

TITAN AF

BS axxent 24+

TITAN AF hardware programme

- For aluminium window elements with 16 mm BAN
- With concealed hinge side axxent 24+
- For square constructions

Window systems

Door systems

Comfort systems

Overview	1
Basic security - Fixed handle position	2
Basic security - Centre handle pos. (variable)	3
RC1 - Fixed handle position	4
RC1 - Centre handle pos. (variable)	5
RC2 - Fixed handle position	6
RC2 - Centre handle pos. (variable)	7
Tilt sash - Centre handle pos. (variable)	8

**Overview**

Overview	H45.TITA000S002EN	1 - 3
Symbols and abbreviations	H45.TITA000S001EN	1 - 4
Material numbers key	H45.TITM000S001EN	1 - 7

Profile cross-sections

Profile cross-sections ALU16	H45.TITPALU0S001EN	1 - 9
------------------------------	--------------------	-------

Intended use

Intended use, Overview	H45.TITA000S004EN	1 - 10
Intended use, Aluminium window	H45.TITA000S008EN	1 - 13

Security and standards

Security and standards	H45.TITA000S003EN	1 - 18
------------------------	-------------------	--------

Application diagram

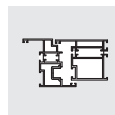
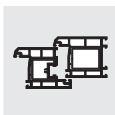
Application diagram 100 kg	H58.AWD_T_S026EN	1 - 26
Application diagram 130 kg	H58.AWD_T_S027EN	1 - 27
Application diagram 150 kg	H58.AWD_T_S028EN	1 - 28
Application diagram tilt sash 80 kg	H58.AWD_T_S032EN	1 - 29

Installation informations

Assembly bottom hinge AX 24 C	H45.TIT0ALU0S001EN	1 - 30
Assembly stay arm AX 24 C	H45.TIT0ALU0S002EN	1 - 31

Hinging / Unhinging the sash

Safety notice axxent 24+	H45.TIT0000S008EN	1 - 32
Hinging / Unhinging the sash (15° opening position of the sash)	H45.TIT0000S004EN	1 - 33
Hinging / Unhinging the sash (Sash in tilted position parallel to the frame)	H45.TIT0000S005EN	1 - 37
Hinging / Unhinging the sash TBT (15° opening position of the sash)	H45.TIT0000S007EN	1 - 41
Hinging / Unhinging the sash Turn only sash stay	H45.TIT0000S006EN	1 - 43



Directives of the Trade Organisation for Locks and Fittings (Gütegemeinschaft Schlösser und Beschläge e. V.)

The directives of the Trade Organisation for Locks and Fittings provide comprehensive information on the correct operation and maintenance of hardware for windows and portal doors.

Compliance with these guidelines is mandatory

You can find the latest versions of the directives, in a range of languages, at:

<http://www.beschlagindustrie.de/ggsb/richtlinien.asp>



TBDK – Attachment of supporting fitting components for turn-only and tilt&turn fittings

with definitions for turn-only and tilt&turn fittings and their possible installation positions

VHBH – Hardware for windows and balcony doors

Guidelines/advice on the product and on liability

VHBE – Hardware for windows and balcony doors

Guidelines/advice for end-users

FPKF – Restrictor and cleaning stays for Tilt-Only sashes and Tilt-Only fanlights

Use of restrictor and cleaning stays

FBDF – Casement stoppers for variable rotational position of window leafs

Casement stoppers that are controlled via the central locking system - definitions and tests

Further relevant documents

You can find further relevant documents, for example structural design charts, assembly instructions, profile spec sheets, individual component sheets, and maintenance, operating and care instructions, on our documentation pages:

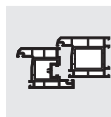
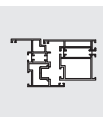
<http://downloads.siegenia.com/>



Feedback on documentation

We welcome your comments and suggestions on how to improve our documentation. Please e-mail your comments to:

dokumentation@siegenia.com



Element materials



Element material PVC



Element material timber



Element material aluminium

Symbols



Height adjustment



Side adjustment



Compression adjustment

Opening types



Rectangular turn-tilt element



2-sash rectangular turn-tilt/turn element



Rectangular turn element



2-sash rectangular turn/turn element



Rectangular tilt element



Arched-head turn-tilt element



2-sash arched-head turn-tilt/turn element



Rounded-head turn-tilt element



2-sash rounded-head turn-tilt/turn element



Angled turn-tilt element



Triangular turn-tilt element

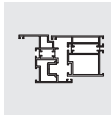
Dimensions

All dimensions are nominal values and include the general tolerances.

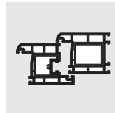
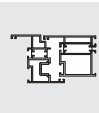
All nominal values are given in mm.

Weights

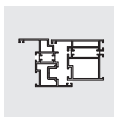
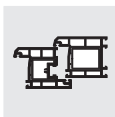
All weights refer to the maximum sash weight.



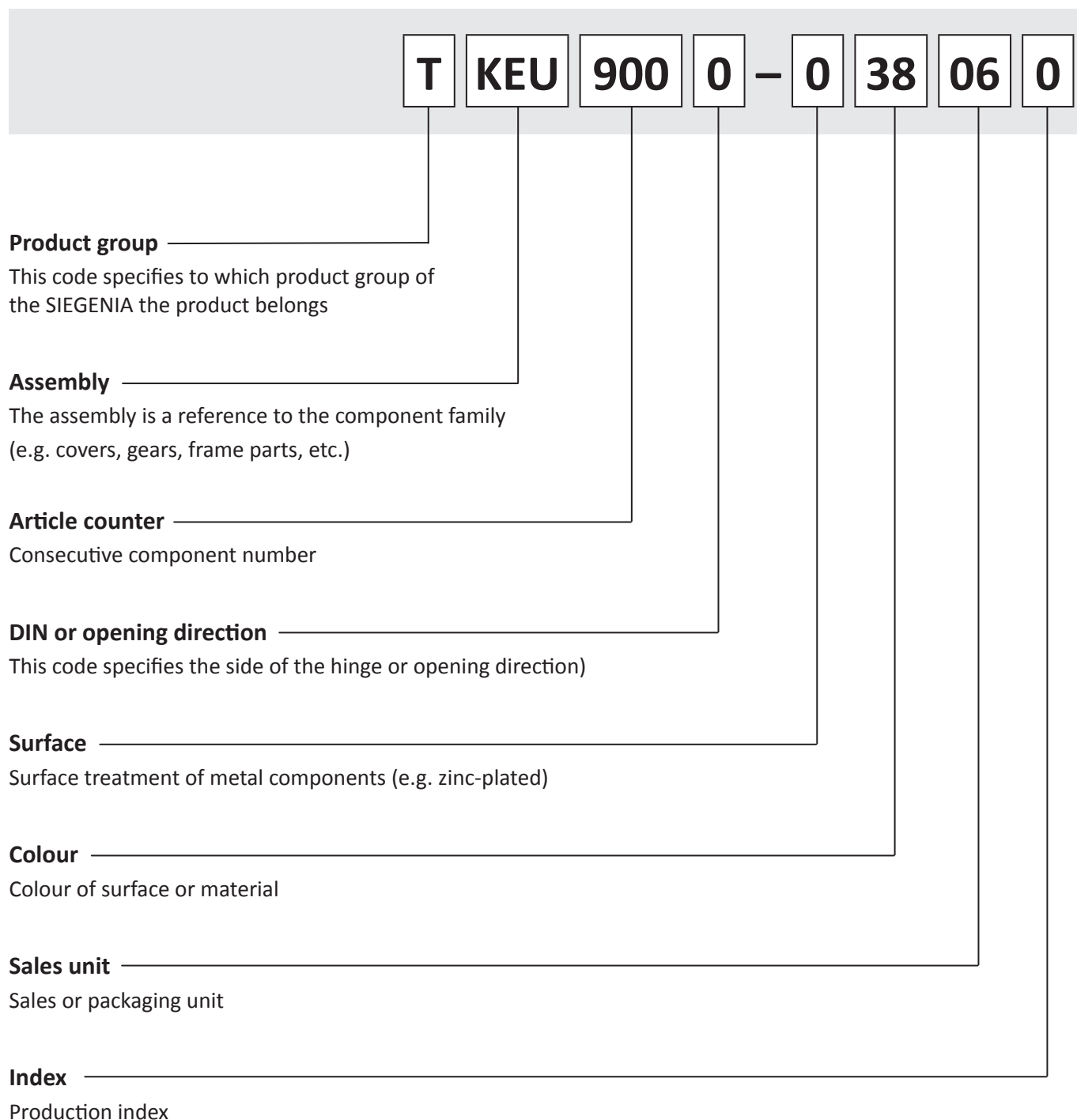
70	locking distance 700 mm	EL U	bottom hinge bottom
.../A	croppable component	EL-S U	bottom hinge
.../G	counter	ES	increased security
.../K	consistent component length	ESL	stainless-steel finish
...+	component to slide underneath	FA	sash distance
16/2	fitting groove 16 x 2 mm	FAV	FAVORIT
A0175	hinge clearance through sash	FB	sash hinge
A0245	suitable for use with threshold	FBS	anti-mishandling device
AB	start of bow begin arch	FEB	rebate corner hinge
ADV	adjustable compression	FFA	sash rebate stop
AF	automated manufacturing	FFB	sash rebate width
AWD	application diagram	FFH	sash rebate height
bag	bag	FFK	sash rebate edge
BAN	hardware groove	FG	sash lift
BS	hinge side	FH	sash lift
BSO	hinge side, top	FHD	sash timber thickness
BSU	hinge side, bottom	FL	airgap
BSW	threshold	FPS	tilt-only security stay
CG	glass deduction dimension	FT	rebate depth
crt.	carton	FZ	fixing bolt
D	turn	G	handle position
DEF	triangular window	GBA	straight pin
DF	turning sash	GG	glass weight
DFB	turn only hinge	GK	Constant handle height
DG	turning sash, reverse-action	GL	glazing bead
DH	turn restriction	GM	centre/variable handle height
DK	turn-tilt element	GS	basic security
DS	turning secondary sash	h	milling depth
DS 8	turning secondary sash (eurogroove)	H	timber
DS 16	turning secondary sash (with reverse-action hardware groove)	H4	timber, 4 mm airgap
DSV	concealed turning lock	H12	timber, 12 mm airgap
DZB	turn hinge	HD	heavy duty hinge side
E	anti-intruder	K	tilt
EB	corner hinge	KD	tilt before turn (=TBT)
EL	inserting jig	KFB	tilt sash hinge
ELB	bottom hinge pin	KL	clamping jig
EL O	bottom hinge top	KR	shoot bolt
		KRB	tilt-lock element

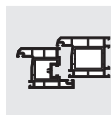
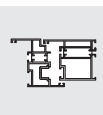


KRL	tilt-lock bearing	SW	wrench size/opening
KS	constant secondary sash	t	drilling depth
KSB	tilt striker plate	TAF	TITAN AF
LH	left	TBT	Tilt-before-turn
LS	length of angled section	Telesk.	Telescope
M	magnetic cam	TiP	TITAN iP
MB	with bolts	TL	door design
MN	with groove	TS	titanium silver
MSP	multiple gap ventilation	U	bottom
MV	centre lock	ÜB	rebate width
NA	groove axis	UE	monitoring
ON	without groove	UEB	rebate
OS	without lock	US	bottom side
OZ	without cam	VKE	sales unit
PDB	profile data sheet	VL	extension
PVC	plastic	VS	locking side
PZ	profile cylinder	VSO	locking side, top
PZD	pozidriv	VSU	locking side, bottom
RAN	fitting groove	W	stay hinge
RB	arched head	witho.	without
RC	resistant Class	Z	additional stay
RH	right	ZZ	toothing/toothing
RFA	frame rebate stop		
RFB	frame rebate width		
RFH	frame rebate height		
RFK	frame rebate edge		
RS	rolling security cam		
RSA	bolt throw		
S	heavy version		
SB	striker plate		
SB	rounded head		
SB-RS	striker plate f. rolling security cam		
SE	flush-closing		
S-ES	mushroom cam		
SF	angled-head window		
SL	top hinge		
SP	gap ventilation		
S-RS	comfort mushroom		



The material number is a code for components and consists of eight segments. The material number allows products to be precisely assigned to their corresponding component drawing, surface, colour and other properties.





T	KEU	900	0	–	0	38	06	0
1	2	3	4	5	6	7	8	

1 Product group

A	A300	G	DRIVE (Building technology)	T	TITAN
B	BASICline	K	Small parts	U	SASS
C	Casement	L	AERO (Ventilation technology)	V	Packaging
D	KFV (Door)	M	ALU	Z	Accessories (general)
F	FAVORIT	P	PORTAL		

2 Assembly

A	Jig	H	Handle	S	Stays
B	Hinge side parts	K	Cover caps	U	Monitoring (Aerocontrol/ radio sensor)
D	Seal, distance piece	L	Bogie wheels	V	Extension
E	Corner drives, lock bolts, locking parts	M	Mixed packages	Z	Linkages / accessories
F	Sash components	P	Profiles / profile sets PORTAL		
G	Gear	R	Frame parts		

The abbreviations ONLY apply to the 1st digit. Further digits are assigned individually.

3 Article counter

The articles are assigned consecutive numbers from 001 to 999.

4 DIN or opening directions

0	Independent of opening	1	DIN right	2	DIN left
---	------------------------	---	-----------	---	----------

5 Surface

0	Neutral (finished surface) e.g. plastic	2	E-Look (galvanised)	6	Clear - chromated (galvanised)
1	Titan silver (galvanised)	5	Aluminium (suitable for anodising, painting or coating)	L	Painted

6 Colour

01	RAL 9001 Cream	16	RAL 8001 Ochre brown	H0	Old gold (EV4)
02	RAL 9003 Signal white	24	EV1 anodised	H4	F9 Titan bright
11	RAL 8022 Black brown	38	Gold shining	I2	F3 Gold matte

For further colours please inquire.

7 Packaging unit

01	Quantity of 1	04	Quantity of 25	07	Quantity of 250
02	Quantity of 10	05	Quantity of 50	08	Quantity of 500
03	Quantity of 20	06	Quantity of 100		

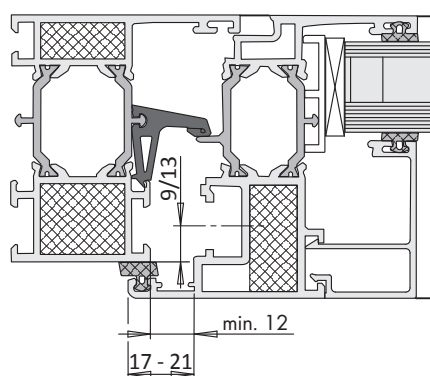
For further packaging units please inquire.

8 Processing index

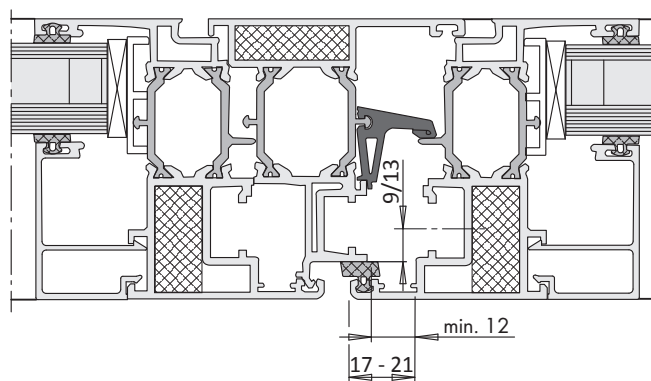
The processing index indicates the processing status and is assigned consecutively.

**1-sash design**

Cavity:	min. 12 mm
Rebate width:	17 to 21 mm
Groove axis:	9/13 mm

**Secondary sash with opposed fitting groove (DS 16)**

Cavity:	min. 12 mm
Rebate width:	17 to 21 mm
Groove axis:	9/13 mm

**Note:**

For profile-related specifications please refer to the SIEGENIA profile datasheets.

Caution:

The size ranges stated on the set sides apply to SIEGENIA fittings. In addition, the specifications of the profile fabricators or system owners also apply, especially in regard to possible restrictions on sash dimensions, sash weight and lock spacing.



Important instructions for fabricators

Prior and applicable documents

The following documents take precedence over and/or are applicable with this document:

- Guidelines regarding product liability (TBDK, VHBH, VHBE, FPKF, FBDF)
- Application range diagrams
- Operating, care and maintenance instructions

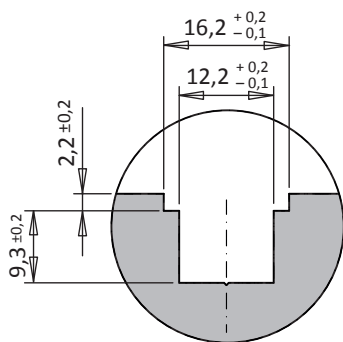
References to these documents can be found in the „General“ section H45.TITA000S002.

Systems

The size ranges that are specified are binding for the hardware solutions that are included in this document. The following specifications must also be adhered to:

- **PVC windows / aluminium window with 16 mm BAN**
The specifications of the profile fabricators or system providers also apply, especially in regard to possible restrictions on sash dimensions, sash weight and lock spacing. Where special manufacturing instructions or fabrication guidelines exist, these must be explicitly adhered to. The specifications given for screw-in revolutions and torques must be adhered to.
- **Timber windows**
The specifications of DIN 68 121 (timber windows and window doors).

Required eurogroove



Area of application

All hardware solutions are intended for installation on **inward** opening windows and portal doors.

The specified steel hardware components are electro-galvanised and then finished using a special process. They are not suitable for use:

- In damp locations
- In environments where the air contains aggressive, corrosive components
- In environments where the air contains salt
- With timbers containing aggressive substances

Please contact your SIEGENIA sales consultant in such situations.

Hardware solutions

The illustrations below of hardware solutions for intruder resistance on single and double-sash windows and window doors are **recommendations** only.

Special measures must be taken in order for test certificates to be obtained, depending on the regulation/test standard and target resistance class, with regard to the type of timber, profiling, reinforcement, weather strip bar, how the weather strip bar is connected and the hardware.

The specifications relating to this in the section:

- Intruder-resistant properties of an PVC window
- Intruder-resistant properties of an aluminium window
- Intruder-resistant properties of a timber window
- Informations about DIN EN 1627 - 1630 in the „Security and Standards“ section

Contact SIEGENIA in individual cases with respect to appropriate testing versions.



Excessive strain

Bearing components can break as a result of excessive strain. If this happens, the window sash may fall out, leading to serious injuries. If the hinge parts are likely to be subject to excessive strain under certain conditions (use in schools, nursery schools, etc.), appropriate measures must be taken to prevent this from happening, such as using a friction stay to limit the opening angle of the window, or using a turning lock.

If there is any doubt, be sure to consult your SIEGENIA sales consultant.

Complete set of hardware

Your complete set of hardware should be composed of **solely** SIEGENIA hardware components. Otherwise damage could occur, for which we accept no liability.

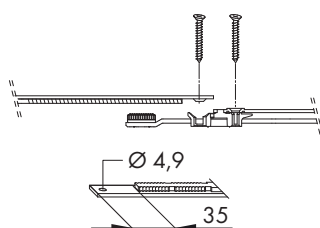
Mounting the hardware components

All hardware components must be mounted properly. When doing so, pay particular attention to the mounting position and ensure that all hardware components on the hinge side are firmly attached. The top hinge pin must be pushed in up to the stop **from below**, and snapped into the springs of the top hinge. Pull out the top hinge pin only with a suitable assembly key.

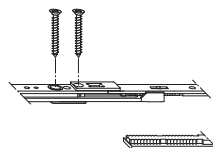
These procedures must be carried out by experienced professionals only.

Connecting the hardware components

- TITAN iP linkage cut



- TITAN AF/FAVORIT cut to length



Calibration of adjustable components

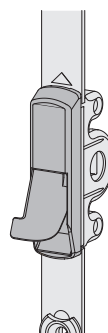
The given values for side, height and pressure settings must not be exceeded. Otherwise bearing components may break due to excessive strain and the window sash may fall out.

Note also our maintenance instructions (order no. H4002.2873en).



Using a mishandling device

In order to protect the hardware and the window element, and to ensure a long service life, we recommend the use of a mishandling device such as the below, **particularly for heavy sash weights from 100kg.**



You can find our assembly video here:
[Assembling the mishandling device](#)





Mounting the hardware components

- Handle:
 - Countersunk screws M 5 x .., in accordance with DIN 965-4.8; the screws should be long enough that they engage a minimum of 6 mm into the screw thread of the gear casing. The maximum torque should not exceed 2 Nm.
- Remaining hardware components:
 - Screws 4 x 25 or 30 for PVC windows
 - Screws 4 x 30 for timber window (pre-drilling is required for softwoods)
 - Self-drilling screws 3.9 x ... for aluminium windows
 - **Countersunk screws with partial thread 4 x 25 or 30 must be used to mount all hardware components in the vertical secondary sash area on secondary sash windows.**
- Screw material:
 - Do not overwind zinc-coated and passivated surfaces for „Titanium Silver“ screws
 - With a Zn-Ni or Deltatone with Delta Seal surface for „E-look“ to avoid contact corrosion.
- To obtain a test certificate, it is necessary for the S-RS striker plates and tilt lock bearing to be connected in a particular way.

Do not overtighten the screws.

Timber surface treatment

Timber windows and door elements should only be surface treated **before** the hardware components are assembled. Treating these surfaces at a later stage can reduce the functional capacity of the hardware components.

Inserting blocks

When inserting blocks, be sure to observe technical guideline no. 3 from the German Glazing Trade [Glaserhandwerk], “Blocking glazing units” [Klotzung von Verglasungseinheiten].

Sealants

Never use acid cure sealants as they may cause the hardware components to corrode.

Cleaning

Keep the rebates free from deposits and dirt, especially from remnants of cement and plaster. Avoid exposing the hardware directly to water and do not let cleaning agents come into contact with the hardware.

Information for end users

Provide the user with the following documents:

- [Operating and Care Instructions](#) (order no. H4002.2874en)



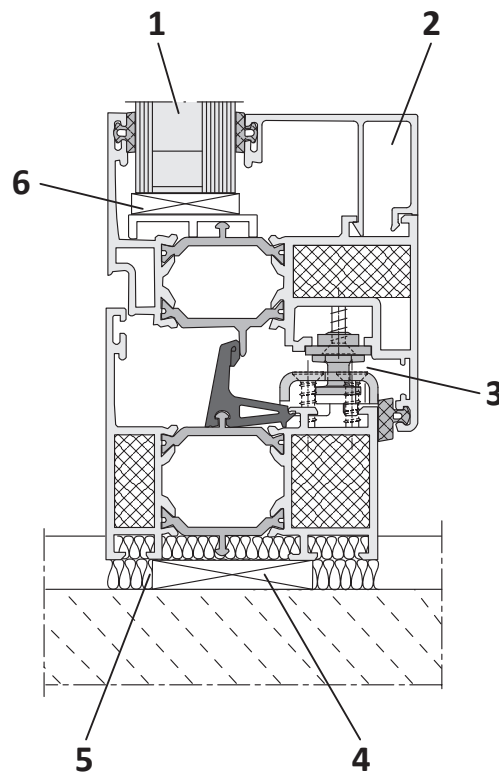
Technical changes

We reserve the right to make technical changes required as a result of the further development of products or a change in standards, laws or jurisdiction.

We assume no liability for printing errors.



Anti-intruder features of a aluminium window



1 Penetrationresistant glazing

5 Compression-resistant backing

2 Secured glazing bead

6 Compression-resistant distance block setting

3 Design and mounting of the hardware

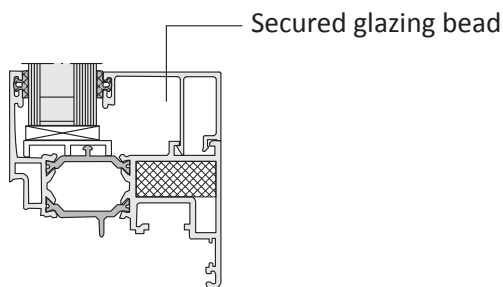
4 Dowel fastening to the building structure around
the locking positions



DIN EN 1627 ff – RC1

Glazing rebate

The glazing beads should be secured according to requirements (e.g. by screw connections, adhesive bonding, etc.) or the laminated safety glass pane must be bonded in the rebate.



Self-drilling screws with $\varnothing$ 3.9 mm must be used. The length should be selected such that the screws can be screwed 8 to 10 mm into the wall.

Suitable window screws

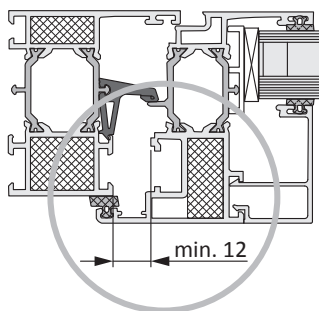


S-RS striker plate

Cavity

The cavity dimension which is specified in the SIEGENIA profile datasheet for the corresponding plastic profile system must be adhered to.

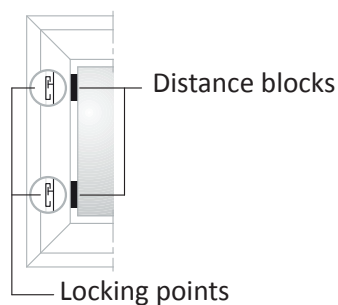
It must not be exceeded, nor must it fall below the limit.



If a frame groove is available, it should be sealed with a cover profile.

Inserting blocks

To prevent the sash profile from moving in the glazing rebate, the glass pane must also be set with blocks close to the security latching positions (distance blocks).



Striker plates and tilt lock bearings

The S-RS striker plates must be positioned in such a way that the locking cams catch in the striker plates as much as possible.

The screw length must be selected so that the S-RS striker plates and tilt lock bearings are screwed into two walls if possible.

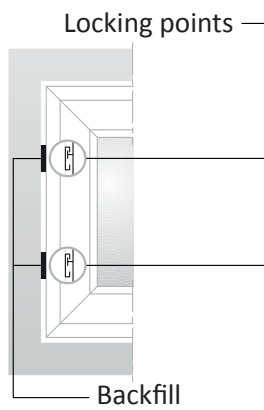
Wall mounting

The cavity between the frame and the brickwork near the locking points must be backfilled to be compression resistant.

When fixing the window elements, special steps must be taken with regard to the distance between fixing



points, the edge spacing and the wall construction, depending on requirements.





DIN EN 1627 ff – additional information for RC2

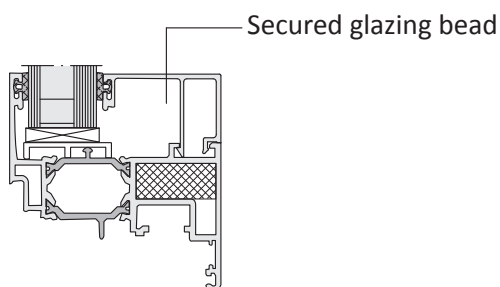
Window frame

To ensure that the sash can only move minimally within the window frame, distance blocks must be mounted in the corner areas of the window frame (see also hardware layout).

At the same time, however, this must not restrict the options available for adjusting the fittings.

Glazing rebate

The glazing beads **must** be secured according to requirements (e.g. by screw connections, adhesive bonding, etc.), or the laminated safety glass pane must be bonded in the rebate.

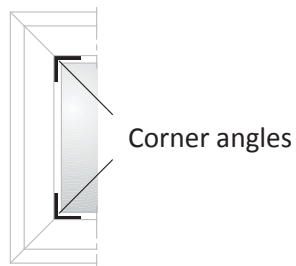




DIN EN 1627 ff – additional information for RC3

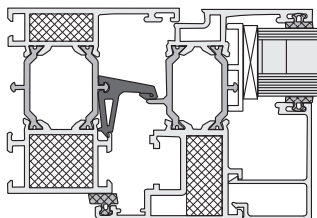
Glazing rebate

The four corners of the sash frame must also be screwed into the glazing rebate with steel brackets. These steel brackets prevent the mitre joints from breaking apart in the event of a break-in attempt.



Profile system

Flush profile systems are generally better suited to the design of anti-intruder windows as they offer fewer opportunities for the intruder's tools to be used.





Requirements and national specifics for DIN EN 1627:2011-09

DIN EN 1627ff

After a draft standard period of 12 years, the EN 1627ff series of standards was published as DIN EN 1627ff in September 2011.

The key changes refer to the description of the resistance classes and the test procedure for resistance class 1.

Widerstandsklassen (resistance classes) WK1 - 6 are referred to as resistance classes (RC) in the final version of the standard.

The number of resistance classes has not changed (RC1 – RC6).

The standard governs the requirements and classifications with respect to the anti-intruder features of windows, doors, curtain walling, grilles and shutters.

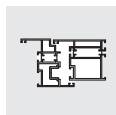
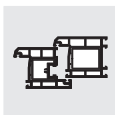
It is valid for the following types of openings: turning, tilting, folding, tilt & turn, swinging, sliding (horizontally and vertically) and roller, as well as structures that do not open.

Resistance class RC2 has been split into two separate classes (RC2N and RC2).

The suffix „N“ in classes RC1N and RC2N represents the possibility that national requirements may have to be taken into account.

No requirements are made in these classes with respect to glazing in the German version of EN 1627. Nevertheless, the glass must be connected in the manner in which it has been tested.

SIEGENIA level	Standard/ Directive	Test class	Striker plate	Handle	Drilling protection	Glazing
Basic security	—	—	Standard	Standard	No	No requirements
RC1	DIN EN 1627	RC1N	S-RS	Lockable 100 Nm	Yes	No requirements
RC2	DIN EN 1627	RC2N	S-RS	Lockable 100 Nm	Yes	No requirements
		RC2				EN356, P4A
RC3	DIN EN 1627	RC3	S-RS	Lockable 100 Nm	Yes	EN356, P4A



Glazing

Minimum requirements for glazing

Test class	Glazing in accordance with EN 356
RC1N	No requirements
RC2N	No requirements
RC2	P4A
RC3	P5A
RC4	P6A
RC5	P7A
RC6	P8A

Requirements for glazing the test specimen

For the test, the test specimens are to be fitted with glazing in accordance with EN 356. In order to protect the tester, the safety glass should be placed on the attack side.

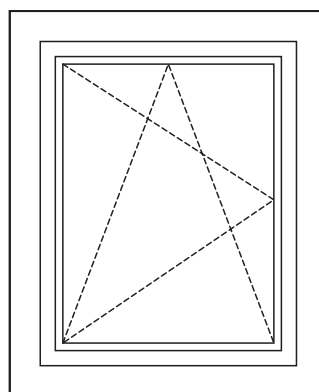
Test class	Glazing in accordance with EN 356
RC1N	P4A
RC2N	P4A
RC2	P4A
RC3	P5A
RC4	P6A
RC5	P7A
RC6	P8A

Test specimens

Two identical test specimens are required for the test in accordance with DIN EN 1627ff.

- Test specimen 1 is used for the weak point analysis.
- Test specimen 2 is used for the main test subject to the weak point analysis.

Test specimen 1

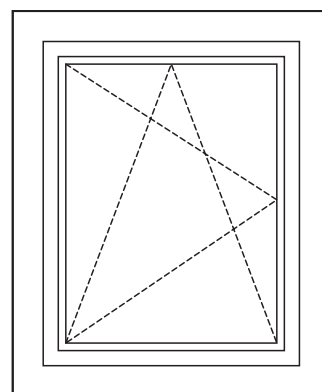


Static test
(DIN EN 1628)

Dynamic test
(DIN EN 1629)

Manual pre-test
(DIN EN 1630)

Test specimen 2



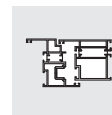
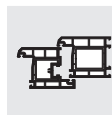
Manual pre-test
(DIN EN 1630)

Test method

The established breakdown of the test method into static, dynamic and manual tests presented in the draft standard has essentially remained the same.

- DIN EN 1628 static test method
- DIN EN 1629 dynamic test method
- DIN EN 1630 manual test method

Changes have however been made to the individual test methods.



DIN EN 1628

DIN EN 1628 describes the test method for determining the resistance of a construction product under static loading.

Depending on the resistance class, this involves defined forces being applied to specific points in order to determine the deflection of the movable part of the construction product.

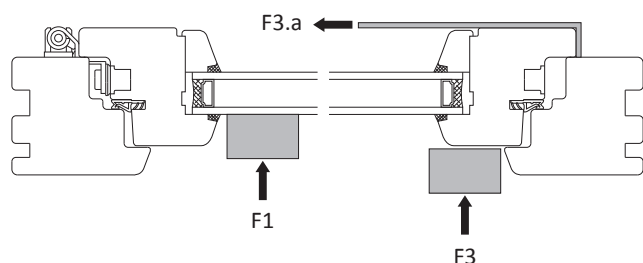
In contrast to the draft standard, the deflection is no longer measured but is determined using gap gauges instead.

	Resistance class (RC)							
	RC1 and RC2		RC3		RC4		RC5 and RC6	
Loading points	Test load kN	Gap gauge type	Test load kN	Gap gauge type	Test load kN	Gap gauge type	Test load kN	Gap gauge type
F1 Infill corner	3	B	6	B	10	B	15	B
F2 Leaf/sash corner	1,5	B	3	B	6	B	10	B
F3 Locking points	3	A	6	A	10	A	15	A
F3.a Additional load	1,5	A	—	—	—	—	—	—

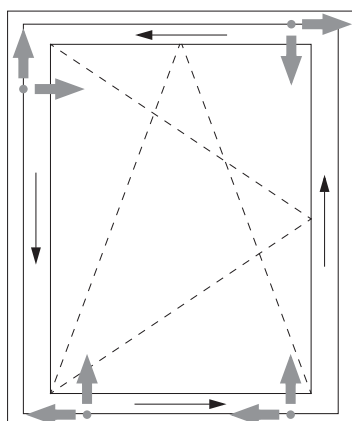


Loading points

- **F1 Infill corners**
Load is to be applied to each infill corner.
- **F2 Leaf/sash corners**
Load is applied to the corners of the leaf/sash if the next locking point is more than 350 mm away from the corner.
- **F3 Locking points**
Each locking point is loaded to F3. If two locking points are less than 200 mm apart, the load is applied midway between them. Locking points are all connection points between window and leaf/sash frames, including hinges.



- **F3.a Locking points**
(only for resistance class RC1N)
Load F3.a is applied in conjunction with load F3 on the flat of the test specimen (reproducibility of an attack using small lever tools). The load is applied against the locking direction in a way which increases the airgap.

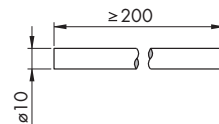


- Locking point
- Locking direction
- ➔ Load direction F3.a

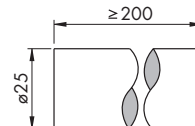
Gap gauges

Gap gauges for testing deflection

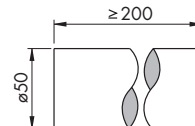
Type A (ø 10 mm)



Type B (ø 25 mm)



Type C (ø 50 mm)



The type C gap gauge is used for group 3 products (e.g. shutters).



DIN EN 1629

DIN EN 1629 describes the dynamic test method for the elements.

The test aims to simulate attacks made by people who attempt to use their shoulders or feet to create an accessible opening.

For products in resistance class 1, all parts are also dismantled on the attack side, in a non-destructive manner, using tool set A1 prior to carrying out the dynamic test. This preparatory procedure must not take longer than 3 minutes.

Whereas in DIN V ENV 1629 the test was carried out using a 30 kg sandbag, the new DIN EN 1629 standard uses a 50 kg impactor.

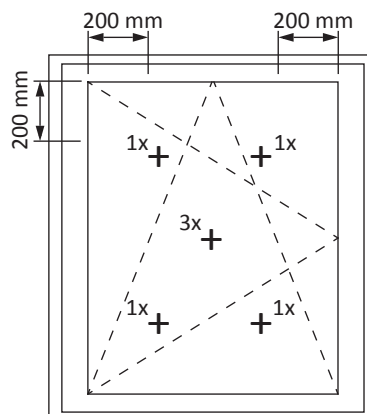
For this test, safety glazing (P4A in accordance with EN 356) should be placed on the load side.

The dynamic test is only carried out in resistance classes RC1 to RC3.

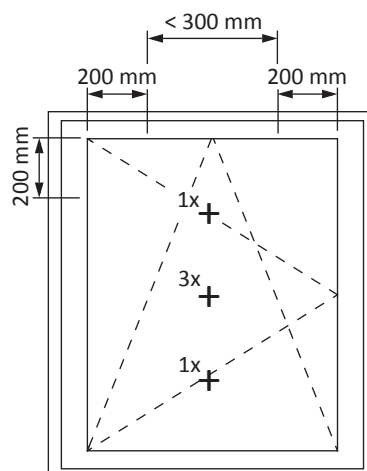
Dynamic testing is not required in resistance classes RC4 to RC6.

Due to the increased weight of the pendulum impact, the drop height has been reduced.

The impact load is applied once at each corner of the infill

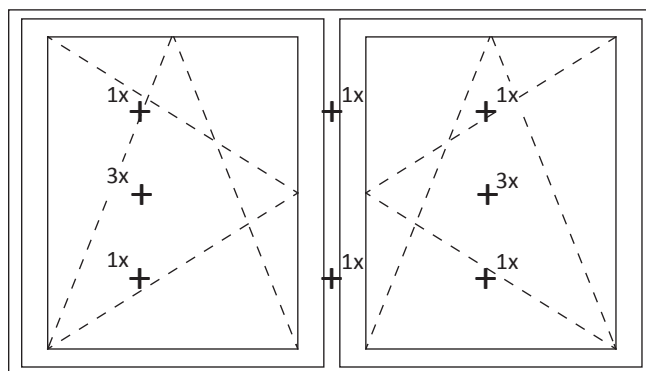


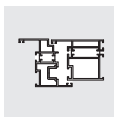
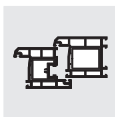
and three times in the centre of the test specimen.



On secondary sashes, the individual infill panels are only impacted on the centreline. The secondary sash area is also tested.

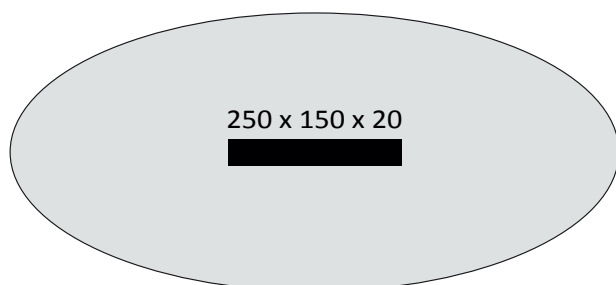
Test class	Drop height in mm	Weight of the impactor in kg
RC1N	450	50
RC2N		
RC2		
RC3	750	
RC4 to RC6	No dynamic test required	





Evaluating the results of the dynamic test

The test specimen has not passed the test if gap gauge D can be passed through the opening that has formed in the test specimen.



DIN EN 1630

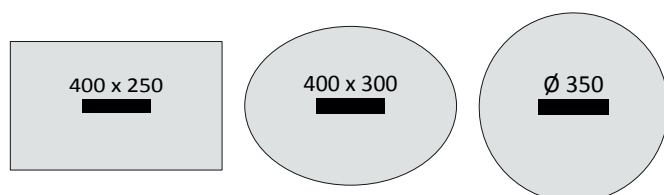
DIN EN 1630 describes how resistance to manual intrusion attempts is determined.

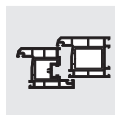
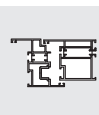
The test specimens are installed in a sub-frame.

Depending on the resistance class, the tester has various tool sets available in order to create an accessible opening.

The resistance time includes periods of fewer than 5 seconds for each time the tester changes tools.

The following analysis templates are used to determine an accessible opening.

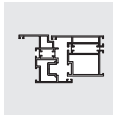
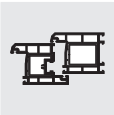




Break-in testing according to DIN EN 1627:2011

A specific procedure, a resistance time and a specific tool set is stipulated for each resistance class for the break-in test.

Resistance class DIN EN 1627:2011	Type of intruder/procedure/tools	Resistance time
RC1N	A manipulation test is carried out using small tools, components of this resistance class only have low protection against the use of lever tools. This class is conducted with standard glass.	3 minutes
RC2N	The intruder also attempts to force the locked and bolted component open using simple tools such as screwdrivers, pliers and wedges. A direct attack on the glazing used is unlikely. This class is also conducted with standard glass.	3 minutes
RC2	The intruder also attempts to force the locked and bolted component open using simple tools such as screwdrivers, pliers and wedges. Glazing in accordance with EN 356 is compulsory from class RC2.	3 minutes
RC3	The intruder also attempts to force the locked and bolted component open using a second screwdriver and a crowbar.	5 minutes
RC4	The experienced intruder also uses sawing tools and striking tools such as an axe, a crowbar, a hammer and chisel and a cordless drill.	10 minutes
RC5	The experienced intruder also uses power tools such as a drill, a jig saw or sabre saw and angle grinder (max. disc diameter 125 mm).	15 minutes
RC6	The experienced intruder also uses heavy-duty power tools such as a drilling machine, a jig saw or sabre saw and angle grinder (max. disc diameter 230 mm).	20 minutes



Correlation

If the body issuing the invitation to tender announces the elements as antiintruder elements in accordance with DIN EN 1627 - Resistance Class RC2, then, by referring to the correlation table, an existing test certificate to DIN V ENV 1627 - Resistance Class RC2 can be used.

Apart from for resistance class RC1N, it is assumed that products that were classified as resistance class RC2 – RC6 correspond to the same classes in the standard DIN EN 1627.

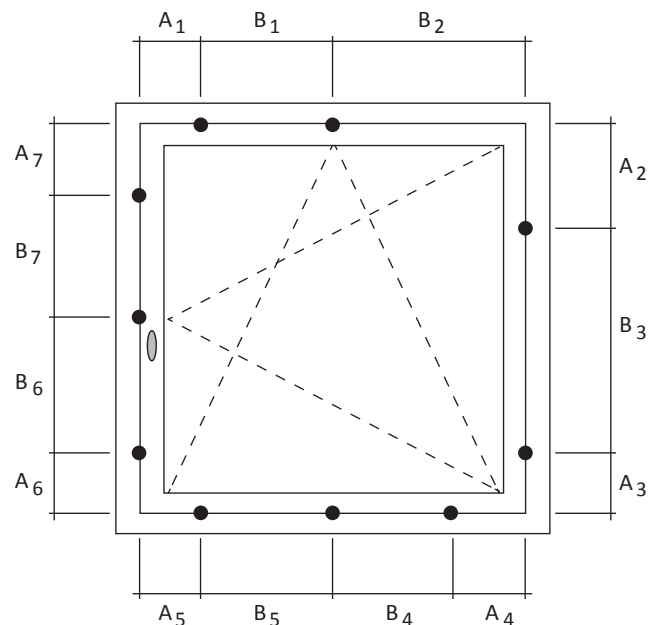
Resistance classes (RC) in accordance with DIN EN 1627:2011-08	Resistance classes (RC) in accordance with DIN V ENV 1627:1999-04
RC1N	No correlation possibleh
RC2N	WK2 (free choice of glazing - glass connection as tested)
RC2	WK2
RC3	WK3
RC4	WK4
RC5	WK5
RC6	WK6

Dimensions

The classification of a product is only valid for the dimensions that were actually tested.

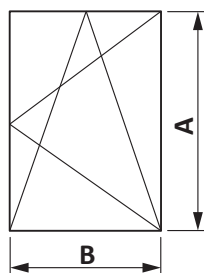
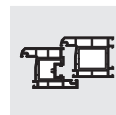
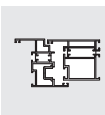
A selection of test specimens is required if a product system is to be assessed.

Using the rule of extrapolation, the tested dimensions can be extended or reduced within their limits without the need to carry out a test.



Key

A1 ... A7	+5%, -20%
B1 ... B7	+5%, -30%
Surface area	±25%



- inward opening elements only
- A = FFH (sash rebate height [mm])
- B = FFB (sash rebate width [mm])
- GG = glass weight [kg/m²]

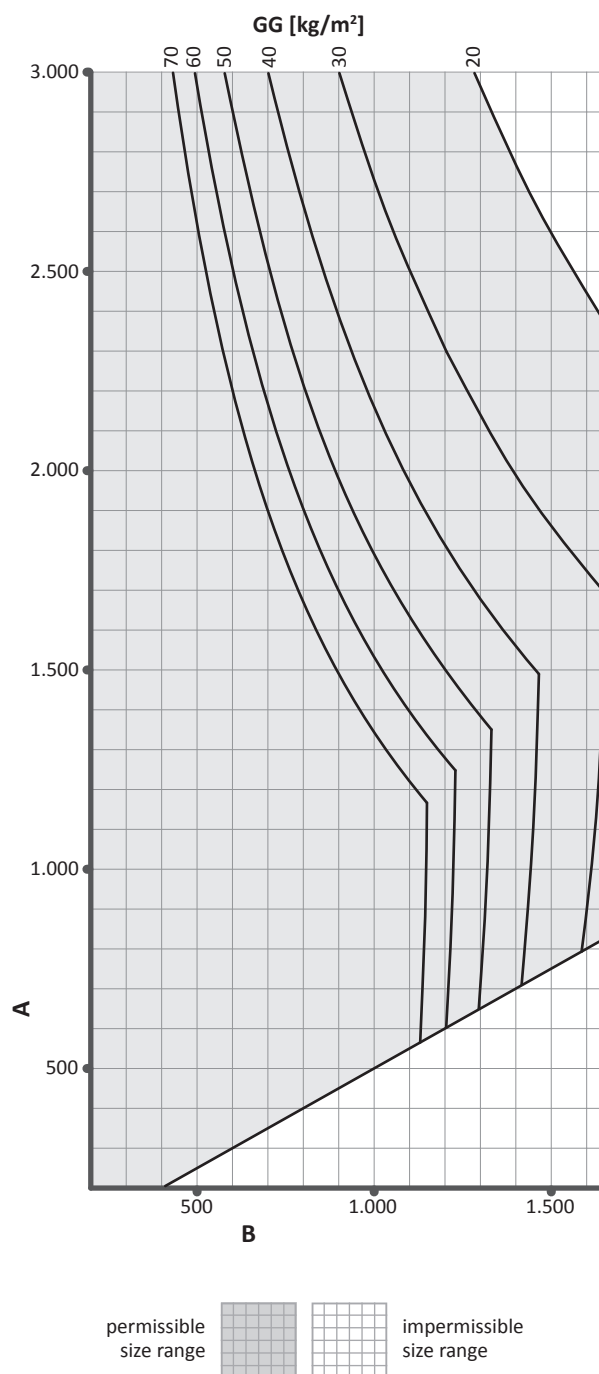
basis for testing and calculation

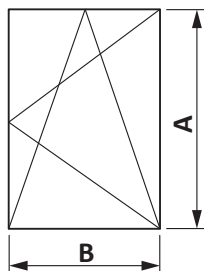
- Tilt-turn test according to QM 328
System 2 - Figure A:
 - turn-only cycles: 10,000
 - tilt-turn cycles: 15,000
- additional loads taken into account according to EN 14608 (figure A.1)/class 4 according to EN 13115 (800N).

Conditions for the use of the application diagram

- Evidence for fixing structural components onto the window system by a window manufacturer according to TSDK with the following forces:
 - on the top hinge (N): 2,710
 - on the bottom hinge (N): 2,890
- The following values are to be observed with all window systems:
 - max. width/height ratio $Q_{B/H}$: ≤ 2.0
 - glass deduction dimension CG (mm): ≥ 28
 - profile weight PG (kg/m): ≤ 3.25
- Notes on the intended use:
Basics and use of the application diagrams

["Download"](#)





- inward opening elements only
- A = FFH (sash rebate height [mm])
- B = FFB (sash rebate width [mm])
- GG = glass weight [kg/m²]

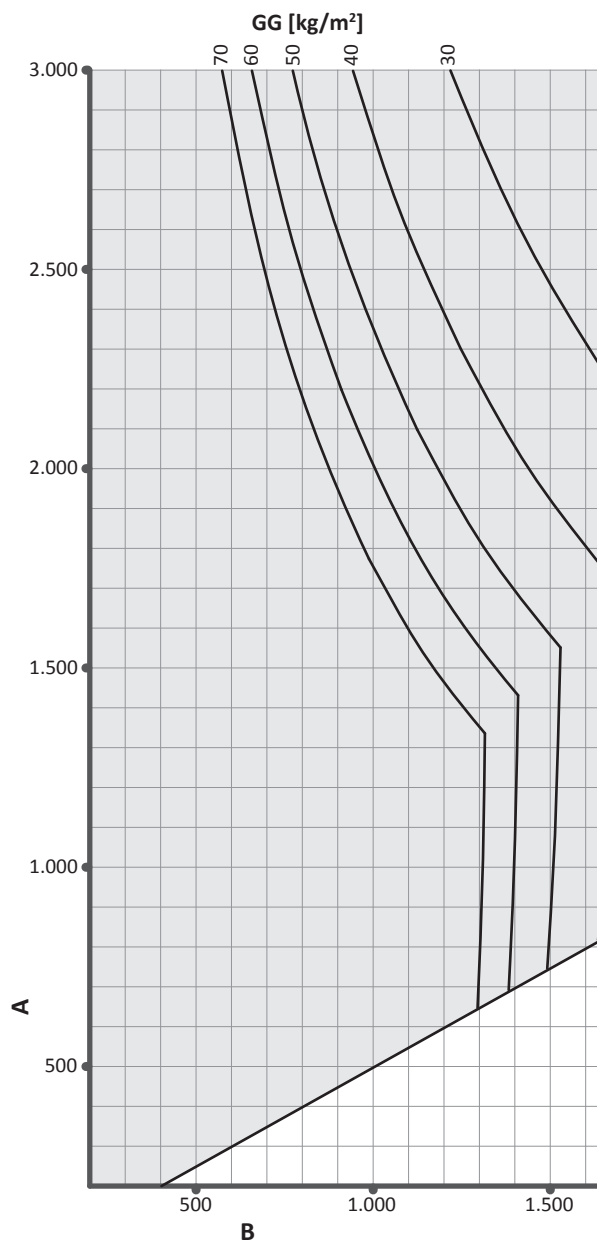
basis for testing and calculation

- Tilt-turn test according to QM 328
System 2 - Figure A:
- turn-only cycles: 10,000
- tilt-turn cycles: 15,000
- additional loads taken into account according to EN 14608 (figure A.1)/class 4 according to EN 13115 (800N).

Conditions for the use of the application diagram

- Evidence for fixing structural components onto the window system by a window manufacturer according to TSDK with the following forces:
- on the top hinge (N): 3,525
- on the bottom hinge (N): 3,760
- The following values are to be observed with all window systems:
- max. width/height ratio $Q_{B/H} \leq 2.0$
- glass deduction dimension CG (mm): ≥ 28
- profile weight PG (kg/m): ≤ 3.25
- Notes on the intended use:
Basics and use of the application diagrams

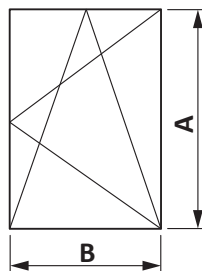
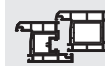
["Download"](#)



permissible
size range



impermissible
size range



- inward opening elements only
- A = FFH (sash rebate height [mm])
- B = FFB (sash rebate width [mm])
- GG = glass weight [kg/m²]

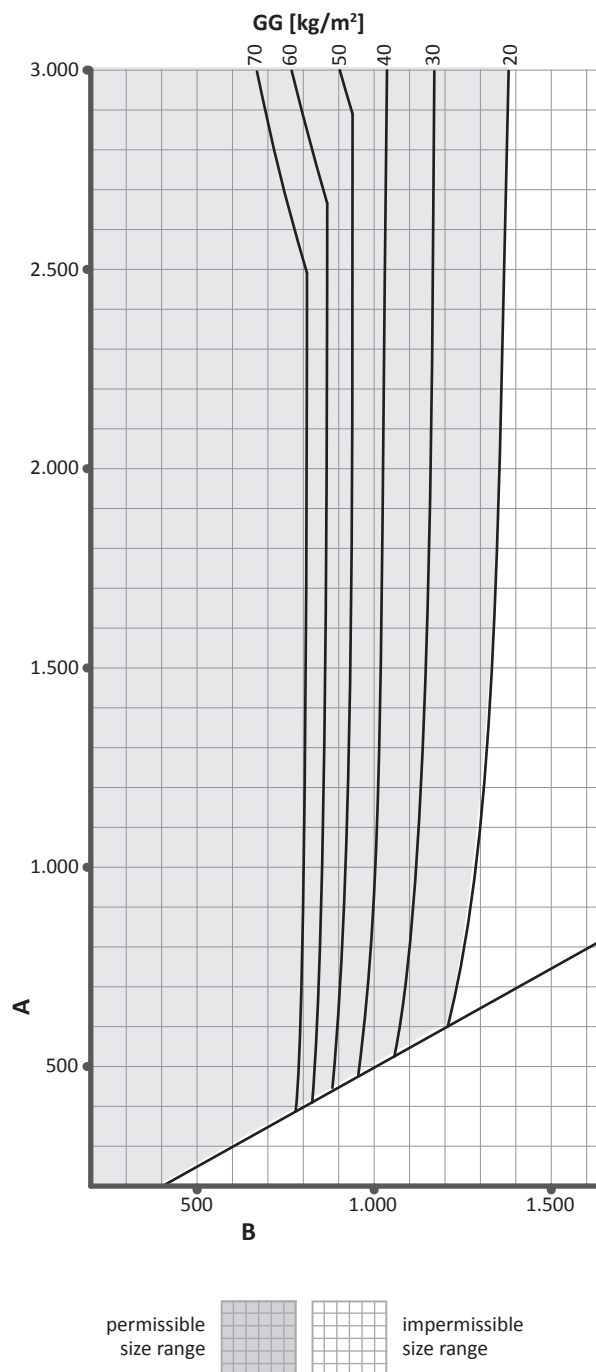
basis for testing and calculation

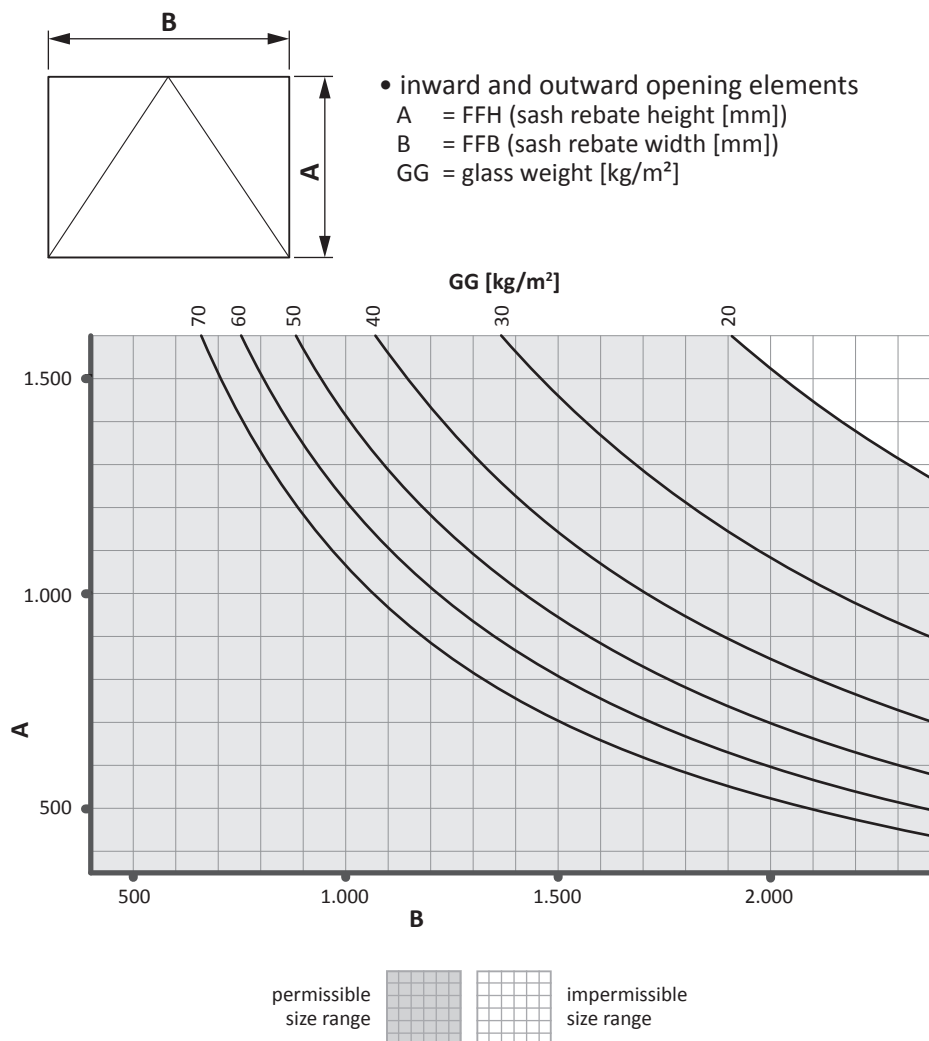
- Tilt-turn test according to QM 328
System 2 - Figure A:
 - turn-only cycles: 10,000
 - tilt-turn cycles: 15,000
- additional loads taken into account according to EN 14608 (figure A.1)/class 4 according to EN 13115 (800N).

Conditions for the use of the application diagram

- Evidence for fixing structural components onto the window system by a window manufacturer according to TSDK with the following forces:
 - on the top hinge (N): 4,200
 - on the bottom hinge (N): 4,340
- The following values are to be observed with all window systems:
 - max. width/height ratio $Q_{B/H} \leq 2.0$
 - glass deduction dimension CG (mm): ≥ 28
 - profile weight PG (kg/m): ≤ 3.25
- Notes on the intended use:
Basics and use of the application diagrams

["Download"](#)





basis for testing and calculation

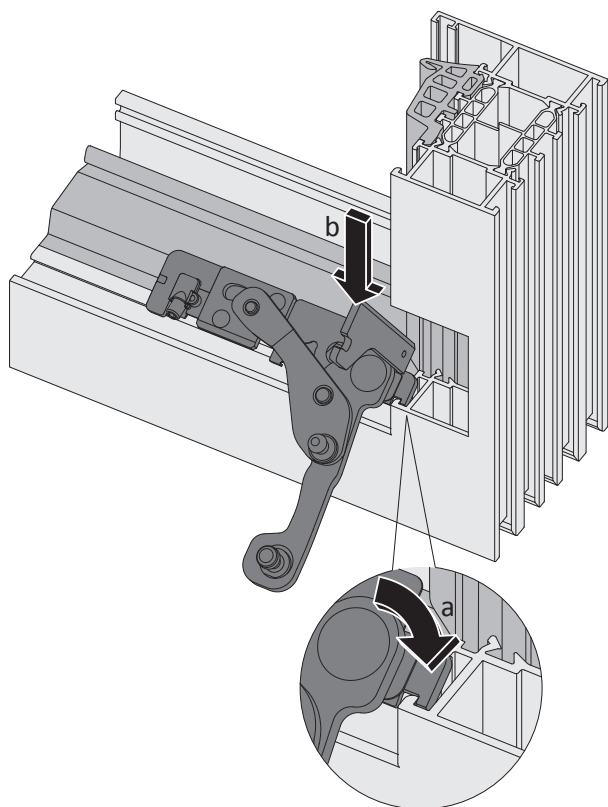
- tilt test according to RAL-GZ 607/12:
 - tilt cycles: 15,000
- additional loads according to RAL-GZ 607/12

Conditions for the use of the application diagram

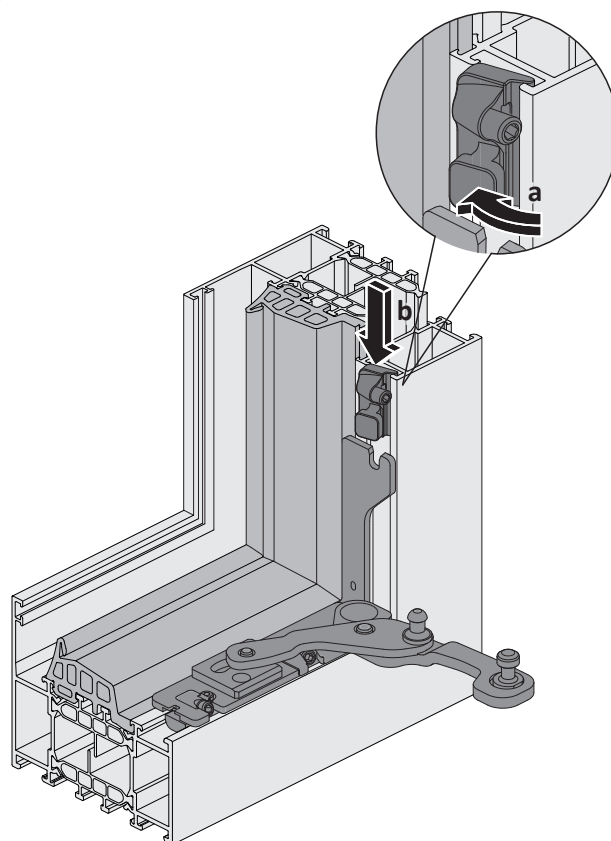
- Evidence for fixing structural components onto the window system by a window manufacturer.
- the following values are to be observed with all window systems:
 - glass deduction dimension CG (mm): ≥ 28
 - profile weight PG (kg/m): ≤ 3.25
- Notes on the intended use:
 Basics and use of the application diagrams
["Download"](#)



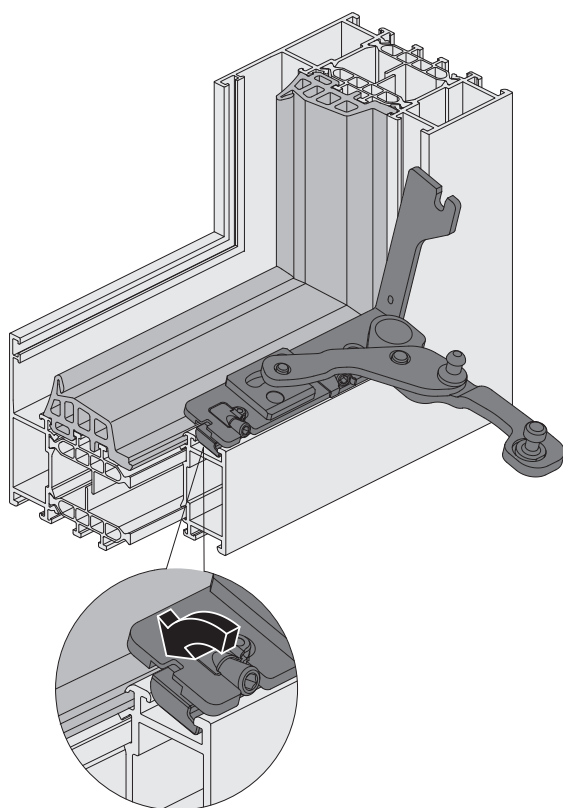
1.



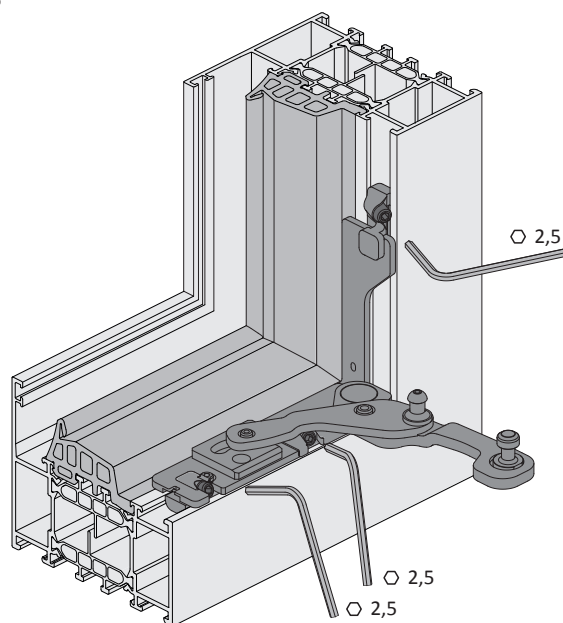
3.



2.



4.



recommended torque = 2 Nm



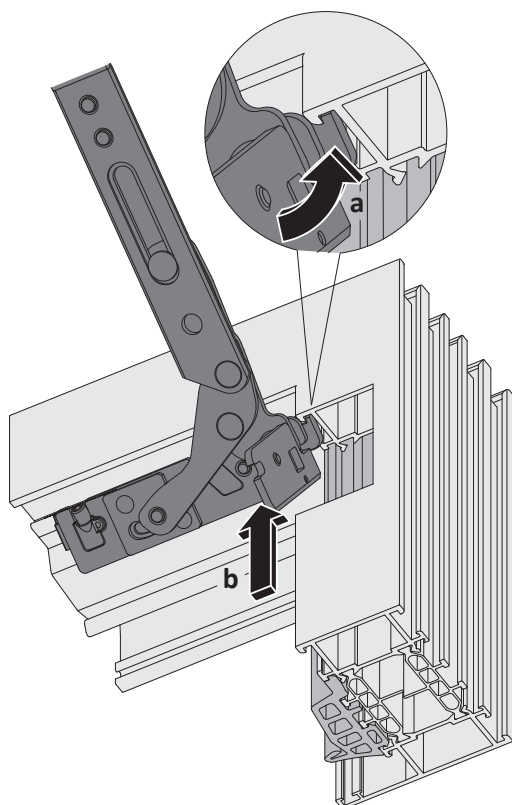
Installation information axxent 24+

Assembly stay arm AX 24 C (clampable)
for aluminium window with 16 mm BAN

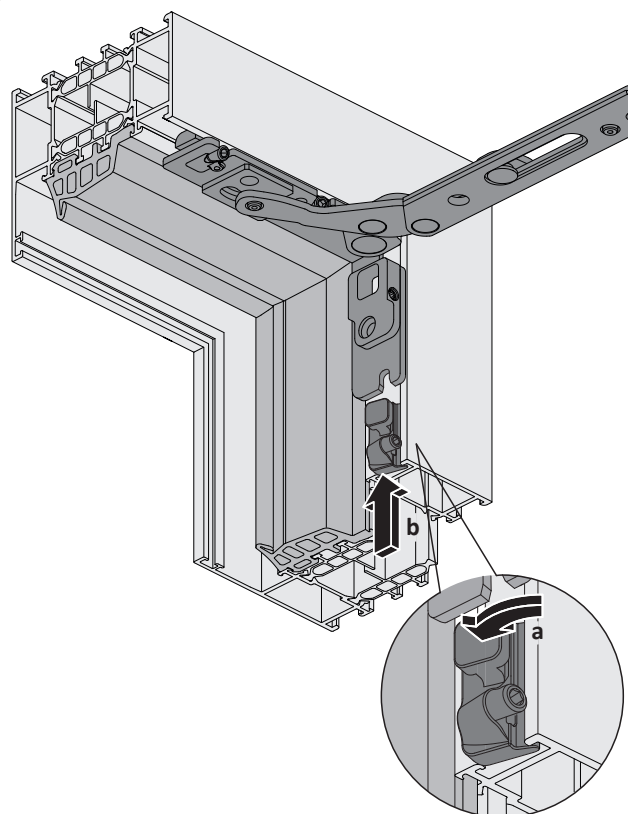
TITAN

1

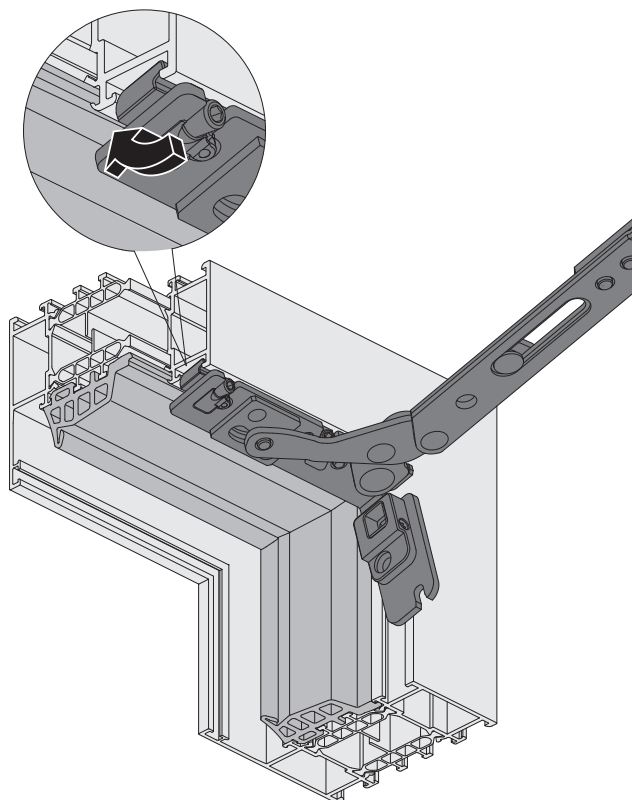
1.



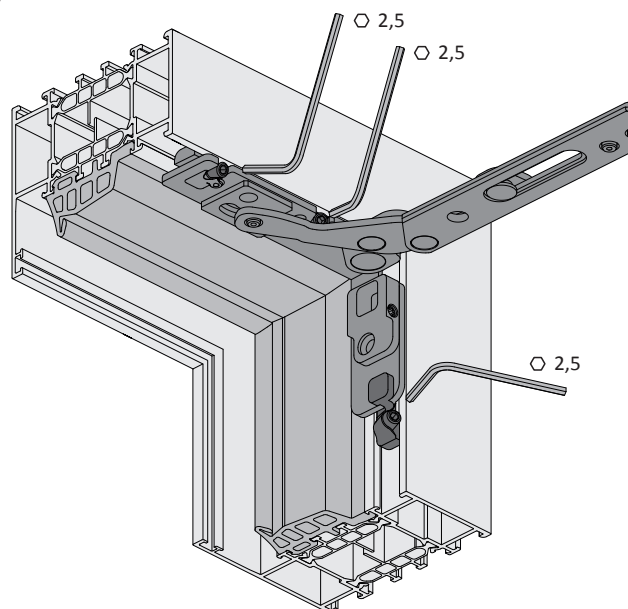
3.



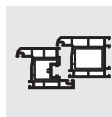
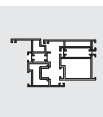
2.



4.

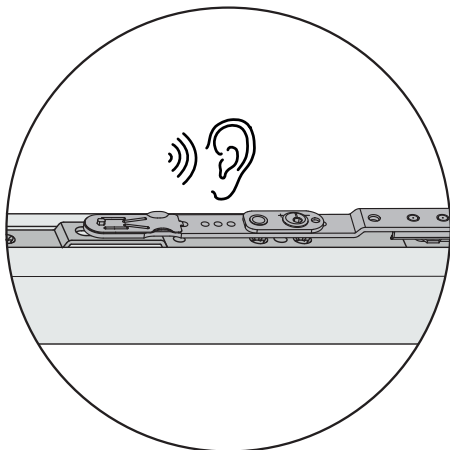
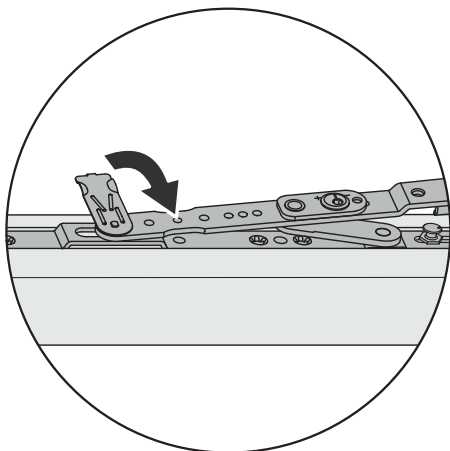
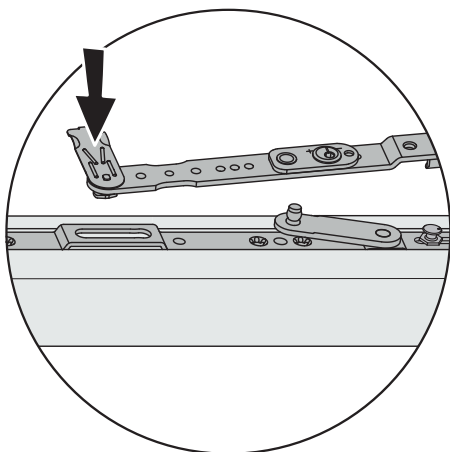


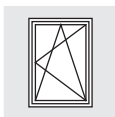
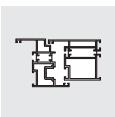
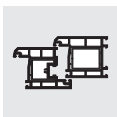
recommended torque = 2 Nm

**⚠ DANGER****Falling sash**

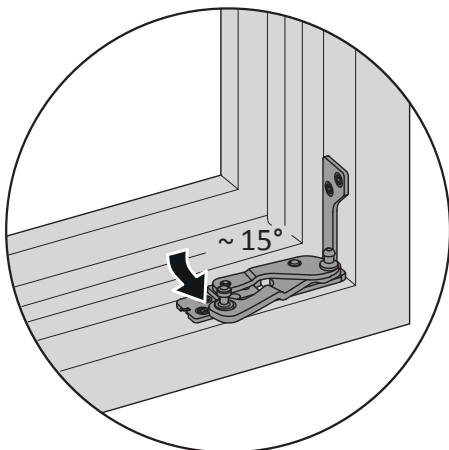
If the stop spring is not locked in, the sash may fall out.

- Audible engagement of the stop spring in the stay sash part.

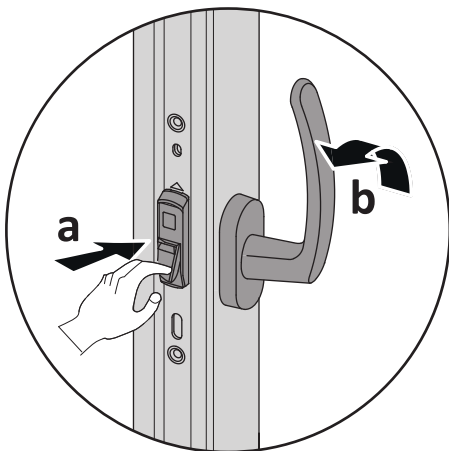




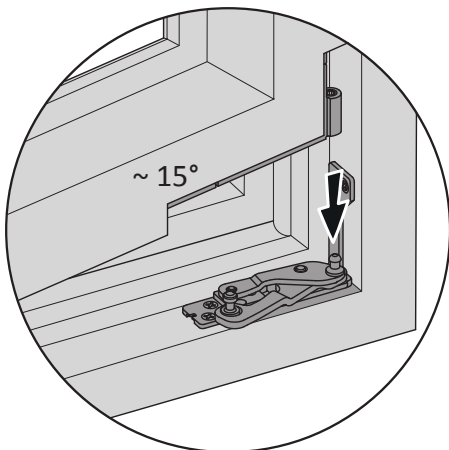
1.



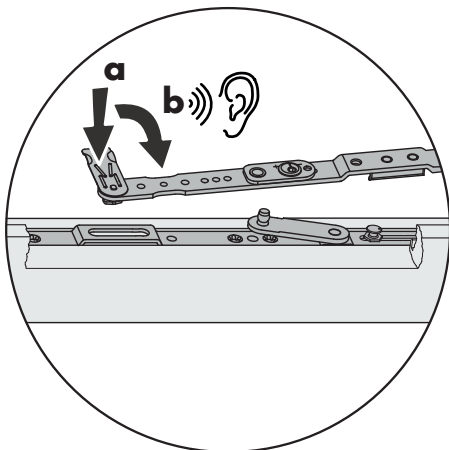
2.



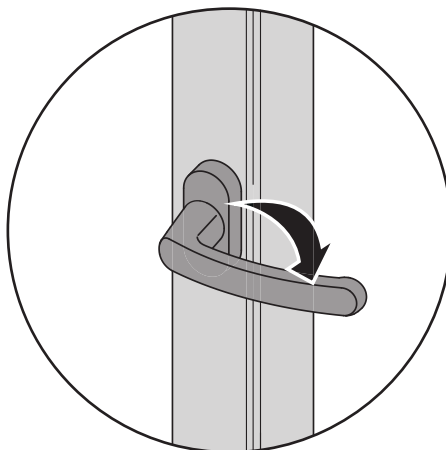
3.



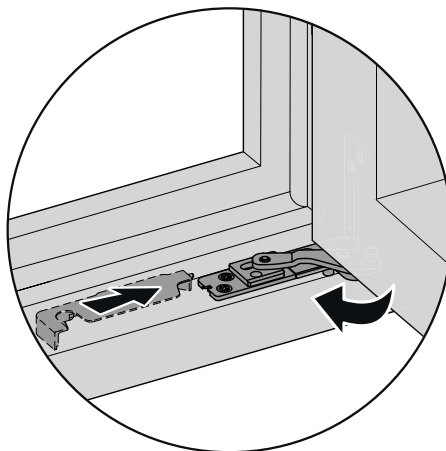
4.



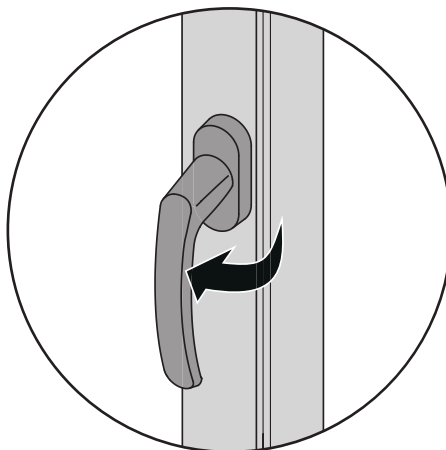
5.



6.



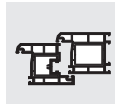
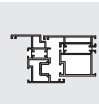
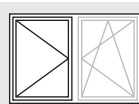
7.



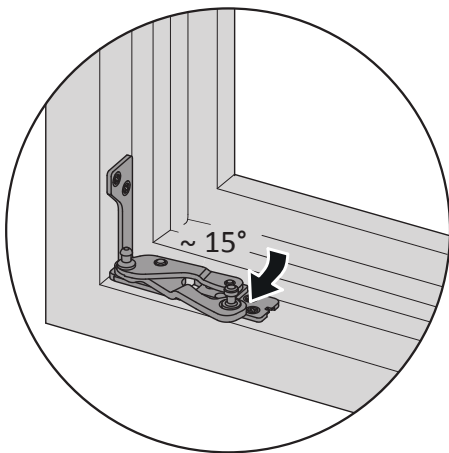
You can find our installation video here:

[axxent 24+ Hinging the sash in turning position](#)

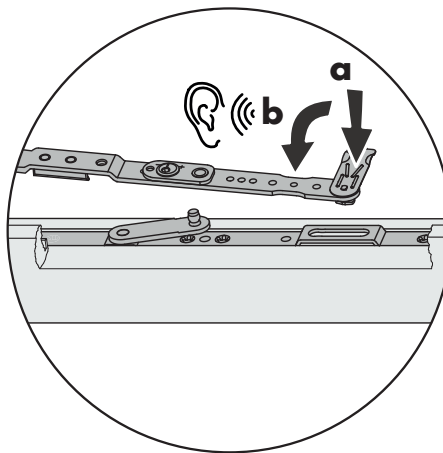




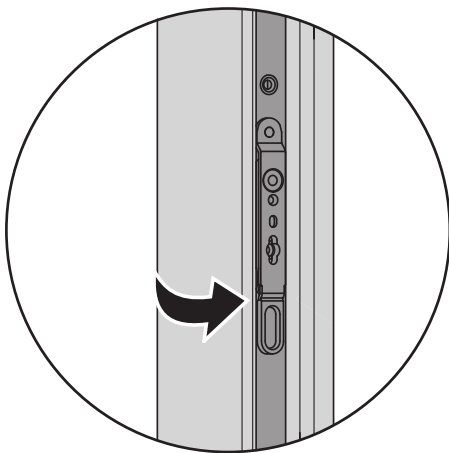
1.



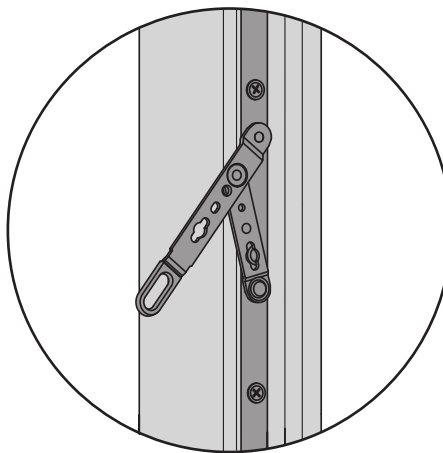
5.



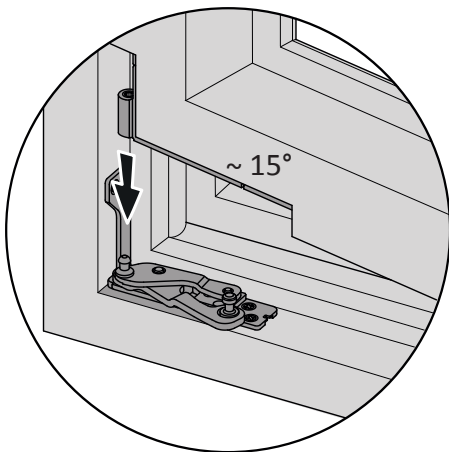
2.



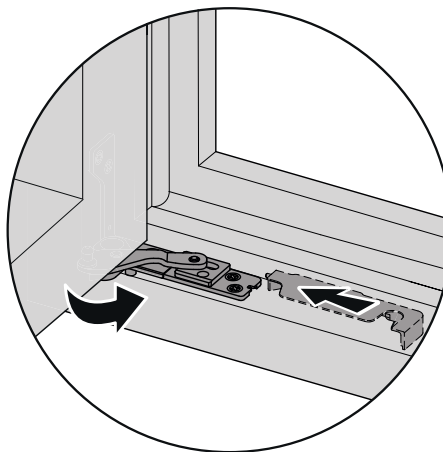
6.



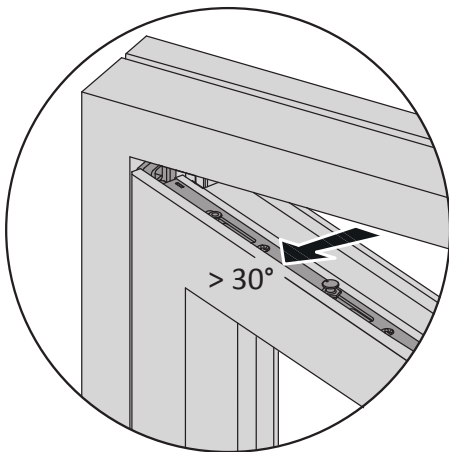
3.



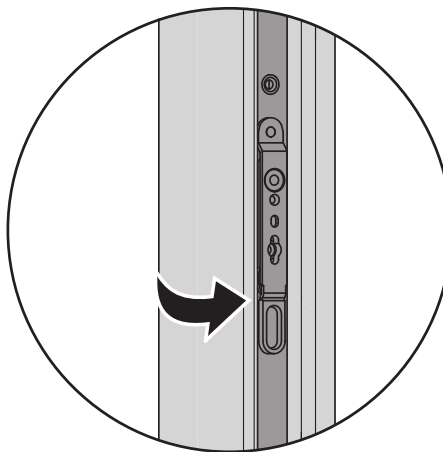
7.

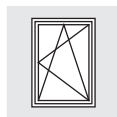
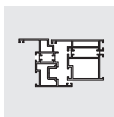
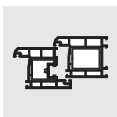


4.

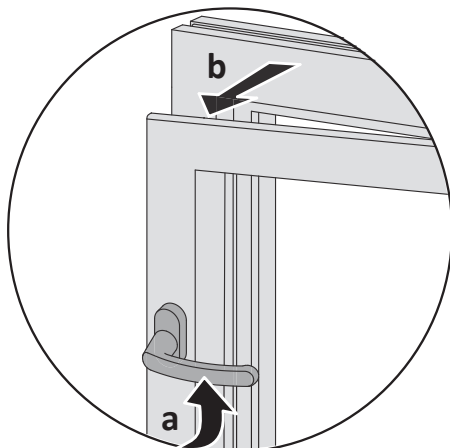


8.

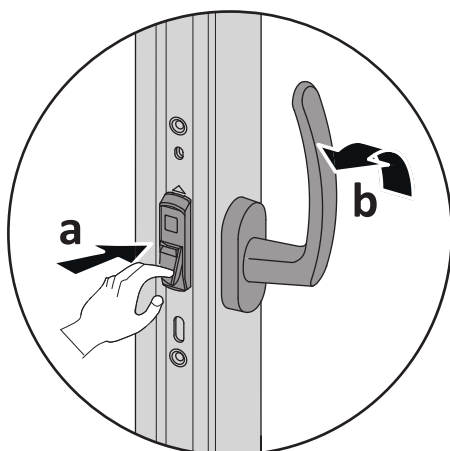




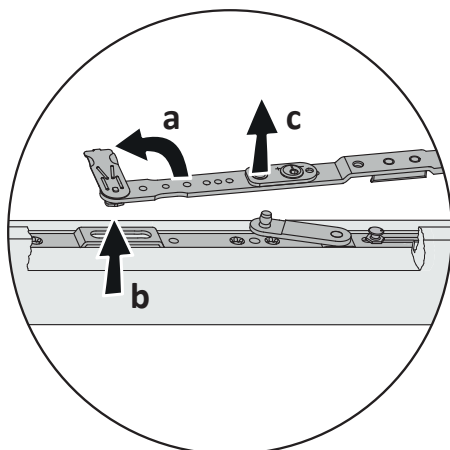
1.



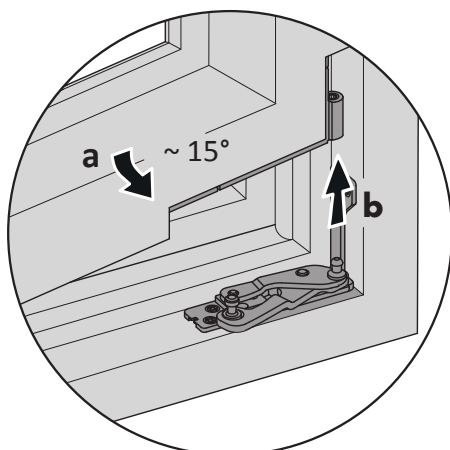
2.



3.



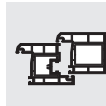
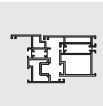
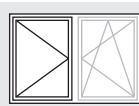
4.



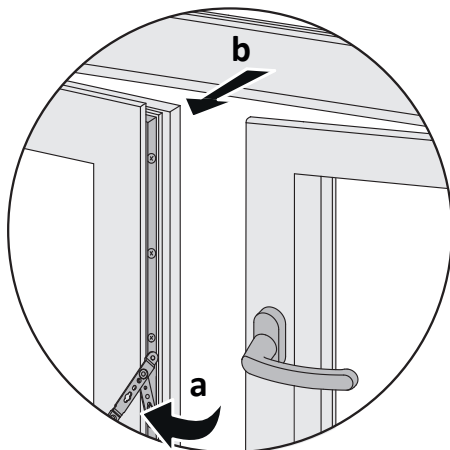
You can find our installation video here:

[axxent 24+ Unhinging the sash in turning position](#)

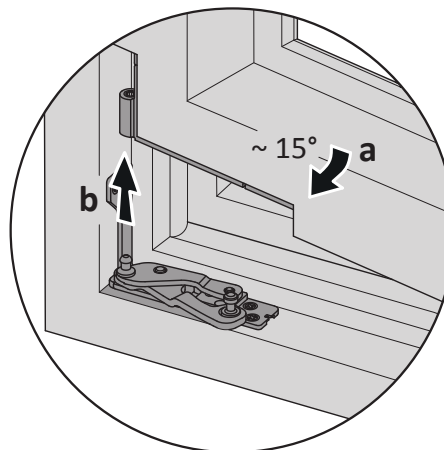




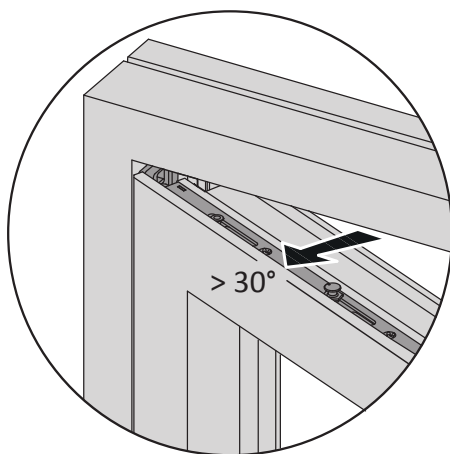
1.



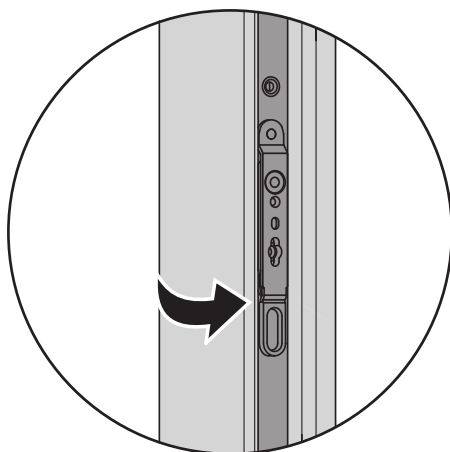
5.



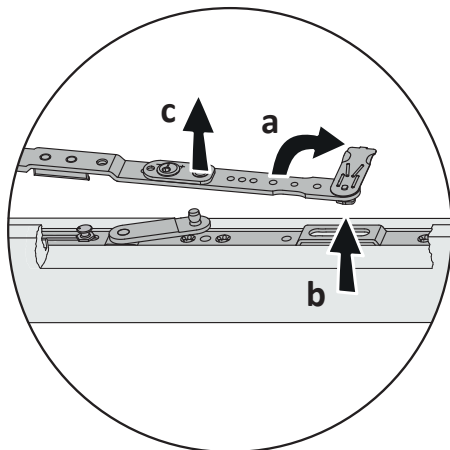
2.

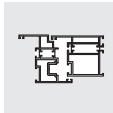
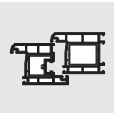


3.



4.





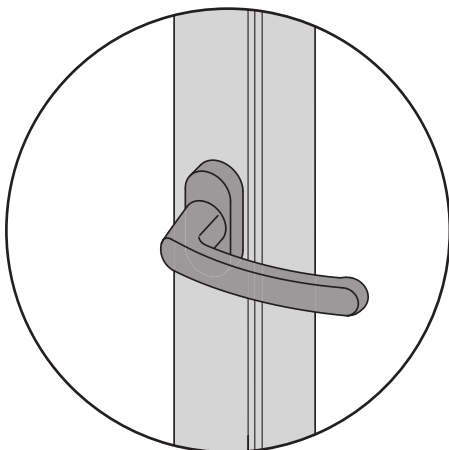
Installation information axxent 24+

Hinging the sash
Sash in tilted position parallel to the frame

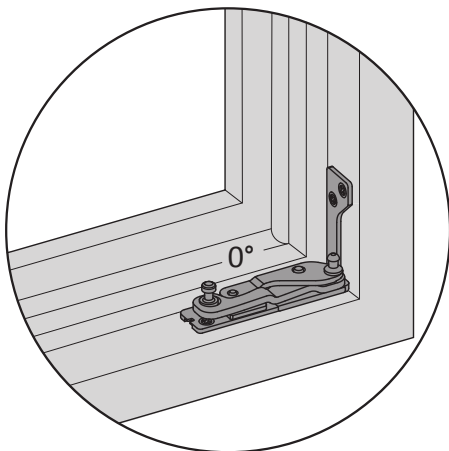
TITAN

1

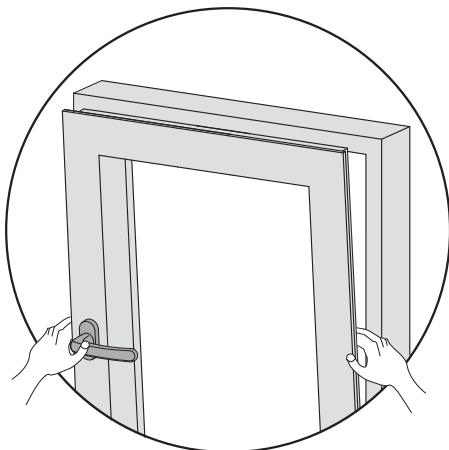
1.



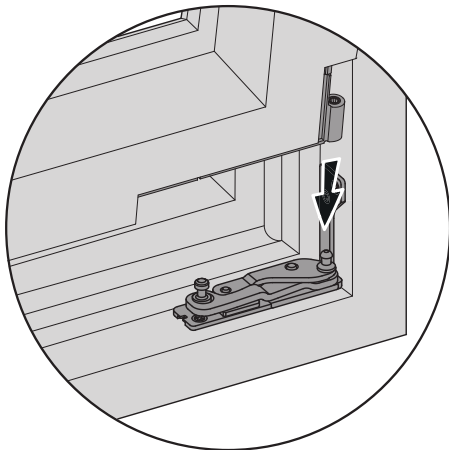
2.



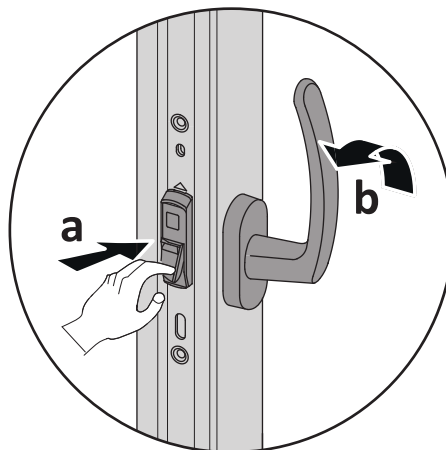
3.



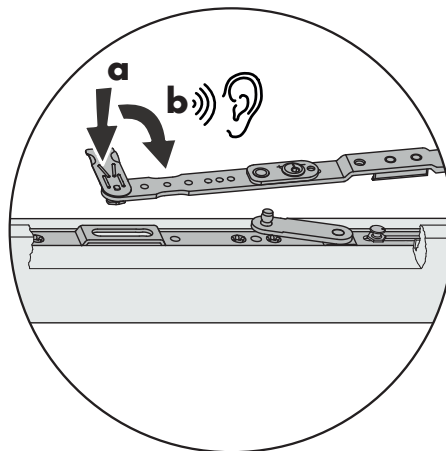
4.



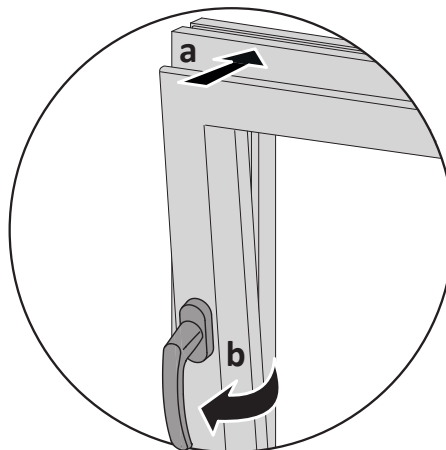
5.



6.



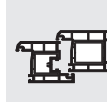
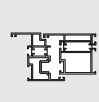
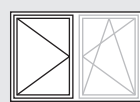
7.



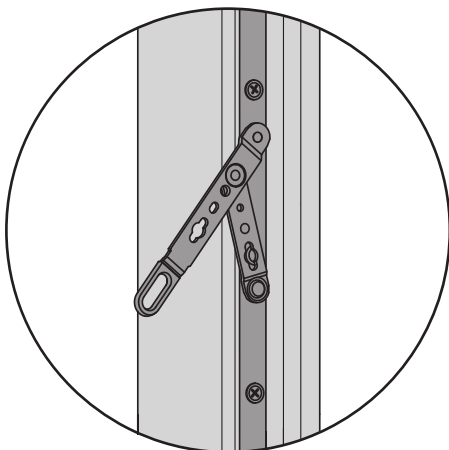
You can find our installation video here:

[axxent 24+ Hinging the sash in tilt position](#)

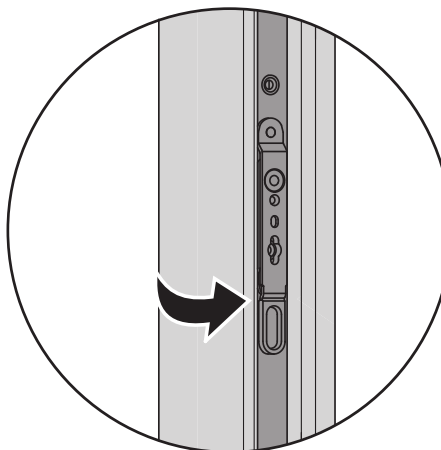




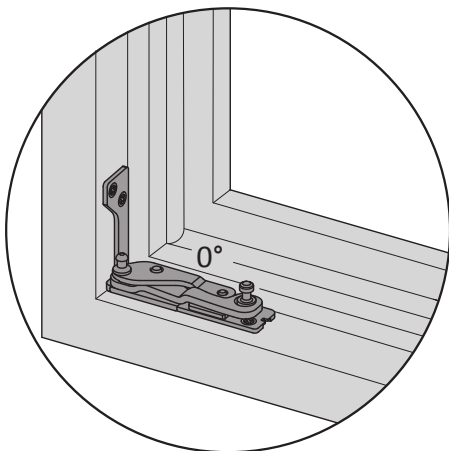
1.



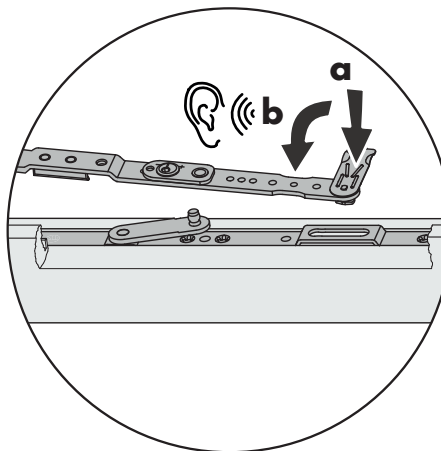
5.



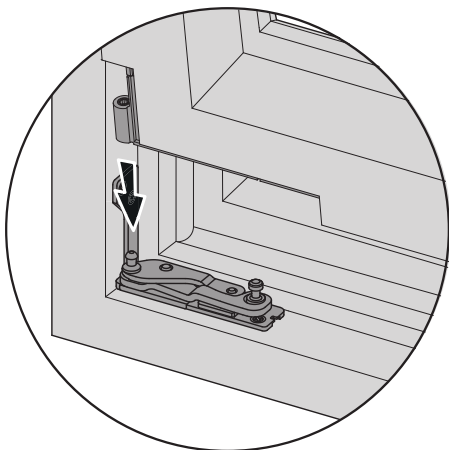
2.



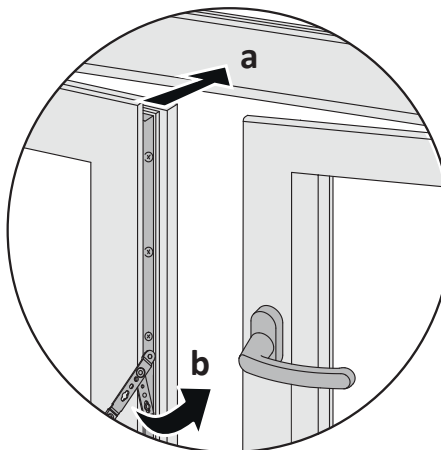
6.



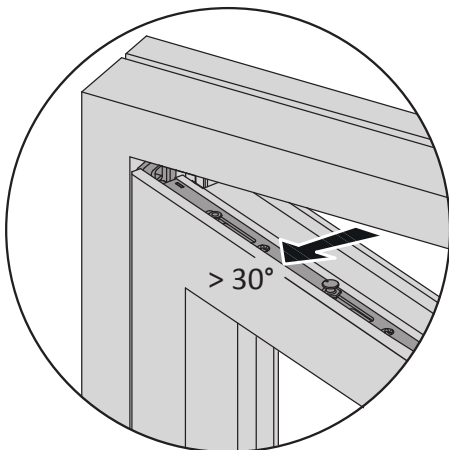
3.



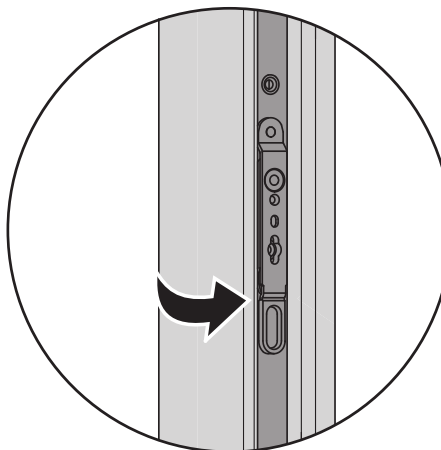
7.

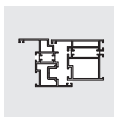
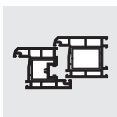


4.



8.





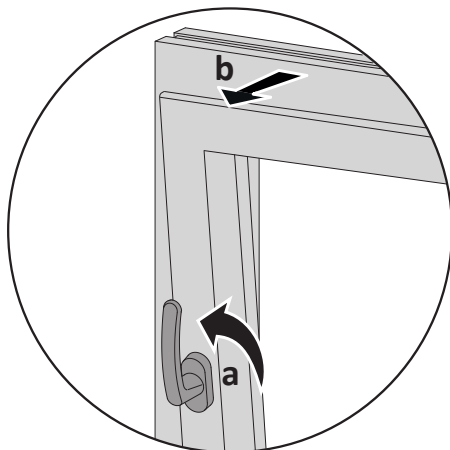
Installation information axxent 24+

Unhinging the sash
Sash in tilted position parallel to the frame

TITAN

1

1.

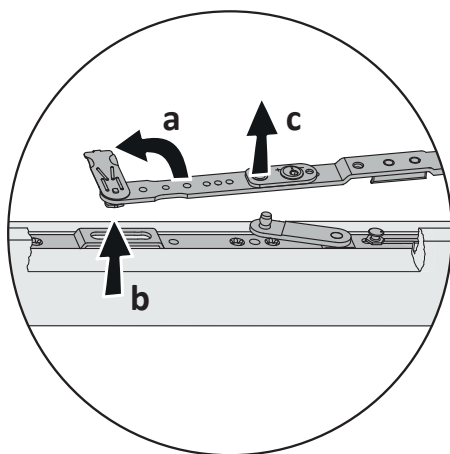


You can find our installation video here:

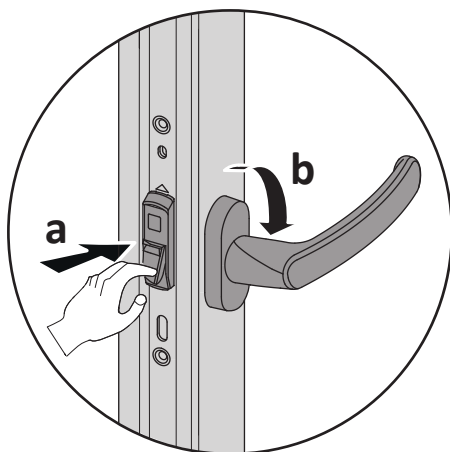
[axxent 24+ Unhinging the sash in tilt position](#)



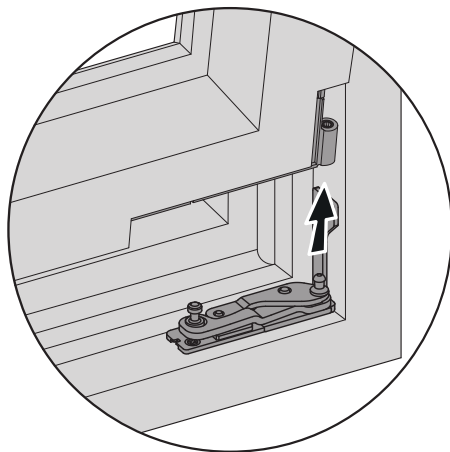
2.

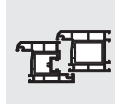
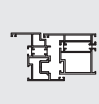
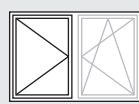


3.

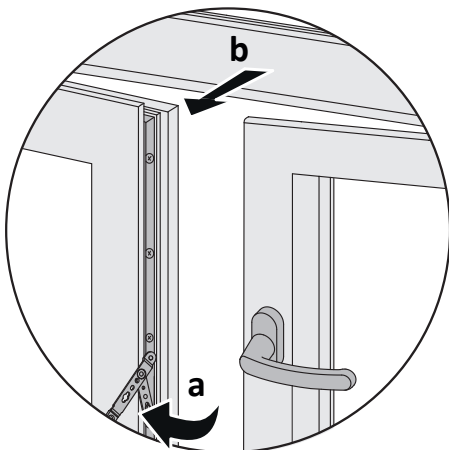


4.

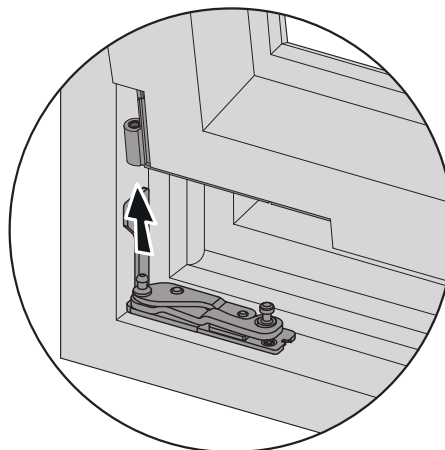




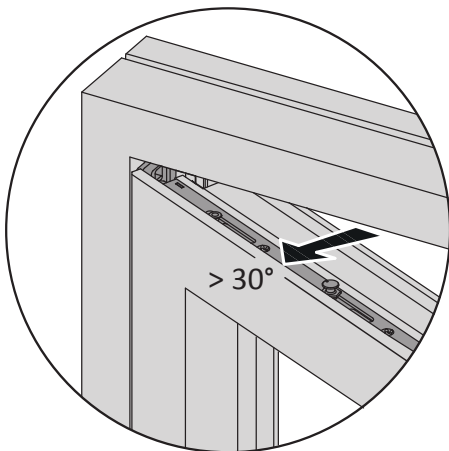
1.



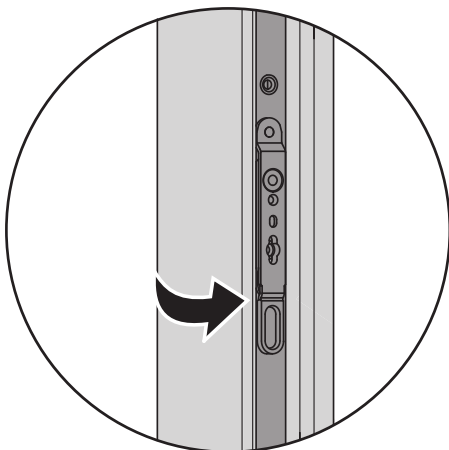
5.



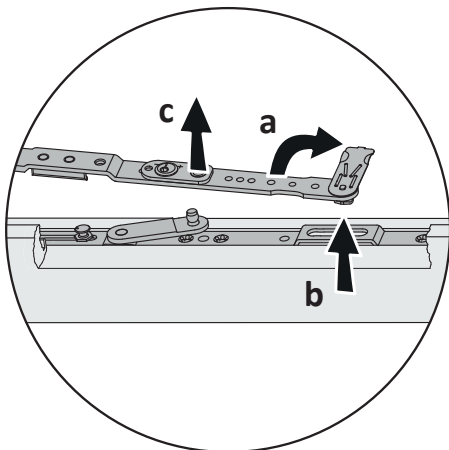
2.

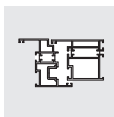
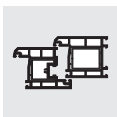


3.

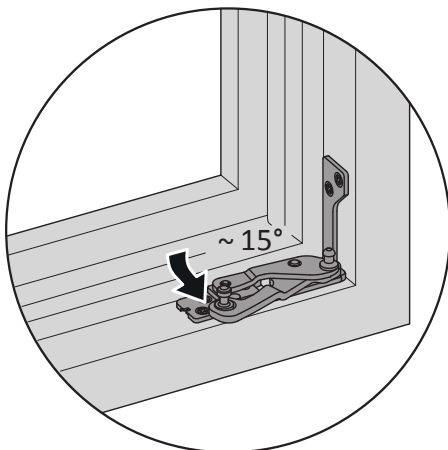


4.

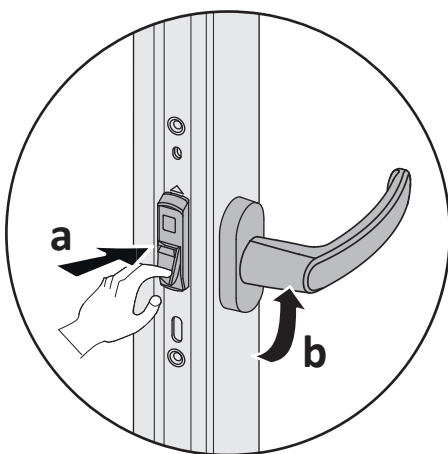




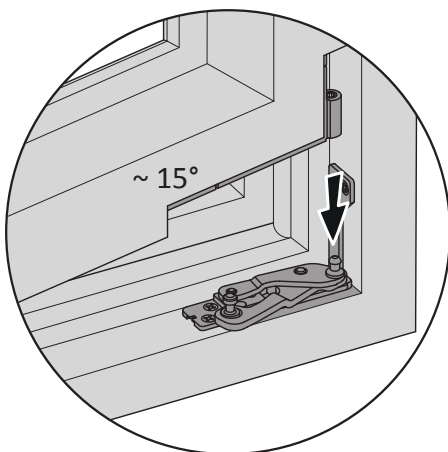
1.



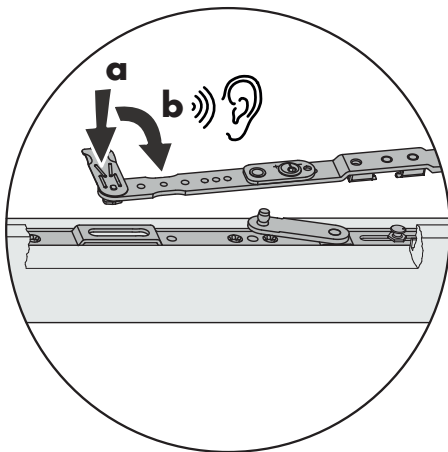
2.



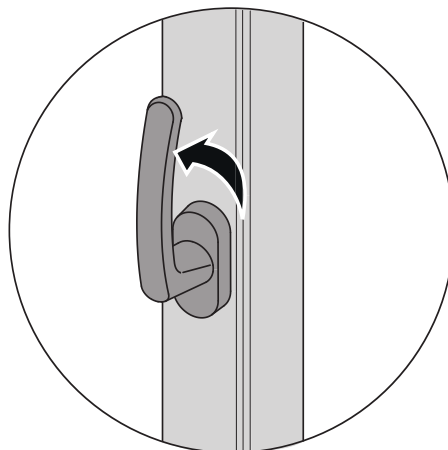
3.



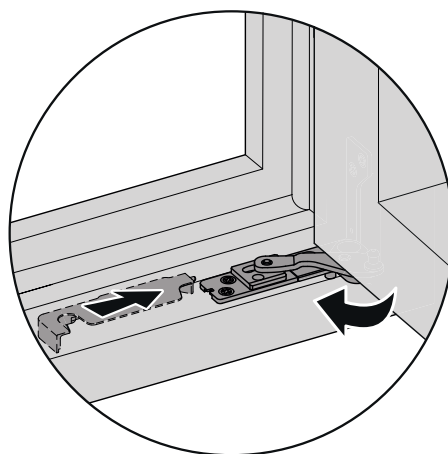
4.



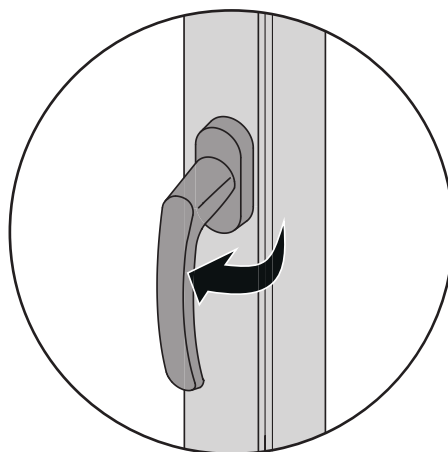
5.

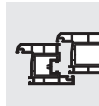
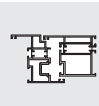


6.

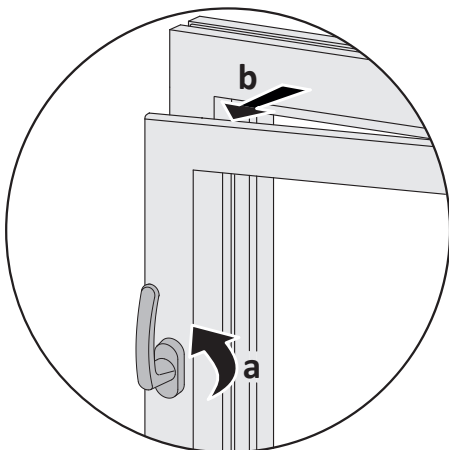


7.

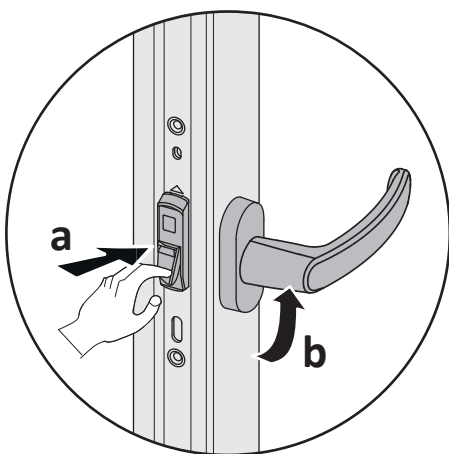




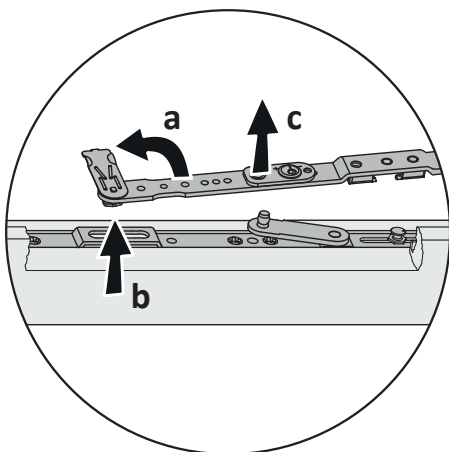
1.



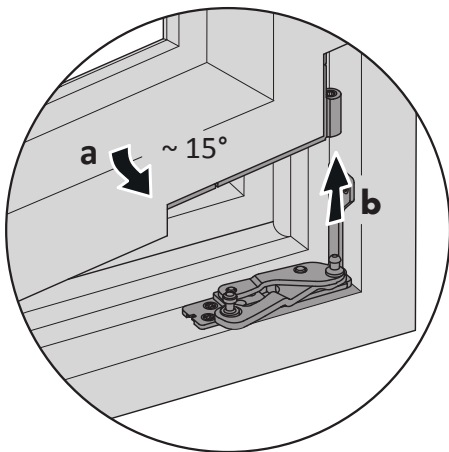
2.

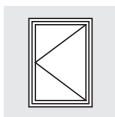
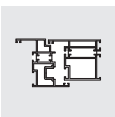
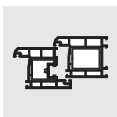


3.

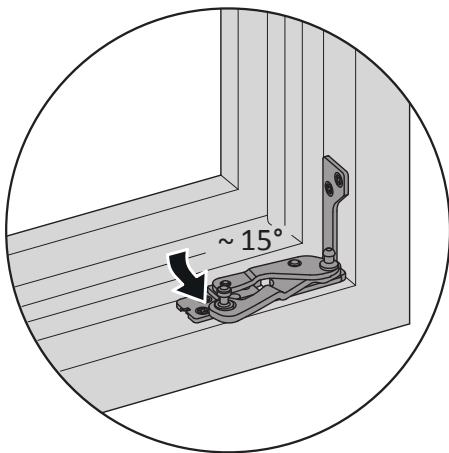


4.

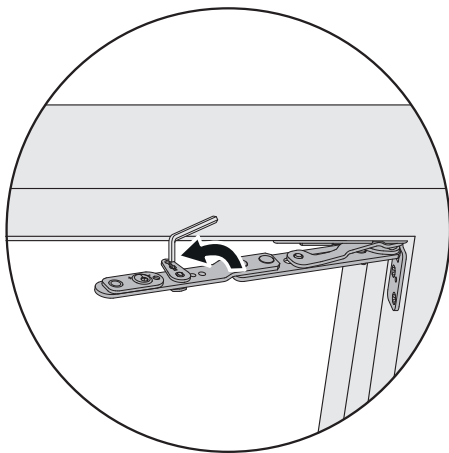




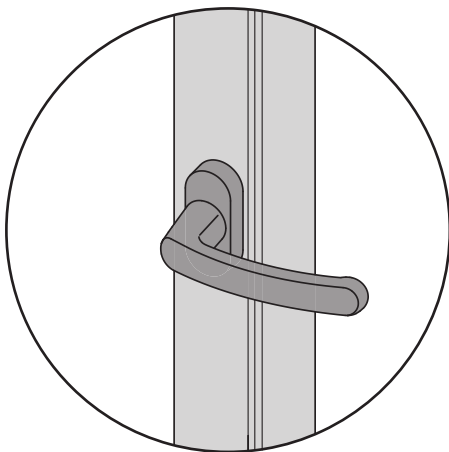
1.



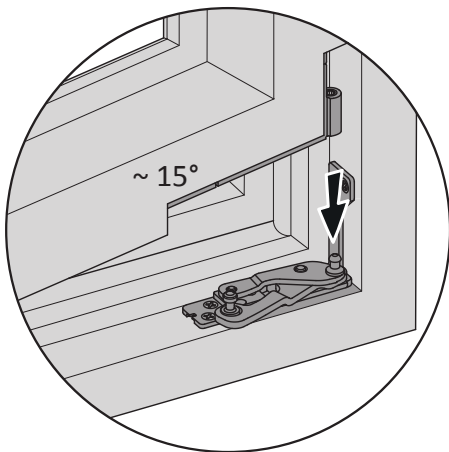
2.



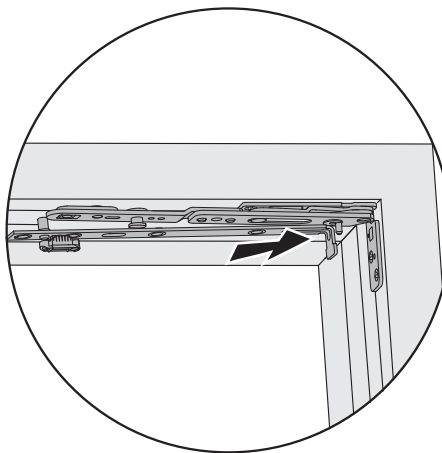
3.



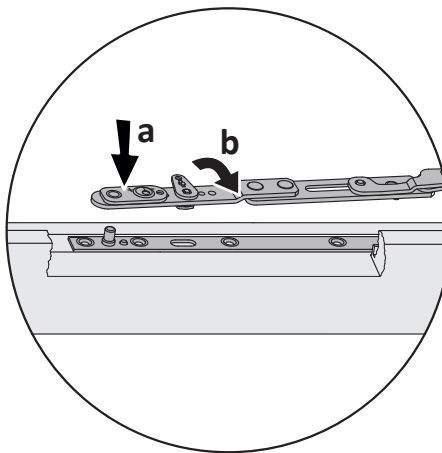
4.



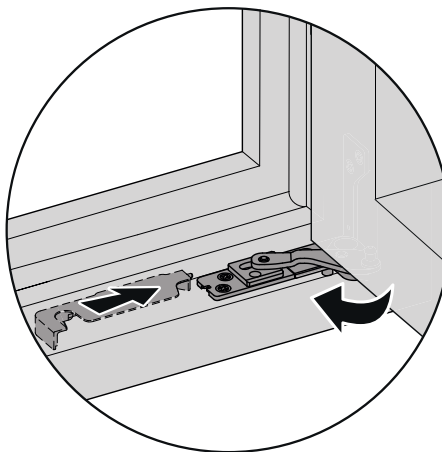
5.



6.



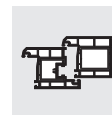
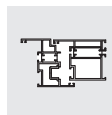
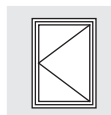
7.



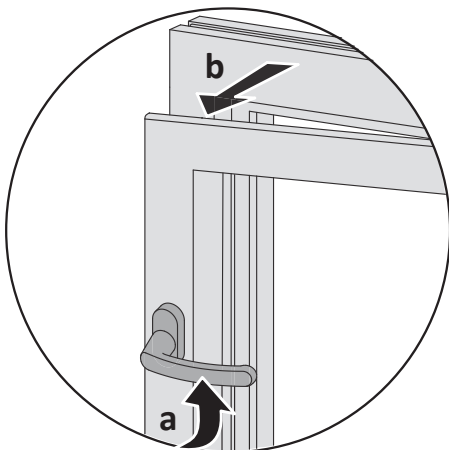
You can find our installation video here:

[axxent 24+ Hinging the turning sash](#)





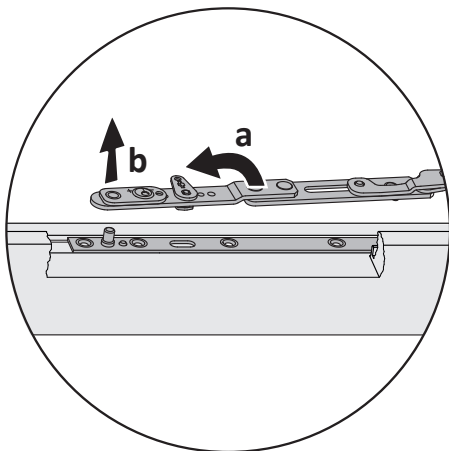
1.



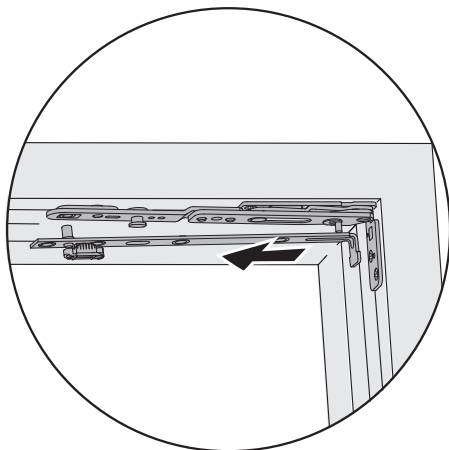
You can find our installation video here:

[axxent 24+ Unhinging the turning sash](#)

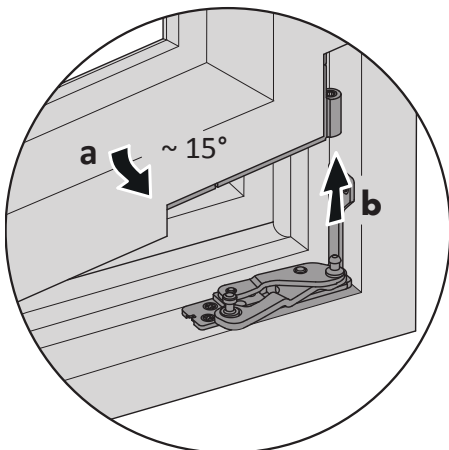
2.



3.



4.





2 - Basic security - Fixed handle position

Installation instructions ALU16
Hinge side axxent 24+

TITAN AF

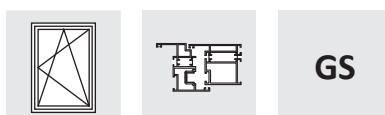
2

Basic security - Fixed handle position

1-sash square tilt-turn	H48.TAFALUKOS006EN	2 - 3
2-sash square tilt-turn/turn DS 16 DF-stay	H48.TAFALUKOS007EN	2 - 9
2-sash square tilt-turn/turn DS 16	H48.TAFALUKOS008EN	2 - 17
tilt before turn (TBT)		
1-sash square tilt before turn (TBT)	H48.TAFALUKOS010EN	2 - 25
square turn		
1-sash square turn	H48.TAFALUKOS009EN	2 - 31

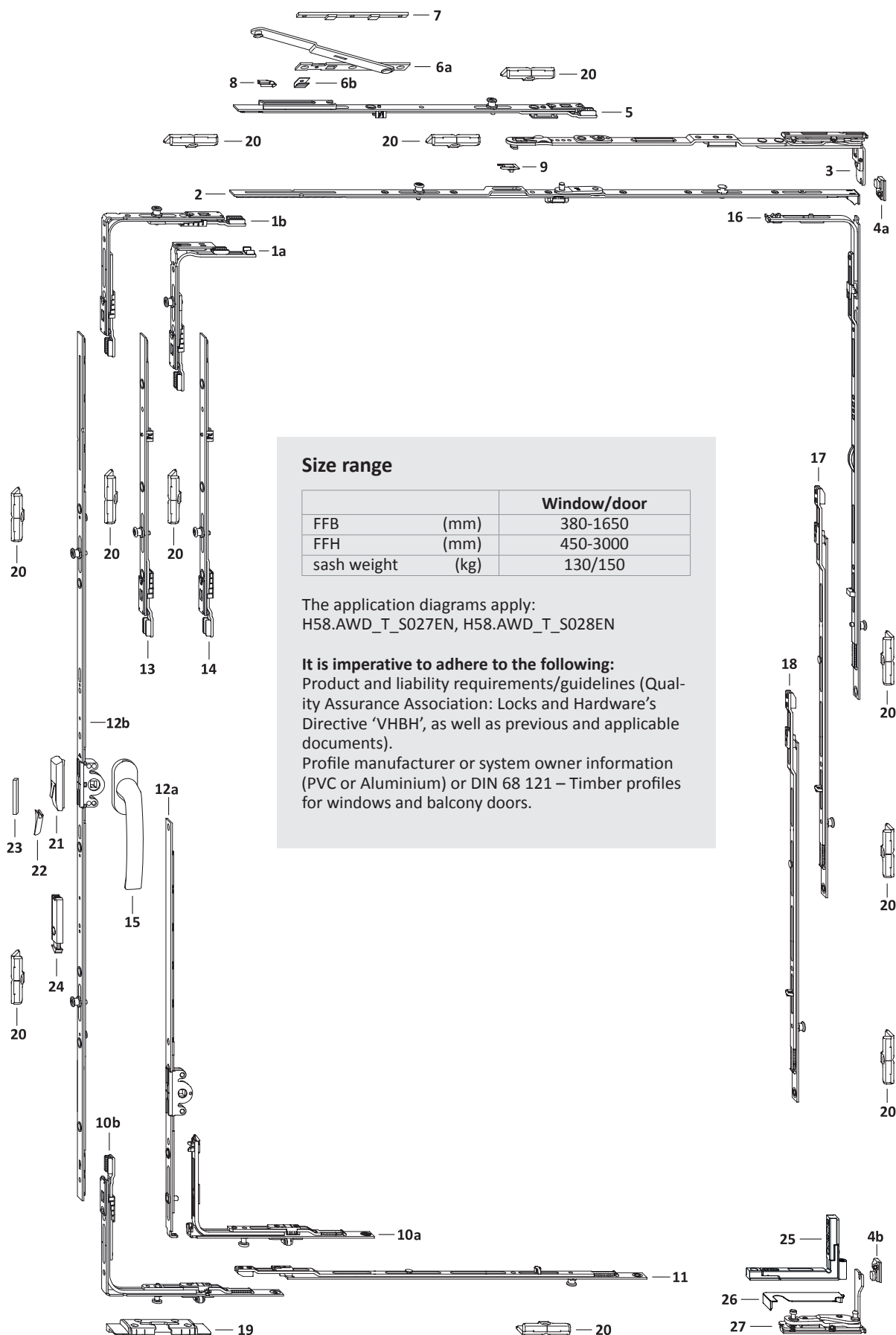
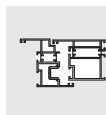
TITAN AF

Installation instructions



1-sash square tilt-turn
 aluminium with 16 mm BAN
 basic security
 fixed handle position
 Hinge side axxent 24+
 surface TS
 backset 15 mm

Hardware set configuration	
General	Locking-points distance 800
Stay side	two-piece stay ax 24+
Bottom	Inliner
Locking side	mishandl. device on gear
Hinge side	corner drive BS sz 1+2 1RS





List of fittings
1-sash square tilt-turn
ALU16 GK Hinge side axxent 24+

TITAN AF

GS

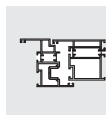
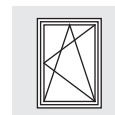
2

Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Number of frame parts / Pos.	
							19	20
1a	corn.drive AF VSO narrow 1RS	TEUL4020- ...	1	380 – 480				1
1b	corn.drive VSO 1RS	TEUL4010- ...	1	481 – 1650				1
2	stay sash part AF AX sz 1	TSSV4000- ...	1	380 – 680				
	stay sash part AF AX 2+3 1RS	TSSV0310- ...		681 – 850				
	stay sash part AF AX sz 4 1RS	TSSV0320- ...		851 – 1050				1
	stay sash part AF AX sz 5 1RS	TSSV0330- ...		1051 – 1250				1
	stay sash part AF AX sz 4 1RS	TSSV0320- ...		1251 – 1450				1
	stay sash part AF AX sz 5 1RS	TSSV0330- ...		1451 – 1650				1
3	stay arm AX sz 1	Ref. PDB, TSAV41	1	380 – 680				
	stay arm AX sz 2+3	Ref. PDB, TSAV42		681 – 850				
	stay arm AX sz 4	Ref. PDB, TSAV44		851 – 1050				
	stay arm AX sz 5	Ref. PDB, TSAV45		1051 – 1250				
	stay arm AX sz 4	Ref. PDB, TSAV44		1251 – 1450				
	stay arm AX sz 5	Ref. PDB, TSAV45		1451 – 1650				
4	crt. accessories AX	Ref. PDB, TMZV41	1	380 – 1650				
5	linkage additional stay 1RS	TZOK1010- ...	1	1251 – 1650				1
6	additional stay	Ref. PDB, TSZS	1	1251 – 1650				
7	packer Z	Ref. PDB, FRUP01	1	1251 – 1650				
8	tilt restr. additional stay ..	889008	1	1251 – 1650				
9	tilt restrictor V-V sz 2-4 ..	TFKB0040- ...	1	681 – 1050	450 – 900			
	tilt restrictor V-V sz 5 ..	TFKB0050- ...		1051 – 1250	450 – 900			
10a	locking part VSU/K FH+ 1S	TEVR1400- ...	1	380 – 1250	450 – 600		1	
10b	corn.drive AF VSU/K+ FH 1S	TEUL5010- ...	1	380 – 1650	601 – 3000		1	
11	linkage BS/FH sz 1+ 1RS	TZBS0180- ...	1	851 – 1050				1
	linkage BS/FH sz 2+ 1RS	TZBS0190- ...		1051 – 1450				1
	linkage BS/FH sz 3+ 1RS	TZBS0200- ...		1451 – 1650				1
12a	gear 15 sz 30/G180	TGKK3010- ...	1	380 – 1250	450 – 600	180		
12b	gear 15 AF sz 60/G300	TGKK4030- ...	1		601 – 800	300		
	gear 15 AF sz 80/G400 1RS	TGKK4050- ...			801 – 1000	400		1
	gear 15 AF sz 100/G500 1RS	TGKK4060- ...			1001 – 1200	500		1
	gear 15 AF sz 120/G600 1RS	TGKK4070- ...			1201 – 1400	600		1
	gear 15 AF sz 140/G700 1RS	TGKK4080- ...			1401 – 1600	700		1
	gear 15 AF sz 160/G700 1RS 70	TGKK4280- ...			1601 – 1800	700		2
	gear 15 AF sz 180/G1000 2RS 70	TGKK4220- ...			1801 – 2000	1000		2
	gear 15 AF sz 200/G1000 2RS	TGKK4110- ...			2001 – 3000	1000		2
13	linkage AF sz 1	TZZS0150- ...	1		2201 – 2400			
	linkage KK/AF sz 2 1RS	TZKK1020- ...			2401 – 2600			1
	linkage AF sz 1	TZZS0150- ...			2601 – 2800			
	linkage KK/AF sz 2 1RS	TZKK1020- ...			2801 – 3000			1
14	linkage KK/AF sz 2 1RS	TZKK1020- ...	1		2601 – 2800			1
	linkage KK/AF sz 2 1RS	TZKK1020- ...			2801 – 3000			1
15	handle Globe	Ref.access. ZHGS	1		450 – 3000			
16	corn.drive BS/K3 sz 1+ 1RS	TEUL2410- ...	1		801 – 1200			1
	corn.drive BS/K3 sz 2+ 1RS	TEUL2420- ...			1201 – 3000			1
17	linkage BS/FH sz 1+ 1RS	TZBS0180- ...	1		1401 – 1600			1
	linkage BS/FH sz 2+ 1RS	TZBS0190- ...			1601 – 2000			1
	linkage BS/FH sz 3+ 1RS	TZBS0200- ...			2001 – 3000			1
18	linkage BS/FH sz 1+ 1RS	TZBS0180- ...	1		2401 – 2600			1
	linkage BS/FH sz 2+ 1RS	TZBS0190- ...			2601 – 2800			1
	linkage BS/FH sz 3+ 1RS	TZBS0200- ...			2801 – 3000			1
19	tilt lock bear. S-ES FH	Ref. PDB, FRKA						
20	striker plate 56	Ref. PDB, FRSB						
on request								
21	mishandling device	TFBS0010- ...	1					
22	pressure piece	Ref. PDB, TFFD	1					
23	stop	Ref. PDB, FRZF01	1					
24	snapper rh.	TFST0021- ...	1		1801 – 3000			
	snapper lh.	TFST0022- ...			1801 – 3000			

List of fittings

1-sash square tilt-turn

ALU16 GK Hinge side axxent 24+



2

Hinge side turning points					
Pos.	Description	Part number		required as per sash weight	
		surface TS	RAL7037	130 kg	150 kg
25	corner hinge AX	Ref. PDB, TBEB41		1	1
26	cover cap AX EL	Ref. PDB, TKEL41		1	1
27	bottom hinge AX	Ref. PDB, TBEV41		1	1

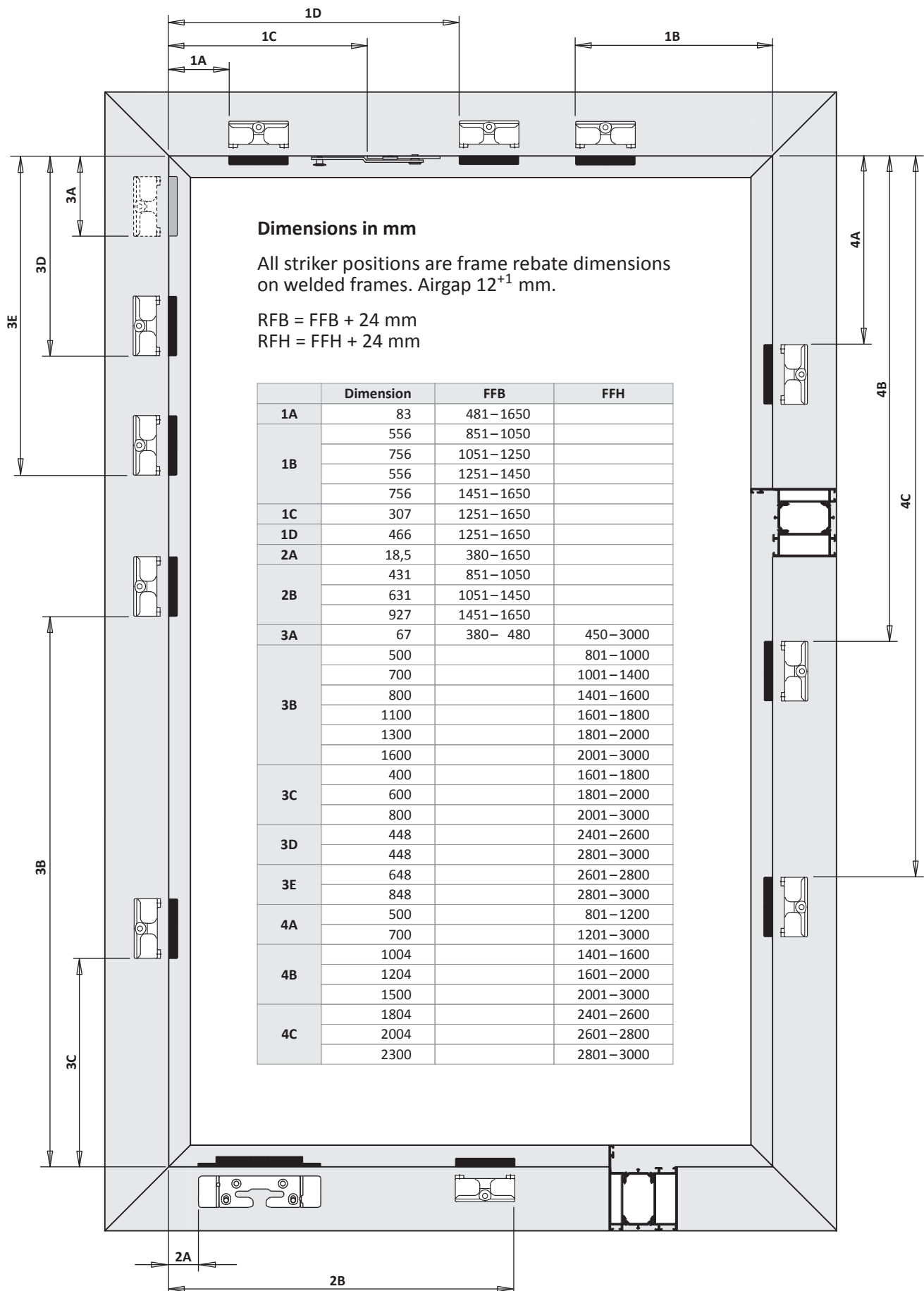


Frame dimensions
1-sash square tilt-turn
ALU16 GK Hinge side axxent 24+

TITAN AF

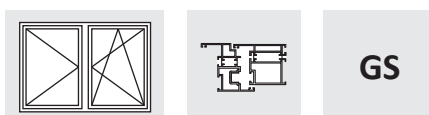
GS

2



TITAN AF

Installation instructions



2-sash square tilt-turn/turn DS 16

aluminium with 16 mm BAN

basic security

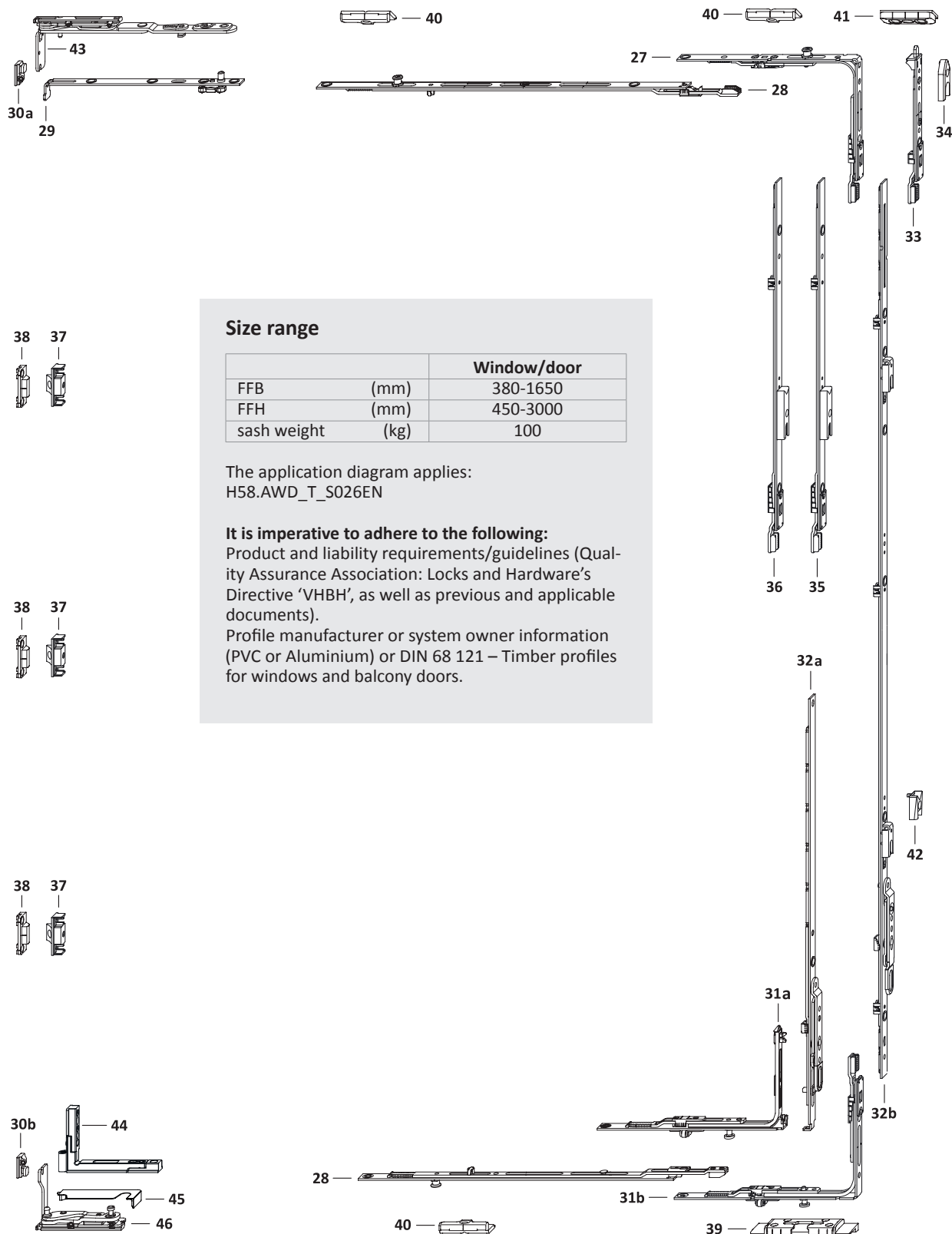
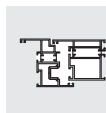
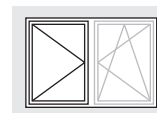
fixed handle position

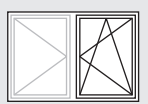
Hinge side axxent 24+

surface TS

backset 15 mm

Hardware set configuration	
General	Locking-points distance 800
Stay side	two-piece stay ax 24+
Bottom	Inliner
Locking side	mishandl. device on gear
Hinge side	corner drive BS sz 1+2 1RS





hardware layout main sash

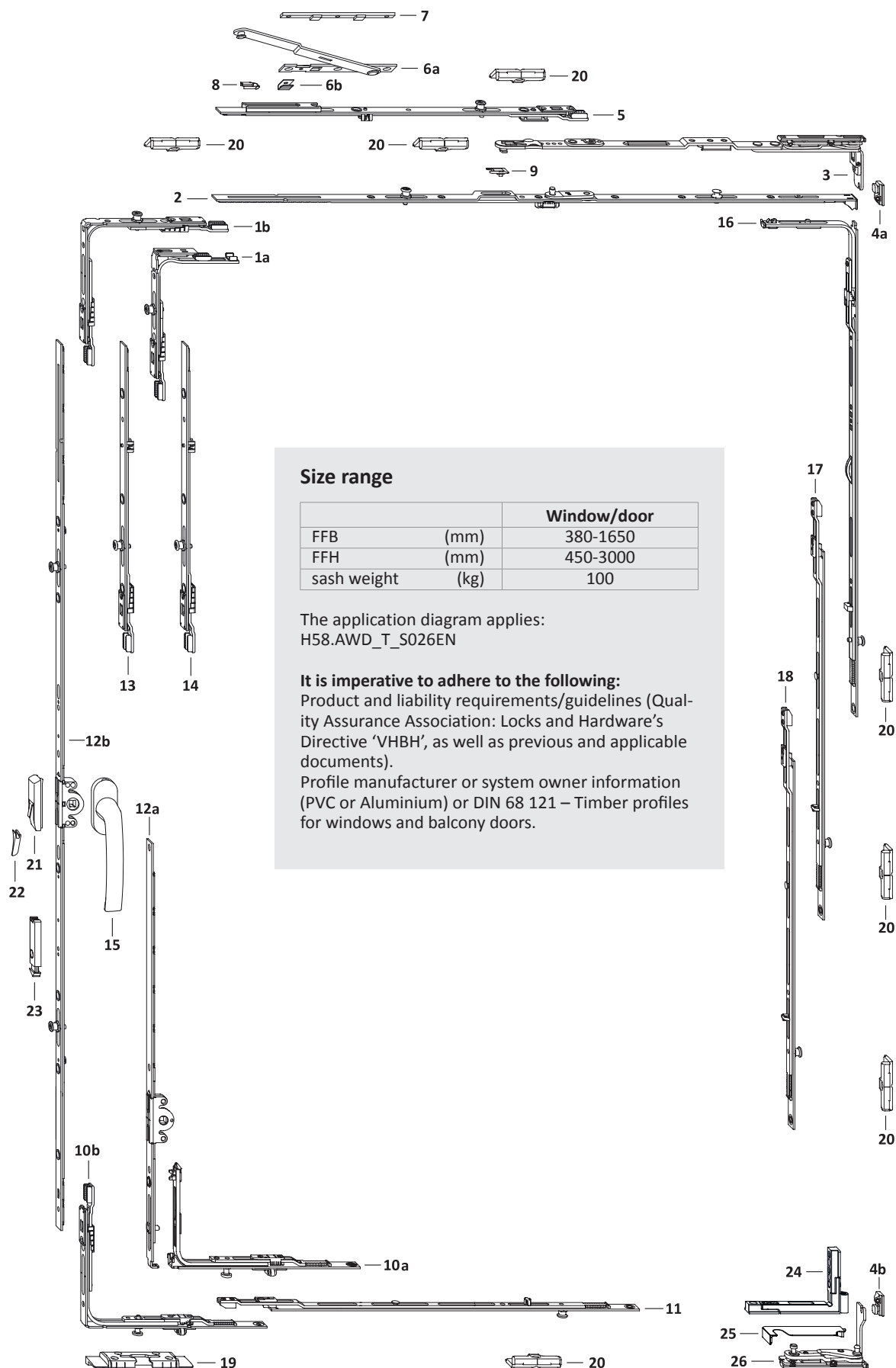
2-sash square tilt-turn/turn DS 16

ALU16 GK Hinge side axxent 24+

TITAN AF

GS

2



Size range

		Window/door
FFB	(mm)	380-1650
FFH	(mm)	450-3000
sash weight	(kg)	100

The application diagram applies:
H58.AWD_T_S026EN

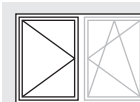
It is imperative to adhere to the following:

Product and liability requirements/guidelines (Quality Assurance Association: Locks and Hardware's Directive 'VHBH', as well as previous and applicable documents).

Profile manufacturer or system owner information (PVC or Aluminium) or DIN 68 121 – Timber profiles for windows and balcony doors.

List of fittings slave sash

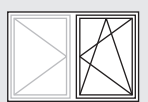
2-sash square tilt-turn/turn DS 16
ALU16 GK Hinge side axxent 24+



2

Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Number of frame parts / Pos.		
						In the main sash	39	40	41
27	corn.drive VSO/K+ DF 1RS	TEUL4110- ...	1	481–1650				1	
28	linkage BS/FH sz 1+ 1RS	TZBS0180- ...	2	851–1050				2	
	linkage BS/FH sz 2+ 1RS	TZBS0190- ...		1051–1450				2	
	linkage BS/FH sz 3+ 1RS	TZBS0200- ...		1451–1650				2	
29	stay sash part DF AX	TSSV3020- ...	1	380–1650					
30	crt. accessories AX	Ref. PDB, TMZV41	1	380–1650					
31a	locking part VSU/K FH+ 1S	TEVR1400- ...	1	380–1650	450– 800		1		
31b	corn.drive AF VSU/K+ FH 1S	TEUL5010- ...	1	380–1650	801–3000		1		
32a	sec.sash gear 16 sz 30	TGKS0010- ...	1	380–1250	450– 600	180			
	sec.sash gear 16 AF 60/G300	TGKS4030- ...			601– 800	300			
32b	sec.sash gear 16 AF80/G400 1SB	TGKS4050- ...	1		801–1000	400			
	sec.sash gear 16 AF sz 100 1SB	TGKS4060- ...			1001–1200	500			
	sec.sash gear 16 AF120/G6001SB	TGKS4070- ...			1201–1400	600			
	sec.sash gear 16 AF140/G7001SB	TGKS4080- ...			1401–1600	700			
	sec.sash gear 16 AF160/G7002SB 70	TGKS4330- ...			1601–1800	700			
	sec.sash gear 16AF180/G10002SB 70	TGKS4270- ...			1801–2000	1000			
	sec.sash gear 16AF200/G10002SB	TGKS4110- ...			2001–3000	1000			
33	locking bolt AF VSO RSA 11	TESC2030- ...	1	380– 480	450–3000				1
34	striker plate A0767	TRSA0010- ...	1	380– 480	450–3000				
35	linkage AF sz 1	TZZS0150- ...	1		2201–2400				
	linkage AF sz 2 1SB-RS	TZKS1030- ...			2401–2600				
	linkage AF sz 1	TZZS0150- ...			2601–2800				
	linkage AF sz 2 1SB-RS	TZKS1030- ...			2801–3000				
36	linkage AF sz 2 1SB-RS	TZKS1030- ...	1		2601–2800				
	linkage AF sz 2 1SB-RS	TZKS1030- ...			2801–3000				
37	sash part MV	Ref. PDB, ZFMV01	1		801–1600				
	sash part MV	Ref. PDB, ZFMV01	2		1601–2400				
	sash part MV	Ref. PDB, ZFMV01	3		2401–3000				
38	frame part MV	Ref. PDB, ZRZM01	1		801–1600				
	frame part MV	Ref. PDB, ZRZM01	2		1601–2400				
	frame part MV	Ref. PDB, ZRZM01	3		2401–3000				
39	tilt lock bear. S-ES FH	Ref. PDB, FRKA							
40	striker plate 56	Ref. PDB, FRSB							
41	striker V	Ref. PDB, FRZV01							
on request									
42	striker snapper AF A0767	TRST0100- ...	1		1801–3000				

Hinge side turning points			
Pos.	Description	Part number	
		surface TS	required as per sash weight
43	stay arm AX DF	Ref. PDB, TSAV46	100 kg
44	corner hinge AX	Ref. PDB, TBEB41	1
45	cover cap AX EL	Ref. PDB, TKEL41	1
46	bottom hinge AX	Ref. PDB, TBEV41	1



List of fittings main sash
2-sash square tilt-turn/turn DS 16
ALU16 GK Hinge side axxent 24+

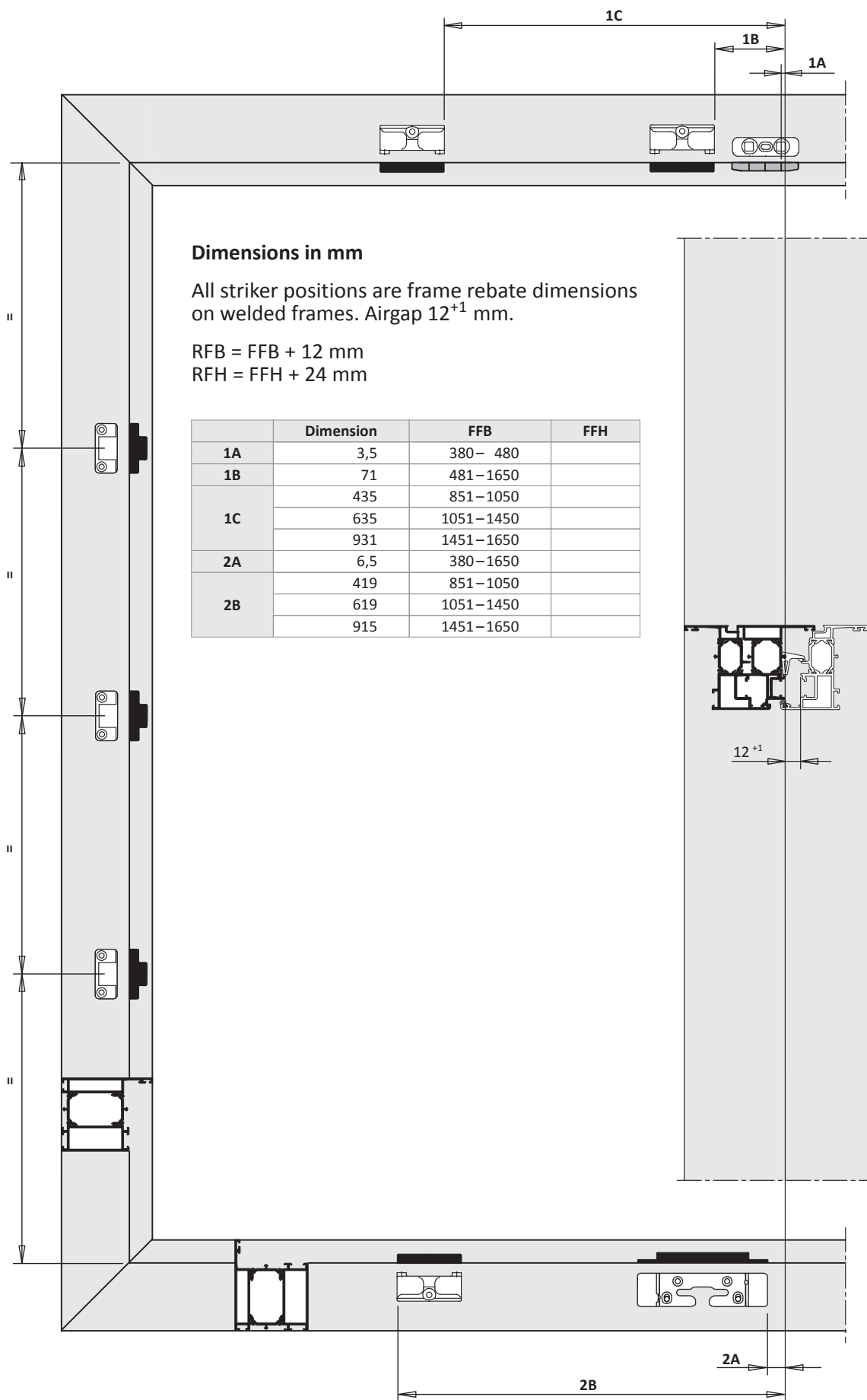
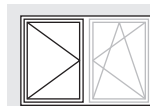
TITAN AF

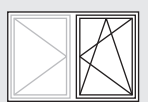
GS

2

Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Number of frame parts / Pos.	
							19	20
1a	corn.drive AF VSO narrow 1RS	TEUL4020- ...	1	380 – 480				
1b	corn.drive VSO 1RS	TEUL4010- ...	1	481 – 1650				1
2	stay sash part AF AX sz 1	TSSV4000- ...	1	380 – 680				
	stay sash part AF AX 2+3 1RS	TSSV0310- ...		681 – 850				
	stay sash part AF AX sz 4 1RS	TSSV0320- ...		851 – 1050				1
	stay sash part AF AX sz 5 1RS	TSSV0330- ...		1051 – 1250				1
	stay sash part AF AX sz 4 1RS	TSSV0320- ...		1251 – 1450				1
	stay sash part AF AX sz 5 1RS	TSSV0330- ...		1451 – 1650				1
3	stay arm AX sz 1	Ref. PDB, TSAV41	1	380 – 680				
	stay arm AX sz 2+3	Ref. PDB, TSAV42		681 – 850				
	stay arm AX sz 4	Ref. PDB, TSAV44		851 – 1050				
	stay arm AX sz 5	Ref. PDB, TSAV45		1051 – 1250				
	stay arm AX sz 4	Ref. PDB, TSAV44		1251 – 1450				
	stay arm AX sz 5	Ref. PDB, TSAV45		1451 – 1650				
4	crt. accessories AX	Ref. PDB, TMZV41	1	380 – 1650				
5	linkage additional stay 1RS	TZOK1010- ...	1	1251 – 1650				1
6	additional stay	Ref. PDB, TSZS	1	1251 – 1650				
7	packer Z	Ref. PDB, FRUP01	1	1251 – 1650				
8	tilt restr. additional stay ..	889008	1	1251 – 1650				
9	tilt restrictor V-V sz 2-4 ..	TFKB0040- ...	1	681 – 1050	450 – 900			
	tilt restrictor V-V sz 5 ..	TFKB0050- ...		1051 – 1250	450 – 900			
10a	locking part VSU/K FH+ 1S	TEVR1400- ...	1	380 – 1250	450 – 600		1	
10b	corn.drive AF VSU/K+ FH 1S	TEUL5010- ...	1	380 – 1650	601 – 3000		1	
11	linkage BS/FH sz 1+ 1RS	TZBS0180- ...	1	851 – 1050				1
	linkage BS/FH sz 2+ 1RS	TZBS0190- ...		1051 – 1450				1
	linkage BS/FH sz 3+ 1RS	TZBS0200- ...		1451 – 1650				1
12a	gear 15 sz 30/G180	TGKK3010- ...	1	380 – 1250	450 – 600	180		
12b	gear 15 AF sz 60/G300	TGKK4030- ...	1		601 – 800	300		
	gear 15 AF sz 80/G400 1RS	TGKK4050- ...			801 – 1000	400		
	gear 15 AF sz 100/G500 1RS	TGKK4060- ...			1001 – 1200	500		
	gear 15 AF sz 120/G600 1RS	TGKK4070- ...			1201 – 1400	600		
	gear 15 AF sz 140/G700 1RS	TGKK4080- ...			1401 – 1600	700		
	gear 15 AF sz 160/G700 1RS 70	TGKK4280- ...			1601 – 1800	700		
	gear 15 AF sz 180/G1000 2RS 70	TGKK4220- ...			1801 – 2000	1000		
	gear 15 AF sz 200/G1000 2RS	TGKK4110- ...			2001 – 3000	1000		
13	linkage AF sz 1	TZZS0150- ...	1		2201 – 2400			
	linkage KK/AF sz 2 1RS	TZKK1020- ...			2401 – 2600			
	linkage AF sz 1	TZZS0150- ...			2601 – 2800			
	linkage KK/AF sz 2 1RS	TZKK1020- ...			2801 – 3000			
14	linkage KK/AF sz 2 1RS	TZKK1020- ...	1		2601 – 2800			
	linkage KK/AF sz 2 1RS	TZKK1020- ...			2801 – 3000			
15	handle Globe	Ref.access. ZHGS	1		450 – 3000			
16	corn.drive BS/K3 sz 1+ 1RS	TEUL2410- ...	1		801 – 1200			1
	corn.drive BS/K3 sz 2+ 1RS	TEUL2420- ...			1201 – 3000			1
17	linkage BS/FH sz 1+ 1RS	TZBS0180- ...	1		1401 – 1600			1
	linkage BS/FH sz 2+ 1RS	TZBS0190- ...			1601 – 2000			1
	linkage BS/FH sz 3+ 1RS	TZBS0200- ...			2001 – 3000			1
18	linkage BS/FH sz 1+ 1RS	TZBS0180- ...	1		2401 – 2600			1
	linkage BS/FH sz 2+ 1RS	TZBS0190- ...			2601 – 2800			1
	linkage BS/FH sz 3+ 1RS	TZBS0200- ...			2801 – 3000			1
19	tilt lock bear. S-ES FH	Ref. PDB, FRKA						
20	striker plate 56	Ref. PDB, FRSB						
on request								
21	mishandling device	TFBS0010- ...	1		601 – 3000			
22	pressure piece	Ref. PDB, TFFD	1		601 – 3000			
23	snapper rh.	TFST0021- ...	1		1801 – 3000			
	snapper lh.	TFST0022- ...			1801 – 3000			

Hinge side turning points			
Pos.	Description	Part number	
		surface TS	required as per sash weight
24	corner hinge AX	Ref. PDB, TBE41	100 kg
25	cover cap AX EL	Ref. PDB, TKEL41	1
26	bottom hinge AX	Ref. PDB, TBEV41	1





Frame dimensions main sash

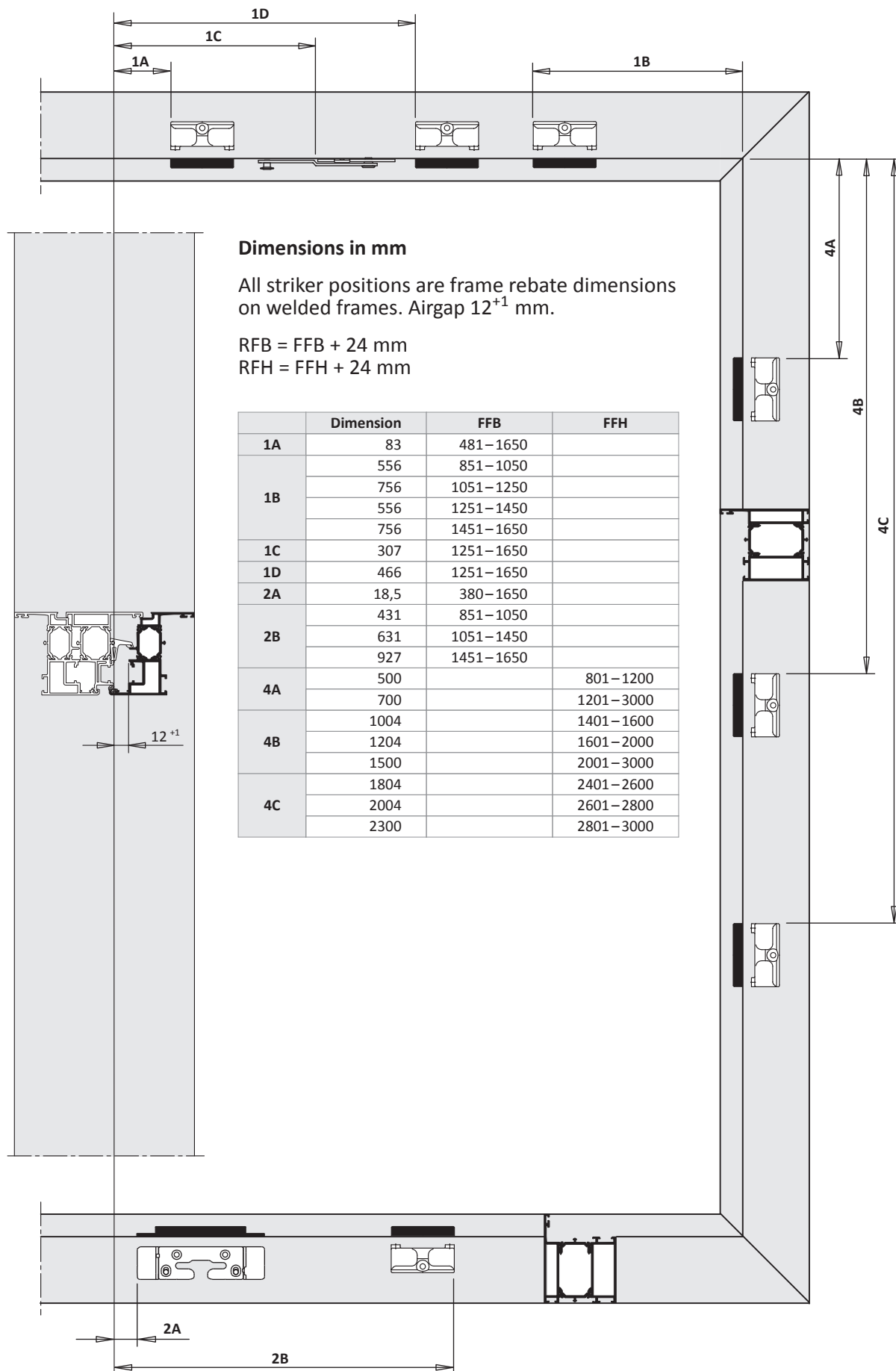
2-sash square tilt-turn/turn DS 16

ALU16 GK Hinge side axxent 24+

TITAN AF

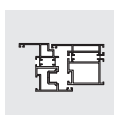
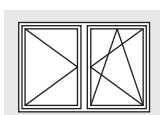
GS

2



TITAN AF

Installation instructions



GS

2-sash square tilt-turn/turn DS 16

aluminium with 16 mm BAN

basic security

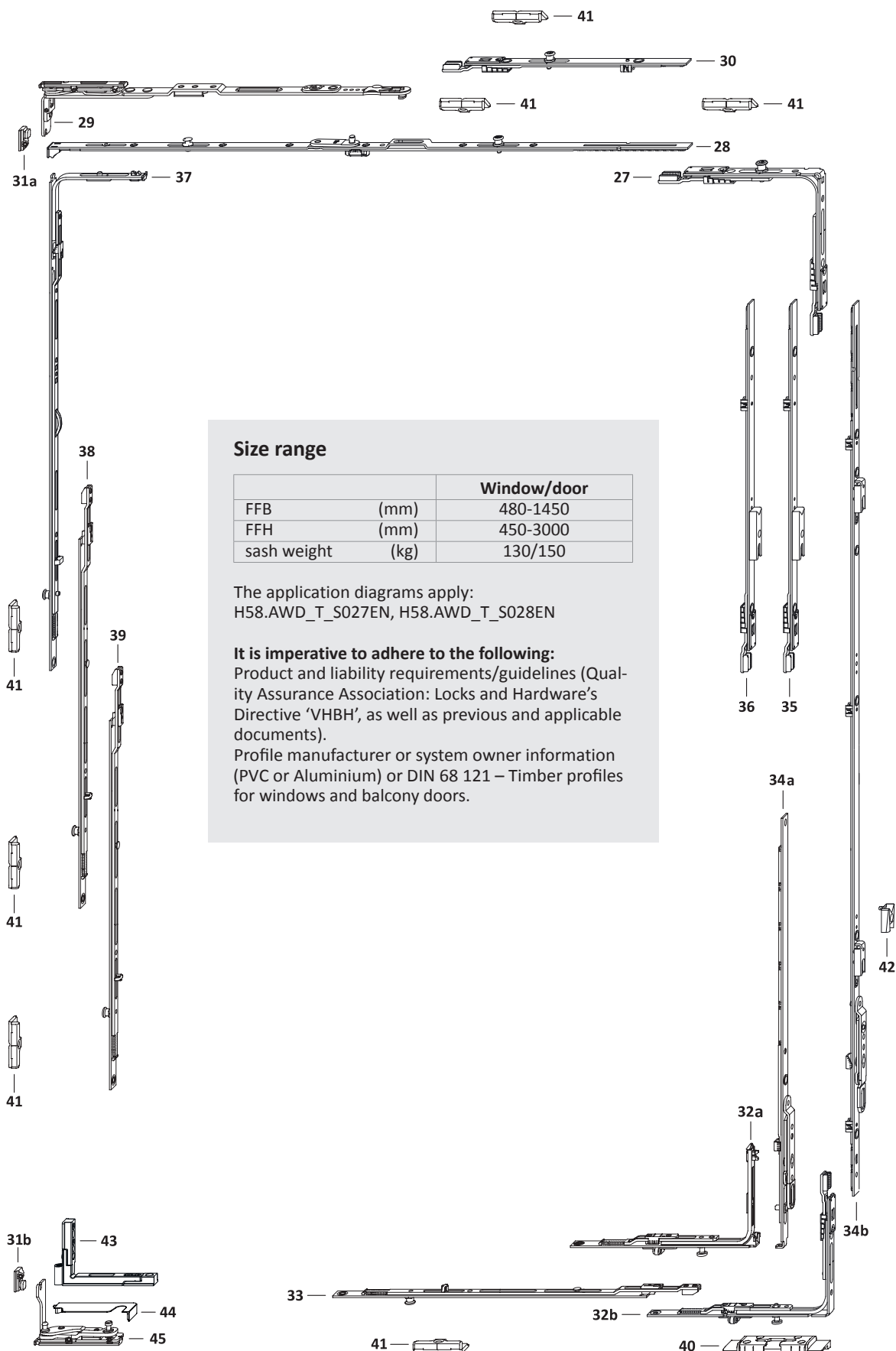
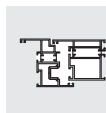
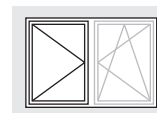
fixed handle position

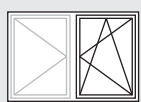
Hinge side axxent 24+

surface TS

backset 15 mm

Hardware set configuration	
General	Locking-points distance 800; secondary sash with DK-stay
Stay side	two-piece stay ax 24+
Bottom	Inliner
Locking side	mishandl. device on gear
Hinge side	corner drive BS sz 1+2 1RS

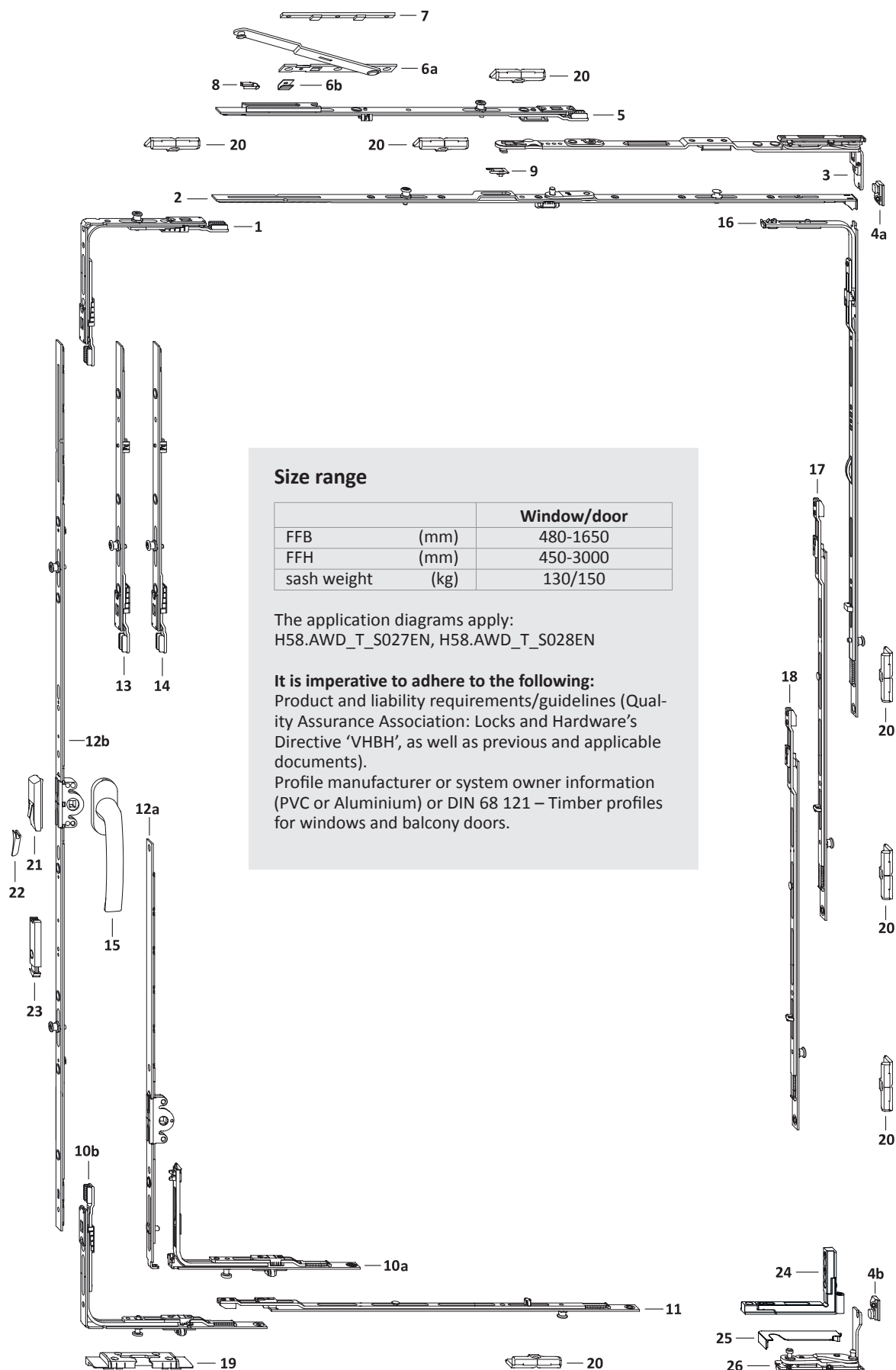




2-sash square tilt-turn/turn DS 16
ALU16 GK Hinge side axxent 24+

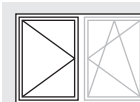
GS

2



List of fittings slave sash

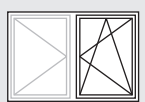
2-sash square tilt-turn/turn DS 16
ALU16 GK Hinge side axxent 24+



2

Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Number of frame parts / Pos.	
						In the main sash	40	41
27	corn.drive VSO 1RS	TEUL4010- ...	1	480 – 1450				1
28	stay sash part AF AX sz 1	TSSV4000- ...	1	480 – 680				
	stay sash part AF AX 2+3 1RS	TSSV0310- ...		681 – 850				
	stay sash part AF AX sz 4 1RS	TSSV0320- ...		851 – 1050				1
	stay sash part AF AX sz 5 1RS	TSSV0330- ...		1051 – 1450				1
29	stay arm AX sz 1	Ref. PDB, TSAV41	1	480 – 680				
	stay arm AX sz 2+3	Ref. PDB, TSAV42		681 – 850				
	stay arm AX sz 4	Ref. PDB, TSAV44		851 – 1050				
	stay arm AX sz 5	Ref. PDB, TSAV45		1051 – 1450				
30	linkage KK/AF sz 1 1RS	TZKK1010- ...	1	1251 – 1450				1
31	crt. accessories AX	Ref. PDB, TMZV41	1	1251 – 1450				
32a	locking part VSU/K FH+ 1S	TEVR1400- ...	1	480 – 1450	450 – 800		1	
32b	corn.drive AF VSU/K+ FH 1S	TEUL5010- ...	1	480 – 1450	801 – 3000		1	
33	linkage BS/FH sz 1+ 1RS	TZBS0180- ...	1	851 – 1050				1
	linkage BS/FH sz 2+ 1RS	TZBS0190- ...		1051 – 1450				1
34a	sec.sash gear 16 sz 30	TGKS0010- ...	1	480 – 1250	450 – 600	180		
	sec.sash gear 16 AF 60/G300	TGKS4030- ...			601 – 800	300		
34b	sec.sash gear 16 AF80/G400 1SB	TGKS4050- ...	1		801 – 1000	400		
	sec.sash gear 16 AF sz 100 1SB	TGKS4060- ...			1001 – 1200	500		
	sec.sash gear 16 AF120/G6001SB	TGKS4070- ...			1201 – 1400	600		
	sec.sash gear 16 AF140/G7001SB	TGKS4080- ...			1401 – 1600	700		
	sec.sash gear 16 AF160/G7002SB 70	TGKS4330- ...			1601 – 1800	700		
	sec.sash gear 16AF180/G10002SB 70	TGKS4270- ...			1801 – 2000	1000		
	sec.sash gear 16AF200/G10002SB	TGKS4110- ...			2001 – 3000	1000		
35	linkage AF sz 1	TZZS0150- ...	1		2201 – 2400			
	linkage AF sz 2 1SB-RS	TZKS1030- ...			2401 – 2600			
	linkage AF sz 1	TZZS0150- ...			2601 – 2800			
	linkage AF sz 2 1SB-RS	TZKS1030- ...			2801 – 3000			
36	linkage AF sz 2 1SB-RS	TZKS1030- ...	1		2601 – 2800			
	linkage AF sz 2 1SB-RS	TZKS1030- ...			2801 – 3000			
37	corn.drive BS/K3 sz 1+ 1RS	TEUL2410- ...	1		801 – 1200			1
	corn.drive BS/K3 sz 2+ 1RS	TEUL2420- ...			1201 – 3000			1
38	linkage BS/FH sz 1+ 1RS	TZBS0180- ...	1		1401 – 1600			1
	linkage BS/FH sz 2+ 1RS	TZBS0190- ...			1601 – 2000			1
	linkage BS/FH sz 3+ 1RS	TZBS0200- ...			2001 – 3000			1
39	linkage BS/FH sz 1+ 1RS	TZBS0180- ...	1		2401 – 2600			1
	linkage BS/FH sz 2+ 1RS	TZBS0190- ...			2601 – 2800			1
	linkage BS/FH sz 3+ 1RS	TZBS0200- ...			2801 – 3000			1
40	tilt lock bear. S-ES FH	Ref. PDB, FRKA						
41	striker plate 56	Ref. PDB, FRSB						
on request								
42	striker snapper AF A0767	TRST0100- ...	1		1801 – 3000			

Hinge side turning points				
Pos.	Description	Part number		required as per sash weight
		surface TS	RAL7037	130 kg 150 kg
43	corner hinge AX	Ref. PDB, TBEB41		1 1
44	cover cap AX EL	Ref. PDB, TKEL41		1 1
45	bottom hinge AX	Ref. PDB, TBEV41		1 1



List of fittings main sash
2-sash square tilt-turn/turn DS 16
ALU16 GK Hinge side axxent 24+

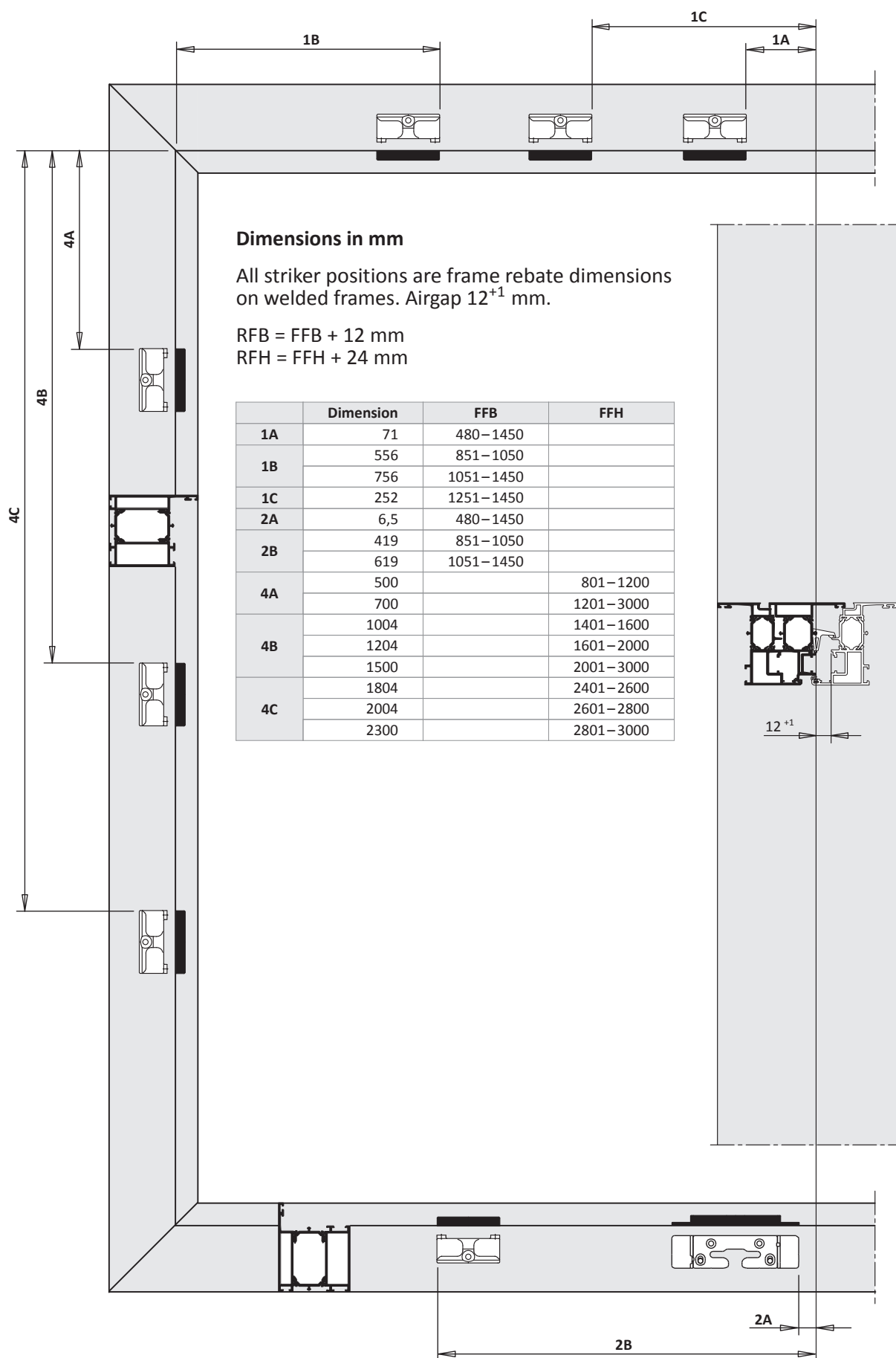
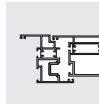
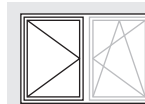
TITAN AF

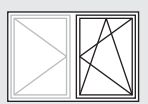
GS

2

Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Number of frame parts / Pos.	
							19	20
1	corn.drive VSO 1RS	TEUL4010- ...	1	480-1650				1
2	stay sash part AF AX sz 1	TSSV4000- ...	1	480- 680				
	stay sash part AF AX 2+3 1RS	TSSV0310- ...		681- 850				
	stay sash part AF AX sz 4 1RS	TSSV0320- ...		851-1050				1
	stay sash part AF AX sz 5 1RS	TSSV0330- ...		1051-1250				1
	stay sash part AF AX sz 4 1RS	TSSV0320- ...		1251-1450				1
	stay sash part AF AX sz 5 1RS	TSSV0330- ...		1451-1650				1
3	stay arm AX sz 1	Ref. PDB, TSAV41	1	480- 680				
	stay arm AX sz 2+3	Ref. PDB, TSAV42		681- 850				
	stay arm AX sz 4	Ref. PDB, TSAV44		851-1050				
	stay arm AX sz 5	Ref. PDB, TSAV45		1051-1250				
	stay arm AX sz 4	Ref. PDB, TSAV44		1251-1450				
	stay arm AX sz 5	Ref. PDB, TSAV45		1451-1650				
4	crt. accessories AX	Ref. PDB, TMZV41	1	480-1650				
5	linkage additional stay 1RS	TZOK1010- ...	1	1251-1650				1
6	additional stay	Ref. PDB, TSZS	1	1251-1650				
7	packer Z	Ref. PDB, FRUP01	1	1251-1650				
8	tilt restr. additional stay ..	889008	1	1251-1650				
9	tilt restrictor V-V sz 2-4 ..	TFKB0040- ...	1	681-1050	450- 900			
	tilt restrictor V-V sz 5 ..	TFKB0050- ...		1051-1250	450- 900			
10a	locking part VSU/K FH+ 1S	TEVR1400- ...	1	480-1250	450- 600		1	
10b	corn.drive AF VSU/K+ FH 1S	TEUL5010- ...	1	480-1650	601-3000		1	
11	linkage BS/FH sz 1+ 1RS	TZBS0180- ...	1	851-1050				1
	linkage BS/FH sz 2+ 1RS	TZBS0190- ...		1051-1450				1
	linkage BS/FH sz 3+ 1RS	TZBS0200- ...		1451-1650				1
12a	gear 15 sz 30/G180	TGKK3010- ...	1	480-1250	450- 600	180		
12b	gear 15 AF sz 60/G300	TGKK4030- ...	1		601- 800	300		
	gear 15 AF sz 80/G400 1RS	TGKK4050- ...			801-1000	400		
	gear 15 AF sz 100/G500 1RS	TGKK4060- ...			1001-1200	500		
	gear 15 AF sz 120/G600 1RS	TGKK4070- ...			1201-1400	600		
	gear 15 AF sz 140/G700 1RS	TGKK4080- ...			1401-1600	700		
	gear 15 AF sz 160/G700 1RS 70	TGKK4280- ...			1601-1800	700		
	gear 15 AF sz 180/G1000 2RS 70	TGKK4220- ...			1801-2000	1000		
	gear 15 AF sz 200/G1000 2RS	TGKK4110- ...			2001-3000	1000		
13	linkage AF sz 1	TZZS0150- ...	1		2201-2400			
	linkage KK/AF sz 2 1RS	TZKK1020- ...			2401-2600			
	linkage AF sz 1	TZZS0150- ...			2601-2800			
	linkage KK/AF sz 2 1RS	TZKK1020- ...			2801-3000			
14	linkage KK/AF sz 2 1RS	TZKK1020- ...	1		2601-2800			
	linkage KK/AF sz 2 1RS	TZKK1020- ...			2801-3000			
15	handle Globe	Ref.access. ZHGS	1		450-3000			
16	corn.drive BS/K3 sz 1+ 1RS	TEUL2410- ...	1		801-1200			1
	corn.drive BS/K3 sz 2+ 1RS	TEUL2420- ...			1201-3000			1
17	linkage BS/FH sz 1+ 1RS	TZBS0180- ...	1		1401-1600			1
	linkage BS/FH sz 2+ 1RS	TZBS0190- ...			1601-2000			1
	linkage BS/FH sz 3+ 1RS	TZBS0200- ...			2001-3000			1
18	linkage BS/FH sz 1+ 1RS	TZBS0180- ...	1		2401-2600			1
	linkage BS/FH sz 2+ 1RS	TZBS0190- ...			2601-2800			1
	linkage BS/FH sz 3+ 1RS	TZBS0200- ...			2801-3000			1
19	tilt lock bear. S-ES FH	Ref. PDB, FRKA						
20	striker plate 56	Ref. PDB, FRSB						
on request								
21	mishandling device	TFBS0010- ...	1		601-3000			
22	pressure piece	Ref. PDB, TFFD	1		601-3000			
23	snapper rh.	TFST0021- ...	1		1801-3000			
	snapper lh.	TFST0022- ...			1801-3000			

Hinge side turning points				
Pos.	Description	Part number		required as per sash weight
		surface TS	RAL7037	130 kg 150 kg
24	corner hinge AX	Ref. PDB, TBEB41		1 1
25	cover cap AX EL	Ref. PDB, TKEL41		1 1
26	bottom hinge AX	Ref. PDB, TBEV41		1 1





Frame dimensions main sash

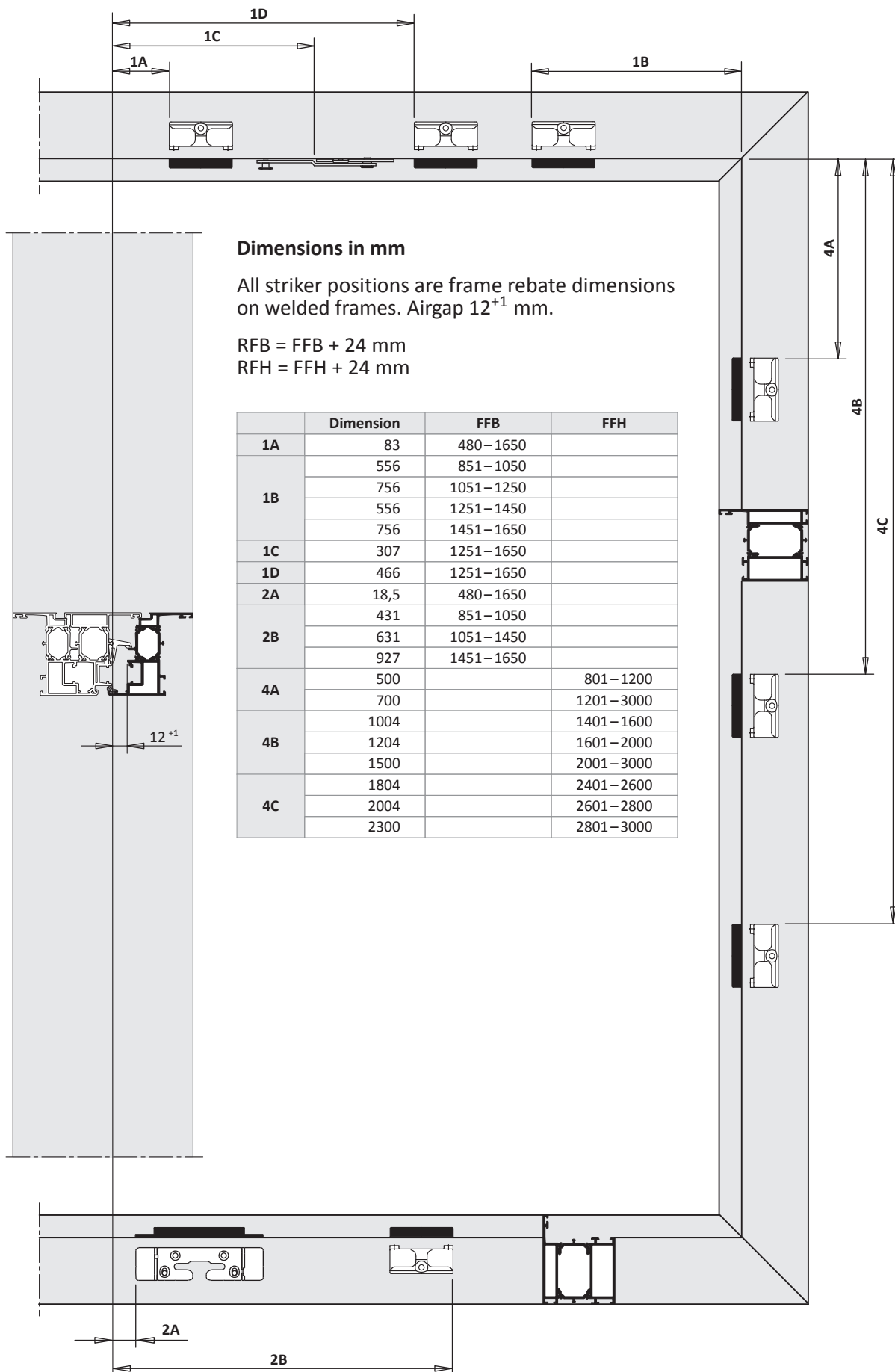
2-sash square tilt-turn/turn DS 16

ALU16 GK Hinge side axxent 24+

TITAN AF

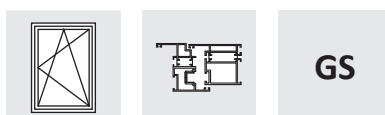
GS

2



TITAN AF

Installation instructions



1-sash square tilt before turn (TBT)

aluminium with 16 mm BAN

basic security

fixed handle position

Hinge side axxent 24+

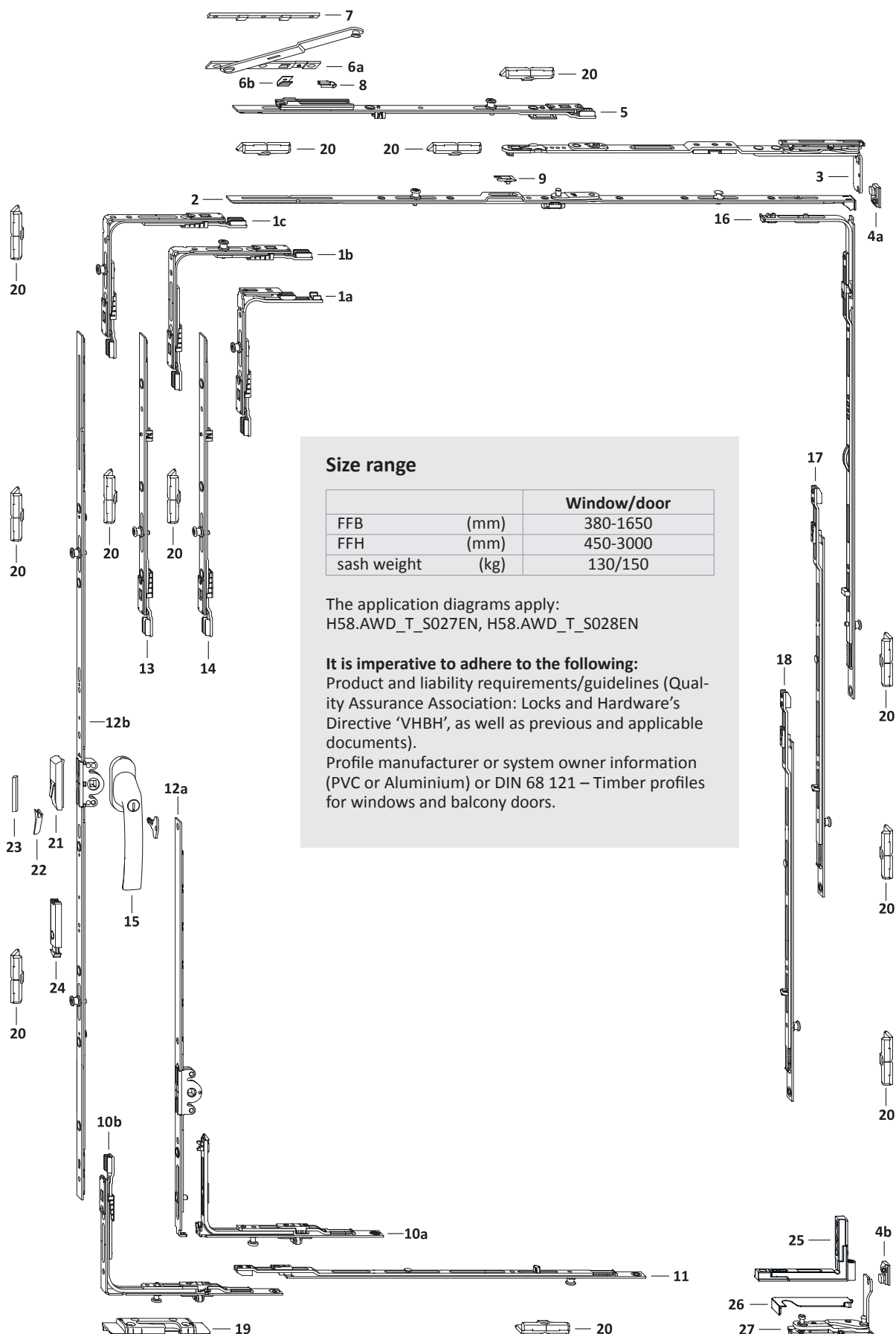
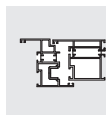
surface TS

backset 15 mm

Hardware set configuration	
General	Locking-points distance 800
Stay side	two-piece stay ax 24+
Bottom	Inliner
Locking side	mishandl. device on gear
Hinge side	corner drive BS sz 1+2 1RS

hardware layout

1-sash square tilt before turn (TBT)
ALU16 GK Hinge side axxent 24+



Size range

		Window/door
FFB	(mm)	380-1650
FFH	(mm)	450-3000
sash weight	(kg)	130/150

The application diagrams apply:
H58.AWD_T_S027EN, H58.AWD_T_S028EN

It is imperative to adhere to the following:
Product and liability requirements/guidelines (Quality Assurance Association: Locks and Hardware's Directive 'VHBH', as well as previous and applicable documents).
Profile manufacturer or system owner information (PVC or Aluminium) or DIN 68 121 – Timber profiles for windows and balcony doors.



List of fittings
1-sash square tilt before turn (TBT)
ALU16 GK Hinge side axxent 24+

TITAN AF

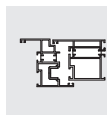
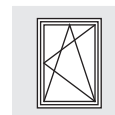
GS

2

Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Number of frame parts / Pos.	
							19	20
1a	corn.drive AF VSO narrow 1RS	TEUL4020- ...	1	380 – 480				1
1b	corn.drive VSO 1RS	TEUL4010- ...	1	481 – 1250				1
1c	corn.drive VSO 1RS	TEUL4010- ...	1	1251 – 1650				1
2	stay sash part AF AX sz 1	TSSV4000- ...	1	380 – 680				
	stay sash part AF AX 2+3 1RS	TSSV0310- ...		681 – 850				
	stay sash part AF AX sz 4 1RS	TSSV0320- ...		851 – 1050				1
	stay sash part AF AX sz 5 1RS	TSSV0330- ...		1051 – 1250				1
	stay sash part AF AX sz 4 1RS	TSSV0320- ...		1251 – 1450				1
	stay sash part AF AX sz 5 1RS	TSSV0330- ...		1451 – 1650				1
3	stay arm AX TBT sz 1	Ref. PDB, TSAV51	1	380 – 680				
	stay arm AX TBT sz 2+3	Ref. PDB, TSAV52		681 – 850				
	stay arm AX TBT sz 4	Ref. PDB, TSAV54		851 – 1050				
	stay arm AX TBT sz 5	Ref. PDB, TSAV55		1051 – 1250				
	stay arm AX TBT sz 4	Ref. PDB, TSAV54		1251 – 1450				
	stay arm AX TBT sz 5	Ref. PDB, TSAV55		1451 – 1650				
4	crt. accessories AX	Ref. PDB, TMZV41	1	380 – 1650				
5	linkage add. stay AF TBT RS	TZOT1010- ...	1	1251 – 1650				1
6	additional stay	Ref. PDB, TSZS	1	1251 – 1650				
7	packer Z	Ref. PDB, FRUP01	1	1251 – 1650				
8	tilt restr. additional stay ..	889008	1	1251 – 1650				
9	tilt restrictor V-V sz 2-4 ..	TFKB0040- ...	1	681 – 1050	450 – 900			
	tilt restrictor V-V sz 5 ..	TFKB0050- ...		1051 – 1250	450 – 900			
10a	locking part VSU/K FH+ 1S	TEVR1400- ...	1	380 – 1250	450 – 600		1	
10b	corn.drive AF VSU/K+ FH 1S	TEUL5010- ...	1	380 – 1650	601 – 3000		1	
11	linkage BS/FH sz 1+ 1RS	TZBS0180- ...	1	851 – 1050				1
	linkage BS/FH sz 2+ 1RS	TZBS0190- ...		1051 – 1450				1
	linkage BS/FH sz 3+ 1RS	TZBS0200- ...		1451 – 1650				1
12a	gear 15 sz 30/G180	TGKK3010- ...	1	380 – 1250	450 – 600	180		
12b	gear 15 AF sz 60/G300	TGKK4030- ...	1		601 – 800	300		
	gear 15 AF sz 80/G400 1RS	TGKK4050- ...			801 – 1000	400		1
	gear 15 AF sz 100/G500 1RS	TGKK4060- ...			1001 – 1200	500		1
	gear 15 AF sz 120/G600 1RS	TGKK4070- ...			1201 – 1400	600		1
	gear 15 AF sz 140/G700 1RS	TGKK4080- ...			1401 – 1600	700		1
	gear 15 AF sz 160/G700 1RS 70	TGKK4280- ...			1601 – 1800	700		2
	gear 15 AF sz 180/G1000 2RS 70	TGKK4220- ...			1801 – 2000	1000		2
	gear 15 AF sz 200/G1000 2RS	TGKK4110- ...			2001 – 3000	1000		2
13	linkage AF sz 1	TZZS0150- ...	1		2201 – 2400			
	linkage KK/AF sz 2 1RS	TZKK1020- ...			2401 – 2600			1
	linkage AF sz 1	TZZS0150- ...			2601 – 2800			
	linkage KK/AF sz 2 1RS	TZKK1020- ...			2801 – 3000			1
14	linkage KK/AF sz 2 1RS	TZKK1020- ...	1		2601 – 2800			1
	linkage KK/AF sz 2 1RS	TZKK1020- ...			2801 – 3000			1
15	handle Globe TBT lockable	Ref.access. ZHGT	1		450 – 3000			
16	corn.drive BS/K3 sz 1+ 1RS	TEUL2410- ...	1		801 – 1200			1
	corn.drive BS/K3 sz 2+ 1RS	TEUL2420- ...			1201 – 3000			1
17	linkage BS/FH sz 1+ 1RS	TZBS0180- ...	1		1401 – 1600			1
	linkage BS/FH sz 2+ 1RS	TZBS0190- ...			1601 – 2000			1
	linkage BS/FH sz 3+ 1RS	TZBS0200- ...			2001 – 3000			1
18	linkage BS/FH sz 1+ 1RS	TZBS0180- ...	1		2401 – 2600			1
	linkage BS/FH sz 2+ 1RS	TZBS0190- ...			2601 – 2800			1
	linkage BS/FH sz 3+ 1RS	TZBS0200- ...			2801 – 3000			1
19	tilt lock bear. S-ES FH TBT	Ref. PDB, FRKB						
20	striker plate 56	Ref. PDB, FRSB						
on request								
21	mishandling device	TFBS0010- ...	1					
22	pressure piece	Ref. PDB, TFFD	1					
23	stop	Ref. PDB, FRZF01	1					
24	snapper rh.	TFST0021- ...	1		1801 – 3000			
	snapper lh.	TFST0022- ...			1801 – 3000			

List of fittings

1-sash square tilt before turn (TBT)
ALU16 GK Hinge side axxent 24+



2

Hinge side turning points					
Pos.	Description	Part number		required as per sash weight	
		surface TS	RAL7037	130 kg	150 kg
25	corner hinge AX	Ref. PDB, TBEB41		1	1
26	cover cap AX EL	Ref. PDB, TKEL41		1	1
27	bottom hinge AX	Ref. PDB, TBEV41		1	1



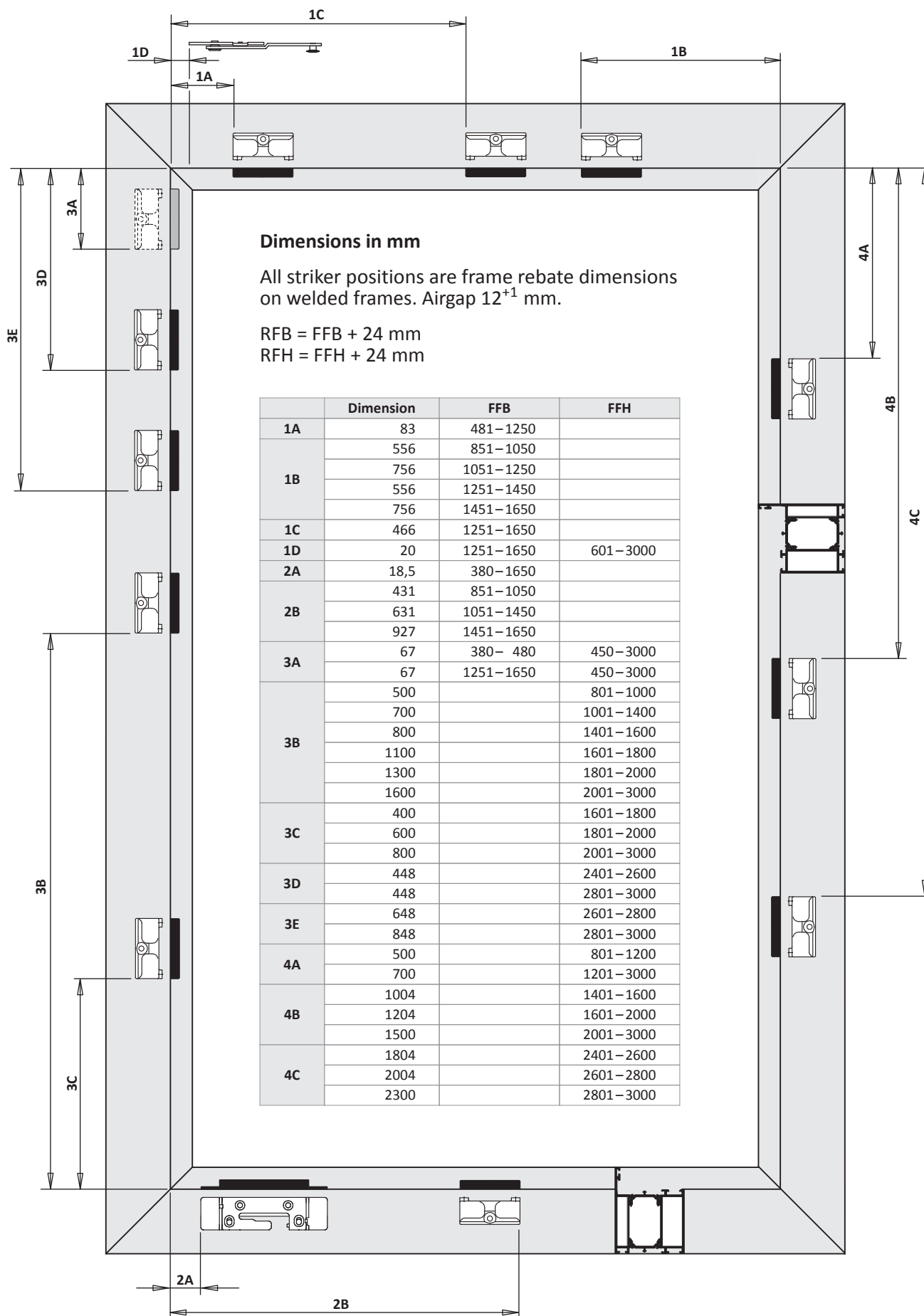
Frame dimensions

1-sash square tilt before turn (TBT)
ALU16 GK Hinge side axxent 24+

TITAN AF

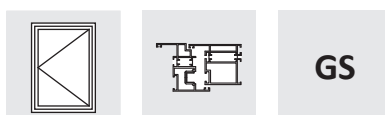
GS

2



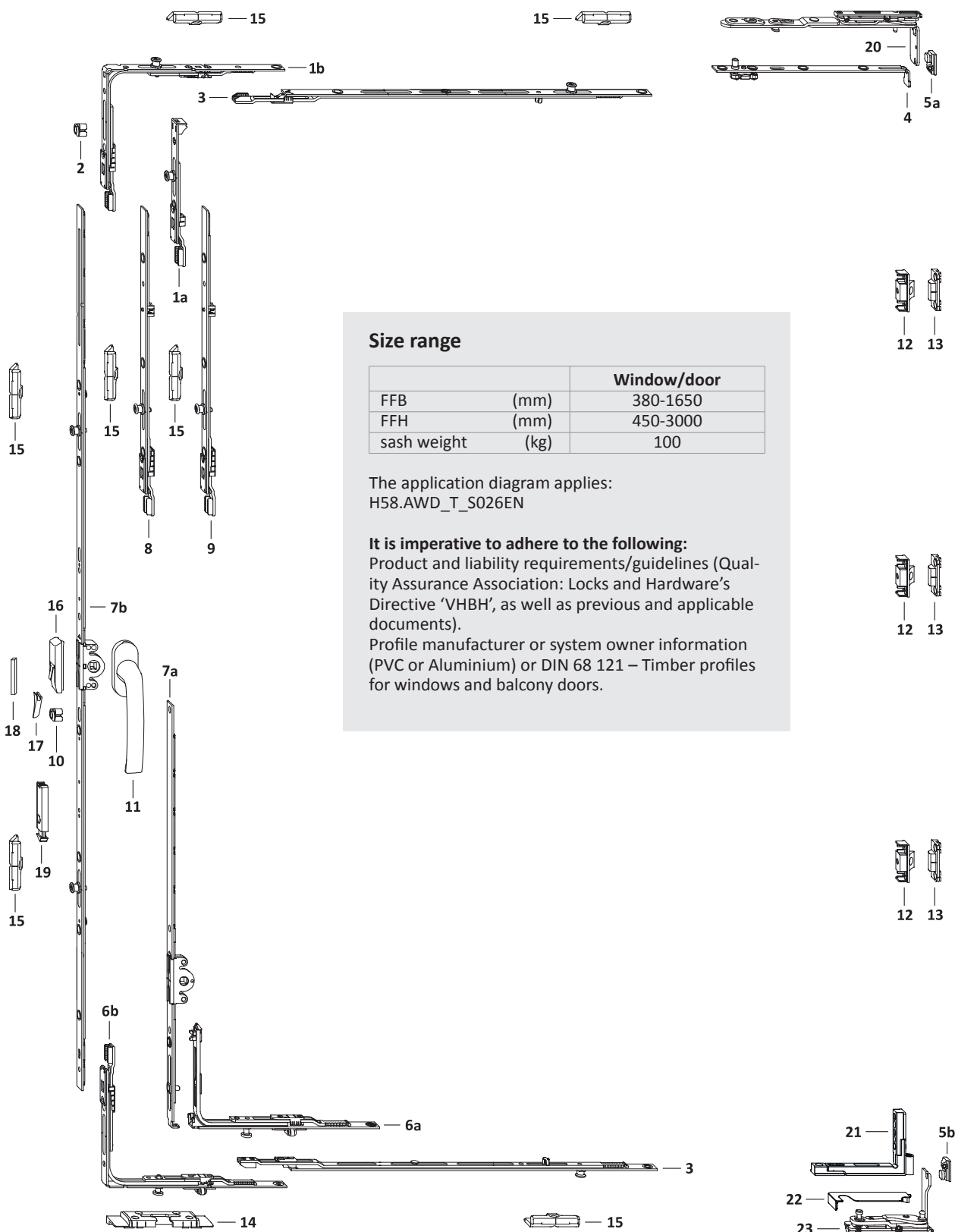
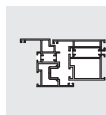
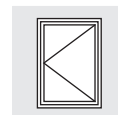
TITAN AF

Installation instructions



1-sash square turn
 aluminium with 16 mm BAN
 basic security
 fixed handle position
 Hinge side axxent 24+
 surface TS
 backset 15 mm

Hardware set configuration	
General	Locking-points distance 800
Stay side	two-piece stay ax 24+
Bottom	Inliner
Locking side	mishandl. device on gear



Size range

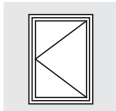
		Window/door
FFB	(mm)	380-1650
FFH	(mm)	450-3000
sash weight	(kg)	100

The application diagram applies:
H58.AWD_T_S026EN

It is imperative to adhere to the following:

Product and liability requirements/guidelines (Quality Assurance Association: Locks and Hardware's Directive 'VHBH', as well as previous and applicable documents).

Profile manufacturer or system owner information (PVC or Aluminium) or DIN 68 121 – Timber profiles for windows and balcony doors.



List of fittings
1-sash square turn
ALU16 GK Hinge side axxent 24+

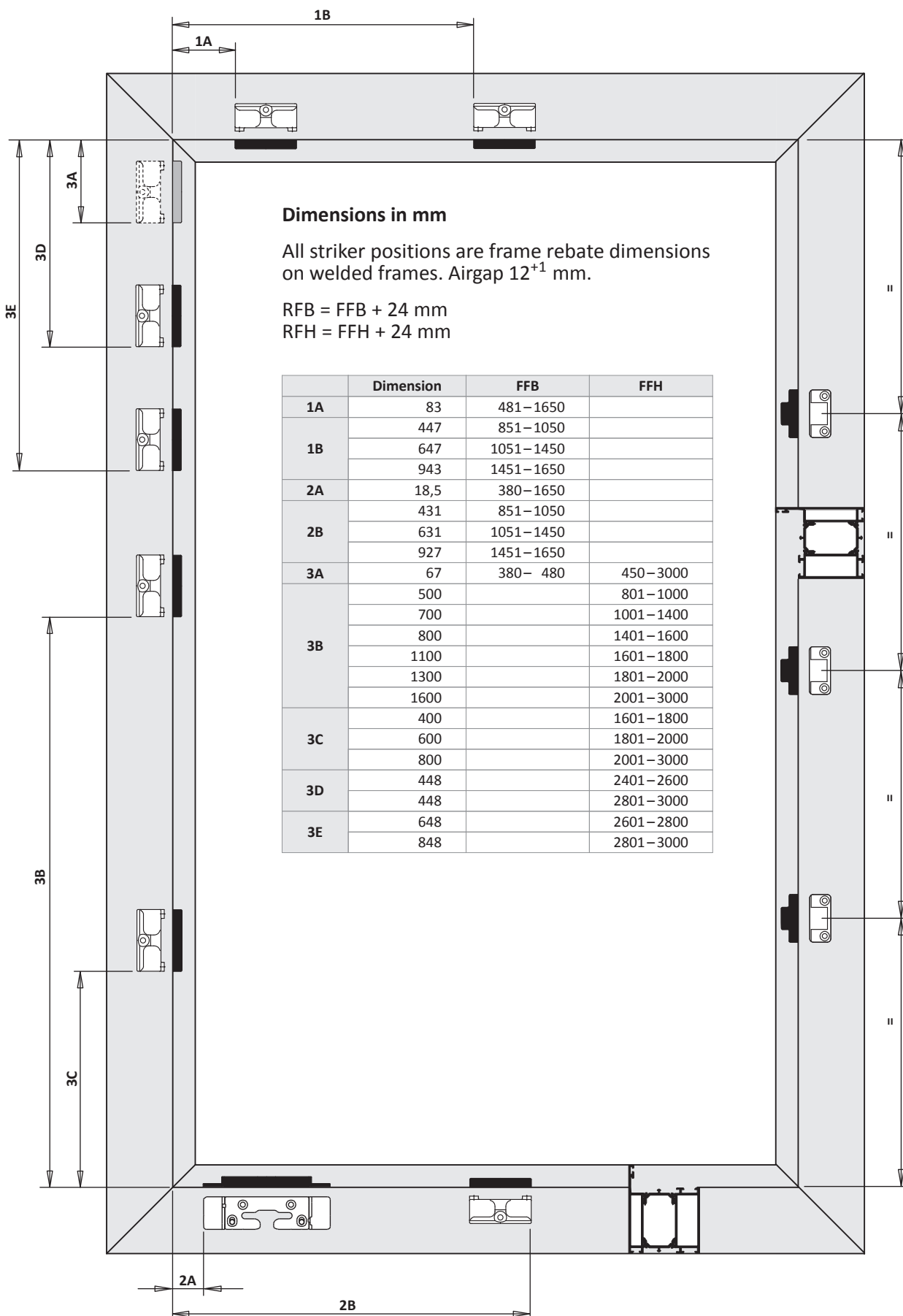
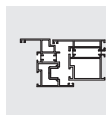
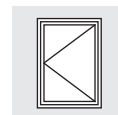
TITAN AF

GS

2

Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Number of frame parts / Pos.	
							14	15
1a	locking bolt AF VS 180° 1RS	TESC2020- ...	1	380– 480				1
1b	corn.drive VSO/K+ DF 1RS	TEUL4110- ...	1	481–1650				1
2	travel restrictor	TFHB0010- ...	1	380–1250	450– 600			
3	linkage BS/FH sz 1+ 1RS	TZBS0180- ...	2	851–1050				2
	linkage BS/FH sz 2+ 1RS	TZBS0190- ...		1051–1450				2
	linkage BS/FH sz 3+ 1RS	TZBS0200- ...		1451–1650				2
4	stay sash part DF AX	TSSV3020- ...	1	380–1650				
5	crt. accessories AX	Ref. PDB, TMZV41	1	380–1650				
6a	locking part VSU/K FH+ 1S	TEVR1400- ...	1	380–1250	450– 600		1	
6b	corn.drive AF VSU/K+ FH 1S	TEUL5010- ...	1	380–1650	601–3000		1	
7a	gear 15 sz 30/G180	TGKK3010- ...	1	380–1250	450– 600	180		
7b	gear 15 AF sz 60/G300	TGKK4030- ...	1		601– 800	300		
	gear 15 AF sz 80/G400 1RS	TGKK4050- ...			801–1000	400		1
	gear 15 AF sz 100/G500 1RS	TGKK4060- ...			1001–1200	500		1
	gear 15 AF sz 120/G600 1RS	TGKK4070- ...			1201–1400	600		1
	gear 15 AF sz 140/G700 1RS	TGKK4080- ...			1401–1600	700		1
	gear 15 AF sz 160/G700 1RS 70	TGKK4280- ...			1601–1800	700		2
	gear 15 AF sz 180/G1000 2RS 70	TGKK4220- ...			1801–2000	1000		2
	gear 15 AF sz 200/G1000 2RS	TGKK4110- ...			2001–3000	1000		2
8	linkage AF sz 1	TZZS0150- ...	1		2201–2400			
	linkage KK/AF sz 2 1RS	TZKK1020- ...			2401–2600			1
	linkage AF sz 1	TZZS0150- ...			2601–2800			
	linkage KK/AF sz 2 1RS	TZKK1020- ...			2801–3000			1
9	linkage KK/AF sz 2 1RS	TZKK1020- ...	1		2601–2800			1
	linkage KK/AF sz 2 1RS	TZKK1020- ...			2801–3000			1
10	travel restrictor	TFHB0010- ...	1		601–3000			
11	handle Globe	Ref.access. ZHGS	1		450–3000			
12	sash part MV	Ref. PDB, ZFMV01	1		801–1600			
	sash part MV	Ref. PDB, ZFMV01	2		1601–2400			
	sash part MV	Ref. PDB, ZFMV01	3		2401–3000			
13	frame part MV	Ref. PDB, ZRZM01	1		801–1600			
	frame part MV	Ref. PDB, ZRZM01	2		1601–2400			
	frame part MV	Ref. PDB, ZRZM01	3		2401–3000			
14	tilt lock bear. S-ES FH	Ref. PDB, FRKA						
15	striker plate 56	Ref. PDB, FRSB						
on request								
16	mishandling device	TFBS0010- ...	1					
17	pressure piece	Ref. PDB, TFFD	1					
18	stop	Ref. PDB, FRZF01	1					
19	snapper rh.	TFST0021- ...	1		1801–3000			
	snapper lh.	TFST0022- ...			1801–3000			

Hinge side turning points			
Pos.	Description	Part number	
		surface TS	required as per sash weight
20	stay arm AX DF	Ref. PDB, TSAV46	100 kg
21	corner hinge AX	Ref. PDB, TBEB41	1
22	cover cap AX EL	Ref. PDB, TKEL41	1
23	bottom hinge AX	Ref. PDB, TBEV41	1





3 - Basic security - Centre handle pos.

Installation instructions ALU16
Hinge side axxent 24+

TITAN AF

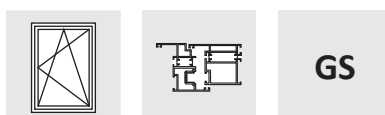
Basic security - Centre handle pos. (variable)

1-sash square tilt-turn	H48.TAFALUM0S006EN	3 - 3
2-sash square tilt-turn/turn DS 16 DF-stay	H48.TAFALUM0S007EN	3 - 7
2-sash square tilt-turn/turn DS 16	H48.TAFALUM0S008EN	3 - 15
tilt before turn (TBT)		
1-sash square tilt before turn (TBT)	H48.TAFALUM0S010EN	3 - 23
square turn		
1-sash square turn	H48.TAFALUM0S009EN	3 - 27

3

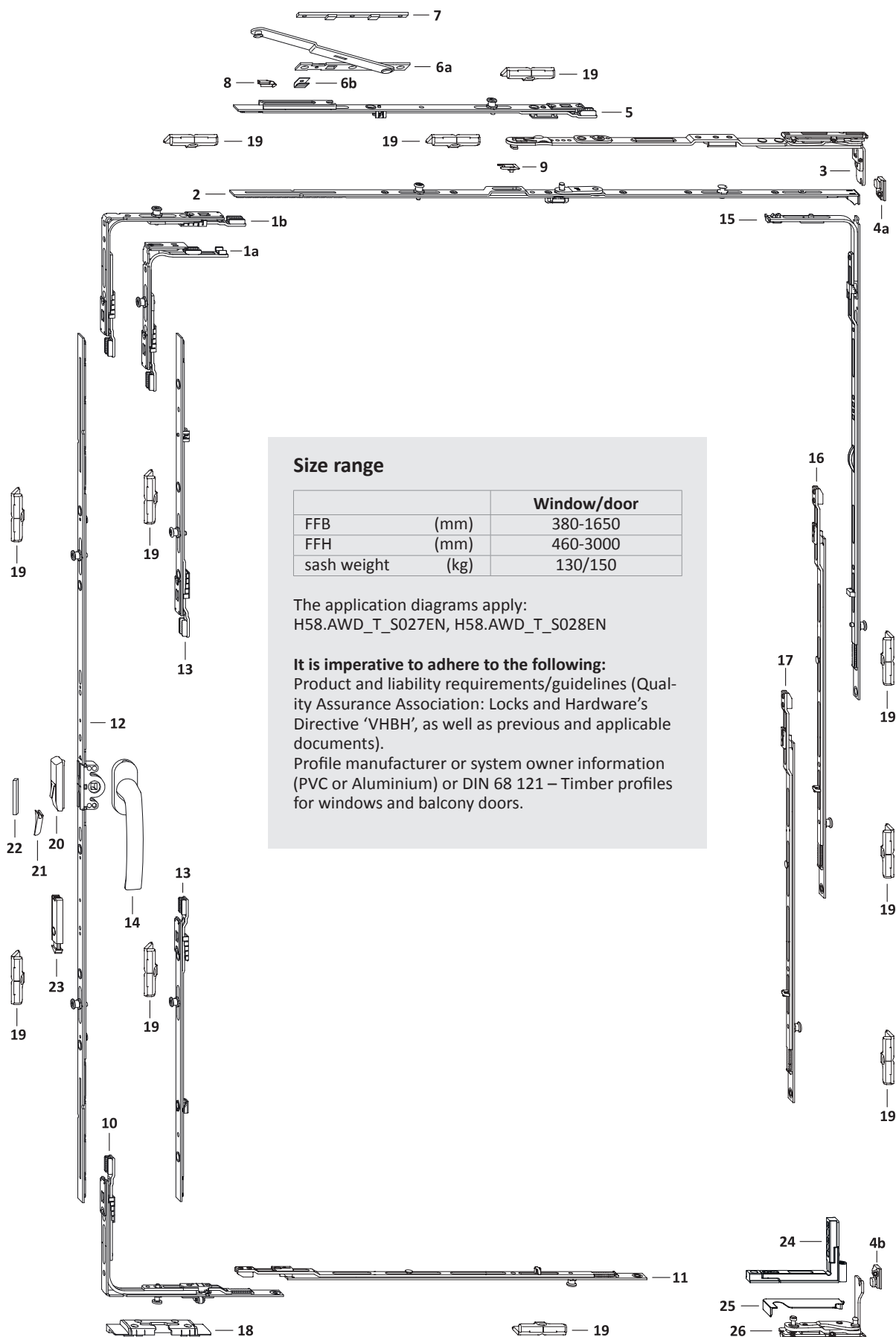
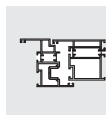
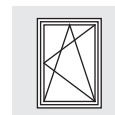
TITAN AF

Installation instructions



1-sash square tilt-turn
 aluminium with 16 mm BAN
 basic security
 centre handle pos. (variable)
 Hinge side axxent 24+
 surface TS
 backset 15 mm

Hardware set configuration	
General	Locking-points distance 800
Stay side	two-piece stay ax 24+
Bottom	Inliner
Locking side	mishandl. device on gear
Hinge side	corner drive BS sz 1+2 1RS



Size range

		Window/door
FFB	(mm)	380-1650
FFH	(mm)	460-3000
sash weight	(kg)	130/150

The application diagrams apply:
H58.AWD_T_S027EN, H58.AWD_T_S028EN

It is imperative to adhere to the following:

Product and liability requirements/guidelines (Quality Assurance Association: Locks and Hardware's Directive 'VHBH', as well as previous and applicable documents).

Profile manufacturer or system owner information (PVC or Aluminium) or DIN 68 121 – Timber profiles for windows and balcony doors.



List of fittings

1-sash square tilt-turn
ALU16 GM Hinge side axxent 24+

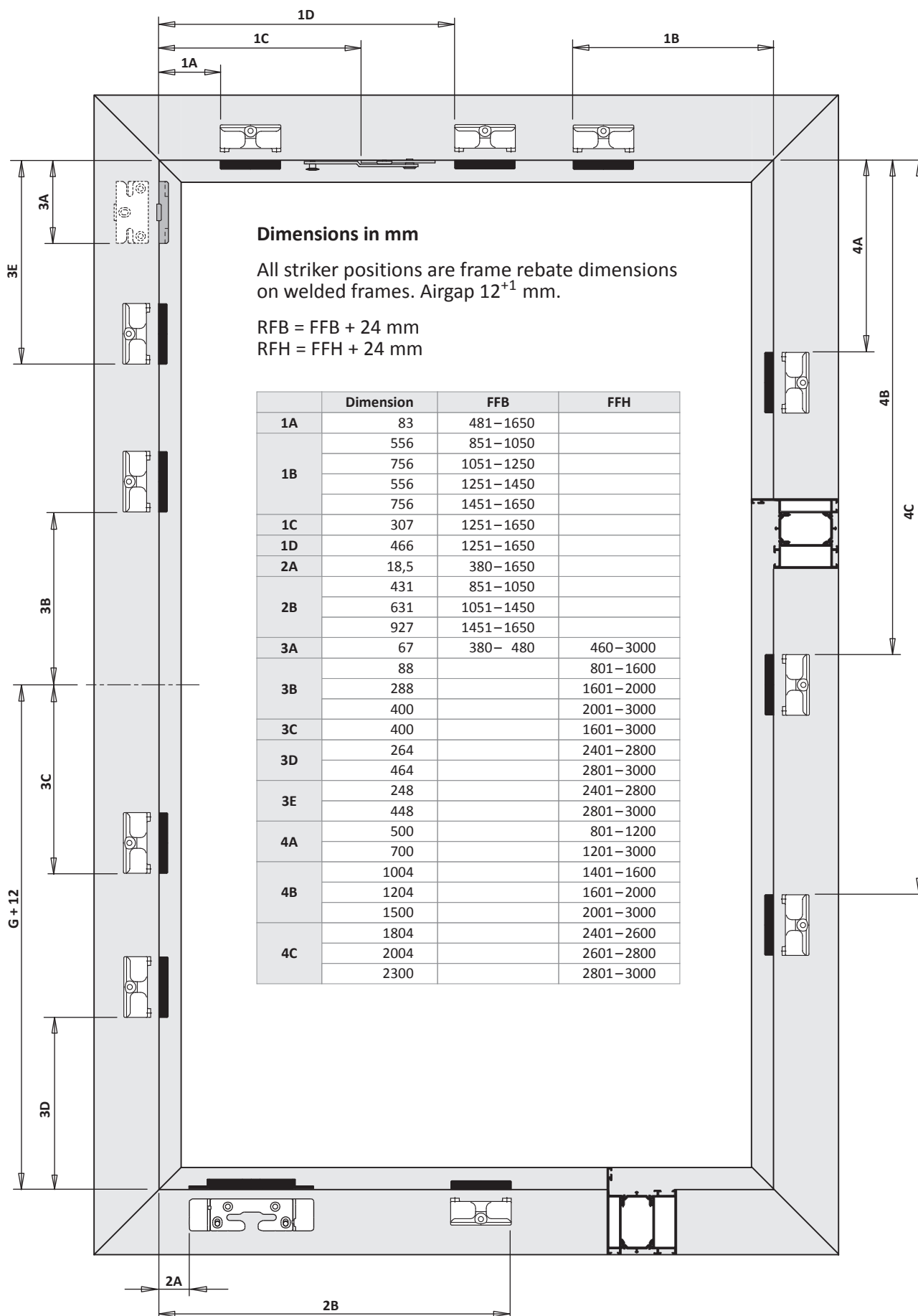
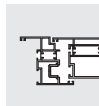
TITAN AF

GS

3

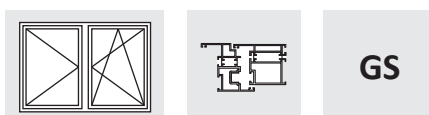
Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Number of frame parts / Pos.	
							18	19
1a	corn.drive AF VSO narrow 1RS	TEUL4020- ...	1	380– 480				1
1b	corn.drive VSO 1RS	TEUL4010- ...	1	481–1650				1
2	stay sash part AF AX sz 1	TSSV4000- ...	1	380– 680				
	stay sash part AF AX 2+3 1RS	TSSV0310- ...		681– 850				
	stay sash part AF AX sz 4 1RS	TSSV0320- ...		851–1050				1
	stay sash part AF AX sz 5 1RS	TSSV0330- ...		1051–1250				1
	stay sash part AF AX sz 4 1RS	TSSV0320- ...		1251–1450				1
	stay sash part AF AX sz 5 1RS	TSSV0330- ...		1451–1650				1
3	stay arm AX sz 1	Ref. PDB, TSAV41	1	380– 680				
	stay arm AX sz 2+3	Ref. PDB, TSAV42		681– 850				
	stay arm AX sz 4	Ref. PDB, TSAV44		851–1050				
	stay arm AX sz 5	Ref. PDB, TSAV45		1051–1250				
	stay arm AX sz 4	Ref. PDB, TSAV44		1251–1450				
	stay arm AX sz 5	Ref. PDB, TSAV45		1451–1650				
4	crt. accessories AX	Ref. PDB, TMZV41	1	380–1650				
5	linkage additional stay 1RS	TZOK1010- ...	1	1251–1650				1
6	additional stay	Ref. PDB, TSZS	1	1251–1650				
7	packer Z	Ref. PDB, FRUP01	1	1251–1650				
8	tilt restr. additional stay ..	889008	1	1251–1650				
9	tilt restrictor V-V sz 2-4 ..	TFKB0040- ...	1	681–1050	460– 900			
	tilt restrictor V-V sz 5 ..	TFKB0050- ...		1051–1250	460– 900			
10	corn.drive AF VSU/K+ FH 1S	TEUL5010- ...	1	380–1650			1	
11	linkage BS/FH sz 1+ 1RS	TZBS0180- ...	1	851–1050				1
	linkage BS/FH sz 2+ 1RS	TZBS0190- ...		1051–1450				1
	linkage BS/FH sz 3+ 1RS	TZBS0200- ...		1451–1650				1
12	gear 15 AF sz 20	TGMK4010- ...	1		460– 600	230– 300		
	gear 15 AF sz 60	TGMK4020- ...			601– 800	300– 400		
	gear 15 AF sz 80 1RS	TGMK4040- ...			801–1200	400– 600		1
	gear 15 AF sz 120 1RS	TGMK4050- ...			1201–1600	600– 800		1
	gear 15 AF sz 160 2RS 70	TGMK4170- ...			1601–2000	800–1000		2
	gear 15 AF sz 200 2RS	TGMK4080- ...			2001–3000	1000–1500		2
13	linkage KK/AF sz 1 1RS	TZKK1010- ...	2		2401–2800			2
	linkage KK/AF sz 2 1RS	TZKK1020- ...			2801–3000			2
14	handle Globe	Ref.access. ZHGS	1		460–3000			
15	corn.drive BS/K3 sz 1+ 1RS	TEUL2410- ...	1		801–1200			1
	corn.drive BS/K3 sz 2+ 1RS	TEUL2420- ...			1201–3000			1
16	linkage BS/FH sz 1+ 1RS	TZBS0180- ...	1		1401–1600			1
	linkage BS/FH sz 2+ 1RS	TZBS0190- ...			1601–2000			1
	linkage BS/FH sz 3+ 1RS	TZBS0200- ...			2001–3000			1
17	linkage BS/FH sz 1+ 1RS	TZBS0180- ...	1		2401–2600			1
	linkage BS/FH sz 2+ 1RS	TZBS0190- ...			2601–2800			1
	linkage BS/FH sz 3+ 1RS	TZBS0200- ...			2801–3000			1
18	tilt lock bear. S-ES FH	Ref. PDB, FRKA						
19	striker plate 56	Ref. PDB, FRSB						
on request								
20	mishandling device	TFBS0010- ...	1					
21	pressure piece	Ref. PDB, TFFD	1					
22	stop	Ref. PDB, FRZF01	1					
23	snapper rh.	TFST0021- ...	1		1601–3000			
	snapper lh.	TFST0022- ...			1601–3000			

Hinge side turning points				
Pos.	Description	Part number		required as per sash weight
		surface TS	RAL7037	130 kg 150 kg
24	corner hinge AX	Ref. PDB, TBEB41		1 1
25	cover cap AX EL	Ref. PDB, TKEL41		1 1
26	bottom hinge AX	Ref. PDB, TBEV41		1 1



TITAN AF

Installation instructions



2-sash square tilt-turn/turn DS 16

aluminium with 16 mm BAN

basic security

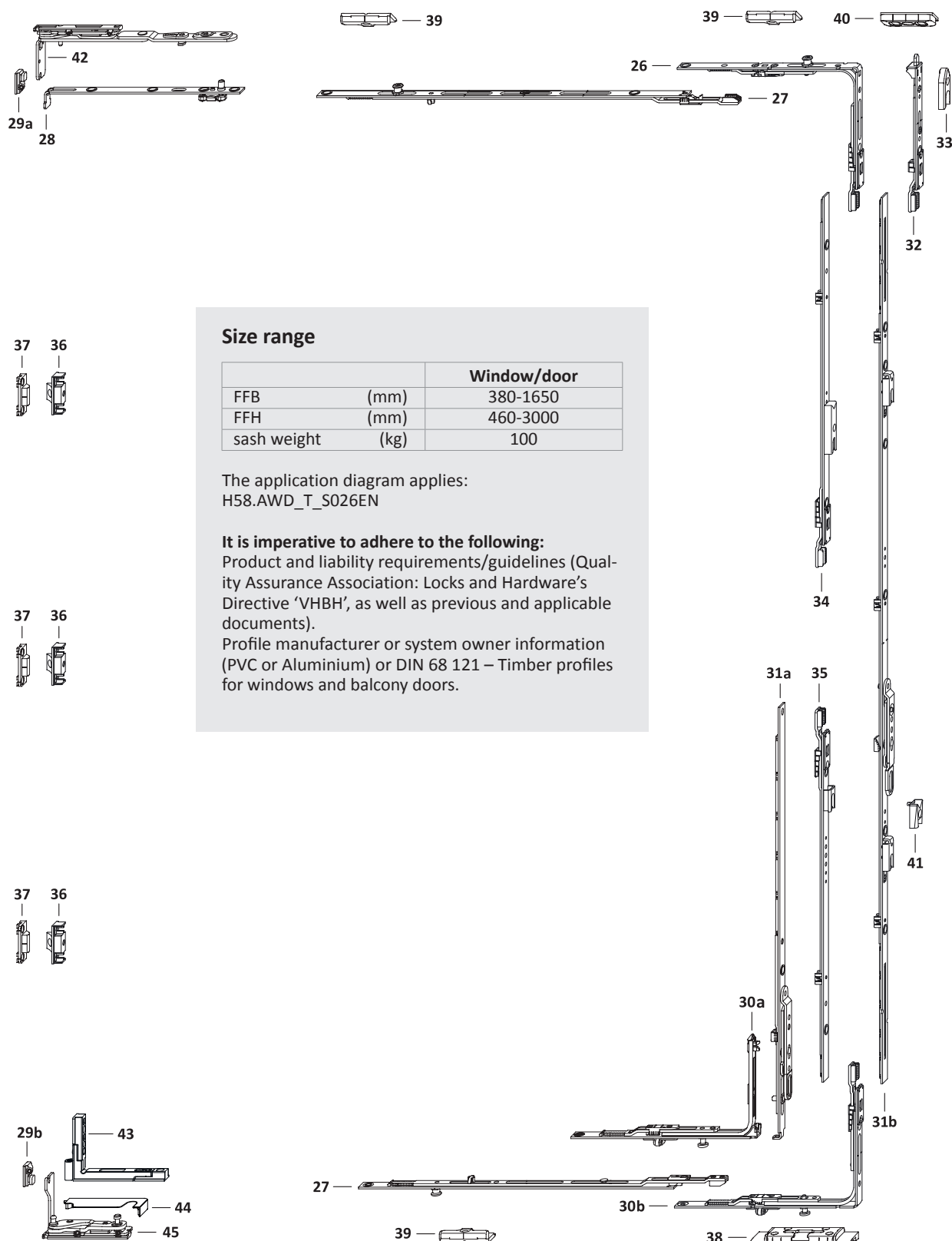
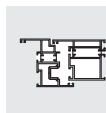
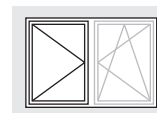
centre handle pos. (variable)

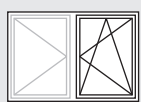
Hinge side axxent 24+

surface TS

backset 15 mm

Hardware set configuration	
General	Locking-points distance 800
Stay side	two-piece stay ax 24+
Bottom	Inliner
Locking side	mishandl. device on gear
Hinge side	corner drive BS sz 1+2 1RS





hardware layout main sash

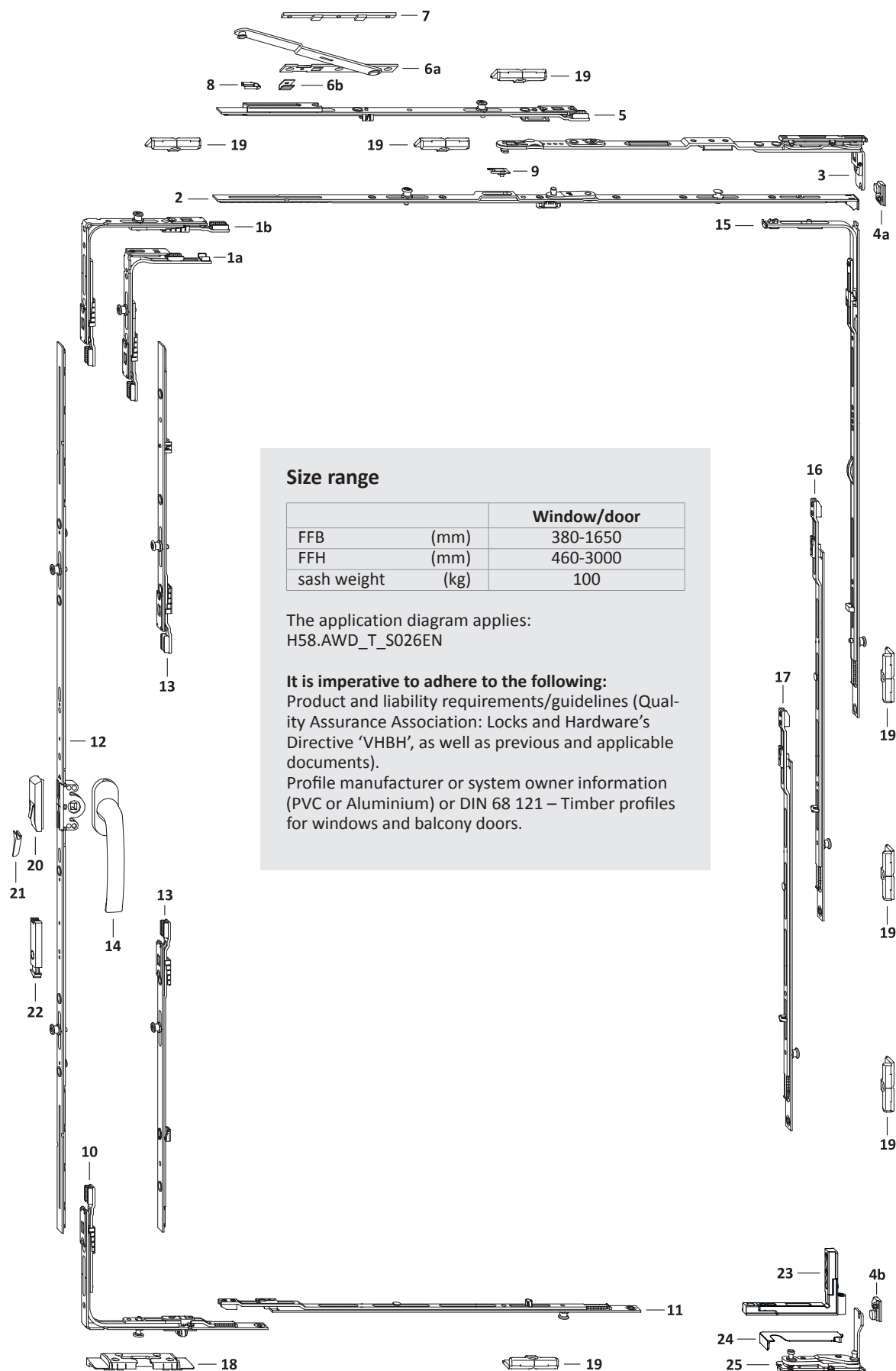
2-sash square tilt-turn/turn DS 16

ALU16 GM Hinge side axxent 24+

TITAN AF

GS

3



Size range

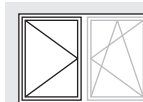
		Window/door
FFB	(mm)	380-1650
FFH	(mm)	460-3000
sash weight	(kg)	100

The application diagram applies:
H58.AWD_T_S026EN

It is imperative to adhere to the following:
Product and liability requirements/guidelines (Quality Assurance Association: Locks and Hardware's Directive 'VHBH', as well as previous and applicable documents).
Profile manufacturer or system owner information (PVC or Aluminium) or DIN 68 121 – Timber profiles for windows and balcony doors.

List of fittings slave sash

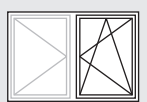
2-sash square tilt-turn/turn DS 16
ALU16 GM Hinge side axxent 24+



3

Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Number of frame parts / Pos.		
						In the main sash	38	39	40
26	corn.drive VSO/K+ DF 1RS	TEUL4110- ...	1	481–1650				1	
27	linkage BS/FH sz 1+ 1RS	TZBS0180- ...	2	851–1050				2	
	linkage BS/FH sz 2+ 1RS	TZBS0190- ...		1051–1450				2	
	linkage BS/FH sz 3+ 1RS	TZBS0200- ...		1451–1650				2	
28	stay sash part DF AX	TSSV3020- ...	1	380–1650					
29	crt. accessories AX	Ref. PDB, TMZV41	1	380–1650					
30a	locking part VSU/K FH+ 1S	TEVR1400- ...	1	380–1650	460– 800		1		
30b	corn.drive AF VSU/K+ FH 1S	TEUL5010- ...	1	380–1650	801–3000		1		
31a	sec.sash gear 16 sz 30	TGKS0010- ...	1		460– 600	230– 300			
	sec.sash gear 16 AF 60/G300	TGKS4030- ...			601– 800	300– 400			
31b	sec.sash gear 16 AF sz 80 1SB	TGMS4040- ...	1		801–1200	400– 600			
	sec.sash gear 16 AF sz 120 1SB	TGMS4050- ...			1201–1600	600– 800			
	sec.sash gear 16 AF 160 2SB 70	TGMS4130- ...			1601–2000	800–1000			
	sec.sash gear 16 AF sz 200 2SB	TGMS4080- ...			2001–3000	1000–1500			
32	locking bolt AF VSO RSA 11	TESC2030- ...	1	380– 480	460–3000				1
33	striker plate A0767	TRSA0010- ...	1	380– 480	460–3000				
34	linkage AF sz 1 1SB-RS	TZKS1020- ...	1		2401–2800				
	linkage AF sz 2 1SB-RS	TZKS1030- ...			2801–3000				
35	linkage AF sz 1 1SB-VSU	TZKS1060- ...	1		2401–2800				
	linkage AF sz 2 1SB-VSU	TZKS1070- ...			2801–3000				
36	sash part MV	Ref. PDB, ZFMV01	1		801–1600				
	sash part MV	Ref. PDB, ZFMV01	2		1601–2400				
	sash part MV	Ref. PDB, ZFMV01	3		2401–3000				
37	frame part MV	Ref. PDB, ZRZM01	1		801–1600				
	frame part MV	Ref. PDB, ZRZM01	2		1601–2400				
	frame part MV	Ref. PDB, ZRZM01	3		2401–3000				
38	tilt lock bear. S-ES FH	Ref. PDB, FRKA							
39	striker plate 56	Ref. PDB, FRSB							
40	striker V	Ref. PDB, FRZV02							
on request									
41	striker snapper AF A0767	TRST0100- ...	1		1601–3000				

Hinge side turning points			
Pos.	Description	Part number	
		surface TS	required as per sash weight
42	stay arm AX DF	Ref. PDB, TSAV46	100 kg
43	corner hinge AX	Ref. PDB, TBEB41	1
44	cover cap AX EL	Ref. PDB, TKEL41	1
45	bottom hinge AX	Ref. PDB, TBEV41	1



List of fittings main sash

2-sash square tilt-turn/turn DS 16

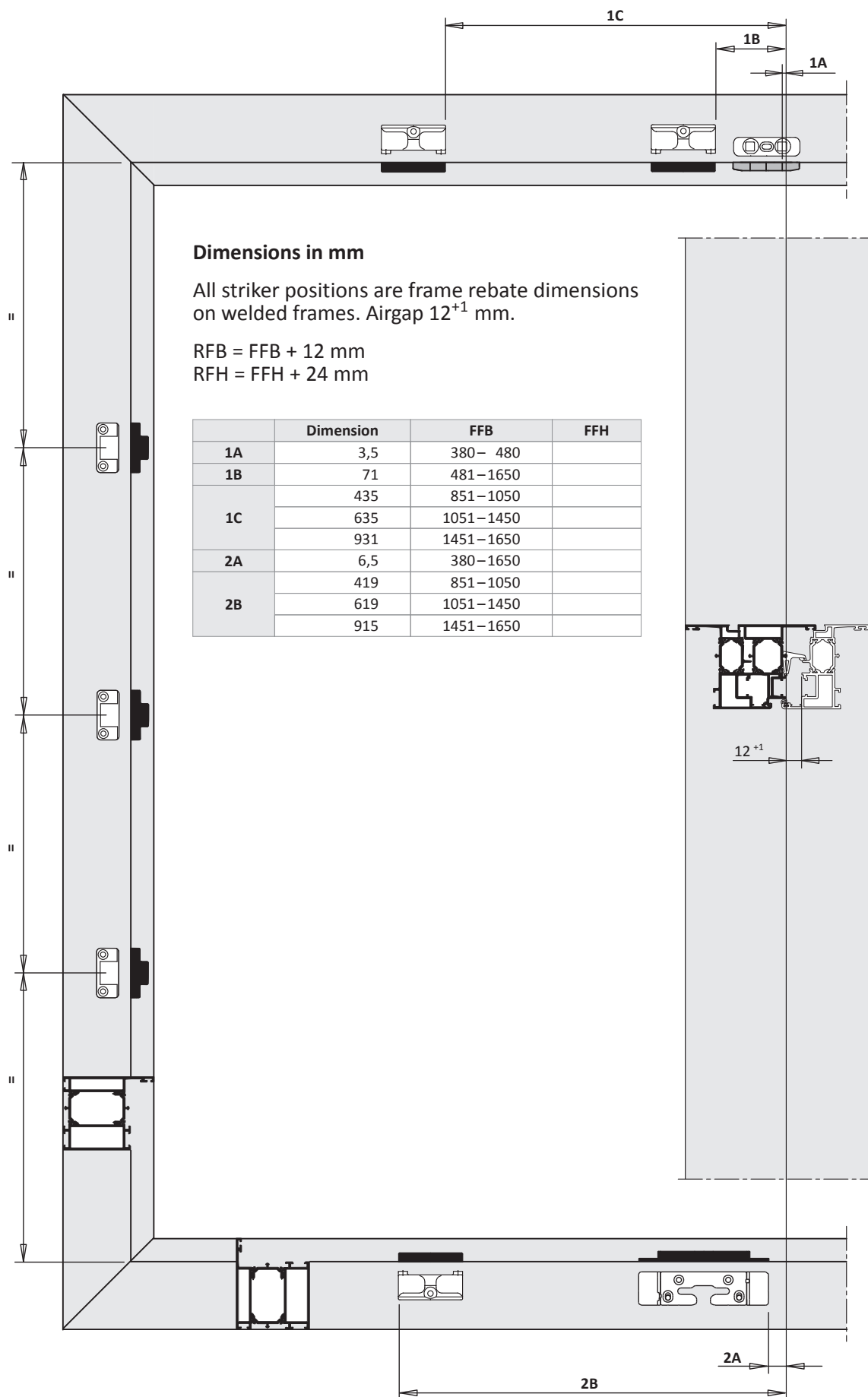
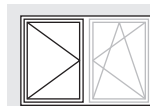
ALU16 GM Hinge side axxent 24+

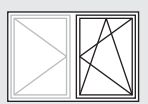
TITAN AF

GS

Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Number of frame parts / Pos.	
							18	19
1a	corn.drive AF VSO narrow 1RS	TEUL4020- ...	1	380– 480				
1b	corn.drive VSO 1RS	TEUL4010- ...	1	481–1650				1
2	stay sash part AF AX sz 1	TSSV4000- ...	1	380– 680				
	stay sash part AF AX 2+3 1RS	TSSV0310- ...		681– 850				
	stay sash part AF AX sz 4 1RS	TSSV0320- ...		851–1050				1
	stay sash part AF AX sz 5 1RS	TSSV0330- ...		1051–1250				1
	stay sash part AF AX sz 4 1RS	TSSV0320- ...		1251–1450				1
	stay sash part AF AX sz 5 1RS	TSSV0330- ...		1451–1650				1
3	stay arm AX sz 1	Ref. PDB, TSAV41	1	380– 680				
	stay arm AX sz 2+3	Ref. PDB, TSAV42		681– 850				
	stay arm AX sz 4	Ref. PDB, TSAV44		851–1050				
	stay arm AX sz 5	Ref. PDB, TSAV45		1051–1250				
	stay arm AX sz 4	Ref. PDB, TSAV44		1251–1450				
	stay arm AX sz 5	Ref. PDB, TSAV45		1451–1650				
4	crt. accessories AX	Ref. PDB, TMZV41	1	380–1650				
5	linkage additional stay 1RS	TZOK1010- ...	1	1251–1650				1
6	additional stay	Ref. PDB, TSZS	1	1251–1650				
7	packer Z	Ref. PDB, FRUP01	1	1251–1650				
8	tilt restr. additional stay ..	889008	1	1251–1650				
9	tilt restrictor V-V sz 2-4 ..	TFKB0040- ...	1	681–1050	460– 900			
	tilt restrictor V-V sz 5 ..	TFKB0050- ...		1051–1250	460– 900			
10	corn.drive AF VSU/K+ FH 1S	TEUL5010- ...	1	380–1650			1	
11	linkage BS/FH sz 1+ 1RS	TZBS0180- ...	1	851–1050				1
	linkage BS/FH sz 2+ 1RS	TZBS0190- ...		1051–1450				1
	linkage BS/FH sz 3+ 1RS	TZBS0200- ...		1451–1650				1
12	gear 15 AF sz 20	TGMK4010- ...	1		460– 600	230– 300		
	gear 15 AF sz 60	TGMK4020- ...			601– 800	300– 400		
	gear 15 AF sz 80 1RS	TGMK4040- ...			801–1200	400– 600		
	gear 15 AF sz 120 1RS	TGMK4050- ...			1201–1600	600– 800		
	gear 15 AF sz 160 2RS 70	TGMK4170- ...			1601–2000	800–1000		
	gear 15 AF sz 200 2RS	TGMK4080- ...			2001–3000	1000–1500		
13	linkage KK/AF sz 1 1RS	TZKK1010- ...	2		2401–2800			
	linkage KK/AF sz 2 1RS	TZKK1020- ...			2801–3000			
14	handle Globe	Ref.access. ZHGS	1		460–3000			
15	corn.drive BS/K3 sz 1+ 1RS	TEUL2410- ...	1		801–1200			1
	corn.drive BS/K3 sz 2+ 1RS	TEUL2420- ...			1201–3000			1
16	linkage BS/FH sz 1+ 1RS	TZBS0180- ...	1		1401–1600			1
	linkage BS/FH sz 2+ 1RS	TZBS0190- ...			1601–2000			1
	linkage BS/FH sz 3+ 1RS	TZBS0200- ...			2001–3000			1
17	linkage BS/FH sz 1+ 1RS	TZBS0180- ...	1		2401–2600			1
	linkage BS/FH sz 2+ 1RS	TZBS0190- ...			2601–2800			1
	linkage BS/FH sz 3+ 1RS	TZBS0200- ...			2801–3000			1
18	tilt lock bear. S-ES FH	Ref. PDB, FRKA						
19	striker plate 56	Ref. PDB, FRSB						
on request								
20	mishandling device	TFBS0010- ...	1		601–3000			
21	pressure piece	Ref. PDB, TFFD	1		601–3000			
22	snapper rh.	TFST0021- ...	1		1601–3000			
	snapper lh.	TFST0022- ...			1601–3000			

Hinge side turning points				
Pos.	Description	Part number		required as per sash weight
		surface TS	RAL7037	100 kg
23	corner hinge AX	Ref. PDB, TBEB41		1
24	cover cap AX EL	Ref. PDB, TKEL41		1
25	bottom hinge AX	Ref. PDB, TBEV41		1





Frame dimensions main sash

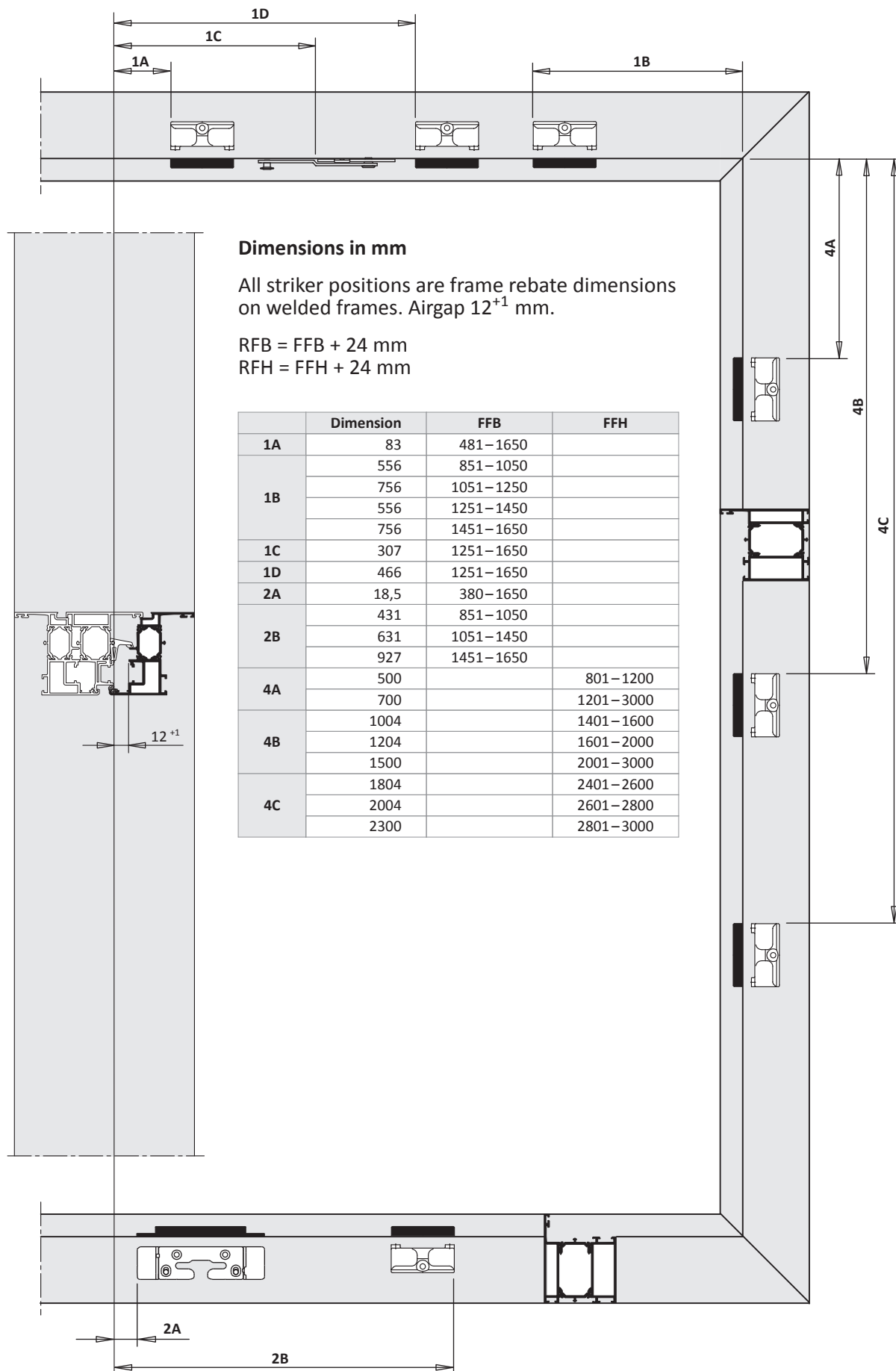
2-sash square tilt-turn/turn DS 16

ALU16 GM Hinge side axxent 24+

TITAN AF

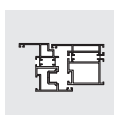
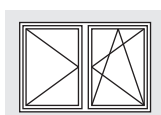
GS

3



TITAN AF

Installation instructions



GS

2-sash square tilt-turn/turn DS 16

aluminium with 16 mm BAN

basic security

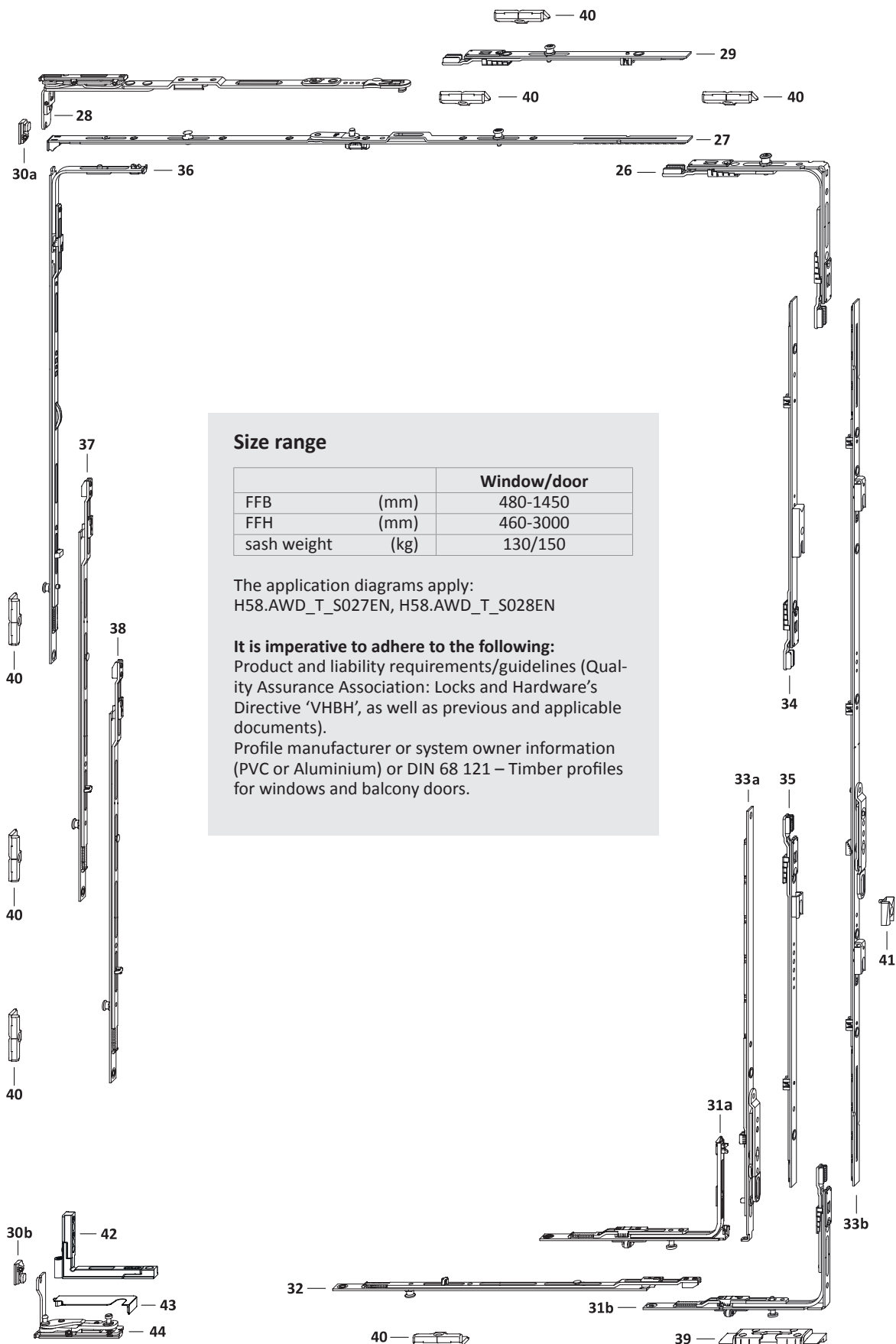
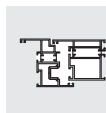
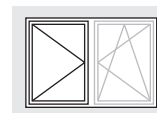
centre handle pos. (variable)

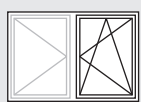
Hinge side axxent 24+

surface TS

backset 15 mm

Hardware set configuration	
General	Locking-points distance 800; secondary sash with DK-stay
Stay side	two-piece stay ax 24+
Bottom	Inliner
Locking side	mishandl. device on gear
Hinge side	corner drive BS sz 1+2 1RS





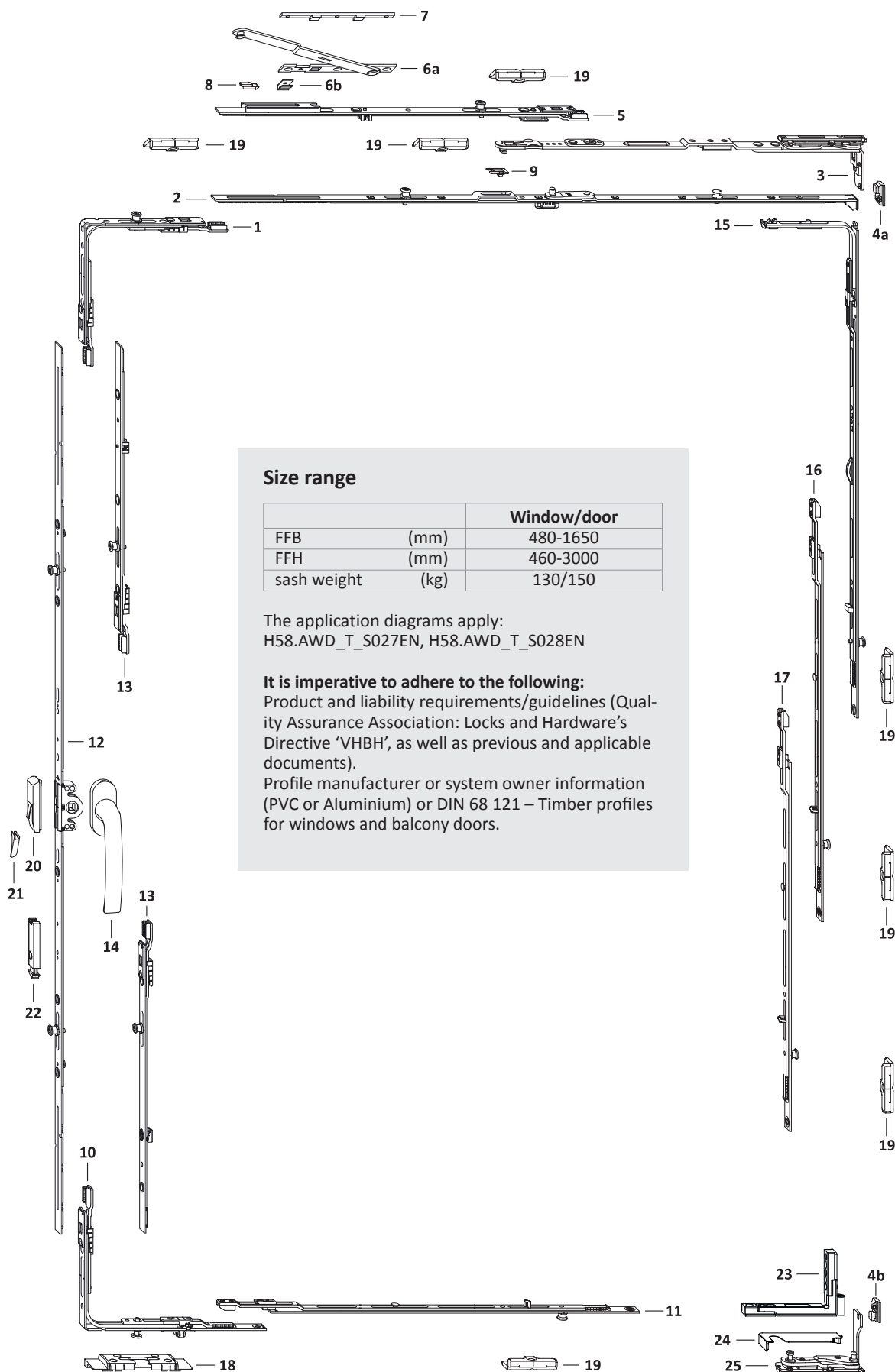
hardware layout main sash

2-sash square tilt-turn/turn DS 16
ALU16 GM Hinge side axxent 24+

TITAN AF

GS

3



Size range

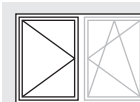
		Window/door
FFB	(mm)	480-1650
FFH	(mm)	460-3000
sash weight	(kg)	130/150

The application diagrams apply:
H58.AWD_T_S027EN, H58.AWD_T_S028EN

It is imperative to adhere to the following:
Product and liability requirements/guidelines (Quality Assurance Association: Locks and Hardware's Directive 'VHBH', as well as previous and applicable documents).
Profile manufacturer or system owner information (PVC or Aluminium) or DIN 68 121 – Timber profiles for windows and balcony doors.

List of fittings slave sash

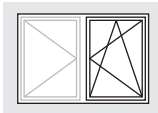
2-sash square tilt-turn/turn DS 16
ALU16 GM Hinge side axxent 24+



3

Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Number of frame parts / Pos.	
						In the main sash	39	40
26	corn.drive VSO 1RS	TEUL4010- ...	1	480 – 1450				1
27	stay sash part AF AX sz 1	TSSV4000- ...	1	480 – 680				
	stay sash part AF AX 2+3 1RS	TSSV0310- ...		681 – 850				
	stay sash part AF AX sz 4 1RS	TSSV0320- ...		851 – 1050				1
	stay sash part AF AX sz 5 1RS	TSSV0330- ...		1051 – 1450				1
28	stay arm AX sz 1	Ref. PDB, TSAV41	1	480 – 680				
	stay arm AX sz 2+3	Ref. PDB, TSAV42		681 – 850				
	stay arm AX sz 4	Ref. PDB, TSAV44		851 – 1050				
	stay arm AX sz 5	Ref. PDB, TSAV45		1051 – 1450				
29	linkage KK/AF sz 1 1RS	TZKK1010- ...	1	1251 – 1450				1
30	crt. accessories AX	Ref. PDB, TMZV41	1	1251 – 1450				
31a	locking part VSU/K FH+ 1S	TEVR1400- ...	1	480 – 1450	460 – 800		1	
31b	corn.drive AF VSU/K+ FH 1S	TEUL5010- ...	1	480 – 1450	801 – 3000		1	
32	linkage BS/FH sz 1+ 1RS	TZBS0180- ...	1	851 – 1050				1
	linkage BS/FH sz 2+ 1RS	TZBS0190- ...		1051 – 1450				1
33a	sec.sash gear 16 sz 30	TGKS0010- ...	1		460 – 600	230 – 300		
	sec.sash gear 16 AF 60/G300	TGKS4030- ...			601 – 800	300 – 400		
33b	sec.sash gear 16 AF sz 80 1SB	TGMS4040- ...	1		801 – 1200	400 – 600		
	sec.sash gear 16 AF sz 120 1SB	TGMS4050- ...			1201 – 1600	600 – 800		
	sec.sash gear 16 AF 160 2SB 70	TGMS4130- ...			1601 – 2000	800 – 1000		
	sec.sash gear 16 AF sz 200 2SB	TGMS4080- ...			2001 – 3000	1000 – 1500		
34	linkage AF sz 1 1SB-RS	TZKS1020- ...	1		2401 – 2800			
	linkage AF sz 2 1SB-RS	TZKS1030- ...			2801 – 3000			
35	linkage AF sz 1 1SB-VSU	TZKS1060- ...	1		2401 – 2800			
	linkage AF sz 2 1SB-VSU	TZKS1070- ...			2801 – 3000			
36	corn.drive BS/K3 sz 1+ 1RS	TEUL2410- ...	1		801 – 1200			1
	corn.drive BS/K3 sz 2+ 1RS	TEUL2420- ...			1201 – 3000			1
37	linkage BS/FH sz 1+ 1RS	TZBS0180- ...	1		1401 – 1600			1
	linkage BS/FH sz 2+ 1RS	TZBS0190- ...			1601 – 2000			1
	linkage BS/FH sz 3+ 1RS	TZBS0200- ...			2001 – 3000			1
38	linkage BS/FH sz 1+ 1RS	TZBS0180- ...	1		2401 – 2600			1
	linkage BS/FH sz 2+ 1RS	TZBS0190- ...			2601 – 2800			1
	linkage BS/FH sz 3+ 1RS	TZBS0200- ...			2801 – 3000			1
39	tilt lock bear. S-ES FH	Ref. PDB, FRKA						
40	striker plate 56	Ref. PDB, FRSB						
on request								
41	striker snapper AF A0767	TRST0100- ...	1		1601 – 3000			

Hinge side turning points				
Pos.	Description	Part number		required as per sash weight
		surface TS	RAL7037	130 kg 150 kg
42	corner hinge AX	Ref. PDB, TBEB41		1 1
43	cover cap AX EL	Ref. PDB, TKEL41		1 1
44	bottom hinge AX	Ref. PDB, TBEV41		1 1



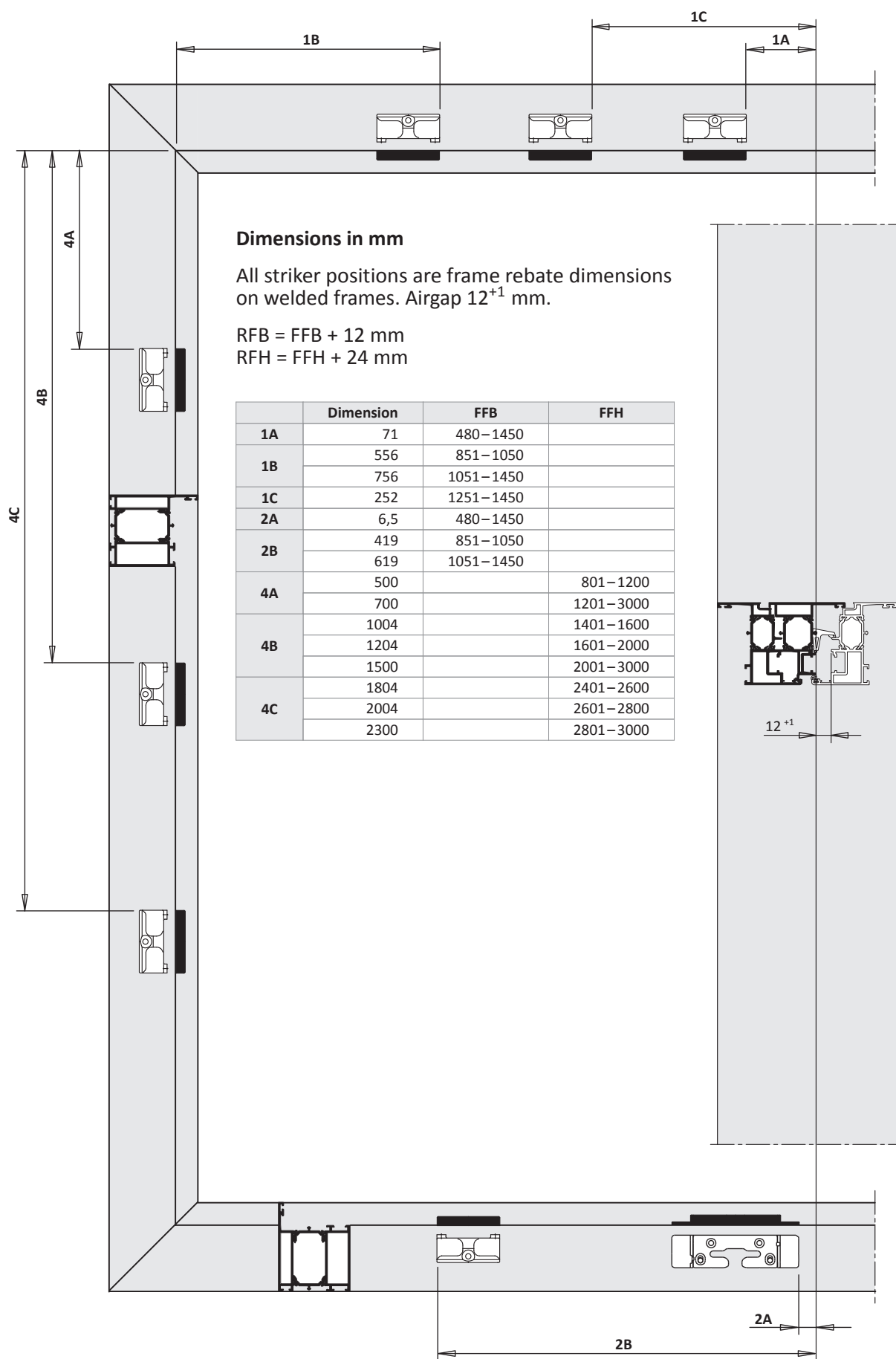
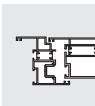
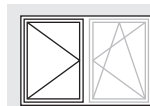
List of fittings main sash
2-sash square tilt-turn/turn DS 16
ALU16 GM Hinge side axxent 24+

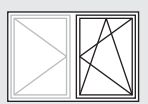
TITAN AF

GS

Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Number of frame parts / Pos.	
							18	19
1	corn.drive VSO 1RS	TEUL4010- ...	1	480–1650				1
2	stay sash part AF AX sz 1	TSSV4000- ...	1	480– 680				
	stay sash part AF AX 2+3 1RS	TSSV0310- ...		681– 850				
	stay sash part AF AX sz 4 1RS	TSSV0320- ...		851–1050				1
	stay sash part AF AX sz 5 1RS	TSSV0330- ...		1051–1250				1
	stay sash part AF AX sz 4 1RS	TSSV0320- ...		1251–1450				1
	stay sash part AF AX sz 5 1RS	TSSV0330- ...		1451–1650				1
3	stay arm AX sz 1	Ref. PDB, TSAV41	1	480– 680				
	stay arm AX sz 2+3	Ref. PDB, TSAV42		681– 850				
	stay arm AX sz 4	Ref. PDB, TSAV44		851–1050				
	stay arm AX sz 5	Ref. PDB, TSAV45		1051–1250				
	stay arm AX sz 4	Ref. PDB, TSAV44		1251–1450				
	stay arm AX sz 5	Ref. PDB, TSAV45		1451–1650				
4	crt. accessories AX	Ref. PDB, TMZV41	1	480–1650				
5	linkage additional stay 1RS	TZOK1010- ...	1	1251–1650				1
6	additional stay	Ref. PDB, TSZS	1	1251–1650				
7	packer Z	Ref. PDB, FRUP01	1	1251–1650				
8	tilt restr. additional stay ..	889008	1	1251–1650				
9	tilt restrictor V-V sz 2-4 ..	TFKB0040- ...	1	681–1050	460– 900			
	tilt restrictor V-V sz 5 ..	TFKB0050- ...		1051–1250	460– 900			
10	corn.drive AF VSU/K+ FH 1S	TEUL5010- ...	1	480–1650			1	
11	linkage BS/FH sz 1+ 1RS	TZBS0180- ...	1	851–1050				1
	linkage BS/FH sz 2+ 1RS	TZBS0190- ...		1051–1450				1
	linkage BS/FH sz 3+ 1RS	TZBS0200- ...		1451–1650				1
12	gear 15 AF sz 20	TGMK4010- ...	1		460– 600	230– 300		
	gear 15 AF sz 60	TGMK4020- ...			601– 800	300– 400		
	gear 15 AF sz 80 1RS	TGMK4040- ...			801–1200	400– 600		
	gear 15 AF sz 120 1RS	TGMK4050- ...			1201–1600	600– 800		
	gear 15 AF sz 160 2RS 70	TGMK4170- ...			1601–2000	800–1000		
	gear 15 AF sz 200 2RS	TGMK4080- ...			2001–3000	1000–1500		
13	linkage KK/AF sz 1 1RS	TZKK1010- ...	2		2401–2800			
	linkage KK/AF sz 2 1RS	TZKK1020- ...			2801–3000			
14	handle Globe	Ref.access. ZHGS	1		460–3000			
15	corn.drive BS/K3 sz 1+ 1RS	TEUL2410- ...	1		801–1200			1
	corn.drive BS/K3 sz 2+ 1RS	TEUL2420- ...			1201–3000			1
16	linkage BS/FH sz 1+ 1RS	TZBS0180- ...	1		1401–1600			1
	linkage BS/FH sz 2+ 1RS	TZBS0190- ...			1601–2000			1
	linkage BS/FH sz 3+ 1RS	TZBS0200- ...			2001–3000			1
17	linkage BS/FH sz 1+ 1RS	TZBS0180- ...	1		2401–2600			1
	linkage BS/FH sz 2+ 1RS	TZBS0190- ...			2601–2800			1
	linkage BS/FH sz 3+ 1RS	TZBS0200- ...			2801–3000			1
18	tilt lock bear. S-ES FH	Ref. PDB, FRKA						
19	striker plate 56	Ref. PDB, FRSB						
on request								
20	mishandling device	TFBS0010- ...	1		601–3000			
21	pressure piece	Ref. PDB, TFFD	1		601–3000			
22	snapper rh.	TFST0021- ...	1		1601–3000			
	snapper lh.	TFST0022- ...			1601–3000			

Hinge side turning points					
Pos.	Description	Part number		required as per sash weight	
		surface TS	RAL7037	130 kg	150 kg
23	corner hinge AX	Ref. PDB, TBEB41		1	1
24	cover cap AX EL	Ref. PDB, TKEL41		1	1
25	bottom hinge AX	Ref. PDB, TBEV41		1	1





Frame dimensions main sash

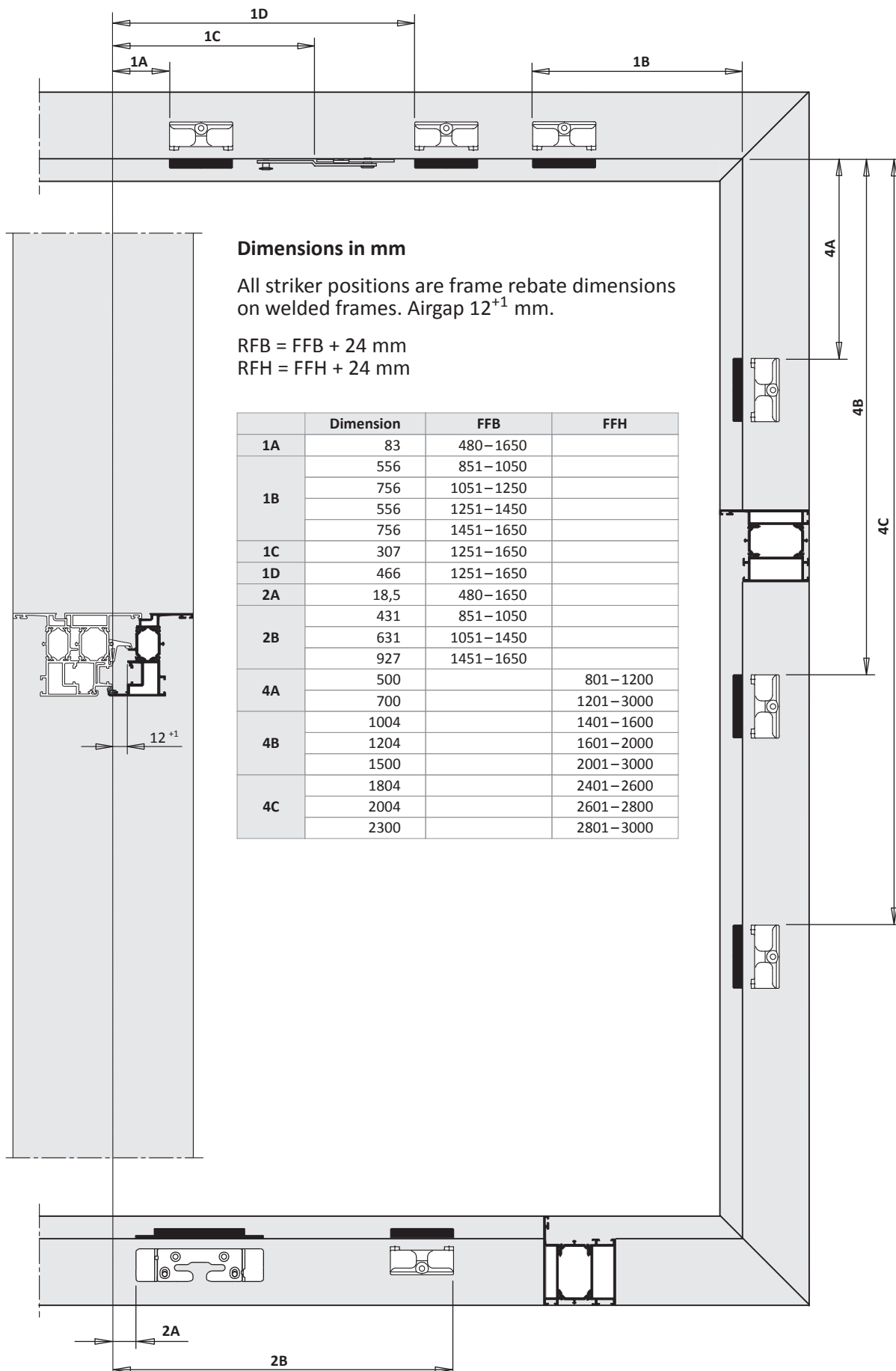
2-sash square tilt-turn/turn DS 16

ALU16 GM Hinge side axxent 24+

TITAN AF

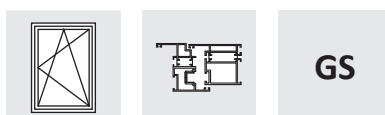
GS

3



TITAN AF

Installation instructions



1-sash square tilt before turn (TBT)

aluminium with 16 mm BAN

basic security

centre handle pos. (variable)

Hinge side axxent 24+

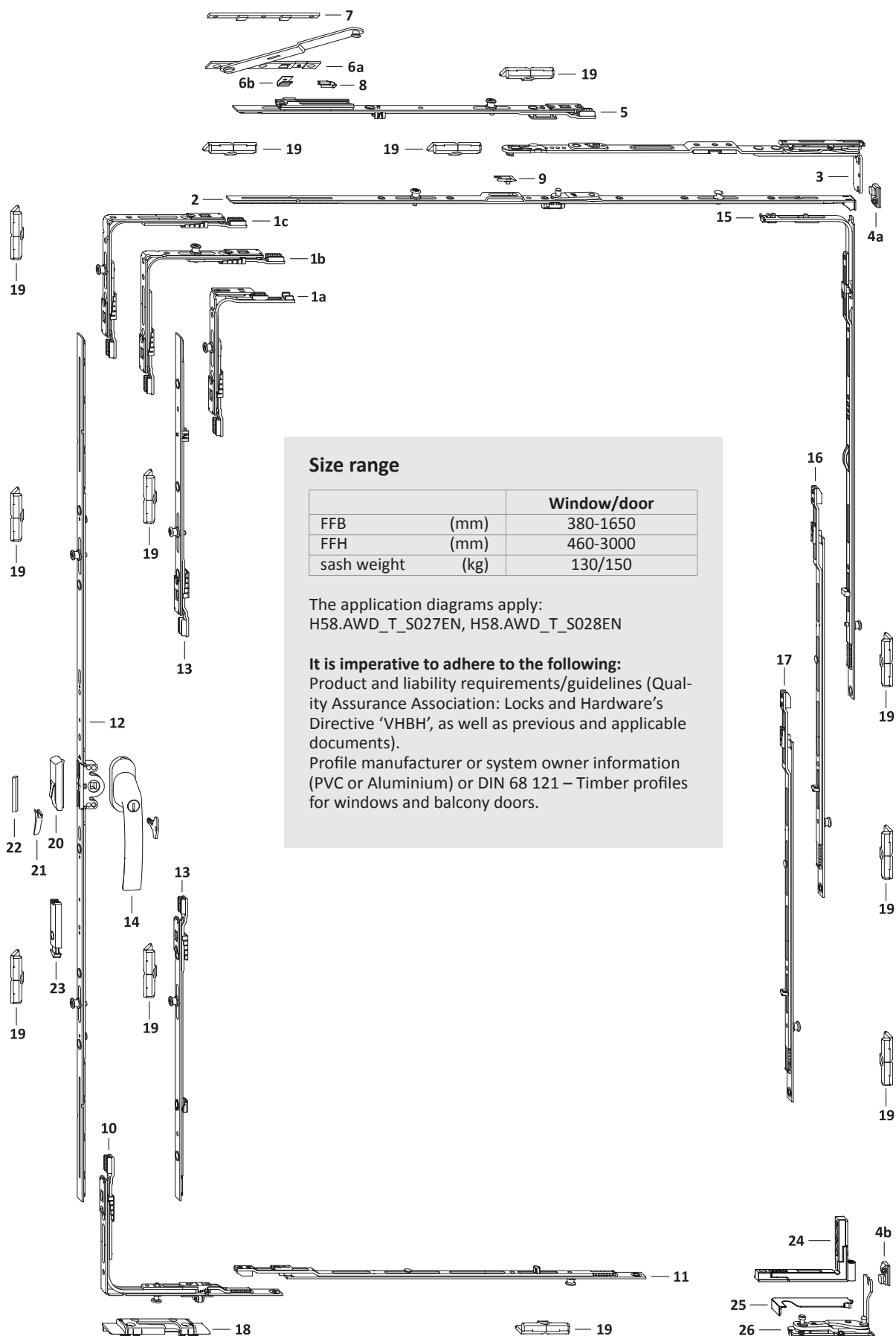
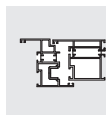
surface TS

backset 15 mm

Hardware set configuration	
General	Locking-points distance 800
Stay side	two-piece stay ax 24+
Bottom	Inliner
Locking side	mishandl. device on gear
Hinge side	corner drive BS sz 1+2 1RS

hardware layout

1-sash square tilt before turn (TBT)
ALU16 GM Hinge side axxent 24+





List of fittings

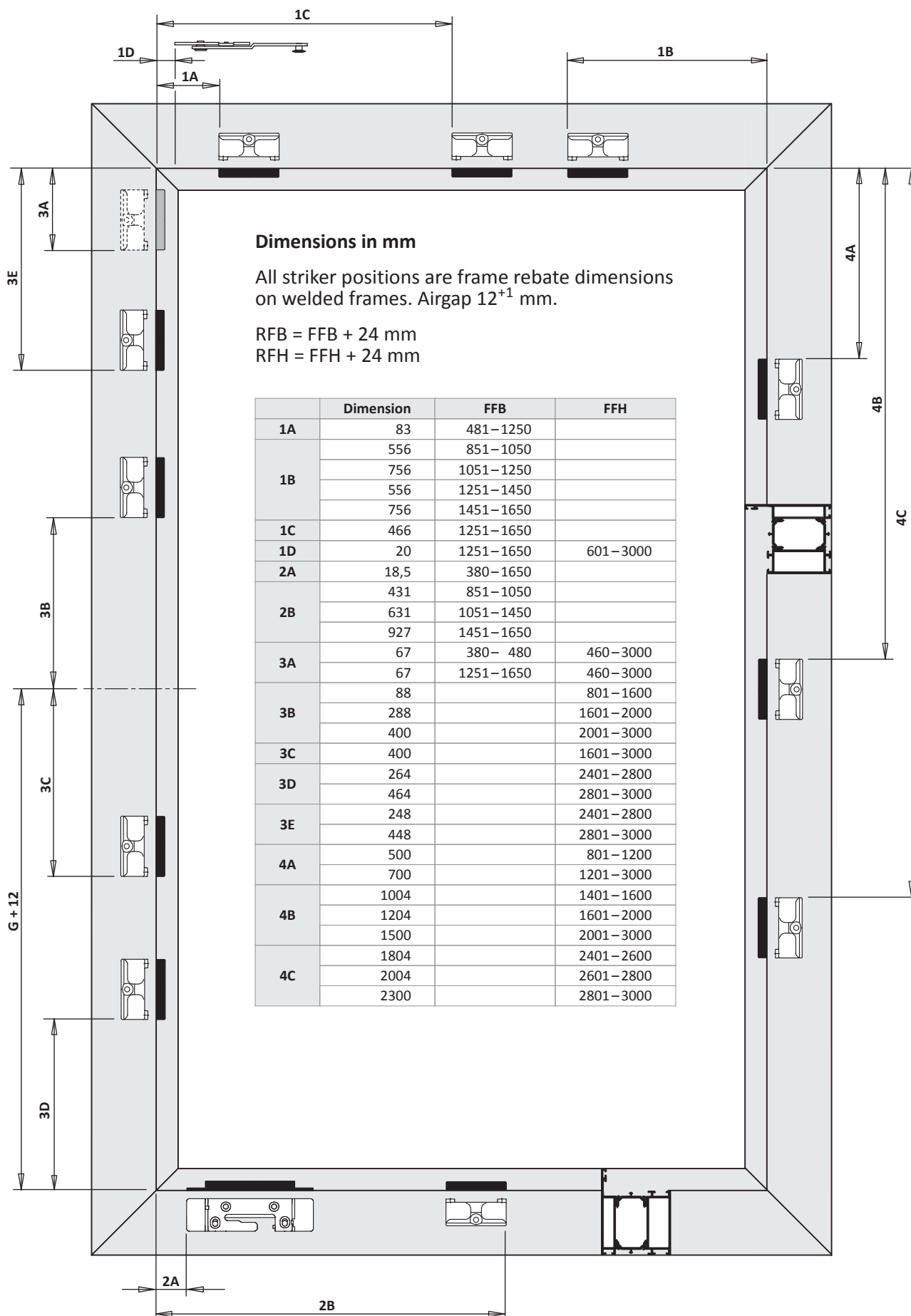
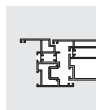
1-sash square tilt before turn (TBT)
ALU16 GM Hinge side axxent 24+

TITAN AF

GS

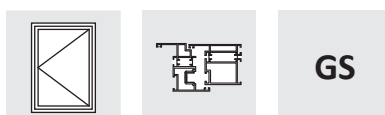
Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Number of frame parts / Pos.	
							18	19
1a	corn.drive AF VSO narrow 1RS	TEUL4020- ...	1	380– 480				1
1b	corn.drive VSO 1RS	TEUL4010- ...	1	481–1250				1
1c	corn.drive VSO 1RS	TEUL4010- ...	1	1251–1650				1
2	stay sash part AF AX sz 1	TSSV4000- ...	1	380– 680				
	stay sash part AF AX 2+3 1RS	TSSV0310- ...		681– 850				
	stay sash part AF AX sz 4 1RS	TSSV0320- ...		851–1050				1
	stay sash part AF AX sz 5 1RS	TSSV0330- ...		1051–1250				1
	stay sash part AF AX sz 4 1RS	TSSV0320- ...		1251–1450				1
	stay sash part AF AX sz 5 1RS	TSSV0330- ...		1451–1650				1
3	stay arm AX TBT sz 1	Ref. PDB, TSAV51	1	380– 680				
	stay arm AX TBT sz 2+3	Ref. PDB, TSAV52		681– 850				
	stay arm AX TBT sz 4	Ref. PDB, TSAV54		851–1050				
	stay arm AX TBT sz 5	Ref. PDB, TSAV55		1051–1250				
	stay arm AX TBT sz 4	Ref. PDB, TSAV54		1251–1450				
	stay arm AX TBT sz 5	Ref. PDB, TSAV55		1451–1650				
4	crt. accessories AX	Ref. PDB, TMZV41	1	380–1650				
5	linkage add. stay AF TBT RS	TZOT1010- ...	1	1251–1650				1
6	additional stay	Ref. PDB, TSZS	1	1251–1650				
7	packer Z	Ref. PDB, FRUP01	1	1251–1650				
8	tilt restr. additional stay ..	889008	1	1251–1650				
9	tilt restrictor V-V sz 2-4 ..	TFKB0040- ...	1	681–1050	460– 900			
	tilt restrictor V-V sz 5 ..	TFKB0050- ...		1051–1250	460– 900			
10	corn.drive AF VSU/K+ FH 1S	TEUL5010- ...	1	380–1650			1	
11	linkage BS/FH sz 1+ 1RS	TZBS0180- ...	1	851–1050				1
	linkage BS/FH sz 2+ 1RS	TZBS0190- ...		1051–1450				1
	linkage BS/FH sz 3+ 1RS	TZBS0200- ...		1451–1650				1
12	gear 15 AF sz 20	TGMK4010- ...	1		460– 600	230– 300		
	gear 15 AF sz 60	TGMK4020- ...			601– 800	300– 400		
	gear 15 AF sz 80 1RS	TGMK4040- ...			801–1200	400– 600		1
	gear 15 AF sz 120 1RS	TGMK4050- ...			1201–1600	600– 800		1
	gear 15 AF sz 160 2RS 70	TGMK4170- ...			1601–2000	800–1000		2
	gear 15 AF sz 200 2RS	TGMK4080- ...			2001–3000	1000–1500		2
13	linkage KK/AF sz 1 1RS	TZKK1010- ...	2		2401–2800			2
	linkage KK/AF sz 2 1RS	TZKK1020- ...			2801–3000			2
14	handle Globe TBT lockable	Ref.access. ZHGT	1		460–3000			
15	corn.drive BS/K3 sz 1+ 1RS	TEUL2410- ...	1		801–1200			1
	corn.drive BS/K3 sz 2+ 1RS	TEUL2420- ...			1201–3000			1
16	linkage BS/FH sz 1+ 1RS	TZBS0180- ...	1		1401–1600			1
	linkage BS/FH sz 2+ 1RS	TZBS0190- ...			1601–2000			1
	linkage BS/FH sz 3+ 1RS	TZBS0200- ...			2001–3000			1
17	linkage BS/FH sz 1+ 1RS	TZBS0180- ...	1		2401–2600			1
	linkage BS/FH sz 2+ 1RS	TZBS0190- ...			2601–2800			1
	linkage BS/FH sz 3+ 1RS	TZBS0200- ...			2801–3000			1
18	tilt lock bear. S-ES FH TBT	Ref. PDB, FRKB						
19	striker plate 56	Ref. PDB, FRSB						
on request								
20	mishandling device	TFBS0010- ...	1					
21	pressure piece	Ref. PDB, TFFD	1					
22	stop	Ref. PDB, FRZF01	1					
23	snapper rh.	TFST0021- ...	1		1601–3000			
	snapper lh.	TFST0022- ...			1601–3000			

Hinge side turning points					
Pos.	Description	Part number		required as per sash weight	
		surface TS	RAL7037	130 kg	150 kg
24	corner hinge AX	Ref. PDB, TBEB41		1	1
25	cover cap AX EL	Ref. PDB, TKEL41		1	1
26	bottom hinge AX	Ref. PDB, TBEV41		1	1



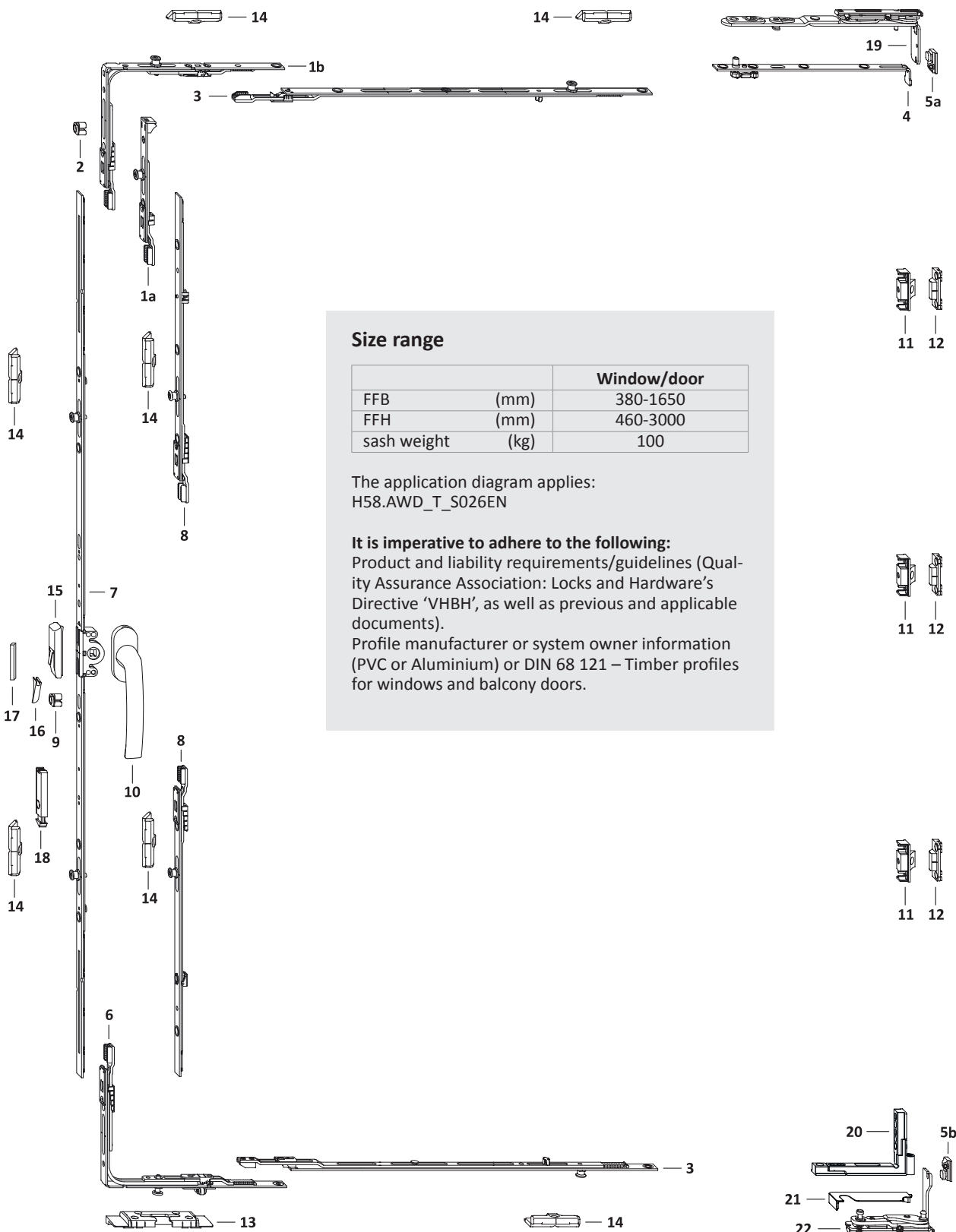
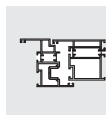
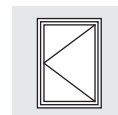
TITAN AF

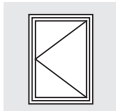
Installation instructions



1-sash square turn
 aluminium with 16 mm BAN
 basic security
 centre handle pos. (variable)
 Hinge side axxent 24+
 surface TS
 backset 15 mm

Hardware set configuration	
General	Locking-points distance 800
Stay side	two-piece stay ax 24+
Bottom	Inliner
Locking side	mishandl. device on gear





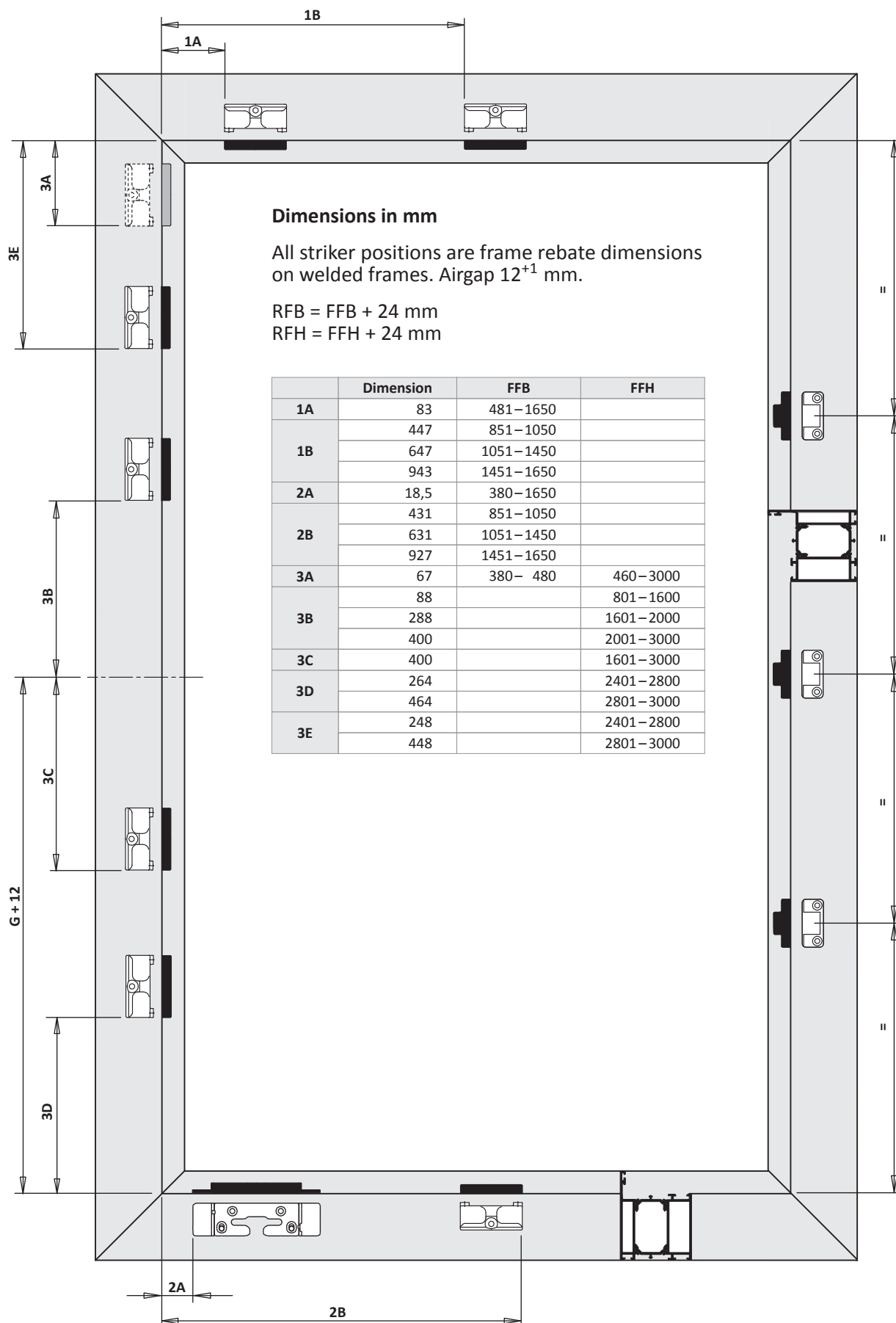
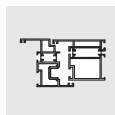
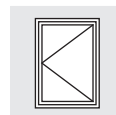
List of fittings
1-sash square turn
ALU16 GM Hinge side axxent 24+

TITAN AF

GS

Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Number of frame parts / Pos.	
							13	14
1a	locking bolt AF VS 180° 1RS	TESC2020- ...	1	380– 480				1
1b	corn.drive VSO/K+ DF 1RS	TEUL4110- ...	1	481–1650				1
2	travel restrictor	TFHB0010- ...	1	380–1250	460– 600			
3	linkage BS/FH sz 1+ 1RS	TZBS0180- ...	2	851–1050				2
	linkage BS/FH sz 2+ 1RS	TZBS0190- ...		1051–1450				2
	linkage BS/FH sz 3+ 1RS	TZBS0200- ...		1451–1650				2
4	stay sash part DF AX	TSSV3020- ...	1	380–1650				
5	crt. accessories AX	Ref. PDB, TMZV41	1	380–1650				
6	corn.drive AF VSU/K+ FH 1S	TEUL5010- ...	1	380–1650			1	
7	gear 15 AF sz 20	TGMK4010- ...	1		460– 600	230– 300		
	gear 15 AF sz 60	TGMK4020- ...			601– 800	300– 400		
	gear 15 AF sz 80 1RS	TGMK4040- ...			801–1200	400– 600		1
	gear 15 AF sz 120 1RS	TGMK4050- ...			1201–1600	600– 800		1
	gear 15 AF sz 160 2RS 70	TGMK4170- ...			1601–2000	800–1000		2
	gear 15 AF sz 200 2RS	TGMK4080- ...			2001–3000	1000–1500		2
8	linkage KK/AF sz 1 1RS	TZKK1010- ...	2		2401–2800			2
	linkage KK/AF sz 2 1RS	TZKK1020- ...			2801–3000			2
9	travel restrictor	TFHB0010- ...	1		460–3000			
10	handle Globe	Ref.access. ZHGS	1		460–3000			
11	sash part MV	Ref. PDB, ZFMV01	1		801–1600			
	sash part MV	Ref. PDB, ZFMV01	2		1601–2400			
	sash part MV	Ref. PDB, ZFMV01	3		2401–3000			
12	frame part MV	Ref. PDB, ZRZM01	1		801–1600			
	frame part MV	Ref. PDB, ZRZM01	2		1601–2400			
	frame part MV	Ref. PDB, ZRZM01	3		2401–3000			
13	tilt lock bear. S-ES FH	Ref. PDB, FRKA						
14	striker plate 56	Ref. PDB, FRSB						
on request								
15	mishandling device	TFBS0010- ...	1					
16	pressure piece	Ref. PDB, TFFD	1					
17	stop	Ref. PDB, FRZF01	1					
18	snapper rh.	TFST0021- ...	1		1601–3000			
	snapper lh.	TFST0022- ...			1601–3000			

Hinge side turning points			
Pos.	Description	Part number	
		surface TS	required as per sash weight
19	stay arm AX DF	Ref. PDB, TSAV46	100 kg
20	corner hinge AX	Ref. PDB, TBEB41	1
21	cover cap AX EL	Ref. PDB, TKEL41	1
22	bottom hinge AX	Ref. PDB, TBEV41	1





4 - RC1 - Fixed handle position

Installation instructions ALU16
Hinge side axxent 24+

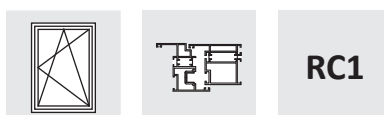
TITAN AF

RC1 - Fixed handle position

1-sash square tilt-turn	H48.TAFALUK1S004EN	4 - 3
2-sash square tilt-turn/turn DS 16	H48.TAFALUK1S005EN	4 - 9
tilt before turn (TBT)		
1-sash square tilt before turn (TBT)	H48.TAFALUK1S006EN	4 - 17

TITAN AF

Installation instructions



1-sash square tilt-turn
aluminium with 16 mm BAN

RC1

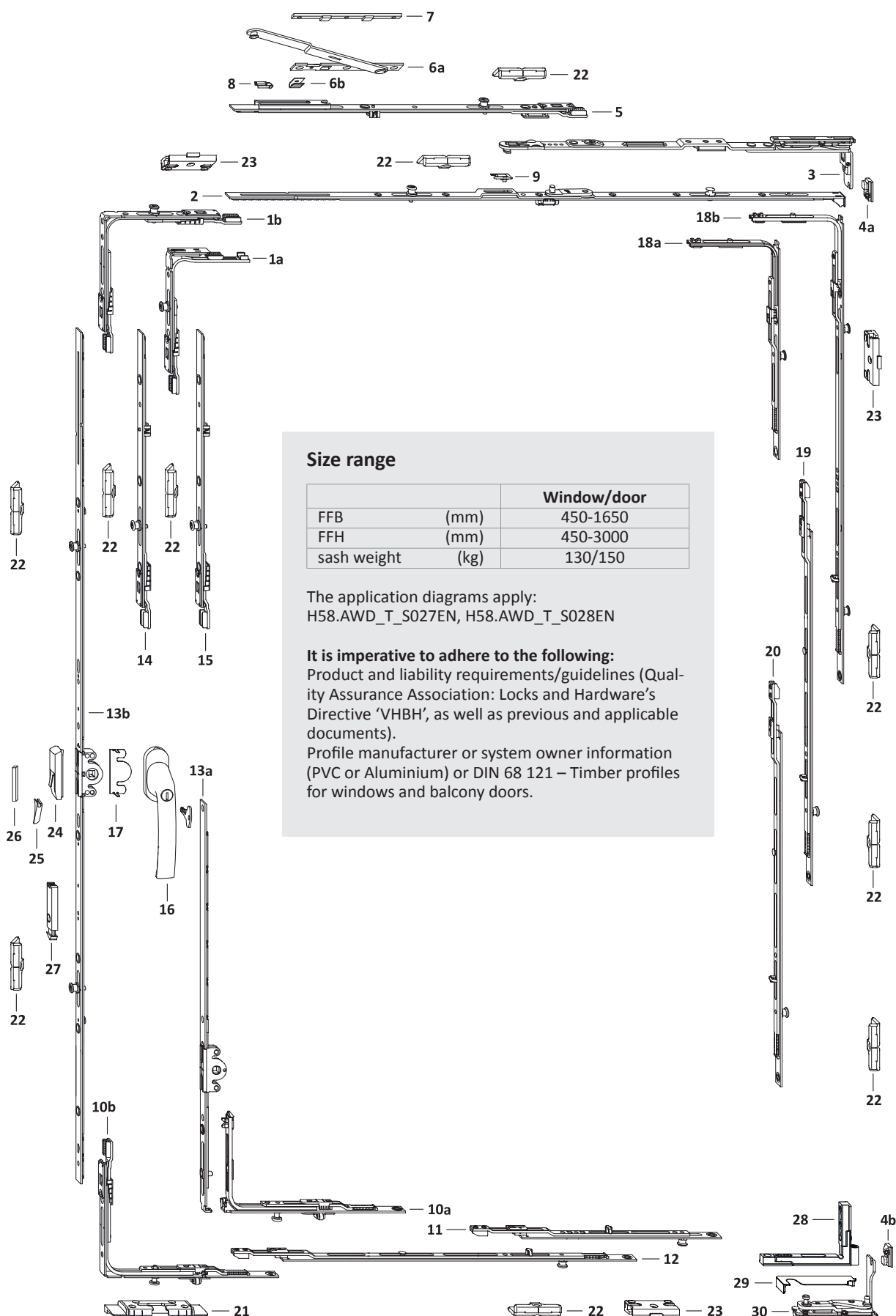
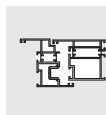
fixed handle position

Hinge side axxent 24+

surface TS

backset 15 mm

Hardware set configuration	
General	Locking-points distance 800
Stay side	two-piece stay ax 24+
Bottom	Inliner
Locking side	mishandl. device on gear
Hinge side	corner drive BS sz 1+2 2RS



Size range

		Window/door
FFB	(mm)	450-1650
FFH	(mm)	450-3000
sash weight	(kg)	130/150

The application diagrams apply:
H58.AWD_T_S027EN, H58.AWD_T_S028EN

It is imperative to adhere to the following:

Product and liability requirements/guidelines (Quality Assurance Association: Locks and Hardware's Directive 'VHBH', as well as previous and applicable documents).

Profile manufacturer or system owner information (PVC or Aluminium) or DIN 68 121 – Timber profiles for windows and balcony doors.



List of fittings
1-sash square tilt-turn
ALU16 GK Hinge side axxent 24+

TITAN AF

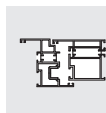
RC1

Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Number of frame parts / Pos.		
							21	22	23
1a	corn.drive AF VSO narrow 1RS	TEUL4020- ...	1	450 – 480					1
1b	corn.drive VSO 1RS	TEUL4010- ...	1	481 – 1650					1
2	stay sash part AF AX sz 1	TSSV4000- ...	1	450 – 680					
	stay sash part AF AX 2+3 1RS	TSSV0310- ...		681 – 850					
	stay sash part AF AX sz 4 1RS	TSSV0320- ...		851 – 1050				1	
	stay sash part AF AX sz 5 1RS	TSSV0330- ...		1051 – 1250				1	
	stay sash part AF AX sz 4 1RS	TSSV0320- ...		1251 – 1450				1	
	stay sash part AF AX sz 5 1RS	TSSV0330- ...		1451 – 1650				1	
3	stay arm AX sz 1	Ref. PDB, TSAV41	1	450 – 680					
	stay arm AX sz 2+3	Ref. PDB, TSAV42		681 – 850					
	stay arm AX sz 4	Ref. PDB, TSAV44		851 – 1050					
	stay arm AX sz 5	Ref. PDB, TSAV45		1051 – 1250					
	stay arm AX sz 4	Ref. PDB, TSAV44		1251 – 1450					
	stay arm AX sz 5	Ref. PDB, TSAV45		1451 – 1650					
4	crt. accessories AX	Ref. PDB, TMZV41	1	450 – 1650					
5	linkage additional stay 1RS	TZOK1010- ...	1	1251 – 1650				1	
6	additional stay	Ref. PDB, TSZS	1	1251 – 1650					
7	packer Z	Ref. PDB, FRUP01	1	1251 – 1650					
8	tilt restr. additional stay ..	889008	1	1251 – 1650					
9	tilt restrictor V-V sz 2-4 ..	TFKB0040- ...	1	681 – 1050	450 – 900				
	tilt restrictor V-V sz 5 ..	TFKB0050- ...		1051 – 1250	450 – 900				
10a	locking part VSU/K FH+ 1S	TEVR1400- ...	1	450 – 1250	450 – 600		1		
10b	corn.drive AF VSU/K+ FH 1S	TEUL5010- ...	1	450 – 1650	601 – 3000		1		
11	extension sz 1+ 1RS	TVSO0200- ...	1	450 – 500					1
	extension sz 2+ 1RS	TVSL0320- ...		501 – 680					1
	extension sz 3+ 1RS	TVSL0330- ...		681 – 850					1
	extension sz 2+ 1RS	TVSL0320- ...		851 – 1250					1
	extension sz 4+ 1RS	TVSL0340- ...		1251 – 1450					1
	extension sz 3+ 1RS	TVSL0330- ...		1451 – 1650					1
12	linkage BS/FH sz 1+ 1RS	TZBS0180- ...	1	851 – 1050				1	
	linkage BS/FH sz 2+ 1RS	TZBS0190- ...		1051 – 1450				1	
	linkage BS/FH sz 3+ 1RS	TZBS0200- ...		1451 – 1650				1	
13a	gear 15 sz 30/G180	TGKK3010- ...	1	450 – 1250	450 – 600	180			
13b	gear 15 AF sz 60/G300	TGKK4030- ...	1		601 – 800	300			
	gear 15 AF sz 80/G400 1RS	TGKK4050- ...			801 – 1000	400		1	
	gear 15 AF sz 100/G500 1RS	TGKK4060- ...			1001 – 1200	500		1	
	gear 15 AF sz 120/G600 1RS	TGKK4070- ...			1201 – 1400	600		1	
	gear 15 AF sz 140/G700 1RS	TGKK4080- ...			1401 – 1600	700		1	
	gear 15 AF sz 160/G700 1RS 70	TGKK4280- ...			1601 – 1800	700		2	
	gear 15 AF sz 180/G1000 2RS 70	TGKK4220- ...			1801 – 2000	1000		2	
	gear 15 AF sz 200/G1000 2RS	TGKK4110- ...			2001 – 3000	1000		2	
14	linkage AF sz 1	TZZS0150- ...	1		2201 – 2400				
	linkage KK/AF sz 2 1RS	TZKK1020- ...			2401 – 2600			1	
	linkage AF sz 1	TZZS0150- ...			2601 – 2800				
	linkage KK/AF sz 2 1RS	TZKK1020- ...			2801 – 3000			1	
15	linkage KK/AF sz 2 1RS	TZKK1020- ...	1		2601 – 2800			1	
	linkage KK/AF sz 2 1RS	TZKK1020- ...			2801 – 3000			1	
16	handle Globe lockable 100Nm	Ref.access. ZHGA100	1		450 – 3000				
17	anti-drill guard E	TGBS0010- ...	1		450 – 3000				
18a	corn.drive BSO/K3+ 1RS	TEUL2400- ...	1		450 – 800				1
18b	corn.drive BS/K3 sz 1+ 2RS	TEUL2380- ...	1		801 – 1200			1	1
	corn.drive BS/K3 sz 2+ 2RS	TEUL2390- ...			1201 – 3000			1	1
19	linkage BS/FH sz 1+ 1RS	TZBS0180- ...	1		1401 – 1600			1	
	linkage BS/FH sz 2+ 1RS	TZBS0190- ...			1601 – 2000			1	
	linkage BS/FH sz 3+ 1RS	TZBS0200- ...			2001 – 3000			1	
20	linkage BS/FH sz 1+ 1RS	TZBS0180- ...	1		2401 – 2600			1	
	linkage BS/FH sz 2+ 1RS	TZBS0190- ...			2601 – 2800			1	
	linkage BS/FH sz 3+ 1RS	TZBS0200- ...			2801 – 3000			1	
21	tilt lock bear. S-ES FH	Ref. PDB, FRKA							
22	striker plate 56	Ref. PDB, FRSB							
23	striker plate S-RS	Ref. PDB, TRSK							
on request									
24	mishandling device	TFBS0010- ...	1						

List of fittings

1-sash square tilt-turn

ALU16 GK Hinge side axxent 24+



Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Number of frame parts / Pos.		
							21	22	23
25	pressure piece	Ref. PDB, TFFD	1						
26	stop	Ref. PDB, FRZF01	1						
27	snapper rh.	TFST0021- ...	1		1801–3000				
	snapper lh.	TFST0022- ...			1801–3000				

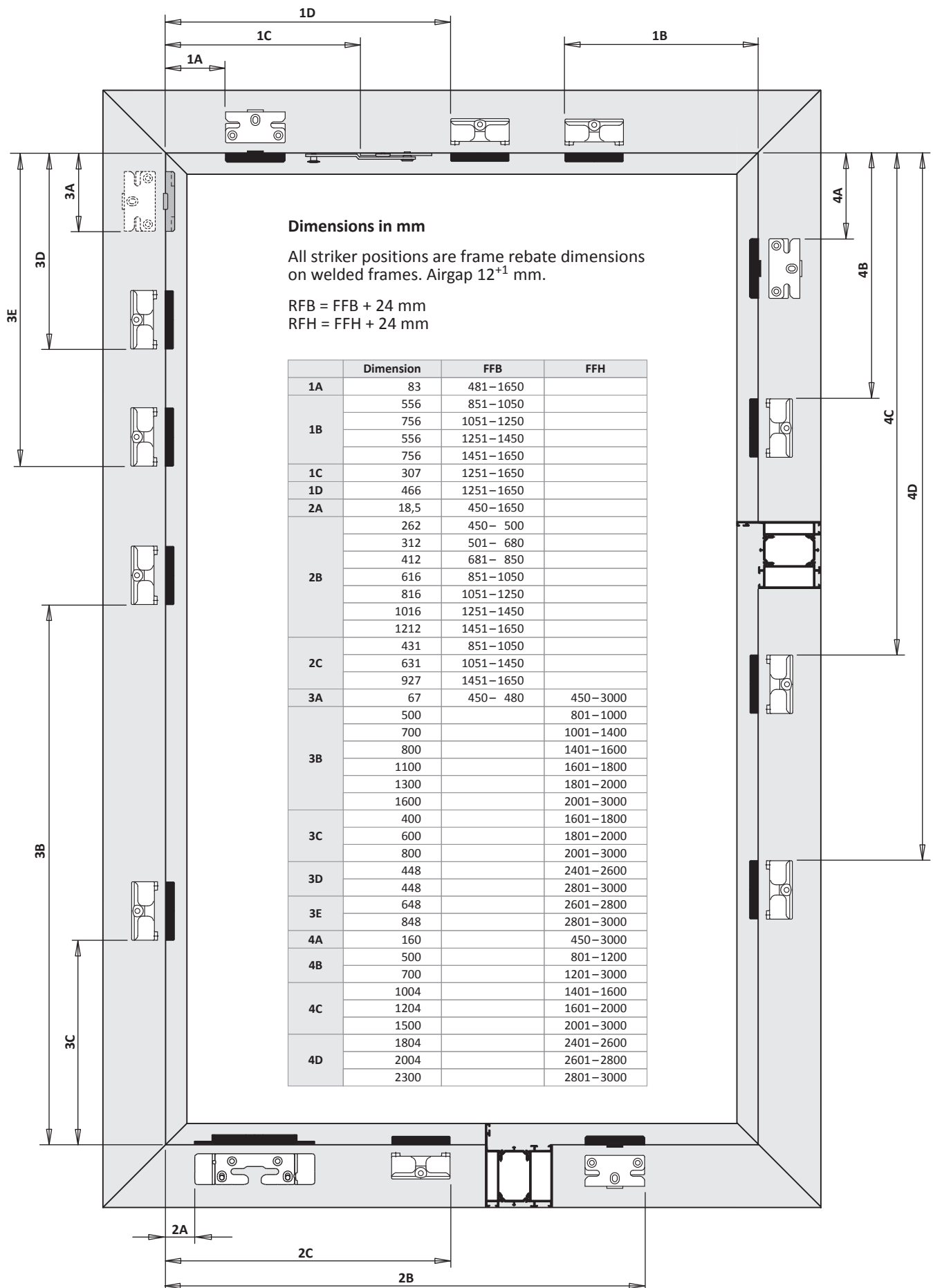
Hinge side turning points					
Pos.	Description	Part number		required as per sash weight	
		surface TS	RAL7037	130 kg	150 kg
28	corner hinge AX	Ref. PDB, TBEB41		1	1
29	cover cap AX EL	Ref. PDB, TKEL41		1	1
30	bottom hinge AX	Ref. PDB, TBEV41		1	1



Frame dimensions
1-sash square tilt-turn
ALU16 GK Hinge side axxent 24+

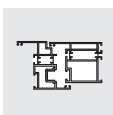
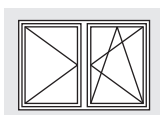
TITAN AF

RC1



TITAN AF

Installation instructions



RC1

2-sash square tilt-turn/turn DS 16

aluminium with 16 mm BAN

RC1

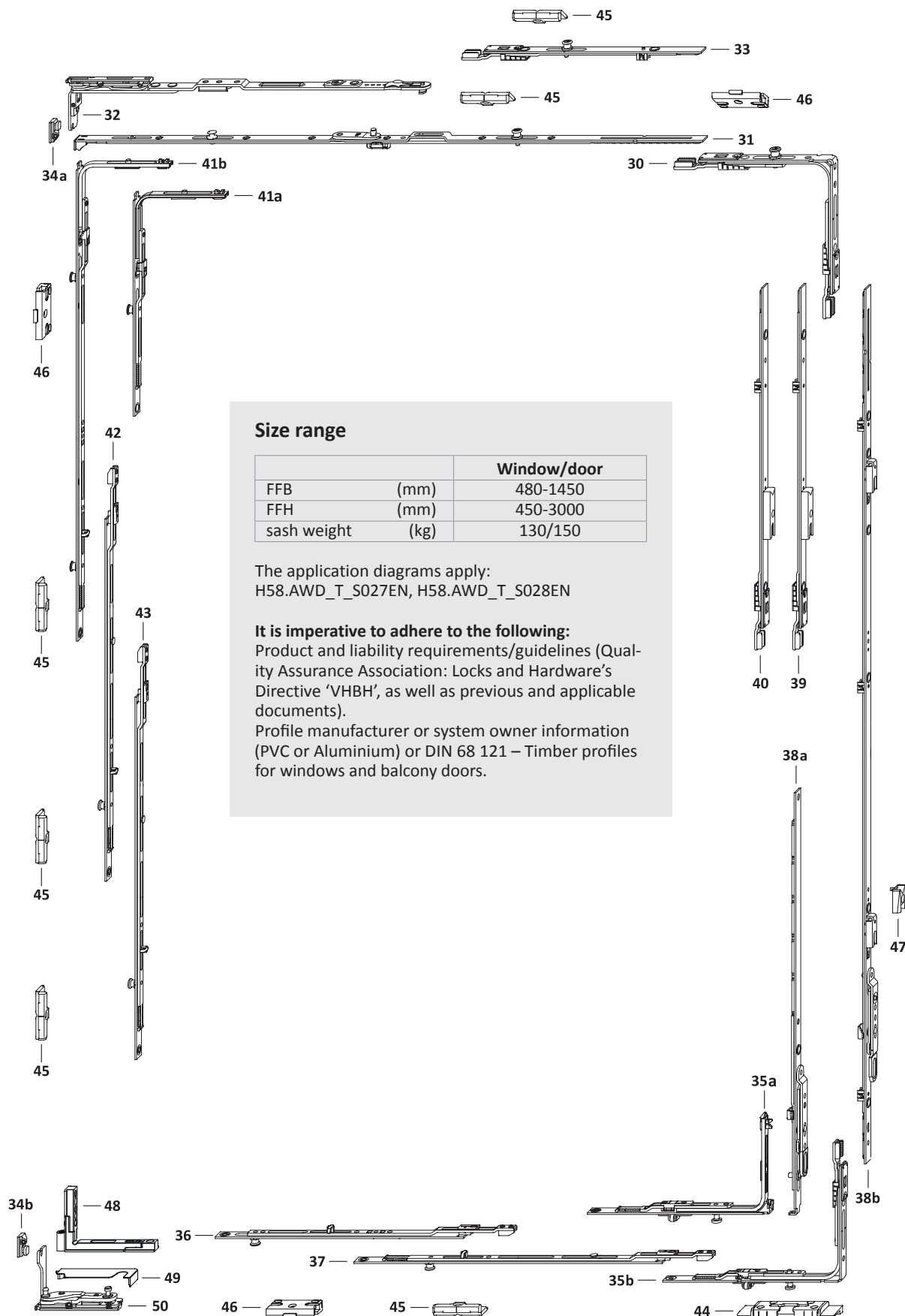
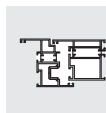
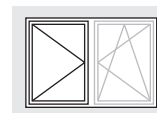
fixed handle position

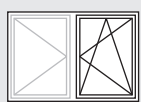
Hinge side axxent 24+

surface TS

backset 15 mm

Hardware set configuration	
General	Locking-points distance 800
Stay side	two-piece stay ax 24+
Bottom	Inliner
Locking side	mishandl. device on gear
Hinge side	corner drive BS sz 1+2 2RS





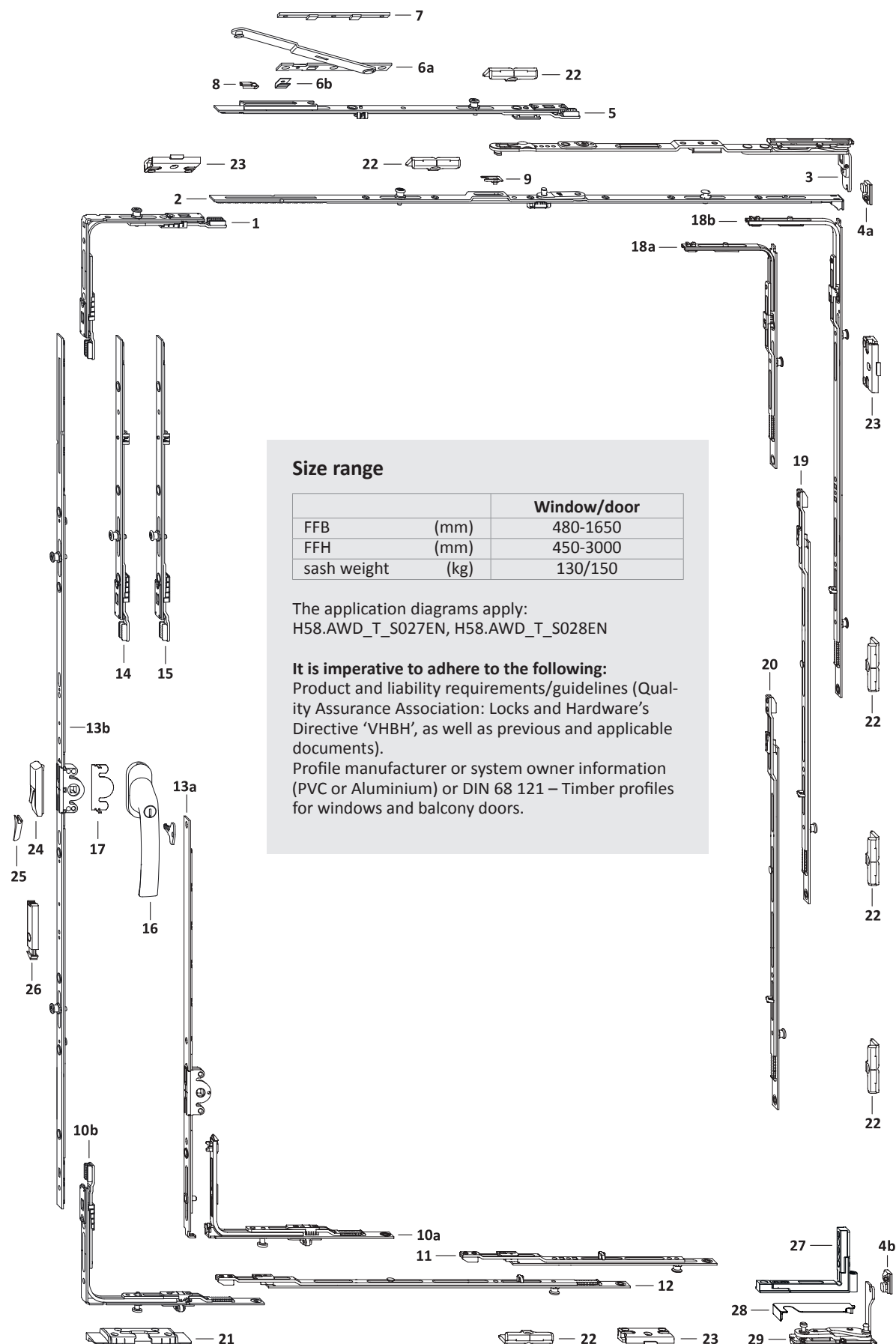
hardware layout main sash

2-sash square tilt-turn/turn DS 16

ALU16 GK Hinge side axxent 24+

TITAN AF

RC1

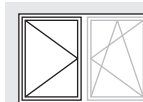


Size range

		Window/door
FFB	(mm)	480-1650
FFH	(mm)	450-3000
sash weight	(kg)	130/150

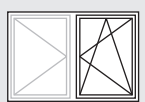
The application diagrams apply:
H58.AWD_T_S027EN, H58.AWD_T_S028EN

It is imperative to adhere to the following:
Product and liability requirements/guidelines (Quality Assurance Association: Locks and Hardware's Directive 'VHBH', as well as previous and applicable documents).
Profile manufacturer or system owner information (PVC or Aluminium) or DIN 68 121 – Timber profiles for windows and balcony doors.



Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Number of frame parts / Pos.		
						In the main sash	44	45	46
30	corn.drive VSO 1RS	TEUL4010- ...	1	480 – 1450					1
31	stay sash part AF AX sz 1	TSSV4000- ...	1	480 – 680					
	stay sash part AF AX 2+3 1RS	TSSV0310- ...		681 – 850					
	stay sash part AF AX sz 4 1RS	TSSV0320- ...		851 – 1050				1	
	stay sash part AF AX sz 5 1RS	TSSV0330- ...		1051 – 1450				1	
32	stay arm AX sz 1	Ref. PDB, TSAV41	1	480 – 680					
	stay arm AX sz 2+3	Ref. PDB, TSAV42		681 – 850					
	stay arm AX sz 4	Ref. PDB, TSAV44		851 – 1050					
	stay arm AX sz 5	Ref. PDB, TSAV45		1051 – 1450					
33	linkage KK/AF sz 1 1RS	TZKK1010- ...	1	1251 – 1450				1	
34	crt. accessories AX	Ref. PDB, TMZV41	1	480 – 1450					
35a	locking part VSU/K FH+ 1S	TEVR1400- ...	1	480 – 1450	450 – 800		1		
35b	corn.drive AF VSU/K+ FH 1S	TEUL5010- ...	1	480 – 1450	801 – 3000		1		
36	extension sz 1+ 1RS	TVSO0200- ...	1	480 – 500					1
	extension sz 2+ 1RS	TVSL0320- ...		501 – 680					1
	extension sz 3+ 1RS	TVSL0330- ...		681 – 850					1
	extension sz 2+ 1RS	TVSL0320- ...		851 – 1250					1
	extension sz 4+ 1RS	TVSL0340- ...		1251 – 1450					1
37	linkage BS/FH sz 1+ 1RS	TZBS0180- ...	1	851 – 1050				1	
	linkage BS/FH sz 2+ 1RS	TZBS0190- ...		1051 – 1450				1	
38a	sec.sash gear 16 sz 30	TGKS0010- ...	1	480 – 1250	450 – 600	180			
	sec.sash gear 16 AF 60/G300	TGKS4030- ...			601 – 800	300			
38b	sec.sash gear 16 AF80/G400 1SB	TGKS4050- ...	1		801 – 1000	400			
	sec.sash gear 16 AF sz 100 1SB	TGKS4060- ...			1001 – 1200	500			
	sec.sash gear 16 AF120/G6001SB	TGKS4070- ...			1201 – 1400	600			
	sec.sash gear 16 AF140/G7001SB	TGKS4080- ...			1401 – 1600	700			
	sec.sash gear 16 AF160/G7002SB 70	TGKS4330- ...			1601 – 1800	700			
	sec.sash gear 16AF180/G10002SB 70	TGKS4270- ...			1801 – 2000	1000			
	sec.sash gear 16AF200/G10002SB	TGKS4110- ...			2001 – 3000	1000			
39	linkage AF sz 1	TZZS0150- ...	1		2201 – 2400				
	linkage AF sz 2 1SB-RS	TZKS1030- ...			2401 – 2600				
	linkage AF sz 1	TZZS0150- ...			2601 – 2800				
	linkage AF sz 2 1SB-RS	TZKS1030- ...			2801 – 3000				
40	linkage AF sz 2 1SB-RS	TZKS1030- ...	1		2601 – 2800				
	linkage AF sz 2 1SB-RS	TZKS1030- ...			2801 – 3000				
41a	corn.drive BSO/K3+ 1RS	TEUL2400- ...	1		450 – 800				1
41b	corn.drive BS/K3 sz 1+ 2RS	TEUL2380- ...	1		801 – 1200			1	1
	corn.drive BS/K3 sz 2+ 2RS	TEUL2390- ...			1201 – 3000			1	1
42	linkage BS/FH sz 1+ 1RS	TZBS0180- ...	1		1401 – 1600			1	
	linkage BS/FH sz 2+ 1RS	TZBS0190- ...			1601 – 2000			1	
	linkage BS/FH sz 3+ 1RS	TZBS0200- ...			2001 – 3000			1	
43	linkage BS/FH sz 1+ 1RS	TZBS0180- ...	1		2401 – 2600			1	
	linkage BS/FH sz 2+ 1RS	TZBS0190- ...			2601 – 2800			1	
	linkage BS/FH sz 3+ 1RS	TZBS0200- ...			2801 – 3000			1	
44	tilt lock bear. S-ES FH	Ref. PDB, FRKA							
45	striker plate 56	Ref. PDB, FRSB							
46	striker plate S-RS	Ref. PDB, TRSK							
on request									
47	striker snapper AF A0767	TRST0100- ...	1		1801 – 3000				

Hinge side turning points				
Pos.	Description	Part number		required as per sash weight
		surface TS	RAL7037	130 kg 150 kg
48	corner hinge AX	Ref. PDB, TBEB41		1 1
49	cover cap AX EL	Ref. PDB, TKEL41		1 1
50	bottom hinge AX	Ref. PDB, TBEV41		1 1



List of fittings main sash

2-sash square tilt-turn/turn DS 16

ALU16 GK Hinge side axxent 24+

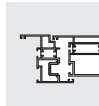
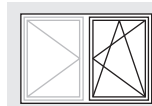
TITAN AF
RC1

Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Number of frame parts / Pos.		
							21	22	23
1	corn.drive VSO 1RS	TEUL4010- ...	1	480–1650					1
2	stay sash part AF AX sz 1	TSSV4000- ...	1	480– 680					
	stay sash part AF AX 2+3 1RS	TSSV0310- ...		681– 850					
	stay sash part AF AX sz 4 1RS	TSSV0320- ...		851–1050				1	
	stay sash part AF AX sz 5 1RS	TSSV0330- ...		1051–1250				1	
	stay sash part AF AX sz 4 1RS	TSSV0320- ...		1251–1450				1	
	stay sash part AF AX sz 5 1RS	TSSV0330- ...		1451–1650				1	
3	stay arm AX sz 1	Ref. PDB, TSAV41	1	480– 680					
	stay arm AX sz 2+3	Ref. PDB, TSAV42		681– 850					
	stay arm AX sz 4	Ref. PDB, TSAV44		851–1050					
	stay arm AX sz 5	Ref. PDB, TSAV45		1051–1250					
	stay arm AX sz 4	Ref. PDB, TSAV44		1251–1450					
	stay arm AX sz 5	Ref. PDB, TSAV45		1451–1650					
4	crt. accessories AX	Ref. PDB, TMZV41	1	480–1650					
5	linkage additional stay 1RS	TZOK1010- ...	1	1251–1650				1	
6	additional stay	Ref. PDB, TSZS	1	1251–1650					
7	packer Z	Ref. PDB, FRUP01	1	1251–1650					
8	tilt restr. additional stay ..	889008	1	1251–1650					
9	tilt restrictor V-V sz 2-4 ..	TFKB0040- ...	1	681–1050	450– 900				
	tilt restrictor V-V sz 5 ..	TFKB0050- ...		1051–1250	450– 900				
10a	locking part VSU/K FH+ 1S	TEVR1400- ...	1	480–1250	450– 600		1		
10b	corn.drive AF VSU/K+ FH 1S	TEUL5010- ...	1	480–1650	601–3000		1		
11	extension sz 1+ 1RS	TVSO0200- ...	1	480– 500					1
	extension sz 2+ 1RS	TVSL0320- ...		501– 680					1
	extension sz 3+ 1RS	TVSL0330- ...		681– 850					1
	extension sz 2+ 1RS	TVSL0320- ...		851–1250					1
	extension sz 4+ 1RS	TVSL0340- ...		1251–1450					1
	extension sz 3+ 1RS	TVSL0330- ...		1451–1650					1
12	linkage BS/FH sz 1+ 1RS	TZBS0180- ...	1	851–1050				1	
	linkage BS/FH sz 2+ 1RS	TZBS0190- ...		1051–1450				1	
	linkage BS/FH sz 3+ 1RS	TZBS0200- ...		1451–1650				1	
13a	gear 15 sz 30/G180	TGKK3010- ...	1	480–1250	450– 600	180			
13b	gear 15 AF sz 60/G300	TGKK4030- ...	1		601– 800	300			
	gear 15 AF sz 80/G400 1RS	TGKK4050- ...			801–1000	400			
	gear 15 AF sz 100/G500 1RS	TGKK4060- ...			1001–1200	500			
	gear 15 AF sz 120/G600 1RS	TGKK4070- ...			1201–1400	600			
	gear 15 AF sz 140/G700 1RS	TGKK4080- ...			1401–1600	700			
	gear 15 AF sz 160/G700 1RS 70	TGKK4280- ...			1601–1800	700			
	gear 15 AF sz 180/G1000 2RS 70	TGKK4220- ...			1801–2000	1000			
	gear 15 AF sz 200/G1000 2RS	TGKK4110- ...			2001–3000	1000			
14	linkage AF sz 1	TZZS0150- ...	1		2201–2400				
	linkage KK/AF sz 2 1RS	TZKK1020- ...			2401–2600				
	linkage AF sz 1	TZZS0150- ...			2601–2800				
	linkage KK/AF sz 2 1RS	TZKK1020- ...			2801–3000				
15	linkage KK/AF sz 2 1RS	TZKK1020- ...	1		2601–2800				
	linkage KK/AF sz 2 1RS	TZKK1020- ...			2801–3000				
16	handle Globe lockable 100Nm	Ref.access. ZHGA100	1		450–3000				
17	anti-drill guard E	TGBS0010- ...	1		450–3000				
18a	corn.drive BSO/K3+ 1RS	TEUL2400- ...	1		450– 800				1
18b	corn.drive BS/K3 sz 1+ 2RS	TEUL2380- ...	1		801–1200			1	1
	corn.drive BS/K3 sz 2+ 2RS	TEUL2390- ...			1201–3000			1	1
19	linkage BS/FH sz 1+ 1RS	TZBS0180- ...	1		1401–1600			1	
	linkage BS/FH sz 2+ 1RS	TZBS0190- ...			1601–2000			1	
	linkage BS/FH sz 3+ 1RS	TZBS0200- ...			2001–3000			1	
	linkage BS/FH sz 1+ 1RS	TZBS0180- ...			2401–2600			1	
20	linkage BS/FH sz 2+ 1RS	TZBS0190- ...	1		2601–2800			1	
	linkage BS/FH sz 3+ 1RS	TZBS0200- ...			2801–3000			1	
21	tilt lock bear. S-ES FH	Ref. PDB, FRKA							
22	striker plate 56	Ref. PDB, FRSB							
23	striker plate S-RS	Ref. PDB, TRSK							
on request									
24	mishandling device	TFBS0010- ...	1		601–3000				
25	pressure piece	Ref. PDB, TFFD	1		601–3000				

List of fittings main sash

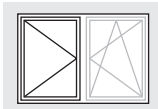
2-sash square tilt-turn/turn DS 16

ALU16 GK Hinge side axxent 24+



Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Number of frame parts / Pos.		
							21	22	23
26	snapper rh.	TFST0021- ...	1		1801–3000				
	snapper lh.	TFST0022- ...			1801–3000				

Hinge side turning points					
Pos.	Description	Part number		required as per sash weight	
		surface TS	RAL7037	130 kg	150 kg
27	corner hinge AX	Ref. PDB, TBEB41		1	1
28	cover cap AX EL	Ref. PDB, TKEL41		1	1
29	bottom hinge AX	Ref. PDB, TBEV41		1	1



Frame dimensions slave sash

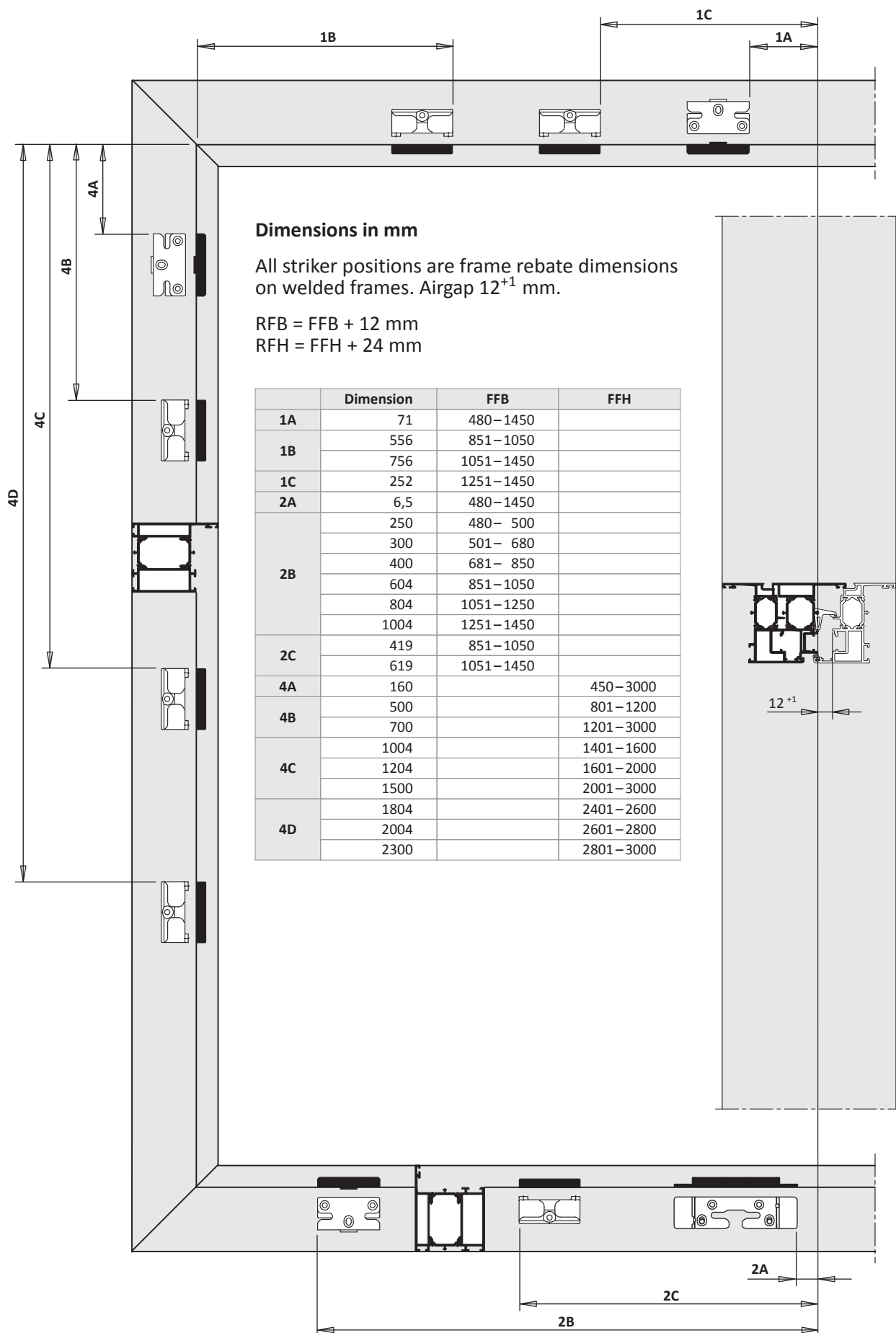
2-sash square tilt-turn/turn DS 16

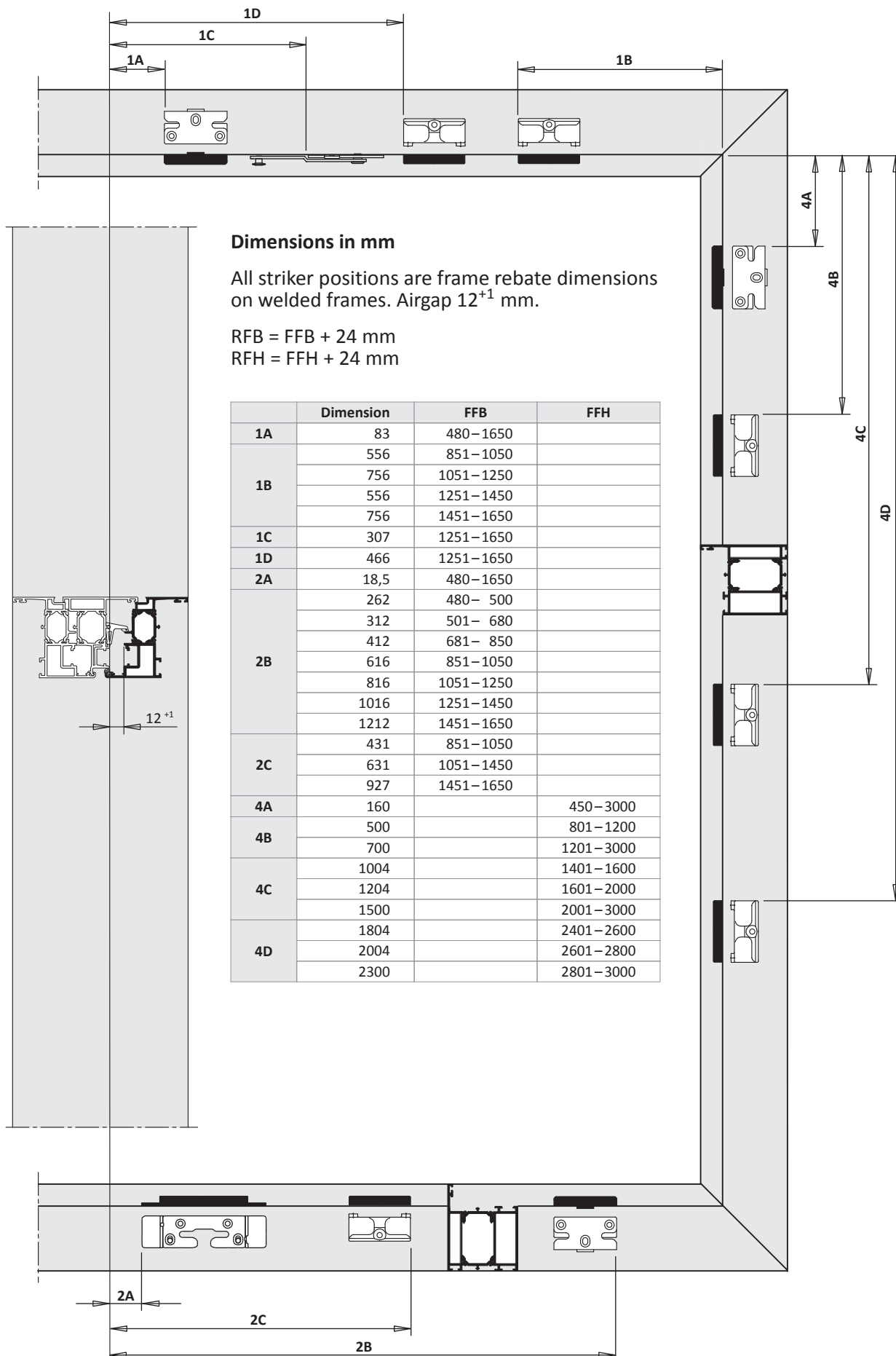
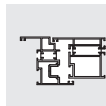
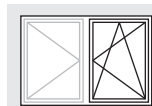
ALU16 GK Hinge side axxent 24+

TITAN AF

RC1

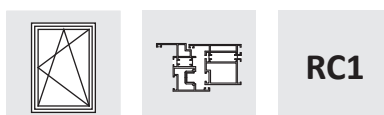
4





TITAN AF

Installation instructions



1-sash square tilt before turn (TBT)

aluminium with 16 mm BAN

RC1

fixed handle position

Hinge side axxent 24+

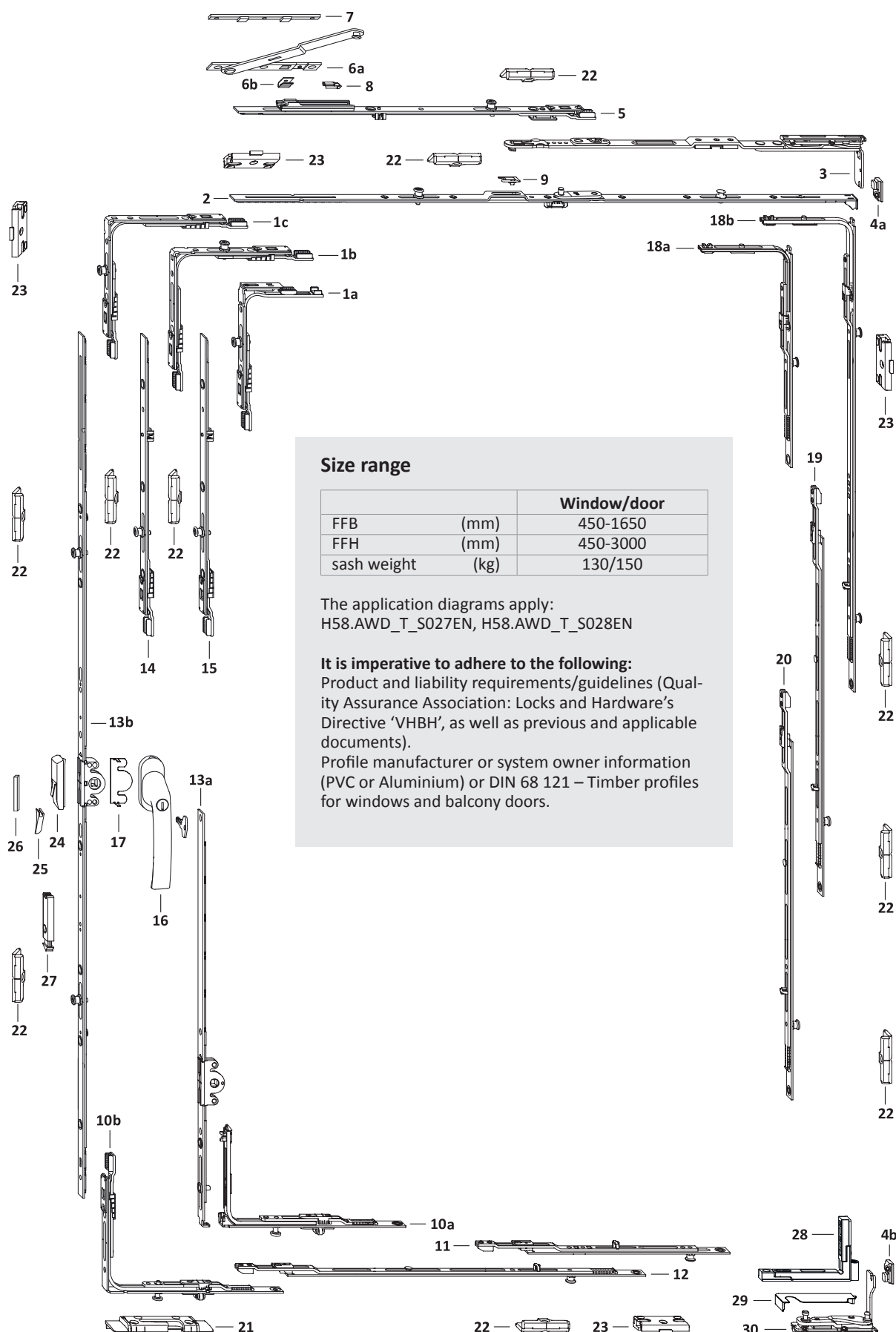
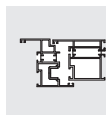
surface TS

backset 15 mm

Hardware set configuration	
General	Locking-points distance 800
Stay side	two-piece stay ax 24+
Bottom	Inliner
Locking side	mishandl. device on gear
Hinge side	corner drive BS sz 1+2 2RS

hardware layout

1-sash square tilt before turn (TBT)
ALU16 GK Hinge side axxent 24+





List of fittings
1-sash square tilt before turn (TBT)
ALU16 GK Hinge side axxent 24+

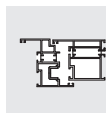
TITAN AF

RC1

Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Number of frame parts / Pos.		
							21	22	23
1a	corn.drive AF VSO narrow 1RS	TEUL4020- ...	1	450 – 480					1
1b	corn.drive VSO 1RS	TEUL4010- ...	1	481 – 1250					1
1c	corn.drive VSO 1RS	TEUL4010- ...	1	1251 – 1650					1
2	stay sash part AF AX sz 1	TSSV4000- ...	1	450 – 680					
	stay sash part AF AX 2+3 1RS	TSSV0310- ...		681 – 850					
	stay sash part AF AX sz 4 1RS	TSSV0320- ...		851 – 1050				1	
	stay sash part AF AX sz 5 1RS	TSSV0330- ...		1051 – 1250				1	
	stay sash part AF AX sz 4 1RS	TSSV0320- ...		1251 – 1450				1	
	stay sash part AF AX sz 5 1RS	TSSV0330- ...		1451 – 1650				1	
3	stay arm AX TBT sz 1	Ref. PDB, TSAV51	1	450 – 680					
	stay arm AX TBT sz 2+3	Ref. PDB, TSAV52		681 – 850					
	stay arm AX TBT sz 4	Ref. PDB, TSAV54		851 – 1050					
	stay arm AX TBT sz 5	Ref. PDB, TSAV55		1051 – 1250					
	stay arm AX TBT sz 4	Ref. PDB, TSAV54		1251 – 1450					
	stay arm AX TBT sz 5	Ref. PDB, TSAV55		1451 – 1650					
4	crt. accessories AX	Ref. PDB, TMZV41	1	450 – 1650					
5	linkage add. stay AF TBT RS	TZOT1010- ...	1	1251 – 1650				1	
6	additional stay	Ref. PDB, TSZS	1	1251 – 1650					
7	packer Z	Ref. PDB, FRUP01	1	1251 – 1650					
8	tilt restr. additional stay ..	889008	1	1251 – 1650					
9	tilt restrictor V-V sz 2-4 ..	TFKB0040- ...	1	681 – 1050	450 – 900				
	tilt restrictor V-V sz 5 ..	TFKB0050- ...		1051 – 1250	450 – 900				
10a	locking part VSU/K FH+ 1S	TEVR1400- ...	1	450 – 1250	450 – 600		1		
10b	corn.drive AF VSU/K+ FH 1S	TEUL5010- ...	1	450 – 1650	601 – 3000		1		
11	extension sz 1+ 1RS	TVSO0200- ...	1	450 – 500					1
	extension sz 2+ 1RS	TVSL0320- ...		501 – 680					1
	extension sz 3+ 1RS	TVSL0330- ...		681 – 850					1
	extension sz 2+ 1RS	TVSL0320- ...		851 – 1250					1
	extension sz 4+ 1RS	TVSL0340- ...		1251 – 1450					1
	extension sz 3+ 1RS	TVSL0330- ...		1451 – 1650					1
12	linkage BS/FH sz 1+ 1RS	TZBS0180- ...	1	851 – 1050				1	
	linkage BS/FH sz 2+ 1RS	TZBS0190- ...		1051 – 1450				1	
	linkage BS/FH sz 3+ 1RS	TZBS0200- ...		1451 – 1650				1	
13a	gear 15 sz 30/G180	TGKK3010- ...	1	450 – 1250	450 – 600	180			
13b	gear 15 AF sz 60/G300	TGKK4030- ...	1		601 – 800	300			
	gear 15 AF sz 80/G400 1RS	TGKK4050- ...			801 – 1000	400		1	
	gear 15 AF sz 100/G500 1RS	TGKK4060- ...			1001 – 1200	500		1	
	gear 15 AF sz 120/G600 1RS	TGKK4070- ...			1201 – 1400	600		1	
	gear 15 AF sz 140/G700 1RS	TGKK4080- ...			1401 – 1600	700		1	
	gear 15 AF sz 160/G700 1RS 70	TGKK4280- ...			1601 – 1800	700		2	
	gear 15 AF sz 180/G1000 2RS 70	TGKK4220- ...			1801 – 2000	1000		2	
	gear 15 AF sz 200/G1000 2RS	TGKK4110- ...			2001 – 3000	1000		2	
14	linkage AF sz 1	TZZS0150- ...	1		2201 – 2400				
	linkage KK/AF sz 2 1RS	TZKK1020- ...			2401 – 2600			1	
	linkage AF sz 1	TZZS0150- ...			2601 – 2800				
	linkage KK/AF sz 2 1RS	TZKK1020- ...			2801 – 3000			1	
15	linkage KK/AF sz 2 1RS	TZKK1020- ...	1		2601 – 2800			1	
	linkage KK/AF sz 2 1RS	TZKK1020- ...			2801 – 3000			1	
16	handle Globe TBT lockable	Ref.access. ZHGT	1		450 – 3000				
17	anti-drill guard E	TGBS0010- ...	1		450 – 3000				
18a	corn.drive BSO/K3+ 1RS	TEUL2400- ...	1		450 – 800				1
18b	corn.drive BS/K3 sz 1+ 2RS	TEUL2380- ...	1		801 – 1200			1	1
	corn.drive BS/K3 sz 2+ 2RS	TEUL2390- ...			1201 – 3000			1	1
19	linkage BS/FH sz 1+ 1RS	TZBS0180- ...	1		1401 – 1600			1	
	linkage BS/FH sz 2+ 1RS	TZBS0190- ...			1601 – 2000			1	
	linkage BS/FH sz 3+ 1RS	TZBS0200- ...			2001 – 3000			1	
20	linkage BS/FH sz 1+ 1RS	TZBS0180- ...	1		2401 – 2600			1	
	linkage BS/FH sz 2+ 1RS	TZBS0190- ...			2601 – 2800			1	
	linkage BS/FH sz 3+ 1RS	TZBS0200- ...			2801 – 3000			1	
21	tilt lock bear. S-ES FH TBT	Ref. PDB, FRKB							
22	striker plate 56	Ref. PDB, FRSB							
23	striker plate S-RS	Ref. PDB, TRSK							

List of fittings

1-sash square tilt before turn (TBT)
ALU16 GK Hinge side axxent 24+



Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Number of frame parts / Pos.		
							21	22	23
on request									
24	mishandling device	TFBS0010- ...	1						
25	pressure piece	Ref. PDB, TFFD	1						
26	stop	Ref. PDB, FRZF01	1						
27	snapper rh.	TFST0021- ...	1		1801–3000				
	snapper lh.	TFST0022- ...			1801–3000				

Hinge side turning points					
Pos.	Description	Part number		required as per sash weight	
		surface TS	RAL7037	130 kg	150 kg
28	corner hinge AX	Ref. PDB, TBEB41		1	1
29	cover cap AX EL	Ref. PDB, TKEL41		1	1
30	bottom hinge AX	Ref. PDB, TBEV41		1	1

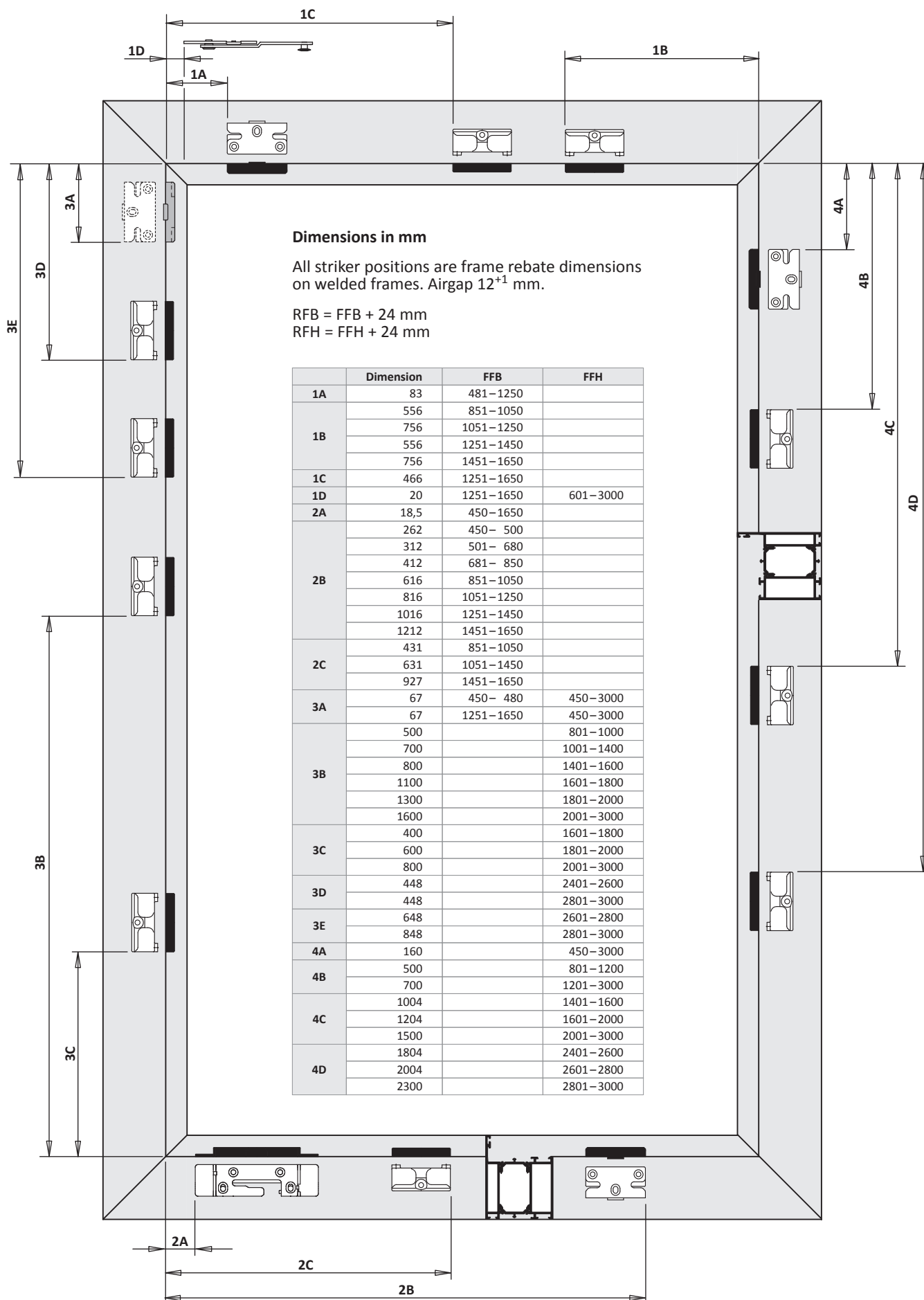


Frame dimensions

1-sash square tilt before turn (TBT)
ALU16 GK Hinge side axxent 24+

TITAN AF

RC1





5 - RC1 - Centre handle pos. (variable)

Installation instructions ALU16
Hinge side axxent 24+

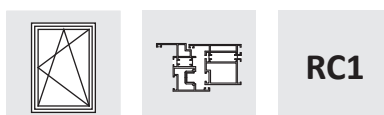
TITAN AF

RC1 - Centre handle pos. (variable)

1-sash square tilt-turn	H48.TAFALUM1S004DE	5 - 3
2-sash square tilt-turn/turn DS 16	H48.TAFALUM1S005DE	5 - 9
tilt before turn (TBT)		
1-sash square tilt before turn (TBT)	H48.TAFALUM1S006DE	5 - 17

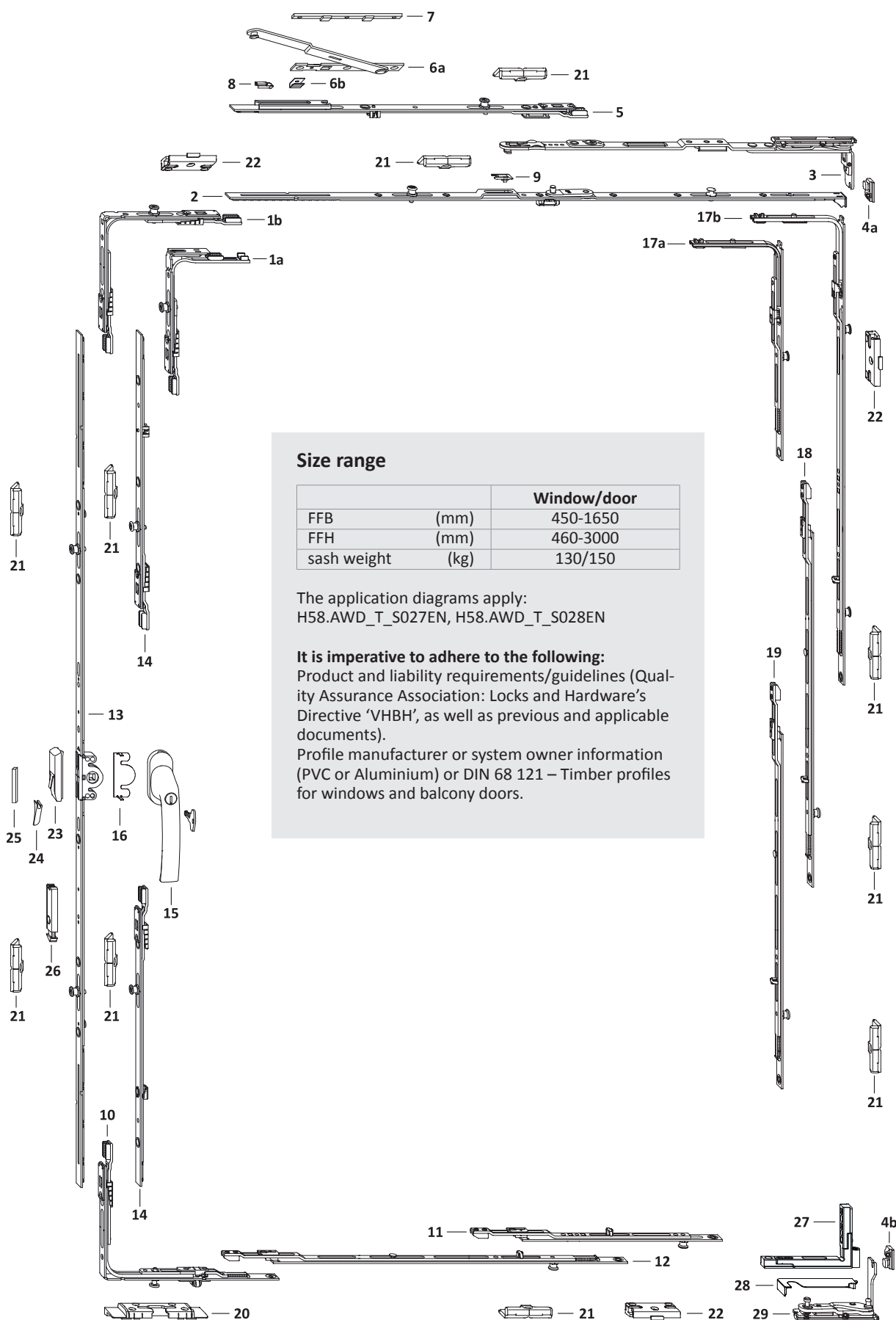
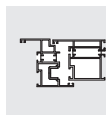
TITAN AF

Installation instructions



1-sash square tilt-turn
aluminium with 16 mm BAN
RC1
centre handle pos. (variable)
Hinge side axxent 24+
surface TS
backset 15 mm

Hardware set configuration	
General	Locking-points distance 800
Stay side	two-piece stay ax 24+
Bottom	Inliner
Locking side	mishandl. device on gear
Hinge side	corner drive BS sz 1+2 2RS





List of fittings
1-sash square tilt-turn
ALU16 GM Hinge side axxent 24+

TITAN AF

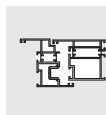
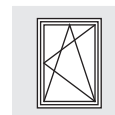
RC1

Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Number of frame parts / Pos.		
							20	21	22
1a	corn.drive AF VSO narrow 1RS	TEUL4020- ...	1	450 – 480					1
1b	corn.drive VSO 1RS	TEUL4010- ...	1	481 – 1650					1
2	stay sash part AF AX sz 1	TSSV4000- ...	1	450 – 680					
	stay sash part AF AX 2+3 1RS	TSSV0310- ...		681 – 850					
	stay sash part AF AX sz 4 1RS	TSSV0320- ...		851 – 1050				1	
	stay sash part AF AX sz 5 1RS	TSSV0330- ...		1051 – 1250				1	
	stay sash part AF AX sz 4 1RS	TSSV0320- ...		1251 – 1450				1	
	stay sash part AF AX sz 5 1RS	TSSV0330- ...		1451 – 1650				1	
3	stay arm AX sz 1	Ref. PDB, TSAV41	1	450 – 680					
	stay arm AX sz 2+3	Ref. PDB, TSAV42		681 – 850					
	stay arm AX sz 4	Ref. PDB, TSAV44		851 – 1050					
	stay arm AX sz 5	Ref. PDB, TSAV45		1051 – 1250					
	stay arm AX sz 4	Ref. PDB, TSAV44		1251 – 1450					
	stay arm AX sz 5	Ref. PDB, TSAV45		1451 – 1650					
4	crt. accessories AX	Ref. PDB, TMZV41	1	450 – 1650					
5	linkage additional stay 1RS	TZOK1010- ...	1	1251 – 1650				1	
6	additional stay	Ref. PDB, TSZS	1	1251 – 1650					
7	packer Z	Ref. PDB, FRUP01	1	1251 – 1650					
8	tilt restr. additional stay ..	889008	1	1251 – 1650					
9	tilt restrictor V-V sz 2-4 ..	TFKB0040- ...	1	681 – 1050	460 – 900				
	tilt restrictor V-V sz 5 ..	TFKB0050- ...		1051 – 1250	460 – 900				
10	corn.drive AF VSU/K+ FH 1S	TEUL5010- ...	1	450 – 1650			1		
11	extension sz 1+ 1RS	TVSO0200- ...	1	450 – 500					1
	extension sz 2+ 1RS	TVSL0320- ...		501 – 680					1
	extension sz 3+ 1RS	TVSL0330- ...		681 – 850					1
	extension sz 2+ 1RS	TVSL0320- ...		851 – 1250					1
	extension sz 4+ 1RS	TVSL0340- ...		1251 – 1450					1
	extension sz 3+ 1RS	TVSL0330- ...		1451 – 1650					1
12	linkage BS/FH sz 1+ 1RS	TZBS0180- ...	1	851 – 1050				1	
	linkage BS/FH sz 2+ 1RS	TZBS0190- ...		1051 – 1450				1	
	linkage BS/FH sz 3+ 1RS	TZBS0200- ...		1451 – 1650				1	
13	gear 15 AF sz 20	TGMK4010- ...	1		460 – 600	230 – 300			
	gear 15 AF sz 60	TGMK4020- ...			601 – 800	300 – 400			
	gear 15 AF sz 80 1RS	TGMK4040- ...			801 – 1200	400 – 600		1	
	gear 15 AF sz 120 1RS	TGMK4050- ...			1201 – 1600	600 – 800		1	
	gear 15 AF sz 160 2RS 70	TGMK4170- ...			1601 – 2000	800 – 1000		2	
	gear 15 AF sz 200 2RS	TGMK4080- ...			2001 – 3000	1000 – 1500		2	
14	linkage KK/AF sz 1 1RS	TZKK1010- ...	2		2401 – 2800			2	
	linkage KK/AF sz 2 1RS	TZKK1020- ...			2801 – 3000			2	
15	handle Globe lockable 100Nm	Ref.access. ZHGA100	1		460 – 3000				
16	anti-drill guard E	TGBS0010- ...	1		460 – 3000				
17a	corn.drive BSO/K3+ 1RS	TEUL2400- ...	1		460 – 800				1
17b	corn.drive BS/K3 sz 1+ 2RS	TEUL2380- ...	1		801 – 1200			1	1
	corn.drive BS/K3 sz 2+ 2RS	TEUL2390- ...			1201 – 3000			1	1
18	linkage BS/FH sz 1+ 1RS	TZBS0180- ...	1		1401 – 1600			1	
	linkage BS/FH sz 2+ 1RS	TZBS0190- ...			1601 – 2000			1	
	linkage BS/FH sz 3+ 1RS	TZBS0200- ...			2001 – 3000			1	
19	linkage BS/FH sz 1+ 1RS	TZBS0180- ...	1		2401 – 2600			1	
	linkage BS/FH sz 2+ 1RS	TZBS0190- ...			2601 – 2800			1	
	linkage BS/FH sz 3+ 1RS	TZBS0200- ...			2801 – 3000			1	
20	tilt lock bear. S-ES FH	Ref. PDB, FRKA							
21	striker plate 56	Ref. PDB, FRSB							
22	striker plate S-RS	Ref. PDB, TRSK							
on request									
23	mishandling device	TFBS0010- ...	1						
24	pressure piece	Ref. PDB, TFFD	1						
25	stop	Ref. PDB, FRZF01	1						
26	snapper rh.	TFST0021- ...	1		1601 – 3000				
	snapper lh.	TFST0022- ...			1601 – 3000				

List of fittings

1-sash square tilt-turn

ALU16 GM Hinge side axxent 24+



Pos.	Description	Hinge side turning points			
		Part number		required as per sash weight	
		surface TS	RAL7037	130 kg	150 kg
27	corner hinge AX	Ref. PDB, TBEB41		1	1
28	cover cap AX EL	Ref. PDB, TKEL41		1	1
29	bottom hinge AX	Ref. PDB, TBEV41		1	1



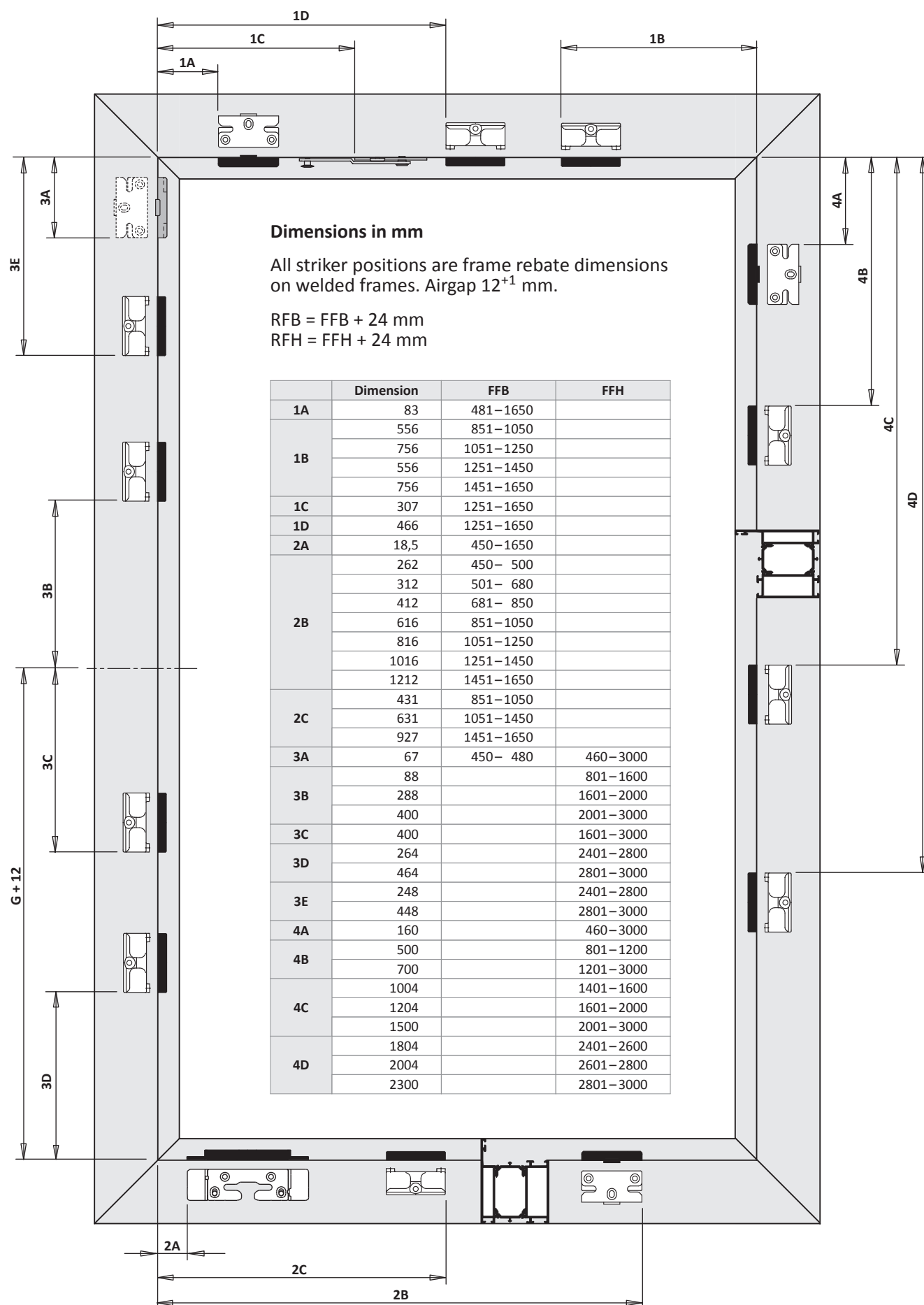
Frame dimensions

1-sash square tilt-turn

ALU16 GM Hinge side axxent 24+

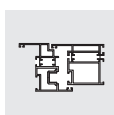
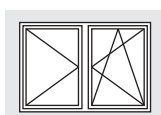
TITAN AF

RC1



TITAN AF

Installation instructions



RC1

2-sash square tilt-turn/turn DS 16

aluminium with 16 mm BAN

RC1

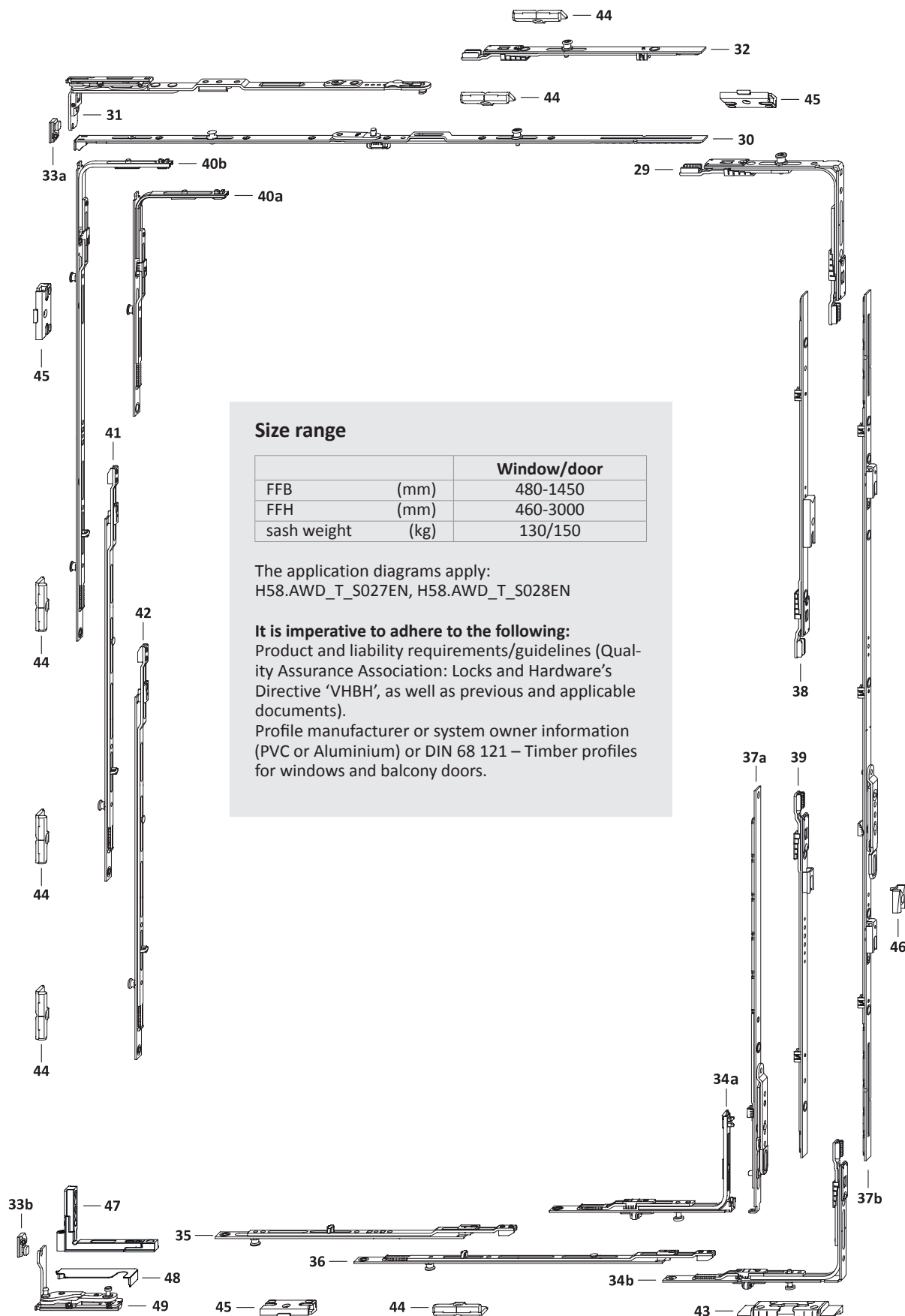
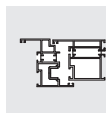
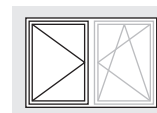
centre handle pos. (variable)

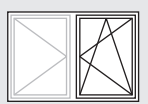
Hinge side axxent 24+

surface TS

backset 15 mm

Hardware set configuration	
General	Locking-points distance 800
Stay side	two-piece stay ax 24+
Bottom	Inliner
Locking side	mishandl. device on gear
Hinge side	corner drive BS sz 1+2 2RS



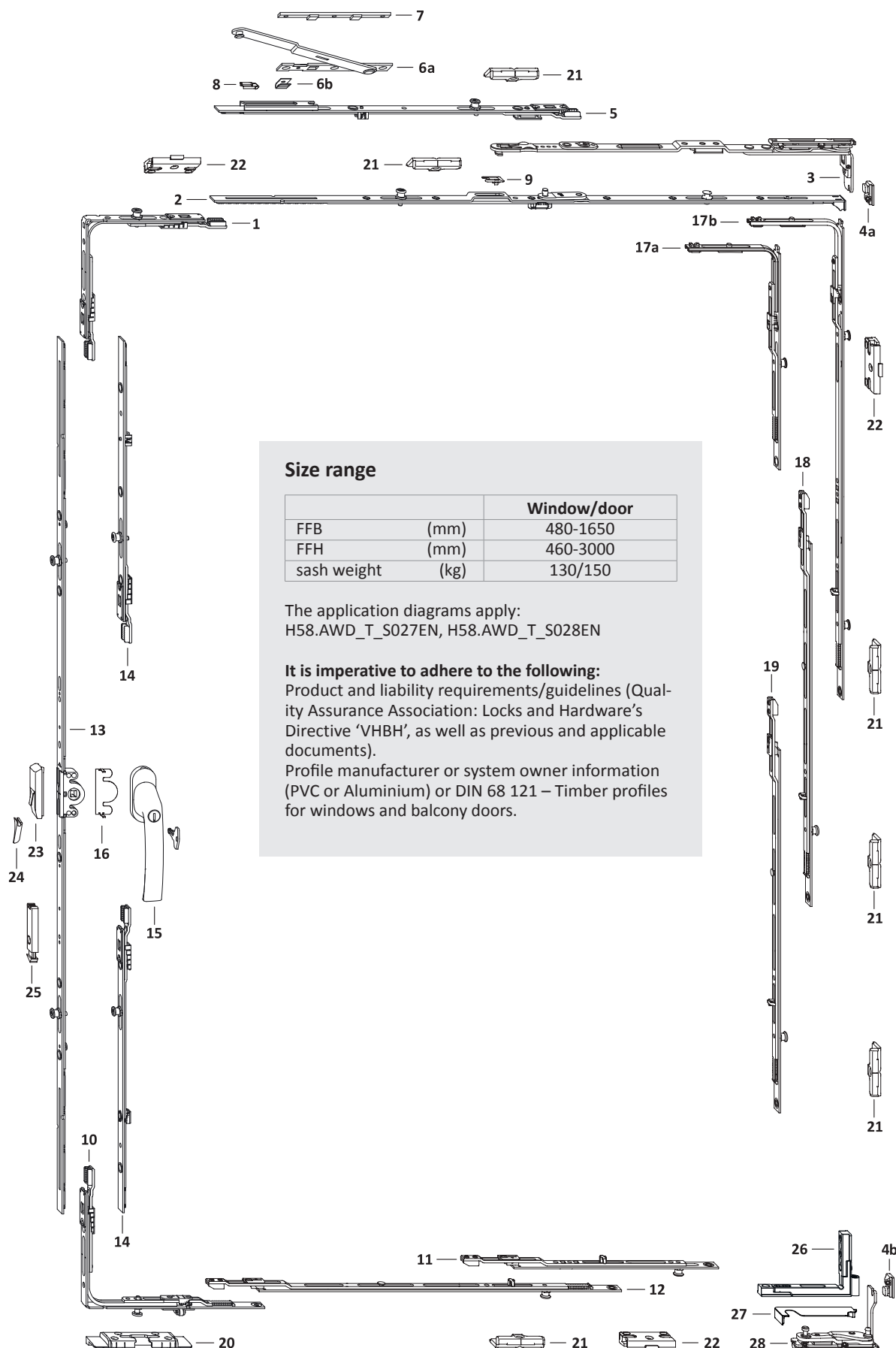


hardware layout main sash

2-sash square tilt-turn/turn DS 16
ALU16 GM Hinge side axxent 24+

TITAN AF

RC1



Size range

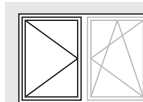
		Window/door
FFB	(mm)	480-1650
FFH	(mm)	460-3000
sash weight	(kg)	130/150

The application diagrams apply:
H58.AWD_T_S027EN, H58.AWD_T_S028EN

It is imperative to adhere to the following:
Product and liability requirements/guidelines (Quality Assurance Association: Locks and Hardware's Directive 'VHBH', as well as previous and applicable documents).
Profile manufacturer or system owner information (PVC or Aluminium) or DIN 68 121 – Timber profiles for windows and balcony doors.

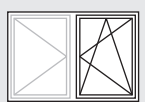
List of fittings slave sash

2-sash square tilt-turn/turn DS 16
ALU16 GM Hinge side axxent 24+



Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Number of frame parts / Pos.		
						In the main sash	43	44	45
29	corn.drive VSO 1RS	TEUL4010- ...	1	480 – 1450					1
30	stay sash part AF AX sz 1	TSSV4000- ...	1	480 – 680					
	stay sash part AF AX 2+3 1RS	TSSV0310- ...		681 – 850					
	stay sash part AF AX sz 4 1RS	TSSV0320- ...		851 – 1050				1	
	stay sash part AF AX sz 5 1RS	TSSV0330- ...		1051 – 1450				1	
31	stay arm AX sz 1	Ref. PDB, TSAV41	1	480 – 680					
	stay arm AX sz 2+3	Ref. PDB, TSAV42		681 – 850					
	stay arm AX sz 4	Ref. PDB, TSAV44		851 – 1050					
	stay arm AX sz 5	Ref. PDB, TSAV45		1051 – 1450					
32	linkage KK/AF sz 1 1RS	TZKK1010- ...	1	1251 – 1450				1	
33	crt. accessories AX	Ref. PDB, TMZV41	1	480 – 1450					
34a	locking part VSU/K FH+ 1S	TEVR1400- ...	1	480 – 1450	460 – 800		1		
34b	corn.drive AF VSU/K+ FH 1S	TEUL5010- ...	1	480 – 1450	801 – 3000		1		
35	extension sz 1+ 1RS	TVSO0200- ...	1	480 – 500					1
	extension sz 2+ 1RS	TVSL0320- ...		501 – 680					1
	extension sz 3+ 1RS	TVSL0330- ...		681 – 850					1
	extension sz 2+ 1RS	TVSL0320- ...		851 – 1250					1
	extension sz 4+ 1RS	TVSL0340- ...		1251 – 1450					1
36	linkage BS/FH sz 1+ 1RS	TZBS0180- ...	1	851 – 1050				1	
	linkage BS/FH sz 2+ 1RS	TZBS0190- ...		1051 – 1450				1	
37a	sec.sash gear 16 sz 30	TGKS0010- ...	1		460 – 600	230 – 300			
	sec.sash gear 16 AF 60/G300	TGKS4030- ...			601 – 800	300 – 400			
37b	sec.sash gear 16 AF sz 80 1SB	TGMS4040- ...	1		801 – 1200	400 – 600			
	sec.sash gear 16 AF sz 120 1SB	TGMS4050- ...			1201 – 1600	600 – 800			
	sec.sash gear 16 AF 160 2SB 70	TGMS4130- ...			1601 – 2000	800 – 1000			
	sec.sash gear 16 AF sz 200 2SB	TGMS4080- ...			2001 – 3000	1000 – 1500			
38	linkage AF sz 1 1SB-RS	TZKS1020- ...	1		2401 – 2800				
	linkage AF sz 2 1SB-RS	TZKS1030- ...			2801 – 3000				
39	linkage AF sz 1 1SB-VSU	TZKS1060- ...	1		2401 – 2800				
	linkage AF sz 2 1SB-VSU	TZKS1070- ...			2801 – 3000				
40a	corn.drive BSO/K3+ 1RS	TEUL2400- ...	1		460 – 800				1
40b	corn.drive BS/K3 sz 1+ 2RS	TEUL2380- ...	1		801 – 1200			1	1
	corn.drive BS/K3 sz 2+ 2RS	TEUL2390- ...			1201 – 3000			1	1
41	linkage BS/FH sz 1+ 1RS	TZBS0180- ...	1		1401 – 1600			1	
	linkage BS/FH sz 2+ 1RS	TZBS0190- ...			1601 – 2000			1	
	linkage BS/FH sz 3+ 1RS	TZBS0200- ...			2001 – 3000			1	
42	linkage BS/FH sz 1+ 1RS	TZBS0180- ...	1		2401 – 2600			1	
	linkage BS/FH sz 2+ 1RS	TZBS0190- ...			2601 – 2800			1	
	linkage BS/FH sz 3+ 1RS	TZBS0200- ...			2801 – 3000			1	
43	tilt lock bear. S-ES FH	Ref. PDB, FRKA							
44	striker plate 56	Ref. PDB, FRSB							
45	striker plate S-RS	Ref. PDB, TRSK							
on request									
46	striker snapper AF A0767	TRST0100- ...	1		1601 – 3000				

Hinge side turning points				
Pos.	Description	Part number		required as per sash weight
		surface TS	RAL7037	130 kg 150 kg
47	corner hinge AX	Ref. PDB, TBEB41		1 1
48	cover cap AX EL	Ref. PDB, TKEL41		1 1
49	bottom hinge AX	Ref. PDB, TBEV41		1 1



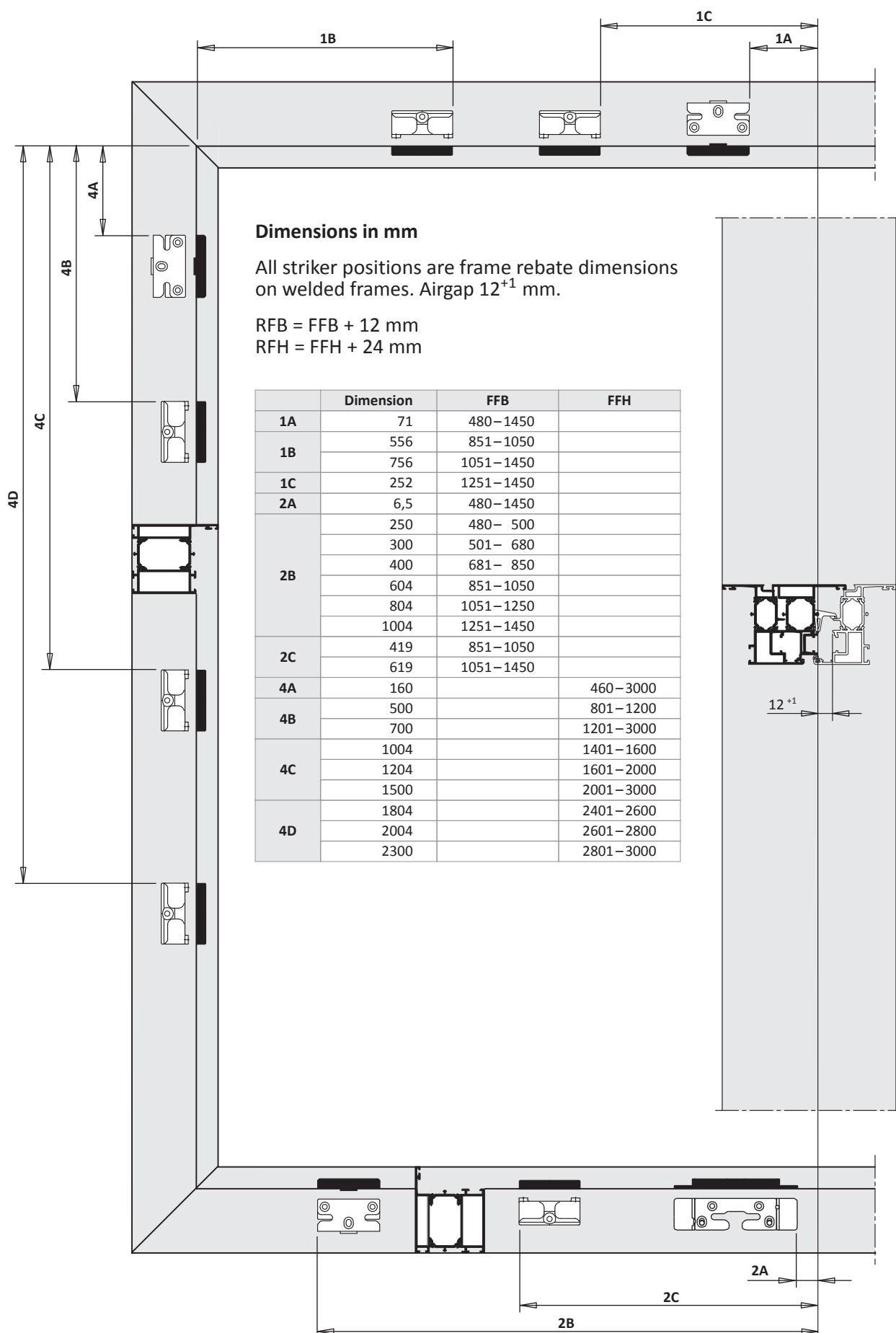
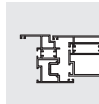
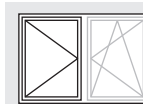
List of fittings main sash
2-sash square tilt-turn/turn DS 16
ALU16 GM Hinge side axxent 24+

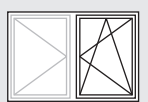
TITAN AF

RC1

Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Number of frame parts / Pos.		
							20	21	22
1	corn.drive VSO 1RS	TEUL4010- ...	1	480–1650					1
2	stay sash part AF AX sz 1	TSSV4000- ...	1	480– 680					
	stay sash part AF AX 2+3 1RS	TSSV0310- ...		681– 850					
	stay sash part AF AX sz 4 1RS	TSSV0320- ...		851–1050				1	
	stay sash part AF AX sz 5 1RS	TSSV0330- ...		1051–1250				1	
	stay sash part AF AX sz 4 1RS	TSSV0320- ...		1251–1450				1	
	stay sash part AF AX sz 5 1RS	TSSV0330- ...		1451–1650				1	
3	stay arm AX sz 1	Ref. PDB, TSAV41	1	480– 680					
	stay arm AX sz 2+3	Ref. PDB, TSAV42		681– 850					
	stay arm AX sz 4	Ref. PDB, TSAV44		851–1050					
	stay arm AX sz 5	Ref. PDB, TSAV45		1051–1250					
	stay arm AX sz 4	Ref. PDB, TSAV44		1251–1450					
	stay arm AX sz 5	Ref. PDB, TSAV45		1451–1650					
4	crt. accessories AX	Ref. PDB, TMZV41	1	480–1650					
5	linkage additional stay 1RS	TZOK1010- ...	1	1251–1650				1	
6	additional stay	Ref. PDB, TSZS	1	1251–1650					
7	packer Z	Ref. PDB, FRUP01	1	1251–1650					
8	tilt restr. additional stay ..	889008	1	1251–1650					
9	tilt restrictor V-V sz 2-4 ..	TFKB0040- ...	1	681–1050	460– 900				
	tilt restrictor V-V sz 5 ..	TFKB0050- ...		1051–1250	460– 900				
10	corn.drive AF VSU/K+ FH 1S	TEUL5010- ...	1	480–1650			1		
11	extension sz 1+ 1RS	TVSO0200- ...	1	480– 500					1
	extension sz 2+ 1RS	TVSL0320- ...		501– 680					1
	extension sz 3+ 1RS	TVSL0330- ...		681– 850					1
	extension sz 2+ 1RS	TVSL0320- ...		851–1250					1
	extension sz 4+ 1RS	TVSL0340- ...		1251–1450					1
	extension sz 3+ 1RS	TVSL0330- ...		1451–1650					1
12	linkage BS/FH sz 1+ 1RS	TZBS0180- ...	1	851–1050				1	
	linkage BS/FH sz 2+ 1RS	TZBS0190- ...		1051–1450				1	
	linkage BS/FH sz 3+ 1RS	TZBS0200- ...		1451–1650				1	
13	gear 15 AF sz 20	TGMK4010- ...	1		460– 600	230– 300			
	gear 15 AF sz 60	TGMK4020- ...			601– 800	300– 400			
	gear 15 AF sz 80 1RS	TGMK4040- ...			801–1200	400– 600			
	gear 15 AF sz 120 1RS	TGMK4050- ...			1201–1600	600– 800			
	gear 15 AF sz 160 2RS 70	TGMK4170- ...			1601–2000	800–1000			
	gear 15 AF sz 200 2RS	TGMK4080- ...			2001–3000	1000–1500			
14	linkage KK/AF sz 1 1RS	TZKK1010- ...	2		2401–2800				
	linkage KK/AF sz 2 1RS	TZKK1020- ...			2801–3000				
15	handle Globe lockable 100Nm	Ref.access. ZHGA100	1		460–3000				
16	anti-drill guard E	TGBS0010- ...	1		460–3000				
17a	corn.drive BSO/K3+ 1RS	TEUL2400- ...	1		460– 800				1
17b	corn.drive BS/K3 sz 1+ 2RS	TEUL2380- ...	1		801–1200			1	1
	corn.drive BS/K3 sz 2+ 2RS	TEUL2390- ...			1201–3000			1	1
18	linkage BS/FH sz 1+ 1RS	TZBS0180- ...	1		1401–1600			1	
	linkage BS/FH sz 2+ 1RS	TZBS0190- ...			1601–2000			1	
	linkage BS/FH sz 3+ 1RS	TZBS0200- ...			2001–3000			1	
19	linkage BS/FH sz 1+ 1RS	TZBS0180- ...	1		2401–2600			1	
	linkage BS/FH sz 2+ 1RS	TZBS0190- ...			2601–2800			1	
	linkage BS/FH sz 3+ 1RS	TZBS0200- ...			2801–3000			1	
20	tilt lock bear. S-ES FH	Ref. PDB, FRKA							
21	striker plate 56	Ref. PDB, FRSB							
22	striker plate S-RS	Ref. PDB, TRSK							
on request									
23	mishandling device	TFBS0010- ...	1						
24	pressure piece	Ref. PDB, TFFD	1						
25	snapper rh.	TFST0021- ...	1		1601–3000				
	snapper lh.	TFST0022- ...			1601–3000				

Hinge side turning points				
Pos.	Description	Part number		required as per sash weight
		surface TS	RAL7037	130 kg 150 kg
26	corner hinge AX	Ref. PDB, TBE41		1 1
27	cover cap AX EL	Ref. PDB, TKEL41		1 1
28	bottom hinge AX	Ref. PDB, TBEV41		1 1

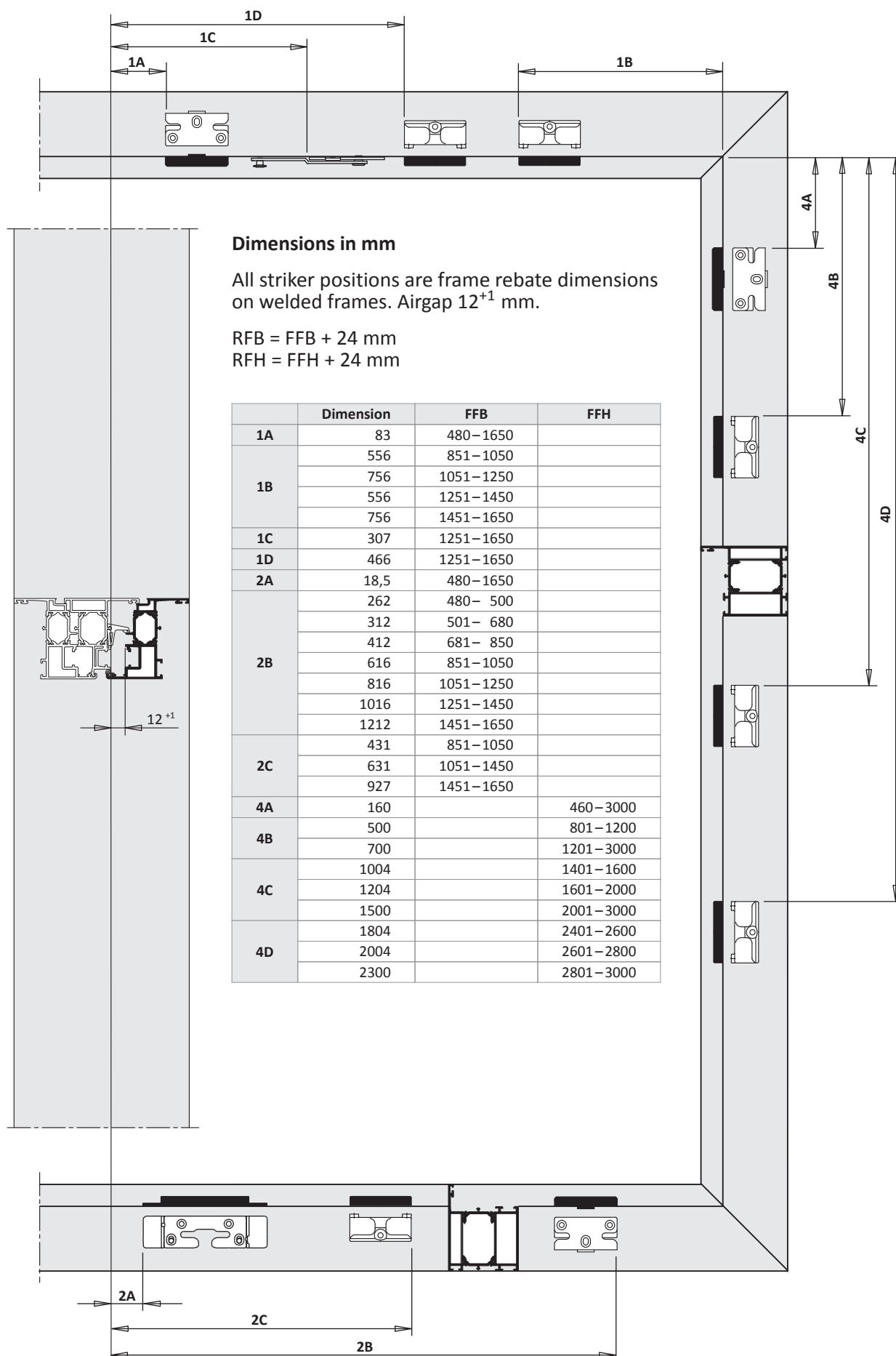




Frame dimensions main sash 2-sash square tilt-turn/turn DS 16 ALU16 GM Hinge side axxent 24+

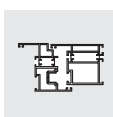
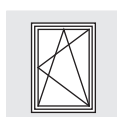
TITAN AF

RC1



TITAN AF

Installation instructions



RC1

1-sash square tilt before turn (TBT)

aluminium with 16 mm BAN

RC1

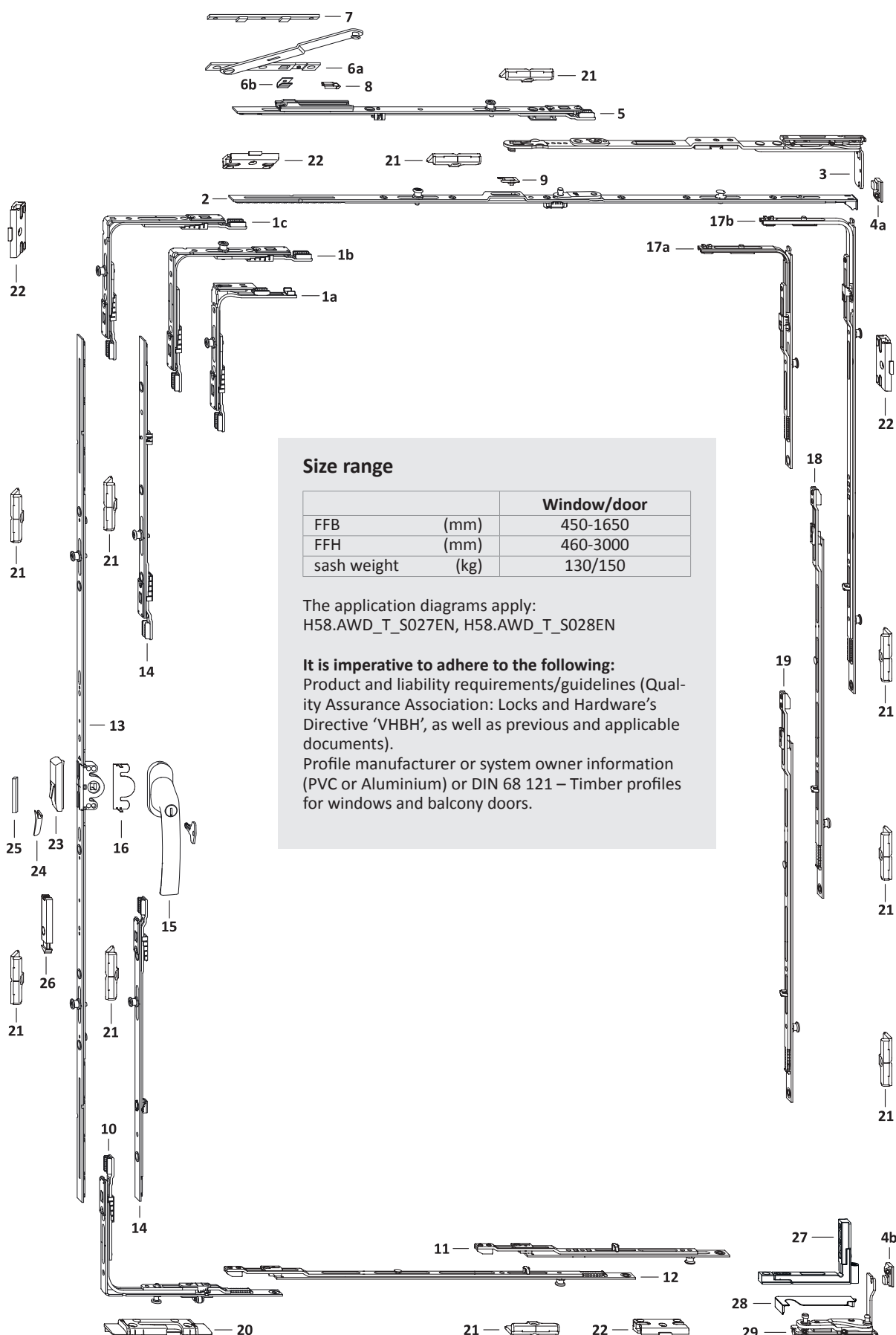
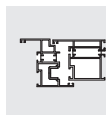
centre handle pos. (variable)

Hinge side axxent 24+

surface TS

backset 15 mm

Hardware set configuration	
General	Locking-points distance 800
Stay side	two-piece stay ax 24+
Bottom	Inliner
Locking side	mishandl. device on gear
Hinge side	corner drive BS sz 1+2 2RS



Size range

		Window/door
FFB	(mm)	450-1650
FFH	(mm)	460-3000
sash weight	(kg)	130/150

The application diagrams apply:
H58.AWD_T_S027EN, H58.AWD_T_S028EN

It is imperative to adhere to the following:
Product and liability requirements/guidelines (Quality Assurance Association: Locks and Hardware's Directive 'VHBH', as well as previous and applicable documents).

Profile manufacturer or system owner information (PVC or Aluminium) or DIN 68 121 – Timber profiles for windows and balcony doors.



List of fittings
1-sash square tilt before turn (TBT)
ALU16 GM Hinge side axxent 24+

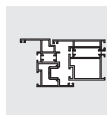
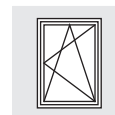
TITAN AF

RC1

Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Number of frame parts / Pos.		
							20	21	22
1a	corn.drive AF VSO narrow 1RS	TEUL4020- ...	1	450 – 480					1
1b	corn.drive VSO 1RS	TEUL4010- ...	1	481 – 1250					1
1c	corn.drive VSO 1RS	TEUL4010- ...	1	1251 – 1650					1
2	stay sash part AF AX sz 1	TSSV4000- ...	1	450 – 680					
	stay sash part AF AX 2+3 1RS	TSSV0310- ...		681 – 850					
	stay sash part AF AX sz 4 1RS	TSSV0320- ...		851 – 1050				1	
	stay sash part AF AX sz 5 1RS	TSSV0330- ...		1051 – 1250				1	
	stay sash part AF AX sz 4 1RS	TSSV0320- ...		1251 – 1450				1	
	stay sash part AF AX sz 5 1RS	TSSV0330- ...		1451 – 1650				1	
3	stay arm AX TBT sz 1	Ref. PDB, TSAV51	1	450 – 680					
	stay arm AX TBT sz 2+3	Ref. PDB, TSAV52		681 – 850					
	stay arm AX TBT sz 4	Ref. PDB, TSAV54		851 – 1050					
	stay arm AX TBT sz 5	Ref. PDB, TSAV55		1051 – 1250					
	stay arm AX TBT sz 4	Ref. PDB, TSAV54		1251 – 1450					
	stay arm AX TBT sz 5	Ref. PDB, TSAV55		1451 – 1650					
4	crt. accessories AX	Ref. PDB, TMZV41	1	450 – 1650					
5	linkage add. stay AF TBT RS	TZOT1010- ...	1	1251 – 1650				1	
6	additional stay	Ref. PDB, TSZS	1	1251 – 1650					
7	packer Z	Ref. PDB, FRUP01	1	1251 – 1650					
8	tilt restr. additional stay ..	889008	1	1251 – 1650					
9	tilt restrictor V-V sz 2-4 ..	TFKB0040- ...	1	681 – 1050	460 – 900				
	tilt restrictor V-V sz 5 ..	TFKB0050- ...		1051 – 1250	460 – 900				
10	corn.drive AF VSU/K+ FH 1S	TEUL5010- ...	1	450 – 1650			1		
11	extension sz 1+ 1RS	TVSO0200- ...	1	450 – 500					1
	extension sz 2+ 1RS	TVSL0320- ...		501 – 680					1
	extension sz 3+ 1RS	TVSL0330- ...		681 – 850					1
	extension sz 2+ 1RS	TVSL0320- ...		851 – 1250					1
	extension sz 4+ 1RS	TVSL0340- ...		1251 – 1450					1
	extension sz 3+ 1RS	TVSL0330- ...		1451 – 1650					1
12	linkage BS/FH sz 1+ 1RS	TZBS0180- ...	1	851 – 1050				1	
	linkage BS/FH sz 2+ 1RS	TZBS0190- ...		1051 – 1450				1	
	linkage BS/FH sz 3+ 1RS	TZBS0200- ...		1451 – 1650				1	
13	gear 15 AF sz 20	TGMK4010- ...	1		460 – 600	230 – 300			
	gear 15 AF sz 60	TGMK4020- ...			601 – 800	300 – 400			
	gear 15 AF sz 80 1RS	TGMK4040- ...			801 – 1200	400 – 600		1	
	gear 15 AF sz 120 1RS	TGMK4050- ...			1201 – 1600	600 – 800		1	
	gear 15 AF sz 160 2RS 70	TGMK4170- ...			1601 – 2000	800 – 1000		2	
	gear 15 AF sz 200 2RS	TGMK4080- ...			2001 – 3000	1000 – 1500		2	
14	linkage KK/AF sz 1 1RS	TZKK1010- ...	2		2401 – 2800			2	
	linkage KK/AF sz 2 1RS	TZKK1020- ...			2801 – 3000			2	
15	handle Globe TBT lockable	Ref.access. ZHGT	1		460 – 3000				
16	anti-drill guard E	TGBS0010- ...	1		460 – 3000				
17a	corn.drive BSO/K3+ 1RS	TEUL2400- ...	1		460 – 800				1
17b	corn.drive BS/K3 sz 1+ 2RS	TEUL2380- ...	1		801 – 1200			1	1
	corn.drive BS/K3 sz 2+ 2RS	TEUL2390- ...			1201 – 3000			1	1
18	linkage BS/FH sz 1+ 1RS	TZBS0180- ...	1		1401 – 1600			1	
	linkage BS/FH sz 2+ 1RS	TZBS0190- ...			1601 – 2000			1	
	linkage BS/FH sz 3+ 1RS	TZBS0200- ...			2001 – 3000			1	
19	linkage BS/FH sz 1+ 1RS	TZBS0180- ...	1		2401 – 2600			1	
	linkage BS/FH sz 2+ 1RS	TZBS0190- ...			2601 – 2800			1	
	linkage BS/FH sz 3+ 1RS	TZBS0200- ...			2801 – 3000			1	
20	tilt lock bear. S-ES FH TBT	Ref. PDB, FRKB							
21	striker plate 56	Ref. PDB, FRSB							
22	striker plate S-RS	Ref. PDB, TRSK							
on request									
23	mishandling device	TFBS0010- ...	1						
24	pressure piece	Ref. PDB, TFFD	1						
25	stop	Ref. PDB, FRZF01	1						
26	snapper rh.	TFST0021- ...	1		1601 – 3000				
	snapper lh.	TFST0022- ...			1601 – 3000				

List of fittings

1-sash square tilt before turn (TBT)
ALU16 GM Hinge side axxent 24+



Hinge side turning points					
Pos.	Description	Part number		required as per sash weight	
		surface TS	RAL7037	130 kg	150 kg
27	corner hinge AX	Ref. PDB, TBEB41		1	1
28	cover cap AX EL	Ref. PDB, TKEL41		1	1
29	bottom hinge AX	Ref. PDB, TBEV41		1	1

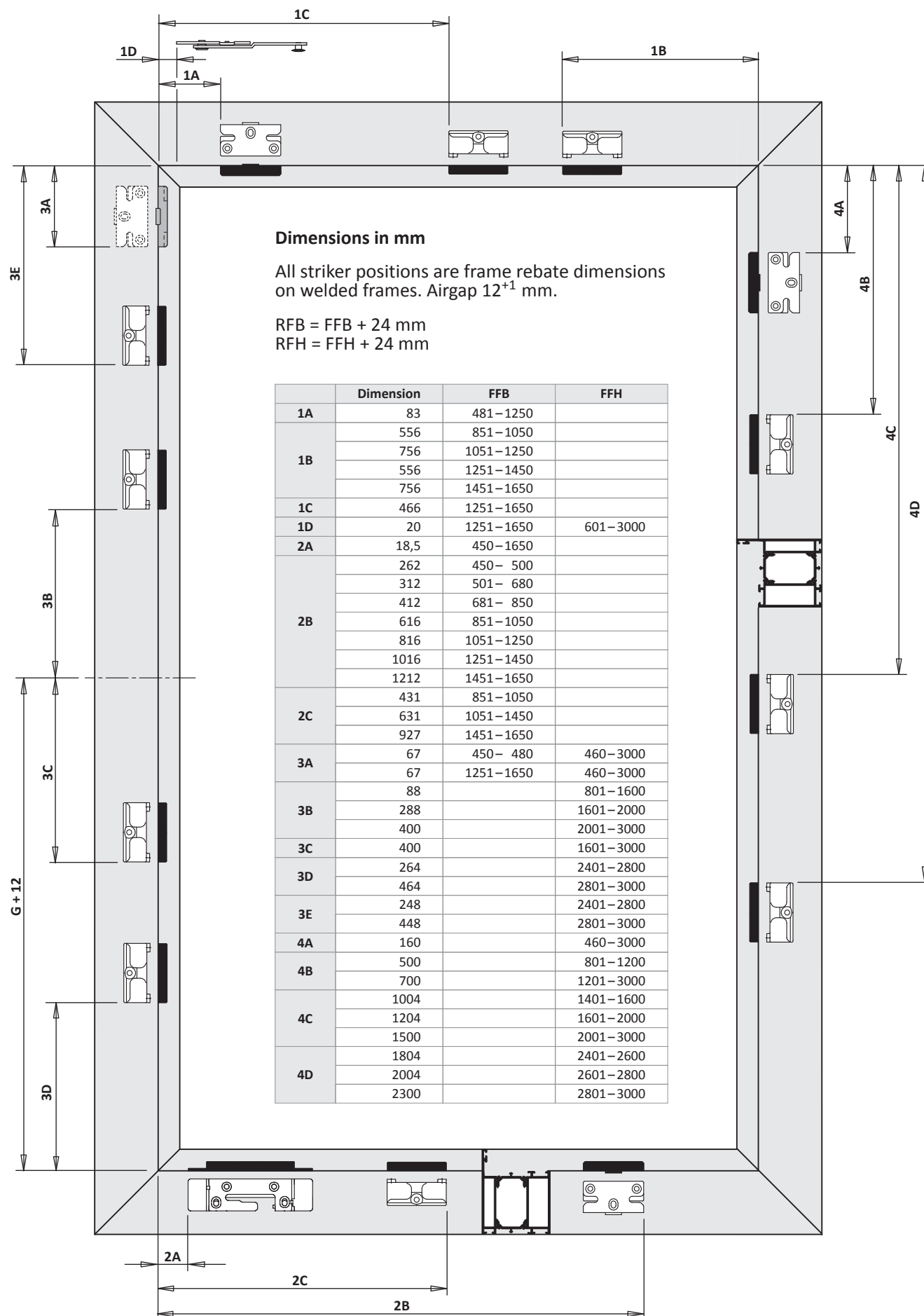


Frame dimensions

1-sash square tilt before turn (TBT)
ALU16 GM Hinge side axxent 24+

TITAN AF

RC1





6 - RC2 - Fixed handle position

Installation instructions ALU16
Hinge side axxent 24+

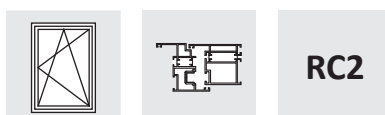
TITAN AF

RC2 - Fixed handle position

1-sash square tilt-turn	H48.TAFALUK2+S003EN	6 - 3
2-sash square tilt-turn/turn DS 16	H48.TAFALUK2+S004EN	6 - 9

TITAN AF

Installation instructions



1-sash square tilt-turn
aluminium with 16 mm BAN

RC2

fixed handle position

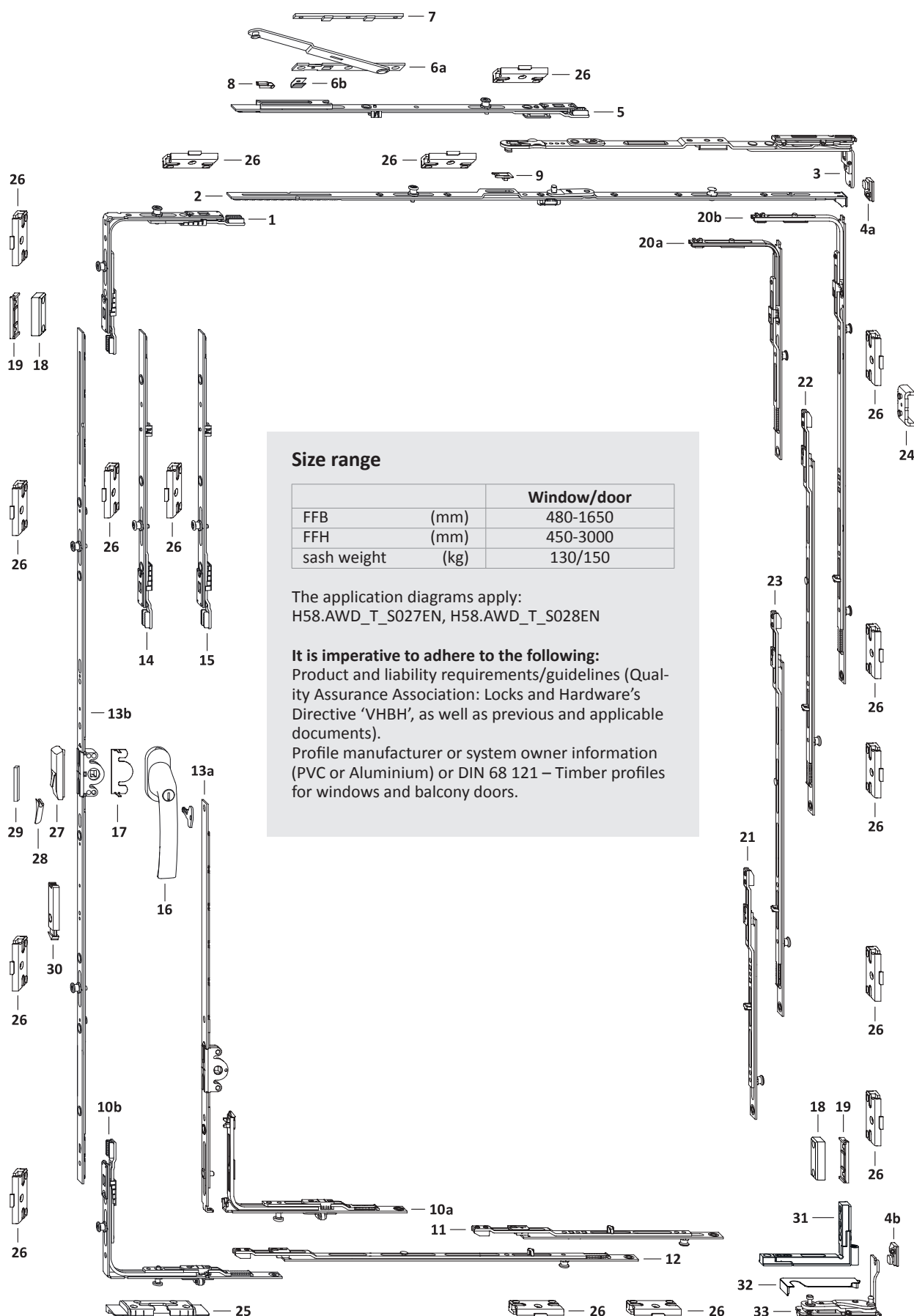
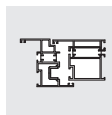
Hinge side axxent 24+

surface TS

backset 15 mm

6

Hardware set configuration	
General	Locking-points distance 800
Stay side	two-piece stay ax 24+
Bottom	Inliner
Locking side	mishandl. device on gear
Hinge side	corner drive BS sz 1+2 2RS



Size range

		Window/door
FFB	(mm)	480-1650
FFH	(mm)	450-3000
sash weight	(kg)	130/150

The application diagrams apply:
H58.AWD_T_S027EN, H58.AWD_T_S028EN

It is imperative to adhere to the following:
Product and liability requirements/guidelines (Quality Assurance Association: Locks and Hardware's Directive 'VHBH', as well as previous and applicable documents).
Profile manufacturer or system owner information (PVC or Aluminium) or DIN 68 121 – Timber profiles for windows and balcony doors.



List of fittings
1-sash square tilt-turn
ALU16 GK Hinge side axxent 24+

TITAN AF

RC2

Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Number of frame parts / Pos.	
							25	26
1	corn.drive VSO 2RS A0055	TEUL4070- ...	1	480 – 1650				2
2	stay sash part AF AX sz 1	TSSV4000- ...	1	480 – 680				
	stay sash part AF AX 2+3 1RS	TSSV0310- ...		681 – 850				
	stay sash part AF AX sz 4 1RS	TSSV0320- ...		851 – 1050				1
	stay sash part AF AX sz 5 1RS	TSSV0330- ...		1051 – 1250				1
	stay sash part AF AX sz 4 1RS	TSSV0320- ...		1251 – 1450				1
	stay sash part AF AX sz 5 1RS	TSSV0330- ...		1451 – 1650				1
3	stay arm AX sz 1	Ref. PDB, TSAV41	1	480 – 680				
	stay arm AX sz 2+3	Ref. PDB, TSAV42		681 – 850				
	stay arm AX sz 4	Ref. PDB, TSAV44		851 – 1050				
	stay arm AX sz 5	Ref. PDB, TSAV45		1051 – 1250				
	stay arm AX sz 4	Ref. PDB, TSAV44		1251 – 1450				
	stay arm AX sz 5	Ref. PDB, TSAV45		1451 – 1650				
4	crt. accessories AX	Ref. PDB, TMZV41	1	480 – 1650				
5	linkage additional stay 1RS	TZOK1010- ...	1	1251 – 1650				1
6	additional stay	Ref. PDB, TSZS	1	1251 – 1650				
7	packer Z	Ref. PDB, FRUP01	1	1251 – 1650				
8	tilt restr. additional stay ..	889008	1	1251 – 1650				
9	tilt restrictor V-V sz 2-4 ..	TFKB0040- ...	1	681 – 1050	450 – 900			
	tilt restrictor V-V sz 5 ..	TFKB0050- ...		1051 – 1250	450 – 900			
10a	locking part VSU/K FH+ 1S	TEVR1400- ...	1	480 – 1250	450 – 600		1	
10b	corn.drive AF VSU/K+ FH 1S 1RS A0055	TEUL5020- ...	1	480 – 1650	601 – 3000		1	1
11	extension sz 1+ 1RS	TVSO0200- ...	1	480 – 500				1
	extension sz 2+ 1RS	TVSL0320- ...		501 – 680				1
	extension sz 3+ 1RS	TVSL0330- ...		681 – 850				1
	extension sz 2+ 1RS	TVSL0320- ...		851 – 1250				1
	extension sz 4+ 1RS	TVSL0340- ...		1251 – 1450				1
	extension sz 3+ 1RS	TVSL0330- ...		1451 – 1650				1
12	linkage BS/FH sz 1+ 1RS	TZBS0180- ...	1	851 – 1050				1
	linkage BS/FH sz 2+ 1RS	TZBS0190- ...		1051 – 1450				1
	linkage BS/FH sz 3+ 1RS	TZBS0200- ...		1451 – 1650				1
13a	gear 15 sz 30/G180	TGKK3010- ...	1	480 – 1250	450 – 600	180		
13b	gear 15 AF sz 60/G300	TGKK4030- ...	1		601 – 800	300		
	gear 15 AF sz 80/G400 1RS	TGKK4050- ...			801 – 1000	400		1
	gear 15 AF sz 100/G500 1RS	TGKK4060- ...			1001 – 1200	500		1
	gear 15 AF sz 120/G600 1RS	TGKK4070- ...			1201 – 1400	600		1
	gear 15 AF sz 140/G700 1RS	TGKK4080- ...			1401 – 1600	700		1
	gear 15 AF sz 160/G700 1RS 70	TGKK4280- ...			1601 – 1800	700		2
	gear 15 AF sz 180/G1000 2RS 70	TGKK4220- ...			1801 – 2000	1000		2
	gear 15 AF sz 200/G1000 2RS	TGKK4110- ...			2001 – 3000	1000		2
14	linkage AF sz 1	TZZS0150- ...	1		2201 – 2400			
	linkage KK/AF sz 2 1RS	TZKK1020- ...			2401 – 2600			1
	linkage AF sz 1	TZZS0150- ...			2601 – 2800			
	linkage KK/AF sz 2 1RS	TZKK1020- ...			2801 – 3000			1
15	linkage KK/AF sz 2 1RS	TZKK1020- ...	1		2601 – 2800			1
	linkage KK/AF sz 2 1RS	TZKK1020- ...			2801 – 3000			1
16	handle Globe lockable 100Nm	Ref.access. ZHGA100	1		450 – 3000			
17	anti-drill guard E	TGBS0010- ...	1		450 – 3000			
18	Air gap limiter	Ref. PDB, FRFL	2		450 – 3000			
19	packer RB/FPS	Ref. PDB, FRUP02	2		450 – 3000			
20a	corn.drive BSO/K3+ 1RS	TEUL2400- ...	1		450 – 800			1
20b	corn.drive BS/K3 sz 1+ 2RS	TEUL2380- ...	1		801 – 1200			2
	corn.drive BS/K3 sz 2+ 2RS	TEUL2390- ...			1201 – 3000			2
21	extension sz 2+ 1RS	TVSL0320- ...	1		601 – 800			1
	extension sz 1+ 1RS	TVSO0200- ...			801 – 1000			1
	extension sz 3+ 1RS	TVSL0330- ...			1001 – 1400			1
	extension sz 2+ 1RS	TVSL0320- ...			1401 – 1800			1
	extension sz 4+ 1RS	TVSL0340- ...			1801 – 2000			1
	extension sz 3+ 1RS	TVSL0330- ...			2001 – 2200			1
	extension sz 5+ 1RS	TVSL0350- ...			2201 – 2400			1
	extension sz 4+ 1RS	TVSL0340- ...			2401 – 2600			1
	extension sz 4+ 1RS	TVSL0340- ...			2601 – 2800			1
	extension sz 3+ 1RS	TVSL0330- ...			2801 – 3000			1



Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Number of frame parts / Pos.	
							25	26
22	linkage BS/FH sz 1+ 1RS	TZBS0180- ...	1		1401–1600			1
	linkage BS/FH sz 2+ 1RS	TZBS0190- ...			1601–2000			1
	linkage BS/FH sz 3+ 1RS	TZBS0200- ...			2001–3000			1
23	linkage BS/FH sz 1+ 1RS	TZBS0180- ...	1		2401–2600			1
	linkage BS/FH sz 2+ 1RS	TZBS0190- ...			2601–2800			1
	linkage BS/FH sz 3+ 1RS	TZBS0200- ...			2801–3000			1
24	anti-lift device	Ref. PDB, TFAH	1		450–3000			
25	tilt lock bear. S-ES FH	Ref. PDB, FRKA						
26	striker plate S-RS	Ref. PDB, TRSK						
on request								
27	mishandling device	TFBS0010- ...	1					
28	pressure piece	Ref. PDB, TFFD	1					
29	stop	Ref. PDB, FRZF01	1					
30	snapper rh.	TFST0021- ...	1		1801–3000			
	snapper lh.	TFST0022- ...			1801–3000			

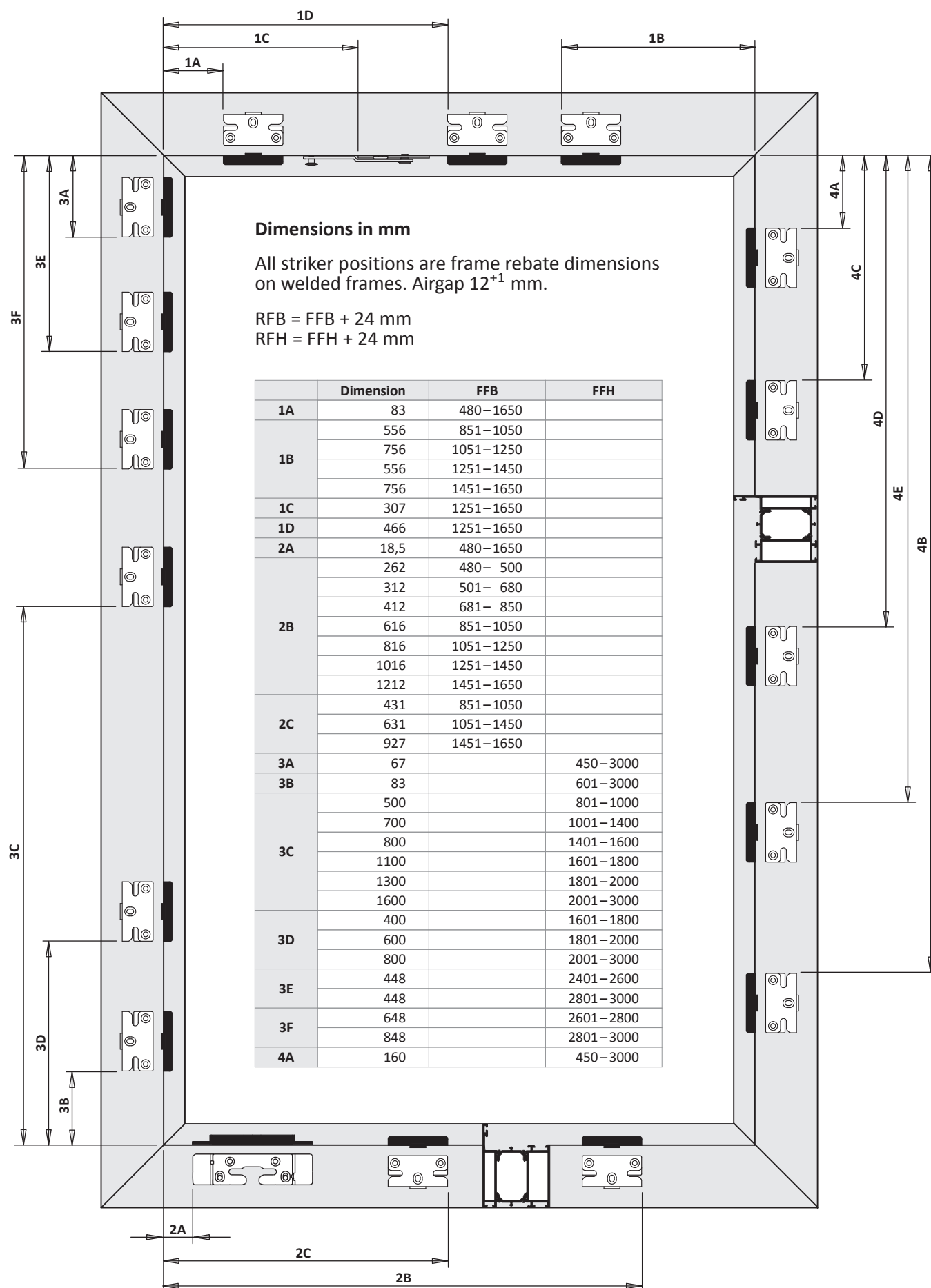
Hinge side turning points					
Pos.	Description	Part number		required as per sash weight	
		surface TS	RAL7037	130 kg	150 kg
31	corner hinge AX	Ref. PDB, TBEB41		1	1
32	cover cap AX EL	Ref. PDB, TKEL41		1	1
33	bottom hinge AX	Ref. PDB, TBEV41		1	1

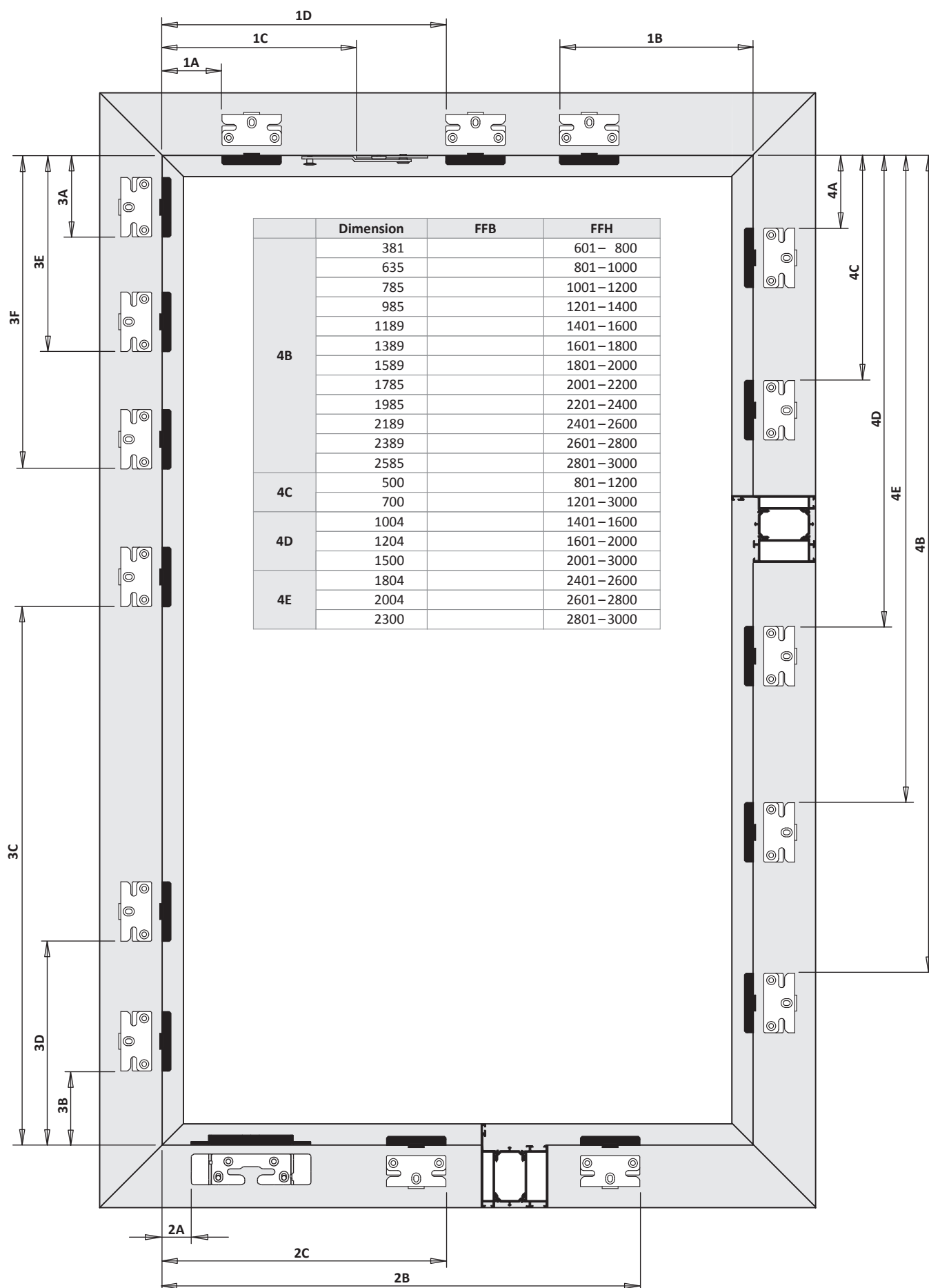
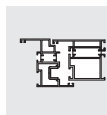


Frame dimensions
1-sash square tilt-turn
ALU16 GK Hinge side axxent 24+

TITAN AF

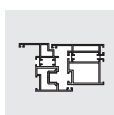
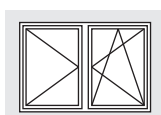
RC2





TITAN AF

Installation instructions



RC2

2-sash square tilt-turn/turn DS 16

aluminium with 16 mm BAN

RC2

fixed handle position

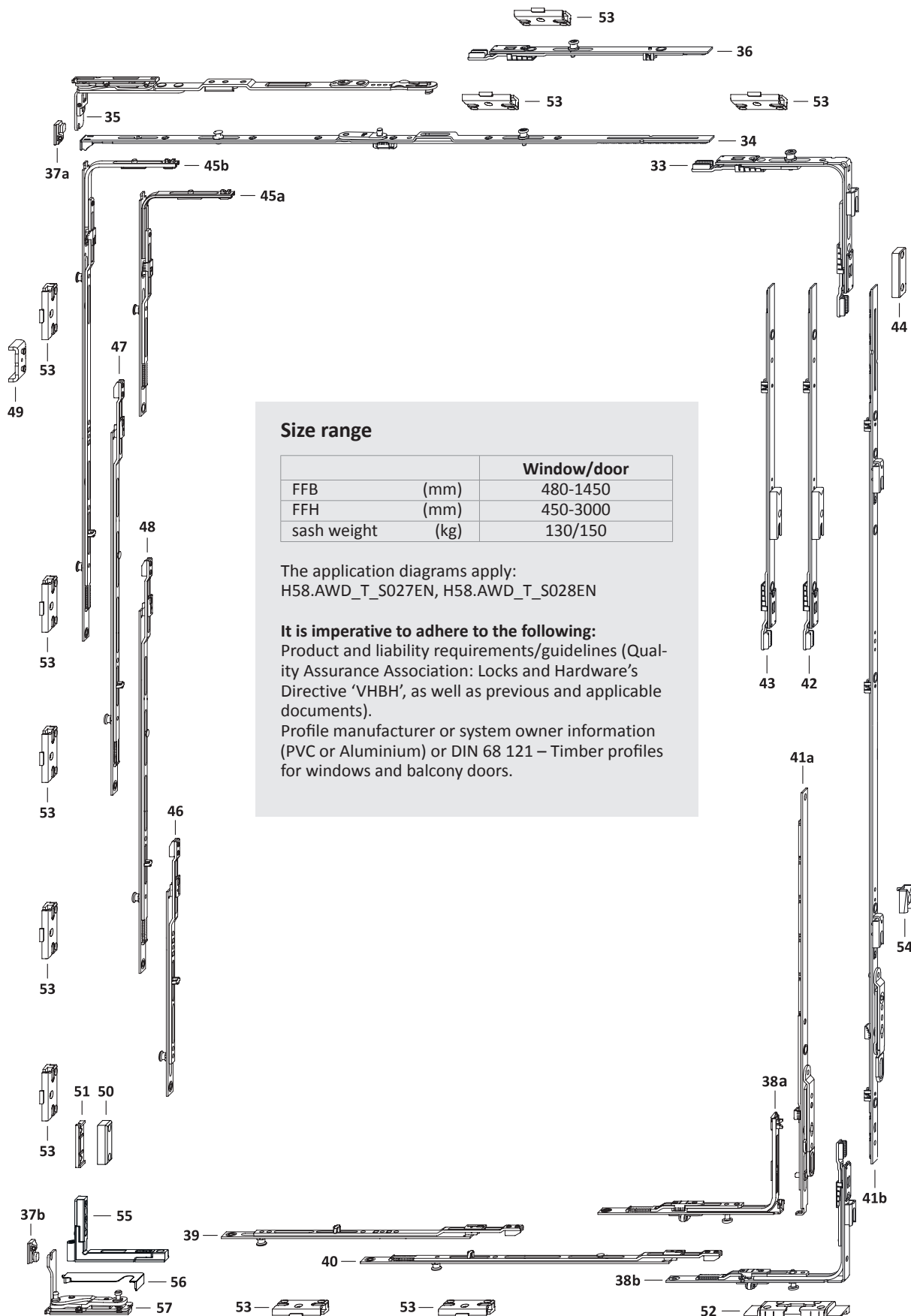
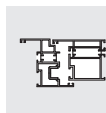
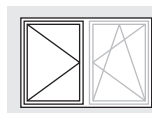
Hinge side axxent 24+

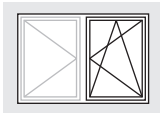
surface TS

backset 15 mm

6

Hardware set configuration	
General	Locking-points distance 800
Stay side	two-piece stay ax 24+
Bottom	Inliner
Locking side	mishandl. device on gear
Hinge side	corner drive BS sz 1+2 2RS





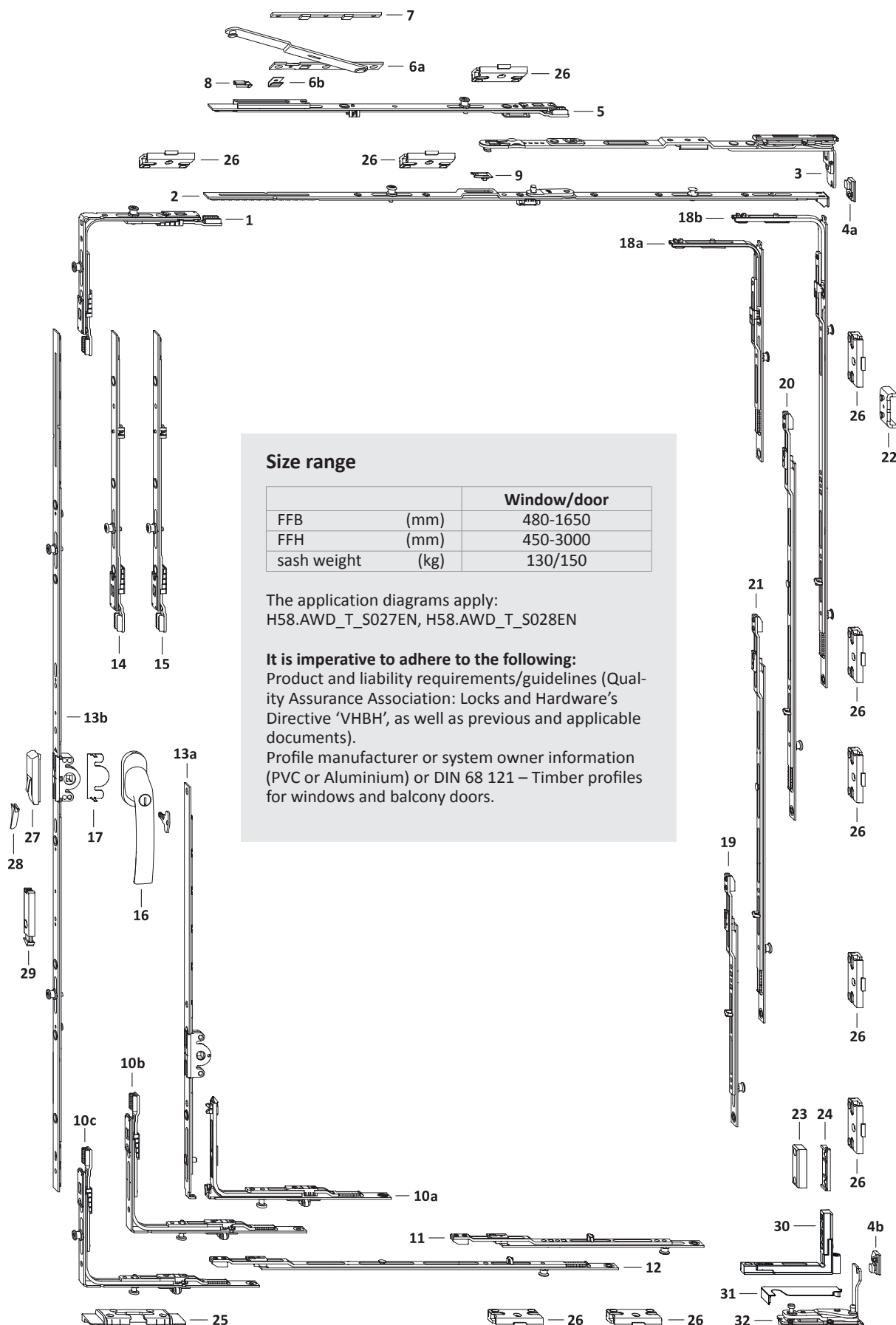
hardware layout main sash

2-sash square tilt-turn/turn DS 16

ALU16 GK Hinge side axxent 24+

TITAN AF

RC2

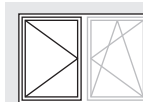


Size range

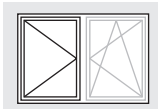
		Window/door
FFB	(mm)	480-1650
FFH	(mm)	450-3000
sash weight	(kg)	130/150

The application diagrams apply:
H58.AWD_T_S027EN, H58.AWD_T_S028EN

It is imperative to adhere to the following:
Product and liability requirements/guidelines (Quality Assurance Association: Locks and Hardware's Directive 'VHBH', as well as previous and applicable documents).
Profile manufacturer or system owner information (PVC or Aluminium) or DIN 68 121 – Timber profiles for windows and balcony doors.



Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Number of frame parts / Pos.	
						In the main sash	52	53
33	corn.drive AF VSO WK2 SB 1RS	TEUL4080- ...	1	480 – 1450				1
34	stay sash part AF AX sz 1	TSSV4000- ...	1	480 – 680				
	stay sash part AF AX 2+3 1RS	TSSV0310- ...		681 – 850				
	stay sash part AF AX sz 4 1RS	TSSV0320- ...		851 – 1050				1
	stay sash part AF AX sz 5 1RS	TSSV0330- ...		1051 – 1450				1
35	stay arm AX sz 1	Ref. PDB, TSAV41	1	480 – 680				
	stay arm AX sz 2+3	Ref. PDB, TSAV42		681 – 850				
	stay arm AX sz 4	Ref. PDB, TSAV44		851 – 1050				
	stay arm AX sz 5	Ref. PDB, TSAV45		1051 – 1050				
36	linkage KK/AF sz 1 1RS	TZKK1010- ...	1	1251 – 1450				1
37	crt. accessories AX	Ref. PDB, TMZV41	1	480 – 1450				
38a	locking part VSU/K FH+ 1S	TEVR1400- ...	1	480 – 1450	450 – 800		1	
38b	corn.drive AF VSU/K+WK2 FHSB1S	TEUL5110- ...	1	480 – 1450	801 – 3000		1	
39	extension sz 1+ 1RS	TVSO0200- ...	1	480 – 500				1
	extension sz 2+ 1RS	TVSL0320- ...		501 – 680				1
	extension sz 3+ 1RS	TVSL0330- ...		681 – 850				1
	extension sz 2+ 1RS	TVSL0320- ...		851 – 1250				1
	extension sz 4+ 1RS	TVSL0340- ...		1251 – 1450				1
	linkage BS/FH sz 1+ 1RS	TZBS0180- ...		851 – 1050				1
40	linkage BS/FH sz 2+ 1RS	TZBS0190- ...	1	1051 – 1450				1
41a	sec.sash gear 16 sz 30	TGKS0010- ...	1	480 – 1250	450 – 600	180		
	sec.sash gear 16 AF 60/G300	TGKS4030- ...			601 – 800	300		
41b	sec.sash gear 16 AF80/G400 1SB	TGKS4050- ...	1		801 – 1000	400		
	sec.sash gear 16 AF sz 100 1SB	TGKS4060- ...			1001 – 1200	500		
	sec.sash gear 16 AF120/G6001SB	TGKS4070- ...			1201 – 1400	600		
	sec.sash gear 16 AF140/G7001SB	TGKS4080- ...			1401 – 1600	700		
	sec.sash gear 16 AF160/G7002SB 70	TGKS4330- ...			1601 – 1800	700		
	sec.sash gear 16AF180/G10002SB 70	TGKS4270- ...			1801 – 2000	1000		
	sec.sash gear 16AF200/G10002SB	TGKS4110- ...			2001 – 3000	1000		
	linkage AF sz 1	TZZS0150- ...			2201 – 2400			
42	linkage AF sz 2 1SB-RS	TZKS1030- ...	1		2401 – 2600			
	linkage AF sz 1	TZZS0150- ...			2601 – 2800			
	linkage AF sz 2 1SB-RS	TZKS1030- ...			2801 – 3000			
	linkage AF sz 2 1SB-RS	TZKS1030- ...			2601 – 2800			
43	linkage AF sz 2 1SB-RS	TZKS1030- ...	1		2801 – 3000			
44	air gap limiter F ..	TFFB0010- ...	1		450 – 3000			
45a	corn.drive BSO/K3+ 1RS	TEUL2400- ...	1		450 – 800			1
45b	corn.drive BS/K3 sz 1+ 2RS	TEUL2380- ...	1		801 – 1200			2
	corn.drive BS/K3 sz 2+ 2RS	TEUL2390- ...			1201 – 3000			2
46	extension sz 2+ 1RS	TVSL0320- ...	1		601 – 800			1
	extension sz 1+ 1RS	TVSO0200- ...			801 – 1000			1
	extension sz 3+ 1RS	TVSL0330- ...			1001 – 1400			1
	extension sz 2+ 1RS	TVSL0320- ...			1401 – 1800			1
	extension sz 4+ 1RS	TVSL0340- ...			1801 – 2000			1
	extension sz 3+ 1RS	TVSL0330- ...			2001 – 2200			1
	extension sz 5+ 1RS	TVSL0350- ...			2201 – 2400			1
	extension sz 4+ 1RS	TVSL0340- ...			2401 – 2600			1
	extension sz 4+ 1RS	TVSL0340- ...			2601 – 2800			1
	extension sz 3+ 1RS	TVSL0330- ...			2801 – 3000			1
47	linkage BS/FH sz 1+ 1RS	TZBS0180- ...	1		1401 – 1600			1
	linkage BS/FH sz 2+ 1RS	TZBS0190- ...			1601 – 2000			1
	linkage BS/FH sz 3+ 1RS	TZBS0200- ...			2001 – 3000			1
48	linkage BS/FH sz 1+ 1RS	TZBS0180- ...	1		2401 – 2600			1
	linkage BS/FH sz 2+ 1RS	TZBS0190- ...			2601 – 2800			1
	linkage BS/FH sz 3+ 1RS	TZBS0200- ...			2801 – 3000			1
49	anti-lift device	Ref. PDB, TFAH	1		450 – 3000			
50	Air gap limiter	Ref. PDB, FRFL	1		450 – 3000			
51	packer RB/FPS	Ref. PDB, FRUP02	1		450 – 3000			
52	tilt lock bear. S-ES FH	Ref. PDB, FRKA						
53	striker plate S-RS	Ref. PDB, TRSK						
on request								
54	striker snapper AF A0767	TRST0100- ...	1		1801 – 3000			



List of fittings slave sash

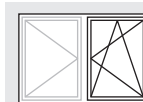
2-sash square tilt-turn/turn DS 16
ALU16 GK Hinge side axxent 24+

TITAN AF

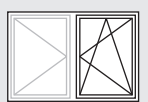
RC2

Hinge side turning points					
Pos.	Description	Part number		required as per sash weight	
		surface TS	RAL7037	130 kg	150 kg
55	corner hinge AX	Ref. PDB, TBEB41		1	1
56	cover cap AX EL	Ref. PDB, TKEL41		1	1
57	bottom hinge AX	Ref. PDB, TBEV41		1	1

List of fittings main sash

2-sash square tilt-turn/turn DS 16
ALU16 GK Hinge side axxent 24+

Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Number of frame parts / Pos.	
							25	26
1	corn.drive VSO 2RS A0055	TEUL4070- ...	1	480-1650				1
2	stay sash part AF AX sz 1	TSSV4000- ...	1	480- 680				
	stay sash part AF AX 2+3 1RS	TSSV0310- ...		681- 850				
	stay sash part AF AX sz 4 1RS	TSSV0320- ...		851-1050				1
	stay sash part AF AX sz 5 1RS	TSSV0330- ...		1051-1250				1
	stay sash part AF AX sz 4 1RS	TSSV0320- ...		1251-1450				1
	stay sash part AF AX sz 5 1RS	TSSV0330- ...		1451-1650				1
3	stay arm AX sz 1	Ref. PDB, TSAV41	1	480- 680				
	stay arm AX sz 2+3	Ref. PDB, TSAV42		681- 850				
	stay arm AX sz 4	Ref. PDB, TSAV44		851-1050				
	stay arm AX sz 5	Ref. PDB, TSAV45		1051-1250				
	stay arm AX sz 4	Ref. PDB, TSAV44		1251-1450				
	stay arm AX sz 5	Ref. PDB, TSAV45		1451-1650				
4	crt. accessories AX	Ref. PDB, TMZV41	1	480-1650				
5	linkage additional stay 1RS	TZOK1010- ...	1	1251-1650				1
6	additional stay	Ref. PDB, TSZS	1	1251-1650				
7	packer Z	Ref. PDB, FRUP01	1	1251-1650				
8	tilt restr. additional stay ..	889008	1	1251-1650				
9	tilt restrictor V-V sz 2-4 ..	TFKB0040- ...	1	681-1050	450- 900			
	tilt restrictor V-V sz 5 ..	TFKB0050- ...		1051-1250	450- 900			
10a	locking part VSU/K FH+ 1S	TEVR1400- ...	1	480-1250	450- 600		1	
10b	corn.drive AF VSU/K+ FH 1S	TEUL5010- ...	1	480-1650	601- 800		1	
10c	corn.drive AF VSU/K+ FH 1S 1RS A0055	TEUL5020- ...	1	480-1650	801-3000		1	
11	extension sz 1+ 1RS	TVSO0200- ...	1	480- 500				1
	extension sz 2+ 1RS	TVSL0320- ...		501- 680				1
	extension sz 3+ 1RS	TVSL0330- ...		681- 850				1
	extension sz 2+ 1RS	TVSL0320- ...		851-1250				1
	extension sz 4+ 1RS	TVSL0340- ...		1251-1450				1
	extension sz 3+ 1RS	TVSL0330- ...		1451-1650				1
12	linkage BS/FH sz 1+ 1RS	TZBS0180- ...	1	851-1050				1
	linkage BS/FH sz 2+ 1RS	TZBS0190- ...		1051-1450				1
	linkage BS/FH sz 3+ 1RS	TZBS0200- ...		1451-1650				1
13a	gear 15 sz 30/G180	TGKK3010- ...	1	480-1250	450- 600	180		
13b	gear 15 AF sz 60/G300	TGKK4030- ...	1		601- 800	300		
	gear 15 AF sz 80/G400 1RS	TGKK4050- ...			801-1000	400		
	gear 15 AF sz 100/G500 1RS	TGKK4060- ...			1001-1200	500		
	gear 15 AF sz 120/G600 1RS	TGKK4070- ...			1201-1400	600		
	gear 15 AF sz 140/G700 1RS	TGKK4080- ...			1401-1600	700		
	gear 15 AF sz 160/G700 1RS 70	TGKK4280- ...			1601-1800	700		
	gear 15 AF sz 180/G1000 2RS 70	TGKK4220- ...			1801-2000	1000		
	gear 15 AF sz 200/G1000 2RS	TGKK4110- ...			2001-3000	1000		
14	linkage AF sz 1	TZZS0150- ...	1		2201-2400			
	linkage KK/AF sz 2 1RS	TZKK1020- ...			2401-2600			
	linkage AF sz 1	TZZS0150- ...			2601-2800			
	linkage KK/AF sz 2 1RS	TZKK1020- ...			2801-3000			
15	linkage KK/AF sz 2 1RS	TZKK1020- ...	1		2601-2800			
	linkage KK/AF sz 2 1RS	TZKK1020- ...			2801-3000			
16	handle Globe lockable 100Nm	Ref.access. ZHGA100	1		450-3000			
17	anti-drill guard E	TGBS0010- ...	1		450-3000			
18a	corn.drive BSO/K3+ 1RS	TEUL2400- ...	1		450- 800			1
18b	corn.drive BS/K3 sz 1+ 2RS	TEUL2380- ...	1		801-1200			2
	corn.drive BS/K3 sz 2+ 2RS	TEUL2390- ...			1201-3000			2
19	extension sz 2+ 1RS	TVSL0320- ...	1		601- 800			1
	extension sz 1+ 1RS	TVSO0200- ...			801-1000			1
	extension sz 3+ 1RS	TVSL0330- ...			1001-1400			1
	extension sz 2+ 1RS	TVSL0320- ...			1401-1800			1
	extension sz 4+ 1RS	TVSL0340- ...			1801-2000			1
	extension sz 3+ 1RS	TVSL0330- ...			2001-2200			1
	extension sz 5+ 1RS	TVSL0350- ...			2201-2400			1
	extension sz 4+ 1RS	TVSL0340- ...			2401-2600			1
	extension sz 4+ 1RS	TVSL0340- ...			2601-2800			1
	extension sz 3+ 1RS	TVSL0330- ...			2801-3000			1



List of fittings main sash 2-sash square tilt-turn/turn DS 16 ALU16 GK Hinge side axxent 24+

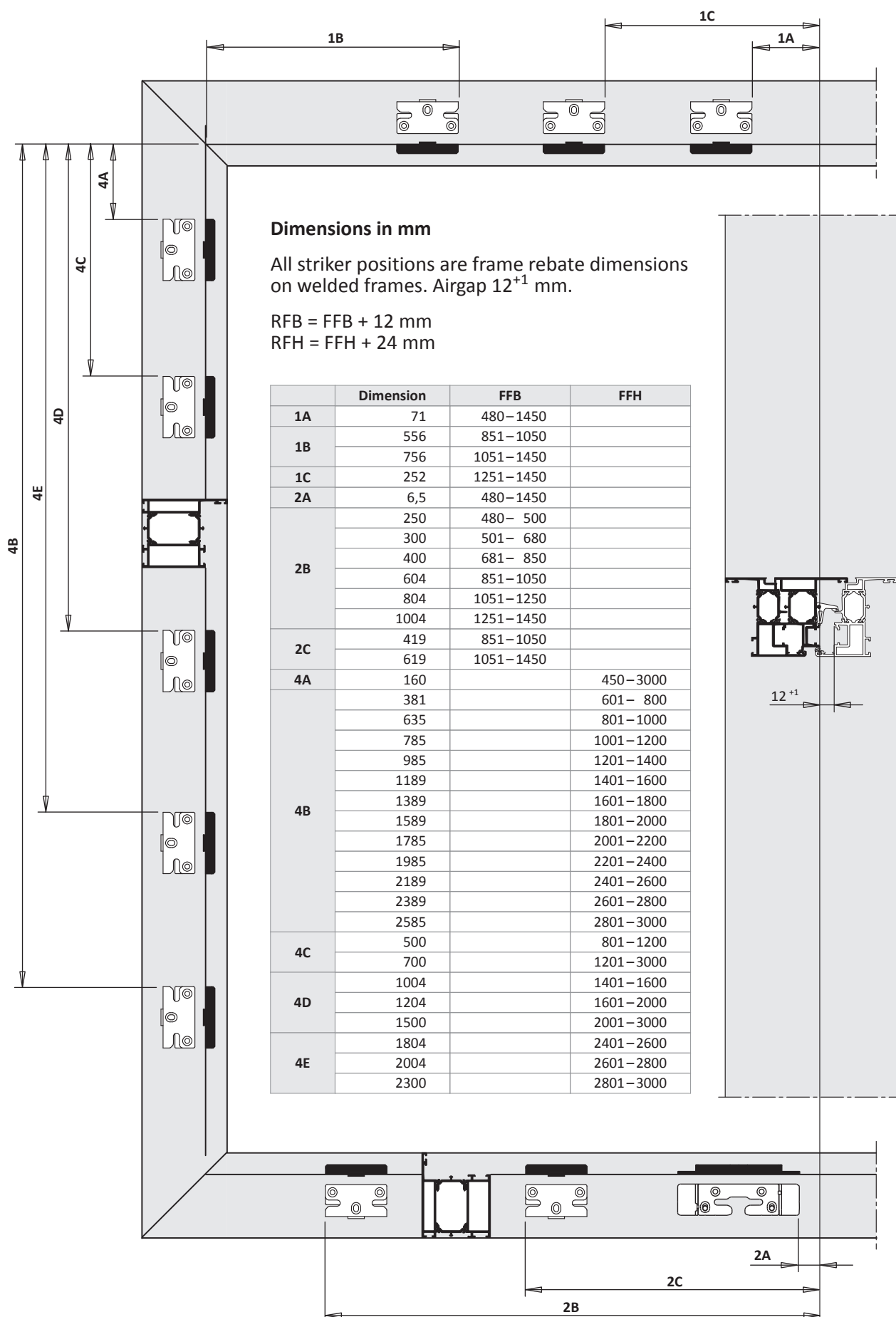
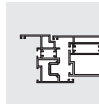
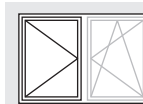
TITAN AF

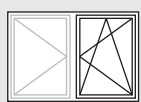
RC2

Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Number of frame parts / Pos.	
							25	26
20	linkage BS/FH sz 1+ 1RS	TZBS0180- ...	1		1401–1600			1
	linkage BS/FH sz 2+ 1RS	TZBS0190- ...			1601–2000			1
	linkage BS/FH sz 3+ 1RS	TZBS0200- ...			2001–3000			1
21	linkage BS/FH sz 1+ 1RS	TZBS0180- ...	1		2401–2600			1
	linkage BS/FH sz 2+ 1RS	TZBS0190- ...			2601–2800			1
	linkage BS/FH sz 3+ 1RS	TZBS0200- ...			2801–3000			1
22	anti-lift device	Ref. PDB, TFAH	1		450–3000			
23	Air gap limiter	Ref. PDB, FRFL	1		450–3000			
24	packer RB/FPS	Ref. PDB, FRUP02	1		450–3000			
25	tilt lock bear. S-ES FH	Ref. PDB, FRKA						
26	striker plate S-RS	Ref. PDB, TRSK						
on request								
27	mishandling device	TFBS0010- ...	1		601–3000			
28	pressure piece	Ref. PDB, TFFD	1		601–3000			
29	snapper rh.	TFST0021- ...	1		1801–3000			
	snapper lh.	TFST0022- ...			1801–3000			

Hinge side turning points					
Pos.	Description	Part number		required as per sash weight	
		surface TS	RAL7037	130 kg	150 kg
30	corner hinge AX	Ref. PDB, TBEB41		1	1
31	cover cap AX EL	Ref. PDB, TKEL41		1	1
32	bottom hinge AX	Ref. PDB, TBEV41		1	1

6





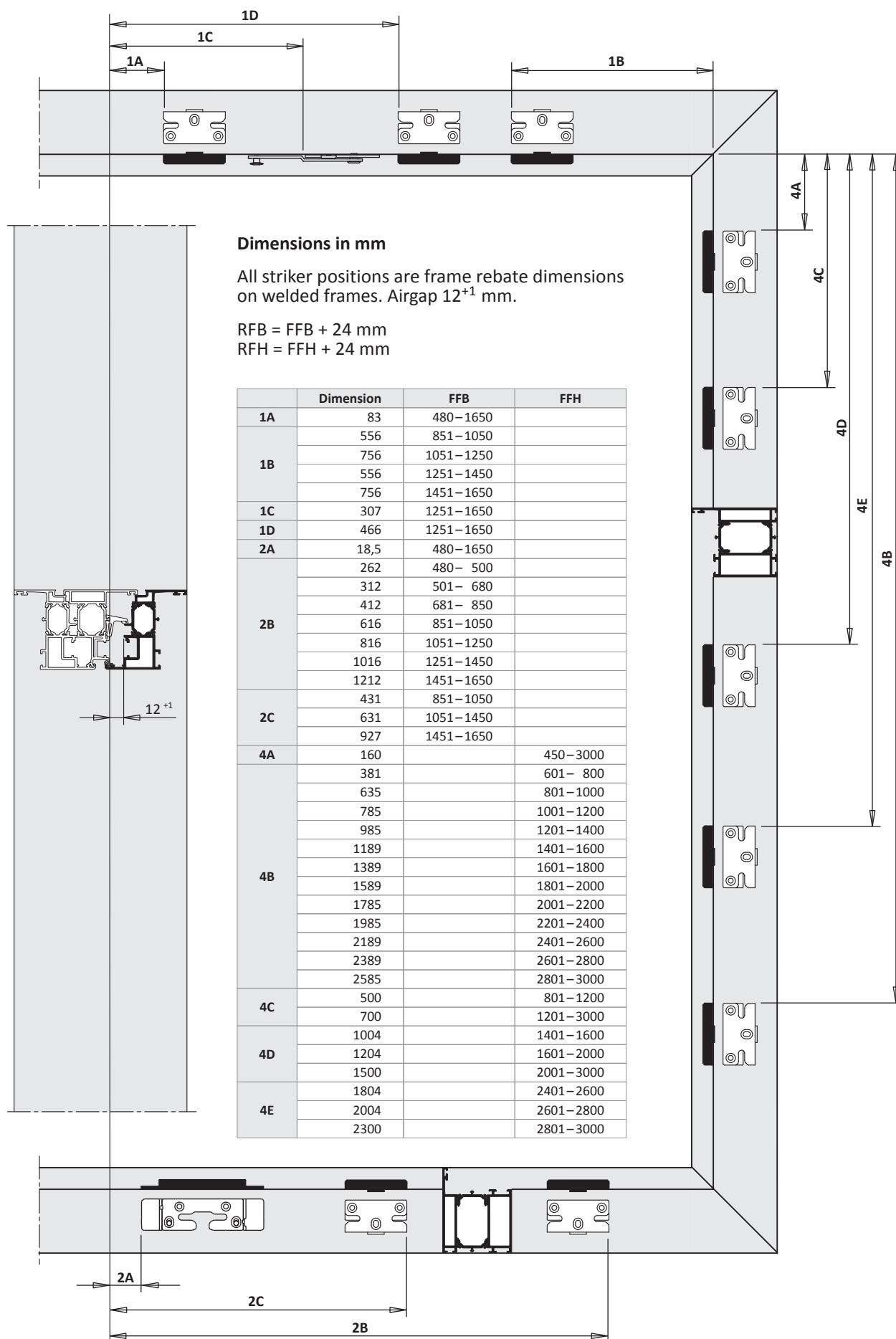
Frame dimensions main sash

2-sash square tilt-turn/turn DS 16

ALU16 GK Hinge side axxent 24+

TITAN AF

RC2





7 - RC2 - Centre handle pos. (variable)

Installation instructions ALU16
Hinge side axxent 24+

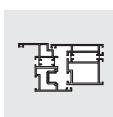
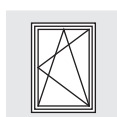
TITAN AF

RC2 - Centre handle pos. (variable)

1-sash square tilt-turn	H48.TAFALUM2+S003EN	7 - 3
2-sash square tilt-turn/turn DS 16	H48.TAFALUM2+S004EN	7 - 9

TITAN AF

Installation instructions

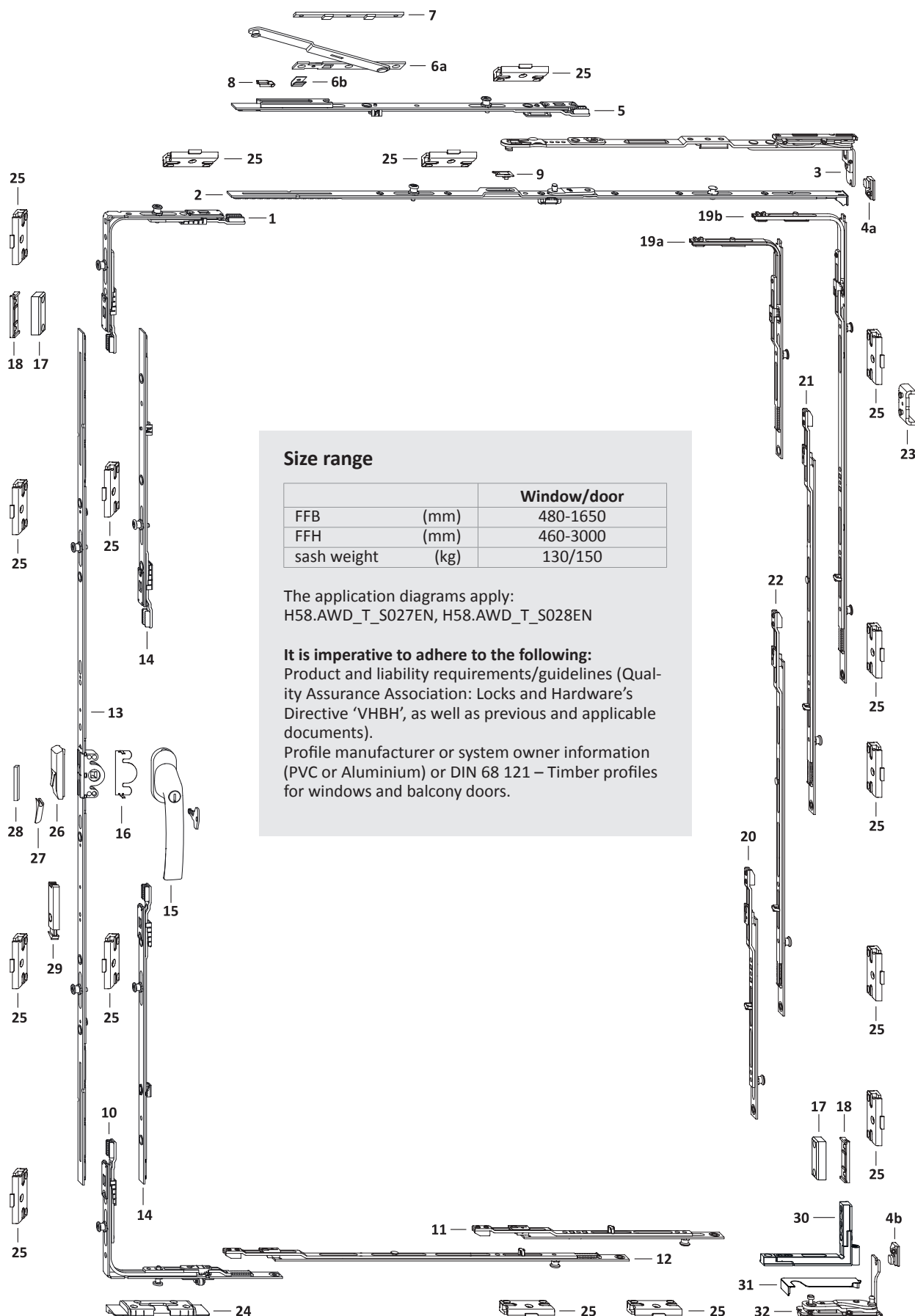
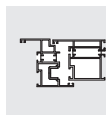


RC2

1-sash square tilt-turn
aluminium with 16 mm BAN
RC2
centre handle pos. (variable)
Hinge side axxent 24+
surface TS
backset 15 mm

7

Hardware set configuration	
General	Locking-points distance 800
Stay side	two-piece stay ax 24+
Bottom	Inliner
Locking side	mishandl. device on gear
Hinge side	corner drive BS sz 1+2 2RS



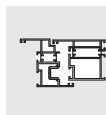


List of fittings
1-sash square tilt-turn
ALU16 GM Hinge side axxent 24+

TITAN AF

RC2

Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Number of frame parts / Pos.	
							24	25
1	corn.drive VSO 2RS A0055	TEUL4070- ...	1	480–1650				2
2	stay sash part AF AX sz 1	TSSV4000- ...	1	480– 680				
	stay sash part AF AX 2+3 1RS	TSSV0310- ...		681– 850				
	stay sash part AF AX sz 4 1RS	TSSV0320- ...		851–1050				1
	stay sash part AF AX sz 5 1RS	TSSV0330- ...		1051–1250				1
	stay sash part AF AX sz 4 1RS	TSSV0320- ...		1251–1450				1
	stay sash part AF AX sz 5 1RS	TSSV0330- ...		1451–1650				1
3	stay arm AX sz 1	Ref. PDB, TSAV41	1	480– 680				
	stay arm AX sz 2+3	Ref. PDB, TSAV42		681– 850				
	stay arm AX sz 4	Ref. PDB, TSAV44		851–1050				
	stay arm AX sz 5	Ref. PDB, TSAV45		1051–1250				
	stay arm AX sz 4	Ref. PDB, TSAV44		1251–1450				
	stay arm AX sz 5	Ref. PDB, TSAV45		1451–1650				
4	crt. accessories AX	Ref. PDB, TMZV41	1	480–1650				
5	linkage additional stay 1RS	TZOK1010- ...	1	1251–1650				1
6	additional stay	Ref. PDB, TSZS	1	1251–1650				
7	packer Z	Ref. PDB, FRUP01	1	1251–1650				
8	tilt restr. additional stay ..	889008	1	1251–1650				
9	tilt restrictor V-V sz 2-4 ..	TFKB0040- ...	1	681–1050	460– 900			
	tilt restrictor V-V sz 5 ..	TFKB0050- ...		1051–1250	460– 900			
10	corn.drive AF VSU/K+ FH 1S 1RS A0055	TEUL5020- ...	1	480–1650			1	1
11	extension sz 1+ 1RS	TVSO0200- ...	1	480– 500				1
	extension sz 2+ 1RS	TVSL0320- ...		501– 680				1
	extension sz 3+ 1RS	TVSL0330- ...		681– 850				1
	extension sz 2+ 1RS	TVSL0320- ...		851–1250				1
	extension sz 4+ 1RS	TVSL0340- ...		1251–1450				1
	extension sz 3+ 1RS	TVSL0330- ...		1451–1650				1
12	linkage BS/FH sz 1+ 1RS	TZBS0180- ...	1	851–1050				1
	linkage BS/FH sz 2+ 1RS	TZBS0190- ...		1051–1450				1
	linkage BS/FH sz 3+ 1RS	TZBS0200- ...		1451–1650				1
13	gear 15 AF sz 20	TGMK4010- ...	1		460– 600	230– 300		
	gear 15 AF sz 60	TGMK4020- ...			601– 800	300– 400		
	gear 15 AF sz 80 1RS	TGMK4040- ...			801–1200	400– 600		1
	gear 15 AF sz 120 1RS	TGMK4050- ...			1201–1600	600– 800		1
	gear 15 AF sz 160 2RS 70	TGMK4170- ...			1601–2000	800–1000		2
	gear 15 AF sz 200 2RS	TGMK4080- ...			2001–3000	1000–1500		2
14	linkage KK/AF sz 1 1RS	TZKK1010- ...	2		2401–2800			2
	linkage KK/AF sz 2 1RS	TZKK1020- ...			2801–3000			2
15	handle Globe lockable 100Nm	Ref.access. ZHGA100	1		460–3000			
16	anti-drill guard E	TGBS0010- ...	1		460–3000			
17	Air gap limiter	Ref. PDB, FRFL	2		460–3000			
18	packer RB/FPS	Ref. PDB, FRUP02	2		460–3000			
19a	corn.drive BSO/K3+ 1RS	TEUL2400- ...	1		460– 800			1
19b	corn.drive BS/K3 sz 1+ 2RS	TEUL2380- ...	1		801–1200			2
	corn.drive BS/K3 sz 2+ 2RS	TEUL2390- ...			1201–3000			2
20	extension sz 2+ 1RS	TVSL0320- ...	1		601– 800			1
	extension sz 1+ 1RS	TVSO0200- ...			801–1000			1
	extension sz 3+ 1RS	TVSL0330- ...			1001–1400			1
	extension sz 2+ 1RS	TVSL0320- ...			1401–1800			1
	extension sz 4+ 1RS	TVSL0340- ...			1801–2000			1
	extension sz 3+ 1RS	TVSL0330- ...			2001–2200			1
	extension sz 5+ 1RS	TVSL0350- ...			2201–2400			1
	extension sz 4+ 1RS	TVSL0340- ...			2401–2600			1
	extension sz 4+ 1RS	TVSL0340- ...			2601–2800			1
	extension sz 3+ 1RS	TVSL0330- ...			2801–3000			1
21	linkage BS/FH sz 1+ 1RS	TZBS0180- ...	1		1401–1600			1
	linkage BS/FH sz 2+ 1RS	TZBS0190- ...			1601–2000			1
	linkage BS/FH sz 3+ 1RS	TZBS0200- ...			2001–3000			1
22	linkage BS/FH sz 1+ 1RS	TZBS0180- ...	1		2401–2600			1
	linkage BS/FH sz 2+ 1RS	TZBS0190- ...			2601–2800			1
	linkage BS/FH sz 3+ 1RS	TZBS0200- ...			2801–3000			1
23	anti-lift device	Ref. PDB, TFAH	1		460–3000			
24	tilt lock bear. S-ES FH	Ref. PDB, FRKA						



Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Number of frame parts / Pos.	
							24	25
25	striker plate S-RS	Ref. PDB, TRSK						
on request								
26	mishandling device	TFBS0010- ...	1					
27	pressure piece	Ref. PDB, TFFD	1					
28	stop	Ref. PDB, FRZF01	1					
29	snapper rh.	TFST0021- ...	1		1601–3000			
	snapper lh.	TFST0022- ...			1601–3000			

Hinge side turning points					
Pos.	Description	Part number		required as per sash weight	
		surface TS	RAL7037	130 kg	150 kg
30	corner hinge AX	Ref. PDB, TBEB41		1	1
31	cover cap AX EL	Ref. PDB, TKEL41		1	1
32	bottom hinge AX	Ref. PDB, TBEV41		1	1



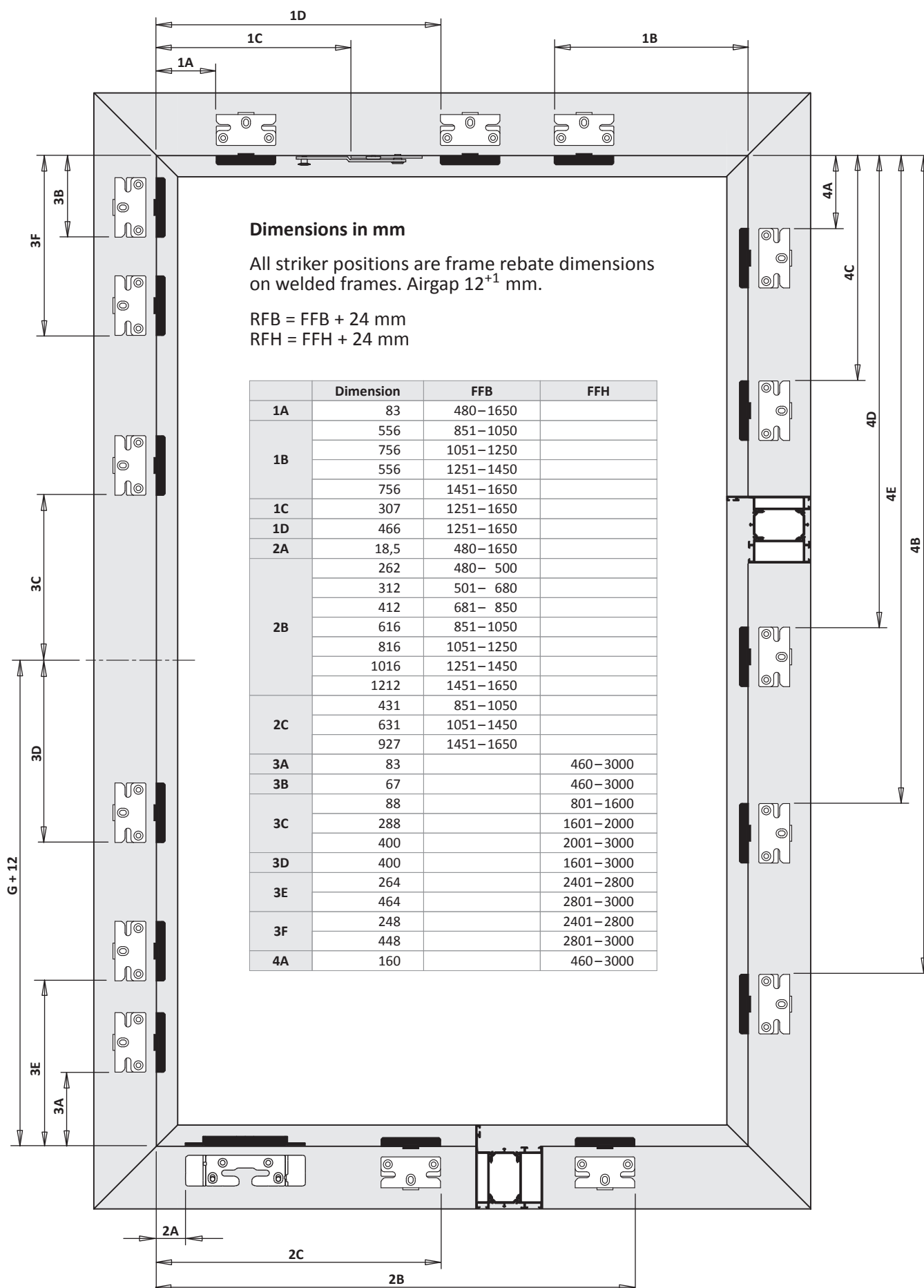
Frame dimensions

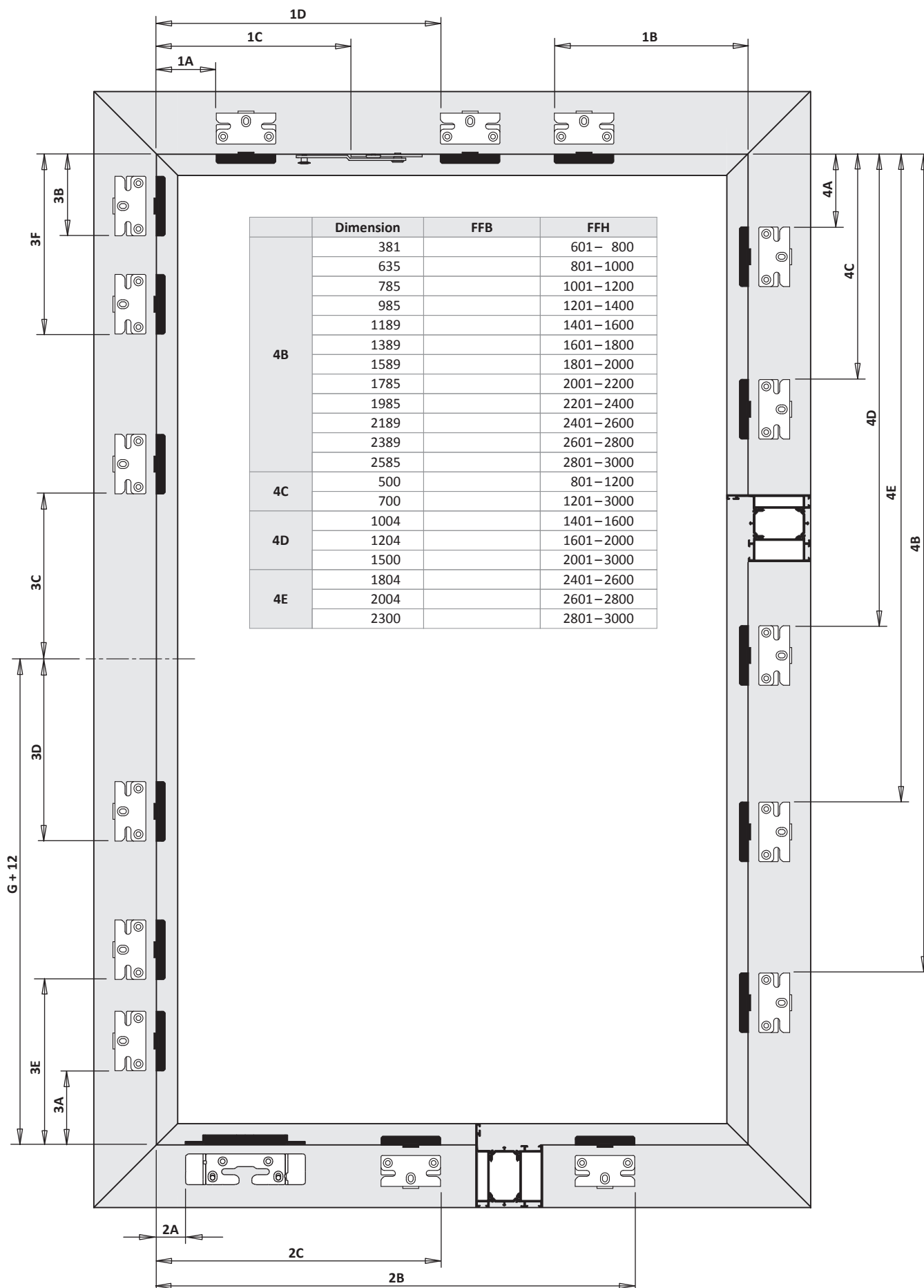
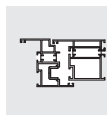
1-sash square tilt-turn

ALU16 GM Hinge side axxent 24+

TITAN AF

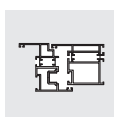
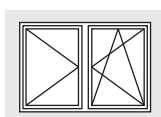
RC2





TITAN AF

Installation instructions



RC2

2-sash square tilt-turn/turn DS 16

aluminium with 16 mm BAN

RC2

centre handle pos. (variable)

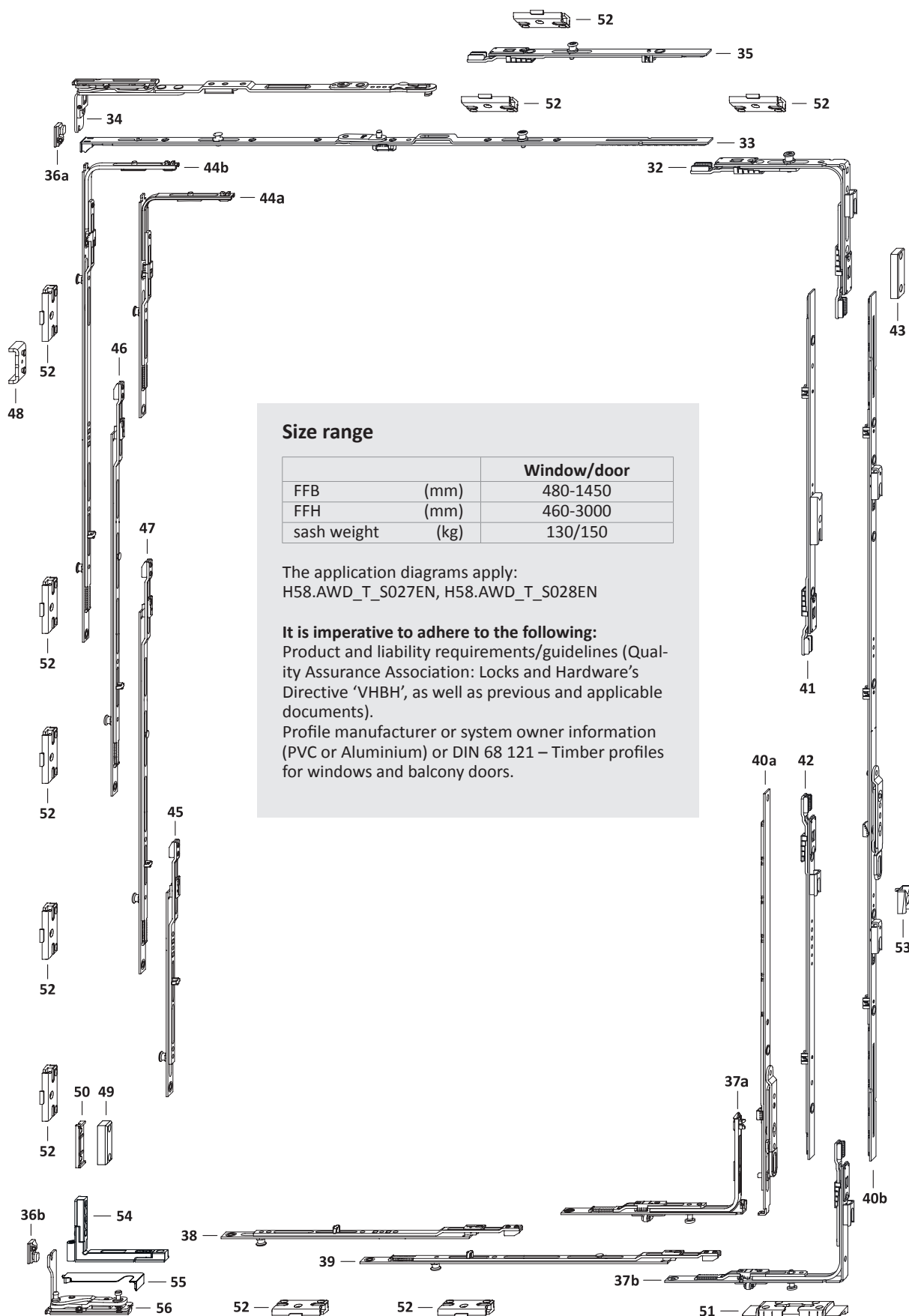
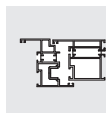
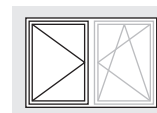
Hinge side axxent 24+

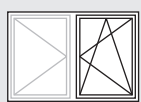
surface TS

backset 15 mm

7

Hardware set configuration	
General	Locking-points distance 800
Stay side	two-piece stay ax 24+
Bottom	Inliner
Locking side	mishandl. device on gear
Hinge side	corner drive BS sz 1+2 2RS



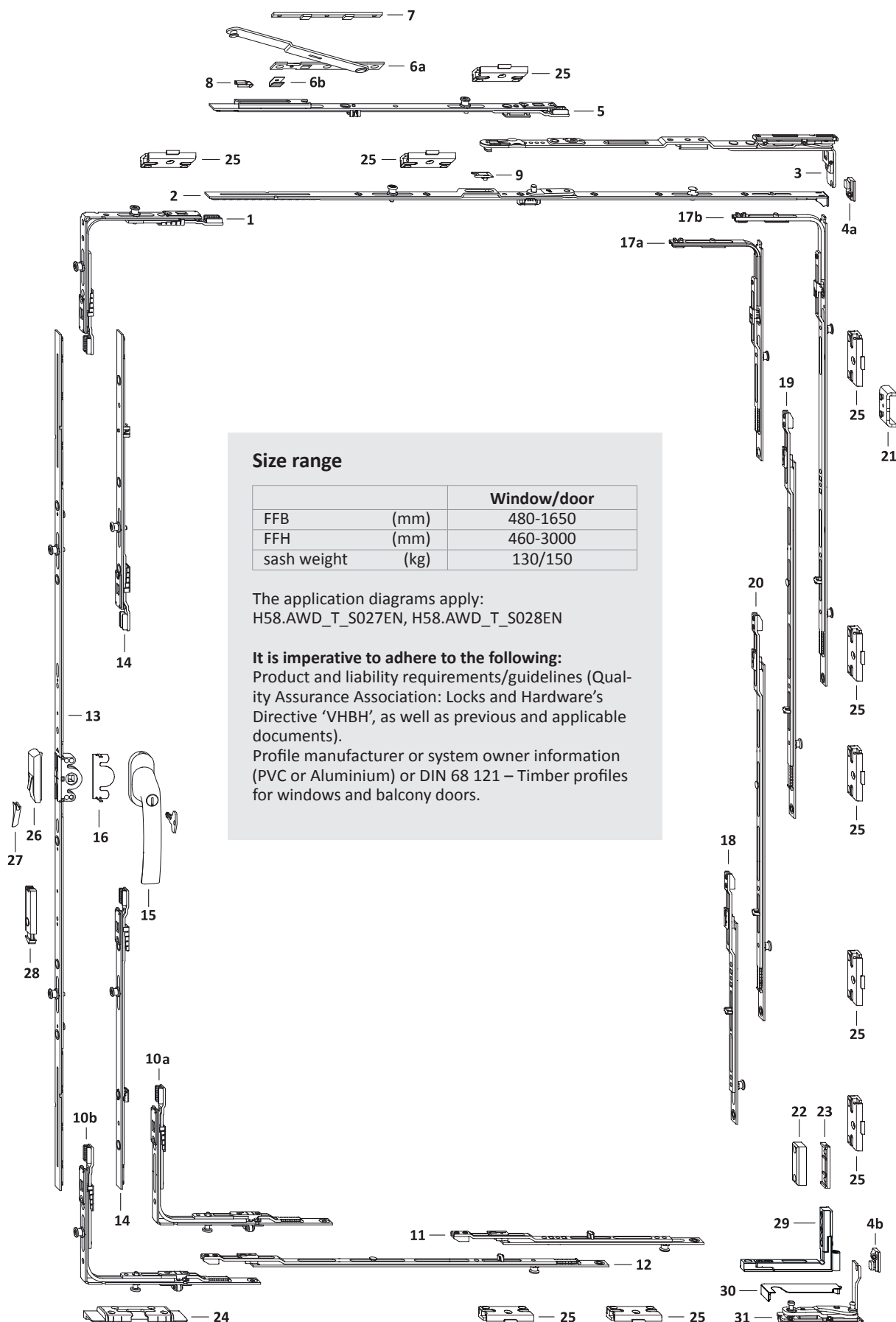


hardware layout main sash

2-sash square tilt-turn/turn DS 16
ALU16 GM Hinge side axxent 24+

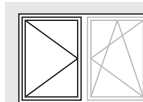
TITAN AF

RC2

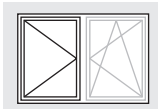


List of fittings slave sash

2-sash square tilt-turn/turn DS 16
ALU16 GM Hinge side axxent 24+



Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Number of frame parts / Pos.	
						In the main sash	51	52
32	corn.drive AF VSO WK2 SB 1RS	TEUL4080- ...	1	480 – 1450				1
33	stay sash part AF AX sz 1	TSSV4000- ...	1	480 – 680				
	stay sash part AF AX 2+3 1RS	TSSV0310- ...		681 – 850				
	stay sash part AF AX sz 4 1RS	TSSV0320- ...		851 – 1050				1
	stay sash part AF AX sz 5 1RS	TSSV0330- ...		1051 – 1450				1
34	stay arm AX sz 1	Ref. PDB, TSAV41	1	480 – 680				
	stay arm AX sz 2+3	Ref. PDB, TSAV42		681 – 850				
	stay arm AX sz 4	Ref. PDB, TSAV44		851 – 1050				
	stay arm AX sz 5	Ref. PDB, TSAV45		1051 – 1050				
35	linkage KK/AF sz 1 1RS	TZKK1010- ...	1	1251 – 1450				1
36	crt. accessories AX	Ref. PDB, TMZV41	1	480 – 1450				
37a	locking part VSU/K FH+ 1S	TEVR1400- ...	1	480 – 1450	460 – 800		1	
37b	corn.drive AF VSU/K+WK2 FHSB1S	TEUL5110- ...	1	480 – 1450	801 – 3000		1	
38	extension sz 1+ 1RS	TVSO0200- ...	1	480 – 500				1
	extension sz 2+ 1RS	TVSL0320- ...		501 – 680				1
	extension sz 3+ 1RS	TVSL0330- ...		681 – 850				1
	extension sz 2+ 1RS	TVSL0320- ...		851 – 1250				1
	extension sz 4+ 1RS	TVSL0340- ...		1251 – 1450				1
39	linkage BS/FH sz 1+ 1RS	TZBS0180- ...	1	851 – 1050				1
	linkage BS/FH sz 2+ 1RS	TZBS0190- ...		1051 – 1450				1
40a	sec.sash gear 16 sz 30	TGKS0010- ...	1		460 – 600	230 – 300		
	sec.sash gear 16 AF 60/G300	TGKS4030- ...			601 – 800	300 – 400		
40b	sec.sash gear 16 AF sz 80 1SB	TGMS4040- ...	1		801 – 1200	400 – 600		
	sec.sash gear 16 AF sz 120 1SB	TGMS4050- ...			1201 – 1600	600 – 800		
	sec.sash gear 16 AF 160 2SB 70	TGMS4130- ...			1601 – 2000	800 – 1000		
	sec.sash gear 16 AF sz 200 2SB	TGMS4080- ...			2001 – 3000	1000 – 1500		
41	linkage AF sz 1 1SB-RS	TZKS1020- ...	1		2401 – 2800			
	linkage AF sz 2 1SB-RS	TZKS1030- ...			2801 – 3000			
42	linkage AF sz 1 1SB-VSU	TZKS1060- ...	1		2401 – 2800			
	linkage AF sz 2 1SB-VSU	TZKS1070- ...			2801 – 3000			
43	air gap limiter F ..	TFFB0010- ...	1		460 – 3000			
44a	corn.drive BSO/K3+ 1RS	TEUL2400- ...	1		460 – 800			1
44b	corn.drive BS/K3 sz 1+ 2RS	TEUL2380- ...	1		801 – 1200			2
	corn.drive BS/K3 sz 2+ 2RS	TEUL2390- ...			1201 – 3000			2
45	extension sz 2+ 1RS	TVSL0320- ...	1		601 – 800			1
	extension sz 1+ 1RS	TVSO0200- ...			801 – 1000			1
	extension sz 3+ 1RS	TVSL0330- ...			1001 – 1400			1
	extension sz 2+ 1RS	TVSL0320- ...			1401 – 1800			1
	extension sz 4+ 1RS	TVSL0340- ...			1801 – 2000			1
	extension sz 3+ 1RS	TVSL0330- ...			2001 – 2200			1
	extension sz 5+ 1RS	TVSL0350- ...			2201 – 2400			1
	extension sz 4+ 1RS	TVSL0340- ...			2401 – 2600			1
	extension sz 4+ 1RS	TVSL0340- ...			2601 – 2800			1
46	linkage BS/FH sz 1+ 1RS	TZBS0180- ...	1		1401 – 1600			1
	linkage BS/FH sz 2+ 1RS	TZBS0190- ...			1601 – 2000			1
	linkage BS/FH sz 3+ 1RS	TZBS0200- ...			2001 – 3000			1
	linkage BS/FH sz 1+ 1RS	TZBS0180- ...			2401 – 2600			1
47	linkage BS/FH sz 2+ 1RS	TZBS0190- ...	1		2601 – 2800			1
	linkage BS/FH sz 3+ 1RS	TZBS0200- ...			2801 – 3000			1
48	anti-lift device	Ref. PDB, TFAH	1		460 – 3000			
49	Air gap limiter	Ref. PDB, FRFL	1		460 – 3000			
50	packer RB/FPS	Ref. PDB, FRUP02	1		460 – 3000			
51	tilt lock bear. S-ES FH	Ref. PDB, FRKA						
52	striker plate S-RS	Ref. PDB, TRSK						
on request								
53	striker snapper AF A0767	TRST0100- ...	1		1601 – 3000			



List of fittings slave sash

2-sash square tilt-turn/turn DS 16
ALU16 GM Hinge side axxent 24+

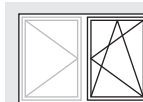
TITAN AF

RC2

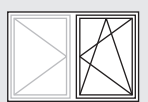
Hinge side turning points					
Pos.	Description	Part number		required as per sash weight	
		surface TS	RAL7037	130 kg	150 kg
54	corner hinge AX	Ref. PDB, TBEB41		1	1
55	cover cap AX EL	Ref. PDB, TKEL41		1	1
56	bottom hinge AX	Ref. PDB, TBEV41		1	1

List of fittings main sash

2-sash square tilt-turn/turn DS 16
ALU16 GM Hinge side axxent 24+



Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Number of frame parts / Pos.	
							24	25
1	corn.drive VSO 2RS A0055	TEUL4070- ...	1	480–1650				1
2	stay sash part AF AX sz 1	TSSV4000- ...	1	480– 680				
	stay sash part AF AX 2+3 1RS	TSSV0310- ...		681– 850				
	stay sash part AF AX sz 4 1RS	TSSV0320- ...		851–1050				1
	stay sash part AF AX sz 5 1RS	TSSV0330- ...		1051–1250				1
	stay sash part AF AX sz 4 1RS	TSSV0320- ...		1251–1450				1
	stay sash part AF AX sz 5 1RS	TSSV0330- ...		1451–1650				1
3	stay arm AX sz 1	Ref. PDB, TSAV41	1	480– 680				
	stay arm AX sz 2+3	Ref. PDB, TSAV42		681– 850				
	stay arm AX sz 4	Ref. PDB, TSAV44		851–1050				
	stay arm AX sz 5	Ref. PDB, TSAV45		1051–1250				
	stay arm AX sz 4	Ref. PDB, TSAV44		1251–1450				
	stay arm AX sz 5	Ref. PDB, TSAV45		1451–1650				
4	crt. accessories AX	Ref. PDB, TMZV41	1	480–1650				
5	linkage additional stay 1RS	TZOK1010- ...	1	1251–1650				1
6	additional stay	Ref. PDB, TSZS	1	1251–1650				
7	packer Z	Ref. PDB, FRUP01	1	1251–1650				
8	tilt restr. additional stay ..	889008	1	1251–1650				
9	tilt restrictor V-V sz 2-4 ..	TFKB0040- ...	1	681–1050	460– 900			
	tilt restrictor V-V sz 5 ..	TFKB0050- ...		1051–1250	460– 900			
10a	corn.drive AF VSU/K+ FH 1S	TEUL5010- ...	1	480–1650	460– 800		1	
10b	corn.drive AF VSU/K+ FH 1S 1RS A0055	TEUL5020- ...	1	480–1650	801–3000		1	
11	extension sz 1+ 1RS	TVSO0200- ...	1	480– 500				1
	extension sz 2+ 1RS	TVSL0320- ...		501– 680				1
	extension sz 3+ 1RS	TVSL0330- ...		681– 850				1
	extension sz 2+ 1RS	TVSL0320- ...		851–1250				1
	extension sz 4+ 1RS	TVSL0340- ...		1251–1450				1
	extension sz 3+ 1RS	TVSL0330- ...		1451–1650				1
12	linkage BS/FH sz 1+ 1RS	TZBS0180- ...	1	851–1050				1
	linkage BS/FH sz 2+ 1RS	TZBS0190- ...		1051–1450				1
	linkage BS/FH sz 3+ 1RS	TZBS0200- ...		1451–1650				1
13	gear 15 AF sz 20	TGMK4010- ...	1		460– 600	230– 300		
	gear 15 AF sz 60	TGMK4020- ...			601– 800	300– 400		
	gear 15 AF sz 80 1RS	TGMK4040- ...			801–1200	400– 600		
	gear 15 AF sz 120 1RS	TGMK4050- ...			1201–1600	600– 800		
	gear 15 AF sz 160 2RS 70	TGMK4170- ...			1601–2000	800–1000		
	gear 15 AF sz 200 2RS	TGMK4080- ...			2001–3000	1000–1500		
14	linkage KK/AF sz 1 1RS	TZKK1010- ...	2		2401–2800			
	linkage KK/AF sz 2 1RS	TZKK1020- ...			2801–3000			
15	handle Globe lockable 100Nm	Ref.access. ZHGA100	1		460–3000			
16	anti-drill guard E	TGBS0010- ...	1		460–3000			
17a	corn.drive BSO/K3+ 1RS	TEUL2400- ...	1		460– 800			1
17b	corn.drive BS/K3 sz 1+ 2RS	TEUL2380- ...	1		801–1200			2
	corn.drive BS/K3 sz 2+ 2RS	TEUL2390- ...			1201–3000			2
18	extension sz 2+ 1RS	TVSL0320- ...	1		601– 800			1
	extension sz 1+ 1RS	TVSO0200- ...			801– 1000			1
	extension sz 3+ 1RS	TVSL0330- ...			1001–1400			1
	extension sz 2+ 1RS	TVSL0320- ...			1401–1800			1
	extension sz 4+ 1RS	TVSL0340- ...			1801–2000			1
	extension sz 3+ 1RS	TVSL0330- ...			2001–2200			1
	extension sz 5+ 1RS	TVSL0350- ...			2201–2400			1
	extension sz 4+ 1RS	TVSL0340- ...			2401–2600			1
	extension sz 4+ 1RS	TVSL0340- ...			2601–2800			1
	extension sz 3+ 1RS	TVSL0330- ...			2801–3000			1
	linkage BS/FH sz 1+ 1RS	TZBS0180- ...			1401–1600			1
19	linkage BS/FH sz 2+ 1RS	TZBS0190- ...	1		1601–2000			1
	linkage BS/FH sz 3+ 1RS	TZBS0200- ...			2001–3000			1
	linkage BS/FH sz 1+ 1RS	TZBS0180- ...			2401–2600			1
20	linkage BS/FH sz 2+ 1RS	TZBS0190- ...	1		2601–2800			1
	linkage BS/FH sz 3+ 1RS	TZBS0200- ...			2801–3000			1
	linkage BS/FH sz 1+ 1RS	TZBS0180- ...			2401–2600			1
21	anti-lift device	Ref. PDB, TFAH	1		460–3000			
22	Air gap limiter	Ref. PDB, FRFL	1		460–3000			
23	packer RB/FPS	Ref. PDB, FRUP02	1		460–3000			



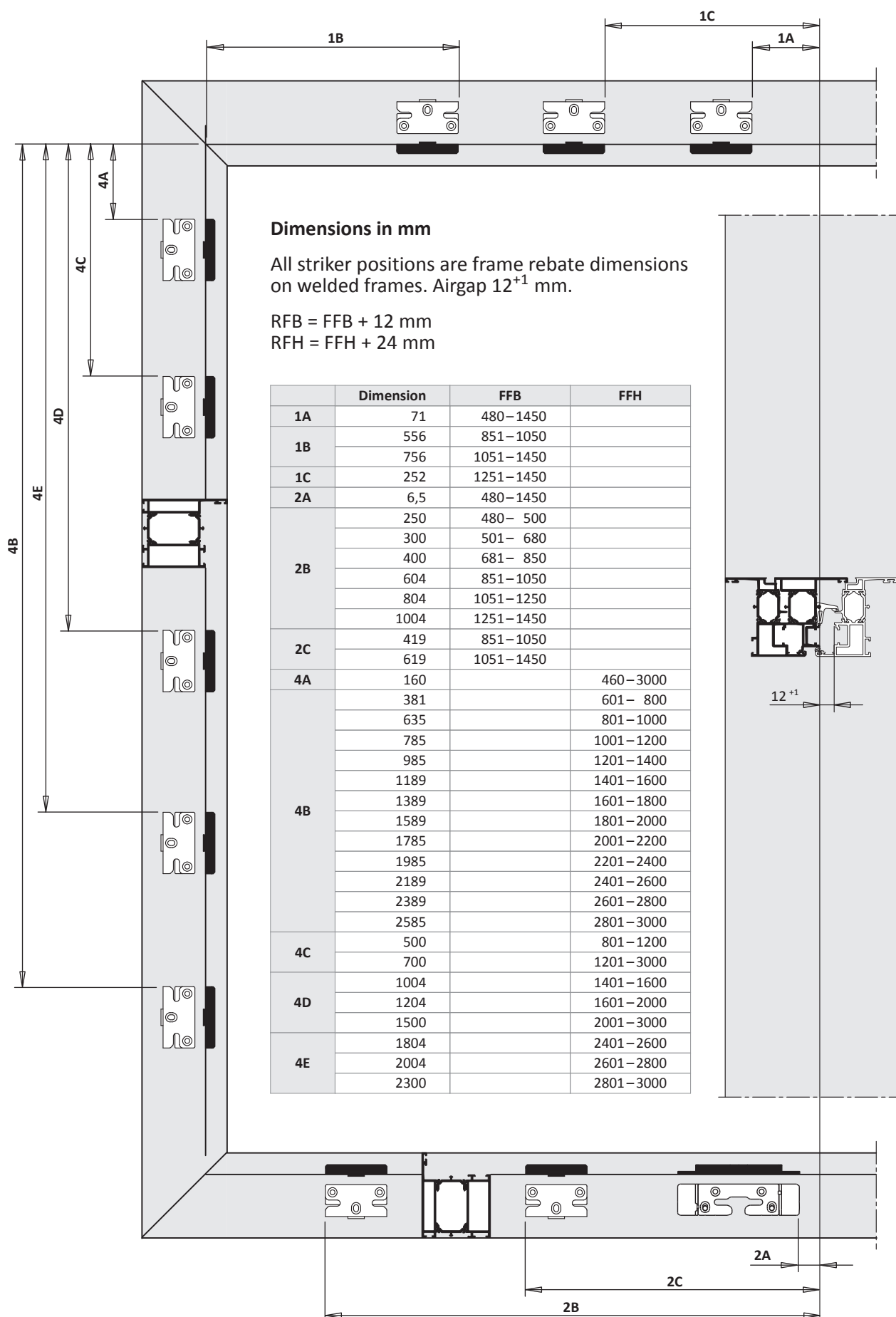
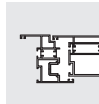
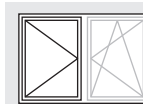
List of fittings main sash
2-sash square tilt-turn/turn DS 16
ALU16 GM Hinge side axxent 24+

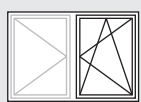
TITAN AF

RC2

Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Number of frame parts / Pos.	
							24	25
24	tilt lock bear. S-ES FH	Ref. PDB, FRKA						
25	striker plate S-RS	Ref. PDB, TRSK						
on request								
26	mishandling device	TFBS0010- ...	1					
27	pressure piece	Ref. PDB, TFFD	1					
28	snapper rh.	TFST0021- ...	1		1601-3000			
	snapper lh.	TFST0022- ...			1601-3000			

Hinge side turning points					
Pos.	Description	Part number		required as per sash weight	
		surface TS	RAL7037	130 kg	150 kg
29	corner hinge AX	Ref. PDB, TBEB41		1	1
30	cover cap AX EL	Ref. PDB, TKEL41		1	1
31	bottom hinge AX	Ref. PDB, TBEV41		1	1

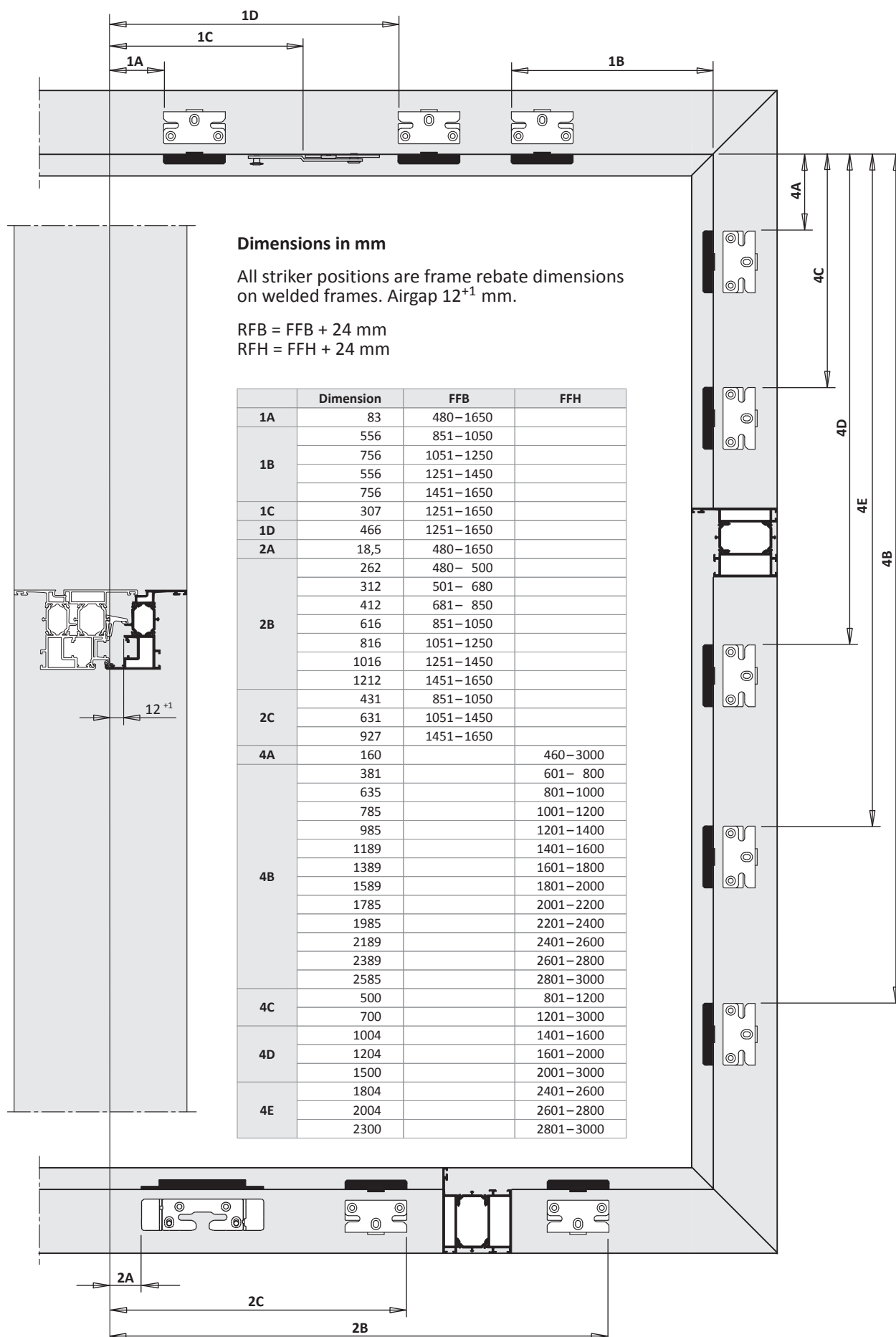


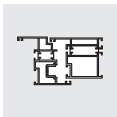


Frame dimensions main sash 2-sash square tilt-turn/turn DS 16 ALU16 GM Hinge side axxent 24+

TITAN AF

RC2





8 - Tilt sash - Centre handle pos. (variable)

Installation instructions ALU16
Hinge side axxent 24+

TITAN AF

Basic security

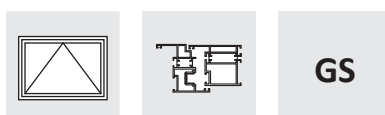
1-sash square tilt

H48.TAFALUM0S011EN

8 - 3

TITAN AF

Installation instructions



1-sash square tilt

aluminium with 16 mm BAN

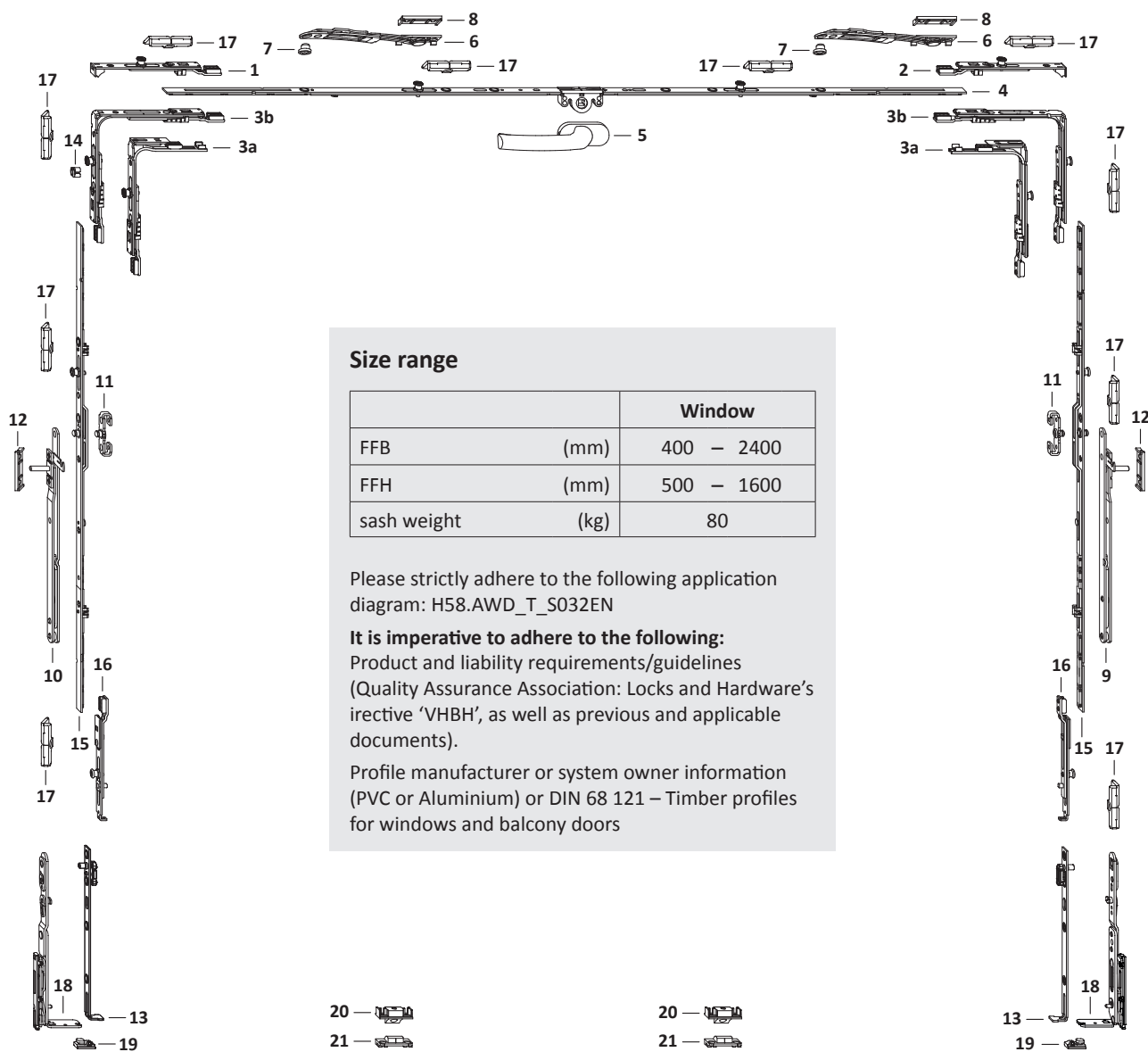
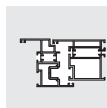
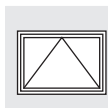
basic security

centre handle pos. (variable)

hinge side axxent 24+

surface TS

backset 15 mm





List of fittings
1-sash square tilt
ALU16 GM hinge side axxent 24+

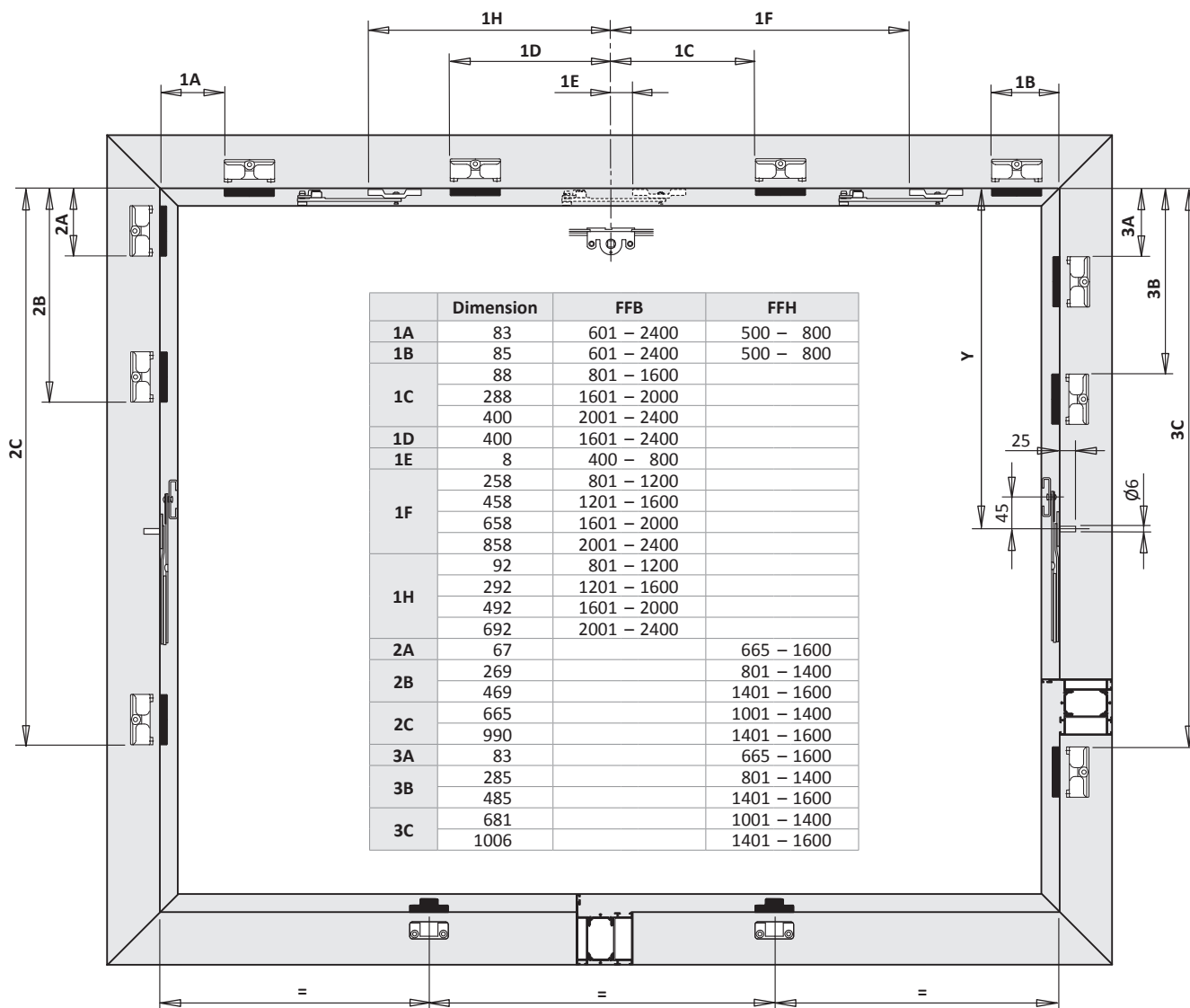
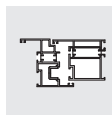
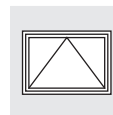
TITAN AF

GS

Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Frame Parts PoRef. 17
1	locking bolt AF VS 180° 1RS	TESC2020-...	1	601 – 2400	500 – 800		1
2	locking bolt AF tilt 90° 1RS	TESC2010-...	1	601 – 2400	500 – 800		1
3a	corn.drive AF VSO narrow 1RS	TEUL4020-...	2	400 – 600	665 – 1600		2
3b	corn.drive AF VSO 1RS	TEUL4010-...		601 – 2400	801 – 1600		2
4	gear 15 AF sz 60	TGMK4020-...	1	400 – 800		200 – 400	
	gear 15 AF sz 80 1RS	TGMK4040-...		801 – 1200		400 – 600	1
	gear 15 AF sz 120 1RS	TGMK4050-...		1201 – 1600		600 – 800	1
	gear 15 AF sz 160 2RS 70	TGMK4170-...		1601 – 2000		800 – 1000	2
	gear 15 AF sz 200 2RS	TGMK4080-...		2001 – 2400		1000 – 1200	2
5	handle Globe	Ref. EBS, ZHGS	1	400 – 2400			
6	telescopic tilt only stay	TSKF0020-...	1	400 – 800			
			2	801 – 2400			
7	lock.bolt f.rais.ring facepl.	TFZB0050-...	1	400 – 800			
			2	801 – 2400			
8	packer RB/FPS A....	Ref. PDB, FRUP02	1	400 – 800			
			2	801 – 2400			
9	tilt only safety stay 25 sz.1 rh.	ASFP0031-...	1	400 – 600	665 – 1400		
	tilt only safety stay 25 sz.2 rh.	ASFP0041-...			1401 – 1600		
	tilt only safety stay 25 sz.1 rh.	ASFP0031-...			500 – 600		
	tilt only safety stay 25 sz.2 rh.	ASFP0041-...			601 – 800		
	tilt only safety stay 25 sz.1 rh.	ASFP0031-...			801 – 1400		
	tilt only safety stay 25 sz.2 rh.	ASFP0041-...			1401 – 1600		
10	tilt only safety stay 25 sz.1 lh.	ASFP0032-...	1	400 – 600	665 – 1400		
	tilt only safety stay 25 sz.2 lh.	ASFP0042-...			1401 – 1600		
	tilt only safety stay 25 sz.1 lh.	ASFP0032-...			500 – 600		
	tilt only safety stay 25 sz.2 lh.	ASFP0042-...			601 – 800		
	tilt only safety stay 25 sz.1 lh.	ASFP0032-...			801 – 1400		
	tilt only safety stay 25 sz.2 lh.	ASFP0042-...			1401 – 1600		
11	fixing claw UGRP	ZFFP0010-...	2		500 – 800		
12	packer RB/FPS A....	Ref. PDB, FRUP02	2		500 – 1600		
13	stay sash part DF AX	TSSV3020-...	2		500 – 1600		
14	travel restrictor	TFHB0010-...	1		665 – 1600		
15	linkage FPS/ZZ 1RS (200 mm above + 340 mm below cutting)	TZZZ0040-...	2		801 – 1000		2
	linkage FPS/ZZ 1RS (200 mm above + 325,5 mm below cutting)				1001 – 1400		
	linkage FPS/ZZ 1RS (200 mm unten ablängen)				1401 – 1600		
16	locking bolt AF VSU/K 1RS	TESC3020-...	2		1001 – 1600		2
17	striker plate 56 A....	Ref. PDB, FRSB					

Hinge side turning points

Pos.	Description	Part number surface TS	QTY - FFB		
			400 – 800	801 – 1800	1801 – 2400
18	stay arm AX DF	Ref. PDB, TSAV46	2	2	2
19	crt. accessories AX	Ref. PDB, TMZV41	2	2	2
20	sash part MV	Ref. PDB, ZFMV01		1	2
21	frame part MV	Ref. PDB, ZRZM01		1	2



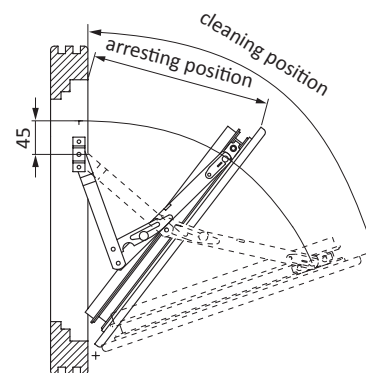
Dimensions in mm

All striker positions are frame rebate dimensions on assembled frames. Airgap 12⁺¹ mm.

RFB = FFB + 24 mm

RFH = FFH + 24 mm

80 kg	Dim.	FFB	FFH	ASFP	Opening width – arresting position	Opening angle – cleaning position
Y	272	400 – 600	665 – 800	Gr.1	298 – 275	24° – 19°
	402		801 – 1400	Gr.1	352 – 263	24° – 11°
	602		1401 – 1600	Gr.2	304 – 280	36° – 29°
	120	601 – 2400	500 – 600	Gr.1	235 – 228	25° – 21°
	120		601 – 800	Gr.2	213 – 205	58° – 41°
	402		801 – 1400	Gr.1	352 – 263	24° – 11°
	602		1401 – 1600	Gr.2	304 – 280	36° – 29°



www.siegenia.com



SIEGENIA®
brings spaces to life