Roto
Window & Door
Technology

Roto NX

Hinge side Designo (hardware axis 13 mm)

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

Installation, maintenance and operation instructions for PVC profiles

Contact

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

1	**General information**	**8**
1.1	Version history	8
1.2	Instructions	8
1.3	Symbols	9
1.4	Pictographs	10
1.5	Product features	10
1.6	Abbreviations	12
1.7	Target groups	12
1.8	Target groups' obligation to give instructions	13
1.9	Copyright protection	13
1.10	Limitation of liability	14
1.11	Preserving the surface finish	14
2	**Security**	**16**
2.1	Presentation and structure of warning instructions	16
2.2	Security levels of warning instructions	16
2.3	Stipulated use	16
2.3.1	Misuse	17
2.3.2	Usage restriction	17
2.4	Stipulated use for end users	17
2.4.1	Misuse	18
2.5	Basic safety information	18
2.5.1	Installation	18
2.5.2	Use	19
2.5.3	Ambient conditions	20
2.6	Operation	20
3	**Information on the product**	**22**
3.1	General hardware characteristics	22
3.2	General information	22
3.3	Application diagrams	24
3.3.1	Turn-Only / Tilt&Turn hardware for rectangular windows	24
3.3.2	Tilt-Only hardware for rectangular windows	27
3.4	Descriptions on the window element and recommendation for the profile dimensioning	28
3.5	Frame clearances	29

3.5.1	Frame clearances with a 90° opening angle	29
3.5.2	Dimensions	30
3.6	Mounting suggestion for security windows	31
4	**Hardware overviews**	**32**
4.1	T&T espagnolette, VT – fixed handle height	34
4.1.1	Tilt&Turn hardware	34
4.1.2	TiltFirst hardware	50
4.1.3	Turn-Only hardware	54
4.1.4	Floating-mullion hardware	58
4.2	T&T espagnolette – centred / variable handle height	82
4.2.1	Tilt&Turn hardware	82
4.2.2	TiltFirst hardware	98
4.2.3	Turn-Only hardware	102
4.2.4	Tilt-Only hardware	106
4.2.5	Floating-mullion hardware	108
5	**T&T espagnolette / floating-mullion sash espagnolette**	**132**
5.1	Floating-mullion sash espagnolette	132
5.1.1	Standard	132
5.1.2	Plus	138
6	**Frame components**	**144**
6.1	Stay arm	144
6.1.1	Standard – stay arm 250	144
6.1.2	Standard – stay arm 350	145
6.1.3	Standard – stay arm 500	147
6.1.4	TiltFirst (TF) – stay arm 250	148
6.1.5	TiltFirst (TF) – stay arm 350	149
6.1.6	TiltFirst (TF) – stay arm 500	150
6.2	Rebate stay arm	151
6.2.1	Standard	151
6.3	Pivot rests	153
6.3.1	Standard	153
6.4	Tilt strikers	154
6.4.1	Standard	154
6.4.2	TiltFirst (TF)	157

6.5	Strikers	159
6.5.1	Standard	159
6.5.2	Security	160
6.6	Packers	166
6.7	Bullet catches	167
6.7.1	Bullet catch	167
6.7.2	Floating mullion	168
6.8	Lifting mishandling devices	169
6.8.1	Lifting mishandling device	169
6.9	Turn restrictors	171
6.9.1	Frame components	171
6.10	Night vents	172
6.10.1	Frame components	172

7	**Jigs**	**174**
7.1	Positioning jigs	174
7.1.1	T&T espagnolette – fixed handle height	174
7.1.2	T&T espagnolette – centred / variable handle height	177
7.1.3	Positioning jigs	179

8	**Installation**	**180**
8.1	Processing instructions	180
8.2	Screw fixing	180
8.3	Fastening suggestion for security windows	181
8.4	Screw connections	182
8.5	Force-fit connection	183
8.6	Drilling and routing dimensions	184
8.6.1	T&T espagnolette	184
8.6.2	High backset espagnolette	185
8.6.3	Corner hinge and load transfer	186
8.7	Sash	188
8.7.1	Installation sequence	188
8.7.2	Preparing the sash for the T&T espagnolette	191
8.7.3	Preparing the sash for a lockable T&T espagnolette	192
8.7.4	Cropping the hardware components	193
8.7.5	Corner drive	194

8.7.6	T&T espagnolettes	194
8.7.7	High backset espagnolette	196
8.7.8	Lever-operated espagnolette Plus	199
8.7.9	Handle	199
8.7.10	Stay guide	201
8.7.11	Rebate sash stay	202
8.7.12	Corner hinge	203
8.7.13	Lifting mishandling device / sash lifter	204
8.7.14	Bullet catch	205
8.7.15	Concealed centre closer	205
8.8	Frame	206
8.8.1	Position of strikers and tilt strikers	206
8.8.2	Position of the lifting mishandling device and bullet catch	230
8.8.3	Security striker for tilt ventilation (TiltSafe)	233
8.8.4	Sash stay / rebate sash stay	234
8.8.5	Pivot rest	234
8.8.6	Lifting mishandling device	235
8.8.7	Bullet catch	235
8.8.8	Concealed centre closer	236
8.9	Accessories	236
8.9.1	Travel restrictor	236
8.9.2	Anti-jemmy device	237
8.9.3	Safety device for lever-operated espagnolette, standard	238
8.9.4	Additional stay arm	240
8.9.5	Tilt stay	241
8.9.6	Arrestable brake stay	246
8.9.7	Load transfer	250
8.9.8	Turn restrictors	252
8.9.9	Anti-slam device for sash stay 350 and sash stay 500	254
8.9.10	Fastening plate	254
8.10	Joining the sash and frame	254
8.10.1	Connecting the corner hinge to the pivot rest	255
8.10.2	Mounting the stay arm	257
8.10.3	Load transfer	259
8.10.4	Turn restrictor	259
8.10.5	Arrestable brake stay	260

8.10.6	Pivot rest cover	260
9	**Adjustment**	**261**
9.1	Locking cam	261
9.2	Pivot rest and corner hinge	262
9.3	Sash stay	264
9.4	Load transfer	265
10	**Operation**	**267**
10.1	Handle position with Tilt&Turn hardware	267
10.2	Handle position with TiltFirst hardware	267
10.3	Handle position for arrestable brake stay	268
10.4	Fault assistance	268
11	**Maintenance**	**269**
11.1	Maintenance intervals	269
11.2	Cleaning	270
11.3	Care	270
11.3.1	Lubrication points	271
11.4	Performance test	272
11.5	Repair	272
12	**Dismantling**	**273**
12.1	Unhinging a sash with load transfer	273
12.2	Unhinging a sash without load transfer	274
12.3	Unhinging the sash stay	276
12.4	Hardware components	277
13	**Transport**	**278**
13.1	Transporting elements and hardware	278
13.2	Storing the hardware	279
14	**Disposal**	**280**
14.1	Disposing of packaging	280
14.2	Disposing of hardware	280

1 General information

1.1 Version history

Version	Date	Changes
v0	10/02/2020	Publication
v1	15/11/2021	Hardware overviews split into T&T espagnolette – fixed handle height and T&T espagnolette – centred / variable handle height → *from page 32*
v2	27/02/2024	New item numbers for lever-operated espagnolette Plus → *from page 70* T&T espagnolette – fixed handle height removed from hardware overview. Fastening plates added to hardware overviews → *from page 32* New positioning jig added incorporated → *from page 175*

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_105
  - 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
	Optional / alternative components seated in the sash
	Sash / components seated in the sash
	Optional / alternative components seated in the frame
	Frame / components seated in the frame
	Drill holes, routing, screw positions
	Unaffected components / indirectly affected components
	Components, arrows or movements that have just been described
1	Item number
[1]	Legend
[A]	Steps

INFO

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

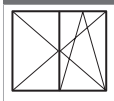
INFO

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

1.3 Symbols

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

1.4 Pictographs

Symbol	Meaning
	Turn-Only / Tilt&Turn floating-mullion sash window
	Turn-Only window
	Tilt&Turn window
	Sash rebate width
	Sash rebate height
	Sash weight
	Tilt-Only window
	PVC

1.5 Product features

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

Symbol	Meaning
	Centred / variable handle height
	Size
	Information
	Fixed toggle lever position
	Centred / variable toggle lever position
	Couplable
	Length
	Material number
	Installation type
	Lifting mishandling device
	Surface
	Position
	Profile
	Number of welded-on strikers
	Number of locking cams
	Type of locking cams
	Security class
	Bullet catch
	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
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 manufacturers or hardware dealers and further process the hardware by integrating it in windows and balcony doors.

Building element dealers or installation companies

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

Builders

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

End users

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

1.8 Target groups' obligation to give instructions

INFO

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

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

Responsibility of hardware dealers

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

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

Responsibility of the window and balcony door manufacturer

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

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

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

Responsibility of building element dealers and the installation company

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

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

Responsibility of the builder

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

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

1.9 Copyright protection

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

1.10 Limitation of liability

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

The hardware manufacturer assumes no liability for damage caused by:

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

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

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

The warranty only covers original Roto components.

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

1.11 Preserving the surface finish

ATTENTION

Surface treatments may cause property damage.

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

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

ATTENTION

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

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

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

ATTENTION

Contamination may cause property damage.

Contamination prevents components working properly.

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

ATTENTION

(Permanently) damp room air may cause property damage.

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

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

2 Security

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

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

2.1 Presentation and structure of warning instructions

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

DANGER

Nature and source of the danger.

Explanation and description of the danger and the implications.

- Measures to take to avert the danger.

2.2 Security levels of warning instructions

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

DANGER

Immediate risk of death or serious injuries.

- Observe these warning instructions to avoid personal injuries.

WARNING

Potential risk of death or serious injuries.

- Observe these warning instructions to avoid personal injuries.

CAUTION

Risk of injuries

- Observe these warning instructions to avoid personal injuries.

ATTENTION

Reference to property or environmental damage.

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

2.3 Stipulated use

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

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

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

2.3.1 Misuse

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

WARNING

Misuse may pose a risk of death!

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

- Only use hardware combinations that have been approved by the hardware manufacturer.
- Only use original accessories or those that have been approved by the hardware manufacturer.
- Note the product-related documentation → *from page 8*.

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 8*.

2.5 Basic safety information

The following hazards may arise when handling the product:

2.5.1 Installation

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

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

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

Heavy loads pose a risk of injury.

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

- Note the applicable accident prevention regulations.

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

Physical overexertion may be harmful to health.

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

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

2.5.2 Use

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

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

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

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

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

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

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

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

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

Misuse poses a risk of injury and property damage.

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

- Do not introduce any obstacles in the opening area between the frame and window or balcony door sashes.
- Do not place additional loads on windows and balcony door sashes.
- Refrain from intentionally or uncontrollably slamming or pushing the window or balcony door sash against the window reveal or the opening restrictor.

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

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

- Keep the hardware free of deposits and contaminants.

- Carry out care and cleaning tasks as specified in these instructions.
- Always have regular maintenance, adjustment and repair work carried out by a specialist company.

2.5.3 Ambient conditions

Physical and chemical influences may result in property damage.

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

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

Moisture may cause property damage.

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

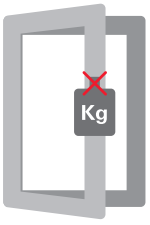
- Avoid preventing the circulation of air (e.g. due to deep reveals, curtains and unfavourable positioning of heaters or the like).
- Intensively air out the room several times per day.

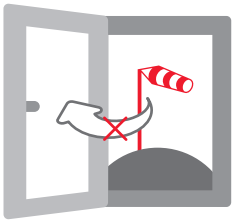
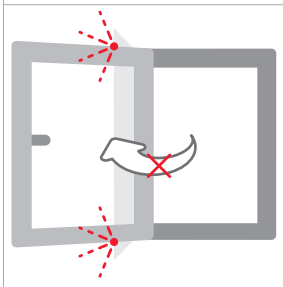
  Open all windows and balcony doors for approximately 15 minutes so that the air in the room can be completely replaced.
- Provide adequate ventilation during holiday periods as well.
- Create a ventilation plan for construction projects if necessary.

2.6 Operation

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

Safety symbols and markings

Symbol	Meaning
	Falls from open windows and balcony doors present an immediate risk of death and pose the risk of serious injuries. Take care when in the vicinity of open windows and balcony doors. Keep children and anyone unable to understand the risks away from the hazardous area.
	Trapping body parts in the opening between sash and frame may lead to serious injuries. When closing windows and balcony doors, never grip between the sash and frame and always exercise caution. Keep children and anyone unable to understand the risks away from the hazardous area.
	**Placing additional loads on the sash may lead to minor injuries and property damage.** Avoid placing additional loads on the sash.

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

3 Information on the product

3.1 General hardware characteristics

- Fully concealed central locking system 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
- Link-guided stay arm, as standard with:
  - Integrated anti-slam device (Tilt&Turn version only)
  - Safeguard against incorrect operation in the tilt position (Tilt&Turn version only)
  - Variable tilt distance restriction (80 – 140 mm, Tilt&Turn version only)
  - Turn restriction
- Fully concealed stay bearing and pivot rest in the sash rebate.
- 3D adjustment in the stay arm / corner hinge / pivot rest.
- Lasting and reliable load relief on the pivot rest.
- Form-fitting “Clip&Fit” connection.
- With burglar inhibiting anti-jemmy device in the tilt striker as standard.
- Low-maintenance thanks to grease deposit recesses.
- Tested in accordance with EN 13126-8 and EN 1191 and certified in accordance with QM 328.
- High-quality Roto Sil surface (matt silver) for maximum corrosion resistance (DIN EN 13126 / 8 and free from chromium VI compounds).

  In combination with Roto Sil, Roto Sil Level 6 is an advanced standard for connection components subject to high stress, such as rivets, bolts and sliding elements.
- Ten-year warranty for the functionality of the hardware.

3.2 General information

Hardware functional safety

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

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

Product liability regulations

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

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

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

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

Sash weight	Tractive force in newtons (N)
140 kg	3900 N
150 kg	4200 N

INFO

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

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

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

Product liability – liability exclusion

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

The warranty only covers original Roto components.

Profile classification – application ranges

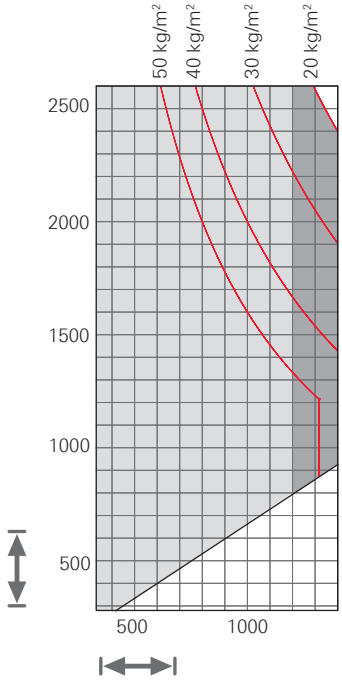
The individual application diagrams must be complied with.

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

3.3 Application diagrams

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

3.3.1.1 80 kg



= Impermissible application range

= Additional stay arm required

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

1 mm/m² glass thickness ≙ 2.5 kg

Application range

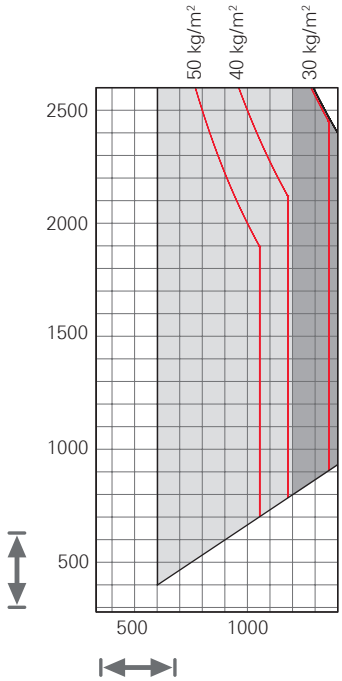
		Basic security	Security RC 1 N	Security RC 2 / RC 2 N
	Sash rebate width	330 – 1400 mm	450 – 1400 mm	450 – 1400 mm
	Sash rebate height	280 – 2600 mm	280 – 2600 mm	490 – 2400 mm
	Sash weight	Max. 80 kg	Max. 80 kg	Max. 80 kg

INFO

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

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

3.3.1.2 100 kg



= Impermissible application range

= Additional stay arm required

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

1 mm/m² glass thickness ≙ 2.5 kg

Application range

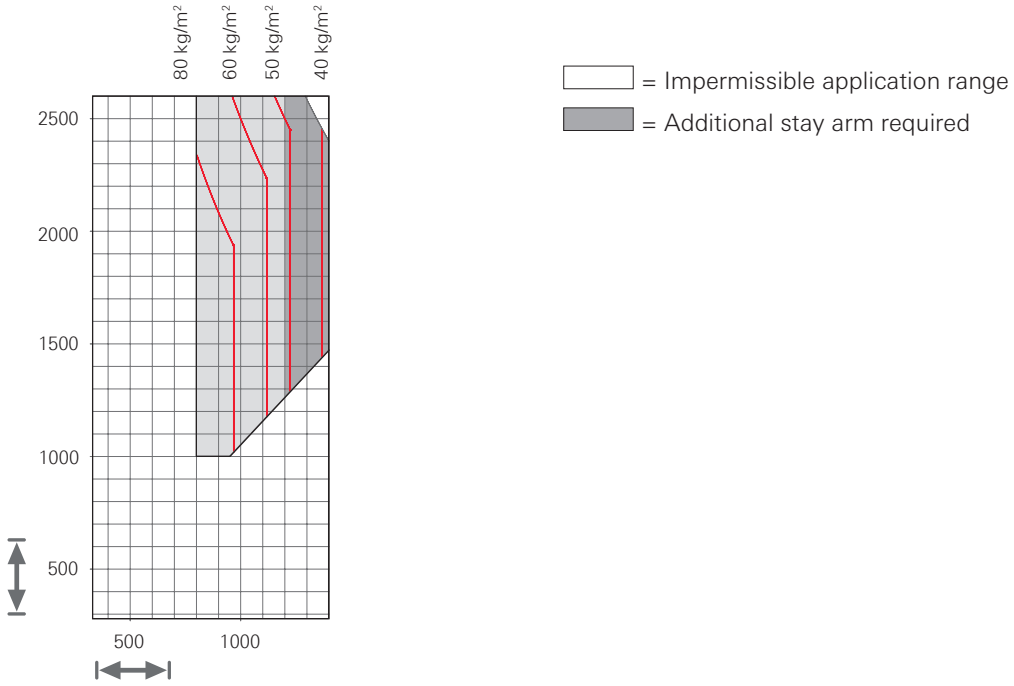
		Basic security	Security RC 1 N	Security RC 2 / RC 2 N
	Sash rebate width	600 – 1400 mm	600 – 1400 mm	600 – 1400 mm
	Sash rebate height	400 – 2600 mm	400 – 2600 mm	490 – 2400 mm
	Sash weight	Max. 100 kg	Max. 100 kg	Max. 100 kg

INFO

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

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

3.3.1.3 Load transfer from 80 to 150 kg



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

1 mm/m² glass thickness ≙ 2.5 kg

Application range

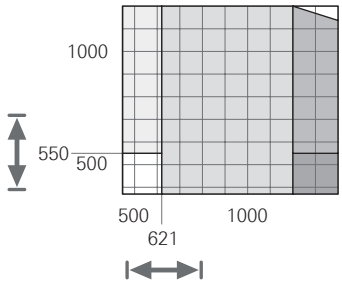
		Basic security	Security RC 1 N	Security RC 2 / RC 2 N
	Sash rebate width	800 – 1400 mm	800 – 1400 mm	800 – 1400 mm
	Sash rebate height	1000 – 2600 mm	1000 – 2600 mm	1000 – 2400 mm
	Sash weight	80 – 150 kg	80 – 150 kg	80 – 150 kg

INFO
If the sash weight is > 130 kg, set the stay arm's tilt distance restriction to 80 mm.

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



= Impermissible application range
= 2 tilt stays at the side
= 1 tilt stay at the top
= 2 tilt stays at the side or top
= 2 tilt stays at the top

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

1 mm/m² glass thickness ≙ 2.5 kg

Application range

		Basic security
↔	Sash rebate width	450 – 1400 mm
↕	Sash rebate height	370 – 1200 mm
	Sash weight	Max. 80 kg

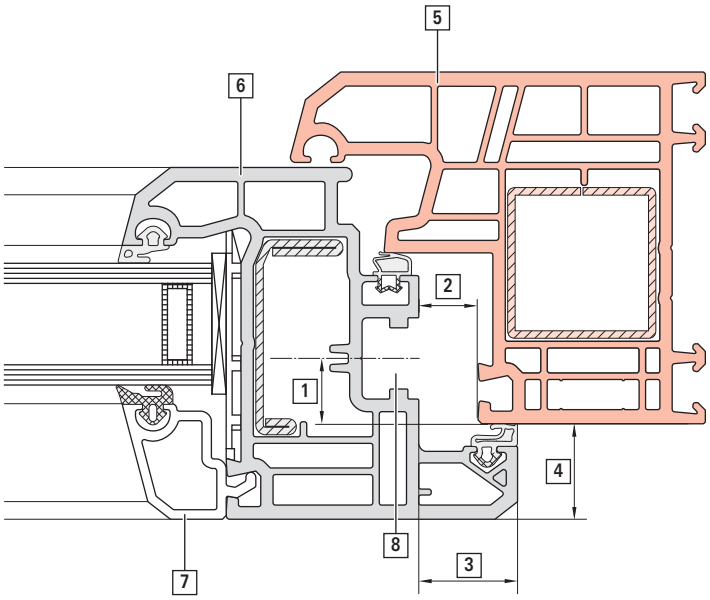
INFO
Restrictor and cleaning stays recommended; mandatory for fanlights (in accordance with RAL RG 607 / 12).

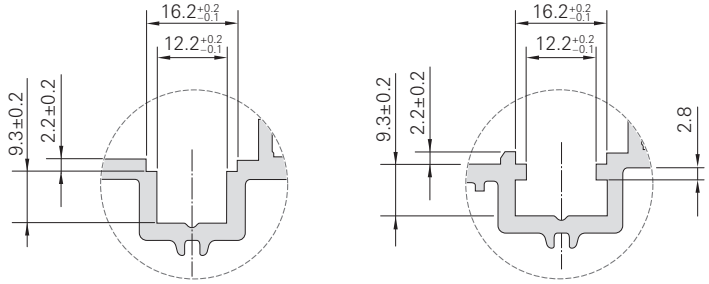
Restrictor and cleaning stays up to max. 60 kg.

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

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

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



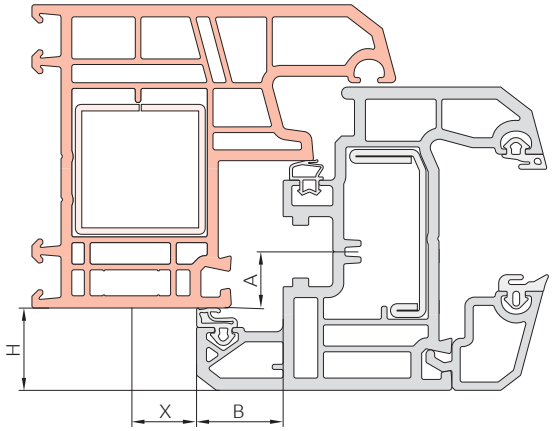


[1] Axis dimension
[2] Rebate clearance
[3] Overlap width
[4] Overlap height
[5] Frame
[6] Sash
[7] Glazing bead
[8] Sash groove

System	Hardware axis [1]	Rebate clearance [2]	Overlap width [3]
12/18-9	9 mm	Horizontal rebate clearance at the bottom / top 11 – 14 mm At the side: 10 – 14 mm Horizontal rebate clearance at the bottom, preset to 12 mm.	18 mm
12/18-13	13 mm		
12/20-9	9 mm		20 mm
12/20-13	13 mm		
12/21-13	13 mm		21 mm
12/22-13	13 mm		22 mm

3.5 Frame clearances

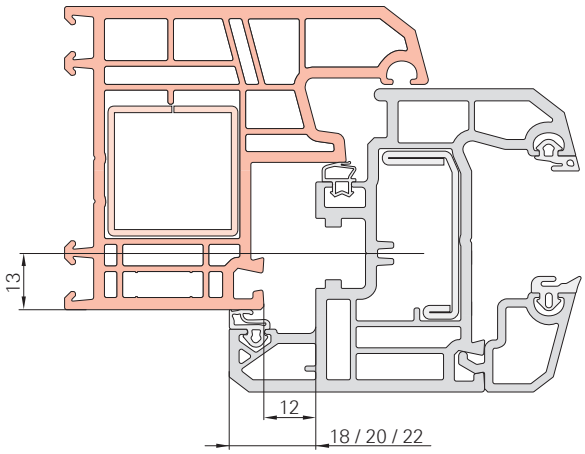
3.5.1 Frame clearances with a 90° opening angle



Axis dimension [A]	Overlap height [H]	Overlap width [B]	Frame clearance [X]
13	16	18	5.2
	20	18	7.6
	24	18	10.6
	16	20	4.9
	20	20	7.2
	24	20	9.9
	16	22	4.7
	20	22	6.8
	24	22	9.3

3.5.2 Dimensions

System 12/18 (20/22)-13

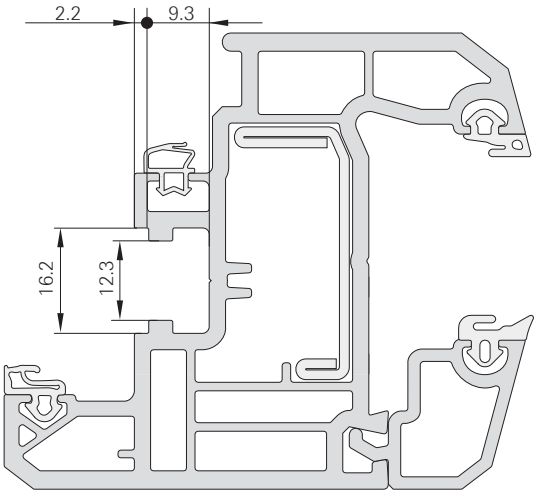


Rebate clearance at the bottom / top, horizontal: 11 - 14 mm

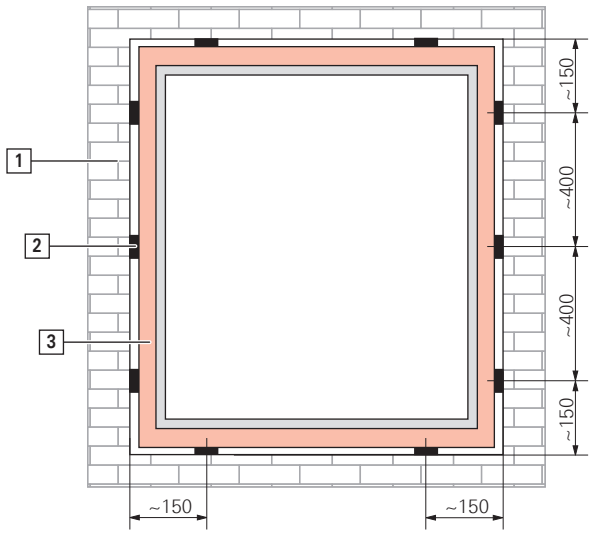
Rebate clearance at the side: 10 - 14 mm

INFO
Horizontal rebate clearance at the bottom, preset to 12 mm.

Sash profile cross section



3.6 Mounting suggestion for security windows



[1] Brickwork

[2] Spacer blocks

[3] Frame

INFO

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

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

4 Hardware overviews

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

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

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

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

The actual composition of the hardware depends on:

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

Application range

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

Anwendungsbereich

FFB: 290 - 1600 mm

A — **FFH**: 430 - 2800 mm

FG: max. 150 kg

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

B — 280 – 570	120	460	J	N	–	–	742199
511 – 710	170	600	J	J	–	–	795324
601 – 800	263	690	N	J	–	–	619591
801 – 1000	413	890	N	J	1	E	619592
1001 – 1200	513	1090	N	J	1	E	619593
1201 – 1400	563	1290	N	J	1	E	619594
1401 – 1600	563	1490	N	J	2	E	619595
1601 – 1800	563	1690	N	J	2	E	619596
1601 – 1800	1000	1690	N	J	2	E	838345
1801 – 2000	1000	1890	N	J	2	E	794637
2001 – 2200	1000	2090	N	J	3	E	794638
2201 – 2400	1000	2290	N	J	3	E	794639

Example

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

INFO

Resistance classes

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

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

Recommended handles can be found in the Roto Handles catalogue.

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

INFO

Roto Con Orders

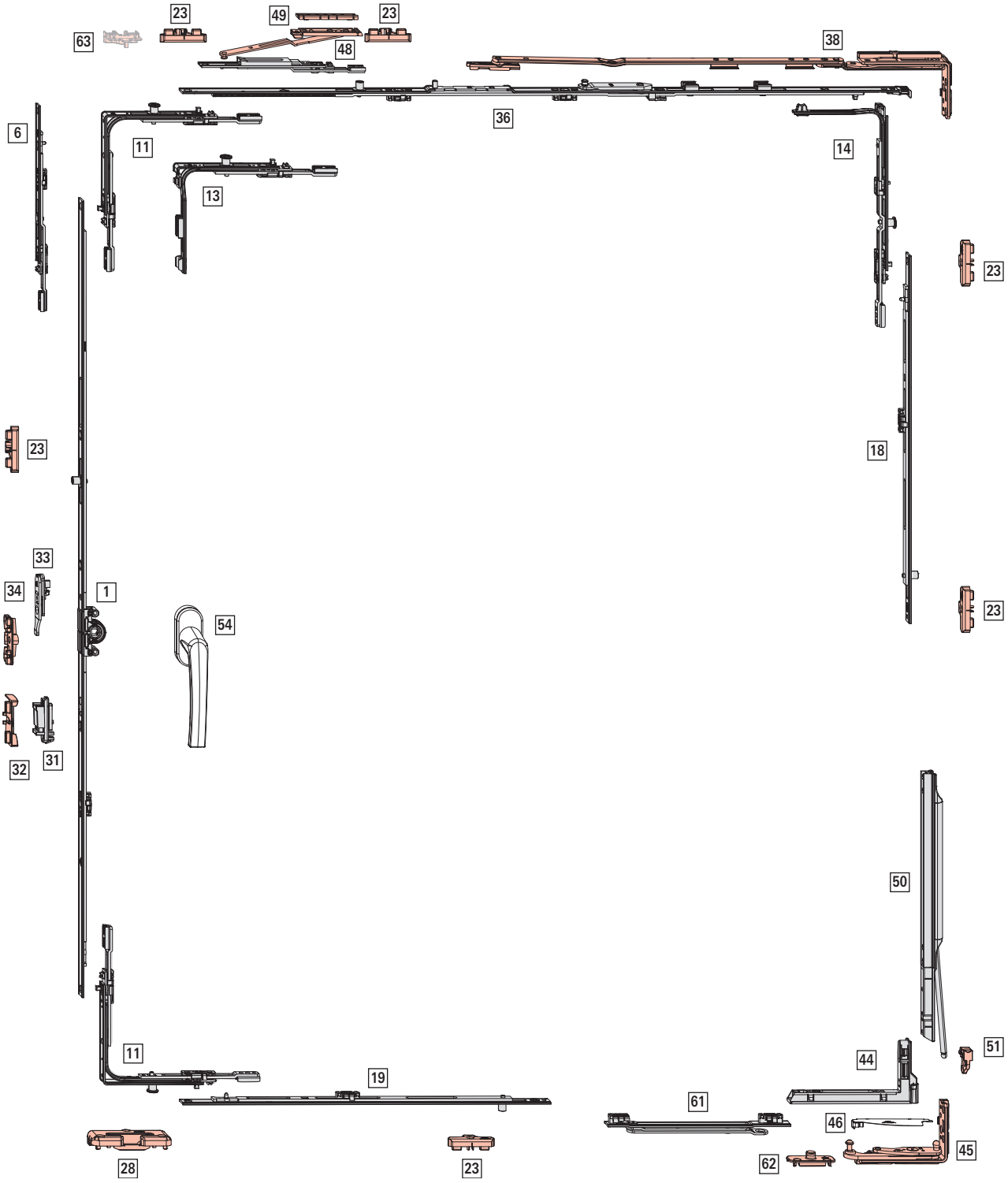
Efficient online hardware configurator for the custom configuration of individual window and door hardware components. All conventional shapes and opening types can be automatically configured quickly and easily. Individual parts lists, including application ranges and an exemplary hardware overview,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

www.roto-frank.com

4.1 T&T espagnolette, VT – fixed handle height

4.1.1 Tilt&Turn hardware

4.1.1.1 Basic security



Application range

Without load transfer	With load transfer
SRW: 330 – 1400 mm	**SRW**: 800 – 1400 mm
SRH: 280 – 2600 mm	**SRH**: 1000 – 2600 mm
S.kg: max. 100 kg	**S.kg**: max. 150 kg

INFO
SRW 330 – 430 mm from SRH 361 mm
SRH 280 – 370 mm from SRW 431 mm

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

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

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

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

				№
200	Y	–	–	308267

Size-specific combinations:

				№
2401 – 2600	200 KU	–	–	308267

[11] Standard corner drive

			№
1	E	Top	260275
1	P	Top Bottom	260277

[13] Special short corner drive

			№
1	E	Top	260280
1	P	Top Bottom	260282

For use with:
SRW ≤ 430 mm
SRH ≤ 370 mm

[14] Sash stay corner drive

		№
1	P	260286

INFO
With SRH 280 – 330 mm, crop the sash stay corner drive (to do so, extend the connecting rod fully).

[18] Multipart centre lock – standard, vertical

				№
400	N	1	E	255280
600	N	1	E	255281
600	Y	1	E	255282
200	N	1	P	255284

Size-specific combinations:

Without load transfer	With load transfer				№
801 – 1200	1001 – 1200	400	1	E	255280
1201 – 1400	1201 – 1400	600	1	E	255281
	1401 – 1600	600 KU	1	E	255282
		200	1	P	255284
1401 – 1800	1601 – 1800	600 KU	1	E	255282
		400	1	E	255280
1801 – 2000	1801 – 2000	600 KU	1	E	255282
		600	1	E	255281
	2001 – 2200	600 KU	1	E	255282
		600 KU	1	E	255282
		200	1	P	255284
2001 – 2400	2201 – 2400	600 KU	1	E	255282
		600 KU	1	E	255282
		400	1	E	255280
2401 – 2600	2401 – 2600	600 KU	1	E	255282
		600 KU	1	E	255282
		600	1	E	255281

[19] Multipart centre lock – standard, horizontal

				№
400	N	1	E	255280
600	N	1	E	255281
200	N	1	P	255284

Size-specific combinations:

Without turn restrictor	With turn restrictor				№
–	801 – 850	200	1	P	255284
801 – 1200	851 – 1200	400	1	E	255280
1201 – 1400	1201 – 1400	600	1	E	255281

[23] Striker → *from page 159*

[28] Tilt striker → *from page 154*

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

	№
Bullet catch sash component	788363

[32] Bullet-catch frame component (optional SRH ≥ 1601 mm) → *from page 167*

[33] Lifting mishandling device sash component

	№
Sash component for lifting mishandling device	795927

[34] Lifting mishandling device frame component → *from page 169*

[36] Stay guide – basic security

			#		№
330 – 600	250	490	–	–	385393
601 – 800	350	690	–	–	385394
801 – 1000	500	890	1	E	385415
1001 – 1200	500	1090	1	E	385416

[38] Stay arm → *from page 144*

INFO
With SRH < 600 mm, set the tilt depth to 80 mm.

[44] Corner hinge

	№
Corner hinge – Designo hinge side (HA 13)	634705

[45] Pivot rest → *from page 153*

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

		№
Frame and sash component	200	255237

[49] Packer → *from page 166*

[50] Load transfer sash component (SRW ≥ 801 mm, SRH ≥ 1001 mm)

	№
max. 150 kg	567972

[51] Load transfer frame component (SRW ≥ 801 mm, SRH ≥ 1001 mm)

	№
max. 150 kg	565254

[54] Handle → CTL_1

[61] Turn restrictor 198, sash component

	№
Designo hinge side	485591

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

[62] Turn restrictor frame component → *from page 171*

Optional

[46] Pivot rest cover

			№
Pivot rest cover – Designo hinge side	Clampable	Left	799664
		Right	799789

INFO
Horizontal rebate clearance at the bottom 11 – 14 mm.

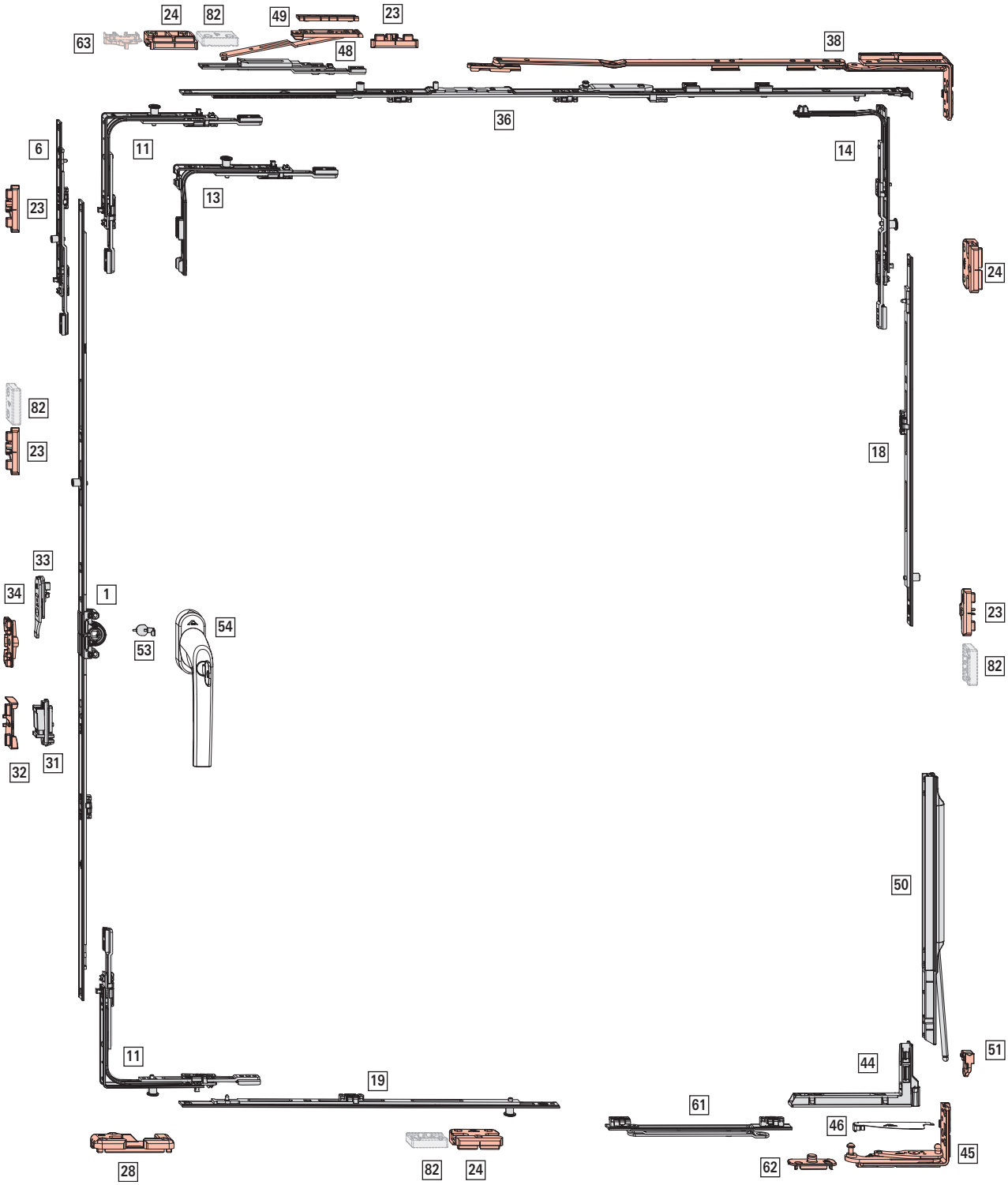
[63] Night vent → *from page 172*

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

Arrestable brake stay → CTL_105

Sash lifter → CTL_105

4.1.1.2 RC 1 N


24
82
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34
1
54
53
23
82
32
31
50
11
51
44
19
61
46
45
62
28
82
24

Application range

Without load transfer	With load transfer
SRW: 450 – 1400 mm	**SRW**: 800 – 1400 mm
SRH: 280 – 2600 mm	**SRH**: 1000 – 2600 mm
S.kg: max. 100 kg	**S.kg**: max. 150 kg

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

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

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

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

				№
200	Y	1	E	450821

Size-specific combinations:

				№
2401 – 2600	200 KU	1	E	450821

[11] Standard corner drive

		№
1	P	260277

[13] Special short corner drive

		№
1	P	260282

For use with SRH ≤ 370 mm.

[14] Sash stay corner drive

		№
1	P	260286

INFO
With SRH 280 – 330 mm, crop the sash stay corner drive (to do so, extend the connecting rod fully).

[18] Multipart centre lock – standard, vertical

				№
400	N	1	E	255280
600	N	1	E	255281
600	Y	1	E	255282
200	N	1	P	255284

Size-specific combinations:

Without load transfer	With load transfer				№
801 – 1200	1001 – 1200	400	1	E	255280
1201 – 1400	1201 – 1400	600	1	E	255281
	1401 – 1600	600 KU	1	E	255282
		200	1	P	255284
1401 – 1800	1601 – 1800	600 KU	1	E	255282
		400	1	E	255280
1801 – 2000	1801 – 2000	600 KU	1	E	255282
		600	1	E	255281
	2001 – 2200	600 KU	1	E	255282
		600 KU	1	E	255282
		200	1	P	255284
2001 – 2400	2201 – 2400	600 KU	1	E	255282
		600 KU	1	E	255282
		400	1	E	255280
2401 – 2600	2401 – 2600	600 KU	1	E	255282
		600 KU	1	E	255282
		600	1	E	255281

[19] Multipart centre lock – standard, horizontal

				№
400	N	1	E	255280
600	N	1	E	255281
600	Y	1	E	255282
200	N	1	P	255284

Size-specific combinations:

Without turn restrictor	With turn restrictor				№
450 – 650	651 – 850	200	1	P	255284
651 – 850	851 – 1050	400	1	E	255280
851 – 1000	1051 – 1250	600 [1]	1	E	255281
	1251 – 1400	600 KU	1	E	255282
		200	1	P	255284

[23] Striker → *from page 159*

[24] Security striker → *from page 160*

[28] Tilt striker → *from page 154*

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

	№
Bullet catch sash component	788363

[1] Crop CL by 15 mm up to SRW 854; when using a turn restrictor: crop CL by 15 mm up to SRH 1053

[32] Bullet-catch frame component (optional SRH ≥ 1601 mm) → *from page 167*

[33] Lifting mishandling device sash component

	№
Sash component for lifting mishandling device	795927

[34] Lifting mishandling device frame component → *from page 169*

[36] Stay guide – basic security

					№
330 – 600	250	490	–	–	385393
601 – 800	350	690	–	–	385394
801 – 1000	500	890	1	E	385415
1001 – 1200	500	1090	1	E	385416

[38] Stay arm → *from page 144*

INFO
With SRH < 600 mm, set the tilt depth to 80 mm.

[44] Corner hinge

	№
Corner hinge – Designo hinge side (HA 13)	634705

[45] Pivot rest → *from page 153*

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

		№
Frame and sash component	200	255237

[49] Packer → *from page 166*

[50] Load transfer sash component (SRW ≥ 801 mm, SRH ≥ 1001 mm)

	№
max. 150 kg	567972

[51] Load transfer frame component (SRW ≥ 801 mm, SRH ≥ 1001 mm)

	№
max. 150 kg	565254

[53] Drilling protection

	№
Drilling protection	797819

[54] Handle, lockable → CTL_1

[61] Turn restrictor 198, sash component

	№
Designo hinge side	485591

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

[62] Turn restrictor frame component → *from page 171*

Optional

[46] Pivot rest cover

			№
Pivot rest cover – Designo hinge side	Clampable	Left	799664
		Right	799789

INFO
Horizontal rebate clearance at the bottom 11 – 14 mm.

[63] Night vent → *from page 172*

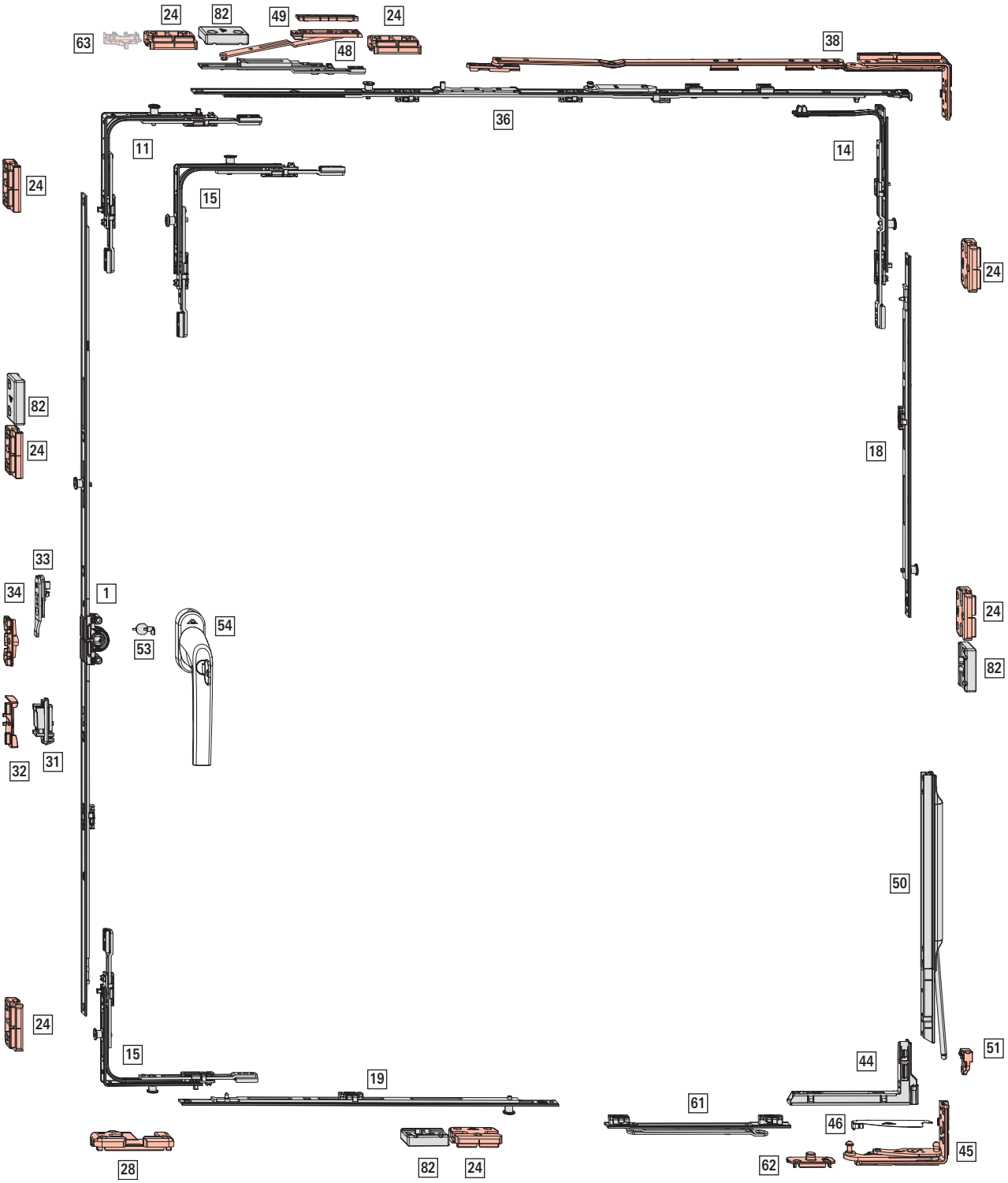
INFO
Only for use in conjunction with P or V cam.

[82] Anti-jemmy device

		№
Anti-jemmy device	From rebate depth 26 mm	811715

Sash lifter → CTL_105

4.1.1.3 RC 2 / RC 2 N



Application range

Without load transfer	With load transfer
SRW: 450 – 1400 mm	**SRW**: 800 – 1400 mm
SRH: 600 – 2400 mm	**SRH**: 1000 – 2400 mm
S.kg: max. 100 kg	**S.kg**: max. 150 kg

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

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

[11] Standard corner drive

#		№
1	V	260272

For use from SRH 801 mm

[14] Sash stay corner drive

#		№
1	V	260284

[15] Corner drive, standard (security)

#		№
2	V	260274

[18] Multipart centre lock – security, vertical

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

Size-specific combinations:

Without load transfer	With load transfer		#		№
600 – 650	–	200	1	V	296853
651 – 850	1000 – 1150	400	1	V	296854
851 – 1050	1151 – 1350	600 [2]	1	V	296855
1051 – 1250	1351 – 1550	600 KU	1	V	337711
		200	1	V	296853
1251 – 1450	1551 – 1750	600 KU	1	V	337711
		400	1	V	296854
1451 – 1650	1751 – 1950	600 KU	1	V	337711
		600 [3]	1	V	296855
1651 – 1850	1951 – 2150	600 KU	1	V	337711
		600 KU	1	V	337711
		200	1	V	296853
1851 – 2050	2151 – 2350	600 KU	1	V	337711
		600 KU	1	V	337711
		400	1	V	296854
2051 – 2250	2351 – 2400	600 KU	1	V	337711
		600 KU	1	V	337711
		600 [4]	1	V	296855
2251 – 2400	–	600 KU	1	V	337711
		600 KU	1	V	337711
		600 KU	1	V	337711
		200	1	V	296853

[19] Multipart centre lock – security, horizontal

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

Size-specific combinations:

Without turn restrictor	With turn restrictor		#		№
450 – 650	801 – 850	200	1	V	296853
651 – 850	851 – 1050	400	1	V	296854
851 – 1000	1051 – 1250	600 [5]	1	V	296855
–	1251 – 1400	600 KU	1	V	337711
		200	1	V	296853

[24] Security striker → *from page 160*

[28] Tilt striker → *from page 154*

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

	№
Bullet catch sash component	788363

[32] Bullet-catch frame component (optional SRH ≥ 1601 mm) → *from page 167*

[33] Lifting mishandling device sash component

	№
Sash component for lifting mishandling device	795927

[2] Crop CL by 15 mm up to SRH 861; when using load transfer: crop CL by 15 mm with SRH 1151

[3] Crop CL by 15 mm up to SRH 1461; when using load transfer: crop CL by 15 mm with SRH 1751

[4] Crop CL by 15 mm up to SRH 2061; when using load transfer: crop CL by 15 mm with SRH 2351

[5] Crop CL by 15 mm up to SRW 854; when using a turn restrictor: crop CL by 15 mm up to SRH 1053

[34] Lifting mishandling device frame component → *from page 169*

[36] Stay guide – security

					№
330 – 600	490	250	–	–	385393
601 – 800	690	350	–	–	385394
801 – 1000	890	500	1	V	450373
1001 – 1200	1090	500	1	V	450374

INFO
SRW 1201 – 1400 mm only possible with stay guide 450374 and additional stay arm

[38] Stay arm → *from page 144*

[44] Corner hinge

	№
Corner hinge – Designo hinge side (HA 13)	634705

[45] Pivot rest → *from page 153*

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

		№
Frame and sash component	200	255237

[49] Packer → *from page 166*

[50] Load transfer sash component (SRW ≥ 801 mm, SRH ≥ 1001 mm)

	№
max. 150 kg	567972

[51] Load transfer frame component (SRW ≥ 801 mm, SRH ≥ 1001 mm)

	№
max. 150 kg	565254

[53] Drilling protection

	№
Drilling protection	797819

[54] Handle, lockable → CTL_1

[61] Turn restrictor 198, sash component

	№
Designo hinge side	485591

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

[62] Turn restrictor frame component → *from page 171*

[82] Anti-jemmy device

		№
Anti-jemmy device	From rebate depth 26 mm	811715

Optional

[46] Pivot rest cover

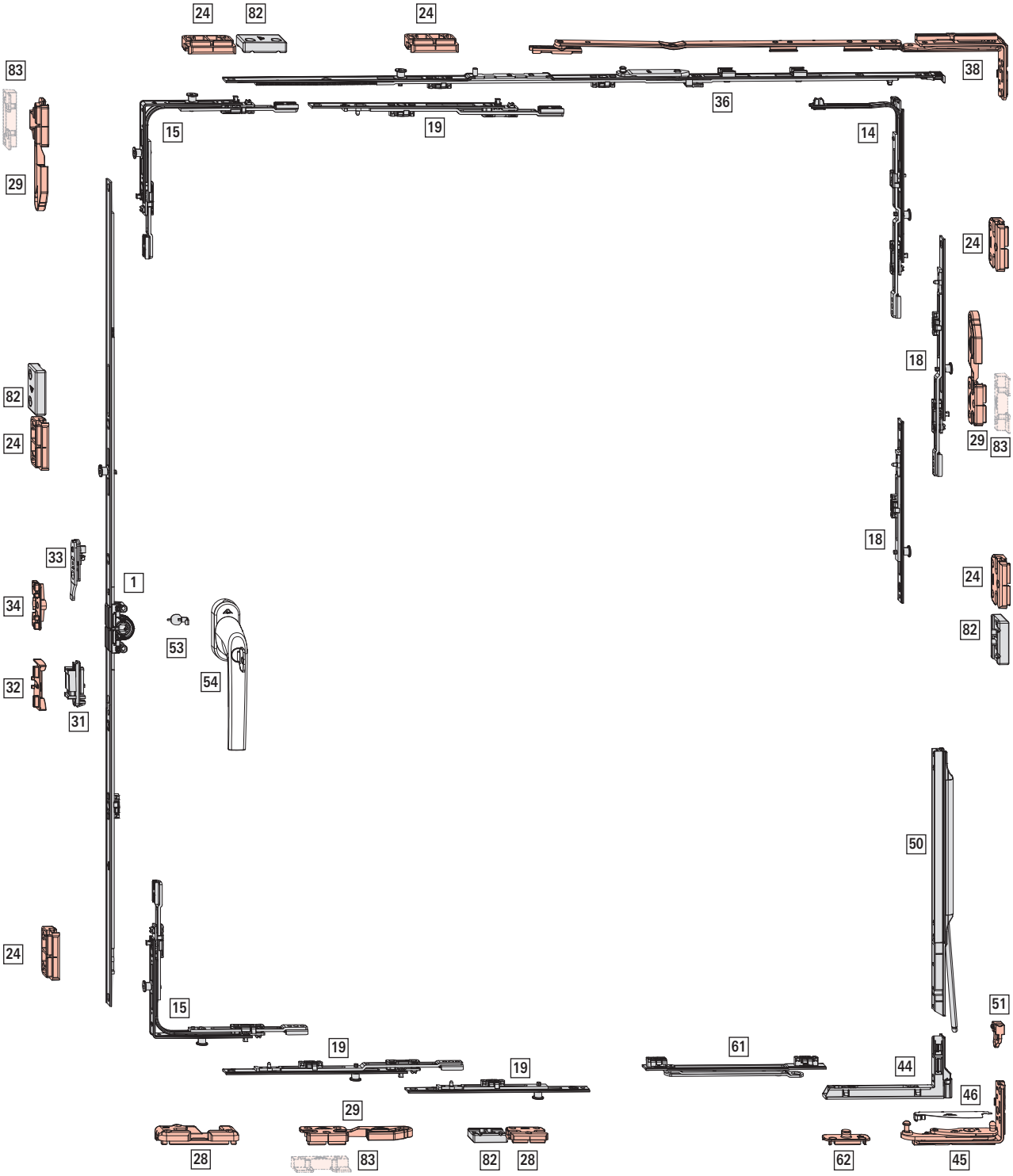
			№
Pivot rest cover – Designo hinge side	Clampable	Left	799664
		Right	799789

INFO
Horizontal rebate clearance at the bottom 11 – 14 mm.

[63] Night vent → *from page 172*

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

4.1.1.4 TiltSafe RC 2 / RC 2 N



Application range

Without load transfer	With load transfer
SRW: 450 – 1400 mm	**SRW**: 800 – 1400 mm
SRH: 600 – 2400 mm	**SRH**: 1000 – 2400 mm
S.kg: max. 100 kg	**S.kg**: max. 150 kg

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

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

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

[14] Sash stay corner drive

		№
1	V	260284

[15] Corner drive, standard (security)

		№
2	V	260274

[18] Multipart centre lock – security, vertical

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

Size-specific combinations:

Without load transfer	With load transfer				№
600 – 700	1000 – 1100	200	1	V	296853
701 – 900	1101 – 1300	200 KU	1	V	337708
		200	1	V	296853
901 – 1100	1301 – 1500	200 KU	1	V	337708
		400	1	V	296854
1101 – 1300	1501 – 1700	200 KU	1	V	337708
		600	1	V	296855
1301 – 1500	1701 – 1900	200 KU	1	V	337708
		600 KU	1	V	337711
		200	1	V	296853
1501 – 1700	1901 – 2100	200 KU	1	V	337708
		600 KU	1	V	337711
		400	1	V	296854
1701 – 1900	2101 – 2300	200 KU	1	V	337708
		600 KU	1	V	337711
		600	1	V	296855
1901 – 2100	2301 – 2400	200 KU	1	V	337708
		600 KU	1	V	337711
		600 KU	1	V	337711
		200	1	V	296853
2101 – 2300	–	200 KU	1	V	337708
		600 KU	1	V	337711
		600 KU	1	V	337711
		400	1	V	296854
2301 – 2400	–	200 KU	1	V	337708
		600 KU	1	V	337711
		600 KU	1	V	337711
		600	1	V	296855

[19] Multipart centre lock – security, horizontal

				№
200	Y	–	–	308267
200	N	1	V	296853
200	Y	1	V	337708
400	Y	1	V	337710

Size-specific combinations:

Without turn restrictor	With turn restrictor				№
450 – 650	801 – 850	200	1	V	296853
651 – 850	851 – 1050	200 KU	1	V	337708
		200	1	V	296853
851 – 1000	1051 – 1250	200 KU	1	V	337708
		200 KU	1	V	337708
		200	1	V	296853
	1251 – 1400	200 KU	1	V	337708
		400 KU	1	V	337710
		200	1	V	296853

[24] Security striker → *from page 160*

[28] Tilt striker → *from page 154*

[29] Security striker for tilt ventilation → *from page 164*

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

	№
Bullet catch sash component	788363

[32] Bullet-catch frame component (optional SRH ≥ 1601 mm) → *from page 167*

[33] Lifting mishandling device sash component

	№
Sash component for lifting mishandling device	795927

[34] Lifting mishandling device frame component → *from page 169*

[36] Stay guide – security

			#		№
330 – 600	490	250	–	–	385393
601 – 800	690	350	–	–	385394
801 – 1000	890	500	1	V	450373
1001 – 1200	1090	500	1	V	450374

INFO
SRW 1201 – 1400 mm only possible with stay guide 450374 and CL 200 KU.

[38] Stay arm → *from page 144*

[44] Corner hinge

	№
Corner hinge – Designo hinge side (HA 13)	634705

[45] Pivot rest → *from page 153*

[50] Load transfer sash component (SRW ≥ 801 mm, SRH ≥ 1001 mm)

	№
max. 150 kg	567972

[51] Load transfer frame component (SRW ≥ 801 mm, SRH ≥ 1001 mm)

	№
max. 150 kg	565254

[53] Drilling protection

	№
Drilling protection	797819

[54] Handle, lockable → CTL_1

[61] Turn restrictor 198, sash component

	№
Designo hinge side	485591

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

[62] Turn restrictor frame component → *from page 171*

[82] Anti-jemmy device

		№
Anti-jemmy device	From rebate depth 26 mm	811715

Optional

[46] Pivot rest cover

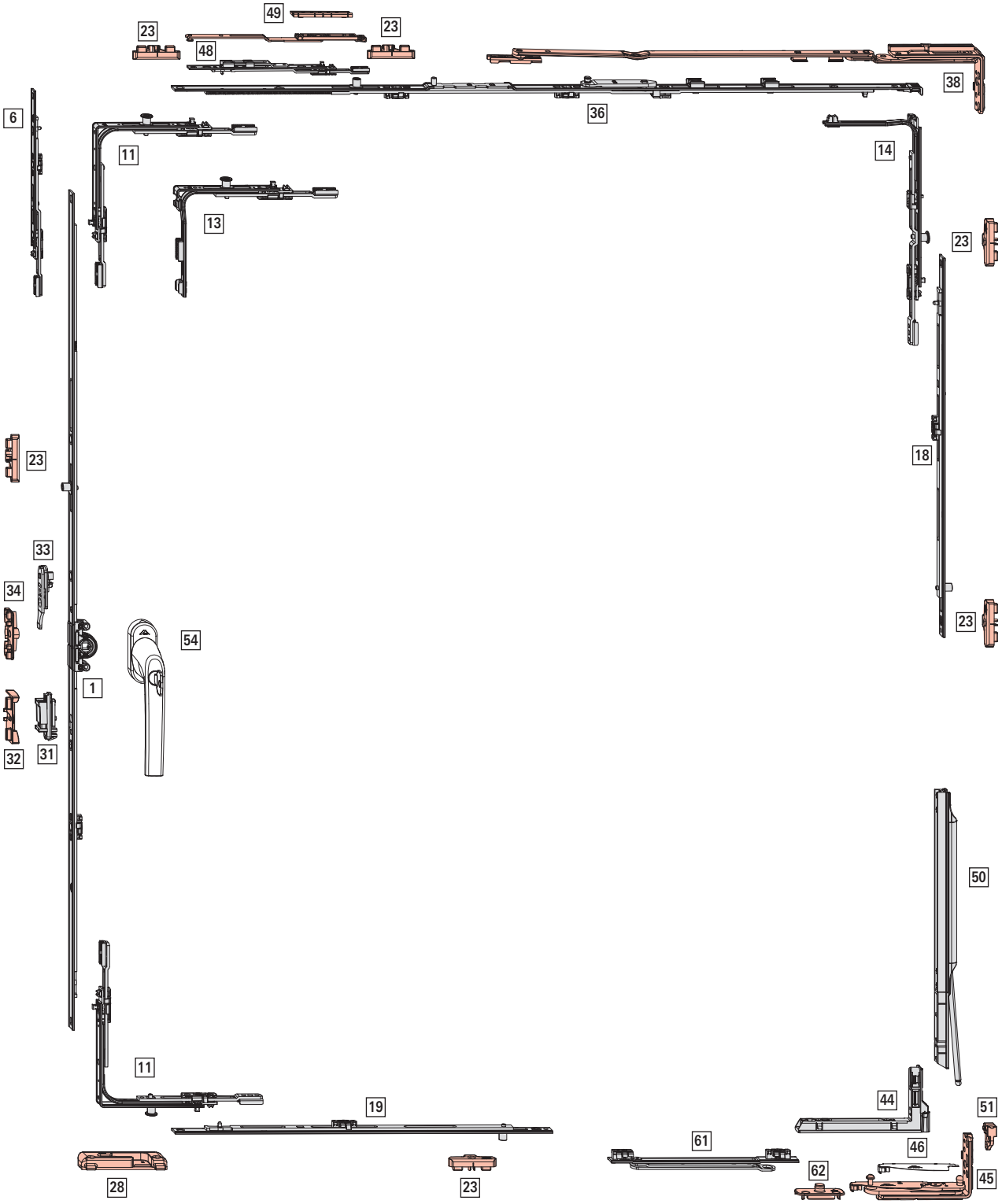
			№
Pivot rest cover – Designo hinge side	Clampable	Left	799664
		Right	799789

INFO
Horizontal rebate clearance at the bottom 11 – 14 mm.

[83] TiltSafe protective support → *from page 164*

4.1.2 TiltFirst hardware

4.1.2.1 Basic security



Application range

Without load transfer	With load transfer
SRW: 330 – 1400 mm	**SRW**: 800 –1400 mm
SRH: 280 – 2600 mm	**SRH**: 1000 – 2600 mm
S.kg: max. 100 kg	**S.kg**: max. 150 kg

INFO
SRW 330 – 430 mm from SRH 361 mm
SRH 280 – 370 mm from SRW 431 mm

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

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

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

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

				Nº
200	Y	–	–	308267

Size-specific combinations:

				Nº
2401 – 2600	200 KU	–	–	308267

[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:
SRW ≤ 430 mm
SRH ≤ 370 mm

[14] Sash stay corner drive

		Nº
1	P	260286

INFO
With SRH 280 – 330 mm, crop the sash stay corner drive (to do so, extend the connecting rod fully).

[18] Multipart centre lock – standard, vertical

				Nº
400	N	1	E	255280
600	N	1	E	255281
600	Y	1	E	255282
200	N	1	P	255284

Size-specific combinations:

Without load transfer	With load transfer				Nº
801 – 1200	1001 – 1200	400	1	E	255280
1201 – 1400	1201 – 1400	600	1	E	255281
	1401 – 1600	600 KU	1	E	255282
		200	1	P	255284
1401 – 1800	1601 – 1800	600 KU	1	E	255282
		400	1	E	255280
1801 – 2000	1801 – 2000	600 KU	1	E	255282
		600	1	E	255281
	2001 – 2200	600 KU	1	E	255282
		600 KU	1	E	255282
		200	1	P	255284
2001 – 2400	2201 – 2400	600 KU	1	E	255282
		600 KU	1	E	255282
		400	1	E	255280
2401 – 2600	2401 – 2600	600 KU	1	E	255282
		600 KU	1	E	255282
		600	1	E	255281

[19] Multipart centre lock – standard, horizontal

				Nº
400	N	1	E	255280
600	N	1	E	255281
200	N	1	P	255284

Size-specific combinations:

Without turn restrictor	With turn restrictor				Nº
–	801 – 850	200	1	P	255284
801 – 1200	851 – 1200	400	1	E	255280
1201 – 1400	1201 – 1400	600	1	E	255281

[23] Striker → *from page 159*

[28] Tilt striker TiltFirst → *from page 157*

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

	№
Bullet catch sash component	788363

[32] Bullet-catch frame component (optional SRH ≥ 1601 mm) → *from page 167*

[33] Lifting mishandling device sash component

	№
Sash component for lifting mishandling device	795927

[34] Lifting mishandling device frame component → *from page 169*

[36] Stay guide – basic security

					№
330 – 600	250	490	–	–	385393
601 – 800	350	690	–	–	385394
801 – 1000	500	890	1	E	385415
1001 – 1200	500	1090	1	E	385416

[38] Stay arm TiltFirst → *from page 144*

INFO
With SRH < 600 mm, set the tilt depth to 80 mm.

[44] Corner hinge

	№
Corner hinge – Designo hinge side (HA 13)	634705

[45] Pivot rest → *from page 153*

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

	№
Frame and sash component	292022

[49] Packer → *from page 166*

[50] Load transfer sash component (SRW ≥ 801 mm, SRH ≥ 1001 mm)

	№
max. 150 kg	567972

[51] Load transfer frame component (SRW ≥ 801 mm, SRH ≥ 1001 mm)

	№
max. 150 kg	565254

[54] Handle, lockable → CTL_1

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

[61] Turn restrictor 198, sash component

	№
Designo hinge side	485591

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

[62] Turn restrictor frame component → *from page 171*

Optional

[46] Pivot rest cover

			№
Pivot rest cover – Designo hinge side	Clampable	Left	799664
		Right	799789

INFO
Horizontal rebate clearance at the bottom 11 – 14 mm.

Sash lifter → CTL_105

4.1.3 Turn-Only hardware

4.1.3.1 Basic security

Application range

Without load transfer	With load transfer
SRW: 370 – 1400 mm	**SRW**: 800 – 1400 mm
SRH: 280 – 2600 mm	**SRH**: 1000 – 2600 mm
S.kg: max. 100 kg	**S.kg**: max. 150 kg

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

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

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

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

				№
200	Y	–	–	308267

Size-specific combinations:

				№
2401 – 2600	200 KU	–	–	308267

[11] Standard corner drive

			№
1	E	Top	260275
1	P	Top Bottom	260277

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

[13] Special short corner drive

			№
1	E	Top	260280
1	P	Top Bottom	260282

For use with:
SRW ≤ 430 mm
SRH ≤ 370 mm

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

[19] Multipart centre lock – standard, horizontal

				№
400	N	1	E	255280
600	N	1	E	255281
200	N	1	P	255284

Size-specific combinations:

Without turn restrictor	With turn restrictor				№
–	801 – 850	200	1	P	255284
801 – 1200	851 – 1200	400	1	E	255280
1201 – 1400	1201 – 1400	600	1	E	255281

[23] Striker → *from page 159*

[24] Security striker → *from page 160*

[26] Concealed centre closer frame component → CTL_105

[27] Concealed centre closer sash component → CTL_105

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

	№
Bullet catch sash component	788363

[32] Bullet-catch frame component (optional SRH ≥ 1601 mm) → *from page 167*

[33] Lifting mishandling device sash component

	№
Sash component for lifting mishandling device	795927

[34] Lifting mishandling device frame component → *from page 169*

[42] Rebate stay guide

		№
Not for Tilt-Only windows	224 / 15	477255

[43] Rebate stay arm → *from page 151*

[44] Corner hinge

	№
Corner hinge – Designo hinge side (HA 13)	634705

[45] Pivot rest → *from page 153*

[50] Load transfer sash component
(SRW ≥ 801 mm, SRH ≥ 1001 mm)

	№
max. 150 kg	567972

[51] Load transfer frame component
(SRW ≥ 801 mm, SRH ≥ 1001 mm)

	№
max. 150 kg	565254

[52] 90° travel restrictor

	№
Travel restrictor	264603

[54] Handle → CTL_1

[61] Turn restrictor 198, sash component

	№
Designo hinge side	485591

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

[62] Turn restrictor frame component → *from page 171*

Optional

[46] Pivot rest cover

			№
Pivot rest cover – Designo hinge side	Clampable	Left	799664
		Right	799789

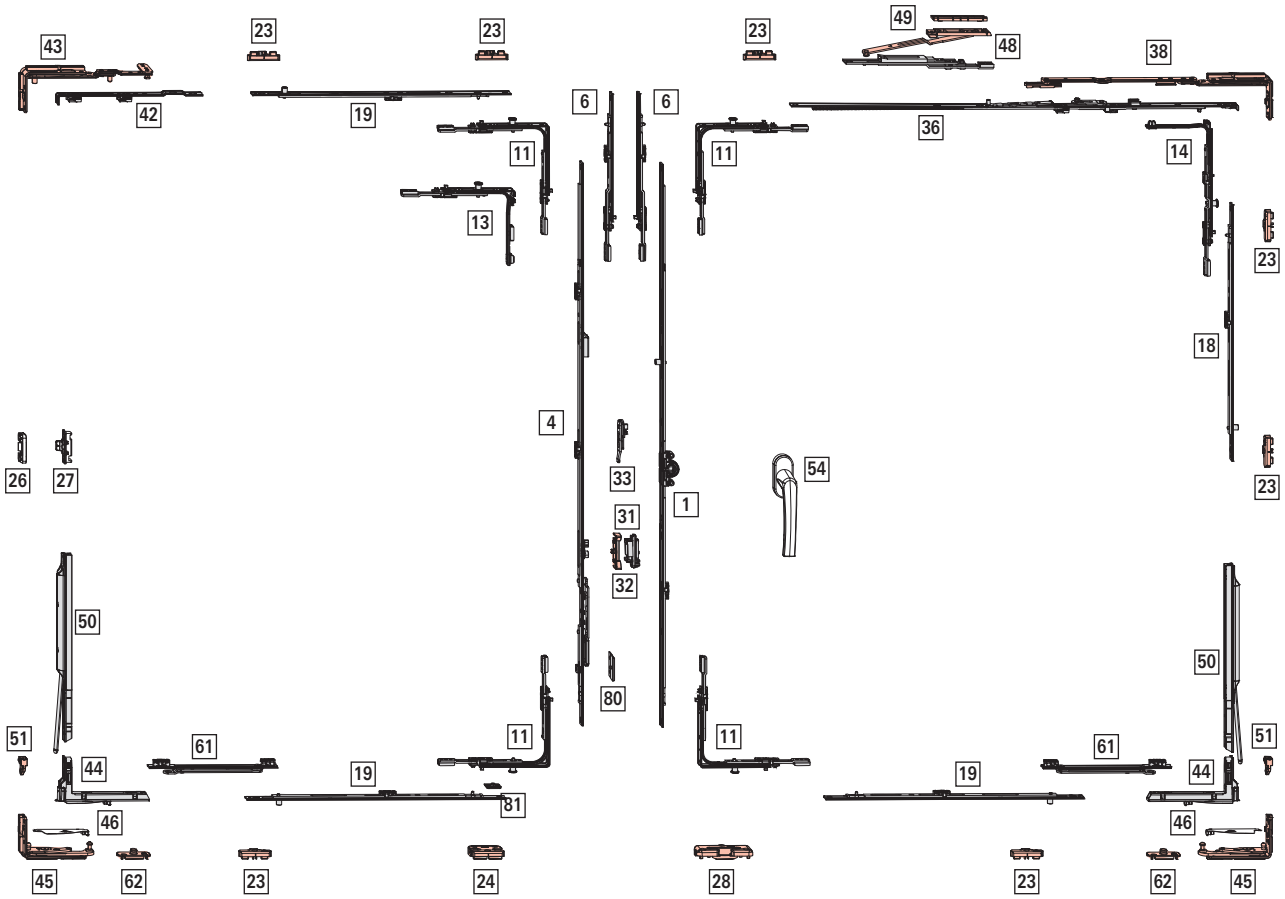
INFO
Horizontal rebate clearance at the bottom 11 – 14 mm.

Arrestable brake stay → CTL_105

Sash lifter → CTL_105

4.1.4 Floating-mullion hardware

4.1.4.1 Standard – basic security



Application range

Without load transfer	With load transfer
SRW: 370 – 1400 mm	**SRW**: 800 – 1400 mm
SRH: 280 – 2600 mm	**SRH**: 1000 – 2600 mm
S.kg: max. 100 kg	**S.kg**: max. 150 kg

INFO
SRW 370 – 430 mm from SRH 510 mm.

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

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

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

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

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

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

				№
200	Y	–	–	308267

Size-specific combinations:

				№
2401 – 2600	200 KU	–	–	308267

[9] Floating-mullion corner drive with security striker

						№
Second opening sash	Top	1	1	V		313538

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

[11] Standard corner drive

			№
1	E	Top	260275
1	P	Top Bottom	260277

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

[13] Special short corner drive

			№
1	E	Top	260280
1	P	Top Bottom	260282

Use → *"Possible combinations" from page 132*

[14] Sash stay corner drive

		№
1	P	260286

[18] Multipart centre lock – standard, vertical

				№
400	N	1	E	255280
600	N	1	E	255281
600	Y	1	E	255282
200	N	1	P	255284

Size-specific combinations:

					№
Without load transfer	With load transfer				
801 – 1200	1001 – 1200	400	1	E	255280
1201 – 1400	1201 – 1400	600	1	E	255281
	1401 – 1600	600 KU	1	E	255282
		200	1	P	255284
1401 – 1800	1601 – 1800	600 KU	1	E	255282
		400	1	E	255280
1801 – 2000	1801 – 2000	600 KU	1	E	255282
		600	1	E	255281
	2001 – 2200	600 KU	1	E	255282
		600 KU	1	E	255282
		200	1	P	255284
2001 – 2400	2201 – 2400	600 KU	1	E	255282
		600 KU	1	E	255282
		400	1	E	255280
2401 – 2600	2401 – 2600	600 KU	1	E	255282
		600 KU	1	E	255282
		600	1	E	255281

[19] Multipart centre lock – standard, horizontal

				Nº
400	N	1	E	255280
600	N	1	E	255281
200	N	1	P	255284

Size-specific combinations:

Without turn restrictor	With turn restrictor				Nº
–	801 – 850	200	1	P	255284
801 – 1200	851 – 1200	400	1	E	255280
1201 – 1400	1201 – 1400	600	1	E	255281

[23] Striker → *from page 159*

[24] Security striker → *from page 160*

[26] Concealed centre closer frame component → CTL_105

[27] Concealed centre closer sash component → CTL_105

[28] Tilt striker → *from page 154*

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

	Nº
Bullet catch sash component	788363

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

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

[33] Lifting mishandling device sash component

	Nº
Sash component for lifting mishandling device	795927

[36] Stay guide – basic security

					Nº
330 – 600	250	490	–	–	385393
601 – 800	350	690	–	–	385394
801 – 1000	500	890	1	E	385415
1001 – 1200	500	1090	1	E	385416

[38] Stay arm → *from page 144*

INFO
With SRH < 600 mm, set the tilt depth to 80 mm.

[42] Rebate stay guide

		Nº
Not for Tilt-Only windows	224 / 15	477255

[43] Rebate stay arm → *from page 151*

[44] Corner hinge

	Nº
Corner hinge – Designo hinge side (HA 13)	634705

[45] Pivot rest → *from page 153*

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

		Nº
Frame and sash component	200	255237

[49] Packer → *from page 166*

[50] Load transfer sash component (SRW ≥ 801 mm, SRH ≥ 1001 mm)

	Nº
max. 150 kg	567972

[51] Load transfer frame component (SRW ≥ 801 mm, SRH ≥ 1001 mm)

	Nº
max. 150 kg	565254

[54] Handle → CTL_1

[61] Turn restrictor 198, sash component

	Nº
Designo hinge side	485591

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

[62] Turn restrictor frame component → *from page 171*

[80] Fastening plate

	Nº
Fastening plate with cam	255211

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

[81] Run-up block

	Nº
Sash	350403

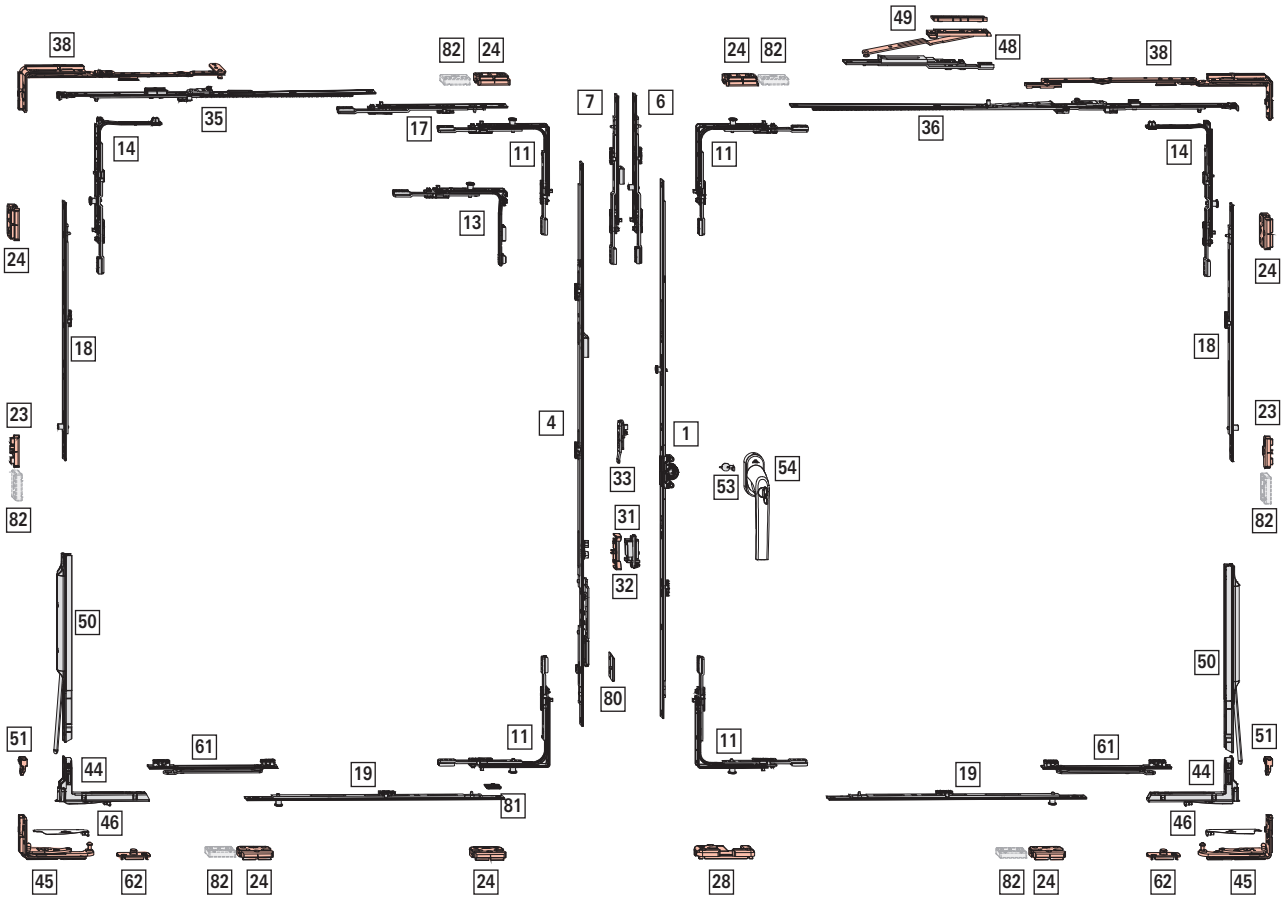
Optional

[46] Pivot rest cover

			Nº
Pivot rest cover – Designo hinge side	Clampable	Left	799664
		Right	799789

INFO
Horizontal rebate clearance at the bottom 11 – 14 mm.

4.1.4.2 Standard – RC 1 N



Application range

Without load transfer	With load transfer
SRW: 450 – 1400 mm	**SRW**: 800 – 1400 mm
SRH: 280 – 2600 mm	**SRH** 1000 – 2600 mm
S.kg: max. 100 kg	**S.kg**: max. 150 kg

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

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

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

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

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

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

				№
200	Y	1	E	450821

Size-specific combinations:

				№
2401 – 2600	200 KU	1	E	450821

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

			№
200	Y	1	450822

Size-specific combinations:

			№
2401 – 2600	200 KU	1	450822

[11] Standard corner drive

		№
1	P	260277

[13] Special short corner drive

		№
1	P	260282

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

[14] Sash stay corner drive

		№
1	P	260286

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

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

Size-specific combinations:

				№
711 – 910	200 KU	–	–	308267
911 – 1110	400 KU	1	E	280346
1111 – 1310	600 KU	1	E	255282
1311 – 1400	600 KU	1	E	255282
	200 KU	–	–	308267

[18] Multipart centre lock – standard, vertical

				№
400	N	1	E	255280
600	N	1	E	255281
600	Y	1	E	255282
200	N	1	P	255284

Size-specific combinations:

					№
Without load transfer	With load transfer				
801 – 1200	1001 – 1200	400	1	E	255280
1201 – 1400	1201 – 1400	600	1	E	255281
	1401 – 1600	600 KU	1	E	255282
		200	1	P	255284
1401 – 1800	1601 – 1800	600 KU	1	E	255282
		400	1	E	255280
1801 – 2000	1801 – 2000	600 KU	1	E	255282
		600	1	E	255281
	2001 – 2200	600 KU	1	E	255282
		600 KU	1	E	255282
		200	1	P	255284

Without load transfer	With load transfer				№
2001 – 2400	2201 – 2400	600 KU	1	E	255282
		600 KU	1	E	255282
		400	1	E	255280
2401 – 2600	2401 – 2600	600 KU	1	E	255282
		600 KU	1	E	255282
		600	1	E	255281

[19] Multipart centre lock – standard, horizontal

				№
400	N	1	E	255280
600	N	1	E	255281
200	N	1	P	255284

Size-specific combinations:

Without turn restrictor	With turn restrictor				№
450 – 650	801 – 850	200	1	P	255284
651 – 850	851 – 1050	400	1	E	255280
851 – 1000	1051 – 1250	600 [6]	1	E	255281
	1251 – 1400	600 KU	1	E	255282
		200	1	P	255284

[23] Striker → *from page 159*

[24] Security striker → *from page 160*

[28] Tilt striker → *from page 154*

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

	№
Bullet catch sash component	788363

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

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

[33] Lifting mishandling device sash component

	№
Sash component for lifting mishandling device	795927

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

			№
430 – 510	250	400	482571
511 – 710	250	600	815784

[36] Stay guide – basic security

					№
330 – 600	250	490	–	–	385393
601 – 800	350	690	–	–	385394
801 – 1000	500	890	1	E	385415
1001 – 1200	500	1090	1	E	385416

[38] Stay arm → *from page 144*

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

[44] Corner hinge

	№
Corner hinge – Designo hinge side (HA 13)	634705

[45] Pivot rest → *from page 153*

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

		№
Frame and sash component	200	255237

[49] Packer → *from page 166*

[50] Load transfer sash component (SRW ≥ 801 mm, SRH ≥ 1001 mm)

	№
max. 150 kg	567972

[51] Load transfer frame component (SRW ≥ 801 mm, SRH ≥ 1001 mm)

	№
max. 150 kg	565254

[53] Drilling protection

	№
Drilling protection	797819

[54] Handle, lockable → CTL_1

[61] Turn restrictor 198, sash component

	№
Designo hinge side	485591

[62] Turn restrictor frame component → *from page 171*

[80] Fastening plate

	№
Fastening plate with cam	255211

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

[81] Run-up block

	№
Sash	350403

[6] Crop CL by 15 mm up to SRW 854; when using a turn restrictor, crop CL by 15 mm up to SRH 1053

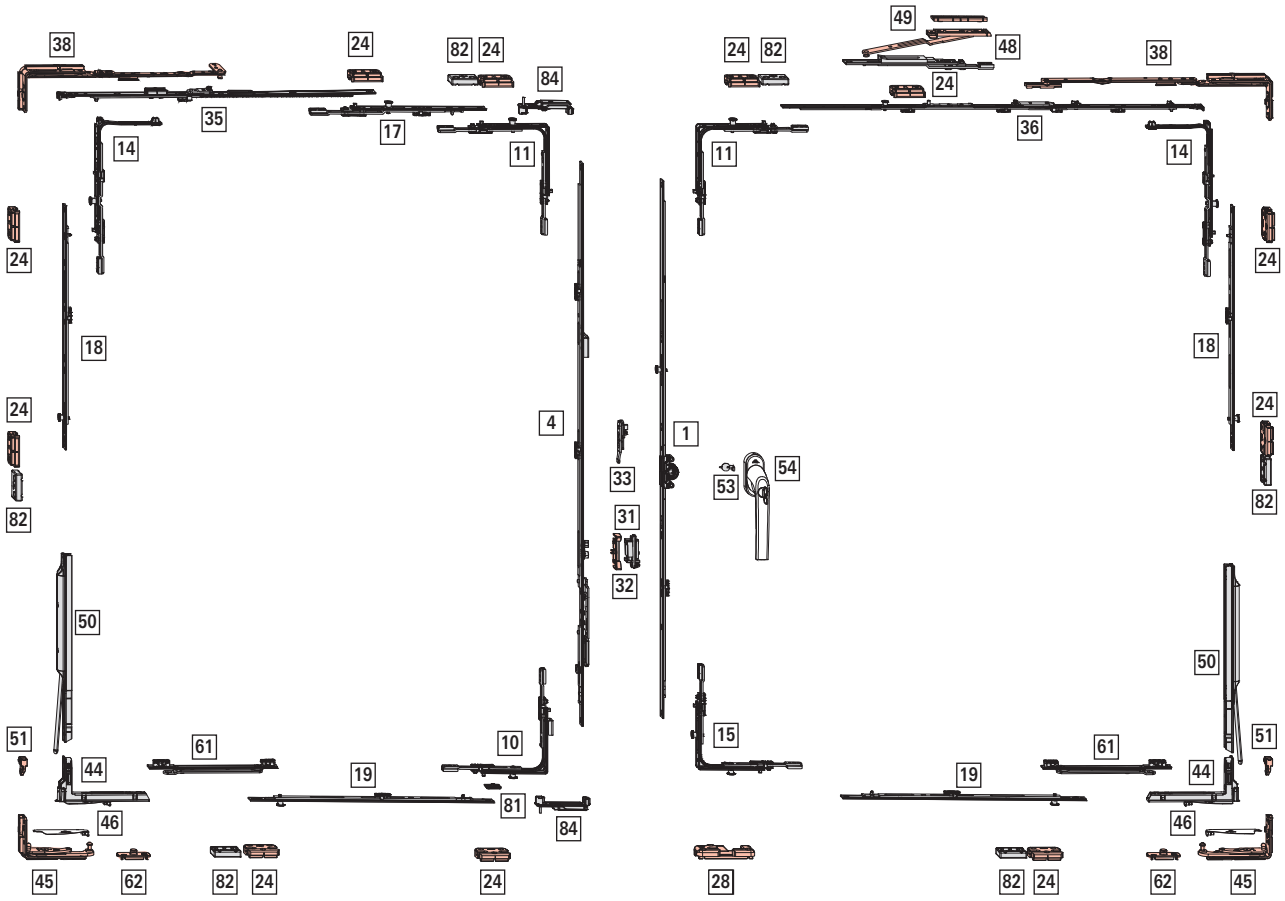
Optional

[46] Pivot rest cover			
			№
Pivot rest cover – Designo hinge side	Clampable	Left	799664
		Right	799789

INFO
Horizontal rebate clearance at the bottom 11 – 14 mm.

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

4.1.4.3 Standard – RC 2 / RC 2 N



Application range

Without load transfer	With load transfer
SRW: 450 – 1400 mm	**SRW**: 800 – 1400 mm
SRH: 600 – 2400 mm	**SRH**: 1000 – 2400 mm
S.kg: max. 100 kg	**S.kg**: max. 150 kg

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

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

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

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

[10] Floating mullion corner drive

					№
Second opening sash	Bottom	1	1	V	367227

[11] Standard corner drive

		№
1	V	260272

[14] Sash stay corner drive

		№
1	V	260284

[15] Corner drive, standard (security)

		№
2	V	260274

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

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

Size-specific combinations:

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

[18] Multipart centre lock – security, vertical

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

Size-specific combinations:

					№
Without load transfer	With load transfer				
600 – 650	–	200	1	V	296853
651 – 850	1000 – 1150	400	1	V	296854
851 – 1050	1151 – 1350	600 [7]	1	V	296855
1051 – 1250	1351 – 1550	600 KU	1	V	337711
		200	1	V	296853
1251 – 1450	1551 – 1750	600 KU	1	V	337711
		400	1	V	296854
1451 – 1650	1751 – 1950	600 KU	1	V	337711
		600 [8]	1	V	296855
1651 – 1850	1951 – 2150	600 KU	1	V	337711
		600 KU	1	V	337711
		200	1	V	296853
1851 – 2050	2151 – 2350	600 KU	1	V	337711
		600 KU	1	V	337711
		400	1	V	296854
2051 – 2250	2351 – 2400	600 KU	1	V	337711
		600 KU	1	V	337711
		600 [9]	1	V	296855
2251 – 2400	–	600 KU	1	V	337711
		600 KU	1	V	337711
		600 KU	1	V	337711
		200	1	V	296853

[7] Crop CL by 15 mm up to SRH 861; when using load transfer: crop CL by 15 mm with SRH 1151

[8] Crop CL by 15 mm up to SRH 1461; when using load transfer: crop CL by 15 mm with SRH 1751

[9] Crop CL by 15 mm up to SRH 2061; when using load transfer: crop CL by 15 mm with SRH 2351

[19] Multipart centre lock – security, horizontal

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

Size-specific combinations:

					№
Without turn restrictor	With turn restrictor				
450 – 650	801 – 850	200	1	V	296853
651 – 850	851 – 1050	400	1	V	296854
851 – 1000	1051 – 1250	600 [10]	1	V	296855
–	1251 – 1400	600 KU	1	V	337711
		200	1	V	296853

[24] Security striker → *from page 160*

[28] Tilt striker → *from page 154*

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

	№
Bullet catch sash component	788363

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

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

[33] Lifting mishandling device sash component

	№
Sash component for lifting mishandling device	795927

[35] Turn-Only sash stay guide – security

			№
430 – 510	250	400	482571
511 – 710	250	600	815784

[36] Stay guide – security

					№
330 – 600	490	250	–	–	385393
601 – 800	690	350	–	–	385394
801 – 1000	890	500	1	V	450373
1001 – 1200	1090	500	1	V	450374

[38] Stay arm → *from page 144*

[44] Corner hinge

	№
Corner hinge – Designo hinge side (HA 13)	634705

[45] Pivot rest → *from page 153*

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

		№
Frame and sash component	200	255237

[49] Packer → *from page 166*

[50] Load transfer sash component (SRW ≥ 801 mm, SRH ≥ 1001 mm)

	№
max. 150 kg	567972

[51] Load transfer frame component (SRW ≥ 801 mm, SRH ≥ 1001 mm)

	№
max. 150 kg	565254

[53] Drilling protection

	№
Drilling protection	797819

[54] Handle, lockable → CTL_1

[61] Turn restrictor 198, sash component

	№
Designo hinge side	485591

[62] Turn restrictor frame component → *from page 171*

[81] Run-up block

	№
Sash	350403

[82] Anti-jemmy device

		№
Anti-jemmy device	From rebate depth 26 mm	811715

[84] Safety device for floating-mullion sashes

	№
Retaining element for floating-mullion sash	552392

Optional

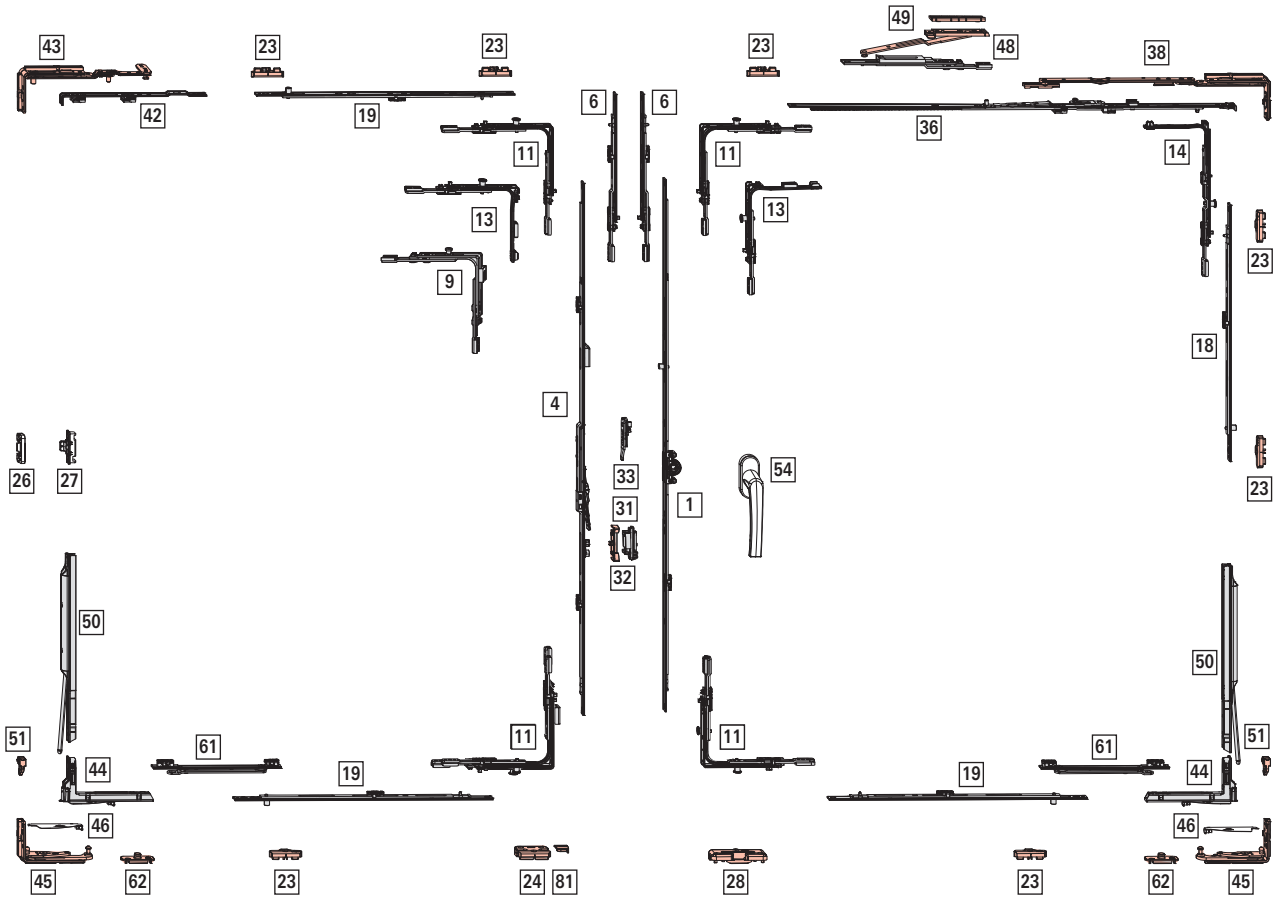
[46] Pivot rest cover

			№
Pivot rest cover – Designo hinge side	Clampable	Left	799664
		Right	799789

INFO
Horizontal rebate clearance at the bottom 11 – 14 mm.

[10] Crop CL by 15 mm up to SRW 854; when using a turn restrictor: crop CL by 15 mm up to SRH 1053

4.1.4.4 Plus – basic security



Application range

Without load transfer	With load transfer
SRW: 370 – 1400 mm	**SRW**: 800 – 1400 mm
SRH: 430 – 2600 mm	**SRH**: 1000 – 2600 mm
S.kg: max. 100 kg	**S.kg**: max. 150 kg

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

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

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

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

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

				№
200	Y	–	–	308267

Size-specific combinations:

				№
2401 – 2600	200 KU	–	–	308267

[9] Floating-mullion corner drive with security striker

						№
Second opening sash	Top	1	1	V		313538

[11] Standard corner drive

			№
1	E	Top	260275
1	P	Top Bottom	260277

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

[13] Special short corner drive

			№
1	E	Top	260280
1	P	Top Bottom	260282

For use with:

Tilt&Turn sash SRW ≤ 430 mm

Floating-mullion sash SRH ≤ 510 mm

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

[14] Sash stay corner drive

		№
1	P	260286

[18] Multipart centre lock – standard, vertical

				№
400	N	1	E	255280
600	N	1	E	255281
600	Y	1	E	255282
200	N	1	P	255284

Size-specific combinations:

Without load transfer	With load transfer				№
801 – 1200	1001 – 1200	400	1	E	255280
1201 – 1400	1201 – 1400	600	1	E	255281
	1401 – 1600	600 KU	1	E	255282
		200	1	P	255284
1401 – 1800	1601 – 1800	600 KU	1	E	255282
		400	1	E	255280
1801 – 2000	1801 – 2000	600 KU	1	E	255282
		600	1	E	255281
	2001 – 2200	600 KU	1	E	255282
		600 KU	1	E	255282
		200	1	P	255284
2001 – 2400	2201 – 2400	600 KU	1	E	255282
		600 KU	1	E	255282
		400	1	E	255280
2401 – 2600	2401 – 2600	600 KU	1	E	255282
		600 KU	1	E	255282
		600	1	E	255281

[19] Multipart centre lock – standard, horizontal

				Nº
400	N	1	E	255280
600	N	1	E	255281
200	N	1	P	255284

Size-specific combinations:

Without turn restrictor	With turn restrictor				Nº
–	801 – 850	200	1	P	255284
801 – 1200	851 – 1200	400	1	E	255280
1201 – 1400	1201 – 1400	600	1	E	255281

[23] Striker → *from page 159*

[24] Security striker → *from page 160*

[26] Concealed centre closer frame component → CTL_105

[27] Concealed centre closer sash component → CTL_105

[28] Tilt striker → *from page 154*

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

	Nº
Bullet catch sash component	788363

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

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

[33] Lifting mishandling device sash component

	Nº
Sash component for lifting mishandling device	795927

[36] Stay guide – basic security

					Nº
330 – 600	250	490	–	–	385393
601 – 800	350	690	–	–	385394
801 – 1000	500	890	1	E	385415
1001 – 1200	500	1090	1	E	385416

[38] Stay arm → *from page 144*

INFO
With SRH < 600 mm, set the tilt depth to 80 mm.

[42] Rebate stay guide

		Nº
Not for Tilt-Only windows	224 / 15	477255

[43] Rebate stay arm → *from page 151*

[44] Corner hinge

	Nº
Corner hinge – Designo hinge side (HA 13)	634705

[45] Pivot rest → *from page 153*

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

		Nº
Frame and sash component	200	255237

[49] Packer → *from page 166*

[50] Load transfer sash component (SRW ≥ 801 mm, SRH ≥ 1001 mm)

	Nº
max. 150 kg	567972

[51] Load transfer frame component (SRW ≥ 801 mm, SRH ≥ 1001 mm)

	Nº
max. 150 kg	565254

[54] Handle → CTL_1

[61] Turn restrictor 198, sash component

	Nº
Designo hinge side	485591

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

[62] Turn restrictor frame component → *from page 171*

[81] Run-up block

			Nº
Rebate run-up block	Frame	Insertable	609211

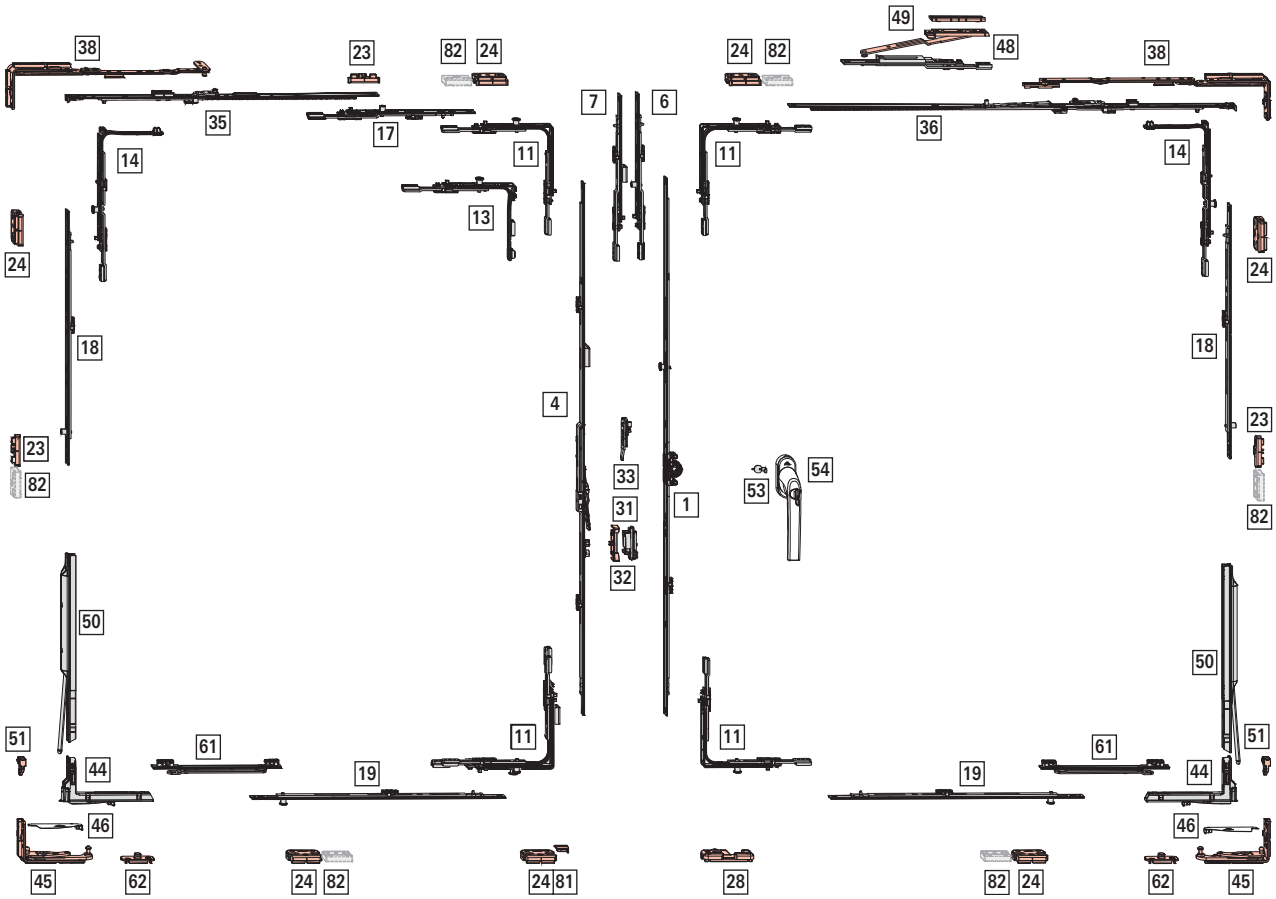
Optional

[46] Pivot rest cover

			Nº
Pivot rest cover – Designo hinge side	Clampable	Left	799664
		Right	799789

INFO
Horizontal rebate clearance at the bottom 11 – 14 mm.

4.1.4.5 Plus – RC 1 N



Application range

Without load transfer	With load transfer
SRW: 450 – 1400 mm	**SRW**: 800 – 1400 mm
SRH: 430 – 2600 mm	**SRH**: 1000 – 2600 mm
S.kg: max. 100 kg	**S.kg**: max. 150 kg

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

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

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

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

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

				№
200	Y	1	E	450821

Size-specific combinations:

				№
2401 – 2600	200 KU	1	E	450821

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

			№
200	Y	1	450822

Size-specific combinations:

			№
2401 – 2600	200 KU	1	450822

[11] Standard corner drive

		№
1	P	260277

[13] Special short corner drive

		№
1	P	260282

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

[14] Sash stay corner drive

		№
1	P	260286

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

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

Size-specific combinations:

				№
801 – 1000	200 KU	–	–	308267
1001 – 1200	400 KU	1	E	280346
1201 – 1400	600 KU	1	E	255282

[18] Multipart centre lock – standard, vertical

				№
400	N	1	E	255280
600	N	1	E	255281
600	Y	1	E	255282
200	N	1	P	255284

Size-specific combinations:

					№
Without load transfer	With load transfer				
801 – 1200	1001 – 1200	400	1	E	255280
1201 – 1400	1201 – 1400	600	1	E	255281
	1401 – 1600	600 KU	1	E	255282
		200	1	P	255284
1401 – 1800	1601 – 1800	600 KU	1	E	255282
		400	1	E	255280
1801 – 2000	1801 – 2000	600 KU	1	E	255282
		600	1	E	255281
	2001 – 2200	600 KU	1	E	255282
		600 KU	1	E	255282
		200	1	P	255284
2001 – 2400	2201 – 2400	600 KU	1	E	255282
		600 KU	1	E	255282
		400	1	E	255280
2401 – 2600	2401 – 2600	600 KU	1	E	255282
		600 KU	1	E	255282
		600	1	E	255281

[19] Multipart centre lock – standard, horizontal

				№
400	N	1	E	255280
600	N	1	E	255281
200	N	1	P	255284

Size-specific combinations:

Without turn restrictor	With turn restrictor				
450 – 650	801 – 850	200	1	P	255284
651 – 850	851 – 1200	400	1	E	255280
851 – 1000	1201 – 1250	600 [11]	1	E	255281
	1251 – 1400	600 KU	1	E	255282
		200	1	P	255284

[23] Striker → *from page 159*

[24] Security striker → *from page 160*

[28] Tilt striker → *from page 154*

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

	№
Bullet catch sash component	788363

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

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

[33] Lifting mishandling device sash component

	№
Sash component for lifting mishandling device	795927

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

					№
330 – 600	250	490	–	–	385393
601 – 800	250	690	–	–	2003336

[36] Stay guide – basic security

					№
330 – 600	250	490	–	–	385393
601 – 800	350	690	–	–	385394
801 – 1000	500	890	1	E	385415
1001 – 1200	500	1090	1	E	385416

[38] Stay arm → *from page 144*

INFO
With SRH < 600 mm, set the tilt depth to 80 mm.

[44] Corner hinge

	№
Corner hinge – Designo hinge side (HA 13)	634705

[45] Pivot rest → *from page 153*

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

		№
Frame and sash component	200	255237

[49] Packer → *from page 166*

[50] Load transfer sash component (SRW ≥ 801 mm, SRH ≥ 1001 mm)

	№
max. 150 kg	567972

[51] Load transfer frame component (SRW ≥ 801 mm, SRH ≥ 1001 mm)

	№
max. 150 kg	565254

[53] Drilling protection

	№
Drilling protection	797819

[54] Handle, lockable → CTL_1

[61] Turn restrictor 198, sash component

	№
Designo hinge side	485591

[62] Turn restrictor frame component → *from page 171*

[81] Run-up block

			№
Rebate run-up block	Frame	Insertable	609211

Optional

[46] Pivot rest cover

			№
Pivot rest cover – Designo hinge side	Clampable	Left	799664
		Right	799789

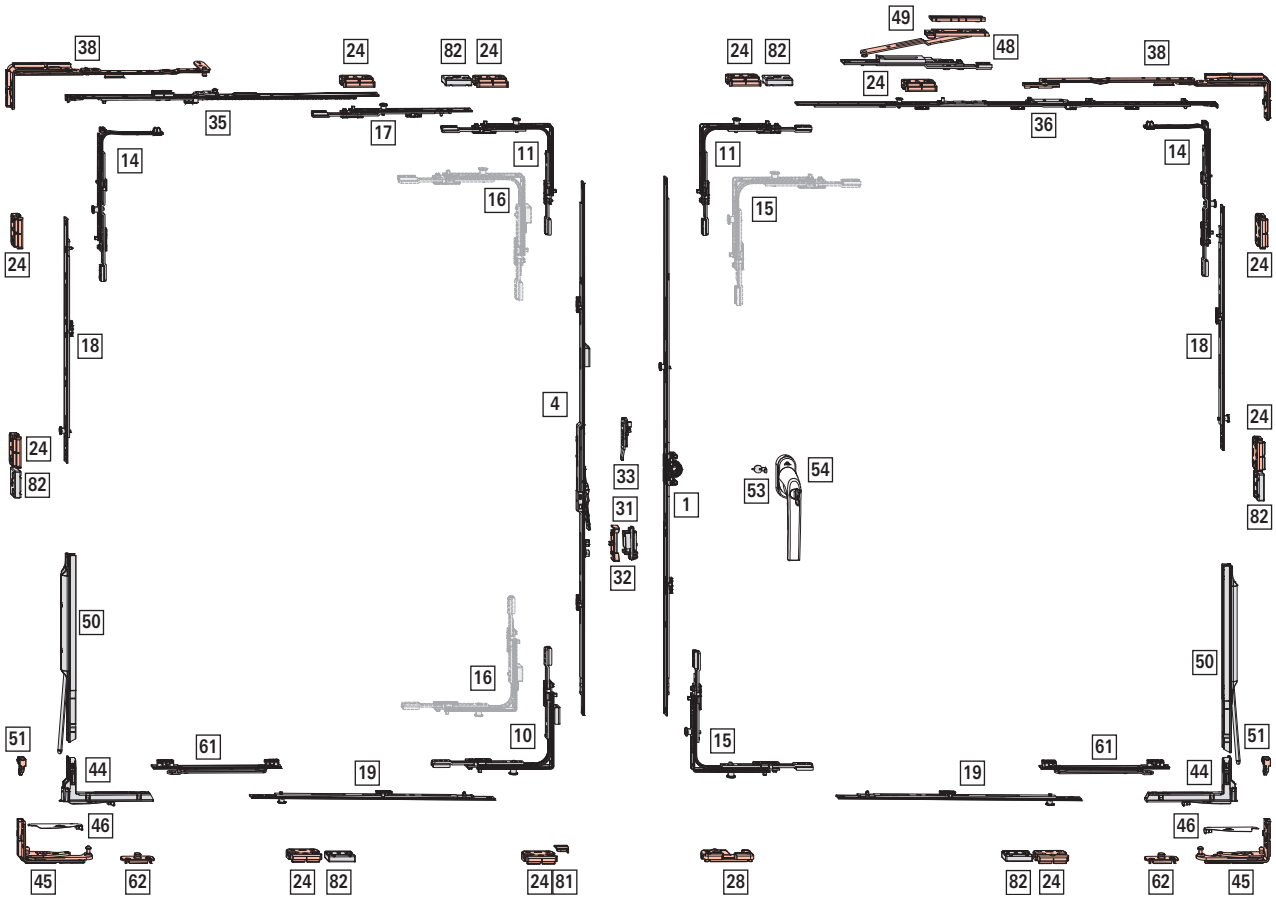
INFO
Horizontal rebate clearance at the bottom 11 – 14 mm.

[82] Anti-jemmy device

		№
Anti-jemmy device	From rebate depth 26 mm	811715

[11] Crop CL by 15 mm up to SRW 854; when using a turn restrictor: crop CL by 15 mm up to SRH 1053

4.1.4.6 Plus – RC 2 / RC 2 N



Application range

Without load transfer	With load transfer
SRW: 450 – 1400 mm	**SRW**: 800 – 1400 mm
SRH: 600 – 2400 mm	**SRH**: 1000 – 2400 mm
S.kg: max. 100 kg	**S.kg**: max. 150 kg

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

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

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

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

[10] Floating mullion corner drive

					№
Second opening sash	Bottom	1	1	V	367227

[11] Standard corner drive

		№
1	V	260272

[14] Sash stay corner drive

		№
1	V	260284

[15] Corner drive, standard (security)

		№
2	V	260274

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

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

Size-specific combinations:

				№
801 – 1000	200 KU	1	V	337708
1001 – 1200	400 KU	1	V	337710
1201 – 1400	600 KU	1	V	337711

[18] Multipart centre lock – security, vertical

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

Size-specific combinations:

					№
Without load transfer	With load transfer				
490 – 650	–	200	1	V	296853
651 – 850	1000 – 1150	400	1	V	296854
851 – 1050	1151 – 1350	600 [12]	1	V	296855
1051 – 1250	1351 – 1550	600 KU	1	V	337711
		200	1	V	296853
1251 – 1450	1551 – 1750	600 KU	1	V	337711
		400	1	V	296854
1451 – 1650	1751 – 1950	600 KU	1	V	337711
		600 [13]	1	V	296855
1651 – 1850	1951 – 2150	600 KU	1	V	337711
		600 KU	1	V	337711
		200	1	V	296853
1851 – 2050	2151 – 2350	600 KU	1	V	337711
		600 KU	1	V	337711
		400	1	V	296854
2051 – 2250	2351 – 2400	600 KU	1	V	337711
		600 KU	1	V	337711
		600 [14]	1	V	296855
2251 – 2400	–	600 KU	1	V	337711
		600 KU	1	V	337711
		600 KU	1	V	337711
		200	1	V	296853

[12] Crop CL by 15 mm up to SRH 861; when using load transfer: crop CL by 15 mm with SRH 1151

[13] Crop CL by 15 mm up to SRH 1461; when using load transfer: crop CL by 15 mm with SRH 1751

[14] Crop CL by 15 mm up to SRH 2061; when using load transfer: crop CL by 15 mm with SRH 2351

[19] Multipart centre lock – security, horizontal

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

Size-specific combinations:

					№
Without turn restrictor	With turn restrictor				
450 – 650	801 – 850	200	1	V	296853
651 – 850	851 – 1050	400	1	V	296854
851 – 1000	1051 – 1250	600 [15]	1	V	296855
–	1251 – 1400	600 KU	1	V	337711
		200	1	V	296853

[24] Security striker → *from page 160*

[28] Tilt striker → *from page 154*

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

	№
Bullet catch sash component	788363

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

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

[33] Lifting mishandling device sash component

	№
Sash component for lifting mishandling device	795927

[35] Turn-Only sash stay guide – security

					№
330 – 600	250	490	–	–	385393
601 – 800	250	690	–	–	2003336

[36] Stay guide – security

					№
330 – 600	490	250	–	–	385393
601 – 800	690	350	–	–	385394
801 – 1000	890	500	1	V	450373
1001 – 1200	1090	500	1	V	450374

[38] Stay arm → *from page 144*

[44] Corner hinge

	№
Corner hinge – Designo hinge side (HA 13)	634705

[45] Pivot rest → *from page 153*

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

		№
Frame and sash component	200	255237

[49] Packer → *from page 166*

[50] Load transfer sash component (SRW ≥ 801 mm, SRH ≥ 1001 mm)

	№
max. 150 kg	567972

[51] Load transfer frame component (SRW ≥ 801 mm, SRH ≥ 1001 mm)

	№
max. 150 kg	565254

[53] Drilling protection

	№
Drilling protection	797819

[54] Handle, lockable → CTL_1

[61] Turn restrictor 198, sash component

	№
Designo hinge side	485591

[62] Turn restrictor frame component → *from page 171*

[81] Run-up block

			№
Rebate run-up block	Frame	Insertable	609211

[82] Anti-jemmy device

		№
Anti-jemmy device	From rebate depth 26 mm	811715

Optional

[16] Corner drive, slide guard

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

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

[46] Pivot rest cover

			№
Pivot rest cover – Designo hinge side	Clampable	Left	799664
		Right	799789

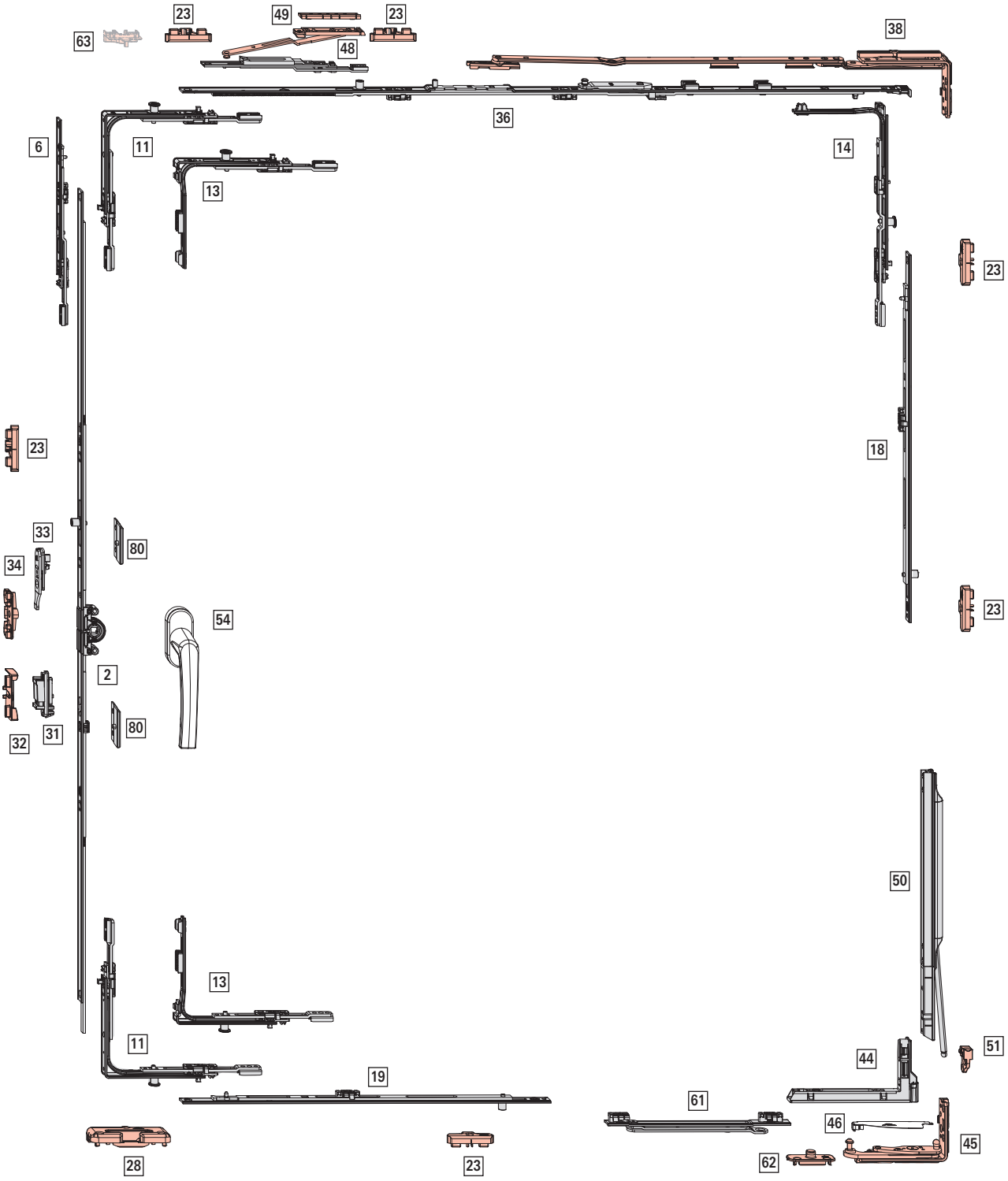
[15] Crop CL by 15 mm up to SRW 854; when using a turn restrictor: crop CL by 15 mm up to SRH 1053

INFO
Horizontal rebate clearance at the bottom
11 – 14 mm.

4.2 T&T espagnolette – centred / variable handle height

4.2.1 Tilt&Turn hardware

4.2.1.1 Basic security



Application range

Without load transfer	With load transfer
SRW: 330 – 1400 mm	**SRW**: 800 – 1400 mm
SRH: 310 – 2600 mm	**SRH**: 1000 – 2600 mm
S.kg: max. 100 kg	**S.kg**: max. 150 kg

INFO
SRW 330 – 430 mm from SRH 361 mm
SRH 280 – 370 mm from SRW 431 mm

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

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

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

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

				Nº
200	Y	–	–	308267

Size-specific combinations:

				Nº
2401 – 2600	200 KU	–	–	308267

[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:
SRW ≤ 430 mm
SRH ≤ 450 mm

[14] Sash stay corner drive

		Nº
1	P	260286

INFO
With SRH 280 – 330 mm, crop the sash stay corner drive (to do so, extend the connecting rod fully).

[18] Multipart centre lock – standard, vertical

				Nº
400	N	1	E	255280
600	N	1	E	255281
600	Y	1	E	255282
200	N	1	P	255284

Size-specific combinations:

					Nº
Without load transfer	With load transfer				
801 – 1200	1001 – 1200	400	1	E	255280
1201 – 1400	1201 – 1400	600	1	E	255281
	1401 – 1600	600 KU	1	E	255282
		200	1	P	255284
1401 – 1800	1601 – 1800	600 KU	1	E	255282
		400	1	E	255280
1801 – 2000	1801 – 2000	600 KU	1	E	255282
		600	1	E	255281
	2001 – 2200	600 KU	1	E	255282
		600 KU	1	E	255282
		200	1	P	255284
2001 – 2400	2201 – 2400	600 KU	1	E	255282
		600 KU	1	E	255282
		400	1	E	255280
2401 – 2600	2401 – 2600	600 KU	1	E	255282
		600 KU	1	E	255282
		600	1	E	255281

[19] Multipart centre lock – standard, horizontal

				Nº
400	N	1	E	255280
600	N	1	E	255281
200	N	1	P	255284

Size-specific combinations:

					Nº
Without turn restrictor	With turn restrictor				
–	801 – 850	200	1	P	255284
801 – 1200	851 – 1200	400	1	E	255280
1201 – 1400	1201 – 1400	600	1	E	255281

[23] Striker → *from page 159*

[28] Tilt striker → *from page 154*

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

	Nº
Bullet catch sash component	788363

[32] Bullet-catch frame component (optional SRH ≥ 1601 mm) → *from page 167*

[33] Lifting mishandling device sash component

	№
Sash component for lifting mishandling device	795927

[34] Lifting mishandling device frame component → *from page 169*

[36] Stay guide – basic security

					№
330 – 600	250	490	–	–	385393
601 – 800	350	690	–	–	385394
801 – 1000	500	890	1	E	385415
1001 – 1200	500	1090	1	E	385416

[38] Stay arm → *from page 144*

INFO
With SRH < 600 mm, set the tilt depth to 80 mm.

[44] Corner hinge

	№
Corner hinge – Designo hinge side (HA 13)	634705

[45] Pivot rest → *from page 153*

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

		№
Frame and sash component	200	255237

[49] Packer → *from page 166*

[50] Load transfer sash component (SRW ≥ 801 mm, SRH ≥ 1001 mm)

	№
max. 150 kg	567972

[51] Load transfer frame component (SRW ≥ 801 mm, SRH ≥ 1001 mm)

	№
max. 150 kg	565254

[54] Handle → CTL_1

[61] Turn restrictor 198, sash component

	№
Designo hinge side	485591

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

[62] Turn restrictor frame component → *from page 171*

[80] Fastening plate

	№
Fastening plate with cam	255211

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

[46] Pivot rest cover

			№
Pivot rest cover – Designo hinge side	Clampable	Left	799664
		Right	799789

INFO
Horizontal rebate clearance at the bottom 11 – 14 mm.

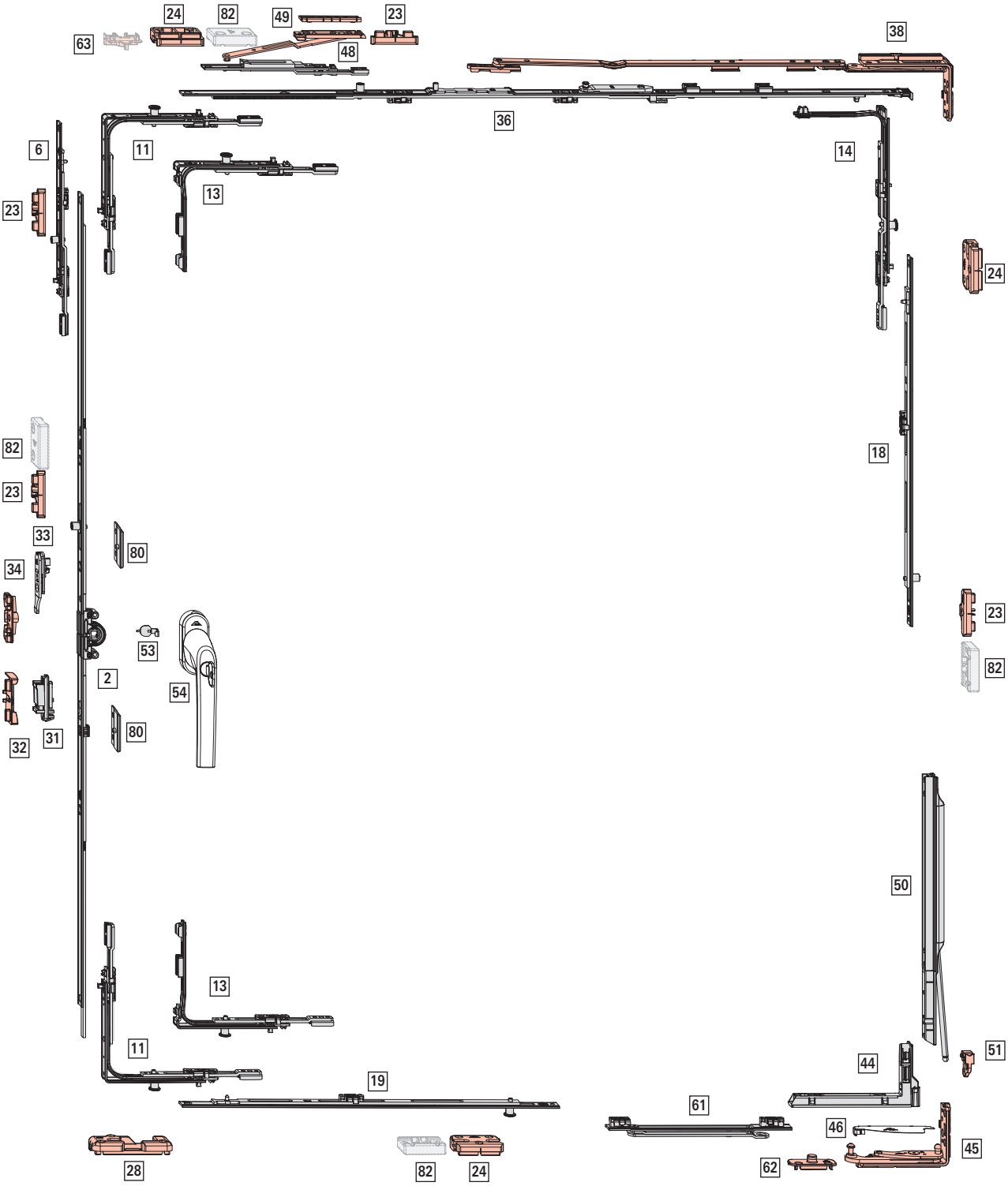
[63] Night vent → *from page 172*

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

Arrestable brake stay → CTL_105

Sash lifter → CTL_105

4.2.1.2 RC 1 N


24
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24

Application range

Without load transfer	With load transfer
SRW: 450 – 1400 mm	**SRW**: 800 – 1400 mm
SRH: 310 – 2600 mm	**SRH**: 1000 – 2600 mm
S.kg: max. 100 kg	**S.kg**: max. 150 kg

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

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

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

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

				№
200	Y	1	E	450821

Size-specific combinations:

				№
2401 – 2600	200 KU	1	E	450821

[11] Standard corner drive

		№
1	P	260277

[13] Special short corner drive

		№
1	P	260282

For use with:
SRH ≤ 450 mm

[14] Sash stay corner drive

		№
1	P	260286

INFO
With SRH 280 – 330 mm, crop the sash stay corner drive (to do so, extend the connecting rod fully).

[18] Multipart centre lock – standard, vertical

				№
400	N	1	E	255280
600	N	1	E	255281
600	Y	1	E	255282
200	N	1	P	255284

Size-specific combinations:

					№
Without load transfer	With load transfer				
801 – 1200	1001 – 1200	400	1	E	255280
1201 – 1400	1201 – 1400	600	1	E	255281
	1401 – 1600	600 KU	1	E	255282
		200	1	P	255284
1401 – 1800	1601 – 1800	600 KU	1	E	255282
		400	1	E	255280
1801 – 2000	1801 – 2000	600 KU	1	E	255282
		600	1	E	255281
	2001 – 2200	600 KU	1	E	255282
		600 KU	1	E	255282
		200	1	P	255284
2001 – 2400	2201 – 2400	600 KU	1	E	255282
		600 KU	1	E	255282
		400	1	E	255280
2401 – 2600	2401 – 2600	600 KU	1	E	255282
		600 KU	1	E	255282
		600	1	E	255281

[19] Multipart centre lock – standard, horizontal

				№
400	N	1	E	255280
600	N	1	E	255281
600	Y	1	E	255282
200	N	1	P	255284

Size-specific combinations:

					№
Without turn restrictor	With turn restrictor				
450 – 650	801 – 850	200	1	P	255284
651 – 850	851 – 1050	400	1	E	255280
851 – 1000	1051 – 1250	600 [16]	1	E	255281
	1251 – 1400	600 KU	1	E	255282
		200	1	P	255284

[23] Striker → *from page 159*

[24] Security striker → *from page 160*

[28] Tilt striker → *from page 154*

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

	№
Bullet catch sash component	788363

[32] Bullet-catch frame component (optional SRH ≥ 1601 mm) → *from page 167*

[33] Lifting mishandling device sash component

	№
Sash component for lifting mishandling device	795927

[16] Crop CL by 15 mm up to SRW 854; when using a turn restrictor: crop CL by 15 mm up to SRH 1053

[34] Lifting mishandling device frame component → *from page 169*

[36] Stay guide – basic security

					№
330 – 600	250	490	–	–	385393
601 – 800	350	690	–	–	385394
801 – 1000	500	890	1	E	385415
1001 – 1200	500	1090	1	E	385416

[38] Stay arm → *from page 144*

INFO
With SRH < 600 mm, set the tilt depth to 80 mm.

[44] Corner hinge

	№
Corner hinge – Designo hinge side (HA 13)	634705

[45] Pivot rest → *from page 153*

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

		№
Frame and sash component	200	255237

[49] Packer → *from page 166*

[50] Load transfer sash component (SRW ≥ 801 mm, SRH ≥ 1001 mm)

	№
max. 150 kg	567972

[51] Load transfer frame component (SRW ≥ 801 mm, SRH ≥ 1001 mm)

	№
max. 150 kg	565254

[53] Drilling protection

	№
Drilling protection	797819

[54] Handle, lockable → CTL_1

[61] Turn restrictor 198, sash component

	№
Designo hinge side	485591

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

[62] Turn restrictor frame component → *from page 171*

[80] Fastening plate

	№
Fastening plate with cam	255211

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

[46] Pivot rest cover

			№
Pivot rest cover – Designo hinge side	Clampable	Left	799664
		Right	799789

INFO
Horizontal rebate clearance at the bottom 11 – 14 mm.

[63] Night vent → *from page 172*

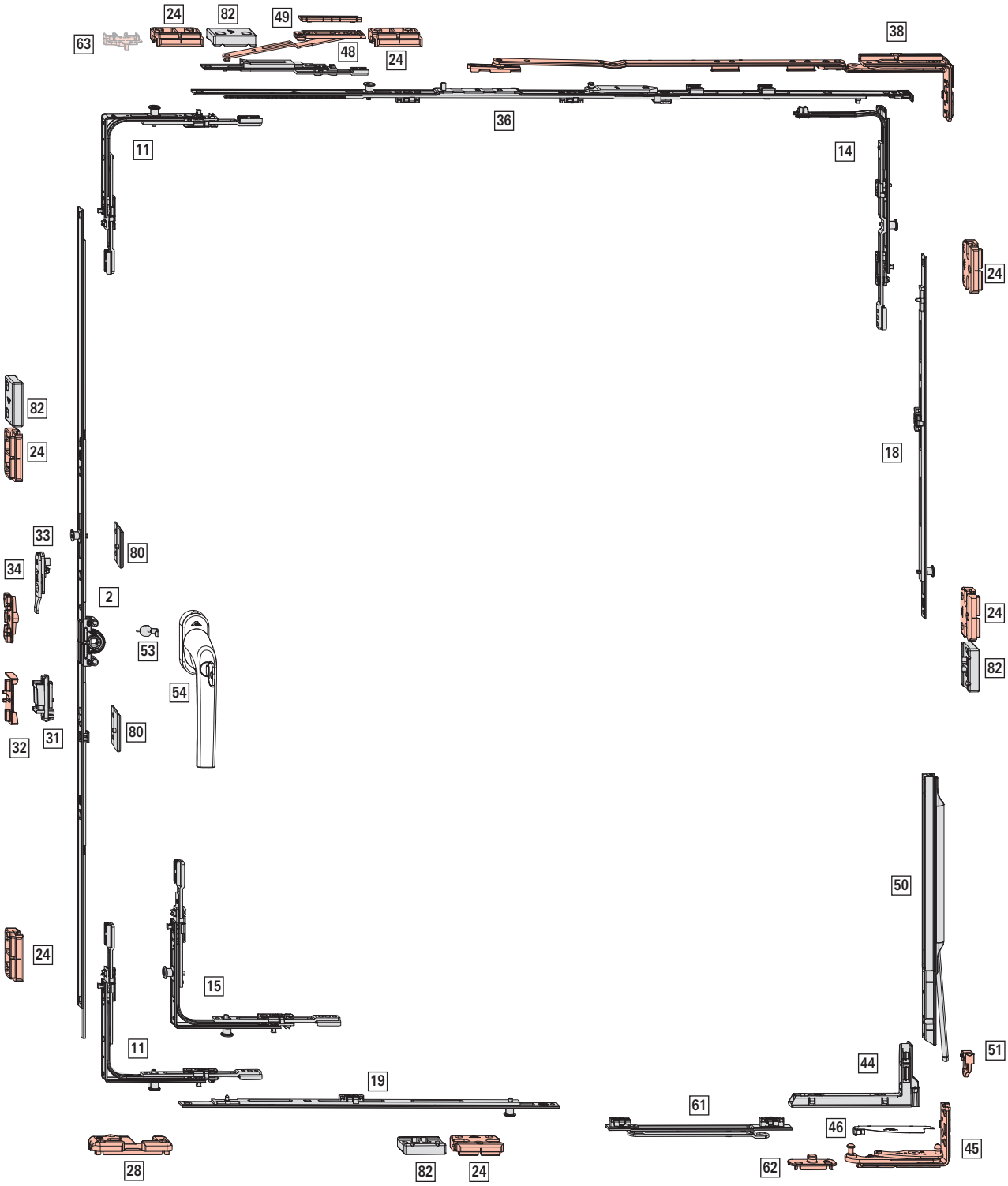
INFO
Only for use in conjunction with P or V cam.

[82] Anti-jemmy device

		№
Anti-jemmy device	From rebate depth 26 mm	811715

Sash lifter → CTL_105

4.2.1.3 RC 2 / RC 2 N



Application range

Without load transfer	With load transfer
SRW: 450 – 1400 mm	**SRW**: 800 – 1400 mm
SRH: 490 – 2400 mm	**SRH**: 1000 – 2400 mm
S.kg: max. 100 kg	**S.kg**: max. 150 kg

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

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

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

[11] Standard corner drive

#		№
1	V	260272

[14] Sash stay corner drive

#		№
1	V	260284

[15] Corner drive, standard (security)

#		№
2	V	260274

For use with: SRH: 490 – 620 mm

[18] Multipart centre lock – security, vertical

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

Size-specific combinations:

Without load transfer	With load transfer		#		№
490 – 650	–	200	1	V	296853
651 – 850	1000 – 1150	400	1	V	296854
851 – 1050	1151 – 1350	600 [17]	1	V	296855
1051 – 1250	1351 – 1550	600 KU	1	V	337711
		200	1	V	296853
1251 – 1450	1551 – 1750	600 KU	1	V	337711
		400	1	V	296854
1451 – 1650	1751 – 1950	600 KU	1	V	337711
		600 [18]	1	V	296855
1651 – 1850	1951 – 2150	600 KU	1	V	337711
		600 KU	1	V	337711
		200	1	V	296853
1851 – 2050	2151 – 2350	600 KU	1	V	337711
		600 KU	1	V	337711
		400	1	V	296854
2051 – 2250	2351 – 2400	600 KU	1	V	337711
		600 KU	1	V	337711
		600 [19]	1	V	296855
2251 – 2400	–	600 KU	1	V	337711
		600 KU	1	V	337711
		600 KU	1	V	337711
		200	1	V	296853

[19] Multipart centre lock – security, horizontal

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

Size-specific combinations:

Without turn restrictor	With turn restrictor		#		№
450 – 650	801 – 850	200	1	V	296853
651 – 850	851 – 1050	400	1	V	296854
851 – 1000	1051 – 1250	600 [20]	1	V	296855
	1251 – 1400	600 KU	1	V	337711
		200	1	V	296853

[24] Security striker → *from page 160*

[28] Tilt striker → *from page 154*

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

	№
Bullet catch sash component	788363

[32] Bullet-catch frame component (optional SRH ≥ 1601 mm) → *from page 167*

[33] Lifting mishandling device sash component

	№
Sash component for lifting mishandling device	795927

[17] Crop CL by 15 mm up to SRH 861; when using load transfer: crop CL by 15 mm with SRH 1151

[18] Crop CL by 15 mm up to SRH 1461; when using load transfer: crop CL by 15 mm with SRH 1751

[19] Crop CL by 15 mm up to SRH 2061; when using load transfer: crop CL by 15 mm with SRH 2351

[20] Crop CL by 15 mm up to SRW 854; when using a turn restrictor: crop CL by 15 mm up to SRH 1053

[34] Lifting mishandling device frame component → *from page 169*

[36] Stay guide – security

					№
330 – 600	490	250	–	–	385393
601 – 800	690	350	–	–	385394
801 – 1000	890	500	1	V	450373
1001 – 1200	1090	500	1	V	450374

[38] Stay arm → *from page 144*

INFO
With SRH < 600 mm, set the tilt depth to 80 mm.

[44] Corner hinge

	№
Corner hinge – Designo hinge side (HA 13)	634705

[45] Pivot rest → *from page 153*

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

		№
Frame and sash component	200	255237

[49] Packer → *from page 166*

[50] Load transfer sash component (SRW ≥ 801 mm, SRH ≥ 1001 mm)

	№
max. 150 kg	567972

[51] Load transfer frame component (SRW ≥ 801 mm, SRH ≥ 1001 mm)

	№
max. 150 kg	565254

[53] Drilling protection

	№
Drilling protection	797819

[54] Handle, lockable → CTL_1

[61] Turn restrictor 198, sash component

	№
Designo hinge side	485591

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

[62] Turn restrictor frame component → *from page 171*

[80] Fastening plate

	№
Fastening plate with cam	255211

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

[82] Anti-jemmy device

		№
Anti-jemmy device	From rebate depth 26 mm	811715

Optional

[46] Pivot rest cover

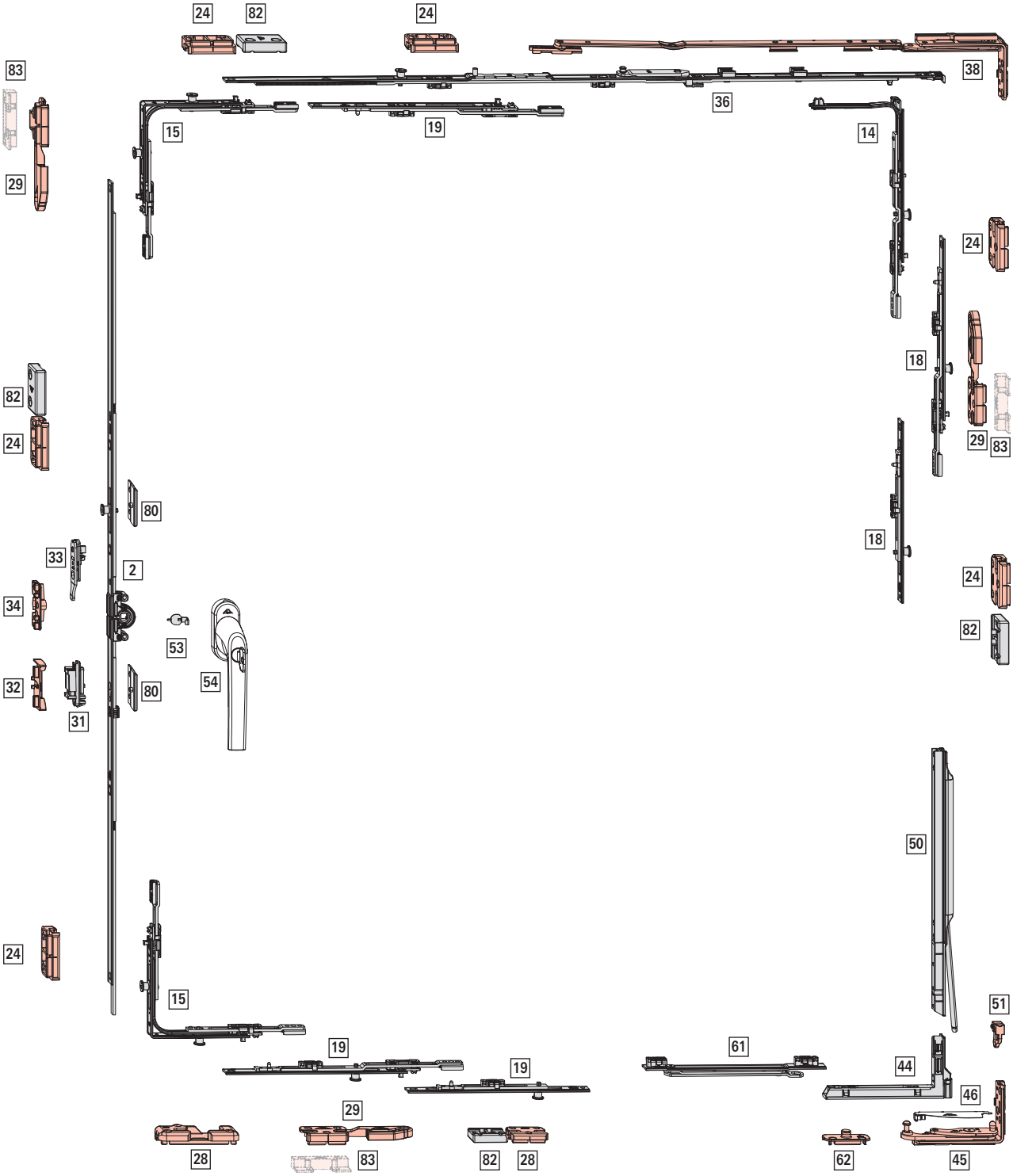
			№
Pivot rest cover – Designo hinge side	Clampable	Left	799664
		Right	799789

INFO
Horizontal rebate clearance at the bottom 11 – 14 mm.

[63] Night vent → *from page 172*

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

4.2.1.4 TiltSafe RC 2 / RC 2 N



Application range

Without load transfer	With load transfer
SRW: 450 – 1400 mm	**SRW**: 800 – 1400 mm
SRH: 490 – 2400 mm	**SRH**: 1000 – 2400 mm
S.kg: max. 100 kg	**S.kg**: max. 150 kg

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

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

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

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

[14] Sash stay corner drive

#		№
1	V	260284

[15] Corner drive, standard (security)

#		№
2	V	260274

For use with: SRH: 490 – 620 mm

[18] Multipart centre lock – security, vertical

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

Size-specific combinations:

Without load transfer	With load transfer		#		№
490 – 700	1000 – 1100	200	1	V	296853
701 – 900	1101 – 1300	200 KU	1	V	337708
		200	1	V	296853
901 – 1100	1301 – 1500	200 KU	1	V	337708
		400	1	V	296854
1101 – 1300	1501 – 1700	200 KU	1	V	337708
		600	1	V	296855
1301 – 1500	1701 – 1900	200 KU	1	V	337708
		600 KU	1	V	337711
		200	1	V	296853
1501 – 1700	1901 – 2100	200 KU	1	V	337708
		600 KU	1	V	337711
		400	1	V	296854
1701 – 1900	2101 – 2300	200 KU	1	V	337708
		600 KU	1	V	337711
		600	1	V	296855
1901 – 2100	2301 – 2400	200 KU	1	V	337708
		600 KU	1	V	337711
		600 KU	1	V	337711
		200	1	V	296853
2101 – 2300	–	200 KU	1	V	337708
		600 KU	1	V	337711
		600 KU	1	V	337711
		400	1	V	296854
2301 – 2400	–	200 KU	1	V	337708
		600 KU	1	V	337711
		600 KU	1	V	337711
		600	1	V	296855

[19] Multipart centre lock – security, horizontal

		#		№
200	Y	–	–	308267
200	N	1	V	296853
200	Y	1	V	337708
400	Y	1	V	337710

Size-specific combinations:

Without turn restrictor	With turn restrictor		#		№
450 – 650	801 – 850	200	1	V	296853
651 – 850	851 – 1050	200 KU	1	V	337708
		200	1	V	296853
851 – 1000	1051 – 1250	200 KU	1	V	337708
		200 KU	1	V	337708
		200	1	V	296853
	1251 – 1400	200 KU	1	V	337708
		400 KU	1	V	337710
		200	1	V	296853

[24] Security striker → *from page 160*

[28] Tilt striker → *from page 154*

[29] Security striker for tilt ventilation → *from page 164*

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

	№
Bullet catch sash component	788363

[32] Bullet-catch frame component (optional SRH ≥ 1601 mm) → *from page 167*

[33] Lifting mishandling device sash component

	№
Sash component for lifting mishandling device	795927

[34] Lifting mishandling device frame component → *from page 169*

[36] Stay guide – security

					№
330 – 600	490	250	–	–	385393
601 – 800	690	350	–	–	385394
801 – 1000	890	500	1	V	450373
1001 – 1200	1090	500	1	V	450374

INFO
SRW 1201 – 1400 mm only possible with stay guide 450374 and CL 200 KU.

[38] Stay arm → *from page 144*

INFO
With SRH < 600 mm, set the tilt depth to 80 mm.

[44] Corner hinge

	№
Corner hinge – Designo hinge side (HA 13)	634705

[45] Pivot rest → *from page 153*

[50] Load transfer sash component (SRW ≥ 801 mm, SRH ≥ 1001 mm)

	№
max. 150 kg	567972

[51] Load transfer frame component (SRW ≥ 801 mm, SRH ≥ 1001 mm)

	№
max. 150 kg	565254

[53] Drilling protection

	№
Drilling protection	797819

[54] Handle, lockable → CTL_1

[61] Turn restrictor 198, sash component

	№
Designo hinge side	485591

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

[62] Turn restrictor frame component → *from page 171*

[80] Fastening plate

	№
Fastening plate with cam	255211

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

[82] Anti-jemmy device

		№
Anti-jemmy device	From rebate depth 26 mm	811715

Optional

[46] Pivot rest cover

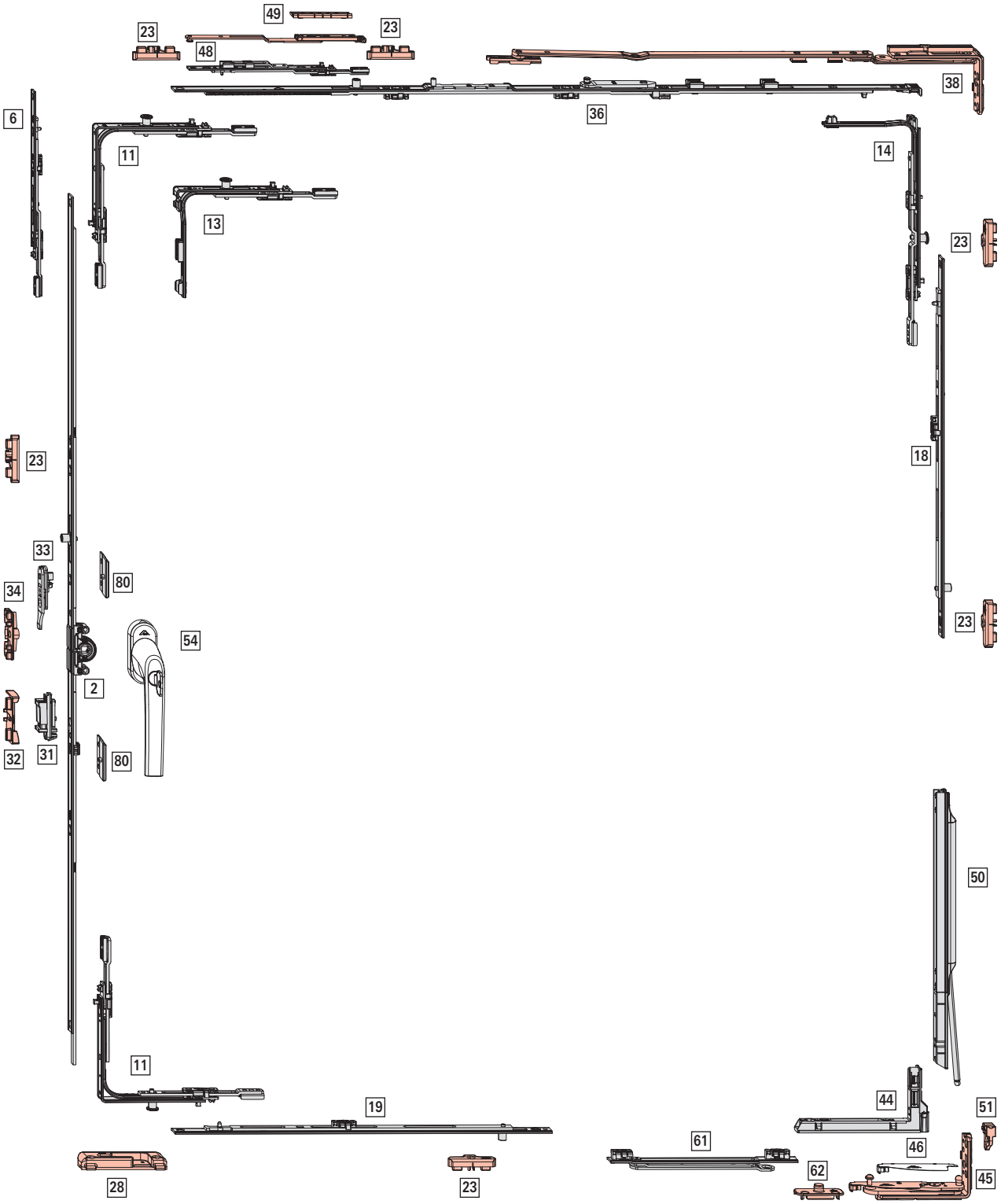
			№
Pivot rest cover – Designo hinge side	Clampable	Left	799664
		Right	799789

INFO
Horizontal rebate clearance at the bottom 11 – 14 mm.

[83] TiltSafe protective support → *from page 164*

4.2.2 TiltFirst hardware

4.2.2.1 Basic security



Application range

Without load transfer	With load transfer
SRW: 330 – 1400 mm	**SRW**: 800 – 1400 mm
SRH: 280 – 2600 mm	**SRH**: 1000 – 2600 mm
S.kg: max. 100 kg	**S.kg**: max. 150 kg

INFO
SRW 330 – 430 mm from SRH 361 mm
SRH 280 – 370 mm from SRW 431 mm

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

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

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

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

				№
200	Y	–	–	308267

Size-specific combinations:

				№
2401 – 2600	200 KU	–	–	308267

[11] Standard corner drive

			№
1	E	Top	260275
1	P	Top Bottom	260277

[13] Special short corner drive

			№
1	E	Top	260280
1	P	Top Bottom	260282

For use with:
SRW ≤ 430 mm
SRH ≤ 450 mm

[14] Sash stay corner drive

		№
1	P	260286

INFO
With SRH 280 – 330 mm, crop the sash stay corner drive (to do so, extend the connecting rod fully).

[18] Multipart centre lock – standard, vertical

				№
400	N	1	E	255280
600	N	1	E	255281
600	Y	1	E	255282
200	N	1	P	255284

Size-specific combinations:

Without load transfer	With load transfer				№
801 – 1200	1001 – 1200	400	1	E	255280
1201 – 1400	1201 – 1400	600	1	E	255281
	1401 – 1600	600 KU	1	E	255282
		200	1	P	255284
1401 – 1800	1601 – 1800	600 KU	1	E	255282
		400	1	E	255280
1801 – 2000	1801 – 2000	600 KU	1	E	255282
		600	1	E	255281
	2001 – 2200	600 KU	1	E	255282
		600 KU	1	E	255282
		200	1	P	255284
2001 – 2400	2201 – 2400	600 KU	1	E	255282
		600 KU	1	E	255282
		400	1	E	255280
2401 – 2600	2401 – 2600	600 KU	1	E	255282
		600 KU	1	E	255282
		600	1	E	255281

[19] Multipart centre lock – standard, horizontal

				№
400	N	1	E	255280
600	N	1	E	255281
200	N	1	P	255284

Size-specific combinations:

Without turn restrictor	With turn restrictor				№
–	801 – 850	200	1	P	255284
801 – 1200	851 – 1200	400	1	E	255280
1201 – 1400	1201 – 1400	600	1	E	255281

[23] Striker → *from page 159*

[28] Tilt striker TiltFirst → *from page 157*

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

	№
Bullet catch sash component	788363

[32] Bullet-catch frame component (optional SRH ≥ 1601 mm) → *from page 167*

[33] Lifting mishandling device sash component

	№
Sash component for lifting mishandling device	795927

[34] Lifting mishandling device frame component → *from page 169*

[36] Stay guide – basic security

					№
330 – 600	250	490	–	–	385393
601 – 800	350	690	–	–	385394
801 – 1000	500	890	1	E	385415
1001 – 1200	500	1090	1	E	385416

[38] Stay arm TiltFirst → *from page 144*

INFO
With SRH < 600 mm, set the tilt depth to 80 mm.

[44] Corner hinge

	№
Corner hinge – Designo hinge side (HA 13)	634705

[45] Pivot rest → *from page 153*

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

	№
Frame and sash component	292022

[49] Packer → *from page 166*

[50] Load transfer sash component (SRW ≥ 801 mm, SRH ≥ 1001 mm)

	№
max. 150 kg	567972

[51] Load transfer frame component (SRW ≥ 801 mm, SRH ≥ 1001 mm)

	№
max. 150 kg	565254

[54] Handle, lockable → CTL_1

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

[61] Turn restrictor 198, sash component

	№
Designo hinge side	485591

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

[62] Turn restrictor frame component → *from page 171*

[80] Fastening plate

	№
Fastening plate with cam	255211

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

[46] Pivot rest cover

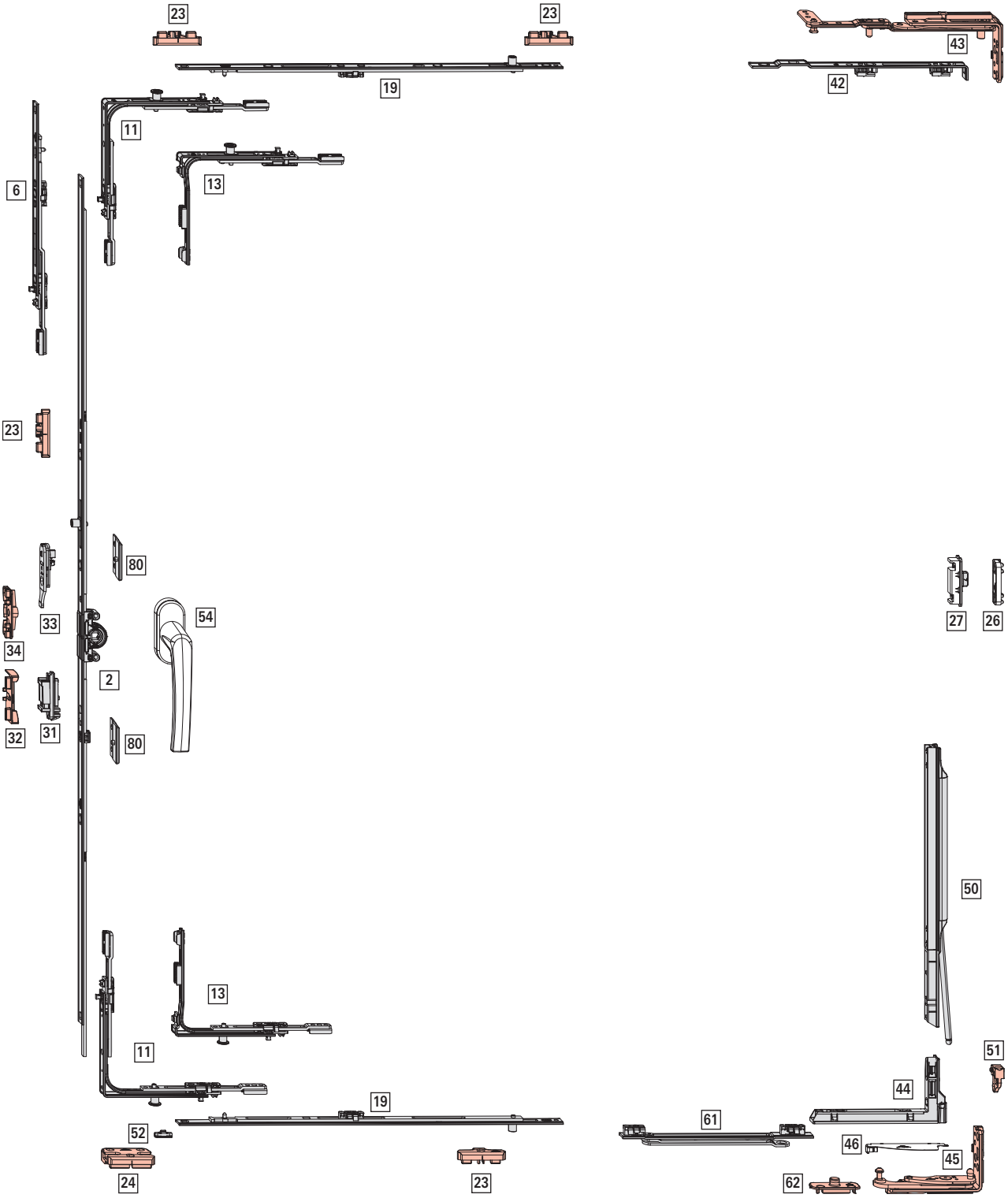
			№
Pivot rest cover – Designo hinge side	Clampable	Left	799664
		Right	799789

INFO
Horizontal rebate clearance at the bottom 11 – 14 mm.

Sash lifter → CTL_105

4.2.3 Turn-Only hardware

4.2.3.1 Basic security



Application range

Without load transfer	With load transfer
SRW: 370 – 1400 mm	**SRW**: 800 – 1400 mm
SRH: 310 – 2600 mm	**SRH**: 1000 – 2600 mm
S.kg: max. 100 kg	**S.kg**: max. 150 kg

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

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

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

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

				№
200	Y	–	–	308267

Size-specific combinations:

				№
2401 – 2600	200 KU	–	–	308267

[11] Standard corner drive

			№
1	E	Top	260275
1	P	Top Bottom	260277

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

[13] Special short corner drive

			№
1	E	Top	260280
1	P	Top Bottom	260282

For use with:
SRW ≤ 430 mm
SRH ≤ 450 mm

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

[19] Multipart centre lock – standard, horizontal

				№
400	N	1	E	255280
600	N	1	E	255281
200	N	1	P	255284

Size-specific combinations:

					№
Without turn restrictor	With turn restrictor				
–	801 – 850	200	1	P	255284
801 – 1200	851 – 1200	400	1	E	255280
1201 – 1400	1201 – 1400	600	1	E	255281

[23] Striker → *from page 159*

[24] Security striker → *from page 160*

[26] Concealed centre closer frame component → CTL_105

[27] Concealed centre closer sash component → CTL_105

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

	№
Bullet catch sash component	788363

[32] Bullet-catch frame component (optional SRH ≥ 1601 mm) → *from page 167*

[33] Lifting mishandling device sash component

	№
Sash component for lifting mishandling device	795927

[34] Lifting mishandling device frame component → *from page 169*

[42] Rebate stay guide

		№
Not for Tilt-Only windows	224 / 15	477255

[43] Rebate stay arm → *from page 151*

[44] Corner hinge

	№
Corner hinge – Designo hinge side (HA 13)	634705

[45] Pivot rest → *from page 153*

[50] Load transfer sash component (SRW ≥ 801 mm, SRH ≥ 1001 mm)

	№
max. 150 kg	567972

[51] Load transfer frame component
(SRW ≥ 801 mm, SRH ≥ 1001 mm)

	№
max. 150 kg	565254

[52] 90° travel restrictor

	№
Travel restrictor	264603

[54] Handle → CTL_1

[61] Turn restrictor 198, sash component

	№
Designo hinge side	485591

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

[62] Turn restrictor frame component → *from page 171*

[80] Fastening plate

	№
Fastening plate with cam	255211

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

[46] Pivot rest cover

			№
Pivot rest cover – Designo hinge side	Clampable	Left	799664
		Right	799789

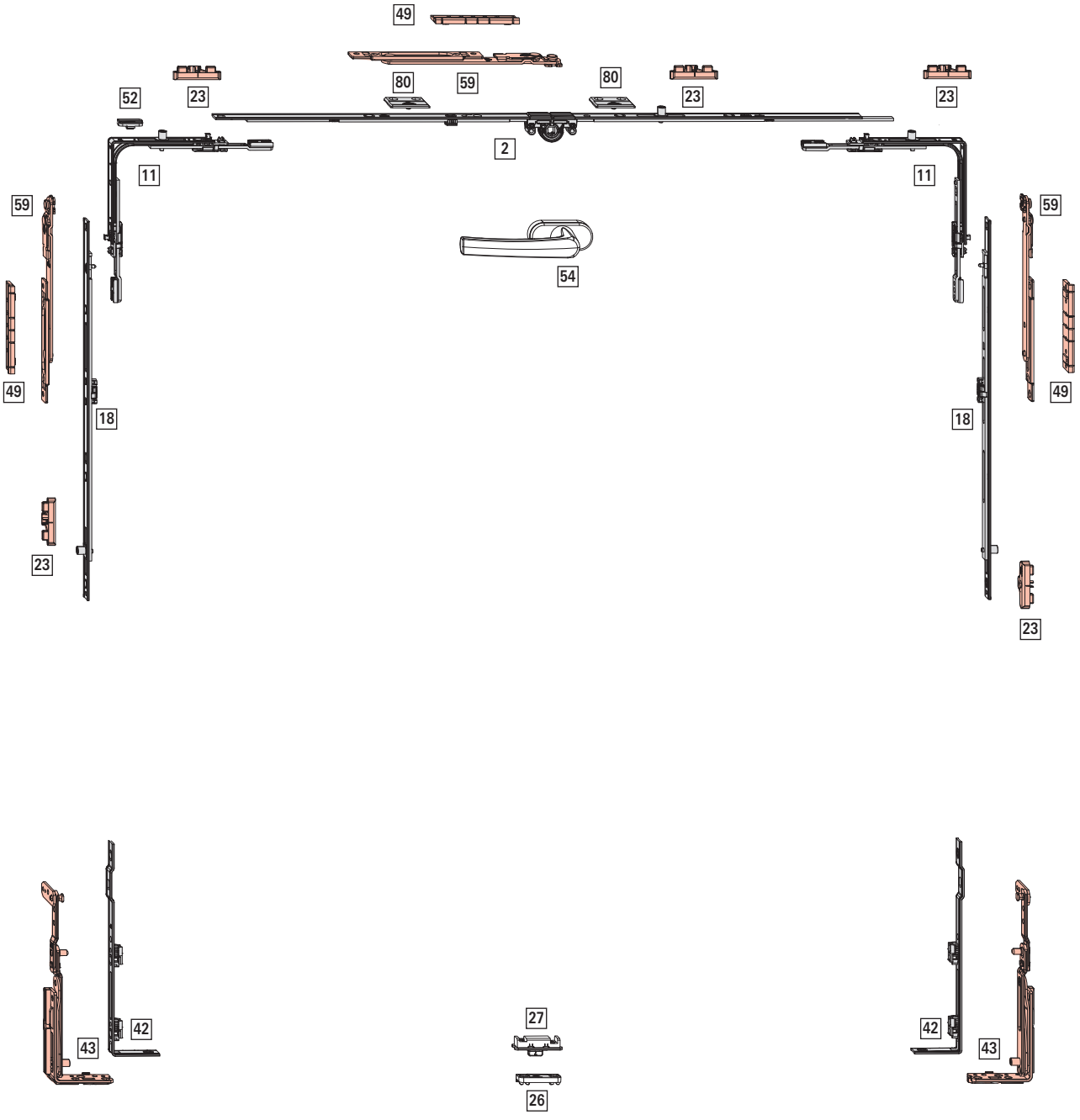
INFO
Horizontal rebate clearance at the bottom 11 – 14 mm.

Arrestable brake stay → CTL_105

Sash lifter → CTL_105

4.2.4 Tilt-Only hardware

4.2.4.1 Standard



Application range

SRW: 450 – 1400 mm

SRH: 370 – 1200 mm

S.kg: max. 80 kg

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

			#		№
451 – 620	400	N	–	–	259718
621 – 800	580	Y	1	E	259719
801 – 1200	980	Y	1	E	259720
1201 – 1600	1380	Y	2	E	259721

T&T espagnolette 259718 must be secured with two fastening plates 255211.

[11] Standard corner drive

#			№
1	E	Top	260275
1	P	Top Bottom	260277

INFO
With SRH 370 – 410 mm, crop the corner drive at the side.

[18] Multipart centre lock – standard, vertical

		#		№
N	400	1	E	255280

[23] Striker → *from page 159*

[26] Concealed centre closer frame component → CTL_105

[27] Concealed centre closer sash component → CTL_105

[42] Rebate stay guide

	№
Rebate stay guide for hinge side Designo (HA 9 / HA 13)	640563

[43] Rebate stay arm → *from page 151*

[49] Packer → *from page 166*

[52] 90° travel restrictor

	№
Travel restrictor	264603

[54] Handle → CTL_1

[59] Tilt stay set for floating-mullion installation

	№
Floating-mullion installation	482823

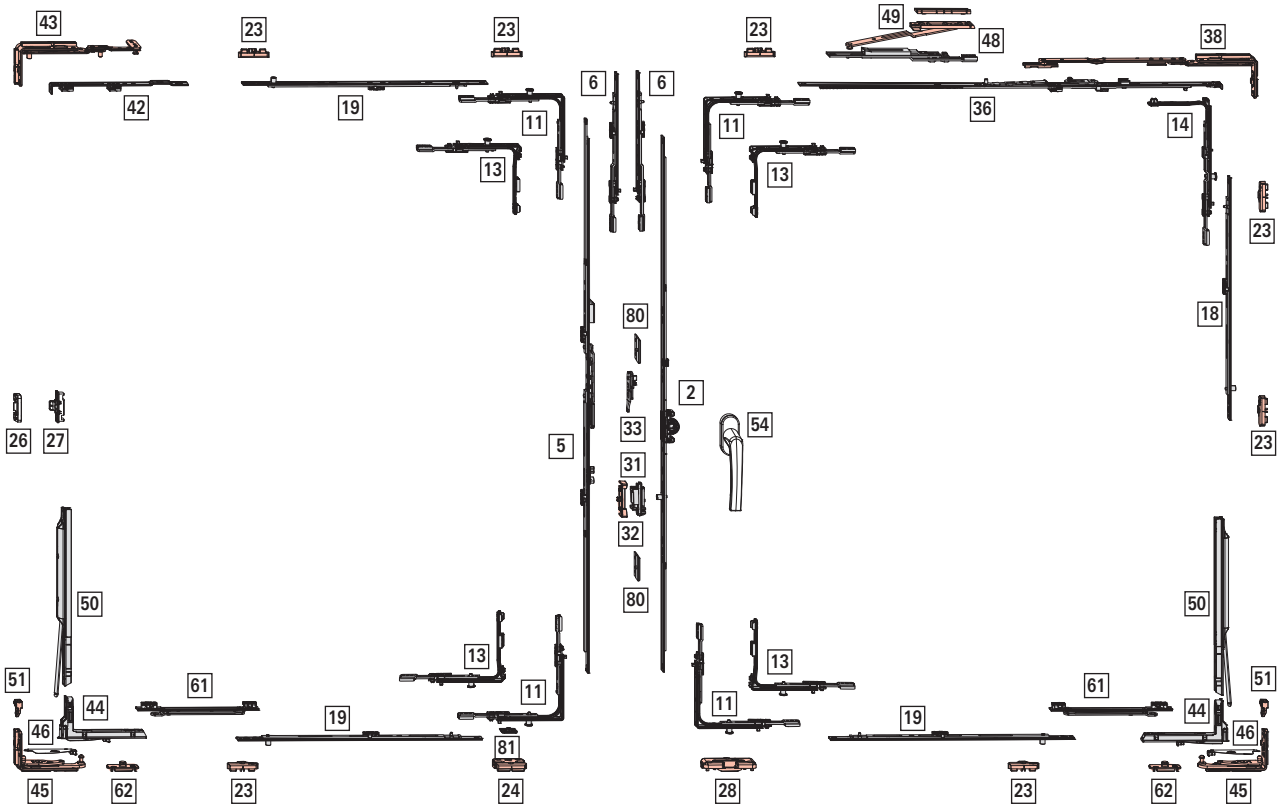
[80] Fastening plate

	№
Fastening plate with cam	255211

T&T espagnolette 259718 must be secured with two fastening plates 255211.

4.2.5 Floating-mullion hardware

4.2.5.1 Standard – basic security



Application range

Without load transfer	With load transfer
SRW: 370 – 1400 mm	**SRW**: 800 – 1400 mm
SRH: 370 – 2600 mm	**SRH**: 1000 – 2600 mm
S.kg: max. 100 kg	**S.kg**: max. 150 kg

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

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

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

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

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

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

				№
200	Y	–	–	308267

Size-specific combinations:

				№
2401 – 2600	200 KU	–	–	308267

[11] Standard corner drive

			№
1	E	Top	260275
1	P	Top Bottom	260277

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

[13] Special short corner drive

			№
1	E	Top	260280
1	P	Top Bottom	260282

Use → *5.1.1.3 "Centred / variable handle height" from page 136*

[14] Sash stay corner drive

		№
1	P	260286

[18] Multipart centre lock – standard, vertical

				№
400	N	1	E	255280
600	N	1	E	255281
600	Y	1	E	255282
200	N	1	P	255284

Size-specific combinations:

Without load transfer	With load transfer				№
801 – 1200	1001 – 1200	400	1	E	255280
1201 – 1400	1201 – 1400	600	1	E	255281
	1401 – 1600	600 KU	1	E	255282
		200	1	P	255284
1401 – 1800	1601 – 1800	600 KU	1	E	255282
		400	1	E	255280
1801 – 2000	1801 – 2000	600 KU	1	E	255282
		600	1	E	255281
	2001 – 2200	600 KU	1	E	255282
		600 KU	1	E	255282
		200	1	P	255284
2001 – 2400	2201 – 2400	600 KU	1	E	255282
		600 KU	1	E	255282
		400	1	E	255280
2401 – 2600	2401 – 2600	600 KU	1	E	255282
		600 KU	1	E	255282
		600	1	E	255281

[19] Multipart centre lock – standard, horizontal

				№
400	N	1	E	255280
600	N	1	E	255281
200	N	1	P	255284

Size-specific combinations:

Without turn restrictor	With turn restrictor				№
–	801 – 850	200	1	P	255284
801 – 1200	851 – 1200	400	1	E	255280
1201 – 1400	1201 – 1400	600	1	E	255281

[23] Striker → *from page 159*

[24] Security striker → *from page 160*

[26] Concealed centre closer frame component → CTL_105

[27] Concealed centre closer sash component → CTL_105

[28] Tilt striker → *from page 154*

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

	№
Bullet catch sash component	788363

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

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

[33] Lifting mishandling device sash component

	№
Sash component for lifting mishandling device	795927

[36] Stay guide – basic security

					№
330 – 600	250	490	–	–	385393
601 – 800	350	690	–	–	385394
801 – 1000	500	890	1	E	385415
1001 – 1200	500	1090	1	E	385416

[38] Stay arm → *from page 144*

INFO
With SRH < 600 mm, set the tilt depth to 80 mm.

[42] Rebate stay guide

		№
Not for Tilt-Only windows	224 / 15	477255

[43] Rebate stay arm → *from page 151*

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

[44] Corner hinge

	№
Corner hinge – Designo hinge side (HA 13)	634705

[45] Pivot rest → *from page 153*

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

		№
Frame and sash component	200	255237

[49] Packer → *from page 166*

[50] Load transfer sash component (SRW ≥ 801 mm, SRH ≥ 1001 mm)

	№
max. 150 kg	567972

[51] Load transfer frame component (SRW ≥ 801 mm, SRH ≥ 1001 mm)

	№
max. 150 kg	565254

[54] Handle → CTL_1

[61] Turn restrictor 198, sash component

	№
Designo hinge side	485591

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

[62] Turn restrictor frame component → *from page 171*

[80] Fastening plate

	№
Fastening plate with cam	255211

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

[81] Run-up block

	№
Sash	350403

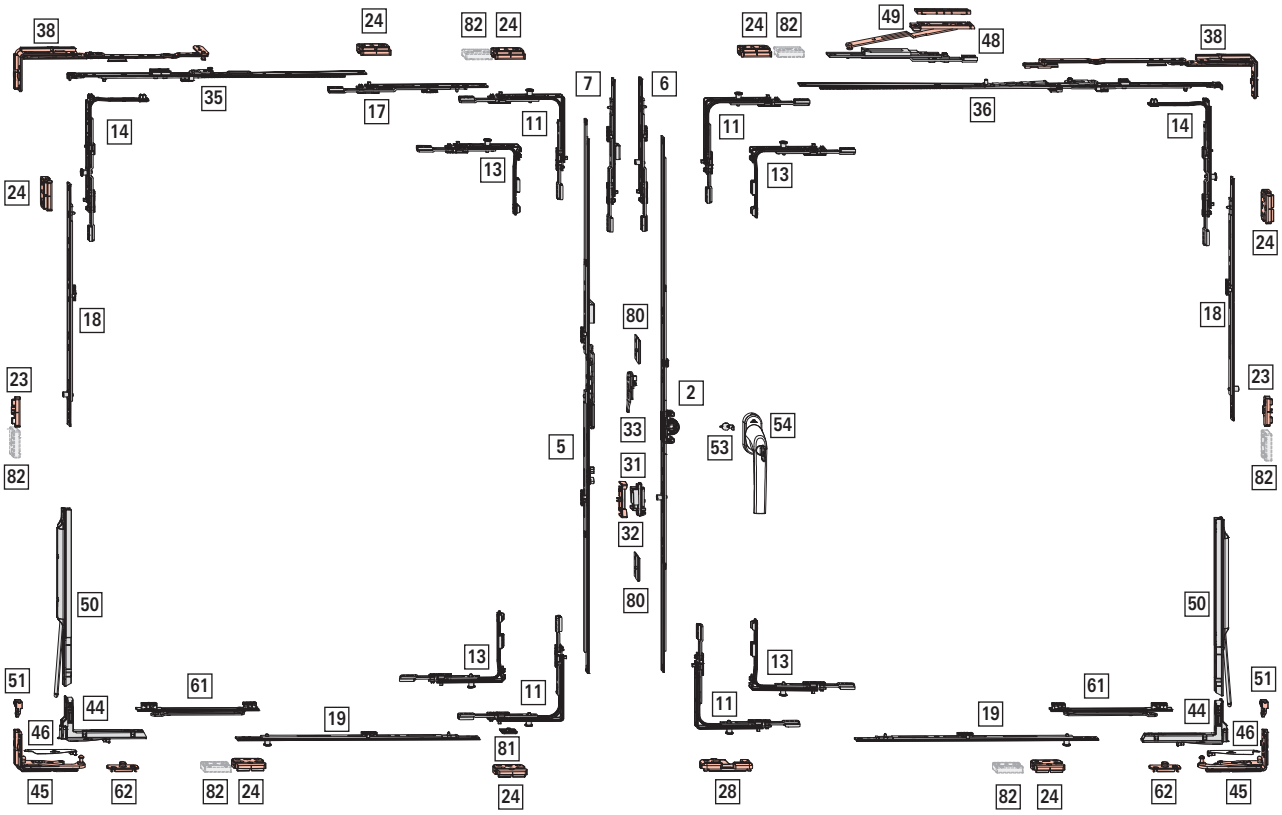
Optional

[46] Pivot rest cover

			№
Pivot rest cover – Designo hinge side	Clampable	Left	799664
		Right	799789

INFO
Horizontal rebate clearance at the bottom 11 – 14 mm.

4.2.5.2 Standard – RC 1 N



Application range

Without load transfer	With load transfer
SRW: 450 – 1400 mm	**SRW**: 800 – 1400 mm
SRH: 370 – 2600 mm	**SRH**: 1000 – 2600 mm
S.kg: max. 100 kg	**S.kg**: max. 150 kg

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

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

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

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

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

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

				№
200	Y	1	E	450821

Size-specific combinations:

				№
2401 – 2600	200 KU	1	E	450821

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

			№
200	Y	1	450822

Size-specific combinations:

			№
2401 – 2600	200 KU	1	450822

[11] Standard corner drive

		№
1	P	260277

[13] Special short corner drive

		№
1	P	260282

Use → *5.1.1.3 "Centred / variable handle height" from page 136*

[14] Sash stay corner drive

		№
1	P	260286

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

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

Size-specific combinations:

				№
711 – 910	200 KU	–	–	308267
911 – 1110	400 KU	1	E	280346
1111 – 1310	600 KU	1	E	255282
1311 – 1400	600 KU	1	E	255282
	200 KU	–	–	308267

[18] Multipart centre lock – standard, vertical

				№
400	N	1	E	255280
600	N	1	E	255281
600	Y	1	E	255282
200	N	1	P	255284

Size-specific combinations:

					№
Without load transfer	With load transfer				
801 – 1200	1001 – 1200	400	1	E	255280
1201 – 1400	1201 – 1400	600	1	E	255281
	1401 – 1600	600 KU	1	E	255282
		200	1	P	255284
1401 – 1800	1601 – 1800	600 KU	1	E	255282
		400	1	E	255280
1801 – 2000	1801 – 2000	600 KU	1	E	255282
		600	1	E	255281
	2001 – 2200	600 KU	1	E	255282
		600 KU	1	E	255282
		200	1	P	255284
2001 – 2400	2201 – 2400	600 KU	1	E	255282
		600 KU	1	E	255282
		400	1	E	255280
2401 – 2600	2401 – 2600	600 KU	1	E	255282
		600 KU	1	E	255282
		600	1	E	255281

[19] Multipart centre lock – standard, horizontal

				№
400	N	1	E	255280
600	N	1	E	255281
200	N	1	P	255284

Size-specific combinations:

Without turn restrictor	With turn restrictor				№
450 – 650	801 – 850	200	1	P	255284
651 – 850	851 – 1050	400	1	E	255280
851 – 1000	1051 – 1250	600 [21]	1	E	255281
	1251 – 1400	600 KU	1	E	255282
		200	1	P	255284

[23] Striker → *from page 159*

[24] Security striker → *from page 160*

[28] Tilt striker → *from page 154*

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

	№
Bullet catch sash component	788363

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

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

[33] Lifting mishandling device sash component

	№
Sash component for lifting mishandling device	795927

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

			№
430 – 510	250	400	482571
511 – 710	250	600	815784

[36] Stay guide – basic security

					№
330 – 600	250	490	–	–	385393
601 – 800	350	690	–	–	385394
801 – 1000	500	890	1	E	385415
1001 – 1200	500	1090	1	E	385416

[38] Stay arm → *from page 144*

INFO
With SRH < 600 mm, set the tilt depth to 80 mm.

[44] Corner hinge

	№
Corner hinge – Designo hinge side (HA 13)	634705

[45] Pivot rest → *from page 153*

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

		№
Frame and sash component	200	255237

[49] Packer → *from page 166*

[50] Load transfer sash component (SRW ≥ 801 mm, SRH ≥ 1001 mm)

	№
max. 150 kg	567972

[51] Load transfer frame component (SRW ≥ 801 mm, SRH ≥ 1001 mm)

	№
max. 150 kg	565254

[53] Drilling protection

	№
Drilling protection	797819

[54] Handle, lockable → CTL_1

[61] Turn restrictor 198, sash component

	№
Designo hinge side	485591

[62] Turn restrictor frame component → *from page 171*

[80] Fastening plate

	№
Fastening plate with cam	255211

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

[81] Run-up block

	№
Sash	350403

Optional

[46] Pivot rest cover

			№
Pivot rest cover – Designo hinge side	Clampable	Left	799664
		Right	799789

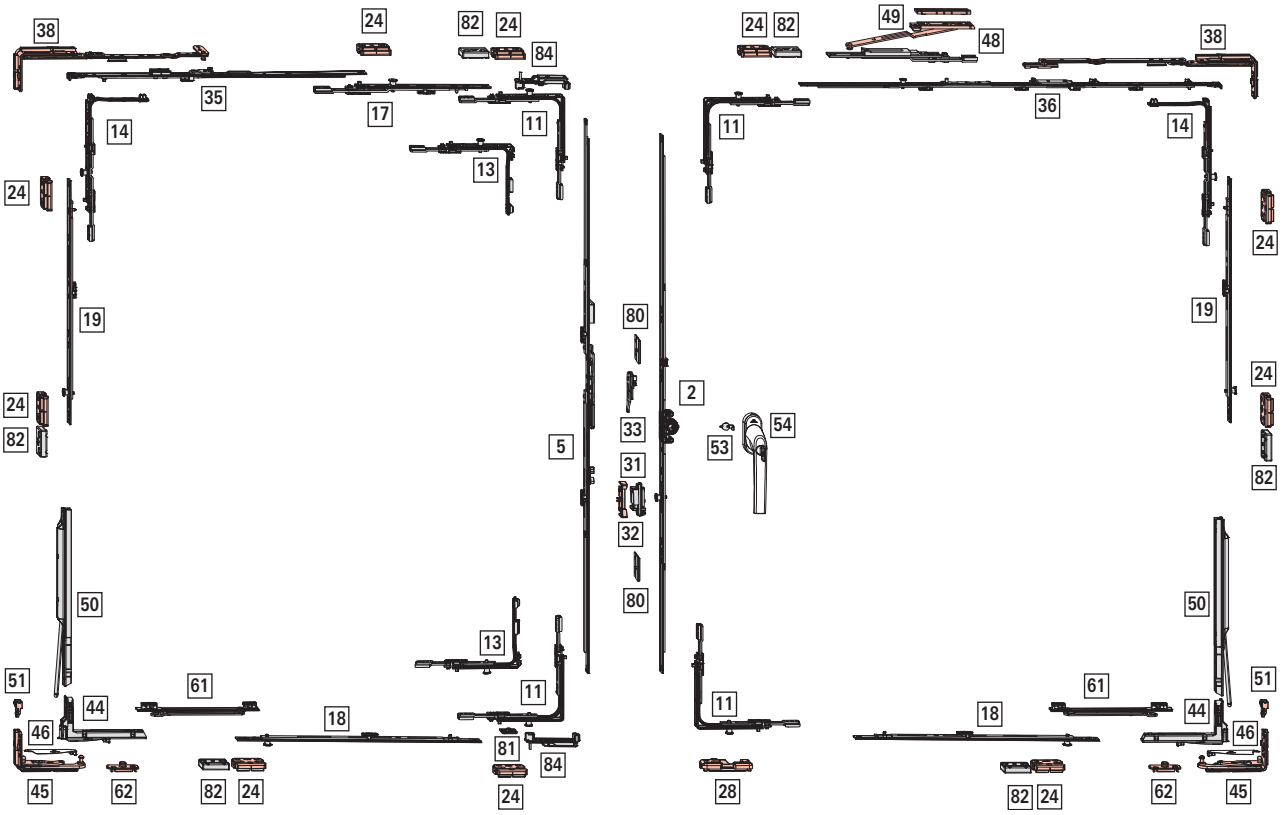
INFO
Horizontal rebate clearance at the bottom 11 – 14 mm.

[82] Anti-jemmy device

		№
Anti-jemmy device	From rebate depth 26 mm	811715

[21] Crop CL by 15 mm up to SRW 854; when using a turn restrictor, crop CL by 15 mm up to SRH 1053

4.2.5.3 Standard – RC 2 / RC 2 N



Application range

Without load transfer	With load transfer
SRW: 450 – 1400 mm	**SRW**: 800 – 1400 mm
SRH: 510 – 2400 mm	**SRH**: 1000 – 2400 mm
S.kg: max. 100 kg	**S.kg**: max. 150 kg

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

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

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

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

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

[10] Floating mullion corner drive

					№
Second opening sash	Bottom	1	1	V	367227

For use with:

SRH: 520 – 620 mm

[11] Standard corner drive

		№
1	V	260272

[13] Special short corner drive

		№
1	V	281288

Use → *5.1.1.3 "Centred / variable handle height" from page 136*

[14] Sash stay corner drive

		№
1	V	260284

[15] Corner drive, standard (security)

		№
2	V	260274

For use with:

SRH: 520 – 620 mm

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

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

Size-specific combinations:

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

[18] Multipart centre lock – security, vertical

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

Size-specific combinations:

Without load transfer	With load transfer				№
510 – 650	–	200	1	V	296853
651 – 850	1000 – 1150	400	1	V	296854
851 – 1050	1151 – 1350	600 [22]	1	V	296855
1051 – 1250	1351 – 1550	600 KU	1	V	337711
		200	1	V	296853
1251 – 1450	1551 – 1750	600 KU	1	V	337711
		400	1	V	296854
1451 – 1650	1751 – 1950	600 KU	1	V	337711
		600 [23]	1	V	296855
1651 – 1850	1951 – 2150	600 KU	1	V	337711
		600 KU	1	V	337711
		200	1	V	296853
1851 – 2050	2151 – 2350	600 KU	1	V	337711
		600 KU	1	V	337711
		400	1	V	296854

[22] Crop CL by 15 mm up to SRH 861; when using load transfer: crop CL by 15 mm with SRH 1151

[23] Crop CL by 15 mm up to SRH 1461; when using load transfer: crop CL by 15 mm with SRH 1751

Without load transfer	With load transfer				Nº
2051 – 2250	2351 – 2400	600 KU	1	V	337711
		600 KU	1	V	337711
		600 [24]	1	V	296855
2251 – 2400	–	600 KU	1	V	337711
		600 KU	1	V	337711
		600 KU	1	V	337711
		200	1	V	296853

[19] Multipart centre lock – security, horizontal

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

Size-specific combinations:

Without turn restrictor	With turn restrictor				Nº
450 – 650	801 – 850	200	1	V	296853
651 – 850	851 – 1050	400	1	V	296854
851 – 1000	1051 – 1250	600 [25]	1	V	296855
–	1251 – 1400	600 KU	1	V	337711
		200	1	V	296853

[24] Security striker → *from page 160*

[28] Tilt striker → *from page 154*

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

	Nº
Bullet catch sash component	788363

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

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

[33] Lifting mishandling device sash component

	Nº
Sash component for lifting mishandling device	795927

[35] Turn-Only sash stay guide – security

			Nº
430 – 510	250	400	482571
511 – 710	250	600	815784

[36] Stay guide – security

					Nº
330 – 600	490	250	–	–	385393
601 – 800	690	350	–	–	385394
801 – 1000	890	500	1	V	450373
1001 – 1200	1090	500	1	V	450374

[38] Stay arm → *from page 144*

INFO
With SRH < 600 mm, set the tilt depth to 80 mm.

[44] Corner hinge

	Nº
Corner hinge – Designo hinge side (HA 13)	634705

[45] Pivot rest → *from page 153*

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

		Nº
Frame and sash component	200	255237

[49] Packer → *from page 166*

[50] Load transfer sash component (SRW ≥ 801 mm, SRH ≥ 1001 mm)

	Nº
max. 150 kg	567972

[51] Load transfer frame component (SRW ≥ 801 mm, SRH ≥ 1001 mm)

	Nº
max. 150 kg	565254

[53] Drilling protection

	Nº
Drilling protection	797819

[54] Handle, lockable → CTL_1

[61] Turn restrictor 198, sash component

	Nº
Designo hinge side	485591

[62] Turn restrictor frame component → *from page 171*

[80] Fastening plate

	Nº
Fastening plate with cam	255211

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

[24] Crop CL by 15 mm up to SRH 2061; when using load transfer: crop CL by 15 mm with SRH 2351

[25] Crop CL by 15 mm up to SRW 854; when using a turn restrictor: crop CL by 15 mm up to SRH 1053

[81] Run-up block

	№
Sash	350403

[82] Anti-jemmy device

		№
Anti-jemmy device	From rebate depth 26 mm	811715

[84] Safety device for floating-mullion sashes

	№
Retaining element for floating-mullion sash	552392

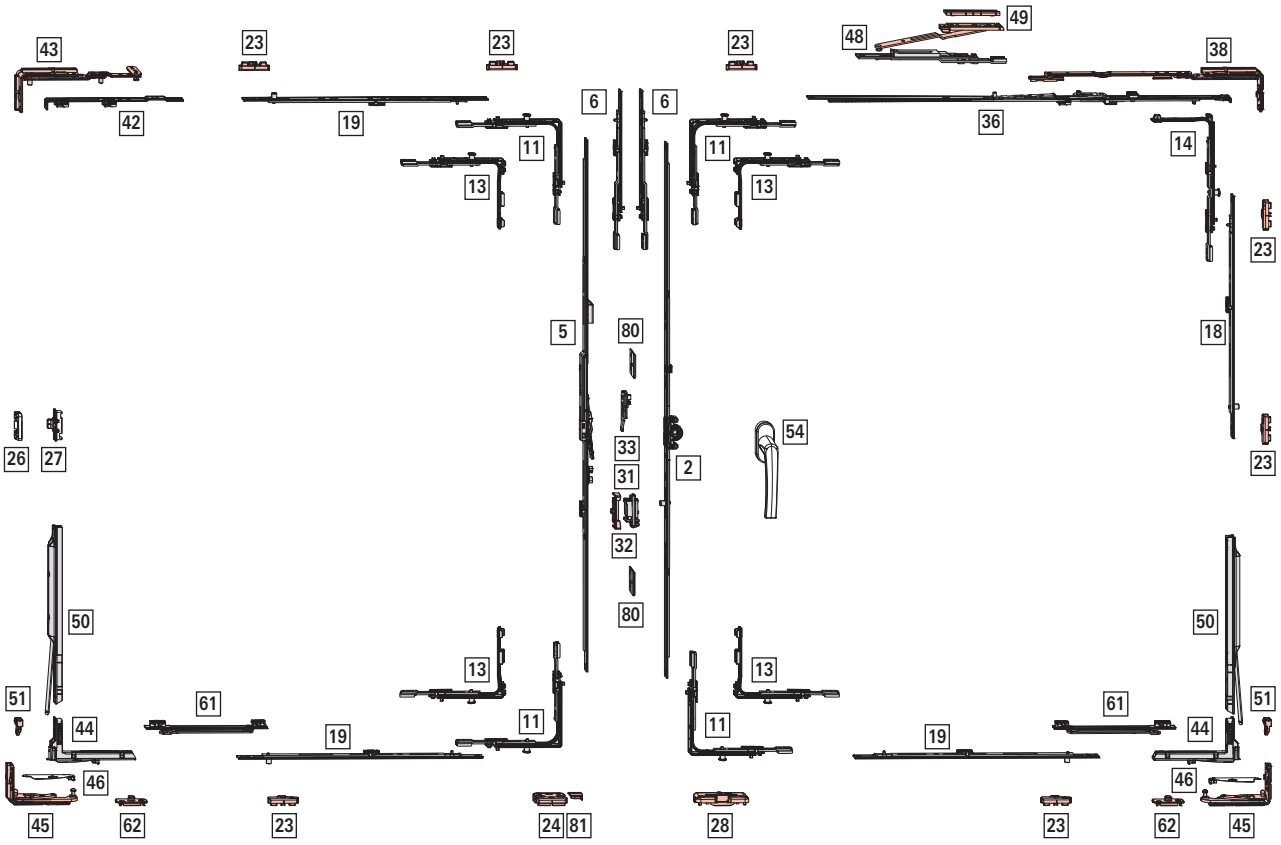
Optional

[46] Pivot rest cover

			№
Pivot rest cover – Designo hinge side	Clampable	Left	799664
		Right	799789

INFO
Horizontal rebate clearance at the bottom 11 – 14 mm.

4.2.5.4 Plus – basic security



Application range

Without load transfer	With load transfer
SRW: 370 – 1400 mm	**SRW**: 800 – 1400 mm
SRH: 420 – 2600 mm	**SRH**: 1000 – 2600 mm
S.kg: max. 100 kg	**S.kg**: max. 150 kg

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

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

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

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

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

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

				№
200	Y	–	–	308267

Size-specific combinations:

				№
2401 – 2600	200 KU	–	–	308267

[11] Standard corner drive

			№
1	E	Top	260275
1	P	Top Bottom	260277

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

[13] Special short corner drive

			№
1	E	Top	260280
1	P	Top Bottom	260282

Use → *5.1.1.3 "Centred / variable handle height" from page 136*

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

[14] Sash stay corner drive

		№
1	P	260286

[18] Multipart centre lock – standard, vertical

				№
400	N	1	E	255280
600	N	1	E	255281
600	Y	1	E	255282
200	N	1	P	255284

Size-specific combinations:

					№
Without load transfer	With load transfer				
801 – 1200	1001 – 1200	400	1	E	255280
1201 – 1400	1201 – 1400	600	1	E	255281
	1401 – 1600	600 KU	1	E	255282
		200	1	P	255284
1401 – 1800	1601 – 1800	600 KU	1	E	255282
		400	1	E	255280
1801 – 2000	1801 – 2000	600 KU	1	E	255282
		600	1	E	255281
	2001 – 2200	600 KU	1	E	255282
		600 KU	1	E	255282
		200	1	P	255284
2001 – 2400	2201 – 2400	600 KU	1	E	255282
		600 KU	1	E	255282
		400	1	E	255280
2401 – 2600	2401 – 2600	600 KU	1	E	255282
		600 KU	1	E	255282
		600	1	E	255281

[19] Multipart centre lock – standard, horizontal

				№
400	N	1	E	255280
600	N	1	E	255281
200	N	1	P	255284

Size-specific combinations:

					№
Without turn restrictor	With turn restrictor				
–	801 – 850	200	1	P	255284
801 – 1200	851 – 1200	400	1	E	255280
1201 – 1400	1201 – 1400	600	1	E	255281

[23] Striker → *from page 159*

[24] Security striker → *from page 160*

[26] Concealed centre closer frame component → CTL_105

[27] Concealed centre closer sash component → CTL_105

[28] Tilt striker → *from page 154*

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

	№
Bullet catch sash component	788363

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

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

[33] Lifting mishandling device sash component

	№
Sash component for lifting mishandling device	795927

[36] Stay guide – basic security

					№
330 – 600	250	490	–	–	385393
601 – 800	350	690	–	–	385394
801 – 1000	500	890	1	E	385415
1001 – 1200	500	1090	1	E	385416

[38] Stay arm → *from page 144*

INFO
With SRH < 600 mm, set the tilt depth to 80 mm.

[42] Rebate stay guide

		№
Not for Tilt-Only windows	224 / 15	477255

[43] Rebate stay arm → *from page 151*

[44] Corner hinge

	№
Corner hinge – Designo hinge side (HA 13)	634705

[45] Pivot rest → *from page 153*

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

		№
Frame and sash component	200	255237

[49] Packer → *from page 166*

[50] Load transfer sash component (SRW ≥ 801 mm, SRH ≥ 1001 mm)

	№
max. 150 kg	567972

[51] Load transfer frame component (SRW ≥ 801 mm, SRH ≥ 1001 mm)

	№
max. 150 kg	565254

[54] Handle → CTL_1

[61] Turn restrictor 198, sash component

	№
Designo hinge side	485591

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

[62] Turn restrictor frame component → *from page 171*

[80] Fastening plate

	№
Fastening plate with cam	255211

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

[81] Run-up block

			№
Rebate run-up block	Frame	Insertable	609211

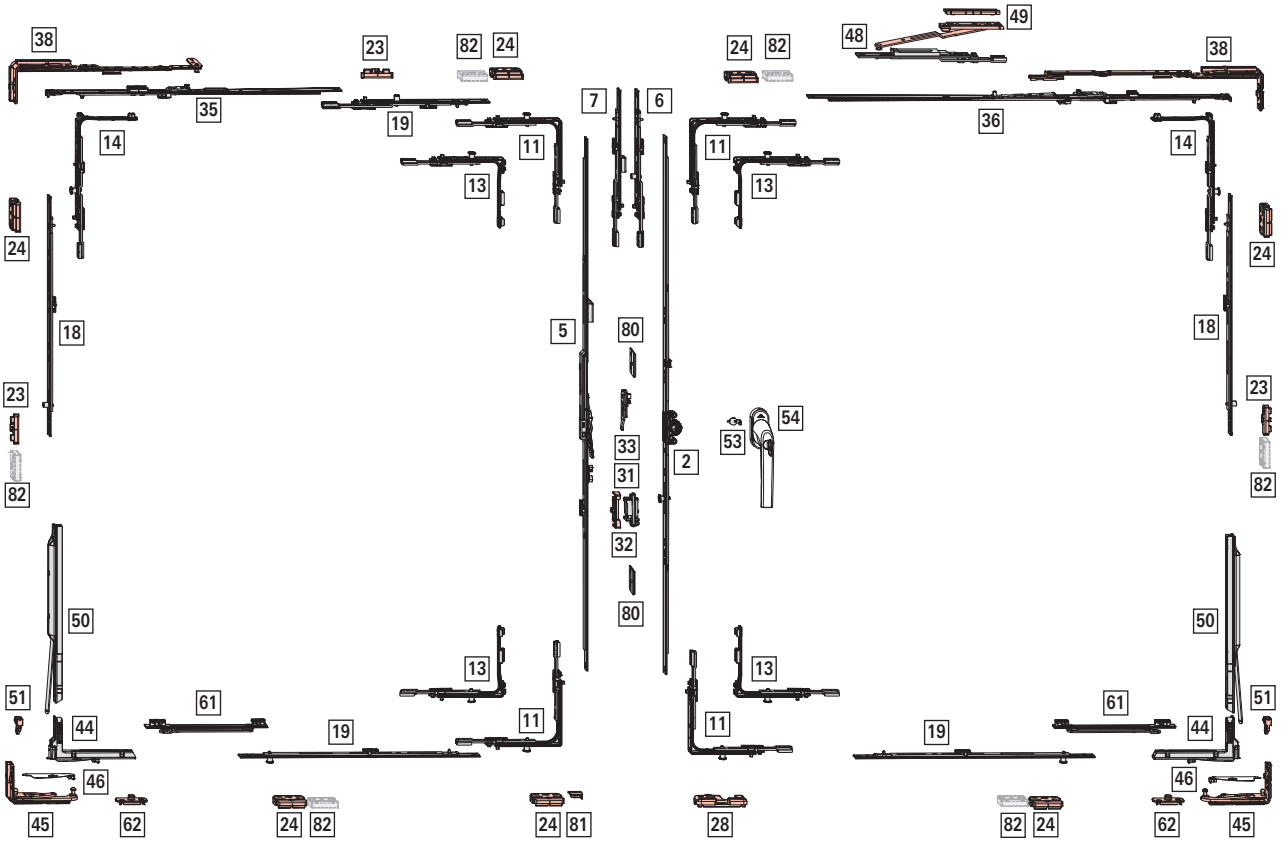
Optional

[46] Pivot rest cover

			№
Pivot rest cover – Designo hinge side	Clampable	Left	799664
		Right	799789

INFO
Horizontal rebate clearance at the bottom 11 – 14 mm.

4.2.5.5 Plus – RC 1 N



Application range

Without load transfer	With load transfer
SRW: 450 – 1400 mm	**SRW**: 800 – 1400 mm
SRH: 420 – 2600 mm	**SRH**: 1000 – 2600 mm
S.kg: max. 100 kg	**S.kg**: max. 150 kg

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

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

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

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

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

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

				№
200	Y	1	E	450821

Size-specific combinations:

				№
2401 – 2600	200 KU	1	E	450821

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

			№
200	Y	1	450822

Size-specific combinations:

			№
2401 – 2600	200 KU	1	450822

[11] Standard corner drive

		№
1	P	260277

[13] Special short corner drive

		№
1	P	260282

Use → *5.1.1.3 "Centred / variable handle height" from page 136*

[14] Sash stay corner drive

		№
1	P	260286

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

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

Size-specific combinations:

				№
801 – 1000	200 KU	–	–	308267
1001 – 1200	400 KU	1	E	280346
1201 – 1400	600 KU	1	E	255282

[18] Multipart centre lock – standard, vertical

				№
400	N	1	E	255280
600	N	1	E	255281
600	Y	1	E	255282
200	N	1	P	255284

Size-specific combinations:

Without load transfer	With load transfer				№
801 – 1200	1001 – 1200	400	1	E	255280
1201 – 1400	1201 – 1400	600	1	E	255281
	1401 – 1600	600 KU	1	E	255282
		200	1	P	255284
1401 – 1800	1601 – 1800	600 KU	1	E	255282
		400	1	E	255280
1801 – 2000	1801 – 2000	600 KU	1	E	255282
		600	1	E	255281
	2001 – 2200	600 KU	1	E	255282
		600 KU	1	E	255282
		200	1	P	255284
2001 – 2400	2201 – 2400	600 KU	1	E	255282
		600 KU	1	E	255282
		400	1	E	255280
2401 – 2600	2401 – 2600	600 KU	1	E	255282
		600 KU	1	E	255282
		600	1	E	255281

[19] Multipart centre lock – standard, horizontal

				№
400	N	1	E	255280
600	N	1	E	255281
200	N	1	P	255284

Size-specific combinations:

Without turn restrictor	With turn restrictor				№
450 – 6500	801 – 850	200	1	P	255284
651 – 850	851 – 1200	400	1	E	255280
851 – 1000	1201 – 1250	600 [26]	1	E	255281
	1251 – 1400	600 KU	1	E	255282
		200	1	P	255284

[23] Striker → *from page 159*

[24] Security striker → *from page 160*

[28] Tilt striker → *from page 154*

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

	№
Bullet catch sash component	788363

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

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

[33] Lifting mishandling device sash component

	№
Sash component for lifting mishandling device	795927

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

					№
330 – 600	250	490	–	–	385393
601 – 800	250	690	–	–	2003336

[36] Stay guide – basic security

					№
330 – 600	250	490	–	–	385393
601 – 800	350	690	–	–	385394
801 – 1000	500	890	1	E	385415
1001 – 1200	500	1090	1	E	385416

For use from SRW 450 mm

[38] Stay arm → *from page 144*

INFO
With SRH < 600 mm, set the tilt depth to 80 mm.

[44] Corner hinge

	№
Corner hinge – Designo hinge side (HA 13)	634705

[45] Pivot rest → *from page 153*

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

		№
Frame and sash component	200	255237

[49] Packer → *from page 166*

[50] Load transfer sash component (SRW ≥ 801 mm, SRH ≥ 1001 mm)

	№
max. 150 kg	567972

[51] Load transfer frame component (SRW ≥ 801 mm, SRH ≥ 1001 mm)

	№
max. 150 kg	565254

[53] Drilling protection

	№
Drilling protection	797819

[54] Handle, lockable → CTL_1

[61] Turn restrictor 198, sash component

	№
Designo hinge side	485591

[62] Turn restrictor frame component → *from page 171*

[80] Fastening plate

	№
Fastening plate with cam	255211

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

[81] Run-up block

			№
Rebate run-up block	Frame	Insertable	609211

Optional

[46] Pivot rest cover

			№
Pivot rest cover – Designo hinge side	Clampable	Left	799664
		Right	799789

INFO
Horizontal rebate clearance at the bottom 11 – 14 mm.

[26] Crop CL by 15 mm up to SRW 854; when using a turn restrictor: crop CL by 15 mm up to SRH 1053

[82] Anti-jemmy device

		№
Anti-jemmy device	From rebate depth 26 mm	811715

4.2.5.6 Plus – RC 2 / RC 2 N

Application range

Without load transfer	With load transfer
SRW: 450 – 1400 mm	**SRW**: 800 – 1400 mm
SRH: 520 – 2400 mm	**SRH**: 1000 – 2400 mm
S.kg: max. 100 kg	**S.kg**: max. 150 kg

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

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

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

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

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

[11] Standard corner drive

		№
1	V	260272

[13] Special short corner drive

		№
1	V	281288

Use → *5.1.1.3 "Centred / variable handle height" from page 136*

[14] Sash stay corner drive

		№
1	V	260284

[15] Corner drive, standard (security)

		№
2	V	260274

For use with:

SRH: 520 – 620 mm

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

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

Size-specific combinations:

				№
801 – 1000	200 KU	1	V	337708
1001 – 1200	400 KU	1	V	337710
1201 – 1400	600 KU	1	V	337711

[18] Multipart centre lock – security, vertical

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

Size-specific combinations:

					№
Without load transfer	With load transfer				
490 – 650	–	200	1	V	296853
651 – 850	1000 – 1150	400	1	V	296854
851 – 1050	1151 – 1350	600 [27]	1	V	296855
1051 – 1250	1351 – 1550	600 KU	1	V	337711
		200	1	V	296853
1251 – 1450	1551 – 1750	600 KU	1	V	337711
		400	1	V	296854
1451 – 1650	1751 – 1950	600 KU	1	V	337711
		600 [28]	1	V	296855
1651 – 1850	1951 – 2150	600 KU	1	V	337711
		600 KU	1	V	337711
		200	1	V	296853
1851 – 2050	2151 – 2350	600 KU	1	V	337711
		600 KU	1	V	337711
		400	1	V	296854
2051 – 2250	2351 – 2400	600 KU	1	V	337711
		600 KU	1	V	337711
		600 [29]	1	V	296855
2251 – 2400	–	600 KU	1	V	337711
		600 KU	1	V	337711
		600 KU	1	V	337711
		200	1	V	296853

[27] Crop CL by 15 mm up to SRH 861; when using load transfer: crop CL by 15 mm with SRH 1151

[28] Crop CL by 15 mm up to SRH 1461; when using load transfer: crop CL by 15 mm with SRH 1751

[29] Crop CL by 15 mm up to SRH 2061; when using load transfer: crop CL by 15 mm with SRH 2351

[19] Multipart centre lock – security, horizontal

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

Size-specific combinations:

					№
Without turn restrictor	With turn restrictor				
450 – 650	801 – 850	200	1	V	296853
651 – 850	851 – 1050	400	1	V	296854
851 – 1000	1051 – 1250	600 [30]	1	V	296855
–	1251 – 1400	600 KU	1	V	337711
		200	1	V	296853

[24] Security striker → *from page 160*

[28] Tilt striker → *from page 154*

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

	№
Bullet catch sash component	788363

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

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

[33] Lifting mishandling device sash component

	№
Sash component for lifting mishandling device	795927

[35] Turn-Only sash stay guide – security

					№
330 – 600	250	490	–	–	385393
601 – 800	250	690	–	–	2003336

[36] Stay guide – security

					№
330 – 600	490	250	–	–	385393
601 – 800	690	350	–	–	385394
801 – 1000	890	500	1	V	450373
1001 – 1200	1090	500	1	V	450374

For use from SRW 450 mm

[38] Stay arm → *from page 144*

INFO
With SRH < 600 mm, set the tilt depth to 80 mm.

[44] Corner hinge

	№
Corner hinge – Designo hinge side (HA 13)	634705

[45] Pivot rest → *from page 153*

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

		№
Frame and sash component	200	255237

[49] Packer → *from page 166*

[50] Load transfer sash component (SRW ≥ 801 mm, SRH ≥ 1001 mm)

	№
max. 150 kg	567972

[51] Load transfer frame component (SRW ≥ 801 mm, SRH ≥ 1001 mm)

	№
max. 150 kg	565254

[53] Drilling protection

	№
Drilling protection	797819

[54] Handle, lockable → CTL_1

[61] Turn restrictor 198, sash component

	№
Designo hinge side	485591

[62] Turn restrictor frame component → *from page 171*

[80] Fastening plate

	№
Fastening plate with cam	255211

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

[81] Run-up block

			№
Rebate run-up block	Frame	Insertable	609211

[82] Anti-jemmy device

		№
Anti-jemmy device	From rebate depth 26 mm	811715

[30] Crop CL by 15 mm up to SRW 854; when using a turn restrictor: crop CL by 15 mm up to SRH 1053

Optional

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

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

[46] Pivot rest cover			
			№
Pivot rest cover – Designo hinge side	Clampable	Left	799664
		Right	799789

INFO
Horizontal rebate clearance at the bottom 11 – 14 mm.

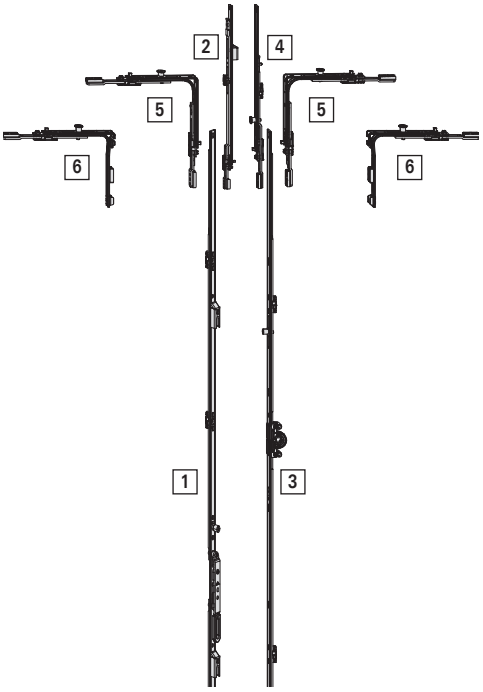
5 T&T espagnolette / floating-mullion sash espagnolette

5.1 Floating-mullion sash espagnolette

5.1.1 Standard

5.1.1.1 VT – fixed handle height

Possible combinations



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

Determining the espagnolettes

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

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

2. Select the lever-operated espagnolette, standard VT [1] using the *sash rebate height (SRH)* and *length of the component*.
   Optional: determine the floating-mullion centre lock [2].

3. Select the T&T espagnolette, VT – fixed handle height [3] using the *length of the component*.
   - ☐ T&T espagnolette, VT – fixed handle height, backset 8 mm
   - ☐ T&T espagnolette, VT – fixed handle height, backset 15 mm
   - ☐ T&T espagnolette, VT – fixed handle height, backset 25, 30, 35, 40, 45, 50 mm

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

Backset 8 mm

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

INFO
A centre lock is required from SRH 2401 mm.

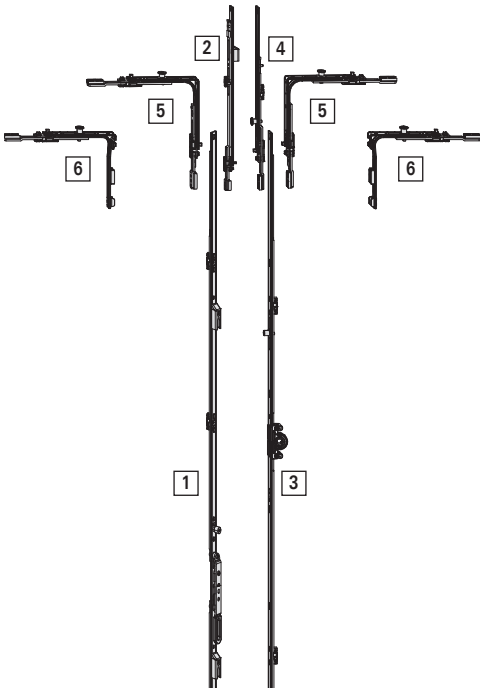
Backset of 15 mm and above

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

INFO
A centre lock is required from SRH 2401 mm.

5.1.1.2 Fixed handle height

Possible combinations



Assignment	Meaning
[1]	Lever-operated espagnolette Standard
[2]	Floating-mullion centre lock
[3]	T&T espagnolette – 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 [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 – fixed handle height [3] using the *length of the component*
   - T&T espagnolette – fixed handle height, backset 8 mm
   - T&T espagnolette – fixed handle height, backset 15 mm
   - T&T espagnolette – 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			T&T espagnolette			
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	195	Corner drive, standard	690	263	N	Corner drive, standard
801 – 1000	890	195	Corner drive, standard	890	413	Y	Corner drive, standard
1001 – 1200	1090	335	Corner drive, standard	1090	513	Y	Corner drive, standard
1201 – 1400	1290	335	Corner drive, standard	1290	563	Y	Corner drive, standard
1401 – 1600	1490	335	Corner drive, standard	1490	563	Y	Corner drive, standard
1601 – 1800	1690	335	Corner drive, standard	1690	563 / 1000	Y	Corner drive, standard
1801 – 2000	1890	640	Corner drive, standard	1890	1000	Y	Corner drive, standard
2001 – 2200	2090	640	Corner drive, standard	2090	1000	Y	Corner drive, standard
2201 – 2400	2290	640	Corner drive, standard	2290	1000	Y	Corner drive, standard

INFO
A centre lock is required from SRH 2401 mm.

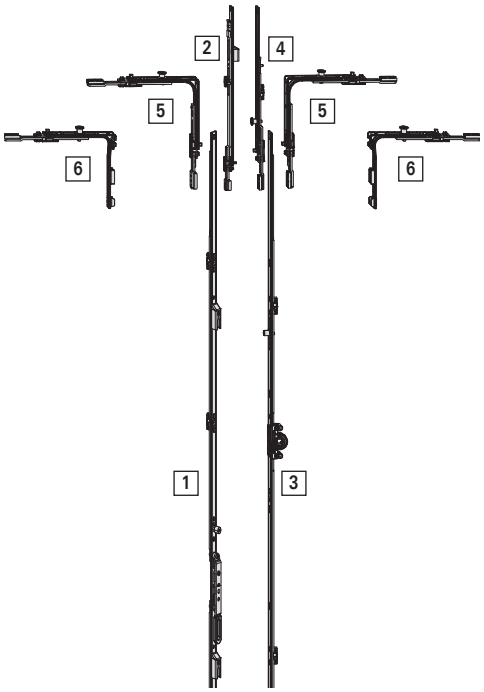
Backset of 15 mm and above

Application range	Lever-operated espagnolette Standard			T&T espagnolette			
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	335	Corner drive, standard	690	263	Y	Corner drive, standard
801 – 1000	890	490	Corner drive, standard	890	413	Y	Corner drive, standard
1001 – 1200	1090	335	Corner drive, standard	1090	513	Y	Corner drive, standard
1201 – 1400	1290	335	Corner drive, standard	1290	563	Y	Corner drive, standard
1401 – 1600	1490	335	Corner drive, standard	1490	563	Y	Corner drive, standard
1601 – 1800	1690	335	Corner drive, standard	1690	563 / 1000	Y	Corner drive, standard
1801 – 2000	1890	640	Corner drive, standard	1890	1000	Y	Corner drive, standard
2001 – 2200	2090	640	Corner drive, standard	2090	1000	Y	Corner drive, standard
2201 – 2400	2290	640	Corner drive, standard	2290	1000	Y	Corner drive, standard

INFO
A centre lock is required from SRH 2401 mm.

5.1.1.3 Centred / variable handle height

Possible combinations



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

Determining the espagnolettes

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

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

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

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

3. Select the T&T espagnolette – centred / variable handle height [3] using the *length of the component*.
   - ☐ T&T espagnolette – centred / variable handle height, backset 8 mm
   - ☐ T&T espagnolette – centred / variable handle height, backset 15 mm
   - ☐ T&T espagnolette – centred / variable handle height, backset 25, 30, 35, 40, 45, 50 mm

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

Backset 8 mm

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

INFO
A centre lock is required from SRH 2401 mm.

Backset of 15 mm and above

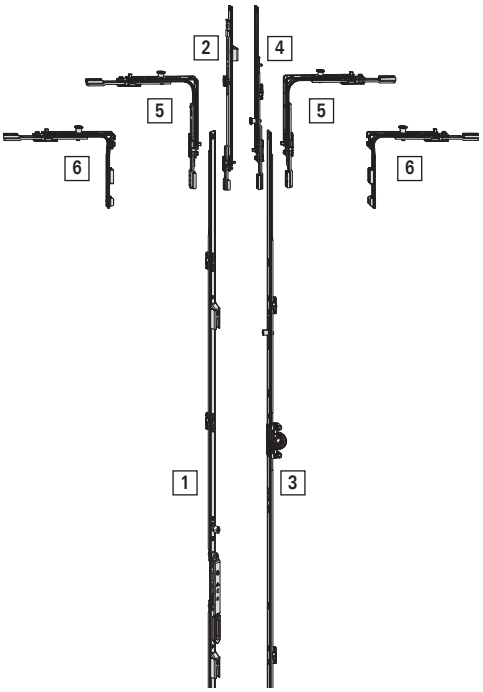
Application range	Lever-operated espagnolette, standard			T&T espagnolette			
SRH	Component length	Toggle lever position	Corner drive type	Component length	Handle height	LMD	Corner drive type
370 – 450	400	255 – 265	Special corner drive, short	430	215 – 225	N	Special corner drive, short
451 – 520		266 – 300	Special corner drive, short		226 – 260	N	Corner drive, standard
521 – 620		301 – 350	Corner drive, standard		261 – 310	N	Corner drive, standard
621 – 650	680	393 – 407	Special corner drive, short	580	311 – 400	Y	Corner drive, standard
651 – 800		408 – 482	Corner drive, standard				
801 – 1200	980	482 – 682	Corner drive, standard	980	401 – 600	Y	Corner drive, standard
1201 – 1600	1380	448 – 648	Corner drive, standard	1380	601 – 800	Y	Corner drive, standard
1601 – 2000	1780	680 – 880	Corner drive, standard	1780	801 – 1000	Y	Corner drive, standard
2001 – 2400	2180	880 – 1080	Corner drive, standard	2180	1001 – 1200	Y	Corner drive, standard

INFO
A centre lock is required from SRH 2401 mm.

5.1.2 Plus

5.1.2.1 VT – fixed handle height

Possible combinations



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

Determining the espagnolettes

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

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

2. Select the lever-operated espagnolette, standard VT [1] using the *sash rebate height (SRH)* and *length of the component*.
   Optional: determine the floating-mullion centre lock [2].

3. Select the T&T espagnolette, VT – fixed handle height [3] using the *length of the component*.
   - T&T espagnolette, VT – fixed handle height, backset 8 mm
   - T&T espagnolette, VT – fixed handle height, backset 15 mm
   - T&T espagnolette, VT – fixed handle height, backset 25, 30, 35, 40, 45, 50 mm

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

Backset 8 mm

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

INFO
A centre lock is required from SRH 2401 mm.

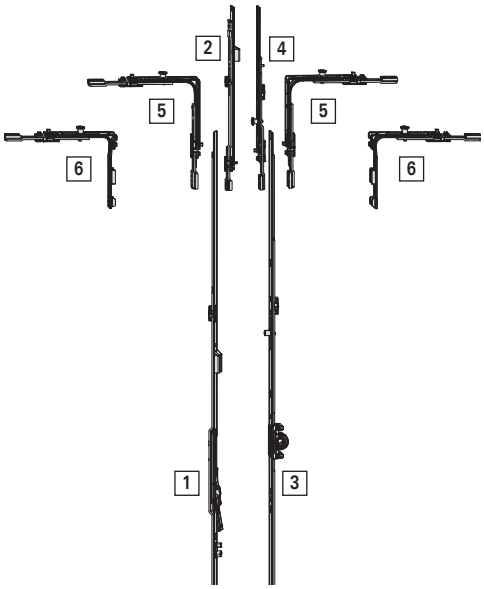
Backset of 15 mm and above

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

INFO
A centre lock is required from SRH 2401 mm.

5.1.2.2 Fixed handle height

Possible combinations



Assignment	Meaning
[1]	Lever-operated espagnolette Plus
[2]	Floating-mullion centre lock
[3]	T&T espagnolette – 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 [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 – fixed handle height [3] using the *length of the component*
   - T&T espagnolette – fixed handle height, backset 8 mm
   - T&T espagnolette – fixed handle height, backset 15 mm
   - T&T espagnolette – fixed handle height, backset 25, 30, 35, 40, 45, 50 mm

   Optional: determine the centre lock, standard [4]

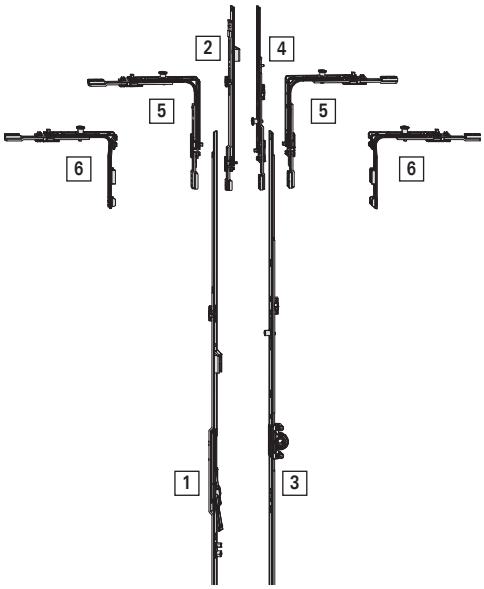
Backset of 8 mm and above

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 – 510	600	144	Special corner drive, short	460	120	N	Corner drive, standard
511 – 600			Corner drive, standard	600	170	Y	Corner drive, standard
601 – 800	690	246	Corner drive, standard	690	263	Y	Corner drive, standard
801 – 1000	890	396	Corner drive, standard	890	413	Y	Corner drive, standard
1001 – 1200	1090	496	Corner drive, standard	1090	513	Y	Corner drive, standard
1201 – 1400	1290	546	Corner drive, standard	1290	563	Y	Corner drive, standard
1401 – 1600	1490	546	Corner drive, standard	1490	563	Y	Corner drive, standard
1601 – 1800	1690	546	Corner drive, standard	1690	563 / 1000	Y	Corner drive, standard
1801 – 2000	1890	546	Corner drive, standard	1890	1000	Y	Corner drive, standard
2001 – 2200	2090	546	Corner drive, standard	2090	1000	Y	Corner drive, standard
2201 – 2400	2290	546	Corner drive, standard	2290	1000	Y	Corner drive, standard

INFO
A centre lock is required from SRH 2401 mm.

5.1.2.3 Centred / variable handle height

Possible combinations



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

Determining the espagnolettes

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

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

2. Select the lever-operated espagnolette Plus [1] using the *sash rebate height (SRH)* and *length of the component*.
   Optional: determine the floating-mullion centre lock [2].

3. Select the T&T espagnolette – centred / variable handle height [3] using the *length of the component*.
   - T&T espagnolette – centred / variable handle height, backset 8 mm
   - T&T espagnolette – centred / variable handle height, backset 15 mm
   - T&T espagnolette – centred / variable handle height, backset 25, 30, 35, 40, 45, 50 mm

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

Backset 8 mm

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

INFO
A centre lock is required from SRH 2401 mm.

Backset of 15 mm and above

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

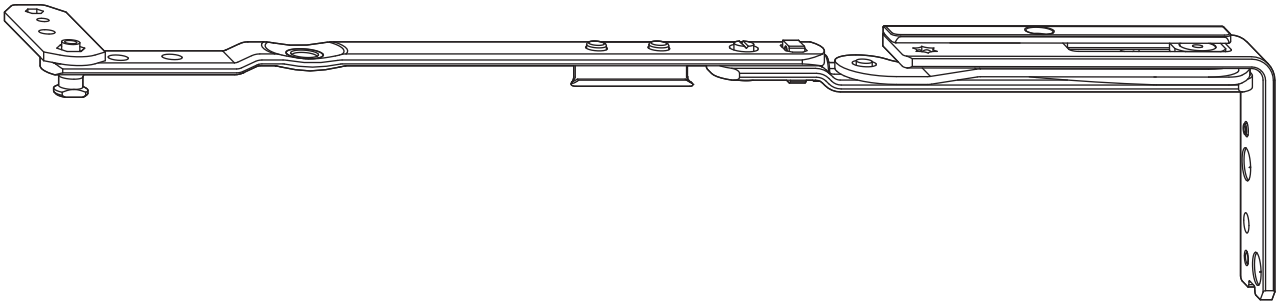
INFO
A centre lock is required from SRH 2401 mm.

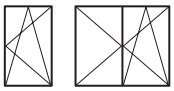
6 Frame components

INFO
Further frame components are available upon request.

6.1 Stay arm

6.1.1 Standard – stay arm 250

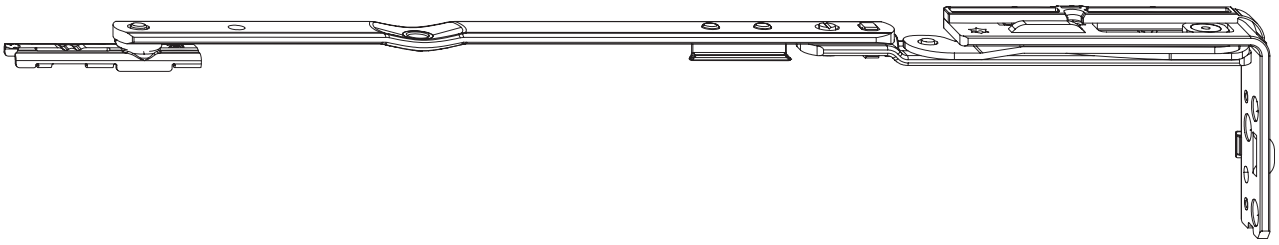


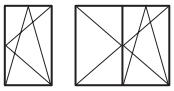


Aluplast Ideal 2000	250	Roto Sil	Left	623968
	250	Roto Sil	Right	623967
Aluplast Ideal 4000 Aluplast Ideal 5000 Aluplast Ideal 8000 Schüco Corona MD Aluplast energeto 5000 view Aluplast energeto 7000 Aluplast Ideal 7000	250	Roto Sil	Left	628938
	250	Roto Sil	Right	628937
Brügmann AD 13 Brügmann MD 13 Veka Alphaline 90 Veka Softline 70 AD Veka Softline 70 MD Veka Softline 82 MD Veka Topline AD 13 Veka Topline MD 13 Salamander BluEvolution 73 Salamander BluEvolution 82 Salamander GreenEvolution 76 Veka Softline 76 AD Veka Softline 76 MD	250	Roto Sil	Left	635229
Brügmann AD 13 Brügmann MD 13 Veka Alphaline 90 Veka Softline 70 AD Veka Softline 70 MD Veka Softline 82 MD Veka Topline AD 13 Veka Topline MD 13 Brügmann AD 73 Salamander BluEvolution 82 Salamander GreenEvolution 76 Veka Softline 76 AD Veka Softline 76 MD	250	Roto Sil	Right	635228
Deceuninck Eforte Deceuninck Prestige Inoutic AD 13 Inoutic MD 100	250	Roto Sil	Left	635396
	250	Roto Sil	Right	635395

Deceuninck Elegant Deceuninck Legend KBE 76 KBE 88 MD Kömmerling 76 Kömmerling 88 MD Trocal 76 Trocal 88 MD	250	Roto Sil	Left	812024
	250	Roto Sil	Right	812023
Deceuninck Zendow KBE 70 AD	250	Roto Sil	Left	623948
	250	Roto Sil	Right	623947
Gealan Kubus	250	Roto Sil	Left	807532
	250	Roto Sil	Right	807531
Gealan S3000 Gealan S7000 Gealan S8000	250	Roto Sil	Left	606334
	250	Roto Sil	Right	606326
Kömmerling 88 Plus Kömmerling Eurodur 3S Kömmerling Eurofutur Classic Kömmerling Eurofutur Elegance	250	Roto Sil	Left	606347
	250	Roto Sil	Right	606346
Rehau S 735 MD Rehau S 788 Rehau S 799 Brillant Design (S 730)	250	Roto Sil	Left	610950
	250	Roto Sil	Right	610949
Rehau S 980 Geneo	250	Roto Sil	Left	606364
	250	Roto Sil	Right	606363
Salamander 2D Salamander 3D Salamander Streamline 76	250	Roto Sil	Left	635510
	250	Roto Sil	Right	635509
Salamander BluEvolution 92	250	Roto Sil	Left	635620
	250	Roto Sil	Right	635619
Schüco Corona CT70 AD Schüco Corona CT70 MD Schüco Corona SI82 MD	250	Roto Sil	Left	764817
	250	Roto Sil	Right	764816

6.1.2 Standard – stay arm 350

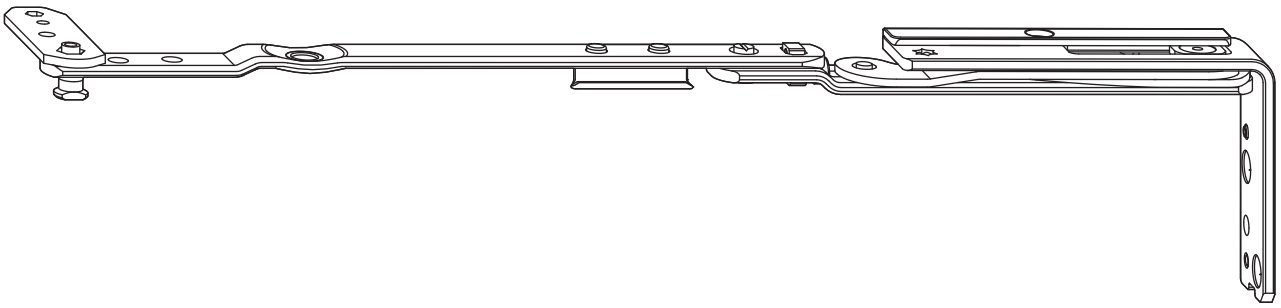


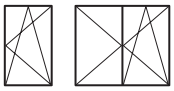


Aluplast Ideal 2000	350	Roto Sil	Left	623970
	350	Roto Sil	Right	623969
Aluplast Ideal 4000 Aluplast Ideal 5000 Aluplast Ideal 8000 Schüco Corona MD Aluplast energeto 5000 view Aluplast energeto 7000 Aluplast Ideal 7000	350	Roto Sil	Left	628941
	350	Roto Sil	Right	628939

Brügmann AD 13 Brügmann MD 13 Veka Alphaline 90 Veka Softline 70 AD Veka Softline 70 MD Veka Softline 82 MD Veka Topline AD 13 Veka Topline MD 13 Salamander BluEvolution 73 Salamander BluEvolution 82 Salamander GreenEvolution 76 Veka Softline 76 AD Veka Softline 76 MD	350	Roto Sil	Left	635231
	350	Roto Sil	Right	635230
Deceuninck Eforte Deceuninck Prestige Inoutic AD 13 Inoutic MD 100	350	Roto Sil	Left	635398
	350	Roto Sil	Right	635397
Deceuninck Elegant Deceuninck Legend KBE 76 KBE 88 MD Kömmerling 76 Kömmerling 88 MD Trocal 76 Trocal 88 MD	350	Roto Sil	Left	812066
	350	Roto Sil	Right	812065
Deceuninck Zendow KBE 70 AD	350	Roto Sil	Left	623950
	350	Roto Sil	Right	623949
Gealan Kubus	350	Roto Sil	Left	807534
	350	Roto Sil	Right	807533
Gealan S3000 Gealan S7000 Gealan S8000	350	Roto Sil	Left	606336
	350	Roto Sil	Right	606335
Kömmerling 88 Plus Kömmerling Eurodur 3S Kömmerling Eurofutur Classic Kömmerling Eurofutur Elegance	350	Roto Sil	Left	606349
	350	Roto Sil	Right	606348
Rehau S 735 MD Rehau S 788 Rehau S 799 Brillant Design (S 730)	350	Roto Sil	Left	610952
	350	Roto Sil	Right	610951
Rehau S 980 Geneo	350	Roto Sil	Left	606366
	350	Roto Sil	Right	606365
Salamander 2D Salamander 3D Salamander Streamline 76	350	Roto Sil	Left	635512
	350	Roto Sil	Right	635511
Salamander BluEvolution 92	350	Roto Sil	Left	635622
	350	Roto Sil	Right	635621
Schüco Corona CT70 AD Schüco Corona CT70 MD Schüco Corona SI82 MD	350	Roto Sil	Left	764819
	350	Roto Sil	Right	764818

6.1.3 Standard – stay arm 500

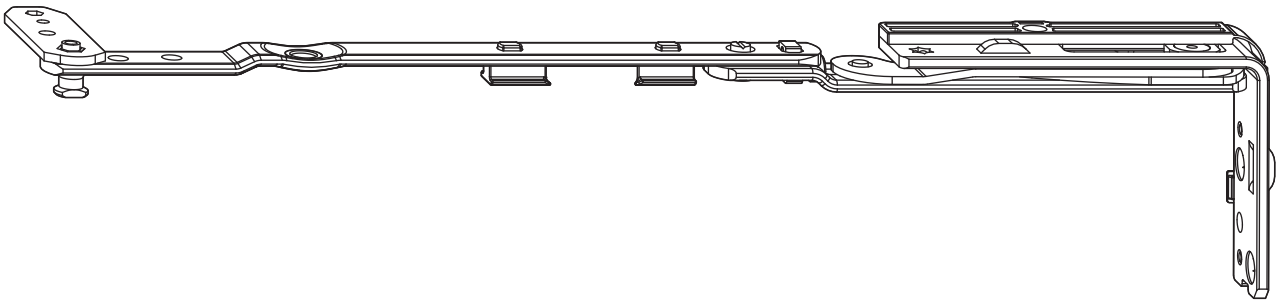


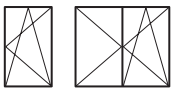


				№
Aluplast Ideal 2000	500	Roto Sil	Left	623972
	500	Roto Sil	Right	623971
Aluplast Ideal 4000 Aluplast Ideal 5000 Aluplast Ideal 8000 Schüco Corona MD Aluplast energeto 5000 view Aluplast energeto 7000 Aluplast Ideal 7000	500	Roto Sil	Left	628948
	500	Roto Sil	Right	628947
Brügmann AD 13 Brügmann MD 13 Veka Alphaline 90 Veka Softline 70 AD Veka Softline 70 MD Veka Softline 82 MD Veka Topline AD 13 Veka Topline MD 13 Salamander BluEvolution 73 Salamander BluEvolution 82 Salamander GreenEvolution 76 Veka Softline 76 AD Veka Softline 76 MD	500	Roto Sil	Left	635233
	500	Roto Sil	Right	635232
Deceuninck Eforte Deceuninck Prestige Inoutic AD 13 Inoutic MD 100	500	Roto Sil	Left	635400
	500	Roto Sil	Right	635399
Deceuninck Elegant Deceuninck Legend KBE 76 KBE 88 MD Kömmerling 76 Kömmerling 88 MD Trocal 76 Trocal 88 MD	500	Roto Sil	Left	812068
	500	Roto Sil	Right	812067
Deceuninck Zendow KBE 70 AD	500	Roto Sil	Left	623952
	500	Roto Sil	Right	623951
Gealan Kubus	500	Roto Sil	Left	807536
	500	Roto Sil	Right	807535
Gealan S3000 Gealan S7000 Gealan S8000	500	Roto Sil	Left	606339
	500	Roto Sil	Right	606338
Kömmerling 88 Plus Kömmerling Eurodur 3S Kömmerling Eurofutur Classic Kömmerling Eurofutur Elegance	500	Roto Sil	Left	606353
	500	Roto Sil	Right	606352
Rehau S 735 MD Rehau S 788 Rehau S 799 Brillant Design (S 730)	500	Roto Sil	Left	610954
	500	Roto Sil	Right	610953
Rehau S 980 Geneo	500	Roto Sil	Left	606369
	500	Roto Sil	Right	606367

Salamander 2D Salamander 3D Salamander Streamline 76	500	Roto Sil	Left	635514
	500	Roto Sil	Right	635513
Salamander BluEvolution 92	500	Roto Sil	Left	635624
	500	Roto Sil	Right	635623
Schüco Corona CT70 AD Schüco Corona CT70 MD Schüco Corona SI82 MD	500	Roto Sil	Left	764821
	500	Roto Sil	Right	764820

6.1.4 TiltFirst (TF) – stay arm 250

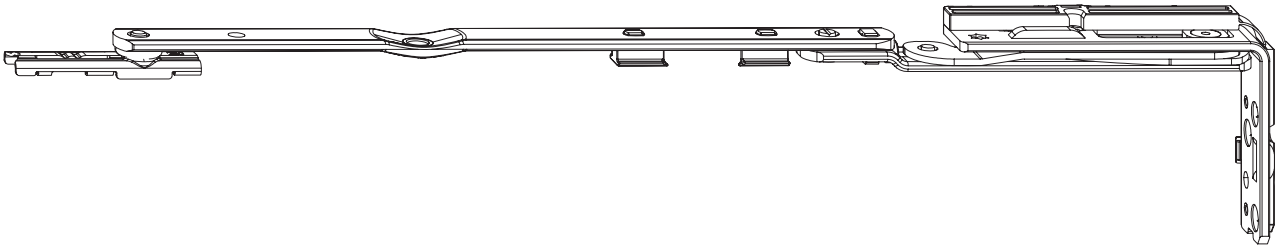


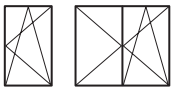


Aluplast Ideal 2000	250	Roto Sil	Left	643271
	250	Roto Sil	Right	643270
Aluplast Ideal 4000 Aluplast Ideal 5000 Aluplast Ideal 8000 Schüco Corona MD Aluplast energeto 5000 view Aluplast energeto 7000 Aluplast Ideal 7000	250	Roto Sil	Left	643247
	250	Roto Sil	Right	643246
Brügmann AD 13 Brügmann MD 13 Veka Alphaline 90 Veka Softline 70 AD Veka Softline 70 MD Veka Softline 82 MD Veka Topline AD 13 Veka Topline MD 13 Salamander BluEvolution 73 Salamander BluEvolution 82 Salamander GreenEvolution 76	250	Roto Sil	Left	643277
	250	Roto Sil	Right	643276
Deceuninck Eforte Deceuninck Prestige Inoutic AD 13 Inoutic MD 100	250	Roto Sil	Left	643259
	250	Roto Sil	Right	643258
Deceuninck Elegant Deceuninck Legend KBE 76 KBE 88 MD Kömmerling 76 Kömmerling 88 MD Trocal 76 Trocal 88 MD	250	Roto Sil	Left	757738
	250	Roto Sil	Right	757737
Deceuninck Zendow KBE 70 AD	250	Roto Sil	Left	643253
	250	Roto Sil	Right	643252
Gealan S3000 Gealan S7000 Gealan S8000	250	Roto Sil	Left	638965
	250	Roto Sil	Right	638944

Kömmerling 88 Plus Kömmerling Eurodur 3S Kömmerling Eurofutur Classic Kömmerling Eurofutur Elegance	250	Roto Sil	Left	643265
	250	Roto Sil	Right	643264
Rehau S 735 MD Rehau S 788 Rehau S 799 Brillant Design (S 730)	250	Roto Sil	Left	640572
	250	Roto Sil	Right	640573
Rehau S 980 Geneo	250	Roto Sil	Left	640566
	250	Roto Sil	Right	640567
Schüco Corona CT70 AD Schüco Corona CT70 MD Schüco Corona SI82 MD	250	Roto Sil	Left	764825
	250	Roto Sil	Right	764824
Veka Softline 70 MD	250	Roto Sil	Left	636481
	250	Roto Sil	Right	636480

6.1.5 TiltFirst (TF) – stay arm 350

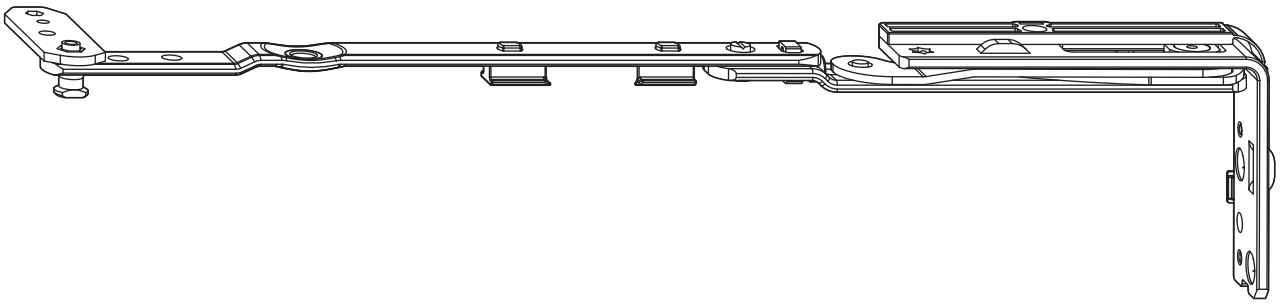


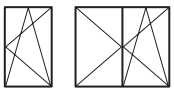


Aluplast Ideal 2000	350	Roto Sil	Left	643273
	350	Roto Sil	Right	643272
Aluplast Ideal 4000	350	Roto Sil	Left	643249
Aluplast Ideal 5000 Aluplast Ideal 8000 Schüco Corona MD Aluplast energeto 5000 view Aluplast energeto 7000 Aluplast Ideal 7000	350	Roto Sil	Right	643248
Brügmann AD 13	350	Roto Sil	Left	643279
Brügmann MD 13 Veka Alphaline 90 Veka Softline 70 AD Veka Softline 70 MD Veka Softline 82 MD Veka Topline AD 13 Veka Topline MD 13 Salamander BluEvolution 73 Salamander BluEvolution 82 Salamander GreenEvolution 76	350	Roto Sil	Right	643278
Deceuninck Eforte	350	Roto Sil	Left	643261
Deceuninck Prestige Inoutic AD 13 Inoutic MD 100	350	Roto Sil	Right	643260
Deceuninck Elegant	350	Roto Sil	Left	757740
Deceuninck Legend KBE 76 KBE 88 MD Kömmerling 76 Kömmerling 88 MD Trocal 76 Trocal 88 MD	350	Roto Sil	Right	757739
Deceuninck Zendow KBE 70 AD	350	Roto Sil	Left	643255
	350	Roto Sil	Right	643254

Gealan S3000 Gealan S7000 Gealan S8000	350	Roto Sil	Left	638967
	350	Roto Sil	Right	638966
Kömmerling 88 Plus Kömmerling Eurodur 3S Kömmerling Eurofutur Classic Kömmerling Eurofutur Elegance	350	Roto Sil	Left	643267
	350	Roto Sil	Right	643266
Rehau S 735 MD Rehau S 788 Rehau S 799 Brillant Design (S 730)	350	Roto Sil	Left	640574
	350	Roto Sil	Right	640575
Rehau S 980 Geneo	350	Roto Sil	Left	640568
	350	Roto Sil	Right	640569
Schüco Corona CT70 AD Schüco Corona CT70 MD Schüco Corona SI82 MD	350	Roto Sil	Left	764827
	350	Roto Sil	Right	764826
Veka Softline 70 MD	350	Roto Sil	Left	636484
	350	Roto Sil	Right	636483

6.1.6 TiltFirst (TF) – stay arm 500



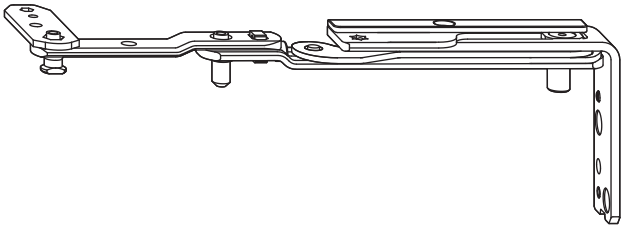


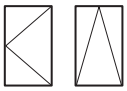
Aluplast Ideal 2000	500	Roto Sil	Left	643275
	500	Roto Sil	Right	643274
Aluplast Ideal 4000 Aluplast Ideal 5000 Aluplast Ideal 8000 Schüco Corona MD Aluplast energeto 5000 view Aluplast energeto 7000 Aluplast Ideal 7000	500	Roto Sil	Left	643251
	500	Roto Sil	Right	643250
Brügmann AD 13 Brügmann MD 13 Veka Alphaline 90 Veka Softline 70 AD Veka Softline 70 MD Veka Softline 82 MD Veka Topline AD 13 Veka Topline MD 13 Salamander BluEvolution 73 Salamander BluEvolution 82 Salamander GreenEvolution 76	500	Roto Sil	Left	643281
	500	Roto Sil	Right	643280
Deceuninck Eforte Deceuninck Prestige Inoutic AD 13 Inoutic MD 100	500	Roto Sil	Left	643263
	500	Roto Sil	Right	643262

Deceuninck Elegant	500	Roto Sil	Left	757742
Deceuninck Legend KBE 76 KBE 88 MD Kömmerling 76 Kömmerling 88 MD Trocal 76 Trocal 88 MD	500	Roto Sil	Right	757741
Deceuninck Zendow KBE 70 AD	500	Roto Sil	Left	643257
	500	Roto Sil	Right	643256
Gealan S3000 Gealan S7000 Gealan S8000	500	Roto Sil	Left	638969
	500	Roto Sil	Right	638968
Kömmerling 88 Plus Kömmerling Eurodur 3S Kömmerling Eurofutur Classic Kömmerling Eurofutur Elegance	500	Roto Sil	Left	643269
	500	Roto Sil	Right	643268
Rehau S 735 MD Rehau S 788 Rehau S 799 Brillant Design (S 730)	500	Roto Sil	Left	640576
	500	Roto Sil	Right	640577
Rehau S 980 Geneo	500	Roto Sil	Left	640570
	500	Roto Sil	Right	640571
Schüco Corona CT70 AD Schüco Corona CT70 MD Schüco Corona SI82 MD	500	Roto Sil	Left	764829
	500	Roto Sil	Right	764828
Veka Softline 70 MD	500	Roto Sil	Left	636516
	500	Roto Sil	Right	636515

6.2 Rebate stay arm

6.2.1 Standard





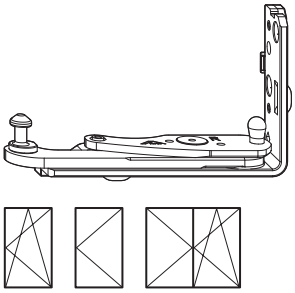
Aluplast Ideal 2000	Roto Sil	Left	623966
	Roto Sil	Right	623965
Aluplast Ideal 4000 Aluplast Ideal 5000 Aluplast Ideal 8000 Schüco Corona MD Aluplast energeto 5000 view Aluplast energeto 7000 Aluplast Ideal 7000	Roto Sil	Left	628936
	Roto Sil	Right	628914

Brügmann AD 13 Brügmann MD 13 Veka Alphaline 90 Veka Softline 70 AD Veka Softline 70 MD Veka Softline 82 MD Veka Topline AD 13 Veka Topline MD 13 Salamander BluEvolution 73 Salamander BluEvolution 82 Salamander GreenEvolution 76 Veka Softline 76 AD Veka Softline 76 MD	Roto Sil	Left	635227
	Roto Sil	Right	635226
Deceuninck Eforte Deceuninck Prestige Inoutic AD 13 Inoutic MD 100	Roto Sil	Left	635274
	Roto Sil	Right	635273
Deceuninck Elegant Deceuninck Legend KBE 76 KBE 88 MD Kömmerling 76 Kömmerling 88 MD Trocal 76 Trocal 88 MD	Roto Sil	Left	812022
	Roto Sil	Right	812021
Deceuninck Zendow KBE 70 AD	Roto Sil	Left	623946
	Roto Sil	Right	623945
Gealan Kubus	Roto Sil	Left	807530
	Roto Sil	Right	807529
Gealan S3000 Gealan S7000 Gealan S8000	Roto Sil	Left	606325
	Roto Sil	Right	606324
Kömmerling 88 Plus Kömmerling Eurodur 3S Kömmerling Eurofutur Classic Kömmerling Eurofutur Elegance	Roto Sil	Left	606345
	Roto Sil	Right	606344
Rehau S 735 MD Rehau S 788 Rehau S 799 Brillant Design (S 730)	Roto Sil	Left	610948
	Roto Sil	Right	610947
Rehau S 980 Geneo	Roto Sil	Left	606362
	Roto Sil	Right	606361
Salamander 2D Salamander 3D Salamander Streamline 76	Roto Sil	Left	635508
	Roto Sil	Right	635507
Salamander BluEvolution 92	Roto Sil	Left	635618
	Roto Sil	Right	635617
Schüco Corona CT70 AD Schüco Corona CT70 MD Schüco Corona SI82 MD	Roto Sil	Left	764815
	Roto Sil	Right	764794
Veka Alphaline 90 Veka Softline 70 AD Veka Softline 70 MD	Roto Sil	Left	606388
	Roto Sil	Right	606387

For the compatible rebate stay guide, see → *from page 32*.

6.3 Pivot rests

6.3.1 Standard



Aluplast Ideal 2000	Roto Sil	Left	623974
	Roto Sil	Right	623973
Aluplast Ideal 4000 Aluplast Ideal 5000 Aluplast Ideal 8000 Schüco Corona MD Aluplast energeto 5000 view Aluplast energeto 7000 Aluplast Ideal 7000	Roto Sil	Left	628950
	Roto Sil	Right	628949
Brügmann AD 13 Brügmann MD 13 Veka Alphaline 90 Veka Softline 70 AD Veka Softline 70 MD Veka Softline 82 MD Veka Topline AD 13 Veka Topline MD 13 Salamander BluEvolution 73 Salamander BluEvolution 82 Salamander GreenEvolution 76 Veka Softline 76 AD Veka Softline 76 MD	Roto Sil	Left	635235
	Roto Sil	Right	635234
Deceuninck Eforte Deceuninck Prestige Inoutic AD 13 Inoutic MD 100	Roto Sil	Left	635402
	Roto Sil	Right	635401
Deceuninck Elegant Deceuninck Legend KBE 76 KBE 88 MD Kömmerling 76 Kömmerling 88 MD Trocal 76 Trocal 88 MD	Roto Sil	Left	757736
	Roto Sil	Right	757735
Deceuninck Zendow KBE 70 AD	Roto Sil	Left	623953
	Roto Sil	Right	623954
Gealan Kubus	Roto Sil	Left	807528
	Roto Sil	Right	807527
Gealan S3000 Gealan S7000 Gealan S8000	Roto Sil	Left	606343
	Roto Sil	Right	606341
Kömmerling 88 Plus Kömmerling Eurodur 3S Kömmerling Eurofutur Classic Kömmerling Eurofutur Elegance	Roto Sil	Left	606355
	Roto Sil	Right	606354
Rehau S 735 MD Rehau S 788 Rehau S 799 Brillant Design (S 730)	Roto Sil	Left	610966
	Roto Sil	Right	610965
Rehau S 980 Geneo	Roto Sil	Left	606371
	Roto Sil	Right	606370
Salamander 2D Salamander 3D	Roto Sil	Left	635616
	Roto Sil	Right	635615

Salamander BluEvolution 92	Roto Sil	Left	635626
	Roto Sil	Right	635625
Schüco Corona CT70 AD Schüco Corona CT70 MD Schüco Corona SI82 MD	Roto Sil	Left	764823
	Roto Sil	Right	764822
Veka Softline 70 MD Salamander ProEvolution 72	Roto Sil	Left	606397
	Roto Sil	Right	606396

For compatible corner hinges, see → *from page 32*.

For compatible load transfer, see → *from page 32*.

6.4 Tilt strikers

6.4.1 Standard

6.4.1.1 Zinc

A B

Assignment	Meaning	Security
[A]	With base	RC 1 N, RC 2 / RC 2 N
[B]	Without base	Basic security

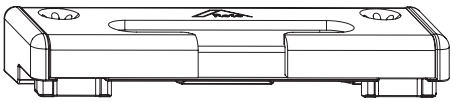
Aluplast Ideal 2000 Schüco Corona CT70 MD Schüco Corona SI82 MD LB Profile Pad Schüco LivIng 82	13	N	Roto Sil	–	331487
	13	Y	Roto Sil	Left	260501
	13	Y	Roto Sil	Right	260502
Aluplast Ideal 4000 Aluplast Ideal 5000 Schüco Corona AD Aluplast energeto 5000 Aluplast energeto 5000 view Aluplast energeto 7000 Aluplast energeto 8000 Aluplast Ideal 8000 Aluplast Ideal 7000	13	N	Roto Sil	–	350190
	13	Y	Roto Sil	Left	257364
	13	Y	Roto Sil	Right	257365
Brügmann AD 13 Brügmann MD 13	13	Y	Roto Sil	Left	292195
	13	Y	Roto Sil	Right	292196
Deceuninck Eforte Deceuninck Prestige AD Inoutic AD 13 Inoutic MD 100	13	Y	Roto Sil	Left	260499
	13	Y	Roto Sil	Right	260500
Deceuninck Zendow Deceuninck Elegant Deceuninck Legend	13	Y	Roto Sil	Left	370073
	13	Y	Roto Sil	Right	370074
Deceuninck Klassiek Deceuninck Mondial VK	13	Y	Roto Sil	Left	281599
	13	Y	Roto Sil	Right	281600
Deceuninck Prestige MD Inoutic AD 13	13	N	Roto Sil	–	729039
Deceuninck Prestige MD	13	Y	Roto Sil	Left	288117
	13	Y	Roto Sil	Right	288118
Gealan Kubus	13	N	Roto Sil	–	807518
	13	Y	Roto Sil	Left	807515
	13	Y	Roto Sil	Right	807516

					№
Gealan S3000 Gealan S7000 Gealan S8000 Gealan S9000 Gealan Linear	13	N	Roto Sil	–	367200
	13	Y	Roto Sil	Left	260497
	13	Y	Roto Sil	Right	260498
KBE 70 AD KBE 70 MD	13	N	Roto Sil	–	338071
	13	Y	Roto Sil	Left	289973
	13	Y	Roto Sil	Right	289974
KBE 76 Kömmerling 76 Panorama 3000 Trocal 76 KBE 88 MD Kömmerling 88 MD Trocal 88 MD	13	N	Roto Sil	–	738472
	13	Y	Roto Sil	Left	780787
	13	Y	Roto Sil	Right	780788
KBE AD	9	Y	Roto Sil	Left	260493
	9	Y	Roto Sil	Right	260494
KBE MD Trocal S900	9	Y	Roto Sil	Left	260505
	9	Y	Roto Sil	Right	260506
Kömmerling 88 Plus Kömmerling Eurofutur Classic Kömmerling Eurofutur Elegance	13	N	Roto Sil	–	334954
Kömmerling Eurodur 3S	13	Y	Roto Sil	Left	260489
	13	Y	Roto Sil	Right	260490
Panorama 2000	9	Y	Roto Sil	Left	261794
	9	Y	Roto Sil	Right	281710
Plus Plan Plus Tec	13	Y	Roto Sil	Left	264420
	13	Y	Roto Sil	Right	264421
Rehau S 735 MD Rehau S 788 Rehau S 799 Brillant Design (S 730) Rehau S 969 Synego Rehau S 986 EuroDesign 86	13	N	Roto Sil	–	338021
Rehau S 735 MD Rehau S 788 Rehau S 799 Brillant Design (S 730) Rehau S 986 EuroDesign 86	13	Y	Roto Sil	Left	316939
	13	Y	Roto Sil	Right	316940
Rehau S 980 Geneo	13	Y	Roto Sil	Left	496018
	13	Y	Roto Sil	Right	496017
Roplasto 4K Roplasto 7001 AD Roplasto 7001 MD	13	Y	Roto Sil	Left	260507
	13	Y	Roto Sil	Right	260508
Salamander 2D Salamander 3D Salamander Streamline 76	13	N	Roto Sil	–	561212
	13	Y	Roto Sil	Left	261724
	13	Y	Roto Sil	Right	261725
Schüco Corona CT70 AD Veka Alphaline 90 Veka Softline 70 AD Veka Softline 70 MD Salamander BluEvolution 73 Salamander BluEvolution 82 Salamander GreenEvolution 76 Veka Softline 82 MD Veka Softline 76 AD Veka Softline 76 MD	13	N	Roto Sil	–	338019
Schüco Corona CT70 AD Veka Softline 70 AD Veka Softline 70 MD Salamander BluEvolution 73 Salamander BluEvolution 82 Salamander GreenEvolution 76 Veka Softline 76 AD Veka Softline 76 MD	13	Y	Roto Sil	Left	256783
	13	Y	Roto Sil	Right	256784
Salamander BluEvolution 92	13	N	Roto Sil	–	604887
	13	Y	Roto Sil	Left	599778
	13	Y	Roto Sil	Right	599779
Trocal 88+ Trocal InnoNova 2000	13	Y	Roto Sil	Left	290131
	13	Y	Roto Sil	Right	290152

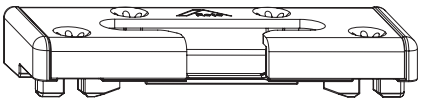
Trocal InnoNova 70.A5 AD Trocal InnoNova 70.M5 MD	13	N	Roto Sil	–	336808
Veka Softline AD 9	9	Y	Roto Sil	Left	260495
	9	Y	Roto Sil	Right	260496
Wymar 2500	13	Y	Roto Sil	Left	254468
	13	Y	Roto Sil	Right	294893
Wymar 3000	13	Y	Roto Sil	Left	373964
	13	Y	Roto Sil	Right	373963

INFO
Other versions are available upon request.

6.4.1.2 Steel



A



B

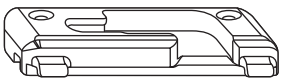
Assignment	Meaning
[A]	Hardware axis 9 mm
[B]	Hardware axis 13 mm

Aluplast Ideal 2000 Schüco Corona CT70 MD Schüco Corona SI82 MD Schüco LivIng 82 Veka Softline 82 MD	13	Y	Roto Sil	–	856773
Aluplast energeto 5000 Aluplast energeto 5000 view Aluplast energeto 7000 Aluplast Ideal 4000 Aluplast energeto 8000 Aluplast Ideal 5000 Aluplast Ideal 7000 Aluplast Ideal 8000 Schüco Corona AD	13	Y	Roto Sil	–	856789
Brügmann AD 13 Brügmann MD 13	13	Y	Roto Sil	–	856786
Inoutic AD 13 Deceuninck Eforte Inoutic MD 100 Deceuninck Prestige AD	13	Y	Roto Sil	–	856797
Deceuninck Elegant Deceuninck Legend Deceuninck Zendow	13	Y	Roto Sil	–	856783
Gealan Linear Gealan S3000 Gealan S7000 Gealan S8000 Gealan S9000	13	Y	Roto Sil	–	856781
KBE AD	9	Y	Roto Sil	–	856800
KBE 70 AD	13	Y	Roto Sil	–	856787
KBE 76 KBE 88 MD Kömmerling 76 Kömmerling 88 MD Trocal 76 Trocal 88 MD	13	Y	Roto Sil	–	856799

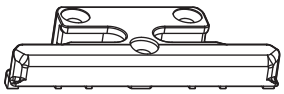
Kömmerling 88 Plus Kömmerling Eurofutur Classic Kömmerling Eurofutur Elegance	13	Y	Roto Sil	–	857009
Kömmerling Eurodur 3S Kömmerling Eurofutur Classic Kömmerling Eurofutur Elegance Wymar 3000	13	Y	Roto Sil	–	857008
Plus Plan Plus Tec Roplasto 4K Roplasto 7001 AD Roplasto 7001 MD	13	Y	Roto Sil	–	856788
Rehau S 735 MD Rehau S 788 Rehau S 799 Brillant Design (S 730) Rehau S 969 Synego Rehau S 980 Geneo Rehau S 986 EuroDesign 86	13	Y	Roto Sil	–	856785
Salamander BluEvolution 73 Salamander BluEvolution 82 Schüco Corona CT70 AD Veka Softline 70 AD Veka Softline 76 AD Veka Softline 76 MD Veka Softline 82 MD Veka Topline AD 13 Veka Topline MD 13	13	Y	Roto Sil	–	856782
Salamander Design 2D Salamander Design 3D Salamander Streamline 76	13	Y	Roto Sil	–	857131
Salamander GreenEvolution 76	13	Y	Roto Sil	–	897733
Schüco Corona CT70 MD	13	Y	Roto Sil	–	856774
Trocal 88+ Trocal InnoNova 2000 Trocal S900	13	Y	Roto Sil	–	856796
Veka Softline AD 9	9	Y	Roto Sil	–	856801

INFO
Other versions are available upon request.

6.4.2 TiltFirst (TF)



A



B

Assignment	Meaning
[A]	Right / left tilt striker
[B]	Symmetrical tilt striker

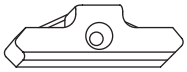
Aluplast Ideal 2000 Schüco Corona CT70 AD Schüco Corona CT70 MD Schüco Corona SI82 MD	13	Y	Roto Sil	Left	891744
	13	Y	Roto Sil	Right	891743
Aluplast energeto 5000 Aluplast energeto 5000 view Aluplast energeto 7000 Aluplast energeto 8000 Aluplast Ideal 4000 Aluplast Ideal 5000 Aluplast Ideal 7000 Aluplast Ideal 8000 Schüco Corona AD	13	Y	Roto Sil	Left	891747
	13	Y	Roto Sil	Right	891748

					Nº
Brügmann AD 13 Brügmann MD 13	13	Y	Roto Sil	Left	320608
	13	Y	Roto Sil	Right	320609
Deceuninck Eforte Deceuninck Prestige AD Deceuninck Prestige MD Inoutic AD 13	13	Y	Roto Sil	Left	493840
	13	Y	Roto Sil	Right	493839
Deceuninck Zendow Deceuninck Elegant Deceuninck Legend	13	Y	Roto Sil	Left	493547
	13	Y	Roto Sil	Right	493426
Gealan Kubus	13	Y	Roto Sil	Left	807519
	13	Y	Roto Sil	Right	807520
Gealan S3000 Gealan S7000 Gealan S8000	13	Y	Roto Sil	Left	280122
	13	Y	Roto Sil	Right	280123
KBE 70 AD KBE 76 KBE 88 MD Kömmerling 76 Kömmerling 88 MD Trocal 76 Trocal 88 MD	13	Y	Roto Sil	Left	891745
	13	Y	Roto Sil	Right	891746
KBE AD	9	Y	Roto Sil	Left	317004
	9	Y	Roto Sil	Right	317005
Kömmerling 88 Plus Kömmerling Eurodur 3S Kömmerling Eurofutur Classic Kömmerling Eurofutur Elegance	13	Y	Roto Sil	Left	309132
	13	Y	Roto Sil	Right	309133
Rehau S 735 MD Rehau S 788 Rehau S 799 Brillant Design (S 730) Rehau S 969 Synego Rehau S 980 Geneo	13	Y	Roto Sil	Left	891718
	13	Y	Roto Sil	Right	891719
Salamander 2D Salamander 3D Salamander Streamline 76	13	Y	Roto Sil	Left	316977
	13	Y	Roto Sil	Right	316978
Salamander BluEvolution 73 Salamander BluEvolution 82 Salamander GreenEvolution 76 Veka Softline 76 AD Veka Softline 76 MD Veka Topline AD 13 Veka Topline MD 13	13	Y	Roto Sil	Left	891741
	13	Y	Roto Sil	Right	891742
Trocal 88+ Trocal InnoNova 2000	13	Y	Roto Sil	Left	606635
	13	Y	Roto Sil	Right	606636
Trocal S900	9	Y	Roto Sil	Left	309136
	9	Y	Roto Sil	Right	309137
Trocal InnoNova 70.A5 AD Trocal InnoNova 70.M5 MD	13	Y	Roto Sil	Left	336107
	13	Y	Roto Sil	Right	336108
Veka Softline 70 AD Veka Topline AD 13 Veka Softline 76 AD Veka Softline 76 MD	13	N	Roto Sil	–	617391
Veka Softline AD 9	9	Y	Roto Sil	Left	328015
	9	Y	Roto Sil	Right	328016

INFO
Other versions are available upon request.

6.5 Strikers

6.5.1 Standard



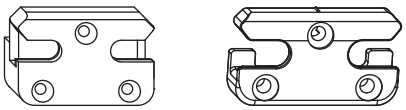
				Nº
Aluplast Ideal 2000 LB Profile Pad Schüco Corona CT70 AD Schüco Corona CT70 MD Schüco Corona SI82 MD Schüco LivIng 82	13	N	Roto Sil	331489
Aluplast Ideal 4000 Aluplast Ideal 5000 Aluplast Ideal 8000 Schüco Corona AD Schüco Corona MD Aluplast energeto 5000 Aluplast energeto 5000 view Aluplast energeto 7000 Aluplast energeto 8000 Aluplast Ideal 7000	13	N	Roto Sil	350192
Brügmann AD 13 Brügmann MD 13	13	N	Roto Sil	341485
	13	Y	Roto Sil	292193
Deceuninck Eforte Deceuninck Prestige AD Deceuninck Prestige MD Inoutic AD 13 Inoutic MD 100	13	Y	Roto Sil	260370
Deceuninck Zendow Deceuninck Elegant Deceuninck Legend	13	N	Roto Sil	370071
Deceuninck Klassiek Deceuninck Mondial VK	13	Y	Roto Sil	281601
Gealan Kubus	13	N	Roto Sil	796675
Gealan S3000 Gealan S7000 Gealan S8000 Gealan S9000 Gealan Linear	13	N	Roto Sil	319744
KBE AD	9	Y	Roto Sil	260367
KBE MD Trocal S900	9	Y	Roto Sil	260373
KBE 70 AD KBE 70 MD	13	N	Roto Sil	338070
KBE 76 Kömmerling 76 Trocal 76 KBE 88 MD Kömmerling 88 MD Panorama 3000 Trocal 88 MD	13	N	Roto Sil	738470
Kömmerling Eurodur 3S	13	N	Roto Sil	457090
	13	Y	Roto Sil	260365
Kömmerling 88 Plus Kömmerling Eurofutur Classic Kömmerling Eurofutur Elegance	13	N	Roto Sil	334957
Panorama 2000	9	Y	Roto Sil	281723
Plus Plan Plus Tec	13	Y	Roto Sil	264316
Rehau S 735 MD Rehau S 788 Rehau S 799 Brillant Design (S 730) Rehau S 969 Synego Rehau S 980 Geneo Rehau S 986 EuroDesign 86	13	N	Roto Sil	332439
Roplasto 4K Roplasto 7001 AD Roplasto 7001 MD	13	N	Roto Sil	482541

				Nº
Salamander 2D Salamander 3D Salamander BluEvolution 92 Salamander Streamline 76	13	N	Roto Sil	486195
Salamander BluEvolution 82 Schüco Corona CT70 AD Veka Alphaline 90 Veka Softline 70 AD Veka Softline 70 MD Veka Topline AD 13 Veka Topline MD 13 Salamander BluEvolution 73 Veka Softline 82 MD Veka Softline 76 AD Veka Softline 76 MD	13	N	Roto Sil	332438
Salamander GreenEvolution 76	13	N	Roto Sil	897004
Trocal 88+ Trocal InnoNova 2000	13	Y	Roto Sil	290127
Trocal InnoNova 70.A5 AD Trocal InnoNova 70.M5 MD	13	N	Roto Sil	336797
Veka Softline AD 9	9	N	Roto Sil	260368
Wymar 2500	13	N	Roto Sil	380088
Wymar 3000	13	N	Roto Sil	374157

INFO
Other versions are available upon request.

6.5.2 Security

6.5.2.1 Zinc



A B

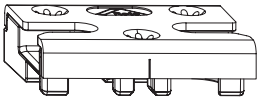
Assignment	Meaning	Security
[A]	With base	RC 1 N, RC 2 / RC 2 N
[B]	Without base	Basic security

					Nº
Aluplast Ideal 2000 Schüco Corona CT70 MD Schüco Corona SI82 MD Schüco LivIng 82	13	N	Roto Sil	–	331490
Aluplast Ideal 2000 LB Profile Pad Schüco Corona CT70 MD Schüco Corona SI82 MD Schüco LivIng 82	13	Y	Roto Sil	–	260395
Aluplast Ideal 4000	13	N	Roto Sil	–	350191
Aluplast Ideal 5000 Schüco Corona AD Aluplast energeto 5000 Aluplast energeto 5000 view Aluplast energeto 7000 Aluplast energeto 8000 Aluplast Ideal 7000 Aluplast Ideal 8000	13	Y	Roto Sil	–	257357
Brügmann AD 13 Brügmann MD 13	13	Y	Roto Sil	–	292194

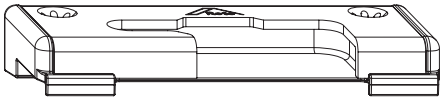
					№
Deceuninck Eforte Deceuninck Prestige AD Deceuninck Prestige MD Inoutic AD 13 Inoutic MD 100	13	Y	Roto Sil	–	260394
Deceuninck Zendow Deceuninck Elegant Deceuninck Legend	13	Y	Roto Sil	–	370072
Deceuninck Klassiek Deceuninck Mondial VK	13	Y	Roto Sil	–	281632
Gealan Kubus	13	N	Roto Sil	–	807521
Gealan S3000	13	N	Roto Sil	–	367201
Gealan S7000 Gealan S8000 Gealan Linear Gealan S9000	13	Y	Roto Sil	–	260393
KBE 70 AD	13	Y	Roto Sil	–	289941
KBE 76 Kömmerling 76 Trocal 76 KBE 88 MD Kömmerling 88 MD Trocal 88 MD	13	Y	Roto Sil	–	738471
KBE AD	9	Y	Roto Sil	–	260391
KBE MD Trocal S900	9	Y	Roto Sil	Right	260398
	9	Y	Roto Sil	Left	260397
Kömmerling Eurodur 3S	13	Y	Roto Sil	–	258303
Kömmerling 88 Plus Kömmerling Eurofutur Classic Kömmerling Eurofutur Elegance	13	N	Roto Sil	–	334958
Panorama 3000	13	Y	Roto Sil	–	281768
Plus Plan Plus Tec	13	Y	Roto Sil	–	264327
Rehau S 735 MD	13	Y	Roto Sil	–	316942
Rehau S 788 Rehau S 799 Brillant Design (S 730) Rehau S 969 Synego Rehau S 986 EuroDesign 86	13	N	Roto Sil	–	348407
Rehau S 980 Geneo	13	Y	Roto Sil	–	496019
Roplasto 4K Roplasto 7001 AD Roplasto 7001 MD	13	Y	Roto Sil	–	260399
Salamander 2D Salamander 3D Salamander Streamline 76	13	Y	Roto Sil	–	365385
Salamander BluEvolution 82 Schüco Corona CT70 AD Veka Topline AD 13 Veka Topline MD 13 Salamander BluEvolution 73 Veka Softline 82 MD Veka Softline 76 AD Veka Softline 76 MD	13	Y	Roto Sil	–	260396
Salamander BluEvolution 82 Schüco Corona CT70 AD Veka Alphaline 90 Veka Softline 70 AD Veka Softline 70 MD Veka Topline AD 13 Veka Topline MD 13 Salamander BluEvolution 73 Veka Softline 76 AD Veka Softline 76 MD	13	N	Roto Sil	–	348410
Salamander BluEvolution 92	13	Y	Roto Sil	–	601574
Salamander GreenEvolution 76	13	Y	Roto Sil	–	897080
Trocal 88+ Trocal InnoNova 2000	13	N	Roto Sil	–	290128
Veka Softline AD 9	9	Y	Roto Sil	–	260392
Wymar 3000	13	Y	Roto Sil	–	374194

INFO
Other versions are available upon request.

6.5.2.2 Steel



A



B

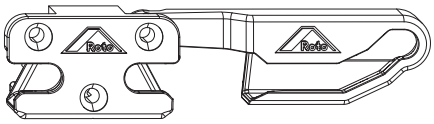
Assignment	Meaning
[A]	Striker, symmetrical
[B]	Striker, right / left

Aluplast Ideal 2000 LB Profile Pad Schüco Corona CT70 MD Schüco Corona SI82 MD Schüco LivIng 82	13	Y	Roto Sil	–	856737
Aluplast energeto 5000 Aluplast energeto 5000 view Aluplast energeto 7000 Aluplast Ideal 4000 Aluplast energeto 8000 Aluplast Ideal 5000 Aluplast Ideal 7000 Aluplast Ideal 8000 Schüco Corona AD	13	Y	Roto Sil	–	856753
Brügmann AD 13 Brügmann MD 13	13	Y	Roto Sil	Left	856757
	13	Y	Roto Sil	Right	856756
Inoutic AD 13 Deceuninck Eforte Inoutic Favorite AD 13 Inoutic MD 100 Deceuninck Prestige AD Deceuninck Prestige MD	13	Y	Roto Sil	–	856752
Deceuninck Elegant Deceuninck Legend Deceuninck Zendow	13	Y	Roto Sil	–	856751
Gealan Linear Gealan S3000 Gealan S7000 Gealan S8000 Gealan S9000	13	Y	Roto Sil	–	856749
KBE AD	9	N	Roto Sil	–	857007
KBE 70 AD	13	Y	Roto Sil	Left	857004
	13	Y	Roto Sil	Right	857005
KBE 76 KBE 88 MD Kömmerling 76 Kömmerling 88 MD Trocal 76 Trocal 88 MD	13	Y	Roto Sil	–	856754
Kömmerling 88 Plus Kömmerling Eurofutur Classic Kömmerling Eurofutur Elegance	13	Y	Roto Sil	–	857003
Kömmerling Eurodur 3S Wymar 3000	13	Y	Roto Sil	–	857006
Plus Plan Plus Tec Roplasto 4K Roplasto 7001 AD Roplasto 7001 MD	13	Y	Roto Sil	–	856750

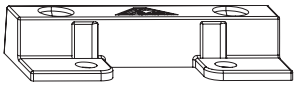
Rehau S 735 MD Rehau S 788 Rehau S 799 Brillant Design (S 730) Rehau S 969 Synego Rehau S 980 Geneo Rehau S 986 EuroDesign 86	13	Y	Roto Sil	–	856748
Salamander BluEvolution 73 Salamander BluEvolution 82 Schüco Corona CT70 AD Veka Alphaline 90 Veka Softline 70 AD Veka Softline 76 AD Veka Softline 76 MD Veka Softline 82 MD Veka Topline AD 13 Veka Topline MD 13	13	Y	Roto Sil	–	856738
Salamander Design 2D Salamander Design 3D Salamander Streamline 76	13	Y	Roto Sil	Left	858209
	13	Y	Roto Sil	Right	858210
Salamander GreenEvolution 76	13	Y	Roto Sil	Left	897003
Trocal 88+ Trocal InnoNova 2000 Trocal S900	13	Y	Roto Sil	Left	856763
	13	Y	Roto Sil	Right	856762
Trocal InnoNova 70.A5 AD Trocal InnoNova 70.M5 MD	13	Y	Roto Sil	–	858211
Veka Softline AD 9	9	N	Roto Sil	–	856761

INFO
Other versions are available upon request.

6.5.2.3 Tilt ventilation (TiltSafe)



Aluplast Ideal 2000 Schüco Corona CT70 AD Schüco Corona CT70 MD Schüco Corona SI82 MD Schüco LivIng 82	13	Roto Sil	Left	816132
	13	Roto Sil	Right	816131
Aluplast energeto 5000 Aluplast energeto 5000 view Aluplast energeto 7000 Aluplast Ideal 4000 Aluplast Ideal 5000 Aluplast energeto 8000 Aluplast Ideal 8000 Aluplast Ideal 7000	13	Roto Sil	Left	795447
	13	Roto Sil	Right	795448
Gealan S8000 Gealan Linear	13	Roto Sil	Left	795450
	13	Roto Sil	Right	795451
Deceuninck Eforte Deceuninck Prestige AD Deceuninck Prestige MD	13	Roto Sil	Left	839325
	13	Roto Sil	Right	839327
Deceuninck Elegant Deceuninck Legend KBE 76 KBE 88 MD Kömmerling 76 Kömmerling 88 MD Trocal 76 Trocal 88 MD	13	Roto Sil	Left	795445
	13	Roto Sil	Right	795446
Rehau S 730 AD Rehau S 735 MD Rehau S 788 Rehau S 799 Brillant Design (S 730) Rehau S 986 EuroDesign 86	13	Roto Sil	Left	794922
	13	Roto Sil	Right	795449
Salamander Streamline 76	13	Roto Sil	Left	828260
	13	Roto Sil	Right	828261
Veka Topline AD 13 Veka Softline 82 MD Veka Softline 76 AD Veka Softline 76 MD	13	Roto Sil	Left	795443
	13	Roto Sil	Right	795444



Tilt ventilation protective support (TiltSafe)	Aluplast Ideal 2000 Aluplast energeto 5000 view Aluplast energeto 7000 Aluplast Ideal 4000 Aluplast Ideal 5000 Aluplast Ideal 8000 Aluplast Ideal 7000 Gealan S8000 KBE 76 KBE 88 MD Kömmerling 76 Kömmerling 88 MD Rehau S 730 AD Rehau S 799 Brillant Design (S 730) Rehau S 986 EuroDesign 86 Schüco Corona CT70 AD Schüco Corona SI82 MD Schüco LivIng 82 Trocal 76 Trocal 88 MD Veka Softline 82 MD Veka Topline AD 13	13	RC 2 RC 2 N	816934

INFO

Recommended component for system testing (RC 2 / RC 2 N)

The tilt ventilation protective support (TiltSafe) reduces the area of attack on the tilt ventilation security strikers (TiltSafe) to a minimum.

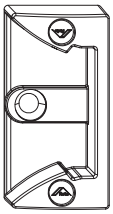
6.6 Packers

		№
Frame	Alphacan Master AD 13 Deceuninck Klassiek Salamander 2D Salamander 3D Salamander Streamline 76 Schüco Corona AD Aluplast energeto 5000 Aluplast energeto 8000 Aluplast Ideal 8000 Gealan Kubus	294365
	Aluplast Ideal 2000 Brügmann AD 13 Salamander BluEvolution 82 Schüco Corona CT70 AD Schüco Corona CT70 MD Schüco Corona SI82 MD Trocal InnoNova 70.A5 AD Trocal InnoNova 70.M5 MD Veka Topline AD 13 Veka Topline MD 13 Salamander BluEvolution 73 Salamander GreenEvolution 76	294364
	Aluplast energeto 5000 view Aluplast energeto 7000 Aluplast Ideal 4000 Aluplast Ideal 5000 Aluplast Ideal 7000	773527
	Brügmann MD 13 Wymar 2500	287070
	Deceuninck Eforte Deceuninck Prestige Inoutic AD 13 Inoutic Favorite AD 13 Inoutic MD 100	294369
	Deceuninck Zendow Rehau S 735 MD Rehau S 788 Rehau S 799 Brillant Design (S 730) Rehau S 980 Geneo Roplasto 4K Roplasto 7001 AD Roplasto 7001 MD Deceuninck Elegant Deceuninck Legend	294469
	Deceuninck Mondial VK	477327
	Gealan S3000 Gealan S7000 Gealan S8000 KBE 76 Kömmerling 76 Trocal 76 KBE 88 MD Kömmerling 88 MD Trocal 88 MD	294370
	KBE AD	294439
	KBE MD Trocal 88+ Trocal InnoNova 2000 Trocal S900	294463
	KBE 70 AD Kömmerling 88 Plus Kömmerling Eurodur 3S Kömmerling Eurofutur Classic Kömmerling Eurofutur Elegance	294464

6.7 Bullet catches

6.7.1 Bullet catch

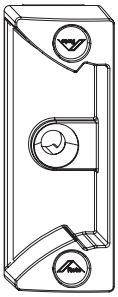
Standard



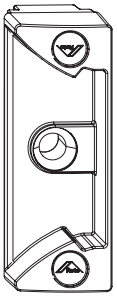
			№
Aluplast Ideal 2000 Aluplast energeto 5000 Aluplast energeto 5000 view Aluplast energeto 7000 Aluplast Ideal 4000 Aluplast Ideal 5000 Aluplast energeto 8000 Aluplast Ideal 7000 Aluplast Ideal 8000 Rehau S 735 MD Rehau S 788 Rehau S 799 Brillant Design (S 730) Rehau S 969 Synego Rehau S 980 Geneo Rehau S 986 EuroDesign 86 Salamander 2D Salamander 3D Salamander Streamline 76 Schüco Corona AD Schüco Corona CT70 AD Schüco Livlng 82	13	Roto Sil	788572
Deceuninck Arcade Deceuninck Eforte Deceuninck Prestige	13	Roto Sil	788616
Deceuninck Elegant Deceuninck Legend	13	Roto Sil	2025385
Gealan S3000 Gealan S7000 Gealan S8000 Gealan Linear Gealan S9000 Wymar 2500	13	Roto Sil	788574
Gealan Kubus	13	Roto Sil	812365

			Nº
Salamander BluEvolution 73 Salamander BluEvolution 82 KBE 70 AD KBE 76 KBE 88 MD Kömmerling 76 Kömmerling 88 Plus Kömmerling 88 MD Kömmerling Eurodur 3S Kömmerling Eurofutur Classic Kömmerling Eurofutur Elegance Plus Plan Plus Tec Roplasto 4K Roplasto 7001 AD Roplasto 7001 MD Trocal 76 Trocal 88 MD Veka Softline 70 AD Veka Softline 70 MD Salamander GreenEvolution 76 Veka Topline AD 13 Veka Topline MD 13 Veka Softline 76 AD Veka Softline 76 MD	13	Roto Sil	788615
KBE AD Veka Softline AD 9	9	Roto Sil	788573

6.7.2 Floating mullion



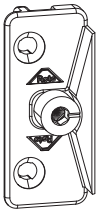
			Nº
Bullet catch for lever-operated espagnolette	Screw-on	Roto Sil	788378



		Nº
Bullet catch for opposite hardware groove	Roto Sil	788507

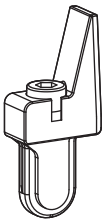
6.8 Lifting mishandling devices

6.8.1 Lifting mishandling device



Aluplast Ideal 2000 Schüco Corona CT70 AD Schüco Corona CT70 MD Schüco Corona SI82 MD	13	Roto Sil	260551
Aluplast Ideal 4000 Aluplast Ideal 5000 Salamander 2D Salamander 3D Salamander BluEvolution 92 Salamander Streamline 76 Schüco Corona AD Aluplast energeto 5000 Aluplast energeto 5000 view Aluplast energeto 7000 Aluplast energeto 8000 Aluplast Ideal 7000 Aluplast Ideal 8000	13	Roto Sil	260557
Brügmann AD 13 Brügmann MD 13	13	Roto Sil	483117
Deceuninck Arcade Deceuninck Eforte Deceuninck Prestige AD Deceuninck Prestige MD Inoutic AD 13 Inoutic Favorite AD 13 Inoutic MD 100	13	Roto Sil	260550
Deceuninck Zendow Deceuninck Elegant Deceuninck Legend Deceuninck Prestige	13	Roto Sil	370175
Deceuninck Klassiek Deceuninck Mondial VK	13	Roto Sil	281636
Gealan S3000 Gealan S7000 Gealan S8000 Gealan S9000	13	Roto Sil	380118
Gealan Kubus	13	Roto Sil	807517
KBE 70 AD KBE 76 Kömmerling 76 Roplasto 4K Roplasto 7001 AD Roplasto 7001 MD Trocal 76 KBE 88 MD Kömmerling 88 MD Trocal 88 MD	13	Roto Sil	260554
KBE AD	9	Roto Sil	260547
KBE MD Trocal S900	9	Roto Sil	260553
Kömmerling Eurodur 3S	13	Roto Sil	260545
Kömmerling 88 Plus Kömmerling Eurofutur Classic Kömmerling Eurofutur Elegance Plus Plan Plus Tec	13	Roto Sil	264523
Panorama 2000	9	Roto Sil	281728

			№
Rehau S 735 MD Rehau S 788 Rehau S 799 Brillant Design (S 730) Rehau S 969 Synego Rehau S 980 Geneo Rehau S 986 EuroDesign 86	13	Roto Sil	260546
Veka Alphaline 90 Veka Softline 70 AD Veka Softline 70 MD Veka Topline AD 13 Veka Topline MD 13 Wymar 3000 Salamander BluEvolution 73 Salamander BluEvolution 82 Salamander GreenEvolution 76 Veka Softline 76 AD Veka Softline 76 MD	13	Roto Sil	260552
Trocal 88+ Trocal InnoNova 2000	13	Roto Sil	290155
Trocal InnoNova 70.A5 AD Trocal InnoNova 70.M5 MD	13	Roto Sil	336813
Veka Softline AD 9	9	Roto Sil	260548

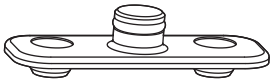


	№
Insert part	534908

INFO
Only in conjunction with SEC striker with base (hardware axis 13).

6.9 Turn restrictors

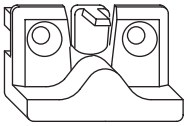
6.9.1 Frame components



		№
Aluplast Ideal 2000 Brügmann AD 13 Brügmann MD 13 Gealan S3000 Gealan S7000 Gealan S8000 KBE 70 AD KBE 70 MD KBE AD Kömmerling 3S Kömmerling Eurodur 3S Kömmerling Eurofutur Classic Kömmerling Eurofutur Elegance Plus Plan Plus Tec Rehau S 735 MD Rehau S 788 Rehau S 799 Brillant Design (S 730) Rehau S 969 Synego Rehau S 980 Geneo Rehau S 986 EuroDesign 86 Salamander 2D Salamander 3D Salamander Design 2D Salamander Design 3D Salamander Streamline 76 Schüco Corona AD Schüco Corona CT70 AD Schüco Corona CT70 MD Trocal InnoNova 2000 Trocal InnoNova 70.A5 AD Trocal InnoNova 70.M5 MD Veka Softline AD 9 Veka Topline AD 13 Veka Topline MD 13 Brügmann AD 73 Salamander BluEvolution 73 Salamander BluEvolution 82 KBE 76 KBE 88 MD Kömmerling 76 Kömmerling 88 MD Trocal 76 Trocal 88 MD Salamander GreenEvolution 76	Roto Sil	477848
Aluplast Ideal 4000 Aluplast Ideal 5000 Aluplast energeto 5000 view Aluplast energeto 7000 Aluplast Ideal 7000	Roto Sil	490128
Deceuninck Eforte Deceuninck Prestige AD Deceuninck Prestige MD Inoutic AD 13 Inoutic Favorite AD 13 Inoutic MD 100	Roto Sil	490133
Gealan Kubus	Roto Sil	807522
KBE MD Trocal S900	Roto Sil	477849
Trocal 88+ Trocal InnoNova 2000	Roto Sil	490159

6.10 Night vents

6.10.1 Frame components



			№
Aluplast Ideal 2000 Deceuninck Zendow Roplasto 4K Roplasto 7001 AD Roplasto 7001 MD Veka Softline 70 AD Veka Softline 70 MD Veka Topline AD 13 Veka Topline MD 13 Salamander BluEvolution 73 Salamander BluEvolution 82 Deceuninck Elegant Deceuninck Legend Salamander GreenEvolution 76 Veka Softline 76 AD Veka Softline 76 MD	13	Roto Sil	260532
Aluplast Ideal 4000 Aluplast Ideal 5000 Deceuninck Klassiek Deceuninck Mondial VK Rehau S 735 MD Rehau S 788 Rehau S 799 Brillant Design (S 730) Rehau S 980 Geneo Rehau S 986 EuroDesign 86 Salamander 2D Salamander 3D Salamander BluEvolution 92 Salamander Streamline 76 Schüco Corona AD Schüco Corona CT70 AD Schüco Corona CT70 MD Schüco Corona SI82 MD Aluplast energeto 5000 Aluplast energeto 8000 Aluplast Ideal 6000 Aluplast Ideal 8000	13	Roto Sil	260534
Brügmann AD 13 Brügmann MD 13	13	Roto Sil	292198
Deceuninck Eforte Deceuninck Prestige AD Deceuninck Prestige MD Inoutic AD 13 Inoutic MD 100	13	Roto Sil	260531
Gealan S3000 Gealan S7000 Gealan S8000 Gealan Linear	13	Roto Sil	260530
KBE AD Veka Softline AD 9	9	Roto Sil	260529
KBE MD	9	Roto Sil	260533
KBE 70 AD KBE 76 Kömmerling 76 Plus Plan Plus Tec Trocal 76 KBE 88 MD Kömmerling 88 MD Trocal 88 MD	13	Roto Sil	263232
Kömmerling 88 Plus Kömmerling Eurodur 3S	13	Roto Sil	260528
Trocal InnoNova 70.A5 AD Trocal InnoNova 70.M5 MD	13	Roto Sil	336815

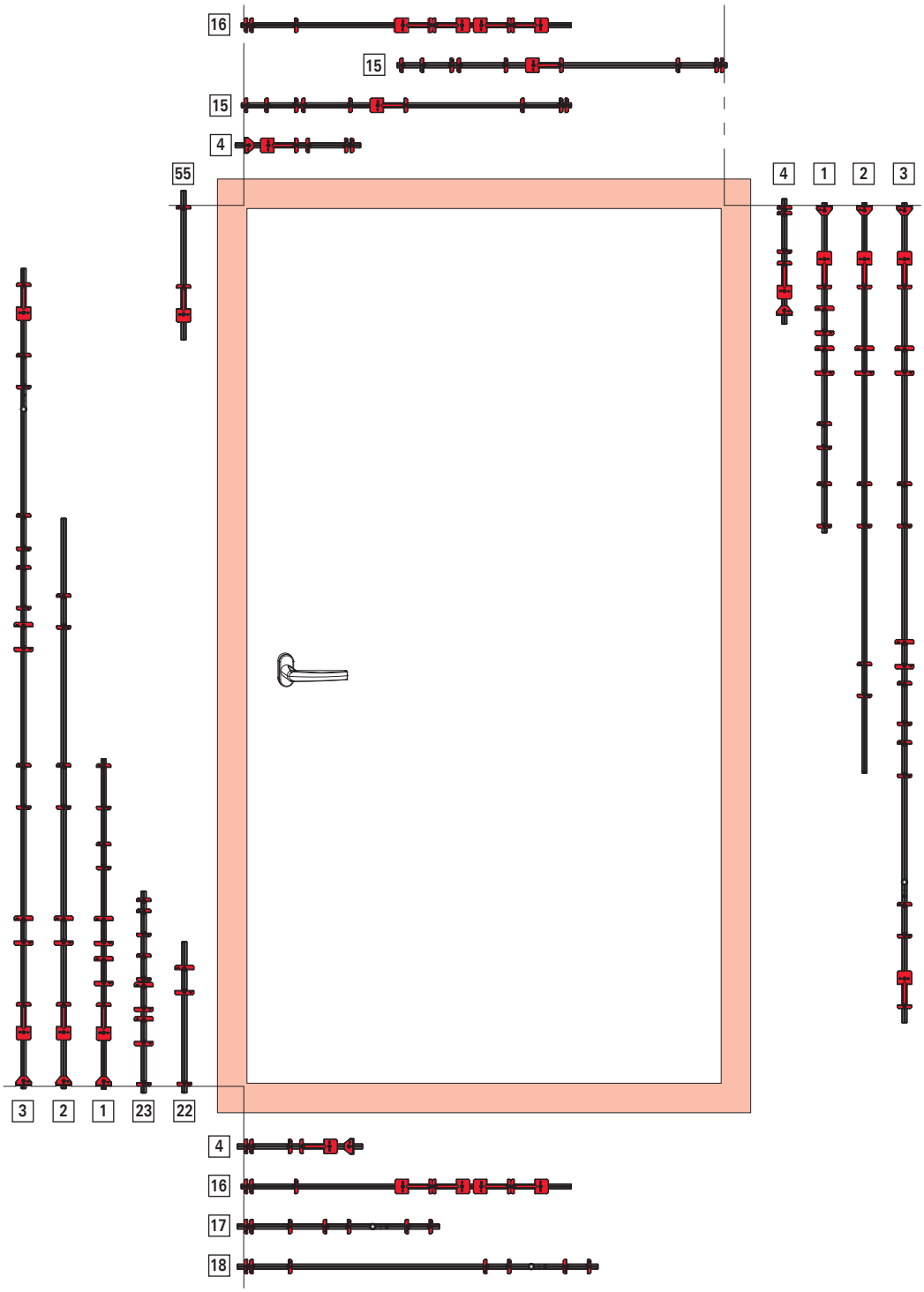
			Nº
Trocal 88+ Trocal InnoNova 2000 Trocal S900	9 13	Roto Sil	451418
Wymar 2500	13	Roto Sil	284627
Wymar 3000	13	Roto Sil	374159

INFO
The component can only be used in conjunction with a corner drive (P or V cam).

7 Jigs

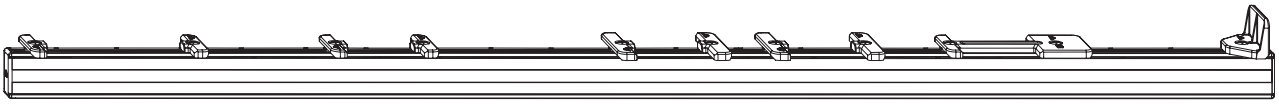
7.1 Positioning jigs

7.1.1 T&T espagnolette – fixed handle height



Assignment	Position	Application range	T&T		T-O	Single jig
			BSec	RC1 N	BSec	
[22]	Espagnolette side	SRH 511 – 710 mm	■	■	■	Standard → *from page 175*
[23]		SRH 601 – 800 mm	■	■	■	
[1]		SRH 801 – 1400 mm	■	■	■	
[2]		SRH 1401 – 1600 mm	■	■	■	
[3]		SRH 1601 – 2600 mm	■	■	■	
[55]		SRH 2401 – 2600 mm	–	■	–	
[4]	Hinge side	SRH 290 – 800 mm	■	■	–	Tilt striker / corner drive → *from page 175*
[1]		SRH 801 – 1400 mm	■	■	■	Standard → *from page 175*
[2]		SRH 1401 – 1800 mm	■	■	■	
[3]		SRH 1801 – 2600 mm	■	■	■	
[4]	Horizontal at the top	SRW 330 – 800	■	■	■	Tilt striker / corner drive → *from page 175*
[15]		SRW 801 – 1400 mm	■	■	–	Centre lock → *from page 176*
[16]		SRW 801 – 1400 mm	–	–	■	Turn-Only sash → *from page 176*
[4]	Horizontal at the bottom	SRW 330 – 800 mm	■	–	–	Tilt striker / corner drive → *from page 175*
[16]		SRW 801 – 1400 mm	–	–	■	Turn-Only sash → *from page 176*
[17]		BSec: SRW 801 – 1200 mm RC1 N: 450 – 850 mm	■	■	–	Centre lock → *from page 176*
[18]		BSec: SRW 1201 – 1400 mm RC1 N: 851 – 1000 mm	■	■	–	

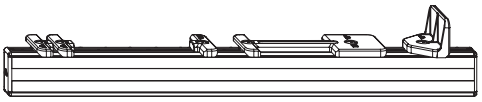
7.1.1.1 Standard



Espagnolette side and hinge side

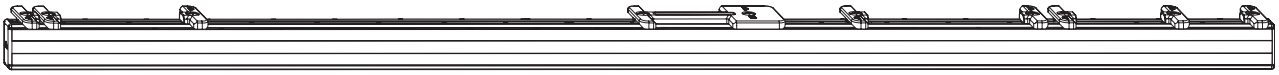
				№
Standard	481 – 800	Espagnolette side	No. 23	263338
	511 – 800	Espagnolette side	No. 22	2033841
	801 – 1400	Espagnolette side Hinge side	No. 1	290048
	1401 – 1600	Espagnolette side Hinge side	No. 2	290049
	1601 – 2600	Espagnolette side Hinge side	No. 3	290050
	2401 – 2600	Espagnolette side	No. 55	640440

7.1.1.2 Tilt striker / corner drive



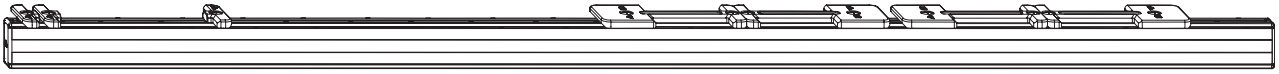
					№
Tilt striker / corner drive	280 – 800	290 – 800	Top Bottom Hinge side	No. 4	290051

7.1.1.3 Centre lock



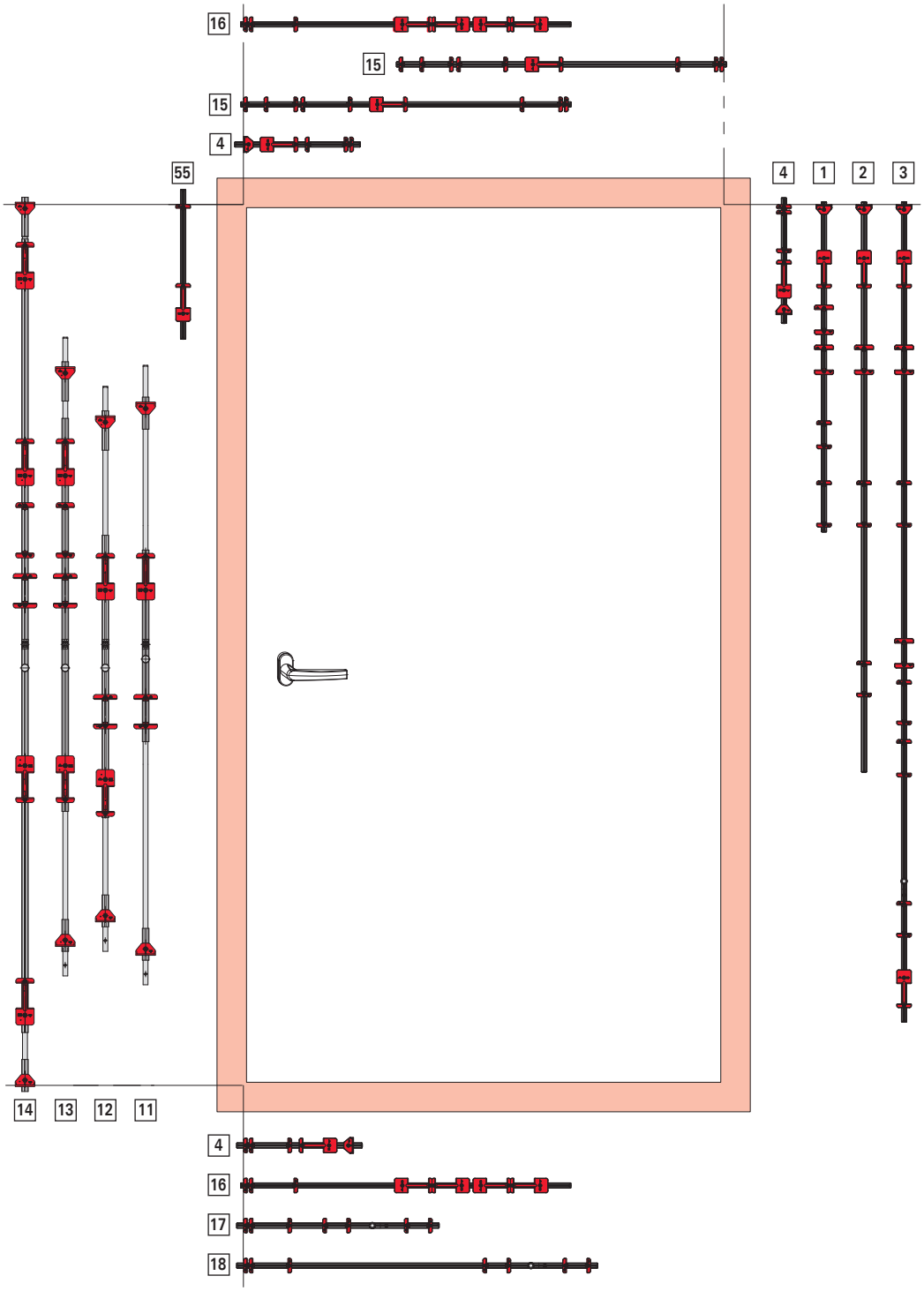
Centre lock	801 – 1600	Top Bottom	No. 15	311892
	320 – 730	Bottom	No. 17	263335
	731 – 1130	Bottom	No. 18	263336

7.1.1.4 Turn-Only sash



Turn-Only sash	801 – 1400	Top Bottom	No. 16	311893

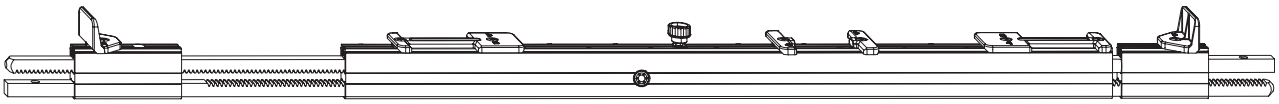
7.1.2 T&T espagnolette – centred / variable handle height



Assignment	Position	Application range	T&T		T-O	Single jig
			BSec	RC1 N	BSec	
[11]	Espagnolette side	SRH 621 – 1200 mm	■	■	■	Standard → *from page 178*
[12]		SRH 1201 – 1600 mm	■	■	■	
[13]		SRH 1601 – 2000 mm	■	■	■	
[14]		SRH 2001 – 2400 mm	■	■	■	
[55]		SRH 2401 – 2600 mm	–	■	–	
[4]	Hinge side	SRH 290 – 800 mm	■	■	–	Tilt striker / corner drive → *from page 175*
[1]		SRH 801 – 1400 mm	■	■	■	Standard → *from page 178*
[2]		SRH 1401 – 1800 mm	■	■	■	
[3]		SRH 1801 – 2600 mm	■	■	■	

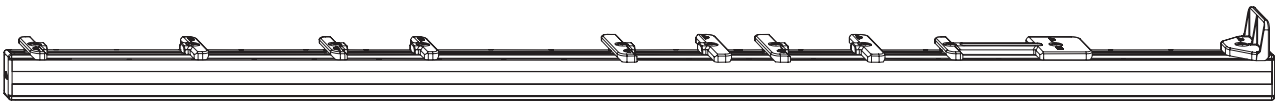
Assignment	Position	Application range	T&T		T-O	Single jig
			BSec	RC1 N	BSec	
[4]	Horizontal at the top	SRW 330 – 800	■	■	■	Tilt striker / corner drive → *from page 175*
[15]		SRW 801 – 1400 mm	■	■	–	Centre lock → *from page 176*
[16]		SRW 801 – 1400 mm	–	–	■	Turn-Only sash → *from page 176*
[4]	Horizontal at the bottom	SRW 330 – 800 mm	■	–	–	Tilt striker / corner drive → *from page 175*
[16]		SRW 801 – 1400 mm	–	–	■	Turn-Only sash → *from page 176*
[17]		BSec: SRW 801 – 1200 mm RC1 N: 450 – 850 mm	■	■	–	Centre lock → *from page 176*
[18]		BSec: SRW 1201 – 1400 mm RC1 N: 851 – 1000 mm	■	■	–	

7.1.2.1 Standard



Espagnolette side

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

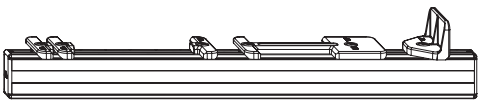


Hinge side

				№
Standard	801 – 1400	Espagnolette side Hinge side	No. 1	290048
	1401 – 1600	Espagnolette side Hinge side	No. 2	290049
	1601 – 2600	Espagnolette side Hinge side	No. 3	290050

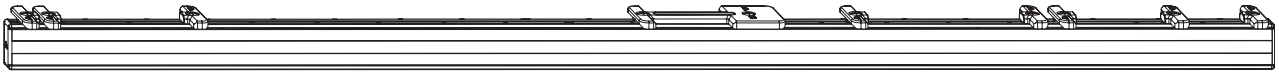
INFO
With T&T espagnolettes – centred / variable handle height, use jigs on the hinge side only.

7.1.2.2 Tilt striker / corner drive



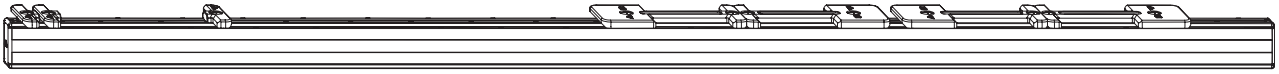
					№
Tilt striker / corner drive	280 – 800	290 – 800	Top Bottom Hinge side	No. 4	290051

7.1.2.3 Centre lock



Centre lock	801 – 1600	Top Bottom	No. 15	311892
	320 – 730	Bottom	No. 17	263335
	731 – 1130	Bottom	No. 18	263336

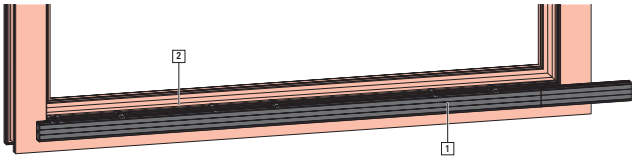
7.1.2.4 Turn-Only sash



Turn-Only sash	801 – 1400	Top Bottom	No. 16	311893

7.1.3 Positioning jigs

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



2. Position the frame components.

8 Installation

8.1 Processing instructions

Maximum sash sizes and weights

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

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

Specifications from profile manufacturers

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

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

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

Combining hardware

Burglar inhibiting elements need hardware which meets special requirements.

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

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

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

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

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

Installation surfaces

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

8.2 Screw fixing

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

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

Sash weight in kg	Tractive force in N [31]
60	1650
70	1900
80	2200
90	2450
100	2700
110	3000
120	3250
130	3500
140	3900
150	4200

INFO

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

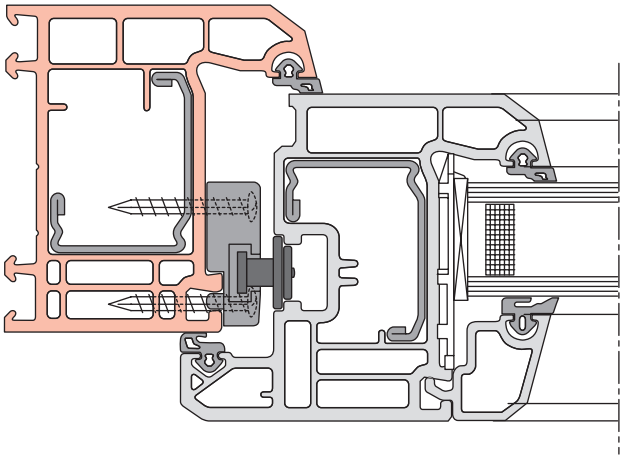
Further information can be found at www.beschlagindustrie.de.

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

8.3 Fastening suggestion for security windows

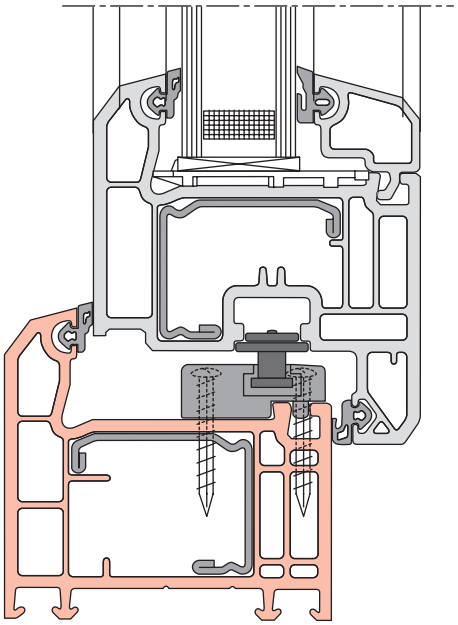
Fastening SEC strikers

3x screws 4x ... Through all walls if attachment through steel reinforcement is not possible.



Horizontal cross section M 1:2

[31] Permissible tolerance -10%



Vertical cross section M 1:2

Glazing bead attachment

With screws if required.

8.4 Screw connections

DANGER

Incorrectly installed or screwed-in hardware components present a risk of death.

Incorrectly installed and screwed-in hardware components may lead to hazardous situations and cause serious or fatal accidents.

- During installation and screwdriving work, observe the specifications provided by the profile manufacturer; contact the profile manufacturer if necessary.
- Use the recommended screws.
- Select the length of the screws according to the profiles used.
- Ensure that the hardware components are adequately secured; contact the screw manufacturer if necessary.

ATTENTION

Using incorrect screw material may cause property damage.

Using the wrong screws may damage the components.

- Only use galvanised zinc-plated and passivated steel screws.
- Use screws with additional sealing in more challenging climatic conditions.
- Use stainless-steel screws on stainless-steel components only.
- For aluminium components, use screws made of steel (coated with zinc-nickel or zinc flakes) or stainless steel.

ATTENTION

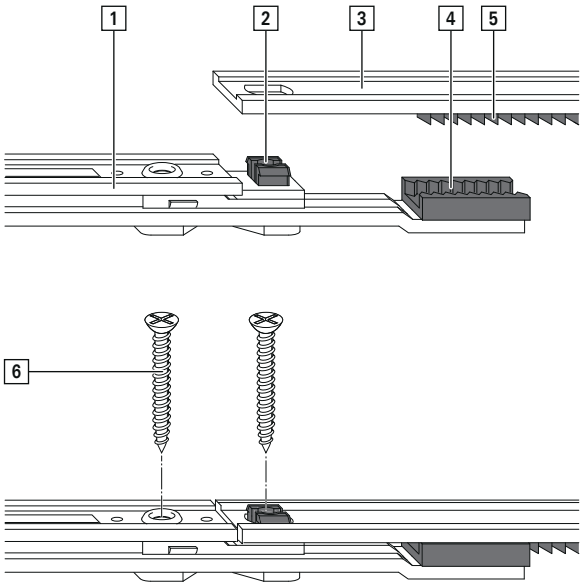
Improper screw fixings may cause property damage.

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

- Unless stated otherwise, turn screws in straight.
- Tighten screw heads until they are flush with the surface.
- Do not over-tighten screws. Note the torque. Choose a torque that will not deform the hardware and profile. Define profile-specific torques on the basis of the demo assembly.
- Use the recommended screws.
- Select the length of the screws according to the profiles used.

8.5 Force-fit connection

Couplable hardware components always require a force-fit connection.



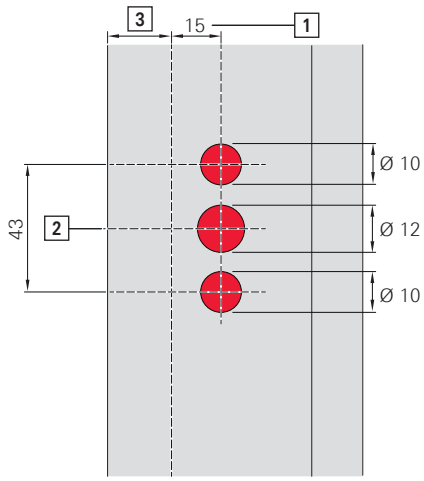
Assignment	Description
[1]	Component A
[2]	Screw guide with clamp
[3]	Component B
[4]	Component A toothed segment
[5]	Component B toothed segment
[6]	Screw

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

INFO
All couplable components are delivered attached in the centre.

8.6 Drilling and routing dimensions

8.6.1 T&T espagnolette



Drill holes for sprocket and handle cam

[1] Backset

[2] Handle height

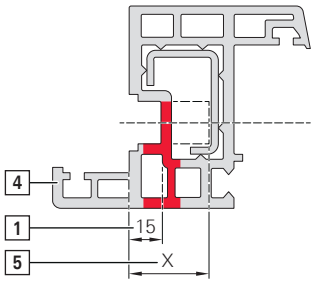
[3] Overlap width

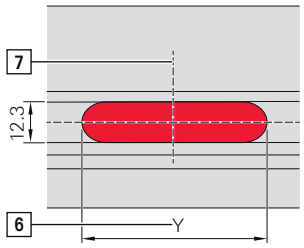
[4] Overlap height: 16 to 22 mm

Drill hole Ø 10: drilling depth = overlap height + 17 mm for countersunk screws (ISO 7046-1 M5 x …)

Drill hole Ø 12: drilling depth = overlap height + 17 mm

[5] Routing depth (X) min. = backset + 12.5 mm





Gearbox routing

[6] Routing length (Y)

Backset 8 = min. 30 mm

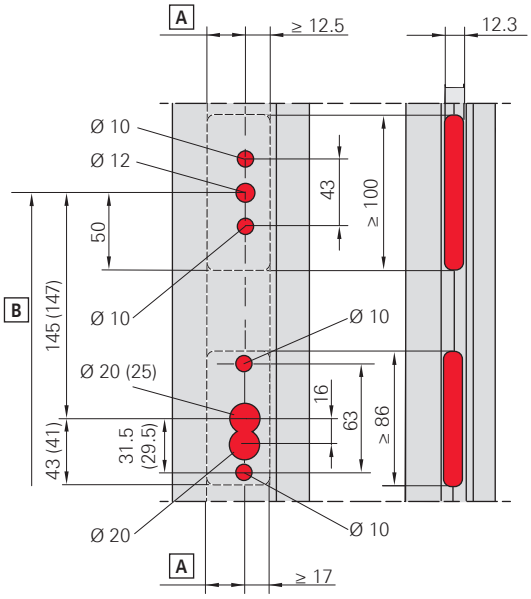
Backset 15 = min. 65 mm

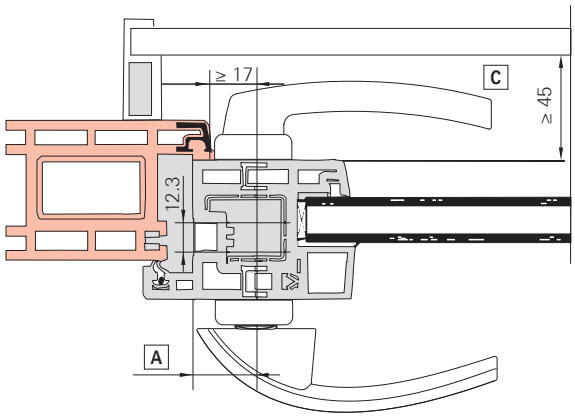
Backset 25 to backset 50 = min. 100 mm

[7] Centre of gearbox

Routing depth min. 28 mm

8.6.2 High backset espagnolette





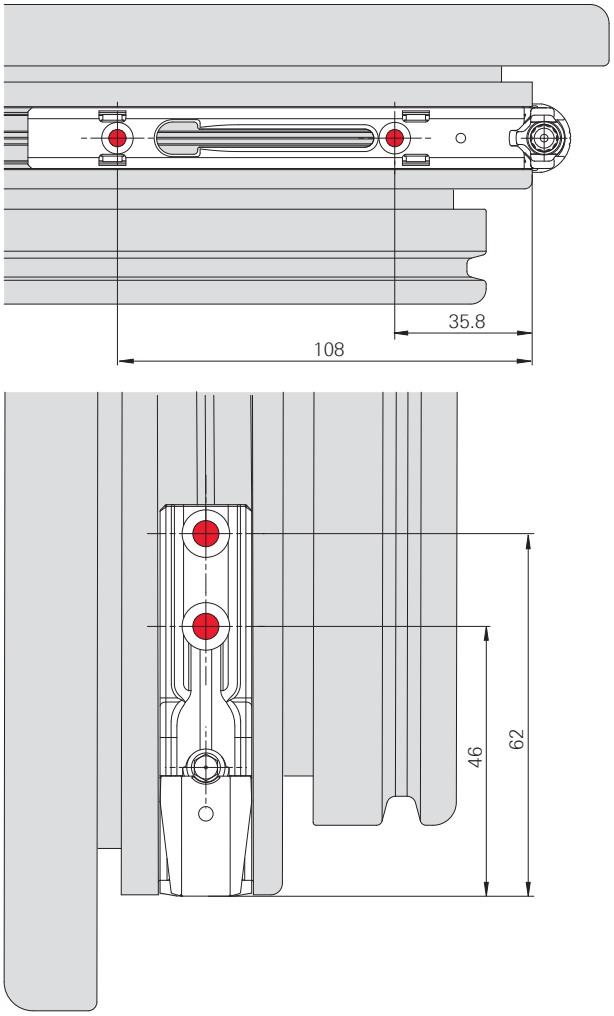
Values in brackets for round cylinder.

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

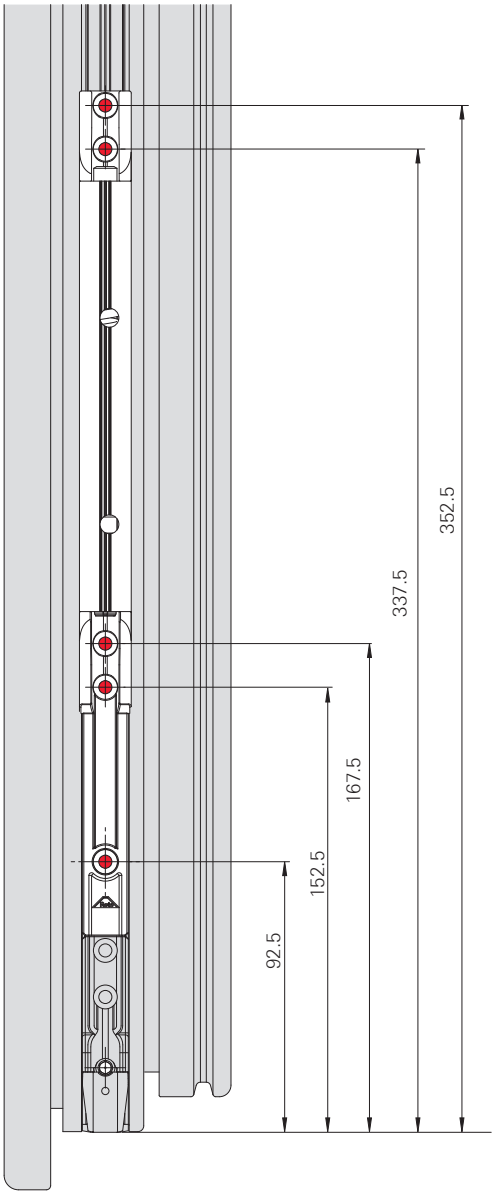
INFO
Cross section: doors (inward opening).

8.6.3 Corner hinge and load transfer

Corner hinge



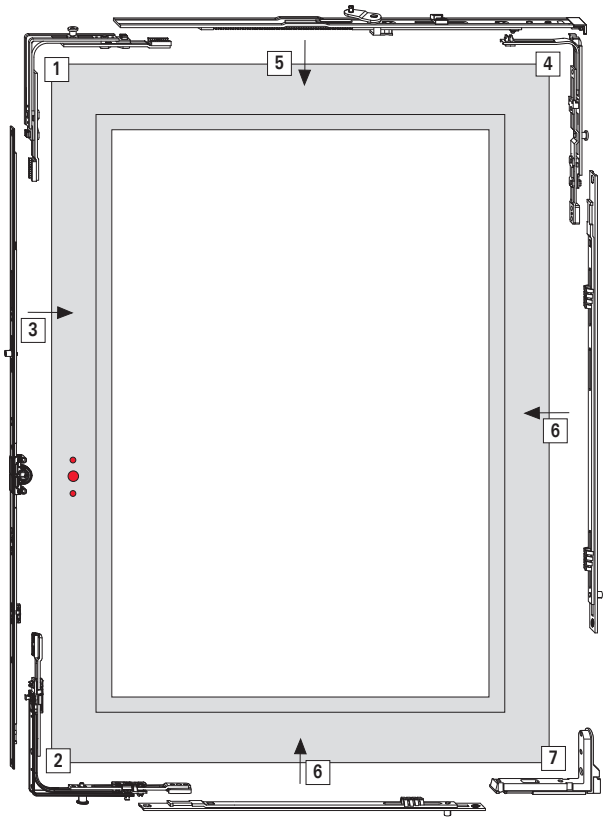
Load transfer



8.7 Sash

8.7.1 Installation sequence

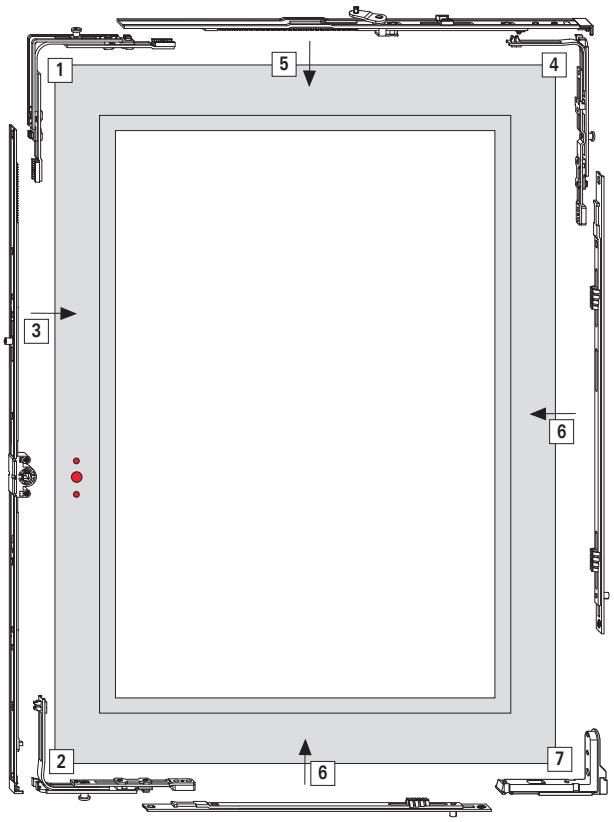
T&T espagnolette, VT – fixed handle height



Installation sequence (suggestion)

[1] Corner drive
[2] Corner drive
[3] T&T espagnolette
[4] Sash stay corner drive
[5] Stay guide
[6] Vertical and horizontal centre lock
[7] Corner hinge

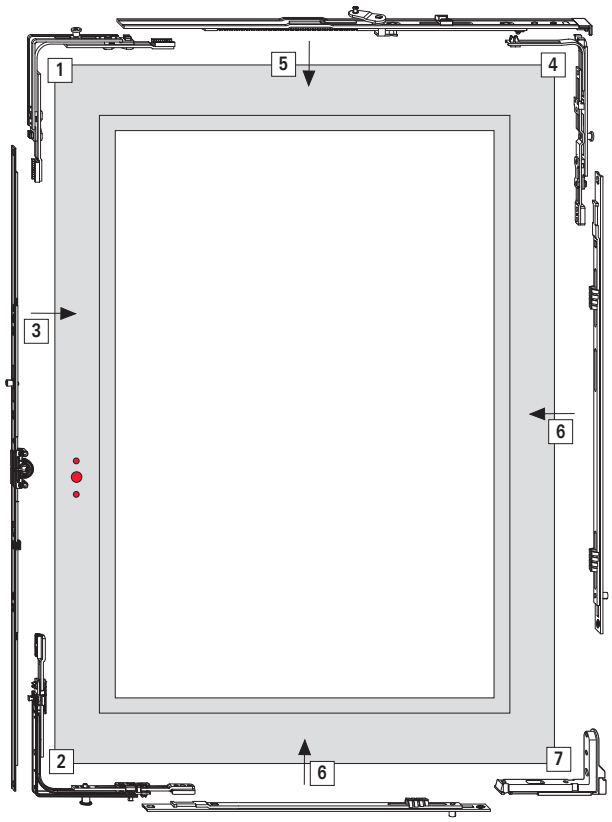
T&T espagnolette – fixed handle height



Installation sequence (suggestion)

[1] Corner drive
[2] Corner drive
[3] T&T espagnolette
[4] Sash stay corner drive
[5] Stay guide
[6] Vertical and horizontal centre lock
[7] Corner hinge

T&T espagnolette – centred / variable handle height



Installation sequence (suggestion)

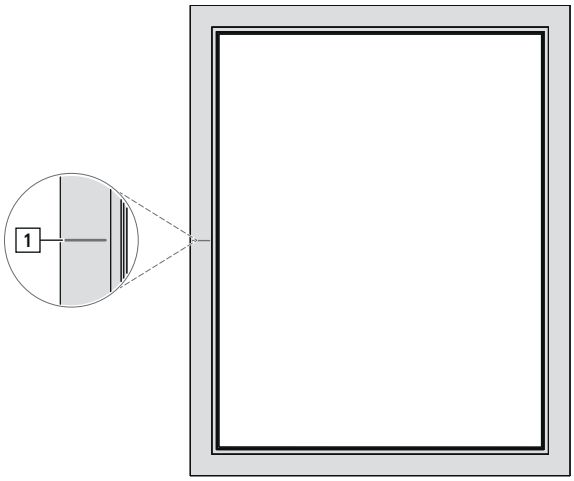
[1] Corner drive
[2] Corner drive
[3] T&T espagnolette
[4] Sash stay corner drive
[5] Stay guide
[6] Vertical and horizontal centre lock
[7] Corner hinge

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 184*

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 184*

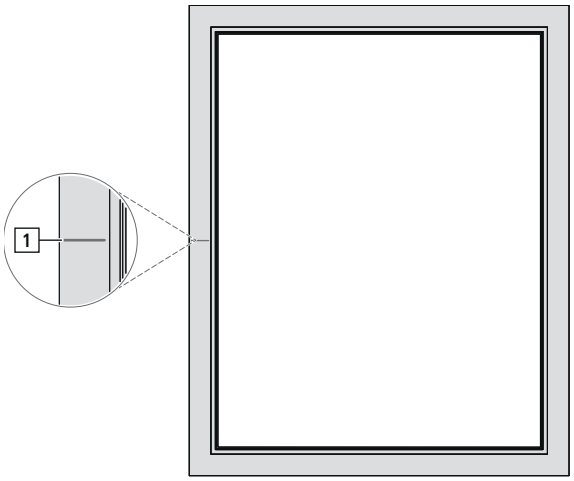
2. Deburr the espagnolette cutout.

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 184*

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 184*

2. Deburr the espagnolette cutout.

8.7.4 Cropping the hardware components

ATTENTION

Incorrect cropping methods may result in property damage.

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

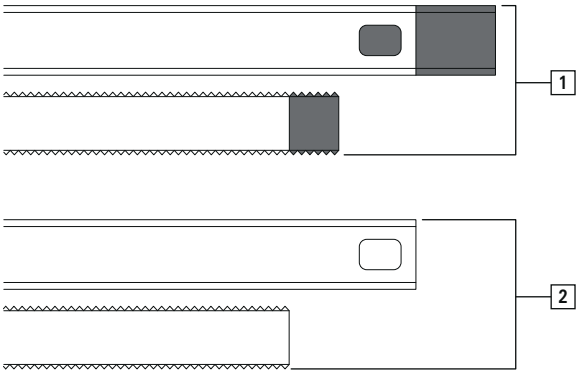
- ▶ Only lay out the hardware components and do not insert them into the sash before they have been cropped.

The following hardware components are cropped:

- Espagnolettes
- Stay guide

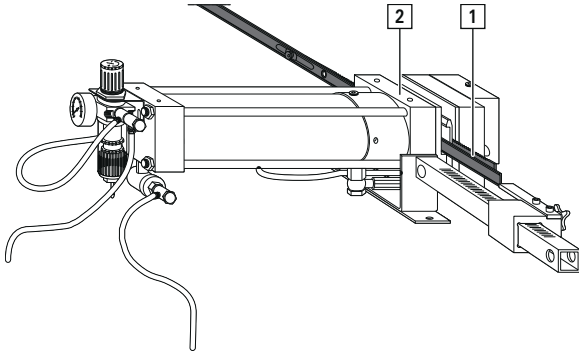
Cropping with a pneumatic punch (hole punching)

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



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

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

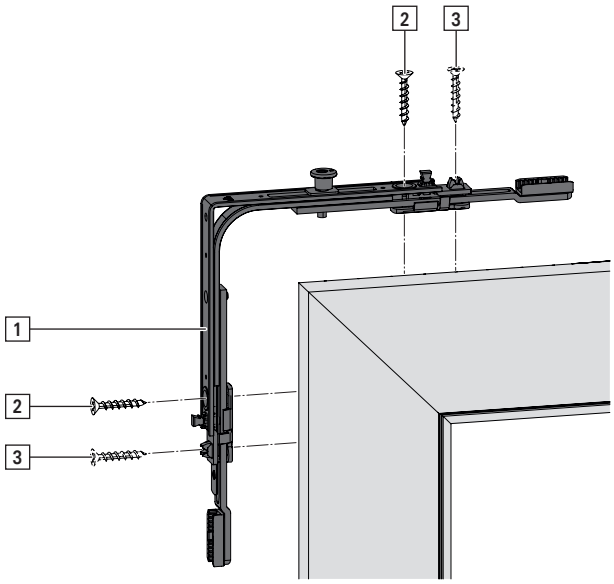


4. Align the hardware component.
5. Crop the hardware component.

8.7.5 Corner drive

Installing the corner drive

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



2. After all of the connector components have been installed, screw down the corner drives with a further two screws [3]. → *8.5 "Force-fit connection" from page 183*

8.7.6 T&T espagnolettes

8.7.6.1 Fixed handle height

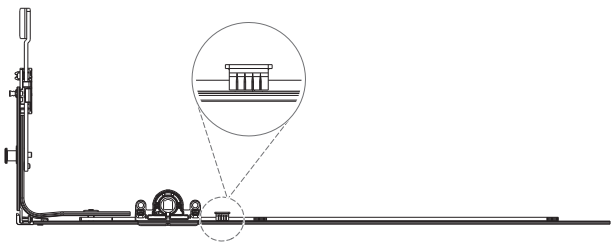
Installing the T&T espagnolette

1. Place the espagnolette in the required position, mark the length on one side and crop it .

2. Insert the espagnolette with the cropped side facing upwards and create a force-fit connection. → *8.5 "Force-fit connection" from page 183*

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

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



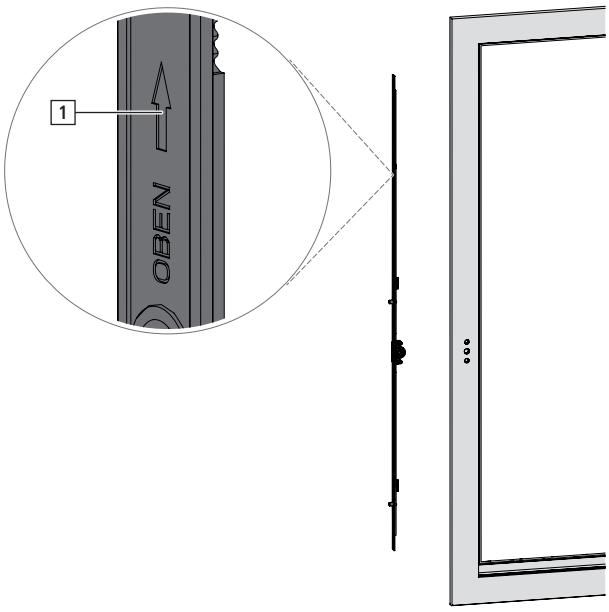
8.7.6.2 Centred / variable handle height

Installing the T&T espagnolette

1. Place the espagnolette in the required position, mark the length on both sides, remove it and crop it .

2. Insert the espagnolette. Ensure it is installed in the correct direction, with the arrow [1] pointing upwards.

   Create a force-fit connection. → *8.5 "Force-fit connection" from page 183*



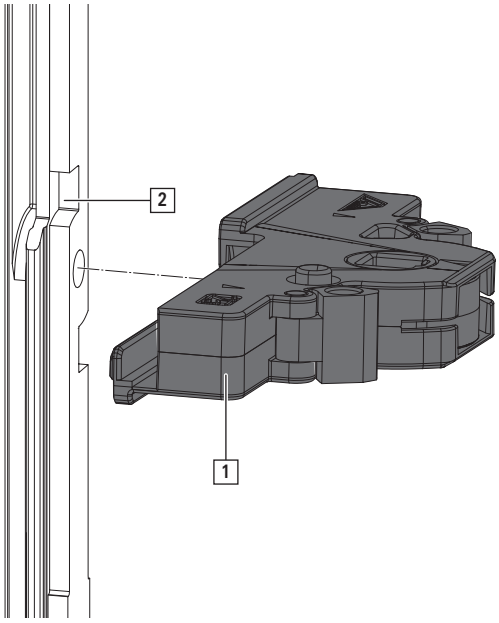
PRECONDITION

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

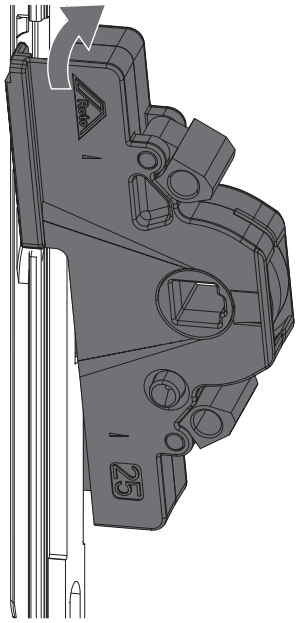
8.7.7 High backset espagnolette

Gearbox

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



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

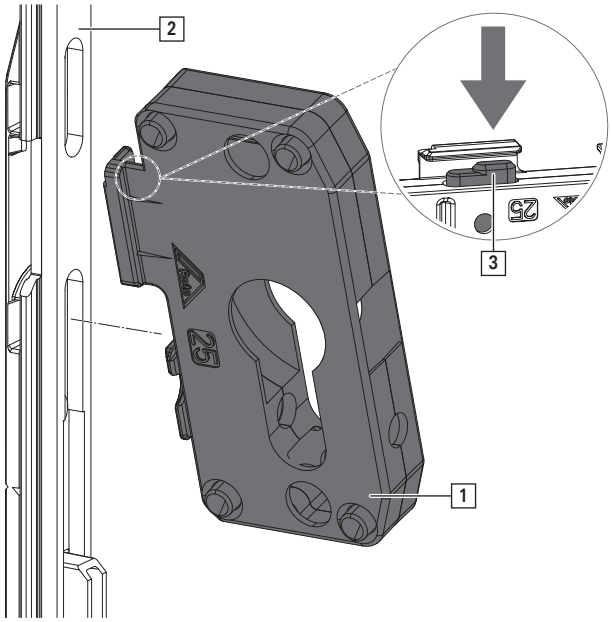


3. For dismantling, turn the gearbox anticlockwise until the gearbox comes out of the groove. Remove from the espagnolette faceplate.

Lock casing

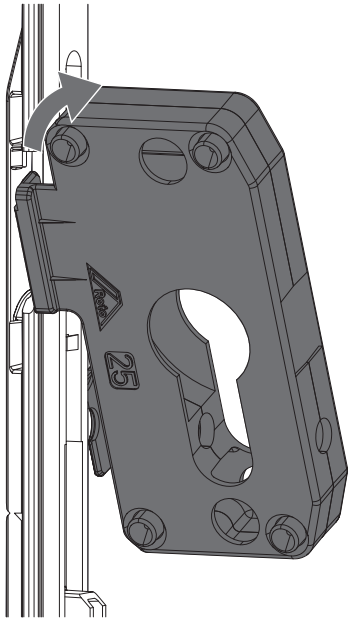
1. If the locking lug [3] is protruding, push it back into the lock casing [1].

   Turn the lock casing slightly before inserting it into the espagnolette faceplate [2].



2. Insert the lock casing into the groove and turn clockwise until the lock casing clicks into place.

   The lock casing is positioned flush with the espagnolette faceplate.



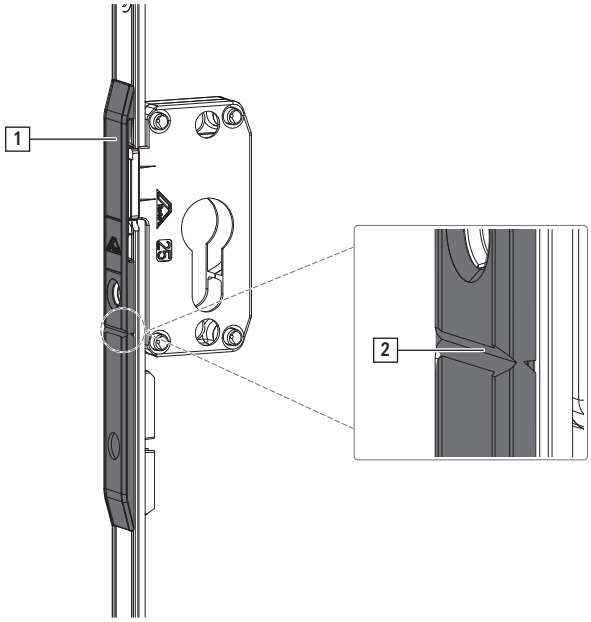
ATTENTION
Improper installation of the lock casing may cause property damage.
Turning the lock casing in incorrectly can damage the links.
- Ensure ease of movement when turning in.
- Reposition the lock casing if excessive force is required.

3. For dismantling, turn the lock casing anticlockwise until the lock casing comes out of the groove.

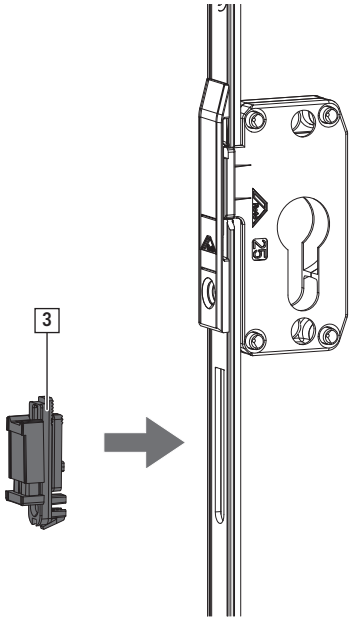
   Remove from the espagnolette faceplate.

Bullet catch

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

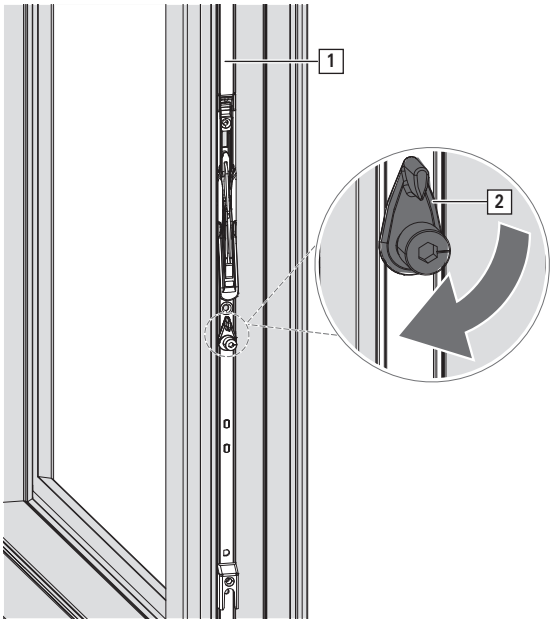


2. Insert the bullet catch [3].



8.7.8 Lever-operated espagnolette Plus

1. Insert the lever-operated espagnolette [1] into the sash groove.
   For installation in the right-hand sash, turn the eccentric bolt [2] 180°.



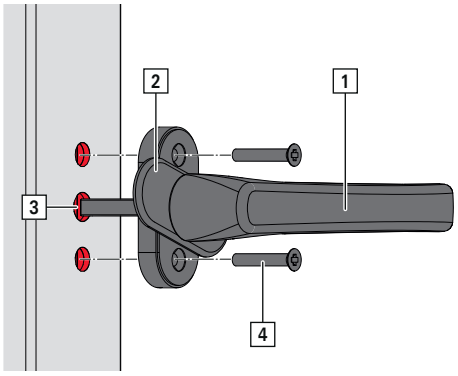
2. Mount the second opening sash with the lever-operated espagnolette open (as delivered).

8.7.9 Handle

8.7.9.1 Handle – T&T espagnolette

1. Move the handle [1] to the turn position (horizontally aligned with the escutcheon).

2. Rotate the cover [2] on the handle 90°.



3. Insert the handle into the sash [3].

4. Screw down the handle using screws [4].

5. Rotate the cover on the handle back 90°.

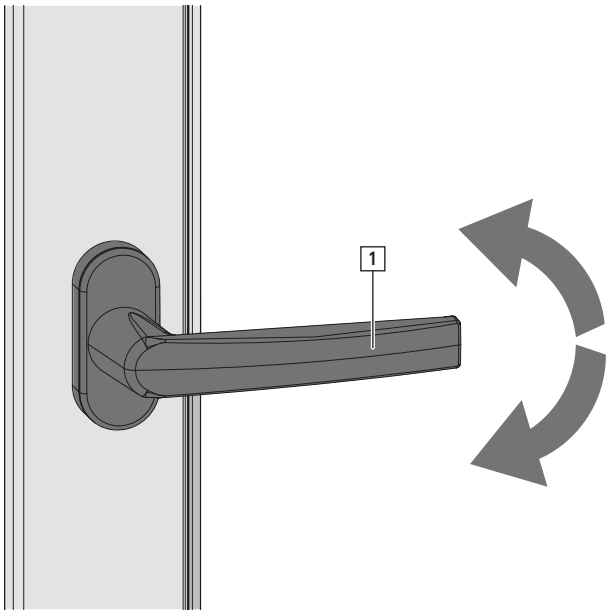
8.7.9.2 Centre fixing

INFO
All coupleable components are delivered attached in the centre.

Undoing the centre fixing

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

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



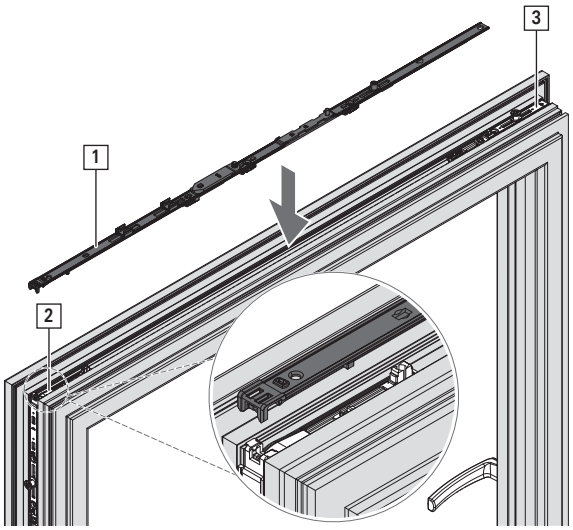
2. Turn the handle in the opposite direction as far as it will go.
   Audible cracking noise.

3. Turn the handle in both directions again and check for ease of movement.

8.7.10 Stay guide

8.7.10.1 Installing the stay guide

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

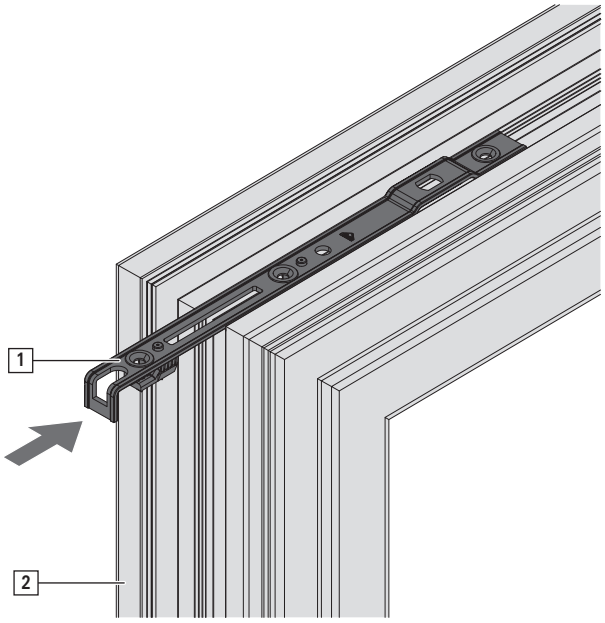


2. Connect the stay guide to the corner drive [3].
   Creating a force-fit connection → *from page 183*

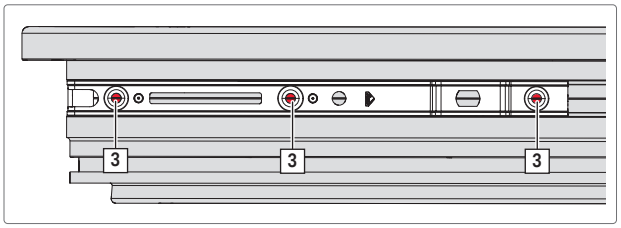
8.7.11 Rebate sash stay

Installing the rebate stay guide

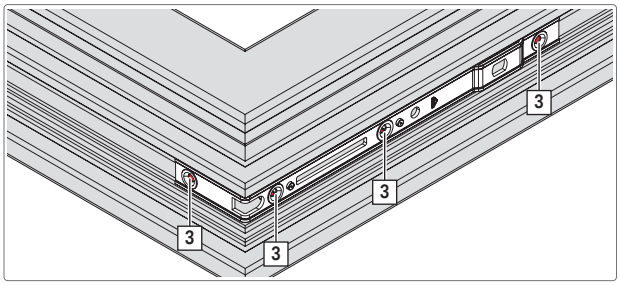
1. Insert the rebate stay guide [1] into the sash groove [2].
   Check that it is seated flush.



2. **Turn-Only sash**
   Fasten with three screws [3].

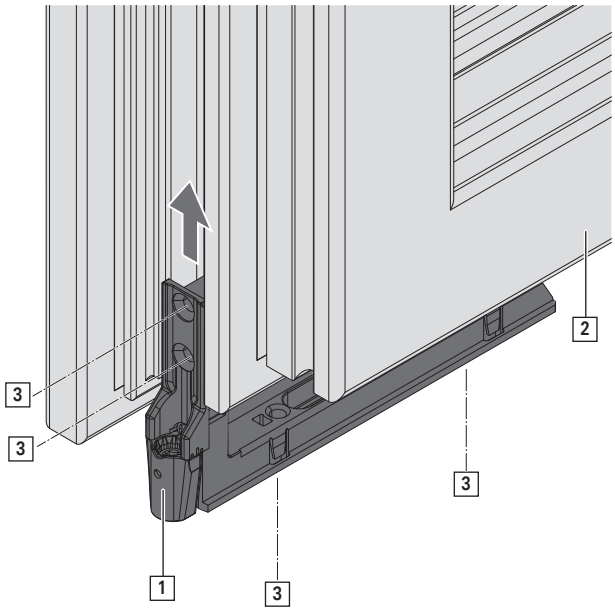


3. **Tilt-Only sash**
   Fasten with four screws [3].



8.7.12 Corner hinge

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

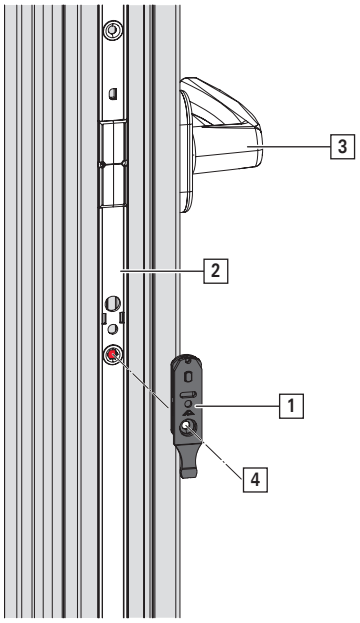


2. Fasten with four screws [3].

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].

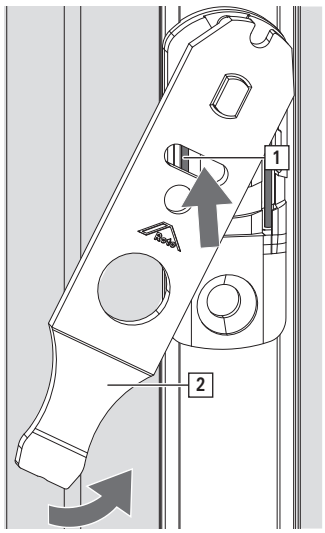


2. Fasten with a screw [4].

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

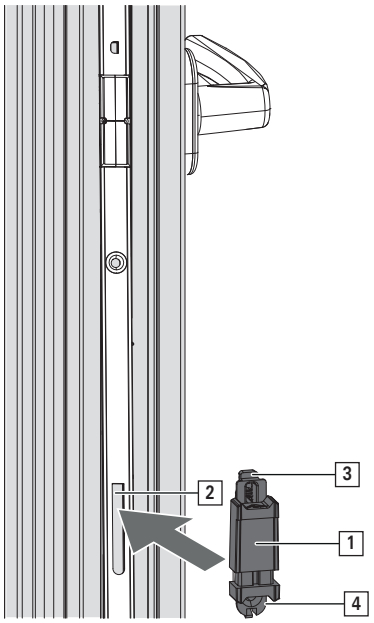
1. Use a suitable tool, for example a screwdriver, to push down on the spring [1] beneath the slot.



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

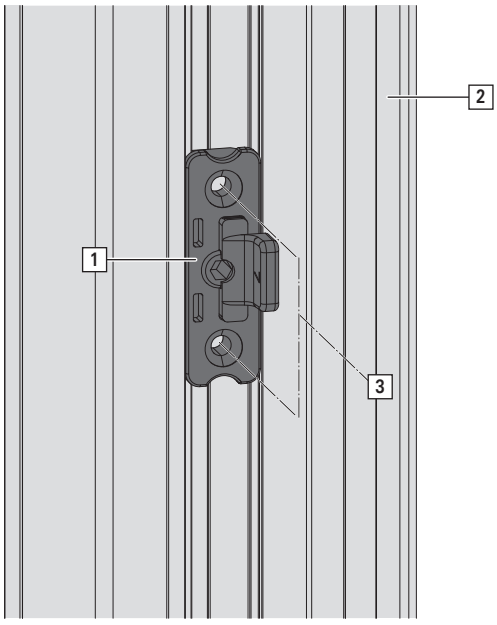
1. Insert the bullet-catch sash component [1] into the espagnolette recess [2].
   To do so, insert the nose of the bullet catch [3] into the flat side of the espagnolette recess and clip the bullet catch into place.



2. Secure with screw [4].

8.7.15 Concealed centre closer

1. Place the centre closer [1] in the sash groove [2].
   For positioning, see → *from page 206*



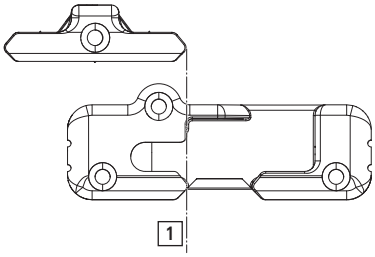
2. Fasten with two screws [3].

8.8 Frame

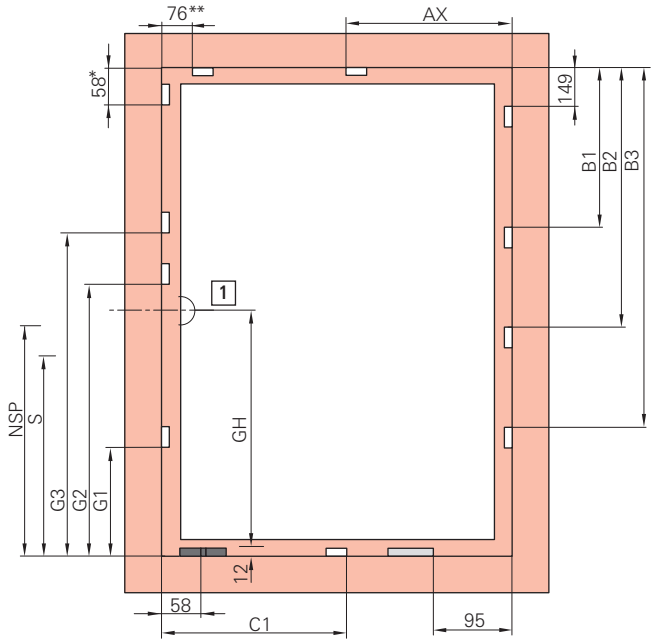
8.8.1 Position of strikers and tilt strikers

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.

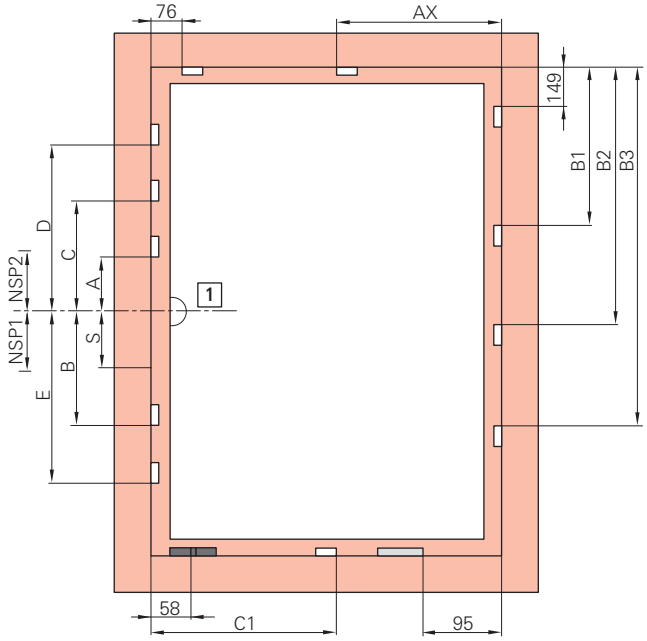
Turn restrictor e.g.

T&T espagnolette, VT – fixed handle height

SRH [mm]	GH	G1	G2	G3	NSP	S
280 – 510	120	–	–	–	–	–
511 – 600	170	–	–	–	262	–
601 – 800	263	–	–	–	350	–
801 – 1000	413	550	–	–	288	–
1001 – 1200	513	700	–	–	388	–
1201 – 1400	563	700	–	–	388	–
1401 – 1600	563	700	1170	–	388	–
1601 – 1800	563	700	1370	–	388	–
1601 – 1800	1000	700	1370	–	1121	807
1801 – 2000	1000	700	1370	–	1121	807
2001 – 2600	1000	700	1370	1770	1121	807

* Fit a striker up to SRW 430 mm

** Fit a striker from SRW 431 mm



[1] Handle centre

Striker e.g.

Tilt striker e.g.

Turn restrictor e.g.

T&T espagnolette – centred / variable handle height

SRH [mm]	A	B	C	D	E	NSP 1	NSP 2	S
310 – 450	–	–	–	–	–	–	–	–
451 – 620	–	–	–	–	–	–	–	–
621 – 800	125	–	–	–	–	137	–	–
801 – 1200	125	–	–	–	–	137	–	–
1201 – 1600	125	340	–	–	–	137	–	–
1601 – 2000	–	312	358	–	–	–	109	395
2001 – 2400	–	312	358	758	740	–	109	395
2401 – 2600	–	312	358	758	740	–	109	395

Stay guide

SRW [mm]	AX	Size
801 – 1000	600	500 / 890
1001 – 1400	750	500 / 1090

Centre lock, vertical, without load transfer

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
2401 – 2600	746	1346	1946	2x CL 600 E KU + CL 600 E

Centre lock, vertical, with load transfer

SRH [mm]	B1	B2	B3	Centre lock
1000 – 1200	550	–	–	CL 400 E
1201 – 1400	746	–	–	CL 600 E
1401 – 1600	746	946	–	CL 600 E KU + CL 200 P
1601 – 1800	746	1150	–	CL 600 E KU + CL 400 E
1801 – 2000	746	1346	–	CL 600 E KU + CL 600 E
2001 – 2200	746	1346	1546	2x CL 600 E KU + CL 200 P
2201 – 2400	746	1346	1750	2x CL 600 E KU + CL 400 E
2401 – 2600	746	1346	1946	2x CL 600 E KU + CL 600 E

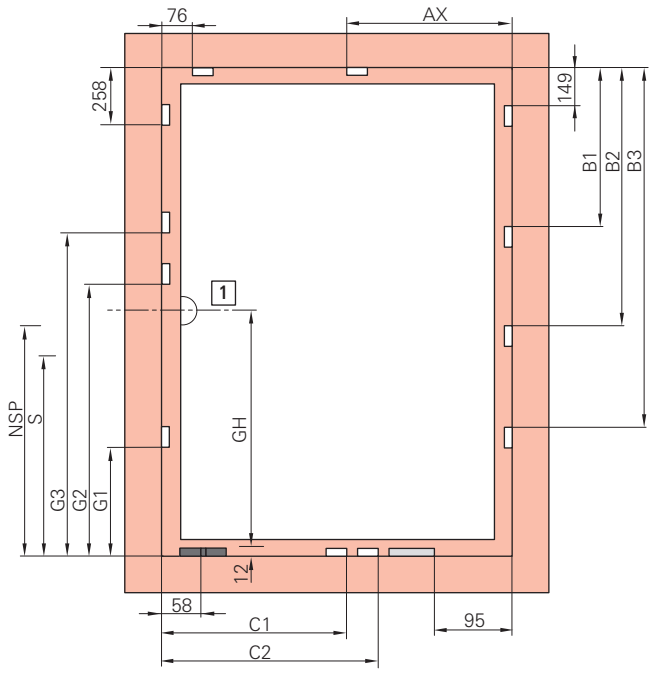
Centre lock, horizontal, without turn restrictor

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

Centre lock, horizontal, with turn restrictor

SRW [mm]	C1	Centre lock
801 – 850	258	CL 200 P
851 – 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.

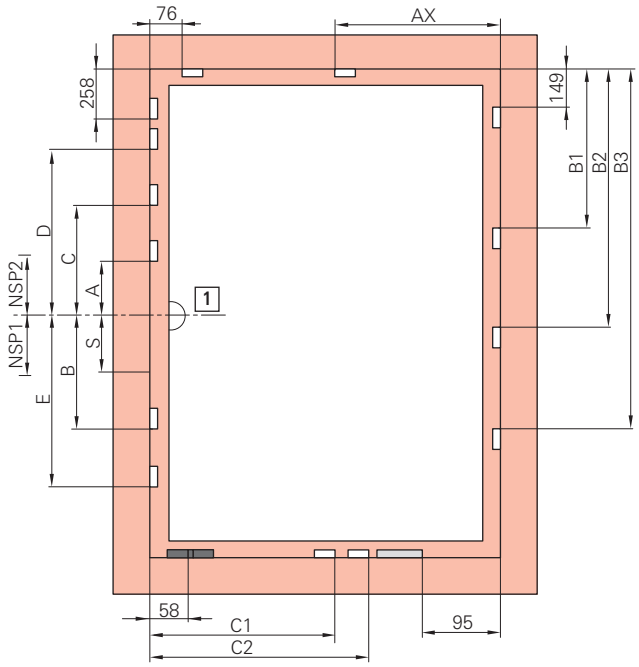
Tilt striker e.g.

Turn restrictor e.g.

T&T espagnolette, VT – fixed handle height

SRH [mm]	GH	G1	G2	G3	NSP	S
280 – 510	120	–	–	–	–	–
511 – 600	170	–	–	–	262	–
601 – 800	263	–	–	–	350	–
801 – 1000	413	550	–	–	288	–
1001 – 1200	513	700	–	–	388	–

SRH [mm]	GH	G1	G2	G3	NSP	S
1201 – 1400	563	700	–	–	388	–
1401 – 1600	563	700	1170	–	388	–
1601 – 1800	563	700	1370	–	388	807
1601 – 1800	1000	700	1370	–	1121	807
1801 – 2000	1000	700	1370	–	1121	807
2001 – 2200	1000	700	1370	1770	1121	807
2201 – 2400	1000	700	1370	1770	1121	807
2401 – 2600	1000	700	1370	1770	1121	807



[1] Handle centre

Striker e.g.

Tilt striker e.g.

Turn restrictor e.g.

T&T espagnolette – centred / variable handle height

SRH [mm]	A	B	C	D	E	NSP 1	NSP 2	S
310 – 450	–	–	–	–	–	–	–	–
451 – 620	–	–	–	–	–	–	–	–
621 – 800	125	–	–	–	–	137	–	–
801 – 1200	125	–	–	–	–	137	–	–
1201 – 1600	125	340	–	–	–	137	–	–
1601 – 2000	–	312	358	–	–	–	109	395
2001 – 2400	–	312	358	758	740	–	109	395
2401 – 2600	–	312	358	758	740	–	109	395

Stay guide

SRW [mm]	AX	Size
801 – 1000	600	500 / 890
1001 – 1400	750	500 / 1090

Centre lock, vertical, without load transfer

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

SRH [mm]	B1	B2	B3	Centre lock
1801 – 2000	746	1346	–	CL 600 E KU + CL 600 E
2001 – 2400	746	1346	1750	2x CL 600 E KU + CL 400 E
2401 – 2600	746	1346	1946	2x CL 600 E KU + CL 600 E

Centre lock, vertical, with load transfer

SRH [mm]	B1	B2	B3	Centre lock
1000 – 1200	550	–	–	CL 400 E
1201 – 1400	746	–	–	CL 600 E
1401 – 1600	746	946	–	CL 600 E KU + CL 200 P
1601 – 1800	746	1150	–	CL 600 E KU + CL 400 E
1801 – 2000	746	1346	–	CL 600 E KU + CL 600 E
2001 – 2200	746	1346	1546	2x CL 600 E KU + CL 200 P
2201 – 2400	746	1346	1750	2x CL 600 E KU + CL 400 E
2401 – 2600	746	1346	1946	2x CL 600 E KU + CL 600 E

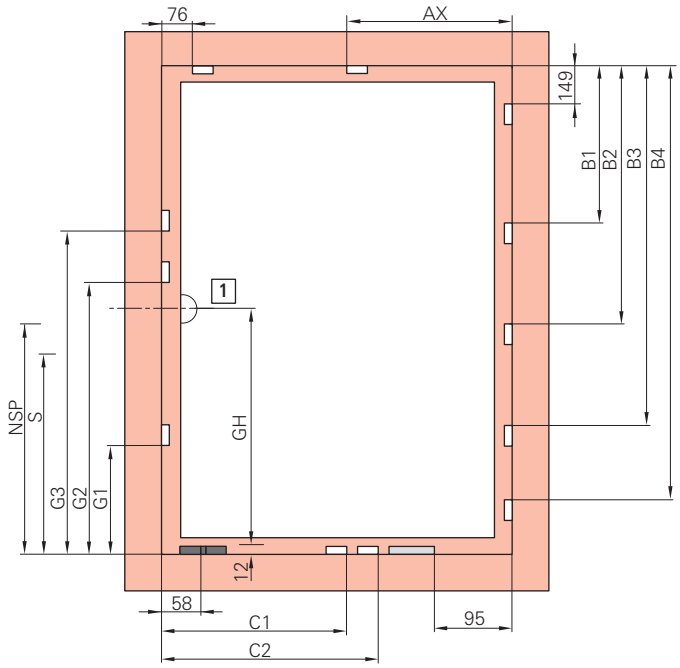
Centre lock, horizontal, without turn restrictor

SRW [mm]	C1	C2	Centre lock
450 – 650	258	–	CL 200 P
651 – 850	462	–	CL 400 P
851 – 1000	658	–	CL 600 P

Centre lock, horizontal, with turn restrictor

SRW [mm]	C1	C2	Centre lock
650 – 850	258	–	CL 200 P
851 – 1050	462	–	CL 400 P
1051 – 1250	658	–	CL 600 P
1251 – 1400	658	858	CL 600 E KU + CL 200 P

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



[1] Handle centre

Striker e.g.

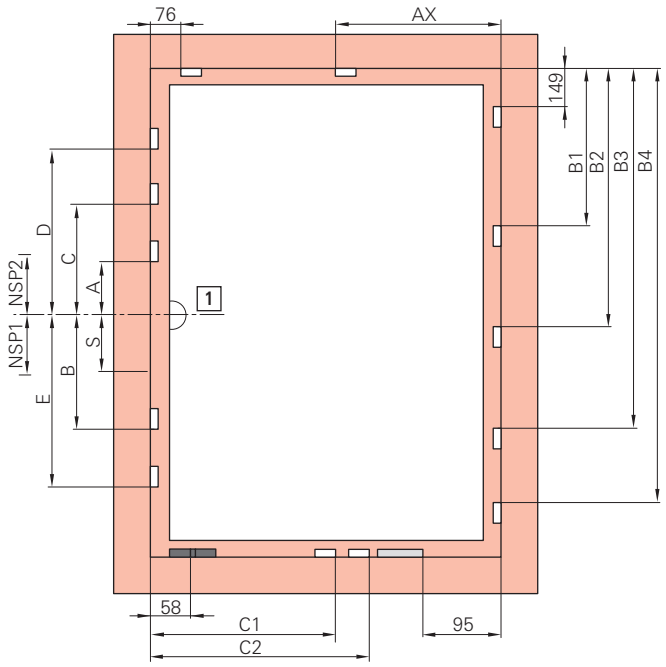
Tilt striker e.g.

Turn restrictor e.g.

T&T espagnolette, VT – fixed handle height

SRH [mm]	GH	G1	G2	G3	NSP	S
600 – 800	263	–	–	–	350	–
801 – 1000	413	550	–	–	288	–
1001 – 1200	513	700	–	–	388	–
1201 – 1400	563	700	–	–	388	–
1401 – 1600	563	700	1170	–	388	–
1601 – 1800	563	700	1370	–	388	807
1601 – 1800	1000	700	1370	–	1121	807
1801 – 2000	1000	700	1370	–	1121	807
2001 – 2200	1000	700	1370	1770	1121	807
2201 – 2400	1000	700	1370	1770	1121	807

Position of strikers and tilt strikers



[1] Handle centre

Striker e.g.

Tilt striker e.g.

Turn restrictor e.g.

T&T espagnolette – centred / variable handle height

SRH [mm]	A	B	C	D	E	NSP 1	NSP 2	S
490 – 620	–	–	–	–	–	–	–	–
621 – 800	125	–	–	–	–	137	–	–
801 – 1200	125	–	–	–	–	137	–	–
1201 – 1600	125	340	–	–	–	137	–	–
1601 – 2000	–	312	358	–	–	–	109	395
2001 – 2400	–	312	358	758	740	–	109	395

Stay guide

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

Centre lock, vertical, without load transfer

SRH [mm]	B1	B2	B3	B4	Centre lock
490 – 650	346	–	–	–	CL 200 V
651 – 850	550	–	–	–	CL 400 V
851 – 1050	746	–	–	–	CL 600 V
1051 – 1250	746	946	–	–	CL 600 V KU + CL 200 V
1251 – 1450	746	1150	–	–	CL 600 V KU + CL 400 V
1451 – 1650	746	1346	–	–	CL 600 V KU + CL 600 V
1651 – 1850	746	1346	1546	–	2x CL 600 V KU + CL 200 V
1851 – 2050	746	1346	1750	–	2x CL 600 V KU + CL 400 V
2051 – 2250	746	1346	1946	–	2x CL 600 V KU + CL 600 V
2251 – 2400	746	1346	1946	2146	3x CL 600 V KU + CL 200 V

Centre lock, vertical, with load transfer

SRH [mm]	B1	B2	B3	B4	Centre lock
1000 – 1150	550	–	–	–	CL 400 V
1151 – 1350	746	–	–	–	CL 600 V
1351 – 1550	746	946	–	–	CL 600 V KU + CL 200 V
1551 – 1750	746	1150	–	–	CL 600 V KU + CL 400 V
1751 – 1950	746	1346	–	–	CL 600 V KU + CL 600 V
1951 – 2150	746	1346	1546	–	2x CL 600 V KU + CL 200 V
2151 – 2350	746	1346	1750	–	2x CL 600 V KU + CL 400 V
2351 – 2400	746	1346	1946	–	2x CL 600 V KU + CL 600 V

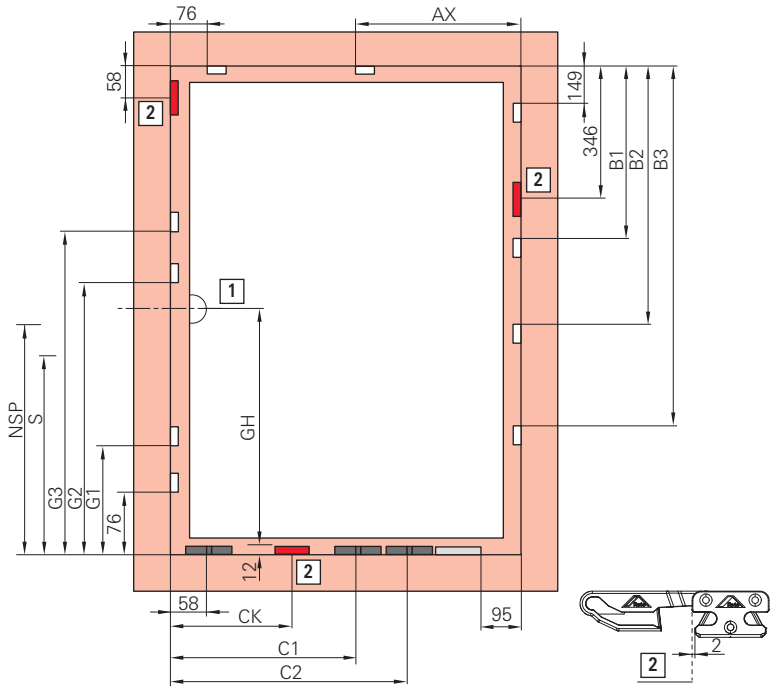
Centre lock, horizontal, without turn restrictor

SRW [mm]	C1	C2	Centre lock
450 – 650	258	–	CL 200 V
651 – 850	462	–	CL 400 V
851 – 1000	658	–	CL 600 V

Centre lock, horizontal, with turn restrictor

SRW [mm]	C1	C2	Centre lock
650 – 850	258	–	CL 200 V
851 – 1050	462	–	CL 400 V
1051 – 1250	658	–	CL 600 V
1251 – 1400	658	858	CL 600 V KU + CL 200 V

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



[1] Handle centre

Striker e.g.

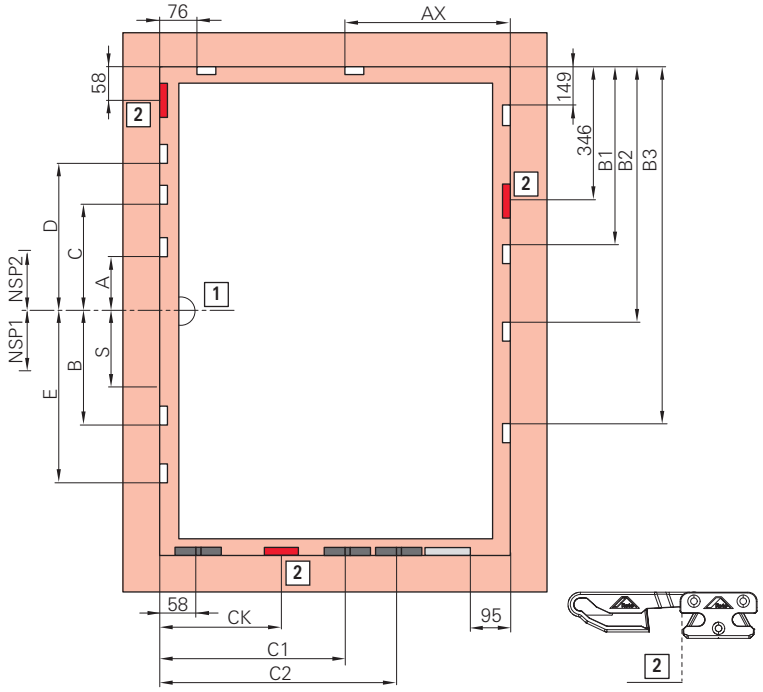
Tilt striker e.g.

Turn restrictor e.g.

Security striker for tilt ventilation

T&T espagnolette, VT – fixed handle height

SRH [mm]	GH	G1	G2	G3	K	NSP	S
600 – 800	263	–	–	–	–	350	–
801 – 1000	413	550	–	–	–	288	–
1001 – 1200	513	700	–	–	–	388	–
1201 – 1400	563	700	–	–	–	388	–
1401 – 1600	563	700	1170	–	–	388	–
1601 – 1800	563	700	1370	–	–	388	–
1601 – 1800	1000	700	1370	–	–	1121	807
1801 – 2000	1000	700	1370	–	–	1121	807
2001 – 2200	1000	700	1370	1770	–	1121	807
2201 – 2400	1000	700	1370	1770	–	1121	807



[1] Handle centre

Striker e.g.

Tilt striker e.g.

Turn restrictor e.g.

Security striker for tilt ventilation

T&T espagnolette – centred / variable handle height

SRH [mm]	A	B	C	D	E	NSP 1	NSP 2	S
490 – 620	–	–	–	–	–	–	–	–
621 – 800	125	–	–	–	–	137	–	–
801 – 1200	125	–	–	–	–	137	–	–
1201 – 1600	125	340	–	–	–	137	–	–
1601 – 2000	–	312	358	–	–	–	109	395
2001 – 2400	–	312	358	758	740	–	109	395

Stay guide

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

Centre lock, vertical, without load transfer

SRH [mm]	B1	B2	B3	Centre lock
490 – 650	–	–	–	CL 200 V
651 – 850	546	–	–	CL 200 V KU + CL 200 V
851 – 1050	750	–	–	CL 200 V KU + CL 400 V
1051 – 1250	946	–	–	CL 200 V KU + CL 600 V
1251 – 1450	946	1146	–	CL 200 V KU + CL 600 V KU+ CL 200 V
1451 – 1650	946	1350	–	CL 200 V KU + CL 600 V KU+ CL 400 V
1651 – 1850	946	1546	–	CL 200 V KU + CL 600 V KU+ CL 600 V
1851 – 2050	946	1546	1746	CL 200 V KU + 2x CL 600 V KU+ CL 200 V
2051 – 2250	946	1546	1950	CL 200 V KU + 2x CL 600 V KU+ CL 400 V
2251 – 2400	946	1546	2146	CL 200 V KU + 2x CL 600 V KU+ CL 600 V

Centre lock, vertical, with load transfer

SRH [mm]	B1	B2	B3	Centre lock
1000 – 1100	–	–	–	CL 200
1101 – 1300	546	–	–	CL 200 V KU + CL 200 V
1301 – 1500	750	–	–	CL 200 V KU + CL 400 V
1501 – 1700	946	–	–	CL 200 V KU + CL 600 V
1701 – 1900	946	1146	–	CL 200 V KU + CL 600 V + CL 200 V
1901 – 2100	946	1350	–	CL 200 V KU + CL 600 V + CL 400 V
2101 – 2300	946	1546	–	CL 200 V KU + CL 600 V + CL 600 V
2301 – 2400	946	1546	1746	CL 200 V KU + 2x CL 600 V + CL 200 V

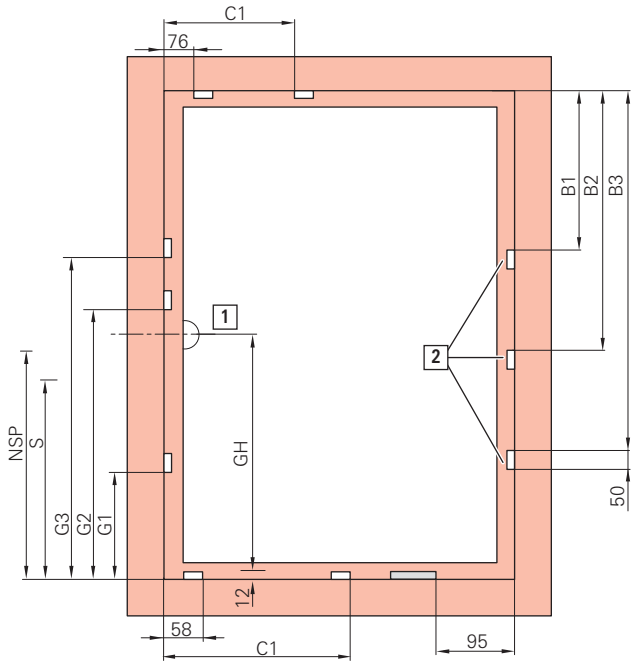
Centre lock, horizontal, without turn restrictor

SRW [mm]	CK	C1	C2	Centre lock
450 – 650	258	–	–	CL 200 V
651 – 850	258	458	–	CL 200 V KU + CL 200 V
851 – 1000	458	258	658	2x CL 200 V KU + CL 200 V

Centre lock, horizontal, with turn restrictor

SRW [mm]	CK	C1	C2	Centre lock
800 – 850	258	–	–	CL 200 V
851 – 1050	458	258	–	CL 200 V KU + CL 200 V
1051 – 1250	458	258	658	2x CL 200 V KU + CL 200 V
1251 – 1400	658	258	858	CL 200 V KU + CL 400 V KU + CL 200 V

8.8.1.6 Turn-Only hardware – basic security



[1] Handle centre

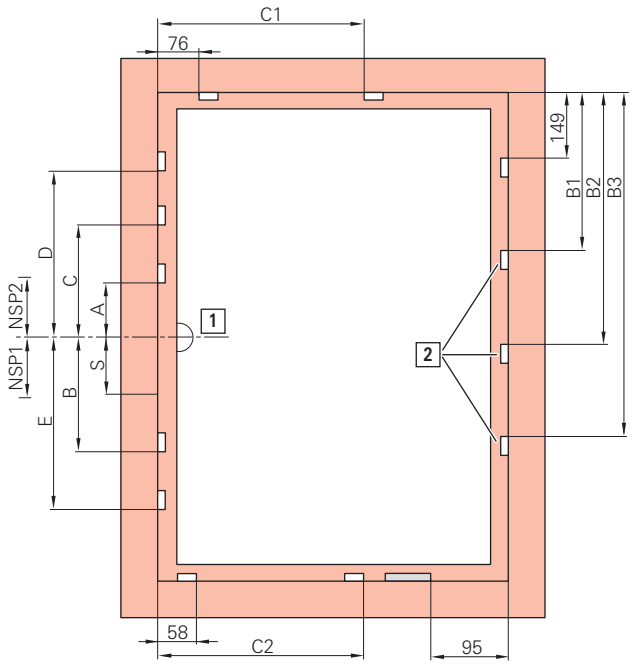
[2] Concealed centre closers

Striker e.g.

Turn restrictor e.g.

T&T espagnolette, VT – fixed handle height

SRH [mm]	GH	G1	G2	G3	NSP	S
280 – 510	120	–	–	–	–	–
511 – 600	170	–	–	–	262	–
601 – 800	263	–	–	–	350	–
801 – 1000	413	550	–	–	288	–
1001 – 1200	513	700	–	–	388	–
1201 – 1400	563	700	–	–	388	–
1401 – 1600	563	700	1170	–	388	–
1601 – 1800	563	700	1370	–	388	–
1601 – 1800	1000	700	1370	–	1121	807
1801 – 2000	1000	700	1370	–	1121	807
2001 – 2600	1000	700	1370	1770	1121	807



[1] Handle centre

[2] Concealed centre closers

Striker e.g.

T&T espagnolette – centred / variable handle height

SRH [mm]	A	B	C	D	E	NSP 1	NSP 2	S
310 – 620	–	–	–	–	–	–	–	–
621 – 800	125	–	–	–	–	137	–	–
801 – 1200	125	–	–	–	–	137	–	–
1201 – 1600	125	340	–	–	–	137	–	–
1601 – 2000	–	312	358	–	–	–	109	395
2001 – 2600	–	312	358	758	740	–	109	395

Centre closer, vertical, concealed, without load transfer

SRH [mm]	B1	B2	B3
801 – 1200	550	–	–
1201 – 1400	746	–	–
1401 – 1800	746	1150	–
1801 – 2000	746	1346	–
2001 – 2400	746	1346	1750
2401 – 2600	746	1346	1946

Centre closer, vertical, concealed, with load transfer

SRH [mm]	B1	B2	B3
1001 – 1200	550	–	–
1201 – 1400	746	–	–
1401 – 1600	746	946	–
1601 – 1800	746	1150	–
1801 – 2000	746	1346	–
2001 – 2200	746	1346	1546
2201 – 2400	746	1346	1750
2401 – 2600	746	1346	1946

Centre lock, horizontal

SRW [mm]	C1	C2	Top
801 – 1200	480	–	CL 400 E

SRW [mm]	C1	C2	Top
1201 – 1400	676	–	CL 600 E

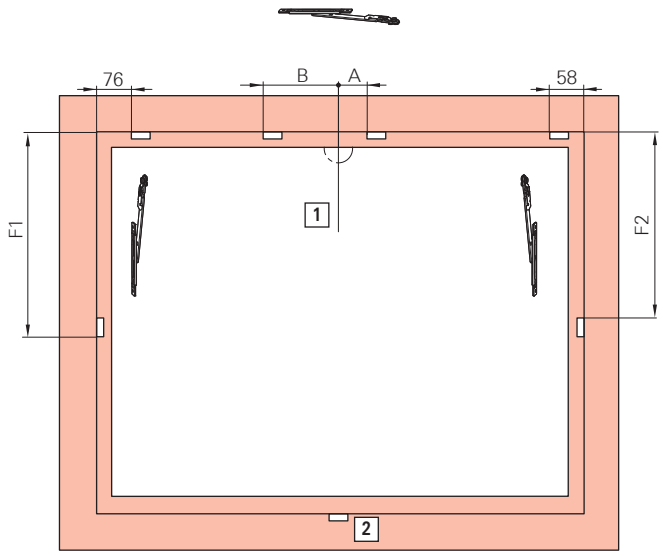
Centre lock, horizontal, without turn restrictor

SRW [mm]	C1	C2	Bottom
801 – 1200	–	462	CL 400 E
1201 – 1400	–	658	CL 600 E

Centre lock, horizontal, with turn restrictor

SRW [mm]	C1	C2	Bottom
801 – 850	–	258	CL 200 P
851 – 1200	–	462	CL 400 E
1201 – 1400	–	658	CL 600 E

8.8.1.7 Tilt-Only hardware – basic security



[1] Handle centre

[2] Concealed centre closer from SRW 801

Striker e.g.

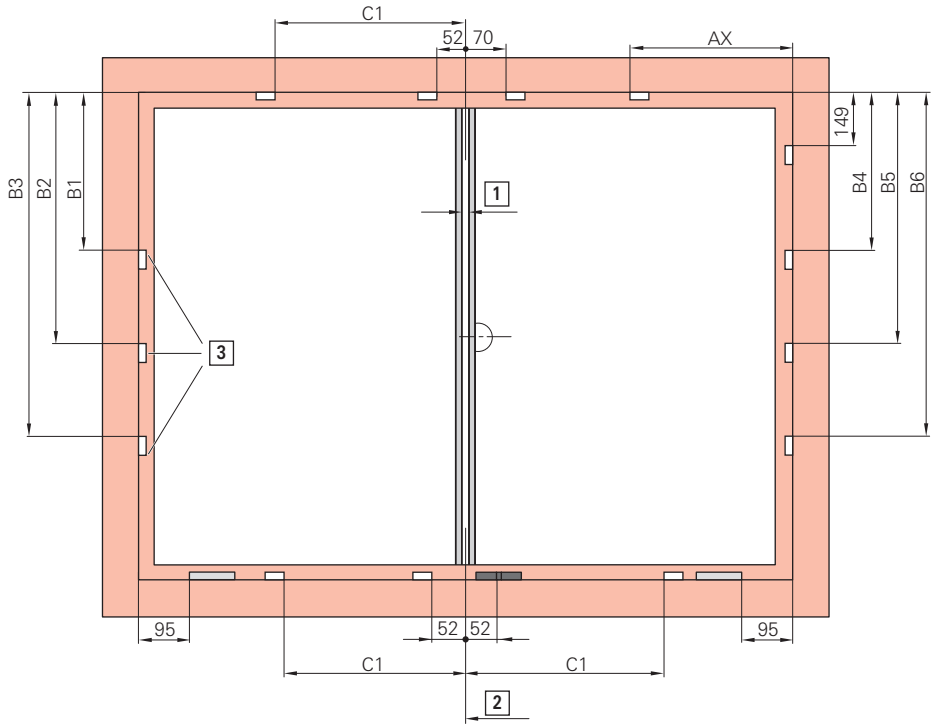
T&T espagnolette – centred / variable handle height

SRW [mm]	A	B
451 – 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 E

8.8.1.8 Floating-mullion hardware, standard – basic security



[1] 12 mm rebate clearance between the sashes

[2] Rebate clearance centre

[3] Concealed centre closers

Striker e.g.

Tilt striker e.g.

Turn restrictor, e.g.

Centre closer, vertical, concealed, without load transfer

SRH / mm	B1	B2	B3
801 - 1200	550	–	–
1201 - 1400	746	–	–
1401 - 1800	746	1150	–
1801 - 2000	746	1346	–
2001 - 2400	746	1346	1750
2401 - 2600	746	1346	1946

Centre closer, vertical, concealed, with load transfer

SRH / mm	B1	B2	B3
1001 - 1200	550	–	–
1201 - 1400	746	–	–
1401 - 1600	746	946	–
1601 - 1800	746	1150	–
1801 - 2000	746	1346	–
2001 - 2200	746	1346	1546
2201 - 2400	746	1346	1750
2401 - 2600	746	1346	1946

Centre lock, vertical, without load transfer

SRH / mm	B4	B5	B6	Centre lock
801 - 1200	550	–	–	CL 400 E
1201 - 1400	746	–	–	CL 600 E KU
1401 - 1800	746	1150	–	CL 600 E KU + CL 400 E
1801 - 2000	746	1346	–	CL 600 E KU + CL 600 E

SRH / mm	B4	B5	B6	Centre lock
2001 - 2400	746	1346	1750	2x CL 600 E KU + CL 400 E
2401 - 2600	746	1346	1946	2x CL 600 E KU + CL 600 E

Centre lock, vertical, with load transfer

SRH / mm	B4	B5	B6	Centre lock
1001 - 1200	550	–	–	CL 400 E
1201 - 1400	746	–	–	CL 600 E
1401 - 1600	746	946	–	CL 600 E KU + CL 200 P
1601 - 1800	746	1150	–	CL 600 E KU + CL 400 E
1801 - 2000	746	1346	–	CL 600 E KU + CL 600 E
2001 - 2200	746	1346	1546	2x CL 600 E KU + CL 200 P
2201 - 2400	746	1346	1750	2x CL 600 E KU + CL 400 E
2401 - 2600	746	1346	1946	2x CL 600 E KU + CL 600 P

Centre lock, horizontal

SRW / mm	C1	Top
801 - 1200	456	CL 400 E
1201 - 1400	652	CL 600 E

Centre lock, horizontal, without turn restrictor

SRW / mm	C1	Bottom
801 - 1200	456	CL 400 E
1201 - 1400	652	CL 600 E

Centre lock, horizontal, with turn restrictor

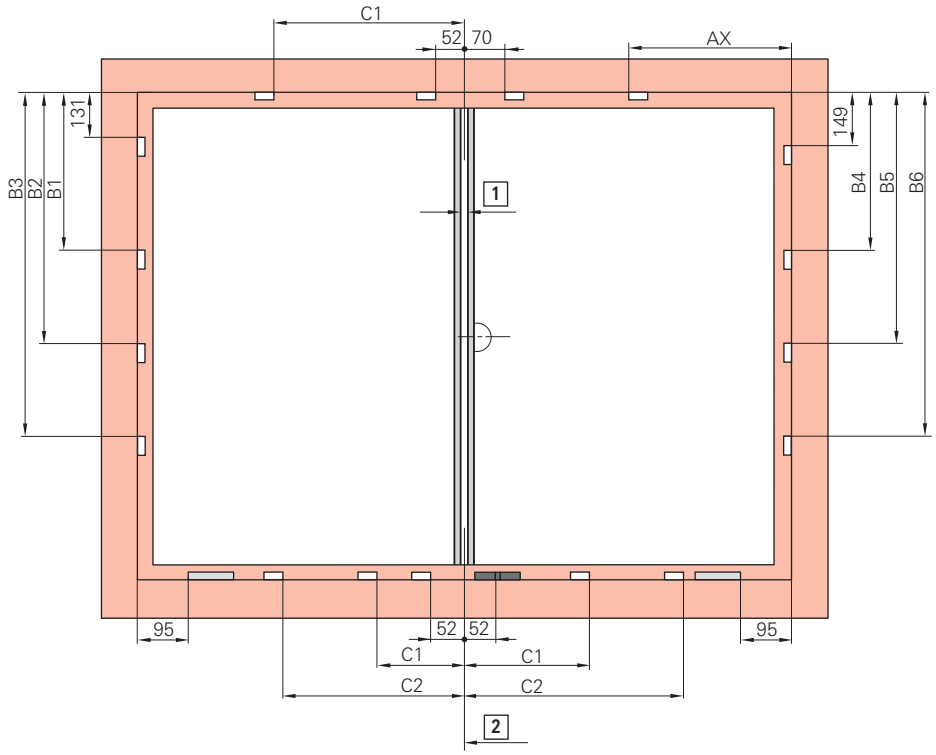
SRW / mm	C1	Bottom
801 - 850	252	CL 200 P
851 - 1200	456	CL 400 E
1201 - 1400	652	CL 600 E

Stay guide

SRW / mm	AX	Size
801 - 1000	600	500 / 890
1001 - 1400	750	500 / 1090

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

8.8.1.9 Floating-mullion hardware, standard – RC 1 N



[1] 12 mm rebate clearance between the sashes

[2] Rebate clearance centre

Striker e.g.

Tilt striker e.g.

Turn restrictor, e.g.

Centre lock, vertical, without load transfer

SRH / mm	B1	B2	B3	B4	B5	B6	Centre lock
801 - 1200	532	–	–	550	–	–	CL 400 E
1201 - 1400	728	–	–	746	–	–	CL 600 E
1401 - 1800	728	1132	–	746	1150	–	CL 600 E KU + CL 400 E
1801 - 2000	728	1328	–	746	1346	–	CL 600 E KU + CL 600 E
2001 - 2400	728	1328	1732	746	1346	1750	2x CL 600 E KU + CL 400 E
2401 - 2600	728	1328	1928	746	1346	1946	2x CL 600 E KU + CL 600 E

Centre lock, vertical, with load transfer

SRH / mm	B1	B2	B3	B4	B5	B6	Centre lock
1000 - 1200	532	–	–	550	–	–	CL 400 E
1201 - 1400	728	–	–	746	–	–	CL 600 E
1401 - 1600	728	928	–	746	946	–	CL 600 E KU + CL 200 P
1601 - 1800	728	1132	–	746	1150	–	CL 600 E KU + CL 400 E
1801 - 2000	728	1328	–	746	1346	–	CL 600 E KU + CL 600 E
2001 - 2200	728	1328	1528	746	1346	1546	2x CL 600 E KU + CL 200 P
2201 - 2400	728	1328	1732	746	1346	1750	2x CL 600 E KU + CL 400 E
2401 - 2600	728	1328	1928	746	1346	1946	2x CL 600 E KU + CL 600 E

Centre lock, horizontal

SRW / mm	C1	Top
911 - 1110	452	CL 400 E KU
1111 - 1310	652	CL 600 E KU
1311 - 1400	652	CL 600 E KU + CL 200 KU

Centre lock, horizontal, without turn restrictor

SRW / mm	C1	Bottom
450 - 650	252	CL 200 P
651 - 850	456	CL 400 P
851 - 1000	652	CL 600 P

Centre lock, horizontal, with turn restrictor

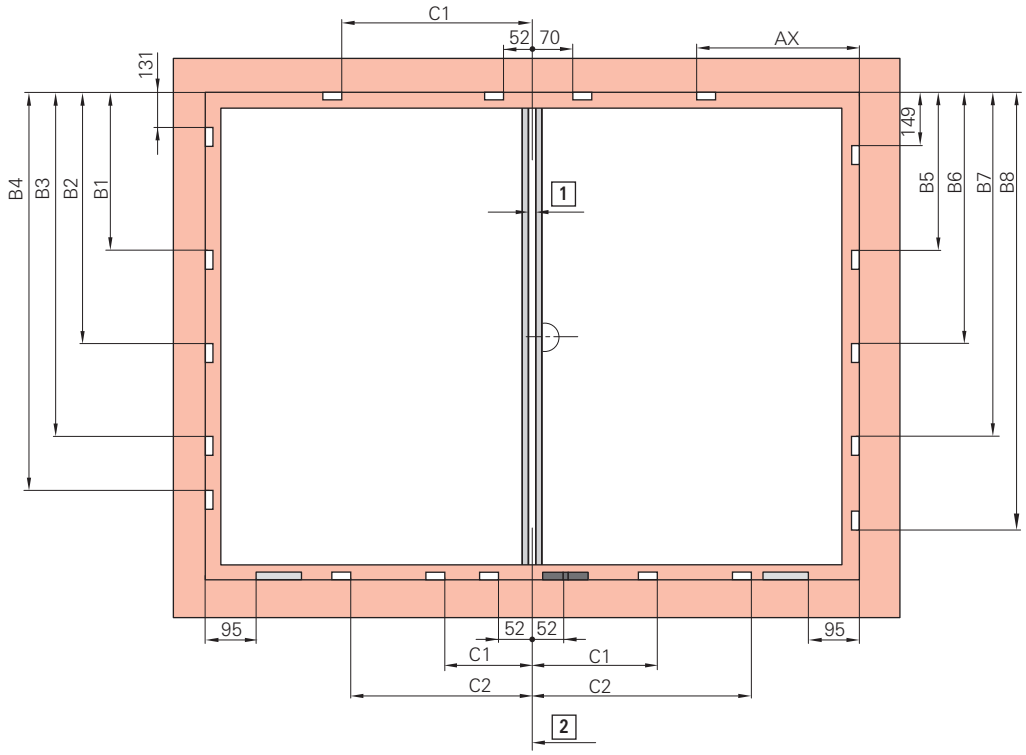
SRW / mm	C1	C2	Bottom
650 - 850	252	–	CL 200 P
851 - 1050	456	–	CL 400 P
1051 - 1250	652	–	CL 600 P
1251 - 1400	652	852	CL 600 E KU + CL 200 P

Stay guide

SRW / mm	AX	Size
801 - 1000	600	500 / 890
1001 - 1400	750	500 / 1090

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

8.8.1.10 Floating-mullion hardware, standard – RC 2 / RC 2 N



[1] 12 mm rebate clearance between the sashes

[2] Rebate clearance centre

Striker e.g.

Tilt striker e.g.

Turn restrictor e.g.

Centre lock, vertical, without load transfer

SRH [mm]	B1	B2	B3	B4	B5	B6	B7	B8	Centre lock
490 – 650	328	–	–	–	346	–	–	–	CL 200 V
651 – 850	532	–	–	–	550	–	–	–	CL 400 V
851 – 1050	728	–	–	–	746	–	–	–	CL 600 V
1051 – 1250	728	928	–	–	746	946	–	–	CL 600 V KU + CL 200 V
1251 – 1450	728	1132	–	–	746	1150	–	–	CL 600 V KU + CL 400 V
1451 – 1650	728	1328	–	–	746	1346	–	–	CL 600 V KU + CL 600 V
1651 – 1850	728	1328	1528	–	746	1346	1546	–	2x CL 600 V KU + CL 200 V
1851 – 2050	728	1328	1732	–	746	1346	1750	–	2x CL 600 V KU + CL 400 V
2051 – 2250	728	1328	1928	–	746	1346	1946	–	2x CL 600 V KU + CL 600 V
2251 – 2400	728	1328	1928	2128	746	1346	1946	2146	3x CL 600 V KU + CL 200 V

Centre lock, vertical, with load transfer

SRH [mm]	B1	B2	B3	B4	B5	B6	Centre lock
1000 – 1150	532	–	–	550	–	–	CL 400 V
1151 – 1350	728	–	–	746	–	–	CL 600 V
1351 – 1550	728	928	–	746	946	–	CL 600 V KU + CL 200 V
1551 – 1750	728	1132	–	746	1150	–	CL 600 V KU + CL 400 V
1751 – 1950	728	1328	–	746	1346	–	CL 600 V KU + CL 600 V
1951 – 2150	728	1328	1528	746	1346	1546	2x CL 600 V KU + CL 200 V
2151 – 2350	728	1328	1732	746	1346	1750	2x CL 600 V KU + CL 400 V
2351 – 2400	728	1328	1928	746	1346	1946	2x CL 600 V KU + CL 600 V

Centre lock, horizontal

SRW [mm]	C1	C1	Top
711 – 910	252	–	CL 200 KU
911 – 1110	452	–	CL 400 KU
1111 – 1310	652	–	CL 600 V KU
1311 – 1400	652	852	CL 600 V KU + CL 200 KU

Centre lock, horizontal, without turn restrictor

SRW [mm]	C1	Bottom
450 – 650	252	CL 200 V
651 – 850	456	CL 400 V
851 – 1000	652	CL 600 V

Centre lock, horizontal, with turn restrictor

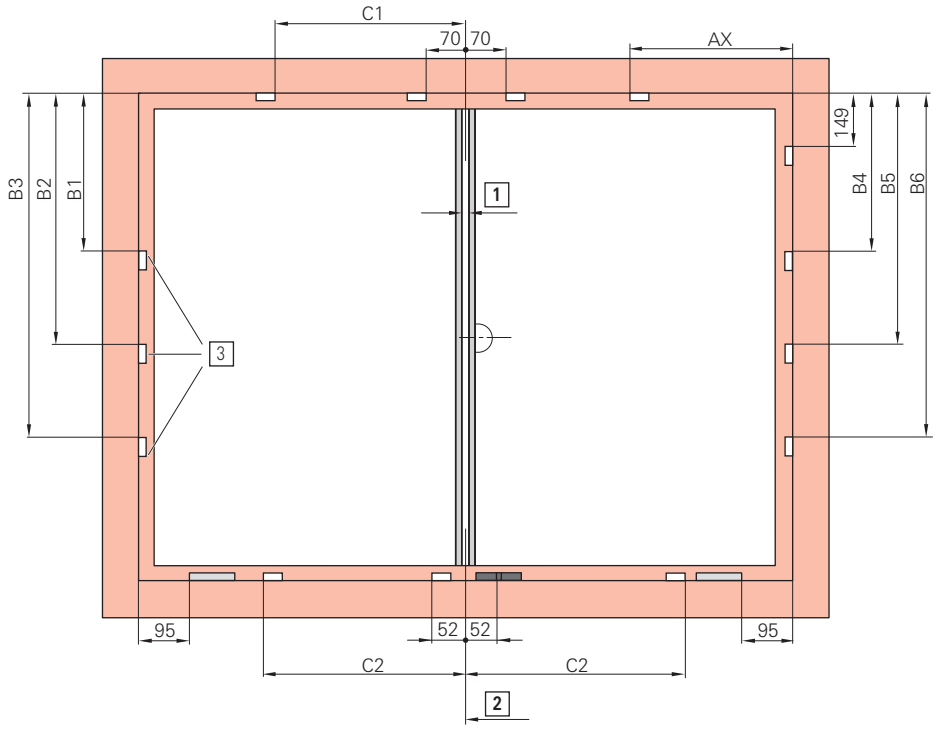
SRW [mm]	C1	C2	Bottom
650 – 850	252	–	CL 200 V
851 – 1050	456	–	CL 400 V
1051 – 1250	652	–	CL 600 V
1251 – 1400	652	852	CL 600 V KU + CL 200 V

Stay guide

SRW [mm]	AX	Size
801 – 1000	600	500 / 890
1001 – 1400	750	500 / 1090

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

8.8.1.11 Floating-mullion hardware Plus – basic security



[1] 12 mm rebate clearance between the sashes

[2] Rebate clearance centre

[3] Concealed centre closers

Striker e.g.

Tilt striker e.g.

Turn restrictor, e.g.

Centre closer, vertical, concealed, without load transfer

SRH / mm	B1	B2	B3
801 - 1200	550	–	–
1201 - 1400	746	–	–
1401 - 1800	746	1150	–
1801 - 2000	746	1346	–
2001 - 2400	746	1346	1750
2401 - 2600	746	1346	1946

Centre closer, vertical, concealed, with load transfer

SRH / mm	B1	B2	B3
1001 - 1200	550	–	–
1201 - 1400	746	–	–
1401 - 1600	746	946	–
1601 - 1800	746	1150	–
1801 - 2000	746	1346	–
2001 - 2200	746	1346	1546
2201 - 2400	746	1346	1750
2401 - 2600	746	1346	1946

Centre lock, vertical, without load transfer

SRH / mm	B4	B5	B6	Centre lock
801 - 1200	550	–	–	CL 400 E
1201 - 1400	746	–	–	CL 600 E KU
1401 - 1800	746	1150	–	CL 600 E KU + CL 400 E
1801 - 2000	746	1346	–	CL 600 E KU + CL 600 E
2001 - 2400	746	1346	1750	2x CL 600 E KU + CL 400 E
2401 - 2600	746	1346	1946	2x CL 600 E KU + CL 600 E

Centre lock, vertical, with load transfer

SRH / mm	B4	B5	B6	Centre lock
1001 - 1200	550	–	–	CL 400 E
1201 - 1400	746	–	–	CL 600 E
1401 - 1600	746	946	–	CL 600 E KU + CL 200 P
1601 - 1800	746	1150	–	CL 600 E KU + CL 400 E
1801 - 2000	746	1346	–	CL 600 E KU + CL 600 E
2001 - 2200	746	1346	1546	2x CL 600 E KU + CL 200 P
2201 - 2400	746	1346	1750	2x CL 600 E KU + CL 400 E
2401 - 2600	746	1346	1946	2x CL 600 E KU + CL 600 P

Centre lock, horizontal

SRW / mm	C1	Top
801 - 1200	474	CL 400 E
1201 - 1400	670	CL 600 E

Centre lock, horizontal, without turn restrictor

SRW / mm	C2	Bottom
801 - 1200	456	CL 400 E
1201 - 1400	652	CL 600 E

Centre lock, horizontal, with turn restrictor

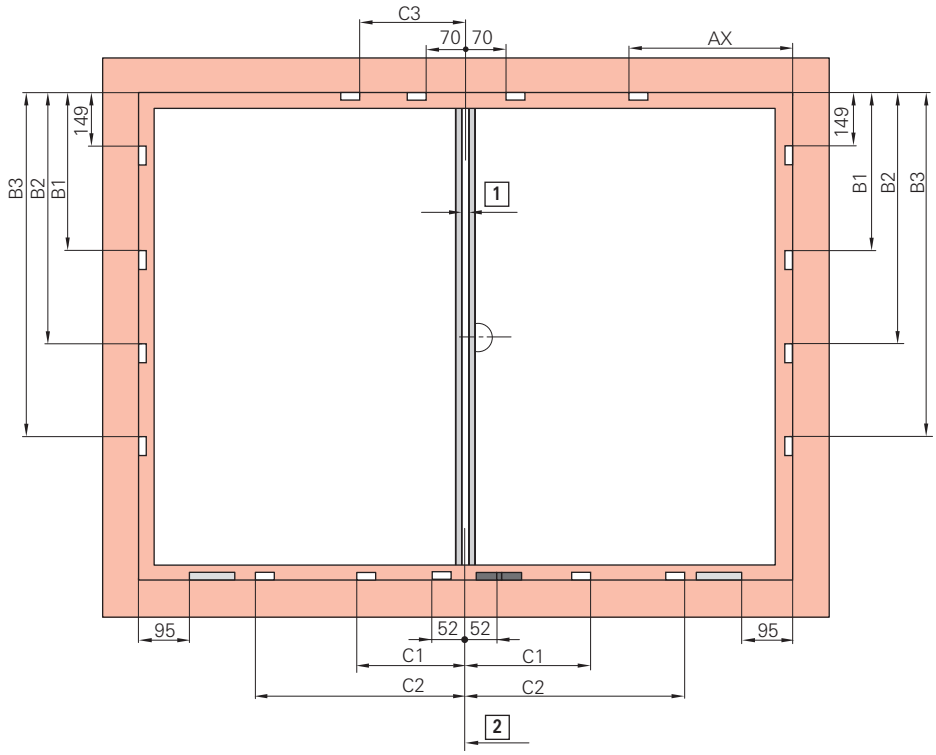
SRW / mm	C2	Bottom
801 - 850	252	CL 200 P
851 - 1200	456	CL 400 E
1201 - 1400	652	CL 600 E

Stay guide

SRW / mm	AX	Size
801 - 1000	600	500 / 890
1001 - 1400	750	500 / 1090

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

8.8.1.12 Floating-mullion hardware Plus – RC 1 N



[1] 12 mm rebate clearance between the sashes

[2] Rebate clearance centre

Striker e.g.

Tilt striker e.g.

Turn restrictor, e.g.

Centre lock, vertical, without load transfer

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
2401 - 2600	746	1346	1946	2x CL 600 E KU + CL 600 E

Centre lock, vertical, with load transfer

SRH / mm	B1	B2	B3	Centre lock
1000 - 1200	550	–	–	CL 400 E
1201 - 1400	746	–	–	CL 600 E
1401 - 1600	746	946	–	CL 600 E KU + CL 200 P
1601 - 1800	746	1150	–	CL 600 E KU + CL 400 E
1801 - 2000	746	1346	–	CL 600 E KU + CL 600 E
2001 - 2200	746	1346	1546	2x CL 600 E KU + CL 200 P
2201 - 2400	746	1346	1750	2x CL 600 E KU + CL 400 E
2401 - 2600	746	1346	1946	2x CL 600 E KU + CL 600 E

Centre lock, horizontal, without turn restrictor

SRW / mm	C1	Bottom
450 - 650	252	CL 200 P
651 - 850	456	CL 400 P
851 - 1000	652	CL 600 P

Centre lock, horizontal, with turn restrictor

SRW / mm	C1	C2	Bottom
650 - 850	252	–	CL 200 P
851 - 1050	456	–	CL 400 P
1051 - 1250	652	–	CL 600 P
1251 - 1400	652	852	CL 600 E KU + CL 200 P

Centre lock, horizontal

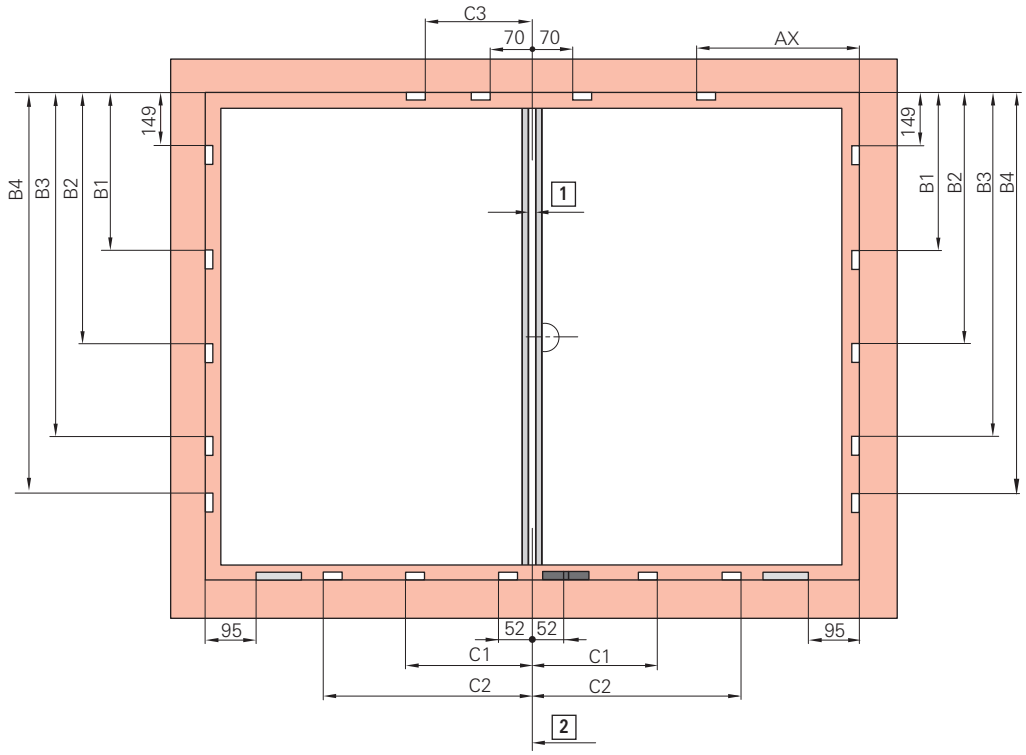
SRW / mm	C3	Top
801 - 1000	270	CL 200 E KU
1001 - 1200	470	CL 400 E KU
1201 - 1400	670	CL 600 E KU

Stay guide

SRW / mm	AX	Size
801 - 1000	600	500 / 890
1001 - 1400	750	500 / 1090

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

8.8.1.13 Floating-mullion hardware Plus – RC 2 / RC 2 N



[1] 12 mm rebate clearance between the sashes

[2] Rebate clearance centre

Striker e.g.

Tilt striker e.g.

Turn restrictor, e.g.

Centre lock, vertical, without load transfer

SRH / mm	B1	B2	B3	B4	Centre lock
490 - 650	346	–	–	–	CL 200 V
651 - 850	550	–	–	–	CL 400 V
851 - 1050	746	–	–	–	CL 600 V
1051 - 1250	746	946	–	–	CL 600 V KU + CL 200 V
1251 - 1450	746	1150	–	–	CL 600 V KU + CL 400 V
1451 - 1650	746	1346	–	–	CL 600 V KU + CL 600 V
1651 - 1850	746	1346	1546	–	2x CL 600 V KU + CL 200 V
1851 - 2050	746	1346	1750	–	2x CL 600 V KU + CL 400 V
2051 - 2250	746	1346	1946	–	2x CL 600 V KU + CL 600 V
2251 - 2400	746	1346	1946	2146	3x CL 600 V KU + CL 200 V

Centre lock, vertical, with load transfer

SRH / mm	B1	B2	B3	Centre lock
1000 - 1150	550	–	–	CL 400 V
1151 - 1350	746	–	–	CL 600 V
1351 - 1550	746	946	–	CL 600 V KU + CL 200 V
1551 - 1750	746	1150	–	CL 600 V KU + CL 400 V
1751 - 1950	746	1346	–	CL 600 V KU + CL 600 V
1951 - 2150	746	1346	1546	2x CL 600 V KU + CL 200 V
2151 - 2350	746	1346	1750	2x CL 600 V KU + CL 400 V
2351 - 2400	746	1346	1946	2x CL 600 V KU + CL 600 V

Centre lock, horizontal, without turn restrictor

SRW / mm	C1	Bottom
450 - 650	252	CL 200 V
651 - 850	456	CL 400 V
851 - 1000	652	CL 600 V

Centre lock, horizontal, with turn restrictor

SRW / mm	C1	C2	Bottom
650 - 850	252	–	CL 200 V
851 - 1050	456	–	CL 400 V
1051 - 1250	652	–	CL 600 V
1251 - 1400	652	852	CL 600 V KU + CL 200 V

Centre lock, horizontal

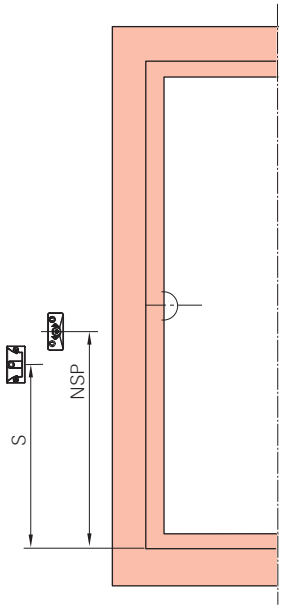
SRW / mm	C3	Top
801 - 1000	270	CL 200 KU
1001 - 1200	470	CL 400 V KU
1201 - 1400	670	CL 600 V KU

Stay guide

SRW / mm	AX	Size
801 - 1000	600	500 / 890
1001 - 1400	600	500 / 1090

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

8.8.2 Position of the lifting mishandling device and bullet catch

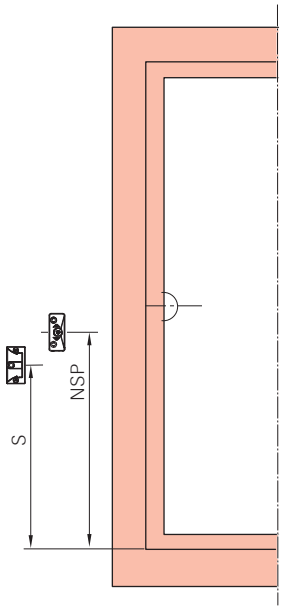


[LMD] Lifting mishandling device

[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

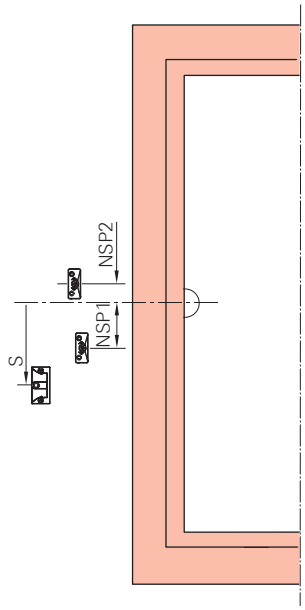
[BC] Bullet catch

T&T espagnolette – fixed handle height

SRH / mm	NSP	S
280 – 480	–	–
481 – 600	262	–
601 – 800	138	–
801 – 1000	288	–
1001 – 1200	388	–
1201 – 1400	388	–
1401 – 1600	388	–
1601 – 1800	388	–
1601 – 1800	1121	807
1801 – 2000	1121	807
2001 – 2200	1121	807
2201 – 2400	1121	807
2401 – 2600	1121	807
2601 – 2800	1121	807

Frame

Position of the lifting mishandling device and bullet catch



[LMD] = Lifting mishandling device

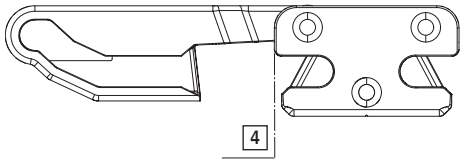
[BC] Bullet catch

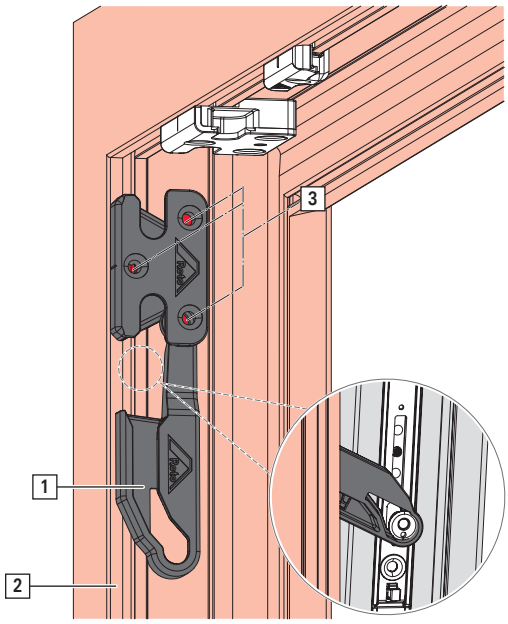
T&T espagnolette – centred / variable handle height

SRH / mm	NSP 1	NSP 2	S
450 – 620	–	–	–
621 – 800	137	–	–
801 – 1200	137	–	–
1201 – 1600	137	–	–
1601 – 2000	–	109	395
2001 – 2400	–	109	395
2401 – 2600	–	109	395
2601 – 2800	–	109	395

8.8.3 Security striker for tilt ventilation (TiltSafe)

1. Position the security striker for tilt ventilation [1] on the frame [2].
   In the turn position, the entering cam must be positioned in the same way as a standard striker.
   Striker point of entry [4]





2. Secure with three single-use screws [3].

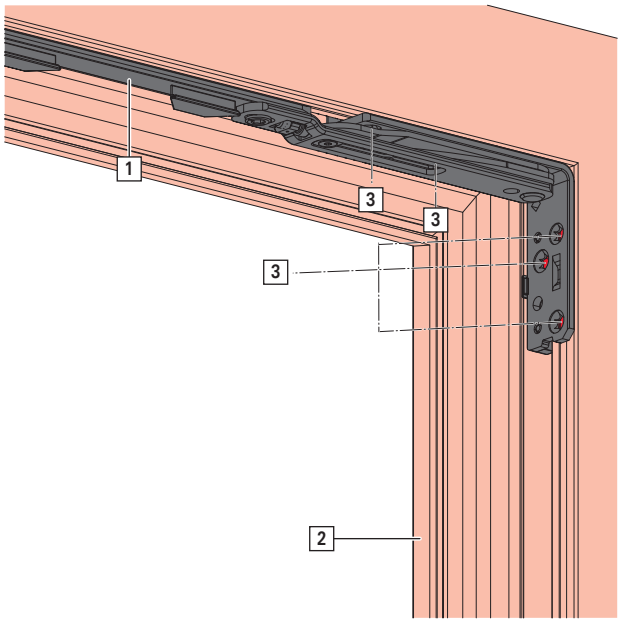
INFO
Single-use screws can be tightened but not undone.

INFO
RC 2 protection cannot be achieved in the 135° handle position (night ventilation). To achieve RC 2 protection:

1. Tilt the window
2. Lock the handle
3. Remove the key.

8.8.4 Sash stay / rebate sash stay

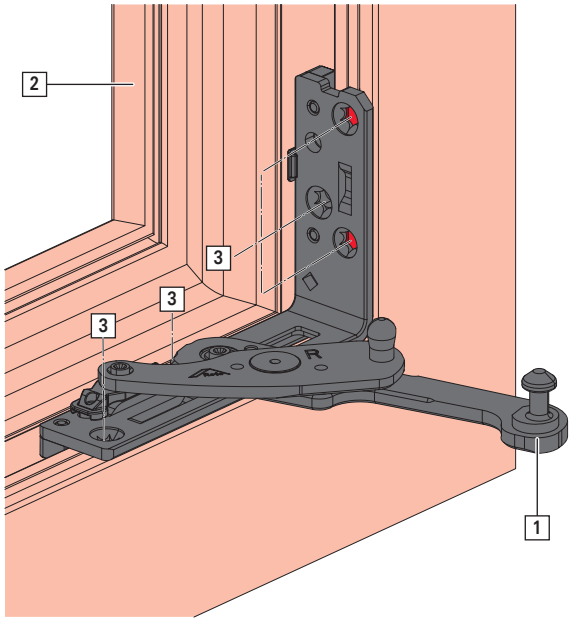
1. Place the sash stay [1] in the frame [2].



2. Fasten with five screws [3].

8.8.5 Pivot rest

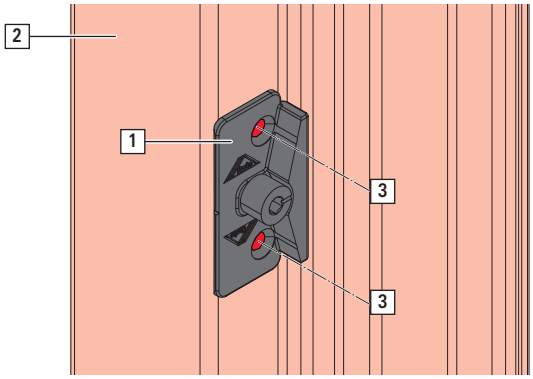
1. Place the pivot rest [1] on the frame [2].



2. Fasten with five screws [3].

8.8.6 Lifting mishandling device

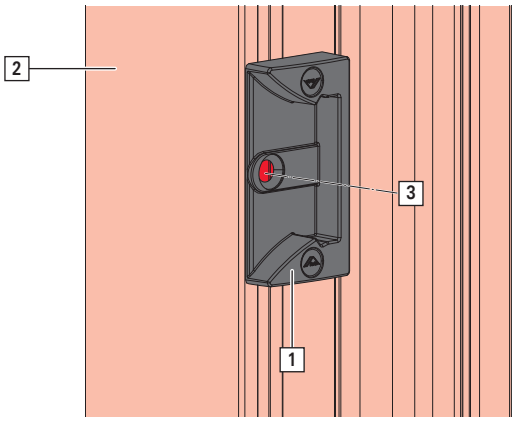
1. Position the lifting mishandling device frame component [1] in the frame [2].



2. Secure with two screws [3].

8.8.7 Bullet catch

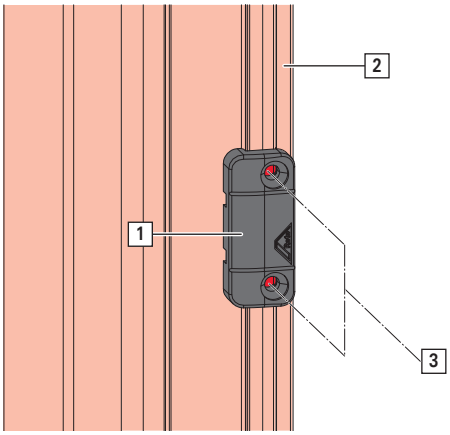
1. Position the bullet-catch frame component [1] in the frame [2].



2. Fasten with a screw [3].

8.8.8 Concealed centre closer

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



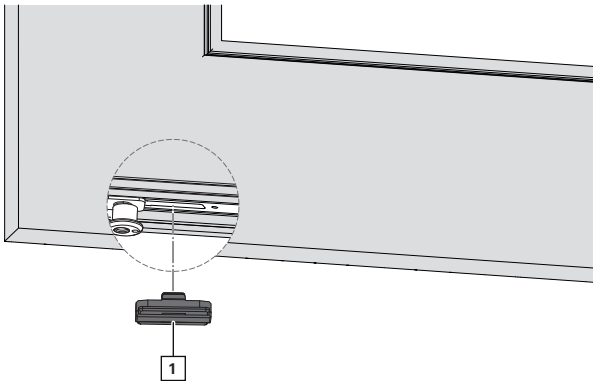
2. Fasten with two screws [3].

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

8.9 Accessories

8.9.1 Travel restrictor

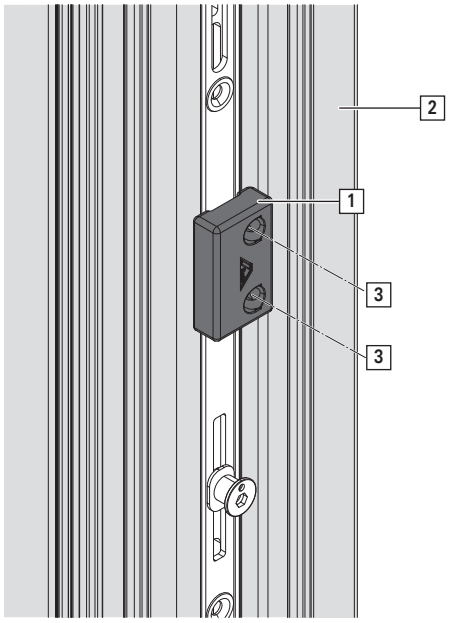
1. Clip the travel restrictor [1] into the locking cam groove.



8.9.2 Anti-jemmy device

INFO
Rebate depth at least 24 mm.

1. Position the anti-jemmy device [1] on the sash [2].

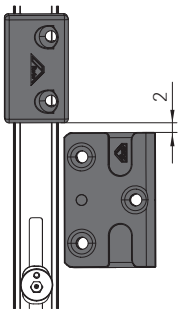


2. Fasten with two screws [3] at an angle in the direction of the overlap.

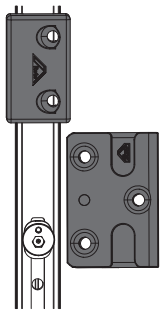
Positioning

The anti-jemmy device runs in approx. 2 mm behind the striker.

Opening position



Locked position



Fit an anti-jemmy device on four sides:

- Hinge side – second-last locking point above the pivot rest.
- Locking side – top locking point.
- Horizontally at the top – on the corner drive, standard
- Horizontally at the bottom – first locking point after the tilt striker.

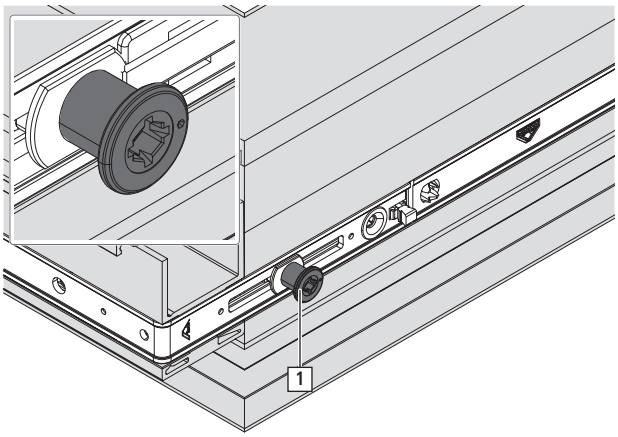
8.9.3 Safety device for lever-operated espagnolette, standard

⇨ Installation

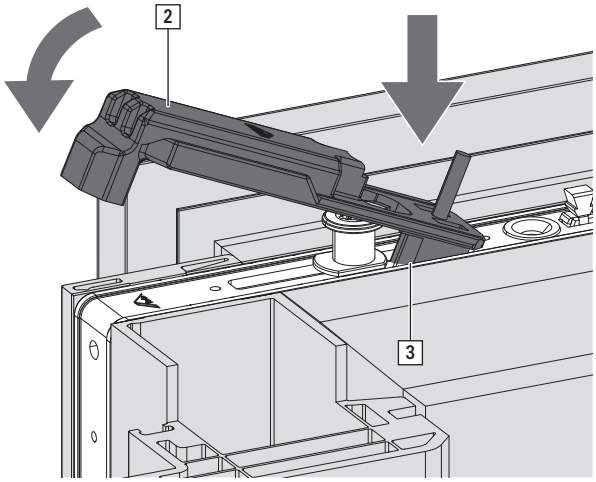
- Turn-Only sash: SEC striker 50 mm
- Tilt&Turn sash: tilt striker 86.5 mm
- Rebate clearance ≥ 10 mm

Installation at the top and bottom of the floating-mullion sash

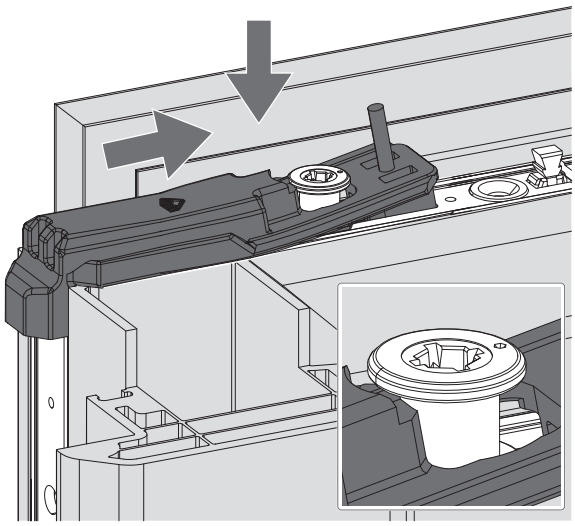
1. The P or V cam [1] must be aligned in the direction of the hinge side.



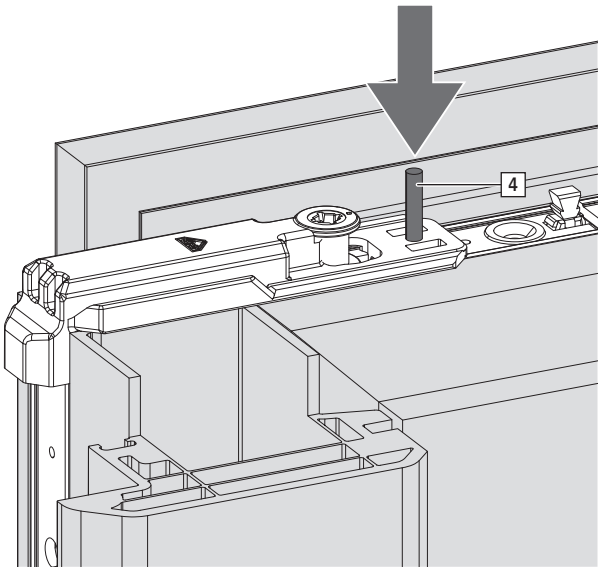
2. Press the safety device [2] into the cam groove of the corner drive [3] and move it above the P or V cam.



3. Press the safety device onto the floating mullion of the corner drive and slide it below the cam.



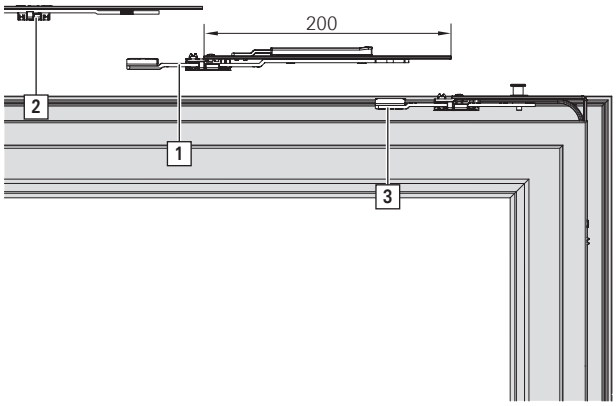
4. Press the safety device fully into the cam groove of the corner drive and insert the locking pin [4].



8.9.4 Additional stay arm

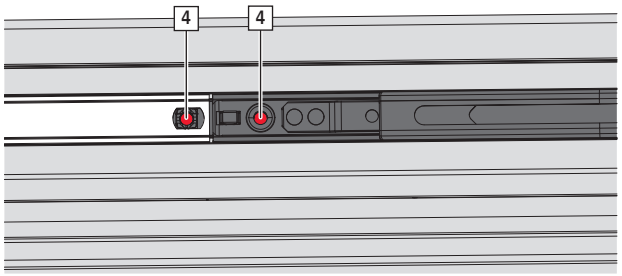
8.9.4.1 Sash component

1. Connect the additional stay arm sash component [1] to the corner drive [3]. Creating a force-fit connection → *from page 183*



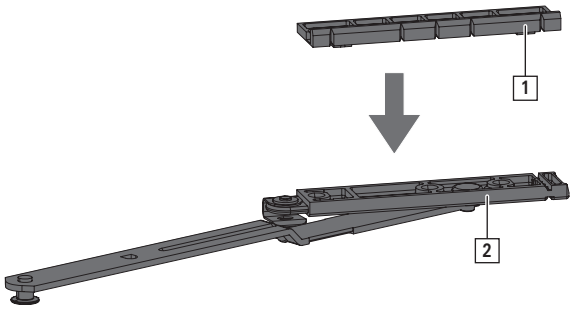
2. Fit the stay guide [2].

3. Secure with two screws [4].



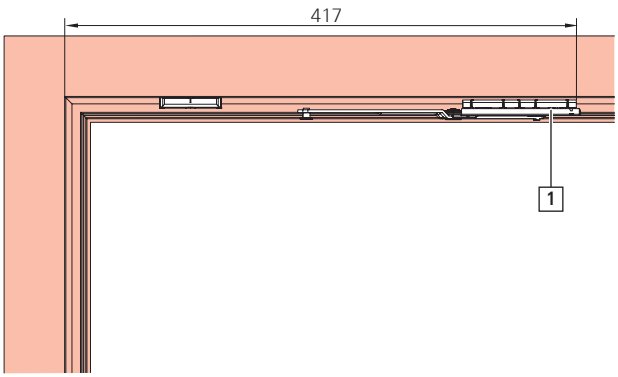
8.9.4.2 Frame component

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



> **INFO**
> With a smooth rebate, no packers are required.

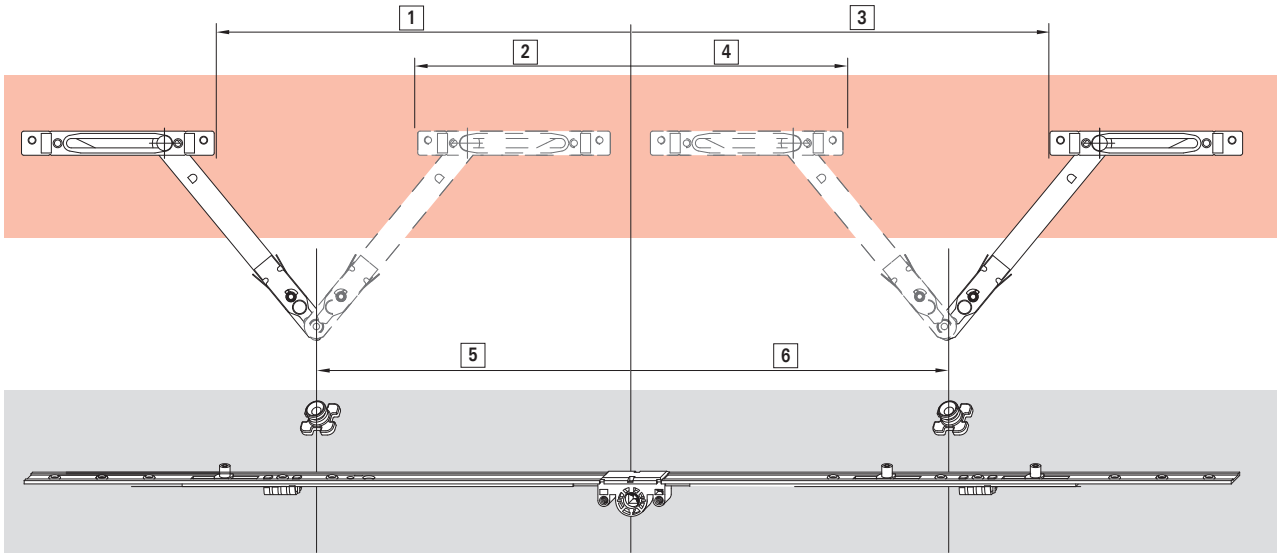
2. Insert the frame component with packer [1] into the frame profile.
   The distance between the frame rebate and frame component is 417 mm.



3. Fasten with three screws.

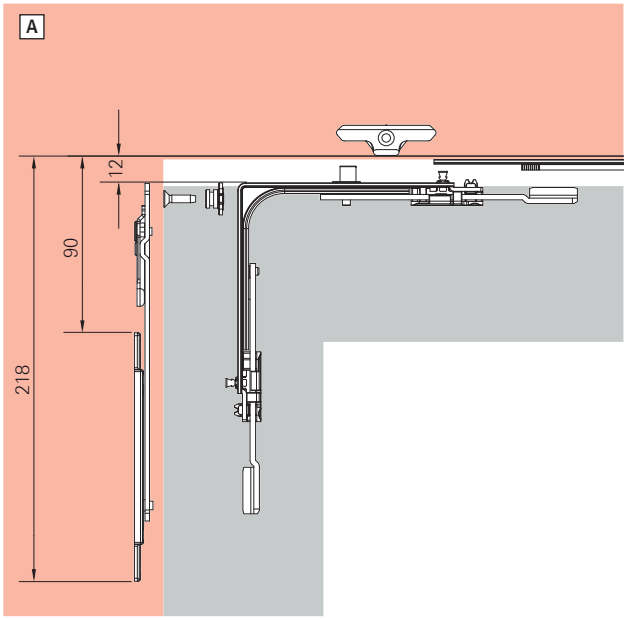
8.9.5 Tilt stay

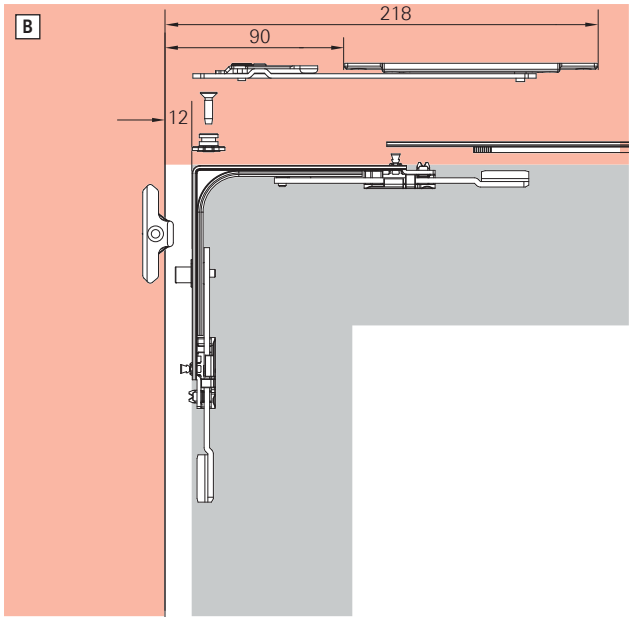
8.9.5.1 Installation dimensions



SRW	[1]	[2]	[3]	[4]	[5]	[6]	BS
621 – 800	–	–	–	4	–	73	15
801 – 1200	–	–	–	4	–	73	15
1200 – 1600	15	–	195	–	212	392	8 / 15

SRW	[1]	[2]	[3]	[4]	[5]	[6]	BS
1601 – 2000	433	–	109	–	364	306	8 / 15
2001 – 2400	433	–	509	–	364	706	8 / 15

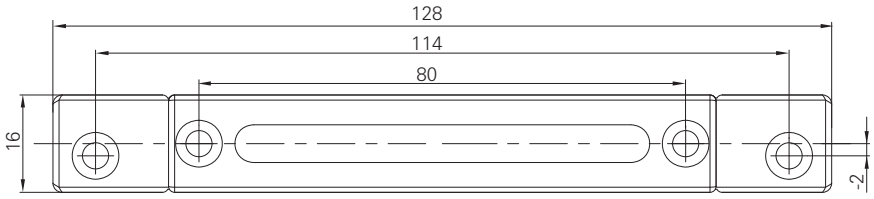




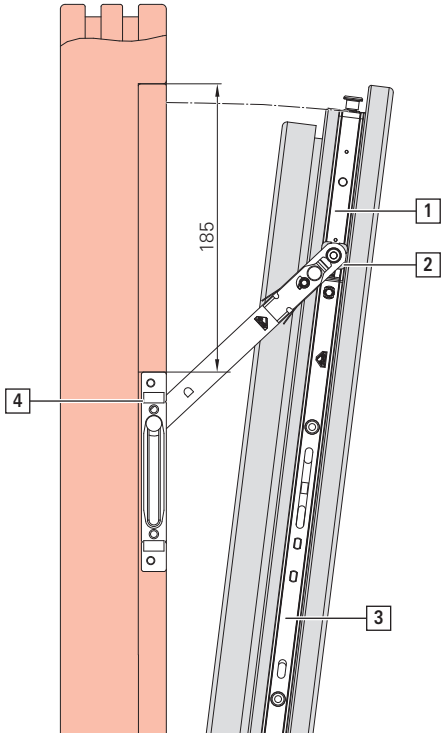
[A] Installation of tilt stay at the side

[B] Installation of tilt stay at the top

Frame component dimensions

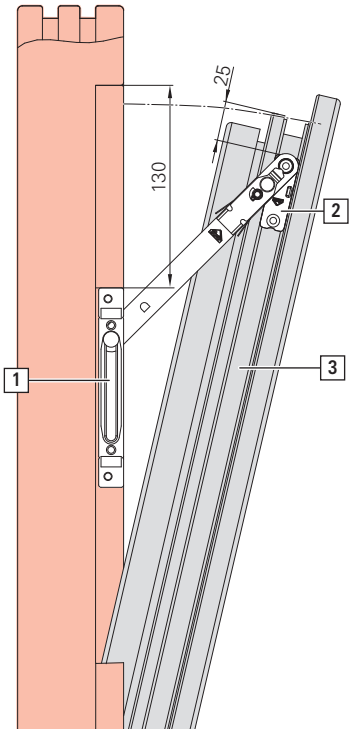


Installation at the side with sash bearing cam at the coupling point



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

Installation, groove mounting



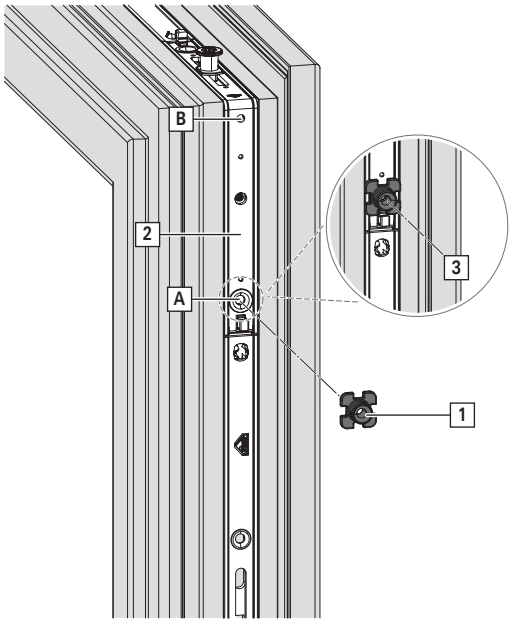
[1] Tilt stay frame component
[2] Tilt stay sash component

[3] Sash groove

8.9.5.2 Sash component

Position at the side

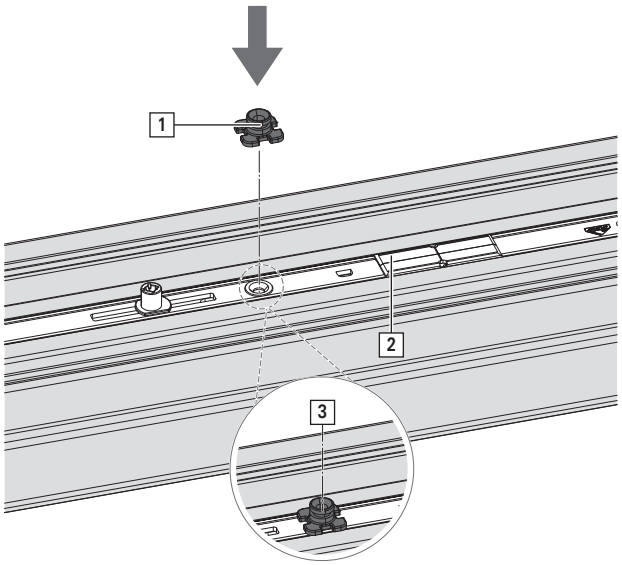
1. Place the sash component [1] on the corner drive [2] (position [A] or [B]).



2. Secure with screw [3].

Position at the top

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

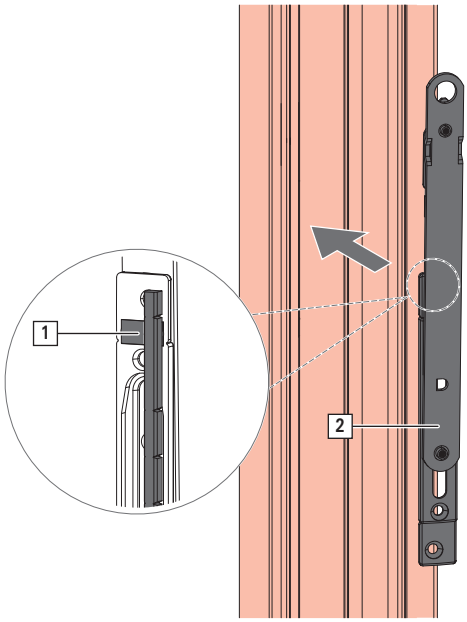


2. Secure with screw [3].

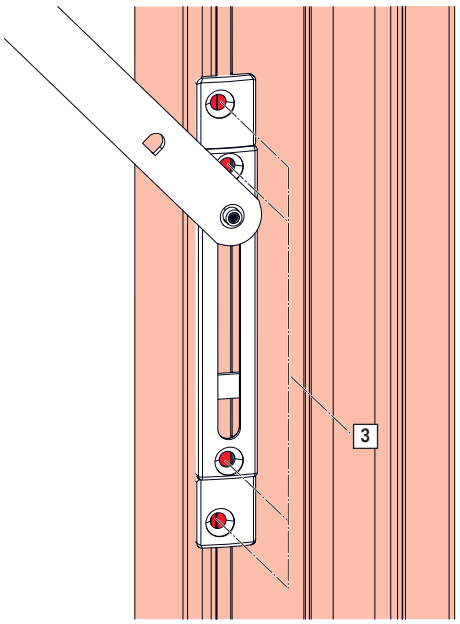
8.9.5.3 Frame component

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

> **INFO**
> With a smooth rebate, no packers are required.

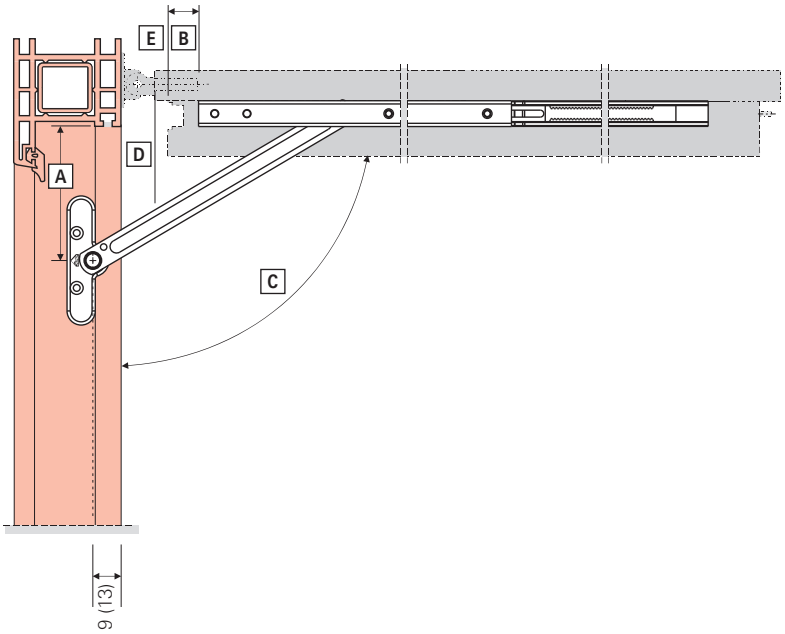


3. Position the tilt stay in the rebate.
4. Secure with four screws [3].



8.9.6 Arrestable brake stay

8.9.6.1 Installation dimensions

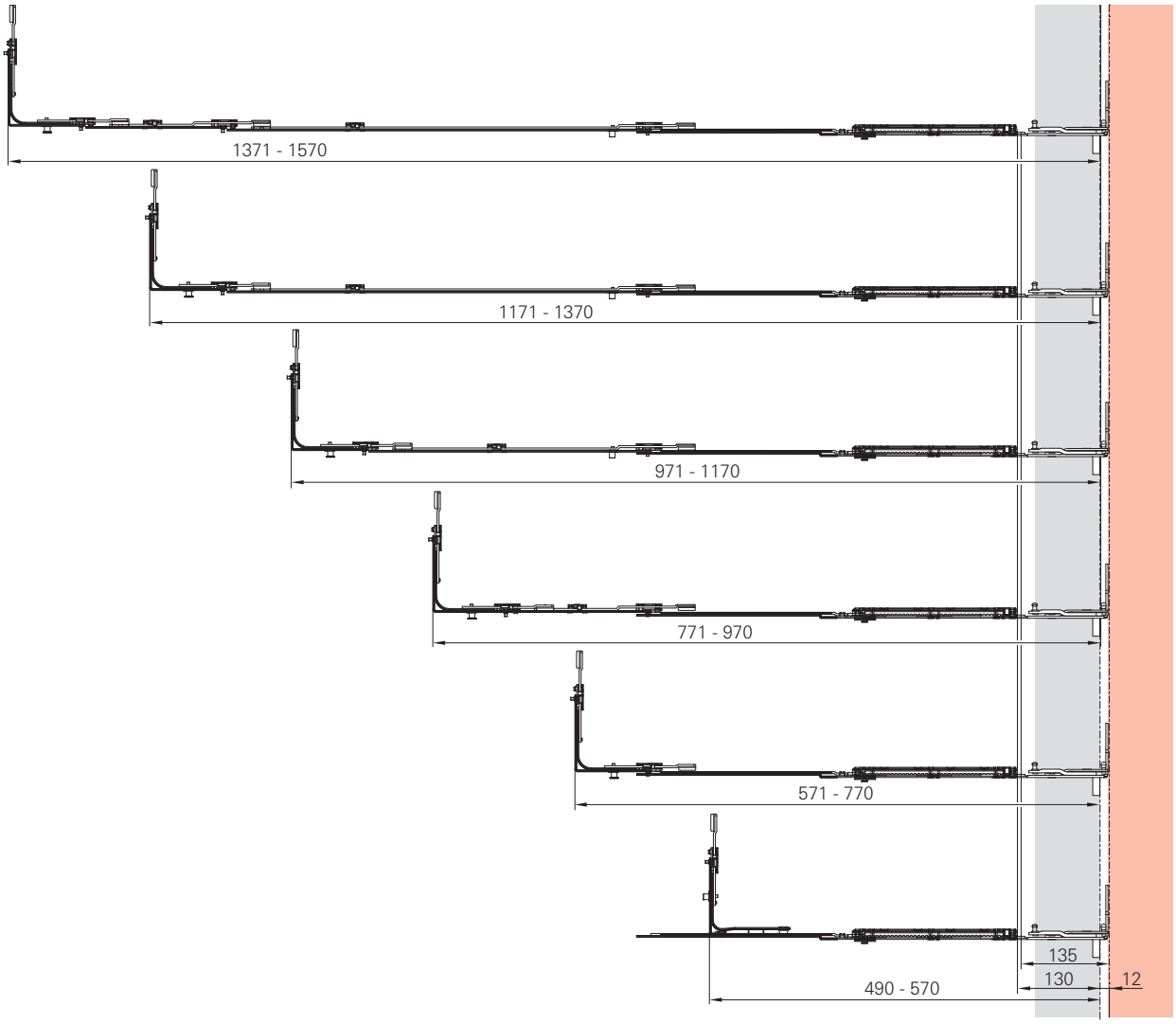


Assignment	Meaning
[A]	Frame dimensions
[B]	Sash dimensions
[C]	Opening angle 90°
[D]	Overlap edge
[E]	Sash rebate edge

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

8.9.6.2 Arrestable brake stay

Installation dimensions 490 – 1570 mm



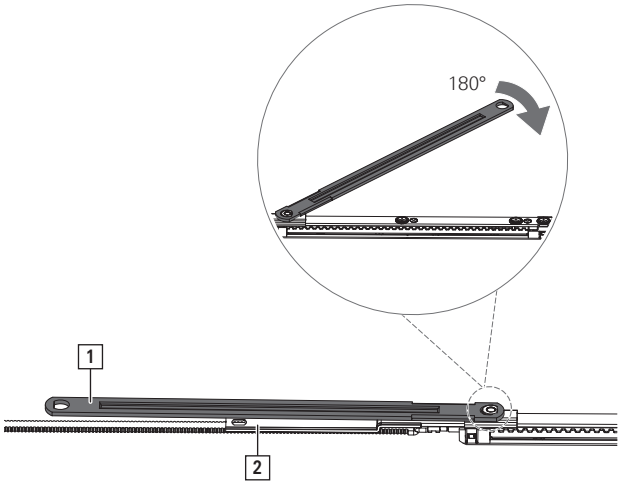
Application range	Corner drive	Centre lock	Arrestable brake stay	Arm	Frame dimension	Sash dimension
490 – 570 [32]	Special corner drive	–	486820	492757	135	130
571 – 770	Corner drive, standard	–	486820	492757	135	130
771 – 970	Corner drive, standard	CL 200 KU	486820	492757	135	130
971 – 1170	Corner drive, standard	CL 400 KU	486820	492757	135	130
1171 – 1370	Corner drive, standard	CL 600 KU	486820	492757	135	130
1371 – 15760	Corner drive, standard	CL 200 KU CL 600 KU	486820	492757	135	130

[32] Turn-Only sash only

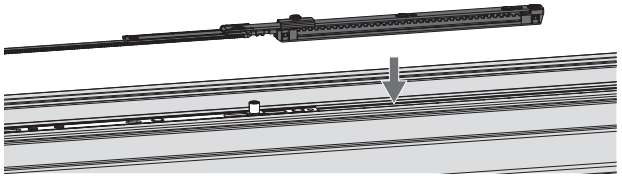
8.9.6.3 Sash component

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

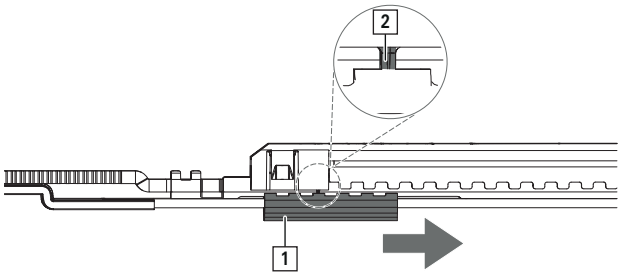
1. Place the scissor stay arm [1] on the arrestable brake stay [2].
   Turn the arm 180°. The arm is fixed in position.



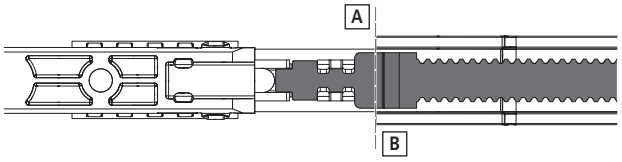
2. Position the arrestable brake stay on the sash and connect it to the centre lock or corner drive. For dimensions, see → *from page 246*.



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

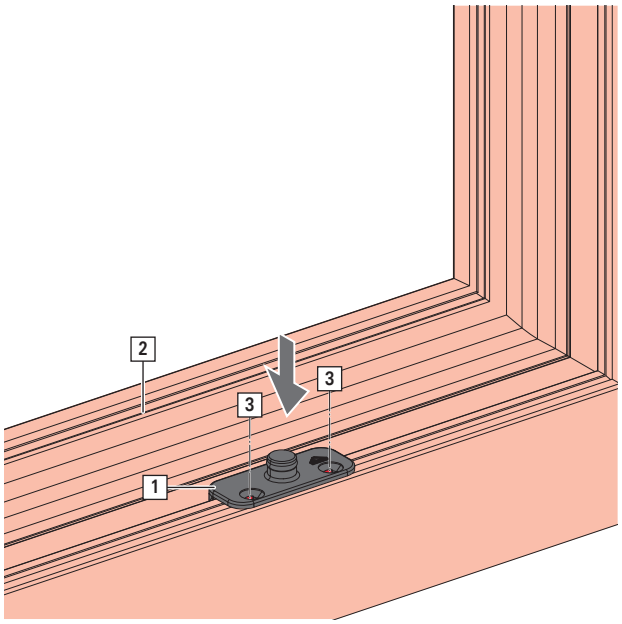


4. Once the centre fixing is undone, the centre position of the push rod can be adjusted by moving the bend of the push rod to the position of the punching on the floating mullion.
   [A] Punching on the floating mullion
   [B] Bend of the push rod



8.9.6.4 Frame component

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



2. Fasten with two screws [3].

8.9.7 Load transfer

8.9.7.1 Sash component

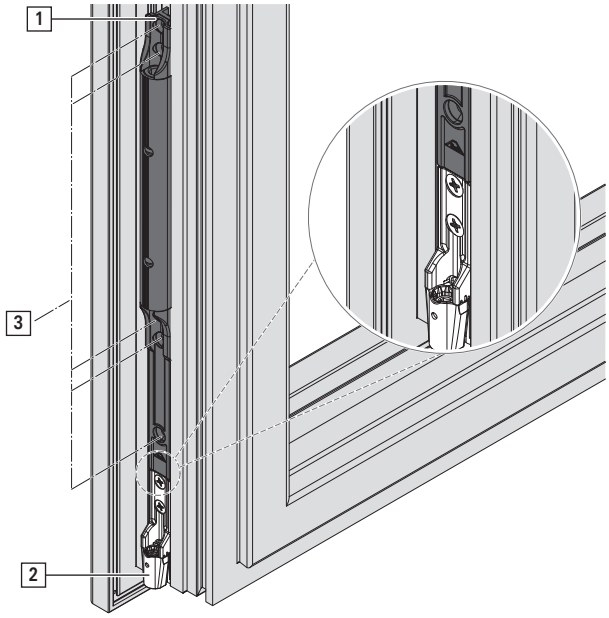
INFO

No load transfer for sash weights < 80 kg, as this may lead to malfunctions.

The use of a turn restrictor is mandatory.

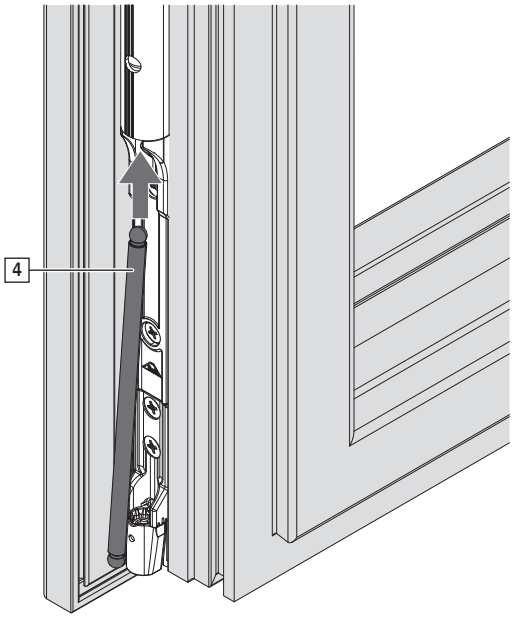
If the sash is transported mounted in the frame, the load transfer spring can be pre-tensioned even in the workshop. This is only useful, however, if the sash is fitted with the full glass weight.

1. Insert the load transfer sash component [1] up to the stop to the corner hinge [2].



2. Fasten with five screws [3].

3. Push the support rod [4] into the load transfer.



8.9.7.2 Frame component

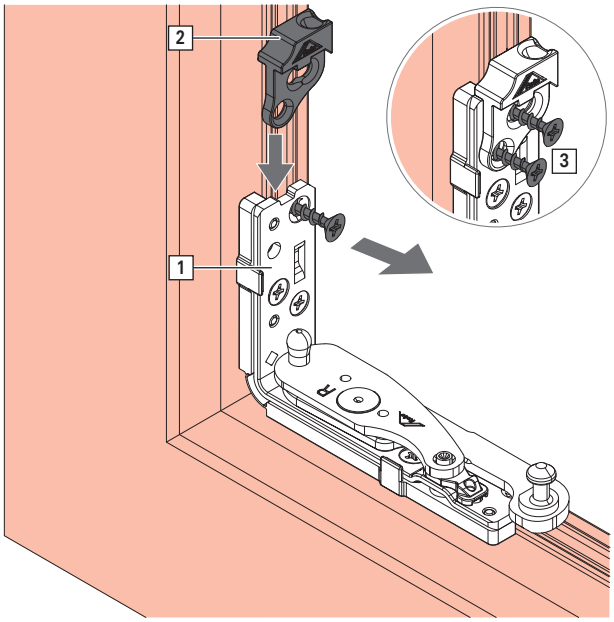
INFO

No load transfer for sash weights < 80 kg, as this may lead to malfunctions.

The use of a turn restrictor is mandatory.

If the sash is transported mounted in the frame, the load transfer spring can be pre-tensioned even in the workshop. This is only useful, however, if the sash is fitted with the full glass weight.

1. Undo the top screw fixing from the pivot rest [1].



2. Place the load transfer frame component [2] on the pivot rest and fasten with two screws [3].

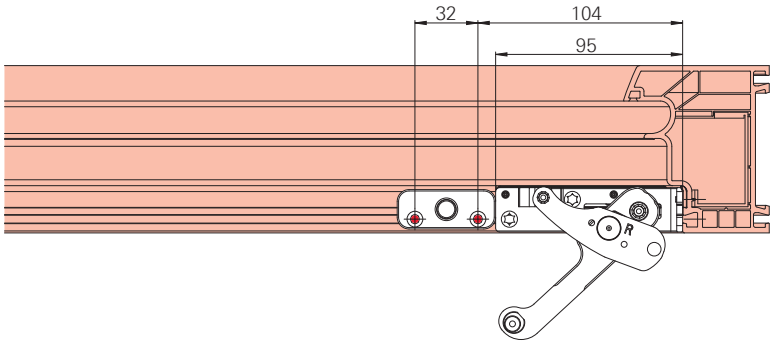
8.9.8 Turn restrictors

8.9.8.1 Drilling and routing dimensions

INFO
The turn restrictor is an additional component designed to provide extra convenience; it is not a security component.

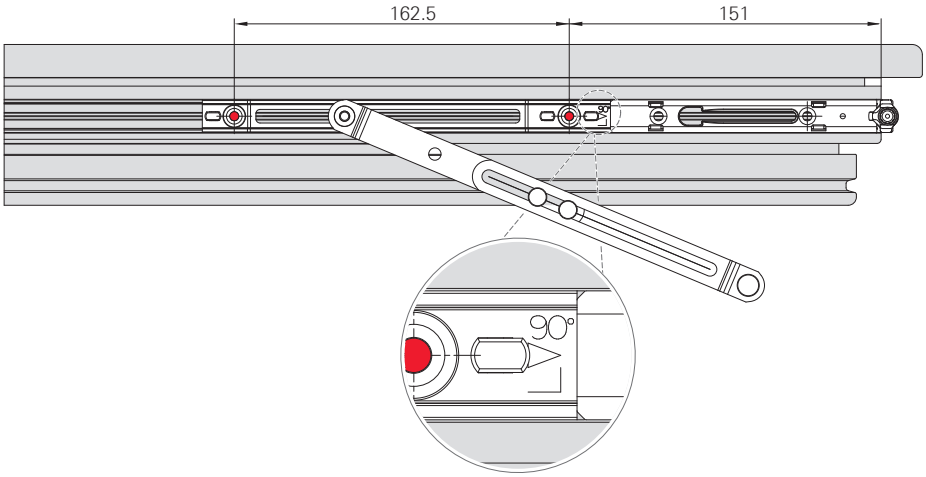
Frame component

Positioning the 90° turn restrictor



Sash component

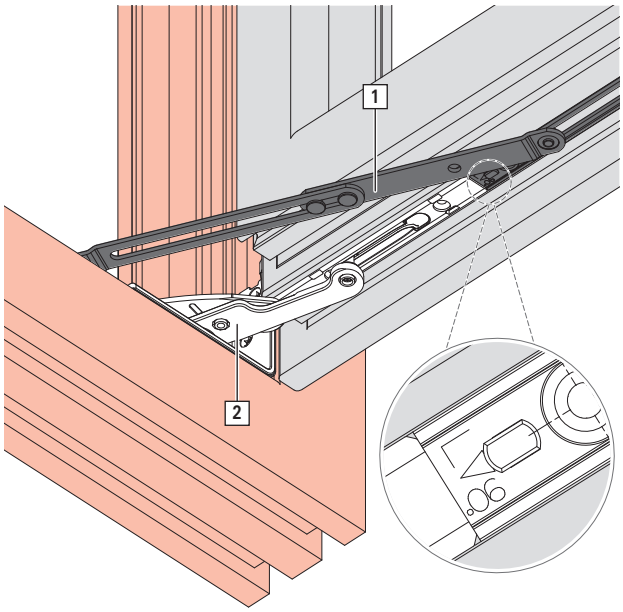
ATTENTION
Improper installation may cause property damage.
Incorrect installation of the sash component destroys the pivot rest.
- The 90° imprint must point towards the corner hinge.



8.9.8.2 Sash component

1. Let the sash component [1] come into contact with the corner hinge [2].

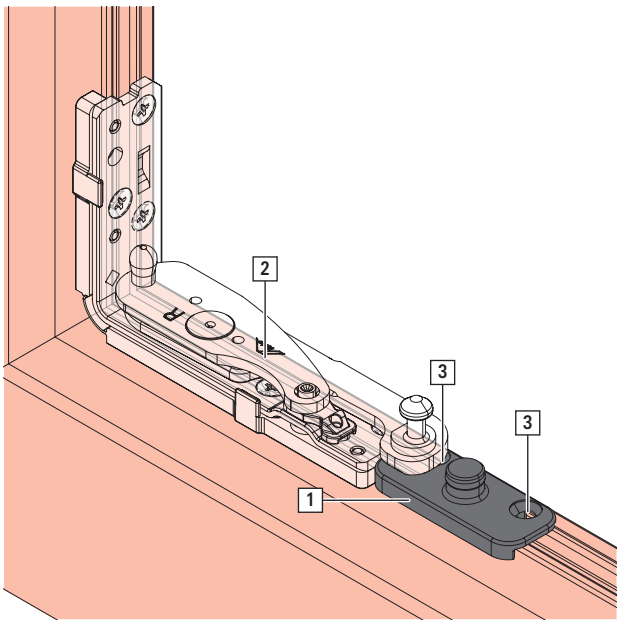
ATTENTION
Improper installation may cause property damage.
Incorrect installation of the sash component destroys the pivot rest.
- The 90° imprint must point towards the corner hinge.



2. Fasten with two screws.

8.9.8.3 Frame component

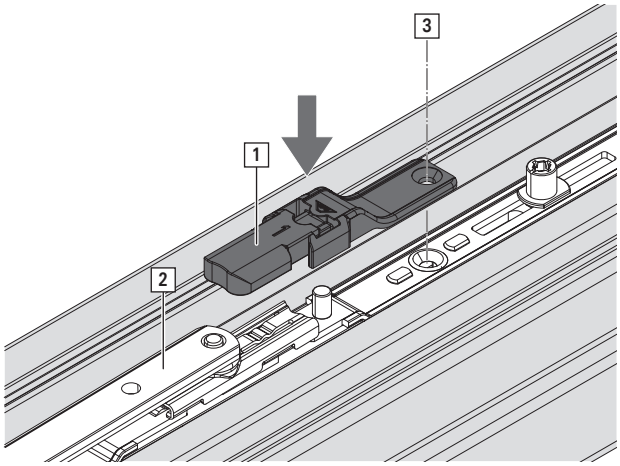
1. Let the frame component [1] come into contact with the pivot rest [2].



2. Fasten with two screws [3].

8.9.9 Anti-slam device for sash stay 350 and sash stay 500

1. Fit the anti-slam device [1] to the stay guide [2] in the mounted sash.

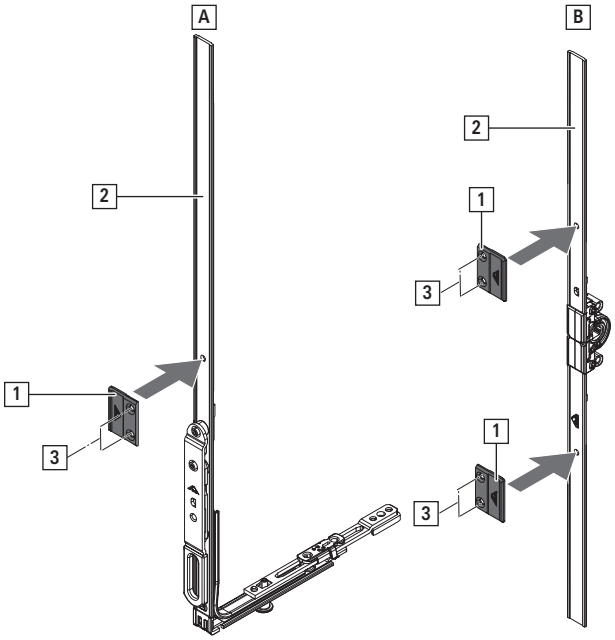


2. Fasten with a screw [3].

8.9.10 Fastening plate

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

1. Fit the fastening plate [1] to the espagnolette face-plate [2].



2. Fasten with two screws [3].

8.10 Joining the sash and frame

CAUTION

Heavy loads pose the risk of injury and property damage.

Lifting and carrying heavy loads in an uncontrolled manner may lead to physical injury and property damage.

- Transport and installation must be carried out by at least two people.
- Use transportation means. → *13 "Transport" from page 278*

8.10.1 Connecting the corner hinge to the pivot rest

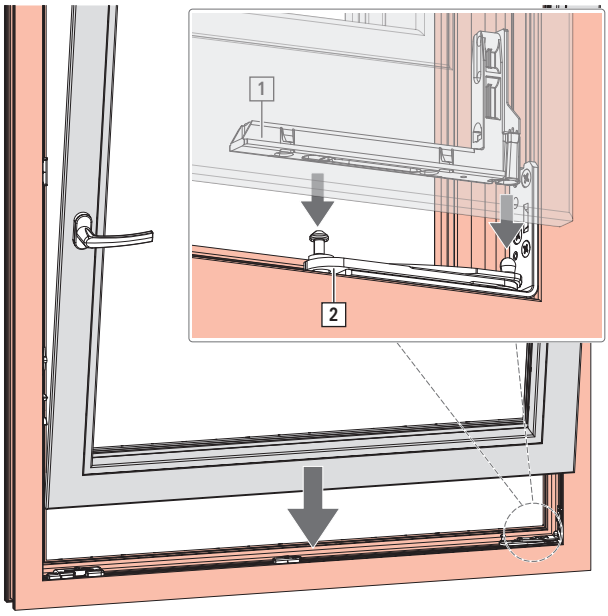
⇨ Pivot rest in initial position

1. Push down on the lifting mishandling device (if fitted).

2. Handle in turn position.

Tilt&Turn hardware	TiltFirst hardware

3. With the sash slightly tilted, guide it along the frame in a downwards direction until you feel the pivot rest [1] touch the corner hinge [2].



4. Secure the sash to prevent it from falling.

WARNING
An unsecured sash may pose a risk of death!
The sash may fall during installation if it is not securely connected to the frame.
- ▶ Secure the sash to prevent it from falling, e.g. by using two people.

5. Push down on the lifting mishandling device (if fitted).

6. Move the handle to the tilt position.

Tilt&Turn hardware

TiltFirst hardware

INFO
Under normal circumstances, this constitutes incorrect operation of the hardware, but it is a necessary step in this case.

7. Connect the sash stay → *from page 257*.

8.10.2 Mounting the stay arm

ATTENTION

High operating forces may cause property damage.

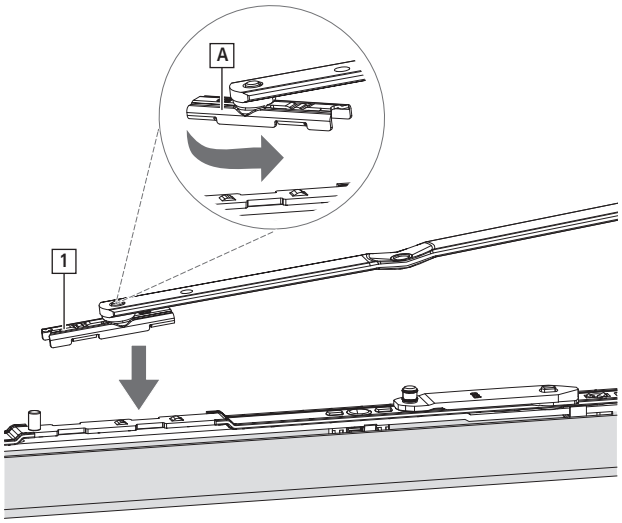
If the sash is difficult to move from the tilted, open position to the closed position, the stay arm might bend out of shape.

- Reduce the tilt depth to 80 mm.

Sash stay 350 / 500

⇨Corner hinge connected to the pivot rest.

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



INFO

With SRH < 600 mm, the tilt depth must be limited to 80 mm. Turn the slider 180° to limit the tilt depth to 80 mm [A].

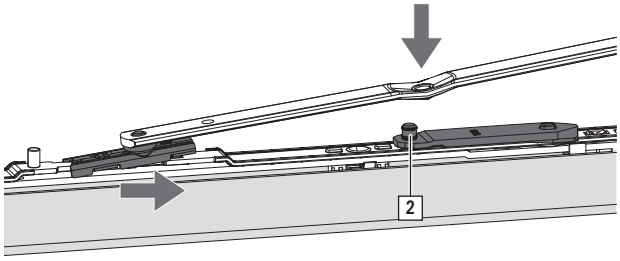
INFO

Fit an anti-slam device to prevent the sash from shutting by itself → *from page 254*.

Sash stay 350: Mat. no. 794827

Sash stay 500: Mat. no. 794828

3. Move the stay arm and clip it onto the supporting arm bolt [2].



4. Push down on the lifting mishandling device (if fitted).

   Turn the handle to the turn position.

   Turn the handle to the locked position.

   Turn the handle to the turn position.

INFO

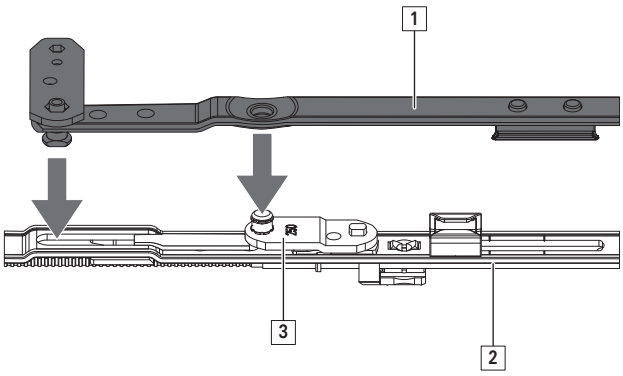
Sash stay 350: if the sash is difficult to close from the tilt position, reduce the tilt depth to 80 mm.

Sash stay 250

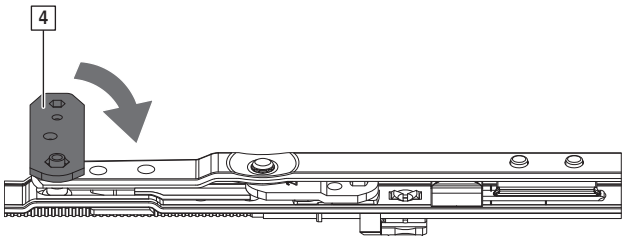
⇨Corner hinge connected to the pivot rest.

1. Open the sash.

2. Push the stay arm [1] onto the stay guide [2] and supporting arm [3].



3. Close the retainer clasp [4] using a tool (e.g. hex key).



> **INFO**
> For a tilt depth set to 80 mm, use an anti-slam device (mat. no. 487206).

4. Push down on the lifting mishandling device (if fitted).
   Turn the handle to the turn position.
   Turn the handle to the locked position.
   Turn the handle to the turn position.

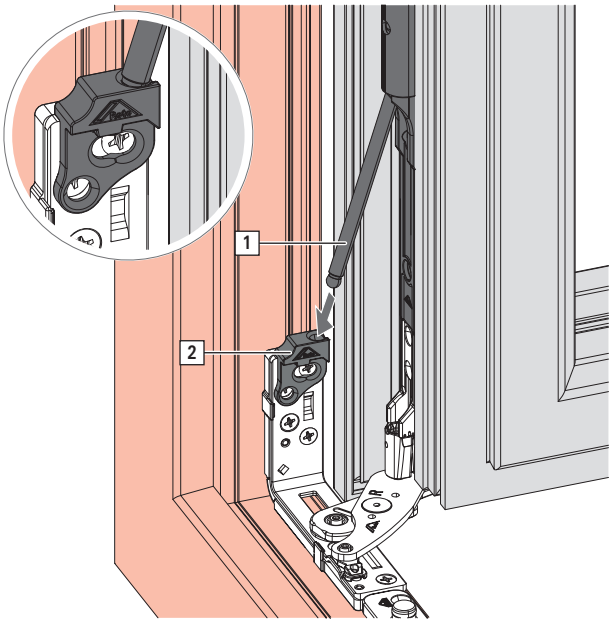
> **INFO**
> Sash stay 250: if the sash is difficult to close from the tilt position, reduce the tilt depth to 80 mm.

8.10.3 Load transfer

⇨ Sash mounted.

1. Open the sash 90°.

2. Connect the support rod [1] to the sash component and insert into the recess in the frame component [2].

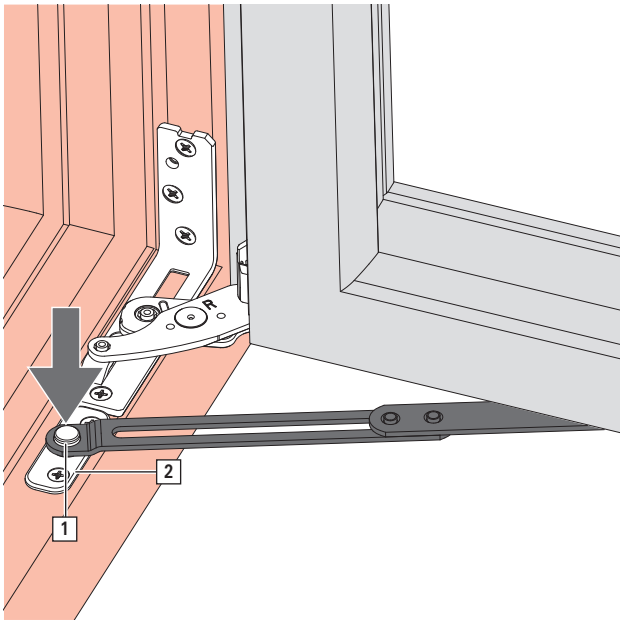


8.10.4 Turn restrictor

⇨ Sash mounted.

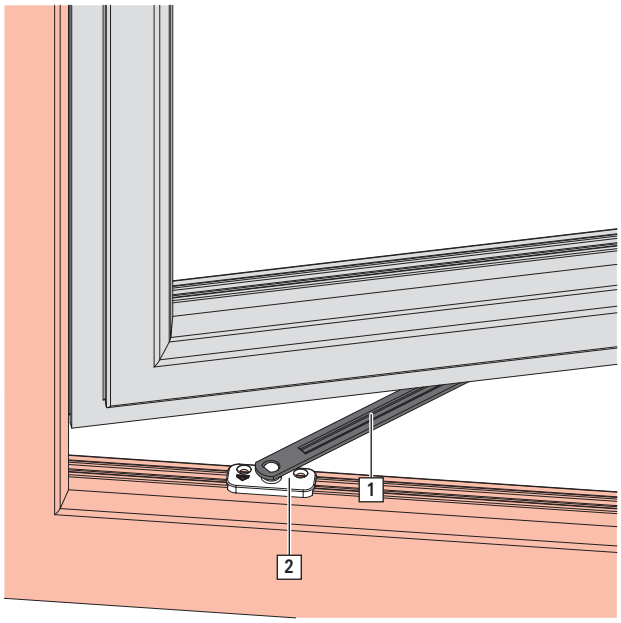
1. Open the sash.

2. Push the hole in the end of the sash component over the rubber ring [1] of the bolt on the frame component [2].



8.10.5 Arrestable brake stay

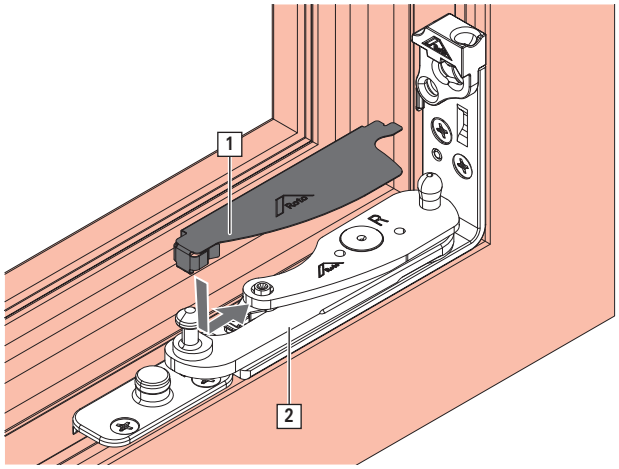
1. Mount the scissor stay arm [1] in the frame component [2].



8.10.6 Pivot rest cover

INFO
Horizontal rebate clearance at the bottom 11 – 14 mm.

1. Slide the cover [1] onto the pivot rest [2] as far as it will go.



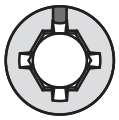
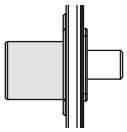
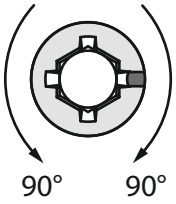
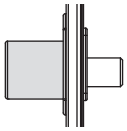
2. Clip in the cover.

9 Adjustment

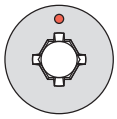
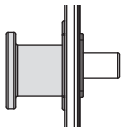
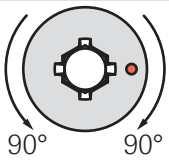
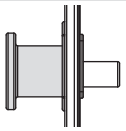
INFO
Roto hardware components may only be adjusted by authorised professionals when the element is installed.

9.1 Locking cam

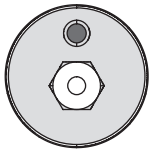
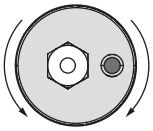
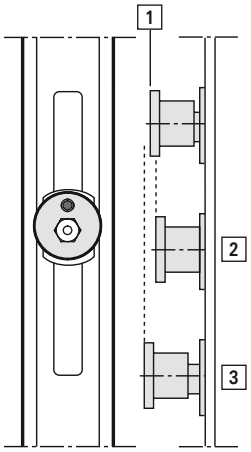
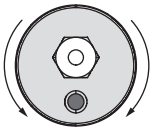
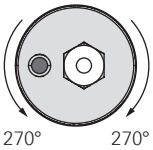
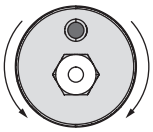
E cam

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

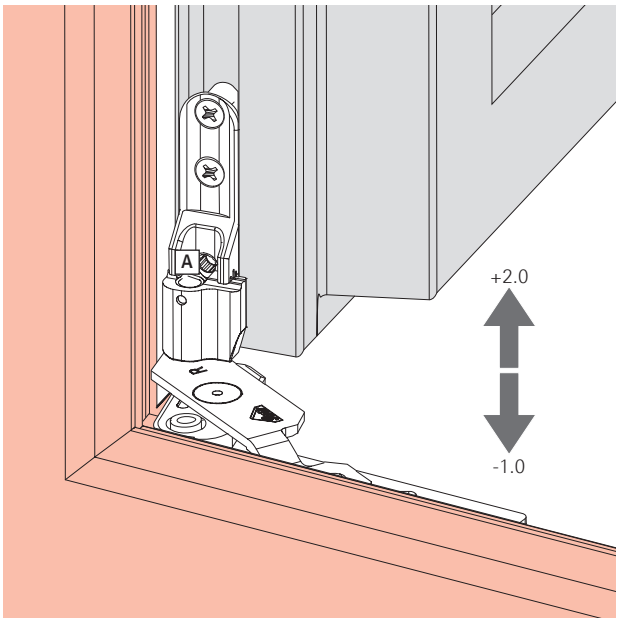
V cam	Adjustment distance	Gasket compression adjustment [mm]	Height adjustment [mm]	Side view
			+1.5 mm -0.8 mm	
	 90° 90°	±0.8 mm	±0.125 mm	 [1] 0 = initial position [2] -0.8 mm max. adjustment [3] +1.5 mm max. adjustment
	 180° 180°		±0.25 mm	
	 270° 270°	±0.8 mm	±0.375 mm	
	 360° 360°		±0.5 mm	

9.2 Pivot rest and corner hinge

Height adjustment

1. Open the sash.

2. Height adjustment +2.0 / -1.0 mm via screw [A] in the corner hinge.
   Tool: 4 mm hex key.



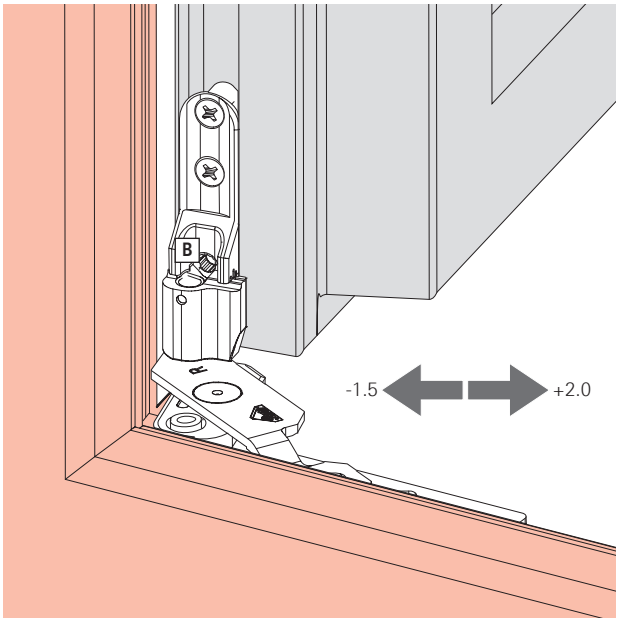
INFO
Readjust the load transfer after adjusting the height.

INFO
When using the cover, the horizontal rebate clearance at the bottom must be 12 – 14 mm, otherwise damage is possible.

Lateral adjustment

1. Open the sash.

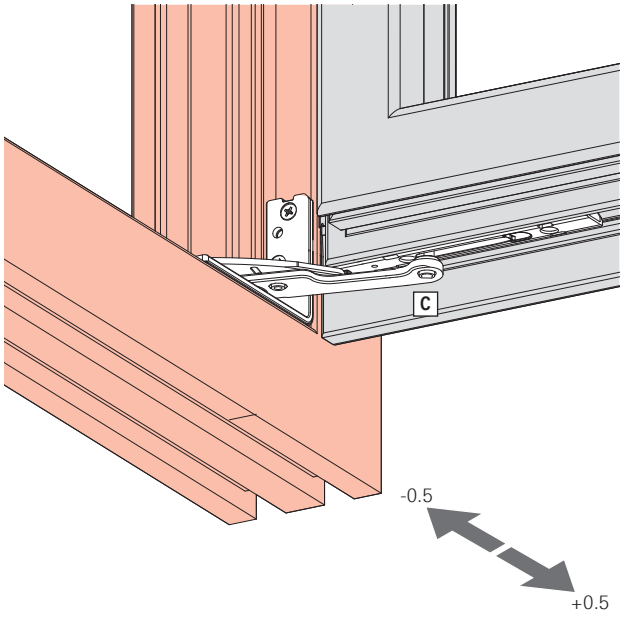
2. Lateral adjustment +2.0 / -1.5 mm via screw [B] in the corner hinge.
   Tool: 4 mm hex key.



Gasket compression adjustment

1. Open the sash.

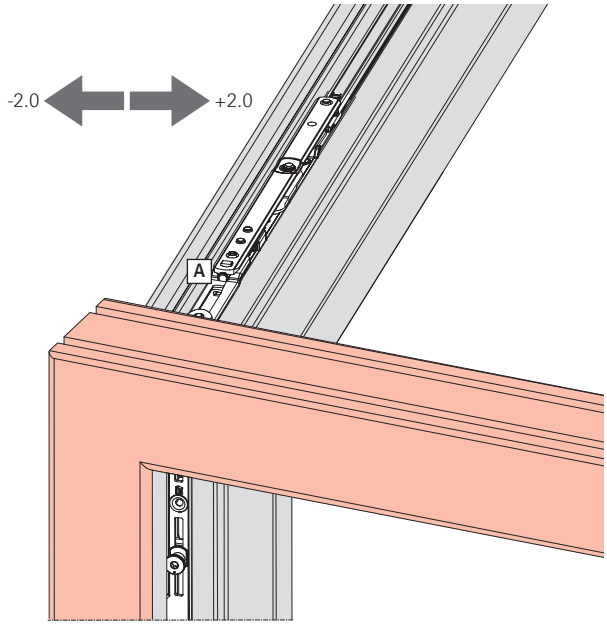
2. Gasket compression adjustment ±0.5 mm via eccentric [C] in the pivot rest.
   Tool: 4 mm hex key.



9.3 Sash stay

Lateral adjustment

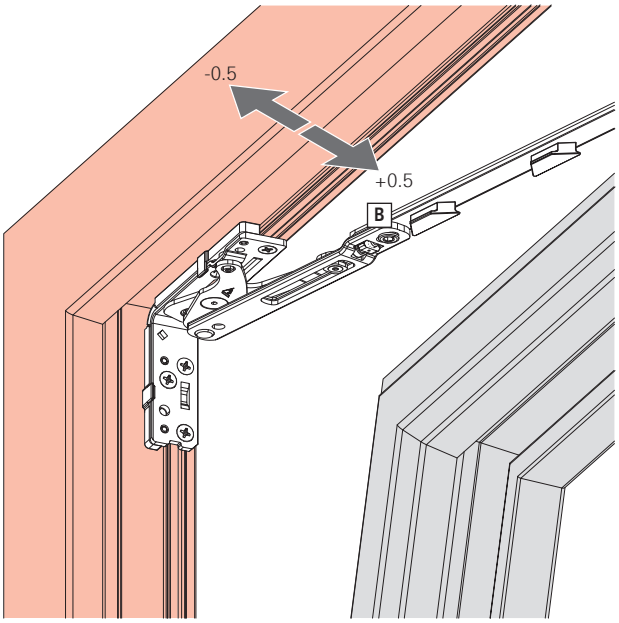
1. Open the sash.



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

Gasket compression adjustment

1. Move the sash to the tilt position.

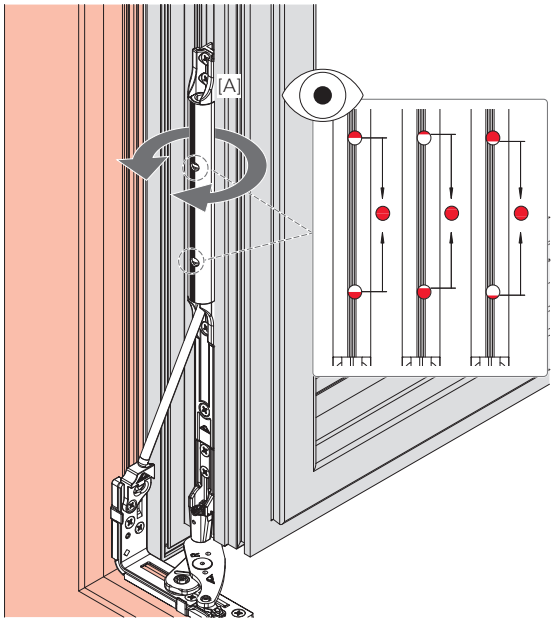


2. Gasket compression adjustment ±0.5 mm via eccentric [B] in the sash stay.
   Tool: 4 mm hex key.

9.4 Load transfer

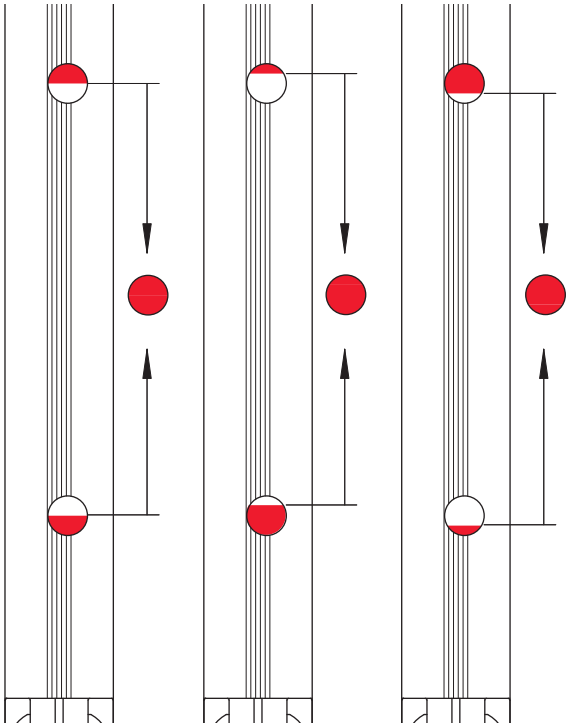
1. Open the sash.

2. Tool: size 4 hex key
   Using the adjusting screw [A], adjust the red partial circle so that a whole circle is produced by adding together the red partial circles.

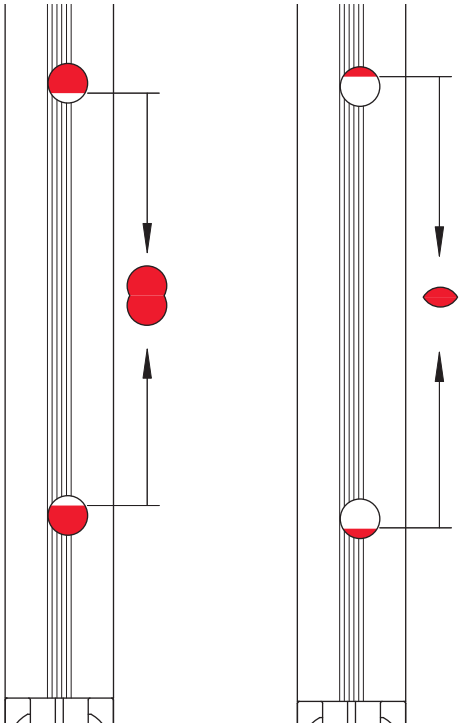


Check at the view windows.

Full circle = right

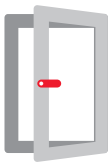
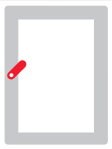


No circle = wrong

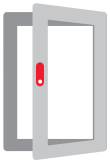


10 Operation

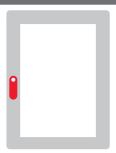
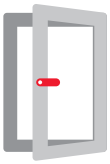
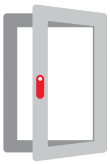
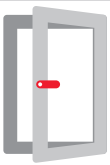
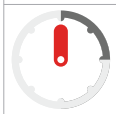
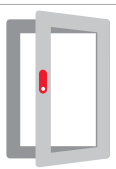
10.1 Handle position with Tilt&Turn hardware

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

10.2 Handle position with TiltFirst hardware

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

10.3 Handle position for arrestable brake stay

Handle position	Sash position	Meaning
		Sash in closed position.
		Sash in turned, open position.
		Sash in fixed position.
		Release the fixed position.
		Sash in turned, open position.

10.4 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 269*
Cleaning		→ *from page 270*
Clean hardware	□	
Care		→ *from page 270*
Lubricate movable parts	□	
Lubricate locking points	□	
Performance test		→ *from page 272*
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 272*
Retighten screws	■	
Replace damaged components	■	

□ = May be carried out by a specialist company or the end user

■ = **Must** be carried out by a specialist company

11.1 Maintenance intervals

ATTENTION

Failure to adhere to maintenance intervals may cause property damage.

The maintenance interval for all tasks relating to the hardware components is **annually** at the least. In hospitals, schools and hotels, the maintenance interval is **six-monthly**.

Regular maintenance is necessary in order to maintain the proper and smooth-running operation of the hardware and to prevent premature wear or even defects.

- Determine and adhere to the appropriate maintenance interval in accordance with the ambient conditions.

11.2 Cleaning

ATTENTION

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

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

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

Cleaning the hardware

- Clean deposits and contaminants off the hardware using a soft cloth.
- Lubricate movable parts and locking points after cleaning. → *11.3 "Care" from page 270*
- Apply a thin protective film to the hardware, for example using a cloth soaked in oil.

11.3 Care

ATTENTION

Using incorrect lubricants may cause property damage.

Substandard lubricants can prevent the hardware from working properly.

- Use high-quality lubricants.
- Only use resin-free and acid-free lubricants.
- Use appropriate lubricant in more challenging climatic conditions. Note the manufacturer specifications.

ATTENTION

Cleaning agents and lubricants may pollute the environment.

Leaking or excess cleaning agents and lubricants may pollute the environment.

- Remove any leaking or excess cleaning agents and lubricants.
- Dispose of cleaning agents and lubricants separately and properly.
- Observe the applicable directives and national laws.

Ease of movement can be improved by lubricating or adjusting the hardware. All functional hardware components must be lubricated on a regular basis.

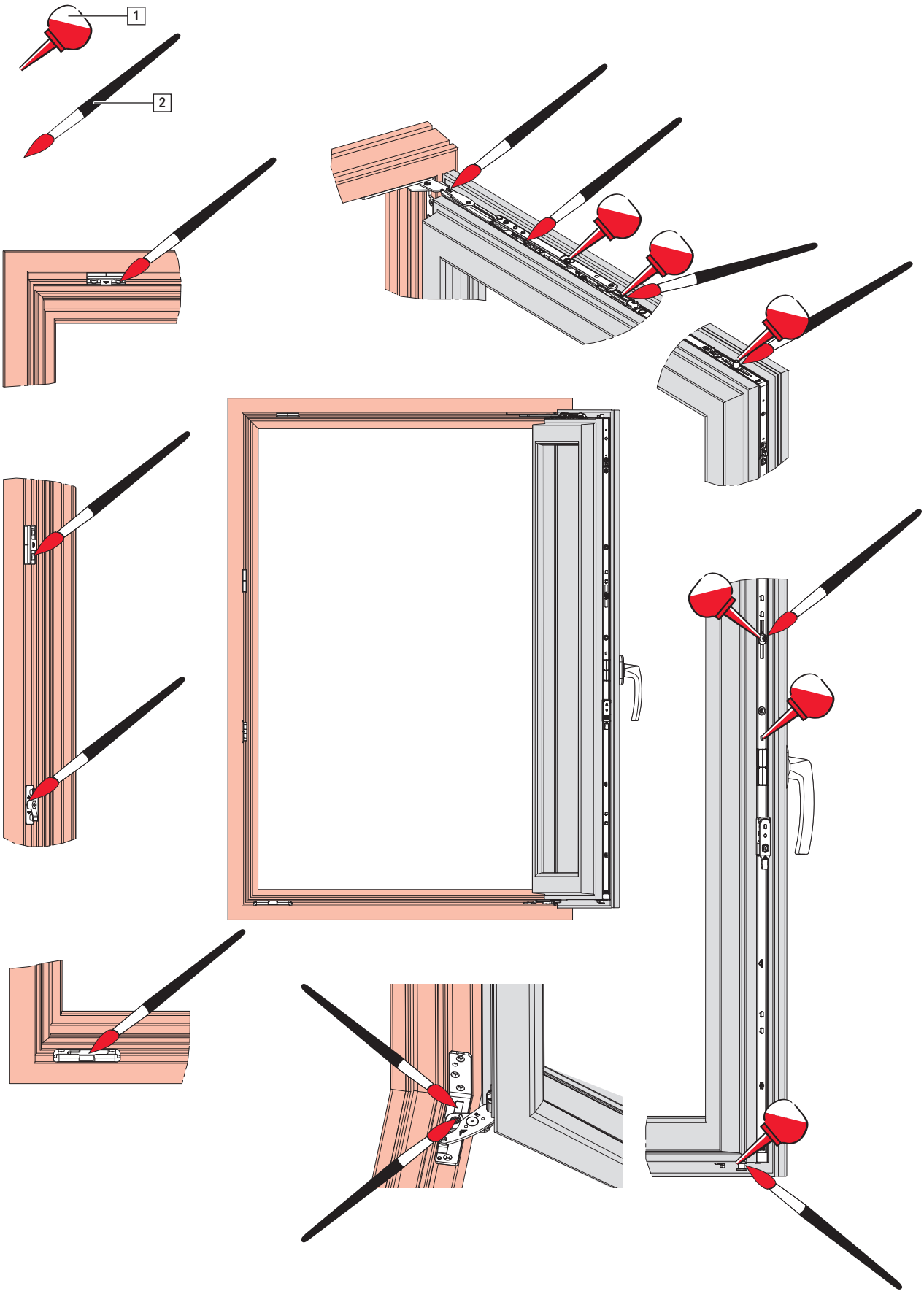
Recommended lubricants

- Roto NX / NT grease

INFO

The figure displays the positioning of potential lubrication points. The figure does not necessarily match the installed hardware. The quantity of lubrication points varies depending on the size and design of the element.

11.3.1 Lubrication points



[1] Oil

[2] Grease

11.4 Performance test

WARNING

Improper repair work may pose a risk of death!

Improper maintenance may prevent the element from working properly and make it less safe to use.

- Always have repairs performed by a specialist company.

Check for proper operation:

- Inspect hardware components for damage, deformation and a firm fit.
- Check that windows or balcony doors run smoothly by opening and closing them.
- Check the window or balcony door gaskets for elasticity and fit.
- Check closed windows or balcony doors to ensure that they are leakproof.
- Locking and unlocking torque max. 10 Nm. The test can be performed using a torque wrench.

Have malfunctions remedied by a specialist company.

11.5 Repair

WARNING

Improper repair work may pose a risk of death!

Improper maintenance may prevent the element from working properly and make it less safe to use.

- Always have repairs performed by a specialist company.

ATTENTION

Improper screw fixings may cause property damage.

Loose or faulty screws can prevent the hardware from working properly.

- Check that the individual screws are secure and seated correctly.
- Tighten or replace loose or faulty screws.
- Use only the suggested screws.

Repair work includes replacing and repairing components and is only necessary if components have become damaged after wear or as a result of external circumstances. The hardware must be secured reliably in order to ensure that the element works properly and is safe to use.

The following tasks must only be performed by a specialist company:

- All adjustment work on the hardware,
- Replacing hardware or hardware components,
- Installing and removing windows, doors or balcony doors

The specialist company must observe the following:

- Perform the necessary repair work properly, according to generally recognised engineering practice and in accordance with the applicable regulations.
- Do not perform makeshift repairs on worn or damaged components.
- Only use original or approved spare parts for repairs.

12 Dismantling

WARNING

Improper dismantling may pose a risk of death!

The sash may fall during dismantling.

- Secure the sash to prevent it from falling, e.g. by using two people.
- Always have dismantling work performed by a specialist company.

CAUTION

Physical strain may cause injury and damage to health.

Carrying and lifting heavy loads for extended periods leads to physical injury in the long term.

- When carrying or lifting loads, maintain an ergonomically correct posture. The maximum permissible load is 25 kg for men and 10 kg for women.

INFO

Unless otherwise stated, dismantling is performed in reverse order to installation.

12.1 Unhinging a sash with load transfer

1. Move the handle to the turn position.

Tilt&Turn hardware

TiltFirst hardware

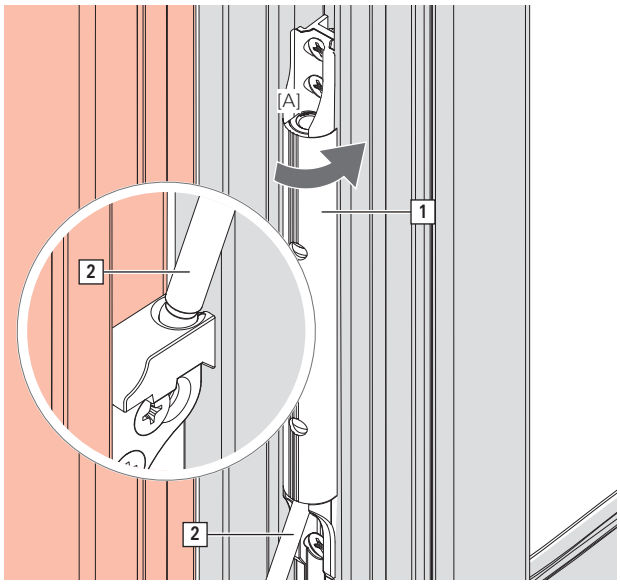
2. Open the sash.

   Relieve the load on the load transfer [1] [A] until the support rod [2] lies loosely in the frame component.

   INFO

   Unscrew the load transfer adjusting screw until the spring is fully released (the support rod becomes loose).

   If the spring is not fully released, the sash cannot be rehinged.



3. Push down on the lifting mishandling device (if fitted).

   Move the handle to the tilt position.

Tilt&Turn hardware

TiltFirst hardware

4. Secure the sash to prevent it from falling.

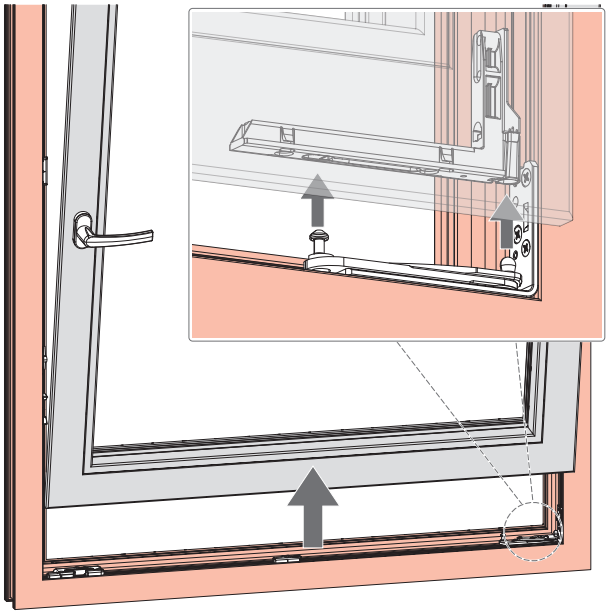
WARNING
An unsecured sash may pose a risk of death!
The sash may fall during installation if it is not securely connected to the frame.
- Secure the sash to prevent it from falling, e.g. by using two people.

5. Unhinge the sash stay → *from page 276*.

6. Push down on the lifting mishandling device and move the handle to the turn position.

7. Close the sash.

8. With the sash slightly tilted, lift it out of the pivot rest.



12.2 Unhinging a sash without load transfer

1. Move the handle to the turn position.

Tilt&Turn hardware

TiltFirst hardware

2. Push down on the lifting mishandling device (if fitted).
Move the handle to the tilt position.

Tilt&Turn hardware

TiltFirst hardware

3. Secure the sash to prevent it from falling.

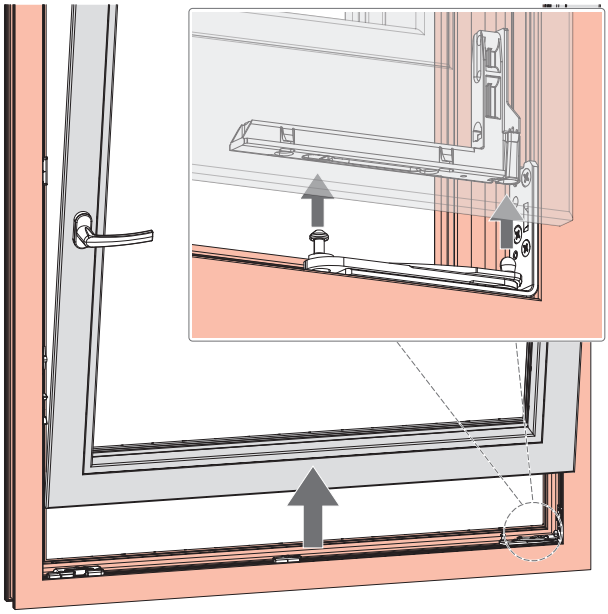
WARNING
An unsecured sash may pose a risk of death!
The sash may fall during installation if it is not securely connected to the frame.
- Secure the sash to prevent it from falling, e.g. by using two people.

4. Unhinge the sash stay → *from page 276*.

5. Push down on the lifting mishandling device and move the handle to the turn position.

6. Close the sash.

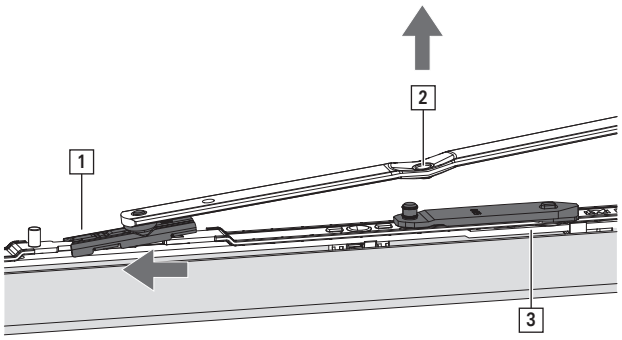
7. With the sash slightly tilted, lift it out of the pivot rest.



12.3 Unhinging the sash stay

Sash stay 350 and 500

1. Open the sash.
2. Detach the slider [1] and stay arm [2] from the stay guide [3].

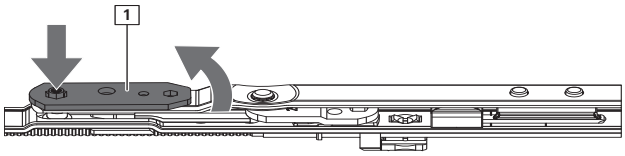


3. Push down on the lifting mishandling device (if fitted) and move the handle to the tilt position.
4. Unhinge the sash stay and secure the sash to prevent it from falling.

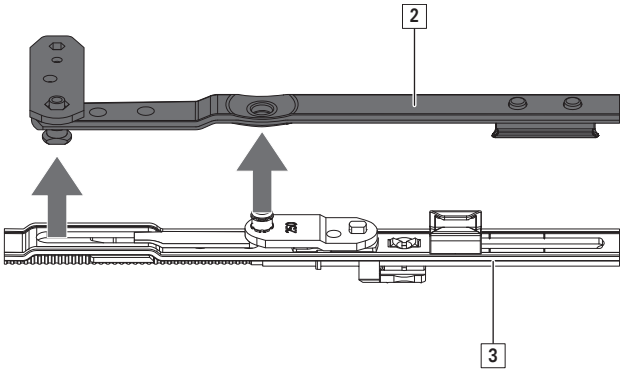
INFO
It is only possible to unhinge the sash once the anti-slam device has been removed.

Sash stay 250

1. Open the sash.
2. Open the retainer clasp [1] using a tool (e.g. hex key).



3. Detach the stay arm [2] from the stay guide [3].



12.4 Hardware components

Removing hardware components

1. Undo all screw connections.
2. Remove the hardware components.
3. Dispose of the hardware components properly.

13 Transport

13.1 Transporting elements and hardware

DANGER

Improper transport poses a risk of death!

Improper procedures for transporting, loading or unloading elements may cause serious injuries and glass breakage as a result of the elements swinging open, falling or becoming overloaded.

- Note the applicable accident prevention regulations.
- Note force application points and reaction forces.
- Prevent the sash from opening uncontrollably.
- Avoid jerky movements.
- Use suitable transportation means and protective devices.
- Watch out for protruding components.
- Transport heavy loads with two people and use suitable transportation means (such as an industrial truck).

CAUTION

Trapped limbs may result in injuries.

The transported goods can skid, open, close or fall during transportation tasks. This can result in limbs being trapped and seriously injured.

- Never reach near the scissor stays.
- Close the sash after installation and secure it in place for transport.
- Wear safety gloves and protective footwear.

CAUTION

Physical strain may cause injury and damage to health.

Carrying and lifting heavy loads for extended periods leads to physical injury in the long term.

- When carrying or lifting loads, maintain an ergonomically correct posture. The maximum permissible load is 25 kg for men and 10 kg for women.

Hardware is supplied to the specialist company as complete sets. The components are packaged accordingly for each scope of delivery. The instructions for safely transporting the hardware are described below.

Observe the following basic instructions when transporting hardware:

- Transport larger scopes of delivery using appropriate transportation means (such as industrial trucks).
- Note the transport weight in order to select appropriate transportation means.
- Ensure that the transport process is careful and appropriate for the material and that components are protected against dirt during transport.
- Immediately check the delivery for completeness and transport damage on receipt.

INFO

Submit a complaint about any defects as soon as they are identified. Claims for damages may only be made within the reclamation period.

Use the following transportation means for support when transporting, loading and unloading larger scopes of delivery:

- Industrial trucks, e.g. forklifts, telescopic handlers, pallet trucks
- Lifting equipment, e.g. transport nets, carry straps, round slings
- Protective devices, e.g. edge protection, spacer blocks

INFO
Industrial trucks and lifting devices may only be operated by qualified persons.

INFO
Lifting equipment and protective devices may only be used if they are in full working order.

13.2 Storing the hardware

Store all hardware components as follows until they are installed:

- Dry and protected
- On a level surface
- Protected against sunlight

14 Disposal

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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