Installation and maintenance instructions

for windows and doors

forster

Contents

Note

For installation and maintenance, please refer to the valid “Installation and maintenance instructions for doors and windows” of Forster Profile Systems Ltd.

Note

The figures in this document are simplified and may vary from the original.

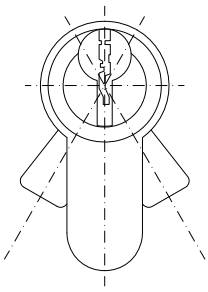
1. Safety instructions for doors and windows

Note

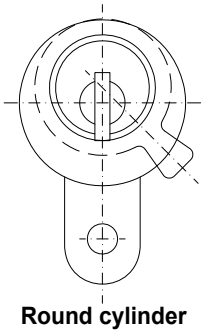
The various door fitting products, their installation and possible adjustments are described in detail in the Forster catalogues.

Note on locking cylinders

The following may be used:
- Locking cylinders with free-running drivers where the driver is always free to rotate easily.
- Locking cylinders with rigid drivers (Caution: please note the classification and application area specified by the manufacturer.)



Profile cylinder



Round cylinder

Open/close/lock

- The door must be easy to open and close. An engaged latch and/or bolt may not prevent the door from being opened.
- The locking elements must always be free to engage in the keep holes.

2. Maintenance instructions for doors

The work below must be carried out once a year or after max. 50,000 opening operations. The work must be documented and the records placed in safe keeping by the operator.

Visual inspection
- Check the general condition of the elements (damage, paint damage, corrosion, cracking, cracks and runs in the glass).
- Check attachments to the building structure (seat of screws and fastening elements).

Seals of fillings and adjoining building components
- Inspect silicone seals, glazing gaskets and ceramic fibre tapes for damage (cracks, vandalism, etc.).
- Inspect glazing beads for correct seating.

Shadow gap
- Check shadow gap between frame and leaf or sash and in face plate area.
- Adjust hinges in case of deviations.

Hinges and locking pins
- Check attachment of hinges and locking pins.
- Hinges with plastic bearing bushes are maintenance-free. Never oil or grease them.
- Hinges without plastic bearing bushes must be lubricated with grease (lubrication set 909240).
- Only use cleaning agents which contain no corrosive substances.

Seals
- Check seals for contact pressure and flexibility.
- Treat seals regularly with a silicone stick or polymer lubricant to prevent them from becoming prematurely brittle. It is best to lightly clean them with water.
- Completely replace brittle, defective or missing seals.
- Check the lowering floor seal for its trigger function and full contact with the floor and re-adjust or replace as required.

Door closer, sequence close regulator, carry bar
- Check the attachment of fitting components for tight fit.
- The door must be self-closing from any position (observe specifications in the installation instructions of the door closer).

Locks, handles, bar knobs, push bars, additional latches, drive bolt locks, switch latch in the fixed leaf, emergency exit closures EN 179, anti-panic door closures EN 1125 (all fittings)
- Check fastening screws for tight fit and completeness.
- Check whether there are any visible traces of forced entry or damage.
- Check closing function and latch play. If the play is too great, tightness is no longer ensured. Remedy: check the condition of the latches and seals and replace as required.
- Clean and lightly grease closing latches (vertical, horizontal), bolts and keeps.
- Only use cleaning agents which contain no corrosive substances.
- Check all functions, e.g. anti-panic function or opening from the fixed leaf (if adjusted in this way).

Sliding door drive, sensors, contacts and wiring
- In compliance with EN 16005, §4.2.1, DIN 18650, § 5.1.3 and ASR A1.7, power operated doors must be inspected and maintained by the drive manufacturer before the first commissioning and as required, but at least once a year. We advise the operator to conclude a service contract with the drive manufacturer.

Notes on fittings made of stainless steel

We urgently advise to carry out regular care using commercially available products. Tests have shown that preservation and the use of small doses of products such as Cillit, Enablitz, Stahlfix and 3M can produce good results when it comes to cleaning effects. Never use steel wool, steel brushes or similar when cleaning since they damage the protective coating and this abrasion promotes the formation of extraneous rust.

2. Maintenance instructions for doors

Fitting parts not included in the Forster portfolio

- Carry out inspection, care and servicing of fitting parts – electromagnetic door holders, magnetic contacts (Reed contacts), motorised locks, electric swing leaf drive motors, electric auxiliary devices, mechatronic components (e.g. electric locking cylinders, door releases), etc. – depending on the supplier's specifications.

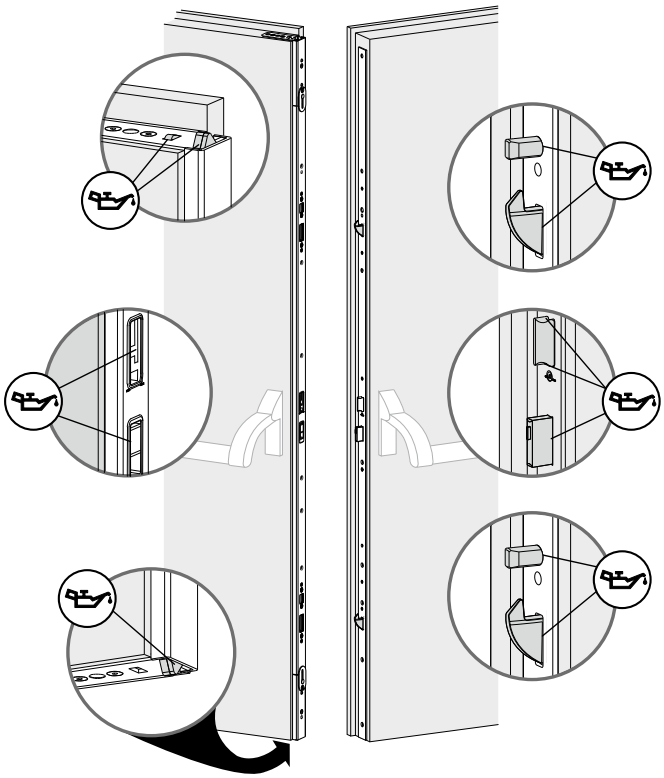
2.1 Maintenance instructions for emergency exit and panic door closures

Monthly maintenance

- Check all lock functions when door is in locked and unlocked states; measure and record operating forces required to release lock.
- Check lock, fastening devices, keeps and hinges for tight fit and latch engagement.
- Check that all system components correspond to the originally delivered system and that the door has no additional locking or closing mechanisms which were added later.

Service after half the max. permitted operations of actuation lever (see Intended Use), or at least once a year.

- Check lubrication at lubricating points marked below and replace as required. Use only resin- and acid-free oil for lubrication.



Lubricating points for locks in 1- and 2-leaf doors

2.2 Liability notes for emergency exit and panic door closures

Intended use

All applications and individual cases of use that are non-compliant with the intended use and any modifications or changes to the product and all its associated parts and components not expressly permitted by Forster Profile Systems Ltd are strictly prohibited.

In cases of failure to comply with this provision, Forster Profile Systems Ltd assumes no liability for personal injury and/or damage to assets.

Liability disclaimer

The product and its component parts are subjected to strict quality controls. When used properly they function reliably and safely. Forster Profile Systems Ltd excludes any liability for consequential damages and/or compensation claims unless Forster Profile Systems Ltd acted wilfully or with gross negligence or are responsible for injury to life, limb or health.

This does not affect any liability without fault according to product liability law. Similarly it does not affect liability for the culpable breach of fundamental contractual obligations; liability in such cases is limited to the foreseeable damage typical of the contract.

The above provisions do not constitute any change in the burden of proof to the disadvantage of the consumer.

Note

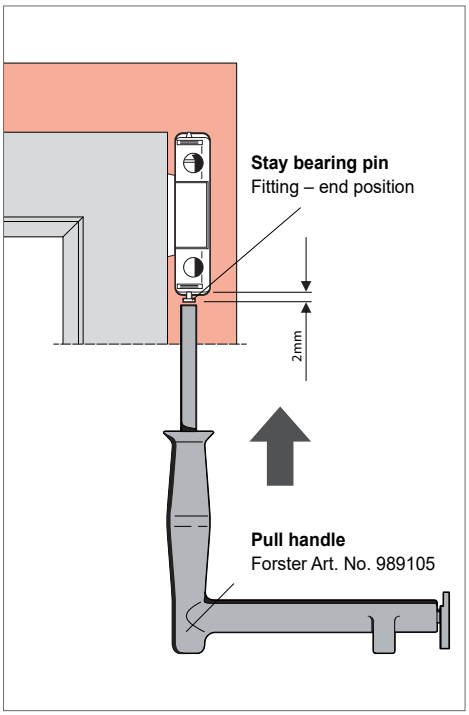
It is prohibited to block or hinder emergency exits, escape, fire or panic doors with objects. Similarly, it is prohibited to lock these doors since the escape or panic function is no longer ensured. No key may remain inserted in the lock.

3. Instructions for installing and removing window sashes

3.1 Roto NT and NX (surface-mounted)

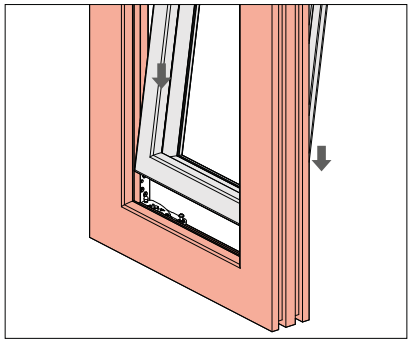
Fitting the sash

Slide in stay bearing pin with window sash closed and handle in tilt position.

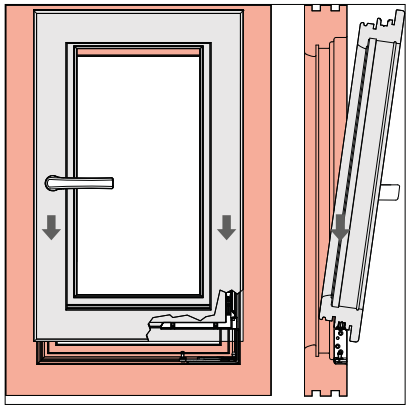


1. Slide in stay bearing pin by hand.
2. Press in stay bearing pin using pull handle.

Sequence of operations



- Place corner hinge in basic position (= closed sash position).
- Place handle in turning position.
- Guide sash in slightly tilted position along frame downwards until corner hinge strip noticeably contacts corner hinge.

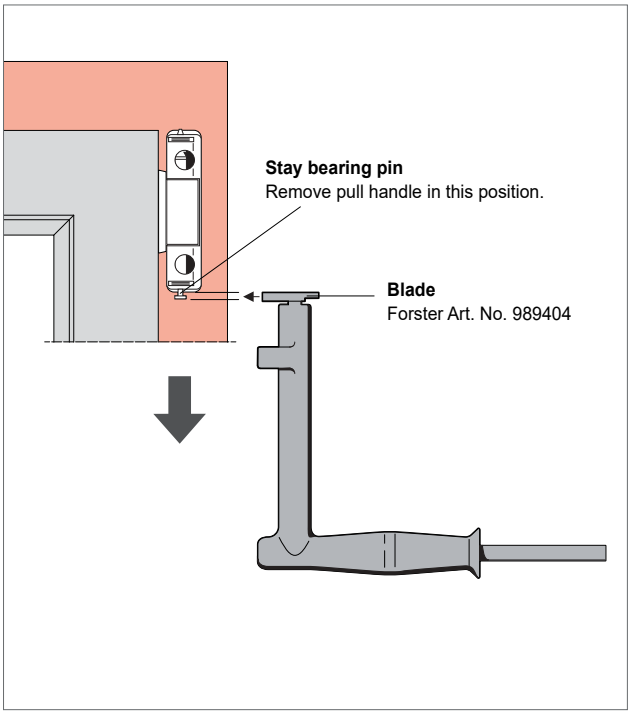


- Secure sash against falling.
- Press lifting mishandling device (if fitted).
- Place handle in tilt position.
  This is a conscious malfunction of the fitting – but here it is necessary!

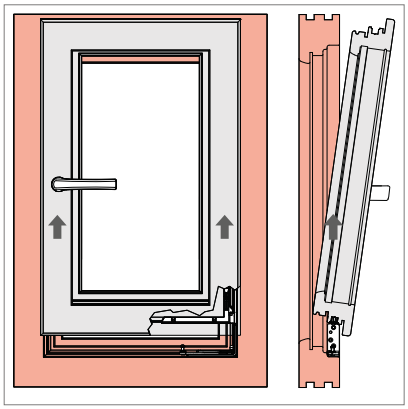
3.1 Roto NT and NX (surface-mounted)

Removing the sash

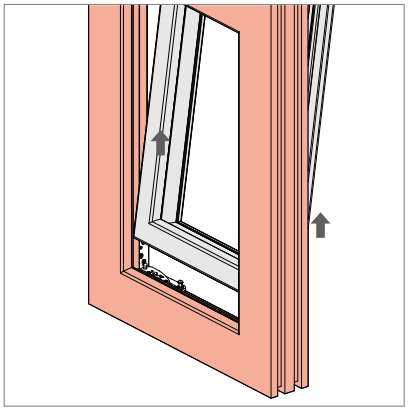
Pull out stay bearing pin with window sash closed and handle in tilt position.



Sequence of operations



- Place sash in turning position (= open sash position).
- Press lifting mishandling device (if fitted) and place handle in tilt position.
- Remove stay and secure sash against falling.



- Press lifting mishandling device and place handle in turning position.
- Close sash.
- Lift sash slightly tilted out of corner hinge.

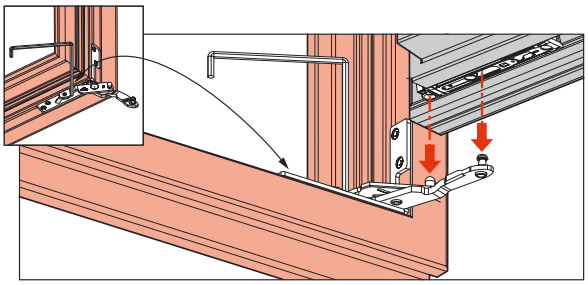
3.2 Roto NT Designo (concealed)

Fitting the sash – Stay 250

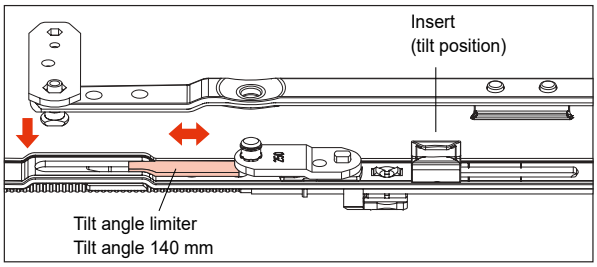
1. Press lifting mishandling device (if fitted).

2. Place handle in tilt position.
   This is a conscious malfunction of the fitting – but here it is necessary!

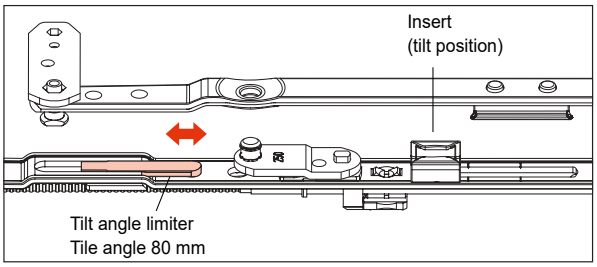
3. Place sash in corner hinge. Important: Do not tilt sash.



4. Press stay arm on stay guide and supporting arm.

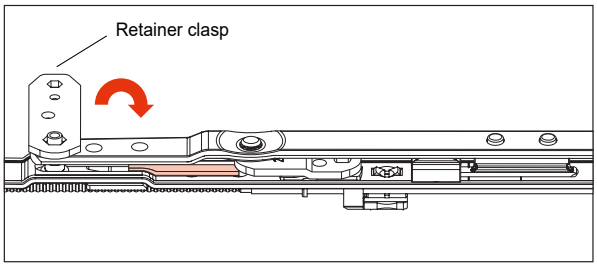


Stay 250 – standard tilt angle 140 mm

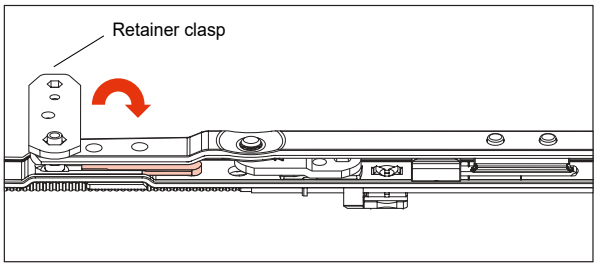


Stay 250 – tilt angle 80 mm

5. Close retainer clasp.



Stay 250 – standard tilt angle 140 mm



Stay 250 – tilt angle 80 mm

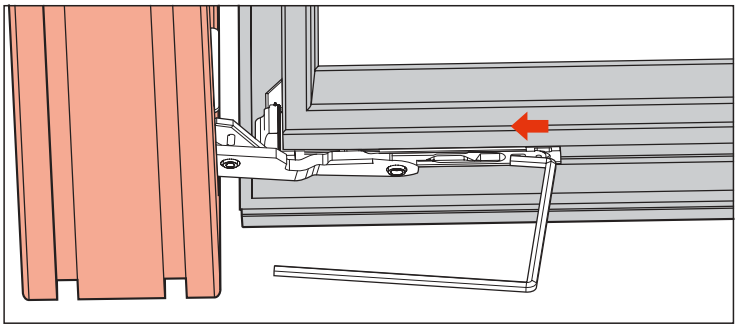
6. Operate lifting mishandling device again.

7. Place handle in turning position.

3.2 Roto NT Designo (concealed)

Removing the sash – Stay 250

1. Open sash by 90°.
2. Slide back anti-jemmy device of corner hinge using Allen key (WAF 4).



3. Press lifting mishandling device (if fitted).
4. Place handle in tilt position.
5. Open retainer clasp.
6. Lift stay arm from stay guide and supporting arm.
7. Lift sash out of corner hinge.

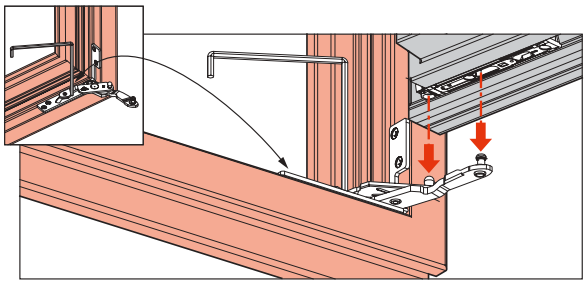
3.2 Roto NT Designo (concealed)

Fitting the sash – Stay 350 and 500

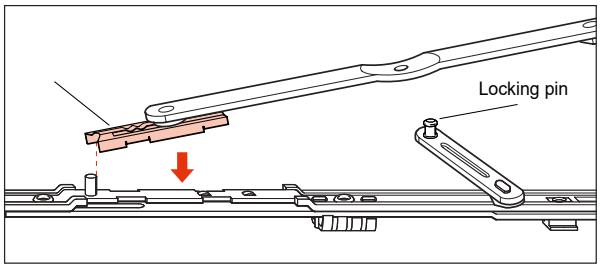
1. Press lifting mishandling device (if fitted).

2. Place handle in tilt position.
   This is a conscious malfunction of the fitting – but here it is necessary!

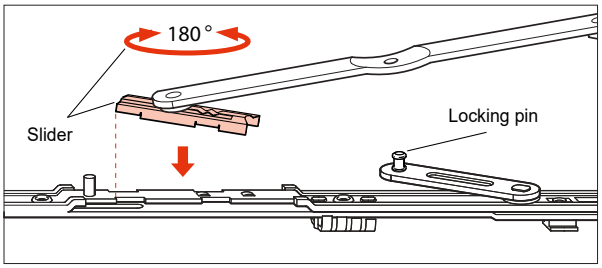
3. Fix corner hinge using Allen key (WAF 4) and place sash in corner hinge. Important: Do not tilt sash.



4. Connect stay slider to stay guide.

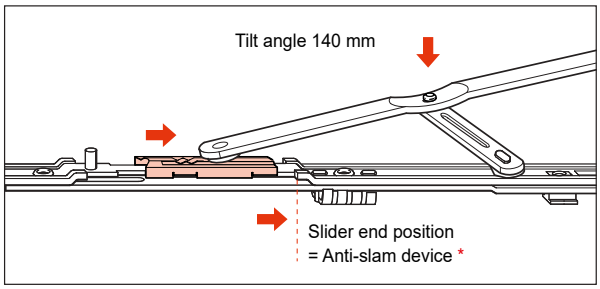


Stay 350 and 500 – standard tilt angle 140 mm

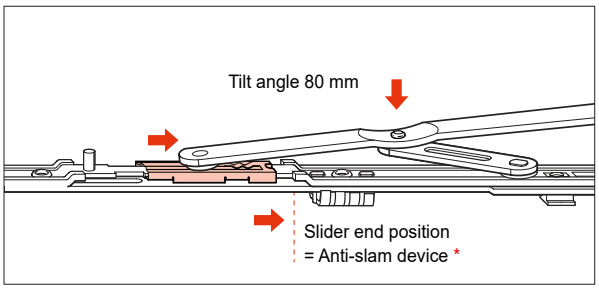


Stay 350 and 500 – tilt angle 80 mm

5. Raise stay arm and snap stay arm drill hole onto supporting arm locking pin.



Stay 350 and 500 – standard tilt angle 140 mm



Stay 350 and 500 – tilt angle 80 mm

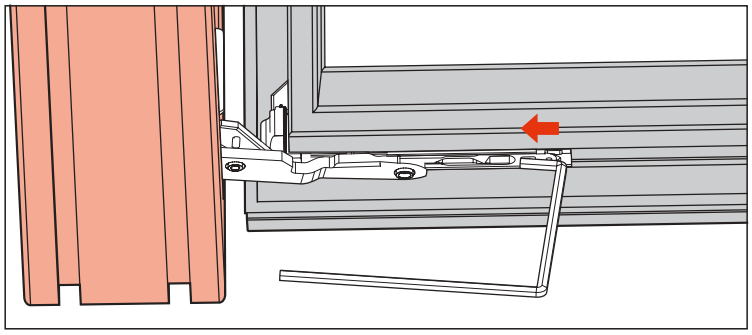
6. Operate lifting mishandling device again.

7. Place handle in turning position.

3.2 Roto NT Designo (concealed)

Removing the sash – Stay 350 and 500

1. Open sash by 90°.
2. Slide back corner hinge anti-jemmy device using Allen key (WAF 4).



3. Press lifting mishandling device (if fitted).
4. Place handle in tilt position.
5. Raise stay arm and release from locking pin.
6. Separate slider from stay guide.
7. Lift sash out of corner hinge.

3.2 Roto NT Designo (concealed)

Fitting load transfer device

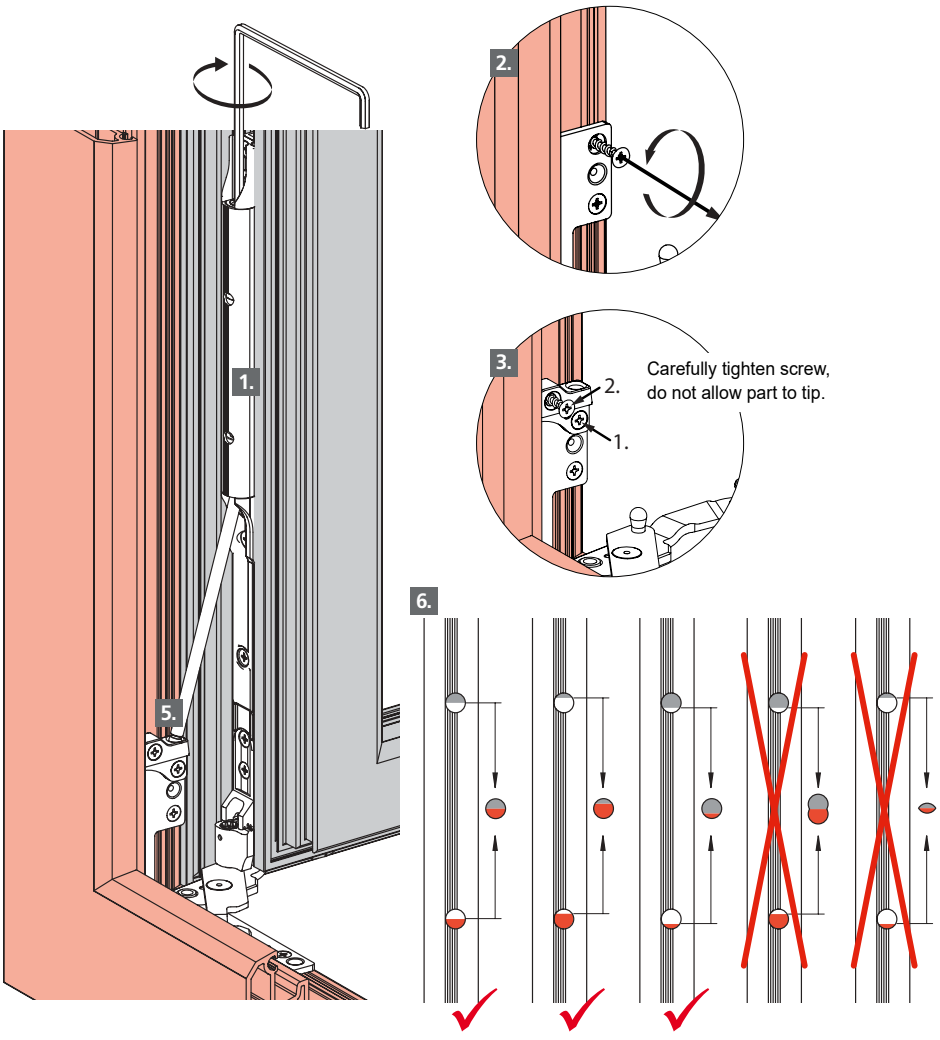
The Installation Instructions AB 598 from Roto are assumed as the basis.

Fitting load transfer device

1. Place sash component load transfer device to stop with corner hinge and screw down.
2. Undo top screw from corner hinge.
3. Place component load transfer device on corner hinge and screw down (note sequence of operations).
   Note: Carefully tighten second screw. Do not allow component to tip.
4. Insert sash in corner hinge (not illustrated).
5. Insert sash component support rod into component recess.

Adjust load transfer device.

6. Adjust load transfer device in open sash position (90°) using 4 mm Allen key: adjust adjusting screw so that full circle results from adding red and silver pitch circles. Check in viewing windows.



3.2 Roto NT Designo (concealed)

Removing the sash

The Installation Instructions AB 598 from Roto are assumed as the basis.

Removing the sash – Stay 250 and 350 and Stay 500

1. Place handle in turning position, open sash by 90°, relieve load transfer device.

2 Secure sash against falling.

3. Slide back corner hinge anti-jemmy device using Allen key (WAF 4).

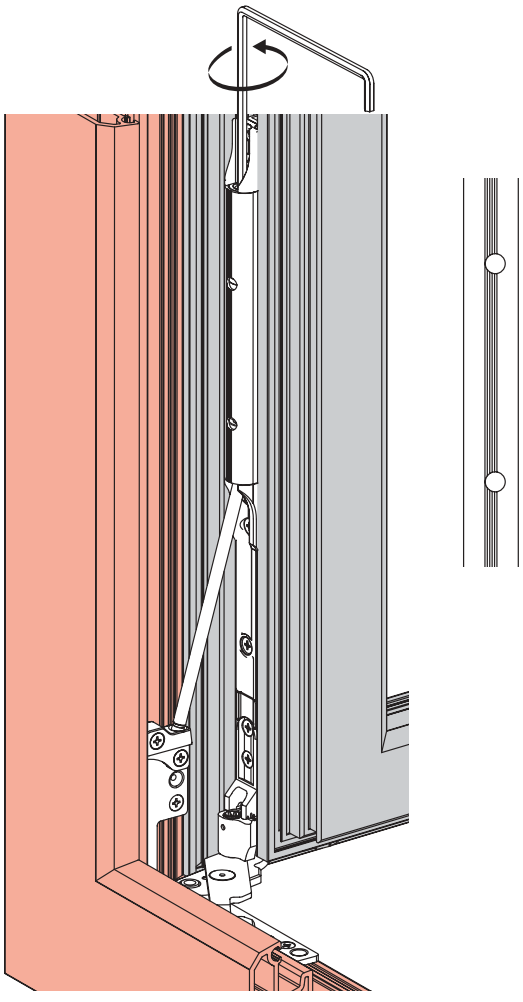
4. Press lifting mishandling device (if fitted).
   This is a conscious malfunction of the fitting – but here it is necessary!

5. Place handle in tilt position.

6. Open retainer clasp (Stay 250).

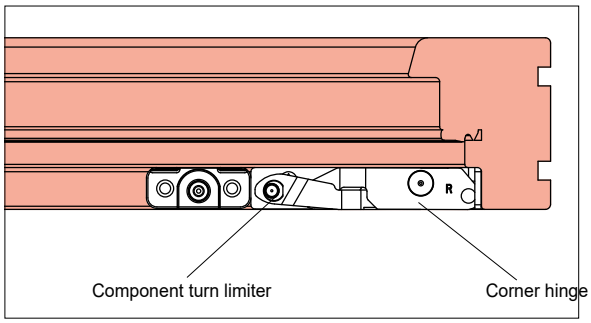
7. Lift stay arm from stay guide and supporting arm.

8. Lift sash out of corner hinge.

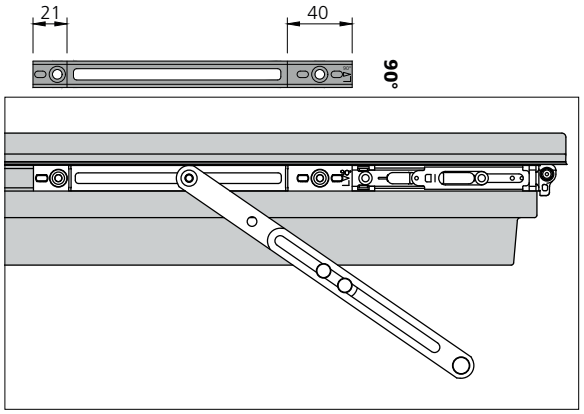


3.2 Roto NT Designo (concealed)

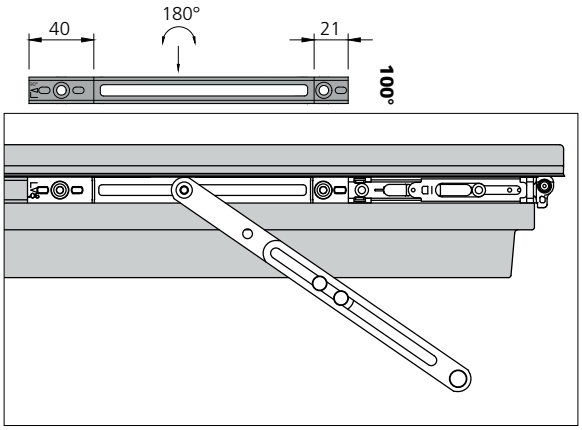
Turn limiter



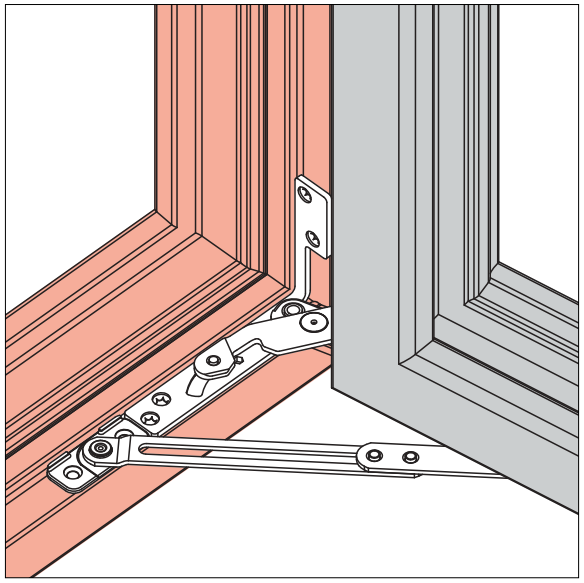
Fit component.

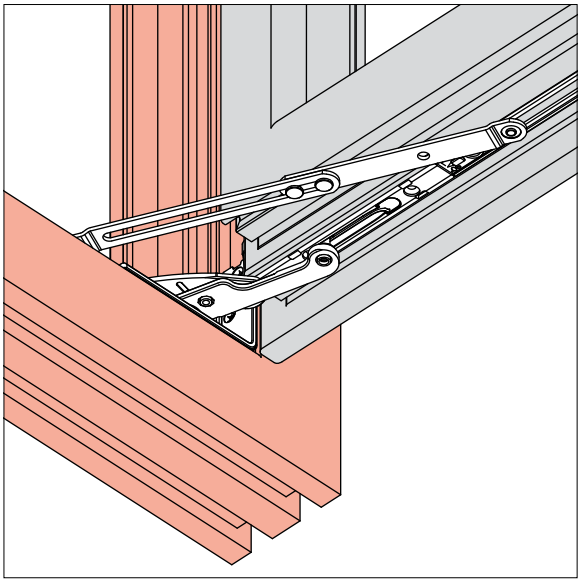


Fit sash component depending on required opening angle.
Opening 90°



Opening 100°

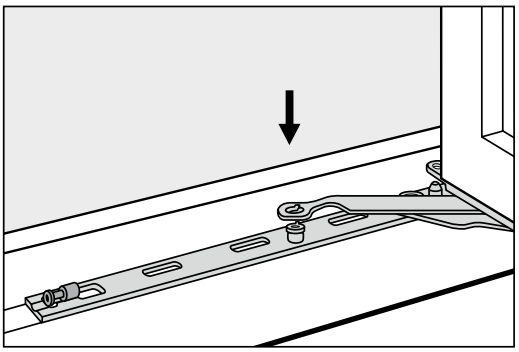




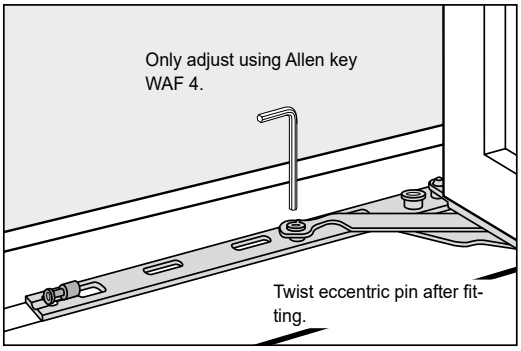
Press turning limiter arm over component rubber ring.

3.3 Roto NT Royal (concealed)

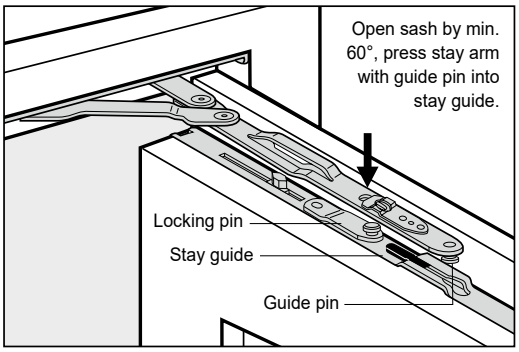
Fitting the sash



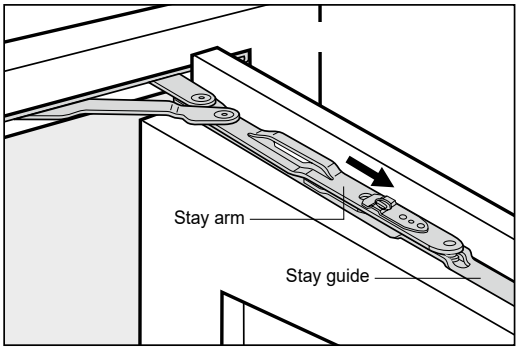
Corner hinge R



Corner hinge R

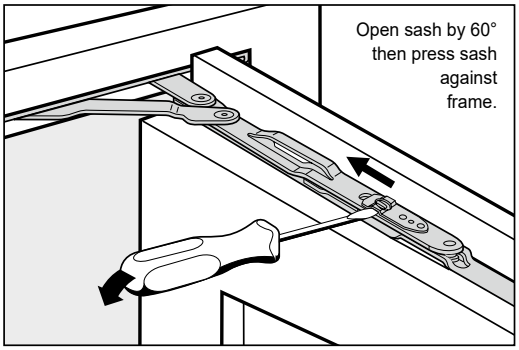


Stay arm R

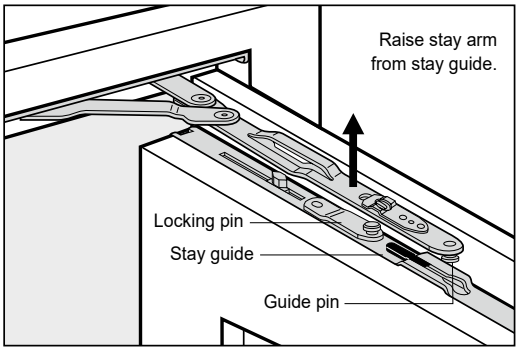


Stay arm R

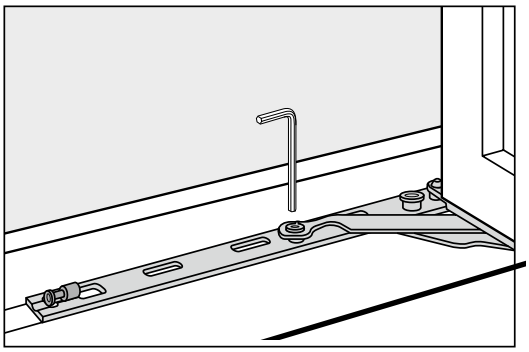
Removing the sash



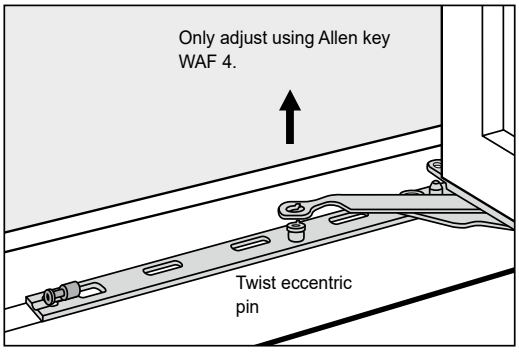
Stay arm R



Stay arm R



Corner hinge R



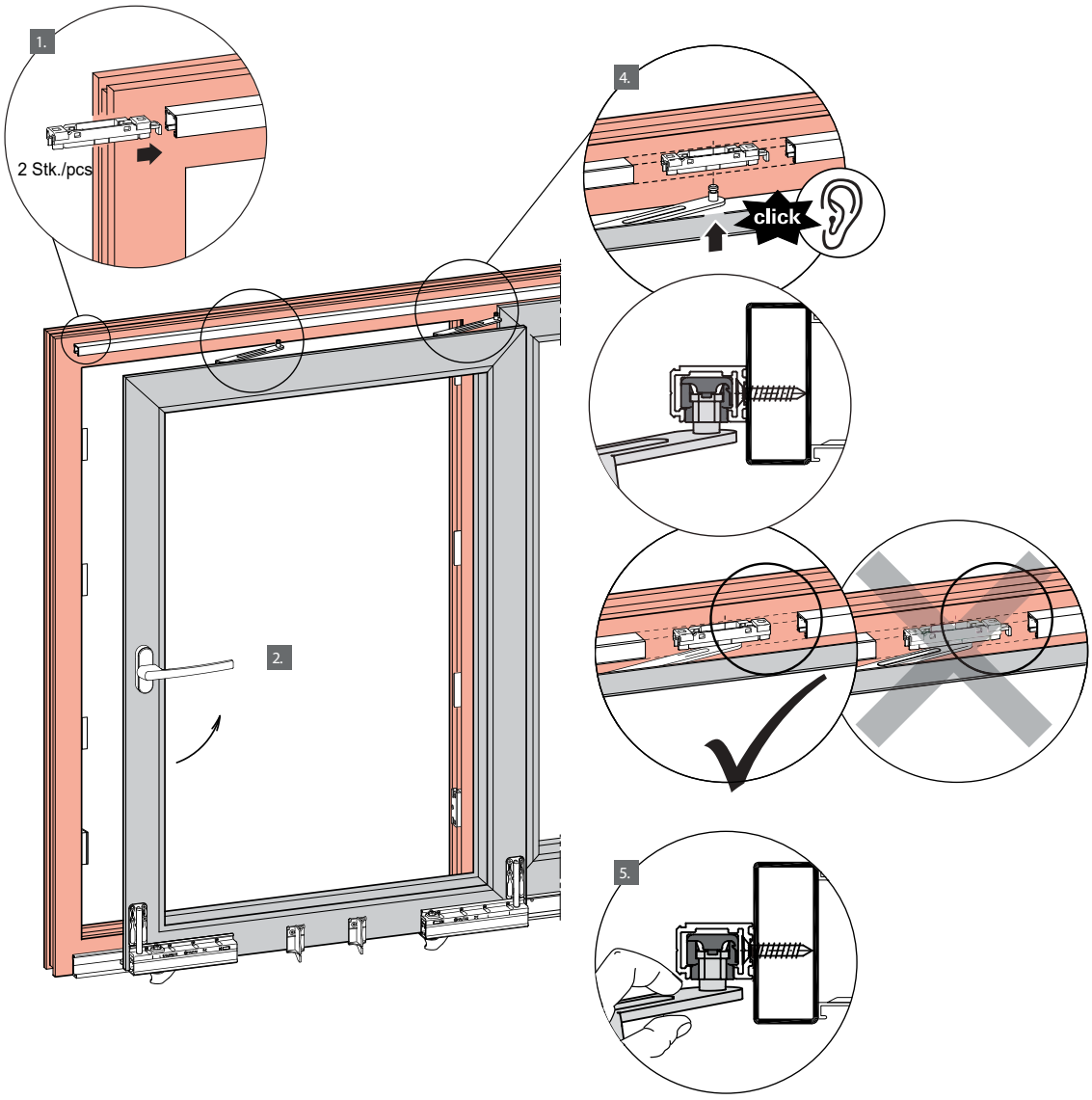
Corner hinge R

3.4 Roto Patio Z (PSK)

Fitting the sash

1. Slide in 2 scissor stay sliders into guide track from side.
2. Place handle horizontally.
3. Place sash with its rollers on sliding track (not illustrated).
4. Click scissor stay pins into central slider openings of both sliders (audible click!). When correctly fitted, the side safety levers of the sliders are flush with the edges of the slider housing.
5. Check fitting by pulling/pressing scissor stay arms down.

Warning: If the scissor stay pins are not firmly engaged in the sliders, the window sash is not secured against falling out. This may result is severe personal injury.



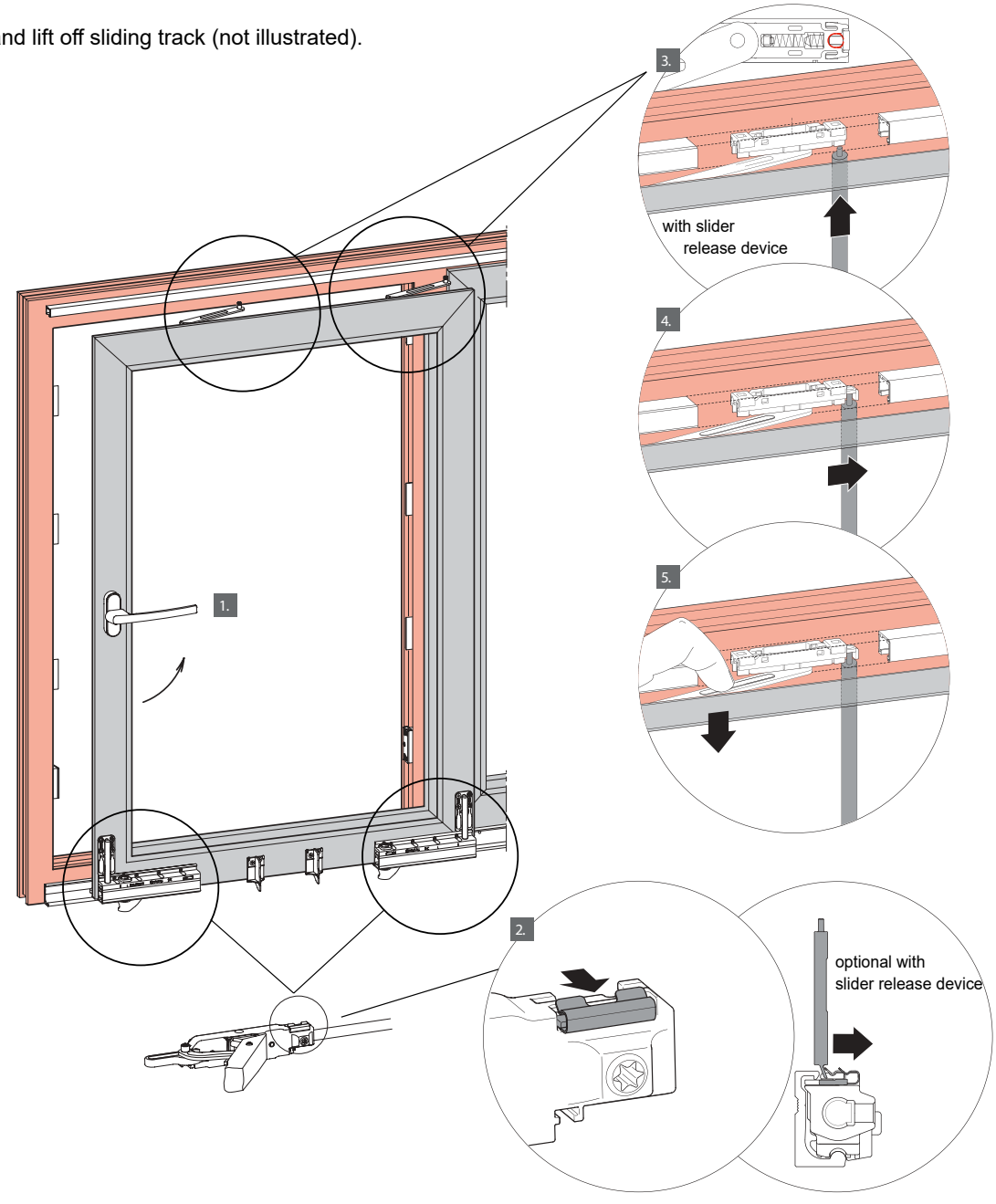
3.4 Roto Patio Z (PSK)

Removing the sash

1. Open sash.
2. Place sliding track lock in released position.
   Caution: Before releasing the scissor stay connection, secure the sash against falling out.
3. Press in slider catch in slider opening next to safety lever.
4. Pull out safety lever with slider catch sideways out of slider.
5. Press out scissor stay pin downwards out of slider.

Repeat this operation on the second slider.

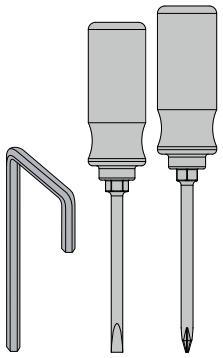
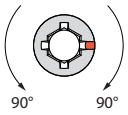
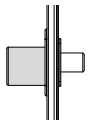
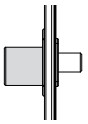
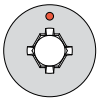
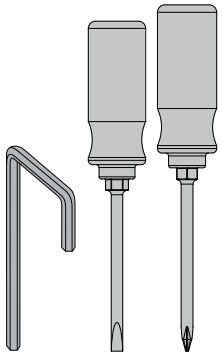
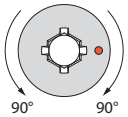
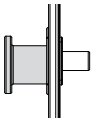
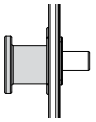
6. Tilt released sash and lift off sliding track (not illustrated).

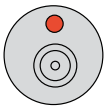
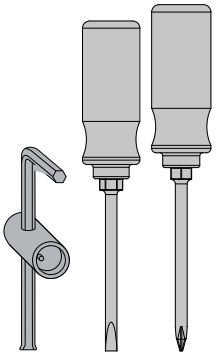
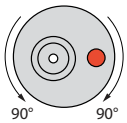
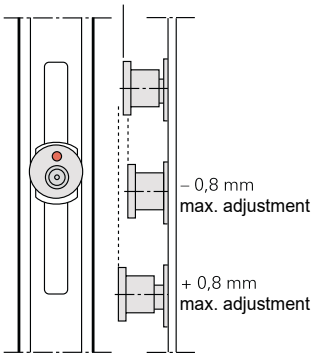
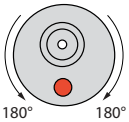
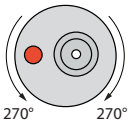
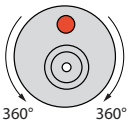


4. Adjustment instructions for window fittings

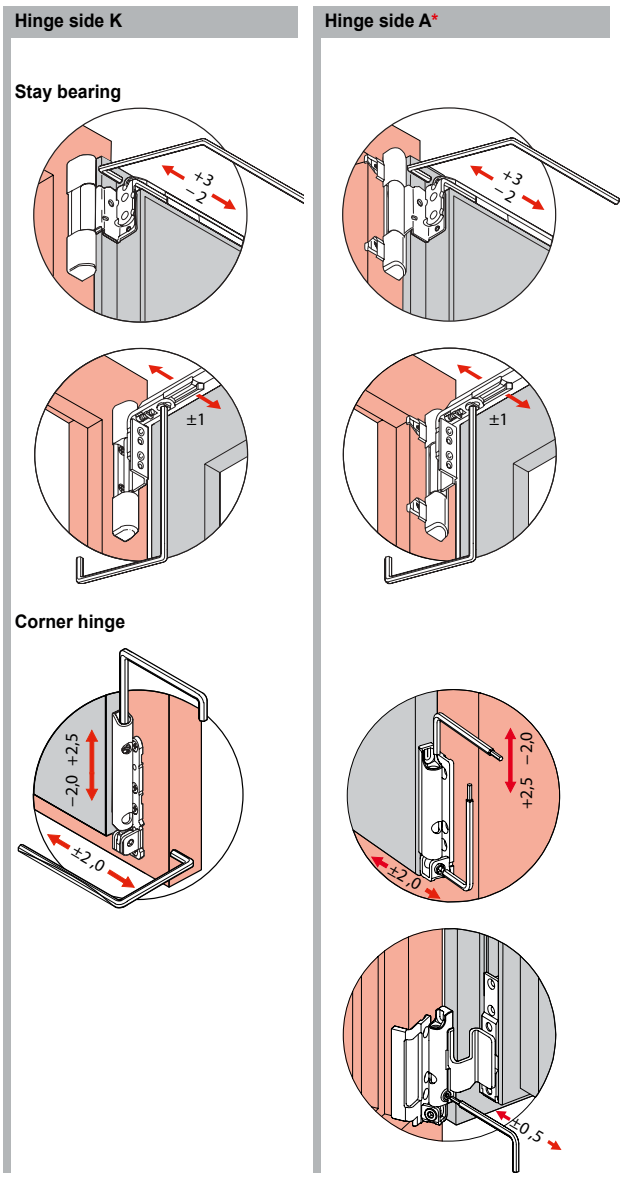
4.1 Locking pins

Adjustment instructions for locking pins

Pin type	Adjusting range	Contact pressure	Height	Side view		Tool
E pin						
						
	 90° 90°	+ / – 0,8 mm				
P pin						
						
	 90° 90°	+ / – 0,8 mm				

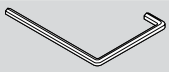
V pin					
Pin type	**Adjusting range**	**Contact pressure adjustment/ mm** 	**Height adjustment/ mm** 	**Side view / Top view**	**Tool**
					
	 90° 90°	+ / – 0,8 mm	+ / – 0,2 mm	0 = basic position  – 0,8 mm max. adjustment + 0,8 mm max. adjustment	
	 180° 180°	–	+ / – 0,4 mm		
	 270° 270°	+ / – 0,8 mm	+ / – 0,6 mm		
	 360° 360°	–	+ / – 0,8 mm		

4.2 Roto NT (surface-mounted)



* When caps are used (on stay bearing/corner hinge) and corner hinge lock, the specified adjustment dimensions change.

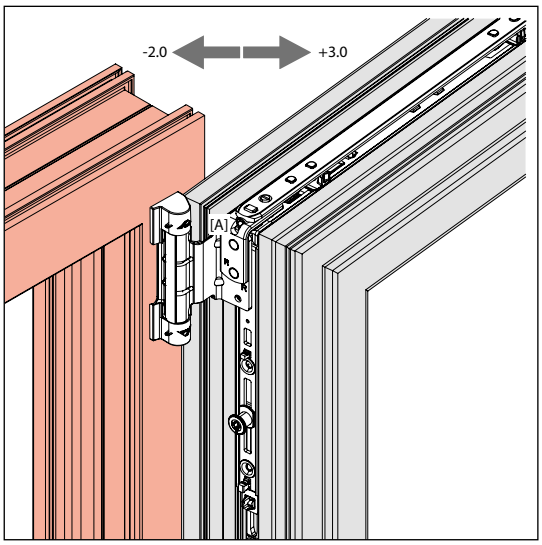
Adjustment tools

Figure	Designation	Article number
	Adjustment tool 4 mm	Forster 989106
	Hex screwdriver 2.5/4 mm	Roto 230 764

4.3 Roto NX (surface-mounted)

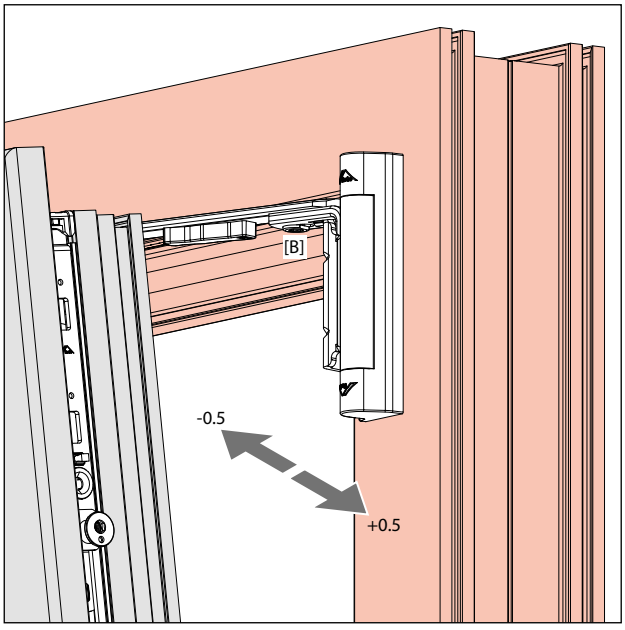
Lateral adjustment sash stay

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



Gasket compression adjustment sash stay

1. Move the sash to the tilt position.
2. Gasket compression adjustment ±0.5 mm via eccentric [B] in the sash stay.Tool: hex key WAF 4.

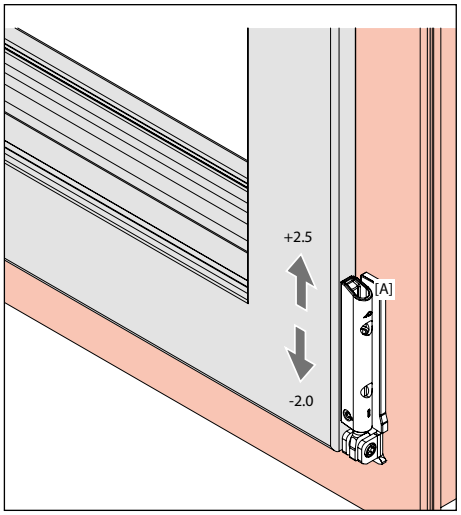


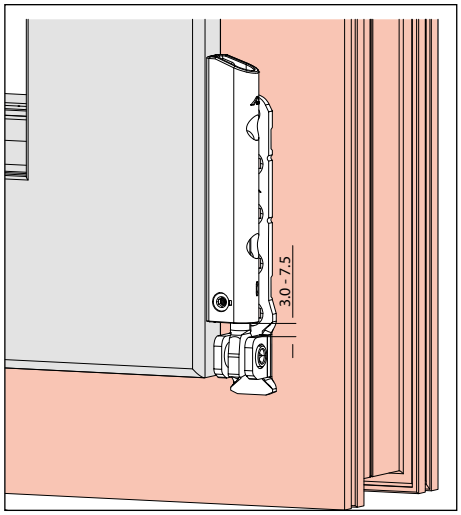
4.3 Roto NX (surface-mounted)

Corner pivot rest and corner hinge height adjustment

1. Remove the cover cap.
   Move the handle to the turn position.

2. Height adjustment -2.0 / +2.5 mm via screw [A] in the corner hinge.
   Tool: hex key WAF 4.

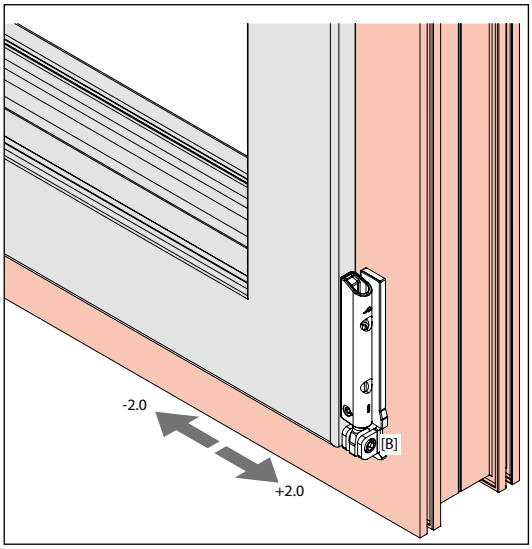




Corner pivot rest and corner hinge lateral adjustment

1. Lateral adjustment ±2.0 mm via screw [B] in the pivot rest.
   Tool: hex key WAF 4.

2. Fit the cover cap.

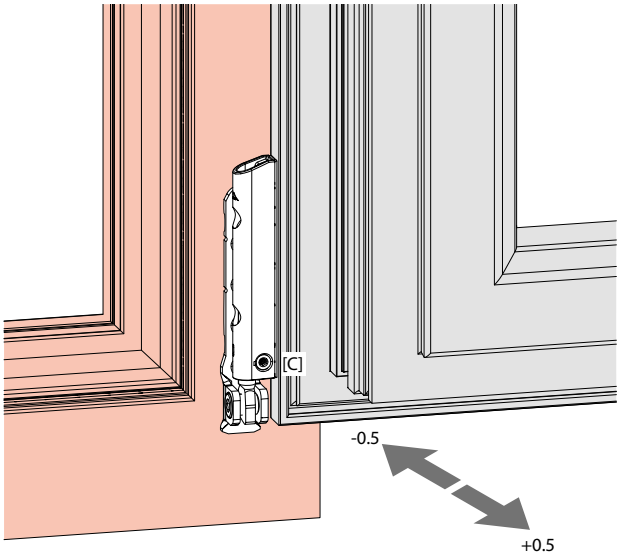


4.3 Roto NX (surface-mounted)

Gasket compression adjustment for corner pivot rest and corner hinge

1. Open the sash 180°.

2. Lateral adjustment ±0.5 mm via eccentric [C] in the corner hinge.
   Tool: hex key WAF 2.5.

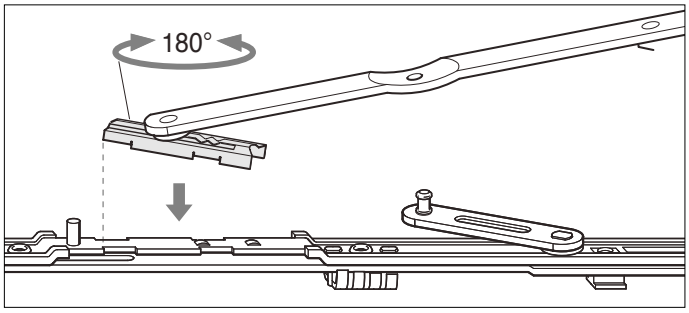


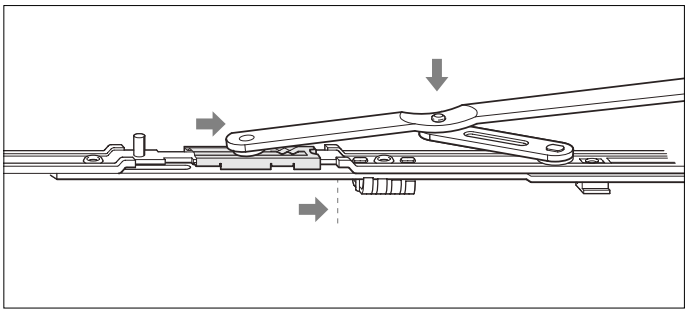
4.3 Roto NX (surface-mounted)

Tilt distances for turn/turn-tilt leaves

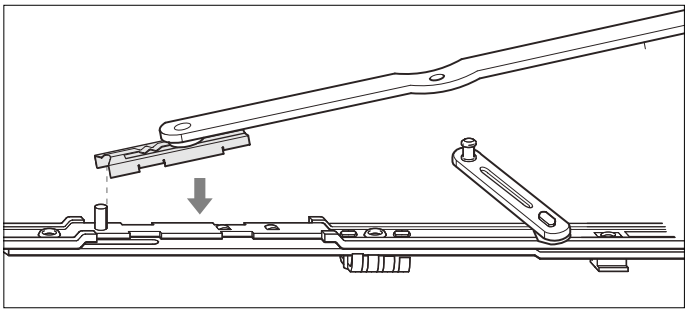
Reduced tilt distances (80 mm)

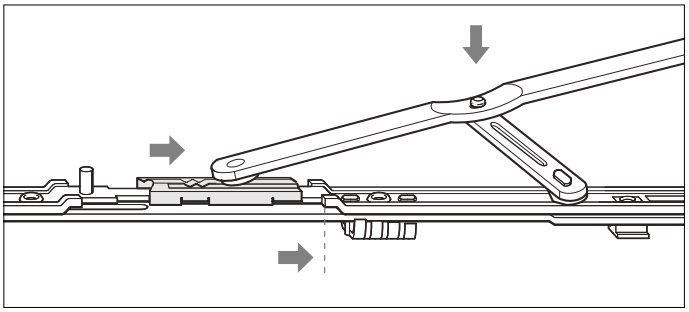
Required for leaves with
FFB: ≤ 500 mm





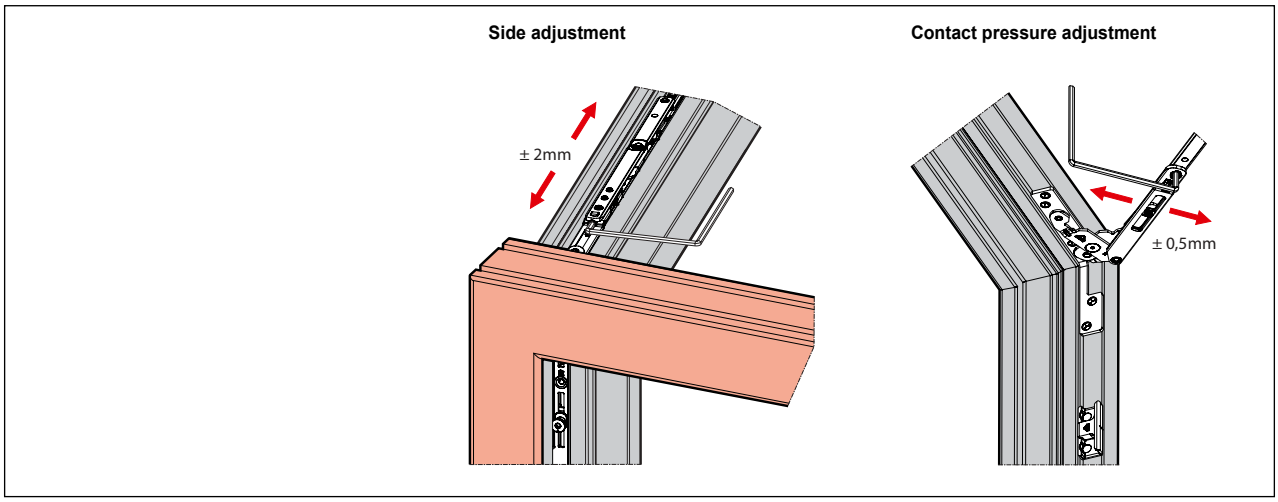
Standard tilt distances (140 mm)



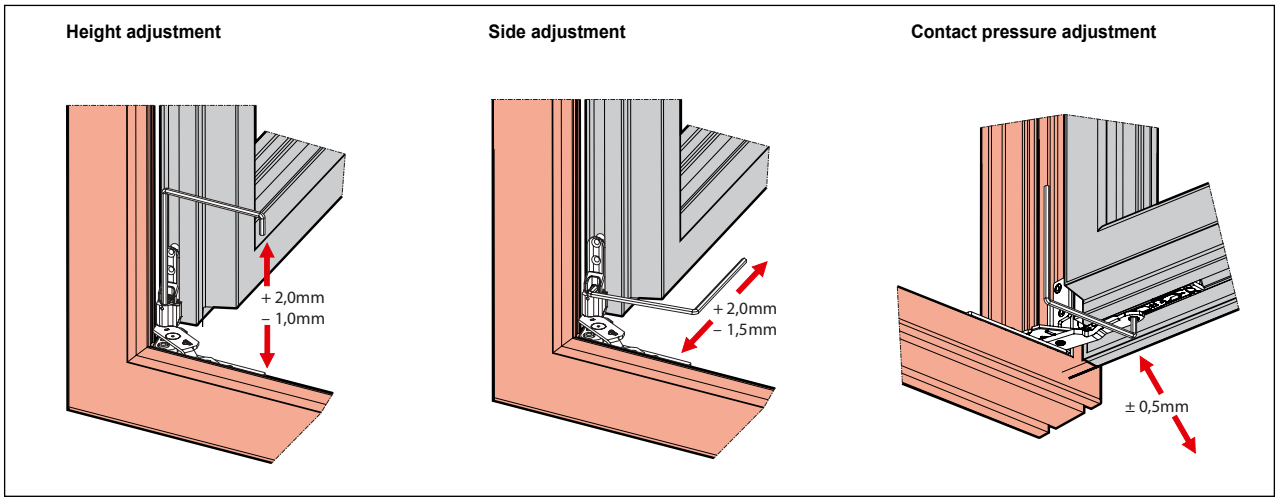


4.4 Roto NT Designo (concealed)

About stay

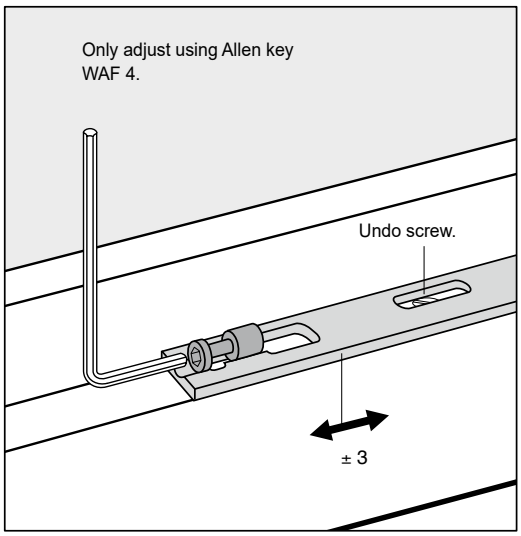


About corner hinge



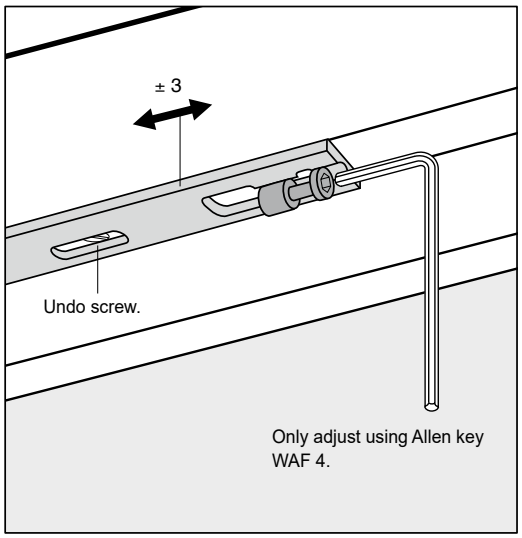
4.5 Roto NT Royal (concealed)

Corner hinge side adjustment



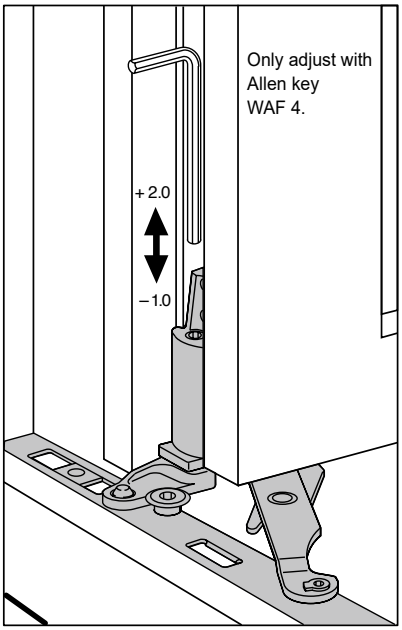
Corner hinge R

Stay arm side adjustment



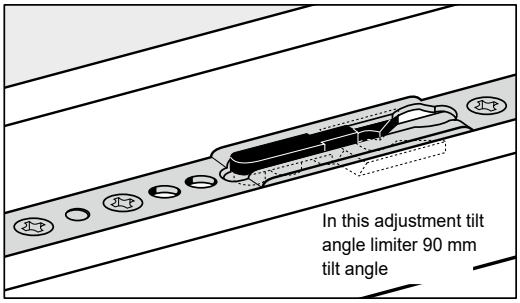
Stay arm R

Corner hinge height adjustment

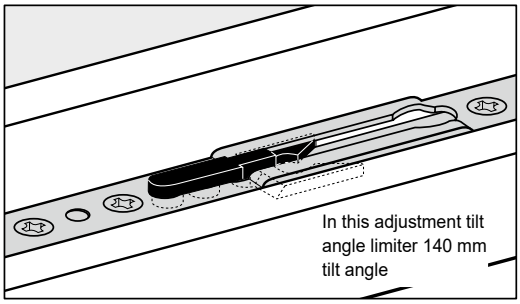


Corner hinge R

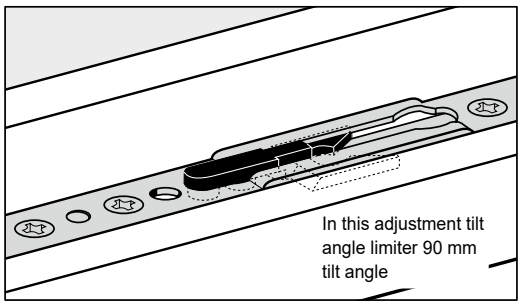
Stay guide tilt angle adjustment



Function as tilt angle limiter with stay guide R
Size 250



Anti-slam device integrated in stay guide R



Function as tilt angle limiter with stay guide R
Size 450

4.6 Roto Patio Z (PSK)

Aligning sash horizontally.

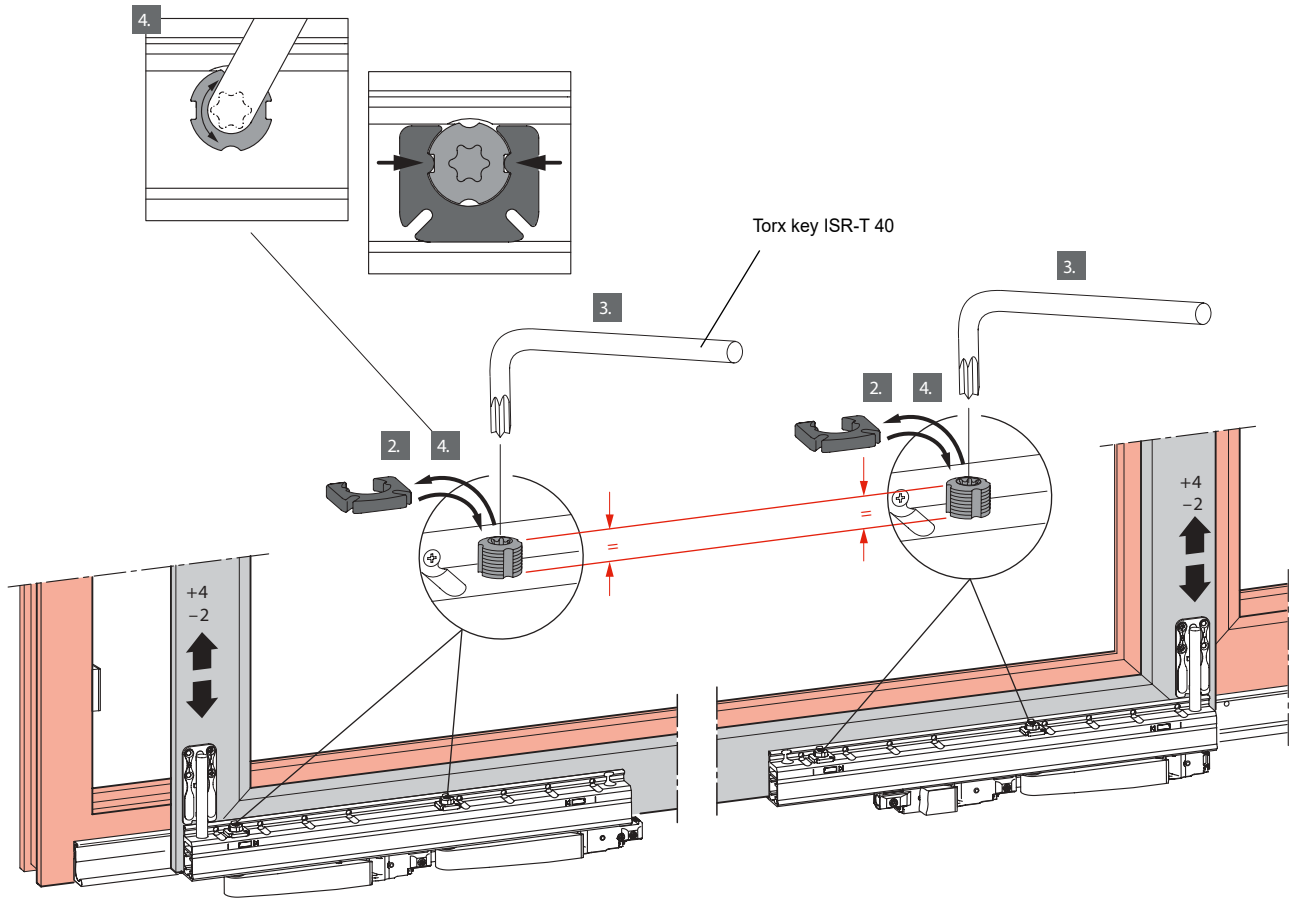
1. Check sash clearance all round (not illustrated).

2. Remove anti-twist device.

3. Raise or lower sliding tracks by adjusting screws using Torx key ISR-T 40.
   2 adjusting screws per Power sliding track, 1 adjusting screw per sliding track.

   Caution: When fitting a sash without glass or sliding tracks with light sash weight, lower sliding tracks by maximum amount using adjusting screws. The sliding tracks must be adjusted evenly using the adjusting screws so that they do not cant. (The sliding tracks are preadjusted identically at the factory.)

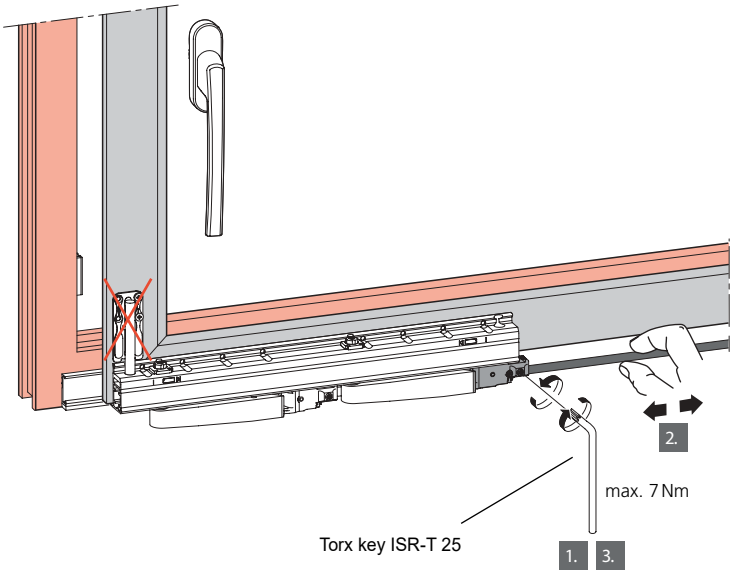
4. After adjusting the sliding tracks, fit the anti-twist device and first correct the orientation of the adjusting screws as required.

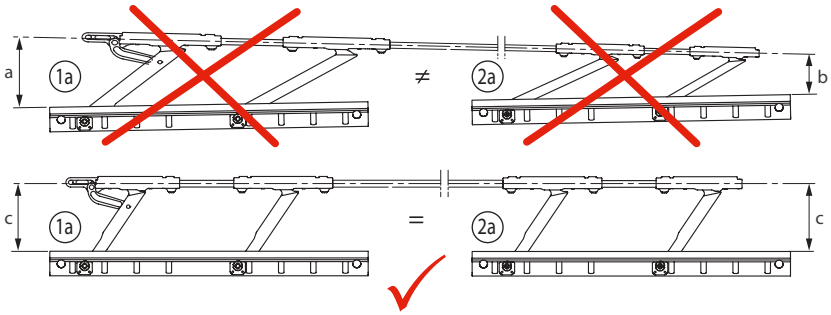


4.6 Roto Patio Z (PSK)

Align sashes in parallel
(to ensure that the sash is inserted evenly into the frame).

1. Remove connecting rod from power sliding track / sliding track on handle side using Torx key.
2. Align sliding track on hinge side in parallel by sliding connecting rod to left or right.
3. Tighten sliding track connecting rod on handle side using Torx key ISR-T 25 (max. 7 Nm).





4.6 Roto Patio Z (PSK)

Activate sliding track lock and fit sliding track cover.

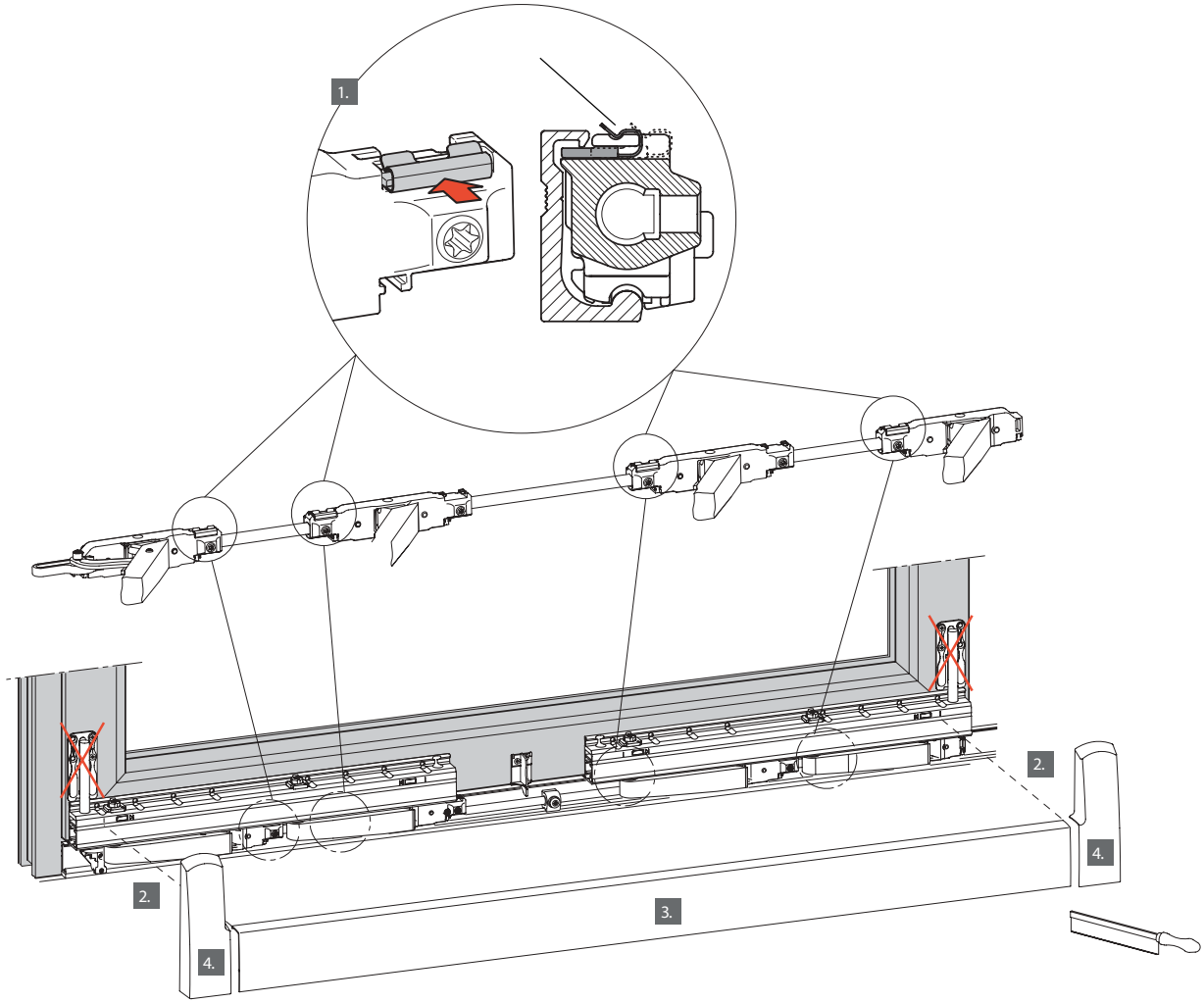
1. Push sliding track lock to rear on both sliding tracks until they engage in position depicted.

⚠ **Warning:** If the sliding track lock has not correctly engaged or not all at the position depicted, the window sash is not sufficiently secure. This may result in severe personal injury.

2. Shorten cover profile in accordance with markings on sliding tracks.

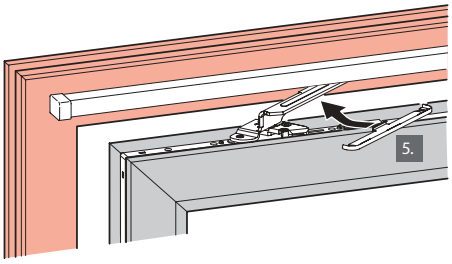
3. Align cover profile with sliding track markings and clip to sliding track and support piece.

4. Clip cap to reinforcement parts on bottom left and bottom right of cover profile.



Fit scissor stay caps.

5. Clip scissor stay caps from below onto scissor stay arms.



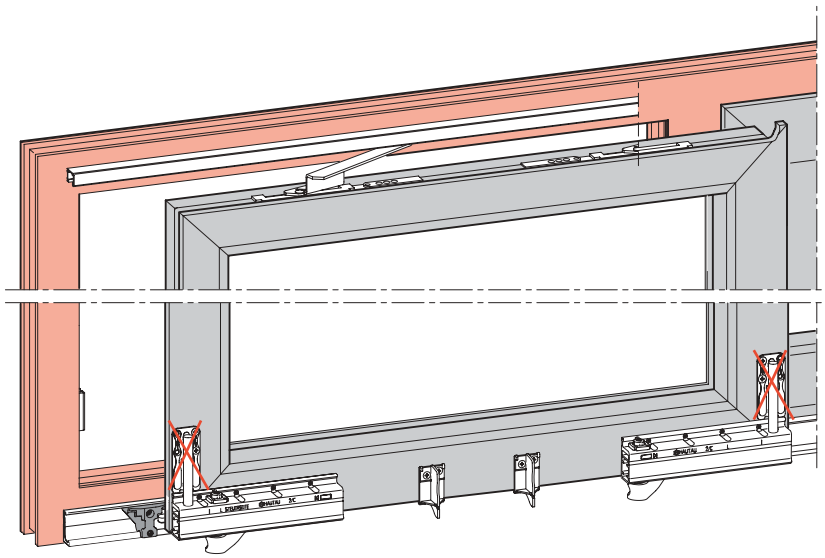
4.6 Roto Patio Z (PSK)

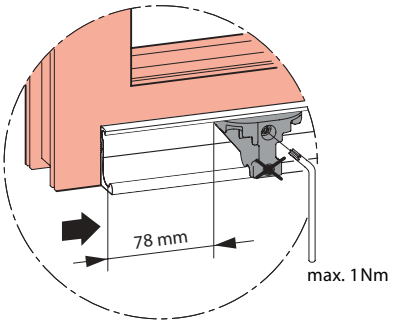
Fitting the guide block

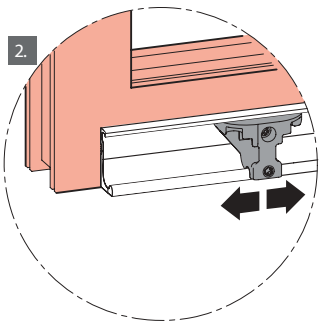
1. Position guide block on handle side approx. 78 mm from outer edge of sliding track.
   Slightly tighten top screw using Torx key ISR-T (max. 1 Nm).

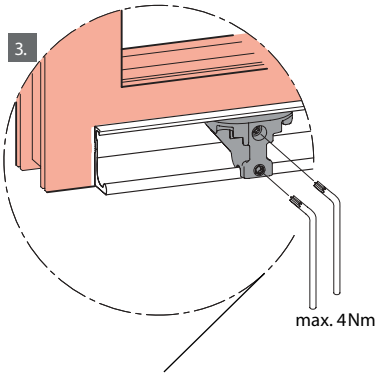
2. Place sash in tilt position and check sash clearance on both sides (12 mm).
   If necessary, reposition guide block.

3. Tighten two screws on guide block using Torx key ISR-T 25 (max. 4 Nm).









4.6 Roto Patio Z (PSK)

Fitting the rubber buffer stop

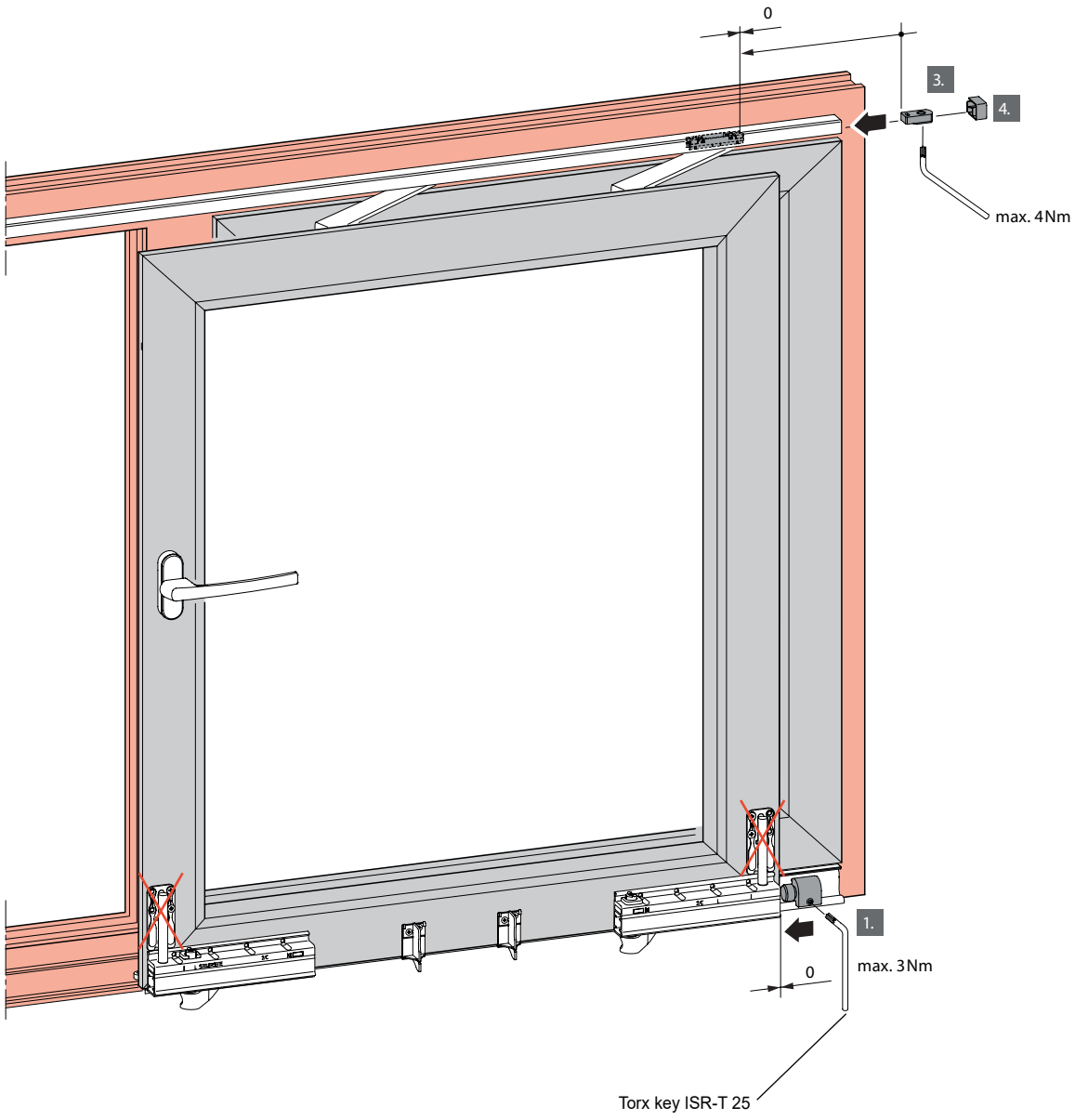
1. Screw rubber buffer stop to required position at bottom of sliding track.
   Torx key ISR-T 25, max. 3 Nm

2. Slide sash frame up to rubber buffer stop.

3. Slide in rubber buffer stop at top into guide track and screw tightly.
   Torx key ISR-T 25, max. 4 Nm

4. Fit cap for guide track.

Important note:
To avoid damaging the fitting parts, move the sash against the top and bottom stops at the same time.



5. Maintenance instructions for windows

Seals
Seals should be regularly treated with a silicone stick or polymer lubricant depending on the seal type. This protects seals from becoming prematurely brittle. The best way is to clean the seals lightly with water. At the same time, check the seals for damage in order to identify any defects. If defects are identified, the seals should be replaced by a specialist company.

Warning

Risk of injury from carrying out maintenance work incorrectly.
Incorrect maintenance may lead to severe personal injury and damage to assets.

- Before starting work, make sure there is sufficient space to carry out fitting work.
- Make sure the work space is orderly and clean.
- Make sure that the window or French window cannot open or close unintentionally during maintenance work.
- Commission a specialist company to carry out adjustment work on the fittings – especially with regard to corner hinges, roller units and scissor stays, the replacement of parts and the fitting and removal of sashes.
- Do not remove the window for maintenance.

At least one a year; every six months in schools and hotels	**Specialist company**	**End-user**
Re-tighten fastening screws as required.	■	–
Replace damaged screws.	■	–
Replace parts as required.	■	–
Oil all moving parts with commercially available acid- and resin-free oil.	☐	☐
Grease keeper plates made of steel with commercially available acid- and resin-free grease.	☐	☐

■ Only to be carried out by specialist company
– Not to be carried out by end-user; the end-user may not carry out any fitting work!
☐ To be carried out by specialist company or end-user

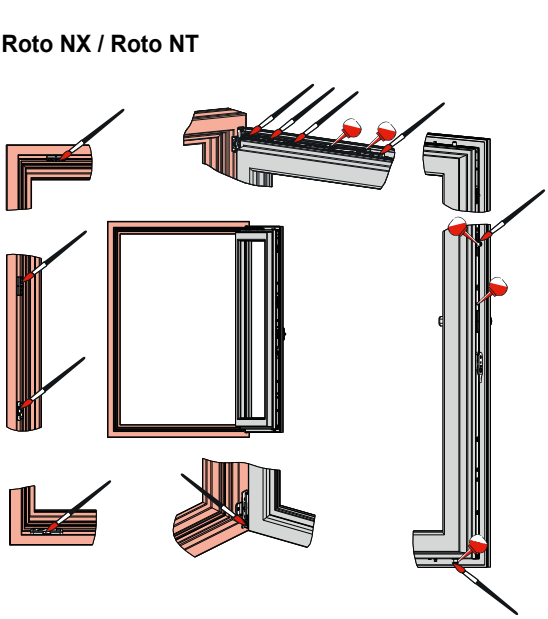
Note

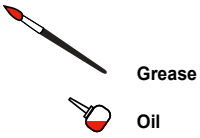
Comply with the following environmental protection instructions when carrying out maintenance work:
- **Remove escaping or excessive grease at lubricating points and dispose in compliance with the applicable local regulations.**
- **Catch replaced oil in suitable vessels and dispose properly (environmental protection).**

5. Maintenance instructions for windows

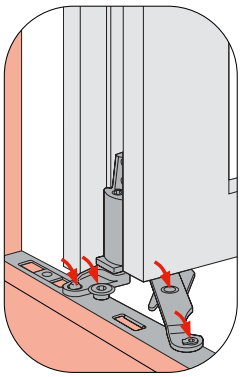
The overview of fittings depicted indicates the locations of possible lubricating points and may not portray the actual fitting installed. The number of lubricating points varies depending on the window size and model.

Roto NX / Roto NT

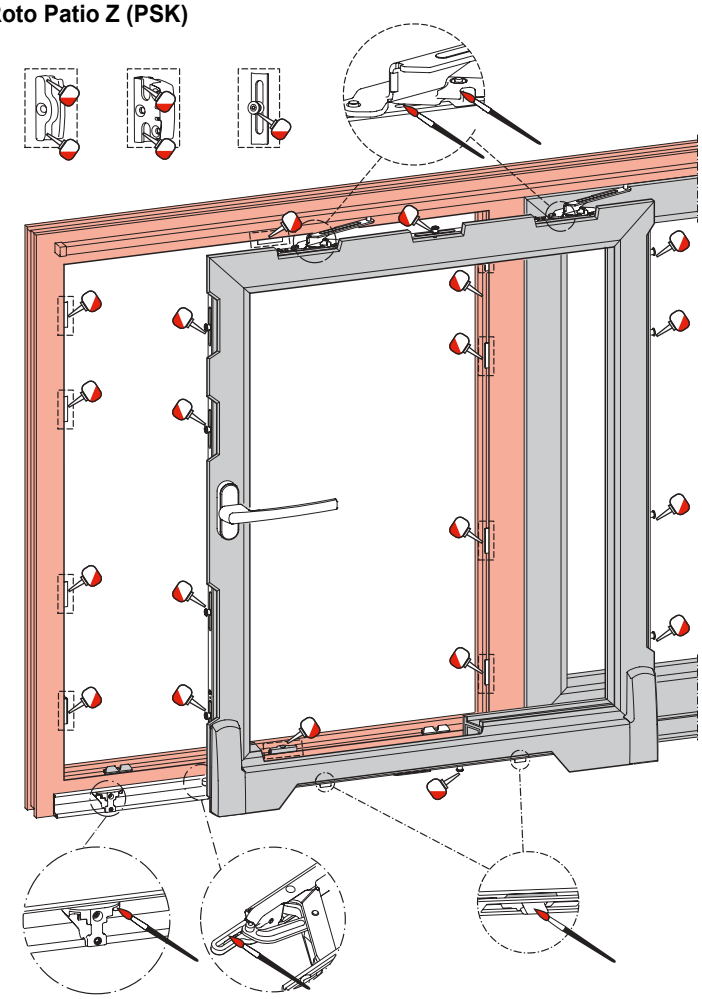




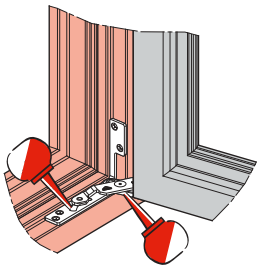
Roto NT Royal

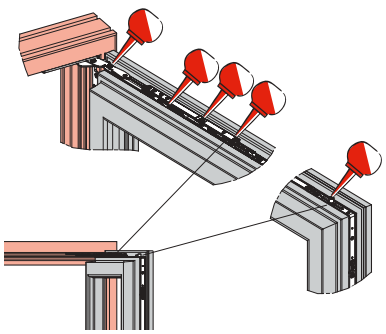


Roto Patio Z (PSK)



Roto NT Designo





5.1 Recommended maintenance for Roto

Windows manufactured by you are fitted with high-quality Roto fittings. Their highlights are high operating convenience, perfect functionality and long service life.

The functionality and easy operation of the fittings depend on compliance with our regulations regarding sash size and sash weight and on our product liability guidelines.

The function and condition of the fittings must be checked every year based on the following criteria:
- Cleanliness
- Free movement
- Attachment of fittings
- Wear of fittings
- Damage to fittings

Cleanliness
Remove lime, cement and mortar spatter from the fitting parts to prevent malfunctions. Always keep sliding tracks clean.
Cleaning agents and sealants may damage component and seal surfaces. No aggressive or flammable liquids and acidic cleaning agents or scouring agents should therefore be used. Mild, PH-neutral cleaning agents in diluted form are suitable as cleaning agents. A thin protective film should then be applied to the fitting (e.g. with an oil-soaked cloth).

Free movement
Free movement of the fitting can be checked by operating the window handle. The locking and unlocking torque of the window handle is defined in DIN 18055 as a value of max. 10 Nm. This can be tested using a torque wrench.

Free movement can be improved by applying grease/oil or readjusting the fittings. Roto turn/tilt fittings are provided with 2/3-sided adjustment options. Incorrect or improper readjustments
of the fittings may result in the windows no longer performing their function.

Attachment of fittings
The reliable attachment of the fitting depends on the window function and its safety in use. Check the tightness and seat of each screw. For example, if there are signs that screws have become loose or screw heads have been shorn off, have them immediately tightened or replaced by a specialist company.
Only screws suggested by Forster should be used.

Wear of fittings
All function-related parts of the fitting must be greased or oiled according to our specifications to prevent wear.
Only high-quality lubricants should be used for lubrication. Resin and acid-free lubricants are entirely unsuitable. Possible lubricating points are on the locking cams, strikers and corner pivot rest (see previous page).

Damage to fittings
Damaged fitting parts must be replaced, especially if this relates to load-bearing fitting parts. Improper repair may impair functioning of the element and its safety in use.

Adjustment work or readjustments to fittings may only be carried out by a specialist company.

No legal claims may be derived from these recommendations. Their application is dependent on specific individual cases.

6. General advice

Forster's series of profiled steel sections and the corresponding accessories have been developed for a wide range of applications in the manufacture of metal structures and façades. These series are designed for processing by specialist firms in the metal-working industry, window construction and similar, who are familiar with the appropriate technical standards, particularly in the field of metal working, door, window and façade construction and where an adequate knowledge of all relevant standards, directives and suppliers' processing instructions can safely be assumed.

All the documentation published by us concerning the combination, erection, arrangement, processing, refinement and assembly of the articles on offer are voluntary services intended as suggestions and ideas for the expert, or else represent a report on combinations and installations already assembled. In all cases when using this documentation, the expert must always critically study whether the suggestions and ideas are suitable and appropriate for the case in point, since loads and stresses vary so greatly that it is impossible in this kind of documentation to cover every eventuality occurring in practice.

Warranty

Unless a written agreement on the contrary has been concluded, the warranty granted by Forster Profile Systems Ltd. applies solely to the extent of the "General Conditions of Sale and Delivery of Forster Profile Systems Ltd." with which the customer is already familiar.

In all cases the warranty only applies provided that original construction parts (profiles, accessories, fittings) are used from the currently valid Forster range. All liability is declined for any damage arising from the use of articles other than Forster original articles. If articles other than Forster original articles are used, test certificates and attestations granted to Foster for constructions built using such articles are deemed to be invalid.

Note

The up-to-dateness, completeness or quality of the contents are not guaranteed. We reserve the right to make technical alterations in the content wholly or partially with no prior notice. We are not liable for damages of any kind, which arise from the use of the information in this document or on the basis of its incompleteness.

The non-observance of the information on the home page of the manufacturer which is currently retrievable, specific for the product, as well as general, in particular with regard to the use for the purpose intended, safety regulations, product performance, product maintenance as well as the duty to inform and instruct, releases the manufacturer from his liability for his product.

Steel is our nature.

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For us, steel is a matter of the heart. We develop long-lasting systems for attractive and energy-efficient architecture.

Forster Profile Systems develops and manufactures safe, energy-efficient solutions in steel and stainless steel for doors, windows and facades in Switzerland. Forster works with its own branches in over 20 countries – and exclusive sales partners in around 10 more. In-house consultants are on hand to assist our customers at sites ranging from Europe and the Middle East to Asia and North America. Forster systems are used for building shells and interiors. This includes market-leading solutions that meet the strictest requirements and standards in terms of thermal insulation, plus safety applications such as fire protection, burglar resistance and bullet resistance. The product range is rounded off by matching accessories. Our customers and business partners in architecture, planning and construction can also count on comprehensive services for their respective industry.

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