ARX
SPIN



Made in Europe
ARX
by KOVINOPLASTIKA LOŽ
10-YEAR WARRANTY

Made in Europe
ARX
by KOVINOPLASTIKA LOŽ
ARX COAT SURFACE PROTECTION

# ARX SPIN ALU

## High quality, durable and simple Turn & Tilt hardware for ALU windows with 16 mm euro-groove

**2026**

KOVINOPLASTIKA LOŽ
Since 1954




# ARX PORTFOLIO

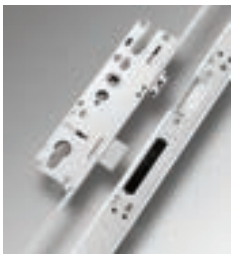
## ARX SPIN



Turn and tilt hardware solutions for windows and balcony doors.

ARX SPIN

## ARX DOOR LOCK



Multipoint door lock solutions for main and back entrance doors.

ARX DOOR LOCK

ift ROSENHEIM
ift TESTED
ID K009656
ift-tested.de

IFT Rosenheim
-Certificate of conformity for ARX SPIN and ARX DOOR LOCK.

## ARX CASEMENT



Solutions for casement windows –outward opening.

ARX CASEMENT

## ARX SLIDE



Sliding hardware solutions for doors and windows.

ARX SLIDE

## ARX ACCESSORIES



High quality, durable and simple accessories for windows and doors.

ARX ACCESSORIES

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ARX The Hardware.
**03/2024**

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## ARX — bring premium quality in your home for a lifetime

**ARX is one of the leading providers of window and door hardware In Europe. Brand ARX is built on more than 70 years of foundation and experience of KOVINOPLASTIKA LOŽ. From that knowledge we are drawing the inspiration to create new and innovative solutions. Integrity in everything we do, quality of our work, and tailor-made building hardware solutions for our customers are the secret of our success and harmonious partnership with our customers. .**

### Window and door hardware tailored to your demands

Concerning costumers our goal is to provide functional, reliable & innovative experience of uncompromising quality that meets the highest standards of window and door hardware. We are focused on developing and applying best solutions in the field, while guaranteeing a flexible and efficient production process. Such approaches, in combination with the established knowledge, enable our experts to design and execute the most appropriate solutions tailored to your demands.

### Our values, vision and mission

We are a team of engaged co-workers with the highest values like honesty, excellence, openness, endeavor and responsibility. We always strive to optimally use the knowledge and technologies, by which we develop and create the products and assemblies with higher added value, to ensure end users with a high level of security, wellbeing and best user experience. Our efforts have been rewarded by becoming established well-known development supplier. Being the best flexible and digitized niche solution developer and material modifier is our first and foremost mission.

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# NOTES

## WHY ARX

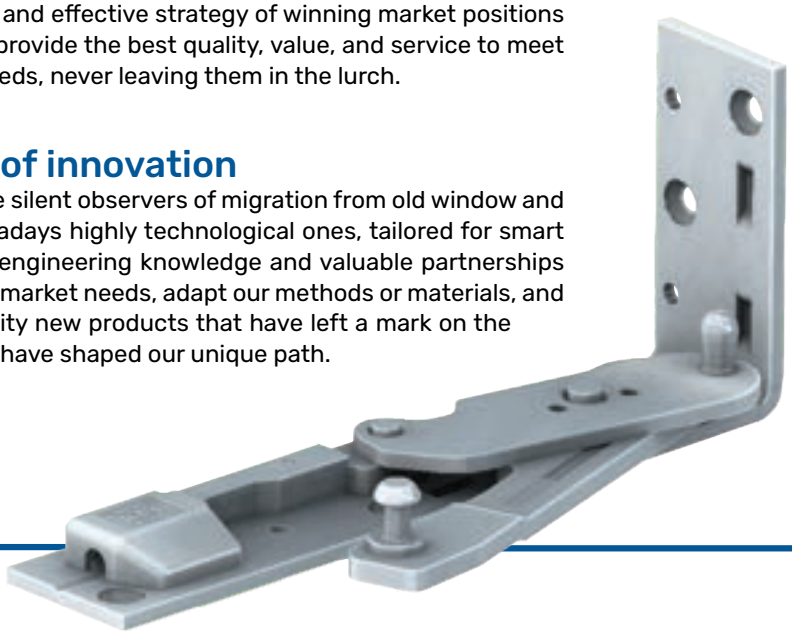



### Quality-to-price ratio that ensures for the best market performance

Besides its distinctive quality, the ARX building hardware has an excellent quality-to-price ratio, providing you with a fast and effective strategy of winning market positions both in the Europe and globally. We provide the best quality, value, and service to meet our business partners' and users' needs, never leaving them in the lurch.

### Accelerating the pace of innovation

Through the years we were never the silent observers of migration from old window and door hardware solutions to the nowadays highly technological ones, tailored for smart homes and buildings. Experiences, engineering knowledge and valuable partnerships helped us respond to and anticipate market needs, adapt our methods or materials, and innovate. Development of high-quality new products that have left a mark on the industry and decades of experience have shaped our unique path.



## There is hardware, and then there is ARX.

**FOR FULL TERMS AND CONDITIONS, PLEASE VISIT:**

# BETTER THAN THE REST



## Based on the huge versatility of our knowledge implemented into the design and applied research, we do not simply offer you products; we provide you with the following BENEFITS:




### ARX 10-year warranty

For you to have complete confidence in our products, proven technologies, and expert skills, like we do, we provide you with a 10-year warranty on our building hardware functionality. The warranty applies exclusively to the use of the ARX building hardware, and to all manufacturers and suppliers of doors and windows who use ARX building hardware.




### ARX surface protection and resistance coating ARX

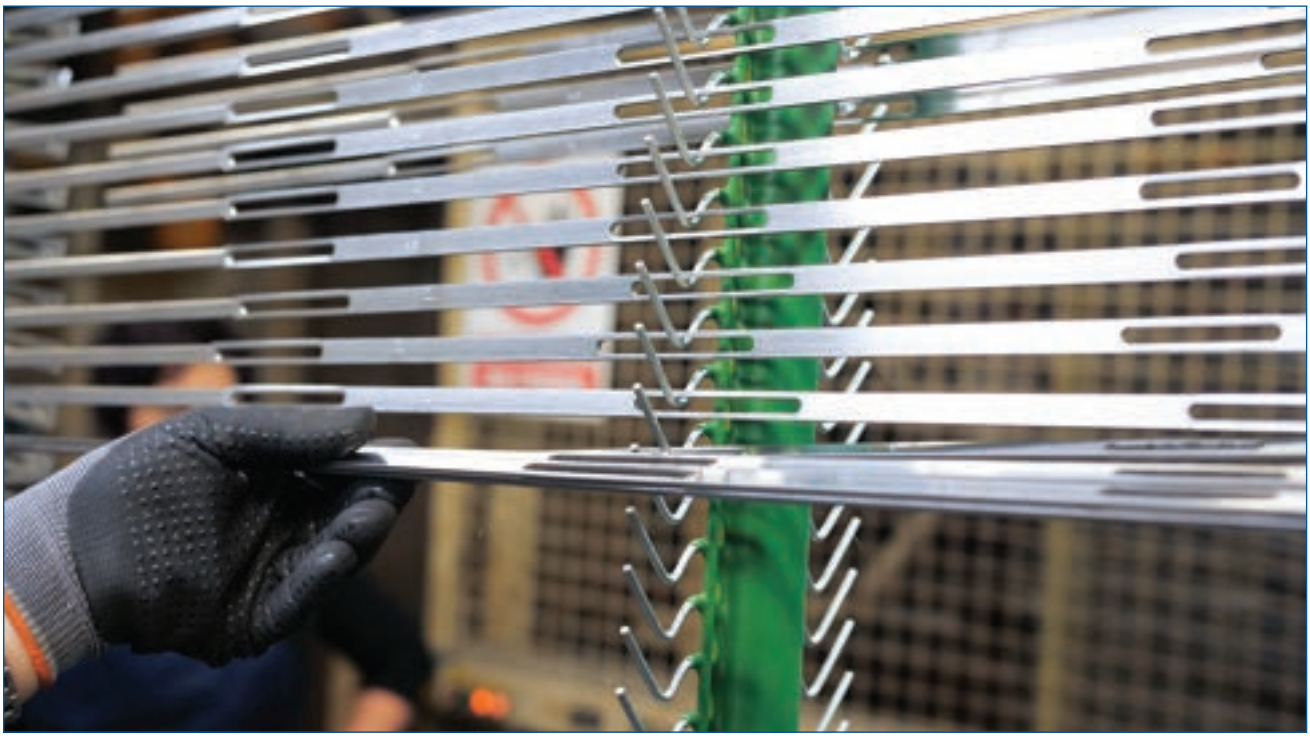
Surface protection and resistance coating ARX Coat, provided by Kovinoplastika Lož is one of the best on the market.

Testing of corrosion resistant coating is carried out in our salt chamber according to standard ISO 9227 (NSS). It is done periodically, so we controll the whole process. In case of deviations from perfect surface protection, immediate actions are applied to the manufacturing process to produce only the best products.

ARX building hardware suits the highest requirements of corrosion resistance as it reaches the 5th grade according to the standard EN 1670. That is an equivalent of 480 hours of salt spray.

ARX Coat is a proper surface protection, which provides good anti-corrosion durability and a trendy silver appearance, all due to our ARX internal processes.

# BETTER THAN THE REST



## Versatile hardware

ARX SPIN hardware can be used for PVC & timber windows and ALU windows with Eurogroove 16 mm. Many top design features offer a reliable operation, security, and functionality.

**The main features of ARX SPIN hardware are:**

- Best solutions for PVC & timber windows and ALU windows with Eurogroove 16 mm.
- High quality and smooth operation after years of use thanks to the ROLLING CAMS and the reduced contact area between the parts of hardware where sliding contact occurs.
- ARX SPIN for simple, fast and efficient installation with SNAP FUNCTION Slider & Straight cut.
- Wide range of applications and the possibility of combination with other product groups.
- High quality production and installation of individual hardware sets by using highly automated production.
- Easy adjustment for different window dimensions, shapes, and constructions.
- ARX SPIN for PVC profiles achieves the highest level of H3 according to the certification scheme QM328.
- ARX SPIN for TIMBER profiles achieves the level of H2 according to the certification scheme QM328.
- Guarantee of the Lifetime Warranty for functionality.
- Providing the 10-year warranty for the ARX Coat the highest corrosion protection Grade 5 according to EN1670 (480 hours exposure to salt spray).
- Possibility of R CAMS & RS cams:
  a) R cams incorporate a regulatory function which allows installer or user to optimize the window compression by +/- 1.2 mm (hex key size 4), thereby improving the sealing properties of windows and balcony doors. Moreover, the R cams provide smoother operation to window users who only need to apply a minimum force to operate the handle.
  b) RS cams provide superior level of security at closing points (with security strikers). Their height adjusts automatically to fit the air gap between sash and frame. The compression can be regulated by +/- 0.8 mm (hex key size 2.5 or spanner 10). The rolling cam enables smoother and easier closing operation. RS cams can be used in combination with both security strikers and standard strikers.

# STANDARDS AND CERTIFICATES



## Manufacturer´s standards and certificates

Our certificates present our dedication to the verifiable quality standards for processes and products. We are proud that we have repeatedly earned them. In every certificate, we see undisputed proof of long-term commitment to our partners, employees, and leadership.

MANAGEMENT SYSTEM CERTIFICATES:
- ISO 9001
- ISO 14001

CERTIFICATE OF COMFORMITY:
- IFT (QM 328)
- IFT (QM 342)

Kovinoplastika Lož aquired many important standards and certificates. Among them is EN1670 (grade 5) which has been held without interuption.










# PRODUCT WARRANTY AND LIABILITY

## 1. Introduction

According to the instructions of the Quality Association for Locks and Hardware (Gütegemeinschaft Schlösser und Beschläge), the VHBH Directive, issued on 11.12.2009 and the manufacturer's responsibility for its products, defined in the Consumer Protection Act (Consumer Protection Act of the Republic of Slovenia, paragraph 2, §4-11a), the following information about the turn-only and tilt&turn hardware for sashes must be observed. Failure to comply with the following information exempts the manufacturer from liability.

## 2. Product information and stipulated application

### 2.1 Quality Assurance Association for Locks and Hardware

(Gütegemeinschaft Schlösser und Beschläge) published in the VHBH Directive states that turn-only and tilt-and-turn hardware is hardware for turnable and tiltable sashes for windows in building construction.

This hardware is used for:

- bringing windows and sashes of windows, by activation of a handle, into a turning position,
- bringing windows and sashes of windows into a tilting position restricted by means of a scissor stay version.

Turn-only and turn&tilt hardware is used for installation in windows and balcony doors which are to be vertically installed, made from timber, PVC, aluminium or steel, and their corresponding combination.

According to the definition above, the regular function of the turn-only and turn & tilt hardware is closing the windows and sashes and opening them in different airing positions. When the sash is closed, the resistance of a gasket normally needs to be overcome.

### 2.2 Misuse – exclusion of liability

Misuse is not compliant with the basic purpose of hardware. Anti-theft windows and balcony doors for wet spaces and installation in aggressive and corrosive climate require special hardware with particularly defined characteristics, adjusted to individual building case.

### 2.3 Restrictions on the use

Open windows, sashes and balcony doors only have protective function and do not provide window fissure sealing, safety in heavy rain or snow, sound and thermal insulation and anti-theft protection. In windy weather and in case of draught, windows and sashes must be closed and bolted. Windy weather and draught logically mean that a window, a sash or balcony doors open and close automatically and uncontrollably in one of the open positions due to air pressure or whirlwind. The only way to make a window, sash or balcony doors fixedly open, is to install additional hardware elements.

### 2.4 Use in case of special requirements

Wind resistance of the closed and bolted window depends on the actual structure of window and balcony doors. In case a window (or a sash or balcony door) has to endure wind load, according to the DIN EN 12210 standards (in particular pressure test p3), suitable hardware compilations are to be matched in relation to the respective window design and frame material, and each case individually agreed upon.

Anti-theft windows and balcony doors for wet spaces and installation in aggressive and corrosive climate require special hardware with particularly defined characteristics, adjusted to individual building case.

In general, the turn-only, turn & tilt and tilt & slide hardware meet the requirements according to the DIN 18025 standards, applicable to open-type buildings. To this end, particular agreements and adjustments regarding the appropriate hardware structure and its installation on windows and balcony doors are required.

## 3. Misuse of the product

Misuse of the turn & tilt and slide hardware for window and balcony doors (i.e. the use, non-compliant with intended use of the product) includes the following:

- inserting obstacles in the opening vicinity between the frame and sash and thus preventing the proper specified use,
- if, contrary to the instructions of use, the window or the sash is uncontrollably pushed toward the window reveals (e.g. because of the wind), causing damage or destruction of hardware, sash material or other parts of the window and the sash,
- additional load on the windows or balcony door sashes (if, for example, children swing on the windows or balcony door sashes),
- inserting a hand or an object into the rebate between the window and the sash when closing the window or balcony doors (risk of injury).

## 4. Product warranty

The manufacturer of ARX building hardware provides a 10-year warranty on on functionality and surface protection, starting from the date of delivery of goods that is defined or can be defined and applies to the territory of the EU.

The warranty applies exclusively to the use of ARX building hardware components. In case of combining ARX building hardware components with components of other manufacturers, this warranty is void. The warranty applies to all manufacturers and suppliers of doors and windows who use ARX building hardware, starting from the purchasing date that is written on the invoice.

For more information please check warranty conditions on webpage - www.arx-hardware.com.

## 5. Product characteristics – manufacturer's instructions for use

### 5.1 Maximum sash weights

The maximum sash weight for individual hardware installation must not be exceeded. The construction element with the smallest possible permissible load defines the maximum weight of the sash. Application diagrams and

component classification must be considered.

**5.2 Sash sizes**
Application diagrams show the relationship between the permissible sash rebate heights, depending on various glass weights i.e. total glass weight. The calculated sash dimensions in the rebate or the sash formats (portrait and/or landscape format), as well as the maximum sash weight must not be exceeded under any circumstances.

**5.3 Hardware combination**
The manufacturer's regulations, regarding the combination of hardware (i.e. the application of additional stay arms, the hardware design for anti-theft windows and balcony door sashes), must be followed.

**5.4 Hardware functionality**
Permanent hardware functionality can be ensured by consistently following the rules below:
- Professional installation of hardware components must be performed according to the attached instructions for installation,
- hardware assembly in the process of window installation is to be done professionally,
- the window manufacturer must deliver the instructions for use and maintenance to the user, along with the guidelines regarding product warranty,
- hardware as a whole can only consist of the original ARX building hardware; any product warranty is excluded for simultaneously using hardware parts, not originally belonging to the ARX building hardware.

## 6. Product maintenance

Hardware components, important for safety, must be checked at least once a year for fitting tightness and tight fitting. If necessary, the fixing screws can be additionally fastened and the component parts replaced. The following maintenance work must be performed at least once a year:
- Greasing and functional control of all the movable parts and all the locking points of the turn-only and tilt&turn hardware.
- only the cleaning and maintenance agents, which do not reduce the anti-corrosion hardware protection, may be used.

Hardware a – particularly in the vicinity of the pivot rest and the scissor-stay, as well as replacement parts and the unhinging & hinging of the active sash – must be provided by highly-qualified experts. In case of surface treatment for windows and balcony doors (e.g. varnishing), all the hardware components must be excluded from treatment; they must also be protected against potential contamination, caused by surface treatment.

**6.1 Maintaining the quality of surface treatment**
In normal climate, the galvanized coating is not damaged by corrosion, as long as condensed water is not produced in hardware parts or if the condensed water quickly dries up.

In order to maintain long-lasting quality of surface treatment and prevent adverse corrosion effects, the instructions below must be followed:
- Hardware and window rebates must be thoroughly aired (particularly during the construction phase) by making sure that the elements mentioned are not exposed to moisture and condensed water,
- hardware must be protected against any covers or contamination with building materials (e.g. roughcast, dust, cement and the like),
- aggressive vapours in the window rebate (e.g. formic acid and acetic acid, ammonia, amino- and ammonium compounds, aldehyde, phenol, tannic acid etc.) may quickly lead to corrosion of hardware components in combination with a small amount of condensed water; in case of aggressive vapours, thorough airing of rebates on the windows and balcony doors must be provided; this is particularly important for windows and balcony doors made of oak and other types of wood, containing a large amount of tannic acid,
- gaskets with acetic acid or acidic net structure or gaskets, containing the above mentioned ingredients must not be used, as the direct contact with the gasket and its vapours may corrode the hardware surface,
- hardware can only be cleaned with soft, ph-neutral cleaning agent in diluted form; aggressive, acidiferous cleaners or abrasive cleaning agents, containing the above mentioned ingredients, must not be used at any time.

## 7. Information and instructions

In order to carry out duties of informing and giving instructions and performing maintenance according to »Consumer Protection Act«, the following publications are available:
- »Catalogues« for designers and authorized dealers
- »Installation instructions« and »factory drawings« for manufacturers of windows and balcony doors,
- »instructions for maintenance and cleaning« and »Instructions for use« for investors and users.

In order to ensure the functionality of the turn-only, turn&tilt and slide hardware for windows and balcony doors, the following rules must be observed:
- The designers are required to obtain information from the manufacturer or the authorized dealer, regarding the products, and act accordingly,
- the authorized dealers must pay attention to product information and the information mentioned herein, along with installation instructions, factory drawings and instructions for maintenance and cleaning; they must obtain instructions for use from the manufacturer and pass them on to manufacturers of windows and balcony doors,
- the manufacturers of windows and balcony doors must consider all the relevant product information and ask the manufacturer or authorized dealer for maintenance and
- cleaning instructions in particular, along with instructions for use and pass them on to investors and users.

All information regarding turn & tilt, turn or tilt only hardware systems for windows and balcony doors made of PVC should be observed. In case of non-compliance the manufacturer is exempt from liability.

# HIGH-QUALITY, DURABLE, SIMPLE



## ARX Coat – High quality surface protection

ARX Coat surface protection gives excellent appearance to building hardware and simultaneously ensures long-term and durable surface. It maintains very high corrosion resistance in severe conditions and extreme climate, exceeding Grade 5 of BS EN1670 (480 hours exposure to salt spray), thereby guaranteeing long-term and simple use.



## Stay guide with integrated anti-slam lock

Integrated tilt lock keeps the sash in tilted position, thus preventing sash slamming in windy conditions. It can be moved into alternative position, to reduce the tilt.



## R cam

R cams incorporate a regulatory function which allows installer or user to optimize the window compression by +/- 1,2mm, thereby improving the sealing properties of windows and balcony doors. Moreover, the R cams provide smoother operation to window users who only need to apply a minimum force in order to operate the handle.



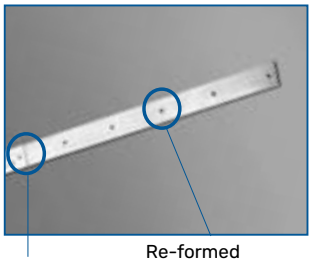
## RS cam

RS cams provide superior level of security at closing points (with security strikers). Their height adjusts automatically to fit the air-gap between sash and frame. The compression can be regulated by +/- 0.8mm (hex key size 2.5 or spanner size 10). The rolling cam enables smoother and easier closing operation. RS cams can be used in combination with both security strikers or standard strikers.



# Additional features

ARX Spin hardware is available in extensive variety of components, which can be combined into a number of turn & tilt solutions. ARX Spin therefore easily meets desires and requirements of different customers. For instance, a wide range of corner drives and shoot-bolts provides an excellent product choice to both very demanding and less stringent security requirements.






**Reduced friction between driving rod and faceplate**

The espagnolettes have been redesigned to reduce the contact between the gearplate and faceplate, thereby reducing potential damage to surface protection.

**Uniform length of redesigned espagnolettes**

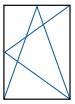
A special feature of ARX Spin hardware is also uniform length of its espagnolettes. A one-size espagnolette can fit a range of sash dimension, covering up to 50% of total requirement. Each espagnolettes can be cropped within the marked cut-off area.

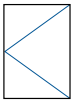


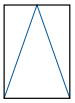

SRH 900 - 1400 mm
(50% Volume)

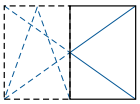
# Symbols

In the part describing the ARX Spin, different symbols, diagrams and tables are used in order to provide a clear picture and demonstration of the hardware application. The meanings are as follows:


Turn & tilt


Turn only


Tilt only


Turn only - sec. sash


Rebate sash height


Rebate sash width


Handle height



R cam



RS cam



Night vent


Warning


Max. sash mass


Material number

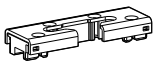

Orientation / postiton

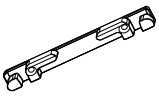

R cam


RS cam


Standard striker


Security striker


T&Ti security striker


T&T striker


Screws


Mishandling device position


Packaging

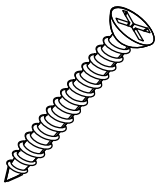

Length / dimension


Hardware shortening

| Abbreviation | Description | Units |
|---|---|---|
| SRH | SASH REBATE HEIGHT | mm |
| SRW | SASH REBATE WIDTH | mm |
| HH | HANDLE HEIGHT | mm |
| MS | MISHANDLING DEVICE POSITION | mm |
| BS | BACKSET | mm |
| LH | LOCK HOLE POSITON | mm |
| HL | HANDLE LENGTH | mm |

# Fixing guidelines

| SCREWS | MATERIAL |
|---|---|
| Φ 4,2 x 25 | 11134209 |
| Φ 4,2 x 35 | 1134210 |

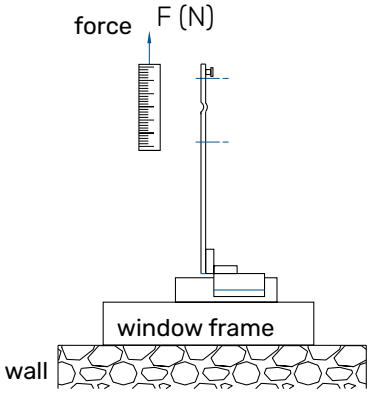


## Screws

In order to fix hardware components, silver galvanized, steel construction screws of 4,2 x 25 mm (1134209) and 4,2 x 35 mm (1134210) are used. The 35 mm long screws are used for the hinges and the 25 mm long screws are used for all the rest of hardware. The window manufacturer must ensure sufficient fixing of hardware components. If necessary, the manufacturer of construction screws may also be included in the process of installing hardware.

## Fixing of hardware

| Sash mass [Kg] | F [N] |
|---|---|
| 60 | 1650 |
| 70 | 1900 |
| 80 | 2200 |
| 90 | 2450 |
| 100 | 2710 |
| 110 | 3000 |
| 120 | 3250 |
| 130 | 3500 |
| 140 | 3900 |
| 150 | 4200 |
| 160 | 4400 |
| 170 | 4710 |
| 180 | 5000 |
| 190 | 5300 |
| 200 | 5500 |




**Fixing**

When fixing safety relevant bearing hardware components (stay bearing and pivot rest), the vertical tractive force on the sash level must reach the values according to the following table (the tractive force values in dependence of the sash weight according to directive TBDK).

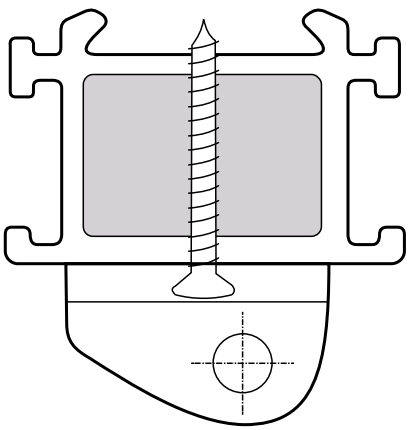
**The necessity of reinforcement**

The values in the table for sashes up to 80 kg in weight are normally achieved if high-quality screws are used for fixing and the fixing on the profile is performed through at least two profile walls. The thickness of the first profile wall must be at least 2,8 mm. For sash weights over 80 kg, a supplementary fixing into the reinforcement profile or profile insertions in accordance with the profile system, is necessary. Required values can be achieved without additional measures by using the bearing parts on sashes up to 100 kg in weight.

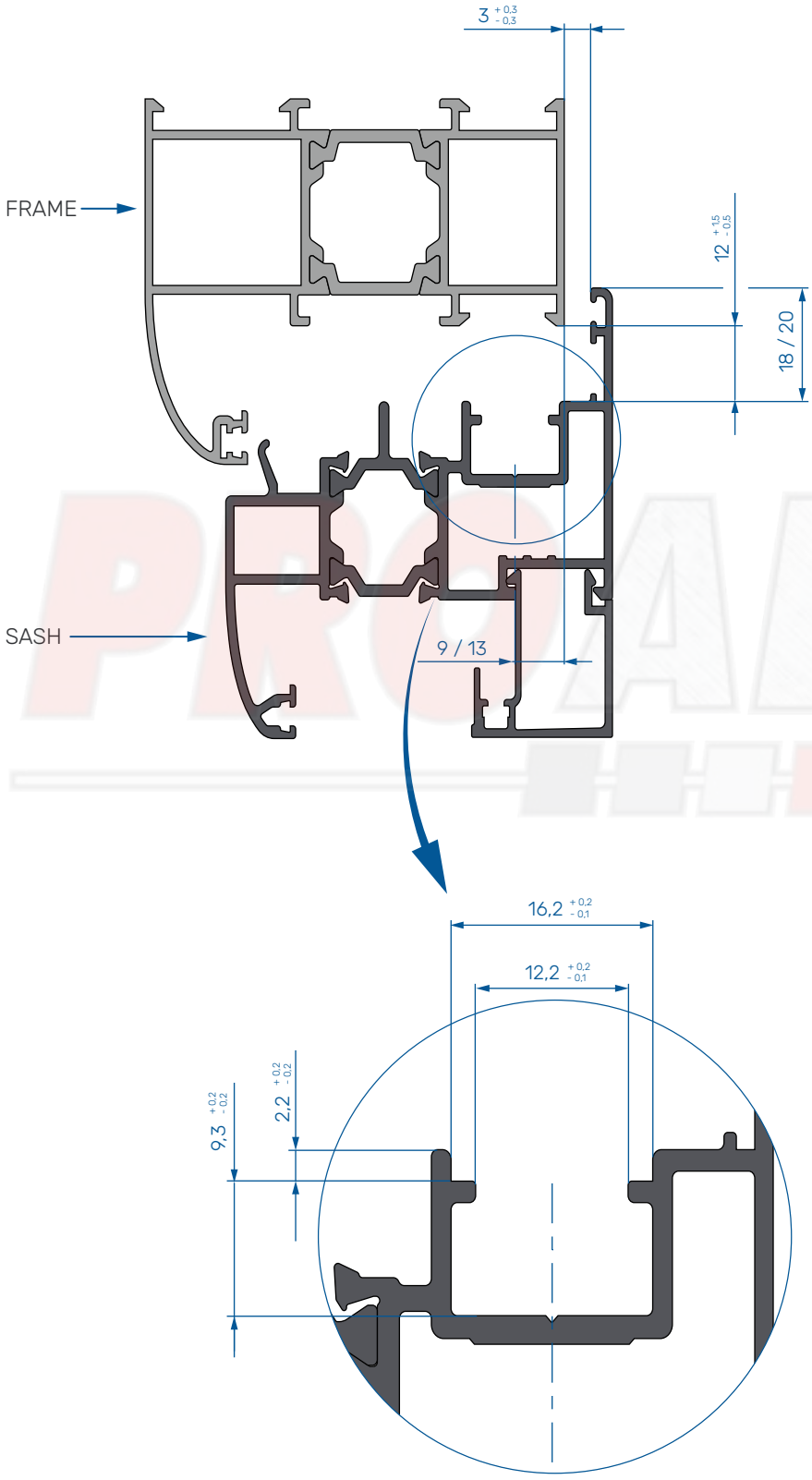
Gaskets with acetic acid net structure must not be used, as their use may lead to corrosion of hardware components. Guidelines regarding the window glazing technique must be followed.

**The use of related hardware types**

Different options within the individual hardware system (e.g. tilt hardware) must be considered according to the product information, purpose, misuse, product characteristics, maintenance, information and instructions in regard to the characteristics of the hardware assembly.



# Profile dimensioning for ALU






# Typical hardware schemes

Basic schemes
Proposed guidelines

# T&TI | FACE-FIT HINGE SIDE

Fixed handle height

## 1 T&T KV ESPAGNOLETTE BS 14,5 mm

| Sash rebate height | Handle height | Lenght | | Material |
|---|---|---|---|---|
| 320 - 460 [1] [2] | 120 | 320 | | 1105430 |
| 461 - 600 [3] | 170 | 410 | | 1118431 |
| 601 - 800 | 263 | 520 | | 1115131 |
| 801 - 1000 | 413 | 720 | | 1115132 |
| 801 - 1000 | 413 | 720 | 1 R | 1115133 |
| 1001 - 1200 | 513 | 920 | 1 R | 1115134 |
| 1201 - 1400 | 563 | 1120 | 1 R | 1115135 |
| 1401 - 1600 | 563 | 1320 | 1 R | 1115136 |
| 1601 - 1800 | 563 | 1520 | 1 R | 1115137 |
| 1601 - 1800 | 1000 | 1520 | 1 R | 1115167 |
| 1801 - 2000 | 1000 | 1720 | 2 R | 1115138 |
| 2001 - 2200 | 1000 | 1920 | 2 R | 1115139 |
| 2201 - 2400 | 1000 | 2120 | 2 R | 1115140 |

## 2 CORNER DRIVE - TOP

| | | |
|---|---|---|
| STANDARD CORNER DRIVE | 1 R | 1103158 |
| SHORT CORNER DRIVE | 1 R | 1103162 |

## 3 SASH STAY GUIDE

| Sash rebate width | Type / length | | Material Nr. |
|---|---|---|---|
| 250 - 410 [4] | 150 / 290 | | 1123308 |
| 411 - 610 | 250 / 470 | | 1083038 |
| 611 - 810 | 350 / 670 | | 1083039 |
| 811 - 1010 | 500 / 870 | 1 R | 1083040 |
| 1011 - 1210 | 500 / 1070 | 1 R | 1083041 |
| 1211 - 1400 | 500 / 1270 | 1 R | 1083042 |

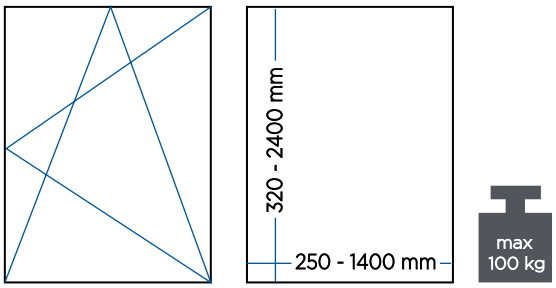
## 4 STAY ARM

SYSTEM 12/18-9

| Sash rebate width | Type / length | Pos. | Material |
|---|---|---|---|
| 250 - 410 [4] | 150 | L | 1134891 |
| | | R | 1134892 |
| 411 - 610 | 250 | L | 1104742 |
| | | R | 1104743 |
| 611 - 810 | 350 | L | 1104744 |
| | | R | 1104745 |
| 811 - 1400 | 500 | L | 1104746 |
| | | R | 1104747 |

## 5 CENTER LOCK - VERTICAL

| Sash rebate height | Length | | Material |
|---|---|---|---|
| 801 - 1200 | 500 / 550 | 2 R | 1083058 |
| 1201 - 1600 | 800 / 850 | 2 R | 1083059 |
| 1601 - 2200 | 1500 / 1550 | 3 R | 1083060 |
| 2201 - 2400 | 1950 / 2000 | 4 R | 1083064 |




## 6 CENTER LOCK - HORIZONTAL

| Sash rebate width | Length | | Material |
|---|---|---|---|
| 801 - 1200 | 400 | 1 R | 1083061 |
| 1201 - 1400 | 600 | 1 R | 1083062 |

## 7 CORNER DRIVE - BOTTOM

| | | |
|---|---|---|
| STANDARD CORNER DRIVE | 1 RS | 1100983 |
| SHORT CORNER DRIVE | 1 RS | 1100986 |

## 8 STAY BEARING

| | |
|---|---|
| STAY BEARING WITH PIN K3 | 1083250 |

## 9 REBATE CORNER HINGE

SYSTEM 12/18-9

| | |
|---|---|
| REBATE CORNER HINGE - L | 1101236 |
| REBATE CORNER HINGE - R | 1101237 |

## 10 CORNER PIVOT REST

| | |
|---|---|
| CORNER PIVOT REST K3 | 1083247 |

## 11 MISHANDLING DEVICE

| | |
|---|---|
| SASH PART | 1093907 |
| FRAME PART AXIS 9 | 1098127 |

## 12 STRIKERS

| | |
|---|---|
| T&Ti STRIKER AXIS 9 - L | 11111000 |
| T&Ti STRIKER AXIS 9 - R | 1110999 |
| STRIKER AXIS 9 | 1097952 |

## 13 COVER CAPS


| | |
|---|---|
| STAY BEARING | PAGE 69 |
| STAY ARM | PAGE 69 |
| CORNER HINGE | PAGE 69 |
| CORNER PIVOT REST | PAGE 69 |
| CORNER PIVOT REST - FLAT | PAGE 69 |

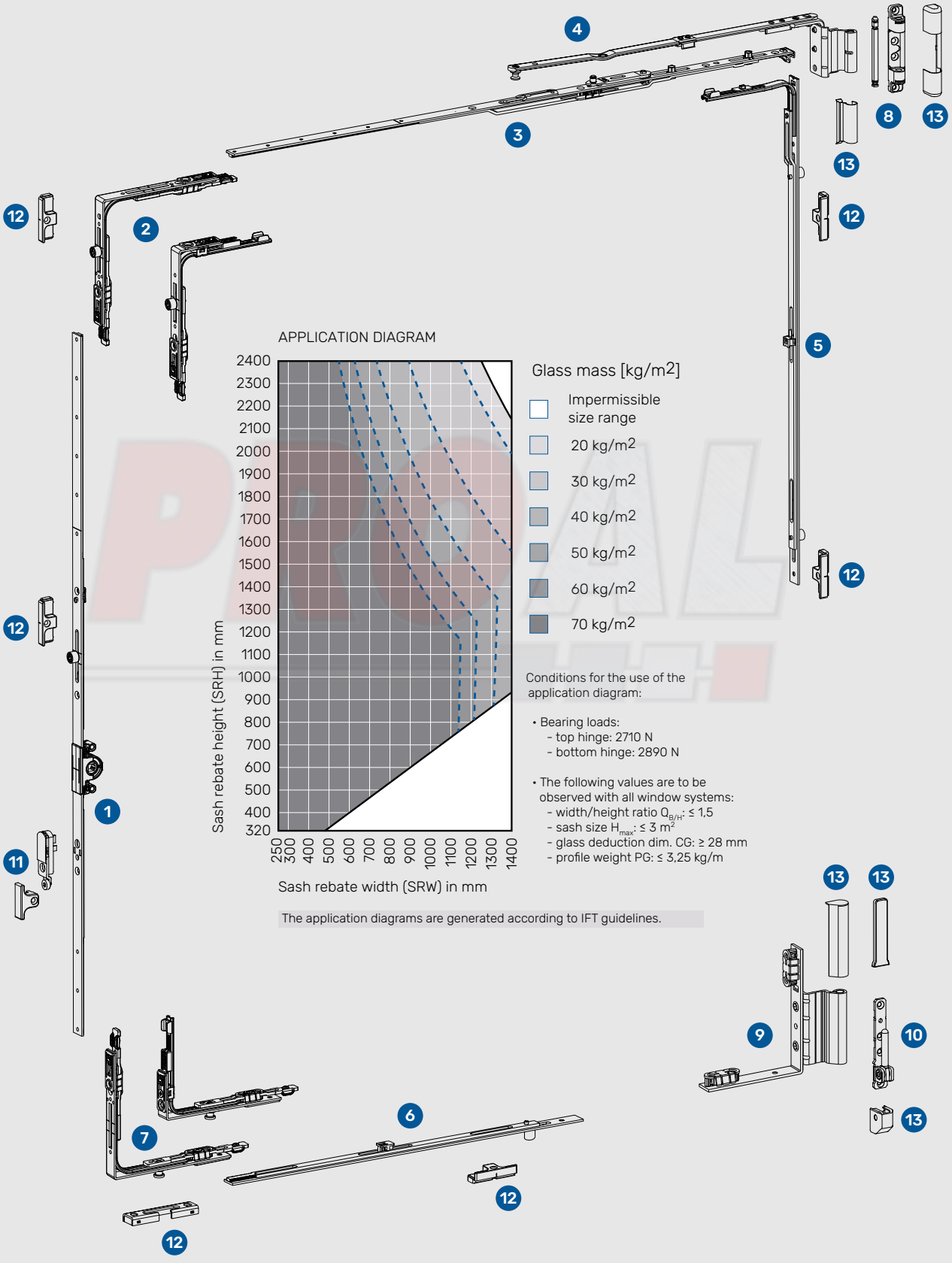

[1] WITH INTEGRATED CORNER DRIVE 1 RS ON BOTTOM

[2] MISHANDLING DEVICE NOT AVAILABLE

[3] MUST USE SHORT CORNER DRIVE 1100986 ON BOTTOM

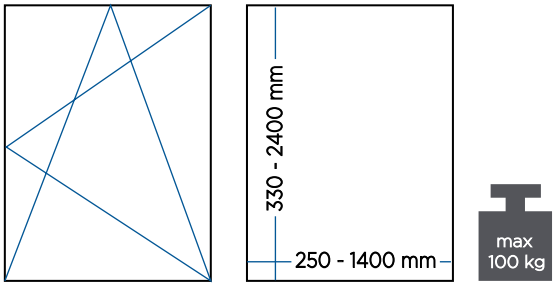
[4] SRW = 250 - 340 mm, WITH SHORT CORNER DRIVE ON TOP

* SRH < 500 mm, move the anti-slam device to reduce the tilt


APPLICATION DIAGRAM
Glass mass [kg/m2]
Impermissible size range
20 kg/m2
30 kg/m2
40 kg/m2
50 kg/m2
60 kg/m2
70 kg/m2
Sash rebate height (SRH) in mm
2400
2300
2200
2100
2000
1900
1800
1700
1600
1500
1400
1300
1200
1100
1000
900
800
700
600
500
400
320
250
300
400
500
600
700
800
900
1000
1100
1200
1300
1400
Sash rebate width (SRW) in mm
Conditions for the use of the application diagram:
• Bearing loads:
- top hinge: 2710 N
- bottom hinge: 2890 N
• The following values are to be observed with all window systems:
- width/height ratio $Q_{B/H}$: ≤ 1,5
- sash size $H_{max}$: ≤ 3 m²
- glass deduction dim. CG: ≥ 28 mm
- profile weight PG: ≤ 3,25 kg/m
The application diagrams are generated according to IFT guidelines.
1
2
3
4
5
6
7
8
9
10
11
12
13

# T&TI | FACE-FIT HINGE SIDE

Centered / variable handle height




## 1 T&T ESPAGNOLETTE M BS 14,5 mm

| Sash rebate height | Handle height | Lenght | | Material |
|---|---|---|---|---|
| 420 - 660 [1] | 165 - 360 | 380 | | 1083117 |
| 600 - 1000 | 300 - 500 | 720 | 1 R | 1088473 |
| 900 - 1400 | 450 - 700 | 1120 | 1 R | 1098964 |
| 1401 - 1800 | 701 - 900 | 1520 | 1 R | 1098965 |
| 1601 - 2000 | 801 - 1000 | 1720 | 2 R | 1098966 |
| 2001 - 2400 | 1001 - 1200 | 2120 | 2 R | 1098967 |

## 2 CORNER DRIVE - TOP

| | | |
|---|---|---|
| STANDARD CORNER DRIVE | 1 R | 1103158 |
| SHORT CORNER DRIVE | 1 R | 1103162 |

## 3 SASH STAY GUIDE

| Sash rebate width | Type / length | | Material Nr. |
|---|---|---|---|
| 250 - 410 [2] | 150 / 290 | | 1123308 |
| 411 - 610 | 250 / 470 | | 1083038 |
| 611 - 810 | 350 / 670 | | 1083039 |
| 811 - 1010 | 500 / 870 | 1 R | 1083040 |
| 1011 - 1210 | 500 / 1070 | 1 R | 1083041 |
| 1211 - 1400 | 500 / 1270 | 1 R | 1083042 |

## 4 STAY ARM

SYSTEM 12/18-9

| Sash rebate width | Type / length | Pos. | Material |
|---|---|---|---|
| 250 - 410 [2] | 150 | L | 1134891 |
| | | R | 1134892 |
| 411 - 610 | 250 | L | 1104742 |
| | | R | 1104743 |
| 611 - 810 | 350 | L | 1104744 |
| | | R | 1104745 |
| 811 - 1400 | 500 | L | 1104746 |
| | | R | 1104747 |

## 5 CENTER LOCK - VERTICAL

| Sash rebate height | Length | | Material |
|---|---|---|---|
| 801 - 1200 | 500 / 550 | 2 R | 1083058 |
| 1201 - 1600 | 800 / 850 | 2 R | 1083059 |
| 1601 - 2200 | 1500 / 1550 | 3 R | 1083060 |
| 2201 - 2400 | 1950 / 2000 | 4 R | 1083064 |

## 6 CENTER LOCK - HORIZONTAL

| Sash rebate width | Length | | Material |
|---|---|---|---|
| 801 - 1200 | 400 | 1 R | 1083061 |
| 1201 - 1400 | 600 | 1 R | 1083062 |

## 7 CORNER DRIVE - BOTTOM

| | | |
|---|---|---|
| STANDARD CORNER DRIVE | 1 RS | 1100983 |

## 8 STAY BEARING

| | |
|---|---|
| STAY BEARING WITH PIN K3 | 1083250 |

## 9 REBATE CORNER HINGE

SYSTEM 12/18-9

| | |
|---|---|
| REBATE CORNER HINGE - L | 1101236 |
| REBATE CORNER HINGE - R | 1101237 |

## 10 CORNER PIVOT REST

| | |
|---|---|
| CORNER PIVOT REST K3 | 1083247 |

## 11 MISHANDLING DEVICE

| | |
|---|---|
| SASH PART | 1093907 |
| FRAME PART AXIS 9 | 1098127 |

## 12 STRIKERS

| | |
|---|---|
| T&Ti STRIKER AXIS 9 - L | 11111000 |
| T&Ti STRIKER AXIS 9 - R | 1110999 |
| STRIKER AXIS 9 | 1097952 |

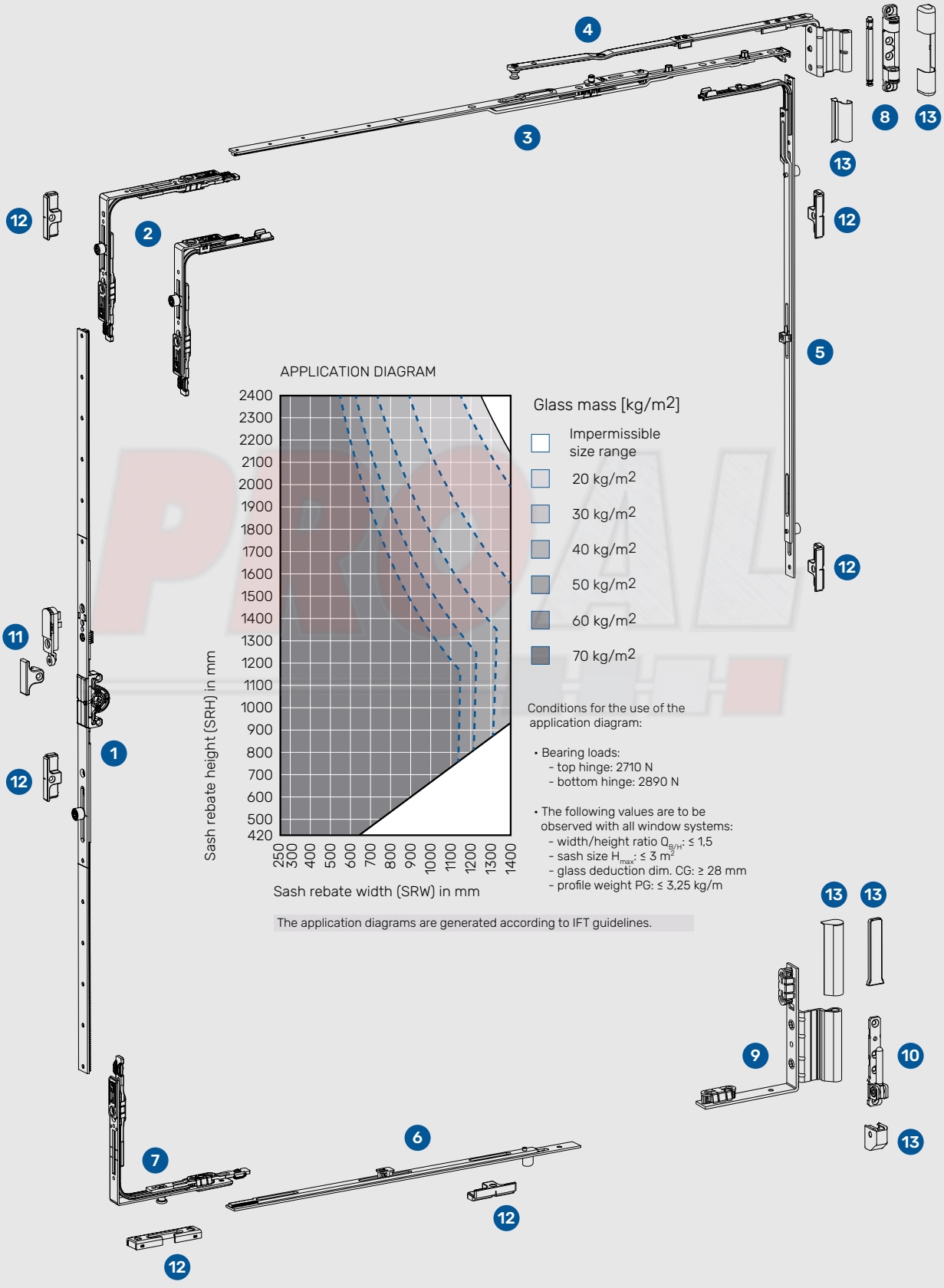
## 13 COVER CAPS


| | |
|---|---|
| STAY BEARING | PAGE 69 |
| STAY ARM | PAGE 69 |
| CORNER HINGE | PAGE 69 |
| CORNER PIVOT REST | PAGE 69 |
| CORNER PIVOT REST - FLAT | PAGE 69 |


[1] MISHANDLING DEVICE NOT AVAILABLE

[2] SRW = 250 - 340 mm, WITH SHORT CORNER DRIVE ON TOP

* SRH < 500 mm, move the anti-slam device to reduce the tilt


APPLICATION DIAGRAM
Glass mass [kg/m2]
Impermissible size range
20 kg/m2
30 kg/m2
40 kg/m2
50 kg/m2
60 kg/m2
70 kg/m2
Sash rebate height (SRH) in mm
2400
2300
2200
2100
2000
1900
1800
1700
1600
1500
1400
1300
1200
1100
1000
900
800
700
600
500
420
250
300
400
500
600
700
800
900
1000
1100
1200
1300
1400
Sash rebate width (SRW) in mm
Conditions for the use of the application diagram:
• Bearing loads:
- top hinge: 2710 N
- bottom hinge: 2890 N
• The following values are to be observed with all window systems:
- width/height ratio $Q_{B/H}$: ≤ 1,5
- sash size $H_{max}$: ≤ 3 m²
- glass deduction dim. CG: ≥ 28 mm
- profile weight PG: ≤ 3,25 kg/m
The application diagrams are generated according to IFT guidelines.

# T&T | FACE-FIT HINGE SIDE

Fixed handle height

## 1 T&T KV ESPAGNOLETTE BS 14,5 mm

| Sash rebate height | Handle height | Lenght | | Material |
|---|---|---|---|---|
| 550 - 600 | 260 | 410 | | 1118431 |
| 601 - 800 | 263 | 520 | | 1115131 |
| 801 - 1000 | 413 | 720 | | 1115132 |
| 801 - 1000 | 413 | 720 | 1 R | 1115133 |
| 1001 - 1200 | 513 | 920 | 1 R | 1115134 |
| 1201 - 1400 | 563 | 1120 | 1 R | 1115135 |
| 1401 - 1600 | 563 | 1320 | 1 R | 1115136 |
| 1601 - 1800 | 563 | 1520 | 1 R | 1115137 |
| 1601 - 1800 | 1000 | 1520 | 1 R | 1115167 |
| 1801 - 2000 | 1000 | 1720 | 2 R | 1115138 |
| 2001 - 2200 | 1000 | 1920 | 2 R | 1115139 |
| 2201 - 2400 | 1000 | 2120 | 2 R | 1115140 |

## 2 CORNER DRIVE

| | | |
|---|---|---|
| STANDARD CORNER DRIVE | 1 R | 1103158 |
| SHORT CORNER DRIVE | 1 R | 1103162 |

## 3 SASH STAY GUIDE

| Sash rebate width | Type / length | | Material Nr. |
|---|---|---|---|
| 250 - 410 [1] | 150 / 290 | | 1123308 |
| 411 - 610 | 250 / 470 | | 1083038 |
| 611 - 810 | 350 / 670 | | 1083039 |
| 811 - 1010 | 500 / 870 | 1 R | 1083040 |
| 1011 - 1210 | 500 / 1070 | 1 R | 1083041 |
| 1211 - 1400 | 500 / 1270 | 1 R | 1083042 |

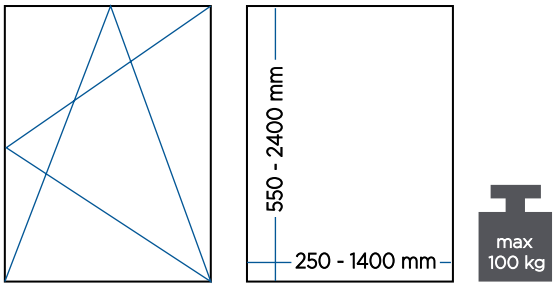
## 4 STAY ARM

SYSTEM 12/18-9

| Sash rebate width | Type / length | Pos. | Material |
|---|---|---|---|
| 250 - 410 [1] | 150 | L | 1134891 |
| | | R | 1134892 |
| 411 - 610 | 250 | L | 1104742 |
| | | R | 1104743 |
| 611 - 810 | 350 | L | 1104744 |
| | | R | 1104745 |
| 811 - 1400 | 500 | L | 1104746 |
| | | R | 1104747 |

## 5 CENTER LOCK - VERTICAL

| Sash rebate height | Length | | Material |
|---|---|---|---|
| 801 - 1200 | 500 / 550 | 2 R | 1083058 |
| 1201 - 1600 | 800 / 850 | 2 R | 1083059 |
| 1601 - 2200 | 1500 / 1550 | 3 R | 1083060 |
| 2201 - 2400 | 1950 / 2000 | 4 R | 1083064 |




## 6 CENTER LOCK - HORIZONTAL

| Sash rebate width | Length | | Material |
|---|---|---|---|
| 801 - 1200 | 500 / 550 | 2 R | 1083058 |
| 1201 - 1400 | 800 / 850 | 2 R | 1083059 |

## 7 TILT LOCK BOLT

| | |
|---|---|
| TILT LOCK BOLT SRH < 1000 mm | 1102388 |
| TILT LOCK BOLT SRH > 1001 mm | 1102391 |

## 8 STAY BEARING

| | |
|---|---|
| STAY BEARING WITH PIN K3 | 1083250 |

## 9 REBATE CORNER HINGE

SYSTEM 12/18-9

| | |
|---|---|
| REBATE CORNER HINGE - L | 1101236 |
| REBATE CORNER HINGE - R | 1101237 |

## 10 CORNER PIVOT REST

| | |
|---|---|
| CORNER PIVOT REST K3 | 1083247 |

## 11 MISHANDLING DEVICE

| | |
|---|---|
| SASH PART | 1093907 |
| FRAME PART AXIS 9 | 1098127 |

## 12 STRIKERS

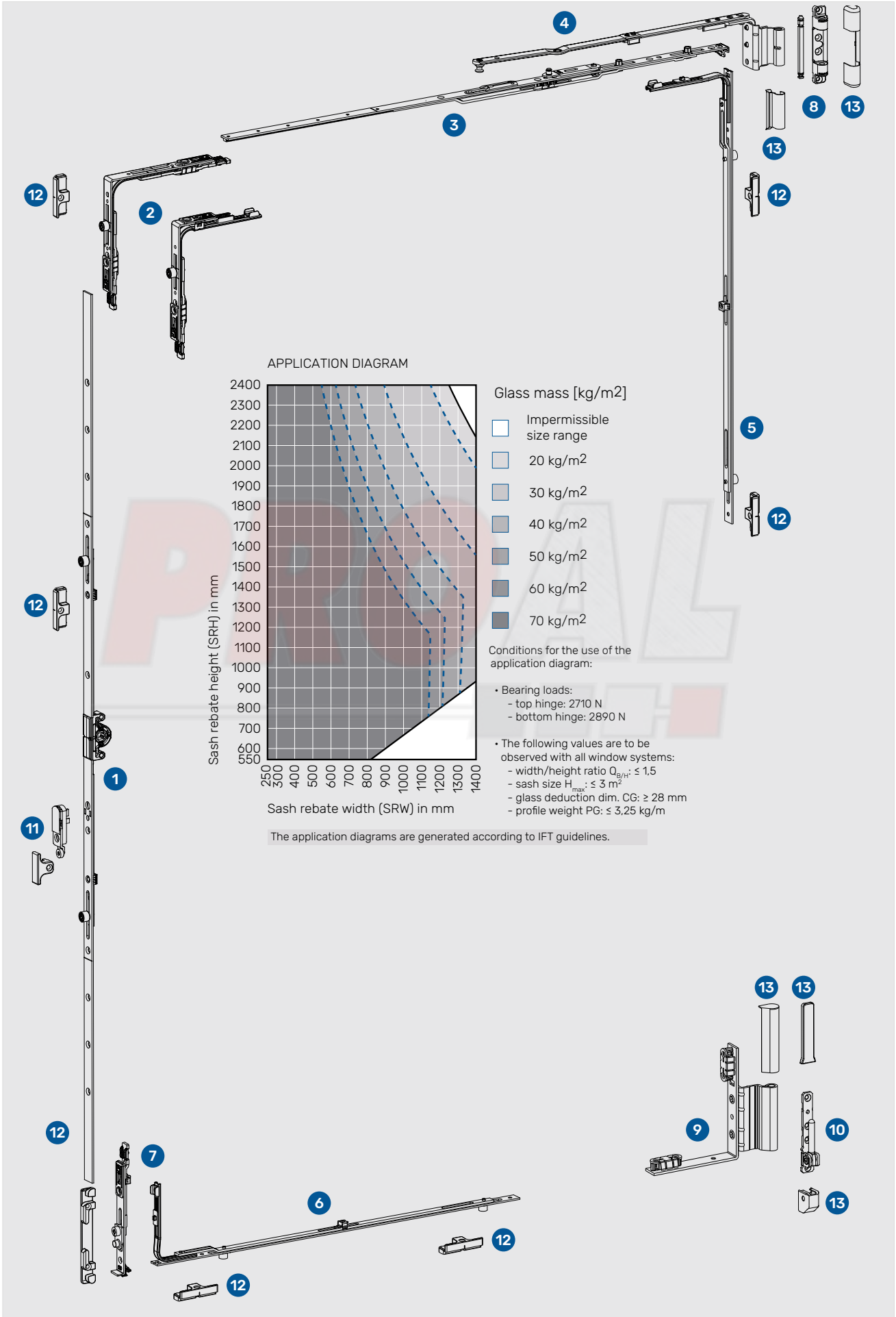
| | |
|---|---|
| T&T STRIKER AXIS 9 | 1097951 |
| STRIKER AXIS 9 | 1097952 |

## 13 COVER CAPS

| | |
|---|---|
| STAY BEARING | PAGE 69 |
| STAY ARM | PAGE 69 |
| CORNER HINGE | PAGE 69 |
| CORNER PIVOT REST | PAGE 69 |
| CORNER PIVOT REST - FLAT | PAGE 69 |

[1] SRW = 250 - 340 mm, WITH SHORT CORNER DRIVE ON TOP

* SRH < 500 mm, move the anti-slam device to reduce the tilt




APPLICATION DIAGRAM




Glass mass [kg/m2]

- Impermissible size range
- 20 kg/m2
- 30 kg/m2
- 40 kg/m2
- 50 kg/m2
- 60 kg/m2
- 70 kg/m2

Conditions for the use of the application diagram:

- Bearing loads:
  - top hinge: 2710 N
  - bottom hinge: 2890 N
- The following values are to be observed with all window systems:
  - width/height ratio $Q_{B/H}$: ≤ 1,5
  - sash size $H_{max}$: ≤ 3 m²
  - glass deduction dim. CG: ≥ 28 mm
  - profile weight PG: ≤ 3,25 kg/m

The application diagrams are generated according to IFT guidelines.

# T&T | FACE-FIT HINGE SIDE

Centered / variable handle height

## 1 T&T ESPAGNOLETTE M BS 14,5 mm

| Sash rebate height | Handle height | Lenght | | Material |
|---|---|---|---|---|
| 420 - 660 [1] | 210 - 360 | 360 | | 1083117 |
| 600 - 1000 | 300 - 500 | 720 | 1 R | 1088473 |
| 900 - 1400 | 450 - 700 | 1120 | 1 R | 1098964 |
| 1401 - 1800 | 701 - 900 | 1520 | 1 R | 1098965 |
| 1601 - 2000 | 801 - 1000 | 1720 | 2 R | 1098966 |
| 2001 - 2400 | 1001 - 1200 | 2120 | 2 R | 1098967 |

## 2 CORNER DRIVE

| | | |
|---|---|---|
| STANDARD CORNER DRIVE | 1 R | 1103158 |
| SHORT CORNER DRIVE | 1 R | 1103162 |

## 3 SASH STAY GUIDE

| Sash rebate width | Type / length | | Material Nr. |
|---|---|---|---|
| 250 - 410 [2] | 150 / 290 | | 1123308 |
| 411 - 610 | 250 / 470 | | 1083038 |
| 611 - 810 | 350 / 670 | | 1083039 |
| 811 - 1010 | 500 / 870 | 1 R | 1083040 |
| 1011 - 1210 | 500 / 1070 | 1 R | 1083041 |
| 1211 - 1400 | 500 / 1270 | 1 R | 1083042 |

## 4 STAY ARM

SYSTEM 12/18-9

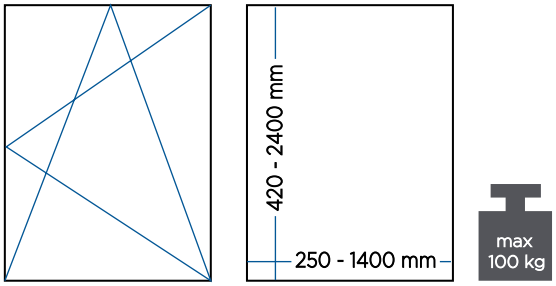
| Sash rebate width | Type / length | Pos. | Material |
|---|---|---|---|
| 250 - 410 [2] | 150 | L | 1134891 |
| | | R | 1134892 |
| 411 - 610 | 250 | L | 1104742 |
| | | R | 1104743 |
| 611 - 810 | 350 | L | 1104744 |
| | | R | 1104745 |
| 811 - 1400 | 500 | L | 1104746 |
| | | R | 1104747 |

## 5 CENTER LOCK - VERTICAL

| Sash rebate height | Length | | Material |
|---|---|---|---|
| 801 - 1200 | 500 / 550 | 2 R | 1083058 |
| 1201 - 1600 | 800 / 850 | 2 R | 1083059 |
| 1601 - 2200 | 1500 / 1550 | 3 R | 1083060 |
| 2201 - 2400 | 1950 / 2000 | 4 R | 1083064 |

## 6 CENTER LOCK - HORIZONTAL

| Sash rebate width | Length | | Material |
|---|---|---|---|
| 801 - 1200 | 500 / 550 | 2 R | 1083058 |
| 1201 - 1400 | 800 / 850 | 2 R | 1083059 |




## 7 TILT LOCK BOLT

| | |
|---|---|
| TILT LOCK BOLT SRH < 1000 mm | 1102388 |
| TILT LOCK BOLT SRH > 1001 mm | 1102391 |

## 8 STAY BEARING

| | |
|---|---|
| STAY BEARING WITH PIN K3 | 1083250 |

## 9 REBATE CORNER HINGE

SYSTEM 12/18-9

| | |
|---|---|
| REBATE CORNER HINGE - L | 1101236 |
| REBATE CORNER HINGE - R | 1101237 |

## 10 CORNER PIVOT REST

| | |
|---|---|
| CORNER PIVOT REST K3 | 1083247 |

## 11 MISHANDLING DEVICE

| | |
|---|---|
| SASH PART | 1093907 |
| FRAME PART AXIS 9 | 1098127 |

## 12 STRIKERS

| | |
|---|---|
| T&T STRIKER AXIS 9 | 1097951 |
| STRIKER AXIS 9 | 1097952 |

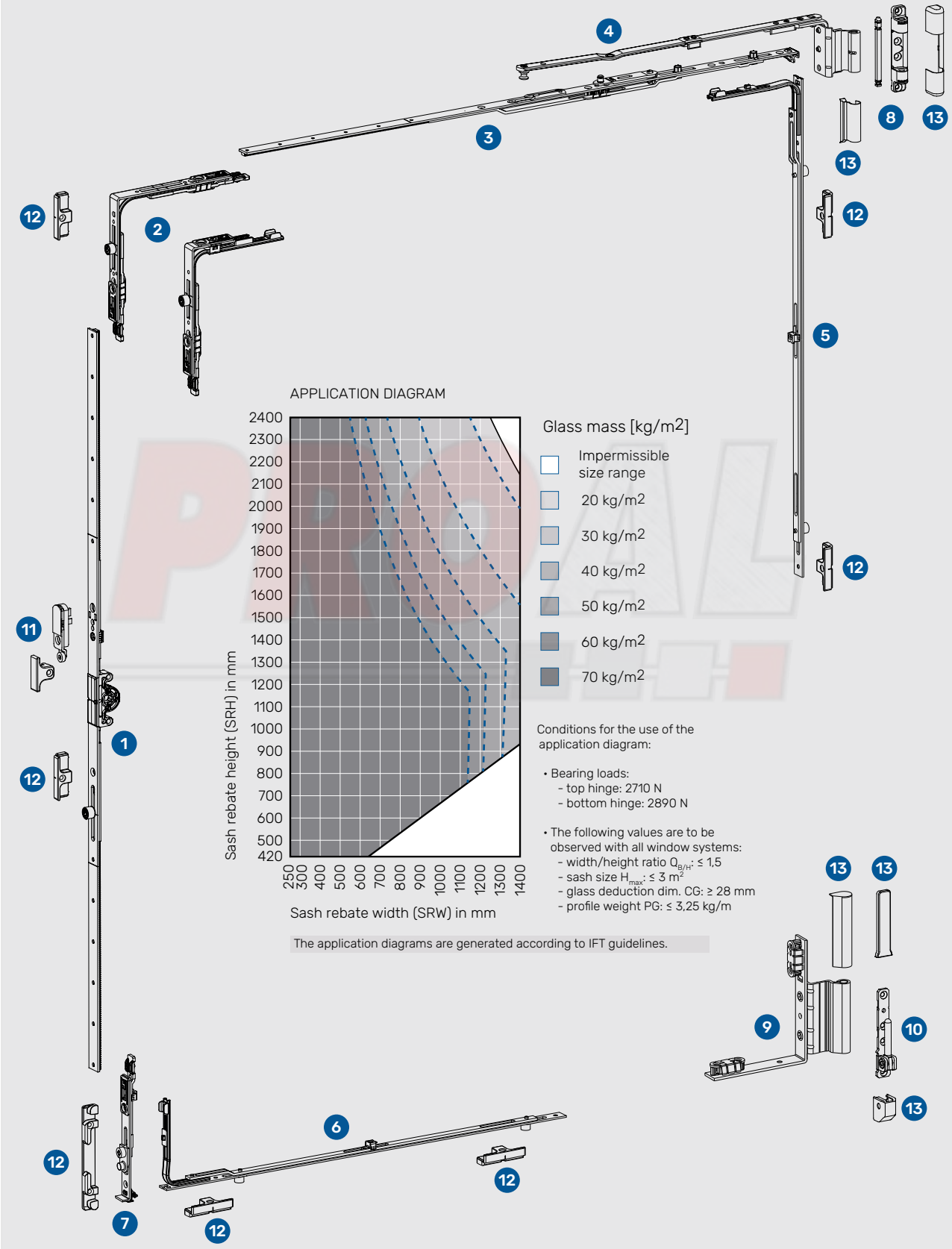
## 13 COVER CAPS

| | |
|---|---|
| STAY BEARING | PAGE 69 |
| STAY ARM | PAGE 69 |
| CORNER HINGE | PAGE 69 |
| CORNER PIVOT REST | PAGE 69 |
| CORNER PIVOT REST - FLAT | PAGE 69 |

[1] MISHANDLING DEVICE NOT AVAILABLE

[2] SRW = 250 - 340 mm, WITH SHORT CORNER DRIVE ON TOP

* SRH < 500 mm, move the anti-slam device to reduce the tilt




APPLICATION DIAGRAM




Glass mass [kg/m2]

- Impermissible size range
- 20 kg/m2
- 30 kg/m2
- 40 kg/m2
- 50 kg/m2
- 60 kg/m2
- 70 kg/m2

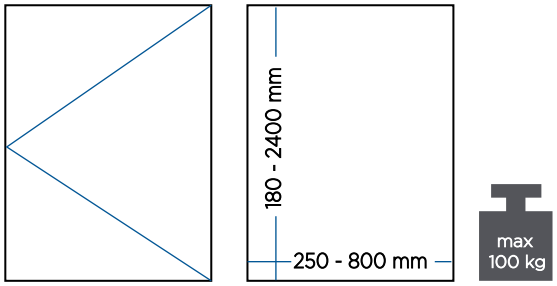
Conditions for the use of the application diagram:

- Bearing loads:
  - top hinge: 2710 N
  - bottom hinge: 2890 N
- The following values are to be observed with all window systems:
  - width/height ratio $Q_{B/H}$: ≤ 1,5
  - sash size $H_{max}$: ≤ 3 m²
  - glass deduction dim. CG: ≥ 28 mm
  - profile weight PG: ≤ 3,25 kg/m

The application diagrams are generated according to IFT guidelines.

# TURN - BASIC | FACE-FIT HINGE SIDE

Centered / variable handle height




## 1 ESPAGNOLETTE M BS 14,5 mm

| Sash rebate height | Handle height | Lenght | | Material |
|---|---|---|---|---|
| 180 - 250 [1] | 90 - 125 | 180 | 1 R | 1083163 |
| 251 - 500 [1] | 126 - 250 | 500 | 1 R | 1083164 |
| 501 - 900 | 251 - 450 | 900 | 2 R | 1083165 |
| 901 - 1400 | 451 - 700 | 1400 | 3 R | 1083166 |
| 1401 - 1900 | 701 - 950 | 1900 | 4 R | 1083167 |
| 1901 - 2400 | 951 - 1200 | 2400 | 4 R | 1083168 |

## 2 REBATE STAY ARM

SYSTEM 12/18-9

| | |
|---|---|
| REBATE STAY ARM - L | 1104763 |
| REBATE STAY ARM - R | 1104764 |

## 3 STAY BEARING

| | |
|---|---|
| STAY BEARING WITH PIN K3 | 1083250 |

## 4 REBATE CORNER HINGE

SYSTEM 12/18-9

| | |
|---|---|
| REBATE CORNER HINGE - L | 1101236 |
| REBATE CORNER HINGE - R | 1101237 |

## 5 CORNER PIVOT REST

| | |
|---|---|
| CORNER PIVOT REST K3 | 1083247 |

## 6 MISHANDLING DEVICE

| | |
|---|---|
| SASH PART | 1093907 |
| FRAME PART AXIS 9 | 1098127 |

## 7 STRIKERS

| | |
|---|---|
| STRIKER AXIS 9 | 1097952 |

## 8 CONCEALED STRIKER

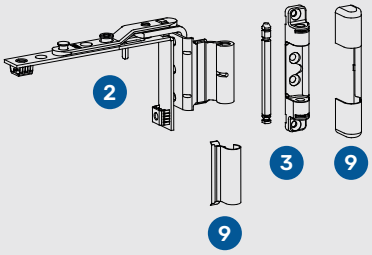
| | |
|---|---|
| SASH PART | 1127509 |
| FRAME PART AXIS 9 | 1127511 |

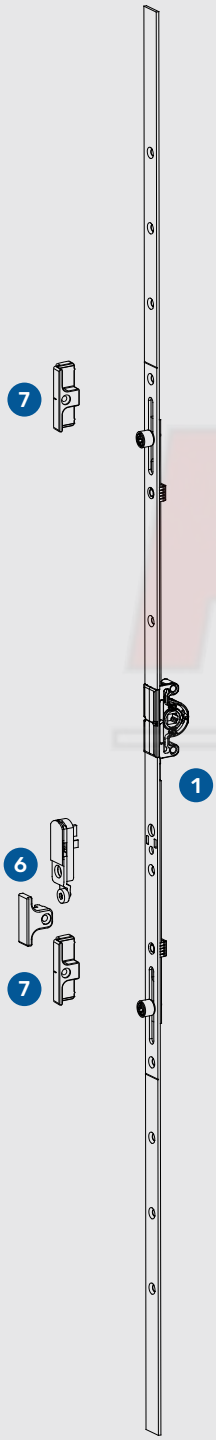
## 9 COVER CAPS

| | |
|---|---|
| STAY BEARING | PAGE 69 |
| REBATE STAY ARM / STAY ARM | PAGE 69 |
| CORNER HINGE | PAGE 69 |
| CORNER PIVOT REST | PAGE 69 |
| CORNER PIVOT REST - FLAT | PAGE 69 |

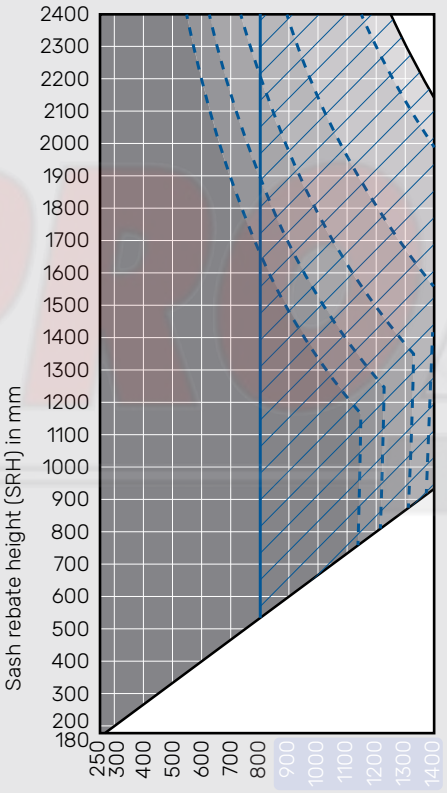
[1] MISHANDLING DEVICE NOT AVAILABLE

* mishandling device serves as a sash lifter
* for SRW > 800 mm, next scheme (STANDARD) is recommended



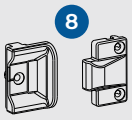




APPLICATION DIAGRAM




Glass mass [kg/m2]

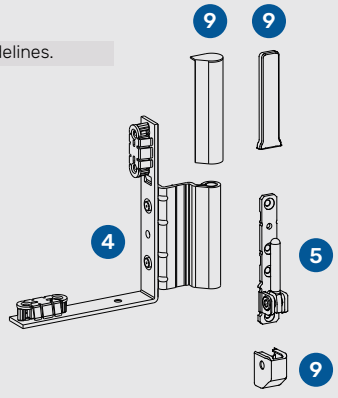
- Impermissible size range
- 20 kg/m2
- 30 kg/m2
- 40 kg/m2
- 50 kg/m2
- 60 kg/m2
- 70 kg/m2




Conditions for the use of the application diagram:

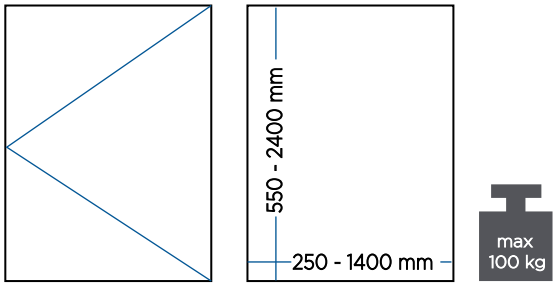
- Bearing loads:
  - top hinge: 2710 N
  - bottom hinge: 2890 N
- The following values are to be observed with all window systems:
  - width/height ratio $Q_{B/H}$: ≤ 1,5
  - sash size $H_{max}$: ≤ 3 m²
  - glass deduction dim. CG: ≥ 28 mm
  - profile weight PG: ≤ 3,25 kg/m

The application diagrams are generated according to IFT guidelines.



# TURN - STANDARD | FACE-FIT HINGE SIDE

Fixed handle height




## 1 KV ESPAGNOLETTE BS 14,5 mm

| Sash rebate height | Handle height | Lenght | | Material |
|---|---|---|---|---|
| 550 - 600 | 260 | 410 | | 1118431 |
| 601 - 800 | 263 | 520 | | 1115131 |
| 801 - 1000 | 413 | 720 | | 1115132 |
| 801 - 1000 | 413 | 720 | 1 R | 1115133 |
| 1001 - 1200 | 513 | 920 | 1 R | 1115134 |
| 1201 - 1400 | 563 | 1120 | 1 R | 1115135 |
| 1401 - 1600 | 563 | 1320 | 1 R | 1115136 |
| 1601 - 1800 | 563 | 1520 | 1 R | 1115137 |
| 1601 - 1800 | 1000 | 1520 | 1 R | 1115167 |
| 1801 - 2000 | 1000 | 1720 | 2 R | 1115138 |
| 2001 - 2200 | 1000 | 1920 | 2 R | 1115139 |
| 2201 - 2400 | 1000 | 2120 | 2 R | 1115140 |

## 2 LOCK BOLT - BOTTOM

| | | |
|---|---|---|
| LOCK BOLT 140 | 1 R | 1102394 |

## 3 LOCK BOLT - TOP

| | | |
|---|---|---|
| LOCK BOLT 140/90 | 1 R | 1102395 |

## 4 CENTER LOCK

| Sash rebate width | Lenght | | Material |
|---|---|---|---|
| 801 - 1200 | 500 / 550 | 2 R | 1083058 |
| 1201 - 1400 | 800 / 850 | 2 R | 1083059 |

## 5 REBATE STAY ARM

SYSTEM 12/18-9

| | |
|---|---|
| REBATE STAY ARM - L | 1104763 |
| REBATE STAY ARM - R | 1104764 |

## 6 STAY BEARING

| | |
|---|---|
| STAY BEARING WITH PIN K3 | 1083250 |

## 7 REBATE CORNER HINGE

SYSTEM 12/18-9

| | |
|---|---|
| REBATE CORNER HINGE - L | 1101236 |
| REBATE CORNER HINGE - R | 1101237 |

## 8 CORNER PIVOT REST

| | |
|---|---|
| CORNER PIVOT REST K3 | 1083247 |

## 9 MISHANDLING DEVICE

| | |
|---|---|
| SASH PART | 1093907 |
| FRAME PART AXIS 9 | 1098127 |

## 10 STRIKERS

| | |
|---|---|
| STRIKER AXIS 9 | 1097952 |

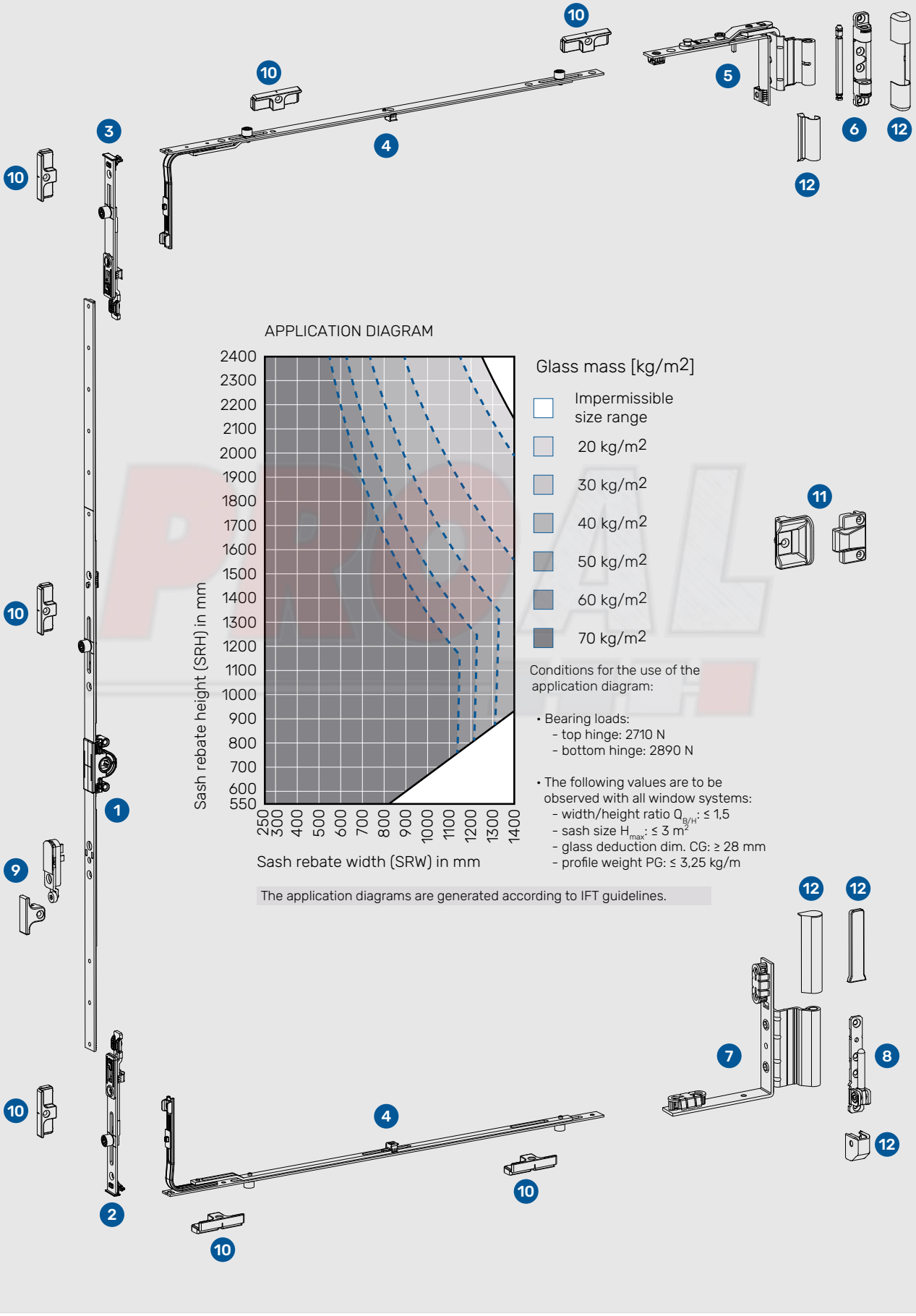
## 11 CONCEALED STRIKER

| | |
|---|---|
| SASH PART | 1127509 |
| FRAME PART AXIS 9 | 1127511 |

## 12 COVER CAPS

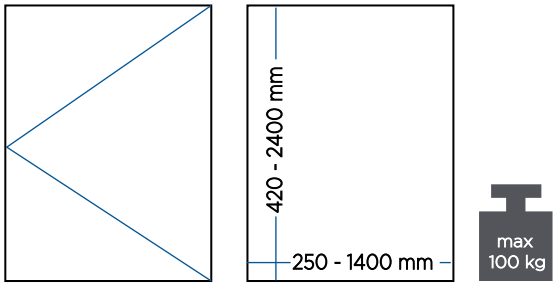
| | |
|---|---|
| STAY BEARING | PAGE 69 |
| REBATE STAY ARM / STAY ARM | PAGE 69 |
| CORNER HINGE | PAGE 69 |
| CORNER PIVOT REST | PAGE 69 |
| CORNER PIVOT REST - FLAT | PAGE 69 |

* mishandling device serves as a sash lifter


APPLICATION DIAGRAM
Sash rebate height (SRH) in mm
2400
2300
2200
2100
2000
1900
1800
1700
1600
1500
1400
1300
1200
1100
1000
900
800
700
600
550
250
300
400
500
600
700
800
900
1000
1100
1200
1300
1400
Sash rebate width (SRW) in mm
Glass mass [kg/m2]
Impermissible size range
20 kg/m2
30 kg/m2
40 kg/m2
50 kg/m2
60 kg/m2
70 kg/m2
Conditions for the use of the application diagram:
• Bearing loads:
- top hinge: 2710 N
- bottom hinge: 2890 N
• The following values are to be observed with all window systems:
- width/height ratio $Q_{B/H}$: ≤ 1,5
- sash size $H_{max}$: ≤ 3 m²
- glass deduction dim. CG: ≥ 28 mm
- profile weight PG: ≤ 3,25 kg/m
The application diagrams are generated according to IFT guidelines.
1
2
3
4
5
6
7
8
9
10
11
12

# TURN - STANDARD | FACE-FIT HINGE SIDE

Centered / variable handle height




## 1 T&T ESPAGNOLETTE M BS 14,5 mm

| Sash rebate height | Handle height | Lenght | | Material |
|---|---|---|---|---|
| 420 - 660 [1] | 210 - 360 | 380 | | 1083117 |
| 601 - 1000 | 300 - 500 | 720 | 1 R | 1088473 |
| 900 - 1400 | 450 - 700 | 1120 | 1 R | 1098964 |
| 1401 - 1800 | 701 - 900 | 1520 | 1 R | 1098965 |
| 1601 - 200 | 801 - 1000 | 1720 | 2 R | 1098966 |
| 2001 - 2400 | 1001 - 1200 | 2120 | 2 R | 1098967 |

## 2 LOCK BOLT - BOTTOM

| | | |
|---|---|---|
| LOCK BOLT 140 | 1 R | 1102394 |

## 3 LOCK BOLT - TOP

| | | |
|---|---|---|
| LOCK BOLT 140/90 | 1 R | 1102395 |

## 4 CENTER LOCK

| Sash rebate width | Lenght | | Material |
|---|---|---|---|
| 801 - 1200 | 500 / 550 | 2 R | 1083058 |
| 1201 - 1400 | 800 / 850 | 2 R | 1083059 |

## 5 REBATE STAY ARM

SYSTEM 12/18-9

| | |
|---|---|
| REBATE STAY ARM - L | 1104763 |
| REBATE STAY ARM - R | 1104764 |

## 6 STAY BEARING

| | |
|---|---|
| STAY BEARING WITH PIN K3 | 1083250 |

## 7 REBATE CORNER HINGE

SYSTEM 12/18-9

| | |
|---|---|
| REBATE CORNER HINGE - L | 1101236 |
| REBATE CORNER HINGE - R | 1101237 |

## 8 CORNER PIVOT REST

| | |
|---|---|
| CORNER PIVOT REST K3 | 1083247 |

## 9 MISHANDLING DEVICE

| | |
|---|---|
| SASH PART | 1093907 |
| FRAME PART AXIS 9 | 1098127 |

## 10 STRIKERS

| | |
|---|---|
| STRIKER AXIS 9 | 1097952 |

## 11 CONCEALED STRIKER

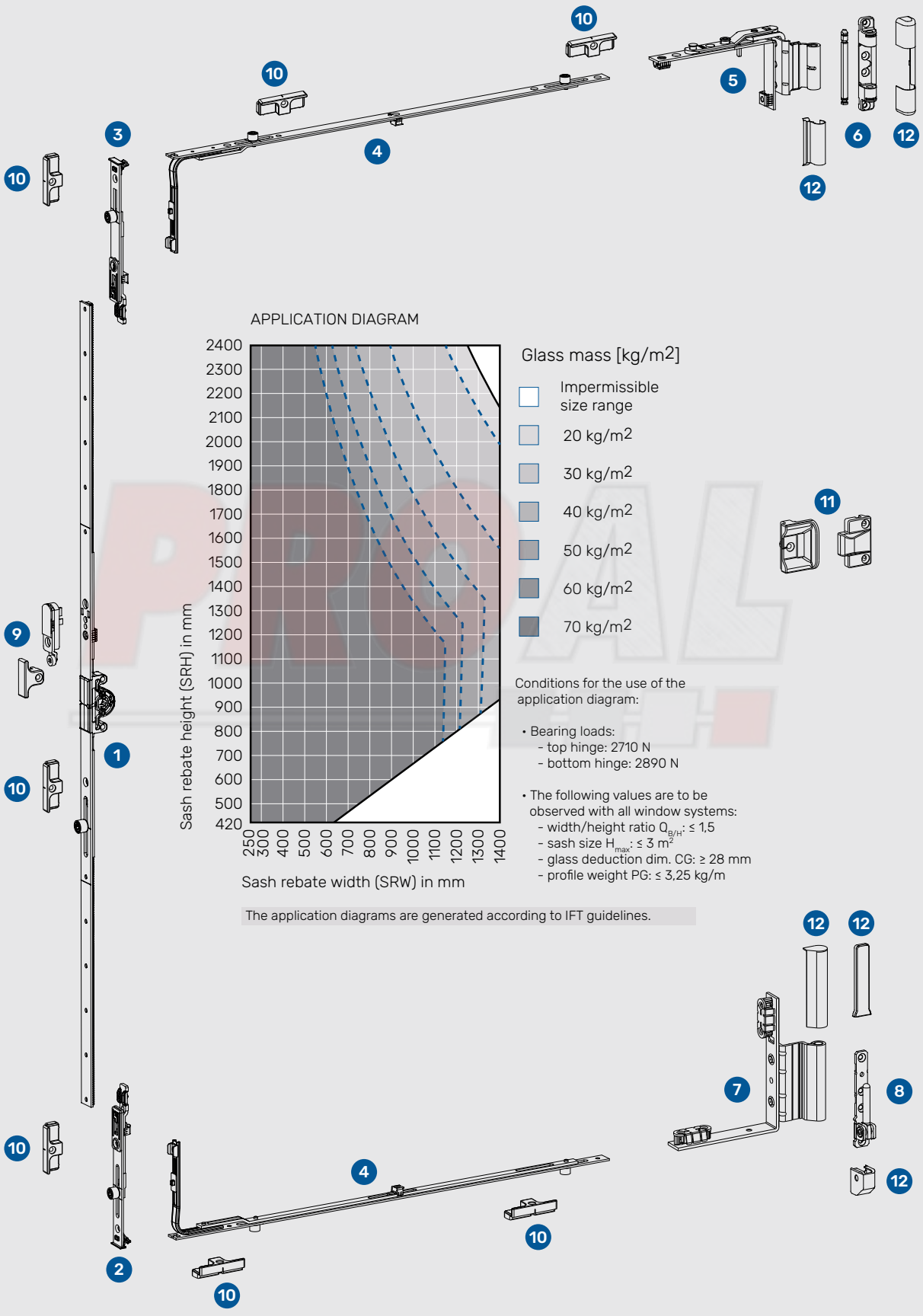
| | |
|---|---|
| SASH PART | 1127509 |
| FRAME PART AXIS 9 | 1127511 |

## 12 COVER CAPS

| | |
|---|---|
| STAY BEARING | PAGE 69 |
| REBATE STAY ARM / STAY ARM | PAGE 69 |
| CORNER HINGE | PAGE 69 |
| CORNER PIVOT REST | PAGE 69 |
| CORNER PIVOT REST - FLAT | PAGE 69 |

[1] MISHANDLING DEVICE NOT AVAILABLE

* mishandling device serves as a sash lifter




Conditions for the use of the application diagram:

- Bearing loads:
  - top hinge: 2710 N
  - bottom hinge: 2890 N
- The following values are to be observed with all window systems:
  - width/height ratio $Q_{B/H}$: ≤ 1,5
  - sash size $H_{max}$: ≤ 3 $m^2$
  - glass deduction dim. CG: ≥ 28 mm
  - profile weight PG: ≤ 3,25 kg/m

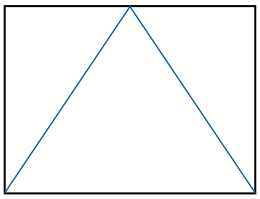
The application diagrams are generated according to IFT guidelines.

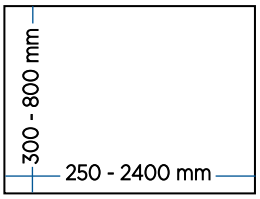
# TILT - BASIC | FACE-FIT HINGE SIDE

Centered / variable handle height

## 1 ESPAGNOLETTE M BS 14,5 mm

| Sash rebate width | Handle width | Lenght | | Material |
|---|---|---|---|---|
| 250 - 500 | 125 - 250 | 500 | 1 R | 1083164 |
| 501 - 900 | 251 - 450 | 900 | 2 R | 1083165 |
| 901 - 1400 | 451 - 700 | 1400 | 3 R | 1083166 |
| 1401 - 1900 | 701 - 950 | 1900 | 4 R | 1083167 |
| 1901 - 2400 | 951 - 1200 | 2400 | 4 R | 1083168 |









## 2 REBATE CENTER HINGE

SYSTEM 12/18-9

REBATE CENTER HINGE - adjustable 1104760

## 3 STAY BEARING

STAY BEARING WITH PIN K3 1083250

## 4 TILT STAY

TILT STAY for GROOVE 1099154

TILT STAY for ESPAGNOLETTE 1099152

## 5 STRIKERS

STRIKER AXIS 9 1097952

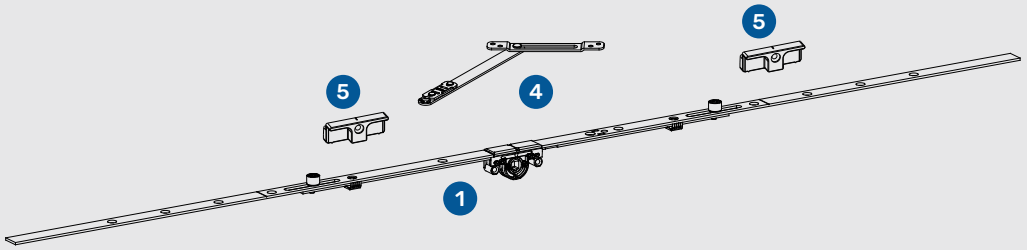
## 6 COVER CAPS

STAY BEARING PAGE 69

REBATE CENTER HINGE / STAY ARM PAGE 69

PROAL

* for SRH > 800 mm, next scheme (STANDARD) is recommended

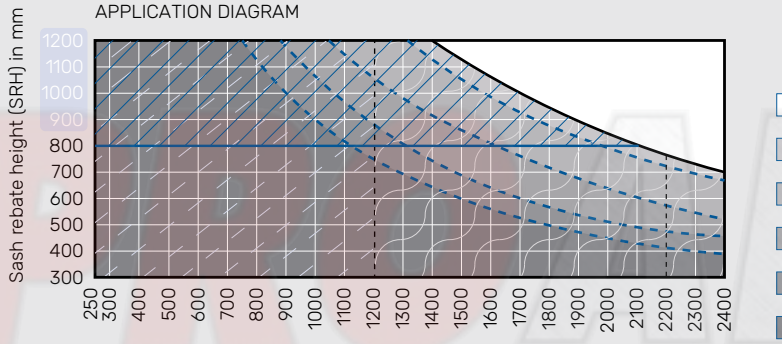









APPLICATION DIAGRAM




Glass mass [kg/m2]

- Impermissible size range
- 30 kg/m2
- 40 kg/m2
- 50 kg/m2
- 60 kg/m2
- 70 kg/m2

Conditions for the use of the application diagram:

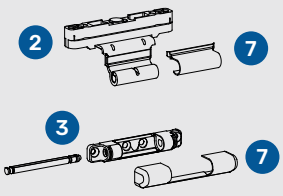
- Glass deduction dim. CG: ≥ 28 mm,
- profile weight PG: ≤ 3,25 kg/m.

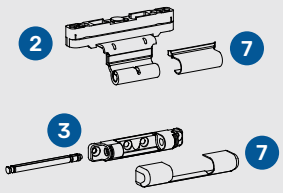
* The application diagrams are generated according to IFT guidelines.

! TILT STAYS MUST BE INSTALLED ON BOTH SIDES - recommended by directive FPKF

ONE TILT STAY UP

TWO TILT STAY UPS



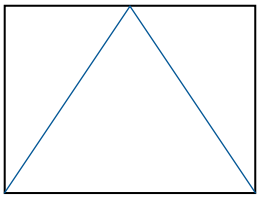



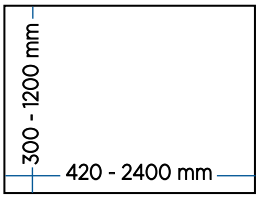
# TILT - STANDARD | FACE-FIT HINGE SIDE

Centered / variable handle height

## 1 T&T ESPAGNOLETTE M BS 14,5 mm

| Sash rebate width | Handle width | Lenght | | Material |
|---|---|---|---|---|
| 420 - 660 | 210 - 360 | 380 | | 1083117 |
| 601 - 1000 | 300 - 500 | 720 | 1 R | 1088473 |
| 900 - 1400 | 450 - 700 | 1120 | 1 R | 1098964 |
| 1401 - 1800 | 701 - 900 | 1520 | 1 R | 1098965 |
| 1601 - 2000 | 801 - 1000 | 1720 | 2 R | 1098966 |
| 2001 - 2400 | 1001 - 1200 | 2120 | 2 R | 1098967 |









## 2 LOCK BOLT

| | | |
|---|---|---|
| LOCK BOLT 140 | 1 R | 1102394 |

## 3 LOCK BOLT

| | | |
|---|---|---|
| LOCK BOLT 140/90 | 1 R | 1102395 |

## 4 CENTER LOCK

| Sash rebate height | Lenght | | Material |
|---|---|---|---|
| 801 - 1200 | 500/550 | 2 R | 1083058 |

## 5 REBATE CENTER HINGE

SYSTEM 12/18-9

| | |
|---|---|
| REBATE CENTER HINGE - adjustable | 1104760 |

## 6 STAY BEARING

| | |
|---|---|
| STAY BEARING WITH PIN K3 | 1083250 |

## 7 TILT STAY

| | |
|---|---|
| TILT STAY for GROOVE | 1099154 |
| TILT STAY for ESPAGNOLETTE / CENTER LOCK | 1099152 |

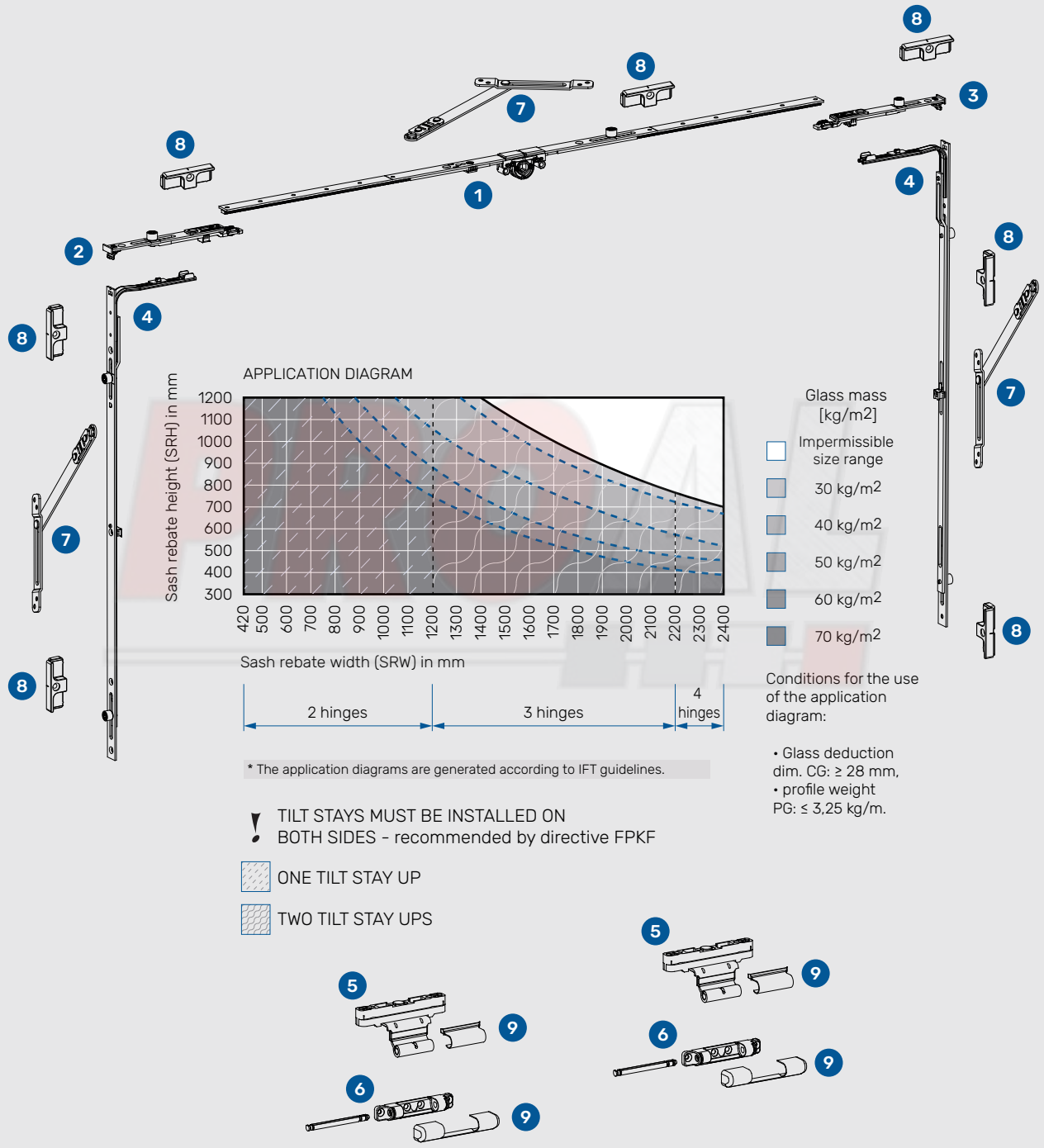
## 8 STRIKERS

| | |
|---|---|
| STRIKER AXIS 9 | 1097952 |

## 9 COVER CAPS

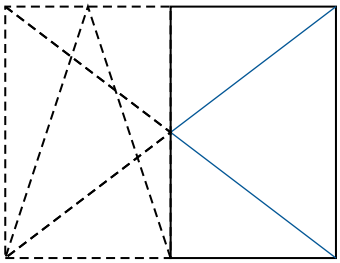
| | |
|---|---|
| STAY BEARING | PAGE 69 |
| REBATE CENTER HINGE / STAY ARM | PAGE 69 |

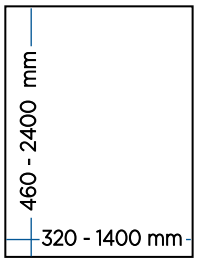
PROAL


APPLICATION DIAGRAM
Sash rebate height (SRH) in mm
1200
1100
1000
900
800
700
600
500
400
300
420 500 600 700 800 900 1000 1100 1200 1300 1400 1500 1600 1700 1800 1900 2000 2100 2200 2300 2400
Sash rebate width (SRW) in mm
2 hinges
3 hinges
4 hinges
Glass mass [kg/m2]
Impermissible size range
30 kg/m2
40 kg/m2
50 kg/m2
60 kg/m2
70 kg/m2
Conditions for the use of the application diagram:
• Glass deduction dim. CG: ≥ 28 mm,
• profile weight PG: ≤ 3,25 kg/m.
* The application diagrams are generated according to IFT guidelines.
TILT STAYS MUST BE INSTALLED ON BOTH SIDES - recommended by directive FPKF
ONE TILT STAY UP
TWO TILT STAY UPS

# TURN - SECOND SASH | FACE-FIT HINGE SIDE

Fixed handle height | First sash T&Ti









## 1 FR. WIN. KV ESPAGNOLETTE

| Sash rebate height | Handle height | Lenght | | Material |
|---|---|---|---|---|
| 460 - 600 [1) 2)] | 230 | 410 | | 1118420 |
| 601 - 800 [2)] | 335 | 520 | | 1118421 |
| 801 - 1000 | 490 | 720 | 1 R | 1118423 |
| 1001 - 1200 | 335 | 920 | 1 R | 1118424 |
| 1201 - 1400 | 335 | 1120 | 1 R | 1118425 |
| 1401 - 1600 | 335 | 1320 | 1 R | 1118426 |
| 1601 - 1800 | 335 | 1520 | 1 R | 1118427 |
| 1801 - 2000 | 640 | 1720 | 2 R | 1118428 |
| 2001 - 2200 | 640 | 1920 | 2 R | 1118429 |
| 2201 - 2400 | 640 | 2120 | 2 R | 1118430 |

## 2 CORNER DRIVE - BOTTOM

| | | |
|---|---|---|
| STANDARD CORNER DRIVE | 1 R | 1103158 |
| SHORT CORNER DRIVE | 1 R | 1103162 |

## 3 CORNER DRIVE - TOP

| | | |
|---|---|---|
| CORNER DRIVE | 1 R | 1103158 |

## 4 CENTER LOCK

| Sash rebate width | Lenght | | Material |
|---|---|---|---|
| 801 - 1200 | 400 | 1 R | 1083061 |
| 1201 - 1400 | 600 | 1 R | 1083062 |

## 5 REBATE STAY ARM

SYSTEM 12/18-9

| | |
|---|---|
| REBATE STAY ARM - L | 1104763 |
| REBATE STAY ARM - R | 1104764 |

## 6 STAY BEARING

| | |
|---|---|
| STAY BEARING WITH PIN K3 | 1083250 |

## 7 REBATE CORNER HINGE

SYSTEM 12/18-9

| | |
|---|---|
| REBATE CORNER HINGE - L | 1101236 |
| REBATE CORNER HINGE - R | 1101237 |

## 8 CORNER PIVOT REST

| | |
|---|---|
| CORNER PIVOT REST K3 | 1083247 |

## 9 MISHANDLING DEVICE

| | |
|---|---|
| MISHANDLING DEVICE for espagnolette | 1083295 |

## 10 STRIKERS

| | |
|---|---|
| STRIKER AXIS 9 | 1097952 |

## 11 CONCEALED STRIKER

| | |
|---|---|
| SASH PART | 1127509 |
| FRAME PART AXIS 9 | 1127511 |

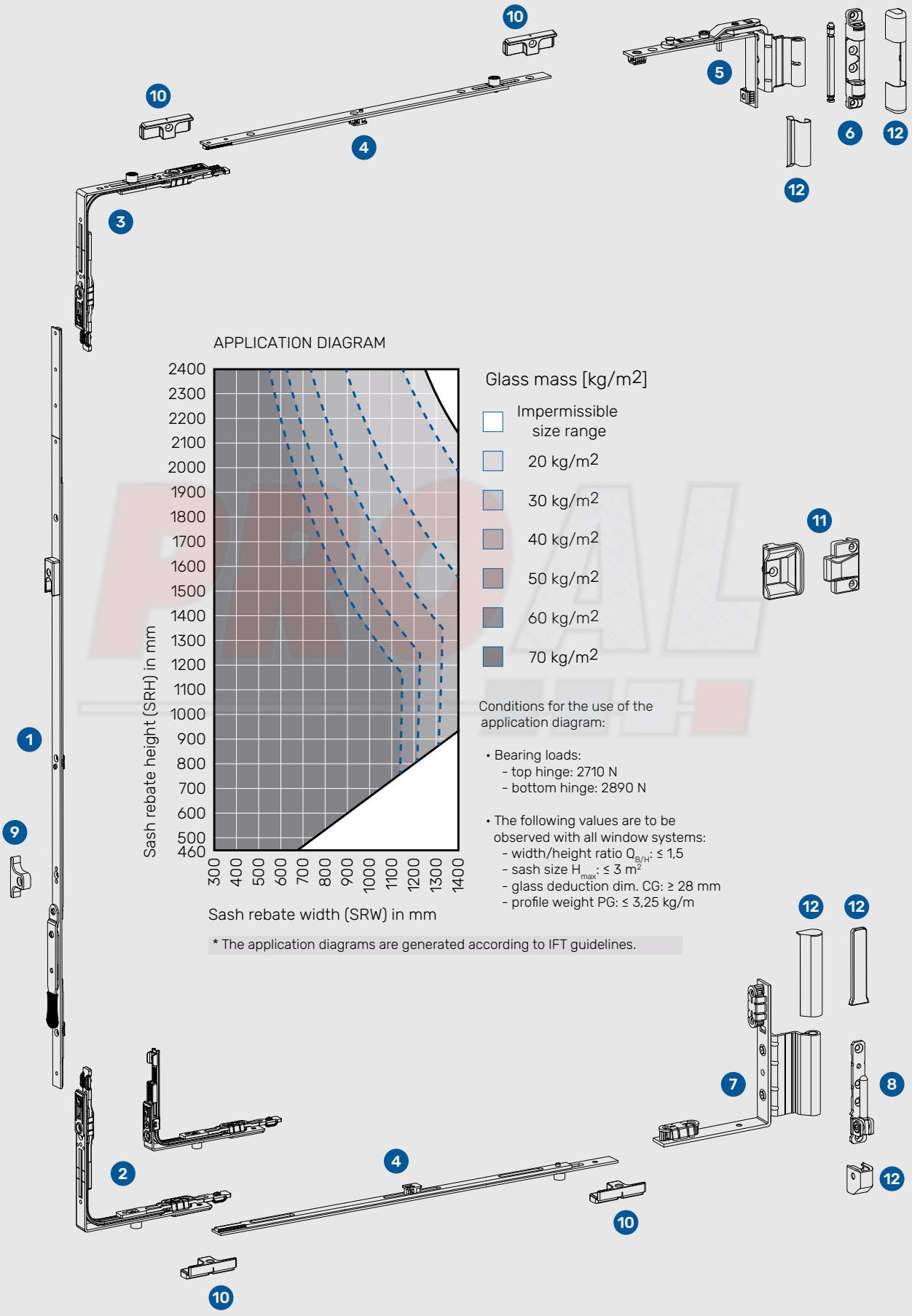
## 12 COVER CAPS


| | |
|---|---|
| STAY BEARING | PAGE 69 |
| REBATE STAY ARM / STAY ARM | PAGE 69 |
| CORNER HINGE | PAGE 69 |
| CORNER PIVOT REST | PAGE 69 |
| CORNER PIVOT REST - FLAT | PAGE 69 |


[1)] MUST USE SHORT CORNER DRIVE 1103162 ON BOTTOM

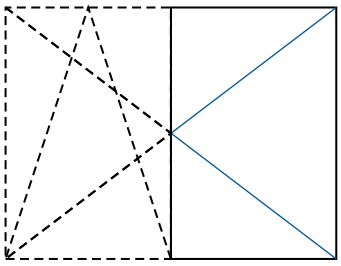
[2)] MISHANDLING DEVICE NOT AVAILABLE

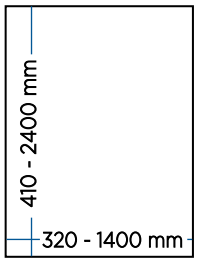
* position the R cams on upper corner drives into vertical position


APPLICATION DIAGRAM
Sash rebate height (SRH) in mm
2400
2300
2200
2100
2000
1900
1800
1700
1600
1500
1400
1300
1200
1100
1000
900
800
700
600
500
460
300
400
500
600
700
800
900
1000
1100
1200
1300
1400
Sash rebate width (SRW) in mm
Glass mass [kg/m2]
Impermissible size range
20 kg/m2
30 kg/m2
40 kg/m2
50 kg/m2
60 kg/m2
70 kg/m2
Conditions for the use of the application diagram:
• Bearing loads:
- top hinge: 2710 N
- bottom hinge: 2890 N
• The following values are to be observed with all window systems:
- width/height ratio $Q_{B/H}$: ≤ 1,5
- sash size $H_{max}$: ≤ 3 m²
- glass deduction dim. CG: ≥ 28 mm
- profile weight PG: ≤ 3,25 kg/m
* The application diagrams are generated according to IFT guidelines.
1
2
3
4
5
6
7
8
9
10
11
12

# TURN - SECOND SASH | FACE-FIT HINGE SIDE

Centered / variable handle height | First sash T&Ti









## 1 FR. WIN. ESPAGNOLETTE M

| Sash rebate height | Handle height | Lenght | | Material |
|---|---|---|---|---|
| 500 - 680 [1] | 200 - 380 | 400 | | 1098116 |
| 600 - 1000 [1] | 387 - 586 | 720 | 1 R | 1098120 |
| 900 - 1400 | 350 - 550 | 1120 | 1 R | 1098122 |
| 1401 - 1800 | 350 - 550 | 1520 | 1 R | 1098123 |
| 1601 - 2000 | 350 - 550 | 1720 | 2 R | 1098124 |
| 2001 - 2400 | 350 - 550 | 2120 | 2 R | 1098125 |

## 2 CORNER DRIVE - BOTTOM

| | | |
|---|---|---|
| STANDARD CORNER DRIVE | 1 R | 1103158 |

## 3 CORNER DRIVE - TOP

| | | |
|---|---|---|
| STANDARD CORNER DRIVE | 1 R | 1103158 |

## 4 CENTER LOCK

| Sash rebate width | Lenght | | Material |
|---|---|---|---|
| 801 - 1200 | 400 | 1 R | 1083061 |
| 1201 - 1400 | 600 | 1 R | 1083062 |

## 5 REBATE STAY ARM

| | SYSTEM 12/18-9 |
|---|---|
| REBATE STAY ARM - L | 1104763 |
| REBATE STAY ARM - R | 1104764 |

## 6 STAY BEARING

| | |
|---|---|
| STAY BEARING WITH PIN K3 | 1083250 |

## 7 REBATE CORNER HINGE

| | SYSTEM 12/18-9 |
|---|---|
| REBATE CORNER HINGE - L | 1101236 |
| REBATE CORNER HINGE - R | 1101237 |

## 8 CORNER PIVOT REST

| | |
|---|---|
| CORNER PIVOT REST K3 | 1083247 |

## 9 MISHANDLING DEVICE

| | |
|---|---|
| MISHANDLING DEVICE for espagnolette | 1083295 |

## 10 STRIKERS

| | |
|---|---|
| STRIKER AXIS 9 | 1097952 |

## 11 CONCEALED STRIKER

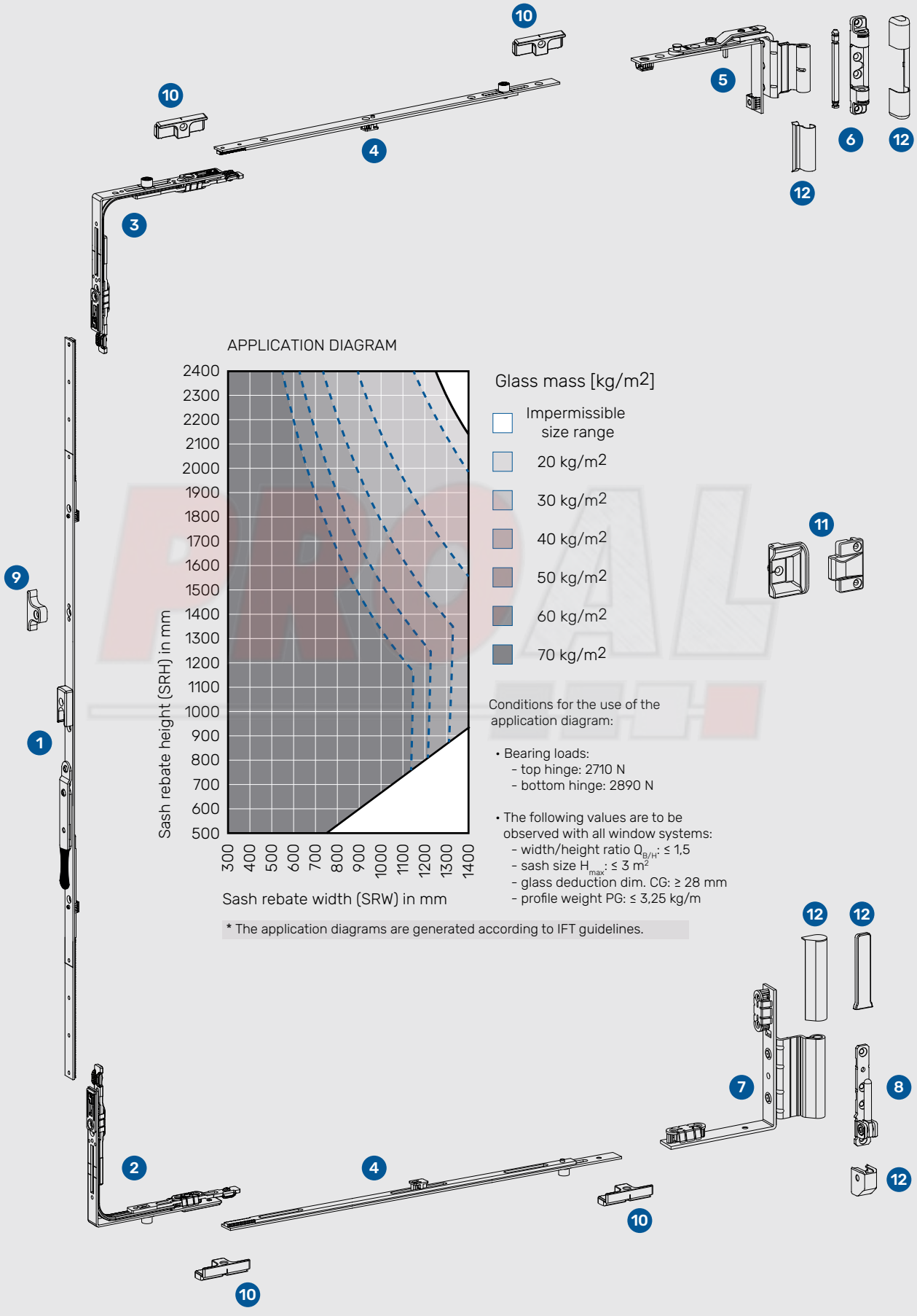
| | |
|---|---|
| SASH PART | 1127509 |
| FRAME PART AXIS 9 | 1127511 |

## 12 COVER CAPS

| | |
|---|---|
| STAY BEARING | PAGE 69 |
| REBATE STAY ARM / STAY ARM | PAGE 69 |
| CORNER HINGE | PAGE 69 |
| CORNER PIVOT REST | PAGE 69 |
| CORNER PIVOT REST - FLAT | PAGE 69 |

[1] MISHANDLING DEVICE NOT AVAILABLE

* position the R cams on upper corner drives into vertical position

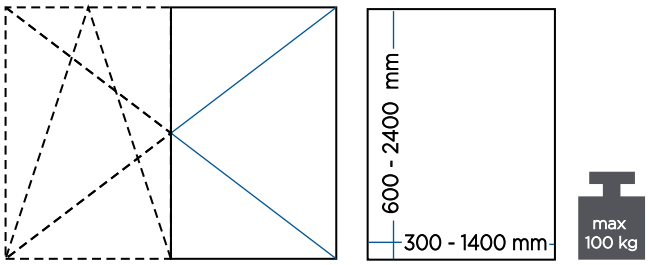

APPLICATION DIAGRAM
Glass mass [kg/m2]
Impermissible size range
20 kg/m2
30 kg/m2
40 kg/m2
50 kg/m2
60 kg/m2
70 kg/m2
Sash rebate height (SRH) in mm
2400
2300
2200
2100
2000
1900
1800
1700
1600
1500
1400
1300
1200
1100
1000
900
800
700
600
500
300
400
500
600
700
800
900
1000
1100
1200
1300
1400
Sash rebate width (SRW) in mm
Conditions for the use of the application diagram:
• Bearing loads:
- top hinge: 2710 N
- bottom hinge: 2890 N
• The following values are to be observed with all window systems:
- width/height ratio $Q_{B/H}$: ≤ 1,5
- sash size $H_{max}$: ≤ 3 m²
- glass deduction dim. CG: ≥ 28 mm
- profile weight PG: ≤ 3,25 kg/m
* The application diagrams are generated according to IFT guidelines.

# TURN - SECOND SASH | FACE-FIT HINGE SIDE

Fixed handle height | First sash T&T

## 1 FR. WIN. KV ESPAGNOLETTE

| Sash rebate height | Handle height | Lenght | | Material |
|---|---|---|---|---|
| 600 - 800 [1] | 335 | 520 | | 1118421 |
| 801 - 1000 | 490 | 720 | 1 R | 1118423 |
| 1001 - 1200 | 335 | 920 | 1 R | 1118424 |
| 1201 - 1400 | 335 | 1120 | 1 R | 1118425 |
| 1401 - 1600 | 335 | 1320 | 1 R | 1118426 |
| 1601 - 1800 | 335 | 1520 | 1 R | 1118427 |
| 1801 - 2000 | 640 | 1720 | 2 R | 1118428 |
| 2001 - 2200 | 640 | 1920 | 2 R | 1118429 |
| 2201 - 2400 | 640 | 2120 | 2 R | 1118430 |




## 2 FR. WIN. T&T LOCK BOLT

| | |
|---|---|
| T&T LOCK BOLT | 1102621 |

## 3 FR. WIN. CONNECTOR with STRIKER

| | |
|---|---|
| CONNECTOR WITH STRIKER | 1110929 |

## 4 CENTER LOCK

| Sash rebate width | Lenght | | Material |
|---|---|---|---|
| 801 - 1200 | 500 / 550 | 2 R | 1083058 |
| 1201 - 1400 | 800 / 850 | 2 R | 1083059 |

## 5 REBATE STAY ARM

SYSTEM 12/18-9

| | |
|---|---|
| REBATE STAY ARM - L | 1104763 |
| REBATE STAY ARM - R | 1104764 |

## 6 STAY BEARING

| | |
|---|---|
| STAY BEARING WITH PIN K3 | 1083250 |

## 7 REBATE CORNER HINGE

SYSTEM 12/18-9

| | |
|---|---|
| REBATE CORNER HINGE - L | 1101236 |
| REBATE CORNER HINGE - R | 1101237 |

## 8 CORNER PIVOT REST

| | |
|---|---|
| CORNER PIVOT REST K3 | 1083247 |

## 9 MISHANDLING DEVICE

| | |
|---|---|
| MISHANDLING DEVICE for espagnolette | 1083295 |

## 10 STRIKERS

| | |
|---|---|
| STRIKER AXIS 9 | 1097952 |
| SECOND SASH STRIKER for shootbolt AXIS 9 | 1097953 |

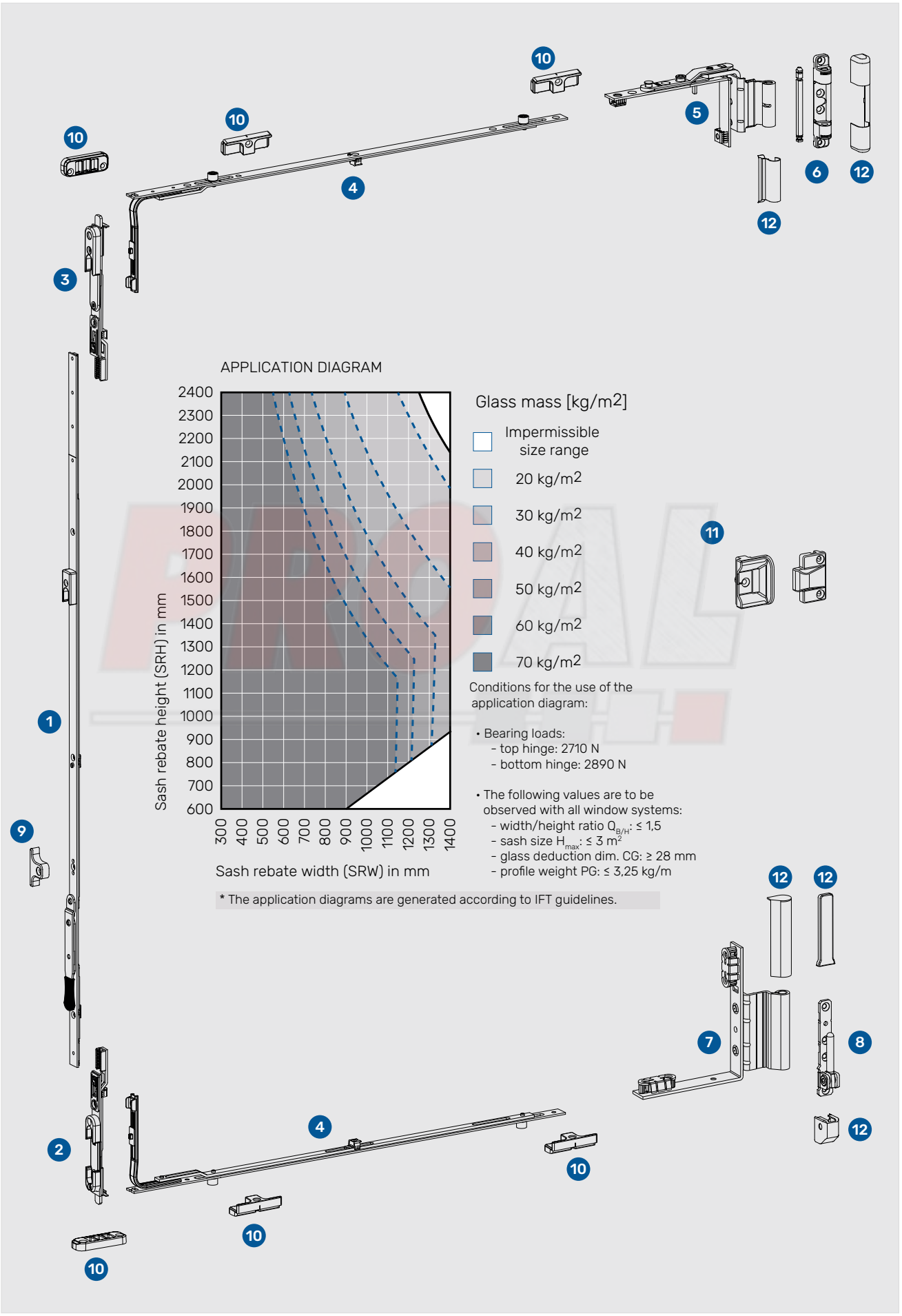
## 11 CONCEALED STRIKER

| | |
|---|---|
| SASH PART | 1127509 |
| FRAME PART AXIS 9 | 1127511 |

## 12 COVER CAPS

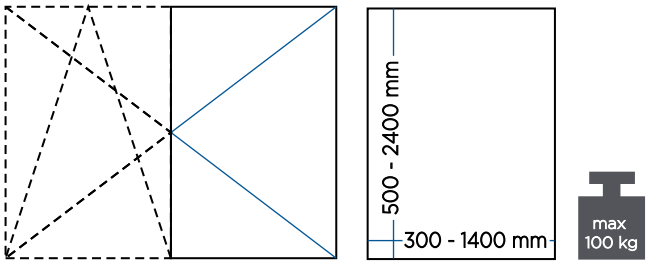

| | |
|---|---|
| STAY BEARING | PAGE 69 |
| REBATE STAY ARM / STAY ARM | PAGE 69 |
| CORNER HINGE | PAGE 69 |
| CORNER PIVOT REST | PAGE 69 |
| CORNER PIVOT REST - FLAT | PAGE 69 |


[1] MISHANDLING DEVICE NOT AVAILABLE


APPLICATION DIAGRAM
Glass mass [kg/m2]
Impermissible size range
20 kg/m2
30 kg/m2
40 kg/m2
50 kg/m2
60 kg/m2
70 kg/m2
Sash rebate height (SRH) in mm
2400
2300
2200
2100
2000
1900
1800
1700
1600
1500
1400
1300
1200
1100
1000
900
800
700
600
300
400
500
600
700
800
900
1000
1100
1200
1300
1400
Sash rebate width (SRW) in mm
Conditions for the use of the application diagram:
• Bearing loads:
- top hinge: 2710 N
- bottom hinge: 2890 N
• The following values are to be observed with all window systems:
- width/height ratio $Q_{B/H}$: ≤ 1,5
- sash size $H_{max}$: ≤ 3 m²
- glass deduction dim. CG: ≥ 28 mm
- profile weight PG: ≤ 3,25 kg/m
* The application diagrams are generated according to IFT guidelines.
1
2
3
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# TURN - SECOND SASH | FACE-FIT HINGE SIDE

Centered / variable handle height | First sash T&T




## 1 FR. WIN. ESPAGNOLETTE M

| Sash rebate height | Handle height | Lenght | | Material |
|---|---|---|---|---|
| 500 - 680 [1] | 290 - 380 | 400 | | 1098116 |
| 600 - 1000 [1] | 387 - 586 | 720 | 1 R | 1098120 |
| 900 - 1400 | 350 - 550 | 1120 | 1 R | 1098122 |
| 1401 - 1800 | 350 - 550 | 1520 | 1 R | 1098123 |
| 1601 - 2000 | 350 - 550 | 1720 | 2 R | 1098124 |
| 2001 - 2400 | 350 - 550 | 2120 | 2 R | 1098125 |

## 2 FR. WIN. T&T LOCK BOLT

| | |
|---|---|
| T&T LOCK BOLT | 1102621 |

## 3 FR. WIN. CONNECTOR with STRIKER

| | |
|---|---|
| CONNECTOR WITH STRIKER | 1110929 |

## 4 CENTER LOCK

| Sash rebate width | Lenght | | Material |
|---|---|---|---|
| 801 - 1200 | 500 / 550 | 2 R | 1083058 |
| 1201 - 1400 | 800 / 850 | 2 R | 1083059 |

## 5 REBATE STAY ARM

| | SYSTEM 12/18-9 |
|---|---|
| REBATE STAY ARM - L | 1104763 |
| REBATE STAY ARM - R | 1104764 |

## 6 STAY BEARING

| | |
|---|---|
| STAY BEARING WITH PIN K3 | 1083250 |

## 7 REBATE CORNER HINGE

| | SYSTEM 12/18-9 |
|---|---|
| REBATE CORNER HINGE - L | 1101236 |
| REBATE CORNER HINGE - R | 1101237 |

## 8 CORNER PIVOT REST

| | |
|---|---|
| CORNER PIVOT REST K3 | 1083247 |

## 9 MISHANDLING DEVICE

| | |
|---|---|
| MISHANDLING DEVICE for espagnolette | 1083295 |

## 10 STRIKERS

| | |
|---|---|
| STRIKER AXIS 9 | 1097952 |
| SECOND SASH STRIKER for shootbolt AXIS 9 | 1097953 |

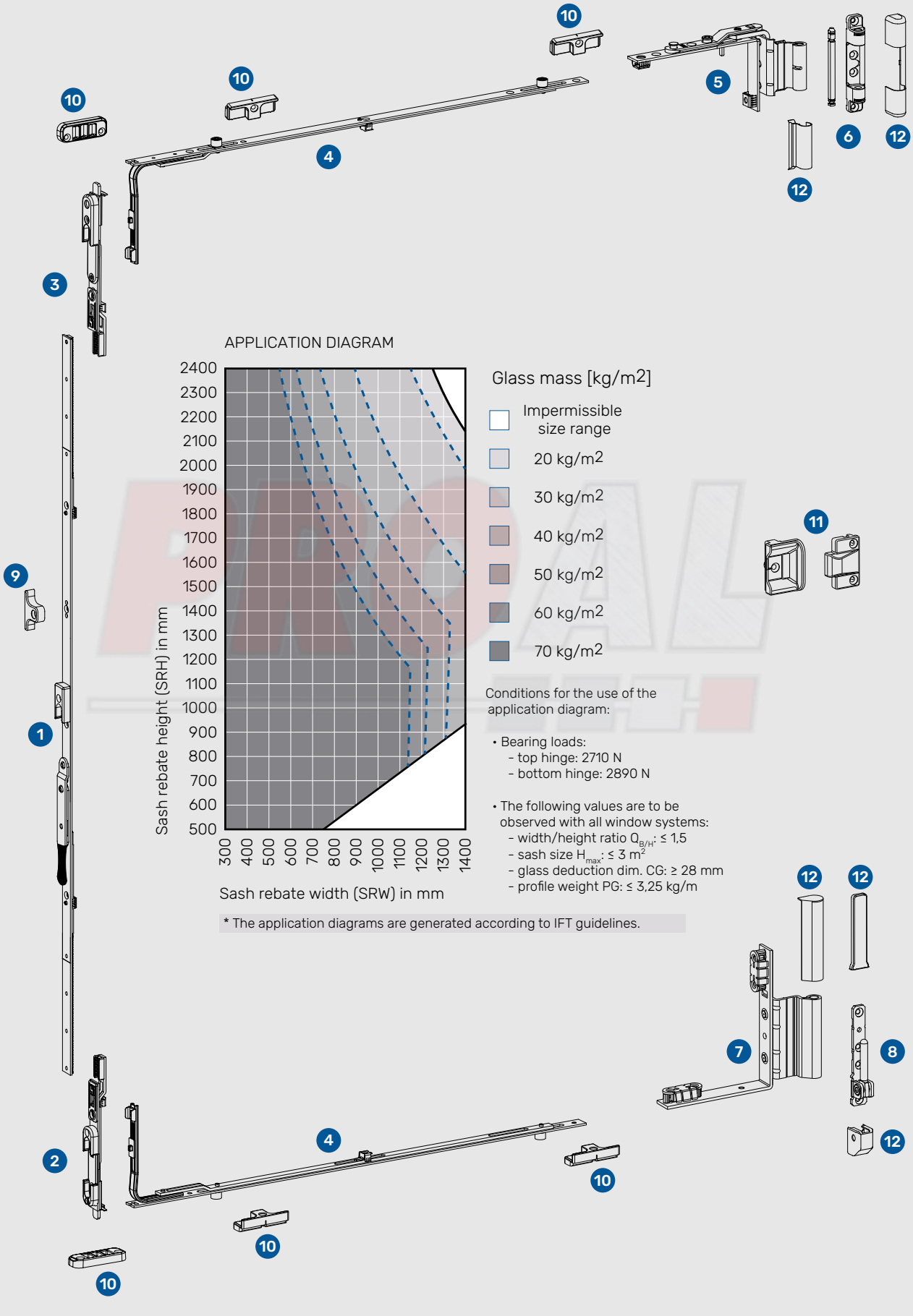
## 11 CONCEALED STRIKER

| | |
|---|---|
| SASH PART | 1127509 |
| FRAME PART AXIS 9 | 1127511 |

## 12 COVER CAPS

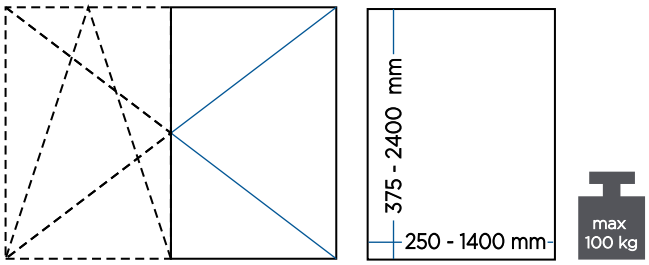
| | |
|---|---|
| STAY BEARING | PAGE 69 |
| REBATE STAY ARM / STAY ARM | PAGE 69 |
| CORNER HINGE | PAGE 69 |
| CORNER PIVOT REST | PAGE 69 |
| CORNER PIVOT REST - FLAT | PAGE 69 |

[1] MISHANDLING DEVICE NOT AVAILABLE


APPLICATION DIAGRAM
Sash rebate height (SRH) in mm
2400
2300
2200
2100
2000
1900
1800
1700
1600
1500
1400
1300
1200
1100
1000
900
800
700
600
500
300
400
500
600
700
800
900
1000
1100
1200
1300
1400
Sash rebate width (SRW) in mm
Glass mass [kg/m2]
Impermissible size range
20 kg/m2
30 kg/m2
40 kg/m2
50 kg/m2
60 kg/m2
70 kg/m2
Conditions for the use of the application diagram:
• Bearing loads:
- top hinge: 2710 N
- bottom hinge: 2890 N
• The following values are to be observed with all window systems:
- width/height ratio $Q_{B/H}$: ≤ 1,5
- sash size $H_{max}$: ≤ 3 m²
- glass deduction dim. CG: ≥ 28 mm
- profile weight PG: ≤ 3,25 kg/m
* The application diagrams are generated according to IFT guidelines.
1
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# TURN - SECOND SASH | FACE-FIT HINGE SIDE

Shootbolts - OHG




**1** SHOOTBOLT with striker - TOP

| | |
|---|---|
| SHOOTBOLT WITH STRIKER | 1083253 |

**1a** SHOOTBOLT with striker - TOP

| | |
|---|---|
| SHOOTBOLT WITHOUT STRIKER 140 | 1083254 |

**2** SHOOTBOLT with T&T striker - BOTTOM

| | |
|---|---|
| SHOOTBOLT WITH T&T STRIKER | 1083252 |

**3** CENTER LOCK

| Sash rebate width | Lenght | | Material |
|---|---|---|---|
| 801 - 1200 | 500 / 550 | 2 R | 1083058 |
| 1201 - 1400 | 800 / 850 | 2 R | 1083059 |

**4** REBATE STAY ARM — SYSTEM 12/18-9

| | |
|---|---|
| REBATE STAY ARM - L | 1104763 |
| REBATE STAY ARM - R | 1104764 |

**5** STAY BEARING

| | |
|---|---|
| STAY BEARING WITH PIN K3 | 1083250 |

**6** REBATE CORNER HINGE — SYSTEM 12/18-9

| | |
|---|---|
| REBATE CORNER HINGE - L | 1101236 |
| REBATE CORNER HINGE - R | 1101237 |

**7** CORNER PIVOT REST

| | |
|---|---|
| CORNER PIVOT REST K3 | 1083247 |

**8** MISHANDLING DEVICE

| | |
|---|---|
| MISHANDLING DEVICE - OHG | 1083293 |

**9** STRIKERS

| | |
|---|---|
| STRIKER AXIS 9 | 1097952 |
| STRIKER - OHG | 1083207 |
| SECOND SASH STRIKER for shootbolt AXIS 9 | 1097953 |

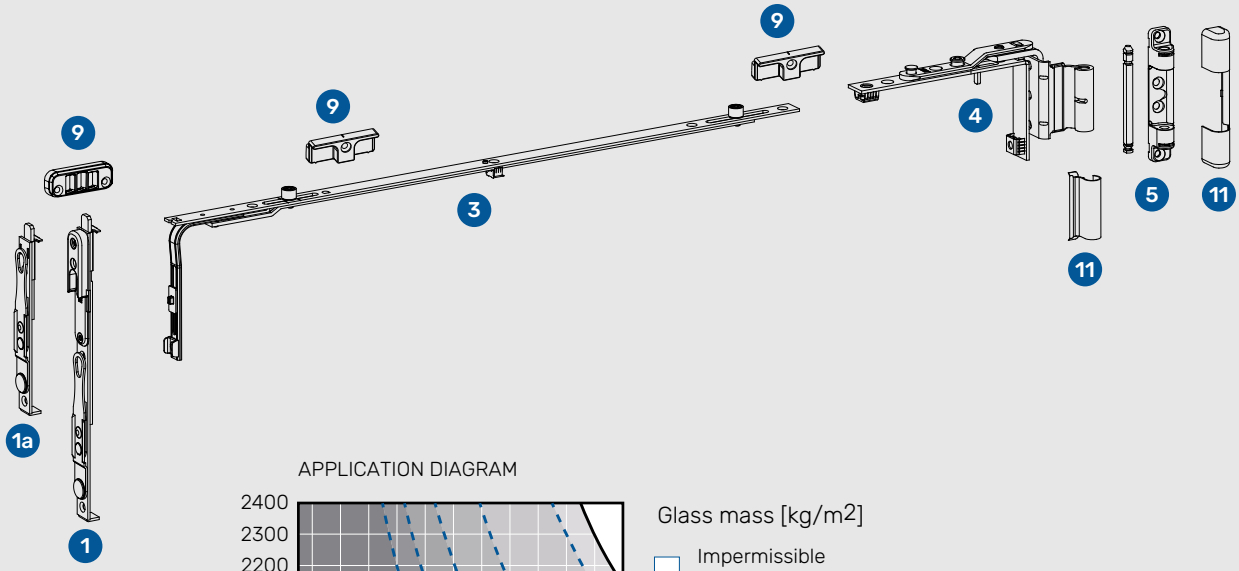
**10** CONCEALED STRIKER

| | |
|---|---|
| SASH PART | 1127509 |
| FRAME PART AXIS 9 | 1127511 |

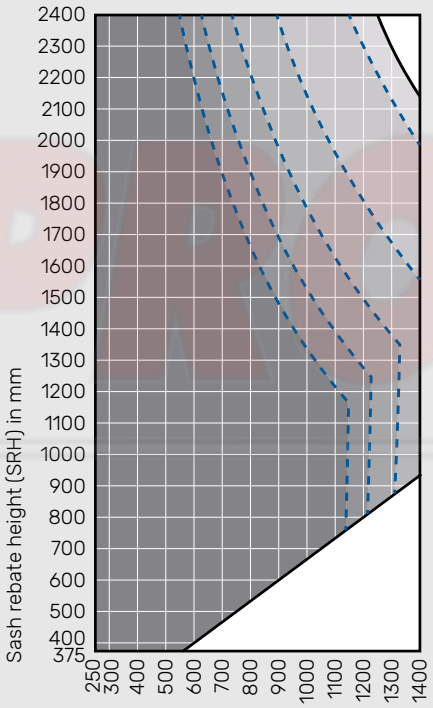
**11** COVER CAPS

| | |
|---|---|
| STAY BEARING | PAGE 69 |
| REBATE STAY ARM / STAY ARM | PAGE 69 |
| CORNER HINGE | PAGE 69 |
| CORNER PIVOT REST | PAGE 69 |
| CORNER PIVOT REST - FLAT | PAGE 69 |

PROAL




APPLICATION DIAGRAM




Glass mass [kg/m2]

- Impermissible size range
- 20 kg/m2
- 30 kg/m2
- 40 kg/m2
- 50 kg/m2
- 60 kg/m2
- 70 kg/m2

Conditions for the use of the application diagram:

- Bearing loads:
  - top hinge: 2710 N
  - bottom hinge: 2890 N
- The following values are to be observed with all window systems:
  - width/height ratio $Q_{B/H}$: ≤ 1,5
  - sash size $H_{max}$: ≤ 3 m²
  - glass deduction dim. CG: ≥ 28 mm
  - profile weight PG: ≤ 3,25 kg/m

* The application diagrams are generated according to IFT guidelines.

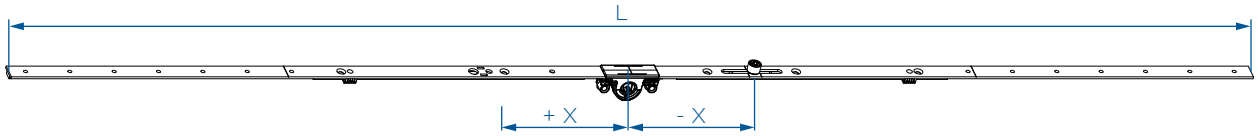



# Product portfolio

Individual products
Detailed information

# T&T ESPAGNOLETTE M

Centered / variable handle height




## Backset 14,5 mm

| SRH | HH | L | X | X | MS | | | PACK. | MATERIAL |
|---|---|---|---|---|---|---|---|---|---|
| 420 - 660 [1] | 210 - 360 | 380 | • | • | • | • | • | 10 | 1083117 |
| 600 - 1000 | 300 - 500 | 720 | -111 | • | + 38,5 | 1 | 2 | 10 | 1088473 |
| 900 - 1400 | 450 - 700 | 1120 | -111 | • | + 99,5 | 1 | 5 | 10 | 1098964 |
| 1401 - 1800 | 701 - 900 | 1520 | - 111 | • | + 99,5 | 1 | 7 | 10 | 1098965 |
| 1601 - 2000 | 801 - 1000 | 1720 | - 311 | + 309 | -121,5 | 2 | 8 | 10 | 1098966 |
| 2001 - 2400 | 1001 - 1200 | 2120 | - 311 | + 309 | - 121,5 | 2 | 10 | 10 | 1098967 |

| SRH | HH | L | X | X | X | X | MS | | | PACK. | MATERIAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 900 - 1400 | 450 - 700 | 1120 | • | -211 | + 209 | • | +99,5 | 2 | 6 | 10 | 1098973 |
| 1401 - 1800 | 701 - 900 | 1520 | • | -211 | + 209 | • | +99,5 | 2 | 8 | 10 | 1098974 |
| 1601 - 2000 | 801 - 1000 | 1720 | • | - 311 | + 109 | + 559 | -121,5 | 3 | 9 | 10 | 1098975 |
| 2001 - 2400 | 1001 - 1200 | 2120 | -631 | - 311 | + 309 | + 629 | -121,5 | 4 | 12 | 10 | 1098976 |

| SRH | HH | L | X | X | MS | | | PACK. | MATERIAL |
|---|---|---|---|---|---|---|---|---|---|
| 600 - 1000 | 300 - 500 | 720 | -111 | • | + 38,5 | 1 | 2 | 10 | 1101035 |
| 900 - 1400 | 450 - 700 | 1120 | -111 | • | + 99,5 | 1 | 5 | 10 | 1101036 |
| 1401 - 1800 | 701 - 900 | 1520 | - 111 | • | + 99,5 | 1 | 7 | 10 | 1101037 |
| 1601 - 2000 | 801 - 1000 | 1720 | - 311 | + 309 | -121,5 | 2 | 8 | 10 | 1101038 |
| 2001 - 2400 | 1001 - 1200 | 2120 | - 311 | + 309 | - 121,5 | 2 | 10 | 10 | 1101039 |

| SRH | HH | L | X | X | X | X | MS | | | PACK. | MATERIAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 900 - 1400 | 450 - 700 | 1120 | • | - 211 | + 209 | • | + 99,5 | 2 | 6 | 10 | 1105851 |
| 1401 - 1800 | 701 - 900 | 1520 | • | - 211 | + 209 | • | + 99,5 | 2 | 8 | 10 | 1105852 |
| 1601 - 2000 | 801 - 1000 | 1720 | • | - 311 | + 109 | + 559 | - 121,5 | 3 | 9 | 10 | 1105853 |
| 2001 - 2400 | 1001 - 1200 | 2120 | -631 | - 311 | + 309 | + 629 | - 121,5 | 4 | 12 | 10 | 1105854 |

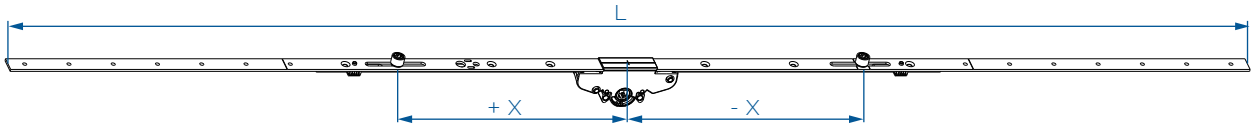
## Backset 7,5 mm

| SRH | HH | L | X | X | MS | | | PACK. | MATERIAL |
|---|---|---|---|---|---|---|---|---|---|
| 470 - 820 [1] | 210 - 410 | 540 | • | • | • | • | • | 10 | 1083123 |
| 600 - 1000 [1] | 300 - 500 | 720 | -111 | • | • | 1 | 2 | 10 | 1083124 |
| 900 - 1400 | 450 - 700 | 1120 | -111 | • | + 99,5 | 1 | 5 | 10 | 1083125 |
| 1401 - 1800 | 701 - 900 | 1520 | - 111 | • | + 99,5 | 1 | 7 | 10 | 1083126 |
| 1601 - 2000 | 801 - 1000 | 1720 | - 311 | + 309 | - 121,5 | 2 | 8 | 10 | 1083127 |
| 2001 - 2400 | 1001 - 1200 | 2120 | - 311 | + 309 | - 121,5 | 2 | 10 | 10 | 1083128 |

MISHANDLING DEVICE NOT AVAILABLE

# T&T ESPAGNOLETTE M - LARGER BACKSETS

Centered / variable handle height




## Backset 25 mm

| SRH | HH | L | X | X | X | X | MS | | | PACK. | MATERIAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 420 - 660 [1] | 210 - 360 | 380 | • | • | • | • | • | • | • | 6 | 1104484 |
| 600 - 1000 | 300 - 500 | 720 | • | • | -111 | • | +38,5 | 1 | 2 | 6 | 1104485 |
| 900 - 1400 | 450 - 700 | 1120 | • | +209 | -211 | • | +99,5 | 2 | 6 | 6 | 1104486 |
| 1401 - 1800 | 701 - 900 | 1520 | • | +209 | -211 | • | +99,5 | 2 | 8 | 6 | 1104487 |
| 1601 - 2000 | 801 - 1000 | 1720 | +559 | +109 | -311 | • | -121,5 | 3 | 9 | 6 | 1104488 |
| 2001 - 2400 | 1001 - 1200 | 2120 | +629 | + 309 | -311 | - 631 | -121,5 | 4 | 12 | 6 | 1104489 |

## Backset 30 mm

| SRH | HH | L | X | X | X | X | MS | | | PACK. | MATERIAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 420 - 660 [1] | 210 - 360 | 380 | • | • | • | • | • | • | • | 6 | 1107647 |
| 600 - 1000 | 300 - 500 | 720 | • | • | -111 | • | +38,5 | 1 | 2 | 6 | 1107648 |
| 900 - 1400 | 450 - 700 | 1120 | • | +209 | -211 | • | +99,5 | 2 | 6 | 6 | 1107649 |
| 1401 - 1800 | 701 - 900 | 1520 | • | +209 | -211 | • | +99,5 | 2 | 8 | 6 | 1107650 |
| 1601 - 2000 | 801 - 1000 | 1720 | +559 | +109 | -311 | • | -121,5 | 3 | 9 | 6 | 1107651 |
| 2001 - 2400 | 1001 - 1200 | 2120 | +629 | + 309 | -311 | - 631 | -121,5 | 4 | 12 | 6 | 1107652 |

## Backset 35 mm

| SRH | HH | L | X | X | X | X | MS | | | PACK. | MATERIAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 420 - 660 [1] | 210 - 360 | 380 | • | • | • | • | • | • | • | 6 | 1107653 |
| 600 - 1000 | 300 - 500 | 720 | • | • | -111 | • | +38,5 | 1 | 2 | 6 | 1107654 |
| 900 - 1400 | 450 - 700 | 1120 | • | +209 | -211 | • | +99,5 | 2 | 6 | 6 | 1107655 |
| 1401 - 1800 | 701 - 900 | 1520 | • | +209 | -211 | • | +99,5 | 2 | 8 | 6 | 1107656 |
| 1601 - 2000 | 801 - 1000 | 1720 | +559 | +109 | -311 | • | -121,5 | 3 | 9 | 6 | 1107657 |
| 2001 - 2400 | 1001 - 1200 | 2120 | +629 | + 309 | -311 | - 631 | -121,5 | 4 | 12 | 6 | 1107658 |

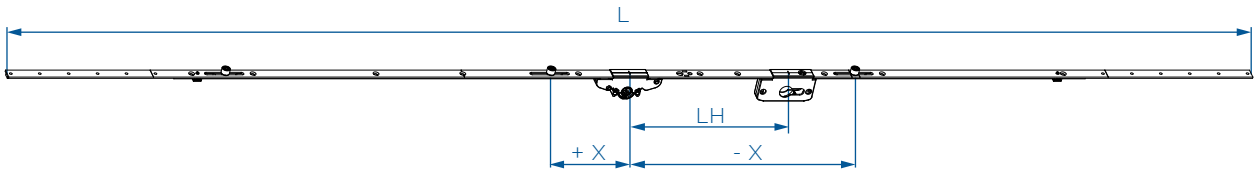
## Backset 45 mm

| SRH | HH | L | X | X | X | X | MS | | | PACK. | MATERIAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 420 - 660 [1] | 210 - 360 | 380 | • | • | • | • | • | • | • | 6 | 1104490 |
| 600 - 1000 | 300 - 500 | 720 | • | • | -111 | • | +38,5 | 1 | 2 | 6 | 1104491 |
| 900 - 1400 | 450 - 700 | 1120 | • | +209 | -211 | • | +99,5 | 2 | 6 | 6 | 1104492 |
| 1401 - 1800 | 701 - 900 | 1520 | • | +209 | -211 | • | +99,5 | 2 | 8 | 6 | 1104493 |
| 1601 - 2000 | 801 - 1000 | 1720 | +559 | +109 | -311 | • | -121,5 | 3 | 9 | 6 | 1104494 |
| 2001 - 2400 | 1001 - 1200 | 2120 | +629 | + 309 | -311 | - 631 | -121,5 | 4 | 12 | 6 | 1104495 |

[1] MISHANDLING DEVICE NOT AVAILABLE

# T&T ESPAGNOLETTE M - LARGER BACKSETS + LOCKABLE

Centered / variable handle height




## Backset 25 mm

| SRH | HH | L | X | X | X | X | MS | LH | | | PACK. | MATERIAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1601 - 2000 | 801 - 1000 | 1720 | +559 | +109 | -311 | • | -121,5 | 220 | 3 | 10 | 6 | 1104477 |

## Backset 30 mm

| SRH | HH | L | X | X | X | X | MS | LH | | | PACK. | MATERIAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1601 - 2000 | 801 - 1000 | 1720 | +559 | +109 | -311 | • | -121,5 | 220 | 3 | 10 | 6 | 1107659 |

## Backset 35 mm

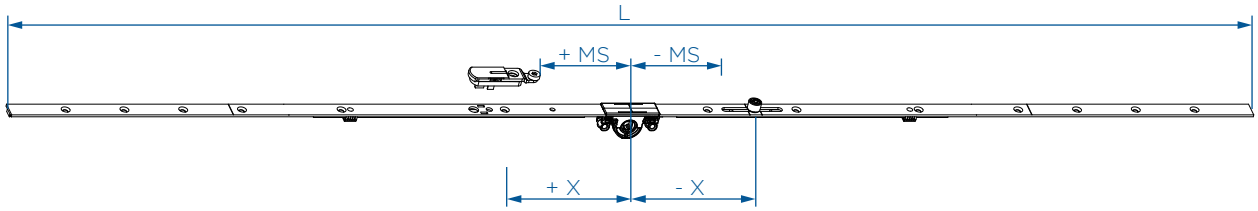
| SRH | HH | L | X | X | X | X | MS | LH | | | PACK. | MATERIAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1601 - 2000 | 801 - 1000 | 1720 | +559 | +109 | -311 | • | -121,5 | 220 | 3 | 10 | 6 | 1107662 |

## Backset 45 mm

| SRH | HH | L | X | X | X | X | MS | LH | | | PACK. | MATERIAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1601 - 2000 | 801 - 1000 | 1720 | +559 | +109 | -311 | • | -121,5 | 220 | 3 | 10 | 6 | 1104482 |

# ESPAGNOLETTE M

Centered / variable handle height




## Backset 14,5mm

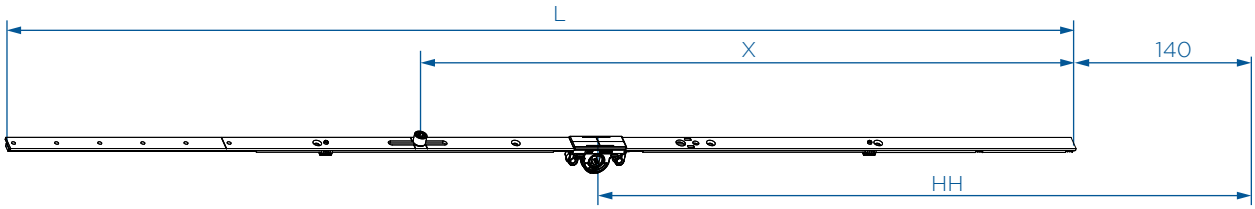
| SRH | HH | L | X | X | X | X | MS | | | PACK. | MATERIAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 180 - 250 [1)2)] | 90 - 125 | 180 | • | - 65 | • | • | • | 1 | 2 | 20 | 1083163 |
| 251 - 500 [1)] | 126 - 250 | 500 | • | - 76 | • | • | • | 1 | 6 | 10 | 1083164 |
| 501 - 900 | 251 - 450 | 900 | • | - 201 | + 199 | • | - 128,5 | 2 | 12 | 10 | 1083165 |
| 901 - 1400 | 451 - 700 | 1400 | • | - 401 | + 112 | + 399 | - 128,5 | 3 | 16 | 10 | 1083166 |
| 1401 - 1900 | 701 - 950 | 1900 | - 651 | - 251 | + 249 | + 649 | + 89,5 | 4 | 20 | 10 | 1083167 |
| 1901 - 2400 | 951 - 1200 | 2400 | - 901 | - 351 | + 349 | + 899 | + 89,5 | 4 | 20 | 10 | 1083168 |

[1)] MISHANDLING DEVICE NOT AVAILABLE

[2)] HARDWARE SHORTENING NOT POSSIBLE

# T&T ESPAGNOLETTE KV

Fixed handle height




## Backset 14,5 mm

| SRH | HH | L | X | X | MS | | | PACK. | MATERIAL |
|---|---|---|---|---|---|---|---|---|---|
| 320 - 460 [1] [3] | 120 | 320 | • | • | • | • | 1 | 10 | 1083081 |
| 320 - 460 [1] [2] [4] | 120 | 320 | • | • | • | • | 2 | 10 | 1105430 |
| 461 - 600 [5] | 170 | 410 | • | • | 168 | • | 1 | 10 | 1118431 |
| 601 - 800 | 263 | 520 | • | • | 176 | • | 1 | 10 | 1115131 |
| 801 - 1000 | 413 | 720 | • | • | 145 | • | 3 | 10 | 1115132 |
| 801 - 1000 | 413 | 720 | 389 | • | 145 | 1 | 3 | 10 | 1115133 |
| 1001 - 1200 | 513 | 920 | 539 | • | 244 | 1 | 4 | 10 | 1115134 |
| 1201 - 1400 | 563 | 1120 | 539 | • | 244 | 1 | 6 | 10 | 1115135 |
| 1401 - 1600 | 563 | 1320 | 539 | • | 244 | 1 | 7 | 10 | 1115136 |
| 1601 - 1800 | 563 | 1520 | 539 | • | 244 | 1 | 8 | 10 | 1115137 |
| 1601 - 1800 | 1000 | 1520 | 539 | • | 244 | 1 | 8 | 10 | 1115167 |
| 1801 - 2000 | 1000 | 1720 | 1209 | 539 | 977 | 2 | 11 | 10 | 1115138 |
| 2001 - 2200 | 1000 | 1920 | 1209 | 539 | 977 | 2 | 12 | 10 | 1115139 |
| 2201 - 2400 | 1000 | 2120 | 1209 | 539 | 977 | 2 | 13 | 10 | 1115140 |

| SRH | HH | L | X | X | MS | | | PACK. | MATERIAL |
|---|---|---|---|---|---|---|---|---|---|
| 801–1000 | 413 | 720 | 389 | • | 145 | 1 | 3 | 10 | 1142916 |
| 1001–1200 | 513 | 920 | 539 | • | 244 | 1 | 4 | 10 | 1142919 |
| 1201–1400 | 563 | 1120 | 539 | • | 244 | 1 | 6 | 10 | 1142921 |
| 1401–1600 | 563 | 1320 | 539 | • | 244 | 1 | 7 | 10 | 1142922 |
| 1601–1800 | 563 | 1520 | 539 | • | 244 | 1 | 8 | 10 | 1142923 |
| 1601–1800 | 1000 | 1520 | 539 | • | 244 | 1 | 8 | 10 | 1142924 |
| 1801–2000 | 1000 | 1720 | 1209 | 539 | 977 | 2 | 11 | 10 | 1142925 |
| 2001–2200 | 1000 | 1920 | 1209 | 539 | 977 | 2 | 12 | 10 | 1142926 |
| 2201–2400 | 1000 | 2120 | 1209 | 539 | 977 | 2 | 13 | 10 | 1142927 |

[1] MISHANDLING DEVICE NOT AVAILABLE

[2] WITH INTEGRATED CORNER DRIVE 1 RS

[3] SIDE TILT - T&T

[4] BOTTOM TILT - T&Ti

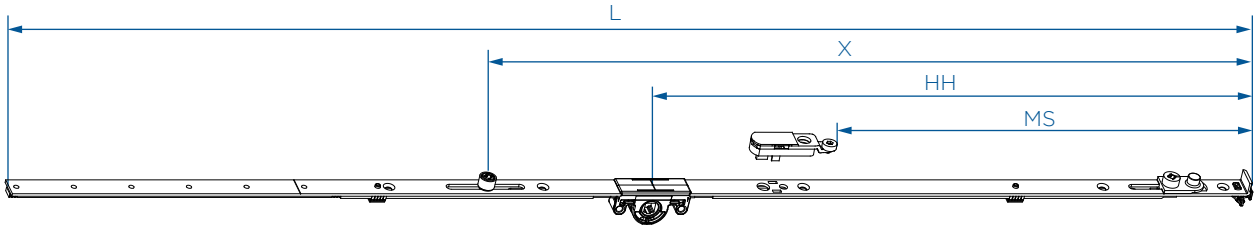
[5] MUST USE SHORT CORNER DRIVE ON BOTTOM

* T&T = WITH T&T LOCK BOLT

* T&Ti = WITH CORNER DRIVE 1 RS

# T&T ESPAGNOLETTE

Fixed handle height




## Backset 14,5 mm

| SRH | HH | L | X | X | MS | | | PACK. | MATERIAL |
|---|---|---|---|---|---|---|---|---|---|
| 320 - 460 [1] | 120 | 320 | • | • | • | • | 1* (0) | 10 | 1083081 |
| 461 - 600 | 170 | 460 | • | • | 219,5 | • | 3* (2) | 10 | 1083082 |
| 601 - 800 | 263 | 660 | • | • | 134,5 | • | 4* (3) | 10 | 1083083 |
| 801 - 1000 | 413 | 860 | • | • | 284,5 | • | 5* (4) | 10 | 1083084 |
| 801 - 1000 | 413 | 860 | 529 | • | 284,5 | 1 | 5* (4) | 10 | 1083085 |
| 1001 - 1200 | 513 | 1060 | 679 | • | 384,5 | 1 | 6* (5) | 10 | 1083086 |
| 1201 - 1400 | 563 | 1260 | 679 | • | 384,5 | 1 | 8* (7) | 10 | 1083087 |
| 1401 - 1600 | 563 | 1460 | 679 | • | 384,5 | 1 | 9* (8) | 10 | 1083088 |
| 1601 - 1800 | 563 | 1660 | 679 | • | 384,5 | 1 | 10* (9) | 10 | 1083089 |
| 1601 - 1800 | 1000 | 1660 | 679 | • | 384,5 | 1 | 10* (9) | 10 | 1083090 |
| 1801 - 2000 | 1000 | 1860 | 1349 | 679 | 1117,5 | 2 | 13* (12) | 10 | 1083091 |
| 2001 - 2200 | 1000 | 2060 | 1349 | 679 | 1117,5 | 2 | 14* (13) | 10 | 1083092 |
| 2201 - 2400 | 1000 | 2260 | 1349 | 679 | 1117,5 | 2 | 15* (14) | 10 | 1083093 |

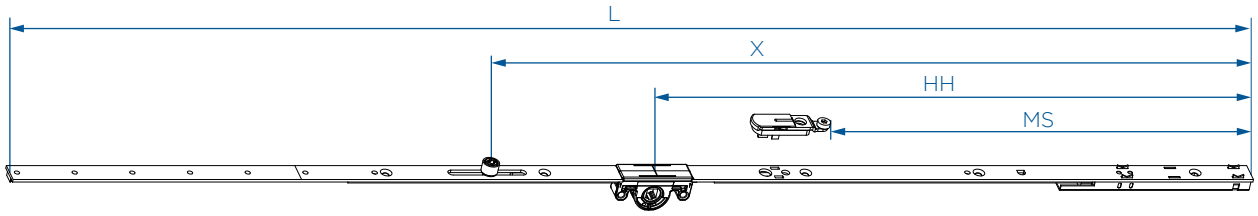
[1] MISHANDLING DEVICE NOT AVAILABLE

* WITHOUT THE USE OF CENTER LOCK

(X) WITH THE USE OF CENTER LOCK

# REVERSE ACTION ESPAGNOLETTE

Fixed handle height

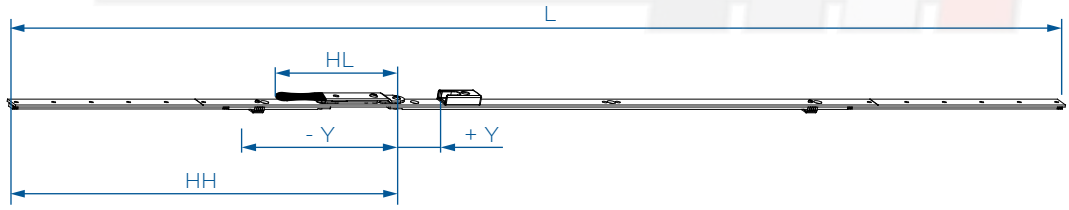



## Backset 14,5 mm

| SRH | HH | L | X | X | MS | | | PACK. | MATERIAL |
|---|---|---|---|---|---|---|---|---|---|
| 440 - 600 | 170 | 460 | • | • | • | • | 2 | 10 | 1105363 |
| 601 - 800 | 263 | 660 | • | • | 134,5 | • | 4 | 10 | 1105364 |
| 801 - 1000 | 413 | 860 | 529 | • | 284,5 | 1 | 5 | 10 | 1105365 |
| 1001 - 1200 | 513 | 1060 | 679 | • | 384,5 | 1 | 6 | 10 | 1105366 |
| 1201 - 1400 | 563 | 1260 | 679 | • | 384,5 | 1 | 8 | 10 | 1105367 |
| 1401 - 1600 | 563 | 1460 | 679 | • | 384,5 | 1 | 8 | 10 | 1105368 |
| 1601 - 1800 | 563 | 1660 | 679 | 1349 | 384,5 | 2 | 10 | 10 | 1105369 |
| 1801 - 2000 | 1000 | 1860 | 679 | 1349 | 384,5 | 2 | 12 | 10 | 1105370 |
| 2001 - 2200 | 1000 | 2060 | 679 | 1349 | 384,5 | 2 | 13 | 10 | 1105371 |
| 2201 - 2400 | 1000 | 2260 | 679 | 1349 | 384,5 | 2 | 14 | 10 | 1105372 |

# FRENCH WINDOW ESPAGNOLETTE M

Centered / variable handle height




| SRH | HH | L | Y [3] | Y | Y | Y [3] | | HL | PACK. | BACKSET [2] | MATERIAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 500 - 680 [1] | 290-380 | 400 | • | • | • | • | 2 | 130 | 10 | 14,5 | 1098116 |
| 600 - 1000 [1] | 387-586 | 720 | • | - 189,5 | • | • | 3 | 130 | 10 | 14,5 | 1098120 |
| 800 - 1000 [1] | 587-686 | 720 | • | - 289,5 | • | • | 3 | 130 | 10 | 7,5 | 1098121 |
| 900 - 1400 | 350-550 | 1120 | • | + 61,5 | • | • | 4 | 130 | 10 | 14,5/7,5 | 1098122 |
| 900 - 1400 | 350-550 | 1120 | • | - 178,5 | + 241,5 | • | 4 | 130 | 10 | 14,5 | 1099308 |
| 1401 - 1800* | 350-550 | 1520 | + 161,5 | + 261,5 | • | + 581,5 | 6 | 130 | 10 | 14,5/7,5 | 1098123 |
| 1601 - 2000* | 350-550 | 1720 | + 581,5 | + 161,5 | + 781,5 | + 1031,5 | 8 | 130 | 10 | 14,5/7,5 | 1098124 |
| 2001 - 2400* | 350-550 | 2120 | + 41,5 | + 361,5 | + 981,5 | + 1301,5 | 10 | 130 | 10 | 14,5/7,5 | 1098125 |

[1] MISHANDLING DEVICE NOT AVAILABLE

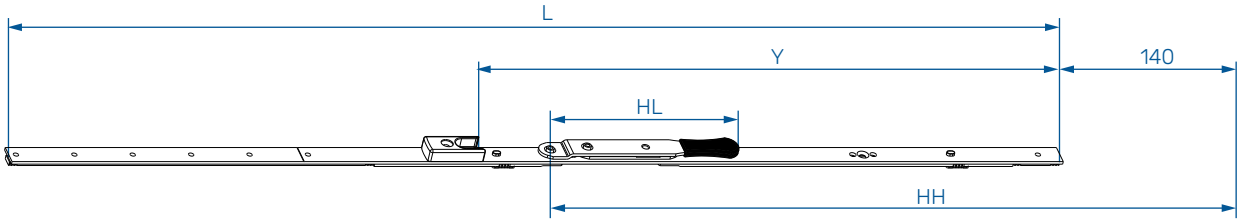
[2] T&T ESPAGNOLETTE M BACKSET COMPATIBLE

[3] FOR ADDITIONAL LOCKING CAM - INSTALL STRIKER 1100213

* FR. WIN. ESPAGNOLETTE BULLET CATCH POSSIBLE

# FRENCH WINDOW ESPAGNOLETTE KV

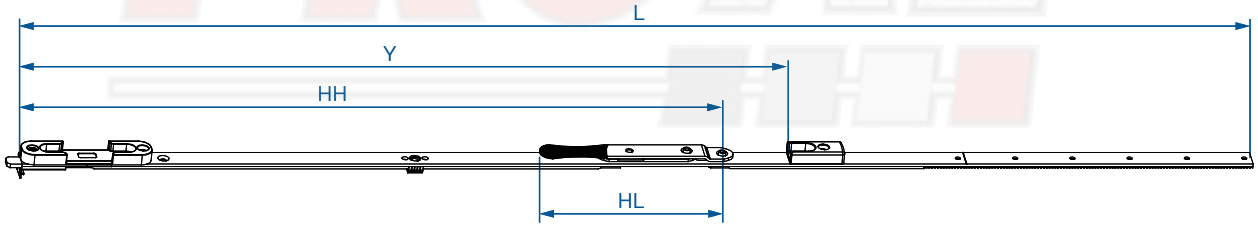
## Fixed handle height




| SRH | HH | L | Y | Y | | HL | PACK. | MATERIAL |
|---|---|---|---|---|---|---|---|---|
| 460–600 [1) 2)] | 230 | 410 | • | • | 2 | 130 | 10 | 1118420 |
| 601–800 [2)] | 335 | 520 | • | • | 2 | 130 | 10 | 1118421 |
| 801–1000 | 490 | 720 | 397,5 | • | 3 | 130 | 10 | 1118423 |
| 1001–1200 | 335 | 920 | 547,5 | • | 4 | 130 | 10 | 1118424 |
| 1201–1400 | 335 | 1120 | 547,5 | • | 6 | 130 | 10 | 1118425 |
| 1401–1600 | 335 | 1320 | 547,5 | • | 7 | 130 | 10 | 1118426 |
| 1601–1800 • | 335 | 1520 | 547,5 | • | 8 | 130 | 10 | 1118427 |
| 1801–2000 • | 640 | 1720 | 547,5 | 1217,5 | 11 | 130 | 10 | 1118428 |
| 2001–2200 • | 640 | 1920 | 547,5 | 1217,5 | 12 | 130 | 10 | 1118429 |
| 2201–2400 • | 640 | 2120 | 547,5 | 1217,5 | 13 | 130 | 10 | 1118430 |

# FRENCH WINDOW ESPAGNOLETTE T&T

## Fixed handle height




| SRH | HH | L | Y | Y | | PACK. | MATERIAL |
|---|---|---|---|---|---|---|---|
| 600–800 [2)] | 335 | 660 | • | • | 4*(3) | 10 | 1083174 |
| 801–1000 | 490 | 860 | 536,5 | • | 4*(3) | 10 | 1083175 |
| 1001–1200 | 335 | 1060 | 687,5 | • | 5*(4) | 10 | 1083176 |
| 1201–1400 | 335 | 1260 | 687,5 | • | 8*(7) | 10 | 1083177 |
| 1401–1600 | 335 | 1460 | 687,5 | • | 8*(7) | 10 | 1083178 |
| 1601–1800 • | 335 | 1660 | 687,5 | • | 9*(8) | 10 | 1083179 |
| 1801–2000 • | 640 | 1860 | 687,5 | 1357,5 | 10*(9) | 10 | 1083180 |
| 2001–2200 • | 640 | 2060 | 687,5 | 1357,5 | 11* (10) | 10 | 1083181 |
| 2201–2400 • | 640 | 2260 | 687,5 | 1357,5 | 12* (11) | 10 | 1083182 |

[1)] MUST USE SHORT CORNER DRIVE ON BOTTOM

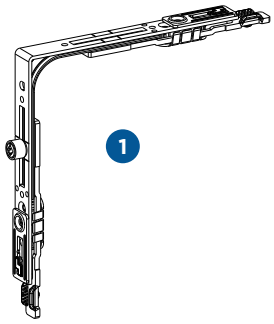
[2)] MISHANDLING DEVICE NOT AVAILABLE

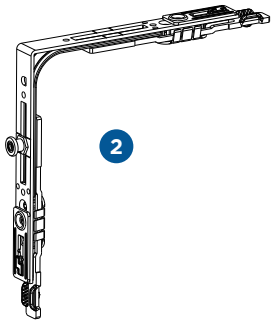
• POSSIBLE FR. WIN. ESPAGNOLETTE BULLET CATCH

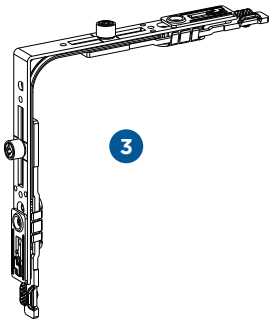
* WITHOUT THE USE OF CENTER LOCK

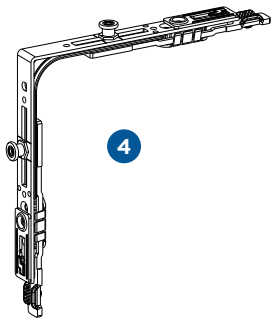
(X) WITH THE USE OF CENTER LOCK

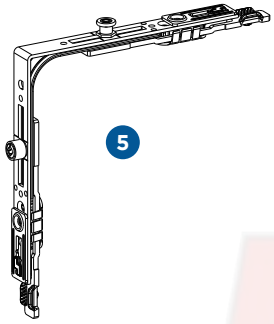
# CORNER DRIVE

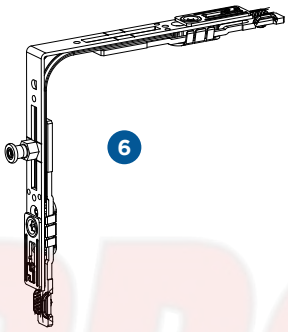

1

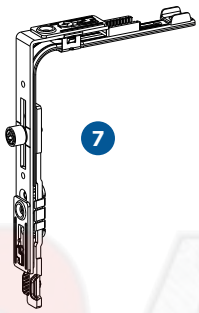

2


3


4

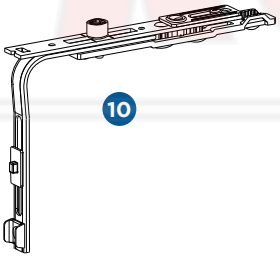

5

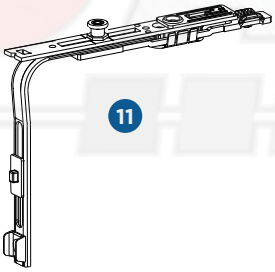

6

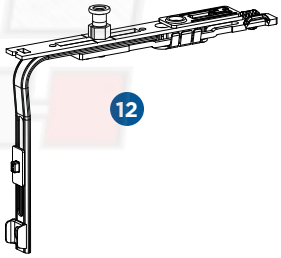

7

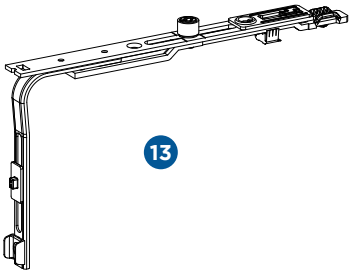

8

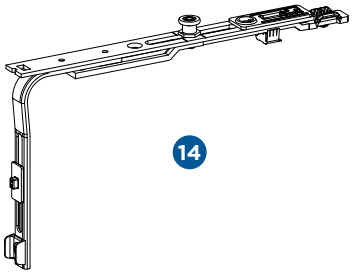

9

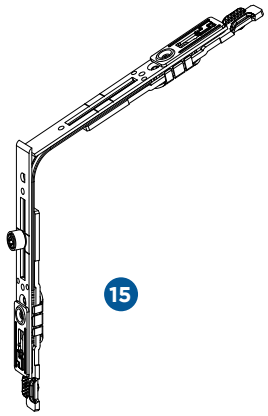

10


11


12


13

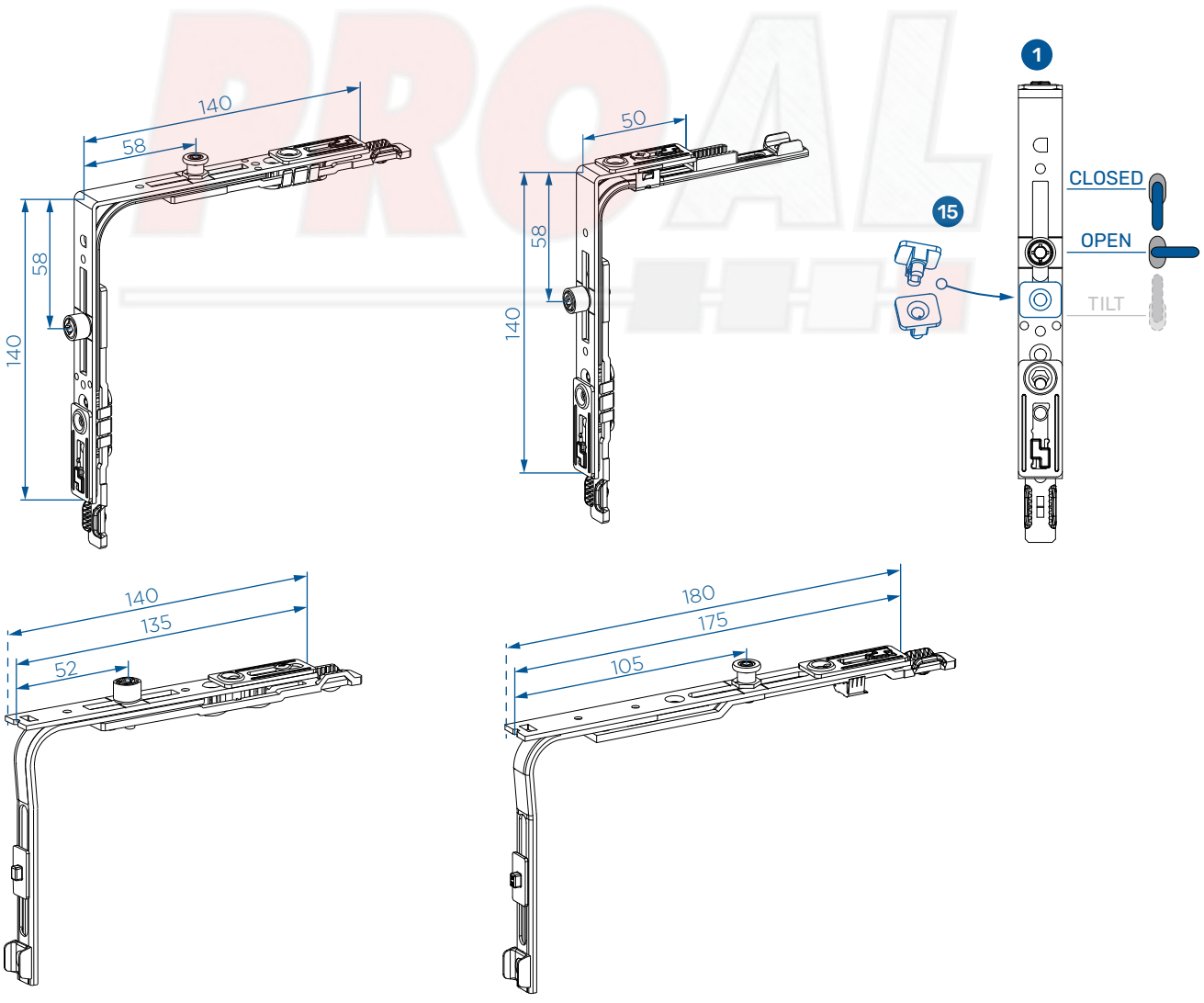

14


15


15

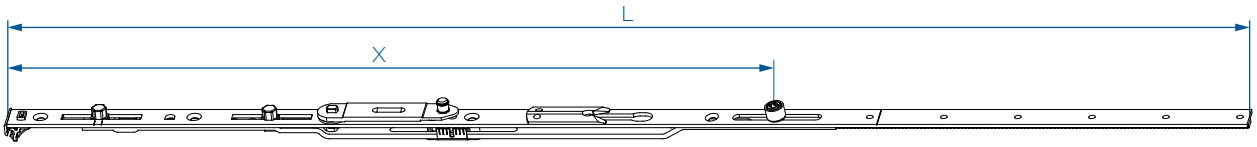
# CORNER DRIVE

| TYPE | DESCRIPTION | CAM | | | | PACK. | MATERIAL |
|---|---|---|---|---|---|---|---|
| 1 | Corner drive | 1 **R** | 1 | • | 4 | 10 | 1103158 |
| 2 | Corner drive | 1 **RS** | 1 | • | 4 | 10 | 1100983 |
| 3 | Corner drive | 2 **R** | 2 | • | 4 | 10 | 1103159 |
| 4 | Corner drive | 2 **RS** | 2 | • | 4 | 10 | 1100984 |
| 5 | Corner drive | 1 **R** + 1 **RS** | 2 | • | 4 | 10 | 1100985 |
| 6* | Corner drive | 1 **RS LONG** | 1 | • | 4 | 10 | 1113170 |
| 7 | Short corner drive | 1 **R** | 1 | • | 3 | 10 | 1103162 |
| 8 | Short corner drive | 1 **RS** | 1 | • | 3 | 10 | 1100986 |
| 9 | Short corner drive | Shootbolt | 1 | • | 3 | 10 | 1103161 |
| 10 | Corner lock 140 | 1 **R** | 1 | • | 2 | 10 | 1103166 |
| 11 | T&Ti Corner lock 140 - SECURITY | 1 **RS** | 1 | • | 2 | 10 | 1100988 |
| 12* | T&Ti Corner lock 140 - SECURITY | 1 **RS LONG** | 1 | • | 2 | 10 | 1113402 |
| 13 | Corner lock 180 | 1 **R** | 1 | • | 2 | 10 | 1103164 |
| 14 | T&Ti Corner lock 180 - SECURITY | 1 **RS** | 1 | • | 2 | 10 | 1100987 |
| 15 | Movement restrictor 90° for corner drive | • | • | • | 1 | 100 | 1142599 |




* FOR LOW THRESHOLD - USE IN COMBINATION WITH T&TI STRIKER **1116153**

# SASH-STAY GUIDE




## Turn & tilt

| SRW | L | X | | | PACK. | MATERIAL |
|---|---|---|---|---|---|---|
| 250 - 430 [1] | 150 / 290 | • | • | 2* (1) | 10 | 1123308 |
| 411 - 610 | 250 / 470 | • | • | 3* (2) | 10 | 1083038 |
| 611 - 810 | 350 / 670 | • | • | 5* (4) | 10 | 1083039 |
| 811 - 1010 | 500 / 870 | 547 | 1 | 6* (5) | 10 | 1083040 |
| 1011 - 1210 | 500 / 1070 | 608 | 1 | 8* (7) | 10 | 1083041 |
| 1211 - 1400 | 500 / 1270 | 808 | 1 | 9* (8) | 10 | 1083042 |

| SRW | L | X | | | PACK. | MATERIAL |
|---|---|---|---|---|---|---|
| 811 - 1010 | 500 / 870 | 547 | 1 | 6* (5) | 10 | 1100978 |
| 1011 - 1210 | 500 / 1070 | 608 | 1 | 8* (7) | 10 | 1100980 |
| 1211 - 1410 | 500 / 1270 | 808 | 1 | 9* (8) | 10 | 1100981 |

## Turn only - SECOND SASH

| SRW | L | X | | | PACK. | MATERIAL |
|---|---|---|---|---|---|---|
| 410 - 610 | 250 / 470 | • | • | 3* (2) | 10 | 1105855 |
| 611 - 810 | 350 / 670 | • | • | 5* (4) | 10 | 1105856 |
| 811 - 1010 | 500 / 870 | 547 | 1 | 6* (5) | 10 | 1105857 |
| 1011 - 1211 | 350 / 670+400 | 547 | 2 | 8* (7) | 10 | 1105856 + 1102897 |
| 1211 - 1400 | 500 / 870+400 | 547 | 2 | 9* (8) | 10 | 1105857 + 1102897 |

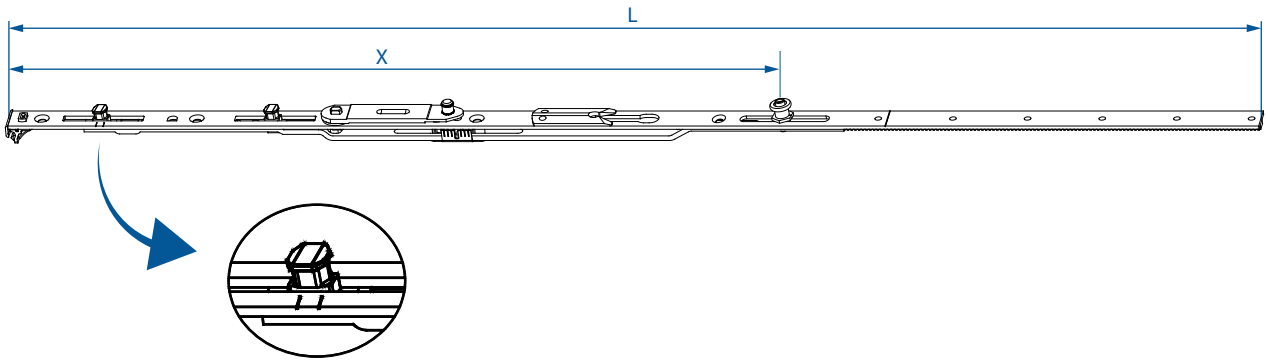
[1] SRW = 250 - 340 mm, WITH SHORT CORNER DRIVE

* WITHOUT THE USE OF CENTER LOCK

(X) WITH THE USE OF CENTER LOCK

* SRH < 500 mm, move the anti-slam device to reduce the tilt

# Sash stay guide - additional security



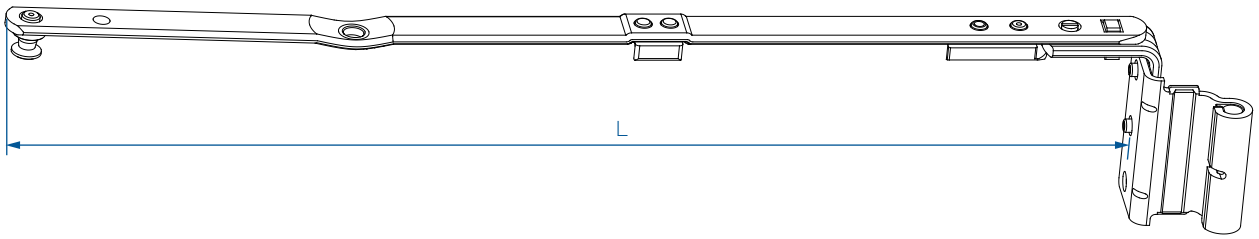

| SRW | L | X | | | PACK. | MATERIAL |
|---|---|---|---|---|---|---|
| 250–430 [1] | 150 / 290 | • | • | 2* (1) | 10 | 1144882 |
| 411–610 | 250 / 470 | • | • | 3* (2) | 10 | 1144883 |
| 611–810 | 350 / 670 | • | • | 5* (4) | 10 | 1144884 |
| 811–1010 | 500 / 870 | 547 | 1 | 6* (5) | 10 | 1144885 |
| 1011–1210 | 500 / 1070 | 608 | 1 | 8* (7) | 10 | 1144886 |
| 1211–1400 | 500 / 1270 | 808 | 1 | 9* (8) | 10 | 1144887 |

[1] SRW = 250 - 340 mm, WITH SHORT CORNER DRIVE

* WITHOUT THE USE OF CENTER LOCK

(X) WITH THE USE OF CENTER LOCK

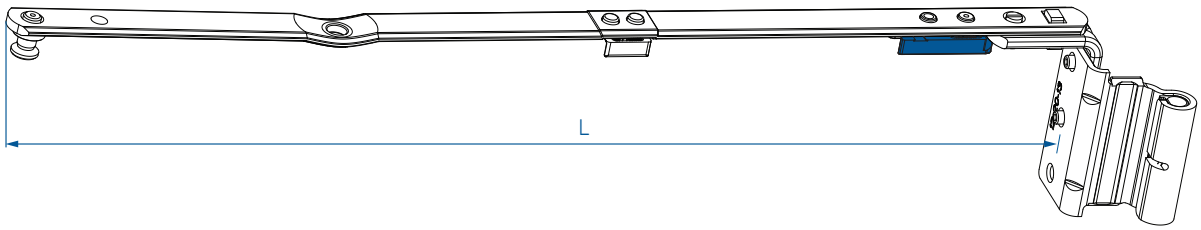
# Stay arm




| SYSTEM | SRW | L | POSITION | PACK. | MATERIAL |
|---|---|---|---|---|---|
| 12/18-9 | 250 - 430 [1] | 150 | L | 10 | 1134891 |
| | 250 - 430 [1] | 150 | R | 10 | 1134892 |
| | 410 - 610 | 250 | L | 10 | 1104742 |
| | 410 - 610 | 250 | R | 10 | 1104743 |
| | 611 - 810 | 350 | L | 10 | 1104744 |
| | 611 - 810 | 350 | R | 10 | 1104745 |
| | 811 - 1400 | 500 | L | 10 | 1104746 |
| | 811 - 1400 | 500 | R | 10 | 1104747 |
| 12/20-9 | 250 - 430 [1] | 150 | L | 10 | 1131552 |
| | 250 - 430 [1] | 150 | R | 10 | 1131553 |
| | 410 - 610 | 250 | L | 10 | 1083008 |
| | 410 - 610 | 250 | R | 10 | 1083009 |
| | 611 - 810 | 350 | L | 10 | 1083010 |
| | 611 - 810 | 350 | R | 10 | 1083011 |
| | 811 - 1400 | 500 | L | 10 | 1083012 |
| | 811 - 1400 | 500 | R | 10 | 1083013 |
| 12/18-13 | 250 - 430 [1] | 150 | L | 10 | 1140315 |
| | 250 - 430 [1] | 150 | R | 10 | 1140317 |
| | 410 - 610 | 250 | L | 10 | 1104753 |
| | 410 - 610 | 250 | R | 10 | 1104755 |
| | 611 - 810 | 350 | L | 10 | 1104756 |
| | 611 - 810 | 350 | R | 10 | 1104757 |
| | 811 - 1400 | 500 | L | 10 | 1104758 |
| | 811 - 1400 | 500 | R | 10 | 1104759 |
| 12/20-13 | 250 - 430 [1] | 150 | L | 10 | 1123306 |
| | 250 - 430 [1] | 150 | R | 10 | 1123307 |
| | 410 - 610 | 250 | L | 10 | 1083016 |
| | 410 - 610 | 250 | R | 10 | 1083017 |
| | 611 - 810 | 350 | L | 10 | 1083018 |
| | 611 - 810 | 350 | R | 10 | 1083019 |
| | 811 - 1400 | 500 | L | 10 | 1083020 |
| | 811 - 1400 | 500 | R | 10 | 1083021 |

[1] SRW = 250 - 340 mm, WITH SHORT CORNER DRIVE AND SASH STAY GUIDE 150 / 290

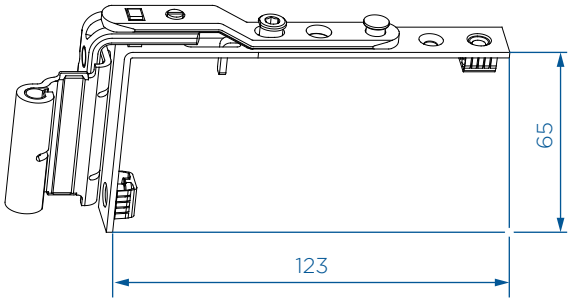
# Stay arm - additional security




| SYSTEM | SRW | L | POSITION | PACK. | MATERIAL |
|---|---|---|---|---|---|
| 12/20-13 | 250–430 [1] | 150 | L | 10 | 1144380 |
| | 250–430 [1] | 150 | R | 10 | 1144381 |
| | 410–610 | 250 | L | 10 | 1144382 |
| | 410–610 | 250 | R | 10 | 1144383 |
| | 611–810 | 350 | L | 10 | 1144384 |
| | 611–810 | 350 | R | 10 | 1144385 |
| | 811–1400 | 500 | L | 10 | 1144386 |
| | 811–1400 | 500 | R | 10 | 1144387 |

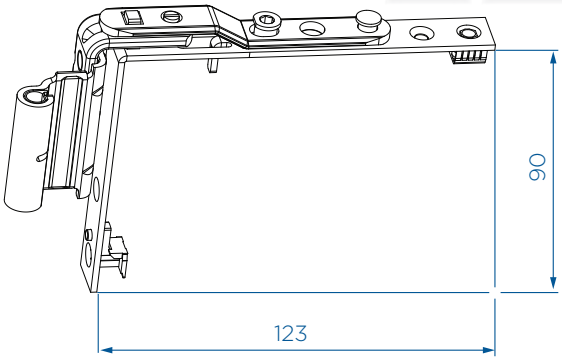
[1] SRW = 250 - 340 mm, WITH SHORT CORNER DRIVE AND SASH STAY GUIDE 150/190

# Rebate stay arm



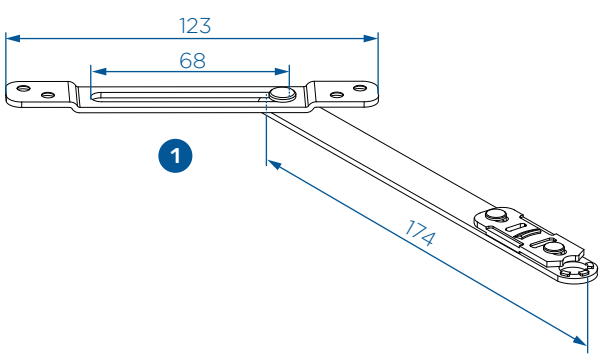

| SYSTEM | POSITION | | PACK. | MATERIAL |
|---|---|---|---|---|
| 12/18-9 | L | 5 | 40 | 1104763 |
| | R | 5 | 40 | 1104764 |
| 12/20-9 | L | 5 | 40 | 1083265 |
| | R | 5 | 40 | 1083264 |
| 12/18-13 | L | 5 | 40 | 1104765 |
| | R | 5 | 40 | 1104766 |
| 12/20-13 | L | 5 | 40 | 1083263 |
| | R | 5 | 40 | 1083262 |

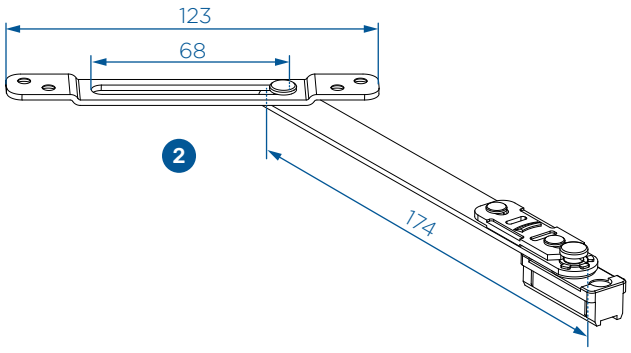
# Rebate stay arm - ALU




| SYSTEM | POSITION | | PACK. | MATERIAL |
|---|---|---|---|---|
| 12/20-9 | | 4 | 40 | 1146161 |
| | | 4 | 40 | 1146162 |

# Tilt stay



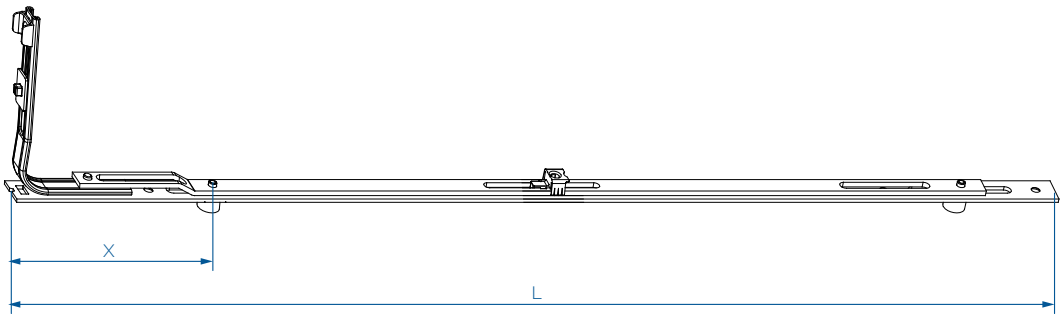




| TYPE | DESCRIPTION | | PACK. | MATERIAL |
|---|---|---|---|---|
| 1 | TILT STAY for espagnolette / center lock | 5 | 100 | 1099152 |
| 2 | TILT STAY for groove | 7 | 100 | 1099154 |

PROAL

# CENTER LOCK

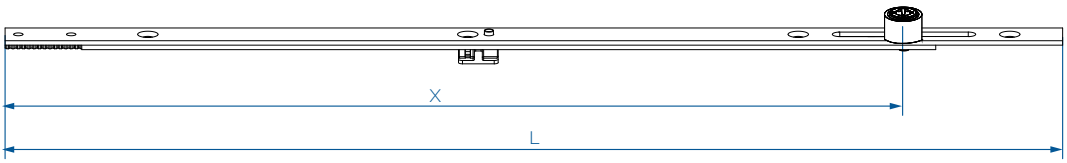
## With guide




| SRH | SRW | L | X | X | X | X | | | PACK. | MATERIAL |
|---|---|---|---|---|---|---|---|---|---|---|
| 600 - 800 | 600 - 800 | 350 | 299 | • | • | • | 1 | 4 | 10 | 1093871 |
| 801 - 1200 | 801 - 1200 | 550 | 105 | 499 | • | • | 2 | 4 | 10 | 1083058 |
| 1201 - 1600 | 1201 - 1400 | 850 | 105 | 799 | • | • | 2 | 6 | 10 | 1083059 |
| 1601 - 2200 | • | 1550 | 105 | 799 | 1499 | • | 3 | 10 | 10 | 1083060 |
| 2201 - 2400 | • | 2000 | 105 | 799 | 1499 | 1949 | 4 | 11 | 10 | 1083064 |

| SRH | SRW | L | X | X | X | X | | | PACK. | MATERIAL |
|---|---|---|---|---|---|---|---|---|---|---|
| 801 - 1200 | 801 - 1200 | 550 | 105 | 499 | • | • | 2 | 4 | 10 | 1101000 |
| 1201 - 1600 | 1201 - 1400 | 850 | 105 | 799 | • | • | 2 | 6 | 10 | 1101002 |
| 1601 - 2200 | • | 1550 | 105 | 799 | 1499 | • | 3 | 10 | 10 | 1101003 |
| 2201 - 2400 | • | 2000 | 105 | 799 | 1499 | 1949 | 4 | 11 | 10 | 1101004 |

## Without guide

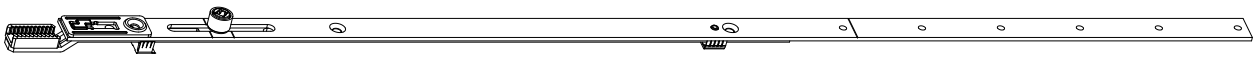



| DESCRIPTION | L | X | | | PACK. | MATERIAL |
|---|---|---|---|---|---|---|
| 400 | 400 | 339 | 1 | 4 | 10 | 1083061 |
| 600 | 600 | 539 | 1 | 4 | 10 | 1083062 |
| 600 coupling | 600 | 539 | 1 | 4 | 10 | 1102900 |

| DESCRIPTION | L | X | | | PACK. | MATERIAL |
|---|---|---|---|---|---|---|
| 200 | 200 | 139 | 1 | 2 | 10 | 1101005 |
| 400 | 400 | 339 | 1 | 4 | 10 | 1101006 |
| 400* | 400 | 339 | 1 | 4 | 10 | 1121626 |
| 600 | 600 | 539 | 1 | 4 | 10 | 1101012 |
| 200 coupling | 200 | 139 | 1 | 2 | 10 | 1101015 |
| 400 coupling | 400 | 339 | 1 | 4 | 10 | 1101016 |
| 600 coupling | 600 | 539 | 1 | 4 | 10 | 1101017 |

* FOR LOW THRESHOLD - USE IN COMBINATION WITH T&TI STRIKER **1116153**

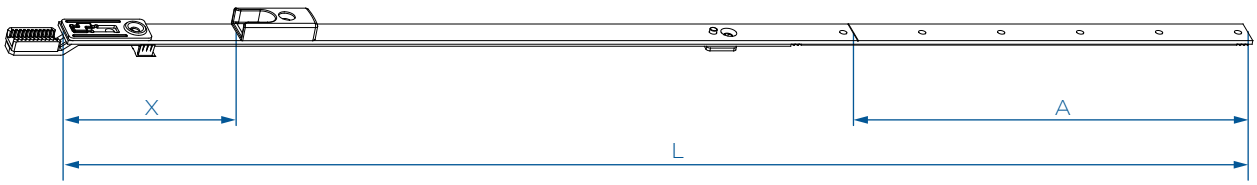
## Primary window



| DESCRIPTION | A | L | X | | | PACK. | MATERIAL |
|---|---|---|---|---|---|---|---|
| 400 | 200 | 400 | 79 | 1 | 3 | 10 | 1102897 |
| 600 | 200 | 600 | 79 | 1 | 4 | 10 | 1102898 |
| 800 | 200 | 800 | 79 | 1 | 5 | 10 | 1102899 |

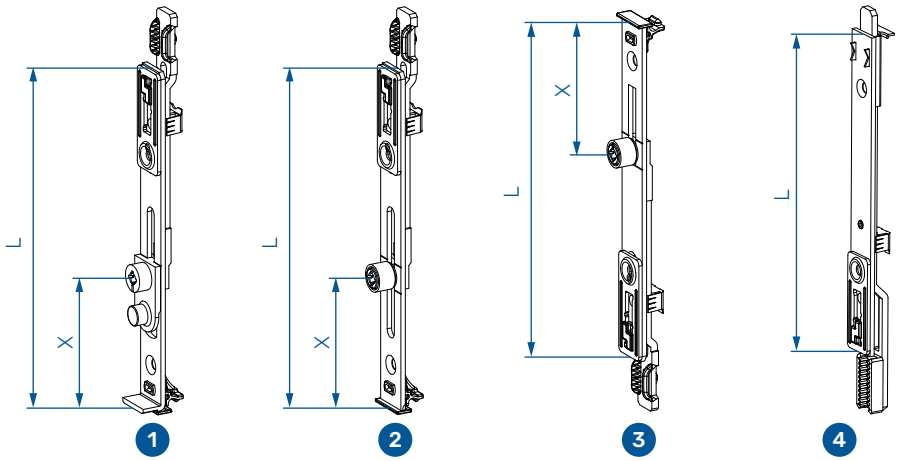
| DESCRIPTION | A | L | X | | | PACK. | MATERIAL |
|---|---|---|---|---|---|---|---|
| 400 | 200 | 400 | 79 | 1 | 3 | 10 | 1137685 |
| 600 | 200 | 600 | 79 | 1 | 4 | 10 | 1140952 |
| 800 | 200 | 800 | 79 | 1 | 5 | 10 | 1144538 |

## French window




| DESCRIPTION | A | L | X | | | PACK. | MATERIAL |
|---|---|---|---|---|---|---|---|
| 400 | 200 | 400 | 87,5 | 1 | 3 | 10 | 1105373 |
| 600 | 200 | 600 | 87,5 | 1 | 4 | 10 | 1105374 |

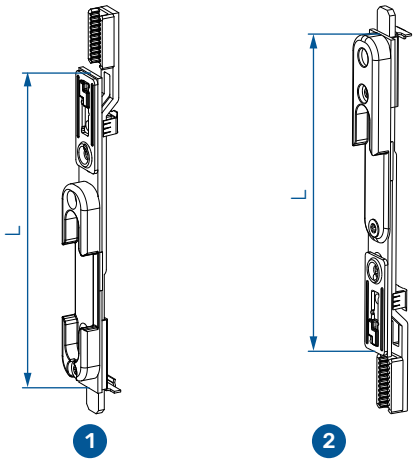
# Lock bolt




| TYPE | DESCRIPTION | L | | | X | | PACK. | MATERIAL |
|---|---|---|---|---|---|---|---|---|
| 1 | TILT LOCK BOLT < 1000 | 140 | 1 | • | • | 3* (2) | 100 | 1102388 |
| | TILT LOCK BOLT > 1001 | 140 | 1 | • | • | 3* (2) | 100 | 1102391 |
| 2 | TILT LOCK BOLT 140 | 140 | • | 1 | 53,5 | 3* (2) | 100 | 1102394 |
| 3 | TILT LOCK BOLT 140/90 | 140 | • | 1 | 53,5 | 3* (2) | 100 | 1102395 |
| 4 | EXT.FR.WIN.ESPAGNO. - 11 - TOP | 140 | • | • | • | 3* (2) | 50 | 1103211 |

* WITHOUT THE USE OF CENTER LOCK
(X) WITH THE USE OF CENTER LOCK

# French window lock bolt

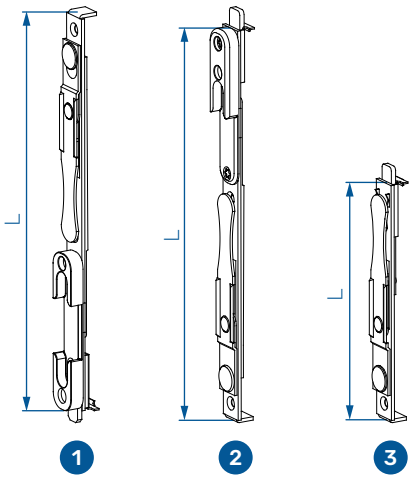



| TYPE | DESCRIPTION | L | | PACK. | MATERIAL |
|---|---|---|---|---|---|
| 1 | T&T EXT. FR. WIN. ESPAGNOLETTE M - 11 mm | 140 | 3* (2) | 50 | 1102621 |
| 2 | EXT. FR. WIN. ESPAGNOLETTE - 11 mm - TOP | 140 | 3* (2) | 50 | 1110929 |

* WITHOUT THE USE OF CENTER LOCK
(X) WITH THE USE OF CENTER LOCK

* dimensions in table are given for a stretched / straight center lock (before bending)

# OHG

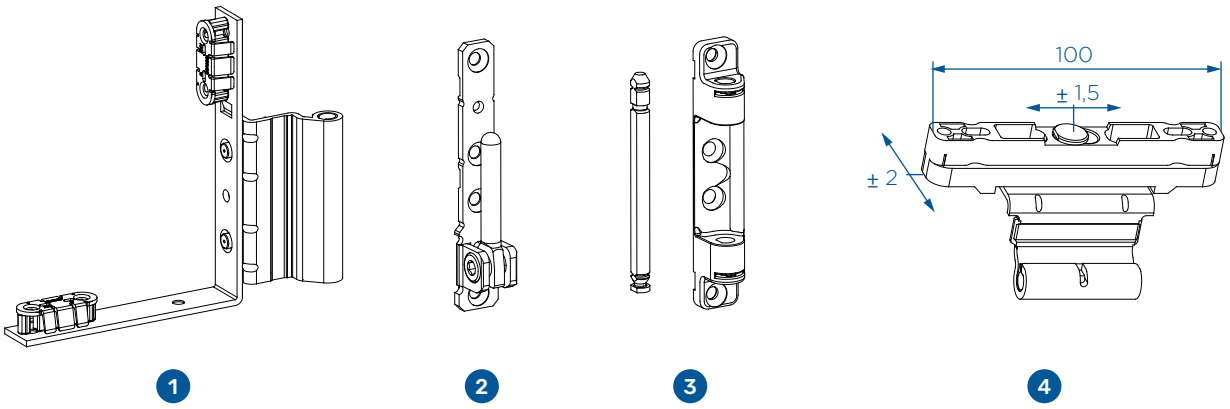



| TYPE | DESCRIPTION | L | | PACK. | MATERIAL |
|---|---|---|---|---|---|
| 1 | T&T SHOOTBOLT - BOTTOM | 230 | 3* (2) | 50 | 1083252 |
| 2 | SHOOTBOLT with STRIKER - TOP | 230 | 3* (2) | 50 | 1083253 |
| 3 | SHOOTBOLT without STRIKER - TOP | 140 | 2 | 100 | 1083254 |

* WITHOUT THE USE OF CENTER LOCK

(X) WITH THE USE OF CENTER LOCK

# HINGE SIDE




1 2 3 4

| TYPE | DESCRIPTION | POS. | | PACK. | MATERIAL |
|---|---|---|---|---|---|
| 1 | CORNER HINGE 12/18-9 | L | 8 | 40 | 1101236 |
| | | R | 8 | 40 | 1101237 |
| | CORNER HINGE 12/20-9 | L | 8 | 40 | 1101239 |
| | | R | 8 | 40 | 1101241 |
| | CORNER HINGE 12/18-13 | L | 8 | 40 | 1101242 |
| | | R | 8 | 40 | 1101243 |
| | CORNER HINGE 12/20-13 | L | 8 | 40 | 1101244 |
| | | R | 8 | 40 | 1101245 |

| TYPE | DESCRIPTION | POS. | | PACK. | MATERIAL |
|---|---|---|---|---|---|
| 2 | CORNER PIVOT REST K3 | L/R | 4 | 200 | 1083247 |

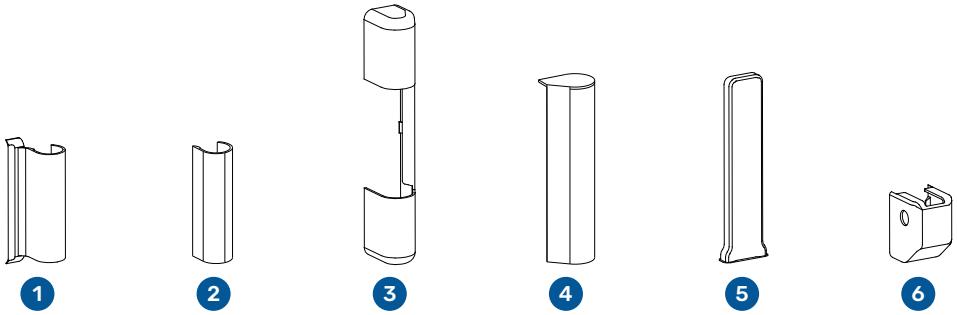
| | DESCRIPTION | POS. | | PACK. | MATERIAL |
|---|---|---|---|---|---|
| 3 | STAY BEARING WITH PIN K3 | L / R | 4 | 200 | 1083250 |

| | DESCRIPTION | | PACK. | MATERIAL |
|---|---|---|---|---|
| 4 | REBATE CENTER HINGE 12/18-9 - adjustable | 4 | 50 | 1104760 |
| | REBATE CENTER HINGE 12/20-9 - adjustable | 4 | 50 | 1083269 |
| | REBATE CENTER HINGE 12/18-13 - adjustable | 4 | 50 | 1104762 |
| | REBATE CENTER HINGE 12/20-13 - adjustable | 4 | 50 | 1083268 |

**NUMBER OF REBATE CENTER HINGES ACCORDING TO SASH REBATE WIDTH**

| TILT WINDOW - SRW | NUMBER OF HINGES |
|---|---|
| < 1200 | 2 |
| 1201 - 2200 | 3 |
| 2201 - 2400 | 4 |

# COVER CAPS



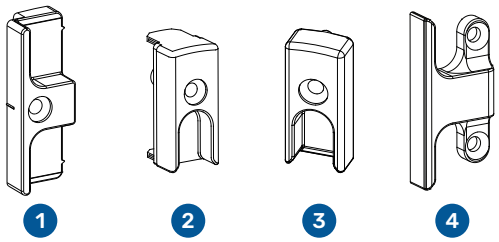

| TYPE | DESCRIPTION | RAL | POS. | PACK. | MATERIAL |
|---|---|---|---|---|---|
| 1 | COVER CAP STAY ARM | RAL9016 - White | | 400 | 1127415 |
| | | RAL8019 - Greybrown | | 400 | 1127416 |
| | | RAL9005 - Black | | 400 | 1127417 |
| | | RAL9001 - Cream White | | 400 | 1127418 |
| | | RAL7016 - Anthracite grey | | 400 | 1134364 |
| | | SILVER | | 400 | 1127425 |
| | | DARK BRONZE | | 400 | 1127424 |
| | | TITANmat | | 400 | 1127423 |
| | | GOLDmat | | 400 | 1135425 |
| 2 | COVER CAP STAY ARM 2 | RAL9016 - White | | 500 | 1127419 |
| | | RAL8019 - Greybrown | | 500 | 1127420 |
| | | RAL9005 - Black | | 500 | 1127421 |
| | | RAL9001 - Cream White | | 500 | 1127422 |
| | | RAL7016 - Anthracite grey | | 500 | 1141060 |
| | | SILVER | | 500 | 1127430 |
| | | DARK BRONZE | | 500 | 1127428 |
| | | TITANmat | | 500 | 1127429 |
| | | GOLDmat | | 500 | 1141059 |
| 3 | COVER CAP STAY BEARING | RAL9016 - White | | 100 | 1127402 |
| | | RAL8019 - Greybrown | | 100 | 1127403 |
| | | RAL9005 - Black | | 100 | 1127404 |
| | | RAL9001 - Cream White | | 100 | 1127405 |
| | | RAL7016 - Anthracite grey | | 100 | 1134361 |
| | | SILVER | | 100 | 1127412 |
| | | DARK BRONZE | | 100 | 1127410 |
| | | TITANmat | | 100 | 1127411 |
| | | GOLDmat | | 100 | 1135423 |

# COVER CAPS

| | | | | | |
|---|---|---|---|---|---|
| 4 | COVER CAP REBATE CORNER HINGE | RAL9016 - White | L | 200 | 1127493 |
| | | | R | 200 | 1127498 |
| | | RAL8019 - Greybrown | L | 200 | 1127494 |
| | | | R | 200 | 1127499 |
| | | RAL9005 - Black | L | 200 | 1127495 |
| | | | R | 200 | 1127500 |
| | | RAL9001 - Cream White | L | 200 | 1127497 |
| | | | R | 200 | 1127502 |
| | | RAL7016 - Anthracite grey | L | 200 | 1134365 |
| | | | R | 200 | 1134366 |
| | | SILVER | L | 200 | 1127496 |
| | | | R | 200 | 1127501 |
| | | DARK BRONZE | L | 200 | 1127505 |
| | | | R | 200 | 1127506 |
| | | TITANmat | L | 200 | 1127504 |
| | | | R | 200 | 1127508 |
| | | GOLDmat | L | 200 | 1135426 |
| | | | R | 200 | 1135427 |
| 5 | COVER CAP CORNER PIVOT REST - flat | RAL9016 - White | | 500 | 1127390 |
| | | RAL8019 - Greybrown | | 500 | 1127391 |
| | | RAL9005 - Black | | 500 | 1127392 |
| | | RAL9001 - Cream White | | 500 | 1127393 |
| | | RAL7016 - Anthracite grey | | 500 | 1134359 |
| | | SILVER | | 500 | 1127400 |
| | | DARK BRONZE | | 500 | 1127398 |
| | | TITANmat | | 500 | 1127399 |
| | | GOLDmat | | 500 | 1135422 |
| 6 | COVER CAP CORNER PIVOT REST | RAL9016 - White | | 300 | 1127386 |
| | | RAL8019 - Greybrown | | 300 | 1127387 |
| | | RAL9005 - Black | | 300 | 1127388 |
| | | RAL9001 - Cream White | | 300 | 1127389 |
| | | RAL7016 - Anthracite grey | | 300 | 1134358 |
| | | SILVER | | 300 | 1127394 |
| | | DARK BRONZE | | 300 | 1127395 |
| | | TITANmat | | 300 | 1127397 |
| | | GOLDmat | | 300 | 1135421 |

* COVER CAPS ''RAL'' ARE INJECTED
* COVER CAPS ''COLOR'' ARE COLORED

## Striker



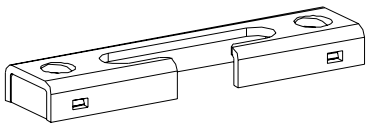

| TYPE | AXIS | PACK. | MATERIAL |
|---|---|---|---|
| 1 | 9 | 300 | 1097952 |
| | 13 | 300 | 1105495 |
| 2 | OHG | 300 | 1083207 |
| 3 | ESPAG. | 300 | 1100213 |
| 4 | ESPAG. M | 100 | 1155047 |

## T&T striker



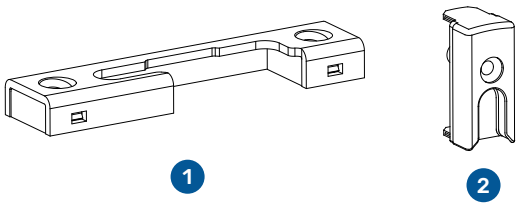
| AXIS | PACK. | MATERIAL |
|---|---|---|
| 9 | 250 | 1097951 |
| 13 | 250 | 1105496 |

## T&Ti striker



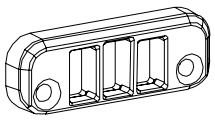
| AXIS | POS. | PACK. | MATERIAL |
|---|---|---|---|
| 9 | L | 100 | 1111000 |
| | R | 100 | 1110999 |
| 13 | L | 100 | 1110998 |
| | R | 100 | 1110997 |

## Security striker



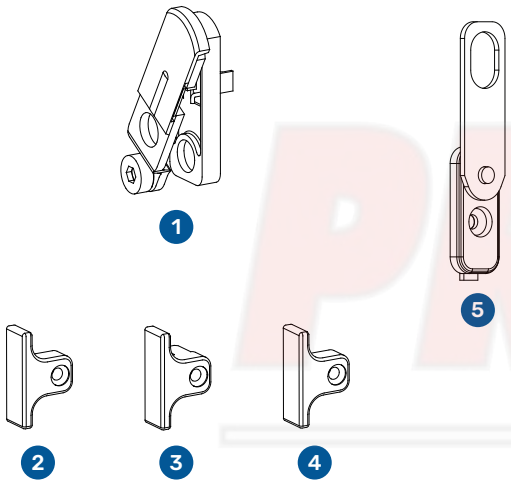

| TYPE | AXIS | POS. | PACK. | MATERIAL |
|---|---|---|---|---|
| 1 | 9 | L | 250 | 1111125 |
| | | R | 250 | 1111124 |
| | 13 | L | 250 | 1111123 |
| | | R | 250 | 1111122 |
| 2 | OHG | L / R | 300 | 1066042 |

## Striker - second sash



| AXIS | PACK. | MATERIAL |
|---|---|---|
| 9 | 300 | 1097953 |
| 13 | 300 | 1105499 |

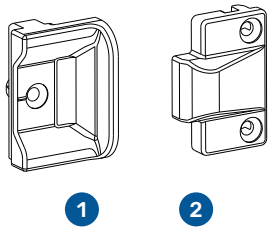
## Mishandling device




| TYPE | AXIS | PACK. | MATERIAL |
|---|---|---|---|
| 1 | SASH | 300 | 1093907 |
| 2 | 9 | 300 | 1098127 |
| | 13 | 300 | 1105500 |
| 3 | OHG | 300 | 1083293 |
| 4* | OHG ESPAG. | 300 | 1083295 |
| 5 | TURN LIMITER - TF | 200 | 1155476 |

* FOR FR. WIN. ESPAGNOLETTE SRH > 1600 mm

## Concealed center striker




| TYPE | AXIS | PACK. | MATERIAL |
|---|---|---|---|
| 1 | SASH | 300 | 1127509 |
| 2 | 9 | 500 | 1127511 |
| | 13 | 500 | 1128331 |

NUMBER OF CONCEALED CENTER STRIKERS ACCORDING TO SASH REBATE HEIGHT

| SRH | NR. OF STRIKERS |
|---|---|
| 800 - 1400 | 1 |
| 1401 - 2000 | 2 |
| 2001 - 2400 | 3 |




# ARX handles

## Handles for windows
## Detailed information

# HANDLES

The program of ARX Handles for windows is divided into three sections:

- Standard,
- Secustic - safety handle system: this program is dustinguished by higher anti-burglary safety,
- Secustic with a lock: additional security against unauthorized opening of windows.

ARX Handles for windows are suitable for installation into different thickness of the profiles. Accordingly, three spindle sizes are used:

- 32 mm,
- 37 mm,
- 42 mm.

With ARX Handles set for balcony doors, a uniform apperance of the building hardware will be provided:

- set handle / handle,
- set handle / handle for balcony door with roller shutters.

Set for balcony doors are used for profile thickness of 68-78 mm. For thicker profiles, it's necessary to use longer screws for fixing the handles.

## Certificate of Quality

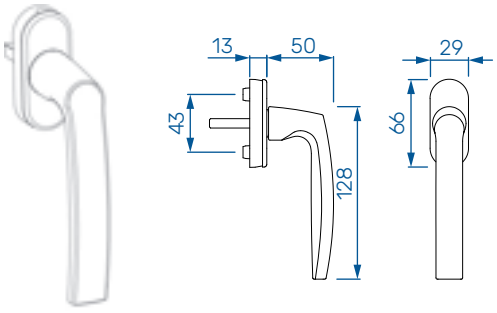



ARX handles are made of quality material (aluminium) and protected by persistent surface protection of powder coating in different colors. Quality materials, modern manufacturing processes and product testing have led ARX handles to have a long lifetime and a 10 year warranty.

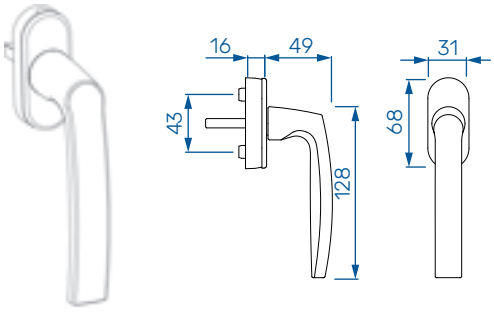



ARX handles have a quality certificate, the German Quality Assurance Institute. We are convinced that our products and services will continue to be a good guarantee for our future long-standing partnership and we look forward to further cooperation with you.

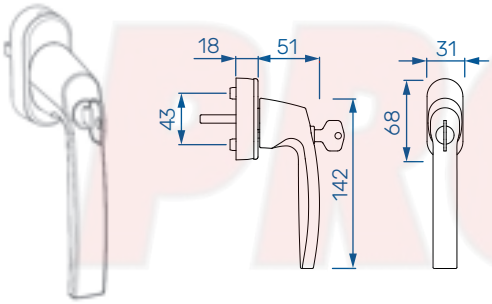
# Window handles



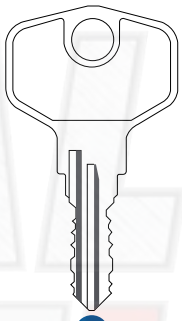

1




2



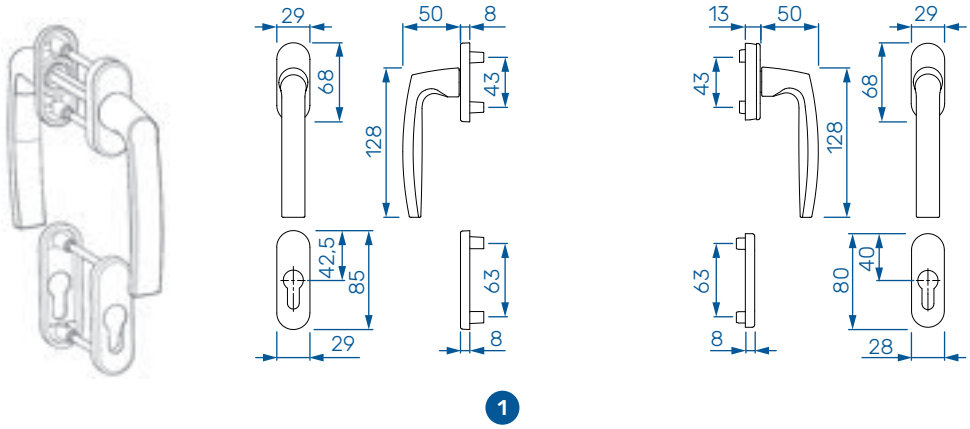

3



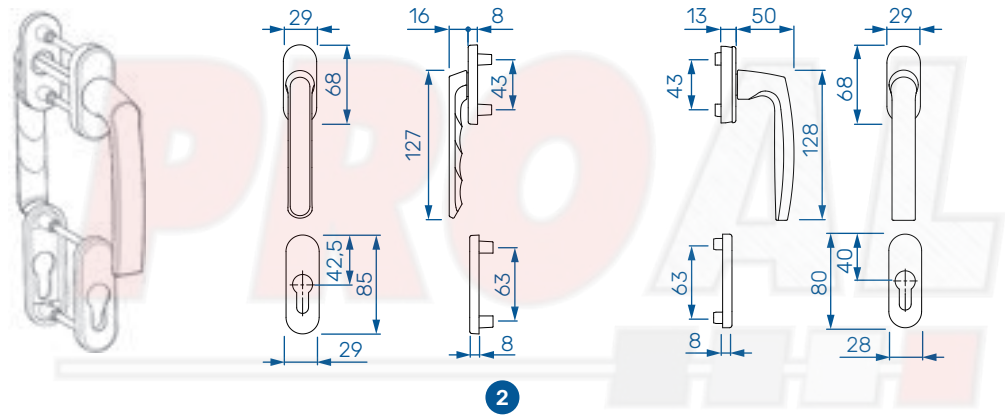
4

| TYPE | DESCRIPTION | L | COLOR | PACK | MATERIAL |
|---|---|---|---|---|---|
| 1 | STANDARD HANDLE | 32 | F4 - dark bronze | 20 | 1053207 |
| | | 37 | F1 - silver | 20 | 1053212 |
| | | 37 | F4 - dark bronze | 20 | 1053213 |
| | | 37 | F9 - titan | 20 | 1053214 |
| | | 37 | RAL 9010 - white | 20 | 1053215 |
| | | 37 | RAL 8707 - brown | 20 | 1053216 |
| | | 42 | F1 - silver | 20 | 1100839 |
| | | 42 | RAL 9010 - white | 20 | 1058068 |
| | | 42 | RAL 8707 - brown | 20 | 1058069 |
| 2 | SECUSTIC HANDLE | 37 | F1 - silver | 10 | 1053222 |
| | | 37 | F4 - dark bronze | 10 | 1053223 |
| | | 37 | F9 - titan | 10 | 1053224 |
| | | 37 | RAL 9010 - white | 10 | 1053225 |
| | | 37 | RAL 8707 - brown | 10 | 1053226 |
| 3 | SECUSTIC HANDLE WITH SAFETY LOCK | 37 | F1 - silver | 10 | 1053232 |
| | | 37 | F4 - dark bronze | 10 | 1053235 |
| | | 37 | F9 - titan | 10 | 1053236 |
| | | 37 | RAL 9010 - white | 10 | 1053237 |
| | | 37 | RAL 8707 - brown | 10 | 1053238 |
| 4 | SPARE KEY FOR HANDLE | / | / | 1 | 1119964 |

# Balcony door handles



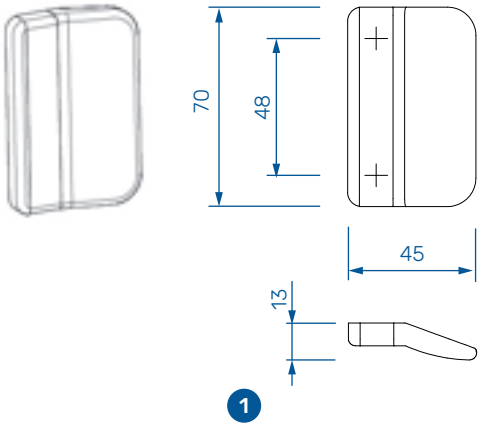

1



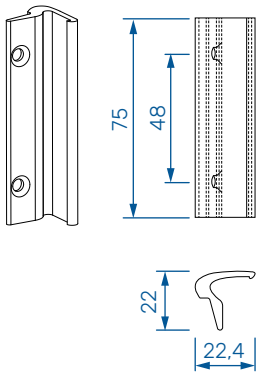

2

| TYPE | DESCRIPTION | COLOR | PACK | MATERIAL |
|---|---|---|---|---|
| 1 | BALCONY DOOR HANDLE | F1 - silver | 10 | 1053267 |
| | | F4 - dark bronze | 10 | 1053268 |
| | | F9 - titan | 10 | 1053269 |
| | | RAL 9010 - white | 10 | 1053270 |
| 2 | BALCONY DOOR HANDLE - ROLLER SHUTTERS | F1 - silver | 10 | 1053281 |
| | | F4 - dark bronze | 10 | 1053282 |
| | | F9 - titan | 10 | 1053283 |
| | | RAL 9010 - white | 10 | 1053284 |

# Balcony door handles - basic



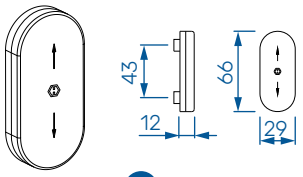

1



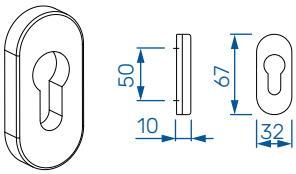

2

| TYPE | DESCRIPTION | COLOR | PACK | MATERIAL |
|---|---|---|---|---|
| 1 | PVC material | RAL 8016 - brown | 1 | 1053291 |
| | | RAL 9016 - white | 1 | 1120683 |
| | | RAL 7016 - anthracite grey | 1 | 1120684 |
| 2 | ALU material | RAL 8019 - grey brown | 1 | 1118689 |
| | | RAL 9016 - white | 1 | 1117164 |
| | | RAL 7016 - anthracite grey | 1 | 1117165 |

# Rosette




1




2

| TYPE | DESCRIPTION | COLOR | PACK | MATERIAL |
|---|---|---|---|---|
| 1 | FOR REMOVABLE HANDLE - PVC material | RAL 9016 - white | 1 | 1053292 |
| 2 | OVAL ROSETTE - ZAMAK material | RAL 8019 - grey brown | 1 | 1081621 |
| | | RAL 9016 - white | 1 | 1085631 |

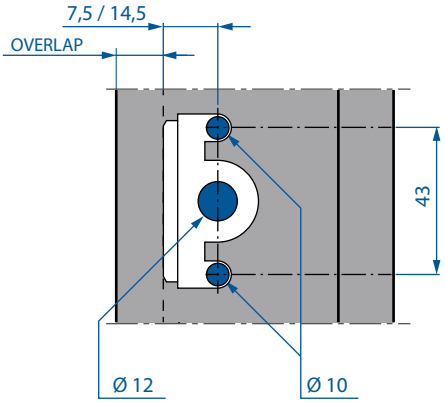


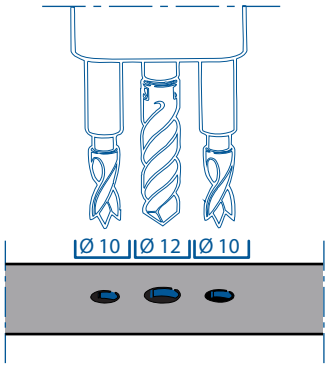

# Installation instructions

Profile treatment, hardware mounting, hardware maintenance
Detailed information

# Window-handle drilling

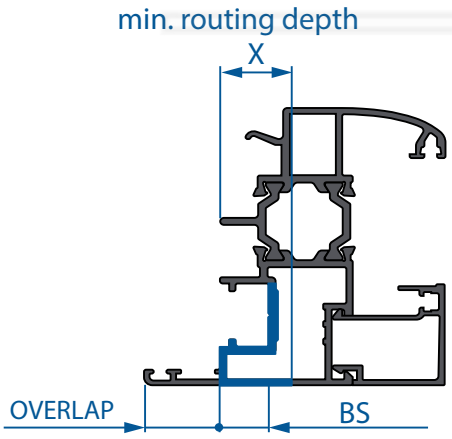
**GEAR-CASE SPROCKET AND LUGS´ DRILL HOLE**

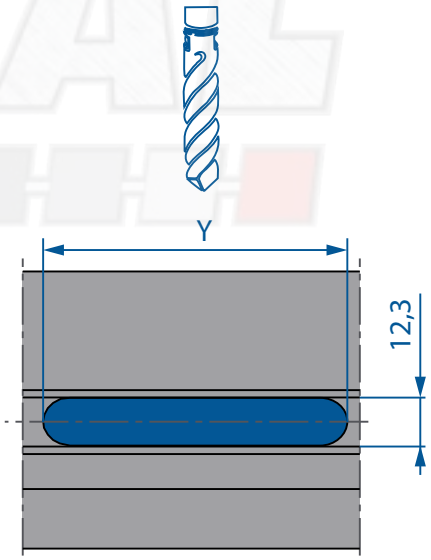



# Gear-case routing

**ESPAGNOLETTE GEAR-CASING**



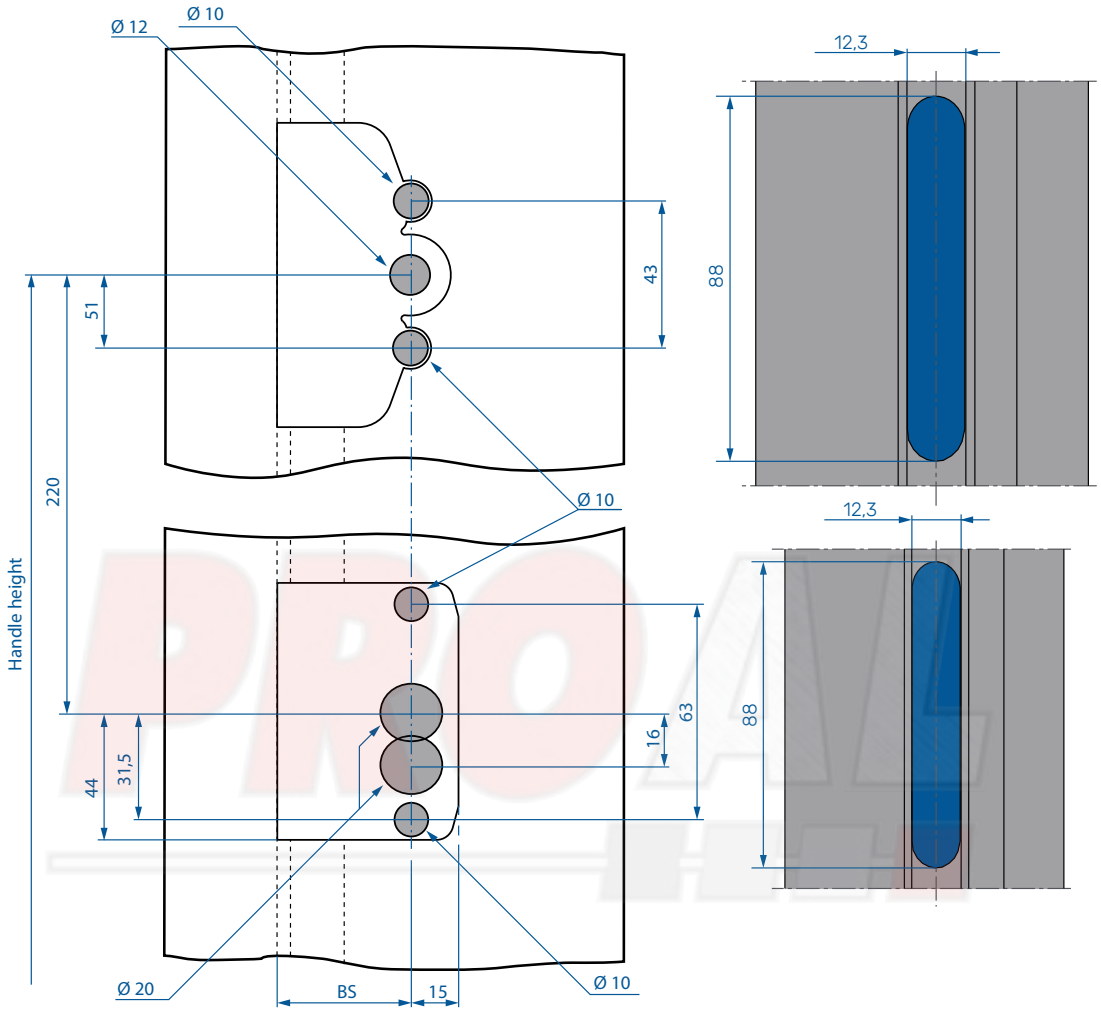



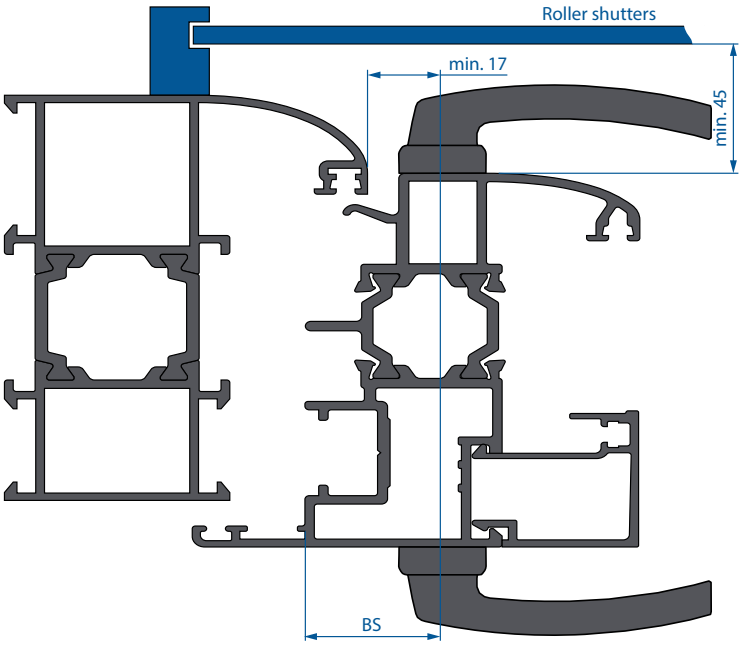

| BS | X |
|---|---|
| 7,5 | 20 |
| 14,5 | 27 |

| BS | Y |
|---|---|
| 7,5 | 34 |
| 14,5 | 64 |

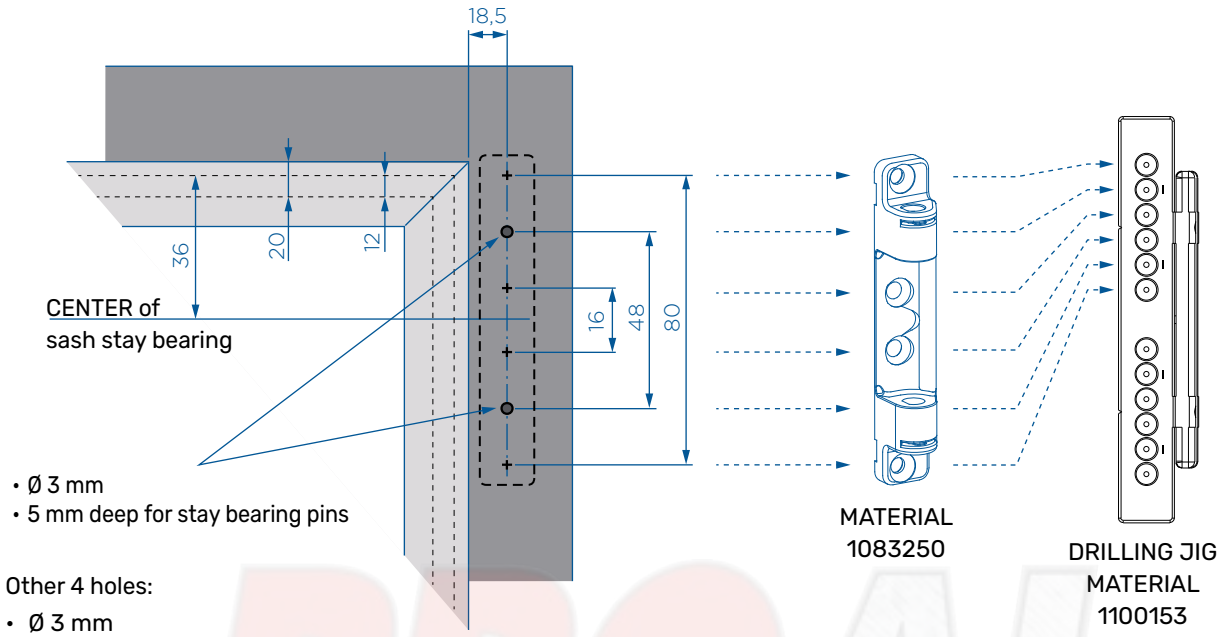
# Lock-case drilling

**ESPAGNOLETTE LOCK-CASING**



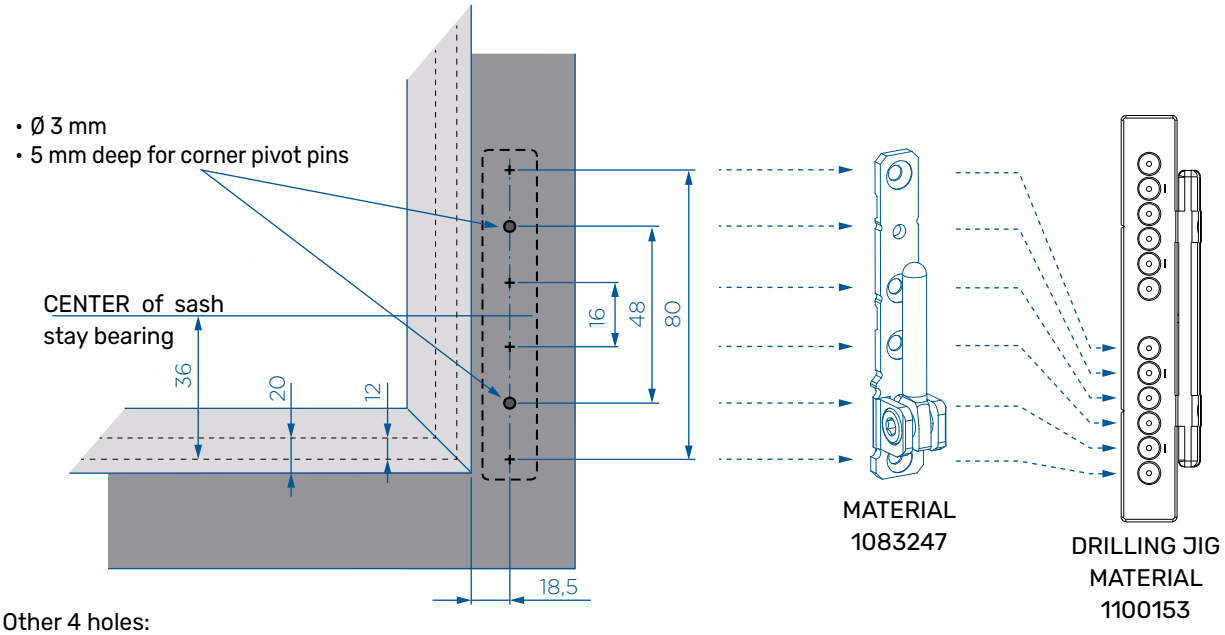



## Sash stay bearing K3



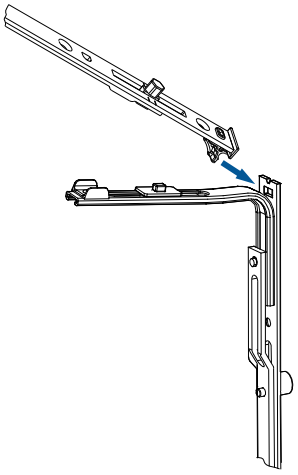

*WHEN USING A 20 mm HARDWARE OVERLAP, READJUST THE DRILLING JIG.

## Corner pivot rest K3

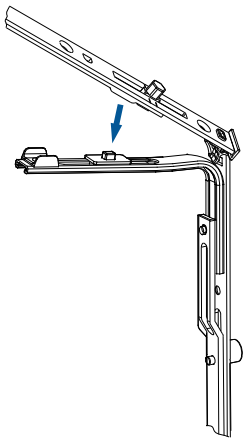



*WHEN USING A 20 mm HARDWARE OVERLAP, READJUST THE DRILLING JIG.

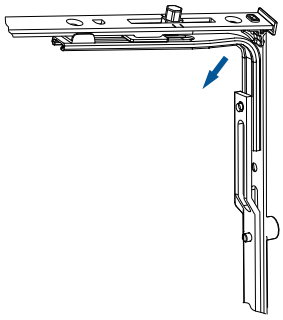
## Sash stay guide and center lock assembly



**1.)** Insert the connecting bracket into the hole of a centre lock

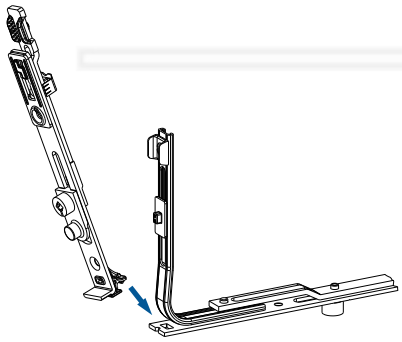


**2.)** Clamp the hole of a driving rod onto the stay guide connector

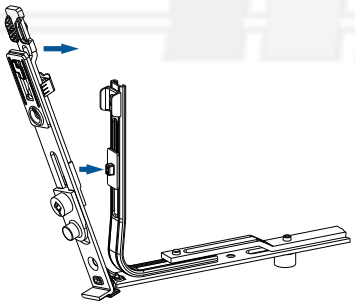


**3.)** Insert the assembly into a sash groove

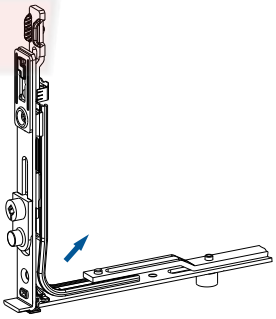
## Tilt lock bolt and center lock assembly



**1.)** Insert the connecting bracket into the hole of a centre lock

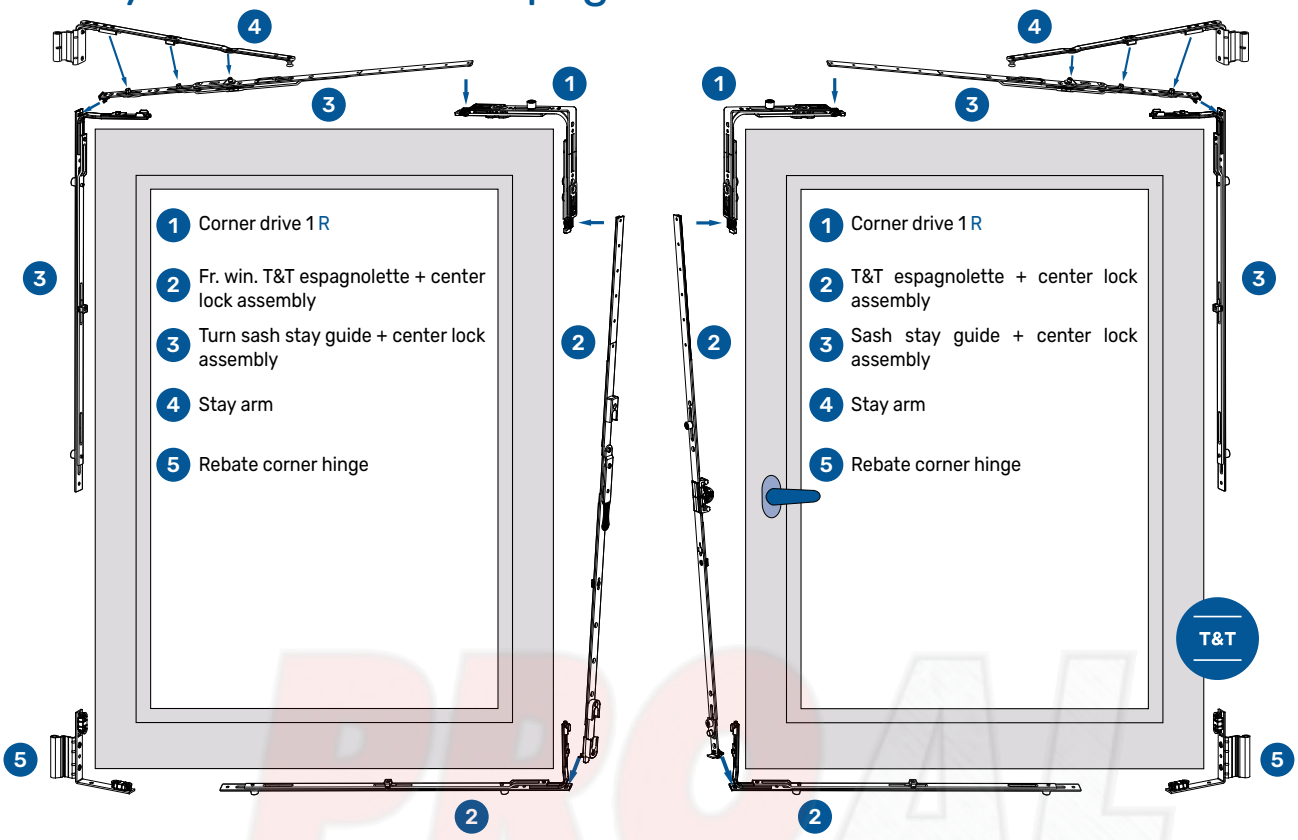


**2.)** Clamp the hole of a driving rod onto the tilt lock bolt connector

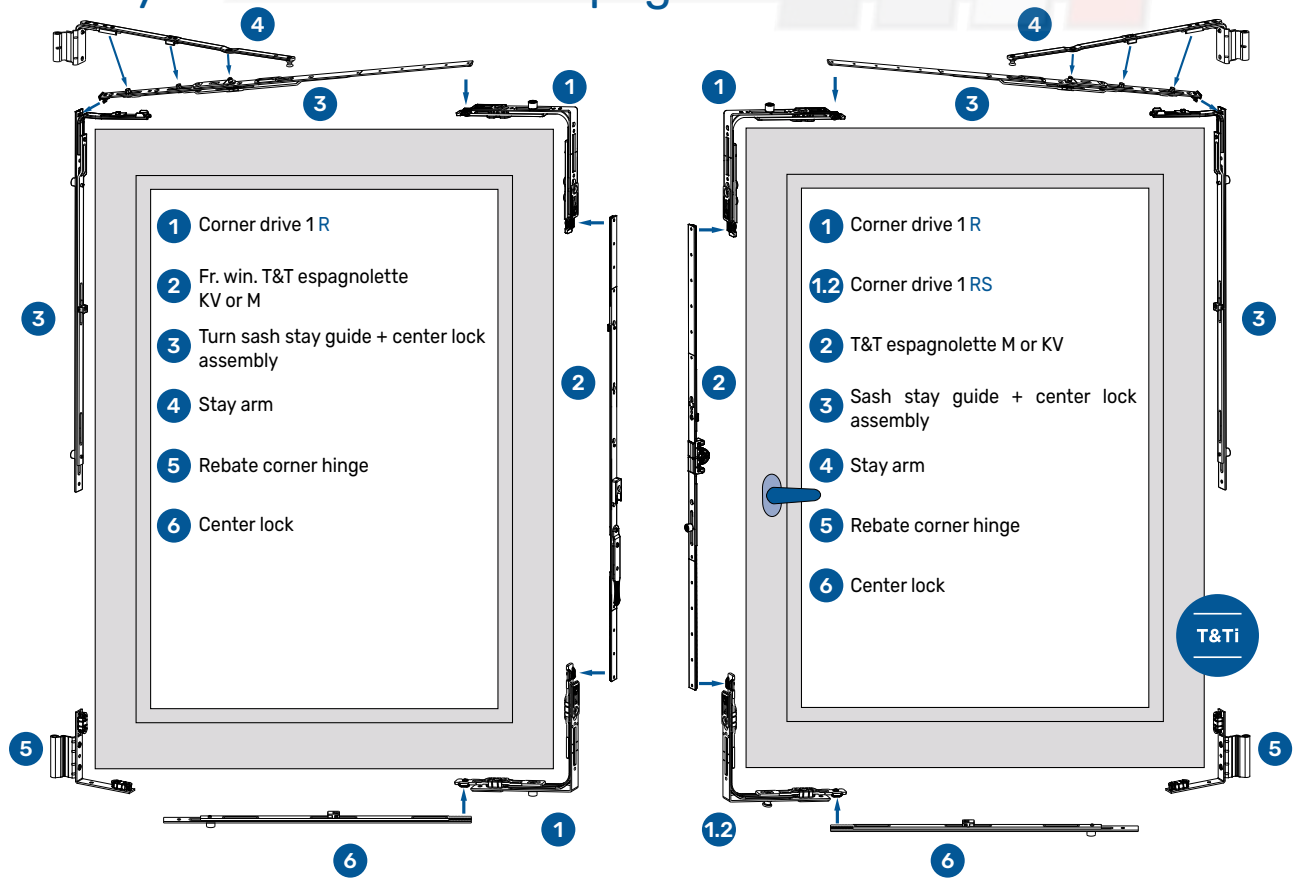


**3.)** Insert the assembly into a sash groove

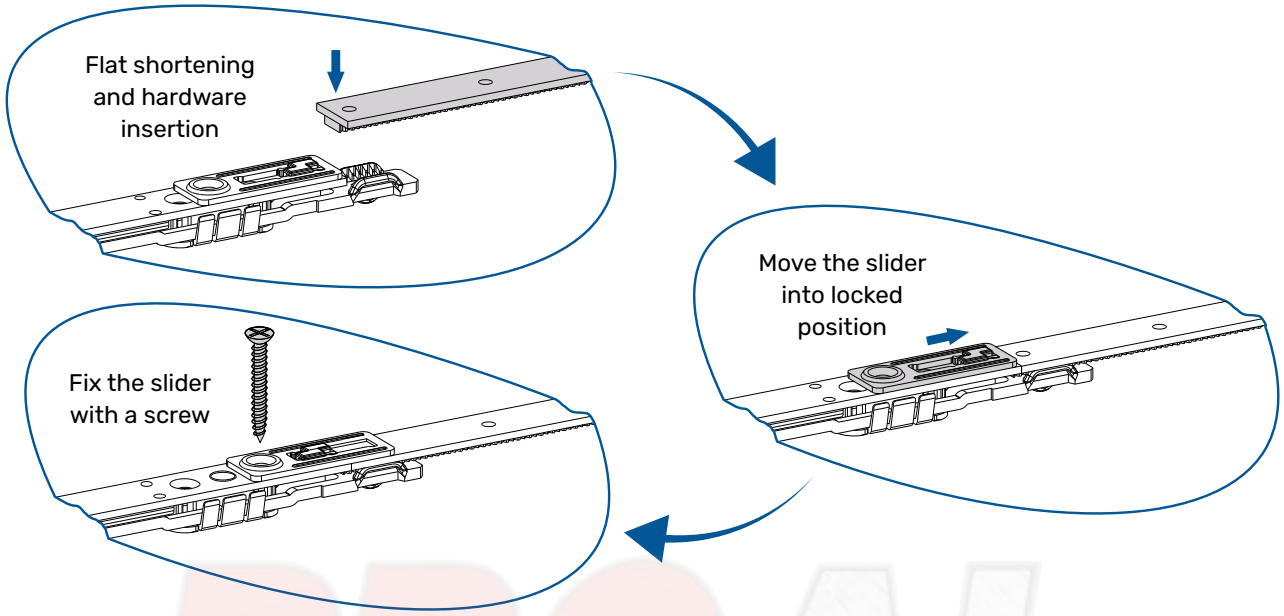
## T&T system with T&T espagnolette



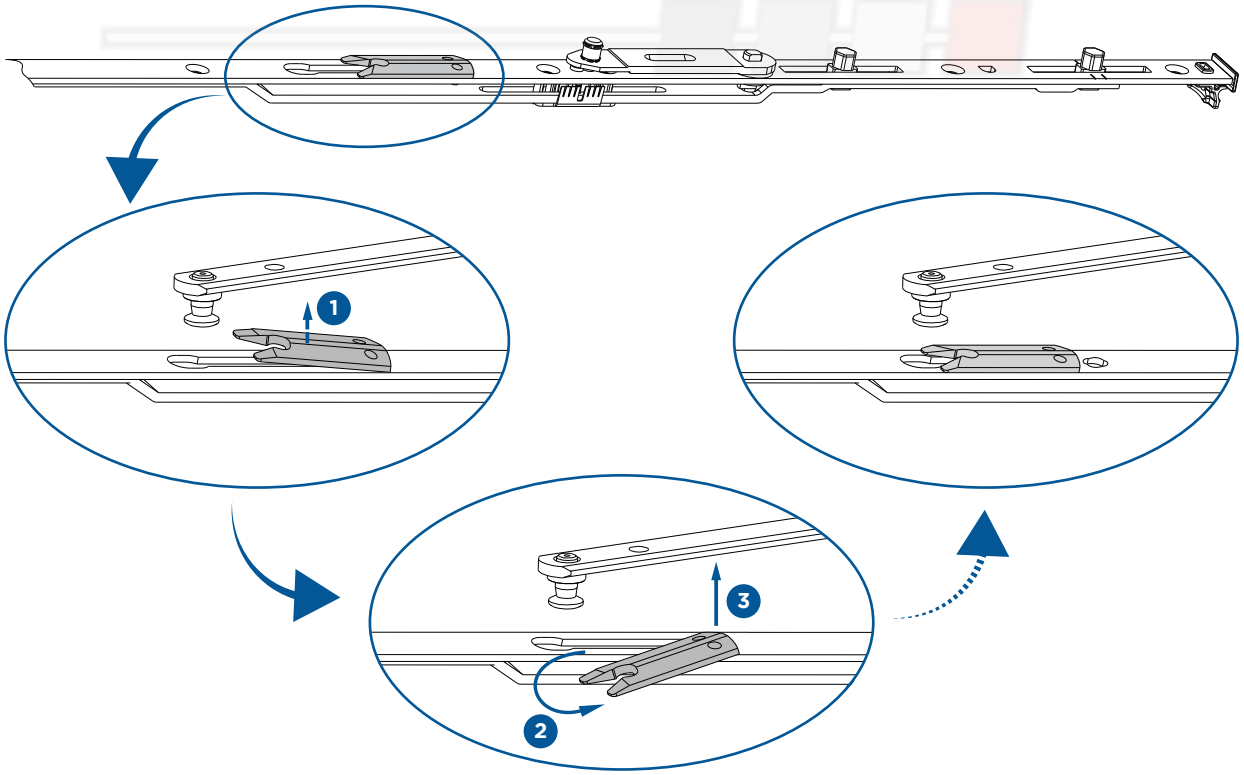

## T&Ti system with T&T M espagnolette



## Slider

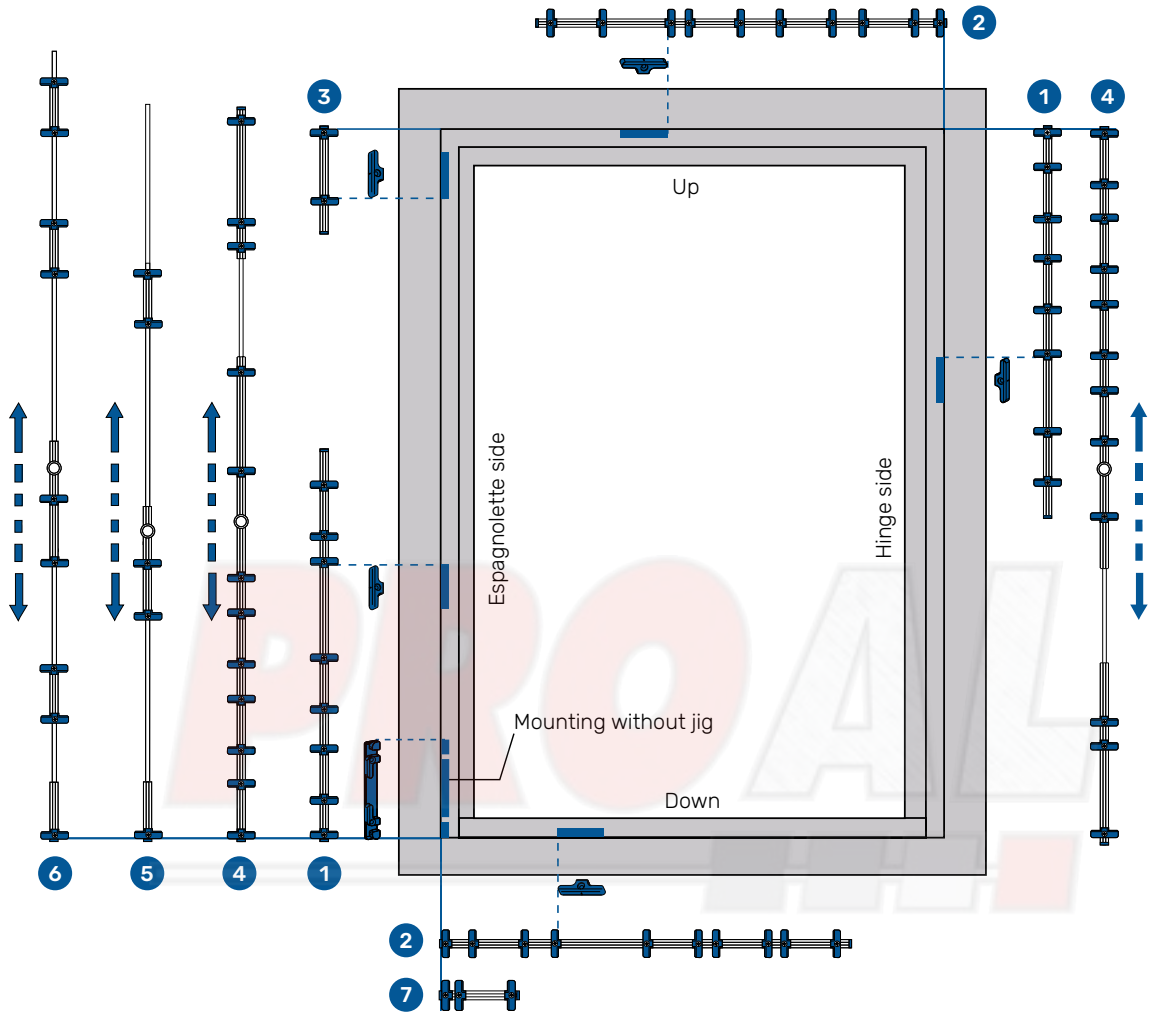



## Anti slam device - tilt reducement



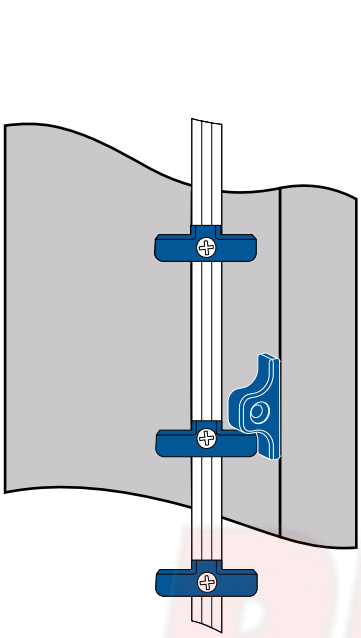

*PICTURES REPRESENT THE ADJUSTMENT OF THE ANTI-SLAM DEVICE (TILT REDUCEMENT)
*MOVE THE ANTI-SLAM DEVICE ON WINDOWS SRH < 500 mm, TO REDUCE TILT

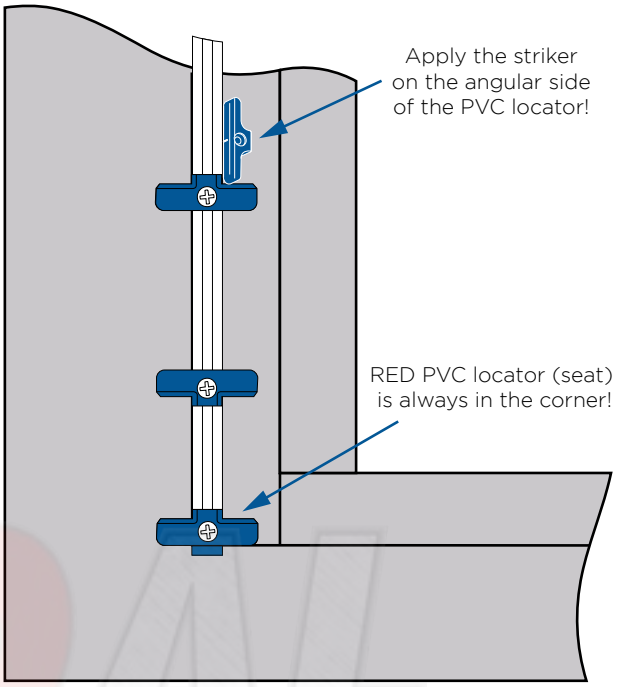
# Types




| TYPE | DESCRIPTION | NOTE | MATERIAL |
|---|---|---|---|
| 1 | Constant handle height espag. / hinge side center lock | SRH < 1600 | 1103566 |
| 1a | TYPE 1 - with additional cam - telescopic jig | SRH < 1600 | 1103567 |
| 2 | Center lock and sash stay guide up / center lock down | SRW < 1400 | 1103568 |
| 3 | Corner drive | SRW < 1400 | 1103569 |
| 4 | Constant handle height espag. - telescopic jig (door) | SRH > 1601 | 1103570 |
| 4a | TYPE 4 - with additional cam | SRH > 1601 | 1103571 |
| 5 | Centered handle height espag. - telescopic jig (window) | SRH < 1600 | 1103572 |
| 5a | TYPE 5 - with additional cam | SRH < 1600 | 1103573 |
| 6 | Centered handle height espag. - telescopic jig (door) | SRH > 1601 | 1103574 |
| 6a | TYPE 6 - with additional cam | SRH > 1601 | 1103575 |
| 7 | T&Ti striker | SRW < 1400 | 1108014 |

# Instructions for use

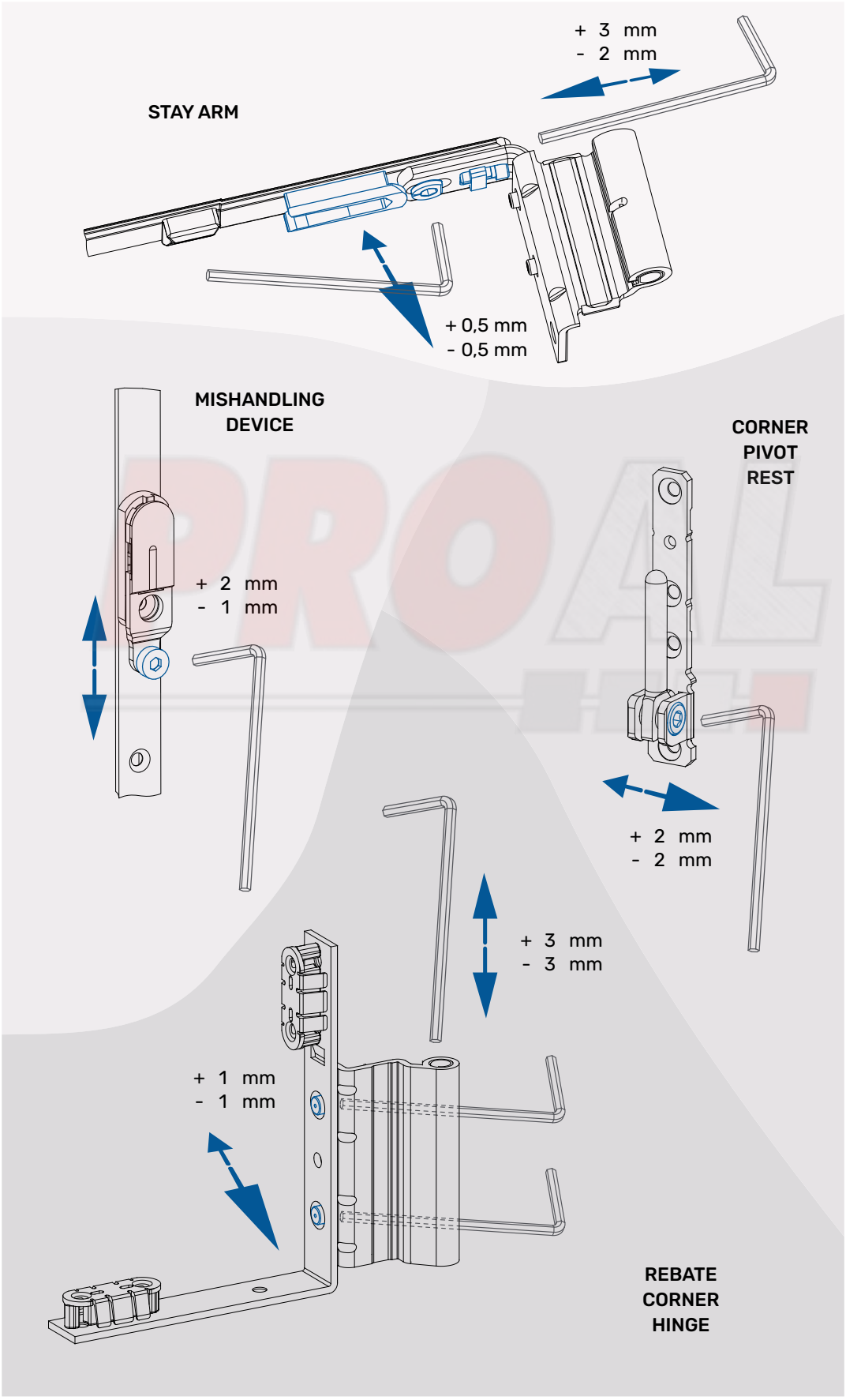





**MSD scheme** **CAM scheme**

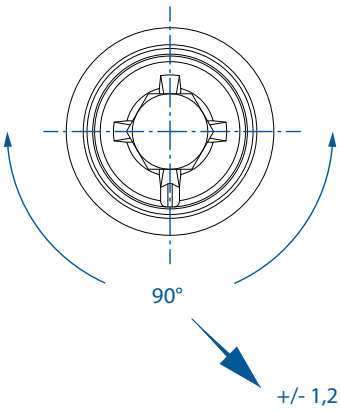
| COLOR of PVC LOCATOR | DESCRIPTION | NOTES |
|---|---|---|
| RED | Seat - NO locking cam | No striker |
| YELLOW | Corner drive locking cam | Located next to the seat |
| YELLOW | Espagnolette locking cam | / |
| GREEN | Mishandling device - frame part | Montage shown on MSD scheme |
| BLUE | Sash stay guide locking cam | / |
| BROWN | Center lock locking cam | / |

## Face-fit hinge side

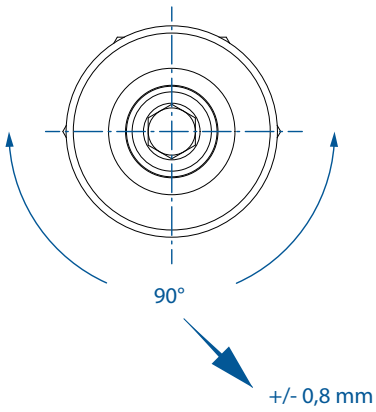


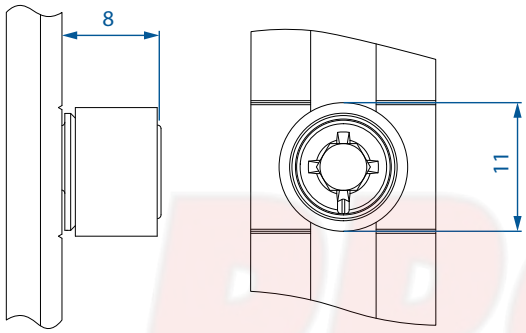
# LOCKING CAM ADJUSTMENT INSTRUCTIONS

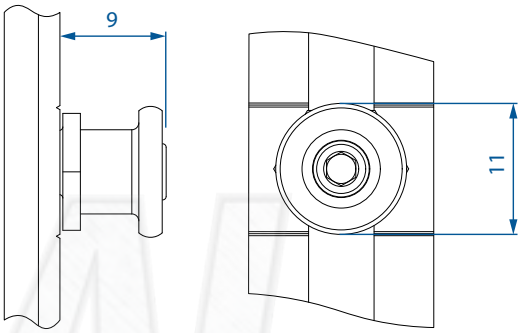
**ROLLING CAM / R CAM**




**ROLLING SECURITY CAM / RS CAM**

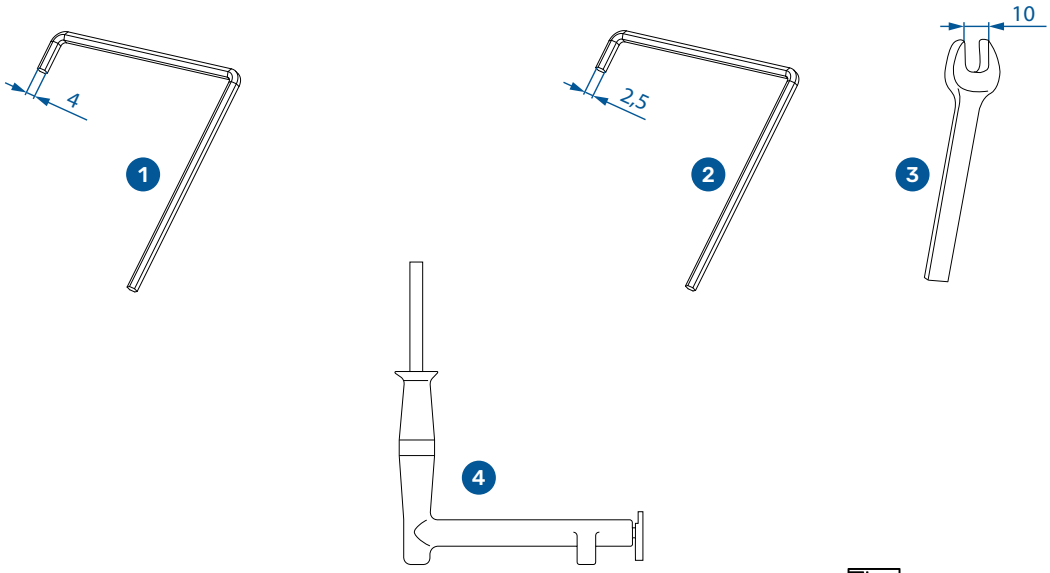



R CAM ADJUSTMENT TOOL

RS CAM ADJUSTMENT TOOL

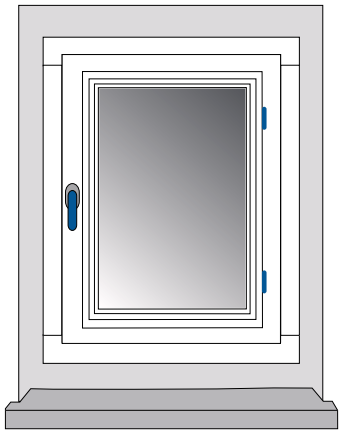



| TYPE | DESCRIPTION | SIZE | MATERIAL |
|---|---|---|---|
| 1 | HEX KEY | 4 mm | 1095750 |
| 2 | HEX KEY | 2,5 mm | / |
| 3 | SPANNER | 10 mm | / |
| 4* | MOUNTING HANDLE | / | 1134960 |

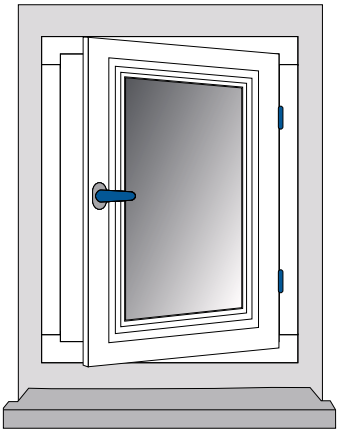
* FOR SASH STAY BEARING PIN MOUNTING

# Operation of window

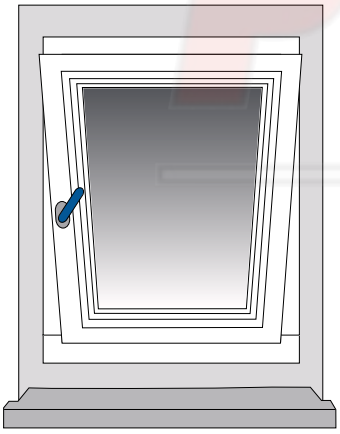
**TURN & TILT - TURN FIRST**



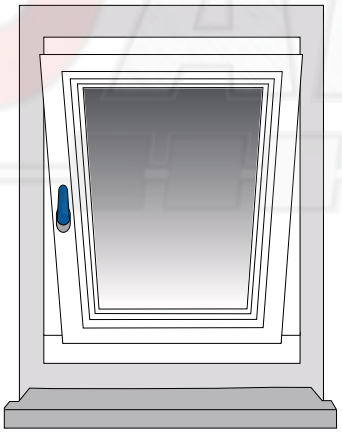
CLOSED POSITION



OPENED POSITION - TURN

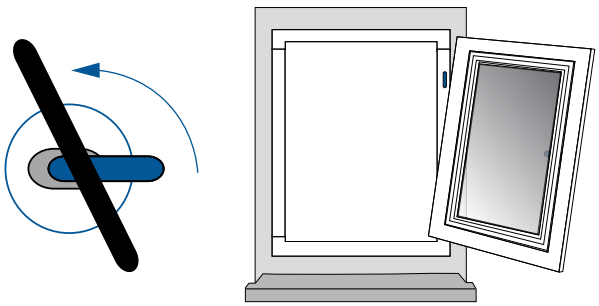


NIGHT VENT POSTION



OPENED POSITION - TILT

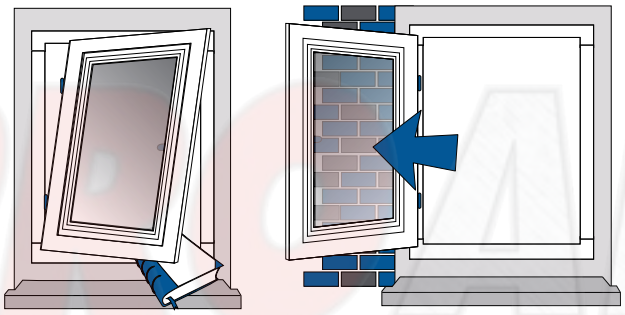
## Warning!



MALPOSITIONING OF THE SASH

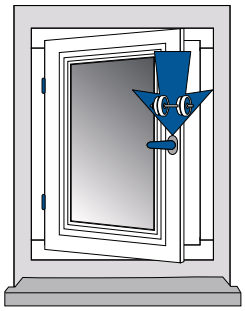
IN ORDER TO PRESERVE THE LONG OPERATIVENESS OF YOUR WINDOW AND TO GUARANTEE SECURITY, IT IS IMPERATIVE TO OBSERVE THE DIRECTIVES LISTED BELOW.

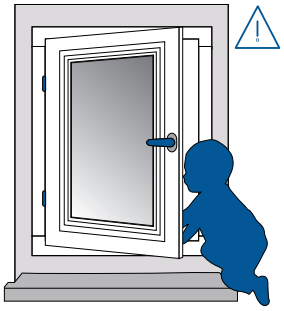
DO NOT PLACE ANY OBJECTS BETWEEN THE SASH AND FRAME.



DO NOT ALLOW THE SASH TO HIT OR PRESS UP AGAINST THE WINDOW REVEAL.

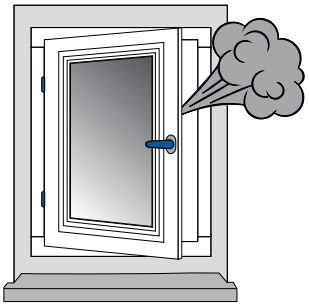
THE WINDOW SASH MAY NOT BE BURDENED WITH ADDITIONAL WEIGHT.

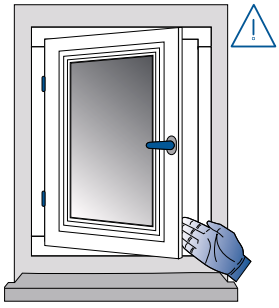




CAUTION!
WHERE SMALL CHILDREN OR MENTALLY HADICAPPED PERSONS HAVE ACCESS TO THE WINDOW, THE SASH HAS TO BE SAFEGUARDED AGAINST TURNING, FOR EXAMPLE WITH A CHILD-SAFETY LOCK OR KEY-LOCKABLE HANDLES.

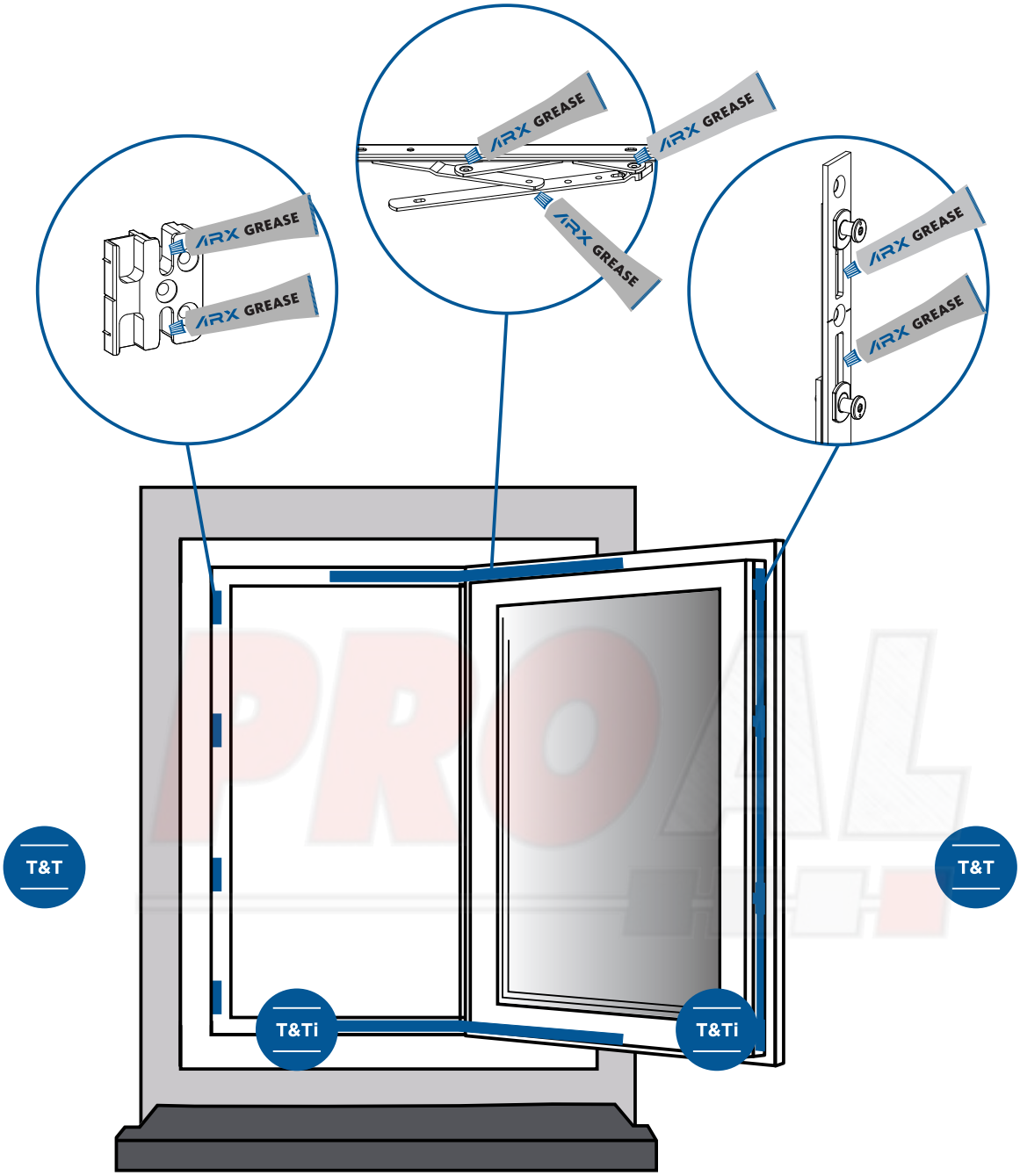
DO NOT LEAVE SASHES OPEN IN THE TURN POSITION DURING STRONG WINDS.





CAUTION!
A SLAMMING SASH CAN LEAD TO INJURIES. WHILE CLOSING, DO NOT GRASP BETWEEN THE SASH AND FRAME.

# MAINTENANCE RECOMMENDATIONS




Regular greasing and oiling of operation-relevant components in the sash and frame is recommended at least once a year. In case of frequent use as in schools, hotels the oiling is recommended once in six months.

Acid free and non–resinous grease and/or oil from a specialized dealer must be used.

| DESCRIPTION | MATERIAL |
|---|---|
| ARX - HIGH QUALITY HARDWARE GREASE | 1055144 |

# NOTES

## ARX building hardware

- INSTALLATION INSTRUCTIONS,
- INSTRUCTIONS FOR USE,
- PRODUCT PORTFOLIO PRESENTATION,
- NOVELTIES.

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# NOTES

# NOTES

# NOTES

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