

Roto NX

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

Hinge side Royal

Installation, maintenance and operation instructions
for timber profiles



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1 General information

1.1 Version history

Version	Date	Changes
v0	15/10/2011	Publication
v1	03/04/2023	<p>Incorporation of T&T espagnolette, VT – fixed handle height → <i>from page 32</i></p> <p>Incorporation of lever-operated espagnolette Plus → <i>from page 137</i></p> <p>Concept of centre lock RC 1 N and RC 2 / RC 2 N changed → <i>from page 30</i></p> <p>Position of centre closer for Tilt-Only hardware changed → <i>from page 196</i></p> <p>Cropping of the lever-operated espagnolette, standard changed → <i>from page 172</i></p> <p>Application range changed → <i>from page 26</i></p>

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:

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

Compliance with the following guidelines is additionally recommended:

- TLE.01 by the VFF (German Window and Facade Association) Correct handling of ready-to-install windows and external doors during transport, storage and installation,

- WP.01 by the VFF (German Window and Facade Association) Maintenance of windows, facades and external doors – Maintenance, care and inspection – Information for sales,
- WP.02 by the VFF (German Window and Facade Association) Maintenance of windows, facades and external doors – Maintenance, care and inspection – Measures and documents,
- WP.03 by the VFF (German Window and Facade Association) Maintenance of windows, facades and external doors – Maintenance, care and inspection – Maintenance agreement.

Storing the instructions

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

Explanation of the markings

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

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



INFO

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



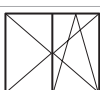
INFO

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

1.3 Symbols

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

1.4 Pictographs

Symbol	Meaning
	Sash rebate width
	Sash rebate height
	Sash weight
 	Timber
	Turn-Only sash
	Tilt&Turn sash
	Tilt-Only sash
	Floating-mullion sash

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

Symbol	Meaning
	Sash rebate width
	Sash rebate height
	Sash weight
	Fixed handle height
	Centred / variable handle height
	Size
	Information
	Fixed toggle lever position
	Centred / variable toggle lever position
	Couplable
	Length
Nº	Material number
	Installation type
	Lifting mishandling device
	Surface
	Position
	Profile
	Number of welded-on strikers
	Number of locking cams

Symbol	Meaning
	Type of locking cams
	Bullet catch
	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
SRH	Sash rebate height
S.kg	Sash weight
HH	Handle height
BSec	Basic security
IMO	Installation instructions
Y	Yes
kg	Kilograms
KU	Couplable
mm	Millimetres
CL	Centre lock
N	No
Nm	Torque in newton metres
LMD	Lifting mishandling device
Not sh.	Not shown
RC	Resistance class
BC	Bullet catch
SEC	Security
ST	Striker

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 manufac-

turers or hardware dealers and further process the hardware by integrating it in windows and balcony doors.

Building element dealers or installation companies

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

Builders

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

End users

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

1.8 Target groups' obligation to give instructions



INFO

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

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

Responsibility of hardware dealers

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

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

Responsibility of the window and balcony door manufacturer

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

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

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

Responsibility of building element dealers and the installation company

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

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

Responsibility of the builder

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

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

1.9 Copyright protection

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

1.10 Limitation of liability

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

The hardware manufacturer assumes no liability for damage caused by:

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

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

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

The warranty only covers original Roto components.

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

1.11 Preserving the surface finish



ATTENTION

Surface treatments may cause property damage.

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

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



ATTENTION

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

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

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



ATTENTION

Contamination may cause property damage.

Contamination prevents components working properly.

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



ATTENTION

(Permanently) damp room air may cause property damage.

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

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

2 Security

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

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

2.1 Presentation and structure of warning instructions

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



DANGER

Nature and source of the danger.

Explanation and description of the danger and the implications.

- Measures to take to avert the danger.

2.2 Security levels of warning instructions

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



DANGER

Immediate risk of death or serious injuries.

- Observe these warning instructions to avoid personal injuries.



WARNING

Potential risk of death or serious injuries.

- Observe these warning instructions to avoid personal injuries.



CAUTION

Risk of injuries

- Observe these warning instructions to avoid personal injuries.



ATTENTION

Reference to property or environmental damage.

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

2.3 Stipulated use

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



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

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

2.3.1 Misuse

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



WARNING

Misuse may pose a risk of death!

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

- ▶ Only use hardware combinations that have been approved by the hardware manufacturer.
- ▶ Only use original accessories or those that have been approved by the hardware manufacturer.
- ▶ Note the product-related documentation → *from page 10*.

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 10*.

2.5 Basic safety information

The following hazards may arise when handling the product:

2.5.1 Installation

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

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

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

Heavy loads pose a risk of injury.

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

- ▶ Note the applicable accident prevention regulations.



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

Physical overexertion may be harmful to health.

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

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

2.5.2 Use

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

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

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

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

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

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

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

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

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

Misuse poses a risk of injury and property damage.

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

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

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

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

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

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

2.5.3 Ambient conditions

Physical and chemical influences may result in property damage.

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

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

Moisture may cause property damage.

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

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

Open all windows and balcony doors for approximately 15 minutes so that the air in the room can be completely replaced.

- ▶ Provide adequate ventilation during holiday periods as well.
- ▶ Create a ventilation plan for construction projects if necessary.

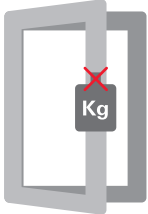
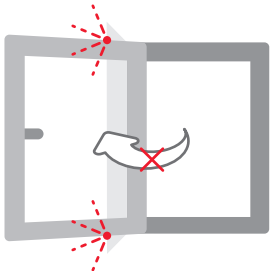
2.6 Operation

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

Safety symbols and markings

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



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

3 Information on the product

3.1 General hardware characteristics

- Central locking system fully 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 via:
 - E locking cam: gasket compression adjustable eccentric cam
 - P locking cam: gasket compression adjustable security eccentric cam
 - V locking cam: gasket compression and height adjustable security eccentric cam
- Stay bearing and pivot rest fully 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.
- The floating mullion and gearbox / lock casing are connected simply without screws thanks to the EasyMix system with high backsets ≥ 25 mm.
- Custom options for adapting the Roto NX hardware system to different security requirements – from basic security up to tested security windows with RC classification in accordance with DIN EN 1627-1630.
- High-quality Roto Sil surface (matt silver) for maximum corrosion resistance (DIN EN 13126 / 8 and free from chromium VI compounds).
In combination with Roto Sil, Roto Sil Level 6 is an advanced standard for connection components subject to high stress, such as rivets, bolts and sliding elements.
- Ten-year warranty for the functionality of the hardware.

3.2 General information

Hardware functional safety

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

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

Product liability regulations

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

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

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

Sash weight	Tractive force in newtons (N)
60 kg	1650 N
70 kg	1900 N
80 kg	2200 N



INFO

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

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

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

Product liability – liability exclusion

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

The warranty only covers original Roto components.

Profile classification – application ranges

The individual application diagrams must strictly be complied with.

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

3.3 Application diagrams

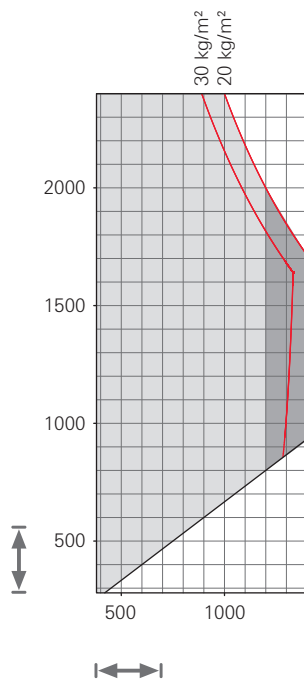
3.3.1 Turn-Only / Tilt&Turn hardware for rectangular windows



INFO

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

80 kg



= Impermissible application range

= Additional stay arm required

Test and calculation principles:

Tilt&Turn test – hardware certification programme in accordance with EN 13126-8:2017 class H2

Additional loads in accordance with EN 14608 are not taken into consideration.

Requirements for using the application diagram:

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

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

Comply with the following values for all profile systems:

Deductible dimension of glass $C_G \geq 28$ mm

Profile weight $PW \leq 3.25$ kg/m

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

1 mm/m² glass thickness ≈ 2.5 kg

Application range

Window		Basic security	RC 1 N	RC 2 / RC 2 N
	Sash rebate width	380 – 1400 mm	380 – 1400 mm	570 – 1400 mm
	Sash rebate height	280 – 2400 mm	350 – 2400 mm	465 – 2400 mm
	Sash weight	Max. 80 kg	Max. 80 kg	Max. 80 kg



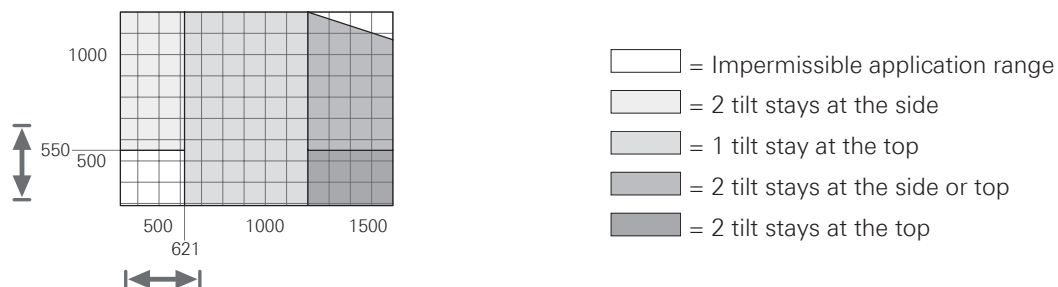
INFO

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

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



3.3.2 Tilt-Only hardware for rectangular windows



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

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

Application range

Basic security		
	Sash rebate width	450 – 1600 mm
	Sash rebate height	480 – 1200 mm
	Sash weight	Max. 80 kg



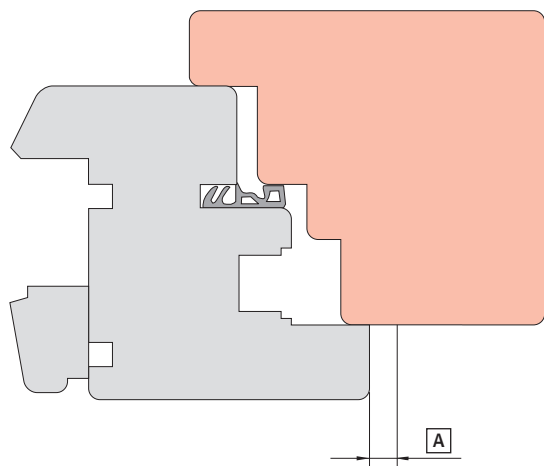
INFO

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

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

3.4 Frame clearances

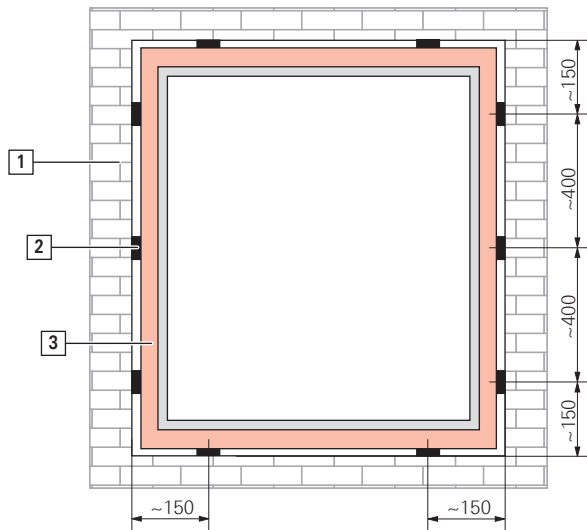
3.4.1 Hinge side Royal



Frame clearances with a 20 mm overlap width.

Hardware axis	Sash weight	Opening angle	Frame clearance [A]
9	60 / 80 kg	approx. 90°	5.0
13	60 / 80 kg	approx. 90°	5.0

3.5 Fastening suggestion for security windows



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



INFO

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

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



4 Hardware overviews

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

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

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

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

The actual composition of the hardware depends on:

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

Application range

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

Anwendungsbereich

FFB: 290 - 1600 mm

[A] — **FFH:** 430 - 2800 mm

FG: max. 150 kg

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

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

Example

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

**INFO****Resistance classes**

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

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

Recommended handles can be found in the Roto Handles catalogue.

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

**INFO****Roto Con Orders**

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

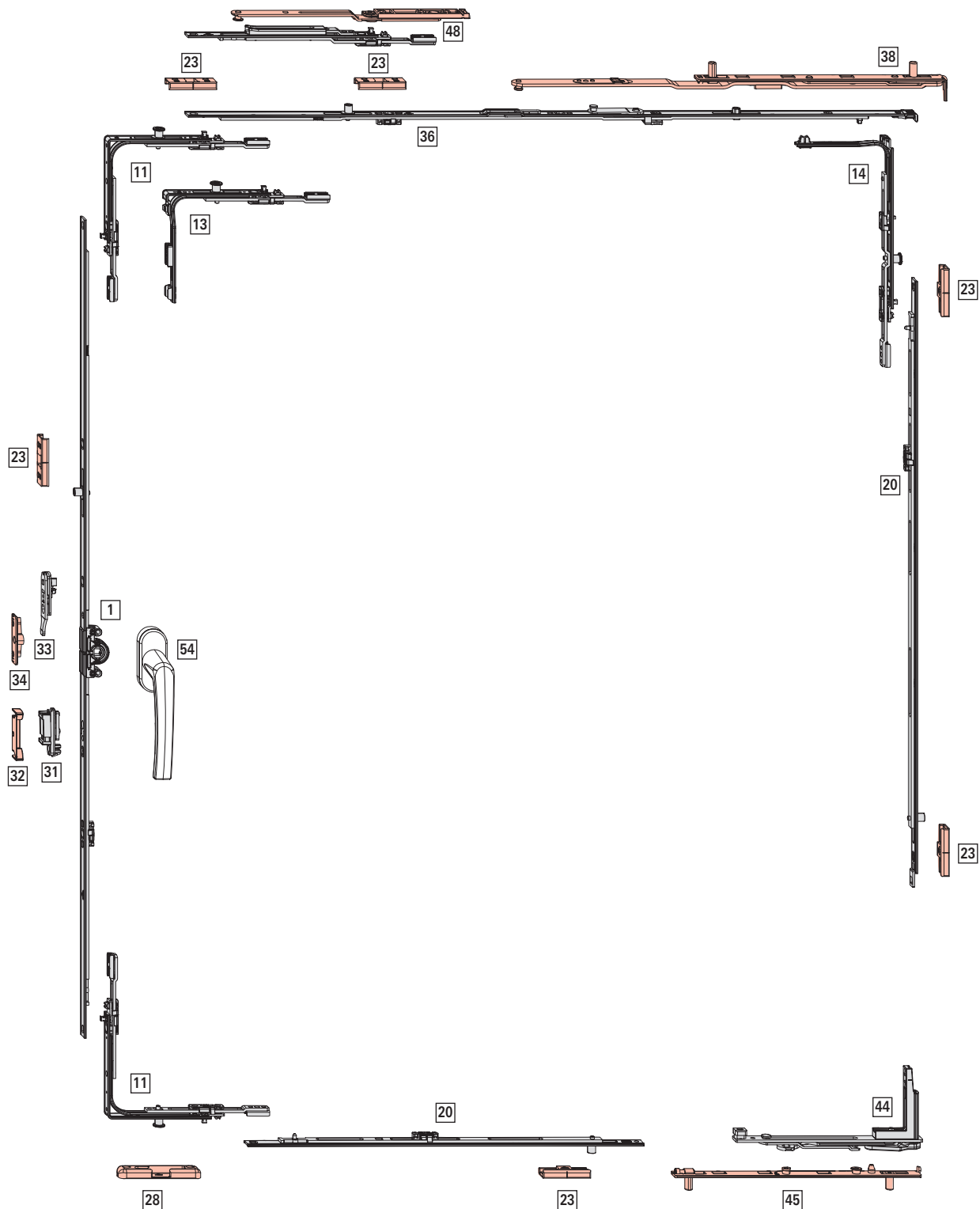


www.roto-frank.com

4.1 T&T espagnolette, VT – fixed handle height

4.1.1 Tilt&Turn hardware

4.1.1.1 Basic security





Application range

SRW: 380 – 1400 mm

SRH: 280 – 2400 mm

S.kg: max. 80 kg

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

								Nº
280 – 570	120	460	Y	N	–	–	–	742199
511 – 710	170	600	Y	Y	–	–	–	795324
601 – 800	263	690	N	Y	–	–	–	619591
801 – 1000	413	890	N	Y	1	E	–	619592
1001 – 1200	513	1090	N	Y	1	E	–	619593
1201 – 1400	563	1290	N	Y	1	E	–	619594
1401 – 1600	563	1490	N	Y	2	E	–	619595
1601 – 1800	563	1690	N	Y	2	E	–	619596
1601 – 1800	1000	1690	N	Y	2	E	–	838345
1801 – 2000	1000	1890	N	Y	2	E	–	794637
2001 – 2200	1000	2090	N	Y	2	E	–	795280
2201 – 2400	1000	2290	N	Y	2	E	–	795282



INFO

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

[11] Standard corner drive

			Nº
1	E	Top	260275
1	P	Top Bottom	260277

[13] Special short corner drive

			Nº
1	E	Top	260280
1	P	Top Bottom	260282

For use with SRH ≤ 370 mm.

[14] Sash stay corner drive

				Nº
250	360 – 800	1	P	617126
450	801 – 1400	1	P	260286



INFO

No sash stay corner drive is possible with SRH 280 – 360.

Screw the sash stay corner drive 250 onto the connecting rod groove before fitting the stay guide 250.

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

				Nº
400	N	1	E	255280

				Nº
600	N	1	E	255281
600	Y	1	E	255282

Size-specific combinations:

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

[23] Striker → from page 149

[28] Tilt striker → from page 147

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

	Nº
Bullet catch sash component	788363

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

[33] Lifting mishandling device sash component

	Nº
Sash component for lifting mishandling device	795927

[34] Lifting mishandling device frame component

[36] Stay guide – basic security

							Nº
360 – 410	300	50	250	–	–	Roto Sil	570222
411 – 600	490	190	250	–	–	Roto Sil	570223
601 – 800	690	200	250	–	–	Roto Sil	570224
801 – 1000	890	200	450	1	E	Roto Sil	570345
1001 – 1200	1090	200	450	1	E	Roto Sil	570346

[38] Stay arm

				Nº
250	360 – 800	18	Left	263331
			Right	263245
		20	Left	254264
			Right	254265
450	801 – 1400	18	Left	563069
			Right	563068
		20	Left	254266
			Right	254267



INFO

With SRH < 500 mm, set the tilt depth to 90 mm.

[44] Corner hinge

					Nº
9	18	12	max. 80 kg	Left	254023
9		12	max. 80 kg	Right	254025
9	20	12	max. 80 kg	Left	254026
13					
9		12	max. 80 kg	Right	254028
13					

[45] Pivot rest

					Nº
9	18	12	max. 80 kg	Left	257123
9		12	max. 80 kg	Right	280425
9	20	12	max. 80 kg	Left	254035
13					
9		12	max. 80 kg	Right	254038
13					

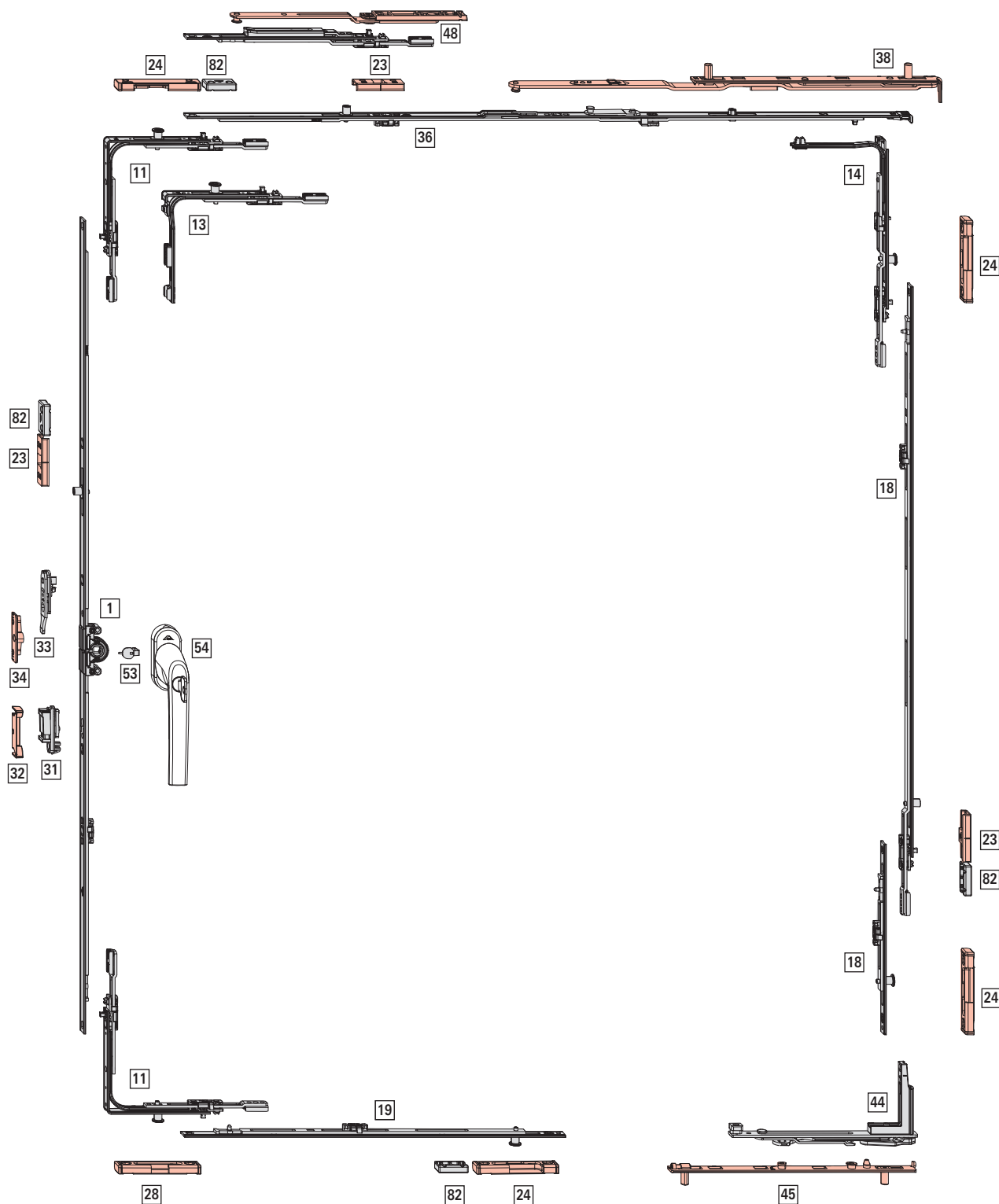
[48] Additional stay arm (SRW ≥ 1201 mm)

		Nº
Frame and sash component	200	255237

[54] Handle → CTL_1



4.1.1.2 RC 1 N



**Application range****SRW:** 380 – 1400 mm**SRH:** 350 – 2400 mm**S.kg:** max. 80 kg**[1] T&T espagnolette, VT – fixed handle height, backset 15 mm**

								Nº
280 – 570	120	460	Y	N	–	–	–	742199
511 – 710	170	600	Y	Y	–	–	–	795324
601 – 800	263	690	N	Y	–	–	–	619591
801 – 1000	413	890	N	Y	1	E	–	619592
1001 – 1200	513	1090	N	Y	1	E	–	619593
1201 – 1400	563	1290	N	Y	1	E	–	619594
1401 – 1600	563	1490	N	Y	2	E	–	619595
1601 – 1800	563	1690	N	Y	2	E	–	619596
1601 – 1800	1000	1690	N	Y	2	E	–	838345
1801 – 2000	1000	1890	N	Y	2	E	–	794637
2001 – 2200	1000	2090	N	Y	2	E	–	795280
2201 – 2400	1000	2290	N	Y	2	E	–	795282

[11] Standard corner drive

		Nº
1	P	260277

[13] Special short corner drive

		Nº
1	P	260282

For use with SRH ≤ 370 mm.

[14] Sash stay corner drive

				Nº
250	360 – 800	1	P	617126
450	801 – 1400	1	P	260286

Screw the sash stay corner drive 250 onto the connecting rod groove before fitting the stay guide 250.

[18] Multipart centre lock – standard, vertical

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

Size-specific combinations:

CL with SRW 380 – 570

				Nº
465 – 700	200	1	P	255284
701 – 900	400	1	P	255285
901 – 1100	600	1	P	255286
1101 – 1300	600 KU	1	E	255282
	200	1	P	255284

				Nº
1301 – 1500	600 KU	1	E	255282
	400	1	P	255285
1501 – 1700	600 KU	1	E	255282
	600	1	P	255286
1701 – 1900	600 KU	1	E	255282
	600 KU	1	E	255282
	200	1	P	255284
1901 – 2100	600 KU	1	E	255282
	600 KU	1	E	255282
	400	1	P	255285
2101 – 2400	600 KU	1	E	255282
	600 KU	1	E	255282
	600	1	P	255286

CL with SRW 571 – 1400

				Nº
801 – 1200	400	1	P	255285
1201 – 1400	600	1	P	255286
1401 – 1800	600 KU	1	E	255282
	400	1	P	255285
1801 – 2000	600 KU	1	E	255282
	600	1	P	255286
2001 – 2400	600 KU	1	E	255282
	600 KU	1	E	255282
	400	1	P	255285

[19] Multipart centre lock – standard, horizontal

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

Size-specific combinations:

				Nº
571 – 770	200	1	P	255284
771 – 970	400	1	P	255285
971 – 1170	600	1	P	255286
1171 – 1370	600 KU	1	E	255282
	200	1	P	255284
1371 – 1400	600 KU	1	E	255282
	400	1	P	255285

[23] Striker → from page 149**[24] Security striker** → from page 149**[28] Tilt striker** → from page 147**[31] Bullet catch sash component** (optional SRH ≥ 1601 mm)

	Nº
Bullet catch sash component	788363

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

	Nº
Sash component for lifting mishandling device	795927

[34] Lifting mishandling device frame component**[36] Stay guide – basic security**

								Nº
360 – 410	300	50	250	–	–	Roto Sil		570222
411 – 600	490	190	250	–	–	Roto Sil		570223
601 – 800	690	200	250	–	–	Roto Sil		570224
801 – 1000	890	200	450	1	E	Roto Sil		570345
1001 – 1200	1090	200	450	1	E	Roto Sil		570346

[38] Stay arm

					Nº
250	360 – 800	18	Left		263331
			Right		263245
		20	Left		254264
			Right		254265
450	801 – 1400	18	Left		563069
			Right		563068
		20	Left		254266
			Right		254267

**INFO**

With SRH < 500 mm, set the tilt depth to 90 mm.

[44] Corner hinge

					Nº
9	18	12	max. 80 kg	Left	254023
9		12	max. 80 kg	Right	254025
9	20	12	max. 80 kg	Left	254026
13					
9		12	max. 80 kg	Right	254028
13					

[45] Pivot rest

					Nº
9	18	12	max. 80 kg	Left	257123
9		12	max. 80 kg	Right	280425



9	20	12	max. 80 kg	Left	254035
13					
9		12	max. 80 kg	Right	254038
13					

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

Frame and sash component	200	255237
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[53] Drilling protection

Drilling protection	797819
---------------------	--------

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

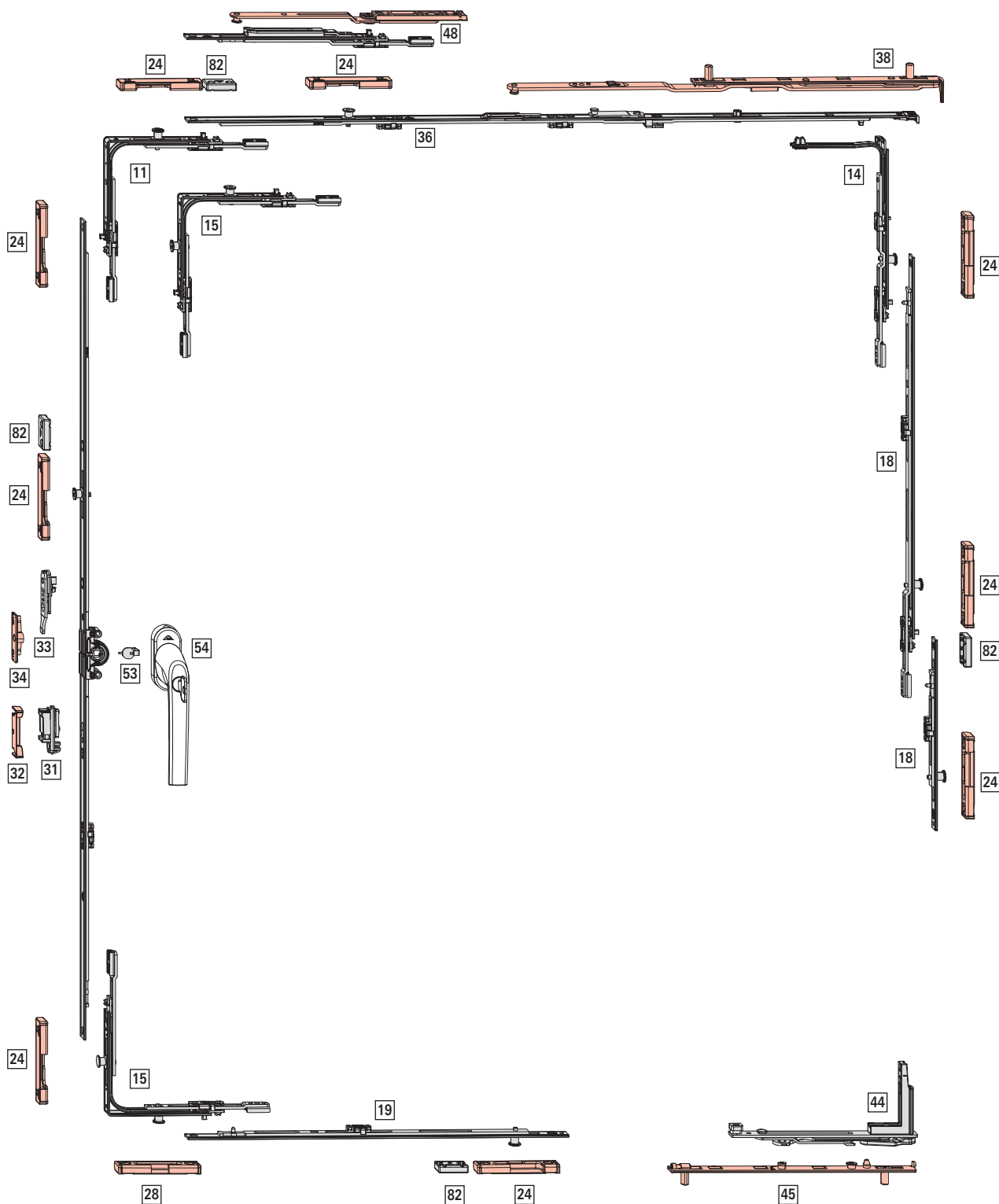
13	From rebate depth 24 mm	792786
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**INFO**

Only for hardware axis 13 and from a rebate depth of 24 mm.



4.1.1.3 RC 2 / RC 2 N



**Application range****SRW:** 570 – 1400 mm**SRH:** 465 – 2400 mm**S.kg:** max. 80 kg**[1] T&T espagnolette, VT – fixed handle height, backset 15 mm**

							Nº
280 – 570	120	460	Y	N	–	–	742199
511 – 710	170	600	Y	Y	–	–	795324
601 – 800	263	690	N	Y	–	–	619591
801 – 1000	413	890	N	Y	1	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

[11] Standard corner drive

#		Nº
1	V	260272

[14] Sash stay corner drive

				Nº
250	360 – 800	1	V	617127
450	801 – 1400	1	V	260284

Screw the sash stay corner drive 250 onto the connecting rod groove before fitting the stay guide 250.

[15] Standard corner drive (RC3)

		Nº
2	V	260274

For use at the top with SRH ≤ 800 mm.

[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:

				Nº
465 – 800	200	1	V	296853
801 – 1000	400	1	V	296854
1001 – 1200	600	1	V	296855
1201 – 1400	600 KU	1	V	337711
	200	1	V	296853
1401 – 1600	600 KU	1	V	337711
	400	1	V	296854

		 #		Nº
1601 – 1800	600 KU	1	V	337711
	600	1	V	296855
1801 – 2000	600 KU	1	V	337711
	600 KU	1	V	337711
	200	1	V	296853
2001 – 2200	600 KU	1	V	337711
	600 KU	1	V	337711
	400	1	V	296854
2201 – 2400	600 KU	1	V	337711
	600 KU	1	V	337711
	600	1	V	296855

[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:

				Nº
571 – 770	200	1	V	296853
771 – 970	400	1	V	296854
971 – 1170	600	1	V	296855
1171 – 1370	600 KU	1	V	337711
1371 – 1400	200	1	V	296853
	600 KU	1	V	337711
	400	1	V	296854

[24] Security striker → from page 149**[28] Tilt striker → from page 147****[31] Bullet catch sash component (optional SRH ≥ 1601 mm)**

Bullet catch sash component	788363

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

Sash component for lifting mishandling device	795927

[34] Lifting mishandling device frame component**[36] Stay guide – security**

						Nº
411 – 600	490	190	250	–	–	570223
601 – 800	690	200	250	–	–	570224
801 – 1000	890	200	450	1	V	601551
1001 – 1200	1090	200	450	1	V	601552

[38] Stay arm

				Nº
250	360 – 800	18	Left	263331
			Right	263245
		20	Left	254264
			Right	254265
450	801 – 1400	18	Left	563069
			Right	563068
		20	Left	254266
			Right	254267

[44] Corner hinge

					Nº
9	18	12	max. 80 kg	Left	254023
9		12	max. 80 kg	Right	254025
9	20	12	max. 80 kg	Left	254026
13					
9		12	max. 80 kg	Right	254028
13					

[45] Pivot rest

					Nº
9	18	12	max. 80 kg	Left	257123
9		12	max. 80 kg	Right	280425
9	20	12	max. 80 kg	Left	254035
13					
9		12	max. 80 kg	Right	254038
13					

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

		Nº
Frame and sash component	200	255237

[53] Drilling protection

	Nº
Drilling protection	797819

[54] Handle, lockable → CTL_1

Optional

[82] Anti-jemmy device

		Nº
13	From rebate depth 24 mm	792786



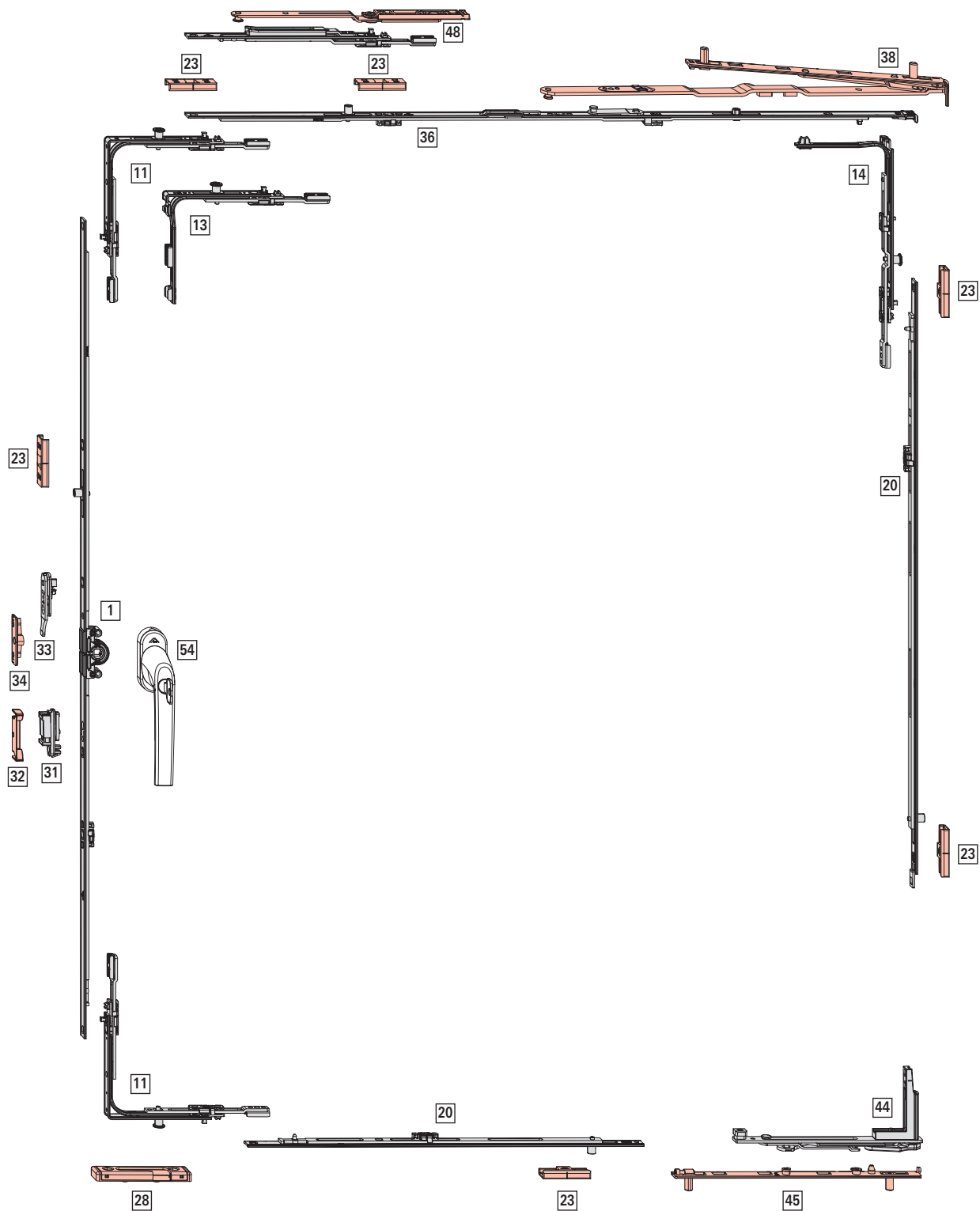
INFO

Only for hardware axis 13 and from a rebate depth of 24 mm.



4.1.2 TiltFirst hardware

4.1.2.1 Basic security



**Application range****SRW:** 380 – 1400 mm**SRH:** 280 – 2400 mm**S.kg:** max. 80 kg**[1] T&T espagnolette, VT – fixed handle height, backset 15 mm**

								Nº
280 – 570	120	460	Y	N	–	–	–	742199
511 – 710	170	600	Y	Y	–	–	–	795324
601 – 800	263	690	N	Y	–	–	–	619591
801 – 1000	413	890	N	Y	1	E	–	619592
1001 – 1200	513	1090	N	Y	1	E	–	619593
1201 – 1400	563	1290	N	Y	1	E	–	619594
1401 – 1600	563	1490	N	Y	2	E	–	619595
1601 – 1800	563	1690	N	Y	2	E	–	619596
1601 – 1800	1000	1690	N	Y	2	E	–	838345
1801 – 2000	1000	1890	N	Y	2	E	–	794637
2001 – 2200	1000	2090	N	Y	2	E	–	795280
2201 – 2400	1000	2290	N	Y	2	E	–	795282

**INFO**

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

[11] Standard corner drive

			Nº
1	E	Top	260275
1	P	Top Bottom	260277

[13] Special short corner drive

			Nº
1	E	Top	260280
1	P	Top Bottom	260282

For use with SRH ≤ 370 mm.

[14] Sash stay corner drive

				Nº
250	360 – 800	1	P	617126
450	801 – 1400	1	P	260286

**INFO**

No sash stay corner drive is possible with SRH 280 – 360.

Screw the sash stay corner drive 250 onto the connecting rod groove before fitting the stay guide 250.

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

				Nº
400	N	1	E	255280

				Nº
600	N	1	E	255281
600	Y	1	E	255282

Size-specific combinations:

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

[23] Striker → from page 149**[28] Tilt striker TiltFirst****[31] Bullet catch sash component (optional SRH ≥ 1601 mm)**

	Nº
Bullet catch sash component	788363

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

	Nº
Sash component for lifting mishandling device	795927

[34] Lifting mishandling device frame component**[36] Stay guide – basic security**

							Nº
360 – 410	300	50	250	–	–	Roto Sil	570222
411 – 600	490	190	250	–	–	Roto Sil	570223
601 – 800	690	200	250	–	–	Roto Sil	570224
801 – 1000	890	200	450	1	E	Roto Sil	570345
1001 – 1200	1090	200	450	1	E	Roto Sil	570346

[38] Stay arm TiltFirst → from page 145

			Nº
360 – 800	250	Left	324662
360 – 800	250	Right	324863
801 – 1400	450	Left	324864
801 – 1400	450	Right	324865

**INFO**

With SRH < 500 mm, set the tilt depth to 90 mm.

[44] Corner hinge

					Nº
9	18	12	max. 80 kg	Left	254023
9		12	max. 80 kg	Right	254025
9 13	20	12	max. 80 kg	Left	254026
9 13		12	max. 80 kg	Right	254028

[45] Pivot rest

					Nº
9	18	12	max. 80 kg	Left	257123
9		12	max. 80 kg	Right	280425
9 13	20	12	max. 80 kg	Left	254035
9 13		12	max. 80 kg	Right	254038

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

	Nº
Frame and sash component	292022

[54] Handle, lockable → CTL_1



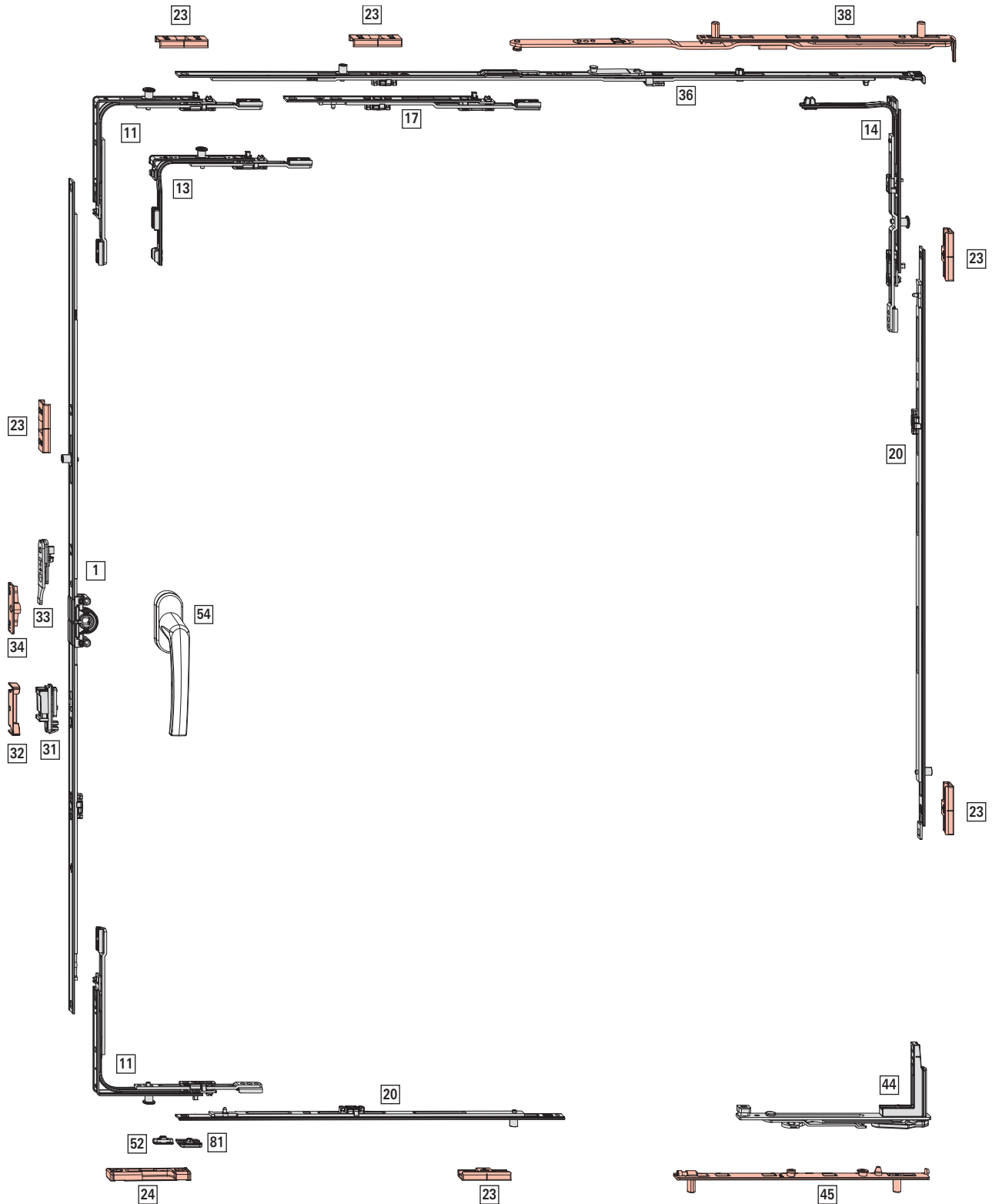
INFO

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



4.1.3 Turn-Only hardware

4.1.3.1 Basic security



**Application range****SRW:** 380 – 1400 mm**SRH:** 280 – 2400 mm**S.kg:** max. 80 kg**[1] T&T espagnolette, VT – fixed handle height, backset 15 mm**

								Nº
280 – 570	120	460	Y	N	–	–	–	742199
511 – 710	170	600	Y	Y	–	–	–	795324
601 – 800	263	690	N	Y	–	–	–	619591
801 – 1000	413	890	N	Y	1	E	–	619592
1001 – 1200	513	1090	N	Y	1	E	–	619593
1201 – 1400	563	1290	N	Y	1	E	–	619594
1401 – 1600	563	1490	N	Y	2	E	–	619595
1601 – 1800	563	1690	N	Y	2	E	–	619596
1601 – 1800	1000	1690	N	Y	2	E	–	838345
1801 – 2000	1000	1890	N	Y	2	E	–	794637
2001 – 2200	1000	2090	N	Y	2	E	–	795280
2201 – 2400	1000	2290	N	Y	2	E	–	795282

**INFO**

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

[11] Standard corner drive

			Nº
1	E	Top	260275
1	P	Top Bottom	260277

[13] Special short corner drive

			Nº
1	E	Top	260280
1	P	Top Bottom	260282

For use with SRH ≤ 370 mm.

[14] Sash stay corner drive

				Nº
250	360 – 800	1	P	617126
450	801 – 1400	1	P	260286

**INFO**

No sash stay corner drive is possible with SRH 280 – 360.

Screw the sash stay corner drive 250 onto the connecting rod groove before fitting the stay guide 250.

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

				Nº
200	Y	–	–	308267

Size-specific combinations:

				Nº
1201 – 1400	200	–	–	308267

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

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

Size-specific combinations:

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

[23] Striker → from page 149**[24] Security striker → from page 149****[31] Bullet catch sash component (optional SRH ≥ 1601 mm)**

	Nº
Bullet catch sash component	788363

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

	Nº
Sash component for lifting mishandling device	795927

[34] Lifting mishandling device frame component**[36] Stay guide – basic security**

							Nº
360 – 410	300	50	250	–	–	Roto Sil	570222
411 – 600	490	190	250	–	–	Roto Sil	570223
601 – 800	690	200	250	–	–	Roto Sil	570224
801 – 1000	890	200	450	1	E	Roto Sil	570345
1001 – 1200	1090	200	450	1	E	Roto Sil	570346

[38] Stay arm

				Nº
250	360 – 800	18	Left	263331
			Right	263245
		20	Left	254264

				Nº
450	801 – 1400	18	Right	254265
			Left	563069
			Right	563068
		20	Left	254266
			Right	254267

[44] Corner hinge

					Nº
9	18	12	max. 80 kg	Left	254023
9		12	max. 80 kg	Right	254025
9 13	20	12	max. 80 kg	Left	254026
9 13		12	max. 80 kg	Right	254028

[45] Pivot rest

					Nº
9	18	12	max. 80 kg	Left	257123
9		12	max. 80 kg	Right	280425
9 13	20	12	max. 80 kg	Left	254035
9 13		12	max. 80 kg	Right	254038

[52] 90° travel restrictor

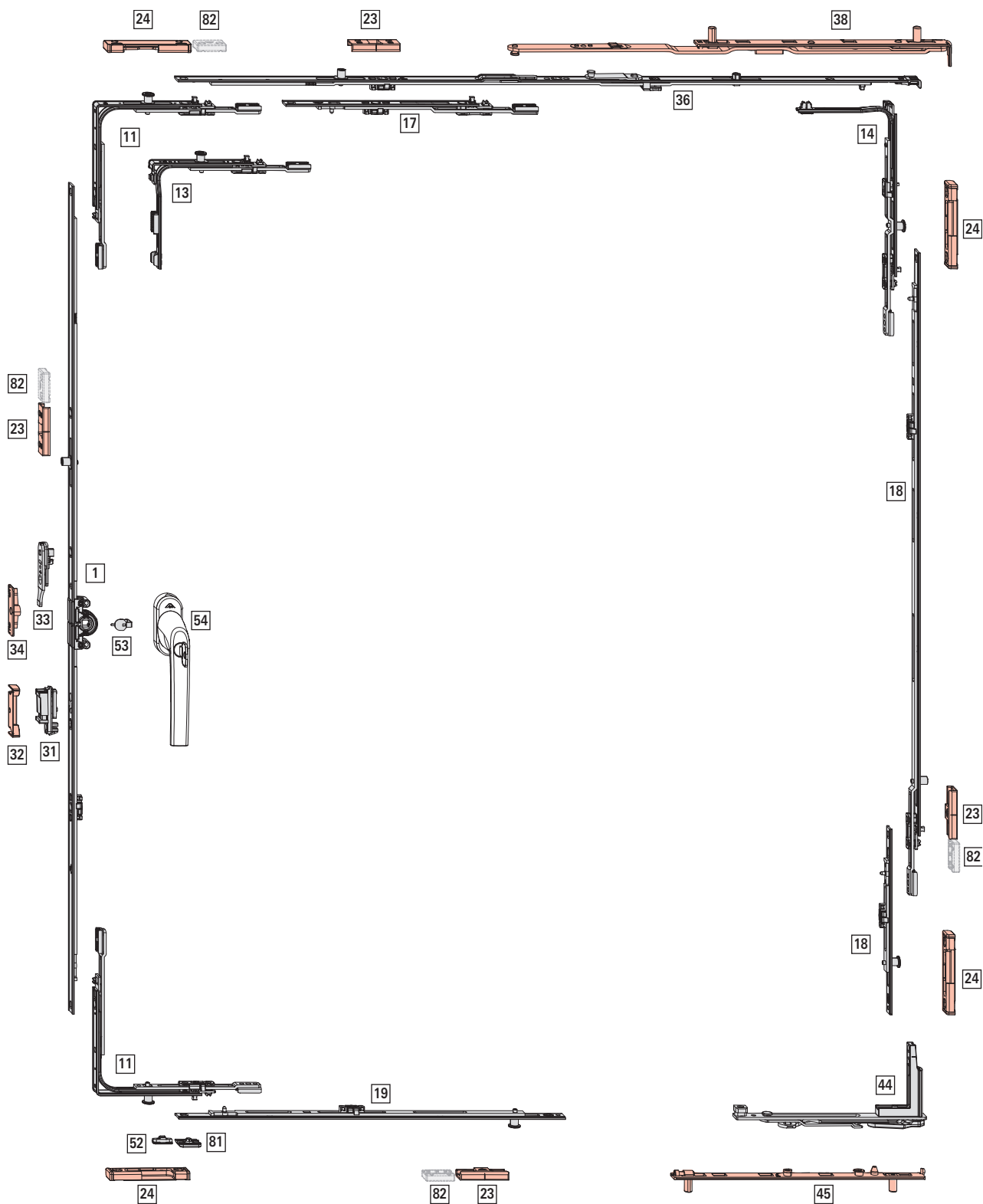
	Nº
Travel restrictor	264603

[54] Handle → CTL_1

	Nº
Sash	350403



4.1.3.2 RC 1 N



**Application range****SRW:** 380 – 1400 mm**SRH:** 350 – 2400 mm**S.kg:** max. 80 kg**[1] T&T espagnolette, VT – fixed handle height, backset 15 mm**

							Nº
280 – 570	120	460	Y	N	–	–	742199
511 – 710	170	600	Y	Y	–	–	795324
601 – 800	263	690	N	Y	–	–	619591
801 – 1000	413	890	N	Y	1	E	619592
1001 – 1200	513	1090	N	Y	1	E	619593
1201 – 1400	563	1290	N	Y	1	E	619594
1401 – 1600	563	1490	N	Y	2	E	619595
1601 – 1800	563	1690	N	Y	2	E	619596
1601 – 1800	1000	1690	N	Y	2	E	838345
1801 – 2000	1000	1890	N	Y	2	E	794637
2001 – 2200	1000	2090	N	Y	2	E	795280
2201 – 2400	1000	2290	N	Y	2	E	795282

[11] Standard corner drive

		Nº
1	P	260277

[13] Special short corner drive

		Nº
1	P	260282

For use with SRH ≤ 370 mm.

[14] Sash stay corner drive

				Nº
250	360 – 800	1	P	617126
450	801 – 1400	1	P	260286

Screw the sash stay corner drive 250 onto the connecting rod groove before fitting the stay guide 250.

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

				Nº
200	Y	–	–	308267

Size-specific combinations:

				Nº
1201 – 1400	200	–	–	308267

[18] Multipart centre lock – standard, vertical

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

				Nº
600	Y	1	E	255282

Size-specific combinations:

CL with SRW 380 – 570

				Nº
465 – 700	200	1	P	255284
701 – 900	400	1	P	255285
901 – 1100	600	1	P	255286
1101 – 1300	600 KU	1	E	255282
	200	1	P	255284
1301 – 1500	600 KU	1	E	255282
	400	1	P	255285
1501 – 1700	600 KU	1	E	255282
	600	1	P	255286
1701 – 1900	600 KU	1	E	255282
	600 KU	1	E	255282
	200	1	P	255284
1901 – 2100	600 KU	1	E	255282
	600 KU	1	E	255282
	400	1	P	255285
2101 – 2400	600 KU	1	E	255282
	600 KU	1	E	255282
	600	1	P	255286

CL with SRW 571 – 1400

				Nº
801 – 1200	400	1	P	255285
1201 – 1400	600	1	P	255286
1401 – 1800	600 KU	1	E	255282
	400	1	P	255285
1801 – 2000	600 KU	1	E	255282
	600	1	P	255286
2001 – 2400	600 KU	1	E	255282
	600 KU	1	E	255282
	400	1	P	255285

[19] Multipart centre lock – standard, horizontal

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

Size-specific combinations:

				Nº
571 – 770	200	1	P	255284
771 – 970	400	1	P	255285
971 – 1170	600	1	P	255286
1171 – 1370	600 KU	1	E	255282
	200	1	P	255284

				Nº
1371 – 1400	600 KU	1	E	255282
	400	1	P	255285

[23] Striker → from page 149

[24] Security striker → from page 149

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

	Nº
Bullet catch sash component	788363

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

	Nº
Sash component for lifting mishandling device	795927

[34] Lifting mishandling device frame component

[36] Stay guide – basic security

							Nº
360 – 410	300	50	250	–	–	Roto Sil	570222
411 – 600	490	190	250	–	–	Roto Sil	570223
601 – 800	690	200	250	–	–	Roto Sil	570224
801 – 1000	890	200	450	1	E	Roto Sil	570345
1001 – 1200	1090	200	450	1	E	Roto Sil	570346

[38] Stay arm

				Nº
250	360 – 800	18	Left	263331
			Right	263245
		20	Left	254264
			Right	254265
450	801 – 1400	18	Left	563069
			Right	563068
		20	Left	254266
			Right	254267

[44] Corner hinge

					Nº
9	18	12	max. 80 kg	Left	254023
9		12	max. 80 kg	Right	254025
9	20	12	max. 80 kg	Left	254026
13					
9		12	max. 80 kg	Right	254028
13					

[45] Pivot rest

					Nº
9	18	12	max. 80 kg	Left	257123
9		12	max. 80 kg	Right	280425
9	20	12	max. 80 kg	Left	254035
13					

					Nº
9		12	max. 80 kg	Right	254038
13					

[52] 90° travel restrictor

	Nº
Travel restrictor	264603

[53] Drilling protection

	Nº
Drilling protection	797819

[54] Handle, lockable → CTL_1

[81] Run-up block

	Nº
Sash	350403

Optional

[82] Anti-jemmy device

		Nº
13	From rebate depth 24 mm	792786

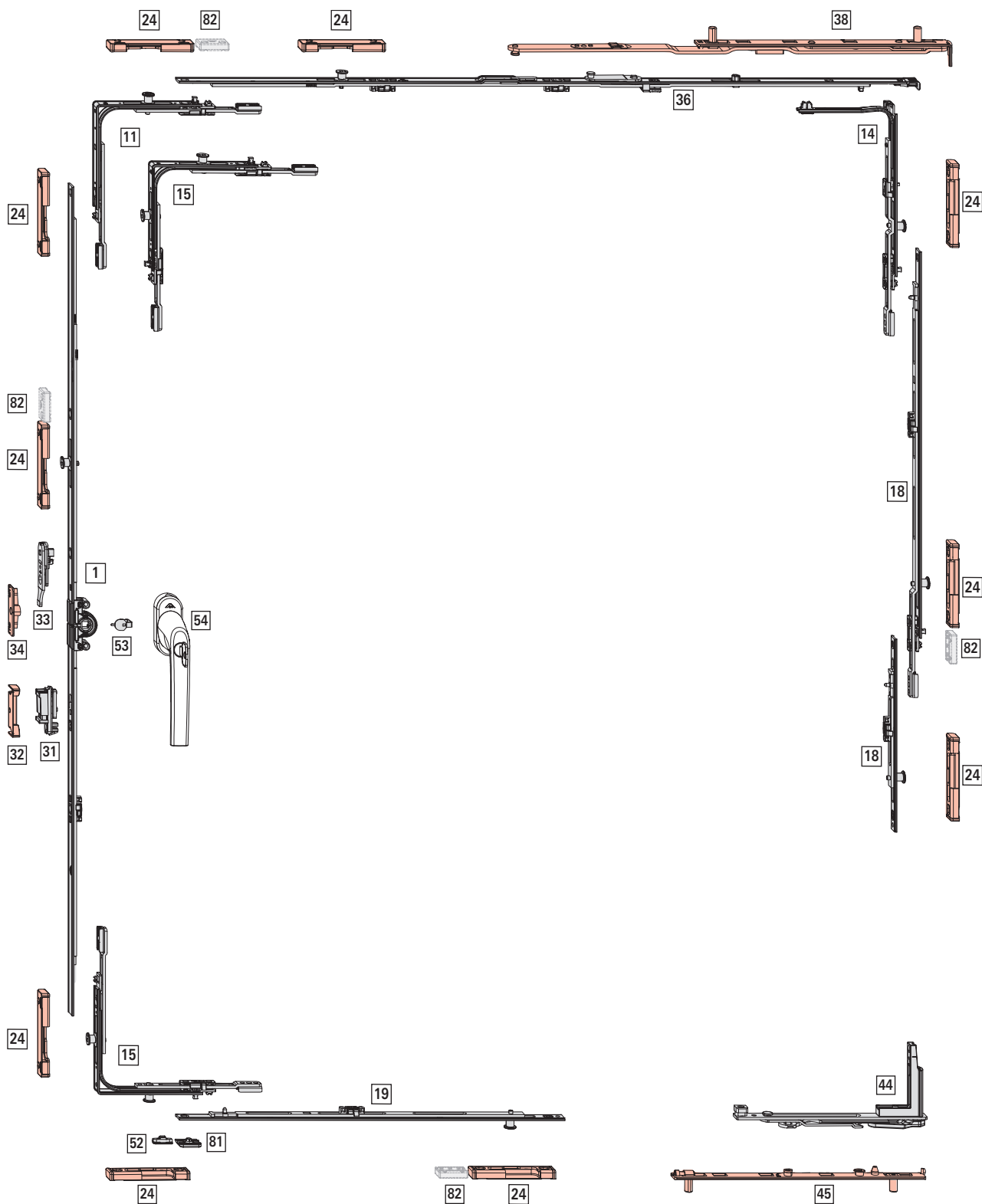


INFO

Only for hardware axis 13 and from a rebate depth of 24 mm.



4.1.3.3 RC 2 / RC 2 N



**Application range****SRW:** 570 – 1400 mm**SRH:** 465 – 2400 mm**S.kg:** max. 80 kg**[1] T&T espagnolette, VT – fixed handle height, backset 15 mm**

								Nº
280 – 570	120	460	Y	N	–	–	–	742199
511 – 710	170	600	Y	Y	–	–	–	795324
601 – 800	263	690	N	Y	–	–	–	619591
801 – 1000	413	890	N	Y	1	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

[11] Standard corner drive

		Nº
1	V	260272

[14] Sash stay corner drive

				Nº
250	360 – 800	1	V	617127
450	801 – 1400	1	V	260284

Screw the sash stay corner drive 250 onto the connecting rod groove before fitting the stay guide 250.

[15] Standard corner drive (RC3)

		Nº
2	V	260274

For use at the top with SRH ≤ 620 mm.

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

				Nº
200	Y	–	–	308267

Size-specific combinations:

				Nº
1201 – 1400	200	–	–	308267

[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:

				Nº
465 – 800	200	1	V	296853
801 – 1000	400	1	V	296854
1001 – 1200	600	1	V	296855
1201 – 1400	600 KU	1	V	337711
	200	1	V	296853
1401 – 1600	600 KU	1	V	337711
	400	1	V	296854
1601 – 1800	600 KU	1	V	337711
	600	1	V	296855
1801 – 2000	600 KU	1	V	337711
	600 KU	1	V	337711
	200	1	V	296853
2001 – 2200	600 KU	1	V	337711
	600 KU	1	V	337711
	400	1	V	296854
2201 – 2400	600 KU	1	V	337711
	600 KU	1	V	337711
	600	1	V	296855

[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:

				Nº
571 – 770	200	1	V	296853
771 – 970	400	1	V	296854
971 – 1170	600	1	V	296855
1171 – 1370	600 KU	1	V	337711
	200	1	V	296853
1371 – 1400	600 KU	1	V	337711
	400	1	V	296854

[24] Security striker → from page 149**[31] Bullet catch sash component (optional SRH ≥ 1601 mm)**

	Nº
Bullet catch sash component	788363

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

	Nº
Sash component for lifting mishandling device	795927

[34] Lifting mishandling device frame component

[36] Stay guide – security

						Nº
411 – 600	490	190	250	–	–	570223
601 – 800	690	200	250	–	–	570224
801 – 1000	890	200	450	1	V	601551
1001 – 1200	1090	200	450	1	V	601552

[38] Stay arm

				Nº
250	360 – 800	18	Left	263331
			Right	263245
		20	Left	254264
			Right	254265
450	801 – 1400	18	Left	563069
			Right	563068
		20	Left	254266
			Right	254267

[44] Corner hinge

					Nº
9	18	12	max. 80 kg	Left	254023
9		12	max. 80 kg	Right	254025
9	20	12	max. 80 kg	Left	254026
13					
9		12	max. 80 kg	Right	254028
13					

[45] Pivot rest

					Nº
9	18	12	max. 80 kg	Left	257123
9		12	max. 80 kg	Right	280425
9	20	12	max. 80 kg	Left	254035
13					
9		12	max. 80 kg	Right	254038
13					

[52] 90° travel restrictor

	Nº
Travel restrictor	264603

[53] Drilling protection

	Nº
Drilling protection	797819

[54] Handle, lockable → CTL_1

[81] Run-up block

	Nº
Sash	350403

Optional

[82] Anti-jemmy device

		Nº
13	From rebate depth 24 mm	792786



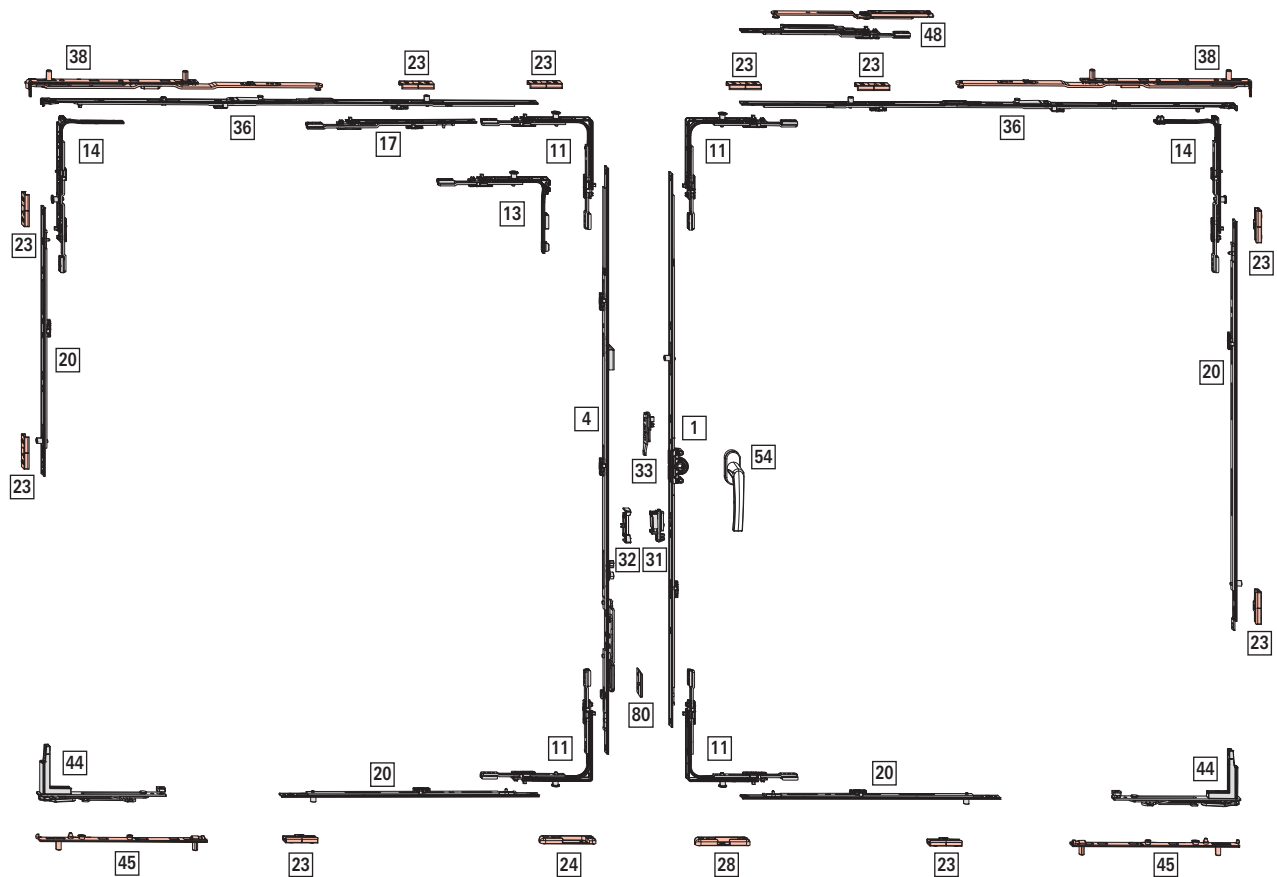
INFO

Only for hardware axis 13 and from a rebate depth of 24 mm.



4.1.4 Floating-mullion hardware

4.1.4.1 Standard – basic security



**Application range****SRW:** 380 – 1400 mm**SRH:** 430 – 2400 mm**S.kg:** max. 80 kg**[1] T&T espagnolette, VT – fixed handle height, backset 15 mm**

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

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

[11] Standard corner drive

			Nº
1	E	Top	260275
1	P	Top Bottom	260277

[13] Special short corner drive

			Nº
1	E	Top	260280
1	P	Top Bottom	260282

For use on the second opening sash: SRH ≤ 510 mm

Use → “Possible combinations” from page 137

[14] Sash stay corner drive

				Nº
250	360 – 800	1	P	617126
450	801 – 1400	1	P	260286

Screw the sash stay corner drive 250 onto the connecting rod groove before fitting the stay guide 250.

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

				Nº
200	Y	–	–	308267

Size-specific combinations:

				Nº
1201 – 1400	200	–	–	308267

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

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

Size-specific combinations:

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

[23] Striker → from page 149**[24] Security striker → from page 149****[28] Tilt striker → from page 147****[31] Bullet catch sash component (optional SRH ≥ 1601 mm)**

	Nº
Bullet catch sash component	788363

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

	Nº
Sash component for lifting mishandling device	795927

[36] Stay guide – basic security

							Nº
360 – 410	300	50	250	–	–	Roto Sil	570222
411 – 600	490	190	250	–	–	Roto Sil	570223
601 – 800	690	200	250	–	–	Roto Sil	570224
801 – 1000	890	200	450	1	E	Roto Sil	570345

							Nº
1001 – 1200	1090	200	450	1	E	Roto Sil	570346

[38] Stay arm

				Nº
250	360 – 800	18	Left	263331
			Right	263245
		20	Left	254264
			Right	254265
450	801 – 1400	18	Left	563069
			Right	563068
		20	Left	254266
			Right	254267



INFO

With SRH < 500 mm, set the tilt depth to 90 mm.

[44] Corner hinge

					Nº
9	18	12	max. 80 kg	Left	254023
9		12	max. 80 kg	Right	254025
9	20	12	max. 80 kg	Left	254026
13					
9		12	max. 80 kg	Right	254028
13					

[45] Pivot rest

					Nº
9	18	12	max. 80 kg	Left	257123
9		12	max. 80 kg	Right	280425
9	20	12	max. 80 kg	Left	254035
13					
9		12	max. 80 kg	Right	254038
13					

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

		Nº
Frame and sash component	200	255237

[54] Handle → CTL_1

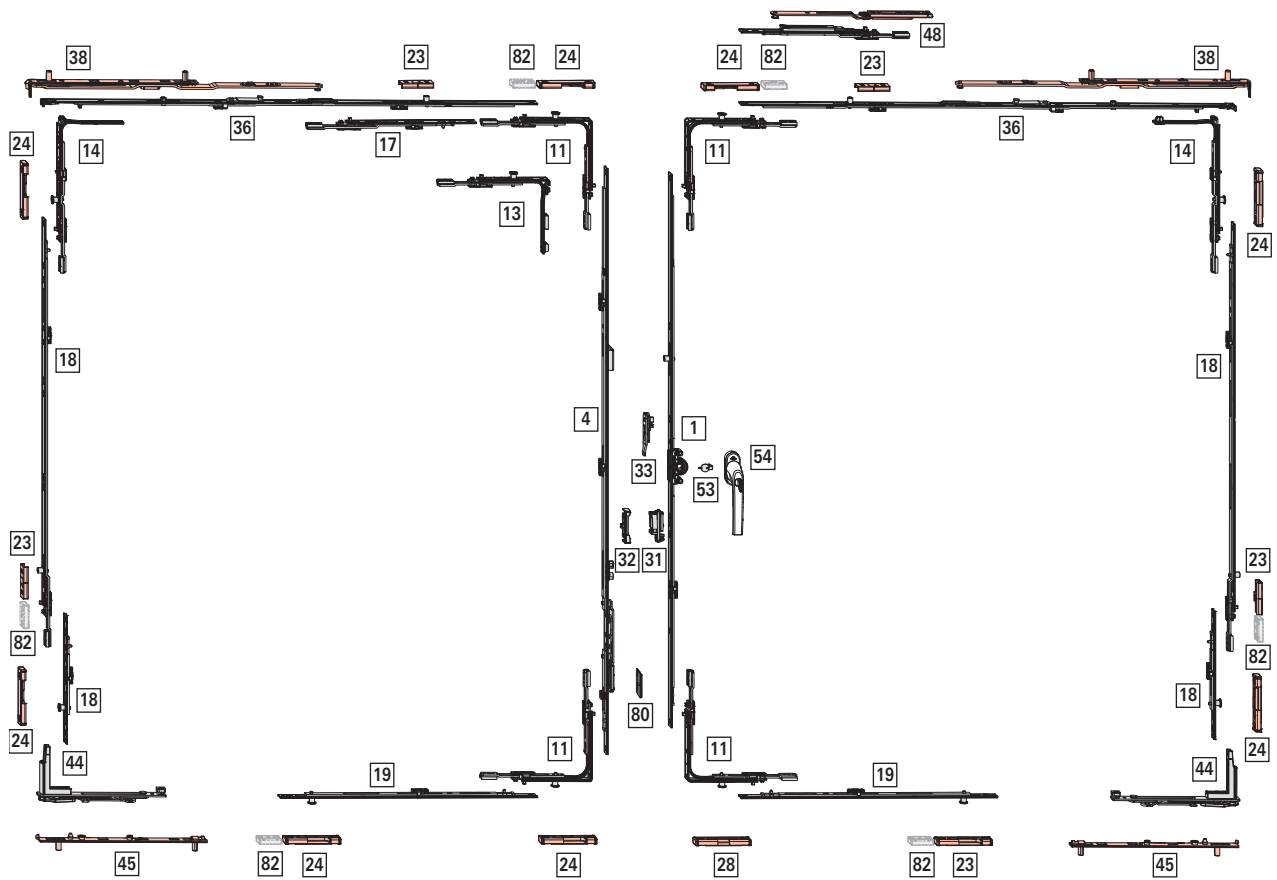
[80] Fastening plate

	Nº
Fastening plate with cam	255211

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



4.1.4.2 Standard – RC 1 N



**Application range****SRW:** 380 – 1400 mm**SRH:** 430 – 2400 mm**S.kg:** max. 80 kg**[1] T&T espagnolette, VT – fixed handle height, backset 15 mm**

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

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

[11] Standard corner drive

		Nº
1	P	260277

[13] Special short corner drive

		Nº
1	P	260282

For use on the second opening sash: SRH ≤ 510 mm

Use → “Possible combinations” from page 137

[14] Sash stay corner drive

				Nº
250	360 – 800	1	P	617126
450	801 – 1400	1	P	260286

Screw the sash stay corner drive 250 onto the connecting rod groove before fitting the stay guide 250.

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

				Nº
200	Y	–	–	308267

Size-specific combinations:

				Nº
1201 – 1400	200	–	–	308267

[18] Multipart centre lock – standard, vertical

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

Size-specific combinations:

CL with SRW 380 – 570

				Nº
465 – 699	200	1	P	255284
700 – 900	400	1	P	255285
901 – 1100	600	1	P	255286
1101 – 1300	600 KU	1	E	255282
	200	1	P	255284
1301 – 1500	600 KU	1	E	255282
	400	1	P	255285
1501 – 1700	600 KU	1	E	255282
	600	1	P	255286
1701 – 1900	600 KU	1	E	255282
	600 KU	1	E	255282
	200	1	P	255284
1901 – 2100	600 KU	1	E	255282
	600 KU	1	E	255282
	400	1	P	255285
2101 – 2400	600 KU	1	E	255282
	600 KU	1	E	255282
	600	1	P	255286

CL with SRW 571 – 1400

				Nº
801 – 1200	400	1	P	255285
1201 – 1400	600	1	P	255286
1401 – 1800	600 KU	1	E	255282
	400	1	P	255285
1801 – 2000	600 KU	1	E	255282
	600	1	P	255286
2001 – 2400	600 KU	1	E	255282
	600 KU	1	E	255282
	400	1	P	255285

[19] Multipart centre lock – standard, horizontal

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

Size-specific combinations:

				Nº
571 – 770	200	1	P	255284
771 – 970	400	1	P	255285
971 – 1170	600	1	P	255286
1171 – 1370	600 KU	1	E	255282
	200	1	P	255284
1371 – 1400	600 KU	1	E	255282
	400	1	P	255285

[23] Striker → from page 149**[24] Security striker → from page 149****[28] Tilt striker → from page 147****[31] Bullet catch sash component (optional SRH ≥ 1601 mm)**

	Nº
Bullet catch sash component	788363

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

	Nº
Sash component for lifting mishandling device	795927

[36] Stay guide – basic security

							Nº
360 – 410	300	50	250	–	–	Roto Sil	570222
411 – 600	490	190	250	–	–	Roto Sil	570223
601 – 800	690	200	250	–	–	Roto Sil	570224
801 – 1000	890	200	450	1	E	Roto Sil	570345
1001 – 1200	1090	200	450	1	E	Roto Sil	570346

[38] Stay arm

				Nº
250	360 – 800	18	Left	263331
			Right	263245
		20	Left	254264
			Right	254265
450	801 – 1400	18	Left	563069
			Right	563068
		20	Left	254266
			Right	254267

**INFO**

With SRH < 500 mm, set the tilt depth to 90 mm.

[44] Corner hinge

					Nº
9	18	12	max. 80 kg	Left	254023
9		12	max. 80 kg	Right	254025
9	20	12	max. 80 kg	Left	254026
13					
9		12	max. 80 kg	Right	254028
13					

[45] Pivot rest

					Nº
9	18	12	max. 80 kg	Left	257123
9		12	max. 80 kg	Right	280425
9	20	12	max. 80 kg	Left	254035
13					
9		12	max. 80 kg	Right	254038
13					

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

		Nº
Frame and sash component	200	255237

[53] Drilling protection

	Nº
Drilling protection	797819

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

	Nº
Fastening plate with cam	255211

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

Optional**[82] Anti-jemmy device**

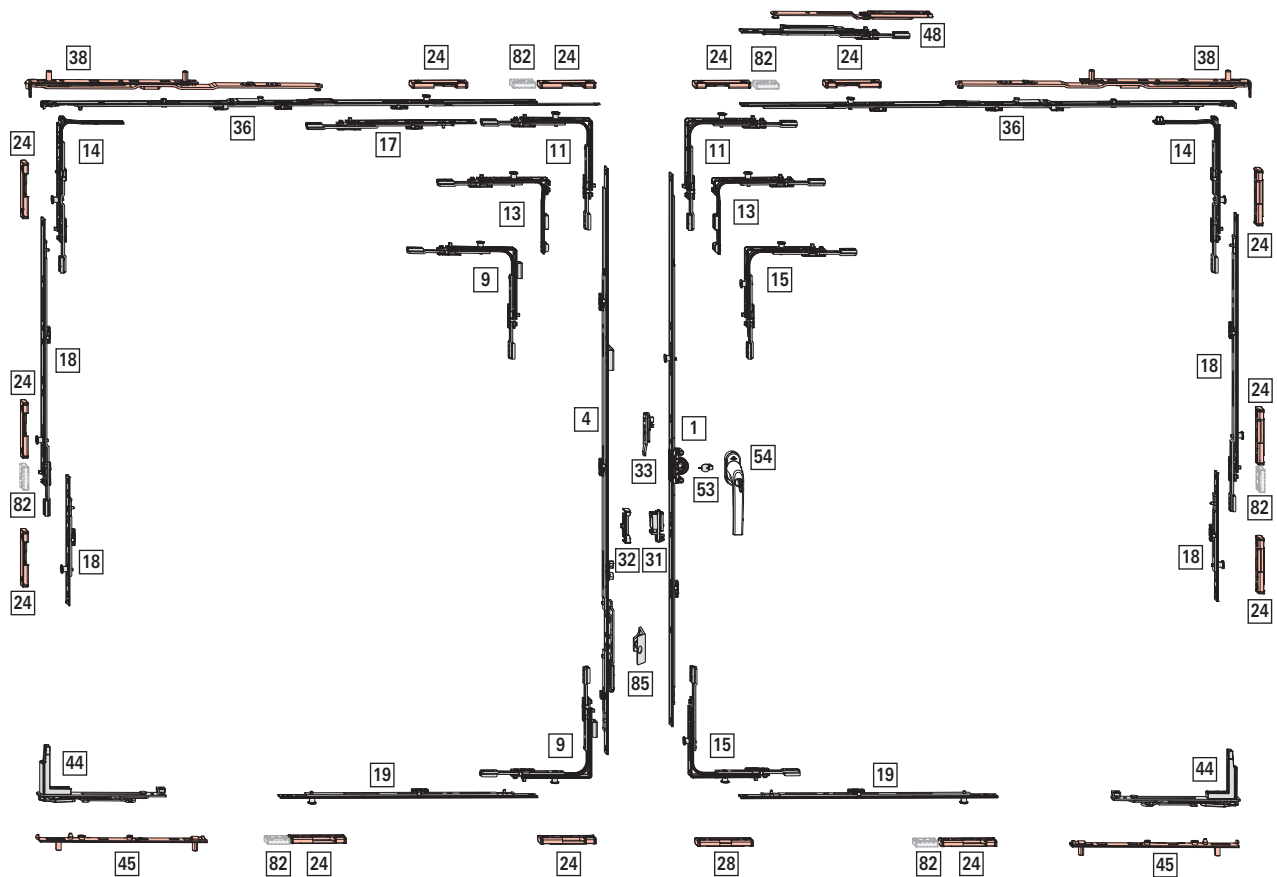
		Nº
13	From rebate depth 24 mm	792786

**INFO**

Only for hardware axis 13 and from a rebate depth of 24 mm.



4.1.4.3 Standard – RC 2 / RC 2 N



**Application range**

SRW: 570 – 1400 mm

SRH: 465 – 2400 mm

S.kg: max. 80 kg

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

							Nº
280 – 570	120	460	Y	N	–	–	742199
511 – 710	170	600	Y	Y	–	–	795324
601 – 800	263	690	N	Y	–	–	619591
801 – 1000	413	890	N	Y	1	V	626542
1001 – 1200	513	1090	N	Y	1	V	626543
1201 – 1400	563	1290	N	Y	1	V	626544
1401 – 1600	563	1490	N	Y	2	V	626575
1601 – 1800	563	1690	N	Y	2	V	626576
1601 – 1800	1000	1690	N	Y	2	V	838324
1801 – 2000	1000	1890	N	Y	2	V	794641
2001 – 2200	1000	2090	N	Y	3	V	794642
2201 – 2400	1000	2290	N	Y	3	V	794643

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

						Nº
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

[9] Floating-mullion corner drive with security striker

				Nº
Top	1	1	V	313538
Bottom	1	1	V	367227

For use at the top: SRH 511 – 800

For use at the bottom: SRH 601 – 2400

[11] Standard corner drive

		Nº
1	V	260272

[13] Special short corner drive

		Nº
1	P	260282

For use on the second opening sash: SRH ≤ 510 mm

Use → “Possible combinations” from page 137

[14] Sash stay corner drive

				Nº
250	360 – 800	1	V	617127
450	801 – 1400	1	V	260284

Screw the sash stay corner drive 250 onto the connecting rod groove before fitting the stay guide 250.

[15] Standard corner drive (RC3)

		Nº
2	V	260274

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

				Nº
200	Y	–	–	308267

Size-specific combinations:

				Nº
1201 – 1400	200	–	–	308267

[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:

				Nº
465 – 800	200	1	V	296853
801 – 1000	400	1	V	296854
1001 – 1200	600	1	V	296855
1201 – 1400	600 KU	1	V	337711
	200	1	V	296853
1401 – 1600	600 KU	1	V	337711
	400	1	V	296854
1601 – 1800	600 KU	1	V	337711
	600	1	V	296855
1801 – 2000	600 KU	1	V	337711
	600 KU	1	V	337711
	200	1	V	296853
2001 – 2200	600 KU	1	V	337711
	600 KU	1	V	337711
	400	1	V	296854
2201 – 2400	600 KU	1	V	337711
	600 KU	1	V	337711
	600	1	V	296855

[19] Multipart centre lock – security, horizontal

				Nº
200	N	1	V	296853
400	N	1	V	296854

				Nº
600	N	1	V	296855
600	Y	1	V	337711

Size-specific combinations:

				Nº
571 – 770	200	1	V	296853
771 – 970	400	1	V	296854
971 – 1170	600	1	V	296855
1171 – 1370	600 KU	1	V	337711
	200	1	V	296853
1371 – 1400	600 KU	1	V	337711
	400	1	V	296854

[24] Security striker → from page 149

[28] Tilt striker → from page 147

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

	Nº
Bullet catch sash component	788363

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

[33] Lifting mishandling device sash component

	Nº
Sash component for lifting mishandling device	795927

[36] Stay guide – security

						Nº
411 – 600	490	190	250	–	–	570223
601 – 800	690	200	250	–	–	570224
801 – 1000	890	200	450	1	V	601551
1001 – 1200	1090	200	450	1	V	601552

[38] Stay arm

				Nº
250	360 – 800	18	Left	263331
			Right	263245
		20	Left	254264
			Right	254265
450	801 – 1400	18	Left	563069
			Right	563068
		20	Left	254266
			Right	254267

[44] Corner hinge

					Nº
9	18	12	max. 80 kg	Left	254023
9		12	max. 80 kg	Right	254025
9	20	12	max. 80 kg	Left	254026
13					
9		12	max. 80 kg	Right	254028
13					

[45] Pivot rest

					Nº
9	18	12	max. 80 kg	Left	257123
9		12	max. 80 kg	Right	280425
9	20	12	max. 80 kg	Left	254035
13					
9		12	max. 80 kg	Right	254038
13					

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

		Nº
Frame and sash component	200	255237

[53] Drilling protection

	Nº
Drilling protection	797819

[54] Handle, lockable → CTL_1

[85] Retainer clasp

	Nº
Retainer clasp for lever-operated espagnolette	314203

Optional

[82] Anti-jemmy device

		Nº
13	From rebate depth 24 mm	792786

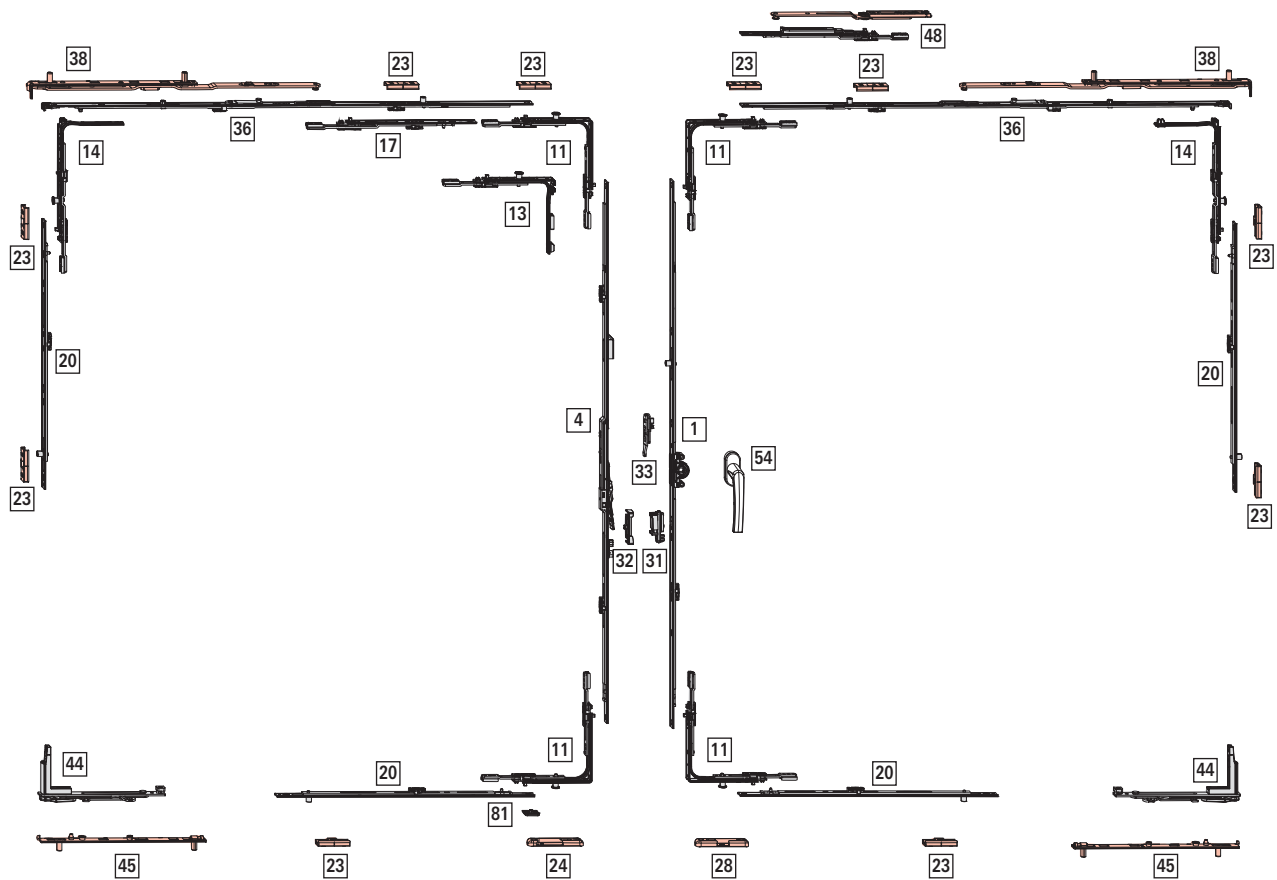


INFO

Only for hardware axis 13 and from a rebate depth of 24 mm.



4.1.4.4 Plus – basic security



**Application range****SRW:** 380 – 1400 mm**SRH:** 430 – 2400 mm**S.kg:** max. 80 kg**[1] T&T espagnolette, VT – fixed handle height, backset 15 mm**

								Nº
280 – 570	120	460	Y	N	–	–	–	742199
511 – 710	170	600	Y	Y	–	–	–	795324
601 – 800	263	690	N	Y	–	–	–	619591
801 – 1000	413	890	N	Y	1	E	–	619592
1001 – 1200	513	1090	N	Y	1	E	–	619593
1201 – 1400	563	1290	N	Y	1	E	–	619594
1401 – 1600	563	1490	N	Y	2	E	–	619595
1601 – 1800	563	1690	N	Y	2	E	–	619596
1601 – 1800	1000	1690	N	Y	2	E	–	838345
1801 – 2000	1000	1890	N	Y	2	E	–	794637
2001 – 2200	1000	2090	N	Y	2	E	–	795280
2201 – 2400	1000	2290	N	Y	2	E	–	795282
2201 – 2400	1000	2290	N	Y	3	E	–	794639

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

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

[11] Standard corner drive

			Nº
1	E	Top	260275
1	P	Top Bottom	260277

[13] Special short corner drive

			Nº
1	E	Top	260280
1	P	Top Bottom	260282

For use on the second opening sash: SRH ≤ 510 mm

Use → “Possible combinations” from page 141

[14] Sash stay corner drive

				Nº
250	360 – 800	1	P	617126
450	801 – 1400	1	P	260286

Screw the sash stay corner drive 250 onto the connecting rod groove before fitting the stay guide 250.

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

				Nº
200	Y	–	–	308267

Size-specific combinations:

				Nº
1201 – 1400	200	–	–	308267

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

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

Size-specific combinations:

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

[23] Striker → from page 149**[24] Security striker → from page 149****[28] Tilt striker → from page 147****[31] Bullet catch sash component (optional SRH ≥ 1601 mm)**

	Nº
Bullet catch sash component	788363

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

	Nº
Sash component for lifting mishandling device	795927

[36] Stay guide – basic security

							Nº
360 – 410	300	50	250	–	–	Roto Sil	570222
411 – 600	490	190	250	–	–	Roto Sil	570223
601 – 800	690	200	250	–	–	Roto Sil	570224
801 – 1000	890	200	450	1	E	Roto Sil	570345

							Nº
1001 – 1200	1090	200	450	1	E	Roto Sil	570346

[38] Stay arm

				Nº
250	360 – 800	18	Left	263331
			Right	263245
		20	Left	254264
			Right	254265
450	801 – 1400	18	Left	563069
			Right	563068
		20	Left	254266
			Right	254267



INFO

With SRH < 500 mm, set the tilt depth to 90 mm.

[44] Corner hinge

					Nº
9	18	12	max. 80 kg	Left	254023
9		12	max. 80 kg	Right	254025
9	20	12	max. 80 kg	Left	254026
13					
9		12	max. 80 kg	Right	254028
13					

[45] Pivot rest

					Nº
9	18	12	max. 80 kg	Left	257123
9		12	max. 80 kg	Right	280425
9	20	12	max. 80 kg	Left	254035
13					
9		12	max. 80 kg	Right	254038
13					

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

		Nº
Frame and sash component	200	255237

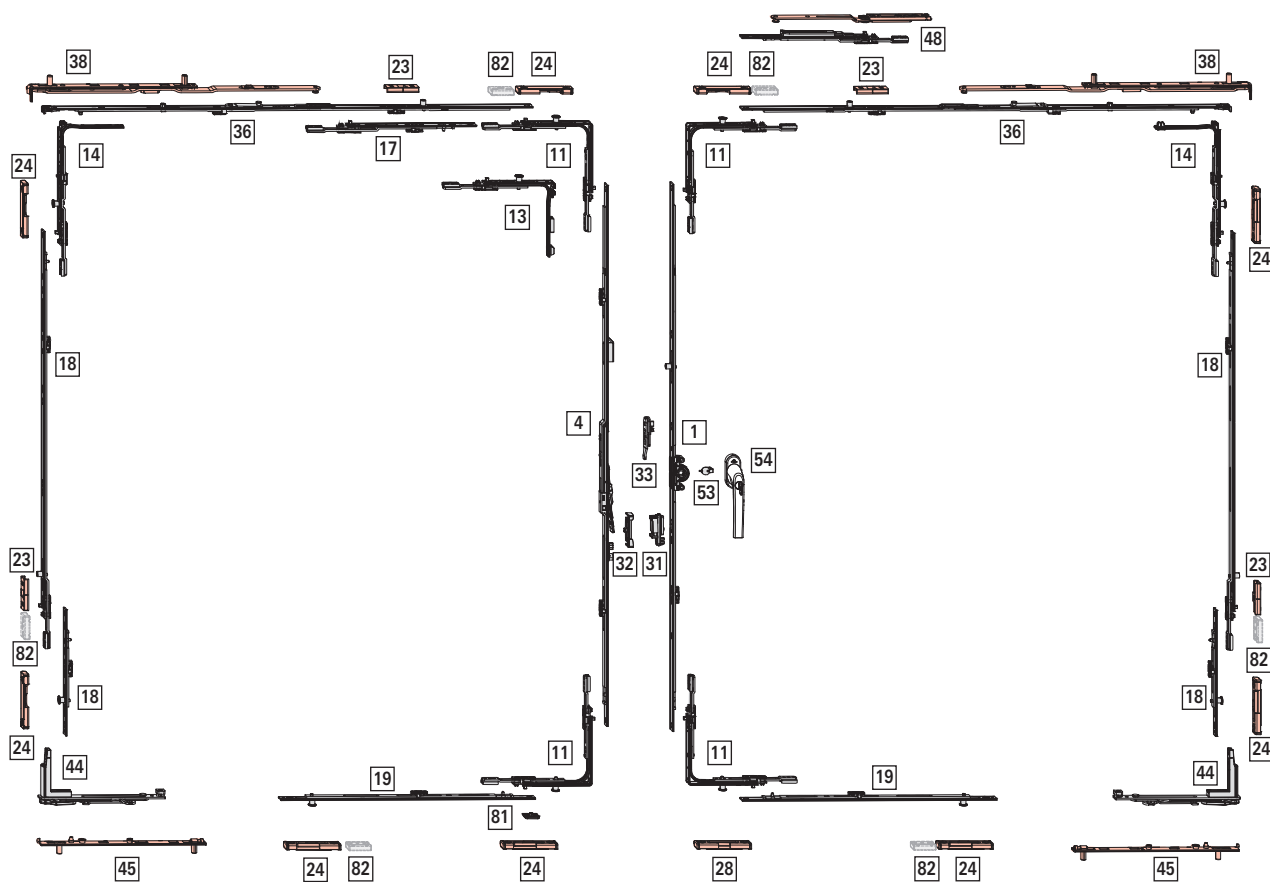
[54] Handle → CTL_1

[81] Run-up block

	Nº
Sash	350403



4.1.4.5 Plus – RC 1 N





Application range

SRW: 380 – 1400 mm

SRH: 430 – 2400 mm

S.kg: max. 80 kg

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

							Nº
280 – 570	120	460	Y	N	–	–	742199
511 – 710	170	600	Y	Y	–	–	795324
601 – 800	263	690	N	Y	–	–	619591
801 – 1000	413	890	N	Y	1	E	619592
1001 – 1200	513	1090	N	Y	1	E	619593
1201 – 1400	563	1290	N	Y	1	E	619594
1401 – 1600	563	1490	N	Y	2	E	619595
1601 – 1800	563	1690	N	Y	2	E	619596
1601 – 1800	1000	1690	N	Y	2	E	838345
1801 – 2000	1000	1890	N	Y	2	E	794637
2001 – 2200	1000	2090	N	Y	2	E	795280
2201 – 2400	1000	2290	N	Y	2	E	795282
2201 – 2400	1000	2290	N	Y	3	E	794639

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

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

[11] Standard corner drive

		Nº
1	P	260277

[13] Special short corner drive

		Nº
1	P	260282

For use on the second opening sash: SRH ≤ 510 mm

Use → “Possible combinations” from page 141

[14] Sash stay corner drive

				Nº
250	360 – 800	1	P	617126
450	801 – 1400	1	P	260286

Screw the sash stay corner drive 250 onto the connecting rod groove before fitting the stay guide 250.

[18] Multipart centre lock – standard, vertical

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

Size-specific combinations:

CL with SRW 380 – 570

				Nº
700 – 900	400	1	P	255285
901 – 1100	600	1	P	255286
1101 – 1300	600 KU	1	E	255282
	200	1	P	255284
1301 – 1500	600 KU	1	E	255282
	400	1	P	255285
1501 – 1700	600 KU	1	E	255282
	600	1	P	255286
1701 – 1900	600 KU	1	E	255282
	600 KU	1	E	255282
	200	1	P	255284
1901 – 2100	600 KU	1	E	255282
	600 KU	1	E	255282
	400	1	P	255285
2101 – 2400	600 KU	1	E	255282
	600 KU	1	E	255282
	600	1	P	255286

CL with SRW 571 – 1400

				Nº
801 – 1200	400	1	P	255285
1201 – 1400	600	1	P	255286
1401 – 1800	600 KU	1	E	255282
	400	1	P	255285
1801 – 2000	600 KU	1	E	255282
	600	1	P	255286
2001 – 2400	600 KU	1	E	255282
	600 KU	1	E	255282
	400	1	P	255285

[19] Multipart centre lock – standard, horizontal

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

Size-specific combinations:

				Nº
571 – 770	200	1	P	255284
771 – 970	400	1	P	255285

				Nº
971 – 1170	600	1	P	255286
1171 – 1370	600 KU	1	E	255282
	200	1	P	255284
1371 – 1400	600 KU	1	E	255282
	400	1	P	255285

[23] Striker → from page 149

[24] Security striker → from page 149

[28] Tilt striker → from page 147

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

	Nº
Bullet catch sash component	788363

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

[33] Lifting mishandling device sash component

	Nº
Sash component for lifting mishandling device	795927

[36] Stay guide – basic security

							Nº
360 – 410	300	50	250	–	–	Roto Sil	570222
411 – 600	490	190	250	–	–	Roto Sil	570223
601 – 800	690	200	250	–	–	Roto Sil	570224
801 – 1000	890	200	450	1	E	Roto Sil	570345
1001 – 1200	1090	200	450	1	E	Roto Sil	570346

[38] Stay arm

				Nº
250	360 – 800	18	Left	263331
			Right	263245
		20	Left	254264
			Right	254265
450	801 – 1400	18	Left	563069
			Right	563068
		20	Left	254266
			Right	254267



INFO

With SRH < 500 mm, set the tilt depth to 90 mm.

[44] Corner hinge

					Nº
9	18	12	max. 80 kg	Left	254023
9		12	max. 80 kg	Right	254025
9	20	12	max. 80 kg	Left	254026
13					
9		12	max. 80 kg	Right	254028
13					

[45] Pivot rest

					Nº
9	18	12	max. 80 kg	Left	257123
9		12	max. 80 kg	Right	280425
9	20	12	max. 80 kg	Left	254035
13					
9		12	max. 80 kg	Right	254038
13					

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

		Nº
Frame and sash component	200	255237

[53] Drilling protection

	Nº
Drilling protection	797819

[54] Handle, lockable → CTL_1

[81] Run-up block

	Nº
Sash	350403

Optional

[82] Anti-jemmy device

		Nº
13	From rebate depth 24 mm	792786

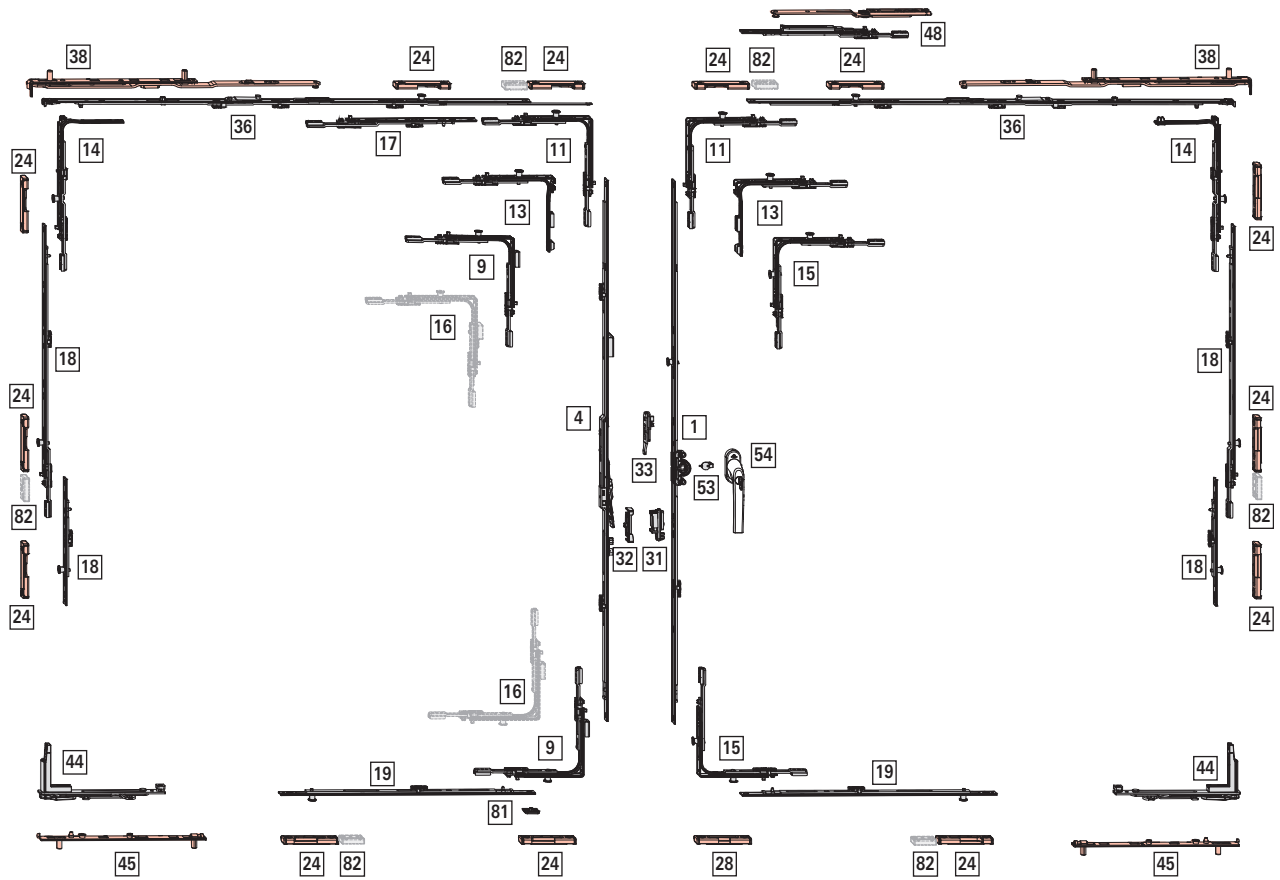


INFO

Only for hardware axis 13 and from a rebate depth of 24 mm.



4.1.4.6 Plus – RC 2 / RC 2 N



**Application range****SRW:** 570 – 1400 mm**SRH:** 465 – 2400 mm**S.kg:** max. 80 kg**[1] T&T espagnolette, VT – fixed handle height, backset 15 mm**

							Nº
280 – 570	120	460	Y	N	–	–	742199
511 – 710	170	600	Y	Y	–	–	795324
601 – 800	263	690	N	Y	–	–	619591
801 – 1000	413	890	N	Y	1	V	626542
1001 – 1200	513	1090	N	Y	1	V	626543
1201 – 1400	563	1290	N	Y	1	V	626544
1401 – 1600	563	1490	N	Y	2	V	626575
1601 – 1800	563	1690	N	Y	2	V	626576
1601 – 1800	1000	1690	N	Y	2	V	838324
1801 – 2000	1000	1890	N	Y	2	V	794641
2001 – 2200	1000	2090	N	Y	3	V	794642
2201 – 2400	1000	2290	N	Y	3	V	794643

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

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

[9] Floating-mullion corner drive with security striker

				Nº
Top	1	1	V	313538
Bottom	1	1	V	367227

For use at the top: SRH 601 – 800 mm

For use at the bottom: SRH 601 – 2400 mm

[11] Standard corner drive

		Nº
1	V	260272

[13] Special short corner drive

		Nº
1	P	260282

Use → “Possible combinations” from page 141

[14] Sash stay corner drive

				Nº
250	360 – 800	1	V	617127
450	801 – 1400	1	V	260284

Screw the sash stay corner drive 250 onto the connecting rod groove before fitting the stay guide 250.

[15] Standard corner drive (RC3)

		Nº
2	V	260274

For use at the top with SRH ≤ 801 mm.

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

				Nº
200	Y	–	–	308267

Size-specific combinations:

				Nº
1201 – 1400	200	–	–	308267

[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:

				Nº
465 – 800	200	1	V	296853
801 – 1000	400	1	V	296854
1001 – 1200	600	1	V	296855
1201 – 1400	600 KU	1	V	337711
	200	1	V	296853
1401 – 1600	600 KU	1	V	337711
	400	1	V	296854
1601 – 1800	600 KU	1	V	337711
	600	1	V	296855
1801 – 2000	600 KU	1	V	337711
	600 KU	1	V	337711
	200	1	V	296853
2001 – 2200	600 KU	1	V	337711
	600 KU	1	V	337711
	400	1	V	296854
2201 – 2400	600 KU	1	V	337711
	600 KU	1	V	337711
	600	1	V	296855

[19] Multipart centre lock – security, horizontal

				Nº
200	N	1	V	296853

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

Size-specific combinations:

				Nº
571 – 770	200	1	V	296853
771 – 970	400	1	V	296854
971 – 1170	600	1	V	296855
1171 – 1370	600 KU	1	V	337711
	200	1	V	296853
1371 – 1400	600 KU	1	V	337711
	400	1	V	296854

[24] Security striker → from page 149

[28] Tilt striker → from page 147

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

	Nº
Bullet catch sash component	788363

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

[33] Lifting mishandling device sash component

	Nº
Sash component for lifting mishandling device	795927

[36] Stay guide – security

						Nº
411 – 600	490	190	250	–	–	570223
601 – 800	690	200	250	–	–	570224
801 – 1000	890	200	450	1	V	601551
1001 – 1200	1090	200	450	1	V	601552

[38] Stay arm

				Nº
250	360 – 800	18	Left	263331
			Right	263245
		20	Left	254264
			Right	254265
450	801 – 1400	18	Left	563069
			Right	563068
		20	Left	254266
			Right	254267

[44] Corner hinge

				Nº
9	18	12	max. 80 kg	Left 254023
9		12	max. 80 kg	Right 254025
9	20	12	max. 80 kg	Left 254026
13				

				Nº
9		12	max. 80 kg	Right 254028
13				

[45] Pivot rest

				Nº
9	18	12	max. 80 kg	Left 257123
9		12	max. 80 kg	Right 280425
9	20	12	max. 80 kg	Left 254035
13				
9		12	max. 80 kg	Right 254038
13				

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

	Nº
Frame and sash component	200 255237

[53] Drilling protection

	Nº
Drilling protection	797819

[54] Handle, lockable → CTL_1

[81] Run-up block

	Nº
Sash	350403

Optional

[82] Anti-jemmy device

	Nº
13 From rebate depth 24 mm	792786



INFO

Only for hardware axis 13 and from a rebate depth of 24 mm.

[16] Corner drive, slide guard

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

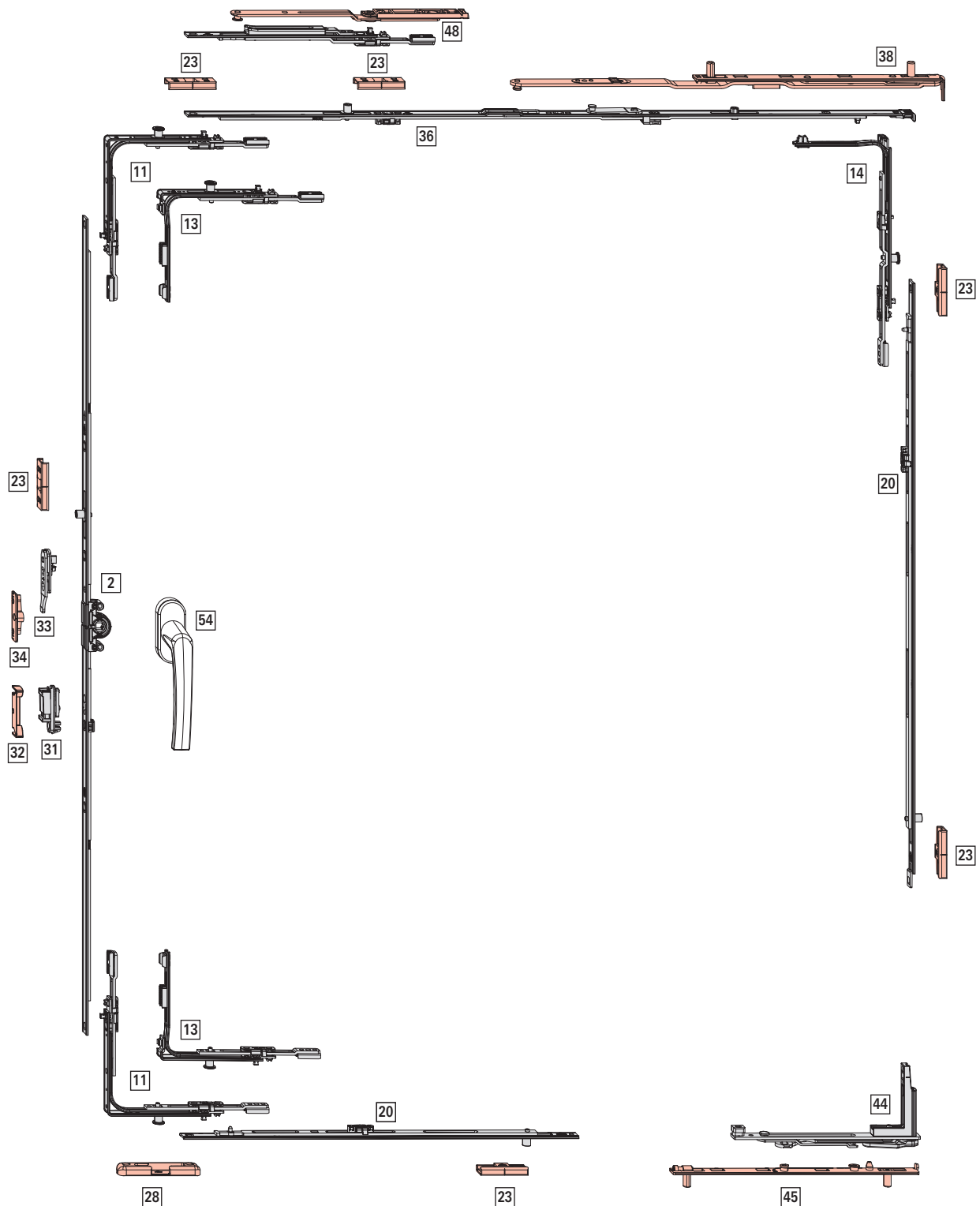
When using a corner drive with a slide guard, a standard corner drive (RC 3) is required on the first opening sash.



4.2 T&T espagnolette – centred / variable handle height

4.2.1 Tilt&Turn hardware

4.2.1.1 Basic security



**Application range****SRW:** 380 – 1400 mm**SRH:** 310 – 2400 mm**S.kg:** max. 80 kg**[2] T&T espagnolette – centred / variable handle height, backset 15 mm**

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

[11] Standard corner drive

			Nº
1	E	Top	260275
1	P	Top Bottom	260277

[13] Special short corner drive

			Nº
1	E	Top	260280
1	P	Top Bottom	260282

For use with SRH ≤ 450 mm.

[14] Sash stay corner drive

				Nº
250	360 – 800	1	P	617126
450	801 – 1400	1	P	260286

**INFO**

No sash stay corner drive is possible with SRH 310 – 360.

Screw the sash stay corner drive 250 onto the connecting rod groove before fitting the stay guide 250.

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

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

Size-specific combinations:

					Nº
801 – 1200	801 – 1200	400	1	E	255280

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

[23] Striker → from page 149**[28] Tilt striker → from page 147****[31] Bullet catch sash component (optional SRH ≥ 1601 mm)**

	Nº
Bullet catch sash component	788363

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

	Nº
Sash component for lifting mishandling device	795927

[34] Lifting mishandling device frame component**[36] Stay guide – basic security**

							Nº
360 – 410	300	50	250	–	–	Roto Sil	570222
411 – 600	490	190	250	–	–	Roto Sil	570223
601 – 800	690	200	250	–	–	Roto Sil	570224
801 – 1000	890	200	450	1	E	Roto Sil	570345
1001 – 1200	1090	200	450	1	E	Roto Sil	570346

[38] Stay arm

				Nº
250	360 – 800	18	Left	263331
			Right	263245
		20	Left	254264
			Right	254265
450	801 – 1400	18	Left	563069
			Right	563068
		20	Left	254266
			Right	254267

[44] Corner hinge

					Nº
9	18	12	max. 80 kg	Left	254023
9		12	max. 80 kg	Right	254025
9 13	20	12	max. 80 kg	Left	254026
9 13		12	max. 80 kg	Right	254028

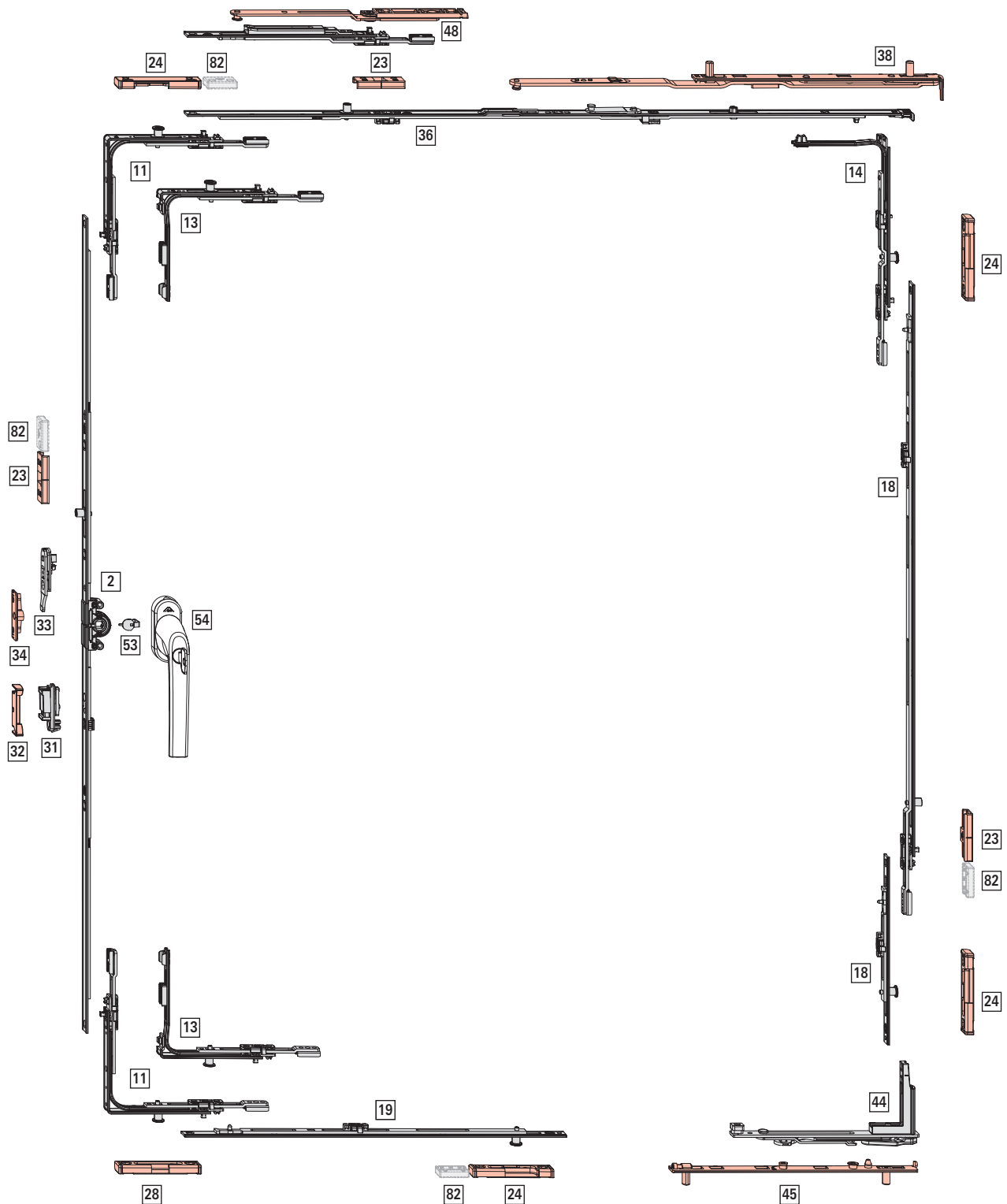
[45] Pivot rest					
					Nº
9	18	12	max. 80 kg	Left	257123
9		12	max. 80 kg	Right	280425
9	20	12	max. 80 kg	Left	254035
13					
9		12	max. 80 kg	Right	254038
13					

[48] Additional stay arm (SRW ≥ 1201 mm)		
		Nº
Frame and sash component	200	255237

[54] Handle → CTL_1	
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4.2.1.2 RC 1 N



**Application range****SRW:** 380 – 1400 mm**SRH:** 350 – 2400 mm**S.kg:** max. 80 kg**[2] T&T espagnolette – centred / variable handle height, backset 15 mm**

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

[11] Standard corner drive

 #	 N°
1	P 260277

[13] Special short corner drive

		Nº
1	P	260282

For use with SRH ≤ 450 mm.

[14] Sash stay corner drive

250	360 – 800	1	P	617126
450	801 – 1400	1	P	260286

Screw the sash stay corner drive 250 onto the connecting rod groove before fitting the stay guide 250.

[18] Multipart centre lock – standard, vertical

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

Size-specific combinations:

CL with SRW 380 – 570

				Nº
465 – 700	200	1	P	255284
701 – 900	400	1	P	255285
901 – 1100	600	1	P	255286
1101 – 1300	600 KU	1	E	255282
	200	1	P	255284
1301 – 1500	600 KU	1	E	255282
	400	1	P	255285
1501 – 1700	600 KU	1	E	255282
	600	1	P	255286

		 #		Nº
1701 – 1900	600 KU	1	E	255282
	600 KU	1	E	255282
	200	1	P	255284
1901 – 2100	600 KU	1	E	255282
	600 KU	1	E	255282
	400	1	P	255285
2101 – 2400	600 KU	1	E	255282
	600 KU	1	E	255282
	600	1	P	255286

CL with SRW 571 – 1400

				Nº
801 – 1200	400	1	P	255285
1201 – 1400	600	1	P	255286
1401 – 1800	600 KU	1	E	255282
	400	1	P	255285
1801 – 2000	600 KU	1	E	255282
	600	1	P	255286
2001 – 2400	600 KU	1	E	255282
	600 KU	1	E	255282
	400	1	P	255285

[19] Multipart centre lock – standard, horizontal

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

Size-specific combinations:

				Nº
571 – 770	200	1	P	255284
771 – 970	400	1	P	255285
971 – 1170	600	1	P	255286
1171 – 1370	600 KU	1	E	255282
	200	1	P	255284
1371 – 1400	600 KU	1	E	255282
	400	1	P	255285

[23] Striker → from page 149**[24] Security striker → from page 149****[28] Tilt striker → from page 147****[31] Bullet catch sash component (optional SRH ≥ 1601 mm)**

Bullet catch sash component	788363

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

[33] Lifting mishandling device sash component



Nº

Sash component for lifting mishandling device	795927
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[34] Lifting mishandling device frame component

[36] Stay guide – basic security



Nº

360 – 410	300	50	250	–	–	Roto Sil	570222
411 – 600	490	190	250	–	–	Roto Sil	570223
601 – 800	690	200	250	–	–	Roto Sil	570224
801 – 1000	890	200	450	1	E	Roto Sil	570345
1001 – 1200	1090	200	450	1	E	Roto Sil	570346

[38] Stay arm



Nº

250	360 – 800	18	Left	263331
			Right	263245
		20	Left	254264
			Right	254265
450	801 – 1400	18	Left	563069
			Right	563068
		20	Left	254266
			Right	254267

[44] Corner hinge



Nº

9	18	12	max. 80 kg	Left	254023
9		12	max. 80 kg	Right	254025
9	20	12	max. 80 kg	Left	254026
13					
9		12	max. 80 kg	Right	254028
13					

[45] Pivot rest



Nº

9	18	12	max. 80 kg	Left	257123
9		12	max. 80 kg	Right	280425
9	20	12	max. 80 kg	Left	254035
13					
9		12	max. 80 kg	Right	254038
13					

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



Nº

Frame and sash component	200	255237
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[53] Drilling protection



Nº

Drilling protection	797819
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[54] Handle, lockable → CTL_1

Optional

[82] Anti-jemmy device



Nº

13	From rebate depth 24 mm	792786
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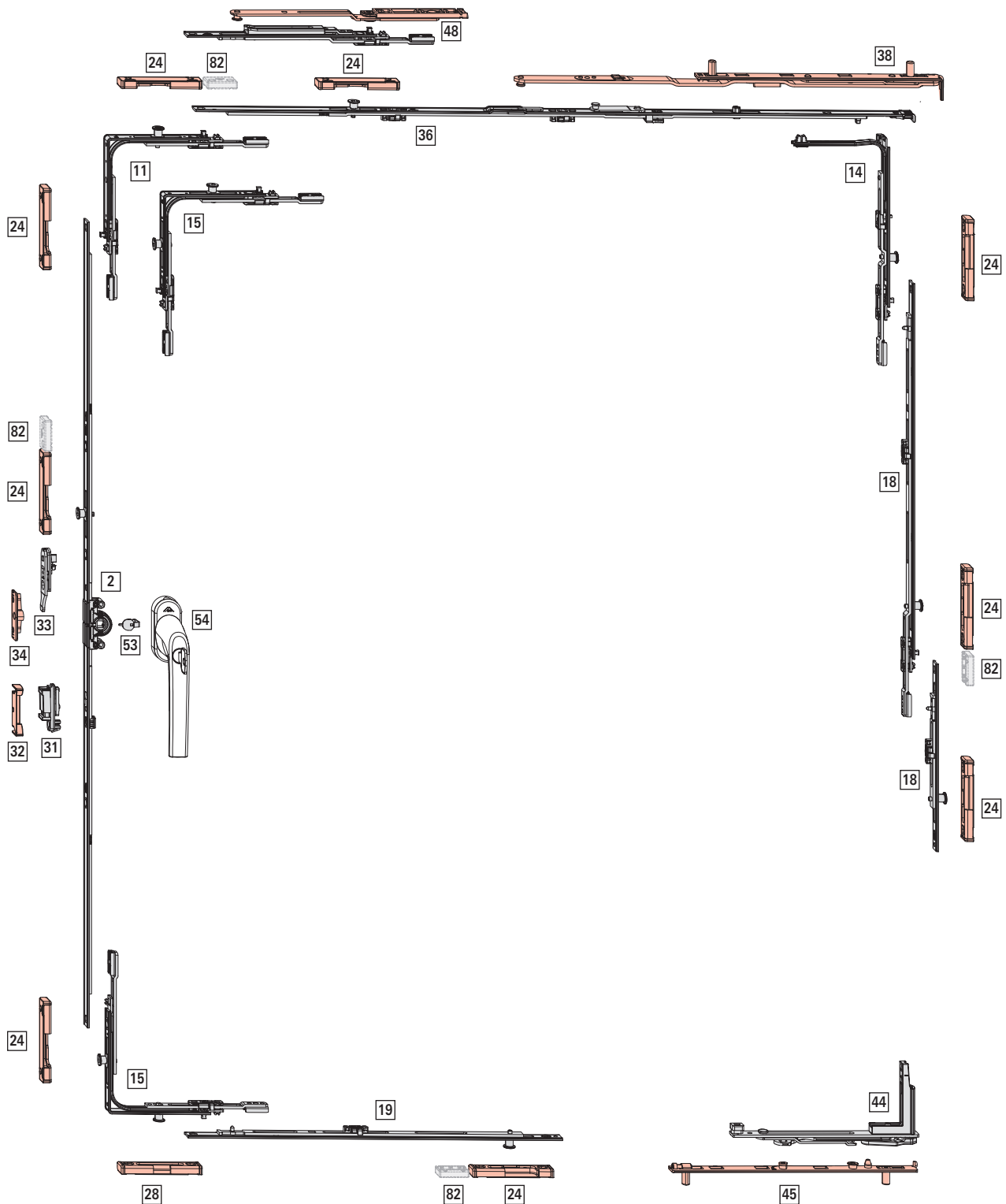


INFO

Only for hardware axis 13 and from a rebate depth of 24 mm.



4.2.1.3 RC 2 / RC 2 N



**Application range****SRW:** 570 – 1400 mm**SRH:** 465 – 2400 mm**S.kg:** max. 80 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

[11] Standard corner drive

		Nº
1	V	260272

[14] Sash stay corner drive

				Nº
250	360 – 800	1	V	617127
450	801 – 1400	1	V	260284

Screw the sash stay corner drive 250 onto the connecting rod groove before fitting the stay guide 250.

[15] Standard corner drive (RC3)

		Nº
2	V	260274

For use at the top with SRH ≤ 620 mm.

[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:

				Nº
465 – 800	200	1	V	296853
801 – 1000	400	1	V	296854
1001 – 1200	600	1	V	296855
1201 – 1400	600 KU	1	V	337711
	200	1	V	296853
1401 – 1600	600 KU	1	V	337711
	400	1	V	296854
1601 – 1800	600 KU	1	V	337711
	600	1	V	296855
1801 – 2000	600 KU	1	V	337711
	600 KU	1	V	337711
	200	1	V	296853

				Nº
2001 – 2200	600 KU	1	V	337711
	600 KU	1	V	337711
	400	1	V	296854
2201 – 2400	600 KU	1	V	337711
	600 KU	1	V	337711
	600	1	V	296855

[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:

				Nº
570 – 770	200	1	V	296853
771 – 970	400	1	V	296854
971 – 1170	600	1	V	296855
1171 – 1370	600 KU	1	V	337711
	200	1	V	296853
1371 – 1400	600 KU	1	V	337711
	400	1	V	296854

[24] Security striker → from page 149**[28] Tilt striker → from page 147****[31] Bullet catch sash component (optional SRH ≥ 1601 mm)**

	Nº
Bullet catch sash component	788363

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

	Nº
Sash component for lifting mishandling device	795927

[34] Lifting mishandling device frame component**[36] Stay guide – security**

						Nº
411 – 600	490	190	250	–	–	570223
601 – 800	690	200	250	–	–	570224
801 – 1000	890	200	450	1	V	601551
1001 – 1200	1090	200	450	1	V	601552

[38] Stay arm

				Nº
250	360 – 800	18	Left	263331
			Right	263245

				Nº
		20	Left	254264
			Right	254265
450	801 – 1400	18	Left	563069
			Right	563068
		20	Left	254266
			Right	254267

[44] Corner hinge

					Nº
9	18	12	max. 80 kg	Left	254023
9		12	max. 80 kg	Right	254025
9	20	12	max. 80 kg	Left	254026
13					
9		12	max. 80 kg	Right	254028
13					

[45] Pivot rest

					Nº
9	18	12	max. 80 kg	Left	257123
9		12	max. 80 kg	Right	280425
9	20	12	max. 80 kg	Left	254035
13					
9		12	max. 80 kg	Right	254038
13					

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

		Nº
Frame and sash component	200	255237

[53] Drilling protection

	Nº
Drilling protection	797819

[54] Handle, lockable → CTL_1

Optional

[82] Anti-jemmy device

		Nº
13	From rebate depth 24 mm	792786



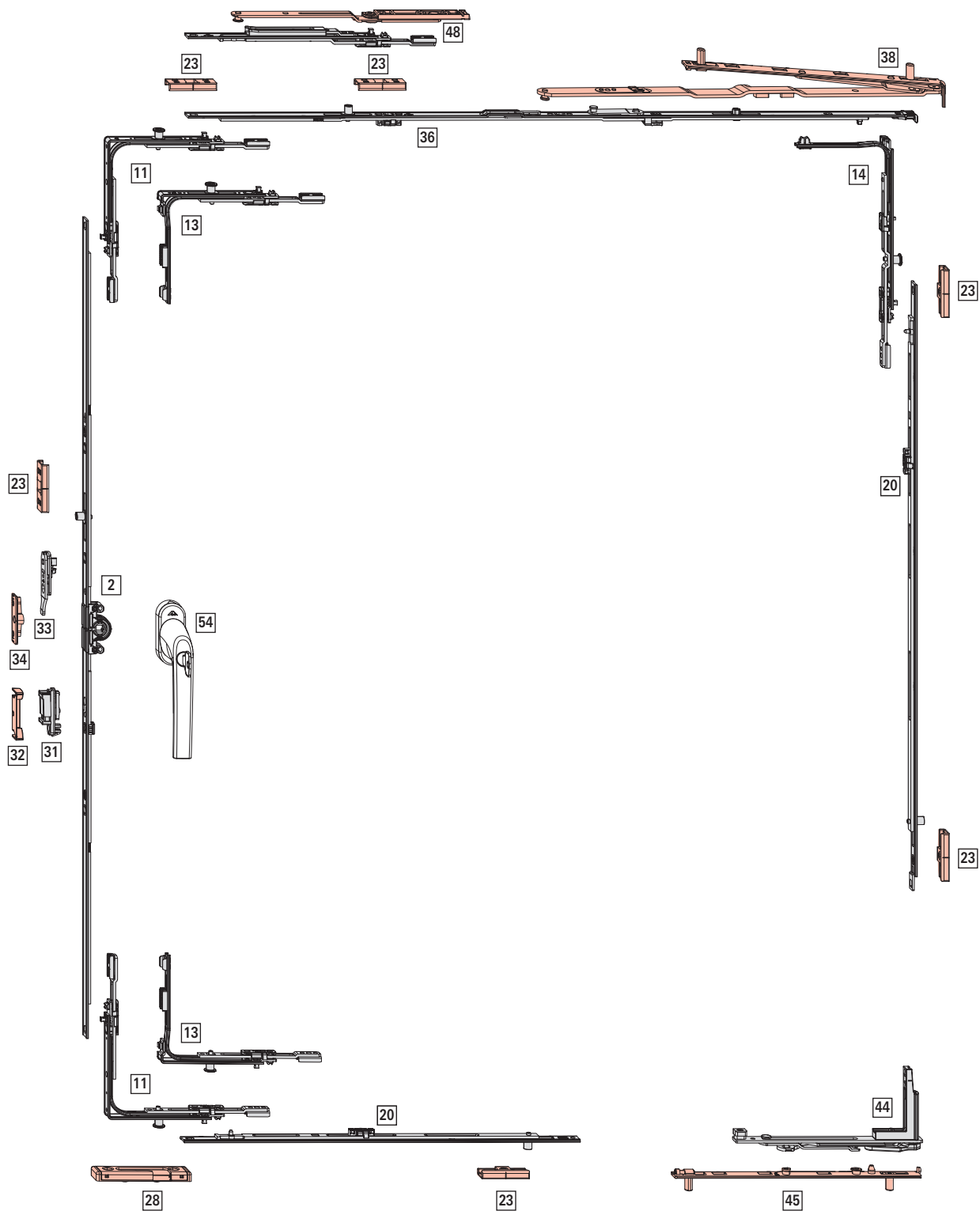
INFO

Only for hardware axis 13 and from a rebate depth of 24 mm.



4.2.2 TiltFirst hardware

4.2.2.1 Basic security



**Application range****SRW:** 380 – 1400 mm**SRH:** 310 – 2400 mm**S.kg:** max. 80 kg**[2] T&T espagnolette – centred / variable handle height, backset 15 mm**

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

[11] Standard corner drive

			Nº
1	E	Top	260275
1	P	Top Bottom	260277

[13] Special short corner drive

			Nº
1	E	Top	260280
1	P	Top Bottom	260282

For use with SRH ≤ 450 mm.

[14] Sash stay corner drive

				Nº
250	360 – 800	1	P	617126
450	801 – 1400	1	P	260286

**INFO**

No sash stay corner drive is possible with SRH 280 – 360.

Screw the sash stay corner drive 250 onto the connecting rod groove before fitting the stay guide 250.

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

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

Size-specific combinations:

					Nº
801 – 1200	801 – 1200	400	1	P	255285

					Nº
1201 – 1400	1201 – 1400	600	1	P	255286
	1401 – 1800	600 KU	1	E	255282
		400	1	P	255285
	1801 – 2000	600 KU	1	E	255282
		600	1	P	255286
	2001 – 2400	600 KU	1	E	255282
		600 KU	1	E	255282
		400	1	P	255285

[23] Striker → from page 149**[28] Tilt striker TiltFirst****[31] Bullet catch sash component (optional SRH ≥ 1601 mm)**

	Nº
Bullet catch sash component	788363

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

	Nº
Sash component for lifting mishandling device	795927

[34] Lifting mishandling device frame component**[36] Stay guide – basic security**

							Nº
360 – 410	300	50	250	–	–	Roto Sil	570222
411 – 600	490	190	250	–	–	Roto Sil	570223
601 – 800	690	200	250	–	–	Roto Sil	570224
801 – 1000	890	200	450	1	E	Roto Sil	570345
1001 – 1200	1090	200	450	1	E	Roto Sil	570346

[38] Stay arm TiltFirst → from page 145

			Nº
360 – 800	250	Left	324662
360 – 800	250	Right	324863
801 – 1400	450	Left	324864
801 – 1400	450	Right	324865

[44] Corner hinge

					Nº
9	18	12	max. 80 kg	Left	254023
9		12	max. 80 kg	Right	254025
9 13	20	12	max. 80 kg	Left	254026
9 13		12	max. 80 kg	Right	254028

[45] Pivot rest

					Nº
9	18	12	max. 80 kg	Left	257123
9		12	max. 80 kg	Right	280425

					Nº
9 13	20	12	max. 80 kg	Left	254035
9 13		12	max. 80 kg	Right	254038

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

	Nº
Frame and sash component	292022

[54] Handle, lockable → CTL_1

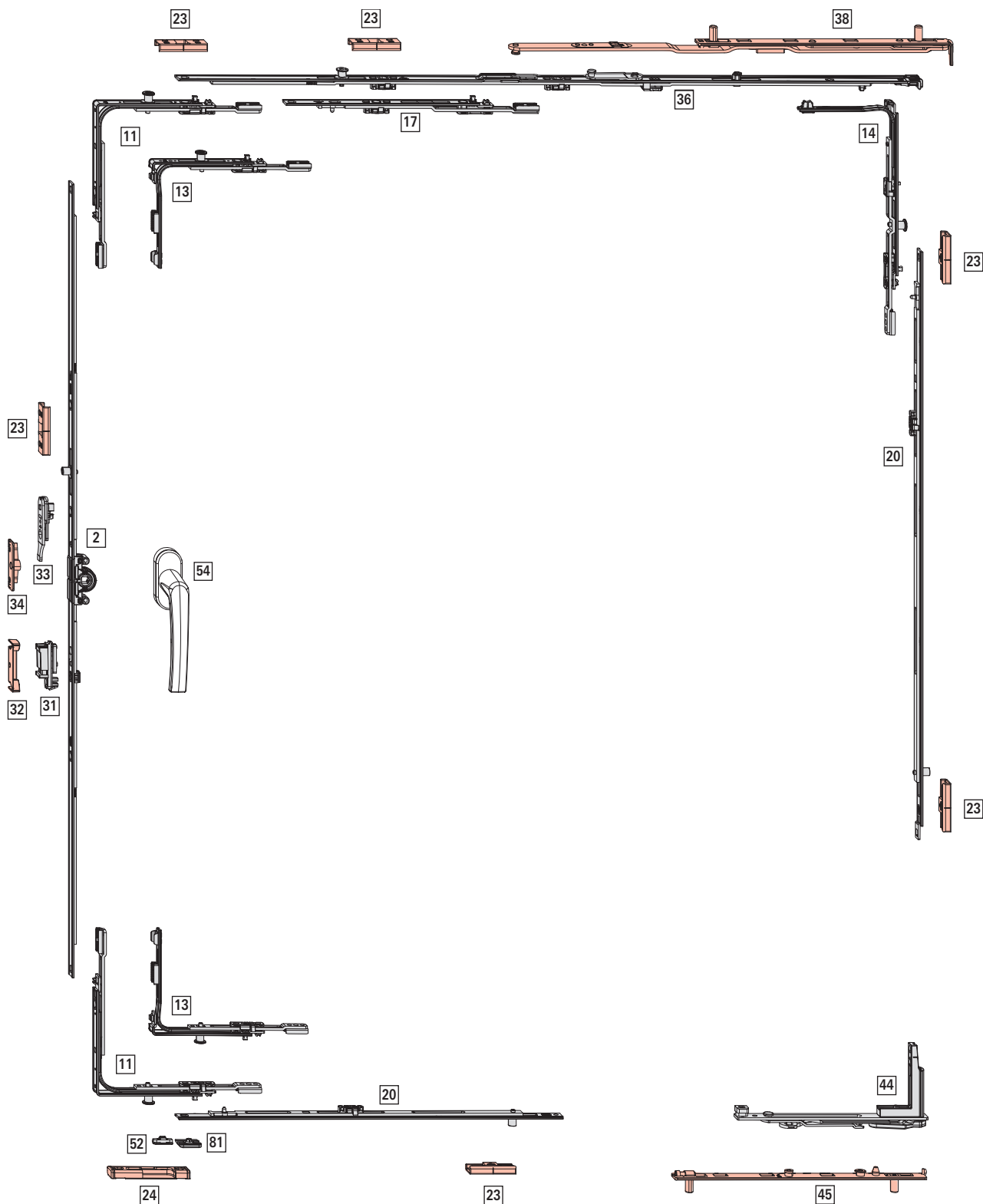


INFO
Use the lockable TiltFirst handle for child safe windows, see CTL_1.



4.2.3 Turn-Only hardware

4.2.3.1 Basic security



**Application range****SRW:** 380 – 1400 mm**SRH:** 310 – 2400 mm**S.kg:** max. 80 kg**[2] T&T espagnolette – centred / variable handle height, backset 15 mm**

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

[11] Standard corner drive

			Nº
1	E	Top	260275
1	P	Top Bottom	260277

[13] Special short corner drive

			Nº
1	E	Top	260280
1	P	Top Bottom	260282

For use with SRH ≤ 450 mm.

[14] Sash stay corner drive

		Nº
1	P	260286

**INFO**

No sash stay corner drive is possible with SRH 310 – 360.

Screw the sash stay corner drive 250 onto the connecting rod groove before fitting the stay guide 250.

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

				Nº
200	Y	–	–	308267

Size-specific combinations:

				Nº
1201 – 1400	200	–	–	308267

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

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

Size-specific combinations:

					Nº
800 – 1200	800 – 1200	400	1	E	255280
1201 – 1400	1201 – 1400	600	1	E	255281
	1401 – 1800	600 KU	1	E	255282
		400	1	E	255280
	1801 – 2000	600 KU	1	E	255282
		600	1	E	255281
	2001 – 2400	600 KU	1	E	255282
		600 KU	1	E	255282
		400	1	E	255280

[23] Striker → from page 149**[24] Security striker → from page 149****[31] Bullet catch sash component (optional SRH ≥ 1601 mm)**

	Nº
Bullet catch sash component	788363

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

	Nº
Sash component for lifting mishandling device	795927

[34] Lifting mishandling device frame component**[36] Stay guide – basic security**

							Nº
360 – 410	300	50	250	–	–	Roto Sil	570222
411 – 600	490	190	250	–	–	Roto Sil	570223
601 – 800	690	200	250	–	–	Roto Sil	570224
801 – 1000	890	200	450	1	E	Roto Sil	570345
1001 – 1200	1090	200	450	1	E	Roto Sil	570346

[38] Stay arm

				Nº
250	360 – 800	18	Left	263331
			Right	263245
		20	Left	254264
			Right	254265
450	801 – 1400	18	Left	563069
			Right	563068
		20	Left	254266
			Right	254267

[44] Corner hinge

					Nº
9	18	12	max. 80 kg	Left	254023
9		12	max. 80 kg	Right	254025
9 13	20	12	max. 80 kg	Left	254026

					Nº
9 13		12	max. 80 kg	Right	254028

[45] Pivot rest

					Nº
9	18	12	max. 80 kg	Left	257123
9		12	max. 80 kg	Right	280425
9 13	20	12	max. 80 kg	Left	254035
9 13		12	max. 80 kg	Right	254038

[52] 90° travel restrictor

	Nº
Travel restrictor	264603

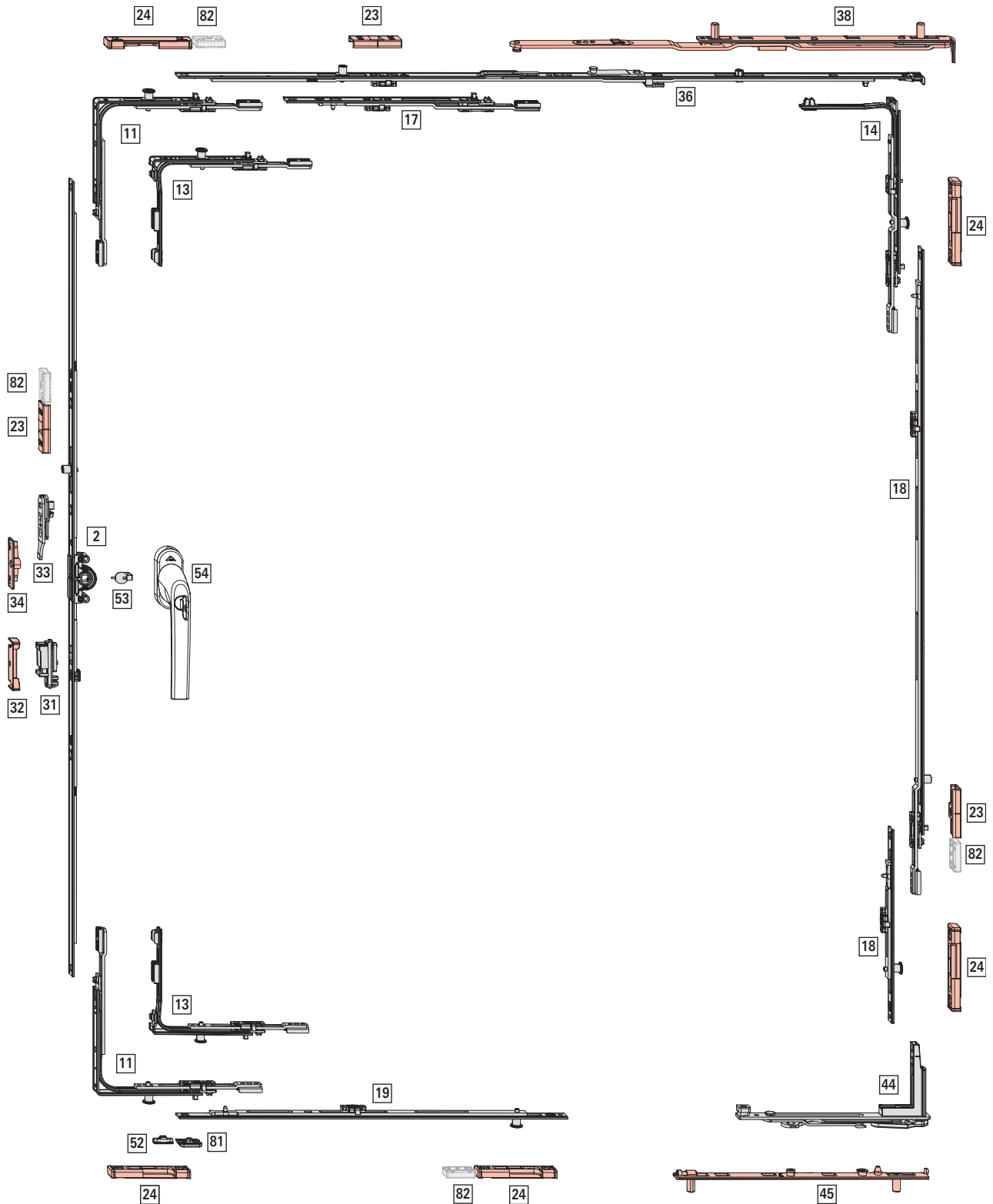
[54] Handle → CTL_1

[81] Run-up block

	Nº
Sash	350403



4.2.3.2 RC 1 N



**Application range****SRW:** 380 – 1400 mm**SRH:** 350 – 2400 mm**S.kg:** max. 80 kg**[2] T&T espagnolette – centred / variable handle height, backset 15 mm**

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

[11] Standard corner drive

		Nº
1	P	260277

[13] Special short corner drive

		Nº
1	P	260282

For use with SRH ≤ 450 mm.

[14] Sash stay corner drive

				Nº
250	360 – 800	1	P	617126
450	801 – 1400	1	P	260286

Screw the sash stay corner drive 250 onto the connecting rod groove before fitting the stay guide 250.

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

				Nº
200	Y	–	–	308267

Size-specific combinations:

				Nº
1201 – 1400	200	–	–	308267

[18] Multipart centre lock – standard, vertical

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

Size-specific combinations:

CL with SRW 380 – 570

				Nº
465 – 700	200	1	P	255284

				Nº
701 – 900	400	1	P	255285
901 – 1100	600	1	P	255286
1101 – 1300	600 KU	1	E	255282
	200	1	P	255284
1301 – 1500	600 KU	1	E	255282
	400	1	P	255285
1501 – 1700	600 KU	1	E	255282
	600	1	P	255286
1701 – 1900	600 KU	1	E	255282
	600 KU	1	E	255282
	200	1	P	255284
1901 – 2100	600 KU	1	E	255282
	600 KU	1	E	255282
	400	1	P	255285
2101 – 2400	600 KU	1	E	255282
	600 KU	1	E	255282
	600	1	P	255286

CL with SRW 571 – 1400

				Nº
801 – 1200	400	1	P	255285
1201 – 1400	600	1	P	255286
1401 – 1800	600 KU	1	E	255282
	400	1	P	255285
1801 – 2000	600 KU	1	E	255282
	600	1	P	255286
2001 – 2400	600 KU	1	E	255282
	600 KU	1	E	255282
	400	1	P	255285

[19] Multipart centre lock – standard, horizontal

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

Size-specific combinations:

				Nº
571 – 770	200	1	P	255284
771 – 970	400	1	P	255285
971 – 1170	600	1	P	255286
1171 – 1370	600 KU	1	E	255282
	200	1	P	255284
1371 – 1400	600 KU	1	E	255282
	400	1	P	255285

[23] Striker → from page 149

[24] Security striker → from page 149

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

	Nº
Bullet catch sash component	788363

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

[33] Lifting mishandling device sash component

	Nº
Sash component for lifting mishandling device	795927

[34] Lifting mishandling device frame component

[36] Stay guide – basic security

							Nº
360 – 410	300	50	250	–	–	Roto Sil	570222
411 – 600	490	190	250	–	–	Roto Sil	570223
601 – 800	690	200	250	–	–	Roto Sil	570224
801 – 1000	890	200	450	1	E	Roto Sil	570345
1001 – 1200	1090	200	450	1	E	Roto Sil	570346

[38] Stay arm

				Nº
250	360 – 800	18	Left	263331
			Right	263245
		20	Left	254264
			Right	254265
450	801 – 1400	18	Left	563069
			Right	563068
		20	Left	254266
			Right	254267

[44] Corner hinge

					Nº
9	18	12	max. 80 kg	Left	254023
9		12	max. 80 kg	Right	254025
9	20	12	max. 80 kg	Left	254026
13					
9		12	max. 80 kg	Right	254028
13					

[45] Pivot rest

					Nº
9	18	12	max. 80 kg	Left	257123
9		12	max. 80 kg	Right	280425
9	20	12	max. 80 kg	Left	254035
13					
9		12	max. 80 kg	Right	254038
13					

[52] 90° travel restrictor

	Nº
Travel restrictor	264603

[53] Drilling protection

	Nº
Drilling protection	797819

[54] Handle, lockable → CTL_1

[81] Run-up block

	Nº
Sash	350403

Optional

[82] Anti-jemmy device

		Nº
13	From rebate depth 24 mm	792786

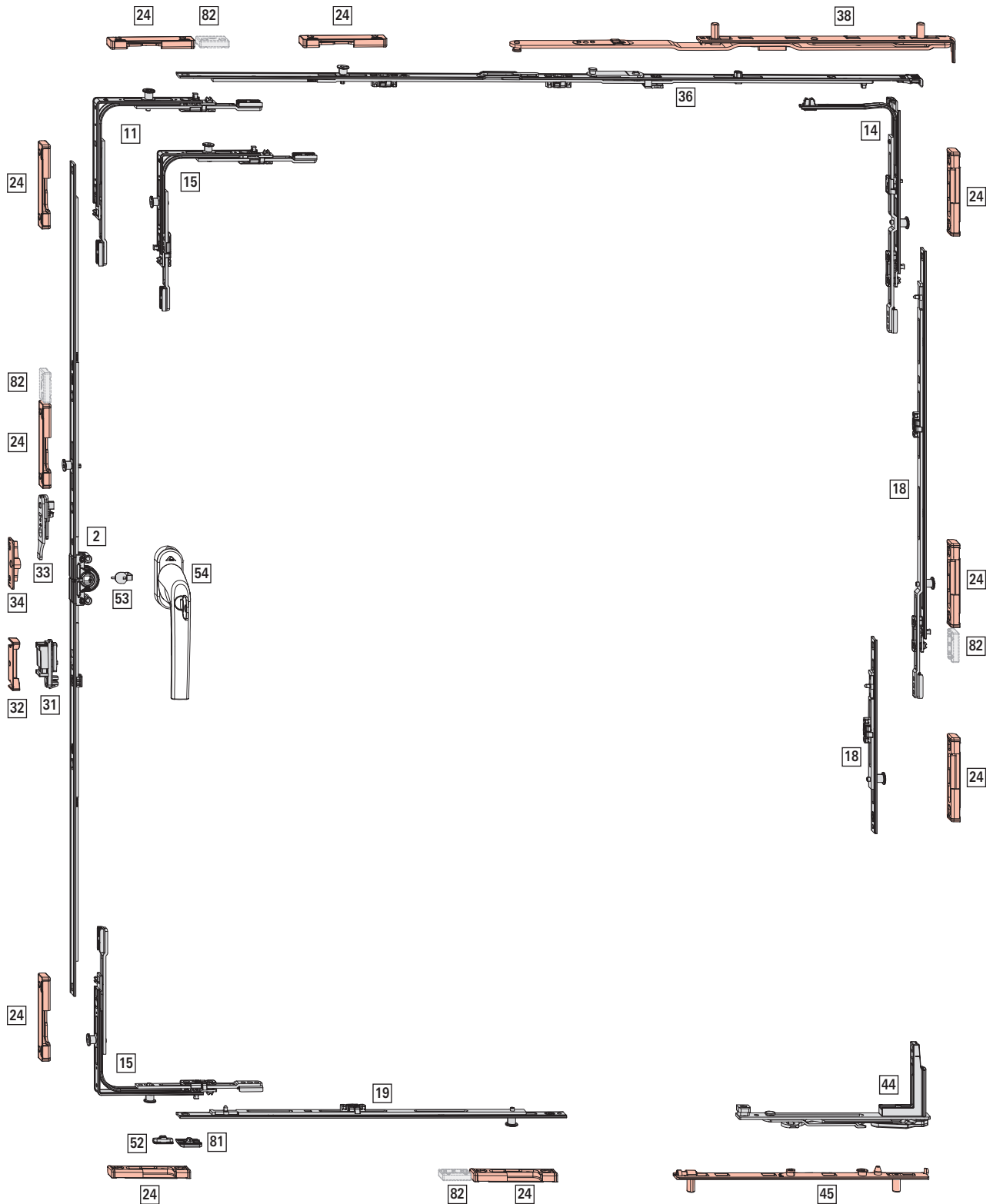


INFO

Only for hardware axis 13 and from a rebate depth of 24 mm.



4.2.3.3 RC 2 / RC 2 N



**Application range****SRW:** 570 – 1400 mm**SRH:** 465 – 2400 mm**S.kg:** max. 80 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

[11] Standard corner drive

		Nº
1	V	260272

[14] Sash stay corner drive

				Nº
250	360 – 800	1	V	617127
450	801 – 1400	1	V	260284

Screw the sash stay corner drive 250 onto the connecting rod groove before fitting the stay guide 250.

[15] Standard corner drive (RC3)

		Nº
2	V	260274

For use at the top with SRH ≤ 620 mm.

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

				Nº
200	Y	–	–	308267

Size-specific combinations:

				Nº
1201 – 1400	200	–	–	308267

[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:

				Nº
465 – 800	200	1	V	296853
801 – 1000	400	1	V	296854
1001 – 1200	600	1	V	296855

				Nº
1201 – 1400	600 KU	1	V	337711
	200	1	V	296853
1401 – 1600	600 KU	1	V	337711
	400	1	V	296854
1601 – 1800	600 KU	1	V	337711
	600	1	V	296855
1801 – 2000	600 KU	1	V	337711
	600 KU	1	V	337711
	200	1	V	296853
2001 – 2200	600 KU	1	V	337711
	600 KU	1	V	337711
	400	1	V	296854
2201 – 2400	600 KU	1	V	337711
	600 KU	1	V	337711
	600	1	V	296855

[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:

				Nº
570 – 770	200	1	V	296853
771 – 970	400	1	V	296854
971 – 1170	600	1	V	296855
1171 – 1370	600 KU	1	V	337711
	200	1	V	296853
1371 – 1400	600 KU	1	V	337711
	400	1	V	296854

[24] Security striker → from page 149**[31] Bullet catch sash component (optional SRH ≥ 1601 mm)**

	Nº
Bullet catch sash component	788363

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

	Nº
Sash component for lifting mishandling device	795927

[34] Lifting mishandling device frame component**[36] Stay guide – security**

						Nº
411 – 600	490	190	250	–	–	570223
601 – 800	690	200	250	–	–	570224

						Nº
801 – 1000	890	200	450	1	V	601551
1001 – 1200	1090	200	450	1	V	601552

[38] Stay arm

				Nº
250	360 – 800	18	Left	263331
			Right	263245
		20	Left	254264
			Right	254265
450	801 – 1400	18	Left	563069
			Right	563068
		20	Left	254266
			Right	254267

[44] Corner hinge

					Nº
9	18	12	max. 80 kg	Left	254023
9		12	max. 80 kg	Right	254025
9 13	20	12	max. 80 kg	Left	254026
9 13		12	max. 80 kg	Right	254028

[45] Pivot rest

					Nº
9	18	12	max. 80 kg	Left	257123
9		12	max. 80 kg	Right	280425
9 13	20	12	max. 80 kg	Left	254035
9 13		12	max. 80 kg	Right	254038

[52] 90° travel restrictor

	Nº
Travel restrictor	264603

[53] Drilling protection

	Nº
Drilling protection	797819

[54] Handle, lockable → CTL_1

[81] Run-up block

	Nº
Sash	350403

Optional

[82] Anti-jemmy device

		Nº
13	From rebate depth 24 mm	792786



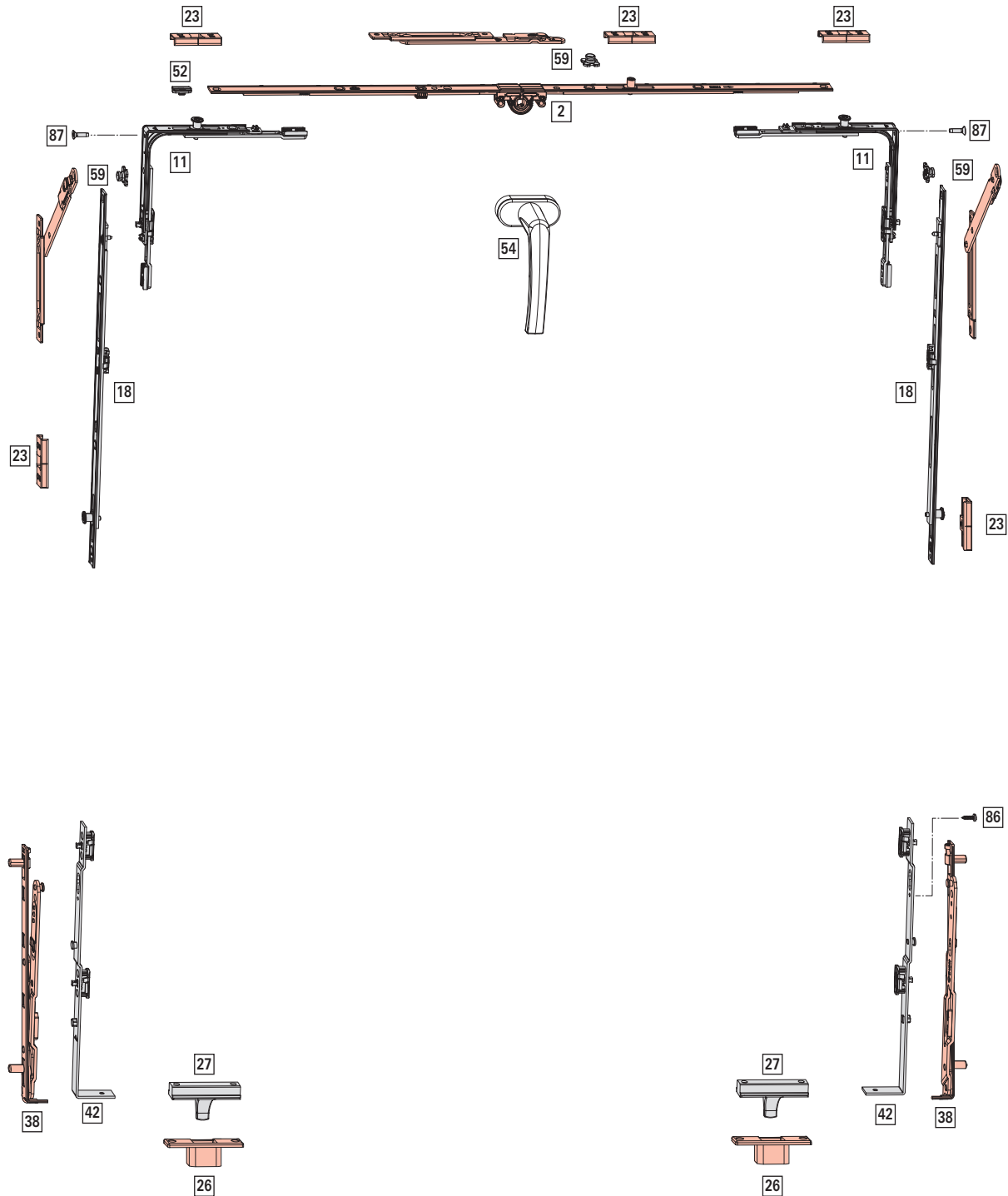
INFO

Only for hardware axis 13 and from a rebate depth of 24 mm.



4.2.4 Tilt-Only hardware

4.2.4.1 Basic security



**Application range**

SRW: 450 – 1600 mm

SRH: 440 – 1200 mm

S.kg: max. 80 kg

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

				Nº
310 – 620	430	–	–	259717
621 – 800	580	1	E	259719
801 – 1200	980	1	E	259720
1201 – 1600	1380	2	E	259721

[11] Standard corner drive

		Nº
1	P	260277

[18] Multipart centre lock – standard, vertical

				Nº
400	N	1	P	255285

[23] Striker → from page 149**[26] Centre closer, concealed, frame component**

			Nº
Euronut 7/8	20	12	255446
Eurofalz			255447

[27] Centre closer, concealed, sash component

	Nº
Sash	255445

[38] Stay arm

				Nº
250	360 – 800	18	Left	263331
			Right	263245
		20	Left	254264
			Right	254265
450	801 – 1400	18	Left	563069
			Right	563068
		20	Left	254266
			Right	254267

[42] Rebate stay guide

	Nº
290 / 42	254068

[52] 90° travel restrictor

	Nº
Travel restrictor	264603

[54] Handle → CTL_1**[59] Tilt stay set for floating-mullion installation**

	Nº
Floating-mullion installation	482823

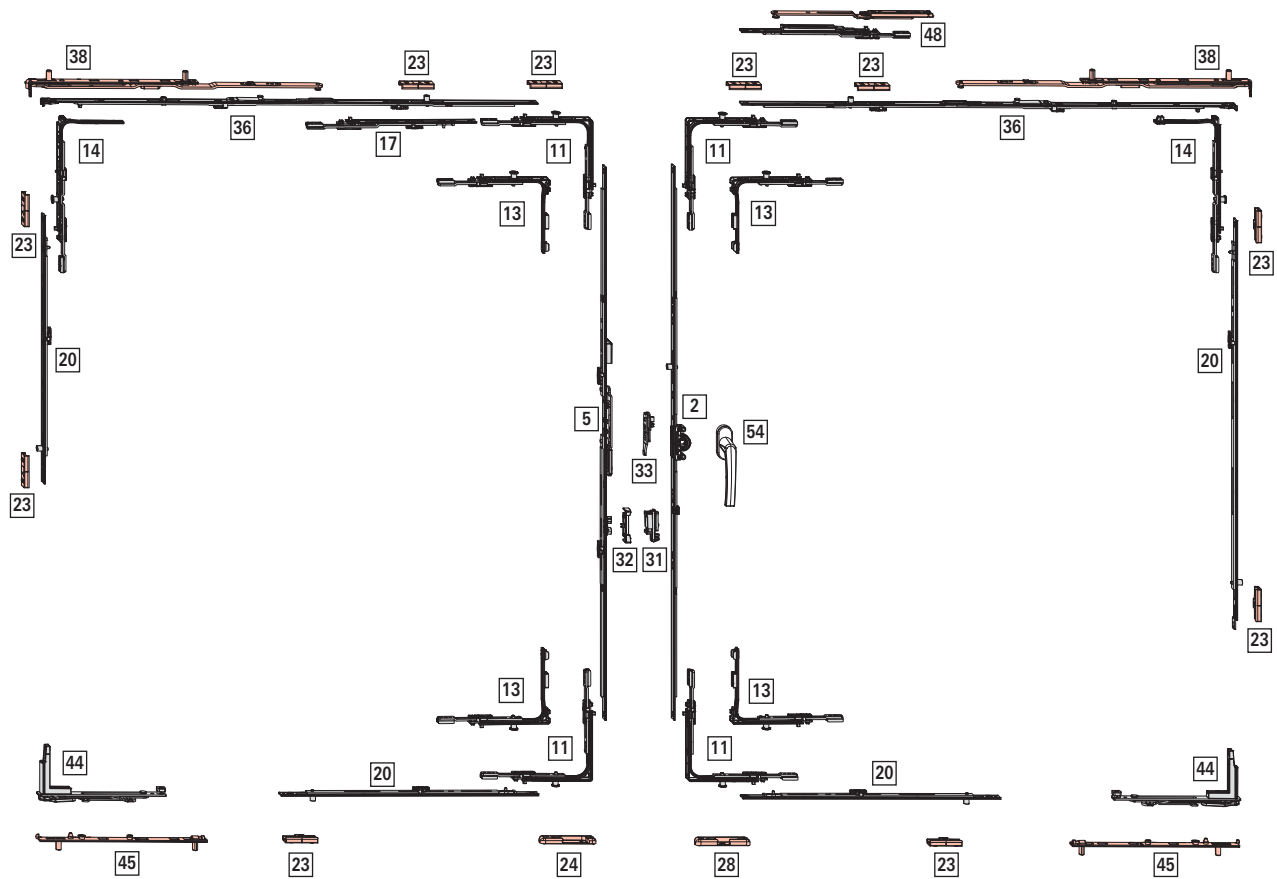
[86] Fixing screw for Tilt-Only sash

	Nº
Locking screw for Tilt-Only sash (self-tapping screw B 3.5 x 9.5 DIN 7981)	227131

[87] Screw for installation on corner drive

	Nº
Screw for installation on corner drive	567995

4.2.5.1 Standard – basic security





Application range

SRW: 380 – 1400 mm

SRH: 370 – 2400 mm

S.kg: max. 80 kg

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

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

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

			Nº
431 – 620	225 – 350	500	233418
621 – 800	393 – 482	630	763125
801 – 1200	482 – 682	980	763126
1201 – 1600	448 – 658	1380	763127
1601 – 2000	680 – 880	1780	795482
2001 – 2400	880 – 1080	2180	795484

[11] Standard corner drive

			Nº
1	E	Top	260275
1	P	Top Bottom	260277

[13] Special short corner drive

			Nº
1	E	Top	260280
1	P	Top Bottom	260282

For use with SRH ≤ 450 mm.

Use → “Possible combinations” from page 139

[14] Sash stay corner drive

				Nº
250	360 – 800	1	P	617126
450	801 – 1400	1	P	260286

Screw the sash stay corner drive 250 onto the connecting rod groove before fitting the stay guide 250.

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

				Nº
200	Y	–	–	308267

Size-specific combinations:

				Nº
1201 – 1400	200	–	–	308267

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

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

Size-specific combinations:

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

[23] Striker → from page 149

[28] Tilt striker → from page 147

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

	Nº
Bullet catch sash component	788363

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

[33] Lifting mishandling device sash component

	Nº
Sash component for lifting mishandling device	795927

[36] Stay guide – basic security

							Nº
360 – 410	300	50	250	–	–	Roto Sil	570222
411 – 600	490	190	250	–	–	Roto Sil	570223
601 – 800	690	200	250	–	–	Roto Sil	570224
801 – 1000	890	200	450	1	E	Roto Sil	570345
1001 – 1200	1090	200	450	1	E	Roto Sil	570346

[38] Stay arm

				Nº
250	360 – 800	18	Left	263331
			Right	263245
		20	Left	254264
			Right	254265
450	801 – 1400	18	Left	563069

				Nº
			Right	563068
	20		Left	254266
			Right	254267



INFO

With SRH < 500 mm, set the tilt depth to 90 mm.

[44] Corner hinge

					Nº
9	18	12	max. 80 kg	Left	254023
9		12	max. 80 kg	Right	254025
9	20	12	max. 80 kg	Left	254026
13					
9		12	max. 80 kg	Right	254028
13					

[45] Pivot rest

					Nº
9	18	12	max. 80 kg	Left	257123
9		12	max. 80 kg	Right	280425
9	20	12	max. 80 kg	Left	254035
13					
9		12	max. 80 kg	Right	254038
13					

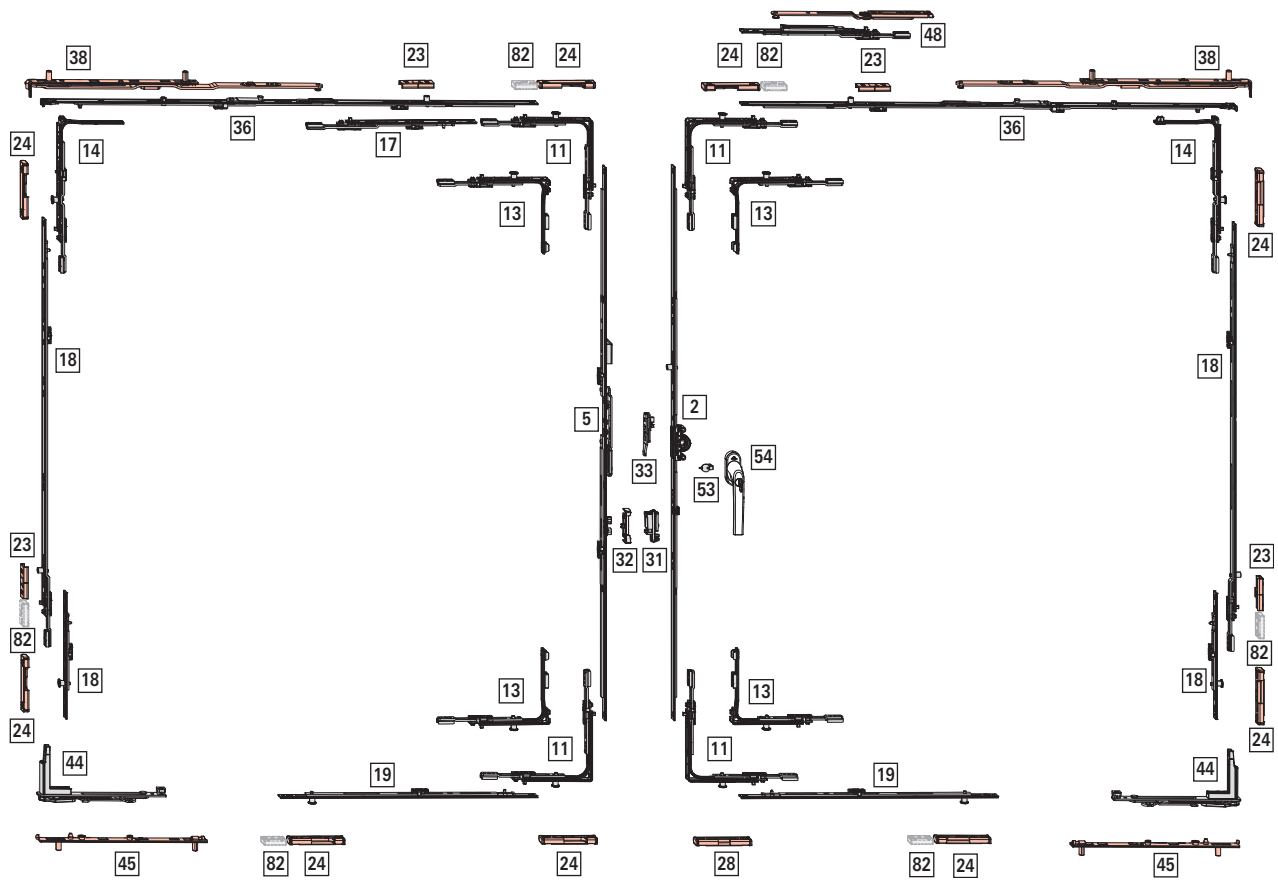
[48] Additional stay arm (SRW ≥ 1201 mm)

		Nº
Frame and sash component	200	255237

[54] Handle → CTL_1



4.2.5.2 Standard – RC 1 N



**Application range**

SRW: 380 – 1400 mm

SRH: 370 – 2400 mm

S.kg: max. 80 kg

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

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

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

			Nº
431 – 620	225 – 350	500	233418
621 – 800	393 – 482	630	763125
801 – 1200	482 – 682	980	763126
1201 – 1600	448 – 658	1380	763127
1601 – 2000	680 – 880	1780	795482
2001 – 2400	880 – 1080	2180	795484

[11] Standard corner drive

		Nº
1	P	260277

[13] Special short corner drive

		Nº
1	P	260282

For use on the first opening sash: SRH ≤ 450 mm

For use on the second opening sash: SRH ≤ 520 mm

Use → “Possible combinations” from page 139

[14] Sash stay corner drive

				Nº
250	360 – 800	1	P	617126
450	801 – 1400	1	P	260286

Screw the sash stay corner drive 250 onto the connecting rod groove before fitting the stay guide 250.

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

				Nº
200	Y	–	–	308267

Size-specific combinations:

				Nº
1201 – 1400	200	–	–	308267

[18] Multipart centre lock – standard, vertical

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

Size-specific combinations:

CL with SRW 380 – 570

				Nº
465 – 699	200	1	P	255284
700 – 900	400	1	P	255285
901 – 1100	600	1	P	255286
1101 – 1300	600 KU	1	E	255282
	200	1	P	255284
1301 – 1500	600 KU	1	E	255282
	400	1	P	255285
1501 – 1700	600 KU	1	E	255282
	600	1	P	255286
1701 – 1900	600 KU	1	E	255282
	600 KU	1	E	255282
	200	1	P	255284
1901 – 2100	600 KU	1	E	255282
	600 KU	1	E	255282
	400	1	P	255285
2101 – 2400	600 KU	1	E	255282
	600 KU	1	E	255282
	600	1	P	255286

CL with SRW 571 – 1400

				Nº
801 – 1200	400	1	P	255285
1201 – 1400	600	1	P	255286
1401 – 1800	600 KU	1	E	255282
	400	1	P	255285
1801 – 2000	600 KU	1	E	255282
	600	1	P	255286
2001 – 2400	600 KU	1	E	255282
	600 KU	1	E	255282
	400	1	P	255285

[19] Multipart centre lock – standard, horizontal

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

Size-specific combinations:

				Nº
571 – 770	200	1	P	255284

				Nº
771 – 970	400	1	P	255285
971 – 1170	600	1	P	255286
1171 – 1370	600 KU	1	E	255282
	200	1	P	255284
1371 – 1400	600 KU	1	E	255282
	400	1	P	255285

[23] Striker → from page 149

[24] Security striker → from page 149

[28] Tilt striker → from page 147

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

	Nº
Bullet catch sash component	788363

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

[33] Lifting mishandling device sash component

	Nº
Sash component for lifting mishandling device	795927

[36] Stay guide – basic security

							Nº
360 – 410	300	50	250	–	–	Roto Sil	570222
411 – 600	490	190	250	–	–	Roto Sil	570223
601 – 800	690	200	250	–	–	Roto Sil	570224
801 – 1000	890	200	450	1	E	Roto Sil	570345
1001 – 1200	1090	200	450	1	E	Roto Sil	570346

[38] Stay arm

				Nº
250	360 – 800	18	Left	263331
			Right	263245
		20	Left	254264
			Right	254265
450	801 – 1400	18	Left	563069
			Right	563068
		20	Left	254266
			Right	254267

INFO
With SRH < 500 mm, set the tilt depth to 90 mm.

[44] Corner hinge

					Nº
9	18	12	max. 80 kg	Left	254023
9		12	max. 80 kg	Right	254025
9	20	12	max. 80 kg	Left	254026
13					

					Nº
9		12	max. 80 kg	Right	254028
13					

[45] Pivot rest

					Nº
9	18	12	max. 80 kg	Left	257123
9		12	max. 80 kg	Right	280425
9	20	12	max. 80 kg	Left	254035
13					
9		12	max. 80 kg	Right	254038
13					

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

		Nº
Frame and sash component	200	255237

[53] Drilling protection

	Nº
Drilling protection	797819

[54] Handle, lockable → CTL_1

Optional

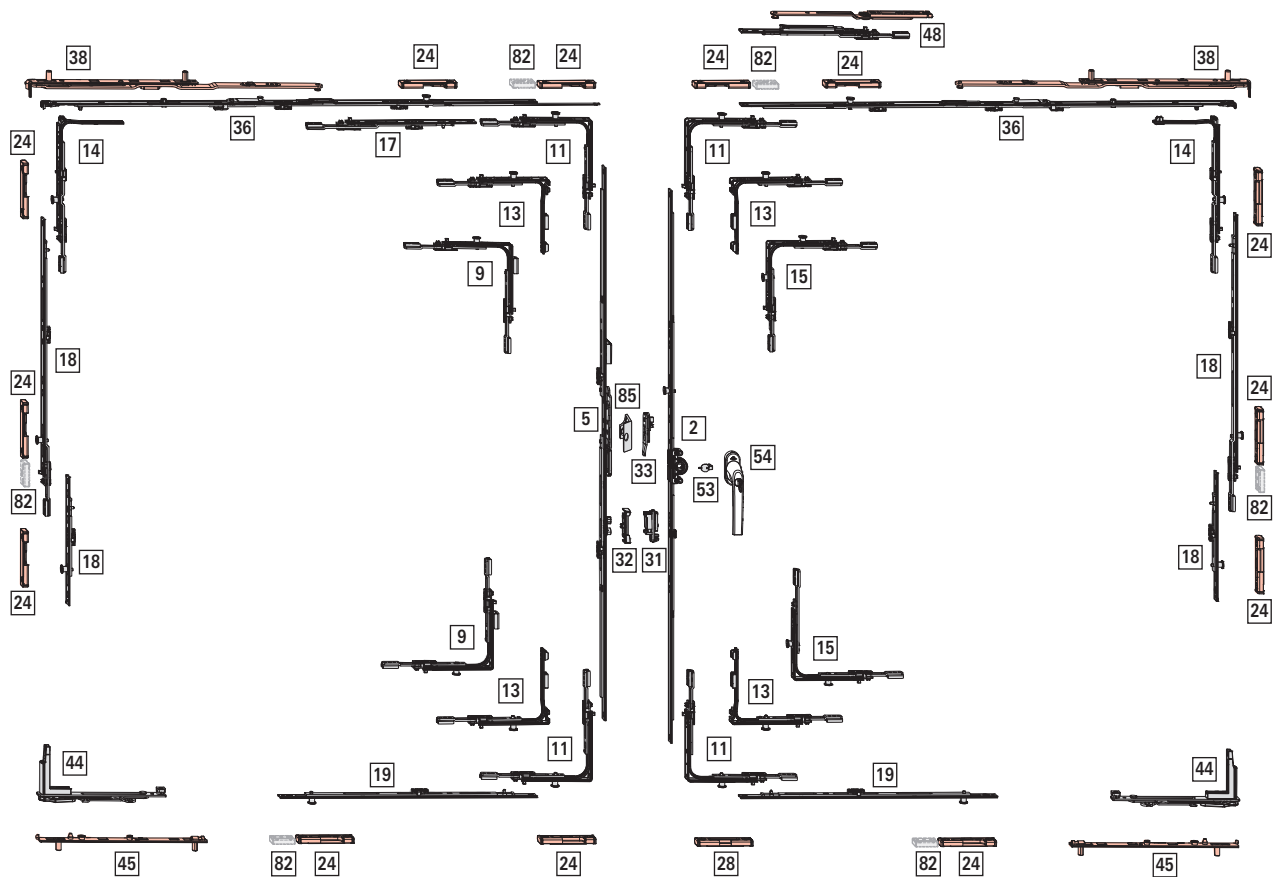
[82] Anti-jemmy device

		Nº
13	From rebate depth 24 mm	792786

INFO
Only for hardware axis 13 and from a rebate depth of 24 mm.



4.2.5.3 Standard – RC 2 / RC 2 N



**Application range**

SRW: 570 – 1400 mm

SRH: 465 – 2400 mm

S.kg: max. 80 kg

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

						Nº
310 – 620	155 – 225	430	N	–	–	259717
310 – 850	155 – 425	630	N	–	–	742202
621 – 800	311 – 400	580	Y	1	V	355743
801 – 1200	401 – 600	980	Y	1	V	355744
1201 – 1600	601 – 800	1380	Y	2	V	355745
1601 – 2000	801 – 1000	1780	Y	2	V	795390
2001 – 2400	1001 – 1200	2180	Y	4	V	795393

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

			Nº
431 – 620	225 – 350	500	233418
621 – 800	393 – 482	630	763125
801 – 1200	482 – 682	980	763126
1201 – 1600	448 – 658	1380	763127
1601 – 2000	680 – 880	1780	795482
2001 – 2400	880 – 1080	2180	795484

[9] Floating-mullion corner drive with security striker

				Nº
Top	1	1	V	313538
Bottom	1	1	V	367227

For use at the top: SRH 521 – 650 mm

For use at the bottom: SRH 521 – 1200 mm

[11] Standard corner drive

		Nº
1	P	260277

[13] Special short corner drive

For use with SRH ≤ 510 mm

Use → “Possible combinations” from page 139

		Nº
1	P	260282

[14] Sash stay corner drive

				Nº
250	360 – 800	1	V	617127
450	801 – 1400	1	V	260284

Screw the sash stay corner drive 250 onto the connecting rod groove before fitting the stay guide 250.

[15] Standard corner drive (RC3)

		Nº
2	V	260274

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

				Nº
200	Y	–	–	308267

Size-specific combinations:

				Nº
1201 – 1400	200	–	–	308267

[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:

				Nº
465 – 800	200	1	V	296853
801 – 1000	400	1	V	296854
1001 – 1200	600	1	V	296855
1201 – 1400	600 KU	1	V	337711
	200	1	V	296853
1401 – 1600	600 KU	1	V	337711
	400	1	V	296854
1601 – 1800	600 KU	1	V	337711
	600	1	V	296855
1801 – 2000	600 KU	1	V	337711
	600 KU	1	V	337711
	200	1	V	296853
2001 – 2200	600 KU	1	V	337711
	600 KU	1	V	337711
	400	1	V	296854
2201 – 2400	600 KU	1	V	337711
	600 KU	1	V	337711
	600	1	V	296855

[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:

				Nº
570 – 770	200	1	V	296853
771 – 970	400	1	V	296854
971 – 1170	600	1	V	296855

				Nº
1171 – 1370	600 KU	1	V	337711
	200	1	V	296853
1371 – 1400	600 KU	1	V	337711
	400	1	V	296854

[24] Security striker → from page 149

[28] Tilt striker → from page 147

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

	Nº
Bullet catch sash component	788363

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

[33] Lifting mishandling device sash component

	Nº
Sash component for lifting mishandling device	795927

[36] Stay guide – security

						Nº
411 – 600	490	190	250	–	–	570223
601 – 800	690	200	250	–	–	570224
801 – 1000	890	200	450	1	V	601551
1001 – 1200	1090	200	450	1	V	601552

[38] Stay arm

				Nº
250	360 – 800	18	Left	263331
			Right	263245
		20	Left	254264
			Right	254265
450	801 – 1400	18	Left	563069
			Right	563068
		20	Left	254266
			Right	254267

[44] Corner hinge

					Nº
9	18	12	max. 80 kg	Left	254023
9		12	max. 80 kg	Right	254025
9	20	12	max. 80 kg	Left	254026
13					
9		12	max. 80 kg	Right	254028
13					

[45] Pivot rest

					Nº
9	18	12	max. 80 kg	Left	257123
9		12	max. 80 kg	Right	280425
9	20	12	max. 80 kg	Left	254035
13					
9		12	max. 80 kg	Right	254038
13					

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

		Nº
Frame and sash component	200	255237

[53] Drilling protection

	Nº
Drilling protection	797819

[54] Handle, lockable → CTL_1

[85] Retainer clasp

	Nº
Retainer clasp for lever-operated espagnolette	314203

Optional

[82] Anti-jemmy device

		Nº
13	From rebate depth 24 mm	792786

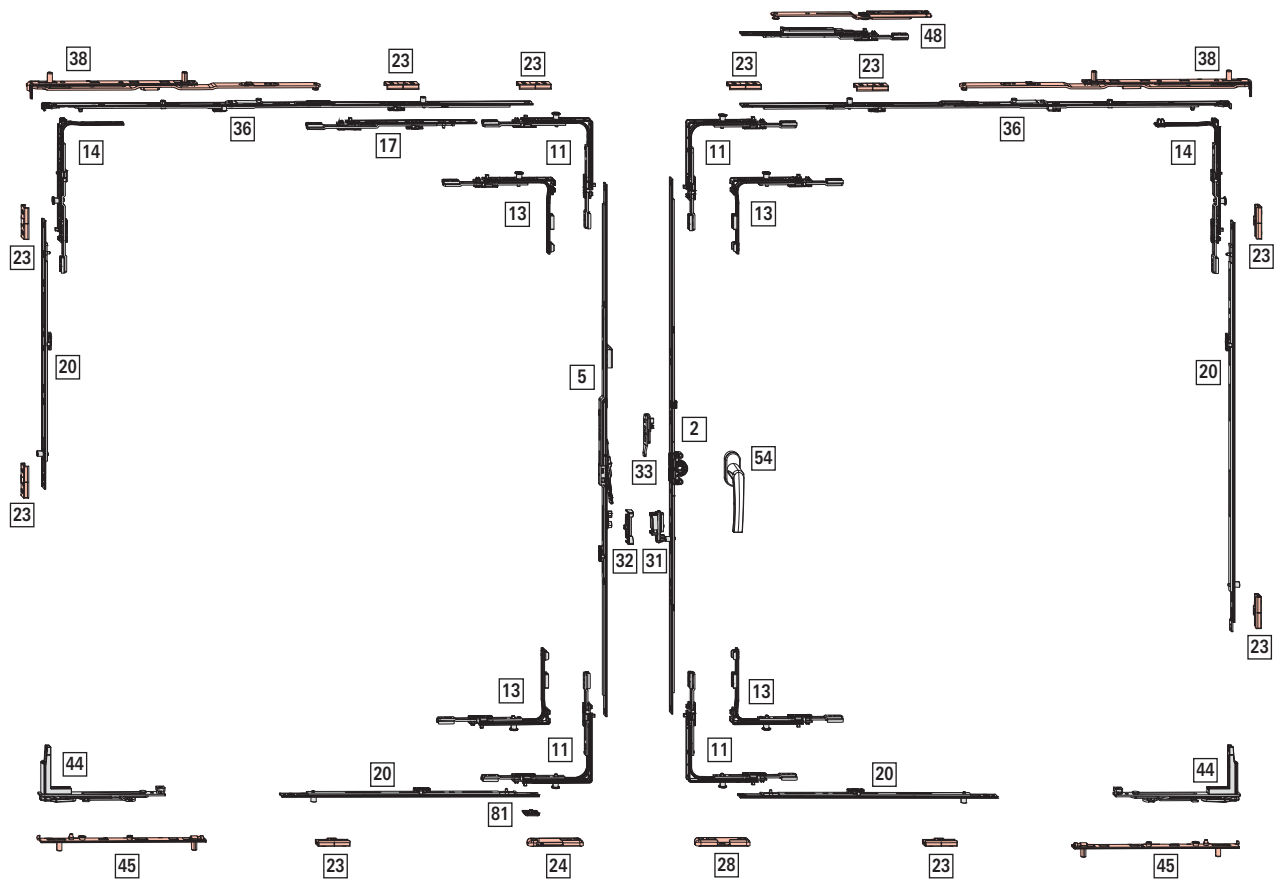


INFO

Only for hardware axis 13 and from a rebate depth of 24 mm.



4.2.5.4 Plus – basic security





Application range

SRW: 380 – 1400 mm

SRH: 420 – 2400 mm

S.kg: max. 80 kg

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

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

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

							Nº
431 – 620	194 – 289	400	N	N	–	–	2007128
621 – 800	290 – 379	680	Y	N	1	–	2007129
801 – 1200	380 – 579	980	Y	N	1	–	2007130
1001 – 1400	480 – 679	1180	Y	N	1	–	2007131
1201 – 1600	580 – 779	1380	Y	N	2	–	2007132
1601 – 2000	780 – 979	1780	Y	Y	2	–	2007133
2001 – 2400	980 – 1179	2180	Y	Y	4	–	2007134

[11] Standard corner drive

			Nº
1	E	Top	260275
1	P	Top Bottom	260277

[13] Special short corner drive

			Nº
1	E	Top	260280
1	P	Top Bottom	260282

For use on the first opening sash: SRH ≤ 450 mm

For use on the second opening sash: SRH ≤ 621 mm

Use → “Possible combinations” from page 143

[14] Sash stay corner drive

				Nº
250	360 – 800	1	P	617126
450	801 – 1400	1	P	260286

Screw the sash stay corner drive 250 onto the connecting rod groove before fitting the stay guide 250.

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

				Nº
200	Y	–	–	308267

Size-specific combinations:

				Nº
1201 – 1400	200	–	–	308267

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

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

Size-specific combinations:

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

[23] Striker → from page 149

[24] Security striker → from page 149

[28] Tilt striker → from page 147

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

	Nº
Bullet catch sash component	788363

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

[33] Lifting mishandling device sash component

	Nº
Sash component for lifting mishandling device	795927

[36] Stay guide – basic security

							Nº
360 – 410	300	50	250	–	–	Roto Sil	570222
411 – 600	490	190	250	–	–	Roto Sil	570223
601 – 800	690	200	250	–	–	Roto Sil	570224
801 – 1000	890	200	450	1	E	Roto Sil	570345
1001 – 1200	1090	200	450	1	E	Roto Sil	570346

[38] Stay arm

				Nº
250	360 – 800	18	Left	263331
			Right	263245
		20	Left	254264

				Nº
450	801 – 1400	18	Right	254265
			Left	563069
			Right	563068
		20	Left	254266
			Right	254267



INFO

With SRH < 500 mm, set the tilt depth to 90 mm.

[44] Corner hinge

					Nº
9	18	12	max. 80 kg	Left	254023
9		12	max. 80 kg	Right	254025
9	20	12	max. 80 kg	Left	254026
13					
9		12	max. 80 kg	Right	254028
13					

[45] Pivot rest

					Nº
9	18	12	max. 80 kg	Left	257123
9		12	max. 80 kg	Right	280425
9	20	12	max. 80 kg	Left	254035
13					
9		12	max. 80 kg	Right	254038
13					

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

		Nº
Frame and sash component	200	255237

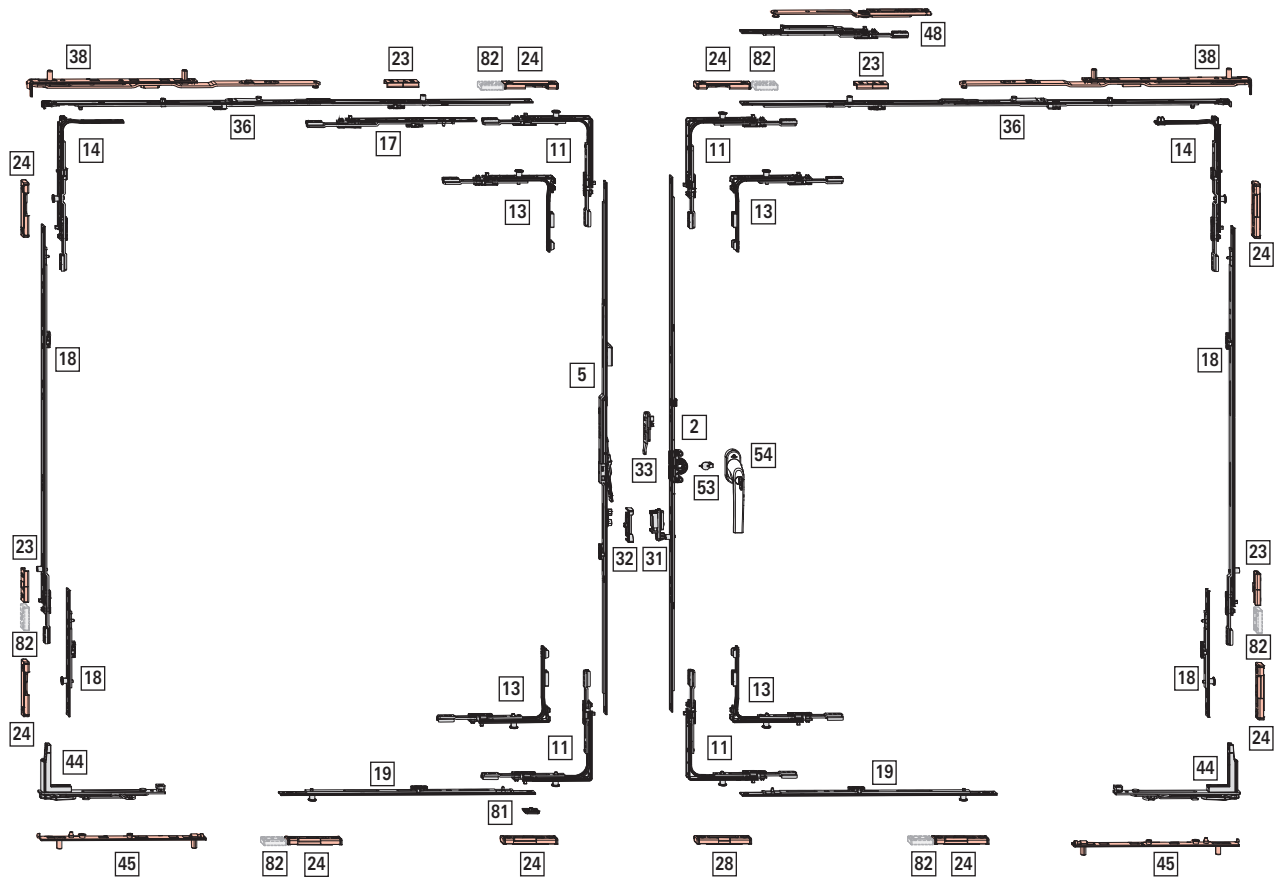
[54] Handle → CTL_1

[81] Run-up block

	Nº
Sash	350403



4.2.5.5 Plus – RC 1 N





Application range

SRW: 380 – 1400 mm

SRH: 420 – 2400 mm

S.kg: max. 80 kg

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

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

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

						Nº
431 – 620	194 – 289	400	N	N	–	2007128
621 – 800	290 – 379	680	Y	N	1	2007129
801 – 1200	380 – 579	980	Y	N	1	2007130
1001 – 1400	480 – 679	1180	Y	N	1	2007131
1201 – 1600	580 – 779	1380	Y	N	2	2007132
1601 – 2000	780 – 979	1780	Y	Y	2	2007133
2001 – 2400	980 – 1179	2180	Y	Y	4	2007134

[11] Standard corner drive

		Nº
1	P	260277

[13] Special short corner drive

		Nº
1	P	260282

For use on the first opening sash: SRH ≤ 451 mm

For use on the second opening sash: SRH ≤ 621 mm

Use → “Possible combinations” from page 143

[14] Sash stay corner drive

				Nº
250	360 – 800	1	P	617126
450	801 – 1400	1	P	260286

Screw the sash stay corner drive 250 onto the connecting rod groove before fitting the stay guide 250.

[18] Multipart centre lock – standard, vertical

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

Size-specific combinations:

CL with SRW 380 – 570

				Nº
465 – 700	200	1	P	255284
701 – 900	400	1	P	255285
901 – 1100	600	1	P	255286
1101 – 1300	600 KU	1	E	255282
	200	1	P	255284
1301 – 1500	600 KU	1	E	255282
	400	1	P	255285
1501 – 1700	600 KU	1	E	255282
	600	1	P	255286
1701 – 1900	600 KU	1	E	255282
	600 KU	1	E	255282
	200	1	P	255284
1901 – 2100	600 KU	1	E	255282
	600 KU	1	E	255282
	400	1	P	255285
2101 – 2400	600 KU	1	E	255282
	600 KU	1	E	255282
	600	1	P	255286

CL with SRW 571 – 1400

				Nº
801 – 1200	400	1	P	255285
1201 – 1400	600	1	P	255286
1401 – 1800	600 KU	1	E	255282
	400	1	P	255285
1801 – 2000	600 KU	1	E	255282
	600	1	P	255286
2001 – 2400	600 KU	1	E	255282
	600 KU	1	E	255282
	400	1	P	255285

[19] Multipart centre lock – standard, horizontal

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

Size-specific combinations:

				Nº
571 – 770	200	1	P	255284
771 – 970	400	1	P	255285
971 – 1170	600	1	P	255286
1171 – 1370	600 KU	1	E	255282
	200	1	P	255284
1371 – 1400	600 KU	1	E	255282
	400	1	P	255285

[23] Striker → from page 149

[24] Security striker → from page 149

[28] Tilt striker → from page 147

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

	Nº
Bullet catch sash component	788363

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

[33] Lifting mishandling device sash component

	Nº
Sash component for lifting mishandling device	795927

[36] Stay guide – basic security

								Nº
360 – 410	300	50	250	–	–	Roto Sil		570222
411 – 600	490	190	250	–	–	Roto Sil		570223
601 – 800	690	200	250	–	–	Roto Sil		570224
801 – 1000	890	200	450	1	E	Roto Sil		570345
1001 – 1200	1090	200	450	1	E	Roto Sil		570346

[38] Stay arm

				Nº
250	360 – 800	18	Left	263331
			Right	263245
		20	Left	254264
			Right	254265
450	801 – 1400	18	Left	563069
			Right	563068
		20	Left	254266
			Right	254267



INFO

With SRH < 500 mm, set the tilt depth to 90 mm.

[44] Corner hinge

					Nº
9	18	12	max. 80 kg	Left	254023
9		12	max. 80 kg	Right	254025
9	20	12	max. 80 kg	Left	254026
13					
9		12	max. 80 kg	Right	254028
13					

[45] Pivot rest

					Nº
9	18	12	max. 80 kg	Left	257123
9		12	max. 80 kg	Right	280425
9	20	12	max. 80 kg	Left	254035
13					



9
13



12



max. 80 kg



Right



254038

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

		Nº
Frame and sash component	200	255237

[53] Drilling protection

	Nº
Drilling protection	797819

[54] Handle, lockable → CTL_1

[81] Run-up block

	Nº
Sash	350403

Optional

[82] Anti-jemmy device

		Nº
13	From rebate depth 24 mm	792786

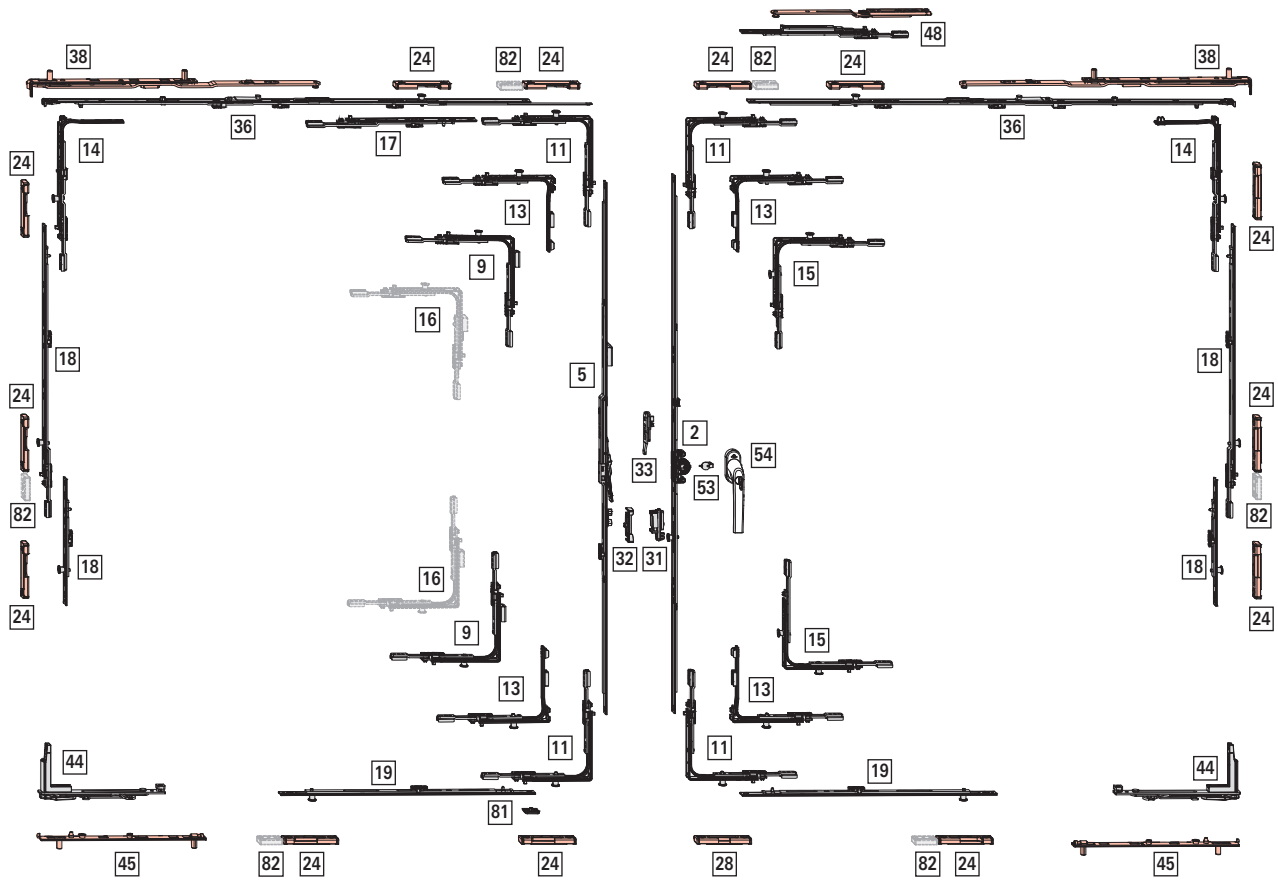


INFO

Only for hardware axis 13 and from a rebate depth of 24 mm.



4.2.5.6 Plus – RC 2 / RC 2 N



**Application range**

SRW: 570 – 1400 mm

SRH: 465 – 2400 mm

S.kg: max. 80 kg

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

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

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

						Nº
431 – 620	194 – 289	400	N	N	–	2007128
621 – 800	290 – 379	680	Y	N	1	2007129
801 – 1200	380 – 579	980	Y	N	1	2007130
1001 – 1400	480 – 679	1180	Y	N	1	2007131
1201 – 1600	580 – 779	1380	Y	N	2	2007132
1601 – 2000	780 – 979	1780	Y	Y	2	2007133
2001 – 2400	980 – 1179	2180	Y	Y	4	2007134

[9] Floating-mullion corner drive with security striker

				Nº
Top	1	1	V	313538
Bottom	1	1	V	367227

For use at the top: SRH 521 – 700 mm

For use at the bottom: SRH 521 – 1200 mm

[11] Standard corner drive

		Nº
1	V	260272

[13] Special short corner drive

		Nº
1	P	260282

Use → “Possible combinations” from page 143

[14] Sash stay corner drive

				Nº
250	360 – 800	1	V	617127
450	801 – 1400	1	V	260284

Screw the sash stay corner drive 250 onto the connecting rod groove before fitting the stay guide 250.

[15] Standard corner drive (RC3)

		Nº
2	V	260274

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

				Nº
200	Y	–	–	308267

Size-specific combinations:

				Nº
1201 – 1400	200	–	–	308267

[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:

				Nº
465 – 800	200	1	V	296853
801 – 1000	400	1	V	296854
1001 – 1200	600	1	V	296855
1201 – 1400	600 KU	1	V	337711
	200	1	V	296853
1401 – 1600	600 KU	1	V	337711
	400	1	V	296854
1601 – 1800	600 KU	1	V	337711
	600	1	V	296855
1801 – 2000	600 KU	1	V	337711
	600 KU	1	V	337711
	200	1	V	296853
2001 – 2200	600 KU	1	V	337711
	600 KU	1	V	337711
	400	1	V	296854
2201 – 2400	600 KU	1	V	337711
	600 KU	1	V	337711
	600	1	V	296855

[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:

				Nº
570 – 770	200	1	V	296853
771 – 970	400	1	V	296854
971 – 1170	600	1	V	296855

				Nº
1171 – 1370	600 KU	1	V	337711
	200	1	V	296853
1371 – 1400	600 KU	1	V	337711
	400	1	V	296854

[24] Security striker → from page 149

[28] Tilt striker → from page 147

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

	Nº
Bullet catch sash component	788363

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

[33] Lifting mishandling device sash component

	Nº
Sash component for lifting mishandling device	795927

[36] Stay guide – security

						Nº
411 – 600	490	190	250	–	–	570223
601 – 800	690	200	250	–	–	570224
801 – 1000	890	200	450	1	V	601551
1001 – 1200	1090	200	450	1	V	601552

[38] Stay arm

				Nº
250	360 – 800	18	Left	263331
			Right	263245
		20	Left	254264
			Right	254265
450	801 – 1400	18	Left	563069
			Right	563068
		20	Left	254266
			Right	254267

[44] Corner hinge

					Nº
9	18	12	max. 80 kg	Left	254023
9		12	max. 80 kg	Right	254025
9	20	12	max. 80 kg	Left	254026
13					
9		12	max. 80 kg	Right	254028
13					

[45] Pivot rest

					Nº
9	18	12	max. 80 kg	Left	257123
9		12	max. 80 kg	Right	280425
9	20	12	max. 80 kg	Left	254035
13					
9		12	max. 80 kg	Right	254038
13					

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

		Nº
Frame and sash component	200	255237

[53] Drilling protection

	Nº
Drilling protection	797819

[54] Handle, lockable → CTL_1

[81] Run-up block

	Nº
Sash	350403

Optional

[82] Anti-jemmy device

		Nº
13	From rebate depth 24 mm	792786

INFO

Only for hardware axis 13 and from a rebate depth of 24 mm.

[16] Corner drive, slide guard

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

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



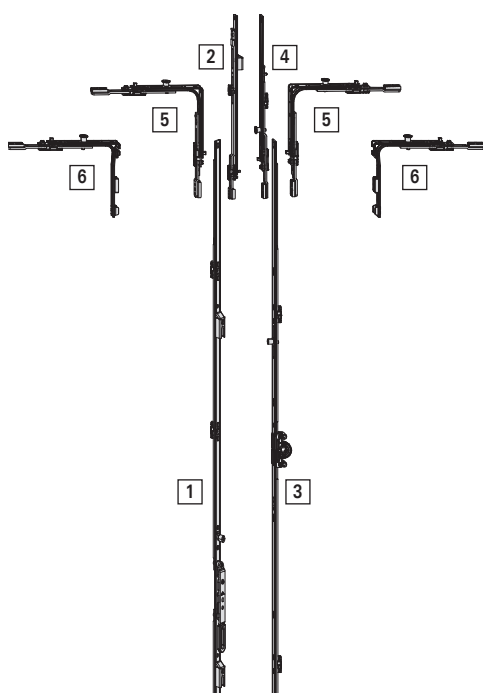
5 T&T espagnolette / floating-mullion sash espagnolette

5.1 Floating-mullion sash espagnolette

5.1.1 Standard

5.1.1.1 VT – fixed handle height

Possible combinations



Assignment	Meaning
[1]	Lever-operated espagnolette, standard VT
[2]	Floating-mullion centre lock
[3]	T&T espagnolette, VT – fixed handle height
[4]	Centre lock, standard
[5]	Corner drive, standard
[6]	Special corner drive, short

Determining the espagnolettes

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



INFO

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

2. Select the lever-operated espagnolette, standard VT [1] using the *sash rebate height (SRH)* and *length of the component*.

Optional: determine the floating-mullion centre lock [2].

3. Select the T&T espagnolette, VT – fixed handle height [3] using the *length of the component*.

- ☐ T&T espagnolette, VT – fixed handle height, backset 8 mm
- ☐ T&T espagnolette, VT – fixed handle height, backset 15 mm

- T&T espagnolette, VT – fixed handle height, backset 25, 30, 35, 40, 45, 50 mm

Optional: determine the centre lock, standard [4] .

Backset 8 mm

Application range		Lever-operated espagnolette, standard VT		T&T espagnolette, VT			
SRH	Component length	Toggle lever position	Corner drive type	Component length	Handle height	LMD	Corner drive type
431 – 510	600	233	Special corner drive, short	490	120	N	Corner drive, standard
511 – 600			Corner drive, standard	600	170	N	Corner drive, standard
601 – 800	690	325	Corner drive, standard	690	263	N	Corner drive, standard
801 – 1000	890	335	Corner drive, standard	890	413	Y	Corner drive, standard
1001 – 1200	1090	335	Corner drive, standard	1090	513	Y	Corner drive, standard
1201 – 1400	1290	335	Corner drive, standard	1290	563	Y	Corner drive, standard
1401 – 1600	1490	335	Corner drive, standard	1490	563	Y	Corner drive, standard
1601 – 1800	1690	335	Corner drive, standard	1690	563 / 1000	Y	Corner drive, standard
1801 – 2000	1890	640	Corner drive, standard	1890	1000	Y	Corner drive, standard
2001 – 2200	2090	640	Corner drive, standard	2090	1000	Y	Corner drive, standard
2201 – 2400	2290	640	Corner drive, standard	2290	1000	Y	Corner drive, standard

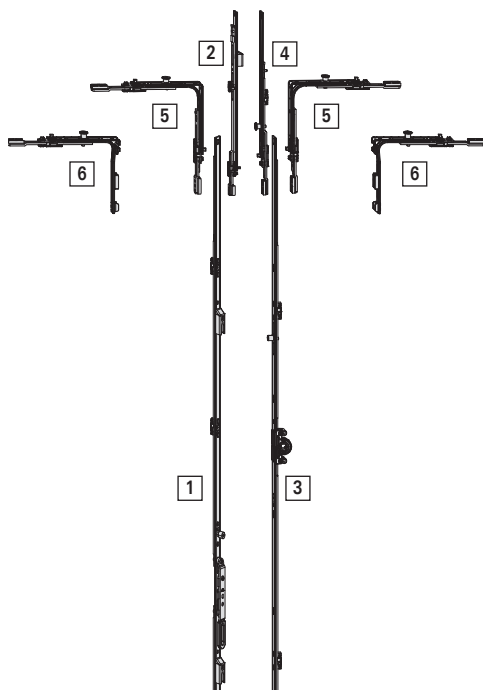
Backset of 15 mm and above

Application range		Lever-operated espagnolette, standard VT		T&T espagnolette, VT			
SRH	Component length	Toggle lever position	Corner drive type	Component length	Handle height	LMD	Corner drive type
280 – 370	445	156	Special corner drive, short	460	120	N	Special corner drive, short
371 – 555	445	156	Corner drive, standard	460	120	N	Corner drive, standard
431 – 510	600	195	Special corner drive, short	460	120	N	Corner drive, standard
511 – 600			Corner drive, standard	600	170	Y	Corner drive, standard
601 – 800	690	300	Corner drive, standard	690	263	Y	Corner drive, standard
801 – 1000	890	490	Corner drive, standard	890	413	Y	Corner drive, standard
1001 – 1200	1090	335	Corner drive, standard	1090	513	Y	Corner drive, standard
1201 – 1400	1290	335	Corner drive, standard	1290	563	Y	Corner drive, standard
1401 – 1600	1490	335	Corner drive, standard	1490	563	Y	Corner drive, standard
1601 – 1800	1690	335	Corner drive, standard	1690	563 / 1000	Y	Corner drive, standard
1801 – 2000	1890	640	Corner drive, standard	1890	1000	Y	Corner drive, standard
2001 – 2200	2090	640	Corner drive, standard	2090	1000	Y	Corner drive, standard
2201 – 2400	2290	640	Corner drive, standard	2290	1000	Y	Corner drive, standard



5.1.1.2 Centred / variable handle height

Possible combinations



Assignment	Meaning
[1]	Lever-operated espagnolette, standard
[2]	Floating-mullion centre lock
[3]	T&T espagnolette – centred / variable handle height
[4]	Centre lock, standard
[5]	Corner drive, standard
[6]	Special corner drive, short

Determining the espagnolettes

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



INFO

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

2. Select the lever-operated espagnolette, standard [1] using the *sash rebate height (SRH)* and *length of the component*.

Optional: determine the floating-mullion centre lock [2].

3. Select the T&T espagnolette – centred / variable handle height [3] using the *length of the component*.

- ☐ T&T espagnolette – centred / variable handle height, backset 8 mm
- ☐ T&T espagnolette – centred / variable handle height, backset 15 mm
- ☐ T&T espagnolette – centred / variable handle height, backset 25, 30, 35, 40, 45, 50 mm

Optional: determine the centre lock, standard [4].

Backset 8 mm

Application range		Lever-operated espagnolette, standard		T&T espagnolette			
SRH	Component length	Toggle lever position	Corner drive type	Component length	Handle height	LMD	Corner drive type
621 – 800	680	235 – 275	Special corner drive, short	800	311 – 510	N	Corner drive, standard
801 – 900		276 – 335	Corner drive, standard	980	351 – 400	N	Corner drive, standard
901 – 1200	980	249 – 448	Corner drive, standard		401 – 600	Y	Corner drive, standard
1201 – 1600	1380	448 – 658	Corner drive, standard	1380	601 – 800	Y	Corner drive, standard
1601 – 2000	1780	680 – 880	Corner drive, standard	1780	801 – 1000	Y	Corner drive, standard
2001 – 2400	2180	880 – 1080	Corner drive, standard	2180	1001 – 1200	Y	Corner drive, standard

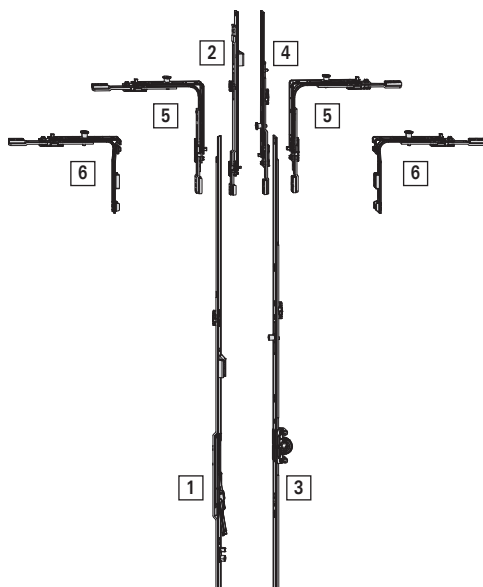
Backset of 15 mm and above

Application range		Lever-operated espagnolette, standard		T&T espagnolette			
SRH	Component length	Toggle lever position	Corner drive type	Component length	Handle height	LMD	Corner drive type
370 – 450	400	255 – 265	Special corner drive, short	430	215 – 225	N	Special corner drive, short
451 – 520		266 – 300	Special corner drive, short		226 – 260	N	Corner drive, standard
521 – 620		301 – 350	Corner drive, standard		261 – 310	N	Corner drive, standard
621 – 650	680	393 – 407	Special corner drive, short	510	311 – 400	Y	Corner drive, standard
651 – 800		408 – 482	Corner drive, standard				
801 – 1200	980	482 – 682	Corner drive, standard	980	401 – 600	Y	Corner drive, standard
1201 – 1600	1380	448 – 648	Corner drive, standard	1380	601 – 800	Y	Corner drive, standard
1601 – 2000	1780	680 – 880	Corner drive, standard	1780	801 – 1000	Y	Corner drive, standard
2001 – 2400	2180	880 – 1080	Corner drive, standard	2180	1001 – 1200	Y	Corner drive, standard

5.1.2 Plus

5.1.2.1 VT – fixed handle height

Possible combinations



Assignment	Meaning
[1]	Lever-operated espagnolette Plus, VT
[2]	Floating-mullion centre lock
[3]	T&T espagnolette, VT – fixed handle height
[4]	Centre lock, standard
[5]	Corner drive, standard
[6]	Special corner drive, short

Determining the espagnolettes

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



INFO

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

2. Select the lever-operated espagnolette Plus, VT [1] using the *sash rebate height (SRH)* and *length of the component*.

Optional: determine the floating-mullion centre lock [2].

3. Select the T&T espagnolette, VT – fixed handle height [3] using the *length of the component*.

- ☐ T&T espagnolette, VT – fixed handle height, backset 8 mm
- ☐ T&T espagnolette, VT – fixed handle height, backset 15 mm
- ☐ T&T espagnolette, VT – fixed handle height, backset 25, 30, 35, 40, 45, 50 mm

Optional: determine the centre lock, standard [4].

Backset 8 mm

Application range SRH	Lever-operated espagnolette Plus, VT			T&T espagnolette, VT			
	Component length	Toggle lever position	Corner drive type	Component length	Handle height	LMD	Corner drive type
431 – 510	600	233	Special corner drive, short	490	120	N	Corner drive, standard
511 – 600			Corner drive, standard	600	170	N	Corner drive, standard
601 – 800	690	325	Corner drive, standard	690	263	N	Corner drive, standard
801 – 1000	890	335	Corner drive, standard	890	413	Y	Corner drive, standard
1001 – 1200	1090	335	Corner drive, standard	1090	513	Y	Corner drive, standard
1201 – 1400	1290	335	Corner drive, standard	1290	563	Y	Corner drive, standard
1401 – 1600	1490	335	Corner drive, standard	1490	563	Y	Corner drive, standard
1601 – 1800	1690	335	Corner drive, standard	1690	563 / 1000	Y	Corner drive, standard
1801 – 2000	1890	640	Corner drive, standard	1890	1000	Y	Corner drive, standard
2001 – 2200	2090	640	Corner drive, standard	2090	1000	Y	Corner drive, standard
2201 – 2400	2290	640	Corner drive, standard	2290	1000	Y	Corner drive, standard

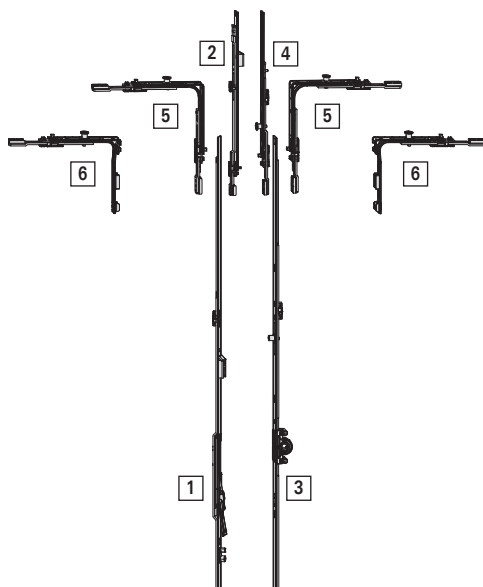
Backset of 15 mm and above

Application range SRH	Lever-operated espagnolette Plus, VT			T&T espagnolette, VT			
	Component length	Toggle lever position	Corner drive type	Component length	Handle height	LMD	Corner drive type
431 – 510	600	195	Special corner drive, short	460	120	N	Corner drive, standard
511 – 600			Corner drive, standard	600	170	Y	Corner drive, standard
601 – 800	690	300	Corner drive, standard	690	263	Y	Corner drive, standard
801 – 1000	890	490	Corner drive, standard	890	413	Y	Corner drive, standard
1001 – 1200	1090	335	Corner drive, standard	1090	513	Y	Corner drive, standard
1201 – 1400	1290	335	Corner drive, standard	1290	563	Y	Corner drive, standard
1401 – 1600	1490	335	Corner drive, standard	1490	563	Y	Corner drive, standard
1601 – 1800	1690	335	Corner drive, standard	1690	563 / 1000	Y	Corner drive, standard
1801 – 2000	1890	640	Corner drive, standard	1890	1000	Y	Corner drive, standard
2001 – 2200	2090	640	Corner drive, standard	2090	1000	Y	Corner drive, standard
2201 – 2400	2290	640	Corner drive, standard	2290	1000	Y	Corner drive, standard



5.1.2.2 Centred / variable handle height

Possible combinations



Assignment	Meaning
[1]	Lever-operated espagnolette Plus
[2]	Floating-mullion centre lock
[3]	T&T espagnolette – centred / variable handle height
[4]	Centre lock, standard
[5]	Corner drive, standard
[6]	Special corner drive, short

Determining the espagnolettes

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



INFO

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

2. Select the lever-operated espagnolette Plus [1] using the *sash rebate height (SRH)* and *length of the component*.

Optional: determine the floating-mullion centre lock [2].

3. Select the T&T espagnolette – centred / variable handle height [3] using the *length of the component*.

- ☐ T&T espagnolette – centred / variable handle height, backset 8 mm
- ☐ T&T espagnolette – centred / variable handle height, backset 15 mm
- ☐ T&T espagnolette – centred / variable handle height, backset 25, 30, 35, 40, 45, 50 mm

Optional: determine the centre lock, standard [4].

Backset 8 mm

Application range		Lever-operated espagnolette Plus		T&T espagnolette			
SRH	Component length	Toggle lever position	Corner drive type	Component length	Handle height	LMD	Corner drive type
431 – 520	400	194 – 239	Special corner drive, short	500	215 – 260	N	Special corner drive, short
521 – 620		240 – 289	Corner drive, standard		261 – 310	N	Corner drive, standard
621 – 720	680	290 – 329	Special corner drive, short	800	311 – 510	Y	Corner drive, standard
721 – 800		330 – 379	Corner drive, standard				
801 – 1200	980	380 – 579	Corner drive, standard	980	401 – 600	Y	Corner drive, standard
1201 – 1600	1380	580 – 779	Corner drive, standard	1380	601 – 800	Y	Corner drive, standard
1601 – 2000	1780	780 – 979	Corner drive, standard	1780	801 – 1000	Y	Corner drive, standard
2001 – 2400	2180	980 – 1179	Corner drive, standard	2180	1001 – 1200	Y	Corner drive, standard

Backset of 15 mm and above

Application range		Lever-operated espagnolette Plus		T&T espagnolette			
SRH	Component length	Toggle lever position	Corner drive type	Component length	Handle height	LMD	Corner drive type
431 – 450	400	194 – 204	Special corner drive, short	430	215 – 225	N	Special corner drive, short
451 – 520		205 – 239	Special corner drive, short		226 – 260	N	Corner drive, standard
521 – 620		240 – 289	Corner drive, standard		261 – 310	N	Corner drive, standard
621 – 700	680	290 – 329	Special corner drive, short	580	311 – 400	Y	Corner drive, standard
701 – 800		330 – 379	Corner drive, standard				
801 – 1200	980	380 – 579	Corner drive, standard	980	401 – 600	Y	Corner drive, standard
1201 – 1600	1380	580 – 779	Corner drive, standard	1380	601 – 800	Y	Corner drive, standard
1601 – 2000	1780	780 – 979	Corner drive, standard	1780	801 – 1000	Y	Corner drive, standard
2001 – 2400	2180	980 – 1179	Corner drive, standard	2180	1001 – 1200	Y	Corner drive, standard



6 Frame components

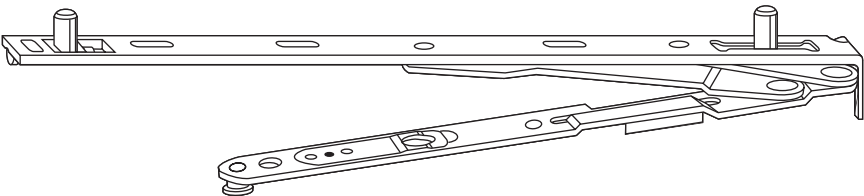


INFO

Further frame components are available upon request.

6.1 Stay arm

6.1.1 Standard

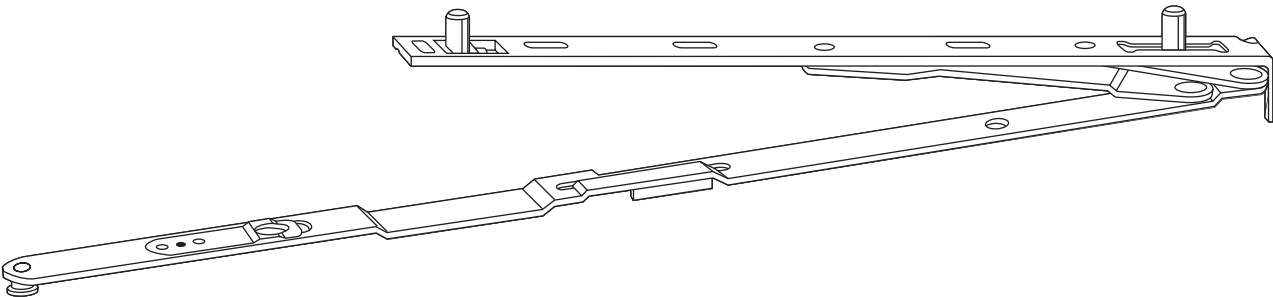
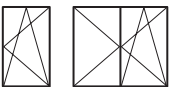


							Nº
Eurofalz Euronut 7/8	360 – 800	250	18	12	Roto Sil	Left	263331
			18	12	Roto Sil	Right	263245
			20	12	Roto Sil	Left	254264
			20	12	Roto Sil	Right	254265



INFO

With SRH < 500 mm, set the tilt depth to 90 mm.



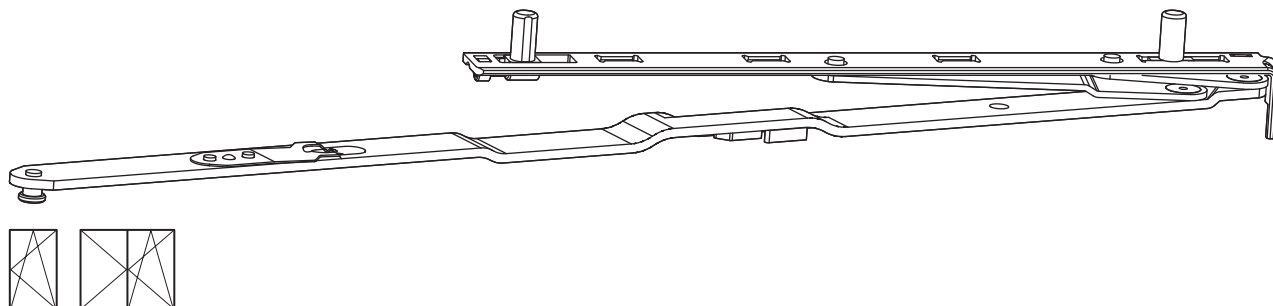
							Nº
Eurofalz Euronut 7/8	801 – 1400	450	18	12	Roto Sil	Left	563069
			18	12	Roto Sil	Right	563068
			20	12	Roto Sil	Left	254266
			20	12	Roto Sil	Right	254267



INFO

With SRH < 500 mm, set the tilt depth to 90 mm.

6.1.2 TiltFirst (TF)



							Nº
Eurofalz Euronut 7/8	360 – 800	250	20	12	Roto Sil	Left	324662
			20	12	Roto Sil	Right	324863
	801 – 1400	450	20	12	Roto Sil	Left	324864
			20	12	Roto Sil	Right	324865

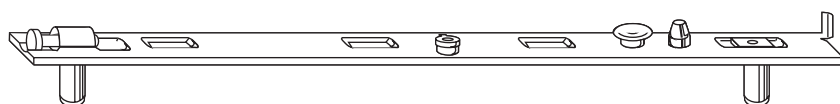


INFO

With SRH < 500 mm, set the tilt depth to 90 mm.

6.2 Pivot rests

6.2.1 Hinge side Royal



							Nº
Pivot rest Royal	18	12	max. 80 kg	9	Roto Sil	Left	257123
		12	max. 80 kg	9	Roto Sil	Right	280425
	20	12	max. 80 kg	9 13	Roto Sil	Left	254035
		12	max. 80 kg	9 13	Roto Sil	Right	254038

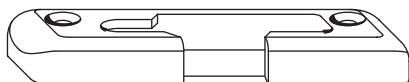
For compatible corner hinges, see → *from page 30*.



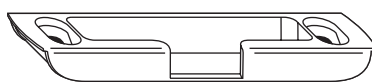
6.3 Tilt strikers

6.3.1 Standard

6.3.1.1 Zinc



A



B

Assignment	Meaning
[A]	Tilt striker, screw-on
[B]	Tilt striker, to be routed in

										
–	18	4	Can be routed in	N	–	9	Y	Roto Sil	–	318319
Eurofalz	18	12	Screw-on	N	–	9	Y	Roto Sil	Left	260479
	18	12	Screw-on	N	–	9	Y	Roto Sil	Right	260480
	18	12	Screw-on	Y	2 x Ø 8 mm	9	Y	Roto Sil	Left	260481
	18	12	Screw-on	Y	2 x Ø 8 mm	9	Y	Roto Sil	Right	260482
	20	12	Screw-on	N	–	9	Y	Roto Sil	Left	260483
	20	12	Screw-on	N	–	9	Y	Roto Sil	Right	260484
	20	12	Screw-on	Y	2 x Ø 8 mm	9	Y	Roto Sil	Left	260485
	20	12	Screw-on	Y	2 x Ø 8 mm	9	Y	Roto Sil	Right	260486
	24	12	Screw-on	N	–	13	Y	Roto Sil	Left	261943
	24	12	Screw-on	N	–	13	Y	Roto Sil	Right	262927
	24	12	Screw-on	Y	2 x Ø 8 mm	13	Y	Roto Sil	Left	261944
	24	12	Screw-on	Y	2 x Ø 8 mm	13	Y	Roto Sil	Right	262929
Euronut 7/8	18	12	Screw-on	N	–	9	Y	Roto Sil	Left	260487
	18	12	Screw-on	N	–	9	Y	Roto Sil	Right	260488
Euronut 11/8	24	12	Screw-on	N	–	13	Y	Roto Sil	Left	378464
	24	12	Screw-on	N	–	13	Y	Roto Sil	Right	378457



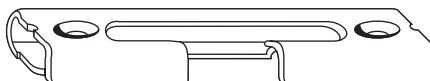
INFO

Other versions are available upon request.

6.3.1.2 Steel



A



B

Assignment	Meaning
[A]	With end caps
[B]	Without end caps

										
–	18	4	Can be routed in	N	–	With end caps	9	Y	Roto Sil	856829
Eurofalz	18	12	Screw-on	N	–	–	9	Y	Roto Sil	856827
	20	12	Screw-on	N	–	–	9	Y	Roto Sil	856824
	20	12	Screw-on	Y	2 x Ø 8 mm	–	9	Y	Roto Sil	856825

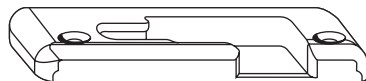
										Nº
Euronut 7/8	18	12	Screw-on	N	–	–	9	Y	Roto Sil	856828
	20	12	Screw-on	N	–	–	9	Y	Roto Sil	856826



INFO

Other versions are available upon request.

6.3.2 TiltFirst (TF)



										Nº
Eurofalz	18	12	Screw-on	N	–	9	Y	Roto Sil	Left	287915
	18	12	Screw-on	N	–	9	Y	Roto Sil	Right	287916
	20	12	Screw-on	N	–	9	Y	Roto Sil	Left	287590
	20	12	Screw-on	N	–	9	Y	Roto Sil	Right	287591
	24	12	Screw-on	Y	2 x Ø 8 mm	13	Y	Roto Sil	Left	611180
	24	12	Screw-on	Y	2 x Ø 8 mm	13	Y	Roto Sil	Right	612134
	24	12	Screw-on	N	–	13	Y	Roto Sil	Left	632132
	24	12	Screw-on	N	–	13	Y	Roto Sil	Right	632133
Euronut 7/8	18	12	Screw-on	N	–	9	Y	Roto Sil	Left	287917
	18	12	Screw-on	N	–	9	Y	Roto Sil	Right	287918
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.



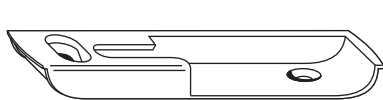
			Nº
TiltFirst adapter for security strikers (steel)	9	Roto Sil	456941

For compatible security strikers (steel – not reverse-action), see .

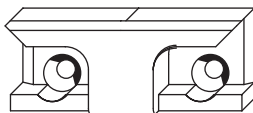


6.4 Strikers

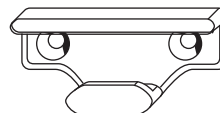
6.4.1 Standard



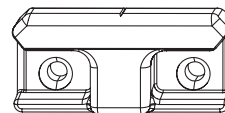
A



B



C



D

Assignment	Meaning
[A]	Can be routed in
[B]	Hardware axis 9 (Euro-rebate / Euro-groove)
[C]	Hardware axis 13 (Euro-rebate / Euro-groove)
[D]	Hardware axis 13 (Euro-rebate, reinforced version)

											
–	18	4	Can be routed in	N	–	–	9	Y	Roto Sil	Left	289320
	18	4	Can be routed in	N	–	–	9	Y	Roto Sil	Right	289321
Eurofalz	18	12	Screw-on	N	–	–	9	Y	Roto Sil	–	260360
	18	12	Screw-on	Y	2 x Ø 8 mm	–	9	Y	Roto Sil	–	260361
	20	12	Screw-on	N	–	–	9	Y	Roto Sil	–	260362
	20	12	Screw-on	Y	2 x Ø 8 mm	–	9	Y	Roto Sil	–	260363
	24	12	Screw-on	N	–	–	13	Y	Roto Sil	–	261933
	24	12	Screw-on	Y	2 x Ø 8 mm	–	13	Y	Roto Sil	–	261934
	24	12	Screw-on	N	–	Reinforced version	13	Y	Roto Sil	–	532873
	24	12	Screw-on	Y	2 x Ø 8 mm	Reinforced version	13	Y	Roto Sil	–	624076
Euronut 7/8	18	12	Screw-on	N	–	–	9	Y	Roto Sil	–	378462
Euronut 11/8	24	12	Screw-on	N	–	–	13	Y	Roto Sil	–	378467



INFO

Reinforced version, not compatible with existing jig system.

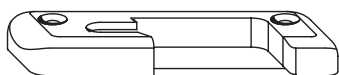


INFO

Other versions are available upon request.

6.4.2 Security

6.4.2.1 Zinc



A



B

Assignment	Meaning
[A]	Striker, right / left

Assignment				Meaning						
[B]				Striker, symmetrical						
										
–	18	4	Can be routed in	N	–	9	Y	Roto Sil	Left	289320
	18	4	Can be routed in	N	–	9	Y	Roto Sil	Right	289321
Eurofalz	18	12	Screw-on	N	–	9	Y	Roto Sil	Left	260382
	18	12	Screw-on	N	–	9	Y	Roto Sil	Right	260383
	18	12	Screw-on	Y	2 x Ø 8 mm	9	Y	Roto Sil	Left	260384
	18	12	Screw-on	Y	2 x Ø 8 mm	9	Y	Roto Sil	Right	260385
	20	12	Screw-on	N	–	9 10	Y	Roto Sil	Left	260386
	20	12	Screw-on	N	–	9 10	Y	Roto Sil	Right	260387
	20	12	Screw-on	Y	2 x Ø 8 mm	9	Y	Roto Sil	Left	259592
	20	12	Screw-on	Y	2 x Ø 8 mm	9	Y	Roto Sil	Right	259593
	24	12	Screw-on	N	–	13	Y	Roto Sil	Left	261935
	24	12	Screw-on	N	–	13	Y	Roto Sil	Right	262930
	24	12	Screw-on	Y	2 x Ø 8 mm	13	Y	Roto Sil	Left	261936
	24	12	Screw-on	Y	2 x Ø 8 mm	13	Y	Roto Sil	Right	262931
Euronut 7/8	18	12	Screw-on	N	–	9	Y	Roto Sil	Left	260388
	18	12	Screw-on	N	–	9	Y	Roto Sil	Right	260389
Euronut 11/8	24	12	Screw-on	N	–	13	Y	Roto Sil	Left	378465
	24	12	Screw-on	N	–	13	Y	Roto Sil	Right	378466

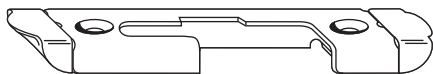


INFO

Other versions are available upon request.



6.4.2.2 Steel



A



B

Assignment	Meaning
[A]	With end caps
[B]	Without end caps

											
–	18	4	Can be routed in	N	–		9	Y	Roto Sil	Left	856987
	18	4	Can be routed in	N	–		9	Y	Roto Sil	Left	856986
Eurofalz	18	12	Screw-on	N	–	–	9	Y	Roto Sil	Left	856982
	18	12	Screw-on	N	–	–	9	Y	Roto Sil	Right	856981
	18	12	Screw-on	Y	2 x Ø 8 mm	–	9	Y	Roto Sil	Left	856988
	18	12	Screw-on	Y	2 x Ø 8 mm	–	9	Y	Roto Sil	Right	856989
	20	12	Screw-on	N	–	–	9	Y	Roto Sil	Left	856991
	20	12	Screw-on	N	–	–	9	Y	Roto Sil	Right	856990
	20	12	Screw-on	Y	2 x Ø 8 mm	–	9	Y	Roto Sil	Left	856993
	20	12	Screw-on	Y	2 x Ø 8 mm	–	9	Y	Roto Sil	Right	856992
	Euronut 7/8	18	12	Screw-on	N	–	–	9	Y	Roto Sil	Left
18		12	Screw-on	N	–	–	9	Y	Roto Sil	Right	856983
20		12	Screw-on	N	–	–	9	Y	Roto Sil	Left	856995
20		12	Screw-on	N	–	–	9	Y	Roto Sil	Right	856994

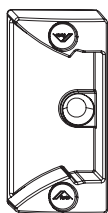


INFO

Other versions are available upon request.

6.5 Bullet catches

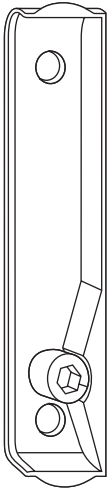
6.5.1 Frame components



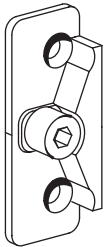
										Nº
–	18	4 mm	Can be routed in	N	–		9		Roto Sil	788376
	24	4 mm	Can be routed in	N	–		13		Roto Sil	788377
Eurofalz	18	12 mm	Screw-on	N	–		9		Roto Sil	788365
	18	12 mm	Screw-on	Y	2 x Ø 8 mm		9		Roto Sil	788369
	20	12 mm	Screw-on	N	–		9		Roto Sil	788366
	20	12 mm	Screw-on	Y	2 x Ø 8 mm		9		Roto Sil	788370
	24	12 mm	Screw-on	N	–		13		Roto Sil	788367
	24	12 mm	Screw-on	Y	2 x Ø 8 mm		13		Roto Sil	788371
	24	12 mm	Screw-on	Y	2 x Ø 8 mm		13		Roto Sil	788371
Euronut 7/8	18	12 mm	Screw-on	N	–		9		Roto Sil	788373
	20	12 mm	Screw-on	N	–		9		Roto Sil	788374

6.6 Lifting mishandling devices

6.6.1 Frame components



									
–	18	4	Can be routed in	N	–	9	Roto Sil	Left	280120
		4	Can be routed in	N	–	9	Roto Sil	Right	280121
	24	5	Can be routed in	N	–	13	Roto Sil	Left	551744
		5	Can be routed in	N	–	13	Roto Sil	Right	551743



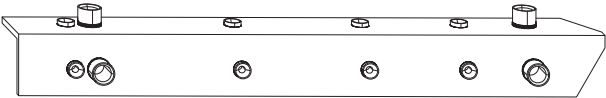
									Nº
Eurofalz	18	12	Screw-on	N	–	9	Roto Sil	–	260540
	18	12	Screw-on	Y	2 x Ø 7 mm	9	Roto Sil	–	260541
	20	12	Screw-on	N	–	9	Roto Sil	–	260542
	20	12	Screw-on	Y	2 x Ø 7 mm	9	Roto Sil	–	260543
	24	12	Screw-on	N	–	13	Roto Sil	–	261947
	24	12	Screw-on	Y	2 x Ø 7 mm	13	Roto Sil	–	261948
Euronut 7/8	18	12	Screw-on	N	–	9	Roto Sil	–	383281



7 Jigs

7.1 Drilling jigs

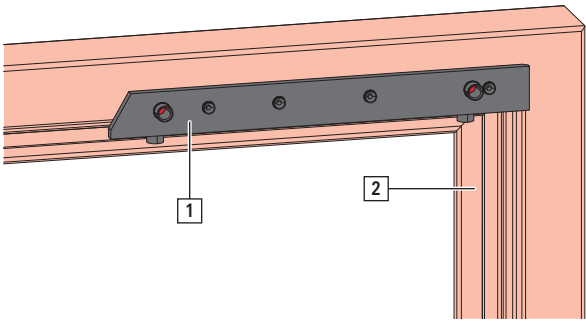
7.1.1 Stay bearing and pivot rest



			Nº
Eurofalz	9	18	259142
Euronut 7/8	9	20	259145

7.1.2 Drilling jig – stay bearing and pivot rest

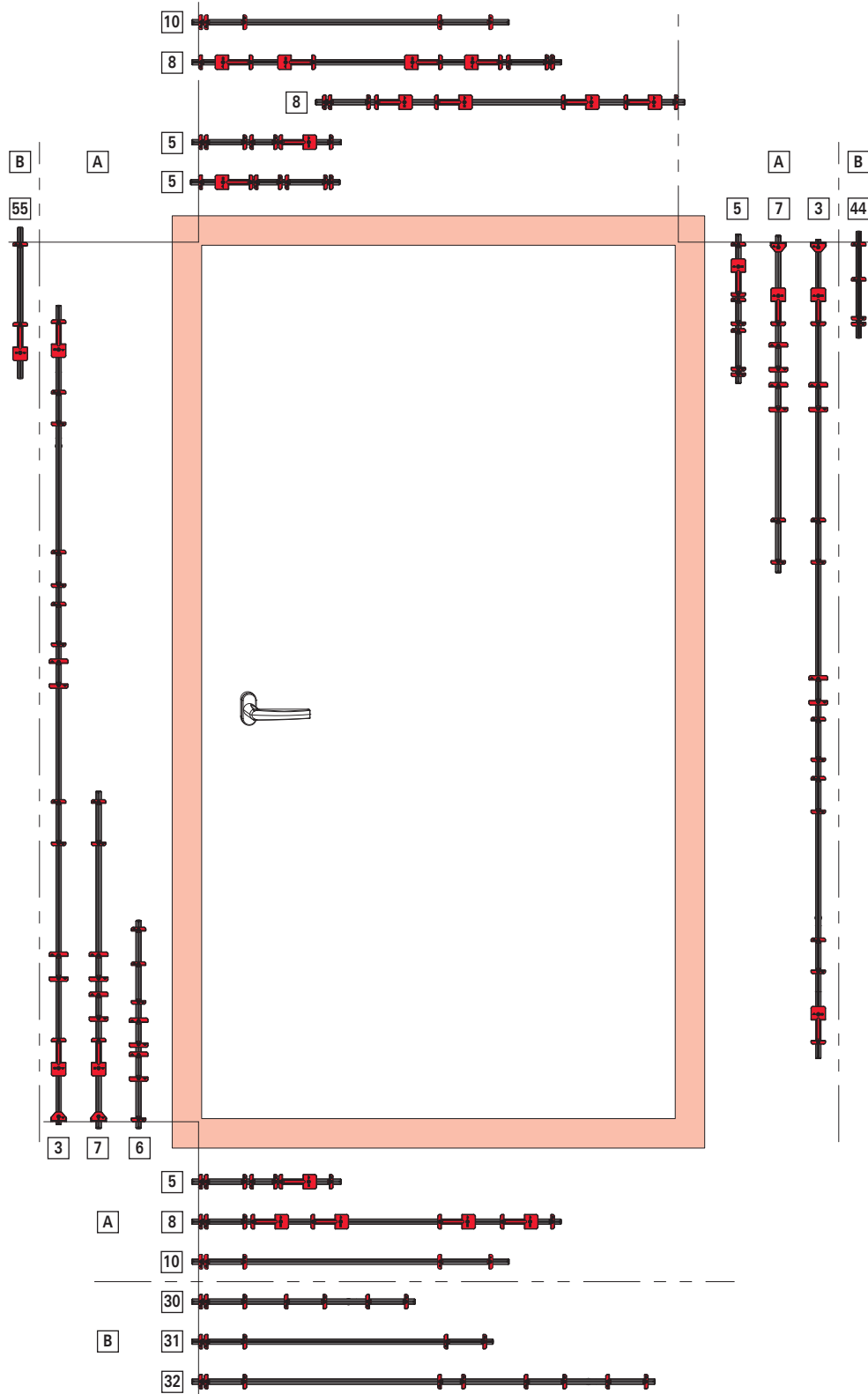
1. Place the drilling jig [1] on the frame [2].



2. Drill holes.

7.2 Positioning jigs

7.2.1 T&T espagnolette – fixed handle height

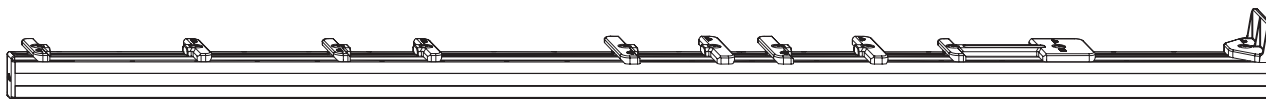


[A] BSec
[B] RC 1 N



Assignment	Position	Application range	T&T		T-O	Single jig
			BSec	RC 1 N	BSec	
[6]	Espagnolette side	SRH 481 – 800 mm	■	■	■	Standard → <i>from page 155</i>
[7]		SRH 801 – 1600 mm	■	■	■	
[3]		SRH 1601 – 2600 mm	■	■	■	
[55]		SRH 2401 – 2600 mm	–	■	–	
[5]	Hinge side	SRH 315 – 1100 mm	■	■	–	Tilt striker / corner drive → <i>from page 155</i>
[7]		SRH 1101 – 1800 mm	■	■	–	Standard → <i>from page 155</i>
[3]		SRH 1801 – 2600 mm	■	■	■	
[44] ^[1]		SRH 320 – 2600 mm	–	■	–	
[5]	Horizontal at the top	SRW 315 – 1200	■	■	■	Tilt striker / corner drive → <i>from page 155</i>
[8]		BSec: SRW 1201 – 1600 mm	■	■	–	Centre lock → <i>from page 156</i>
		RC 1 N: SRW 1201 – 1400 mm				
[10]		SRW 1101 – 1600 mm	–	–	■	Turn-Only sash → <i>from page 156</i>
[5]	Horizontal at the bottom	SRW 315 – 1100 mm	■	–	■	Tilt striker / corner drive → <i>from page 155</i>
[8]		SRW 1101 – 1600 mm	■	–	–	Centre lock → <i>from page 156</i>
[10]		SRW 1101 – 1600 mm	–	–	■	Turn-Only sash → <i>from page 156</i>
[30]		SRW 400 – 800 mm	–	■	–	RC 1 N centre lock → <i>from page 156</i>
[31]		SRW 801 – 1000 mm	–	■	–	
[32]		SRW 1001 – 1400 mm	–	■	–	

7.2.1.1 Standard



Espagnolette side and hinge side

						Nº
Tilt striker / corner drive	RC 1 N	320 – 2600		Hinge side	No. 44	640450
Standard	Basic security RC 1 N	481 – 800		Espagnolette side	No. 6	290073
	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
	RC 1 N	2401 – 2600		Espagnolette side	No. 55	640440

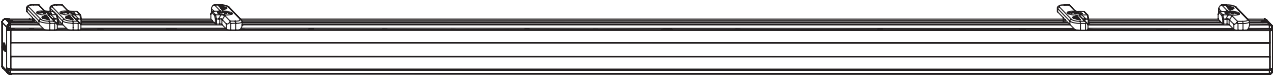
7.2.1.2 Tilt striker / corner drive



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

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

7.2.1.3 Centre lock



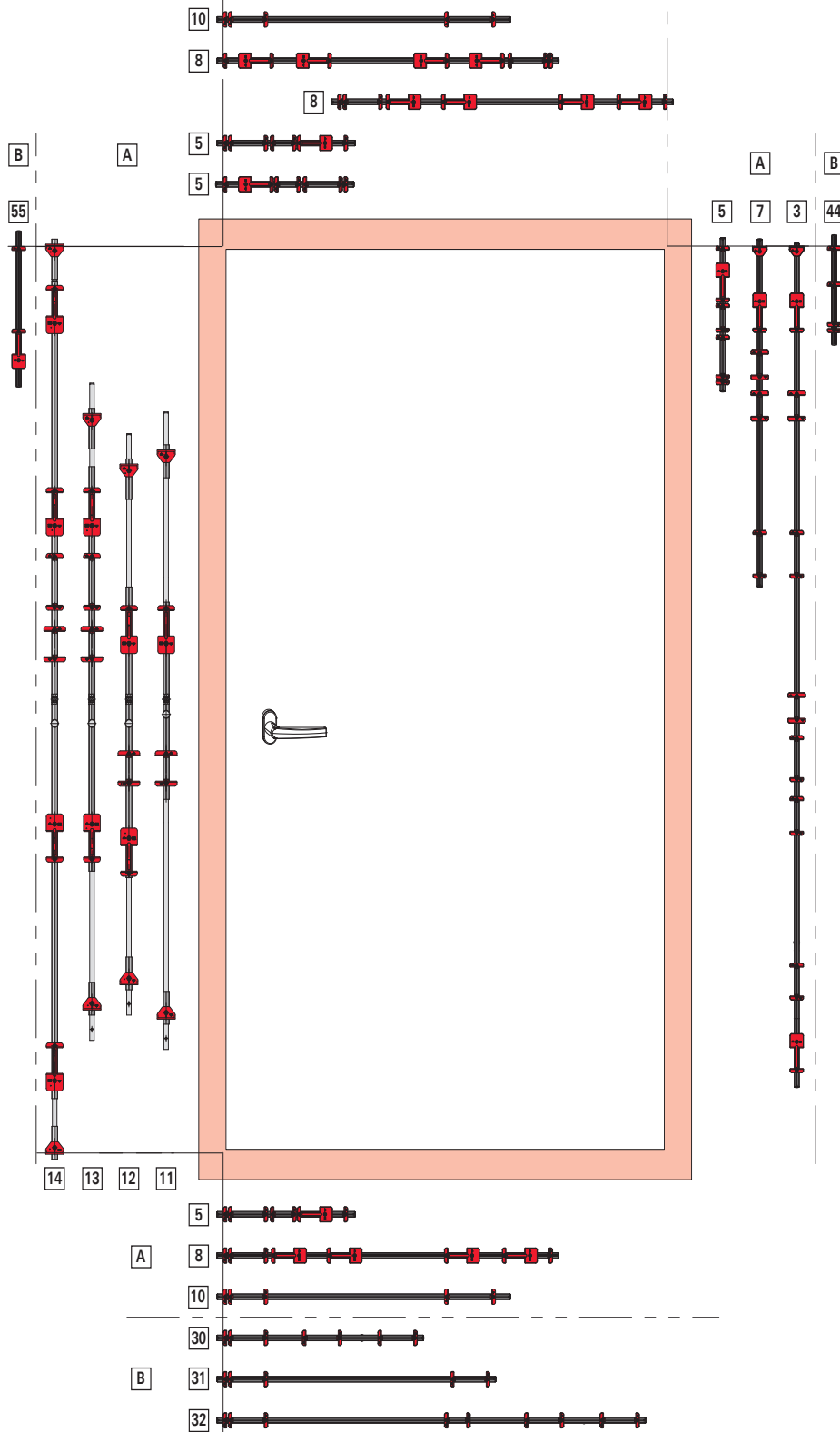
					Nº
Centre lock	Basic security RC 1 N	1201 – 1600	Top Bottom	No. 8	290075
	RC 1 N	400 – 800	Bottom	No. 30	268931
		801 – 1000	Bottom	No. 31	268932
		1001 – 1400	Bottom	No. 32	268933

7.2.1.4 Turn-Only sash



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

7.2.2 T&T espagnolette – centred / variable handle height

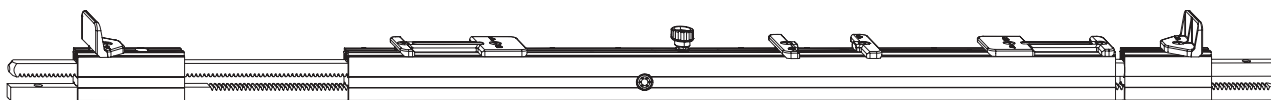


[A] BSec

[B] RC 1 N

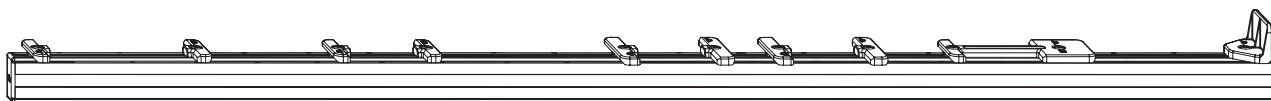
Assignment	Position	Application range	T&T		T-O	Single jig
			BSec	RC 1 N	BSec	
[11]	Espagnolette side	SRH 621 – 1200 mm	■	■	■	Standard → <i>from page 158</i>
[12]		SRH 1201 – 1600 mm	■	■	■	
[13]		SRH 1601 – 2000 mm	■	■	■	
[14]		SRH 2001 – 2400 mm	■	■	■	
[55]		SRH 2401 – 2600 mm	–	■	–	
[5]	Hinge side	SRH 315 – 1100 mm	■	■	–	Tilt striker / corner drive → <i>from page 159</i>
[7]		SRH 1101 – 1800 mm	■	■	–	Standard → <i>from page 158</i>
[3]		SRH 1801 – 2600 mm	■	■	■	
[44] ^[2]		SRH 320 – 2600 mm	–	■	–	
[5]	Horizontal at the top	SRW 315 – 1200	■	■	■	Tilt striker / corner drive → <i>from page 159</i>
[8]		BSec: SRW 1201 – 1600 mm	■	■	–	Centre lock → <i>from page 159</i>
		RC 1 N: SRW 1201 – 1400 mm				
[10]		SRW 1101 – 1600 mm	–	–	■	Turn-Only sash → <i>from page 159</i>
[5]	Horizontal at the bottom	SRW 315 – 1100 mm	■	–	■	Tilt striker / corner drive → <i>from page 159</i>
[8]		SRW 1101 – 1600 mm	■	–	–	Centre lock → <i>from page 159</i>
[10]		SRW 1101 – 1600 mm	–	–	■	Turn-Only sash → <i>from page 159</i>
[30]		SRW 400 – 800 mm	–	■	–	RC 1 N centre lock → <i>from page 159</i>
[31]		SRW 801 – 1000 mm	–	■	–	
[32]		SRW 1001 – 1400 mm	–	■	–	

7.2.2.1 T&T espagnolette – centred / variable handle height



Espagnolette side

					Nº
Standard	Basic security	621 – 1200	Espagnolette side	No. 11	268943
	Basic security	1001 – 1600	Espagnolette side	No. 12	798480
	Basic security	1601 – 2000	Espagnolette side	No. 13	787401
	Basic security	2001 – 2400	Espagnolette side	No. 14	787402
	RC 1 N	2401 – 2600	Espagnolette side	No. 55	640440



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.

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

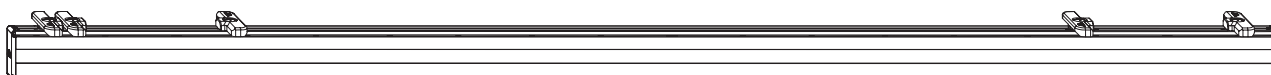


7.2.2.2 Tilt striker / corner drive



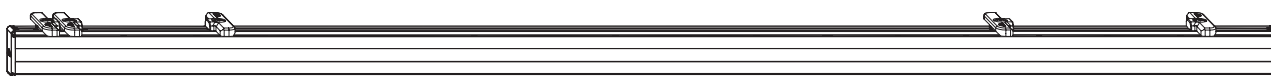
					Nº
Tilt striker / corner drive	315 – 1100	315 – 1200	Top Bottom Hinge side	No. 5	290072

7.2.2.3 Centre lock



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

7.2.2.4 Turn-Only sash



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

8 Installation

8.1 Processing instructions

Maximum sash sizes and weights

The specifications, application diagrams and component assignments which can be found in the hardware manufacturer's product-specific documents provide information on the maximum permitted sash sizes and weights. The component with the lowest permitted load bearing capacity determines the maximum permitted sash weight.

- Before using electronic data records and implementing them in window fabrication programs in particular, check that they match the specifications, application diagrams and component assignments.
- Never exceed the maximum permitted sash sizes and weights. If any points are unclear, contact the hardware manufacturer.

Specifications from profile manufacturers

The element manufacturer must comply with all specified system dimensions (e.g. gasket gap dimensions or locking distances).

They must continue to ensure and check this on a regular basis, especially when new hardware components are used for the first time, during production and on a continuous basis, up to and including element installation.



INFO

The hardware components are always designed in such a way that any system dimensions affected by the hardware can be adjusted. The hardware manufacturer shall not be liable for any additional expenses incurred if a deviation from these dimensions is not discovered until after the element has been installed.

Combining hardware

Burglar inhibiting elements need hardware which meets special requirements.

Elements for wet rooms and those for use in environments with aggressive, corrosive constituents in the air require hardware that meets special requirements.

The resistance of elements to wind loads when they are closed and locked depends on the individual design of the element. The hardware system is capable of handling wind loads specified by legislation and standards (for example in accordance with EN 12210 – especially test pressure P3).

Coordinate suitable hardware combinations and installation procedures in elements with the hardware manufacturer and profile manufacturer for the areas listed above, and conclude a separate agreement for them.



INFO

The hardware manufacturer's specifications on the combination of hardware (e.g. the use of additional scissor stays, the design of hardware for burglar-inhibiting elements, etc.) are binding.

In general, the hardware defined in this document is capable of meeting statutory and normative requirements for accessible dwellings.

Installation surfaces

The frame and sash grooves must be free from construction materials (such as plaster, gypsum). The sash groove must be free from welding residue to ensure an optimum supporting surface for the hardware components.

8.2 Screw fixing

Electrogalvanised and passivated steel fenestration screws (Ø 3.9 – 4.2 x ...) are to be used to fasten the hardware components; in more challenging climatic conditions, use fenestration screws with additional sealing.

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



Sash weight in kg	Tractive force in N [3]
60	1650
70	1900
80	2200



INFO

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

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

The spacer block guidelines for glazing methods must be complied with.

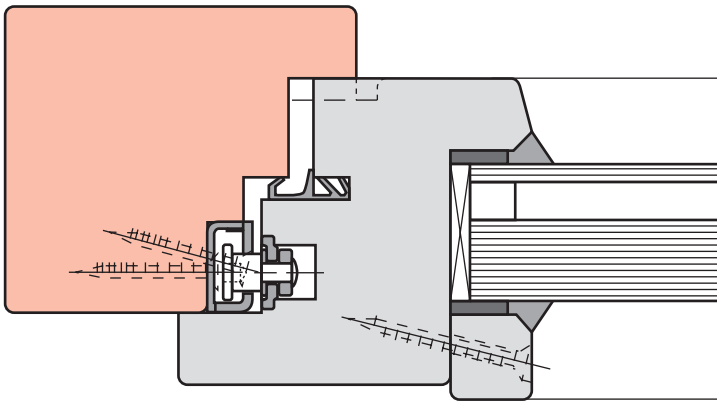
8.3 Fastening suggestion for security windows

Fastening SEC strikers

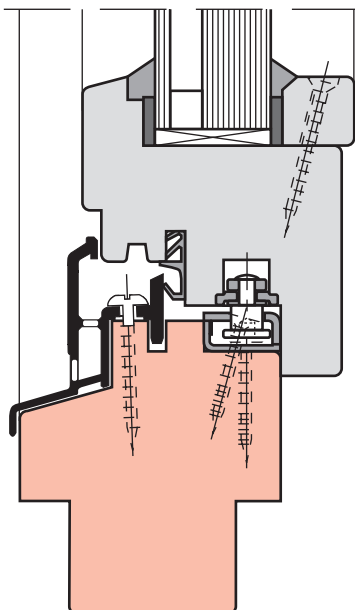
3 pcs. screws 4x ...

Glazing bead attachment

With screws if required.



Horizontal cross section M 1:2



[3] Permissible tolerance -10%

Vertical cross section M 1:2

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.

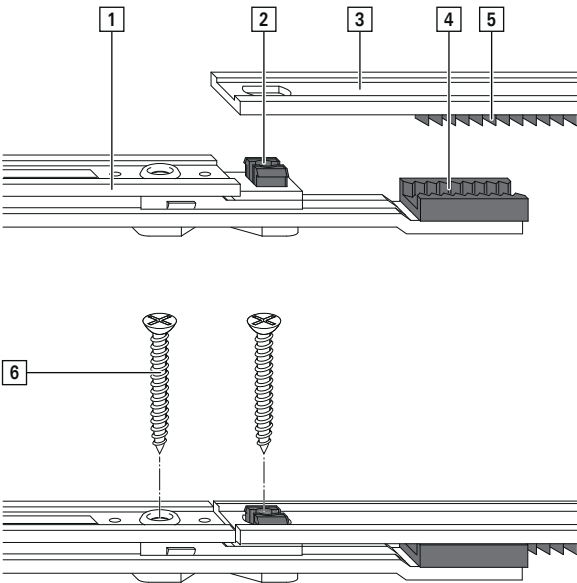
Improper screw fixings may damage the components and the element as a whole, and stop them from working properly.

- ▶ 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

Coupleable hardware components always require a force-fit connection.



Assignment	Description
[1]	Component A
[2]	Screw guide with clamp
[3]	Component B
[4]	Component A toothed segment
[5]	Component B toothed segment
[6]	Screw

Force-fit connections are formed by screwing down components A and B so that forces and movements are transferred without loss.



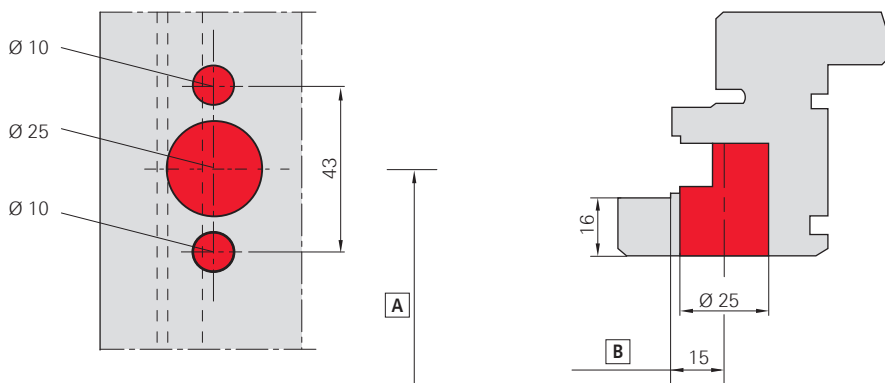
INFO

All coupleable components are delivered attached in the centre.

8.6 Drilling and routing dimensions

8.6.1 T&T espagnolette

8.6.1.1 Drilling and routing pattern



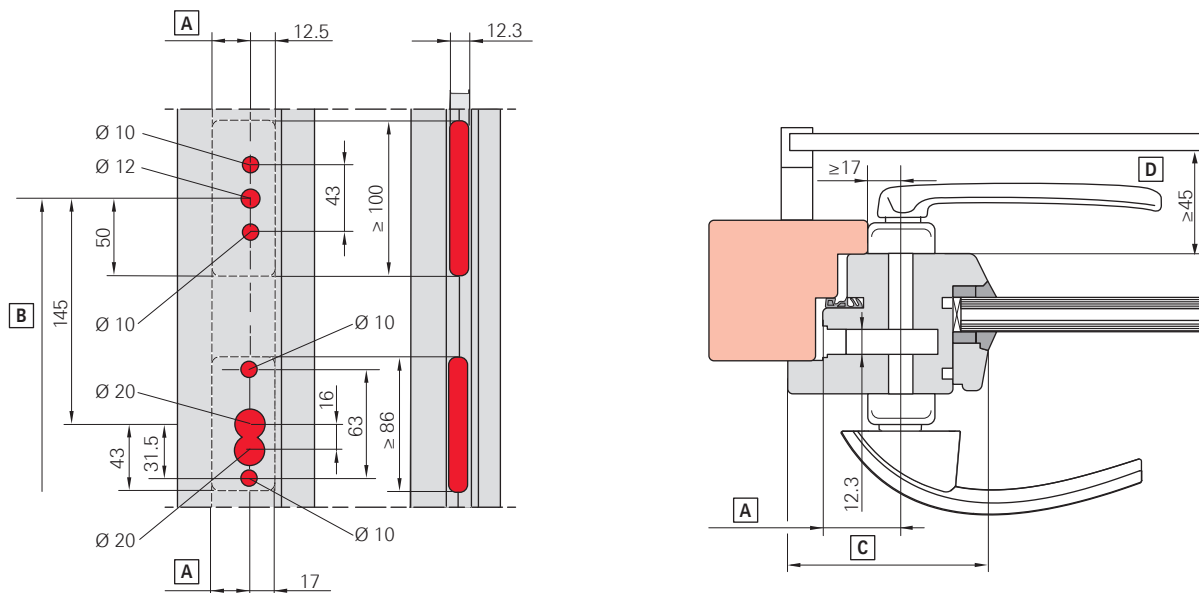
Assignment	Meaning
[A]	Handle height
[B]	Backset



INFO

Ø 10 drilling depth 33 mm (for 16 mm overlap) for countersunk screws M5 x ... DIN EN ISO 7046.

8.6.2 High backset espagnolette



Assignment	Meaning	Backset
[A]	Backset	-
[B]	Handle height	-



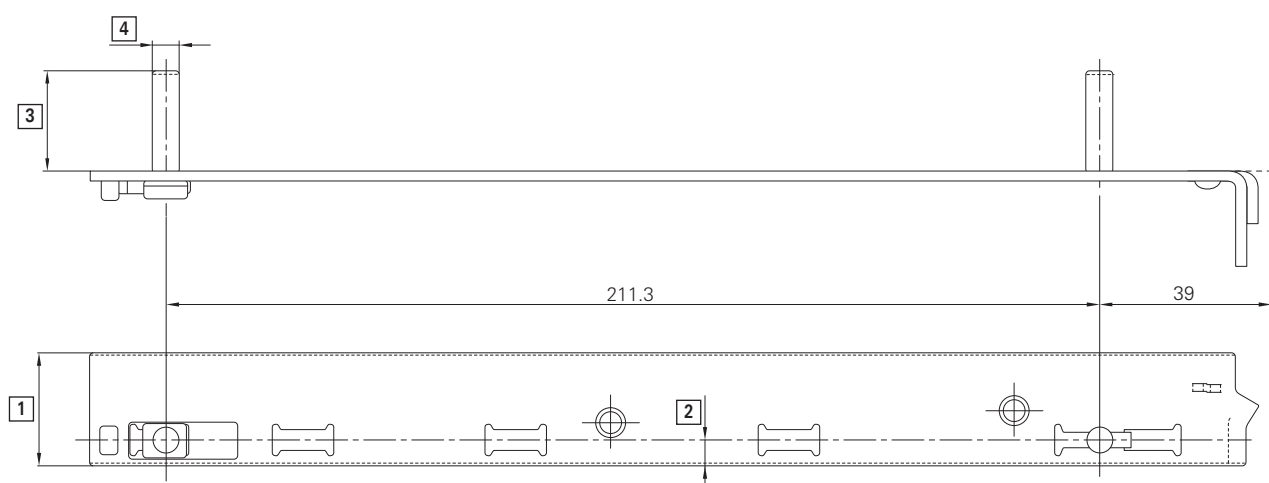
Assignment	Meaning	Backset
[C]	82 mm	25 mm
	87 mm	30 mm
	92 mm	35 mm
	97 mm	40 mm
	102 mm	45 mm
	107 mm	50 mm
[D]	On roller shutters	-



INFO

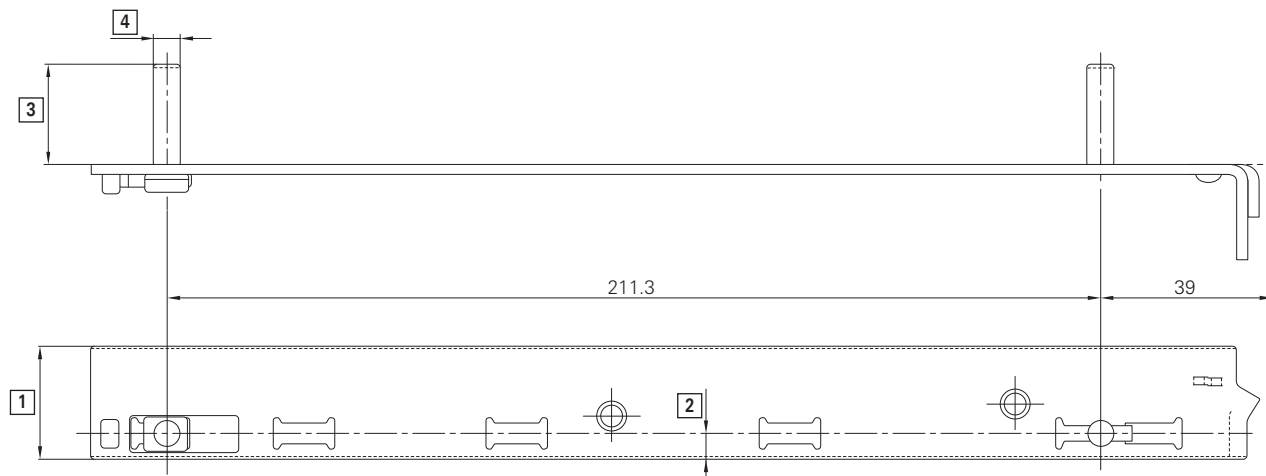
Cross section: doors (inward opening).

8.6.3 Pivot rest



Profile	Rebate depth	Hardware axis	[1]	[2]	[3]	[4]
Euro-rebate	18	9	17.5	11	15	8
Euro-groove 7/8						
Euro-rebate	20	9	19.5	12	15	8
Euro-groove 7/8						
	24	13	19.5	16	15	8

8.6.4 Sash stay



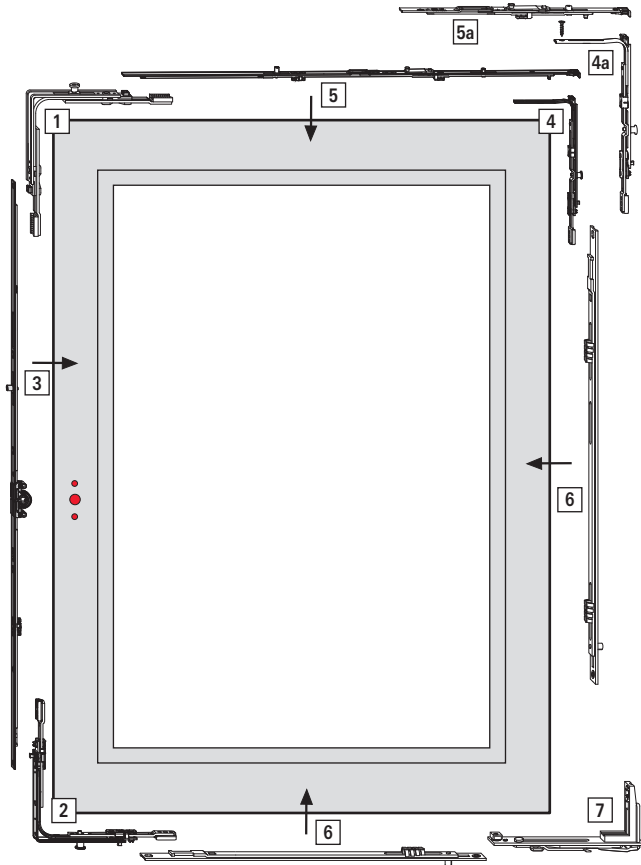
Profile	Rebate depth	Hardware axis	[1]	[2]	[3]	[4]
Euro-rebate	18	9	17.5	11	15	8
Euro-groove 7/8						
Euro-rebate	20	9	19.5	12	15	8
Euro-groove 7/8						
	24	13	19.5	16	15	8



8.7 Sash

8.7.1 Installation sequence

T&T espagnolette, VT – fixed handle height



- [1] Corner drive
- [2] Corner drive
- [3] T&T espagnolette
- [4] Sash stay corner drive
- [4a] Sash stay corner drive Royal 250
- [5] Stay guide 450
- [5a] Stay guide 250

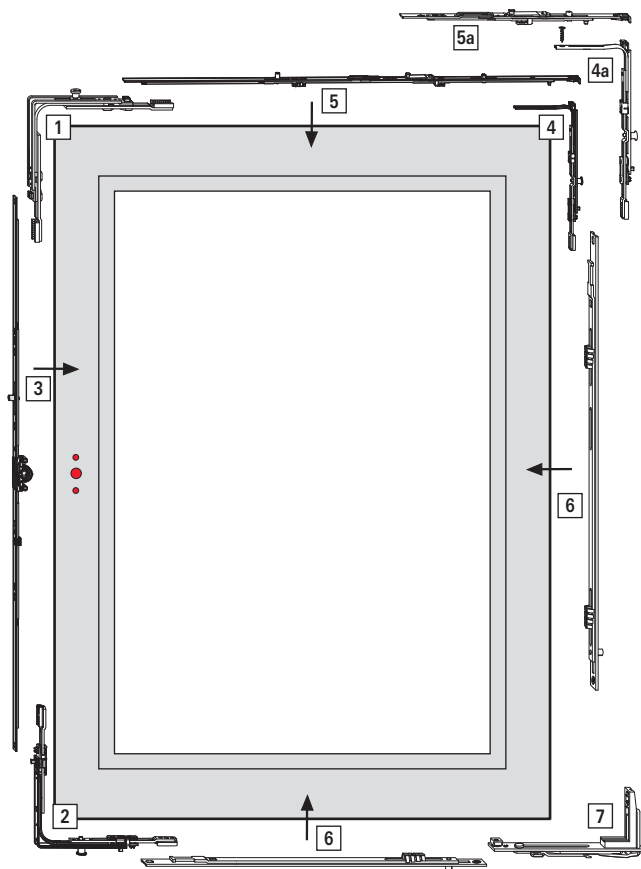


INFO

Screw the sash stay corner drive Royal 250 onto the connecting rod groove before fitting the stay guide 250.

- [6] Centre lock, vertical and horizontal
- [7] Corner hinge

T&T espagnolette – centred / variable handle height



- [1] Corner drive
- [2] Corner drive
- [3] T&T espagnolette
- [4] Sash stay corner drive
- [4a] Sash stay corner drive Royal 250
- [5] Stay guide 450
- [5a] Stay guide 250



INFO

Screw the sash stay corner drive Royal 250 onto the connecting rod groove before fitting the stay guide 250.

- [6] Centre lock, vertical and horizontal
- [7] Corner hinge

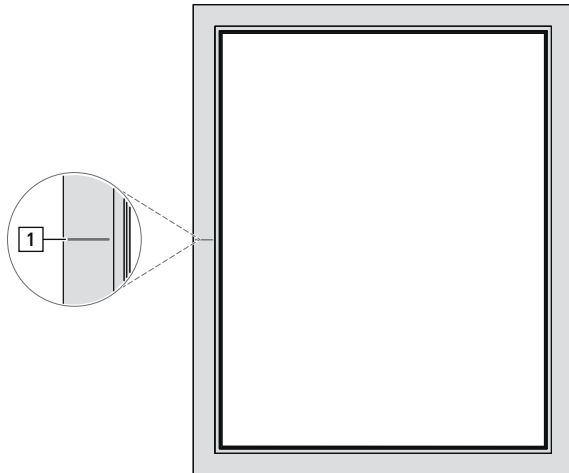


8.7.2 Preparing the sash for the T&T espagnolette

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 164
3. Deburr the drill holes.

8.7.2.2 Gearbox cutout

Routing the gearbox cutout

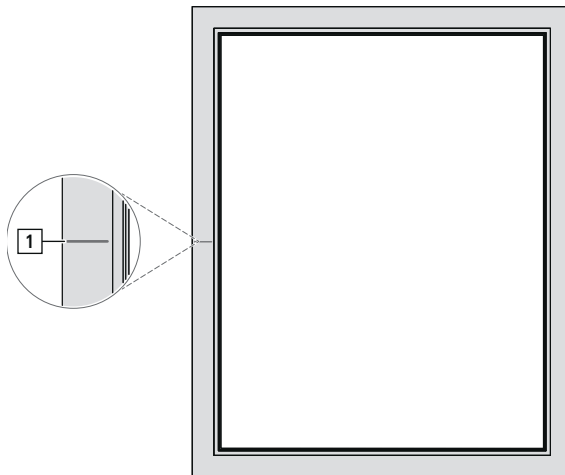
1. Route the espagnolette cutout.
Observe the routing dimensions. → 8.6 *"Drilling and routing dimensions" from page 164*
2. Deburr the espagnolette cutout.

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 164
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 164*
2. Deburr the espagnolette cutout.



8.7.4 Cropping the hardware components



ATTENTION

Incorrect cropping methods may result in property damage.

Do not insert the hardware components into the sash before they have been cropped. The screw guide engages and can be destroyed when it is removed.

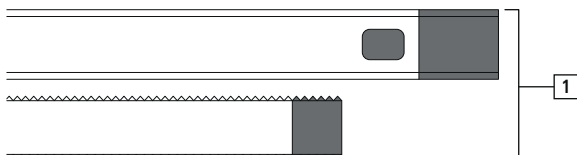
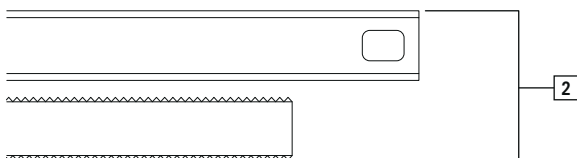
- Only lay out the hardware components and do not insert them into the sash before they have been cropped.

The following hardware components are cropped:

- Espagnolettes
- Stay guide

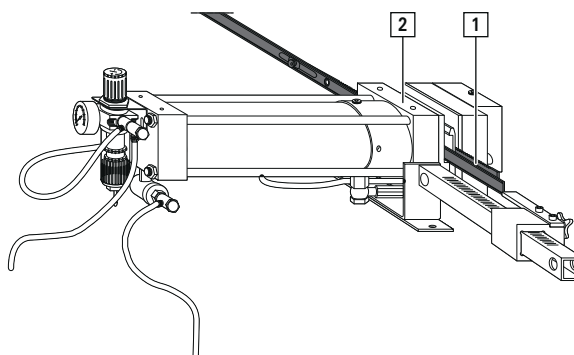
Cropping with a pneumatic punch (hole punching)

Hardware components are delivered 10 mm longer than the nominal dimension.



Assignment	Description
[1]	Hardware delivery state
[2]	Hardware, cropped

1. Place the hardware component in the required position.
2. Mark the length on the hardware component.
3. Insert the hardware component [1] into the pneumatic punch [2].



4. Align the hardware component.
5. Crop the hardware component.

8.7.5 Cropping the lever-operated espagnolette, standard



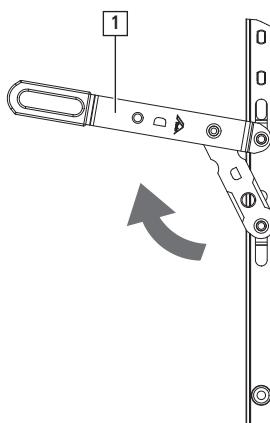
INFO

The figure shows the T&T espagnolette, VT – fixed handle height.

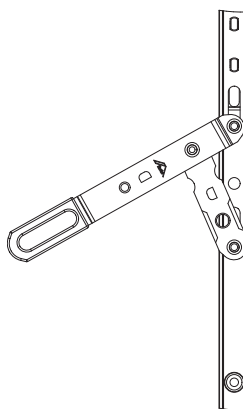
Crop the T&T espagnolette – centred / variable handle height in the same way.

⇒ Hardware is fully installed.

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



2. Crop the lever-operated espagnolette, standard.
3. With the red toggle lever closed at the bottom and open at the top, connect it to the corner drives → *8.5 "Force-fit connection" from page 163.*



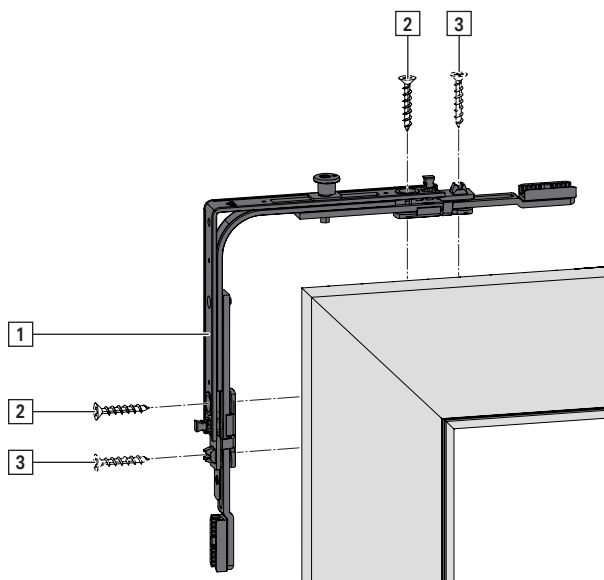
4. Close the lever-operated espagnolette, standard.



8.7.6 Corner drive

Corner drive, standard

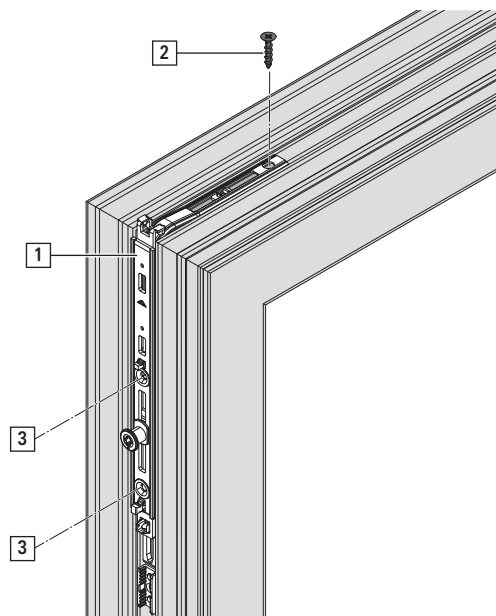
1. Insert the corner drives [1] and fasten them with two screws [2].



2. After all of the connector components have been installed, fasten the corner drives with a further two screws [3]. → 8.5 "Force-fit connection" from page 163

Sash stay corner drive 250

1. Fasten the sash stay corner drive 250 [1] to the connecting rod groove with one screw [2] before fitting the stay guide 250.



2. After all of the connector components have been installed, fasten the corner drives with a further two screws [3]. → 8.5 "Force-fit connection" from page 163

8.7.7 T&T espagnolettes

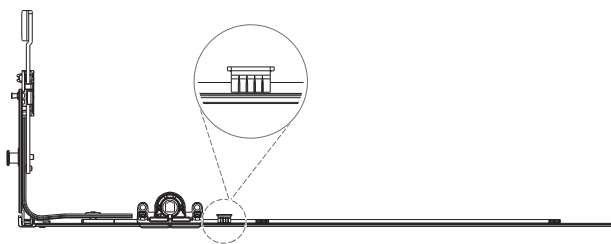
8.7.7.1 Fixed handle height

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 163



INFO

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

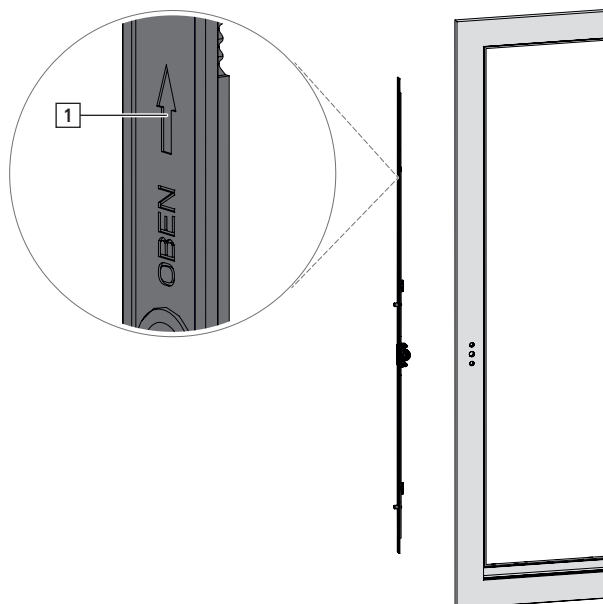


8.7.7.2 Centred / variable handle height

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 163

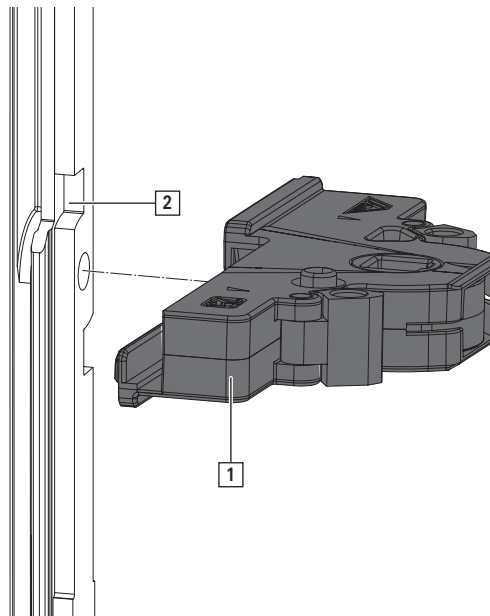




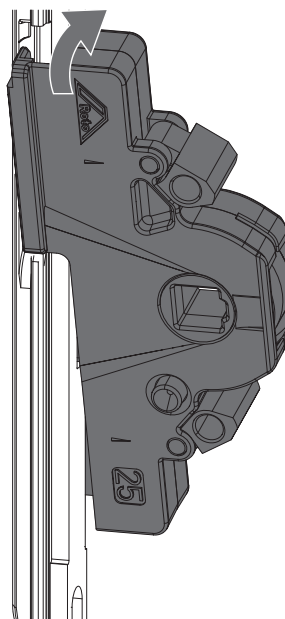
8.7.8 High backset espagnolette

Gearbox

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



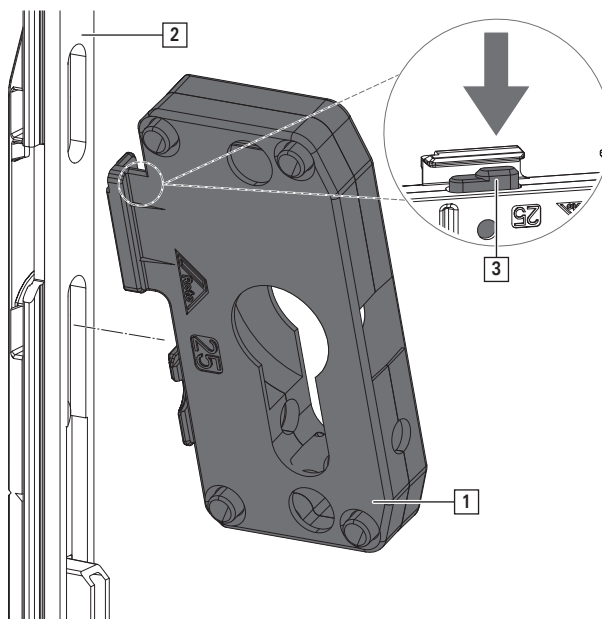
2. Turn the gearbox clockwise until the gearbox clicks into place.
The gearbox is positioned flush with the espagnolette faceplate.



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

Lock casing

1. If the locking lug [3] is protruding, push it back into the lock casing [1].
Turn the lock casing slightly before inserting it into the espagnolette faceplate [2].



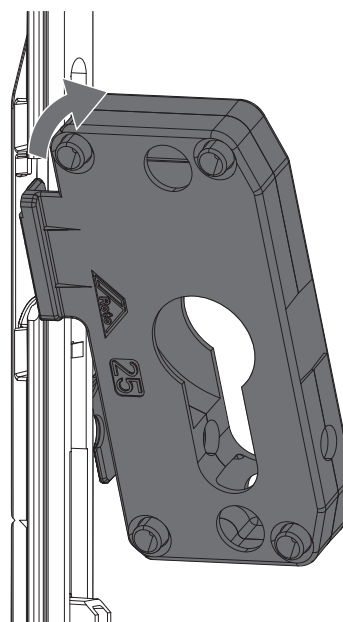
2. Insert the lock casing into the groove and turn clockwise until the lock casing clicks into place.
The lock casing is positioned flush with the espagnolette faceplate.



ATTENTION
Improper installation may cause property damage.

Turning the lock casing in incorrectly can damage the links.

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

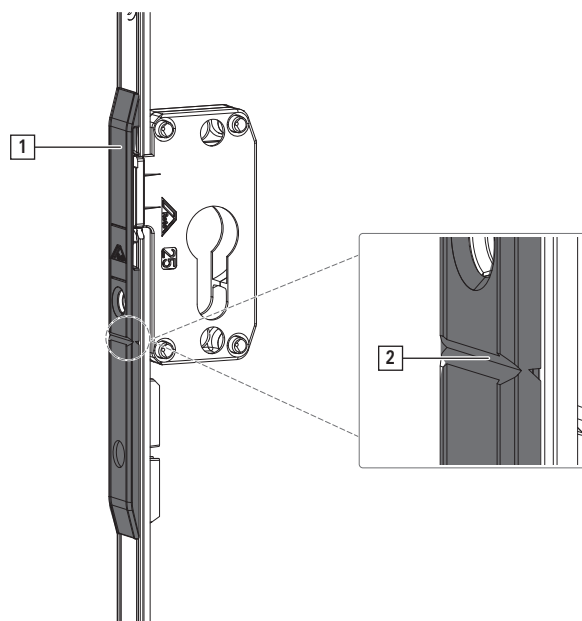


3. For dismantling, turn the lock casing anticlockwise until the lock casing comes out of the groove.
Remove from the espagnolette faceplate.

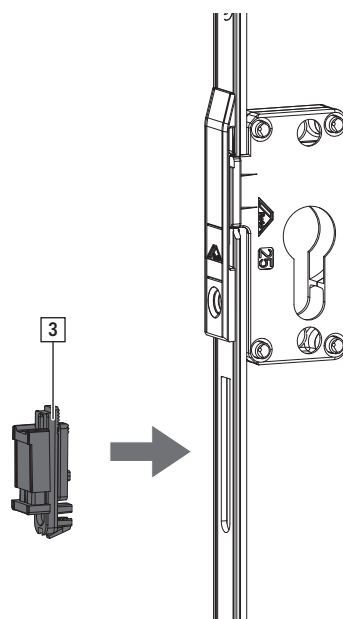


Bullet catch

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



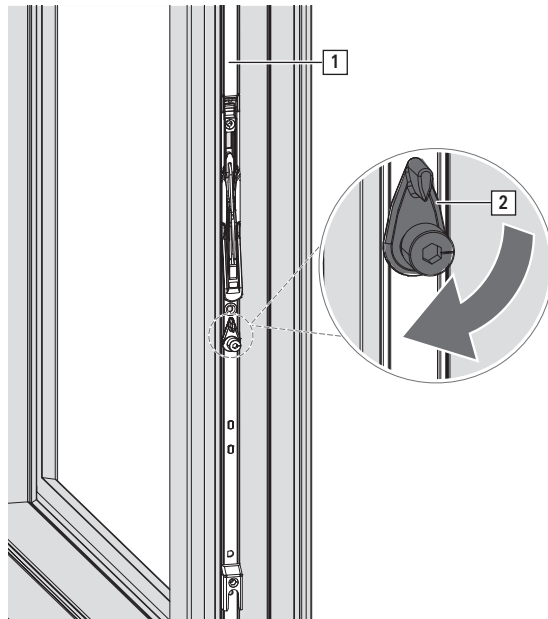
2. Insert the bullet catch [3].



8.7.9 Lever-operated espagnolette Plus

1. Insert the lever-operated espagnolette [1] into the sash groove.

For installation in the right-hand sash, turn the eccentric bolt [2] 180°.

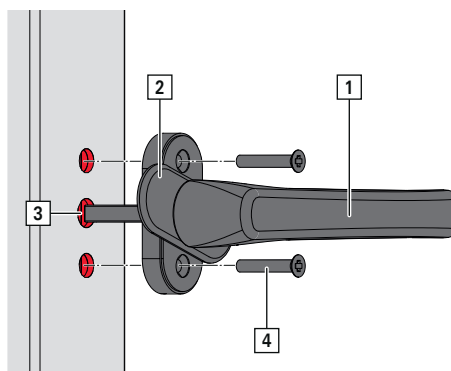


2. Mount the second opening sash with the lever-operated espagnolette open (as delivered).

8.7.10 Handle

8.7.10.1 Handle – T&T espagnolette

1. Move the handle [1] to the turn position (horizontally aligned with the escutcheon).
2. Rotate the cover [2] on the handle 90°.



3. Insert the handle into the sash [3].
4. Screw down the handle using screws [4].
5. Rotate the cover on the handle back 90°.



8.7.10.2 Centre fixing



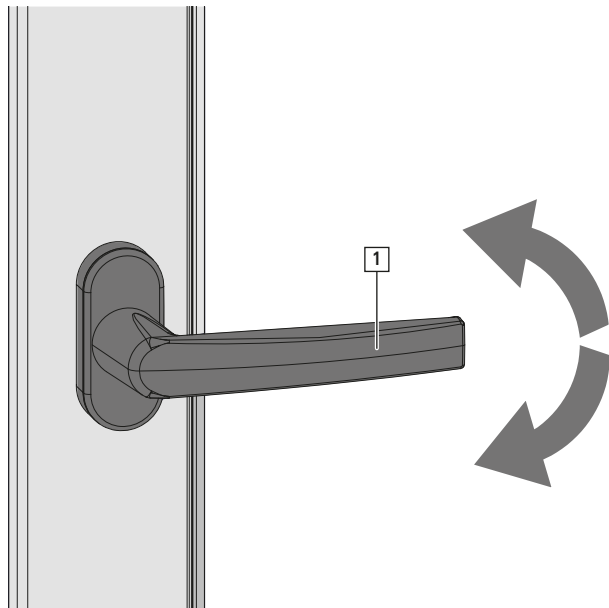
INFO

All coupleable components are delivered attached in the centre.

Undoing the centre fixing

Turning the handle undoes the centre fixing of the hardware components. Undo the centre fixing with the sash open.

1. Turn the handle [1] in one direction as far as it will go.
Audible cracking noise.



2. Turn the handle in the opposite direction as far as it will go.
Audible cracking noise.
3. Turn the handle in both directions again and check for ease of movement.

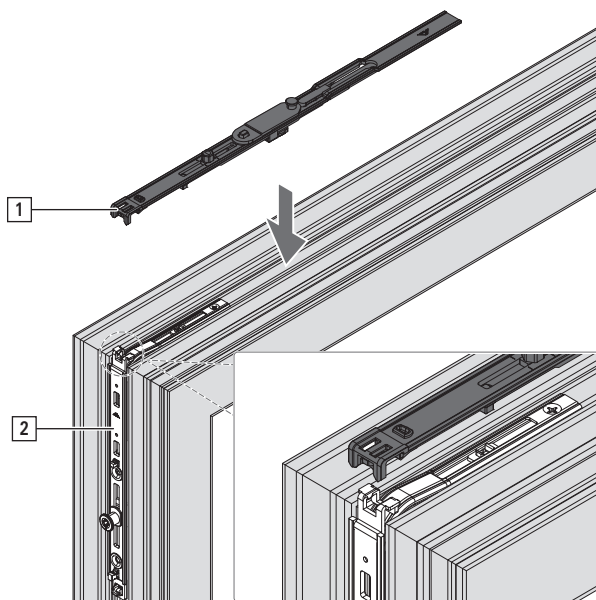
8.7.11 Stay guide

Stay guide 250

⇒ Sash stay corner drive 250 is installed → *from page 173*.

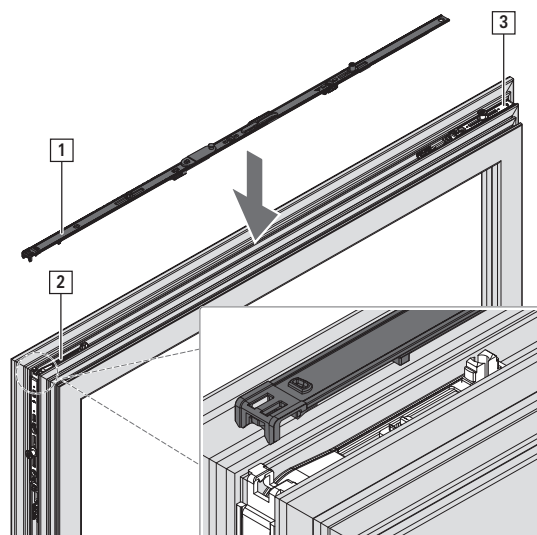
1. Insert the stay guide [1] into the sash groove and clip it into the sash stay corner drive [2].

Create a force-fit connection → *from page 163*.



Stay guide 450

1. Insert the stay guide [1] into the sash groove and clip it into the sash stay corner drive [2].

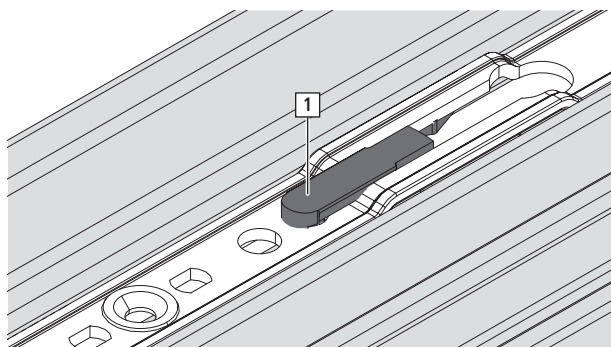


2. Connect the stay guide to the corner drive [3].
Create a force-fit connection → *from page 163*.

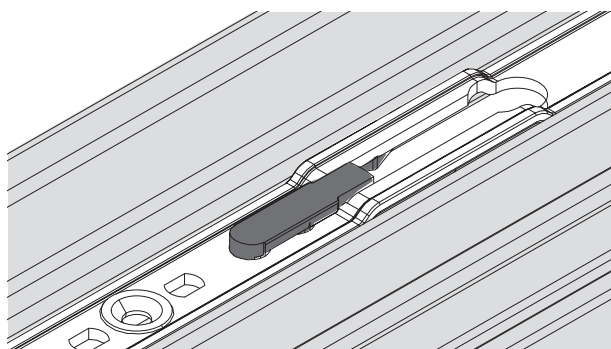


Anti-slam device and tilt depth restriction

1. Position the anti-slam device [1] in the stay guide.
Tilt depth restriction 90 mm

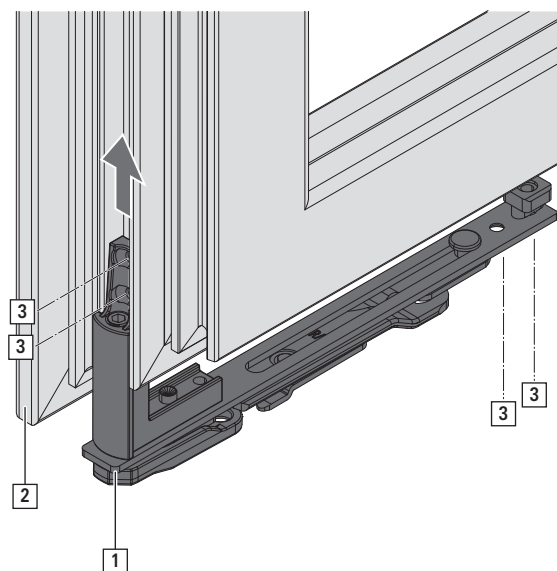


2. Tilt depth restriction 140 mm



8.7.12 Corner hinge

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



2. Fasten with four screws [3].

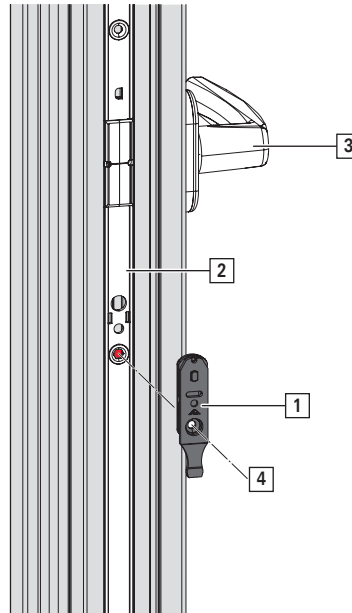
8.7.13 Lifting mishandling device / sash lifter



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.

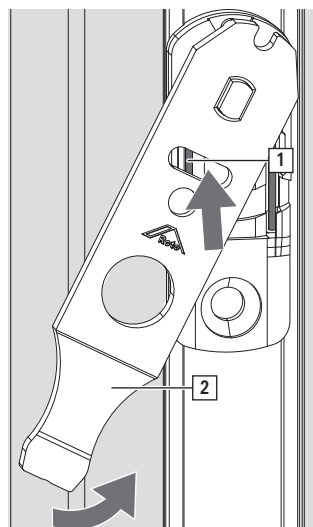
1. Clip the lifting mishandling device [1] into the hole pattern provided in the espagnolette [2].
Position near the handle [3].



2. Fasten with a screw [4].
3. Activate the lifting mishandling device by pushing the arm in the required direction until the arm cam snaps past the spring. Do not push the arm cam beyond the housing. The lifting mishandling device's centre fixing is undone.

Restoring the neutral position

1. Use a suitable tool, for example a screwdriver, to push down on the spring [1] beneath the slot.



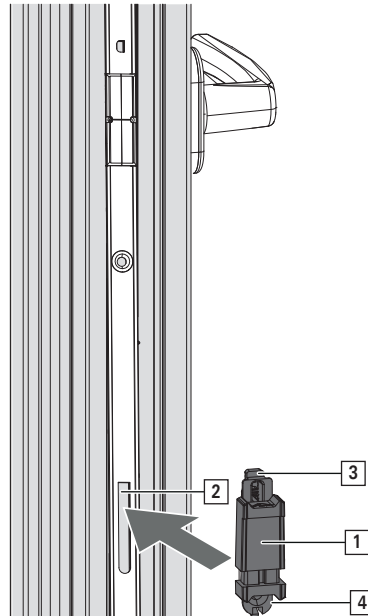
2. Keep the spring held down and turn the arm [2] back to 0°.



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

8.7.14 Bullet catch

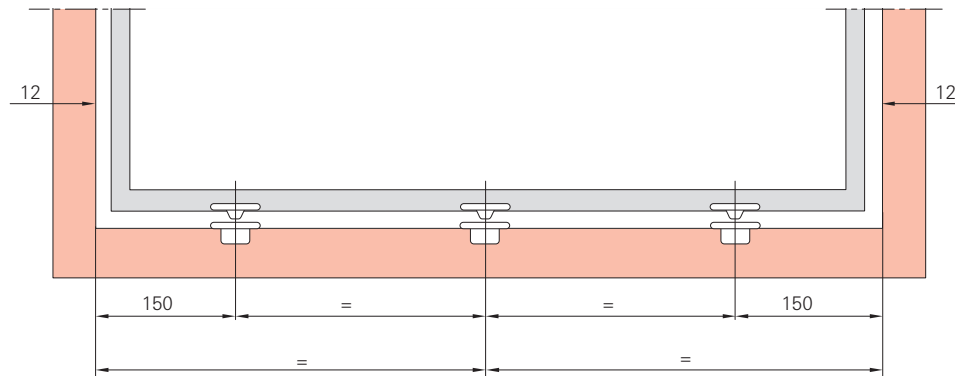
1. Insert the bullet-catch sash component [1] into the espagnolette recess [2].
To do so, insert the nose of the bullet catch [3] into the flat side of the espagnolette recess and clip the bullet catch into place.



2. Secure with screw [4].

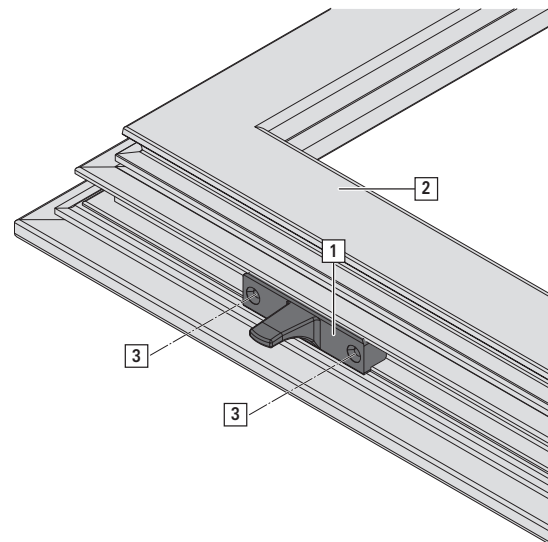
8.7.15 Centre closer

Positioning



Installation

1. Place the centre closer [1] in the sash groove [2].



2. Fasten with two screws [3].

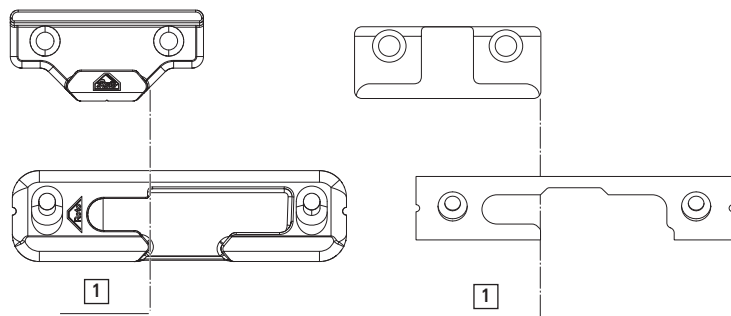


8.8 Frame

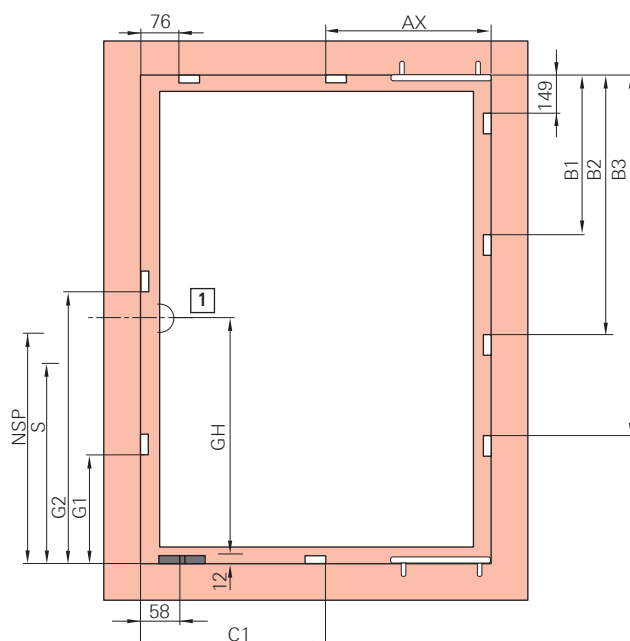
8.8.1 Position of strikers and tilt strikers

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] of the cams:



8.8.1.2 Tilt&Turn hardware / TiltFirst hardware – basic security



[1] Handle centre

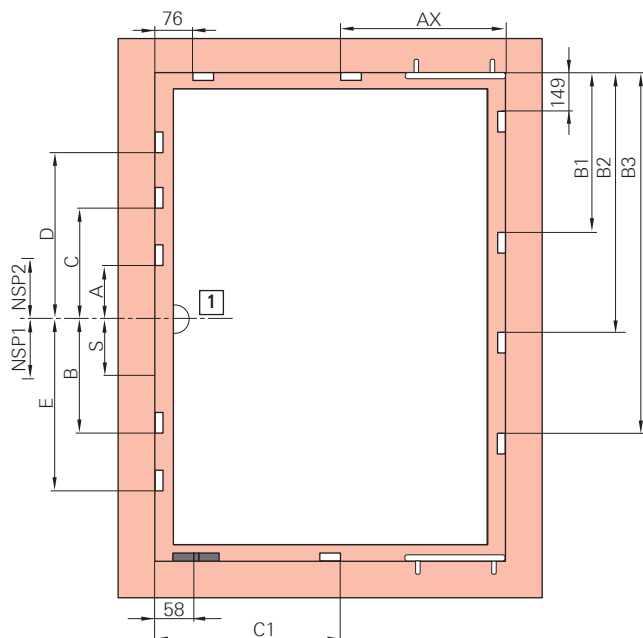
□ Striker e.g.

■ Tilt striker e.g.

T&T espagnolette, VT – fixed handle height

SRH [mm]	GH	G1	G2	NSP	S
280 – 510	120	–	–	–	–
511 – 600	170	–	–	262	–
601 – 800	263	–	–	350	–
801 – 1000	413	550	–	288	–
1001 – 1200	513	700	–	388	–
1201 – 1400	563	700	–	388	–
1401 – 1600	563	700	1170	388	–
1601 – 1800	563	700	1370	388	–
1601 – 1800	1000	700	1370	1121	807

SRH [mm]	GH	G1	G2	NSP	S
1801 – 2000	1000	700	1370	1121	807
2001 – 2400	1000	700	1370	1121	807



[1] Handle centre

□ Striker e.g. 

■ Tilt striker e.g. 

T&T espagnolette – centred / variable handle height

SRH [mm]	A	B	C	D	E	NSP 1	NSP 2	S
310 – 450	–	–	–	–	–	–	–	–
451 – 620	–	–	–	–	–	–	–	–
621 – 800	125	–	–	–	–	137	–	–
801 – 1200	125	–	–	–	–	137	–	–
1201 – 1600	125	340	–	–	–	137	–	–
1601 – 2000	–	312	358	–	–	–	109	395
2001 – 2400	–	312	358	758	740	–	109	395

Stay guide

SRW [mm]	AX	Size
801 – 1000	600	450 / 890
1001 – 1400	750	450 / 1090

Centre lock, vertical

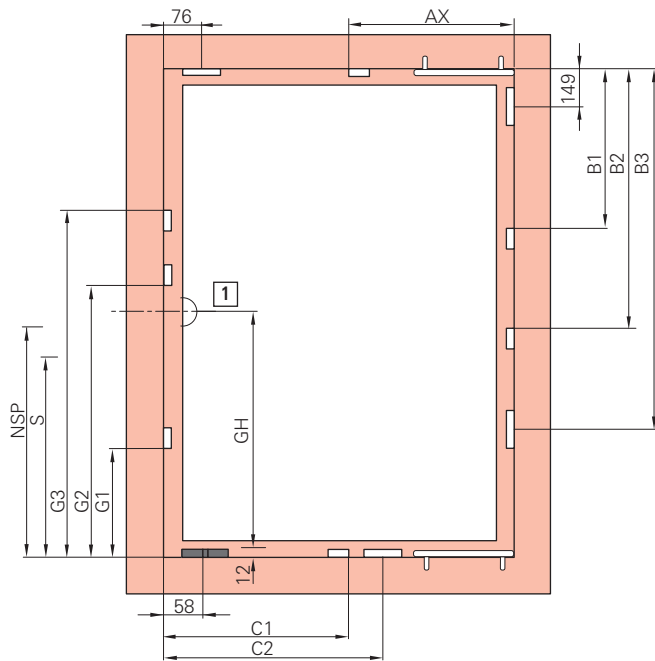
SRH [mm]	B1	B2	B3	Centre lock
801 – 1200	550	–	–	CL 400 E
1201 – 1400	746	–	–	CL 600 E
1401 – 1800	746	1150	–	CL 600 E KU + CL 400 E
1801 – 2000	746	1346	–	CL 600 E KU + CL 600 E
2001 – 2400	746	1346	1750	2x CL 600 E KU + CL 400 E

Centre lock, horizontal

SRW [mm]	C1	Centre lock
801 – 1200	462	CL 400 E
1201 – 1400	658	CL 600 E



8.8.1.3 Tilt&Turn hardware – RC 1 N



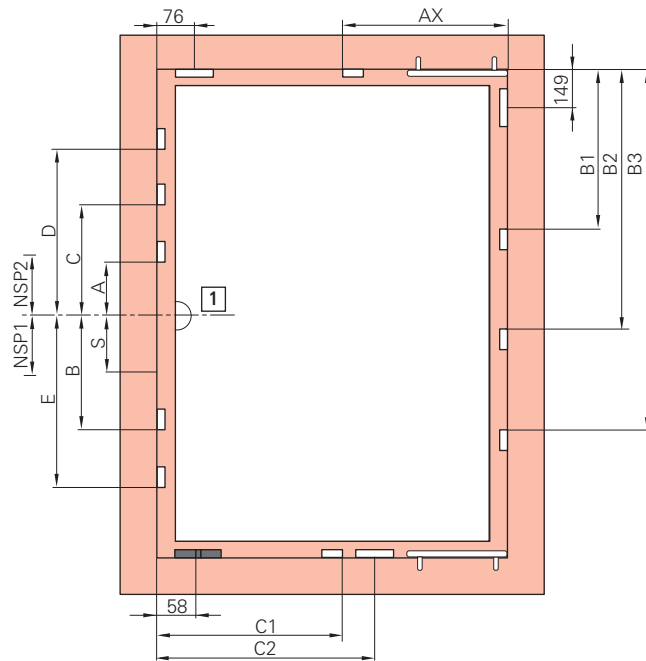
[1] Handle centre

□ Striker e.g. 

■ Tilt striker e.g. 

T&T espagnolette, VT – fixed handle height

SRH [mm]	GH	G1	G2	G3	NSP	S
350 – 510	120	–	–	–	–	–
511 – 600	170	–	–	–	262	–
601 – 800	263	–	–	–	350	–
801 – 1000	413	550	–	–	288	–
1001 – 1200	513	700	–	–	388	–
1201 – 1400	563	700	–	–	388	–
1401 – 1600	563	700	1170	–	388	–
1601 – 1800	563	700	1370	–	388	–
1601 – 1800	1000	700	1370	–	1121	807
1801 – 2000	1000	700	1370	–	1121	807
2001 – 2400	1000	700	1370	1770	1121	807



[1] Handle centre

□ Striker e.g. 

■ Tilt striker e.g. 

T&T espagnolette – centred / variable handle height

SRH [mm]	A	B	C	D	E	NSP 1	NSP 2	S
350 – 450	–	–	–	–	–	–	–	–
451 – 620	–	–	–	–	–	–	–	–
621 – 800	125	–	–	–	–	137	–	–
801 – 1200	125	–	–	–	–	137	–	–
1201 – 1600	125	340	–	–	–	137	–	–
1601 – 2000	–	312	358	–	–	–	109	395
2001 – 2400	–	312	358	758	740	–	109	395

Stay guide

SRW [mm]	AX	Size
801 – 1000	600	450 / 890
1001 – 1400	750	450 / 1090

Centre lock, vertical, with SRW 380 – 570

SRH [mm]	B1	B2	B3	Centre lock
465 – 700	346	–	–	CL 200 P
701 – 900	550	–	–	CL 400 P
901 – 1100	746	–	–	CL 600 P
1101 – 1300	746	946	–	CL 600 E KU + CL 200 P
1301 – 1500	746	1150	–	CL 600 E KU + CL 400 P
1501 – 1700	746	1346	–	CL 600 E KU + CL 600 P
1701 – 1900	746	1346	1546	2x CL 600 E KU + CL 200 P
1901 – 2100	746	1346	1750	2x CL 600 E KU + CL 400 P
2101 – 2400	746	1346	1946	2x CL 600 E KU + CL 600 P

Centre lock, vertical, with SRW 571 – 1400

SRH [mm]	B1	B2	B3	Centre lock
801 – 1200	550	–	–	CL 400 P

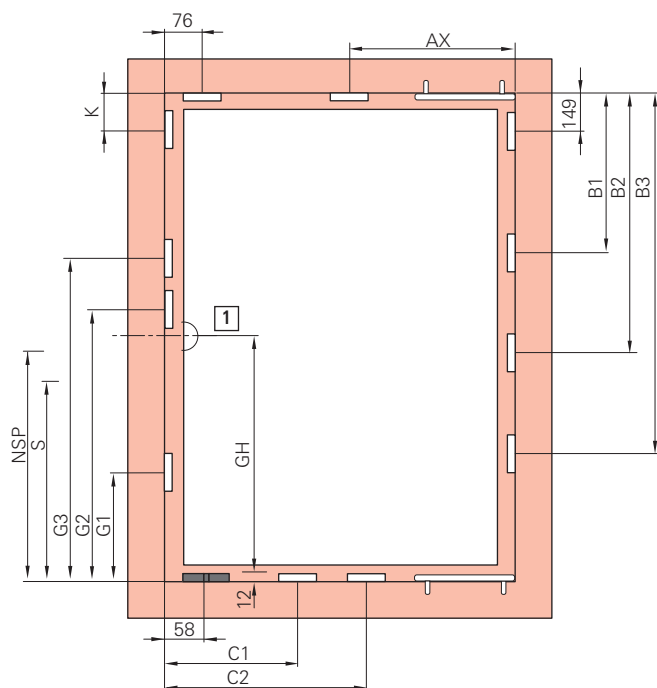


SRH [mm]	B1	B2	B3	Centre lock
1201 – 1400	746	–	–	CL 600 P
1401 – 1800	746	1150	–	CL 600 E KU + CL 400 P
1801 – 2000	746	1346	–	CL 600 E KU + CL 600 P
2001 – 2400	746	1346	1750	2x CL 600 E KU + CL 400 P

Centre lock, horizontal

SRW [mm]	C1	C2	Centre lock
571 – 770	258	–	CL 200 P
571 – 970	462	–	CL 400 P
971 – 1170	658	–	CL 600 P
1171 – 1370	658	858	CL 600 E KU + CL 200 P
1371 – 1400	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. 

T&T espagnolette, VT – fixed handle height

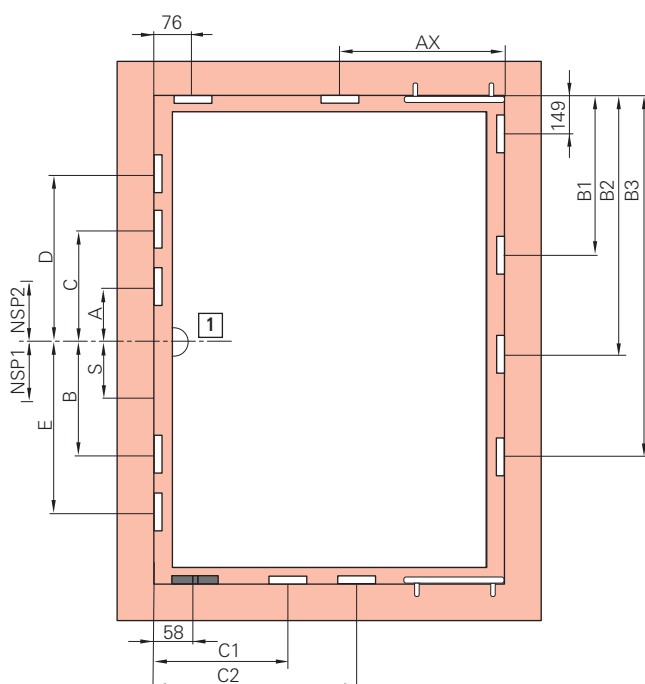
SRH [mm]	GH	G1	G2	G3	K	NSP	S
465 – 570	120	–	–	–	58	–	–
511 – 710	170	–	–	–	58	262	–
601 – 800	263	76	–	–	58	350	–
801 – 1000	413	550	–	–	–	288	–
1001 – 1200	513	700	–	–	–	388	–
1201 – 1400	563	700	–	–	–	388	–
1401 – 1600	563	700	1170	–	–	388	–
1601 – 1800	563	700	1370	–	–	388	807
1601 – 1800	1000	700	1370	–	–	1121	807
1801 – 2000	1000	700	1370	–	–	1121	807
2001 – 2200	1000	700	1370	1770	–	1121	807

Installation

Frame

Position of strikers and tilt strikers

SRH [mm]	GH	G1	G2	G3	K	NSP	S
2201 – 2400	1000	700	1370	1770	–	1121	807



[1] Handle centre

□ Striker e.g. 

T&T espagnolette – centred / variable handle height

SRH [mm]	A	B	C	D	E	NSP 1	NSP 2	S
465 – 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	450 / 890
1001 – 1400	750	450 / 1090

Centre lock, vertical

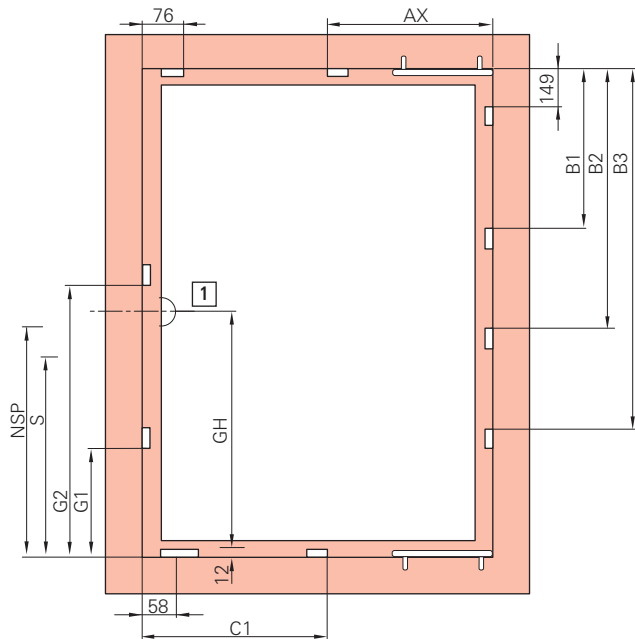
SRH [mm]	B1	B2	B3	Centre lock
465 – 800	346	–	–	CL 200 V
801 – 1000	550	–	–	CL 400 V
1000 – 1200	746	–	–	CL 600 V
1201 – 1400	746	946	–	CL 600 V KU + CL 200 V
1401 – 1600	746	1150	–	CL 600 V KU + CL 400 V
1601 – 1800	746	1346	–	CL 600 V KU + CL 600 V
1801 – 2000	746	1346	1546	2x CL 600 V KU + CL 200 V
2001 – 2200	746	1346	1750	2x CL 600 V KU + CL 400 V
2201 – 2400	746	1346	1946	2x CL 600 V KU + CL 600 V



Centre lock, horizontal

SRW [mm]	C1	C2	Centre lock
571 – 770	258	–	CL 200 V
771 – 970	458	–	CL 400 V
971 – 1170	658	–	CL 600 V
1171 – 1370	658	858	CL 600 V KU + CL 200 V
1371 – 1400	658	1058	CL 600 V KU + CL 400 V

8.8.1.5 Turn-Only hardware – basic security



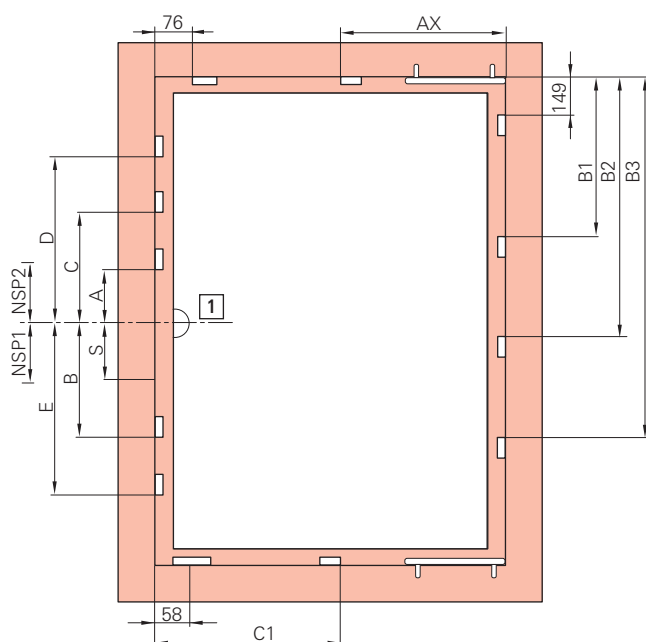
[1] Handle centre

□ Striker e.g. 

T&T espagnolette, VT – fixed handle height

SRH [mm]	GH	G1	G2	NSP	S
280 – 570	120	–	–	–	–
511 – 710	170	–	–	262	–
601 – 800	263	–	–	350	–
801 – 1000	413	550	–	288	–
1001 – 1200	513	700	–	388	–
1201 – 1400	563	700	–	388	–
1401 – 1600	563	700	1170	388	–
1601 – 1800	563	700	1370	388	–
1601 – 1800	1000	700	1370	1121	807
1801 – 2000	1000	700	1370	1121	807

SRH [mm]	GH	G1	G2	NSP	S
2001 – 2400	1000	700	1370	1121	807



[1] Handle centre

□ Striker 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 – 2400	–	312	358	758	740	–	109	395

Stay guide

SRW [mm]	AX	Size
801 – 1000	600	450 / 890
1001 – 1400	750	450 / 1090

Centre lock, vertical

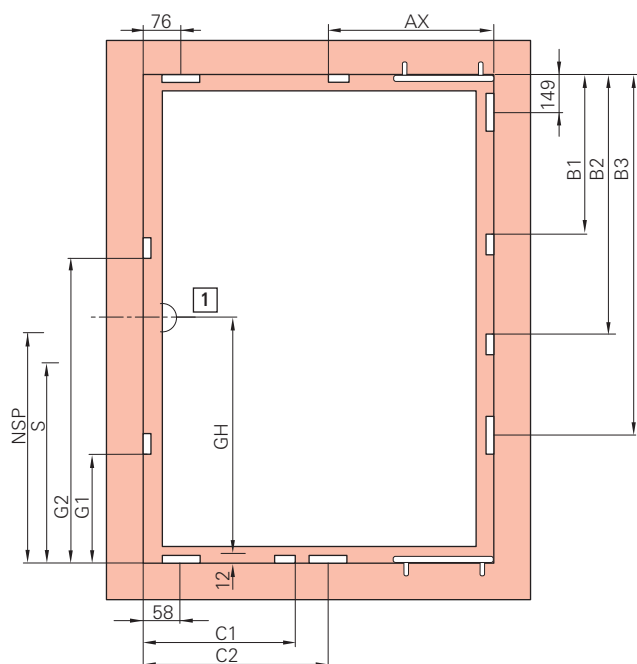
SRH [mm]	B1	B2	B3	Centre lock
801 – 1200	550	–	–	CL 400 E
1201 – 1400	746	–	–	CL 600 E
1401 – 1800	746	1150	–	CL 600 E KU + CL 400 E
1801 – 2000	746	1346	–	CL 600 E KU + CL 600 E
2001 – 2400	746	1346	1750	2x CL 600 E KU + CL 400 E

Centre lock, horizontal

SRW [mm]	C1	Centre lock
801 – 1200	462	CL 400 E
1201 – 1400	658	CL 600 E



8.8.1.6 Turn-Only hardware – RC 1 N



[1] Handle centre

□ Striker e.g.

T&T espagnolette, VT – fixed handle height

SRH [mm]	GH	G1	G2	NSP	S
350 – 570	120	–	–	–	–
511 – 710	170	–	–	262	–
601 – 800	263	–	–	350	–
801 – 1000	413	550	–	288	–
1001 – 1200	513	700	–	388	–
1201 – 1400	563	700	–	388	–
1401 – 1600	563	700	1170	388	–
1601 – 1800	563	700	1370	388	807
1601 – 1800	1000	700	1370	1121	807
1801 – 2000	1000	700	1370	1121	807
2001 – 2400	1000	700	1370	1121	807

Stay guide

SRW [mm]	AX	Size
801 – 1000	600	450 / 890
1001 – 1400	750	450 / 1090

Centre lock, vertical, with SRW 380 – 570

SRH [mm]	B1	B2	B3	Centre lock
465 – 700	346	–	–	CL 200 P
701 – 900	550	–	–	CL 400 P
901 – 1100	746	–	–	CL 600 P
1101 – 1300	746	946	–	CL 600 E KU + CL 200 P
1301 – 1500	746	1150	–	CL 600 E KU + CL 400 P
1501 – 1700	746	1346	–	CL 600 E KU + CL 600 P
1701 – 1900	746	1346	1546	2x CL 600 E KU + CL 200 P
1901 – 2100	746	1346	1750	2x CL 600 E KU + CL 400 P
2101 – 2400	746	1346	1946	2x CL 600 E KU + CL 600 P

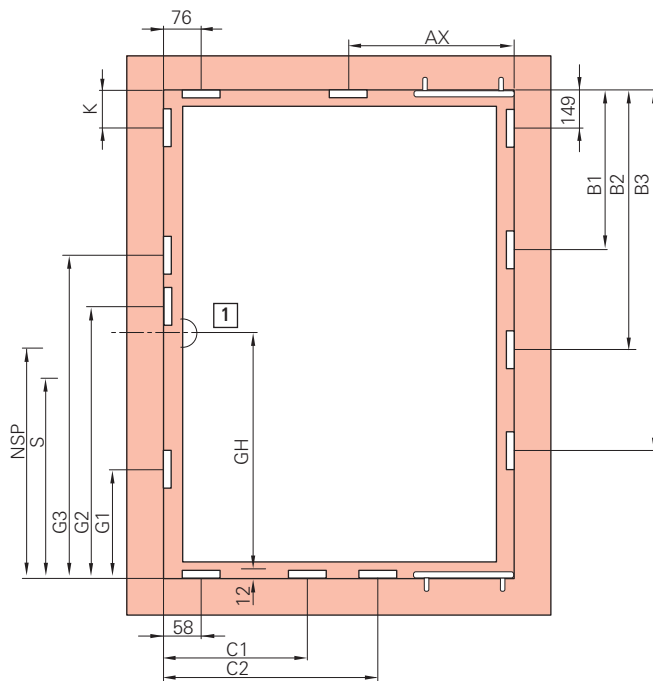
Centre lock, vertical, with SRW 571 – 1400

SRH [mm]	B1	B2	B3	Centre lock
801 – 1200	550	–	–	CL 400 P
1201 – 1400	746	–	–	CL 600 P
1401 – 1800	746	1150	–	CL 600 E KU + CL 400 P
1801 – 2000	746	1346	–	CL 600 E KU + CL 600 P
2001 – 2400	746	1346	1750	2x CL 600 E KU + CL 400 P

Centre lock, horizontal

SRW [mm]	C1	C2	Centre lock
571 – 770	258	–	CL 200 P
571 – 970	462	–	CL 400 P
971 – 1170	658	–	CL 600 P
1171 – 1370	658	858	CL 600 E KU + CL 200 P
1371 – 1400	658	1062	CL 600 E KU + CL 400 P

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



[1] Handle centre

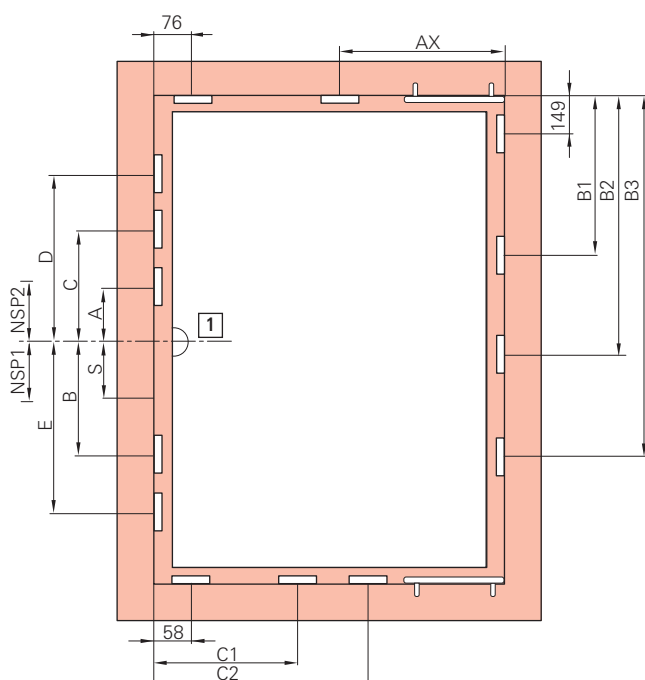
□ Striker e.g. 

T&T espagnolette, VT – fixed handle height

SRH [mm]	GH	G1	G2	G3	K	NSP	S
465 – 570	120	–	–	–	58	–	–
511 – 710	170	–	–	–	58	262	–
601 – 800	263	76	–	–	58	350	–
801 – 1000	413	550	–	–	–	288	–
1001 – 1200	513	700	–	–	–	388	–
1201 – 1400	563	700	–	–	–	388	–
1401 – 1600	563	700	1170	–	–	388	–
1601 – 1800	563	700	1370	–	–	388	807
1601 – 1800	1000	700	1370	–	–	1121	807
1801 – 2000	1000	700	1370	–	–	1121	807
2001 – 2200	1000	700	1370	1770	–	1121	807



SRH [mm]	GH	G1	G2	G3	K	NSP	S
2201 – 2400	1000	700	1370	1770		1121	807



[1] Handle centre

□ Striker e.g. 

■ Tilt striker e.g. 

T&T espagnolette – centred / variable handle height

SRH [mm]	A	B	C	D	E	NSP 1	NSP 2	S
465 – 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	450 / 890
1001 – 1400	750	450 / 1090

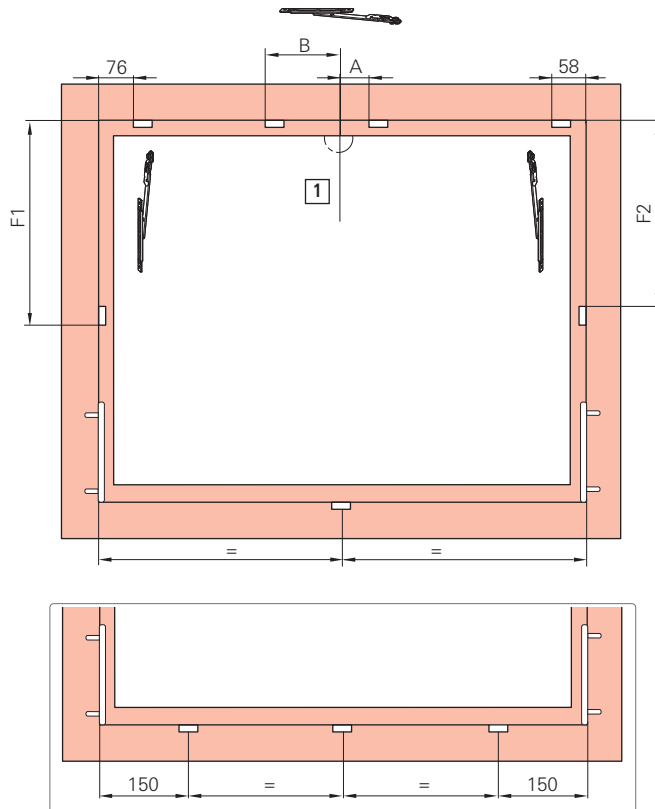
Centre lock, vertical

SRH [mm]	B1	B2	B3	Centre lock
465 – 800	346	–	–	CL 200 V
801 – 1000	550	–	–	CL 400 V
1000 – 1200	746	–	–	CL 600 V
1201 – 1400	746	946	–	CL 600 V KU + CL 200 V
1401 – 1600	746	1150	–	CL 600 V KU + CL 400 V
1601 – 1800	746	1346	–	CL 600 V KU + CL 600 V
1801 – 2000	746	1346	1546	2x CL 600 V KU + CL 200 V
2001 – 2200	746	1346	1750	2x CL 600 V KU + CL 400 V
2201 – 2400	746	1346	1946	2x CL 600 V KU + CL 600 V

Centre lock, horizontal

SRW [mm]	C1	C2	Centre lock
571 – 770	258	–	CL 200 V
771 – 970	458	–	CL 400 V
971 – 1170	658	–	CL 600 V
1171 – 1370	658	858	CL 600 V KU + CL 200 V
1371 – 1400	658	1058	CL 600 V KU + CL 400 V

8.8.1.8 Tilt-Only hardware – basic security



[1] Handle centre

□ Striker e.g. 5x6

SRW $\geq$ 450: fit one centre closer in the middle

SRW $\geq$ 601: fit two centre closers

SRW $\geq$ 1001: fit three centre closers

T&T espagnolette – centred / variable handle height

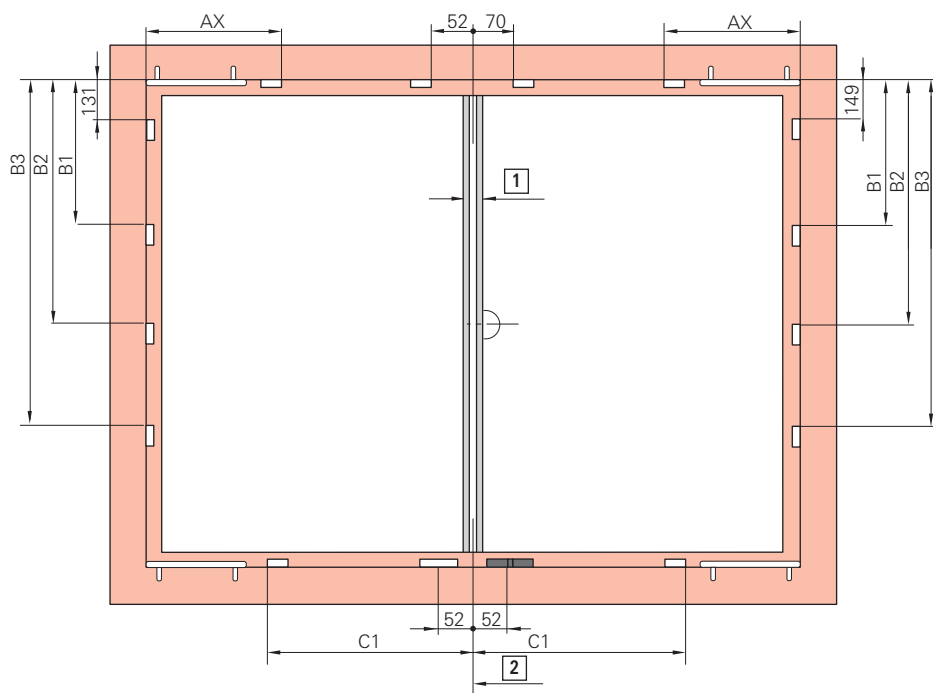
SRW [mm]	A	B
450 – 620	–	–
621 – 800	125	–
801 – 1200	125	–
1201 – 1400	125	340

Centre lock, vertical

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



8.8.1.9 Floating-mullion hardware, standard – basic security



[1] 12 mm rebate clearance between the sashes

[2] Rebate clearance centre

□ Striker e.g.

■ Tilt striker e.g.

Stay guide

SRW [mm]	AX	Size
801 – 1000	600	450 / 890
1001 – 1400	750	450 / 1090

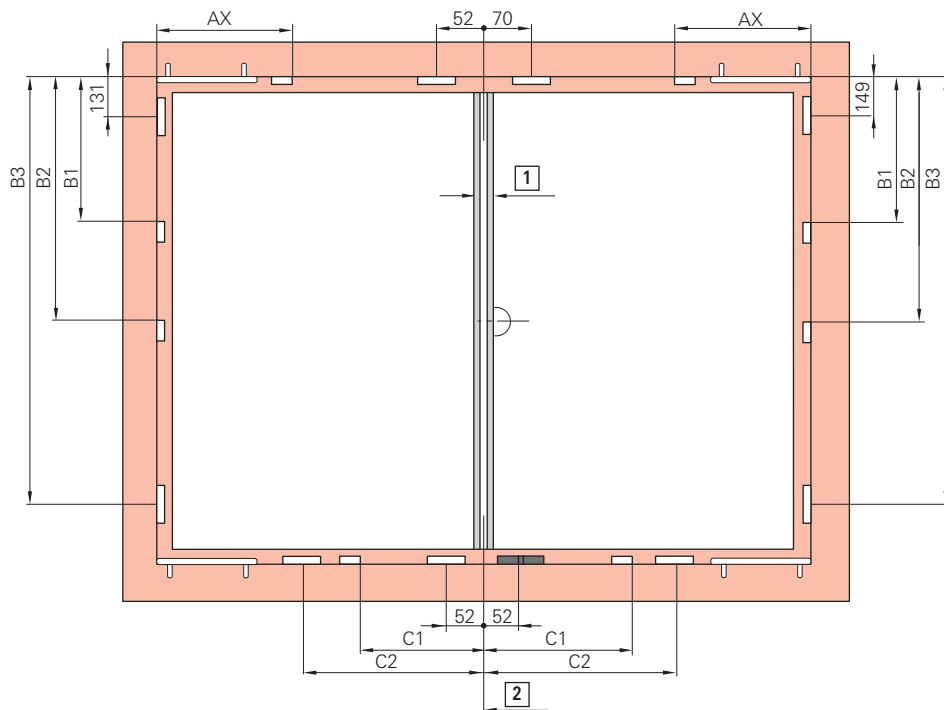
Centre lock, vertical

SRH [mm]	B1	B2	B3	Centre lock
801 – 1200	550	–	–	CL 400 E
1201 – 1400	746	–	–	CL 600 E
1401 – 1800	746	1150	–	CL 600 E KU + CL 400 E
1801 – 2000	746	1346	–	CL 600 E KU + CL 600 E
2001 – 2400	746	1346	1750	2x CL 600 E KU + CL 400 E

Centre lock, horizontal, bottom

SRW [mm]	C1	Centre lock
801 – 1200	456	CL 400 E
1201 – 1400	652	CL 600 E

8.8.1.10 Floating-mullion hardware, standard – RC 1 N



[1] 12 mm rebate clearance between the sashes

[2] Rebate clearance centre

□ Striker e.g. 

■ Tilt striker e.g. 

Stay guide

SRW [mm]	AX	Size
801 – 1000	600	450 / 890
1001 – 1400	750	450 / 1090

Centre lock, vertical, with SRW 380 – 570

SRH [mm]	B1	B2	B3	Centre lock
465 – 700	346	–	–	CL 200 P
701 – 900	550	–	–	CL 400 P
901 – 1100	746	–	–	CL 600 P
1101 – 1300	746	946	–	CL 600 E KU + CL 200 P
1301 – 1500	746	1150	–	CL 600 E KU + CL 400 P
1501 – 1700	746	1346	–	CL 600 E KU + CL 600 P
1701 – 1900	746	1346	1546	2x CL 600 E KU + CL 200 P
1901 – 2100	746	1346	1750	2x CL 600 E KU + CL 400 P
2101 – 2400	746	1346	1946	2x CL 600 E KU + CL 600 P

Centre lock, vertical, with SRW 571 – 1400

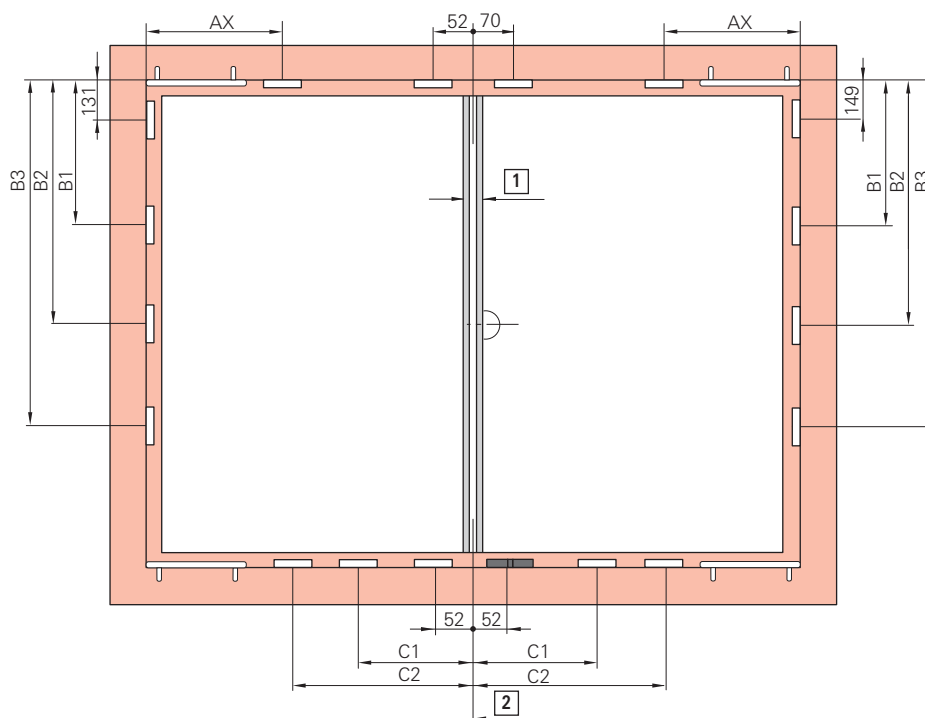
SRH [mm]	B1	B2	B3	Centre lock
801 – 1200	550	–	–	CL 400 P
1201 – 1400	746	–	–	CL 600 P
1401 – 1800	746	1150	–	CL 600 E KU + CL 400 P
1801 – 2000	746	1346	–	CL 600 E KU + CL 600 P
2001 – 2400	746	1346	1750	2x CL 600 E KU + CL 400 P



Centre lock, horizontal, bottom

SRW [mm]	C1	C2	Centre lock
571 – 770	252	–	CL 200 P
771 – 970	456	–	CL 400 P
971 – 1170	652	–	CL 600 P
1171 – 1370	652	852	CL 600 E KU + CL 200 P
1371 – 1400	652	1056	CL 600 E KU + CL 400 P

8.8.1.11 Floating-mullion hardware, standard – RC 2 / RC 2 N



[1] 12 mm rebate clearance between the sashes

[2] Rebate clearance centre

□ Striker e.g.

■ Tilt striker e.g.

Stay guide

SRW [mm]	AX	Size
801 – 1000	600	450 / 890
1001 – 1400	750	450 / 1090

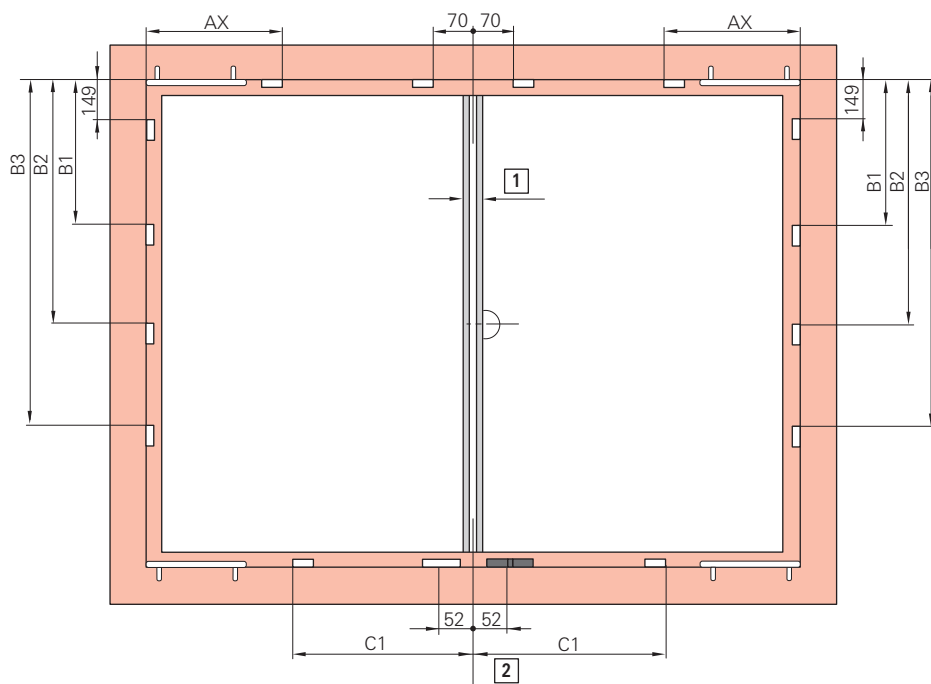
Centre lock, vertical

SRH [mm]	B1	B2	B3	Centre lock
465 – 800	346	–	–	CL 200 V
801 – 1000	550	–	–	CL 400 V
1001 – 1200	746	–	–	CL 600 V
1201 – 1400	746	946	–	CL 600 V KU + CL 200 V
1401 – 1600	746	1150	–	CL 600 V KU + CL 400 V
1601 – 1800	746	1346	–	CL 600 V KU + CL 600 V
1801 – 2000	746	1346	1546	2x CL 600 V KU + CL 200 V
2001 – 2200	746	1346	1750	2x CL 600 V KU + CL 400 V
2201 – 2400	746	1346	1946	2x CL 600 V KU + CL 600 V

Centre lock, horizontal

SRW [mm]	C1	C2	Centre lock
571 – 770	252	–	CL 200 V
771 – 970	452	–	CL 400 V
971 – 1170	652	–	CL 600 V
1171 – 1370	652	852	CL 600 V KU + CL 200 V
1371 – 1400	652	1052	CL 600 V KU + CL 400 V

8.8.1.12 Floating-mullion hardware Plus – basic security



[1] 12 mm rebate clearance between the sashes

[2] Rebate clearance centre

□ Striker e.g. 

▤ Tilt striker e.g. 

Stay guide

SRW [mm]	AX	Size
801 – 1000	600	450 / 890
1001 – 1400	750	450 / 1090

Centre lock, vertical

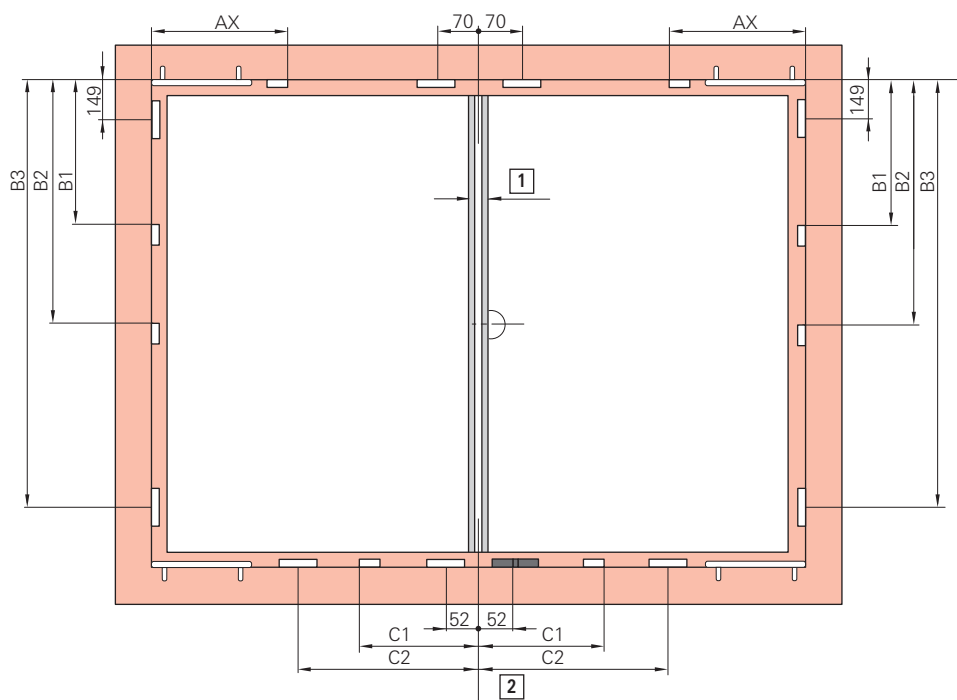
SRH [mm]	B1	B2	B3	Centre lock
801 – 1200	550	–	–	CL 400 E
1201 – 1400	746	–	–	CL 600 E
1401 – 1800	746	1150	–	CL 600 E KU + CL 400 E
1801 – 2000	746	1346	–	CL 600 E KU + CL 600 E
2001 – 2400	746	1346	1750	2x CL 600 E KU + CL 400 E

Centre lock, horizontal, bottom

SRW [mm]	C1	Centre lock
801 – 1200	456	CL 400 E
1201 – 1400	652	CL 600 E



8.8.1.13 Floating-mullion hardware Plus – RC 1 N



[1] 12 mm rebate clearance between the sashes

[2] Rebate clearance centre

□ Striker e.g.

■ Tilt striker e.g.

Stay guide

SRW [mm]	AX	Size
801 – 1000	600	450 / 890
1001 – 1400	750	450 / 1090

Centre lock, vertical, with SRW 380 – 570

SRH [mm]	B1	B2	B3	Centre lock
465 – 700	346	–	–	CL 200 P
701 – 900	550	–	–	CL 400 P
901 – 1100	746	–	–	CL 600 P
1101 – 1300	746	946	–	CL 600 E KU + CL 200 P
1301 – 1500	746	1150	–	CL 600 E KU + CL 400 P
1501 – 1700	746	1346	–	CL 600 E KU + CL 600 P
1701 – 1900	746	1346	1546	2x CL 600 E KU + CL 200 P
1901 – 2100	746	1346	1750	2x CL 600 E KU + CL 400 P
2101 – 2400	746	1346	1946	2x CL 600 E KU + CL 600 P

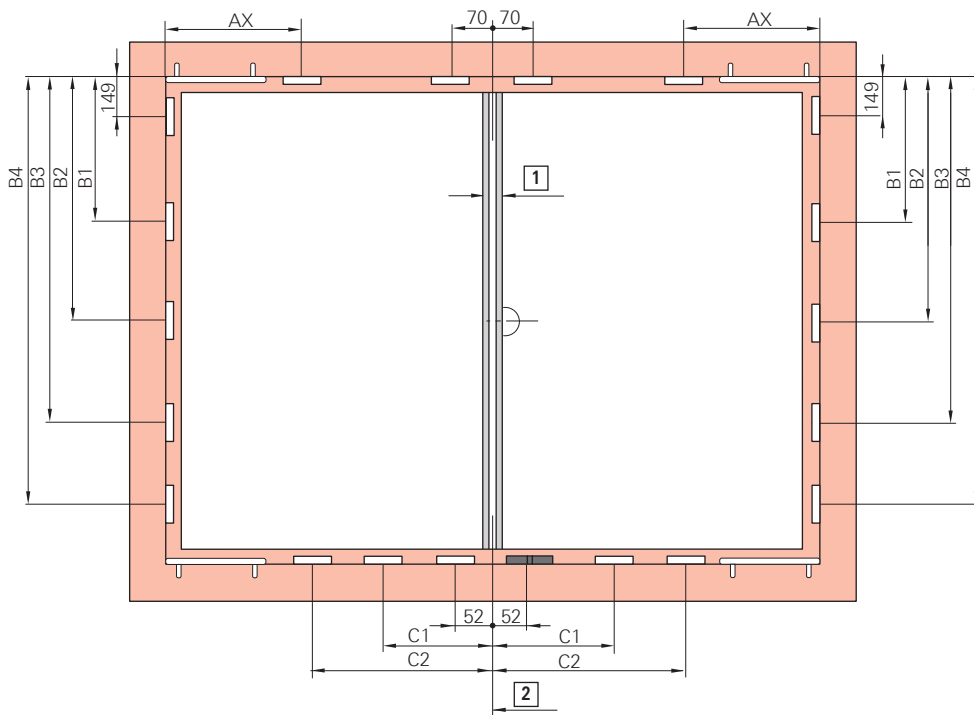
Centre lock, vertical, with SRW 571 – 1400

SRH [mm]	B1	B2	B3	Centre lock
801 – 1200	550	–	–	CL 400 P
1201 – 1400	746	–	–	CL 600 P
1401 – 1800	746	1150	–	CL 600 E KU + CL 400 P
1801 – 2000	746	1346	–	CL 600 E KU + CL 600 P
2001 – 2400	746	1346	1750	2x CL 600 E KU + CL 400 P

Centre lock, horizontal

SRW [mm]	C1	C2	Centre lock
571 – 770	252	–	CL 200 P
571 – 970	456	–	CL 400 P
971 – 1170	652	–	CL 600 P
1171 – 1370	652	852	CL 600 E KU + CL 200 P
1371 – 1400	652	1056	CL 600 E KU + CL 400 P

8.8.1.14 Floating-mullion hardware Plus – RC 2 / RC 2 N



[1] 12 mm rebate clearance between the sashes

[2] Rebate clearance centre

□ Striker e.g. 

■ Tilt striker e.g. 

Stay guide

SRW [mm]	AX	Size
801 – 1000	600	450 / 890
1001 – 1400	750	450 / 1090

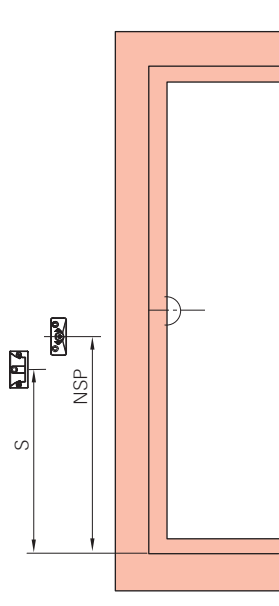
Centre lock, vertical

SRH [mm]	B1	B2	B3	Centre lock
465 – 800	346	–	–	CL 200 V
801 – 1000	550	–	–	CL 400 V
1001 – 1200	746	–	–	CL 600 V
1201 – 1400	746	946	–	CL 600 V KU + CL 200 V
1401 – 1600	746	1150	–	CL 600 V KU + CL 400 V
1601 – 1800	746	1346	–	CL 600 V KU + CL 600 V
1801 – 2000	746	1346	1546	2x CL 600 V KU + CL 200 V
2001 – 2200	746	1346	1750	2x CL 600 V KU + CL 400 V
2201 – 2400	746	1346	1946	2x CL 600 V KU + CL 600 V


Centre lock, horizontal

SRW [mm]	C1	C2	Centre lock
571 – 770	252	–	CL 200 V
771 – 970	452	–	CL 400 V
971 – 1170	652	–	CL 600 V
1171 – 1370	652	852	CL 600 V KU + CL 200 V
1371 – 1400	652	1052	CL 600 V KU + CL 400 V

8.8.2 Position of the lifting mishandling device and bullet catch

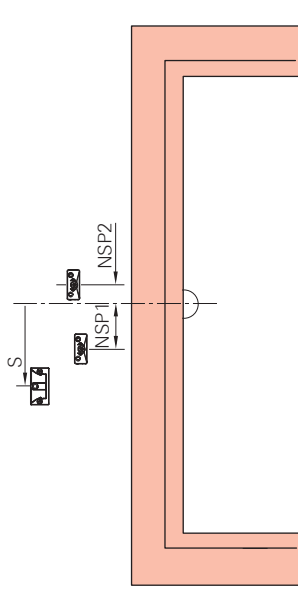


[LMD] Lifting mishandling device

[BC] Bullet catch

T&T espagnolette, VT – fixed handle height

SRH / mm	NSP	S
280 – 480	–	–
481 – 600	262	–
601 – 800	350	–
801 – 1000	288	–
1001 – 1200	388	–
1201 – 1400	388	–
1401 – 1600	388	–
1601 – 1800	388	–
1601 – 1800	1121	807
1801 – 2000	1121	807
2001 – 2600	1121	807
2601 – 2800	1121	807



[LMD] = Lifting mishandling device

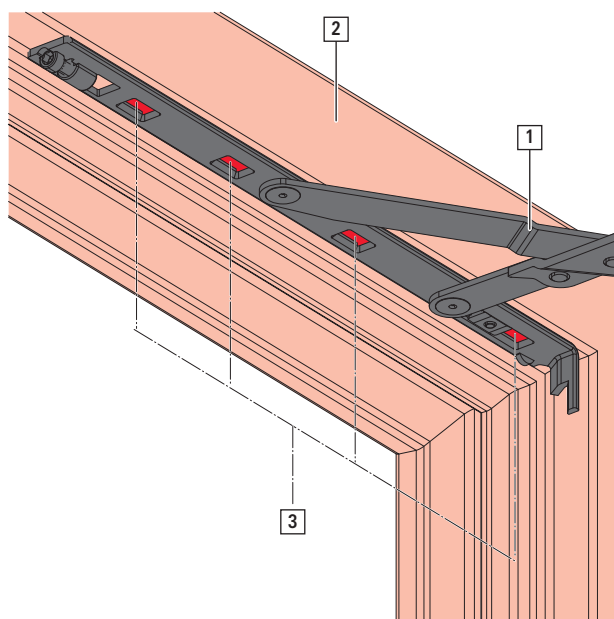
[BC] Bullet catch

T&T espagnolette – centred / variable handle height

SRH / mm	NSP 1	NSP 2	S
450 – 620	–	–	–
621 – 800	137	–	–
801 – 1200	137	–	–
1201 – 1600	137	–	–
1601 – 2000	–	109	395
2001 – 2400	–	109	395
2401 – 2600	–	109	395
2601 – 2800	–	109	395

8.8.3 Stay arm

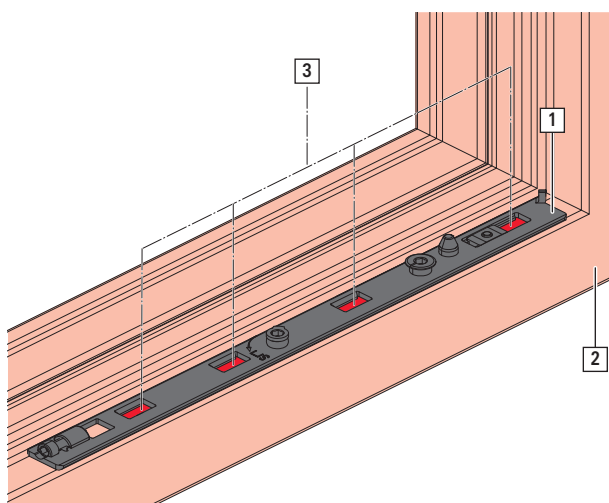
1. Place the sash stay [1] in the frame [2].



2. Fasten with four screws [3].

8.8.4 Pivot rest

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

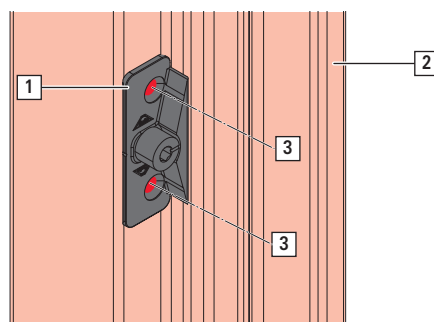


2. Fasten with four screws [3].



8.8.5 Lifting mishandling device

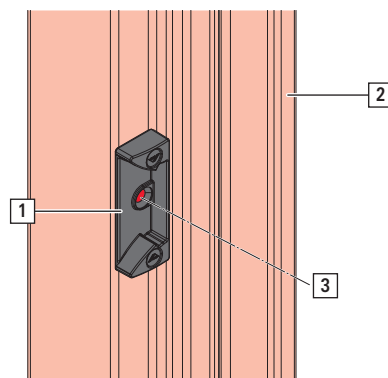
1. Position the lifting mishandling device frame component [1] in the frame [2].



2. Fasten with two screws [3].

8.8.6 Bullet catch

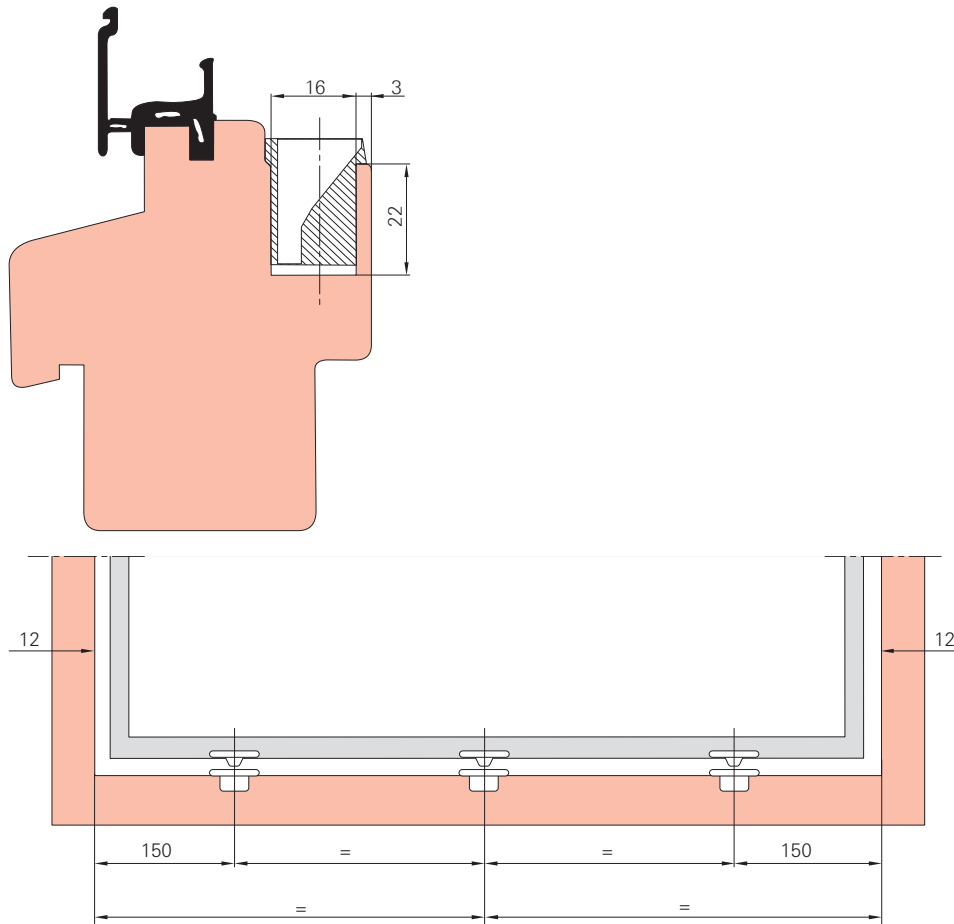
1. Position the bullet-catch frame component [1] in the frame [2].



2. Fasten with a screw [3].

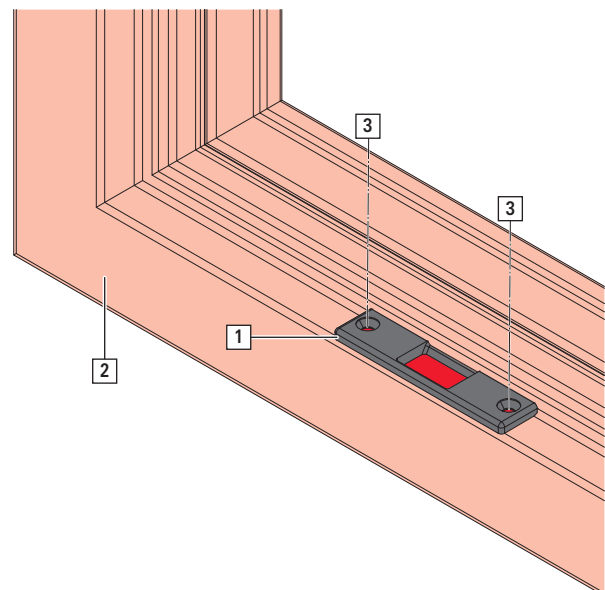
8.8.7 Centre closer

Positioning



Installation

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



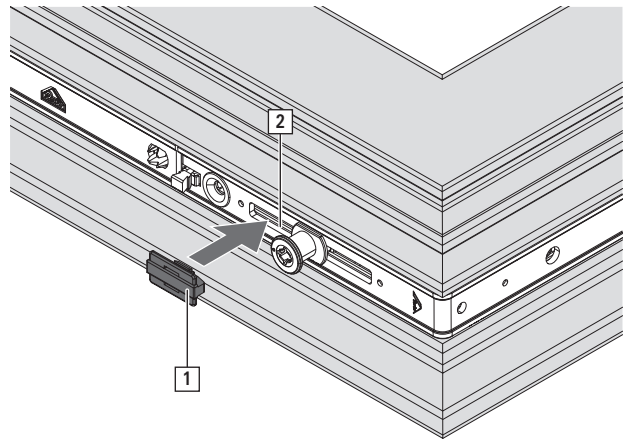


2. Fasten with two screws [3].

8.9 Accessories

8.9.1 Travel restrictor

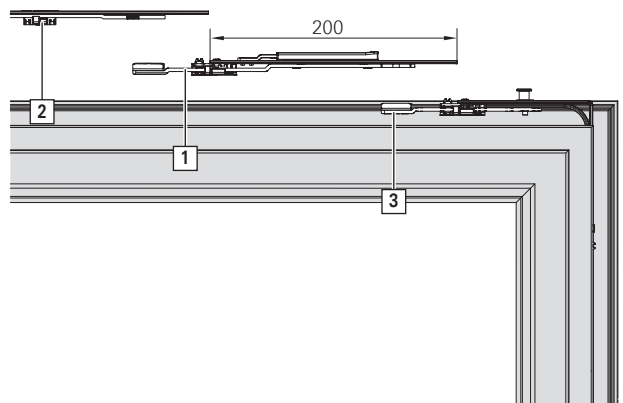
1. Clip the travel restrictor [1] into the locking cam groove [2].



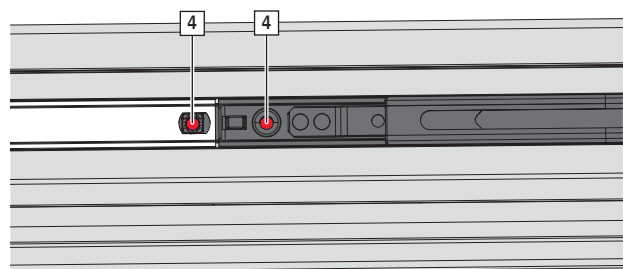
8.9.2 Additional stay arm

8.9.2.1 Sash component

1. Connect the additional stay arm sash component [1] to the corner drive [3]. Creating a force-fit connection → *from page 163*

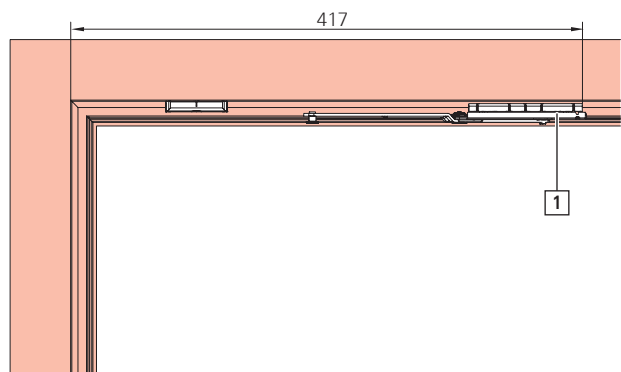


2. Fit the stay guide [2].
3. Secure with two screws [4].



8.9.2.2 Frame component

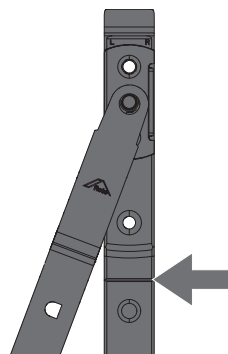
1. Insert the frame component into the frame profile.
The distance between the frame rebate and frame component is 417 mm.



2. Fasten with three screws.

Arched additional stay arm

1. Break the frame component at the notch.

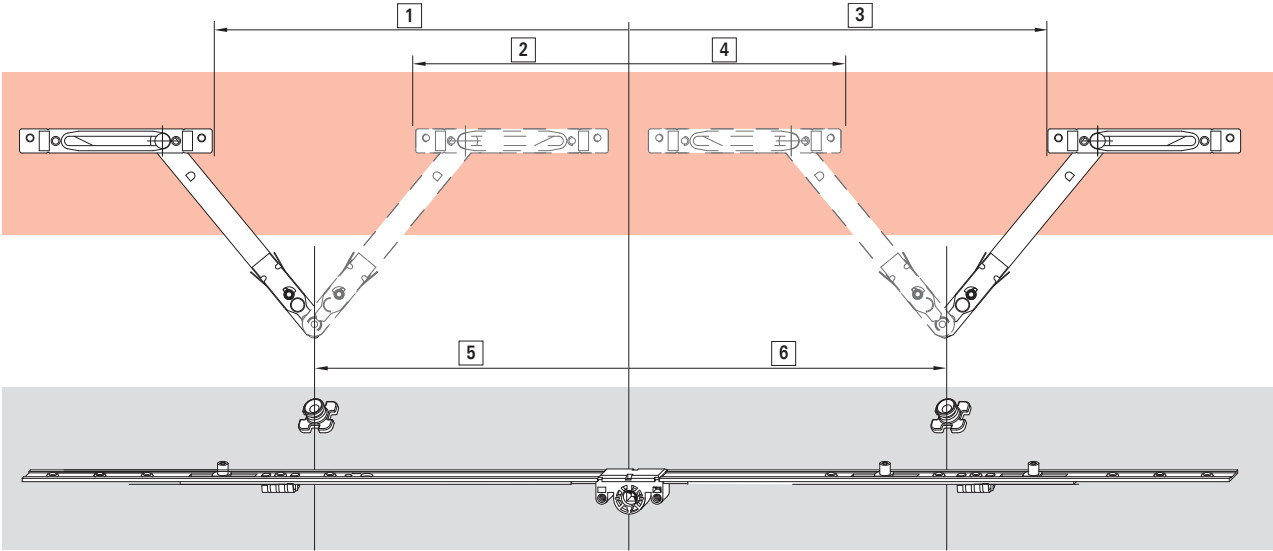


2. Insert the frame component into the frame profile.
3. Fasten with three screws.

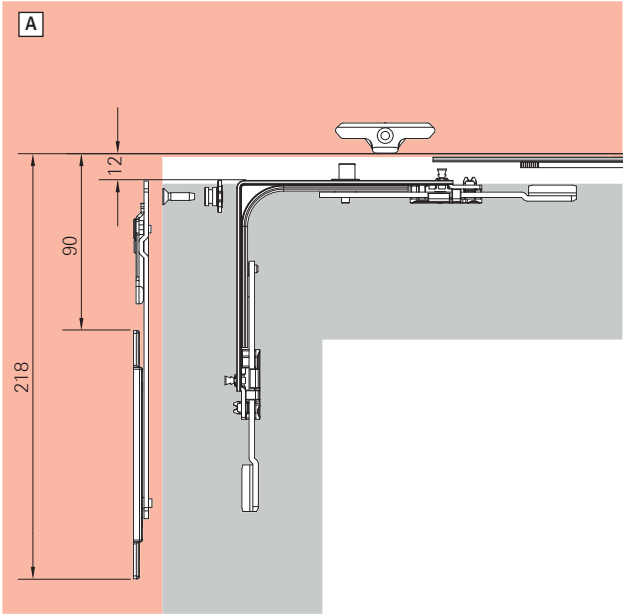


8.9.3 Tilt stay

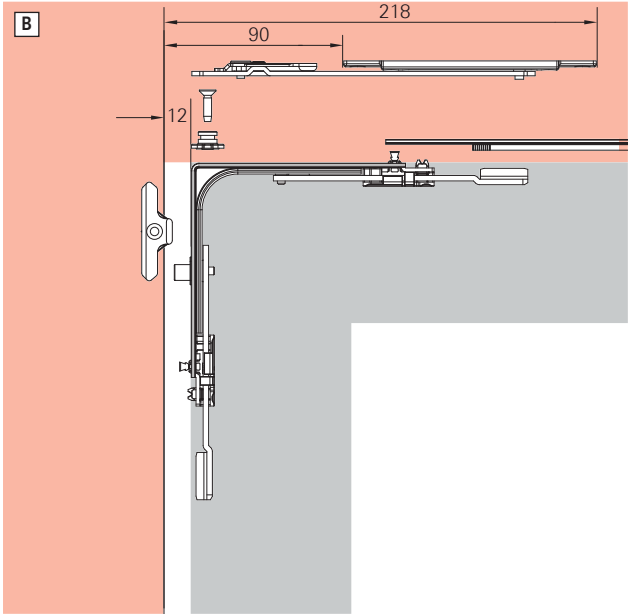
8.9.3.1 Installation dimensions



SRW	[1]	[2]	[3]	[4]	[5]	[6]	BS
621 – 800	–	–	–	4	–	73	15
801 – 1200	–	–	–	4	–	73	15
1200 – 1600	15	–	195	–	212	392	8 / 15
1601 – 2000	433	–	109	–	364	306	8 / 15
2001 – 2400	433	–	509	–	364	706	8 / 15

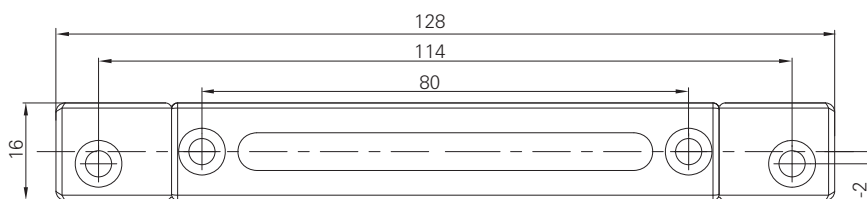


[A] Installation of tilt stay at the side

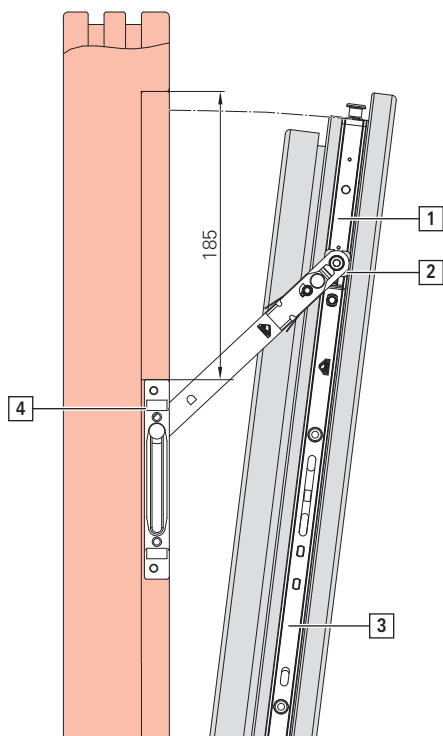


[B] Installation of tilt stay at the top

Frame component dimensions



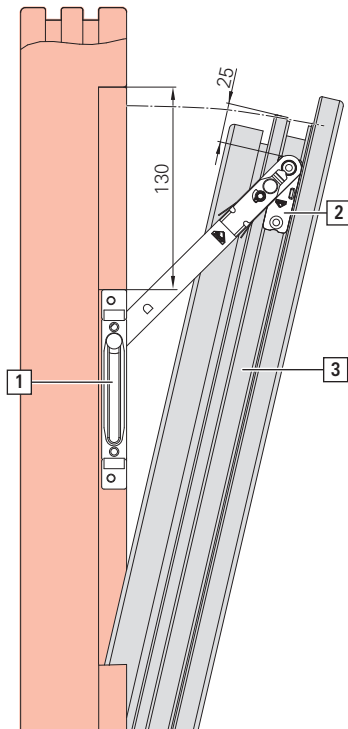
Installation at the side with sash bearing cam at the coupling point



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



Installation, groove mounting

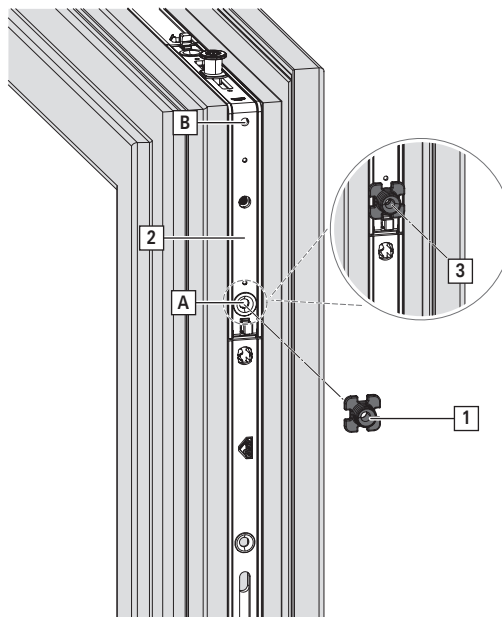


- [1] Tilt stay frame component
- [2] Tilt stay sash component
- [3] Sash groove

8.9.3.2 Sash component

Position at the side

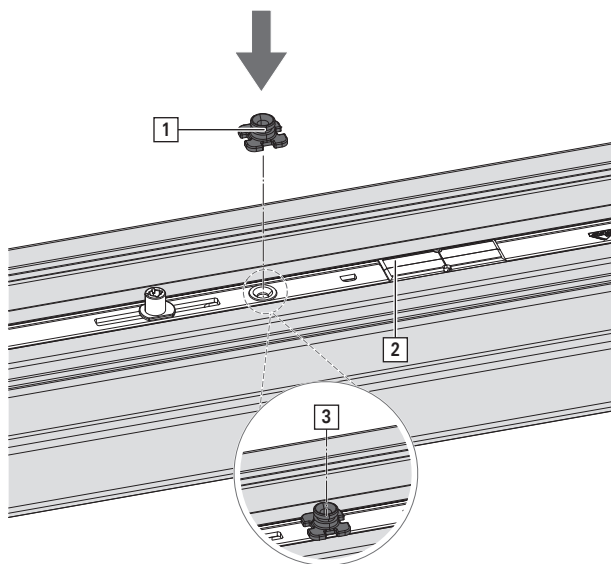
1. Place the sash component [1] on the corner drive [2] (position [A] or [B]).



2. Secure with screw [3].

Position at the top

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



2. Secure with screw [3].



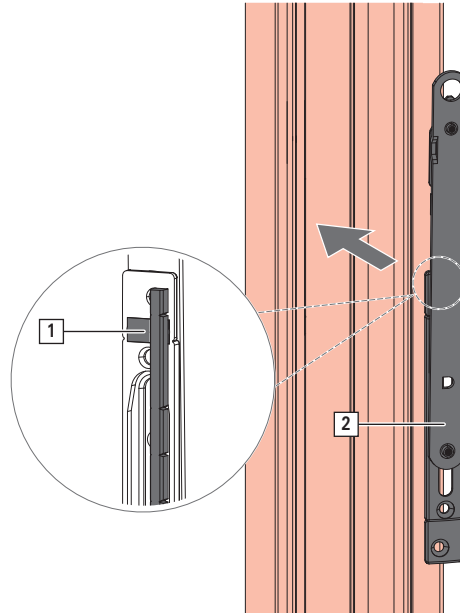
8.9.3.3 Frame component

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

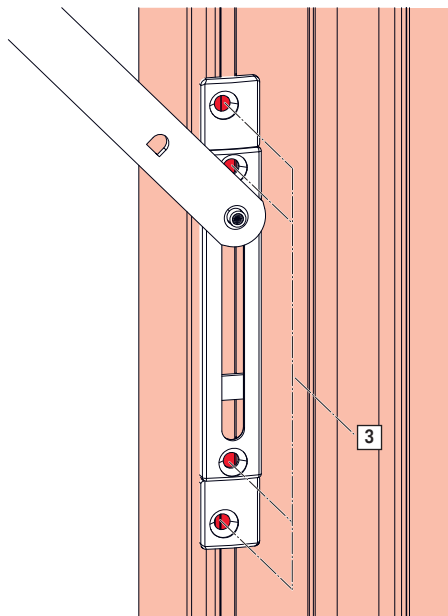


INFO

With a smooth rebate, no packers are required.



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



8.9.4 Anti-jemmy device

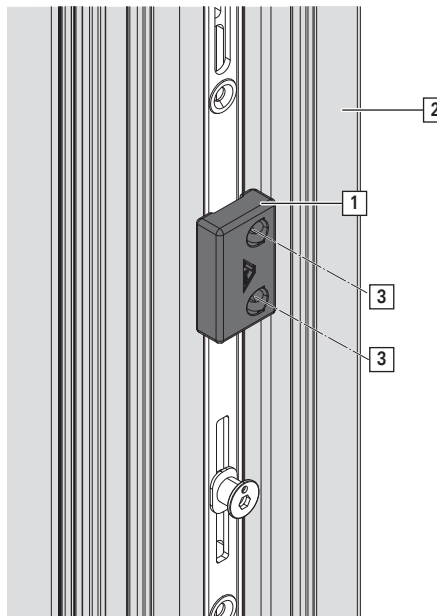


INFO

Only possible for hardware axis 13.

Rebate depth at least 24 mm.

1. Position the anti-jemmy device [1] on the sash [2].

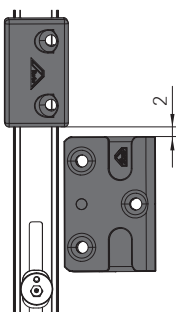


2. Fasten with two screws [3] at an angle in the direction of the overlap.

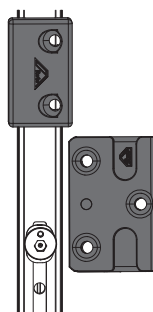
Positioning

The anti-jemmy device runs in approx. 2 mm behind the striker.

Opening position



Locked position



Fit an anti-jemmy device on four sides:

- Hinge side – second-last locking point above the pivot rest.
- Locking side – top locking point.
- Horizontally at the top – on the corner drive, standard
- Horizontally at the bottom – first locking point after the tilt striker.



8.10 Joining the sash and frame



CAUTION

Heavy loads pose the risk of injury and property damage.

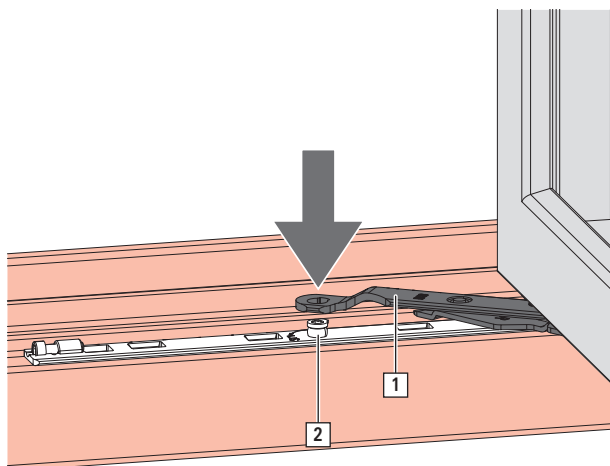
Lifting and carrying heavy loads in an uncontrolled manner may lead to physical injury and property damage.

- ▶ Transport and installation must be carried out by at least two people.
- ▶ Use transportation means. → 13 "Transport" from page 232

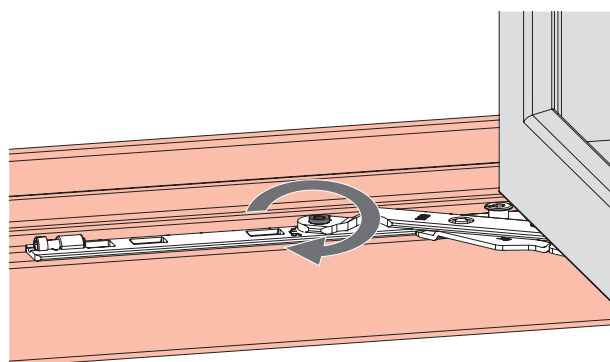
8.10.1 Hinging the sash

Pivot rest

1. Place the corner hinge [1] on the pivot rest eccentric bolt [2].



2. Adjust the eccentric bolt.
Tool: hex key WAF 4



8.10.2 Stay arm

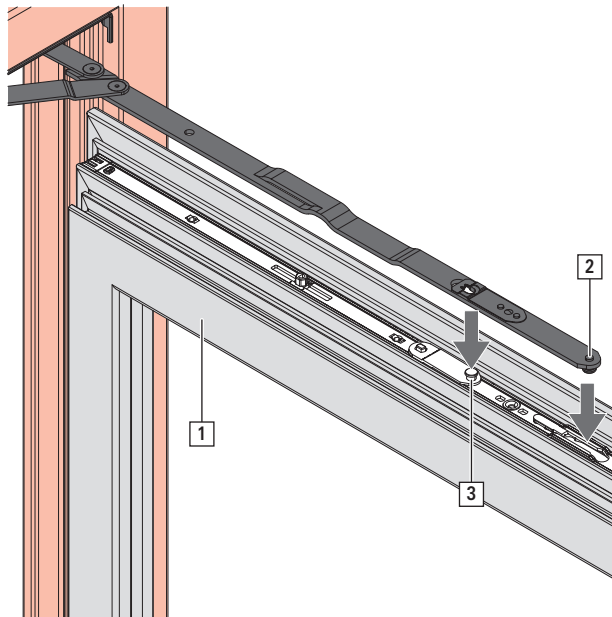
**WARNING**

An unsecured sash may pose a risk of death!

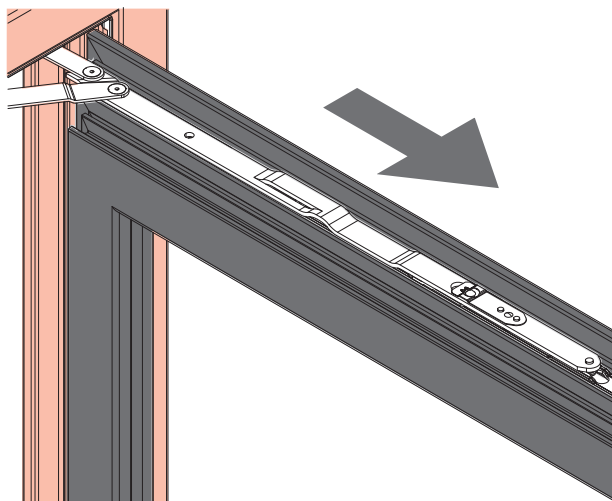
The sash may fall during installation if it is not securely connected to the frame.

- Secure the sash to prevent it from falling, e.g. by using two people.

1. Open the sash [1] at least 60°.
2. Push the stay arm with guide pin [2] into the stay guide [3] and snap it into place.



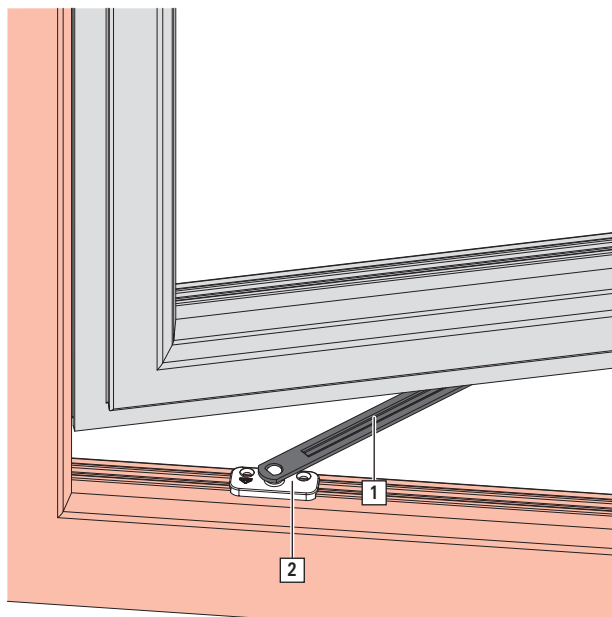
3. After it snaps into place, pull the sash in the direction of the arrow.





8.10.3 Arrestable brake stay

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



9 Adjustment



INFO

Roto hardware components may only be adjusted by authorised professionals when the element is installed.

9.1 Locking cam

E cam

E cam	Adjustment distance	Gasket compression adjustment [mm]	Height	Side view
		±0.8 mm		

P cam

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



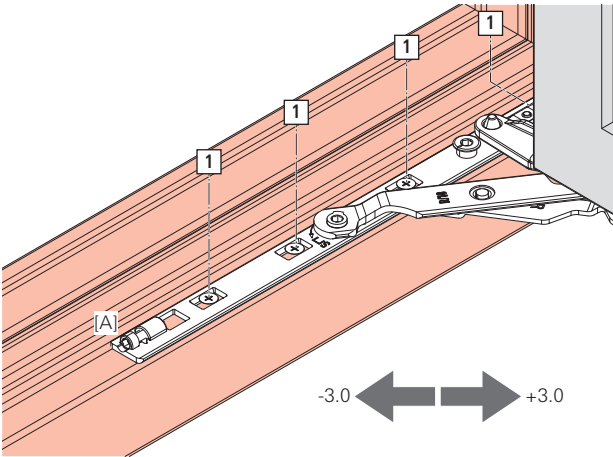
V cam

V cam	Adjustment distance	Gasket compression adjustment [mm]	Height adjustment [mm]	Side view
			+1.5 mm -0.8 mm	
	90°	±0.8 mm	±0.125 mm	<p>[1] 0 = initial position [2] -0.8 mm max. adjustment [3] +1.5 mm max. adjustment</p>
	180°		±0.25 mm	
	270°	±0.8 mm	±0.375 mm	
	360°		±0.5 mm	

9.2 Pivot rest and corner hinge

Lateral adjustment

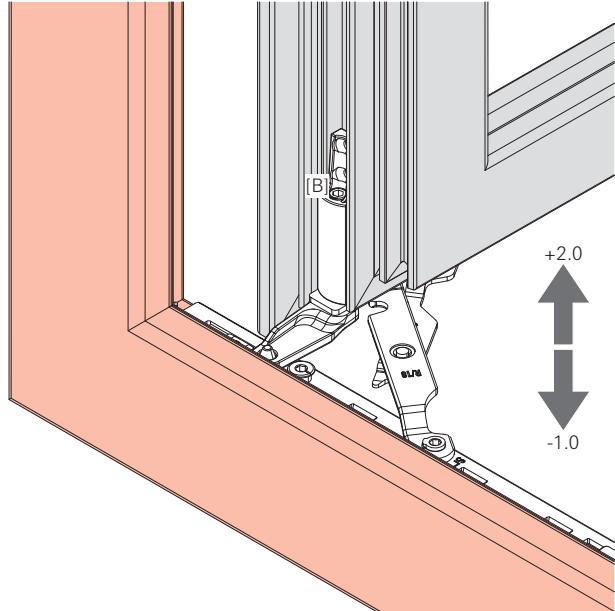
1. Open the sash.
2. Undo the screws [1].



3. Lateral adjustment ± 3 mm via screw [A] in the pivot rest.
 Tool: hex key WAF 4

Height adjustment

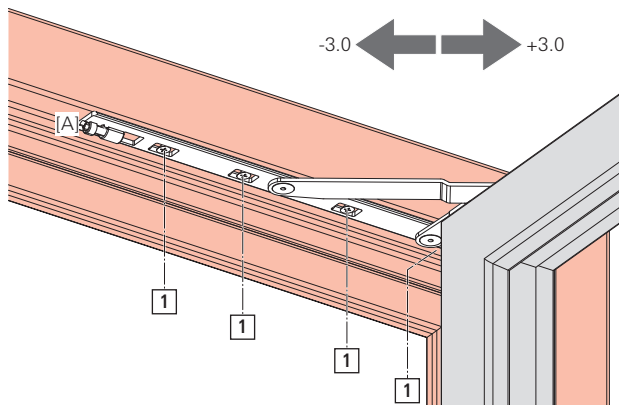
1. Open the sash.
2. Height adjustment $+2.0$ / -1.0 mm via screw [B] in the corner hinge.
Tool: hex key WAF 4



9.3 Sash stay

Lateral adjustment

1. Open the sash.
2. Undo the screws [1].

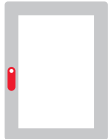


3. Lateral adjustment ± 3 mm via screw [A] in the stay bearing.
Tool: hex key WAF 4

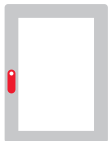
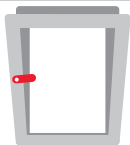


10 Operation

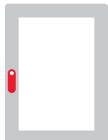
10.1 Handle position with Tilt&Turn hardware

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

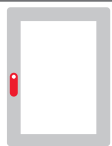
10.2 Handle position with TiltFirst hardware

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

10.3 Handle position with Turn-Only hardware

Handle position	Sash position	Meaning
		Sash in closed position.
		Sash in turned, open position.

10.4 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.

10.5 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 (accumulation of gaskets).	Adjust the sash stay gasket compression or clean the gasket.	■
Handle cannot be turned 180°.	Sash components hinged or installed incorrectly.	Check the setting in the turn position (potentially rehang – start from the T&T espagnolette).	■
Sash falls into the tilt position when in the turn position.	Excessive clearance at the top.	Check the fit of the corner hinge.	■
		Check the fit of the pivot rest.	■
		Adjust the corner hinge so that it is positioned higher (pay attention to the tilt striker).	■
Sash falls into the turn position when in the tilt position.	Tilt striker damaged.	Replace the tilt striker.	■
Sash scrapes in the tilt position.	Insufficient clearance at the top.	Lower the corner hinge (pay attention to the tilt striker).	■
Locking cam is rubbing against the striker.	Sash mounted incorrectly.	Rehang the sash.	■
	Incorrect striker position.	Adapt the striker position.	■

□ = May be carried out by a specialist company or the end user

■ = **Must** be carried out by a specialist company



11 Maintenance



CAUTION

Performing maintenance work incorrectly can lead to injuries.

Performing maintenance incorrectly can lead to injuries.

- ▶ Ensure that there is sufficient space for installation before starting work.
- ▶ Ensure that the installation site is clean and tidy.
- ▶ Always have hardware adjustment and replacement work performed by a specialist company.
- ▶ Secure the sash against unintentionally opening or closing.
- ▶ Do not unhinge the sash for maintenance.



ATTENTION

Incorrect or improper testing may cause property damage.

Incorrect or improper testing of the hardware may cause the element to malfunction.

- ▶ Have the hardware checked by a specialist company when installed.
- ▶ If defects need to be remedied, have the element unhinged and remounted by a specialist company.



INFO

The manufacturer must draw the attention of builders and end consumers to these maintenance instructions.

Roto Frank Fenster- und Türtechnologie GmbH recommends the manufacturer conclude a maintenance agreement with their end users.

No legal claims can be derived from the following recommendations; their application is to be based on the specific individual case.

	Responsibility	
Maintenance interval	☐	→ from page 225
Cleaning		→ from page 226
Clean hardware	☐	
Care		→ from page 226
Lubricate movable parts	☐	
Lubricate locking points	☐	
Performance test		→ from page 228
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 228
Retighten screws	■	
Replace damaged components	■	

☐ = May be carried out by a specialist company or the end user

■ = **Must** be carried out by a specialist company

11.1 Maintenance intervals



ATTENTION

Failure to adhere to maintenance intervals may cause property damage.

The maintenance interval for all tasks relating to the hardware components is **annually** at the least. In hospitals, schools and hotels, the maintenance interval is **six-monthly**.

Regular maintenance is necessary in order to maintain the proper and smooth-running operation of the hardware and to prevent premature wear or even defects.

- ▶ Determine and adhere to the appropriate maintenance interval in accordance with the ambient conditions.

11.2 Cleaning



ATTENTION

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

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

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

Cleaning the hardware

- ▶ Clean deposits and contaminants off the hardware using a soft cloth.
- ▶ Lubricate movable parts and locking points after cleaning. → 11.3 "Care" from page 226
- ▶ Apply a thin protective film to the hardware, for example using a cloth soaked in oil.

11.3 Care



ATTENTION

Using incorrect lubricants may cause property damage.

Substandard lubricants can prevent the hardware from working properly.

- ▶ Use high-quality lubricants.
- ▶ Only use resin-free and acid-free lubricants.
- ▶ Use appropriate lubricant in more challenging climatic conditions. Note the manufacturer specifications.



ATTENTION

Cleaning agents and lubricants may pollute the environment.

Leaking or excess cleaning agents and lubricants may pollute the environment.

- ▶ Remove any leaking or excess cleaning agents and lubricants.
- ▶ Dispose of cleaning agents and lubricants separately and properly.
- ▶ Observe the applicable directives and national laws.

Ease of movement can be improved by lubricating or adjusting the hardware. All functional hardware components must be lubricated on a regular basis.

Recommended lubricants

- Roto NX / NT grease



INFO

The figure displays the positioning of potential lubrication points. The figure does not necessarily match the installed hardware. The quantity of lubrication points varies depending on the size and design of the element.

The image contains 11 detailed diagrams illustrating the step-by-step process of installing a window frame into a wall opening. The diagrams show the frame being positioned, secured with screws, and adjusted for proper fit and operation. Numbered callouts (1, 2) indicate specific components or steps.

- Diagram 1:** Shows the initial placement of the window frame into the wall opening.
- Diagram 2:** Shows the frame being secured with screws into the wall.
- Diagram 3:** Shows the frame being adjusted for proper fit and operation.
- Diagram 4:** Shows the frame being secured with screws into the wall.
- Diagram 5:** Shows the frame being adjusted for proper fit and operation.
- Diagram 6:** Shows the frame being secured with screws into the wall.
- Diagram 7:** Shows the frame being adjusted for proper fit and operation.
- Diagram 8:** Shows the frame being secured with screws into the wall.
- Diagram 9:** Shows the frame being adjusted for proper fit and operation.
- Diagram 10:** Shows the frame being secured with screws into the wall.
- Diagram 11:** Shows the frame being adjusted for proper fit and operation.

- 

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.

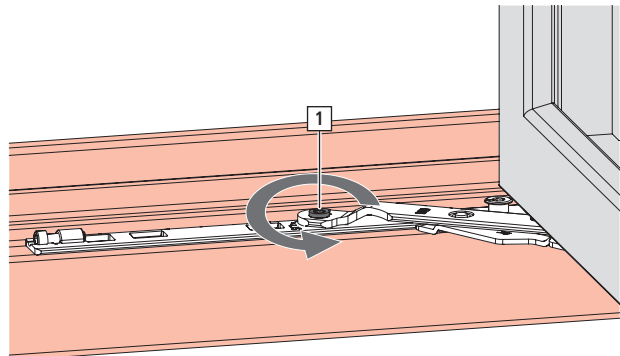


INFO

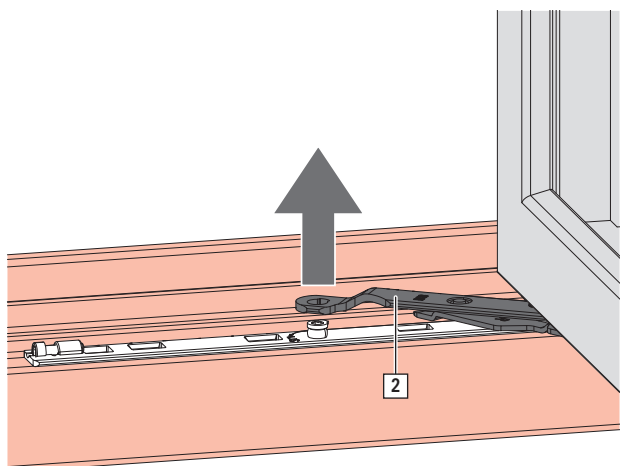
Unless otherwise stated, dismantling is performed in reverse order to installation.

12.1 Pivot rest

1. Open the sash.
2. Adjust the eccentric bolt [1].
Tool: hex key WAF 4



3. Detach the corner hinge [2] from the eccentric bolt.



12.2 Sash stay



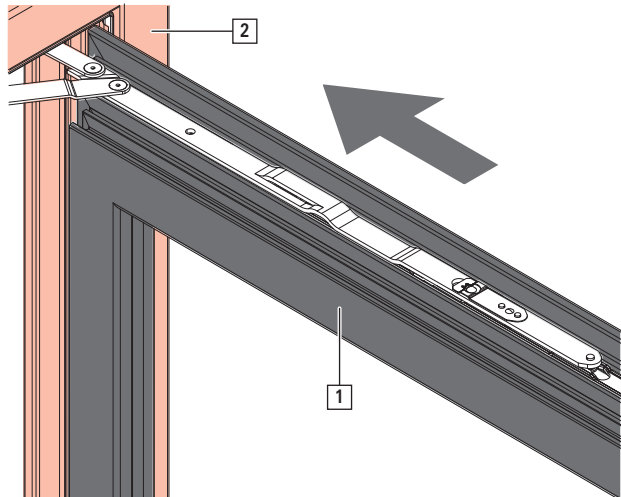
WARNING

An unsecured sash may pose a risk of death!

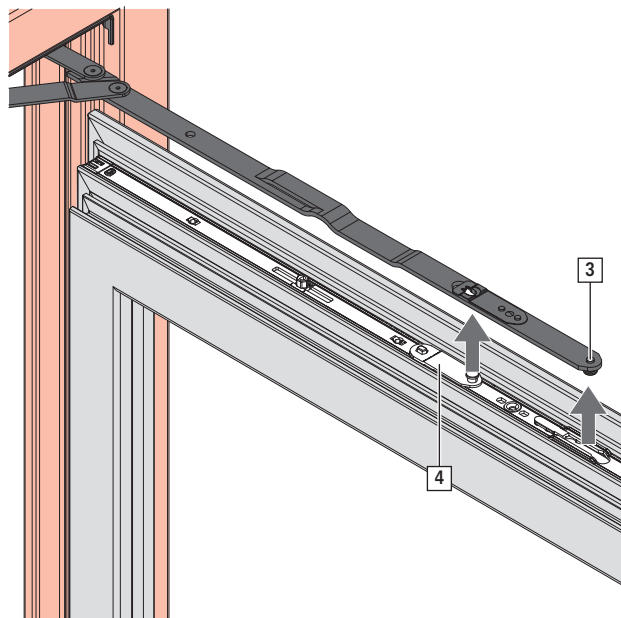
The sash may fall during dismantling as it is no longer securely connected to the frame.

- Secure the sash to prevent it from falling, e.g. by using two people.

1. Open the sash 60°.
2. Push the sash [1] against the frame [2].



3. Detach the stay arm [3] from the stay guide [4].



12.3 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 reutilisation as mixed scrap.

14.1 Disposing of packaging

The hardware is supplied as complete sets together with the packaging. Once unpacked, the installation company or builder is responsible for disposing of the packaging properly. The packaging materials are produced in accordance with current environmental protection standards. The materials can be recycled separately.

Follow the basic instructions below for the proper disposal of packaging:

- ▶ Do not dispose of packaging in household waste.
- ▶ Hand over packaging at local waste collection points or recycling centres.
- ▶ Observe the national regulations on the disposal of recyclable materials.
- ▶ Contact the local authorities if necessary.

14.2 Disposing of hardware

Once the hardware is finished with, the end user or builder is responsible for properly disposing of the windows, doors or balcony doors and the hardware, including any accessories. Hardware is produced in accordance with current environmental protection standards. The materials can be recycled separately.

Follow the basic instructions below for the proper disposal of hardware:

- ▶ Observe the information and specifications for disposal contained in the other applicable documents.
- ▶ Separate hardware components from windows, doors or balcony doors.
- ▶ Do not dispose of hardware in household waste.
- ▶ Hand over hardware at local waste collection points or recycling centres.
- ▶ Observe the national regulations on the disposal of recyclable materials.
- ▶ Contact the local authorities if necessary.



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