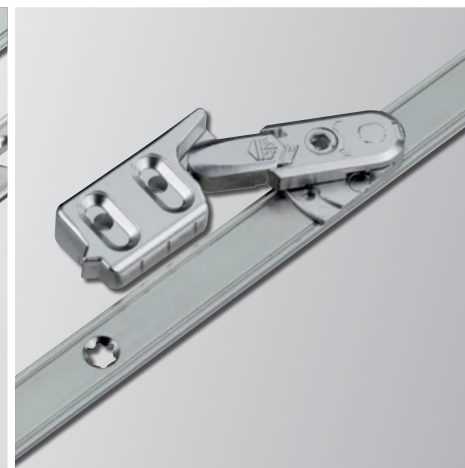


TECHNOLOGY IN MOTION



MACO MULTI-MATIC

TURN AND TILT HARDWARE



Catalogue 2016



	For timber windows		Packing unit
	For PVC and aluminium windows		Packing unit per pallet
	Part number	MM =	MULTI-MATIC
	Tricoat number	MP =	MULTI POWER
	Sash rebate width (SRW) and sash rebate height (SRH)	KS =	Tilt lock bolt
	Sash rebate width (SRW), standard	DK =	Turn&tilt
	Sash rebate width (SRW), angled window	KD =	Tilt&turn
	Sash rebate width with short corner element	DR =	Turn
	Sash rebate height (SRH)	FFB =	Sash rebate width (SRW)
	Backset (BS)	FFH =	Sash rebate height (SRH)
	Handle height (HH)	FT =	Rebate depth
	Maximum sash weight	L =	Air gap
	Number of security cams (i.S.)	V =	Offset (hardware axis)
	Number of standard cams	AS =	Surface-mounted
	Sash lifter	DT =	Double routing (Timber)
	Screw diameter	TO =	Single routing (Timber)
	Faceplate width	TV =	Partially concealed hardware
	Spindle size	VV =	Fully concealed hardware
	Handle centre (E)	i.S. =	Security cam
	Packer thickness	VZ =	Standard cam
	Screw	DM =	Backset (BS)
	Overall component width	GM =	Handle height (HH)
	Overall component length	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
		ES =	adjustable
		HG =	rear-engaging



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 extranet.maco.eu or 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 our operation and maintenance instructions or the VHBH guideline of the Quality Assurance Association: Locks and Hardware (www.fvsb.de).

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 at extranet.maco.eu or 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.	
Stamp: 	<hr style="border: 0; border-top: 1px solid black; margin-bottom: 5px;"/> <p style="text-align: center; margin: 0;"><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 Technical and general 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 calibration is necessary.

The current version is downloadable from the Extranet (extranet.maco.eu) or from our website (www.macouk.net).

Please send comments or suggestions about our instructions 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
- turn and tilt or
- tilt and turn or
- tilt.

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 or ÖNORM B 1600. 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.at. 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 TDK 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



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 our extranet (<https://extranet.maco.eu>) or 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.

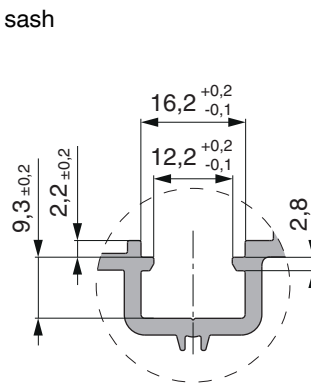
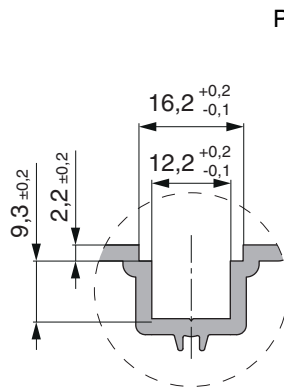
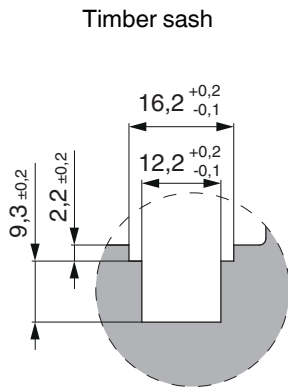
Always use transport securing measures appropriate to the actual clearance (e.g. spacer blocks), in order to hold the sash in the intended position in the frame during transport, and thus to dissipate the resulting reaction forces directly from the sash via the frame.

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.

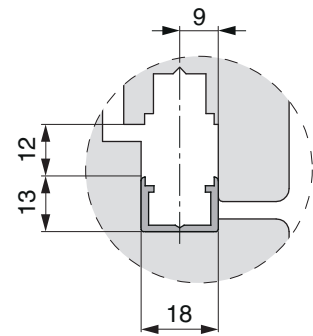
1.4 Profile specifications

1.4.1 Eurogroove

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

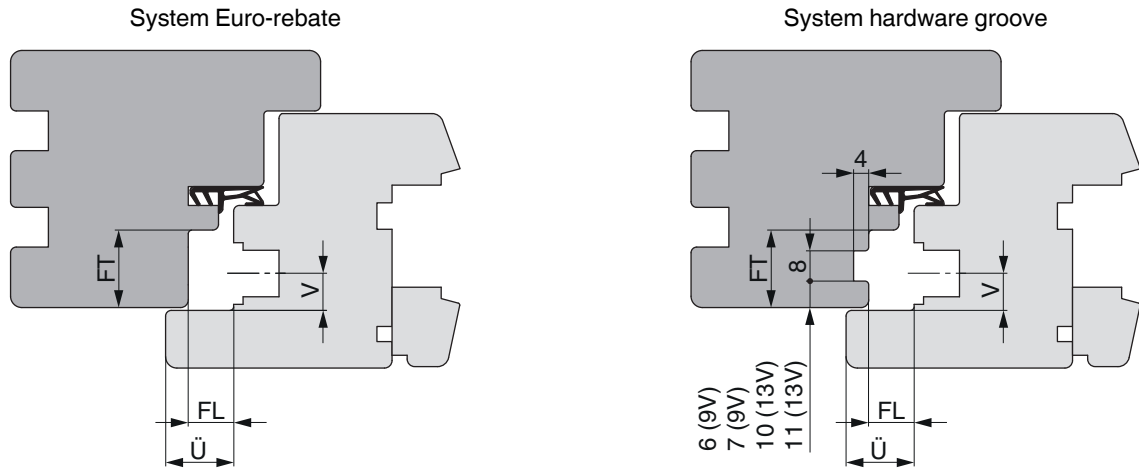


Timber sash French casement
design
with Aluminium recess

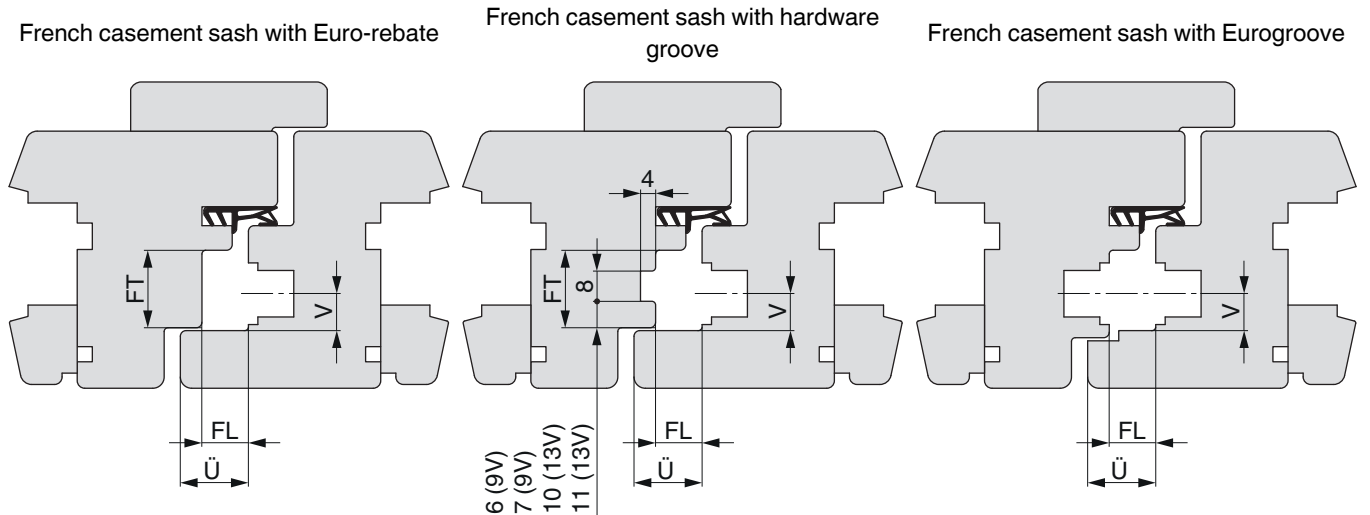


1.4.2 Recommendation for timber profiles

Single-sash



Double-sash (French casement)



Recommended values for air gap, rebate depth, offset and rebate leg:

FL = Air gap: 4 or 12 mm

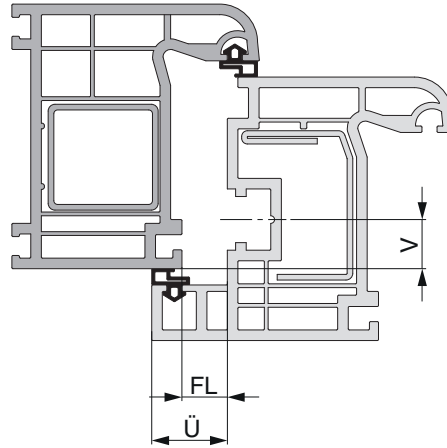
V = Offset: 9 or 13 mm

Ü = Rebate leg: 15 or 18 mm (4 FL) or 18 or 20 mm (12 FL)

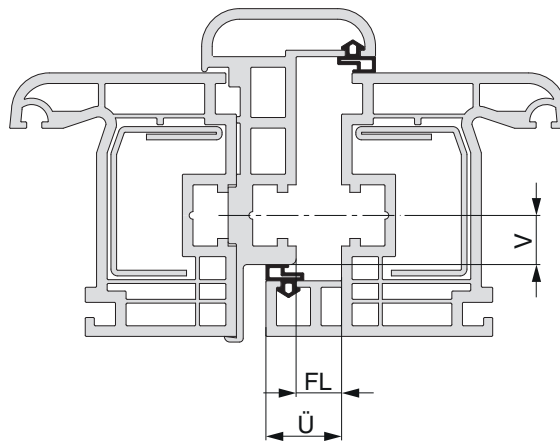
FT = Rebate depth: 18 or 20 mm (9V) or 22, 24 or 30 mm (13V)

1.4.3 Examples for PVC profiles

Single-sash



Double-sash (French casement)



Default values for air gap, rebate depth, offset and rebate leg:

FL = Air gap: 12 mm

V = Offset: 13 mm

Ü = Rebate leg: 20 mm

FT = Rebate depth: 24 or 30 mm



1.5 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 or from our customer extranet portal extranet.maco.eu) you will find detailed information about all our surface finishes, as well as measures to protect and preserve them.

1.6 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	5	6	7	8	9
								Category of use	Lasting functionality	Mass (in kg)	Fire resistance	Safety of use	Corrosion resistance	Protective function	Application	Test quantities (in mm)
1.	Support pin long	MULTI-MATIC Standard*	52486	52481	52479	52484	120 kg	-	4	120	0	1	5	-	8	1300/1200
2.	DT	MULTI-MATIC RC 2*	202534	202543	54710	52703	130 kg	-	4	130	0	1	5	-	8	900/2300 1300/1200
3.	MULTI POWER Timber	MULTI Standard	-	215767	215804	215810	130 kg	-	4	130	0	1	5	-	8	1300/1200
4.	MULTI POWER PVC	MULTI Standard	-	215775	215804	215814	130 kg	-	4	130	0	1	5	-	8	1300/1200
* 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 our extranet (https://extranet.maco.eu) or from the MACO website www.maco.eu under tab "Downloads" (ift Certificate of Conformity QM328).																





1.7 Burglar resistance according to standards

With MACO hardware windows and casement doors can be built in burglar-resistant versions in accordance with resistance classes RC1, RC2 or RC3 (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

The inspection should normally be implemented by the processor. We can provide a test certificate under certain conditions. The hardware must be matched properly to the material used. Our technical advisers are available for any additional information.

1.8 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 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, customers can access them directly from our customer extranet portal (extranet.maco.eu). In addition our safety descriptions relating to dangerous substances (REACH Declaration) are available, covering all MACO products.

1.9 General terms and conditions

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



2 Fundamental processing information

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2 Fundamental processing information

2.1 Manufacturers application advice

This catalogue applies only for the installation of MACO MULTI-MATIC turn-only and turn&tilt hardware for windows and window doors. 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.

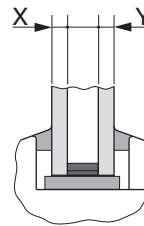
3. Composition of the hardware

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

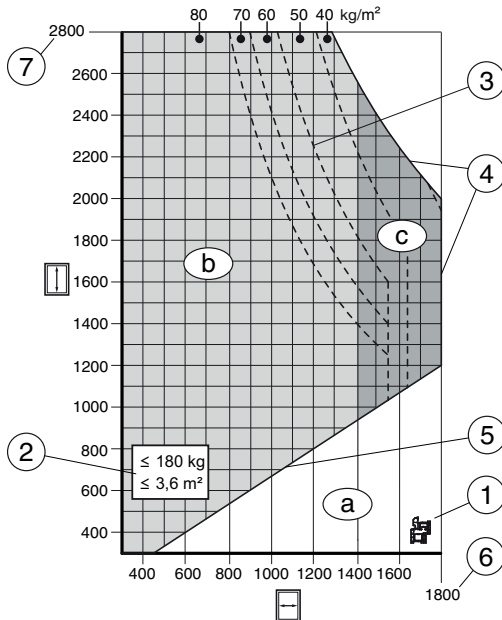
1 mm = 2.5 kg/m²



Total glass thickness = x + y

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

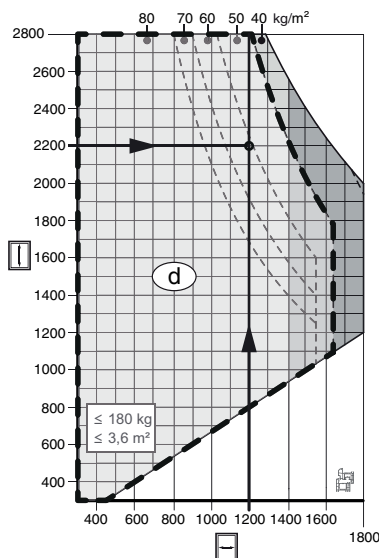
Sash size 1200 x 2200 mm

Total glass thickness 2 x 4 mm = 8 mm

(8 mm x 2.5 kg/m² = 20 kg/m²)

Sash weight = 1.2 x 2.2 x 20 = 52.8 kg

Valid range in diagram left of the glass line
50 kg/m²



d) Valid range

Example 2: Sash weight is outside the valid range

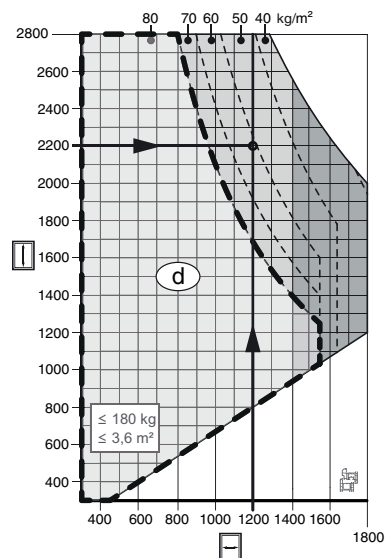
Sash size 1200 x 2200 mm

Total glass thickness 3 x 4 mm = 12 mm

(12 mm x 2.5 kg/m² = 30 kg/m²)

Sash weight = 1.2 x 2.2 x 30 = 79.2 kg

Valid range in diagram left of the glass line
80 kg/m² (rounded up)



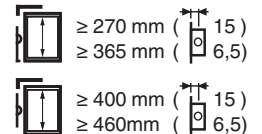
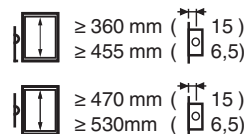
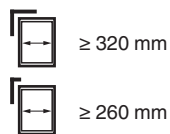
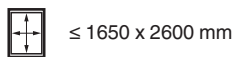
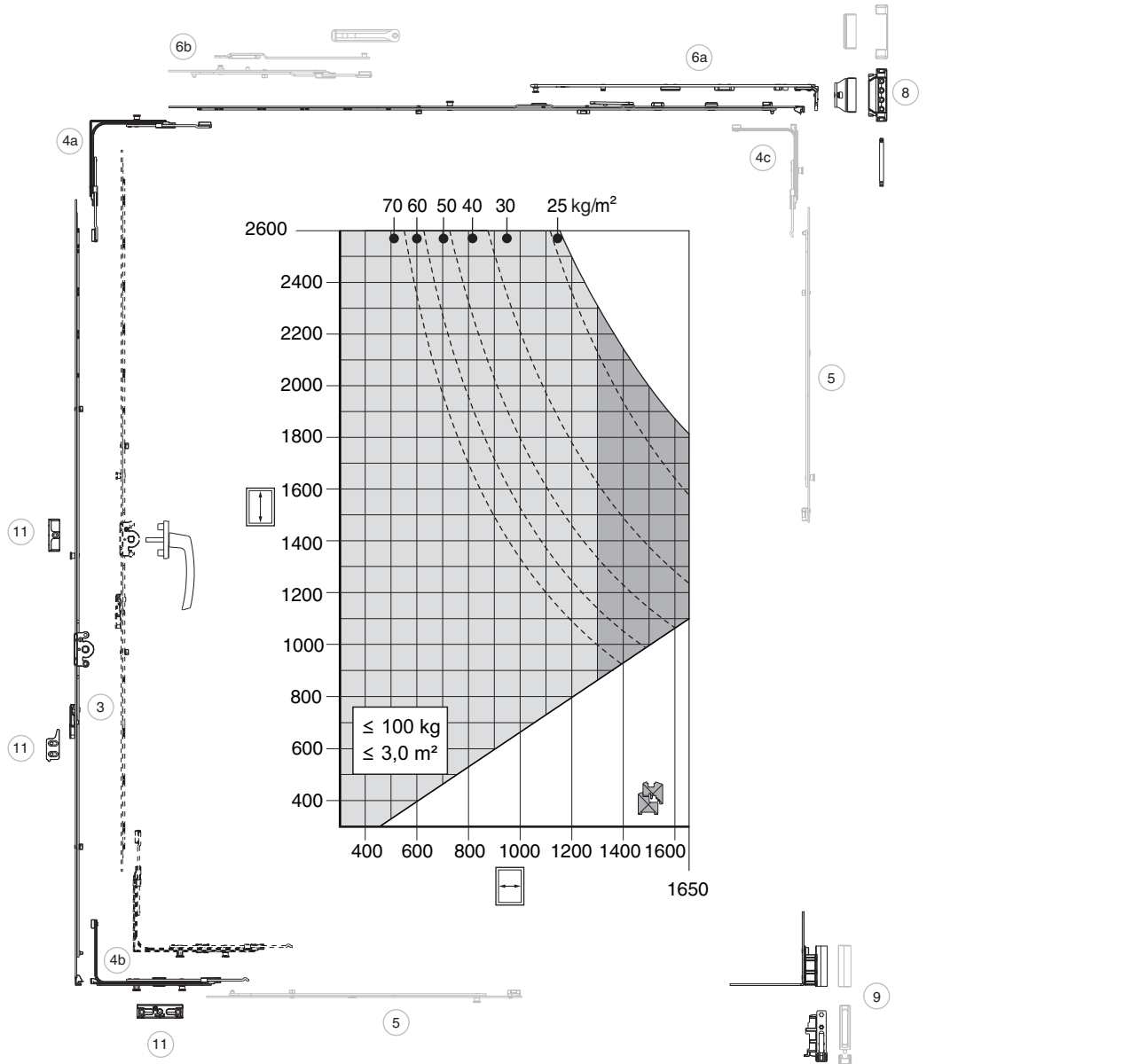
d) Valid range

2.4 Hardware overview

2.4.1 Timber (DT130, DT160, TO)

2.4.1.1 DT130

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



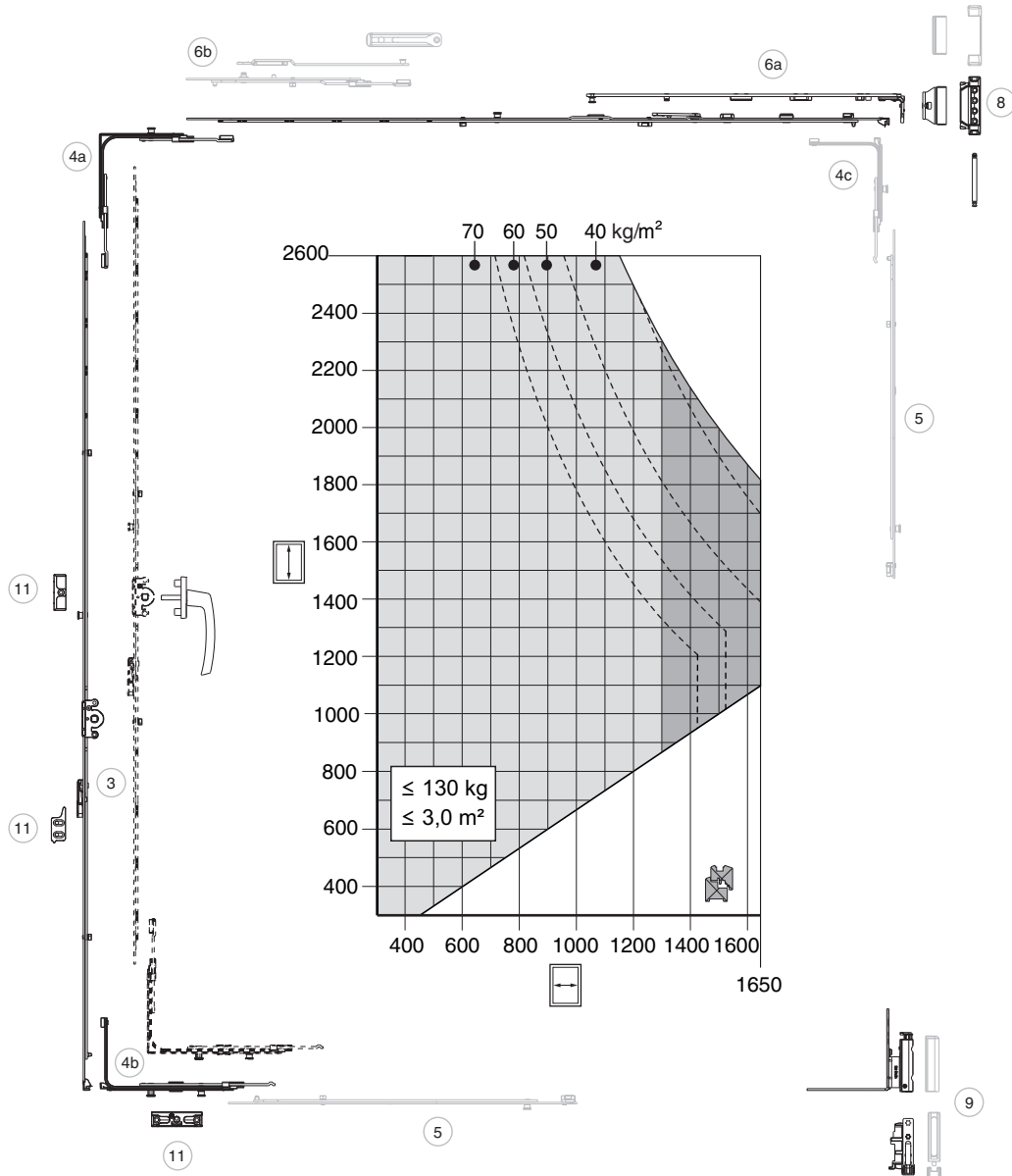
- 3 = Drive gear FHH or VHH (Backset 15 or 6.5)
- 5 = Above 800 mm (PVC) or 1,000 mm (timber); Observe details from profile manufacturer!
- 6b = Stabilizing scissor stay necessary from 1,301 mm (dark shading in application range diagram)



Selection guide		Page
3a	3.1.1.1 T&T drive gears BS 15 FHH i.S.	→150
3b	3.1.1.9 T&T drive gears BS 15 VHH i.S.	→152
4a	4.1.1 Corner elements standard i.S.	→180
4b	4.1.2 Corner elements horizontal i.S.	→180
4c	4.1.3 Corner elements vertical i.S.	→180
5	5.1 Centre locks FHH i.S.	→188
6a	6.1.4 Scissor stay faceplates i.S.	→195
6b	6.11.1 Stabilizing scissor stays	→210
8	8.5.1 Scissor stay hinges DT130	→235
9	9.4.1 Pivot posts DT130	→251
11	11 Striker plates	→290



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



≤ 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)

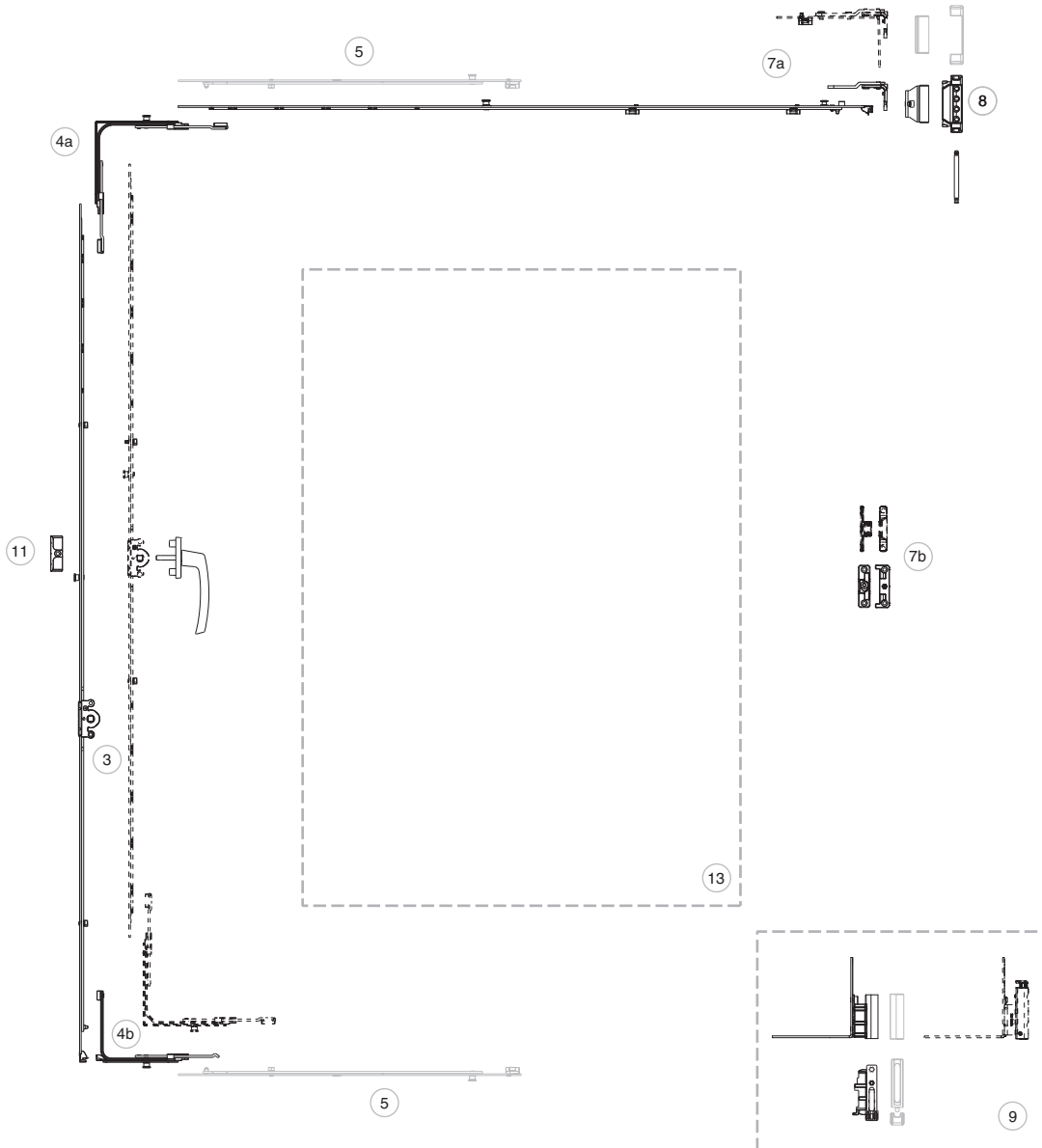
- 3 = Drive gear FHH or VHH (Backset 15 or 6.5)
- 5 = Above 800 mm (PVC) or 1,000 mm (timber); Observe details from profile manufacturer!
- 6b = Stabilizing scissor stay necessary from 1,301 mm (dark shading in application range diagram)
- 9 = The support screw has to be set from 100 kg sash weight!



Selection guide		Page
3a	3.1.1.1 T&T drive gears BS 15 FHH i.S.	→150
3b	3.1.1.9 T&T drive gears BS 15 VHH i.S.	→152
4a	4.1.1 Corner elements standard i.S.	→180
4b	4.1.2 Corner elements horizontal i.S.	→180
4c	4.1.3 Corner elements vertical i.S.	→180
5	5.1 Centre locks FHH i.S.	→188
6a	6.1 Rebated scissor stays	→194
6b	6.11.1 Stabilizing scissor stays	→210
8	8.5.1 Scissor stay hinges DT130	→235
9	9.4.1 Pivot posts DT130	→251
11	11 Striker plates	→290



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)

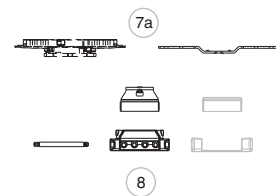
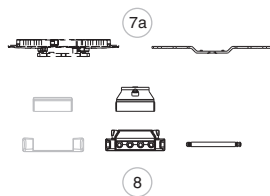
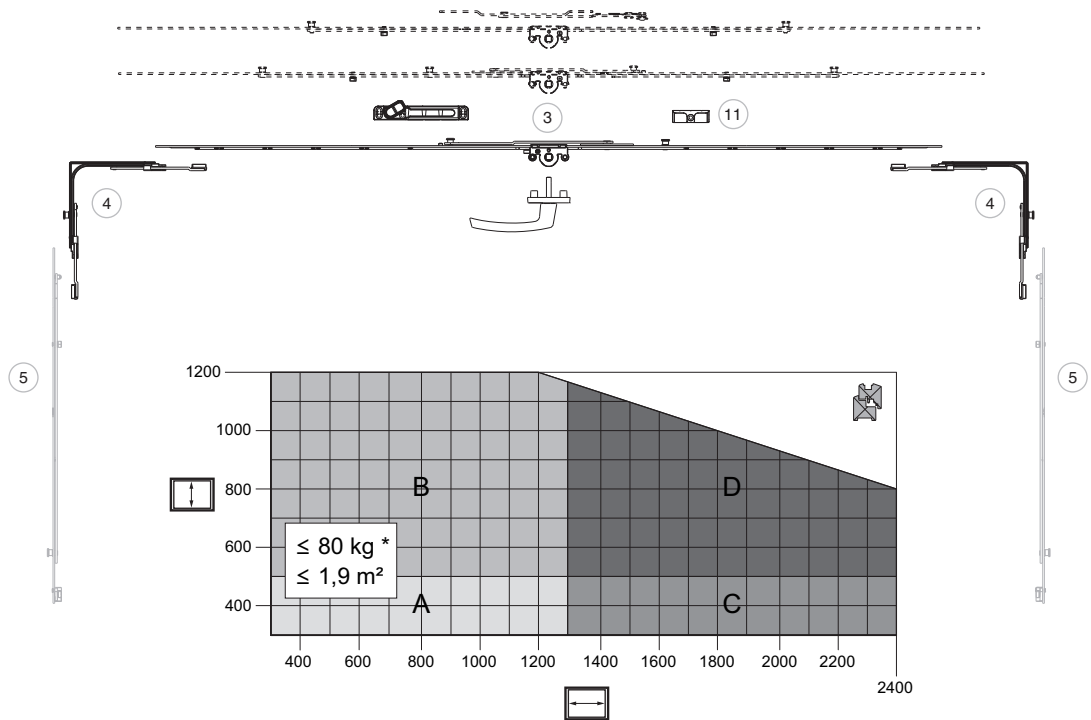
- 3 = Drive gear FHH or VHH (Backset 15 or 6.5)
- 5 = Above 800 mm (PVC) or 1,000 mm (timber); Observe details from profile manufacturer!
- 7a = Turn-only hinge - sash part fixed or croppable
- 7b = 1 piece 800 - 1,600 mm, 2 pieces 1,601 - 2,400 mm, 3 pieces 2,401 - 2,650 mm; Observe details from profile 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.



Selection guide		Page
3a	3.2.1.1 Turn-only drive gears BS 15 FHH i.S.	→161
3b	3.2.1.9 Turn-only drive gears BS 15 VHH i.S.	→162
4a	4.1.1 Corner elements standard i.S.	→180
4b	4.1.3 Corner elements vertical i.S.	→180
5	5.1 Centre locks FHH i.S.	→188
7a	7.1 Turn-only hinges - sash part / turn-only hinges - frame part / turn-only hinge faceplates	→214
7b	7.10 Compression devices	→226
8	8.5.1 Scissor stay hinges DT130	→235
9	9.4.1 Pivot posts DT130	→251
11	11 Striker plates	→290



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

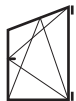
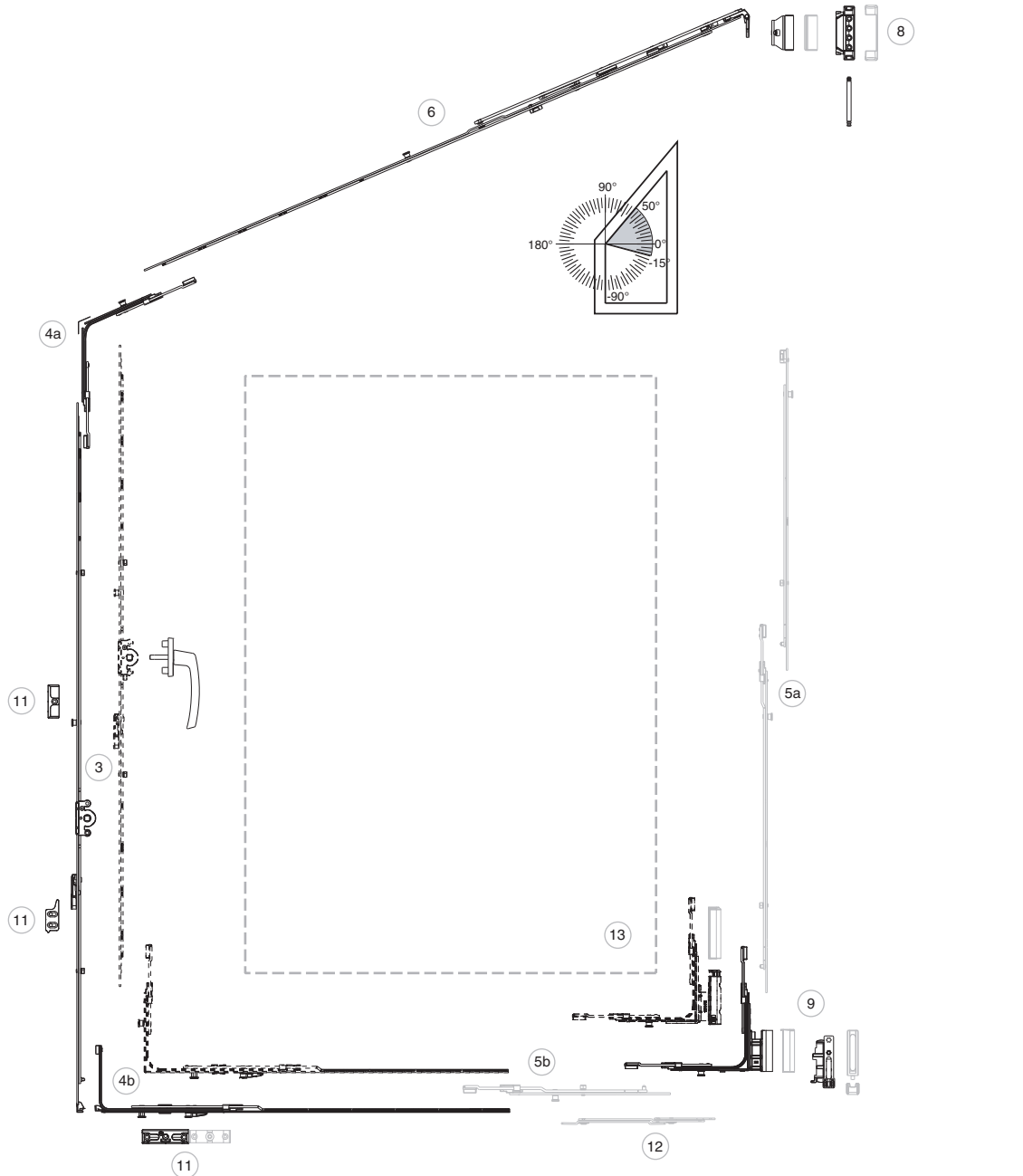
- A = 1 tilt stay + restrictor and cleaning stay size 1
- B = 1 tilt stay + restrictor and cleaning stay size 2
- C = 2 tilt stays + restrictor and cleaning stay size 1
- D = 2 tilt stays + restrictor and cleaning stay size 2
- * = Mandatory installation of restrictor and cleaning stay (guideline FPKF 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!



Selection guide			Page
3	3.4	Espagnolettes	→170
4	4.1.1	Corner elements standard i.S.	→180
5	5.1	Centre locks FHH i.S.	→188
7a	7.2	Tilt-only and turn-only hinges - sash part / tilt-only bearings	→216
7b	7.10	Compression devices	→226
8	8.5.1	Scissor stay hinges DT130	→235
11	11	Striker plates	→290



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



≤ 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)

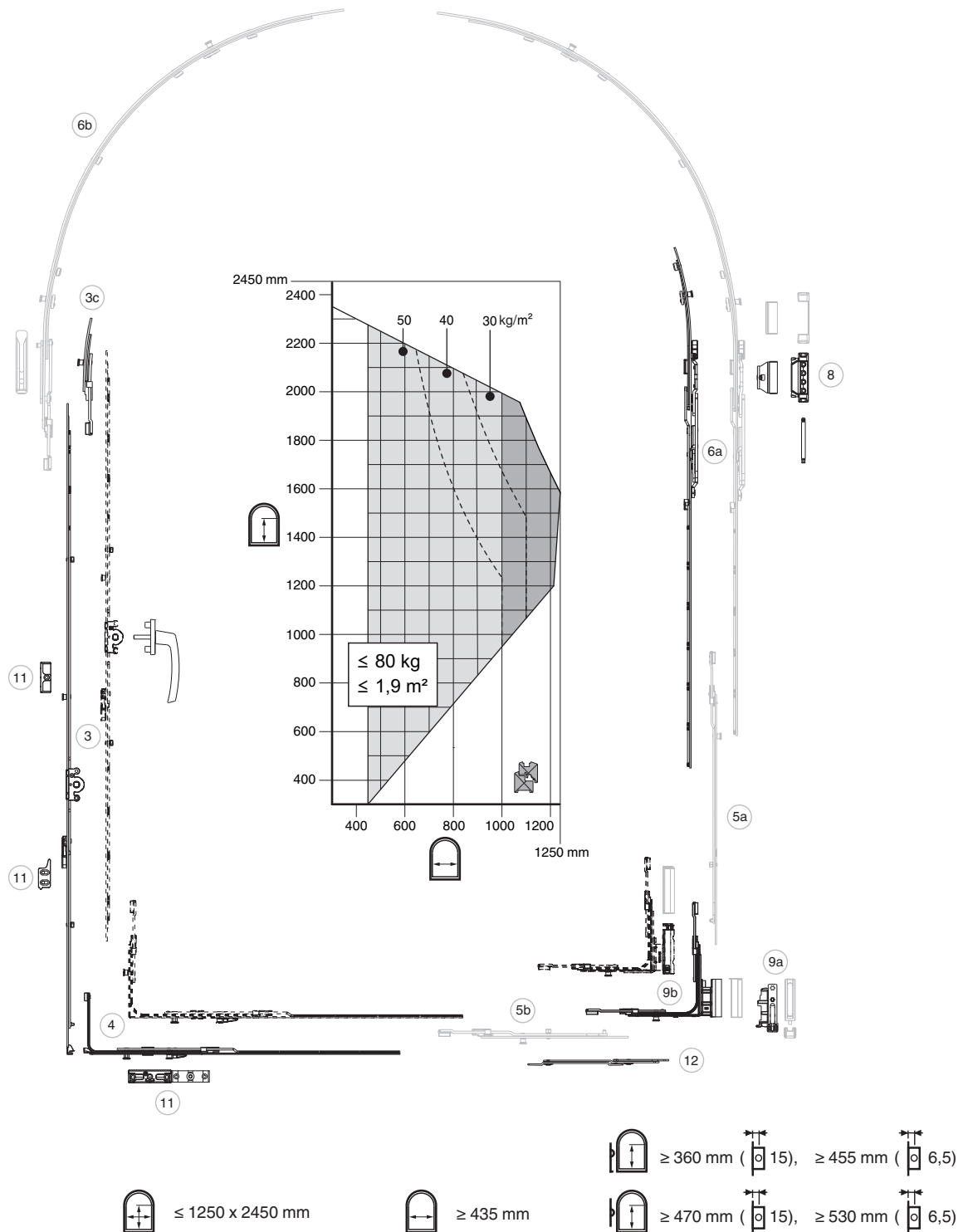
- 3 = Drive gear FHH or VHH (Backset 15 or 6.5)
- 5a = Above SRH 800 mm; Observe details from profile manufacturer!
- 5b = Required above SRW 670 mm.
- 9b = Corner element with corner supports with or without rebate-leg screw fixing
- 13 = Refer to application diagrams for angled windows in chapter 2.5.



Selection guide		Page
3a	3.1.1.1 T&T drive gears BS 15 FHH i.S.	→150
3b	3.1.1.9 T&T drive gears BS 15 VHH i.S.	→152
4a	4.6 Corner elements i.S. for angled windows	→182
4b	4.7 Corner elements i.S. for half round windows	→183
5a	5.1 Centre locks FHH i.S.	→188
5b	5.9 Faceplate extensions fixed and extendable	→190
6	6.1.11 Rebated scissor stays i.S. for angled windows	→197
8	8.5.1 Scissor stay hinges DT130	→235
9	9.4.1 Pivot posts DT130	→251
11	11 Striker plates	→290
12	12.12 Independent turn limiting restrictors	→312



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



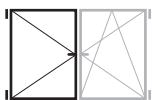
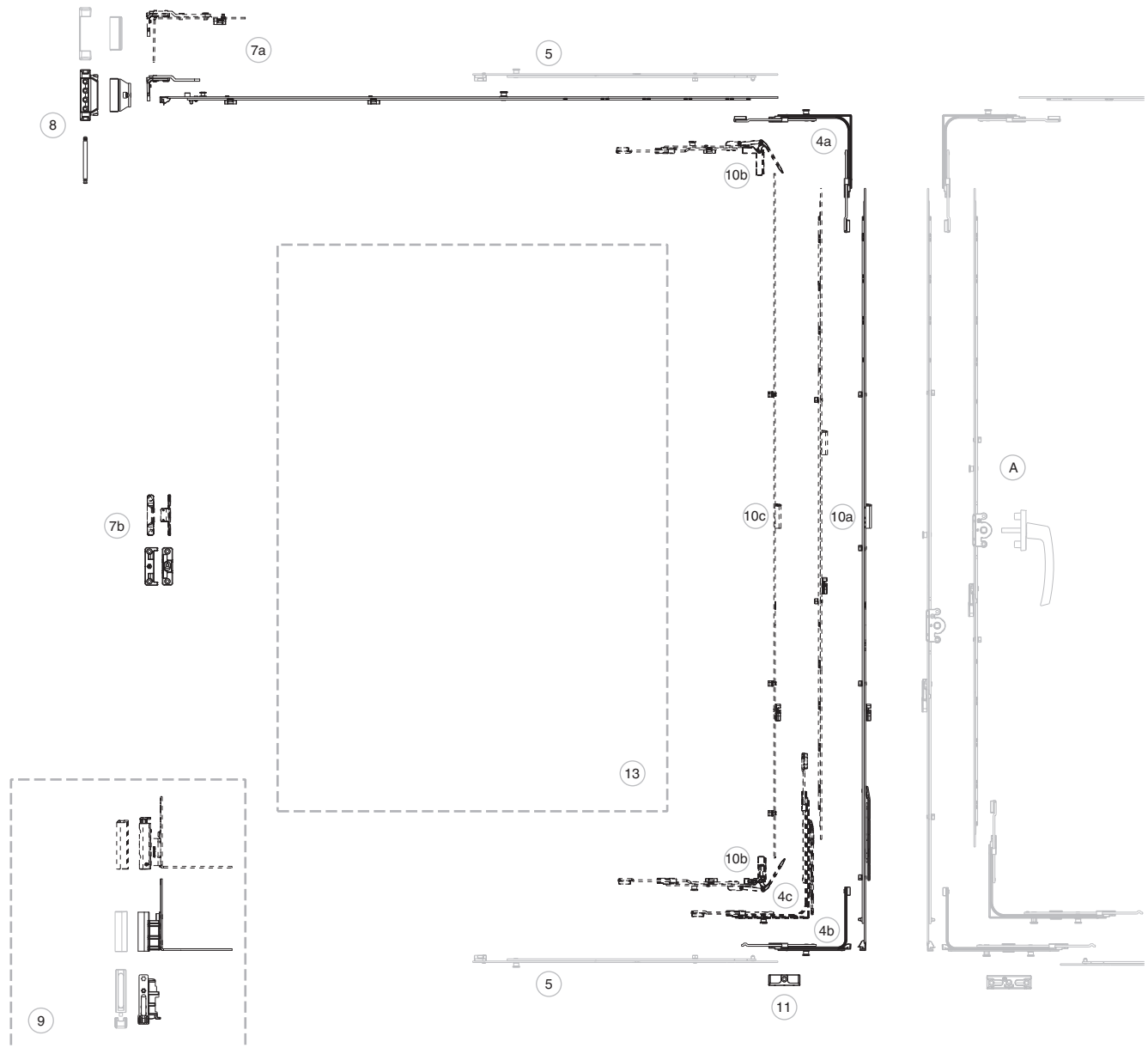
- 3 = Drive gear FHH or VHH (Backset 15 or 6.5)
- 5a = Above 800 mm (PVC) or 1,000 mm (timber); Observe details from profile manufacturer!
- 5b = Required above SRW 670 mm.
- 6a = Use above SRW 631 mm!
- 6b = Stabilizing scissor stay necessary from 1,001 mm (dark shading in application range diagram)



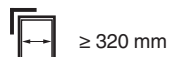
Selection guide		Page
3a	3.1.1.1 T&T drive gears BS 15 FHH i.S.	→150
3b	3.1.1.9 T&T drive gears BS 15 VHH i.S.	→152
3c	3.5.3 End pieces top for half round windows	→176
4	4.7 Corner elements i.S. for half round windows	→183
5	5 Centre locks / Horizontal tilt locks / Faceplate extensions	→188
6a	6.1.12 Rebated scissor stays i.S. for half round windows 9 mm offset	→197
6b	6.11.4 Stabilizing scissor stays for half round windows	→210
8	8.5.1 Scissor stay hinges DT130	→235
9a	9.4.1 Pivot posts DT130	→251
9b	9.4.3.7 Corner elements with corner support DTuni with rebate-leg screw fixing EH	→255
11	11 Striker plates	→290
12	12.12 Independent turn limiting restrictors	→312



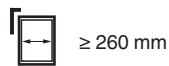
2.4.1.1.7 2-sashed rectangular T&T window
with pivot post DT130 and rebated corner support DT130



≤ 1650 x 2600 mm



≥ 320 mm



≥ 260 mm



≥ 360 mm (15),



≥ 455 mm (6,5)



≥ 470 mm (15),



≥ 530 mm (6,5)



≥ 530 mm (6,5)



≥ 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.

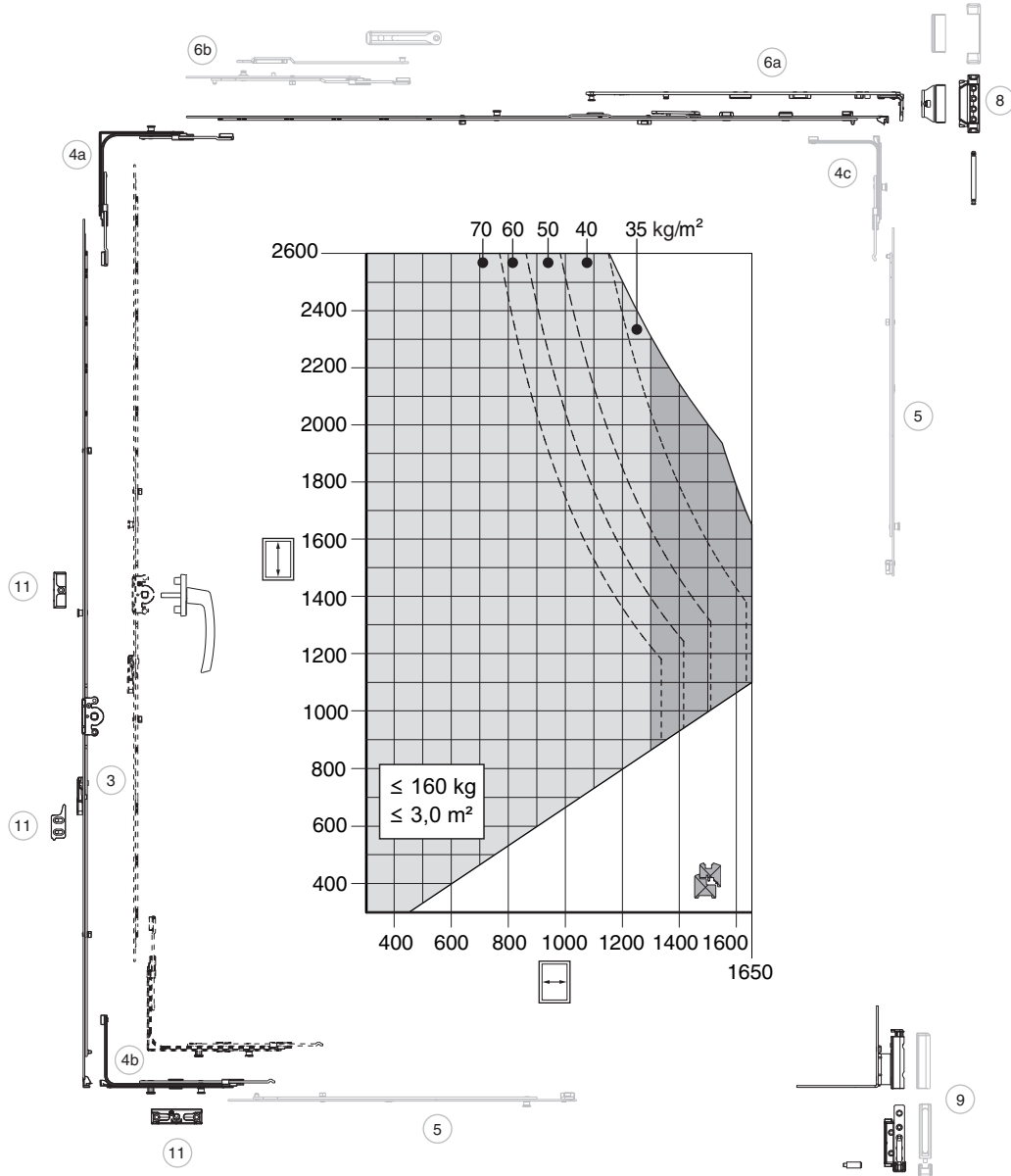


Selection guide		Page
4a	4.1.1 Corner elements standard i.S.	→180
4b	4.1.3 Corner elements vertical i.S.	→180
4c	4.4 Corner elements i.S. for French casement drive gears	→182
5	5.1 Centre locks FHH i.S.	→188
7a	7.1 Turn-only hinges - sash part / turn-only hinges - frame part / turn-only hinge faceplates	→214
7b	7.10 Compression devices	→226
8	8.5.1 Scissor stay hinges DT130	→235
9	9.4.1 Pivot posts DT130	→251
10a	10.2 French casement drive gears	→277
10b	10.3 Horizontal French casement lock	→285
10c	10.4 Single piece door strikers	→285
11	11 Striker plates	→290



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)

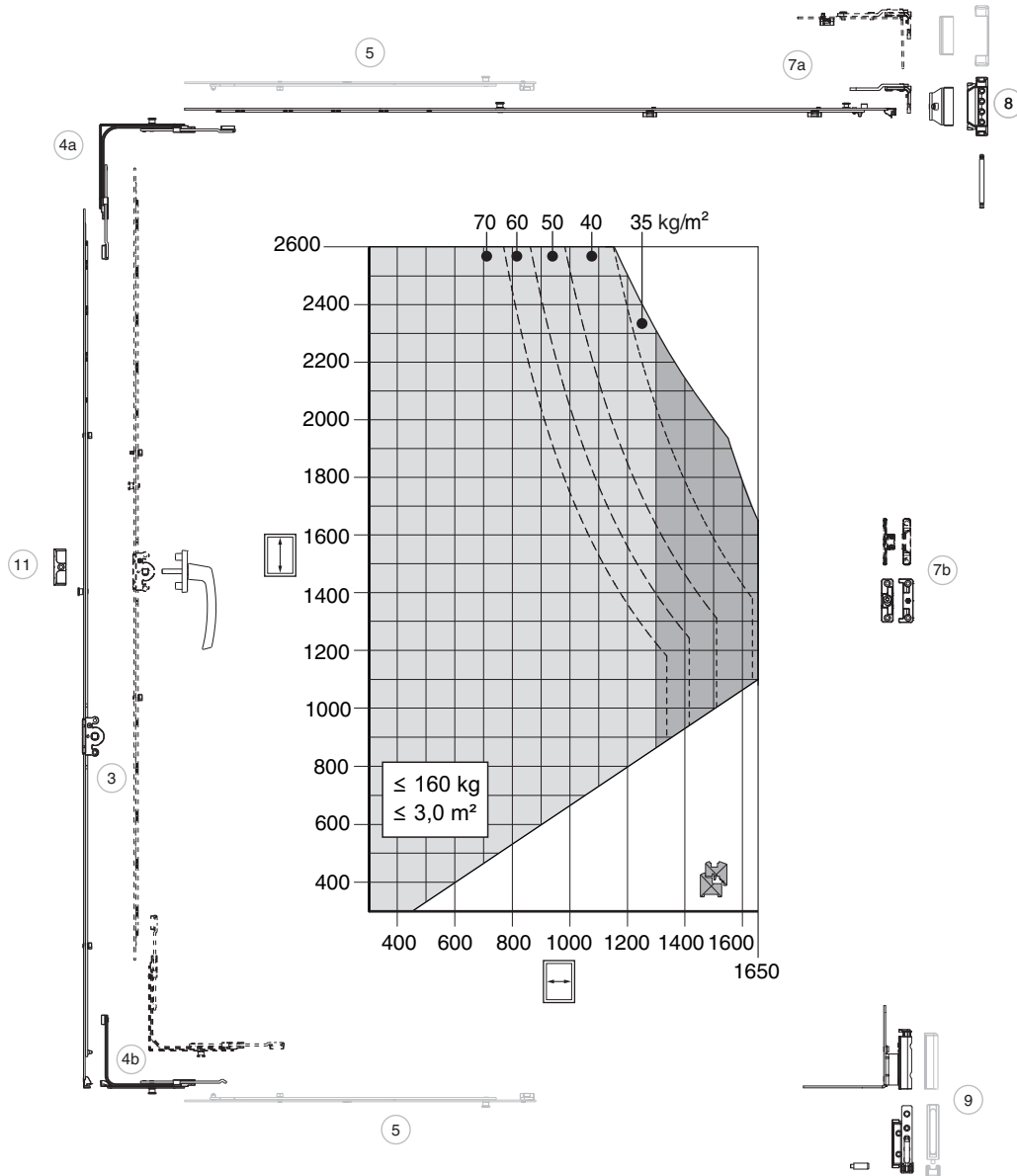
- 3 = Drive gear FHH or VHH (Backset 15 or 6.5)
- 5 = Above 800 mm (PVC) or 1,000 mm (timber); Observe details from profile manufacturer!
- 6b = Stabilizing scissor stay necessary from 1,301 mm (dark shading in application range diagram)
- 9 = The support dowel or support screw has to be set from 100 kg sash weight!



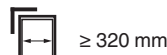
Selection guide		Page
3a	3.1.1.1 T&T drive gears BS 15 FHH i.S.	→150
3b	3.1.1.9 T&T drive gears BS 15 VHH i.S.	→152
4a	4.1.1 Corner elements standard i.S.	→180
4b	4.1.2 Corner elements horizontal i.S.	→180
4c	4.1.3 Corner elements vertical i.S.	→180
5	5.1 Centre locks FHH i.S.	→188
6a	6.1.4 Scissor stay faceplates i.S.	→195
6b	6.11.1 Stabilizing scissor stays	→210
8	8.5.2 Scissor stay hinges DT160	→235
9	9.4.2 Pivot posts DT160	→251
11	11 Striker plates	→290



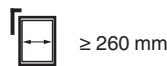
2.4.1.2.2 1-sashed rectangular turn-only window with pivot post DT160 and fixed or croppable turn-only hinge



≤ 1650 x 2600 mm



≥ 320 mm



≥ 260 mm



≥ 360 mm (15),



≥ 455 mm (6,5)



≥ 470 mm (15),



≥ 530 mm (6,5)

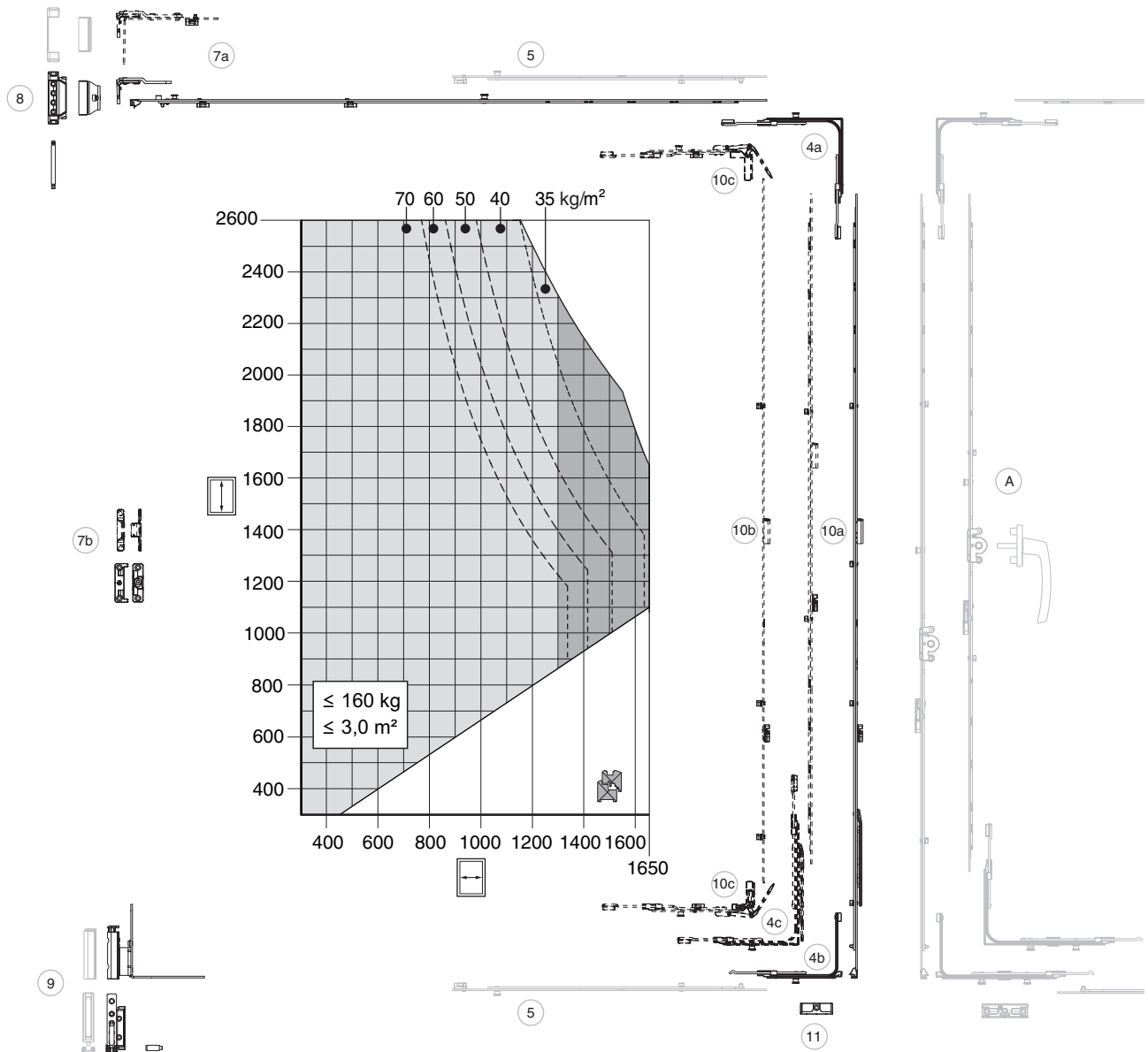
- 3 = Drive gear FHH or VHH (Backset 15 or 6.5)
- 5 = Above 800 mm (PVC) or 1,000 mm (timber); Observe details from profile manufacturer!
- 7a = Turn-only hinge - sash part fixed or croppable
- 7b = 1 piece 800 - 1,600 mm, 2 pieces 1,601 - 2,400 mm, 3 pieces 2,401 - 2,650 mm; Observe details from profile 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!
- 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.	→161
3b	3.2.1.9 Turn-only drive gears BS 15 VHH i.S.	→162
4a	4.1.1 Corner elements standard i.S.	→180
4b	4.1.3 Corner elements vertical i.S.	→180
5	5.1 Centre locks FHH i.S.	→188
7a	7.1 Turn-only hinges - sash part / turn-only hinges - frame part / turn-only hinge faceplates	→214
7b	7.10 Compression devices	→226
8	8.5.2 Scissor stay hinges DT160	→235
9	9.4.2 Pivot posts DT160	→251
11	11 Striker plates	→290



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
- 13 = For application diagram refer to turn&tilt hardware overview according to corresponding pivot post combination.

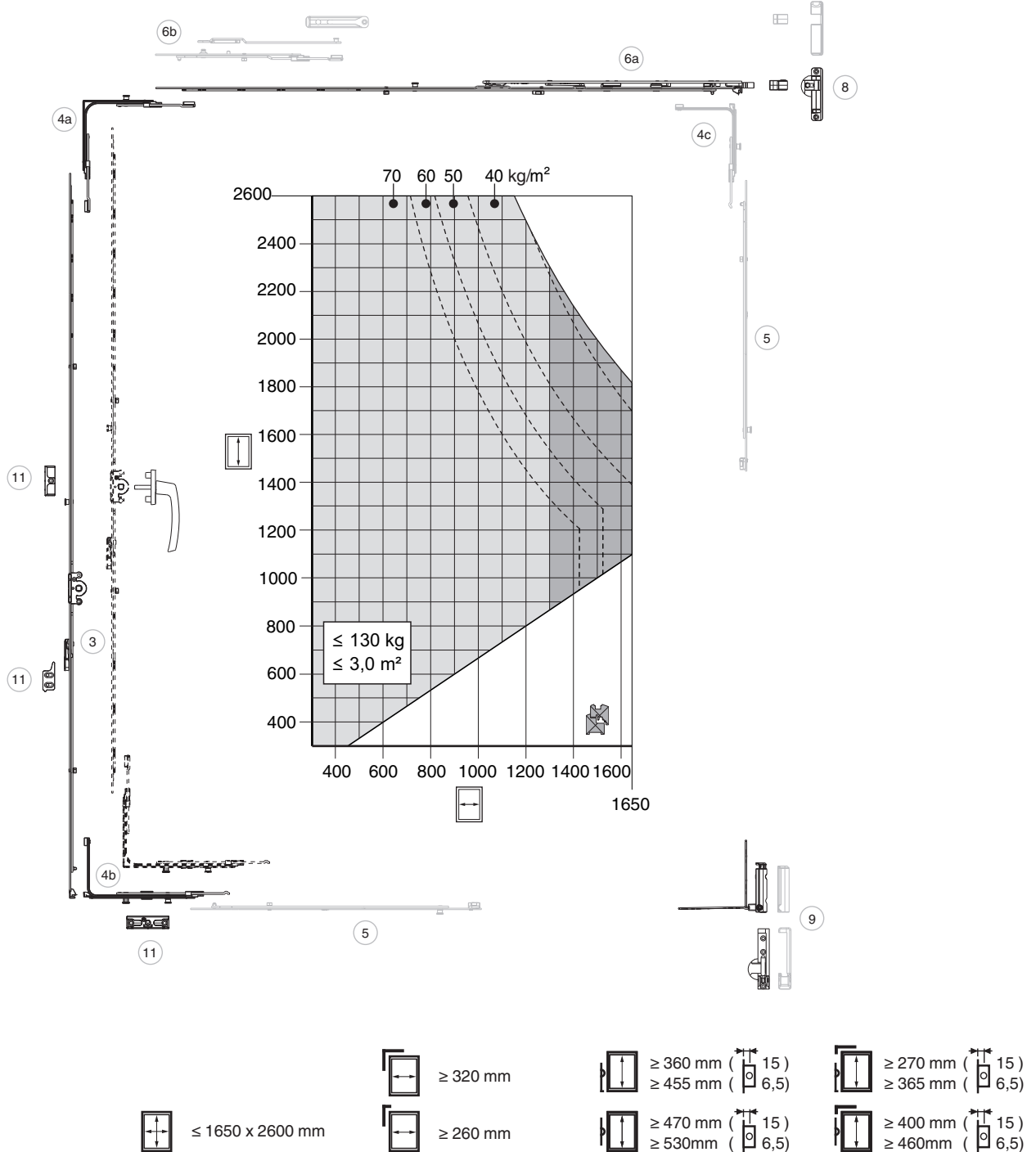


Selection guide		Page
4a	4.1.1 Corner elements standard i.S.	→180
4b	4.1.3 Corner elements vertical i.S.	→180
4c	4.4 Corner elements i.S. for French casement drive gears	→182
5	5.1 Centre locks FHH i.S.	→188
7a	7.1 Turn-only hinges - sash part / turn-only hinges - frame part / turn-only hinge faceplates	→214
7b	7.10 Compression devices	→226
8	8.5.2 Scissor stay hinges DT160	→235
9	9.4.2 Pivot posts DT160	→251
10a	10.2 French casement drive gears	→277
10b	10.3 Horizontal French casement lock	→285
10c	10.4 Single piece door strikers	→285
11	11 Striker plates	→290



2.4.1.3 TO

2.4.1.3.1 1-sashed rectangular T&T window
with pivot post TO and rebated corner support TO



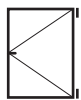
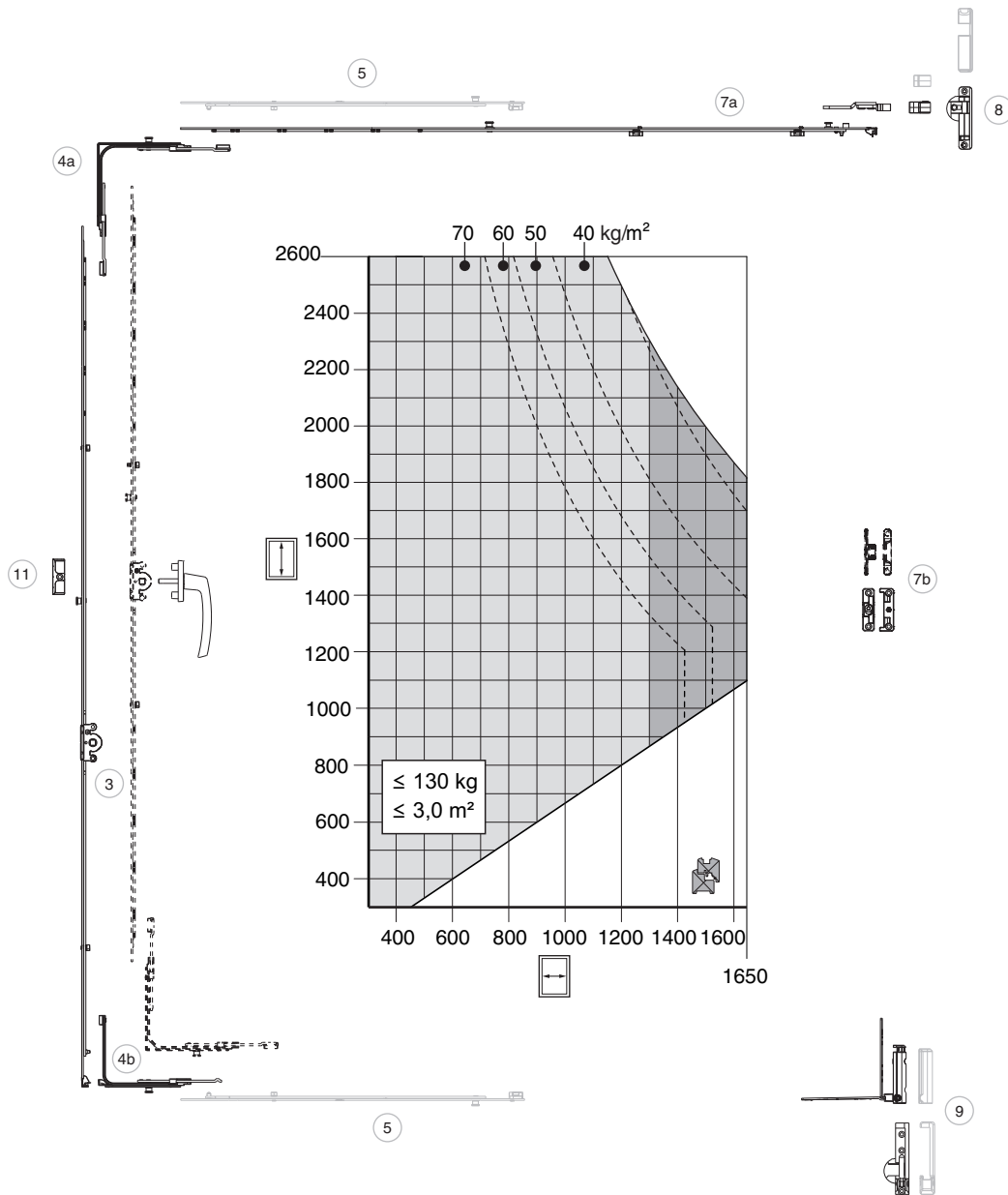
- 3 = Drive gear FHH or VHH (Backset 15 or 6.5)
- 5 = Above 800 mm (PVC) or 1,000 mm (timber); Observe details from profile manufacturer!
- 6b = Stabilizing scissor stay necessary from 1,301 mm (dark shading in application range diagram)
- 9 = For possible pivot post combinations refer to matrix; the support screw has to be set from 100 kg sash weight!



Selection guide		Page
3a	3.1.1.1 T&T drive gears BS 15 FHH i.S.	→150
3b	3.1.1.9 T&T drive gears BS 15 VHH i.S.	→152
4a	4.1.1 Corner elements standard i.S.	→180
4b	4.1.2 Corner elements horizontal i.S.	→180
4c	4.1.3 Corner elements vertical i.S.	→180
5	5.1 Centre locks FHH i.S.	→188
6a	6.2.1 Scissor stays TO without scissor stay support arm i.S.	→199
6b	6.11.1 Stabilizing scissor stays	→210
8	8.6 Scissor stay hinges TO	→237
9	9.5 Pivot posts TO	→256
11	11 Striker plates	→290



2.4.1.3.2 1-sashed rectangular turn-only window with pivot post TO and 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)

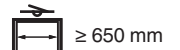
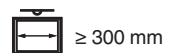
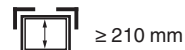
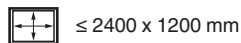
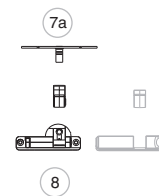
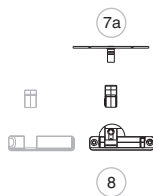
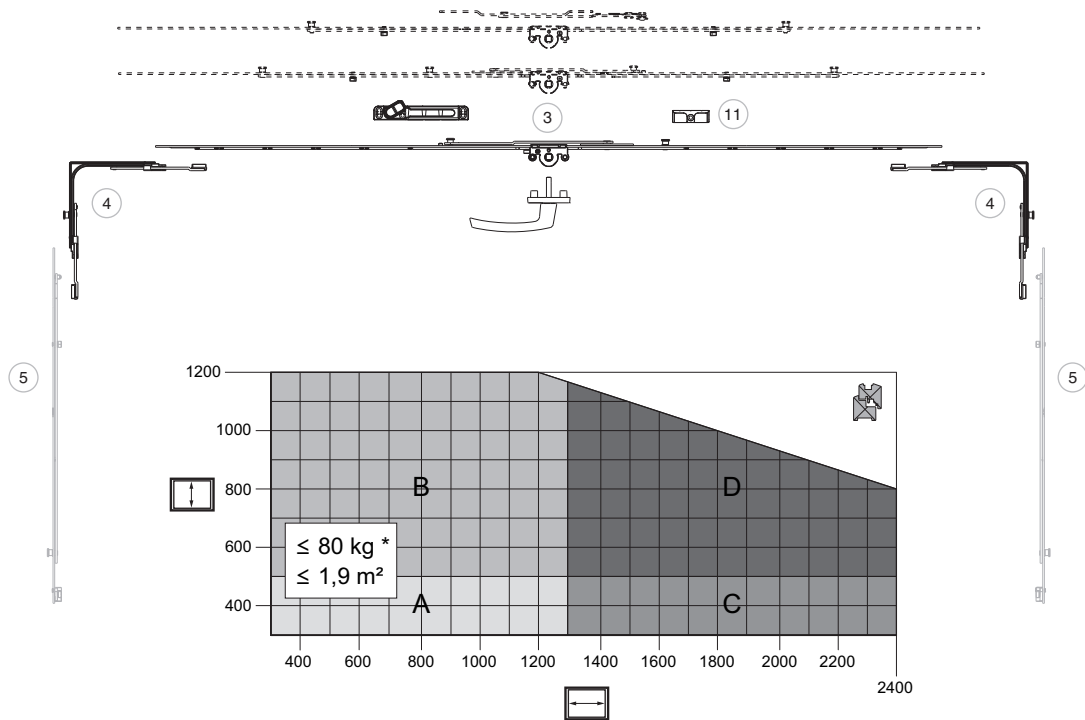
- 3 = Drive gear FHH or VHH (Backset 15 or 6.5)
- 5 = Above 800 mm (PVC) or 1,000 mm (timber); Observe details from profile manufacturer!
- 7b = 1 piece 800 - 1,600 mm, 2 pieces 1,601 - 2,400 mm, 3 pieces 2,401 - 2,650 mm; Observe details from profile manufacturer!
- 9 = For possible pivot post combinations refer to matrix; the support screw has to be set from 100 kg sash weight!



Selection guide		Page
3a	3.2.1.1 Turn-only drive gears BS 15 FHH i.S.	→161
3b	3.2.1.9 Turn-only drive gears BS 15 VHH i.S.	→162
4a	4.1.1 Corner elements standard i.S.	→180
4b	4.1.3 Corner elements vertical i.S.	→180
5	5.1 Centre locks FHH i.S.	→188
7a	7.1 Turn-only hinges - sash part / turn-only hinges - frame part / turn-only hinge faceplates	→214
7b	7.10 Compression devices	→226
8	8.6 Scissor stay hinges TO	→237
9	9.5 Pivot posts TO	→256
11	11 Striker plates	→290



2.4.1.3.3 1-sashed rectangular tilt-only window with scissor stay hinge TO and tilt-only hinge TO



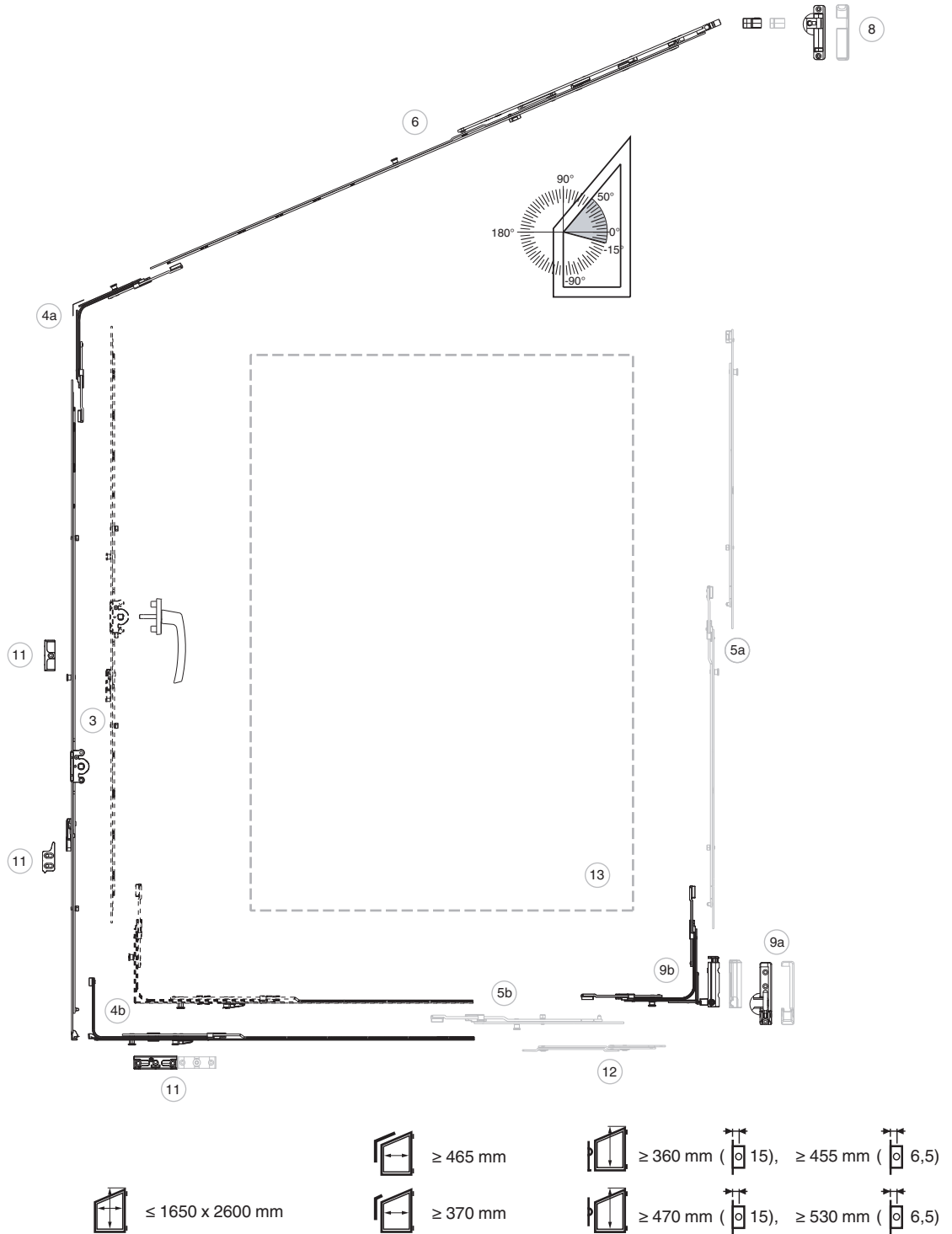
- A = 1 tilt stay + restrictor and cleaning stay size 1
- B = 1 tilt stay + restrictor and cleaning stay size 2
- C = 2 tilt stays + restrictor and cleaning stay size 1
- D = 2 tilt stays + restrictor and cleaning stay size 2
- * = Mandatory installation of restrictor and cleaning stay (guideline FPKF 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!



Selection guide			Page
3	3.4	Espagnolettes	→170
4	4.1.1	Corner elements standard i.S.	→180
5	5.1	Centre locks FHH i.S.	→188
7a	7.2.2	Tilt-only and turn-only hinge - sash part TO with spacers	→216
7b	7.10	Compression devices	→226
8	8.6	Scissor stay hinges TO	→237
11	11	Striker plates	→290



2.4.1.3.4 1-sashed angled T&T window
with pivot post TO and corner element with corner support TO



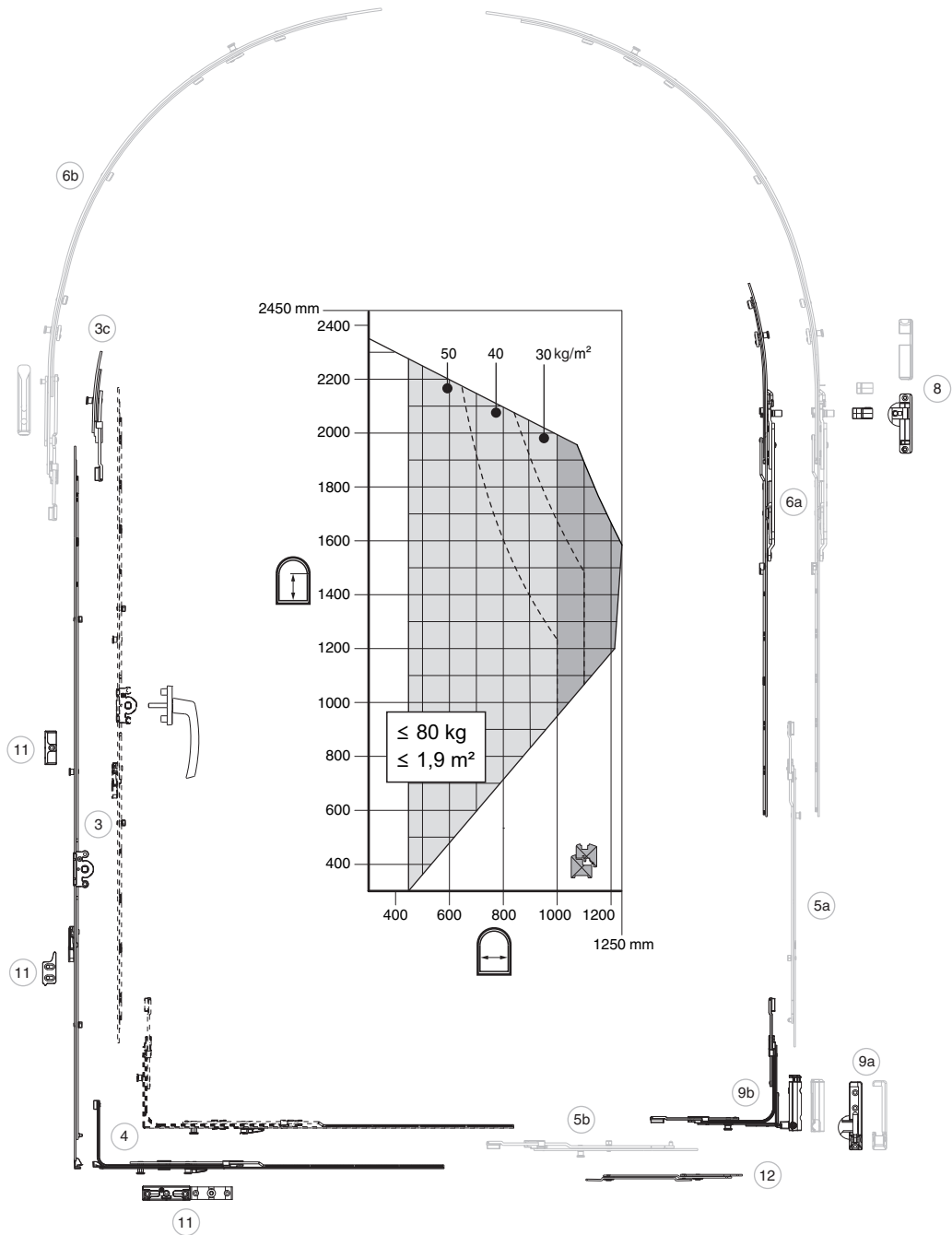
- 3 = Drive gear FHH or VHH (Backset 15 or 6.5)
- 5a = Above SRH 800 mm; Observe details from profile manufacturer!
- 5b = Required above SRW 670 mm.
- 13 = Refer to application diagrams for angled windows.



Selection guide		Page
3a	3.1.1.1 T&T drive gears BS 15 FHH i.S.	→150
3b	3.1.1.9 T&T drive gears BS 15 VHH i.S.	→152
4a	4.6 Corner elements i.S. for angled windows	→182
4b	4.7 Corner elements i.S. for half round windows	→183
5a	5.1 Centre locks FHH i.S.	→188
5b	5.9 Faceplate extensions fixed and extendable	→190
6	6.2.2 Scissor stays TO without scissor stay support arm i.S. for angled windows	→199
8	8.6 Scissor stay hinges TO	→237
9a	9.5.1 Pivot posts TO	→256
9b	9.5.3 Corner elements with corner support TO with rebate-leg screw fixing EH	→257
11	11 Striker plates	→290
12	12.12 Independent turn limiting restrictors	→312



2.4.1.3.5 1-sashed half round T&T window with pivot post TO and corner element with corner support TO



≤ 1250 x 2450 mm



≥ 435 mm



≥ 360 mm (15), ≥ 455 mm (6,5)



≥ 470 mm (15), ≥ 530 mm (6,5)

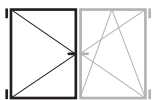
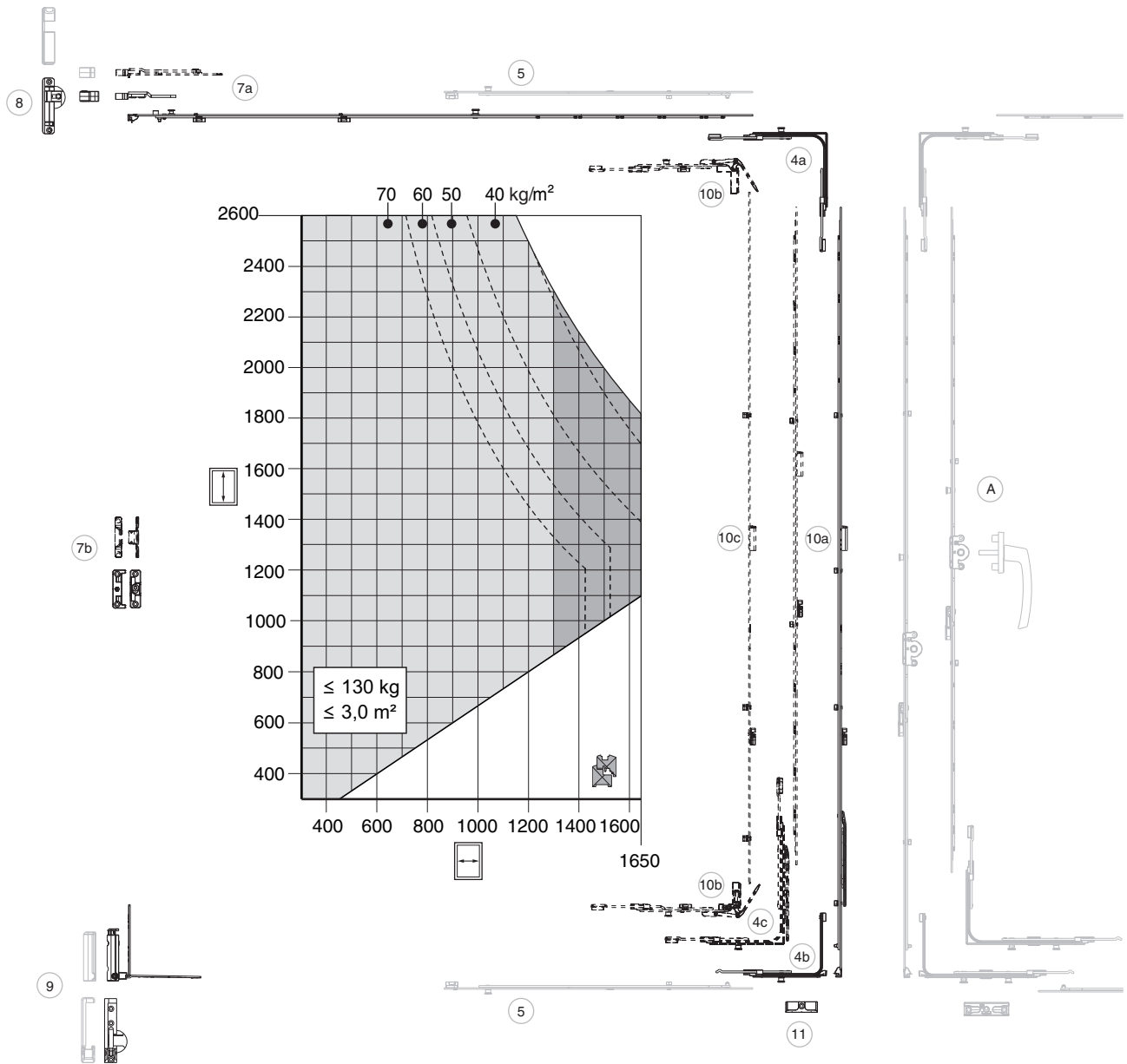
- 3 = Drive gear FHH or VHH (Backset 15 or 6.5)
- 5a = Above 800 mm (PVC) or 1,000 mm (timber); Observe details from profile manufacturer!
- 5b = Required above SRW 670 mm.
- 6a = Use above SRW 631 mm!
- 6b = Stabilizing scissor stay necessary from 1,001 mm (dark shading in application range diagram)



Selection guide		Page
3a	3.1.1.1 T&T drive gears BS 15 FHH i.S.	→150
3b	3.1.1.9 T&T drive gears BS 15 VHH i.S.	→152
3c	3.5.3 End pieces top for half round windows	→176
4	4.7 Corner elements i.S. for half round windows	→183
5	5 Centre locks / Horizontal tilt locks / Faceplate extensions	→188
6a	6.1.12 Rebated scissor stays i.S. for half round windows 9 mm offset	→197
6b	6.11.4 Stabilizing scissor stays for half round windows	→210
8	8.6 Scissor stay hinges TO	→237
9a	9.5.1 Pivot posts TO	→256
9b	9.5.3 Corner elements with corner support TO with rebate-leg screw fixing EH	→257
11	11 Striker plates	→290
12	12.12 Independent turn limiting restrictors	→312



2.4.1.3.6 2-sashed rectangular T&T window with pivot post TO and rebated corner support TO



≤ 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 = The support rawlplug has to be set from 100 kg sash weight!
- 10a = French casement drive gear FHH or VHH

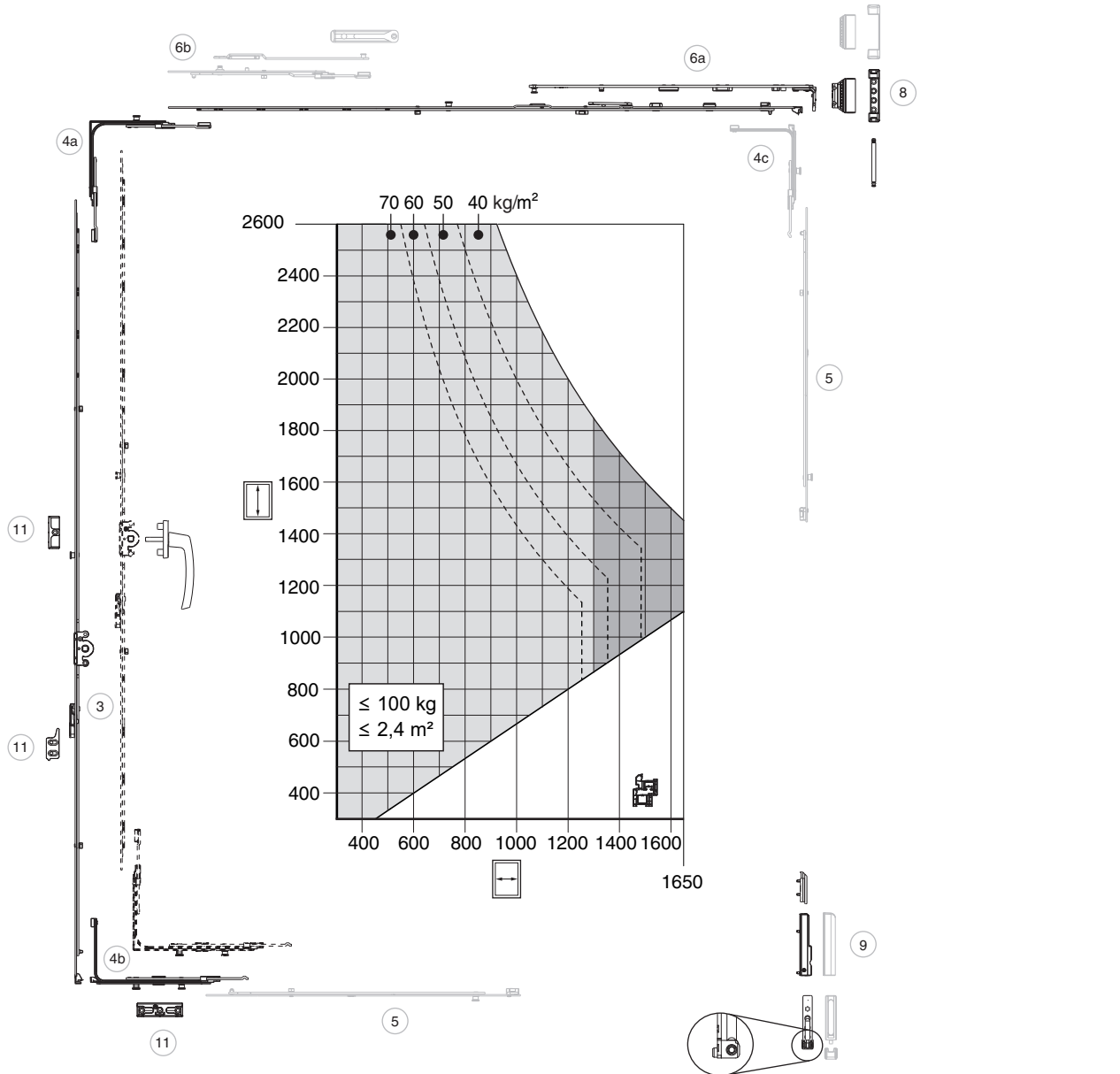


Selection guide			Page
4a	4.1.1	Corner elements standard i.S.	→180
4b	4.1.3	Corner elements vertical i.S.	→180
4c	4.4	Corner elements i.S. for French casement drive gears	→182
5	5.1	Centre locks FHH i.S.	→188
7a	7.1	Turn-only hinges - sash part / turn-only hinges - frame part / turn-only hinge faceplates	→214
7b	7.10	Compression devices	→226
8	8.6	Scissor stay hinges TO	→237
9	9.5	Pivot posts TO	→256
10a	10.2	French casement drive gears	→277
10b	10.3	Horizontal French casement lock	→285
10c	10.4	Single piece door strikers	→285
11	11	Striker plates	→290



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



≤ 1650 x 2600 mm



≥ 320 mm



≥ 260 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)

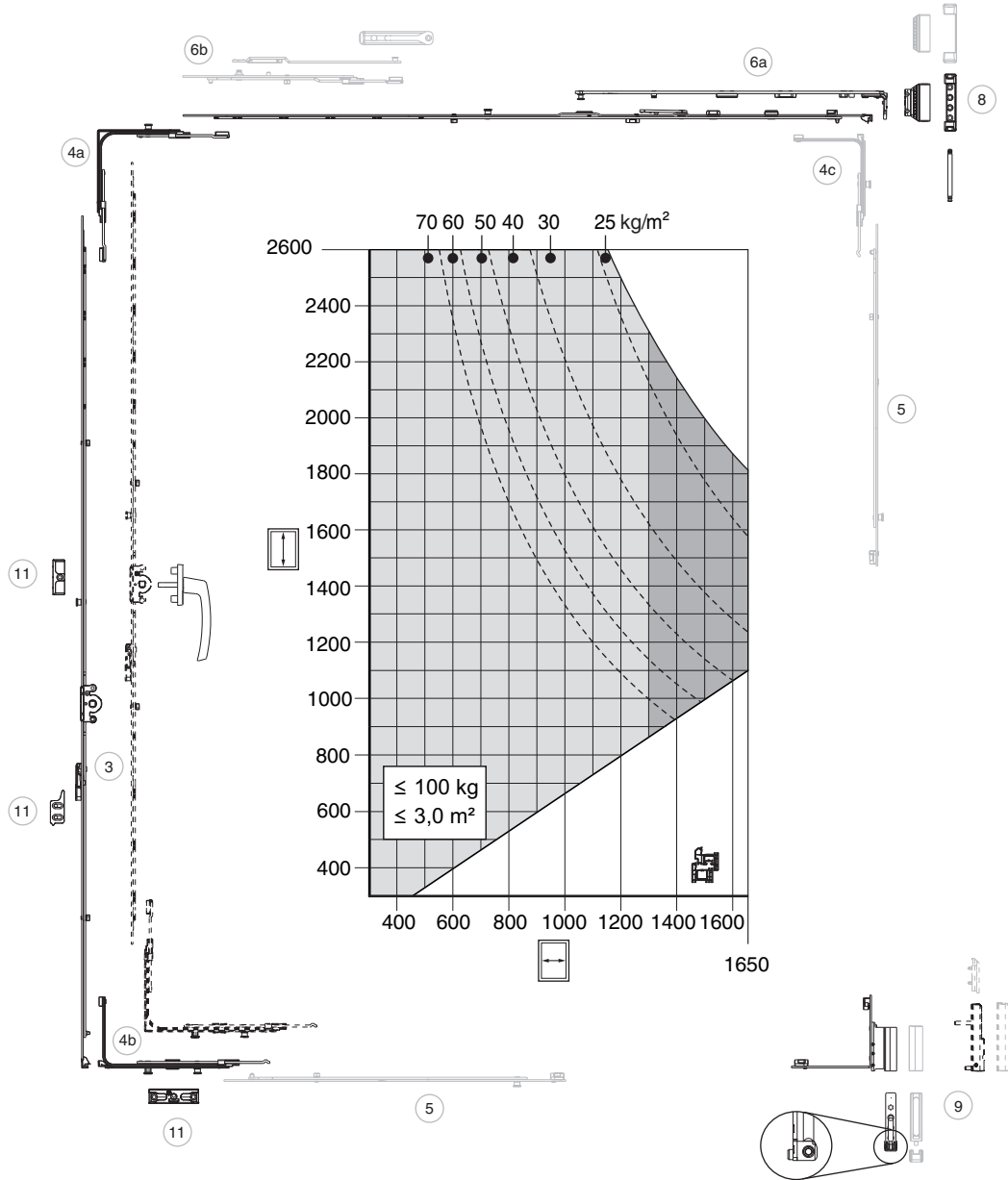
- 3 = Drive gear FHH or VHH (Backset 15 or 6.5)
- 5 = Above 800 mm (PVC) or 1,000 mm (timber); Observe details from profile manufacturer!
- 6b = Stabilizing scissor stay necessary from 1,301 mm (dark shading in application range diagram)
- 11 = Refer to profile data sheets for striker plates and sash lifters for PVC.



Selection guide		Page
3a	3.1.1.1 T&T drive gears BS 15 FHH i.S.	→150
3b	3.1.1.9 T&T drive gears BS 15 VHH i.S.	→152
4a	4.1.1 Corner elements standard i.S.	→180
4b	4.1.2 Corner elements horizontal i.S.	→180
4c	4.1.3 Corner elements vertical i.S.	→180
5	5.1 Centre locks FHH i.S.	→188
6a	6.1.4 Scissor stay faceplates i.S.	→195
6b	6.11.1 Stabilizing scissor stays	→210
8	8.1 Scissor stay hinges PVC	→232
9	9.2 Pivot posts PVC	→246



**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**



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



$\geq 320 \text{ mm}$



$\geq 260 \text{ mm}$



$\geq 360 \text{ mm}$ (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)

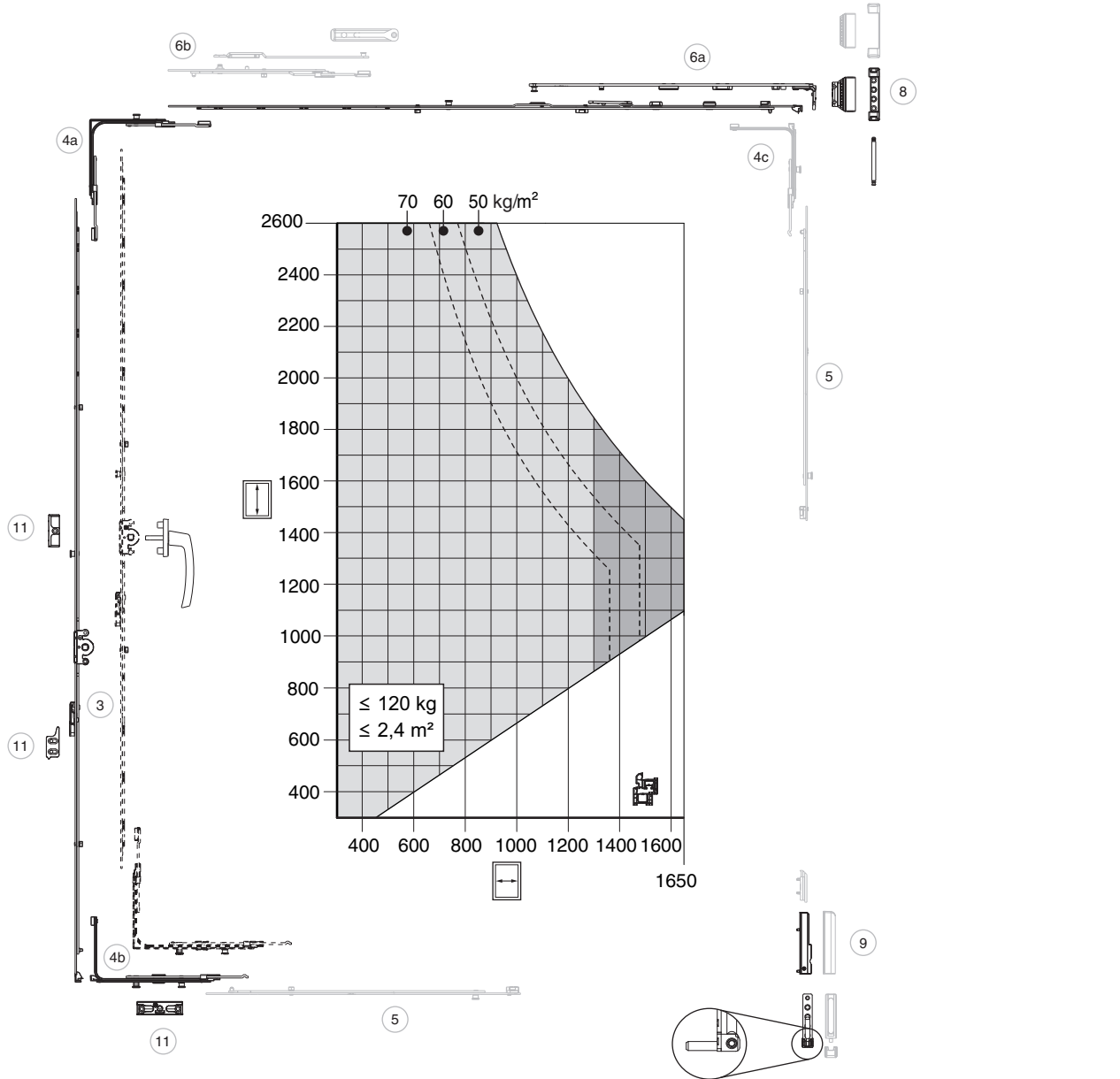
- 3 = Drive gear FHH or VHH (Backset 15 or 6.5)
- 5 = Above 800 mm (PVC) or 1,000 mm (timber); Observe details from profile manufacturer!
- 6b = Stabilizing scissor stay necessary from 1,301 mm (dark shading in application range diagram)
- 11 = Refer to profile data sheets for striker plates and sash lifters for PVC.



Selection guide		Page
3a	3.1.1.1 T&T drive gears BS 15 FHH i.S.	→150
3b	3.1.1.9 T&T drive gears BS 15 VHH i.S.	→152
4a	4.1.1 Corner elements standard i.S.	→180
4b	4.1.2 Corner elements horizontal i.S.	→180
4c	4.1.3 Corner elements vertical i.S.	→180
5	5.1 Centre locks FHH i.S.	→188
6a	6.1.4 Scissor stay faceplates i.S.	→195
6b	6.11.1 Stabilizing scissor stays	→210
8	8.1 Scissor stay hinges PVC	→232
9	9.2 Pivot posts PVC	→246



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



≤ 1650 x 2600 mm



≥ 320 mm



≥ 260 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)

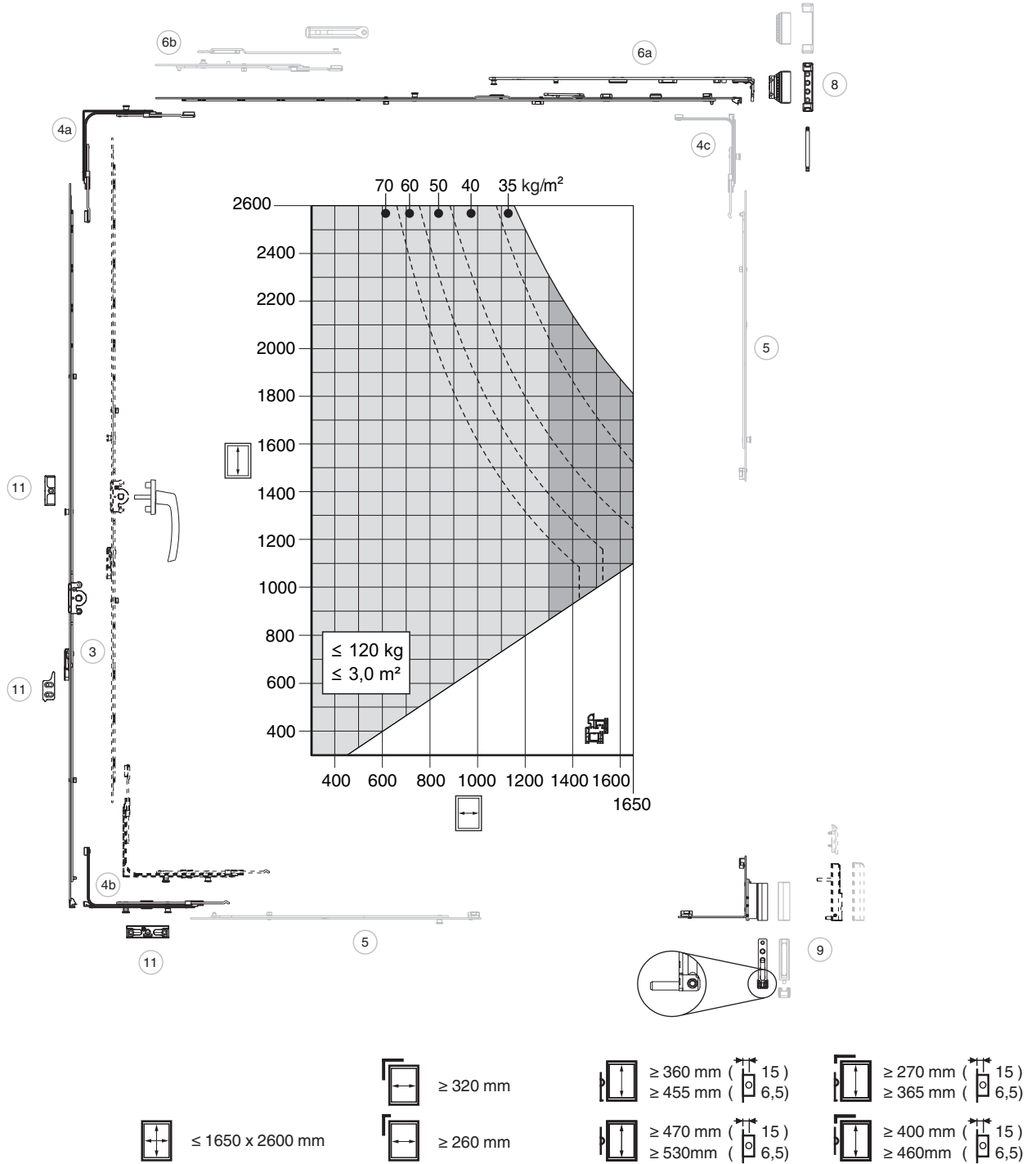
- 3 = Drive gear FHH or VHH (Backset 15 or 6.5)
- 5 = Mandatory installation of third multi-sash centre frame hinge above SRH 800 mm (PVC) or 1,000 mm (timber)!
- 6b = Stabilizing scissor stay necessary from 1,301 mm (dark shading in application range diagram)
- 9 = Support pin must reach through at 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.	→150
3b	3.1.1.9 T&T drive gears BS 15 VHH i.S.	→152
4a	4.1.1 Corner elements standard i.S.	→180
4b	4.1.2 Corner elements horizontal i.S.	→180
4c	4.1.3 Corner elements vertical i.S.	→180
5	5.1 Centre locks FHH i.S.	→188
6a	6.1.4 Scissor stay faceplates i.S.	→195
6b	6.11.1 Stabilizing scissor stays	→210
8	8.1 Scissor stay hinges PVC	→232
9	9.2 Pivot posts PVC	→246



**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**



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



$\geq 320 \text{ mm}$



$\geq 260 \text{ mm}$



$\geq 360 \text{ mm}$ (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)

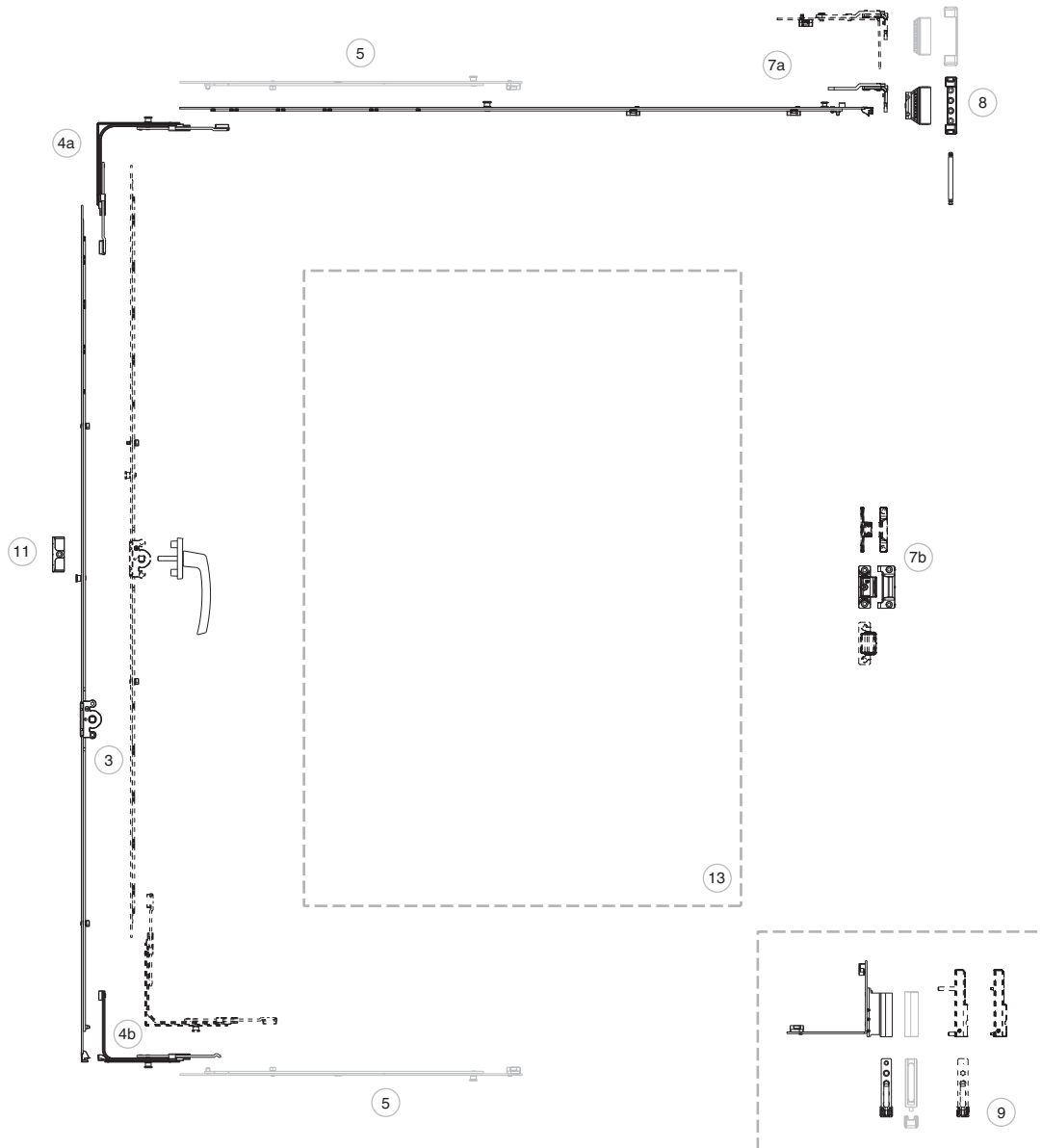
- 3 = Drive gear FHH or VHH (Backset 15 or 6.5)
- 5 = Above 800 mm (PVC) or 1,000 mm (timber); Observe details from profile manufacturer!
- 6b = Stabilizing scissor stay necessary from 1,301 mm (dark shading in application range diagram)
- 9 = Support pin must reach through at least two profile walls!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



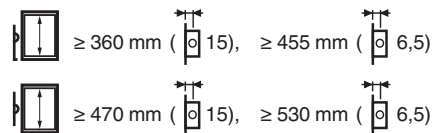
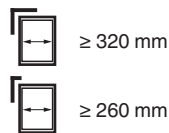
Selection guide		Page
3a	3.1.1.1 T&T drive gears BS 15 FHH i.S.	→150
3b	3.1.1.9 T&T drive gears BS 15 VHH i.S.	→152
4a	4.1.1 Corner elements standard i.S.	→180
4b	4.1.2 Corner elements horizontal i.S.	→180
4c	4.1.3 Corner elements vertical i.S.	→180
5	5.1 Centre locks FHH i.S.	→188
6a	6.1.4 Scissor stay faceplates i.S.	→195
6b	6.11.1 Stabilizing scissor stays	→210
8	8.1 Scissor stay hinges PVC	→232
9	9.2 Pivot posts PVC	→246



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



≤ 1650 x 2600 mm



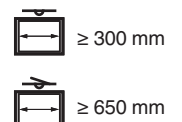
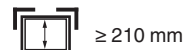
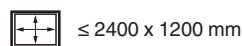
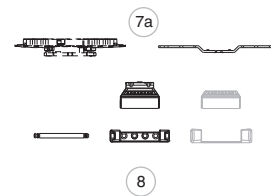
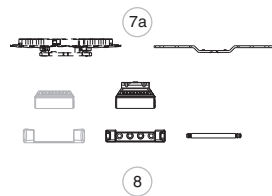
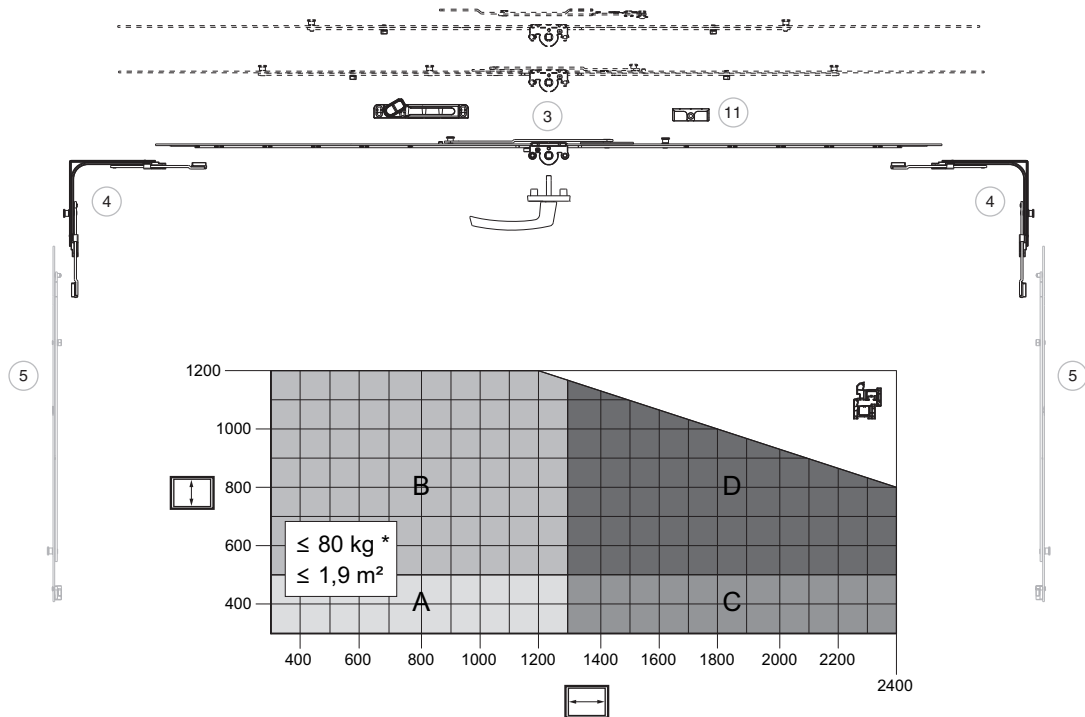
- 3 = Drive gear FHH or VHH (Backset 15 or 6.5)
- 5 = Above 800 mm (PVC) or 1,000 mm (timber); Observe details from profile manufacturer!
- 7a = Turn-only hinge - sash part fixed or croppable
- 7b = 1 piece 800 - 1,600 mm, 2 pieces 1,601 - 2,400 mm, 3 pieces 2,401 - 2,650 mm; Observe details from profile 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.	→161
3b	3.2.1.9 Turn-only drive gears BS 15 VHH i.S.	→162
4a	4.1.1 Corner elements standard i.S.	→180
4b	4.1.3 Corner elements vertical i.S.	→180
5	5.1 Centre locks FHH i.S.	→188
7a	7.1 Turn-only hinges - sash part / turn-only hinges - frame part / turn-only hinge faceplates	→214
7b	7.10 Compression devices	→226
8	8.1 Scissor stay hinges PVC	→232
9	9.2 Pivot posts PVC	→246



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



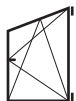
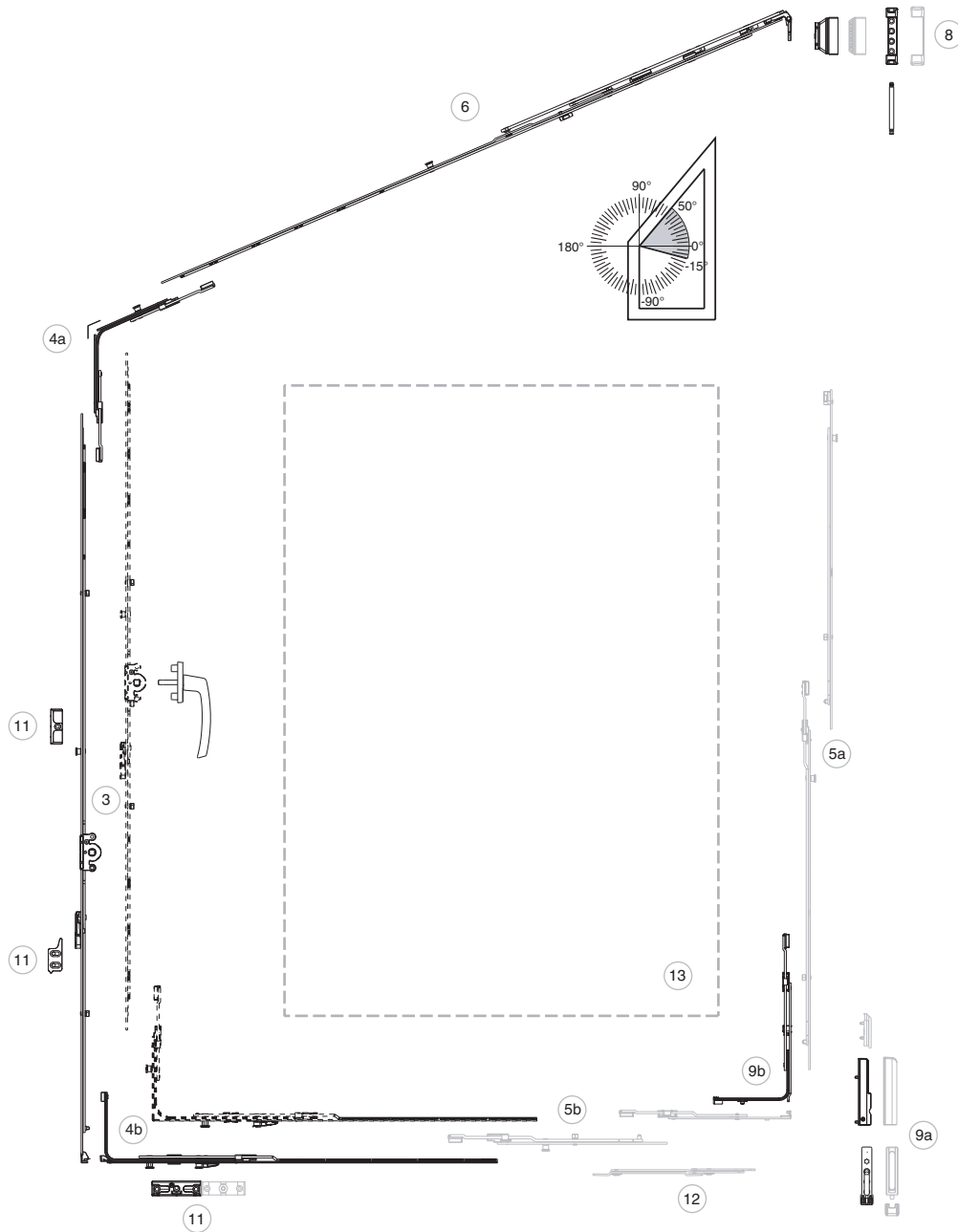
- A = 1 tilt stay + restrictor and cleaning stay size 1
- B = 1 tilt stay + restrictor and cleaning stay size 2
- C = 2 tilt stays + restrictor and cleaning stay size 1
- D = 2 tilt stays + restrictor and cleaning stay size 2
- * = Mandatory installation of restrictor and cleaning stay (guideline FPKF 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.



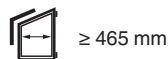
Selection guide			Page
3	3.4	Espagnolettes	→170
4	4.1.1	Corner elements standard i.S.	→180
5	5.1	Centre locks FHH i.S.	→188
7a	7.2	Tilt-only and turn-only hinges - sash part / tilt-only bearings	→216
7b	7.10.1	Surface-mounted compression devices	→226
8	8.1	Scissor stay hinges PVC	→232



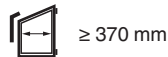
**2.4.2.7 1-sashed angled T&T window
with pivot post PVC with positioning pin and corner support PVC with positioning pin**



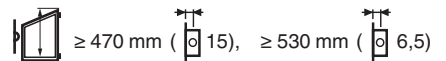
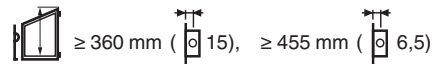
≤ 1650 x 2600 mm



≥ 465 mm



≥ 370 mm



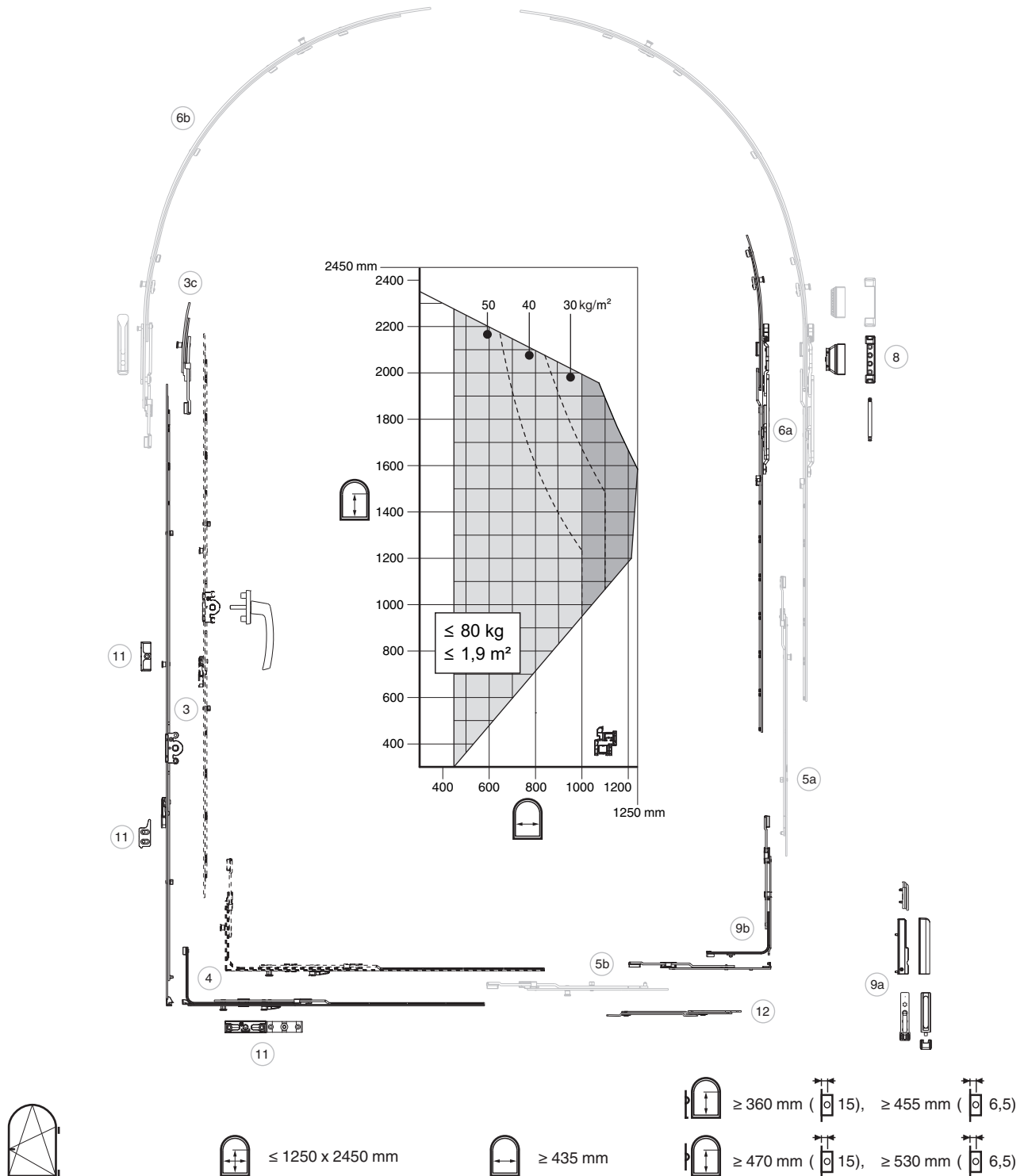
- 3 = Drive gear FHH or VHH (Backset 15 or 6.5)
- 5a = Above SRH 800 mm; Observe details from profile manufacturer!
- 5b = Required above SRW 670 mm.
- 9b = Corner element with corner supports with or without rebate-leg screw fixing
- 11 = Refer to profile data sheets for striker plates and sash lifters 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.	→150
3b	3.1.1.9 T&T drive gears BS 15 VHH i.S.	→152
4a	4.6 Corner elements i.S. for angled windows	→182
4b	4.7 Corner elements i.S. for half round windows	→183
5a	5.1 Centre locks FHH i.S.	→188
5b	5.9 Faceplate extensions fixed and extendable	→190
6	6.1.11 Rebated scissor stays i.S. for angled windows	→197
8	8.1 Scissor stay hinges PVC	→232
9a	9.2.1 Pivot posts PVC	→246
9b	9.2.5 Corner element two-part	→248
12	12.12 Independent turn limiting restrictors	→312



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



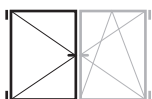
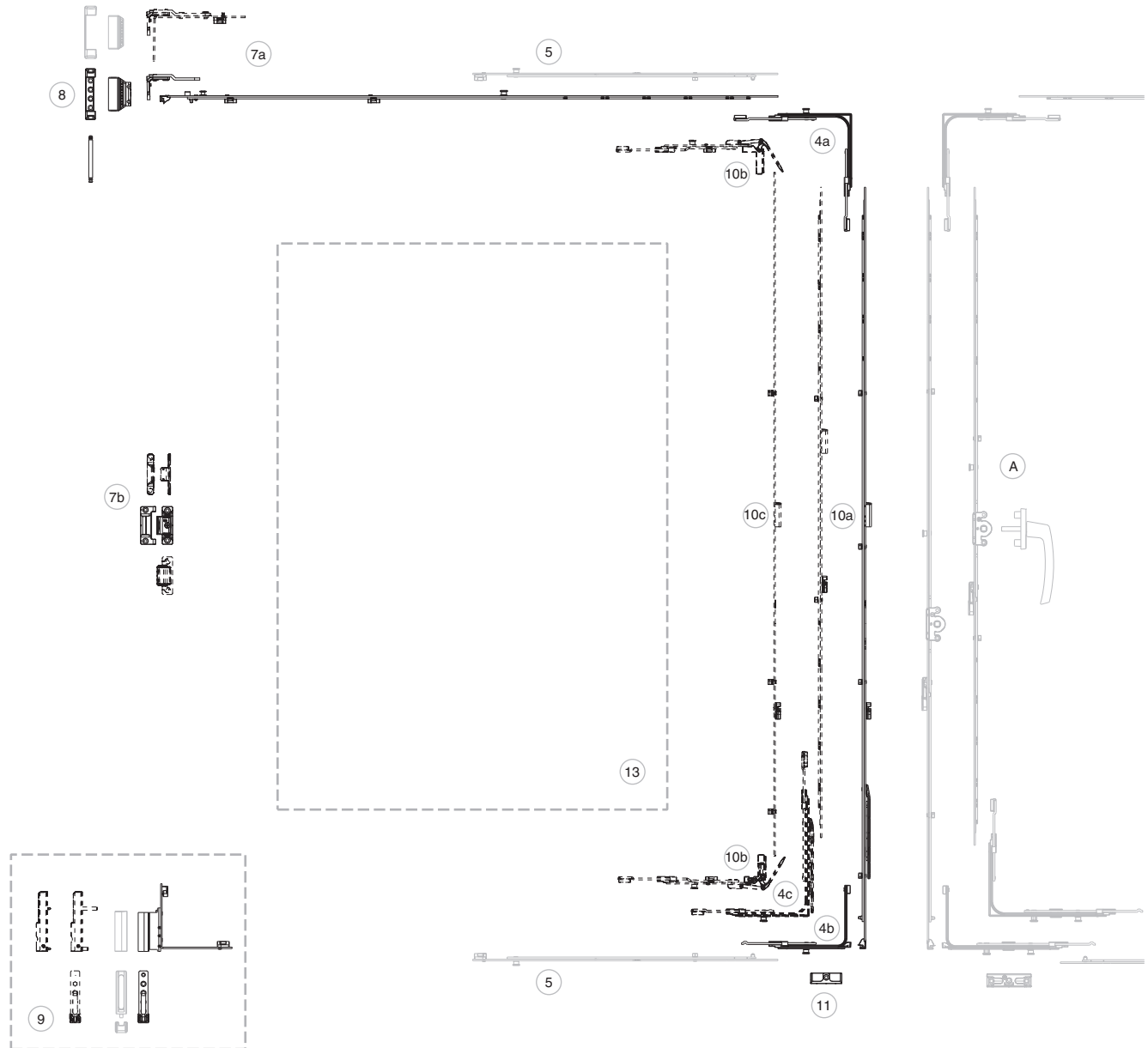
- 3 = Drive gear FHH or VHH (Backset 15 or 6.5)
- 5a = Required above SRW 670 mm.
- 5b = Above 800 mm (PVC) or 1,000 mm (timber); Observe details from profile manufacturer!
- 6a = Use above SRW 631 mm!
- 6b = Stabilizing scissor stay necessary from 1,001 mm (dark shading in application range diagram)
- 11 = Refer to profile data sheets for striker plates and sash lifters for PVC.



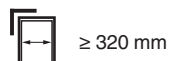
Selection guide		Page
3a	3.1.1.1 T&T drive gears BS 15 FHH i.S.	→150
3b	3.1.1.9 T&T drive gears BS 15 VHH i.S.	→152
3c	3.5.3 End pieces top for half round windows	→176
4	4.7 Corner elements i.S. for half round windows	→183
5a	5.2 Centre locks extendable i.S.	→188
5b	5.9 Faceplate extensions fixed and extendable	→190
6a	6.1.12 Rebated scissor stays i.S. for half round windows 9 mm offset	→197
6b	6.11.4 Stabilizing scissor stays for half round windows	→210
8	8.1 Scissor stay hinges PVC	→232
9a	9.2.1 Pivot posts PVC	→246
9b	9.2.5 Corner element two-part	→248
12	12.12 Independent turn limiting restrictors	→312



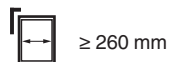
**2.4.2.9 2-sashed rectangular T&T window
with pivot post PVC and corner support PVC or rebated corner support PVC**



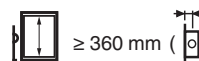
≤ 1650 x 2600 mm



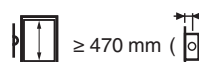
≥ 320 mm



≥ 260 mm



≥ 360 mm (15), ≥ 455 mm (6,5)



≥ 470 mm (15), ≥ 530 mm (6,5)

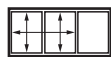
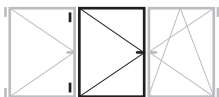
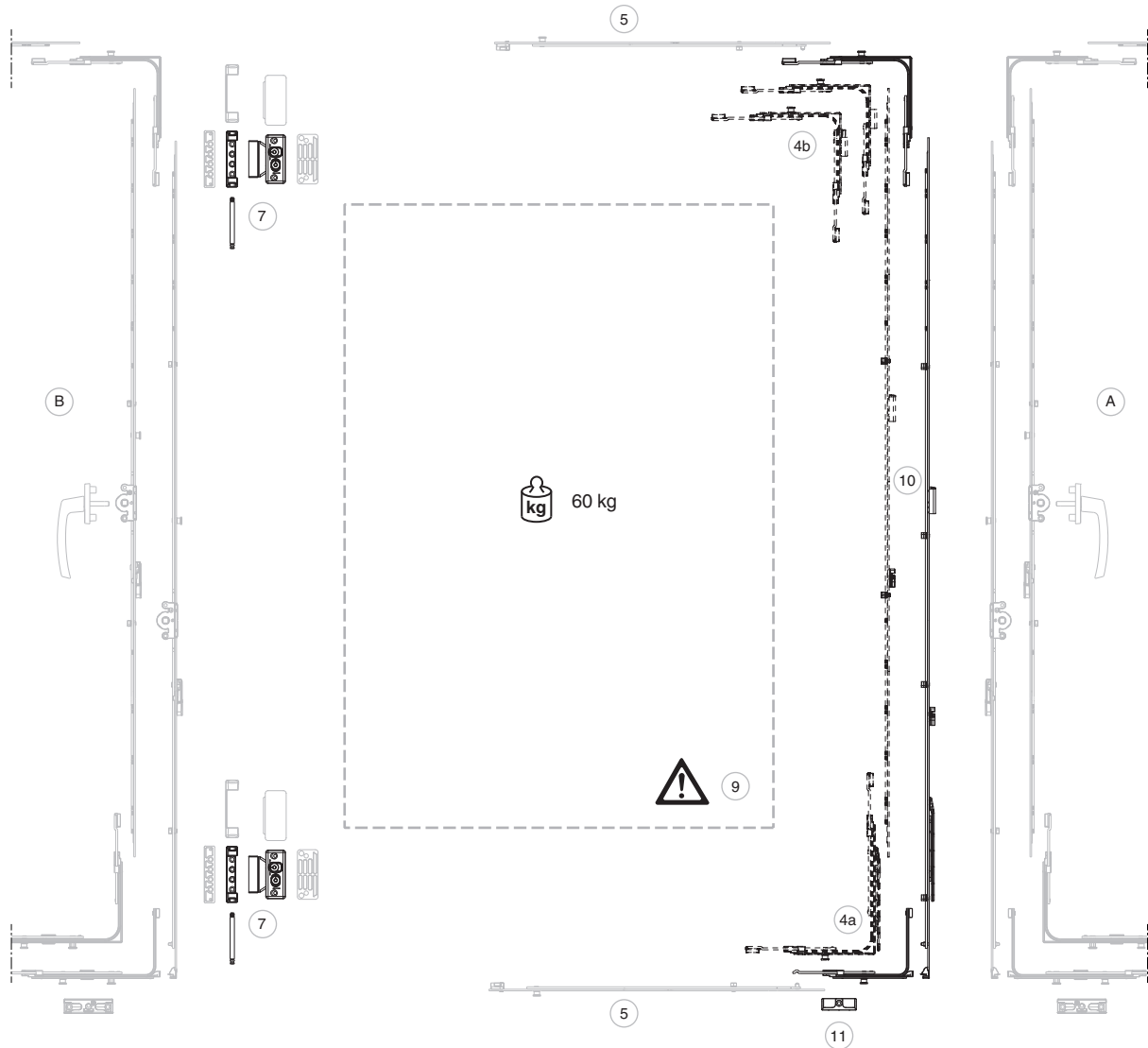
- A = For details refer to 1-sashed turn&tilt window.
- 5 = Above 800 mm (PVC) or 1,000 mm (timber); Observe details from profile manufacturer!
- 7b = 1 piece 800 - 1,600 mm, 2 pieces 1,601 - 2,400 mm, 3 pieces 2,401 - 2,650 mm; Observe details from profile manufacturer!
- 9 = For possible pivot post 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.	→180
4b	4.1.3 Corner elements vertical i.S.	→180
4c	4.4 Corner elements i.S. for French casement drive gears	→182
5	5.1 Centre locks FHH i.S.	→188
7a	7.1 Turn-only hinges - sash part / turn-only hinges - frame part / turn-only hinge faceplates	→214
7b	7.10 Compression devices	→226
8	8.1 Scissor stay hinges PVC	→232
9	9.2 Pivot posts PVC	→246
10a	10.2 French casement drive gears	→277
10b	10.3 Horizontal French casement lock	→285
10c	10.4 Single piece door strikers	→285



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



≤ 1650 x 2600 mm *



≥ 465 mm

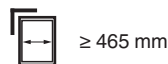
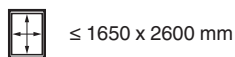
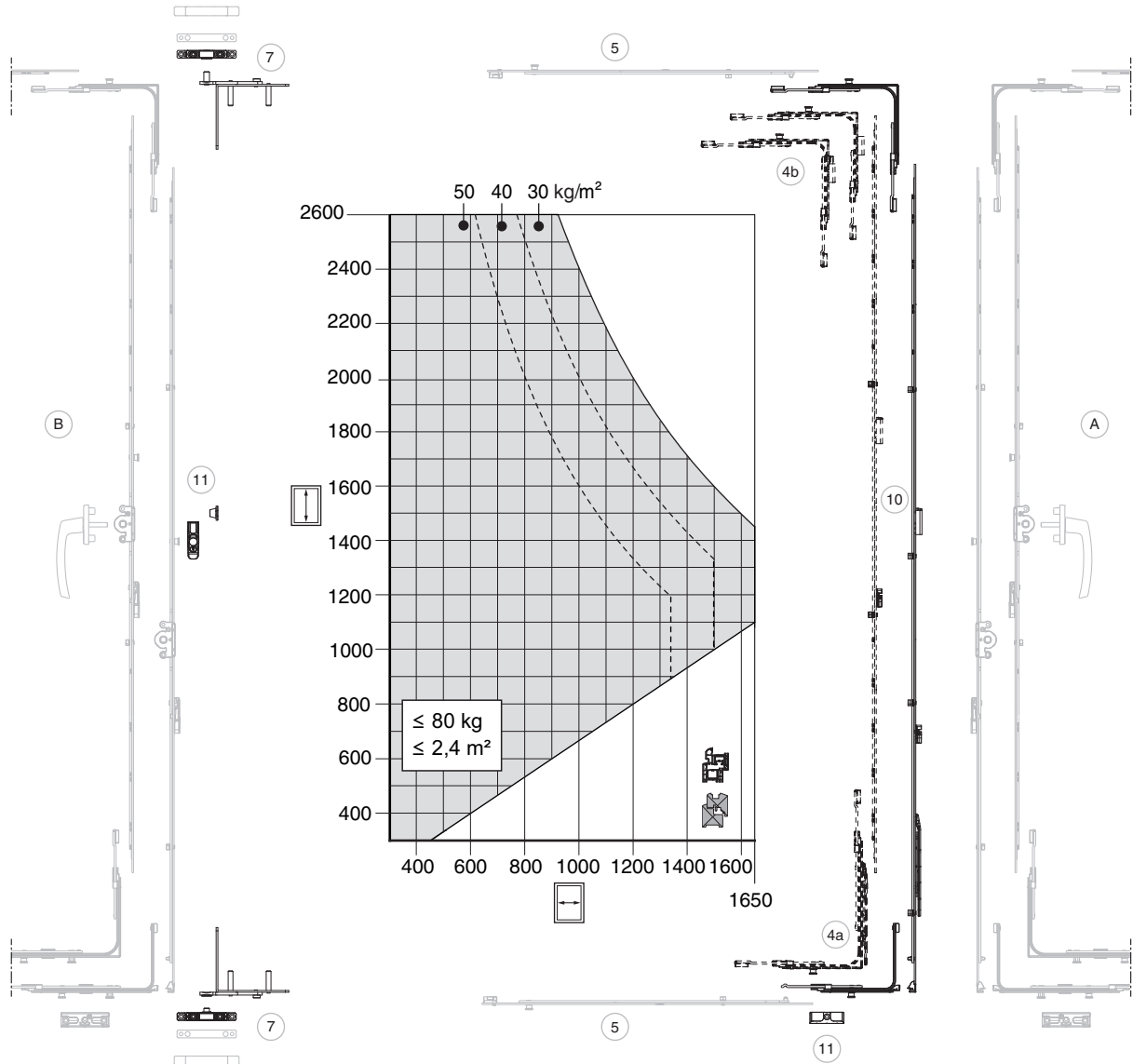
- A = For details refer to 1-sashed turn&tilt window.
- B = For details refer to 1-sashed turn-only window.
- 5 = Above 800 mm (PVC) or 1,000 mm (timber); Observe details from profile manufacturer!
- 7 = Mandatory installation of third multi-sash centre frame hinge above SRH 800 mm (PVC) or 1,000 mm (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 bearing!
- 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.	→180
4b	4.4 Corner elements i.S. for French casement drive gears	→182
5	5.1 Centre locks FHH i.S.	→188
7	7.9 Multi-sash centre frame hinges	→224
10	10.2 French casement drive gears	→277



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



- 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.

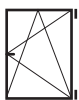
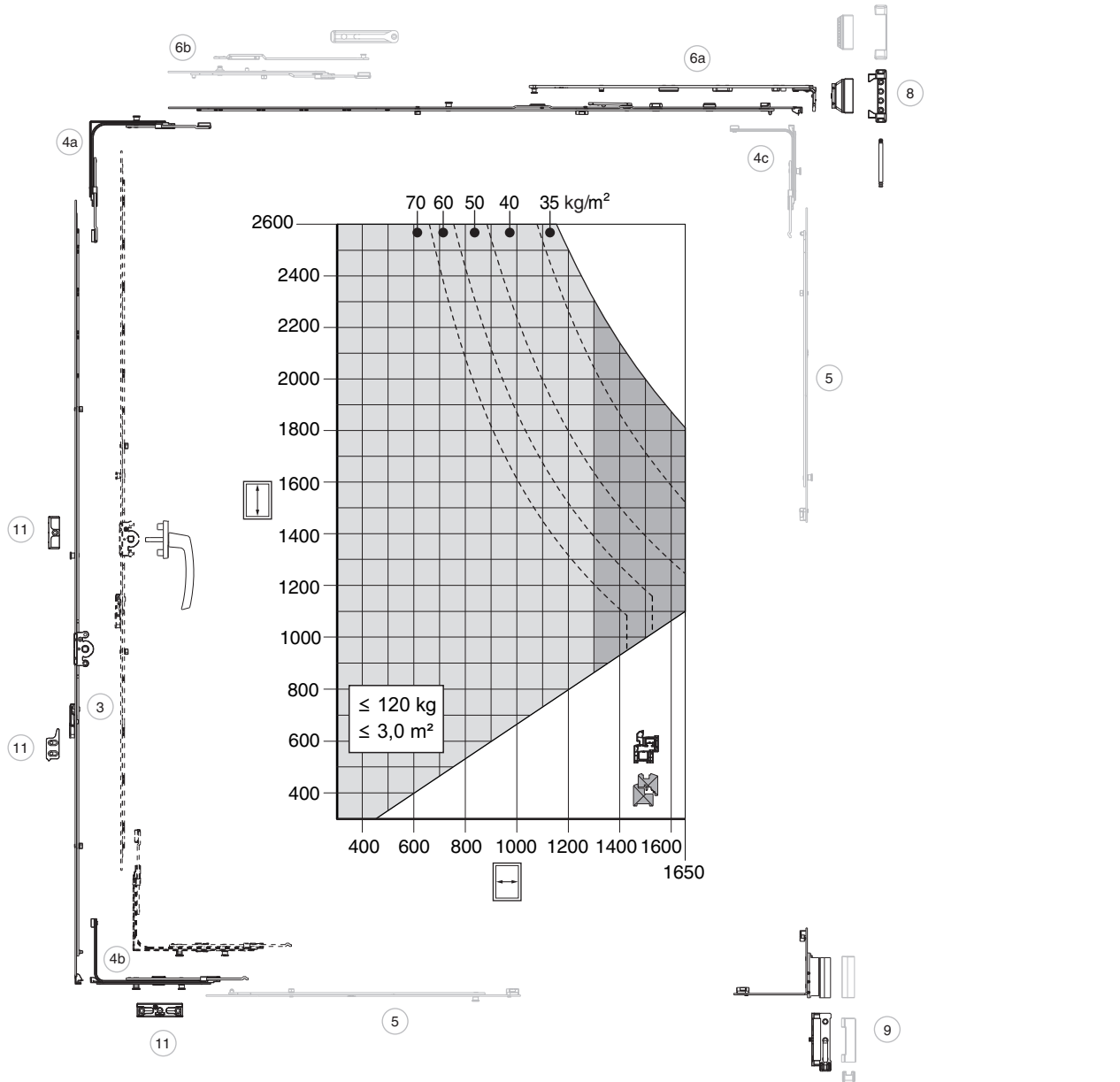


Selection guide		Page
4a	4.1.3 Corner elements vertical i.S.	→180
4b	4.4 Corner elements i.S. for French casement drive gears	→182
5	5.1 Centre locks FHH i.S.	→188
7	7.8 Turn-only hinges for 3-sashed windows	→223
10	10.2 French casement drive gears	→277
11	11 Striker plates	→290



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)
≥ 530 mm (6,5)



≥ 270 mm (15)
≥ 365 mm (6,5)



≥ 400 mm (15)
≥ 460 mm (6,5)

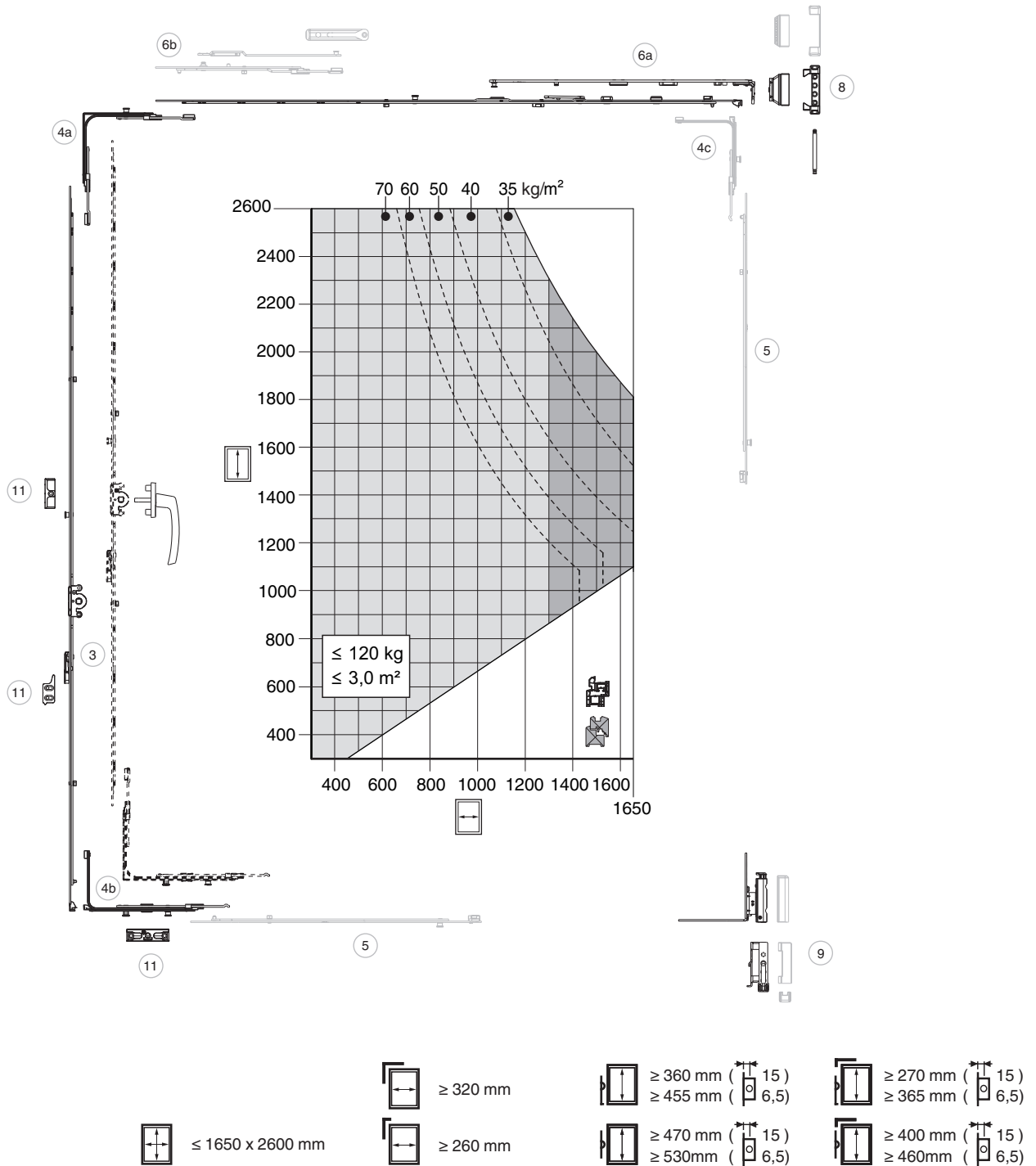
- 3 = Drive gear FHH or VHH (Backset 15 or 6.5)
- 5 = Above 800 mm (PVC) or 1,000 mm (timber); Observe details from profile manufacturer!
- 6b = Stabilizing scissor stay necessary from 1,301 mm (dark shading in application range diagram)
- 11 = Refer to profile data sheets for striker plates and sash lifters for PVC.



Selection guide		Page
3a	3.1.1.1 T&T drive gears BS 15 FHH i.S.	→150
3b	3.1.1.9 T&T drive gears BS 15 VHH i.S.	→152
4a	4.1.1 Corner elements standard i.S.	→180
4b	4.1.2 Corner elements horizontal i.S.	→180
4c	4.1.3 Corner elements vertical i.S.	→180
5	5.1 Centre locks FHH i.S.	→188
6a	6.1.4 Scissor stay faceplates i.S.	→195
6b	6.11.1 Stabilizing scissor stays	→210
8	8.2 Surface-mounted scissor stay hinges	→232
9	9.3 Surface-mounted pivot posts	→249
11	11 Striker plates	→290



2.4.3.2 1-sashed rectangular T&T window
with pivot post AS and rebated corner support AS with rebate-leg screw fixing



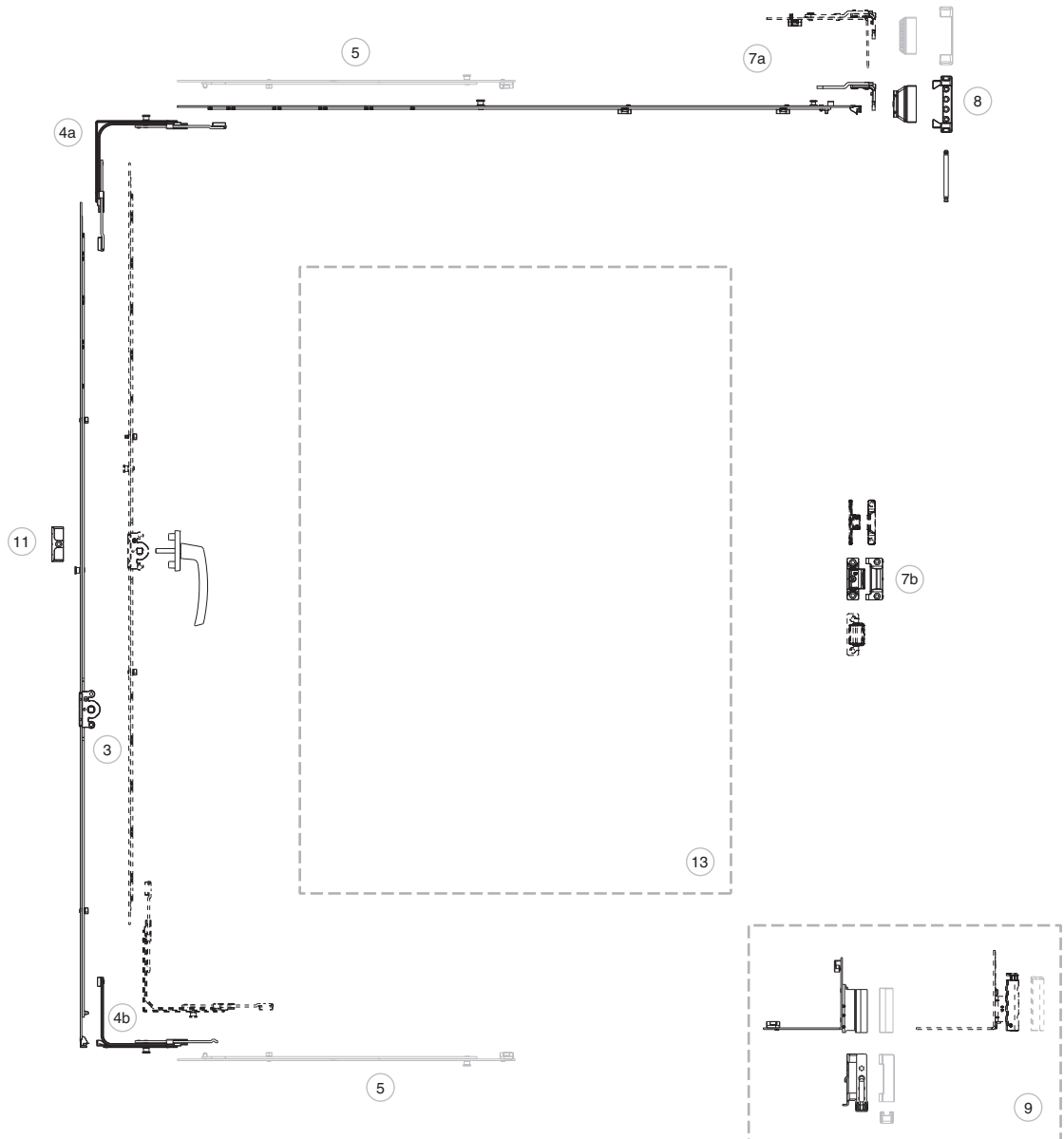
- 3 = Drive gear FHH or VHH (Backset 15 or 6.5)
- 5 = Above 800 mm (PVC) or 1,000 mm (timber); Observe details from profile manufacturer!
- 6b = Stabilizing scissor stay necessary from 1,301 mm (dark shading in application range diagram)
- 11 = Refer to profile data sheets for striker plates and sash lifters for PVC.



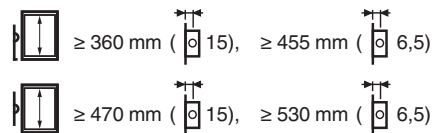
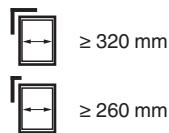
Selection guide		Page
3a	3.1.1.1 T&T drive gears BS 15 FHH i.S.	→150
3b	3.1.1.9 T&T drive gears BS 15 VHH i.S.	→152
4a	4.1.1 Corner elements standard i.S.	→180
4b	4.1.2 Corner elements horizontal i.S.	→180
4c	4.1.3 Corner elements vertical i.S.	→180
5	5.1 Centre locks FHH i.S.	→188
6a	6.1.4 Scissor stay faceplates i.S.	→195
6b	6.11.1 Stabilizing scissor stays	→210
8	8.2 Surface-mounted scissor stay hinges	→232
9	9.3 Surface-mounted pivot posts	→249
11	11 Striker plates	→290



**2.4.3.3 1-sashed rectangular turn-only window
with pivot post AS and fixed or croppable turn-only hinge**



≤ 1650 x 2600 mm



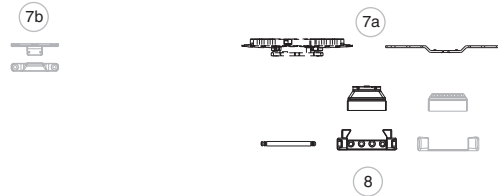
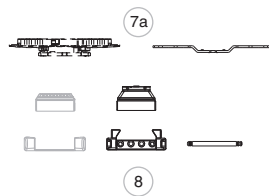
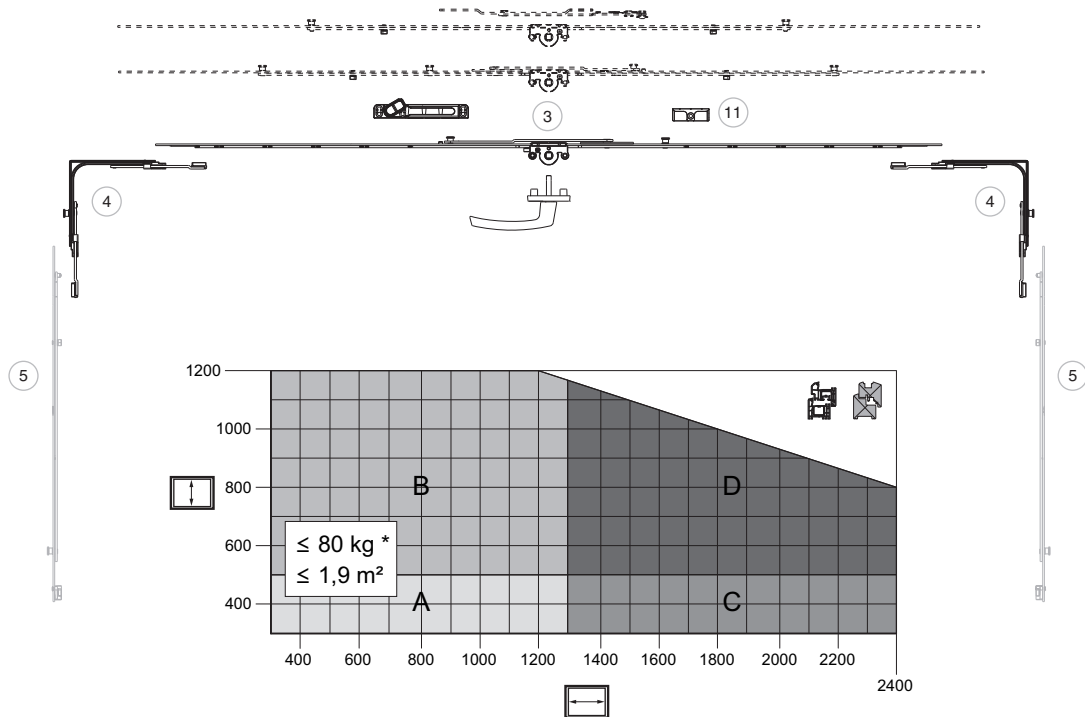
- 3 = Drive gear FHH or VHH (Backset 15 or 6.5)
- 5 = Above 800 mm (PVC) or 1,000 mm (timber); Observe details from profile manufacturer!
- 7a = Turn-only hinge - sash part fixed or croppable
- 7b = 1 piece 800 - 1,600 mm, 2 pieces 1,601 - 2,400 mm, 3 pieces 2,401 - 2,650 mm; Observe details from profile 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.	→161
3b	3.2.1.9 Turn-only drive gears BS 15 VHH i.S.	→162
4a	4.1.1 Corner elements standard i.S.	→180
4b	4.1.3 Corner elements vertical i.S.	→180
5	5.1 Centre locks FHH i.S.	→188
7a	7.1 Turn-only hinges - sash part / turn-only hinges - frame part / turn-only hinge faceplates	→214
7b	7.10.1 Surface-mounted compression devices	→226
8	8.2 Surface-mounted scissor stay hinges	→232
9	9.3 Surface-mounted pivot posts	→249
11	11 Striker plates	→290



2.4.3.4 1-sashed rectangular tilt-only window
with scissor stay hinge AS and tilt-only hinge AS/PVC



≤ 2400 x 1200 mm

≥ 210 mm

≥ 300 mm
 ≥ 650 mm

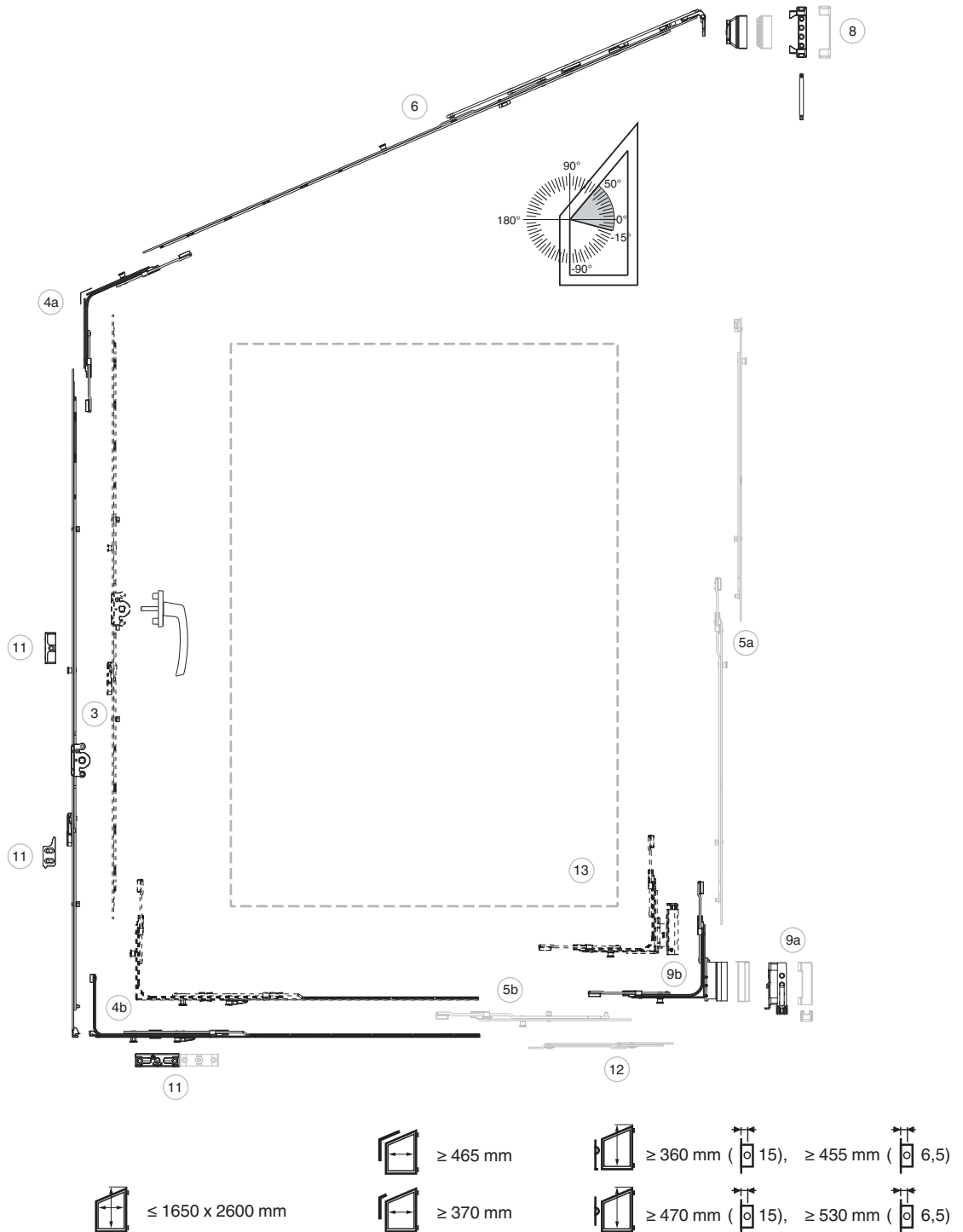
- A = 1 tilt stay + restrictor and cleaning stay size 1
- B = 1 tilt stay + restrictor and cleaning stay size 2
- C = 2 tilt stays + restrictor and cleaning stay size 1
- D = 2 tilt stay + restrictor and cleaning stay size 2
- * = Mandatory installation of restrictor and cleaning stay (guideline FPKF 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	→170
4	4.1.1	Corner elements standard i.S.	→180
5	5.1	Centre locks FHH i.S.	→188
7a	7.2	Tilt-only and turn-only hinges - sash part / tilt-only bearings	→216
7b	7.10.1	Surface-mounted compression devices	→226
8	8.2	Surface-mounted scissor stay hinges	→232
11	11	Striker plates	→290



2.4.3.5 1-sashed angled T&T window
with pivot post AS and corner element with corner support AS EH



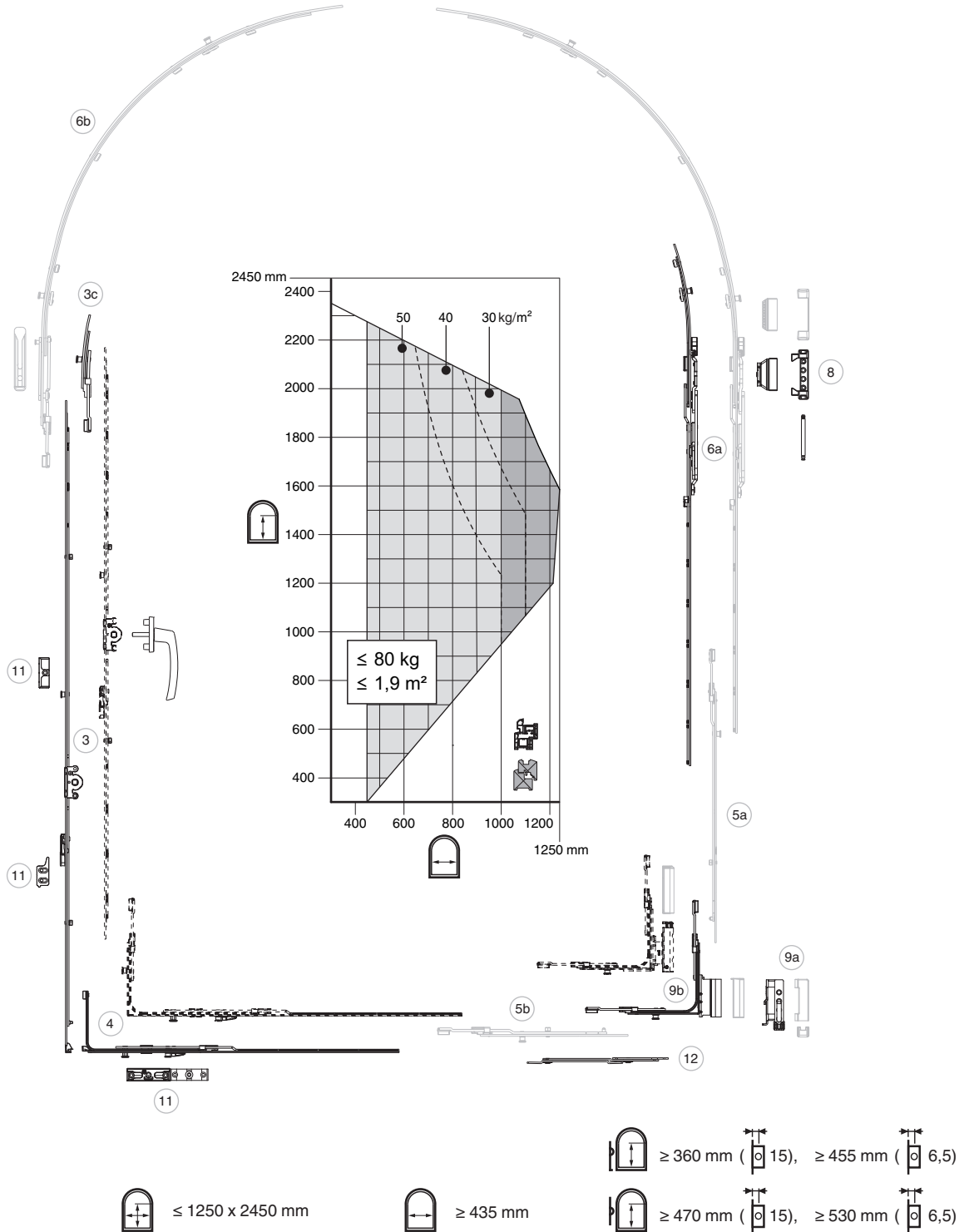
- 3 = Drive gear FHH or VHH (Backset 15 or 6.5)
- 5a = Above SRH 800 mm; Observe details from profile manufacturer!
- 5b = Required above SRW 670 mm.
- 9b = Corner element with corner supports with or without rebate-leg screw fixing
- 11 = Refer to profile data sheets for striker plates and sash lifters 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.	→150
3b	3.1.1.9 T&T drive gears BS 15 VHH i.S.	→152
4a	4.6 Corner elements i.S. for angled windows	→182
4b	4.7 Corner elements i.S. for half round windows	→183
5a	5.1 Centre locks FHH i.S.	→188
5b	5.9 Faceplate extensions fixed and extendable	→190
6	6.1.11 Rebated scissor stays i.S. for angled windows	→197
8	8.2 Surface-mounted scissor stay hinges	→232
9	9.3 Surface-mounted pivot posts	→249
11	11 Striker plates	→290
12	12.12 Independent turn limiting restrictors	→312



**2.4.3.6 1-sashed half round T&T window
with pivot post AS (for rebated corner support AS/PVC)
+ corner element with corner support AS EH**



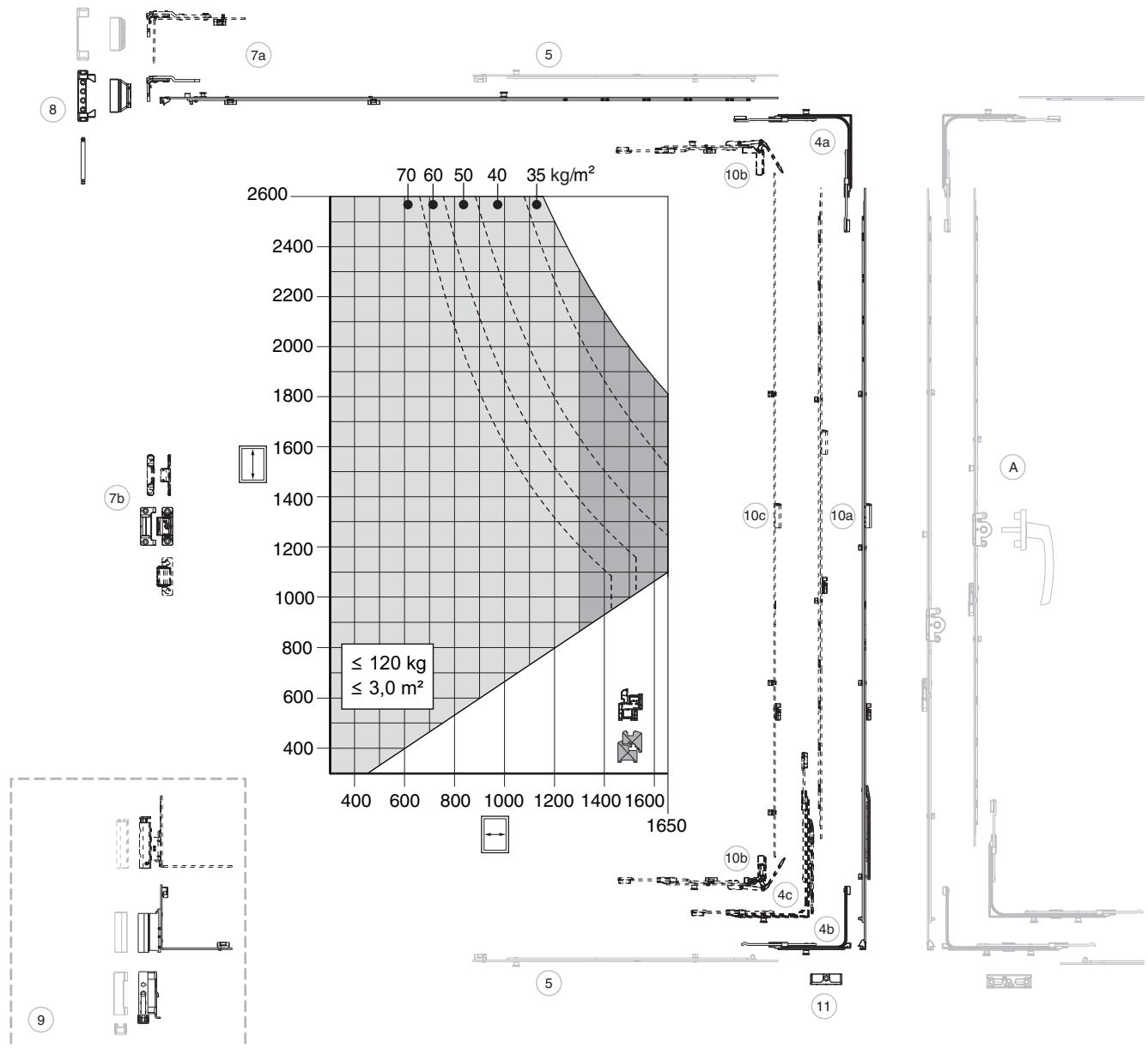
- 3 = Drive gear FHH or VHH (Backset 15 or 6.5)
- 5a = Above 800 mm (PVC) or 1,000 mm (timber); Observe details from profile manufacturer!
- 5b = Required above SRW 670 mm.
- 6a = Use above SRW 631 mm!
- 6b = Stabilizing scissor stay necessary from 1,001 mm (dark shading in application range diagram)
- 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.	→150
3b	3.1.1.9 T&T drive gears BS 15 VHH i.S.	→152
3c	3.5.3 End pieces top for half round windows	→176
4	4.7 Corner elements i.S. for half round windows	→183
5a	5.2 Centre locks extendable i.S.	→188
5b	5.9 Faceplate extensions fixed and extendable	→190
6a	6.1.12 Rebated scissor stays i.S. for half round windows 9 mm offset	→197
6b	6.11.4 Stabilizing scissor stays for half round windows	→210
8	8.2 Surface-mounted scissor stay hinges	→232
9a	9.3.1 Surface-mounted pivot posts for rebated corner supports AS/PVC without rebate-leg screw fixing	→249
9b	9.3.3 Corner elements with corner support AS with rebate-leg screw fixing EH	→250
11	11 Striker plates	→290
12	12.12 Independent turn limiting restrictors	→312



2.4.3.7 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!
- 10 = French casement drive gear FHH or VHH

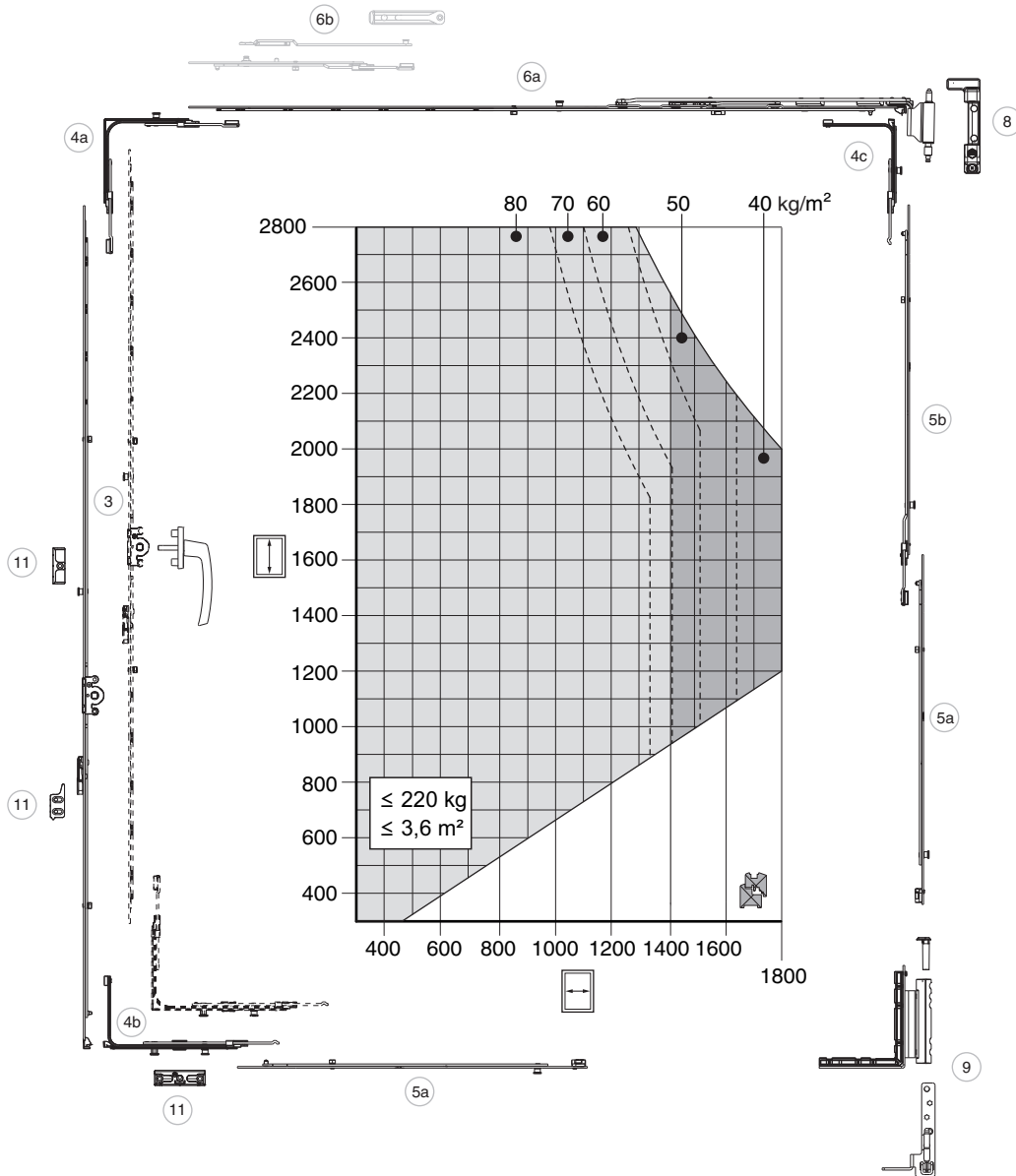


Selection guide		Page
4a	4.1.1 Corner elements standard i.S.	→180
4b	4.1.3 Corner elements vertical i.S.	→180
4c	4.4 Corner elements i.S. for French casement drive gears	→182
5	5.1 Centre locks FHH i.S.	→188
7a	7.1 Turn-only hinges - sash part / turn-only hinges - frame part / turn-only hinge faceplates	→214
7b	7.10 Compression devices	→226
8	8.2 Surface-mounted scissor stay hinges	→232
9	9.3 Surface-mounted pivot posts	→249
10a	10.2 French casement drive gears	→277
10b	10.3 Horizontal French casement lock	→285
10c	10.4 Single piece door strikers	→285
11	11 Striker plates	→290



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



≤ 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)

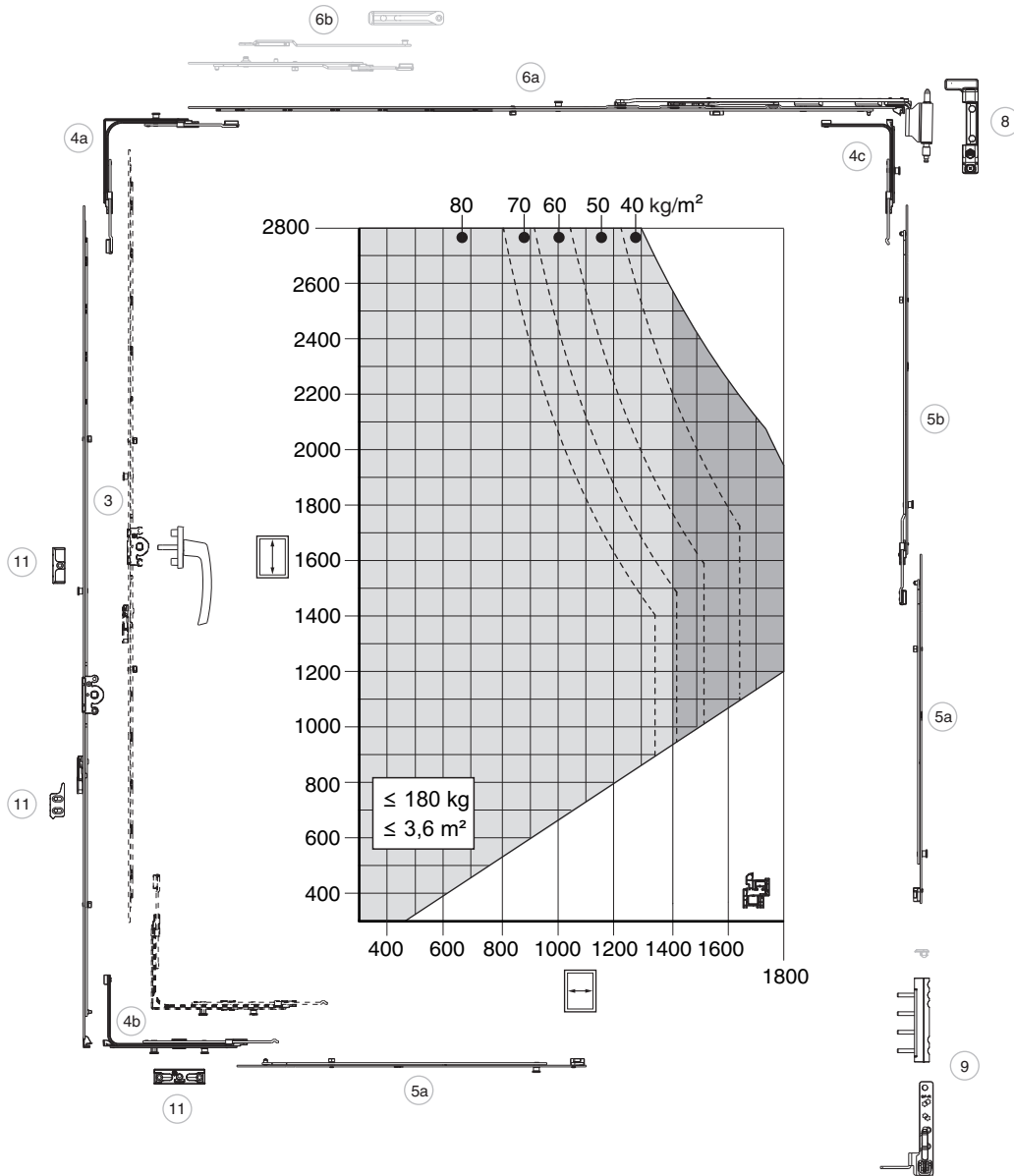
- 3 = Drive gear FHH or VHH (Backset 15 or 6.5)
- 5 = Above 800 mm (PVC) or 1,000 mm (timber); Observe details from profile manufacturer!
- 5b = Use additional centre locks from 1,280 mm!
- 6b = Stabilizing scissor stay necessary from 1,401 mm (dark shading in application range diagram)



Selection guide		Page
3a	3.1.1.1 T&T drive gears BS 15 FHH i.S.	→150
3b	3.1.1.9 T&T drive gears BS 15 VHH i.S.	→152
4a	4.1.1 Corner elements standard i.S.	→180
4b	4.1.2 Corner elements horizontal i.S.	→180
4c	4.1.3 Corner elements vertical i.S.	→180
5a	5.1 Centre locks FHH i.S.	→188
5b	5.2 Centre locks extendable i.S.	→188
6a	6.3 Rebated scissor stays MULTI MAMMUT	→200
6b	6.11.1 Stabilizing scissor stays	→210
8	8.8 Scissor stay hinges MULTI MAMMUT	→238
9	9.7 Pivot posts MULTI MAMMUT	→259
11	11 Striker plates	→290



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)

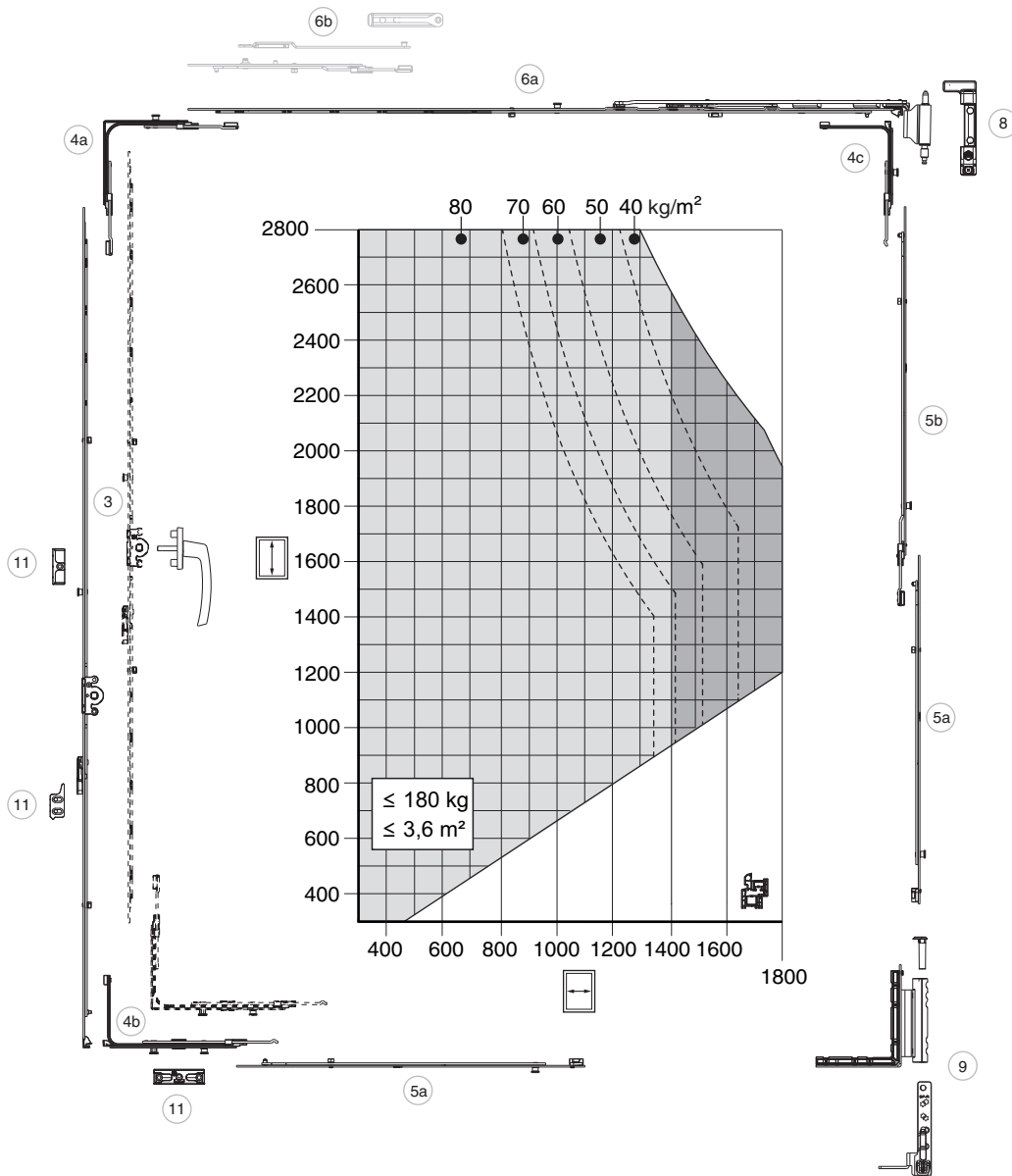
- 3 = Drive gear FHH or VHH (Backset 15 or 6.5)
- 5 = Above 800 mm (PVC) or 1,000 mm (timber); Observe details from profile manufacturer!
- 5b = Use additional centre locks from 1,280 mm!
- 6b = Stabilizing scissor stay necessary from 1,401 mm (dark shading in application range diagram)
- 11 = Refer 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.	→150
3b	3.1.1.9 T&T drive gears BS 15 VHH i.S.	→152
4a	4.1.1 Corner elements standard i.S.	→180
4b	4.1.2 Corner elements horizontal i.S.	→180
4c	4.1.3 Corner elements vertical i.S.	→180
5a	5.1 Centre locks FHH i.S.	→188
5b	5.2 Centre locks extendable i.S.	→188
6a	6.3 Rebated scissor stays MULTI MAMMUT	→200
6b	6.11.1 Stabilizing scissor stays	→210
8	8.8 Scissor stay hinges MULTI MAMMUT	→238
9	9.7 Pivot posts MULTI MAMMUT	→259



2.4.4.3 1-sashed rectangular T&T window
with pivot post PVC MULTI MAMMUT + 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)

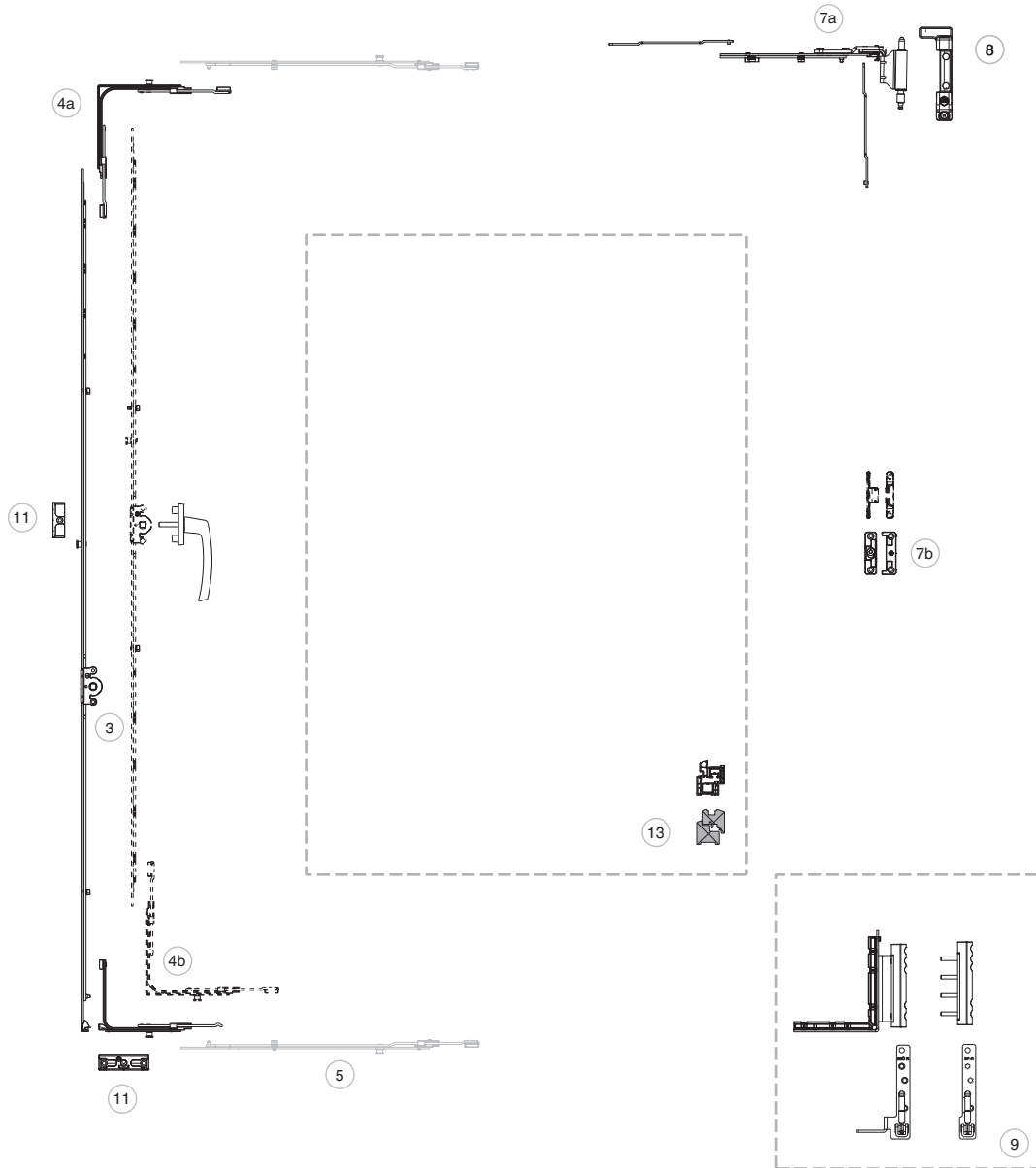
- 3 = Drive gear FHH or VHH (Backset 15 or 6.5)
- 5 = Above 800 mm (PVC) or 1,000 mm (timber); Observe details from profile manufacturer!
- 5b = Use additional centre locks from 1,280 mm!
- 6b = Stabilizing scissor stay necessary from 1,401 mm (dark shading in application range diagram)
- 11 = Refer 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.	→150
3b	3.1.1.9 T&T drive gears BS 15 VHH i.S.	→152
4a	4.1.1 Corner elements standard i.S.	→180
4b	4.1.2 Corner elements horizontal i.S.	→180
4c	4.1.3 Corner elements vertical i.S.	→180
5a	5.1 Centre locks FHH i.S.	→188
5b	5.2 Centre locks extendable i.S.	→188
6a	6.3 Rebated scissor stays MULTI MAMMUT	→200
6b	6.11.1 Stabilizing scissor stays	→210
8	8.8 Scissor stay hinges MULTI MAMMUT	→238
9	9.7 Pivot posts MULTI MAMMUT	→259



**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)

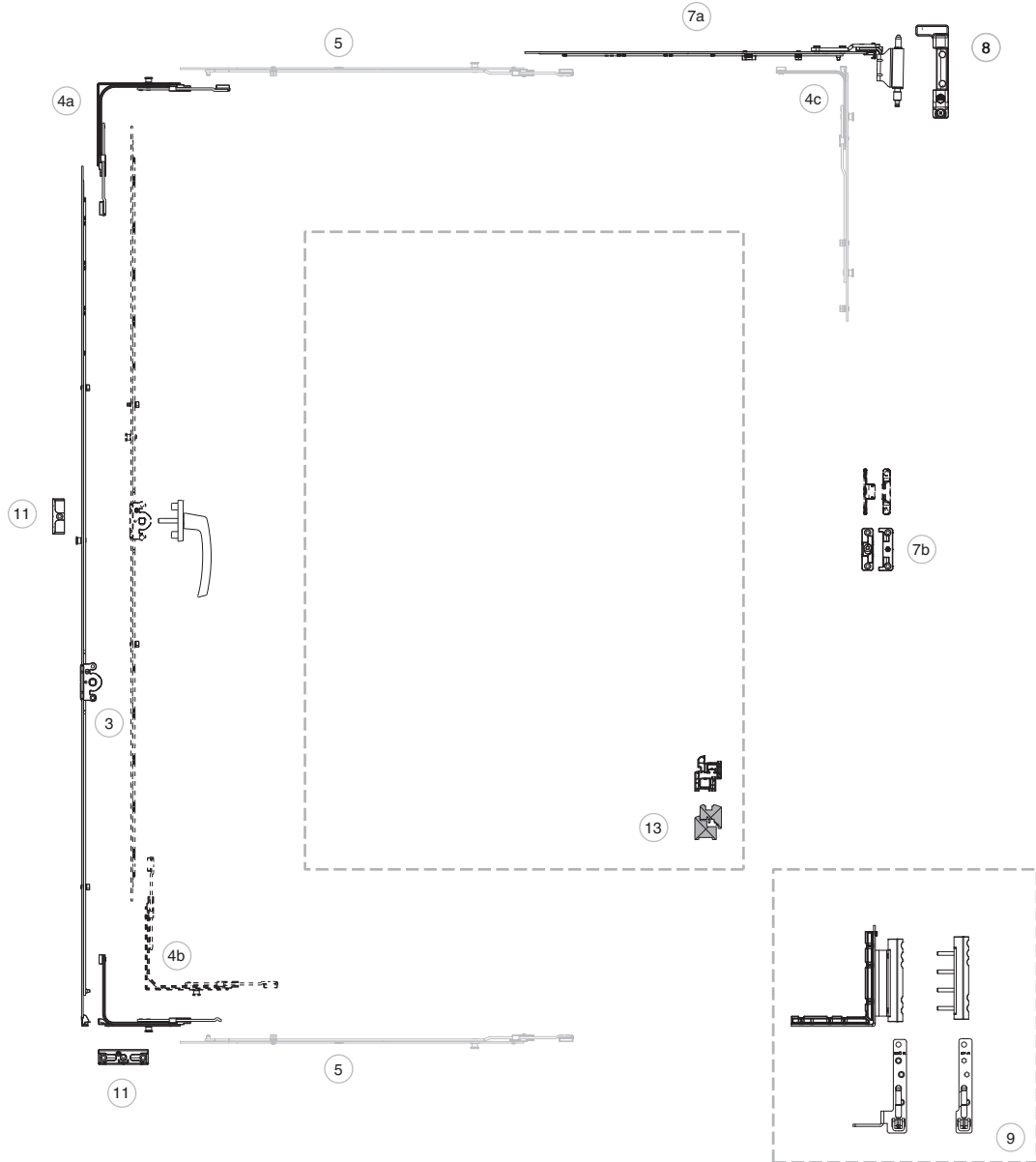
- 3 = Drive gear FHH or VHH (Backset 15 or 6.5)
- 5 = Above 800 mm (PVC) or 1,000 mm (timber); Observe details from profile manufacturer!
- 7a = Use as turn-only hinge (sash part) FHH (application range 385-635 mm)
- 7b = 1 piece 800 - 1,600 mm, 2 pieces 1,601 - 2,400 mm, 3 pieces 2,401 - 2,650 mm; Top 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.



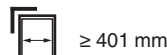
Selection guide		Page
3a	3.2.1.1 Turn-only drive gears BS 15 FHH i.S.	→161
3b	3.2.1.9 Turn-only drive gears BS 15 VHH i.S.	→162
4a	4.1.1 Corner elements standard i.S.	→180
4b	4.1.2 Corner elements horizontal i.S.	→180
5	5.1 Centre locks FHH i.S.	→188
7a	7.4 Turn-only hinges - sash part MULTI MAMMUT	→218
7b	7.10 Compression devices	→226
8	8.8 Scissor stay hinges MULTI MAMMUT	→238
9	9.7 Pivot posts MULTI MAMMUT	→259
11	11 Striker plates	→290



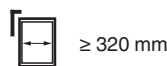
**2.4.4.5 1-sashed rectangular turn-only window
with pivot post MULTI MAMMUT and corner support MULTI MAMMUT
with croppable turn-only hinge**



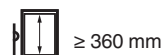
≤ 1800 x 2800 mm



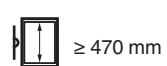
≥ 401 mm



≥ 320 mm



≥ 360 mm (15), ≥ 455 mm (6,5)



≥ 470 mm (15), ≥ 530 mm (6,5)

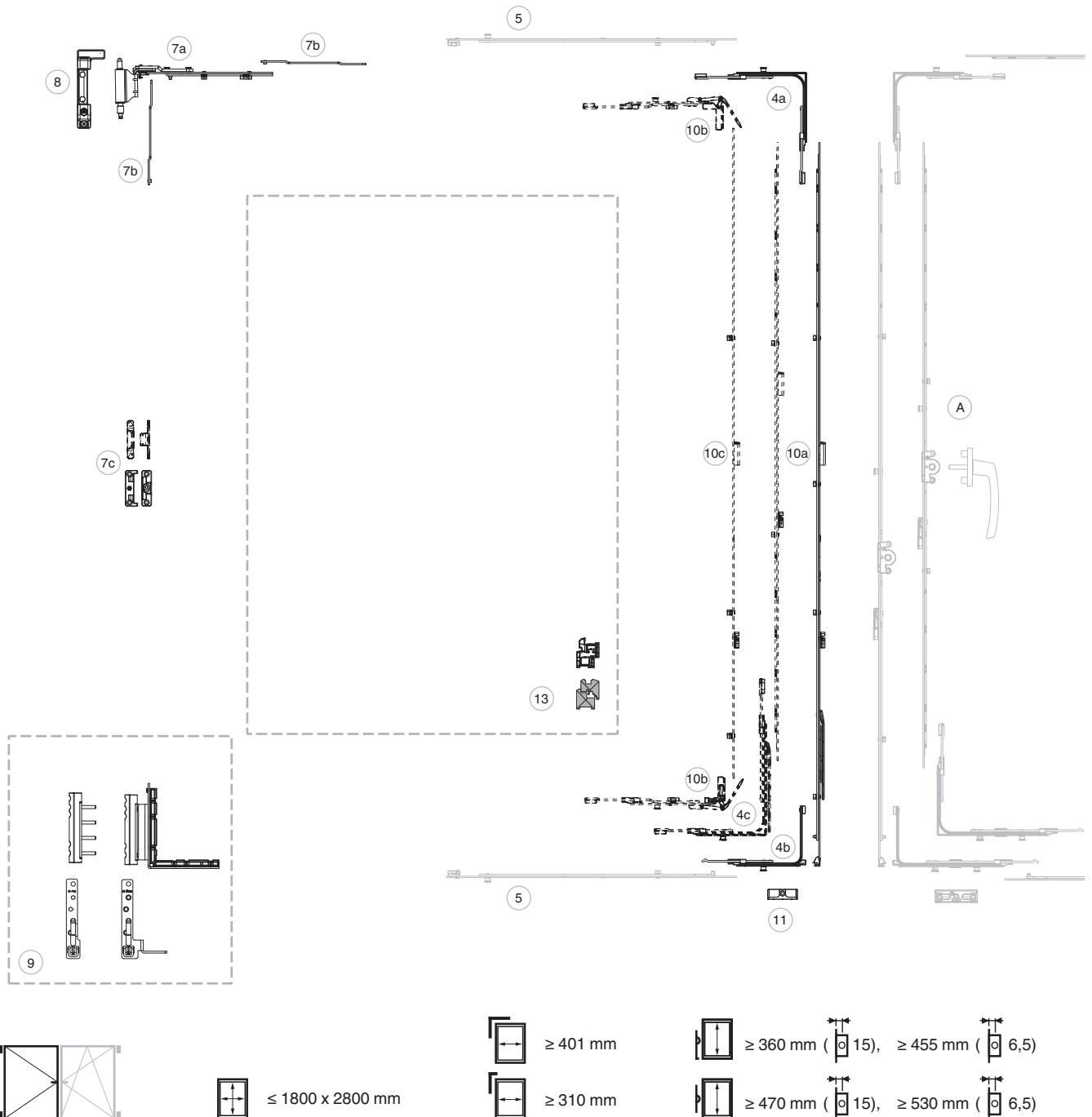
- 3 = Drive gear FHH or VHH (Backset 15 or 6.5)
- 5 = Above 800 mm (PVC) or 1,000 mm (timber); Observe details from profile manufacturer!
- 7a = Use as croppable turn-only hinge (sash part) (application range 636-1,800 mm)
- 7b = 1 piece 800 - 1,600 mm, 2 pieces 1,601 - 2,400 mm, 3 pieces 2,401 - 2,650 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.	→161
3b	3.2.1.9 Turn-only drive gears BS 15 VHH i.S.	→162
4a	4.1.1 Corner elements standard i.S.	→180
4b	4.1.2 Corner elements horizontal i.S.	→180
4c	4.1.3 Corner elements vertical i.S.	→180
5	5.1 Centre locks FHH i.S.	→188
7a	7.4 Turn-only hinges - sash part MULTI MAMMUT	→218
7b	7.10 Compression devices	→226
8	8.8 Scissor stay hinges MULTI MAMMUT	→238
9	9.7 Pivot posts MULTI MAMMUT	→259
11	11 Striker plates	→290



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



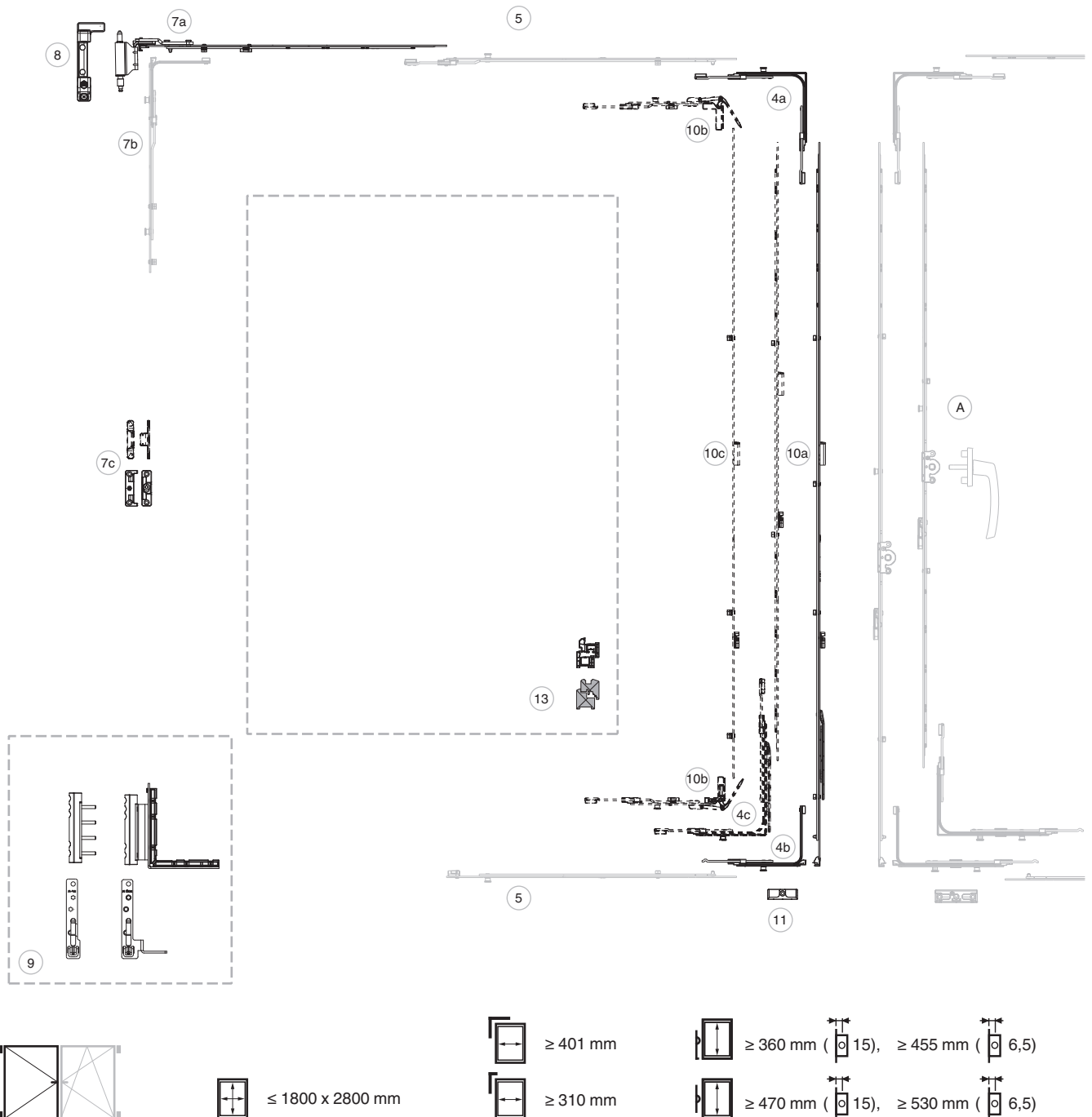
- A = For details refer to 1-sashed turn&tilt window.
- 5 = Above 800 mm (PVC) or 1,000 mm (timber); Observe details from profile manufacturer!
- 7c = 1 piece 800 - 1,600 mm, 2 pieces 1,601 - 2,400 mm, 3 pieces 2,401 - 2,650 mm; Observe details from profile manufacturer!
- 9 = For possible pivot post 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.	→180
4b	4.1.3 Corner elements vertical i.S.	→180
4c	4.4 Corner elements i.S. for French casement drive gears	→182
5	5.1 Centre locks FHH i.S.	→188
7a	7.4.1 Croppable turn-only hinges - sash part MULTI MAMMUT	→218
7b	7.4.2 Faceplate extensions for turn-only hinges - sash part MULTI MAMMUT	→218
7c	7.10 Compression devices	→226
8	8.8 Scissor stay hinges MULTI MAMMUT	→238
9	9.7 Pivot posts MULTI MAMMUT	→259
10a	10.2 French casement drive gears	→277
10b	10.3 Horizontal French casement lock	→285
10c	10.4 Single piece door strikers	→285
11	11 Striker plates	→290



**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.

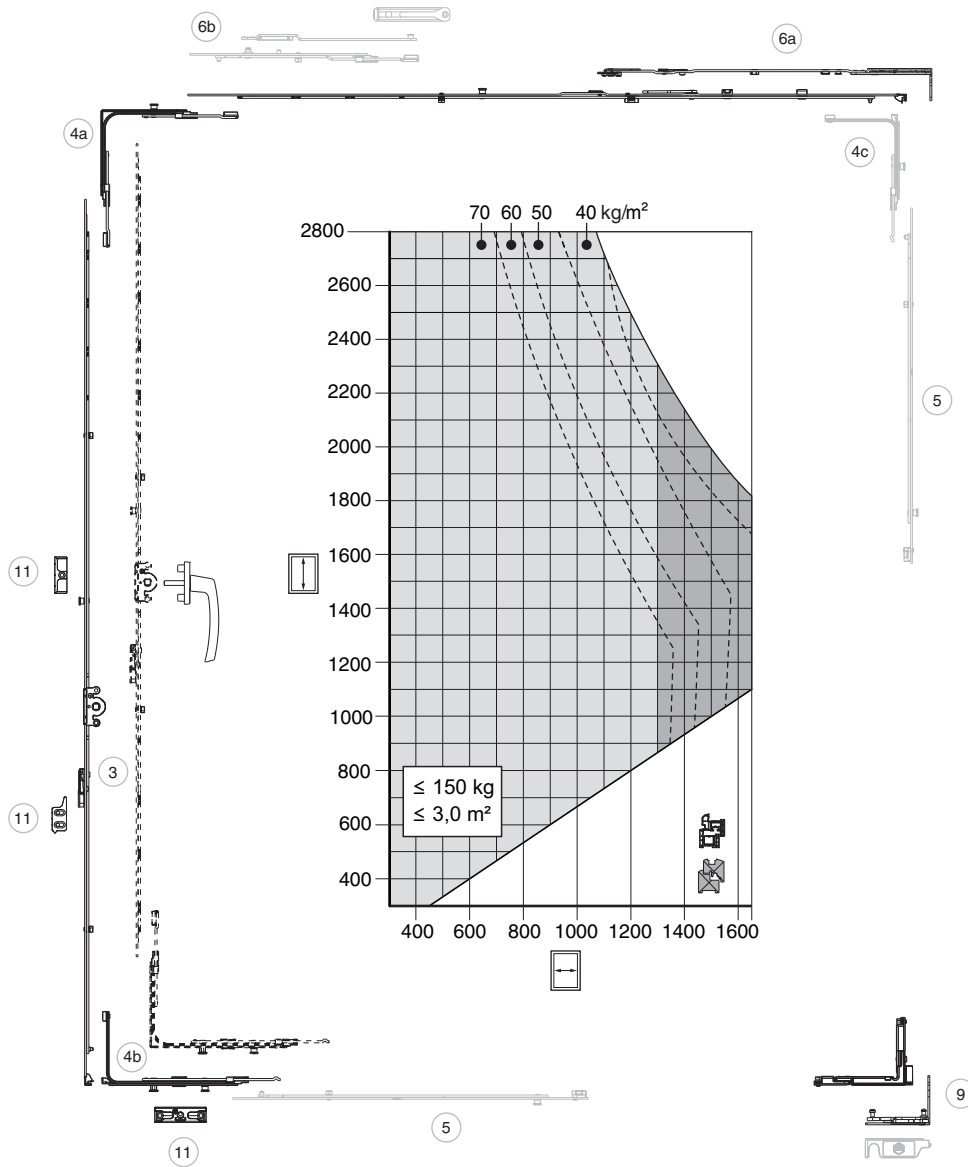


Selection guide		Page
4a	4.1.1 Corner elements standard i.S.	→180
4b	4.1.3 Corner elements vertical i.S.	→180
4c	4.4 Corner elements i.S. for French casement drive gears	→182
5	5.1 Centre locks FHH i.S.	→188
7a	7.4.1 Croppable turn-only hinges - sash part MULTI MAMMUT	→218
7b	7.4.2 Faceplate extensions for turn-only hinges - sash part MULTI MAMMUT	→218
7c	7.10 Compression devices	→226
8	8.8 Scissor stay hinges MULTI MAMMUT	→238
9	9.7 Pivot posts MULTI MAMMUT	→259
10a	10.2 French casement drive gears	→277
10b	10.3 Horizontal French casement lock	→285
10c	10.4 Single piece door strikers	→285
11	11 Striker plates	→290



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



$\leq 1650 \times 2800 \text{ mm}$

$\geq 465 \text{ mm}$

$\geq 370 \text{ mm}$

$\geq 360 \text{ mm}$ (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)

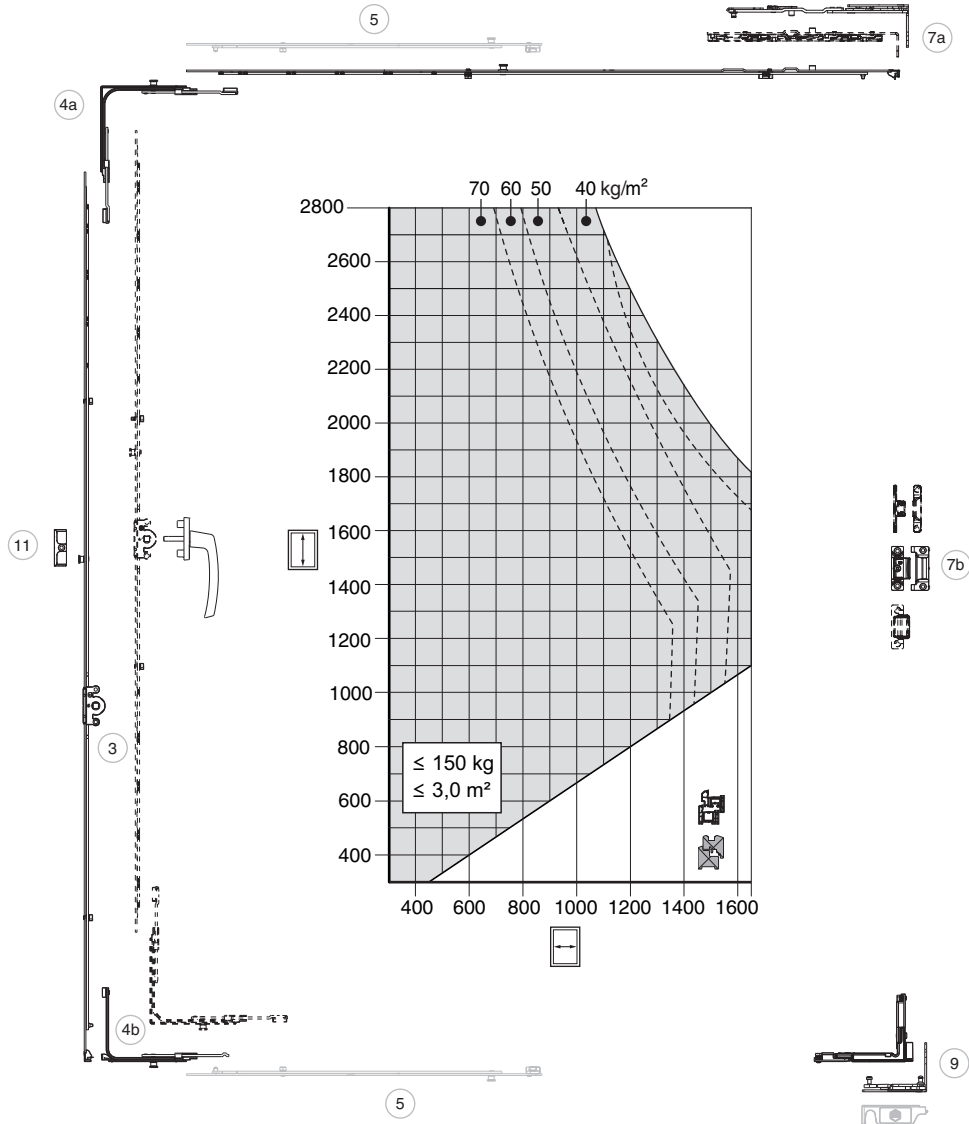
- 3 = Drive gear FHH or VHH (Backset 15 or 6.5)
- 5 = Above 800 mm (PVC) or 1,000 mm (timber); Observe details from profile manufacturer!
- 6b = Stabilizing scissor stay necessary from 1,301 mm (dark shading in application range diagram)
- 9 = Timber or PVC variant
- 11 = Refer to profile data sheets 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.	→150
3b	3.1.1.9 T&T drive gears BS 15 VHH i.S.	→152
4a	4.1.1 Corner elements standard i.S.	→180
4b	4.1.2 Corner elements horizontal i.S.	→180
4c	4.1.3 Corner elements vertical i.S.	→180
5	5.1 Centre locks FHH i.S.	→188
6a	6.6 Scissor stays MULTI POWER	→205
6b	6.11.1 Stabilizing scissor stays	→210
9	9.10 Pivot posts MULTI POWER	→263
11	11 Striker plates	→290



2.4.5.2 1-sashed rectangular turn-only window with pivot post MULTI POWER and corner support MULTI POWER and fixed or croppable turn-only hinge faceplate



≤ 1650 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)
- 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
- 11 = Refer to profile data sheets for striker plates and sash lifters for PVC.

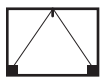
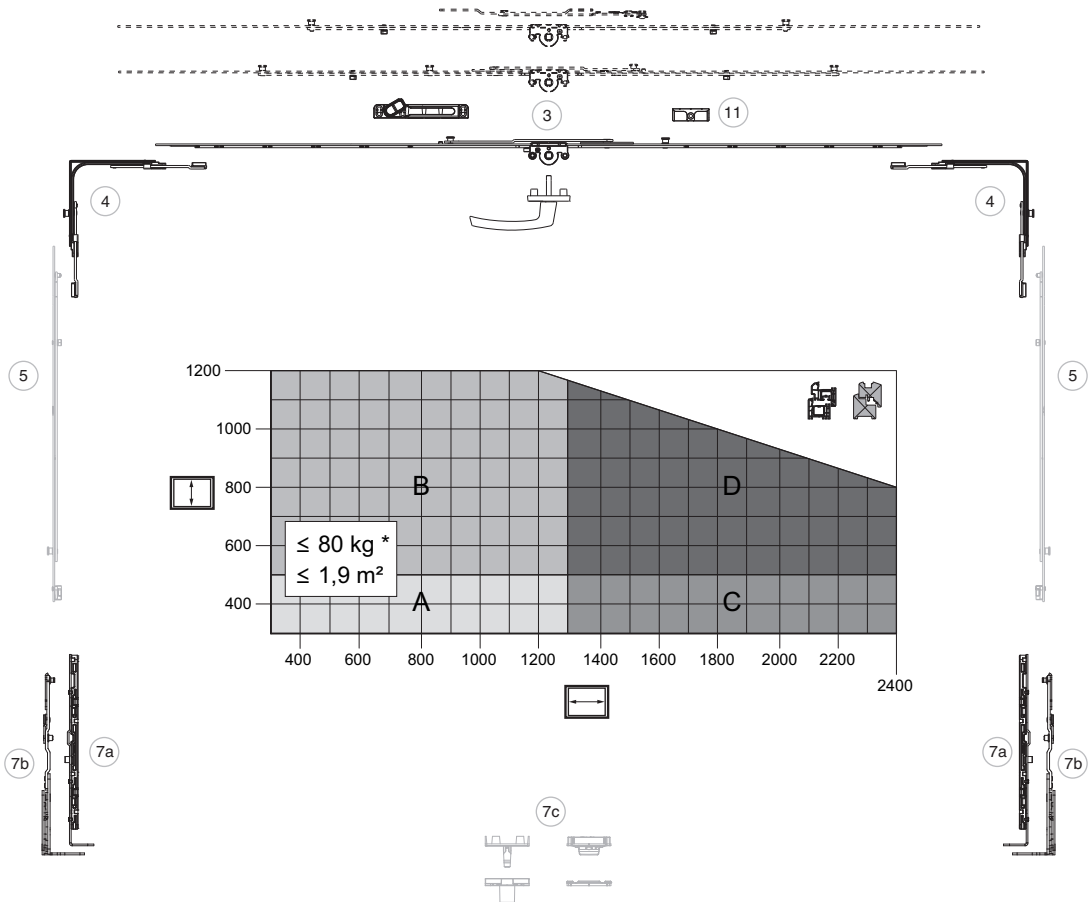


Selection guide		Page
3a	3.2.1.1 Turn-only drive gears BS 15 FHH i.S.	→161
3b	3.2.1.9 Turn-only drive gears BS 15 VHH i.S.	→162
4a	4.1.1 Corner elements standard i.S.	→180
4b	4.1.3 Corner elements vertical i.S.	→180
5	5.1 Centre locks FHH i.S.	→188
7a	7.7.1 Turn-only and tilt-only hinge faceplates / turn-only and tilt-only hinge arms with hinge MULTI POWER	→221
7b	7.10 Compression devices	→226
9	9.10 Pivot posts MULTI POWER	→263
11	11 Striker plates	→290



2.4.5.3 1-sashed rectangular tilt-only window

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



≤ 2400 x 1200 mm

≥ 255 mm

≥ 310 mm

≥ 455 mm

≥ 650 mm

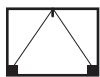
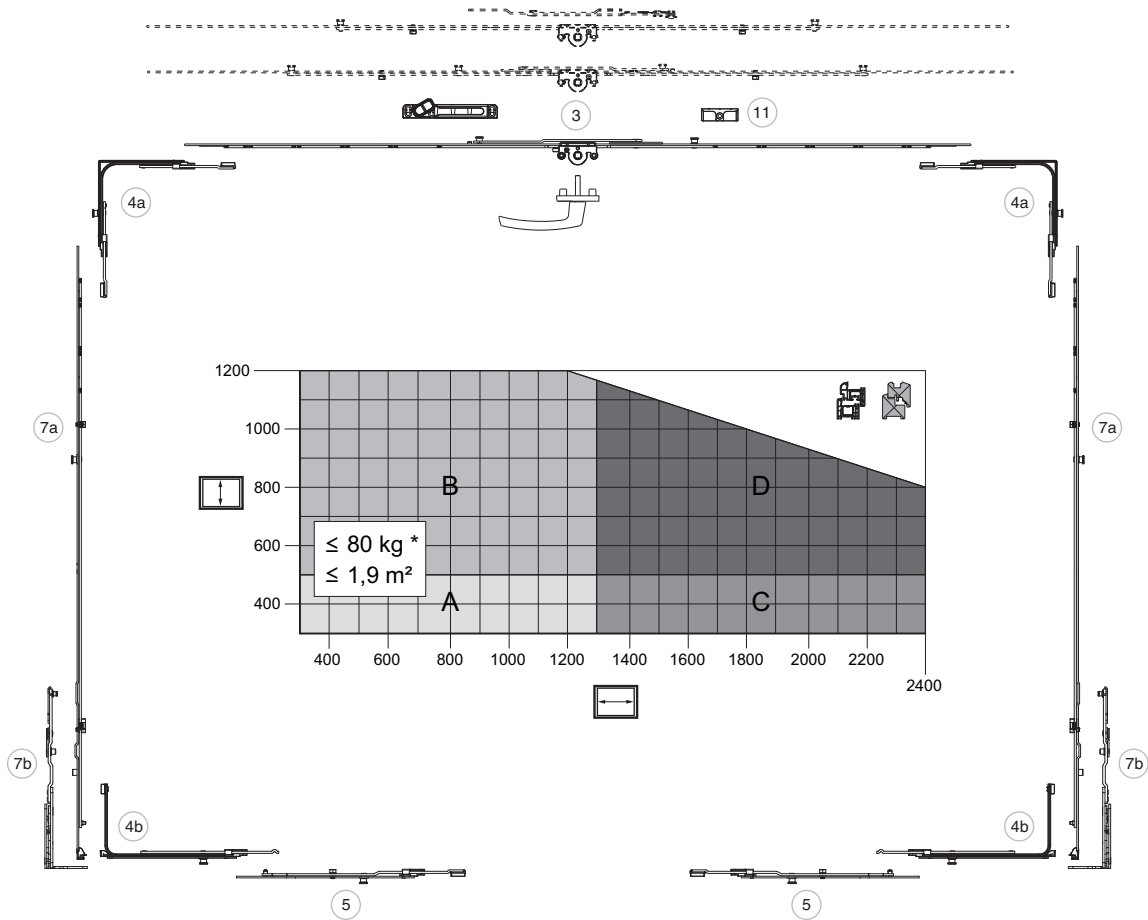
- A = 1 tilt stay + restrictor and cleaning stay size 1
- B = 1 tilt stay + restrictor and cleaning stay size 2
- C = 2 tilt stays + restrictor and cleaning stay size 1
- D = 2 tilt stays + restrictor and cleaning stay size 2
- * = Mandatory installation of restrictor and cleaning stay (guideline FPKF 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!
- 11 = Refer to profile data sheets for striker plates and sash lifters for PVC.



Selection guide			Page
3	3.4	Espagnolettes	→170
4	4.1.1	Corner elements standard i.S.	→180
5	5.1	Centre locks FHH i.S.	→188
7a	7.7.1.1	Turn-only and tilt-only hinge faceplates fixed MULTI POWER	→221
7b	7.7.1.5	Tilt-only hinge arms with hinge timber MULTI POWER	→221
7c	7.10	Compression devices	→226
11	11	Striker plates	→290



**2.4.5.4 1-sashed rectangular tilt-only window
with tilt-only hinge arm MULTI POWER and croppable tilt-only hinge faceplate MULTI POWER**



$\leq 2400 \times 1200 \text{ mm}$

$\geq 401 \text{ mm}$

$\geq 310 \text{ mm}$
 $\geq 650 \text{ mm}$

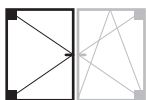
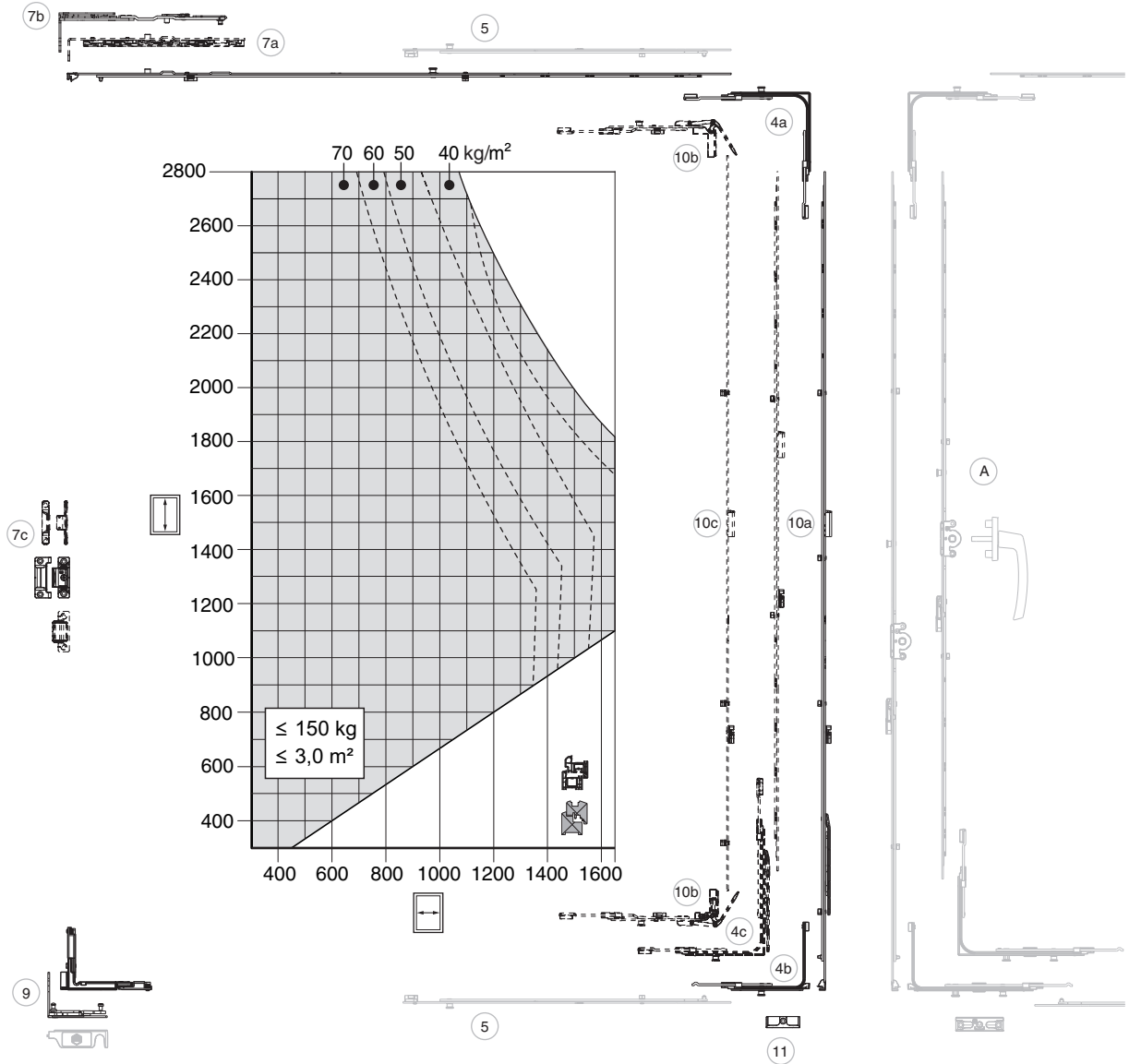
- A = 1 tilt stay + restrictor and cleaning stay size 1
- B = 1 tilt stay + restrictor and cleaning stay size 2
- C = 2 tilt stays + restrictor and cleaning stay size 1
- D = 2 tilt stay + restrictor and cleaning stay size 2
- * = Mandatory installation of restrictor and cleaning stay (guideline FPKF 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	→170
4a	4.1.1	Corner elements standard i.S.	→180
4b	4.1.3	Corner elements vertical i.S.	→180
5	5.9	Faceplate extensions fixed and extendable	→190
7a	7.7.1.2	Croppable turn-only hinge faceplates MULTI POWER	→221
7b	7.7.1.5	Tilt-only hinge arms with hinge timber MULTI POWER	→221
11	11	Striker plates	→290



2.4.5.5 2-sashed rectangular T&T window with pivot post MULTI POWER and corner support MULTI POWER and fixed or croppable turn-only hinge faceplate



≤ 1400 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)

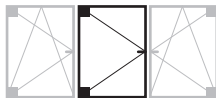
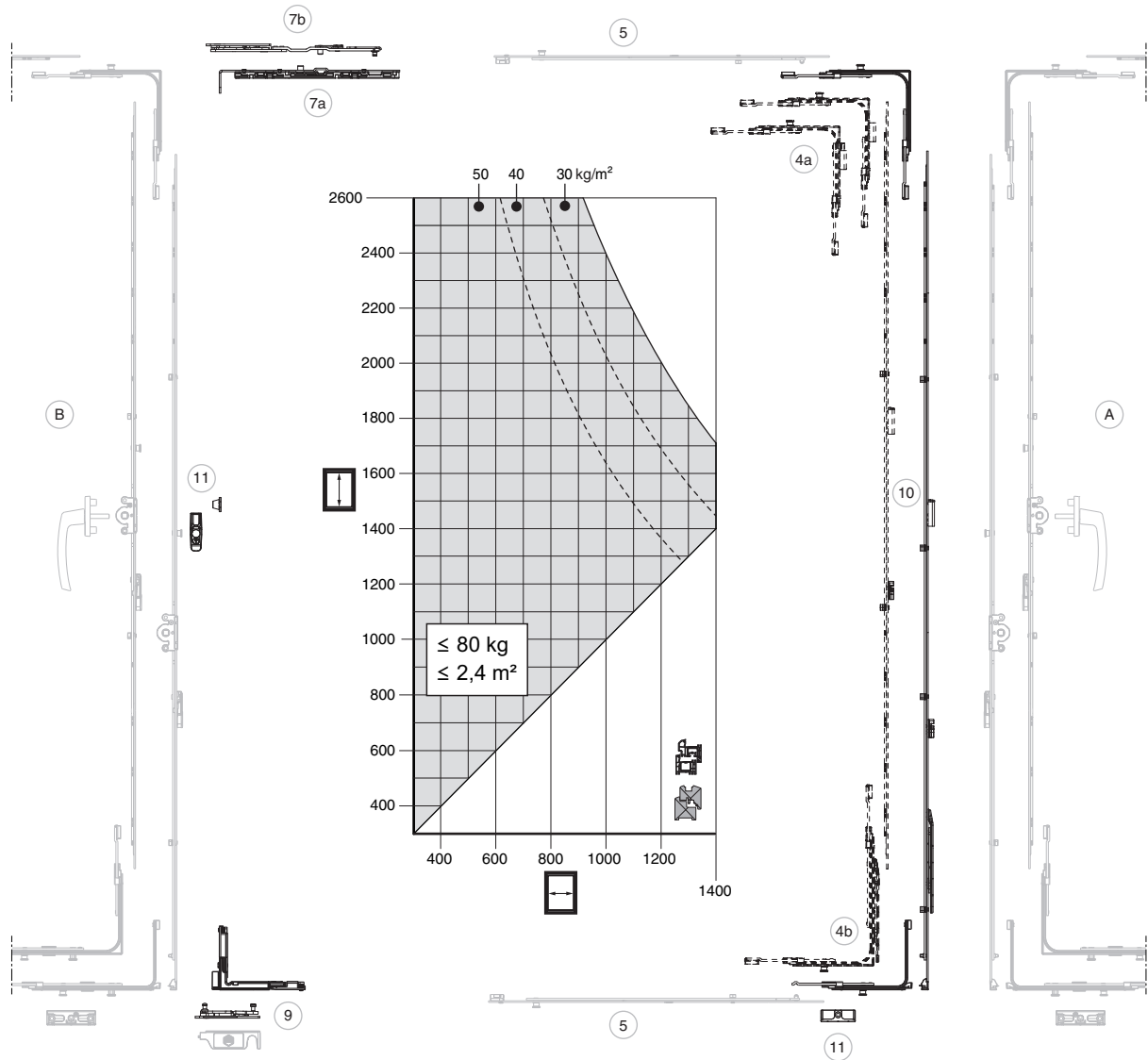
- A = For details refer to 1-sashed turn&tilt window.
- 5 = Above 800 mm (PVC) or 1,000 mm (timber); Observe details from profile manufacturer!
- 7a = Turn-only hinge faceplate fixed or croppable
- 7c = 1 piece 800 - 1,600 mm, 2 pieces 1,601 - 2,400 mm, 3 pieces 2,401 - 2,650 mm; Observe details from 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.	→180
4b	4.1.3 Corner elements vertical i.S.	→180
4c	4.4 Corner elements i.S. for French casement drive gears	→182
5	5.1 Centre locks FHH i.S.	→188
7a	7.7.1.1 Turn-only and tilt-only hinge faceplates fixed MULTI POWER	→221
7b	7.7.1.3 Turn-only hinge arms with hinge timber MULTI POWER	→221
7c	7.10 Compression devices	→226
9	9.10 Pivot posts MULTI POWER	→263
10a	10.2 French casement drive gears	→277
10b	10.3 Horizontal French casement lock	→285
10c	10.4 Single piece door strikers	→285
11	11 Striker plates	→290



2.4.5.6 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.
- 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.

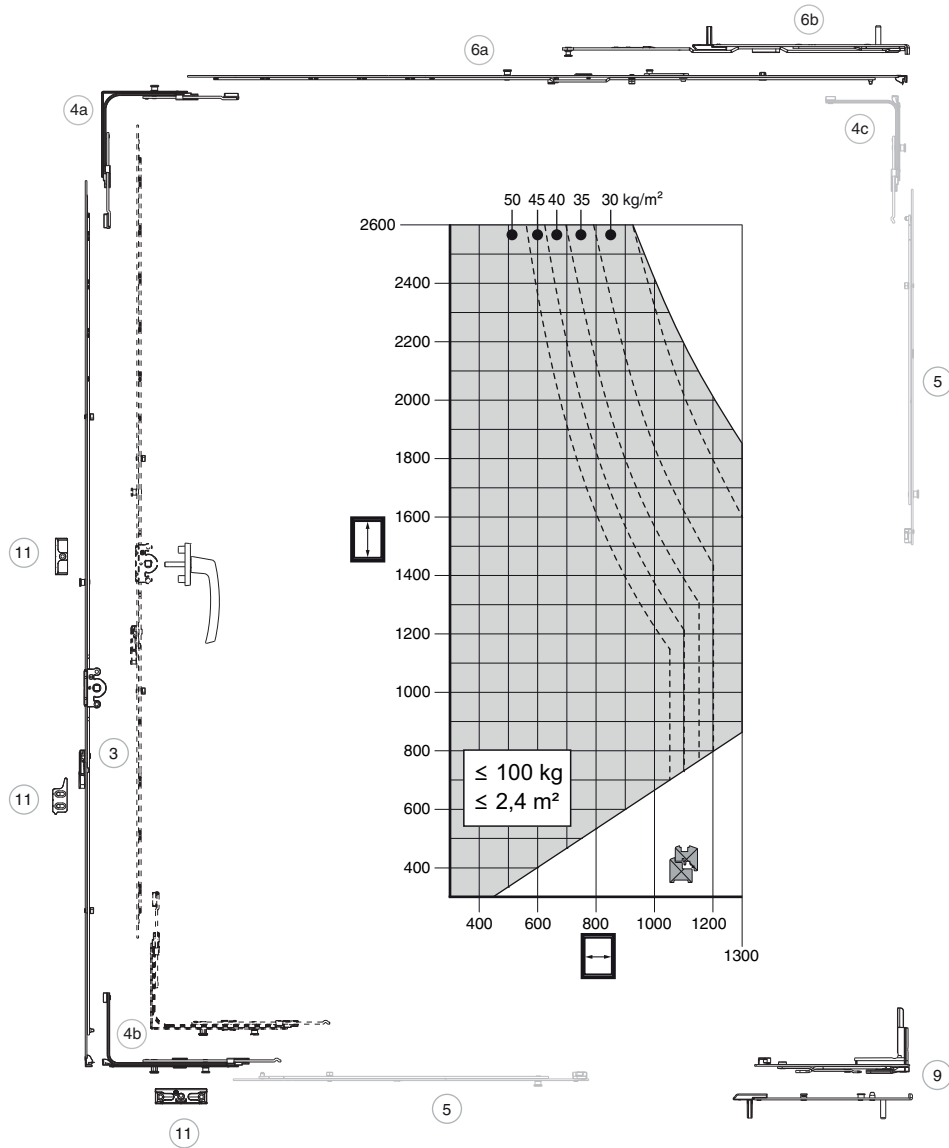


Selection guide		Page
4a	4.1.1 Corner elements standard i.S.	→180
4b	4.1.3 Corner elements vertical i.S.	→180
5	5.1 Centre locks FHH i.S.	→188
7a	7.7.1.1 Turn-only and tilt-only hinge faceplates fixed MULTI POWER	→221
7b	7.7.2 Turn-only hinge arms with hinge for 3-sashed windows MULTI POWER	→222
9	9.10.3 Pivot posts for 3-sashed windows for timber MULTI POWER	→263
10	10.2 French casement drive gears	→277
11	11 Striker plates	→290



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)

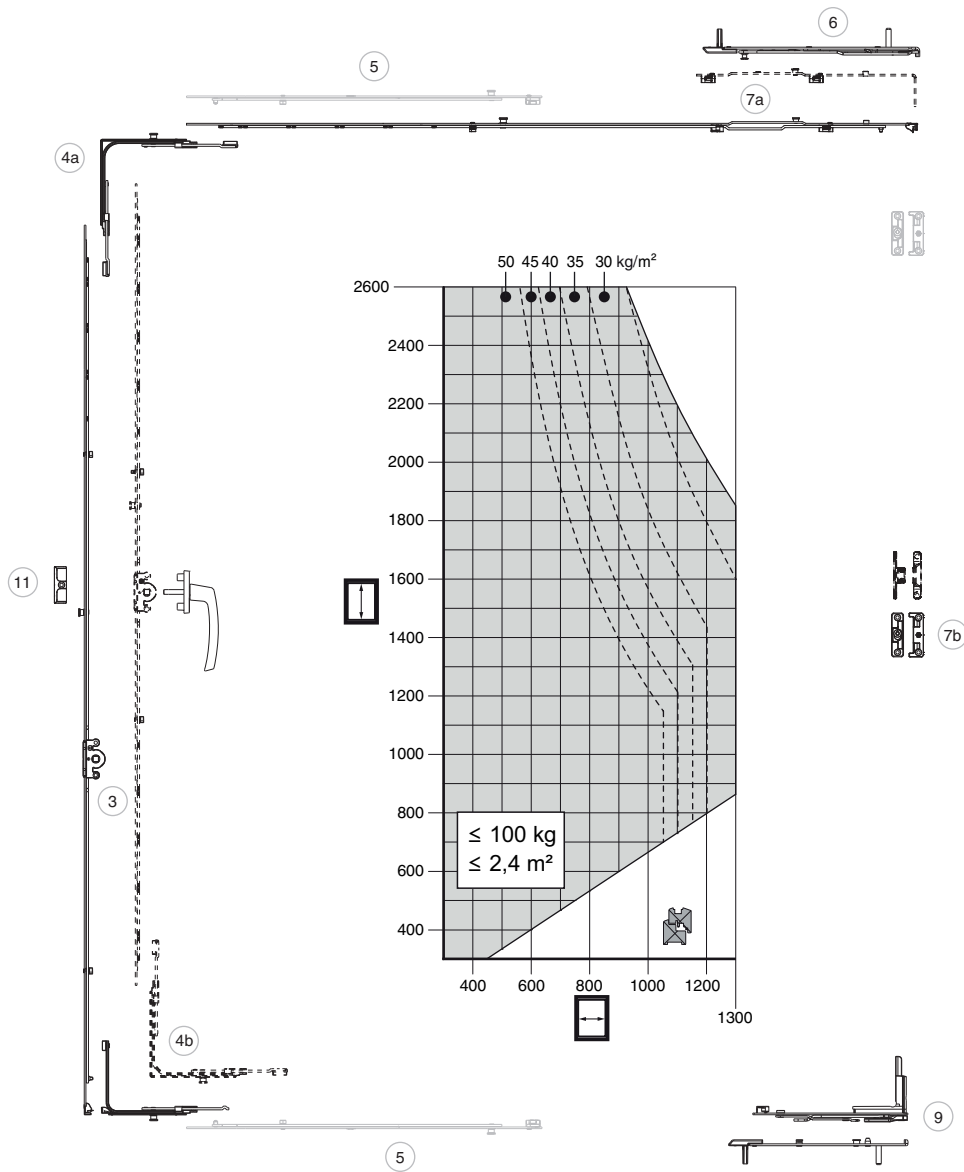
5 = Above 800 mm (PVC) or 1,000 mm (timber); Observe details from profile manufacturer!



Selection guide		Page
3a	3.1.1.1 T&T drive gears BS 15 FHH i.S.	→150
3b	3.1.1.9 T&T drive gears BS 15 VHH i.S.	→152
4a	4.1.1 Corner elements standard i.S.	→180
4b	4.1.2 Corner elements horizontal i.S.	→180
4c	4.1.3 Corner elements vertical i.S.	→180
5	5.1 Centre locks FHH i.S.	→188
6a	6.5.1 T&T/tilt-first scissor stay faceplates INVISIBLE	→203
6b	6.5.2 T&T Scissor stay arms with hinge INVISIBLE	→203
9	9.9 Pivot posts INVISIBLE	→262
11	11 Striker plates	→290



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



$\leq 1300 \times 2600$ mm



≥ 490 mm



≥ 385 mm



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



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

3 = Drive gear FHH or VHH (Backset 15 or 6.5)

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

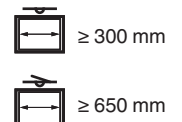
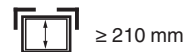
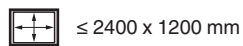
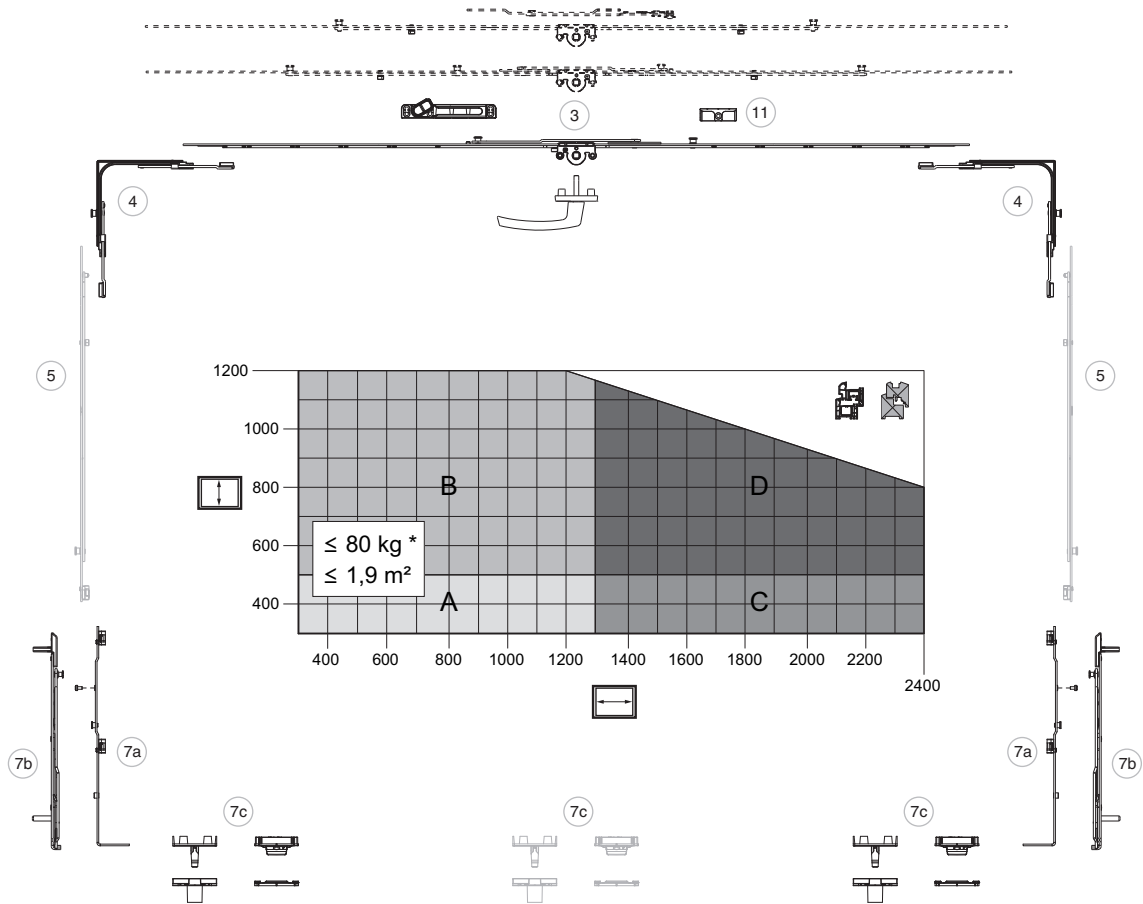
7b = 1 piece 800 - 1,600 mm, 2 pieces 1,601 - 2,400 mm, 3 pieces 2,401 - 2,650 mm; Observe details from profile manufacturer; Mandatory installation of additional compression device at top bearing area (max. 150 mm)!



Selection guide		Page
3a	3.2.1.1 Turn-only drive gears BS 15 FHH i.S.	→161
3b	3.2.1.9 Turn-only drive gears BS 15 VHH i.S.	→162
4a	4.1.1 Corner elements standard i.S.	→180
4b	4.1.3 Corner elements vertical i.S.	→180
5	5.1 Centre locks FHH i.S.	→188
6	6.5.2 T&T Scissor stay arms with hinge INVISIBLE	→203
7a	7.6 Tilt-only and turn-only hinges - sash part INVISIBLE	→220
7b	7.10 Compression devices	→226
9	9.9 Pivot posts INVISIBLE	→262
11	11 Striker plates	→290



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



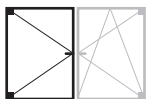
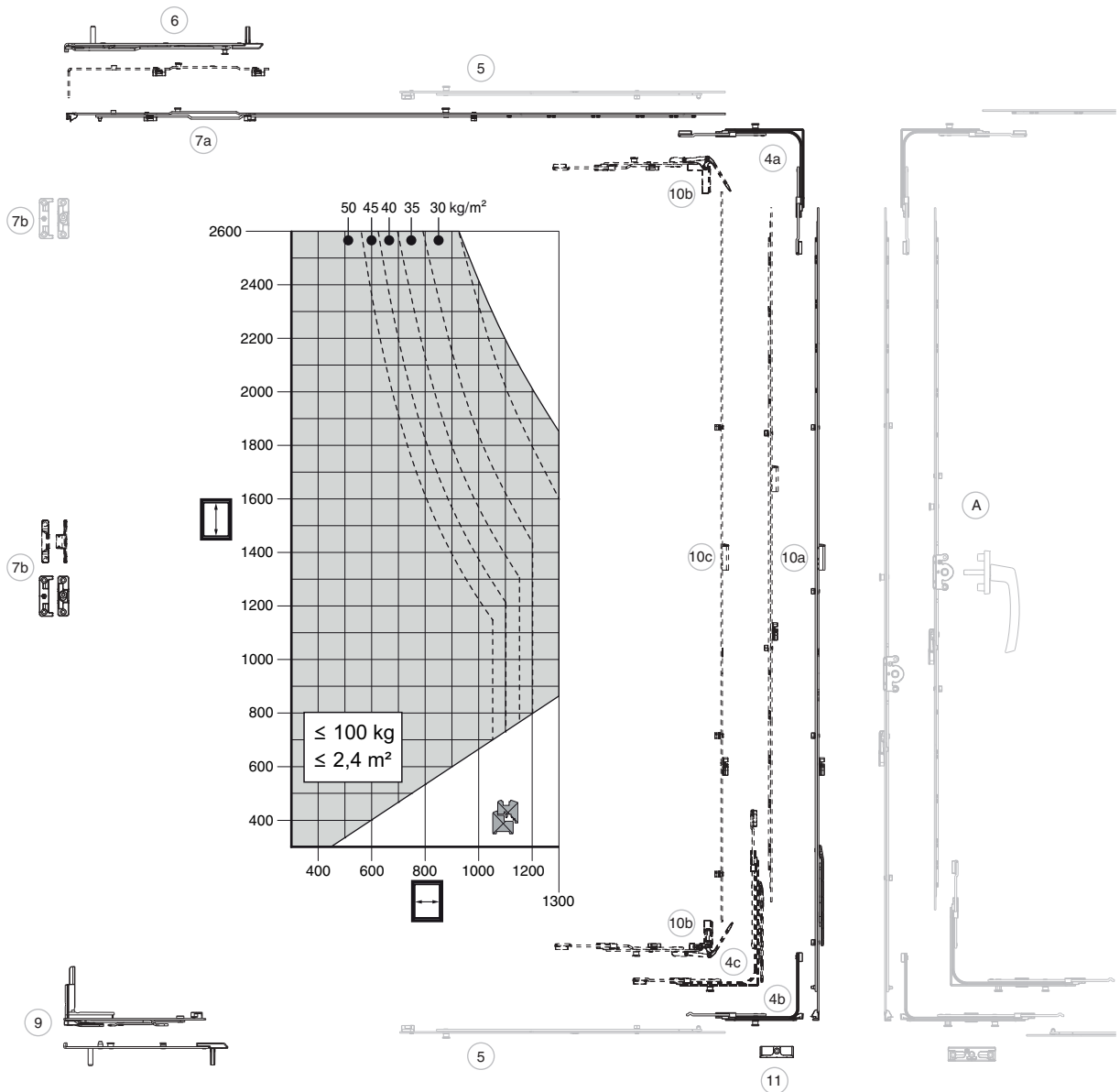
- A = 1 tilt stay + restrictor and cleaning stay size 1
- B = 1 tilt stay + restrictor and cleaning stay size 2
- C = 2 tilt stays + restrictor and cleaning stay size 1
- D = 2 tilt stay + restrictor and cleaning stay size 2
- * = Mandatory installation of restrictor and cleaning stay (guideline FPKF 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	→170
4	4.1.1	Corner elements standard i.S.	→180
5	5.1	Centre locks FHH i.S.	→188
7a	7.6.1	Turn-only and tilt-only hinge faceplates INVISIBLE	→220
7b	7.6.3	Basic pack tilt-only VV INVISIBLE	→220
7c	7.10.3	Concealed compression devices adjustable for timber without Eurogroove	→227
11	11	Striker plates	→290



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)

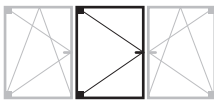
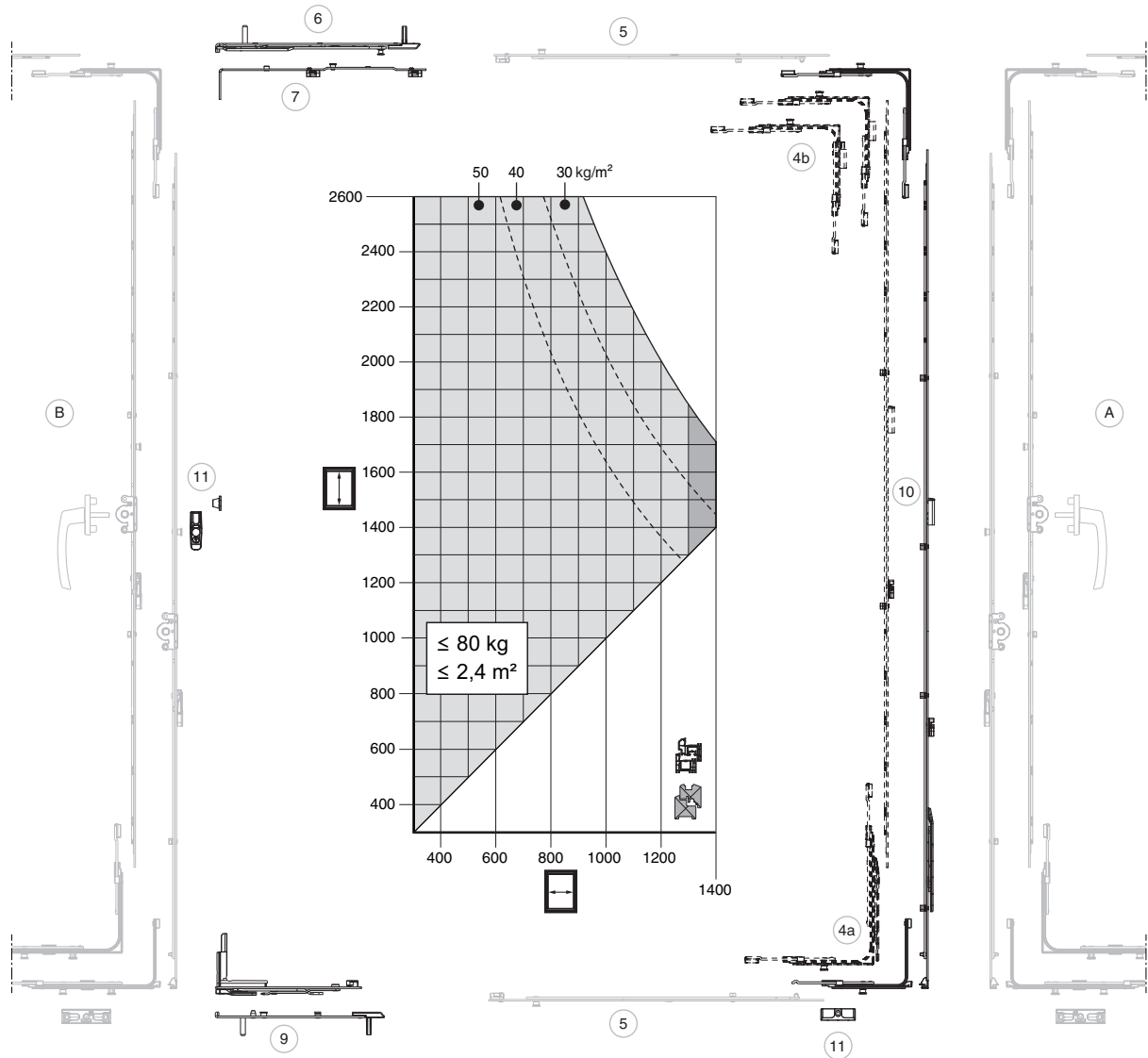
- A = For details refer to 1-sashed turn&tilt window.
- 5 = Above 800 mm (PVC) or 1,000 mm (timber); Observe details from profile manufacturer!
- 7b = 1 piece 800 - 1,600 mm, 2 pieces 1,601 - 2,400 mm, 3 pieces 2,401 - 2,650 mm; Observe details from profile manufacturer!
- 10a = French casement drive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



Selection guide		Page
4a	4.1.1 Corner elements standard i.S.	→180
4b	4.1.3 Corner elements vertical i.S.	→180
4c	4.4 Corner elements i.S. for French casement drive gears	→182
5	5.1 Centre locks FHH i.S.	→188
6	6.5.2 T&T Scissor stay arms with hinge INVISIBLE	→203
7a	7.6 Tilt-only and turn-only hinges - sash part INVISIBLE	→220
7b	7.10.3 Concealed compression devices adjustable for timber without Eurogroove	→227
9	9.9 Pivot posts INVISIBLE	→262
10a	10.2 French casement drive gears	→277
10b	10.3 Horizontal French casement lock	→285
10c	10.4 Single piece door strikers	→285
11	11 Striker plates	→290



2.4.6.5 3-sashed rectangular turn-only window with pivot post INVISIBLE and corner support INVISIBLE



≤ 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!
- 10 = French casement drive gear FHH or VHH
- 11 = Refer to profile data sheets for striker plates and sash lifters for PVC.

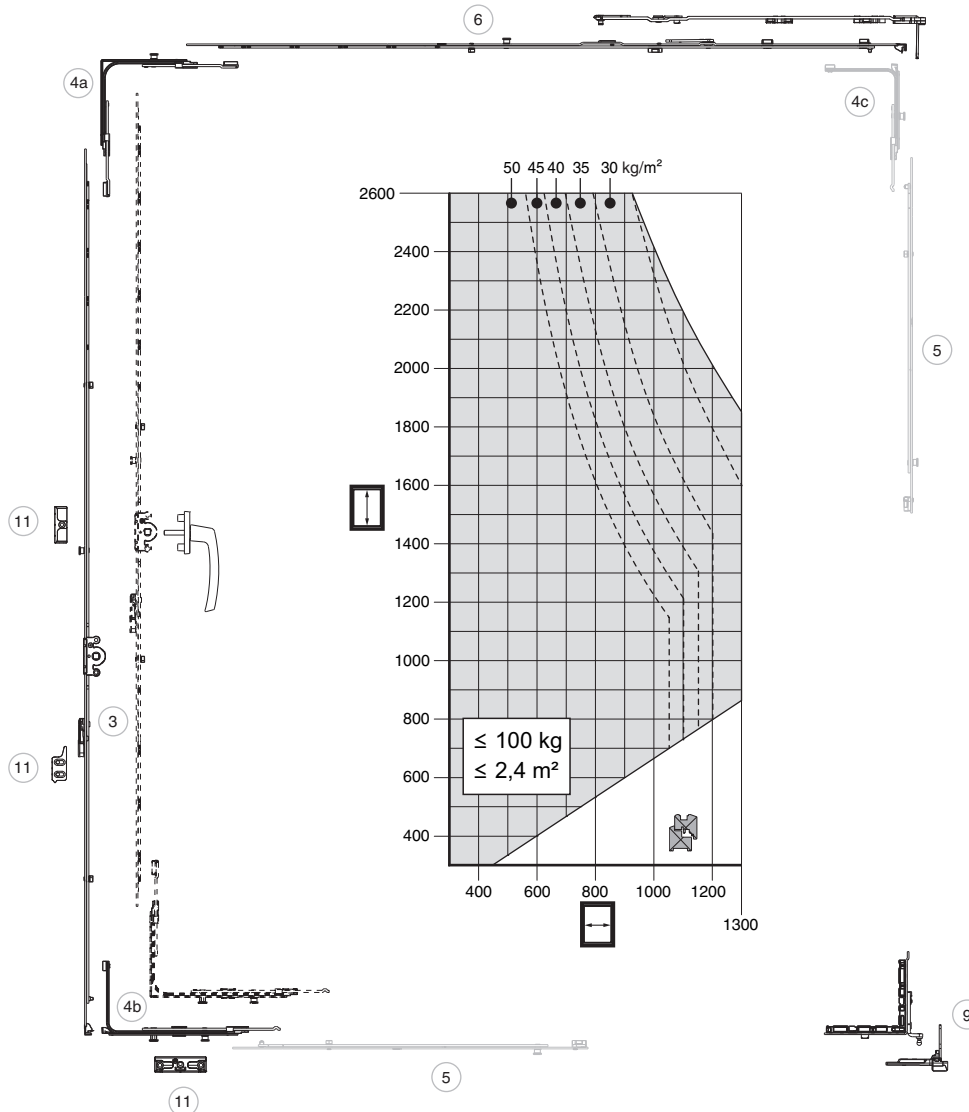


Selection guide			Page
4a	4.1.3	Corner elements vertical i.S.	→180
4b	4.4	Corner elements i.S. for French casement drive gears	→182
5	5.1	Centre locks FHH i.S.	→188
6	6.5.2	T&T Scissor stay arms with hinge INVISIBLE	→203
7	7.6.1	Turn-only and tilt-only hinge faceplates INVISIBLE	→220
9	9.9	Pivot posts INVISIBLE	→262
10	10.2	French casement drive gears	→277
11	11	Striker plates	→290



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)

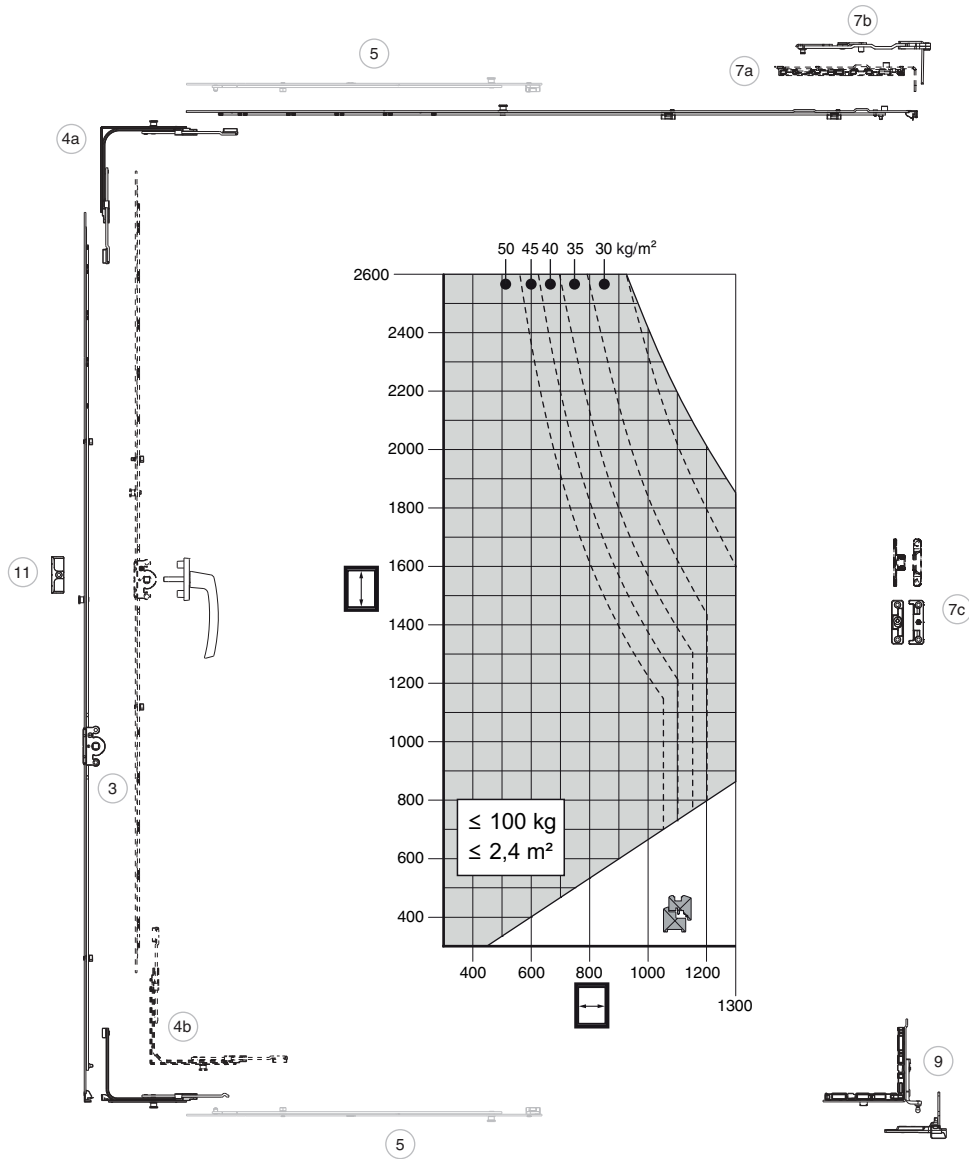
5 = Above 800 mm (PVC) or 1,000 mm (timber); Observe details from profile manufacturer!



Selection guide		Page
3a	3.1.1.1 T&T drive gears BS 15 FHH i.S.	→150
3b	3.1.1.9 T&T drive gears BS 15 VHH i.S.	→152
4a	4.1.1 Corner elements standard i.S.	→180
4b	4.1.2 Corner elements horizontal i.S.	→180
4c	4.1.3 Corner elements vertical i.S.	→180
5	5.1 Centre locks FHH i.S.	→188
6	6.4 Scissor stays TV	→202
9	9.8 Pivot posts TV	→261
11	11 Striker plates	→290



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)

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

7a = Turn-only hinge faceplate fixed or croppable

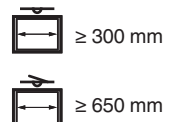
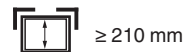
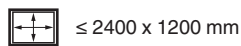
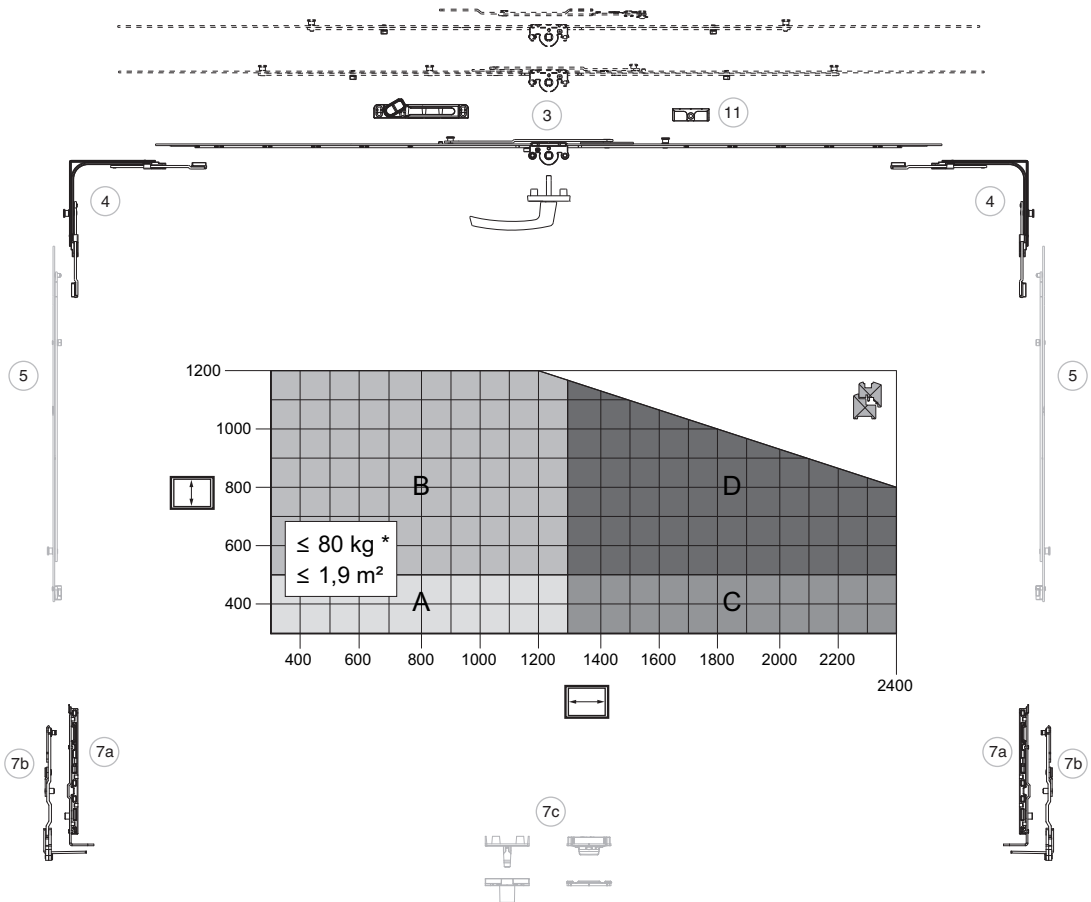
7c = 1 piece 800 - 1,600 mm, 2 pieces 1,601 - 2,400 mm, 3 pieces 2,401 - 2,650 mm; Observe details from profile manufacturer!



Selection guide		Page
3a	3.2.1.1 Turn-only drive gears BS 15 FHH i.S.	→161
3b	3.2.1.9 Turn-only drive gears BS 15 VHH i.S.	→162
4a	4.1.1 Corner elements standard i.S.	→180
4b	4.1.3 Corner elements vertical i.S.	→180
5	5.1 Centre locks FHH i.S.	→188
7a	7.5.1 Turn-only hinge faceplates TV with packer	→219
7b	7.5.3 Turn-only hinges - frame part, for turn-only hinge faceplates TV timber	→219
7c	7.10 Compression devices	→226
9	9.8 Pivot posts TV	→261
11	11 Striker plates	→290



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



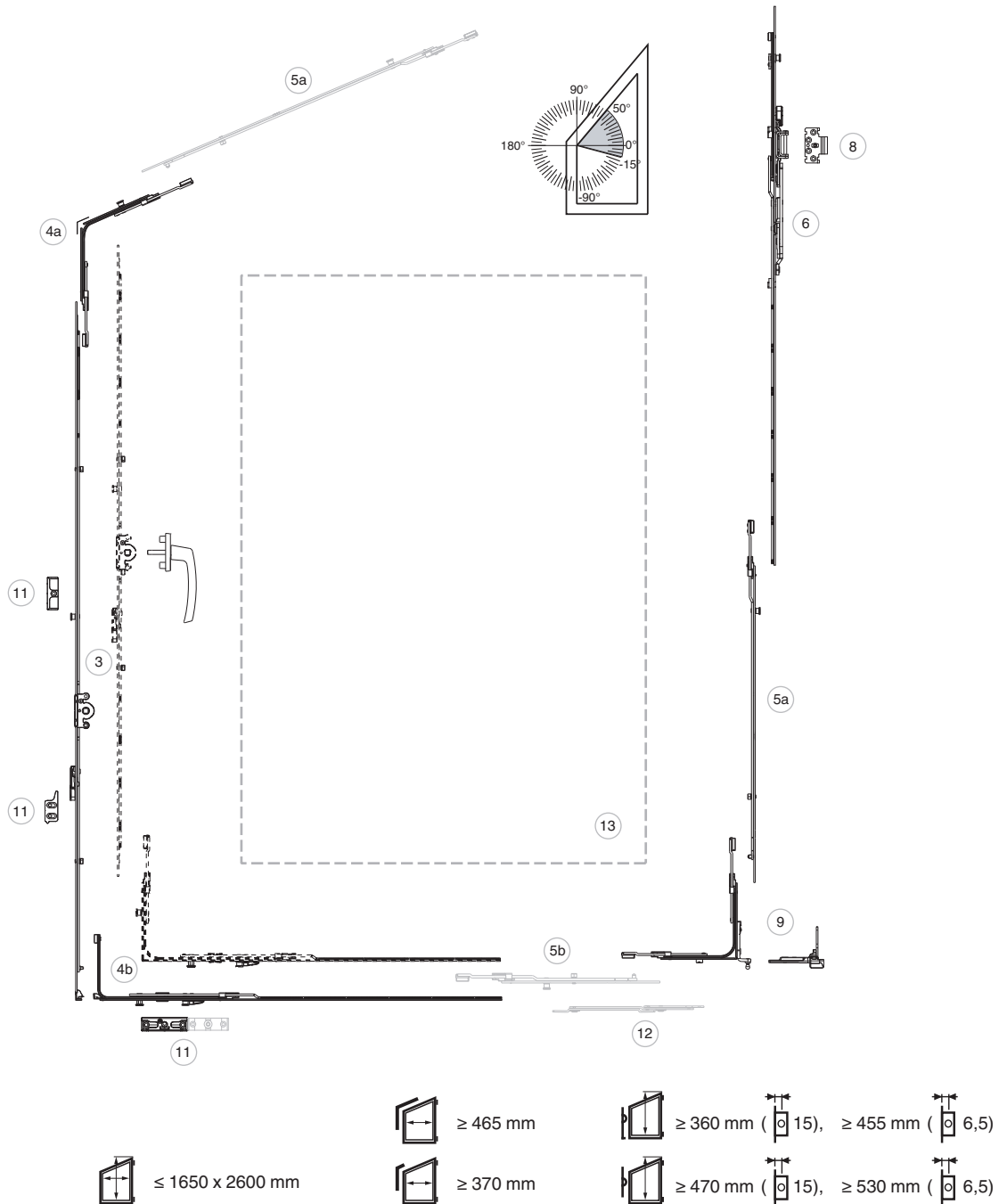
- A = 1 tilt stay + restrictor and cleaning stay size 1
- B = 1 tilt stay + restrictor and cleaning stay size 2
- C = 2 tilt stays + restrictor and cleaning stay size 1
- D = 2 tilt stays + restrictor and cleaning stay size 2
- * = Mandatory installation of restrictor and cleaning stay (guideline FPKF 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	→170
4	4.1.1	Corner elements standard i.S.	→180
5	5.1	Centre locks FHH i.S.	→188
7a	7.5.1	Turn-only hinge faceplates TV with packer	→219
7b	7.5.3	Turn-only hinges - frame part, for turn-only hinge faceplates TV timber	→219
7c	7.10	Compression devices	→226
11	11	Striker plates	→290



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



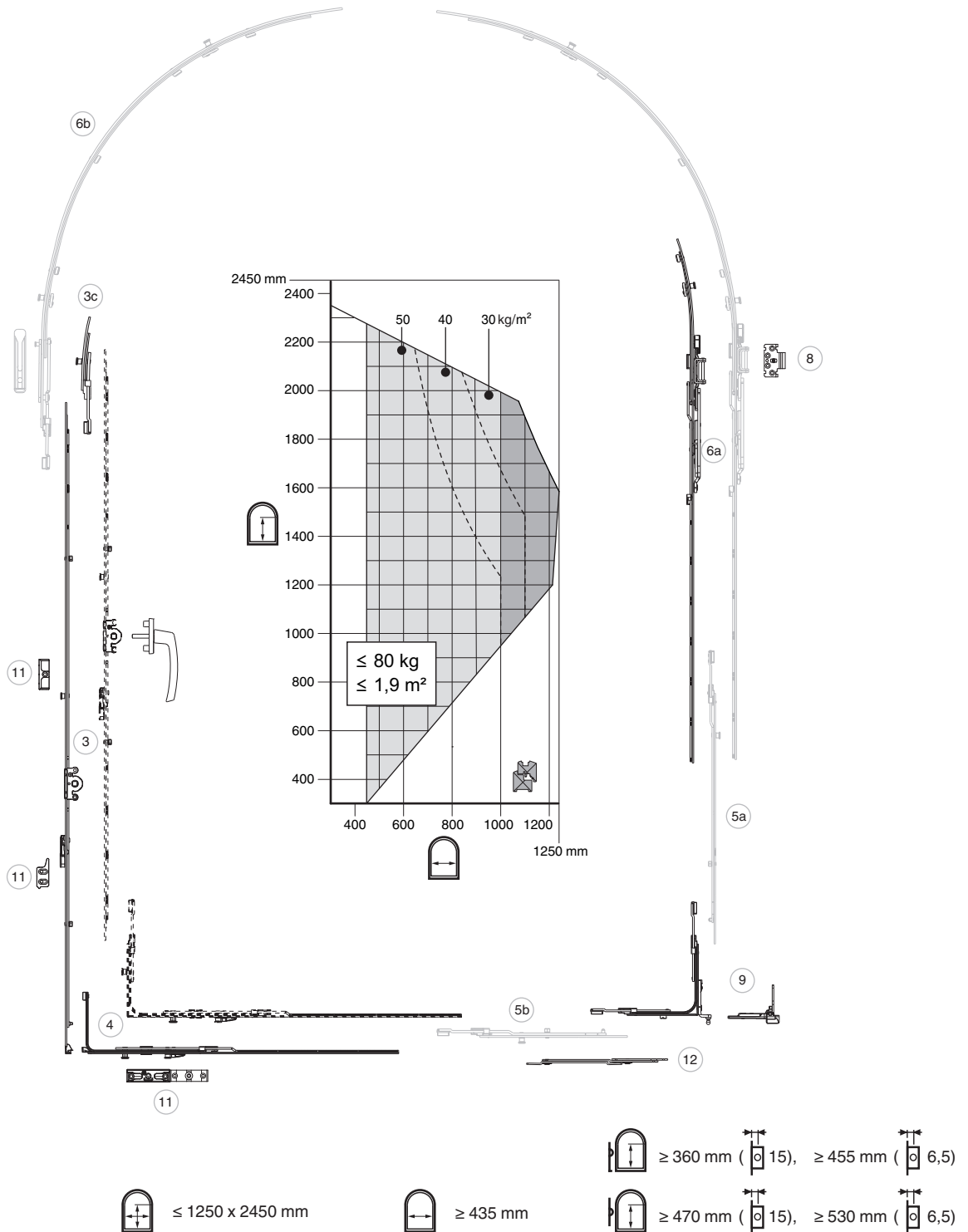
- 3 = Drive gear FHH or VHH (Backset 15 or 6.5)
- 5a = Above SRH 800 mm; Observe details from profile manufacturer!
- 5b = Required above SRW 670 mm.
- 13 = Refer to application diagrams for angled windows.



Selection guide		Page
3a	3.1.1.1 T&T drive gears BS 15 FHH i.S.	→150
3b	3.1.1.9 T&T drive gears BS 15 VHH i.S.	→152
4a	4.6 Corner elements i.S. for angled windows	→182
4b	4.7 Corner elements i.S. for half round windows	→183
5a	5.2 Centre locks extendable i.S.	→188
5b	5.9 Faceplate extensions fixed and extendable	→190
6	6.1.11 Rebated scissor stays i.S. for angled windows	→197
8	8 Scissor stay hinges	→232
9	9.8 Pivot posts TV	→261
11	11 Striker plates	→290
12	12.12 Independent turn limiting restrictors	→312



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



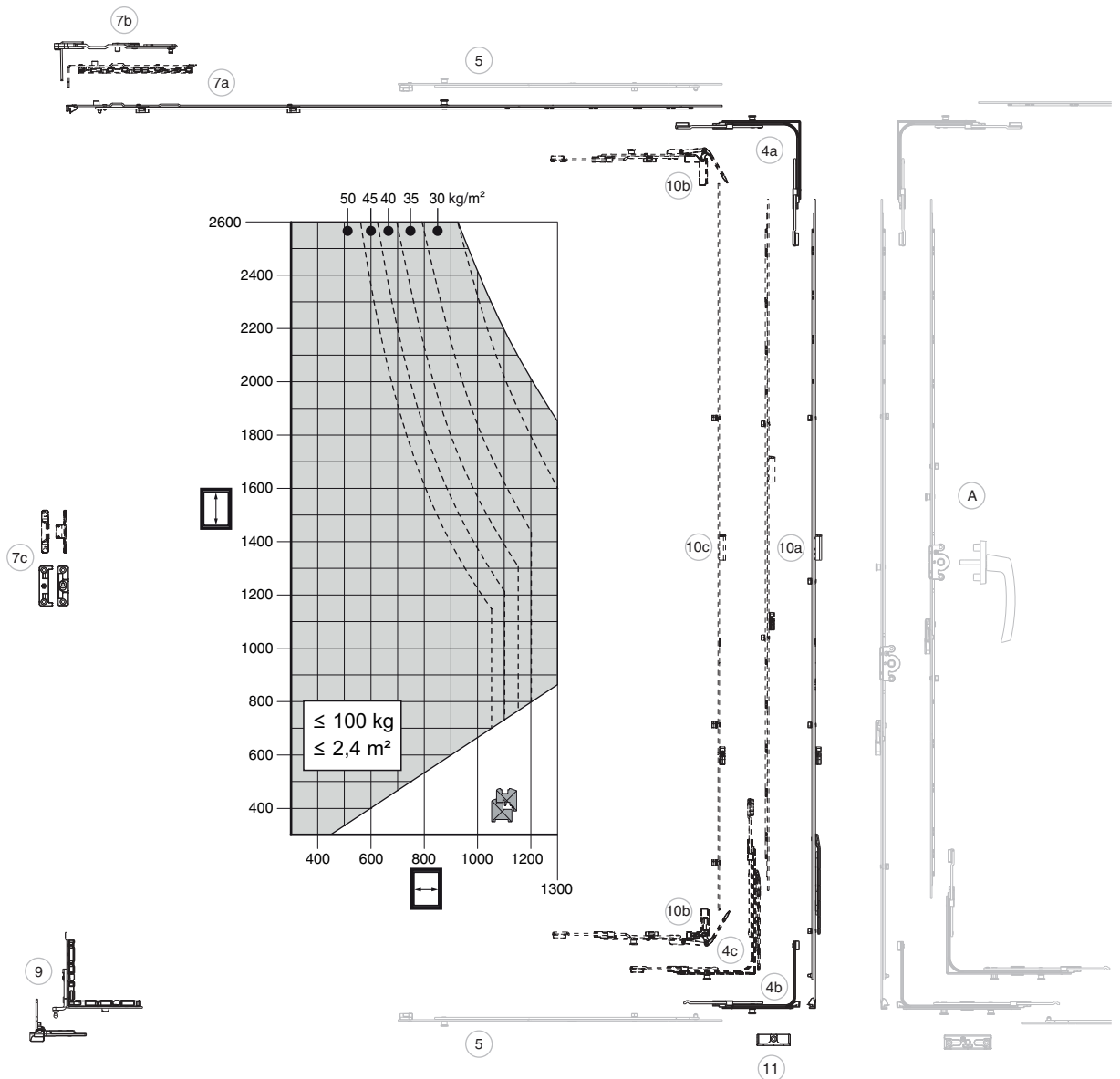
- 3 = Drive gear FHH or VHH (Backset 15 or 6.5)
- 5a = Above 800 mm (PVC) or 1,000 mm (timber); Observe details from profile manufacturer!
- 5b = Required above SRW 670 mm.
- 6a = Use above SRW 631 mm!
- 6b = Stabilizing scissor stay necessary from 1,001 mm (dark shading in application range diagram)



Selection guide		Page
3a	3.1.1.1 T&T drive gears BS 15 FHH i.S.	→150
3b	3.1.1.9 T&T drive gears BS 15 VHH i.S.	→152
3c	3.5.3 End pieces top for half round windows	→176
4	4.7 Corner elements i.S. for half round windows	→183
5a	5.2 Centre locks extendable i.S.	→188
5b	5.9 Faceplate extensions fixed and extendable	→190
6a	6.4.2 Rebated scissor stays TV i.S. for half round windows	→202
6b	6.11.4 Stabilizing scissor stays for half round windows	→210
8	8.9 Scissor stay hinges TV for half round windows	→238
9	9.8 Pivot posts TV	→261
11	11 Striker plates	→290
12	12.12 Independent turn limiting restrictors	→312



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)

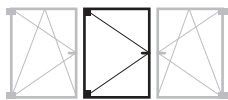
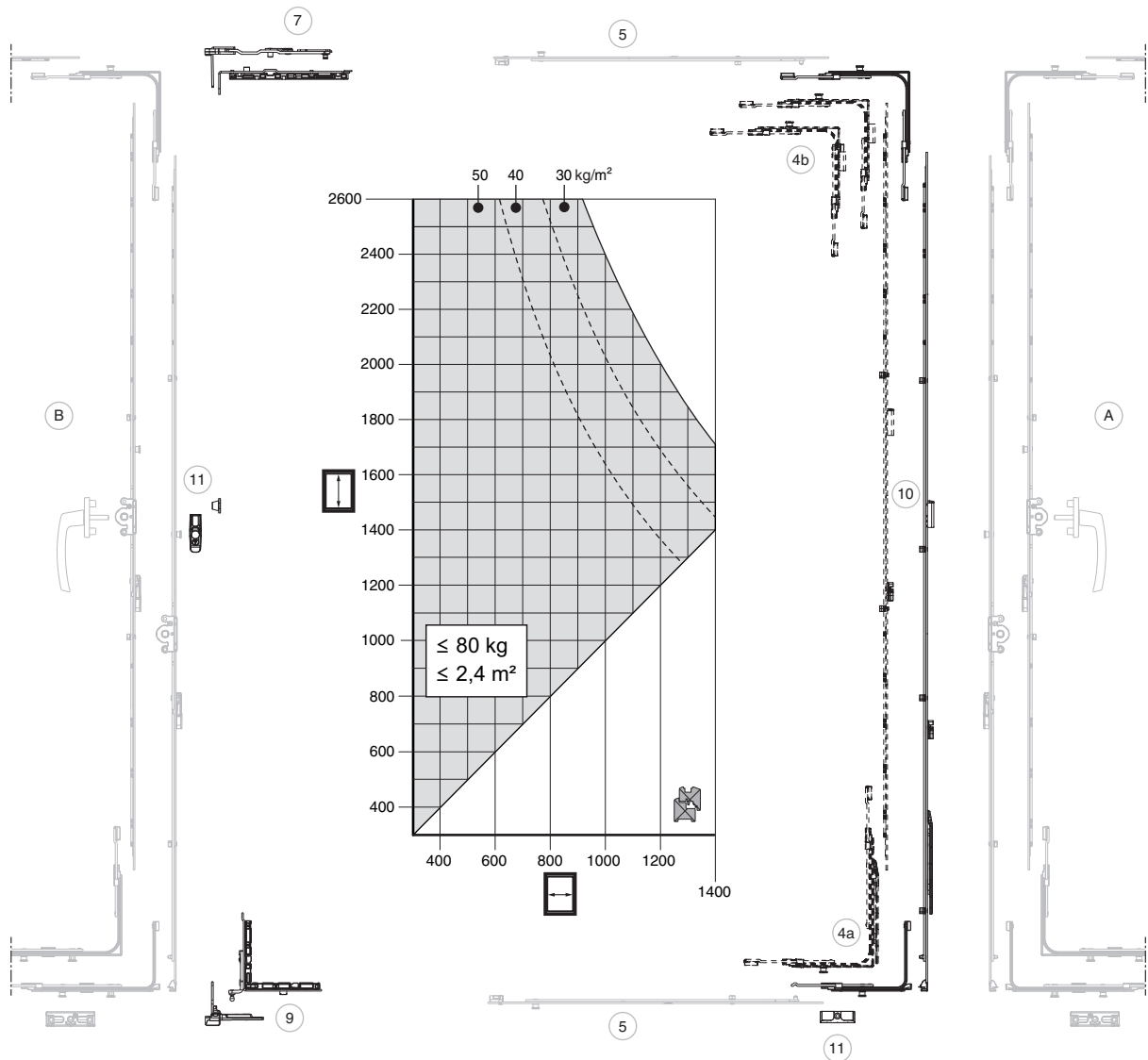
- A = For details refer to 1-sashed turn&tilt window.
- 5 = Above 800 mm (PVC) or 1,000 mm (timber); Observe details from profile manufacturer!
- 7c = 1 piece 800 - 1,600 mm, 2 pieces 1,601 - 2,400 mm, 3 pieces 2,401 - 2,650 mm; Observe details from profile manufacturer!
- 10a = French casement drive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



Selection guide			Page
4a	4.1.1	Corner elements standard i.S.	→180
4b	4.1.3	Corner elements vertical i.S.	→180
4c	4.4	Corner elements i.S. for French casement drive gears	→182
5	5.1	Centre locks FHH i.S.	→188
7a	7.5.1	Turn-only hinge faceplates TV with packer	→219
7b	7.5.3	Turn-only hinges - frame part, for turn-only hinge faceplates TV timber	→219
7c	7.10	Compression devices	→226
9	9.8	Pivot posts TV	→261
10a	10.2	French casement drive gears	→277
10b	10.3	Horizontal French casement lock	→285
10c	10.4	Single piece door strikers	→285
11	11	Striker plates	→290



2.4.7.7 3-sashed rectangular turn-only window with pivot post TV and corner support TV



≤ 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!
- 10 = French casement drive gear FHH or VHH

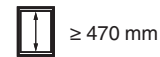
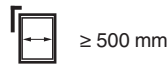
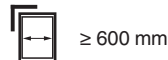
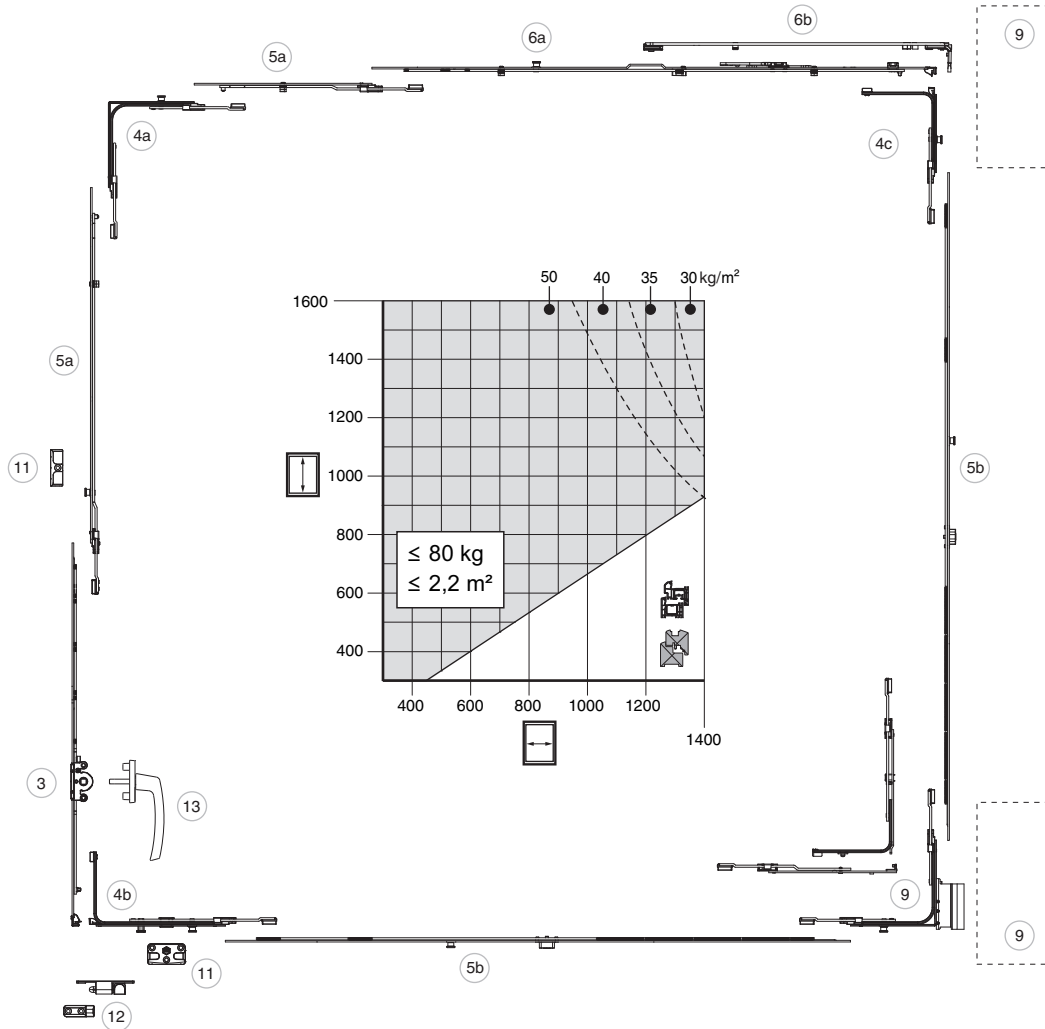


Selection guide			Page
4a	4.1.3	Corner elements vertical i.S.	→180
4b	4.4	Corner elements i.S. for French casement drive gears	→182
5	5.1	Centre locks FHH i.S.	→188
7	7.5	Turn-only hinges TV - sash part	→219
9	9.8	Pivot posts TV	→261
10	10.2	French casement drive gears	→277
11	11	Striker plates	→290



2.4.8 COMFORT

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



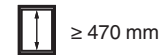
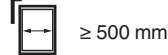
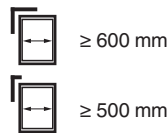
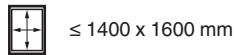
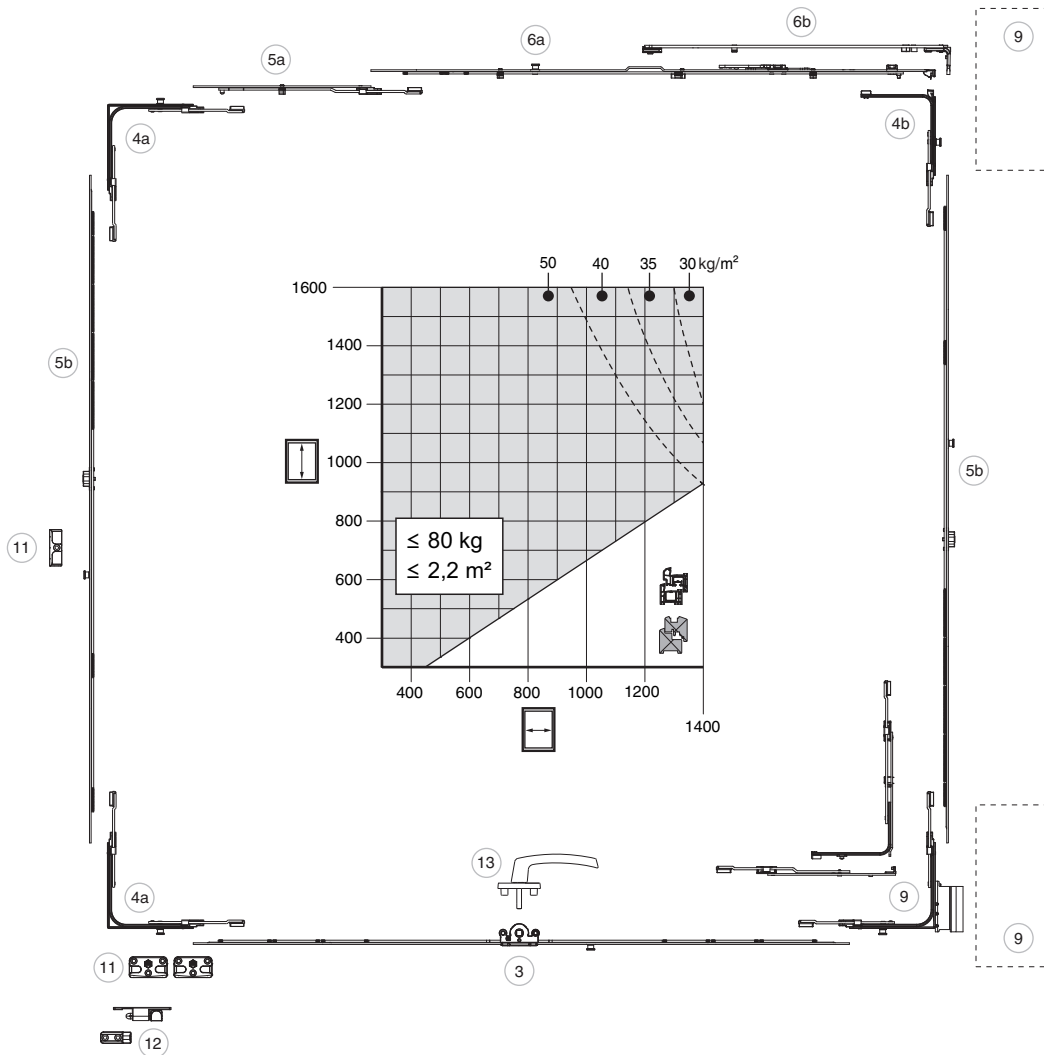
- 5a = Faceplate extension or centre lock
- 5b = Width connector SB (refer to RAIL-SYSTEMS catalogue).
- 9 = Refer to matrix pivot posts PVC and timber for possible bearing types.
- 11 = Refer to profile data sheets for striker plates and sash lifters for PVC.
- 12 = Mandatory installation of turn lock.
- 13 = SKB handle (refer to RAIL-SYSTEMS catalogue).



Selection guide		Page
3	3.1.1.5 T&T drive gears BS 15 FHH i.S. with offset handle position	→151
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4b	4.1.2 Corner elements horizontal i.S.	→180
4c	4.1.3 Corner elements vertical i.S.	→180
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5b	5.13 Width connectors SKB-S/SE	→191
6a	6.7.1 Scissor stay faceplates for comfort scissor stays	→208
6b	6.7.2 Rebated scissor stay arms for comfort scissor stays	→208
9	9.1 Matrix for pivot posts and corner supports	→244
11	11 Striker plates	→290
12	12.3 Self-catching turn locks	→308



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



- 5a = Faceplate extension or centre lock
- 5b = Width connector SB (refer to RAIL-SYSTEMS catalogue).
- 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.
- 13 = SKB handle (refer to RAIL-SYSTEMS catalogue).

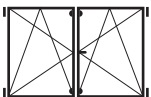
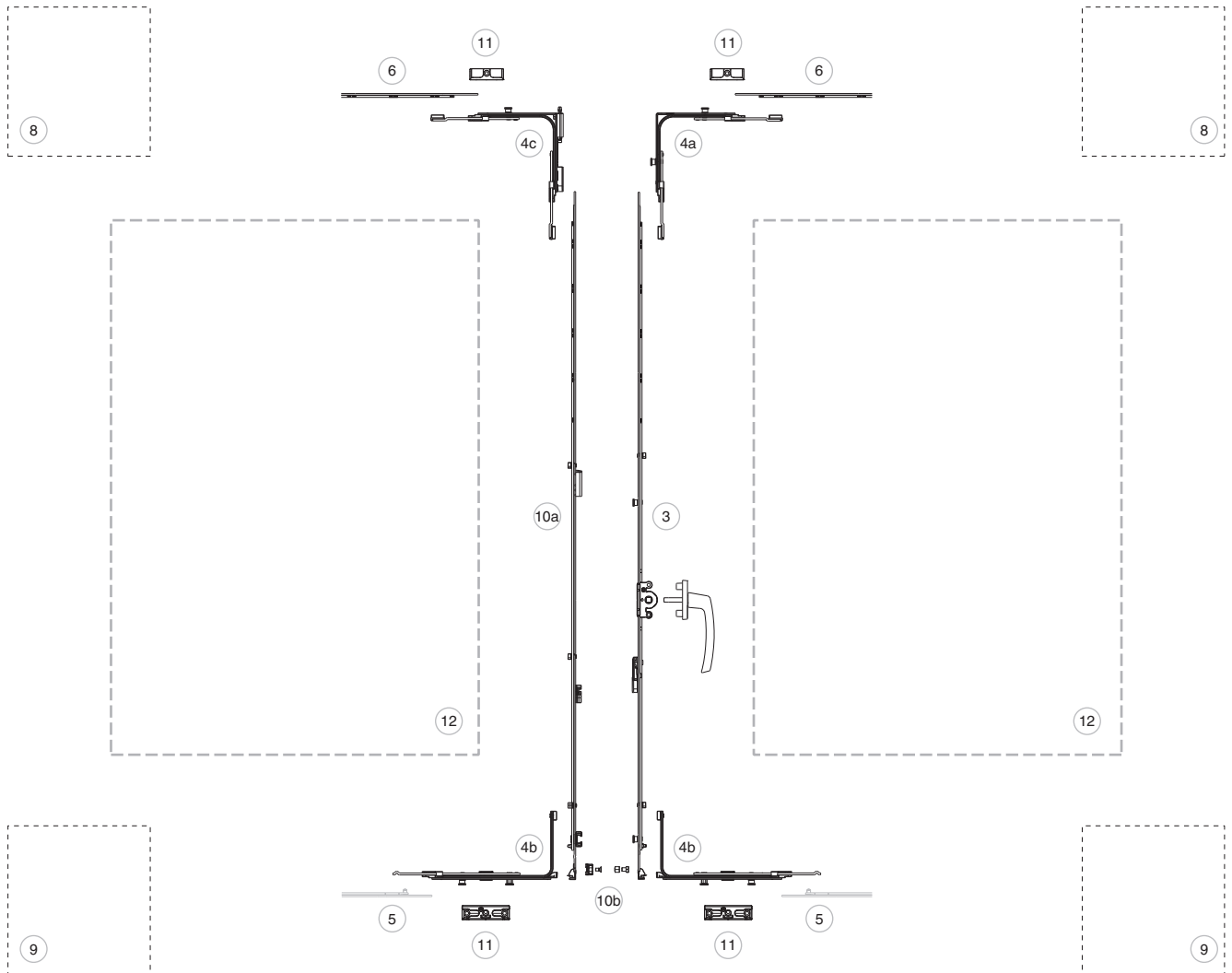


Selection guide		Page
3	3.1.1.9 T&T drive gears BS 15 VHH i.S.	→152
4a	4.1.1 Corner elements standard i.S.	→180
4b	4.1.3 Corner elements vertical i.S.	→180
5a	5.2 Centre locks extendable i.S.	→188
5b	5.13 Width connectors SKB-S/SE	→191
6a	6.7.1 Scissor stay faceplates for comfort scissor stays	→208
6b	6.7.2 Rebated scissor stay arms for comfort scissor stays	→208
9	9.1 Matrix for pivot posts and corner supports	→244
11	11 Striker plates	→290
12	12.3 Self-catching turn locks	→308



2.4.9 TWIN-FIT

2.4.9.1 2-sashed rectangular T&T window
Twin-Fit



≤ 1060 x 1590 mm



≥ 320 mm



≥ 431 mm



(\varnothing 15)

≥ 455 mm



(\varnothing 6,5)

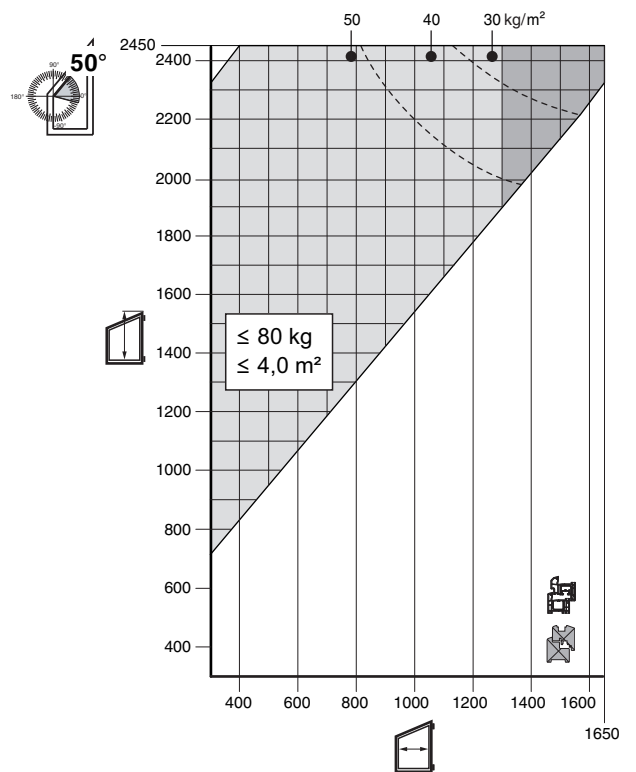
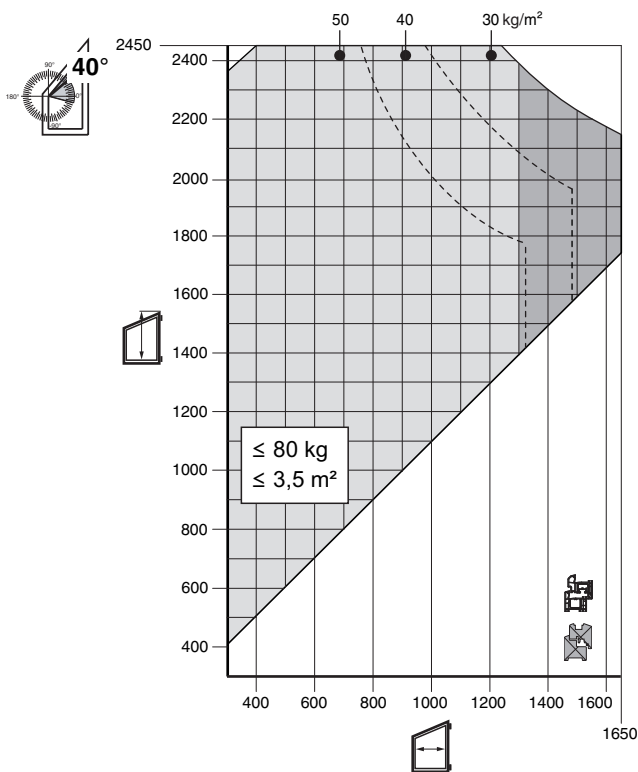
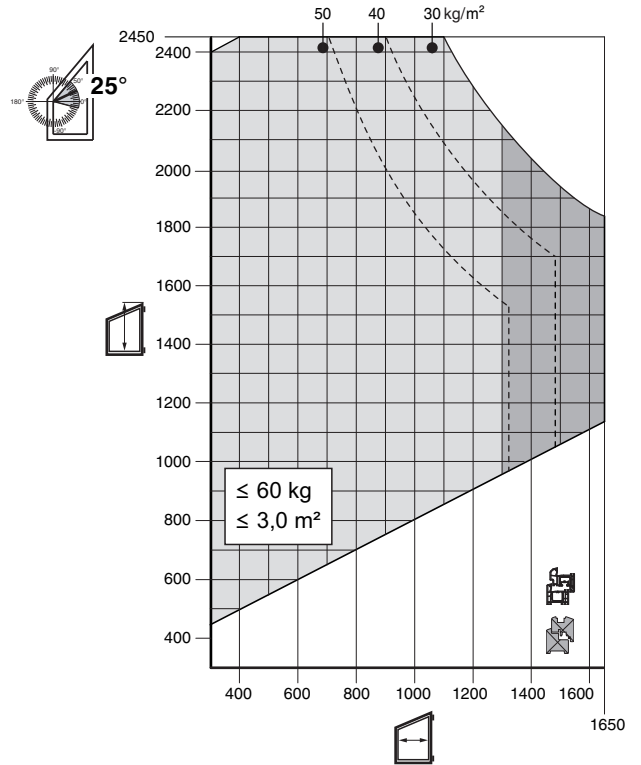
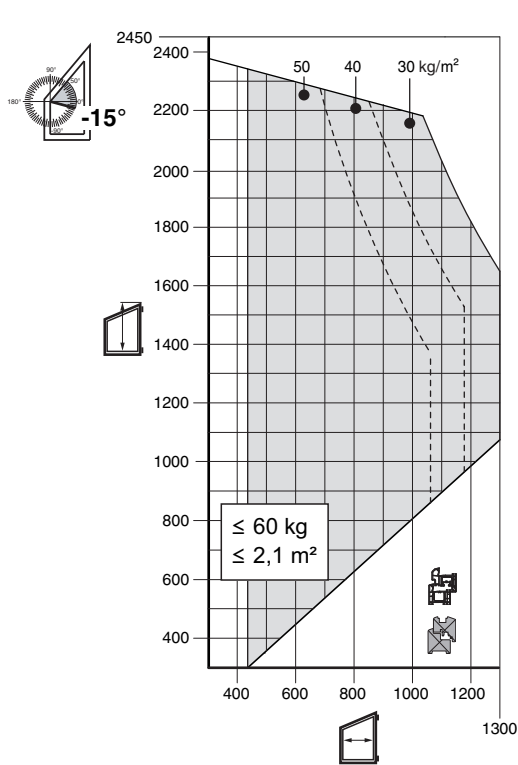
- 3 = Use drive gear EH FHH!
- 4a = Use part number 222212!
- 5 = Above 800 mm (PVC) or 1,000 mm (timber); Observe details from profile manufacturer!
- 6 = No night-vent possible!
- 9 = Refer to matrix pivot posts PVC and timber for possible bearing types.
- 11 = Refer to profile data sheets for striker plates and sash lifters for PVC.
- 12 = For application diagram refer to turn&tilt hardware overview according to corresponding pivot post combination.



Selection guide		Page
3	3.1.1.4 T&T drive gears EH BS 15 FHH i.S.	→151
4a	4.1.1 Corner elements standard i.S.	→180
4b	4.1.2 Corner elements horizontal i.S.	→180
4c	4.5 Corner elements i.S. for double-tilt	→182
5	5.1 Centre locks FHH i.S.	→188
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10b	10.2.4 Accessories for French casement drive gears for double-tilt	→283
11	11 Striker plates	→290



2.5 Application diagrams for angled windows



2.6 General security information

2.6.1 General Information

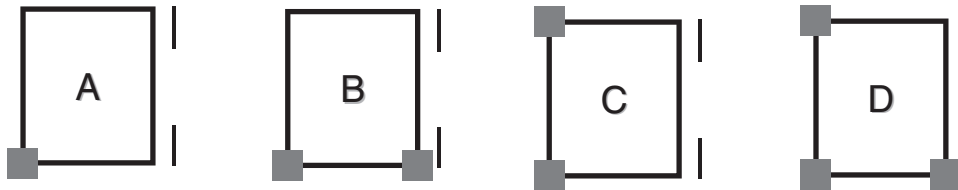
Generally, a variety of design variants are possible for a window or French door. Besides the requirements for corrosion resistance, the end user's demands for convenience, colour design and, above all, security are decisive for the selection of

the hardware components. The combination and/or design of various hardware components allows a variety of security levels.

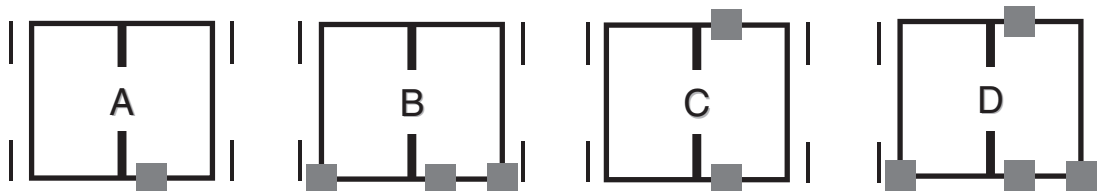


2.6.2 MACO security levels

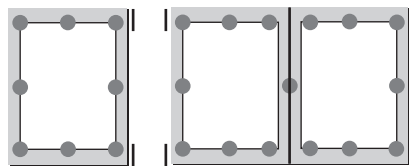
Basic security for single-sash windows and balcony doors



Basic security for double-sash windows and balcony doors



2.6.3 Security in accordance with EN 1627-1630



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 our extranet (<https://extranet.maco.eu>) or from our homepage at www.maco.at in the Downloads area.





3 Drive gears

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3.1.4	T&T drive gears special-BS i.S.	157
3.1.5	T&T drive gears lockable special-BS i.S.	159
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3.6.3	Balcony door locks B-TV E94 with RC	178







3 Drive gears

3.1 T&T drive gears

3.1.1 T&T drive gears BS 15

201734









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 213287.

209373



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	222669
			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 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 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 ^{1,2,3}	207458 ^{1,2,3}
			2	190	510 - 660	-	10	214441 ³	
	840	15	2	300	661 - 840	1	20	201736 ³	207460 ³
	1090	15	2	400	841 - 1.090	1	20	201737 ³	207461 ³
	1340	15	2	500	1.091 - 1.340	1	10	201738 ³	207462 ³
	1590	15	3	600	1.341 - 1.590	1	10	206847 ³	207463 ³
	1700	15	3	700	1.591 - 1.700	1	10	207303 ^{1,3}	207467 ^{1,3}

¹ 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 205644.

² To fasten faceplate use faceplate restrainer 213287.

³ Use for windows produced according to standard EN-1627.

209770



3.1.1.5 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

209374



3.1.1.6 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
				2	600	1.591 - 1.700	1	10	209380

212137



3.1.1.7 T&T drive gears BS 15 FHH VZ with offset handle position and tilt lock bolt									No	No Tricoat
silver	1090	15	1	300	841 - 1.090	1	20		212137	
				500	841 - 1.090	1	20		217870	
	1340	15	1	400	1.091 - 1.340	1	10		212139	
	1590	15	1	500	1.341 - 1.590	1	10		212141	
	1700	15	1	500	1.591 - 1.700	1	10		212143	
			2	600	1.591 - 1.700	1	10		212144	

201743



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}	
							20	217969^{1,3}	
	1340	15	2	400	1.091 - 1.340	1	10	201744¹	
	1590	15	2	500	1.341 - 1.590	1	10	208804¹	
	1700	15	3	600	1.591 - 1.700	1	10	208777¹	
1950	15	3	700	1.701 - 1.950	1	10	208786¹	218769¹	

¹ Use for windows produced according to standard EN-1627.

² No FCD possible

³ Door catch above drive gear; therefore use for 2-sashed windows French casement drive gear 217877.

201747



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	201746¹	207468¹
	1250	1.040	15	1	801 - 1.250	260	1	20	201747	207469
	1350	1.140	15	1	901 - 1.350	260	1	20	215778	219611
	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 213287.

212156









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	201746¹	207468¹
	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 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
		2200	6,5	3	1.050	1.951 - 2.200	1	10	202218







¹ To fasten faceplate use faceplate restrainer 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	222833 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	222842
	1950	6,5	3	1.050	1.701 - 1.950	1	10	212038	222843
	2200	6,5	3	1.050	1.951 - 2.200	1	10	212040	222845
	with door catch		1950	6,5	3	1.050	1.701 - 1.950	1	10
		2200	6,5	3	1.050	1.951 - 2.200	1	10	212041

¹ To fasten faceplate use faceplate restrainer 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	222833 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	
	with door catch		1950	6,5	3	1.050	1.701 - 1.950	1	10
		2200	6,5	3	1.050	1.951 - 2.200	1	10	212058

¹ To fasten faceplate use faceplate restrainer 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	207478 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 213287.

² Use for windows produced 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 205664.



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	222835
						-	20	212043	222848
	1340	6,5	1	400	1.091 - 1.340	1	10	212032	222837
	1590	6,5	1	500	1.341 - 1.590	1	10	212034	222839
	1700	6,5	1	500	1.591 - 1.700	1	10	212066	222871
								2	600



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	215146 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 Use for windows produced 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		
	with door catch		2250	2.040	6,5	3	1.751 - 2.250	260	1	10	202496	

¹ To fasten faceplate use faceplate restrainer 213287.



209388









3.1.2.9 T&T drive gears BS 6.5 VHH VZ										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	1	10	209388									
	1750	1.540	6,5	2	1.251 - 1.750	260	1	10	209389									
	2250	2.040	6,5	3	1.751 - 2.250	260	1	20	209390									

¹ To fasten faceplate use faceplate restrainer 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}	226433¹
	840	-6	1	300	661 - 840	1	20	218241¹	226434¹
	1090	-6	1	400	841 - 1.090	1	20	218242¹	226435¹
	1340	-6	1	500	1.091 - 1.340	1	10	218243¹	226436¹
	1590	-6	2	600	1.341 - 1.590	1	10	218244¹	226437¹
	1700	-6	2	700	1.591 - 1.700	1	10	218245¹	226438¹
	1950	-6	3	1.050	1.701 - 1.950	1	10	218246¹	226439¹
	2200	-6	3	1.050	1.951 - 2.200	1	10	218247¹	226440¹

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

² To fasten faceplate use faceplate restrainer 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	218249¹	
	1750	-6	2	1.251 - 1.750	1	10	218250¹	
	2250	-6	3	1.751 - 2.250	1	10	218251¹	
	with door catch	2250	-6	3	1.751 - 2.250	1	10	218356¹

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

² To fasten faceplate use faceplate restrainer 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	840	30	1	300	661 - 840	1	10	212183	212197
	1090	30	1	400	841 - 1.090	1	20	212184	212198
	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	207494
		45	3	1.050	1.701 - 1.950	1	10	206403	207497
		50	3	1.050	1.701 - 1.950	1	10	205491	207500
		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
	2450	50	3	1.050	1.951 - 2.200	1	10	205492	207501
		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	207499
	50	4	1.050	2.201 - 2.450	1	10	205493	207502	

212221



3.1.4.2 T&T drive gears special-BS FHH i.S. with tilt lock bolt								No	No Tricoat
silver	1950	25	3	1.050	1.701 - 1.950	1	10	212221	222931
		30	3	1.050	1.701 - 1.950	1	10	212222	222932
		35	3	1.050	1.701 - 1.950	1	10	212223	222933
		40	3	1.050	1.701 - 1.950	1	10	212224	222934
		45	3	1.050	1.701 - 1.950	1	10	212225	222935
		50	3	1.050	1.701 - 1.950	1	10	212226	222936
	2200	25	3	1.050	1.951 - 2.200	1	10	212227	222937
		30	3	1.050	1.951 - 2.200	1	10	212228	222938
		35	3	1.050	1.951 - 2.200	1	10	212229	222939
		40	3	1.050	1.951 - 2.200	1	10	212230	222940
		45	3	1.050	1.951 - 2.200	1	10	212231	222941
	2450	50	3	1.050	1.951 - 2.200	1	10	212232	222942
		25	4	1.050	2.201 - 2.450	1	10	212233	222943
		30	4	1.050	2.201 - 2.450	1	10	212234	222944
		35	4	1.050	2.201 - 2.450	1	10	212235	222945
		40	4	1.050	2.201 - 2.450	1	10	212236	222946
		45	4	1.050	2.201 - 2.450	1	10	212237	222947
		50	4	1.050	2.201 - 2.450	1	10	212238	222948



205514



3.1.4.3 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	207507 ¹	
			35	0	470 - 800	200	-	10	205525 ¹	207511 ¹	
			40	0	470 - 800	200	-	10	205529 ¹	207515 ¹	
			45	0	470 - 800	200	-	10	205539 ¹	207519 ¹	
		1250	1.040	50	0	470 - 800	200	-	10	205540 ¹	207523 ¹
	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	
		1750	1.540	45	1	801 - 1.250	260	1	10	206308	207520
	50			1	801 - 1.250	260	1	10	213071		
	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	207513	
		2250	2.040	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		
	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 213287.

210654



3.1.4.4 T&T drive gears EH special-BS FHH i.S.								No	No Tricoat
silver	660	35	1	190	431 - 660	-	10	211069 ^{1,2,3}	
	840	35	2	300	661 - 840	1	10	211070 ^{1,3}	
	1090	35	2	400	841 - 1.090	1	10	210654 ^{1,3}	
	1340	35	2	500	1.091 - 1.340	1	10	210655 ^{1,3}	
	1590	35	2	600	1.341 - 1.590	1	10	210656 ^{1,3}	
	1700	35	3	700	1.591 - 1.700	1	10	210657 ^{1,3}	

¹ Above SRH 1700 mm use T&T drive gear special-BS 15 FHH i.S. and crop at 170 mm notch. Then extend with bottom end piece EH 205664.

² To fasten faceplate use faceplate restrainer 213287.

³ Use for windows produced according to standard EN-1627.



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	207524
		30	3	1.050	1.701 - 1.950	1	10	205627	207527
		35	3	1.050	1.701 - 1.950	1	10	206153	207530
		40	3	1.050	1.701 - 1.950	1	10	206984	207533
		45	3	1.050	1.701 - 1.950	1	10	206155	207536
		50	3	1.050	1.701 - 1.950	1	10	206985	207539
	2200	25	3	1.050	1.951 - 2.200	1	10	205571	207525
		30	3	1.050	1.951 - 2.200	1	10	205624	207528
		35	3	1.050	1.951 - 2.200	1	10	205629	207531
		40	3	1.050	1.951 - 2.200	1	10	205631	207534
		45	3	1.050	1.951 - 2.200	1	10	205633	207537
		50	3	1.050	1.951 - 2.200	1	10	205635	207540
	2450	25	4	1.050	2.201 - 2.450	1	10	205623	207526
		30	4	1.050	2.201 - 2.450	1	10	205628	207529
		35	4	1.050	2.201 - 2.450	1	10	205630	207532
		40	4	1.050	2.201 - 2.450	1	10	205632	207535
		45	4	1.050	2.201 - 2.450	1	10	205634	207538
		50	4	1.050	2.201 - 2.450	1	10	205636	207541

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	222961
		30	3	1.050	1.701 - 1.950	1	10	212257	222962
		35	3	1.050	1.701 - 1.950	1	10	212258	222963
		40	3	1.050	1.701 - 1.950	1	10	212259	222964
		45	3	1.050	1.701 - 1.950	1	10	212260	222965
		50	3	1.050	1.701 - 1.950	1	10	212261	222966
	2200	25	3	1.050	1.951 - 2.200	1	10	212262	222967
		30	3	1.050	1.951 - 2.200	1	10	212263	222968
		35	3	1.050	1.951 - 2.200	1	10	212264	222969
		40	3	1.050	1.951 - 2.200	1	10	212265	222970
		45	3	1.050	1.951 - 2.200	1	10	212266	222971
		50	3	1.050	1.951 - 2.200	1	10	212267	222972
	2450	25	4	1.050	2.201 - 2.450	1	10	212268	222973
		30	4	1.050	2.201 - 2.450	1	10	212269	222974
		35	4	1.050	2.201 - 2.450	1	10	212270	222975
		40	4	1.050	2.201 - 2.450	1	10	212271	222976
		45	4	1.050	2.201 - 2.450	1	10	212272	222977
		50	4	1.050	2.201 - 2.450	1	10	212273	222978



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		
	2250	2.040	40	3	1.751 - 2.250	260	1	10	217873		
			45	3	1.751 - 2.250	260	1	10	217874		

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	211245
	1700	15	2	700	1.591 - 1.700	10	207302	211246
	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 213287.



3.2.1.2 Turn-only drive gears BS 15 FHH i.S. with tilt lock bolt							No	No Tricoat
silver	840	15	1	300	661 - 840	20	209590	222707
	1090	15	1	400	841 - 1.090	20	212067	222872
	1340	15	1	500	1.091 - 1.340	10	212068	222873
	1590	15	2	600	1.341 - 1.590	10	212069	222874
	1700	15	2	700	1.591 - 1.700	10	212070	222875
	1950	15	3	1.050	1.701 - 1.950	10	212071	222876
	2200	15	3	1.050	1.951 - 2.200	10	212072	222877
	2450	15	4	1.050	2.201 - 2.450	10	212073	222878



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 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 ²	
	840	15	2	300	661 - 840	20	206614 ²	207459 ²

¹ To fasten faceplate use faceplate restrainer 213287.

² Use for windows produced according to standard EN-1627.



209771



3.2.1.5 Turn-only drive gears BS 15 FHH i.S. with offset handle position							No	No Tricoat
silver	1090	15	1	500	841 - 1.090	20	209771	
	1590	15	2	500	1.341 - 1.590	10	214548	214549

209591



3.2.1.6 Turn-only 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	20	209591	222708
	1340	15	1	400	1.091 - 1.340	10	212074	222879
	1590	15	1	500	1.341 - 1.590	10	212075	222880
	1700	15	2	600	1.591 - 1.700	10	212076	222881

212138



3.2.1.7 Turn-only drive gears BS 15 FHH VZ with offset handle position and tilt lock bolt							No	No Tricoat
silver	1090	15	1	300	841 - 1.090	20	212138	
	1340	15	1	400	1.091 - 1.340	10	212140	
	1590	15	1	500	1.341 - 1.590	10	212142	
	1700	15	2	600	1.591 - 1.700	10	212145	

205547



3.2.1.8 Turn-only drive gears BS 15 FHH without cam						No	No Tricoat
silver	840	15	300	661 - 840	20	205546	211341
	1090	15	400	841 - 1.090	20	205547	211218
	1340	15	500	1.091 - 1.340	10	205548	211221
	1590	15	600	1.341 - 1.590	10	205549	211222
	1700	15	700	1.591 - 1.700	10	207304	211225
	1950	15	1.050	1.701 - 1.950	10	205545	211217
	2200	15	1.050	1.951 - 2.200	10	205550	211223
	2450	15	1.050	2.201 - 2.450	10	205551	211224

202170



3.2.1.9 Turn-only drive gears BS 15 VHH i.S.		L						No	No Tricoat
silver	800	640	15	0	470 - 800	200	20	201746¹	207468¹
	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 213287.



212157



3.2.1.10 Turn-only drive gears BS 15 VHH VZ		L						No	No Tricoat
silver	800	640	15	0	470 - 800	200	20	201746¹	207468¹
	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 213287.

205542








3.2.1.11 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

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	202206 ¹	207470 ¹
	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 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	222847
	1090	6,5	1	400	841 - 1.090	20	212044	222849
	1340	6,5	1	500	1.091 - 1.340	10	212045	222850
	1590	6,5	2	600	1.341 - 1.590	10	212046	222851
	1700	6,5	2	700	1.591 - 1.700	10	212047	222852

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	202491 ¹	207481 ¹
	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 213287.

209391 






3.2.2.5 Turn-only drive gears BS 6.5 VHH VZ		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	20	209391	
	1750	1.540	6,5	2	1.251 - 1.750	260	10	209392	
	2250	2.040	6,5	3	1.751 - 2.250	260	10	209393	

¹ To fasten faceplate use faceplate restrainer 213287.








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

205497

3.2.3.1 Turn-only drive gears special-BS FHH i.S.							No	No Tricoat
silver	660	45	0	190	431 - 660	10	211473¹	
		50	0	190	431 - 660	10	211665¹	215755¹
	840	45	1	300	661 - 840	10	211474	
		50	1	300	661 - 840	10	211666	215756
	1090	45	1	400	841 - 1.090	10	211475	
		50	1	400	841 - 1.090	10	211667	215757
	1340	45	1	500	1.091 - 1.340	10	211476	
		50	1	500	1.091 - 1.340	10	211668	215758
	1590	45	2	600	1.341 - 1.590	10	211477	
		50	2	600	1.341 - 1.590	10	211669	215759
	1700	45	2	700	1.591 - 1.700	10	211478	
		50	2	700	1.591 - 1.700	10	211670	223232
	1950	45	3	1.050	1.701 - 1.950	10	211479	
		50	3	1.050	1.701 - 1.950	10	211671	215760
	2200	25	3	1.050	1.951 - 2.200	10	205497	
		30	3	1.050	1.951 - 2.200	10	205499	
		35	3	1.050	1.951 - 2.200	10	205503	
		40	3	1.050	1.951 - 2.200	10	205505	
		45	3	1.050	1.951 - 2.200	10	205509	
	2450	50	3	1.050	1.951 - 2.200	10	205511	215753
		25	4	1.050	2.201 - 2.450	10	205498	
		30	4	1.050	2.201 - 2.450	10	205500	
		35	4	1.050	2.201 - 2.450	10	205504	
		40	4	1.050	2.201 - 2.450	10	205506	
		45	4	1.050	2.201 - 2.450	10	205510	
		50	4	1.050	2.201 - 2.450	10	205512	215754

¹ To fasten faceplate use faceplate restrainer 213287.

212239

3.2.3.2 Turn-only drive gears special-BS FHH i.S. with tilt lock bolt							No	No Tricoat
silver	2200	25	3	1.050	1.951 - 2.200	10	212239	222949
		30	3	1.050	1.951 - 2.200	10	212240	222950
		35	3	1.050	1.951 - 2.200	10	212241	222951
		40	3	1.050	1.951 - 2.200	10	212242	222952
		45	3	1.050	1.951 - 2.200	10	212243	222953
	2450	50	3	1.050	1.951 - 2.200	10	212244	222954
		25	4	1.050	2.201 - 2.450	10	212245	222955
		30	4	1.050	2.201 - 2.450	10	212246	222956
		35	4	1.050	2.201 - 2.450	10	212247	222957
		40	4	1.050	2.201 - 2.450	10	212248	222958
		45	4	1.050	2.201 - 2.450	10	212249	222959
		50	4	1.050	2.201 - 2.450	10	212250	222960



209968



3.2.3.3 Turn-only drive gears special-BS FHH with welded striker						No	No Tricoat
silver	660	30	190	431 - 660	10	224139¹	
		40	190	431 - 660	10	210939¹	
		50	190	431 - 660	10	218426¹	
	840	30	300	661 - 840	10	224140	
		40	300	661 - 840	10	210940	
		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	210945
		40	1.050	1.701 - 1.950	10	207014	
		45	1.050	1.701 - 1.950	10	207015	
		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 213287.

216195



3.2.3.4 Turn-only drive gears special-BS VHH with welded striker		L					No	No Tricoat
silver	1250	1.040	45	801 - 1.250	260	10	216194	
			50	801 - 1.250	260	10	218225	
	1750	1.540	45	1.251 - 1.750	260	10	216195	
			50	1.251 - 1.750	260	10	218226	
	2250	2.040	45	1.751 - 2.250	260	10	216196	
			50	1.751 - 2.250	260	10	218227	

205515



3.2.3.5 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								No	No Tricoat
	L									
silver	800	640	30	0	470 - 800	200	10	205517¹	207507¹	
	1250	1.040	30	1	801 - 1.250	260	10	214904	223049	
	1750	1.540	30	2	1.251 - 1.750	260	10	214905	223050	
	2250	2.040	30	3	1.751 - 2.250	260	10	214906	223051	

¹ To fasten faceplate use faceplate restrainer 213287.

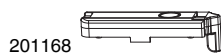
208747



	3.2.5 Turn-only drive gears for half round windows						No	No Tricoat
silver		925	15	3	425 - 925	10	208747	
		1425	15	4	926 - 1.425	10	208748	218511



3.3 Accessories for drive gears



201168

3.3.1 Door catch MM



No

No
Tricoat

silver

50

201168

207674



44349

3.3.2 Packers for door catches



No

No
Tricoat

pearl light grey RAL 9022 for bullet catch case

3

100

44349



202581

3.3.3 Sash lifter retrofittable MM



No

No
Tricoat

silver

50

202581

215239



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 Use for windows produced according to standard EN-1627.



208887

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



No

No
Tricoat

silver

20

208887



213287

3.3.6 Faceplate restrainers 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 Extensions 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
adapter for drive gear DM-6		50	366719	
spacer	1.5 mm	50	366006	
	5 mm	50	367850	
	8.5 mm	50	366007	
	9.5 mm	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	222796
	1700	15	3	700	1.591 - 1.700	10	211967	222797
	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	223015¹
		4	1.050	2.451 - 2.600	10	212637	222996	

¹ Extendable



3.4.1.3 Espagnolettes BS 15 FHH VZ with offset handle position							No	No Tricoat
silver	840	15	2	190	661 - 840	20	218086	
	1090	15	2	190	841 - 1.090	20	218087	
				300	841 - 1.090	20	211971	222798
	1340	15	3	190	1.091 - 1.340	10	218088	
				400	1.091 - 1.340	10	211972	222799
	1590	15	3	400	1.341 - 1.590	10	218506	
				500	1.341 - 1.590	10	211973	222630
	1700	15	3	400	1.591 - 1.700	10	212632	222992
				500	1.591 - 1.700	10	212634	222993
	1950	15	3	400	1.701 - 1.950	10	218507	
				500	1.701 - 1.950	10	218508	
	2200	15	4	400	1.951 - 2.200	10	212636	222995
				500	1.951 - 2.200	10	212635	222994



208328



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
				1.001 - 1.400	10	212694	223002
	1.800	15	3	1.401 - 1.800	10	211993	222813
				1.401 - 1.800	10	212699	223003
	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	223009
	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	222822
	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	222823
	1340	15	1	190	1.091 - 1.340	10	218079	
				400	1.091 - 1.340	10	212009	222824
	1590	15	1	400	1.341 - 1.590	10	218503	
				500	1.341 - 1.590	10	212010	222638
	1700	15	1	400	1.591 - 1.700	10	212725	223005
				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	223007
				500	1.951 - 2.200	10	212726	223006

3.4.2 Espagnolettes BS 6.5






208364 

3.4.2.1 Espagnolettes BS 6.5 FHH i.S.							No	No Tricoat
silver	1590	6,5	3	600	1.341 - 1.590	10	208364	






211983 

3.4.2.2 Espagnolettes BS 6.5 FHH VZ							No	No Tricoat
silver	660	6,5	2	190	431 - 660	20	211981	222803
	840	6,5	2	300	661 - 840	20	211982	222804
	1090	6,5	2	400	841 - 1.090	20	211983	222805
	1340	6,5	3	500	1.091 - 1.340	10	211984	222806
	1590	6,5	3	600	1.341 - 1.590	10	211985	222807
	1700	6,5	3	700	1.591 - 1.700	10	211986	222808
	1950	6,5	3	1.050	1.701 - 1.950	10	211987	222809
	2200	6,5	4	1.050	1.951 - 2.200	10	211988	222810





218116 

3.4.2.3 Espagnolettes BS 6.5 VZ with fixed, 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 

3.4.2.4 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	223030	
					400	1.091 - 1.340	10	213524	223032
					2	850	1.115 - 1.340	10	214790
	1590	6,5	1	500	1.341 - 1.590	10	213526	223034	
	1700	6,5	2	500	1.591 - 1.700	10	213529	223037	
					600	1.591 - 1.700	10	213528	223036
					2200	6,5	2	600	1.951 - 2.200
					700	1.951 - 2.200	10	213532	223040

208325 

3.4.2.5 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	



211997

3.4.2.6 Espagnolettes BS 6.5 centered VZ							No	No Tricoat
silver	500	6,5	2	390 - 500	20	211995	222815	
	700	6,5	2	501 - 700	20	211996	222816	
	1.000	6,5	2	701 - 1.000	20	211997	222817	
	1.400	6,5	3	1.001 - 1.400	10	211998	222818	
	1.800	6,5	3	1.401 - 1.800	10	211999	222819	








213521

3.4.2.7 Espagnolettes BS 6.5 with gearbox reverse action VZ							No	No Tricoat
silver	660	6,5	0	190	431 - 660	10	213516	223027
	840	6,5	1	300	661 - 840	10	213520	223028
	1090	6,5	1	400	841 - 1.090	10	213521	223029
	1340	6,5	1	500	1.091 - 1.340	10	213523	223031
	1590	6,5	1	600	1.341 - 1.590	10	213525	223033
	1700	6,5	2	700	1.591 - 1.700	10	213527	223035
	1950	6,5	2	1.050	1.701 - 1.950	10	213530	223038
	2200	6,5	2	1.050	1.951 - 2.200	10	213531	223039
	2450	6,5	2	1.050	2.201 - 2.450	10	213534	223042






3.4.3 Espagnolettes BS -6

219757 

3.4.3.1 Espagnolettes BS -6 with gearbox reverse action						No	No Tricoat
silver	-6	0	190	431 - 660	10	219755¹	
			300	661 - 840	10	219756¹	
			400	841 - 1.090	10	219757¹	
			500	1.091 - 1.340	10	219758¹	
			600	1.341 - 1.590	10	219759¹	
	2	1.050	700	1.591 - 1.700	10	219760¹	
			1.701 - 1.950	10	219761¹		
			1.951 - 2.200	10	219762¹		
			2.201 - 2.450	10	219763¹		

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

219765 

3.4.3.2 Espagnolettes BS -6 with gearbox reverse action with offset handle position						No	No Tricoat
silver	-6	1	190	661 - 840	10	219764¹	
			841 - 1.090	10	219765¹		
			1.091 - 1.340	10	219766¹		
			400	1.091 - 1.340	10	219767¹	
	2	850	1.115 - 1.340	10	219768¹		
			1	500	1.341 - 1.590	10	219769¹
	2	500	1.591 - 1.700	10	219770¹		
			600	1.591 - 1.700	10	219771¹	
			1.951 - 2.200	10	219772¹		
			700	1.951 - 2.200	10	219773¹	

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

3.4.4 Espagnolettes with mounted tilt stay



3.4.4.1 Espagnolettes centered i.S. with mounted tilt stay	No	Tricoat					
			1.000	15	2	650 - 1.000	20
silver	206268 ^{1,2}	207551 ^{1,2}					
	206269 ^{1,2}	207552 ^{1,2}	1.300	15	3	1.001 - 1.300	10
	206270 ^{2,3}	207553 ^{2,3}	1.700	15	3	1.301 - 1.700	10

¹ One mounted tilt-only stay arm

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-only stay arms



3.4.4.2 Espagnolettes centered VZ with mounted tilt stay	No	Tricoat					
			1.000	15	2	650 - 1.000	20
silver	212702 ^{1,2}						
	212703 ^{1,2}		1.300	15	3	1.001 - 1.300	10
	212704 ^{2,3}		1.700	15	3	1.301 - 1.700	10

¹ One mounted tilt-only stay arm

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-only stay arms



3.4.4.3 Espagnolettes VHH i.S. with mounted tilt stay	No	Tricoat					
			1.250	15	1	751 - 1.250	20
silver	206174 ^{1,2}	207554 ^{1,2}					
	212772 ^{2,3}	223010 ^{2,3}	1.700	15	2	1.251 - 1.700	10
	206271 ^{2,3}	207555 ^{2,3}	2.200	15	3	1.701 - 2.200	10

¹ One mounted tilt-only stay arm

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-only stay arms



3.4.4.4 Espagnolettes VHH VZ with mounted tilt stay	No	Tricoat					
			1.250	15	1	751 - 1.250	20
silver	212770 ^{1,2}						

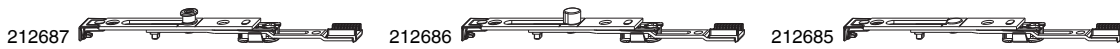
¹ One mounted tilt-only stay arm




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).






3.4.4.5 Faceplate restrainer for espagnolettes	No	Tricoat				
			100			
silver	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	222997

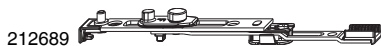




3.5.2 End pieces for 180° (T&T, French casement drive gears)					No	No Tricoat
silver	180° bottom and top with 1 VZ	1	0	20	212212	
	180° bottom and top with 1 i.S.	0	1	20	212211	222927
	180° bottom and top without cam	0	0	20	212213	222929






3.5.3 End pieces top for half round windows					No	No Tricoat
silver	top with 1 i.S.		1	20	205177¹	207556¹
	croppable 1090/600 top with 3 i.S.	600 - 1.090	3	10	209033¹	
	for turn-only window top with 2 i.S.		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 doors bottom	1.751 - 2.250	20	212688	223000
	with tilt lock bolt for windows bottom	470 - 1.750	20	212689	223001



3.5.5 Bottom end pieces for drive gears VHH					No	No Tricoat
silver	bottom with 1 i.S.	1.340 - 2.450	1	20	205644¹	207558¹
	with striker bottom	1.340 - 2.450	0	20	205717¹	207557¹

¹ Use for windows produced according to standard EN-1627.



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








3.5.7 Top end pieces for reverse action espagnolettes				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	223043
	for reverse action espagnolette top with extendable shootbolt protrusion slanted on both sides	431 - 2.450	100	214014	223044
	for reverse action espagnolette lockcase top with extendable shootbolt protrusion	431 - 2.450	100	214015	223045
	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	



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	228275
			35	8	1.050	85	5	203835	
			40	8	1.050	85	5	203836	226997
			45	8	1.050	85	5	203837	
			50	8	1.050	85	5	203838	218737
			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	215145
			28	8	1.050	92	5	203696	214448
			35	8	1.050	92	5	203829	224077
			40	8	1.050	92	5	203830	213101
			45	8	1.050	92	5	203831	210593
			50	8	1.050	92	5	203832	210493
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	219067
			45	8	1.050	94	5	203843	219074
			50	8	1.050	94	5	203844	219066
			55	8	1.050	94	5	203845	






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 - 1.650	360 - 2.450	50	222201	207564
	with 2 i.S.	320 - 1.650	360 - 2.450	50	222202	207567
	short with 1 i.S.	220 - 319	275 - 359	50	222203¹	207566¹
	short with shootbolt protrusion and faceplate fixing	225 - 319	275 - 359	50	225021²	
	short with faceplate fixing with 1 i.S.	225 - 324	280 - 364	50	216712²	218976²
	for night ventilation with 1 i.S.	320 - 1.650	360 - 2.450	50	209034	
	with 5 ventilation positions with 1 i.S.	400 - 1.000	800 - 1.700	30	101879³	103777³
	with 7 ventilation positions with 1 i.S.	400 - 1.000	800 - 1.700	30	101880⁴	
for turn-only window with 1 i.S.	320 - 1.650	360 - 2.450	50	209610	218078	



¹ Countersunk self-tapping screw M4x8 mm part number 101339 included.

² Countersunk self-tapping screw M4x6 mm part number 455461 included.

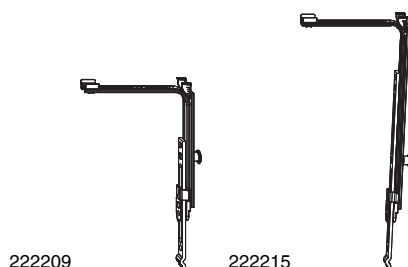
³ Observe rebate depth with timber!



⁴ For timber only on request (depending on profile)!

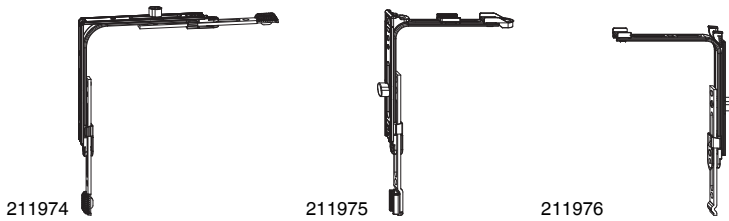


4.1.2 Corner elements horizontal i.S.				No	No Tricoat
silver	horizontal with 1 i.S.	320 - 750	50	222204¹	
	horizontally extendable with 1 i.S.	320 - 1.650	50	222205¹	207569¹
	with serrated carrier horizontally extendable with 1 i.S.	320 - 1.650	50	216784¹	219370¹

¹ In combination with eurogroove fixing corner support possible from SRW 365

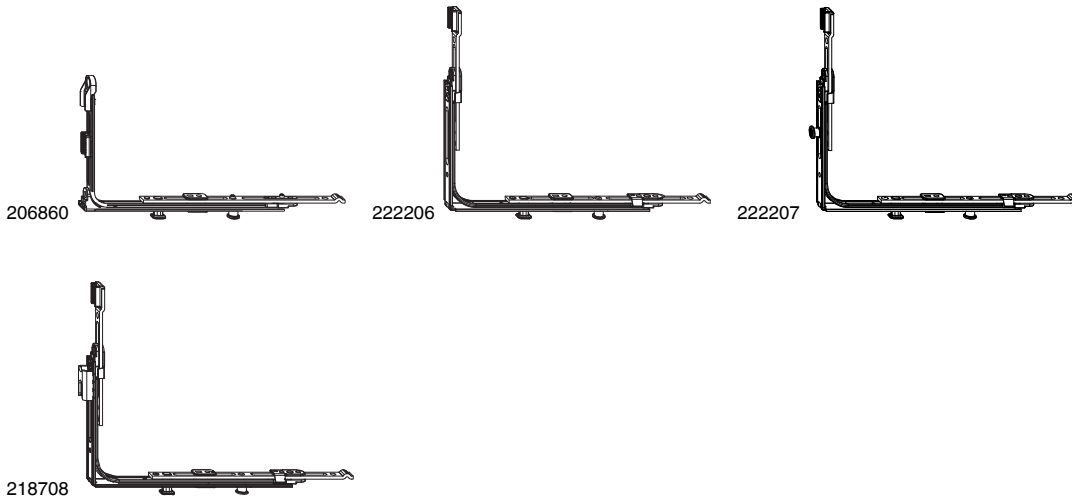


4.1.3 Corner elements vertical i.S.				No	No Tricoat
silver	vertical with 1 i.S.	470 - 1.100	50	222208	218232
	vertically extendable with 1 i.S.	750 - 2.450	50	222209	207575
	vertically extendable without i.S. cams	750 - 2.450	50	222214	209792
	with serrated carrier vertically extendable with 1 i.S.	750 - 2.450	10	210096	211241
	4 mm air gap vertically extendable with 1 i.S.	750 - 2.450	50	222215	207576



4.2 Corner elements VZ					No	No Tricoat
silver	with 1 VZ	320 - 1.650	360 - 2.450	50	211974	
	short with 1 VZ	220 - 319	275 - 359	50	211975¹	
	vertically extendable with 1 VZ		750 - 2.450	50	211976	
	for night ventilation with 1 VZ	320 - 1.650	360 - 2.450	50	228430	
	with 5 ventilation positions with 1 VZ	400 - 1.000	800 - 1.700	30	105309	

¹ Countersunk self-tapping screw M4x8 mm part number 101339 included.



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 - 1.650	250 - 650	50	206860^{1,2}	207572^{1,2}
	for variable drive gear horizontally extendable with 1 i.S.	320 - 1.650	470 - 2.250	50	222206²	207570²
	for variable drive gear horizontally extendable with 2 i.S.	320 - 1.650	470 - 2.250	50	222207²	207571²
	for variable drive gear for tilt-first horizontally extendable with 2 i.S.	320 - 1.650	470 - 2.250	50	211934²	
	for variable drive gear horizontally extendable with 1 i.S. cam and striker	320 - 1.650	470 - 2.250	50	218708²	

¹ Countersunk self-tapping screw M4x8 mm part number 101339 included.

² In combination with eurogroove fixing corner support possible from SRW 365



222210



208415



209611

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	207577¹
	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 - 1.650	360 - 2.450	20	222210	207565
	2-sashed RC2 with sliding locks with 1 i.S.	320 - 1.650	360 - 2.450	20	208415³	214184³
	2-sashed RC2 with striker for bottom	320 - 1.650	841 - 2.450	50	211740	214185
	2-sashed for turn-only window with 1 i.S. cam and striker	320 - 1.650	360 - 2.450	20	209611	216970

¹ For French casement drive gear 1250 VHH for mullion profile (205970)!

² For French casement drive gear 1250 VHH (202471)!

³ Use for windows produced according to standard EN-1627.



207427

4.5 Corner elements i.S. for double-tilt



No

No
Tricoat

silver	right with 1 i.S.	320 - 1.050	431 - 1.590	20	207427	216969
	left with 1 i.S.	320 - 1.050	431 - 1.590	20	207428	215319



222212



214990



209655

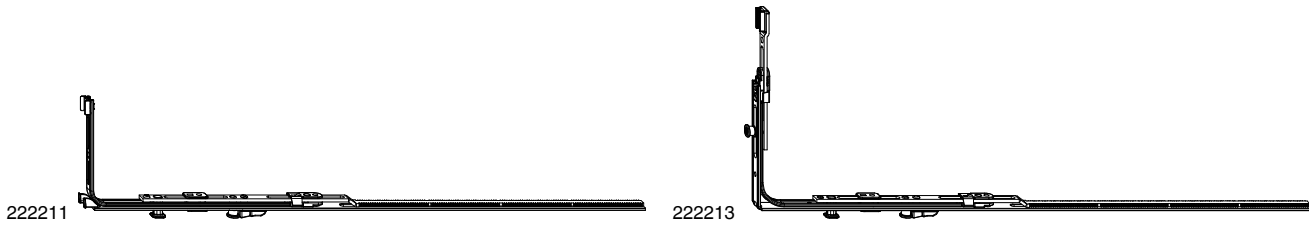
4.6 Corner elements i.S. for angled windows





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 vertically extendable with 1 i.S.		330 - 1.300	50	209655	217160




4.7 Corner elements i.S. for half round windows				No	No Tricoat
silver	4 mm air gap horizontally croppable with 1 i.S.	435 - 1.250	10	218072 ¹	
	horizontally croppable with 1 i.S.	435 - 1.250	10	222211 ¹	207573 ¹
	for tilt lock bolt horizontally croppable without cam	435 - 1.250	10	215216 ¹	
	for variable drive gear horizontally croppable with 2 i.S.	435 - 1.250	10	222213 ¹	207574 ¹
	for variable drive gear 4 mm air gap horizontally croppable with 2 i.S.	435 - 1.250	10	218071 ¹	
for variable drive gear for turn-only window horizontally croppable without cam	435 - 1.250	10	215217 ¹		

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




4.8 Accessories for corner elements


357081  355418  43625 


4.8.1 Travel restrictors			No	No Tricoat
silver	surface mounted PVC travel restrictor 90° surface-mounted	200	357081 ¹	357887 ¹
	clip-on 90° travel-restrictor MM, natural	200	355418 ¹	
	surface mounted PVC travel restrictor surface-mounted PVC	200	43625 ¹	

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


207421 

4.8.2 Bullet catch for double-tilt (Twin-Fit) hardware MM			No	No Tricoat
silver	right	50	207421	
	left	50	207422	

101339 

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

355678 

4.8.4 Faceplate restrainers			No	No Tricoat
silver		100	355678 ¹	

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


352980 

4.8.5 Adapter piece straight punch/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 

4.8.6 Faceplate strip covers MM		L		No	No Tricoat
silver		90	100	357960	364410

354966 


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

358368 


4.8.8 Connector plates MM EH		No	No Tricoat
silver	100	358368¹	385036¹


¹ Use for windows produced according to standard EN-1627.

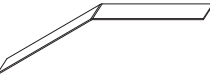
103121 

4.8.9 Short catching plates for multi-stepped ventilation		No	No Tricoat
silver	30	103121¹	103766¹

¹ Use for timber from 30 mm rebate depth.

363796 

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


104256 

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

366348 

4.8.12 Run-up for horizontal corner element MM		No	No Tricoat
run-up for horizontal corner element MM	100	366348	

44273 

4.8.13 Clip-on component		No	No Tricoat
clip-on component for serrated carrier punched	200	44273	



**MACO
MULTI-MATIC**



Corner elements



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

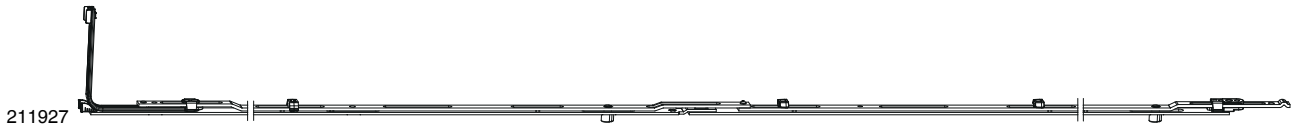
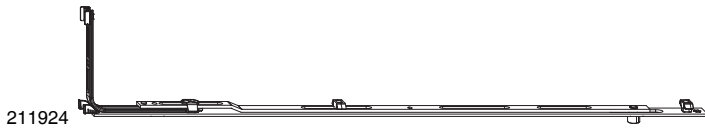
5.3 Centre locks extendable VZ				L			No	No Tricoat
silver	1280V	with 1 VZ	1	470	801 - 1.280	20	215272 ¹	




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

211929

211932

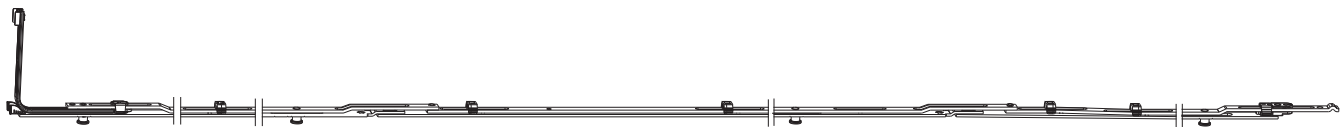
5.4 Centre locks single piece i.S.						No	No Tricoat	
silver	700	with 1 i.S.	1	480 - 700	20	218493		
	Use 215449 (single-piece centre lock size 840) for application range 701-800 mm.							
	1280	with 1 i.S.	1	801 - 1.280	20	211929	222786	
	1500	with 1 i.S.	1	1.281 - 1.500	20	211930	222787	
		with 2 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	






5.5 Centre locks single piece VZ						No	No Tricoat
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	



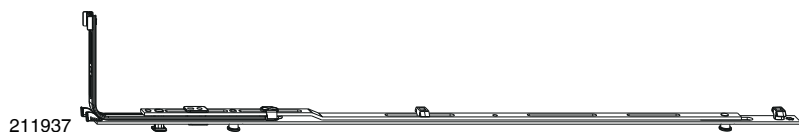
215463








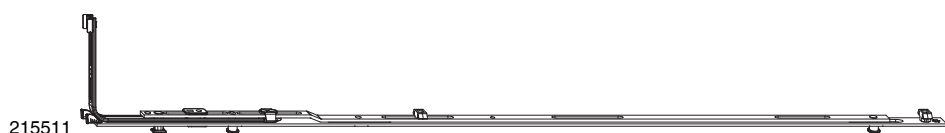
5.6 Centre locks single piece EH						No	No Tricoat
silver	700	with 2 i.S.	2	480 - 700	20	215448¹	223265¹
	840	with 2 i.S.	2	701 - 840	20	215449^{1,2}	223266^{1,2}
	1090	with 2 i.S.	2	841 - 1.090	20	215450¹	223267¹
	1200	with 3 i.S.	3	1.091 - 1.200	20	215451¹	223268¹
	1340	with 3 i.S.	3	1.201 - 1.340	20	215452¹	223269¹
	1450	with 3 i.S.	3	1.341 - 1.450	20	215453¹	223270¹
	1590	with 3 i.S.	3	1.451 - 1.590	10	215454¹	223271¹
	1700	with 3 i.S.	3	1.591 - 1.700	20	215455¹	223272¹
	1850	with 3 i.S.	3	1.701 - 1.850	10	215456¹	223273¹
	1950	with 3 i.S.	3	1.851 - 1.950	10	215457¹	223274¹
	2000	with 4 i.S.	4	1.951 - 2.000	20	215458¹	223275¹
	2100	with 4 i.S.	4	2.001 - 2.100	10	215459¹	223276¹
	2300	with 4 i.S.	4	2.101 - 2.300	10	215460¹	223277¹
	2450	with 4 i.S.	4	2.301 - 2.450	10	215461¹	223278¹
	2500	with 4 i.S.	4	2.451 - 2.500	10	215462¹	223279¹
	2600V	with 4 i.S.	4	2.501 - 2.600	10	215463¹	223280¹






¹ Use for windows produced according to standard EN-1627.

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







5.7 Tilt locks single piece i.S.							
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







5.8 Tilt locks single piece EH							
silver	700	with 2 i.S.	2	525 - 700	20	215509¹	223281¹
	800	with 2 i.S.	2	701 - 800	20	215510¹	223282¹
For application range 801-900 mm use single-piece tilt lock 211937 (size 1280).							
	1150	with 2 i.S.	2	901 - 1.150	20	215511¹	223283¹
	1280	with 2 i.S.	2	801 - 1.280	20	211937¹	222791¹
	1300	with 3 i.S.	3	1.151 - 1.300	20	215512¹	223284¹
	1500	with 3 i.S.	3	1.301 - 1.500	20	215513¹	223285¹
	1650	with 3 i.S.	3	1.501 - 1.650	10	215514¹	223286¹

¹ Use for windows produced according to standard EN-1627.








5.9 Faceplate extensions fixed and extendable				L			
silver	faceplate extension without serrated carrier MM	with 1 i.S.	1	235	20	210496	218772
		with 2 i.S.	2	235	20	214547	
silver	faceplate extension MM, extendable	with 1 i.S.	0	140	20	206630	207443
		with 1 i.S.	1	140	20	201841	207442
		with 1 i.S.	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	222930
		with pull-in wedge right	0	235	20	217865	
		with pull-in wedge left	0	235	20	217866	



5.10 Faceplate extensions croppable MM			L				
silver	515	with sash lifter	515	250	20	218214	
		with sash-lifter run-up	515	250	20	218215	



5.11 Faceplate extension MM B-TV				L				
silver	1950	with 1 i.S.	1	497	260	10	203697	210482
	2200	with 1 i.S.	1	747	260	10	203698	210481
	2450	with 2 i.S.	2	997	260	10	203699	210480



210335

5.12 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

210380

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



**MACO
MULTI-MATIC**



**Centre locks / Horizontal tilt locks /
Faceplate extensions**



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	260 - 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}
		1300	1	1.051 - 1.300		20	201829¹	207609¹
	left	400	0	320 - 400	260 - 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

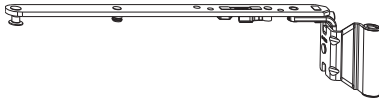
¹ A stabilizing scissor stay is compulsory from a SRW of 1301 mm.

² Use scissor stay arm size 1300.

201855 

6.1.2 Scissor stay arms with night-vent				No	No Tricoat	
silver	right	400	320 - 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	320 - 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" (may un hinge 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	320 - 400	120	20	202922¹	
			600	401 - 600	120	20	202924¹	
			800	601 - 800	120	20	204436¹	
			1300	801 - 1.300	120	20	202926¹	
	left	12/20-13	400	320 - 400	120	20	202923¹	
			600	401 - 600	120	20	202925¹	
			800	601 - 800	120	20	204437¹	
			1300	801 - 1.300	120	20	202927¹	
traffic white RAL 9016	right	12/20-13	400	320 - 400	120	20	202928¹	
			600	401 - 600	120	20	202930¹	
			800	601 - 800	120	20	204438¹	
			1300	801 - 1.300	120	20	202932¹	
	left	12/20-13	400	320 - 400	120	20	202929¹	
			600	401 - 600	120	20	202931¹	
			800	601 - 800	120	20	204439¹	
			1300	801 - 1.300	120	20	202933¹	

¹ Use only for "horizontal tilt position" (may unhinge at "vertical tilt position").

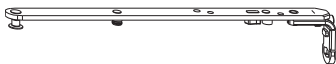
211128



6.1.4 Scissor stay faceplates i.S.							No	No Tricoat
silver	400	0	320 - 400	260 - 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		206866¹	209807¹

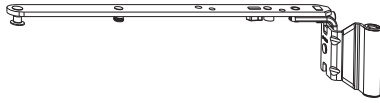
¹ A stabilizing scissor stay is compulsory from a SRW of 1301 mm.

² Use scissor stay arm size 1300.



207122

6.1.5 Scissor stay arms					No	No Tricoat
silver	400	320 - 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	320 - 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	320 - 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	320 - 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	320 - 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	260 - 320	20	211694	222727
			0	401 - 600	290 - 490	20	211695	222728
			0	601 - 800	491 - 690	20	211696	222729
			1	630 - 800		20	211904	222772
			1	801 - 1.050		20	211905¹	222773¹
			1	1.051 - 1.300		20	211906¹	222774¹

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	260 - 320	20	211694	222727
			0	401 - 600	290 - 490	20	211695	222728
			0	601 - 800	491 - 690	20	211696	222729
			1	630 - 800		20	211697	
			1	801 - 1.050		20	211698¹	
			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	260 - 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	222766 ¹
			1050	1	801 - 1.050		20	211900 ^{1,2}	222768 ¹
			1300	1	1.051 - 1.300		20	211902 ^{1,2}	222770 ¹
	left	scissor stay mounted MM	400	0	320 - 400	260 - 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	222767 ¹
			1050	1	801 - 1.050		20	211901 ^{1,2}	222769 ¹
			1300	1	1.051 - 1.300		20	211903 ^{1,2}	222771 ¹

¹ Use only for "horizontal tilt position" (may unhinge 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	260 - 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	260 - 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" (may unhinge 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

203297



6.1.12 Rebated scissor stays i.S. for half round windows 9 mm offset							No	No Tricoat	
silver			620	1	435 - 620	80	10	203297 ¹	207619 ¹
			1250	2	621 - 1.250	80	10	203298 ^{1,2}	207620 ¹
			with top coupling possibility		1250	0	435 - 1.250	80	10

¹ Use notch as reference point for screw positions.

² From SRW 1001 mm or sash weight above 60 kg, use of the stabilizing scissor stay is mandatory.

218200



6.1.13 Rebated scissor stays i.S. for half round windows 13 mm offset						No	No Tricoat	
silver	620	1	435 - 620	80	10	218200¹	226242¹	
	1250	2	621 - 1.250	80	10	218201^{1,2}	226247¹	
	with top coupling possibility		1250	0	435 - 1.250	80	10	218202^{1,2}

¹ Use notch as reference point for screw positions.

² From SRW 1001 mm or sash weight above 60 kg, use of the stabilizing scissor stay is mandatory.

204829



6.1.14 Tilt-first scissor stay faceplates i.S.						No	No Tricoat
silver	400	0	320 - 400	260 - 320	10	204826	
	600	0	401 - 600	290 - 490	10	204827	216963
	800	0	601 - 800	491 - 690	10	204828	211777
	1050	1	801 - 1.050		10	204829^{1,2}	211778^{1,2}
	1300	1	1.051 - 1.300		10	204830¹	211779¹

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

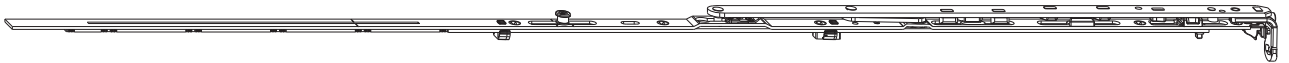
² Use scissor stay arm size 1300.



204832

6.1.15 Tilt-first scissor stay arms				No	No Tricoat
silver	400	320 - 400	10	204831	
	600	401 - 600	10	204832	216964
	800	601 - 800	10	204833	211780
	1300	801 - 1.300	10	204834	211782

212081







6.1.16 Tilt-first rebated scissor stays i.S.						No	No Tricoat	
silver	scissor stay mounted MM	400	0	320 - 400	260 - 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	212081¹	222886¹
		1300	1	1.051 - 1.300		10	212082¹	222887¹

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





6.2 Scissor stays TO

211911 

T	6.2.1 Scissor stays TO without scissor stay support arm i.S.					No		
						Tricoat		
silver	pot hinge scissor stay mounted MM	400	0	320 - 400	260 - 320	20	211711	222743
		600	0	401 - 600	290 - 490	20	211712	222744
		800	0	601 - 800	491 - 690	20	211713	222745
		1050	1	801 - 1.050		20	211911 ¹	222779 ¹
		1300	1	1.051 - 1.300		20	211912 ¹	222780 ¹





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

212331 

T	6.2.2 Scissor stays TO without scissor stay support arm i.S. for angled windows					No		
						Tricoat		
silver		630	0	430 - 630	80	10	212330	222987
		800	0	500 - 800	80	10	212331	222988
		1050	1	801 - 1.050	80	10	212332	222989
		1300	1	1.051 - 1.300	80	10	212333	222990



212953 

T	6.2.3 Scissor stays TO without scissor stay support arm i.S. for half round windows					No		
						Tricoat		
silver		620	1	435 - 620	80	10	212952	223011
		1250	2	621 - 1.250	80	10	212953 ¹	223012 ¹
		with top coupling possibility	0	435 - 1.250	80	10	212961 ¹	223013 ¹

¹ From SRW 1001 mm or sash weight above 60 kg, use of the stabilizing scissor stay is mandatory.



6.3 Rebated scissor stays MULTI MAMMUT








223612

6.3.1 Rebated scissor stays MULTI MAMMUT 9 mm offset								No	No Tricoat					
T	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	223600¹	223696¹			
			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	223601¹	223697¹		
			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	223616¹	223712¹
			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	223617¹	223713¹
	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	223632¹		
		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	223633¹		
		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	223648¹		
		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	223649¹		

¹ From SRW 1401 mm, use of the stabilizing stay is mandatory.



223620





6.3.2 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 stay is mandatory.







6.4 Scissor stays TV

201864 

6.4.1 Scissor stay faceplates TV							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	





206073 


6.4.2 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	206075	
	left	13 mm offset	620	1	435 - 620	60	10	206074	
			1250	2	621 - 1.250	60	10	206076	




6.5 Scissor stays INVISIBLE

206816 

206817 

6.5.1 T&T/tilt-first scissor stay faceplates INVISIBLE						No	No Tricoat	
silver		690	0	490 - 690	385 - 600	20	206810	209063
		800	0	691 - 800	601 - 700	20	206816	209064
		1050	1	801 - 1.050		20	206817	209065
		1300	1	1.051 - 1.300		20	217861	218779

212670 

6.5.2 T&T Scissor stay arms with hinge INVISIBLE						No	No Tricoat		
silver	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		
7 mm screw axis	right	9 mm offset	690	385 - 690	100	10	206332¹	209038¹	
			800/1050/1300	691 - 1.300	100	10	206345	209045	
	left	9 mm offset	690	385 - 690	100	10	206333¹	209039¹	
			800/1050/1300	691 - 1.300	100	10	206346	209046	
	right	13 mm offset	690	385 - 690	100	10	206334¹	209040¹	
			800/1050/1300	691 - 1.300	100	10	206347	209047	
	left	13 mm offset	690	385 - 690	100	10	206335¹	209041¹	
			800/1050/1300	691 - 1.300	100	10	206348	209048	
	13 mm screw axis	right	9 mm offset	690	385 - 690	100	10	206336¹	209042¹
				800/1050/1300	691 - 1.300	100	10	206349	209049
		left	9 mm offset	690	385 - 690	100	10	206337¹	209066¹
				800/1050/1300	691 - 1.300	100	10	206350	209050
right		13 mm offset	690	385 - 690	100	10	206338¹	209043¹	
			800/1050/1300	691 - 1.300	100	10	206351	209051	
left	13 mm offset	690	385 - 690	100	10	206339¹	209044¹		
		800/1050/1300	691 - 1.300	100	10	206352	209052		

¹ For combination with T&T hinge faceplate INVISIBLE (385 - 690)





207685



6.5.3 Tilt-first scissor stay arms with hinge INVISIBLE							No	No Tricoat
silver	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	
7 mm screw axis	right	9 mm offset	690	385 - 690	100	10	207685	211194
			800/1050/1300	691 - 1.300	100	10	207695	211196
	left	9 mm offset	690	385 - 690	100	10	207686	211195
			800/1050/1300	691 - 1.300	100	10	207696	211197
	right	13 mm offset	690	385 - 690	100	10	207687	211433
			800/1050/1300	691 - 1.300	100	10	207697	211437
left	13 mm offset	690	385 - 690	100	10	207688	211434	
		800/1050/1300	691 - 1.300	100	10	207698	211438	
13 mm screw axis	right	9 mm offset	690	385 - 690	100	10	207689	209930
			800/1050/1300	691 - 1.300	100	10	207699	209932
	left	9 mm offset	690	385 - 690	100	10	207690	209931
			800/1050/1300	691 - 1.300	100	10	207700	209933
	right	13 mm offset	690	385 - 690	100	10	207691	211429
			800/1050/1300	691 - 1.300	100	10	207701	211431
left	13 mm offset	690	385 - 690	100	10	207692	211430	
		800/1050/1300	691 - 1.300	100	10	207702	211432	

6.6 Scissor stays MULTI POWER

217348

6.6.1 T&T/tilt-first scissor stay faceplates MULTI POWER							No	No Tricoat
silver	600	0	465 - 600	370 - 490	150	20	217346	225296
	800	0	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

6.6.2 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

6.6.3 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	225313
				1050/1300	442	801 - 1.300	150	10	217480	225317
		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	225314
				1050/1300	442	801 - 1.300	150	10	217481	225318
		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

6.6.4 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

6.6.5 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	600/800	330	370 - 800	150	10	217492	225539
				1050/1300	442	801 - 1.300	150	10	217496	225541
		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	600/800	330	370 - 800	150	10	217493	225540
					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



6.6.6 Scissor stay faceplates with night-vent MULTI POWER									No	No Tricoat
silver	right	600	0	465 - 600	370 - 490	150	20	217562¹	225523¹	
		800	0	601 - 800	491 - 690	150	20	217564¹	225525¹	
		1050	1	801 - 1.050		150	20	217566¹	225527¹	
		1300	1	1.051 - 1.300		150	20	217568^{1,2}	225529^{1,2}	
	left	600	0	465 - 600	370 - 490	150	20	217563¹	225524¹	
		800	0	601 - 800	491 - 690	150	20	217565¹	225526¹	
		1050	1	801 - 1.050		150	20	217567¹	225528¹	
		1300	1	1.051 - 1.300		150	20	217569^{1,2}	225530^{1,2}	

¹ Use only for "horizontal tilt position" (may unhinge at "vertical tilt position").

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



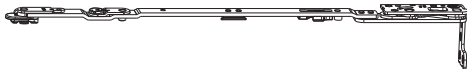
217647

T	6.6.7 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	225547¹
				1050/1300	442	801 - 1.300	150	10	217645¹	225549¹
		13 mm offset	timber 24 mm rebate depth	600/800	330	370 - 800	150	10	217643¹	225551¹
				1050/1300	442	801 - 1.300	150	10	217647¹	225553¹
	left	9 mm offset	timber 24 mm rebate depth	600/800	330	370 - 800	150	10	217642¹	225548¹
					1050/1300	442	801 - 1.300	150	10	217646¹
		13 mm offset	timber 24 mm rebate depth	600/800	330	370 - 800	150	10	217644¹	225552¹
				1050/1300	442	801 - 1.300	150	10	217648¹	225554¹

¹ Use only for "horizontal tilt position" (may unhinge at "vertical tilt position").



217655







P	6.6.8 Scissor stay arms with hinge with night-vent for PVC MULTI POWER				L				No	No Tricoat
	Material	Side	Offset	Rebate depth						
silver	right	9 mm offset	PVC 30 mm rebate depth	600/800	330	370 - 800	150	10	217649 ¹	225555 ¹
		13 mm offset	PVC 30 mm rebate depth	1050/1300	442	801 - 1.300	150	10	217653 ¹	225557 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	225556 ¹
		13 mm offset	PVC 30 mm rebate depth	1050/1300	442	801 - 1.300	150	10	217654 ¹	225558 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

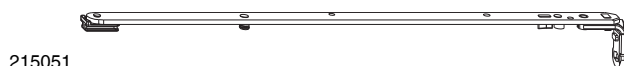
¹ Use only for "horizontal tilt position" (may unhinge at "vertical tilt position").




6.7 Comfort scissor stays




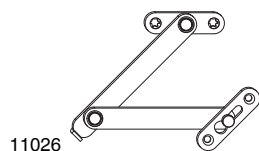
6.7.1 Scissor stay faceplates for comfort scissor stays							No	No Tricoat
silver	right	800	0	601 - 800	490 - 600	10	215053	218588
		1050	1	801 - 1.050		10	215055	218590
	left	800	0	601 - 800	490 - 600	10	215054	218589
		1050	1	801 - 1.050		10	215056	218591




6.7.2 Rebated scissor stay arms for comfort scissor stays						No	No Tricoat
silver	right	490 - 1.400	80	10	215051	218049	
	left	490 - 1.400	80	10	215052	218050	

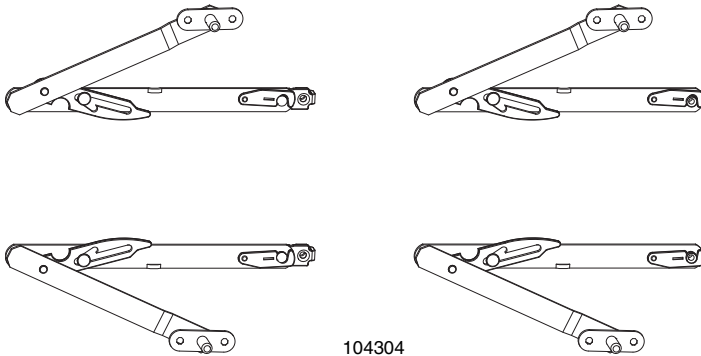


6.8 Tilt stays			L		No	No Tricoat
silver	tilt stay with fixing tab		205	20	209723	216249
	tilt stay with fixing tab with screw hole mounting		205	20	101548	209297



6.9 Horizontal tilt stays			L		No	No Tricoat
silver			190	20	11026	101354
			250	20	11027	101355

6.10 Restrictor and cleaning stays



455347

104304

6.10.1 Restrictor and cleaning stays							
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

6.10.2 Accessories for restrictor and cleaning stays

455386

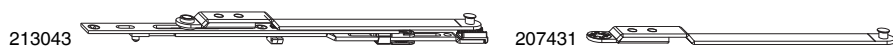
P 6.10.2.1 Spacer plates for restrictor and cleaning stay						
silver	1 mm			20	455386	363378
	3 mm			20	455349	
	6 mm			20	455387	
	5° angle			20	455388	


368425

6.10.2.2 Hinge bolt with screw hole for restrictor and cleaning stay						
silver			40	100	368425	




6.11 Accessories for scissor stays




6.11.1 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




6.11.2 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




6.11.3 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	219512




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



6.11.5 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 


6.11.6 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 400/600/800		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 on scissors-stay sizes 150; 60 mm on size 1300.

³ Opening dimension: 75 mm for scissor sizes 400 + 600; 60 mm for size 800.


369474  366012 

6.11.7 Anti-slam devices / scissor stay restrictors MULTI POWER			No	No Tricoat
grey 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	
brown scissor stay restrictor for scissor stay MULTI POWER, sizes 2/3 or 1050/1300		100	366012 ²	

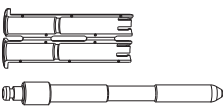
¹ Opening dimension: 75 mm for scissor stay sizes 600; 60 mm for size 800.


² Opening dimension: 80 mm on scissors-stay sizes 150; 60 mm on size 1300.

368077 

6.11.8 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	

¹ For sash weight from approximately 60 kg, depending on the window profile or window geometry.

105273 

6.11.9 Accessories scissor stays MULTI MAMMUT			No	No Tricoat
Scissor stay hinge pin and PVC bush for scissor stay Multi Mammut		20	105273	



**MACO
MULTI-MATIC**



Scissor stays

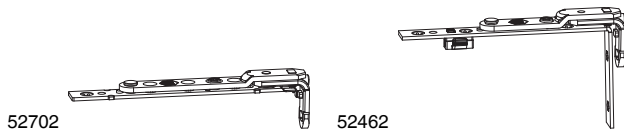


7 Turn-only and tilt-only hinges, turn-only hinge - frame parts and compression devices

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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



7.1.1 Turn-only hinges - sash part AS/DT/PVC		L	kg	cube	No	No Tricoat
silver	turn-only hinge on top DT	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 For 13 mm offset without Eurogroove use spacer clips 357881.

² Use extension faceplate 360327 if necessary.

³ For Eurogroove use packer 41103.

⁴ Use extension faceplate 215572 if necessary.

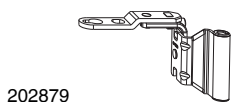


T	7.1.2 Turn-only hinges - sash part TO		L	mm	kg	cube	No	No Tricoat
silver	turn-only hinge croppable TO without scissor stay support arm		430	370 - 1.650	130	10	207116	
	turn-only hinge on top TO	15 rebate leg	143		130	50	55417	202516
		18 rebate leg	143		130	50	54777	201472
		20 rebate leg	143		130	50	54719	205052
	turn-only hinge on top TO without scissor stay support arm	timber	143		130	50	220076	205053

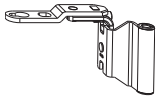


7.1.3 Turn-only hinge arms for turn and tilt hinge faceplates		kg	cube	No	No Tricoat
silver	turn-only hinge TO for turn-only faceplate MM	130	10	213217	
	support-arm for turn-only hinge MM	120	50	202271 ¹	208314 ¹

¹ With rebated scissor stay support arm DT 130 kg



7.1.4 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	223228
	left	12/20-13	120	20	202880	223227
traffic white RAL 9016	right	12/20-13	120	20	207392	
	left	12/20-13	120	20	207391	



217187

T

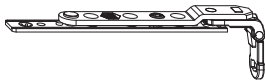
7.1.5 Turn-only hinge arms with rebated scissor stay support arm DT for turn and tilt hinge faceplates



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



206315

7.1.6 Turn-only hinges - sash part, for angled windows



No

No
Tricoat

silver				20	206315^{1,2,3}	207669^{1,2,3}
--------	--	--	--	----	-------------------------------	-------------------------------

¹ For 13 mm offset without Eurogroove use spacer clips 357881.

² Use extension faceplate 360327 if necessary.

³ For Eurogroove use packer 41103.

202269



7.1.7 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



T

7.1.8 Packer for turn-only hinge - sash part, top, timber for Eurogroove

L



No

No
Tricoat

natural				142	100	41103	
---------	--	--	--	-----	-----	--------------	--

360327



215572



7.1.9 Faceplate extensions for turn-only hinges - sash part

L



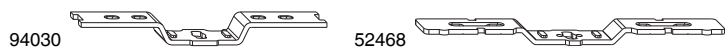
No

No
Tricoat

silver	DT/TO			180	20	360327	
	AS/PVC			180	20	215572	



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



7.2.1 Tilt-only and turn-only hinges - sash part AS/DT/PVC		L	kg	cube	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/DT	159	80	100	52468 ^{1,3}	205066 ^{1,3}

¹ When our restrictor and cleaning stays are 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

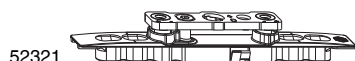
³ Without Eurogroove



7.2.2 Tilt-only and turn-only hinge - sash part TO with spacers		L	kg	cube	No	No Tricoat
silver		100	80	50	54775 ^{1,2}	201609 ^{1,2}

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

² Without Eurogroove



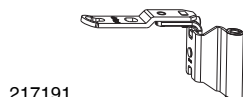
7.2.3 Tilt-only and turn-only hinge		L	kg	cube	No	No Tricoat
silver	tilt-only hinge and turn-only hinge AS/DT/PVC adjustable	146	80	50	52321 ^{1,2}	201631 ^{1,2}

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

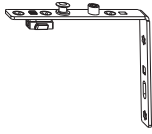
² For Eurogroove



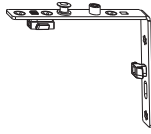
7.2.4 Tilt-only hinge for turn-only and tilt-only hinge faceplates		cube	No	No Tricoat
silver		20	213297	



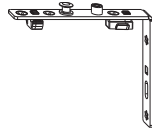
7.2.5 Tilt-only hinges with rebated scissor stay support arm DT for turn-only and tilt-only hinge faceplates		kg	cube	No	No Tricoat
silver	right 12/18-13	130	20	217191	
	left 12/18-13	130	20	217192	
traffic white RAL 9016	right 12/18-13	130	20	217193	
	left 12/18-13	130	20	217194	




202270



207817

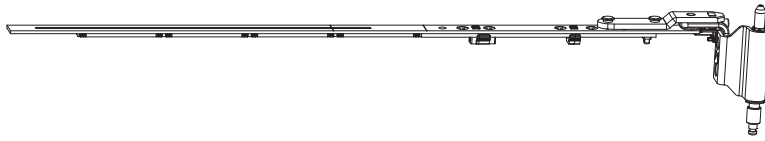


210025





7.3 Turn-only and tilt-only hinge faceplates			No	No <small>Tricoat</small>
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	



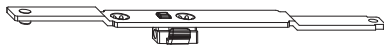
7.4 Turn-only hinges - sash part MULTI MAMMUT



223776

7.4.1 Croppable turn-only hinges - sash part MULTI MAMMUT						
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 extensions for turn-only hinges - sash part MULTI MAMMUT						
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 TV - sash part



54917

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

¹ For Eurogroove

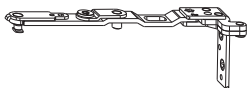


206748



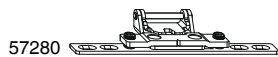
206750

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



54922

7.5.3 Turn-only hinges - frame part, for turn-only hinge faceplates 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



7.6.1 Turn-only and tilt-only hinge faceplates INVISIBLE		L	kg		No	No Tricoat
silver		290	100	20	208993 ¹	209062 ¹

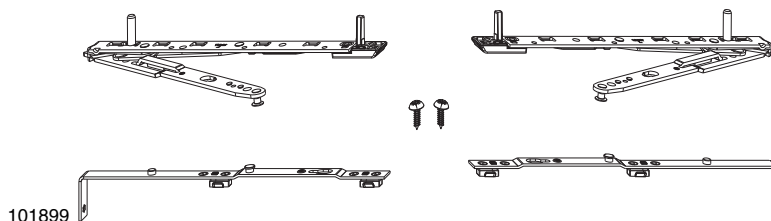
¹ For combination with scissor stay arm with hinge INVISIBLE (206810).



7.6.2 Croppable turn-only hinge faceplates INVISIBLE MM			L			No	No Tricoat	
silver		600	0	496,5	490 - 600	20	213791 ^{1,2}	218773 ^{1,2}
		800	0	696,5	601 - 800	20	213792 ¹	218774 ¹
	with 1 i.S.	1050	1	946,5	801 - 1.050	20	213793 ¹	218775 ¹
		1300	1	1.196,5	1.051 - 1.300	20	213794 ¹	218776 ¹

¹ For combination with scissor stay arm with hinge INVISIBLE (206810).

² With short corner element a min. application range from SRW 385 mm is possible.

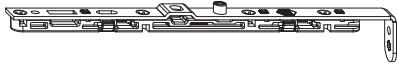


7.6.3 Basic pack tilt-only VV INVISIBLE					No	No Tricoat	
silver	tilt-only 18 mm rebate depth 9 mm offset	520 - 1.200	300 - 2.400	10	103302		
	7 mm screw axis	tilt-only 9 mm offset	520 - 1.200	300 - 2.400	10	101899 ¹	101903 ¹
		tilt-only 13 mm offset	520 - 1.200	300 - 2.400	10	101900 ¹	101904 ¹
	13 mm screw axis	tilt-only 9 mm offset	520 - 1.200	300 - 2.400	10	101901 ¹	101905 ¹
		tilt-only 13 mm offset	520 - 1.200	300 - 2.400	10	101902 ¹	101906 ¹

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

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

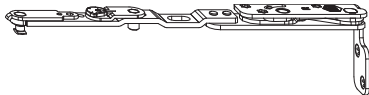
7.7.1 Turn-only and tilt-only hinge faceplates / turn-only and tilt-only hinge arms with hinge MULTI POWER



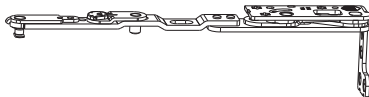
217729										
7.7.1.1 Turn-only and tilt-only hinge faceplates fixed MULTI POWER					No	No Tricoat				
silver		255 - 1.400	150	20	217729	225300				



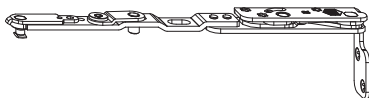
217687										
7.7.1.2 Croppable turn-only hinge faceplates MULTI POWER					No	No Tricoat				
silver		600	0	401 - 600	20	217685	225301			
		800	0	601 - 800	20	217686	225302			
		1050	1	801 - 1.050	20	217687	225303			
		1300	1	1.051 - 1.300	20	217688	225304			



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	225326		
		left	9 mm offset	255 - 1.400	150	10	217694	225327		
		right	13 mm offset	255 - 1.400	150	10	217695	225328		
		left	13 mm offset	255 - 1.400	150	10	217696	225329		



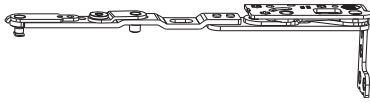
217723										
T	7.7.1.5 Tilt-only hinge arms with hinge timber MULTI POWER					No	No Tricoat			
silver	timber 24 mm rebate depth	right	9 mm offset	255 - 1.200	80	10	217721^{1,2}	225338^{1,2}		
		left	9 mm offset	255 - 1.200	80	10	217722^{1,2}	225339^{1,2}		
		right	13 mm offset	255 - 1.200	80	10	217723^{1,2}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



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



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}	225342 ^{1,2}	
		left	9 mm offset	255 - 1.200	80	10	217726 ^{1,2}	225343 ^{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

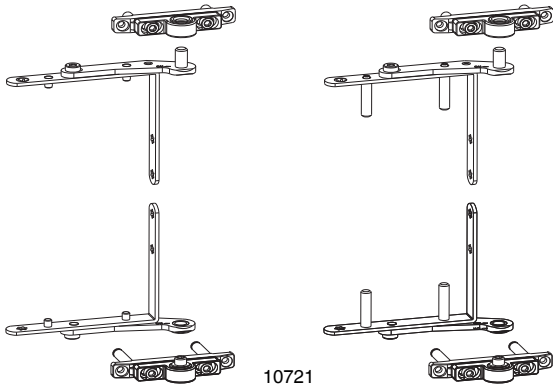
T	7.7.2.1 Turn-only hinge arms with hinge for 3-sashed timber windows MULTI POWER							No	No Tricoat
	silver	timber 24 mm rebate depth							
		right	9 mm offset	255 - 1.400	80	10	217713	225330	
		left	9 mm offset	255 - 1.400	80	10	217714	225331	
		right	13 mm offset	255 - 1.400	80	10	217715	225332	
		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	225334	
		left	9 mm offset	255 - 1.400	80	10	217718	225335	
		right	13 mm offset	255 - 1.400	80	10	217719	225336	
		left	13 mm offset	255 - 1.400	80	10	217720	225337	

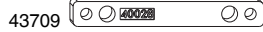
7.8 Turn-only hinges for 3-sashed windows



7.8.1 Turn-only hinges for 3-sashed windows				kg	cube	No	No Tricoat
silver	PVC	right	top + bottom	60	20	10755 ¹	101400 ¹
		left	top + bottom	60	20	10756 ¹	101401 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 ^{1,1,2}	
		left	top + bottom	60	20	10902 ^{1,1,2}	
	timber	right	top + bottom	80	20	11251 ²	
		left	top + bottom	80	20	11252 ²	

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

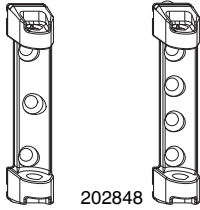
² CAUTION: When using the 2 mm and 4 mm packers, the max. sash weight is 60 kg!



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



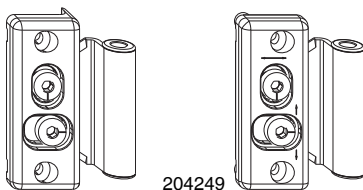
57930 202848

7.9.1 Multi-sash centre frame hinges - frame part				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
		with 7 mm supporting pin	timber/PVC	60	50	202848	205124
traffic white RAL 9016	multi-sash centre frame hinge bearing	with 7 mm supporting pin	PVC	60	50	205705	



44470

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



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	212815
		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
	pearl light grey RAL 9022		100	44468
	Brown F5		100	44467
	RAL 9016 traffic white		100	44463
			100	44456



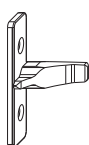
7.10 Compression devices



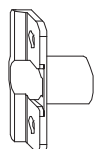
54783

7.10.1 Surface-mounted compression devices					N ^o	N ^o Tricoat
silver	sash and frame component	timber	100	52389 ¹	205054 ¹	
		PVC	100	54783 ¹	205058 ¹	
	sash and frame component for rebate leg gasket	timber	100	55028 ¹	205055 ¹	
	sash component for rebate screw-fixing	PVC 18 mm rebate leg	100	220074 ¹	205059 ¹	
	sash component	timber/PVC/alu-timber	100	94217 ¹	355817 ¹	
traffic white RAL 9016	frame component	timber/PVC/alu-timber	100	94218 ¹	355814 ¹	
	sash and frame component	timber	100	206585 ¹		
	sash and frame component for 5° pitch	PVC	100	27248 ¹		
	sash and frame component for rebate leg gasket	timber	100	21062 ¹		

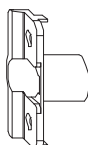
¹ Not suitable for fully concealed hardware!



97529



97528



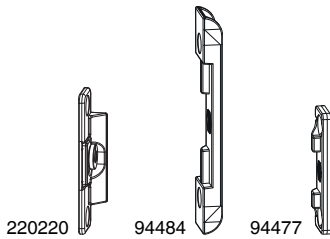
94088


T 7.10.2 Drill-in compression devices for timber					N ^o	N ^o Tricoat
silver	sash component 9 / 13 mm offset	for Eurogroove	100	94089 ^{1,2,3}	359574 ^{1,2,3}	
	sash component 9 mm offset	without Eurogroove	100	97529 ^{2,3}	359211 ^{2,3}	
	sash component 13 mm offset	without Eurogroove	100	360009 ^{2,3}	360264 ^{2,3}	
	frame component	for 4 mm air gap, 9 mm offset	100	360006 ^{2,3}	368198 ^{2,3}	
		for 4 mm air gap, 13 mm offset	100	358996 ^{2,3}	363377 ^{2,3}	
		Euro-rebate 18 mm rebate depth	100	354090 ^{2,3}	363297 ^{2,3}	
		Euro-rebate 20 mm rebate depth	100	97528 ^{2,3}	359594 ^{2,3}	
		Euro-rebate 24 mm rebate depth	100	357741 ^{2,3}	359573 ^{2,3}	
		Euro-rebate 13 mm offset	100	94088 ^{2,3}	363246 ^{2,3}	
	hardware groove 20 mm rebate depth 9 mm offset	100	94258 ^{2,3}	360371 ^{2,3}		
	hardware groove 25 mm rebate depth 9 mm offset	100	94258 ^{2,3}	360371 ^{2,3}		
	Euro-rebate 30 mm rebate depth	100	368015			
13 mm offset						

¹ Spacer for corner hinge 40485 may be used for Eurogroove.

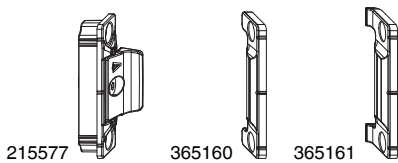
² Suitable for MULTI POWER, INVISIBLE, TV, MULTI MAMMUT, TO, DT and AS.


³ For windows - GroupC5 EN 12210



7.10.3 Concealed compression devices adjustable for timber without Eurogroove				No	No Tricoat
silver	sash component 9 mm offset	without Eurogroove	100	220220 ¹	203333 ¹
	sash component 13 mm offset	without Eurogroove	100	208195 ¹	211008 ¹
	frame component	for 4 mm air gap, 9 mm offset	100	94484 ¹	204968 ¹
		for 4 mm air gap, 13 mm offset	100	357677 ¹	
		Euro-rebate 18 mm rebate depth 9 mm offset	100	94477 ¹	355796 ¹
	Euro-rebate 20 mm rebate depth 9 mm offset	100	98265 ¹	358861 ¹	
	Euro-rebate 24 mm rebate depth 13 mm offset	100	359002 ¹	359572 ¹	
	Hardware groove 6/8/4	100	94478 ¹	355557 ¹	
	hardware groove 7/8/4	100	94479 ¹	201469 ¹	

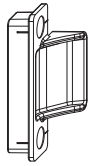
¹ Not suitable for fully concealed hardware!



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

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

² For windows - Group C3 EN 12210



94185



218543

P 7.10.5 Concealed compression devices for PVC



No

No
Tricoat

silver	sash component	PVC	100	94185 ^{1,2,3}	355815 ^{1,2,3}
	sash component with 5 mm positioning pin	PVC	100	354795 ^{1,2,3}	
	sash component adjustable	PVC	100	218543 ^{1,2,4}	226554 ^{1,2,4}

¹ Frame component PVC, see profile sheet

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


³ For windows - Group C5 EN 12210

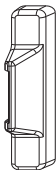
⁴ For windows - Group C3 EN 12210

7.11 Cover caps




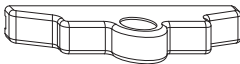
43568

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




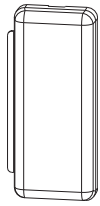
43569

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




42714

7.11.3 Cover caps for 3-sashed windows - frame part			No	No Tricoat
silver	painted	50	44287	
champagne	painted	50	41698	
titanium	painted	50	40734	
light bronze	dyed	20	41642	
RAL 9001 cream white	dyed	100	364093	
Brown F5	dyed	20	42723	
gold look	metallised	50	40737	
pearl light grey RAL 9022	dyed	50	43618	
RAL 9016 traffic white	dyed	20	42714	
white	dyed	20	41117	for timber profiles



43800

7.11.4 Cover caps for multi-sash centre frame hinges			No	No Tricoat
silver	painted	50	44289	
champagne	painted	50	44288	
titanium	painted	50	43803	
light bronze	dyed	50	43801	
RAL 9001 cream white	dyed	50	44295	
Brown F5	dyed	50	43804	
chrome-look	metallised	50	44286	
gold look	metallised	50	43802	
pearl light grey RAL 9022	dyed	100	44102	
RAL 9016 traffic white	dyed	50	43800	



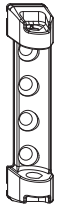
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8 Scissor stay hinges

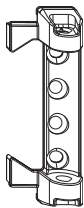
8.1 Scissor stay hinges PVC



52480

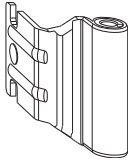
P	8.1.1 Scissor stay hinges PVC		kg	No	No
					Tricoat
silver	with 3 mm positioning pin	100	100	52480	201082
	with 7 mm supporting pin	120	100	52481	201402
traffic white RAL 9016	with 3 mm positioning pin	100	100	204039	
	with 7 mm supporting pin	120	100	204779	

8.2 Surface-mounted scissor stay hinges

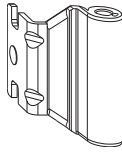


54694



8.2.1	Surface-mounted scissor stay hinges		kg	No	No
					Tricoat
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	



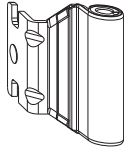
58477



52486

8.3 Rebated scissor stay support arms AS/PVC				No	No <small>Tricoat</small>
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	204567
	12/18-26	80	100	58477	204568
	12/20-9	120	100	52487	204570
	12/20-10	120	100	52489	203685
	12/20-11	120	100	52488	202292
	12/20-13	120	100	52486	201403
	12/20-14	120	100	55359	204569
	12/20-15	120	100	55883	204571
	12/20-26	80	100	59469	204572
	12/21-13	120	100	58004	204573
	12/22-9	120	100	55085	204574
	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	

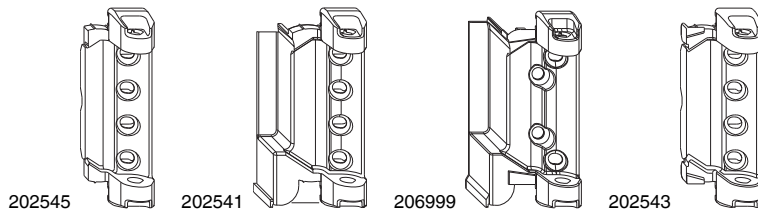




55009

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	
	12/22-13	120	100	201094	

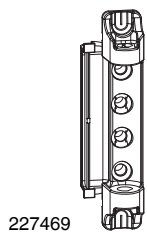
8.5 Scissor stay hinges DT



T 8.5.1 Scissor stay hinges DT130

		kg	kg	No	No Tricoat
silver	4/15	130	50	202545 ¹	206706 ¹
	right 4/18-9	130	50	202541 ¹	206702 ¹
	left 4/18-9	130	50	202542 ¹	206703 ¹
	right 4/18-13	130	50	206999 ¹	215019 ¹
	left 4/18-13	130	50	207000 ¹	215020 ¹
	12/18	130	50	202543 ¹	206704 ¹
	12/20	130	50	202544 ¹	206705 ¹
	right 4/18-9	130	50	207878 ¹	
	left 4/18-9	130	50	207879 ¹	
	right 4/18-13	130	50	207006 ¹	
left 4/18-13	130	50	207007 ¹		
12/18	130	50	207880 ¹		
12/20	130	50	207881 ¹		
traffic white RAL 9016					

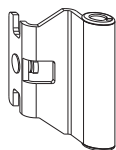
¹ Angled screw-fixing required from 100 kg.



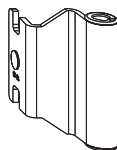
T 8.5.2 Scissor stay hinges DT160

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





202534



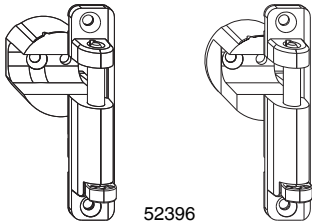
202535

T	8.5.3 Rebated scissor stay support arms DTuni		kg	No	No	
						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.

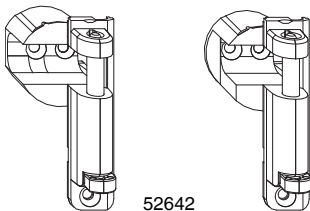
8.6 Scissor stay hinges TO

8.6.1 Scissor stay hinges TO



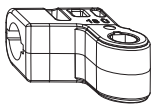
55235 52396

T 8.6.1.1 Scissor stay hinges TO			kg	cube	No	No Tricoat
silver	right	4/15-9	130	50	55414	202511
	left	4/15-9	130	50	55415	202515
	right	4/18-9	130	50	55235	204138
	left	4/18-9	130	50	55236	203705
	right	12/18-9	130	50	52396	201479
	left	12/18-9	130	50	52397	201474
	right	12/20-9	130	50	54716	204609
	left	12/20-9	130	50	54717	204610
traffic white RAL 9016	right	12/18-9	130	50	22519	
	left	12/18-9	130	50	22517	



207061 52642

T 8.6.1.2 Scissor stay hinges TO 80 kg short			kg	cube	No	No Tricoat
silver	right	4/15-9	80	50	207061	
	left	4/15-9	80	50	207062	
	right	12/18-9	80	50	52642	
	left	12/18-9	80	50	52643	

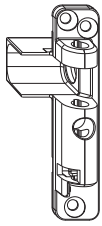


55416

T 8.6.2 Scissor stay support arms TO / Routed scissor stay hinges			kg	cube	No	No Tricoat
silver	15 rebate leg		130	50	55416	202512
	18 rebate leg		130	50	52388	201488
	20 rebate leg		130	50	54718	204611
	18 rebate leg		130	50	22526	
traffic white RAL 9016						



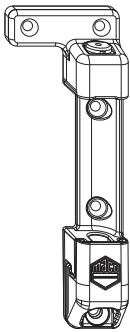
8.7 Routed scissor stay hinges



58076

8.7.1 Routed scissor stay hinges		kg		No		No Tricoat	
silver	right	80	50	58076 ¹	206415 ¹		
	left	80	50	58077 ¹	206416 ¹		

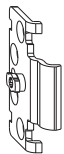
¹ Scissor stay hinge bolt 39146 and retainer for scissor stay hinge bolt 58240 included.



210600

8.8 Scissor stay hinges MULTI MAMMUT		kg		No		No 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 min. 20 mm



55354

T 8.9 Scissor stay hinges TV for half round windows		kg		No		No Tricoat	
silver	13 mm offset	60	100	55354			

8.10 Cover caps



42083

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



369607

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

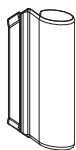
¹ Also compatible with scissor stay hinge DT 130




369525

T 8.10.3 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

8.10.4 Cover caps for rebated scissor stay support arms AS/PVC			No	No Tricoat
silver	painting	100	44291	
champagne	painting	100	42108	
titanium	painting	100	42107	
light bronze	dyed	100	42105	
RAL 9001 cream white	dyed	100	42194	
Brown F5	dyed	100	42192	
chrome-look	metallised	100	44244	
gold look	metallised	100	42106	
pearl light grey RAL 9022	dyed	100	43760	
RAL 9016 traffic white	dyed	100	42084	



354669

T	8.10.5 Cover caps for rebated scissor stay support arms DTuni			No	No Tricoat
	silver	painting	100	360952	
	champagne	painting	100	354673	
	titanium	painting	100	354672	
	light bronze	dyed	100	354670	
	RAL 9001 cream white	dyed	100	356597	
	Brown F5	dyed	100	354675	
	chrome-look	metallised	100	354676	
	gold look	metallised	100	354671	
	pearl light grey RAL 9022	dyed	100	354674	
	RAL 9016 traffic white	dyed	100	354669	



360239

T 8.10.6 Cover caps for scissor stay hinges TO



No

No
Tricoat

silver	right	Painted	50	360239	
	left	Painted	50	360240	
titanium	right	Painted	50	40761	
	left	Painted	50	40763	
Brown F5	right	Dyed	50	40746	
	left	Dyed	50	40747	
champagne	left	Painted	50	41695	
	right	Painted	50	41696	
chrome-look	right	Metallised	50	360853	
	left	Metallised	50	360854	
gold look	right	Metallised	50	40503	
	left	Metallised	50	40505	
light bronze	right	Dyed	50	41574	
	left	Dyed	50	41576	
RAL 9016 traffic white	right	Dyed	100	41241	
	left	Dyed	100	41242	



360241

T 8.10.7 Cover caps for scissor stay support arms TO



No

No
Tricoat

silver	Painted	100	360241	
titanium	Painted	50	40760	
Brown F5	Dyed	50	40745	
champagne	Painted	50	41697	
chrome-look	Metallised	50	360855	
gold look	Metallised	50	40508	
light bronze	Dyed	50	41587	
RAL 9016 traffic white	Dyed	100	41240	



8.11 Accessories for scissor stay hinges



94491

8.11.1 Scissor stay hinge pins AS/DTuni/PVC



No

No
Tricoat

silver

200

94491

97553



58240

T 8.11.2 Catch for scissor stay hinge pin TO



No

No
Tricoat

silver

100

58240



364716

8.11.3 Dust cover caps for scissor stay hinges MULTI MAMMUT



No

No
Tricoat

titanium

100

367812

pearl light grey RAL 9022

100

364565

RAL 9016 traffic white

100

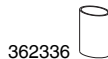
364716



364675



364676



362336

8.11.4 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, 180 kg 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 / Corner support	Pivot post with Ø 3 mm positioning pin 52483	Pivot post with Ø 7 mm supporting pins, 3 mm long 52485	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 PVC with Ø 3 mm positioning pin 52478	100 kg max. 2.4 m ²	100 kg max. 2.4 m ²	120 kg max. 2.4 m ²	--	--	--	--	--
Corner support PVC with Ø 5 mm supporting pins 52479	100 kg max. 3.0 m ²	100 kg max. 3.0 m ²	120 kg max. 3.0 m ²	--	--	--	--	--
Rebated corner support AS/PVC without rebate-leg	100 kg* max. 3.0 m ²	100 kg* max. 3.0 m ²	120 kg* max. 3.0 m ²	120 kg* max. 3.0 m ²	--	--	--	--
Corner support AS with rebate-leg	--	--	--	--	120 kg* max. 3.0 m ²	--	--	--
Corner support INVISIBLE	--	--	--	--	--	100 kg* max. 2.4 m ²	--	--
Corner support MULTI POWER	--	--	--	--	--	--	150 kg max. 3.0 m ²	--
Rebated corner support MULTI MAMMUT	--	--	--	--	--	--	--	180 kg max. 3.6 m ²
Corner support PVC MULTI MAMMUT	--	--	--	--	--	--	--	180 kg max. 3.6 m ²

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

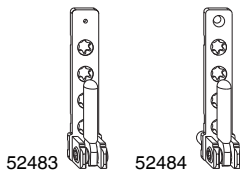
Above pivot post / corner support combinations may only be combined with scissor stay hinges of the same bearing type!

9.1.2 Timber

Pivot post	Drill-in pivot post	Pivot post AS	Pivot post AS for rebated corner support ASI/PVC	Pivot post DT130	Pivot post DT160	Pivot post TO	Pivot post TV	Pivot post INVISIBLE	Pivot post MULTI POWER	Pivot post MULTI MAMMUT
Corner support										
Drill-in corner support	60 kg max. 2.2 m²	--	--	--	--	--	--	--	--	--
Corner support AS with rebate-leg	--	120 kg max. 3.0 m²	--	--	--	--	--	--	--	--
Rebated corner support ASI/PVC without rebate-leg	--	--	120 kg max. 3.0 m²	--	--	--	--	--	--	--
Corner support DT130 without rebate-leg	--	--	--	100 kg max. 3.0 m²	100 kg max. 3.0 m²	--	--	--	--	--
Corner support DT130 with rebate-leg	--	--	--	130 kg max. 3.0 m²	130 kg max. 3.0 m²	--	--	--	--	--
Corner support DT160 with rebate-leg	--	--	--	--	160 kg max. 3.0 m²	--	--	--	--	--
Corner support TO with rebate-leg	--	--	--	--	--	130 kg max. 3.0 m²	--	--	--	--
Corner support TV	--	--	--	--	--	--	100 kg max. 2.4 m²	--	--	--
Corner support INVISIBLE	--	--	--	--	--	--	--	100 kg max. 2.4 m²	--	--
Corner support MULTI POWER	--	--	--	--	--	--	--	--	150 kg max. 3.0 m²	--
Corner support MULTI MAMMUT	--	--	--	--	--	--	--	--	--	220 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!										



9.2 Pivot posts PVC

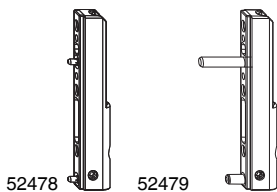


52483

52484

P 9.2.1 Pivot posts PVC		kg	cube	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	201401¹
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!



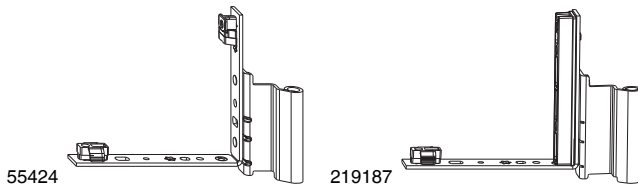
52478

52479

P 9.2.2 Corner supports PVC		kg	cube	No	No Tricoat
silver	with 3 mm positioning pin	120	100	52478¹	202647¹
	with 5 mm supporting pin 17 mm long	120	100	206196²	
	with 5 mm supporting pins 23 mm long	120	100	52479²	201400²
traffic white RAL 9016	with 3 mm positioning pin	120	100	206848¹	
	with 5 mm supporting pins 23 mm long	120	100	206584²	

¹ Maximum sash total surface 2.4 m².

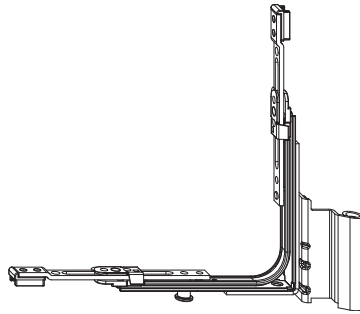
² Above 100 kg support pin must reach through at least 2 profile walls!





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	215436 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	204618 ¹
	left	12/18-26	80	100	58476 ¹	204619 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	204622 ¹
	left	12/20-26	80	100	59917 ¹	204623 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 Corner elements with corner support AS/PVC without rebate-leg screw fixing EH						No	No Tricoat
silver	with 1 i.S.	right	12/18-9	120	20	218155¹	
		left	12/18-9	120	20	218156¹	
		right	12/18-11	120	20	218157¹	
		left	12/18-11	120	20	218158¹	
		right	12/18-13	120	20	218159¹	218988¹
		left	12/18-13	120	20	218160¹	218989¹
		right	12/18-26	80	20	218161¹	
		left	12/18-26	80	20	218162¹	
		right	12/20-9	120	20	218163¹	
		left	12/20-9	120	20	218164¹	
		right	12/20-13	120	20	205664¹	207579¹
		left	12/20-13	120	20	205665¹	207580¹
		right	12/20-26	80	20	218165¹	
		left	12/20-26	80	20	218166¹	

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



224282

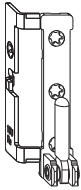
224283

9.2.5 Corner element two-part				No	No Tricoat
silver	corner connector MM bottom for half round		20	224282¹	
	vertically extendable	480 - 1.250	50	224283²	

¹ When used for half round windows also part number 224283.

² When used for half round windows also part number 224282.

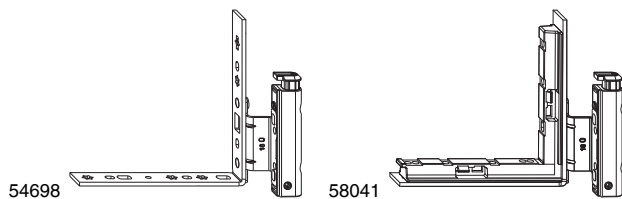
9.3 Surface-mounted pivot posts



214104

9.3.1 Surface-mounted pivot posts for rebated corner supports AS/PVC without rebate-leg screw fixing						No	No Tricoat
silver	right	12/18	120	50	214104¹	218986¹	
	left	12/18	120	50	214105¹	218987¹	
	right	12/20	120	50	214106¹	224271¹	
	left	12/20	120	50	214107¹	224272¹	
traffic white RAL 9016	right	12/18	120	50	214112¹		
	left	12/18	120	50	214113¹		
	right	12/20	120	50	214114¹		
	left	12/20	120	50	214115¹		

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



54698

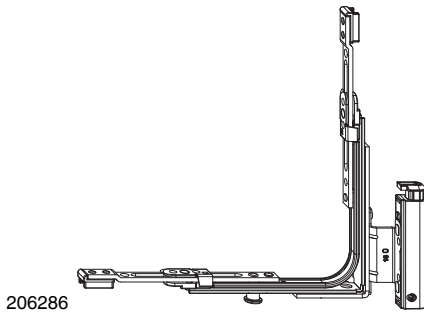
58041



9.3.2 Surface-mounted rebated corner supports with rebate-leg screw fixing						No	No Tricoat		
silver	with rebate-leg screw-fixing	right	12/18-9	120	50	54698¹	204606¹		
		left	12/18-9	120	50	54699¹	204607¹		
		right	12/18-11	120	50	206996¹			
		left	12/18-11	120	50	206997¹			
		right	12/18-13	120	50	54700¹	204608¹		
		left	12/18-13	120	50	54701¹	204603¹		
		right	12/20-9	120	50	54702¹	204781¹		
		left	12/20-9	120	50	54703¹	204782¹		
		right	12/20-13	120	50	54704¹	202520¹		
		left	12/20-13	120	50	54705¹	202521¹		
		pre-assembled spacer bar for corner hinge		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	207922¹			
		left	12/18-9	120	50	207923¹			
		right	12/18-11	120	50	207924¹			
		left	12/18-11	120	50	207925¹			
		right	12/18-13	120	50	207926¹			
		left	12/18-13	120	50	207927¹			
		right	12/20-9	120	50	207928¹			
		left	12/20-9	120	50	207929¹			
		right	12/20-13	120	50	207930¹			
		left	12/20-13	120	50	207931¹			
		pre-assembled spacer bar for corner hinge		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.

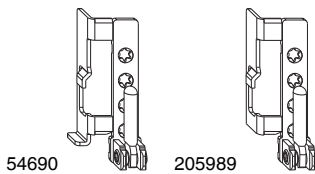
² Not suitable for half round and angled windows.







9.3.3 Corner elements with corner support AS with rebate-leg screw fixing EH						No	No Tricoat
silver	with 1 i.S.	right	12/18-9	120	20	206286¹	207581¹
		left	12/18-9	120	20	206287¹	207582¹
		right	12/18-11	120	20	207070¹	207583¹
		left	12/18-11	120	20	207071¹	207584¹
		right	12/18-13	120	20	206288¹	207585¹
		left	12/18-13	120	20	206289¹	207586¹
		right	12/20-9	120	20	206290¹	207587¹
		left	12/20-9	120	20	206291¹	207588¹
		right	12/20-13	120	20	206292¹	207589¹
		left	12/20-13	120	20	206293¹	207590¹

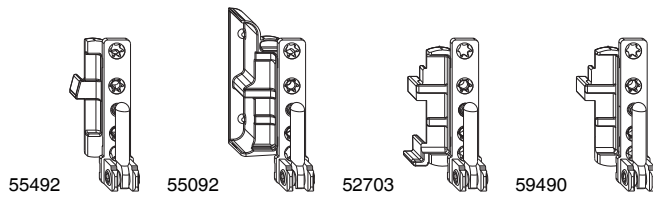
¹ Suitable for half round and angled windows as well as EH.



9.3.4 Pivot posts AS for corner element with corner support AS with rebate-leg screw fixing						No	No Tricoat
silver	right	12/18	120	50	54690¹	204604¹	
	left	12/18	120	50	54691¹	204605¹	
	right	12/18 bottom 5 air gap	80	50	205989¹	213822¹	
	left	12/18 bottom 5 air gap	80	50	205990¹	213823¹	
	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 corner element and corner support AS with rebate-leg screw-fixing!

9.4 Pivot posts DT



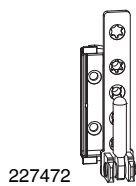
T 9.4.1 Pivot posts DT130		kg		No	No Tricoat	
silver	right 4/15	130	50	55492 ¹	204783 ¹	
	left 4/15	130	50	55493 ¹	204784 ¹	
	right 4/18	130	50	55092 ^{1,2,3}	204785 ^{1,2,3}	
	left 4/18	130	50	55093 ^{1,2,3}	204786 ^{1,2,3}	
	right 12/18	130	50	52703 ¹	201601 ¹	
	left 12/18	130	50	52704 ¹	202311 ¹	
	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
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 raw thickness below 0.62 g/cm³, insert a countersunk self-tapping screw 4 x 40 mm flush below the pivot post!

² For milling depth 24.5 mm, use packer 360464!

³ For milling depth 22 mm, use packer 366541!

⁴ For milling depth 24.5 mm, use packer 360465!



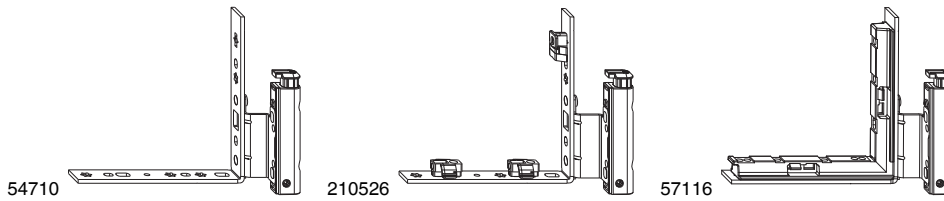
227472

T 9.4.2 Pivot posts DT160		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	

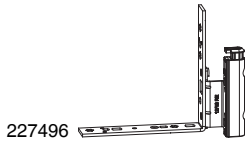
¹ Use only supporting dowel part number 369535 for a sash weight above 100 kg for windows! Place a support screw for balcony doors over 100 kg!



9.4.3 Rebated corner supports DT

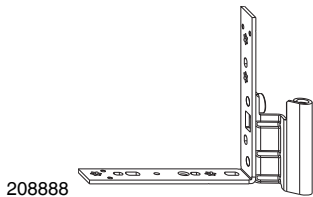


9.4.3.1 Rebated corner supports DT130 with rebate-leg screw fixing				kg		No	No Tricoat	
silver	with rebate-leg screw-fixing	right	4/15-9	130	50	55494	204795	
		left	4/15-9	130	50	55495	204796	
		right	4/18-9	130	50	220048	204797	
		left	4/18-9	130	50	220051	204798	
		right	4/18-13	130	50	207870	215021	
		left	4/18-13	130	50	207871	212437	
		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 bar for corner support		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		
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 for Eurogroove			right	4/18-13	130	50	218074	
		left	4/18-13	130	50	218075		
		with rebate-leg screw-fixing and pre-assembled spacer bar for corner support	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		



227496

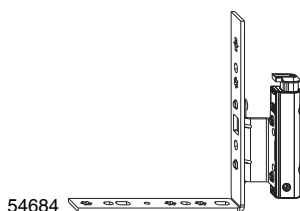
T 9.4.3.2 Rebated corner supports DT160 with rebate-leg screw fixing						No	No Tricoat		
silver	with rebate-leg screw-fixing	right	4/15-9	160	50	227496			
		left	4/15-9	160	50	227497			
		right	4/18-9	160	50	227498			
		left	4/18-9	160	50	227499			
		right	4/18-13	160	50	227500			
		left	4/18-13	160	50	227501			
		right	12/18-9	160	50	227502			
		left	12/18-9	160	50	227503			
		right	12/18-13	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 spacer for corner hinge	right	12/18-13	160	50	227510	
				left	12/18-13	160	50	227511	



208888

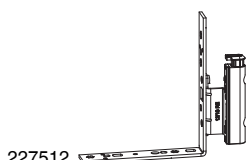
T 9.4.3.3 Rebated corner supports DTuni without rebate-leg screw fixing						No	No Tricoat
silver	right	4/18-9	100	50	55097	204789	
	left	4/18-9	100	50	55098	204790	
	right	12/18-9	100	50	52706	204791	
	left	12/18-9	100	50	52707	204792	
	right	12/18-13	100	50	208888		
	left	12/18-13	100	50	208889		
	right	12/20-9	100	50	54728	204793	
	left	12/20-9	100	50	54729	204794	
	right	12/20-13	100	50	212209	224634	
	left	12/20-13	100	50	212210	224635	
	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		





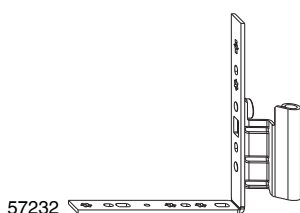
54684

9.4.3.4 Rebated corner supports DT130 for casement doors with rebate-leg screw fixing						No	No Tricoat
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	



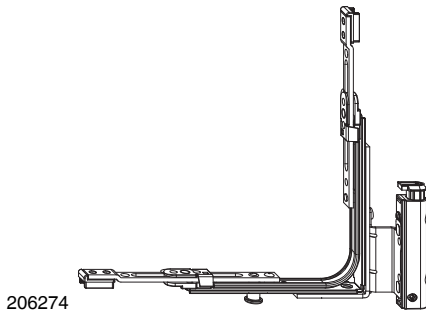
227512

9.4.3.5 Rebated corner supports DT160 for casement doors with rebate-leg screw fixing						No	No Tricoat
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

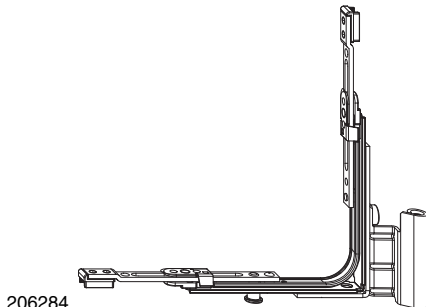
9.4.3.6 Rebated corner supports DTuni for casement doors without rebate-leg screw fixing						No	No Tricoat
silver	for balcony doors	right	12/18-9	100	50	57232	204801
		left	12/18-9	100	50	57233	204802
		right	12/18-13	100	50	209407	
		left	12/18-13	100	50	209408	
		right	12/20-13	100	50	209409	
		left	12/20-13	100	50	209410	





206274

T 9.4.3.7 Corner elements with corner support DTuni with rebate-leg screw fixing EH						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	4/18-9	130	20	224286 ¹	
		left	4/18-9	130	20	224287 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.



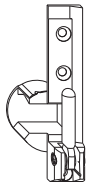
206284

T 9.4.3.8 Corner elements with corner support DTuni without rebate-leg screw fixing EH						No	No Tricoat
silver	with 1 i.S.	right	4/18-9	100	20	206284 ¹	207591 ¹
		left	4/18-9	100	20	206285 ¹	207592 ¹
		right	12/18-9	100	20	208773 ¹	
		left	12/18-9	100	20	208774 ¹	
		right	12/18-11	100	20	208839 ¹	
		left	12/18-11	100	20	208840 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	
		left	12/20-9	100	20	208776 ¹	
		right	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.



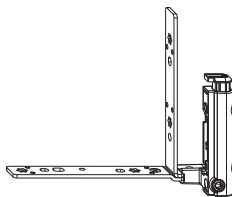
9.5 Pivot posts TO



52399

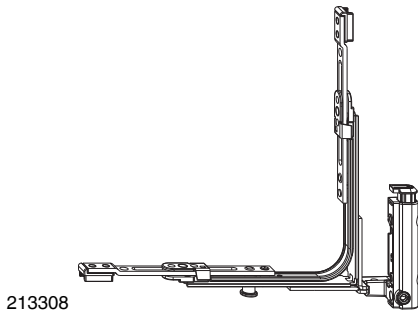
T 9.5.1 Pivot posts TO						No	
						kg	Tricoat
silver	right	4/15	130	50	55412 ¹	202513 ¹	
	left	4/15	130	50	55413 ¹	202517 ¹	
	right	4/18	130	50	55237 ¹	204139 ¹	
	left	4/18	130	50	55238 ¹	203706 ¹	
	right	12/18	130	50	52399 ¹	201489 ¹	
	left	12/18	130	50	52398 ¹	201485 ¹	
	right	12/20	130	50	54722 ¹	204814 ¹	
	left	12/20	130	50	54723 ¹	204815 ¹	
traffic white RAL 9016	right	12/18	130	50	22520 ¹		
	left	12/18	130	50	22521 ¹		

¹ For sash weight above 100 kg or a raw thickness below 0.62 g/cm³, use support rawplug part number 36668 (Tricoat-Plus = 355715)





52394

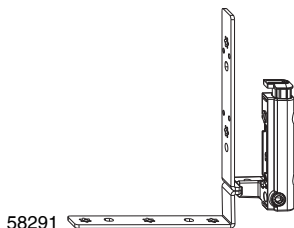
T 9.5.2 Rebated corner supports TO with rebate-leg screw fixing						No	
						kg	Tricoat
silver	with rebate-leg screw-fixing	right	4/15-9	130	50	55410	202514
		left	4/15-9	130	50	55411	202518
		right	4/18-9	130	50	55239	204140
		left	4/18-9	130	50	55240	203704
		right	12/18-9	130	50	52394	201480
		left	12/18-9	130	50	52395	201478
		right	12/20-9	130	50	54724	204816
		left	12/20-9	130	50	54725	204817
traffic white RAL 9016	with rebate-leg screw-fixing	right	12/18-9	130	50	22523	
		left	12/18-9	130	50	22524	





213308

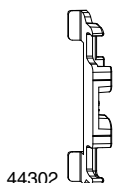
9.5.3 Corner elements with corner support TO with rebate-leg screw fixing EH				 		No	No Tricoat
silver	with 1 i.S. with rebate-leg screw-fixing	right	4/15-9	130	20	214678¹	
		left	4/15-9	130	20	214680¹	
		right	12/18-9	130	20	213308¹	
		left	12/18-9	130	20	213309¹	

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




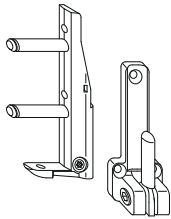
58291

9.5.4 Rebated corner supports TO for casement doors with rebate-leg screw fixing				 		No	No Tricoat
silver	for balcony doors with rebate-leg screw-fixing	right	4/15-9	130	50	58604	204818
		left	4/15-9	130	50	58605	204819
		right	4/18-9 bottom 12 air gap and 12/18-9	130	50	55067	201483
		left	4/18-9 bottom 12 air gap and 12/18-9	130	50	55068	201490
		right	12/20-9	130	50	58470	205726
		left	12/20-9	130	50	58471	204822
		right	4/15-9	130	50	59470	204820
		left	4/15-9	130	50	59471	204821
		right	12/18-9	130	50	58291	201639
		left	12/18-9	130	50	58292	202315
		right	for balcony doors with rebate-leg screw-fixing 11 mm rebate leg at bottom	130	50	59470	204820
		left	for balcony doors with rebate-leg screw-fixing 4 mm air gap on the bottom	130	50	58291	201639



44302

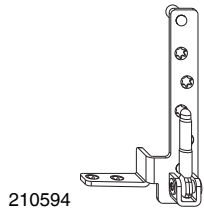
9.5.5 Accessories for pivot posts TO						No	No Tricoat
pearl light grey RAL 9022	stop for rebate leg gasket	4 mm		100		44302	
		5 mm		100		43719	
		6 mm		100		44354	





10915

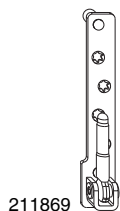
T	9.6	Drill-in pivot posts			No	No
			60	20	10915	Tricoat 101347
silver						

9.7 Pivot posts MULTI MAMMUT





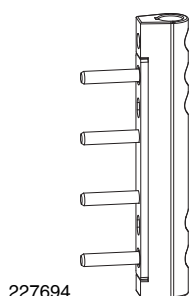
210594

T 9.7.1 Pivot posts for timber MULTI MAMMUT						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

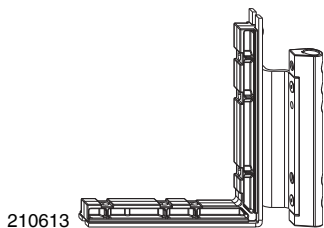
P 9.7.2 Pivot posts for PVC MULTI MAMMUT						No	No Tricoat
silver	with 9 mm supporting pins	right	12/18 12/20	180	20	211869	217765
		left	12/18 12/20	180	20	211870	217766
traffic white RAL 9016	with 9 mm supporting pins	right	12/18 12/20	180	20	212540	
		left	12/18 12/20	180	20	212541	





227694


9.7.3 Corner supports PVC MULTI MAMMUT						No	No Tricoat
silver	with 5 mm supporting pins 23 mm long			180	20	227694	227696
white	with 5 mm supporting pins 23 mm long			180	20	227695	



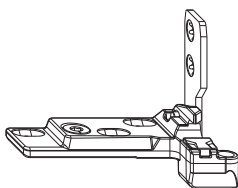


9.7.4 Rebated corner supports MULTI MAMMUT						No	No Tricoat
silver	pre-assembled spacer bar for corner hinge	right	12/18-9	220	20	210613	223059
		left	12/18-9	220	20	210614	223060
		right	12/18-13	220	20	210611	223057
		left	12/18-13	220	20	210612	223058
		right	12/20-9	220	20	210617	223063
		left	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	



9.7.5 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, 180 kg fittings			50	362336	

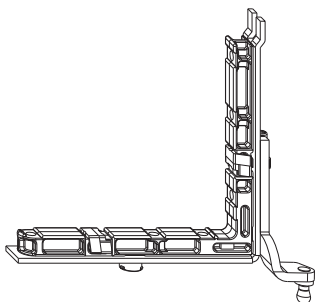
9.8 Pivot posts TV



55291

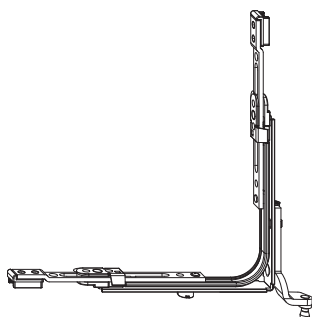
T 9.8.1 Pivot posts TV timber					No	No Tricoat
silver	right	Euro-rebate 24 mm rebate depth 13 mm offset	100	50	55291¹	
	left	Euro-rebate 24 mm rebate depth 13 mm offset	100	50	55292¹	

¹ Available for PVC windows upon request.



58131

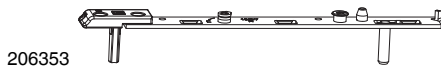
9.8.2 Rebated corner supports TV					No	No Tricoat
silver	right	13 mm offset	100	50	58131	
	left	13 mm offset	100	50	58132	



206163

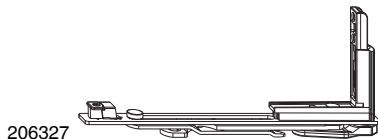
9.8.3 Corner element with corner support TV					No	No Tricoat
silver	right	13 mm offset	60	10	206163	
	left	13 mm offset	60	10	206165	

9.9 Pivot posts INVISIBLE



206353

9.9.1 Pivot posts INVISIBLE				kg		No	No Tricoat
silver	right	9 mm offset	timber rebate depth 18 mm	80	20	212659	
	left	9 mm offset	timber rebate depth 18 mm	80	20	212660	
7 mm screw axis	right	9 mm offset	PVC	100	20	206353	209053
	left	9 mm offset	PVC	100	20	206354	209054
	right	13 mm offset	PVC	100	20	206355	209055
	left	13 mm offset	PVC	100	20	206356	209056
13 mm screw axis	right	9 mm offset	timber	100	20	206357	209057
	left	9 mm offset	timber	100	20	206358	209067
	right	13 mm offset	timber	100	20	206359	209058
	left	13 mm offset	timber	100	20	206360	209059



206327

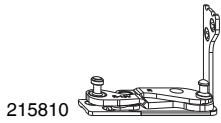
9.9.2 Corner supports INVISIBLE				kg		No	No Tricoat
silver	timber rebate depth 18 mm	right	9 mm offset	80	20	212663	
		left	9 mm offset	80	20	212664	
		right		100	20	206327	209060
		left		100	20	206328	209061



465315

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

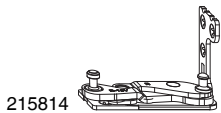
9.10 Pivot posts MULTI POWER



T 9.10.1 Pivot posts for timber MULTI POWER

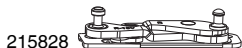
						 Tricoat
silver	right	timber 24 mm rebate depth 9 mm offset	150	20	215812 ¹	218883 ¹
	left	timber 24 mm rebate depth 9 mm offset	150	20	215813 ¹	218884 ¹
	right	timber 24 mm rebate depth 13 mm offset	150	20	215810 ¹	218885 ¹
	left	timber 24 mm rebate depth 13 mm offset	150	20	215811 ¹	218886 ¹
	right	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 36668 for sash weights over 100 kg.



P 9.10.2 Pivot posts for PVC MULTI POWER

						 Tricoat
silver	right	PVC 30 mm rebate depth 9 mm offset	150	20	215816	218889
	left	PVC 30 mm rebate depth 9 mm offset	150	20	215817	218890
	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



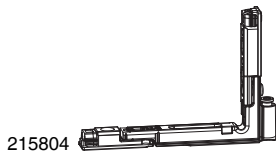
T 9.10.3 Pivot posts for 3-sashed windows for timber MULTI POWER

						 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




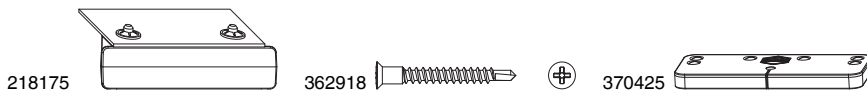
9.10.4 Pivot posts for 3-sashed windows for PVC MULTI POWER


						 Tricoat
silver	right	PVC 30 mm rebate depth 9 mm offset	80	20	215834	218897
	left	PVC 30 mm rebate depth 9 mm offset	80	20	215835	218898
	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



215804

9.10.5 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	




9.10.6 Accessories MULTI POWER		Ø	L		No	No Tricoat
silver	mounting cover for pivot post MULTI POWER right/left			5	218175	
	special drilling screw for VV130 Phillips	4,5	32	1.000	364563	
	special drilling screw for VV130 T20	4,5	38	100	362918	105152
black	support rawlplug pivot post TO timber		19	50	36668	
	clip-on part corner support MULTI POWER for 18 mm air gap		117	20	368390	
	back pull plate for narrow profiles multi-power timber			100	370425	

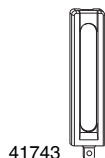
9.11 Cover caps

9.11.1 Cover caps for pivot posts




41742

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




41743

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




369611

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






369529

T 9.11.1.4 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

9.11.1.5 Long cover caps for surface-mounted pivot posts					No	No Tricoat
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	
RAL 9001 cream white	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	
pearl light grey RAL 9022	right	dyed		100	43743	
	left	dyed		100	43744	
RAL 9016 traffic white	right	dyed		100	43622	
	left	dyed		100	43623	




362609

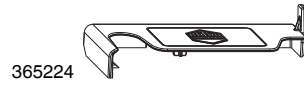
9.11.1.6 Cover caps for surface-mounted pivot posts for rebated corner supports AS/PVC				No	No Tricoat
silver	right	painted	100	364004	
	left	painted	100	364005	
champagne	right	painted	100	364096	
	left	painted	100	364097	
titanium	right	painted	100	363996	
	left	painted	100	363997	
light bronze	right	dyed	100	364094	
	left	dyed	100	364095	
RAL 9001 cream white	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	
pearl light grey RAL 9022	right	dyed	100	363998	
	left	dyed	100	363999	
RAL 9016 traffic white	right	dyed	100	362609	
	left	dyed	100	362610	




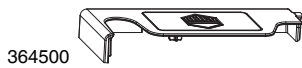
360235


T	9.11.1.7 Cover caps for pivot posts TO				No	No Tricoat
silver	right	painted	50	360235		
	left	painted	50	360236		
titanium	right	painted	50	40762		
	left	painted	50	40764		
white	right	dyed	50	40345		
	left	dyed	50	40346		
Brown F5	right	dyed	50	41202		
	left	dyed	50	41203		
champagne	left	painted	50	41691		
	right	painted	50	41692		
chrome-look	right	metallised	50	360856		
	left	metallised	50	360857		
gold look	right	metallised	50	40489		
	left	metallised	50	40490		
light bronze	right	dyed	50	41612		
	left	dyed	50	41613		
RAL 9016 traffic white	left	dyed	50	43573		
	right	dyed	50	43572		





T 9.11.1.8 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		



P 9.11.1.9 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		

9.11.2 Cover caps for corner supports and rebated corner supports



42087

P

9.11.2.1 Cover caps for corner supports PVC



No

No
Tricoat

silver	painting	100	360233	
champagne	painting	100	42096	
titanium	painting	100	42095	
light bronze	dyeing	100	42093	
RAL 9001 cream white	dyeing	100	42188	
Brown F5	dyeing	100	42186	
chrome-look	metallised	100	44245	
gold look	metallised	100	42094	
pearl light grey RAL 9022	dyeing	100	43940	
RAL 9016 traffic white	dyeing	100	42087	



41740

9.11.2.2 Cover caps for rebated corner supports AS/PVC and rebated corner supports DTuni without rebate-leg screw fixing

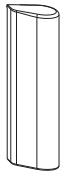


No


No
Tricoat

silver	right	painting	100	363116	
	left	painting	100	363117	
champagne	right	painting	100	42064	
	left	painting	100	42061	
titanium	right	painting	100	42063	
	left	painting	100	42060	
light bronze	right	dyeing	100	41764	
	left	dyeing	100	41770	
RAL 9001 cream white	right	dyeing	100	43553	
	left	dyeing	100	43554	
Brown F5	right	dyeing	100	42599	
	left	dyeing	100	42598	
chrome-look	right	metallised	100	44239	
	left	metallised	100	44240	
gold look	right	metallised	100	41769	
	left	metallised	100	41771	
pearl light grey RAL 9022	right	dyeing	100	43564	
	left	dyeing	100	43565	
RAL 9016 traffic white	right	dyeing	100	41740	
	left	dyeing	100	41741	






363403

P 9.11.2.3 Cover caps for rebated corner supports and corner supports with tab					No	No Tricoat
silver	right	paint	ed	100	363403	
	left	paint	ed	100	363404	
champagne	right	paint	ed	100	364102	
	left	paint	ed	100	364103	
titanium	right	paint	ed	100	363137	
	left	paint	ed	100	363138	
light bronze	right	dyed		100	364100	
	left	dyed		100	364101	
RAL 9001 cream white	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	
pearl light grey RAL 9022	right	dyed		100	363508	
	left	dyed		100	363509	
RAL 9016 traffic white	right	dyed		100	362333	
	left	dyed		100	362334	



43587

9.11.2.4 Cover caps for rebated corner supports AS/DTuni with rebate-leg screw fixing					No	No Tricoat
silver	right	paint	ed	100	360953	
	left	paint	ed	100	360954	
champagne	right	paint	ed	100	43593	
	left	paint	ed	100	43604	
titanium	right	paint	ed	100	43592	
	left	paint	ed	100	43603	
light bronze	right	dyed		100	43590	
	left	dyed		100	43601	
RAL 9001 cream white	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	
pearl light grey RAL 9022	right	dyed		100	43597	
	left	dyed		100	43608	
RAL 9016 traffic white	right	dyed		100	43587	
	left	dyed		100	43588	



43570

T 9.11.2.5 Cover caps for rebated corner supports TO with rebate-leg screw fixing



No

No
Tricoat

silver	right	paint	50	360237	
	left	paint	50	360238	
titanium	right	paint	50	40758	
	left	paint	50	40759	
white	right	dyed	50	40343	
	left	dyed	50	40344	
Brown F5	right	dyed	50	41204	
	left	dyed	50	41205	
champagne	left	paint	50	41693	
	right	paint	50	41694	
chrome-look	right	metallised	50	360858	
	left	metallised	50	360859	
gold look	right	metallised	50	40460	
	left	metallised	50	40462	
light bronze	right	dyed	50	41614	
	left	dyed	50	41615	
RAL 9016 traffic white	right	dyed	50	43570	
	left	dyed	50	43571	



43651

P 9.11.2.6 Dust cover caps for corner supports PVC



No

No
Tricoat

titanium	dyed	100	209669	
pearl light grey RAL 9022	dyed	100	43651	
RAL 8019 grey brown	dyed	100	203287	
RAL 9007 grey aluminium	dyed	100	224132	
RAL 9016 traffic white	dyed	100	40341	



43626

9.11.2.7 Dust cover caps for rebated corner supports AS/DTuni/TO with rebate-leg screw fixing



No

No
Tricoat

titanium	dyed/coated	100	358989	
pearl light grey RAL 9022	dyed	100	43626	
RAL 8019 grey brown	dyed	100	360230	
RAL 9016 traffic white	dyed	100	42166	
traffic yellow RAL 1023	dyed	100	40342	

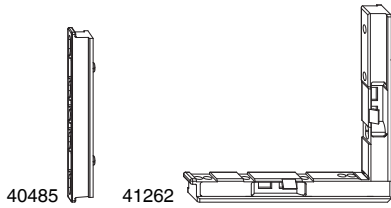



9.11.2.8 Dust cover caps for rebated corner supports AS/PVC and rebated corner supports DTuni without rebate-leg screw fixing			No	No Tricoat
pearl light grey RAL 9022	dyed	100	43701	
RAL 8022 black brown	dyed	100	368556	
RAL 9016 traffic white	dyed	100	42185	





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

9.12 Accessories for pivot posts



9.12.1 Spacer bars for corner supports					No	No Tricoat
black	packer	for rebated corner support AS/DT/TO	100		40485	
	packer with faceplate for 1 mm offset	for rebated corner support AS/DT/TO	100		40486	
	spacer bar for corner support	for corner support TO	100		41262	
		for corner support AS/DT	100		44234	



T 9.12.2 Support rawlplug and support dowel						No	No Tricoat
silver	support rawlplug pivot post TO and Multi Power timber		50		36668	355715	
	support rawlplug pivot post DT 160 4 mm air gap / 12 mm air gap	20 mm	8	50	369535		



**MACO
MULTI-MATIC**



Pivot posts



10 French casement drive gears


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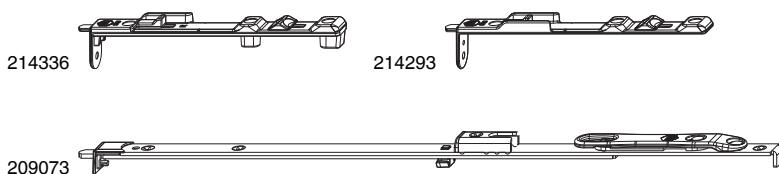



10 French casement drive gears

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 24 mm rebate depth 13 mm offset	170	20	218177	219170
	flat console with reversible striker plate and swivel plate GM 300 MM	288	20	215781	
	flat console with reversible striker plate and swivel plate GM 400 MM	288	20	215780	
	with reversible striker and sash lifter run-up, HH 300 MMKS	288	20	215304	223231
	with reversible striker and sash lifter run-up, HH 400 MMKS	288	20	215303	223230
	with striker and sash lifter run-up HH 300 MM	288	20	208955	
	with striker and sash lifter run-up HH 400 MM	288	20	208954	215148




10.1.2 Shootbolts top		L		No	No Tricoat
silver	right MM-KS for Eurogroove	162	20	214336	217511
	left MM-KS for Eurogroove	162	20	214337	217510
	MM-KS hardware groove	162	20	213922	218759
	MM-KS Euro-rebate 18 mm rebate depth 9 mm offset	162	20	214293	217442
	MM-KS Euro-rebate 24 mm rebate depth 13 mm offset	162	20	218176	219169
	MM-KS 4 mm air gap R8	170	20	214506	
	with i.S. striker plate and operating lever MM	450	20	209073	216534



10.1.3 Shootbolts bottom/top		L		No	No Tricoat
silver	flat MT/MM for Eurogroove	180	20	202068	212712
	MT/MM for Eurogroove	286	20	208956	216533
	for striker plate and reverse-action lever MM for Eurogroove	450	20	215240	217512

10.1.4 Accessories for shootbolts






10.1.4.1 Eurogroove packer with shootbolt for Euro-rebate			No	No Tricoat
natural		100	41263	

10.2 French casement drive gears




10.2.1 French casement drive gears for Eurogroove



10.2.1.1 French casement drive gears for Eurogroove FHH					No	No Tricoat	
silver		660	190	431 - 660	10	202873 ¹	207630 ¹
	for 1 i.S.	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
	for 3 i.S.	1950	1.050	1.701 - 1.950	10	221907	207636
		2200	1.050	1.951 - 2.200	10	221908	207637
	for 4 i.S.	2450	1.050	2.201 - 2.450	10	221909	207638




¹ Use only in combination with turn-only drive gear 660 (201731).



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 (201745).



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
	for 2 VZ	1590	600	1.341 - 1.590	10	209512	222686
		1700	700	1.591 - 1.700	10	209514	222688
	for 3 VZ	1950	1.050	1.701 - 1.950	10	209517	222691
		2200	1.050	1.951 - 2.200	10	209518	222692
	for 4 VZ	2450	1.050	2.201 - 2.450	10	209519	222693




¹ Only in combination with turn-only drive gear 840 (209590 with tilt lock bolt).



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 209591.



10.2.1.5 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 (206614).

² Use for windows produced 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 EH 205664.

221910



10.2.1.6 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	223252 ²



¹ Use only in combination with T&T drive gear EH 1090 (217969).

² Use for windows produced according to standard EN-1627.

³ Use only in combination with T&T drive gear EH 1340 (201744).



⁴ Use only in combination with T&T drive gear EH 1590 (208804).



10.2.1.7 French casement drive gears for Eurogroove VHH i.S.				No	No Tricoat	
silver	for 1 i.S.	1250	801 - 1.250	10	202471 ¹	207644 ¹
		1350	901 - 1.350	10	215409	
	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 202475.



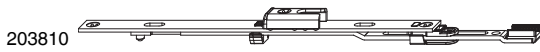
10.2.1.8 French casement drive gears for Eurogroove VHH VZ				No	No Tricoat	
silver	for 1 VZ	1250	840 - 1.250	10	211791 ¹	222749 ¹
	for 2 VZ	1750	1.251 - 1.750	10	209670	222712
	for 3 VZ	2250	1.751 - 2.250	10	209671	222713

¹ Use only in combination with end piece 209648.




10.2.1.9 French casement drive gears EH for Eurogroove variable with central reverse-action lever				No	No Tricoat	
silver	without strikers	800	500 - 800	10	227784	
		1250	801 - 1.250	10	227785	

10.2.1.10 Accessories for French casement drive gears for Eurogroove




10.2.1.10.1 Faceplate extensions for French casement drive gears

				No	No Tricoat
silver	for 1 i.S.	235	20	203810	207559
		470	20	208333	208369



10.2.1.10.2 End pieces with shootbolt protrusion for French casement drive gears

				No	No Tricoat
silver	bottom		20	209637	222709
	top		20	211745 ¹	222748 ¹
	bottom	with reverse-action lever	20	209648	222711

¹ Striker plate enclosed.




10.2.1.10.3 Striker cover for French casement drive gear MM

				No	No Tricoat
silver			100	44660	



10.2.1.10.4 Locking slider for French casement drive gear MM

				No	No Tricoat
silver			100	97550 ¹	357889 ¹

¹ Thread forming screw 44162 must be ordered separately.




10.2.1.10.5 Thread tapping screw M5x12 for slider-locks MM

			L		No	No Tricoat
silver			12	1.000	44162 ¹	358179 ¹

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



T 10.2.1.10.6 Bullet catches for French casement drive gears

				No	No Tricoat
silver			50	213460 ^{1,2}	


¹ Order steel bullet catch roll 362446 or PVC 362060 separately!

² For Eurogroove use packer 362059!








365791 

<p>10.2.1.10.7 Striker plates i.S. for French casement drive gears MM-KS</p>		<p>No</p>	<p>No Tricoat</p>
<p>silver</p>	<p>100</p>	<p>365791</p>	<p>366724</p>

10.2.2 French casement drive gears for hardware groove



226635




10.2.2.1 French casement drive gears for hardware groove FHH					No	No Tricoat	
silver	for 1 i.S.	660	190	431 - 660	10	203482 ^{1,2}	207650 ^{1,2}
		840	300	661 - 840	10	226629 ¹	226748 ¹
for 2 i.S.		1090	400	841 - 1.090	10	226635 ¹	226749 ¹
		1340	500	1.091 - 1.340	10	226636 ¹	226750 ¹
		1590	600	1.341 - 1.590	10	226637 ¹	226751 ¹
		1700	700	1.591 - 1.700	10	226638 ¹	226752 ¹
for 3 i.S.		1950	1.050	1.701 - 1.950	10	226639 ¹	226753 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 94035 and faceplate restrainer 94036 must be ordered separately!

² Possible only with turn-only drive gear BS 15!






226643

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 94035 and faceplate restrainer 94036 must be ordered separately!






226646

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	222694 ¹
		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 94035 and faceplate restrainer 94036 must be ordered separately!



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		
	for 2 VZ		1340	400	1.091 - 1.340	10	226654 ¹	226765 ¹
			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 94035 and faceplate restrainer 94036 must be ordered separately!



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	222758 ¹
		1950	1.050	1.701 - 1.950	10	211802 ¹	222760 ¹
2200		1.050	1.951 - 2.200	10	211804 ¹	222762 ¹	
2450	1.050	2.201 - 2.450	10	211806 ¹	222764 ¹		

¹ Bracket 94035 and faceplate restrainer 94036 must be ordered separately!

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}	226770 ^{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 203771 required (length 200 mm).

² Bracket 94035 and faceplate restrainer 94036 must be ordered separately!

³ End piece 209647 required (length 269 mm) with tilt striker plate.


10.2.2.7 Accessories for French casement drive gears for hardware groove

226007

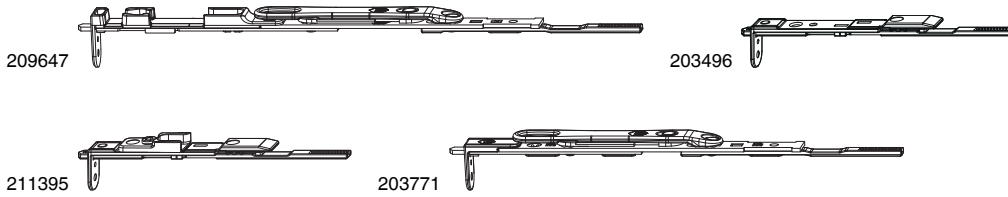


226005



10.2.2.7.1 Faceplate extensions for French casement drive gears MM for hardware groove				No	No Tricoat
silver	140 without striker		20	226007 ¹	226925 ¹
	235 with striker		20	226005 ¹	226008 ¹
	470 with striker		20	226006 ¹	226924 ¹
	connecting plate MM for end piece for French casement drive gear hardware groove		50	205921	208317

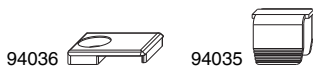
¹ Connection plate 205921 enclosed.



T 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 hardware groove French casement drive-gear MM	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 205921 separately!
² For French casement drive gear use 226659!
³ For French casement drive gear use 226658!



T 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



10.2.3 French casement drive gears for double-tilt

					No	No Tricoat	
silver	for 1 i.S.	660	190	431 - 660	10	207415¹	216965¹
	for 2 i.S.	840	300	661 - 840	10	207416	216966
		1090	400	841 - 1.090	10	207417	216967
		1340	500	1.091 - 1.340	10	207418	215318
	for 3 i.S.	1590	600	1.341 - 1.590	10	207419	216968

¹ Only in combination with T&T drive gear EH 206986.






10.2.4 Accessories for French casement drive gears for double-tilt

				No	No Tricoat
silver			10	103829	104074



10.2.5 French casement drive gears for intermediate profiles (without striker plates)



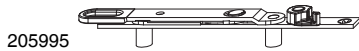
10.2.5.1 French casement drive gears for intermediate profiles FHH						No	No Tricoat
silver	without strikers	660	190	431 - 660	10	205962	
		840	300	661 - 840	10	205963	218340
		1090	400	841 - 1.090	10	205964	
		1340	500	1.091 - 1.340	10	205965	
		1590	600	1.341 - 1.590	10	205966	218342
		1700	700	1.591 - 1.700	10	207319	218343
		1950	1.050	1.701 - 1.950	10	205967	
		2200	1.050	1.951 - 2.200	10	205968	
		2450	1.050	2.201 - 2.450	10	205969	




10.2.5.2 French casement drive gears for intermediate profiles VHH					No	No Tricoat
silver	without strikers	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 205973 .

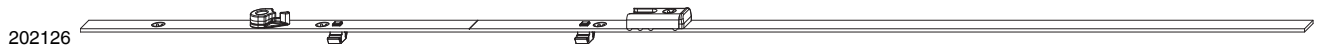
10.2.5.3 Accessories for French casement drive gears for intermediate profiles






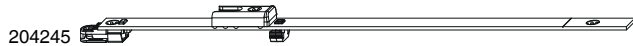
10.2.5.3.1 Operating levers for French casement drive gears without striker plate				No	No Tricoat
silver	right	with spacer sleeve 13 mm	20	208433	
		with spacer sleeve 36 mm	20	208434	
		with spacer sleeve 43 mm	20	208435	
	left	with spacer sleeve 13 mm	20	205995	207647
		with spacer sleeve 36 mm	20	206108	207648
		with spacer sleeve 43 mm	20	206107	207649




10.3 Horizontal French casement lock				No	No Tricoat
silver	French casement lock MM	230 - 800	20	202251	207662
	extendable French casement lock MM	240 - 1.650	20	202252	207663



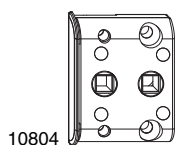
10.4 Single piece door strikers		L				No	No Tricoat	
silver	for 1 i.S.	840	809,5	300	661 - 840	10	202126	207665
		1340	1.296,5	500	841 - 1.340	10	202128	207666
	for 2 i.S.	1590	1.559,5	600	1.341 - 1.590	10	202131	207667
	for 3 i.S.	2200	2.169,5	1.050	1.701 - 2.200	10	202133	207668



10.5 Faceplate extensions for single piece door strikers MM with striker plate		L		No	No Tricoat
silver		349,5	20	204245	207664



10.6 Accessories for 2-sashed windows



10804

T 10.6.1 Intermediate drive gears with spindle					No	No Tricoat
silver	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	102235 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	102236 ¹

¹ Available for PVC windows upon request.

10.6.2 Accessories for intermediate drive gears



44274

T 10.6.2.1 Packers for intermediate drive gears		L				No	No Tricoat
silver	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	
	13 mm offset	10 mm (for SV33, SV103)	56	11	100	356970	
		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.

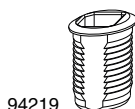


32365

T 10.6.2.2 Spindles for intermediate drive gears					No	No Tricoat
spindle for intermediate drive gear 7x20 mm profile thickness					100	32365
spindle for intermediate drive gear 7x26 mm profile thickness					100	32412 ¹
spindle for intermediate drive gear 7x30 mm profile thickness					100	93228 ²

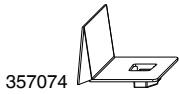
¹ For rebate leg gasket 9 mm offset, without overlap gasket 13 mm offset.

² For rebate leg gasket 13 mm offset.




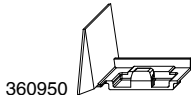
94219

10.6.2.3 Drill-in bushes for shootbolt 8x4 mm					No	No Tricoat
silver					100	94219
						355812




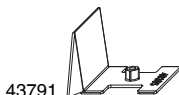
357074

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 caps for hardware groove - sash part				No	No Tricoat
pearl light grey RAL 9022			100	43791	





T 10.6.6 Alu profile for French casement drive gears		L		No	No <small>Tricoat</small>
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	
	clip-on end cap for aluminium groove		100	40522	



11 Striker plates

11.1	Striker plates 4 mm air gap _____	290
11.2	Striker plates 12 mm air gap, hardware groove 6/8/4 _____	293
11.3	Striker plates 12 mm air gap, hardware groove 7/8/4 _____	294
11.4	Striker plates 12 mm air gap, hardware groove 6/8/4 and 7/8/4 _____	296
11.5	Striker plates 12 mm air gap, Euro-rebate, 18 mm rebate depth _____	297
11.6	Striker plates 12 mm air gap, Euro-rebate, 20 mm rebate depth _____	299
11.7	Striker plates 12 mm air gap, Euro-rebate, 24 mm rebate depth _____	301
11.8	Striker plates 12 mm air gap, Euro-rebate, 18-24 mm rebate depth _____	304
11.9	Striker plates for opposite Eurogroove _____	305
11.10	Accessories for striker plates _____	306



11 Striker plates

11.1 Striker plates 4 mm air gap

11.1.1 Striker plates 4 mm air gap

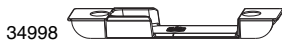



T 11.1.1.1 Striker plates 4 mm air gap			No	No Tricoat
silver	for 4 mm air gap, 9 mm offset	200	30545 ^{1,2}	355132 ^{1,2}
	for 4 mm air gap, 13 mm offset	right 200	363020 ^{2,3}	
		left 200	363021 ^{2,3}	
	- 1 mm gasket-compression	right 200	357671 ^{2,3}	359251 ^{2,3}
		left 200	357672 ^{2,3}	359252 ^{2,3}

¹ 9 mm offset 18 mm milling depth.

² Routing length 90 mm

³ 13 mm offset 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 9 mm offset 18 mm milling depth.

² Routing length 90 mm

³ 13 mm offset 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}	207678 ^{1,3}
		left 20	206114 ^{1,3}	207679 ^{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 9 mm offset 18 mm milling depth.

² Routing length 90 mm

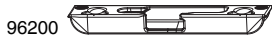
³ Routing length 160 mm.

⁴ 13 mm offset 22 mm milling depth .



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	100	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}		
			right	100	357673^{2,3}	359253^{2,3}	
			left	100	357674^{2,3}	359254^{2,3}	
			- 1 mm gasket-compression	right	100	360102^{2,3}	
			left	100	360103^{2,3}		

¹ 9 mm offset 18 mm milling depth.
² Routing length 90 mm
³ 13 mm offset 22 mm milling depth .



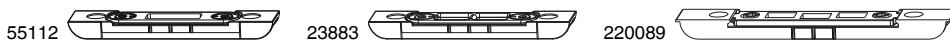
T 11.1.1.5 Horizontal tilt striker plates i.S. 4 mm air gap					No	No Tricoat
silver	for 4 mm air gap, 9 mm offset	angled screw-fixing	right	100	96200^{1,2}	204964^{1,2}
			left	100	96201^{1,2}	204965^{1,2}
	for 4 mm air gap, 13 mm offset	angled screw-fixing	right	100	357678^{2,3}	365089^{2,3}
			left	100	357679^{2,3}	365090^{2,3}

¹ 9 mm offset 18 mm milling depth.
² Routing length 90 mm
³ 13 mm offset 22 mm milling depth .



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}	363130^{1,2}

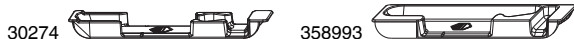
¹ 9 mm offset 18 mm milling depth.
² Routing length 113 mm.




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}	203979^{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 9 mm offset 18 mm milling depth.
² Routing length 90 mm
³ Routing length 120 mm.
⁴ For windows - Group C5 EN 12210
⁵ 13 mm offset 22 mm milling depth .



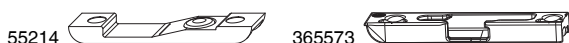



T 11.1.1.8 Tilt striker plates 4 mm air gap				No	No Tricoat
silver	for 4 mm air gap, 9 mm offset	right and left	100	30274 ^{1,2}	355134 ^{1,2}
	for 4 mm air gap, 13 mm offset	right	100	358993 ^{2,3}	365091 ^{2,3}
		left	100	358994 ^{2,3}	365092 ^{2,3}

¹ 9 mm offset 18 mm milling depth.

² Routing length 90 mm

³ 13 mm offset 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}	204967 ^{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 9 mm offset 18 mm milling depth.

² Routing length 90 mm

³ Use with corner element 215216, 215217.

⁴ 13 mm offset 22 mm milling depth .


⁵ Use with corner element 218071, 218072.

⁶ Routing length 169 mm.

⁷ Only in combination with tilt lock 218072.



209365

T 11.1.1.10 Striker plates 4 mm air gap for opening restrictors				No	No Tricoat
silver	for 4 mm air gap, 9 mm offset	angled screw-fixing	50	55988 ^{1,2}	208788 ^{1,2}
	for 4 mm air gap, 13 mm offset		100	209365 ^{2,3}	

¹ 9 mm offset 18 mm milling depth.

² Routing length 90 mm

³ 13 mm offset 22 mm milling depth .




94022


T 11.1.1.11 Run-up blocks 4 mm air gap for horizontal tilt locks				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	355863
	- 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	201790

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 

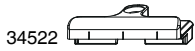
T 11.2.7 Striker plate for espagnolettes with mounted tilt scissor stay 12 mm air gap, hardware groove 6/8/4			No	No Tricoat
silver		100	56930	


25928 

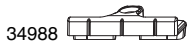
T 11.2.8 Night-vent striker plate 12 mm air gap, hardware groove 6/8/4			No	No Tricoat
silver		100	25928	204969




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			No	No Tricoat
silver		200	34902	201481
	- 1 mm gasket-compression	200	34969	201465
	angled screw-fixing	200	34522	360626




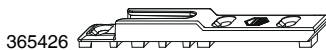
T 11.3.2 Striker plate for 3-sashed windows 12 mm air gap, hardware groove 7/8/4			No	No Tricoat
silver		200	34988	




T 11.3.3 Sash lifters MM 12 mm air gap, hardware groove 7/8/4			No	No Tricoat
silver	angled screw-fixing	right 100	356774	357928
		left 100	356775	357929



T 11.3.4 Striker plates i.S. 12 mm air gap, hardware groove 7/8/4			No	No 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	

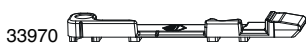


T 11.3.5 Tilt-first striker plates i.S. 12 mm air gap, hardware groove 7/8/4			No	No Tricoat
silver	MM	right 100	365426	
		left 100	365427	



T 11.3.6 Shootbolt striker plates 12 mm air gap, hardware groove 7/8/4			No	No 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

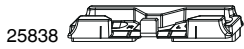


T 11.3.7 Tilt striker plates 12 mm air gap, hardware groove 7/8/4			No	No Tricoat
silver		right 100	33970	201473
		left 100	33971	201470




56910

T	11.3.8 Striker plate for espagnolettes with mounted tilt scissor stay 12 mm air gap, hardware groove 7/8/4		No	No Tricoat
	silver	100	56910	211783




25838

T	11.3.9 Night-vent striker plate 12 mm air gap hardware groove 7/8/4		No	No Tricoat
	silver	100	25838	202552




34937

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	




96691

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	




26734

T	11.3.12 Shootbolt striker plate with positioning pins 12 x 3 mm 12 mm air gap, hardware groove 7/8/4		No	No Tricoat
	silver 2 slots	100	26734	




11.4 Striker plates 12 mm air gap, hardware groove 6/8/4 and 7/8/4




T	11.4.1 Sash lifter striker plate 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	201463




T	11.4.2 Striker plates for opening restrictors 12 mm air gap, hardware groove 6/8/4 and 7/8/4		No	No Tricoat
	silver	striker plate for opening restrictor Euro-rebate 18 mm angled screw-fixing 50 packer for striker for opening restrictor for timber 100	54697 40349	201785

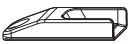



T	11.4.3 Stabilizing scissor stay casing 12 mm air gap, hardware groove 6/8/4 and 7/8/4		No	No Tricoat
	silver	100	55066	204124

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	359769	
	- 1 mm gasket-compression	200	357844	


34958 


11.5.2 Striker plate for 3-sashed windows 12 mm air gap, Euro-rebate, 18 mm rebate depth			No	No Tricoat
silver		200	34958	360073


356298 




11.5.3 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 

11.5.4 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		
	without reinforcement rings	angled screw-fixing	- 0.7 mm gasket-compression	100	96660	362849
				100	355606	358991

365400 


11.5.5 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

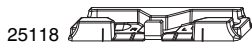
98021  23731  26308 

11.5.6 Shootbolt striker plates 12 mm air gap, Euro-rebate, 18 mm rebate depth			No	No Tricoat	
silver	1 fixed slot	100	98021 ¹	364734 ¹	
	2 slots		100	23731	201482
		+ 1 mm gasket-compression	100	26745	
	2 slots with angled screw-fixing	100	26741	209301	
	3 slots	100	26308 ¹	218695 ¹	

¹ For windows - Group C5 EN 12210




T	11.5.7 Tilt striker plate 12 mm air gap, Euro-rebate, 18 mm rebate depth			No	No Tricoat
	silver				




T	11.5.8 Night-vent striker plate 12 mm air gap, Euro-rebate, 18 mm rebate depth			No	No Tricoat
	silver				




T	11.5.9 Striker plate for espagnolettes with mounted tilt stay 12 mm air gap, Euro-rebate, 18 mm rebate depth			No	No Tricoat
	silver				




T	11.5.10 Stabilizing scissor stay casing 12 mm air gap, Euro-rebate, 18 mm rebate depth			No	No Tricoat
	silver				




T	11.5.11 Striker plate with positioning pins 12 x 3 mm 12 mm air gap, Euro-rebate, 18 mm rebate depth			No	No Tricoat			
	silver	angled screw-fixing				200	34963	359212
						- 1 mm gasket-compression	200	370110




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 Tricoat			
	silver	angled screw-fixing				100	96690	359213
						- 0.7 mm gasket-compression	100	96890




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 Tricoat
	silver	2 slots			





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 Tricoat			
	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 


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	200	355396	366379	
	without reinforcement rings angled screw-fixing		200	34986		

361960 


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	366432¹	

¹ Only for i.S. cam!


356326 

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 

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	100	96861	360293	
	without reinforcement rings angled screw-fixing		100	96779	359370	
		- 0.7 mm gasket-compression	100	96641		

363797 

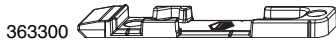
11.6.5 Tilt-first striker plate i.S. 12 mm air gap, Euro-rebate, 20 mm rebate depth					No	No Tricoat
silver	MM	right and left	100	363797	369981	

26241 

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	100	208439		
	steel plate 2 slots		100	214779¹		


¹ For windows - Group C5 EN 12210






T	11.6.7 Tilt striker plate 12 mm air gap, Euro-rebate, 20 mm rebate depth				No	No Tricoat
	silver		right and left	100	363300	355798




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		200	34985	

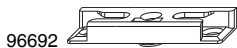



T	11.6.9 Striker plate rear-engaging with positioning pins 12 x 3 mm 12 mm air gap, Euro-rebate, 20 mm rebate depth				No	No Tricoat
	silver	angled screw-fixing		200	361959¹	

¹ Only for i.S. cam!




T	11.6.10 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 left	100 100	356959 356960	362671 362670




T	11.6.11 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		100	96692	366988




T	11.6.12 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		100	206977	

11.7 Striker plates 12 mm air gap, Euro-rebate, 24 mm rebate depth

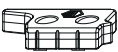
34934 


11.7.1 Striker plates 12 mm air gap, Euro-rebate, 24 mm rebate depth, 13 mm offset					No	No Tricoat
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
silver		angled screw-fixing		200	360849 ¹	

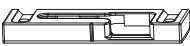
¹ Only for i.S. cam!


356333 

11.7.3 Sash lifters MM 12 mm air gap, Euro-rebate, 24 mm rebate depth, 13 mm offset					No	No Tricoat
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
silver	without reinforcement rings	angled screw-fixing		100	364952	366635
			- 1 mm gasket-compression	100	364953	366636
			+ 1 mm gasket-compression	100	368443	
	design or reinforcement rings	angled screw-fixing		100	363027	
	without reinforcement rings	angled screw-fixing	+ 2 mm	100	369301	

369757 

11.7.5 Tilt-first striker plates i.S. 12 mm air gap, Euro-rebate, 24 mm rebate depth					No	No Tricoat
silver			right	100	369757	
			left	100	369758	





11.7.6 Shootbolt striker plates 12 mm air gap, Euro-rebate, 24 mm rebate depth				No	No Tricoat
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	366013
	24 mm rebate depth, 13 mm offset without reinforcement rings	2 slots with angled screw-fixing	+ 1 mm gasket-compression 100	212343	216407
	Euro-rebate 20 mm steel plate	2 slots	100	214779 ¹	


¹ For windows - Group C5 EN 12210

² Height + 1 mm




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	359003	359570
		left	100	359004	359571




11.7.8 Sash lifter striker plate 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




11.7.9 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	359561

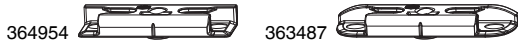


11.7.10 Striker plate rear-engaging with positioning pins 12 x 3 mm 12 mm air gap, Euro-rebate, 24 mm rebate depth, 13 mm offset				No	No Tricoat
silver			200	360154 ¹	366920 ¹

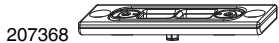
¹ Only for i.S. cam!




11.7.11 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	363992	365567
		left	200	363993	365568



T 11.7.12 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	370557	370558	
	design with positioning pins 12x3 mm	angled screw-fixing	100	363487	366921	




T 11.7.13 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	





11.8 Striker plates 12 mm air gap, Euro-rebate, 18-24 mm rebate depth


25114 

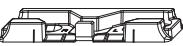
T	11.8.1 Sash lifter striker plate for half round and angled windows 12 mm air gap, Euro-rebate, 18-24 mm rebate depth		No	No Tricoat
	silver	50	25114	201466


55277 

T	11.8.2 Striker plate for espagnolettes with mounted tilt stay 12 mm air gap, Euro-rebate, 18-24 mm rebate depth		No	No Tricoat
	silver	100	55277	204970


207432 

T	11.8.3 Striker plate for opening restrictor 12 mm air gap, Euro-rebate, 20-24 mm rebate depth		No	No Tricoat
	silver angled screw-fixing	50	207432	212218

25118 

T	11.8.4 Night-vent striker plate 12 mm air gap, Euro-rebate, 18-24 mm rebate depth		No	No Tricoat
	silver	100	25118	204963

52794 

T	11.8.5 Stabilizing scissor stay casing 12 mm air gap, Euro-rebate, 18-24 mm rebate depth		No	No Tricoat
	silver	100	52794	204972

11.9 Striker plates for opposite Eurogroove



34610

11.9.1 Striker plates for opposite Eurogroove



No

No
Tricoat

silver
- 1 mm gasket-compression

200

200

34610

34606

354028

359599



34618

11.9.2 Striker plate for 3-sashed windows for opposite Eurogroove



No

No
Tricoat

silver

200

34618

366537



355923

11.9.3 Sash lifters MM for opposite Eurogroove



No

No
Tricoat

silver

right

100

355923

357926

left

100

355924

357927



355221



96558

11.9.4 Striker plates i.S. for opposite Eurogroove



No

No
Tricoat

silver

100

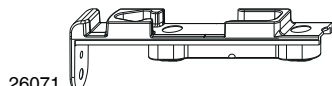
355221

- 0.8 mm gasket-compression

100

96558

358862



26071

11.9.5 Tilt striker plate for opposite Eurogroove for PVC



No

No
Tricoat

silver

right and
left


100

26071


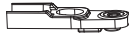

358868




11.10 Accessories for striker plates

355615 

11.10.1 Sash run-up block 2-sashed for striker plates i.S. MM			No	No Tricoat
silver		100	355615	

355920  55039  94053 

11.10.2 Striker plates 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	100	55039 ¹	205141 ¹
	clip-on striker for i.S. cams	100	205563	207676
	locking cam Euro-rebate	100	94053	355828
	locking cam hardware groove	100	94037	355829
	locking cam opposite Eurogroove	100	94038	355830

¹ NOTE: Not suitable for i.S. cams!

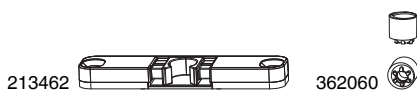


12 Accessories MULTI-MATIC

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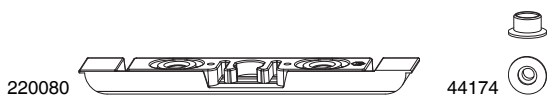


12 Accessories MULTI-MATIC



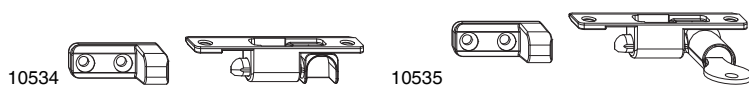
12.1 Door catches and bullet catches for 2-sashed windows			No	No Tricoat
silver	bullet catch timber 18 mm rebate depth 9 mm offset and 22 mm rebate depth 13 mm offset	50	213461	
	bullet catch timber 20 mm rebate depth 9 mm offset and 24 mm rebate depth 13 mm offset	50	213462	217455
	bullet catch hardware 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	364608
	bullet catch French casement drive gear	50	213460	
	packer for bullet catch for Eurogroove	100	362059¹	
pearl light grey RAL 9022	bullet-catch roll	100	362060	

¹ Use for installation into Eurogroove!

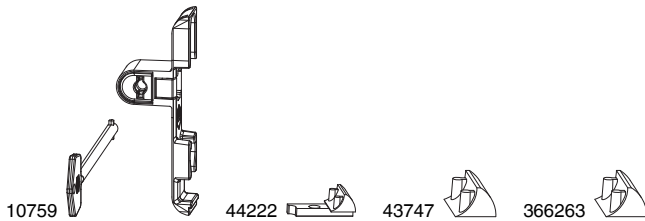


12.2 PVC bullet catch for 2-sashed windows			No	No Tricoat
silver	2-sashed bullet catch 4 mm air gap 9 mm offset mill-in	50	220080¹	
	2-sashed bullet catch without Eurogroove	50	57891	
	2-sashed bullet catch for Eurogroove	50	55189	
	bullet-catch roll Euro-rebate 10x7 mm	100	44174	
	bullet-catch roll 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			No	No Tricoat
silver	turn-restrictor self-catching	20	10534	102049
	turn-restrictor self-catching lockable	20	10535	102193
	packer for frame component self-catching turn restrictor 2 mm	20	366651	
	key for self-catching turn restrictor lockable 2D057	100	40401	
traffic white RAL 9016	turn-restrictor self-catching	20	12067	
	turn-restrictor self-catching lockable	20	12069	
RAL 8019 grey brown	turn-restrictor self-catching	20	12068	
	turn-restrictor self-catching lockable	20	12070	



T 12.4 Concealed turn locks 4 mm air gap				No	No Tricoat
silver		concealed turn restrictor for 4 mm air gap, 9 mm offset	20	10759 ^{1,2,3,4}	100036 ^{1,2,3,4}
	right	concealed turn restrictor 4 mm air gap, 13 mm offset	20	103874 ^{2,3,5,6}	
	left	concealed turn restrictor 4 mm air gap, 13 mm offset	20	103875 ^{2,3,5,6}	
		concealed turn restrictor 4 mm air gap, 11 mm offset	20	103873 ^{2,3,5,6}	
pearl light grey RAL 9022	right	adapter spacer for turn restrictor cases Hardware groove 6/8/4	100	44222	
	left	adapter spacer for turn restrictor cases Hardware groove 6/8/4	100	44223	
		adapter spacer for turn restrictor cases Euro-rebate	100	43747	
		adapter spacer for turn restrictor cases 12 air gap	20	366263	

¹ 9 mm offset: 18 mm milling depth

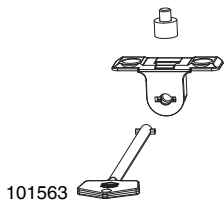
² For 4 mm air gap 90 mm milling length.

³ Box contents: Turn lock and tilt-stay key.

⁴ For timber 18 mm rebate depth 9 mm offset use end cap 43747 and for hardware groove 6/8/4 end cap 44222 on the right and/or 44223 on the left.

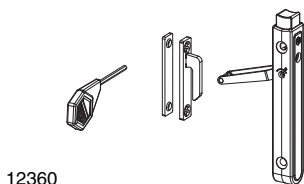
⁵ Use end cap 366263 for 12 mm air gap.

⁶ 11 + 13 mm offset: 22 mm milling depth



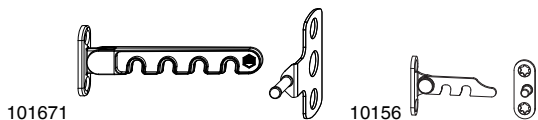
12.5 Concealed turn locks 12 mm air gap				No	No Tricoat
silver		lockable 9 mm offset	20	101563 ¹	
		lockable 13 mm offset	20	101562 ¹	103414 ¹


¹ Box contents: Turn lock, bolt for turn lock, Sped-Form screw, tilt-stay key.

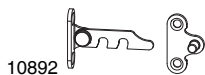



12.6 MULTI VENT tilt restrictors				No	No Tricoat
traffic white RAL 9016			20	12360	
RAL 9001 cream white			20	101524	
RAL 8019 grey brown			20	12361	
white	packer 5°		100	42509	
	packer 15°		100	42514	

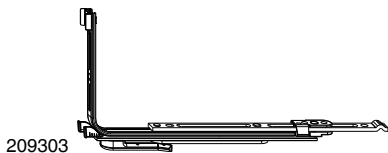




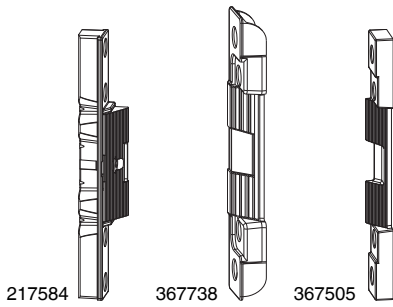
12.7 Tilt restrictors			No	No Tricoat
silver	right	50	10890	
	left	50	10891	
traffic white RAL 9016	right	50	10137	
	left	50	10138	
	left/right	50	101671	
pearl light grey RAL 9022	left/right	50	101672	
		50	101673	
		50	101674	
yellow	right	50	10156	
	left	50	10157	
black	right	50	12460	
	left	50	12461	




12.8 Tilt restrictors for 2-sashed windows			No	No Tricoat
silver	right	50	10892	
	left	50	10893	
traffic white RAL 9016	right	50	13295	
	left	50	10132	



12.9 Tilt restrictors for turn-only windows			No	No Tricoat
silver	9 mm offset / 13 mm offset	20	209303	



12.10 Turn-only hinge safety devices			N^o	N^o 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

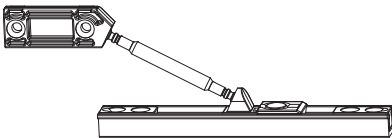
² For PVC and timber/alu profiles — see profile data sheets.

³ Must be used for MACO basic security B and D.


⁴ 9 mm offset 18 mm milling depth.

⁵ Routing length 120 mm.

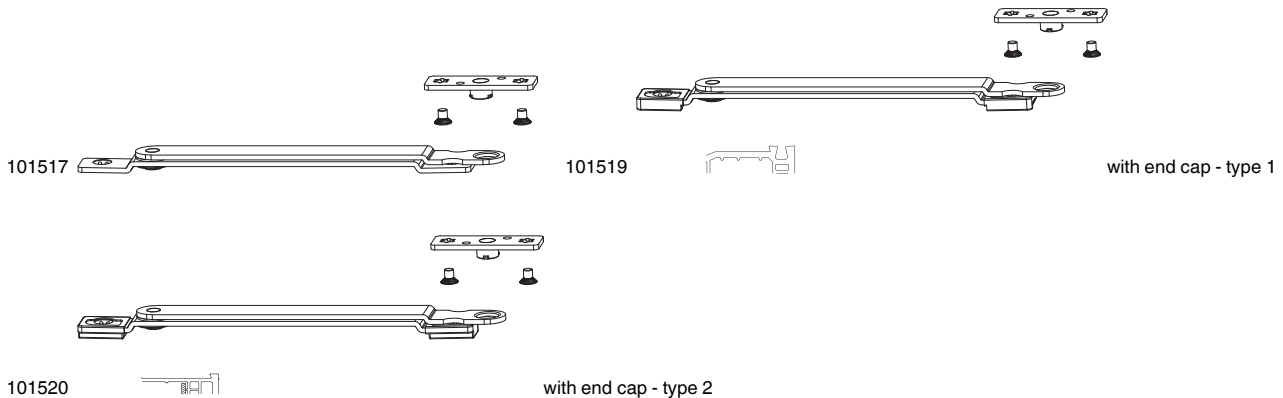
⁶ 13 mm offset 22 mm milling depth .



214718

T	12.11 Vertical turn limiting restrictors		N^o	N^o Tricoat
silver	concealed vertical turn limiting restrictor timber	20	214718	
	concealed turn restrictor TV timber	20	214717	

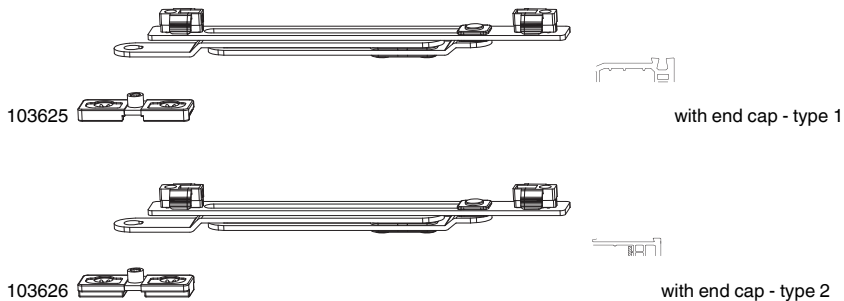




12.12 Independent turn limiting restrictors					No	No Tricoat
silver	independent turn limiting restrictor timber Euro-rebate	240 - 1.300	80	20	101517 ^{1,2}	101888 ^{1,2}
	independent turn limiting restrictor timber hardware groove	240 - 1.300	80	20	101518 ^{1,2}	
	independent turn limiting restrictor PVC / TV PVC end cap - type 1	240 - 1.300	80	20	101519 ^{1,2}	103845 ^{1,2}
	independent turn limiting restrictor PVC / TV PVC end cap - type 2	240 - 1.300	80	20	101520 ^{1,2}	
	turn-restrictor TV timber Euro-rebate	240 - 1.300	80	20	206207	211527
	independent turn limiting restrictor MM for half round windows	505 - 1.300	80	20	103080	
	packer for independent turn limiting restrictor sash component for Eurogroove			100	40456	
	screw for turn-restrictor for half round window			100	101655	

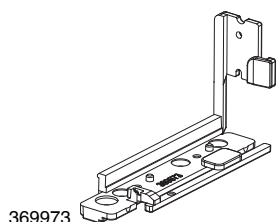
¹ In combination with horizontal corner support, the application area increases by 250 mm.

² Not for use in combination with rebated corner support without rebate-leg screw-fixing



12.13 Turn restrictors 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	103779 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	103781 ¹

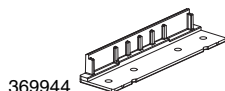
¹ With horizontal corner element, application range from 560 mm



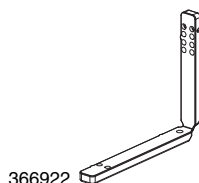
369973



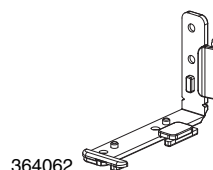
369939



369944



366922



364062

P 12.14 Packers MULTI POWER



				No	No Tricoat
pearl light grey RAL 9022	VEKA right	for threshold	20	369973	
	VEKA left	for threshold	20	369974	
	for GKG Grundmeier	for threshold	20	369939	
	for ROTO Gluske BKV Eifel TB	for threshold	20	369944	
	for Trocal alu and GRP groove 10/14 Heroal	for threshold	20	369945	
grey F1	type01	pivot post and scissor stay hinge MULTI POWER	100	366922	
		pivot post left/scissor stay hinge right for MULTI POWER	100	364063¹	
		pivot post right/scissor stay hinge left for MULTI POWER	100	364062¹	
	type02	pivot post left/scissor stay hinge right for MULTI POWER	100	364065²	
		pivot post right/scissor stay hinge left for MULTI POWER	100	364064²	
	type03	pivot post left/scissor stay hinge right for MULTI POWER	100	364067³	
		pivot post right/scissor stay hinge left for MULTI POWER	100	364066³	
	type04	pivot post left/scissor stay hinge right for MULTI POWER	100	364069⁴	
		pivot post right/scissor stay hinge left for MULTI POWER	100	364068⁴	
	type05	pivot post left/scissor stay hinge right for MULTI POWER	100	364071⁵	
		pivot post right/scissor stay hinge left for MULTI POWER	100	364070⁵	
	type06	pivot post left/scissor stay hinge right for MULTI POWER	100	364073⁶	
		pivot post right/scissor stay hinge left for MULTI POWER	100	364072⁶	
	type07	pivot post left/scissor stay hinge right for MULTI POWER	100	364075⁷	
		pivot post right/scissor stay hinge left for MULTI POWER	100	364074⁷	
	type08	pivot post left/scissor stay hinge right for MULTI POWER	100	364077⁸	
		pivot post right/scissor stay hinge left for MULTI POWER	100	364076⁸	
	type09	pivot post left/scissor stay hinge right for MULTI POWER	100	364175^{9,10}	
		pivot post right/scissor stay hinge left for MULTI POWER	100	364174^{9,10}	
type10	pivot post left/scissor stay hinge right for MULTI POWER	100	364177¹¹		
	pivot post right/scissor stay hinge left for MULTI POWER	100	364176¹¹		
type11	pivot post left/scissor stay hinge right for MULTI POWER	100	364179¹²		
	pivot post right/scissor stay hinge left for MULTI POWER	100	364178¹²		
type12	pivot post left/scissor stay hinge right for MULTI POWER	100	364181^{9,13}		
	pivot post right/scissor stay hinge left for MULTI POWER	100	364180^{9,13}		
type13	pivot post left/scissor stay hinge right for MULTI POWER	100	366340¹⁴		
	pivot post right/scissor stay hinge left for MULTI POWER	100	366339¹⁴		
type14	pivot post left/scissor stay hinge right for MULTI POWER	100	367263¹⁵		
	pivot post right/scissor stay hinge left for MULTI POWER	100	367262¹⁵		
type15	pivot post left/scissor stay hinge right for MULTI POWER	100	367848¹⁶		
	pivot post right/scissor stay hinge left for MULTI POWER	100	367847¹⁶		
type16	pivot post left/scissor stay hinge right for MULTI POWER	100	368311¹⁷		
	pivot post right/scissor stay hinge left for MULTI POWER	100	368310¹⁷		
type17	pivot post left/scissor stay hinge right for MULTI POWER	100	369288¹⁸		
	pivot post right/scissor stay hinge left for MULTI POWER	100	369287¹⁸		
type18	pivot post left/scissor stay hinge right for MULTI POWER	100	370031¹⁹		
	pivot post right/scissor stay hinge left for MULTI POWER	100	370030¹⁹		
type19	pivot post left/scissor stay hinge right for MULTI POWER	100	370466²⁰		
	pivot post right/scissor stay hinge left for MULTI POWER	100	370465²⁰		

¹ Aluplast AD 2000, Veka Softline 70 AD + MD + Topline + Swingline, Brüggmann AD + MD, Alphacan System Alpha 70 + 80, Schüco Corona CT70 / SI 82

² Aluplast AD 4000, Aluplast MD 5000 + 6000 + 8000, Schüco Corona AS

³ Gromathic AD 3100

⁴ Rehau Brilliant Design AD

⁵ Profine Trocal Innovova 70 A3/A5/M5

⁶ Gealan S7000 + 8000

⁷ Salamander 2D + 3D + Streamline 76

⁸ Rehau Geneo MD + Brilliant Design MD + Thermo Design

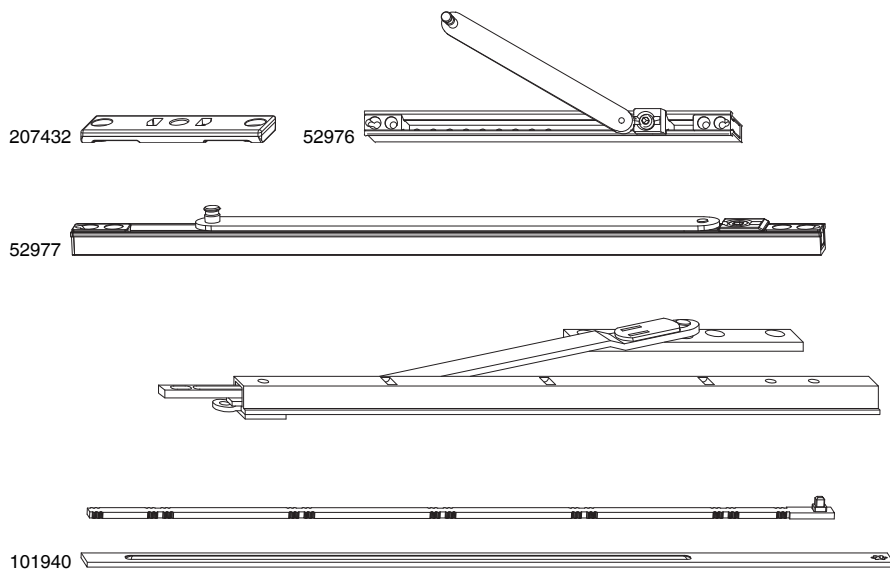
⁹ Use pivot post MULTI POWER timber 24 mm rebate depth.

¹⁰ Profine Trocal System 88 + Innovova 2000

¹¹ Aluplast Energeto

¹² Inoutic AD

- ¹³ Inoutic Prestige MD
¹⁴ Kömmerling Eurofutur AD + MD + 3S + MPF, KBE 70 AD + MD
¹⁵ KB07 KBE 70 AD, KB08 KBE 70 MD, KB13 KBE System 88, Trocal 76 AD; Deceuninck Zendow
¹⁶ Wymar 3000 AD / MD
¹⁷ Swish 24-7 / Profile 22
¹⁸ Deceuninck Zendow 3000 with transom recess.
¹⁹ Eurocell TBT
²⁰ Profile 22 Optima



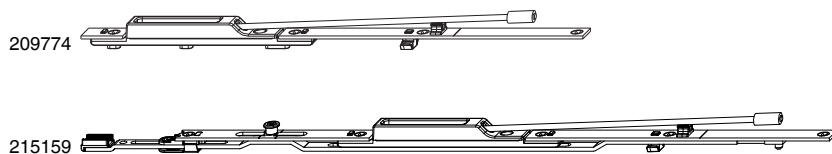
12.15 Opening restrictors / brake stays		L			No	No Tricoat
silver	striker plate for opening restrictor for PVC	78		20	10757	101408
	striker plate for opening restrictor Euro-rebate 20 mm angled screw-fixing	80		50	207432	212218
	opening restrictor with brake arm length 145 mm L=244	244	280 - 380	20	52976 ^{1,2}	201784 ^{1,2}
	opening restrictor with brake arm length 210 mm L=244	244	360 - 449	20	216367 ^{1,2}	
	opening restrictor with brake arm length 250 mm L=244	244	381 - 470	20	52978 ²	202432 ²
	opening restrictor with brake arm length 250 mm L=333	333	471 - 1.650	20	52977 ^{2,3}	201774 ^{2,3}
	opening restrictor with brake arm length 274 mm L=333	333	480 - 1.800	20	214328 ^{2,4}	223210 ^{2,4}
	brake stay with adaptor MM 800 L=270	270	510 - 800	20	101940	
	brake stay with adaptor MM 1650 L=420	420	801 - 1.650	20	103242	

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.

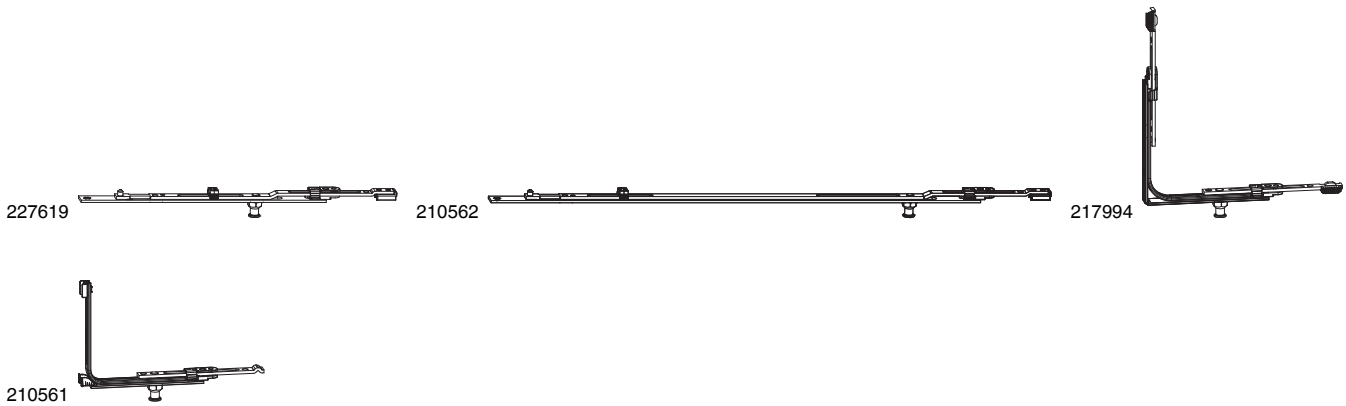
⁴ In connection with 180 kg application range from 695 mm.






12.16 Anti-unhinge devices "Safety Pin" for PVC and timber				No	No Tricoat
silver	centre lock cable junction TR to MM	280 - 2.600	20	206538	
	Anti-unhinge safety device for PVC and timber bottom		20	209774 ¹	223236 ¹
	top anti-unhinge device for PVC & 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	105154
	left base plate for anti-unhinge device angled screw-fixing with positioning pins for timber and PVC		20	102302	105155
	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!

12.17 Central locking system components for floor threshold

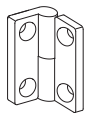


12.17.1 For 14 mm air gap					No	No Tricoat
silver	faceplate extension MM, extendable 235			10	227619	
	centre lock extendable MM 1280V	801 - 1.280		10	210562	
	centre lock extendable MM 1500V	1.281 - 1.500		10	210563	
	corner element MM for threshold for variable drive gear		260 - 1.650	50	217994	
	corner element MM for threshold		260 - 1.650	50	210561	218229
	corner element MM for threshold for EH		320 - 1.650	50	227339	




12.17.2 For 18 mm air gap					No	No Tricoat
silver	faceplate extension MM, extendable 235			10	214848	
	centre lock extendable MM 1280V	801 - 1.280		10	209882	211723
	centre lock extendable MM 1500V	1.281 - 1.500		10	209883	214296
	corner element MM for threshold for variable drive gear		260 - 1.650	50	217995	
	corner element MM for threshold		260 - 1.650	50	209881	211722
	corner element MM for threshold for EH		320 - 1.650	50	227338	






11154

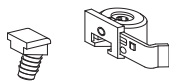
T 12.18 Glazing-bar hinges for glazing-bar cross			No	No Tricoat
white	right	50	11472	
	left	50	11473	
brown	right	50	11154	
	left	50	11155	




10992

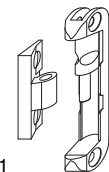
T 12.19 Glazing-bar catch for glazing-bar cross and glazing-bar frame			No	No Tricoat
white	for 26 mm glazing-bar cross	50	11470¹	
	for 33 mm glazing-bar cross	50	11471	
brown	for 22 mm glazing-bar cross	50	13130¹	
	for 26 mm glazing-bar cross	50	11153¹	
	for 33 mm glazing-bar cross	50	10992	

¹ Compatible with glazing-bar hinges.




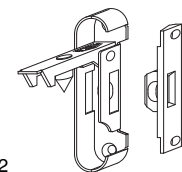
12387

T 12.20 Drill-in glazing-bar catches			No	No Tricoat
white		50	12388	
brown		50	12387	




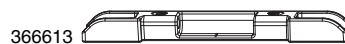
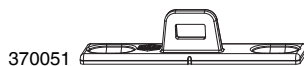
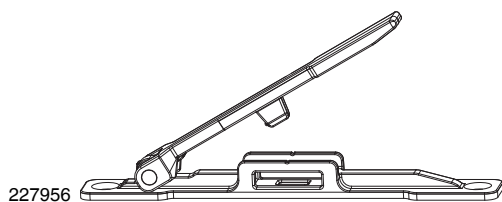
101251

T 12.21 Universal coupling hinges			No	No Tricoat
silver	with 2 mm air gap	50	101248	103556
	without air gap	50	101251	



101252

T 12.22 Universal coupling catches			No	No Tricoat
silver	with 2 mm air gap	50	101250	
	without air gap	50	101252	



12.23 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		366613¹
	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		367617¹

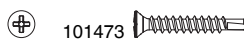
¹ Please order screw for pin safety device part number 104302 separately.



T 12.24 Run-up blocks

			No	No Tricoat
	lifting block 12 mm air gap for frame silver	50	44350¹	
	lifting block 12 mm air gap for sash silver	50	44351¹	
	run-up block 4 mm air gap silver	500	94022¹	

¹ Only for 20 mm flat rebate.



12.25 Screws

		L	Ø		No	No Tricoat
silver	special drilling screw for VV130 for timber and PVC Phillips 7.2 mm head	38	4,5	100	362918	105152
	special drilling screw for VV130 for timber and PVC T20 7.2 mm head	38	4,5	500	367828	104212
Tricoat	screw for PVC Phillips with drill bit 7 mm head	25	3,9	100		101474
		32	3,9	100		101473
		38	3,9	100		101472
	screw for timber and PVC Phillips 7 mm head	25	4	100		104371
		22	4,2	100		101466
		30	4,2	100		101469
		40	4,2	100		101470
	55	4,2	500		102269	



12.26 Serrated carrier connector MM


			No	No Tricoat
silver		50	206692¹	

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




12.27 Clip-on bushes for i.S. cam 3-sashed			No	No Tricoat
silver		100	355920	

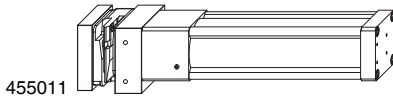



12.28 Faceplate strip covers		L		No	No Tricoat
silver		1.400	10	364686	
		2.200	10	364687	



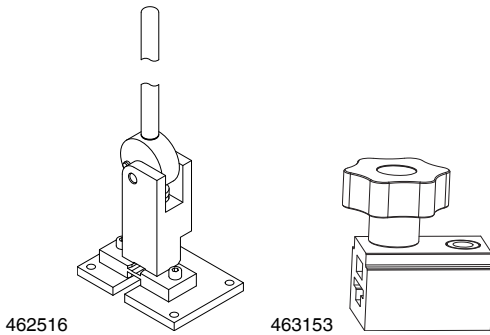
12.29 Tricoat touch-up paint			No	No Tricoat
Tricoat repair paint 0.125 L tin		1	358440	


12.30 Hardware cropper



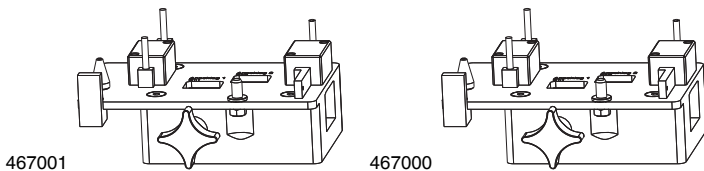
12.30.1 SOMATEC hardware cropper		No	No Tricoat
SOMATEC hardware angle cropper MM without accessories left	1	455457	
SOMATEC hardware angle cropper MM without accessories right	1	455458	
SOMATEC hardware cropper MM with accessories left	1	455008 ¹	
SOMATEC hardware cropper MM with accessories right	1	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



12.30.2 Hand cropper for offset cut		No	No Tricoat
manual fitting cutter MM Reiplinger	1	462516	
punching tool for hand cropper MM 462516	1	464534	
cutting blade for hand cropper MM 462516	1	464526	
cropping aid for offset punch MULTI-MATIC	1	463153	

12.30.3 Accessories for SOMATEC hardware cropper




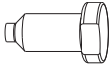
12.30.3.1 Fences		No	No Tricoat
fence for SOMATEC hardware cropper left MM 2.500	1	455010	
fence for SOMATEC hardware cropper right MM 2.500	1	455122	
stop for SOMATEC ruler left MM	1	467001	
stop for SOMATEC ruler right MM	1	467000	
support for fence MM	1	466850	





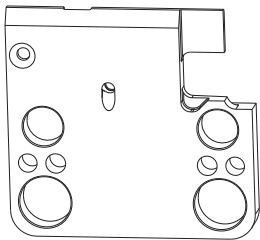
455048

12.30.3.2 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

12.30.3.3 Hole-punches		No	No Tricoat
punching for SOMATEC hardware cropper MM	10	455051	




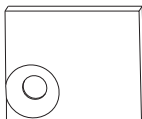
455052

12.30.3.4 Female die		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

12.30.3.5 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	
FIBRO spring for SOMATEC hardware cropper with straight cut MM	1	467066	




455056

12.30.3.6 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	



455058

12.30.3.7 Controllers		No	No Tricoat
foot control for SOMATEC hardware cropper MM	1	455058	
pressure regulating valve for SOMATEC hardware cropper MM	1	455059	



466859

12.31 Accessory tools		No	No Tricoat
corner kit for pressure control MM	1	466859	



**MACO
MULTI-MATIC**



Accessories MULTI-MATIC







































13 Stackable pallets

13.1	T&T drive gears BS 15 FHH i.S. _____	324
13.2	T&T drive gears EH BS 15 FHH i.S. _____	324
13.3	T&T drive gears EH BS 6.5 FHH i.S. _____	324
13.4	T&T drive gears BS 15 VHH i.S. _____	324
13.5	Corner elements _____	324
13.6	Centre locks _____	324
13.7	Faceplate extensions _____	324
13.8	Scissor stay faceplates i.S. with night-vent _____	325
13.9	French casement drive gears for Eurogroove FHH _____	325
13.10	Drive gears BS 15 FHH with tilt lock bolt _____	325
13.11	Pre-assembled rebated scissor stays _____	325



13 Stackable pallets

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	
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				
	3	600	1.341 - 1.590	320	210902				
13.3 T&T drive gears EH BS 6.5 FHH i.S.						No	No Tricoat		
silver	6,5	2	300	661 - 840	320	214714			
	400		841 - 1.090	320	211435				
	500		1.091 - 1.340	320	211436				
13.4 T&T drive gears BS 15 VHH i.S.						No	No Tricoat		
silver	15	1	801 - 1.250	320	208443				
13.5 Corner elements					No	No Tricoat			
silver	vertically extendable with 1 i.S.			750 - 2.450	1.100	204408	212178		
	vertically extendable without i.S. cams			750 - 2.450	1.100	215247			
	horizontally extendable with 1 i.S.		320 - 1.650		1.100	204409	212179		
	with 1 i.S.		320 - 1.650	360 - 2.450	1.100	204407	212177		
	with 2 i.S.		320 - 1.650	360 - 2.450	1.000	208440			
	with 1 VZ		320 - 1.650	360 - 2.450	1.100	216934			
	for variable drive gear horizontally extendable with 1 i.S.		320 - 1.650	470 - 2.250	1.000	204410			
	for variable drive gear horizontally extendable with 2 i.S.		320 - 1.650	470 - 2.250	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 extensions				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		
	left	600	0	401 - 600	720	204444		
	right	800	0	601 - 800	630	204445		
	left	800	0	601 - 800	630	204446		
	right	1050	1	801 - 1.050	450	204447		
	left	1050	1	801 - 1.050	450	204448		
	right	1300	1	1.051 - 1.300	320	204449		
	left	1300	1	1.051 - 1.300	320	204450		
13.9 French casement drive gears 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



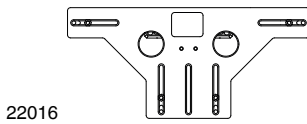
14 Jigs, tools and adjusting screws

14.1	Jigs timber 4 mm air gap	328
14.2	Jigs timber 12 mm air gap	332
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	Adjustment keys	343

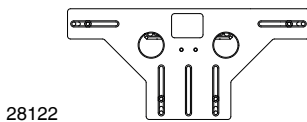


14 Jigs, tools and adjusting screws

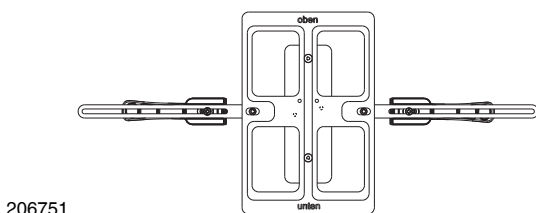
14.1 Jigs timber 4 mm air gap



14.1.1 Routing jigs for pivot posts and scissor stay hinges TO 4 mm air gap							
T	routing template for pivot post and scissor stay hinge	timber	TO FR16/AR27	4 mm air gap / 15 mm rebate leg	1	22016	No Tricoat
			TO FR34/AR40	4 mm air gap / 15 mm rebate leg	1	21723	
				4 mm air gap / 18 mm rebate leg	1	21724	

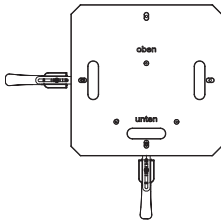


14.1.2 Routing jigs for scissor stay hinges for angled windows TO 4 mm air gap							
T	routing template for angled window scissor stay hinge	timber	TO FR16/AR27	4 mm air gap / 15 mm rebate leg	1	28122	No Tricoat
			TO FR34/AR40	4 mm air gap / 15 mm rebate leg	1	22021	
				4 mm air gap / 18 mm rebate leg	1	22022	



14.1.3 Routing jigs for pivot posts and scissor stay hinges DT 4 mm air gap								
T	routed frame for pivot post and scissor stay hinge	timber	DT FR16/AR27		1	206751 ¹	No Tricoat	
		routing insert for pivot post and scissor stay hinge	timber	DT FR16/AR27	4 mm air gap / 15 mm rebate leg	1		101551
					4 mm air gap / 8 mm rebate leg / 9 mm offset	1		101550
					4 mm air gap / 18 mm rebate leg / 13 mm offset	1		102890

¹ Order routing plates 101551, 101550, 102890.



214813

14.1.4 Routing jigs for drive gears MM/MM-KS 4 mm air gap						No	No Tricoat
T	routing template for drive gear FHH MM & corner element i.S.	4 mm air gap			1	214813¹	
	routing template for drive gear FHH MM-KS	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	

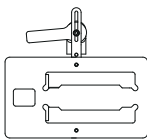
¹ Corner element 222215



214669

14.1.5 Positioning jigs and routing jigs for centre locks and scissor stays MM/MM-KS 4 mm air gap							No	No Tricoat
T	striker positioning jig with 48 mm retainer	4 mm air gap	630 - 1.300		1	214669¹		
	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-KS	4 mm air gap	801 - 1.500		1	214161		

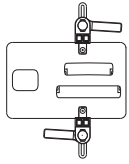
¹ Top 12 mm air gap



21598

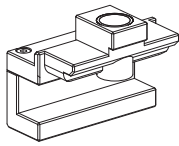
14.1.6 Routing jigs for 2-sashed windows for drive gears, centre locks and shootbolts MM/MM-KS 4 mm air gap							No	No Tricoat	
T	routing template for 2-sashed windows	timber shootbolt FR16/AR27	4 mm air gap			1	21598		
	routing template for drive gear FHH MM-KS	2-sashed	4 mm air gap	841 - 1.340		1	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	
			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		





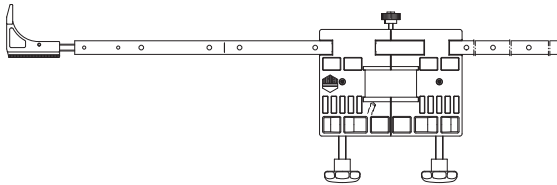
41537

T 14.1.7 Routing jigs for half round windows 4 mm air gap						No	No Tricoat
routing template for half round windows sash lifter striker 4 mm air gap timber					1	218153	
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	



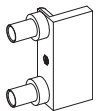
214542

T 14.1.8 Drilling jigs for compression devices 4 mm air gap						No	No Tricoat
drilling block for compression device	timber	drill-in	9 mm offset	4 mm air gap	1	23871	
			13 mm fittings axis	4 mm air gap	1	214542	



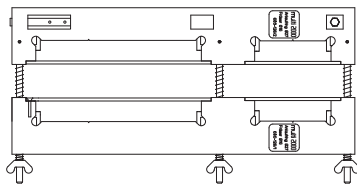
28377

T 14.1.9 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	



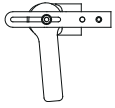
20554

T 14.1.10 Drilling jig for door catches 4 mm air gap						No	No Tricoat
drill jig for door catch	timber			4 mm air gap	1	20554	

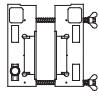


21728

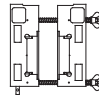
T 14.1.11 Jig for turn restrictor 4 mm air gap						No	No Tricoat
routing template for door catch MT	timber			4 mm air gap	1	21728	



11195



22127



T 14.1.12 Spare parts and individual parts for jigs 4 mm air gap



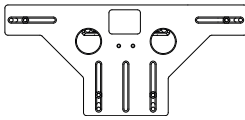
No

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	

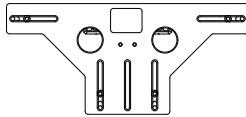


14.2 Jigs timber 12 mm air gap




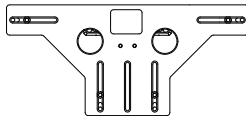
220023

T 14.2.1 Routing jigs pivot post and scissor stay hinge TO 12 mm air gap					No	No Tricoat
routing template for pivot post and scissor stay hinge	timber	TO FR34/AR40	12 mm air gap / 18 mm rebate leg	1	21725	
			12 mm air gap / 20 mm rebate leg	1	21726	
			hardware groove 12 mm air gap / 18 mm rebate leg	1	220023	
			hardware groove 12 mm air gap / 20 mm rebate leg	1	220022	




22019

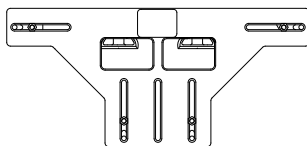
T 14.2.2 Routing jigs for scissor stay hinge angled windows TO 12 mm air gap					No	No Tricoat
routing template for angled window scissor stay hinge	timber	TO FR34/AR40	12 mm air gap / 18 mm rebate leg	1	22019	
			12 mm air gap / 20 mm rebate leg	1	22020	




20890

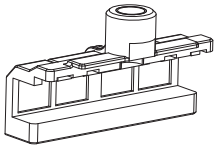
T 14.2.3 Routing jig for pivot post and scissor stay hinge DT 12 mm air gap					No	No Tricoat
routing template for pivot post and scissor stay hinge	timber	DT FR34/AR40	12 mm air gap / 18RL + 12 mm air gap / 20RL	1	20890¹	

¹ Spare and component part available.



23957

T 14.2.4 Routing jig for scissor stay hinge 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 / 18RL + 12 mm air gap / 20RL	1	23957	



22482

T 14.2.5 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	



212948

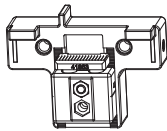
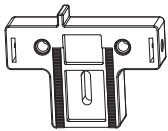
T 14.2.6 Drilling jigs for "Safety Pin" 12 mm air gap



No

No
Tricoat

drill jig for safety pin	timber			Euro-rebate 18 mm rebate depth 9 mm offset	1	212948	
				Euro-rebate 24 mm rebate depth 13 mm offset	1	212949	



12506

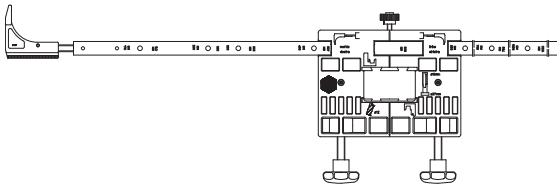
T 14.2.7 Jigs for 3-sashed windows 12 mm air gap



No

No
Tricoat

drill jig for 3-sashed turn-only hinge	timber				1	12506	
jig for multi-sash centre frame hinge	timber				1	11025	



206581

T 14.2.8 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	12 mm air gap / 18RL + 12 mm air gap / 20RL	1	28376	
			13 mm fittings axis	12 mm air gap / 18RL + 12 mm air gap / 20RL	1	206581	





215700

T 14.2.9 Drilling jig for espagnolette striker plate with pre-mounted tilt stay 13 mm offset



No

No
Tricoat

drill jig for espagnolette MM

timber

12 air gap

1

215700



215702

14.2.10 Drilling jig for sash lifter striker plate for half round and angled windows 13 mm offset



No

No
Tricoat

drill jig MM

12 air gap

1

215702



215703

T 14.2.11 Drilling jig for stabilizing scissor stay casing 13 mm offset



No

No
Tricoat

drill jig

for stabilizing scissor stay casing

1

215703



370313

T 14.2.12 Spare parts and individual parts for jigs 12 mm air gap



No

No
Tricoat

stop piece DT 160

18 mm high

2

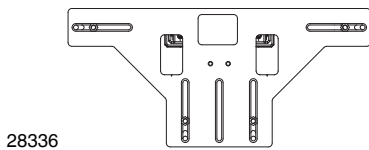
370313

14.3 Jigs timber 4 mm + 12 mm air gap



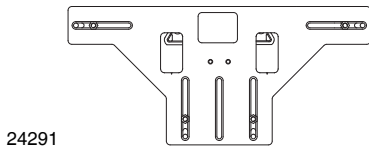
21058

T 14.3.1 Drilling jigs			No	No Tricoat
drill jig for drill-in pivot post	timber	1	21058	
drill jig for support rawlplug	timber	1	28780	
drill jig for drill-in pivot post	timber	1	20550	
drill jig for glazing-bar catch	timber	10	24871	
drill jig for pivot post and scissor stay hinge DT 160		4 mm air gap / 12 mm air gap	1	227425



28336

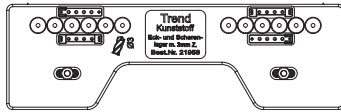
T 14.3.2 Routing jig for routed scissor stay support arm 4 mm/12 mm air gap			No	No Tricoat
routing template for routed scissor stay hinge	timber	FR16/AR27	1	28336



24291

T 14.3.3 Routing jig for routed scissor stay support arm for angled windows 4 mm/12 mm air gap			No	No Tricoat
routing template for angled window routed scissor stay hinge	timber	FR16/AR27	1	24291

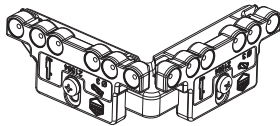
14.4 Jigs PVC



21958

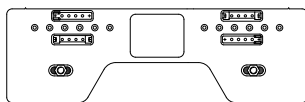
P 14.4.1 Jigs for pivot posts and scissor stay hinges			No	No Tricoat
frame drilling jig for pivot post and scissor stay hinge	PVC	with 3 mm pin	1	21958¹
		self-tightening with 3 mm pin	1	29480¹
		with 7 mm pin	1	21694¹
		self-tightening with 7 mm pin	1	28597¹

¹ Spare and component part available.



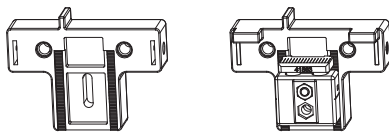
21564

P 14.4.2 Jigs for corner supports			No	No Tricoat
drill jig for corner support	PVC	with 3 mm pin	1	21564
		5 mm positioning pins	1	21562
	5° angle	with 3 mm pin	1	28235
		5 mm positioning pins	1	23279
		MULTI MAMMUT	1	228043



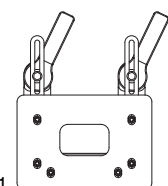
24003

P 14.4.3 Jigs for pivot posts and scissor stay hinges for angled windows			No	No Tricoat
frame drilling jig for angled window scissor stay hinge	PVC	with 3 mm pin	1	24003
		with 7 mm pin	1	24004



13029



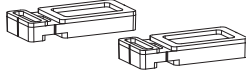
P 14.4.4 Jigs for 3-sashed windows			No	No Tricoat	
drill jig for 3-sashed turn-only hinge	PVC		1	13029	
jig for multi-sash centre frame hinge	PVC	with 3 mm pin	drilling-hole pattern 11.5/5/23.5	1	11888
		with 7 mm pin	drilling-hole pattern 11.5/5/23.5	1	11889



202641

14.4.5 Jig for intermediate drive gears			No	No Tricoat
routing template for intermediate drive gear	frontal		1	202641

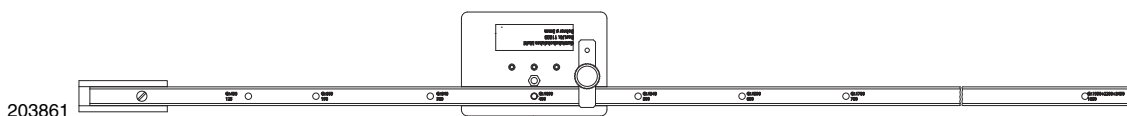



104941 6x  2,5mm  2mm 2x 101458 

14.4.6 Spare parts and individual parts for jigs PVC			No	No Tricoat
silver	packers for drilling jig corner support PVC MULTI MAMMUT	1	104941	
	stop block for drilling jig for scissor stay hinge tilt-only	1	101458	





14.5 Jigs timber and PVC

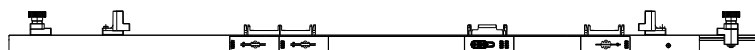




14.5.1 Jigs for drive gear holes MM/MM-KS			No	No Tricoat
drill jig for drive gear drill-hole MM	for 3 mm drillbits	1	203861	
	for 3 mm and 12 mm drill bit	1	203862	
drill jig for lockable door espagnolettes BS 25-50 mm	profile width max. 110 mm	1	214634	

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 with 48 mm retainer gear FHH MM		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 with 48 mm retainer gear MM	variable (centred)	1.250 - 1.750	1	206049	
		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	801 - 1.500		1	204772	
striker positioning jig scissor stay	with 48 mm retainer MULTI MAMMUT	601 - 1.500		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 MMKS	2-sashed	1	213865	



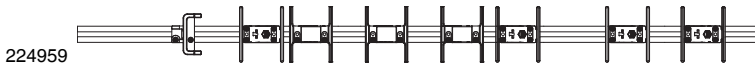
14.5.2.5 Striker plate jigs for 2-sashed windows for drive gears FHH Eurogroove MM/MM-KS						No	No Tricoat
striker positioning jig for drive gear FHH MM	for striker plate 48 mm	2-sashed	for Eurogroove	431 - 1.340	1	210983	
	for striker plate 68 mm	2-sashed	for Eurogroove	431 - 1.340	1	209954	
	for striker 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	



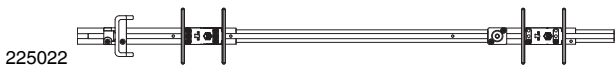
14.5.2.6 Striker plate jigs for 2-sashed windows for drive gears FHH hardware groove MM/MM-KS						No	No Tricoat
striker positioning jig for drive gear FHH MM	for striker plate 48 mm	2-sashed	hardware groove	431 - 1.340	1	218327¹	
	for striker plate 68 mm	2-sashed	hardware groove	431 - 1.340	1	218326¹	
	for striker plate 48 mm	2-sashed	hardware groove	1.341 - 1.700	1	218328¹	
	for striker plate 68 mm	2-sashed	hardware groove	1.341 - 1.700	1	218329¹	
	for striker plate 48 mm	2-sashed	hardware groove	1.701 - 2.450	1	218330¹	
	for striker plate 68 mm	2-sashed	hardware groove	1.701 - 2.450	1	218331¹	

¹ Only for hardware groove and Euro-rebate

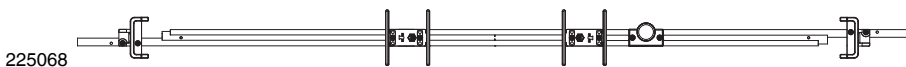
14.5.3 Striker plate jigs timber 12 mm air gap and PVC EH



14.5.3.1 Striker plate jigs for drive gears FHH 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	

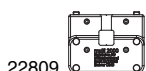


14.5.3.2 Striker plate jigs for centre locks and scissor stays MM EH							No	No Tricoat
striker positioning jig scissor stay MM	with 50 mm retainer	EH		480 - 1.650		1	225022	
striker positioning jig for bottom centre lock MM	with 50 mm retainer	EH		480 - 1.650		1	225032	
striker positioning jig for hinge side centre lock MM	with 50 mm retainer	EH		480 - 1.340		1	225038	
				1.341 - 1.950		1	225059	
				1.951 - 2.600		1	225060	



14.5.3.3 Striker plate jigs for 2-sashed centre locks MM EH							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	





22809

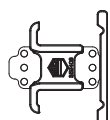
14.5.4 Jigs for compression devices



No

No
Tricoat

drilling block for compression device	surface-mounted	1	22809	
drill jig for compression device with positioning jig-rod	surface-mounted	1	11029	
jig for compression device	concealed ES+TV sash and frame component	1	57247	



359408

T 14.5.5 Jigs individual 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 individual components, striker plate brackets



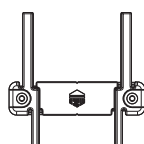
No

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	
		for striker plate 80 mm	20	359148	
timber		for striker plate 48 mm	Euro-rebate 24 mm rebate depth 13 mm offset	20	359407
		for striker plate 68 mm i.S.	Euro-rebate 24 mm rebate depth 13 mm offset	20	359410
			Euro-rebate 9 mm offset	20	359409
		for striker plate 34943	Euro-rebate	10	40107
PVC		for striker plate 34980	Euro-rebate	20	41272
		for striker plate 50 mm i.S.		10	43702²

¹ Striker plate 48 mm and sash lifter MM PVC

² Striker plate rear-engaging



441345

14.5.7 Jigs individual components, striker plate brackets compression device



No

No
Tricoat

striker plate retainer for compression device	concealed ES+TV sash and frame component	1	441345	
	timber	1	361815	



102977

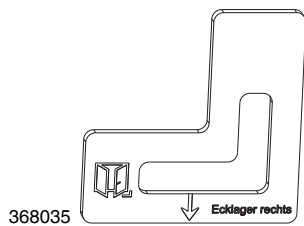
14.5.8 Drilling jigs INVISIBLE



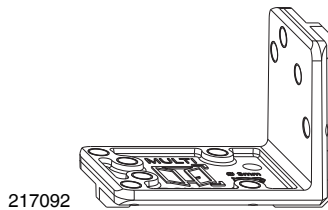
No

No
Tricoat

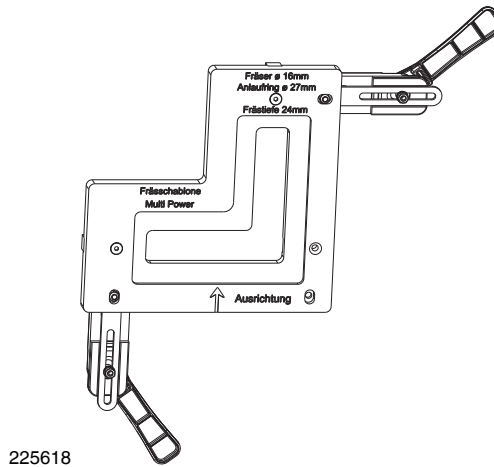
drilling jig accessories for VV flush			1	102980
drill jig for pivot post and scissor stay hinge VV	7 mm screw axis		1	102977
	13 mm screw axis		1	102978
		Euro-rebate 18 mm rebate depth 9 mm offset	1	102979



368035



217092



225618

14.5.9 Drilling and routing jigs MULTI POWER



No

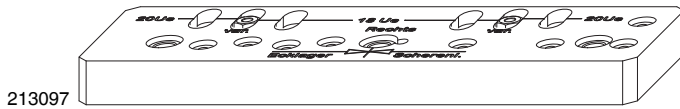
No
Tricoat


routing insert for 3-sashed turn-only hinge	right/left			1	368094¹
routing insert for pivot post	right/left			1	368035¹
routing insert for scissor stay hinge	right/left			1	368036¹
drill jig for pivot post	right/left	for threshold	PVC rebate depth 24/30 mm	1	227810¹
drill jig for pivot post and scissor stay hinge	right		groove 10/14 Heroal	1	219539¹
			timber 24 mm rebate depth	1	217092¹
	left		groove 10/14 Heroal	1	219540¹
			timber 24 mm rebate depth	1	217093¹
	right/left		PVC 30 mm rebate depth	1	217094¹
routed frame				1	225618^{1,2}

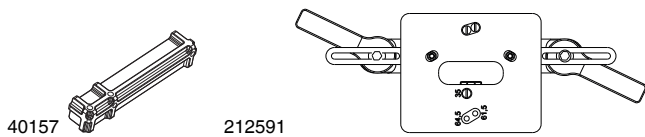
¹ Spare and component part available.


² Order routing jig for pivot post, scissor stay hinge or 3-sash turn-only hinge (frame part) separately.

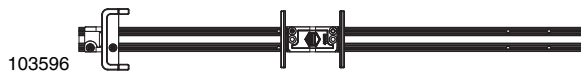





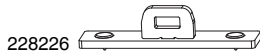
14.5.10 Drilling and routing jigs MULTI MAMMUT					No	No Tricoat
drill jig for pivot post and scissor stay hinge	left	MULTI MAMMUT	1	213097		
	right	MULTI MAMMUT	1	213096		
routing jig for corner support & rebated scissor stay support arm	timber	MULTI MAMMUT	1	213099		




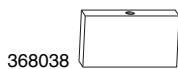
14.5.11 Drilling and routing jigs					No	No Tricoat
drill jig for turn lock	self-closing	timber/PVC	10	40157		
drill jig for Multi-Vent tilt restrictor		timber/PVC/alu-timber	1	42505		
routing template for turn lock MT/MM	concealed		1	212591		



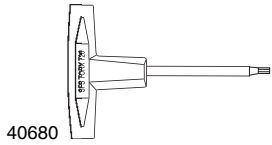
14.5.12 Striker plate jig for sash lifter striker plate half round window and stabilizing scissor stay casing					No	No Tricoat
striker plate jig MM for sash lifter striker plate half round window and stabilizing scissor stay casing			1	103596		



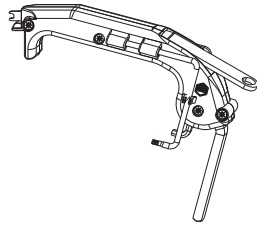
14.5.13 Marking jig					No	No Tricoat
marking jig for frame component for alu front profiles			5	228226		




14.5.14 Spare parts and individual parts for jigs timber and PVC					No	No Tricoat
stop block	alu	MULTI POWER	flush	1	368038	



206417



14.6 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 T 15	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

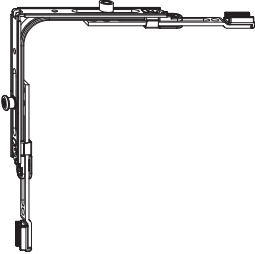


15 MACO TRONIC locking monitoring

15.1	Corner element	346
15.2	Faceplate extension MM, extendable	346
15.3	Reed contact for locking and tilt monitoring acc. to VdS B/C, EN 50131-2-6 level 2	346
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15.13	Removable cable transition for alarm contact with accessories	348
15.14	Test device for reed contacts	348



15 MACO TRONIC locking monitoring



206190

15.1 Corner element



silver with 1 i.S. and 1 contact sensor

320 - 1.650

360 - 2.450

50

206190

209920

201755



15.2 Faceplate extension MM, extendable



silver 140 with 1 contact sensor

20

201755

209921

363177



15.3 Reed contact for locking and tilt monitoring acc. to VdS B/C, EN 50131-2-6 level 2



grey
6 m cable (0.14 mm²)
10 m cable (0.14 mm²)
15 m cable (0.14 mm²)

10

10

10

363177

363178

363179¹

¹ Reed contact for lock monitoring RVS cable 15 m is not approved by VdS

363180



363181



15.4 Reed contact RHS for heating control



grey
6 m cable (0.14 mm²)
15 m cable (0.14 mm²)

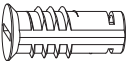
10

10

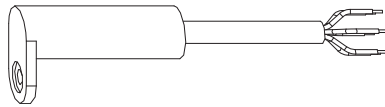
363180

363181

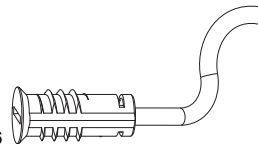
465323



455427



455426



15.5 Magnetic contact for locking and tilt monitoring acc. to VdS C



silver
screw-in magnet in zinc case
magnetic contact for combined opening and locking monitoring 6 m cable (0.14 mm²)
screw-in magnetic contact VS for locking and tilt monitoring 6 m cable (0.14 mm²)

100

10

10

465323

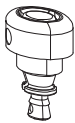
455427

455426

363182 363186

15.6 Moulded parts for reed contact			No	No Tricoat
white	type 1 RVS (PVC)	10	363182¹	
	type 2 RVS (PVC)	10	363183¹	
	type 3 RVS (PVC)	10	363184¹	
	type 4 RVS (PVC)	10	363185¹	
	type 5 RVS (PVC+timber)	10	363186¹	
	type 6 RVS (PVC)	10	363187¹	
	type 7 RVS (PVC)	10	370482¹	

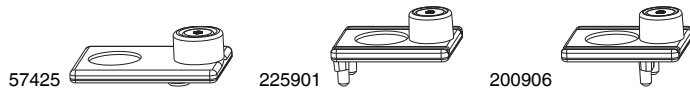
¹ To select the correct injection-moulded part please refer to the latest profile data sheet.



57428

15.7 Cams for locking monitoring			No	No Tricoat
	contact sensor cam short 10x13.4 mm	50	57428¹	
blank	magnetic disc 8x1 mm	200	465416	

¹ Use from extendible faceplate 235

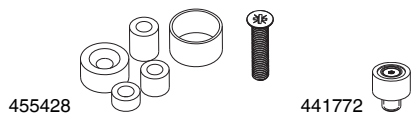


57425

225901

200906

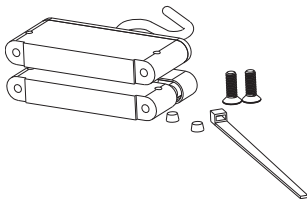
15.8 Adapter with contact sensor			No	No Tricoat
silver	adaptor with contact sensor	50	57425	
	adaptor with contact sensor KVS MM	50	200906	
	adaptor for automated processing with contact sensor KVS MM	10	225901	



455428

441772

15.9 Contact sensor and accessories			No	No Tricoat
white	surface mounted contact sensor	10	455428	
	cam for locking monitoring M5 Ø 10x10 mm	100	441772	




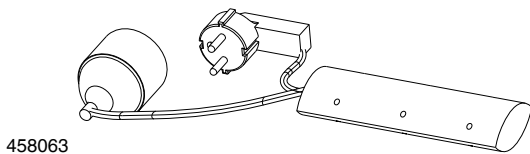
458062

15.10 Electrical contactless sensors			No	No Tricoat
for alarm glass and glass breakage sensors		1	458062	






15.11 Accessories for sensors			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	

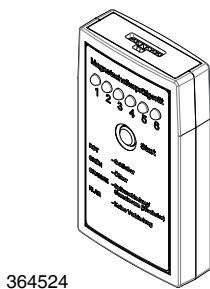



15.12 Exit air control			No	No Tricoat
exit air control		1	458063¹	
		1	458064²	

¹ Box contents: 1 x controller, 1 x magnetic switch, 1 x contact sensor, 6 x packers for PVC profiles
² Box contents: 1 x controller, 1 x radio sensor, 1 x radio magnet




15.13 Removable cable transition for alarm contact with accessories			No	No Tricoat
	detachable cable junction 6-pin 1 m / 2 m cable	1	458281	
	detachable cable junction for alarm contact 6 m cable (0.14 mm ²)	1	363472	
stainless steel	cable junction cover plate, PVC for alarm contact	1	363474	
	cable junction cover plate, timber	1	363473	





15.14 Test device for reed contacts			No	No Tricoat
test device for reed contacts		1	364524	






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101248	50	316
101250	50	316
101251	50	316
101252	50	316
10132	50	310
101339	50	184
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103779	20	312
103780	20	312
103781	20	312




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201404	100	247
201405	100	247
201463	50	296
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201466	50	304
201469	100	227
201470	100	294
201472	50	214

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455009	1	319	54693	50	250	57280	50	219
455010	1	319	54694	50	232	57425	50	347
455011	1	319	54695	50	232	57428	50	347
455012	1	319	54697	50	296	57891	50	308
455048	1	320	54698	50	249	57892	50	224
455049	1	320	54699	50	249	57930	50	224
455050	1	320	54700	50	249	58004	100	233
455051	10	320	54701	50	249	58006	100	234
455052	1	320	54702	50	249	58041	50	249
455053	1	320	54703	50	249	58042	50	249
455054	1	320	54704	50	249	58076	50	238
455055	1	320	54705	50	249	58077	50	238
455056	1	320	54706	100	233	58131	50	261
455057	1	320	54709	100	233	58132	50	261
455058	1	321	54710	50	252	58240	100	242
455059	1	321	54711	50	252	58291	50	257
455122	1	319	54712	50	252	58292	50	257
455347	10	209	54713	50	252	58470	50	257
455348	10	209	54716	50	237	58471	50	257
455349	20	209	54717	50	237	58475	100	247
455386	20	209	54718	50	237	58476	100	247
455387	20	209	54719	50	214	58477	100	233
455388	20	209	54722	50	256	58601	50	251
455426	10	346	54723	50	256	58602	50	251
455427	10	346	54724	50	256	58604	50	257
455428	10	347	54725	50	256	58605	50	257
455429	1	348	54726	50	251	58619	100	233
455430	1	348	54727	50	251	59443	100	247
455431	1	348	54728	50	253	59444	100	247
455432	1	348	54729	50	253	59469	100	233
455457	1	319	54775	50	216	59470	50	257
455458	1	319	54777	50	214	59471	50	257
458062	1	347	54783	100	226	59490	50	251
458063	1	348	54799	100	234	59491	50	251
458064	1	348	54890	100	247	59916	100	247
458281	1	348	54891	100	247	59917	100	247
462516	1	319	54892	100	247			
463153	1	319	54893	100	247	9		
464526	1	319	54917	100	219	93228	100	286
464534	1	319	54922	100	219	94022	500	292,317
465205	1	319	54923	100	219	94030	100	216
465206	1	319	55009	100	234	94031	100	306
465315	400	262	55028	100	226	94035	100	283
465323	100	346	55039	100	306	94036	50	283
465416	200	347	55051	100	233	94037	100	306
465776	50	343	55066	100	296	94038	100	306
466850	1	319	55067	50	257	94053	100	306
466859	1	321	55068	50	257	94074	100	175
467000	1	319	55085	100	233	94088	100	226
467001	1	319	55092	50	251	94089	100	226
467066	1	320	55093	50	251	94111	100	308
			55097	50	253	94185	100	228
			55098	50	253	94217	100	226
5			55112	100	291	94218	100	226
52321	50	216	55167	20	276	94219	100	286
52388	50	237	55189	50	308	94258	100	226
52389	100	226	55214	50	292	94477	100	227
52394	50	256	55235	50	237	94478	100	227
52395	50	256	55236	50	237	94479	100	227
52396	50	237	55237	50	256	94484	100	227
52397	50	237	55238	50	256	94491	200	242
52398	50	256	55239	50	256	96200	100	291
52399	50	256	55240	50	256	96201	100	291
52462	50	214	55277	100	298,304	96263	100	293
52468	100	216	55291	50	261	96264	100	294
52478	100	246	55292	50	261	96305	100	291
52479	100	246	55354	100	238	96306	100	291
52480	100	224,232	55359	100	233	96558	100	305
52481	100	232	55409	20	276	96561	100	299
52483	100	246	55410	50	256	96563	100	293
52484	100	246	55411	50	256	96564	100	294
52485	100	246	55412	50	256	96565	100	291
52486	100	233	55413	50	256	96566	100	291
52487	100	233	55414	50	237	96641	100	299
52488	100	233	55415	50	237	96660	100	297
52489	100	233	55416	50	237	96690	100	298
52504	20	276	55417	50	214	96691	100	295
52642	50	237	55424	100	247	96692	100	300
52643	50	237	55425	100	247	96779	100	299
52702	50	214	55452	50	252	96860	100	297
52703	50	251	55453	50	252	96861	100	299
52704	50	251	55492	50	251	96890	100	298
52706	50	253						



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97377	100	291
97528	100	226
97529	100	226
97544	100	297
97550	100	279
97553	200	242
98021	100	297
98110	100	294
98265	100	227

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