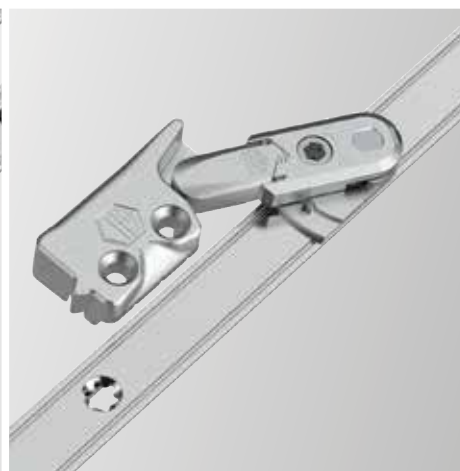
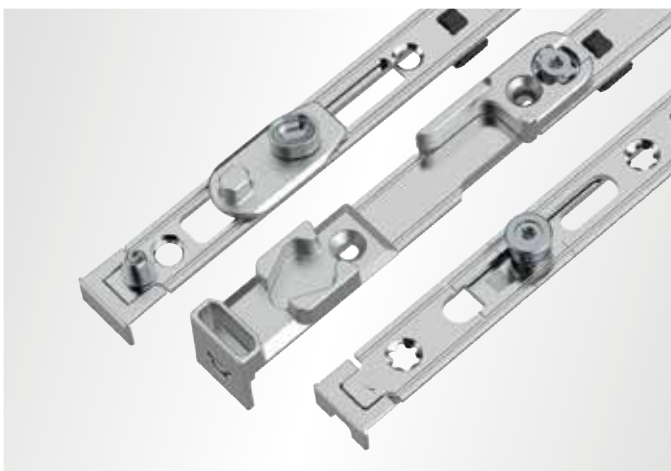


TECHNOLOGY IN MOTION



MACO MULTI-MATIC

TURN AND TILT HARDWARE



Catalogue



	For timber windows		Offset
	For PVC and aluminium windows		Rebate depth
	Part number		Maximum sash weight
	Tricoat number		Number of security cams (i.S.)
	Sash rebate width (SRW) and sash rebate height (SRH)		Number of standard cams
	Sash rebate width (SRW)		Sash lifter and mishandling device
	SRW with standard corner element		Screw diameter
	SRW with short corner element		Faceplate width
	SRW half round window/segmental arch window		Spindle size
	SRW round window		Handle centre (E)
	SRW angled window		Packer thickness
	Sash rebate height (SRH)		Screw
	SRH with short corner element	W	Overall component width
	SRH half round window/segmental arch window	L	Overall component length
	Drive gears FHH		Packing unit
	Drive gears VHH		Packing unit per pallet
	Backset (BS)	MM =	MULTI-MATIC
	Handle height (HH)	MT =	MULTI-TREND
	Hinge side	MP =	MULTI POWER
	Central locking system	KS =	Tilt lock bolt
	Air gap	DK =	Turn&Tilt (T&T)
	Rebate leg	KD =	Tilt before Turn (TBT)
		DR =	Turn-only
		FFB =	Sash rebate width (SRW)
		FFH =	Sash rebate height (SRH)
		FT =	Rebate depth
		L =	Air gap
		V =	Offset (hardware axis)
		AS =	Surface-mounted



DT =	Double routing (Timber)
TO =	Single routing (Timber)
TV =	Partially concealed hardware
VV =	Fully concealed hardware
i.S. =	Security cam
VZ =	Standard cam
DM =	Backset (BS)
GM =	Handle height (HH)
ÜV =	Rebate leg screw-fixing
Ü =	Rebate leg
RZ =	Round cylinder (RC)
PZ =	Profile cylinder (PC)
EH =	Burglar resistant
AR =	Guide ring
BO =	Drill
FR =	Milling cutter
AWB =	Application range
SFG =	French casement drive gear (FCD)
ES =	adjustable
ESH =	self-locking drive gear
HG =	rear-engaging
GL =	secured ventilation position

**MACO
MULTI-MATIC**





Dear MACO customer,

You are holding our new order catalogue in your hands. Our main aim was to present our product range in a simple and easy-to-understand manner in order to provide you with a practical working document. In addition to this catalogue, our package leaflet and assembly instructions will help you to process and install our products correctly. These are available to download from www.maco.eu.

Our products help to ensure that windows, doors and large-scale elements offer optimum function and security. As a premium manufacturer, that carries out its business according to the highest standards, the optimum quality and functionality of our hardware is our top priority. While we guarantee the best possible product characteristics for our hardware components, the responsibility for professional installation and correct fixing lies in your hands.

We want to support you, as a dealer or fabricator, with your responsibility for the safety of your products. Our binding assembly instructions and package leaflets provide information about the general use and processing of our hardware. To ensure the best fabrication and attachment of the hardware components – to suit the relevant installation situation, such as strength and profile design of the timber, arrangement of chambers and reinforcement in PVC profiles, etc., you can have elements tested and evaluated at our certified test centre: an air permeability and driving rain test as well as a pull-out test will help you to meet CE marking requirements. This means that you can rest assured that you are meeting all the standards and directives applicable to you.

You can find information about how to properly store our hardware components in the VHBH guideline of the Quality Assurance Association: Locks and Hardware (www.fvsb.de) or section Information on storage and transport of hardware components.

Important for dealers: MACO supplies its products with the corresponding number of package leaflets. As a dealer, you are responsible for enclosing the correct number of package leaflets with the products sold by you. Also, please ensure that you make your customers aware of the relevant binding instructions and legal aspects of the document.

We also provide you with operation and maintenance instructions for end users for you to pass on to your customers. These can also be downloaded from the MACO website (www.maco.eu).

We are offering an option in our extranet (extranet.maco.eu) with our online catalogue, which, in addition to highly up-to-date information, also offers the advantage of extensive additional technical information for all components. You can obtain access details from your contact partner in field sales.

All of our printed documentation is continuously revised and expanded. Please make sure that you are working with our most current documentation. All of our documentation is available for download from www.maco.eu. We hope that the catalogue will prove to be a valuable tool for your daily work. We wish you every success and hope to see you online soon.

Please fill in completely
















We confirm receipt and approvingly acknowledge its contents.	
<div style="border: 1px solid black; height: 100px; width: 100%; margin-bottom: 5px;"></div> <p><i>Stamp:</i></p>	<p style="text-align: center; margin-top: 50px;">_____</p> <p style="text-align: center;"><i>Please print your name in capital letters</i></p>
Date: _____	Signature: _____

MACO sales manager: _____

**MACO
MULTI-MATIC**





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**MACO
MULTI-MATIC**





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1 General and technical information

1.1 How to use the catalogue

If not otherwise specified, all dimensions are stated in millimetres and packing units in items per box.

Drawings and diagrams are not to scale.

The content of this document is constantly being updated, so regular comparison is necessary.

No liabilities are accepted for possible printing errors, mistakes or changes.

The current version is downloadable from our website (www.maco.eu).

Please send comments or suggestions about our catalogues by email to feedback@maco.eu.



1.2 Information on product safety and product liability

In accordance with the manufacturer's liability for his products defined in the Product Liability Act (PHG in Austria, ProdHaftG in Germany, PrHG in Switzerland, Codice del Consumo in Italy), the following information on turn-only and turn&tilt hardware for sashes in window and window door must be heeded. Non-compliance shall release the manufacturer from this liability.

1.2.1 Product information and proper use

Turn-only and turn&tilt hardware in the terms of this definition are hardware for turn and/or tilt sashes in windows and window doors made of timber. They are used to bring windows and/or window doors to a turn position or to a tilt position that is restricted by the scissor stay design when the manual lever is operated. When closing the sash and locking the hardware, it is generally necessary to overcome the counter-force of the seal.

The sashes that are equipped with this turn-only and turn&tilt hardware can:

- turn-only
- turn and tilt or
- tilt before turn or
- tilt-only.

Turn-only and turn&tilt hardware are used on vertically installed windows and window doors made of timber, PVC, aluminium or steel and their corresponding material combinations. Proper use includes compliance with all specifications made in the corresponding product documentation.

Differing applications do not correspond to their proper use. Burglar-resistant window and window doors, windows and window doors for damp rooms and those for use in environments with aggressive, corrosive air content, require hardware that has been adapted to the particular application and specifically agreed performance features. Open windows and window door sashes achieve only a shielding function and do not satisfy the requirements for joint seals, protection against driving rain, sound absorption, thermal protection and burglary resistance.

In the case of wind and draught, the windows and window door sashes must be closed and locked. Wind and draught in the terms of this definition apply when a window or window door sash that is in one of the opening position opens or closes autonomously due to air pressure or draught and in an uncontrolled manner. The resistance against wind loads in a closed and locked state is dependent on the respective designs of windows & window doors. Should wind loads in accordance with DIN EN 12210 (in particular pressure test p3) be accommodated, suitable hardware set combinations must be agreed for the respective window design and frame material and approved individually. Generally speaking, the hardware sliding fulfils the requirements for barrier-free apartments in accordance with DIN 18025, ÖNORM B 1600 or SIA 500. This requires corresponding combinations and installation of hardware sets for

windows and window doors, which must be coordinated and agreed individually.

1.2.2 Incorrect use or misuse

The following cases, in particular, shall be deemed to be product misuse - i.e. utilization turn-only and turn&tilt hardware for windows and window doors for purposes other than their specified proper use:

- If obstacles are inserted in the opening area, thereby preventing proper use of the product
- Additional loads act on windows or window door sashes
- When opening and/or closing (turning or tilting), handling between the cover frame and the sash or when a person or limb is present in this area
- When the sash is not guided manually over the entire range of motion to the absolute closing or opening position
- The sash is pressed against the opening edge (window reveal).

1.2.3 Principles of liability

The relevant entire hardware set may only consist of hardware components from the MACO turn-only and turn&tilt MULTI-MATIC hardware. The component combination may neither be modified, extended nor restricted. In the case of non factory-approved combinations by and/or inappropriately assembled hardware, and/or the use of non-original and/or non factory-approved accessory components, no liability will be accepted.

All hardware for windows and French casement windows must be inspected and serviced systematically by qualified experts to ensure their functional integrity and safety. This maintenance must be carried out - verifiably and documented - in accordance with our maintenance documentation: otherwise, no liability can be accepted.

Our processing specifications in the product catalogues, installation instructions/information and leaflets are binding and must be heeded without restriction; otherwise, no liability can be accepted for the safety and/or durability of the hardware.

Where timber, PVC, light-metal or steel profiles are used, the specifications the profile manufacturer and/or system owner must be observed. The window fabricator is essentially responsible for ensuring compliance with the specified system-related dimensions (for example, the gasket gap dimensions). These specified system-related dimensions must be checked regularly, in particular when using new hardware components for the first time, and also during production as well as during the window installation process. The hardware components are designed to permit partial or full adjustment of the certain system-related dimensions, provided that the hardware can have an effect on these. Should there be a deviation from these dimensions, resulting in a fault that has not been noted prior to window installation, no liability shall be accepted for the additional expenses incurred.



1.2.4 Product performance

The fundamental principle for the suitability of use of MACO hardware is compliance with all specification in the product documentation supplied by MACO. The documents are maintained in a document management system and the current edition is available at www.maco.eu. The classification of the products according to EN 13126-8:2006 is shown at Certificates.

1.2.4.1 Maximum sash weights and sash rebate dimensions

The defined maximum sash weights for the individual hardware versions may under no circumstances be exceeded. The component that has the lowest permissible load-bearing capacity determines the max. Application diagrams, installation instructions/information and component assignments must be observed.

1.2.4.2 Hardware composition

The manufacturers guidelines regarding hardware composition (e.g. positioning of exterior handles, hardware design for burglary-resistant windows and window sashes) are legally binding.

1.2.4.3 Fixing of hardware

MACO guarantees as a hardware manufacturer and deliverer, the quality and serviceability of its products. Because of different installation situations there are no general valid instructions for the screw fixing of hardware possible. The TBDK guideline Gütegemeinschaft Schlösser und Beschläge (quality community for locks and hardware - www.beschlagindustrie.de) is usually a help for the specifications of screw fixing. This guideline is similar to a standard an industry standard for the instructions of screw fixing of bearing components.

1.2.5 Product maintenance

1.2.5.1 General

Inspection and service are fundamental components of maintenance. The verified maintenance is in turn basis for the legal warrant and/or our guarantee.

All inspection intervals and maintenance instructions must be observed. These details must be evident from the operating and maintenance instructions for the corresponding turn-only and/or turn&tilt hardware.

Settings and adjustments for the hardware, as well as replacement of components may only be carried out by specialists. Similarly, inserting and/or removing the sashes may only be carried out by specialists. When treating surfaces - e.g.: painting or glazing windows and window doors, all hardware components must be excluded from this treatment and protected to prevent contamination.

1.2.5.2 Retaining the surface quality

The electrolytically applied zinc coatings are not affected in a normal room climate if no condensation collects on the hard-

ware components (or occasional condensation can dry off quickly). To retain the surface quality of the hardware components over the long term and prevent damage due to corrosion, it is essential to observe the following points:

- The hardware and/or the rebate areas must be ventilated sufficiently – in particular during the building phase – so that they are not exposed to direct wetness impact or to condensation. If systematic ventilation is not possible, because fresh screed cannot be accessed or does not tolerate draughts, bring the windows to the tilt position and seal them off air-tight at the room side. Use condensation dryers to remove any humidity from the room air to outside the area.
- The hardware must be kept free of deposits and soiling thorough construction material (building dust, gypsum plaster, cement etc.). Aggressive vapours in the rebate area (e.g.: due to formic or acetic acids, ammonia, amine or ammonia compounds, aldehydes phenols, tannic acids, etc.) in conjunction with small formations of condensation can lead to fast corrosion on the hardware components. If such aggressive vapours do occur, a sufficient supply of fresh air to the rebate areas must generally be provided for windows and window doors. This applies in particular to windows and window doors made of oak or other wood types that have a high share of tannic acid. No acetic-acid or cross-linked acidic sealing compounds or those with the above mentioned contents may be used, since both direct contact with the sealing compound and its vapours can attack the surface.
- The hardware may only be cleaned with mild, pH-neutral cleaning agent in diluted form. Never use aggressive, acidic cleaning agents or abrasive cleansers that contain the ingredients listed in the section above.

1.2.6 Information and instruction duties

The following is available to comply with information and instruction obligation duties and perform maintenance work in accordance with the product liability legislation:

- for dealers: Catalogues, operation and maintenance instructions, installation instructions/information and leaflets for components
- for processors: Catalogues, tool drawings, operation and maintenance instructions, installation instructions/information and leaflets for components
- for owners and end users: Operating and maintenance instructions

To ensure the functional integrity of sliding hardware for the sashes of window and window doors:

- Designers must request all relevant product information from the manufacturer and observe the details provided.
- Specialised dealers are obliged to comply with all relevant product information and, in particular, request installation instructions/information, factory drawings, component leaflets, as well as operating and maintenance instructions from the manufacturer and hand these over to the processors.
- Processors are obliged comply with all relevant product information and, in particular, request operating and maintenance



Information on product safety and product liability



nance instructions from the manufacturer or specialized dealers and forward these to the end user.

All above mentioned reference material is available for download from the MACO website (www.maco.eu).

1.2.7 Application for similar hardware

Hardware for sliding folding doors must be treated analogously with respect to product information for proper use, misuse, product performance, product maintenance, information & instruction obligations as the features apply.

1.2.8 Disclaimer

The manufacturer's liability can also be excluded, among other things:

- If the fault is attributed to a regulation or an official ruling, to which product compliance was stipulated.

- Characteristics of the product, which have given rise to the claim (against the manufacturer), could not be identified as a fault according to the conditions of science and technology at the time.
- The claim (against the manufacturer) only involves a basic material or a part product that was manufactured, and the fault is due to the construction of the product that was incorporated into the basic material or the part product, or as a result of instructions issued by the manufacturer of this product.

In connection with Section 1.2 and its subsections, the guideline - Hardware for windows and balcony doors - Guidelines/advice on the product and on liability (VHBH) of the Quality Assurance Association: Locks and Hardware (Gütegemeinschaft Schlösser und Beschläge e.V.) must be observed. Download at www.beschlagindustrie.de.



1.3 Information on transport and handling of window units

Improper handling and improper transport of the windows and/or casement door elements can produce hazardous situations and cause serious accidents or lethal injury. To prevent this, the following instructions must be heeded:

- During loading and unloading, select force application points which exclusively create reaction forces appropriate to the designed layout of the hardware components for the intended installation location.
- During handling and transport, ensure that the hardware is in the locked position to prevent the sash from opening unexpectedly. Use suitable securing equipment to do this.
- Use only transport fastenings designed for the respective clearance.
- Wherever possible, transport the windows in the intended installation position. If transport in the intended installation position is not possible, unhinge the sash, and transport it separately from the frame to which it belongs.
- During transport, loading, and unloading, especially if auxiliaries such as suction cups, transport nets, forklifts, or cranes are used for support, reaction forces may arise which could damage or overload the installed hardware. Therefore, observe the following instructions during all transport, loading, and unloading.
- The type and the force application points when transporting,

loading, and unloading have a significant effect on the reaction forces which arise.

- Always choose the force application points so that the resulting reaction forces are dissipated appropriate to the design of the hardware components for the intended installation location. This applies particularly for the hinge positions.
- During transport, loading, and unloading, especially if auxiliaries such as suction cups, transport nets, forklifts, or cranes are used for support, reaction forces may arise which could damage or overload the installed hardware.
- Always use transport securing measures appropriate to the actual clearance (e.g. spacer blocks), in order to hold the sash in the intended position in the frame during transport, and thus to dissipate the resulting reaction forces directly from the sash via the frame.
- Wherever possible, always transport window elements in the intended installation position, so that the resulting reaction forces are dissipated appropriate to the designed layout of the hardware components for the intended installation location. This applies particularly for the hinge positions. If transport in the intended installation position is not possible, unhinge the sash, and transport it separately from the frame to which it belongs.

1.4 Information on storage and transport of hardware components

Improper storage of fittings can affect the surface quality. To prevent this, the following points should be noted:

- Ensure that the room air is permanently dry.
- Large temperature fluctuations, which lead to condensation must be prevented. Condensation on fittings means that the galvanized surfaces are attacked.

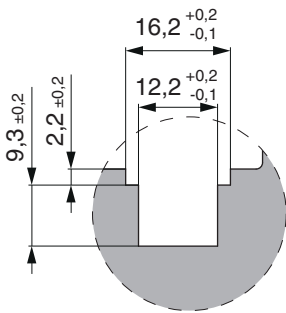
- Aggressive vapors by cleaners or assembly aids such as silicone, and the like must - be avoided - even briefly. Vapors of such substances can cause very rapid corrosion of fittings.
- Salty air or polluted by industrial air causes galvanized surfaces to corrode and can leave deposits.

1.5 Profile specifications

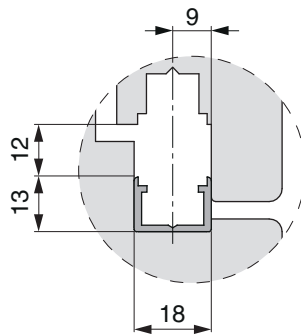
1.5.1 Eurogroove

For installation of turn-only and turn&tilt hardware the Eurogroove must be designed according to the following specifications:

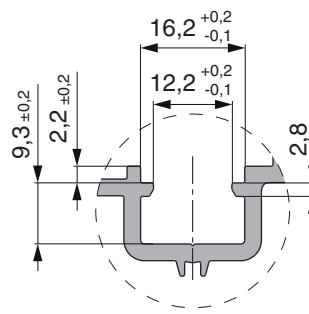
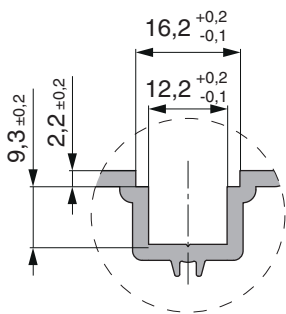
Timber sash



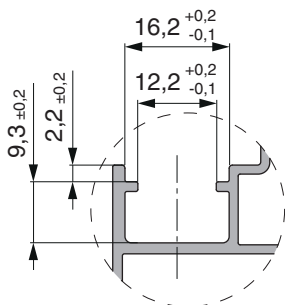
Timber sash French casement design with Aluminium recess



PVC sash



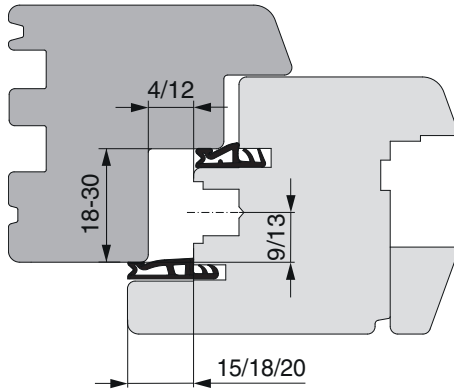
Aluminium sash



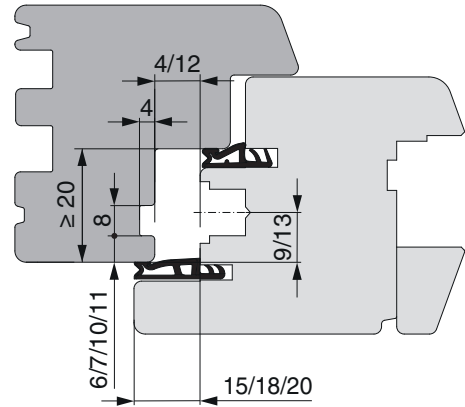
1.5.2 Recommendation for timber profiles

Single-sash

System Euro-rebate

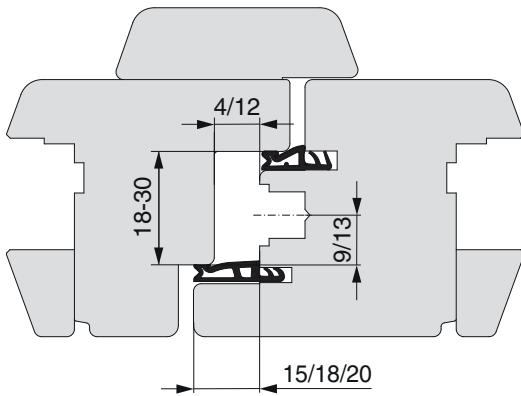


System hardware groove

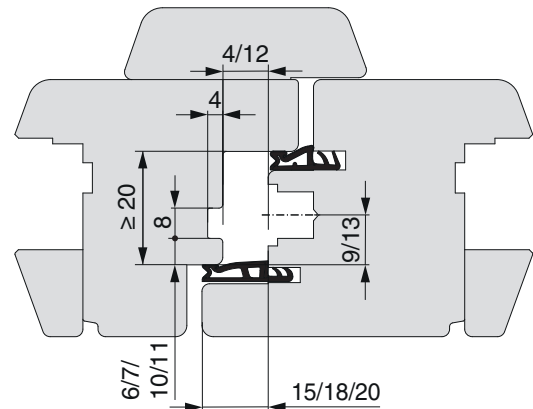


Double-sash (French casement)

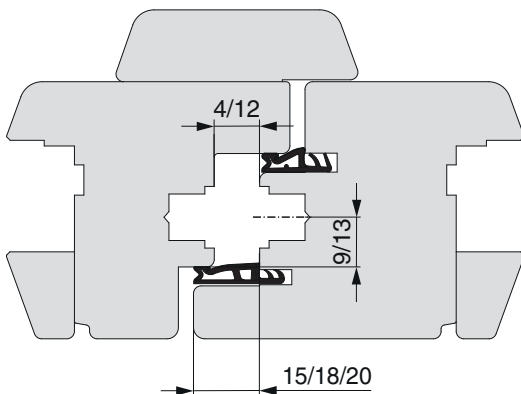
French casement sash with Euro-rebate



French casement sash with hardware groove

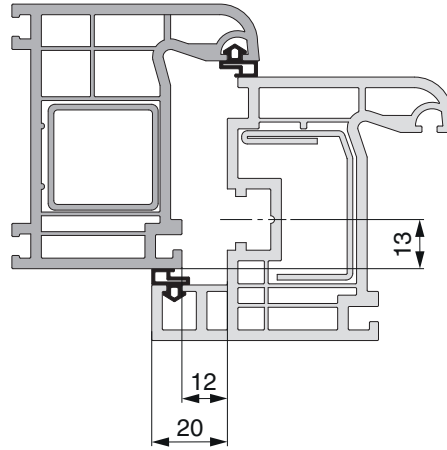


French casement sash with Eurogroove

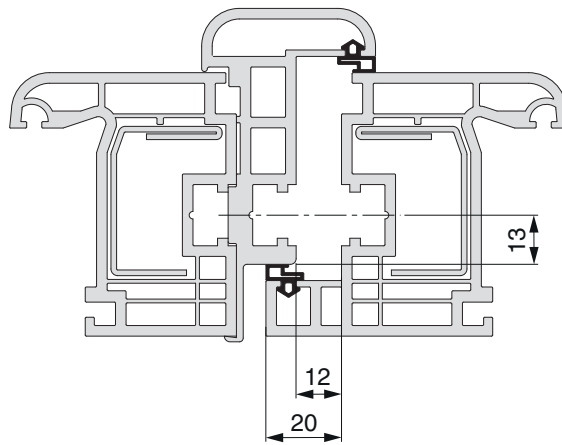


1.5.3 Examples for PVC profiles

Single-sash



Double-sash (French casement)





1.6 MACO surface finish

Hardware components in this catalogue are offered in different surface finishes. Components of the central locking system are available in *silver-look* or TRICOAT-PLUS, visible bearing components can be powder coated in RAL classic colors as well. Standard components in this catalogue are readily available, the delivery times for special versions are available on re-

quest from our field service representatives. In our brochure "MACO surfaces" order number 49510 (available to download from our website www.maco.eu) you will find detailed information about all our surface finishes and their areas of application, as well as measures to protect and preserve them.

1.7 Classification code in accordance with EN 13126-8

Consecutive number	Design of sash rebate	Design of sash hardware	Description of hardware specifications on frame side				Sash weight	Classification according to verification as per EN 13126-8			
			Rebated scissor stay support arm	Scissor stay hinge	Corner support	Pivot post		1	2	3	4
								Lasting functionality	Mass (in kg)	Corrosion resistance	Test quantities (in mm)
1.	PVC with positioning pins	MULTI-MATIC RC 2	52486	52480	52478	52483	100 kg	H2	100	5	900/2300
2.	PVC with positioning pins	MULTI-MATIC RC 2	52486	52480	52478	52483	100 kg	H2	100	5	1300/1200
3.	PVC with supporting pins long	MULTI-MATIC Standard *	52486	52481	52479	52484	120 kg	H2	120	5	1300/1200
4.	PVC with supporting pins long	MULTI-MATIC RC 2 *	52486	52481	52479	52484	120 kg	H2	120	5	900/2300
5.	PVC with supporting pins long	MULTI-MATIC RC 2 *	52486	52481	52479	52484	120 kg	H2	120	5	1300/1200
6.	TO	MULTI-MATIC Standard *	52388	52396	52394	52399	130 kg	H2	130	5	1300/1200
7.	TO	MULTI-MATIC RC 2 *	55416	52414	55410	55412	130 kg	H2	130	5	900/2300
8.	TO	MULTI-MATIC RC 2 *	55416	52414	55410	55412	130 kg	H2	130	5	1300/1200
9.	DT130	MULTI-MATIC Standard *	202534	202543	54710	52703	130 kg	H2	130	5	1300/1200
10.	DT130	MULTI-MATIC RC 2 *	202534	202543	54710	52703	130 kg	H2	130	5	900/2300
11.	DT130	MULTI-MATIC RC 2 *	202534	202543	54710	52703	130 kg	H2	130	5	1300/1200
12.	DT160	MULTI-MATIC Standard *	202535	227470	227504	227476	160 kg	H2	160	5	900/2300
13.	DT160	MULTI-MATIC Standard *	202535	227470	227504	227476	130 kg	H2	130	5	1300/1200
14.	INVISIBLE	MULTI-MATIC Standard *	206351	206351	206327	206359	100 kg	H2	100	5	900/2300
15.	MULTI POWER PVC	MULTI-MATIC Standard *	217482	215767	215804	215810	130 kg	H2	130	5	1300/1200
16.	MULTI POWER PVC	MULTI-MATIC Standard *	217482	215767	215804	215810	150 kg	H2	150	5	900/2300
17.	MULTI POWER Timber	MULTI-MATIC Standard *	217474	215767	215804	215810	130 kg	H2	130	5	1300/1200
18.	MULTI MAMMUT PVC	MULTI-MATIC Standard *	223624	210600	227694	211869	180 kg	H2	180	5	1550/1400
19.	MULTI MAMMUT Timber	MULTI-MATIC Standard *	223606	210600	210611	210594	220 kg	H2	220	5	900/2300
20.	MULTI MAMMUT Timber	MULTI-MATIC Standard *	223608	210600	210611	210594	200 kg	H2	200	5	1550/1400

* optional with MULTI-MATIC tilt lock bolt

Observe all technical documentation of hardware manufacturer, especially corresponding application diagrams!
A list of all current classification keys is available at the MACO website (www.maco.eu) under tab "Downloads" (ift Certificate of Conformity QM328).

1.8 Security for turn and tilt hardware (mechanical burglary resistance)

1.8.1 General Information

Generally, a variety of design variants are possible for a window or French door. Besides the requirements for corrosion resistance, the end user's demands for convenience, colour design and, above all, security are decisive for the selection of the hardware components. The combination and/or design of various hardware components allows a variety of security levels.

With MACO hardware windows and casement doors can be built in burglar-resistant versions in accordance with resistance classes RC 1, RC 2 or RC 3 (EN 1627 - 1630).

Note: These standards dictate a complete examination of the finished window, which includes the following areas:

- a) Glazing
- b) Hardware
- c) Assembly and/or securing the window within the wall

1.8.2 MACO security levels (basic security)

Single-sash windows and balcony doors

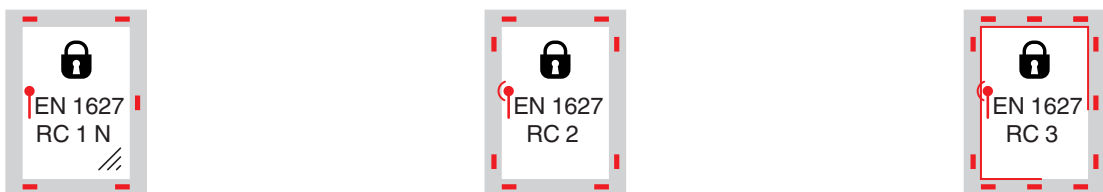


Double-sash windows and balcony doors



1.8.3 Security in accordance with EN 1627 - 1630

Single-sash windows and balcony doors



Double-sash windows and balcony doors



Further and/or supplementary information on the topic of security and the exact design of the hardware is provided in our brochures MACO security, MACO MULTI burglary resistance

in timber and PVC windows and MULTI-MATIC system matrix RC 1 / RC 2 / RC 3. All documents are available for download from the MACO website www.maco.eu in the Downloads area.



1.9 Certificates and guarantees

MACO ensures high quality, not only with ongoing continuous internal testing, but also through external auditing by renowned, independent institutes. Copies of all our current independent test certificates, covering our quality, safety and environmental management systems, as well as our product

guarantees are available to download from our website www.maco.eu. In addition our safety descriptions relating to dangerous substances (REACH Declaration) are available, covering all MACO products.

1.10 General terms and conditions

Our current general terms and conditions are available for download from our website (www.maco.eu).



**MACO
MULTI-MATIC**



General terms and conditions



2 Fundamental processing information

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2 Fundamental processing information

2.1 Manufacturers application advices

This catalogue applies only for the installation of MACO MULTI-MATIC turn-only and turn&tilt hardware of plumb windows and window doors in building construction. The hardware is designed for the following sash rebate dimensions and sash weights:

1. Maximum sash weights

The following listed maximum sash weights for the individual hardware versions may not be exceeded. The component that has the lowest permissible load-bearing capacity determines the max. sash weight. Application diagrams and component assignment must be observed.

2. Sash sizes

The description of the application diagrams show the relationships between the permissible sash rebate widths and sash rebate heights, depending on various glass weights and/or total glass thickness. The resulting sash rebate dimensions or sash formats (portrait and/or landscape format) - as well as the maximum sash weight - may not be exceeded under any circumstance.

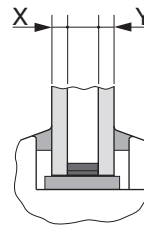
3. Composition of the hardware

The manufacturer's regulations governing the combination of hardware are binding (for example, the application of additional stay arms, the hardware design for burglar-resistant window and casement doors, sashes etc.).

2.2 Calculation of glass weight (= sash weight)

Glass thickness (mm)	8	10	12	14	16	18	20	22	24
Weight (kg/m ²)	20	25	30	35	40	45	50	55	60

1 mm = 2.5 kg/m²

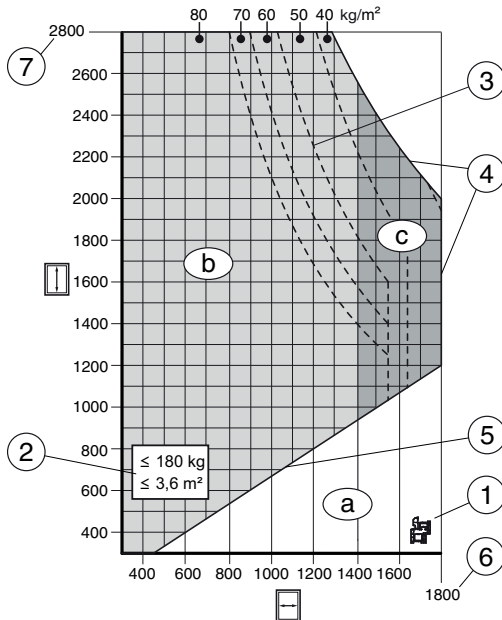


Total glass thickness = x + y

In order to derive the sash weight from the weight of the glass in a simplified form, it is not necessary to use the glass rebate dimensions but the sash rebate dimensions to calculate the weight!

2.3 Application diagram

2.3.1 Information inside the application diagram



- 1) Material mark
 - 2) Maximum weight and format size
 - 3) Glass weight lines (dashed)
 - 4) Maximum format size
 - 5) Ratio SRH : SRW (1 : 1.5)
 - 6) Maximum sash rebate width (SRW)
 - 7) Maximum sash rebate height (SRH)
- a) White area = not allowed
b) Grey area = allowed
c) Dark grey area = stabilizing scissor stay necessary



2.3.2 Calculation examples

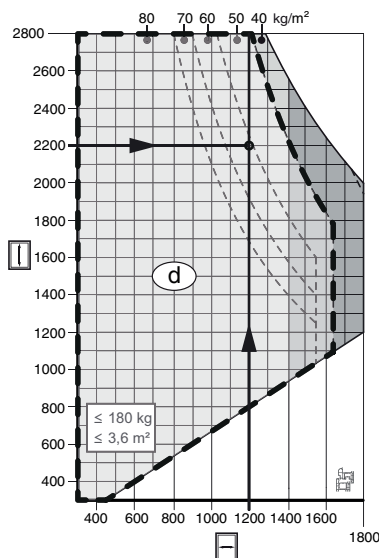
Example 1: Sash weight is within the valid range

Sash-rebate dimensions 1,200 x 2,200 mm

Total glass thickness = 16 mm

Glass weight = 16 mm x 2.5 kg/m² = 40 kg/m²
(Sash weight = 1.2 x 2.2 x 40 ≈ 106 kg)

VALID range of application, because the point of intersection is left of the line 40 kg/m².



d) Valid range

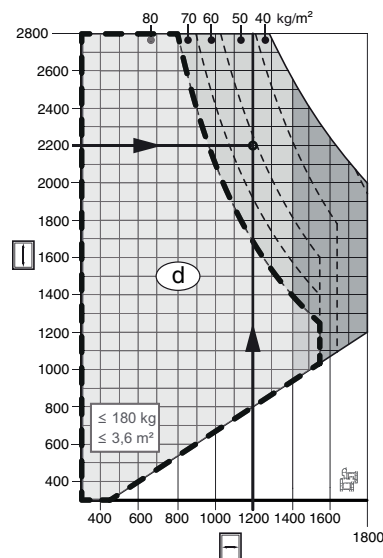
Example 2: Sash weight is outside the valid range

Sash-rebate dimensions 1,200 x 2,200 mm

Total glass thickness = 32 mm

Glass weight = 32 mm x 2.5 kg/m² = 80 kg/m²
(Sash weight = 1.2 x 2.2 x 80 ≈ 211 kg)

INVALID range of application, because the point of intersection is NOT left of the line 80 kg/m².



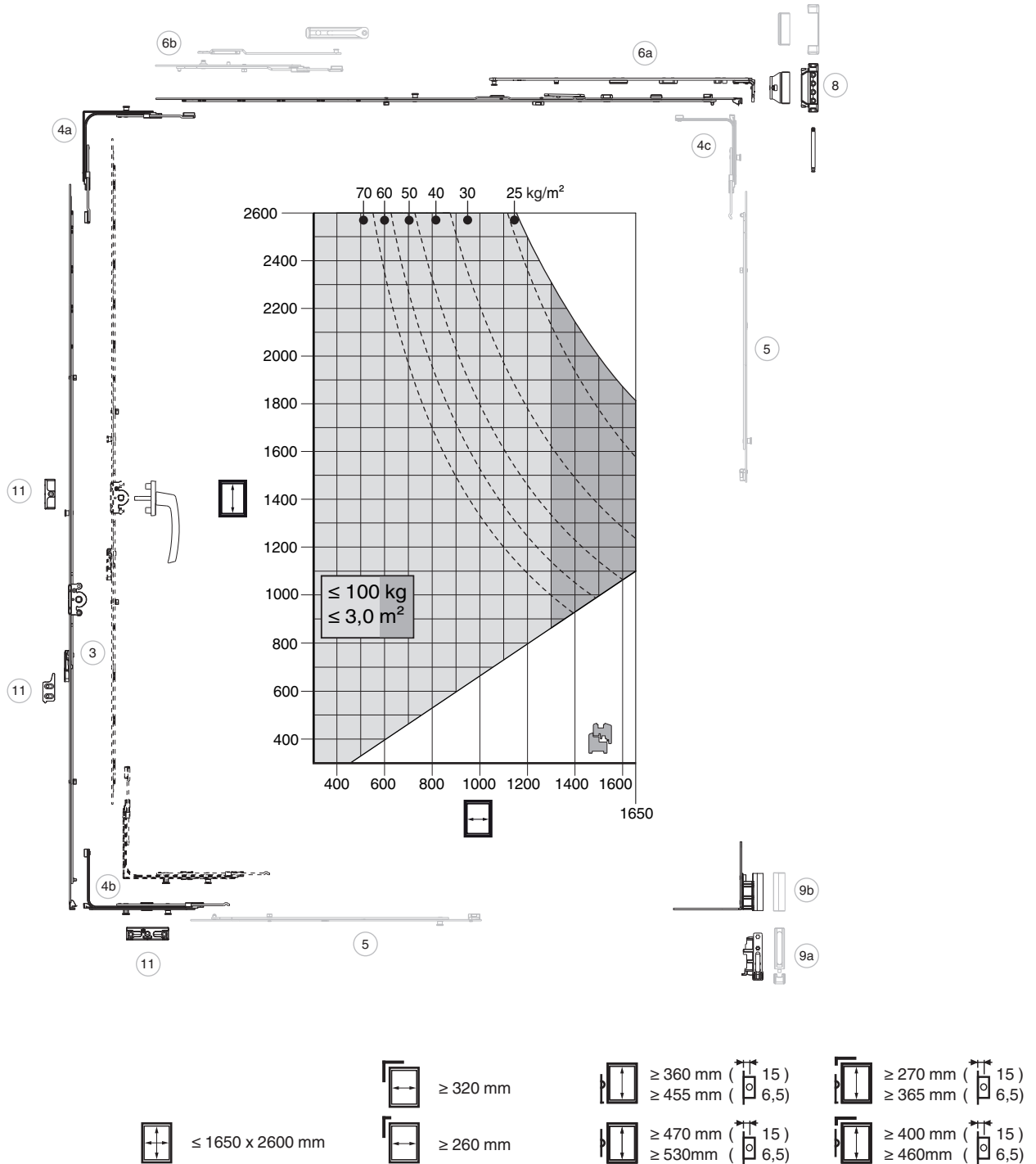
d) Valid range

2.4 Hardware overviews

2.4.1 Timber (DT130, DT160)

2.4.1.1 DT130

2.4.1.1.1 1-sashed rectangular T&T window with pivot post DT130 and rebated corner support DTuni without rebate-leg screw fixing

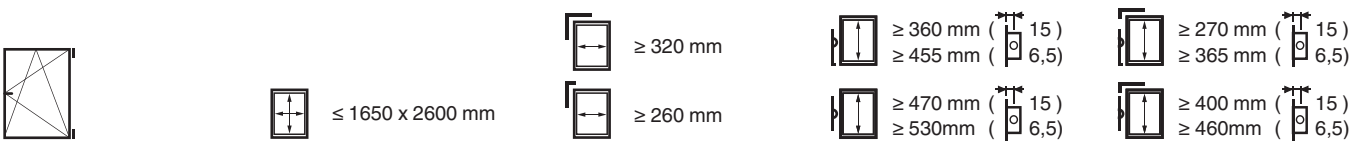
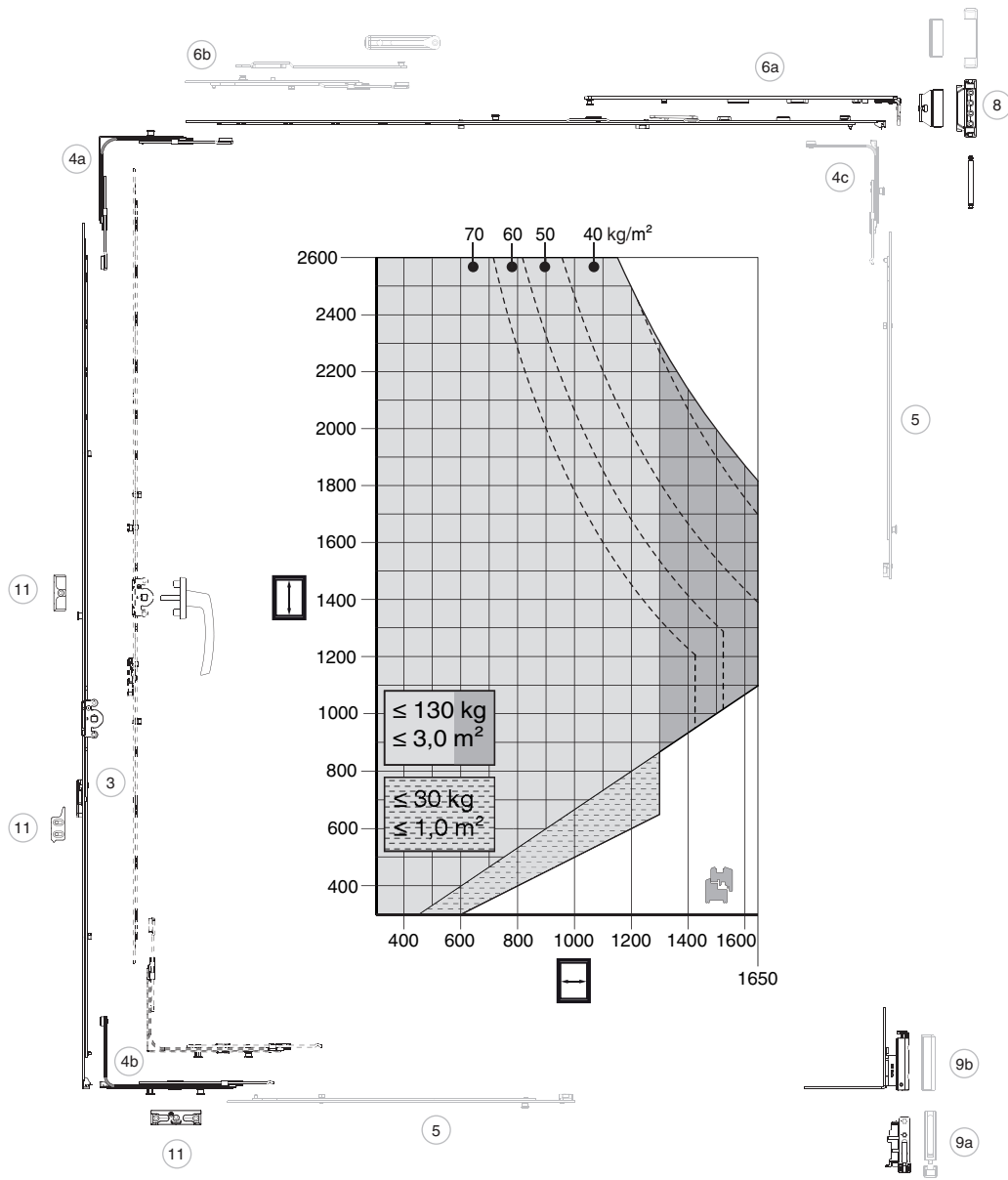




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6a	6.1.4 Scissor stay faceplates i.S.	→203
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8	8.5.1 Scissor stay hinges DT130	→240
9a	9.4.1 Pivot posts DT130	→254
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2.4.1.1.2 1-sashed rectangular T&T window with pivot post DT130 and rebated corner support DT130 with rebate-leg screw fixing



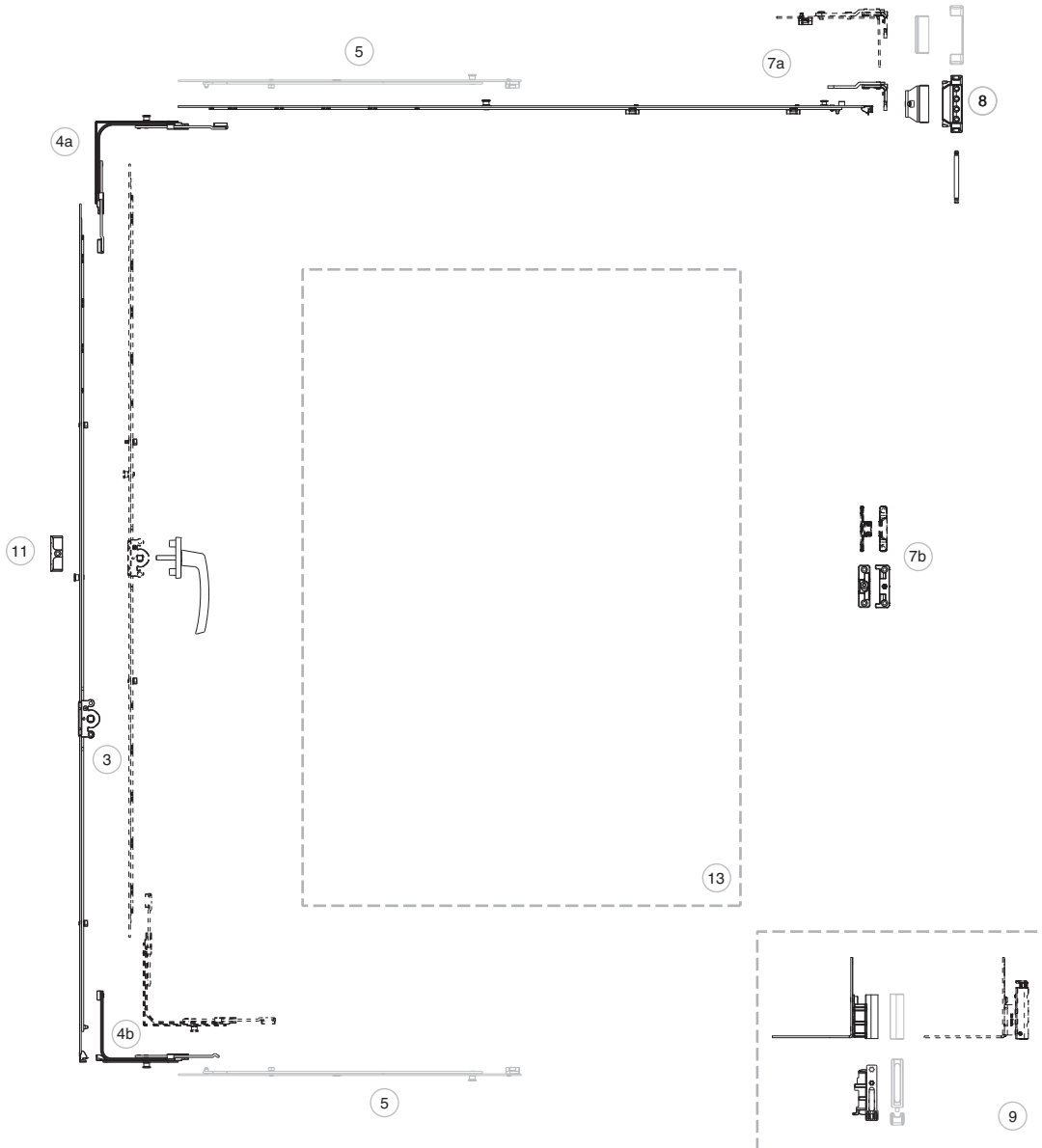
- 3 = Drive gear FHH or VHH (Backset 15 or 6.5). Recommendation: Handle height should be between $\frac{1}{3}$ and $\frac{1}{2}$ of sash rebate height (SRH).
- 5 = Above 800 mm (PVC) or 1,000 mm (timber); Observe details from profile manufacturer!
- 6b = Stabilizing scissor stay necessary from 1,301 mm (dark shading in application range diagram).
- 9 = The support screw has to be set from 100 kg sash weight!



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8	8.5.1 Scissor stay hinges DT130	→240
9a	9.4.1 Pivot posts DT130	→254
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11	11 Striker plates	→292



2.4.1.1.3 1-sashed rectangular turn-only window
with pivot post DT130 and fixed or croppable turn-only hinge



≤ 1650 x 2600 mm



≥ 320 mm



≥ 260 mm



≥ 360 mm (15), ≥ 455 mm (6,5)



≥ 470 mm (15), ≥ 530 mm (6,5)

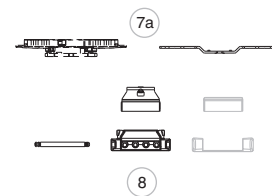
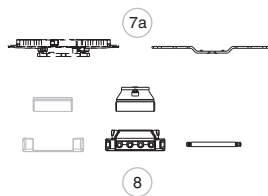
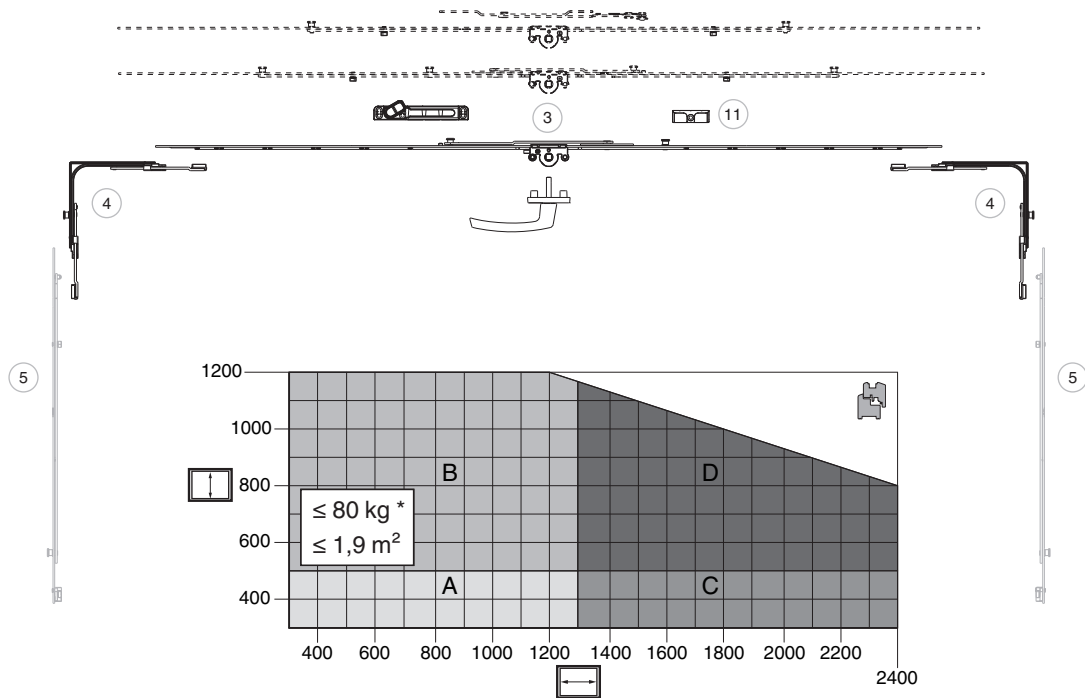
- 3 = Drive gear FHH or VHH (Backset 15 or 6.5). Recommendation: Handle height should be between $\frac{1}{3}$ and $\frac{1}{2}$ of sash rebate height (SRH).
- 5 = Above 800 mm (PVC) or 1,000 mm (timber); Observe details from profile manufacturer!
- 7a = Turn-only hinge - sash part fixed or croppable.
- 7b = 1 piece 800 - 1,600 mm, 2 pieces 1,601 - 2,400 mm, 3 pieces 2,401 - 2,650 mm; Observe details from profile manufacturer!
- 9 = For possible pivot post combinations refer to matrix; the support screw has to be set from 100 kg sash weight!
- 13 = For application diagram refer to turn&tilt hardware overview according to corresponding pivot post combination.



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5	5.1 Centre locks FHH i.S.	→196
7a	7.1 Turn-only hinges - sash part / turn-only hinges - frame part / turn-only hinge faceplates AS/DTuni/PVC	→220
7b	7.10 Compression devices	→232
8	8.5.1 Scissor stay hinges DT130	→240
9	9.4.1 Pivot posts DT130	→254
11	11 Striker plates	→292



2.4.1.1.4 1-sashed rectangular tilt-only window
with scissor stay hinge DT130 and tilt-only hinge DT



≤ 2400 x 1200 mm

≥ 210 mm

≥ 300 mm

≥ 650 mm

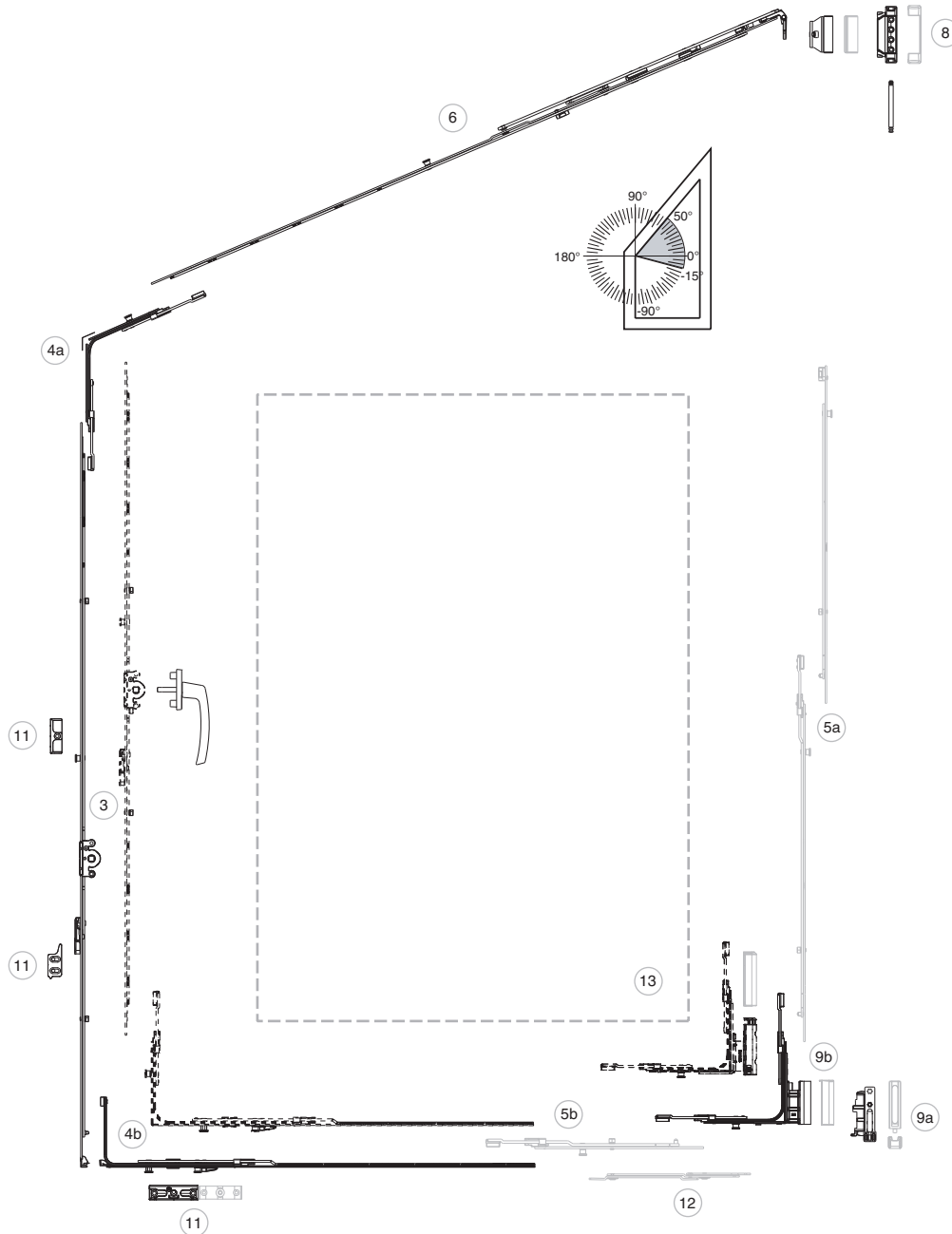
- A = 1 tilt stay + restrictor and cleaning stay size 1.
- B = 1 tilt stay + restrictor and cleaning stay size 2.
- C = 2 tilt stays + restrictor and cleaning stay size 1.
- D = 2 tilt stays + restrictor and cleaning stay size 2.
- * = Mandatory installation of restrictor and cleaning stay (guideline FPKF at www.schlossindustrie.de)! Observe application diagrams and max. load capacity for restrictor and cleaning stays!
- 5 = Above 800 mm (PVC) or 1,000 mm (timber); Observe details from profile manufacturer!
- 7b = 1 piece 800 - 1,600 mm, 2 pieces 1,601 - 2,400 mm, 3 pieces 2,401 - 2,650 mm; Observe details from profile manufacturer!



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4	4.1.1	Corner elements standard i.S.	→188
5	5.1	Centre locks FHH i.S.	→196
7a	7.2	Tilt and turn hinges - sash part / tilt-only bearings AS/DTuni/PVC	→222
7b	7.10	Compression devices	→232
8	8.5.1	Scissor stay hinges DT130	→240
11	11	Striker plates	→292



2.4.1.1.5 1-sashed angled T&T window with pivot post DT130 and rebated corner support DT with corner element



≤ 1650 x 2600 mm



≥ 465 mm



≥ 370 mm



≥ 360 mm (\varnothing 15), ≥ 455 mm (\varnothing 6,5)



≥ 470 mm (\varnothing 15), ≥ 530 mm (\varnothing 6,5)

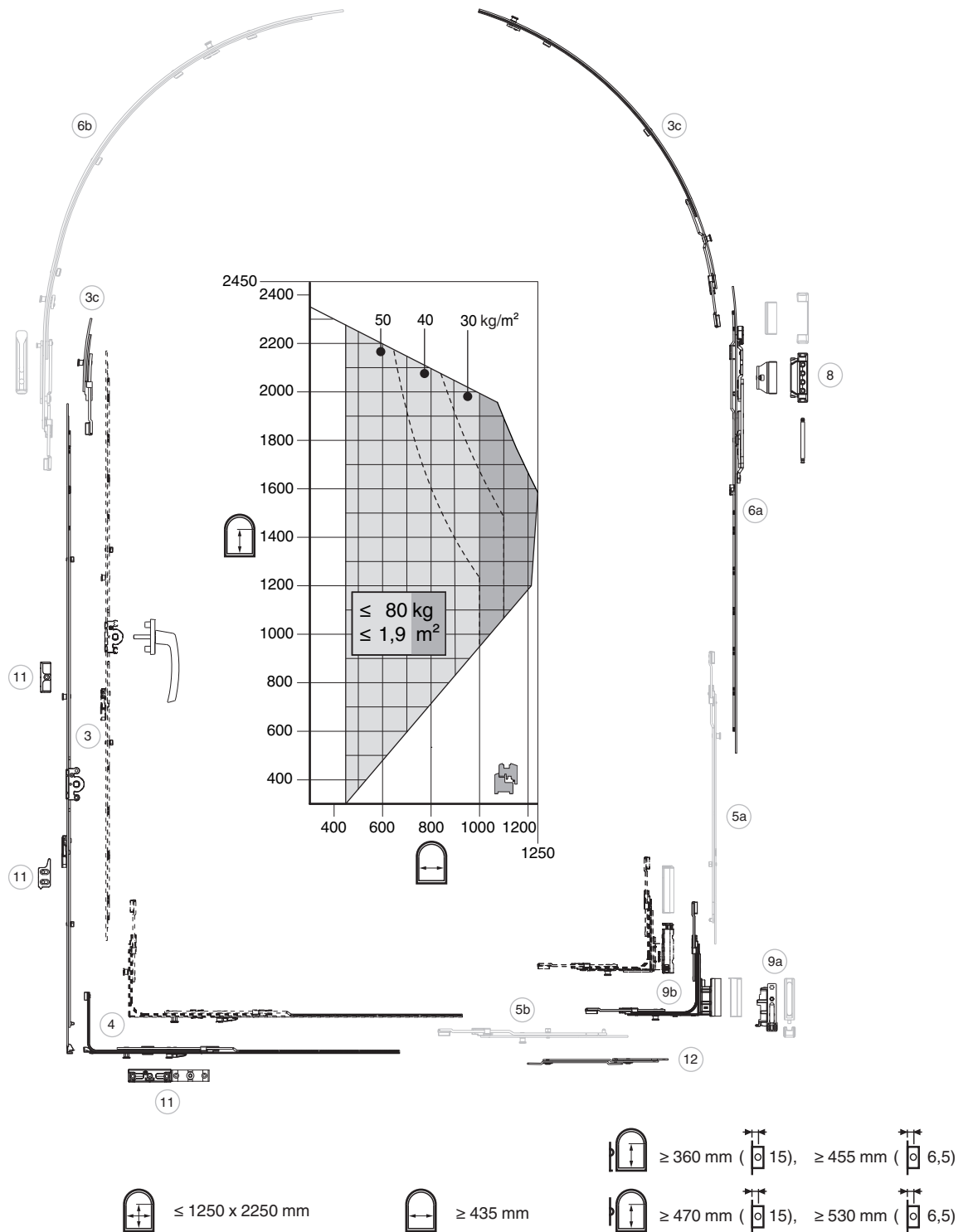
- 3 = Drive gear FHH or VHH (Backset 15 or 6.5). Recommendation: Handle height should be between $\frac{1}{3}$ and $\frac{1}{2}$ of sash rebate height (SRH).
- 5a = Above SRH 800 mm; Observe details from profile manufacturer!
- 5b = Required above SRW 670 mm.
- 13 = Refer to application diagrams for angled windows in chapter 2.5.



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3a	3.1.1.1 T&T drive gears BS 15 FHH i.S.	→162
3b	3.1.1.9 T&T drive gears BS 15 VHH i.S.	→164
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4b	4.6 Corner elements i.S. for half round windows	→192
5a	5.1 Centre locks FHH i.S.	→196
5b	5.10 Faceplate extensions fixed and extendable	→199
6	6.1.11 Rebated scissor stays i.S. for angled windows	→205
8	8.5.1 Scissor stay hinges DT130	→240
9a	9.4.1 Pivot posts DT130	→254
9b	9.4.3.7 Rebated corner supports DTuni with rebate-leg screw fixing EH with corner element	→258
11	11 Striker plates	→292
12	12.12 Turn restrictions	→315



2.4.1.1.6 1-sashed half round T&T window with pivot post DT130 and rebated corner support DT130 with corner element



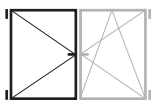
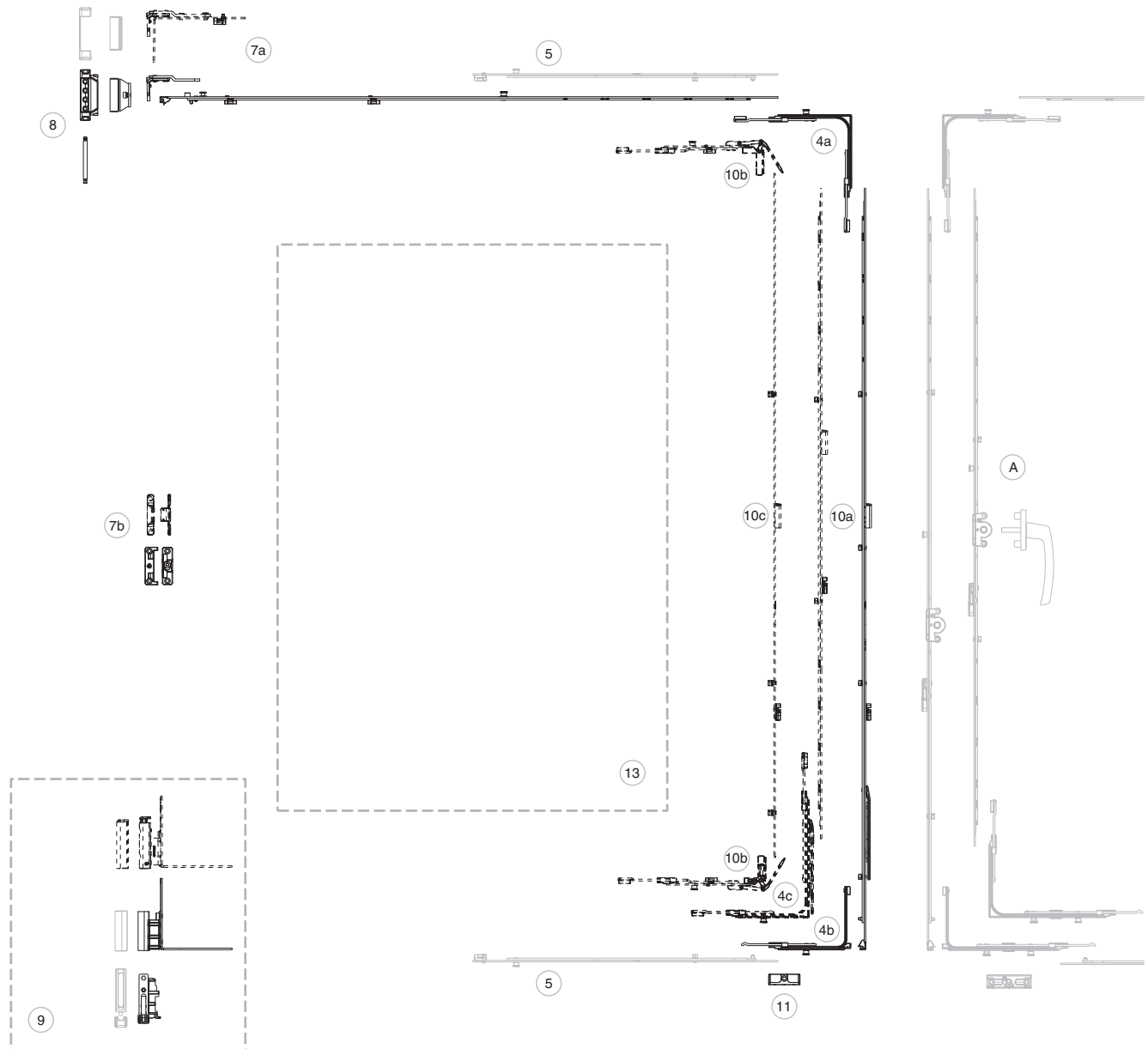
- 3 = Drive gear FHH or VHH (Backset 15 or 6.5). Recommendation: Handle height should be between $\frac{1}{3}$ and $\frac{1}{2}$ of sash rebate height (SRH).
- 3c = Required above SRW 671 mm.
- 5a = Above 800 mm (PVC) or 1,000 mm (timber); Observe details from profile manufacturer!
- 5b = Required above SRW 670 mm.
- 6b = Stabilizing scissor stay necessary from 1,001 mm (dark shading in application range diagram).
- 9b = Rebated corner support with corner element with or without rebate-leg screw fixing.



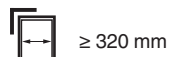
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3a	3.1.1.1 T&T drive gears BS 15 FHH i.S.	→162
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6a	6.1.12 Rebated scissor stays i.S. for half round windows	→206
6b	6.10.4 Stabilizing scissor stays for half round windows	→216
8	8.5.1 Scissor stay hinges DT130	→240
9a	9.4.1 Pivot posts DT130	→254
9b	9.4.3.7 Rebated corner supports DTuni with rebate-leg screw fixing EH with corner element	→258
11	11 Striker plates	→292
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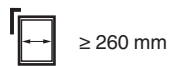
2.4.1.1.7 2-sashed rectangular T&T window
with pivot post DT130 and rebated corner support DT130



≤ 1650 x 2600 mm



≥ 320 mm



≥ 260 mm



≥ 360 mm (15),



≥ 455 mm (6,5)



≥ 470 mm (15),



≥ 530 mm (6,5)

- A = For details refer to 1-sashed turn&tilt window.
- 5 = Above 800 mm (PVC) or 1,000 mm (timber); Observe details from profile manufacturer!
- 7b = 1 piece 800 - 1,600 mm, 2 pieces 1,601 - 2,400 mm, 3 pieces 2,401 - 2,650 mm; Observe details from profile manufacturer!
- 9 = For possible pivot post combinations refer to matrix; the support screw has to be set from 100 kg sash weight!
- 10a = French casement drive gear FHH or VHH.
- 13 = For application diagram refer to turn&tilt hardware overview according to corresponding pivot post combination.

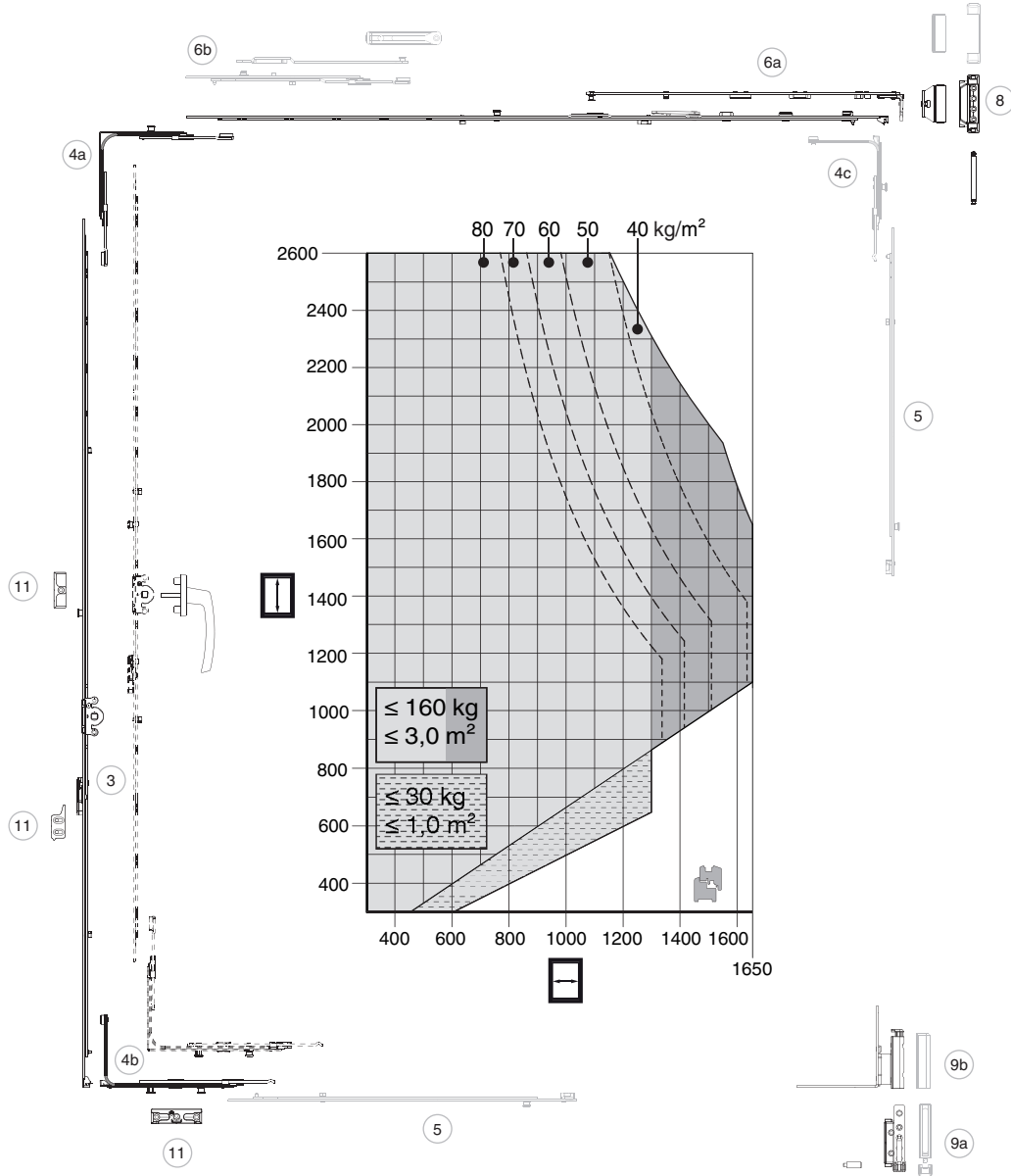


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4b	4.1.3 Corner elements vertical i.S.	→189
4c	4.4 Corner elements i.S. for French casement drive gears	→191
5	5.1 Centre locks FHH i.S.	→196
7a	7.1 Turn-only hinges - sash part / turn-only hinges - frame part / turn-only hinge faceplates AS/DTuni/PVC	→220
7b	7.10 Compression devices	→232
8	8.5.1 Scissor stay hinges DT130	→240
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10a	10.2 French casement drive gears	→278
10b	10.3 Horizontal French casement locks	→286
10c	10.4 Single piece door striker	→286
11	11 Striker plates	→292



2.4.1.2 DT160

2.4.1.2.1 1-sashed rectangular T&T window with pivot post DT160 and rebated corner support DT160 with rebate-leg screw fixing



≤ 1650 x 2600 mm



≥ 320 mm



≥ 260 mm



≥ 360 mm (15)
≥ 455 mm (6,5)



≥ 470 mm (15)
≥ 530mm (6,5)



≥ 270 mm (15)
≥ 365 mm (6,5)



≥ 400 mm (15)
≥ 460mm (6,5)

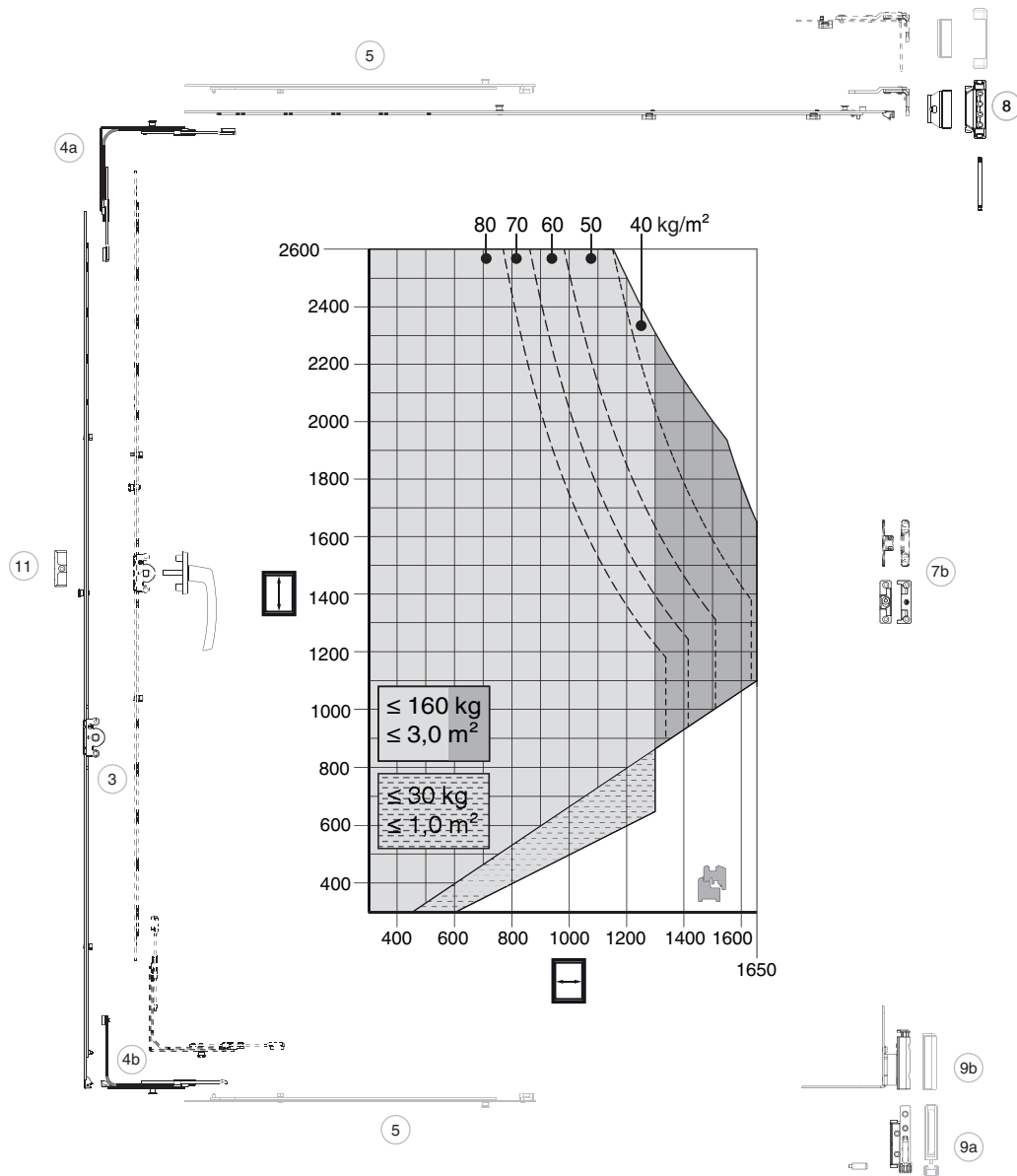
- 3 = Drive gear FHH or VHH (Backset 15 or 6.5). Recommendation: Handle height should be between $\frac{1}{3}$ and $\frac{1}{2}$ of sash rebate height (SRH).
- 5 = Above 800 mm (PVC) or 1,000 mm (timber); Observe details from profile manufacturer!
- 6b = Stabilizing scissor stay necessary from 1,301 mm (dark shading in application range diagram).
- 9 = The support dowel or support screw has to be set from 100 kg sash weight!



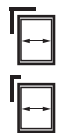
Selection guide		Page
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4a	4.1.1 Corner elements standard i.S.	→188
4b	4.1.2 Corner elements horizontal i.S.	→188
4c	4.1.3 Corner elements vertical i.S.	→189
5	5.1 Centre locks FHH i.S.	→196
6a	6.1.4 Scissor stay faceplates i.S.	→203
6b	6.10.1 Stabilizing scissor stays	→216
8	8.5.2 Scissor stay hinges DT160	→240
9a	9.4.2 Pivot posts DT160	→254
9b	9.4.3.2 Rebated corner supports DT160 with rebate-leg screw fixing	→256
11	11 Striker plates	→292



2.4.1.2.2 1-sashed rectangular turn-only window with pivot post DT160 and fixed or croppable turn-only hinge



≤ 1650 x 2600 mm



≥ 320 mm



≥ 260 mm



≥ 360 mm (15),



≥ 470 mm (15),



≥ 455 mm (6,5)



≥ 530 mm (6,5)

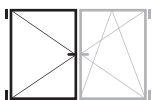
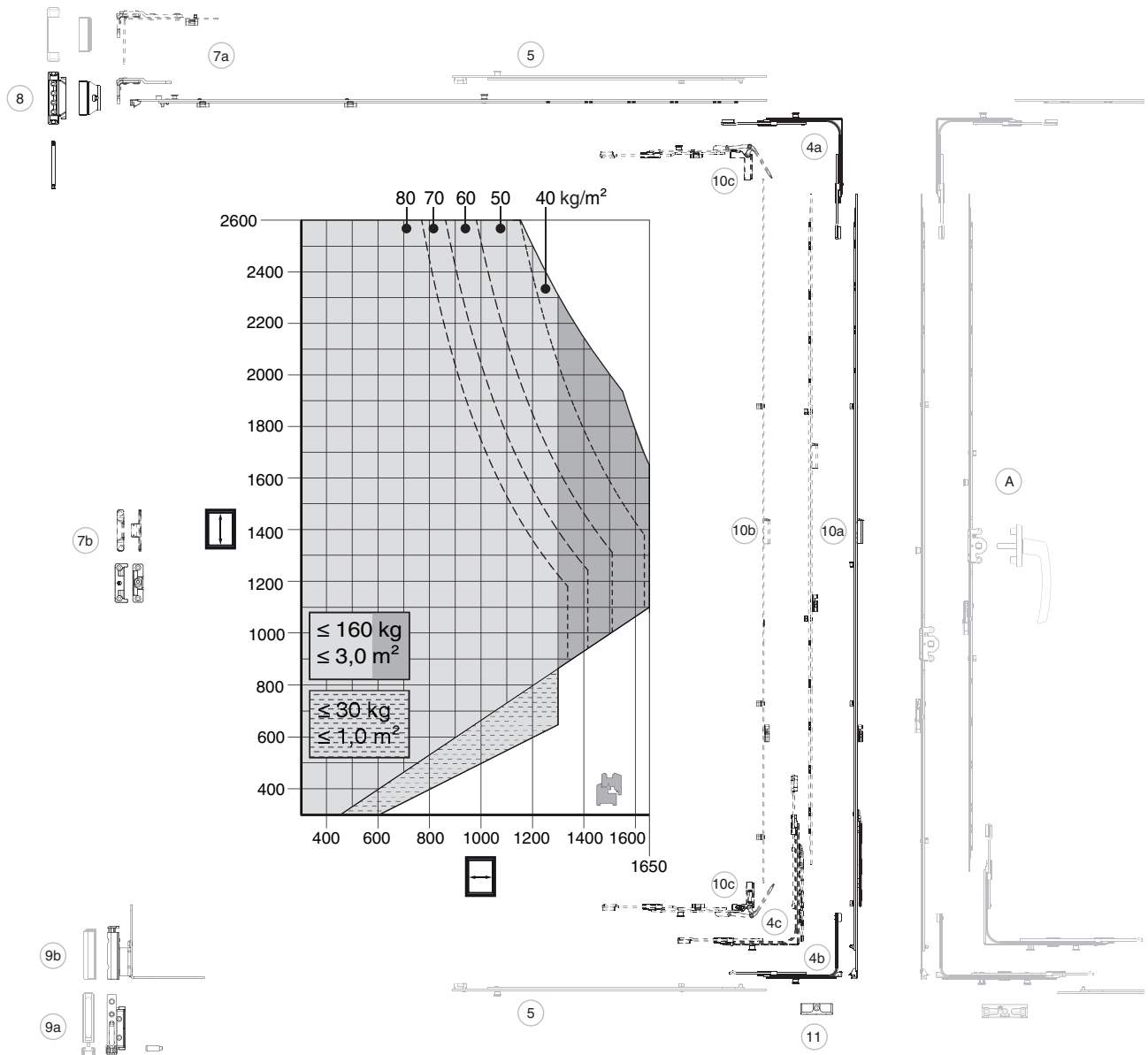
- 3 = Drive gear FHH or VHH (Backset 15 or 6.5). Recommendation: Handle height should be between $\frac{1}{3}$ and $\frac{1}{2}$ of sash rebate height (SRH).
- 5 = Above 800 mm (PVC) or 1,000 mm (timber); Observe details from profile manufacturer!
- 7a = Turn-only hinge - sash part fixed or croppable.
- 7b = 1 piece 800 - 1,600 mm, 2 pieces 1,601 - 2,400 mm, 3 pieces 2,401 - 2,650 mm; Observe details from profile manufacturer!
- 9 = For possible pivot post combinations refer to matrix; the support dowel or support screw has to be set from 100 kg sash weight!



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3b	3.2.1.6 Turn-only drive gears BS 15 VHH i.S.	→173
4a	4.1.1 Corner elements standard i.S.	→188
4b	4.1.3 Corner elements vertical i.S.	→189
5	5.1 Centre locks FHH i.S.	→196
7a	7.1 Turn-only hinges - sash part / turn-only hinges - frame part / turn-only hinge faceplates AS/DTuni/PVC	→220
7b	7.10 Compression devices	→232
8	8.5.2 Scissor stay hinges DT160	→240
9a	9.4.2 Pivot posts DT160	→254
9b	9.4.3.2 Rebated corner supports DT160 with rebate-leg screw fixing	→256
11	11 Striker plates	→292



2.4.1.2.3 2-sashed rectangular T&T window
with pivot post DT160 and rebated corner support DT160



≤ 1650 x 2600 mm

≥ 320 mm

≥ 260 mm

≥ 360 mm (15), ≥ 455 mm (6,5)

≥ 470 mm (15), ≥ 530 mm (6,5)

- A = For details refer to 1-sashed turn&tilt window.
- 5 = Above 800 mm (PVC) or 1,000 mm (timber); Observe details from profile manufacturer!
- 7b = 1 piece 800 - 1,600 mm, 2 pieces 1,601 - 2,400 mm, 3 pieces 2,401 - 2,650 mm; Observe details from profile manufacturer!
- 9 = For possible pivot post combinations refer to matrix; the support dowel or support screw has to be set from 100 kg sash weight!
- 10a = French casement drive gear FHH or VHH.

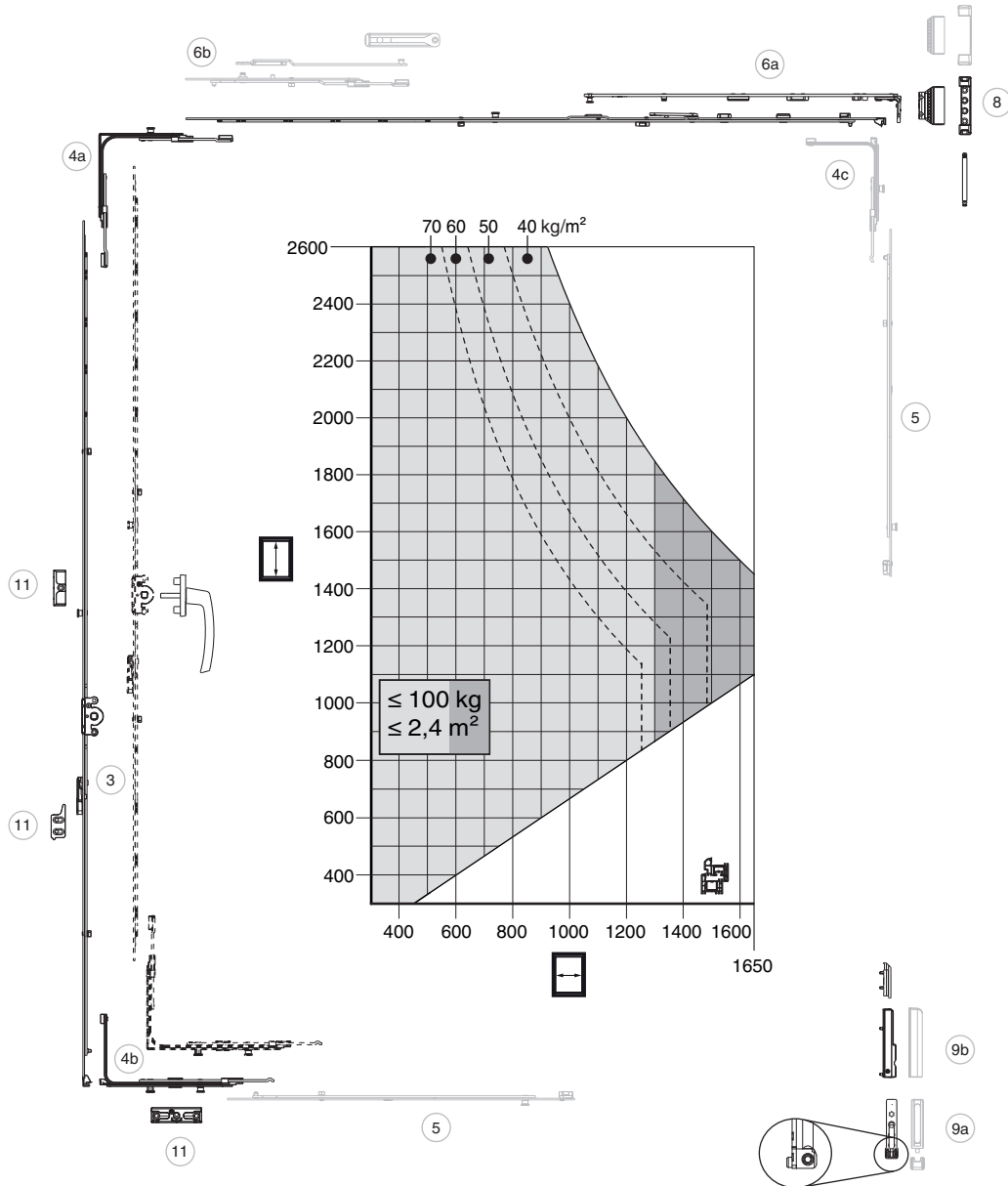


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4c	4.4 Corner elements i.S. for French casement drive gears	→191
5	5.1 Centre locks FHH i.S.	→196
7a	7.1 Turn-only hinges - sash part / turn-only hinges - frame part / turn-only hinge faceplates AS/DTuni/PVC	→220
7b	7.10 Compression devices	→232
8	8.5.2 Scissor stay hinges DT160	→240
9a	9.4.2 Pivot posts DT160	→254
9b	9.4.3.2 Rebated corner supports DT160 with rebate-leg screw fixing	→256
10a	10.2 French casement drive gears	→278
10b	10.3 Horizontal French casement locks	→286
10c	10.4 Single piece door striker	→286
11	11 Striker plates	→292



2.4.2 PVC (drive gear FHH/VHH)

2.4.2.1 1-sashed rectangular T&T window
with pivot post PVC with positioning pin or short support pin
+ corner support PVC with positioning pin



$\leq 1650 \times 2600 \text{ mm}$

$\geq 320 \text{ mm}$
 $\geq 260 \text{ mm}$

$\geq 360 \text{ mm}$ (15)
 $\geq 455 \text{ mm}$ (6,5)

$\geq 470 \text{ mm}$ (15)
 $\geq 530 \text{ mm}$ (6,5)

$\geq 270 \text{ mm}$ (15)
 $\geq 365 \text{ mm}$ (6,5)

$\geq 400 \text{ mm}$ (15)
 $\geq 460 \text{ mm}$ (6,5)

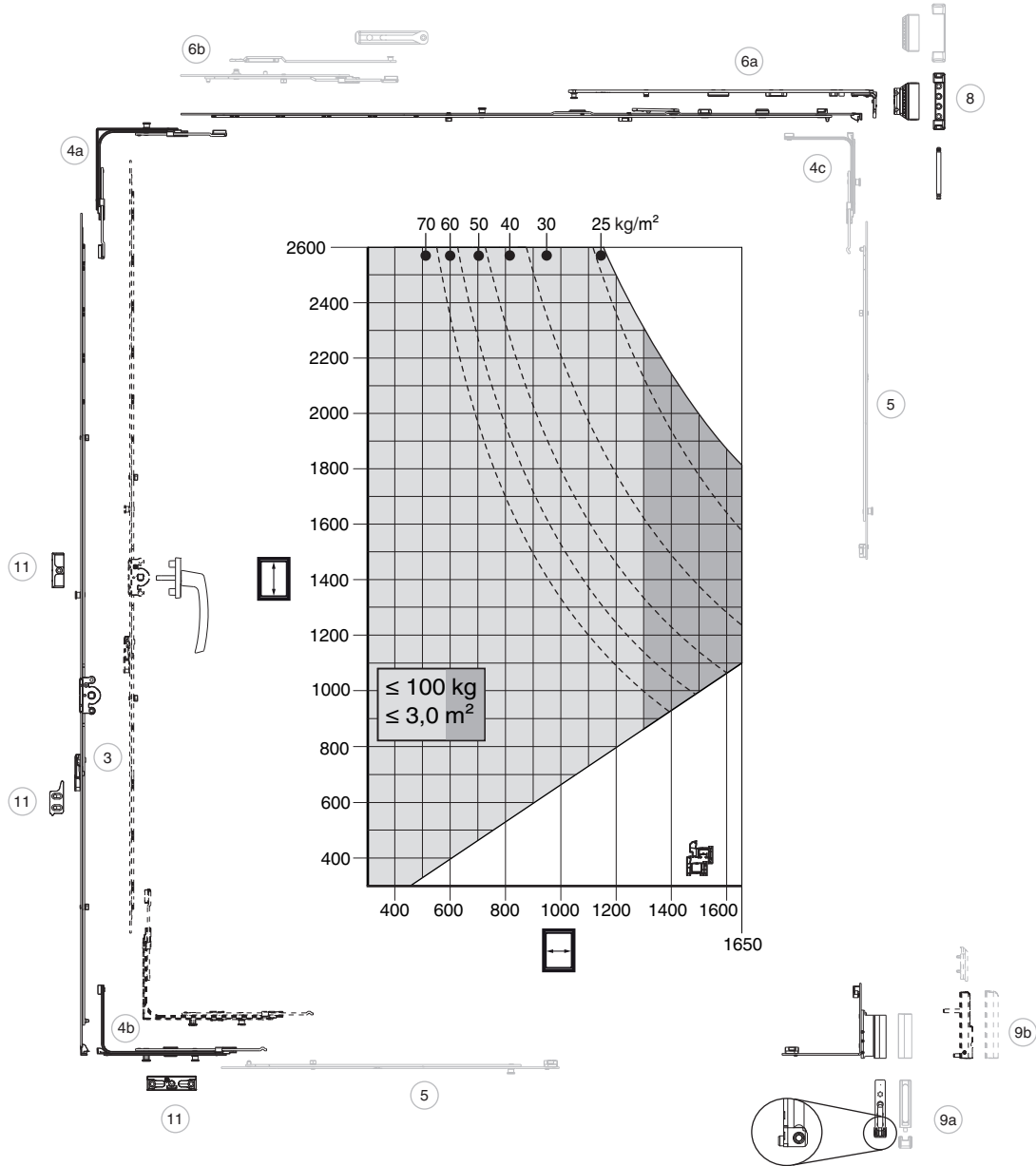
- 3 = Drive gear FHH or VHH (Backset 15 or 6.5). Recommendation: Handle height should be between $\frac{1}{3}$ and $\frac{1}{2}$ of sash rebate height (SRH).
- 5 = Above 800 mm (PVC) or 1,000 mm (timber); Observe details from profile manufacturer!
- 6b = Stabilizing scissor stay necessary from 1,301 mm (dark shading in application range diagram).
- 11 = Refer to profile data sheets for striker plates and sash lifters for PVC.



Selection guide		Page
3a	3.1.1.1 T&T drive gears BS 15 FHH i.S.	→162
3b	3.1.1.9 T&T drive gears BS 15 VHH i.S.	→164
4a	4.1.1 Corner elements standard i.S.	→188
4b	4.1.2 Corner elements horizontal i.S.	→188
4c	4.1.3 Corner elements vertical i.S.	→189
5	5.1 Centre locks FHH i.S.	→196
6a	6.1.4 Scissor stay faceplates i.S.	→203
6b	6.10.1 Stabilizing scissor stays	→216
8	8.1 Scissor stay hinges PVC	→238
9a	9.2.1 Pivot posts PVC	→248
9b	9.2.2 Corner supports PVC	→248



**2.4.2.2 1-sashed rectangular T&T window
with pivot post PVC with positioning pin or short support pin
+ corner support PVC with support pin or rebated corner support AS/PVC without rebate-leg screw fixing**



≤ 1650 x 2600 mm



≥ 320 mm



≥ 260 mm



≥ 360 mm (15)
≥ 455 mm (6,5)



≥ 470 mm (15)
≥ 530mm (6,5)



≥ 270 mm (15)
≥ 365 mm (6,5)



≥ 400 mm (15)
≥ 460mm (6,5)

3 = Drive gear FHH or VHH (Backset 15 or 6.5). Recommendation: Handle height should be between $\frac{1}{3}$ and $\frac{1}{2}$ of sash rebate height (SRH).

5 = Above 800 mm (PVC) or 1,000 mm (timber); Observe details from profile manufacturer!

6b = Stabilizing scissor stay necessary from 1,301 mm (dark shading in application range diagram).

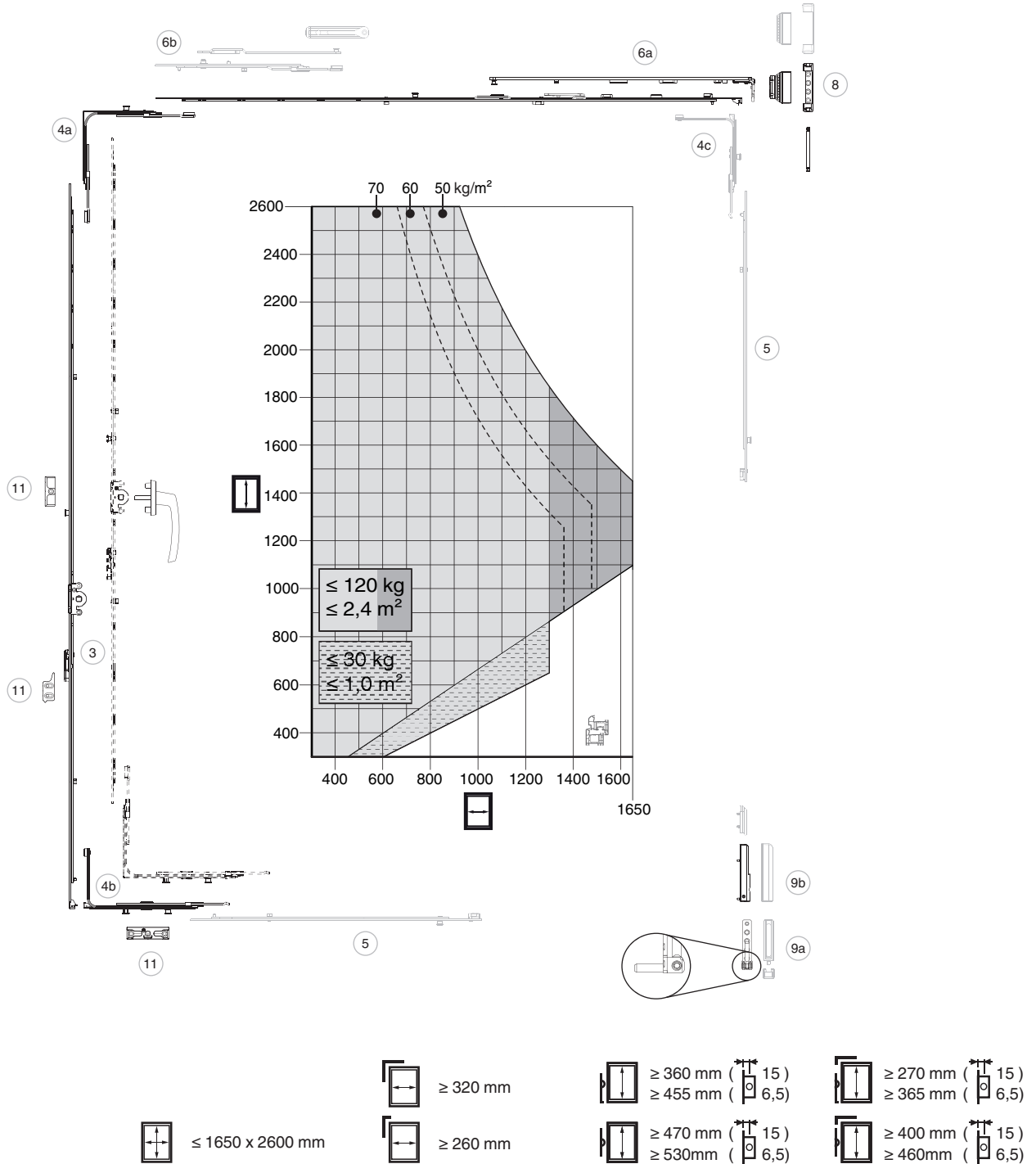
11 = Refer to profile data sheets for striker plates and sash lifters for PVC.



Selection guide		Page
3a	3.1.1.1 T&T drive gears BS 15 FHH i.S.	→162
3b	3.1.1.9 T&T drive gears BS 15 VHH i.S.	→164
4a	4.1.1 Corner elements standard i.S.	→188
4b	4.1.2 Corner elements horizontal i.S.	→188
4c	4.1.3 Corner elements vertical i.S.	→189
5	5.1 Centre locks FHH i.S.	→196
6a	6.1.4 Scissor stay faceplates i.S.	→203
6b	6.10.1 Stabilizing scissor stays	→216
8	8.1 Scissor stay hinges PVC	→238
9a	9.2.1 Pivot posts PVC	→248
9b	9.2.2 Corner supports PVC	→248



**2.4.2.3 1-sashed rectangular T&T window
with pivot post PVC with long support pin
+ corner support PVC with positioning pin**



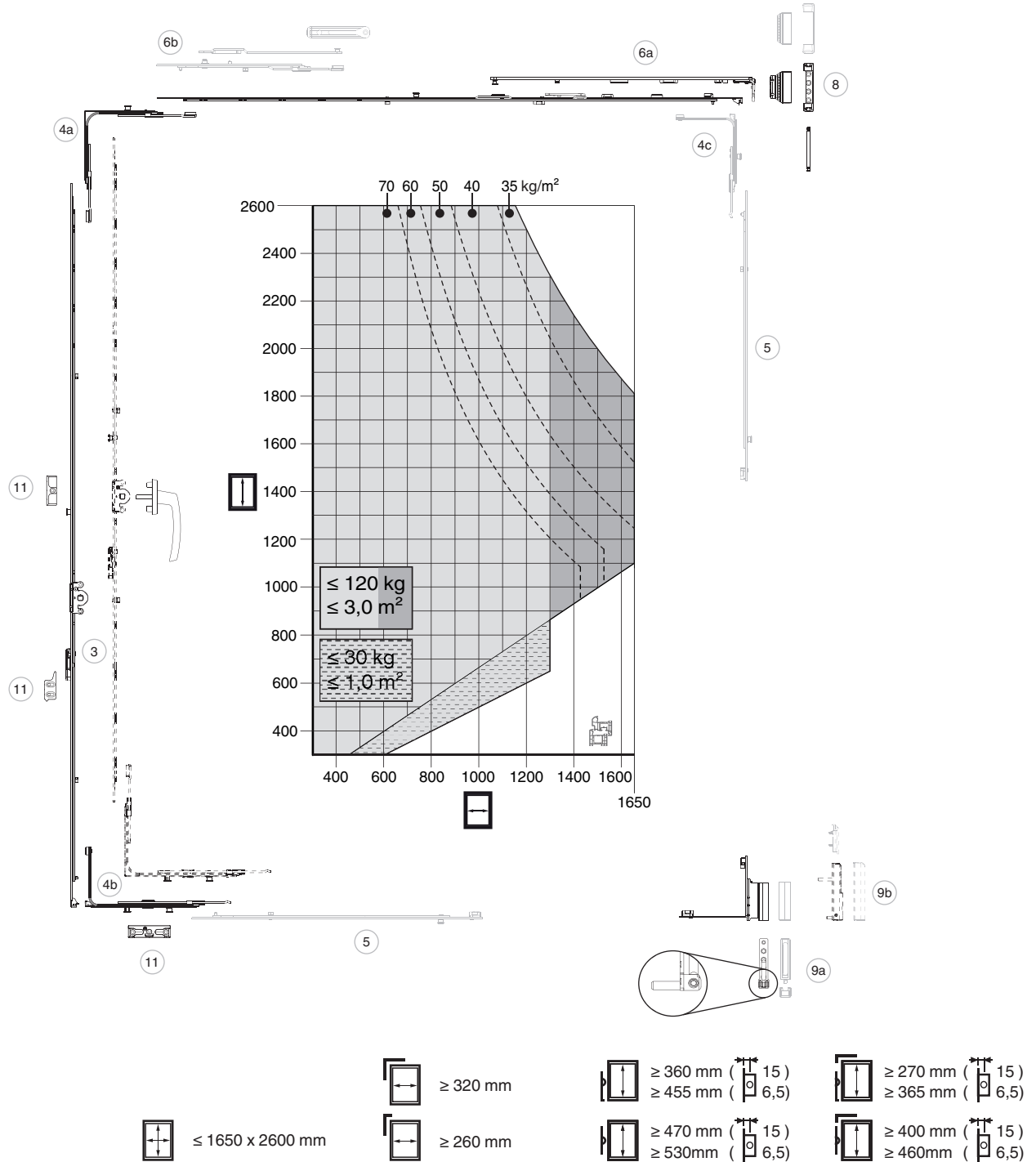
- 3 = Drive gear FHH or VHH (Backset 15 or 6.5). Recommendation: Handle height should be between $\frac{1}{3}$ and $\frac{1}{2}$ of sash rebate height (SRH).
- 5 = Mandatory installation of third multi-sash centre frame hinge above SRH 800 mm (PVC) or 1,000 mm (timber)!
- 6b = Stabilizing scissor stay necessary from 1,301 mm (dark shading in application range diagram).
- 9 = Support pin must reach through at least two profile walls!
- 11 = Refer to profile data sheets for striker plates and sash lifters for PVC.



Selection guide		Page
3a	3.1.1.1 T&T drive gears BS 15 FHH i.S.	→162
3b	3.1.1.9 T&T drive gears BS 15 VHH i.S.	→164
4a	4.1.1 Corner elements standard i.S.	→188
4b	4.1.2 Corner elements horizontal i.S.	→188
4c	4.1.3 Corner elements vertical i.S.	→189
5	5.1 Centre locks FHH i.S.	→196
6a	6.1.4 Scissor stay faceplates i.S.	→203
6b	6.10.1 Stabilizing scissor stays	→216
8	8.1 Scissor stay hinges PVC	→238
9a	9.2.1 Pivot posts PVC	→248
9b	9.2.2 Corner supports PVC	→248



2.4.2.4 1-sashed rectangular T&T window with pivot post PVC with long support pin + corner support PVC with support pin or rebated corner support AS/PVC without rebate-leg screw fixing



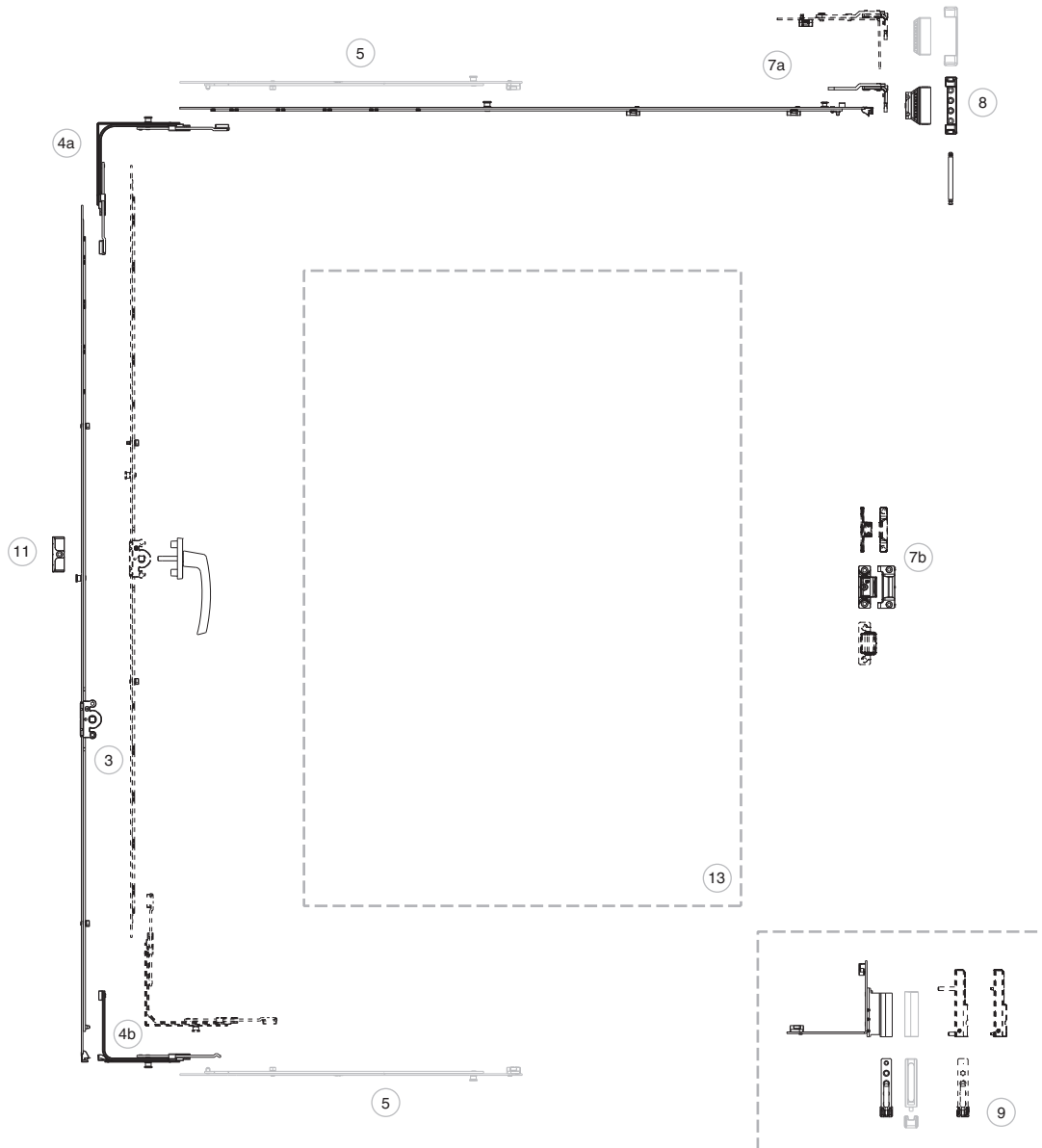
- 3 = Drive gear FHH or VHH (Backset 15 or 6.5). Recommendation: Handle height should be between $\frac{1}{3}$ and $\frac{1}{2}$ of sash rebate height (SRH).
- 5 = Above 800 mm (PVC) or 1,000 mm (timber); Observe details from profile manufacturer!
- 6b = Stabilizing scissor stay necessary from 1,301 mm (dark shading in application range diagram).
- 9 = Support pin must reach through at least two profile walls! Observe restrictions for 26 mm rebate depth!
- 11 = Refer to profile data sheets for striker plates and sash lifters for PVC.



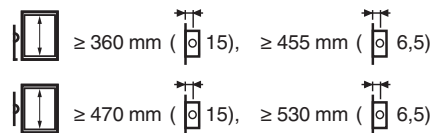
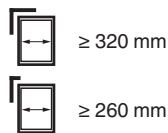
Selection guide		Page
3a	3.1.1.1 T&T drive gears BS 15 FHH i.S.	→162
3b	3.1.1.9 T&T drive gears BS 15 VHH i.S.	→164
4a	4.1.1 Corner elements standard i.S.	→188
4b	4.1.2 Corner elements horizontal i.S.	→188
4c	4.1.3 Corner elements vertical i.S.	→189
5	5.1 Centre locks FHH i.S.	→196
6a	6.1.4 Scissor stay faceplates i.S.	→203
6b	6.10.1 Stabilizing scissor stays	→216
8	8.1 Scissor stay hinges PVC	→238
9a	9.2.1 Pivot posts PVC	→248
9b	9.2.2 Corner supports PVC	→248



2.4.2.5 1-sashed rectangular turn-only window with pivot post PVC



≤ 1650 x 2600 mm



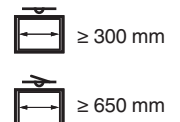
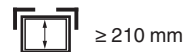
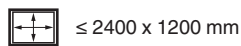
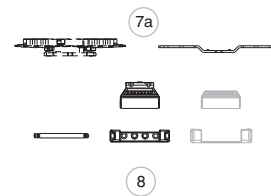
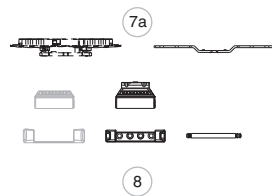
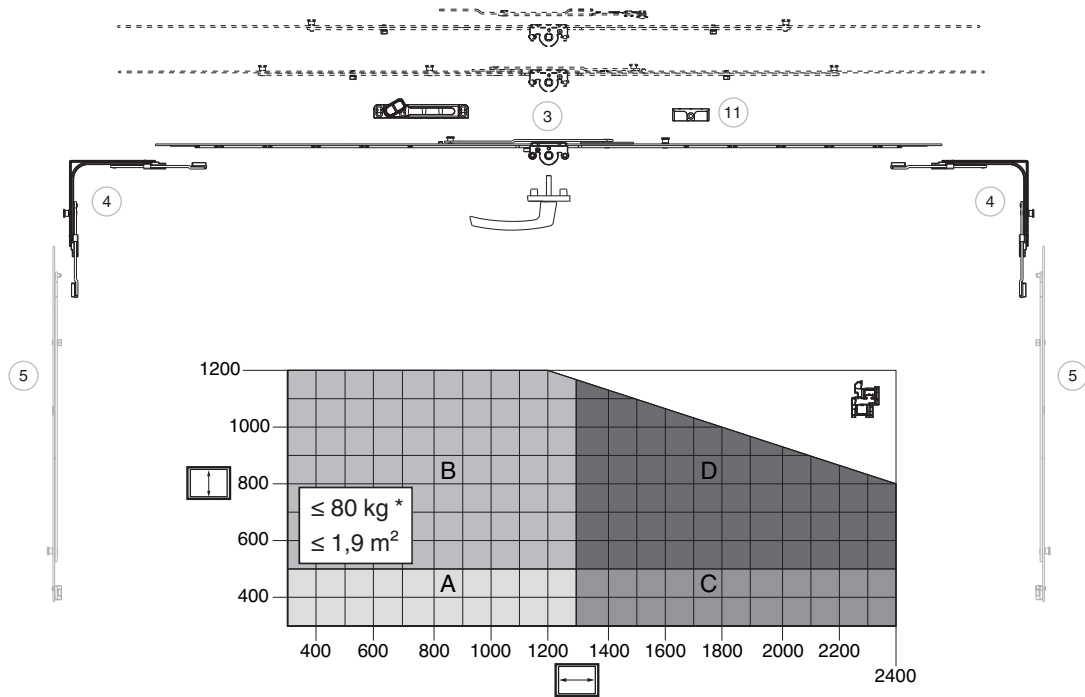
- 3 = Drive gear FHH or VHH (Backset 15 or 6.5). Recommendation: Handle height should be between $\frac{1}{3}$ and $\frac{1}{2}$ of sash rebate height (SRH).
- 5 = Above 800 mm (PVC) or 1,000 mm (timber); Observe details from profile manufacturer!
- 7a = Turn-only hinge - sash part fixed or croppable.
- 7b = 1 piece 800 - 1,600 mm, 2 pieces 1,601 - 2,400 mm, 3 pieces 2,401 - 2,650 mm; Observe details from profile manufacturer!
- 9 = For possible pivot post combinations refer to matrix.
- 11 = Refer to profile data sheets for striker plates and sash lifters for PVC.
- 13 = For application diagram refer to turn&tilt hardware overview according to corresponding pivot post combination.



Selection guide		Page
3a	3.2.1.1 Turn-only drive gears BS 15 FHH i.S.	→172
3b	3.2.1.6 Turn-only drive gears BS 15 VHH i.S.	→173
4a	4.1.1 Corner elements standard i.S.	→188
4b	4.1.3 Corner elements vertical i.S.	→189
5	5.1 Centre locks FHH i.S.	→196
7a	7.1 Turn-only hinges - sash part / turn-only hinges - frame part / turn-only hinge faceplates AS/DTuni/PVC	→220
7b	7.10 Compression devices	→232
8	8.1 Scissor stay hinges PVC	→238
9	9.2 Pivot posts PVC	→248



2.4.2.6 1-sashed rectangular tilt-only window
with scissor stay hinge PVC and tilt-only hinge AS/PVC



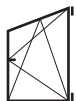
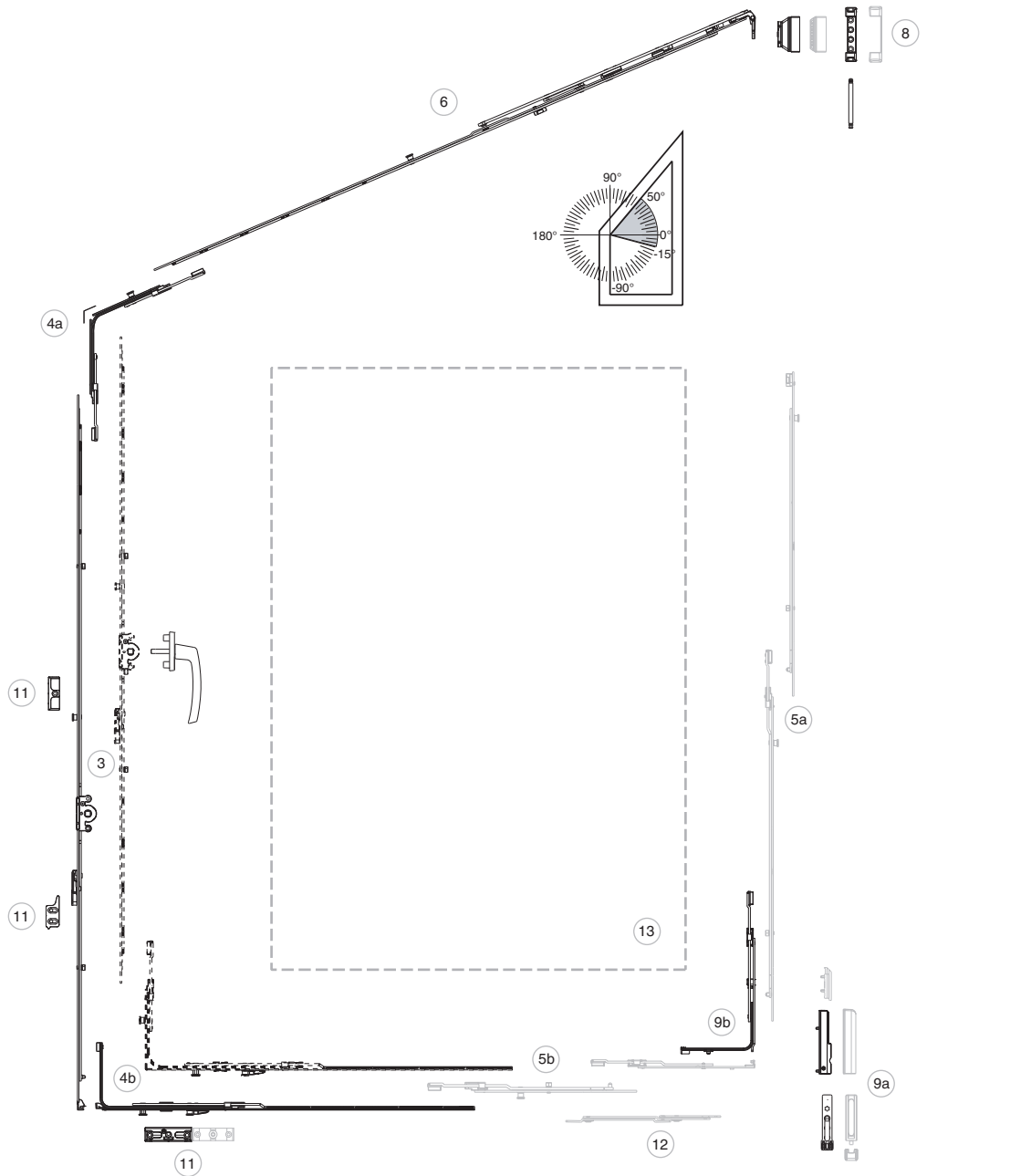
- A = 1 tilt stay + restrictor and cleaning stay size 1.
- B = 1 tilt stay + restrictor and cleaning stay size 2.
- C = 2 tilt stays + restrictor and cleaning stay size 1.
- D = 2 tilt stays + restrictor and cleaning stay size 2.
- * = Mandatory installation of restrictor and cleaning stay (guideline FPKF at www.schlossindustrie.de)! Observe application diagrams and max. load capacity for restrictor and cleaning stays!
- 5 = Above 800 mm (PVC) or 1,000 mm (timber); Observe details from profile manufacturer!
- 7b = 1 piece 800 - 1,600 mm, 2 pieces 1,601 - 2,400 mm, 3 pieces 2,401 - 2,650 mm; Observe details from profile manufacturer!
- 11 = Refer to profile data sheets for striker plates and sash lifters for PVC.



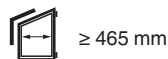
Selection guide			Page
3	3.4	Espagnolettes	→179
4	4.1.1	Corner elements standard i.S.	→188
5	5.1	Centre locks FHH i.S.	→196
7a	7.2	Tilt and turn hinges - sash part / tilt-only bearings AS/DTuni/PVC	→222
7b	7.10.1	Surface-mounted compression devices	→232
8	8.1	Scissor stay hinges PVC	→238



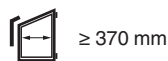
2.4.2.7 1-sashed angled T&T window
with pivot post PVC with positioning pin and corner support PVC with positioning pin



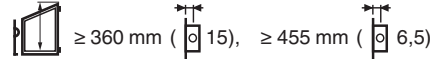
≤ 1650 x 2600 mm



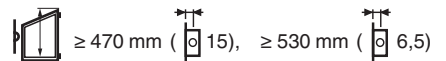
≥ 465 mm



≥ 370 mm



≥ 360 mm (15), ≥ 455 mm (6,5)



≥ 470 mm (15), ≥ 530 mm (6,5)

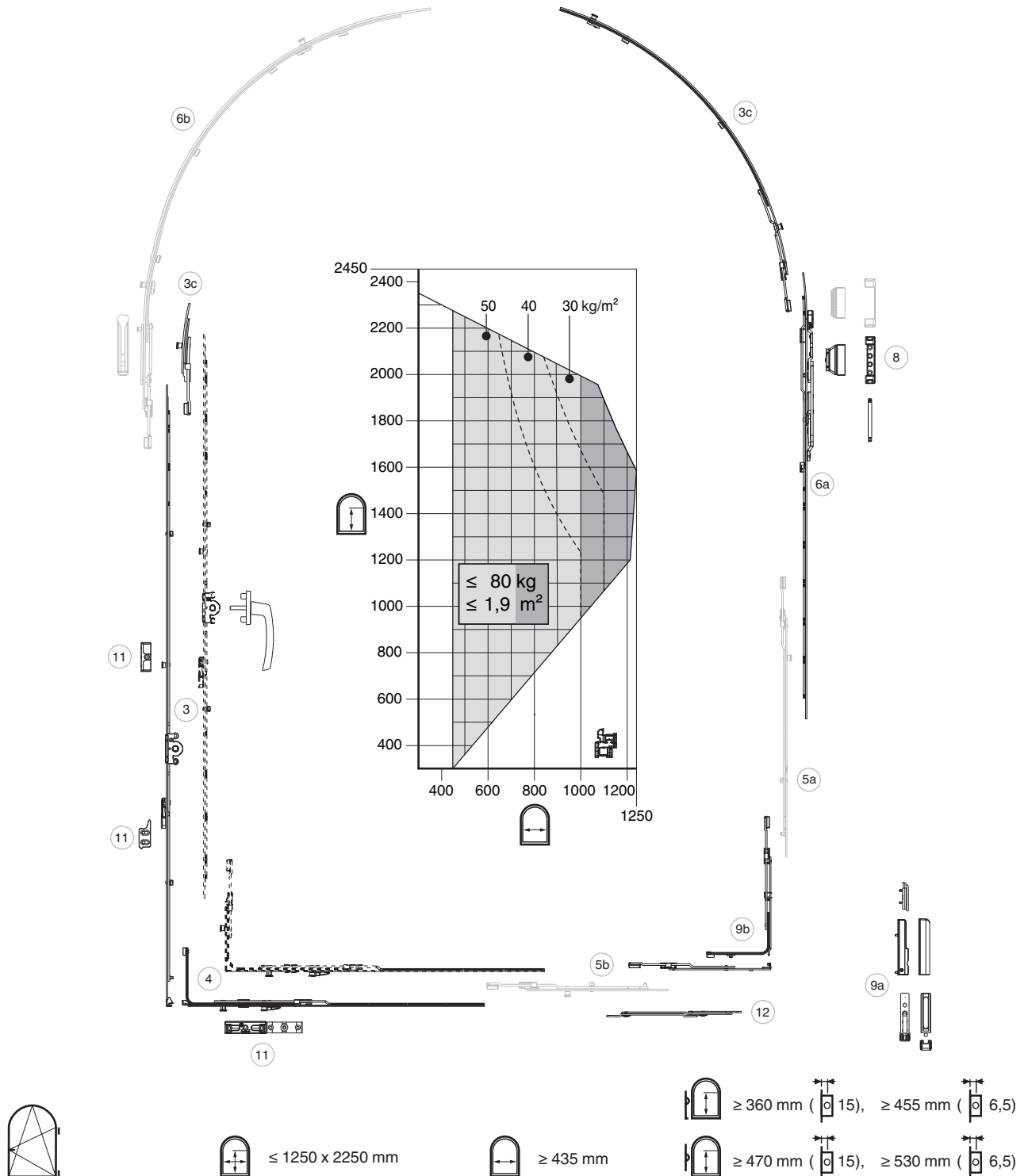
- 3 = Drive gear FHH or VHH (Backset 15 or 6.5). Recommendation: Handle height should be between $\frac{1}{3}$ and $\frac{1}{2}$ of sash rebate height (SRH).
- 5a = Above SRH 800 mm; Observe details from profile manufacturer!
- 5b = Required above SRW 670 mm.
- 9b = Rebated corner support with corner element with or without rebate-leg screw fixing.
- 11 = Refer to profile data sheets for striker plates and sash lifters for PVC.
- 13 = Refer to application diagrams for angled windows in chapter 2.5.



Selection guide		Page
3a	3.1.1.1 T&T drive gears BS 15 FHH i.S.	→162
3b	3.1.1.9 T&T drive gears BS 15 VHH i.S.	→164
4a	4.5 Corner elements i.S. for angled windows	→191
4b	4.6 Corner elements i.S. for half round windows	→192
5a	5.1 Centre locks FHH i.S.	→196
5b	5.10 Faceplate extensions fixed and extendable	→199
6	6.1.11 Rebated scissor stays i.S. for angled windows	→205
8	8.1 Scissor stay hinges PVC	→238
9a	9.2.1 Pivot posts PVC	→248
9b	9.2.5 Corner element two-part	→250
12	12.12 Turn restrictions	→315



2.4.2.8 1-sashed half round T&T window
with pivot post PVC with positioning pin and corner support PVC with positioning pin



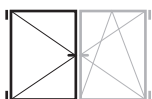
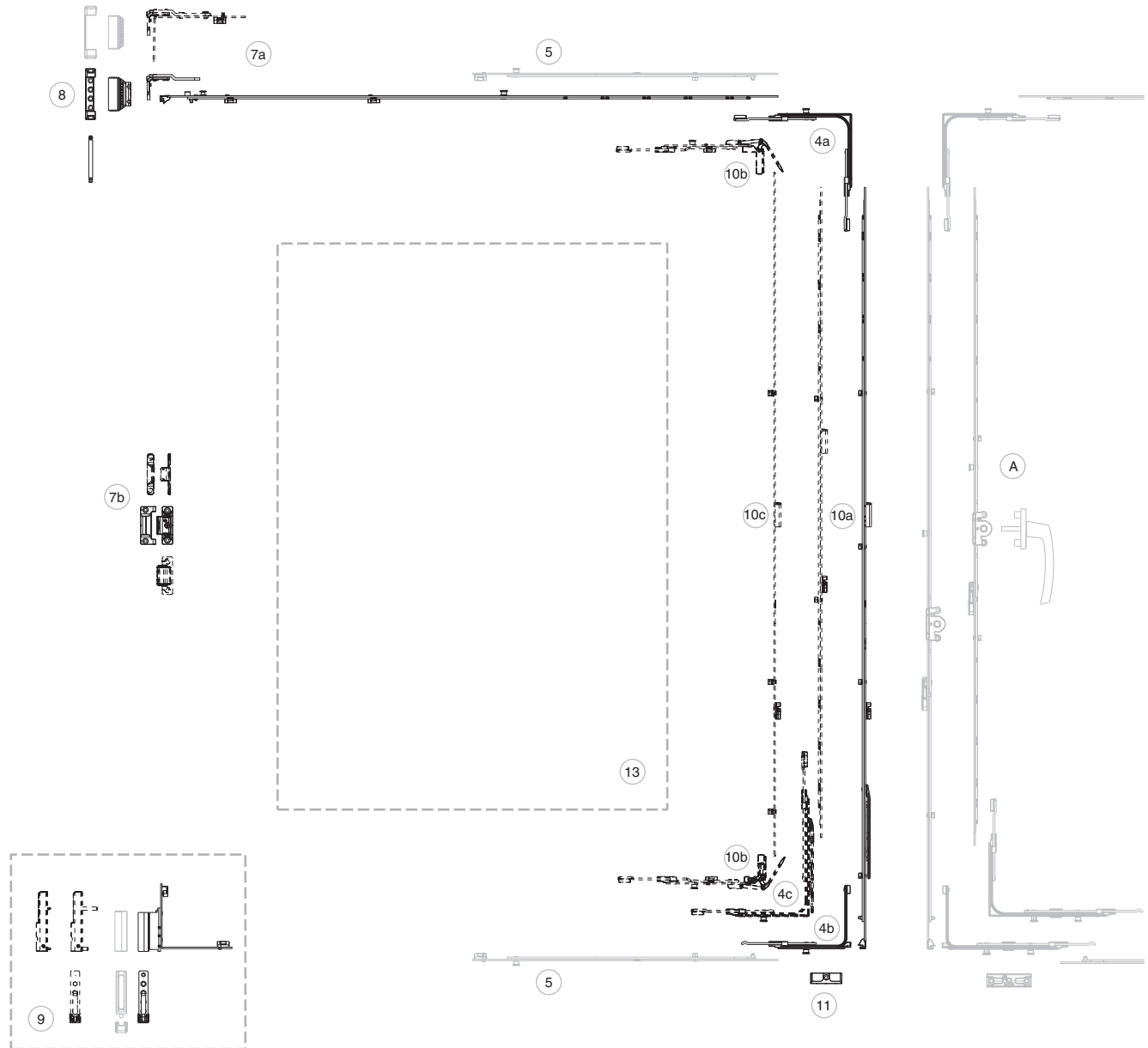
- 3 = Drive gear FHH or VHH (Backset 15 or 6.5). Recommendation: Handle height should be between $\frac{1}{3}$ and $\frac{1}{2}$ of sash rebate height (SRH).
- 3c = Required above SRW 671 mm.
- 5a = Above 800 mm (PVC) or 1,000 mm (timber); Observe details from profile manufacturer!
- 5b = Required above SRW 670 mm.
- 6b = Stabilizing scissor stay necessary from 1,001 mm (dark shading in application range diagram).
- 11 = Refer to profile data sheets for striker plates and sash lifters for PVC.



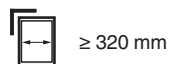
Selection guide		Page
3a	3.1.1.1 T&T drive gears BS 15 FHH i.S.	→162
3b	3.1.1.9 T&T drive gears BS 15 VHH i.S.	→164
3c	3.5.3 End pieces top for half round windows	→183
4	4.6 Corner elements i.S. for half round windows	→192
5a	5.2 Centre locks extendable i.S.	→196
5b	5.10 Faceplate extensions fixed and extendable	→199
6a	6.1.12 Rebated scissor stays i.S. for half round windows	→206
6b	6.10.4 Stabilizing scissor stays for half round windows	→216
8	8.1 Scissor stay hinges PVC	→238
9a	9.2.1 Pivot posts PVC	→248
9b	9.2.5 Corner element two-part	→250
12	12.12 Turn restrictions	→315



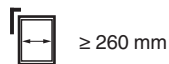
2.4.2.9 2-sashed rectangular T&T window with pivot post PVC and corner support PVC or rebated corner support PVC



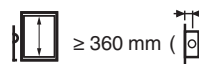
≤ 1650 x 2600 mm



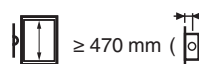
≥ 320 mm



≥ 260 mm



≥ 360 mm (15), ≥ 455 mm (6,5)



≥ 470 mm (15), ≥ 530 mm (6,5)

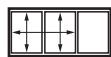
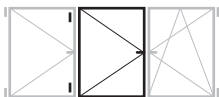
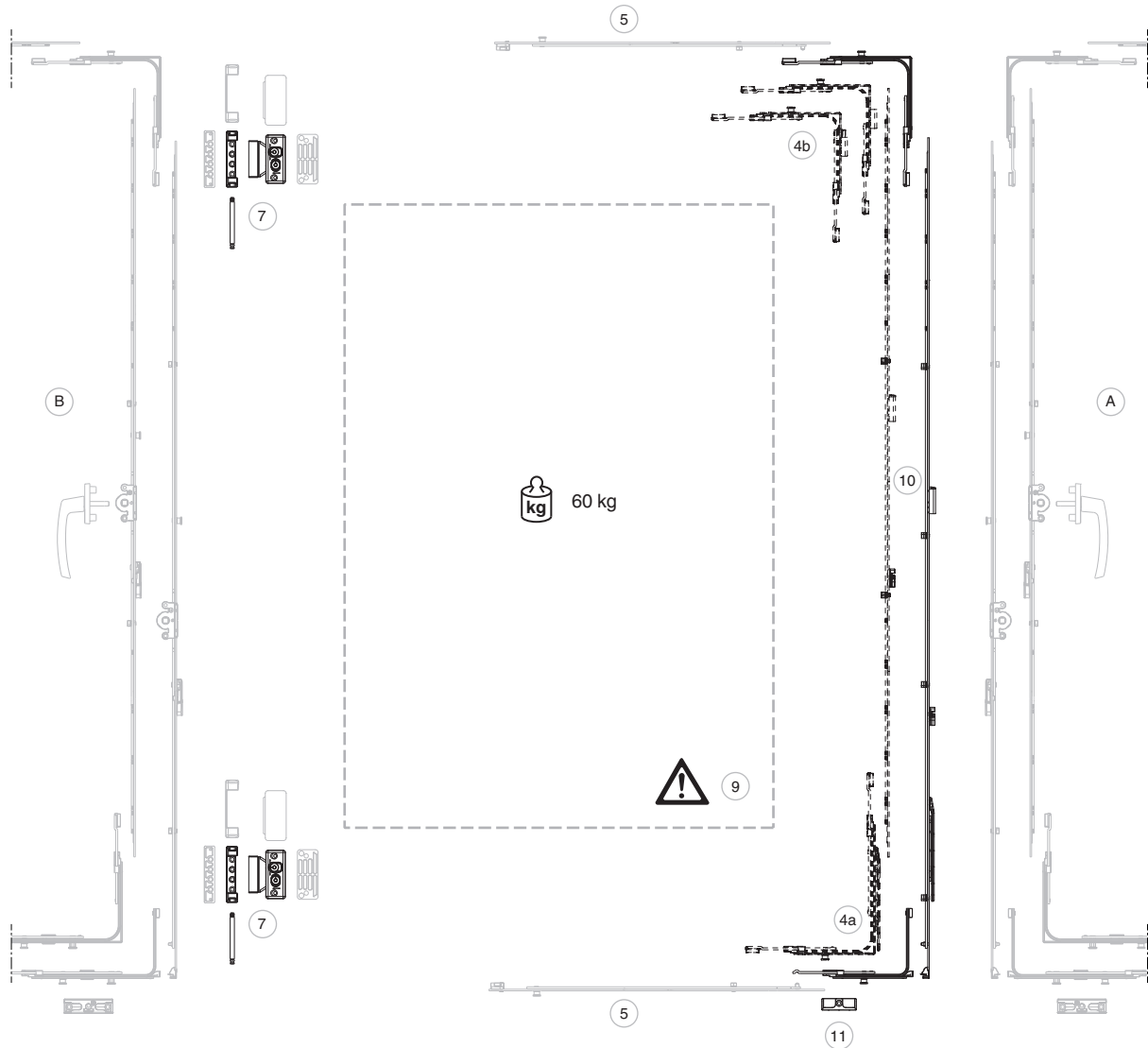
- A = For details refer to 1-sashed turn&tilt window.
- 5 = Above 800 mm (PVC) or 1,000 mm (timber); Observe details from profile manufacturer!
- 7b = 1 piece 800 - 1,600 mm, 2 pieces 1,601 - 2,400 mm, 3 pieces 2,401 - 2,650 mm; Observe details from profile manufacturer!
- 9 = For possible pivot post combinations refer to matrix.
- 10a = French casement drive gear FHH or VHH.
- 11 = Refer to profile data sheets for striker plates and sash lifters for PVC.
- 13 = For application diagram refer to turn&tilt hardware overview according to corresponding pivot post combination.



Selection guide		Page
4a	4.1.1 Corner elements standard i.S.	→188
4b	4.1.3 Corner elements vertical i.S.	→189
4c	4.4 Corner elements i.S. for French casement drive gears	→191
5	5.1 Centre locks FHH i.S.	→196
7a	7.1 Turn-only hinges - sash part / turn-only hinges - frame part / turn-only hinge faceplates AS/DTuni/PVC	→220
7b	7.10 Compression devices	→232
8	8.1 Scissor stay hinges PVC	→238
9	9.2 Pivot posts PVC	→248
10a	10.2 French casement drive gears	→278
10b	10.3 Horizontal French casement locks	→286
10c	10.4 Single piece door striker	→286



2.4.2.10 3-sashed rectangular turn-only window
with multi-sash centre frame hinge



≤ 1650 x 2600 mm *



≥ 465 mm

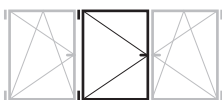
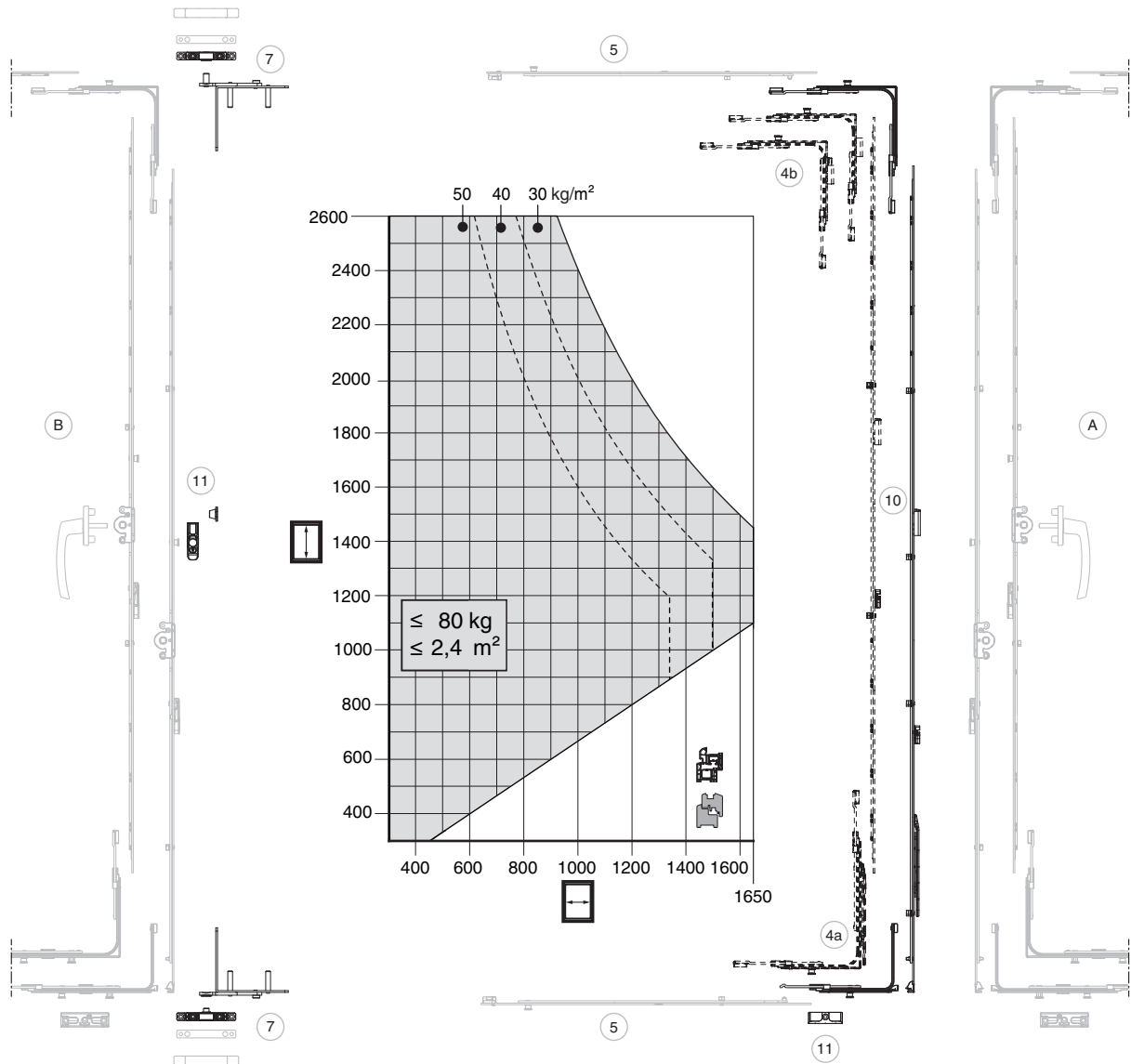
- A = For details refer to 1-sashed turn&tilt window.
- B = For details refer to 1-sashed turn-only window.
- 5 = Above 800 mm (PVC) or 1,000 mm (timber); Observe details from profile manufacturer!
- 7 = Mandatory installation of third multi-sash centre frame hinge above SRH 800 mm (PVC) or 1,000 mm (timber)!
- 9 = Maximum sash weight of the middle sash is 60 kg! The total weight of the two combined sashes must not exceed the maximum weight of the used hinge side!
- 10 = French casement drive gear FHH or VHH.
- 11 = Refer to profile data sheets for striker plates and sash lifters for PVC.



Selection guide		Page
4a	4.1.3 Corner elements vertical i.S.	→189
4b	4.4 Corner elements i.S. for French casement drive gears	→191
5	5.1 Centre locks FHH i.S.	→196
7	7.9 Multi-sash centre frame hinges	→230
10	10.2 French casement drive gears	→278



2.4.2.11 3-sashed rectangular turn-only window with 3-sashed turn-only hinge (frame part)



$\leq 1650 \times 2600 \text{ mm}$



$\geq 465 \text{ mm}$

- A = For details refer to 1-sashed turn-only or turn&tilt window.
- B = For details refer to 1-sashed turn-only or turn&tilt window.
- 5 = Above 800 mm (PVC) or 1,000 mm (timber); Observe details from profile manufacturer!
- 10 = French casement drive gear FHH or VHH.
- 11 = Refer to profile data sheets for striker plates and sash lifters for PVC.

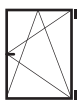
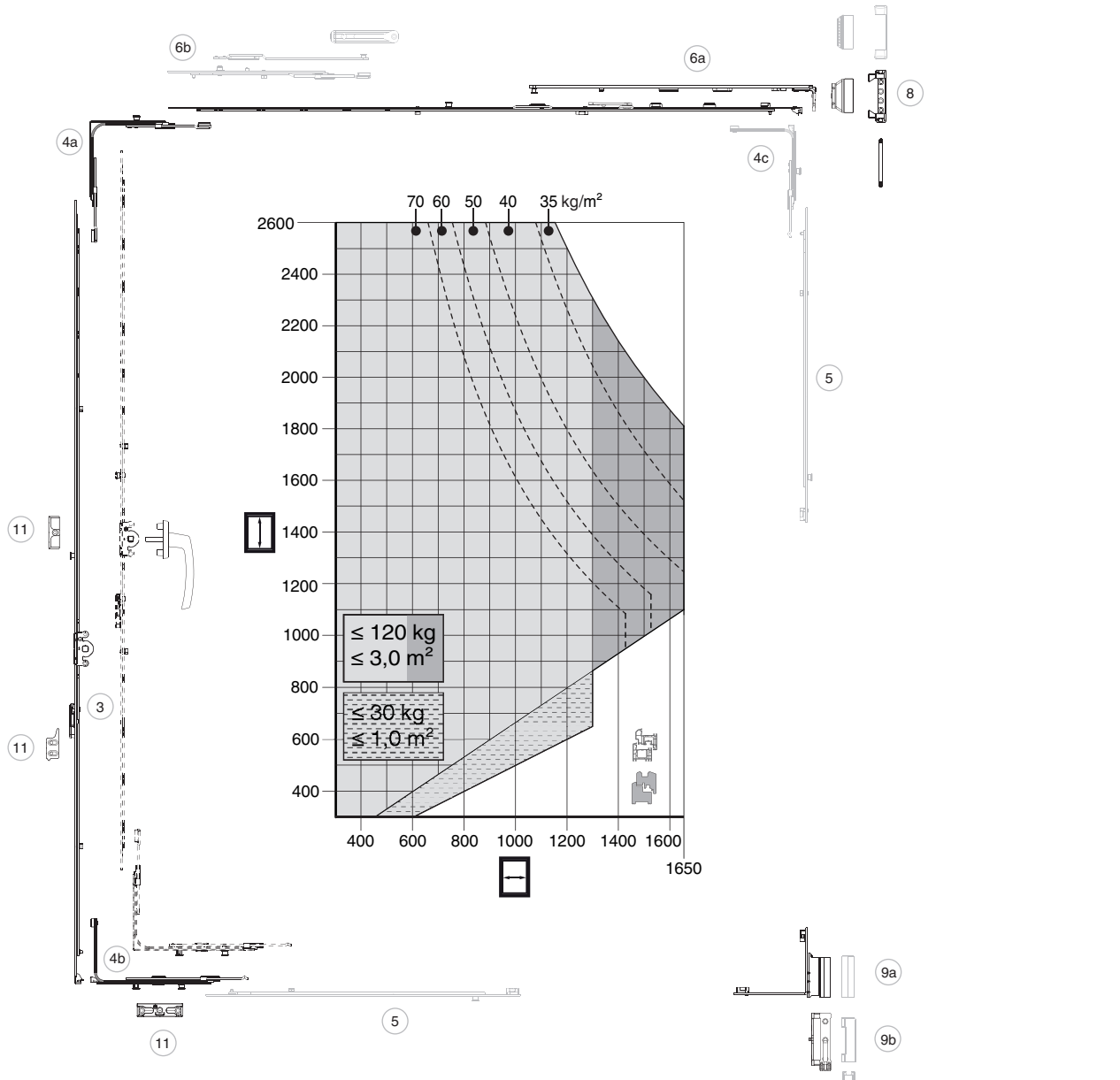


Selection guide		Page
4a	4.1.3 Corner elements vertical i.S.	→189
4b	4.4 Corner elements i.S. for French casement drive gears	→191
5	5.1 Centre locks FHH i.S.	→196
7	7.8 Turn-only hinges - frame part for 3-sashed windows	→229
10	10.2 French casement drive gears	→278
11	11 Striker plates	→292

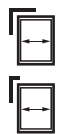


2.4.3 AS (drive gear FHH/VHH)

2.4.3.1 1-sashed rectangular T&T window
with pivot post AS (for rebated corner support AS/PVC)
+ rebated corner support AS/PVC without rebate-leg screw fixing



≤ 1650 x 2600 mm



≥ 320 mm



≥ 260 mm



≥ 360 mm (15)
≥ 455 mm (6,5)



≥ 470 mm (15)
≥ 530mm (6,5)



≥ 270 mm (15)
≥ 365 mm (6,5)



≥ 400 mm (15)
≥ 460mm (6,5)

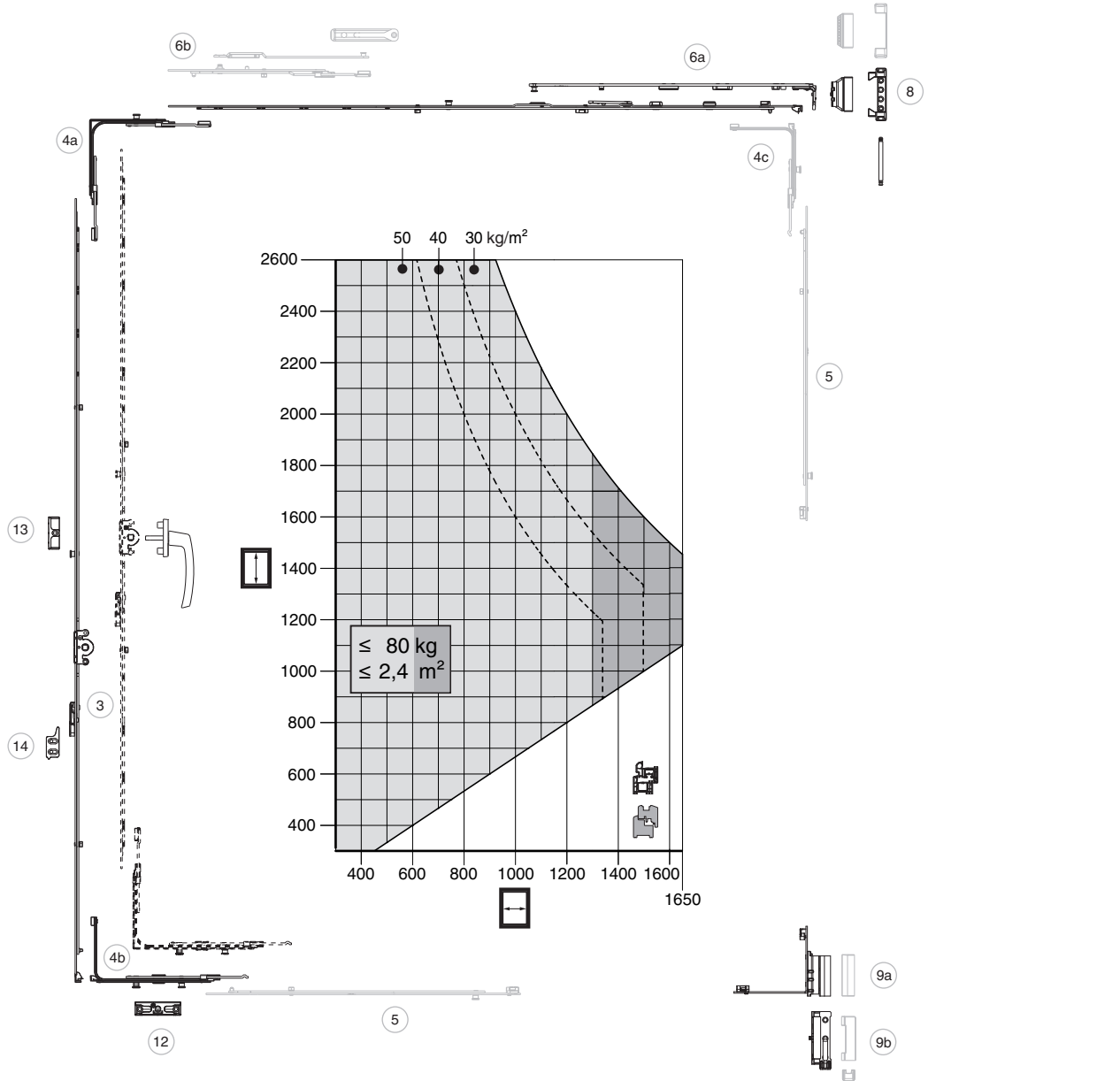
- 3 = Drive gear FHH or VHH (Backset 15 or 6.5). Recommendation: Handle height should be between $\frac{1}{3}$ and $\frac{1}{2}$ of sash rebate height (SRH).
- 5 = Above 800 mm (PVC) or 1,000 mm (timber); Observe details from profile manufacturer!
- 6b = Stabilizing scissor stay necessary from 1,301 mm (dark shading in application range diagram).
- 11 = Refer to profile data sheets for striker plates and sash lifters for PVC.



Selection guide		Page
3a	3.1.1.1 T&T drive gears BS 15 FHH i.S.	→162
3b	3.1.1.9 T&T drive gears BS 15 VHH i.S.	→164
4a	4.1.1 Corner elements standard i.S.	→188
4b	4.1.2 Corner elements horizontal i.S.	→188
4c	4.1.3 Corner elements vertical i.S.	→189
5	5.1 Centre locks FHH i.S.	→196
6a	6.1.4 Scissor stay faceplates i.S.	→203
6b	6.10.1 Stabilizing scissor stays	→216
8	8.2 Surface-mounted scissor stay hinges	→238
9a	9.2.3 Rebated corner supports AS/PVC without rebate-leg screw fixing	→249
9b	9.3.1 Surface-mounted pivot posts for rebated corner supports AS/PVC without rebate-leg screw fixing	→252
11	11 Striker plates	→292



**2.4.3.2 1-sashed rectangular T&T window
with pivot post AS (for rebated corner support AS/PVC)
+ rebated corner support AS/PVC without rebate-leg screw fixing / 26 mm offset**



≤ 1650 x 2600 mm



≥ 320 mm



≥ 260 mm



≥ 360 mm (15)
≥ 455 mm (6,5)



≥ 470 mm (15)
≥ 530mm (6,5)



≥ 270 mm (15)
≥ 365 mm (6,5)



≥ 400 mm (15)
≥ 460mm (6,5)

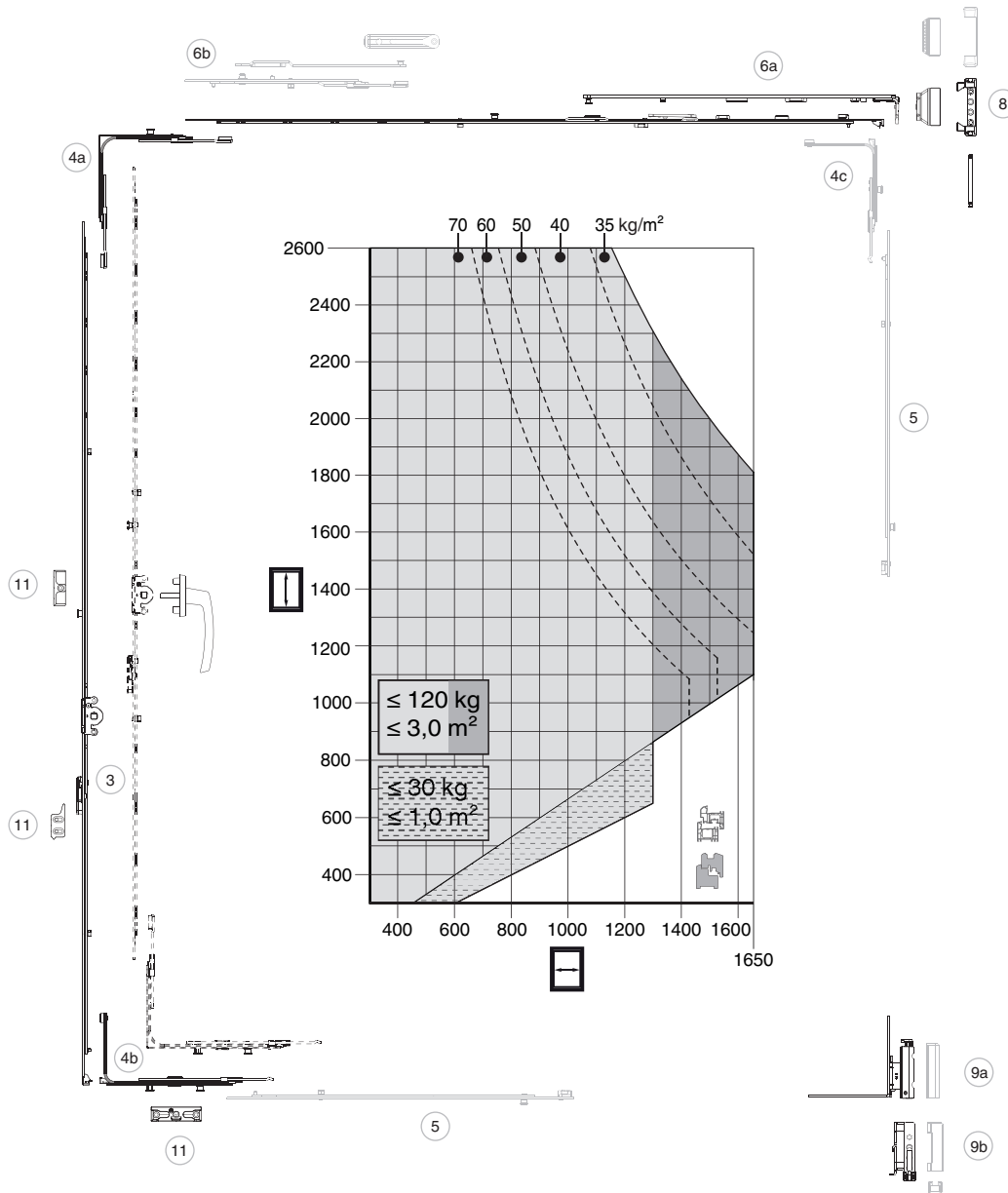
- 3 = Drive gear FHH or VHH (Backset 15 or 6.5). Recommendation: Handle height should be between $\frac{1}{3}$ and $\frac{1}{2}$ of sash rebate height (SRH).
- 5 = Above 800 mm (PVC) or 1,000 mm (timber); Observe details from profile manufacturer!
- 6b = Stabilizing scissor stay necessary from 1,301 mm (dark shading in application range diagram).
- 9b = Observe restrictions for 26 mm rebate depth!
- 11 = Refer to profile data sheets for striker plates and sash lifters for PVC.



Selection guide		Page
3a	3.1.1.1 T&T drive gears BS 15 FHH i.S.	→162
3b	3.1.1.9 T&T drive gears BS 15 VHH i.S.	→164
4a	4.1.1 Corner elements standard i.S.	→188
4b	4.1.2 Corner elements horizontal i.S.	→188
4c	4.1.3 Corner elements vertical i.S.	→189
5	5.1 Centre locks FHH i.S.	→196
6a	6.1.4 Scissor stay faceplates i.S.	→203
6b	6.10.1 Stabilizing scissor stays	→216
8	8.2 Surface-mounted scissor stay hinges	→238
9a	9.2.3 Rebated corner supports AS/PVC without rebate-leg screw fixing	→249
9b	9.3.1 Surface-mounted pivot posts for rebated corner supports AS/PVC without rebate-leg screw fixing	→252
11	11 Striker plates	→292



2.4.3.3 1-sashed rectangular T&T window with pivot post AS and rebated corner support AS with rebate-leg screw fixing



≤ 1650 x 2600 mm



≥ 320 mm



≥ 260 mm



≥ 360 mm (15)
≥ 455 mm (6,5)



≥ 470 mm (15)
≥ 530mm (6,5)



≥ 270 mm (15)
≥ 365 mm (6,5)



≥ 400 mm (15)
≥ 460mm (6,5)

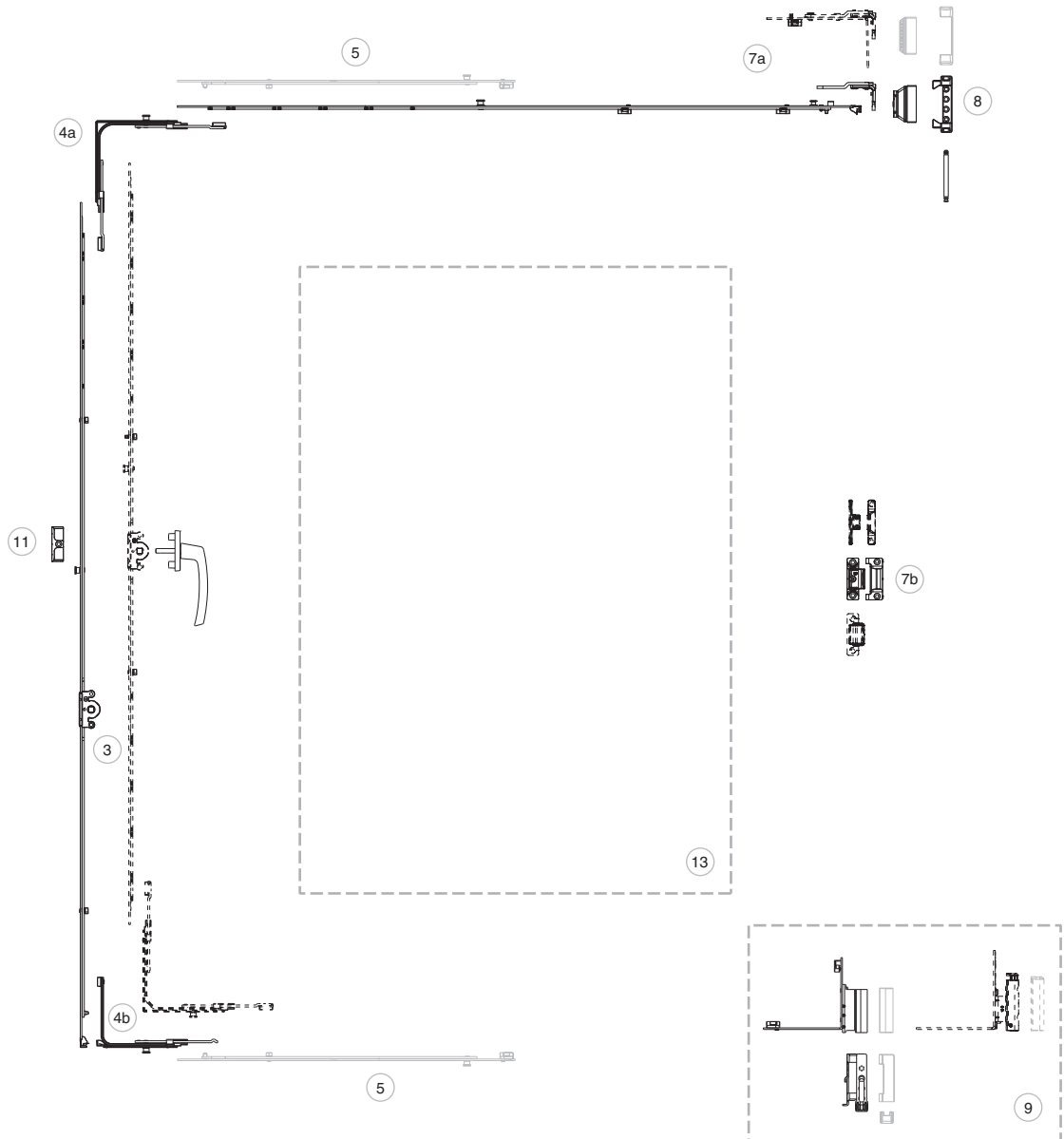
- 3 = Drive gear FHH or VHH (Backset 15 or 6.5). Recommendation: Handle height should be between $\frac{1}{3}$ and $\frac{1}{2}$ of sash rebate height (SRH).
- 5 = Above 800 mm (PVC) or 1,000 mm (timber); Observe details from profile manufacturer!
- 6b = Stabilizing scissor stay necessary from 1,301 mm (dark shading in application range diagram).
- 11 = Refer to profile data sheets for striker plates and sash lifters for PVC.



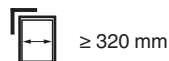
Selection guide		Page
3a	3.1.1.1 T&T drive gears BS 15 FHH i.S.	→162
3b	3.1.1.9 T&T drive gears BS 15 VHH i.S.	→164
4a	4.1.1 Corner elements standard i.S.	→188
4b	4.1.2 Corner elements horizontal i.S.	→188
4c	4.1.3 Corner elements vertical i.S.	→189
5	5.1 Centre locks FHH i.S.	→196
6a	6.1.4 Scissor stay faceplates i.S.	→203
6b	6.10.1 Stabilizing scissor stays	→216
8	8.2 Surface-mounted scissor stay hinges	→238
9a	9.3.2 Surface-mounted rebated corner supports with rebate-leg screw fixing	→252
9b	9.3.4 Surface-mounted pivot posts for surface-mounted rebated corner supports with rebate-leg screw fixing	→253
11	11 Striker plates	→292



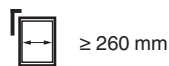
2.4.3.4 1-sashed rectangular turn-only window
with pivot post AS and fixed or croppable turn-only hinge



≤ 1650 x 2600 mm



≥ 320 mm



≥ 260 mm



≥ 360 mm (15), ≥ 455 mm (6,5)



≥ 470 mm (15), ≥ 530 mm (6,5)

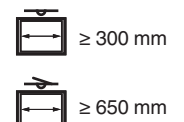
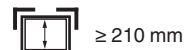
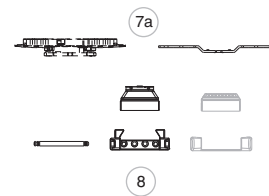
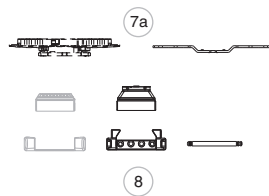
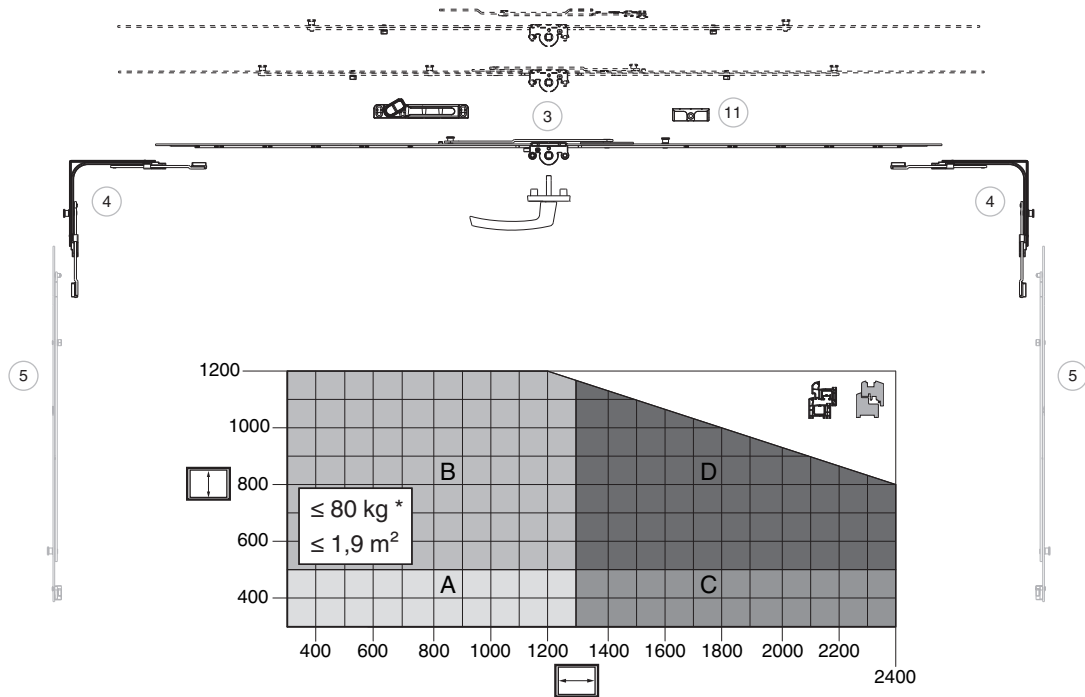
- 3 = Drive gear FHH or VHH (Backset 15 or 6.5). Recommendation: Handle height should be between $\frac{1}{3}$ and $\frac{1}{2}$ of sash rebate height (SRH).
- 5 = Above 800 mm (PVC) or 1,000 mm (timber); Observe details from profile manufacturer!
- 7a = Turn-only hinge - sash part fixed or croppable.
- 7b = 1 piece 800 - 1,600 mm, 2 pieces 1,601 - 2,400 mm, 3 pieces 2,401 - 2,650 mm; Observe details from profile manufacturer!
- 9 = For possible pivot post combinations refer to matrix; the support screw has to be set from 100 kg sash weight!
- 11 = Refer to profile data sheets for striker plates and sash lifters for PVC.
- 13 = For application diagram refer to turn&tilt hardware overview according to corresponding pivot post combination.



Selection guide		Page
3a	3.2.1.1 Turn-only drive gears BS 15 FHH i.S.	→172
3b	3.2.1.6 Turn-only drive gears BS 15 VHH i.S.	→173
4a	4.1.1 Corner elements standard i.S.	→188
4b	4.1.3 Corner elements vertical i.S.	→189
5	5.1 Centre locks FHH i.S.	→196
7a	7.1 Turn-only hinges - sash part / turn-only hinges - frame part / turn-only hinge faceplates AS/DTuni/PVC	→220
7b	7.10.1 Surface-mounted compression devices	→232
8	8.2 Surface-mounted scissor stay hinges	→238
9	9.3 Pivot posts AS (surface-mounted)	→252
11	11 Striker plates	→292



2.4.3.5 1-sashed rectangular tilt-only window
with scissor stay hinge AS and tilt-only hinge AS/PVC



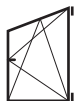
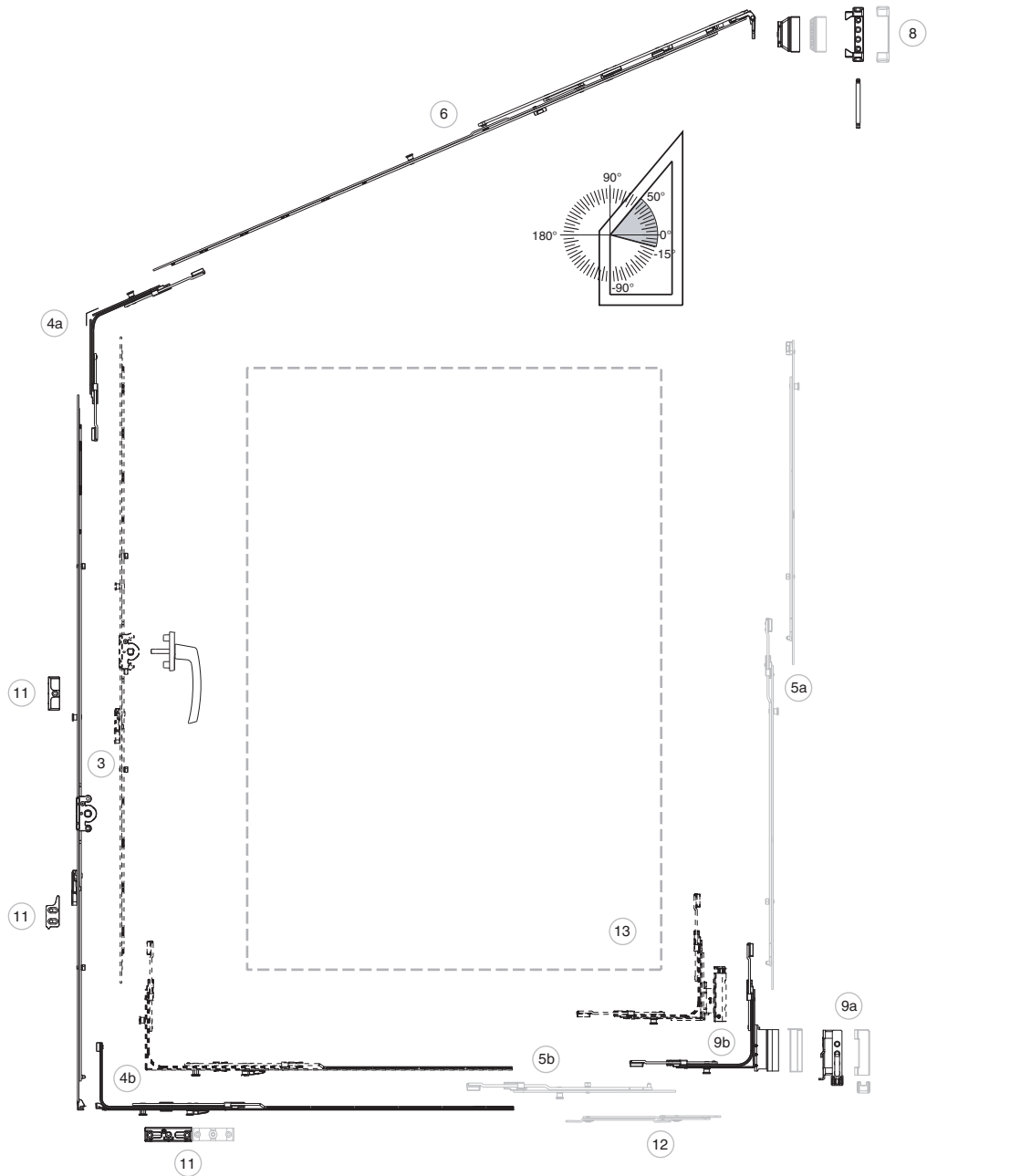
- A = 1 tilt stay + restrictor and cleaning stay size 1.
- B = 1 tilt stay + restrictor and cleaning stay size 2.
- C = 2 tilt stays + restrictor and cleaning stay size 1.
- D = 2 tilt stays + restrictor and cleaning stay size 2.
- * = Mandatory installation of restrictor and cleaning stay (guideline FPKF at www.schlossindustrie.de)! Observe application diagrams and max. load capacity for restrictor and cleaning stays!
- 5 = Above 800 mm (PVC) or 1,000 mm (timber); Observe details from profile manufacturer!
- 7b = 1 piece 800 - 1,600 mm, 2 pieces 1,601 - 2,400 mm, 3 pieces 2,401 - 2,650 mm; Observe details from profile manufacturer!
- 11 = Refer to profile data sheets for striker plates and sash lifters for PVC.



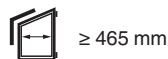
Selection guide			Page
3	3.4	Espagnolettes	→179
4	4.1.1	Corner elements standard i.S.	→188
5	5.1	Centre locks FHH i.S.	→196
7a	7.2	Tilt and turn hinges - sash part / tilt-only bearings AS/DTuni/PVC	→222
7b	7.10.1	Surface-mounted compression devices	→232
8	8.2	Surface-mounted scissor stay hinges	→238
11	11	Striker plates	→292



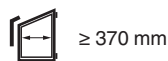
2.4.3.6 1-sashed angled T&T window
with pivot post AS and rebated corner support AS EH with corner element



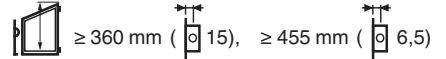
≤ 1650 x 2600 mm



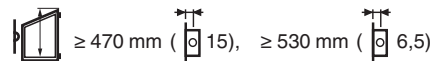
≥ 465 mm



≥ 370 mm



≥ 360 mm (15), ≥ 455 mm (6,5)



≥ 470 mm (15), ≥ 530 mm (6,5)

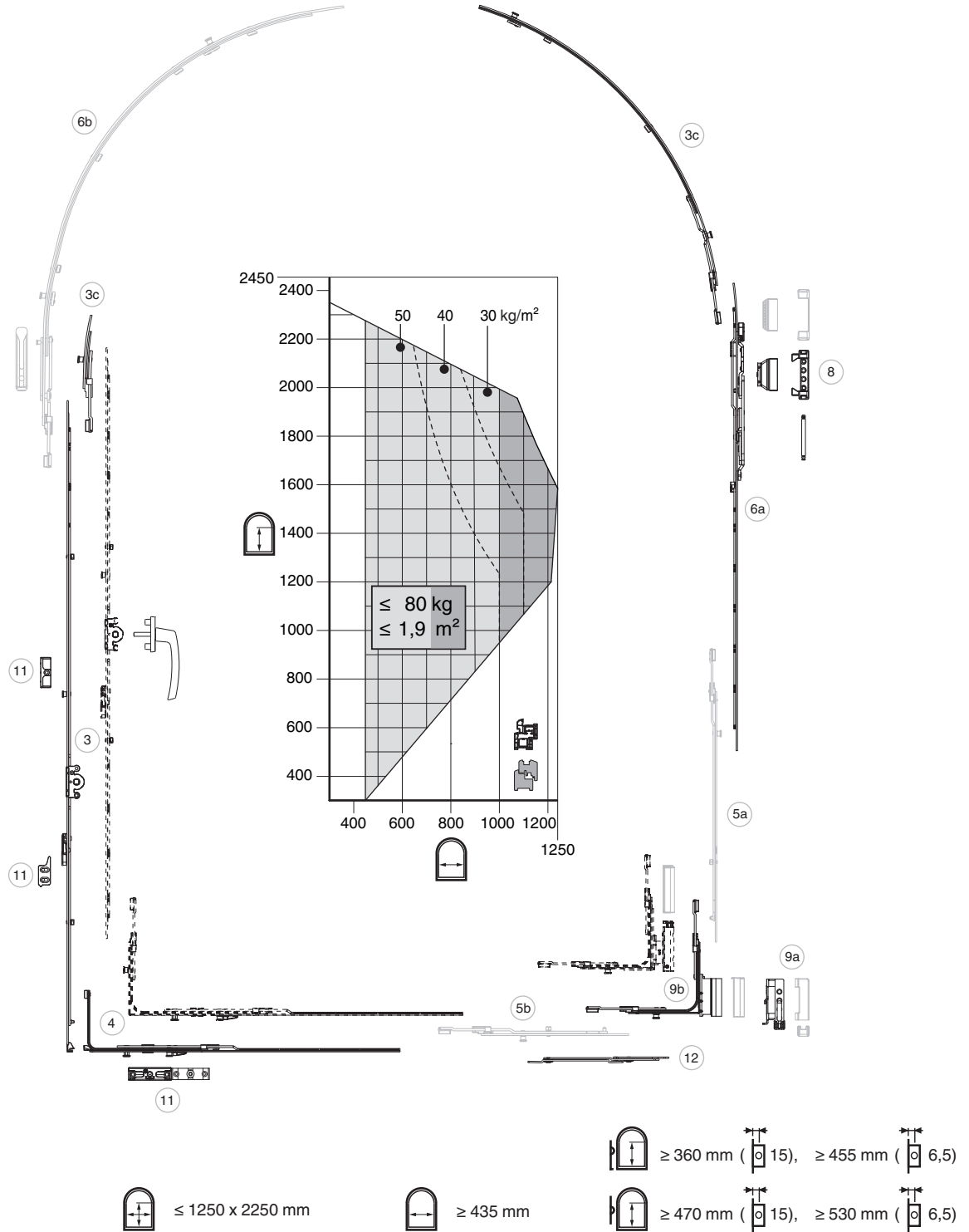
- 3 = Drive gear FHH or VHH (Backset 15 or 6.5). Recommendation: Handle height should be between $\frac{1}{3}$ and $\frac{1}{2}$ of sash rebate height (SRH).
- 5a = Above SRH 800 mm; Observe details from profile manufacturer!
- 5b = Required above SRW 670 mm.
- 9b = Rebated corner support with corner element with or without rebate-leg screw fixing.
- 11 = Refer to profile data sheets for striker plates and sash lifters for PVC.
- 13 = Refer to application diagrams for angled windows in chapter 2.5.



Selection guide		Page
3a	3.1.1.1 T&T drive gears BS 15 FHH i.S.	→162
3b	3.1.1.9 T&T drive gears BS 15 VHH i.S.	→164
4a	4.5 Corner elements i.S. for angled windows	→191
4b	4.6 Corner elements i.S. for half round windows	→192
5a	5.1 Centre locks FHH i.S.	→196
5b	5.10 Faceplate extensions fixed and extendable	→199
6	6.1.11 Rebated scissor stays i.S. for angled windows	→205
8	8.2 Surface-mounted scissor stay hinges	→238
9a	9.3.1 Surface-mounted pivot posts for rebated corner supports AS/PVC without rebate-leg screw fixing	→252
9b	9.3.3 Surface-mounted rebated corner supports with rebate-leg screw fixing EH with corner element	→253
11	11 Striker plates	→292
12	12.12 Turn restrictions	→315



**2.4.3.7 1-sashed half round T&T window
with pivot post AS (for rebated corner support AS/PVC)
+ rebated corner support AS EH with corner element**



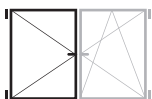
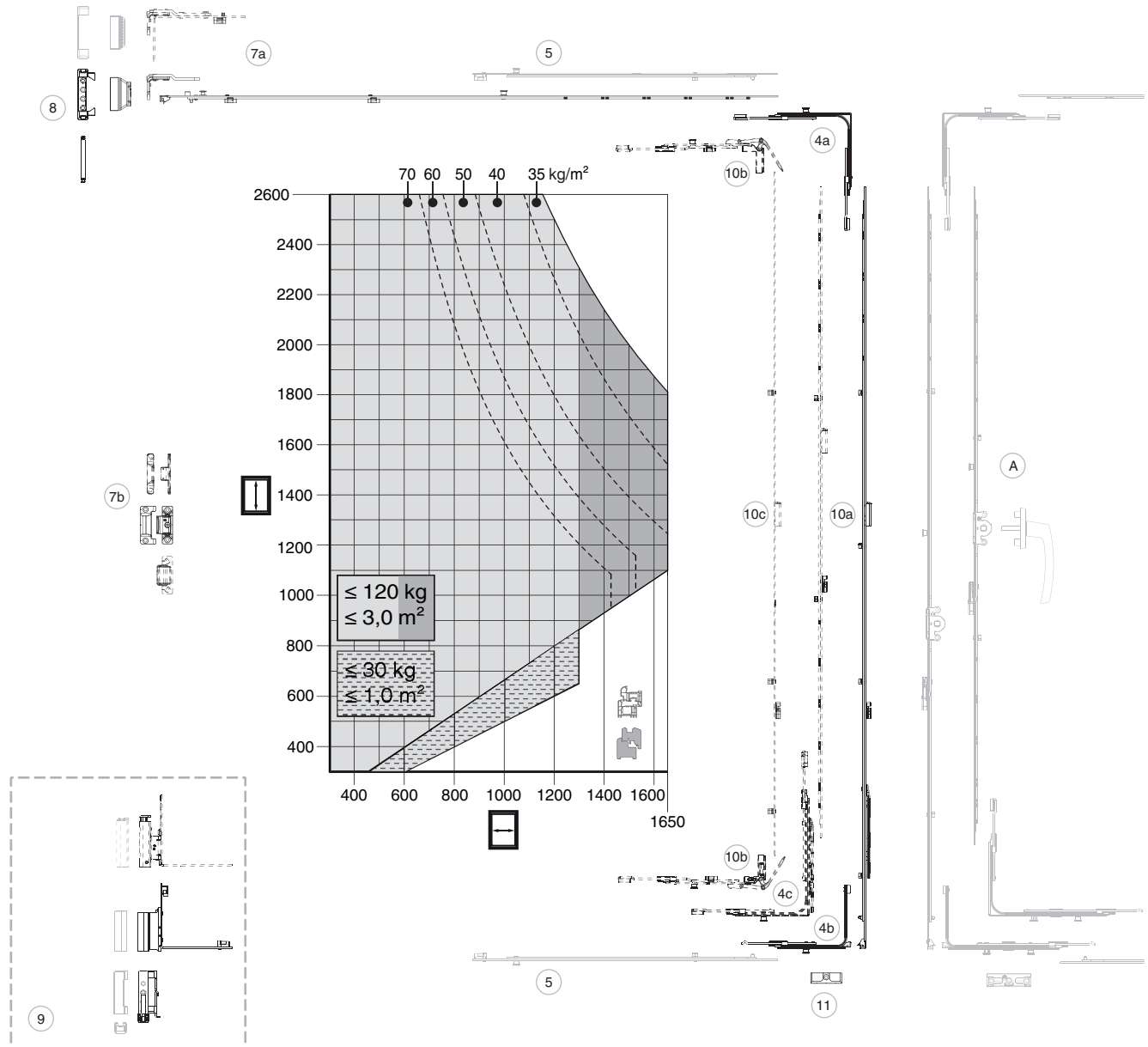
- 3 = Drive gear FHH or VHH (Backset 15 or 6.5). Recommendation: Handle height should be between $\frac{1}{3}$ and $\frac{1}{2}$ of sash rebate height (SRH).
- 3c = Required above SRW 671 mm.
- 5a = Above 800 mm (PVC) or 1,000 mm (timber); Observe details from profile manufacturer!
- 5b = Required above SRW 670 mm.
- 6b = Stabilizing scissor stay necessary from 1,001 mm (dark shading in application range diagram).
- 9b = Rebated corner support with corner element with or without rebate-leg screw fixing.
- 11 = Refer to profile data sheets for striker plates and sash lifters for PVC.



Selection guide		Page
3a	3.1.1.1 T&T drive gears BS 15 FHH i.S.	→162
3b	3.1.1.9 T&T drive gears BS 15 VHH i.S.	→164
3c	3.5.3 End pieces top for half round windows	→183
4	4.6 Corner elements i.S. for half round windows	→192
5a	5.2 Centre locks extendable i.S.	→196
5b	5.10 Faceplate extensions fixed and extendable	→199
6a	6.1.12 Rebated scissor stays i.S. for half round windows	→206
6b	6.10.4 Stabilizing scissor stays for half round windows	→216
8	8.2 Surface-mounted scissor stay hinges	→238
9a	9.3.1 Surface-mounted pivot posts for rebated corner supports AS/PVC without rebate-leg screw fixing	→252
9b	9.3.3 Surface-mounted rebated corner supports with rebate-leg screw fixing EH with corner element	→253
11	11 Striker plates	→292
12	12.12 Turn restrictions	→315



2.4.3.8 2-sashed rectangular T&T window with pivot post AS



≤ 1650 x 2600 mm



≥ 320 mm



≥ 260 mm



≥ 360 mm (15), ≥ 455 mm (6,5)



≥ 470 mm (15), ≥ 530 mm (6,5)

A = For details refer to 1-sashed turn&tilt window.

5 = Above 800 mm (PVC) or 1,000 mm (timber); Observe details from profile manufacturer!

7b = 1 piece 800 - 1,600 mm, 2 pieces 1,601 - 2,400 mm, 3 pieces 2,401 - 2,650 mm; Observe details from profile manufacturer!

9 = For possible pivot post combinations refer to matrix; the support screw has to be set from 100 kg sash weight!

10a = French casement drive gear FHH or VHH.

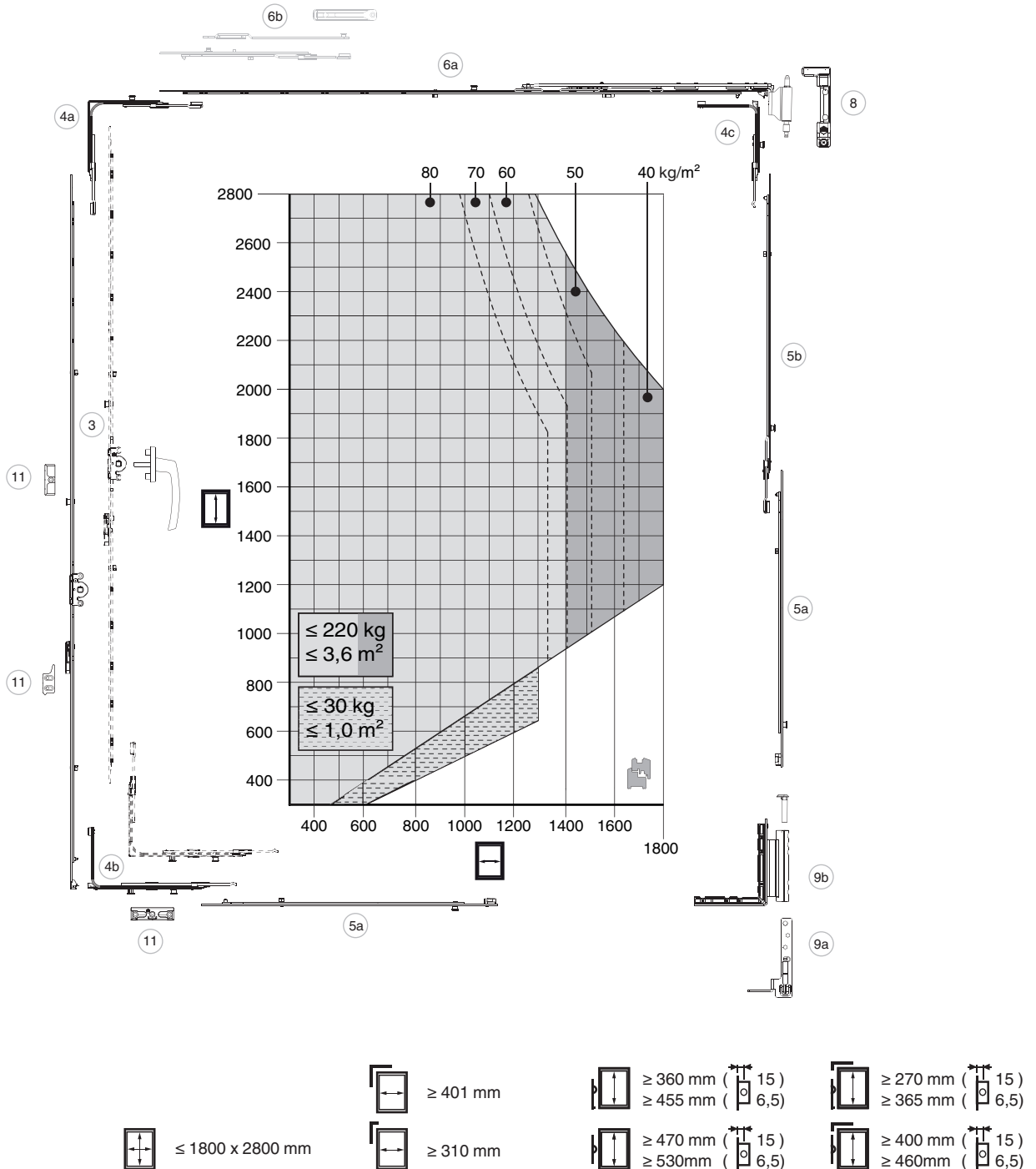


Selection guide		Page
4a	4.1.1 Corner elements standard i.S.	→188
4b	4.1.3 Corner elements vertical i.S.	→189
4c	4.4 Corner elements i.S. for French casement drive gears	→191
5	5.1 Centre locks FHH i.S.	→196
7a	7.1 Turn-only hinges - sash part / turn-only hinges - frame part / turn-only hinge faceplates AS/DTuni/PVC	→220
7b	7.10 Compression devices	→232
8	8.2 Surface-mounted scissor stay hinges	→238
9	9.3 Pivot posts AS (surface-mounted)	→252
10a	10.2 French casement drive gears	→278
10b	10.3 Horizontal French casement locks	→286
10c	10.4 Single piece door striker	→286
11	11 Striker plates	→292



2.4.4 MULTI MAMMUT (drive gear FHH/VHH)

2.4.4.1 1-sashed rectangular T&T window with pivot post timber MULTI MAMMUT and corner support MULTI MAMMUT



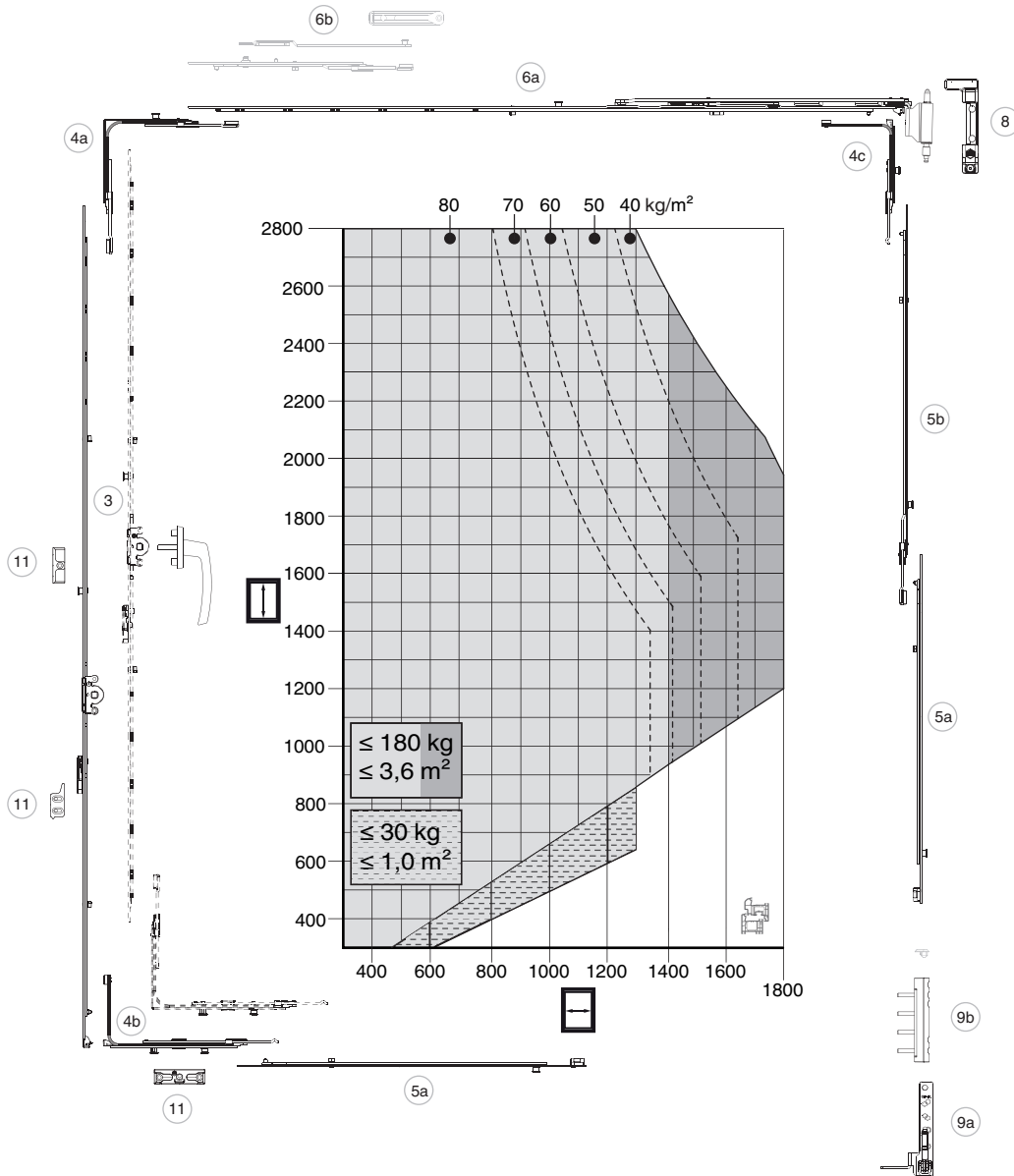
- 3 = Drive gear FHH or VHH (Backset 15 or 6.5). Recommendation: Handle height should be between $\frac{1}{3}$ and $\frac{1}{2}$ of sash rebate height (SRH).
- 5 = Above 800 mm (PVC) or 1,000 mm (timber); Observe details from profile manufacturer!
- 5b = Use additional centre locks from 1,280 mm!
- 6b = Stabilizing scissor stay necessary from 1,401 mm (dark shading in application range diagram).



Selection guide		Page
3a	3.1.1.1 T&T drive gears BS 15 FHH i.S.	→162
3b	3.1.1.9 T&T drive gears BS 15 VHH i.S.	→164
4a	4.1.1 Corner elements standard i.S.	→188
4b	4.1.2 Corner elements horizontal i.S.	→188
4c	4.1.3 Corner elements vertical i.S.	→189
5a	5.1 Centre locks FHH i.S.	→196
5b	5.2 Centre locks extendable i.S.	→196
6a	6.2 Rebated scissor stays MULTI MAMMUT	→207
6b	6.10.1 Stabilizing scissor stays	→216
8	8.6 Scissor stay hinges MULTI MAMMUT	→241
9a	9.5.1 Pivot posts for timber MULTI MAMMUT	→259
9b	9.5.4 Rebated corner supports MULTI MAMMUT	→260
11	11 Striker plates	→292



2.4.4.2 1-sashed rectangular T&T window
with pivot post PVC MULTI MAMMUT and corner support MULTI MAMMUT



≤ 1800 x 2800 mm



≥ 401 mm



≥ 310 mm



≥ 360 mm (15)
≥ 455 mm (6,5)



≥ 470 mm (15)
≥ 530mm (6,5)



≥ 270 mm (15)
≥ 365 mm (6,5)



≥ 400 mm (15)
≥ 460mm (6,5)

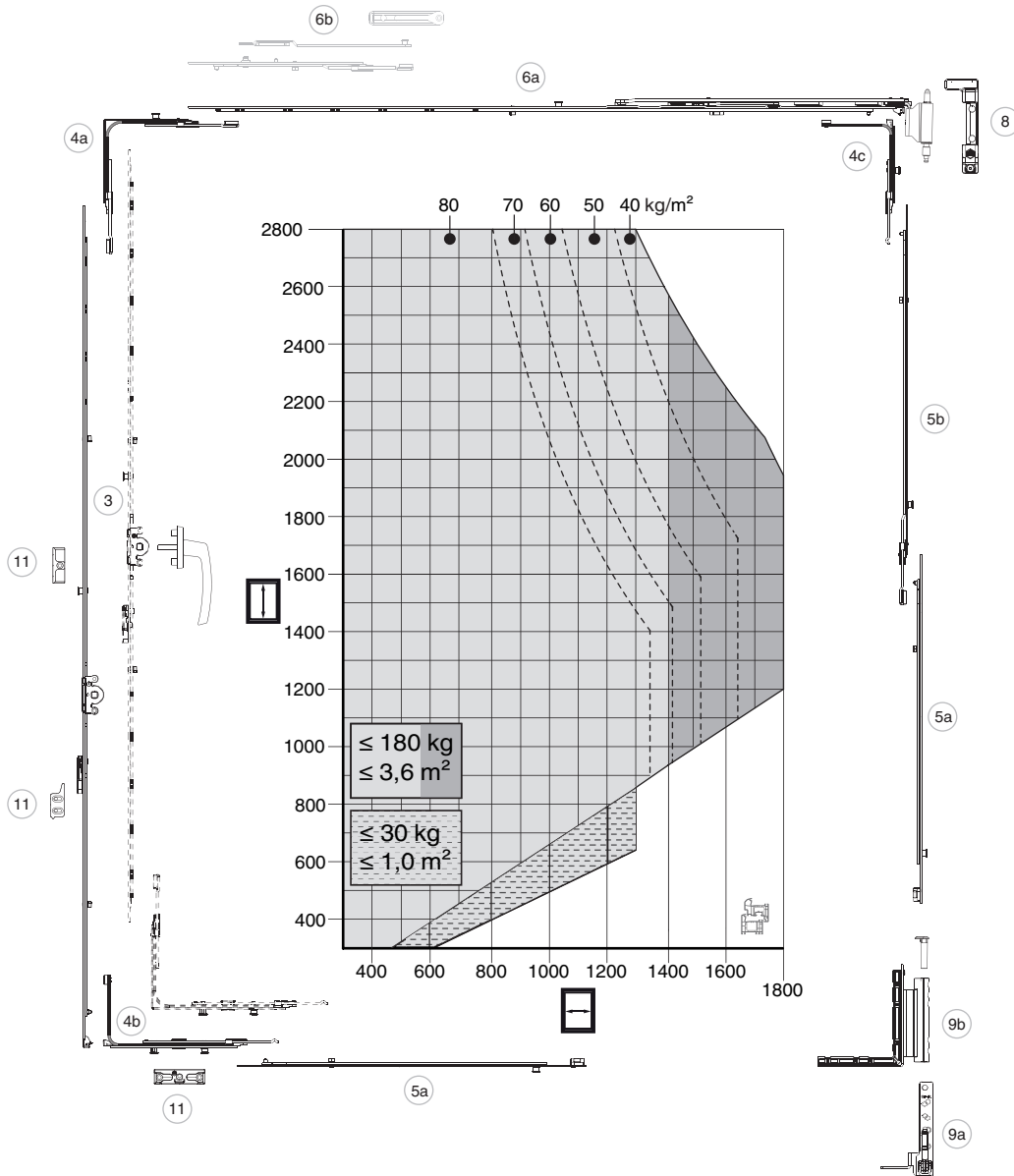
- 3 = Drive gear FHH or VHH (Backset 15 or 6.5). Recommendation: Handle height should be between $\frac{1}{3}$ and $\frac{1}{2}$ of sash rebate height (SRH).
- 5 = Above 800 mm (PVC) or 1,000 mm (timber); Observe details from profile manufacturer!
- 5b = Use additional centre locks from 1,280 mm!
- 6b = Stabilizing scissor stay necessary from 1,401 mm (dark shading in application range diagram).
- 11 = Refer to profile data sheets for striker plates and sash lifters for PVC.



Selection guide		Page
3a	3.1.1.1 T&T drive gears BS 15 FHH i.S.	→162
3b	3.1.1.9 T&T drive gears BS 15 VHH i.S.	→164
4a	4.1.1 Corner elements standard i.S.	→188
4b	4.1.2 Corner elements horizontal i.S.	→188
4c	4.1.3 Corner elements vertical i.S.	→189
5a	5.1 Centre locks FHH i.S.	→196
5b	5.2 Centre locks extendable i.S.	→196
6a	6.2 Rebated scissor stays MULTI MAMMUT	→207
6b	6.10.1 Stabilizing scissor stays	→216
8	8.6 Scissor stay hinges MULTI MAMMUT	→241
9a	9.5.2 Pivot posts for PVC MULTI MAMMUT	→259
9b	9.5.3 Corner supports PVC MULTI MAMMUT	→259



2.4.4.3 1-sashed rectangular T&T window with pivot post PVC MULTI MAMMUT and rebated corner support MULTI MAMMUT



≤ 1800 x 2800 mm



≥ 401 mm



≥ 310 mm



≥ 360 mm (15)
≥ 455 mm (6,5)



≥ 470 mm (15)
≥ 530mm (6,5)



≥ 270 mm (15)
≥ 365 mm (6,5)



≥ 400 mm (15)
≥ 460mm (6,5)

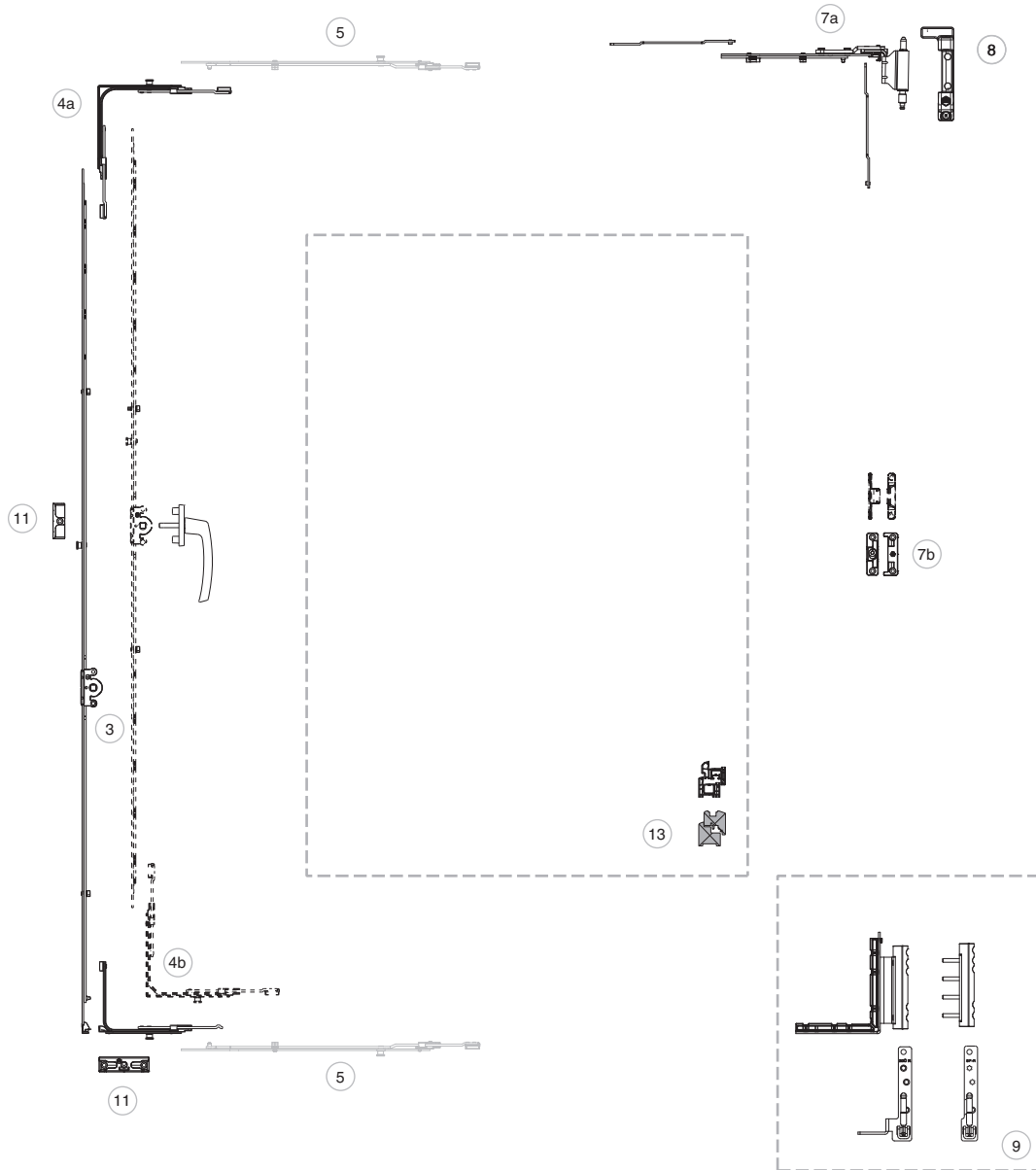
- 3 = Drive gear FHH or VHH (Backset 15 or 6.5). Recommendation: Handle height should be between $\frac{1}{3}$ and $\frac{1}{2}$ of sash rebate height (SRH).
- 5 = Above 800 mm (PVC) or 1,000 mm (timber); Observe details from profile manufacturer!
- 5b = Use additional centre locks from 1,280 mm!
- 6b = Stabilizing scissor stay necessary from 1,401 mm (dark shading in application range diagram).
- 11 = Refer to profile data sheets for striker plates and sash lifters for PVC.



Selection guide		Page
3a	3.1.1.1 T&T drive gears BS 15 FHH i.S.	→162
3b	3.1.1.9 T&T drive gears BS 15 VHH i.S.	→164
4a	4.1.1 Corner elements standard i.S.	→188
4b	4.1.2 Corner elements horizontal i.S.	→188
4c	4.1.3 Corner elements vertical i.S.	→189
5a	5.1 Centre locks FHH i.S.	→196
5b	5.2 Centre locks extendable i.S.	→196
6a	6.2 Rebated scissor stays MULTI MAMMUT	→207
6b	6.10.1 Stabilizing scissor stays	→216
8	8.6 Scissor stay hinges MULTI MAMMUT	→241
9a	9.5.2 Pivot posts for PVC MULTI MAMMUT	→259
9b	9.5.4 Rebated corner supports MULTI MAMMUT	→260



**2.4.4.4 1-sashed rectangular turn-only window
with pivot post MULTI MAMMUT and corner support MULTI MAMMUT
with fixed turn-only hinge**



≤ 1800 x 2800 mm

≥ 385/400 mm
 ≥ 325/340 mm

≥ 360 mm (□ 15), ≥ 455 mm (□ 6,5)
 ≥ 470 mm (□ 15), ≥ 530 mm (□ 6,5)

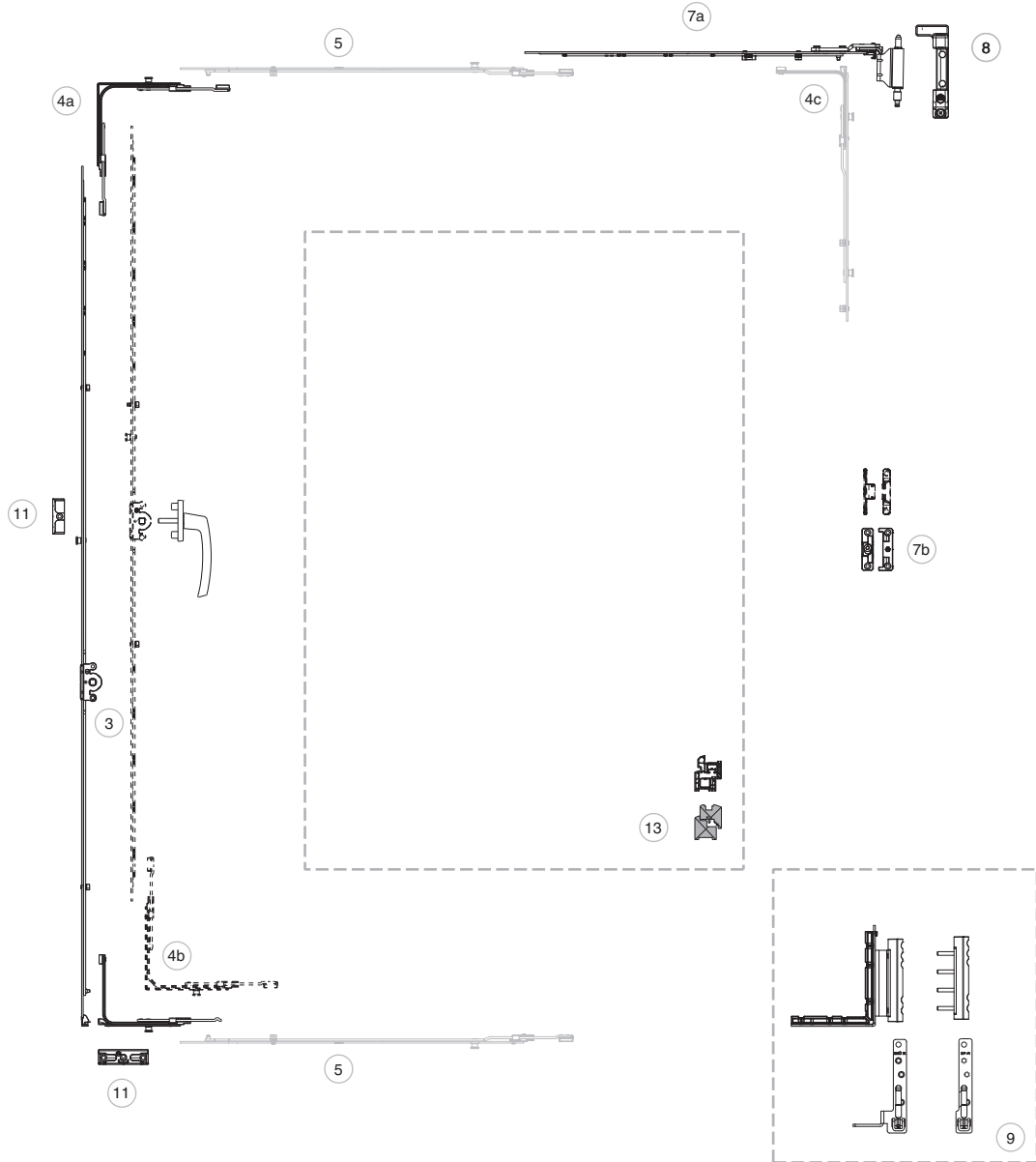
- 3 = Drive gear FHH or VHH (Backset 15 or 6.5). Recommendation: Handle height should be between $\frac{1}{3}$ and $\frac{1}{2}$ of sash rebate height (SRH).
- 5 = Above 800 mm (PVC) or 1,000 mm (timber); Observe details from profile manufacturer!
- 7a = Faceplate extensions, when used as turn-only hinge (sash part) FHH (application range 385-1800 mm).
- 7b = 1 piece 800 - 1,600 mm, 2 pieces 1,601 - 2,400 mm, 3 pieces 2,401 - 2,650 mm; Top compression device must be installed close to turn-only hinge for gasket compression adjustment; Observe details from profile manufacturer!
- 9 = For possible pivot post combinations refer to matrix.
- 11 = Refer to profile data sheets for striker plates and sash lifters for PVC.
- 13 = For application diagram refer to turn&tilt hardware overview according to corresponding pivot post combination.



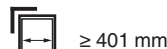
Selection guide		Page
3a	3.2.1.1 Turn-only drive gears BS 15 FHH i.S.	→172
3b	3.2.1.6 Turn-only drive gears BS 15 VHH i.S.	→173
4a	4.1.1 Corner elements standard i.S.	→188
4b	4.1.2 Corner elements horizontal i.S.	→188
5	5.1 Centre locks FHH i.S.	→196
7a	7.4 Turn-only hinges - sash part MULTI MAMMUT	→224
7b	7.10 Compression devices	→232
8	8.6 Scissor stay hinges MULTI MAMMUT	→241
9	9.5 Pivot posts MULTI MAMMUT	→259
11	11 Striker plates	→292



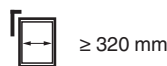
**2.4.4.5 1-sashed rectangular turn-only window
with pivot post MULTI MAMMUT and corner support MULTI MAMMUT
with croppable turn-only hinge**



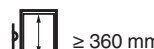
≤ 1800 x 2800 mm



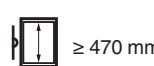
≥ 401 mm



≥ 320 mm



≥ 360 mm (15), ≥ 455 mm (6,5)



≥ 470 mm (15), ≥ 530 mm (6,5)

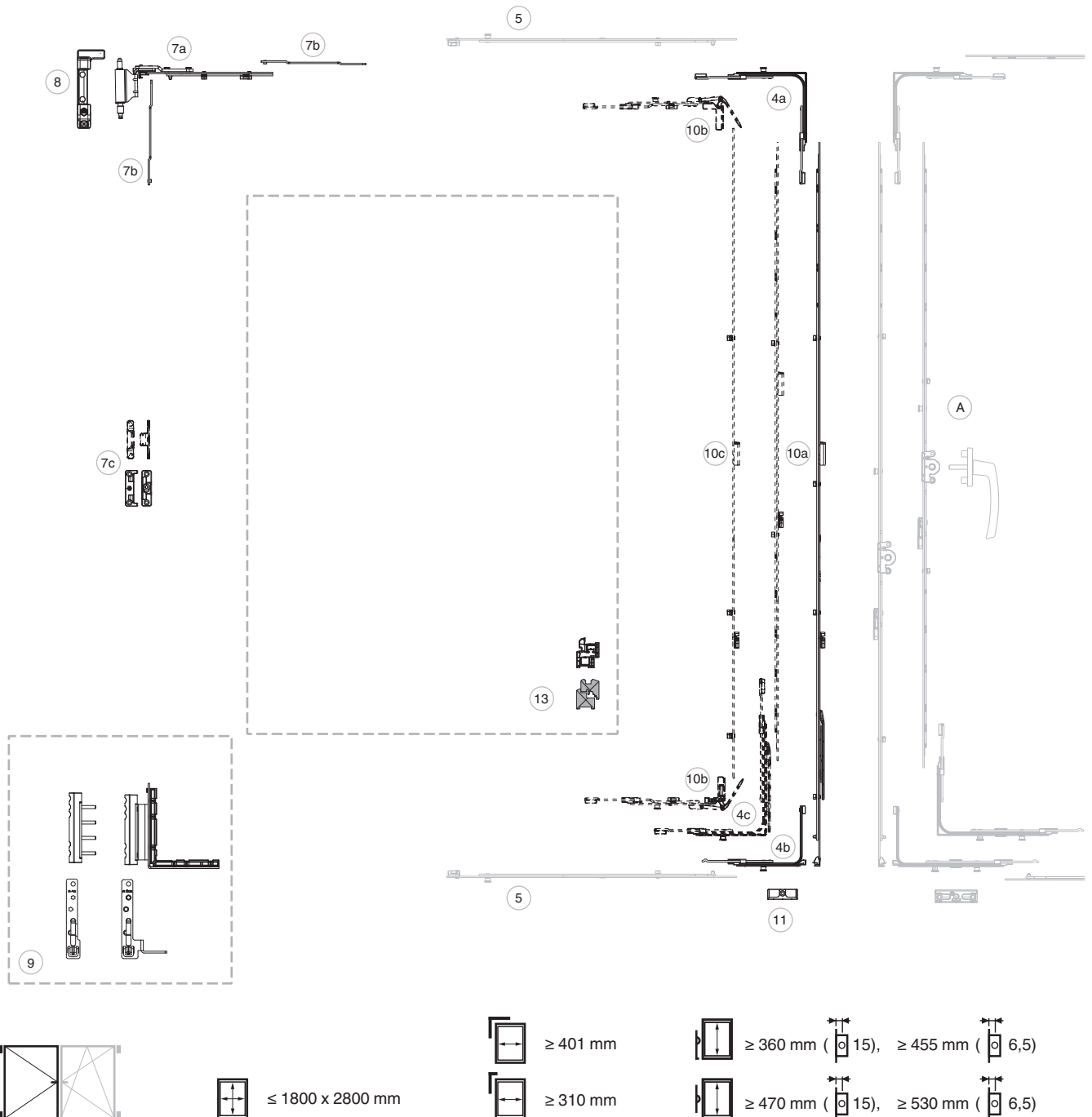
- 3 = Drive gear FHH or VHH (Backset 15 or 6.5). Recommendation: Handle height should be between $\frac{1}{3}$ and $\frac{1}{2}$ of sash rebate height (SRH).
- 5 = Above 800 mm (PVC) or 1,000 mm (timber); Observe details from profile manufacturer!
- 7a = Use as croppable turn-only hinge (sash part) (application range 400 - 635 mm).
- 7b = 1 piece 800 - 1,600 mm, 2 pieces 1,601 - 2,400 mm, 3 pieces 2,401 - 2,650 mm; Observe details from profile manufacturer!
- 9 = For possible pivot post combinations refer to matrix.
- 13 = For application diagram refer to turn&tilt hardware overview according to corresponding pivot post combination.



Selection guide		Page
3a	3.2.1.1 Turn-only drive gears BS 15 FHH i.S.	→172
3b	3.2.1.6 Turn-only drive gears BS 15 VHH i.S.	→173
4a	4.1.1 Corner elements standard i.S.	→188
4b	4.1.2 Corner elements horizontal i.S.	→188
4c	4.1.3 Corner elements vertical i.S.	→189
5	5.1 Centre locks FHH i.S.	→196
7a	7.4 Turn-only hinges - sash part MULTI MAMMUT	→224
7b	7.10 Compression devices	→232
8	8.6 Scissor stay hinges MULTI MAMMUT	→241
9	9.5 Pivot posts MULTI MAMMUT	→259
11	11 Striker plates	→292



2.4.4.6 2-sashed rectangular T&T window
with pivot post MULTI MAMMUT and fixed turn-only hinge



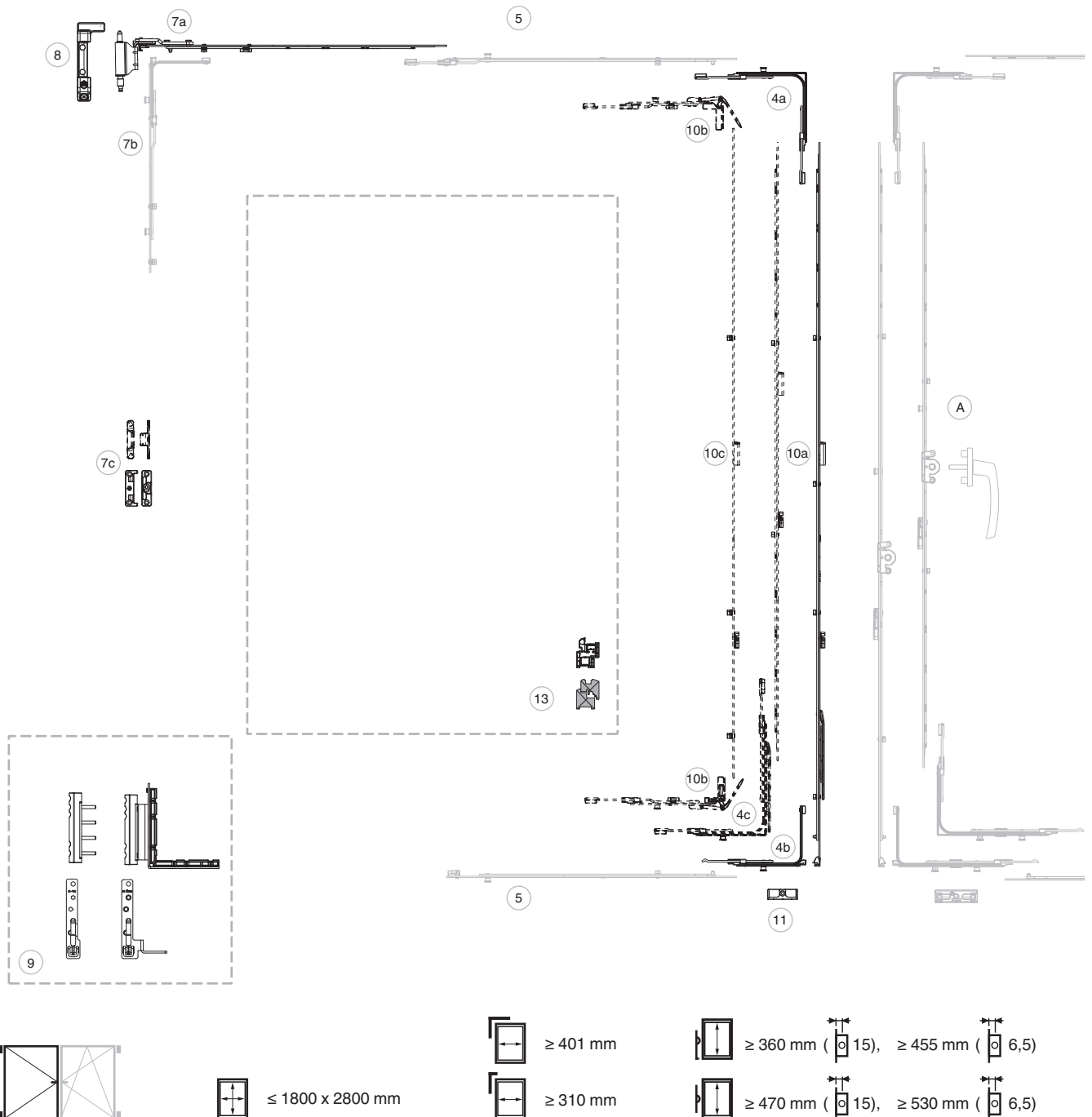
- A = For details refer to 1-sashed turn&tilt window.
- 5 = Above 800 mm (PVC) or 1,000 mm (timber); Observe details from profile manufacturer!
- 7c = 1 piece 800 - 1,600 mm, 2 pieces 1,601 - 2,400 mm, 3 pieces 2,401 - 2,650 mm; Observe details from profile manufacturer!
- 9 = For possible pivot post combinations refer to matrix; the support screw has to be set from 100 kg sash weight!
- 10a = French casement drive gear FHH or VHH.
- 11 = Refer to profile data sheets for striker plates and sash lifters for PVC.
- 13 = For application diagram refer to turn&tilt hardware overview according to corresponding pivot post combination.



Selection guide		Page
4a	4.1.1 Corner elements standard i.S.	→188
4b	4.1.3 Corner elements vertical i.S.	→189
4c	4.4 Corner elements i.S. for French casement drive gears	→191
5	5.1 Centre locks FHH i.S.	→196
7a	7.4.1 Turn-only hinges - sash part croppable MULTI MAMMUT	→224
7b	7.4.2 Faceplate extension for turn-only hinge - sash part MULTI MAMMUT	→224
7c	7.10 Compression devices	→232
8	8.6 Scissor stay hinges MULTI MAMMUT	→241
9	9.5 Pivot posts MULTI MAMMUT	→259
10a	10.2 French casement drive gears	→278
10b	10.3 Horizontal French casement locks	→286
10c	10.4 Single piece door striker	→286
11	11 Striker plates	→292



**2.4.4.7 2-sashed rectangular T&T window
with pivot post MULTI MAMMUT and croppable turn-only hinge**



- A = For details refer to 1-sashed turn&tilt window.
- 5 = Above 800 mm (PVC) or 1,000 mm (timber); Observe details from profile manufacturer!
- 7c = 1 piece 800 - 1,600 mm, 2 pieces 1,601 - 2,400 mm, 3 pieces 2,401 - 2,650 mm; Observe details from profile manufacturer!
- 9 = For possible pivot post combinations refer to matrix; the support screw has to be set from 100 kg sash weight!
- 10a = French casement drive gear FHH or VHH.
- 11 = Refer to profile data sheets for striker plates and sash lifters for PVC.
- 13 = For application diagram refer to turn&tilt hardware overview according to corresponding pivot post combination.

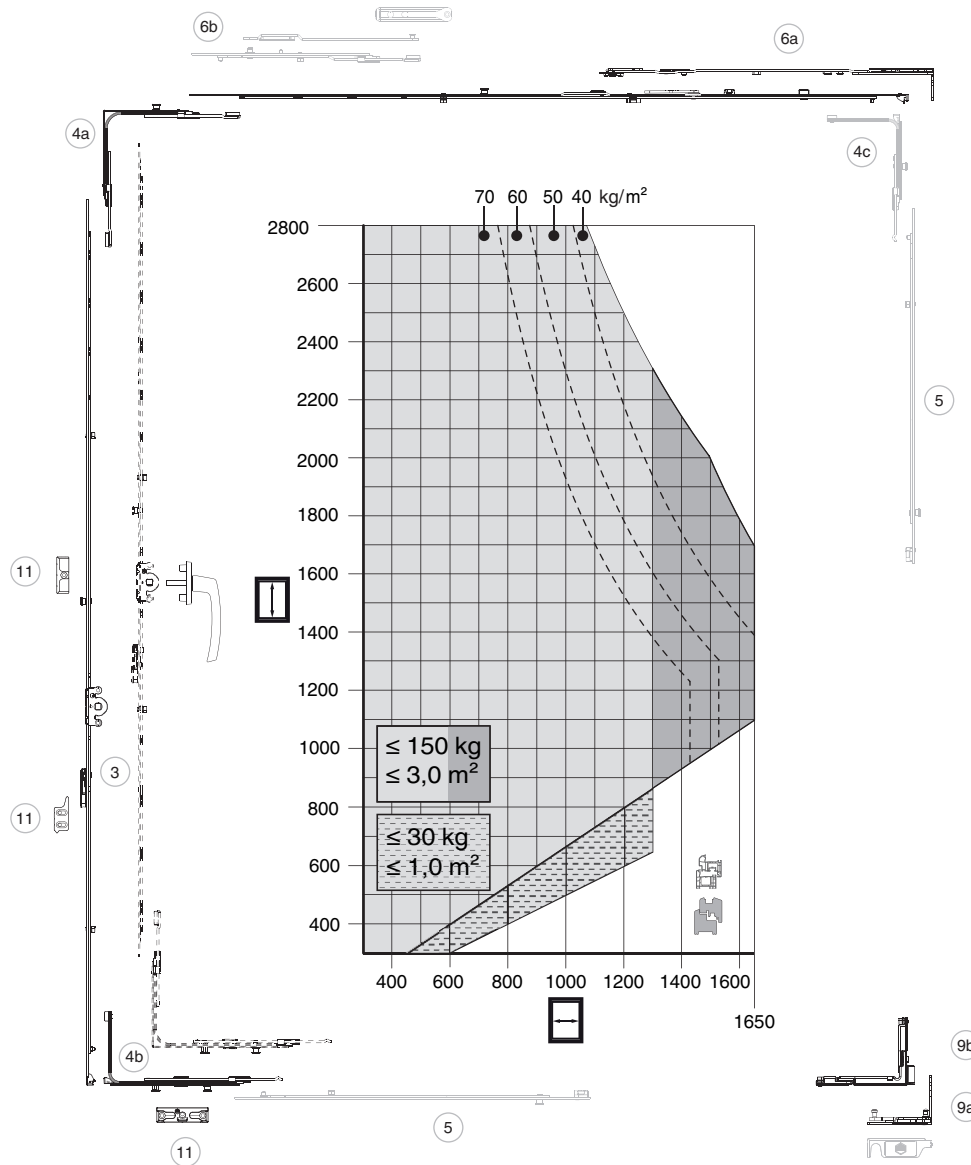


Selection guide		Page
4a	4.1.1 Corner elements standard i.S.	→188
4b	4.1.3 Corner elements vertical i.S.	→189
4c	4.4 Corner elements i.S. for French casement drive gears	→191
5	5.1 Centre locks FHH i.S.	→196
7a	7.4.1 Turn-only hinges - sash part croppable MULTI MAMMUT	→224
7b	7.4.2 Faceplate extension for turn-only hinge - sash part MULTI MAMMUT	→224
7c	7.10 Compression devices	→232
8	8.6 Scissor stay hinges MULTI MAMMUT	→241
9	9.5 Pivot posts MULTI MAMMUT	→259
10a	10.2 French casement drive gears	→278
10b	10.3 Horizontal French casement locks	→286
10c	10.4 Single piece door striker	→286
11	11 Striker plates	→292



2.4.5 MULTI POWER (drive gear FHH/VHH)

2.4.5.1 1-sashed rectangular T&T window with pivot post MULTI POWER and corner support MULTI POWER



≤ 1650 x 2800 mm

≥ 465 mm

≥ 370 mm

≥ 360 mm (15)
≥ 455 mm (6,5)

≥ 470 mm (15)
≥ 530 mm (6,5)

≥ 270 mm (15)
≥ 365 mm (6,5)

≥ 400 mm (15)
≥ 460 mm (6,5)

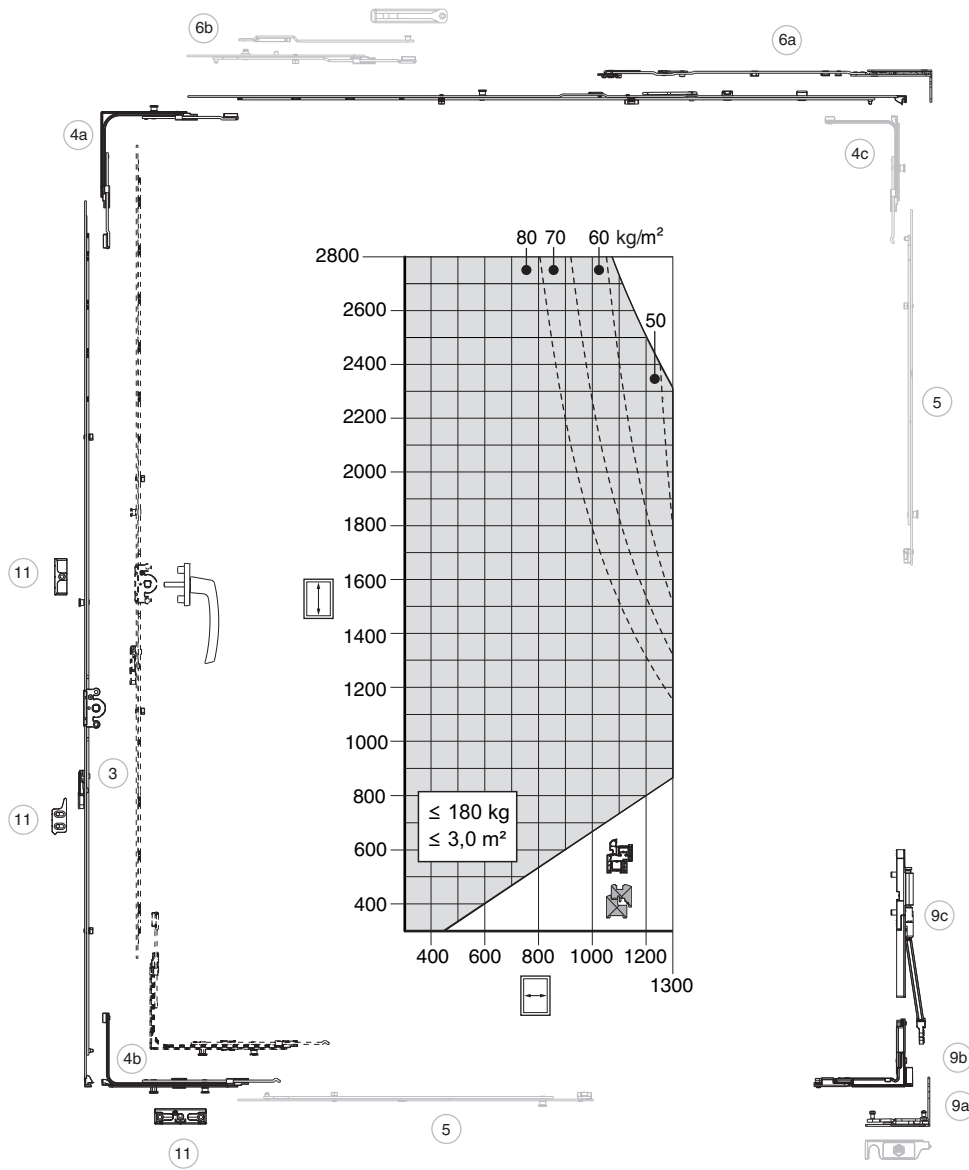
- 3 = Drive gear FHH or VHH (Backset 15 or 6.5). Recommendation: Handle height should be between $\frac{1}{3}$ and $\frac{1}{2}$ of sash rebate height (SRH).
- 5 = Above 800 mm (PVC) or 1,000 mm (timber); Observe details from profile manufacturer!
- 6b = Stabilizing scissor stay necessary from 1,301 mm (dark shading in application range diagram).
- 9 = Timber or PVC variant.
- 11 = Refer to profile data sheets for striker plates and sash lifters for PVC.



Selection guide		Page
3a	3.1.1.1 T&T drive gears BS 15 FHH i.S.	→162
3b	3.1.1.9 T&T drive gears BS 15 VHH i.S.	→164
4a	4.1.1 Corner elements standard i.S.	→188
4b	4.1.2 Corner elements horizontal i.S.	→188
4c	4.1.3 Corner elements vertical i.S.	→189
5	5.1 Centre locks FHH i.S.	→196
6a	6.5 Scissor stays MULTI POWER	→211
6b	6.10.1 Stabilizing scissor stays	→216
9a	9.8.1 Pivot posts for timber MULTI POWER	→263
9b	9.8.6 Rebated corner supports MULTI POWER	→264
11	11 Striker plates	→292



2.4.5.2 1-sashed rectangular T&T window with pivot post MULTI POWER and corner support MULTI POWER and load transfer



≤ 1300 x 2800 mm



≥ 465 mm



≥ 370 mm



≥ 360 mm (15)
≥ 455 mm (6,5)



≥ 470 mm (15)
≥ 530mm (6,5)



≥ 270 mm (15)
≥ 365 mm (6,5)



≥ 400 mm (15)
≥ 460mm (6,5)

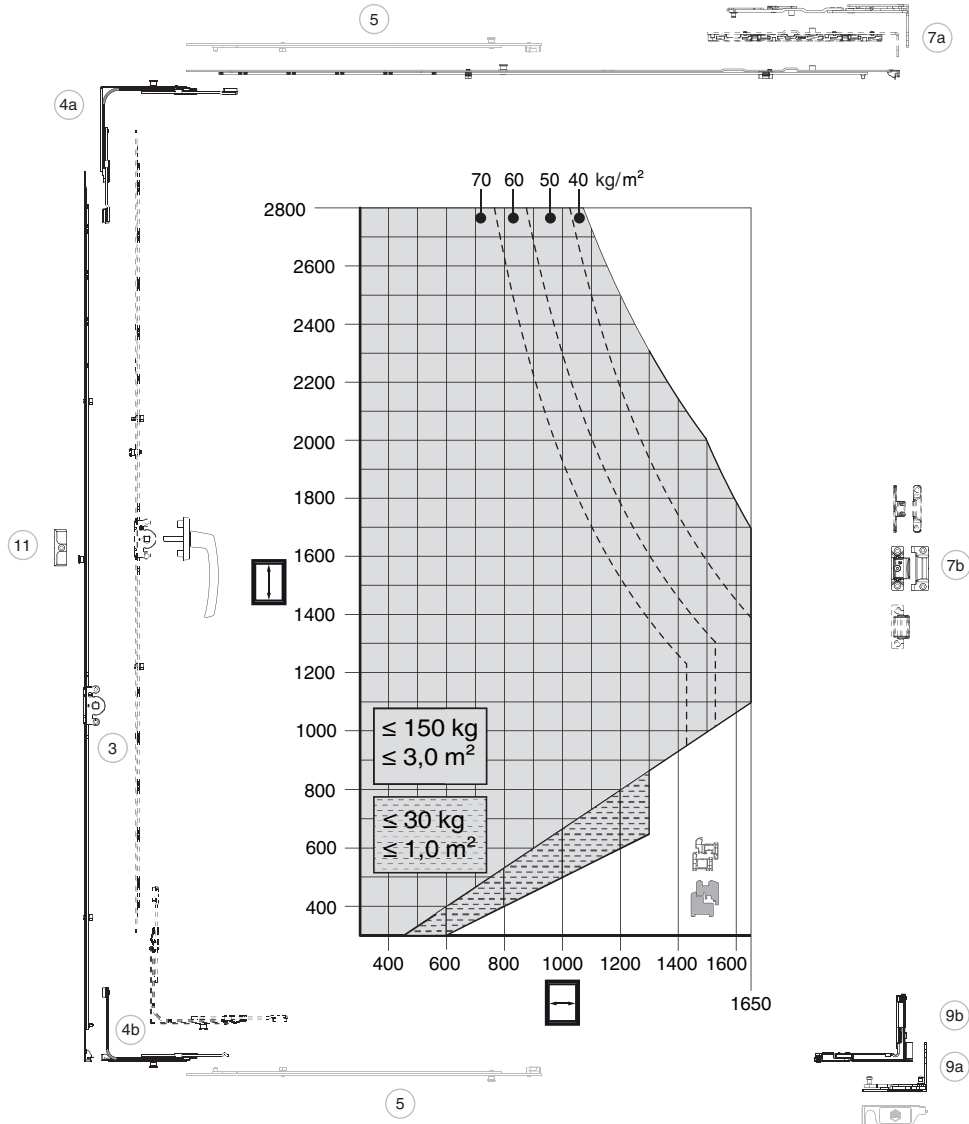
- 3 = Drive gear FHH or VHH (Backset 15 or 6.5). Recommendation: Handle height should be between $\frac{1}{3}$ and $\frac{1}{2}$ of sash rebate height (SRH).
- 5 = Above 800 mm (PVC) or 1,000 mm (timber); Observe details from profile manufacturer!
- 6b = Stabilizing scissor stay necessary from 1,301 mm (dark shading in application range diagram).
- 9 = Timber or PVC variant.
- 11 = Refer to profile data sheets for striker plates and sash lifters for PVC.



Selection guide		Page
3a	3.1.1.1 T&T drive gears BS 15 FHH i.S.	→162
3b	3.1.1.9 T&T drive gears BS 15 VHH i.S.	→164
4a	4.1.1 Corner elements standard i.S.	→188
4b	4.1.2 Corner elements horizontal i.S.	→188
4c	4.1.3 Corner elements vertical i.S.	→189
5	5.1 Centre locks FHH i.S.	→196
6a	6.5 Scissor stays MULTI POWER	→211
6b	6.10.1 Stabilizing scissor stays	→216
9a	9.8.1 Pivot posts for timber MULTI POWER	→263
9b	9.8.6 Rebated corner supports MULTI POWER	→264
9c	9.8.7 Load transfer MULTI POWER	→264
11	11 Striker plates	→292



2.4.5.3 1-sashed rectangular turn-only window with fixed or croppable turn-only hinge faceplate and pivot post MULTI POWER and corner support MULTI POWER



≤ 1650 x 2800 mm



≥ 465 mm

≥ 370 mm



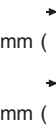
≥ 360 mm (15),

≥ 470 mm (15),



≥ 455 mm (6,5)

≥ 530 mm (6,5)



≥ 455 mm (6,5)

≥ 530 mm (6,5)

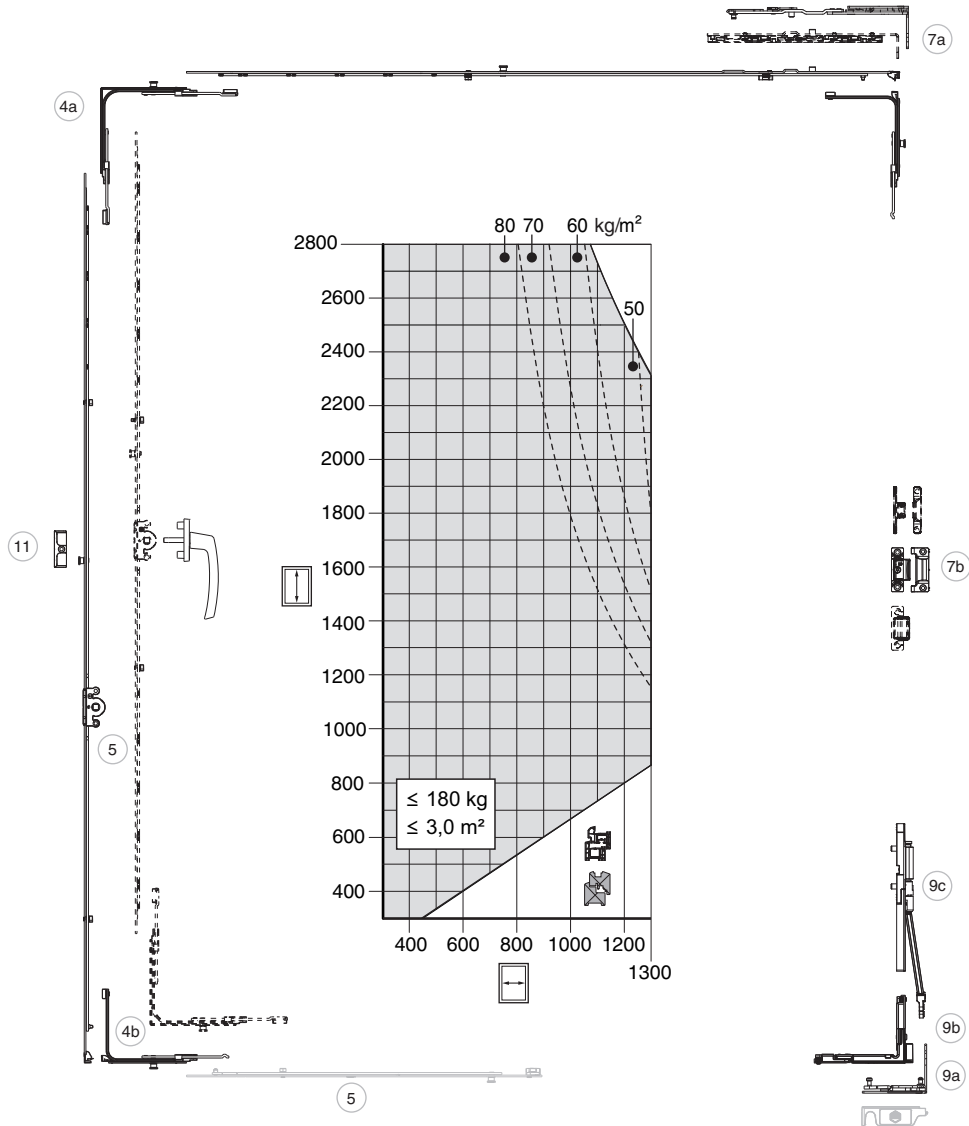
- 3 = Drive gear FHH or VHH (Backset 15 or 6.5). Recommendation: Handle height should be between $\frac{1}{3}$ and $\frac{1}{2}$ of sash rebate height (SRH).
- 5 = Above 800 mm (PVC) or 1,000 mm (timber); Observe details from profile manufacturer!
- 7a = Turn-only hinge faceplate fixed or croppable.
- 7b = 1 piece 800 - 1,600 mm, 2 pieces 1,601 - 2,400 mm, 3 pieces 2,401 - 2,650 mm; Observe details from profile manufacturer!
- 9 = Timber or PVC variant.
- 11 = Refer to profile data sheets for striker plates and sash lifters for PVC.



Selection guide		Page
3a	3.2.1.1 Turn-only drive gears BS 15 FHH i.S.	→172
3b	3.2.1.6 Turn-only drive gears BS 15 VHH i.S.	→173
4a	4.1.1 Corner elements standard i.S.	→188
4b	4.1.3 Corner elements vertical i.S.	→189
5	5.1 Centre locks FHH i.S.	→196
7a	7.7.1 Turn-only and tilt-only hinge faceplates / turn-only and tilt-only hinge arms with hinge MULTI POWER	→227
7b	7.10 Compression devices	→232
9a	9.8.1 Pivot posts for timber MULTI POWER	→263
9b	9.8.6 Rebated corner supports MULTI POWER	→264
11	11 Striker plates	→292



2.4.5.4 1-sashed rectangular turn-only window with fixed or croppable turn-only hinge faceplate and pivot post MULTI POWER and corner support MULTI POWER and load transfer



≤ 1300 x 2800 mm



≥ 465 mm



≥ 370 mm



≥ 360 mm (15), ≥ 455 mm (6,5)



≥ 470 mm (15), ≥ 530 mm (6,5)

- 3 = Drive gear FHH or VHH (Backset 15 or 6.5). Recommendation: Handle height should be between $\frac{1}{3}$ and $\frac{1}{2}$ of sash rebate height (SRH).
- 5 = Above 800 mm (PVC) or 1,000 mm (timber); Observe details from profile manufacturer!
- 7a = Turn-only hinge faceplate fixed or croppable.
- 7b = 1 piece 800 - 1,600 mm, 2 pieces 1,601 - 2,400 mm, 3 pieces 2,401 - 2,650 mm; Observe details from profile manufacturer!
- 9 = Timber or PVC variant.
- 11 = Refer to profile data sheets for striker plates and sash lifters for PVC.

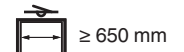
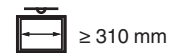
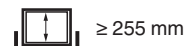
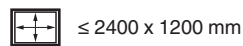
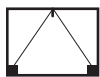
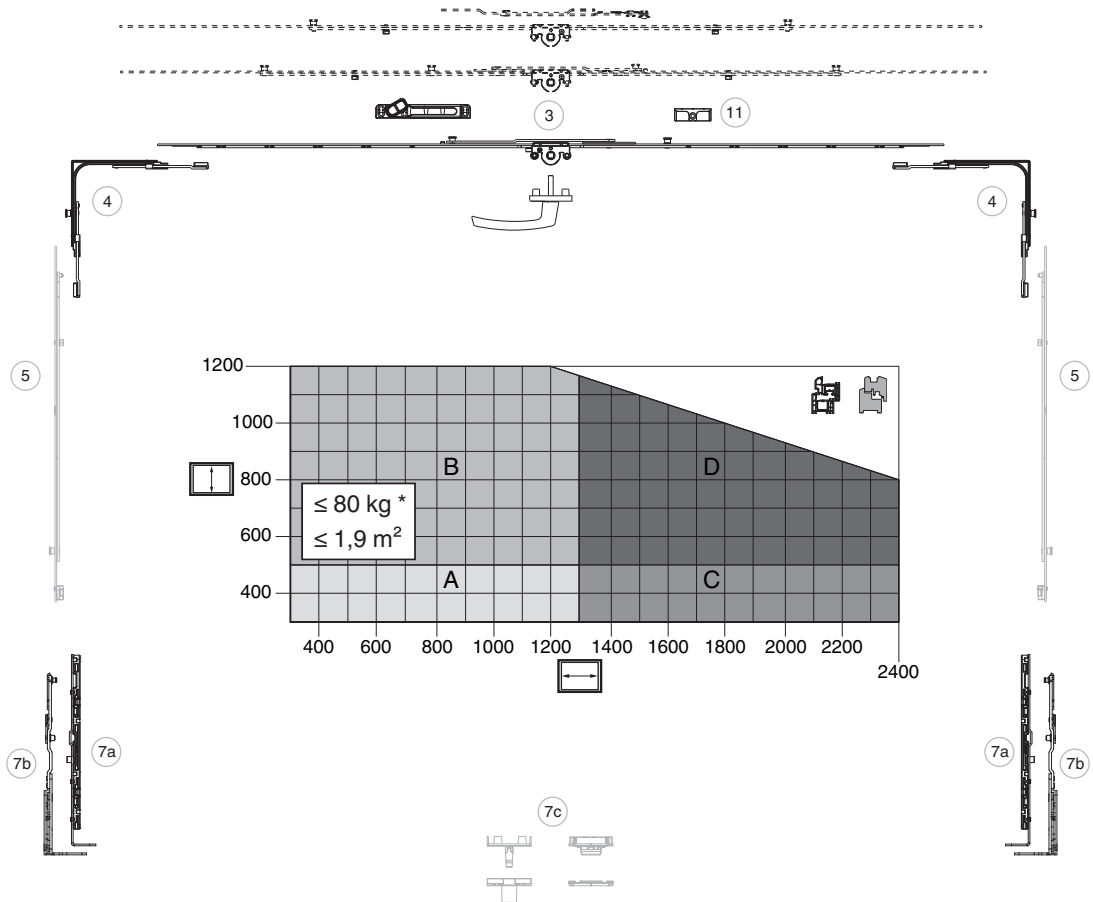


Selection guide		Page
3a	3.2.1.1 Turn-only drive gears BS 15 FHH i.S.	→172
3b	3.2.1.6 Turn-only drive gears BS 15 VHH i.S.	→173
4a	4.1.1 Corner elements standard i.S.	→188
4b	4.1.3 Corner elements vertical i.S.	→189
5	5.1 Centre locks FHH i.S.	→196
7a	7.7.1 Turn-only and tilt-only hinge faceplates / turn-only and tilt-only hinge arms with hinge MULTI POWER	→227
7b	7.10 Compression devices	→232
9a	9.8.1 Pivot posts for timber MULTI POWER	→263
9b	9.8.6 Rebated corner supports MULTI POWER	→264
9c	9.8.7 Load transfer MULTI POWER	→264
11	11 Striker plates	→292



2.4.5.5 1-sashed rectangular tilt-only window

with tilt-only hinge arm MULTI POWER and fixed tilt-only hinge faceplate MULTI POWER



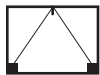
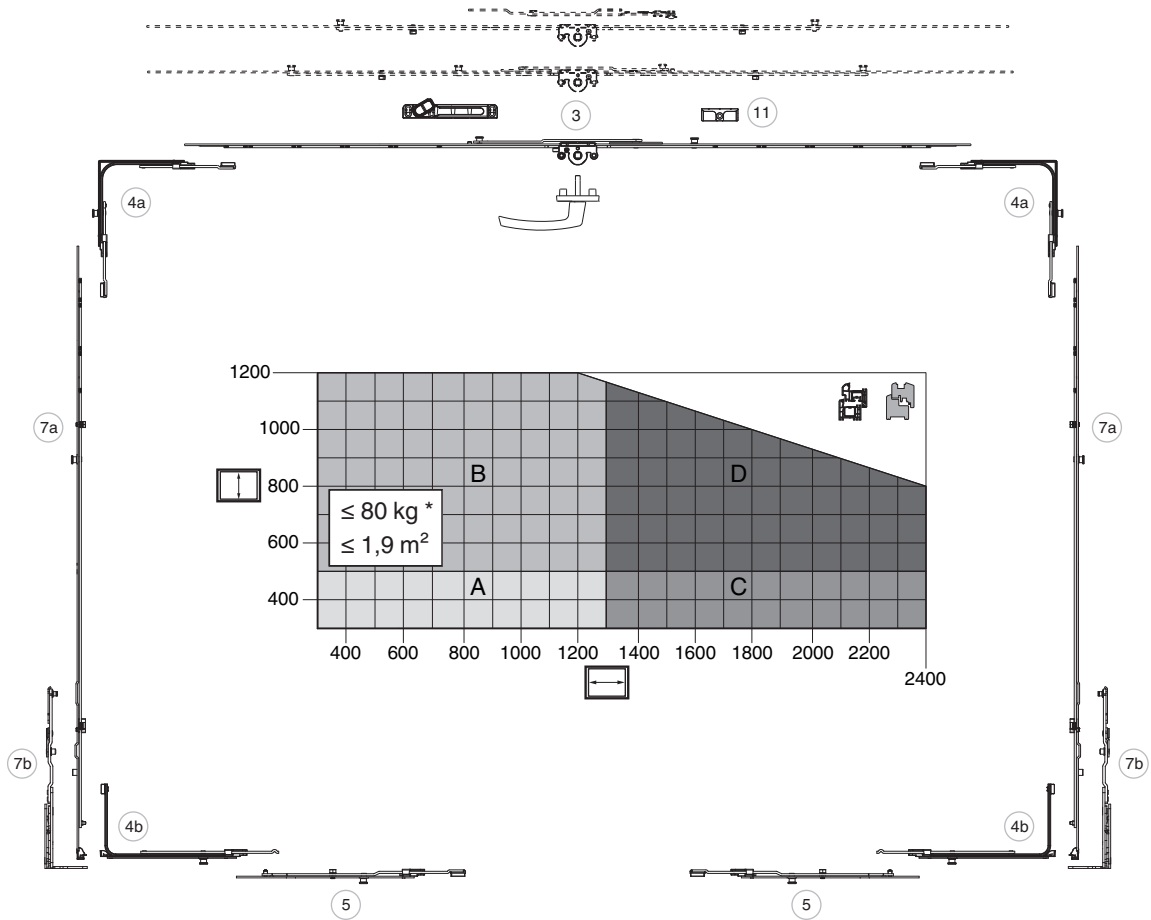
- A = 1 tilt stay + restrictor and cleaning stay size 1.
- B = 1 tilt stay + restrictor and cleaning stay size 2.
- C = 2 tilt stays + restrictor and cleaning stay size 1.
- D = 2 tilt stays + restrictor and cleaning stay size 2.
- * = Mandatory installation of restrictor and cleaning stay (guideline FPKF at www.schlossindustrie.de)! Observe application diagrams and max. load capacity for restrictor and cleaning stays!
- 5 = Above 800 mm (PVC) or 1,000 mm (timber); Observe details from profile manufacturer!
- 7c = 1 piece 800 - 1,600 mm, 2 pieces 1,601 - 2,400 mm, 3 pieces 2,401 - 2,650 mm; Observe details from profile manufacturer!
- 11 = Refer to profile data sheets for striker plates and sash lifters for PVC.



Selection guide			Page
3	3.4	Espagnolettes	→179
4	4.1.1	Corner elements standard i.S.	→188
5	5.1	Centre locks FHH i.S.	→196
7a	7.7.1.1	Turn-only and tilt-only hinge faceplate fixed MULTI POWER	→227
7b	7.7.1.5	Tilt-only hinge arms with hinge timber MULTI POWER	→227
7c	7.10	Compression devices	→232
11	11	Striker plates	→292



**2.4.5.6 1-sashed rectangular tilt-only window
with tilt-only hinge arm MULTI POWER and croppable tilt-only hinge faceplate MULTI POWER**



≤ 2400 x 1200 mm

≥ 401 mm

≥ 310 mm
 ≥ 650 mm

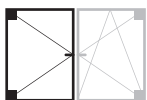
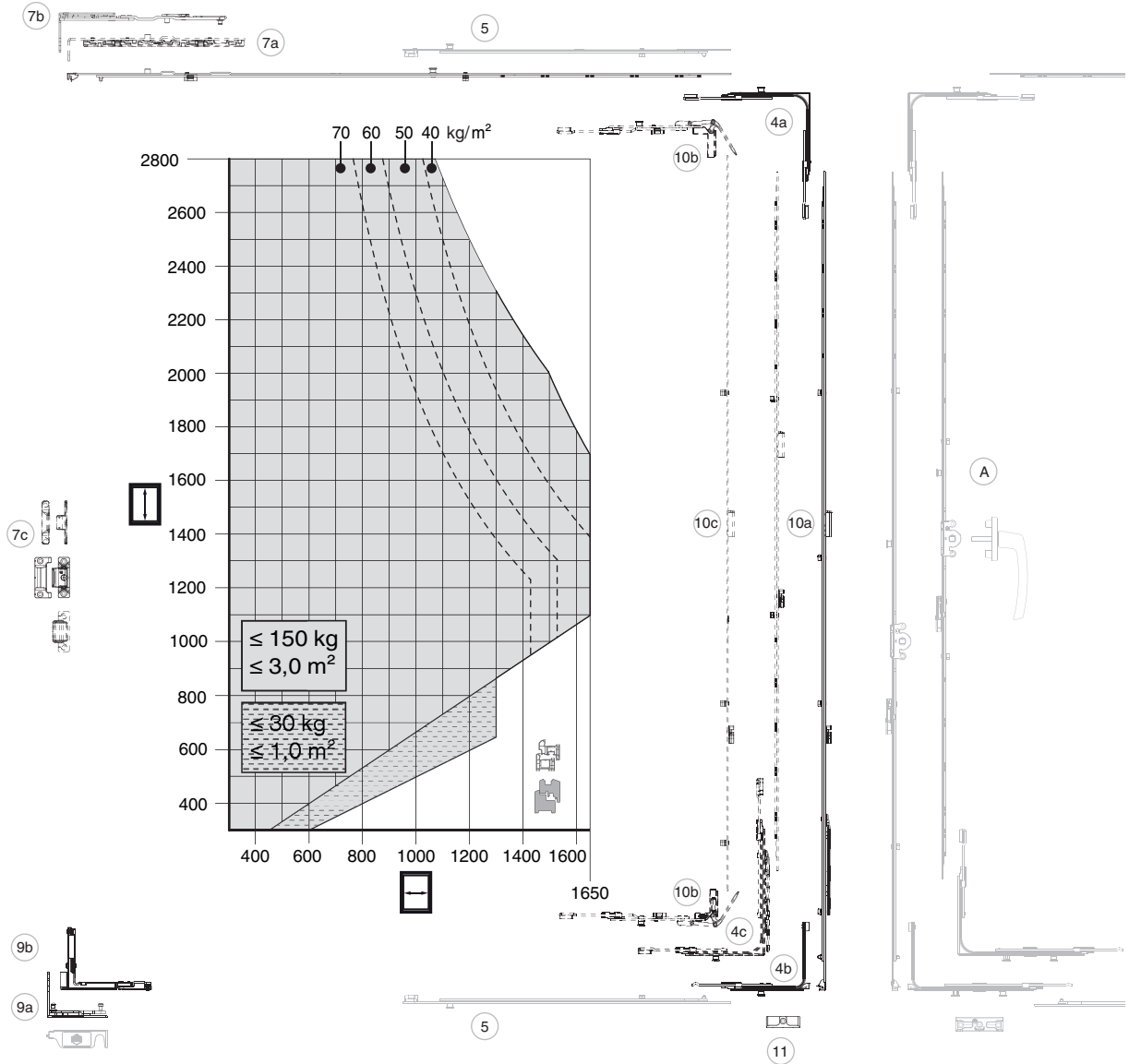
- A = 1 tilt stay + restrictor and cleaning stay size 1.
- B = 1 tilt stay + restrictor and cleaning stay size 2.
- C = 2 tilt stays + restrictor and cleaning stay size 1.
- D = 2 tilt stays + restrictor and cleaning stay size 2.
- * = Mandatory installation of restrictor and cleaning stay (guideline FPKF at www.schlossindustrie.de)! Observe application diagrams and max. load capacity for restrictor and cleaning stays!
- 5 = Above 800 mm (PVC) or 1,000 mm (timber); Observe details from profile manufacturer!
- 11 = Refer to profile data sheets for striker plates and sash lifters for PVC.



Selection guide			Page
3	3.4	Espagnolettes	→179
4a	4.1.1	Corner elements standard i.S.	→188
4b	4.1.3	Corner elements vertical i.S.	→189
5	5.10	Faceplate extensions fixed and extendable	→199
7a	7.7.1.2	Turn-only hinge faceplates croppable MULTI POWER	→227
7b	7.7.1.5	Tilt-only hinge arms with hinge timber MULTI POWER	→227
11	11	Striker plates	→292



2.4.5.7 2-sashed rectangular T&T window with fixed or croppable turn-only hinge faceplate and pivot post MULTI POWER and corner support MULTI POWER



≤ 1650 x 2800 mm



≥ 465 mm



≥ 370 mm



≥ 360 mm (\square 15), ≥ 455 mm (\square 6,5)



≥ 470 mm (\square 15), ≥ 530 mm (\square 6,5)

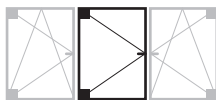
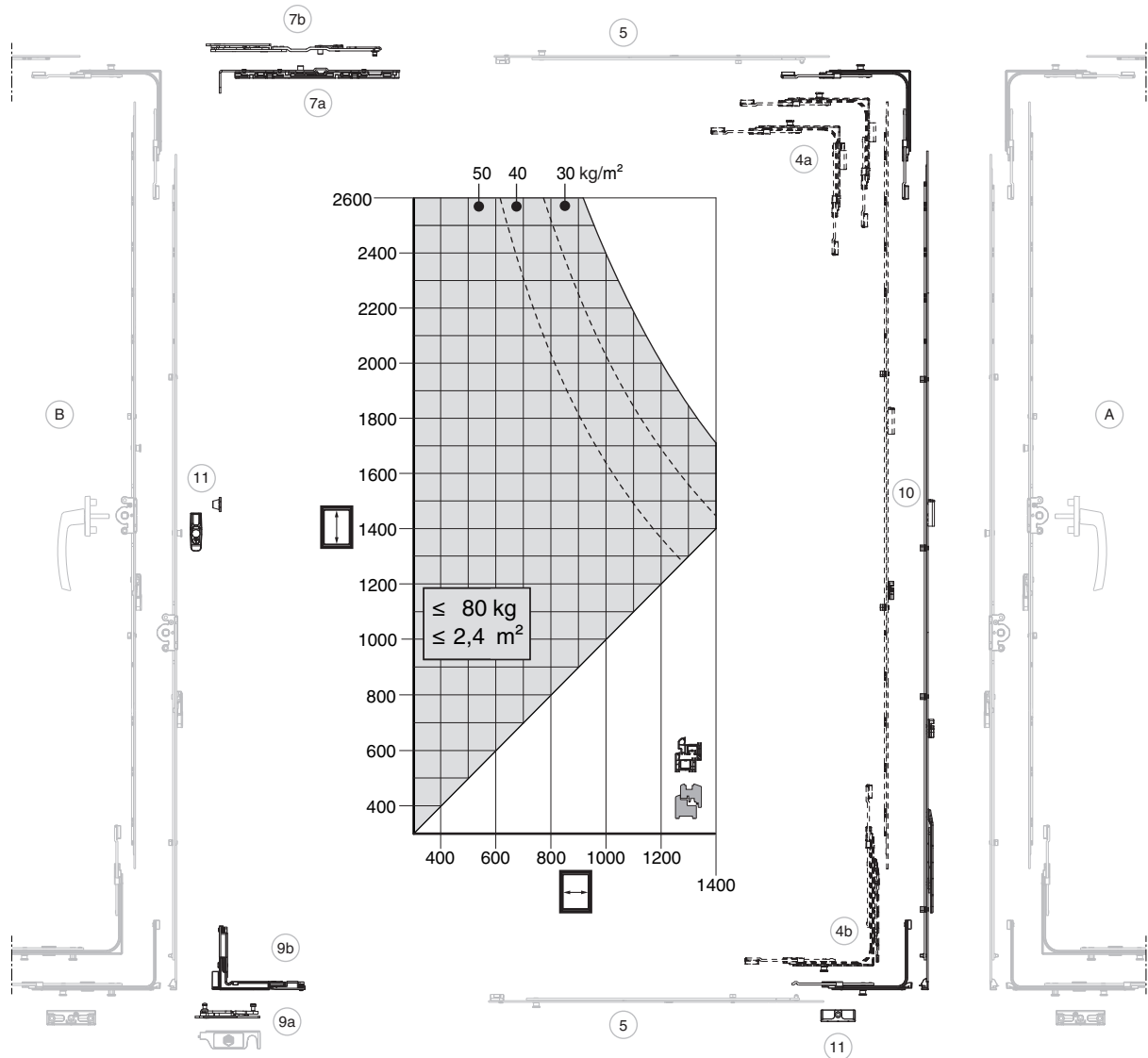
- A = For details refer to 1-sashed turn&tilt window.
- 5 = Above 800 mm (PVC) or 1,000 mm (timber); Observe details from profile manufacturer!
- 7a = Turn-only hinge faceplate fixed or croppable.
- 7c = 1 piece 800 - 1,600 mm, 2 pieces 1,601 - 2,400 mm, 3 pieces 2,401 - 2,650 mm; Observe details from profile manufacturer!
- 9 = Timber or PVC variant.
- 10a = French casement drive gear FHH or VHH.
- 11 = Refer to profile data sheets for striker plates and sash lifters for PVC.





Selection guide		Page
4a	4.1.1 Corner elements standard i.S.	→188
4b	4.1.3 Corner elements vertical i.S.	→189
4c	4.4 Corner elements i.S. for French casement drive gears	→191
5	5.1 Centre locks FHH i.S.	→196
7a	7.7.1.1 Turn-only and tilt-only hinge faceplate fixed MULTI POWER	→227
7b	7.7.1.3 Turn-only hinge arms with hinge timber MULTI POWER	→227
7c	7.10 Compression devices	→232
9a	9.8.1 Pivot posts for timber MULTI POWER	→263
9b	9.8.6 Rebated corner supports MULTI POWER	→264
10a	10.2 French casement drive gears	→278
10b	10.3 Horizontal French casement locks	→286
10c	10.4 Single piece door striker	→286
11	11 Striker plates	→292





2.4.5.8 3-sashed rectangular turn-only window with pivot post MULTI POWER and corner support MULTI POWER



 ≤ 1400 x 2600 mm

 ≥ 465 mm

 ≥ 360 mm (⌀ 15), ≥ 455 mm (⌀ 6,5)
 ≥ 470 mm (⌀ 15), ≥ 530 mm (⌀ 6,5)

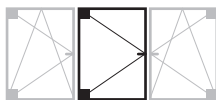
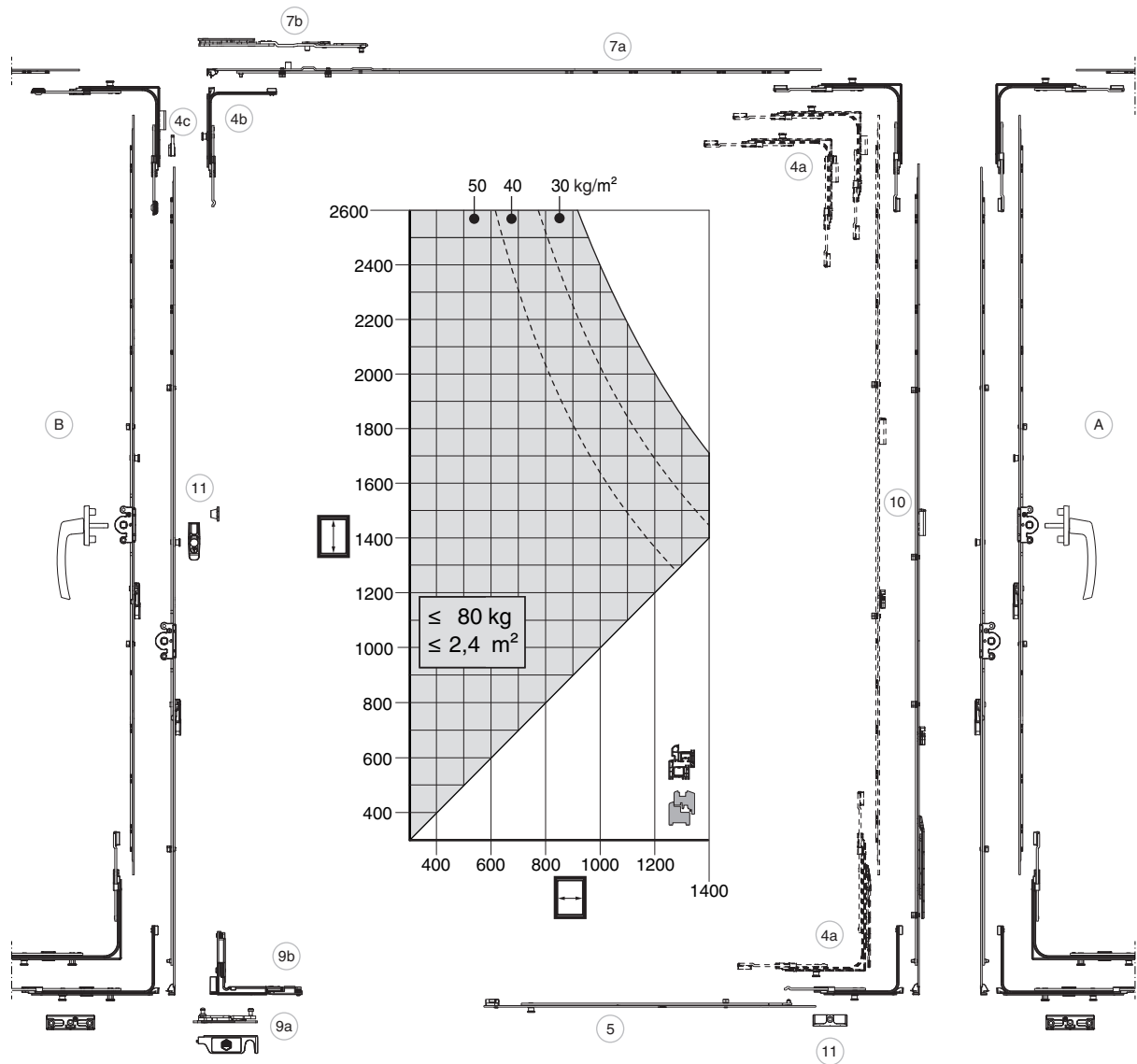
- A = For details refer to 1-sashed turn-only or turn&tilt window.
- B = For details refer to 1-sashed turn-only or turn&tilt window. Drive gear with tilt lock bolt not possible!
- 5 = Above 800 mm (PVC) or 1,000 mm (timber); Observe details from profile manufacturer!
- 7b = Timber or PVC variant.
- 9 = Timber or PVC variant.
- 10 = French casement drive gear FHH or VHH.
- 11 = Refer to profile data sheets for striker plates and sash lifters for PVC.



Selection guide		Page
4a	4.1.1 Corner elements standard i.S.	→188
4b	4.1.3 Corner elements vertical i.S.	→189
5	5.1 Centre locks FHH i.S.	→196
7a	7.7.1.1 Turn-only and tilt-only hinge faceplate fixed MULTI POWER	→227
7b	7.7.2 Turn-only hinge arms with hinge for 3-sashed windows MULTI POWER	→228
9a	9.8.4 Pivot posts for 3-sashed windows for timber MULTI POWER	→263
9b	9.8.6 Rebated corner supports MULTI POWER	→264
10	10.2 French casement drive gears	→278
11	11 Striker plates	→292



2.4.5.9 3-sashed rectangular turn-only window with operation lock with pivot post MULTI POWER and corner support MULTI POWER



≤ 1400 x 2600 mm

≥ 465 mm

≥ 360 mm (∅ 15), ≥ 455 mm (∅ 6,5)
 ≥ 470 mm (∅ 15), ≥ 530 mm (∅ 6,5)

- A = For details refer to 1-sashed turn-only or turn&tilt window.
- B = For details refer to 1-sashed turn-only or turn&tilt window.
- 5 = Above 800 mm (PVC) or 1,000 mm (timber); Observe details from profile manufacturer!
- 7b = Timber or PVC variant.
- 9 = Timber or PVC variant.
- 10 = French casement drive gear FHH or VHH.
- 11 = Refer to profile data sheets for striker plates and sash lifters for PVC.

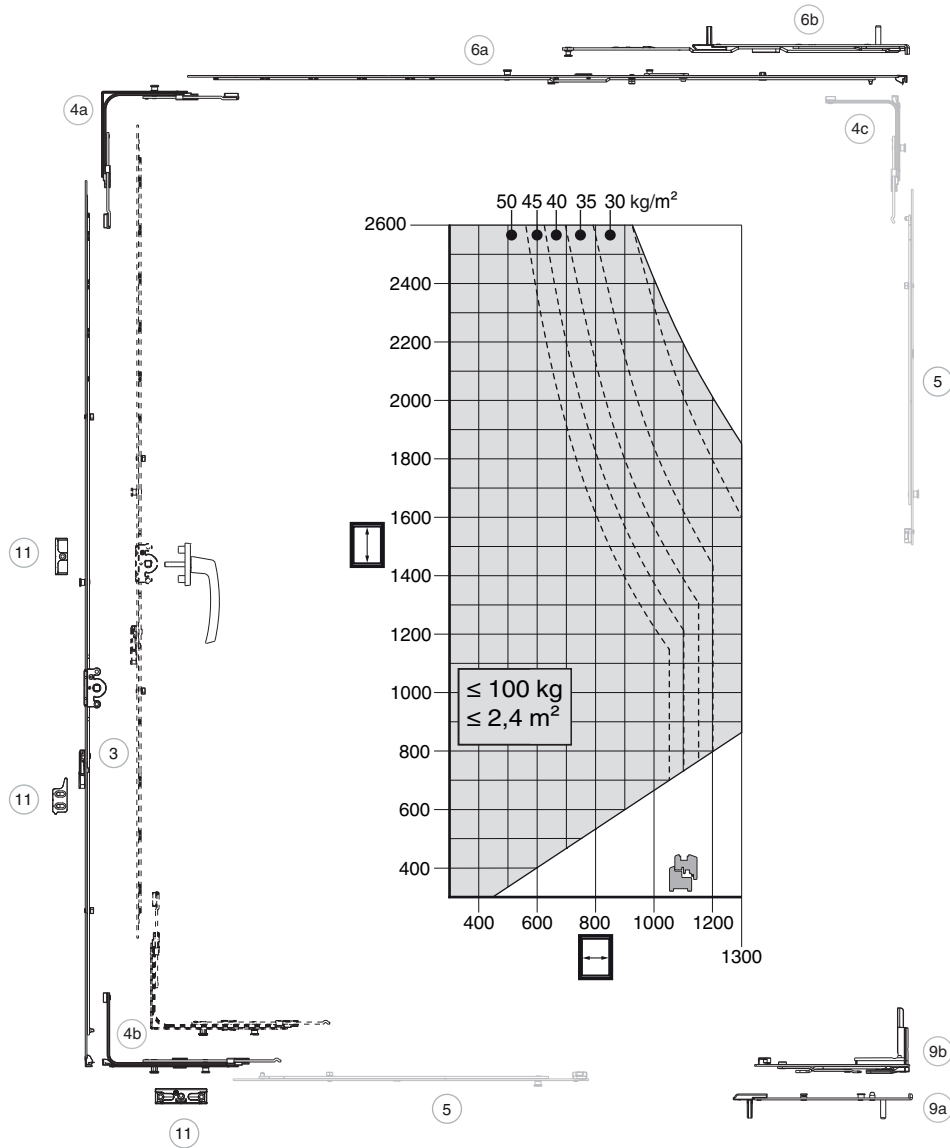


Selection guide		Page
4a	4.1.1 Corner elements standard i.S.	→188
4b	4.1.3 Corner elements vertical i.S.	→189
4c	4.9.8 Insert as operation lock for corner element MM for 3-sashed elements	→194
5	5.1 Centre locks FHH i.S.	→196
7a	7.7.1.2 Turn-only hinge faceplates croppable MULTI POWER	→227
7b	7.7.2 Turn-only hinge arms with hinge for 3-sashed windows MULTI POWER	→228
9a	9.8.4 Pivot posts for 3-sashed windows for timber MULTI POWER	→263
9b	9.8.6 Rebated corner supports MULTI POWER	→264
10	10.2 French casement drive gears	→278
11	11 Striker plates	→292



2.4.6 MULTI INVISIBLE (drive gear FHH/VHH)

2.4.6.1 1-sashed rectangular T&T window with pivot post INVISIBLE and corner support INVISIBLE



≤ 1300 x 2600 mm



≥ 490 mm



≥ 385 mm



≥ 360 mm (15)
≥ 455 mm (6,5)



≥ 470 mm (15)
≥ 530mm (6,5)



≥ 270 mm (15)
≥ 365 mm (6,5)



≥ 400 mm (15)
≥ 460mm (6,5)

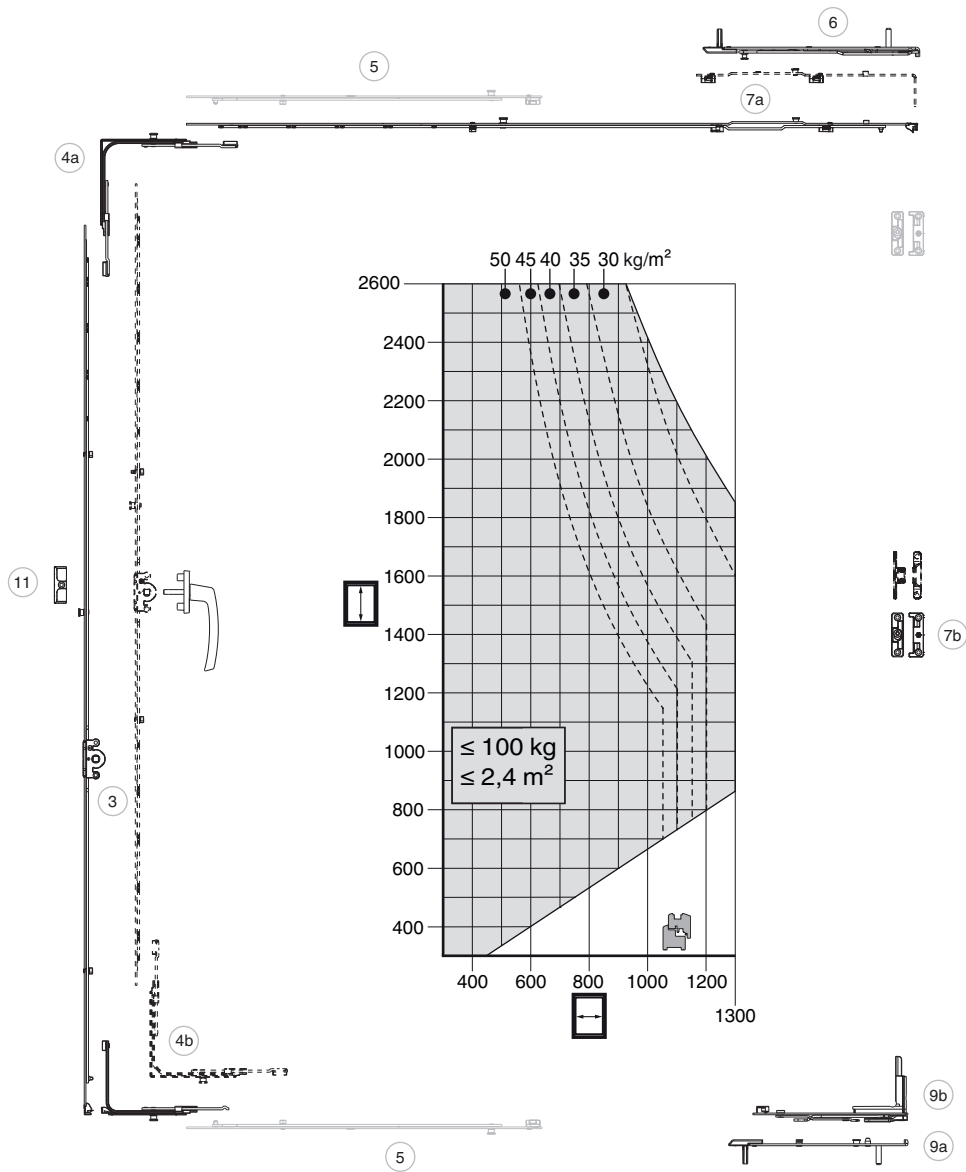
- 3 = Drive gear FHH or VHH (Backset 15 or 6.5). Recommendation: Handle height should be between $\frac{1}{3}$ and $\frac{1}{2}$ of sash rebate height (SRH).
- 5 = Above 800 mm (PVC) or 1,000 mm (timber); Observe details from profile manufacturer!



Selection guide		Page
3a	3.1.1.1 T&T drive gears BS 15 FHH i.S.	→162
3b	3.1.1.9 T&T drive gears BS 15 VHH i.S.	→164
4a	4.1.1 Corner elements standard i.S.	→188
4b	4.1.2 Corner elements horizontal i.S.	→188
4c	4.1.3 Corner elements vertical i.S.	→189
5	5.1 Centre locks FHH i.S.	→196
6a	6.4.1 T&T/tilt-first scissor stay faceplates INVISIBLE	→210
6b	6.4.2 T&T scissor stay arms with hinge INVISIBLE	→210
9a	9.7.1 Pivot posts INVISIBLE	→262
9b	9.7.2 Rebated corner supports INVISIBLE	→262
11	11 Striker plates	→292



2.4.6.2 1-sashed rectangular turn-only window
with pivot post INVISIBLE and corner support INVISIBLE



≤ 1300 x 2600 mm



≥ 490 mm



≥ 385 mm



≥ 360 mm (Ø 15), ≥ 455 mm (Ø 6,5)



≥ 470 mm (Ø 15), ≥ 530 mm (Ø 6,5)

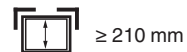
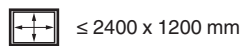
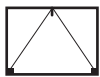
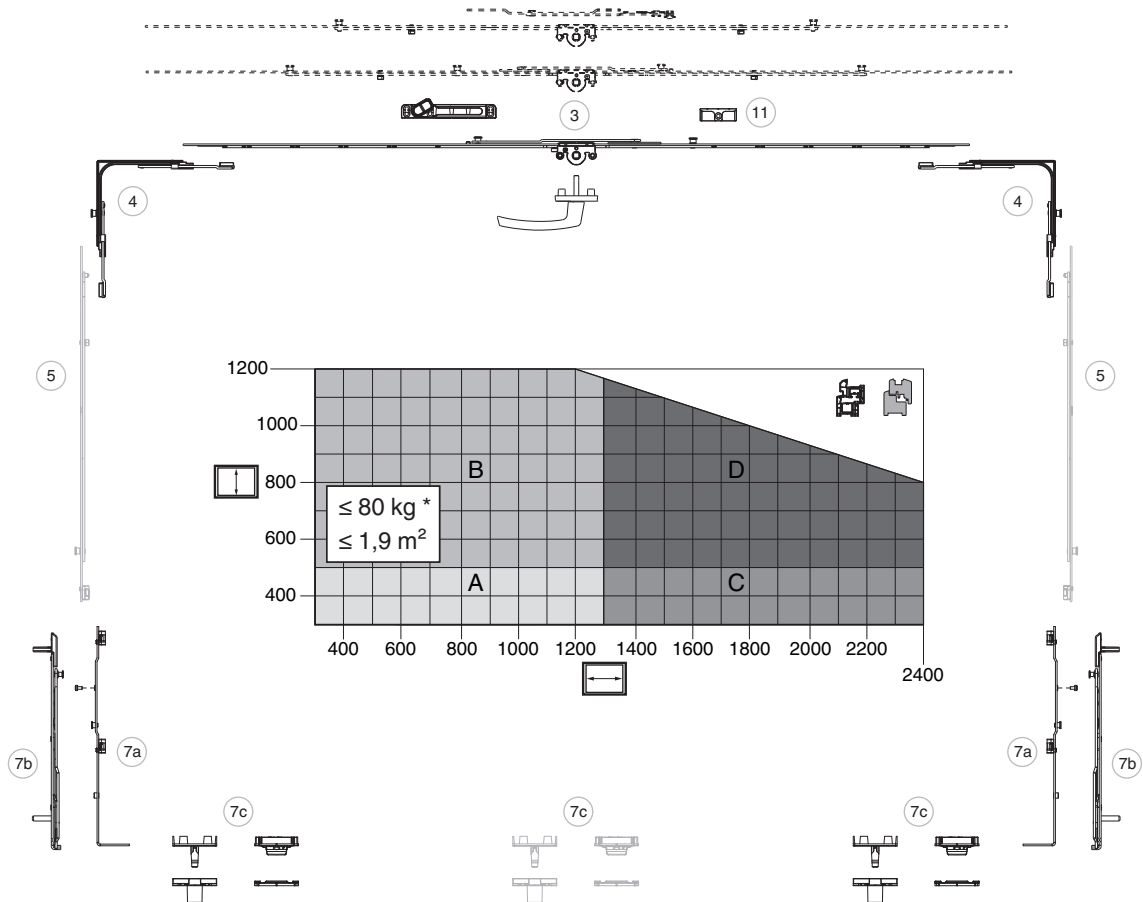
- 3 = Drive gear FHH or VHH (Backset 15 or 6.5). Recommendation: Handle height should be between $\frac{1}{3}$ and $\frac{1}{2}$ of sash rebate height (SRH).
- 5 = Above 800 mm (PVC) or 1,000 mm (timber); Observe details from profile manufacturer!
- 7b = 1 piece 800 - 1,600 mm, 2 pieces 1,601 - 2,400 mm, 3 pieces 2,401 - 2,650 mm; Observe details from profile manufacturer; Mandatory installation of additional compression device at top bearing area (max. 150 mm)!



Selection guide		Page
3a	3.2.1.1 Turn-only drive gears BS 15 FHH i.S.	→172
3b	3.2.1.6 Turn-only drive gears BS 15 VHH i.S.	→173
4a	4.1.1 Corner elements standard i.S.	→188
4b	4.1.3 Corner elements vertical i.S.	→189
5	5.1 Centre locks FHH i.S.	→196
6	6.4.2 T&T scissor stay arms with hinge INVISIBLE	→210
7a	7.6 Tilt-only and turn-only hinges - sash part INVISIBLE	→226
7b	7.10 Compression devices	→232
9a	9.7.1 Pivot posts INVISIBLE	→262
9b	9.7.2 Rebated corner supports INVISIBLE	→262
11	11 Striker plates	→292



2.4.6.3 1-sashed rectangular tilt-only window
with pivot post INVISIBLE and corner support INVISIBLE



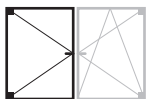
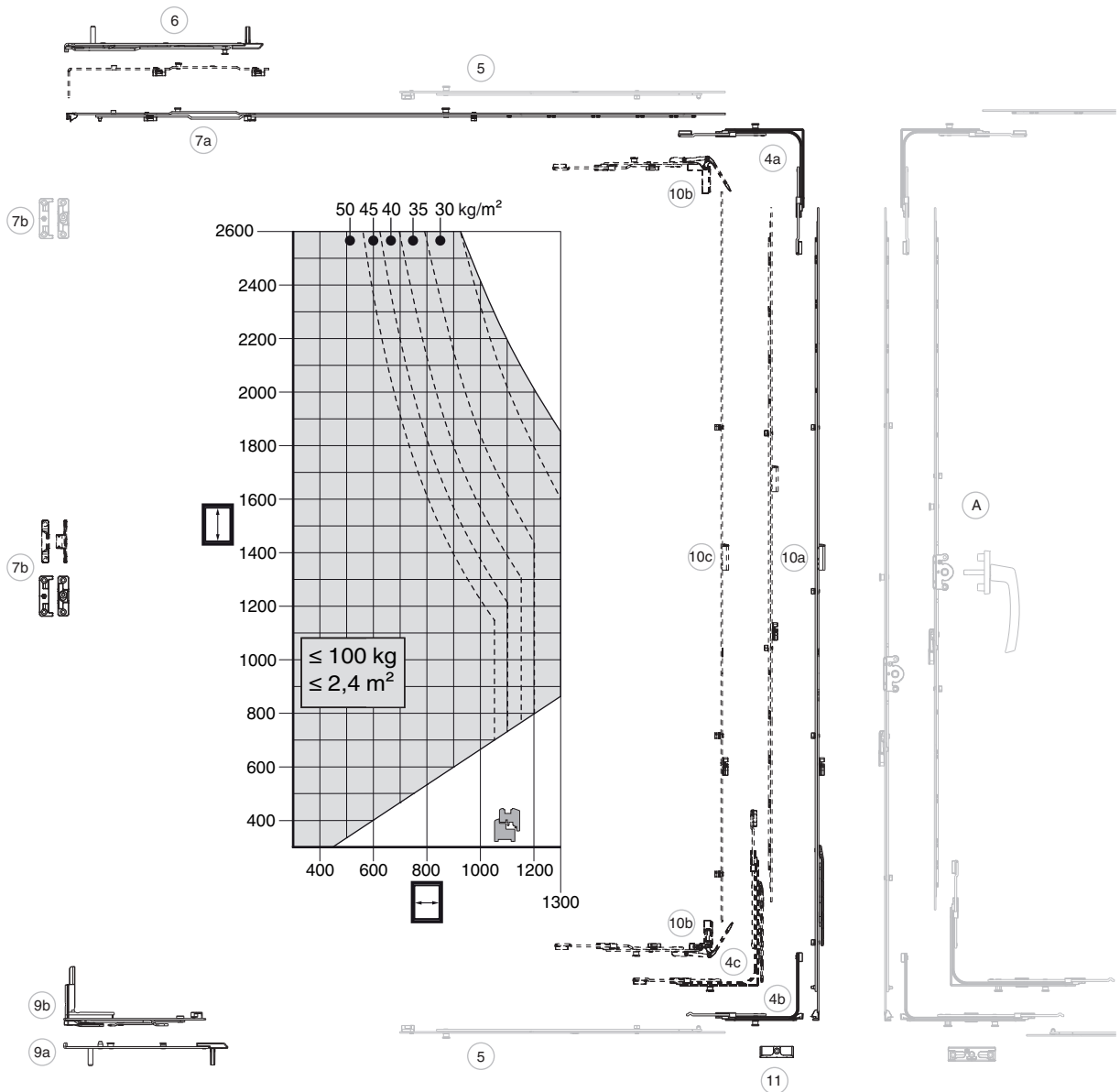
- A = 1 tilt stay + restrictor and cleaning stay size 1.
- B = 1 tilt stay + restrictor and cleaning stay size 2.
- C = 2 tilt stays + restrictor and cleaning stay size 1.
- D = 2 tilt stays + restrictor and cleaning stay size 2.
- * = Mandatory installation of restrictor and cleaning stay (guideline FPKF at www.schlossindustrie.de)! Observe application diagrams and max. load capacity for restrictor and cleaning stays!
- 5 = Above 800 mm (PVC) or 1,000 mm (timber); Observe details from profile manufacturer!
- 7c = 1 piece 800 - 1,600 mm, 2 pieces 1,601 - 2,400 mm, 3 pieces 2,401 - 2,650 mm; Observe details from profile manufacturer!
- 11 = Refer to profile data sheets for striker plates and sash lifters for PVC.



Selection guide			Page
3	3.4	Espagnolettes	→179
4	4.1.1	Corner elements standard i.S.	→188
5	5.1	Centre locks FHH i.S.	→196
7a	7.6.1	Turn-only and tilt-only hinge faceplate INVISIBLE	→226
7b	7.6.2	Basic pack tilt-only INVISIBLE	→226
7c	7.10.3	Concealed compression devices adjustable with depth adjustment	→233
11	11	Striker plates	→292



2.4.6.4 2-sashed rectangular T&T window
with pivot post INVISIBLE and corner support INVISIBLE



≤ 1300 x 2600 mm

≥ 490 mm

≥ 385 mm

≥ 360 mm (15), ≥ 455 mm (6,5)

≥ 470 mm (15), ≥ 530 mm (6,5)

- A = For details refer to 1-sashed turn&tilt window.
- 5 = Above 800 mm (PVC) or 1,000 mm (timber); Observe details from profile manufacturer!
- 7b = 1 piece 800 - 1,600 mm, 2 pieces 1,601 - 2,400 mm, 3 pieces 2,401 - 2,650 mm; Observe details from profile manufacturer!
- 10a = French casement drive gear FHH or VHH.

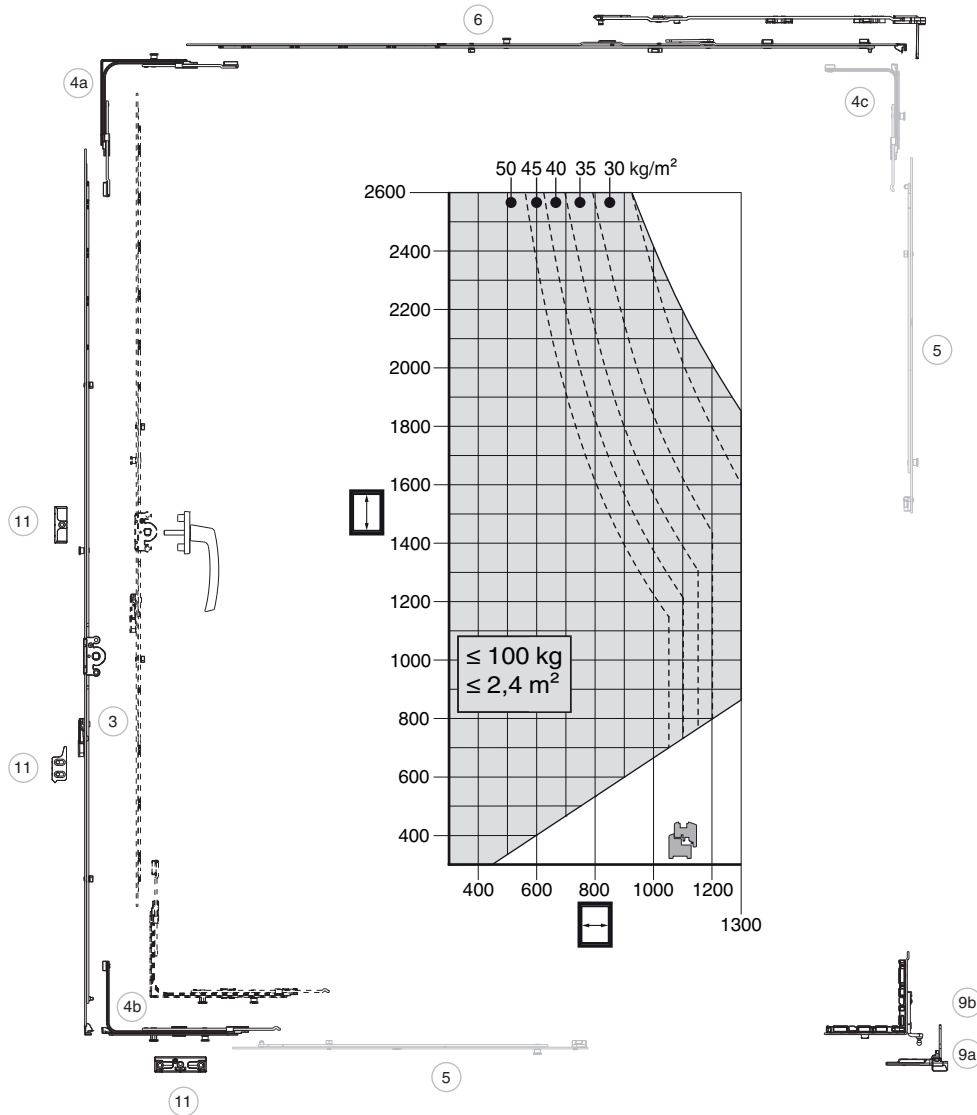


Selection guide		Page
4a	4.1.1 Corner elements standard i.S.	→188
4b	4.1.3 Corner elements vertical i.S.	→189
4c	4.4 Corner elements i.S. for French casement drive gears	→191
5	5.1 Centre locks FHH i.S.	→196
6	6.4.2 T&T scissor stay arms with hinge INVISIBLE	→210
7a	7.6 Tilt-only and turn-only hinges - sash part INVISIBLE	→226
7b	7.10.3 Concealed compression devices adjustable with depth adjustment	→233
9a	9.7.1 Pivot posts INVISIBLE	→262
9b	9.7.2 Rebated corner supports INVISIBLE	→262
10a	10.2 French casement drive gears	→278
10b	10.3 Horizontal French casement locks	→286
10c	10.4 Single piece door striker	→286
11	11 Striker plates	→292



2.4.7 TV (drive gear FHH/VHH)

2.4.7.1 1-sashed rectangular T&T window with pivot post TV and corner support TV



≤ 1300 x 2600 mm



≥ 401 mm



≥ 290 mm



≥ 360 mm (15)
≥ 455 mm (6,5)



≥ 470 mm (15)
≥ 530 mm (6,5)



≥ 270 mm (15)
≥ 365 mm (6,5)



≥ 400 mm (15)
≥ 460 mm (6,5)

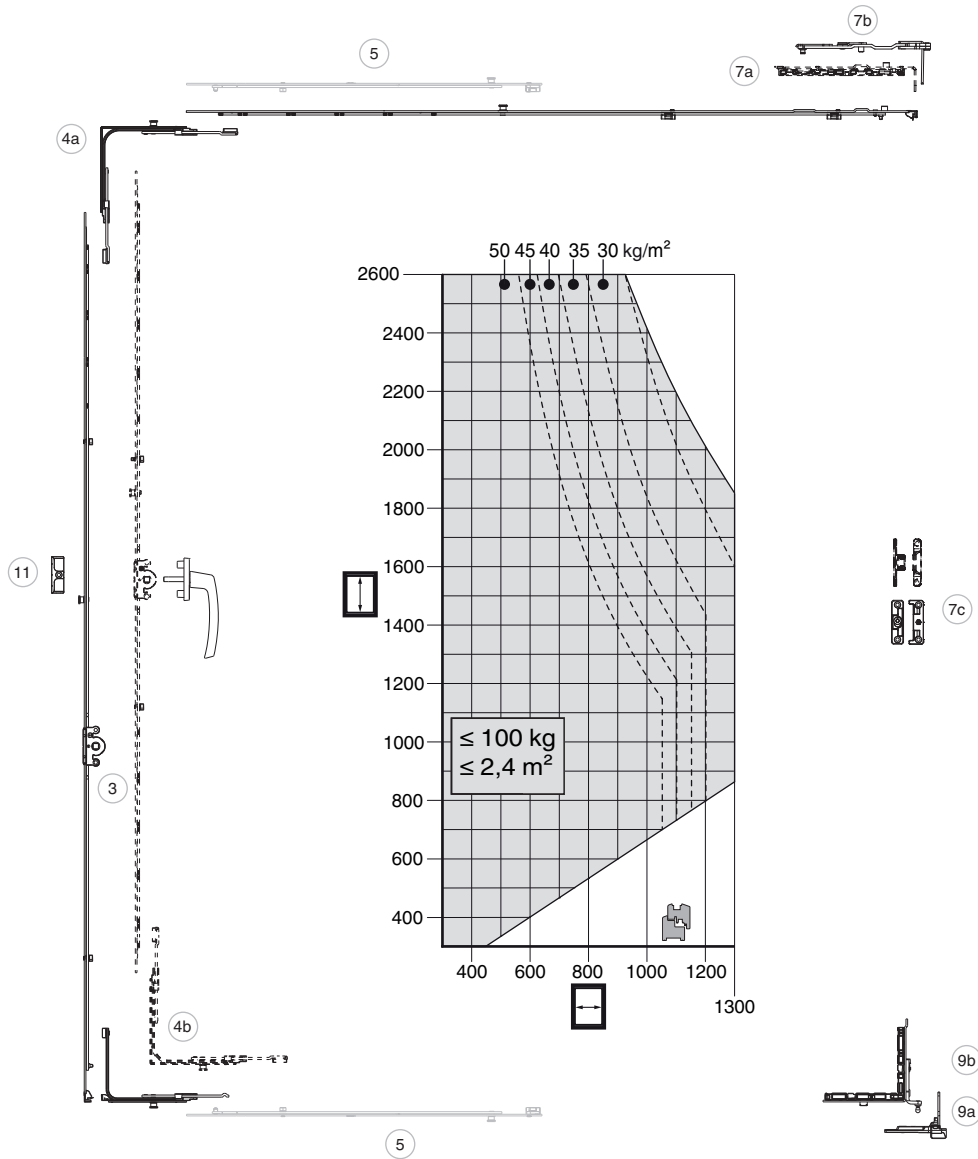
- 3 = Drive gear FHH or VHH (Backset 15 or 6.5). Recommendation: Handle height should be between $\frac{1}{3}$ and $\frac{1}{2}$ of sash rebate height (SRH).
- 5 = Above 800 mm (PVC) or 1,000 mm (timber); Observe details from profile manufacturer!



Selection guide		Page
3a	3.1.1.1 T&T drive gears BS 15 FHH i.S.	→162
3b	3.1.1.9 T&T drive gears BS 15 VHH i.S.	→164
4a	4.1.1 Corner elements standard i.S.	→188
4b	4.1.2 Corner elements horizontal i.S.	→188
4c	4.1.3 Corner elements vertical i.S.	→189
5	5.1 Centre locks FHH i.S.	→196
6	6.3 Scissor stays TV	→209
9a	9.6.1 Pivot posts TV timber	→261
9b	9.6.2 Rebated corner supports TV	→261
11	11 Striker plates	→292



2.4.7.2 1-sashed rectangular turn-only window with pivot post TV and corner support TV



≤ 1300 x 2600 mm



≥ 401 mm



≥ 290 mm



≥ 360 mm (15), ≥ 455 mm (6,5)



≥ 470 mm (15), ≥ 530 mm (6,5)

3 = Drive gear FHH or VHH (Backset 15 or 6.5). Recommendation: Handle height should be between $\frac{1}{3}$ and $\frac{1}{2}$ of sash rebate height (SRH).

5 = Above 800 mm (PVC) or 1,000 mm (timber); Observe details from profile manufacturer!

7a = Turn-only hinge faceplate fixed or croppable.

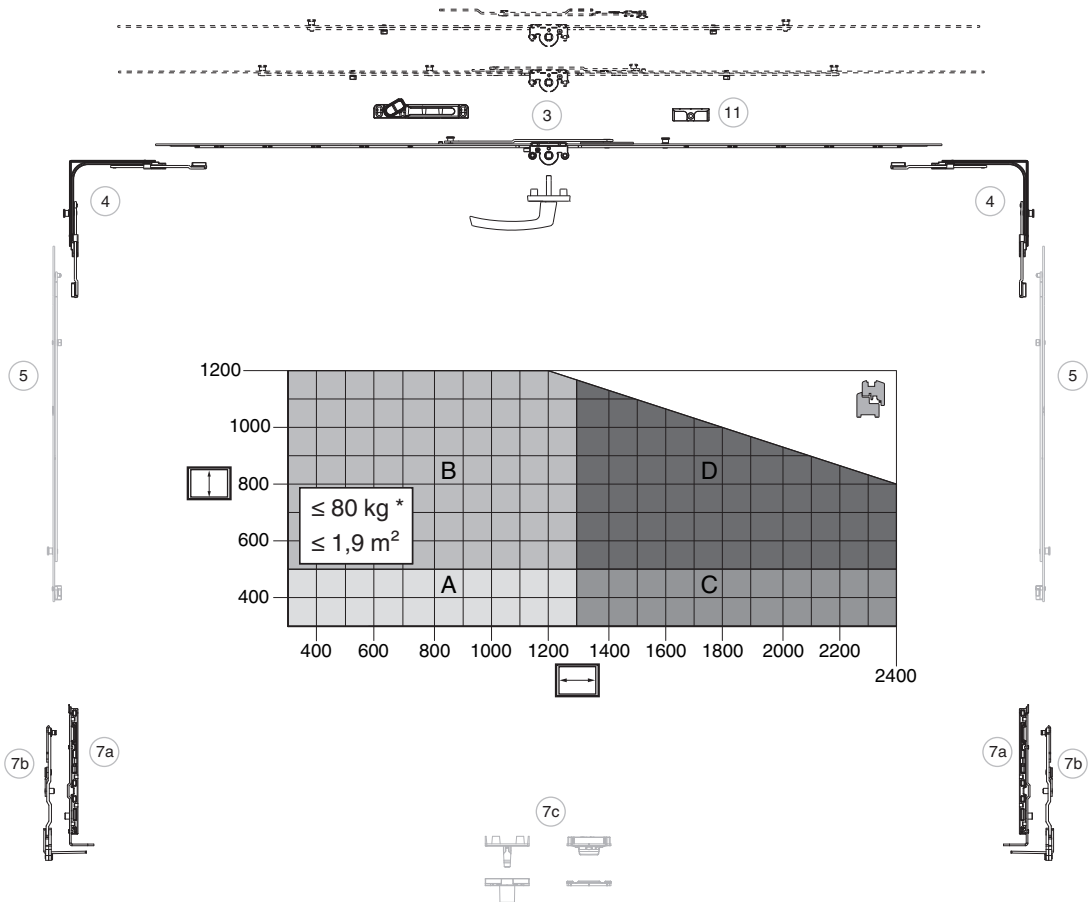
7c = 1 piece 800 - 1,600 mm, 2 pieces 1,601 - 2,400 mm, 3 pieces 2,401 - 2,650 mm; Observe details from profile manufacturer!



Selection guide		Page
3a	3.2.1.1 Turn-only drive gears BS 15 FHH i.S.	→172
3b	3.2.1.6 Turn-only drive gears BS 15 VHH i.S.	→173
4a	4.1.1 Corner elements standard i.S.	→188
4b	4.1.3 Corner elements vertical i.S.	→189
5	5.1 Centre locks FHH i.S.	→196
7a	7.5.1 Turn-only hinge faceplate TV with packer	→225
7b	7.5.3 Turn-only hinge arms for turn-only hinge faceplate TV timber	→225
7c	7.10 Compression devices	→232
9a	9.6.1 Pivot posts TV timber	→261
9b	9.6.2 Rebated corner supports TV	→261
11	11 Striker plates	→292



2.4.7.3 1-sashed rectangular tilt-only window
with pivot post TV and corner support TV



≤ 2400 x 1200 mm



≥ 210 mm



≥ 300 mm



≥ 650 mm

A = 1 tilt stay + restrictor and cleaning stay size 1.

B = 1 tilt stay + restrictor and cleaning stay size 2.

C = 2 tilt stays + restrictor and cleaning stay size 1.

D = 2 tilt stays + restrictor and cleaning stay size 2.

* = Mandatory installation of restrictor and cleaning stay (guideline FPKF at www.schlossindustrie.de)! Observe application diagrams and max. load capacity for restrictor and cleaning stays!

5 = Above 800 mm (PVC) or 1,000 mm (timber); Observe details from profile manufacturer!

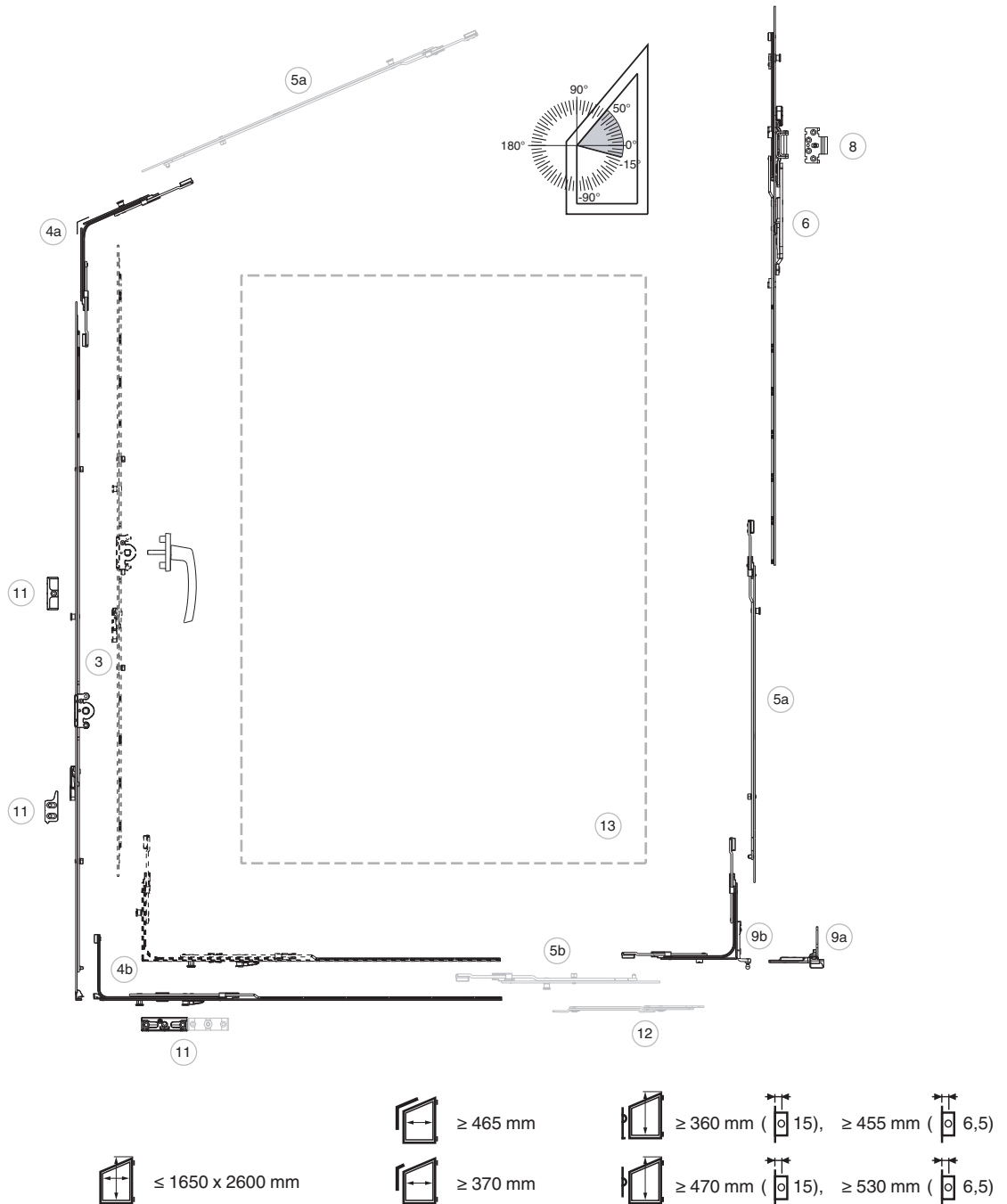
7c = 1 piece 800 - 1,600 mm, 2 pieces 1,601 - 2,400 mm, 3 pieces 2,401 - 2,650 mm; Observe details from profile manufacturer!



Selection guide			Page
3	3.4	Espagnolettes	→179
4	4.1.1	Corner elements standard i.S.	→188
5	5.1	Centre locks FHH i.S.	→196
7a	7.5.1	Turn-only hinge faceplate TV with packer	→225
7b	7.5.3	Turn-only hinge arms for turn-only hinge faceplate TV timber	→225
7c	7.10	Compression devices	→232
11	11	Striker plates	→292



2.4.7.4 1-sashed angled T&T window
with pivot post TV and rebated corner support TV



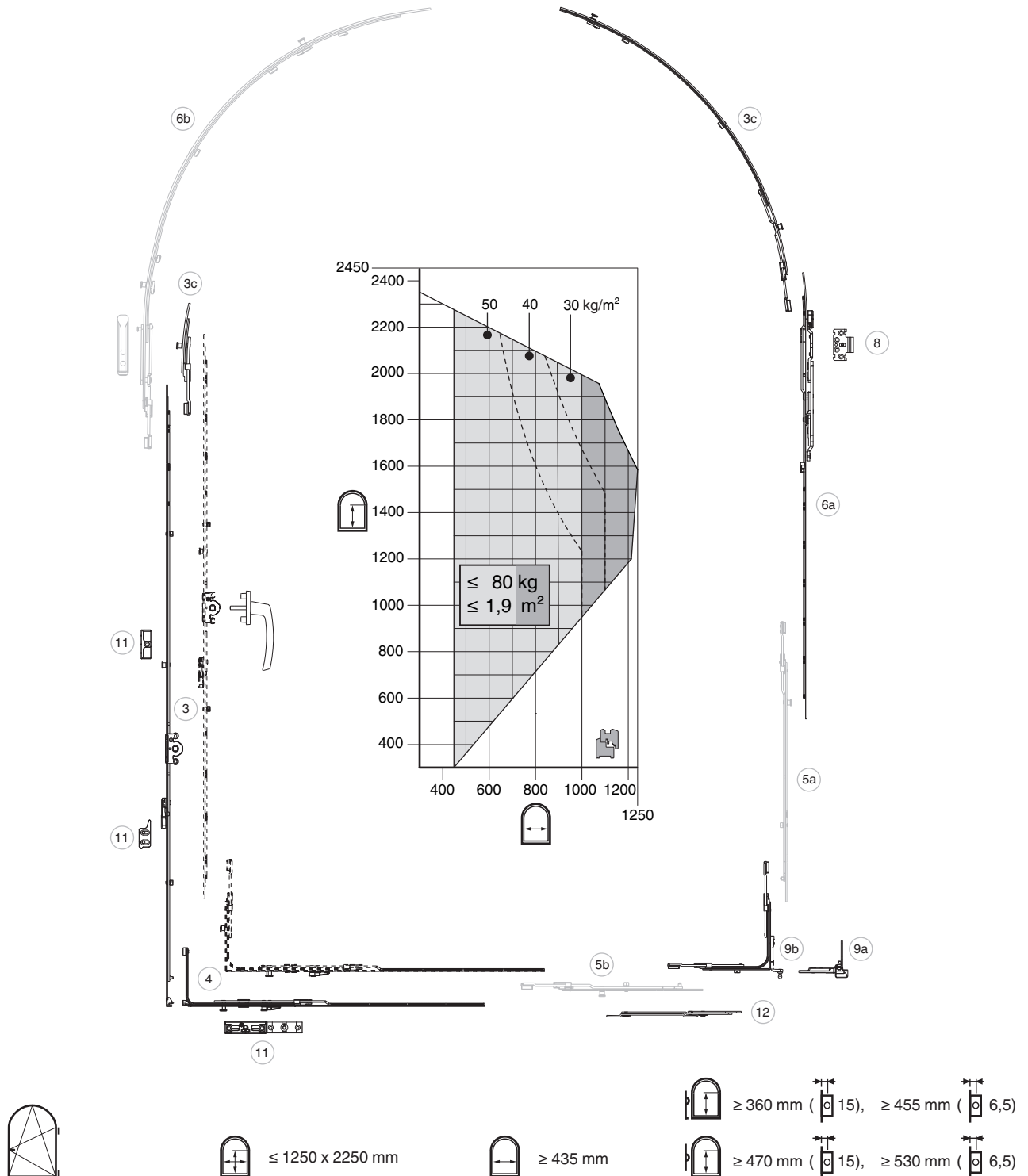
- 3 = Drive gear FHH or VHH (Backset 15 or 6.5). Recommendation: Handle height should be between $\frac{1}{3}$ and $\frac{1}{2}$ of sash rebate height (SRH).
- 5a = Above SRH 800 mm; Observe details from profile manufacturer!
- 5b = Required above SRW 670 mm.
- 13 = Refer to application diagrams for angled windows in chapter 2.5.



Selection guide		Page
3a	3.1.1.1 T&T drive gears BS 15 FHH i.S.	→162
3b	3.1.1.9 T&T drive gears BS 15 VHH i.S.	→164
4a	4.5 Corner elements i.S. for angled windows	→191
4b	4.6 Corner elements i.S. for half round windows	→192
5a	5.2 Centre locks extendable i.S.	→196
5b	5.10 Faceplate extensions fixed and extendable	→199
6	6.1.11 Rebated scissor stays i.S. for angled windows	→205
8	8 Scissor stay hinges	→238
9a	9.6.1 Pivot posts TV timber	→261
9b	9.6.3 Rebated corner supports TV with corner element	→261
11	11 Striker plates	→292
12	12.12 Turn restrictions	→315



2.4.7.5 1-sashed half round T&T window
with pivot post TV and rebated corner support TV



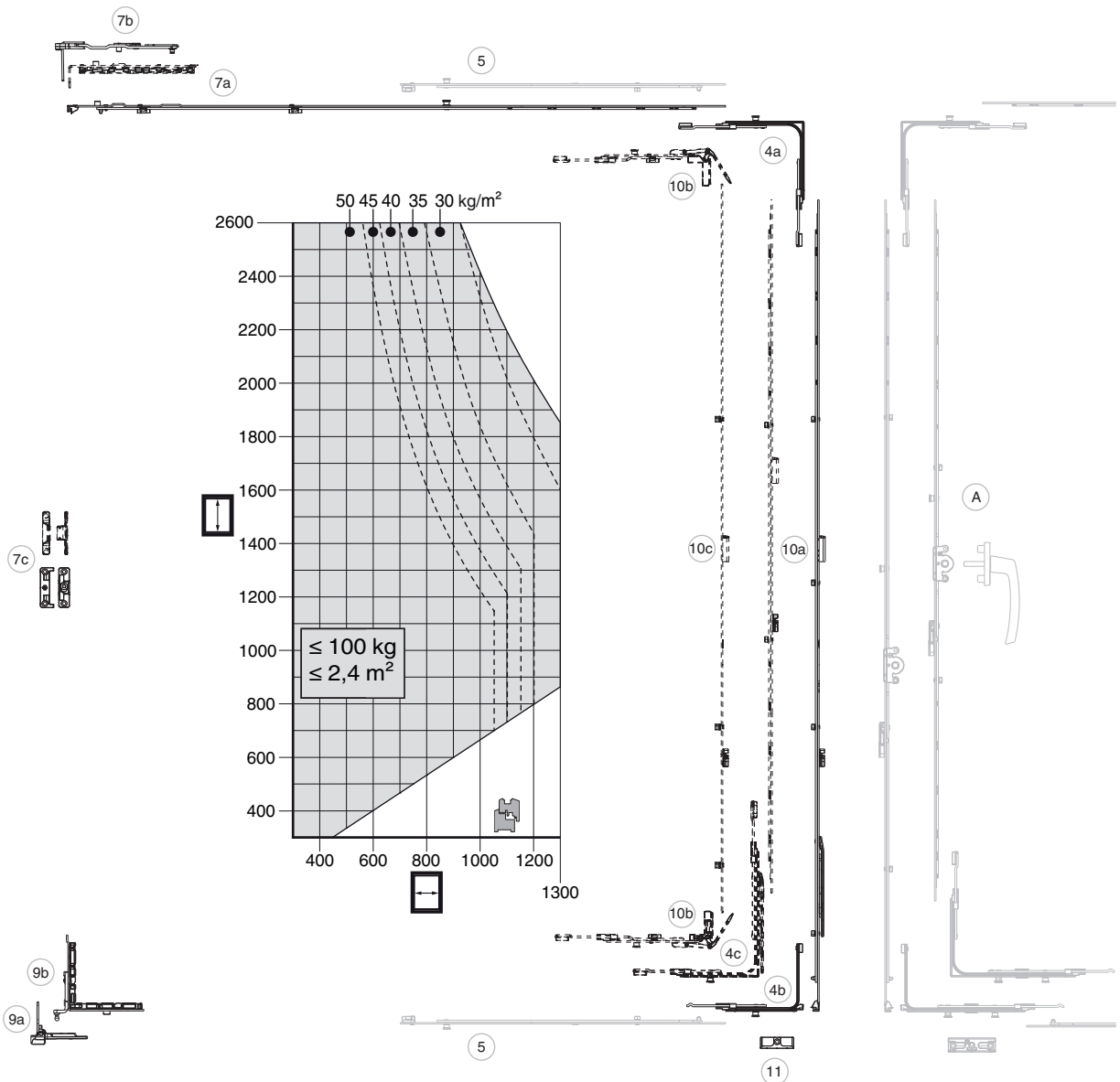
- 3 = Drive gear FHH or VHH (Backset 15 or 6.5). Recommendation: Handle height should be between $\frac{1}{3}$ and $\frac{1}{2}$ of sash rebate height (SRH).
- 3c = Required above SRW 671 mm.
- 5a = Above 800 mm (PVC) or 1,000 mm (timber); Observe details from profile manufacturer!
- 5b = Required above SRW 670 mm.
- 6b = Stabilizing scissor stay necessary from 1,001 mm (dark shading in application range diagram).



Selection guide		Page
3a	3.1.1.1 T&T drive gears BS 15 FHH i.S.	→162
3b	3.1.1.9 T&T drive gears BS 15 VHH i.S.	→164
3c	3.5.3 End pieces top for half round windows	→183
4	4.6 Corner elements i.S. for half round windows	→192
5a	5.2 Centre locks extendable i.S.	→196
5b	5.10 Faceplate extensions fixed and extendable	→199
6a	6.3.3 Rebated scissor stays TV i.S. for half round windows	→209
6b	6.10.4 Stabilizing scissor stays for half round windows	→216
8	8.7 Scissor stay hinges TV for half round windows	→241
9a	9.6.1 Pivot posts TV timber	→261
9b	9.6.3 Rebated corner supports TV with corner element	→261
11	11 Striker plates	→292
12	12.12 Turn restrictions	→315



2.4.7.6 2-sashed rectangular T&T window
with pivot post TV and corner support TV



≤ 1300 x 2600 mm



≥ 401 mm



≥ 290 mm



≥ 360 mm (15), ≥ 455 mm (6,5)



≥ 470 mm (15), ≥ 530 mm (6,5)

- A = For details refer to 1-sashed turn&tilt window.
- 5 = Above 800 mm (PVC) or 1,000 mm (timber); Observe details from profile manufacturer!
- 7c = 1 piece 800 - 1,600 mm, 2 pieces 1,601 - 2,400 mm, 3 pieces 2,401 - 2,650 mm; Observe details from profile manufacturer!
- 10a = French casement drive gear FHH or VHH.

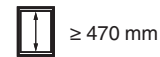
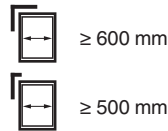
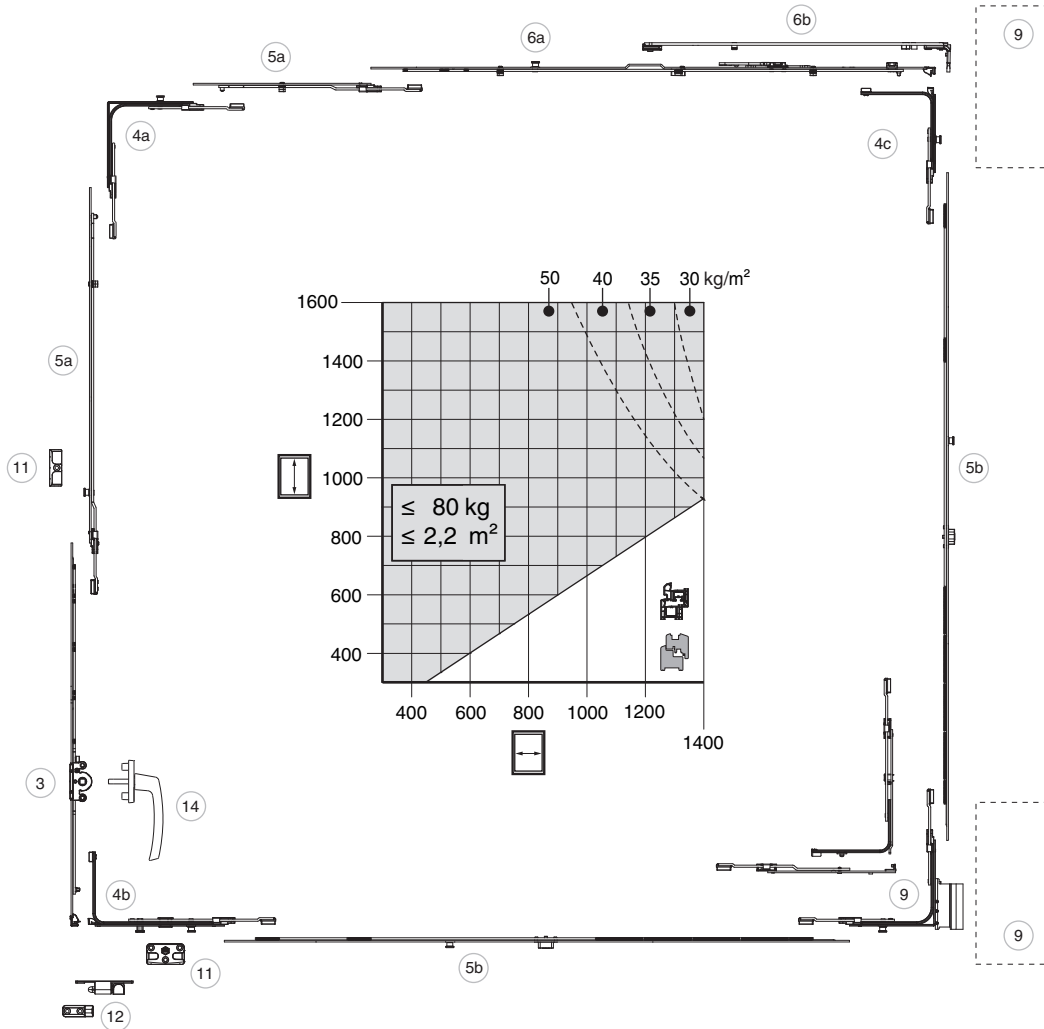


Selection guide		Page
4a	4.1.1 Corner elements standard i.S.	→188
4b	4.1.3 Corner elements vertical i.S.	→189
4c	4.4 Corner elements i.S. for French casement drive gears	→191
5	5.1 Centre locks FHH i.S.	→196
7a	7.5.1 Turn-only hinge faceplate TV with packer	→225
7b	7.5.3 Turn-only hinge arms for turn-only hinge faceplate TV timber	→225
7c	7.10 Compression devices	→232
9a	9.6.1 Pivot posts TV timber	→261
9b	9.6.2 Rebated corner supports TV	→261
10a	10.2 French casement drive gears	→278
10b	10.3 Horizontal French casement locks	→286
10c	10.4 Single piece door striker	→286
11	11 Striker plates	→292



2.4.8 COMFORT

2.4.8.1 1-sashed rectangular T&T window with comfort scissor stay, vertical handle position



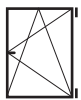
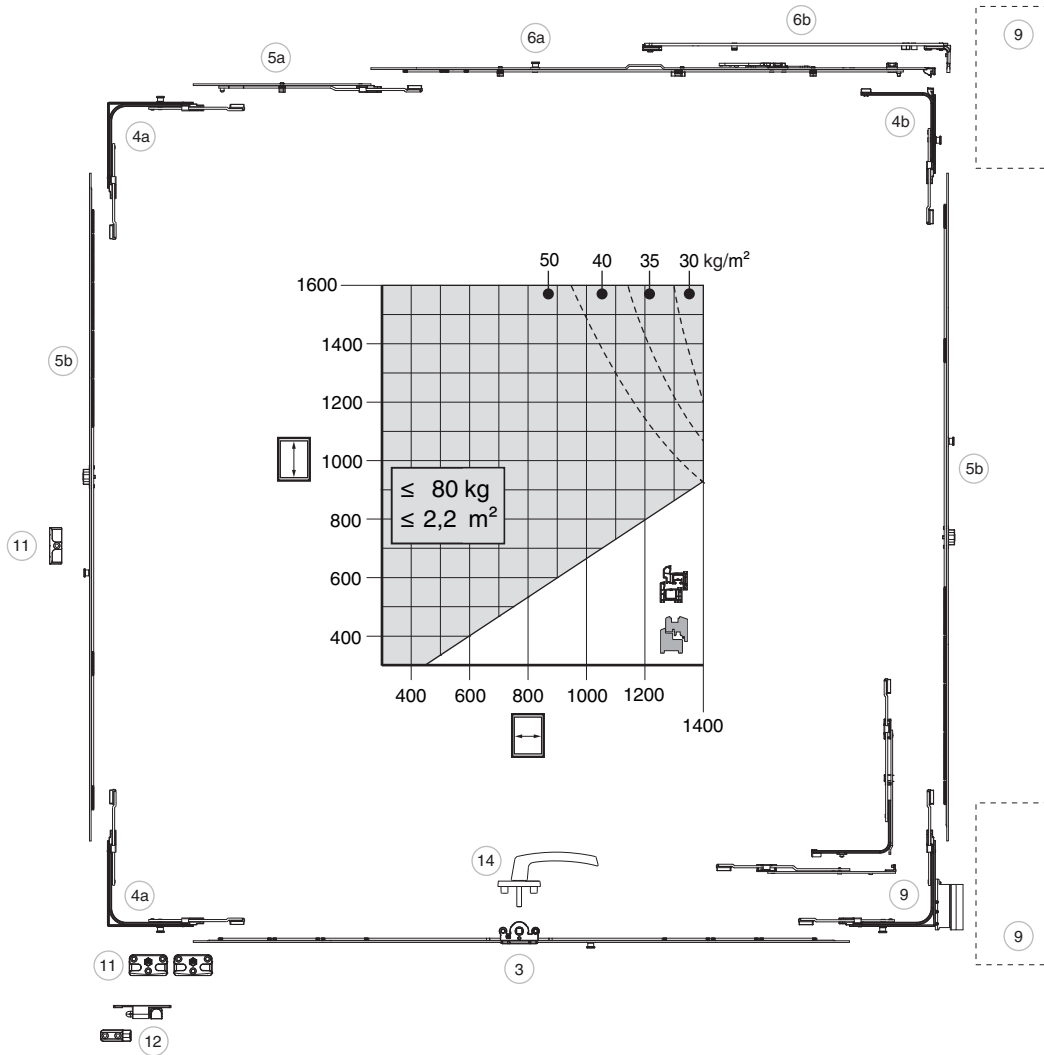
- 9 = Refer to matrix pivot posts PVC and timber for possible bearing types.
- 11 = Refer to profile data sheets for striker plates and sash lifters for PVC.
- 12 = Mandatory installation of turn lock.
- 14 = SKB handle (refer to EMOTION catalogue).



Selection guide		Page
3	3.1.1.1 T&T drive gears BS 15 FHH i.S.	→162
4a	4.1.1 Corner elements standard i.S.	→188
4b	4.1.2 Corner elements horizontal i.S.	→188
4c	4.1.3 Corner elements vertical i.S.	→189
5a	5.2 Centre locks extendable i.S.	→196
5b	5.19 Width connectors SKB-S/SE	→200
6a	6.6.1 Scissor stay faceplates for comfort scissor stay	→214
6b	6.6.2 Rebated scissor stay arms for comfort scissor stay	→214
9	9.1 Matrix for pivot posts and corner supports	→246
11	11 Striker plates	→292
12	12.3 Self-catching turn locks	→312



2.4.8.2 1-sashed rectangular T&T window
with comfort scissor stay, horizontal handle position



$\leq 1400 \times 1600 \text{ mm}$

$\geq 600 \text{ mm}$
 $\geq 500 \text{ mm}$

$\geq 470 \text{ mm}$

- 9 = Refer to matrix pivot posts PVC and timber for possible bearing types.
- 11 = Refer to profile data sheets for striker plates and sash lifters for PVC.
- 12 = Mandatory installation of turn lock.
- 14 = SKB handle (refer to EMOTION catalogue).

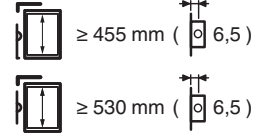
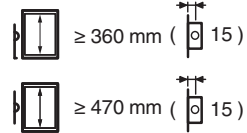
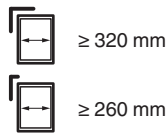
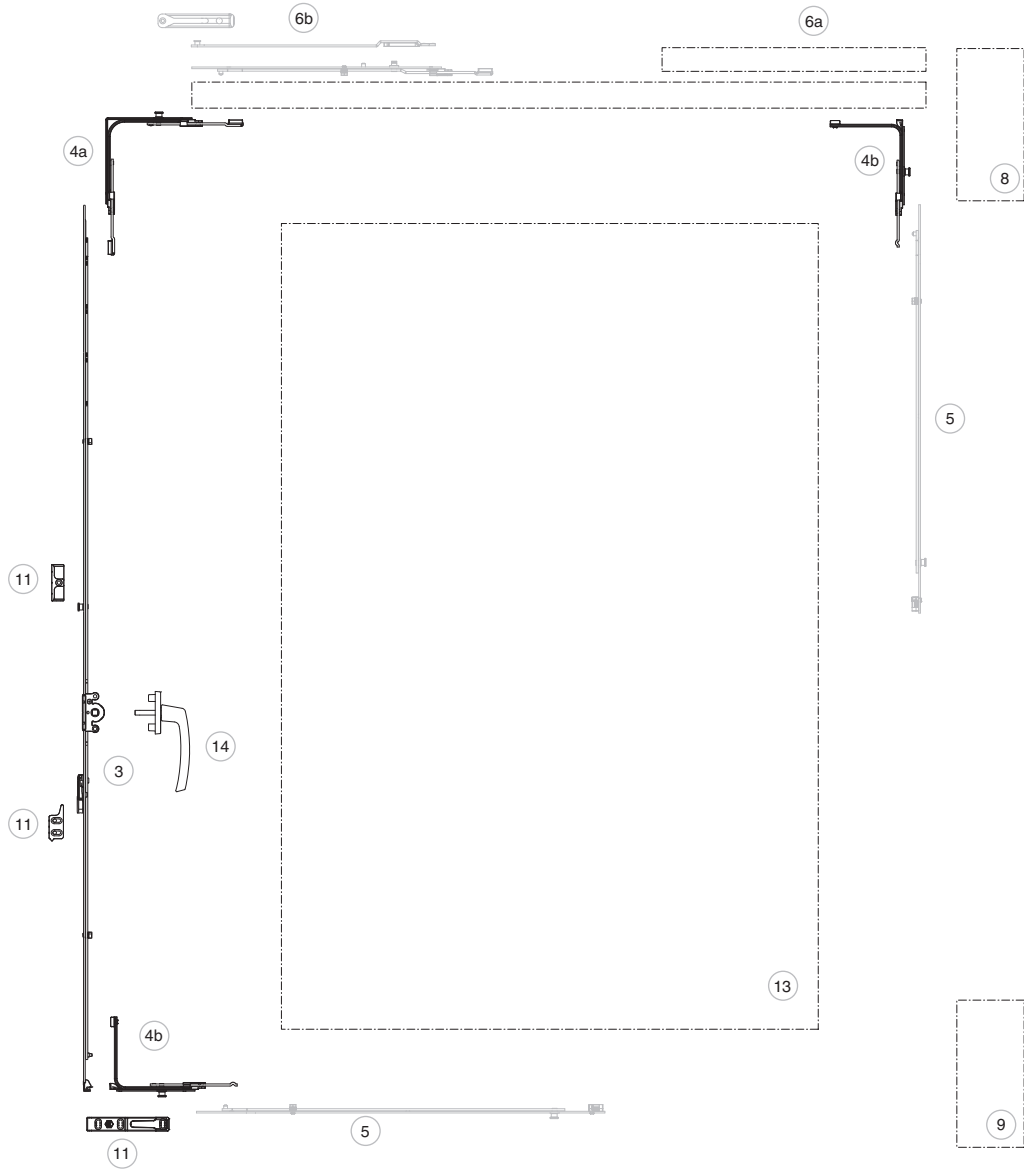


Selection guide		Page
3	3.1.1.9 T&T drive gears BS 15 VHH i.S.	→164
4a	4.1.1 Corner elements standard i.S.	→188
4b	4.1.3 Corner elements vertical i.S.	→189
5a	5.2 Centre locks extendable i.S.	→196
5b	5.19 Width connectors SKB-S/SE	→200
6a	6.6.1 Scissor stay faceplates for comfort scissor stay	→214
6b	6.6.2 Rebated scissor stay arms for comfort scissor stay	→214
9	9.1 Matrix for pivot posts and corner supports	→246
11	11 Striker plates	→292
12	12.3 Self-catching turn locks	→312



2.4.9 Central locking system for tilt-first window

2.4.9.1 1-sashed rectangular tilt-first window with drive-gear FHH



3 = Drive gears BS 15 or 6.5. Recommendation: Handle height should be between 1/3 and 1/2 of sash rebate height (SRH).

5 = Above 800 mm (PVC) or 1,000 mm (timber); Observe details from profile manufacturer!

6a = Rebated scissor stay or scissor stay faceplate and scissor stay arm according to used hinge side. For hinge sides MULTI MAMMUT not possible!

6b = For stabilizing scissor stay refer to turn&tilt hardware overview according to corresponding hinge side.

8 = Scissor stay hinge according to used hinge side.

9 = For possible pivot post combinations refer to matrix. For hinge sides MULTI MAMMUT not possible!

11 = Refer to profile data sheets for striker plates and sash lifters for PVC.

13 = Application diagram according to used hinge side.

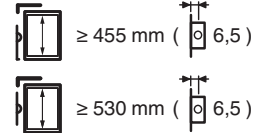
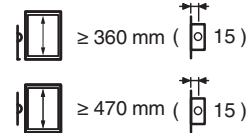
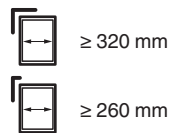
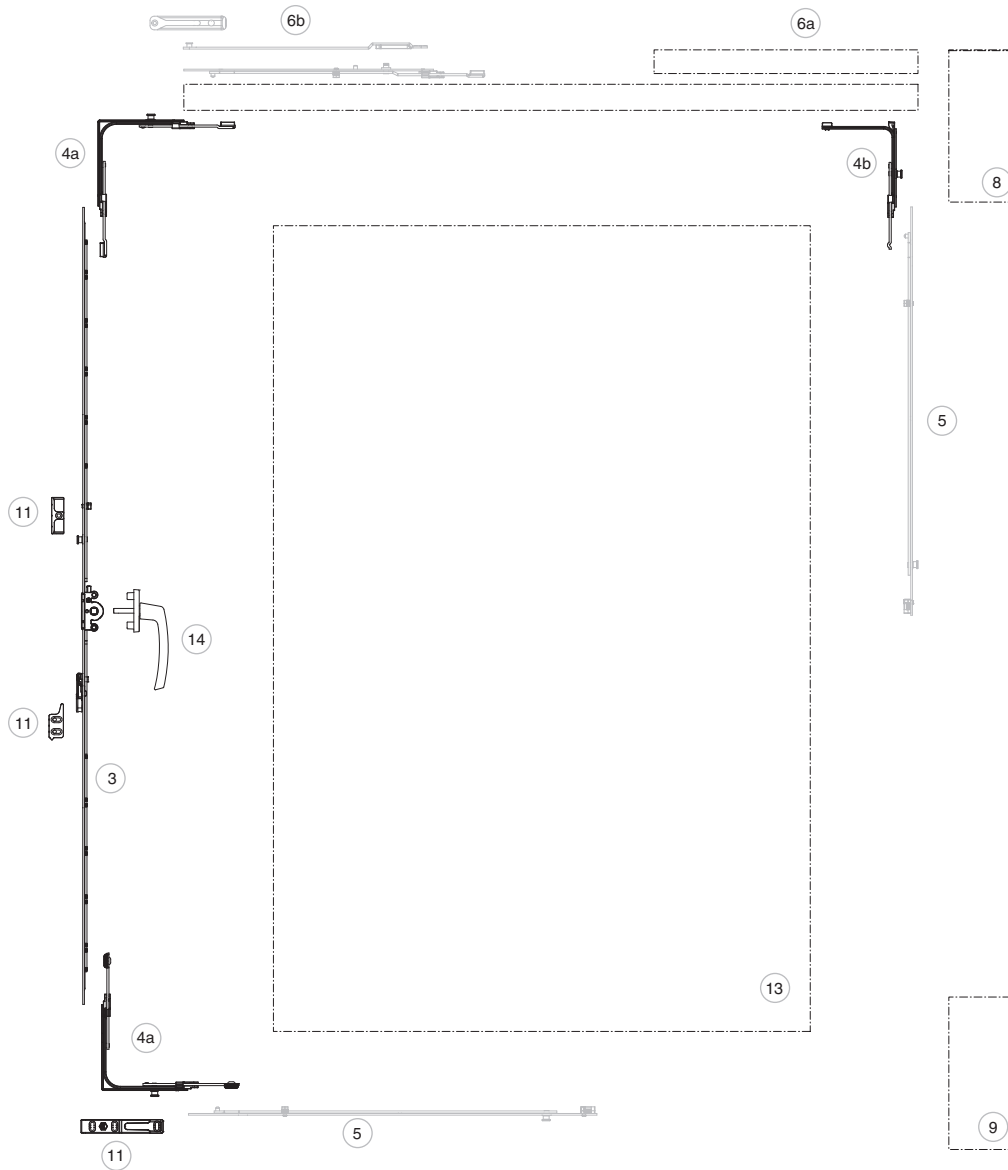
14 = Tilt before turn handle (refer to EMOTION catalogue).



Selection guide		Page
3	3.1.1.1 T&T drive gears BS 15 FHH i.S.	→162
4a	4.1.1 Corner elements standard i.S.	→188
4b	4.1.3 Corner elements vertical i.S.	→189
5	5.1 Centre locks FHH i.S.	→196
6a	6.1 Rebated scissor stays	→202
6b	6.10.3 Stabilizing scissor stays for tilt-first windows	→216
8	8 Scissor stay hinges	→238
9	9 Pivot posts	→246
11	11 Striker plates	→292



2.4.9.2 1-sashed rectangular tilt-first window with drive-gear VHH



- 3 = Drive gears BS 15 or 6.5. Recommendation: Handle height should be between 1/3 and 1/2 of sash rebate height (SRH).
- 5 = Above 800 mm (PVC) or 1,000 mm (timber); Observe details from profile manufacturer!
- 6a = Rebated scissor stay or scissor stay faceplate and scissor stay arm according to used hinge side. For hinge sides MULTI MAMMUT not possible!
- 6b = For stabilizing scissor stay refer to turn&tilt hardware overview according to corresponding hinge side.
- 8 = Scissor stay hinge according to used hinge side.
- 9 = For possible pivot post combinations refer to matrix. For hinge sides MULTI MAMMUT not possible!
- 11 = Refer to profile data sheets for striker plates and sash lifters for PVC.
- 13 = Application diagram according to used hinge side.
- 14 = Tilt before turn handle (refer to EMOTION catalogue).

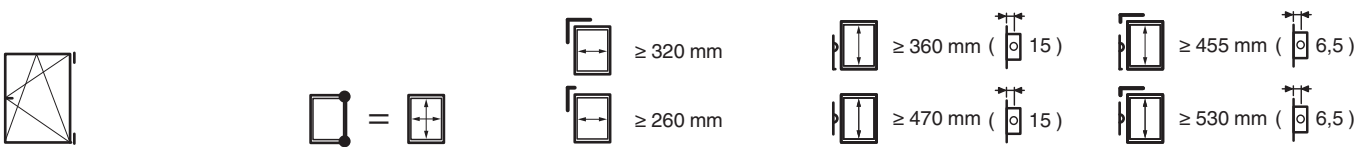
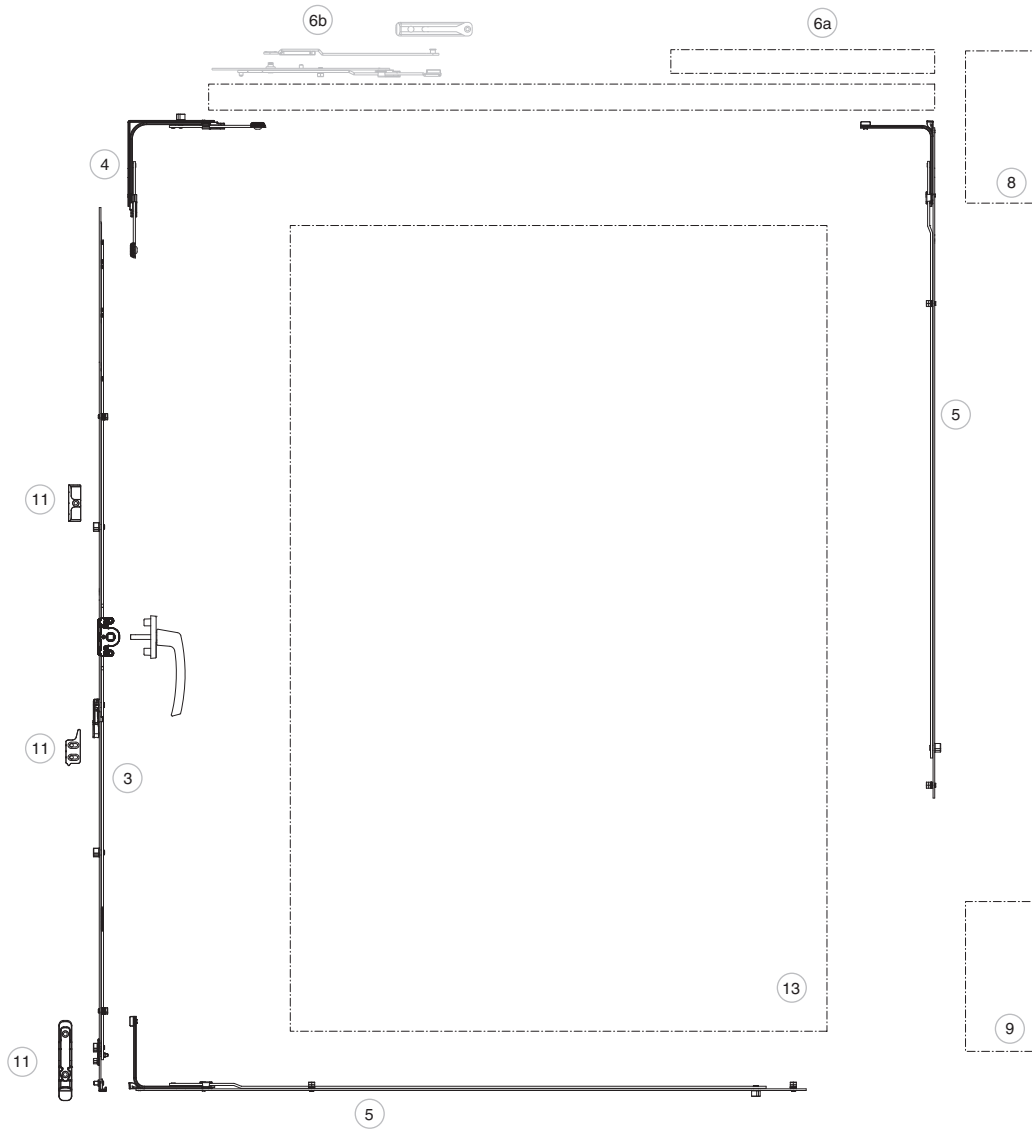


Selection guide		Page
3	3.1.1.9 T&T drive gears BS 15 VHH i.S.	→164
4a	4.1.1 Corner elements standard i.S.	→188
4b	4.1.3 Corner elements vertical i.S.	→189
5	5.1 Centre locks FHH i.S.	→196
6a	6.1 Rebated scissor stays	→202
6b	6.10.3 Stabilizing scissor stays for tilt-first windows	→216
8	8 Scissor stay hinges	→238
9	9 Pivot posts	→246
11	11 Striker plates	→292



2.4.10 Central locking system for MM-KS (with tilt lock bolt)

2.4.10.1 1-sashed rectangular T&T window with drive-gear FHH



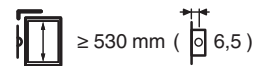
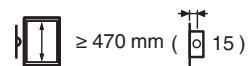
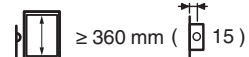
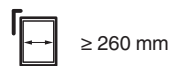
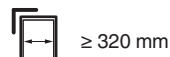
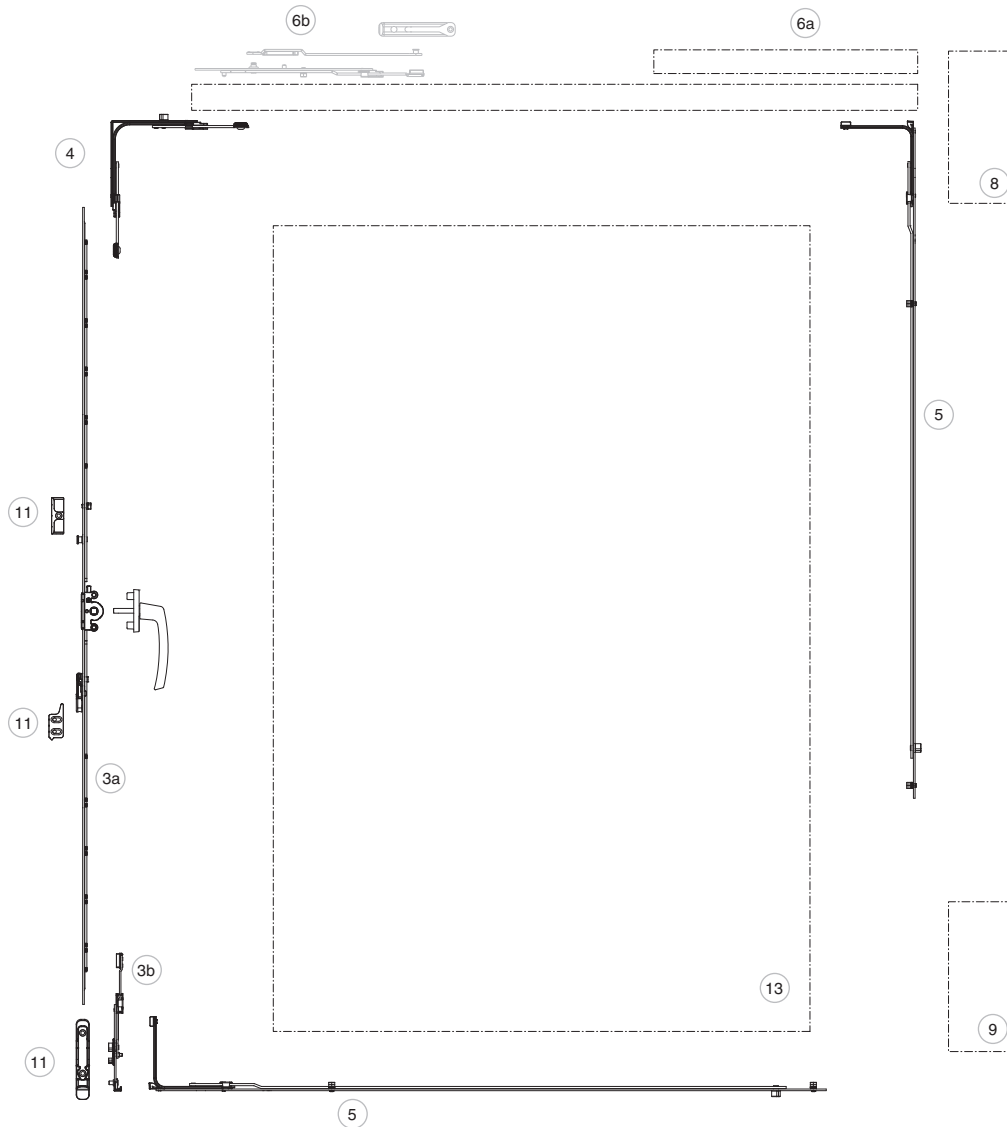
- 3 = Drive gears BS 15 or 6.5. Recommendation: Handle height should be between 1/3 and 1/2 of sash rebate height (SRH).
- 5 = Above 800 mm (PVC) or 1,000 mm (timber); Observe details from profile manufacturer!
- 6b = Stabilizing scissor stay necessary from 1,301 mm (dark shading in application range diagram).
- 8 = Scissor stay hinge according to used hinge side.
- 9 = For possible pivot post combinations refer to matrix.
- 11 = Refer to profile data sheets for striker plates, sash lifters and tilt striker plates for PVC.
- 13 = Application diagram according to used hinge side.



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3	3.1.1.3 T&T drive gears BS 15 FHH VZ with tilt lock bolt	→163
4	4.2 Corner elements VZ	→189
5	5.6 Centre locks single piece VZ	→197
6a	6.1.8 Rebated scissor stays VZ	→204
6b	6.10.1 Stabilizing scissor stays	→216
8	8 Scissor stay hinges	→238
9	9 Pivot posts	→246
11	11 Striker plates	→292



2.4.10.2 1-sashed rectangular T&T window with drive-gear VHH



- 3a = Drive gears BS 15 or 6.5. Recommendation: Handle height should be between 1/3 and 1/2 of sash rebate height (SRH).
- 5 = Above 800 mm (PVC) or 1,000 mm (timber); Observe details from profile manufacturer!
- 6b = Stabilizing scissor stay necessary from 1,301 mm (dark shading in application range diagram).
- 8 = Scissor stay hinge according to used hinge side.
- 9 = For possible pivot post combinations refer to matrix.
- 11 = Refer to profile data sheets for striker plates, sash lifters and tilt striker plates for PVC.
- 13 = Application diagram according to used hinge side.

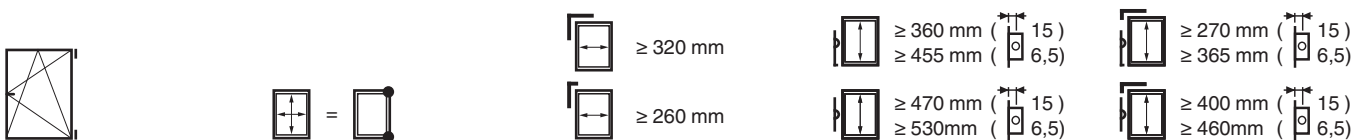
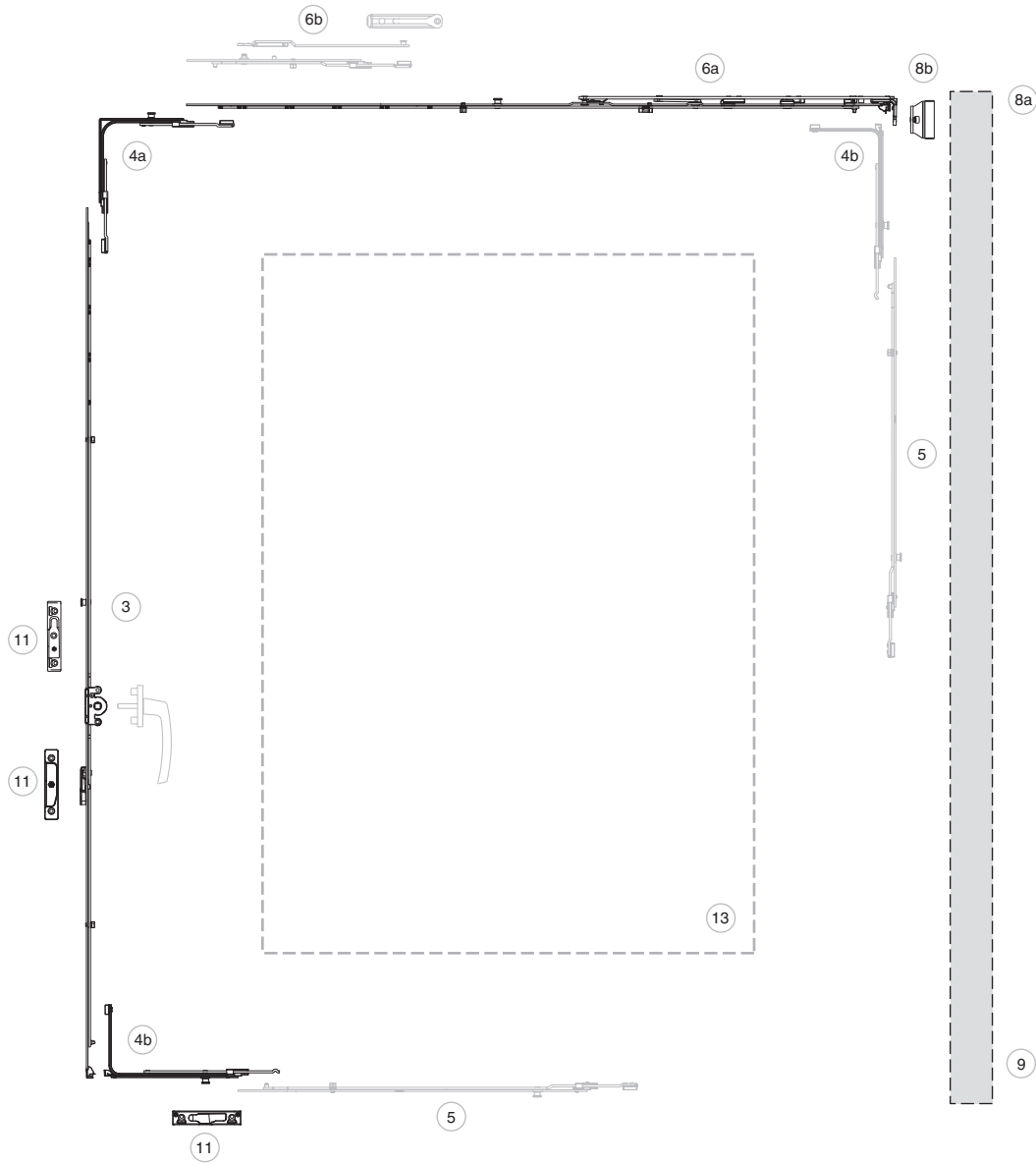


Selection guide		Page
3a	3.1.1.10T&T drive gears BS 15 VHH VZ	→164
3b	3.5.4 Tilt locks for drive gears	→183
4	4.2 Corner elements VZ	→189
5	5.6 Centre locks single piece VZ	→197
6a	6.1.8 Rebated scissor stays VZ	→204
6b	6.10.1 Stabilizing scissor stays	→216
8	8 Scissor stay hinges	→238
9	9 Pivot posts	→246
11	11 Striker plates	→292



2.4.11 Central locking system for 4 mm air gap

2.4.11.1 1-sashed rectangular T&T window with drive-gear FHH



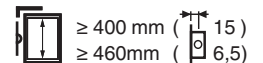
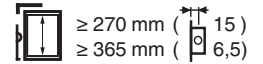
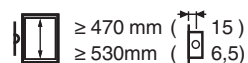
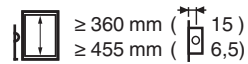
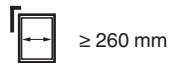
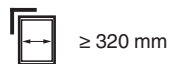
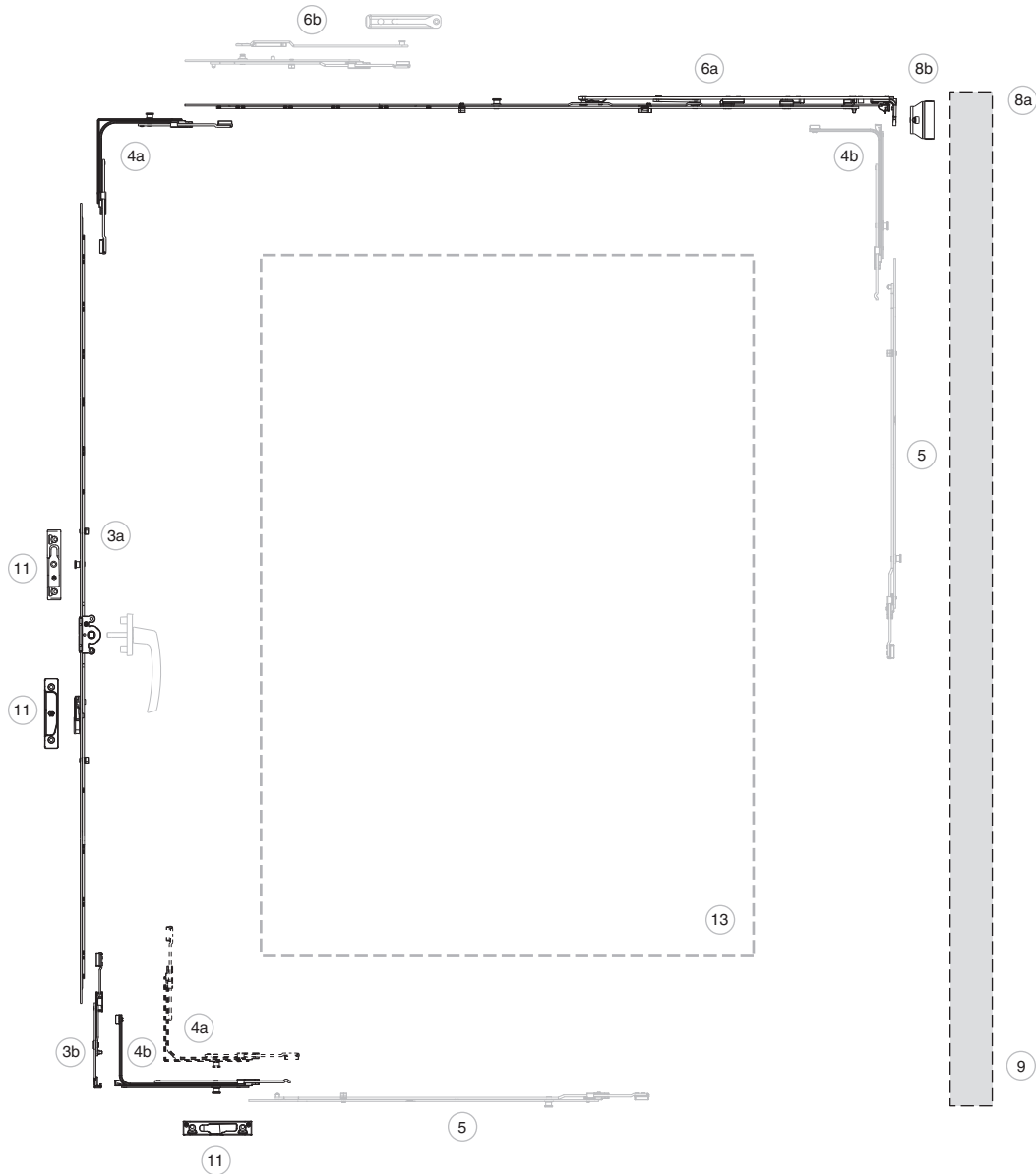
- 3 = Drive gear backset 15, backset 6.5 or special backset. Recommendation: Handle height should be between 1/3 and 1/2 of sash rebate height (SRH).
- 4b = Item no. 222208 can be used also for installation position scissor stay hinge, except for scissor stay hinge DT and routed scissor stay hinge.
- 5 = Above 800 mm (PVC) or 1,000 mm (timber); Observe details from profile manufacturer!
- 6a = Rebated scissor stay with or without night-vent (for hinge sides PVC, AS, DT130, DT160) respectively scissor stay MULTI MAMMUT or MULTI POWER.
- 6b = Stabilizing scissor stay according to hinge side (dark shaded area in the diagram).
- 8 = For scissor stay hinge and rebated scissor stay support arm refer to hinge side.
- 9 = For pivot post refer to hinge side.
- 13 = Application diagram according to used hinge side.



Selection guide		Page
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4b	4.1.3 Corner elements vertical i.S.	→189
5	5.1 Centre locks FHH i.S.	→196
6a	6.1 Rebated scissor stays	→202
6b	6.10.1 Stabilizing scissor stays	→216
8a	8.5.1 Scissor stay hinges DT130	→240
8b	8.5.3 Rebated scissor stay support arms DTuni	→241
9	9.4 Pivot posts DT	→254
11	11.1.1 Striker plates 4 mm air gap	→292



2.4.11.2 1-sashed rectangular T&T window
with drive-gear VHH



- 3 = Drive gear backset 15, backset 6.5 or special backset. Recommendation: Handle height should be between 1/3 and 1/2 of sash rebate height (SRH).
- 4b = Item no. 222208 can be used also for installation position scissor stay hinge, except for scissor stay hinge DT and routed scissor stay hinge.
- 5 = Above 800 mm (PVC) or 1,000 mm (timber); Observe details from profile manufacturer!
- 6a = Rebated scissor stay with or without night-vent (for hinge sides PVC, AS, DT130, DT160) respectively scissor stay MULTI MAMMUT or MULTI POWER.
- 6b = Stabilizing scissor stay according to hinge side (dark shaded area in the diagram).
- 8 = For scissor stay hinge and rebated scissor stay support arm refer to hinge side.
- 9 = For pivot post refer to hinge side.
- 13 = Application diagram according to used hinge side.

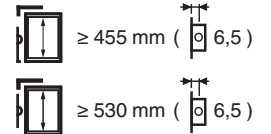
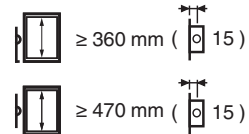
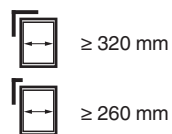
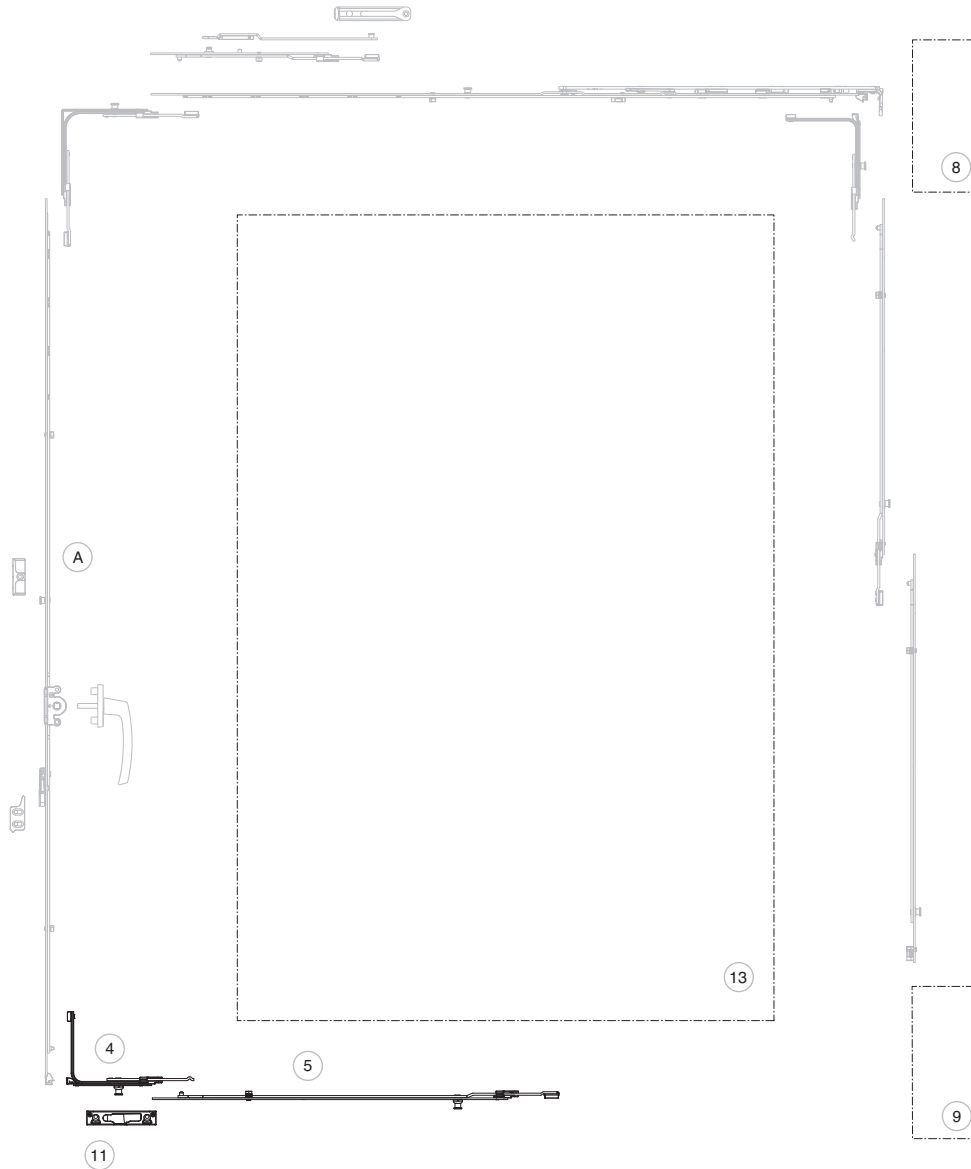


Selection guide		Page
3a	3.1.1.9 T&T drive gears BS 15 VHH i.S.	→164
3b	3.5.4 Tilt locks for drive gears	→183
4a	4.1.1 Corner elements standard i.S.	→188
4b	4.1.3 Corner elements vertical i.S.	→189
5	5.1 Centre locks FHH i.S.	→196
6a	6.1 Rebated scissor stays	→202
6b	6.10.1 Stabilizing scissor stays	→216
8a	8.5.1 Scissor stay hinges DT130	→240
8b	8.5.3 Rebated scissor stay support arms DTuni	→241
9	9.4 Pivot posts DT	→254
11	11.1.1 Striker plates 4 mm air gap	→292



2.4.12 Central locking system for threshold

2.4.12.1 1-sashed rectangular T&T casement door with drive-gear FHH



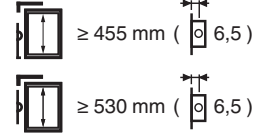
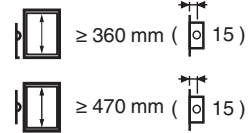
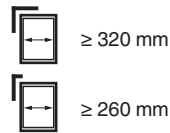
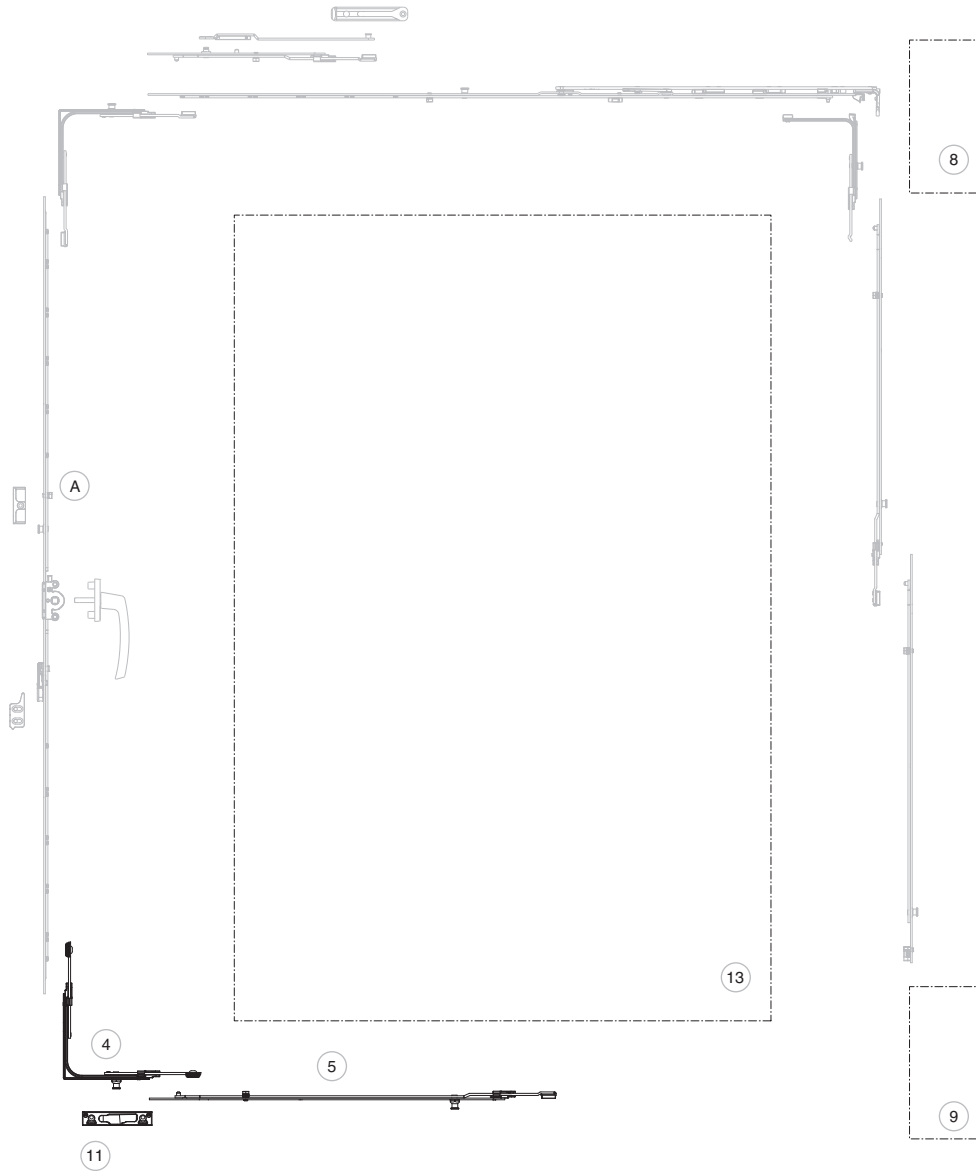
- A = Central locking system.
- 8 = Scissor stay hinge according to used hinge side.
- 9 = For possible pivot post combinations refer to matrix.
- 11 = Refer to profile data sheets for tilt striker plate.
- 13 = Application diagram according to used hinge side.



Selection guide			Page
4	4.7	Corner element for threshold 14 mm air gap	→192
5	5.14	Centre locks for threshold 14 mm air gap	→200
8	8	Scissor stay hinges	→238
9	9	Pivot posts	→246



2.4.12.2 1-sashed rectangular T&T casement door
with drive-gear VHH



- A = Central locking system.
- 8 = Scissor stay hinge according to used hinge side.
- 9 = For possible pivot post combinations refer to matrix.
- 11 = Refer to profile data sheets for tilt striker plate.
- 13 = Application diagram according to used hinge side.

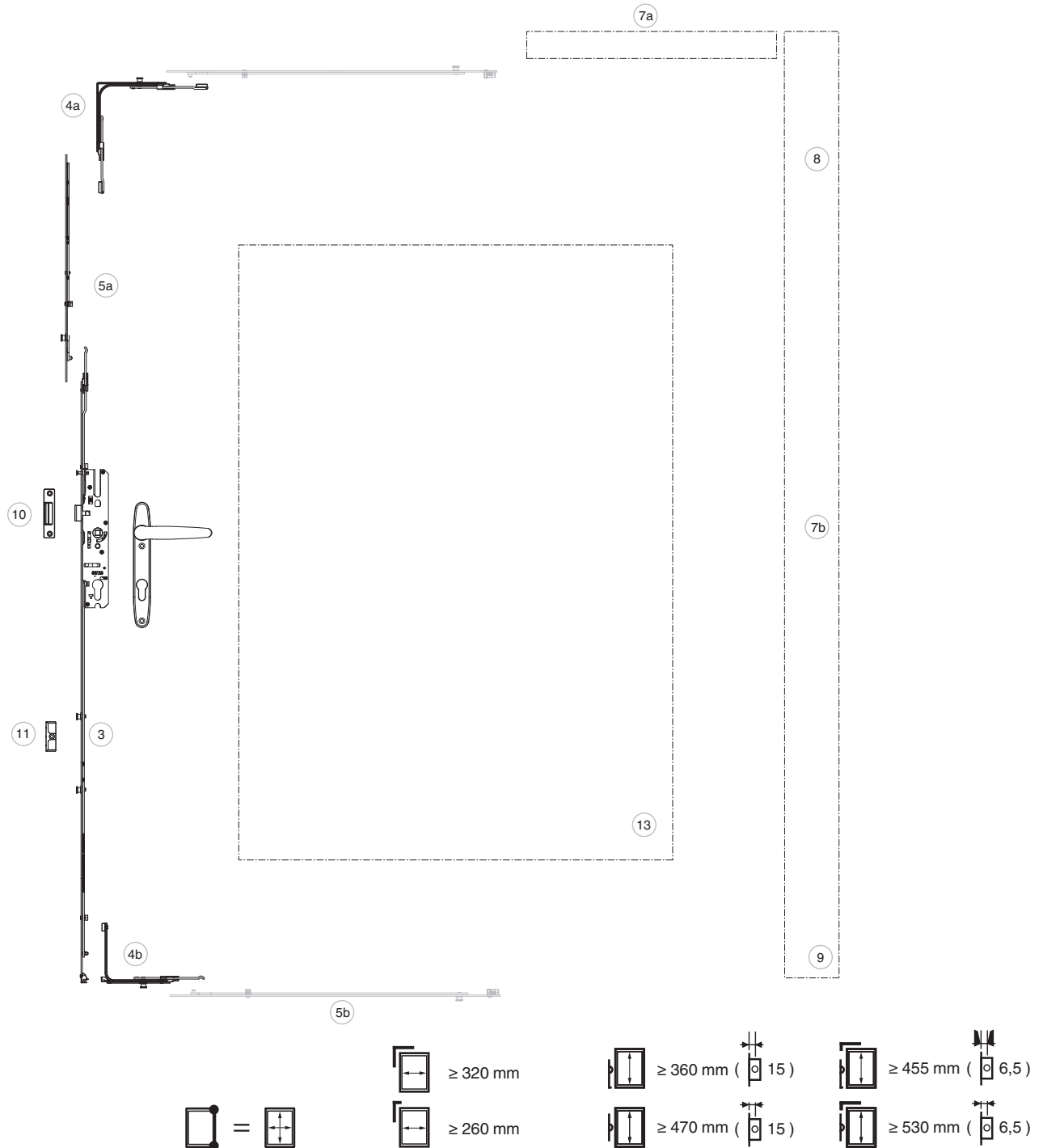


Selection guide			Page
4	4.7	Corner element for threshold 14 mm air gap	→192
5	5.14	Centre locks for threshold 14 mm air gap	→200
8	8	Scissor stay hinges	→238
9	9	Pivot posts	→246



2.4.13 Central locking system for B-TV

2.4.13.1 1-sashed rectangular turn-only casement door



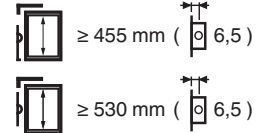
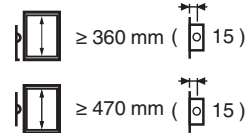
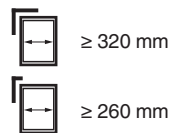
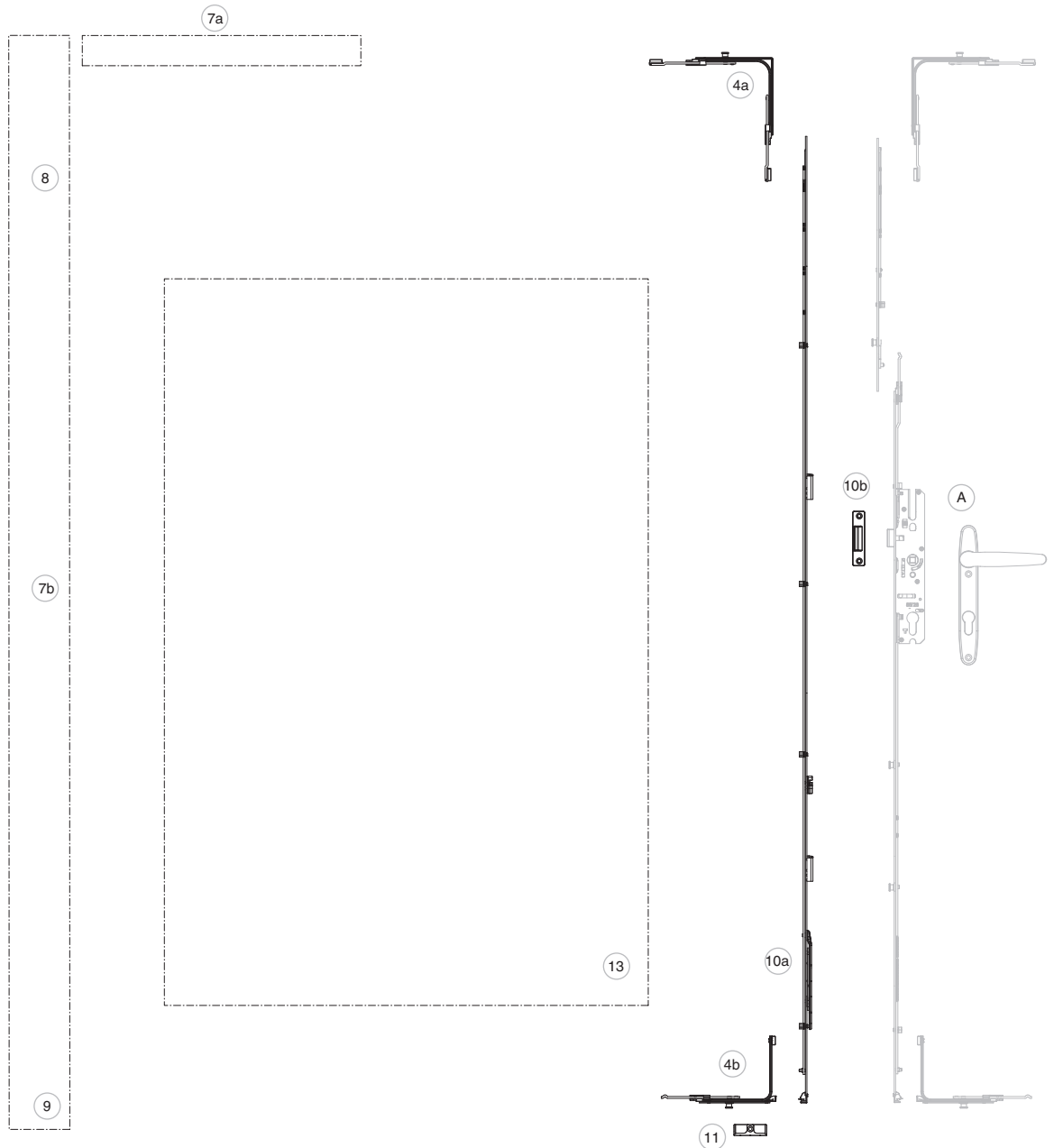
- 3 = Balcony door lock B-TV E85 with PC, E92 with PC or E94 with RC.
- 5 = Above 800 mm (PVC) or 1,000 mm (timber); Observe details from profile manufacturer!
- 7a = Refer to turn hardware overview for turn-only hinge - sash part fixed or croppable.
- 7b = 1 piece 800 - 1,600 mm, 2 pieces 1,601 - 2,400 mm, 3 pieces 2,401 - 2,650 mm; Observe details from profile manufacturer!
- 8 = Scissor stay hinge according to used hinge side.
- 9 = For possible pivot post combinations refer to matrix.
- 11 = Refer to profile data sheets for striker plates and sash lifters for PVC.
- 13 = Application diagram according to used hinge side.



Selection guide			Page
3	3.6	Balcony door locks B-TV	→185
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4b	4.1.3	Corner elements vertical i.S.	→189
5a	5.1	Centre locks FHH i.S.	→196
5b	5.12	Faceplate extensions croppable MM B-TV	→199
7a	7.1	Turn-only hinges - sash part / turn-only hinges - frame part / turn-only hinge faceplates AS/DTuni/PVC	→220
7b	7.10	Compression devices	→232
8	8	Scissor stay hinges	→238
9	9	Pivot posts	→246
10	10.7.4	Latch striker plates for balcony door locks B-TV	→290
11	11	Striker plates	→292



2.4.13.2 2-sashed rectangular turn-only casement door
with French casement drive gear



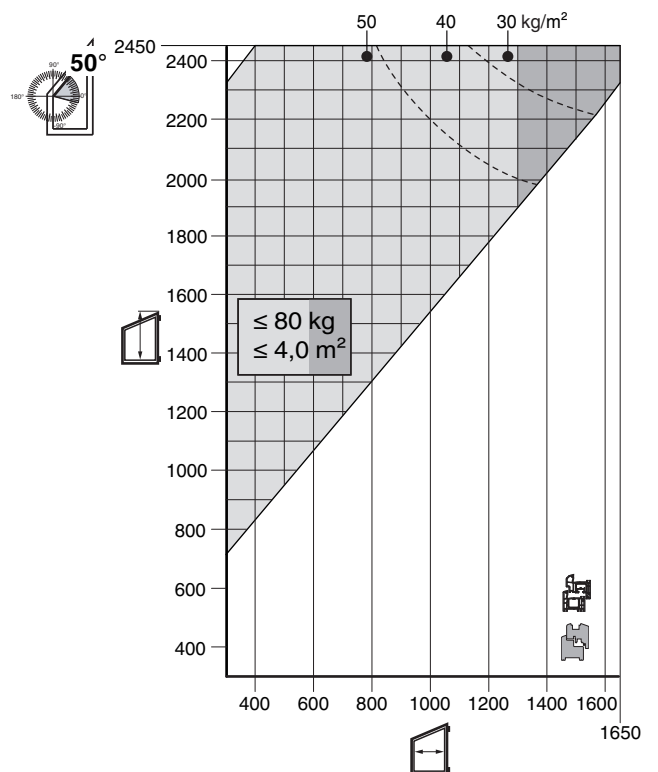
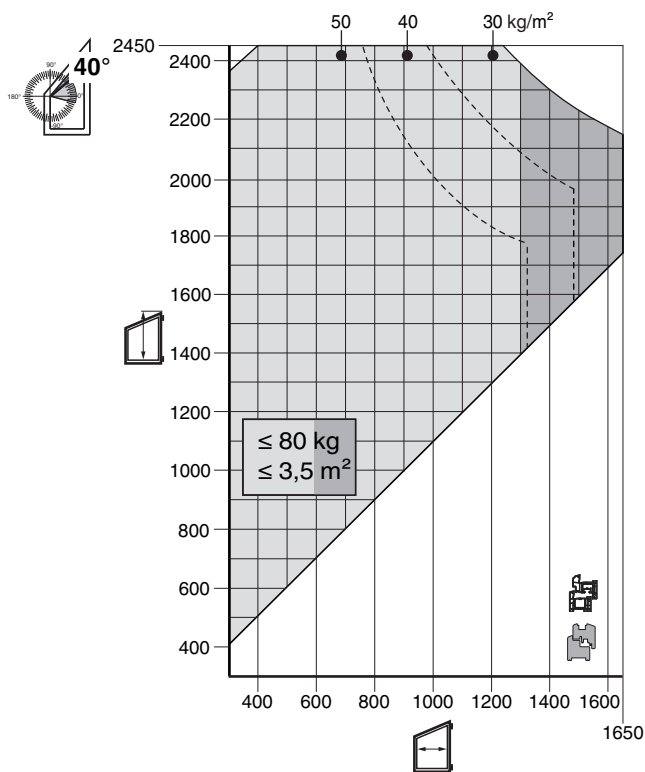
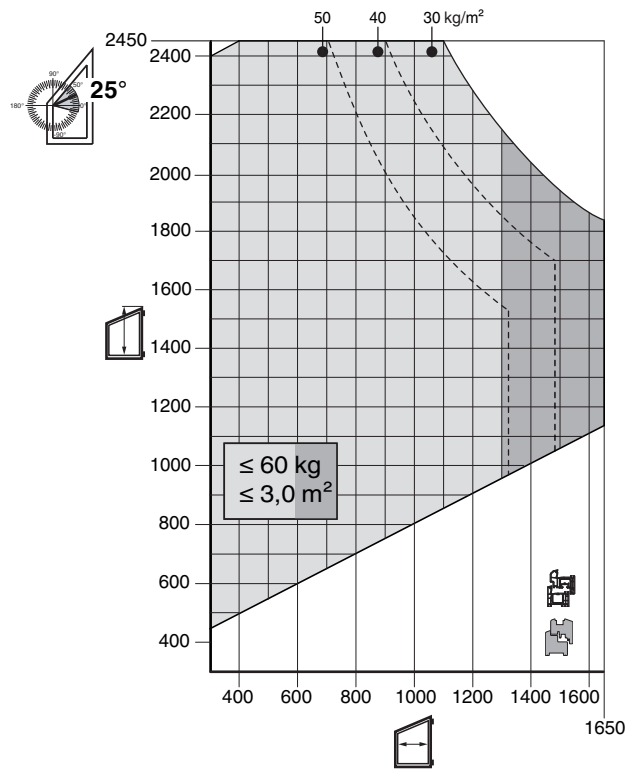
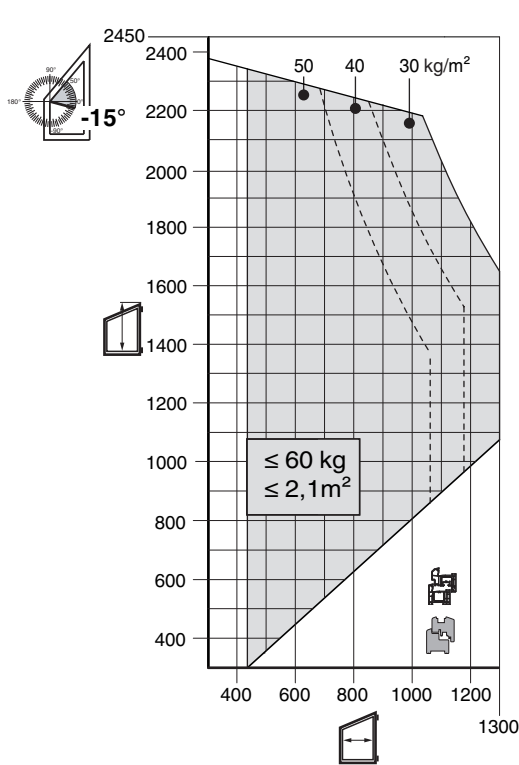
- A = For details refer to 1-sashed turn-only balcony door B-TV.
- 5 = Above 800 mm (PVC) or 1,000 mm (timber); Observe details from profile manufacturer!
- 7a = Refer to turn hardware overview for turn-only hinge - sash part fixed or croppable.
- 7b = 1 piece 800 - 1,600 mm, 2 pieces 1,601 - 2,400 mm, 3 pieces 2,401 - 2,650 mm; Observe details from profile manufacturer!
- 8 = Scissor stay hinge according to used hinge side.
- 9 = For possible pivot post combinations refer to matrix.
- 11 = Refer to profile data sheets for striker plates and sash lifters for PVC.
- 13 = Application diagram according to used hinge side.



Selection guide		Page
4a	4.1.1 Corner elements standard i.S.	→188
4b	4.1.3 Corner elements vertical i.S.	→189
7a	7.1 Turn-only hinges - sash part / turn-only hinges - frame part / turn-only hinge faceplates AS/DTuni/PVC	→220
7b	7.10 Compression devices	→232
8	8 Scissor stay hinges	→238
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2.5 Application diagrams for angled windows





3 Drive gears







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3 Drive gears

3.1 T&T drive gears







3.1.1 T&T drive gears BS 15



3.1.1.1 T&T drive gears BS 15 FHH i.S.								No	No Tricoat	
silver	430	15	0	125	360 - 430	-	20	201730 ¹	207448 ^{1*}	
	660	15	0	190	431 - 660	1	20	201732 ¹	207449 ^{1*}	
	840	15	1	300	661 - 840	1	20	201733	207450*	
	1090	15	1	400	841 - 1.090	1	20	201734	207451*	
	1340	15	1	500	1.091 - 1.340	1	10	201735	207452*	
	1590	15	2	600	1.341 - 1.590	1	10	201739	207453*	
	1700	15	2	700	1.591 - 1.700	1	10	207301	207454*	
	1950	15	3	1.050	1.701 - 1.950	1	10	201740	207455*	
	2200	15	3	1.050	1.951 - 2.200	1	10	201741	207456*	
	2450	15	4	1.050	2.201 - 2.450	1	10	201742	207457*	
	with door catch	1950	15	3	1.050	1.701 - 1.950	1	10	201842	
		2200	15	3	1.050	1.951 - 2.200	1	10	201843	219075
		2450	15	4	1.050	2.201 - 2.450	1	10	201844	

¹ To fasten faceplate use faceplate restrainer item no. 213287.



3.1.1.2 T&T drive gears BS 15 FHH i.S. with tilt lock bolt								No	No Tricoat	
silver	430	15	0	125	360 - 430	-	20	209370 ¹	222657 ^{1*}	
	660	15	0	190	431 - 660	-	20	209371 ¹	222658 ^{1*}	
	840	15	1	300	661 - 840	1	20	209372	222659*	
	1090	15	1	400	841 - 1.090	1	20	209373	222660*	
	1340	15	1	500	1.091 - 1.340	1	10	209375	222662*	
	1590	15	2	600	1.341 - 1.590	1	10	209377	222664*	
	1700	15	2	700	1.591 - 1.700	1	10	209379	222666*	
	1950	15	3	1.050	1.701 - 1.950	1	10	209383	222670*	
	2200	15	3	1.050	1.951 - 2.200	1	10	209385	222672*	
	2450	15	4	1.050	2.201 - 2.450	1	10	209387	222674*	
	with door catch	1950	15	3	1.050	1.701 - 1.950	1	10	209382	
		2200	15	3	1.050	1.951 - 2.200	1	10	209384	222671
		2450	15	4	1.050	2.201 - 2.450	1	10	209386	222673

¹ To fasten faceplate use faceplate restrainer item no. 213287.

212120



3.1.1.3 T&T drive gears BS 15 FHH VZ with tilt lock bolt								No	No Tricoat
silver	430	15	0	125	360 - 430	-	20	209370 ¹	222657 ^{1*}
	660	15	0	190	431 - 660	-	20	209371 ¹	222658 ^{1*}
	840	15	1	300	661 - 840	1	20	212118	
	1090	15	1	400	841 - 1.090	1	20	212120	
	1340	15	1	500	1.091 - 1.340	1	10	212122	
	1590	15	2	600	1.341 - 1.590	1	10	212124	
	1700	15	2	700	1.591 - 1.700	1	10	212126	
	1950	15	3	1.050	1.701 - 1.950	1	10	212128	
	2200	15	3	1.050	1.951 - 2.200	1	10	212131	
	2450	15	4	1.050	2.201 - 2.450	1	10	212134	
with door catch	1950	15	3	1.050	1.701 - 1.950	1	10	212129	
	2200	15	3	1.050	1.951 - 2.200	1	10	212132	
	2450	15	4	1.050	2.201 - 2.450	1	10	212135	

¹ To fasten faceplate use faceplate restrainer item no. 213287.

201737



3.1.1.4 T&T drive gears EH BS 15 FHH i.S.								No	No Tricoat
silver	660	15	1	190	431 - 660	-	10	206986 ^{1,2}	207458 ^{1,2}
			2	190	510 - 660	-	10	214441 ^{1,2}	
	840	15	2	300	661 - 840	1	20	201736 ²	207460 ^{2*}
	1090	15	2	400	841 - 1.090	1	20	201737 ²	207461 ^{2*}
	1340	15	2	500	1.091 - 1.340	1	10	201738 ²	207462 ^{2*}
	1590	15	3	600	1.341 - 1.590	1	10	206847 ²	207463 ^{2*}
	1700	15	3	700	1.591 - 1.700	1	10	207303 ^{2,3}	207467 ^{2,3*}

¹ To fasten faceplate use faceplate restrainer item no. 213287.

² For burglar-resistant windows according to standard EN 1627.

³ Above SRH 1700 mm use T&T drive gear BS 15 FHH i.S. and crop at 170 mm notch. Then extend with bottom end piece EH item no. 205644.

227863



227865



3.1.1.5 T&T drive gears ESH BS 15 FHH i.S.								No	No Tricoat	
silver	660	15	1	190	431 - 660	-	10	227863 ¹		
			2	190	510 - 660	-	10	227864 ¹		
	840	15	2	300	661 - 840	1	20	227865		
				400	841 - 1.090	1	20	227866		
	1340	15	2	400	1.091 - 1.340	1	10	227868		
				500	1.091 - 1.340	1	10	227869		
	1590	15	2	500	1.341 - 1.590	1	10	227870		
				600	1.341 - 1.590	1	10	227871		
	1700	15	3	600	1.591 - 1.700	1	10	227872		
				700	1.591 - 1.700	1	10	227873		
	1950	15	3	700	1.701 - 1.950	1	10	227874		
	with door catch	1950	15	3	1.050	1.701 - 1.950	1	10	228320	
		2200	15	3	1.050	1.951 - 2.200	1	10	227876	
		2450	15	4	1.050	2.201 - 2.450	1	10	227877	

¹ To fasten faceplate use faceplate restrainer item no. 213287.



3.1.1.6 T&T drive gears BS 15 FHH i.S. with offset handle position								No	No Tricoat
silver	1090	15	1	300	841 - 1.090	1	20	217867	
				500	841 - 1.090	1	20	209770	214310
	1340	15	1	400	1.091 - 1.340	1	10	217868	
	1590	15	2	500	1.341 - 1.590	1	10	201745	210072*
	1700	15	2	500	1.591 - 1.700	1	10	209261	223253*



3.1.1.7 T&T drive gears BS 15 FHH i.S. with offset handle position and tilt lock bolt								No	No Tricoat
silver	1090	15	1	300	841 - 1.090	1	20	209374	222661
				500	841 - 1.090	1	20	216142	
	1340	15	1	400	1.091 - 1.340	1	10	209376	222663
	1590	15	1	500	1.341 - 1.590	1	10	209378	222665*
	1700	15	1	500	1.591 - 1.700	1	10	209381	222668*



3.1.1.8 T&T drive gears EH BS 15 FHH with offset handle position								No	No Tricoat
silver	1090	15	2	300	841 - 1.090	1	20	201743 ^{1,2}	
	1340	15	2	400	1.091 - 1.340	1	10	201744 ¹	
	1590	15	2	500	1.341 - 1.590	1	10	208804 ¹	
	1700	15	3	600	1.591 - 1.700	1	10	208777 ¹	
	1950	15	3	700	1.701 - 1.950	1	10	208786 ¹	218769 ¹

¹ For burglar-resistant windows according to standard EN 1627.

² No FCD possible.



3.1.1.9 T&T drive gears BS 15 VHH i.S.		L							No	No Tricoat
silver	800	640	15	0	470 - 800	200	-	20	201746 ¹	207468 ^{1*}
				1	590 - 800	159	1	20	227936 ¹	
	1250	1.040	15	1	801 - 1.250	260	1	20	201747	207469*
	1750	1.540	15	2	1.251 - 1.750	260	1	10	201748	208318*
	2250	2.040	15	3	1.751 - 2.250	260	1	10	202739	208319*
	with door catch	2250	2.040	15	3	1.751 - 2.250	260	1	10	201749

¹ To fasten faceplate use faceplate restrainer item no. 213287.



3.1.1.10 T&T drive gears BS 15 VHH VZ		L							No	No Tricoat
silver	800	640	15	0	470 - 800	200	-	20	201746 ¹	207468 ^{1*}
	1250	1.040	15	1	801 - 1.250	260	1	20	212156	
	1350	1.140	15	1	901 - 1.350	260	1	20	225098	
	1750	1.540	15	2	1.251 - 1.750	260	1	10	212158	
	2250	2.040	15	3	1.751 - 2.250	260	1	10	212160	

¹ To fasten faceplate use faceplate restrainer item no. 213287.



228128



3.1.1.11 T&T drive gears ESH BS 15 VHH i.S.		L							No	No Tricoat	
silver	800	640	15	0	470 - 800	200	-	20	229389 ¹		
	1250	1.040	15	1	801 - 1.250	260	1	20	228128		
	1750	1.540	15	2	1.251 - 1.750	260	1	10	229390		
	with door catch	2250	2.040	15	3	1.751 - 2.250	260	1	10	229391	







¹ To fasten faceplate use faceplate restrainer item no. 213287.



3.1.2 T&T drive gears BS 6.5

202208









3.1.2.1 T&T drive gears BS 6.5 FHH i.S.								No	No Tricoat	
silver	660	6,5	0	190	455 - 660	-	20	202206 ¹	207470 ¹	
	840	6,5	1	300	661 - 840	1	20	202207	207471	
	1090	6,5	1	400	841 - 1.090	1	20	202208	207472	
	1340	6,5	1	500	1.091 - 1.340	1	10	202209	207473	
	1590	6,5	2	600	1.341 - 1.590	1	10	202216	207474	
	1700	6,5	2	700	1.591 - 1.700	1	10	207305	207475	
	1950	6,5	3	1.050	1.701 - 1.950	1	10	202737	207476	
	2200	6,5	3	1.050	1.951 - 2.200	1	10	202738	207477	
	with door catch	1950	6,5	3	1.050	1.701 - 1.950	1	10	202217	
		2200	6,5	3	1.050	1.951 - 2.200	1	10	202218	

¹ To fasten faceplate use faceplate restrainer item no. 213287.

212031









3.1.2.2 T&T drive gears BS 6.5 FHH i.S. with tilt lock bolt								No	No Tricoat
silver	660	6,5	0	190	455 - 660	-	20	212028 ¹	
	840	6,5	1	300	661 - 840	1	20	212029	222834
	1090	6,5	1	400	841 - 1.090	1	20	212031	222836
	1340	6,5	1	500	1.091 - 1.340	1	10	212033	222838
	1590	6,5	2	600	1.341 - 1.590	1	10	212035	222840
	1700	6,5	2	700	1.591 - 1.700	1	10	212037	
	1950	6,5	3	1.050	1.701 - 1.950	1	10	212038	
	2200	6,5	3	1.050	1.951 - 2.200	1	10	212040	222845

¹ To fasten faceplate use faceplate restrainer item no. 213287.

212049



3.1.2.3 T&T drive gears BS 6.5 FHH VZ with tilt lock bolt								No	No Tricoat
silver	660	6,5	0	190	455 - 660	-	20	212028 ¹	
	840	6,5	1	300	661 - 840	1	20	212048	
	1090	6,5	1	400	841 - 1.090	1	20	212049	
	1340	6,5	1	500	1.091 - 1.340	1	10	212050	
	1590	6,5	2	600	1.341 - 1.590	1	10	212052	
	1700	6,5	2	700	1.591 - 1.700	1	10	212054	
	1950	6,5	3	1.050	1.701 - 1.950	1	10	212055	
	2200	6,5	3	1.050	1.951 - 2.200	1	10	212057	

¹ To fasten faceplate use faceplate restrainer item no. 213287.



3.1.2.4 T&T drive gears EH BS 6.5 FHH i.S.								No	No Tricoat
silver	660	6,5	1	190	455 - 660	-	20	209609 ^{1,2}	
	840	6,5	2	300	661 - 840	1	20	202213 ²	
	1090	6,5	2	400	841 - 1.090	1	20	202214 ²	207479 ²
	1340	6,5	2	500	1.091 - 1.340	1	10	202215 ²	207480 ²
	1590	6,5	3	600	1.341 - 1.590	1	10	208779 ²	
	1700	6,5	3	700	1.591 - 1.700	1	10	208780 ^{2,3}	

¹ To fasten faceplate use faceplate restrainer item no. 213287.

² For burglar-resistant windows according to standard EN 1627.

³ Above SRH 1700 mm use T&T drive gear BS 6.5 FHH i.S. and crop at 170 mm notch. Then extend with bottom end piece EH item no. 205644.



3.1.2.5 T&T drive gears BS 6.5 FHH i.S. with offset handle position and tilt lock bolt								No	No Tricoat
silver	1090	6,5	1	300	841 - 1.090	1	20	212030	
	1340	6,5	1	400	1.091 - 1.340	1	10	212032	
	1590	6,5	1	500	1.341 - 1.590	1	10	212034	
	1700	6,5	1	500	1.591 - 1.700	1	10	212066	
			2	600	1.591 - 1.700	1	10	212036	



3.1.2.6 T&T drive gears BS 6.5 FHH VZ with offset handle position and tilt lock bolt								No	No Tricoat
silver	1590	6,5	1	500	1.341 - 1.590	1	10	212051	
	1700	6,5	1	500	1.591 - 1.700	1	10	212053	



3.1.2.7 T&T drive gears EH BS 6.5 FHH with offset handle position								No	No Tricoat
silver	1090	6,5	2	300	841 - 1.090	1	10	208781 ¹	
	1340	6,5	2	400	1.091 - 1.340	1	10	208782 ¹	
	1590	6,5	2	500	1.341 - 1.590	1	10	208783 ¹	
	1700	6,5	3	600	1.591 - 1.700	1	10	208784 ¹	
	1950	6,5	3	700	1.701 - 1.950	1	10	208785 ¹	

¹ For burglar-resistant windows according to standard EN 1627.



3.1.2.8 T&T drive gears BS 6.5 VHH i.S.		L							No	No Tricoat
silver	800	640	6,5	0	530 - 800	200	-	20	202491 ¹	207481 ¹
	1250	1.040	6,5	1	801 - 1.250	260	1	20	202492	207482
	1750	1.540	6,5	2	1.251 - 1.750	260	1	10	202494	207483
	2250	2.040	6,5	3	1.751 - 2.250	260	1	10	202205	207484

¹ To fasten faceplate use faceplate restrainer item no. 213287.



202491









3.1.2.9 T&T drive gears BS 6.5 VHH VZ		L						No	No Tricoat
silver	800	640	6,5	530 - 800	200	-	20	202491 ¹	207481 ¹

¹ To fasten faceplate use faceplate restrainer item no. 213287.

3.1.3 T&T drive gears BS -6







218242 

3.1.3.1 T&T drive gears BS -6 FHH i.S.													No	No Tricoat
silver	660	-6	0	190	455 - 660	-	20						218240 ^{1,2}	
	840	-6	1	300	661 - 840	1	20						218241 ¹	226434 ¹
	1090	-6	1	400	841 - 1.090	1	20						218242 ¹	
	1340	-6	1	500	1.091 - 1.340	1	10						218243 ¹	226436 ¹
	1590	-6	2	600	1.341 - 1.590	1	10						218244 ¹	
	1700	-6	2	700	1.591 - 1.700	1	10						218245 ¹	
	1950	-6	3	1.050	1.701 - 1.950	1	10						218246 ¹	226439 ¹
	2200	-6	3	1.050	1.951 - 2.200	1	10						218247 ¹	

¹ Do not exceed max. torque of 22 Nm when breaking the centre die anchorage! Otherwise install drive gear BS 6.5 with frontal intermediate drive gear.

² To fasten faceplate use faceplate restrainer item no. 213287.

218249 

3.1.3.2 T&T drive gears BS -6 VHH i.S.													No	No Tricoat
silver	800	-6	0	530 - 800	-	20							218248 ^{1,2}	
	1250	-6	1	801 - 1.250	1	10							218249 ¹	
	1750	-6	2	1.251 - 1.750	1	10							218250 ¹	
	2250	-6	3	1.751 - 2.250	1	10							218251 ¹	

¹ Do not exceed max. torque of 22 Nm when breaking the centre die anchorage! Otherwise install drive gear BS 6.5 with frontal intermediate drive gear.

² To fasten faceplate use faceplate restrainer item no. 213287.



3.1.4 T&T drive gears special-BS i.S.

205465



3.1.4.1 T&T drive gears special-BS FHH i.S.								No	No Tricoat
silver	1090	30	1	400	841 - 1.090	1	20	212184	
	1340	30	1	500	1.091 - 1.340	1	10	212185	212199
	1950	25	3	1.050	1.701 - 1.950	1	10	205465	207485
		30	3	1.050	1.701 - 1.950	1	10	205473	207488
		35	3	1.050	1.701 - 1.950	1	10	205487	207491
		40	3	1.050	1.701 - 1.950	1	10	206402	
		45	3	1.050	1.701 - 1.950	1	10	206403	207497
		50	3	1.050	1.701 - 1.950	1	10	205491	
	2200	25	3	1.050	1.951 - 2.200	1	10	205464	
		30	3	1.050	1.951 - 2.200	1	10	205472	207489
		35	3	1.050	1.951 - 2.200	1	10	205480	207492
		40	3	1.050	1.951 - 2.200	1	10	205489	207495
		45	3	1.050	1.951 - 2.200	1	10	205490	207498
		50	3	1.050	1.951 - 2.200	1	10	205492	207501
	2450	25	4	1.050	2.201 - 2.450	1	10	206399	207487
		30	4	1.050	2.201 - 2.450	1	10	205479	207490
		35	4	1.050	2.201 - 2.450	1	10	205488	207493
		40	4	1.050	2.201 - 2.450	1	10	206400	207496
		45	4	1.050	2.201 - 2.450	1	10	206401	
		50	4	1.050	2.201 - 2.450	1	10	205493	

205514



3.1.4.2 T&T drive gears special-BS VHH i.S.		L						No	No Tricoat	
silver	800	640	25	0	470 - 800	200	-	10	205513 ¹	207503 ¹
			30	0	470 - 800	200	-	10	205517 ¹	
			35	0	470 - 800	200	-	10	205525 ¹	
			40	0	470 - 800	200	-	10	205529 ¹	207515 ¹
			45	0	470 - 800	200	-	10	205539 ¹	
			50	0	470 - 800	200	-	10	205540 ¹	207523 ¹
	1250	1.040	25	1	801 - 1.250	260	1	10	205514	207504
			30	1	801 - 1.250	260	1	10	205518	207508
			35	1	801 - 1.250	260	1	10	205534	207512
			40	1	801 - 1.250	260	1	10	205530	207516
			45	1	801 - 1.250	260	1	10	206308	207520
			50	1	801 - 1.250	260	1	10	213071	
	1750	1.540	25	2	1.251 - 1.750	260	1	10	205532	207505
			30	2	1.251 - 1.750	260	1	10	205520	207509
			35	2	1.251 - 1.750	260	1	10	205535	
			40	2	1.251 - 1.750	260	1	10	205537	207517
			45	2	1.251 - 1.750	260	1	10	206309	207521
			50	2	1.251 - 1.750	260	1	10	213072	
	2250	2.040	25	3	1.751 - 2.250	260	1	10	205533	207506
			30	3	1.751 - 2.250	260	1	10	205531	207510
			35	3	1.751 - 2.250	260	1	10	205536	207514
			40	3	1.751 - 2.250	260	1	10	205538	207518
			45	3	1.751 - 2.250	260	1	10	206310	207522
			50	3	1.751 - 2.250	260	1	10	213073	218909

¹ To fasten faceplate use faceplate restrainer item no. 213287.

3.1.5 T&T drive gears lockable special-BS i.S.

205602



3.1.5.1 T&T drive gears lockable special BS for PC FHH i.S.								No	No Tricoat
silver	1950	25	3	1.050	1.701 - 1.950	1	10	205602 ¹	207524 ¹
		30	3	1.050	1.701 - 1.950	1	10	205627 ¹	207527 ¹
		35	3	1.050	1.701 - 1.950	1	10	206153 ¹	207530 ¹
		40	3	1.050	1.701 - 1.950	1	10	206984 ¹	207533 ¹
		45	3	1.050	1.701 - 1.950	1	10	206155 ¹	207536 ¹
		50	3	1.050	1.701 - 1.950	1	10	206985 ¹	
	2200	25	3	1.050	1.951 - 2.200	1	10	205571 ¹	207525 ¹
		30	3	1.050	1.951 - 2.200	1	10	205624 ¹	207528 ¹
		35	3	1.050	1.951 - 2.200	1	10	205629 ¹	207531 ¹
		40	3	1.050	1.951 - 2.200	1	10	205631 ¹	207534 ¹
		45	3	1.050	1.951 - 2.200	1	10	205633 ¹	207537 ¹
		50	3	1.050	1.951 - 2.200	1	10	205635 ¹	207540 ¹
	2450	25	4	1.050	2.201 - 2.450	1	10	205623 ¹	
		30	4	1.050	2.201 - 2.450	1	10	205628 ¹	207529 ¹
		35	4	1.050	2.201 - 2.450	1	10	205630 ¹	207532 ¹
		40	4	1.050	2.201 - 2.450	1	10	205632 ¹	
		45	4	1.050	2.201 - 2.450	1	10	205634 ¹	207538 ¹
		50	4	1.050	2.201 - 2.450	1	10	205636 ¹	207541 ¹

¹ Cropping for end piece 115 mm and 170 mm possible. Notch only at 170 mm.

212256



3.1.5.2 T&T drive gears lockable special BS for PC FHH i.S. with tilt lock bolt								No	No Tricoat
silver	1950	25	3	1.050	1.701 - 1.950	1	10	212256	
		35	3	1.050	1.701 - 1.950	1	10	212258	

205670



3.1.5.3 T&T drive gears lockable special BS for PC VHH i.S.		L							No	No Tricoat
silver	1750	1.540	25	2	1.251 - 1.750	260	1	10	205670	207542
			30	2	1.251 - 1.750	260	1	10	205671	207543
			35	2	1.251 - 1.750	260	1	10	205672	207545
			40	2	1.251 - 1.750	260	1	10	205673	207547
			45	2	1.251 - 1.750	260	1	10	207316	207549
			50	2	1.251 - 1.750	260	1	10	213074	
	2250	2.040	25	3	1.751 - 2.250	260	1	10	210347	214727
			30	3	1.751 - 2.250	260	1	10	205674	207544
			35	3	1.751 - 2.250	260	1	10	205675	207546
			40	3	1.751 - 2.250	260	1	10	207317	207548
			45	3	1.751 - 2.250	260	1	10	207318	207550
			50	3	1.751 - 2.250	260	1	10	213075	

217871



3.1.5.4 T&T drive gears lockable special BS for RC VHH i.S.		L							No	No Tricoat
silver	1750	1.540	40	2	1.251 - 1.750	260	1	10	217871	
			45	2	1.251 - 1.750	260	1	10	217872	

3.2 Turn-only drive gears

3.2.1 Turn-only drive gears BS 15



3.2.1.1 Turn-only drive gears BS 15 FHH i.S.							No	No Tricoat
silver	430	15	0	125	360 - 430	20	201730 ¹	207448 ^{1*}
	660	15	0	190	431 - 660	20	201731 ¹	210343 ^{1*}
	840	15	1	300	661 - 840	20	201833	215752
	1090	15	1	400	841 - 1.090	20	201834	211244
	1340	15	1	500	1.091 - 1.340	10	201835	210073
	1590	15	2	600	1.341 - 1.590	10	201836	
	1700	15	2	700	1.591 - 1.700	10	207302	
	1950	15	3	1.050	1.701 - 1.950	10	201837	211247
	2200	15	3	1.050	1.951 - 2.200	10	201838	210074
	2450	15	4	1.050	2.201 - 2.450	10	201839	210075

¹ To fasten faceplate use faceplate restrainer item no. 213287.



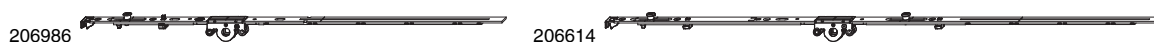
3.2.1.2 Turn-only drive gears BS 15 FHH i.S. with tilt lock bolt							No	No Tricoat
silver	430	15	0	125	360 - 430	20	209370 ¹	222657 ^{1*}
	660	15	0	190	431 - 660	20	209371 ¹	222658 ^{1*}
	840	15	1	300	661 - 840	20	209590	

¹ To fasten faceplate use faceplate restrainer item no. 213287.



3.2.1.3 Turn-only drive gears BS 15 FHH VZ with tilt lock bolt							No	No Tricoat
silver	430	15	0	125	360 - 430	20	209370 ¹	222657 ^{1*}
	660	15	0	190	431 - 660	20	209371 ¹	222658 ^{1*}
	840	15	1	300	661 - 840	20	212119	
	1090	15	1	400	841 - 1.090	20	212121	
	1340	15	1	500	1.091 - 1.340	10	212123	
	1590	15	2	600	1.341 - 1.590	10	212125	
	1700	15	2	700	1.591 - 1.700	10	212127	
	1950	15	3	1.050	1.701 - 1.950	10	212130	
	2200	15	3	1.050	1.951 - 2.200	10	212133	
	2450	15	4	1.050	2.201 - 2.450	10	212136	

¹ To fasten faceplate use faceplate restrainer item no. 213287.



3.2.1.4 Turn-only drive gears EH BS 15 FHH i.S.							No	No Tricoat
silver	660	15	1	190	431 - 660	10	206986 ^{1,2}	207458 ^{1,2}
			2	190	510 - 660	10	214441 ^{1,2}	
	840	15	2	300	661 - 840	20	206614 ²	

¹ To fasten faceplate use faceplate restrainer item no. 213287.

² For burglar-resistant windows according to standard EN 1627.



205547



3.2.1.5 Turn-only drive gears BS 15 FHH without cam							No	No Tricoat
silver	840	15	300	661 - 840	20		205546	
	1090	15	400	841 - 1.090	20		205547	
	1340	15	500	1.091 - 1.340	10		205548	
	1590	15	600	1.341 - 1.590	10		205549	
	1700	15	700	1.591 - 1.700	10		207304	
	1950	15	1.050	1.701 - 1.950	10		205545	
	2200	15	1.050	1.951 - 2.200	10		205550	
	2450	15	1.050	2.201 - 2.450	10		205551	

202170



3.2.1.6 Turn-only drive gears BS 15 VHH i.S.		L					No	No Tricoat	
silver	800	640	15	0	470 - 800	200	20	201746¹	207468^{1*}
	1250	1.040	15	1	801 - 1.250	260	20	202170	
	1350	1.140	15	1	901 - 1.350	260	20	215408	
	1750	1.540	15	2	1.251 - 1.750	260	10	202171	
	2250	2.040	15	3	1.751 - 2.250	260	10	202172	

¹ To fasten faceplate use faceplate restrainer item no. 213287.

212157



3.2.1.7 Turn-only drive gears BS 15 VHH VZ		L					No	No Tricoat	
silver	800	640	15	0	470 - 800	200	20	201746¹	207468^{1*}
	1250	1.040	15	1	801 - 1.250	260	20	212157	
	1750	1.540	15	2	1.251 - 1.750	260	10	212159	
	2250	2.040	15	3	1.751 - 2.250	260	10	212161	

¹ To fasten faceplate use faceplate restrainer item no. 213287.



205542








3.2.1.8 Turn-only drive gears BS 15 VHH without cam		L					No	No Tricoat
silver	1250	1.040	15	801 - 1.250	260	10	205542	211338
	1750	1.540	15	1.251 - 1.750	260	10	205543	211339
	2250	2.040	15	1.751 - 2.250	260	10	205544	211340









3.2.2 Turn-only drive gears BS 6.5


202206  202211 






3.2.2.1 Turn-only drive gears BS 6.5 FHH i.S.							No	No Tricoat
silver	660	6,5	0	190	455 - 660	20	202206¹	207470¹
	840	6,5	1	300	661 - 840	20	202210	
	1090	6,5	1	400	841 - 1.090	20	202211	
	1340	6,5	1	500	1.091 - 1.340	10	202212	
	1590	6,5	2	600	1.341 - 1.590	10	202219	
	1700	6,5	2	700	1.591 - 1.700	10	207306	
	1950	6,5	3	1.050	1.701 - 1.950	10	202220	
2200	6,5	3	1.050	1.951 - 2.200	10	202221		


¹ To fasten faceplate use faceplate restrainer item no. 213287.






212044 

3.2.2.2 Turn-only drive gears BS 6.5 FHH i.S. with tilt lock bolt							No	No Tricoat
silver	840	6,5	1	300	661 - 840	20	212042	
	1090	6,5	1	400	841 - 1.090	20	212044	
	1340	6,5	1	500	1.091 - 1.340	10	212045	
	1590	6,5	2	600	1.341 - 1.590	10	212046	


212060 





3.2.2.3 Turn-only drive gears BS 6.5 FHH VZ with tilt lock bolt							No	No Tricoat
silver	840	6,5	1	300	661 - 840	20	212059	
	1090	6,5	1	400	841 - 1.090	20	212060	
	1340	6,5	1	500	1.091 - 1.340	10	212061	
	1590	6,5	2	600	1.341 - 1.590	10	212062	
	1700	6,5	2	700	1.591 - 1.700	10	212063	
	1950	6,5	3	1.050	1.701 - 1.950	10	212064	
	2200	6,5	3	1.050	1.951 - 2.200	10	212065	

202493 

3.2.2.4 Turn-only drive gears BS 6.5 VHH i.S.		L						No	No Tricoat
silver	800	640	6,5	0	530 - 800	200	20	202491¹	207481¹
	1250	1.040	6,5	1	801 - 1.250	260	20	202493	
	1750	1.540	6,5	2	1.251 - 1.750	260	10	202495	
	2250	2.040	6,5	3	1.751 - 2.250	260	10	202497	

¹ To fasten faceplate use faceplate restrainer item no. 213287.

202491 

3.2.2.5 Turn-only drive gears BS 6.5 VHH VZ		L					No	No Tricoat
silver	800	640	6,5	530 - 800	200	20	202491¹	207481¹

¹ To fasten faceplate use faceplate restrainer item no. 213287.



3.2.3 Turn-only drive gears special BS i.S.

209968



3.2.3.1 Turn-only drive gears special-BS FHH with welded striker						No	No Tricoat
silver	660	30	190	431 - 660	10	224139 ¹	
		50	190	431 - 660	10	218426 ¹	
	840	30	300	661 - 840	10	224140	
		50	300	661 - 840	10	218427	
1090	30	400	841 - 1.090	10	224141		
	40	400	841 - 1.090	10	210941		
	50	400	841 - 1.090	10	218428		
1340	30	500	1.091 - 1.340	10	224142		
	40	500	1.091 - 1.340	10	210942		
	50	500	1.091 - 1.340	10	218429		
1590	30	600	1.341 - 1.590	10	224143		
	40	600	1.341 - 1.590	10	211659		
	50	600	1.341 - 1.590	10	218430		
1700	30	700	1.591 - 1.700	10	224144		
	40	700	1.591 - 1.700	10	211660		
	50	700	1.591 - 1.700	10	218431		
1950	30	1.050	1.701 - 1.950	10	209968		
	40	1.050	1.701 - 1.950	10	207014		
	50	1.050	1.701 - 1.950	10	218432		
2200	30	1.050	1.951 - 2.200	10	224145		
	40	1.050	1.951 - 2.200	10	210943		
	50	1.050	1.951 - 2.200	10	218433		
2450	30	1.050	2.201 - 2.450	10	224146		
	40	1.050	2.201 - 2.450	10	210944		

¹ To fasten faceplate use faceplate restrainer item no. 213287.

218225



3.2.3.2 Turn-only drive gears special-BS VHH with welded striker		L					No	No Tricoat
silver	1250	1.040	50	801 - 1.250	260	10	218225	
	1750	1.540	50	1.251 - 1.750	260	10	218226	
	2250	2.040	50	1.751 - 2.250	260	10	218227	

205515



3.2.3.3 Turn-only drive gears special-BS VHH i.S.		L						No	No Tricoat
silver	1750	1.540	25	2	1.251 - 1.750	260	10	205515	
			30	2	1.251 - 1.750	260	10	205541	
	2250	2.040	25	3	1.751 - 2.250	260	10	205516	
			30	3	1.751 - 2.250	260	10	205523	

214904







3.2.4 Turn-only drive gears special-BS VHH VZ		L						No	No Tricoat
silver	800	640	30	0	470 - 800	200	10	205517 ¹	
	1250	1.040	30	1	801 - 1.250	260	10	214904	

¹ To fasten faceplate use faceplate restrainer item no. 213287.

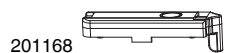


208747



3.2.5 Turn-only drive gears for round windows i.S.					No	No Tricoat
silver	925	15	3	425 - 925	10	208747
	1425	15	4	926 - 1.425	10	208748

3.3 Accessories for drive gears



201168

3.3.1 Door catch MM



No

No
Tricoat

silver

50

201168

207674*



44349

3.3.2 Packer for door catch



No

No
Tricoat

pearl light grey RAL 9022 for bullet catch case

3

100

44349



202581

370922

3.3.3 Sash lifters and mishandling devices



No

No
Tricoat

silver

sash lifter and mishandling device retrofittable MM

50

202581

215239

sash lifter and mishandling device retrofittable MM for comfort adjuster

10

370922



207434

207435

3.3.4 Anti-drill plates for drive gears



No

No
Tricoat

silver

BS 15 hardened

50

207434¹

BS 6.5 hardened

50

207435¹

¹ For burglar-resistant windows according to standard EN 1627.



208887

3.3.5 Faceplate extension MM/MM-KS for corner screw-mounting on Alu windows



No

No
Tricoat

silver

20

208887



213287

3.3.6 Faceplate restrainer for short drive gears MM



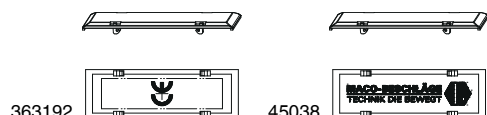
No

No
Tricoat

silver

100

213287



363192

45038

3.3.7 Clip-on parts for drive gears



No

No
Tricoat

clip-on component for gearbox cases CE

100

363192¹

clip-on component for gearbox cases MACO

100



45038¹



¹ Attachments for the drive gear are also available with logo.



366284 

3.3.8 Extension for bottom sash lifter run-up			No	No Tricoat
silver		100	366284	

366719  366008 

3.3.9 Accessories for drive gears BS -6		 	No	No Tricoat
silver	adapter for drive gear DM-6	50	366719	
pearl light grey RAL 9022	spacer	1,5 50	366006	
		5 50	367850	
		8,5 50	366007	
		9,5 50	366008	

3.4 Espagnolettes

3.4.1 Espagnolettes BS 15



3.4.1.1 Espagnolettes BS 15 FHH i.S.							No	No Tricoat
silver	430	15	1	125	270 - 430	20	208343	
	660	15	2	190	431 - 660	20	208344	
	840	15	2	300	661 - 840	20	208345	
	1090	15	2	400	841 - 1.090	20	208346	
	1340	15	3	500	1.091 - 1.340	10	208347	
	1590	15	3	600	1.341 - 1.590	10	208348	
	1700	15	3	700	1.591 - 1.700	10	208349	
	1950	15	3	1.050	1.701 - 1.950	10	208350	
	2200	15	4	1.050	1.951 - 2.200	10	208351	
	2450	15	4	1.050	2.201 - 2.450	10	208352	



3.4.1.2 Espagnolettes BS 15 FHH VZ							No	No Tricoat
silver	430	15	1	125	270 - 430	20	211961	222793
	660	15	2	190	431 - 660	20	211962	222794
	840	15	2	300	661 - 840	20	211963	222795
	1090	15	2	400	841 - 1.090	20	211964	222625
	1340	15	3	500	1.091 - 1.340	10	211965	222626
	1590	15	3	600	1.341 - 1.590	10	211966	
	1700	15	3	700	1.591 - 1.700	10	211967	
	1950	15	3	1.050	1.701 - 1.950	10	211968	222627
	2200	15	4	1.050	1.951 - 2.200	10	211969	222628
	2450	15	4	1.050	2.201 - 2.450	10	211970	222629
	2600	15	3	1.050	1.801 - 2.600	10	212970¹	
			4	1.050	2.451 - 2.600	10	212637	

¹ extendable







3.4.1.3 Espagnolettes BS 15 FHH VZ with offset handle position							No	No Tricoat
silver	1090	15	2	300	841 - 1.090	20	211971	
	1340	15	3	190	1.091 - 1.340	10	218088	
				400	1.091 - 1.340	10	211972	
	1590	15	3	500	1.341 - 1.590	10	211973	
	1700	15	3	500	1.591 - 1.700	10	212634	
	1950	15	3	500	1.701 - 1.950	10	218508	
	2200	15	4	500	1.951 - 2.200	10	212635	



3.4.1.4 Espagnolettes BS 15 centered i.S.							No	No Tricoat
silver	500	15	2	300 - 500		20	208328	216836
	700	15	2	501 - 700		20	208329	210287
	1.000	15	2	701 - 1.000		20	208330	210288
	1.400	15	3	1.001 - 1.400		10	208331	214297
	1.800	15	3	1.401 - 1.800		10	208332	217158
	2.400	15	4	1.801 - 2.400		10	208436	217159

211989








3.4.1.5 Espagnolettes BS 15 centered VZ						No	No Tricoat
silver	500	15	2	300 - 500	20	211989	222631
	700	15	2	501 - 700	20	211990	222632
	1.000	15	2	701 - 1.000	20	211991	222811
	1.400	15	3	1.001 - 1.400	10	211992	222812
				4	1.001 - 1.400	10	212694
	1.800	15	3	1.401 - 1.800	10	211993	222813
2.400	15	4	1.801 - 2.400	10	211994	222814	

212001








212007



3.4.1.6 Espagnolettes BS 15 reverse action VZ							No	No Tricoat
silver	660	15	0	190	430 - 660	10	208395	222656
	840	15	1	300	661 - 840	10	212000	222820
			0	300	661 - 840	10	212769	
	1090	15	1	400	841 - 1.090	10	212001	222633
	1340	15	1	190	1.091 - 1.340	10	218079	
				500	1.091 - 1.340	10	212002	222634
	1590	15	1	600	1.341 - 1.590	10	212003	222821
	1700	15	1	700	1.591 - 1.700	10	212004	
	1950	15	2	1.050	1.701 - 1.950	10	212005	222635
	2200	15	2	1.050	1.951 - 2.200	10	212006	222636
	2450	15	3	1.050	2.201 - 2.450	10	212007	222637
	2600	15	3	1.050	2.450 - 2.600	10	212728	223008

212008



3.4.1.7 Espagnolettes BS 15 reverse action VZ with offset handle position							No	No Tricoat
silver	840	15	1	190	661 - 840	10	216982	
	1090	15	1	190	841 - 1.090	10	216983	
				300	841 - 1.090	10	212008	
	1340	15	1	190	1.091 - 1.340	10	218079	
				400	1.091 - 1.340	10	212009	
	1590	15	1	400	1.341 - 1.590	10	218503	
				500	1.341 - 1.590	10	212010	222638
	1700	15	1	500	1.591 - 1.700	10	212724	223004
	1950	15	2	400	1.701 - 1.950	10	218504	
				500	1.701 - 1.950	10	218505	
	2200	15	2	400	1.951 - 2.200	10	212727	
				500	1.951 - 2.200	10	212726	223006

3.4.2 Espagnolettes BS 6.5

211983

3.4.2.1 Espagnolettes BS 6.5 FHH VZ							No	No Tricoat
silver	660	6,5	2	190	431 - 660	20	211981	
	840	6,5	2	300	661 - 840	20	211982	
	1090	6,5	2	400	841 - 1.090	20	211983	
	1340	6,5	3	500	1.091 - 1.340	10	211984	
	1590	6,5	3	600	1.341 - 1.590	10	211985	
	1700	6,5	3	700	1.591 - 1.700	10	211986	
	1950	6,5	3	1.050	1.701 - 1.950	10	211987	
	2200	6,5	4	1.050	1.951 - 2.200	10	211988	

218116

3.4.2.2 Espagnolettes BS 6.5 FHH VZ with offset handle position							No	No Tricoat
silver	840	6,5	2	0	190	661 - 840	20	218115
	1090	6,5	0	2	190	841 - 1.090	20	218116
	1340	6,5	0	3	190	1.091 - 1.340	10	218117

213522

3.4.2.3 Espagnolettes BS 6.5 with gearbox reverse action VZ with offset handle position							No	No Tricoat
silver	840	6,5	1	190	661 - 840	10	216353	
	1090	6,5	1	190	841 - 1.090	10	216354	
	1340	6,5	1	190	1.091 - 1.340	10	213522	
				400	1.091 - 1.340	10	213524	
	1590	6,5	1	500	1.341 - 1.590	10	213526	
	1700	6,5	2	500	1.591 - 1.700	10	213529	
				600	1.591 - 1.700	10	213528	
	2200	6,5	2	600	1.951 - 2.200	10	213533	

208325

3.4.2.4 Espagnolettes BS 6.5 centered i.S.							No	No Tricoat
silver	500	6,5	2	390 - 500	20	208323		
	700	6,5	2	501 - 700	20	208324		
	1.000	6,5	2	701 - 1.000	20	208325		
	1.400	6,5	3	1.001 - 1.400	10	208326		
	1.800	6,5	3	1.401 - 1.800	10	208327		

213521

3.4.2.5 Espagnolettes BS 6.5 with gearbox reverse action VZ							No	No Tricoat
silver	660	6,5	0	190	431 - 660	10	213516	
	840	6,5	1	300	661 - 840	10	213520	
	1090	6,5	1	400	841 - 1.090	10	213521	
	1340	6,5	1	500	1.091 - 1.340	10	213523	
	1590	6,5	1	600	1.341 - 1.590	10	213525	
	1700	6,5	2	700	1.591 - 1.700	10	213527	
	1950	6,5	2	1.050	1.701 - 1.950	10	213530	
	2200	6,5	2	1.050	1.951 - 2.200	10	213531	
	2450	6,5	2	1.050	2.201 - 2.450	10	213534	



3.4.3 Espagnolettes with mounted tilt stay

206268



3.4.3.1 Espagnolettes centered i.S. with mounted tilt stay					No	No Tricoat		
							silver	1.000
							206269 ^{1,2}	207552 ^{1,2}
							206270 ^{2,3}	207553 ^{2,3}

¹ One mounted tilt stay.

² The MACO product liability stipulates the additional use of a commercially available restrictor and cleaning stay. Note the max. sash weight for the restrictor and cleaning stay.

³ Two mounted tilt stays.

212702



3.4.3.2 Espagnolettes centered VZ with mounted tilt stay					No	No Tricoat		
							silver	1.000
							212703 ^{1,2}	
							212704 ^{2,3}	

¹ One mounted tilt stay.

² The MACO product liability stipulates the additional use of a commercially available restrictor and cleaning stay. Note the max. sash weight for the restrictor and cleaning stay.

³ Two mounted tilt stays.

206174



3.4.3.3 Espagnolettes VHH i.S. with mounted tilt stay					No	No Tricoat		
							silver	1.250
							212772 ^{2,3}	223010 ^{2,3*}
							206271 ^{2,3}	207555 ^{2,3*}

¹ One mounted tilt stay.

² The MACO product liability stipulates the additional use of a commercially available restrictor and cleaning stay. Note the max. sash weight for the restrictor and cleaning stay.

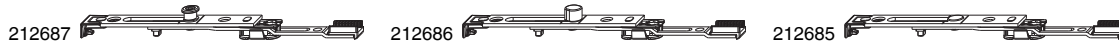
³ Two mounted tilt stays.

94074

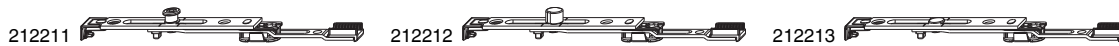


3.4.3.4 Faceplate restrainer for espagnolette		No	No Tricoat
silver	100	94074	

3.5 End pieces



3.5.1 End pieces with 90° restriction (turn-only)					No	No Tricoat
silver	90° top with 1 i.S.	0	1	20	212687	222999*
	90° top with 1 VZ	1	0	20	212686	
	90° top without cam	0	0	20	212685	



3.5.2 End pieces for 180° (T&T, French casement drive gears)					No	No Tricoat
silver	180° bottom and top with 1 i.S.	0	1	20	212211	222927
	180° bottom and top with 1 VZ	1	0	20	212212	
	180° bottom and top without cam	0	0	20	212213	222929



3.5.3 End pieces top for half round windows					No	No Tricoat
silver	top with 1 i.S.	450 - 1.000	1	20	205177¹	207556¹
	croppable 1090/600 top with 3 i.S.	671 - 1.250	3	10	209033¹	
	for turn-only window top with 2 i.S.	671 - 1.250	2	10	212963¹	223014¹

¹ Use possible only with 1-sashed windows.



3.5.4 Tilt locks for drive gears				No	No Tricoat
silver	with tilt lock bolt for windows bottom	470 - 1.750	20	212689	223001*
	with tilt lock bolt for doors bottom	1.751 - 2.250	20	212688	223000



3.5.5 End pieces bottom for drive gears VHH					No	No Tricoat
silver	bottom with 1 i.S.	1.340 - 2.450	1	20	205644¹	207558^{1*}
	with tilt lock bolt for doors bottom	1.701 - 2.450	0	20	203744²	207560²

¹ For burglar-resistant windows according to standard EN 1627.

² For use with drive gears with 170 mm notch.



3.5.6 End piece bottom MM with reverse action for turn-only windows with shootbolt				No	No Tricoat
silver		500 - 2.350	20	225092	








3.5.7 End pieces top for reverse action espagnolette				No	No Tricoat
silver	for reverse action espagnolette top with shootbolt	431 - 2.450	20	208432	222624*
	for reverse action espagnolette top with extendable shootbolt protrusion slanted on one side	431 - 2.450	100	214013	
	for reverse action espagnolette top with extendable shootbolt protrusion slanted on both sides	431 - 2.450	100	214014	
	for reverse action espagnolette lockcase top with extendable shootbolt protrusion	431 - 2.450	100	214015	
	for reverse action espagnolette top with extendable shootbolt protrusion	431 - 2.450	20	214016	223046
	for reverse action espagnolette extendable top with extendable shootbolt protrusion slanted on one side, right	431 - 2.450	100	218977	
	for reverse action espagnolette extendable top with extendable shootbolt protrusion slanted on one side, left	431 - 2.450	100	218978	

* TRICOAT-PLUS standard parts

3.6 Balcony door locks B-TV








203834

3.6.1 Balcony door locks B-TV E85 with PC		L						No	No Tricoat
silver	fixed handle height with 2 i.S. cams	1.347	28	8	1.050	85	5	203834	
			35	8	1.050	85	5	203835	
			40	8	1.050	85	5	203836	
			45	8	1.050	85	5	203837	
			50	8	1.050	85	5	203838	
			55	8	1.050	85	5	203839	








203696

3.6.2 Balcony door locks B-TV E92 with PC		L						No	No Tricoat
silver	fixed handle height with 2 i.S. cams	1.347	25	8	1.050	92	5	203828	
			28	8	1.050	92	5	203696	
			35	8	1.050	92	5	203829	
			40	8	1.050	92	5	203830	
			45	8	1.050	92	5	203831	
			50	8	1.050	92	5	203832	
			55	8	1.050	92	5	203833	



203841

3.6.3 Balcony door locks B-TV E94 with RC		L						No	No Tricoat
silver	fixed handle height with 2 i.S. cams	1.347	35	8	1.050	94	5	203841	
			40	8	1.050	94	5	203842	
			45	8	1.050	94	5	203843	
			50	8	1.050	94	5	203844	
			55	8	1.050	94	5	203845	

**MACO
MULTI-MATIC**



Drive gears

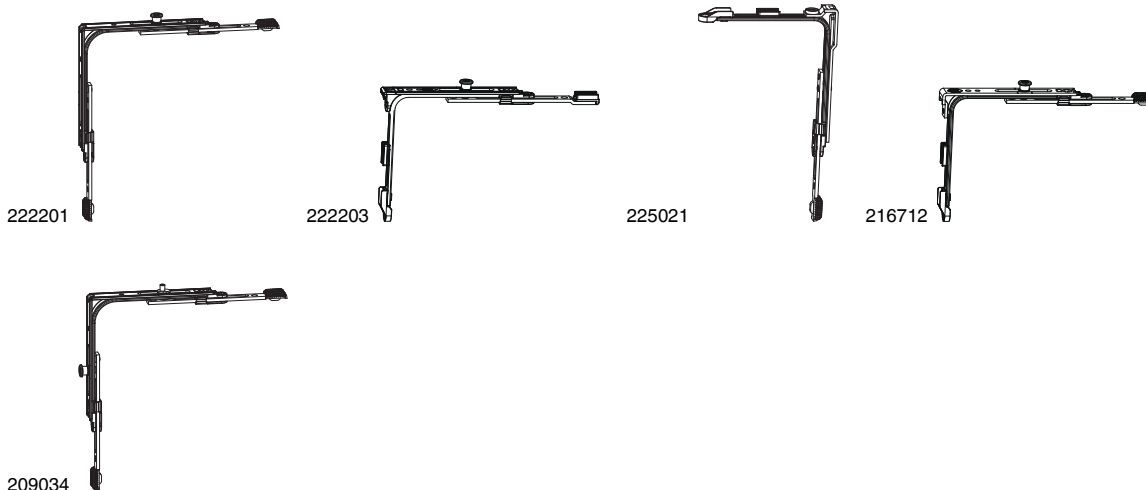


4 Corner elements

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4 Corner elements

4.1 Corner elements i.S.



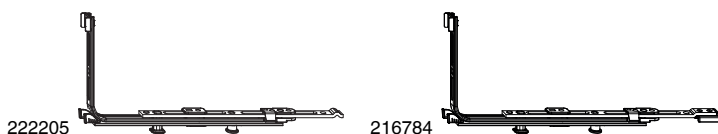
4.1.1 Corner elements standard i.S.					No	No Tricoat
silver	with 1 i.S.	320 - 1.800	360 - 2.800	50	222201	207564*
	with 2 i.S.	320 - 1.800	360 - 2.800	50	222202	207567*
	short with 1 i.S.	220 - 319	275 - 359	50	222203¹	207566^{2*}
	short with shootbolt protrusion and faceplate fixing	225 - 319	275 - 359	50	225021³	
	short with faceplate fixing with 1 i.S.	225 - 324	280 - 364	50	216712³	218976³
	for night ventilation with 1 i.S.	320 - 1.800	360 - 2.800	50	209034	
	with 5 ventilation positions with 1 i.S.	400 - 1.000	800 - 1.700	30	101879⁴	103777^{4*}
for turn-only window with 1 i.S.	320 - 1.800	360 - 2.800	50	209610	218078	

¹ Countersunk head screw M4x8 mm item no. 101339 included.

² Countersunk head screw M4x8 mm item no. 101683 included.

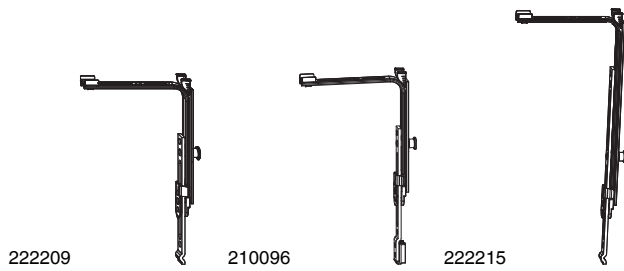
³ Countersunk head screw M4x6 mm item no. 455461 included.

⁴ Observe rebate depth with timber!

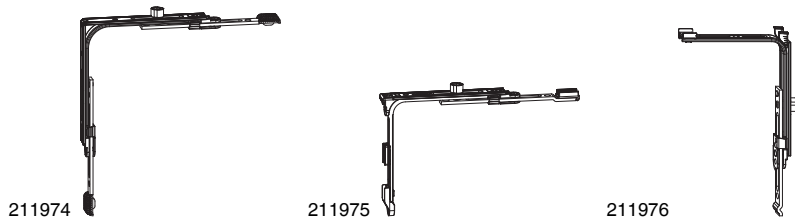


4.1.2 Corner elements horizontal i.S.				No	No Tricoat
silver	horizontal with 1 i.S.	320 - 750	50	222204¹	
	horizontally extendable with 1 i.S.	320 - 1.800	50	222205¹	207569^{1*}
	with serrated carrier horizontally extendable with 1 i.S.	320 - 1.800	50	216784¹	219370¹

¹ In combination with rebated corner supports possible from SRW 365 mm.



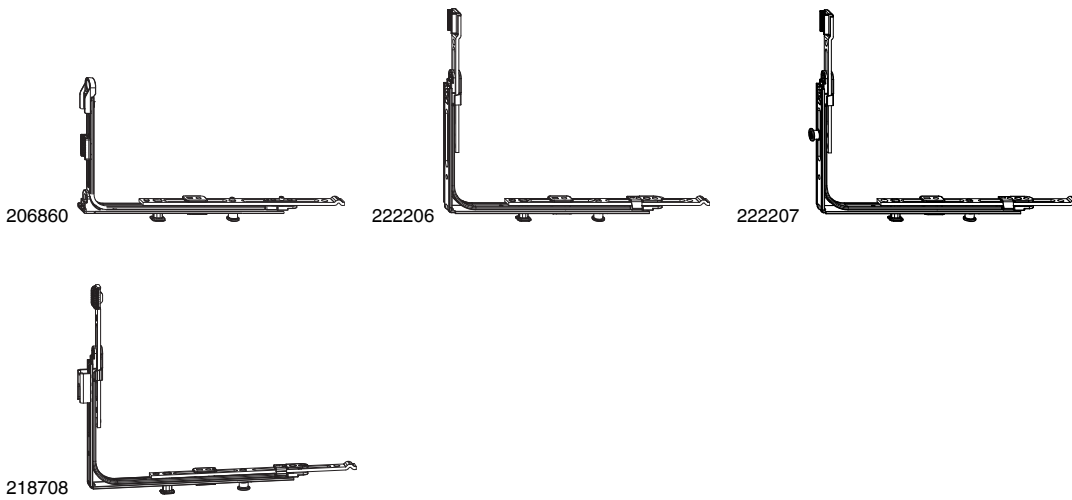
4.1.3 Corner elements vertical i.S.				No	No Tricoat
silver	vertical with 1 i.S.	470 - 750	50	222208	218232
	vertically extendable with 1 i.S.	750 - 2.800	50	222209	207575*
	vertically extendable without i.S. cams	750 - 2.800	50	222214	209792*
	with serrated carrier vertically extendable with 1 i.S.	750 - 2.800	10	210096	211241
	vertically extendable with 1 i.S.	750 - 2.800	50	222215	207576*



4.2 Corner elements VZ					No	No Tricoat
silver	with 1 VZ	320 - 1.800	360 - 2.800	50	211974	
	short with 1 VZ	220 - 319	275 - 359	50	211975¹	
	vertically extendable with 1 VZ	320 - 1.800	750 - 2.800	50	211976	
	for night ventilation with 1 VZ	320 - 1.800	360 - 2.800	50	228430	
	with 5 ventilation positions with 1 VZ	400 - 1.000	800 - 1.700	30	105309²	

¹ Countersunk head screw M4x8 mm item no. 101339 included.

² Observe rebate depth with timber!

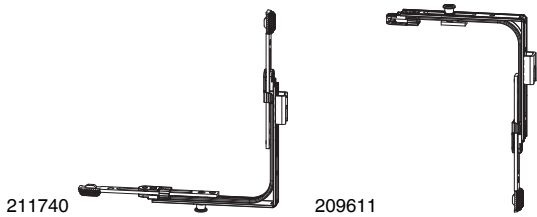
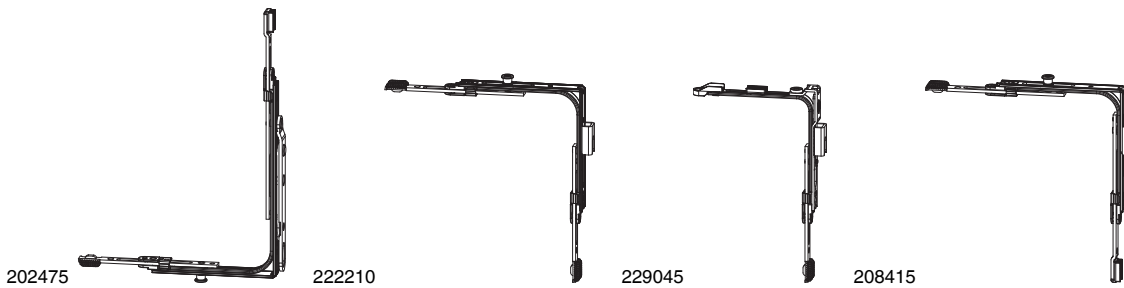


4.3 Corner elements i.S. for drive gears VHH					No	No Tricoat
silver	short for variable espagnolettes horizontally extendable with 1 i.S.	320 - 1.800	250 - 650	50	206860 ^{1,2}	207572 ^{1,3}
	for variable drive gear horizontally extendable with 1 i.S.	320 - 1.800	470 - 2.800	50	222206 ¹	207570 ^{1*}
	for variable drive gear horizontally extendable with 2 i.S.	320 - 1.800	470 - 2.800	50	222207 ¹	207571 ^{1*}
	for variable drive gear for tilt-first horizontally extendable with 2 i.S.	320 - 1.800	470 - 2.800	50	211934 ¹	
	for variable drive gear horizontally extendable with 1 i.S. cam and striker	320 - 1.800	470 - 2.800	50	218708 ¹	

¹ In combination with rebated corner supports possible from SRW 365 mm.

² Countersunk head screw M4x8 mm item no. 101339 included.

³ Countersunk head screw M4x8 mm item no. 101683 included.



4.4 Corner elements i.S. for French casement drive gears					No	No Tricoat
silver	variable 1250 concealed with 1 i.S.		801 - 1.250	10	205973¹	
	variable 1250 with reverse-action lever with 1 i.S.		801 - 1.250	10	202475²	207578²
	2-sashed with 1 i.S. cam and striker	320 - 1.800	360 - 2.800	20	222210	207565*
	2-sashed short with shootbolt protrusion and welded-on striker	225 - 319	275 - 359	50	229045	
	2-sashed RC2 with sliding locks with 1 i.S.	320 - 1.800	360 - 2.800	20	208415³	214184^{3*}
	2-sashed RC2 with striker for bottom	320 - 1.800	841 - 2.800	50	211740	214185
	2-sashed for turn-only window with 1 i.S. cam and striker	320 - 1.800	360 - 2.800	20	209611	216970

¹ For French casement drive gear 1250 VHH for mullion profile (item no. 205970)!

² For French casement drive gear 1250 VHH (item no. 202471)!

³ For burglar-resistant windows according to standard EN 1627.

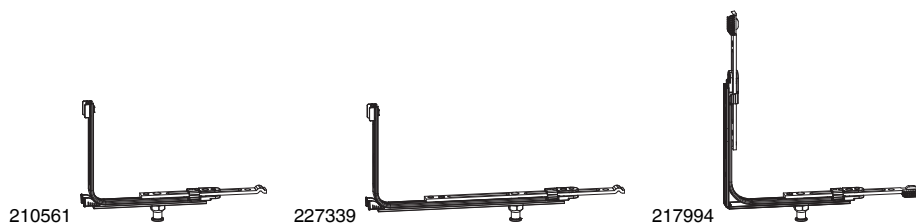


4.5 Corner elements i.S. for angled windows				No	No Tricoat
silver	with 1 i.S.	440 - 1.300	20	222212	207568
	with 2 i.S.	440 - 1.300	20	214990	217161
	short with 1 i.S.	330 - 1.300	50	209655	217160

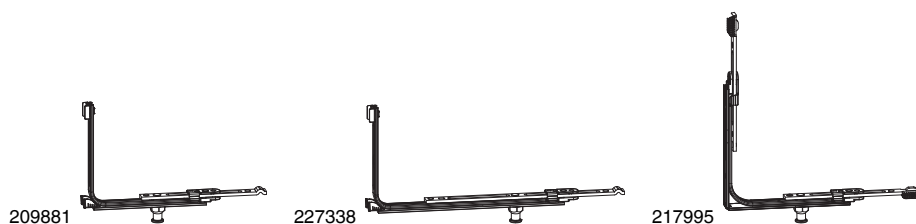


4.6 Corner elements i.S. for half round windows				No	No Tricoat
silver	horizontally croppable with 1 i.S.	450 - 1.300	10	222211¹	207573¹
	for tilt lock bolt horizontally croppable without cam	450 - 1.300	10	215216¹	
	4 mm air gap horizontally croppable with 1 i.S.	450 - 1.300	10	218072¹	
	for variable drive gear horizontally croppable with 2 i.S.	450 - 1.300	10	222213¹	207574¹
	for variable drive gear 4 mm air gap horizontally croppable with 2 i.S.	450 - 1.300	10	218071¹	

¹ Use short corner element and drill-in pivot post for SRW below 380 mm.



4.7 Corner element for threshold 14 mm air gap				No	No Tricoat
silver	corner element MM for threshold	260 - 1.800	50	210561	218229
	corner element MM for threshold for EH	320 - 1.800	50	227339	
	corner element MM for threshold for variable drive gear	260 - 1.800	50	217994	




4.8 Corner element for threshold 18 mm air gap				No	No Tricoat
silver	corner element MM for threshold	260 - 1.800	50	209881	211722*
	corner element MM for threshold for EH	320 - 1.800	50	227338	
	corner element MM for threshold for variable drive gear	260 - 1.800	50	217995	


* TRICOAT-PLUS standard parts


4.9 Accessories for corner elements

357081  355418  43625 


4.9.1 Travel restrictions			No	No Tricoat
silver	90° travel restriction surface-mounted	200	357081 ¹	357887 ^{1*}
white	clip-on 90° travel-restriction MM PVC	200	355418 ¹	
	90° travel restriction surface-mounted PVC	200	43625 ¹	

¹ Can also be supplied in quantities less than one packaging unit.

101339 

4.9.2 Countersunk screw M4x8 for short corner element MM		L		No	No Tricoat
silver		8	50	101339	101683

355678 

4.9.3 Faceplate restrainer MM			No	No Tricoat
silver		100	355678 ¹	

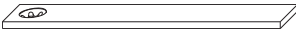
¹ Can also be supplied in quantities less than one packaging unit.

352980 

4.9.4 Adapter component straight punch MM/replacement part			No	No Tricoat
silver		100	352980 ^{1,2}	357877 ^{1,2*}


¹ Can also be supplied in quantities less than one packaging unit.

² Creates no positive connection.


357960 

4.9.5 Faceplate strip cover MM		L		No	No Tricoat
silver		90	100	357960	364410

354966 


4.9.6 Cropped area cover caps MM			No	No Tricoat
silver		100	354966	
	with imprint MACO 2-coloured	100	357252	

358368 

4.9.7 Connecting plate MM EH			No	No Tricoat
silver		100	358368 ¹	385036 ¹

¹ For burglar-resistant windows according to standard EN 1627.



363796 

4.9.8	Insert as operation lock for corner element MM for 3-sashed elements		No	No Tricoat
silver		50	363796	


104256 

4.9.9	Adhesive film for corner element for angled windows		No	No Tricoat
silver		100	104256	

366348 

4.9.10	Run-up for horizontal corner element MM		No	No Tricoat
white		100	366348	

44273 

4.9.11	Clip-on component for serrated carrier punched		No	No Tricoat
white		200	44273	






5 Centre locks / Horizontal tilt locks / Faceplate extensions

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5 Centre locks / Horizontal tilt locks / Faceplate extensions

201751 

5.1 Centre locks FHH i.S.				L			No	No Tricoat
silver	1280	with 1 i.S.	1	470	801 - 1.280	20	201751	209781*
	1500	with 1 i.S.	1	705	1.281 - 1.500	20	201752	209782*

201840 

201754 

5.2 Centre locks extendable i.S.				L			No	No Tricoat
silver	1280V	with 1 i.S.	1	470	801 - 1.280	20	201840 ¹	207446 ¹ *
	1500V	with 1 i.S.	1	705	1.281 - 1.500	20	201753	207447*
	Use 201753 and 201840 for application range 1501-1700 mm.							
	2200V	with 2 i.S.	2	1.410	1.701 - 2.200	10	201754	209783*

¹ Possible only from 850 mm SRH/SRW when using a rebated corner support!

215272 

5.3 Centre locks extendable VZ				L			No	No Tricoat
silver	1280V	with 1 VZ	1	470	801 - 1.280	20	215272 ¹	

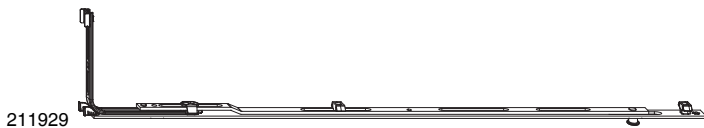
¹ Possible only from 850 mm SRH/SRW when using a rebated corner support!



5.4 Centre locks reverse action i.S.



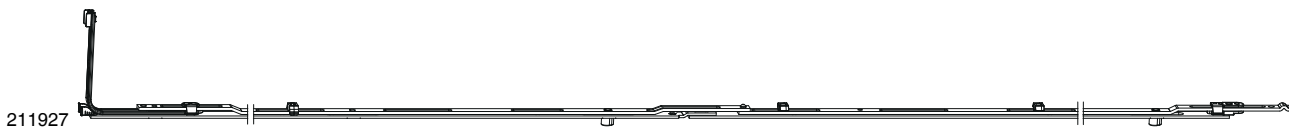
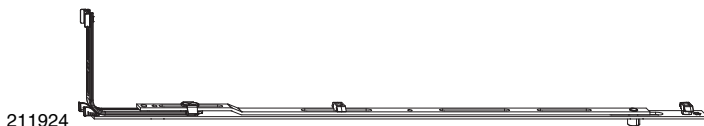
silver	centre lock horizontal reverse action MM	with 2 i.S.	2	360	20	229393	
				470	20	224130	
	centre lock vertical reverse action MM	with 2 i.S.	2	470	20	224131	



5.5 Centre locks single piece i.S.



silver	700	with 1 i.S.	1	480 - 700	20	218493	
	Use 215449 (single-piece centre lock size 840) for application range 701-800 mm.						
	1280	with 1 i.S.	1	801 - 1.280	20	211929	222786*
	1500	with 1 i.S.	1	1.281 - 1.500	20	211930	222787*
		with 2 i.S.	2	1.281 - 1.500	20	215696	218777
	2000	with 2 i.S.	2	1.501 - 2.000	10	211931	222788*
	2200V	with 2 i.S.	2	2.001 - 2.200	10	211932	222789*
	2450	with 3 i.S.	3	2.201 - 2.450	10	211933	222790*



5.6 Centre locks single piece VZ






silver	700	with 1 VZ	1	480 - 700	20	228398	
	1280	with 1 VZ	1	801 - 1.280	20	211924	
	1500	with 1 VZ	1	1.281 - 1.500	20	211925	
	2000	with 2 VZ	2	1.501 - 2.000	10	211926	
	2200V	with 2 VZ	2	2.001 - 2.200	10	211927	
	2450	with 3 VZ	3	2.201 - 2.450	10	211928	



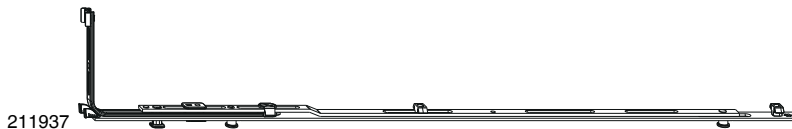
215463






5.7 Centre locks single piece EH						No	No Tricoat
silver	700	with 2 i.S.	2	480 - 700	20	215448 ¹	223265 ^{1*}
	840	with 2 i.S.	2	701 - 840	20	215449 ^{1,2}	223266 ^{1,2*}
	1090	with 2 i.S.	2	841 - 1.090	20	215450 ¹	223267 ¹
	1200	with 3 i.S.	3	1.091 - 1.200	20	215451 ¹	223268 ¹
	1340	with 3 i.S.	3	1.201 - 1.340	20	215452 ¹	223269 ¹
	1450	with 3 i.S.	3	1.341 - 1.450	20	215453 ¹	223270 ¹
	1590	with 3 i.S.	3	1.451 - 1.590	10	215454 ¹	223271 ¹
	1700	with 3 i.S.	3	1.591 - 1.700	20	215455 ¹	223272 ¹
	1850	with 3 i.S.	3	1.701 - 1.850	10	215456 ¹	223273 ¹
	1950	with 3 i.S.	3	1.851 - 1.950	10	215457 ¹	
	2000	with 4 i.S.	4	1.951 - 2.000	20	215458 ¹	223275 ¹
	2100	with 4 i.S.	4	2.001 - 2.100	10	215459 ¹	223276 ¹
	2300	with 4 i.S.	4	2.101 - 2.300	10	215460 ¹	223277 ¹
	2450	with 4 i.S.	4	2.301 - 2.450	10	215461 ¹	223278 ¹
	2500	with 4 i.S.	4	2.451 - 2.500	10	215462 ¹	223279 ¹
	2600V	with 4 i.S.	4	2.501 - 2.600	10	215463 ¹	223280 ¹

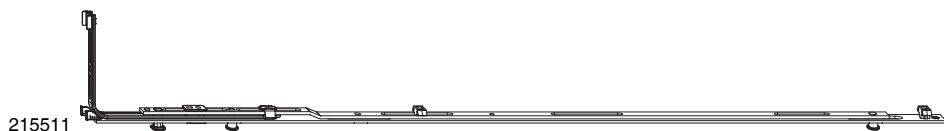
¹ For burglar-resistant windows according to standard EN 1627.

² As for single-piece centre lock 1280 but with 2 i.S.



211937

5.8 Tilt locks single piece i.S.						No	No Tricoat
silver	1280	with 2 i.S.	2	801 - 1.280	20	211937	222791*
	1500	with 2 i.S.	2	1.281 - 1.500	20	211938	222792*



5.9 Tilt locks single piece EH						No	No Tricoat
silver	480	with 2 i.S.	2	350 - 524	20	215880 ¹	223287 ^{1*}
	700	with 2 i.S.	2	525 - 700	20	215509 ¹	223281 ^{1*}
	800	with 2 i.S.	2	701 - 800	20	215510 ¹	
	For application range 801-900 mm use single-piece tilt lock 211937 (size 1280).						
	1150	with 2 i.S.	2	901 - 1.150	20	215511 ¹	223283 ¹
	1280	with 2 i.S.	2	801 - 1.280	20	211937 ¹	222791 ^{1*}
	1500	with 3 i.S.	3	1.301 - 1.500	20	215513 ¹	223285 ^{1*}

¹ For burglar-resistant windows according to standard EN 1627.



5.10 Faceplate extensions fixed and extendable				L		No	No Tricoat
silver	faceplate extension without serrated carrier MM	with 1 i.S.	1	235	20	210496	218772
		with 2 i.S.	2	235	20	214547	
	faceplate extension MM, extendable		0	138,5	20	206630	207443*
		with 1 i.S.	1	138,5	20	201841	207442*
			0	235	20	206197	207445*
		with 1 i.S.	1	235	20	201750	207444*
		with 2 i.S.	2	235	20	214546	
		with sash lifter	0	235	20	212214	
		with pull-in wedge right	0	235	20	217865	
		with pull-in wedge left	0	235	20	217866	



5.11 Faceplate extensions croppable MM			L			No	No Tricoat
silver	515	with sash lifter	515	250	20	218214	
		with sash-lifter run-up	515	250	20	218215	



5.12 Faceplate extensions croppable MM B-TV				L			No	No Tricoat
silver	1950	with 1 i.S.	1	497	260	10	203697	
	2200	with 1 i.S.	1	747	260	10	203698	
	2450	with 2 i.S.	2	997	260	10	203699	



5.13 Faceplate extensions for threshold 14 mm air gap		L		No	No
				Tricoat	
silver	faceplate extension MM, extendable 235	235	10	227619	



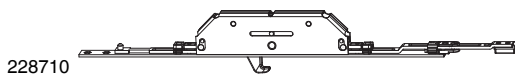
5.14 Centre locks for threshold 14 mm air gap				No	No
				Tricoat	
silver	centre lock extendable MM 1280V	801 - 1.280	10	210562	
	centre lock extendable MM 1500V	1.281 - 1.500	10	210563	



5.15 Faceplate extensions for threshold 18 mm air gap		L		No	No
				Tricoat	
silver	faceplate extension MM, extendable 235	235	10	214848	



5.16 Centre locks for threshold 18 mm air gap				No	No
				Tricoat	
silver	centre lock extendable MM 1280V	801 - 1.280	10	209882	211723
	centre lock extendable MM 1500V	1.281 - 1.500	10	209883	



5.17 Hook closure horizontally extendable		L			No	No
					Tricoat	
silver	for 7.5 mm air gap	349	540 - 1.800	10	228710	



5.18 Height connectors SKB-S/SE				No	No	
				Tricoat		
silver	with 1 i.S.	1090	841 - 1.090	10	210335	211234
		1340	1.091 - 1.340	10	210336	211235
	with 2 i.S.	1590	1.341 - 1.590	10	210337	211236
		1700	1.591 - 1.700	10	210338	211237
	with 3 i.S.	1950	1.701 - 1.950	10	210339	211238
		2200	1.951 - 2.200	10	210340	211239
	with 4 i.S.	2450	2.201 - 2.450	10	210341	211240



5.19 Width connectors SKB-S/SE				No	No	
				Tricoat		
silver	with 1 i.S.	900	620 - 900	20	210380	211229
		1150	901 - 1.150	20	210381	211231
		1400	1.151 - 1.400	20	210382	211232
	with 2 i.S.	1650	1.401 - 1.650	10	210383	211233



6 Scissor stays





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6 Scissor stays

6.1 Rebated scissor stays

201821 



201827 

6.1.1 Scissor stay faceplates i.S. with night-vent						No	No Tricoat	
silver	right	400	0	320 - 400	220 - 320	20	201821	207601
		600	0	401 - 600	290 - 490	20	201823	207603
		800	0	601 - 800	491 - 690	20	204115	207605
		1050	1	801 - 1.050		20	201827^{1,2}	207607^{1,2}
	left	1300	1	1.051 - 1.300		20	201829¹	207609¹
		400	0	320 - 400	220 - 320	20	201822	207602
		600	0	401 - 600	290 - 490	20	201824	207604
		800	0	601 - 800	491 - 690	20	204116	207606
		1050	1	801 - 1.050		20	201828^{1,2}	207608^{1,2}
		1300	1	1.051 - 1.300		20	201830¹	207610¹

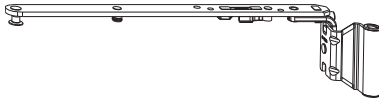
¹ A stabilizing scissor stay is compulsory from a SRW of 1301 mm.

² Use scissor stay arm size 1300.

201855 

6.1.2 Scissor stay arms with night-vent				No	No Tricoat	
silver	right	400	220 - 400	20	201853¹	207611¹
		600	401 - 600	20	201855¹	207613¹
		800	601 - 800	20	204117¹	207615¹
		1300	801 - 1.300	20	201857¹	207617¹
	left	400	220 - 400	20	201854¹	207612¹
		600	401 - 600	20	201856¹	207614¹
		800	601 - 800	20	204118¹	207616¹
		1300	801 - 1.300	20	201858¹	207618¹

¹ Use only for "horizontal tilt position" (sash can be pry opened at "vertical tilt position").



202924

6.1.3 Scissor stay arms with night-vent and pre-mounted rebated scissor stay support arm AS/PVC							No	No Tricoat	
silver	right	12/20-13	400	220 - 400	120	20	202922 ¹		
			600	401 - 600	120	20	202924 ¹		
			800	601 - 800	120	20	204436 ¹		
			1300	801 - 1.300	120	20	202926 ¹		
	left	12/20-13	400	220 - 400	120	20	202923 ¹		
			600	401 - 600	120	20	202925 ¹		
			800	601 - 800	120	20	204437 ¹		
			1300	801 - 1.300	120	20	202927 ¹		
	traffic white RAL 9016	right	12/20-13	400	220 - 400	120	20	202928 ¹	
				600	401 - 600	120	20	202930 ¹	
				800	601 - 800	120	20	204438 ¹	
				1300	801 - 1.300	120	20	202932 ¹	
left		12/20-13	400	220 - 400	120	20	202929 ¹		
			600	401 - 600	120	20	202931 ¹		
			800	601 - 800	120	20	204439 ¹		
			1300	801 - 1.300	120	20	202933 ¹		

¹ Use only for "horizontal tilt position" (sash can be pry opened at "vertical tilt position").

211128



6.1.4 Scissor stay faceplates i.S.								No	No Tricoat	
silver	400	0	320 - 400	220 - 320	20			206862	209785	
	600	0	401 - 600	290 - 490	20			206863	209786	
	800	0	601 - 800	491 - 690	20			206864	209787	
		1	630 - 800	520 - 690	10			211128		
	1050	1	801 - 1.050		20			206865 ^{1,2}	209788 ^{1,2}	
	1300	1	1.051 - 1.300			20			206866 ¹	209807 ¹

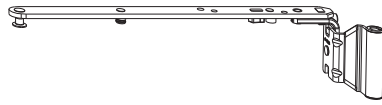
¹ A stabilizing scissor stay is compulsory from a SRW of 1301 mm.

² Use scissor stay arm size 1300.



207122

6.1.5 Scissor stay arms						No	No Tricoat
silver	400	220 - 400	20	206856	209784		
	600	401 - 600	20	207122	209789		
	800	601 - 800	20	207123	209790		
	1300	801 - 1.300	20	207124	209791		



209270

6.1.6 Scissor stay arms with pre-mounted rebated scissor stay support arm AS/PVC							No	No Tricoat
silver	right	12/20-13	400	220 - 400	120	20	209268	
			600	401 - 600	120	20	209270	
			800	601 - 800	120	20	209272	
			1300	801 - 1.300	120	20	209274	
	left	12/20-13	400	220 - 400	120	20	209269	
			600	401 - 600	120	20	209271	
			800	601 - 800	120	20	209273	
			1300	801 - 1.300	120	20	209275	
traffic white RAL 9016	right	12/20-13	400	220 - 400	120	20	209539	
			600	401 - 600	120	20	209541	
			800	601 - 800	120	20	209543	
			1300	801 - 1.300	120	20	209545	
	left	12/20-13	400	220 - 400	120	20	209540	
			600	401 - 600	120	20	209542	
			800	601 - 800	120	20	209544	
			1300	801 - 1.300	120	20	209546	

211904



6.1.7 Rebated scissor stays i.S.								No	No Tricoat
silver	scissor stay mounted MM	400	0	320 - 400	220 - 320	20	211694	222727*	
		600	0	401 - 600	290 - 490	20	211695	222728*	
		800	0	601 - 800	491 - 690	20	211696	222729*	
			1	630 - 800		20	211904	222772*	
		1050	1	801 - 1.050		20	211905¹	222773^{1*}	
		1300	1	1.051 - 1.300		20	211906¹	222774^{1*}	

¹ A stabilizing scissor stay is compulsory from a SRW of 1301 mm.

211697



6.1.8 Rebated scissor stays VZ								No	No Tricoat
silver	scissor stay mounted MM	400	0	320 - 400	220 - 320	20	211694	222727*	
		600	0	401 - 600	290 - 490	20	211695	222728*	
		800	0	601 - 800	491 - 690	20	211696	222729*	
			1	630 - 800		20	211697		
		1050	1	801 - 1.050		20	211698¹		
		1300	1	1.051 - 1.300		20	211699¹		

¹ A stabilizing scissor stay is compulsory from a SRW of 1301 mm.

211898



6.1.9 Rebated scissor stays i.S. with night-vent							No	No Tricoat	
silver	right	scissor stay mounted MM	400	0	320 - 400	220 - 320	20	211673 ¹	222715 ^{1*}
			600	0	401 - 600	290 - 490	20	211675 ¹	222717 ^{1*}
			800	0	601 - 800	491 - 690	20	211677 ¹	222719 ^{1*}
				1	630 - 800		20	211898 ¹	
			1050	1	801 - 1.050		20	211900 ^{1,2}	222768 ^{1,2*}
			1300	1	1.051 - 1.300		20	211902 ^{1,2}	222770 ^{1,2}
	left	scissor stay mounted MM	400	0	320 - 400	220 - 320	20	211674 ¹	222716 ^{1*}
			600	0	401 - 600	290 - 490	20	211676 ¹	222718 ^{1*}
			800	0	601 - 800	491 - 690	20	211678 ¹	222720 ^{1*}
				1	630 - 800		20	211899 ¹	
			1050	1	801 - 1.050		20	211901 ^{1,2}	222769 ^{1,2*}
			1300	1	1.051 - 1.300		20	211903 ^{1,2}	222771 ^{1,2}

¹ Use only for "horizontal tilt position" (sash can be pry opened at "vertical tilt position").
² A stabilizing scissor stay is compulsory from a SRW of 1301 mm.

211679



6.1.10 Rebated scissor stays VZ with night-vent							No	No Tricoat	
silver	right	scissor stay mounted MM	400	0	320 - 400	220 - 320	20	211673 ¹	222715 ^{1*}
			600	0	401 - 600	290 - 490	20	211675 ¹	222717 ^{1*}
			800	0	601 - 800	491 - 690	20	211677 ¹	222719 ^{1*}
				1	630 - 800		20	211679 ¹	
			1050	1	801 - 1.050		20	211681 ^{1,2}	
			1300	1	1.051 - 1.300		20	211683 ^{1,2}	
	left	scissor stay mounted MM	400	0	320 - 400	220 - 320	20	211674 ¹	222716 ^{1*}
			600	0	401 - 600	290 - 490	20	211676 ¹	222718 ^{1*}
			800	0	601 - 800	491 - 690	20	211678 ¹	222720 ^{1*}
				1	630 - 800		20	211680 ¹	
			1050	1	801 - 1.050		20	211682 ^{1,2}	
			1300	1	1.051 - 1.300		20	211684 ^{1,2}	

¹ Use only for "horizontal tilt position" (sash can be pry opened at "vertical tilt position").
² A stabilizing scissor stay is compulsory from a SRW of 1301 mm.

202318



6.1.11 Rebated scissor stays i.S. for angled windows							No	No Tricoat	
silver			630	0	430 - 630	80	10	202316	207622
			800	0	500 - 800	80	10	202317	207623
				1	631 - 800	80	10	208892	
			1050	1	801 - 1.050	80	10	202318	207624
			1300	1	1.051 - 1.300	80	10	202319	207625

207621

6.1.12 Rebated scissor stays i.S. for half round windows		L						No	No Tricoat	
silver	9 mm offset	1250	745	335	450 - 1.625	450 - 1.250	80	10	206597 ^{1,2,3}	207621 ^{1,2,3}
	13 mm offset	1250	745	335	450 - 1.625	450 - 1.250	80	10	218202 ^{1,2,3}	226243 ^{1,2,3}

¹ For elliptical arched windows the application range SRH increases about 78 mm.

² From SRW 1001 mm, use of the stabilizing scissor stay is mandatory.

³ Use notch as reference point for screw positions.

204829

6.1.13 Tilt-first scissor stay faceplates i.S.						No	No Tricoat
silver	400	0	320 - 400	220 - 320	10	204826	
	600	0	401 - 600	290 - 490	10	204827	
	800	0	601 - 800	491 - 690	10	204828	
	1050	1	801 - 1.050		10	204829 ^{1,2}	
	1300	1	1.051 - 1.300		10	204830 ¹	

¹ A stabilizing scissor stay is compulsory from a SRW of 1301 mm.

² Use scissor stay arm size 1300.

204832

6.1.14 Tilt-first scissor stay arms				No	No Tricoat
silver	400	220 - 400	10	204831	
	600	401 - 600	10	204832	
	800	601 - 800	10	204833	
	1300	801 - 1.300	10	204834	

212081

6.1.15 Tilt-first rebated scissor stays i.S.						No	No Tricoat	
silver	scissor stay mounted MM	400	0	320 - 400	220 - 320	10	212077	222882
		600	0	401 - 600	290 - 490	10	212078	222883
		800	0	601 - 800	491 - 690	10	212079	222884
			1	630 - 800		10	212080	222885
		1050	1	801 - 1.050		10	212081 ¹	222886 ¹
		1300	1	1.051 - 1.300		10	212082 ¹	222887 ¹

¹ A stabilizing scissor stay is compulsory from a SRW of 1301 mm.



6.2 Rebated scissor stays MULTI MAMMUT



223612

6.2.1 Rebated scissor stays MULTI MAMMUT 9 mm offset								No	No Tricoat		
silver	right	12/18-9	670	0	401 - 670	310 - 400	220	10	223594	223690	
			900	1	671 - 900	601 - 670	220	10	223596	223692	
			1200	1	901 - 1.200		220	10	223598	223694	
			1500	2	1.201 - 1.500		220	10	223600 ¹	223696 ¹	
	left	12/18-9	670	0	401 - 670	310 - 400	220	10	223595	223691	
			900	1	671 - 900	601 - 670	220	10	223597	223693	
			1200	1	901 - 1.200		220	10	223599	223695	
			1500	2	1.201 - 1.500		220	10	223601 ¹	223697 ¹	
	right	12/20-9	670	0	401 - 670	310 - 400	220	10	223610	223706	
			900	1	671 - 900	601 - 670	220	10	223612	223708	
			1200	1	901 - 1.200		220	10	223614	223710	
			1500	2	1.201 - 1.500		220	10	223616 ¹	223712 ¹	
	left	12/20-9	670	0	401 - 670	310 - 400	220	10	223611	223707	
			900	1	671 - 900	601 - 670	220	10	223613	223709	
			1200	1	901 - 1.200		220	10	223615	223711	
			1500	2	1.201 - 1.500		220	10	223617 ¹	223713 ¹	
	traffic white RAL 9016	right	12/18-9	670	0	401 - 670	310 - 400	220	10	223626	
				900	1	671 - 900	601 - 670	220	10	223628	
				1200	1	901 - 1.200		220	10	223630	
				1500	2	1.201 - 1.500		220	10	223632 ¹	
left		12/18-9	670	0	401 - 670	310 - 400	220	10	223627		
			900	1	671 - 900	601 - 670	220	10	223629		
			1200	1	901 - 1.200		220	10	223631		
			1500	2	1.201 - 1.500		220	10	223633 ¹		
right		12/20-9	670	0	401 - 670	310 - 400	220	10	223642		
			900	1	671 - 900	601 - 670	220	10	223644		
			1200	1	901 - 1.200		220	10	223646		
			1500	2	1.201 - 1.500		220	10	223648 ¹		
left		12/20-9	670	0	401 - 670	310 - 400	220	10	223643		
			900	1	671 - 900	601 - 670	220	10	223645		
			1200	1	901 - 1.200		220	10	223647		
			1500	2	1.201 - 1.500		220	10	223649 ¹		

¹ From SRW 1401 mm, use of the stabilizing scissor stay is recommended. From SRW 1401 - 1435 mm, scissor stay size 1200 + stabilizing scissor stay must be used.









223620

6.2.2 Rebated scissor stays MULTI MAMMUT 13 mm offset								No	No Tricoat	
silver	right	12/18-13	670	0	401 - 670	310 - 400	220	10	223602	223698
			900	1	671 - 900	601 - 670	220	10	223604	223700
			1200	1	901 - 1.200		220	10	223606	223702
			1500	2	1.201 - 1.500		220	10	223608¹	223704¹
	left	12/18-13	670	0	401 - 670	310 - 400	220	10	223603	223699
			900	1	671 - 900	601 - 670	220	10	223605	223701
			1200	1	901 - 1.200		220	10	223607	223703
			1500	2	1.201 - 1.500		220	10	223609¹	223705¹
	right	12/20-13	670	0	401 - 670	310 - 400	220	10	223618	223714
			900	1	671 - 900	601 - 670	220	10	223620	223716
			1200	1	901 - 1.200		220	10	223622	223718
			1500	2	1.201 - 1.500		220	10	223624¹	223720¹
	left	12/20-13	670	0	401 - 670	310 - 400	220	10	223619	223715
			900	1	671 - 900	601 - 670	220	10	223621	223717
			1200	1	901 - 1.200		220	10	223623	223719
			1500	2	1.201 - 1.500		220	10	223625¹	223721¹
traffic white RAL 9016	right	12/18-13	670	0	401 - 670	310 - 400	220	10	223634	
			900	1	671 - 900	601 - 670	220	10	223636	
			1200	1	901 - 1.200		220	10	223638	
			1500	2	1.201 - 1.500		220	10	223640¹	
	left	12/18-13	670	0	401 - 670	310 - 400	220	10	223635	
			900	1	671 - 900	601 - 670	220	10	223637	
			1200	1	901 - 1.200		220	10	223639	
			1500	2	1.201 - 1.500		220	10	223641¹	
	right	12/20-13	670	0	401 - 670	310 - 400	220	10	223650	
			900	1	671 - 900	601 - 670	220	10	223652	
			1200	1	901 - 1.200		220	10	223654	
			1500	2	1.201 - 1.500		220	10	223656¹	
	left	12/20-13	670	0	401 - 670	310 - 400	220	10	223651	
			900	1	671 - 900	601 - 670	220	10	223653	
			1200	1	901 - 1.200		220	10	223655	
			1500	2	1.201 - 1.500		220	10	223657¹	

¹ From SRW 1401 mm, use of the stabilizing scissor stay is recommended. From SRW 1401 - 1435 mm, scissor stay size 1200 + stabilizing scissor stay must be used.

6.3 Scissor stays TV

201864 




6.3.1 Scissor stay faceplates TV i.S.							No	No Tricoat
silver	right	600	0	401 - 600	290 - 490	10	201860	
		800	0	601 - 800	491 - 690	10	201862	
		1050	1	801 - 1.050		10	201864	
		1300	1	1.051 - 1.300		10	201866	
	left	600	0	401 - 600	290 - 490	10	201861	
		800	0	601 - 800	491 - 690	10	201863	
		1050	1	801 - 1.050		10	201865	
		1300	1	1.051 - 1.300		10	201867	

211617







55301



6.3.2 Scissor stay arms TV				L				No	No Tricoat
silver	right	13 mm offset	Euro-rebate 30 mm rebate depth	600/800	249	290 - 800	100	10	211615
			PVC	600/800	249	290 - 800	100	10	55299
		Euro-rebate 30 mm rebate depth	1050/1300	430	801 - 1.300	100	10	211617	
			PVC	1050/1300	430	801 - 1.300	100	10	55301
	left	13 mm offset	Euro-rebate 30 mm rebate depth	600/800	249	290 - 800	100	10	211616
			PVC	600/800	249	290 - 800	100	10	55300
		Euro-rebate 30 mm rebate depth	1050/1300	430	801 - 1.300	100	10	211618	
			PVC	1050/1300	430	801 - 1.300	100	10	55302



206073 





6.3.3 Rebated scissor stays TV i.S. for half round windows								No	No Tricoat
silver	right	13 mm offset	620	1	435 - 620	60	10	206073	
			1250	2	621 - 1.250	60	10	206075¹	
	left	13 mm offset	620	1	435 - 620	60	10	206074	
			1250	2	621 - 1.250	60	10	206076¹	

¹ From SRW 1001 mm, use of the stabilizing scissor stay is mandatory.




6.4 Scissor stays INVISIBLE

206816 


206817 




6.4.1 T&T/tilt-first scissor stay faceplates INVISIBLE						No	No Tricoat	
silver		690	0	490 - 690	385 - 600	20	206810	
		800	0	691 - 800	601 - 700	20	206816	
		1050	1	801 - 1.050		20	206817	
		1300	1	1.051 - 1.300		20	217861	

212670 

T 6.4.2 T&T scissor stay arms with hinge INVISIBLE					No	No Tricoat			
silver	screw axis 12 mm	right	9 mm offset	690	385 - 690	80	10	212670¹	
			18 mm rebate depth	800/1050/1300	691 - 1.300	80	10	212666	
		left	9 mm offset	690	385 - 690	80	10	212671¹	
			18 mm rebate depth	800/1050/1300	691 - 1.300	80	10	212667	
	screw axis 13 mm	right	9 mm offset	690	385 - 690	100	10	206336¹	
				800/1050/1300	691 - 1.300	100	10	206349	
		left	9 mm offset	690	385 - 690	100	10	206337¹	
				800/1050/1300	691 - 1.300	100	10	206350	

¹ For combination with turn-only and tilt-only hinge faceplate item no. 208993.

207689 

T 6.4.3 Tilt-first scissor stay arms with hinge INVISIBLE					No	No Tricoat			
silver	screw axis 12 mm	right	9 mm offset	690	385 - 690	80	10	212674	
			18 mm rebate depth	800/1050/1300	691 - 1.300	80	10	212678	
		left	9 mm offset	690	385 - 690	80	10	212675	
			18 mm rebate depth	800/1050/1300	691 - 1.300	80	10	212679	
	screw axis 13 mm	right	9 mm offset	690	385 - 690	100	10	207689	
				800/1050/1300	691 - 1.300	100	10	207699	
		left	9 mm offset	690	385 - 690	100	10	207690	
				800/1050/1300	691 - 1.300	100	10	207700	

6.5 Scissor stays MULTI POWER

217348

6.5.1 T&T/tilt-first scissor stay faceplates MULTI POWER									No	No Tricoat
silver	600	0	465 - 600	370 - 490	150	20	217346	225296*		
		800	601 - 800	491 - 690	150	20	217347	225297*		
	1050	1	801 - 1.050		150	20	217348	225298*		
		1300	1	1.051 - 1.300		150	20	217349 ¹	225299 ^{1*}	

¹ A stabilizing scissor stay is compulsory from a SRW of 1301 mm.

217474

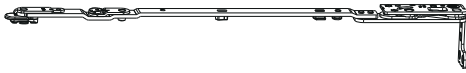
6.5.2 T&T scissor stay arms with hinge for timber MULTI POWER				L				No	No Tricoat	
silver	right	9 mm offset	timber 24 mm rebate depth	600/800	330	370 - 800	150	10	217468	225305*
			1050/1300	442	801 - 1.300	150	10	217472	225309*	
		13 mm offset	timber 24 mm rebate depth	600/800	330	370 - 800	150	10	217470	225307*
			1050/1300	442	801 - 1.300	150	10	217474	225311*	
	left	9 mm offset	timber 24 mm rebate depth	600/800	330	370 - 800	150	10	217469	225306*
			1050/1300	442	801 - 1.300	150	10	217473	225310*	
		13 mm offset	timber 24 mm rebate depth	600/800	330	370 - 800	150	10	217471	225308*
			1050/1300	442	801 - 1.300	150	10	217475	225312*	

217482

6.5.3 T&T scissor stay arms with hinge for PVC MULTI POWER				L				No	No Tricoat	
silver	right	9 mm offset	PVC 30 mm rebate depth	600/800	330	370 - 800	150	10	217476	
			1050/1300	442	801 - 1.300	150	10	217480		
		13 mm offset	PVC 30 mm rebate depth	600/800	330	370 - 800	150	10	217478	225315
			1050/1300	442	801 - 1.300	150	10	217482	225319	
	left	9 mm offset	PVC 30 mm rebate depth	600/800	330	370 - 800	150	10	217477	
			1050/1300	442	801 - 1.300	150	10	217481		
		13 mm offset	PVC 30 mm rebate depth	600/800	330	370 - 800	150	10	217479	225316
			1050/1300	442	801 - 1.300	150	10	217483	225320	

217490

6.5.4 Tilt-first scissor stay arms with hinge for timber MULTI POWER				L				No	No Tricoat	
silver	right	9 mm offset	timber 24 mm rebate depth	600/800	330	370 - 800	150	10	217484	225531
			1050/1300	442	801 - 1.300	150	10	217488	225533	
		13 mm offset	timber 24 mm rebate depth	600/800	330	370 - 800	150	10	217486	225535
			1050/1300	442	801 - 1.300	150	10	217490	225537	
	left	9 mm offset	timber 24 mm rebate depth	600/800	330	370 - 800	150	10	217485	225532
			1050/1300	442	801 - 1.300	150	10	217489	225534	
		13 mm offset	timber 24 mm rebate depth	600/800	330	370 - 800	150	10	217487	225536
			1050/1300	442	801 - 1.300	150	10	217491	225538	



217498

6.5.5 Tilt-first scissor stay arms with hinge for PVC MULTI POWER				L				No	No Tricoat
silver	right	9 mm offset	PVC 30 mm rebate depth	1050/1300	442	801 - 1.300	150 10	217496	
		13 mm offset	PVC 30 mm rebate depth	600/800	330	370 - 800	150 10	217494	225543
				1050/1300	442	801 - 1.300	150 10	217498	225545
	left	9 mm offset	PVC 30 mm rebate depth	1050/1300	442	801 - 1.300	150 10	217497	
		13 mm offset	PVC 30 mm rebate depth	600/800	330	370 - 800	150 10	217495	225544
				1050/1300	442	801 - 1.300	150 10	217499	225546

217564



217566



6.5.6 Scissor stay faceplates with night-vent MULTI POWER								No	No Tricoat
silver	right	600	0	465 - 600	370 - 490	150	20	217562¹	225523^{1*}
		800	0	601 - 800	491 - 690	150	20	217564¹	225525^{1*}
		1050	1	801 - 1.050		150	20	217566¹	225527^{1*}
		1300	1	1.051 - 1.300		150	20	217568^{1,2}	225529^{1,2*}
	left	600	0	465 - 600	370 - 490	150	20	217563¹	225524^{1*}
		800	0	601 - 800	491 - 690	150	20	217565¹	225526^{1*}
		1050	1	801 - 1.050		150	20	217567¹	225528^{1*}
		1300	1	1.051 - 1.300		150	20	217569^{1,2}	225530^{1,2*}

¹ Use only for "horizontal tilt position" (sash can be pry opened at "vertical tilt position").

² A stabilizing scissor stay is compulsory from a SRW of 1301 mm.



217647

T	6.5.7 Scissor stay arms with hinge with night-vent for timber MULTI POWER				L				No	No Tricoat
silver	right	9 mm offset	timber 24 mm rebate depth	600/800	330	370 - 800	150 10	217641¹	225547^{1*}	
				1050/1300	442	801 - 1.300	150 10	217645¹	225549^{1*}	
		13 mm offset	timber 24 mm rebate depth	600/800	330	370 - 800	150 10	217643¹	225551^{1*}	
				1050/1300	442	801 - 1.300	150 10	217647¹	225553^{1*}	
	left	9 mm offset	timber 24 mm rebate depth	600/800	330	370 - 800	150 10	217642¹	225548^{1*}	
				1050/1300	442	801 - 1.300	150 10	217646¹	225550^{1*}	
		13 mm offset	timber 24 mm rebate depth	600/800	330	370 - 800	150 10	217644¹	225552^{1*}	
				1050/1300	442	801 - 1.300	150 10	217648¹	225554^{1*}	

¹ Use only for "horizontal tilt position" (sash can be pry opened at "vertical tilt position").



217655



P	6.5.8 Scissor stay arms with hinge with night-vent for PVC MULTI POWER				L				No	No Tricoat
	Material	Offset	Rebate depth	Window width						
silver	right	9 mm offset	PVC 30 mm rebate depth	600/800	330	370 - 800	150	10	217649 ¹	
		13 mm offset	PVC 30 mm rebate depth	1050/1300	442	801 - 1.300	150	10	217653 ¹	
silver	right	9 mm offset	PVC 30 mm rebate depth	600/800	330	370 - 800	150	10	217651 ¹	225559 ^{1*}
		13 mm offset	PVC 30 mm rebate depth	1050/1300	442	801 - 1.300	150	10	217655 ¹	225561 ^{1*}
	left	9 mm offset	PVC 30 mm rebate depth	600/800	330	370 - 800	150	10	217650 ¹	
		13 mm offset	PVC 30 mm rebate depth	1050/1300	442	801 - 1.300	150	10	217654 ¹	
silver	left	9 mm offset	PVC 30 mm rebate depth	600/800	330	370 - 800	150	10	217652 ¹	225560 ^{1*}
		13 mm offset	PVC 30 mm rebate depth	1050/1300	442	801 - 1.300	150	10	217656 ¹	225562 ^{1*}

¹ Use only for "horizontal tilt position" (sash can be pry opened at "vertical tilt position").



6.6 Comfort scissor stays



6.6.1 Scissor stay faceplates for comfort scissor stay							No	No Tricoat
silver	right	800	0	601 - 800	490 - 600	10	215053	218588
		1050	1	801 - 1.050		10	215055	218590
	left	800	0	601 - 800	490 - 600	10	215054	218589
		1050	1	801 - 1.050		10	215056	218591

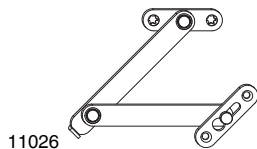


6.6.2 Rebated scissor stay arms for comfort scissor stay							No	No Tricoat
silver	right	800/1050		490 - 1.050	80	10	215051	218049
	left	800/1050		490 - 1.050	80	10	215052	218050



6.7 Tilt stays							No	No Tricoat
silver	tilt stay with fixing tab			204	80	20	209723¹	216249¹
	tilt stay with screwhole mounting			204	80	20	101548¹	209297^{1*}

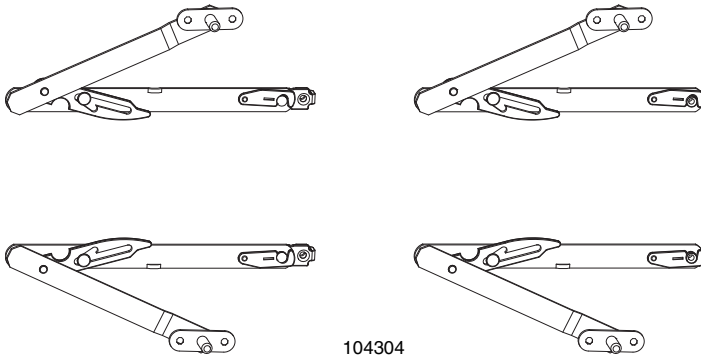
¹ Please note: The minimum sash rebate height depends on window profile or geometry!



6.8 Horizontal tilt stays		L					No	No Tricoat
silver		190	1.400	210 - 800	40	20	11026¹	101354¹
		250	1.400	210 - 800	40	20	11027¹	

¹ Use always two pieces per window!

6.9 Restrictor and cleaning stays



6.9.1 Restrictor and cleaning stays						No	No Tricoat
silver	restrictor and cleaning stay with fixing tab	size 1	300 - 500	40	10	455347 ^{1,2}	210263 ^{1,2}
		size 2	501 - 1.200	40	10	455348 ^{1,3}	211390 ^{1,3}
	restrictor and cleaning stay with screw hole fixing	size 1	300 - 500	40	10	104304 ^{1,2}	
		size 2	501 - 1.200	40	10	104305 ^{1,3}	

¹ One piece = one pair.

² Application range fully concealed hardware: 520 - 620 mm.

³ Application range fully concealed hardware: 621 - 1200 mm.

6.9.2 Accessories for restrictor and cleaning stays

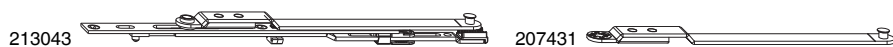
455386


6.9.2.1 Spacer plates for restrictor and cleaning stay				No	No Tricoat
silver		1	20	455386	363378
		3	20	455349	
		6	20	455387	
	5° pitched		20	455388	

368425


6.9.2.2 Hinge bolt with screw hole for restrictor and cleaning stay				No	No Tricoat
silver		40	100	368425	

6.10 Accessories for scissor stays




6.10.1 Stabilizing scissor stays		L		No	No Tricoat
silver	stabilizing scissor stay MM mounted without night-vent	235	20	213043	216209*
	stabilizing scissor stay arm MM without night-vent	231,5	20	207431	209858
	stabilizing scissor stay faceplate MM	235	20	203765	207626*



6.10.2 Stabilizing scissor stays with night-vent		L		No	No Tricoat
silver	right stabilizing scissor stay MM mounted	235	20	213041	223020
	left stabilizing scissor stay MM mounted	235	20	213042	223021
	right stabilizing scissor stay arm MM	231,5	20	203766	207627*
	left stabilizing scissor stay arm MM	231,5	20	203767	207628*
	stabilizing scissor stay faceplate MM	235	20	203765	207626*




6.10.3 Stabilizing scissor stays for tilt-first windows		L		No	No Tricoat
silver	stabilizing scissor stay MM mounted for tilt-first	330	20	213044	223023
	stabilizing scissor stay arm MM for tilt-first	231,5	20	205933	219511
	stabilizing scissor stay faceplate MM for tilt-first	330	20	205934	




6.10.4 Stabilizing scissor stays for half round windows		L		No	No Tricoat
silver	with 2 i.S.	945	10	203961	207629



6.10.5 Anti-slam devices			No	No Tricoat
traffic white RAL 9016	for scissor stay, sizes 2-4 or 1050/1300	100	43549	
black	for scissor stay, sizes 00-1 or 400/600/800	100	43548	

43551 


6.10.6 Scissor stay restrictors			No	No Tricoat
traffic white RAL 9016	for scissor stay, sizes 2-4 or 1050/1300	100	43552 ^{1,2}	
	for stabilizing scissor stay	100	43613 ¹	
black	for scissor stay, sizes 00-1 or 600/800	100	43551 ^{1,3}	

¹ Scissor stay restrictor absolutely necessary for SRH below 600 mm. A scissor stay restrictor may be necessary for a SRH above 600 mm, if required by the window profile and/or the window geometry.

² Opening dimension: 80 mm for scissor stay size 1050; 60 mm for size 1300.

³ Opening dimension: 75 mm for scissor stay size 600; 60 mm for size 800.

369474  366012 


6.10.7 Anti-slam devices / scissor stay restrictors MULTI POWER			No	No Tricoat
grey F1	anti-slam device MULTI POWER	20	369474	
blue	scissor stay restrictor for scissor stay MULTI POWER, sizes 0/1 or 600/800	100	366011 ^{1,2}	
brown	scissor stay restrictor for scissor stay MULTI POWER, sizes 2/3 or 1050/1300	100	366012 ^{2,3}	

¹ Tilt opening 100 mm.

² Scissor stay restrictor absolutely necessary for SRH below 600 mm. A scissor stay restrictor may be necessary for a SRH above 600 mm, if required by the window profile and/or the window geometry.

³ Tilt opening 110 mm.

368077 

6.10.8 Anti-slam devices / scissor stay restrictors MULTI MAMMUT			No	No Tricoat
silver	anti-slam device rough-running Multi Mammut	50	368075	
	anti-slam device smooth-running Multi Mammut	50	368076 ¹	
	scissor stay restrictor for scissor stay Multi Mammut	50	368077 ²	

¹ For sash weight up to 60 kg.

² Scissor stay restrictor absolutely necessary for SRH below 600 mm. A scissor stay restrictor may be necessary for a SRH above 600 mm, if required by the window profile and/or the window geometry.



**MACO
MULTI-MATIC**



Scissor stays

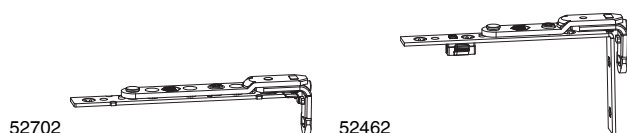


7 Turn-only and tilt-only hinges, turn-only hinge - frame parts and compression devices

7.1	Turn-only hinges - sash part / turn-only hinges - frame part / turn-only hinge faceplates AS/DTuni/PVC _____	220
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7 Turn-only and tilt-only hinges, turn-only hinge - frame parts and compression devices

7.1 Turn-only hinges - sash part / turn-only hinges - frame part / turn-only hinge faceplates AS/DTuni/PVC



7.1.1 Turn-only hinges - sash part AS/DTuni/PVC			L	kg	cube	No	No Tricoat
silver	turn-only hinge on top DTuni	timber	152	130	50	52702 ^{1,2,3}	202314 ^{1,2,3*}
	turn-only hinge on top PVC + AS corner hinge version		143	120	50	52462 ⁴	201764 ^{4*}

¹ Use extension faceplate item no. 360327 if necessary.

² For 13 mm offset without Eurogroove use spacer clips item no. 357881.

³ For Eurogroove use packer item no. 41103.

⁴ Use extension faceplate item no. 215572 if necessary.

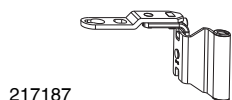


7.1.2 Turn-only hinge arm for turn and tilt hinge faceplates			kg	cube	No	No Tricoat
silver	turn-only hinge arm AS/DTuni/PVC for turn-only hinge faceplate MM		120	50	202271 ¹	208314 ^{1*}

¹ With rebated scissor stay support arm DT 130 kg.



7.1.3 Turn-only hinge arms with rebated scissor stay support arm AS/PVC for turn and tilt hinge faceplates			kg	cube	No	No Tricoat
silver	right	12/20-13	120	20	202879	
	left	12/20-13	120	20	202880	
traffic white RAL 9016	right	12/20-13	120	20	207392	
	left	12/20-13	120	20	207391	




7.1.4 Turn-only hinge arms with rebated scissor stay support arm DTuni for turn and tilt hinge faceplates			kg	cube	No	No Tricoat
silver	right	12/18-13	130	20	217187	
	left	12/18-13	130	20	217188	
traffic white RAL 9016	right	12/18-13	130	20	217189	
	left	12/18-13	130	20	217190	

* TRICOAT-PLUS standard parts

206315



7.1.5 Turn-only hinges - sash part for angled windows			No	No Tricoat
silver		20	206315 ^{1,2,3}	207669 ^{1,2,3}




¹ Use extension faceplate item no. 360327 if necessary.

² For 13 mm offset without Eurogroove use spacer clips item no. 357881.

³ For Eurogroove use packer item no. 41103.

202269



7.1.6 Turn-only hinge faceplates croppable MM			L			No	No Tricoat
silver	600	0	498,5	350 - 600	20	202269	207671*
	800	0	697,5	601 - 800	20	205940	207672*
	with 1 i.S.	1050	1	947,5	801 - 1.050	20	205941


41103



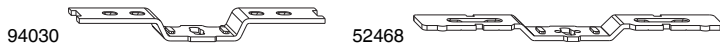
7.1.7 Packer for turn-only hinge - sash part top DTuni		L		No	No Tricoat
natural		142	100	41103	

360327



7.1.8 Faceplate extensions for turn-only hinges - sash part		L		No	No Tricoat
silver	DTuni	180	20	360327	
	AS/PVC	180	20	215572	

7.2 Tilt and turn hinges - sash part / tilt-only bearings AS/DTuni/PVC

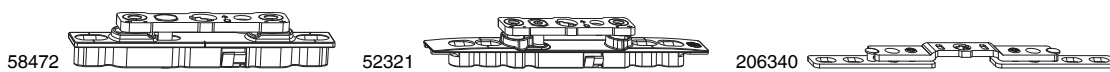


7.2.1 Tilt and turn hinges - sash part AS/DT/PVC		L	kg		No	No Tricoat
silver	tilt-only hinge and turn-only hinge AS/PVC	130	80	100	94030 ^{1,2}	355816 ^{1,2*}
	tilt-only hinge and turn-only hinge AS/DTuni	159	80	100	52468 ^{1,3}	205066 ^{1,3*}

¹ When our restrictor and cleaning stay is used, the maximum sash weight is 40 kg. Observe FPKF guideline of the Gütegemeinschaft Schlösser und Beschläge (quality community for locks and hardware)!

² For Eurogroove.

³ Without Eurogroove.



7.2.2 Tilt and turn hinges adjustable		L	kg		No	No Tricoat
silver	tilt-only hinge self-regulating	106	30	50	58472 ^{1,2}	
	tilt-only hinge and turn-only hinge AS/DTuni/PVC adjustable	146	80	50	52321 ^{1,2}	201631 ^{1,2*}
	tilt-only hinge and turn-only hinge DTuni adjustable	200	80	50	206340 ¹	213789 ¹

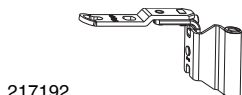
¹ When our restrictor and cleaning stay is used, the maximum sash weight is 40 kg. Observe FPKF guideline of the Gütegemeinschaft Schlösser und Beschläge (quality community for locks and hardware)!

² For Eurogroove.



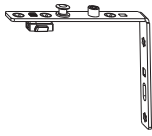
213297

7.2.3 Tilt-only hinge arm for turn and tilt hinge faceplate			No	No Tricoat
silver		20	213297	

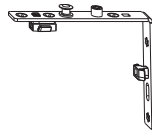


217192

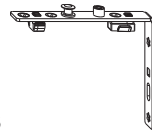
T	7.2.4 Tilt-only hinge arms with rebated scissor stay support arm DTuni for turn and tilt hinge faceplate		kg		No	No Tricoat
	silver	left	12/18-13	130	20	217192
traffic white RAL 9016	right	12/18-13	130	20	217193	
	left	12/18-13	130	20	217194	




202270



207817



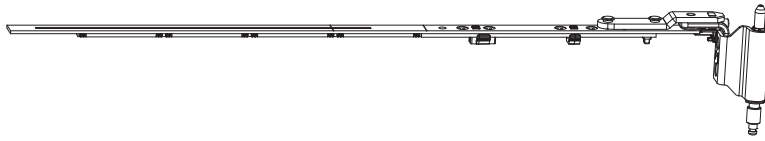
210025

7.3 Turn and tilt hinge faceplates PVC			No	No Tricoat
silver	top turn-only hinge corner-bracket MM	50	202270	207670*
	top turn-only hinge corner-bracket with second positioning component MM	50	207817	211318
	turn-only and tilt-only faceplate for installation with automated machinery MM	50	210025	





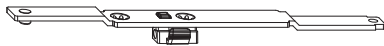
7.4 Turn-only hinges - sash part MULTI MAMMUT



223776

7.4.1 Turn-only hinges - sash part croppable MULTI MAMMUT					No	No Tricoat
silver	right	12/18-9	400 - 635	10	223776¹	223800¹
	left	12/18-9	400 - 635	10	223777¹	223801¹
	right	12/18-13	400 - 635	10	223778¹	223802¹
	left	12/18-13	400 - 635	10	223779¹	223803¹
	right	12/20-9	400 - 635	10	223780¹	223804¹
	left	12/20-9	400 - 635	10	223781¹	223805¹
	right	12/20-13	400 - 635	10	223782¹	223806¹
	left	12/20-13	400 - 635	10	223783¹	223807¹
traffic white RAL 9016	right	12/18-9	400 - 635	10	223784¹	
	left	12/18-9	400 - 635	10	223785¹	
	right	12/18-13	400 - 635	10	223786¹	
	left	12/18-13	400 - 635	10	223787¹	
	right	12/20-9	400 - 635	10	223788¹	
	left	12/20-9	400 - 635	10	223789¹	
	right	12/20-13	400 - 635	10	223790¹	
	left	12/20-13	400 - 635	10	223791¹	

¹ Above the maximum application range use faceplate extension and centre lock.



202867

7.4.2 Faceplate extension for turn-only hinge - sash part MULTI MAMMUT					No	No Tricoat
silver			385 - 1.800	20	202867¹	216725¹

¹ For the use as fixed turn-only hinge combine with croppable turn-only hinge.

7.5 Turn-only hinges - sash part TV



54917

7.5.1 Turn-only hinge faceplate TV with packer		L	kg	100	No	No Tricoat
silver		187	100	100	54917 ¹	

¹ For Eurogroove.

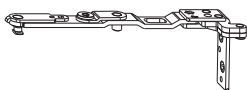


206748



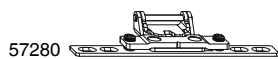
206750

7.5.2 Turn-only hinge faceplates croppable MM TV			L			No	No Tricoat
silver	600	0	497,5	350 - 600	20	206748	
	800	0	696,5	601 - 800	20	206749	
	1050	1	946,5	801 - 1.050	20	206750	
	with 1 i.S.						



54922

7.5.3 Turn-only hinge arms for turn-only hinge faceplate TV timber		L	kg	100	No	No Tricoat
silver	right	13 mm offset	170	100	100	54922
	left	13 mm offset	170	100	100	54923



57280

7.5.4 Turn-only hinges - sash part for half round windows TV		L	kg	50	No	No Tricoat
silver	13 mm offset	150	60	50	57280	



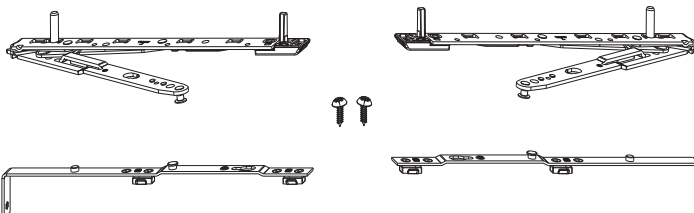
7.6 Tilt-only and turn-only hinges - sash part INVISIBLE



208993

7.6.1 Turn-only and tilt-only hinge faceplate INVISIBLE		L	kg	Box	No	No Tricoat
silver		290	100	20	208993¹	

¹ For combination with T&T scissor stay arms with hinge INVISIBLE, size 690.



101901

T	7.6.2 Basic pack tilt-only INVISIBLE		↑	→	Box	No	No Tricoat
	silver	12 mm screw axis	tilt-only 18 mm rebate depth 9 mm offset	520 - 1.200	300 - 2.400	10	103302
	13 mm screw axis	tilt-only 9 mm offset	520 - 1.200	300 - 2.400	10	101901¹	

¹ From SRH 520 mm: use restrictor and cleaning stay!

7.7 Tilt-only and turn-only hinges - sash part MULTI POWER

7.7.1 Turn-only and tilt-only hinge faceplates / turn-only and tilt-only hinge arms with hinge MULTI POWER



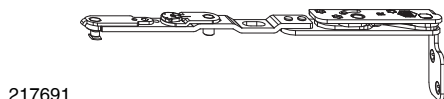
217729

7.7.1.1 Turn-only and tilt-only hinge faceplate fixed MULTI POWER							No	No Tricoat
silver				255 - 1.400	150	20	217729	225300*



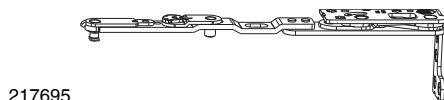
217687

7.7.1.2 Turn-only hinge faceplates croppable MULTI POWER								No	No Tricoat
silver	600	0	401 - 600	320 - 490	20		217685	225301*	
	800	0	601 - 800		20		217686	225302*	
	1050	1	801 - 1.050		20		217687	225303*	
	1300	1	1.051 - 1.300		20		217688	225304*	



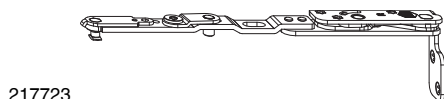
217691

T 7.7.1.3 Turn-only hinge arms with hinge timber MULTI POWER							No	No Tricoat
silver	timber 24 mm rebate depth	right	9 mm offset	255 - 1.400	150	10	217689	225321*
		left	9 mm offset	255 - 1.400	150	10	217690	225322*
		right	13 mm offset	255 - 1.400	150	10	217691	225323*
		left	13 mm offset	255 - 1.400	150	10	217692	225324*



217695

P 7.7.1.4 Turn-only hinge arms with hinge PVC MULTI POWER							No	No Tricoat
silver	PVC 30 mm rebate depth	right	9 mm offset	255 - 1.400	150	10	217693	
		left	9 mm offset	255 - 1.400	150	10	217694	
		right	13 mm offset	255 - 1.400	150	10	217695	225328*
		left	13 mm offset	255 - 1.400	150	10	217696	225329*

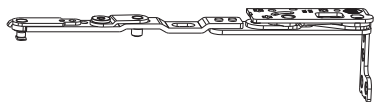


217723

T 7.7.1.5 Tilt-only hinge arms with hinge timber MULTI POWER							No	No Tricoat
silver	timber 24 mm rebate depth	right	9 mm offset	255 - 1.200	80	10	217721 ^{1,2}	225338 ^{1,2}
		left	9 mm offset	255 - 1.200	80	10	217722 ^{1,2}	225339 ^{1,2}
		right	13 mm offset	255 - 1.200	80	10	217723 ^{1,2}	225340 ^{1,2}
		left	13 mm offset	255 - 1.200	80	10	217724 ^{1,2}	225341 ^{1,2}

¹ Observe guideline FPKF (restrictor and cleaning stay) published by "Gütegemeinschaft Schlösser und Beschläge e.V." (www.schlossindustrie.de)

² SRW max. 2400 mm. The sash must be stabilized (e.g. taped).



217727

P	7.7.1.6 Tilt-only hinge arms with hinge PVC MULTI POWER							No	No Tricoat
	silver	PVC 30 mm rebate depth							
		right	9 mm offset	255 - 1.200	80	10	217725 ^{1,2}		
		left	9 mm offset	255 - 1.200	80	10	217726 ^{1,2}		
		right	13 mm offset	255 - 1.200	80	10	217727 ^{1,2}	225344 ^{1,2}	
		left	13 mm offset	255 - 1.200	80	10	217728 ^{1,2}	225345 ^{1,2}	

¹ Observe guideline FPKF (restrictor and cleaning stay) published by "Gütegemeinschaft Schlösser und Beschläge e.V." (www.schlossindustrie.de)!

² SRW max. 2400 mm. The sash must be stabilized (e.g. taped).

7.7.2 Turn-only hinge arms with hinge for 3-sashed windows MULTI POWER



217715

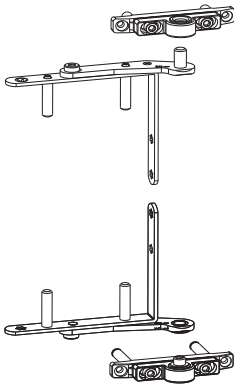
T	7.7.2.1 Turn-only hinge arms with hinge for 3-sashed timber windows MULTI POWER							No	No Tricoat
	silver	timber 24 mm rebate depth							
		right	9 mm offset	255 - 1.400	80	10	217713	225330	
		left	9 mm offset	255 - 1.400	80	10	217714	225331	
		right	13 mm offset	255 - 1.400	80	10	217715	225332	
		left	13 mm offset	255 - 1.400	80	10	217716	225333	



217719

P	7.7.2.2 Turn-only hinge arms with hinge for 3-sashed PVC windows MULTI POWER							No	No Tricoat
	silver	PVC 30 mm rebate depth							
		right	9 mm offset	255 - 1.400	80	10	217717		
		left	9 mm offset	255 - 1.400	80	10	217718		
		right	13 mm offset	255 - 1.400	80	10	217719	225336	
		left	13 mm offset	255 - 1.400	80	10	217720	225337	

7.8 Turn-only hinges - frame part for 3-sashed windows



10721

7.8.1 Turn-only hinges - frame part for 3-sashed windows				kg		No	No Tricoat
silver	PVC	left	top + bottom	60	20	10756 ¹	
	timber	right	top + bottom	80	20	10721 ^{1,2}	101398 ^{1,2}
		left	top + bottom	80	20	10722 ^{1,2}	101399 ^{1,2}
traffic white RAL 9016	PVC	right	top + bottom	60	20	10901	
		left	top + bottom	60	20	10902 ¹	
	timber	right	top + bottom	80	20	11251 ^{1,2}	
		left	top + bottom	80	20	11252 ^{1,2}	

¹ No cover caps are enclosed in the packaging for the frame components for pure silver sash components.

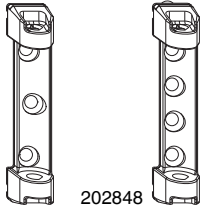
² CAUTION: When using the 2 mm and 4 mm packers, the max. sash weight is 60 kg!



T	7.8.2 Packers for turn-only hinges - frame part for 3-sashed windows			No	No Tricoat
	silver	4	100	43709 ¹	
	pearl light grey RAL 9022	2	100	354023 ¹	
	white	4	100	44199 ¹	

¹ CAUTION: When using the 2 mm and 4 mm packers, the max. sash weight is 60 kg!

7.9 Multi-sash centre frame hinges



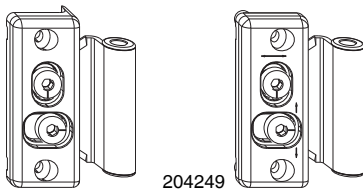
57930 202848

7.9.1 Multi-sash centre frame hinge bearings				kg		No	No Tricoat
silver	scissor stay hinge PVC	with 3 mm positioning pin	PVC	100	100	52480	201082*
	multi-sash centre frame hinge bearing	with centering tip	timber	60	50	57930	205123*
traffic white RAL 9016	multi-sash centre frame hinge bearing	with 7 mm supporting pin	timber/PVC	60	50	202848	205124*
		with 7 mm supporting pin	PVC	60	50	205705	



44470

P 7.9.2 Packers for multi-sash centre frame hinge bearings						No	No Tricoat
traffic white RAL 9016	with 3 mm positioning pin			2,4	100	44477	
	with 7 mm supporting pin			2,4	100	44470	
pearl light grey RAL 9022	with 3 mm positioning pin			2,4	100	44482	
	with 7 mm supporting pin			2,4	100	44475	
Brown F5	with 3 mm positioning pin			2,4	100	44481	
	with 7 mm supporting pin			2,4	100	44474	



57892 204249

7.9.3 Multi-sash centre frame hinges - sash part				kg		No	No Tricoat
silver			timber	60	50	57892	205126*
	with 3 mm positioning pin	40 mm cam distance	PVC	60	50	220241	205128
	with 7 mm supporting pin	36 mm cam distance	timber	60	50	204249	
		40 mm cam distance	PVC	60	50	220240	205127



44463

P 7.9.4 Packers for multi-sash centre frame hinges - sash part



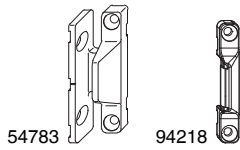
No

No
Tricoat

traffic white RAL 9016	with 3 mm positioning pin	2,4	100	44463	
	with 7 mm supporting pin	2,4	100	44456	
pearl light grey RAL 9022	with 3 mm positioning pin	2,4	100	44468	
	with 7 mm supporting pin	2,4	100	44461	
Brown F5	with 3 mm positioning pin	2,4	100	44467	
	with 7 mm supporting pin	2,4	100	44460	

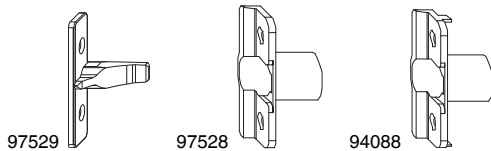


7.10 Compression devices



7.10.1 Surface-mounted compression devices				No	No Tricoat
silver	sash and frame component	timber	100	52389 ¹	205054 ¹
		PVC	100	54783 ¹	
	sash and frame component for rebate leg gasket	timber	100	55028 ¹	205055 ¹
	frame component	timber/PVC/alu-timber	100	94218 ¹	
traffic white RAL 9016	sash component	timber/PVC/alu-timber	100	94217 ¹	
	sash and frame component	timber	100	206585 ¹	
	sash and frame component for rebate leg gasket	timber	100	21062 ¹	

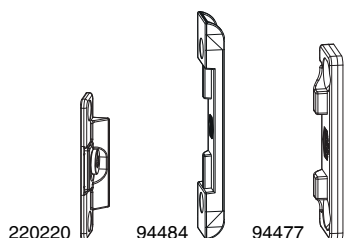
¹ Not suitable for fully concealed hardware!



T	7.10.2 Drill-in compression devices for timber			No	No Tricoat	
silver	sash component 9 / 13 mm offset	for Eurogroove	100	94089 ^{1,2}	359574 ^{1,2*}	
	sash component 9 mm offset	without Eurogroove	100	97529 ²	359211 ²	
	sash component 13 mm offset	without Eurogroove	100	360009 ²	360264 ^{2*}	
	frame component	for 4 mm air gap, 9 mm offset		100	360006 ²	368198 ²
		for 4 mm air gap, 13 mm offset		100	358996 ²	363377 ²
		Euro-rebate 18 mm rebate depth 9 mm offset		100	354090 ²	363297 ²
		Euro-rebate 20 mm rebate depth 9 mm offset		100	97528 ²	359594 ²
		Euro-rebate 24 mm rebate depth 13 mm offset		100	357741 ²	359573 ^{2*}
		Euro-rebate 30 mm rebate depth 13 mm offset		100	368015 ²	
		hardware groove 20 mm rebate depth 9 mm offset		100	94088 ²	
	hardware groove 25 mm rebate depth 9 mm offset		100	94258 ²		

¹ Spacer for corner hinge item no. 40485 may be used for Eurogroove.

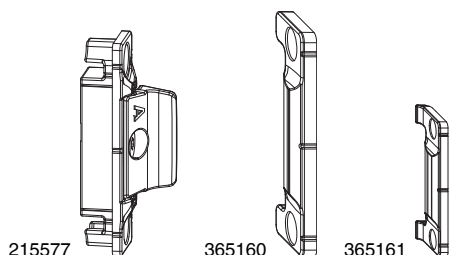
² Suitable for MULTI POWER, INVISIBLE, TV, MULTI MAMMUT, DT and AS.



7.10.3 Concealed compression devices adjustable with depth adjustment			No	No Tricoat	
silver	sash component with depth adjustment 9 mm offset	for Eurogroove	100	220219 ¹	201471 ¹
		without Eurogroove	100	220220 ²	203333 ²
	sash component with depth adjustment 13 mm offset	without Eurogroove	100	208195 ²	211008 ²
		frame component	for 4 mm air gap, 9 mm offset	100	94484 ²
		for 4 mm air gap, 13 mm offset	100	357677 ²	
		Euro-rebate 18 mm rebate depth 9 mm offset	100	94477 ²	355796 ²
		Euro-rebate 20 mm rebate depth 9 mm offset	100	98265 ²	358861 ²
		Euro-rebate 24 mm rebate depth 13 mm offset	100	359002 ²	359572 ^{2*}
		hardware groove 6/8/4	100	94478 ²	
		hardware groove 7/8/4	100	94479 ²	201469 ²

¹ Suitable for: MULTI POWER, INVISIBLE, TV, MULTI MAMMUT, DT, AS.

² Not suitable for fully concealed hardware!

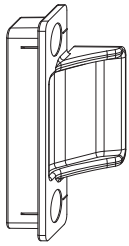


7.10.4 Concealed compression devices adjustable with lateral adjustment			No	No Tricoat		
silver	sash component with lateral adjustment for timber	for Eurogroove	100	215577 ¹	219344 ^{1*}	
	sash component with lateral adjustment for PVC	for Eurogroove	100	218543 ^{1,2}	226554 ^{1,2}	
pearl light grey RAL 9022	frame component	Euro-rebate 18 mm rebate depth 9 mm offset	100	365159 ^{1,3}		
		Euro-rebate 20 mm rebate depth 9 mm offset	100	365160 ^{1,3}		
		Euro-rebate 24 mm rebate depth 13 mm offset	100	365161 ^{1,3}		
		hardware groove 7/8/4	100	367938 ^{1,3}		
		Euro-rebate 30 mm rebate depth 13 mm offset	100	367510 ^{1,3}		
		frame component with positioning pins 8 x 4 mm	Euro-rebate 24mm rebate depth 13 mm offset	100	367494 ^{1,3}	
		frame component with positioning pins 12 x 3 mm	Euro-rebate 24mm rebate depth 13 mm offset	100	367652 ^{1,3}	


¹ Suitable for: MULTI POWER, INVISIBLE, TV, MULTI MAMMUT, DT, AS.

² Frame components for PVC, see profile sheet (sash component B).

³ For combination with item no. 215577 (sash component A).



94185

P 7.10.5 Concealed compression devices for PVC			N_o	N_o Tricoat
silver	sash component	100	94185^{1,2}	355815^{1,2+}
	sash component with 5 mm positioning pin	100	354795^{1,2}	


¹ Frame components for PVC, see profile sheet.

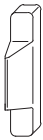
² Suitable for: MULTI POWER, INVISIBLE, TV, MULTI MAMMUT, AS.

7.11 Cover caps




43568

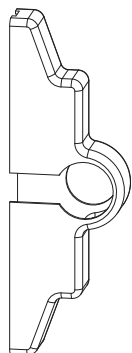
7.11.1 Cover caps for surface-mounted compression devices - sash part			No	No Tricoat
traffic white RAL 9016	dyed	100	41339	
pearl light grey RAL 9022	dyed	100	43568	
silver	painted	100	364107	
champagne	painted	100	41699	
titanium	painted	100	40757	
light bronze	dyed	100	41582	
cream white RAL 9001	dyed	100	41231	
brown F5	dyed	100	41340	
chrome-look	metallised	100	44236	
gold look	metallised	100	40553	






43569

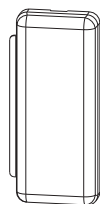
7.11.2 Cover caps for surface-mounted compression devices - frame part			No	No Tricoat
traffic white RAL 9016	dyed	100	41342	
pearl light grey RAL 9022	dyed	100	43569	
silver	painted	100	364106	
champagne	painted	100	41701	
titanium	painted	100	40756	
light bronze	dyed	100	41583	
cream white RAL 9001	dyed	100	41233	
brown F5	dyed	100	41343	
chrome-look	metallised	100	44235	
gold look	metallised	100	40551	








42714

7.11.3 Cover caps for turn-only hinges for 3-sashed windows					
traffic white RAL 9016	dyed		20	42714	
pearl light grey RAL 9022	dyed		50	43618	
silver	painted		50	44287	
champagne	painted		50	41698	
titanium	painted		50	40734	
light bronze	dyed		20	41642	
brown F5	dyed		20	42723	
gold look	metallised		50	40737	
white	dyed	for timber profiles	20	41117	



43800

7.11.4 Cover caps for multi-sash centre frame hinges - sash part					
traffic white RAL 9016	dyed		50	43800	
pearl light grey RAL 9022	dyed		100	44102	
silver	painted		50	44289	
champagne	painted		50	44288	
titanium	painted		50	43803	
light bronze	dyed		50	43801	
cream white RAL 9001	dyed		50	44295	
brown F5	dyed		50	43804	
chrome-look	metallised		50	44286	
gold look	metallised		50	43802	



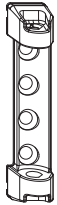
8 Scissor stay hinges



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8 Scissor stay hinges

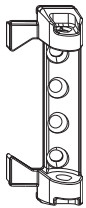
8.1 Scissor stay hinges PVC



52480

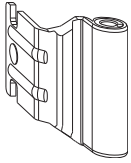
P	8.1.1 Scissor stay hinges PVC		kg		No	No Tricoat
			kg	kg		
	silver	with 3 mm positioning pin	100	100	52480	201082*
		with 7 mm supporting pin	120	100	52481	201402*
	traffic white RAL 9016	with 3 mm positioning pin	100	100	204039	
		with 7 mm supporting pin	120	100	204779	

8.2 Surface-mounted scissor stay hinges

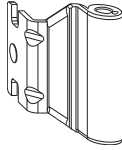


54694

	8.2.1 Surface-mounted scissor stay hinges		kg		No	No Tricoat
			kg	kg		
silver		12/18	120	50	54694	204563*
		12/20	120	50	54695	202519
traffic white RAL 9016		12/18	120	50	207876	
		12/20	120	50	207877	

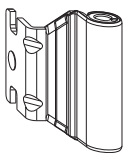


58477



52486

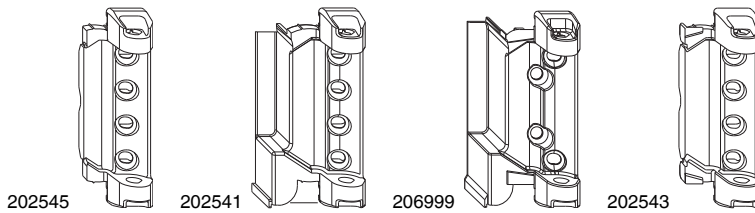
8.3 Rebated scissor stay support arms AS/PVC				No	No Tricoat
silver	12/18-9	120	100	54706	204564*
	12/18-10	120	100	58619	204565*
	12/18-11	120	100	206998	
	12/18-13	120	100	54709	204566*
	12/18-14	120	100	56771	
	12/18-26	80	100	58477	
	12/20-9	120	100	52487	204570
	12/20-10	120	100	52489	
	12/20-11	120	100	52488	
	12/20-13	120	100	52486	201403*
	12/20-14	120	100	55359	204569*
	12/20-15	120	100	55883	
	12/20-26	80	100	59469	
	12/21-13	120	100	58004	204573
	12/22-9	120	100	55085	
	12/22-13	120	100	55051	204576
	traffic white RAL 9016	12/18-9	120	100	207882
12/18-11		120	100	207884	
12/18-13		120	100	207885	
12/20-9		120	100	207268	
12/20-10		120	100	207888	
12/20-11		120	100	207889	
12/20-13		120	100	206588	
12/20-14		120	100	207890	
12/20-15		120	100	207891	
12/21-13		120	100	207267	
12/22-9		120	100	207892	
12/22-13		120	100	207895	





55009

8.4 Rebated scissor stay support arms AS/PVC with pre-mounted cover cap in traffic white RAL 9016				No	No Tricoat
silver	12/20-9	120	100	54799	
	12/20-11	120	100	201066	
	12/20-13	120	100	55009	
	12/20-14	120	100	201064	
	12/21-13	120	100	58006	

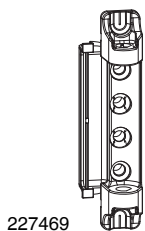
8.5 Scissor stay hinges DT



T 8.5.1 Scissor stay hinges DT130



				No	No Tricoat	
silver	4/15	130	50	202545¹		
	right 4/18-9	130	50	202541¹	206702¹	
	left 4/18-9	130	50	202542¹	206703¹	
	right 4/18-13	130	50	206999¹	215019¹	
	left 4/18-13	130	50	207000¹	215020¹	
	12/18	130	50	202543¹	206704^{1*}	
	12/20	130	50	202544¹	206705^{1*}	
	traffic white RAL 9016	right 4/18-9	130	50	207878¹	
		left 4/18-9	130	50	207879¹	
		right 4/18-13	130	50	207006¹	
left 4/18-13		130	50	207007¹		
12/18		130	50	207880¹		
12/20		130	50	207881¹		

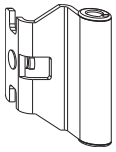
¹ Angled screw-fixing required from 100 kg.



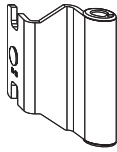
227469

T 8.5.2 Scissor stay hinges DT160

				No	No Tricoat
silver	4/15	160	50	227469	
	4/18 and 12/18	160	50	227470	
	12/20	160	50	227471	



202534

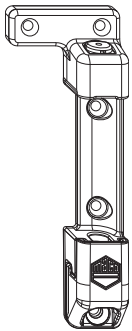


202535

T 8.5.3 Rebated scissor stay support arms DTuni

					 Tricoat
silver	4/15-9	160	50	202533 ¹	206696 ¹
	4/18-9 and 12/18-9	160	50	202534 ¹	206697 ^{1*}
	4/18-13 and 12/18-13	160	50	202535 ¹	206698 ^{1*}
	12/18-11	160	50	202539 ¹	206701 ^{1*}
	12/18-14	160	50	206718 ¹	
	12/20-9	160	50	202536 ¹	206699 ^{1*}
	12/20-13	160	50	202537 ¹	206700 ^{1*}
traffic white RAL 9016	4/15-9	160	100	207896 ¹	
	4/18-9 and 12/18-9	160	100	207897 ¹	
	4/18-13 and 12/18-13	160	100	207898 ¹	
	12/18-11	160	50	208936 ¹	
	12/18-14	160	50	215096 ¹	
	12/20-9	160	100	207899 ¹	
	12/20-13	160	50	212826 ¹	

¹ Compatible with scissor stay hinge DT130 and DT160.

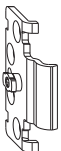


210600

8.6 Scissor stay hinges MULTI MAMMUT

					 Tricoat	
silver	with 9 mm supporting pins	right	220	20	210600 ¹	223145 ¹
		left	220	20	210601 ¹	223146 ¹
traffic white RAL 9016	with 9 mm supporting pins	right	220	20	212542 ¹	
		left	220	20	212543 ¹	

¹ Sash rebate depth minimum 20 mm.



55354


T 8.7 Scissor stay hinges TV for half round windows

					 Tricoat
silver	13 mm offset	60	100	55354	

8.8 Cover caps




42083

8.8.1 Cover caps for scissor stay hinges AS/DT130/PVC			No	No Tricoat
traffic white RAL 9016	dyed	100	42083 ¹	
pearl light grey RAL 9022	dyed	100	43761	
silver	painted	100	44290	
champagne	painted	100	42103	
titanium	painted	100	42099	
light bronze	dyed	100	42097	
cream white RAL 9001	dyed	100	42191	
brown F5	dyed	100	42189	
chrome-look	metallised	100	44243	
black	dyed	100	42190	
gold look	metallised	100	42098	

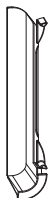
¹ Also available as bulk pack of 500 pieces as item no. 42284.




369607

T	8.8.2 Cover caps for scissor stay hinges DT160			No	No Tricoat
	traffic white RAL 9016	dyed	50	369607 ¹	
	pearl light grey RAL 9022	dyed	50	369608 ¹	
	titanium	painted	50	369609 ¹	
	gold look	metallised	50	369610 ¹	

¹ Also compatible with scissor stay hinge DT 130.




369525

T	8.8.3 Recess cover caps for scissor stay hinges DT160			No	No Tricoat
	grey F1	right 4/15-9 and 4/18-9	50	369525	
		left 4/15-9 and 4/18-9	50	369526	
		right 4/18-13	50	369527	
		left 4/18-13	50	369528	




42084

8.8.4 Cover caps for rebated scissor stay support arms AS/PVC			No	No Tricoat
traffic white RAL 9016	dyed	100	42084¹	
pearl light grey RAL 9022	dyed	100	43760	
silver	painted	100	44291	
champagne	painted	100	42108	
titanium	painted	100	42107	
light bronze	dyed	100	42105	
cream white RAL 9001	dyed	100	42194	
brown F5	dyed	100	42192	
chrome-look	metallised	100	44244	
black	dyed	100	42193	
gold look	metallised	100	42106	

¹ Also available as bulk pack of 500 pieces as item no. 42285.



354669

T	8.8.5 Cover caps for rebated scissor stay support arms DTuni			No	No Tricoat
	traffic white RAL 9016	dyed	100	354669	
	pearl light grey RAL 9022	dyed	100	354674	
	silver	painted	100	360952	
	champagne	painted	100	354673	
	titanium	painted	100	354672	
	light bronze	dyed	100	354670	
	cream white RAL 9001	dyed	100	356597	
	brown F5	dyed	100	354675	
	chrome-look	metallised	100	354676	
	black	dyed	100	356598	
	gold look	metallised	100	354671	



8.9 Accessories for scissor stay hinges



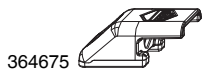
94491

8.9.1 Scissor stay hinge pin AS/DTuni/PVC			No	No Tricoat
silver		200	94491	97553*

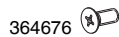


364716

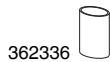
8.9.2 Dust cover caps for scissor stay hinges MULTI MAMMUT			No	No Tricoat
traffic white RAL 9016	dyed	100	364716	
pearl light grey RAL 9022	dyed	100	364565	
titanium	dyed	100	367812	



364675



364676



362336

8.9.3 Accessories for scissor stay hinges MULTI MAMMUT			No	No Tricoat
silver	scissor stay hinge pin safety device for scissor stay hinge 180 kg	20	364675	
	countersunk screw M5x12 for slide-over lock for scissor stay hinge pin	20	364676	
traffic white RAL 9016	scissor stay hinge pin safety device for scissor stay hinge 180 kg	20	364677	
	countersunk screw M5x12 for slide-over lock for scissor stay hinge pin	20	364678	
white	clip-on bush 10 mm, Multi Mammut fittings	50	362336	









































9 Pivot posts

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9 Pivot posts

9.1 Matrix for pivot posts and corner supports

9.1.1 PVC

Pivot post	Pivot post with Ø 3 mm positioning pin	Pivot post with Ø 7 mm supporting pins, 3 mm short	Pivot post with Ø 7 mm supporting pins, 12 mm / 23 mm long	Pivot post AS for rebated corner support PVC	Pivot post AS	Pivot post INVISIBLE	Pivot post MULTI POWER	Pivot post MULTI MAMMUT
Corner support								
Corner support PVC with Ø 3 mm positioning pin	 100 kg  max. 2,4 m²	 100 kg  max. 2,4 m²	 100 kg  max. 2,4 m²	--	--	--	--	--
Corner support PVC with Ø 5 mm supporting pins	 100 kg  max. 3,0 m²	 100 kg  max. 3,0 m²	 120 kg  max. 3,0 m²	--	--	--	--	--
Rebated corner support AS/PVC without rebate-leg	 100 kg *  max. 3,0 m²	 100 kg *  max. 3,0 m²	 120 kg *  max. 3,0 m²	 120 kg *  max. 3,0 m²	--	--	--	--
Rebated corner support AS with rebate-leg	--	--	--	--	 120 kg *  max. 3,0 m²	--	--	--
Rebated corner support INVISIBLE	--	--	--	--	--	 100 kg *  max. 2,4 m²	--	--
Rebated corner support MULTI POWER	--	--	--	--	--	--	 150 kg  max. 3,0 m²	--
Rebated corner support MULTI MAMMUT	--	--	--	--	--	--	--	 180 kg  max. 3,6 m²
Corner support PVC MULTI MAMMUT	--	--	--	--	--	--	--	 180 kg  max. 3,6 m²
* Observe max. load or size restrictions (80 kg / 2.4 m²) for certain components!								
Above pivot post / corner support combinations may only be combined with scissor stay hinges of the same bearing type!								

9.1.2 Timber

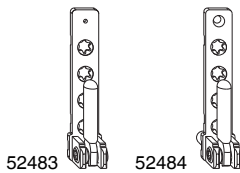
Pivot post Corner support	Pivot post AS	Pivot post AS for rebated corner support ASI/PVC	Pivot post DT130	Pivot post DT160	Pivot post TV	Pivot post INVISIBLE	Pivot post MULTI POWER	Pivot post MULTI MAMMUT
Rebated corner support AS with rebate-leg 	120 kg max. 3,0 m ²	--	--	--	--	--	--	--
Rebated corner support ASI/PVC without rebate-leg 	--	120 kg max. 3,0 m ²	--	--	--	--	--	--
Rebated corner support DT130 without rebate-leg 	--	--	100 kg max. 3,0 m ²	100 kg max. 3,0 m ²	--	--	--	--
Rebated corner support DT130 with rebate-leg 	--	--	130 kg max. 3,0 m ²	130 kg max. 3,0 m ²	--	--	--	--
Rebated corner support DT160 with rebate-leg 	--	--	--	160 kg max. 3,0 m ²	--	--	--	--
Rebated corner support TV 	--	--	--	--	100 kg max. 2,4 m ²	--	--	--
Rebated corner support INVISIBLE 	--	--	--	--	--	100 kg max. 2,4 m ²	--	--
Rebated corner support MULTI POWER 	--	--	--	--	--	--	150 kg max. 3,0 m ²	--
Rebated corner support MULTI MAMMUT 	--	--	--	--	--	--	--	220 kg max. 3,6 m ²

* Observe max. load or size restrictions (80 kg / 2.4 m²) for certain components!

Above pivot post / corner support combinations may only be combined with scissor stay hinges of the same bearing type!



9.2 Pivot posts PVC

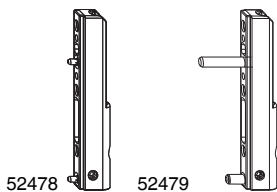


52483

52484

P 9.2.1 Pivot posts PVC		kg		No	No Tricoat
silver	with 3 mm positioning pin	100	100	52483	201084*
	with 7 mm supporting pins 3 mm long	100	100	52485	204613*
	with 7 mm supporting pins 12 mm long	120	100	52764¹	204612¹
	with 7 mm supporting pins 23 mm long	120	100	52484¹	201401^{1*}
traffic white RAL 9016	with 3 mm positioning pin	100	100	206802	
	with 7 mm supporting pins 3 mm long	100	100	206586	
	with 7 mm supporting pins 12 mm long	120	100	207902¹	
	with 7 mm supporting pins 23 mm long	120	100	207278¹	

¹ Above 100 kg support pin must reach through at least 2 profile walls!



52478

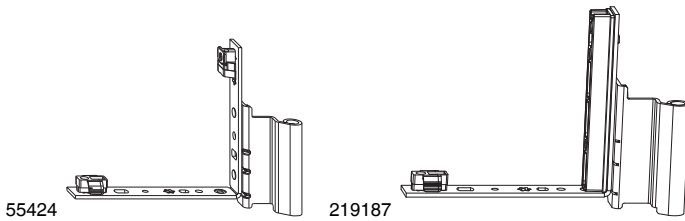
52479

P 9.2.2 Corner supports PVC		kg		No	No Tricoat
silver	with 3 mm positioning pin	100	100	52478^{1,2}	202647^{1,2*}
	with 5 mm supporting pin 17 mm long	120	100	206196^{1,3}	
	with 5 mm supporting pins 23 mm long	120	100	52479^{1,3}	201400^{1,3*}
traffic white RAL 9016	with 3 mm positioning pin	100	100	206848^{1,2}	
	with 5 mm supporting pins 23 mm long	120	100	206584^{1,3}	

¹ For packers for corner supports refer to accessories for pivot posts PVC.

² Maximum sash total surface 2.4 m².

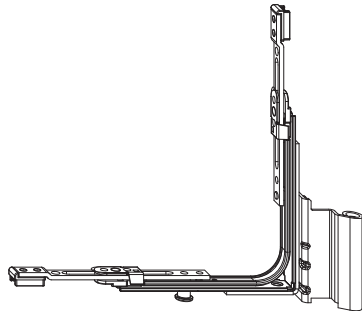
³ Above 100 kg support pin must reach through at least 2 profile walls!



9.2.3 Rebated corner supports AS/PVC without rebate-leg screw fixing			kg	cube	No	No Tricoat
silver	right	12/18-9	120	100	214391 ¹	
	left	12/18-9	120	100	214392 ¹	215437 ¹
	right	12/18-11	120	100	55424 ¹	204614 ^{1*}
	left	12/18-11	120	100	55425 ¹	204615 ^{1*}
	right	12/18-13	120	100	59444 ¹	204616 ^{1*}
	left	12/18-13	120	100	59443 ¹	204617 ^{1*}
	right	12/18-26	80	100	58475 ¹	
	left	12/18-26	80	100	58476 ¹	
	right	12/20-9	120	100	54890 ¹	204620 ¹
	left	12/20-9	120	100	54891 ¹	204621 ¹
	right	12/20-13	120	100	54892 ¹	201404 ^{1*}
	left	12/20-13	120	100	54893 ¹	201405 ^{1*}
	right	12/20-14	120	100	212967 ¹	
	left	12/20-14	120	100	212968 ¹	
	right	12/20-26	80	100	59916 ¹	
	left	12/20-26	80	100	59917 ¹	
	right	12/22-13	120	100	219187 ¹	
	left	12/22-13	120	100	219188 ¹	
traffic white RAL 9016	right	12/18-11	120	100	207916 ¹	
	left	12/18-11	120	100	207917 ¹	
	right	12/20-9	120	100	207918 ¹	
	left	12/20-9	120	100	207919 ¹	
	right	12/20-13	120	100	207920 ¹	
left	12/20-13	120	100	207921 ¹		

¹ Not for use with half-round or angled windows; use on profile system with overlap gasket upon request.





205664

9.2.4 Rebated corner supports AS/PVC without rebate-leg screw fixing EH with corner element				kg		No	No Tricoat
silver	with 1 i.S.	right	12/18-9	120	20	218155 ¹	
		left	12/18-9	120	20	218156 ¹	
		right	12/18-13	120	20	218159 ¹	218988 ¹
		left	12/18-13	120	20	218160 ¹	218989 ¹
		right	12/18-26	80	20	218161 ¹	
		left	12/18-26	80	20	218162 ¹	
		right	12/20-9	120	20	218163 ¹	
		left	12/20-9	120	20	218164 ¹	
		right	12/20-13	120	20	205664 ¹	207579 ¹
		left	12/20-13	120	20	205665 ¹	207580 ¹
		right	12/20-26	80	20	218165 ¹	
		left	12/20-26	80	20	218166 ¹	

¹ Suitable for half round and angled windows as well as EH.



224282

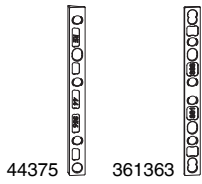
224283

9.2.5 Corner element two-part					No	No Tricoat
silver	corner connector MM bottom for half round			500 - 1.650	20	224282 ¹
	vertically extendable			500 - 1.650	50	224283 ²





¹ When used for half round windows also item no. 224283.

² When used for half round windows also item no. 224282.

9.2.6 Accessories for pivot posts PVC

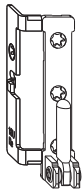


44375 361363

9.2.6.1 Packers for corner supports PVC					
white	5 mm	8,4 right	100	44375	
		left	100	44374	
	5°		100	361363	
brown F5	5 mm	8,4 right	100	363288	
		left	100	363289	



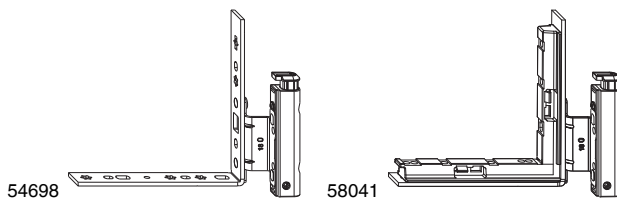
9.3 Pivot posts AS (surface-mounted)



214104

9.3.1 Surface-mounted pivot posts for rebated corner supports AS/PVC without rebate-leg screw fixing				kg		No	No Tricoat
silver	right	12/18	120	50	214104 ¹	218986 ¹	
	left	12/18	120	50	214105 ¹	218987 ¹	
	right	12/20	120	50	214106 ¹	224271 ¹	
	left	12/20	120	50	214107 ¹	224272 ¹	
traffic white RAL 9016	right	12/18	120	50	214112 ¹		
	left	12/18	120	50	214113 ¹		
	right	12/20	120	50	214114 ¹		
	left	12/20	120	50	214115 ¹		

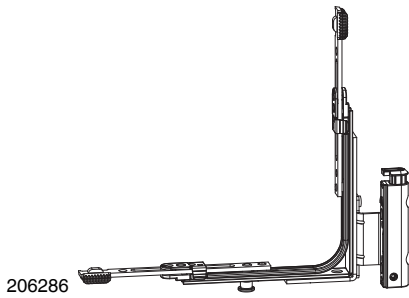
¹ Suitable only with rebated corner support AS/PVC without rebate-leg screw fixing.





9.3.2 Surface-mounted rebated corner supports with rebate-leg screw fixing				kg		No	No Tricoat
silver	with rebate-leg screw-fixing	right	12/18-9	120	50	54698 ¹	204606 ¹
		left	12/18-9	120	50	54699 ¹	204607 ¹
		right	12/18-11	120	50	206996 ¹	
		left	12/18-11	120	50	206997 ¹	
		right	12/18-13	120	50	54700 ¹	204608 ¹
		left	12/18-13	120	50	54701 ¹	204603 ¹
		right	12/20-9	120	50	54702 ¹	
	pre-assembled spacer bar for corner hinge	left	12/20-9	120	50	54703 ¹	
		right	12/20-13	120	50	54704 ¹	202520 ¹
		left	12/20-13	120	50	54705 ¹	202521 ¹
		right	12/18-9	120	50	58041 ^{1,2}	
		left	12/18-9	120	50	58042 ^{1,2}	
		right	12/20-13	120	50	222168 ^{1,2}	
		left	12/20-13	120	50	222169 ^{1,2}	
traffic white RAL 9016	with rebate-leg screw-fixing	right	12/18-9	120	50	207922 ¹	
		left	12/18-9	120	50	207923 ¹	
		right	12/18-11	120	50	207924 ¹	
		left	12/18-11	120	50	207925 ¹	
		right	12/18-13	120	50	207926 ¹	
		left	12/18-13	120	50	207927 ¹	
		right	12/20-9	120	50	207928 ¹	
	pre-assembled spacer bar for corner hinge	left	12/20-9	120	50	207929 ¹	
		right	12/20-13	120	50	207930 ¹	
		left	12/20-13	120	50	207931 ¹	
		right	12/20-13	120	50	207932 ^{1,2}	
		left	12/20-13	120	50	207933 ^{1,2}	

¹ Use on profile systems with overlap gasket upon request.

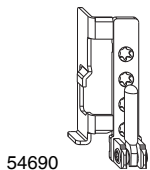
² Not suitable for half round and angled windows.





206286

9.3.3 Surface-mounted rebated corner supports with rebate-leg screw fixing EH with corner element			 		No	No Tricoat
silver	with 1 i.S.	right 12/18-9	120	20	206286¹	
		left 12/18-9	120	20	206287¹	
	right 12/18-13	120	20	206288¹	207585¹	
	left 12/18-13	120	20	206289¹	207586¹	
	right 12/20-9	120	20	206290¹		
	left 12/20-9	120	20	206291¹	207588¹	
	right 12/20-13	120	20	206292¹		
	left 12/20-13	120	20	206293¹		

¹ Suitable for half round and angled windows as well as EH.



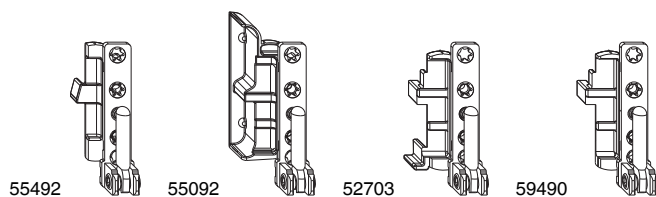
54690

9.3.4 Surface-mounted pivot posts for surface-mounted rebated corner supports with rebate-leg screw fixing			 		No	No Tricoat
silver	right 12/18	120	50	54690¹	204604¹	
	left 12/18	120	50	54691¹	204605¹	
	right 12/20	120	50	54692¹	202522¹	
	left 12/20	120	50	54693¹	202523¹	
traffic white RAL 9016	right 12/18	120	50	207904¹		
	left 12/18	120	50	207905¹		
	right 12/20	120	50	207906¹		
	left 12/20	120	50	207907¹		

¹ Only suitable with rebated corner support AS with rebate-leg screw fixing!



9.4 Pivot posts DT



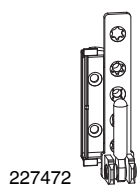
T 9.4.1 Pivot posts DT130		kg	kg	No	No Tricoat	
silver	right 4/15	130	50	55492 ¹		
	left 4/15	130	50	55493 ¹		
	right 4/18	130	50	55092 ^{1,2,3}	204785 ^{1,2,3}	
	left 4/18	130	50	55093 ^{1,2,3}	204786 ^{1,2,3}	
	right 12/18	130	50	52703 ¹	201601 ^{1*}	
	left 12/18	130	50	52704 ¹	202311 ^{1*}	
	right 12/20	130	50	54726 ¹	204787 ^{1*}	
	left 12/20	130	50	54727 ¹	204788 ^{1*}	
	for balcony doors	right 12/18	130	50	59490 ¹	204125 ^{1*}
		left 12/18	130	50	59491 ¹	204126 ^{1*}
		right 12/20	130	50	58601 ¹	213221 ¹
		left 12/20	130	50	58602 ¹	213222 ¹
	traffic white RAL 9016	right 4/15	130	50	207908 ¹	
		left 4/15	130	50	207909 ¹	
right 4/18		130	50	207910 ^{1,4}		
left 4/18		130	50	207911 ^{1,4}		
right 12/18		130	50	207912 ¹		
left 12/18		130	50	207913 ¹		
right 12/20		130	50	207914 ¹		
left 12/20		130	50	207915 ¹		

¹ For sash weights above 100 kg or a dry density below 0.62 g/cm³, insert a countersunk head screw 4 x 40 mm flush below the pivot post!

² For milling depth 24.5 mm, use packer item no. 360464!

³ For milling depth 22 mm, use packer item no. 366541!

⁴ For milling depth 24.5 mm, use packer item no. 360465!

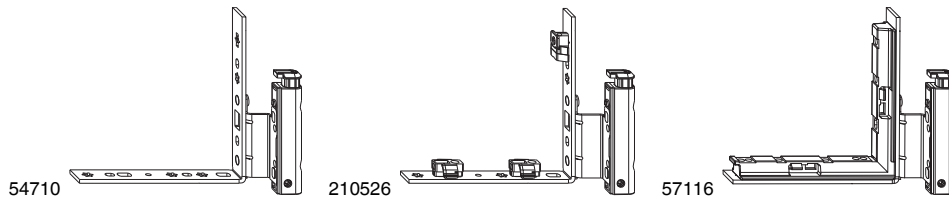


227472

T 9.4.2 Pivot posts DT160		kg	kg	No	No Tricoat
silver	right 4/15	160	50	227472 ¹	
	left 4/15	160	50	227473 ¹	
	right 4/18	160	50	227474 ¹	
	left 4/18	160	50	227475 ¹	
	right 12/18	160	50	227476 ¹	
	left 12/18	160	50	227477 ¹	
	right 12/20	160	50	227478 ¹	
	left 12/20	160	50	227479 ¹	

¹ Use support rawplug item no. 369535 for a sash weight above 100 kg for windows and balcony doors! For balcony doors between 100 - 130 kg, a support screw may be used alternatively!

9.4.3 Rebated corner supports DT



T

9.4.3.1 Rebated corner supports DT130 with rebate-leg screw fixing



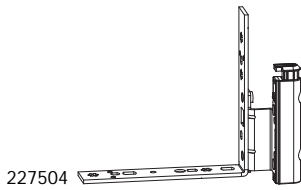
No

No
Tricoat

Color	Mounting	Right/Left	Height	kg	Box	No	No Tricoat	
silver	with rebate-leg screw-fixing	right	4/15-9	130	50	55494		
		left	4/15-9	130	50	55495		
		right	4/18-9	130	50	220048	204797	
		left	4/18-9	130	50	220051	204798	
		right	4/18-13	130	50	207870		
		left	4/18-13	130	50	207871		
		right	12/18-9	130	50	54710	201602*	
		left	12/18-9	130	50	54711	202310*	
		right	12/18-13	130	50	55452	204808*	
		left	12/18-13	130	50	55453	204809*	
		right	12/20-9	130	50	54712	204810*	
		left	12/20-9	130	50	54713	204811*	
		right	12/20-13	130	50	220045	204812*	
		left	12/20-13	130	50	220046	204813*	
		with rebate-leg screw-fixing for Eurogroove	right	4/18-9	130	50	210526	
	left		4/18-9	130	50	210527		
	right		4/18-13	130	50	210524		
	left		4/18-13	130	50	210525		
	with rebate-leg screw-fixing and pre-assembled spacer for rebated corner hinge		right	12/18-9	130	50	57116	218938
			left	12/18-9	130	50	57117	218937
		right	12/18-11	130	50	201016	204799*	
		left	12/18-11	130	50	201017	204800*	
		right	12/18-13	130	50	209594	211096	
		left	12/18-13	130	50	209595	211097	
		right	12/20-13	130	50	214774		
		left	12/20-13	130	50	214775		
		right	12/18-14	130	50	206994		
		left	12/18-14	130	50	206995		
	traffic white RAL 9016	with rebate-leg screw-fixing	right	4/15-9	130	50	207940	
			left	4/15-9	130	50	207941	
right			4/18-9	130	50	207942		
left			4/18-9	130	50	207943		
right			4/18-13	130	50	207872		
left			4/18-13	130	50	207873		
right			12/18-9	130	50	207944		
left			12/18-9	130	50	207945		
right			12/18-13	130	50	207946		
left			12/18-13	130	50	207947		
with rebate-leg screw-fixing for Eurogroove		right	12/20-9	130	50	207948		
		left	12/20-9	130	50	207949		
		right	12/20-13	130	50	213683		
		left	12/20-13	130	50	213684		
		with rebate-leg screw-fixing and pre-assembled spacer for rebated corner hinge	right	4/18-13	130	50	218074	
			left	4/18-13	130	50	218075	
			right	12/18-11	130	50	209500	
			left	12/18-11	130	50	209501	
			right	12/18-13	130	50	211720	
			left	12/18-13	130	50	211721	

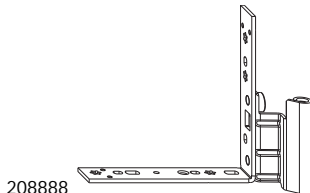


* TRICOAT-PLUS standard parts



227504

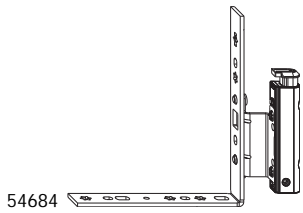
T 9.4.3.2 Rebated corner supports DT160 with rebate-leg screw fixing						No	No Tricoat		
silver	with rebate-leg screw-fixing	right	4/15-9	160	50	227496			
		left	4/15-9	160	50	227497			
		right	4/18-9	160	50	227498			
		left	4/18-9	160	50	227499			
		right	4/18-13	160	50	227500			
		left	4/18-13	160	50	227501			
		right	12/18-9	160	50	227502			
		left	12/18-9	160	50	227503			
		right	12/18-11	160	50	228961			
		left	12/18-11	160	50	228962			
		right	12/18-13	160	50	227504			
		left	12/18-13	160	50	227505			
		right	12/20-9	160	50	227506			
		left	12/20-9	160	50	227507			
		right	12/20-13	160	50	227508			
		left	12/20-13	160	50	227509			
			with rebate-leg screw-fixing and pre-assembled spacer for rebated corner hinge	right	12/18-13	160	50	227510	
				left	12/18-13	160	50	227511	



208888

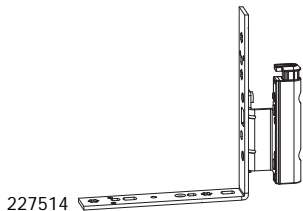
T 9.4.3.3 Rebated corner supports DTuni without rebate-leg screw fixing						No	No Tricoat
silver	right	4/18-9	100	50	55097		
	left	4/18-9	100	50	55098		
	right	12/18-9	100	50	52706	204791	
	left	12/18-9	100	50	52707	204792	
	right	12/18-13	100	50	208888 ¹		
	left	12/18-13	100	50	208889 ¹		
	right	12/20-9	100	50	54728	204793	
	left	12/20-9	100	50	54729	204794	
	right	12/20-13	100	50	212209 ¹	224634 ¹	
	left	12/20-13	100	50	212210 ¹	224635 ¹	
	traffic white RAL 9016	right	4/18-9	100	50	207934	
		left	4/18-9	100	50	207935	
		right	12/18-9	100	50	207936	
		left	12/18-9	100	50	207937	
right		12/20-9	100	50	207938		
left		12/20-9	100	50	207939		

¹ When using spacer for rebated corner hinge item no. 44234, one vertical screw hole omits.



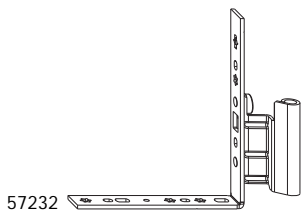
54684

9.4.3.4 Rebated corner supports DT130 for casement doors with rebate-leg screw fixing				kg	cube	No	No Tricoat	
T	silver	for balcony doors with rebate-leg screw-fixing	right	12/18-9	130	50	54684	204122
			left	12/18-9	130	50	54685	204123
			right	12/18-13	130	50	209411	214059*
			left	12/18-13	130	50	209412	214060*
			right	12/20-9	130	50	54688	212588
			left	12/20-9	130	50	54689	213223
			right	12/20-13	130	50	209413	
			left	12/20-13	130	50	209414	



227514

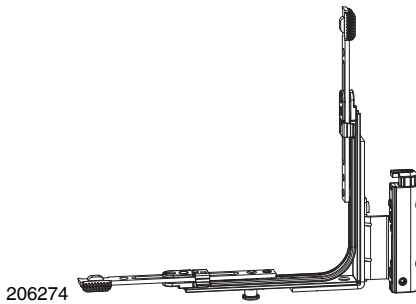
9.4.3.5 Rebated corner supports DT160 for casement doors with rebate-leg screw fixing				kg	cube	No	No Tricoat	
T	silver	for balcony doors with rebate-leg screw-fixing	right	12/18-9	160	50	227512	
			left	12/18-9	160	50	227513	
			right	12/18-13	160	50	227514	
			left	12/18-13	160	50	227515	
			right	12/20-9	160	50	227516	
			left	12/20-9	160	50	227517	
			right	12/20-13	160	50	227518	
			left	12/20-13	160	50	227519	



57232

9.4.3.6 Rebated corner supports DTuni for casement doors without rebate-leg screw fixing				kg	cube	No	No Tricoat	
T	silver	for balcony doors	right	12/18-9	100	50	57232	
			left	12/18-9	100	50	57233	
			right	12/18-13	100	50	209407 ¹	
			left	12/18-13	100	50	209408 ¹	
			right	12/20-13	100	50	209409 ¹	
			left	12/20-13	100	50	209410 ¹	

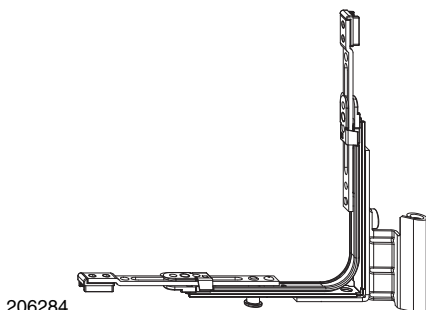
¹ When using spacer for rebated corner hinge item no. 44234, one vertical screw hole omits.



206274

T 9.4.3.7 Rebated corner supports DTuni with rebate-leg screw fixing EH with corner element						No	No Tricoat
		silver	with 1 i.S.				
right	4/15-9	130	20	224284 ¹			
left	4/15-9	130	20	224285 ¹			
right	4/18-13	130	20	214908 ¹			
left	4/18-13	130	20	214910 ¹			
right	12/18-9	130	20	206274 ¹	207593 ¹		
left	12/18-9	130	20	206275 ¹	207594 ¹		
right	12/18-11	130	20	207065 ¹	207595 ¹		
left	12/18-11	130	20	207066 ¹	207596 ¹		
right	12/18-13	130	20	206276 ¹	208315 ¹		
left	12/18-13	130	20	206277 ¹	208316 ¹		
right	12/20-9	130	20	206278 ¹	207597 ¹		
left	12/20-9	130	20	206279 ¹	207598 ¹		
right	12/20-13	130	20	206280 ¹	207599 ¹		
left	12/20-13	130	20	206281 ¹	207600 ¹		

¹ Suitable for half round and angled windows as well as EH.

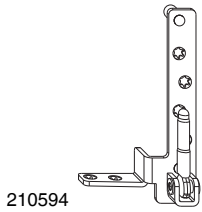


206284

T 9.4.3.8 Rebated corner supports DTuni without rebate-leg screw fixing EH with corner element						No	No Tricoat
		silver	with 1 i.S.				
right	4/18-9	100	20	206284 ¹			
left	4/18-9	100	20	206285 ¹			
right	12/18-9	100	20	208773 ¹			
left	12/18-9	100	20	208774 ¹			
right	12/18-13	100	20	208793 ¹	217668 ¹		
left	12/18-13	100	20	208794 ¹	217669 ¹		
right	12/20-9	100	20	208775 ¹			
	12/20-13	100	20	208795 ¹			
left	12/20-13	100	20	208796 ¹			

¹ Suitable for half round and angled windows as well as EH.

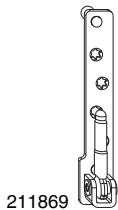
9.5 Pivot posts MULTI MAMMUT



210594

T 9.5.1 Pivot posts for timber MULTI MAMMUT

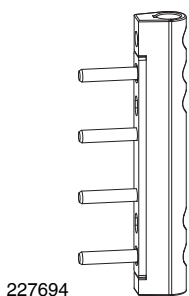
				kg	cube	No	No Tricoat
silver	with 9 mm supporting pins	right	12/18	220	20	210594	223053
		left	12/18	220	20	210595	223054
		right	12/20	220	20	210605	223055
		left	12/20	220	20	210606	223056
traffic white RAL 9016	with 9 mm supporting pins	right	12/18	220	20	222500	
		left	12/18	220	20	222501	
		right	12/20	220	20	222502	
		left	12/20	220	20	222503	



211869

P 9.5.2 Pivot posts for PVC MULTI MAMMUT

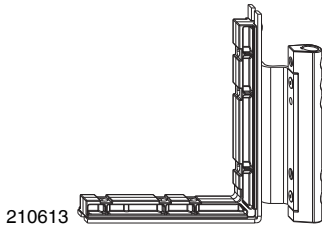
				kg	cube	No	No Tricoat
silver	with 9 mm supporting pins	right	12/18 12/20	180	20	211869	217765
		left	12/18 12/20	180	20	211870	217766
traffic white RAL 9016	with 9 mm supporting pins	right	12/18 12/20	180	20	212540	
		left	12/18 12/20	180	20	212541	





227694


P 9.5.3 Corner supports PVC MULTI MAMMUT

				kg	cube	No	No Tricoat
silver	with 5 mm supporting pins 23 mm long			180	20	227694	227696
traffic white RAL 9016	with 5 mm supporting pins 23 mm long			180	20	227695	

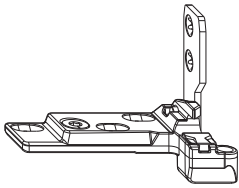


9.5.4 Rebated corner supports MULTI MAMMUT					No	No Tricoat
silver	pre-assembled spacer bar for corner hinge	right 12/18-9	220	20	210613	223059
		left 12/18-9	220	20	210614	223060
		right 12/18-13	220	20	210611	223057
		left 12/18-13	220	20	210612	223058
		right 12/20-9	220	20	210617	223063
		left 12/20-9	220	20	210618	223064
		right 12/20-13	220	20	210615	223061
		left 12/20-13	220	20	210616	223062
traffic white RAL 9016	pre-assembled spacer bar for corner hinge	right 12/18-9	220	20	222506	
		left 12/18-9	220	20	222507	
		right 12/18-13	220	20	222504	
		left 12/18-13	220	20	222505	
		right 12/20-9	220	20	222510	
		left 12/20-9	220	20	222511	
		right 12/20-13	220	20	222508	
		left 12/20-13	220	20	222509	



9.5.5 Accessories for pivot posts MULTI MAMMUT				No	No Tricoat
silver	packer for rebated corner support Multi Mammut	2 mm	50	363306	
		3 mm	50	363307	
white	clip-on bush 10 mm, Multi Mammut fittings		50	362336	

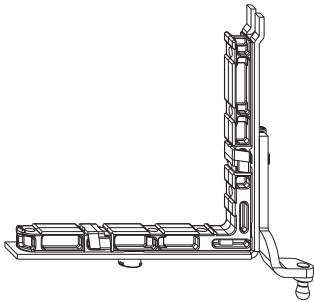
9.6 Pivot posts TV



55291

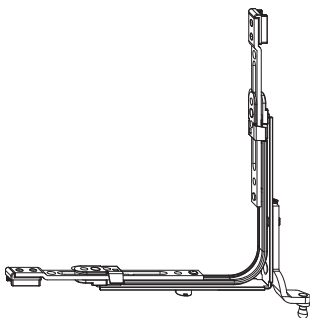
T 9.6.1 Pivot posts TV timber			kg		No	No Tricoat
silver	right	Euro-rebate 24 mm rebate depth 13 mm offset	100	50	55291 ¹	
	left	Euro-rebate 24 mm rebate depth 13 mm offset	100	50	55292 ¹	

¹ Available for PVC windows upon request.



58131

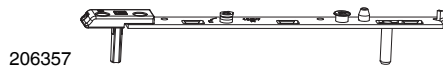
9.6.2 Rebated corner supports TV			kg		No	No Tricoat
silver	right	13 mm offset	100	50	58131	
	left	13 mm offset	100	50	58132	



206163

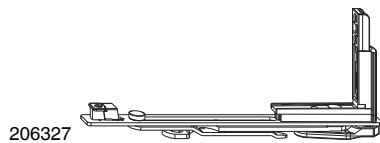
9.6.3 Rebated corner supports TV with corner element			kg		No	No Tricoat
silver	right	13 mm offset	60	10	206163	
	left	13 mm offset	60	10	206165	

9.7 Pivot posts INVISIBLE



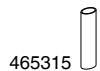
206357

9.7.1 Pivot posts INVISIBLE					kg		No	No Tricoat
silver	screw axis 12 mm	right	9 mm offset	timber rebate depth 18 mm	80	20	212659	
		left	9 mm offset	timber rebate depth 18 mm	80	20	212660	
	screw axis 13 mm	right	9 mm offset	timber rebate depth 20 mm	100	20	206357	
		left	9 mm offset	timber rebate depth 20 mm	100	20	206358	



206327

9.7.2 Rebated corner supports INVISIBLE					kg		No	No Tricoat
silver	timber rebate depth 18 mm	right	9 mm offset		80	20	212663	
		left	9 mm offset		80	20	212664	
	timber rebate depth 20 mm	right	9 mm offset		100	20	206327	
		left	9 mm offset		100	20	206328	



465315

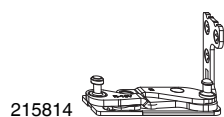
9.7.3 Accessories INVISIBLE							No	No Tricoat
white	clip-on bush 8 mm, Invisible				400		465315	

9.8 Pivot posts MULTI POWER

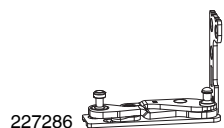


T	9.8.1 Pivot posts for timber MULTI POWER				kg	No	No Tricoat
silver	right	timber 24 mm rebate depth 9 mm offset	150	20	215812 ¹	218883 ^{1*}	
	left	timber 24 mm rebate depth 9 mm offset	150	20	215813 ¹	218884 ^{1*}	
	right	timber 24 mm rebate depth 13 mm offset	150	20	215810 ¹	218885 ^{1*}	
	left	timber 24 mm rebate depth 13 mm offset	150	20	215811 ¹	218886 ^{1*}	
	right	timber 30 mm rebate depth 13 mm offset	150	20	214252 ¹	218887 ^{1*}	
	left	timber 30 mm rebate depth 13 mm offset	150	20	214253 ¹	218888 ^{1*}	

¹ Use support rawplug item no. 36668 for sash weights over 100 kg.

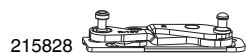


P	9.8.2 Pivot posts for PVC MULTI POWER				kg	No	No Tricoat
silver	right	PVC 30 mm rebate depth 9 mm offset	150	20	215816		
	left	PVC 30 mm rebate depth 9 mm offset	150	20	215817		
	right	PVC 30 mm rebate depth 13 mm offset	150	20	215814	218891*	
	left	PVC 30 mm rebate depth 13 mm offset	150	20	215815	218892*	



P	9.8.3 Pivot posts for PVC MULTI POWER for thresholds				kg	No	No Tricoat
silver	for threshold	right	13 mm offset	PVC	150	20	227286 ¹
		left	13 mm offset	PVC	150	20	227287 ¹

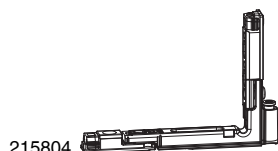
¹ Observe assembly instructions and restrictions for thresholds of type Grundmeier KG Combi, Eifel TB and Profine A075 or A076!



T	9.8.4 Pivot posts for 3-sashed windows for timber MULTI POWER				kg	No	No Tricoat
silver	right	timber 24 mm rebate depth 9 mm offset	80	20	215830	218893	
	left	timber 24 mm rebate depth 9 mm offset	80	20	215831	218894	
	right	timber 24 mm rebate depth 13 mm offset	80	20	215828	218895	
	left	timber 24 mm rebate depth 13 mm offset	80	20	215829	218896	

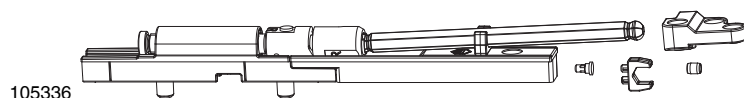


9.8.5 Pivot posts for 3-sashed windows for PVC MULTI POWER				kg		No	No Tricoat
silver	right	PVC 30 mm rebate depth 9 mm offset	80	20	215834		
	left	PVC 30 mm rebate depth 9 mm offset	80	20	215835		
	right	PVC 30 mm rebate depth 13 mm offset	80	20	215832	218899	
	left	PVC 30 mm rebate depth 13 mm offset	80	20	215833	218900	

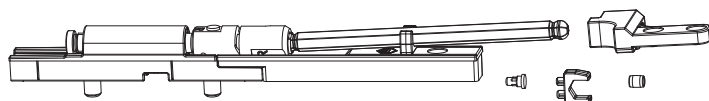


9.8.6 Rebated corner supports MULTI POWER				kg		No	No Tricoat
silver	right	9 mm offset	150	20	215806	218879*	
	left	9 mm offset	150	20	215807	218880*	
	right	13 mm offset	150	20	215804	218881*	
	left	13 mm offset	150	20	215805	218882*	

9.8.7 Load transfer MULTI POWER

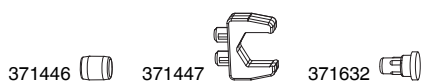


105336



105338

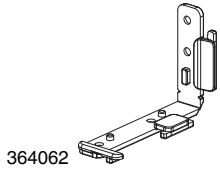
9.8.7.1 Load transfer MULTI POWER				kg		No	No Tricoat
silver	right	FT24	180	10	105336	105574	
	left	FT24	180	10	105339	105787	
	right	FT30	180	10	105338	105575	
	left	FT30	180	10	105337	105788	



9.8.7.2 Accessories for load transfer MULTI POWER					No	No Tricoat
seal for load transfer Multi Power				500	371446	
installation aid for load transfer Multi Power				50	371447	
centre-fixing for load transfer Multi Power				50	371632	

* TRICOAT-PLUS standard parts

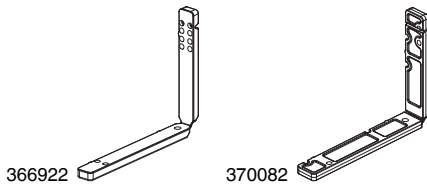
9.8.8 Packers MULTI POWER



364062

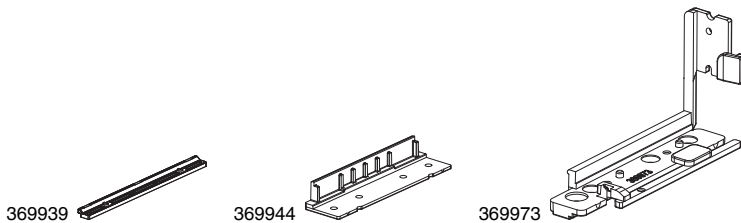
P 9.8.8.1 Packers MULTI POWER for PVC profiles				No	No Tricoat	
grey F1	type01 for Multi Power	Aluplast AD 2000, Veka Softline 70 AD + MD + Topline + Swingline, Brüggmann AD + MD, Alphacan System Alpha 70 + 80, Schüco Corona CT70 / SI 82, Salamander bluEvolution 82 AD + MD	pivot post left/scissor stay hinge right	100	364063	
			pivot post right/scissor stay hinge left	100	364062	
type02 for Multi Power	Aluplast AD 4000, Aluplast MD 5000 + 6000 + 8000, Schüco Corona AS	pivot post left/scissor stay hinge right	100	364065		
		pivot post right/scissor stay hinge left	100	364064		
type03 for Multi Power	Salamander bluEvolution 92 + System 76 MD, Gromathic AD 3100	pivot post left/scissor stay hinge right	100	364067		
		pivot post right/scissor stay hinge left	100	364066		
type04 for Multi Power	Rehau S730 + Brilliant Design AD + Clima Design, Kompen Termoline	pivot post left/scissor stay hinge right	100	364069		
		pivot post right/scissor stay hinge left	100	364068		
type05 for Multi Power	Profine Trocal Innonova 70 A3/A5/M5	pivot post left/scissor stay hinge right	100	364071		
		pivot post right/scissor stay hinge left	100	364070		
type06 for Multi Power	Gealan S7000 + S8000 + S9000	pivot post left/scissor stay hinge right	100	364073		
		pivot post right/scissor stay hinge left	100	364072		
type07 for Multi Power	Salamander 2D + 3D + MD + Streamline 76	pivot post left/scissor stay hinge right	100	364075		
		pivot post right/scissor stay hinge left	100	364074		
type08 for Multi Power	Rehau Geneo MD + Brilliant Design MD + Thermo Design	pivot post left/scissor stay hinge right	100	364077		
		pivot post right/scissor stay hinge left	100	364076		
type09 for Multi Power	Profine Trocal System 88 + Innonova 2000	pivot post left/scissor stay hinge right	100	364175¹		
		pivot post right/scissor stay hinge left	100	364174¹		
type10 for Multi Power	Aluplast Energeto 5000 + 8000	pivot post left/scissor stay hinge right	100	364177		
		pivot post right/scissor stay hinge left	100	364176		
type11 for Multi Power	Inoutic AD	pivot post left/scissor stay hinge right	100	364179		
		pivot post right/scissor stay hinge left	100	364178		
type12 for Multi Power	Inoutic Prestige MD	pivot post left/scissor stay hinge right	100	364181¹		
		pivot post right/scissor stay hinge left	100	364180¹		
type13 for Multi Power	Kömmerling Eurofutur AD + MD + 3S + MPF, KBE 70 AD + MD	pivot post left/scissor stay hinge right	100	366340		
		pivot post right/scissor stay hinge left	100	366339		
type14 for Multi Power	KB07 KBE 70 AD, KB08 KBE 70 MD, KB13 KBE System 88, Trocal 76 AD; Deceuninck Zendow	pivot post left/scissor stay hinge right	100	367263		
		pivot post right/scissor stay hinge left	100	367262		
type15 for Multi Power	Wymar 3000 AD + MD	pivot post left/scissor stay hinge right	100	367848		
		pivot post right/scissor stay hinge left	100	367847		
type16 for Multi Power	Swish 24-7 / Profile 22	pivot post left/scissor stay hinge right	100	368311		
		pivot post right/scissor stay hinge left	100	368310		
type17 for Multi Power	Deceuninck Zendow Kämpfer; Roplasto	pivot post left/scissor stay hinge right	100	369288		
		pivot post right/scissor stay hinge left	100	369287		
type18 for Multi Power	Eurocell TBT	pivot post left/scissor stay hinge right	100	370031		
		pivot post right/scissor stay hinge left	100	370030		
type19 for Multi Power	Profile 22 Optima	pivot post left/scissor stay hinge right	100	370466		
		pivot post right/scissor stay hinge left	100	370465		
type20 for Multi Power	Eurocell und Eurologic 70	pivot post left/scissor stay hinge right	100	370600		
		pivot post right/scissor stay hinge left	100	370599		
type21 for Multi Power	HL Plastics Liniar	pivot post left/scissor stay hinge right	100	370602		
		pivot post right/scissor stay hinge left	100	370601		
type22 for Multi Power	Synseal Synerjy	pivot post left/scissor stay hinge right	100	370506		
		pivot post right/scissor stay hinge left	100	370505		

¹ Use pivot post MULTI POWER timber 24 mm rebate depth.

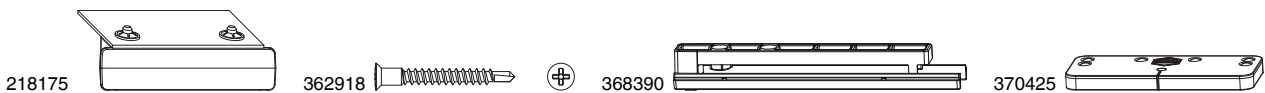


9.8.8.2 Packers MULTI POWER for Alu profiles					No	No Tricoat
pearl light grey RAL 9022	groove 10/14	Heraal	pivot post and scissor stay hinge MULTI POWER	100	366922 ¹	
	groove 14/18	Aluprof, Alumil, Aliplast, Blyweert, Ponzio, Yawal, Feal T85, Cortizio 3500, Bauxal	pivot post and scissor stay hinge MULTI POWER	100	370082 ¹	

¹ Use pivot post MULTI POWER timber 24 mm rebate depth.



9.8.8.3 Packers MULTI POWER for thresholds					No	No Tricoat
pearl light grey RAL 9022		GKG Grundmeier	for threshold	20	369939	
		Roto Gluske BKV Eifel TB	for threshold	20	369944	
		Trocal Alu und GFK	for threshold	20	369945	
	right	VEKA	for threshold	20	369973	
	left	VEKA	for threshold	20	369974	



9.8.9 Accessories MULTI POWER		Ø	L		No	No Tricoat
grey F1	mounting cover for pivot post MULTI POWER right/left			5	218175	
silver	special drill screw Multi Power Phillips	4,5	32	1.000	364563 ¹	
	special drill screw Multi Power T20	4,5	38	500	362918	105152*
	support rawlplug Multi Power timber		19	50	36668	
	clip-on part corner support MULTI POWER for 18 mm air gap		117	20	368390	
black	back pull plate for narrow profiles MULTI POWER timber			100	370425	


¹ Maximum sash weight 100 kg!

9.9 Cover caps

9.9.1 Cover caps for pivot posts




41742

9.9.1.1 Short cover caps for pivot posts AS/DTuni/PVC			No	No Tricoat
traffic white RAL 9016	dyed	100	41742 ¹	
pearl light grey RAL 9022	dyed	100	43566	
silver	painted	100	360232	
champagne	painted	100	42049	
titanium	painted	100	42048	
light bronze	dyed	100	41762	
cream white RAL 9001	dyed	100	42207	
brown F5	dyed	100	42195	
chrome-look	metallised	100	44241	
black	dyed	100	42196	
gold look	metallised	100	41763	

¹ Also available as bulk pack of 500 pieces as item no. 42286.




41743

9.9.1.2 Long cover caps for pivot posts DT130/PVC			No	No Tricoat
traffic white RAL 9016	dyed	100	41743 ¹	
pearl light grey RAL 9022	dyed	100	43567	
silver	painted	100	360231	
champagne	painted	100	42058	
titanium	painted	100	42057	
light bronze	dyed	100	41752	
cream white RAL 9001	dyed	100	42215	
brown F5	dyed	100	42208	
chrome-look	metallised	100	44242	
black	dyed	100	42209	
gold look	metallised	100	41760	

¹ Also available as bulk pack of 500 pieces as item no. 42287.




369611

9.9.1.3 Long cover caps for pivot posts DT160			No	No Tricoat
traffic white RAL 9016	painted	50	369611	
pearl light grey RAL 9022	painted	50	369612	
titanium	painted	50	369613	
gold look	painted	100	369614	




369529

T 9.9.1.4 Recess cover caps for pivot posts DT160				No	No Tricoat
grey F1	right	4/15-9 and 4/18-9	50	369529	
	left	4/15-9 and 4/18-9	50	369530	
	right	4/18-13	50	369531	
	left	4/18-13	50	369532	




43622

9.9.1.5 Long cover caps for surface-mounted pivot posts				No	No Tricoat
traffic white RAL 9016	right	dyed	100	43622	
	left	dyed	100	43623	
pearl light grey RAL 9022	right	dyed	100	43743	
	left	dyed	100	43744	
silver	right	painted	100	363353	
	left	painted	100	363354	
champagne	right	painted	100	43733	
	left	painted	100	43734	
titanium	right	painted	100	43731	
	left	painted	100	43732	
light bronze	right	dyed	100	43727	
	left	dyed	100	43728	
cream white RAL 9001	right	dyed	100	43739	
	left	dyed	100	43740	
brown F5	right	dyed	100	43735	
	left	dyed	100	43736	
chrome-look	right	metallised	100	364087	
	left	metallised	100	364088	
gold look	right	metallised	100	43729	
	left	metallised	100	43730	



362609


9.9.1.6 Cover caps for surface-mounted pivot posts for rebated corner supports AS/PVC					No	No Tricoat
traffic white RAL 9016	right	dyed		100	362609	
	left	dyed		100	362610	
pearl light grey RAL 9022	right	dyed		100	363998	
	left	dyed		100	363999	
silver	right	painted		100	364004	
	left	painted		100	364005	
champagne	right	painted		100	364096	
	left	painted		100	364097	
titanium	right	painted		100	363996	
	left	painted		100	363997	
light bronze	right	dyed		100	364094	
	left	dyed		100	364095	
cream white RAL 9001	right	dyed		100	364000	
	left	dyed		100	364001	
brown F5	right	dyed		100	364018	
	left	dyed		100	364019	
chrome-look	right	metallised		100	364098	
	left	metallised		100	364099	
gold look	right	metallised		100	364016	
	left	metallised		100	364017	



364498




365224

T 9.9.1.7 Cover caps for timber MULTI POWER					No	No Tricoat
pearl light grey RAL 9022	right	timber 24 mm rebate depth	dyed	20	364498	
	left	timber 24 mm rebate depth	dyed	20	364499	
	right	timber 30 mm rebate depth	dyed	20	365224	
	left	timber 30 mm rebate depth	dyed	20	365225	

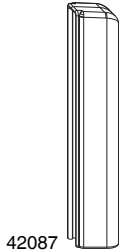


364500


P 9.9.1.8 Cover caps for PVC MULTI POWER					No	No Tricoat
pearl light grey RAL 9022	right	PVC 30 mm rebate depth	dyed	20	364500	
	left	PVC 30 mm rebate depth	dyed	20	364501	



9.9.2 Cover caps for corner supports, rebated corner supports and rebated corner supports with corner element




42087

P 9.9.2.1 Cover caps for corner supports PVC			No	No Tricoat
traffic white RAL 9016	dyed	100	42087¹	
pearl light grey RAL 9022	dyed	100	43940	
silver	painted	100	360233	
champagne	painted	100	42096	
titanium	painted	100	42095	
light bronze	dyed	100	42093	
cream white RAL 9001	dyed	100	42188	
brown F5	dyed	100	42186	
chrome-look	metallised	100	44245	
gold look	metallised	100	42094	

¹ Also available as bulk pack of 500 pieces as item no. 42288.




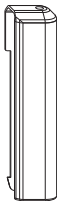
41740

9.9.2.2 Cover caps for rebated corner supports without rebate-leg screw fixing				No	No Tricoat
traffic white RAL 9016	right	dyed	100	41740	
	left	dyed	100	41741	
pearl light grey RAL 9022	right	dyed	100	43564	
	left	dyed	100	43565	
silver	right	painted	100	363116	
	left	painted	100	363117	
champagne	right	painted	100	42064	
	left	painted	100	42061	
titanium	right	painted	100	42063	
	left	painted	100	42060	
light bronze	right	dyed	100	41764	
	left	dyed	100	41770	
cream white RAL 9001	right	dyed	100	43553	
	left	dyed	100	43554	
brown F5	right	dyed	100	42599	
	left	dyed	100	42598	
chrome-look	right	metallised	100	44239	
	left	metallised	100	44240	
black	right	dyed	100	43518	
	left	dyed	100	43519	
gold look	right	metallised	100	41769	
	left	metallised	100	41771	




363403

9.9.2.3 Cover caps with tab for rebated corner supports without rebate-leg screw fixing				No	No Tricoat
traffic white RAL 9016	right	dyed	100	362333	
	left	dyed	100	362334	
pearl light grey RAL 9022	right	dyed	100	363508	
	left	dyed	100	363509	
silver	right	painting	100	363403	
	left	painting	100	363404	
titanium	right	painting	100	363137	
	left	painting	100	363138	
light bronze	right	dyed	100	364100	
	left	dyed	100	364101	
cream white RAL 9001	right	dyed	100	363510	
	left	dyed	100	363511	
brown F5	right	dyed	100	364029	
	left	dyed	100	364030	
chrome-look	right	metallised	100	364104	
	left	metallised	100	364105	
gold look	right	metallised	100	364027	
	left	metallised	100	364028	




43587

9.9.2.4 Cover caps for rebated corner supports with rebate-leg screw fixing				No	No Tricoat
traffic white RAL 9016	right	dyed	100	43587	
	left	dyed	100	43588	
pearl light grey RAL 9022	right	dyed	100	43597	
	left	dyed	100	43608	
silver	right	painting	100	360953	
	left	painting	100	360954	
champagne	right	painting	100	43593	
	left	painting	100	43604	
titanium	right	painting	100	43592	
	left	painting	100	43603	
light bronze	right	dyed	100	43590	
	left	dyed	100	43601	
cream white RAL 9001	right	dyed	100	43598	
	left	dyed	100	43609	
brown F5	right	dyed	100	43595	
	left	dyed	100	43606	
chrome-look	right	metallised	100	44246	
	left	metallised	100	44247	
gold look	right	metallised	100	43591	
	left	metallised	100	43602	






43651

P 9.9.2.5 Dust cover caps for corner supports PVC			No	No Tricoat
traffic white RAL 9016	dyed	100	40341	
pearl light grey RAL 9022	dyed	100	43651	
titanium	dyed	100	209669	
grey aluminium RAL 9007	dyed	100	224132	
grey brown RAL 8019	dyed	100	203287	




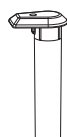
43626

9.9.2.6 Dust cover caps for rebated corner supports AS/DTuni with rebate-leg screw fixing			No	No Tricoat
traffic white RAL 9016	dyed	100	42166	
pearl light grey RAL 9022	dyed	100	43626	
titanium	dyed	100	358989	
grey brown RAL 8019	dyed	100	360230	
pearl gold RAL 1036	dyed	100	40342	




42185

9.9.2.7 Dust cover caps for rebated corner supports AS/PVC and rebated corner supports DTuni without rebate-leg screw fixing			No	No Tricoat
traffic white RAL 9016	dyed	100	42185	
pearl light grey RAL 9022	dyed	100	43701	
black brown RAL 8022	dyed	100	368556	




364726



9.9.2.8 Dust cover caps for rebated corner supports MULTI MAMMUT			No	No Tricoat
traffic white RAL 9016	dyed	100	364726	
pearl light grey RAL 9022	dyed	100	363148	
titanium	dyed	100	367573	

9.10 Accessories for pivot posts



9.10.1 Spacer bars for corner support				No	No Tricoat
black	packer	for rebated corner support AS/DTuni	100	40485	
	packer with faceplate for 1 mm offset	for rebated corner support AS/DTuni	100	40486	
	spacer bar for corner support	for rebated corner support AS/DTuni	100	44234	



T 9.10.2 Support rawlplug and support dowel				L		No	No Tricoat
silver	support rawlplug Multi Power timber		19	50	36668	355715*	
	support rawlplug pivot post DT160 4 mm air gap / 12 mm air gap		8	20	369535		



**MACO
MULTI-MATIC**



Pivot posts



10 French casement locks

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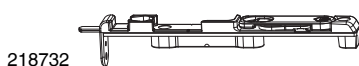


10 French casement locks

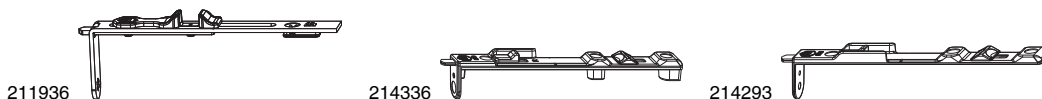
10.1 Shootbolts



10.1.1 Shootbolts bottom		L		No	No Tricoat
silver	right MMKS for Eurogroove	170	20	214445	
	left MMKS for Eurogroove	170	20	214446	
	MT/MM 4 mm air gap R8	170	20	55409	205068
	MT/MM hardware groove	170	20	52504	201770
	MT/MM Euro-rebate 18 mm rebate depth 9 mm offset	170	20	55167	202383
	MMKS Euro-rebate 24mm rebate depth 13mm offset	170	20	218177	219170*
	flat console with reversible striker plate and swivel plate HH 300 MM	288	20	215781	
	flat console with reversible striker plate and swivel plate HH 400 MM	288	20	215780	
	with i.S. striker plate and sash lifter run-up HH 300 MM	288	20	208955	
	with i.S. striker plate and sash lifter run-up HH 400 MM	288	20	208954	215148
	with reversible striker plate and sash lifter run-up HH 300 MMKS	288	20	215304	
	with reversible striker plate and sash lifter run-up HH 400 MMKS	288	20	215303	

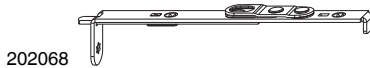


10.1.2 Shootbolts bottom for thresholds		L		No	No Tricoat
silver	right MM/MMKS for Eurogroove and 18 mm deadbolt protrusion	170	20	218732	
	left MM/MMKS for Eurogroove and 18 mm deadbolt protrusion	170	20	218733	



10.1.3 Shootbolts top		L		No	No Tricoat
silver	controlled MM	138	20	211936	
	right MM/MMKS for Eurogroove	162	20	214336	217511
	left MM/MMKS for Eurogroove	162	20	214337	217510
	MM/MMKS hardware groove	162	20	213922	218759
	MM/MMKS Euro-rebate 18 mm rebate depth 9 mm offset	162	20	214293	217442
	MM/MMKS Euro-rebate 24mm rebate depth 13mm offset	162	20	218176	219169
	MM/MMKS 4 mm air gap R8	170	20	214506	
	with i.S. striker plate and operating lever MM	450	20	209073	

* TRICOAT-PLUS standard parts



10.1.4 Shotbolts bottom/top		L		No	No Tricoat
silver	flat MT/MM for Eurogroove	180	20	202068	212712
	MT/MM for Eurogroove	286	20	208956	
	for striker plate and reverse-action lever MM for Eurogroove	450	20	215240¹	

¹ Compatible striker plate item no. 94221.

10.1.5 Accessories for shotbolts






10.1.5.1 Eurogroove packer with shotbolt for Euro-rebate		L		No	No Tricoat
natural		169	100	41263	



10.2 French casement drive gears




10.2.1 French casement drive gears for Eurogroove

221902 

10.2.1.1 French casement drive gears for Eurogroove FHH					No	No Tricoat	
silver	for 1 i.S.	660	190	431 - 660	10	202873 ¹	207630 ^{1*}
		840	300	661 - 840	10	221901	207631*
		1090	400	841 - 1.090	10	221902	207632*
		1340	500	1.091 - 1.340	10	221903	207633*
for 2 i.S.		1590	600	1.341 - 1.590	10	221906	207634*
		1700	700	1.591 - 1.700	10	207242	207635*
		1950	1.050	1.701 - 1.950	10	221907	207636*
for 3 i.S.		2200	1.050	1.951 - 2.200	10	221908	207637*
		2450	1.050	2.201 - 2.450	10	221909	207638*




¹ Use only in combination with turn-only drive gear 660 (item no. 201731).

209776 

10.2.1.2 French casement drive gears for Eurogroove FHH with offset HH					No	No Tricoat	
silver	for 1 i.S.	1090	300	841 - 1.090	10	217875	
			500	841 - 1.090	10	209776	
		1340	400	1.091 - 1.340	10	217878	
for 2 i.S.		1590	500	1.341 - 1.590	10	221911 ¹	210087 ^{1*}
		1700	500	1.591 - 1.700	10	209263	217509*




¹ Use only in combination with T&T drive gear 1590 (item no. 201745).

209508 

10.2.1.3 French casement drive gears for tilt lock bolt for Eurogroove FHH					No	No Tricoat	
silver	for 1 VZ	840	300	661 - 840	10	209507 ¹	222681 ¹
		1090	400	841 - 1.090	10	209508	222682*
		1340	500	1.091 - 1.340	10	209510	222684*
		1590	600	1.341 - 1.590	10	209512	222686
for 2 VZ		1700	700	1.591 - 1.700	10	209514	222688
		1950	1.050	1.701 - 1.950	10	209517	222691
for 3 VZ		2200	1.050	1.951 - 2.200	10	209518	222692*
		2450	1.050	2.201 - 2.450	10	209519	222693*

¹ Only in combination with turn-only drive gear 840 with tilt lock bolt (item no. 209590).

209509 

10.2.1.4 French casement drive gears for tilt lock bolt for Eurogroove FHH with offset HH					No	No Tricoat	
silver	for 1 VZ	1090	300	841 - 1.090	10	209509 ¹	222683 ¹
			500	841 - 1.090	10	216143	
		1340	400	1.091 - 1.340	10	209511	222685
		1590	500	1.341 - 1.590	10	209513	222687*
		1700	500	1.591 - 1.700	10	209516	222690
for 2 VZ		1700	600	1.591 - 1.700	10	209515	222689

¹ Can be used only in combination with turn-only drive gear 1090 with tilt lock bolt (item no. 209591).

218715

P	10.2.1.5 French casement drive gears for tilt lock bolt for Eurogroove FHH for thresholds							No	No Tricoat
	silver	for 3 VZ	1950	1.050	1.701 - 1.950	10	218715		
		2200	1.050	1.951 - 2.200	10	218716			
	for 4 VZ	2450	1.050	2.201 - 2.450	10	218717			

221904

10.2.1.6 French casement drive gears EH for Eurogroove FHH							No	No Tricoat
silver	for 2 i.S.	840	300	661 - 840	10	206582 ^{1,2}	207639 ^{1,2}	
		1090	400	841 - 1.090	10	221904 ²	207640 ²	
		1340	500	1.091 - 1.340	10	221905 ²	207641 ²	
	for 3 i.S.	1590	600	1.341 - 1.590	10	205643 ²	207642 ²	
		1700	700	1.591 - 1.700	10	207308 ^{2,3}	207643 ^{2,3}	

¹ Use only in combination with turn-only drive gear 840 EH (item no. 206614).

² For burglar-resistant windows according to standard EN 1627.

³ Above SRH 1700 mm use French casement drive gear FHH for Eurogroove and crop at 170 mm notch. Then extend with bottom end piece for drive gears VHH item no. 205717.

221910

10.2.1.7 French casement drive gears EH for Eurogroove FHH with offset HH							No	No Tricoat
silver	for 2 i.S.	1090	300	841 - 1.090	10	217877 ^{1,2}		
		1340	400	1.091 - 1.340	10	221910 ^{2,3}		
		1590	500	1.341 - 1.590	10	209023 ^{2,4}		
	for 3 i.S.	1700	600	1.591 - 1.700	10	208967 ²		
		1950	700	1.701 - 1.950	10	208970 ²		

¹ Use only in combination with T&T drive gear EH 1090 (item no. 217969).

² For burglar-resistant windows according to standard EN 1627.

³ Use only in combination with T&T drive gear EH 1340 (item no. 201744).

⁴ Use only in combination with T&T drive gear EH 1590 (item no. 208804).



227937





202471

10.2.1.8 French casement drive gears for Eurogroove VHH i.S.						No	No Tricoat
silver	for 1 i.S.	800	695 - 800	10	227937 ¹		
		1250	801 - 1.250	10	202471 ¹	207644 ^{1*}	
	for 2 i.S.	1750	1.251 - 1.750	10	202472	207645 *	
	for 3 i.S.	2250	1.751 - 2.250	10	202473	207646 *	

¹ Use only in combination with corner element item no. 202475.

211791







10.2.1.9 French casement drive gears for Eurogroove VHH VZ						
silver	for 1 VZ	1250	840 - 1.250	10	211791¹	
	for 2 VZ	1750	1.251 - 1.750	10	209670	
	for 3 VZ	2250	1.751 - 2.250	10	209671	

¹ Use only in combination with end piece item no. 209648. At centered handle position the application range changes to 930 – 1250 mm.

227784



10.2.1.10 French casement drive gears EH for Eurogroove VHH with central reverse-action lever						
silver	without striker plates	800	500 - 800	10	227784¹	
		1250	801 - 1.250	10	227785¹	

¹ For burglar-resistant windows according to standard EN 1627.




10.2.1.11 Accessoires for French casement drive gears for Eurogroove

203810

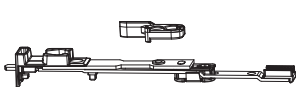


208333

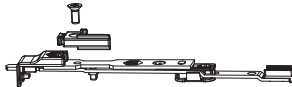


10.2.1.11.1 Faceplate extensions for French casement drive gears					
silver	for 1 i.S.	235	20	203810	207559*
		470	20	208333	208369*
	for 1 VZ	235	20	214712	223048

209637






211745



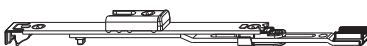
209648







10.2.1.11.2 End pieces with shootbolt protrusion for French casement drive gears MM-KS					
silver	bottom		20	209637	222709
	top		20	211745¹	222748^{1*}
	bottom	with reverse-action lever	20	209648	222711

¹ Striker plate enclosed.


205717




10.2.1.11.3 End piece bottom for French casement drive gears VHH						
silver	with striker bottom		1.340 - 2.450	20	205717¹	207557¹


¹ For burglar-resistant windows according to standard EN 1627.



44660 


10.2.1.11.4 Striker plate cover for French casement drive gear MM			No	No Tricoat
silver		100	44660	

97550 

10.2.1.11.5 Locking slider for French casement drive gear MM			No	No Tricoat
silver		100	97550¹	

¹ Thread forming screw item no. 44162 must be ordered separately.




44162 

10.2.1.11.6 Thread tapping screw M5x12 for slider-locks MM		L 	No	No Tricoat
silver		12 100	44162	



10.2.2 French casement drive gears for hardware groove






10.2.2.1 French casement drive gears for hardware groove FHH					No	No Tricoat	
silver		660	190	431 - 660	10	203482 ^{1,2}	207650 ^{1,2}
	for 1 i.S.	840	300	661 - 840	10	226629 ¹	
for 2 i.S.		1090	400	841 - 1.090	10	226635 ¹	
		1340	500	1.091 - 1.340	10	226636 ¹	
		1590	600	1.341 - 1.590	10	226637 ¹	
		1700	700	1.591 - 1.700	10	226638 ¹	
for 3 i.S.		1950	1.050	1.701 - 1.950	10	226639 ¹	
		2200	1.050	1.951 - 2.200	10	226640 ¹	226754 ¹
for 4 i.S.		2450	1.050	2.201 - 2.450	10	226641 ¹	226755 ¹

¹ Bracket item no. 94035 and faceplate restrainer item no. 94036 must be ordered separately! The type and the number of fixtures is dependent on the capabilities of the French casement drive gear after cutting.




² Possible only with turn-only drive gear BS 15!



10.2.2.2 French casement drive gears for hardware groove FHH with offset HH					No	No Tricoat	
silver	for 1 i.S.	1090	300	841 - 1.090	10	226642 ¹	
			500	841 - 1.090	10	226643 ¹	
for 2 i.S.		1340	400	1.091 - 1.340	10	226644 ¹	
		1590	500	1.341 - 1.590	10	226645 ¹	

¹ Bracket item no. 94035 and faceplate restrainer item no. 94036 must be ordered separately! The type and the number of fixtures is dependent on the capabilities of the French casement drive gear after cutting.






10.2.2.3 French casement drive gears for tilt lock bolt for hardware groove FHH					No	No Tricoat	
silver	for 1 VZ	840	300	661 - 840	10	209556 ^{1,2}	222694 ^{1,2}
		1090	400	841 - 1.090	10	226646 ¹	226757 ¹
		1340	500	1.091 - 1.340	10	226647 ¹	226758 ¹
for 2 VZ		1590	600	1.341 - 1.590	10	226648 ¹	226759 ¹
		1700	700	1.591 - 1.700	10	226649 ¹	226760 ¹
for 3 VZ		1950	1.050	1.701 - 1.950	10	226650 ¹	226761 ¹
		2200	1.050	1.951 - 2.200	10	226651 ¹	226762 ¹
for 4 VZ		2450	1.050	2.201 - 2.450	10	226652 ¹	226763 ¹

¹ Bracket item no. 94035 and faceplate restrainer item no. 94036 must be ordered separately! The type and the number of fixtures is dependent on the capabilities of the French casement drive gear after cutting.

² Possible only with turn-only drive gear BS 15!

209558






10.2.2.4 French casement drive gears for tilt lock bolt for hardware groove FHH with offset HH									
					No	No	Tricoat		
silver	for 1 VZ	1090	300	841 - 1.090	10	209558 ¹	222696 ¹		
			500	841 - 1.090	10	226653 ¹			
		1340	400	1.091 - 1.340	10	226654 ¹	226765 ¹		
	for 2 VZ	1590	500	1.341 - 1.590	10	226655 ¹	226766 ¹		
		1700	500	1.591 - 1.700	10	226656 ¹	226767 ¹		
		1700	600	1.591 - 1.700	10	226657 ¹	226768 ¹		

¹ Bracket item no. 94035 and faceplate restrainer item no. 94036 must be ordered separately! The type and the number of fixtures is dependent on the capabilities of the French casement drive gear after cutting.

211795





10.2.2.5 French casement drive gears for hardware groove with 180° operating lever									
					No	No	Tricoat		
silver	right	840	300	661 - 840	10	211793 ¹	222751 ¹		
		1090	400	841 - 1.090	10	211795 ¹	222753 ¹		
		1340	500	1.091 - 1.340	10	211797 ¹	222755 ¹		
		1590	600	1.341 - 1.590	10	211799 ¹	222757 ¹		
		1700	700	1.591 - 1.700	10	211801 ¹	222759 ¹		
		1950	1.050	1.701 - 1.950	10	211803 ¹	222761 ¹		
		2200	1.050	1.951 - 2.200	10	211805 ¹	222763 ¹		
		2450	1.050	2.201 - 2.450	10	211807 ¹	222765 ¹		
		left	840	300	661 - 840	10	211792 ¹	222750 ¹	
	1090		400	841 - 1.090	10	211794 ¹	222752 ¹		
	1340		500	1.091 - 1.340	10	211796 ¹	222754 ¹		
	1590		600	1.341 - 1.590	10	211798 ¹	222756 ¹		
	1700		700	1.591 - 1.700	10	211800 ¹	222760 ¹		
	1950		1.050	1.701 - 1.950	10	211802 ¹	222762 ¹		
	2200		1.050	1.951 - 2.200	10	211804 ¹	222764 ¹		
	2450		1.050	2.201 - 2.450	10	211806 ¹	222764 ¹		

¹ Bracket item no. 94035 and faceplate restrainer item no. 94036 must be ordered separately! The type and the number of fixtures is dependent on the capabilities of the French casement drive gear after cutting.



226658



10.2.2.6 French casement drive gears for hardware groove VHH									
				No	No	Tricoat			
silver	for 1 i.S.	1250	801 - 1.250	10	226658 ^{1,2}	226769 ^{1,2}			
	for 1 VZ	1250	840 - 1.250	10	226659 ^{2,3}				
	for 2 i.S.	1750	1.251 - 1.750	10	226660 ²	226771 ²			
	for 3 i.S.	2250	1.751 - 2.250	10	226661 ²	226772 ²			

¹ End piece item no. 203771 required (length 200 mm).

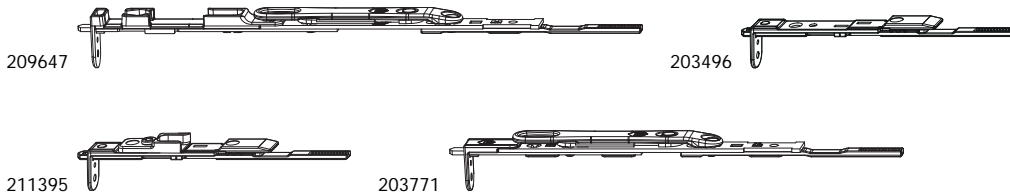
² Bracket item no. 94035 and faceplate restrainer item no. 94036 must be ordered separately! The type and the number of fixtures is dependent on the capabilities of the French casement drive gear after cutting.

³ End piece item no. 209647 required (length 269 mm) with tilt striker plate.

10.2.2.7 Accessories for French casement drive gears for hardware groove

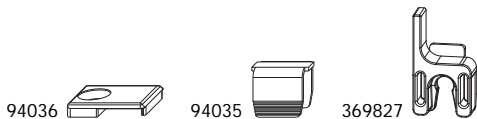


10.2.2.7.1 Faceplate extensions for French casement drive gears MM for hardware groove			No	No Tricoat
silver	140 without striker plate	20	218626	225238
	235 with striker	20	203480	207561
	470 with striker	20	218627	225239
	connecting plate MM hardware groove	50	205921	208317



10.2.2.8 End pieces for French casement drive gears for hardware groove			No	No Tricoat	
silver	end piece for French casement drive gear MMKS hardware groove	bottom with shootbolt	20	209775	222714
		bottom for tilt lock bolt with operating lever	20	209647 ^{1,2}	222710 ^{1,2}
	end piece for French casement drive-gear MM hardware groove	top with shootbolt	20	203496	207562
		top with striker with shootbolt	20	211395	217454
		bottom with reverse-action lever	20	203771 ^{1,3}	207563 ^{1,3}

¹ Order connection plate item no. 205921 separately!
² For French casement drive gear use item no. 226659!
³ For French casement drive gear use item no. 226658!





10.2.2.9 Accessories for French casement drive gears for hardware groove			No	No Tricoat
silver	faceplate restrainer	50	94036	355818
	fixing clamp	100	94035	353299
pearl light grey RAL 9022	spare part lifter run-up for French casement drive gear left	50	369827	
	spare part lifter run-up for French casement drive gear right	50	369828	

10.2.3 French casement drive gears for intermediate profiles (without striker plates)



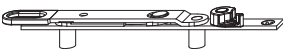
10.2.3.1 French casement drive gears for intermediate profiles FHH					No	No Tricoat
silver	without striker plates	660	190	431 - 660	10	205962
		1090	400	841 - 1.090	10	205964
		1340	500	1.091 - 1.340	10	205965
		1590	600	1.341 - 1.590	10	205966
		1950	1.050	1.701 - 1.950	10	205967
		2200	1.050	1.951 - 2.200	10	205968


205970 

10.2.3.2 French casement drive gears for intermediate profiles VHH					No	No Tricoat
silver	without striker plates	1250	801 - 1.250	10	205970¹	
		1750	1.251 - 1.750	10	205971	
		2250	1.751 - 2.250	10	205972	

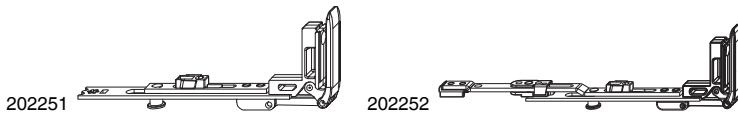
¹ Only in combination with corner element item no. 205973.



10.2.3.3 Accessories for French casement drive gears for intermediate profiles

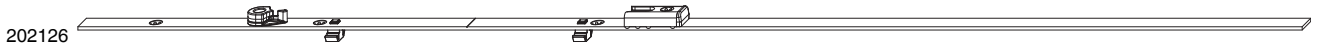
205995 




10.2.3.3.1 Operating levers for French casement drive gears without striker plate				No	No Tricoat
silver	right	with spacer sleeve 13 mm	20	208433	
		with spacer sleeve 36 mm	20	208434	
		with spacer sleeve 43 mm	20	208435	
	left	with spacer sleeve 13 mm	20	205995	
		with spacer sleeve 36 mm	20	206108	
		with spacer sleeve 43 mm	20	206107	

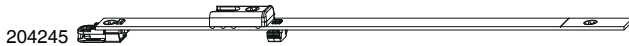





10.3 Horizontal French casement locks				N^o	N^o Tricoat
silver	French casement lock MM	230 - 800	20	202251	207662
	extendable French casement lock MM	240 - 1.650	20	202252	207663

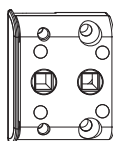


10.4 Single piece door striker		L				N^o	N^o Tricoat	
silver	for 1 i.S.	840	809,5	300	661 - 840	10	202126	207665
		1340	1.296,5	500	841 - 1.340	10	202128	207666
	for 2 i.S.	1590	1.559,5	600	1.341 - 1.590	10	202131	207667
	for 3 i.S.	2200	2.169,5	1.050	1.701 - 2.200	10	202133	207668



10.5 Faceplate extension for single piece door striker MM with striker plate		L		N^o	N^o Tricoat
silver		349,5	20	204245	

10.6 Accessories for 2-sashed windows



10804

T 10.6.1 Intermediate drive gears with spindle



No

No
Tricoat

silver						No	No Tricoat
	4 air gap/15 rebate leg/9 offset	-3,5	20			10945 ¹	101356 ¹
	12 air gap/18 rebate leg/9 offset	-6	20			10804 ¹	101357 ¹
	12 air gap/18 rebate leg/13 offset	-6	20			102233 ¹	
	12 air gap/20 rebate leg/9 offset	-6	20			10920 ¹	101358 ¹
	12 air gap/20 rebate leg/13 offset	-6	20			102234 ¹	

¹ Available for PVC windows upon request.

10.6.2 Accessories for intermediate drive gears



44274

T 10.6.2.1 Packer for intermediate drive gears



No

No
Tricoat

silver			L			No	No Tricoat
9 mm offset	5 mm (for SV150-180, SV415a-418-155)	56	5	100		44274 ¹	
	6 mm (for SV33, SV103)	56	6	100		44250 ²	
	7 mm (for SV33, SV103)	56	7	100		44300 ³	
	without rebate leg gasket, 1 mm distance	56	1,5	100		360221	
	10 mm (for SV33, SV103)	56	11	100		356970	
13 mm offset	10 mm (for SV150-180, SV415a-418-155)	56	11	100		43509	
	without rebate leg gasket	56	6	100		360220	

¹ For rebate leg gasket 9 mm offset, without overlap gasket 13 mm offset.

² For rebate leg gasket SV33, SV103.

³ For rebate leg gasket plus 1 mm.



32365

T 10.6.2.2 Spindles for intermediate drive gears



No

No
Tricoat

				No	No Tricoat
7x20 mm			100	32365	
7x25 mm			100	32412 ¹	
7x30 mm			20	93228 ²	

¹ For rebate leg gasket 9 mm offset, without overlap gasket 13 mm offset.

² For rebate leg gasket 13 mm offset.



94219

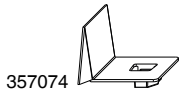
10.6.2.3 Drill-in bush for deadbolt 8 x 4 mm



No

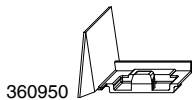
No
Tricoat

silver				No	No Tricoat
			100	94219	



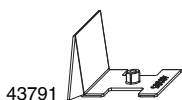
357074

10.6.3 Gap cover caps MM				No	No Tricoat
silver	left bottom	9 mm offset	100	357091	
		11 mm offset	100	357092	
		13 mm offset	100	357093	
	left top	9 mm offset	100	357078	
		11 mm offset	100	357074	
		13 mm offset	100	357075	
	right bottom	9 mm offset	100	357079	
		11 mm offset	100	357076	
		13 mm offset	100	357077	
	right top	9 mm offset	100	357088	
		11 mm offset	100	357089	
		13 mm offset	100	357090	



360950

10.6.4 Gap cover caps MM-KS				No	No Tricoat
silver	top left / bottom right	9 mm offset	100	360950	
		11 mm offset	100	365193	
		13 mm offset	100	365195	
	top right / bottom left	9 mm offset	100	360951	
		11 mm offset	100	365194	
		13 mm offset	100	365196	

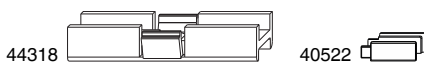


43791

10.6.5 Gap cover cap for hardware groove - sash part				No	No Tricoat
pearl light grey RAL 9022			100	43791	



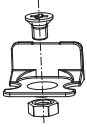
37535



44318

40522

T 10.6.6 Alu profiles for French casement drive gears			L		No	No Tricoat
blank	aluminium profile for French casement drive-gear	1.000	10	37535		
		1.250	10	37536		
		1.500	10	37537		
		1.800	10	37554		
		2.350	10	37538		
		2.600	10	357399		
		6.000	10	37571		
silver	packer for serrated carrier connection		100	44318		
white	clip-on end cap for aluminium groove		100	40522		



105316

10.6.7 Fixing of scissor stays for French casement EH



50



105316




Tricoat

silver



10.7 Accessories for French casement drive gears


213460 


T 10.7.1 Bullet catch for French casement drive gear			No	No Tricoat
silver	bullet catch French casement drive gear	50	213460 ^{1,2}	

¹ Order steel bullet catch roll item no. 362446 or PVC item no. 362060 separately!


² For Eurogroove use packer item no. 362059!





362446 

10.7.2 Bullet catch rolls			No	No Tricoat
pearl light grey RAL 9022	bullet-catch roll PVC	100	362060	
silver	bullet-catch roll steel	100	362446	

365791 

10.7.3 Striker plate i.S. for French casement drive gear MM-KS			No	No Tricoat
silver	for French casement drive gear MMKS	100	365791	366724

35178  218605 

10.7.4 Latch striker plates for balcony door locks B-TV			No	No Tricoat
silver	for French casement drive gear	50	35178	355819
	1 fixed slot	50	218605	
	adjustable	50		



11 Striker plates

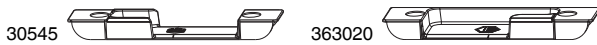
11.1	Striker plates 4 mm air gap _____	292
11.2	Striker plates 12 mm air gap, hardware groove 6/8/4 _____	295
11.3	Striker plates 12 mm air gap, hardware groove 7/8/4 _____	296
11.4	Striker plates 12 mm air gap, hardware groove 6/8/4 and 7/8/4 _____	298
11.5	Striker plates 12 mm air gap, Euro-rebate, 18 mm rebate depth _____	299
11.6	Striker plates 12 mm air gap, Euro-rebate, 20 mm rebate depth _____	301
11.7	Striker plates 12 mm air gap, Euro-rebate, 24 mm rebate depth _____	303
11.8	Striker plates 12 mm air gap, Euro-rebate, 30 mm rebate depth _____	306
11.9	Striker plates 12 mm air gap, Euro-rebate, 18 - 30 mm rebate depth _____	307
11.10	Striker plates for opposite Eurogroove _____	308
11.11	Hook striker plate _____	308
11.12	Accessories for striker plates _____	309



11 Striker plates

11.1 Striker plates 4 mm air gap

11.1.1 Striker plates 4 mm air gap

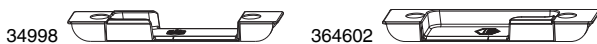



T 11.1.1.1 Striker plates 4 mm air gap			No	No Tricoat
silver	for 4 mm air gap, 9 mm offset	200	30545 ^{1,2}	355132 ^{1,2}
	for 4 mm air gap, 13 mm offset	right 200	363020 ^{2,3}	
		left 200	363021 ^{2,3}	
	- 1 mm gasket-compression	right 200	357671 ^{2,3}	359251 ^{2,3}
		left 200	357672 ^{2,3}	359252 ^{2,3}

¹ 18 mm milling depth.

² Routing length 90 mm.

³ 22 mm milling depth.

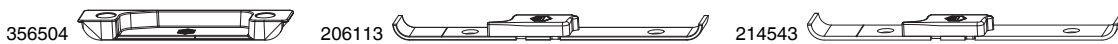



T 11.1.1.2 Striker plates for 3-sashed windows 4 mm air gap			No	No Tricoat
silver	for 4 mm air gap, 9 mm offset	200	34998 ^{1,2}	
	for 4 mm air gap, 13 mm offset	right 100	364602 ^{2,3}	
		left 100	364604 ^{2,3}	

¹ 18 mm milling depth.

² Routing length 90 mm.

³ 22 mm milling depth.



T 11.1.1.3 Sash lifters 4 mm air gap			No	No Tricoat
silver	for 4 mm air gap, 9 mm offset	right 100	356504 ^{1,2}	357924 ^{1,2}
		left 100	356505 ^{1,2}	357925 ^{1,2}
	with door catch	right 20	206113 ^{1,3}	
		left 20	206114 ^{1,3}	
	for 4 mm air gap, 13 mm offset	right 100	357675 ^{2,4}	367294 ^{2,4}
		left 100	357676 ^{2,4}	367295 ^{2,4}
	with door catch	right 20	214543 ^{3,4}	
		left 20	214544 ^{3,4}	

¹ 18 mm milling depth.

² Routing length 90 mm.

³ Routing length 160 mm.

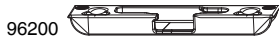
⁴ 22 mm milling depth.



96565

T 11.1.1.4 Striker plates i.S. 4 mm air gap						No	No Tricoat
silver	for 4 mm air gap, 9 mm offset	angled screw-fixing	right	100		96565 ^{1,2}	355826 ^{1,2}
			left	100		96566 ^{1,2}	355827 ^{1,2}
	for 4 mm air gap, 9 mm offset without reinforcement rings	angled screw-fixing	- 1 mm gasket-compression	right		96305 ^{1,2}	
			left	100		96306 ^{1,2}	
	for 4 mm air gap, 13 mm offset	angled screw-fixing	right	100		357958 ^{1,2}	
			left	100		357959 ^{1,2}	
			- 1 mm gasket-compression	right		357673 ^{2,3}	359253 ^{2,3}
				left		100	357674 ^{2,3}
				right		360102 ^{2,3}	
				left		360103 ^{2,3}	

¹ 18 mm milling depth.
² Routing length 90 mm.
³ 22 mm milling depth.



96200

T 11.1.1.5 Horizontal tilt striker plates i.S. 4 mm air gap						No	No Tricoat
silver	for 4 mm air gap, 9 mm offset	angled screw-fixing	right	100		96200 ^{1,2}	204964 ^{1,2}
			left	100		96201 ^{1,2}	204965 ^{1,2}
	for 4 mm air gap, 13 mm offset	angled screw-fixing	right	100		357678 ^{2,3}	365089 ^{2,3}
			left	100		357679 ^{2,3}	365090 ^{2,3}

¹ 18 mm milling depth.
² Routing length 90 mm.
³ 22 mm milling depth.



97377

T 11.1.1.6 Tilt-first striker plates i.S. 4 mm air gap						No	No Tricoat
silver	for 4 mm air gap, 9 mm offset		right and left	100		97377 ^{1,2}	

¹ 18 mm milling depth.
² Routing length 113 mm.



55112

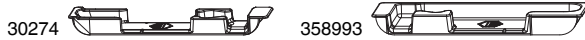
23883


220089

T 11.1.1.7 Shootbolt striker plates 4 mm air gap						No	No Tricoat
silver	for 4 mm air gap, 9 mm offset	1 slot		100		55112 ^{1,2}	
		2 slots		100		23883 ^{1,2}	203993 ^{1,2}
			+ 1 mm gasket-compression	100		26083 ^{1,2}	
		3 slots		100		220089 ^{1,3,4}	
	for 4 mm air gap, 13 mm offset	2 slots		100		209338 ^{2,5}	215023 ^{2,5}

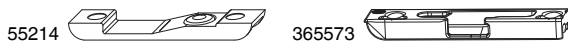
¹ 18 mm milling depth.
² Routing length 90 mm.
³ Routing length 120 mm.
⁴ For windows - Group C5 EN 12210.
⁵ 22 mm milling depth.






T 11.1.1.8 Tilt striker plates 4 mm air gap					No	No Tricoat
silver	for 4 mm air gap, 9 mm offset	right and left	100	30274 ^{1,2}	355134 ^{1,2}	
	for 4 mm air gap, 13 mm offset	right	100			358993 ^{2,3}
		left	100	358994 ^{2,3}		

¹ 18 mm milling depth.
² Routing length 90 mm.
³ 22 mm milling depth.



T 11.1.1.9 Sash lifter striker plates and tilt striker plates for half round and angled windows 4 mm air gap					No	No Tricoat
silver	sash lifter striker plate for half round and angled windows for 4 mm air gap, 9 mm offset		50	55214 ^{1,2,3}		
	sash lifter striker plate for half round and angled windows for 4 mm air gap, 13 mm offset		50	209364 ^{2,3,4}		
	tilt striker i.S. horizontal for half round and angled window for 4 mm air gap, 9 mm offset	angled screw-fixing	right	100	365573 ^{1,5,6}	
			left	100	365574 ^{1,5,6}	
	tilt striker i.S. horizontal for half round and angled window for 4 mm air gap, 13 mm offset	angled screw-fixing	right	100	365571 ^{4,5,6}	
			left	100	365572 ^{4,5,6}	
	sash lifter striker plate for half round and angled windows for 4 mm air gap, 13 mm offset			50	218076 ^{4,5,6,7}	
sash lifter striker plate for half round and angled windows for 4 mm air gap, 9 mm offset			50	218077 ^{1,5,6,7}		

¹ 18 mm milling depth.
² Routing length 90 mm.
³ Use with corner element item no. 215216, item no. 215217.
⁴ 22 mm milling depth.
⁵ Use with corner element item no. 218071, item no. 218072.
⁶ Routing length 169 mm.
⁷ Only in combination with tilt lock item no. 218072.




T 11.1.1.10 Run-up blocks 4 mm air gap for horizontal tilt lock					No	No Tricoat
silver	run-up block 4 mm air gap		500	94022		

11.2 Striker plates 12 mm air gap, hardware groove 6/8/4

34921 

T	11.2.1 Striker plates 12 mm air gap, hardware groove 6/8/4		No	No Tricoat
	silver	200	34921	355443
	- 1 mm gasket-compression	200	34979	355901

34917 

T	11.2.2 Striker plate for 3-sashed windows 12 mm air gap, hardware groove 6/8/4		No	No Tricoat
	silver	200	34917	


363175 

T	11.2.3 Sash lifters MM 12 mm air gap, hardware groove 6/8/4		No	No Tricoat
	silver	right 100	363175	
		left 100	363176	

96563 

T	11.2.4 Striker plates i.S. 12 mm air gap, hardware groove 6/8/4		No	No Tricoat
	silver	angled screw-fixing 100	96563	
	- 1 mm gasket-compression	100	96263	


23886 


T	11.2.5 Shootbolt striker plates 12 mm air gap, hardware groove 6/8/4		No	No Tricoat
	silver	2 slots 100	23886	201484
	+ 1 mm gasket-compression	100	26610	

33932 

T	11.2.6 Tilt striker plate 12 mm air gap, hardware groove 6/8/4		No	No Tricoat
	silver	right and left 100	33932	355558

56930 

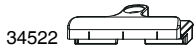
T	11.2.7 Striker plate for espagnolette with mounted tilt scissor stay 12 mm air gap, hardware groove 6/8/4		No	No Tricoat
	silver	100	56930	


94322 

T	11.2.8 Latch striker plate 12 mm air gap, hardware groove 6/8/4		No	No Tricoat
	silver	adjustable 50	94322	




11.3 Striker plates 12 mm air gap, hardware groove 7/8/4




T 11.3.1 Striker plates 12 mm air gap, hardware groove 7/8/4			N^o	N^o Tricoat
silver		200	34902	201481*
	- 1 mm gasket-compression	200	34969	201465
	angled screw-fixing	200	34522	




T 11.3.2 Sash lifters MM 12 mm air gap, hardware groove 7/8/4			N^o	N^o Tricoat
silver	angled screw-fixing	right 100	356774	357928
		left 100	356775	357929




T 11.3.3 Striker plates i.S. 12 mm air gap, hardware groove 7/8/4			N^o	N^o Tricoat
silver	angled screw-fixing	100	96564	352994
	- 0.8 mm gasket-compression	100	360564	
	- 1 mm gasket-compression	100	96264	358450
	without reinforcement rings angled screw-fixing	100	363486	




T 11.3.4 Tilt-first striker plates i.S. 12 mm air gap, hardware groove 7/8/4			N^o	N^o Tricoat
silver	MM	right 100	365426	
		left 100	365427	




T 11.3.5 Shootbolt striker plates 12 mm air gap, hardware groove 7/8/4			N^o	N^o Tricoat
silver	2 slots	100	23886	201484
	1 fixed slot	+ 0.8 mm gasket-compression	100	360561¹
			100	98110¹

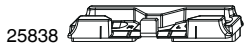
¹ For windows - Group C5 EN 12210.



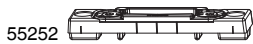
T 11.3.6 Tilt striker plates 12 mm air gap, hardware groove 7/8/4			N^o	N^o Tricoat
silver		right 100	33970	
		left 100	33971	



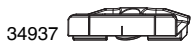
T	11.3.7 Striker plate for espagnolette with mounted tilt scissor stay 12 mm air gap, hardware groove 7/8/4		No	No Tricoat
silver		100	56910	211783




T	11.3.8 Night-vent striker plate 12 mm air gap, hardware groove 7/8/4		No	No Tricoat
silver		100	25838	




T	11.3.9 Latch striker plate 12 mm air gap, hardware groove 7/8/4		No	No Tricoat
silver	adjustable	50	55252	



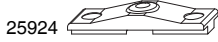
T	11.3.10 Striker plate with positioning pins 12 x 3 mm 12 mm air gap, hardware groove 7/8/4		No	No Tricoat
silver	angled screw-fixing	200	34937	




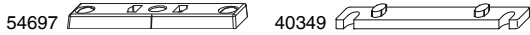
T	11.3.11 Striker plate i.S. with positioning pins 12 x 3 mm 12 mm air gap, hardware groove 7/8/4		No	No Tricoat
silver	angled screw-fixing	100	96691	




11.4 Striker plates 12 mm air gap, hardware groove 6/8/4 and 7/8/4




T	11.4.1 Sash lifter for half round and angled windows 12 mm air gap, hardware groove 6/8/4 and 7/8/4			No	No Tricoat
	silver		50	25924	




T	11.4.2 Striker plates for opening restrictor 12 mm air gap, hardware groove 6/8/4 and 7/8/4			No	No Tricoat	
	silver	frame component for opening restrictor Euro-rebate 18 mm	angled screw-fixing	50	54697	201785
		packer for striker plate for opening restrictor for timber		100	40349	




T	11.4.3 Stabilizing scissor stay casing 12 mm air gap, hardware groove 6/8/4 and 7/8/4			No	No Tricoat
	silver			100	55066

11.5 Striker plates 12 mm air gap, Euro-rebate, 18 mm rebate depth


34943  34980 

11.5.1 Striker plates 12 mm air gap, Euro-rebate, 18 mm rebate depth			No	No Tricoat
silver	double screw fixing	200	34943	201476*
	angled screw-fixing	200	34980	355135
	- 1 mm gasket-compression	200	357844	


356298 




11.5.2 Sash lifters MM 12 mm air gap, Euro-rebate, 18 mm rebate depth			No	No Tricoat	
silver	angled screw-fixing	right	100	356298	357918
		left	100	356299	357919


96860 

11.5.3 Striker plates i.S. 12 mm air gap, Euro-rebate, 18 mm rebate depth			No	No Tricoat	
silver	angled screw-fixing		100	96860	97544*
		+ 1 mm gasket-compression	100	359770	
		- 0.7 mm gasket-compression	100	96660	362849
	without reinforcement rings	angled screw-fixing	100	355606	358991*

365400 

11.5.4 Tilt-first striker plates i.S. 12 mm air gap, Euro-rebate, 18 mm rebate depth			No	No Tricoat	
silver	MM	right	100	365400	366528
		left	100	365401	366529

98021  23731  26308 

11.5.5 Shootbolt striker plates 12 mm air gap, Euro-rebate, 18 mm rebate depth			No	No Tricoat	
silver	1 fixed slot	100	98021 ¹		
	2 slots	100	23731	201482*	
		+ 1 mm gasket-compression	100	26745	
	2 slots with angled screw-fixing	100	26741		
	3 slots	100	26308 ¹	218695 ¹	

¹ For windows - Group C5 EN 12210.

33981 

11.5.6 Tilt striker plate 12 mm air gap, Euro-rebate, 18 mm rebate depth			No	No Tricoat
silver		100	33981	201486

25118									
T	11.5.7 Night-vent striker plate 12 mm air gap, Euro-rebate, 18 mm rebate depth			No	No				
	silver		100	25118					
55277									
T	11.5.8 Striker plate for espagnolette with mounted tilt stay 12 mm air gap, Euro-rebate, 18 mm rebate depth			No	No				
	silver		100	55277	204970*				
52794									
T	11.5.9 Stabilizing scissor stay casing 12 mm air gap, Euro-rebate, 18 mm rebate depth			No	No				
	silver		100	52794	204972*				
38924									
T	11.5.10 Latch striker plate 12 mm air gap, Euro-rebate, 18 mm rebate depth			No	No				
	silver	adjustable	50	38924					
34963									
T	11.5.11 Striker plates with positioning pins 12 x 3 mm 12 mm air gap, Euro-rebate, 18 mm rebate depth			No	No				
	silver	angled screw-fixing	200	34963	359212				
			- 1 mm gasket-compression	200	370110	370111			
96690									
T	11.5.12 Striker plates i.S. with positioning pins 12 x 3 mm 12 mm air gap, Euro-rebate, 18 mm rebate depth			No	No				
	silver	angled screw-fixing	100	96690	359213				
			- 0.7 mm gasket-compression	100	96890				
26621									
T	11.5.13 Shootbolt striker plate with positioning pins 12 x 3 mm 12 mm air gap, Euro-rebate, 18 mm rebate depth			No	No				
	silver	2 slots	100	26621	210273				
364286									
T	11.5.14 Sash lifters MM with positioning pins 12 x 3 mm 12 mm air gap, Euro-rebate, 18 mm rebate depth			No	No				
	silver	angled screw-fixing	right 100	364286					
			left 100	364287					

11.6 Striker plates 12 mm air gap, Euro-rebate, 20 mm rebate depth

34981

T 11.6.1 Striker plates 12 mm air gap, Euro-rebate, 20 mm rebate depth			No	No Tricoat
silver	angled screw-fixing	200	34981	355797*
		- 1 mm gasket-compression	355396	366379
	without reinforcement rings	angled screw-fixing	34986	

361960

T 11.6.2 Striker plate rear-engaging 12 mm air gap, Euro-rebate, 20 mm rebate depth			No	No Tricoat
silver	angled screw-fixing	200	361960¹	

¹ Only for i.S. cam!

356326

T 11.6.3 Sash lifters MM 12 mm air gap, Euro-rebate, 20 mm rebate depth			No	No Tricoat
silver	angled screw-fixing	right 100	356326	357920*
		left 100	356327	357921*

96561

T 11.6.4 Striker plates i.S. 12 mm air gap, Euro-rebate, 20 mm rebate depth			No	No Tricoat
silver	angled screw-fixing	100	96561	355865*
		- 0.7 mm gasket-compression	96861	360293
	without reinforcement rings	angled screw-fixing	96779	359370
		- 0.7 mm gasket-compression	96641	

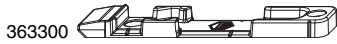
363797

T 11.6.5 Tilt-first striker plate i.S. 12 mm air gap, Euro-rebate, 20 mm rebate depth			No	No Tricoat
silver	MM	right and left 100	363797	369981

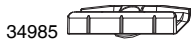
26241


T 11.6.6 Shootbolt striker plates 12 mm air gap, Euro-rebate, 20 mm rebate depth			No	No Tricoat
silver	2 slots	100	26241	208368
		+ 1 mm gasket-compression	208439	

* TRICOAT-PLUS standard parts




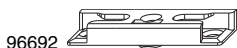
T	11.6.7 Tilt striker plate 12 mm air gap, Euro-rebate, 20 mm rebate depth			No	No Tricoat
	silver	right and left			




T	11.6.8 Striker plate with positioning pins 12 x 3 mm 12 mm air gap, Euro-rebate, 20 mm rebate depth			No	No Tricoat
	silver	angled screw-fixing			




T	11.6.9 Sash lifters MM with positioning pins 12 x 3 mm 12 mm air gap, Euro-rebate, 20 mm rebate depth			No	No Tricoat				
	silver	angled screw-fixing				right	100	356959	362671
						left	100	356960	362670




T	11.6.10 Striker plate i.S. with positioning pins 12 x 3 mm 12 mm air gap, Euro-rebate, 20 mm rebate depth			No	No Tricoat
	silver	angled screw-fixing			





T	11.6.11 Shootbolt striker plate with positioning pins 12 x 3 mm 12 mm air gap, Euro-rebate, 20 mm rebate depth			No	No Tricoat
	silver	2 slots			

11.7 Striker plates 12 mm air gap, Euro-rebate, 24 mm rebate depth

34934 


11.7.1 Striker plates 12 mm air gap, Euro-rebate, 24 mm rebate depth, 13 mm offset					No	No Tricoat
T	silver	angled screw-fixing		200	34934	359575*
			- 1 mm gasket-compression	200	359297	361346*
		without reinforcement rings	angled screw-fixing	100	362812	

360849 


11.7.2 Striker plate rear-engaging 12 mm air gap, Euro-rebate, 24 mm rebate depth, 13 mm offset					No	No Tricoat
T	silver	angled screw-fixing		200	360849 ¹	

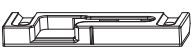
¹ Only for i.S. cam!

356333 

11.7.3 Sash lifters MM 12 mm air gap, Euro-rebate, 24 mm rebate depth, 13 mm offset					No	No Tricoat
T	silver	angled screw-fixing	right	100	356333	357922*
			left	100	356334	357923*


364952  363027 

11.7.4 Striker plates i.S. 12 mm air gap, Euro-rebate, 24 mm rebate depth, 13 mm offset					No	No Tricoat
T	silver	without reinforcement rings	angled screw-fixing	100	364952	366635*
			- 1 mm gasket-compression	100	364953	366636*
		design without reinforcement rings	angled screw-fixing	100	363027	

369757 

11.7.5 Tilt-first striker plates i.S. 12 mm air gap, Euro-rebate, 24 mm rebate depth, 13 mm offset					No	No Tricoat
T	silver		right	100	369757	
			left	100	369758	

360624  203329 

11.7.6 Shootbolt striker plates 12 mm air gap, Euro-rebate, 24 mm rebate depth, 13 mm offset					No	No Tricoat	
T	silver	24 mm rebate depth, 13 mm offset	1 fixed slot	100	360624 ¹		
			2 slots	100	203329	208979*	
			2 slots with angled screw-fixing	+ 1 mm	100	212474 ²	
				+ 1 mm gasket-compression	100	211369	
			24 mm rebate depth, 13 mm offset without reinforcement rings	2 slots with angled screw-fixing + 1 mm gasket-compression	100	212343	

¹ For windows - Group C5 EN 12210.

² Height + 1 mm.



T	11.7.7 Tilt striker plates 12 mm air gap, Euro-rebate, 24 mm rebate depth, 13 mm offset				No	No Tricoat
	silver			right 100 left 100	359003 359004	359570* 359571*



T	11.7.8 Sash lifter for half round and angled windows, 12 mm air gap, Euro-rebate, 24 mm rebate depth, 13 mm offset				No	No Tricoat
silver				50	206200	210646



T	11.7.9 Latch striker plate 12 mm air gap, Euro-rebate, 24 mm rebate depth				No	No Tricoat
silver	adjustable			50	209347	



T	11.7.10 Striker plates with positioning pins 12 x 3 mm 12 mm air gap, Euro-rebate, 24 mm rebate depth, 13 mm offset				No	No Tricoat
silver		angled screw-fixing		200	356961	358851*
			+ 1.2 mm gasket compression	200	357213	

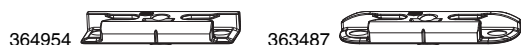


T	11.7.11 Striker plate rear-engaging with positioning pins 12 x 3 mm 12 mm air gap, Euro-rebate, 24 mm rebate depth, 13 mm offset				No	No Tricoat
silver				200	360154¹	366920¹

¹ Only for i.S. cam!



T	11.7.12 Sash lifters MM with positioning pins 12 x 3 mm 12 mm air gap, Euro-rebate, 24 mm rebate depth, 13 mm offset				No	No Tricoat
silver		angled screw-fixing		right 200 left 200	363992 363993	365567 365568



T	11.7.13 Striker plates i.S. with positioning pins 12 x 3 mm 12 mm air gap, Euro-rebate, 24 mm rebate depth, 13 mm offset				No	No Tricoat
silver	with positioning pins 12x3 mm	angled screw-fixing		100	364954	366638*
			- 1 mm gasket-compression	100	370557	370558*
	design with positioning pins 12x3 mm	angled screw-fixing		100	363487	366921

* TRICOAT-PLUS standard parts





T	11.7.14 Shootbolt striker plates with positioning pins 12 x 3 mm 12 mm air gap, Euro-rebate, 24 mm rebate depth, 13 mm offset			No	No Tricoat
	silver	2 slots	100	207368	210004*





* TRICOAT-PLUS standard parts

11.8 Striker plates 12 mm air gap, Euro-rebate, 30 mm rebate depth





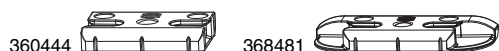
T	11.8.1 Striker plate 12 mm air gap, Euro-rebate, 30 mm rebate depth, 13 mm offset				No.	
	silver	angled screw-fixing	200	360443	362304	





T	11.8.2 Striker plates rear-engaging 12 mm air gap, Euro-rebate, 30 mm rebate depth, 13 mm offset				No.	
	silver	angled screw-fixing	200	361100		
		+ 0.8 mm gasket-compression	100	368482		



T	11.8.3 Sash lifters MM 12 mm air gap, Euro-rebate, 30 mm rebate depth, 13 mm offset				No.	
	silver	angled screw-fixing	right 100	360445	368095	
			left 100	360446	368096	





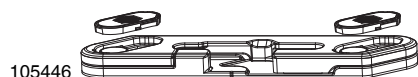
T	11.8.4 Striker plates i.S. 12 mm air gap, Euro-rebate, 30 mm rebate depth, 13 mm offset				No.	
	silver	angled screw-fixing	100	360444	362305	
		+ 0.7 mm gasket compression	100	368481		




	11.8.5 Shootbolt striker plate 12 mm air gap, Euro-rebate, 30 mm rebate depth, 13 mm offset				No.	
	silver	2 slots	100	225431		



T	11.8.6 Tilt striker plates 12 mm air gap, Euro-rebate, 30 mm rebate depth, 13 mm offset				No.	
	silver		right 200	368345		
			left 200	368346		




T	11.8.7 SV striker plates i.S. 12 mm air gap, Euro-rebate, 30 mm rebate depth, 13 mm offset				No.	
	silver	secured ventilation position	right 20	105446¹		
			left 20	105447¹		


¹ Refer to profile data sheets for PVC profiles.

11.9 Striker plates 12 mm air gap, Euro-rebate, 18 - 30 mm rebate depth




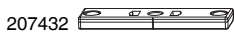
T	11.9.1 Sash lifter for half round and angled windows 12 mm air gap, Euro-rebate, 18 - 30 mm rebate depth		No	No Tricoat
	silver	50	25114	201466




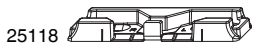
T	11.9.2 Striker plate for espagnolette with mounted tilt stay 12 mm air gap, Euro-rebate, 18 - 30 mm rebate depth		No	No Tricoat
	silver	100	55277	204970*




T	11.9.3 Striker plate for 3-sashed windows 12 mm air gap, Euro-rebate, 18 - 30 mm rebate depth		No	No Tricoat
	silver	200	34958	




T	11.9.4 Striker plate for opening restrictor 12 mm air gap, Euro-rebate, 20 - 30 mm rebate depth		No	No Tricoat
	silver angled screw-fixing	50	207432	212218



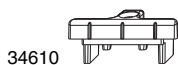
T	11.9.5 Night-vent striker plate 12 mm air gap, Euro-rebate, 18 - 30 mm rebate depth		No	No Tricoat
	silver	100	25118	



T	11.9.6 Stabilizing scissor stay casing 12 mm air gap, Euro-rebate, 18 - 30 mm rebate depth		No	No Tricoat
	silver	100	52794	204972*



11.10 Striker plates for opposite Eurogroove



34610

11.10.1 Striker plates for opposite Eurogroove



No

No
Tricoat

silver

- 1 mm gasket-compression

200

200

34610

34606

354028

359599*



34618

11.10.2 Striker plate for 3-sashed windows for opposite Eurogroove



No

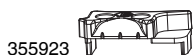
No
Tricoat

silver

200

34618

366537



355923

11.10.3 Sash lifters MM for opposite Eurogroove



No

No
Tricoat

silver

right

100

355923

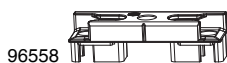
357926*

left

100

355924

357927*



96558

11.10.4 Striker plates i.S. for opposite Eurogroove



No

No
Tricoat

silver

- 0.8 mm gasket-compression

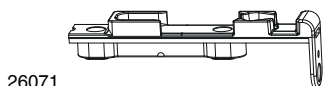
100

100

355221

96558

358862



26071

11.10.5 Tilt striker plate for opposite Eurogroove for PVC



No

No
Tricoat

silver

right and
left

100

26071



228711

P 11.11 Hook striker plate



No

No
Tricoat

silver


+/- 1.5 mm gasket compression

10


228711


11.12 Accessories for striker plates

365791 


11.12.1 Striker plates for French casement drive gears			No	No Tricoat
silver	for French casement drive gear MMKS	100	365791 ¹	

¹ Compatible for shootbolt item no. 215240 and MT.


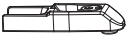

355615  43922 


11.12.2 Sash run-up block 2-sashed			No	No Tricoat
silver	for i.S striker plate MM	100	355615	
pearl light grey RAL 9022	for shootbolt striker plate	1.000	43922	

365561 

11.12.3 Adapter			No	No Tricoat
adapter MM for i.S. striker plate		50	365561 ¹	

¹ Only for i.S. striker plates with 50 mm length.

355920  205563  94037 

11.12.4 Accessories for 3-sashed windows			No	No Tricoat
silver	clip-on bush for i.S. cam	100	355920	
	clip-on bush for locking cam	100	94031	
	clip-on striker plate for locking cam	100	55039	
	clip-on striker plate for i.S. cams	100	205563	207676
	locking cam hardware groove	100	94037	
	locking cam opposite Eurogroove	100	94038	



MACO
MULTI-MATIC



Striker plates

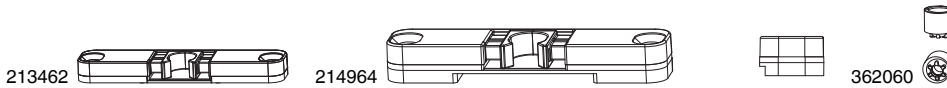





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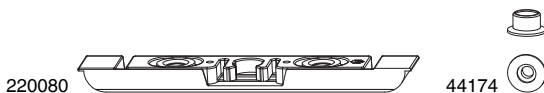





12 Accessories MULTI-MATIC



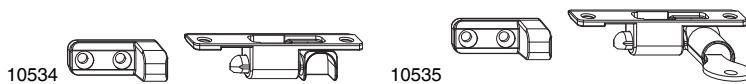
12.1 Door catches and bullet catches for 2-sashed windows				
silver	bullet catch timber 18 mm rebate depth 9 mm offset and 22 mm rebate depth 13 mm offset	50	213461	
	bullet catch timber 20 mm rebate depth 9 mm offset and 24 mm rebate depth 13 mm offset	50	213462	217455
	bullet catch hardware groove	50	214804	
	bullet-catch roll for timber 9 mm offset	with plate	50	215372
	bullet-catch roll for timber 13 mm offset	with plate	50	215374
	bullet-catch roll Eurogroove	with plate	50	215373
	bullet-catch roll steel		100	362446
	bullet catch French casement drive gear		50	213460
	bullet catch opposite Eurogroove		50	214964
	packer for bullet catch for Eurogroove		100	362059 ¹
pearl light grey RAL 9022	bullet-catch roll PVC	100	362060	




¹ Use for installation into Eurogroove!

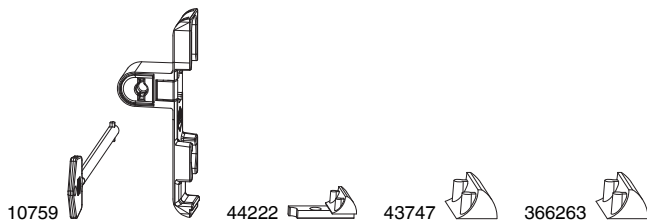


12.2 PVC bullet catches for 2-sashed windows				
silver	2-sashed bullet catch 4 mm air gap 9 mm offset mill-in	50	220080 ¹	
	2-sashed bullet catch without Eurogroove	50	57891	
	2-sashed bullet catch for Eurogroove	50	55189	
	bullet-catch roll Euro-rebate 10x7 mm	100	44174	
	bullet-catch roll hardware groove 10x7 mm with lip	100	44175	
	bullet-catch roll Euro-rebate 10x9 mm	100	94111	

¹ Routing length 120 mm.



12.3 Self-catching turn locks				
silver	turn lock self-catching	20	10534	102049
	turn lock self-catching lockable	20	10535	102193
	packer for frame component self-catching turn lock 2 mm	20	366651	
	key for self-catching turn lock lockable 2D057	100	40401	
traffic white RAL 9016	turn lock self-catching	20	12067	
	turn lock self-catching lockable	20	12069	
grey brown RAL 8019	turn lock self-catching	20	12068	
	turn lock self-catching lockable	20	12070	



T 12.4 Concealed turn locks 4 mm air gap

			No	No Tricoat
silver	concealed turn lock for 4 mm air gap, 9 mm offset	20	10759 ^{1,2,3,4}	100036 ^{1,2,3,4}
	right concealed turn lock 4 mm air gap, 13 mm offset	20	103874 ^{2,3,5,6}	
	left concealed turn lock 4 mm air gap, 13 mm offset	20	103875 ^{2,3,5,6}	
pearl light grey RAL 9022	right adapter spacer for turn lock cases Hardware groove 6/8/4	100	44222	
	left adapter spacer for turn lock cases Hardware groove 6/8/4	100	44223	
	adapter spacer for turn lock cases Euro-rebate	100	43747	
	adapter spacer for turn lock cases 12 air gap	20	366263	

¹ 9 mm offset: 18 mm milling depth.

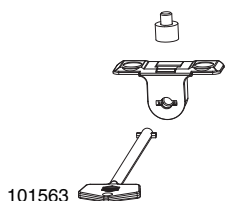
² For 4 mm air gap 90 mm milling length.

³ Box contents: Turn lock and tilt-stay key.

⁴ For timber 18 mm rebate depth 9 mm offset use end cap item no. 43747 and for hardware groove 6/8/4 end cap item no. 44222 on the right and/or item no. 44223 on the left.

⁵ Use end cap item no. 366263 for 12 mm air gap.

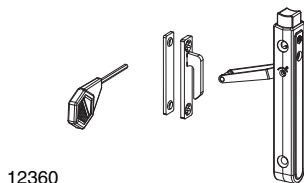
⁶ 11 + 13 mm offset: 22 mm milling depth.



12.5 Concealed turn locks 12 mm air gap

			No	No Tricoat
silver	lockable 9 mm offset	20	101563 ¹	
	lockable 13 mm offset	20	101562 ¹	103414 ¹

¹ Box contents: Turn lock, bolt for turn lock, Sped-Form screw, tilt-stay key.




12.6 MULTI VENT vent adjusters

			No	No Tricoat
traffic white RAL 9016		20	12360	
cream white RAL 9001		20	101524	
grey brown RAL 8019		20	12361	
white	packer 5°	100	42509	
	packer 15°	100	42514	






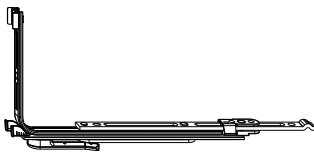
101671

12.7 Vent adjusters			No	No Tricoat
silver	right	50	10890	
	left	50	10891	
traffic white RAL 9016	right	50	10137	
	left	50	10138	
	left/right	50	101671	
pearl light grey RAL 9022	to be attached on HARMONY handle	50	101672	
	to be attached on RHAPSODY handle	50	101673	
jet black RAL 9005	to be attached on HARMONY handle	50	101674	
	to be attached on RHAPSODY handle	50	12460	
jet black RAL 9005	right	50	12461	
	left	50		



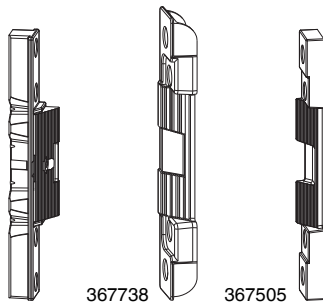
10892

12.8 Vent adjusters for 2-sashed windows			No	No Tricoat
silver	right	50	10892	
	left	50	10893	



209303


12.9 Vent adjuster for turn-only windows			No	No Tricoat
silver	9 V / 13 V	20	209303	



217584

367738

367505

12.10 Turn-only hinge safety devices			No	No Tricoat
silver	turn-only hinge safety device - sash component	20	217584 ^{1,2,3}	224968 ^{1,2,3}
	turn-only hinge safety device - frame component for 4 mm air gap, 9 mm offset	20	368014 ^{4,5}	
	turn-only hinge safety device - frame component 4 mm air gap, 13 mm offset	20	367738 ^{5,6}	
	turn-only hinge safety device - frame component timber 18 mm rebate depth 9 mm offset and 22 mm rebate depth 13 mm offset	20	367505	367721
	turn-only hinge safety device - frame component hardware groove	20	367722	367723

¹ Sash must have a Eurogroove in the sash component area.

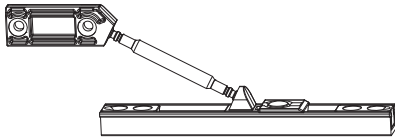
² For PVC and timber/alu profiles — see profile data sheets.

³ Must be used for MACO basic security B and D.

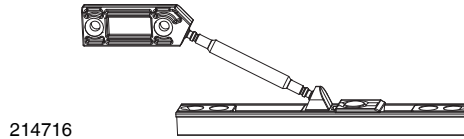
⁴ 18 mm milling depth.

⁵ Routing length 120 mm.

⁶ 22 mm milling depth.



214718



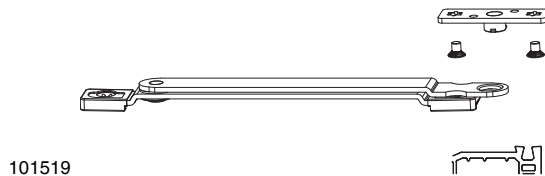
214716

12.11 Turn retarders

			No	No Tricoat
silver	concealed turn retarder timber	20	214718	
	concealed turn retarder PVC	20	214716	



101517



101519

with end cap - type 1



101520

with end cap - type 2

12.12 Turn restrictions

					No	No Tricoat
silver	turn restriction timber Euro-rebate	240 - 1.300	80	20	101517 ^{1,2}	101888 ^{1,2}
	turn restriction timber hardware groove	240 - 1.300	80	20	101518 ^{1,2}	
	turn restriction PVC / TV PVC end cap - type 1	240 - 1.300	80	20	101519 ^{1,2}	
	turn restriction PVC / TV PVC end cap - type 2	240 - 1.300	80	20	101520 ^{1,2}	
	turn restriction TV timber Euro-rebate	240 - 1.300	80	20	206207	
	turn restriction MM for half round windows	505 - 1.300	80	20	103080	
	packer for turn restriction sash component for Eurogroove			100	40456	
	screw for turn restriction for half round window			100	101655	

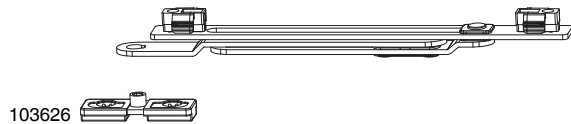
¹ In combination with horizontal corner support, the application area increases by 250 mm.

² Not for use in combination with rebated corner support without rebate-leg screw fixing.



103625

with end cap - type 1



103626

with end cap - type 2

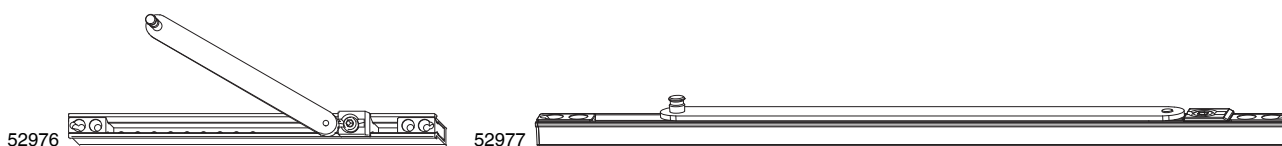
12.13 Turn restrictions MULTI POWER

					No	No Tricoat
silver	timber Euro-rebate	330 - 1.400	150	20	103623 ¹	103778 ¹
	timber hardware groove	330 - 1.400	150	20	103624 ¹	
	PVC with end cap - type 1	330 - 1.400	150	20	103625 ¹	103780 ¹
	PVC with end cap - type 2	330 - 1.400	150	20	103626 ¹	

¹ With horizontal corner element, application range from 560 mm.



12.14 Opening restrictors



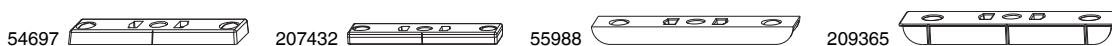
12.14.1 Opening restrictors		L			No	No Tricoat
silver	opening restrictor with brake arm length 145 mm	244	280 - 380	20	52976 ^{1,2}	201784 ^{1,2*}
	opening restrictor with brake arm length 210 mm	244	360 - 449	20	216367 ^{1,2}	
	opening restrictor with brake arm length 250 mm	244	381 - 470	20	52978 ²	202432 ^{2*}
	opening restrictor with brake arm length 250 mm	333	471 - 1.650	20	52977 ^{2,3}	201774 ^{2,3*}
	opening restrictor with brake arm length 274 mm	333	480 - 1.800	20	214328 ^{2,4}	223210 ^{2,4}

¹ Crop the corner support at the notch.

² In combination with horizontal corner support, the application area increases by 250 mm.

³ In connection with MULTI POWER application range 470 - 1400 mm.

⁴ In connection with MULTI MAMMUT application range from 695 mm.



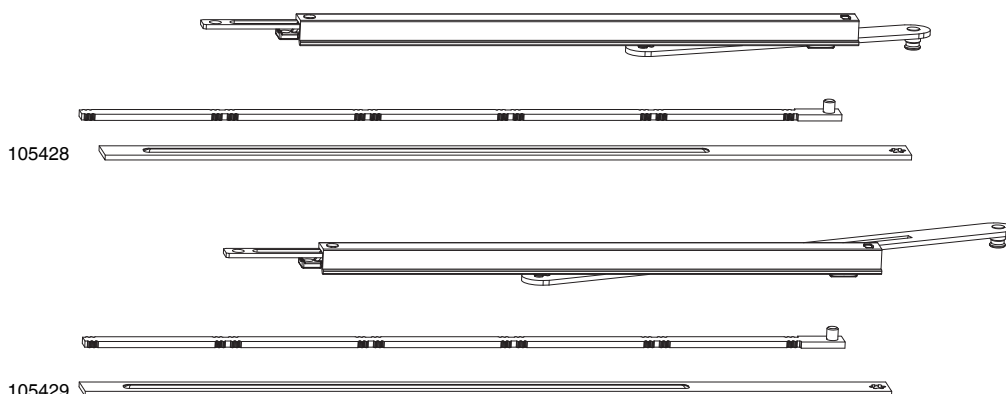
12.14.2 Frame components for opening restrictors		L		No	No Tricoat
silver	frame component for opening restrictor for PVC	78	50	10757	101408
	frame component for opening restrictor Euro-rebate 18 mm angled screw-fixing	80	50	54697	201785
	frame component for opening restrictor Euro-rebate 20 mm angled screw-fixing	80	50	207432	212218
	frame component for opening restrictor for 4 mm air gap, 9 mm offset angled screw-fixing	90	50	55988 ^{1,2}	208788 ^{1,2}
	frame component for opening restrictor for 4 mm air gap, 13 mm offset	90	100	209365 ^{2,3}	

¹ 18 mm milling depth.

² Routing length 90 mm.

³ 22 mm milling depth.

12.15 Comfort adjusters

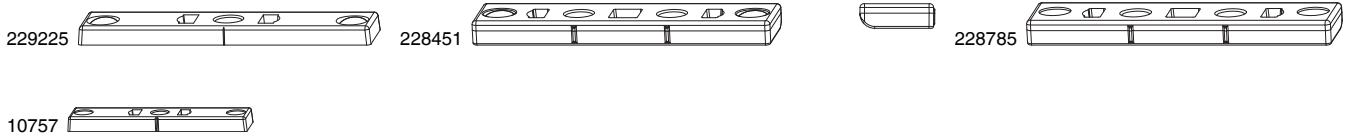


12.15.1 Comfort adjusters		L			No	No Tricoat
silver	parking brake arm length 145 mm size 1	250	566 - 800	20	105428 ^{1,2}	
	parking brake arm length 250 mm size 2	250	660 - 1.800	20	105429 ^{1,3}	

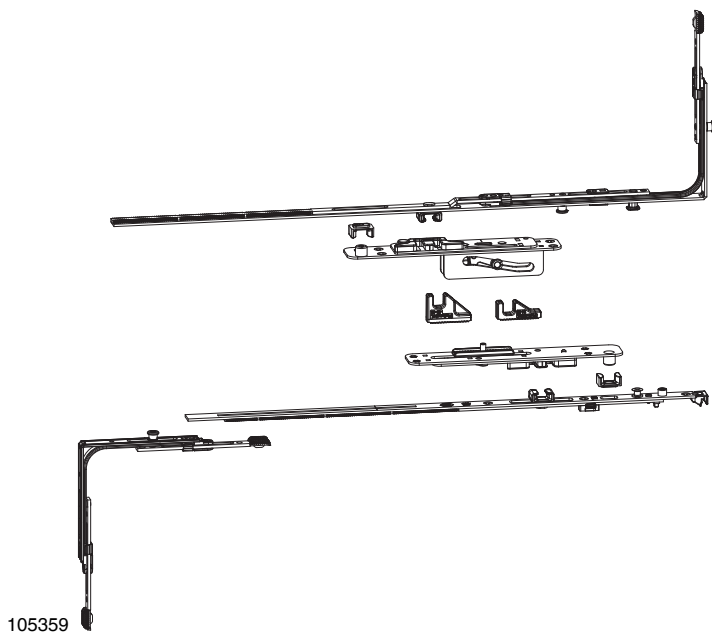
¹ Use sash lifter and mishandling device retrofittable for comfort adjuster item no. 370922!

² Sash rebate width only for corner support, not for rebated corner support!

³ Sash rebate width for rebated corner support; 670 mm for MULTI POWER.



12.15.2 Frame components for comfort adjusters					No	No Tricoat
silver	frame component for comfort adjuster for timber	angled screw-fixing	18 mm rebate depth	50	229225	
	12 mm air gap					
	frame component for opening restrictor for timber	angled screw-fixing	20 mm rebate depth and 24 mm rebate depth	50	228451	
	12 mm air gap					
	frame component for comfort adjuster for PVC	MULTI POWER		50	228785	
	frame component for opening restrictor for PVC			50	10757	

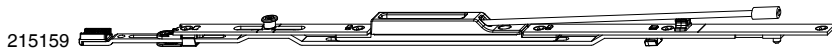
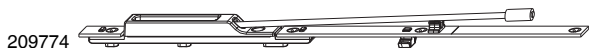


12.16 MULTI SKY skylight fitting							No	No Tricoat
silver	right	13 mm offset	600 - 1.300	500 - 800	30	1	105359¹	
	left	13 mm offset	600 - 1.300	500 - 800	30	1	105360²	

¹ Consisting of: transom kinematics top right, transom kinematics bottom right, turn-only hinge - sash part, croppable MM 600 SRW 430 - 600, corner element bottom horizontal, corner element MM with 1 i.S. SRW 320 - 1650, 2 piece location screw, connector plate distance 43 - 48 mm (for transom 51 - 56 mm).

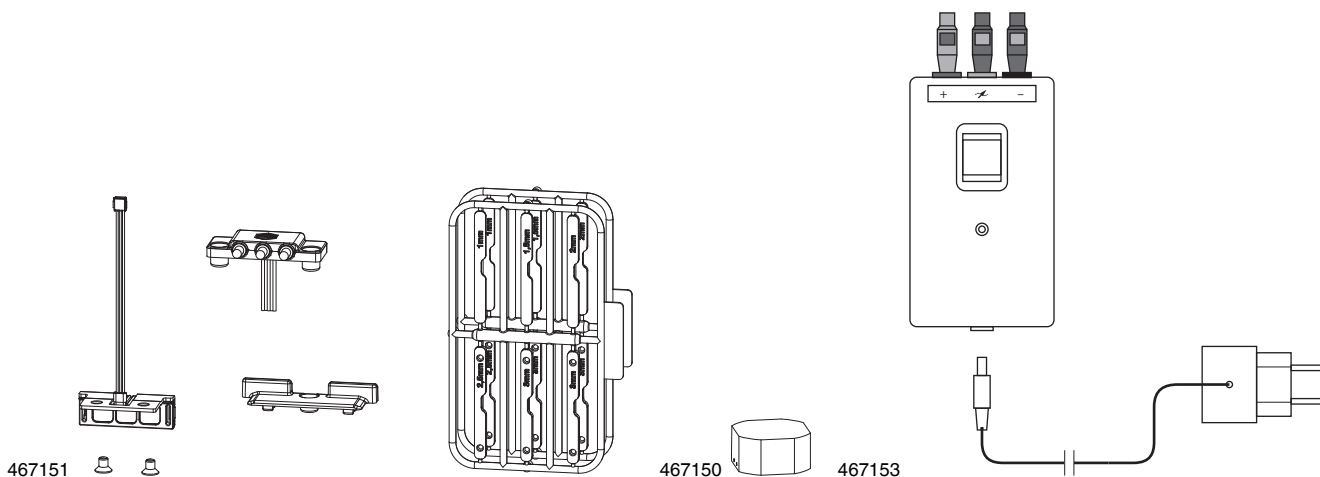
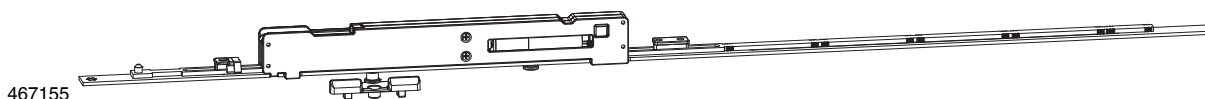
² Consisting of: transom kinematics top left, transom kinematics bottom left, turn-only hinge - sash part, croppable MM 600 SRW 430 - 600, corner element bottom horizontal, corner element MM with 1 i.S. SRW 320 - 1650, 2 piece location screw, connector plate distance 43 - 48 mm (for transom 51 - 56 mm).





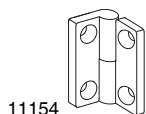
12.17 SAFETY PIN fall protection					No	No Tricoat
silver		centre lock cable junction TR to MM	280 - 2.800	20	206538	
		bottom anti-unhinge safety device for PVC and timber		20	209774 ¹	
		top anti-unhinge device for PVC and timber, extendable, 1 i.S.		20	215159	223245
yellow	right	base plate for anti-unhinge device angled screw-fixing with positioning pins for timber and PVC		20	102301	
	left	base plate for anti-unhinge device angled screw-fixing with positioning pins for timber and PVC		20	102302	
white		packer for PVC hinged plate 2 mm		50	363605	
		packer for PVC hinged plate 3 mm		50	363606	

¹ Must be used from SRH 1850 mm!

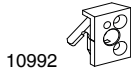


12.18 Components for E-hardware				No	No Tricoat
E-hardware silver			1	467155 ¹	
contact transition for E-hardware			1	467151	
Power supply for E-hardware			1	467150	
activating device for E-hardware			1	467153	


¹ For not circumferential central locking system maximum 60 kg sash weight, for circumferential central locking system maximum 80 kg!



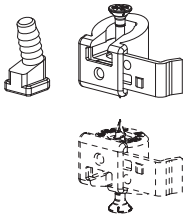
T 12.19 Glazing-bar hinges for glazing-bar frame				No	No Tricoat
white	right		50	11472	
	left		50	11473	
brown	right		50	11154	
	left		50	11155	




10992

T 12.20 Glazing-bar catches for glazing-bar cross and glazing-bar frame			No	No Tricoat
white	for 26 mm glazing-bar cross/glazing-bar frame	50	11470¹	
	for 33 mm glazing-bar cross	50	11471	
brown	for 22 mm glazing-bar cross/glazing-bar frame	50	13130¹	
	for 26 mm glazing-bar cross/glazing-bar frame	50	11153¹	
	for 33 mm glazing-bar cross	50	10992	

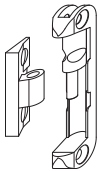
¹ Compatible with glazing-bar hinges.





12387

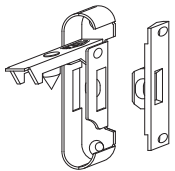
T 12.21 Drill-in glazing-bar catches			No	No Tricoat
white		50	12388¹	
brown		50	12387¹	

¹ 25 each left and right.




101251

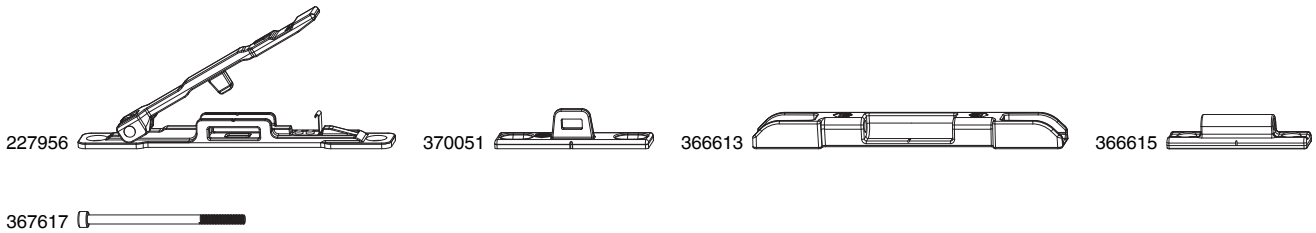
T 12.22 Universal coupling hinges				No	No Tricoat
silver	with 2 mm air gap	40	50	101248	
	without air gap	40	50	101251	



101252

T 12.23 Universal coupling catches			No	No Tricoat
silver	with 2 mm air gap	50	101250	
	without air gap	50	101252	





12.24 Coupling hardware for aluminium front profile			No	No Tricoat
Tricoat	locking unit for alu front profiles	20		227956*
	frame component for lock for alu front profiles	20		370051*
	packer for frame component for alu front profiles	20		370052*
	coupling hinge for alu front profiles	20		366613*¹
	coupling hinge roll for alu front profiles 15 mm high	20		366614*
	coupling hinge roll for alu front profiles 16 mm high	20		366615*
	shaft pin for coupling hinge	20		367617*¹

¹ Please order screw for pin safety device item no. 104302 separately.



T 12.25 Run-up blocks			No	No Tricoat
silver	run-up block	4 mm air gap	500	94022¹
		sash component	50	44351¹
		frame component	50	44350¹

¹ Only for Euro-rebate 20 mm rebate depth.



P 12.26 Run-up blocks for thresholds			W	L		No	No Tricoat
silver	frame component	8	21,8	50	100	370252¹	
			23,5	50	100	371009²	
			27,3	50	100	371712³	
			28	50	100	370390⁴	
			33,9	50	100	369788⁵	
pearl light grey RAL 9022	sash component		4 mm air gap	20	100	369791	
			6 mm air gap	20	100	369790	
			10 mm air gap	20	100	369789	

¹ TROCAL and GKG

² MACO TRANSIT

³ Schüco Living

⁴ Eifel TB

⁵ VEKA



12.27 Screws		L	Ø		No	No Tricoat
silver	special drill screw Multi Power for timber and PVC Phillips 7.2 mm head	38	4,5	100	362918	105152*
	special drill screw Multi Power for timber and PVC T20 7.2 mm head	38	4,5	500	367828	104212*
Tricoat	hardware bolt for PVC Phillips with drill bit 7 mm head	25	3,9	100		101474*
		32	3,9	100		101473*
		38	3,9	100		101472*
	hardware bolt for timber and PVC Phillips 7 mm head	22	4,2	100		101466*
		25	4,2	100		104371*
		30	4,2	100		101469*
		40	4,2	100		101470*
	55	4,2	500		102269*	



12.28 Serrated carrier connector MM			No	No Tricoat
silver		50	206692¹	

¹ Can also be supplied in quantities less than one packaging unit.



12.29 Clip-on bush for i.S. cam 3-sashed			No	No Tricoat
silver		100	355920	



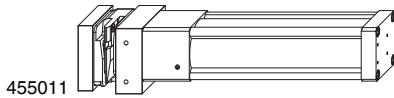
12.30 Faceplate strip cover		L		No	No Tricoat
silver		1.400	10	364686	
		2.200	10	364687	



12.31 Tricoat repair paint			No	No Tricoat
Tricoat repair paint 0,125 L tin		1	358440	



12.32 Hardware croppers



12.32.1 SOMATEC hardware croppers

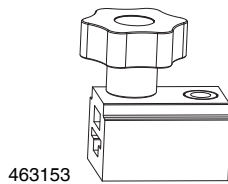
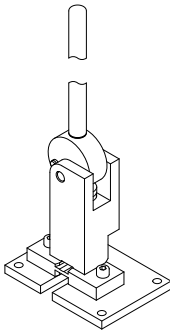


No

No
Tricoat

Somatec hardware angle cropper MM without accessories left	1	455457	
Somatec hardware angle cropper MM without accessories right	1	455458	
SOMATEC hardware cropper MM with accessories left	1	455008 ¹	
SOMATEC hardware cropper MM with accessories right	1	455009 ¹	
SOMATEC hardware cropper MM without accessories left	1	455011	
SOMATEC hardware cropper MM without accessories right	1	455012	
SOMATEC hardware cropper with straight cut with accessories left	1	465205 ¹	
SOMATEC hardware cropper with straight cut with accessories right	1	465206 ¹	

¹ Accessories: filter and regulation unit, pedal, air-tube.



12.32.2 Hand cropper/cropping aid for offset cut

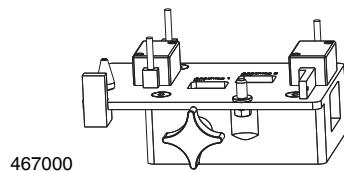
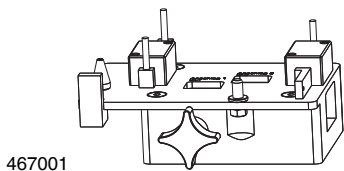


No

No
Tricoat

manual fitting cutter MM Reiplinger	1	462516	
punching tool for hand cropper MM 462516 with ram and punch holder	1	464534	
cutting blade for hand cropper MM 462516	1	464526	
cropping aid for offset punch MULTI MATIC	1	463153	

12.32.3 Accessories for SOMATEC hardware croppers



12.32.3.1 Fences




No

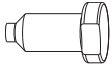
No
Tricoat

fence for SOMATEC hardware cropper left MM 2.500	1	455010	
fence for SOMATEC hardware cropper right MM 2.500	1	455122	
stop for SOMATEC ruler left MM	1	467001	
stop for SOMATEC ruler right MM	1	467000	
support for fence MM	1	466850	




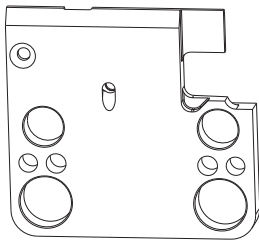
455048

12.32.3.2 Cutting punches			No	No Tricoat
punch for SOMATEC hardware cropper 0006 right MM	1		455049	
punch for SOMATEC hardware cropper 0007 MM	1		455048	
punch for SOMATEC hardware cropper 0106 left MM	1		455050	




455051

12.32.3.3 Hole-punch			No	No Tricoat
punching die for SOMATEC hardware cropper MM	10		455051	




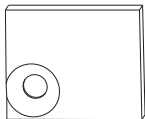
455052

12.32.3.4 Female dies			No	No Tricoat
female die for SOMATEC hardware cropper 0001 left MM	1		455052	
female die for SOMATEC hardware cropper 0101 right MM	1		455053	




455054

12.32.3.5 Fibro springs			No	No Tricoat
Fibro spring for SOMATEC hardware cropper D12x4x12, 90 mm long, Shore MM	1		455054	
Fibro spring for SOMATEC hardware cropper D32.5x13.5x23, 80 mm long, Shore MM	1		455055	



455056

12.32.3.6 Fibro insertions			No	No Tricoat
Fibro insertion for SOMATEC hardware cropper left MM	1		455056	
Fibro insertion for SOMATEC hardware cropper right MM	1		455057	





12.32.3.7 Controls		No	No Tricoat
pressure regulating valve for SOMATEC hardware cropper MM	1	455059	
corner kit for pressure control MM	1	466859	
foot control for SOMATEC hardware cropper MM	1	455058	



13 Stackable pallets







13.1	T&T drive gears BS 15 FHH i.S. _____	326
13.2	T&T drive gears EH BS 15 FHH i.S. _____	326
13.3	T&T drive gears EH BS 6.5 FHH i.S. _____	326
13.4	T&T drive gear BS 15 VHH i.S. _____	326
13.5	Corner elements _____	326
13.6	Centre locks _____	327
13.7	Faceplate extension _____	327
13.8	Scissor stay faceplates i.S. with night-vent _____	327
13.9	French casement drive gear for Eurogroove FHH _____	327
13.10	Drive gears BS 15 FHH with tilt lock bolt _____	327
13.11	Pre-assembled rebated scissor stays _____	327



13 Stackable pallets








208442

13.1 T&T drive gears BS 15 FHH i.S.								No	No Tricoat
silver	430	15	0	125	360 - 430	0	560	210896	
	660	15	0	190	431 - 660	0	560	210897	
	840	15	1	300	661 - 840	1	320	208442	
	1090	15	1	400	841 - 1.090	1	320	204423	
	1340	15	1	500	1.091 - 1.340	1	320	204424	








208444

13.2 T&T drive gears EH BS 15 FHH i.S.							No	No Tricoat
silver	15	2	300	661 - 840	320	208444		
			400	841 - 1.090	320	210900		
			500	1.091 - 1.340	320	210901		





211435

13.3 T&T drive gears EH BS 6.5 FHH i.S.							No	No Tricoat
silver	6,5	2	400	841 - 1.090	320	211435		
			500	1.091 - 1.340	320	211436		






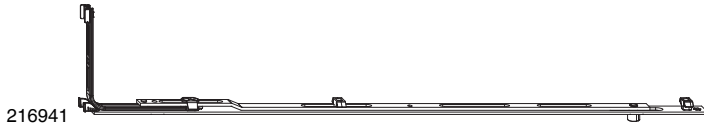
208443

13.4 T&T drive gear BS 15 VHH i.S.						No	No Tricoat
silver	15	1	801 - 1.250	320	208443		



208440

13.5 Corner elements					No	No Tricoat
silver	vertically extendable with 1 i.S.		750 - 2.800	1.100	204408	212178*
	vertically extendable without i.S. cams		750 - 2.800	1.100	215247	
	horizontally extendable with 1 i.S.	320 - 1.800	360 - 2.800	1.100	204409	212179*
	with 1 i.S.	320 - 1.800	360 - 2.800	1.100	204407	212177*
	with 2 i.S.	320 - 1.800	360 - 2.800	1.000	208440	
	with 1 VZ	320 - 1.800	360 - 2.800	1.100	216934	
	for variable drive gear horizontally extendable with 1 i.S.	320 - 1.800	470 - 2.800	1.000	204410	
for variable drive gear horizontally extendable with 2 i.S.	320 - 1.800	470 - 2.800	900	208441		



13.6 Centre locks			No	No Tricoat
silver	centre lock MM 1280	900	204418	
	centre lock one piece MM 1280	560	216941	
	centre lock extendable MM 1280V	900	204417	
	centre lock MM 1500	750	204419	
	centre lock one piece MM 1500	450	216942	
	centre lock extendable MM 1500V	540	204420	



13.7 Faceplate extension				No	No Tricoat
silver	faceplate extension MM, extendable	1	1.200	214760	



13.8 Scissor stay faceplates i.S. with night-vent					No	No Tricoat
silver	right	600	0	401 - 600	720	204443
		800	0	601 - 800	630	204445
	left	800	0	601 - 800	630	204446
		1050	1	801 - 1.050	450	204447
	left	1050	1	801 - 1.050	450	204448
	left	1300	1	1.051 - 1.300	320	204449
	left	1300	1	1.051 - 1.300	320	204450



13.9 French casement drive gear for Eurogroove FHH					No	No Tricoat
silver	for 1 i.S.	1340	500	1.091 - 1.340	320	204426



13.10 Drive gears BS 15 FHH with tilt lock bolt						No	No Tricoat
silver		15	1	400	841 - 1.090	320	216935
				500	1.091 - 1.340	320	216936



13.11 Pre-assembled rebated scissor stays				No	No Tricoat
silver		401 - 600	560	216938	
		601 - 800	480	216939	
	with 1 VZ	801 - 1.050	480	216940	



**MACO
MULTI-MATIC**



Stackable pallets



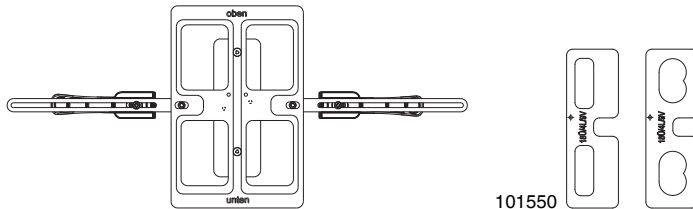
14 Jigs, tools and adjusting screws

14.1	Jigs timber 4 mm air gap	330
14.2	Jigs timber 12 mm air gap	333
14.3	Jigs timber 4 mm + 12 mm air gap	335
14.4	Jigs PVC	336
14.5	Jigs timber and PVC	338
14.6	Tools and adjustment keys	343



14 Jigs, tools and adjusting screws

14.1 Jigs timber 4 mm air gap



206751

101550

14.1.1 Routing jigs for pivot posts and scissor stay hinges DT 4 mm air gap

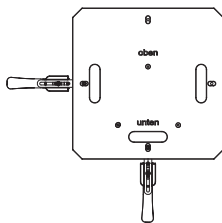


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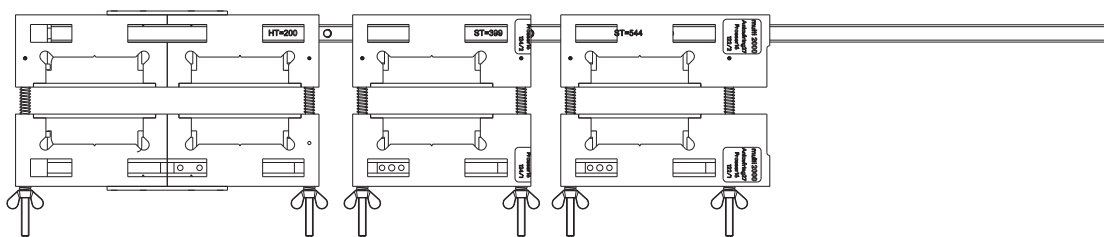
No
Tricoat

routing frame for pivot post and scissor stay hinge	timber	DT FR16/AR27		1	206751 ¹	
routing jig insert for pivot post and scissor stay hinge	timber	DT FR16/AR27	4 air gap/15 rebate leg	1	101551	
			4 air gap/18 rebate leg/9 offset	1	101550	
			4 air gap/18 rebate leg/13 offset	1	102890	

¹ Order routing plates item no. 101551, item no. 101550, item no. 102890 separately.



214813



214152

14.1.2 Routing jigs for drive gears MM/MM-KS 4 mm air gap

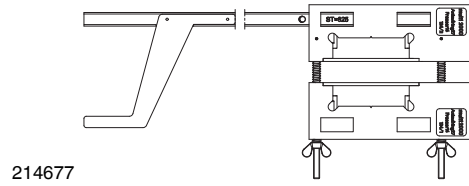


No

No
Tricoat

routing template for drive gear FHH MM	& corner element i.S.	4 mm air gap		1	214813 ¹	
routing template for drive gear FHH MM/MMKS		4 mm air gap	661 - 1.090	1	214152	
			841 - 1.340	1	214153	
			1.341 - 1.700	1	214154	
			1.701 - 2.200	1	214155	
	door catch	4 mm air gap	1.701 - 2.200	1	214156	

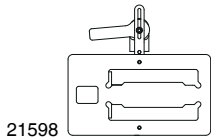
¹ Corner element item no. 222215.



14.1.3 Positioning jigs and routing jigs for centre locks and scissor stays MM/MM-KS 4 mm air gap

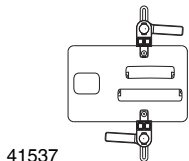
						No	No Tricoat
striker positioning jig with 48 mm retainer	4 mm air gap	630 - 1.300	1			214669 ¹	
scissor stay MM/MMKS							
routing template for bottom centre lock MM	4 mm air gap	801 - 1.500	1			214677	
routing template for bottom centre lock MMKS	4 mm air gap	801 - 1.500	1			214163	
routing template for hinge side centre lock MM	4 mm air gap	801 - 2.200	1			214676	
routing template for hinge side centre lock MMKS	4 mm air gap	801 - 2.450	1			214162	
routing template for hinge side centre lock MM/MMKS	4 mm air gap	801 - 1.500	1			214161	

¹ Top 12 mm air gap.



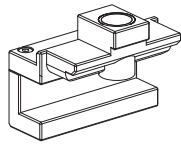
14.1.4 Routing jigs for 2-sashed windows for drive gears, centre locks and shootbolts MM/MM-KS 4 mm air gap

						No	No Tricoat
routing template for 2-sashed windows	timber shootbolt FR16/AR27	4 mm air gap			1	21598	
routing template for drive gear FHH MM/MMKS	2-sashed	4 mm air gap		841 - 1.340	1	214157	
				1.341 - 1.700	1	214158	
				1.701 - 2.200	1	214159	
	door catch	2-sashed	4 mm air gap	1.701 - 2.200	1	214160	
routing template for bottom centre lock MM	2-sashed	4 mm air gap	801 - 1.500		1	214679	
routing template for centre lock Euronut	2-sashed	4 mm air gap	801 - 1.500		1	215016	
routing template for bottom centre lock MMKS	2-sashed	4 mm air gap	801 - 1.500		10	214164	



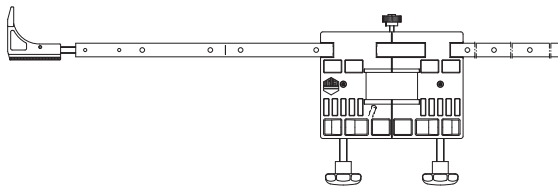
14.1.5 Routing jigs for half round windows 4 mm air gap

routing template MT/MM for half round windows stabilizing scissor stay case and strikers	4 mm air gap timber	1				41537	
routing template MT/MM for half round scissor stay	4 mm air gap timber	1				28337	



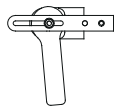
214542

T 14.1.6 Drilling jigs for compression devices 4 mm air gap							No 	No Tricoat
drill jig for compression device	timber	drill-in	9 mm offset	4 mm air gap	1		23871	
			13 mm offset	4 mm air gap	1		214542	

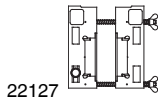


28377

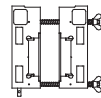
T 14.1.7 Routing jig for intermediate drive gears 4 mm air gap							No 	No Tricoat
routing template for intermediate drive gear	timber	FR16/AR27/BO12		4 mm air gap / 15 mm rebate leg	1		28377	



11195

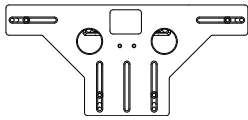


22127



T 14.1.8 Replacement parts and single components for jigs 4 mm air gap							No 	No Tricoat
clamp for routing jig	timber	2 pcs. with screws			10		11195	
routing jig 122/1+2	timber	replacement part for routing jig		4 mm air gap	1		22127	
routing jig 123/1+2	timber	replacement part for routing jig		4 mm air gap	1		20924	
routing jig 124/1+2	timber	replacement part for routing jig		4 mm air gap	1		20925	
routing jig 125/1+2	timber	replacement part for routing jig		4 mm air gap	1		20926	

14.2 Jigs timber 12 mm air gap



20890

14.2.1 Routing jig for pivot posts and scissor stay hinges DT 12 mm air gap



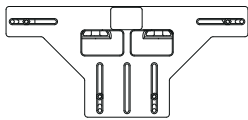
No

No
Tricoat

routing template for pivot post and scissor stay hinge timber DT FR34/AR40 12 mm air gap / 18 mm rebate leg + 12 mm air gap / 20 mm rebate leg 1

20890¹

¹ Replacement part and single component available.



23957

14.2.2 Routing jig for scissor stay hinges for angled windows DT 12 mm air gap

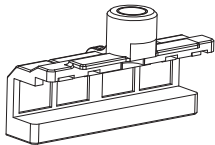


No

No
Tricoat

routing template for angled window scissor stay hinge timber DT FR34/AR40 12 mm air gap / 18 mm rebate leg + 12 mm air gap / 20 mm rebate leg 1

23957



22482

14.2.3 Drilling jigs for compression devices 12 mm air gap



No

No
Tricoat

striker positioning jig for compression device timber drill-in sash component 1

29489

drilling block for compression device timber drill-in 12 mm air gap 9 mm offset 1

22482

drill jig for compression device timber drill-in frame components 12 mm air gap 9 mm offset 1

29490

drilling block for compression device timber drill-in Euro-rebate 24 mm rebate depth 13 mm offset 1

206881

drill jig for compression device timber drill-in Euro-rebate 24 mm rebate depth 13 mm offset 1

207300

212949



14.2.4 Drilling jigs for Safety Pin 12 mm air gap

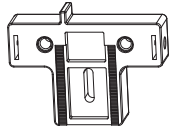


No

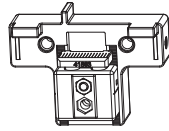
No
Tricoat

drill jig for safety pin timber Euro-rebate 24 mm rebate depth 13 mm offset 1

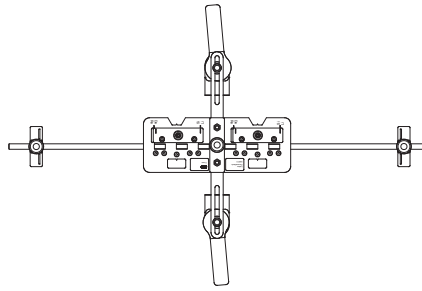
212949



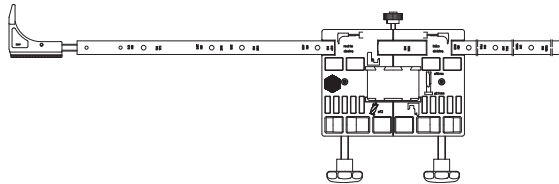
12506



11025



T 14.2.5 Drilling jigs for 3-sashed windows 12 mm air gap			No	No Tricoat
drill jig for 3-sashed turn-only hinge	timber	1	12506	
drill jig for multi-sash centre frame hinge	timber	1	11025	



206581

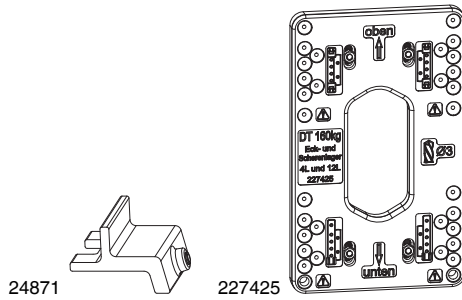
T 14.2.6 Routing jigs for intermediate drive gears 12 mm air gap			No	No Tricoat
routing template for intermediate drive gear	timber FR16/AR27/BO12 9 mm offset	1	28376	
	13 mm offset	1	206581	



370313

T 14.2.7 Replacement parts and single components for jigs 12 mm air gap			No	No Tricoat
Stop piece DT160	18 mm high	2	370313	

14.3 Jigs timber 4 mm + 12 mm air gap



24871

227425

T 14.3.1 Drilling jigs

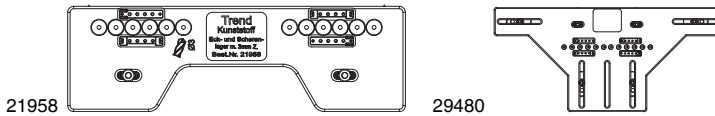


No

No
Tricoat

drill jig for glazing-bar catch	timber	10	24871	
drill jig for pivot post and scissor stay hinge DT160		4 mm air gap / 12 mm air gap	1	227425

14.4 Jigs PVC



P 14.4.1 Drilling jigs for pivot posts and scissor stay hinges

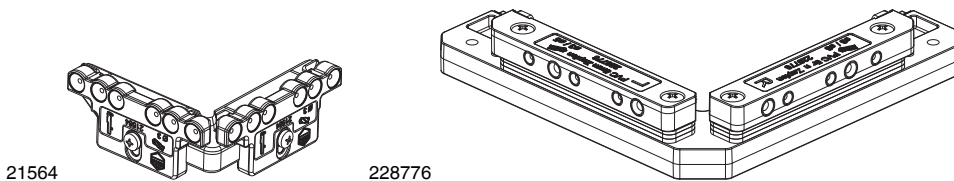


No

No
Tricoat

drill jig for pivot post and scissor stay hinge	PVC	with 3 mm pin	1	21958 ¹	
		self-tightening with 3 mm pin	1	29480 ¹	
		with 7 mm pin	1	21694 ¹	
		self-tightening with 7 mm pin	1	28597 ¹	

¹ Replacement part and single component available.



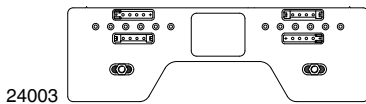
P 14.4.2 Drilling jigs for corner supports



No

No
Tricoat

drill jig for corner support	PVC	with 3 mm pin	1	21564	
		with 5 mm positioning pins	1	21562	
			1	228776	Design Multi Mammut
	5° angle	with 5 mm positioning pins	1	23279	
		MULTI MAMMUT	1	228043	



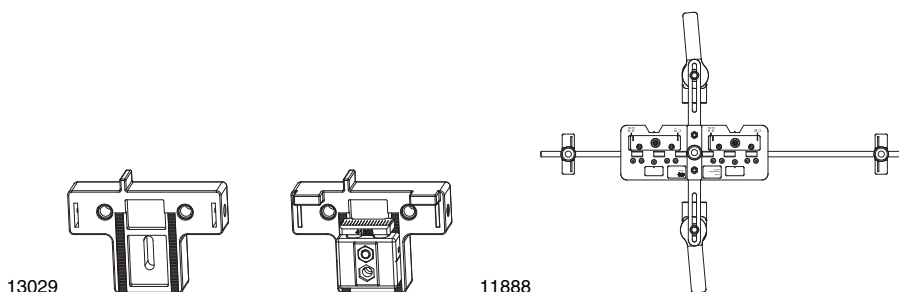
P 14.4.3 Drilling jigs for pivot posts and scissor stay hinges for angled windows



No

No
Tricoat

drill jig for angled window	PVC	with 3 mm pin	1	24003	
scissor stay hinge		with 7 mm pin	1	24004	



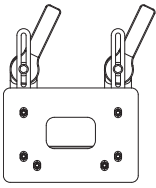
P 14.4.4 Drilling jigs for 3-sashed windows



No

No
Tricoat

drill jig for 3-sashed turn-only hinge	PVC		1	13029	
drill jig for multi-sash centre frame hinge	PVC	with 3 mm pin	1	11888	drilling-hole pattern 11.5/5/23.5
		with 7 mm pin	1	11889	drilling-hole pattern 11.5/5/23.5



202641

14.4.5 Jig for intermediate drive gears




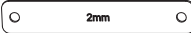
No

No
Tricoat

routing template for intermediate drive gear frontal

1

202641

104941 6x   2x

P 14.4.6 Replacement parts and single components for jigs PVC



No

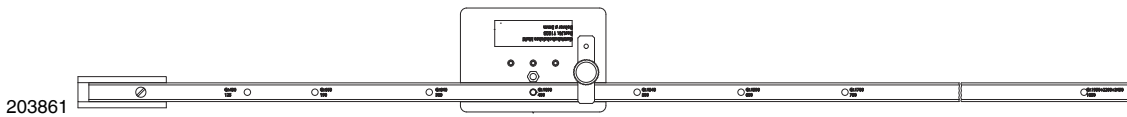
No
Tricoat

silver Packers for drilling jig corner support PVC MULTI MAMMUT

1

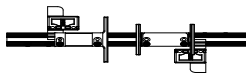
104941

14.5 Jigs timber and PVC

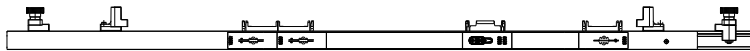


14.5.1 Jigs for drive gear holes MM/MM-KS			No	No Tricoat
drill jig for drive gear drill-hole MM	for 3 mm drillbits	1	203861	
	for 3 mm and 12 mm drill bit	1	203862	
drill jig for lockable door espagnolettes BS 25-50 mm	profile width max. 110 mm	1	214634	

14.5.2 Striker plate jigs timber 12 mm air gap and PVC



14.5.2.1 Striker plate jigs for drive gears FHH MM/MM-KS				No	No Tricoat
striker positioning jig for drive gear FHH MM	with 48 mm retainer	431 - 660	1	204773	
		661 - 1.340	1	204774	
		1.341 - 1.700	1	204775	
	for doors	1.701 - 2.450	1	204776	



14.5.2.2 Striker plate jigs for drive gears VHH MM/MM-KS				No	No Tricoat
striker positioning jig for drive gear MM	with 48 mm retainer	1.250 - 1.750	1	206049	
	variable (centred)	1.751 - 2.250	1	206067	



14.5.2.3 Striker plate jigs for centre locks and scissor stays MM/MM-KS					No	No Tricoat
striker positioning jig for centre lock and scissor stay MM	with 48 mm retainer	260 - 1.500	270 - 2.000	1	204771	
striker positioning jig for centre lock MM	with 48 mm retainer	horizontal		1	204772	
striker positioning jig scissor stay	with 48 mm retainer	MULTI MAMMUT		1	213310	

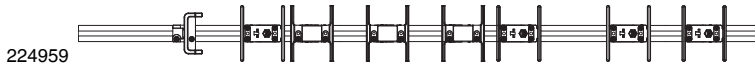


14.5.2.4 Striker plate jigs for 2-sashed centre locks MM/MM-KS			No	No Tricoat
striker positioning jig for centre lock MM	2-sashed	1	206260	
striker positioning jig for centre deadbolt striker plate MMKS	2-sashed	1	213865	



14.5.2.5 Striker plate jigs for 2-sashed windows for drive gears FHH Eurogroove MM/MM-KS						No	No Tricoat
striker positioning jig for drive gear FHH MM	for striker plate 48 mm	2-sashed	for Eurogroove	431 - 1.340	1	210983	
	for striker plate 68 mm	2-sashed	for Eurogroove	431 - 1.340	1	209954	
	for striker plate 48 mm	2-sashed	for Eurogroove	1.341 - 1.700	1	210984	
	for striker plate 68 mm	2-sashed	for Eurogroove	1.341 - 1.700	1	209955	
	for striker plate 48 mm	2-sashed	for Eurogroove	1.701 - 2.450	1	210985	
	for striker plate 68 mm	2-sashed	for Eurogroove	1.701 - 2.450	1	209956	

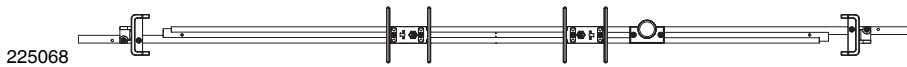
14.5.3 Striker plate jigs timber 12 mm air gap and PVC EH



14.5.3.1 Striker plate jigs for drive gears FHH EH MM						No	No Tricoat
striker positioning jig for drive gear FHH MM	with 50 mm retainer		EH	661 - 1.340	1	224959	
				1.341 - 1.700	1	224960	
				1.701 - 2.450	1	224961	

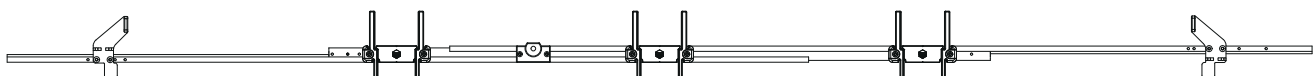


14.5.3.2 Striker plate jigs for centre locks and scissor stays EH MM							No	No Tricoat
striker positioning jig scissor stay MM	with 50 mm retainer		EH	480 - 1.650		1	225022	
striker positioning jig for bottom centre lock MM	with 50 mm retainer		EH	480 - 1.650		1	225032	
striker positioning jig for hinge side centre lock MM	with 50 mm retainer		EH	480 - 1.340		1	225038	
			EH	1.341 - 1.950		1	225059	
				1.951 - 2.600		1	225060	



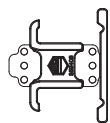
14.5.3.3 Striker plate jigs for 2-sashed centre locks EH MM						No	No Tricoat
striker positioning jig for bottom centre lock MM	with 50 mm retainer	2-sashed	EH		1	225068	
striker positioning jig for top centre lock MM	with 50 mm retainer	2-sashed	EH		1	225069	

57247



14.5.4 Jigs for compression devices				No	No Tricoat
drill jig for compression device	with positioning jig-rod	surface-mounted	1	11029	
striker positioning jig for compression device		concealed ES+TV sash and frame component	1	57247	





359408

T 14.5.5 Jigs for single components, sash lifter brackets timber				No	No Tricoat
lifting component retainer MM	timber	Euro-rebate 24 mm rebate depth 13 mm offset	20	359408	
		Euro-rebate 9 mm offset	20	364241	

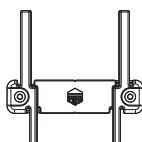


40116

14.5.6 Jigs for single components, striker plate brackets				No	No Tricoat
striker plate retainer	for striker plate 48 mm		10	40116	
		with long stop	1	441296¹	
	for striker plate 68 mm	i.S.	1	13318	
timber	for striker plate 48 mm	Euro-rebate 24 mm rebate depth 13 mm offset	20	359407	
	for striker plate 68 mm	i.S.	20	359410	
		Euro-rebate 24 mm rebate depth 13 mm offset	20	359409	
	for striker plate 34943	Euro-rebate	10	40107	
	for striker plate 34980	Euro-rebate	20	41272	
PVC	for striker plate 50 mm	i.S.	10	43702²	

¹ Striker plate 48 mm and sash lifter MM PVC.

² Striker plate rear-engaging.



361815

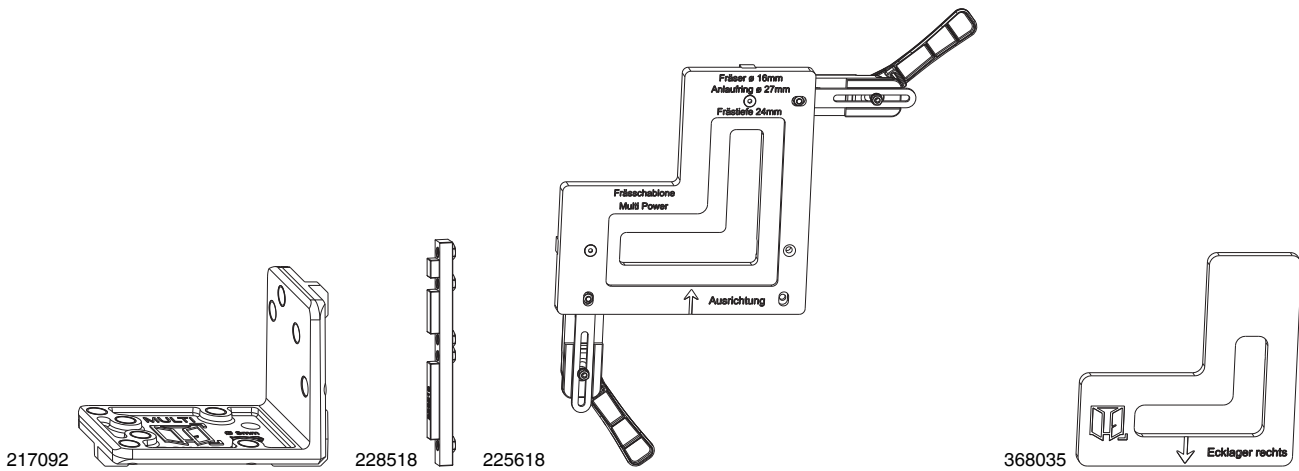
14.5.7 Jigs for single components, striker plate brackets compression device				No	No Tricoat
striker plate retainer for compression device	concealed ES+TV sash and frame component	timber	1	361815	



102978



14.5.8 Drilling jigs for INVISIBLE				No	No Tricoat
drill jig for pivot post and scissor stay hinge VV	13 mm screw axis		1	102978	
		Euro-rebate 18 mm rebate depth 9 mm offset	1	102979	
drilling jig accessories for VV flush			1	102980	

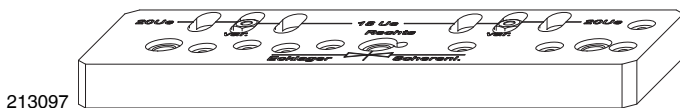


14.5.9 Drilling and routing jigs for MULTI POWER

					No	No Tricoat
drill jig for pivot post and scissor stay hinge	right		FT24	1	217092	
			groove 10/14 Heroal	1	219539	
	left		FT24	1	217093	
			groove 10/14 Heroal	1	219540	
drill jig for pivot post	right/left		FT30	1	217094	
	right/left	for threshold	PVC rebate depth 24/30 mm	1	227810	
drill jig for load transfer				1	228518	
routing frame				1	225618^{1,2}	
routing jig insert for 3-sashed turn-only hinge	right/left			1	368094	
routing jig insert for pivot post	right/left			1	368035	
routing jig insert for scissor stay hinge	right/left			1	368036	

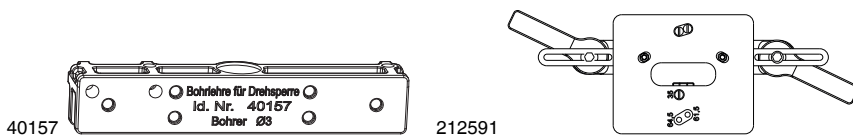
¹ Replacement part and single component available.

² Order routing jig for pivot post, scissor stay hinge or 3-sash turn-only hinge (frame part) separately.



14.5.10 Drilling and routing jigs for MULTI MAMMUT

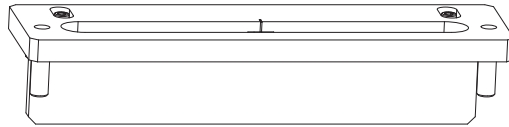
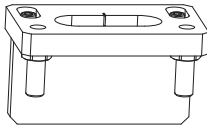
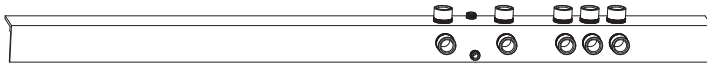
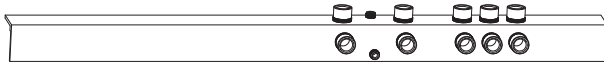
					No	No Tricoat
drill jig for pivot post and scissor stay hinge	left		MULTI MAMMUT	1	213097	
	right		MULTI MAMMUT	1	213096	
routing jig for corner support & rebated scissor stay support arm	timber		MULTI MAMMUT	1	213099	



14.5.11 Drilling and routing jigs for turn locks and MULTI VENT

					No	No Tricoat
drill jig for turn lock		self-closing	timber/PVC	10	40157	
drill jig for Multi-Vent tilt restrictor			timber/PVC/alu-timber	1	42505	
routing template for turn lock MT/MM		concealed		1	212591	





104717

14.5.12 Drilling and routing jigs for E-Hardware



No

No
Tricoat

drilling and routing jig set for E-hardware

surface-mounted

12 air gap/20 rebate leg/
13 offset

1

104717



103596

14.5.13 Striker plate jig for sash lifter striker plate for half round windows and stabilizing scissor stay casing



No

No
Tricoat

striker plate jig MM for sash lifter striker plate half round window and stabilizing scissor stay casing

1

103596



228226

14.5.14 Marking jig for alu front profiles



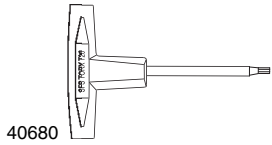
No

No
Tricoat

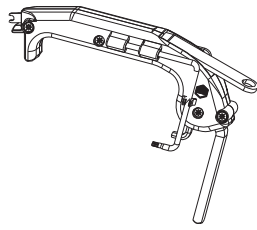
marking jig for frame component for alu front profiles

5

228226



206417



14.6 Tools and adjustment keys



No

No
Tricoat

universal access key	20	40720	
adjusting spanner/key allen key, bent twice, 145 mm long SW 4	50	454888	
adjusting spanner/key allen key, bent twice, 75 mm long SW 4	50	41017	
adjusting spanner/key for locking cams and scissor stays	50	20947	
adjusting spanner/key for i.S. cams, bent twice, 145 mm long T15	50	465776	
adjusting spanner/key for i.S. cams, bent twice, 75 mm long T15	50	44192	
adjusting spanner/key for i.S. cams - 4 mm Allen key and T15	100	43647	
pin pull-handle for rebated scissor stay TX20	50	40680	
MACO allen key for MULTI VENT SW 2.5	100	24239	
scriber	100	42465	
multifunctional key	20	206417	
key for scissor stay hinge pin	20	28620	

MACO
MULTI-MATIC



Jigs, tools and adjusting screws



15 MACO TRONIC

15.1 Window monitoring	346
15.1.1 Sash components for locking monitoring	346
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15 MACO TRONIC




15.1 Window monitoring

15.1.1 Sash components for locking monitoring

15.1.1.1 Corner elements with magnetic cam





206190

15.1.1.1.1 Corner element standard with magnetic cam					No	No Tricoat
silver	with 1 i.S. and 1 magnetic cam	320 - 1.650	360 - 2.450	50	206190	209920



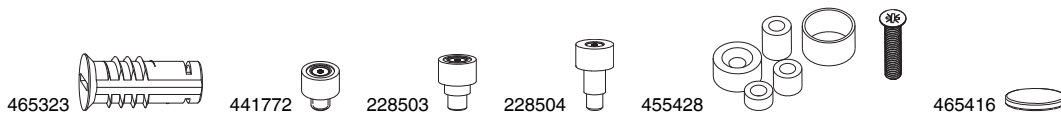
228493


15.1.1.1.2 Corner element vertical with magnetic cam				No	No Tricoat
silver	vertically extendable with 1 magnetic cam	750 - 2.450	50	228493	

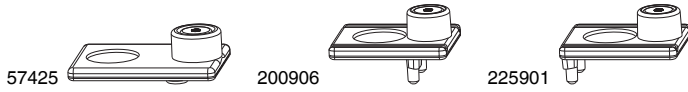


201755

15.1.1.2 Faceplate extension MM, extendable with magnetic cam			No	No Tricoat
silver	140 with 1 magnetic cam	20	201755	209921



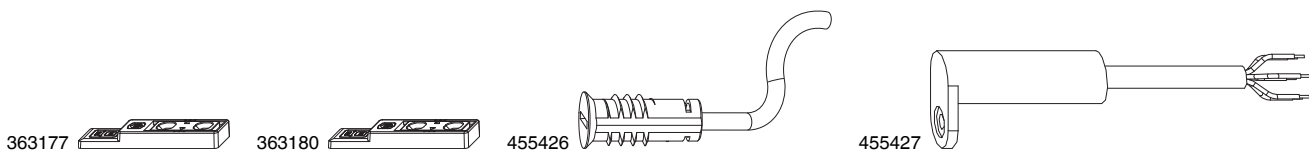
15.1.1.3 Magnetic cam and accessories			No	No Tricoat
silver	screw-in magnet in zink case	100	465323	
	contact sensor cam M5 Ø 10x10 mm	100	441772	
	contact sensor cam short Ø 10x13.4 mm	100	228503	
	contact sensor cam long Ø 10x17.7 mm	100	228504	
white	surface mounted contact sensor	10	455428	
blank	magnetic disc Ø 8x1 mm	200	465416	



15.1.1.4 Adaptors with magnetic cam						No	No Tricoat
grey	adaptor with contact sensor				50	57425	
	adaptor with contact sensor KVS MM				50	200906	
	adaptor with contact sensor KVS MM suitable for automation				10	225901	

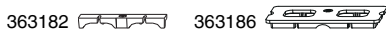
15.1.2 Frame components/sensors for locking monitoring

15.1.2.1 Tethered sensors



15.1.2.1.1 Reed contacts							No	No Tricoat
grey	built-on	RVS	for locking and tilt monitoring	VdS B/C	6 m cable (0.14 mm ²)	10	363177	
					10 m cable (0.14 mm ²)	10	363178	
					15 m cable (0.14 mm ²)	10	363179 ¹	
	RHS	for central heating control	VdS C	6 m cable (0.14 mm ²)	10	363180		
15 m cable (0.14 mm ²)				10	363181			
silver	built-in	MVE	for locking and tilt monitoring	VdS C	6 m cable (0.14 mm ²)	10	455426	
		MVF	for combined opening and locking monitoring	VdS C	6 m cable (0.14 mm ²)	10	455427	

¹ Reed contact for lock monitoring RVS cable 15 m is not approved by VdS.



15.1.2.1.2 Injection-moulded parts for reed contact						No	No Tricoat
white	type 1				10	363182 ¹	
	type 2				10	363183 ¹	
	type 3				10	363184 ¹	
	type 4				10	363185 ¹	
	type 5				10	363186 ¹	
	type 6				10	363187 ¹	
	type 7				10	370482 ¹	

¹ To select the correct injection-moulded part please refer to the latest profile data sheet.

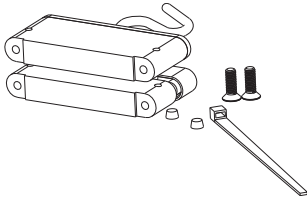
15.1.2.2 Radio sensors



15.1.2.2.1 mTRONIC						No	No Tricoat
grey	RAL 7035				10	476776	



15.1.3 Accessories for window monitoring



458062

15.1.3.1 Electrical, contactless signal transmitter



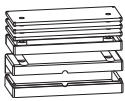
No

No
Tricoat

for alarm glass and glass breakage sensors

1

458062



455431



455429

15.1.3.2 Accessories for signal transmitter



No

No
Tricoat

white	construction case set for electronic cable junction without contacts	1	455431	
	fixing frame for electronic cable junction without contacts	1	455429	
brown	construction case set for electronic cable junction without contacts	1	455432	
	fixing frame for electronic cable junction without contacts	1	455430	



458281



363472



363474

363473

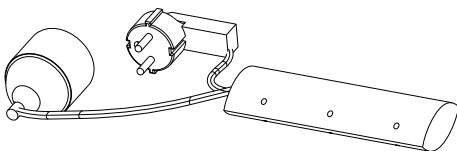
15.1.3.3 Removable cable transitions



No

No
Tricoat

	detachable cable junction 6-pin	1	458281	
	detachable cable junction for alarm contact	1	363472	
stainless steel	cable junction cover plate, PVC for alarm contact	1	363474	
	cable junction cover plate, timber	1	363473	



458063

15.1.3.4 Exit air controls



No

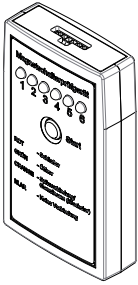
No
Tricoat

exit air control cable version

1

458063¹

¹ Box contents: 1 x controller, 1 x magnetic switch, 1 x contact sensor, 6 x packers for PVC profiles.



364524

15.1.3.5 Test device for reed contacts



No

No
Tricoat

test device for reed contacts




1

364524








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101250	50	319	10722	20	229	201748	10	164
101251	50	319	10756	20	229	201749	10	164
101252	50	319	10757	50	316,317	201750	20	199
101339	50	193	10759	20	313	201751	20	196
101354	20	214	10804	20	287	201752	20	196
101356	20	287	10890	50	314	201753	20	196
101357	20	287	10891	50	314	201754	10	196
101358	20	287	10892	50	314	201755	20	346
10137	50	314	10893	50	314	201764	50	220
10138	50	314	10901	20	229	201770	20	276
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101548	20	214	11470	50	319	201836	10	172
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101562	20	313	11473	50	318	201839	10	172
101563	20	313	11888	1	336	201840	20	196
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101671	50	314	12067	20	312	201842	10	162
101672	50	314	12068	20	312	201843	10	162
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101674	50	314	12070	20	312	201853	20	202
101683	50	193	12360	20	313	201854	20	202
101879	30	188	12361	20	313	201855	20	202
101888	20	315	12387	50	319	201856	20	202
101901	10	226	12388	50	319	201857	20	202
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102301	20	318	13318	1	340	201864	10	209
102302	20	318	2			201865	10	209
102890	1	330	200906	50	347	201866	10	209
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103080	20	315	201066	100	239	202128	10	286
103302	10	226	201082	100	230,238	202131	10	286
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103596	1	342	201168	50	177	202170	20	173
103623	20	315	201400	100	248	202171	10	173
103624	20	315	201401	100	248	202172	10	173
103625	20	315	201402	100	238	202205	10	167
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104304	10	215	201481	200	296	202214	20	167
104305	10	215	201482	100	299	202215	10	167
104371	100	321	201484	100	295,296	202216	10	166
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105152	100	266,321	201601	50	254	202219	10	174
105309	30	189	201602	50	255	202220	10	174
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105336	10	264	201730	20	162,172	202251	20	286
105337	10	264	201731	20	172	202252	20	286
105338	10	264	201732	20	162	202269	20	221
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206291	20	253	207318	10	171
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206293	20	253	207391	20	220
206308	10	170	207392	20	220
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206336	10	210	207443	20	199
206337	10	210	207444	20	199
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206701	50	241	207476	10	166
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