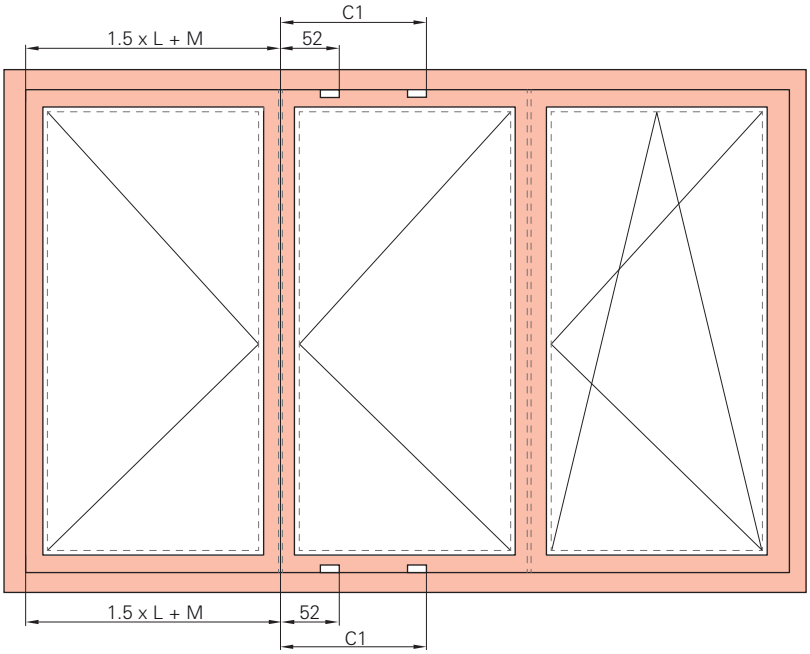
SRW [mm]	C1	Bottom
450 – 650	252	CL 200 V
651 – 850	456	CL 400 V
851 – 1000	652	CL 600 V

Centre lock, horizontal, with turn restrictor

SRW [mm]	C1	C2	Bottom
650 – 850	252	–	CL 200 V
851 – 1050	456	–	CL 400 V
1051 – 1250	652	–	CL 600 V
1251 – 1400	652	852	CL 600 V KU + CL 200 V

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

8.8.1.17 Centre sash – floating-mullion hardware, standard – basic security



Striker e.g.

[L] = Rebate clearance

[M] = Sash rebate width

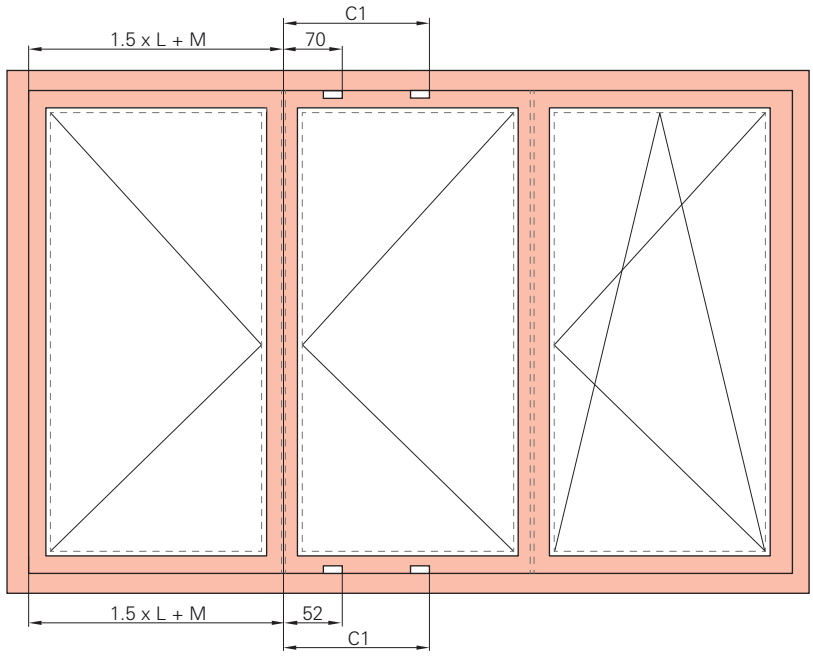
Centre lock, horizontal, without turn restrictor

SRW [mm]	C1	Centre lock
801 – 1200	652	CL 400 E

Centre lock, horizontal, with turn restrictor

SRW [mm]	C1	Centre lock
801 – 850	652	CL 200 P
851 – 1200	1056	CL 400 E

8.8.1.18 Centre sash – floating-mullion hardware Plus – basic security



[L] = Rebate clearance
[M] = Sash rebate width

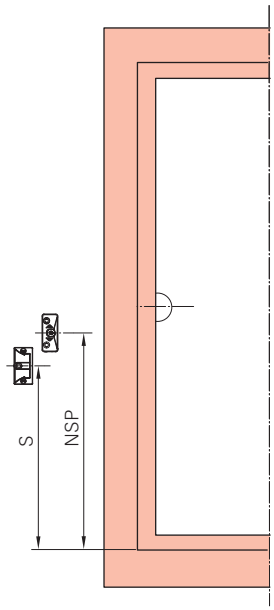
Centre lock, horizontal, without turn restrictor

SRW [mm]	C1	Centre lock
801 – 1200	652	CL 400 E

Centre lock, horizontal, with turn restrictor

SRW [mm]	C1	Centre lock
801 – 850	652	CL 200 P
851 – 1200	1056	CL 400 E

8.8.2 Position of the lifting mishandling device and bullet catch



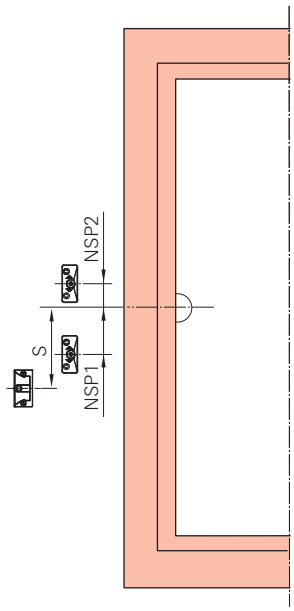
[NSP] Lifting mishandling device

[S] Bullet catch

T&T espagnolette, VT – fixed handle height

SRH [mm]	NSP	S
280 – 480	–	–
481 – 600	262	–
601 – 800	350	–
801 – 1000	288	–
1001 – 1200	388	–
1201 – 1400	388	–
1401 – 1600	388	–
1601 – 1800	388	–
1601 – 1800	1121	807
1801 – 2000	1121	807
2001 – 2600	1121	807
2601 – 3000	1121	807

Position of the lifting mishandling device and bullet catch



[NSP] = Lifting mishandling device

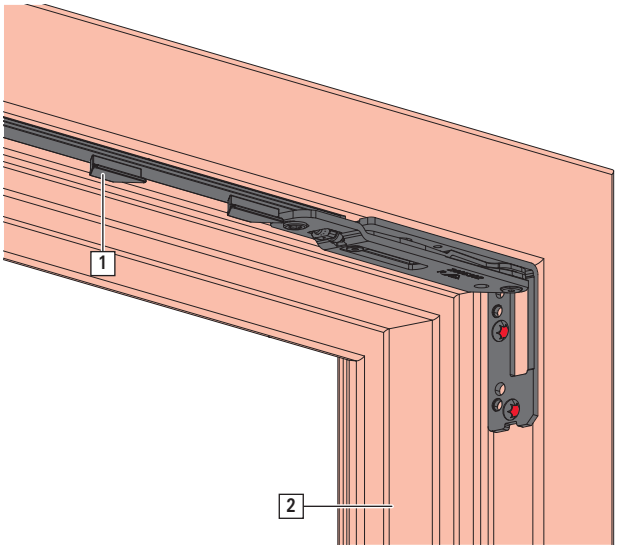
[S] Bullet catch

T&T espagnolette – centred / variable handle height

SRH [mm]	NSP 1	NSP 2	S
450 – 620	–	–	–
621 – 800	137	–	–
801 – 1200	137	–	–
1201 – 1600	137	–	–
1601 – 2000	–	109	395
2001 – 2400	–	109	395
2401 – 2600	–	109	395
2601 – 3000	–	109	395

8.8.3 Sash stay / rebate sash stay

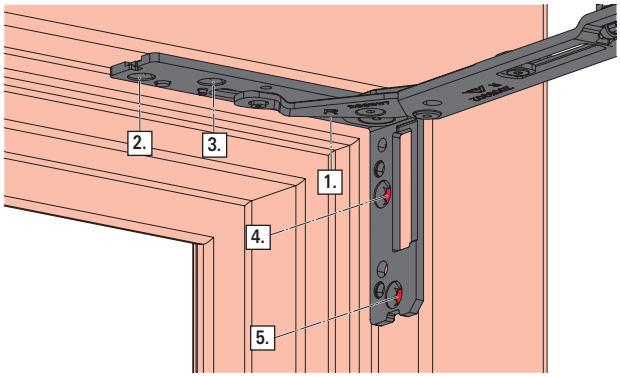
1. Place the sash stay [1] in the frame [2].



2. Fasten with five screws.

   Recommended screw sequence

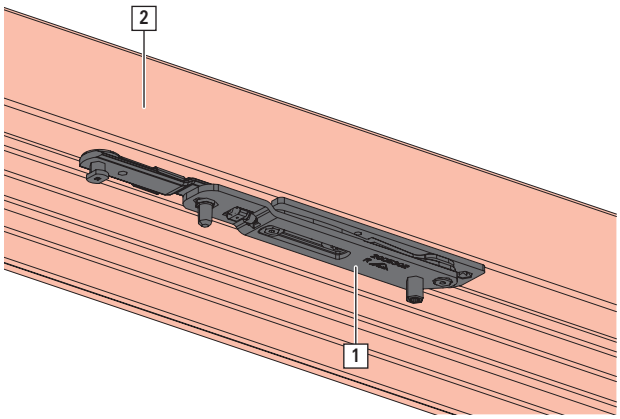
   Tighten the rear screw [1.] on the horizontal leg first. Then tighten screws [2.], [3.], [4.] and [5.].



> **INFO**
> Check that the screws are seated flush. The screws must not protrude beyond the baseplate by more than 0.2 mm.

8.8.4 Rebate sash stay for centre sash

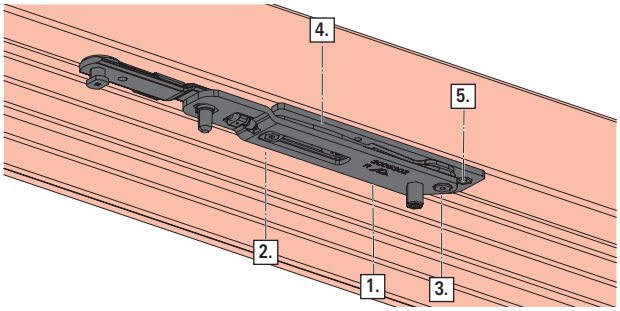
1. Place the rebate sash stay [1] in the frame [2].



2. Fasten with five screws.

   Recommended screw sequence

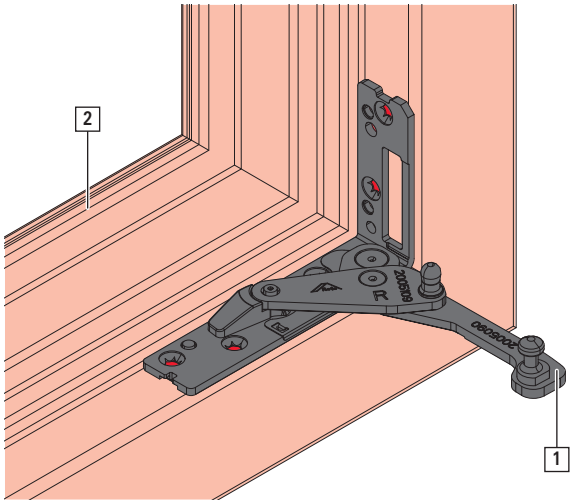
   Tighten the rear screw [1.] on the horizontal leg first. Then tighten screws [2.], [3.], [4.] and [5.].



> **INFO**
> Check that the screws are seated flush. The screws must not protrude beyond the baseplate by more than 0.2 mm.

8.8.5 Pivot rest

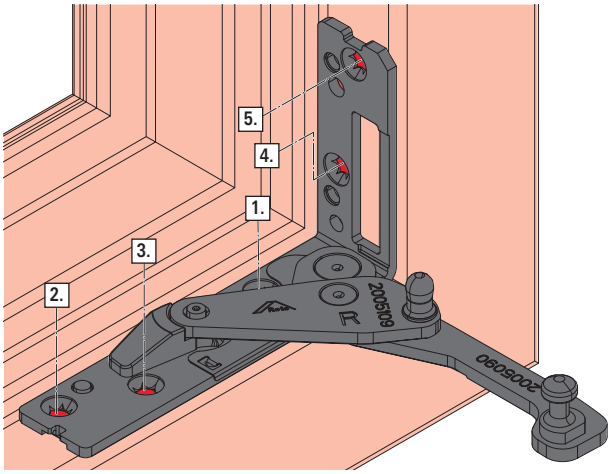
1. Place the pivot rest [1] on the frame [2].



2. Fasten with five screws.

   Recommended screw sequence

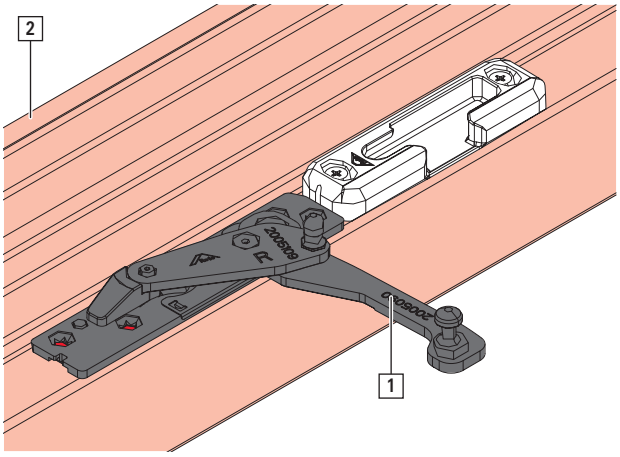
   Tighten the rear screw [1.] on the horizontal leg first. Then tighten screws [2.], [3.], [4.] and [5.].



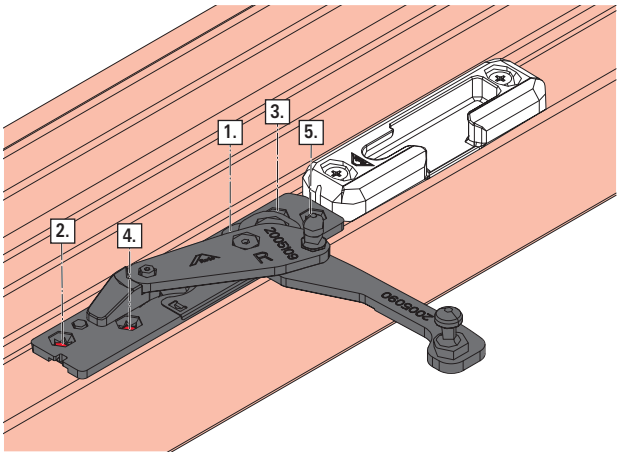
> **INFO**
> Check that the screws are seated flush. The screws must not protrude beyond the baseplate by more than 0.2 mm.

8.8.6 Centre sash pivot rest

1. For the drilling position, see → *from page 199*
   Place the pivot rest [1] on the frame [2].



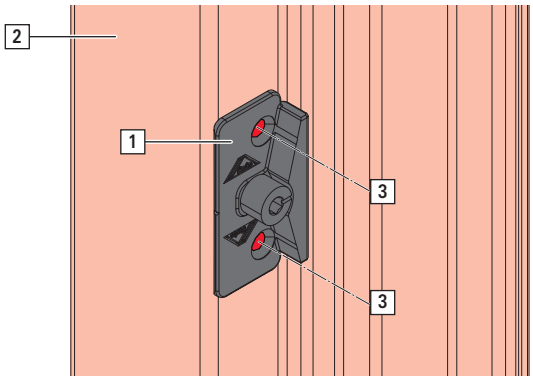
2. Fasten with five screws.
   Recommended screw sequence
   Tighten the rear screw [1.] first. Then tighten screws [2.], [3.], [4.] and [5.].



> **INFO**
> Check that the screws are seated flush. The screws must not protrude beyond the baseplate by more than 0.2 mm.

8.8.7 Lifting mishandling device

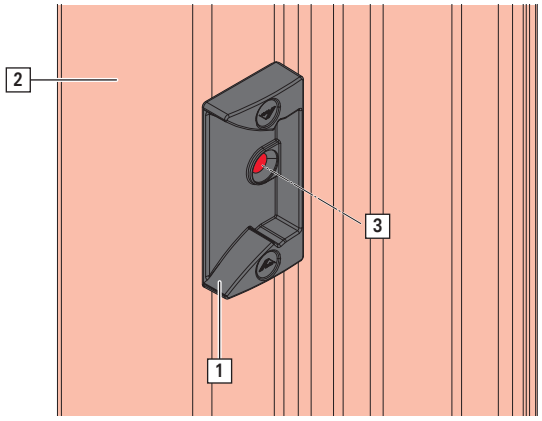
1. Position the lifting mishandling device frame component [1] in the frame [2] → *from page 248*.



2. Fasten with two screws [3].

8.8.8 Bullet catch

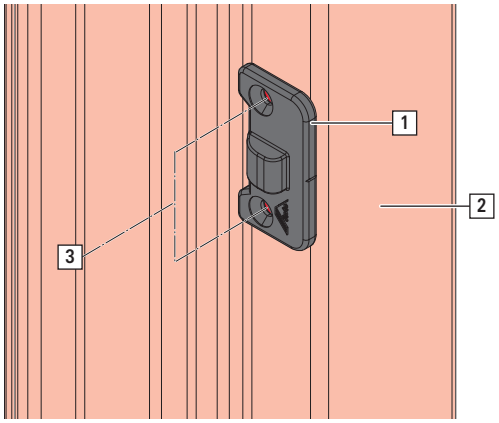
1. Position the bullet-catch frame component [1] in the frame [2] → *from page 248*.



2. Fasten with a screw [3].

8.8.9 Centre closer

1. Position the centre closer [1] in the frame [2] → *from page 218*.

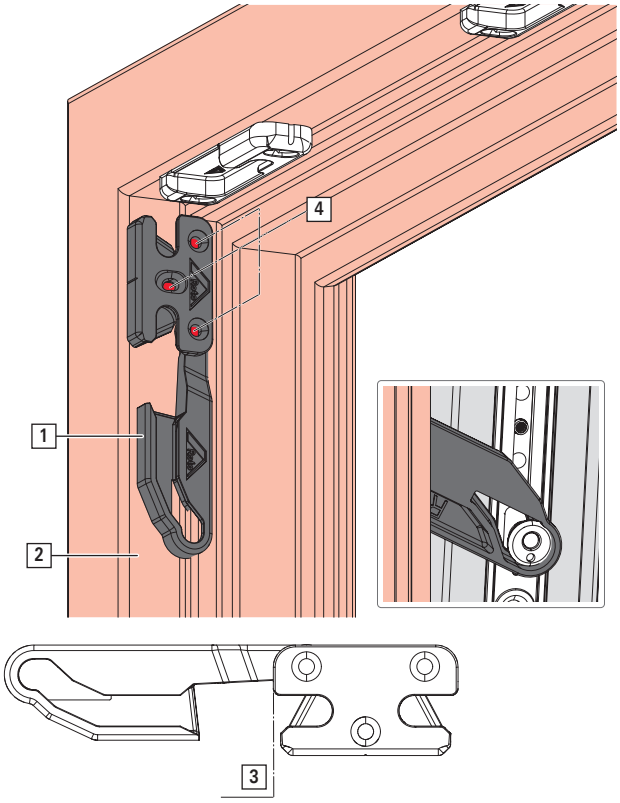


2. Fasten with two screws [3].

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

8.8.10 Security striker for tilt ventilation (TiltSafe)

1. Position the security striker for tilt ventilation [1] on the frame [2] → *from page 225*.
   In the turn position, the entering cam must be positioned in the same way as a standard striker.
   Striker's point of entry [3]



2. Fasten with three one-way screws [4].

INFO
One-way screws can be tightened but not undone.

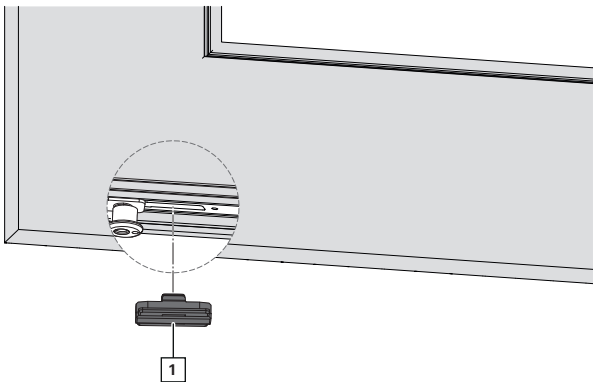
INFO
RC 2 protection cannot be achieved in the 135° handle position (night ventilation). To achieve RC 2 protection:

1. Tilt the window
2. Lock the handle
3. Remove the key.

8.9 Accessories

8.9.1 Travel restrictor

1. Clip the travel restrictor [1] into the locking cam groove.
   Refer to the hardware overviews for the positioning → *from page 34*.

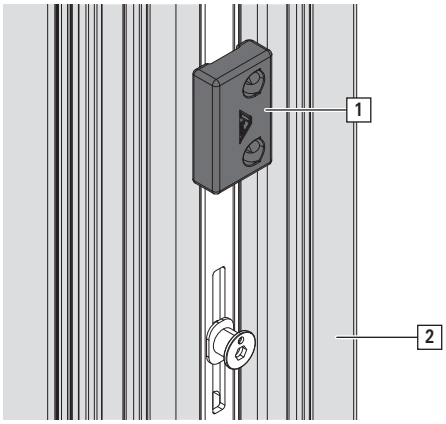


8.9.2 Anti-jemmy device

INFO
Only possible for hardware axis 13.

Rebate depth at least 24 mm.

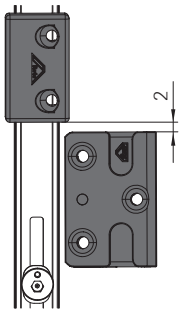
1. Position the anti-jemmy device [1] on the sash [2].



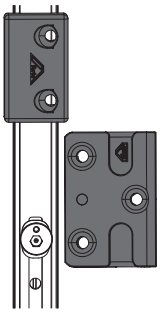
Positioning

The anti-jemmy device runs in approx. 2 mm behind the striker.

Opening position



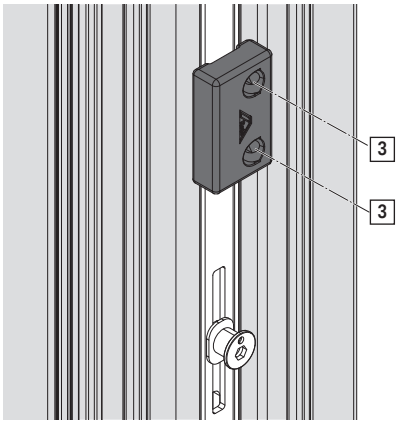
Locked position



Fit an anti-jemmy device on four sides:

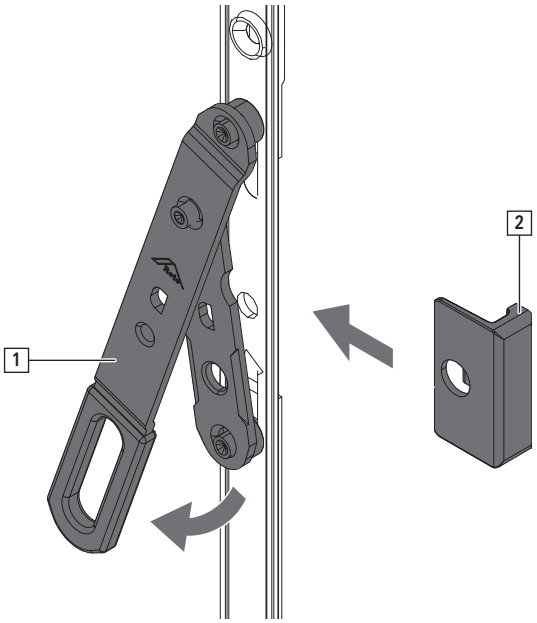
- Hinge side – second-last locking point above the pivot rest
- Locking side – top locking point
- Horizontally at the top – on the corner drive, standard
- Horizontally at the bottom – first locking point after the tilt striker

2. Fasten with two screws [3] at an angle in the direction of the overlap.

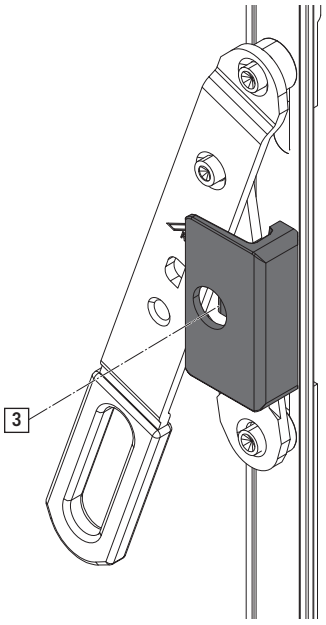


8.9.3 Retainer clasp

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



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

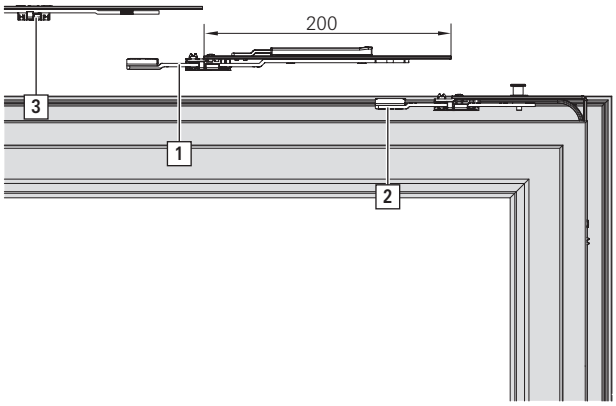


4. Close the red toggle lever.

8.9.4 Additional stay arm

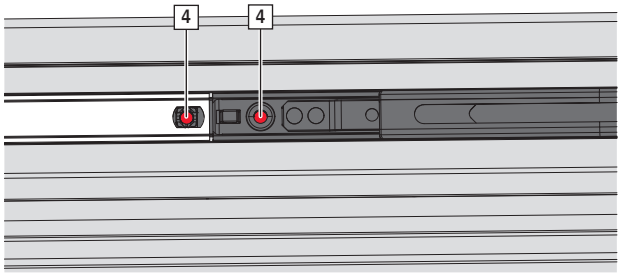
8.9.4.1 Sash component

1. Connect the additional stay arm sash component [1] to the corner drive [2]. Creating a force-fit connection → *from page 194*



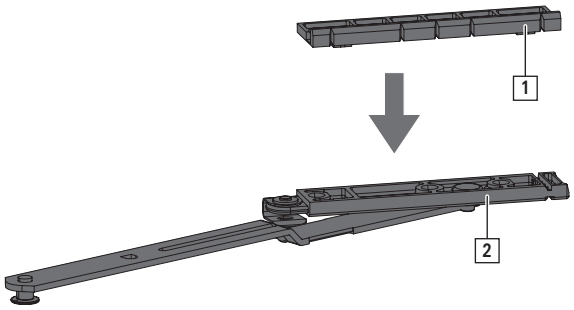
2. Fit the stay guide [3] and create a force-fit connection.

3. Fasten the stay guide and sash component with two screws [4].



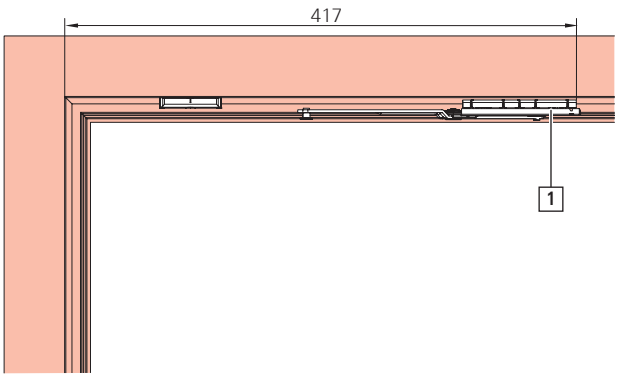
8.9.4.2 Frame component

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.

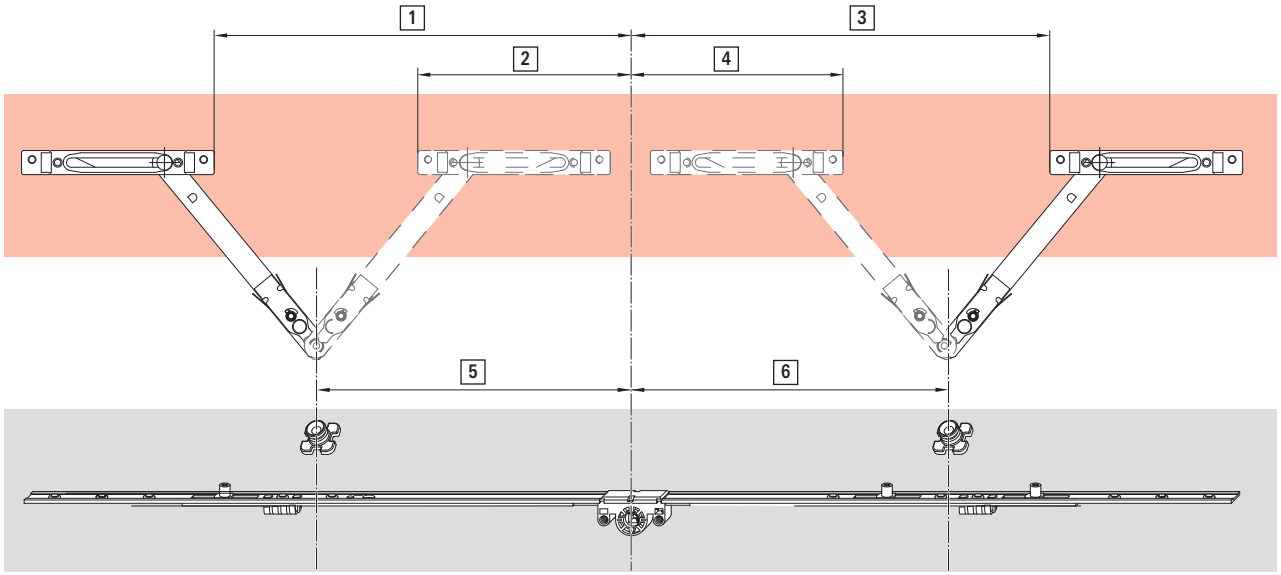
2. Insert the frame component with packer [1] into the frame profile.
   The distance between the frame rebate and frame component is 417 mm.



3. Fasten with three screws.

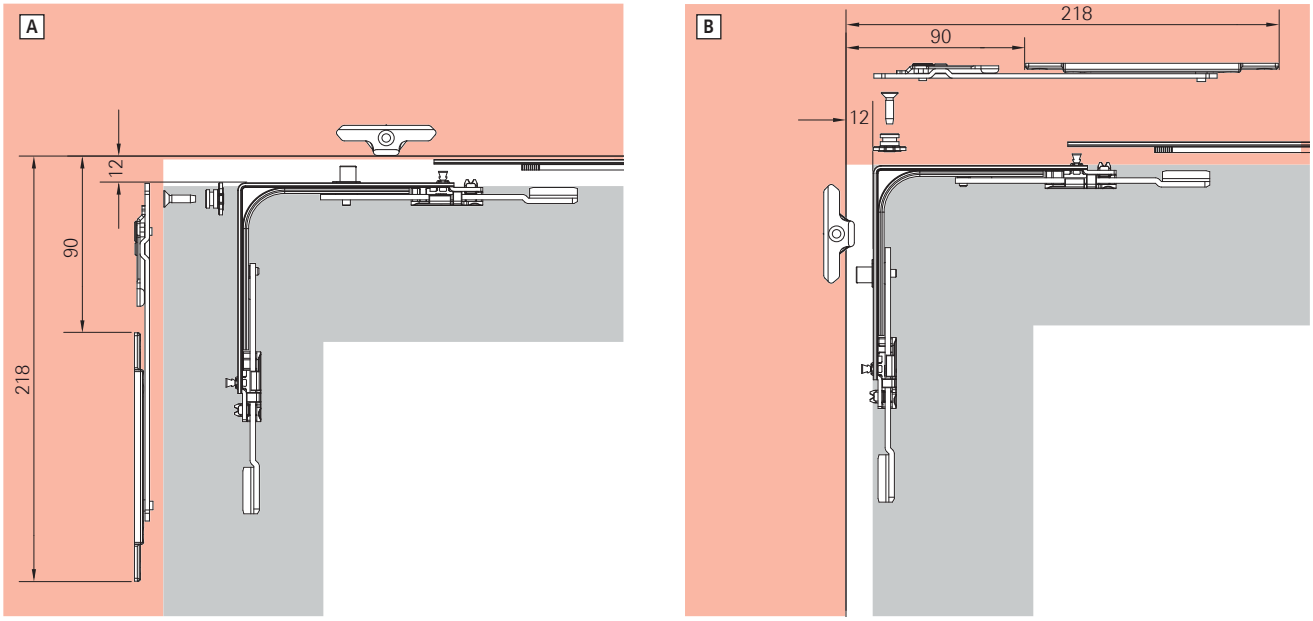
8.9.5 Tilt stay

8.9.5.1 Installation dimensions



SRW	[1]	[2]	[3]	[4]	[5]	[6]	BS
621 – 800	–	–	–	4	–	73	15
801 – 1200	–	–	–	4	–	73	15
1200 – 1600	15	–	195	–	212	392	8 / 15

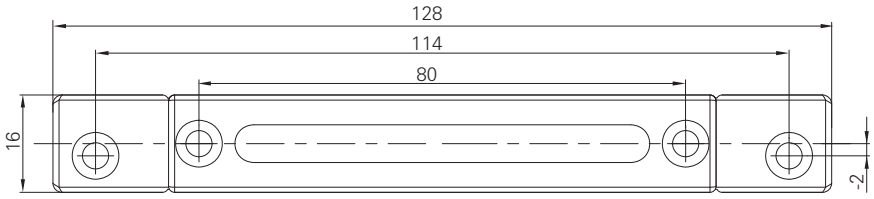
SRW	[1]	[2]	[3]	[4]	[5]	[6]	BS
1601 – 2000	433	–	109	–	364	306	8 / 15
2001 – 2400	433	–	509	–	364	706	8 / 15



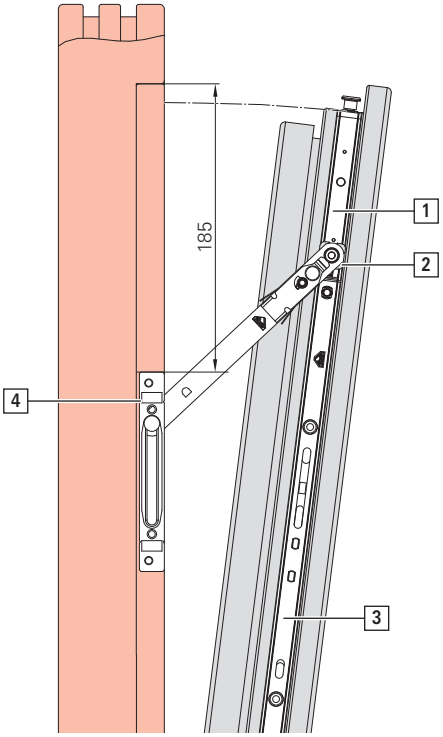
[A] Installation of tilt stay at the side

[B] Installation of tilt stay at the top

Frame component dimensions



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

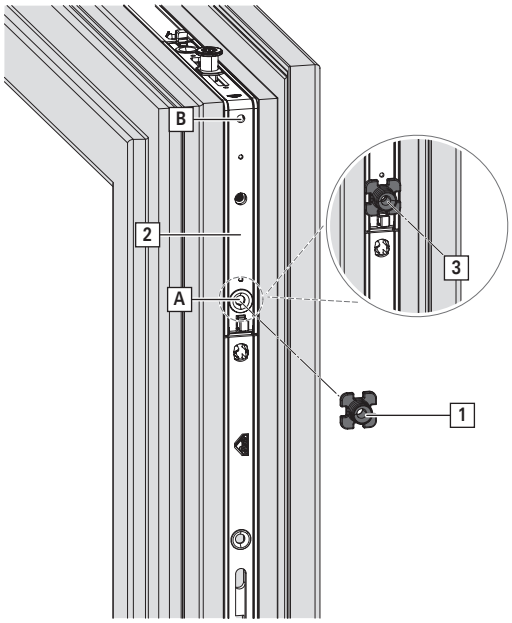


[1] Corner drive
[2] Sash bearing cam
[3] Centre lock
[4] Tilt stay frame component

8.9.5.2 Sash component

Position at the side

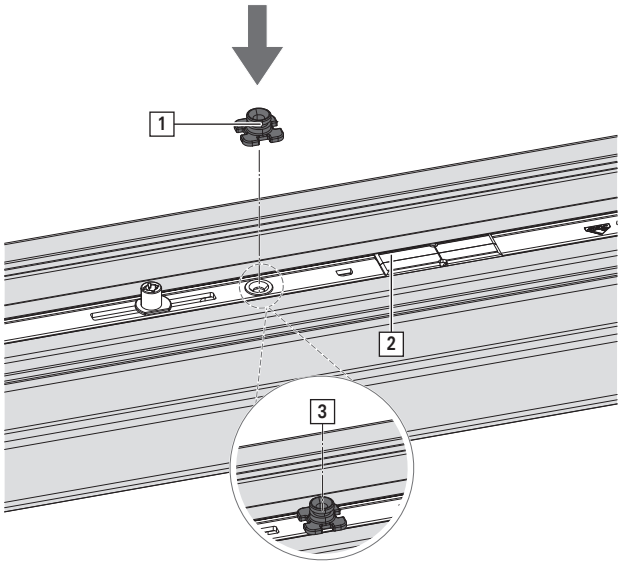
1. Place the sash component [1] on the corner drive [2] (position [A] or [B]).



2. Secure with screw [3].

Position at the top

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

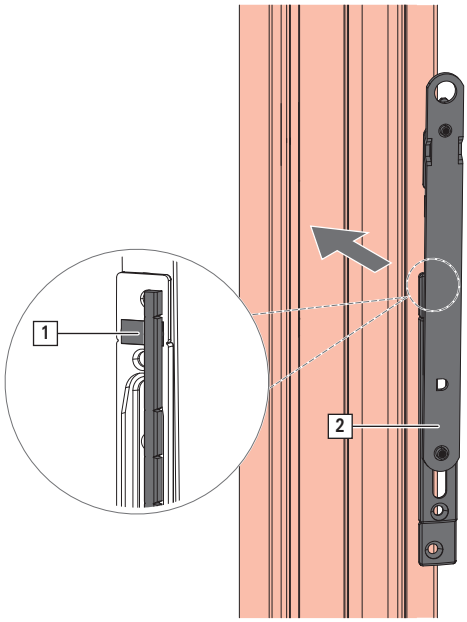


2. Secure with screw [3].

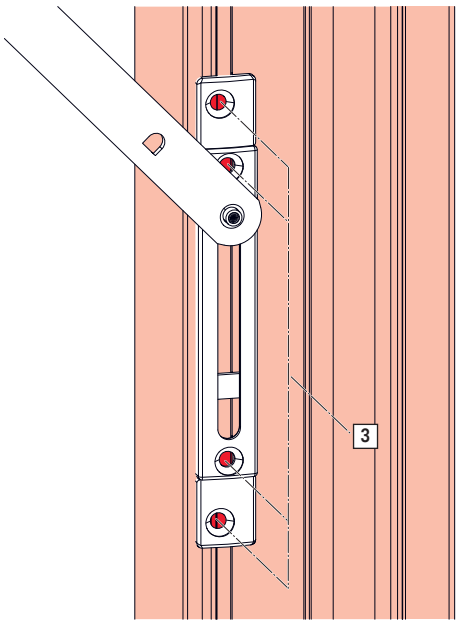
8.9.5.3 Frame component

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.

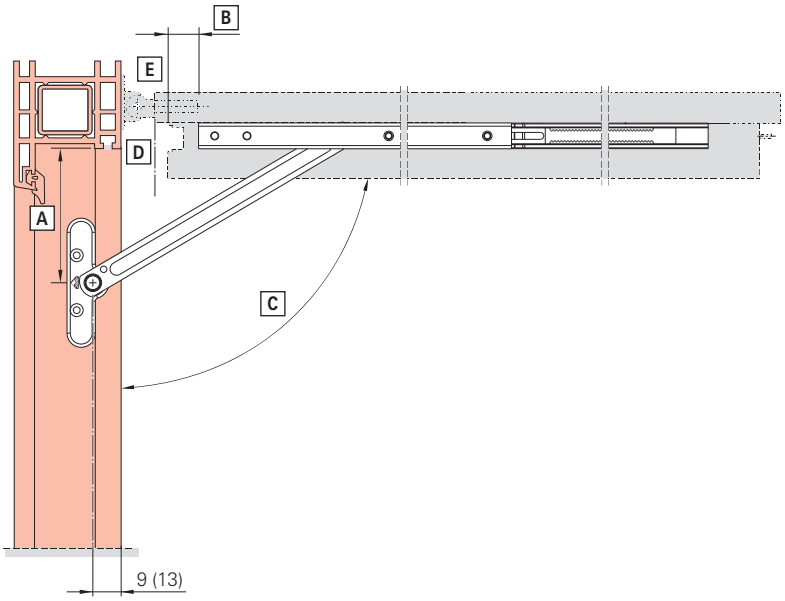


3. Position the tilt stay in the rebate.
4. Secure with four screws [3].



8.9.6 Arrestable brake stay

8.9.6.1 Installation dimensions

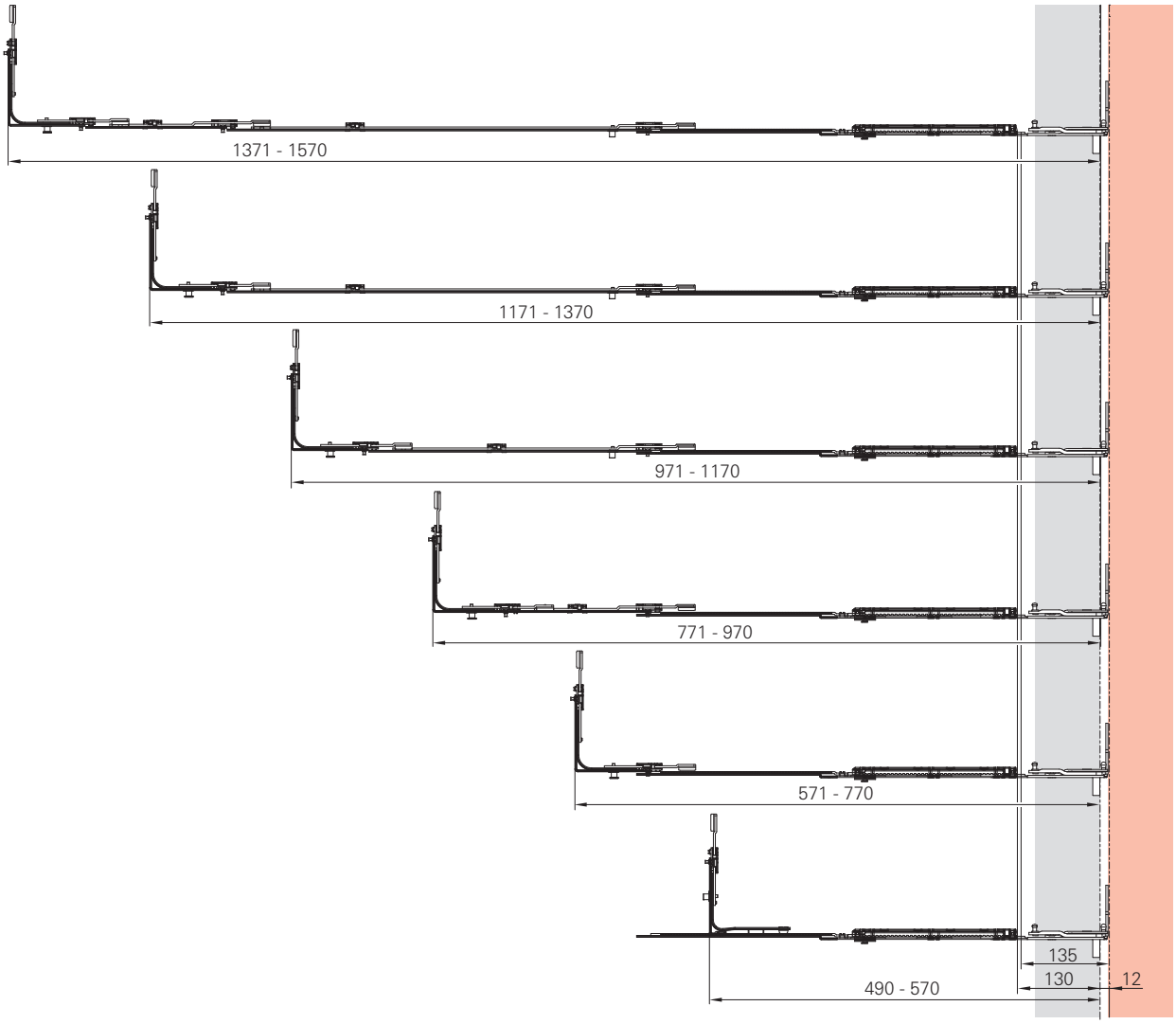


Assignment	Meaning
[A]	Frame dimensions
[B]	Sash dimensions
[C]	Opening angle 90°
[D]	Overlap edge
[E]	Sash rebate edge

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

8.9.6.2 Arrestable brake stay

Installation dimensions 490 – 1570 mm



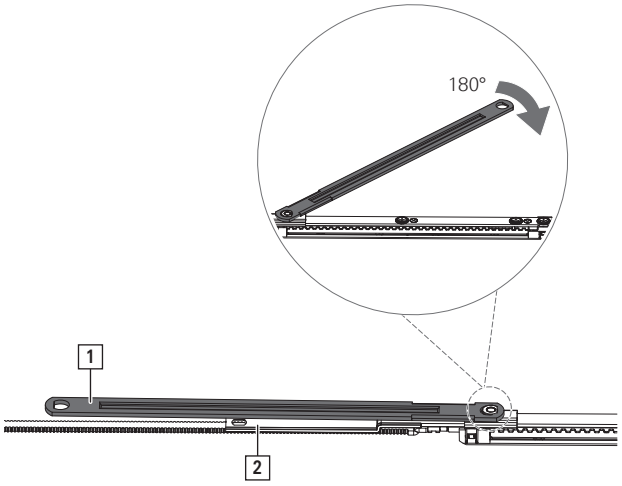
Application range	Corner drive	Centre lock	Arrestable brake stay	Arm	Frame dimension	Sash dimension
490 – 570 [57][58]	Special corner drive	–	486820	492757	135	130
571 – 770	Corner drive, standard	–	486820	492757	135	130
771 – 970	Corner drive, standard	CL 200 KU	486820	492757	135	130
971 – 1170	Corner drive, standard	CL 400 KU	486820	492757	135	130
1171 – 1370	Corner drive, standard	CL 600 KU	486820	492757	135	130
1371 – 15760	Corner drive, standard	CL 200 KU CL 600 KU	486820	492757	135	130

[57] Turn-Only sash only

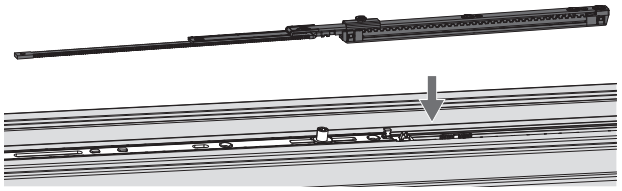
[58] Cropping the arrestable brake stay

8.9.6.3 Sash component

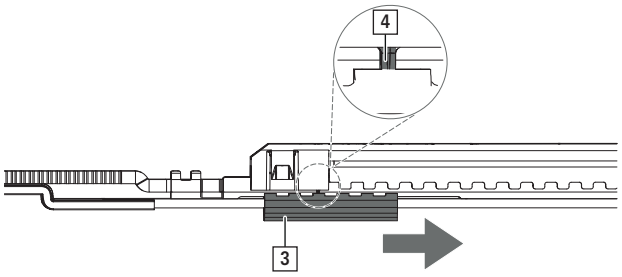
1. Place the scissor stay arm [1] on the arrestable brake stay [2].
   Turn the arm 180°. The arm is fixed in position.



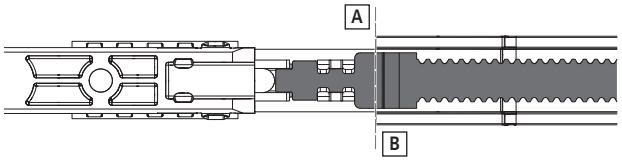
2. Position the arrestable brake stay on the sash and connect it to the centre lock or corner drive. For dimensions, see → *from page 265*.



3. Move the slider [3] in jerks to release the assembly fixture out of the final position. While doing so, strike the cam [4].

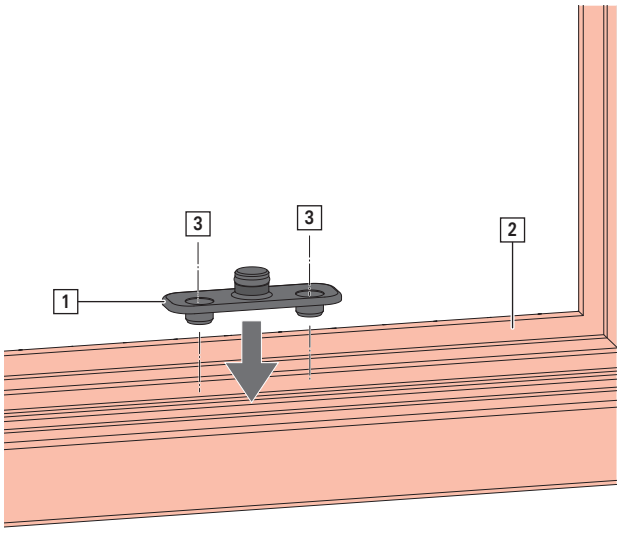


4. Once the centre fixing is undone, the centre position of the connecting rod can be adjusted by moving the offset of the connecting rod to the position of the punching on the floating mullion.
   [A] Punching on the floating mullion
   [B] Offset of the connecting rod



8.9.6.4 Frame component

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



2. Fasten with two screws [3].

8.9.7 Load transfer

INFO

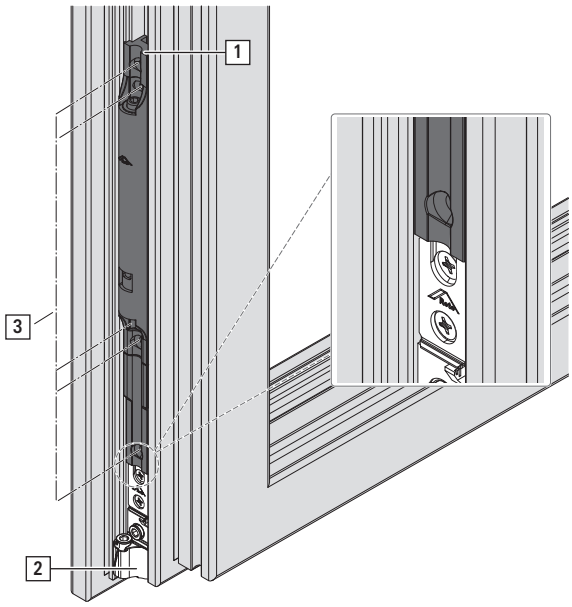
No load transfer for sash weights < 80 kg, as this may lead to malfunctions.

The use of a turn restrictor is mandatory.

If the sash is transported mounted in the frame, the load transfer spring can be pre-tensioned even in the workshop. This is only useful, however, if the sash is fitted with the full glass weight.

8.9.7.1 Sash component

1. Insert the load transfer sash component [1] up to the stop to the corner hinge [2].

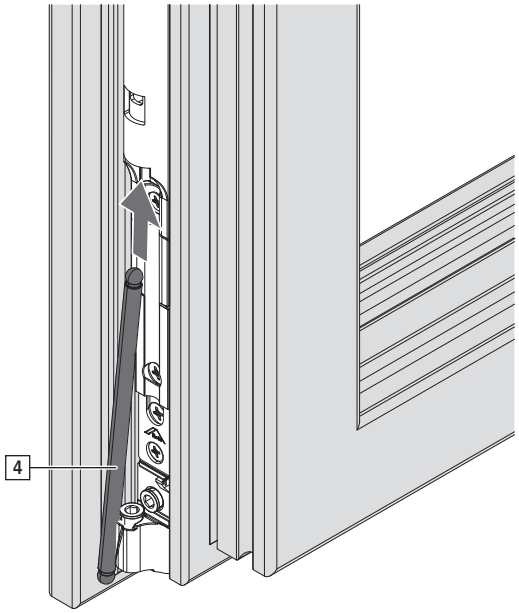


2. Fasten with five screws [3].

INFO

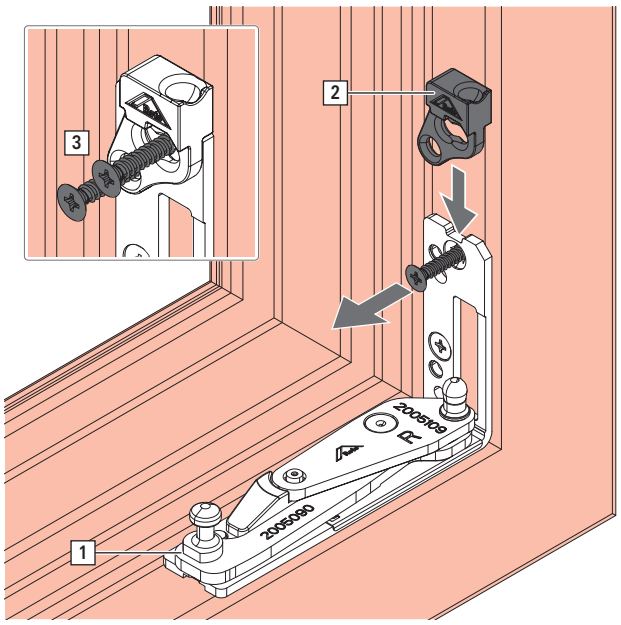
Tighten the screws to a maximum torque of 2 Nm.

3. Push the support rod [4] into the load transfer so that it clicks into place.



8.9.7.2 Frame component

1. Undo the top screw fixing from the pivot rest [1].



2. Place the load transfer frame component [2] on the pivot rest and fasten with two screws [3].

3. Join the load transfer frame component and sash component together → *from page 285*.

8.9.8 Turn restrictors

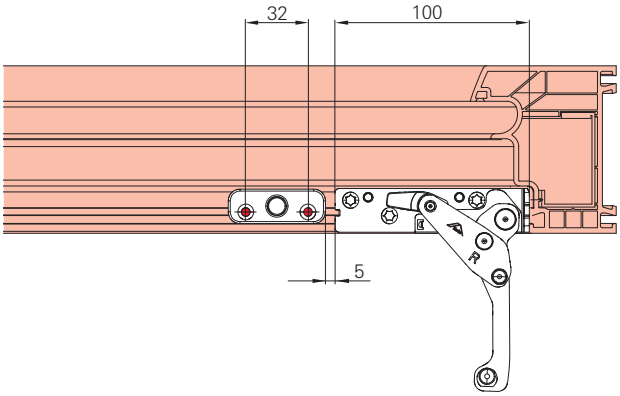
8.9.8.1 Drilling and routing dimensions

INFO

The turn restrictor is an additional component designed to provide extra convenience; it is not a security component.

Frame component

Positioning the 90° turn restrictor



Sash component

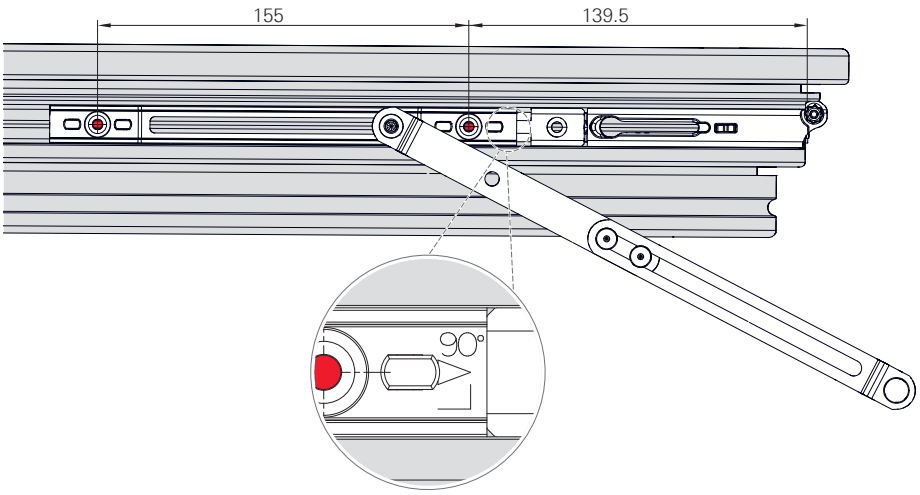
It is possible to install sash components with an angle of 90° or 95°. If load transfer is fitted, the sash component with an angle of 90° must be installed. For an opening width of 95°, fit the sash component the other way around.

ATTENTION

Improper installation may cause property damage.

Incorrect installation of the sash component when load transfer is fitted can cause a malfunction.

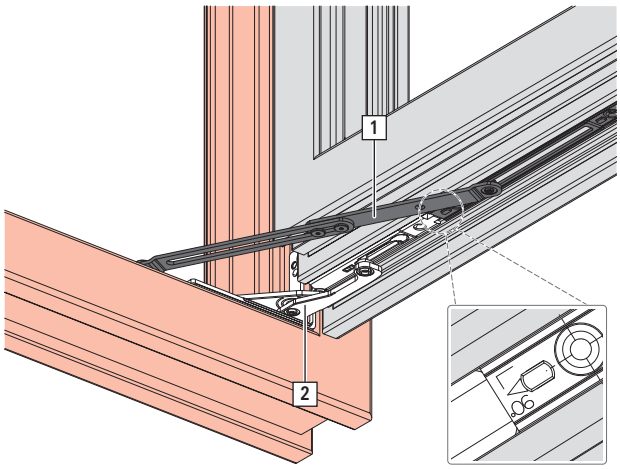
- The 90° imprint must point towards the corner hinge.



8.9.8.2 Sash component

1. Let the sash component [1] come into contact with the corner hinge [2].

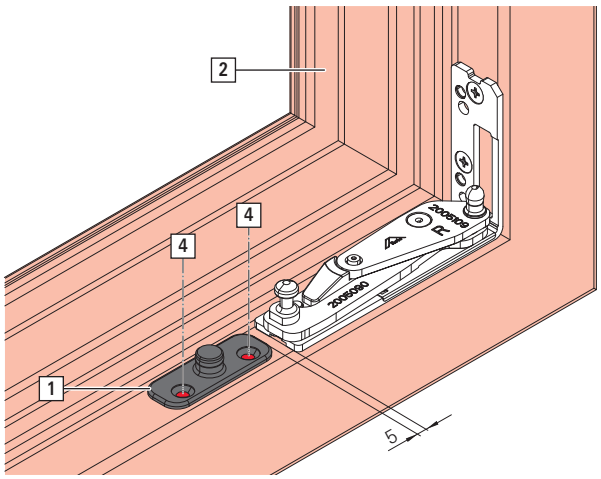
ATTENTION
Improper installation may cause property damage.
Incorrect installation of the sash component when load transfer is fitted can cause a malfunction.
- The 90° imprint must point towards the corner hinge.



2. Fasten with two screws.

8.9.8.3 Frame component

1. Place the frame component [1] on the frame [2].
   The distance between the pivot rest [3] and frame component is 5 mm.



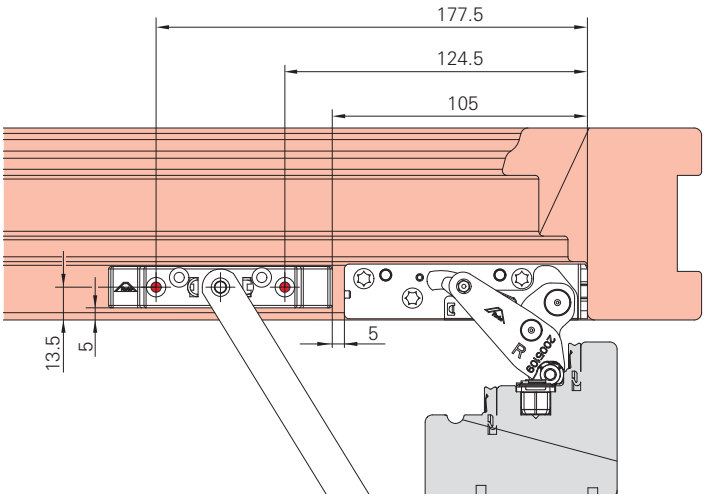
2. Fasten with two screws [4].

8.9.9 Turn restrictor 355

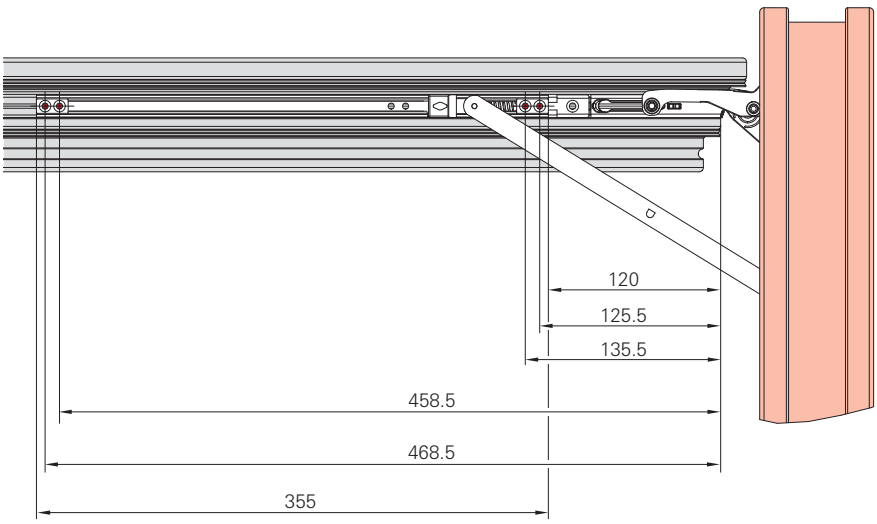
8.9.9.1 Drilling and routing dimensions

INFO
The turn restrictor is an additional component designed to provide extra convenience; it is not a security component.

Frame component



Sash component



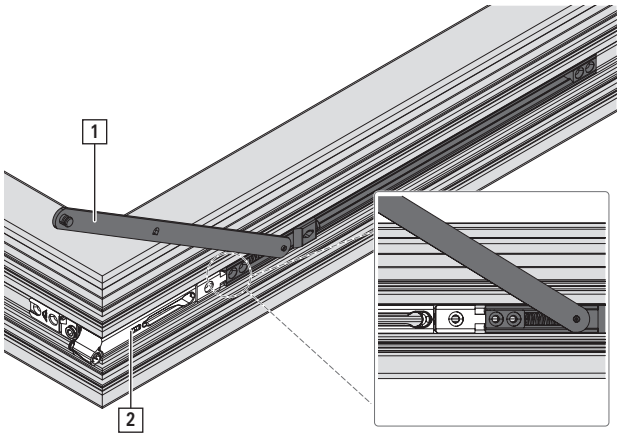
8.9.9.2 Sash component

INFO

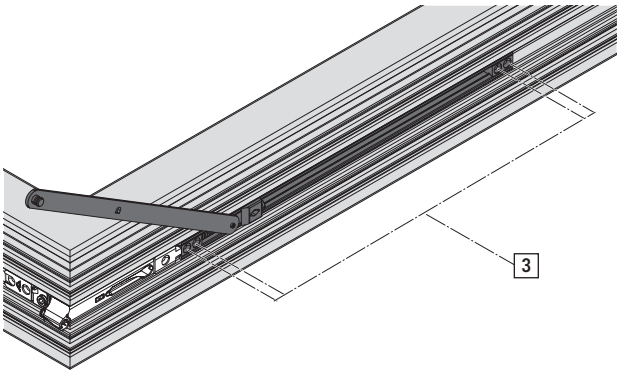
Can be used in conjunction with corner drive, standard, from SRW > 600 mm.

The corner drive must be cropped.

1. Let the sash component [1] come into contact with the corner hinge [2].



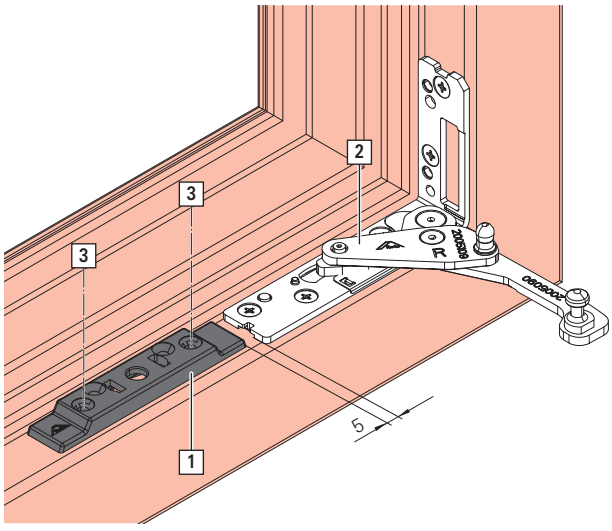
2. Fasten with four screws [3].



8.9.9.3 Frame component

1. Place the frame component [1] on the frame.

   The distance between the pivot rest [2] and frame component is 5 mm.

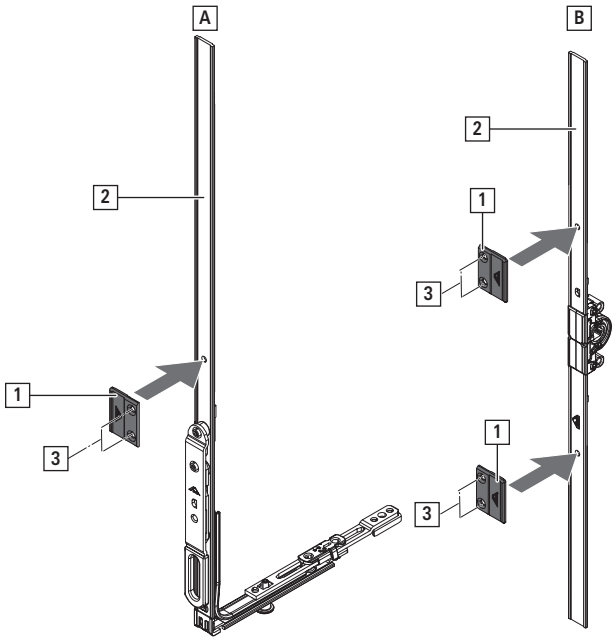


2. Fasten with two screws [3].

8.9.10 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 face-plate [2].



2. Fasten with two screws [3].

8.10 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 305*

8.10.1 Connecting the corner hinge to the pivot rest

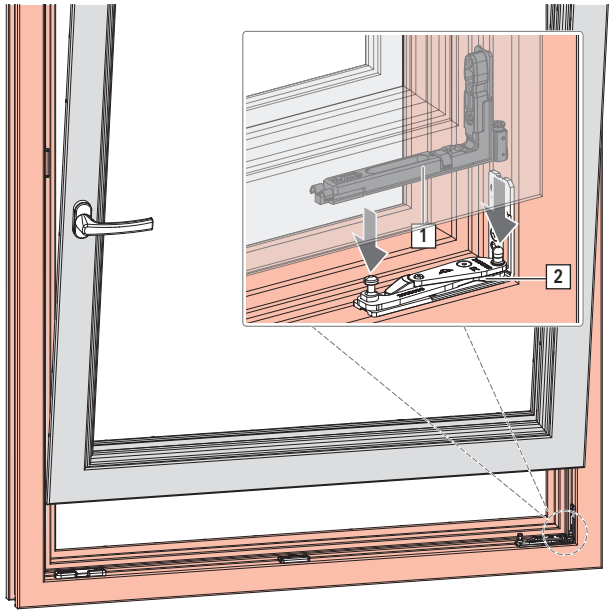
⇨ Pivot rest in initial position

1. Push down on the lifting mishandling device (if fitted).

2. Handle in turn position.

Tilt&Turn hardware	TiltFirst hardware
	

3. With the sash slightly tilted, guide it along the frame in a downwards direction until you feel the pivot rest [1] engage in the corner hinge [2].



4. Secure the sash to prevent it from falling.

> **WARNING**
> **An unsecured sash may pose a risk of death!**
> The sash may fall during installation if it is not securely connected to the frame.
> ▶ Secure the sash to prevent it from falling, e.g. by using two people.

5. Connect the sash stay → *from page 277*.

8.10.2 Mounting the stay arm

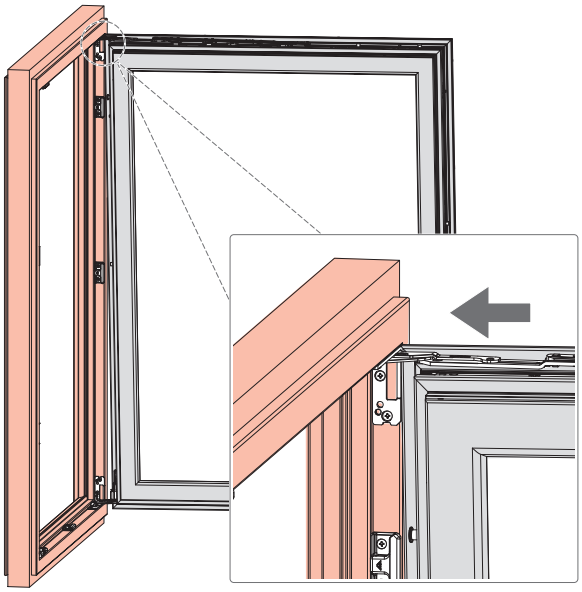
8.10.2.1 Mounting the stay arm – mounting bolt

⇨ The corner hinge and pivot rest are joined together → *from page 276*

1. Secure the sash to prevent it from falling.

WARNING
An unsecured sash may pose a risk of death!
The sash may fall during installation if it is not securely connected to the frame.
- Secure the sash to prevent it from falling, e.g. by using two people.

2. Turn the sash and stay arm to 90°. Push the sash slightly towards the frame at the top.



3. Push down on the lifting mishandling device (if fitted).

4. Move the handle to the tilt position.

Tilt&Turn hardware



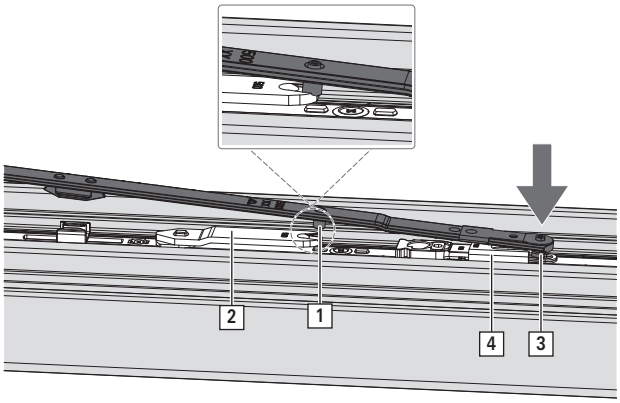
TiltFirst hardware



INFO
Under normal circumstances, this constitutes incorrect operation of the hardware, but it is a necessary step in this case.

5. Place the stay arm mounting bolt [1] on the stay guide supporting arm [2].

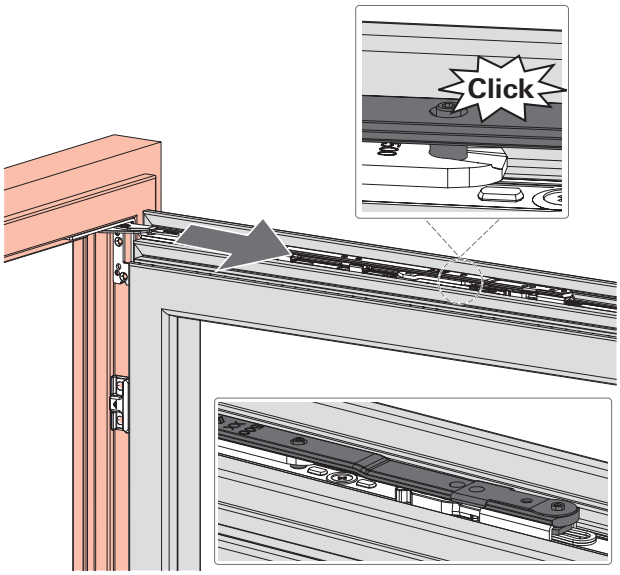
INFO
The mounting bolt must be at the depth of the supporting arm.



6. Push the bayonet bolt [3] in the front downwards so that it can extend underneath the mounting plate [4].

7. Pull the sash away from the frame until you hear the stay arm click into place.

WARNING
Potential risk of death caused by the sash falling!
The sash may fall if the stay arm is not correctly positioned in the stay guide.
- ▸ Check correct mounting.
  The mounting bolt and the bayonet bolt must be locked in the stay guide.
- ▸ The stay arm must audibly click into place.



8. Push down on the lifting mishandling device (if fitted).

9. Move the handle to the turn position.

Tilt&Turn hardware



TiltFirst hardware



8.10.2.2 Mounting the stay arm – mounting lock

⇨ The corner hinge and pivot rest are joined together → *from page 276*

1. Secure the sash to prevent it from falling.

WARNING
An unsecured sash may pose a risk of death!
The sash may fall during installation if it is not securely connected to the frame.
- Secure the sash to prevent it from falling, e.g. by using two people.

2. Turn the sash and stay arm to 90°.

3. Push down on the lifting mishandling device (if fitted).

4. 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.)

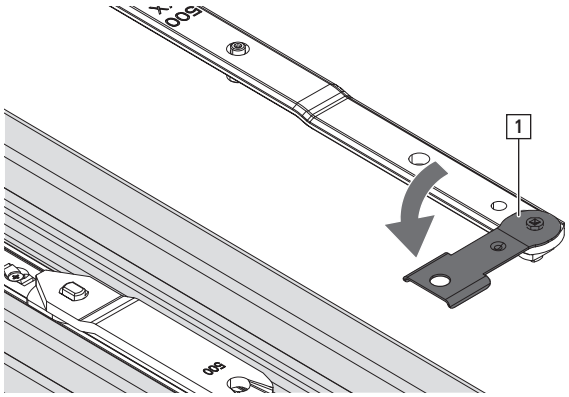
Tilt&Turn hardware



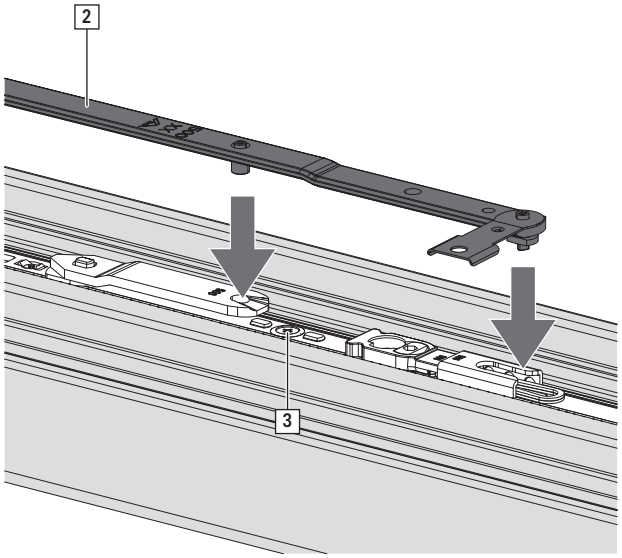
TiltFirst hardware



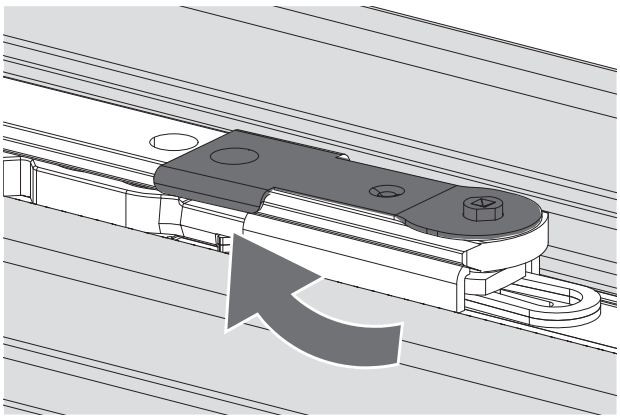
5. Turn the bayonet bolt 90° using the plate [1], lifting the plate slightly while doing so.



6. Position the stay arm [2] over the stay guide [3] and push it downwards so that the mounting bolt extends into the supporting arm and the bayonet bolt extends into the mounting plate.



7. Turn the bayonet bolt 90° using the plate so that the plate engages on the sash stay rod again.

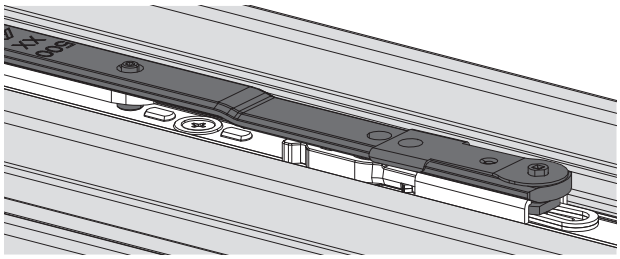


INFO
The plate must be easy to turn. If a lot of force is required or if it is jammed, check the position of the bolt in the mounting plate.

WARNING
Potential risk of death caused by the sash falling!
The sash may fall if the stay arm is not correctly positioned in the stay guide.
- ▶ Check correct mounting.

  The mounting bolt and the bayonet bolt must be locked in the stay guide.
- ▶ The stay arm must audibly click into place.

8. Check the mounting of the stay arm.



9. Push down on the lifting mishandling device (if fitted).

10. Move the handle to the turn position.

Tilt&Turn hardware



TiltFirst hardware



8.10.2.3 Mounting the rebate stay arm – mounting lock

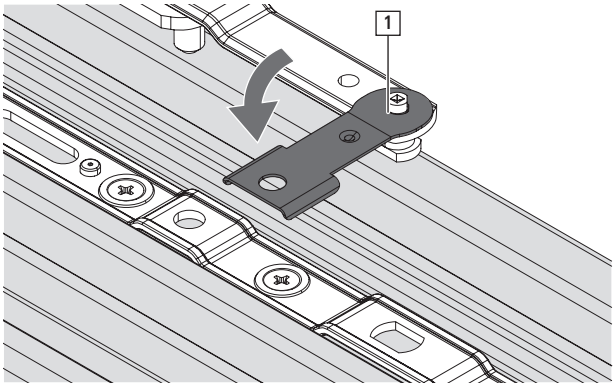
⇨ The corner hinge and pivot rest are joined together → *from page 276*

1. Secure the sash to prevent it from falling.

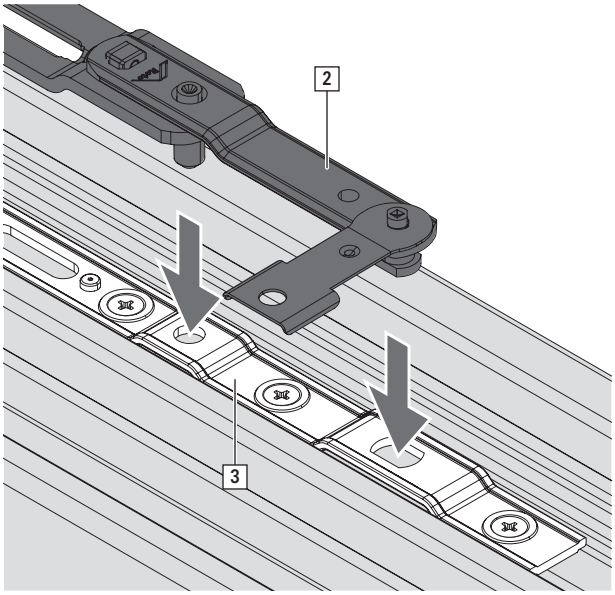
WARNING
An unsecured sash may pose a risk of death!
The sash may fall during installation if it is not securely connected to the frame.
- Secure the sash to prevent it from falling, e.g. by using two people.

2. Turn the sash and stay arm to 90°.

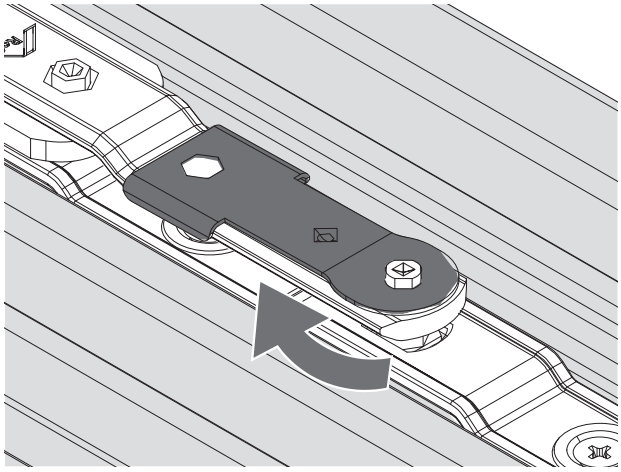
3. Turn the bayonet bolt 90° using the plate [1], lifting the plate slightly while doing so.



4. Position the rebate stay arm [2] over the stay guide [3] and push it downwards so that the mounting bolt extends into the supporting arm and the bayonet bolt extends into the holes provided.



5. Turn the bayonet bolt 90° using the plate so that the plate engages on the sash stay rod again.



INFO

The plate must be easy to turn. If a lot of force is required or if it is jammed, check the position of the bolt in the mounting plate.

WARNING

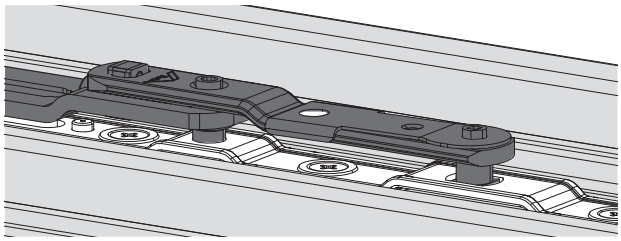
Potential risk of death caused by the sash falling!

The sash may fall if the stay arm is not correctly positioned in the stay guide.

- ▶ Check correct mounting.

  The mounting bolt and the bayonet bolt must be locked in the stay guide.
- ▶ The stay arm must audibly click into place.

6. Check the mounting of the rebate stay arm.



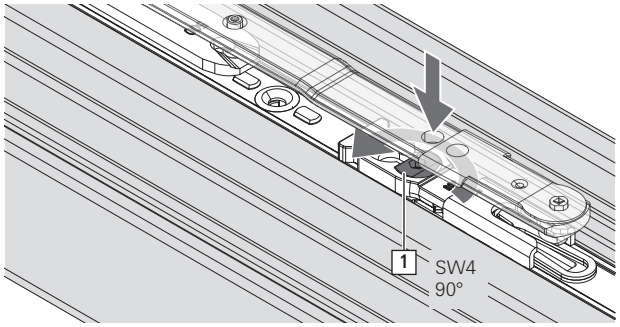
8.10.2.4 Setting the tilt depth

On delivery, the tilt depth is preset to 140 mm.

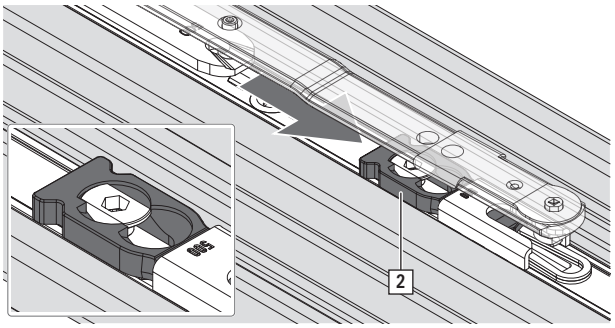
INFO
With SRH < 600 mm, set the tilt depth to 80 mm.

1. Turn the screw [1] in the stay guide 90° anticlockwise.
   Tool: size 4 hex key

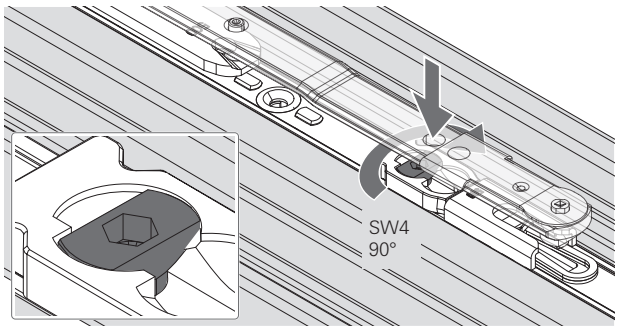
   INFO
   The screw must be easy to turn.



2. Push the tilt restrictor [2] forwards as far as it will go.



3. Turn the screw back clockwise 90°. The tilt restrictor is locked.

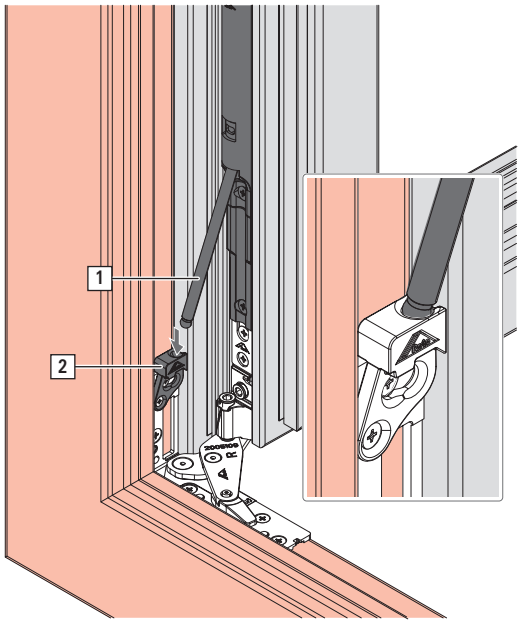


8.10.3 Load transfer

⇨ Sash mounted.

1. Open the sash 90°.

2. Connect the support rod [1] to the sash component and insert into the recess in the frame component [2].



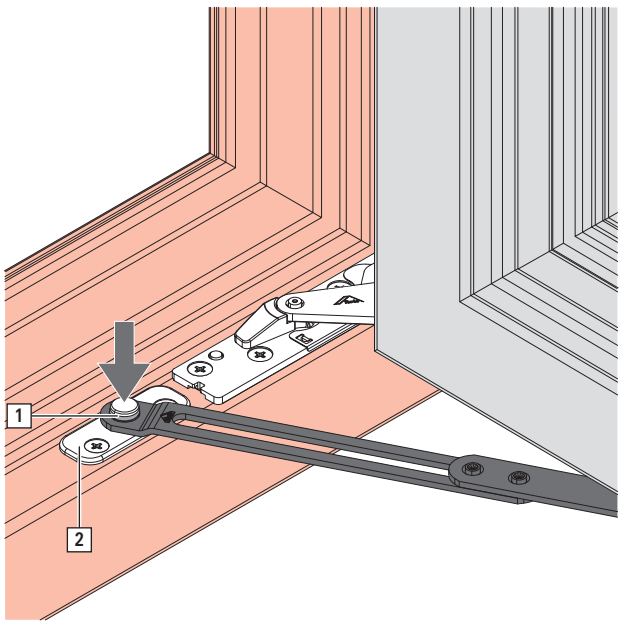
3. Set the load transfer → *from page 292*.

8.10.4 Turn restrictor 195

⇨ Sash mounted.

1. Open the sash.

2. Push the hole at the end of the sash component over the rubber ring [1] of the bolt on the frame component [2].

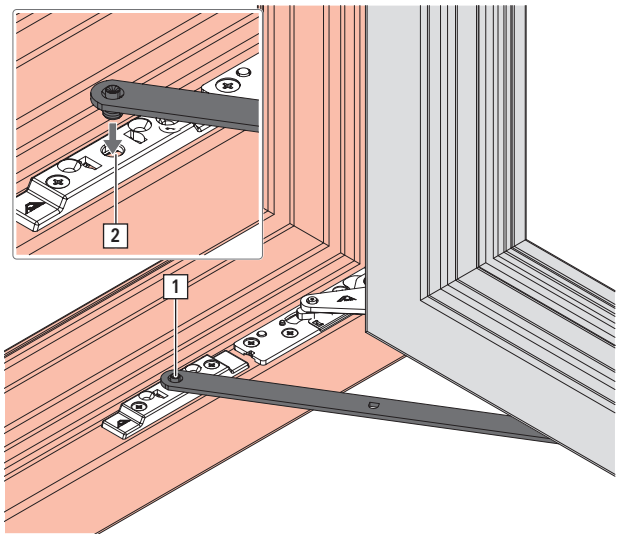


8.10.5 Turn restrictor 355

⇨ Sash mounted.

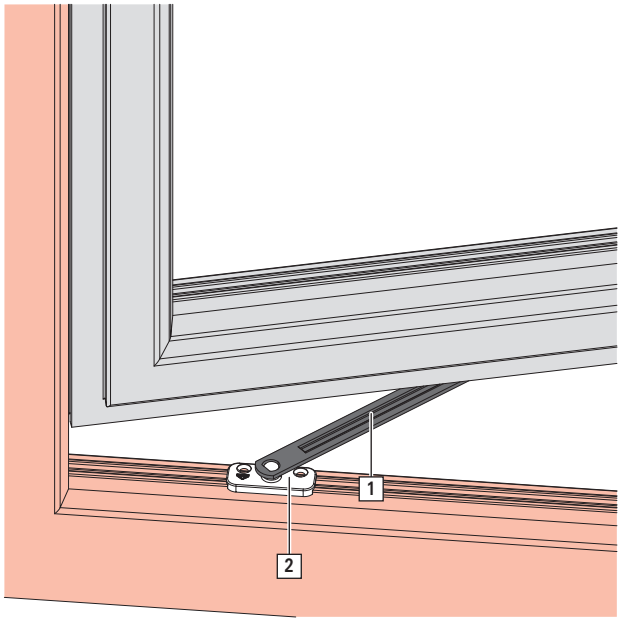
1. Open the sash.

2. Insert the bolt [1] into the mount of the frame component [2].



8.10.6 Arrestable brake stay

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



8.11 Performance test

A quick performance test must be performed on all elements to ensure that their components fulfil their intended function.

Time

- After production (once the sash and frame have been fully assembled and glazed).
- On site / on the construction site (after the Tilt&Turn element has been fully installed in the masonry).

To be carried out by

Tilt&Turn hardware

1. Move the sash to the turn position.
2. Then close the sash.
3. Move the sash to the tilt position end stop.
4. Then close the sash.

Turn-Only hardware

1. Move the sash to the turn position.
2. Then close the sash.

Tilt-Only hardware

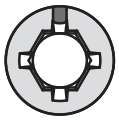
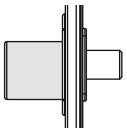
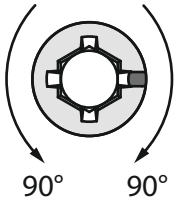
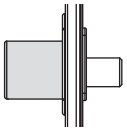
1. Move the sash to the tilt position end stop.
2. Then close the sash.

9 Adjustment

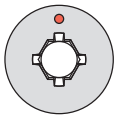
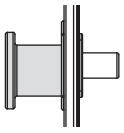
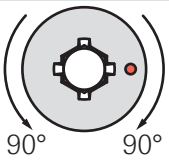
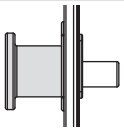
INFO
Roto hardware components may only be adjusted by authorised professionals when the element is installed.

9.1 Locking cam

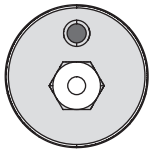
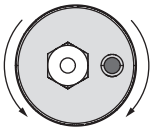
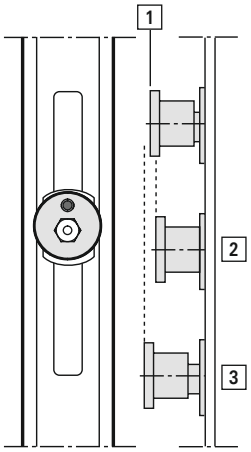
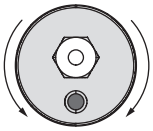
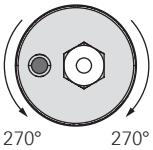
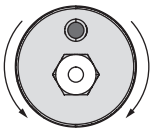
E cam

E cam	Adjustment distance	Gasket compression adjustment [mm]	Side view
			
		±0.8 mm	

P cam

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

V cam

V cam	Adjustment distance	Gasket compression adjustment [mm]	Height adjustment [mm]	Side view
			+1.5 mm -0.8 mm	
	 90° 90°	±0.8 mm	±0.125 mm	 [1] 0 = initial position [2] -0.8 mm max. adjustment [3] +1.5 mm max. adjustment
	 180° 180°		±0.25 mm	
	 270° 270°	±0.8 mm	±0.375 mm	
	 360° 360°		±0.5 mm	

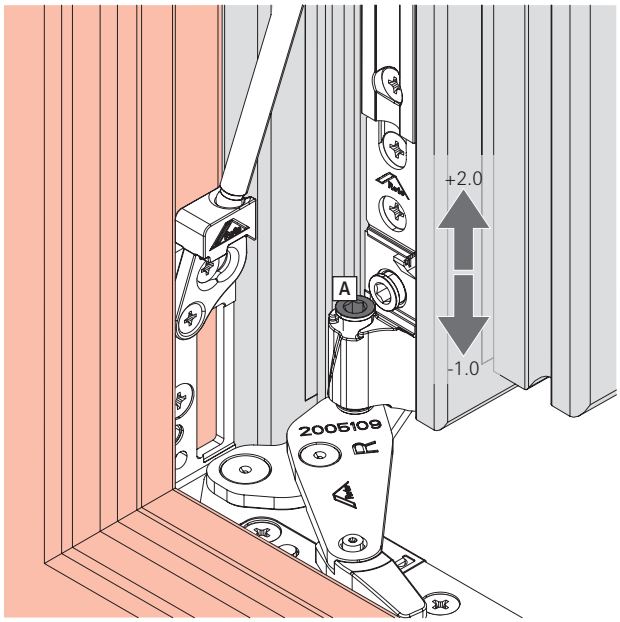
9.2 Pivot rest and corner hinge

Height adjustment

1. Opening the sash

2. Height adjustment +2.0 / -1.0 mm via screw [A] in the corner hinge.
   Tool: 4 mm hex key.

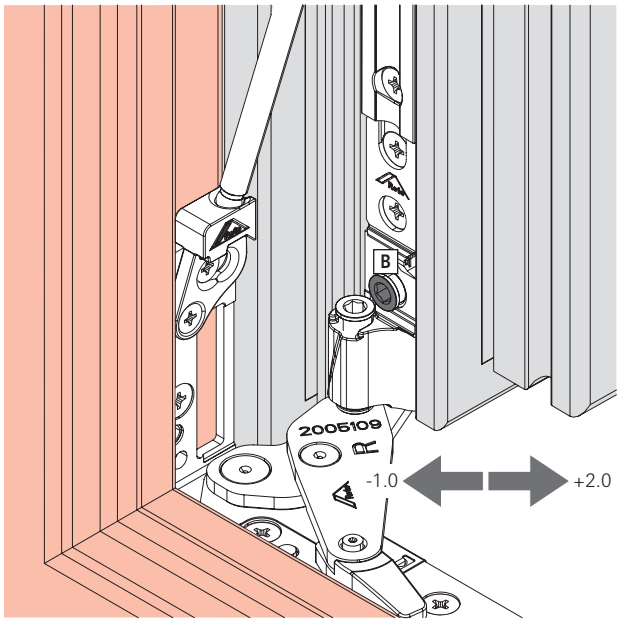
> **INFO**
> Readjust the load transfer after adjusting the height.



Lateral adjustment

1. Open the sash.

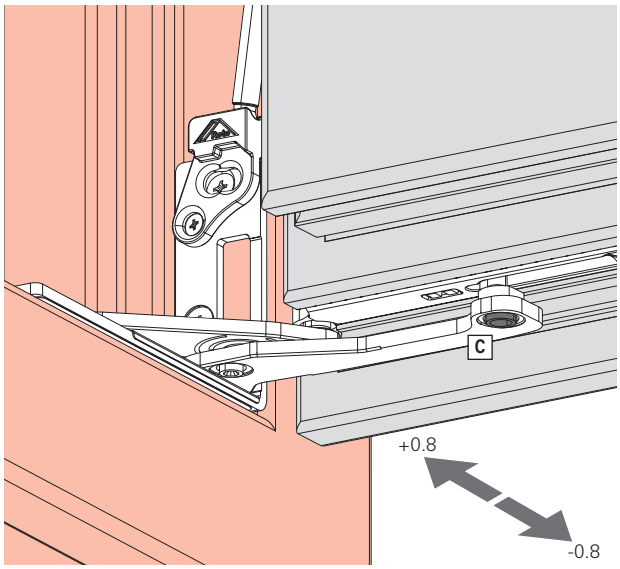
2. Lateral adjustment +2.0 / -1.0 mm via screw [B] in the corner hinge.
   Tool: 4 mm hex key.



Gasket compression adjustment

1. Open the sash.

2. Gasket compression adjustment ±0.8 mm via eccentric [C] in the pivot rest.
   Tool: 4 mm hex key.

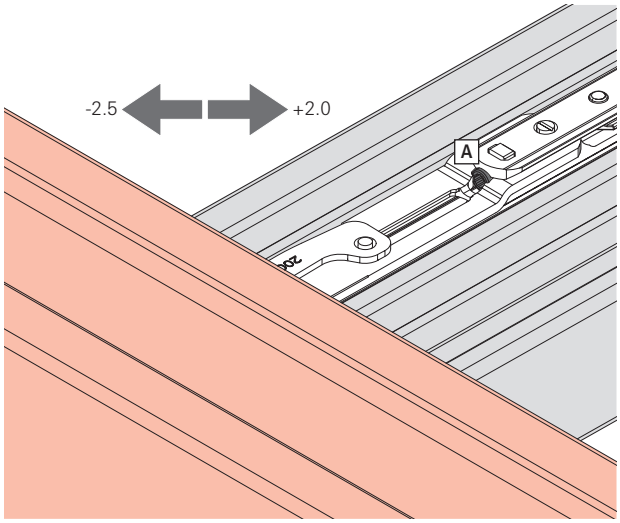


9.3 Sash stay

Lateral adjustment

1. Open the sash.

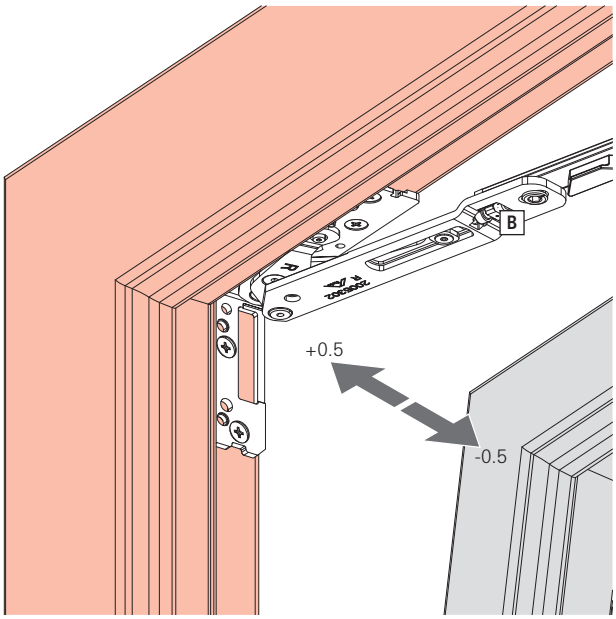
2. Lateral adjustment -2.5 / +2.0 mm via screw in the sash stay [A].
   Tool: 4 mm hex key.



Gasket compression adjustment

1. Move the sash to the tilt position.

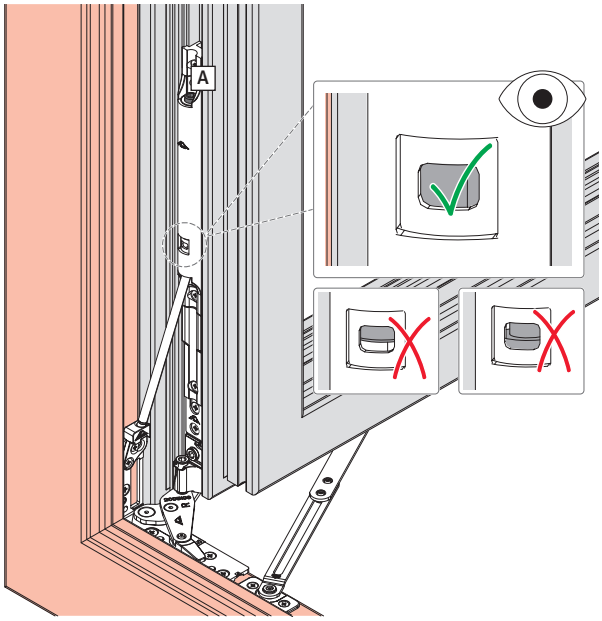
2. Gasket compression adjustment ±0.5 mm via eccentric [B] in the sash stay.
   Tool: 4 mm hex key.



9.4 Load transfer

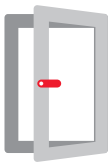
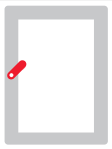
1. Open the sash 90°.

2. Turn the adjusting screw [A] in until the entire silver screw head can be seen in the inspection window.
   Tool: 4 mm hex key



10 Operation

10.1 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.

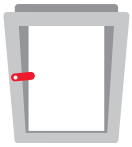
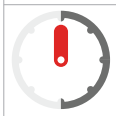
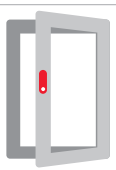
Security striker for tilt ventilation (TiltSafe)

INFO

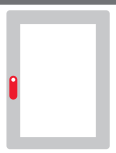
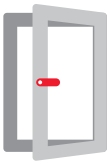
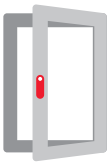
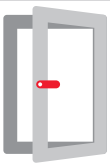
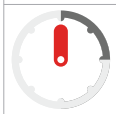
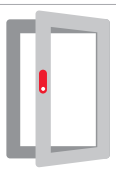
RC 2 protection cannot be achieved in the 135° handle position (night ventilation). To achieve RC 2 protection:

1. Tilt the window
2. Lock the handle
3. Remove the key.

10.2 Handle position with TiltFirst hardware

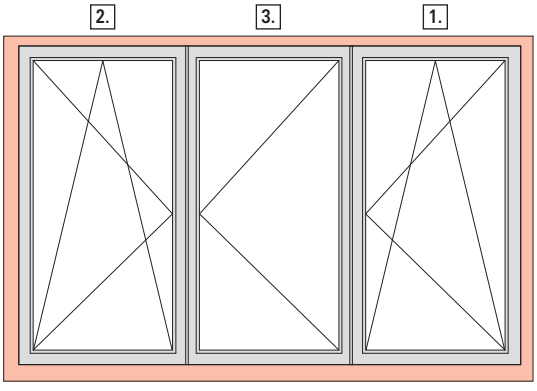
Handle position	Sash position	Meaning
		Sash in closed position.
		Sash in tilted, open position.
		Sash in turned, open position.

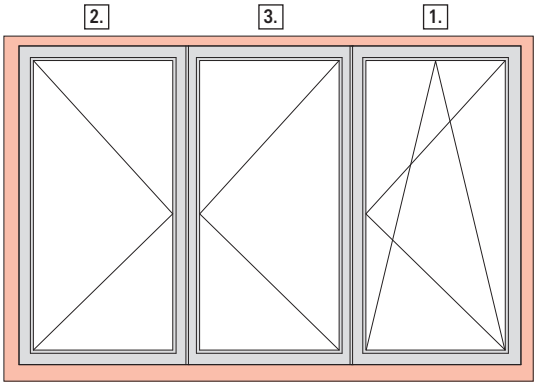
10.3 Handle position for arrestable brake stay

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.

10.4 Operating sequence

Both outer sashes must always be opened first in order to open the centre sash. Always open the centre sash last.





10.5 Fault assistance

Fault	Cause	Corrective action	To be carried out by
Handle is difficult to turn.	Frame components have not been greased.	Grease the frame components.	☐
	Handle is damaged.	Replace the handle.	■
	Handle screwed into place too tightly.	Undo the screw fixing slightly.	■
	Sash components with slanting screws.	Screw the sash components in straight.	■
	Sash components are damaged.	Replace the sash components.	■
	Incorrect striker positions.	Adapt the striker positions.	■
	Sash stay gasket compression is too strong (build-up on gasket).	Adjust the sash stay gasket compression or clean the gasket.	■
	Gasket compression is too strong.	Reduce the gasket compression using the cam setting.	■
Handle cannot be turned 180°.	Sash components hinged or installed incorrectly.	Check the setting in the turn position (potentially rehang – start from the T&T espagnolette).	■
Sash falls into the tilt position when in the turn position.	Excessive clearance at the top.	Check the fit of the corner hinge.	■
		Check the fit of the pivot rest.	■
		Adjust the corner hinge so that it is positioned higher (pay attention to the tilt striker).	■
Sash falls into the turn position when in the tilt position.	Tilt striker damaged.	Replace the tilt striker.	■
Sash scrapes in the tilt position.	Insufficient clearance at the top.	Lower the corner hinge (pay attention to the tilt striker).	■
Locking cam is rubbing against the striker.	Incorrect striker position.	Adapt the striker position.	■

☐ = May be carried out by a specialist company or the end user

■ = **Must** be carried out by a specialist company

11 Maintenance

CAUTION

Performing maintenance work incorrectly can lead to injuries.

Performing maintenance incorrectly can lead to injuries.

- Ensure that there is sufficient space for installation before starting work.
- Ensure that the installation site is clean and tidy.
- Always have hardware adjustment and replacement work performed by a specialist company.
- Secure the sash against unintentionally opening or closing.
- Do not unhinge the sash for maintenance.

ATTENTION

Incorrect or improper testing may cause property damage.

Incorrect or improper testing of the hardware may cause the element to malfunction.

- Have the hardware checked by a specialist company when installed.
- If defects need to be remedied, have the element unhinged and remounted by a specialist company.

INFO

The manufacturer must draw the attention of builders and end consumers to these maintenance instructions.

Roto Frank Fenster- und Türtechnologie GmbH recommends the manufacturer conclude a maintenance agreement with their end users.

No legal claims can be derived from the following recommendations; their application is to be based on the specific individual case.

	Responsibility	
Maintenance interval	☐	→ *from page 296*
Cleaning		→ *from page 297*
Clean hardware	☐	
Care		→ *from page 297*
Lubricate movable parts	☐	
Lubricate locking points	☐	
Performance test		→ *from page 299*
Check that hardware components are fitted securely	☐	
Inspect hardware components for wear	☐	
Check that movable parts work properly	☐	
Check that locking points work properly	☐	
Check ease of movement	■	
Repair		→ *from page 299*
Retighten screws	■	
Replace damaged components	■	

☐ = May be carried out by a specialist company or the end user

■ = **Must** be carried out by a specialist company

11.1 Maintenance intervals

ATTENTION

Failure to adhere to maintenance intervals may cause property damage.

The maintenance interval for all tasks relating to the hardware components is **annually** at the least. In hospitals, schools and hotels, the maintenance interval is **six-monthly**.

Regular maintenance is necessary in order to maintain the proper and smooth-running operation of the hardware and to prevent premature wear or even defects.

- Determine and adhere to the appropriate maintenance interval in accordance with the ambient conditions.

11.2 Cleaning

ATTENTION

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

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

- Do not use aggressive or flammable liquids, acidic cleaners or abrasive cleaners.
- Only use mild, pH-neutral cleaning agents that have been diluted.
- Apply a thin protective film to the components, for example using a cloth soaked in oil.
- Avoid aggressive vapours (e.g. produced by formic acid, acetic acid, ammonia, amine compounds, ammonia compounds, aldehyde, 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 297*
- 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.

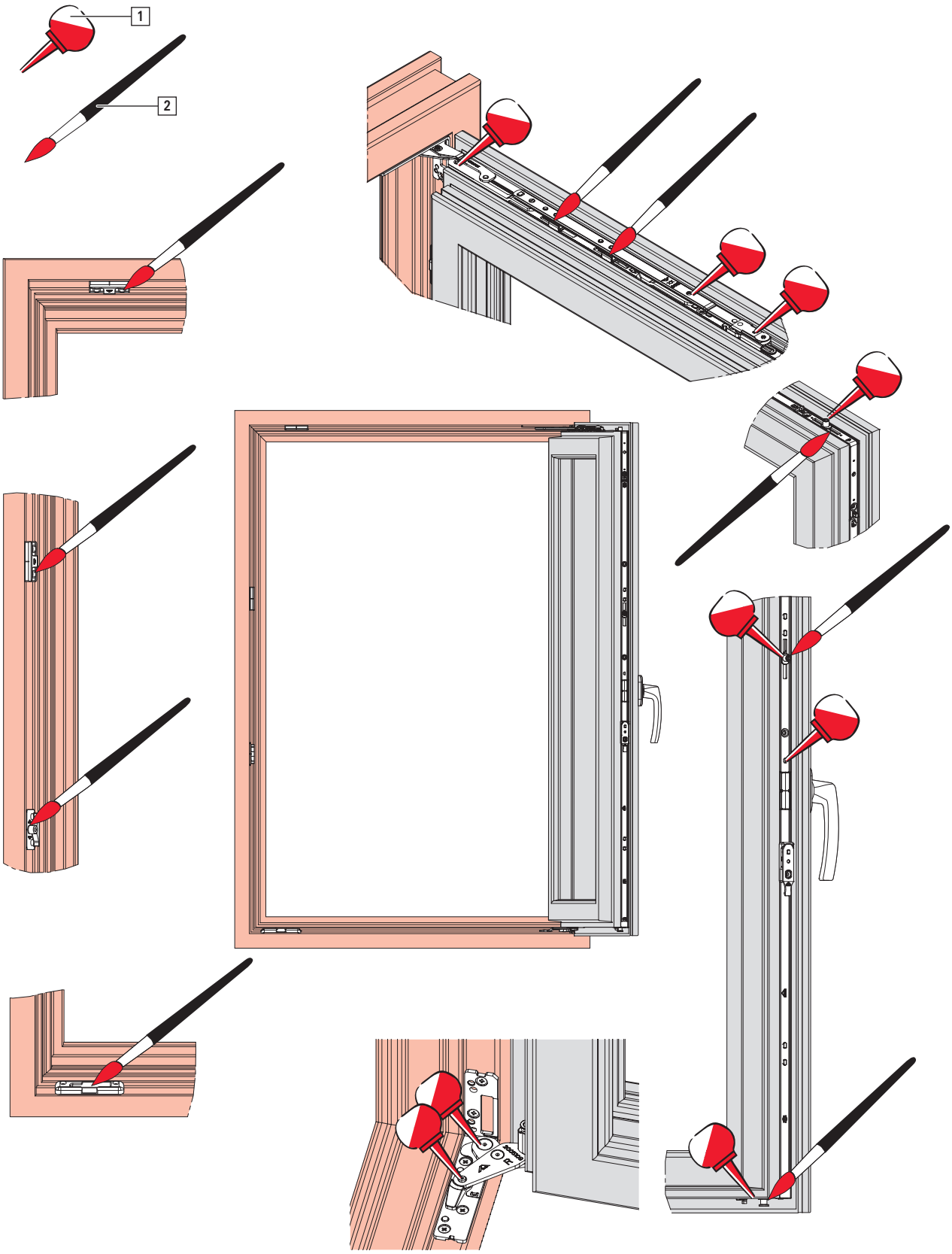
Recommended lubricants

- Roto NX / NT grease
  Material number: 782881

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 Unhinging a sash without load transfer

1. Move the handle to the turn position.

Tilt&Turn hardware



TiltFirst hardware



2. Open the sash.

3. Push down on the lifting mishandling device (if fitted).
   Move the handle to the tilt position.

Tilt&Turn hardware



TiltFirst hardware



INFO
Under normal circumstances, this constitutes incorrect operation of the hardware, but it is a necessary step in this case.

4. Secure the sash to prevent it from falling.

WARNING
An unsecured sash may pose a risk of death!
The sash may fall during installation if it is not securely connected to the frame.
- Secure the sash to prevent it from falling, e.g. by using two people.

5. Unhinge the sash stay → *from page 303*.

6. Push down on the lifting mishandling device and move the handle to the turn position.

Tilt&Turn hardware

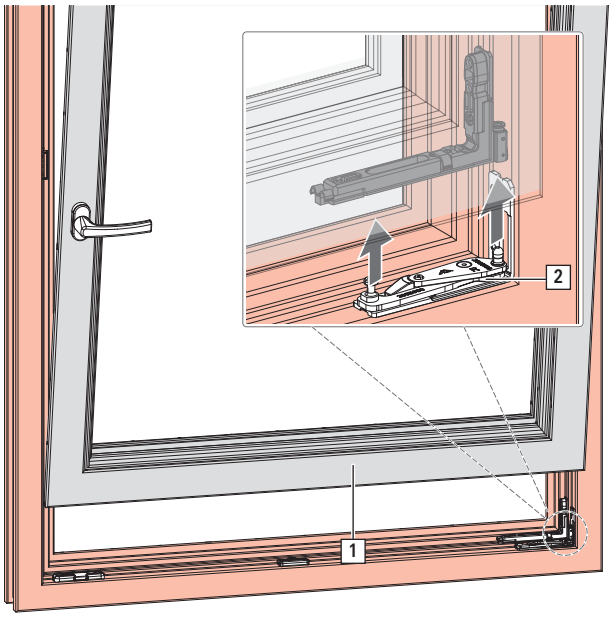


TiltFirst hardware



7. Close the sash.

8. With the sash [1] slightly tilted, lift it out of the pivot rest [2].



12.2 Unhinging a sash with load transfer

1. Move the handle to the turn position.

Tilt&Turn hardware



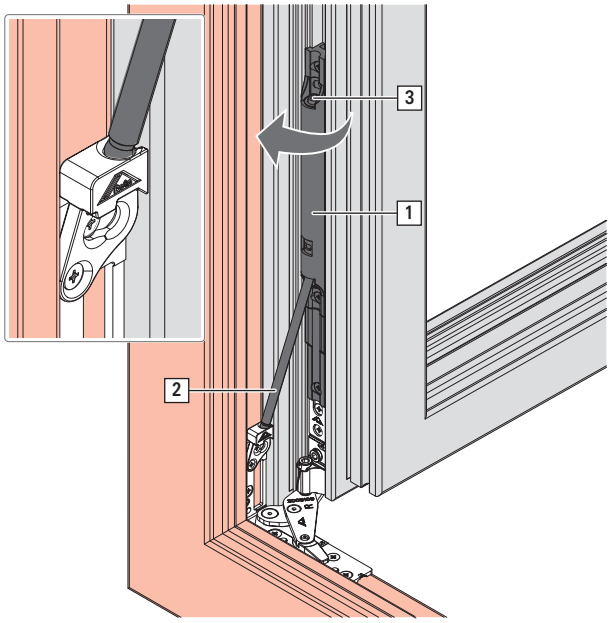
TiltFirst hardware



2. Open the sash.

   Relieve the load on the load transfer [1] until the support rod [2] lies loosely in the frame component.

   To do so, unscrew the load transfer adjusting screw [3] until the spring is fully released (the support rod becomes loose).



INFO
If the spring is not fully released, the sash cannot be rehinged.

3. Remove the support rod from the recess in the frame component.

4. Push down on the lifting mishandling device (if fitted).

   Move the handle to the tilt position.

Tilt&Turn hardware	TiltFirst hardware
	

INFO
Under normal circumstances, this constitutes incorrect operation of the hardware, but it is a necessary step in this case.

5. Secure the sash to prevent it from falling.

WARNING
An unsecured sash may pose a risk of death!
The sash may fall during installation if it is not securely connected to the frame.
- ▸ Secure the sash to prevent it from falling, e.g. by using two people.

6. Unhinge the sash stay → *from page 303*.

7. Push down on the lifting mishandling device and move the handle to the turn position.

Tilt&Turn hardware

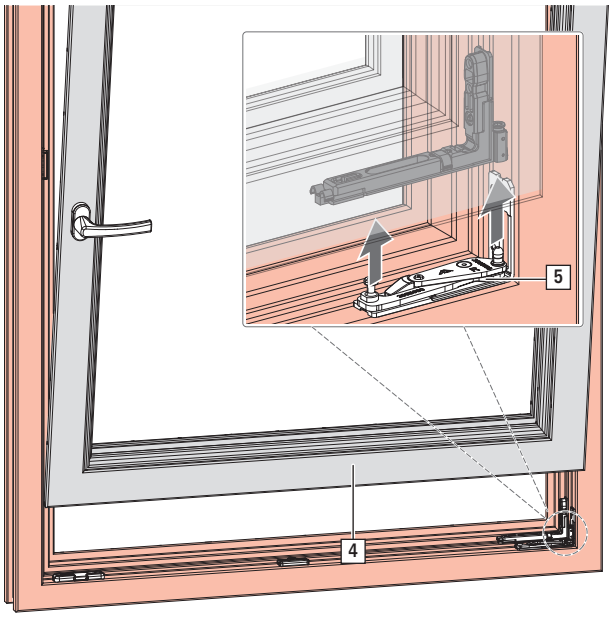


TiltFirst hardware



8. Close the sash.

9. With the sash [4] slightly tilted, lift it out of the pivot rest [5].

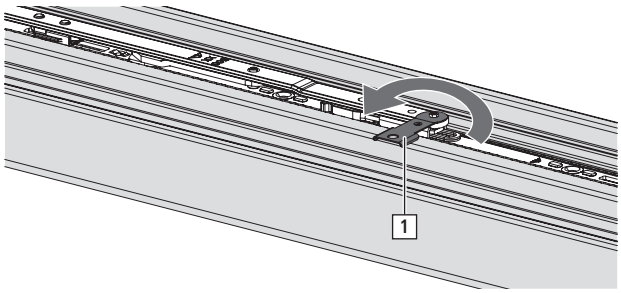


12.3 Unhinging the sash stay

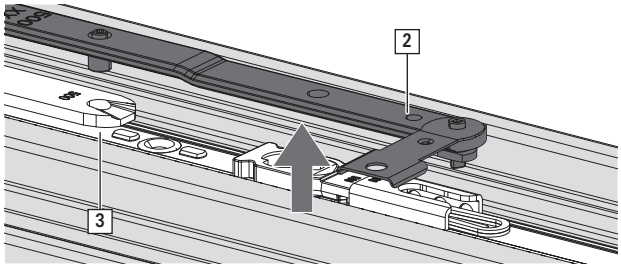
⇨ Sash is in the tilt position.

1. Turn the bayonet plate [1] 90° while lifting it slightly.

WARNING
An unsecured sash may pose a risk of death!
The sash may fall during dismantling if it is no longer connected to the frame.
- Secure the sash to prevent it from falling, e.g. by using two people.



2. Detach the stay arm [2] from the stay guide [3].



3. Push down on the lifting mishandling device (if fitted).

4. Move the handle to the turn position.

Tilt&Turn hardware

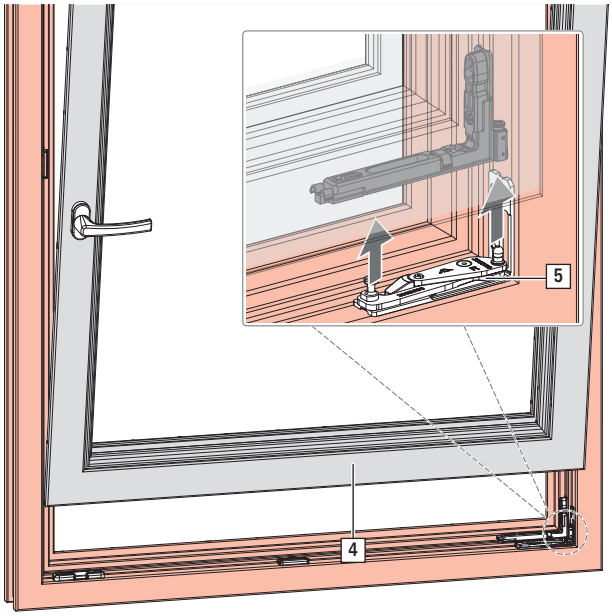


TiltFirst hardware



5. Close the sash.

6. With the sash [4] slightly tilted, lift it out of the pivot rest [5].



12.4 Hardware components

Removing hardware components

1. Undo all screw connections.

2. Remove the hardware components.

3. Dispose of the hardware components properly.

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 re-utilisation 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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