PRODUCT CATALOGUE
H12 SQUARE CONSTRUCTIONS

SIEGENIA®
brings spaces to life

TITAN AF

BS axxent 24+

TITAN AF hardware programme
- For timber 12 mm window elements
- With concealed hinge side axxent 24+
- For square constructions

Window systems

Door systems

Comfort systems

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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 sashes

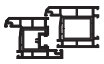
Casement stoppers that are controlled via the central locking system - definitions and tests

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/

Element materials



Element material PVC

Element material timber

Element material aluminium

Opening types

Rectangular turn-tilt element

2-sash rectangular turn-tilt/turn elementt

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

Symbols

Height adjustment

Side adjustment

Compression adjustment

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

KRL	tilt-lock bearing
KS	constant secondary sash
KSB	tilt striker plate
LH	left
LS	length of angled section
M	magnetic cam
MB	with bolts
MN	with groove
MSP	multiple gap ventilation
MV	centre lock
NA	groove axis
ON	without groove
OS	without lock
OZ	without cam
PDB	profile data sheet
PVC	plastic
PZ	profile cylinder
PZD	pozidriv
RAN	fitting groove
RB	arched head
RC	resistant Class
RH	right
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
SW	wrench size/opening
t	drilling depth
TAF	TITAN AF
TBT	Tilt-before-turn
Telesk.	Telescope
TiP	TITAN iP
TL	door design
TS	titanium silver
U	bottom
ÜB	rebate width
UE	monitoring
UEB	rebate
US	bottom side
VKE	sales unit
VL	extension
VS	locking side
VSO	locking side, top
VSU	locking side, bottom
W	stay hinge
witho.	without
Z	additional stay
ZZ	toothing/toothing

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

Product group
This code specifies to which product group of the SIEGENIA the product belongs

Assembly
The assembly is a reference to the component family (e.g. covers, gears, frame parts, etc.)

Article counter
Consecutive component number

DIN or opening direction
This code specifies the side of the hinge or opening direction)

Surface
Surface treatment of metal components (e.g. zinc-plated)

Colour
Colour of surface or material

Sales unit
Sales or packaging unit

Index
Production index

Material numbers key

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.					

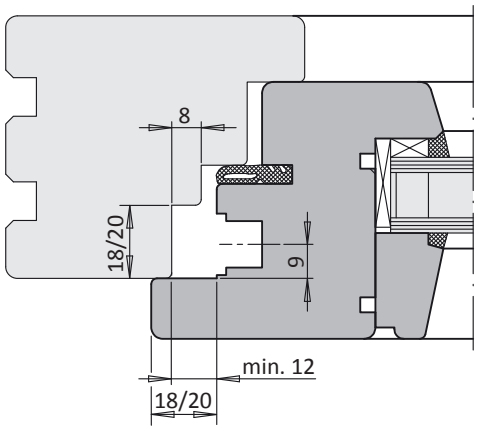
8 Processing index
The processing index indicates the processing status and is assigned consecutively.

Eurogroove 18/8 and 20/8

Airgap: min. 12 mm circumferential

Rebate width: 18/20 mm

Groove axis: 9 mm

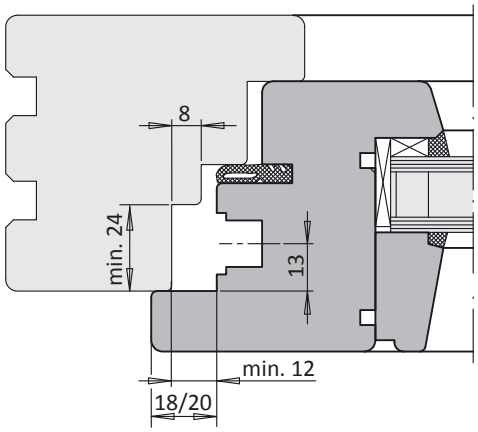


Eurogroove 24/8

Airgap: min. 12mm circumferential

Rebate width: 18/20 mm

Groove axis: 13 mm

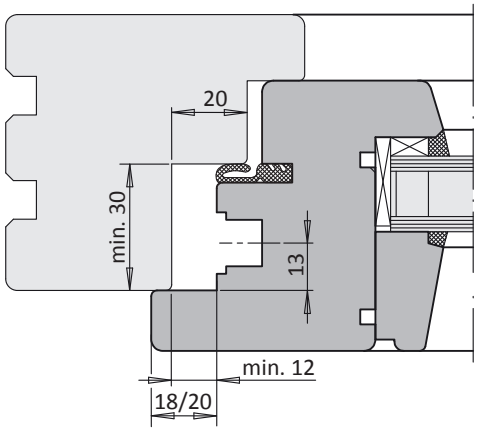


Eurogroove 30/20

Airgap: min. 12 mm circumferential

Rebate width: 18/20 mm

Groove axis: 13 mm

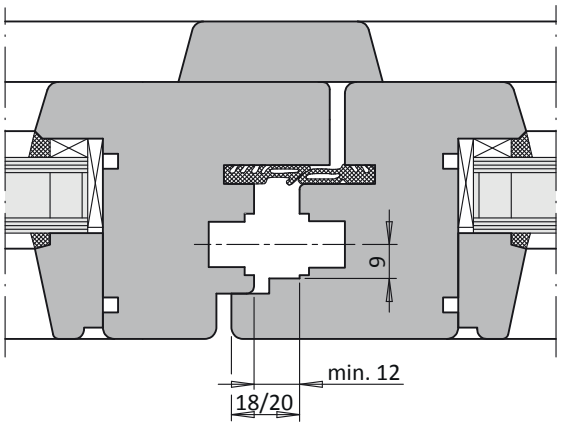


Secondary sash with opposed fitting groove (DS 16)

Airgap: min. 12 mm circumferential

Rebate width: 18/20 mm

Groove axis: 9 mm

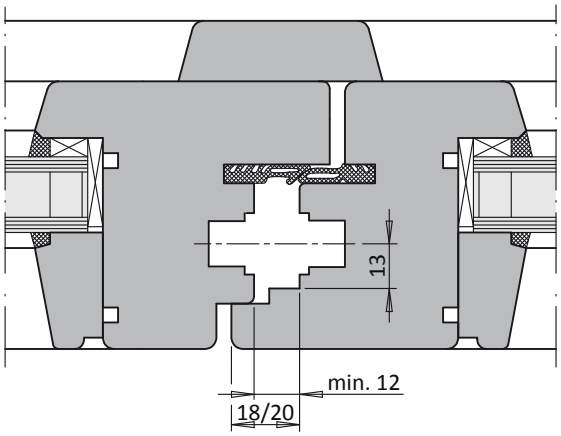


Secondary sash with opposed fitting groove (DS 16)

Airgap: min. 12mm circumferential

Rebate width: 18/20 mm

Groove axis: 13 mm



Note:

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

Attention:

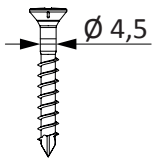
The specifications of DIN 68 121 (timber profiles for windows and portal windows) apply to SIEGENIA fittings.

Important instructions for fabricators

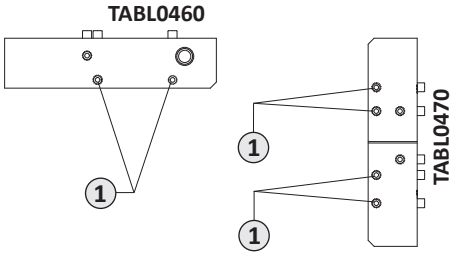
Mounting the hardware components

Bottom hinge and stay arm:

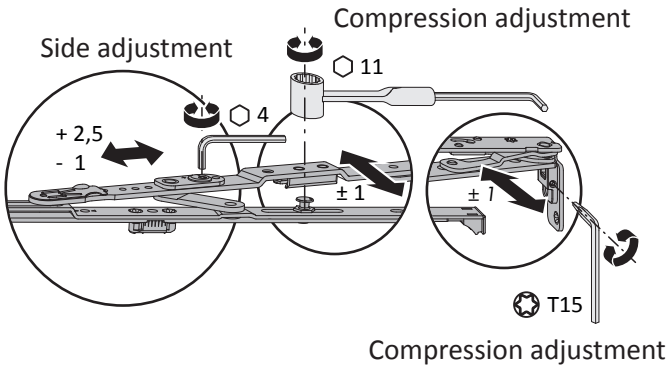
A special screw with a shank diameter of 4.5mm must be used to fix thecomponent!



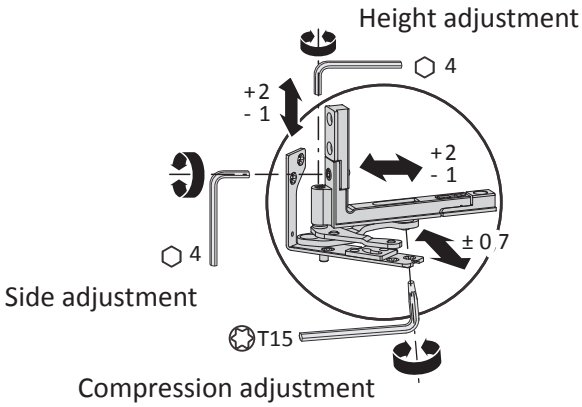
For sufficient fastening according to TBDK the designated screws (1) must be screwed in to the steel reinforcement for PVC profiles.



Adjusting the stay



Adjusting the bottom and corner hinge



Important instructions for fabricators

Priorandapplicable 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.

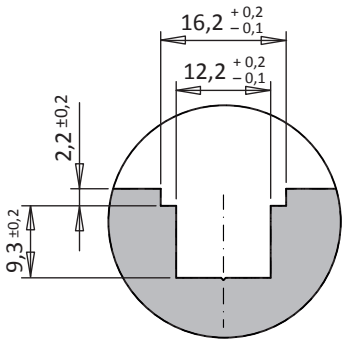
Systems

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.

Hardwaresolutions

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 an 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.

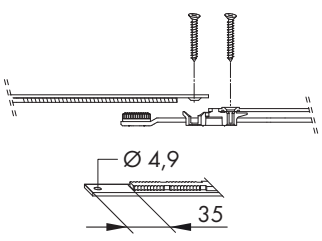
Mounting the hardware components

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.

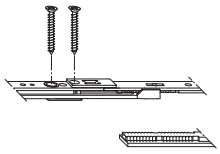
These procedures must be carried out by experienced professionals only.

Connecting the hardware components

- TITAN iP linkage cut



- TITAN AF/FAVORIT cut to length



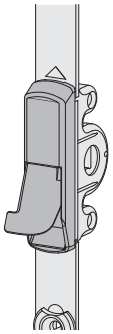
Calibration of adjustable components

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:

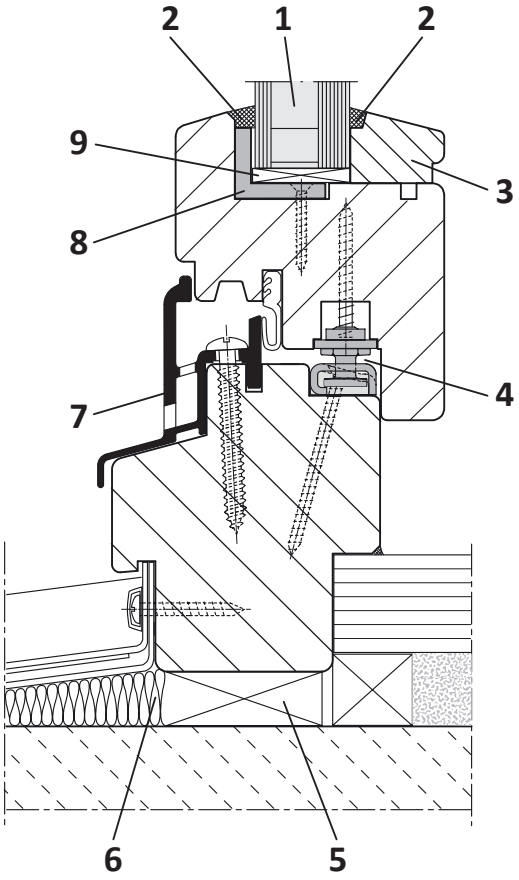
- Operating and Care Instructions (order no. H4002.2874en)

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 timber window



1 Penetrationresistant glazing

2 Sealing with strong adhesion

3 Secured glazing bead

4 Design and mounting of the fittings

5 Dowel fastening to the building structure around the locking positions

6 Pressure-resistant backing

7 Reinforced weather strip bar with special screw connection

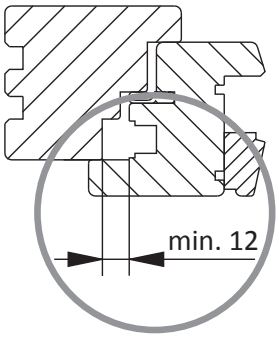
8 Screwed steel bracket in the glazing rebate

9 Pressure-resistant distance block setting

DIN EN 1627 ff – RC1

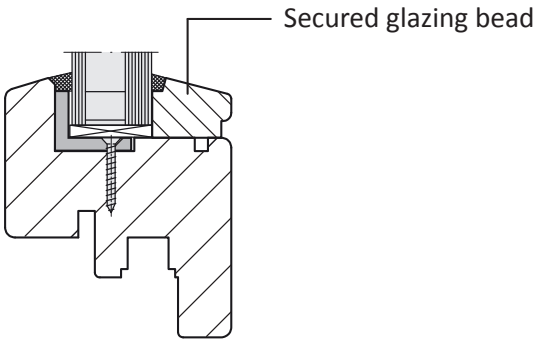
Airgap

The airgap which is specified in the SIEGENIA profile datasheet for the corresponding system must be adhered to.
It must not be exceeded, nor must it fall below the limit.



Glazing rebate

The glazing beads should be secured according to requirements (e.g. by screw connections, adhesive bonding, nailing, etc.).



Construction material

Only timber which meets the following requirements may be used for anti-intruder window elements:

- No knots with a diameter of more than 2 mm
- No cracks
- No other defects

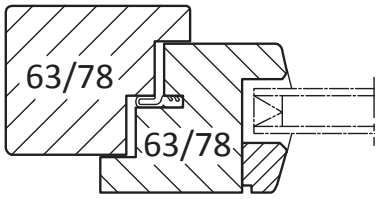
The type of timber used must have at least the following gross density:

- 0,55 g/cm³ for hardwoods
- 0,45 g/cm³ for softwoods

The annual ring widths must not exceed 4 mm on softwoods.

Profile cross-section

In order to create the worst possible conditions for the lever tool, the minimum profile crosssection used must be IV 63/78 in accordance with DIN 68 121.



Weather strip bar

RC1 does not place any particular requirements on the weather strip bar.

However, the following must be observed with regard to fixing:

- The distance between screws should be 300 mm maximum
- Corner spacing 50 to 100 mm

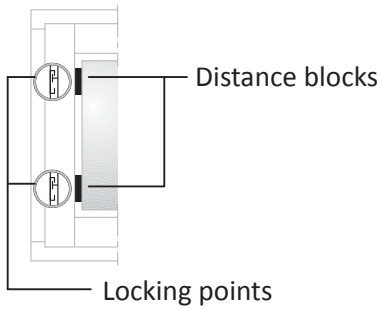
Striker plates

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.

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).

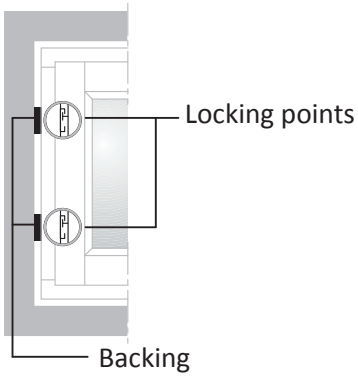
The distance blocks must be at least 100 mm long.



Wall mounting

The hollow space between the frame and the brickwork near the locking points must be back-filled to be pressure 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

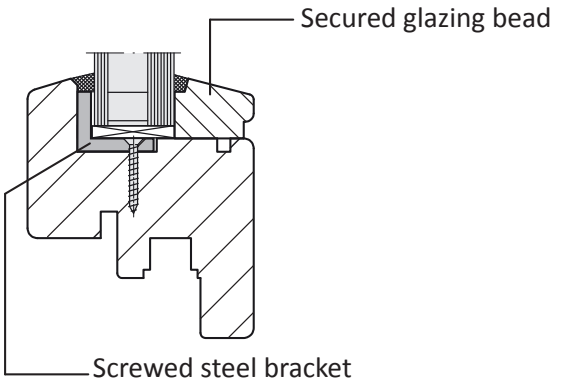
To ensure that the sash can only move minimally within the window frame, distance blocks must be mounted in the corner regions of the window frame (see also hardware layout).

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, nailing, etc.).

To prevent the washer from being pulled out, steel brackets should be screwed into the glazing rebate in sections or continuously. These steel brackets must be screwed offset into the glazing edge area.



Construction material

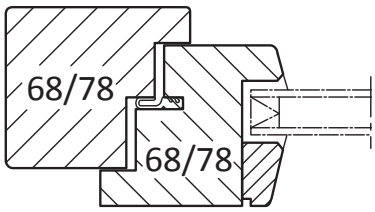
The type of timber used must have the following gross densities as a minimum:

- 0,60 g/cm³ for hardwoods
- 0,50 g/cm³ for softwoods

If possible, a type of timber harder than meranti should be used as the bulk density is usually lower due to the large fluctuation range.
The annual ring widths must not exceed 3 mm on softwoods.

Profile cross-section

In order to produce the worst possible conditions for the lever tool, the minimum profile crosssection used must be IV 68/78 according to DIN 68 121.

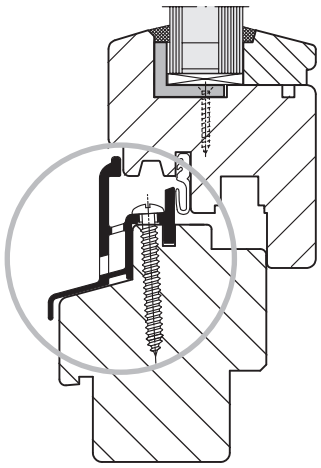


Weather strip bar

Special anti-intruder weather strip bars must be integrated in order to provide appropriate resistance to the intruder‘s tools. They are characterised by thicker walls and a special screw connection.

The external limit stop may warp a maximum of 3 to 6 mm at a force of 1 kN.

- Mounting with round head or cheese head screws 5 x 60 mm
- The distance between screws should be 300 mm maximum
- Corner spacing 50 to 100 mm



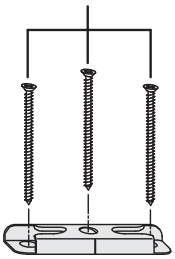
Striker plates and tilt lock bearings

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

SL-RS striker plates and tilt lock bearings must be screwed with stop screws which are at least 45 mm long.

Pre-drilling is required for hardwoods (0.7 x d).

Suitable window-screws
4 x 45



SL-RS striker plate

Sealing

To make it difficult to remove the sealed glass, it is important to select a glass sealant which has as much adhesion force as possible. Two-component sealants are particularly suitable for this.

DIN EN 1627 ff – additional information for RC3

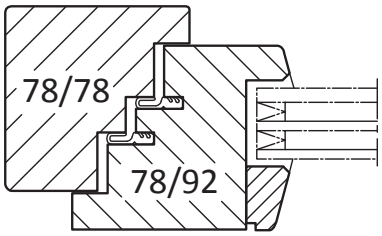
Construction material

The type of timber used must have the following gross densities as a minimum:

- 0,65 g/cm³ for hardwoods
- 0,50 g/cm³ for softwoods

Profile cross-section

In order to produce the worst possible conditions for the lever tool, the minimum profile crosssection used must be IV 78/92 according to DIN 68 121.



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, P5A

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

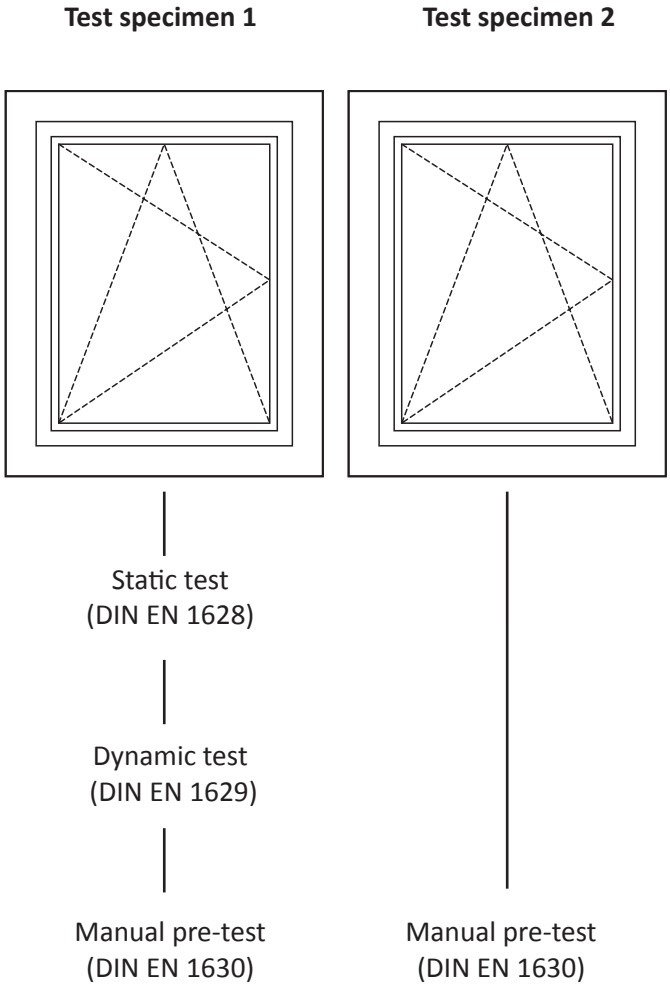
For the test, the test specimens are to be fitted with glazing in accordance with EN 356. In order to protect the tester, the safety glass should be placed on the attack side.

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 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.

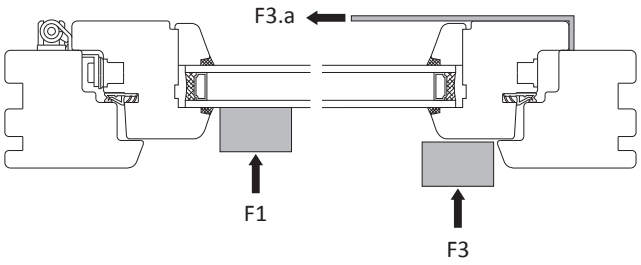
	Resistance class (RC)							
	RC1 and RC2		RC3		RC4		RC5 and RC6	
Loading points	Test load kN	Gap gauge type	Test load kN	Gap gauge type	Test load kN	Gap gauge type	Test load kN	Gap gauge type
F1 Infill corner	3	B	6	B	10	B	15	B
F2 Leaf/sash corner	1,5	B	3	B	6	B	10	B
F3 Locking points	3	A	6	A	10	A	15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

Loading points

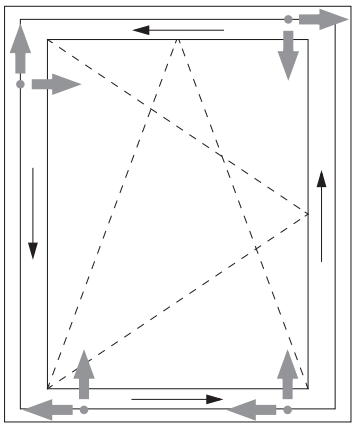
- **F1 Infill corners**
  Load is to be applied to each infill corner.

- **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

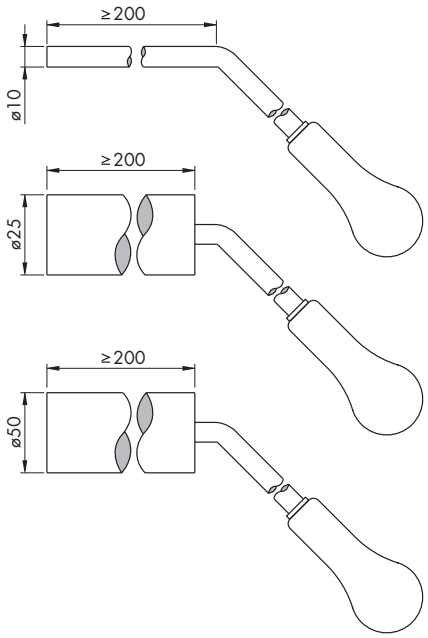
Gap gauges

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.

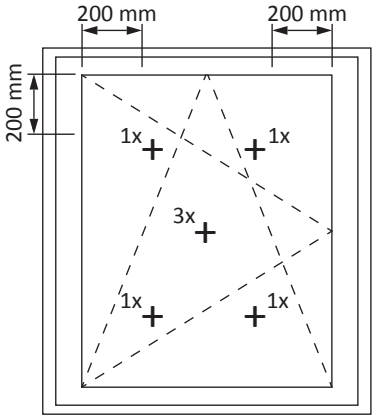
The dynamic test is only carried out in resistance classes RC1 to RC3.

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

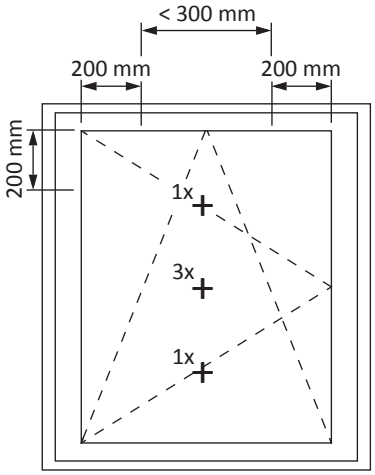
Due to the increased weight of the pendulum impact, the drop height has been reduced.

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	

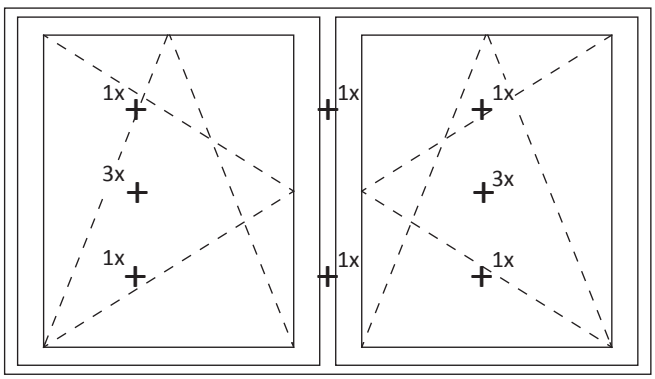
The impact load is applied once at each corner of the infill



and three times in the centre of the test specimen.

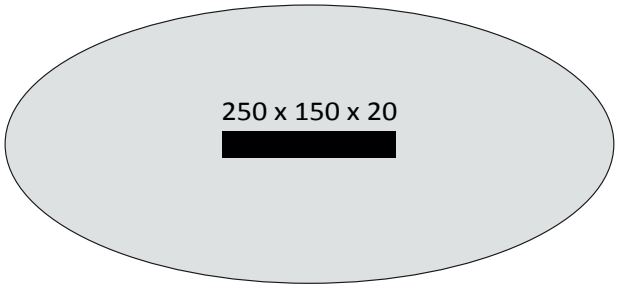


On secondary sashes, the individual infill panels are only impacted on the centreline. The secondary sash area is also tested.



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

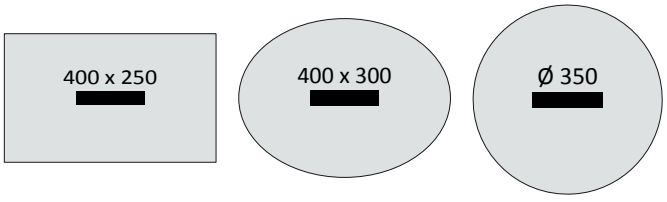
DIN EN 1630 describes how resistance to manual intrusion attempts is determined.

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 thelocked and bolted component openusing 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.

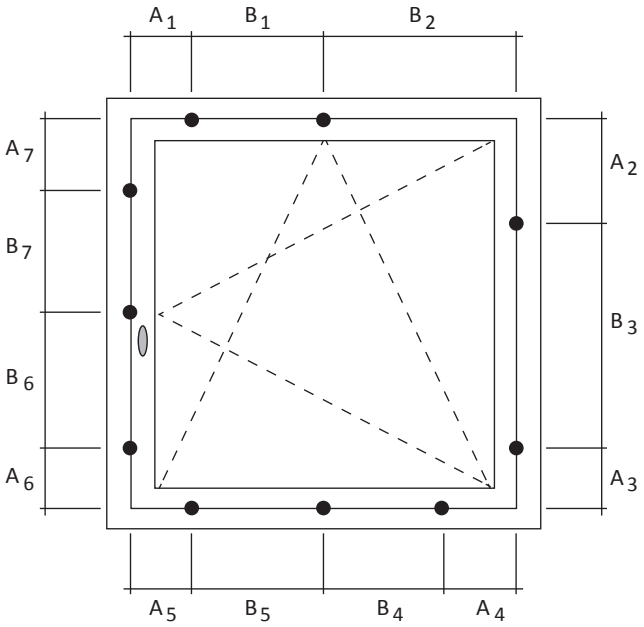
Resistance classes (RC) in accordance with DIN EN 1627:2011-08	Resistance classes (RC) in accordance with DIN V ENV 1627:1999-04
RC1N	No correlation possibleh
RC2N	WK2 (free choice of glazing - glass connection as tested)
RC2	WK2
RC3	WK3
RC4	WK4
RC5	WK5
RC6	WK6

Dimensions

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

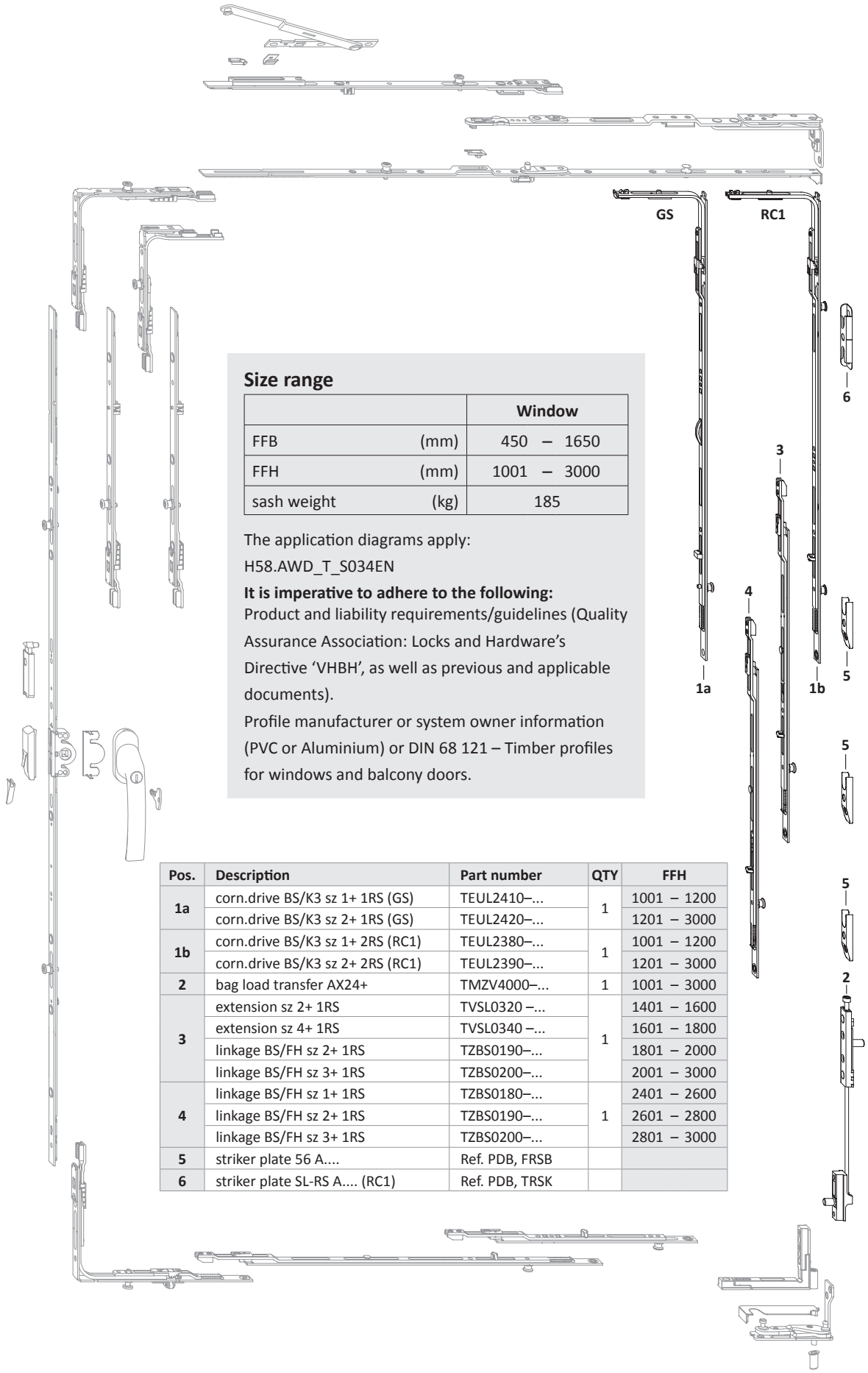
A selection of test specimens is required if a product system is to be assessed.

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%



Size range

		Window
FFB	(mm)	450 – 1650
FFH	(mm)	1001 – 3000
sash weight	(kg)	185

The application diagrams apply:
H58.AWD_T_S034EN

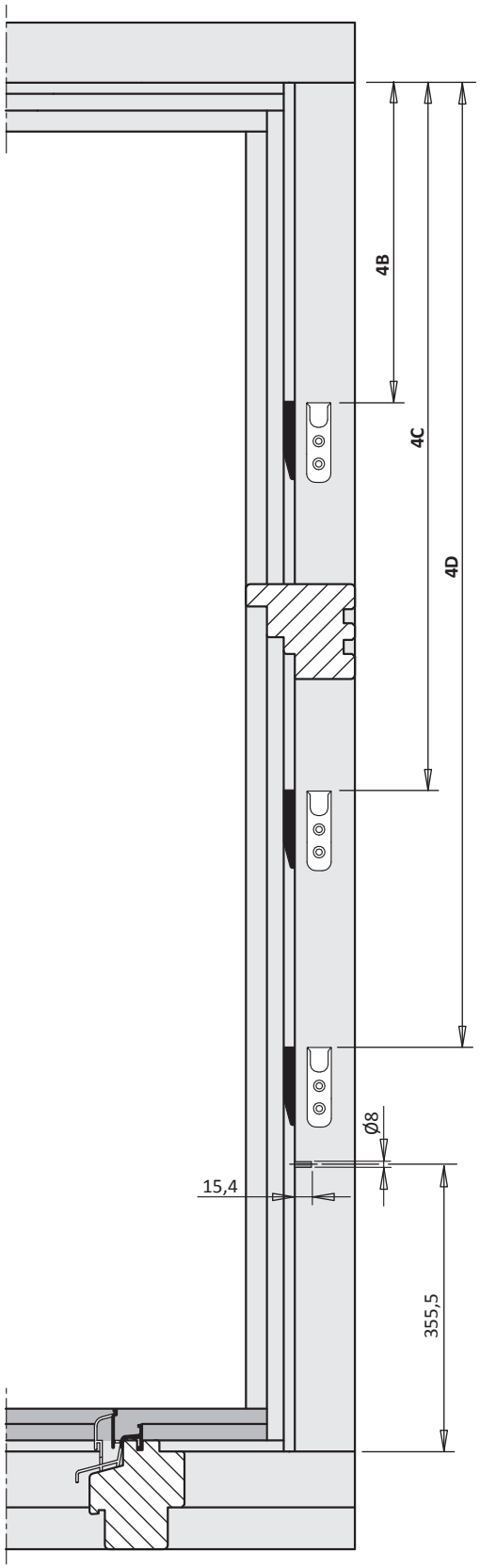
It is imperative to adhere to the following:
Product and liability requirements/guidelines (Quality Assurance Association: Locks and Hardware's Directive 'VHBH', as well as previous and applicable documents).
Profile manufacturer or system owner information (PVC or Aluminium) or DIN 68 121 – Timber profiles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

Pos.	Description	Part number	QTY	FFH
1a	corn.drive BS/K3 sz 1+ 1RS (GS)	TEUL2410–...	1	1001 – 1200
	corn.drive BS/K3 sz 2+ 1RS (GS)	TEUL2420–...		1201 – 3000
1b	corn.drive BS/K3 sz 1+ 2RS (RC1)	TEUL2380–...	1	1001 – 1200
	corn.drive BS/K3 sz 2+ 2RS (RC1)	TEUL2390–...		1201 – 3000
2	bag load transfer AX24+	TMZV4000–...	1	1001 – 3000
3	extension sz 2+ 1RS	TVSL0320 –...	1	1401 – 1600
	extension sz 4+ 1RS	TVSL0340 –...		1601 – 1800
	linkage BS/FH sz 2+ 1RS	TZBS0190–...		1801 – 2000
	linkage BS/FH sz 3+ 1RS	TZBS0200–...		2001 – 3000
4	linkage BS/FH sz 1+ 1RS	TZBS0180–...	1	2401 – 2600
	linkage BS/FH sz 2+ 1RS	TZBS0190–...		2601 – 2800
	linkage BS/FH sz 3+ 1RS	TZBS0200–...		2801 – 3000
5	striker plate 56 A....	Ref. PDB, FRSB		
6	striker plate SL-RS A.... (RC1)	Ref. PDB, TRSK		

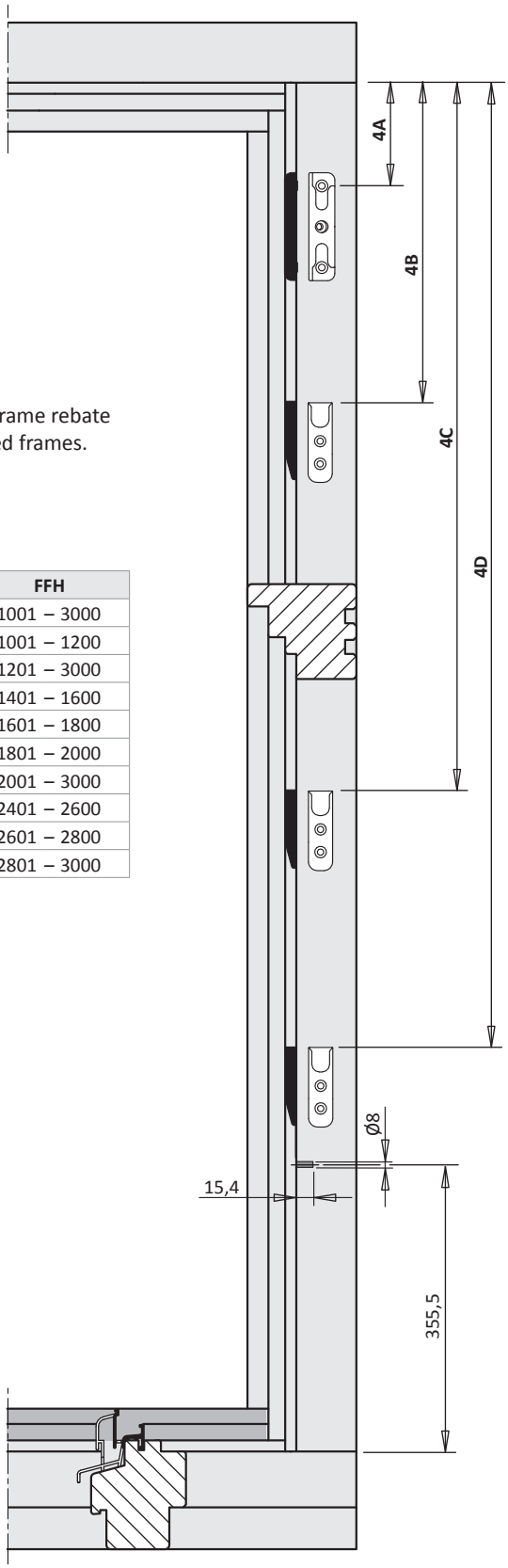
axxent 24+ load transfer additional data

Frame measurement hinge side

GS



RC1



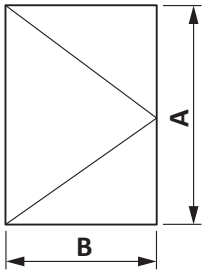
Dimensions in mm

All striker positions are frame rebate dimensions on assembled frames.

Airgap 12^{+1} mm.

RFH = FFH + 24 mm

	Dimension	FFH
4A	160	1001 – 3000
4B	500	1001 – 1200
	700	1201 – 3000
4C	885	1401 – 1600
	1085	1601 – 1800
	1204	1801 – 2000
	1500	2001 – 3000
4D	1804	2401 – 2600
	2004	2601 – 2800
	2300	2801 – 3000



- for the middle sash (in triple sash elements)
- inward opening elements only

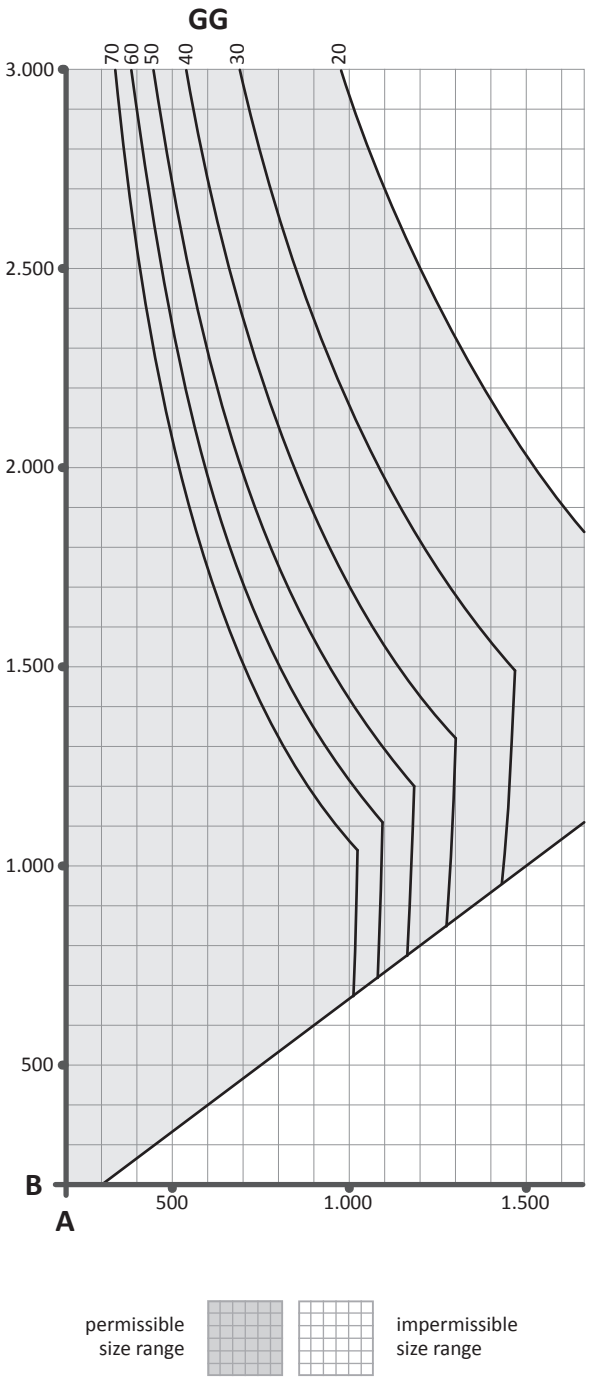
A = FFH (sash rebate height [mm])
B = FFB (sash rebate width [mm])
GG = glass weight [kg/m²]

basis for testing and calculation

- Tilt-turn test according to EN 13126-8:
  - turn-only cycles: 20.000
- 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 TBDK with the following forces:
  - on the top hinge (N): 2.200
  - on the bottom hinge (N): 2.310
- The following values are to be observed with all window systems:
  - max. width/height ratio $Q_{B/H}$: ≤ 1,5
  - 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"

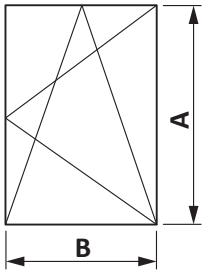


TITAN

application diagram

hinge side: axxent 24+

kg ≤100



- inward opening elements only

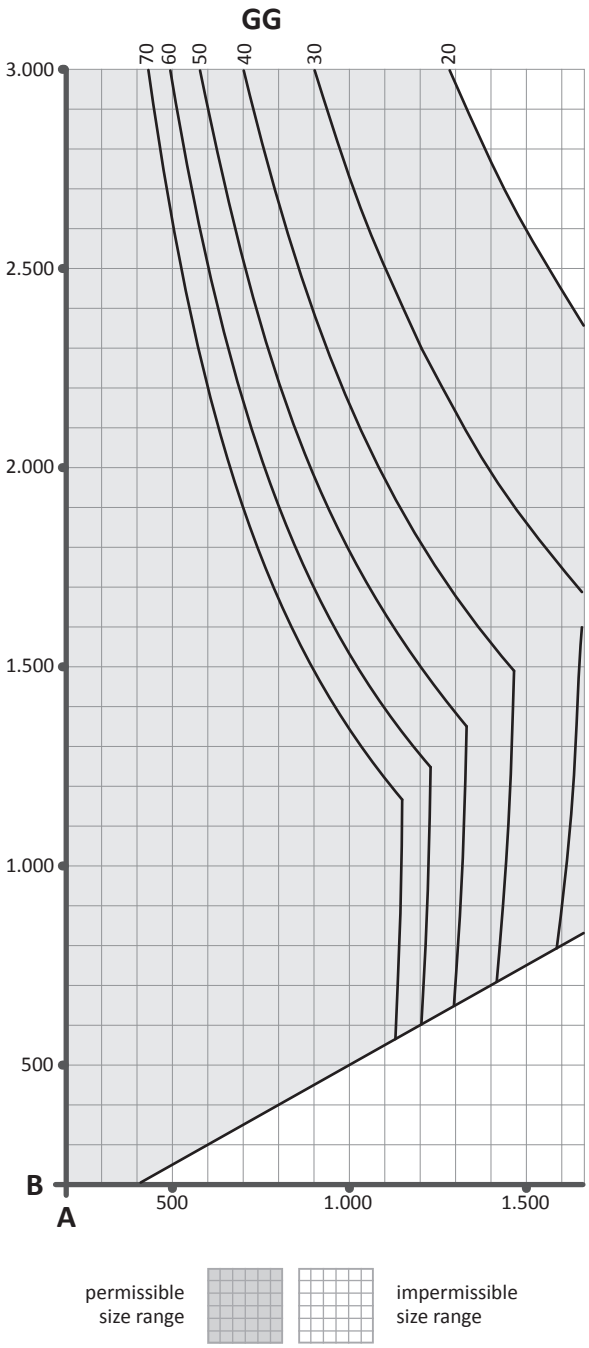
A = FFH (sash rebate height [mm])
B = FFB (sash rebate width [mm])
GG = glass weight [kg/m²]

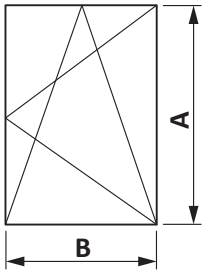
basis for testing and calculation

- Tilt-turn test according to EN 13126-8:
  - tilt cycles: 10.000
  - turn-only cycles: 10.000
- 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 TBDK 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"





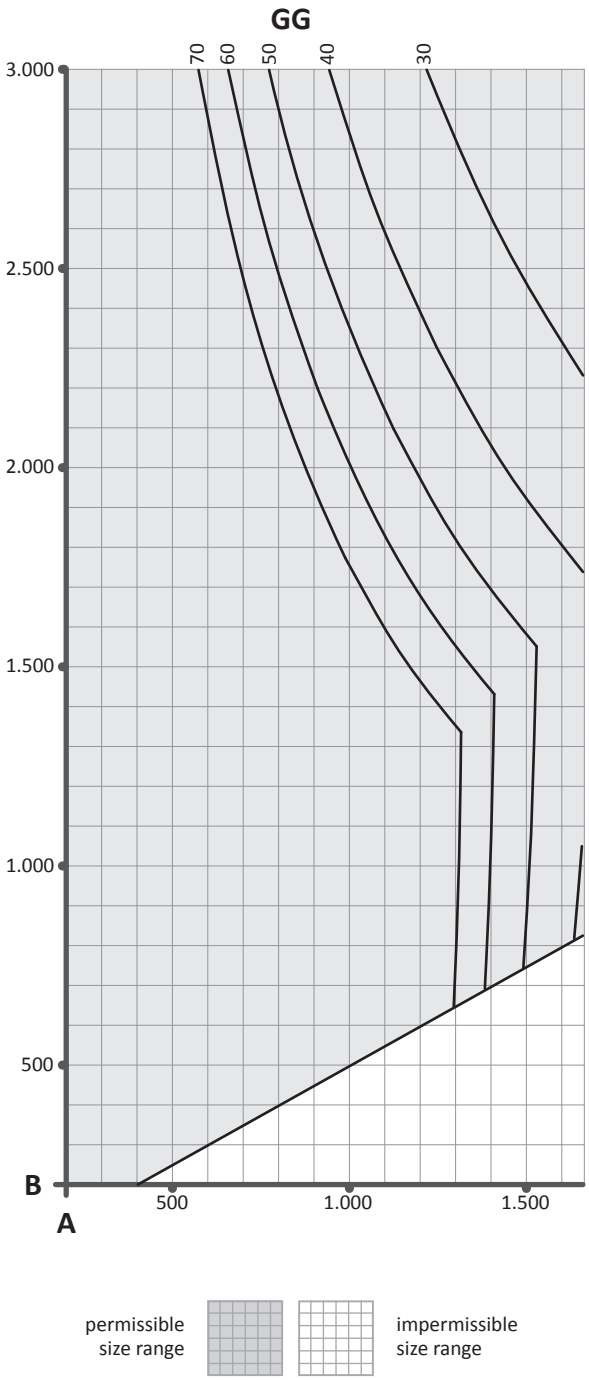
- inward opening elements only
  A = FFH (sash rebate height [mm])
  B = FFB (sash rebate width [mm])
  GG = glass weight [kg/m²]

basis for testing and calculation

- Tilt-turn test according to EN 13126-8:
  - tilt cycles: 10.000
  - turn-only cycles: 10.000
- 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 TBDK 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 $Q_{B/H}$: ≤ 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"

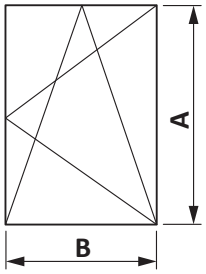


TITAN

application diagram

hinge side: axxent 24+

kg ≤150



- inward opening elements only

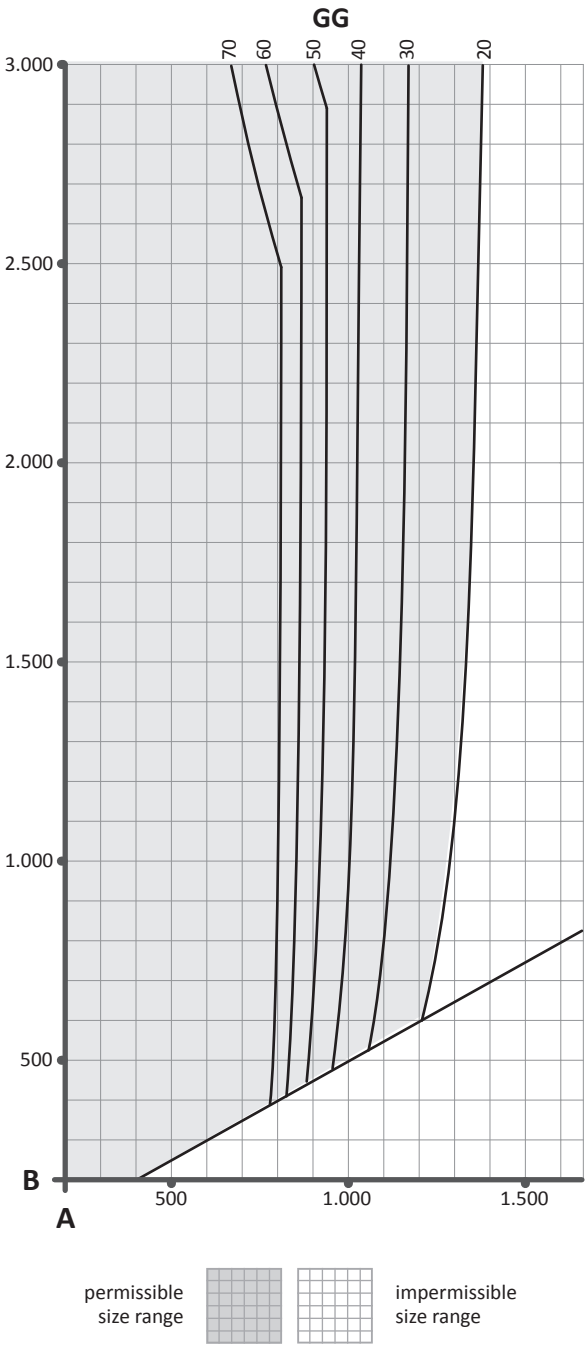
A = FFH (sash rebate height [mm])
B = FFB (sash rebate width [mm])
GG = glass weight [kg/m²]

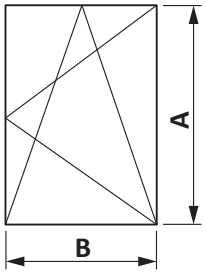
basis for testing and calculation

- Tilt-turn test according to EN 13126-8:
  - tilt cycles: 10.000
  - turn-only cycles: 10.000
- 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 TBDK 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 $Q_{B/H}$: ≤ 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"





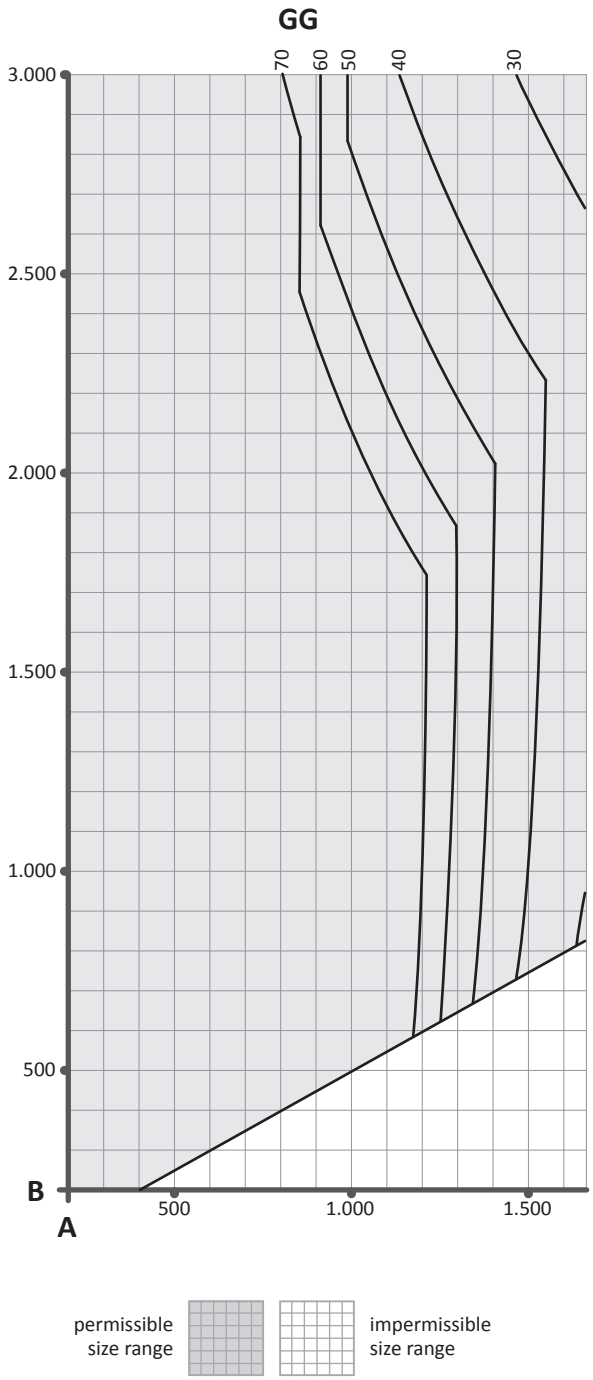
- inward opening elements only
  A = FFH (sash rebate height [mm])
  B = FFB (sash rebate width [mm])
  GG = glass weight [kg/m²]

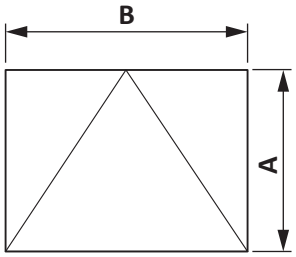
basis for testing and calculation

- Tilt-turn test according to EN 13126-8:
  - tilt cycles: 10,000
  - turn-only cycles: 10,000
- additional loads taken into account
  according to EN 14608 (figure A.1)/class 4
  according to EN 13115 (800N).

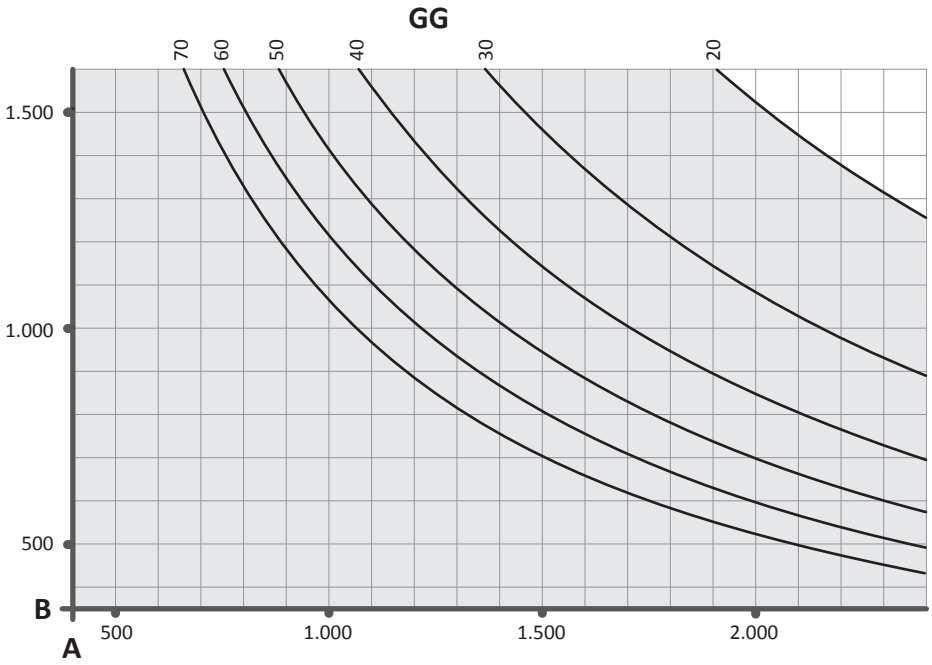
Conditions for the use of the application diagram

- Evidence for fixing structural components
  onto the window system by a window manufacturer
  according to TBDK with the following forces:
  - on the top hinge (N): 5,121
  - on the bottom hinge (N): 5,340
- Evidence determining the resistance
  of the window or window door to repeated opening
  and closing according to EN 1191
- 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): ≤ 4.00
- Notes on the intended use:
  Basics and use of the application diagrams
  "Download"





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



permissible size range

impermissible size range

basis for testing and calculation

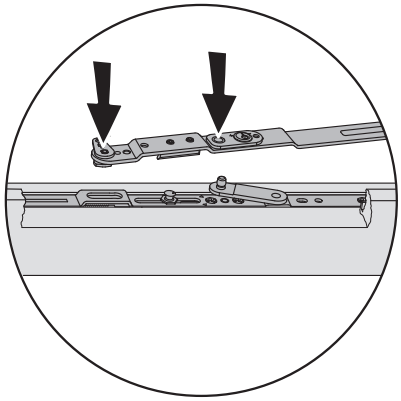
- tilt test according to RAL-GZ 607/12:
  - tilt cycles: 15.000
- additional loads according to RAL-GZ 607/12

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"

Stay arm Sz 1

1.



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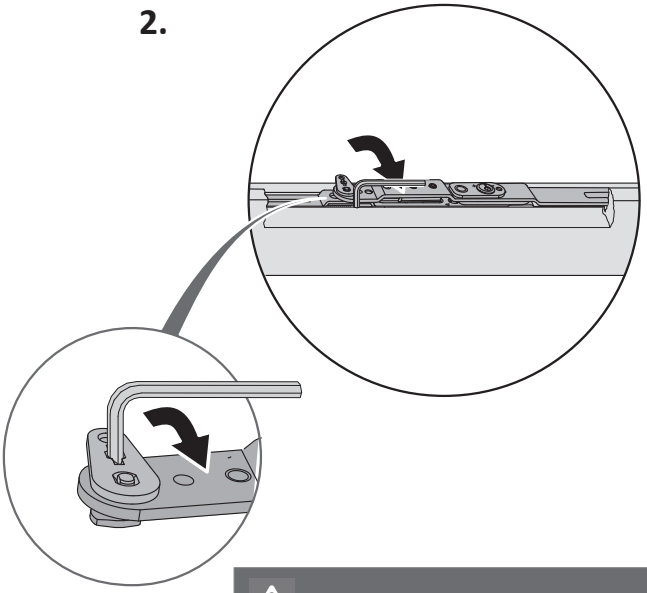

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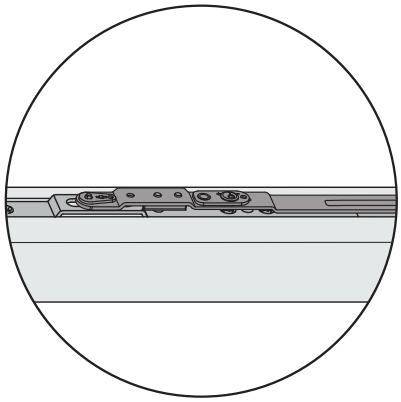


DANGER

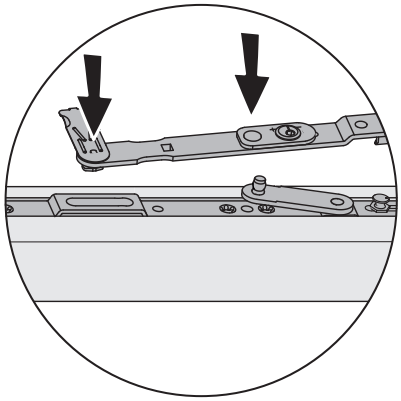
Falling sash

If the security plate is not engaged the sash may fall out.

- Noticeable engagement of the security plate in the stay sash part.

Stay arm Sz 2 - Sz 5

1.



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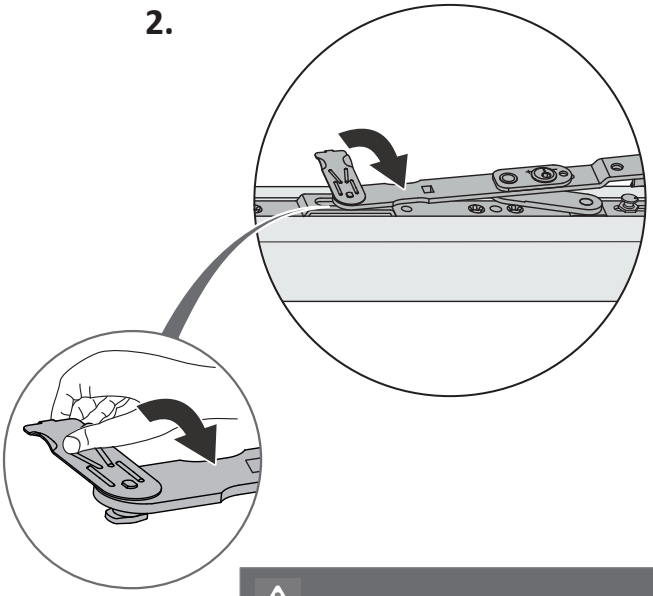

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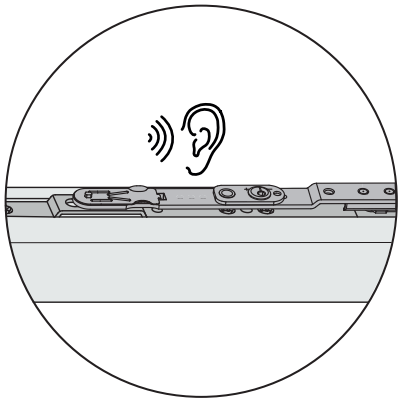


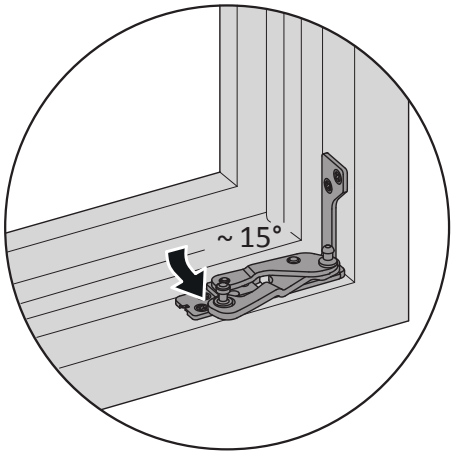
DANGER

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.



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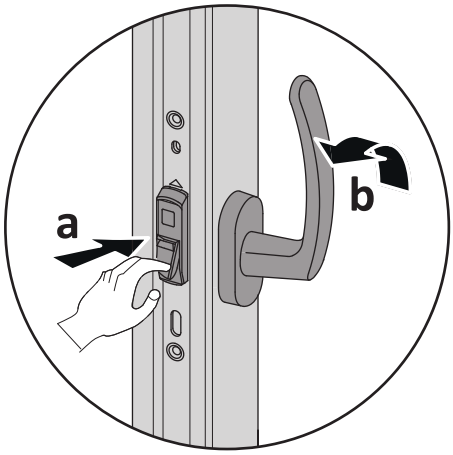

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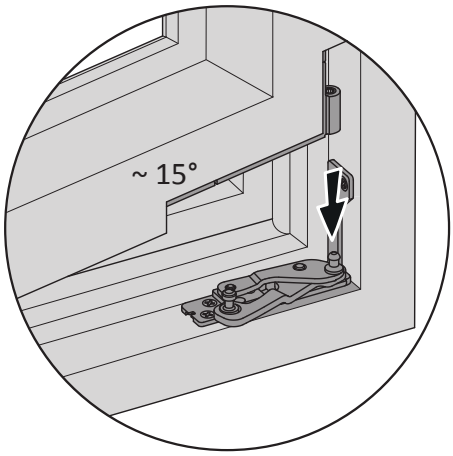

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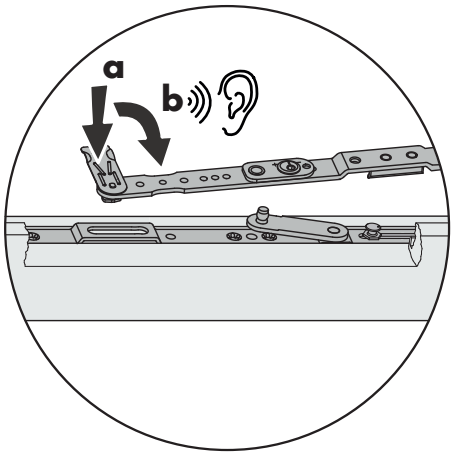

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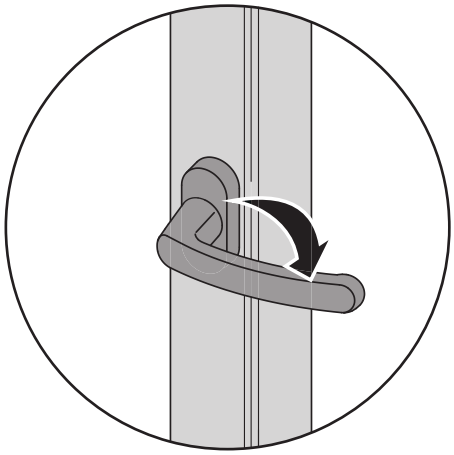

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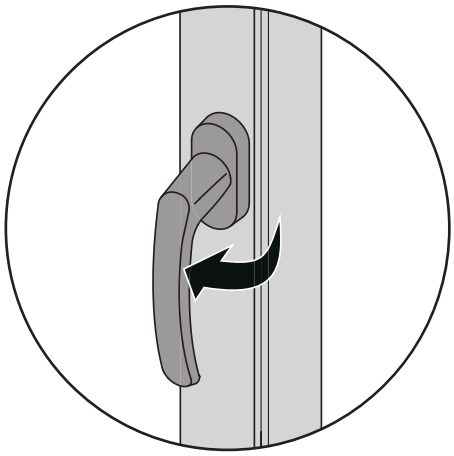

You can find our installation video here:

axxent 24+ Hinging the sash in turning position

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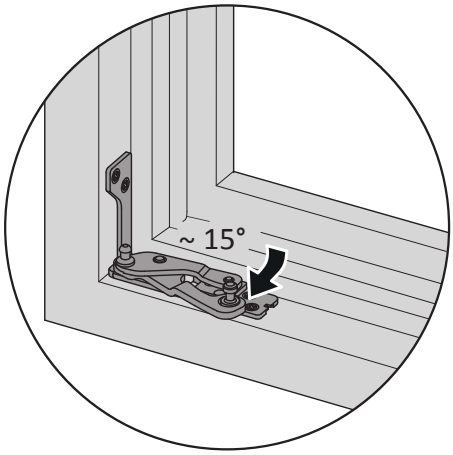

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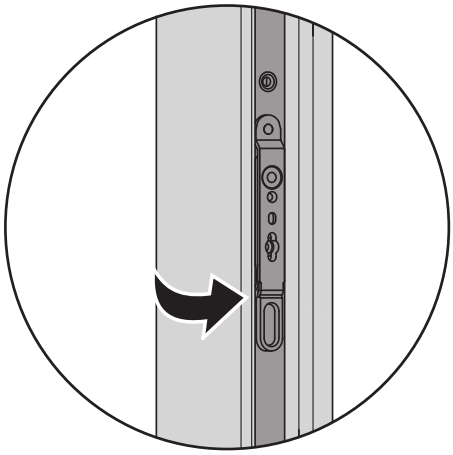

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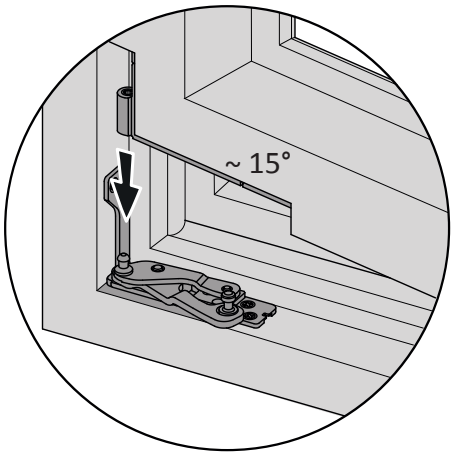

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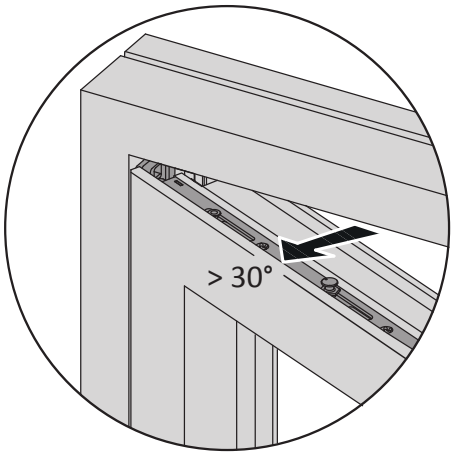

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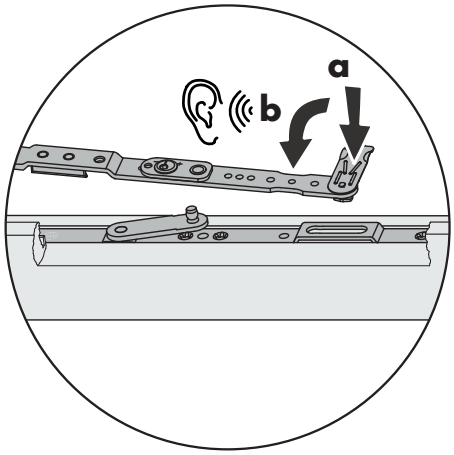

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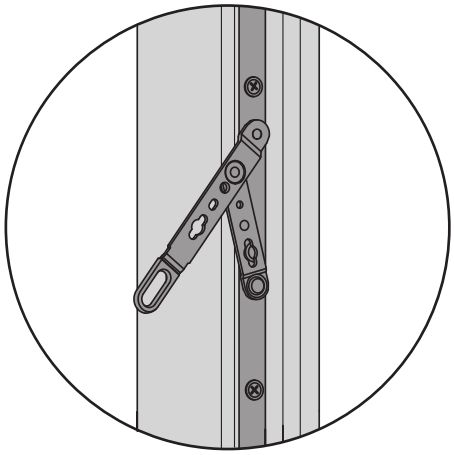

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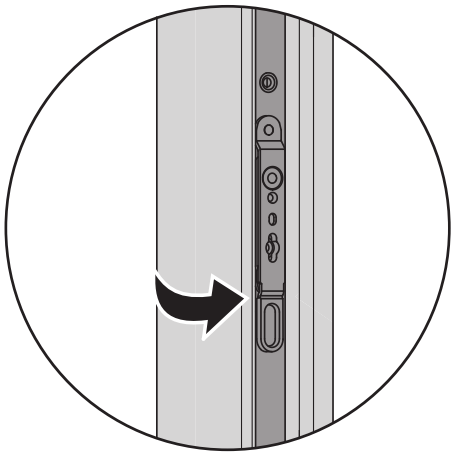

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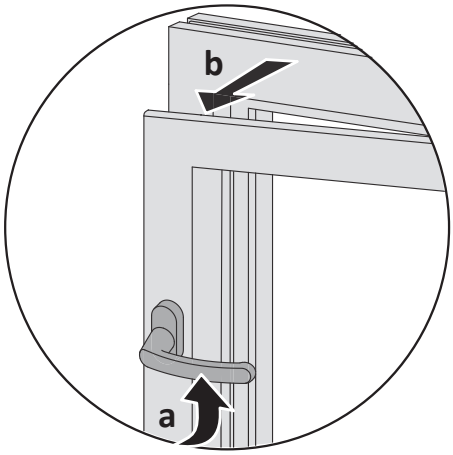

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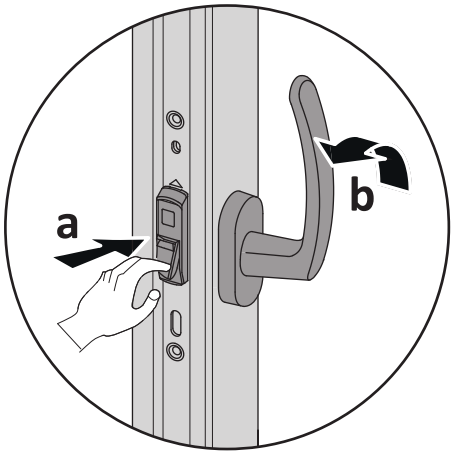

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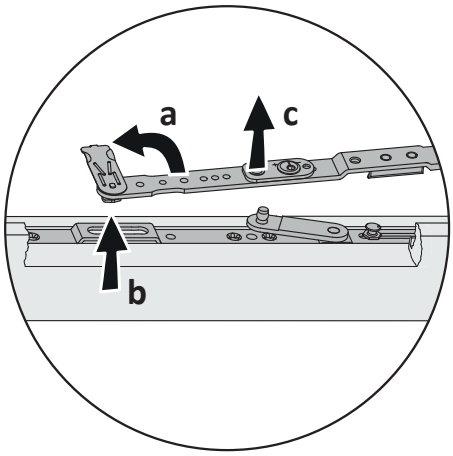

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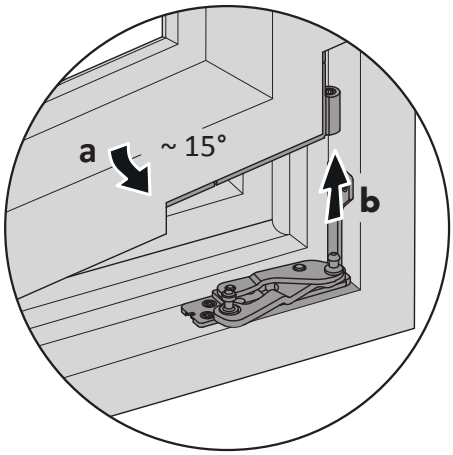
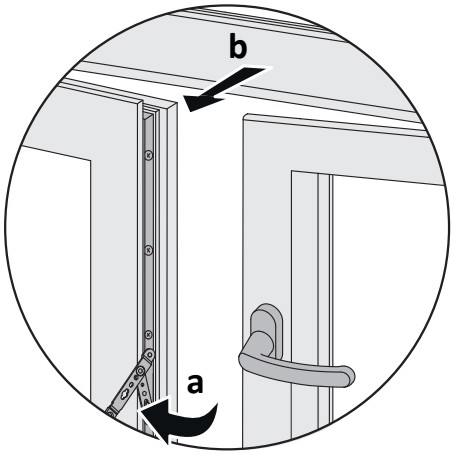


You can find our installation video here:

axxent 24+ Unhinging the sash in turning position

1.



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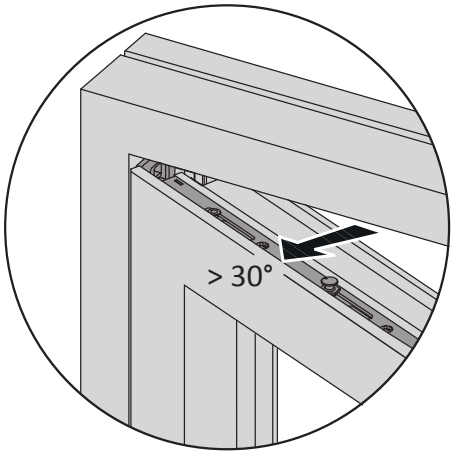

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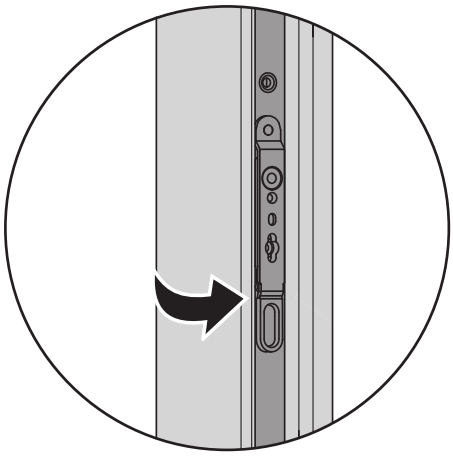

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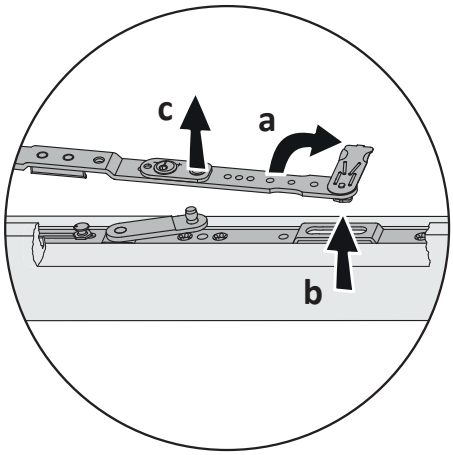

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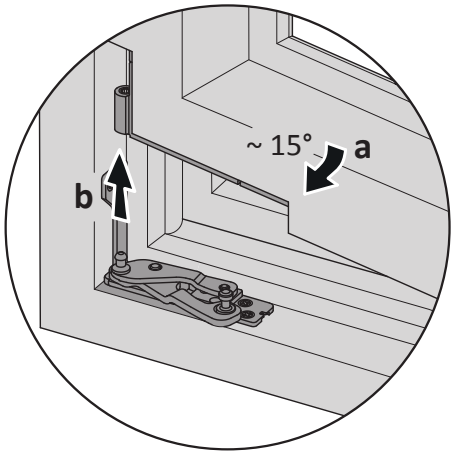

Installation information axxent 24+

Hinging the sash

Sash in tilted position parallel to the frame

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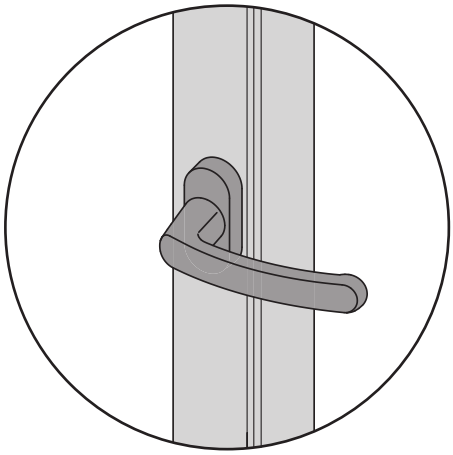

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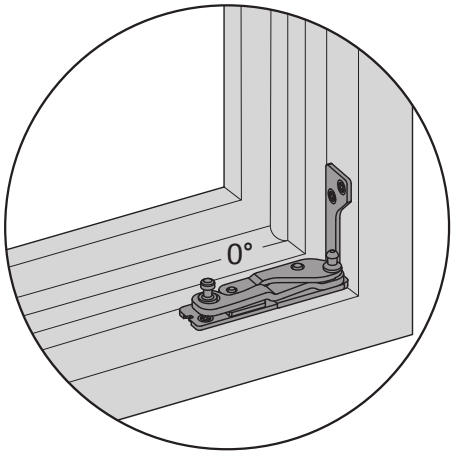

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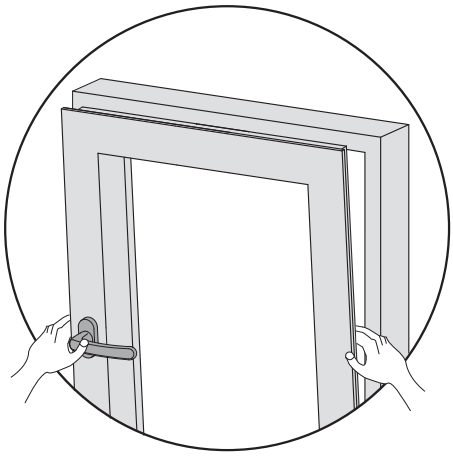

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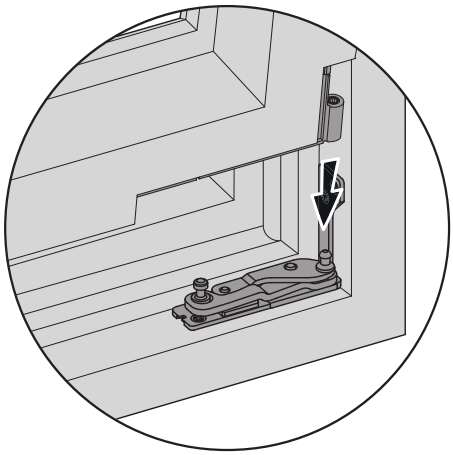

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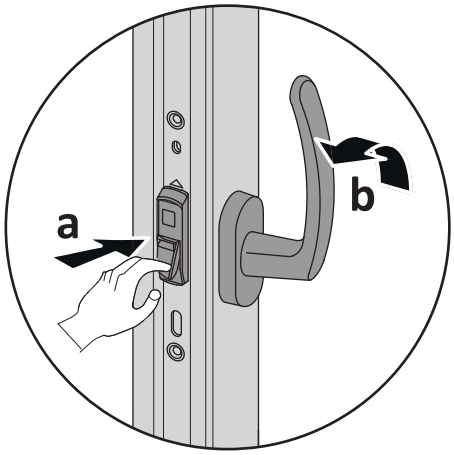

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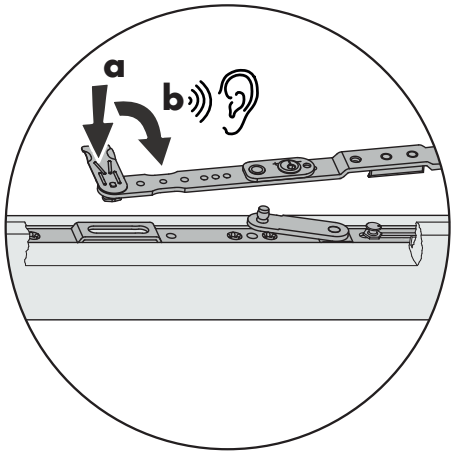

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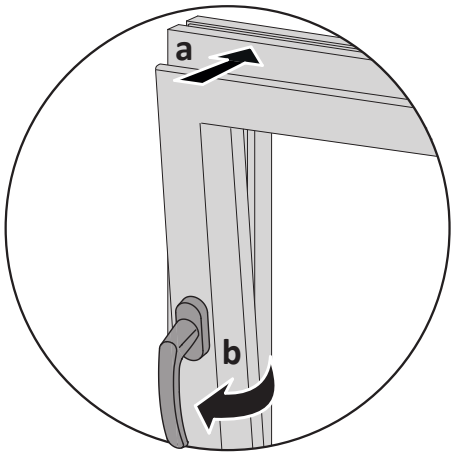
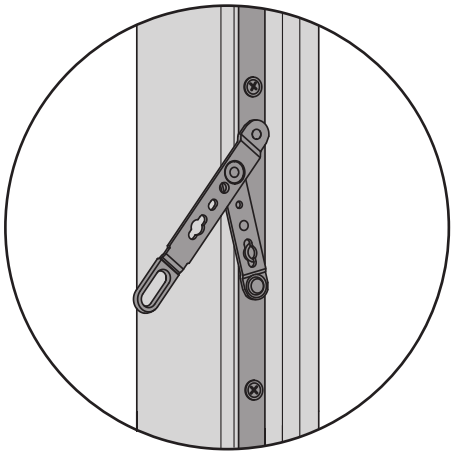


You can find our installation video here:

axxent 24+ Hinging the sash in tilt position

1.



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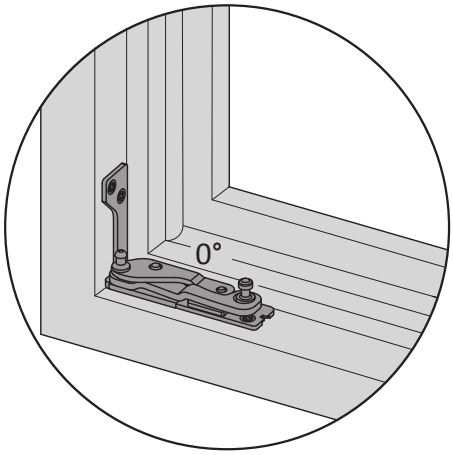

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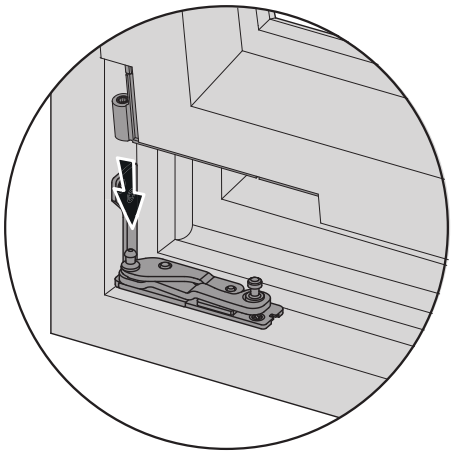

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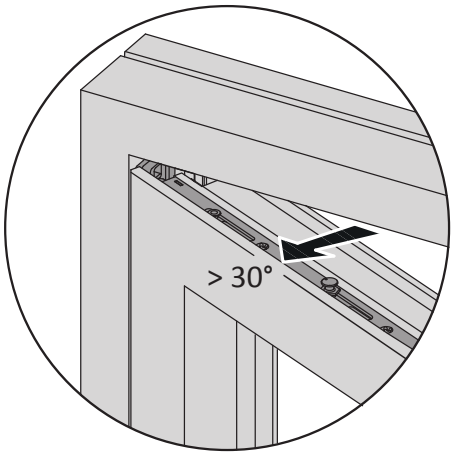

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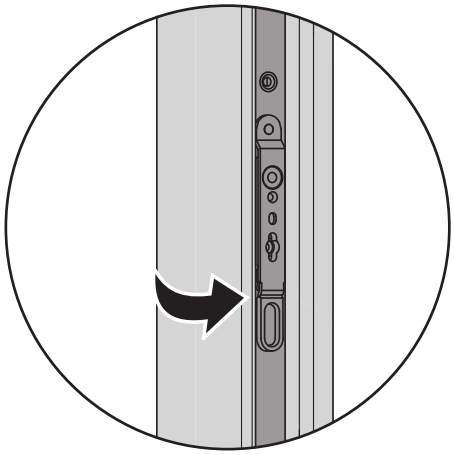

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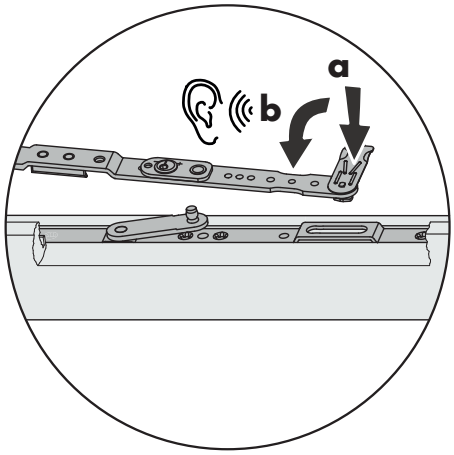

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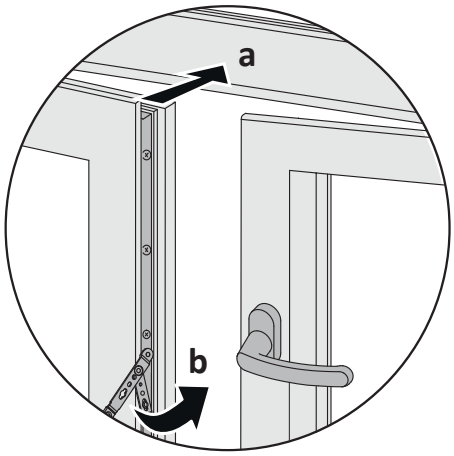

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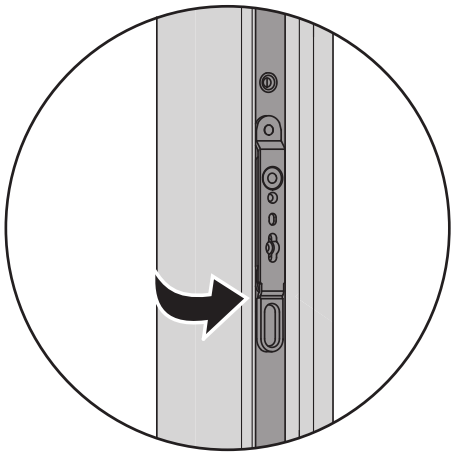
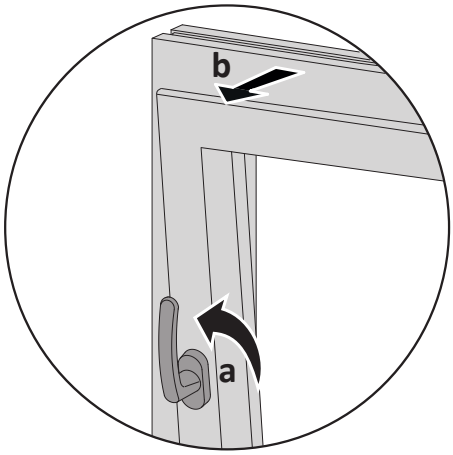


Installation information axxent 24+

Unhinging the sash

Sash in tilted position parallel to the frame

1.



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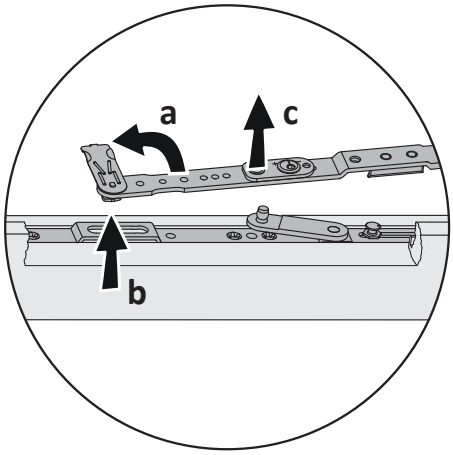

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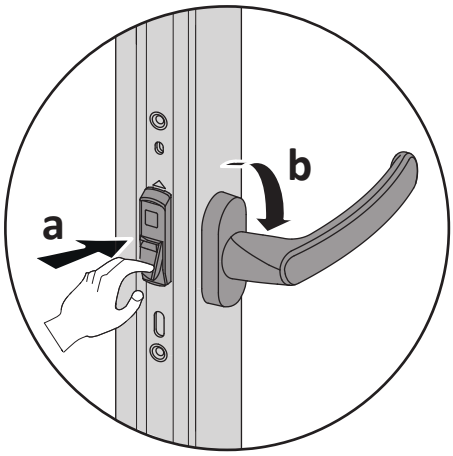

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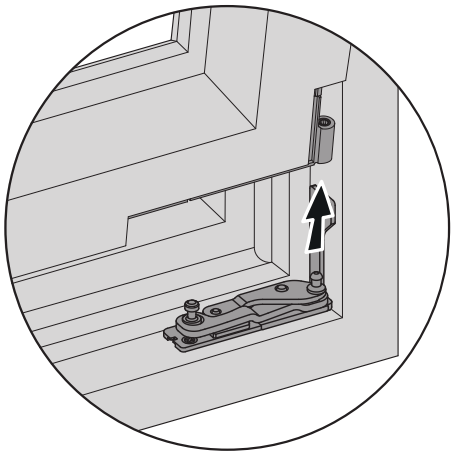
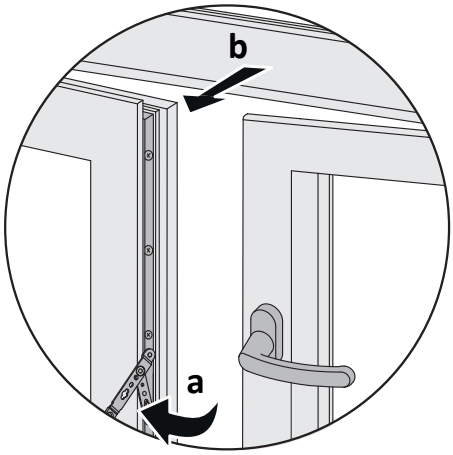


You can find our installation video here:

axxent 24+ Unhinging the sash in tilt position

1.



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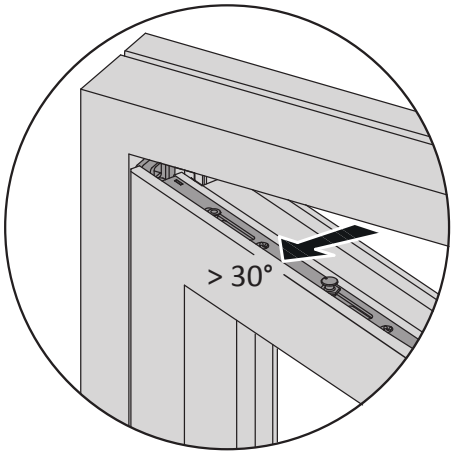

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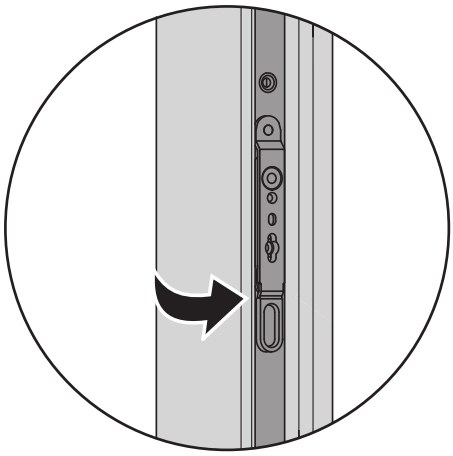

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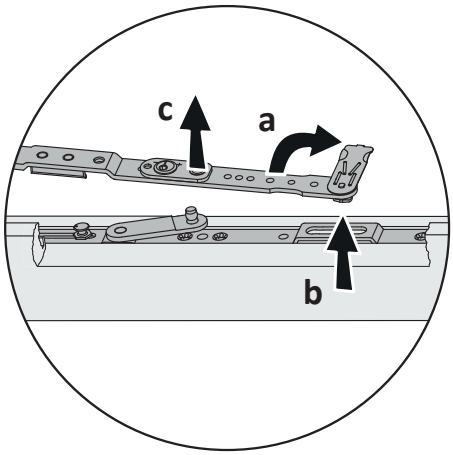

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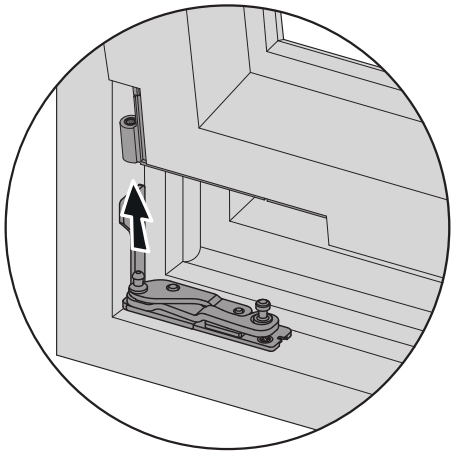

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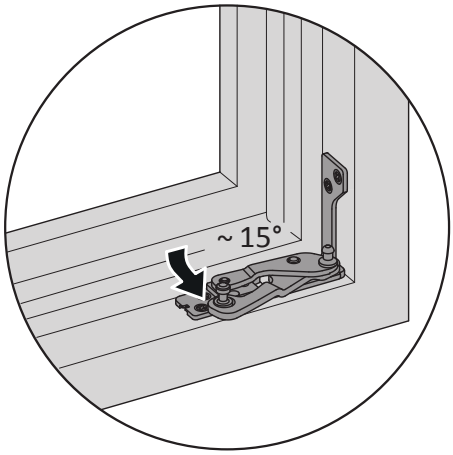

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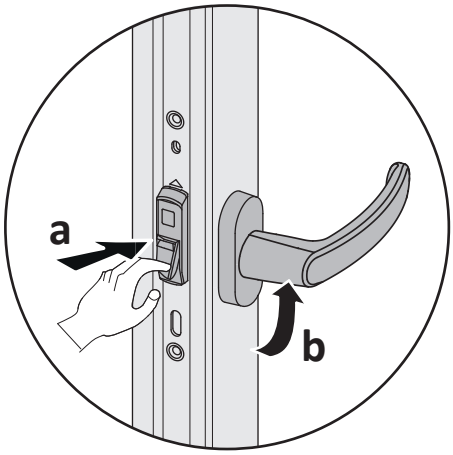

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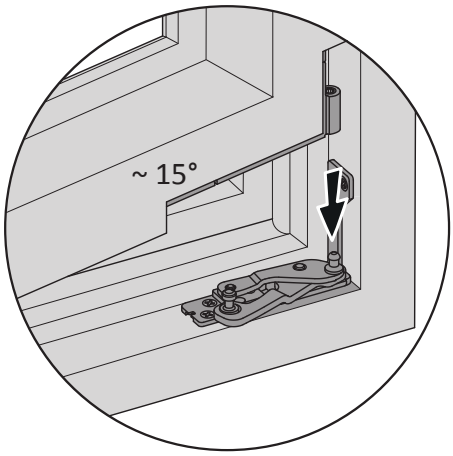

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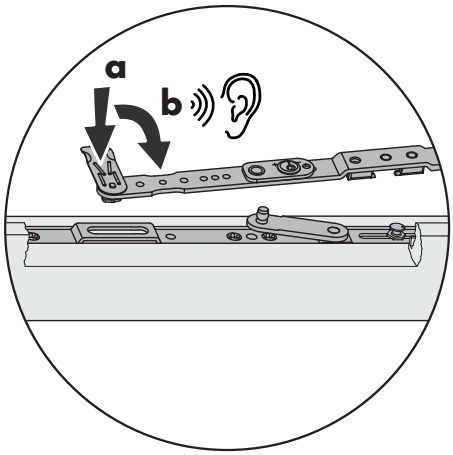

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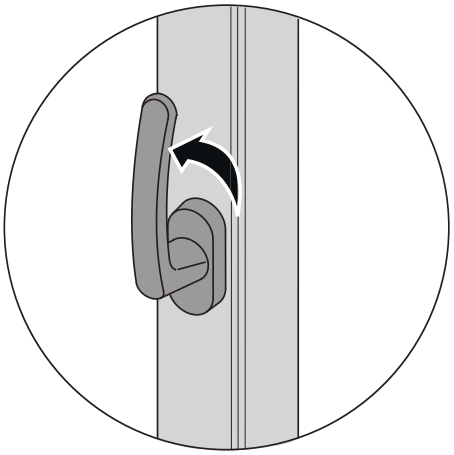

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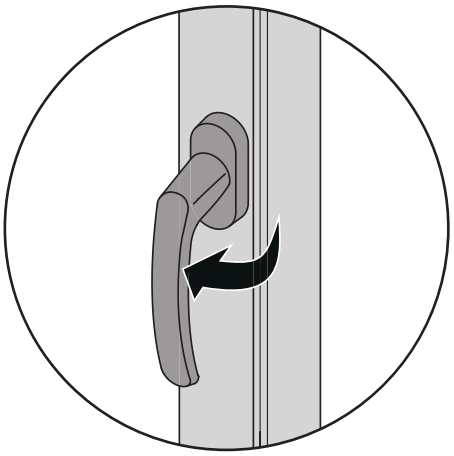

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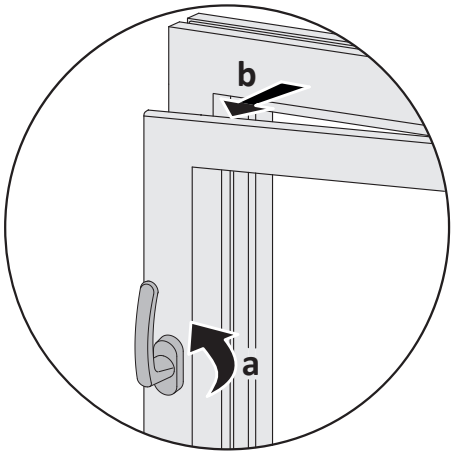

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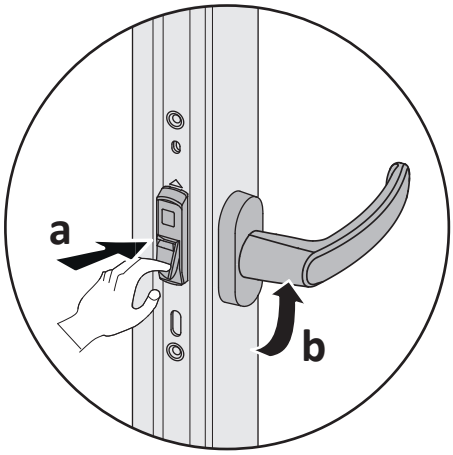

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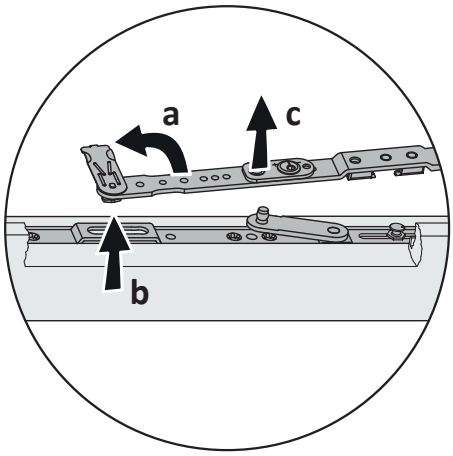

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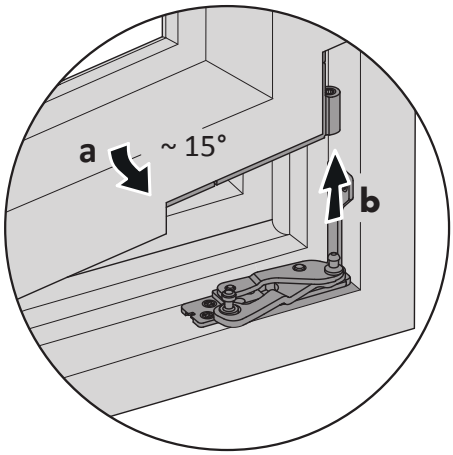
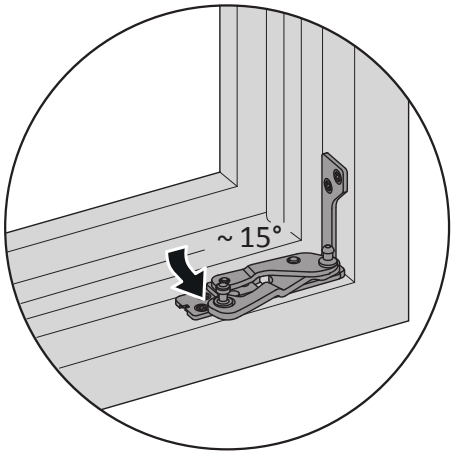


Installation information axxent 24+

Hinging the sash
turn only sash stay

1.



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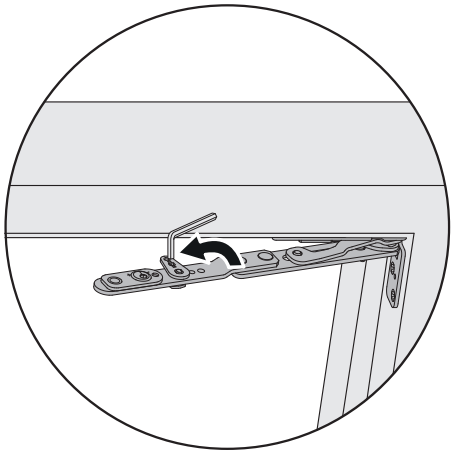

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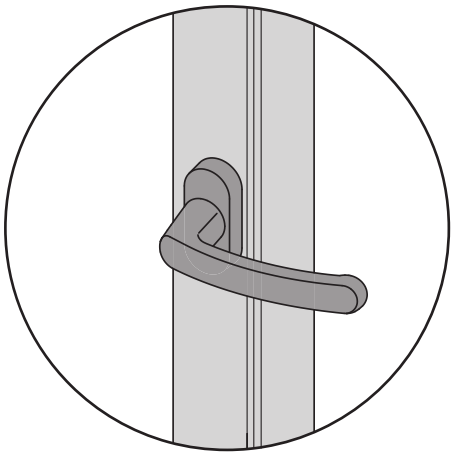

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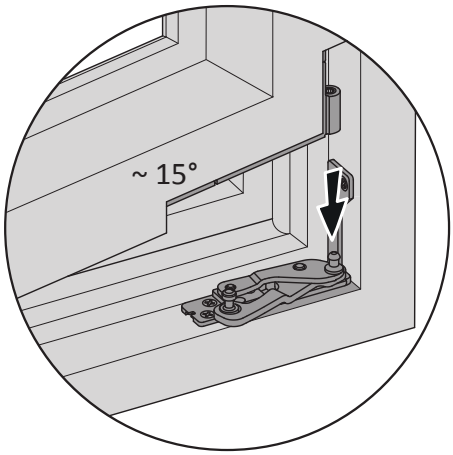

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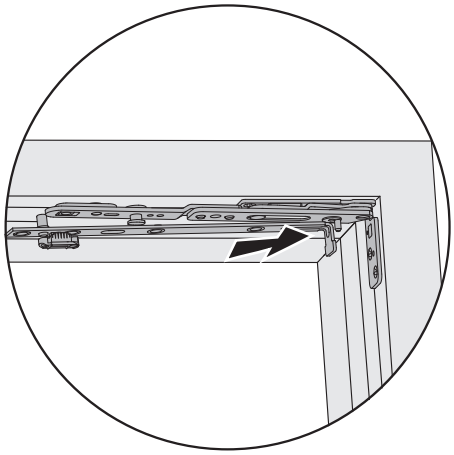

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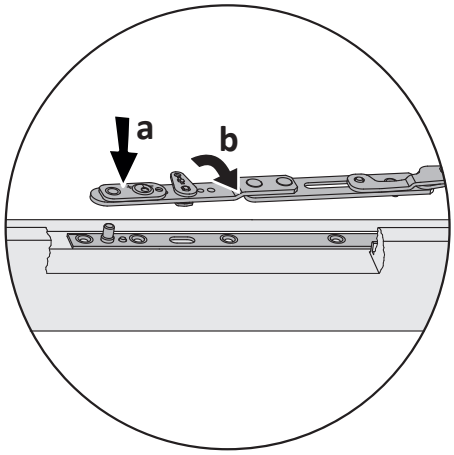
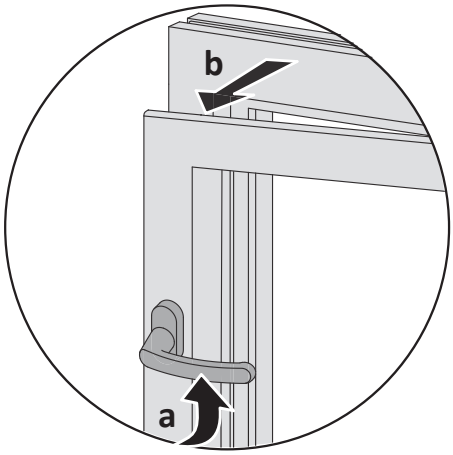


7.

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

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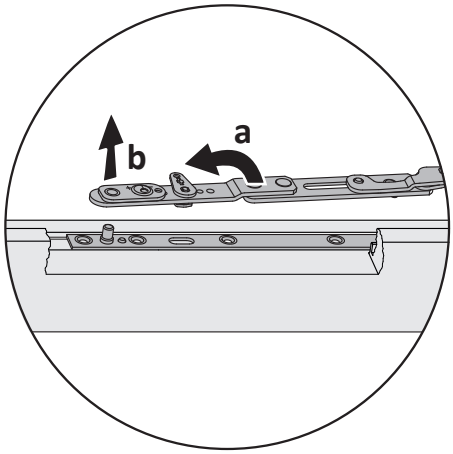

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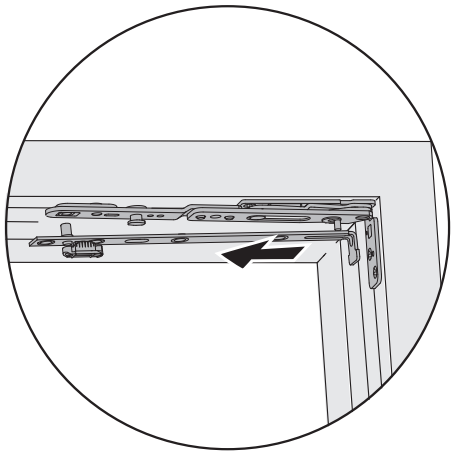

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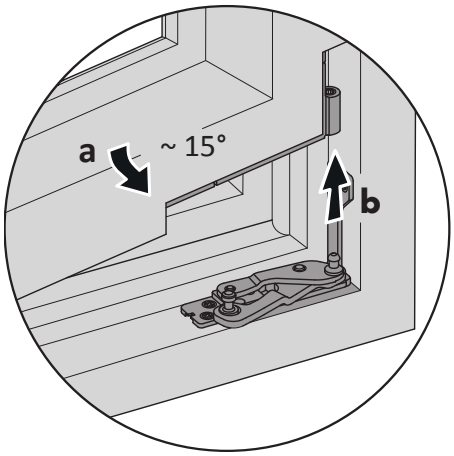


Bottom Inliner

1-sash square tilt-turn	H48.TAFH2K0S039EN	2 - 3
2-sash square tilt-turn/turn DS 16 with DK-stay	H48.TAFH2K0S040EN	2 - 9
2-sash square tilt-turn/turn DS 16 with DF-stay	H48.TAFH2K0S041EN	2 - 17
3-sash Centre sash second opening turn	H48.TAFH2K0S042EN	2 - 25
Tilt before turn (TBT)		
1-sash square tilt before turn (TBT)	H48.TAFH2K0S044EN	2 - 29
Turn only sash		
1-sash square turn	H48.TAFH2K0S043EN	2 - 35

Bottom Double cam SB R-RS

1-sash square tilt-turn	H48.TAFH2K0S405EN	2 - 39
2-sash square tilt-turn/turn DS 16 with DK-stay	H48.TAFH2K0S406EN	2 - 45
2-sash square tilt-turn/turn DS 16 with DF-stay	H48.TAFH2K0S407EN	2 - 53
3-sash Centre sash second opening turn	H48.TAFH2K0S409EN	2 - 61
Turn only sash		
1-sash square turn	H48.TAFH2K0S408EN	2 - 65

TITAN AF

Installation instructions

1-sash square tilt-turn

timber 12 mm

basic security

fixed handle position

Hinge side axxent 24+

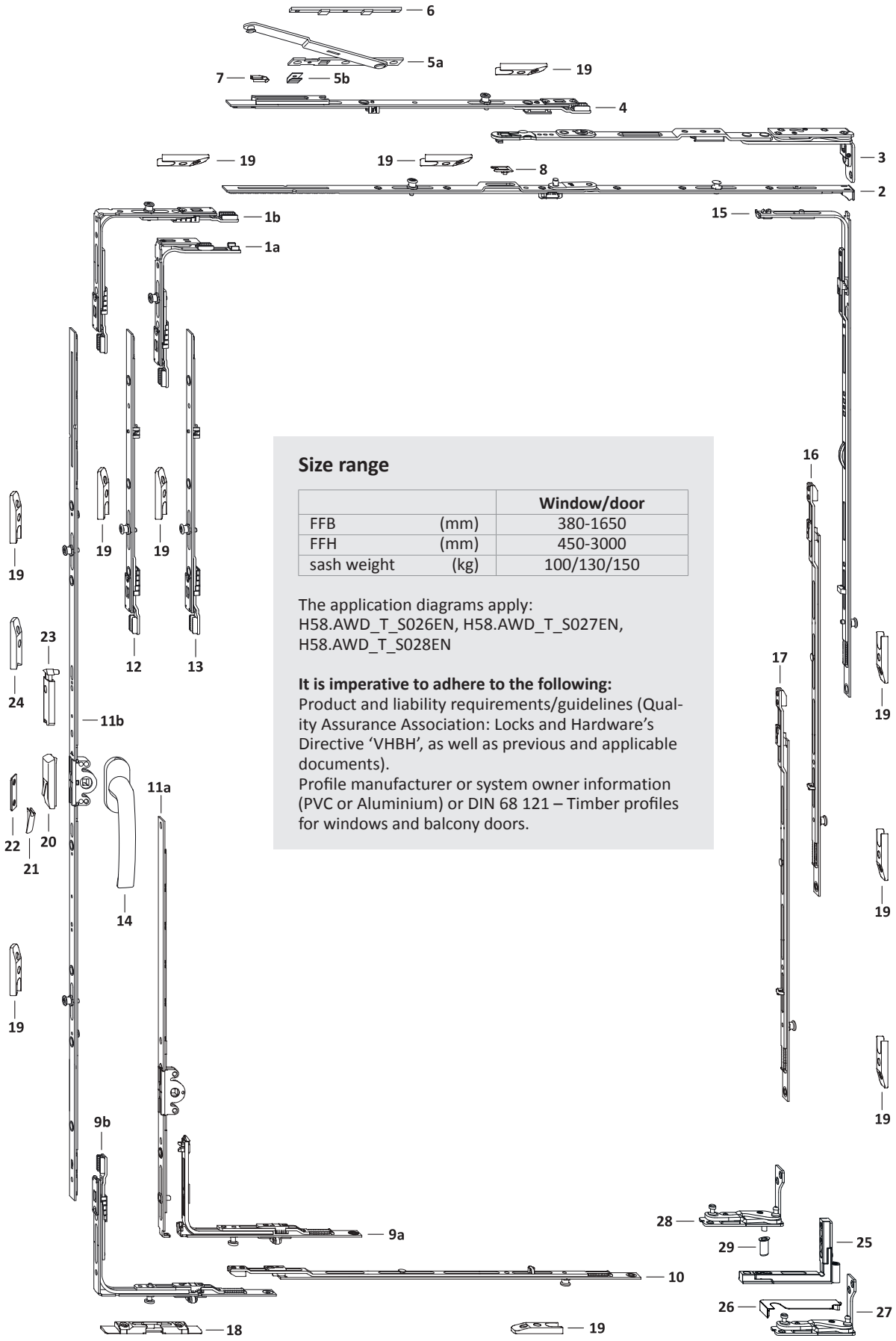
surface TS

backset 15 mm

Hardware set configuration	
General	Locking-points distance 1000
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-turn
H12 GK Hinge side axxent 24+



Size range

		Window/door
FFB	(mm)	380-1650
FFH	(mm)	450-3000
sash weight	(kg)	100/130/150

The application diagrams apply:
H58.AWD_T_S026EN, H58.AWD_T_S027EN,
H58.AWD_T_S028EN

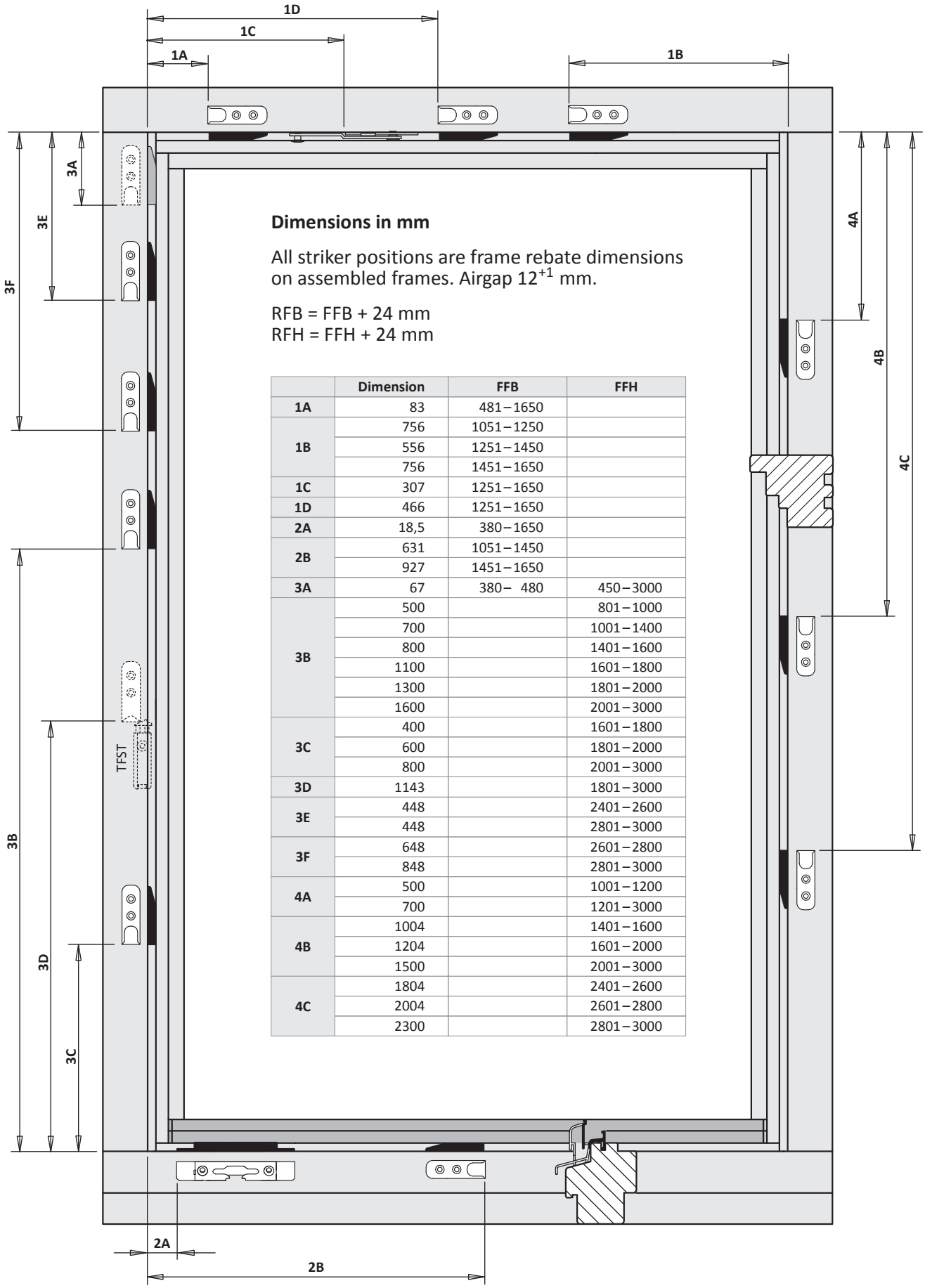
It is imperative to adhere to the following:
Product and liability requirements/guidelines (Quality Assurance Association: Locks and Hardware's Directive 'VHBH', as well as previous and applicable documents).
Profile manufacturer or system owner information (PVC or Aluminium) or DIN 68 121 – Timber profiles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

Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Number of frame parts / Pos.	
							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				
	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	linkage additional stay 1RS	TZOK1010- ...	1	1251–1650				1
5	additional stay	Ref. PDB, TSZS	1	1251–1650				
6	packer Z	Ref. PDB, FRUP01	1	1251–1650				
7	tilt restr. additional stay ..	889008	1	1251–1650				
8	tilt restrictor V-V sz 2-4 ..	TFKB0040- ...	1	681–1050	450– 900			
	tilt restrictor V-V sz 5 ..	TFKB0050- ...		1051–1250	450– 900			
9a	locking part VSU/K FH+ 1S	TEVR1400- ...	1	380–1250	450– 600		1	
9b	corn.drive AF VSU/K+ FH 1S	TEUL5010- ...	1	380–1650	601–3000		1	
10	linkage BS/FH sz 2+ 1RS	TZBS0190- ...	1	1051–1450				1
	linkage BS/FH sz 3+ 1RS	TZBS0200- ...		1451–1650				1
11a	gear 15 sz 30/G180	TGKK3010- ...	1	380–1250	450– 600	180		
11b	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
12	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
13	linkage KK/AF sz 2 1RS	TZKK1020- ...	1		2601–2800			1
	linkage KK/AF sz 2 1RS	TZKK1020- ...			2801–3000			1
14	handle Globe	Ref.access. ZHGS	1		450–3000			
15	corn.drive BS/K3 sz 1+ 1RS	TEUL2410- ...	1		1001–1200			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 switchable rh.	TFST0011- ...	1		1801–3000			
	snapper switchable lh.	TFST0012- ...			1801–3000			
24	frame part snapper	Ref. PDB, TRST	1		1801–3000			

List of fittings

1-sash square tilt-turn
H12 GK Hinge side axxent 24+

Hinge side turning points						
Pos.	Description	Part number		required as per sash weight		
		surface TS	RAL7037	100 kg	130 kg	150 kg
25	corner hinge AX	Ref. PDB, TBEB41		1	1	1
26	cover cap AX EL	Ref. PDB, TKEL41		1	1	1
27	bottom hinge AX	Ref. PDB, TBEV41		1		
28	bottom hinge AX Ø8	Ref. PDB, TBEV42			1	1
29	supporting dowel AX	TBAV4010-0 ...			1	1



Dimensions in mm

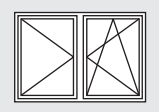
All striker positions are frame rebate dimensions on assembled frames. Airgap 12^{+1} mm.

RFB = FFB + 24 mm
RFH = FFH + 24 mm

	Dimension	FFB	FFH
1A	83	481–1650	
1B	756	1051–1250	
	556	1251–1450	
	756	1451–1650	
1C	307	1251–1650	
1D	466	1251–1650	
2A	18,5	380–1650	
2B	631	1051–1450	
	927	1451–1650	
3A	67	380– 480	450–3000
3B	500		801–1000
	700		1001–1400
	800		1401–1600
	1100		1601–1800
	1300		1801–2000
	1600		2001–3000
3C	400		1601–1800
	600		1801–2000
	800		2001–3000
3D	1143		1801–3000
3E	448		2401–2600
	448		2801–3000
3F	648		2601–2800
	848		2801–3000
4A	500		1001–1200
	700		1201–3000
4B	1004		1401–1600
	1204		1601–2000
	1500		2001–3000
4C	1804		2401–2600
	2004		2601–2800
	2300		2801–3000

TITAN AF

Installation instructions



GS

2-sash square tilt-turn/turn DS 16

timber 12 mm

basic security

fixed handle position

Hinge side axxent 24+

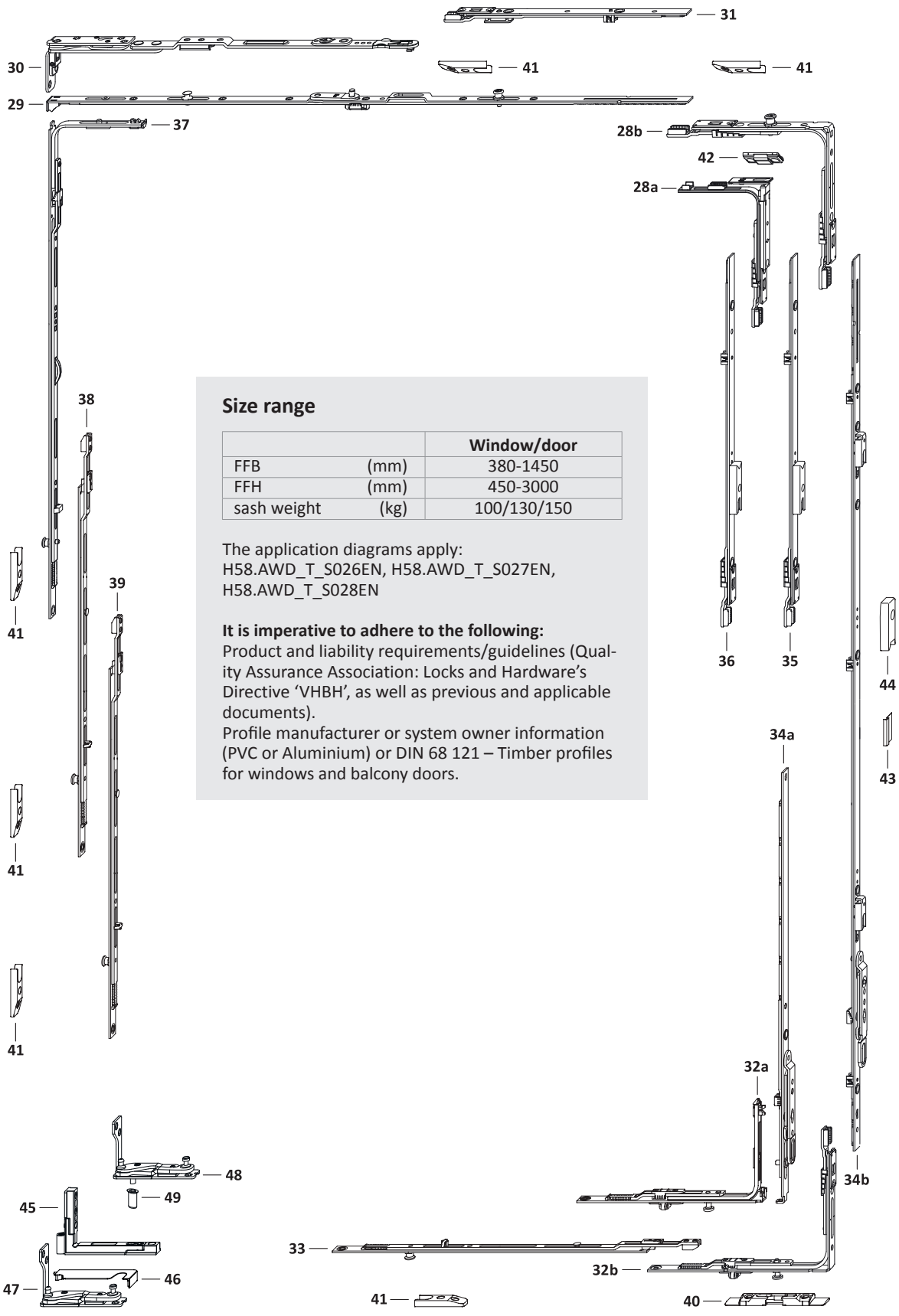
surface TS

backset 15 mm

Hardware set configuration	
General	Locking-points distance 1000; 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 slave sash

2-sash square tilt-turn/turn DS 16
H12 GK Hinge side axxent 24+



Size range

		Window/door
FFB	(mm)	380-1450
FFH	(mm)	450-3000
sash weight	(kg)	100/130/150

The application diagrams apply:
H58.AWD_T_S026EN, H58.AWD_T_S027EN,
H58.AWD_T_S028EN

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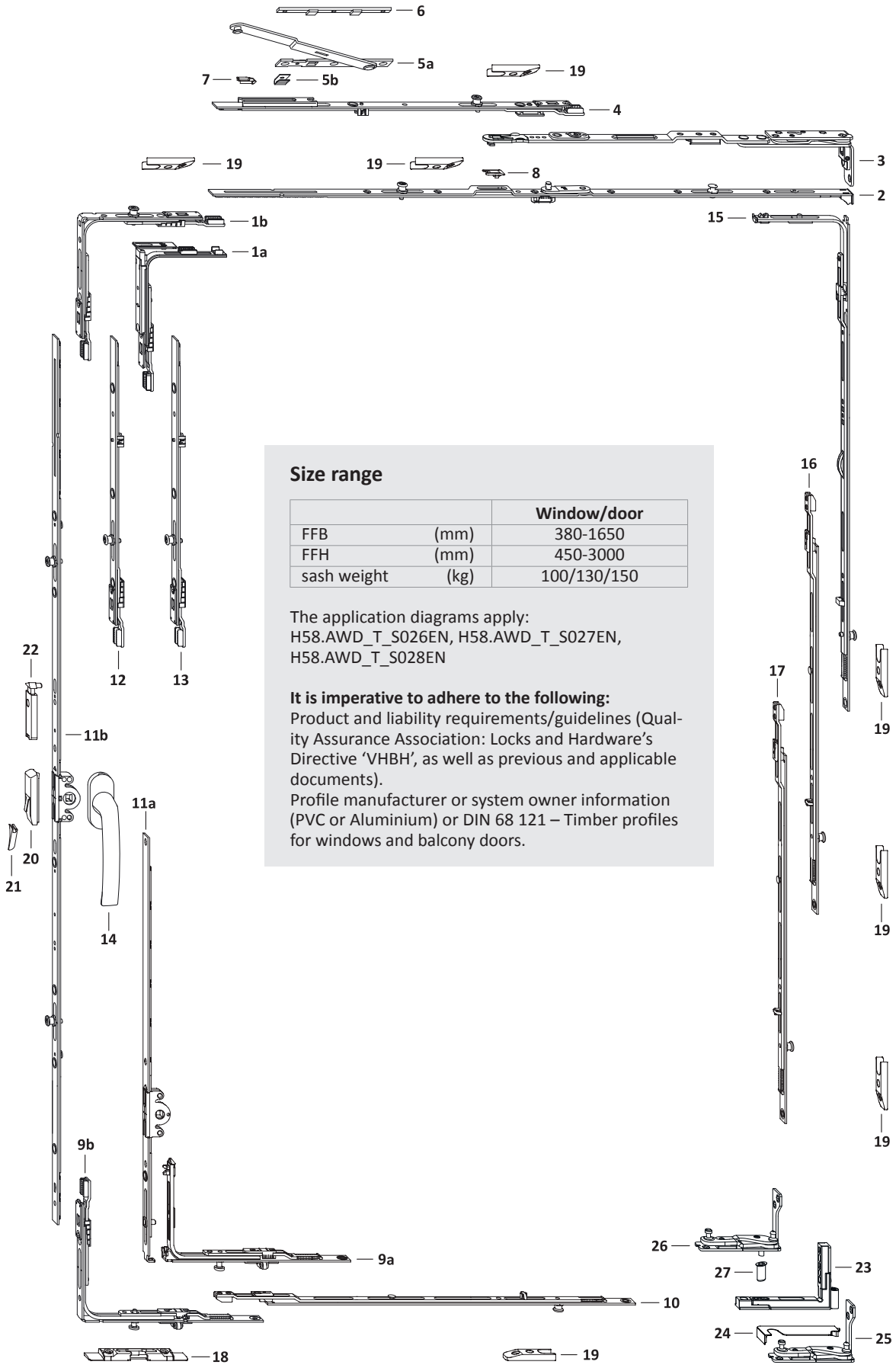

Size range

		Window/door
FFB	(mm)	380-1650
FFH	(mm)	450-3000
sash weight	(kg)	100/130/150

The application diagrams apply:
H58.AWD_T_S026EN, H58.AWD_T_S027EN,
H58.AWD_T_S028EN

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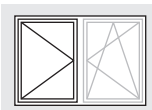
List of fittings slave sash

2-sash square tilt-turn/turn DS 16
H12 GK Hinge side axxent 24+



Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Number of frame parts / Pos.		
						In the main sash	40	41	42
28a	corn.drive VSO narrow RSA/11mm	TEUL4150- ...	1	380– 480					1
28b	corn.drive VSO 1RS	TEUL4010- ...	1	481–1450				1	
29	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					
	stay sash part AF AX sz 5 1RS	TSSV0330- ...		1051–1450				1	
30	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		1051–1450					
31	linkage AF sz 1	TZZS0150- ...	1	1251–1450					
32a	locking part VSU/K FH+ 1S	TEVR1400- ...	1	380–1450	450– 800		1		
32b	corn.drive AF VSU/K+ FH 1S	TEUL5010- ...	1	380–1450	801–3000		1		
33	linkage BS/FH sz 2+ 1RS	TZBS0190- ...	1	1051–1450				1	
34a	sec.sash gear 16 sz 30	TGKS0010- ...	1	380–1250	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		1001–1200			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							
42	short striker V	Ref. PDB, FRZV12							
on request									
43	stop	Ref. PDB, FRZF04	1		601–3000				
44	striker snapper A0767	TRST0010- ...	1		1801–3000				

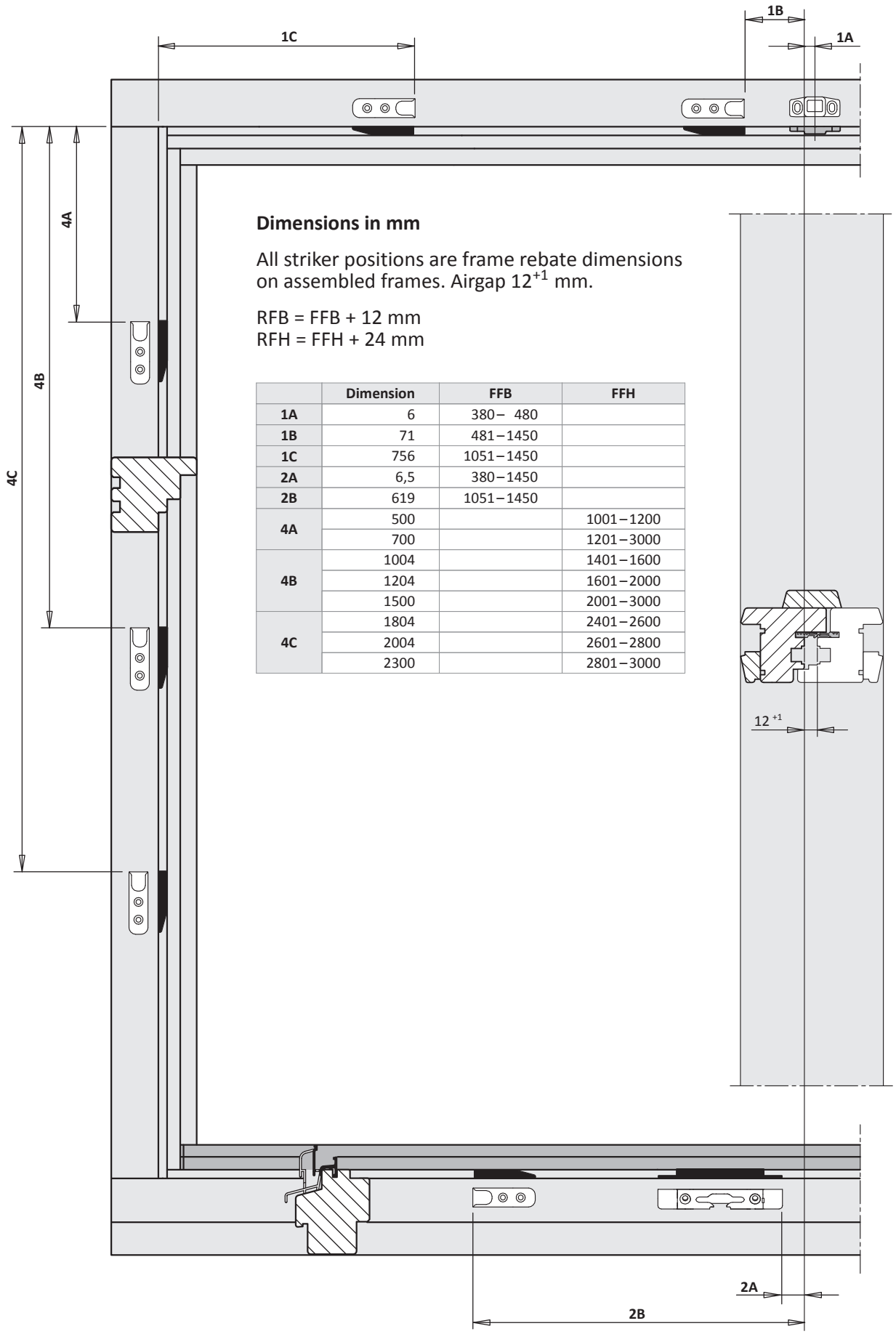
Hinge side turning points						
Pos.	Description	Part number		required as per sash weight		
		surface TS	RAL7037	100 kg	130 kg	150 kg
45	corner hinge AX	Ref. PDB, TBEB41		1	1	1
46	cover cap AX EL	Ref. PDB, TKEL41		1	1	1
47	bottom hinge AX	Ref. PDB, TBEV41		1		
48	bottom hinge AX Ø8	Ref. PDB, TBEV42			1	1
49	supporting dowel AX	TBAV4010-0 ...			1	1

Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Number of frame parts / Pos.	
							18	19
1a	corn.drive VSO narrow RSA/11mm	TEUL4150- ...	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				
	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	linkage additional stay 1RS	TZOK1010- ...	1	1251–1650				1
5	additional stay	Ref. PDB, TSZS	1	1251–1650				
6	packer Z	Ref. PDB, FRUP01	1	1251–1650				
7	tilt restr. additional stay ..	889008	1	1251–1650				
8	tilt restrictor V-V sz 2-4 ..	TFKB0040- ...	1	681–1050	450– 900			
	tilt restrictor V-V sz 5 ..	TFKB0050- ...		1051–1250	450– 900			
9a	locking part VSU/K FH+ 1S	TEVR1400- ...	1	380–1250	450– 600		1	
9b	corn.drive AF VSU/K+ FH 1S	TEUL5010- ...	1	380–1650	601–3000		1	
10	linkage BS/FH sz 2+ 1RS	TZBS0190- ...	1	1051–1450				1
	linkage BS/FH sz 3+ 1RS	TZBS0200- ...		1451–1650				1
11a	gear 15 sz 30/G180	TGKK3010- ...	1	380–1250	450– 600	180		
11b	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		
12	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			
13	linkage KK/AF sz 2 1RS	TZKK1020- ...	1		2601–2800			
	linkage KK/AF sz 2 1RS	TZKK1020- ...			2801–3000			
14	handle Globe	Ref.access. ZHGS	1		450–3000			
15	corn.drive BS/K3 sz 1+ 1RS	TEUL2410- ...	1		1001–1200			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 switchable rh.	TFST0011- ...	1		1801–3000			
	snapper switchable lh.	TFST0012- ...			1801–3000			

Hinge side turning points						
Pos.	Description	Part number		required as per sash weight		
		surface TS	RAL7037	100 kg	130 kg	150 kg
23	corner hinge AX	Ref. PDB, TBEB41		1	1	1
24	cover cap AX EL	Ref. PDB, TKEL41		1	1	1
25	bottom hinge AX	Ref. PDB, TBEV41		1		
26	bottom hinge AX Ø8	Ref. PDB, TBEV42			1	1
27	supporting dowel AX	TBAV4010-0 ...			1	1

Frame dimensions slave sash

2-sash square tilt-turn/turn DS 16
H12 GK Hinge side axxent 24+

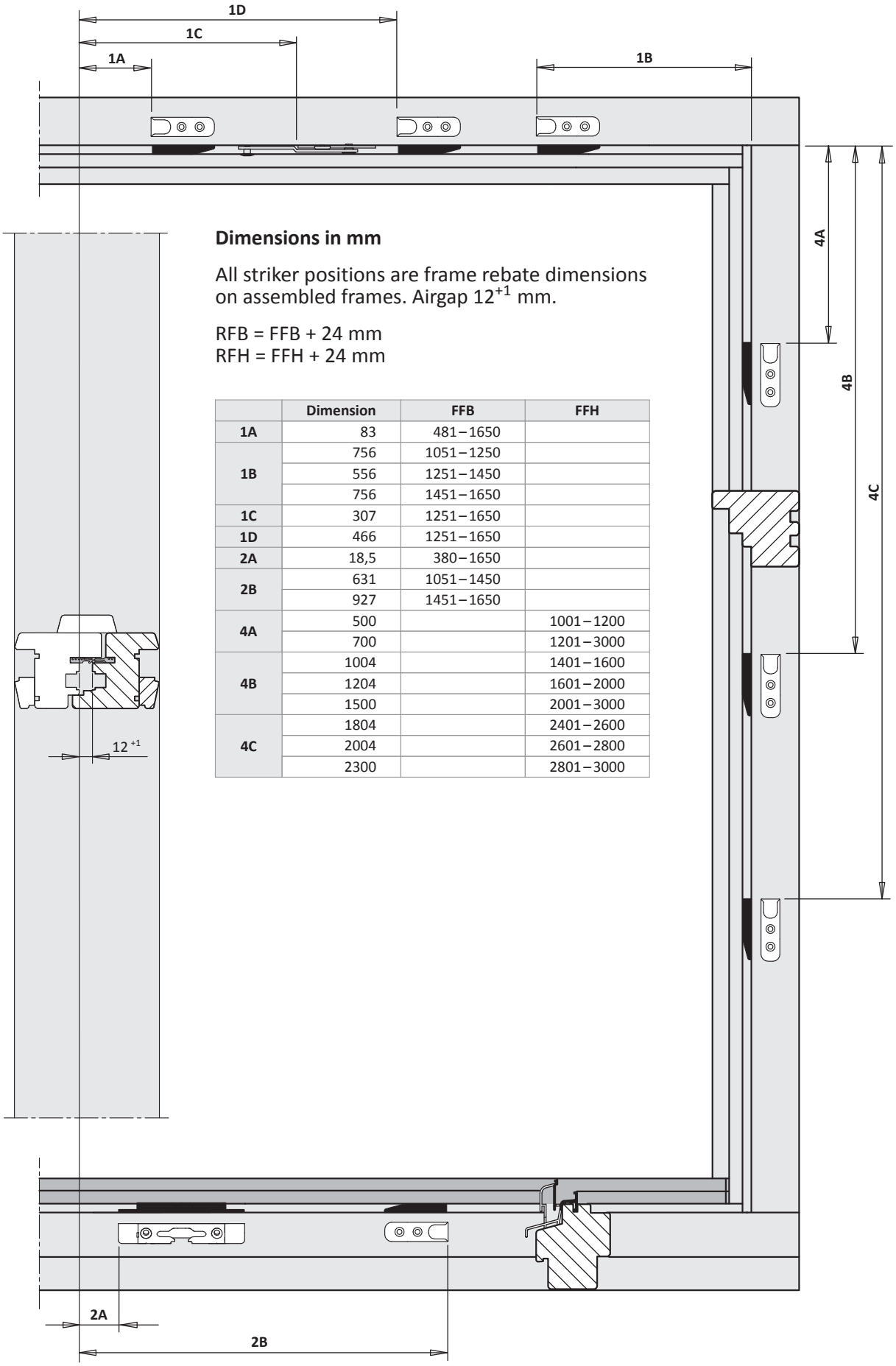


Dimensions in mm

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

RFB = FFB + 12 mm
RFH = FFH + 24 mm

	Dimension	FFB	FFH
1A	6	380 – 480	
1B	71	481 – 1450	
1C	756	1051 – 1450	
2A	6,5	380 – 1450	
2B	619	1051 – 1450	
4A	500		1001 – 1200
	700		1201 – 3000
4B	1004		1401 – 1600
	1204		1601 – 2000
	1500		2001 – 3000
4C	1804		2401 – 2600
	2004		2601 – 2800
	2300		2801 – 3000



Dimensions in mm

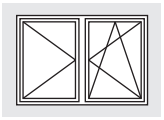
All striker positions are frame rebate dimensions on assembled frames. Airgap 12^{+1} mm.

RFB = FFB + 24 mm
RFH = FFH + 24 mm

	Dimension	FFB	FFH
1A	83	481 – 1650	
1B	756	1051 – 1250	
	556	1251 – 1450	
	756	1451 – 1650	
1C	307	1251 – 1650	
1D	466	1251 – 1650	
2A	18,5	380 – 1650	
2B	631	1051 – 1450	
	927	1451 – 1650	
4A	500		1001 – 1200
	700		1201 – 3000
4B	1004		1401 – 1600
	1204		1601 – 2000
	1500		2001 – 3000
4C	1804		2401 – 2600
	2004		2601 – 2800
	2300		2801 – 3000

TITAN AF

Installation instructions



GS

2-sash square tilt-turn/turn DS 16

timber 12 mm

basic security

fixed handle position

Hinge side axxent 24+

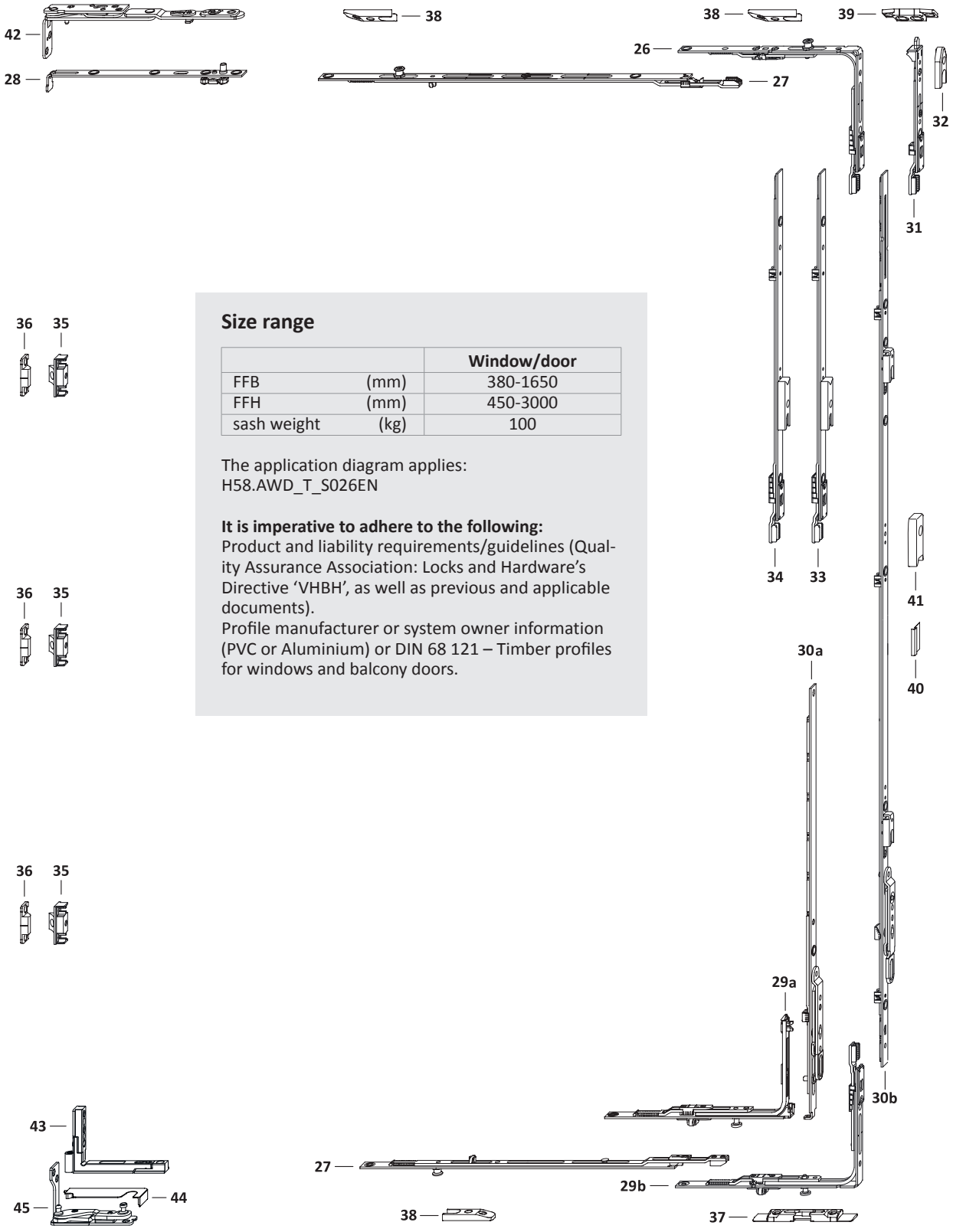
surface TS

backset 15 mm

Hardware set configuration	
General	Locking-points distance 1000
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 slave sash

2-sash square tilt-turn/turn DS 16
H12 GK Hinge side axxent 24+



Size range

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

The application diagram applies:
H58.AWD_T_S026EN

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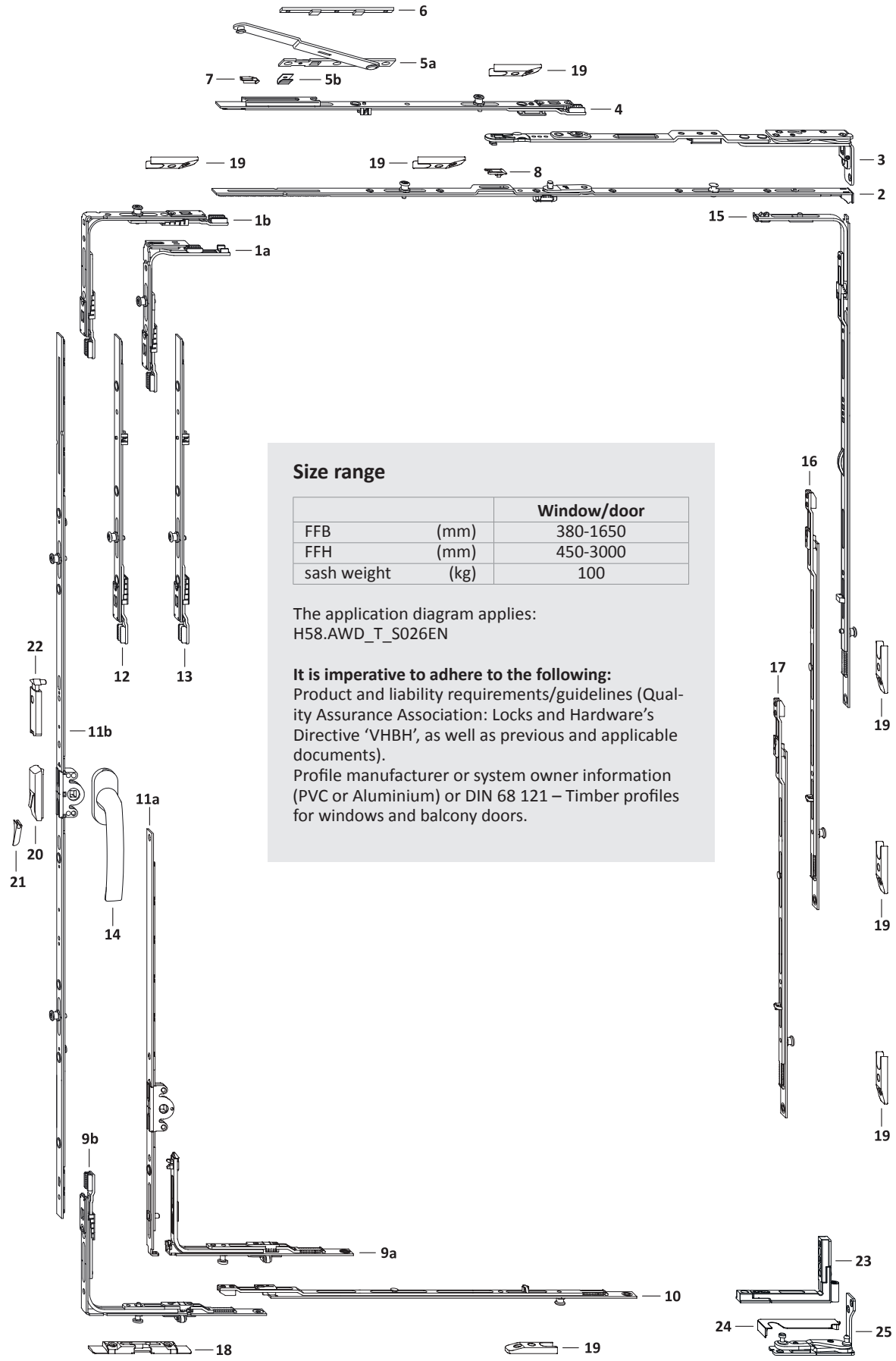

Size range

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

The application diagram applies:
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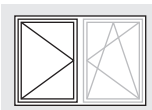
List of fittings slave sash

2-sash square tilt-turn/turn DS 16
H12 GK Hinge side axxent 24+



Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Number of frame parts / Pos.		
						In the main sash	37	38	39
26	corn.drive VSO/K+ DF 1RS	TEUL4110- ...	1	481–1650				1	
27	linkage BS/FH sz 2+ 1RS	TZBS0190- ...	2	1051–1450				1	
	linkage BS/FH sz 3+ 1RS	TZBS0200- ...		1451–1650				1	
28	stay sash part DF AX	TSSV3020- ...	1	380–1650					
29a	locking part VSU/K FH+ 1S	TEVR1400- ...	1	380–1650	450– 800		1		
29b	corn.drive AF VSU/K+ FH 1S	TEUL5010- ...	1	380–1650	801–3000		1		
30a	sec.sash gear 16 sz 30	TGKS0010- ...	1	380–1250	450– 600	180			
	sec.sash gear 16 AF 60/G300	TGKS4030- ...			601– 800	300			
30b	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			
31	locking bolt AF VSO RSA 11	TESC2030- ...	1	380– 480	450–3000				1
32	striker plate A0767	TRSA0010- ...	1	380– 480	450–3000				
33	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				
34	linkage AF sz 2 1SB-RS	TZKS1030- ...	1		2601–2800				
	linkage AF sz 2 1SB-RS	TZKS1030- ...			2801–3000				
35	sash part MV	Ref. PDB, ZFMV01	1		1001–1600				
	sash part MV	Ref. PDB, ZFMV01	2		1601–2400				
	sash part MV	Ref. PDB, ZFMV01	3		2401–3000				
36	frame part MV	Ref. PDB, ZRZM01	1		1001–1600				
	frame part MV	Ref. PDB, ZRZM01	2		1601–2400				
	frame part MV	Ref. PDB, ZRZM01	3		2401–3000				
37	tilt lock bear. S-ES FH	Ref. PDB, FRKA							
38	striker plate 56	Ref. PDB, FRSB							
39	striker V	Ref. PDB, FRZV02							
on request									
40	stop	Ref. PDB, FRZF04	1						
41	striker snapper A0767	TRST0010- ...	1		1801–3000				

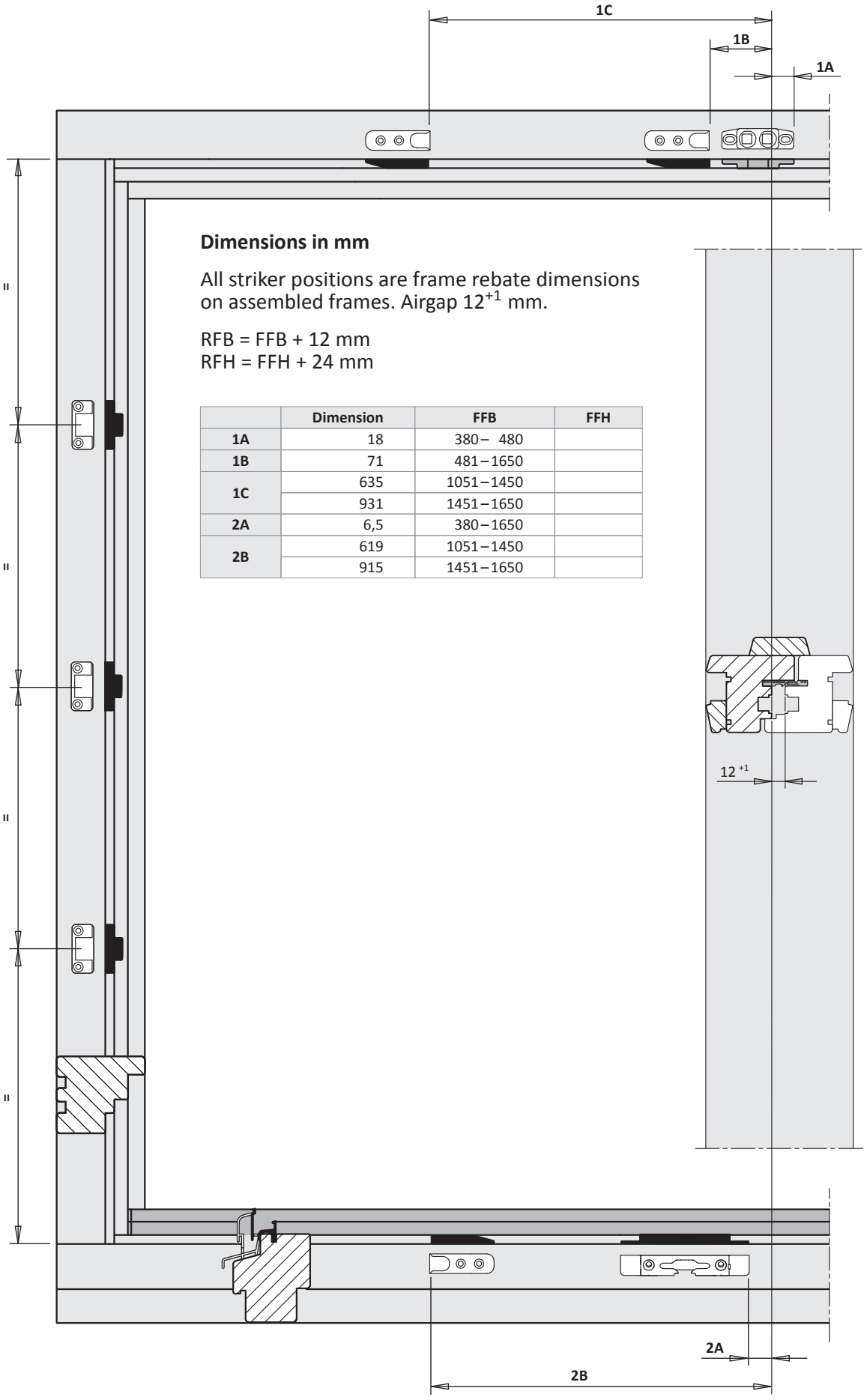
Hinge side turning points				
Pos.	Description	Part number		required as per sash weight
		surface TS	RAL7037	100 kg
42	stay arm AX DF	Ref. PDB, TSAV46		1
43	corner hinge AX	Ref. PDB, TBEB41		1
44	cover cap AX EL	Ref. PDB, TKEL41		1
45	bottom hinge AX	Ref. PDB, TBEV41		1

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				
	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	linkage additional stay 1RS	TZOK1010- ...	1	1251–1650				1
5	additional stay	Ref. PDB, TSZS	1	1251–1650				
6	packer Z	Ref. PDB, FRUP01	1	1251–1650				
7	tilt restr. additional stay ..	889008	1	1251–1650				
8	tilt restrictor V-V sz 2-4 ..	TFKB0040- ...	1	681–1050	450– 900			
	tilt restrictor V-V sz 5 ..	TFKB0050- ...		1051–1250	450– 900			
9a	locking part VSU/K FH+ 1S	TEVR1400- ...	1	380–1250	450– 600		1	
9b	corn.drive AF VSU/K+ FH 1S	TEUL5010- ...	1	380–1650	601–3000		1	
10	linkage BS/FH sz 2+ 1RS	TZBS0190- ...	1	1051–1450				1
	linkage BS/FH sz 3+ 1RS	TZBS0200- ...		1451–1650				1
11a	gear 15 sz 30/G180	TGKK3010- ...	1	380–1250	450– 600	180		
11b	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		
12	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			
13	linkage KK/AF sz 2 1RS	TZKK1020- ...	1		2601–2800			
	linkage KK/AF sz 2 1RS	TZKK1020- ...			2801–3000			
14	handle Globe	Ref.access. ZHGS	1		450–3000			
15	corn.drive BS/K3 sz 1+ 1RS	TEUL2410- ...	1		1001–1200			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 switchable rh.	TFST0011- ...	1		1801–3000			
	snapper switchable lh.	TFST0012- ...			1801–3000			

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 slave sash

2-sash square tilt-turn/turn DS 16
H12 GK Hinge side axxent 24+

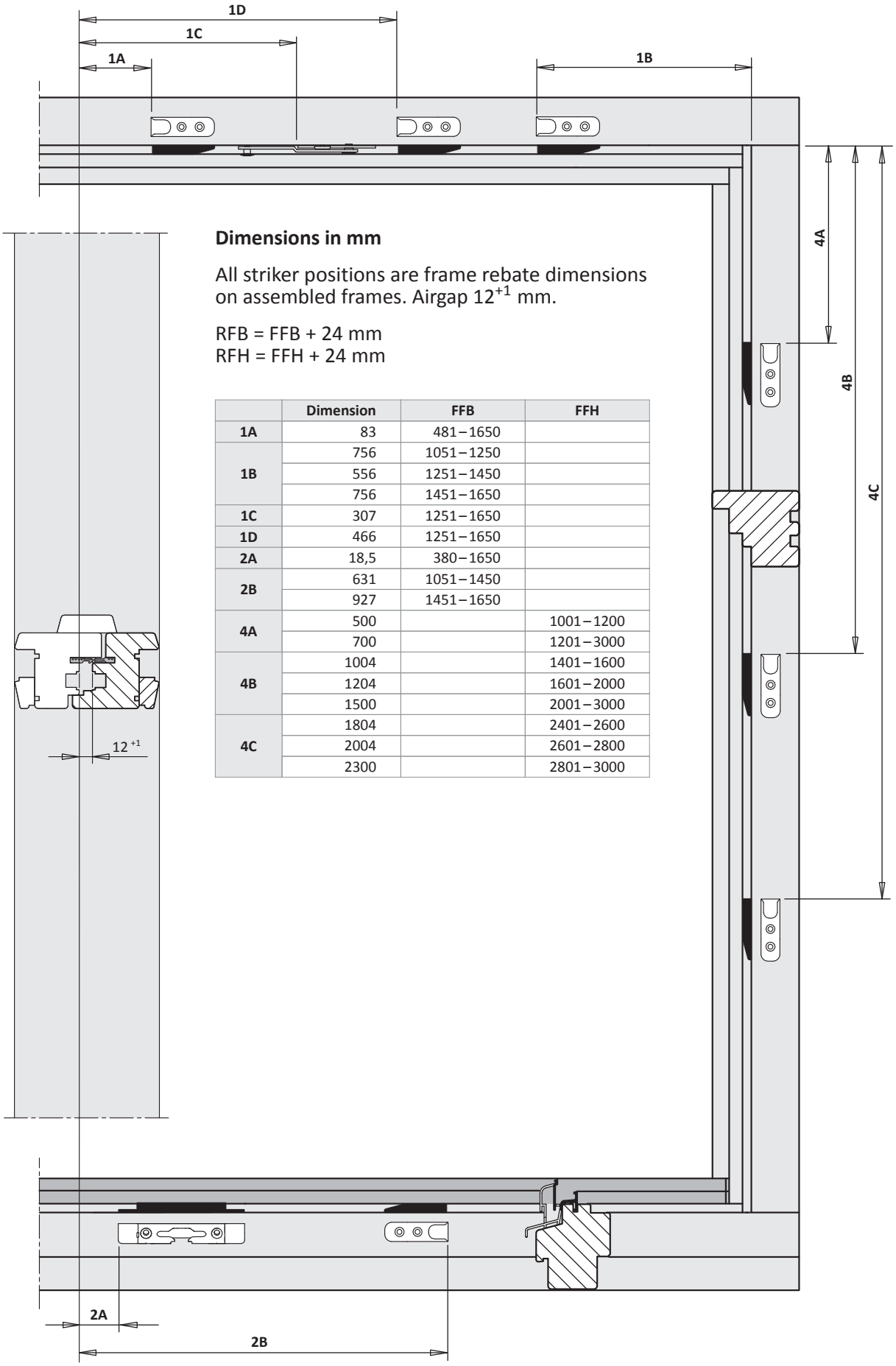


Dimensions in mm

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

RFB = FFB + 12 mm
RFH = FFH + 24 mm

	Dimension	FFB	FFH
1A	18	380– 480	
1B	71	481–1650	
1C	635	1051–1450	
	931	1451–1650	
2A	6,5	380–1650	
2B	619	1051–1450	
	915	1451–1650	



Dimensions in mm

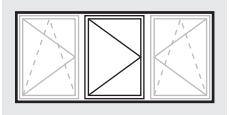
All striker positions are frame rebate dimensions on assembled frames. Airgap 12^{+1} mm.

RFB = FFB + 24 mm
RFH = FFH + 24 mm

	Dimension	FFB	FFH
1A	83	481 – 1650	
1B	756	1051 – 1250	
	556	1251 – 1450	
	756	1451 – 1650	
1C	307	1251 – 1650	
1D	466	1251 – 1650	
2A	18,5	380 – 1650	
2B	631	1051 – 1450	
	927	1451 – 1650	
4A	500		1001 – 1200
	700		1201 – 3000
4B	1004		1401 – 1600
	1204		1601 – 2000
	1500		2001 – 3000
4C	1804		2401 – 2600
	2004		2601 – 2800
	2300		2801 – 3000

TITAN AF

Installation instructions



GS

3-sash Centre sash second opening turn

timber 12 mm

basic security

fixed handle position

Hinge side axxent 24+

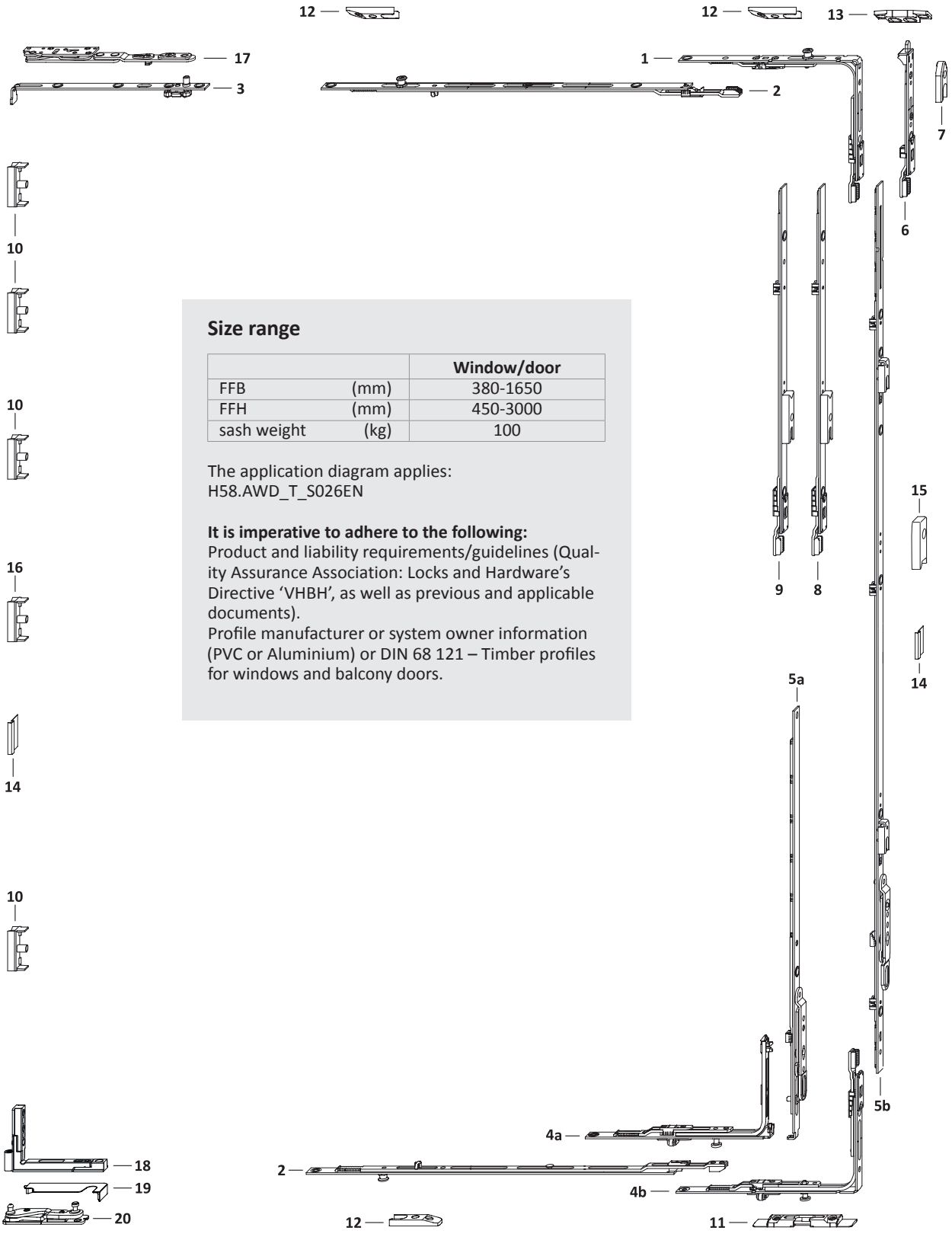
surface TS

backset 15 mm

Hardware set configuration	
General	Locking-points distance 1000
Stay side	two-piece stay ax 24+
Bottom	Inliner
Locking side	mishandl. device on gear

hardware layout

3-sash Centre sash second opening turn
H12 GK Hinge side axxent 24+



Size range

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

The application diagram applies:
H58.AWD_T_S026EN

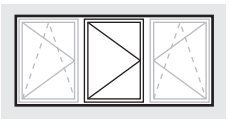
It is imperative to adhere to the following:
Product and liability requirements/guidelines (Quality Assurance Association: Locks and Hardware's Directive 'VHBH', as well as previous and applicable documents).
Profile manufacturer or system owner information (PVC or Aluminium) or DIN 68 121 – Timber profiles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

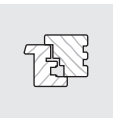
Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Number of frame parts / Pos.		
							11	12	13
1	corn.drive VSO/K+ DF 1RS	TEUL4110- ...	1	481 – 1650				1	
2	linkage BS/FH sz 2+ 1RS	TZBS0190- ...	2	1051 – 1450				1	
	linkage BS/FH sz 3+ 1RS	TZBS0200- ...		1451 – 1650				1	
3	stay sash part DF AX	TSSV3020- ...	1	380 – 1650					
4a	locking part VSU/K FH+ 1S	TEVR1400- ...	1	380 – 1650	450 – 800		1		
4b	corn.drive AF VSU/K+ FH 1S	TEUL5010- ...	1	380 – 1650	801 – 3000		1		
5a	sec.sash gear 16 sz 30	TGKS0010- ...	1	380 – 1250	450 – 600	180			
	sec.sash gear 16 AF 60/G300	TGKS4030- ...			601 – 800	300			
5b	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			
6	locking bolt AF VSO RSA 11	TESC2030- ...	1	380 – 480	450 – 3000				1
7	striker plate A0767	TRSA0010- ...	1	380 – 480	450 – 3000				
8	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				
9	linkage AF sz 2 1SB-RS	TZKS1030- ...	1		2601 – 2800				
	linkage AF sz 2 1SB-RS	TZKS1030- ...			2801 – 3000				
10	striker plate 56 A2000	TRSB0030- ...	1		801 – 1000				
	striker plate 56 A2000	TRSB0030- ...			1001 – 1200				
	striker plate 56 A2000	TRSB0030- ...			1201 – 1400				
	striker plate 56 A2000	TRSB0030- ...			1401 – 1600				
	striker plate 56 A2000	TRSB0030- ...	2		1601 – 2400				
	striker plate 56 A2000	TRSB0030- ...	3		2401 – 2800				
	striker plate 56 A2000	TRSB0030- ...	4		2801 – 3000				
11	tilt lock bear. S-ES FH	Ref. PDB, FRKA							
12	striker plate 56	Ref. PDB, FRSB							
13	striker V	Ref. PDB, FRZV02							
on request									
14	stop	Ref. PDB, FRZF04	2						
15	striker snapper A0767	TRST0010- ...	1		1801 – 3000				
16	striker plate 56 A2000	TRSB0030- ...	1		1801 – 3000				

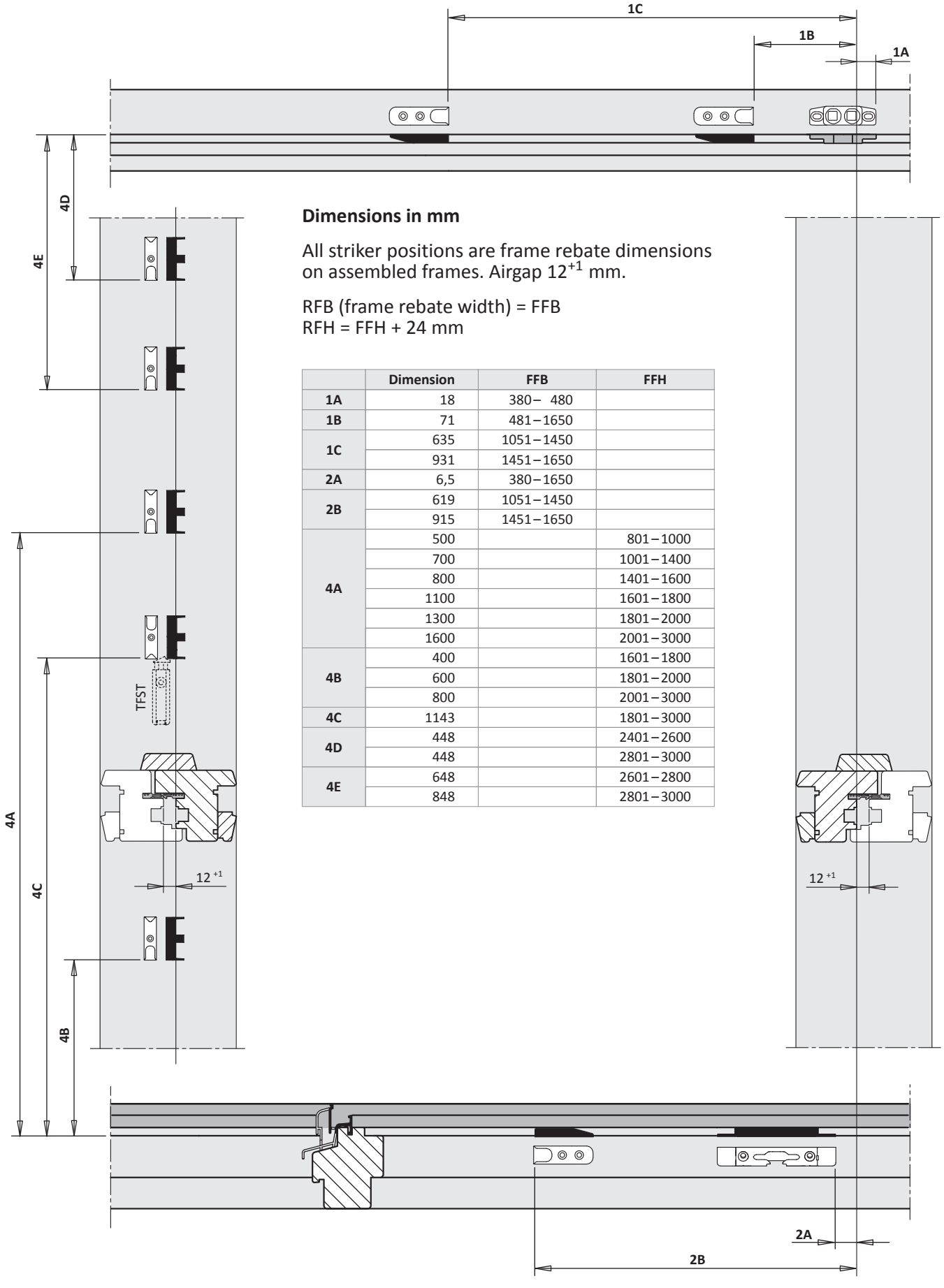
Hinge side turning points				
Pos.	Description	Part number		required as per sash weight
		surface TS	RAL7037	100 kg
17	stay arm AX DF/3	Ref. PDB, TSAV47		1
18	corner hinge AX	Ref. PDB, TBEB41		1
19	cover cap AX EL	Ref. PDB, TKEL41		1
20	bottom hinge AX DF/3	Ref. PDB, TBEV43		1

Frame dimensions

3-sash Centre sash second opening turn
H12 GK Hinge side axxent 24+







Dimensions in mm

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

RFB (frame rebate width) = FFB
RFH = FFH + 24 mm

	Dimension	FFB	FFH
1A	18	380– 480	
1B	71	481–1650	
1C	635	1051–1450	
	931	1451–1650	
2A	6,5	380–1650	
2B	619	1051–1450	
	915	1451–1650	
4A	500		801–1000
	700		1001–1400
	800		1401–1600
	1100		1601–1800
	1300		1801–2000
	1600		2001–3000
4B	400		1601–1800
	600		1801–2000
	800		2001–3000
4C	1143		1801–3000
4D	448		2401–2600
	448		2801–3000
4E	648		2601–2800
	848		2801–3000

TITAN AF

Installation instructions

1-sash square tilt before turn (TBT)

timber 12 mm

basic security

fixed handle position

Hinge side axxent 24+

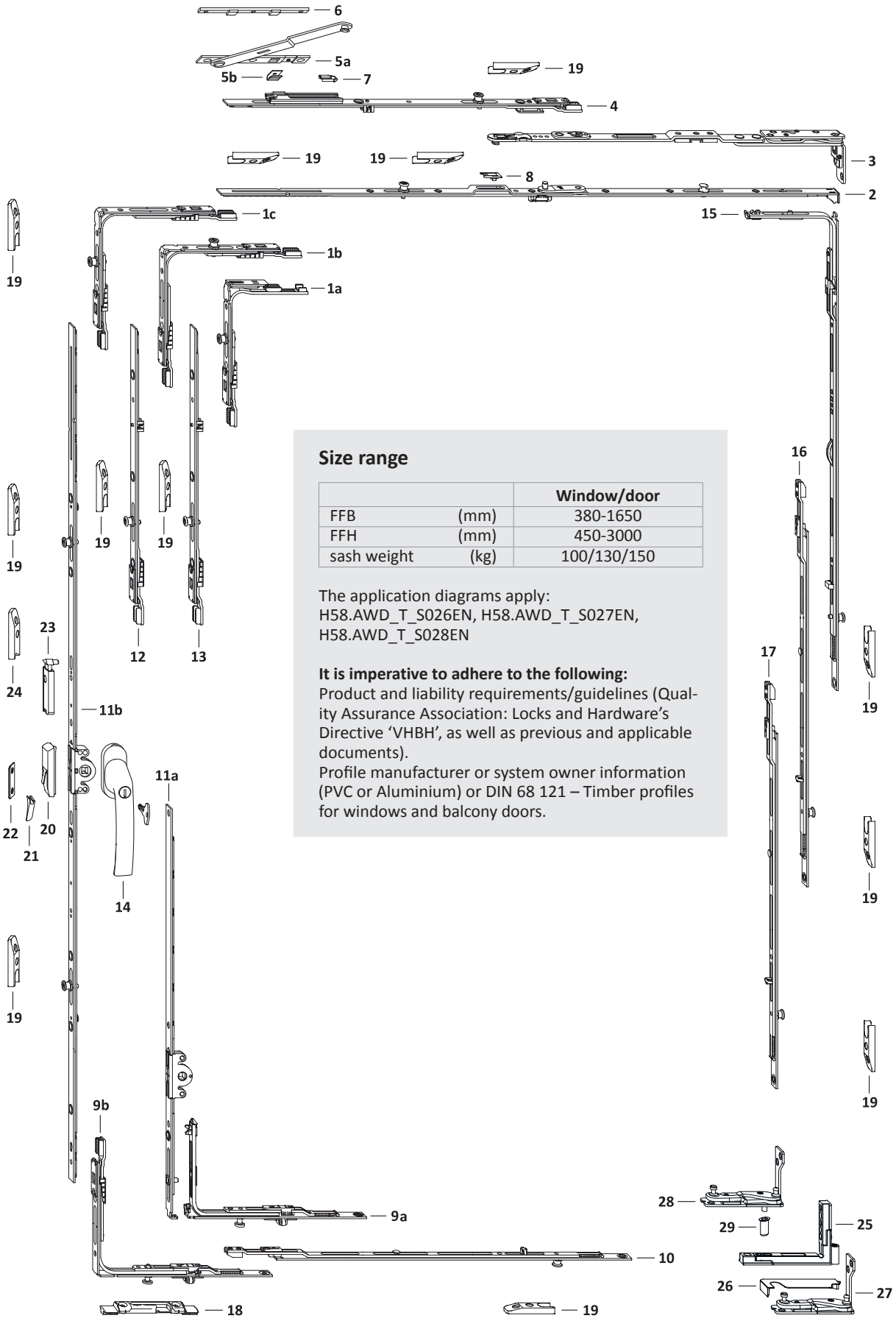
surface TS

backset 15 mm

Hardware set configuration	
General	Locking-points distance 1000
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)
H12 GK Hinge side axxent 24+



Size range

		Window/door
FFB	(mm)	380-1650
FFH	(mm)	450-3000
sash weight	(kg)	100/130/150

The application diagrams apply:
H58.AWD_T_S026EN, H58.AWD_T_S027EN,
H58.AWD_T_S028EN

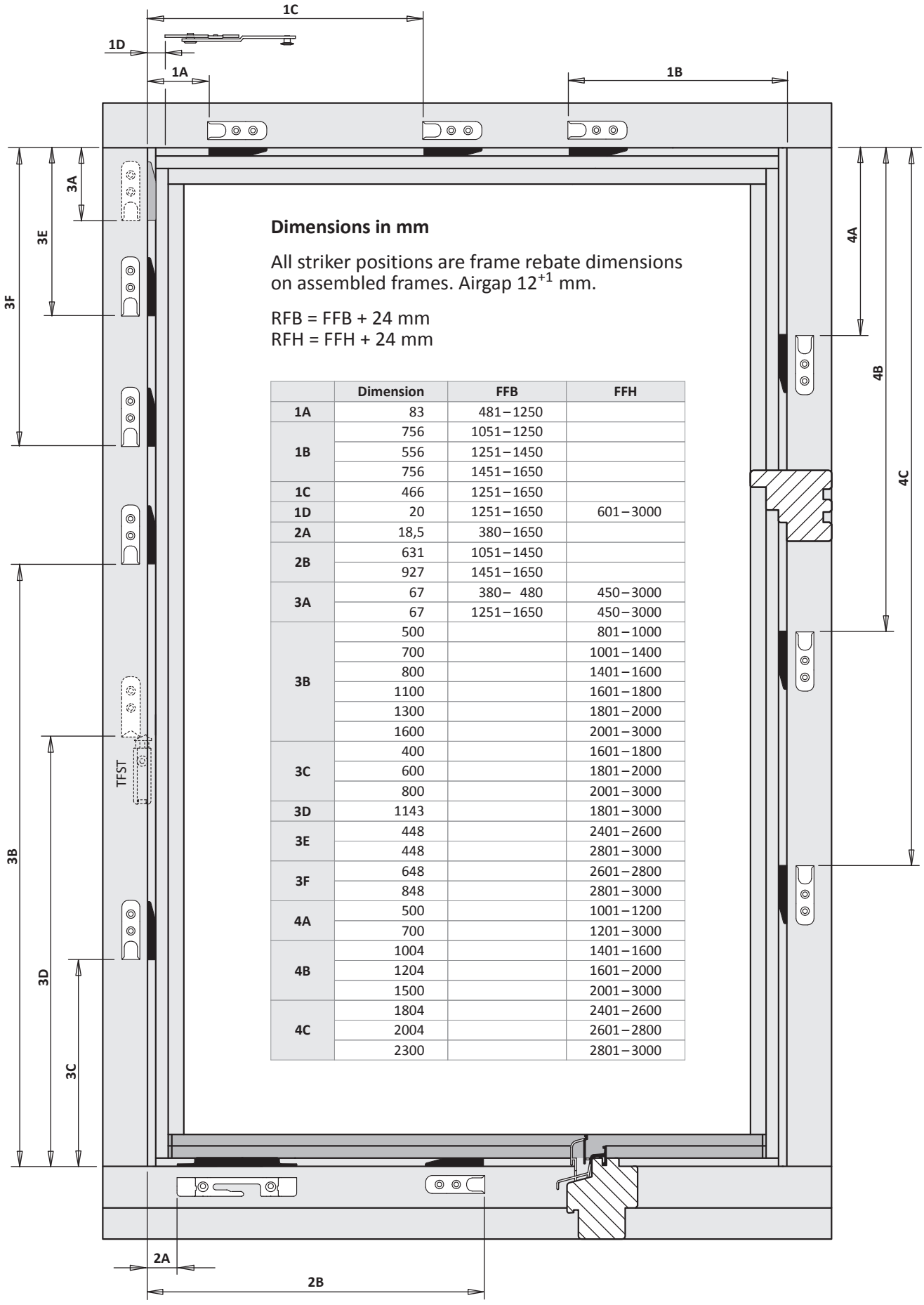
It is imperative to adhere to the following:
Product and liability requirements/guidelines (Quality Assurance Association: Locks and Hardware's Directive 'VHBH', as well as previous and applicable documents).
Profile manufacturer or system owner information (PVC or Aluminium) or DIN 68 121 – Timber profiles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

Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Number of frame parts / Pos.	
							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				
	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	linkage add. stay AF TBT RS	TZOT1010- ...	1	1251–1650				1
5	additional stay	Ref. PDB, TSZS	1	1251–1650				
6	packer Z	Ref. PDB, FRUP01	1	1251–1650				
7	tilt restr. additional stay ..	889008	1	1251–1650				
8	tilt restrictor V-V sz 2-4 ..	TFKB0040- ...	1	681–1050	450– 900			
	tilt restrictor V-V sz 5 ..	TFKB0050- ...		1051–1250	450– 900			
9a	locking part VSU/K FH+ 1S	TEVR1400- ...	1	380–1250	450– 600		1	
9b	corn.drive AF VSU/K+ FH 1S	TEUL5010- ...	1	380–1650	601–3000		1	
10	linkage BS/FH sz 2+ 1RS	TZBS0190- ...	1	1051–1450				1
	linkage BS/FH sz 3+ 1RS	TZBS0200- ...		1451–1650				1
11a	gear 15 sz 30/G180	TGKK3010- ...	1	380–1250	450– 600	180		
11b	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
12	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
13	linkage KK/AF sz 2 1RS	TZKK1020- ...	1		2601–2800			1
	linkage KK/AF sz 2 1RS	TZKK1020- ...			2801–3000			1
14	handle Globe TBT lockable	Ref.access. ZHGT	1		450–3000			
15	corn.drive BS/K3 sz 1+ 1RS	TEUL2410- ...	1		1001–1200			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 switchable rh.	TFST0011- ...	1		1801–3000			
	snapper switchable lh.	TFST0012- ...			1801–3000			
24	frame part snapper	Ref. PDB, TRST	1		1801–3000			

List of fittings

1-sash square tilt before turn (TBT)
H12 GK Hinge side axxent 24+

Hinge side turning points						
Pos.	Description	Part number		required as per sash weight		
		surface TS	RAL7037	100 kg	130 kg	150 kg
25	corner hinge AX	Ref. PDB, TBEB41		1	1	1
26	cover cap AX EL	Ref. PDB, TKEL41		1	1	1
27	bottom hinge AX	Ref. PDB, TBEV41		1		
28	bottom hinge AX Ø8	Ref. PDB, TBEV42			1	1
29	supporting dowel AX	TBAV4010-0 ...			1	1



Dimensions in mm

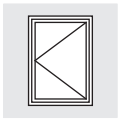
All striker positions are frame rebate dimensions on assembled frames. Airgap 12^{+1} mm.

RFB = FFB + 24 mm
RFH = FFH + 24 mm

	Dimension	FFB	FFH
1A	83	481–1250	
1B	756	1051–1250	
	556	1251–1450	
	756	1451–1650	
1C	466	1251–1650	
1D	20	1251–1650	601–3000
2A	18,5	380–1650	
2B	631	1051–1450	
	927	1451–1650	
3A	67	380– 480	450–3000
	67	1251–1650	450–3000
3B	500		801–1000
	700		1001–1400
	800		1401–1600
	1100		1601–1800
	1300		1801–2000
	1600		2001–3000
3C	400		1601–1800
	600		1801–2000
	800		2001–3000
3D	1143		1801–3000
3E	448		2401–2600
	448		2801–3000
3F	648		2601–2800
	848		2801–3000
4A	500		1001–1200
	700		1201–3000
4B	1004		1401–1600
	1204		1601–2000
	1500		2001–3000
4C	1804		2401–2600
	2004		2601–2800
	2300		2801–3000

TITAN AF

Installation instructions



1-sash square turn

timber 12 mm

basic security

fixed handle position

Hinge side axxent 24+

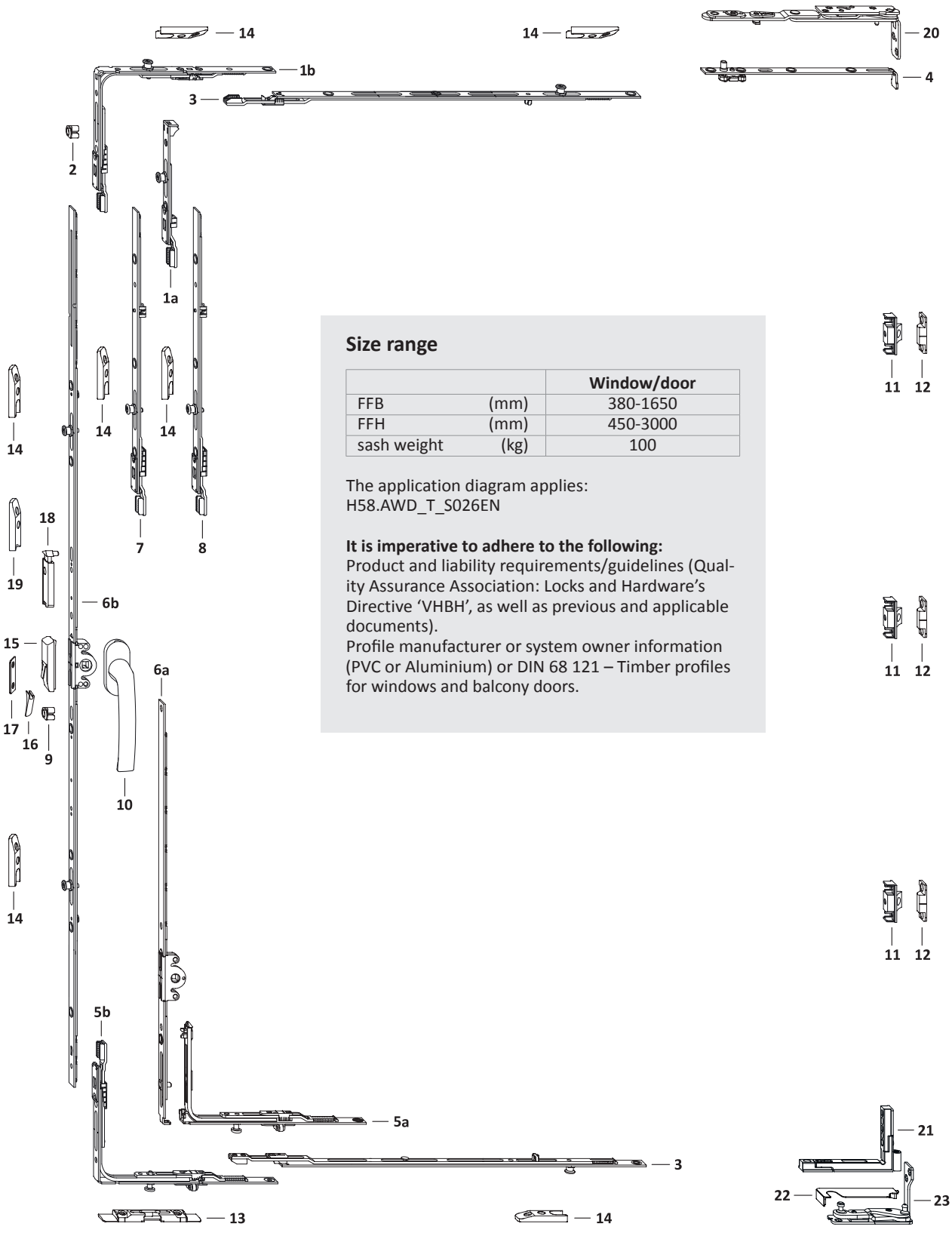
surface TS

backset 15 mm

Hardware set configuration	
General	Locking-points distance 1000
Stay side	two-piece stay ax 24+
Bottom	Inliner
Locking side	mishandl. device on gear

hardware layout

1-sash square turn
H12 GK Hinge side axxent 24+



Size range

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

The application diagram applies:
H58.AWD_T_S026EN

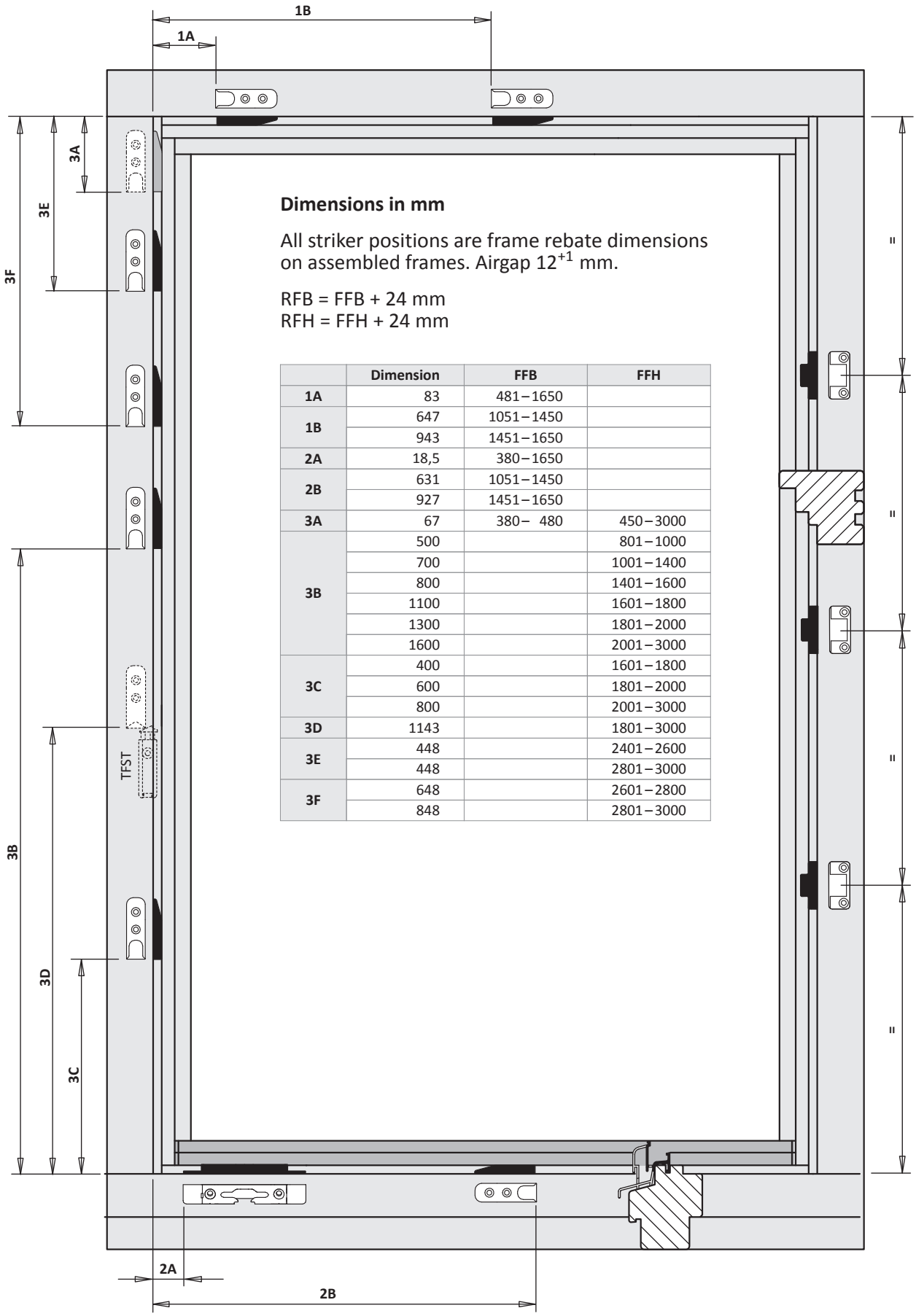
It is imperative to adhere to the following:
Product and liability requirements/guidelines (Quality Assurance Association: Locks and Hardware's Directive 'VHBH', as well as previous and applicable documents).
Profile manufacturer or system owner information (PVC or Aluminium) or DIN 68 121 – Timber profiles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

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	450– 600			
3	linkage BS/FH sz 2+ 1RS	TZBS0190- ...	2	1051–1450				1
	linkage BS/FH sz 3+ 1RS	TZBS0200- ...		1451–1650				1
4	stay sash part DF AX	TSSV3020- ...	1	380–1650				
5a	locking part VSU/K FH+ 1S	TEVR1400- ...	1	380–1250	450– 600		1	
5b	corn.drive AF VSU/K+ FH 1S	TEUL5010- ...	1	380–1650	601–3000		1	
6a	gear 15 sz 30/G180	TGKK3010- ...	1	380–1250	450– 600	180		
6b	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
7	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
8	linkage KK/AF sz 2 1RS	TZKK1020- ...	1		2601–2800			1
	linkage KK/AF sz 2 1RS	TZKK1020- ...			2801–3000			1
9	travel restrictor	TFHB0010- ...	1		601–3000			
10	handle Globe	Ref.access. ZHGS	1		450–3000			
11	sash part MV	Ref. PDB, ZFMV01	1		1001–1600			
	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		1001–1600			
	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 switchable rh.	TFST0011- ...	1		1801–3000			
	snapper switchable lh.	TFST0012- ...			1801–3000			
19	frame part snapper	Ref. PDB, TRST	1		1801–3000			

Hinge side turning points				
Pos.	Description	Part number		required as per sash weight
		surface TS	RAL7037	100 kg
20	stay arm AX DF	Ref. PDB, TSAV46		1
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

Frame dimensions

1-sash square turn
H12 GK Hinge side axxent 24+



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

	Dimension	FFB	FFH
1A	83	481 – 1650	
1B	647	1051 – 1450	
	943	1451 – 1650	
2A	18,5	380 – 1650	
2B	631	1051 – 1450	
	927	1451 – 1650	
3A	67	380 – 480	450 – 3000
3B	500		801 – 1000
	700		1001 – 1400
	800		1401 – 1600
	1100		1601 – 1800
	1300		1801 – 2000
	1600		2001 – 3000
3C	400		1601 – 1800
	600		1801 – 2000
	800		2001 – 3000
3D	1143		1801 – 3000
3E	448		2401 – 2600
	448		2801 – 3000
3F	648		2601 – 2800
	848		2801 – 3000

TITAN AF

Installation instructions

1-sash square tilt-turn

timber 12 mm

basic security

fixed handle position

Hinge side axxent 24+

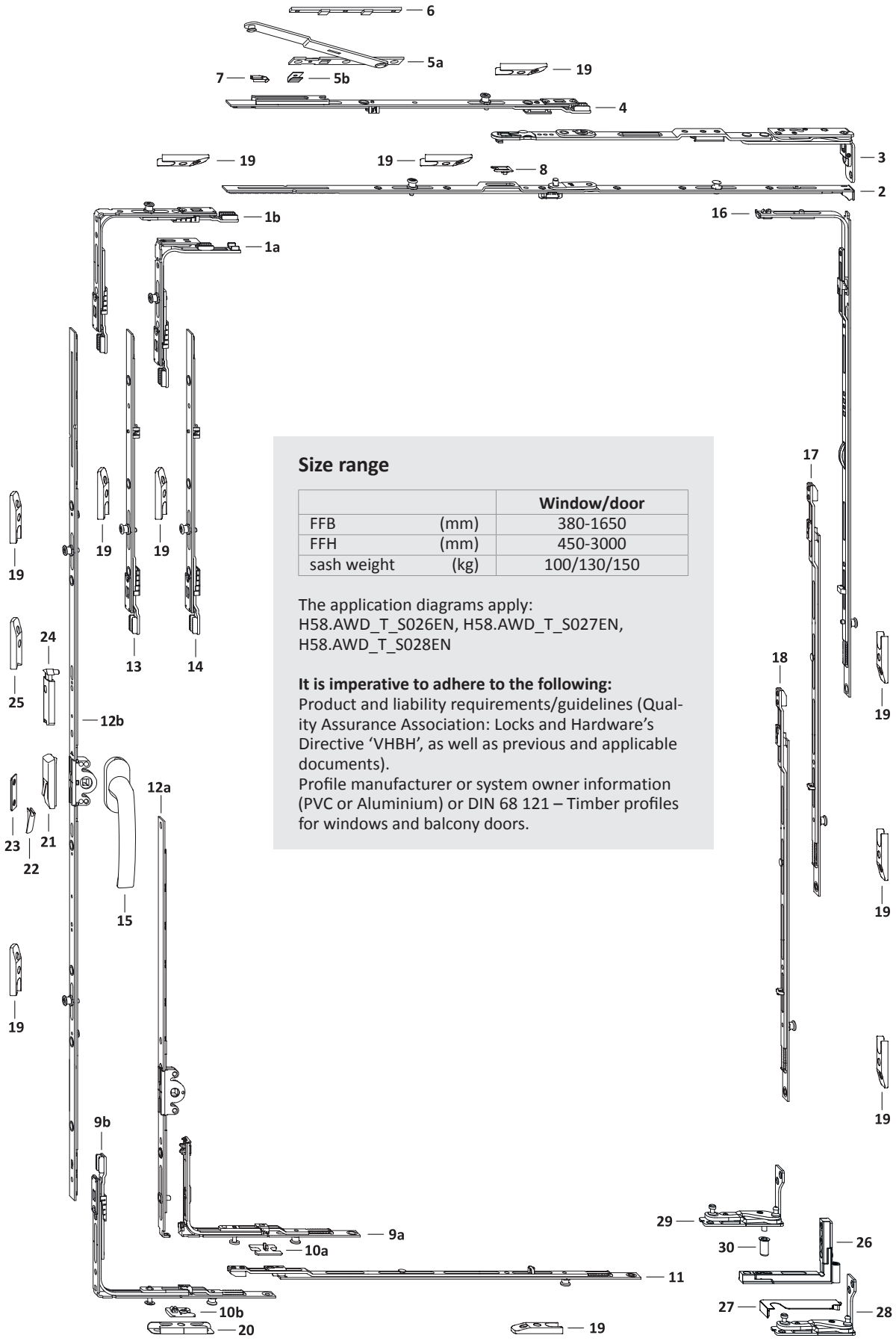
surface TS

backset 15 mm

Hardware set configuration	
General	Locking-points distance 1000
Stay side	two-piece stay ax 24+
Bottom	double cam SB R-RS
Locking side	mishandl. device on gear
Hinge side	corner drive BS sz 1+2 1RS

hardware layout

1-sash square tilt-turn
H12 GK Hinge side axxent 24+



Size range

		Window/door
FFB	(mm)	380-1650
FFH	(mm)	450-3000
sash weight	(kg)	100/130/150

The application diagrams apply:
H58.AWD_T_S026EN, H58.AWD_T_S027EN,
H58.AWD_T_S028EN

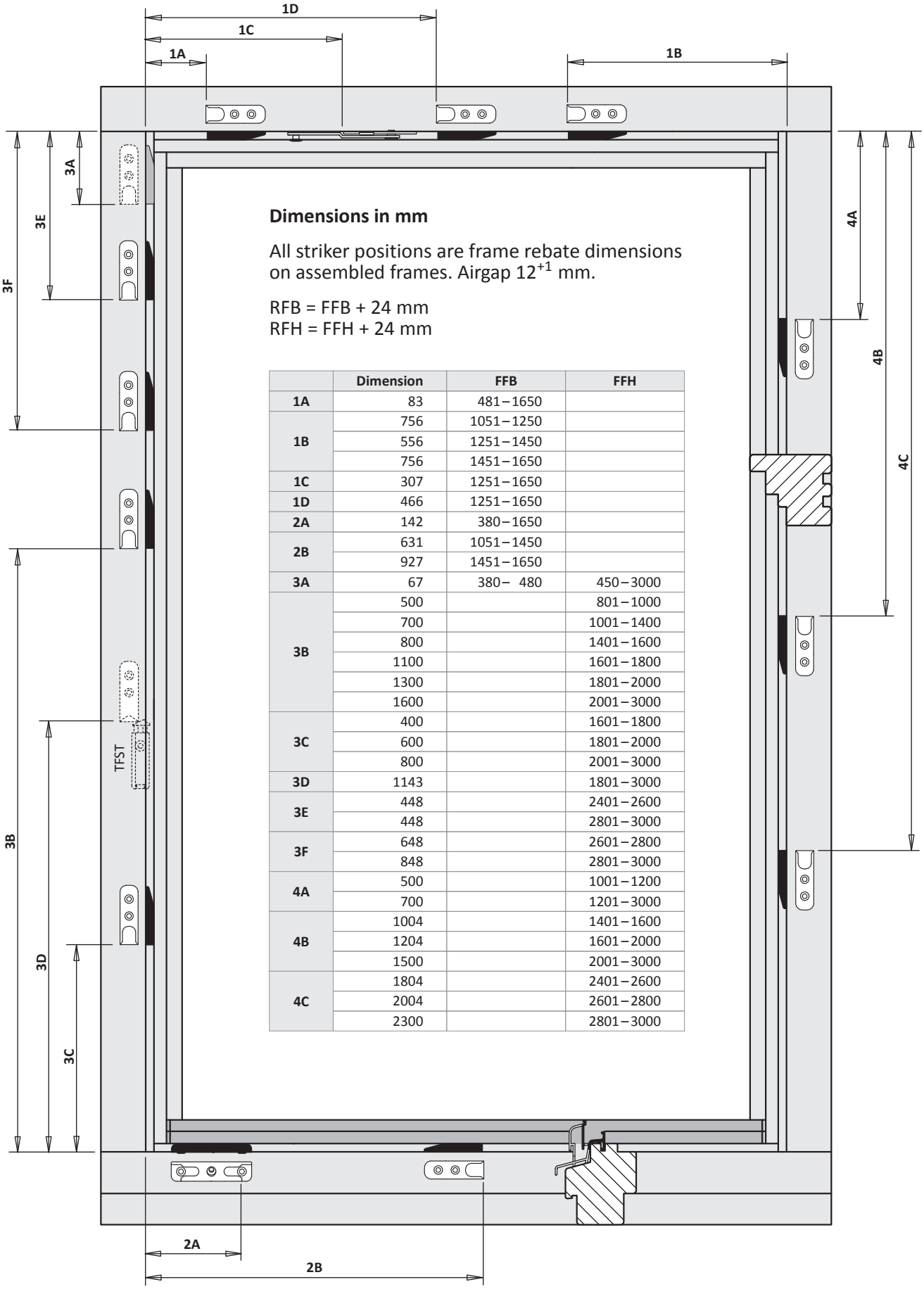
It is imperative to adhere to the following:
Product and liability requirements/guidelines (Quality Assurance Association: Locks and Hardware's Directive 'VHBH', as well as previous and applicable documents).
Profile manufacturer or system owner information (PVC or Aluminium) or DIN 68 121 – Timber profiles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

Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Number of frame parts / Pos.	
							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				
	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	linkage additional stay 1RS	TZOK1010- ...	1	1251–1650			1	
5	additional stay	Ref. PDB, TSZS	1	1251–1650				
6	packer Z	Ref. PDB, FRUP01	1	1251–1650				
7	tilt restr. additional stay ..	889008	1	1251–1650				
8	tilt restrictor V-V sz 2-4 ..	TFKB0040- ...	1	681–1050	450– 900			
	tilt restrictor V-V sz 5 ..	TFKB0050- ...		1051–1250	450– 900			
9a	locking part VSU/K 56+ 1S 1RS	TEVR1340- ...	1	380–1250	450– 600			1
9b	corn.drive AF VSU/K 56+ 1S 1RS	TEUL5030- ...	1	380–1650	601–3000			1
10a	run-up plate FH KRL56	Ref. PDB, TRAL01	1	380–1250	450– 600			
10b	run up block AF 13 mm 13	TFFH0080- ...	1	380–1650	601–3000			
11	linkage BS/FH sz 2+ 1RS	TZBS0190- ...	1	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		1001–1200		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	striker plate 56	Ref. PDB, FRSB						
20	striker plate S-RS	Ref. PDB, TRSK						
on request								
21	mishandling device	TFBS0010- ...	1					
22	pressure piece	Ref. PDB, TFFD	1					
23	stop	Ref. PDB, FRZF01	1					
24	snapper switchable rh.	TFST0011- ...	1		1801–3000			
	snapper switchable lh.	TFST0012- ...			1801–3000			
25	frame part snapper	Ref. PDB, TRST	1		1801–3000			

List of fittings

1-sash square tilt-turn
H12 GK Hinge side axxent 24+

Hinge side turning points						
Pos.	Description	Part number		required as per sash weight		
		surface TS	RAL7037	100 kg	130 kg	150 kg
26	corner hinge AX	Ref. PDB, TBEB41		1	1	1
27	cover cap AX EL	Ref. PDB, TKEL41		1	1	1
28	bottom hinge AX	Ref. PDB, TBEV41		1		
29	bottom hinge AX Ø8	Ref. PDB, TBEV42			1	1
30	supporting dowel AX	TBAV4010-0 ...			1	1



Dimensions in mm

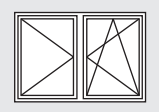
All striker positions are frame rebate dimensions on assembled frames. Airgap 12^{+1} mm.

RFB = FFB + 24 mm
RFH = FFH + 24 mm

	Dimension	FFB	FFH
1A	83	481–1650	
1B	756	1051–1250	
	556	1251–1450	
	756	1451–1650	
1C	307	1251–1650	
1D	466	1251–1650	
2A	142	380–1650	
2B	631	1051–1450	
	927	1451–1650	
3A	67	380– 480	450–3000
3B	500		801–1000
	700		1001–1400
	800		1401–1600
	1100		1601–1800
	1300		1801–2000
	1600		2001–3000
3C	400		1601–1800
	600		1801–2000
	800		2001–3000
3D	1143		1801–3000
3E	448		2401–2600
	448		2801–3000
3F	648		2601–2800
	848		2801–3000
4A	500		1001–1200
	700		1201–3000
4B	1004		1401–1600
	1204		1601–2000
	1500		2001–3000
4C	1804		2401–2600
	2004		2601–2800
	2300		2801–3000

TITAN AF

Installation instructions



GS

2-sash square tilt-turn/turn DS 16

timber 12 mm

basic security

fixed handle position

Hinge side axxent 24+

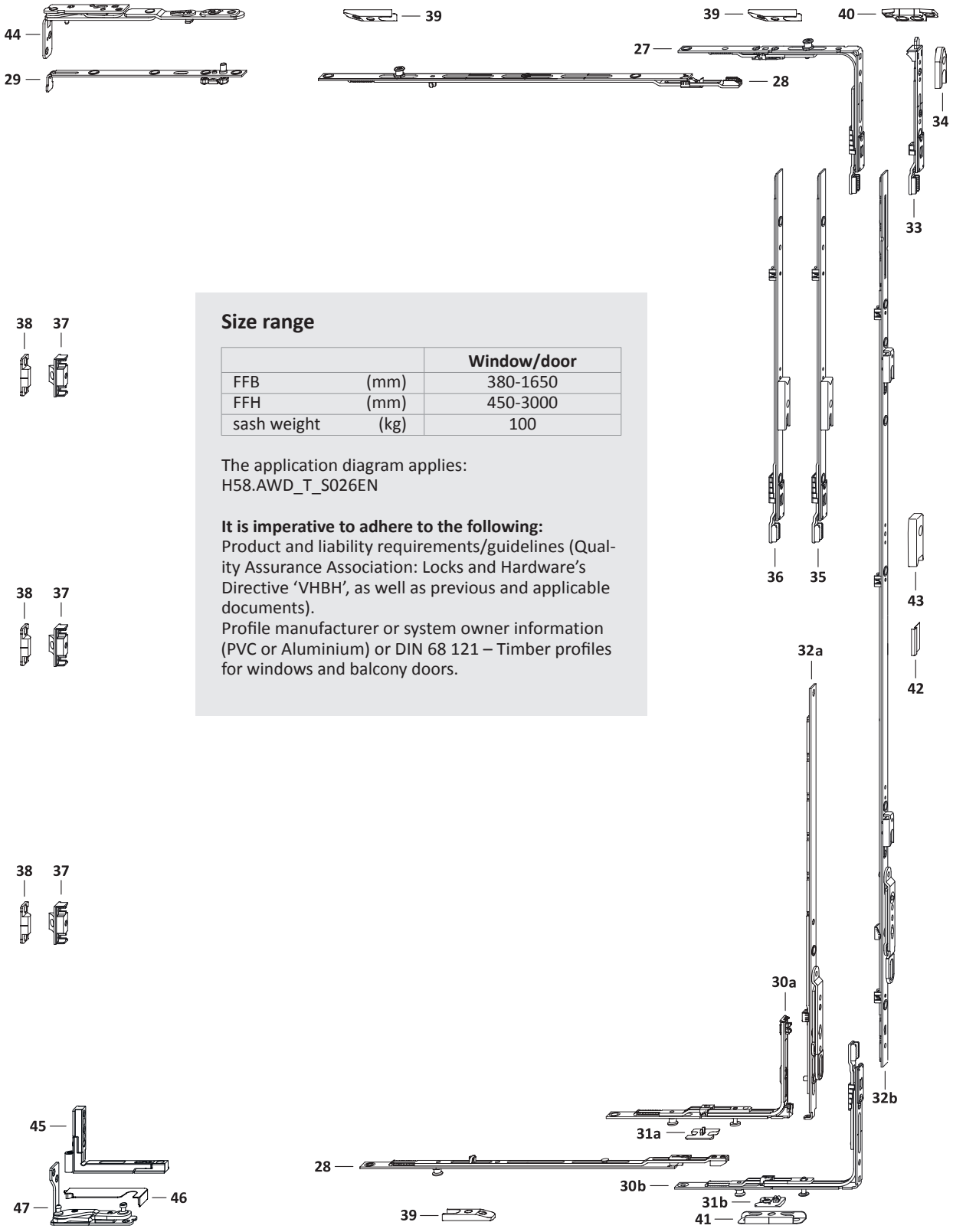
surface TS

backset 15 mm

Hardware set configuration	
General	Locking-points distance 1000
Stay side	two-piece stay ax 24+
Bottom	double cam SB R-RS
Locking side	mishandl. device on gear
Hinge side	corner drive BS sz 1+2 1RS

hardware layout slave sash

2-sash square tilt-turn/turn DS 16
H12 GK Hinge side axxent 24+

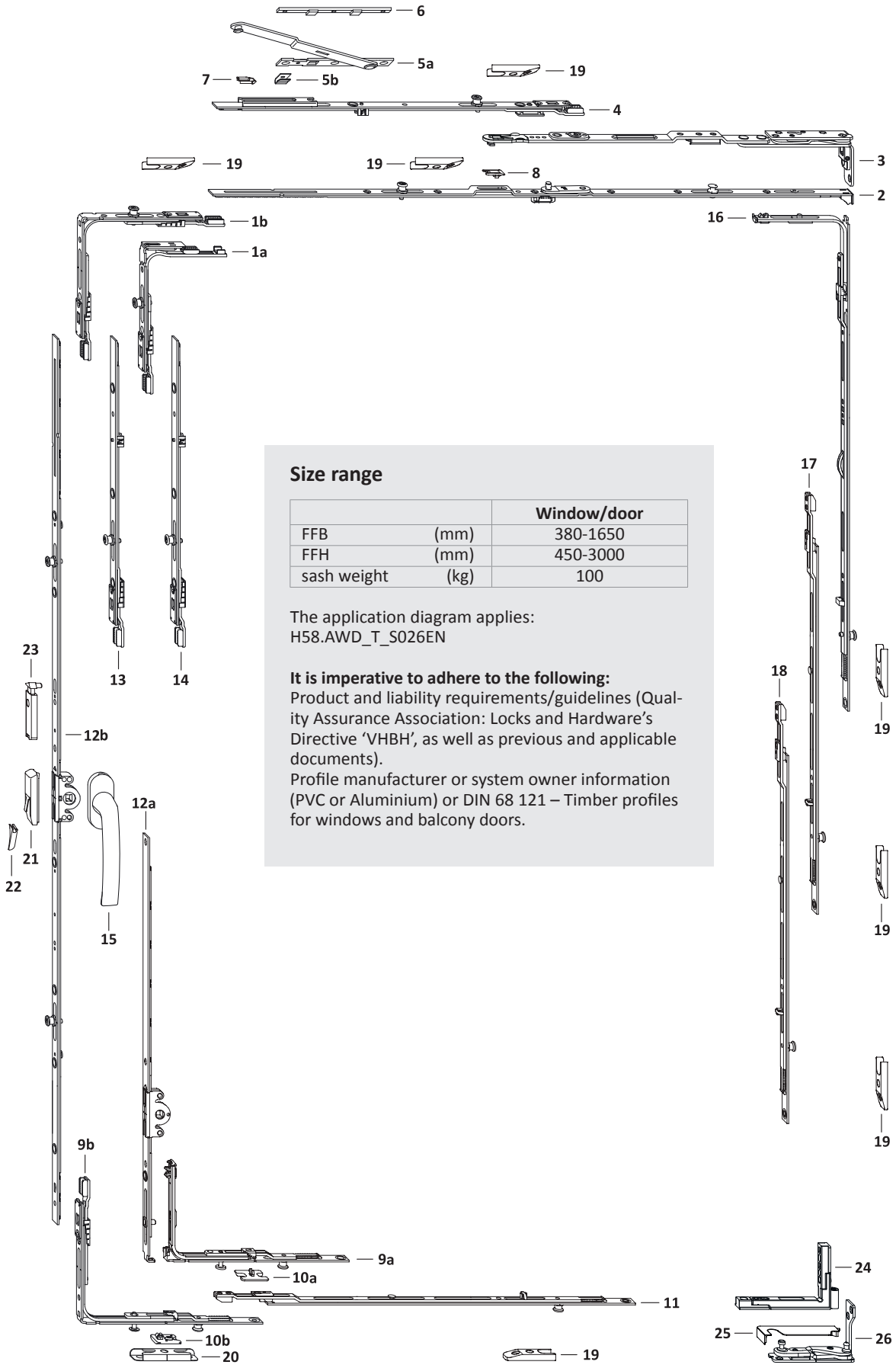


Size range

		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.



Size range

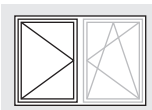
		Window/door
FFB	(mm)	380-1650
FFH	(mm)	450-3000
sash weight	(kg)	100

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
H12 GK Hinge side axxent 24+



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 2+ 1RS	TZBS0190- ...	2	1051–1450			2		
	linkage BS/FH sz 3+ 1RS	TZBS0200- ...		1451–1650			2		
29	stay sash part DF AX	TSSV3020- ...	1	380–1650					
30a	locking part VSU/K 56+ 1S 1RS	TEVR1340- ...	1	380–1650	450– 800				1
30b	corn.drive AF VSU/K 56+ 1S 1RS	TEUL5030- ...	1	380–1650	801–3000				1
31a	run-up plate FH KRL56	Ref. PDB, TRAL01	1	380–1650	450– 800				
31b	run up block AF 13 mm 13	TFFH0080- ...	1	380–1650	801–3000				
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		1001–1600				
	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		1001–1600				
	frame part MV	Ref. PDB, ZRZM01	2		1601–2400				
	frame part MV	Ref. PDB, ZRZM01	3		2401–3000				
39	striker plate 56	Ref. PDB, FRSB							
40	striker V	Ref. PDB, FRZV02							
41	striker plate S-RS	Ref. PDB, TRSK							
on request									
42	stop	Ref. PDB, FRZF04	1						
43	striker snapper A0767	TRST0010- ...	1		1801–3000				

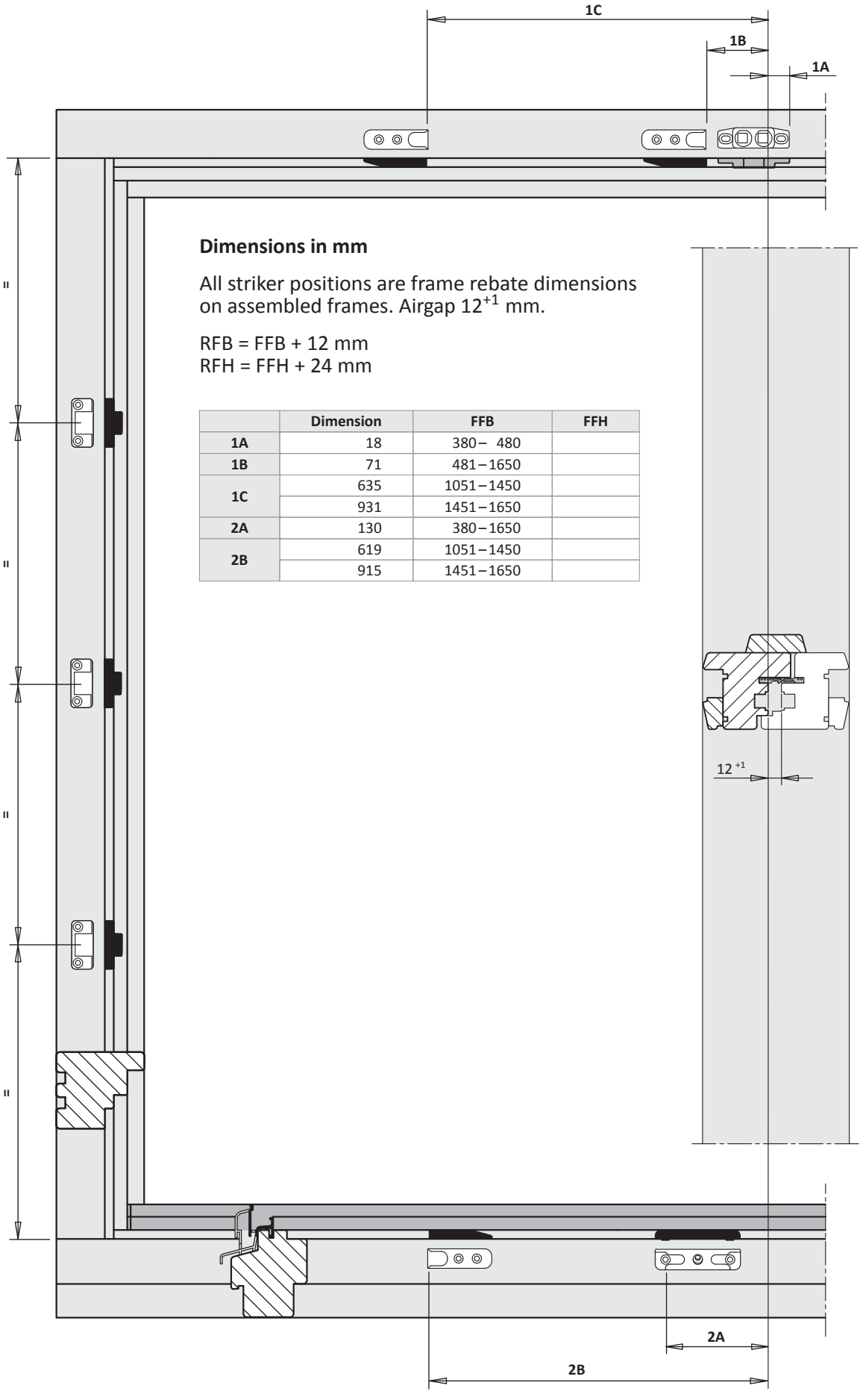
Hinge side turning points				
Pos.	Description	Part number		required as per sash weight
		surface TS	RAL7037	100 kg
44	stay arm AX DF	Ref. PDB, TSAV46		1
45	corner hinge AX	Ref. PDB, TBEB41		1
46	cover cap AX EL	Ref. PDB, TKEL41		1
47	bottom hinge AX	Ref. PDB, TBEV41		1

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				
	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	linkage additional stay 1RS	TZOK1010- ...	1	1251–1650			1	
5	additional stay	Ref. PDB, TSZS	1	1251–1650				
6	packer Z	Ref. PDB, FRUP01	1	1251–1650				
7	tilt restr. additional stay ..	889008	1	1251–1650				
8	tilt restrictor V-V sz 2-4 ..	TFKB0040- ...	1	681–1050	450– 900			
	tilt restrictor V-V sz 5 ..	TFKB0050- ...		1051–1250	450– 900			
9a	locking part VSU/K 56+ 1S 1RS	TEVR1340- ...	1	380–1250	450– 600			1
9b	corn.drive AF VSU/K 56+ 1S 1RS	TEUL5030- ...	1	380–1650	601–3000			1
10a	run-up plate FH KRL56	Ref. PDB, TRAL01	1	380–1250	450– 600			
10b	run up block AF 13 mm 13	TFFH0080- ...	1	380–1650	601–3000			
11	linkage BS/FH sz 2+ 1RS	TZBS0190- ...	1	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		1001–1200		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	striker plate 56	Ref. PDB, FRSB						
20	striker plate S-RS	Ref. PDB, TRSK						
on request								
21	mishandling device	TFBS0010- ...	1		601–3000			
22	pressure piece	Ref. PDB, TFFD	1		601–3000			
23	snapper switchable rh.	TFST0011- ...	1		1801–3000			
	snapper switchable lh.	TFST0012- ...			1801–3000			

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

Frame dimensions slave sash

2-sash square tilt-turn/turn DS 16
H12 GK Hinge side axxent 24+

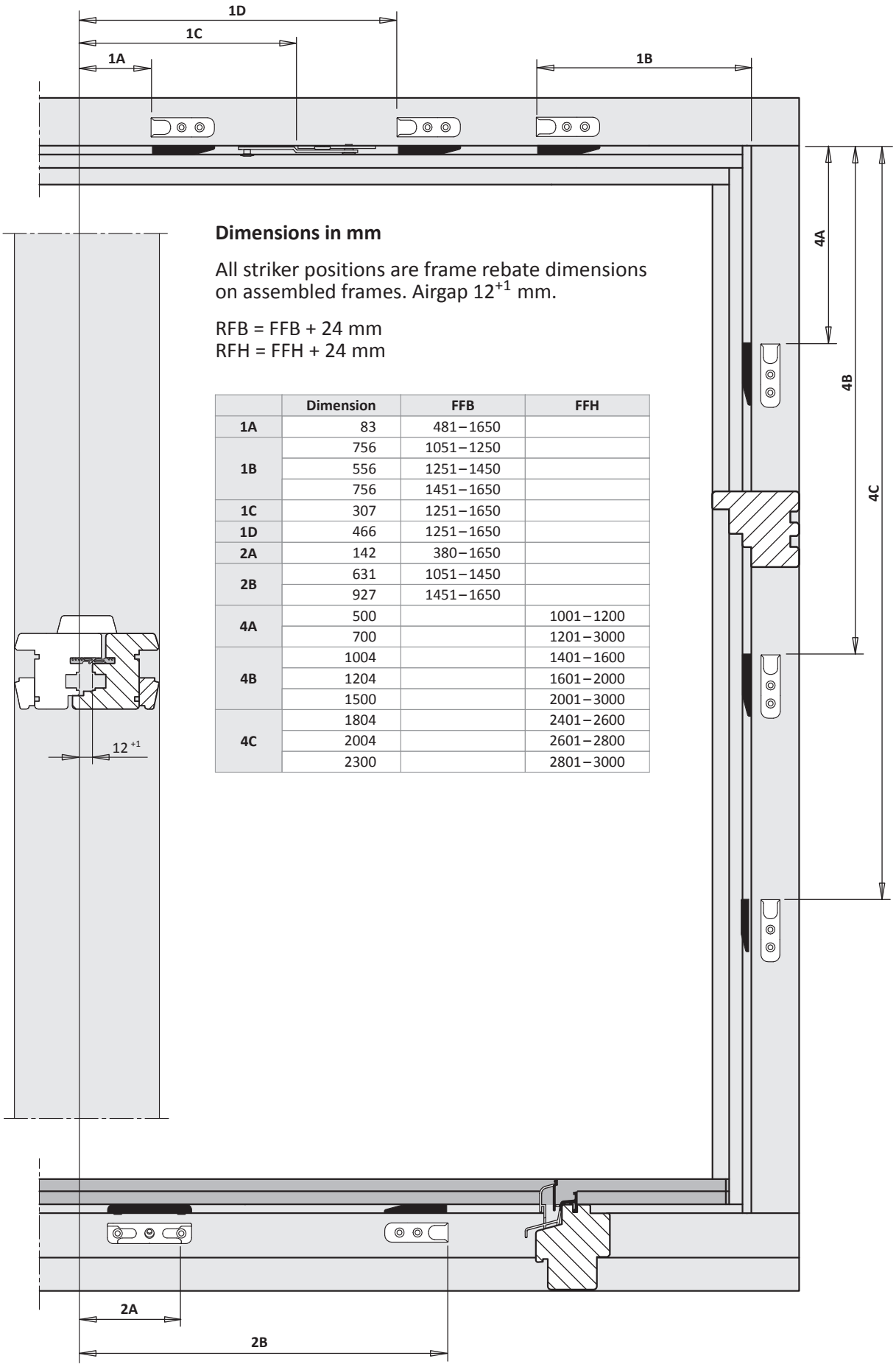


Dimensions in mm

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

RFB = FFB + 12 mm
RFH = FFH + 24 mm

	Dimension	FFB	FFH
1A	18	380– 480	
1B	71	481–1650	
1C	635	1051–1450	
	931	1451–1650	
2A	130	380–1650	
2B	619	1051–1450	
	915	1451–1650	



Dimensions in mm

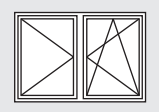
All striker positions are frame rebate dimensions on assembled frames. Airgap 12^{+1} mm.

RFB = FFB + 24 mm
RFH = FFH + 24 mm

	Dimension	FFB	FFH
1A	83	481 – 1650	
1B	756	1051 – 1250	
	556	1251 – 1450	
	756	1451 – 1650	
1C	307	1251 – 1650	
1D	466	1251 – 1650	
2A	142	380 – 1650	
2B	631	1051 – 1450	
	927	1451 – 1650	
4A	500		1001 – 1200
	700		1201 – 3000
4B	1004		1401 – 1600
	1204		1601 – 2000
	1500		2001 – 3000
4C	1804		2401 – 2600
	2004		2601 – 2800
	2300		2801 – 3000

TITAN AF

Installation instructions



GS

2-sash square tilt-turn/turn DS 16

timber 12 mm

basic security

fixed handle position

Hinge side axxent 24+

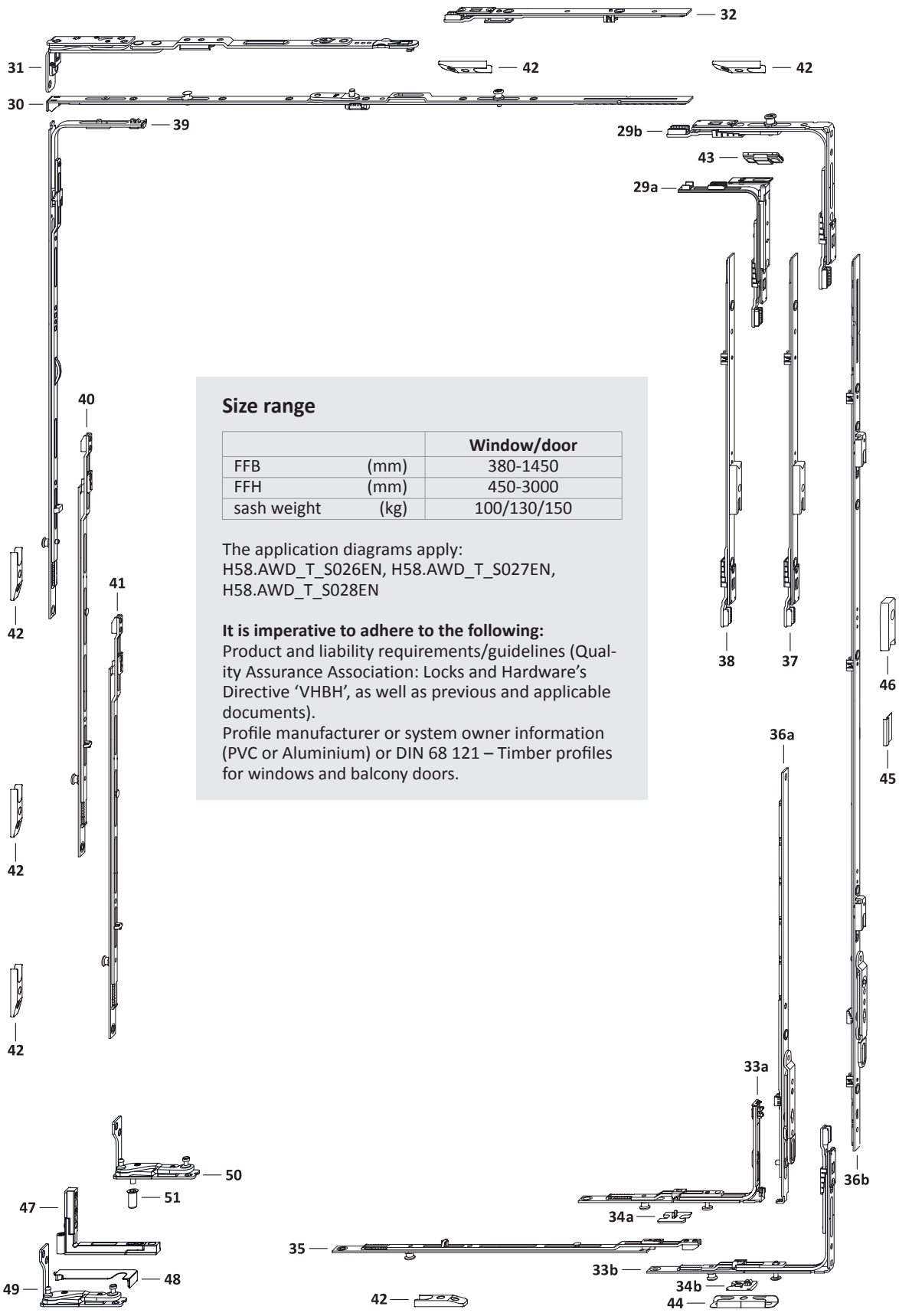
surface TS

backset 15 mm

Hardware set configuration	
General	Locking-points distance 1000; secondary sash with DK-stay
Stay side	two-piece stay ax 24+
Bottom	double cam SB R-RS
Locking side	mishandl. device on gear
Hinge side	corner drive BS sz 1+2 1RS

hardware layout slave sash

2-sash square tilt-turn/turn DS 16
H12 GK Hinge side axxent 24+

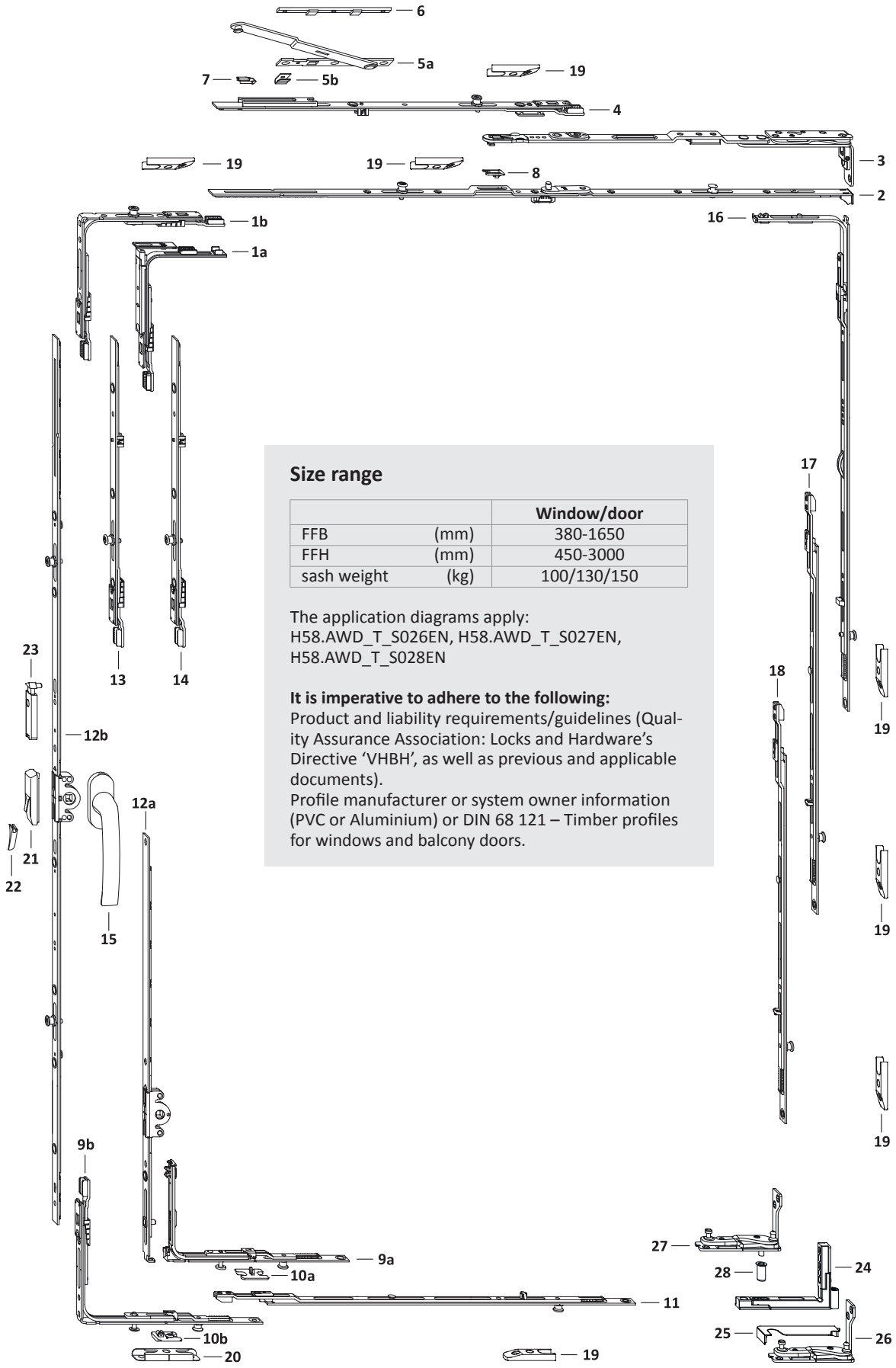


Size range

		Window/door
FFB	(mm)	380-1450
FFH	(mm)	450-3000
sash weight	(kg)	100/130/150

The application diagrams apply:
H58.AWD_T_S026EN, 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.



Size range

		Window/door
FFB	(mm)	380-1650
FFH	(mm)	450-3000
sash weight	(kg)	100/130/150

The application diagrams apply:
H58.AWD_T_S026EN, H58.AWD_T_S027EN,
H58.AWD_T_S028EN

It is imperative to adhere to the following:
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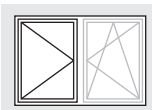
List of fittings slave sash

2-sash square tilt-turn/turn DS 16
H12 GK Hinge side axxent 24+



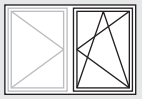
Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Number of frame parts / Pos.		
						In the main sash	42	43	44
29a	corn.drive VSO narrow RSA/11mm	TEUL4150- ...	1	380– 480				1	
29b	corn.drive VSO 1RS	TEUL4010- ...	1	481–1450			1		
30	stay sash part AF AX sz 1	TSSV4000- ...	1	380– 680					
	stay sash part AF AX 2+3 1RS	TSSV0310- ...		681– 850					
	stay sash part AF AX sz 4 1RS	TSSV0320- ...		851–1050					
	stay sash part AF AX sz 5 1RS	TSSV0330- ...		1051–1450			1		
31	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		1051–1450					
32	linkage AF sz 1	TZZS0150- ...	1	1251–1450					
33a	locking part VSU/K 56+ 1S 1RS	TEVR1340- ...	1	380–1450	450– 800				1
33b	corn.drive AF VSU/K 56+ 1S 1RS	TEUL5030- ...	1	380–1450	801–3000				1
34a	run-up plate FH KRL56	Ref. PDB, TRAL01	1	380–1450	450– 800				
34b	run up block AF 13 mm 13	TFFH0080- ...	1	380–1450	801–3000				
35	linkage BS/FH sz 2+ 1RS	TZBS0190- ...	1	1051–1450			1		
36a	sec.sash gear 16 sz 30	TGKS0010- ...	1	380–1250	450– 600	180			
	sec.sash gear 16 AF 60/G300	TGKS4030- ...			601– 800	300			
36b	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			
37	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				
38	linkage AF sz 2 1SB-RS	TZKS1030- ...	1		2601–2800				
	linkage AF sz 2 1SB-RS	TZKS1030- ...			2801–3000				
39	corn.drive BS/K3 sz 1+ 1RS	TEUL2410- ...	1		1001–1200		1		
	corn.drive BS/K3 sz 2+ 1RS	TEUL2420- ...			1201–3000		1		
40	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		
41	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		
42	striker plate 56	Ref. PDB, FRSB							
43	short striker V	Ref. PDB, FRZV12							
44	striker plate S-RS	Ref. PDB, TRSK							
on request									
45	stop	Ref. PDB, FRZF04	1		601–3000				
46	striker snapper A0767	TRST0010- ...	1		1801–3000				

Hinge side turning points						
Pos.	Description	Part number		required as per sash weight		
		surface TS	RAL7037	100 kg	130 kg	150 kg
47	corner hinge AX	Ref. PDB, TBEB41		1	1	1
48	cover cap AX EL	Ref. PDB, TKEL41		1	1	1
49	bottom hinge AX	Ref. PDB, TBEV41		1		
50	bottom hinge AX Ø8	Ref. PDB, TBEV42			1	1
51	supporting dowel AX	TBAV4010-0 ...			1	1

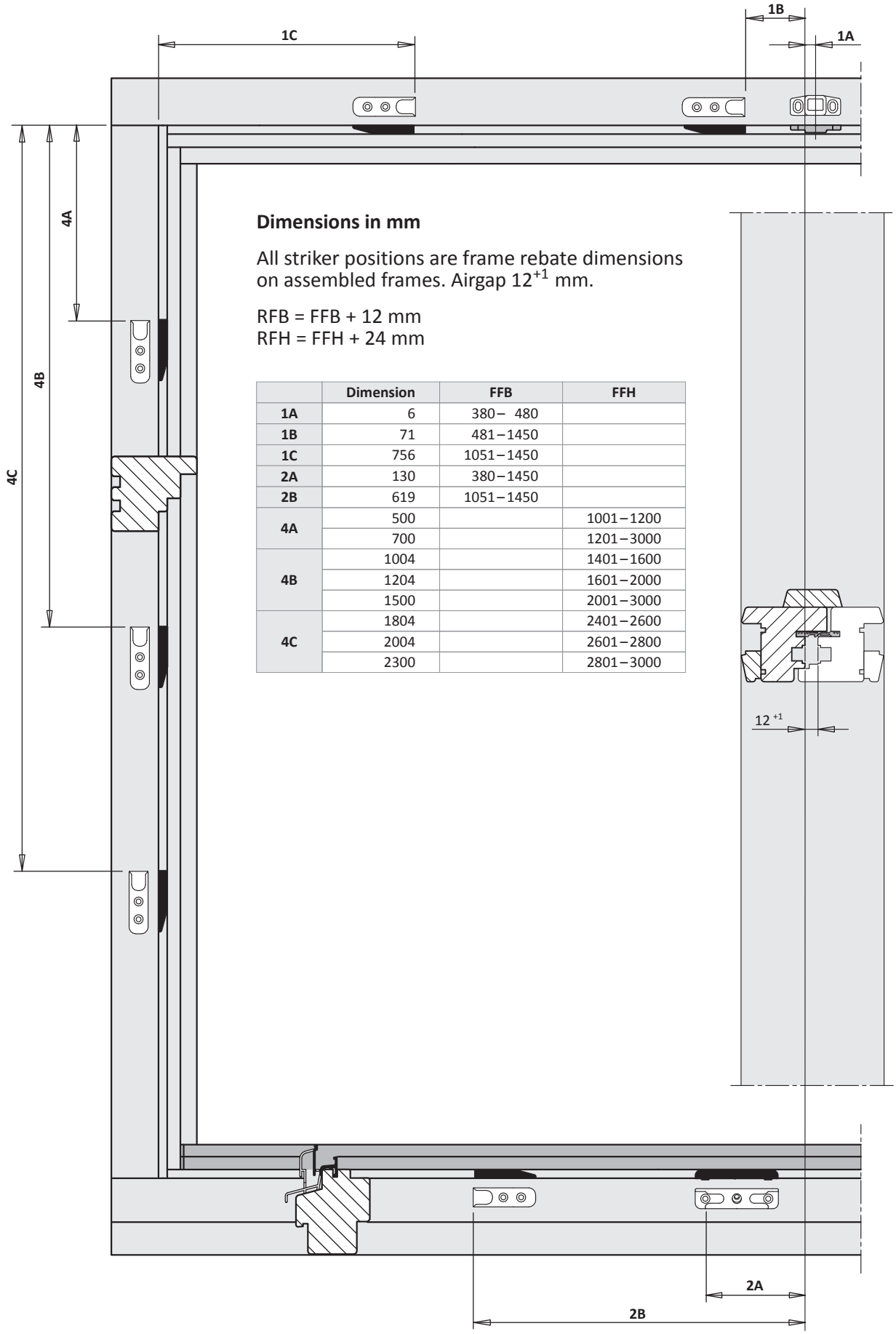
Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Number of frame parts / Pos.	
							19	20
1a	corn.drive VSO narrow RSA/11mm	TEUL4150- ...	1	380– 480				
1b	corn.drive VSO 1RS	TEUL4010- ...	1	481–1650			1	
2	stay sash part AF AX sz 1	TSSV4000- ...	1	380– 680				
	stay sash part AF AX 2+3 1RS	TSSV0310- ...		681– 850				
	stay sash part AF AX sz 4 1RS	TSSV0320- ...		851–1050				
	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	linkage additional stay 1RS	TZOK1010- ...	1	1251–1650			1	
5	additional stay	Ref. PDB, TSZS	1	1251–1650				
6	packer Z	Ref. PDB, FRUP01	1	1251–1650				
7	tilt restr. additional stay ..	889008	1	1251–1650				
8	tilt restrictor V-V sz 2-4 ..	TFKB0040- ...	1	681–1050	450– 900			
	tilt restrictor V-V sz 5 ..	TFKB0050- ...		1051–1250	450– 900			
9a	locking part VSU/K 56+ 1S 1RS	TEVR1340- ...	1	380–1250	450– 600			1
9b	corn.drive AF VSU/K 56+ 1S 1RS	TEUL5030- ...	1	380–1650	601–3000			1
10a	run-up plate FH KRL56	Ref. PDB, TRAL01	1	380–1250	450– 600			
10b	run up block AF 13 mm 13	TFFH0080- ...	1	380–1650	601–3000			
11	linkage BS/FH sz 2+ 1RS	TZBS0190- ...	1	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		1001–1200		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	striker plate 56	Ref. PDB, FRSB						
20	striker plate S-RS	Ref. PDB, TRSK						
on request								
21	mishandling device	TFBS0010- ...	1		601–3000			
22	pressure piece	Ref. PDB, TFFD	1		601–3000			
23	snapper switchable rh.	TFST0011- ...	1		1801–3000			
	snapper switchable lh.	TFST0012- ...			1801–3000			

List of fittings main sash

2-sash square tilt-turn/turn DS 16
H12 GK Hinge side axxent 24+



Hinge side turning points						
Pos.	Description	Part number		required as per sash weight		
		surface TS	RAL7037	100 kg	130 kg	150 kg
24	corner hinge AX	Ref. PDB, TBEB41		1	1	1
25	cover cap AX EL	Ref. PDB, TKEL41		1	1	1
26	bottom hinge AX	Ref. PDB, TBEV41		1		
27	bottom hinge AX Ø8	Ref. PDB, TBEV42			1	1
28	supporting dowel AX	TBAV4010-0 ...			1	1



Dimensions in mm

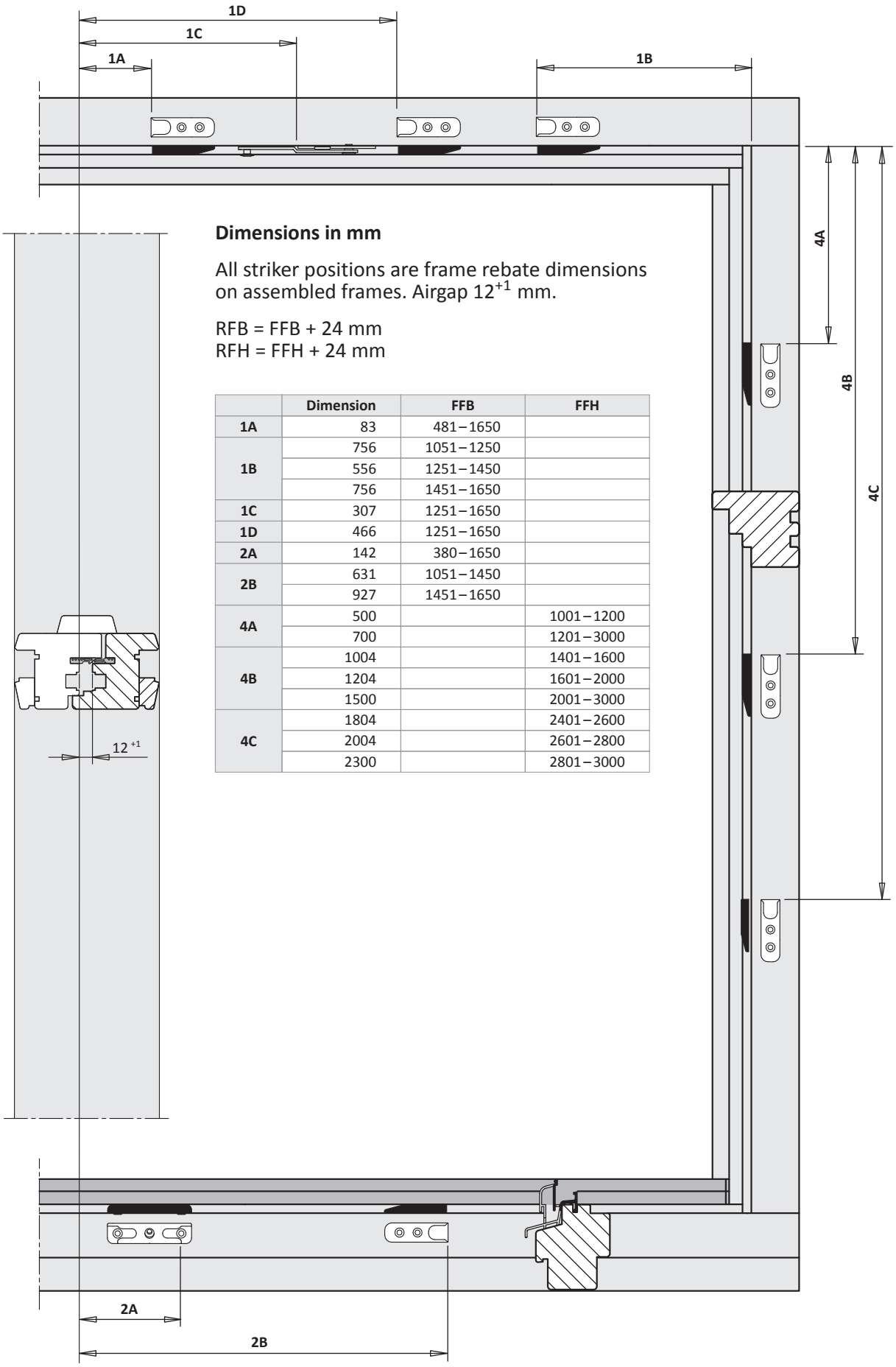
All striker positions are frame rebate dimensions on assembled frames. Airgap 12^{+1} mm.

RFB = FFB + 12 mm
RFH = FFH + 24 mm

	Dimension	FFB	FFH
1A	6	380 – 480	
1B	71	481 – 1450	
1C	756	1051 – 1450	
2A	130	380 – 1450	
2B	619	1051 – 1450	
4A	500		1001 – 1200
	700		1201 – 3000
4B	1004		1401 – 1600
	1204		1601 – 2000
	1500		2001 – 3000
4C	1804		2401 – 2600
	2004		2601 – 2800
	2300		2801 – 3000

Frame dimensions main sash

2-sash square tilt-turn/turn DS 16
H12 GK Hinge side axxent 24+



Dimensions in mm

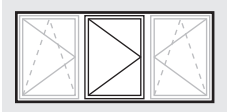
All striker positions are frame rebate dimensions on assembled frames. Airgap 12^{+1} mm.

RFB = FFB + 24 mm
RFH = FFH + 24 mm

	Dimension	FFB	FFH
1A	83	481 – 1650	
1B	756	1051 – 1250	
	556	1251 – 1450	
	756	1451 – 1650	
1C	307	1251 – 1650	
1D	466	1251 – 1650	
2A	142	380 – 1650	
2B	631	1051 – 1450	
	927	1451 – 1650	
4A	500		1001 – 1200
	700		1201 – 3000
4B	1004		1401 – 1600
	1204		1601 – 2000
	1500		2001 – 3000
4C	1804		2401 – 2600
	2004		2601 – 2800
	2300		2801 – 3000

TITAN AF

Installation instructions



GS

3-sash Centre sash second opening turn

timber 12 mm

basic security

fixed handle position

Hinge side axxent 24+

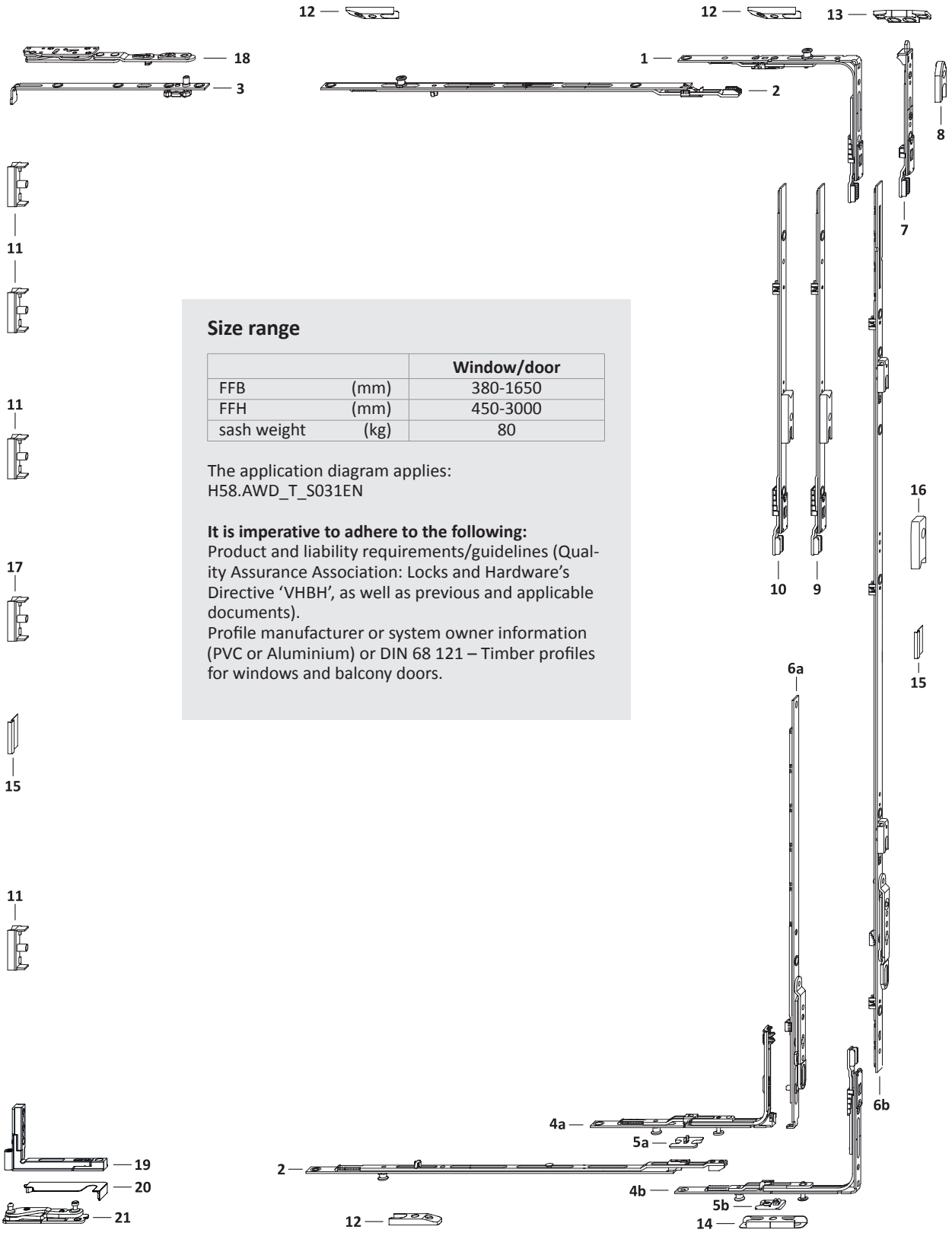
surface TS

backset 15 mm

Hardware set configuration	
General	Locking-points distance 1000
Stay side	two-piece stay ax 24+
Bottom	double cam SB R-RS
Locking side	mishandl. device on gear

hardware layout

3-sash Centre sash second opening turn
H12 GK Hinge side axxent 24+



Size range

		Window/door
FFB	(mm)	380-1650
FFH	(mm)	450-3000
sash weight	(kg)	80

The application diagram applies:
H58.AWD_T_S031EN

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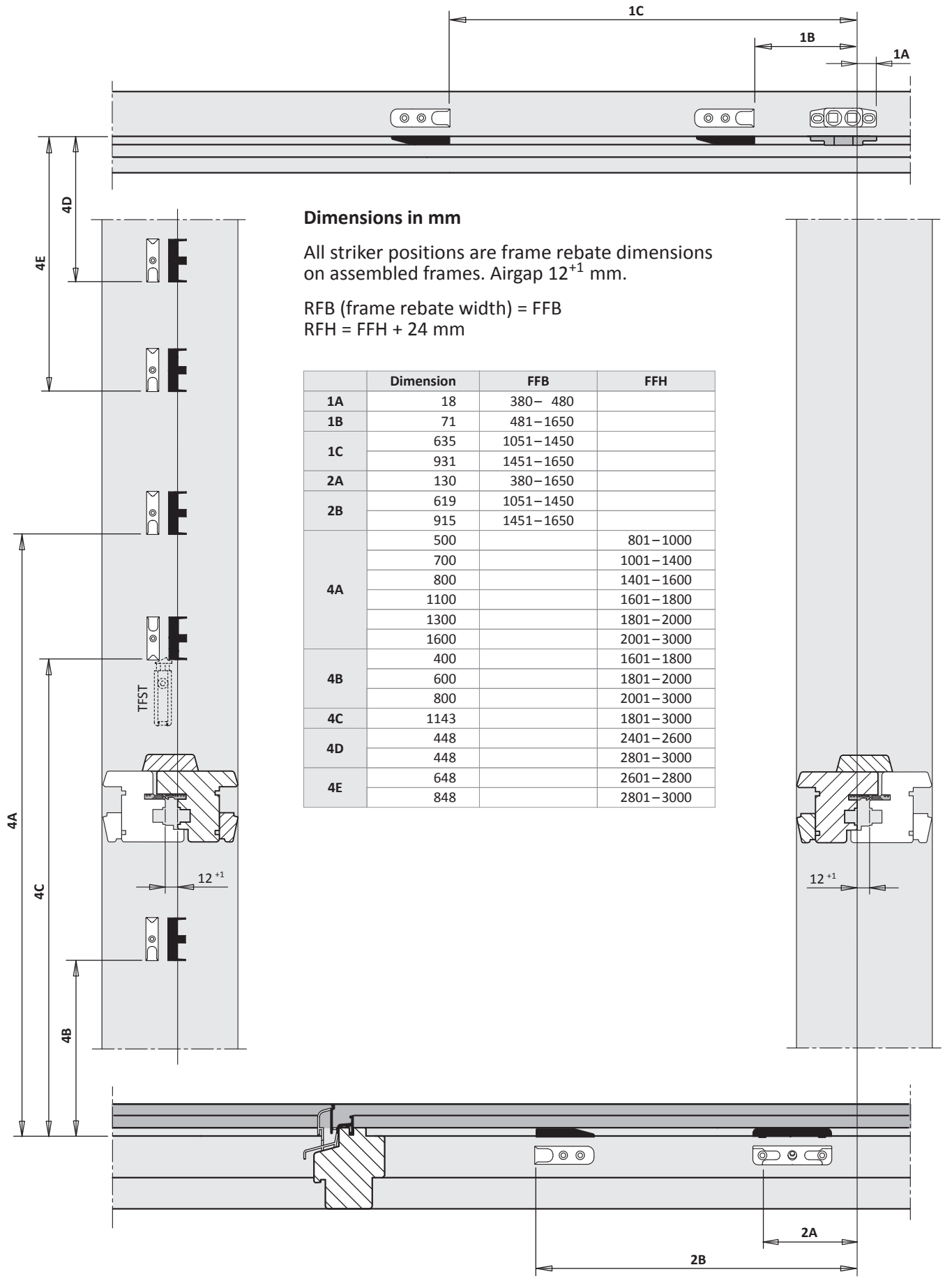
Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Number of frame parts / Pos.		
							12	13	14
1	corn.drive VSO/K+ DF 1RS	TEUL4110- ...	1	481 – 1650			1		
2	linkage BS/FH sz 2+ 1RS	TZBS0190- ...	2	1051 – 1450			2		
	linkage BS/FH sz 3+ 1RS	TZBS0200- ...		1451 – 1650			2		
3	stay sash part DF AX	TSSV3020- ...	1	380 – 1650					
4a	locking part VSU/K 56+ 1S 1RS	TEVR1340- ...	1	380 – 1650	450 – 800				1
4b	corn.drive AF VSU/K 56+ 1S 1RS	TEUL5030- ...	1	380 – 1650	801 – 3000				1
5a	run-up plate FH KRL56	Ref. PDB, TRAL01	1	380 – 1650	450 – 800				
5b	run up block AF 13 mm 13	TFFH0080- ...	1	380 – 1650	801 – 3000				
6a	sec.sash gear 16 sz 30	TGKS0010- ...	1	380 – 1250	450 – 600	180			
	sec.sash gear 16 AF 60/G300	TGKS4030- ...			601 – 800	300			
6b	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			
7	locking bolt AF VSO RSA 11	TESC2030- ...	1	380 – 480	450 – 3000			1	
8	striker plate A0767	TRSA0010- ...	1	380 – 480	450 – 3000				
9	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				
10	linkage AF sz 2 1SB-RS	TZKS1030- ...	1		2601 – 2800				
	linkage AF sz 2 1SB-RS	TZKS1030- ...			2801 – 3000				
11	striker plate 56 A2000	TRSB0030- ...	1		801 – 1000				
	striker plate 56 A2000	TRSB0030- ...			1001 – 1200				
	striker plate 56 A2000	TRSB0030- ...			1201 – 1400				
	striker plate 56 A2000	TRSB0030- ...			1401 – 1600				
	striker plate 56 A2000	TRSB0030- ...	2		1601 – 2400				
	striker plate 56 A2000	TRSB0030- ...	3		2401 – 2800				
	striker plate 56 A2000	TRSB0030- ...	4		2801 – 3000				
12	striker plate 56	Ref. PDB, FRSB							
13	striker V	Ref. PDB, FRZV02							
14	striker plate S-RS	Ref. PDB, TRSK							
on request									
15	stop	Ref. PDB, FRZF04	2						
16	striker snapper A0767	TRST0010- ...	1		1801 – 3000				
17	striker plate 56 A2000	TRSB0030- ...	1		1801 – 3000				

Hinge side turning points				
Pos.	Description	Part number		required as per sash weight
		surface TS	RAL7037	80 kg
18	stay arm AX DF/3	Ref. PDB, TSAV47		1
19	corner hinge AX	Ref. PDB, TBEB41		1
20	cover cap AX EL	Ref. PDB, TKEL41		1
21	bottom hinge AX DF/3	Ref. PDB, TBEV43		1

Frame dimensions

3-sash Centre sash second opening turn
H12 GK Hinge side axxent 24+



Dimensions in mm

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

RFB (frame rebate width) = FFB
RFH = FFH + 24 mm

	Dimension	FFB	FFH
1A	18	380– 480	
1B	71	481–1650	
1C	635	1051–1450	
	931	1451–1650	
2A	130	380–1650	
2B	619	1051–1450	
	915	1451–1650	
4A	500		801–1000
	700		1001–1400
	800		1401–1600
	1100		1601–1800
	1300		1801–2000
	1600		2001–3000
4B	400		1601–1800
	600		1801–2000
	800		2001–3000
4C	1143		1801–3000
4D	448		2401–2600
	448		2801–3000
4E	648		2601–2800
	848		2801–3000

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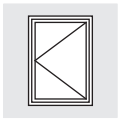
Installation instructions



1-sash square turn

timber 12 mm

basic security

fixed handle position

Hinge side axxent 24+

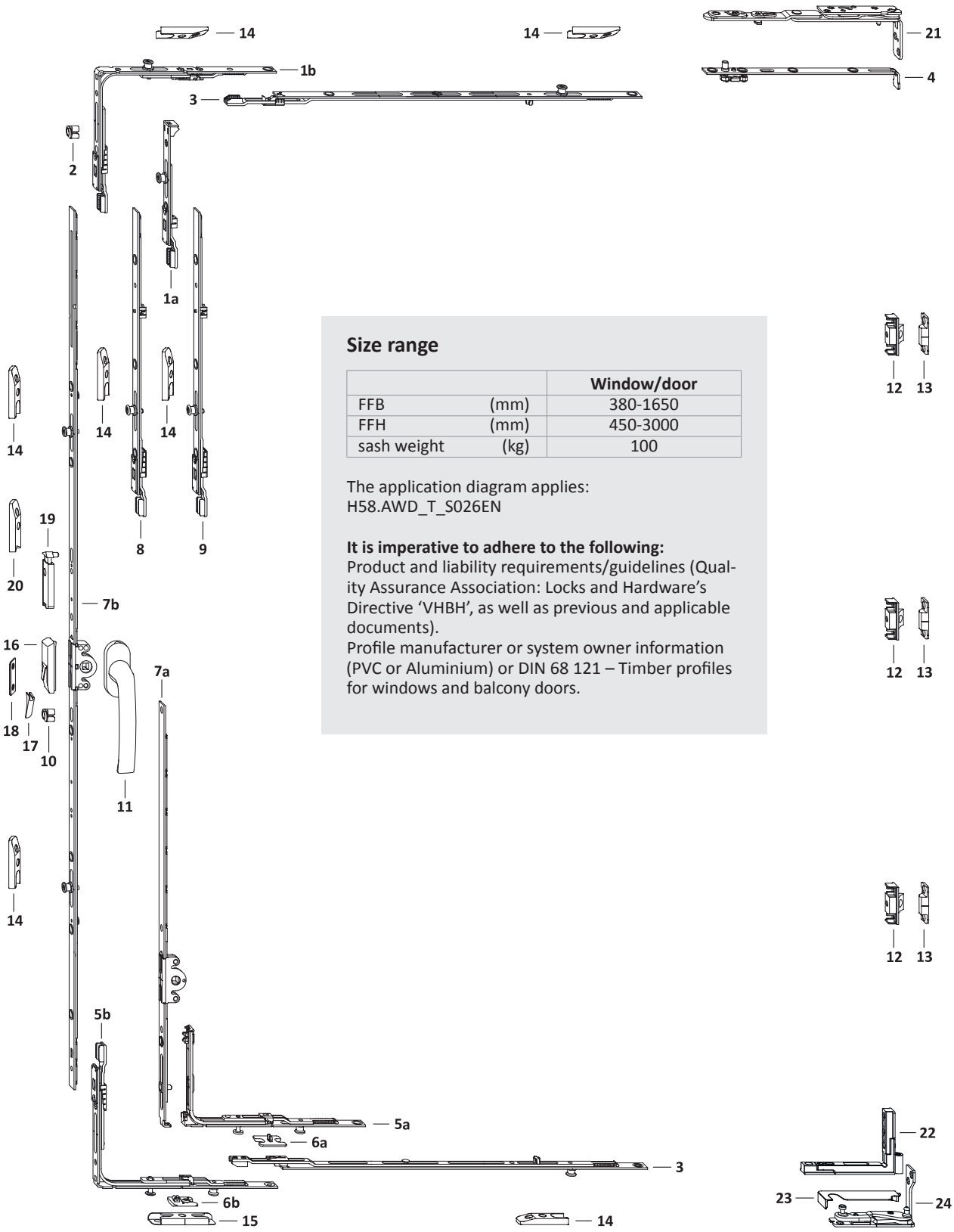
surface TS

backset 15 mm

Hardware set configuration	
General	Locking-points distance 1000
Stay side	two-piece stay ax 24+
Bottom	double cam SB R-RS
Locking side	mishandl. device on gear

hardware layout

1-sash square turn
H12 GK Hinge side axxent 24+



Size range

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

The application diagram applies:
H58.AWD_T_S026EN

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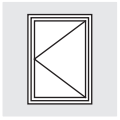
Profile manufacturer or system owner information (PVC or Aluminium) or DIN 68 121 – Timber profiles for windows and balcony doors.

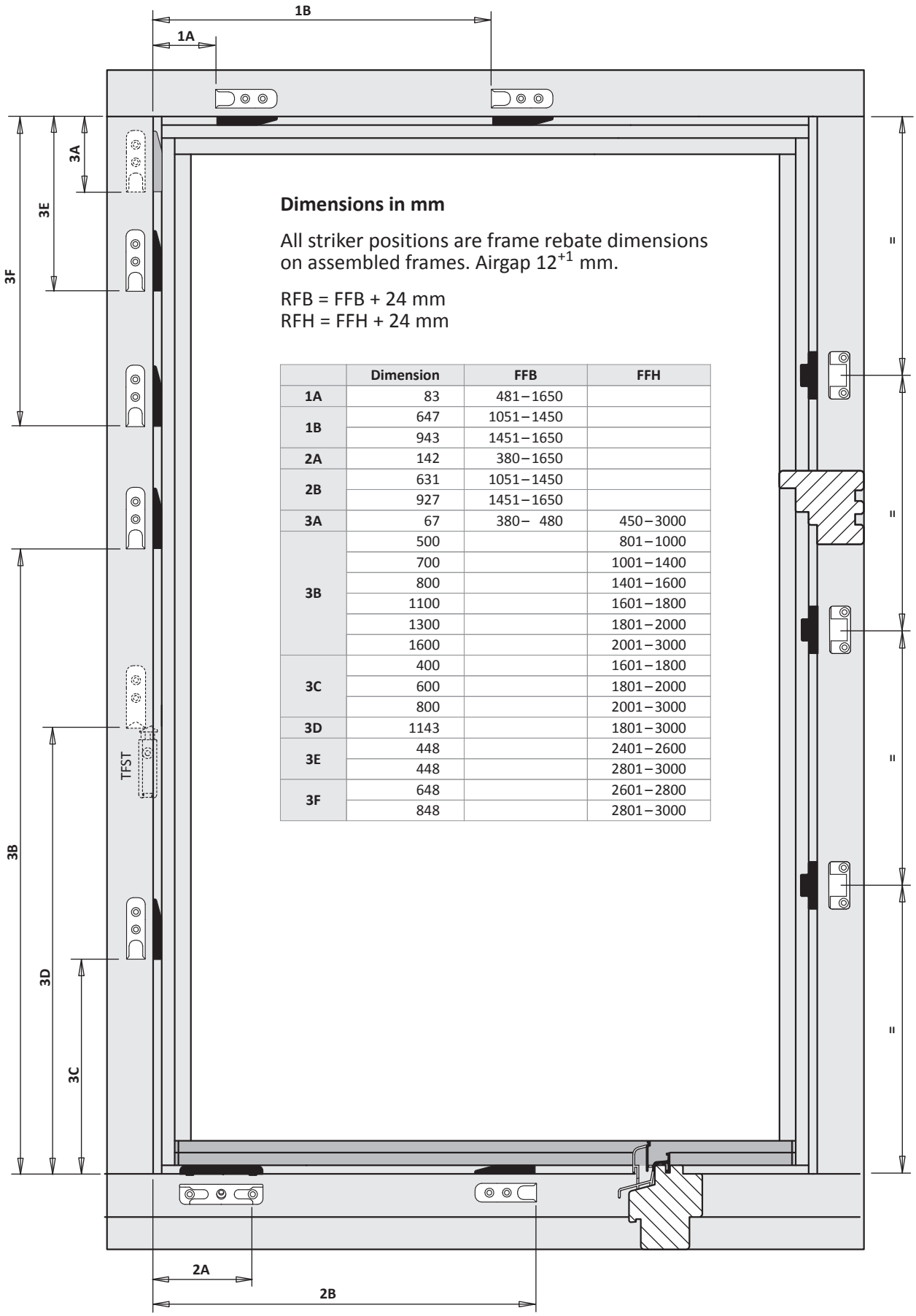


Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Number of frame parts / Pos.	
							14	15
1a	locking bolt AF VS 180° 1RS	TESC2020- ...	1	380– 480			1	
1b	corn.drive VSO/K+ DF 1RS	TEUL4110- ...	1	481–1650			1	
2	travel restrictor	TFHB0010- ...	1	380–1250	450– 600			
3	linkage BS/FH sz 2+ 1RS	TZBS0190- ...	2	1051–1450			2	
	linkage BS/FH sz 3+ 1RS	TZBS0200- ...		1451–1650			2	
4	stay sash part DF AX	TSSV3020- ...	1	380–1650				
5a	locking part VSU/K 56+ 1S 1RS	TEVR1340- ...	1	380–1250	450– 600			1
5b	corn.drive AF VSU/K 56+ 1S 1RS	TEUL5030- ...	1	380–1650	601–3000			1
6a	run-up plate FH KRL56	Ref. PDB, TRAL01	1	380–1250	450– 600			
6b	run up block AF 13 mm 13	TFFH0080- ...	1	380–1650	601–3000			
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		1001–1600			
	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		1001–1600			
	frame part MV	Ref. PDB, ZRZM01	2		1601–2400			
	frame part MV	Ref. PDB, ZRZM01	3		2401–3000			
14	striker plate 56	Ref. PDB, FRSB						
15	striker plate S-RS	Ref. PDB, TRSK						
on request								
16	mishandling device	TFBS0010- ...	1					
17	pressure piece	Ref. PDB, TFFD	1					
18	stop	Ref. PDB, FRZF01	1					
19	snapper switchable rh.	TFST0011- ...	1		1801–3000			
	snapper switchable lh.	TFST0012- ...			1801–3000			
20	frame part snapper	Ref. PDB, TRST	1		1801–3000			

Hinge side turning points				
Pos.	Description	Part number		required as per sash weight
		surface TS	RAL7037	100 kg
21	stay arm AX DF	Ref. PDB, TSAV46		1
22	corner hinge AX	Ref. PDB, TBEB41		1
23	cover cap AX EL	Ref. PDB, TKEL41		1
24	bottom hinge AX	Ref. PDB, TBEV41		1

Frame dimensions

1-sash square turn
H12 GK Hinge side axxent 24+



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

	Dimension	FFB	FFH
1A	83	481–1650	
1B	647	1051–1450	
	943	1451–1650	
2A	142	380–1650	
2B	631	1051–1450	
	927	1451–1650	
3A	67	380– 480	450–3000
3B	500		801–1000
	700		1001–1400
	800		1401–1600
	1100		1601–1800
	1300		1801–2000
	1600		2001–3000
3C	400		1601–1800
	600		1801–2000
	800		2001–3000
3D	1143		1801–3000
3E	448		2401–2600
	448		2801–3000
3F	648		2601–2800
	848		2801–3000

Bottom Inliner

1-sash square tilt-turn	H48.TAFH2M0S040EN	3 - 3
2-sash square tilt-turn/turn DS 16 with DK-stay	H48.TAFH2M0S041EN	3 - 7
2-sash square tilt-turn/turn DS 16 with DF-stay	H48.TAFH2M0S042EN	3 - 15
3-sash Centre sash second opening turn	H48.TAFH2M0S043EN	3 - 23
Tilt before turn (TBT)		
1-sash square tilt before turn (TBT)	H48.TAFH2M0S045EN	3 - 27
Turn only sash		
1-sash square turn	H48.TAFH2M0S044EN	3 - 31

Bottom Double cam SB R-RS

1-sash square tilt-turn	H48.TAFH2M0S405EN	3 - 35
2-sash square tilt-turn/turn DS 16 with DK-stay	H48.TAFH2M0S406EN	3 - 39
2-sash square tilt-turn/turn DS 16 with DF-stay	H48.TAFH2M0S407EN	3 - 47
3-sash Centre sash second opening turn	H48.TAFH2M0S409EN	3 - 55
Turn only sash		
1-sash square turn	H48.TAFH2M0S408EN	3 - 59

TITAN AF

Installation instructions

1-sash square tilt-turn

timber 12 mm

basic security

centre handle pos. (variable)

Hinge side axxent 24+

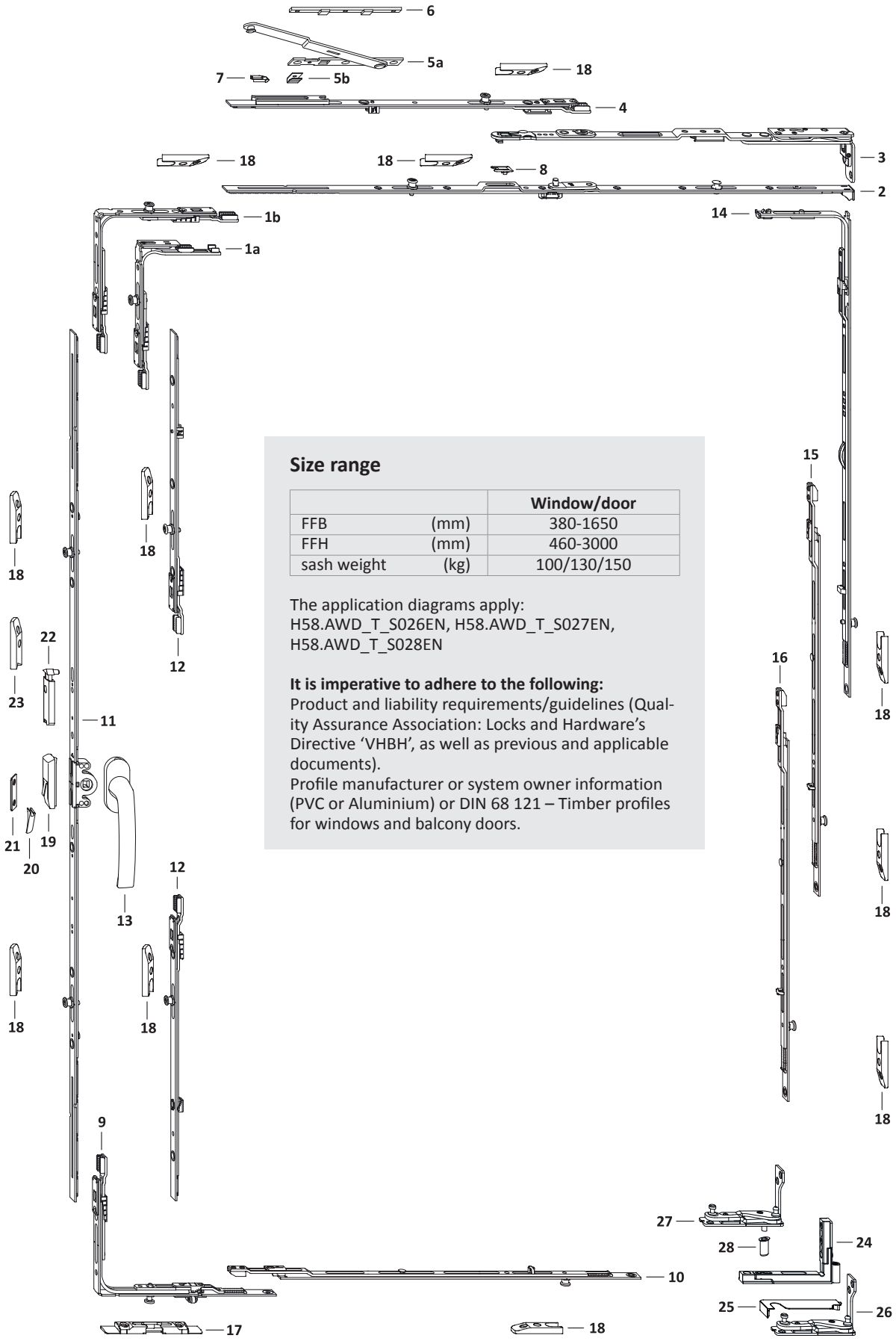
surface TS

backset 15 mm

Hardware set configuration	
General	Locking-points distance 1000
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-turn
H12 GM Hinge side axxent 24+



Size range

		Window/door
FFB	(mm)	380-1650
FFH	(mm)	460-3000
sash weight	(kg)	100/130/150

The application diagrams apply:
H58.AWD_T_S026EN, H58.AWD_T_S027EN,
H58.AWD_T_S028EN

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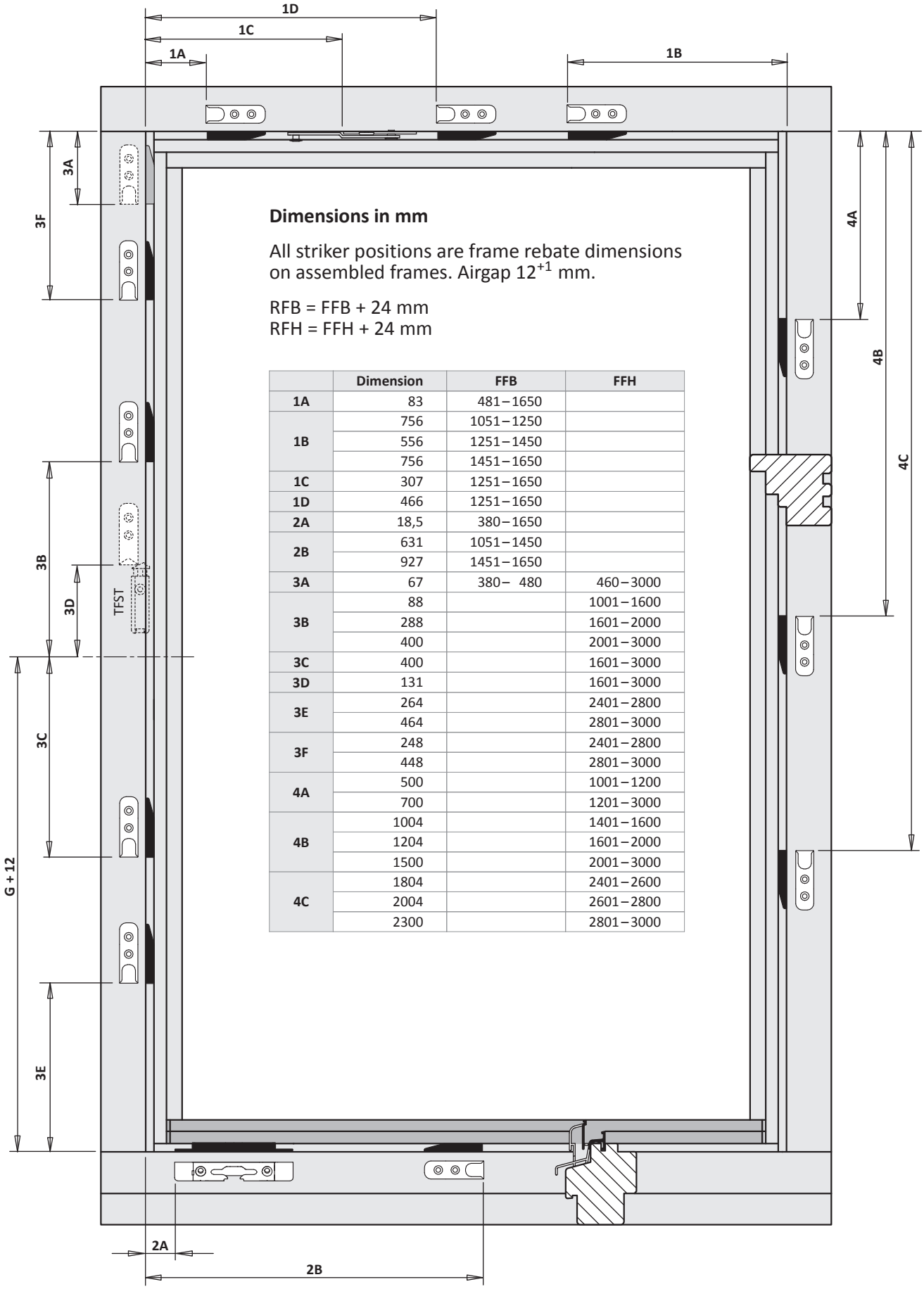
Profile manufacturer or system owner information (PVC or Aluminium) or DIN 68 121 – Timber profiles for windows and balcony doors.

Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Number of frame parts / Pos.	
							17	18
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				
	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	linkage additional stay 1RS	TZOK1010- ...	1	1251–1650				1
5	additional stay	Ref. PDB, TSZS	1	1251–1650				
6	packer Z	Ref. PDB, FRUP01	1	1251–1650				
7	tilt restr. additional stay ..	889008	1	1251–1650				
8	tilt restrictor V-V sz 2-4 ..	TFKB0040- ...	1	681–1050	460– 900			
	tilt restrictor V-V sz 5 ..	TFKB0050- ...		1051–1250	460– 900			
9	corn.drive AF VSU/K+ FH 1S	TEUL5010- ...	1	380–1650			1	
10	linkage BS/FH sz 2+ 1RS	TZBS0190- ...	1	1051–1450				1
	linkage BS/FH sz 3+ 1RS	TZBS0200- ...		1451–1650				1
11	gear 15 AF sz 20	TGMK4010- ...	1		460– 600	230– 300		
	gear 15 AF sz 60	TGMK4020- ...			601–1000	300– 500		
	gear 15 AF sz 80 1RS	TGMK4040- ...			1001–1200	500– 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
12	linkage KK/AF sz 1 1RS	TZKK1010- ...	2		2401–2800			2
	linkage KK/AF sz 2 1RS	TZKK1020- ...			2801–3000			2
13	handle Globe	Ref.access. ZHGS	1		460–3000			
14	corn.drive BS/K3 sz 1+ 1RS	TEUL2410- ...	1		1001–1200			1
	corn.drive BS/K3 sz 2+ 1RS	TEUL2420- ...			1201–3000			1
15	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
16	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
17	tilt lock bear. S-ES FH	Ref. PDB, FRKA						
18	striker plate 56	Ref. PDB, FRSB						
on request								
19	mishandling device	TFBS0010- ...	1					
20	pressure piece	Ref. PDB, TFFD	1					
21	stop	Ref. PDB, FRZF01	1					
22	snapper switchable rh.	TFST0011- ...	1		1601–3000			
	snapper switchable lh.	TFST0012- ...			1601–3000			
23	frame part snapper	Ref. PDB, TRST	1		1601–3000			

Hinge side turning points						
Pos.	Description	Part number		required as per sash weight		
		surface TS	RAL7037	100 kg	130 kg	150 kg
24	corner hinge AX	Ref. PDB, TBEB41		1	1	1
25	cover cap AX EL	Ref. PDB, TKEL41		1	1	1
26	bottom hinge AX	Ref. PDB, TBEV41		1		
27	bottom hinge AX Ø8	Ref. PDB, TBEV42			1	1
28	supporting dowel AX	TBAV4010-0 ...			1	1

Frame dimensions

1-sash square tilt-turn
H12 GM Hinge side axxent 24+



Dimensions in mm

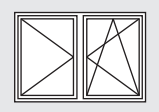
All striker positions are frame rebate dimensions on assembled frames. Airgap 12^{+1} mm.

RFB = FFB + 24 mm
RFH = FFH + 24 mm

	Dimension	FFB	FFH
1A	83	481–1650	
1B	756	1051–1250	
	556	1251–1450	
	756	1451–1650	
1C	307	1251–1650	
1D	466	1251–1650	
2A	18,5	380–1650	
2B	631	1051–1450	
	927	1451–1650	
3A	67	380– 480	460–3000
3B	88		1001–1600
	288		1601–2000
	400		2001–3000
3C	400		1601–3000
3D	131		1601–3000
3E	264		2401–2800
	464		2801–3000
3F	248		2401–2800
	448		2801–3000
4A	500		1001–1200
	700		1201–3000
4B	1004		1401–1600
	1204		1601–2000
	1500		2001–3000
4C	1804		2401–2600
	2004		2601–2800
	2300		2801–3000

TITAN AF

Installation instructions



GS

2-sash square tilt-turn/turn DS 16

timber 12 mm

basic security

centre handle pos. (variable)

Hinge side axxent 24+

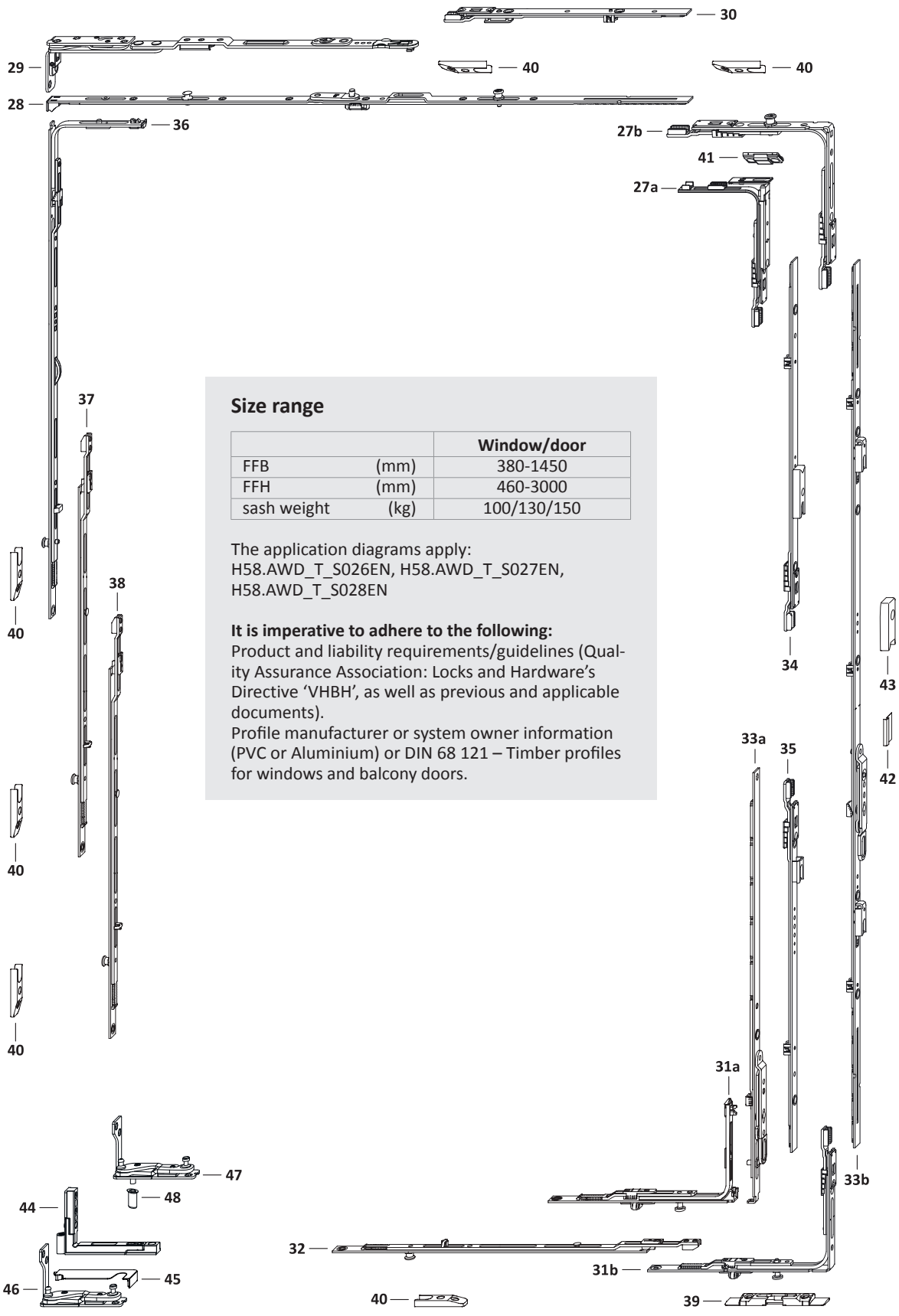
surface TS

backset 15 mm

Hardware set configuration	
General	Locking-points distance 1000; 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 slave sash

2-sash square tilt-turn/turn DS 16
H12 GM Hinge side axxent 24+



Size range

		Window/door
FFB	(mm)	380-1450
FFH	(mm)	460-3000
sash weight	(kg)	100/130/150

The application diagrams apply:
H58.AWD_T_S026EN, H58.AWD_T_S027EN,
H58.AWD_T_S028EN

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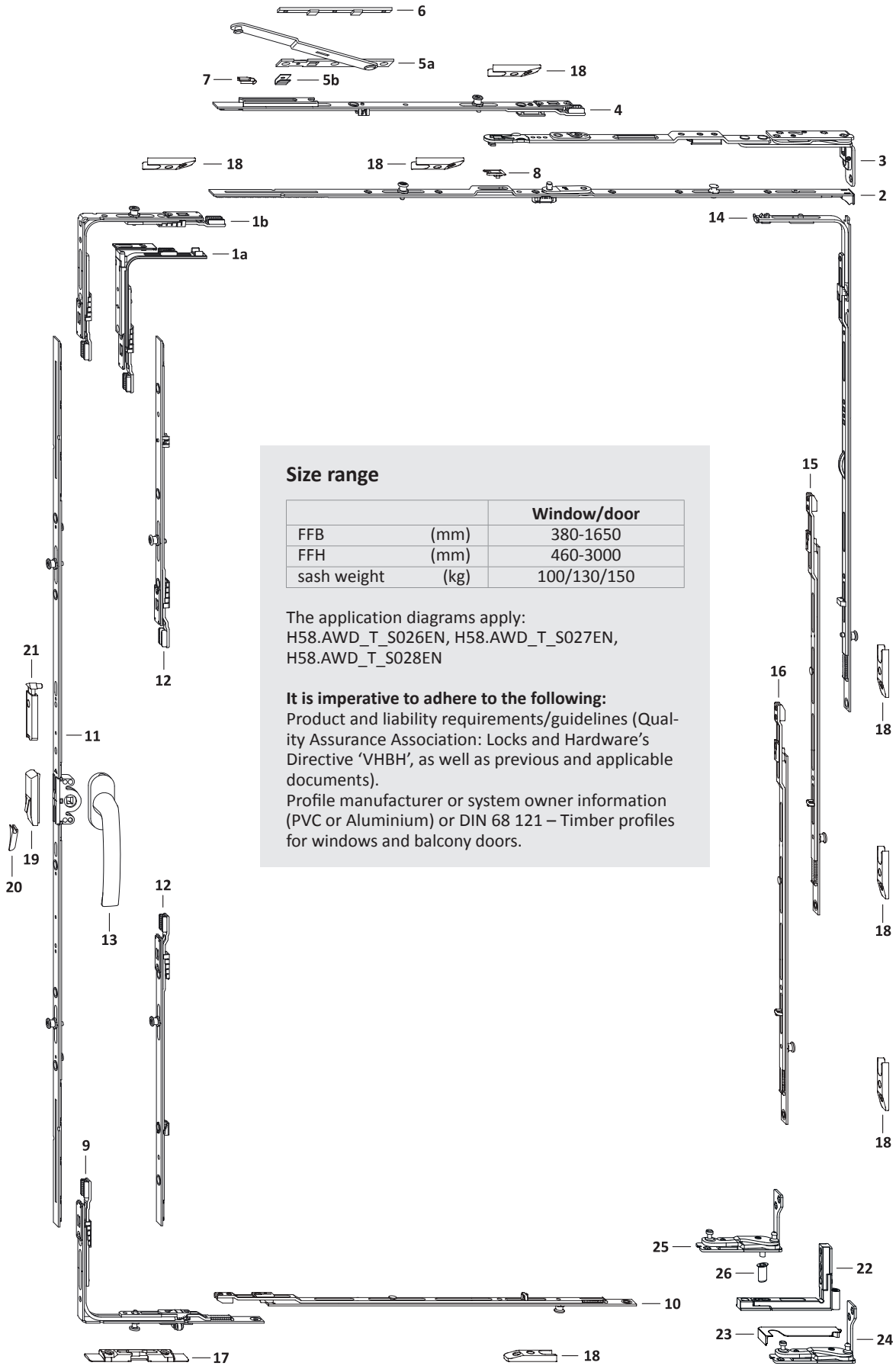

Size range

		Window/door
FFB	(mm)	380-1650
FFH	(mm)	460-3000
sash weight	(kg)	100/130/150

The application diagrams apply:
H58.AWD_T_S026EN, H58.AWD_T_S027EN,
H58.AWD_T_S028EN

It is imperative to adhere to the following:
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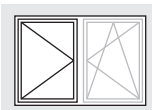
List of fittings slave sash

2-sash square tilt-turn/turn DS 16
H12 GM Hinge side axxent 24+



Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Number of frame parts / Pos.		
						In the main sash	39	40	41
27a	corn.drive VSO narrow RSA/11mm	TEUL4150- ...	1	380– 480					1
27b	corn.drive VSO 1RS	TEUL4010- ...	1	481–1450				1	
28	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					
	stay sash part AF AX sz 5 1RS	TSSV0330- ...		1051–1450				1	
29	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		1051–1450					
30	linkage AF sz 1	TZZS0150- ...	1	1251–1450					
31a	locking part VSU/K FH+ 1S	TEVR1400- ...	1	380–1450	460– 800		1		
31b	corn.drive AF VSU/K+ FH 1S	TEUL5010- ...	1	380–1450	801–3000		1		
32	linkage BS/FH sz 2+ 1RS	TZBS0190- ...	1	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		1001–1200			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							
41	short striker V	Ref. PDB, FRZV12							
on request									
42	stop	Ref. PDB, FRZF04	1		601–3000				
43	striker snapper A0767	TRST0010- ...	1		1601–3000				

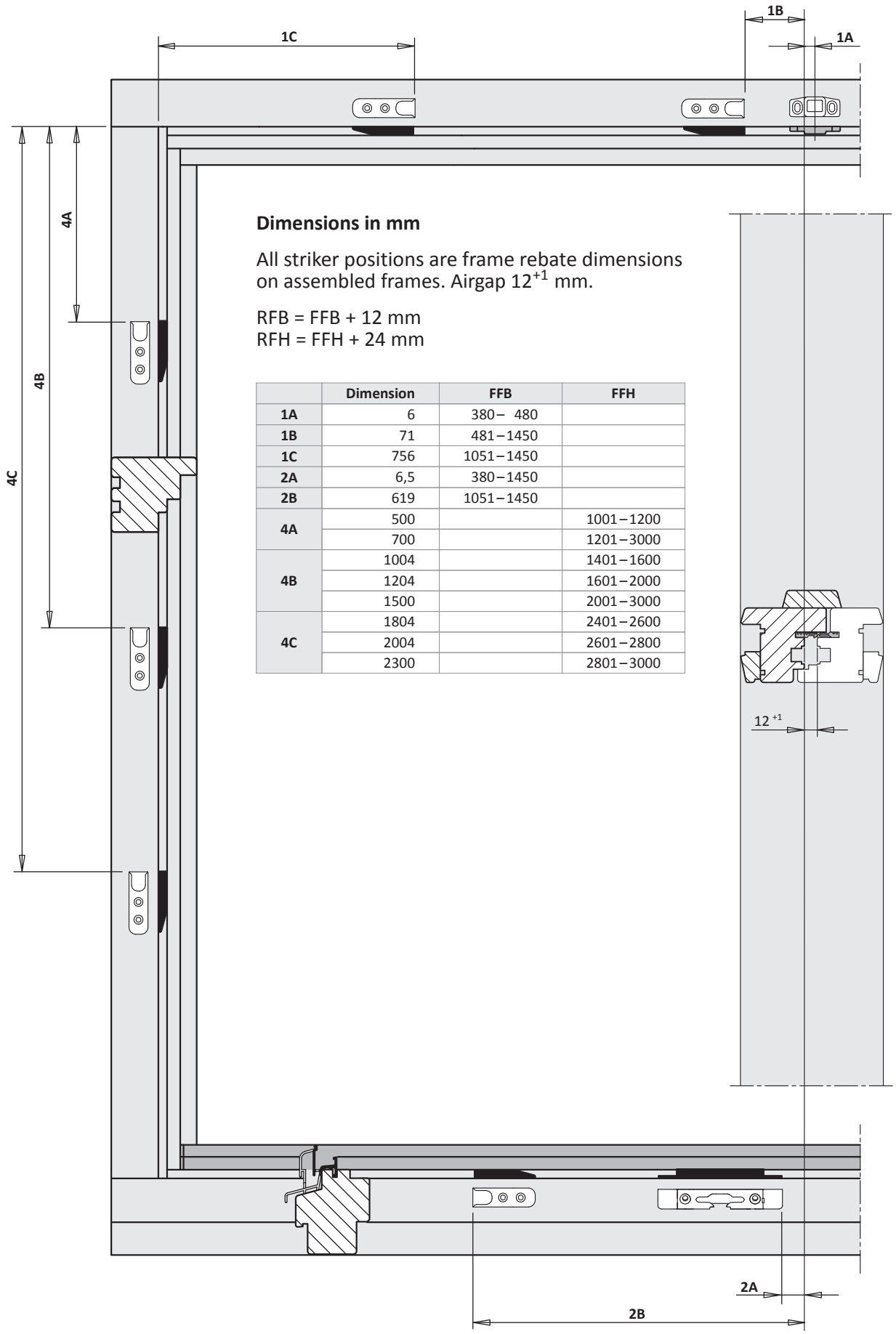
Hinge side turning points						
Pos.	Description	Part number		required as per sash weight		
		surface TS	RAL7037	100 kg	130 kg	150 kg
44	corner hinge AX	Ref. PDB, TBEB41		1	1	1
45	cover cap AX EL	Ref. PDB, TKEL41		1	1	1
46	bottom hinge AX	Ref. PDB, TBEV41		1		
47	bottom hinge AX Ø8	Ref. PDB, TBEV42			1	1
48	supporting dowel AX	TBAV4010-0 ...			1	1

Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Number of frame parts / Pos.	
							17	18
1a	corn.drive VSO narrow RSA/11mm	TEUL4150- ...	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				
	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	linkage additional stay 1RS	TZOK1010- ...	1	1251–1650				1
5	additional stay	Ref. PDB, TSZS	1	1251–1650				
6	packer Z	Ref. PDB, FRUP01	1	1251–1650				
7	tilt restr. additional stay ..	889008	1	1251–1650				
8	tilt restrictor V-V sz 2-4 ..	TFKB0040- ...	1	681–1050	460– 900			
	tilt restrictor V-V sz 5 ..	TFKB0050- ...		1051–1250	460– 900			
9	corn.drive AF VSU/K+ FH 1S	TEUL5010- ...	1	380–1650			1	
10	linkage BS/FH sz 2+ 1RS	TZBS0190- ...	1	1051–1450				1
	linkage BS/FH sz 3+ 1RS	TZBS0200- ...		1451–1650				1
11	gear 15 AF sz 20	TGMK4010- ...	1		460– 600	230– 300		
	gear 15 AF sz 60	TGMK4020- ...			601–1000	300– 500		
	gear 15 AF sz 80 1RS	TGMK4040- ...			1001–1200	500– 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		
12	linkage KK/AF sz 1 1RS	TZKK1010- ...	2		2401–2800			
	linkage KK/AF sz 2 1RS	TZKK1020- ...			2801–3000			
13	handle Globe	Ref.access. ZHGS	1		460–3000			
14	corn.drive BS/K3 sz 1+ 1RS	TEUL2410- ...	1		1001–1200			1
	corn.drive BS/K3 sz 2+ 1RS	TEUL2420- ...			1201–3000			1
15	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
16	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
17	tilt lock bear. S-ES FH	Ref. PDB, FRKA						
18	striker plate 56	Ref. PDB, FRSB						
on request								
19	mishandling device	TFBS0010- ...	1		601–3000			
20	pressure piece	Ref. PDB, TFFD	1		601–3000			
21	snapper switchable rh.	TFST0011- ...	1		1601–3000			
	snapper switchable lh.	TFST0012- ...			1601–3000			

Hinge side turning points						
Pos.	Description	Part number		required as per sash weight		
		surface TS	RAL7037	100 kg	130 kg	150 kg
22	corner hinge AX	Ref. PDB, TBEB41		1	1	1
23	cover cap AX EL	Ref. PDB, TKEL41		1	1	1
24	bottom hinge AX	Ref. PDB, TBEV41		1		
25	bottom hinge AX Ø8	Ref. PDB, TBEV42			1	1
26	supporting dowel AX	TBAV4010-0 ...			1	1

Frame dimensions slave sash

2-sash square tilt-turn/turn DS 16
H12 GM Hinge side axxent 24+

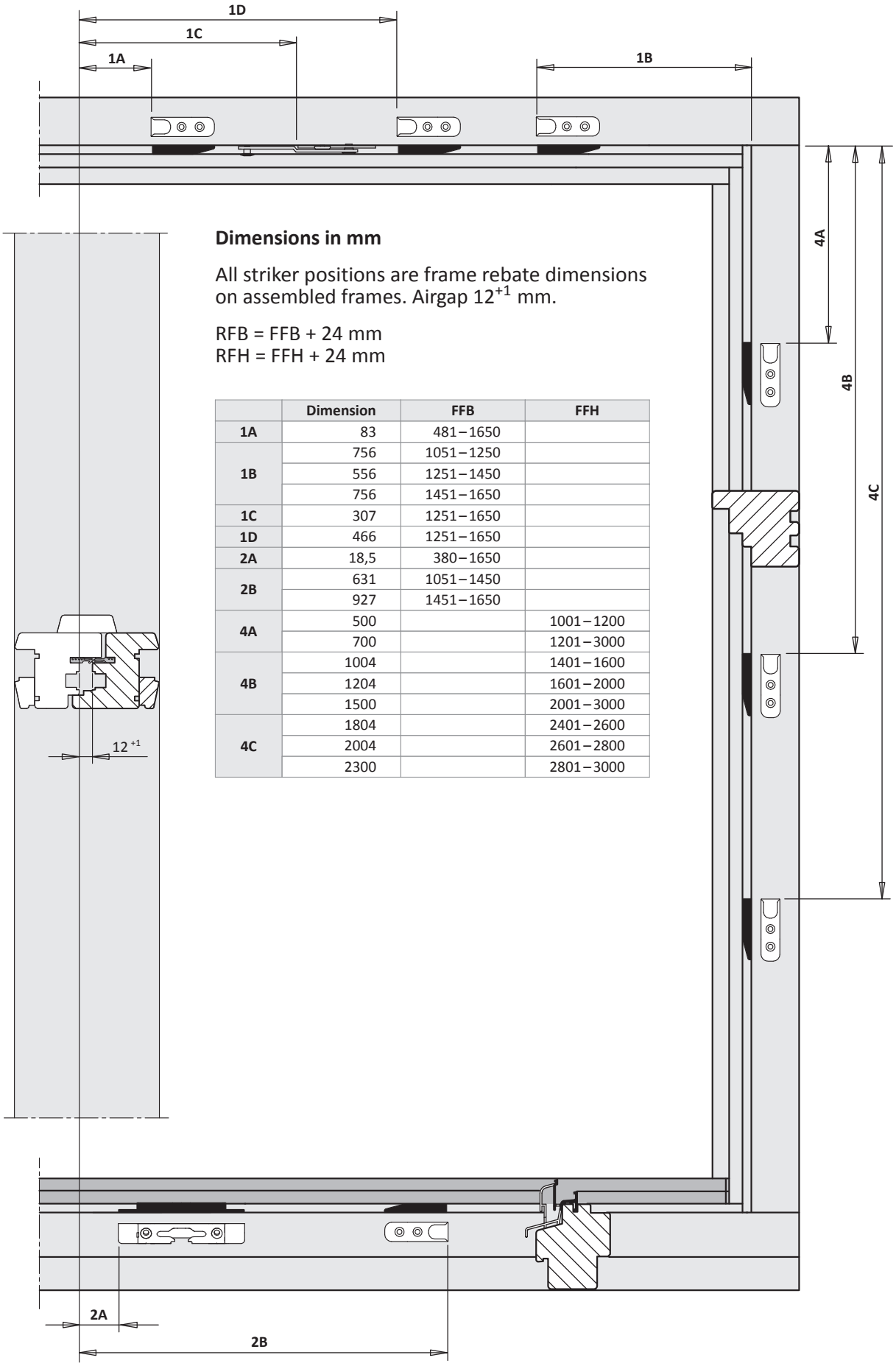


Dimensions in mm

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

RFB = FFB + 12 mm
RFH = FFH + 24 mm

	Dimension	FFB	FFH
1A	6	380 – 480	
1B	71	481 – 1450	
1C	756	1051 – 1450	
2A	6,5	380 – 1450	
2B	619	1051 – 1450	
4A	500		1001 – 1200
	700		1201 – 3000
4B	1004		1401 – 1600
	1204		1601 – 2000
	1500		2001 – 3000
4C	1804		2401 – 2600
	2004		2601 – 2800
	2300		2801 – 3000



Dimensions in mm

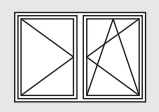
All striker positions are frame rebate dimensions on assembled frames. Airgap 12^{+1} mm.

RFB = FFB + 24 mm
RFH = FFH + 24 mm

	Dimension	FFB	FFH
1A	83	481 – 1650	
1B	756	1051 – 1250	
	556	1251 – 1450	
	756	1451 – 1650	
1C	307	1251 – 1650	
1D	466	1251 – 1650	
2A	18,5	380 – 1650	
2B	631	1051 – 1450	
	927	1451 – 1650	
4A	500		1001 – 1200
	700		1201 – 3000
4B	1004		1401 – 1600
	1204		1601 – 2000
	1500		2001 – 3000
4C	1804		2401 – 2600
	2004		2601 – 2800
	2300		2801 – 3000

TITAN AF

Installation instructions



GS

2-sash square tilt-turn/turn DS 16

timber 12 mm

basic security

centre handle pos. (variable)

Hinge side axxent 24+

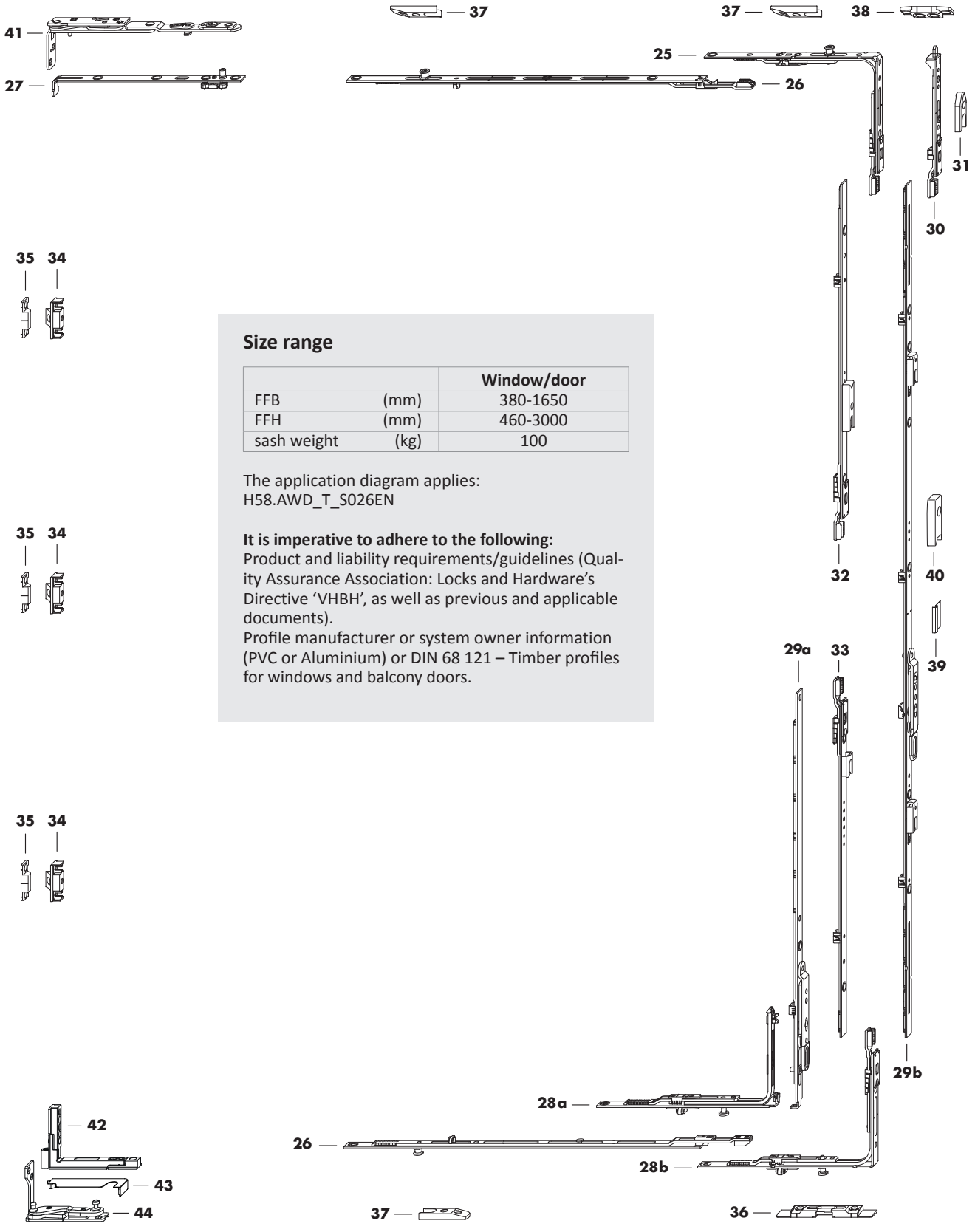
surface TS

backset 15 mm

Hardware set configuration	
General	Locking-points distance 1000
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 slave sash

2-sash square tilt-turn/turn DS 16
H12 GM Hinge side axxent 24+

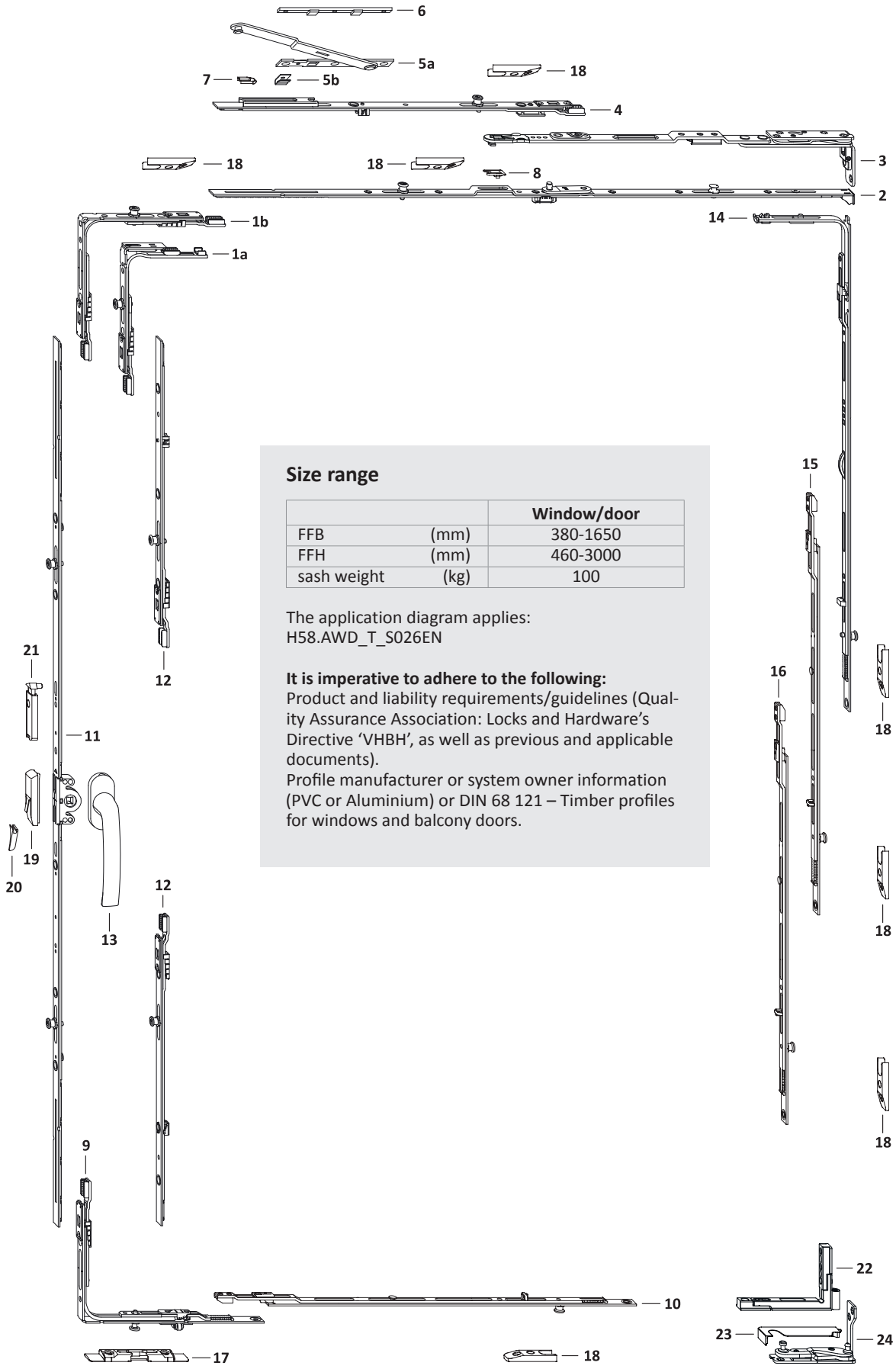


Size range

		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.



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:
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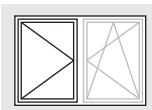
List of fittings slave sash

2-sash square tilt-turn/turn DS 16
H12 GM Hinge side axxent 24+



Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Number of frame parts / Pos.		
						In the main sash	36	37	38
25	corn.drive VSO/K+ DF 1RS	TEUL4110- ...	1	481–1650				1	
26	linkage BS/FH sz 2+ 1RS	TZBS0190- ...	2	1051–1450				2	
	linkage BS/FH sz 3+ 1RS	TZBS0200- ...		1451–1650				2	
27	stay sash part DF AX	TSSV3020- ...	1	380–1650					
28a	locking part VSU/K FH+ 1S	TEVR1400- ...	1	380–1650	460– 800		1		
28b	corn.drive AF VSU/K+ FH 1S	TEUL5010- ...	1	380–1650	801–3000		1		
29a	sec.sash gear 16 sz 30	TGKS0010- ...	1		460– 600	230– 300			
	sec.sash gear 16 AF 60/G300	TGKS4030- ...			601– 800	300– 400			
29b	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			
30	locking bolt AF VSO RSA 11	TESC2030- ...	1	380– 480	460–3000				1
31	striker plate A0767	TRSA0010- ...	1	380– 480	460–3000				
32	linkage AF sz 1 1SB-RS	TZKS1020- ...	1		2401–2800				
	linkage AF sz 2 1SB-RS	TZKS1030- ...			2801–3000				
33	linkage AF sz 1 1SB-VSU	TZKS1060- ...	1		2401–2800				
	linkage AF sz 2 1SB-VSU	TZKS1070- ...			2801–3000				
34	sash part MV	Ref. PDB, ZFMV01	1		1001–1600				
	sash part MV	Ref. PDB, ZFMV01	2		1601–2400				
	sash part MV	Ref. PDB, ZFMV01	3		2401–3000				
35	frame part MV	Ref. PDB, ZRZM01	1		1001–1600				
	frame part MV	Ref. PDB, ZRZM01	2		1601–2400				
	frame part MV	Ref. PDB, ZRZM01	3		2401–3000				
36	tilt lock bear. S-ES FH	Ref. PDB, FRKA							
37	striker plate 56	Ref. PDB, FRSB							
38	striker V	Ref. PDB, FRZV02							
on request									
39	stop	Ref. PDB, FRZF04	1		601–3000				
40	striker snapper A0767	TRST0010- ...	1		1601–3000				

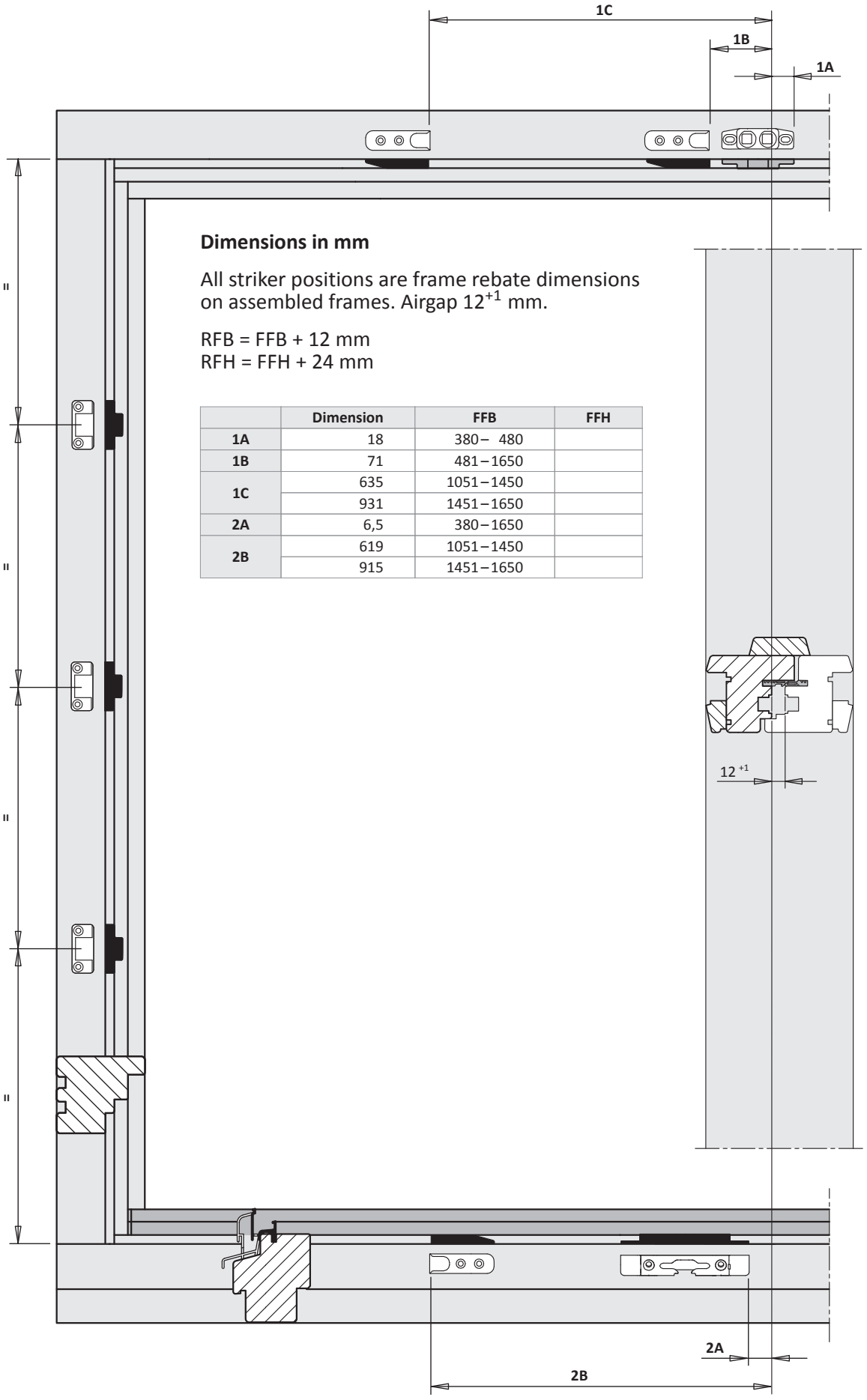
Hinge side turning points				
Pos.	Description	Part number		required as per sash weight
		surface TS	RAL7037	100 kg
41	stay arm AX DF	Ref. PDB, TSAV46		1
42	corner hinge AX	Ref. PDB, TBEB41		1
43	cover cap AX EL	Ref. PDB, TKEL41		1
44	bottom hinge AX	Ref. PDB, TBEV41		1

Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Number of frame parts / Pos.	
							17	18
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				
	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	linkage additional stay 1RS	TZOK1010- ...	1	1251–1650				1
5	additional stay	Ref. PDB, TSZS	1	1251–1650				
6	packer Z	Ref. PDB, FRUP01	1	1251–1650				
7	tilt restr. additional stay ..	889008	1	1251–1650				
8	tilt restrictor V-V sz 2-4 ..	TFKB0040- ...	1	681–1050	460– 900			
	tilt restrictor V-V sz 5 ..	TFKB0050- ...		1051–1250	460– 900			
9	corn.drive AF VSU/K+ FH 1S	TEUL5010- ...	1	380–1650			1	
10	linkage BS/FH sz 2+ 1RS	TZBS0190- ...	1	1051–1450				1
	linkage BS/FH sz 3+ 1RS	TZBS0200- ...		1451–1650				1
11	gear 15 AF sz 20	TGMK4010- ...	1		460– 600	230– 300		
	gear 15 AF sz 60	TGMK4020- ...			601–1000	300– 500		
	gear 15 AF sz 80 1RS	TGMK4040- ...			1001–1200	500– 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		
12	linkage KK/AF sz 1 1RS	TZKK1010- ...	2		2401–2800			
	linkage KK/AF sz 2 1RS	TZKK1020- ...			2801–3000			
13	handle Globe	Ref.access. ZHGS	1		460–3000			
14	corn.drive BS/K3 sz 1+ 1RS	TEUL2410- ...	1		1001–1200			1
	corn.drive BS/K3 sz 2+ 1RS	TEUL2420- ...			1201–3000			1
15	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
16	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
17	tilt lock bear. S-ES FH	Ref. PDB, FRKA						
18	striker plate 56	Ref. PDB, FRSB						
on request								
19	mishandling device	TFBS0010- ...	1		601–3000			
20	pressure piece	Ref. PDB, TFFD	1		601–3000			
21	snapper switchable rh.	TFST0011- ...	1		1601–3000			
	snapper switchable lh.	TFST0012- ...			1601–3000			

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

Frame dimensions slave sash

2-sash square tilt-turn/turn DS 16
H12 GM Hinge side axxent 24+

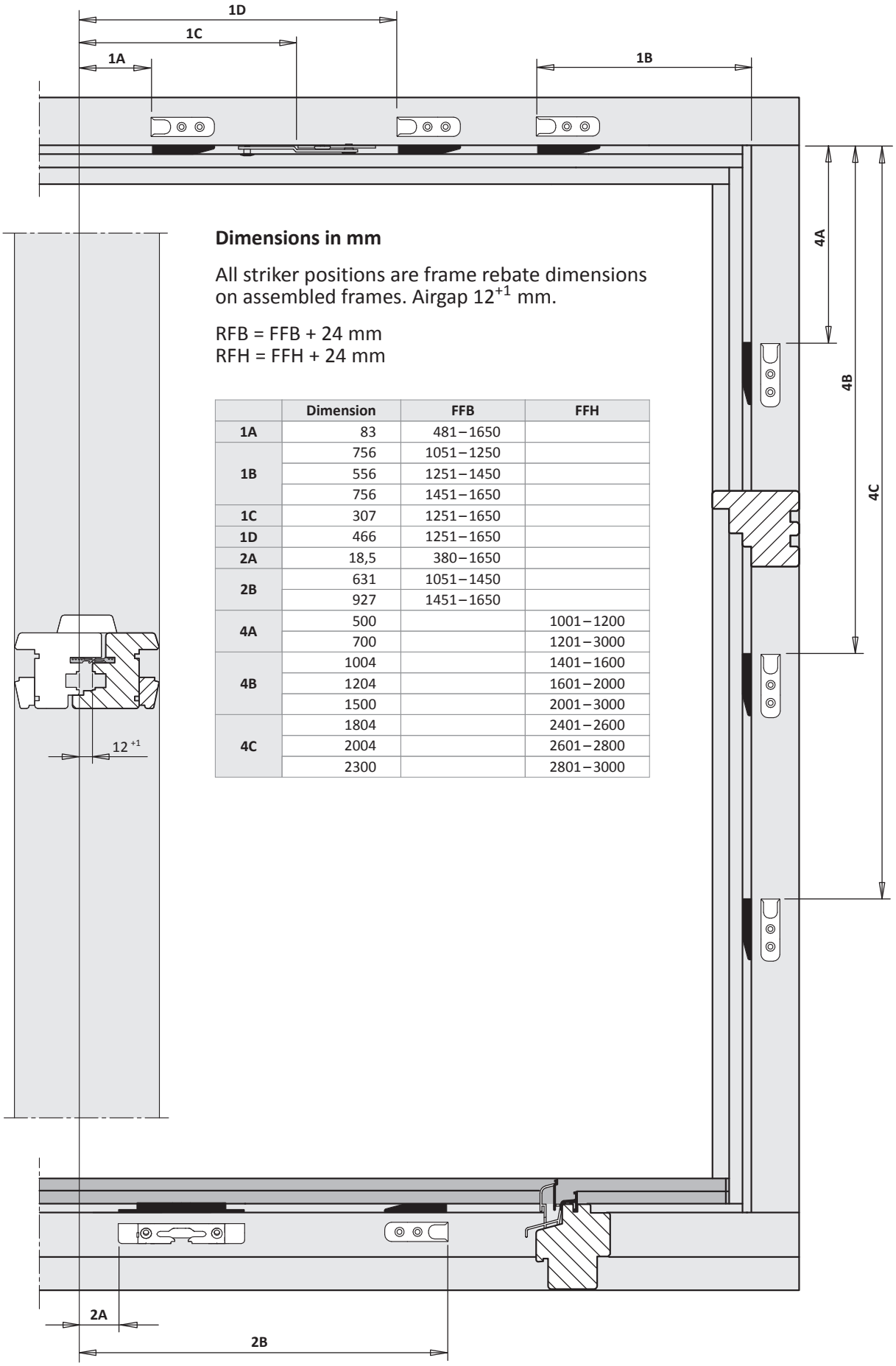


Dimensions in mm

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

RFB = FFB + 12 mm
RFH = FFH + 24 mm

	Dimension	FFB	FFH
1A	18	380– 480	
1B	71	481–1650	
1C	635	1051–1450	
	931	1451–1650	
2A	6,5	380–1650	
2B	619	1051–1450	
	915	1451–1650	



Dimensions in mm

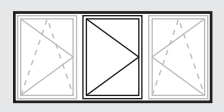
All striker positions are frame rebate dimensions on assembled frames. Airgap 12^{+1} mm.

RFB = FFB + 24 mm
RFH = FFH + 24 mm

	Dimension	FFB	FFH
1A	83	481 – 1650	
1B	756	1051 – 1250	
	556	1251 – 1450	
	756	1451 – 1650	
1C	307	1251 – 1650	
1D	466	1251 – 1650	
2A	18,5	380 – 1650	
2B	631	1051 – 1450	
	927	1451 – 1650	
4A	500		1001 – 1200
	700		1201 – 3000
4B	1004		1401 – 1600
	1204		1601 – 2000
	1500		2001 – 3000
4C	1804		2401 – 2600
	2004		2601 – 2800
	2300		2801 – 3000

TITAN AF

Installation instructions



GS

3-sash Centre sash second opening turn

timber 12 mm

basic security

centre handle pos. (variable)

Hinge side axxent 24+

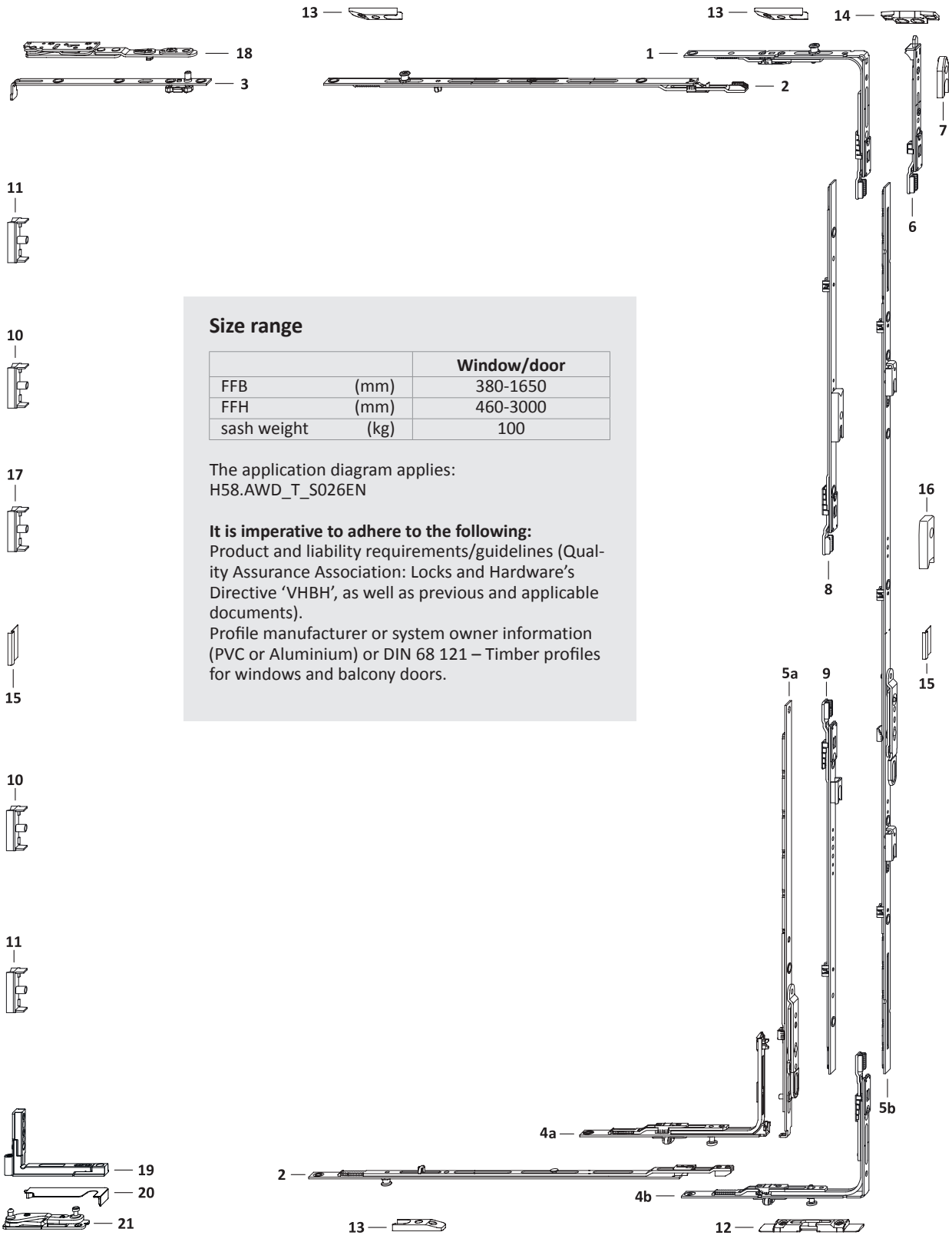
surface TS

backset 15 mm

Hardware set configuration	
General	Locking-points distance 1000
Stay side	two-piece stay ax 24+
Bottom	Inliner
Locking side	mishandl. device on gear

hardware layout

3-sash Centre sash second opening turn
H12 GM Hinge side axxent 24+



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:
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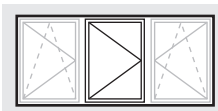


List of fittings

3-sash Centre sash second opening turn
H12 GM Hinge side axxent 24+

TITAN AF

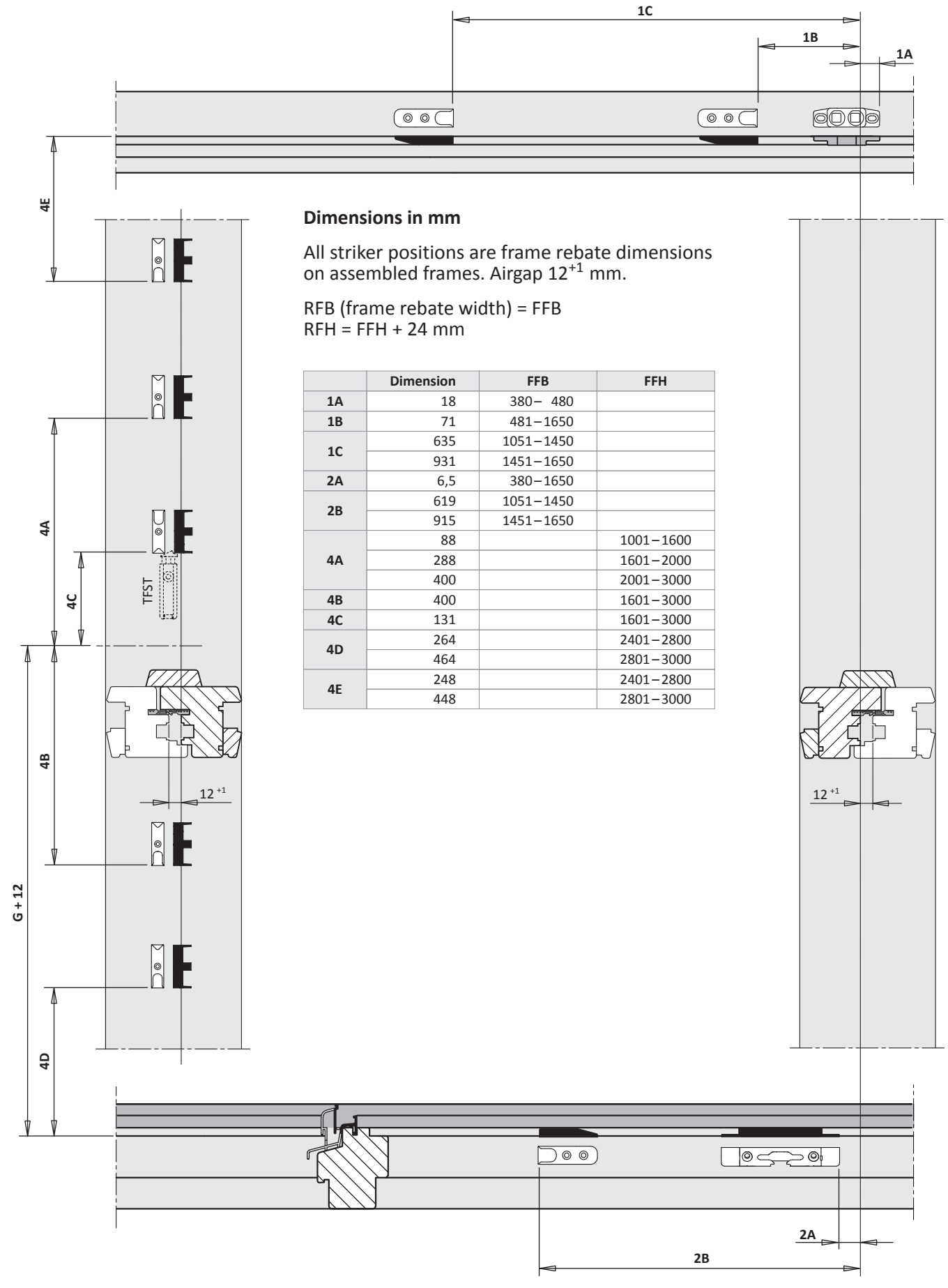
GS

Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Number of frame parts / Pos.		
							12	13	14
1	corn.drive VSO/K+ DF 1RS	TEUL4110- ...	1	481 – 1650				1	
2	linkage BS/FH sz 2+ 1RS	TZBS0190- ...	2	1051 – 1450				2	
	linkage BS/FH sz 3+ 1RS	TZBS0200- ...		1451 – 1650				2	
3	stay sash part DF AX	TSSV3020- ...	1	380 – 1650					
4a	locking part VSU/K FH+ 1S	TEVR1400- ...	1	380 – 1650	460 – 800		1		
4b	corn.drive AF VSU/K+ FH 1S	TEUL5010- ...	1	380 – 1650	801 – 3000		1		
5a	sec.sash gear 16 sz 30	TGKS0010- ...	1		460 – 600	230 – 300			
	sec.sash gear 16 AF 60/G300	TGKS4030- ...			601 – 800	300 – 400			
5b	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			
6	locking bolt AF VSO RSA 11	TESC2030- ...	1	380 – 480	460 – 3000				1
7	striker plate A0767	TRSA0010- ...	1	380 – 480	460 – 3000				
8	linkage AF sz 1 1SB-RS	TZKS1020- ...	1		2401 – 2800				
	linkage AF sz 2 1SB-RS	TZKS1030- ...			2801 – 3000				
9	linkage AF sz 1 1SB-VSU	TZKS1060- ...	1		2401 – 2800				
	linkage AF sz 2 1SB-VSU	TZKS1070- ...			2801 – 3000				
10	striker plate 56 A2000	TRSB0030- ...	1		1001 – 1200				
	striker plate 56 A2000	TRSB0030- ...			1201 – 1600				
	striker plate 56 A2000	TRSB0030- ...	2		1601 – 2000				
	striker plate 56 A2000	TRSB0030- ...			2001 – 3000				
11	striker plate 56 A2000	TRSB0030- ...	2		2401 – 3000				
12	tilt lock bear. S-ES FH	Ref. PDB, FRKA							
13	striker plate 56	Ref. PDB, FRSB							
14	striker V	Ref. PDB, FRZV02							
on request									
15	stop	Ref. PDB, FRZF04	2		601 – 3000				
16	striker snapper A0767	TRST0010- ...	1		1601 – 3000				
17	striker plate 56 A2000	TRSB0030- ...	1		1601 – 3000				

Hinge side turning points				
Pos.	Description	Part number		required as per sash weight
		surface TS	RAL7037	100 kg
18	stay arm AX DF/3	Ref. PDB, TSAV47		1
19	corner hinge AX	Ref. PDB, TBEB41		1
20	cover cap AX EL	Ref. PDB, TKEL41		1
21	bottom hinge AX DF/3	Ref. PDB, TBEV43		1

Frame dimensions

3-sash Centre sash second opening turn
H12 GM Hinge side axxent 24+



Dimensions in mm

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

RFB (frame rebate width) = FFB
RFH = FFH + 24 mm

	Dimension	FFB	FFH
1A	18	380– 480	
1B	71	481–1650	
1C	635	1051–1450	
	931	1451–1650	
2A	6,5	380–1650	
2B	619	1051–1450	
	915	1451–1650	
4A	88		1001–1600
	288		1601–2000
	400		2001–3000
4B	400		1601–3000
4C	131		1601–3000
4D	264		2401–2800
	464		2801–3000
4E	248		2401–2800
	448		2801–3000

TITAN AF

Installation instructions

1-sash square tilt before turn (TBT)

timber 12 mm

basic security

centre handle pos. (variable)

Hinge side axxent 24+

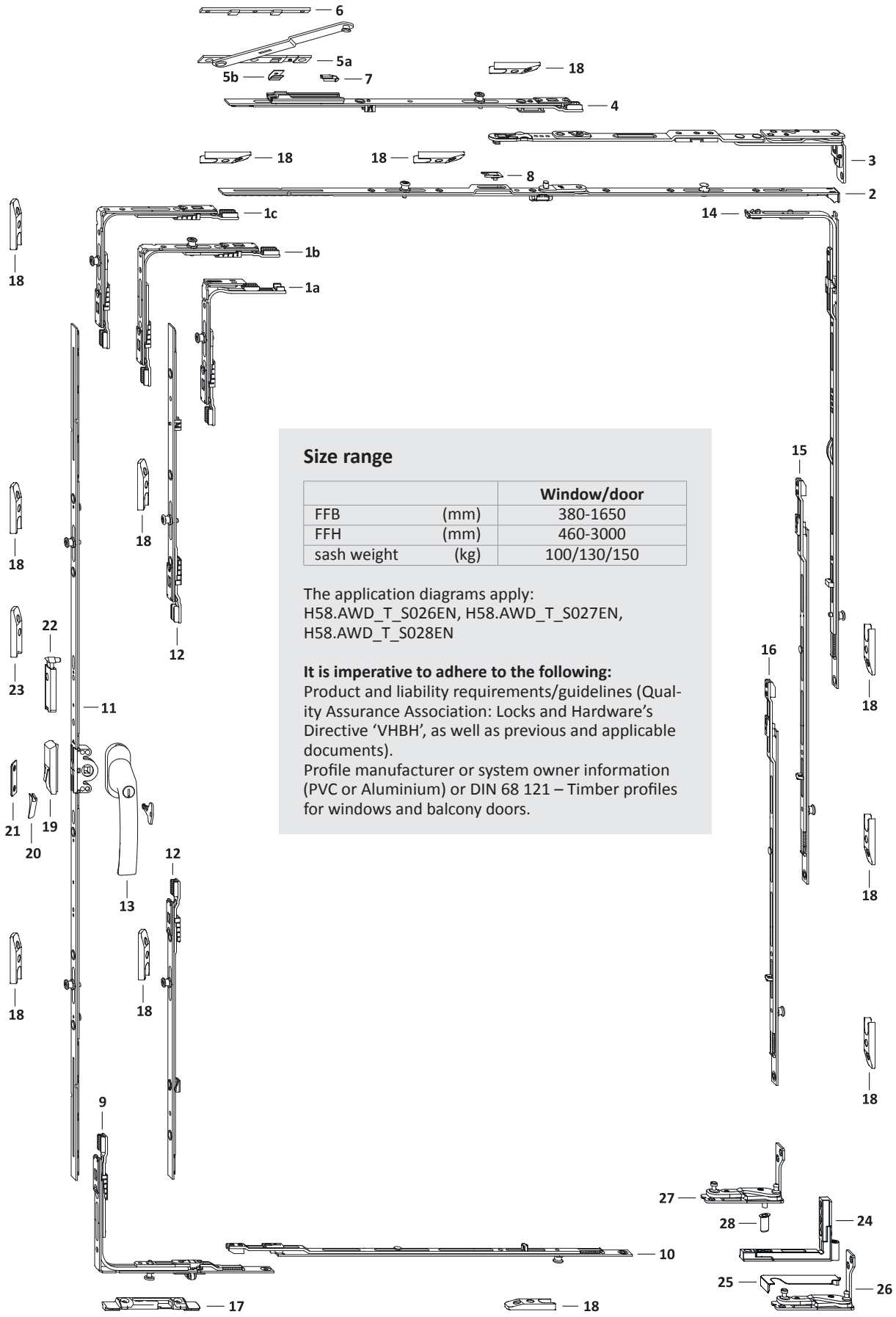
surface TS

backset 15 mm

Hardware set configuration	
General	Locking-points distance 1000
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)
H12 GM Hinge side axxent 24+



Size range

		Window/door
FFB	(mm)	380-1650
FFH	(mm)	460-3000
sash weight	(kg)	100/130/150

The application diagrams apply:
H58.AWD_T_S026EN, H58.AWD_T_S027EN,
H58.AWD_T_S028EN

It is imperative to adhere to the following:
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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)
H12 GM Hinge side axxent 24+

TITAN AF

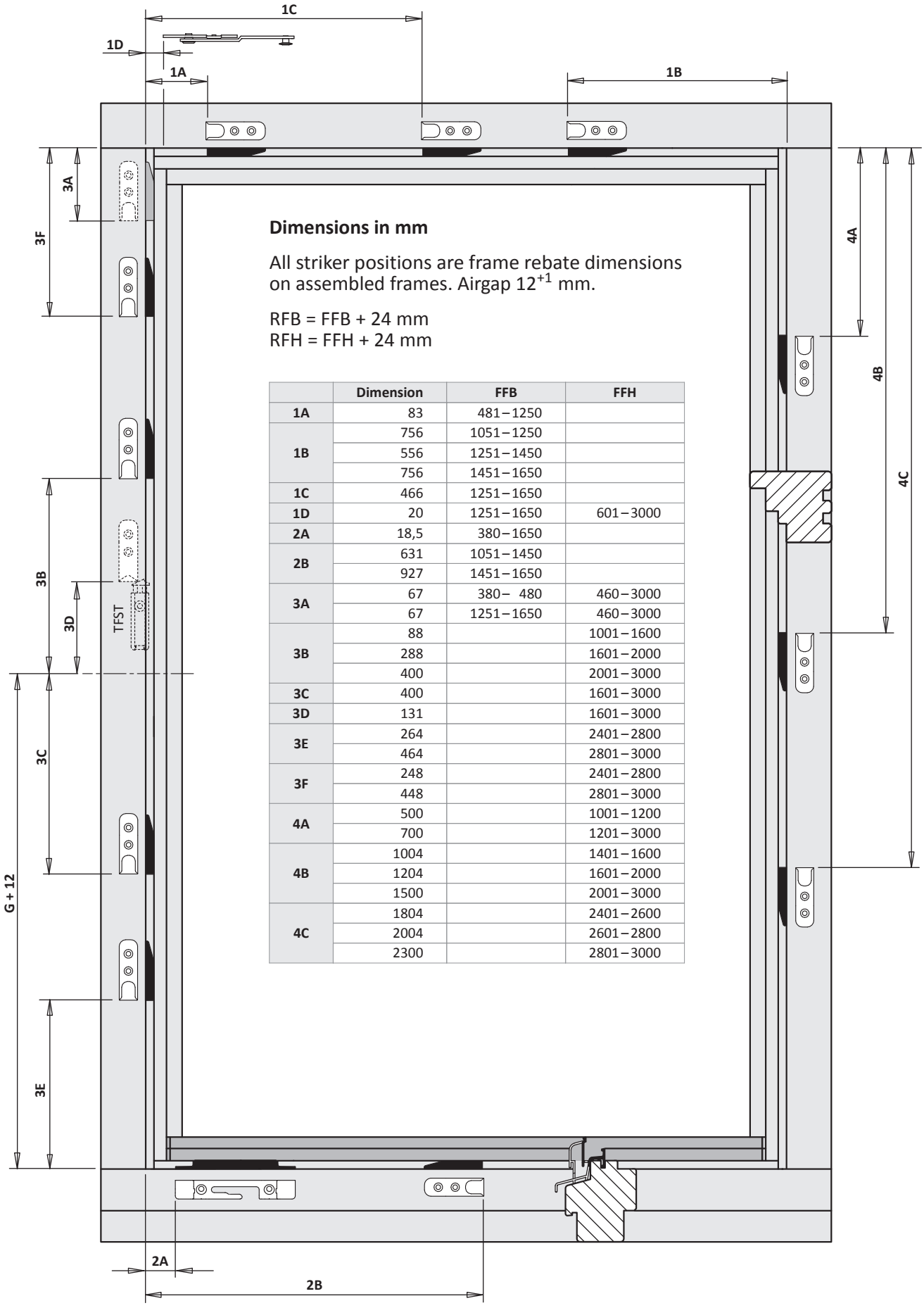
GS

Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Number of frame parts / Pos.	
							17	18
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				
	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	linkage add. stay AF TBT RS	TZOT1010- ...	1	1251–1650				1
5	additional stay	Ref. PDB, TSZS	1	1251–1650				
6	packer Z	Ref. PDB, FRUP01	1	1251–1650				
7	tilt restr. additional stay ..	889008	1	1251–1650				
8	tilt restrictor V-V sz 2-4 ..	TFKB0040- ...	1	681–1050	460– 900			
	tilt restrictor V-V sz 5 ..	TFKB0050- ...		1051–1250	460– 900			
9	corn.drive AF VSU/K+ FH 1S	TEUL5010- ...	1	380–1650			1	
10	linkage BS/FH sz 2+ 1RS	TZBS0190- ...	1	1051–1450				1
	linkage BS/FH sz 3+ 1RS	TZBS0200- ...		1451–1650				1
11	gear 15 AF sz 20	TGMK4010- ...	1		460– 600	230– 300		
	gear 15 AF sz 60	TGMK4020- ...			601–1000	300– 500		
	gear 15 AF sz 80 1RS	TGMK4040- ...			1001–1200	500– 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
12	linkage KK/AF sz 1 1RS	TZKK1010- ...	2		2401–2800			2
	linkage KK/AF sz 2 1RS	TZKK1020- ...			2801–3000			2
13	handle Globe TBT lockable	Ref.access. ZHGT	1		460–3000			
14	corn.drive BS/K3 sz 1+ 1RS	TEUL2410- ...	1		1001–1200			1
	corn.drive BS/K3 sz 2+ 1RS	TEUL2420- ...			1201–3000			1
15	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
16	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
17	tilt lock bear. S-ES FH TBT	Ref. PDB, FRKB						
18	striker plate 56	Ref. PDB, FRSB						
on request								
19	mishandling device	TFBS0010- ...	1					
20	pressure piece	Ref. PDB, TFFD	1					
21	stop	Ref. PDB, FRZF01	1					
22	snapper switchable rh.	TFST0011- ...	1		1601–3000			
	snapper switchable lh.	TFST0012- ...			1601–3000			
23	frame part snapper	Ref. PDB, TRST	1		1601–3000			

Hinge side turning points						
Pos.	Description	Part number		required as per sash weight		
		surface TS	RAL7037	100 kg	130 kg	150 kg
24	corner hinge AX	Ref. PDB, TBEB41		1	1	1
25	cover cap AX EL	Ref. PDB, TKEL41		1	1	1
26	bottom hinge AX	Ref. PDB, TBEV41		1		
27	bottom hinge AX Ø8	Ref. PDB, TBEV42			1	1
28	supporting dowel AX	TBAV4010-0 ...			1	1

Frame dimensions

1-sash square tilt before turn (TBT)
H12 GM Hinge side axxent 24+



Dimensions in mm

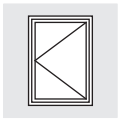
All striker positions are frame rebate dimensions on assembled frames. Airgap 12^{+1} mm.

RFB = FFB + 24 mm
RFH = FFH + 24 mm

	Dimension	FFB	FFH
1A	83	481–1250	
1B	756	1051–1250	
	556	1251–1450	
	756	1451–1650	
1C	466	1251–1650	
1D	20	1251–1650	601–3000
2A	18,5	380–1650	
2B	631	1051–1450	
	927	1451–1650	
3A	67	380– 480	460–3000
	67	1251–1650	460–3000
3B	88		1001–1600
	288		1601–2000
	400		2001–3000
3C	400		1601–3000
3D	131		1601–3000
3E	264		2401–2800
	464		2801–3000
3F	248		2401–2800
	448		2801–3000
4A	500		1001–1200
	700		1201–3000
4B	1004		1401–1600
	1204		1601–2000
	1500		2001–3000
4C	1804		2401–2600
	2004		2601–2800
	2300		2801–3000

TITAN AF

Installation instructions



1-sash square turn

timber 12 mm

basic security

centre handle pos. (variable)

Hinge side axxent 24+

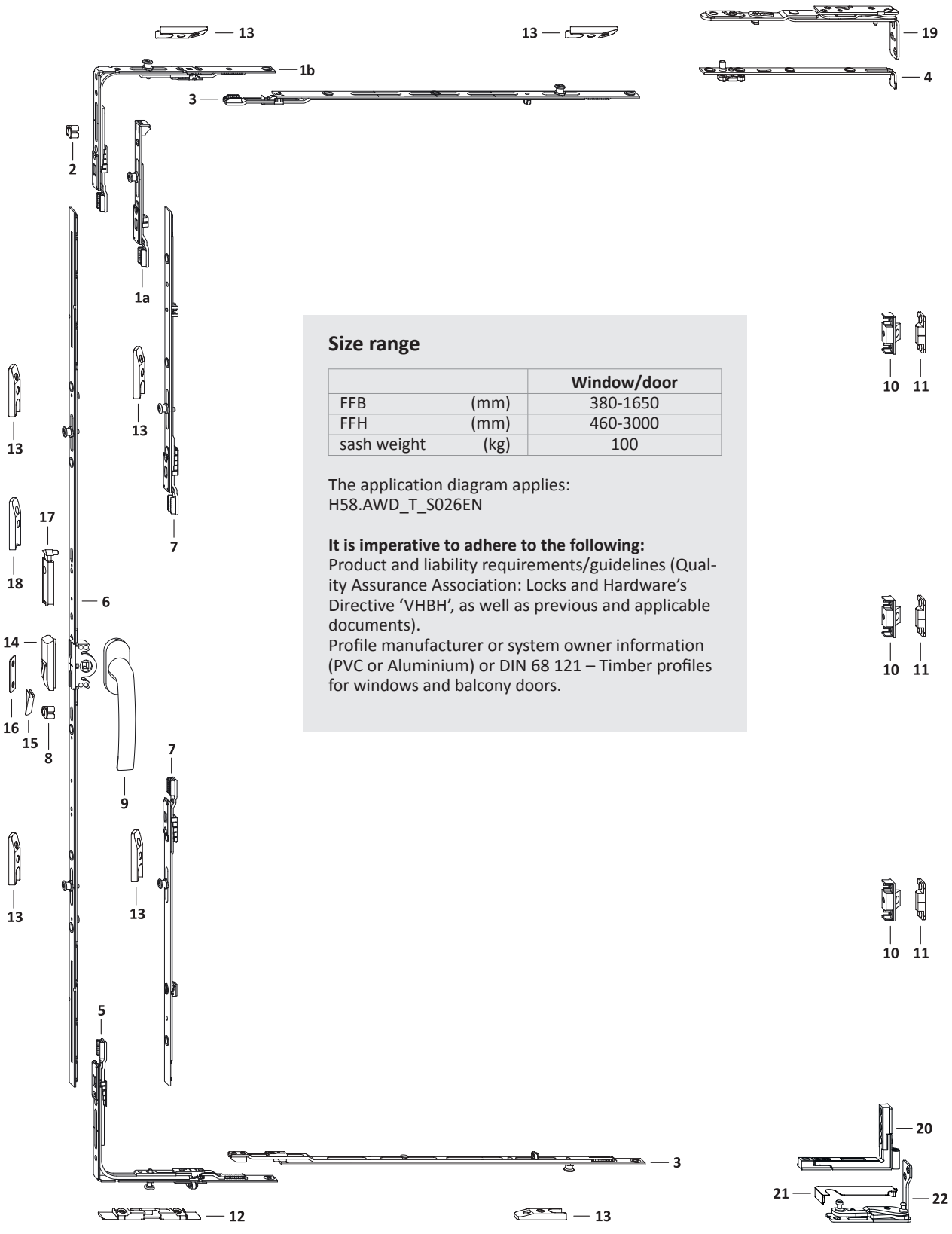
surface TS

backset 15 mm

Hardware set configuration	
General	Locking-points distance 1000
Stay side	two-piece stay ax 24+
Bottom	Inliner
Locking side	mishandl. device on gear

hardware layout

1-sash square turn
H12 GM Hinge side axxent 24+



Size range

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

The application diagram applies:
H58.AWD_T_S026EN

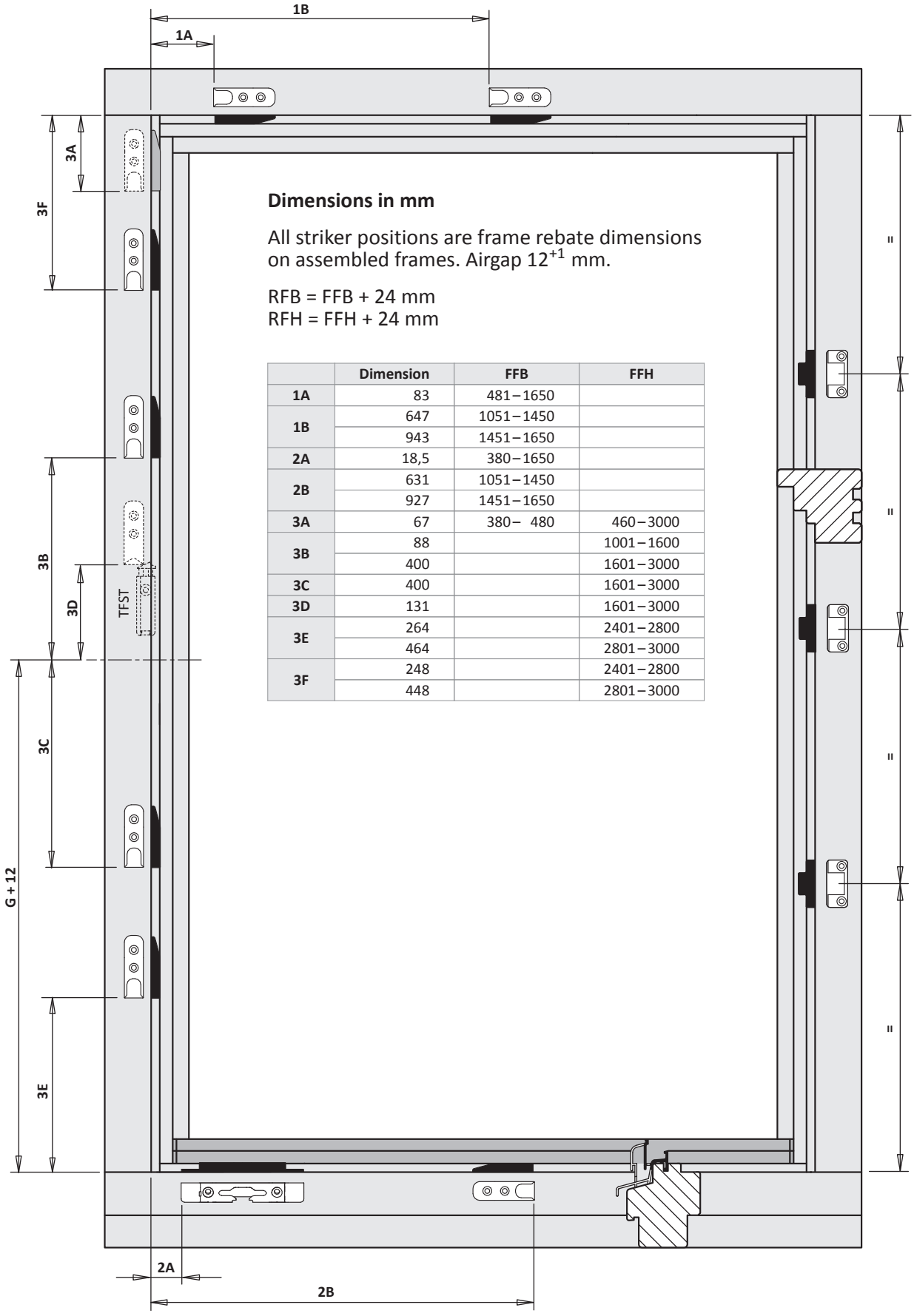
It is imperative to adhere to the following:
Product and liability requirements/guidelines (Quality Assurance Association: Locks and Hardware's Directive 'VHBH', as well as previous and applicable documents).
Profile manufacturer or system owner information (PVC or Aluminium) or DIN 68 121 – Timber profiles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

Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Number of frame parts / Pos.	
							12	13
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 2+ 1RS	TZBS0190- ...	2	1051–1450				2
	linkage BS/FH sz 3+ 1RS	TZBS0200- ...		1451–1650				2
4	stay sash part DF AX	TSSV3020- ...	1	380–1650				
5	corn.drive AF VSU/K+ FH 1S	TEUL5010- ...	1	380–1650			1	
6	gear 15 AF sz 20	TGMK4010- ...	1		460– 600	230– 300		
	gear 15 AF sz 60	TGMK4020- ...			601–1000	300– 500		
	gear 15 AF sz 80 1RS	TGMK4040- ...			1001–1200	500– 600		1
	gear 15 AF sz 120 1RS	TGMK4050- ...			1201–1600	600– 800		1
	gear 15 AF sz 160 2RS	TGMK4060- ...			1601–2000	800–1000		2
	gear 15 AF sz 200 2RS	TGMK4080- ...			2001–3000	1000–1500		2
7	linkage KK/AF sz 1 1RS	TZKK1010- ...	2		2401–2800			2
	linkage KK/AF sz 2 1RS	TZKK1020- ...			2801–3000			2
8	travel restrictor	TFHB0010- ...	1		460–3000			
9	handle Globe	Ref.access. ZHGS	1		460–3000			
10	sash part MV	Ref. PDB, ZFMV01	1		1001–1600			
	sash part MV	Ref. PDB, ZFMV01	2		1601–2400			
	sash part MV	Ref. PDB, ZFMV01	3		2401–3000			
11	frame part MV	Ref. PDB, ZRZM01	1		1001–1600			
	frame part MV	Ref. PDB, ZRZM01	2		1601–2400			
	frame part MV	Ref. PDB, ZRZM01	3		2401–3000			
12	tilt lock bear. S-ES FH	Ref. PDB, FRKA						
13	striker plate 56	Ref. PDB, FRSB						
on request								
14	mishandling device	TFBS0010- ...	1					
15	pressure piece	Ref. PDB, TFFD	1					
16	stop	Ref. PDB, FRZF01	1					
17	snapper switchable rh.	TFST0011- ...	1		1601–3000			
	snapper switchable lh.	TFST0012- ...			1601–3000			
18	frame part snapper	Ref. PDB, TRST	1		1601–3000			

Hinge side turning points				
Pos.	Description	Part number		required as per sash weight
		surface TS	RAL7037	100 kg
19	stay arm AX DF	Ref. PDB, TSAV46		1
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

Frame dimensions

1-sash square turn
H12 GM Hinge side axxent 24+



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

	Dimension	FFB	FFH
1A	83	481–1650	
1B	647	1051–1450	
	943	1451–1650	
2A	18,5	380–1650	
2B	631	1051–1450	
	927	1451–1650	
3A	67	380– 480	460–3000
3B	88		1001–1600
	400		1601–3000
3C	400		1601–3000
3D	131		1601–3000
3E	264		2401–2800
	464		2801–3000
3F	248		2401–2800
	448		2801–3000

TITAN AF

Installation instructions

1-sash square tilt-turn

timber 12 mm

basic security

centre handle pos. (variable)

Hinge side axxent 24+

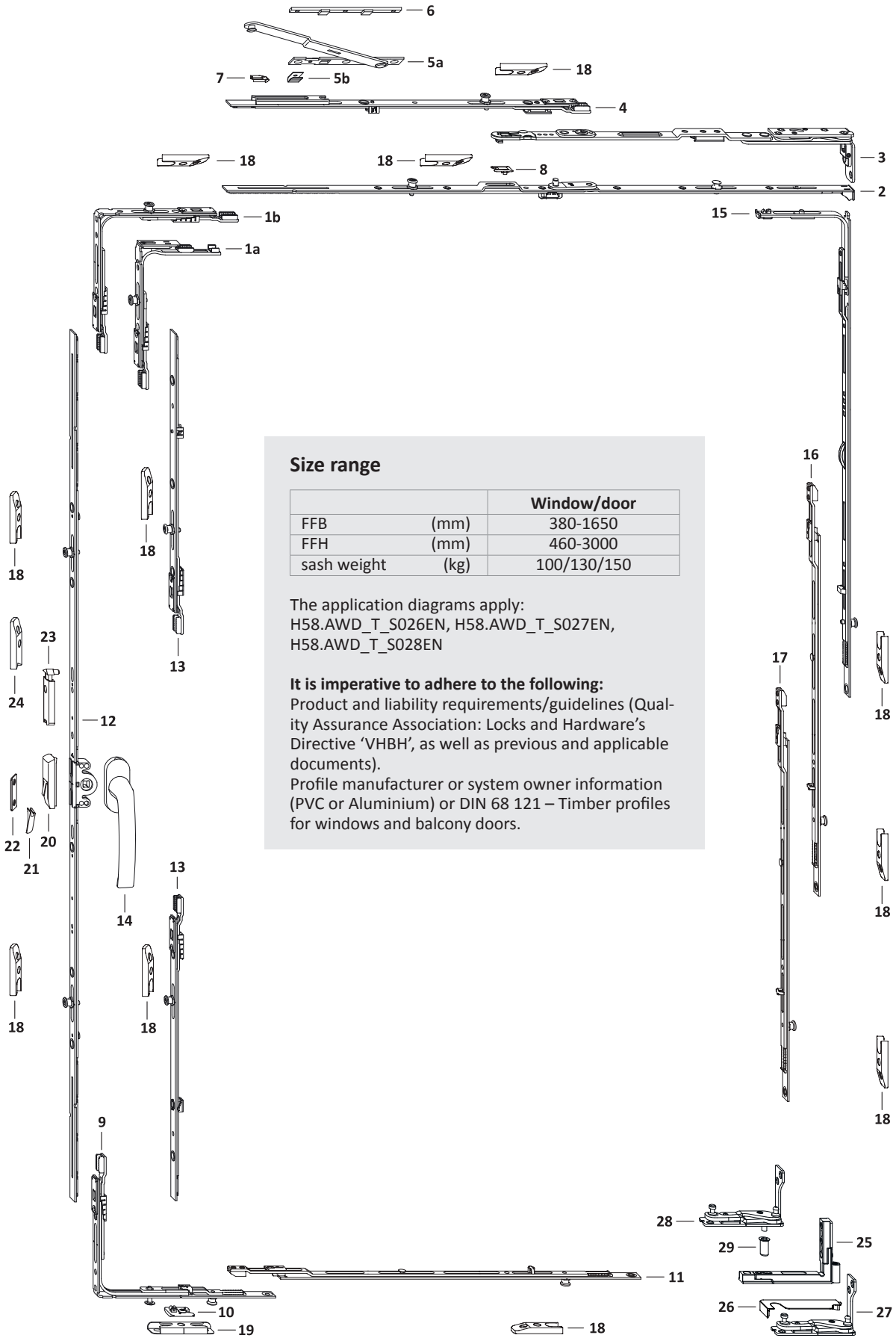
surface TS

backset 15 mm

Hardware set configuration	
General	Locking-points distance 1000
Stay side	two-piece stay ax 24+
Bottom	double cam SB R-RS
Locking side	mishandl. device on gear
Hinge side	corner drive BS sz 1+2 1RS

hardware layout

1-sash square tilt-turn
H12 GM Hinge side axxent 24+



Size range

		Window/door
FFB	(mm)	380-1650
FFH	(mm)	460-3000
sash weight	(kg)	100/130/150

The application diagrams apply:
H58.AWD_T_S026EN, H58.AWD_T_S027EN,
H58.AWD_T_S028EN

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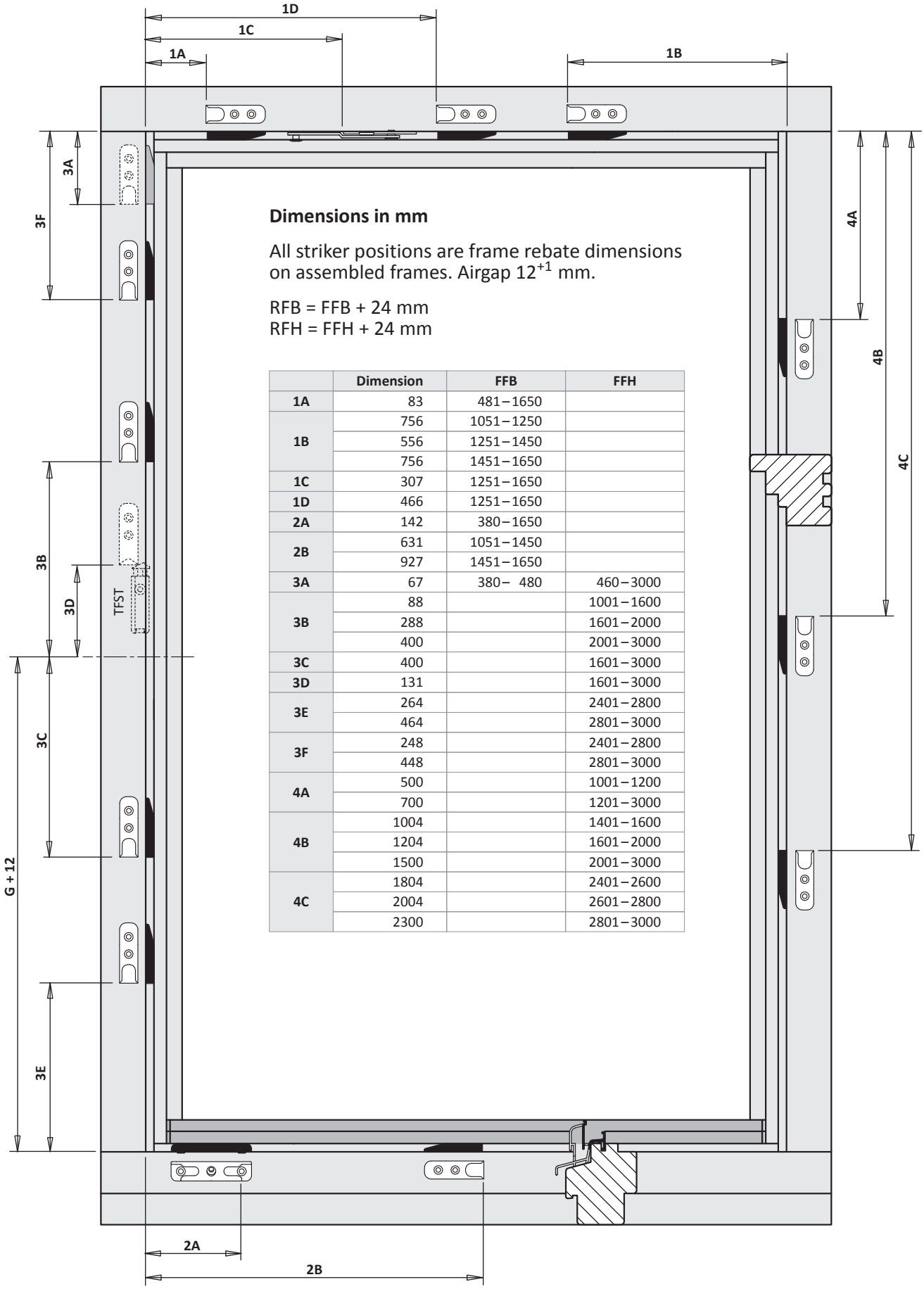
Profile manufacturer or system owner information (PVC or Aluminium) or DIN 68 121 – Timber profiles for windows and balcony doors.

Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Number of frame parts / Pos.	
							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				
	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	linkage additional stay 1RS	TZOK1010- ...	1	1251–1650			1	
5	additional stay	Ref. PDB, TSZS	1	1251–1650				
6	packer Z	Ref. PDB, FRUP01	1	1251–1650				
7	tilt restr. additional stay ..	889008	1	1251–1650				
8	tilt restrictor V-V sz 2-4 ..	TFKB0040- ...	1	681–1050	460– 900			
	tilt restrictor V-V sz 5 ..	TFKB0050- ...		1051–1250	460– 900			
9	corn.drive AF VSU/K 56+ 1S 1RS	TEUL5030- ...	1	380–1650				1
10	run up block AF 13 mm 13	TFFH0080- ...	1	380–1650				
11	linkage BS/FH sz 2+ 1RS	TZBS0190- ...	1	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- ...			601–1000	300– 500		
	gear 15 AF sz 80 1RS	TGMK4040- ...			1001–1200	500– 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		1001–1200		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	striker plate 56	Ref. PDB, FRSB						
19	striker plate S-RS	Ref. PDB, TRSK						
on request								
20	mishandling device	TFBS0010- ...	1					
21	pressure piece	Ref. PDB, TFFD	1					
22	stop	Ref. PDB, FRZF01	1					
23	snapper switchable rh.	TFST0011- ...	1		1601–3000			
	snapper switchable lh.	TFST0012- ...			1601–3000			
24	frame part snapper	Ref. PDB, TRST	1		1601–3000			

Hinge side turning points						
Pos.	Description	Part number		required as per sash weight		
		surface TS	RAL7037	100 kg	130 kg	150 kg
25	corner hinge AX	Ref. PDB, TBEB41		1	1	1
26	cover cap AX EL	Ref. PDB, TKEL41		1	1	1
27	bottom hinge AX	Ref. PDB, TBEV41		1		
28	bottom hinge AX Ø8	Ref. PDB, TBEV42			1	1
29	supporting dowel AX	TBAV4010-0 ...			1	1

Frame dimensions

1-sash square tilt-turn
H12 GM Hinge side axxent 24+



Dimensions in mm

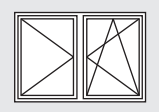
All striker positions are frame rebate dimensions on assembled frames. Airgap 12^{+1} mm.

RFB = FFB + 24 mm
RFH = FFH + 24 mm

	Dimension	FFB	FFH
1A	83	481–1650	
1B	756	1051–1250	
	556	1251–1450	
	756	1451–1650	
1C	307	1251–1650	
1D	466	1251–1650	
2A	142	380–1650	
2B	631	1051–1450	
	927	1451–1650	
3A	67	380– 480	460–3000
3B	88		1001–1600
	288		1601–2000
	400		2001–3000
3C	400		1601–3000
3D	131		1601–3000
3E	264		2401–2800
	464		2801–3000
3F	248		2401–2800
	448		2801–3000
4A	500		1001–1200
	700		1201–3000
4B	1004		1401–1600
	1204		1601–2000
	1500		2001–3000
4C	1804		2401–2600
	2004		2601–2800
	2300		2801–3000

TITAN AF

Installation instructions



GS

2-sash square tilt-turn/turn DS 16

timber 12 mm

basic security

centre handle pos. (variable)

Hinge side axxent 24+

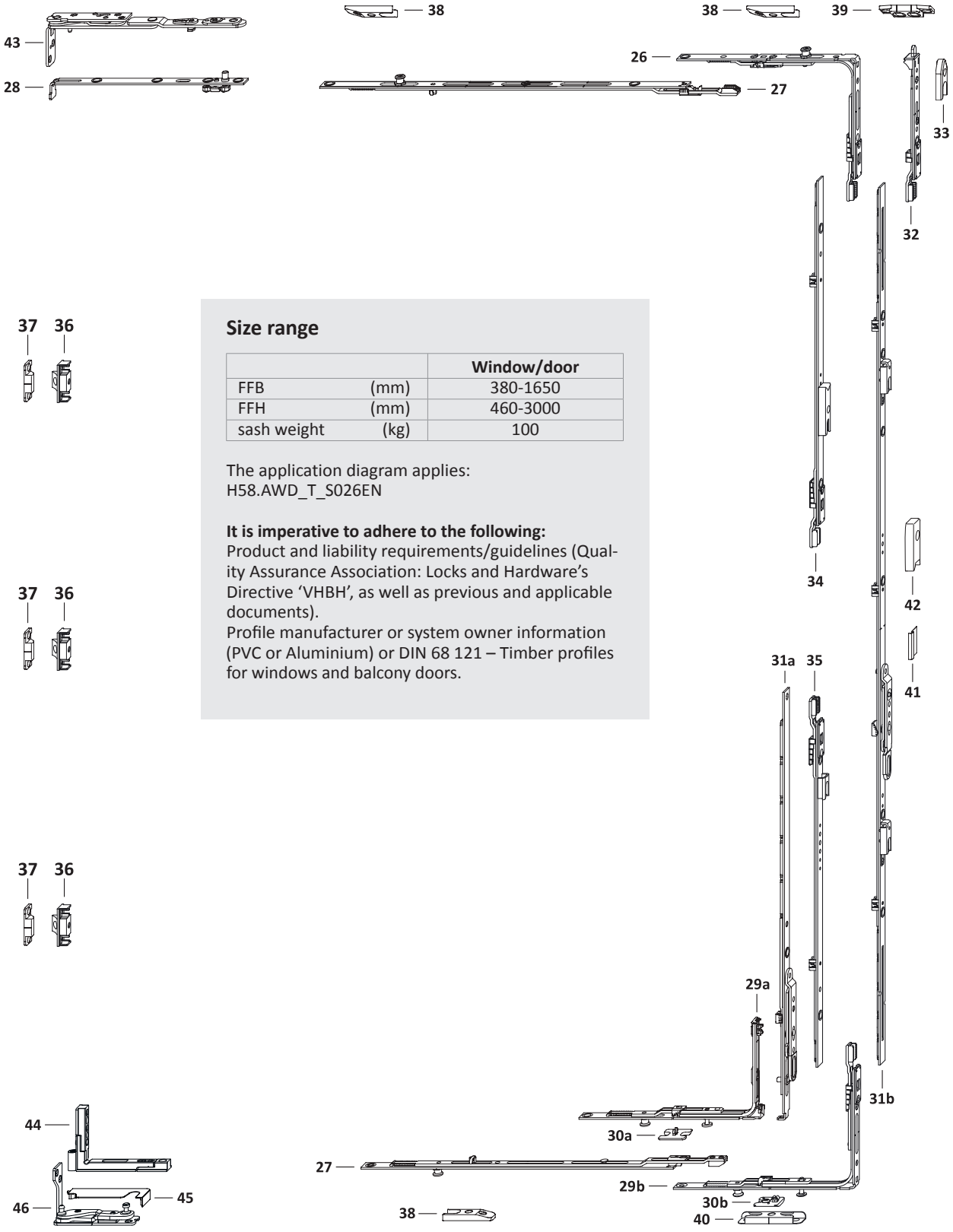
surface TS

backset 15 mm

Hardware set configuration	
General	Locking-points distance 1000
Stay side	two-piece stay ax 24+
Bottom	double cam SB R-RS
Locking side	mishandl. device on gear
Hinge side	corner drive BS sz 1+2 1RS

hardware layout slave sash

2-sash square tilt-turn/turn DS 16
H12 GM Hinge side axxent 24+

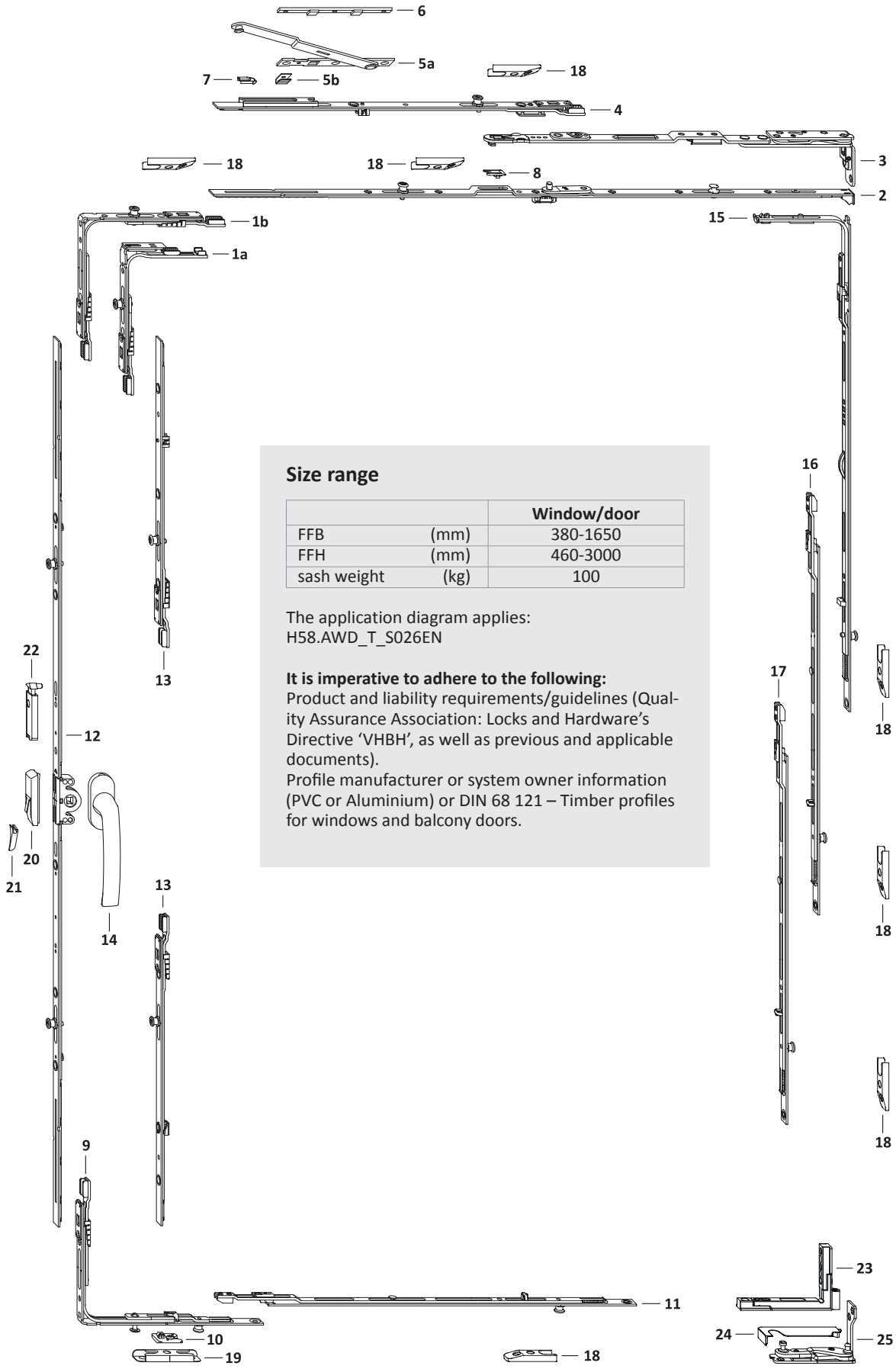


Size range

		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.



Size range

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

The application diagram applies:
H58.AWD_T_S026EN

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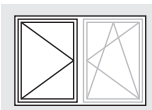
List of fittings slave sash

2-sash square tilt-turn/turn DS 16
H12 GM Hinge side axxent 24+



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 2+ 1RS	TZBS0190- ...	2	1051–1450			2		
	linkage BS/FH sz 3+ 1RS	TZBS0200- ...		1451–1650			2		
28	stay sash part DF AX	TSSV3020- ...	1	380–1650					
29a	locking part VSU/K 56+ 1S 1RS	TEVR1340- ...	1	380–1650	460– 800				1
29b	corn.drive AF VSU/K 56+ 1S 1RS	TEUL5030- ...	1	380–1650	801–3000				1
30a	run-up plate FH KRL56	Ref. PDB, TRAL01	1	380–1650	460– 800				
30b	run up block AF 13 mm 13	TFFH0080- ...	1	380–1650	801–3000				
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		1001–1600				
	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		1001–1600				
	frame part MV	Ref. PDB, ZRZM01	2		1601–2400				
	frame part MV	Ref. PDB, ZRZM01	3		2401–3000				
38	striker plate 56	Ref. PDB, FRSB							
39	striker V	Ref. PDB, FRZV02							
40	striker plate S-RS	Ref. PDB, TRSK							
on request									
41	stop	Ref. PDB, FRZF04	1		601–3000				
42	striker snapper A0767	TRST0010- ...	1		1601–3000				

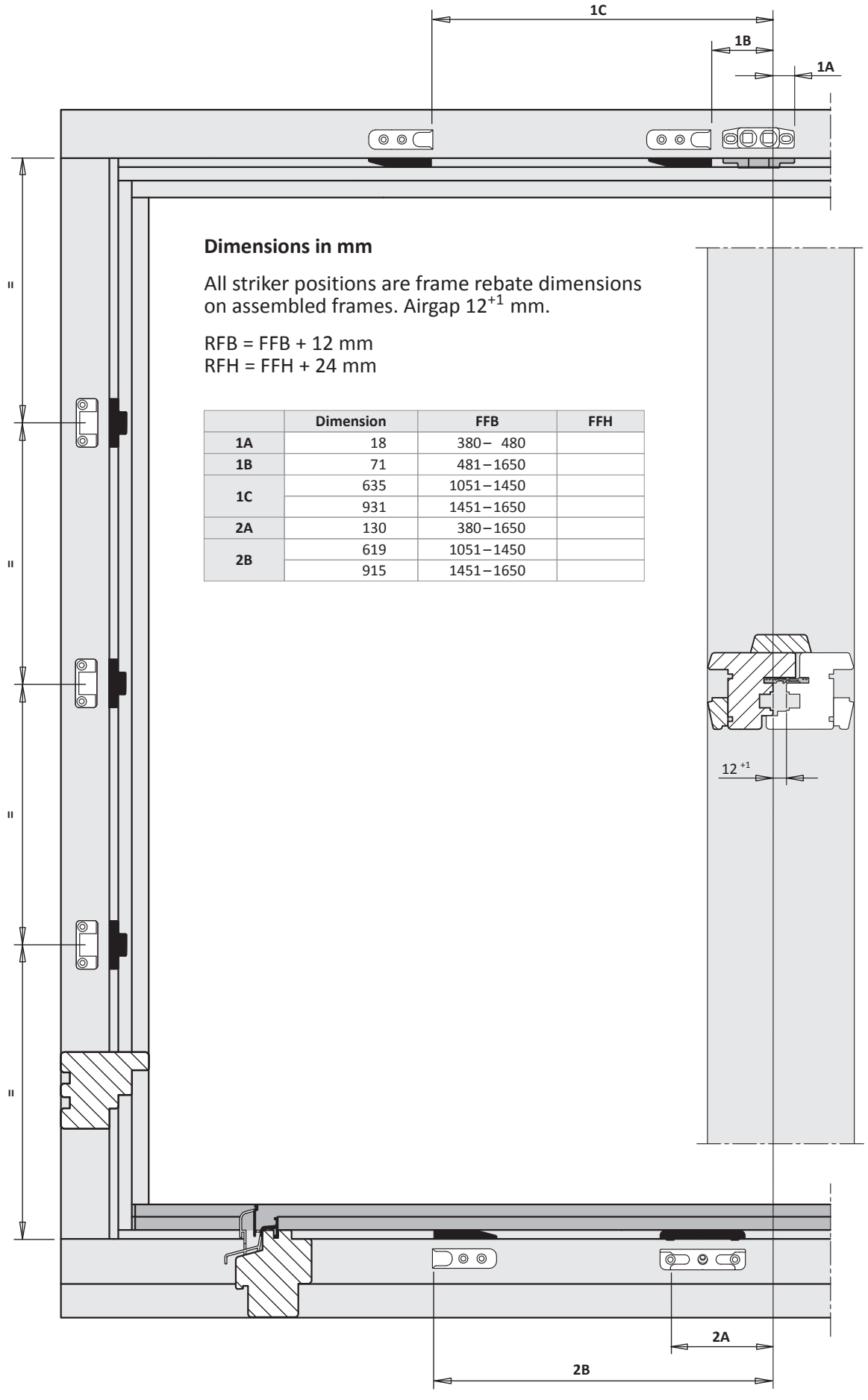
Hinge side turning points				
Pos.	Description	Part number		required as per sash weight
		surface TS	RAL7037	100 kg
43	stay arm AX DF	Ref. PDB, TSAV46		1
44	corner hinge AX	Ref. PDB, TBEB41		1
45	cover cap AX EL	Ref. PDB, TKEL41		1
46	bottom hinge AX	Ref. PDB, TBEV41		1

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				
	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	linkage additional stay 1RS	TZOK1010- ...	1	1251–1650			1	
5	additional stay	Ref. PDB, TSZS	1	1251–1650				
6	packer Z	Ref. PDB, FRUP01	1	1251–1650				
7	tilt restr. additional stay ..	889008	1	1251–1650				
8	tilt restrictor V-V sz 2-4 ..	TFKB0040- ...	1	681–1050	460– 900			
	tilt restrictor V-V sz 5 ..	TFKB0050- ...		1051–1250	460– 900			
9	corn.drive AF VSU/K 56+ 1S 1RS	TEUL5030- ...	1	380–1650				1
10	run up block AF 13 mm 13	TFFH0080- ...	1	380–1650				
11	linkage BS/FH sz 2+ 1RS	TZBS0190- ...	1	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- ...			601–1000	300– 500		
	gear 15 AF sz 80 1RS	TGMK4040- ...			1001–1200	500– 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		1001–1200		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	striker plate 56	Ref. PDB, FRSB						
19	striker plate S-RS	Ref. PDB, TRSK						
on request								
20	mishandling device	TFBS0010- ...	1		601–3000			
21	pressure piece	Ref. PDB, TFFD	1		601–3000			
22	snapper switchable rh.	TFST0011- ...	1		1601–3000			
	snapper switchable lh.	TFST0012- ...			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 slave sash

2-sash square tilt-turn/turn DS 16
H12 GM Hinge side axxent 24+

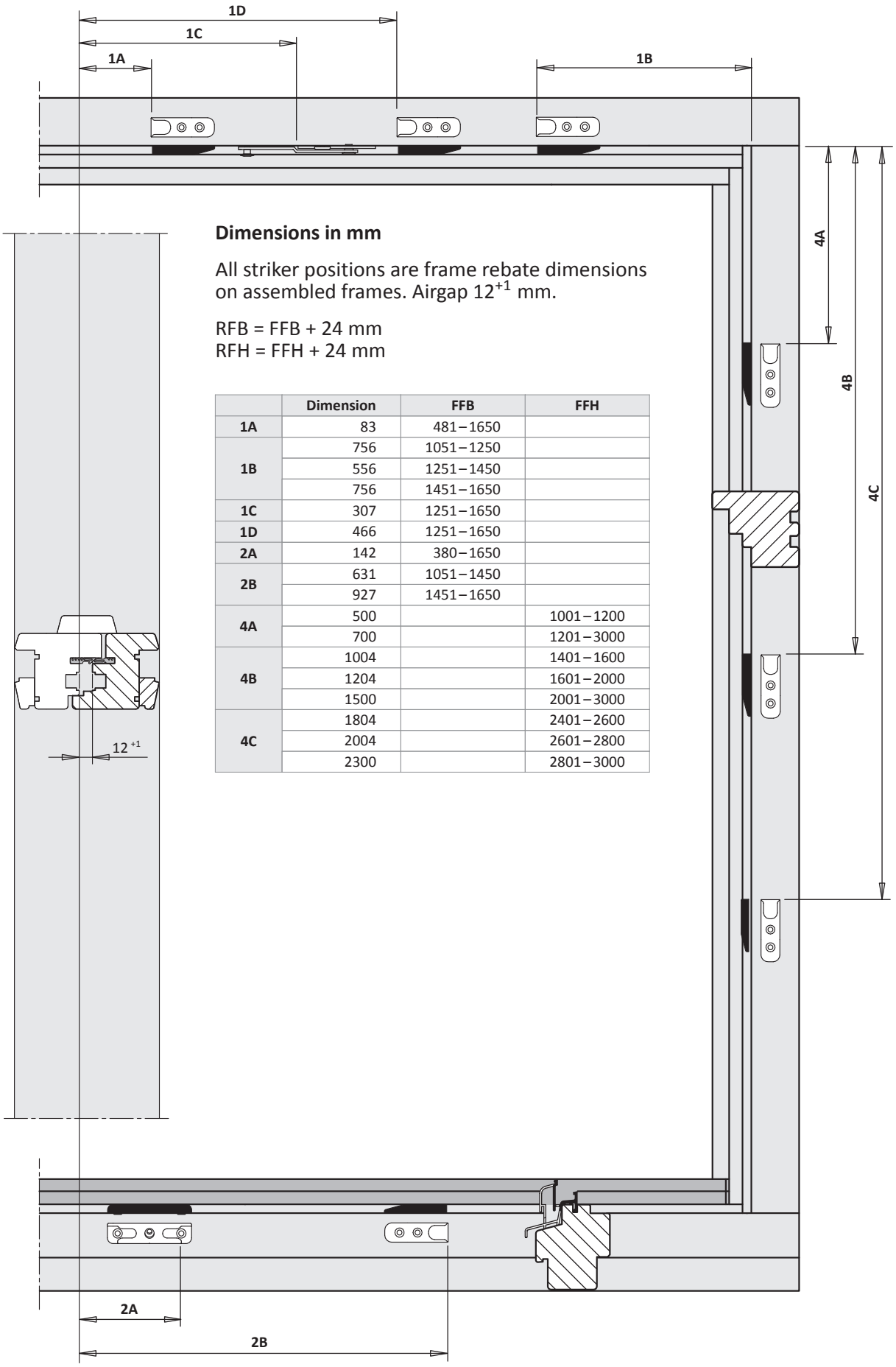


Dimensions in mm

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

RFB = FFB + 12 mm
RFH = FFH + 24 mm

	Dimension	FFB	FFH
1A	18	380– 480	
1B	71	481–1650	
1C	635	1051–1450	
	931	1451–1650	
2A	130	380–1650	
2B	619	1051–1450	
	915	1451–1650	



Dimensions in mm

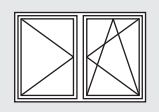
All striker positions are frame rebate dimensions on assembled frames. Airgap 12^{+1} mm.

RFB = FFB + 24 mm
RFH = FFH + 24 mm

	Dimension	FFB	FFH
1A	83	481 – 1650	
1B	756	1051 – 1250	
	556	1251 – 1450	
	756	1451 – 1650	
1C	307	1251 – 1650	
1D	466	1251 – 1650	
2A	142	380 – 1650	
2B	631	1051 – 1450	
	927	1451 – 1650	
4A	500		1001 – 1200
	700		1201 – 3000
4B	1004		1401 – 1600
	1204		1601 – 2000
	1500		2001 – 3000
4C	1804		2401 – 2600
	2004		2601 – 2800
	2300		2801 – 3000

TITAN AF

Installation instructions



GS

2-sash square tilt-turn/turn DS 16

timber 12 mm

basic security

centre handle pos. (variable)

Hinge side axxent 24+

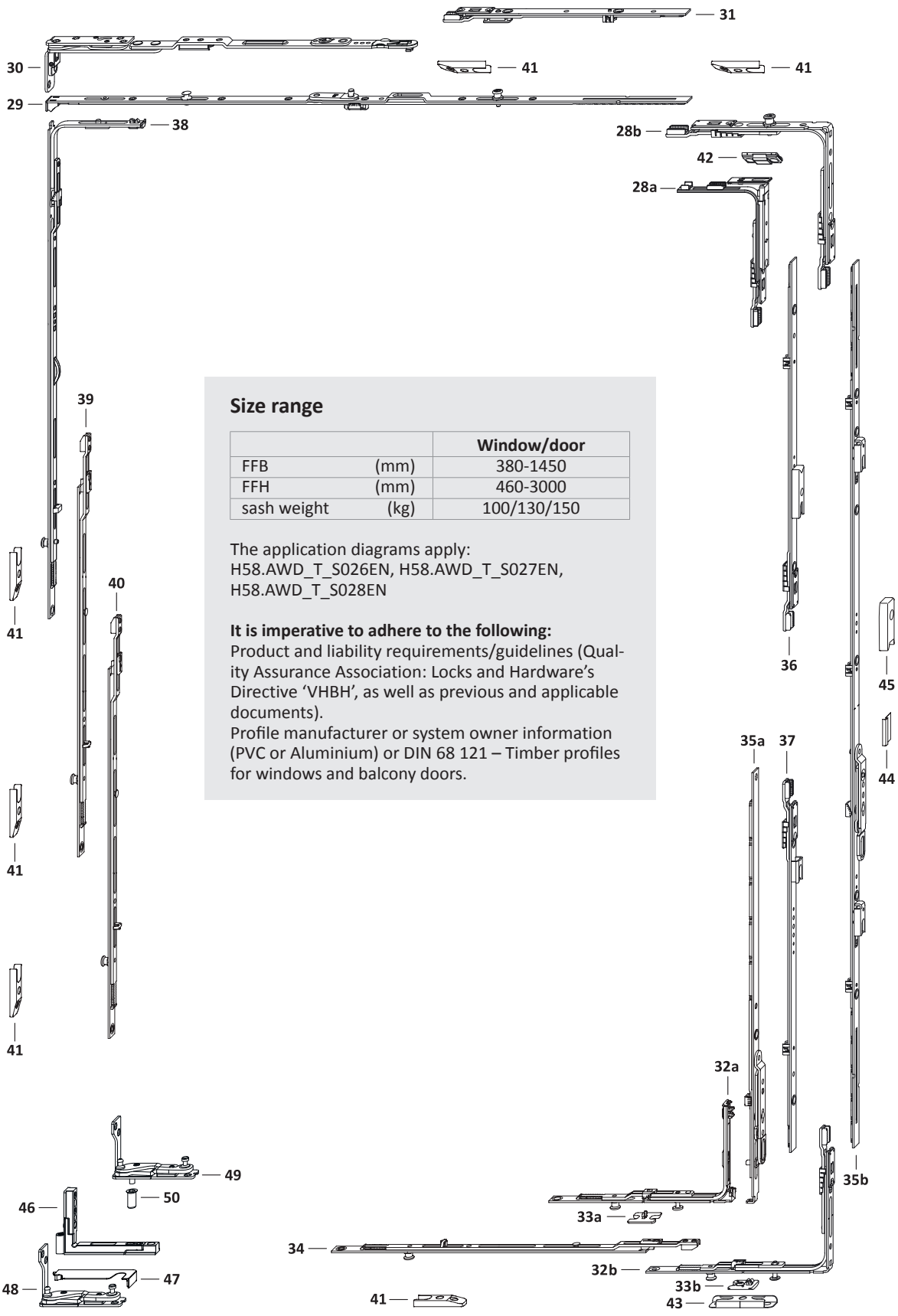
surface TS

backset 15 mm

Hardware set configuration	
General	Locking-points distance 1000; secondary sash with DK-stay
Stay side	two-piece stay ax 24+
Bottom	double cam SB R-RS
Locking side	mishandl. device on gear
Hinge side	corner drive BS sz 1+2 1RS

hardware layout slave sash

2-sash square tilt-turn/turn DS 16
H12 GM Hinge side axxent 24+



Size range

		Window/door
FFB	(mm)	380-1450
FFH	(mm)	460-3000
sash weight	(kg)	100/130/150

The application diagrams apply:
H58.AWD_T_S026EN, H58.AWD_T_S027EN,
H58.AWD_T_S028EN

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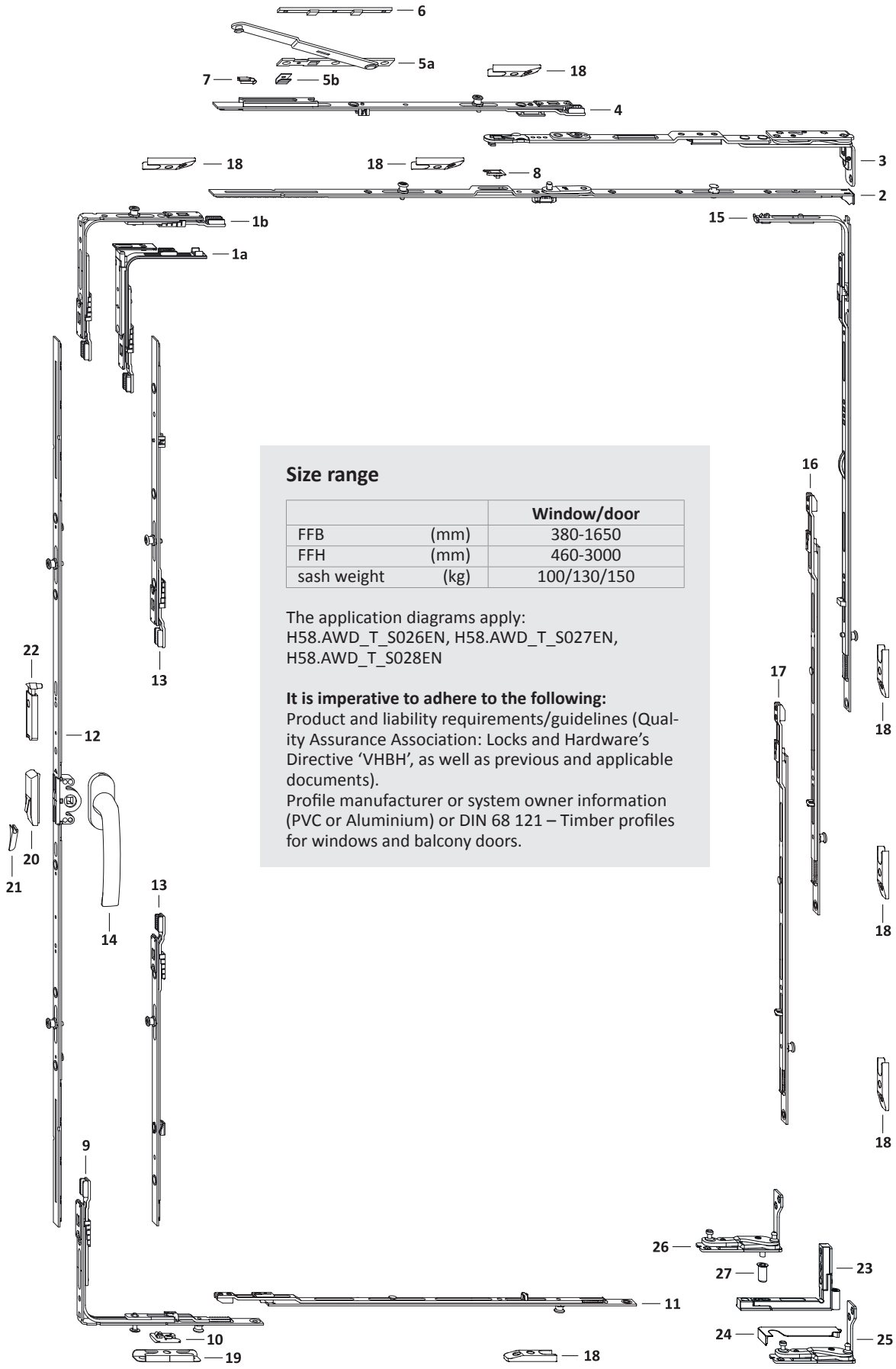

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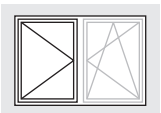


Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Number of frame parts / Pos.		
						In the main sash	41	42	43
28a	corn.drive VSO narrow RSA/11mm	TEUL4150- ...	1	380– 480				1	
28b	corn.drive VSO 1RS	TEUL4010- ...	1	481–1450			1		
29	stay sash part AF AX sz 1	TSSV4000- ...	1	380– 680					
	stay sash part AF AX 2+3 1RS	TSSV0310- ...		681– 850					
	stay sash part AF AX sz 4 1RS	TSSV0320- ...		851–1050					
	stay sash part AF AX sz 5 1RS	TSSV0330- ...		1051–1450			1		
30	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		1051–1450					
31	linkage AF sz 1	TZZS0150- ...	1	1251–1450					
32a	locking part VSU/K 56+ 1S 1RS	TEVR1340- ...	1	380–1450	460– 800				1
32b	corn.drive AF VSU/K 56+ 1S 1RS	TEUL5030- ...	1	380–1450	801–3000				1
33a	run-up plate FH KRL56	Ref. PDB, TRAL01	1	380–1450	460– 800				
33b	run up block AF 13 mm 13	TFFH0080- ...	1	380–1450	801–3000				
34	linkage BS/FH sz 2+ 1RS	TZBS0190- ...	1	1051–1450			1		
35a	sec.sash gear 16 sz 30	TGKS0010- ...	1		460– 600	230– 300			
	sec.sash gear 16 AF 60/G300	TGKS4030- ...			601– 800	300– 400			
35b	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			
36	linkage AF sz 1 1SB-RS	TZKS1020- ...	1		2401–2800				
	linkage AF sz 2 1SB-RS	TZKS1030- ...			2801–3000				
37	linkage AF sz 1 1SB-VSU	TZKS1060- ...	1		2401–2800				
	linkage AF sz 2 1SB-VSU	TZKS1070- ...			2801–3000				
38	corn.drive BS/K3 sz 1+ 1RS	TEUL2410- ...	1		1001–1200		1		
	corn.drive BS/K3 sz 2+ 1RS	TEUL2420- ...			1201–3000		1		
39	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		
40	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		
41	striker plate 56	Ref. PDB, FRSB							
42	short striker V	Ref. PDB, FRZV12							
43	striker plate S-RS	Ref. PDB, TRSK							
on request									
44	stop	Ref. PDB, FRZF04	1		601–3000				
45	striker snapper A0767	TRST0010- ...	1		1601–3000				

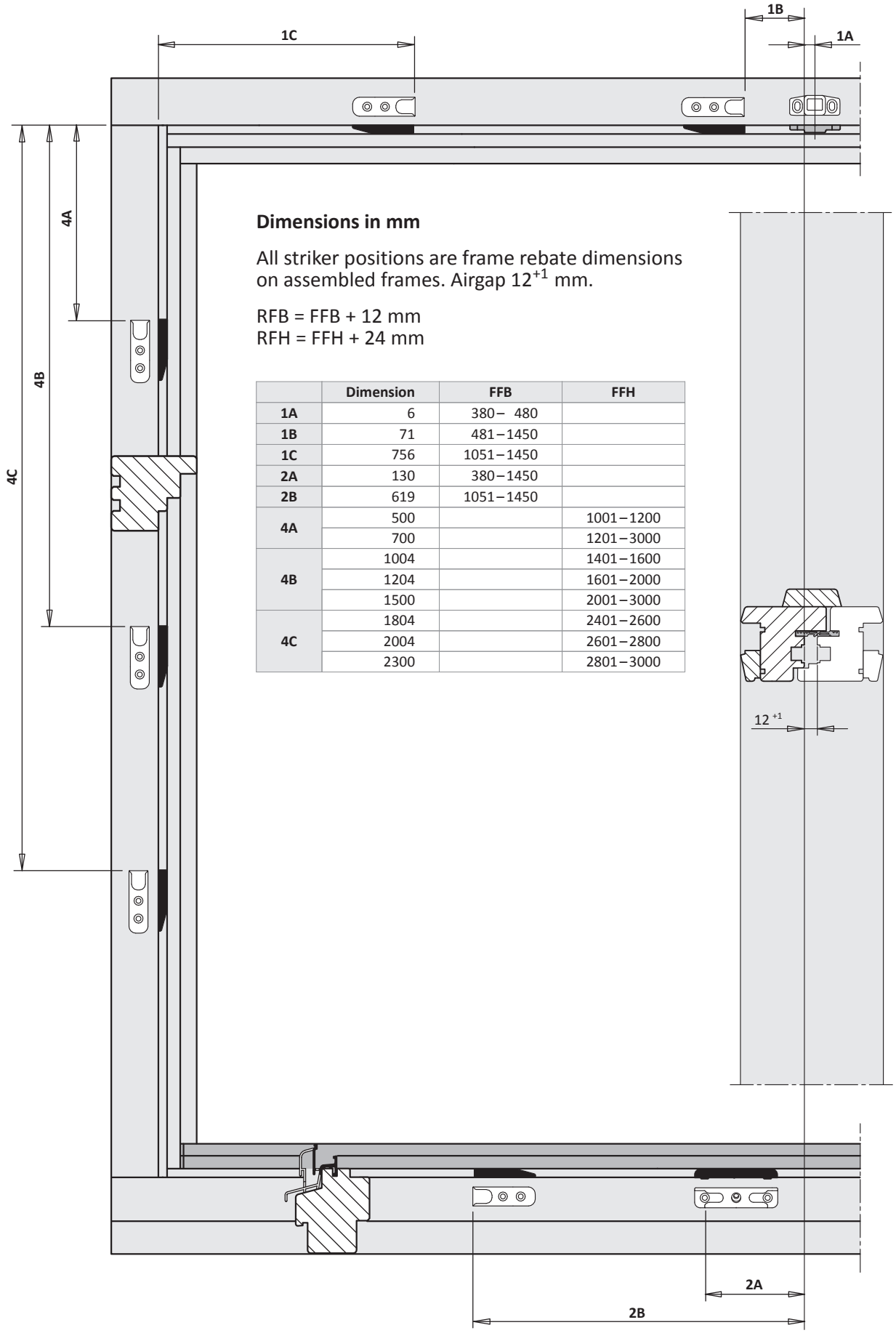
Hinge side turning points						
Pos.	Description	Part number		required as per sash weight		
		surface TS	RAL7037	100 kg	130 kg	150 kg
46	corner hinge AX	Ref. PDB, TBEB41		1	1	1
47	cover cap AX EL	Ref. PDB, TKEL41		1	1	1
48	bottom hinge AX	Ref. PDB, TBEV41		1		
49	bottom hinge AX Ø8	Ref. PDB, TBEV42			1	1
50	supporting dowel AX	TBAV4010-0 ...			1	1

Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Number of frame parts / Pos.	
							18	19
1a	corn.drive VSO narrow RSA/11mm	TEUL4150- ...	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				
	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	linkage additional stay 1RS	TZOK1010- ...	1	1251–1650			1	
5	additional stay	Ref. PDB, TSZS	1	1251–1650				
6	packer Z	Ref. PDB, FRUP01	1	1251–1650				
7	tilt restr. additional stay ..	889008	1	1251–1650				
8	tilt restrictor V-V sz 2-4 ..	TFKB0040- ...	1	681–1050	460– 900			
	tilt restrictor V-V sz 5 ..	TFKB0050- ...		1051–1250	460– 900			
9	corn.drive AF VSU/K 56+ 1S 1RS	TEUL5030- ...	1	380–1650				1
10	run up block AF 13 mm 13	TFFH0080- ...	1	380–1650				
11	linkage BS/FH sz 2+ 1RS	TZBS0190- ...	1	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- ...			601–1000	300– 500		
	gear 15 AF sz 80 1RS	TGMK4040- ...			1001–1200	500– 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		1001–1200		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	striker plate 56	Ref. PDB, FRSB						
19	striker plate S-RS	Ref. PDB, TRSK						
on request								
20	mishandling device	TFBS0010- ...	1		601–3000			
21	pressure piece	Ref. PDB, TFFD	1		601–3000			
22	snapper switchable rh.	TFST0011- ...	1		1601–3000			
	snapper switchable lh.	TFST0012- ...			1601–3000			

Hinge side turning points						
Pos.	Description	Part number		required as per sash weight		
		surface TS	RAL7037	100 kg	130 kg	150 kg
23	corner hinge AX	Ref. PDB, TBEB41		1	1	1
24	cover cap AX EL	Ref. PDB, TKEL41		1	1	1
25	bottom hinge AX	Ref. PDB, TBEV41		1		
26	bottom hinge AX Ø8	Ref. PDB, TBEV42			1	1
27	supporting dowel AX	TBAV4010-0 ...			1	1

Frame dimensions slave sash

2-sash square tilt-turn/turn DS 16
H12 GM Hinge side axxent 24+

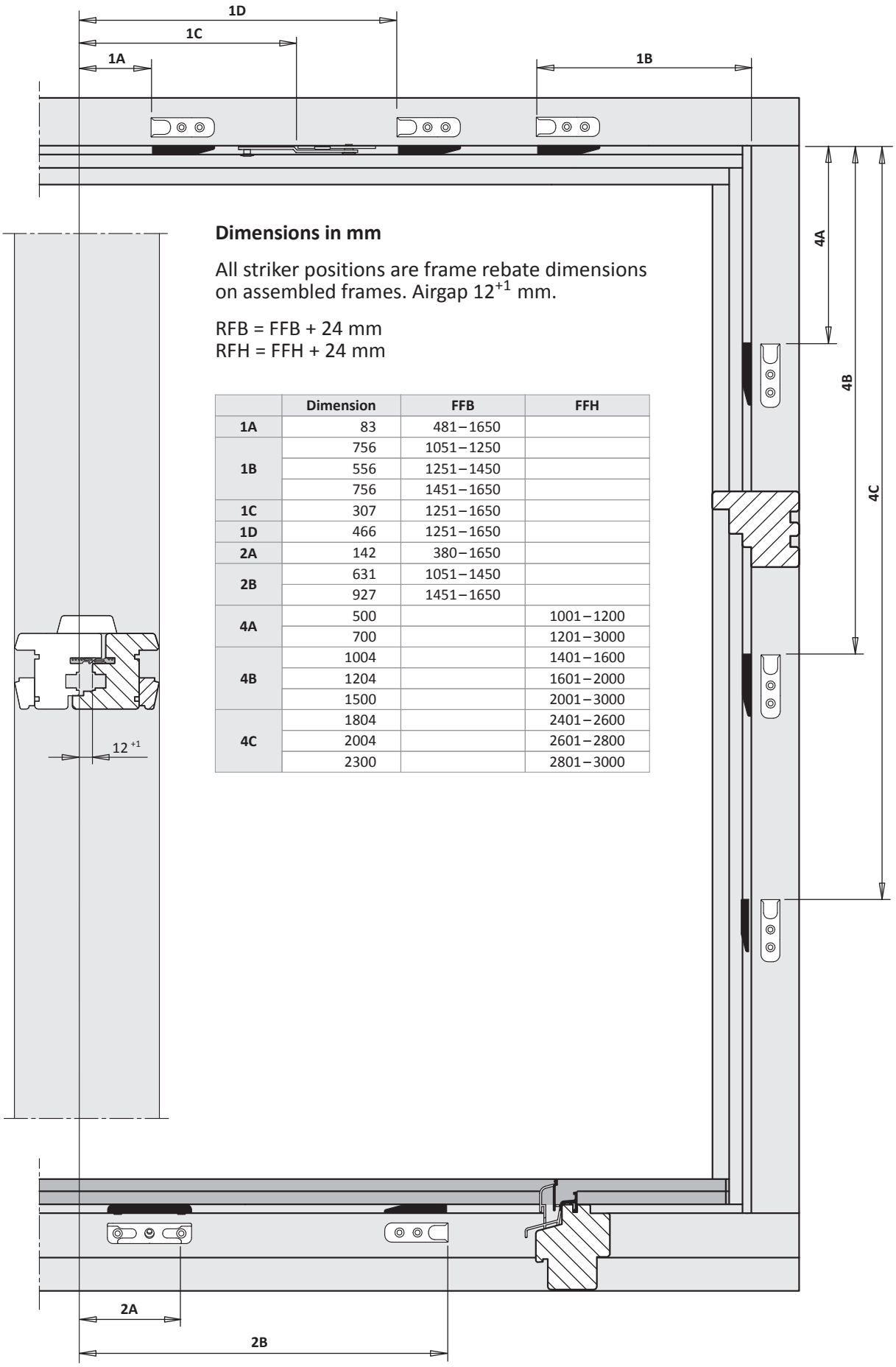


Dimensions in mm

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

RFB = FFB + 12 mm
RFH = FFH + 24 mm

	Dimension	FFB	FFH
1A	6	380 – 480	
1B	71	481 – 1450	
1C	756	1051 – 1450	
2A	130	380 – 1450	
2B	619	1051 – 1450	
4A	500		1001 – 1200
	700		1201 – 3000
4B	1004		1401 – 1600
	1204		1601 – 2000
	1500		2001 – 3000
4C	1804		2401 – 2600
	2004		2601 – 2800
	2300		2801 – 3000



Dimensions in mm

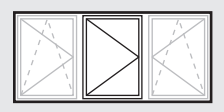
All striker positions are frame rebate dimensions on assembled frames. Airgap 12^{+1} mm.

RFB = FFB + 24 mm
RFH = FFH + 24 mm

	Dimension	FFB	FFH
1A	83	481 – 1650	
1B	756	1051 – 1250	
	556	1251 – 1450	
	756	1451 – 1650	
1C	307	1251 – 1650	
1D	466	1251 – 1650	
2A	142	380 – 1650	
2B	631	1051 – 1450	
	927	1451 – 1650	
4A	500		1001 – 1200
	700		1201 – 3000
4B	1004		1401 – 1600
	1204		1601 – 2000
	1500		2001 – 3000
4C	1804		2401 – 2600
	2004		2601 – 2800
	2300		2801 – 3000

TITAN AF

Installation instructions



GS

3-sash Centre sash second opening turn

timber 12 mm

basic security

centre handle pos. (variable)

Hinge side axxent 24+

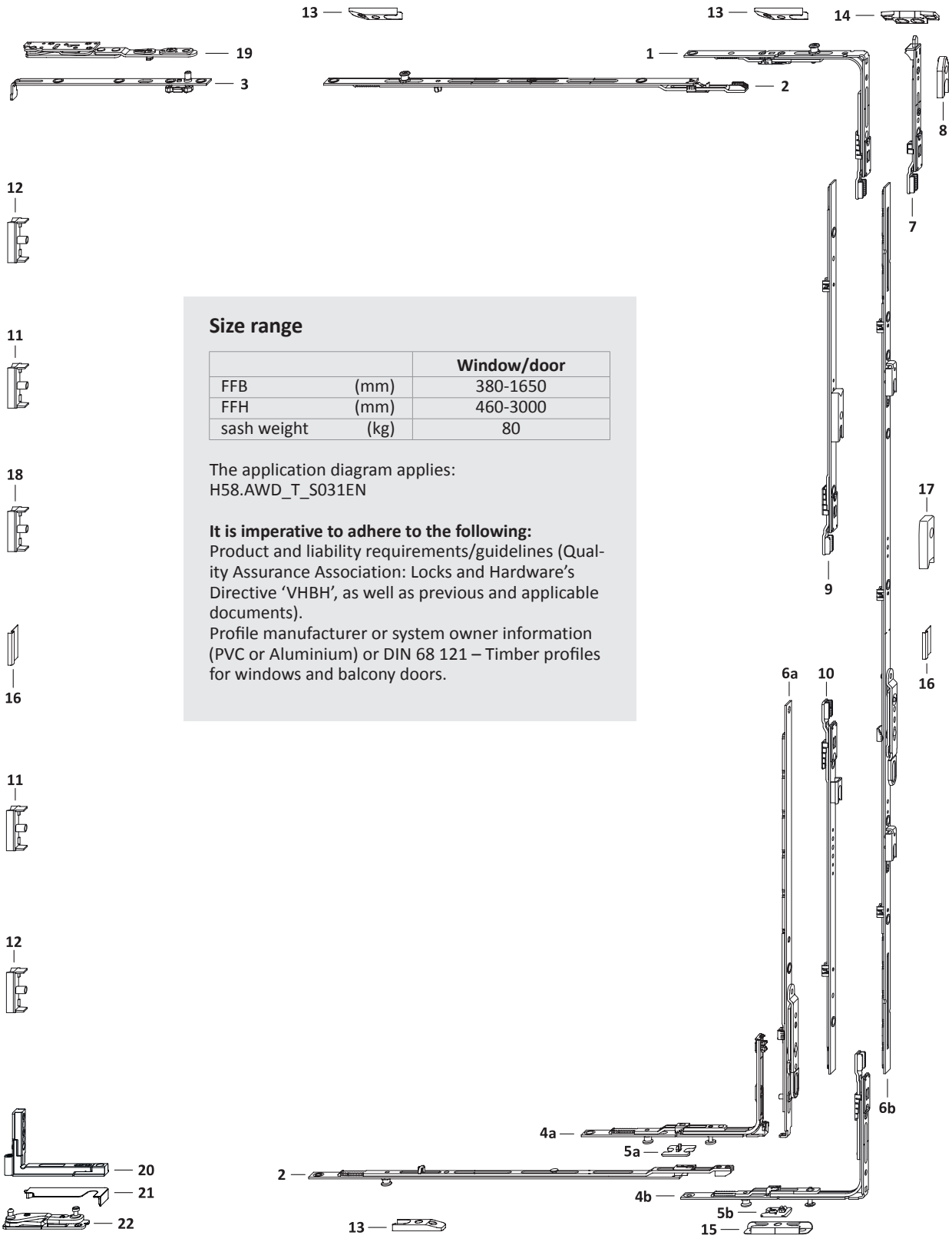
surface TS

backset 15 mm

Hardware set configuration	
General	Locking-points distance 1000
Stay side	two-piece stay ax 24+
Bottom	double cam SB R-RS
Locking side	mishandl. device on gear

hardware layout

3-sash Centre sash second opening turn
H12 GM Hinge side axxent 24+

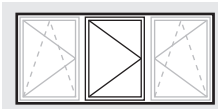


Size range

		Window/door
FFB	(mm)	380-1650
FFH	(mm)	460-3000
sash weight	(kg)	80

The application diagram applies:
H58.AWD_T_S031EN

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

3-sash Centre sash second opening turn
H12 GM Hinge side axxent 24+

TITAN AF

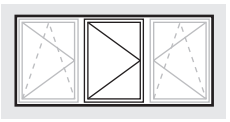
GS

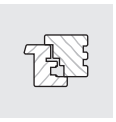
Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Number of frame parts / Pos.		
							13	14	15
1	corn.drive VSO/K+ DF 1RS	TEUL4110- ...	1	481 – 1650			1		
2	linkage BS/FH sz 2+ 1RS	TZBS0190- ...	2	1051 – 1450			2		
	linkage BS/FH sz 3+ 1RS	TZBS0200- ...		1451 – 1650			2		
3	stay sash part DF AX	TSSV3020- ...	1	380 – 1650					
4a	locking part VSU/K 56+ 1S 1RS	TEVR1340- ...	1	380 – 1650	460 – 800				1
4b	corn.drive AF VSU/K 56+ 1S 1RS	TEUL5030- ...	1	380 – 1650	801 – 3000				1
5a	run-up plate FH KRL56	Ref. PDB, TRAL01	1	380 – 1650	460 – 800				
5b	run up block AF 13 mm 13	TFFH0080- ...	1	380 – 1650	801 – 3000				
6a	sec.sash gear 16 sz 30	TGKS0010- ...	1		460 – 600	230 – 300			
	sec.sash gear 16 AF 60/G300	TGKS4030- ...			601 – 800	300 – 400			
6b	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			
7	locking bolt AF VSO RSA 11	TESC2030- ...	1	380 – 480	460 – 3000			1	
8	striker plate A0767	TRSA0010- ...	1	380 – 480	460 – 3000				
9	linkage AF sz 1 1SB-RS	TZKS1020- ...	1		2401 – 2800				
	linkage AF sz 2 1SB-RS	TZKS1030- ...			2801 – 3000				
10	linkage AF sz 1 1SB-VSU	TZKS1060- ...	1		2401 – 2800				
	linkage AF sz 2 1SB-VSU	TZKS1070- ...			2801 – 3000				
11	striker plate 56 A2000	TRSB0030- ...	1		1001 – 1200				
	striker plate 56 A2000	TRSB0030- ...			1201 – 1600				
	striker plate 56 A2000	TRSB0030- ...	2		1601 – 2000				
	striker plate 56 A2000	TRSB0030- ...			2001 – 3000				
12	striker plate 56 A2000	TRSB0030- ...	2		2401 – 3000				
13	striker plate 56	Ref. PDB, FRSB							
14	striker V	Ref. PDB, FRZV02							
15	striker plate S-RS	Ref. PDB, TRSK							
on request									
16	stop	Ref. PDB, FRZF04	2		601 – 3000				
17	striker snapper A0767	TRST0010- ...	1		1601 – 3000				
18	striker plate 56 A2000	TRSB0030- ...	1		1601 – 3000				

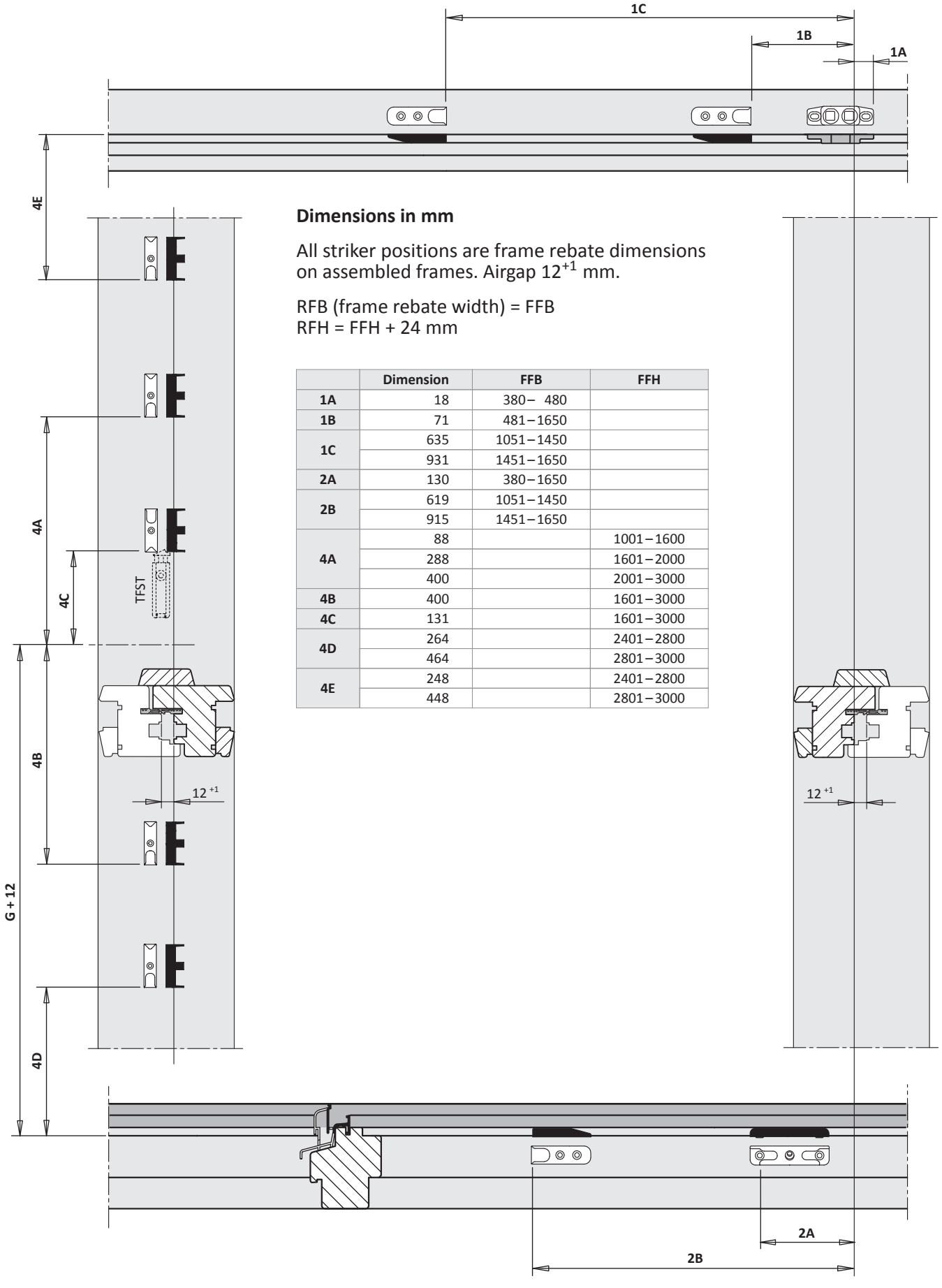
Hinge side turning points				
Pos.	Description	Part number		required as per sash weight
		surface TS	RAL7037	80 kg
19	stay arm AX DF/3	Ref. PDB, TSAV47		1
20	corner hinge AX	Ref. PDB, TBEB41		1
21	cover cap AX EL	Ref. PDB, TKEL41		1
22	bottom hinge AX DF/3	Ref. PDB, TBEV43		1

Frame dimensions

3-sash Centre sash second opening turn
H12 GM Hinge side axxent 24+







Dimensions in mm

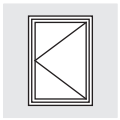
All striker positions are frame rebate dimensions on assembled frames. Airgap 12^{+1} mm.

RFB (frame rebate width) = FFB
RFH = FFH + 24 mm

	Dimension	FFB	FFH
1A	18	380– 480	
1B	71	481–1650	
1C	635	1051–1450	
	931	1451–1650	
2A	130	380–1650	
2B	619	1051–1450	
	915	1451–1650	
4A	88		1001–1600
	288		1601–2000
	400		2001–3000
4B	400		1601–3000
4C	131		1601–3000
4D	264		2401–2800
	464		2801–3000
4E	248		2401–2800
	448		2801–3000

TITAN AF

Installation instructions



1-sash square turn

timber 12 mm

basic security

centre handle pos. (variable)

Hinge side axxent 24+

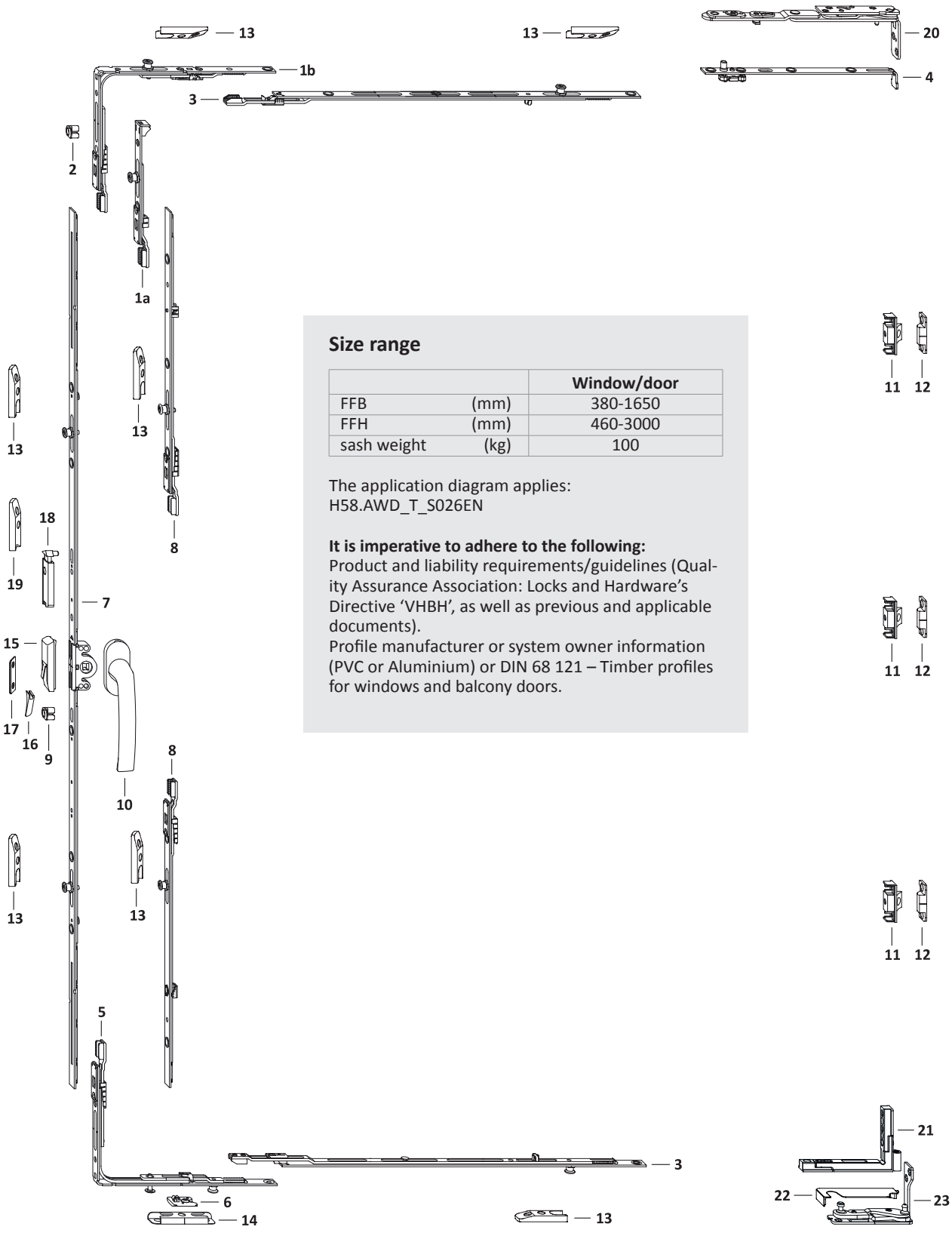
surface TS

backset 15 mm

Hardware set configuration	
General	Locking-points distance 1000
Stay side	two-piece stay ax 24+
Bottom	double cam SB R-RS
Locking side	mishandl. device on gear

hardware layout

1-sash square turn
H12 GM Hinge side axxent 24+



Size range

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

The application diagram applies:
H58.AWD_T_S026EN

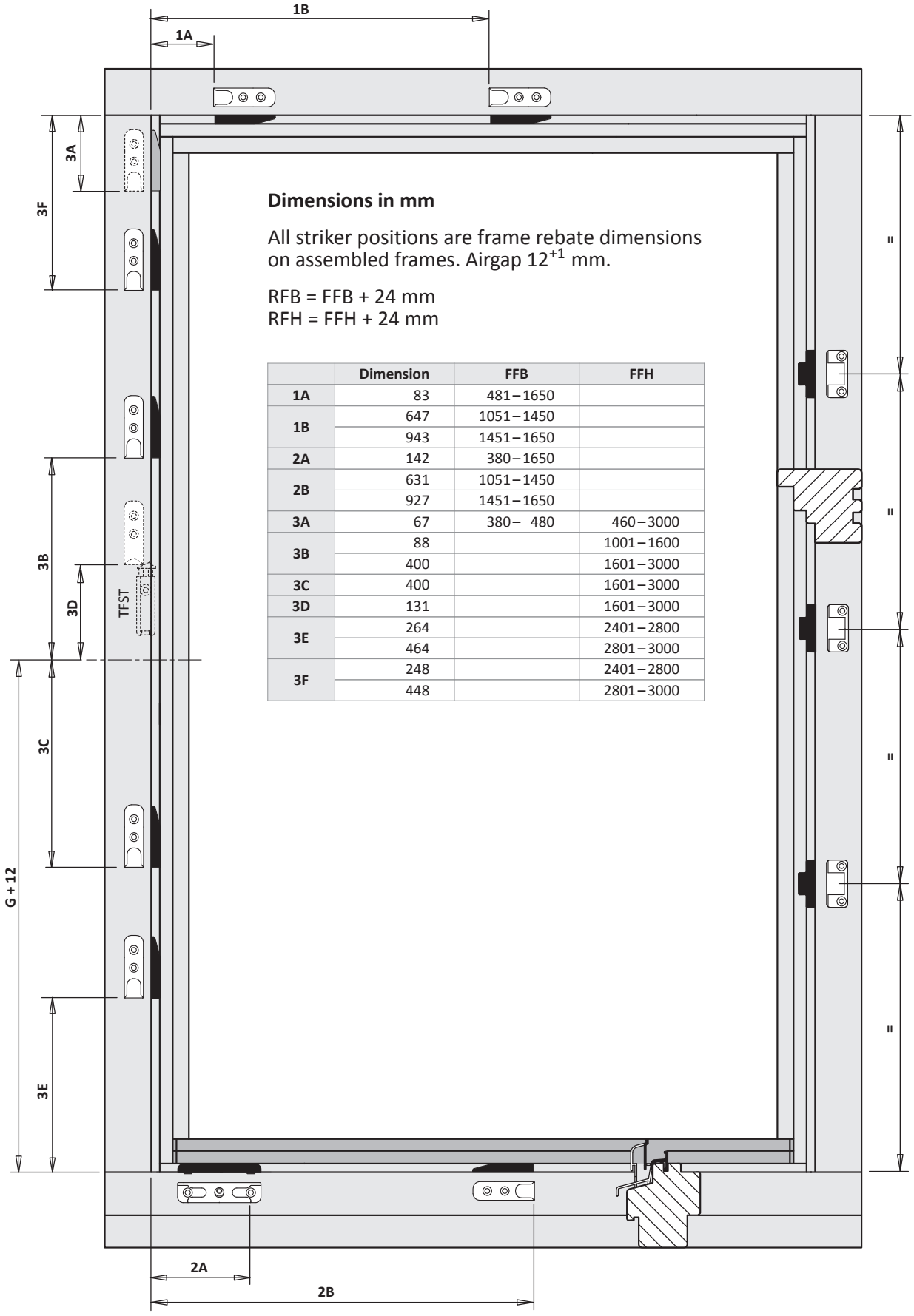
It is imperative to adhere to the following:
Product and liability requirements/guidelines (Quality Assurance Association: Locks and Hardware's Directive 'VHBH', as well as previous and applicable documents).
Profile manufacturer or system owner information (PVC or Aluminium) or DIN 68 121 – Timber profiles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

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 2+ 1RS	TZBS0190- ...	2	1051–1450			2	
	linkage BS/FH sz 3+ 1RS	TZBS0200- ...		1451–1650			2	
4	stay sash part DF AX	TSSV3020- ...	1	380–1650				
5	corn.drive AF VSU/K 56+ 1S 1RS	TEUL5030- ...	1	380–1650				1
6	run up block AF 13 mm 13	TFFH0080- ...	1	380–1650				
7	gear 15 AF sz 20	TGMK4010- ...	1		460– 600	230– 300		
	gear 15 AF sz 60	TGMK4020- ...			601–1000	300– 500		
	gear 15 AF sz 80 1RS	TGMK4040- ...			1001–1200	500– 600	1	
	gear 15 AF sz 120 1RS	TGMK4050- ...			1201–1600	600– 800	1	
	gear 15 AF sz 160 2RS	TGMK4060- ...			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		1001–1600			
	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		1001–1600			
	frame part MV	Ref. PDB, ZRZM01	2		1601–2400			
	frame part MV	Ref. PDB, ZRZM01	3		2401–3000			
13	striker plate 56	Ref. PDB, FRSB						
14	striker plate S-RS	Ref. PDB, TRSK						
on request								
15	mishandling device	TFBS0010- ...	1					
16	pressure piece	Ref. PDB, TFFD	1					
17	stop	Ref. PDB, FRZF01	1					
18	snapper switchable rh.	TFST0011- ...	1		1601–3000			
	snapper switchable lh.	TFST0012- ...			1601–3000			
19	frame part snapper	Ref. PDB, TRST	1		1601–3000			

Hinge side turning points				
Pos.	Description	Part number		required as per sash weight
		surface TS	RAL7037	100 kg
20	stay arm AX DF	Ref. PDB, TSAV46		1
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

Frame dimensions

1-sash square turn
H12 GM Hinge side axxent 24+



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

	Dimension	FFB	FFH
1A	83	481–1650	
1B	647	1051–1450	
	943	1451–1650	
2A	142	380–1650	
2B	631	1051–1450	
	927	1451–1650	
3A	67	380– 480	460–3000
3B	88		1001–1600
	400		1601–3000
3C	400		1601–3000
3D	131		1601–3000
3E	264		2401–2800
	464		2801–3000
3F	248		2401–2800
	448		2801–3000

Bottom Inliner

1-sash square tilt-turn H48.TAFH2K1S024EN 4 - 3

2-sash square tilt-turn/turn DS 16 H48.TAFH2K1S025EN 4 - 9

Tilt before turn (TBT)

1-sash square tilt before turn (TBT) H48.TAFH2K1S026EN 4 - 17

Bottom Double cam SB R-RS

1-sash square tilt-turn H48.TAFH2K1S403EN 4 - 23

2-sash square tilt-turn/turn DS 16 H48.TAFH2K1S404EN 4 - 29

TITAN AF

Installation instructions

RC1

1-sash square tilt-turn

timber 12 mm

RC1

fixed handle position

Hinge side axxent 24+

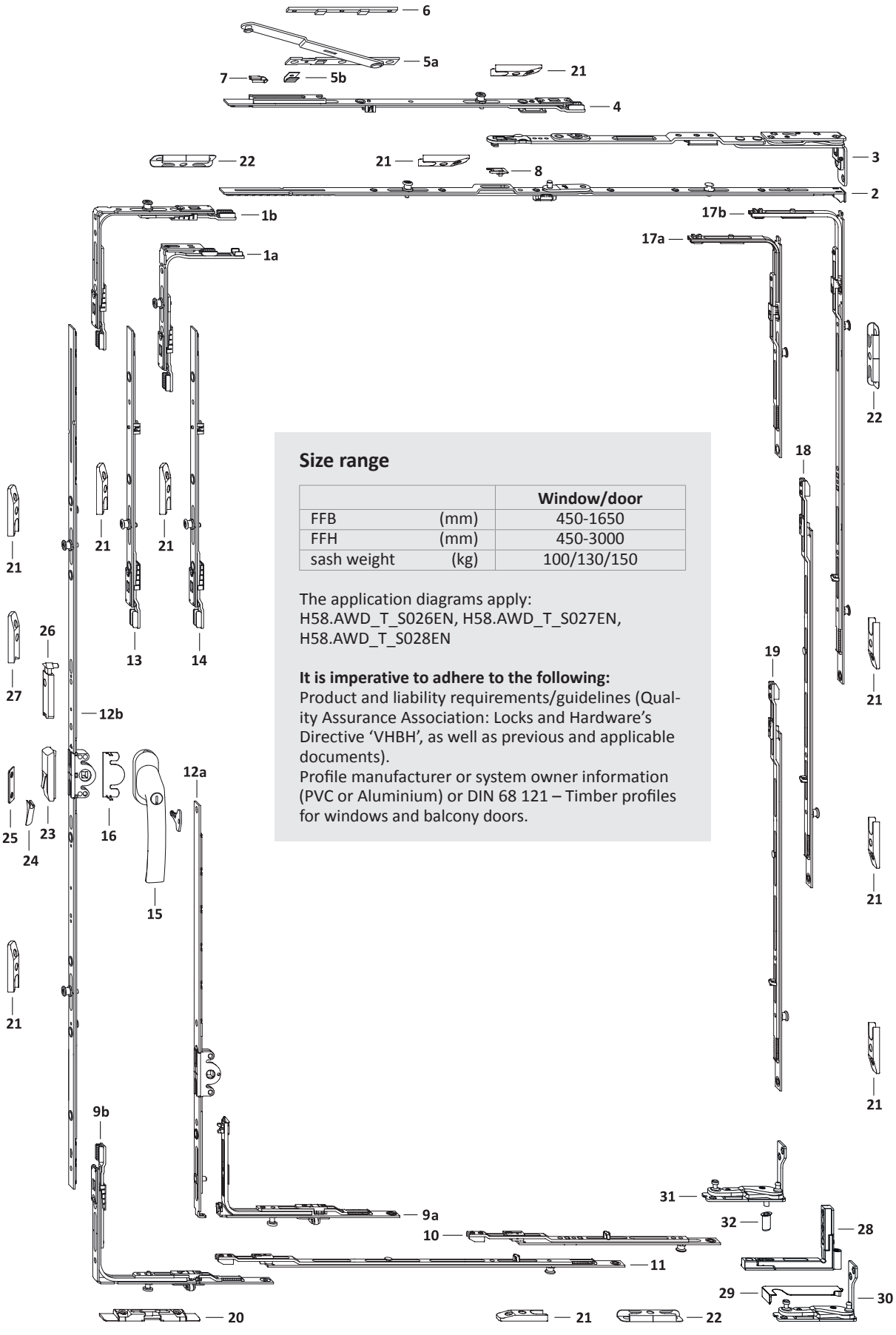
surface TS

backset 15 mm

Hardware set configuration	
General	Locking-points distance 1000
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-turn
H12 GK Hinge side axxent 24+



Size range

		Window/door
FFB	(mm)	450-1650
FFH	(mm)	450-3000
sash weight	(kg)	100/130/150

The application diagrams apply:
H58.AWD_T_S026EN, 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.

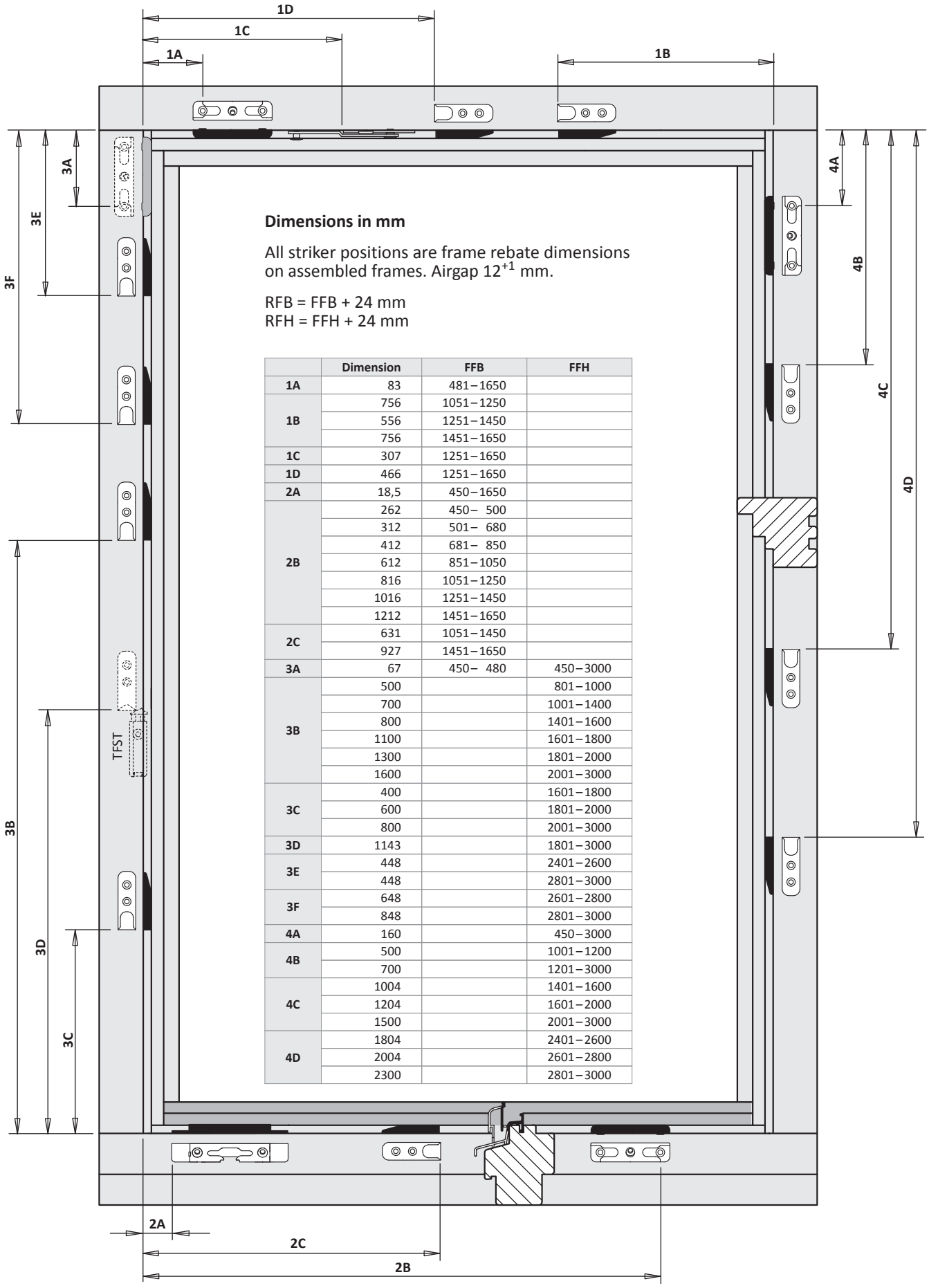
Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Number of frame parts / Pos.		
							20	21	22
1a	corn.drive AF VSO narrow 1RS	TEUL4020- ...	1	450– 480					1
1b	corn.drive VSO 1RS	TEUL4010- ...	1	481–1650					1
2	stay sash part AF AX sz 1	TSSV4000- ...	1	450– 680					
	stay sash part AF AX 2+3 1RS	TSSV0310- ...		681– 850					
	stay sash part AF AX sz 4 1RS	TSSV0320- ...		851–1050					
	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	linkage additional stay 1RS	TZOK1010- ...	1	1251–1650				1	
5	additional stay	Ref. PDB, TSZS	1	1251–1650					
6	packer Z	Ref. PDB, FRUP01	1	1251–1650					
7	tilt restr. additional stay ..	889008	1	1251–1650					
8	tilt restrictor V-V sz 2-4 ..	TFKB0040- ...	1	681–1050	450– 900				
	tilt restrictor V-V sz 5 ..	TFKB0050- ...		1051–1650	450– 900				
9a	locking part VSU/K FH+ 1S	TEVR1400- ...	1	450–1250	450– 600		1		
9b	corn.drive AF VSU/K+ FH 1S	TEUL5010- ...	1	450–1650	601–3000		1		
10	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 5+ 1RS	TVSL0350- ...		851–1050					1
	extension sz 2+ 1RS	TVSL0320- ...		1051–1250					1
	extension sz 4+ 1RS	TVSL0340- ...		1251–1450					1
	extension sz 3+ 1RS	TVSL0330- ...		1451–1650					1
11	linkage BS/FH sz 2+ 1RS	TZBS0190- ...	1	1051–1450				1	
	linkage BS/FH sz 3+ 1RS	TZBS0200- ...		1451–1650				1	
12a	gear 15 sz 30/G180	TGKK3010- ...	1	450–1250	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 lockable 100Nm	Ref.access. ZHGA100	1		450–3000				
16	anti-drill guard E	TGBS0010- ...	1		450–3000				
17a	corn.drive BSO/K3+ 1RS	TEUL2400- ...	1		450–1000				1
17b	corn.drive BS/K3 sz 1+ 2RS	TEUL2380- ...	1		1001–1200			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						

List of fittings

1-sash square tilt-turn
H12 GK Hinge side axxent 24+

Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Number of frame parts / Pos.		
							20	21	22
25	stop	Ref. PDB, FRZF01	1						
26	snapper switchable rh.	TFST0011- ...	1		1801 – 3000				
	snapper switchable lh.	TFST0012- ...			1801 – 3000				
27	frame part snapper	Ref. PDB, TRST	1		1801 – 3000				

Hinge side turning points						
Pos.	Description	Part number		required as per sash weight		
		surface TS	RAL7037	100 kg	130 kg	150 kg
28	corner hinge AX	Ref. PDB, TBEB41		1	1	1
29	cover cap AX EL	Ref. PDB, TKEL41		1	1	1
30	bottom hinge AX	Ref. PDB, TBEV41		1		
31	bottom hinge AX Ø8	Ref. PDB, TBEV42			1	1
32	supporting dowel AX	TBAV4010-0 ...			1	1



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

	Dimension	FFB	FFH
1A	83	481–1650	
1B	756	1051–1250	
	556	1251–1450	
	756	1451–1650	
1C	307	1251–1650	
1D	466	1251–1650	
2A	18,5	450–1650	
2B	262	450– 500	
	312	501– 680	
	412	681– 850	
	612	851–1050	
	816	1051–1250	
	1016	1251–1450	
	1212	1451–1650	
2C	631	1051–1450	
	927	1451–1650	
3A	67	450– 480	450–3000
3B	500		801–1000
	700		1001–1400
	800		1401–1600
	1100		1601–1800
	1300		1801–2000
	1600		2001–3000
3C	400		1601–1800
	600		1801–2000
	800		2001–3000
3D	1143		1801–3000
3E	448		2401–2600
	448		2801–3000
3F	648		2601–2800
	848		2801–3000
4A	160		450–3000
4B	500		1001–1200
	700		1201–3000
4C	1004		1401–1600
	1204		1601–2000
	1500		2001–3000
4D	1804		2401–2600
	2004		2601–2800
	2300		2801–3000

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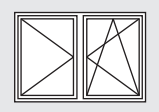
Installation instructions



RC1

2-sash square tilt-turn/turn DS 16

timber 12 mm

RC1

fixed handle position

Hinge side axxent 24+

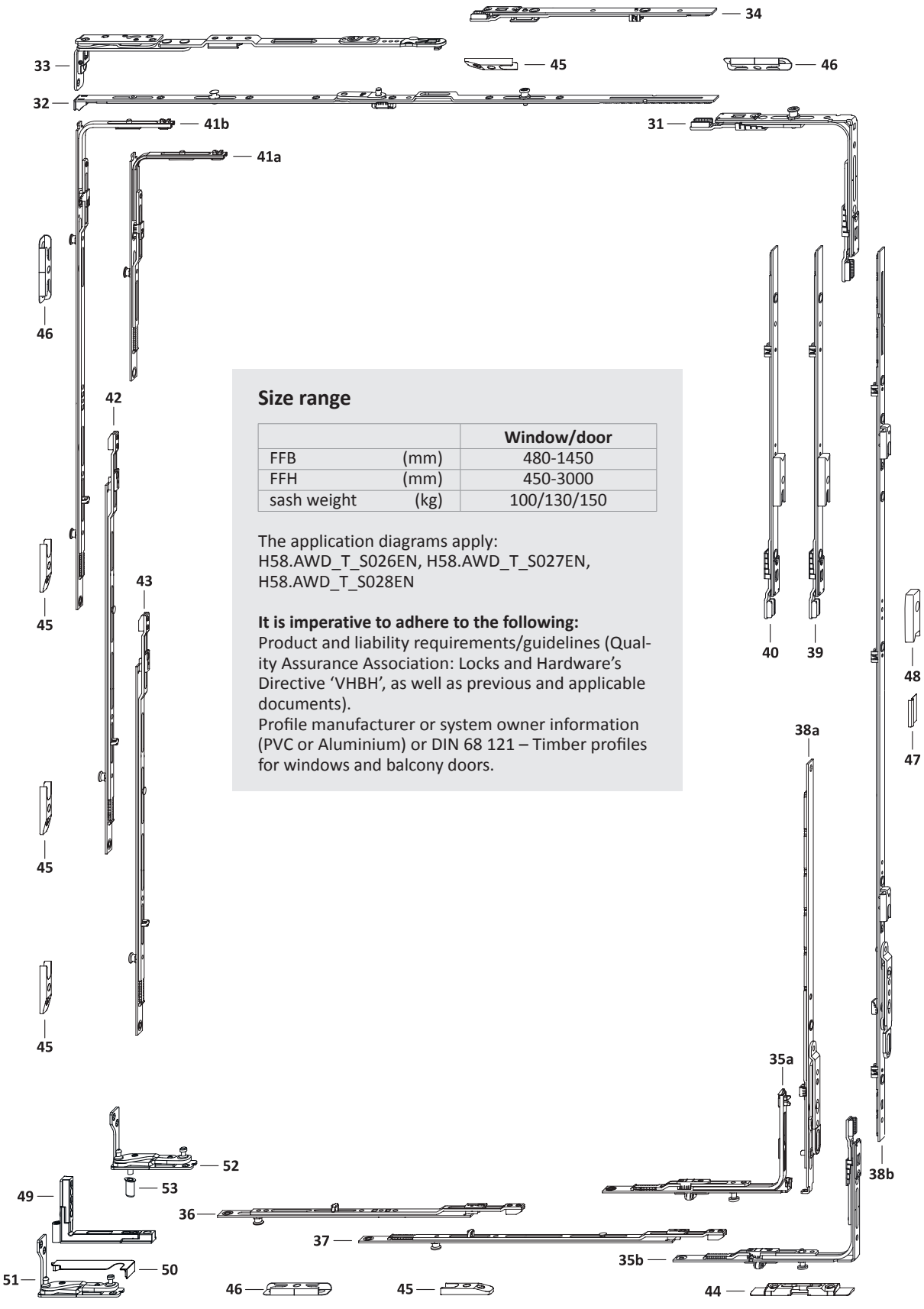
surface TS

backset 15 mm

Hardware set configuration	
General	Locking-points distance 1000
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 slave sash

2-sash square tilt-turn/turn DS 16
H12 GK Hinge side axxent 24+

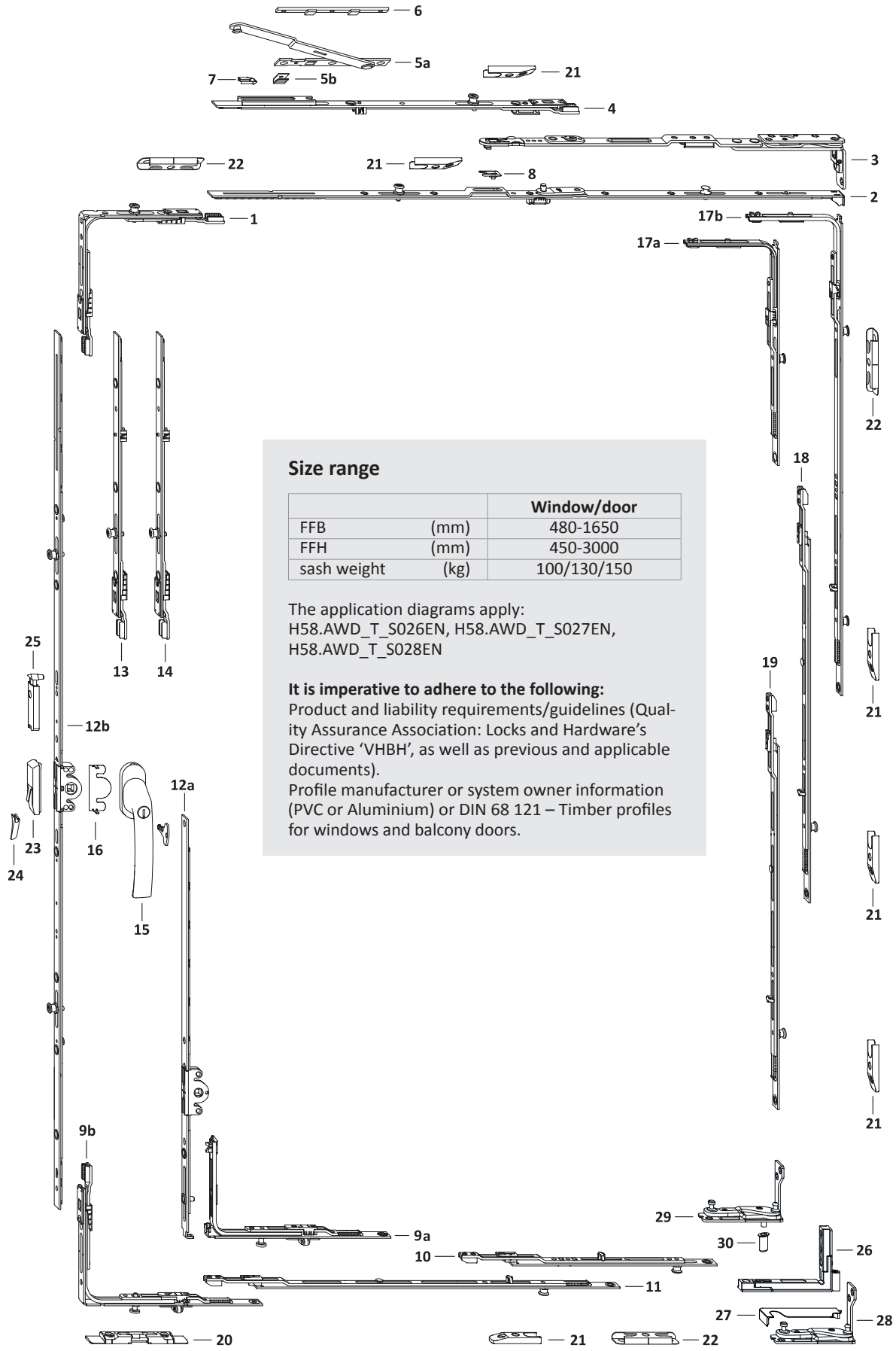


Size range

		Window/door
FFB	(mm)	480-1450
FFH	(mm)	450-3000
sash weight	(kg)	100/130/150

The application diagrams apply:
H58.AWD_T_S026EN, 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.



Size range

		Window/door
FFB	(mm)	480-1650
FFH	(mm)	450-3000
sash weight	(kg)	100/130/150

The application diagrams apply:
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H58.AWD_T_S028EN

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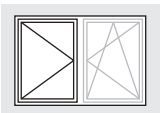
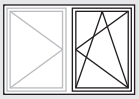
List of fittings slave sash

2-sash square tilt-turn/turn DS 16
H12 GK Hinge side axxent 24+



Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Number of frame parts / Pos.		
						In the main sash	44	45	46
31	corn.drive VSO 1RS	TEUL4010- ...	1	480–1450					1
32	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					
	stay sash part AF AX sz 5 1RS	TSSV0330- ...		1051–1450				1	
33	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					
34	linkage AF sz 1	TZZS0150- ...	1	1251–1450					
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 5+ 1RS	TVSL0350- ...		851–1050					1
	extension sz 2+ 1RS	TVSL0320- ...		1051–1250					1
	extension sz 4+ 1RS	TVSL0340- ...		1251–1450					1
37	linkage BS/FH sz 2+ 1RS	TZBS0190- ...	1	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		450–1000				1
41b	corn.drive BS/K3 sz 1+ 2RS	TEUL2380- ...	1		1001–1200			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	stop	Ref. PDB, FRZF04	1		601–3000				
48	striker snapper A0767	TRST0010- ...	1		1801–3000				

Hinge side turning points						
Pos.	Description	Part number		required as per sash weight		
		surface TS	RAL7037	100 kg	130 kg	150 kg
49	corner hinge AX	Ref. PDB, TBEB41		1	1	1
50	cover cap AX EL	Ref. PDB, TKEL41		1	1	1
51	bottom hinge AX	Ref. PDB, TBEV41		1		
52	bottom hinge AX Ø8	Ref. PDB, TBEV42			1	1
53	supporting dowel AX	TBAV4010-0 ...			1	1



List of fittings main sash

2-sash square tilt-turn/turn DS 16
H12 GK Hinge side axxent 24+

TITAN AF

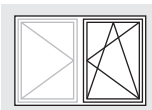
RC1

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					
	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	linkage additional stay 1RS	TZOK1010- ...	1	1251–1650				1	
5	additional stay	Ref. PDB, TSZS	1	1251–1650					
6	packer Z	Ref. PDB, FRUP01	1	1251–1650					
7	tilt restr. additional stay ..	889008	1	1251–1650					
8	tilt restrictor V-V sz 2-4 ..	TFKB0040- ...	1	681–1050	450– 900				
	tilt restrictor V-V sz 5 ..	TFKB0050- ...		1051–1250	450– 900				
9a	locking part VSU/K FH+ 1S	TEVR1400- ...	1	480–1250	450– 600		1		
9b	corn.drive AF VSU/K+ FH 1S	TEUL5010- ...	1	480–1650	601–3000		1		
10	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 5+ 1RS	TVSL0350- ...		851–1050					1
	extension sz 2+ 1RS	TVSL0320- ...		1051–1250					1
	extension sz 4+ 1RS	TVSL0340- ...		1251–1450					1
	extension sz 3+ 1RS	TVSL0330- ...		1451–1650					1
11	linkage BS/FH sz 2+ 1RS	TZBS0190- ...	1	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 lockable 100Nm	Ref.access. ZHGA100	1		450–3000				
16	anti-drill guard E	TGBS0010- ...	1		450–3000				
17a	corn.drive BSO/K3+ 1RS	TEUL2400- ...	1		450–1000				1
17b	corn.drive BS/K3 sz 1+ 2RS	TEUL2380- ...	1		1001–1200			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		601–3000				
24	pressure piece	Ref. PDB, TFFD	1		601–3000				

4

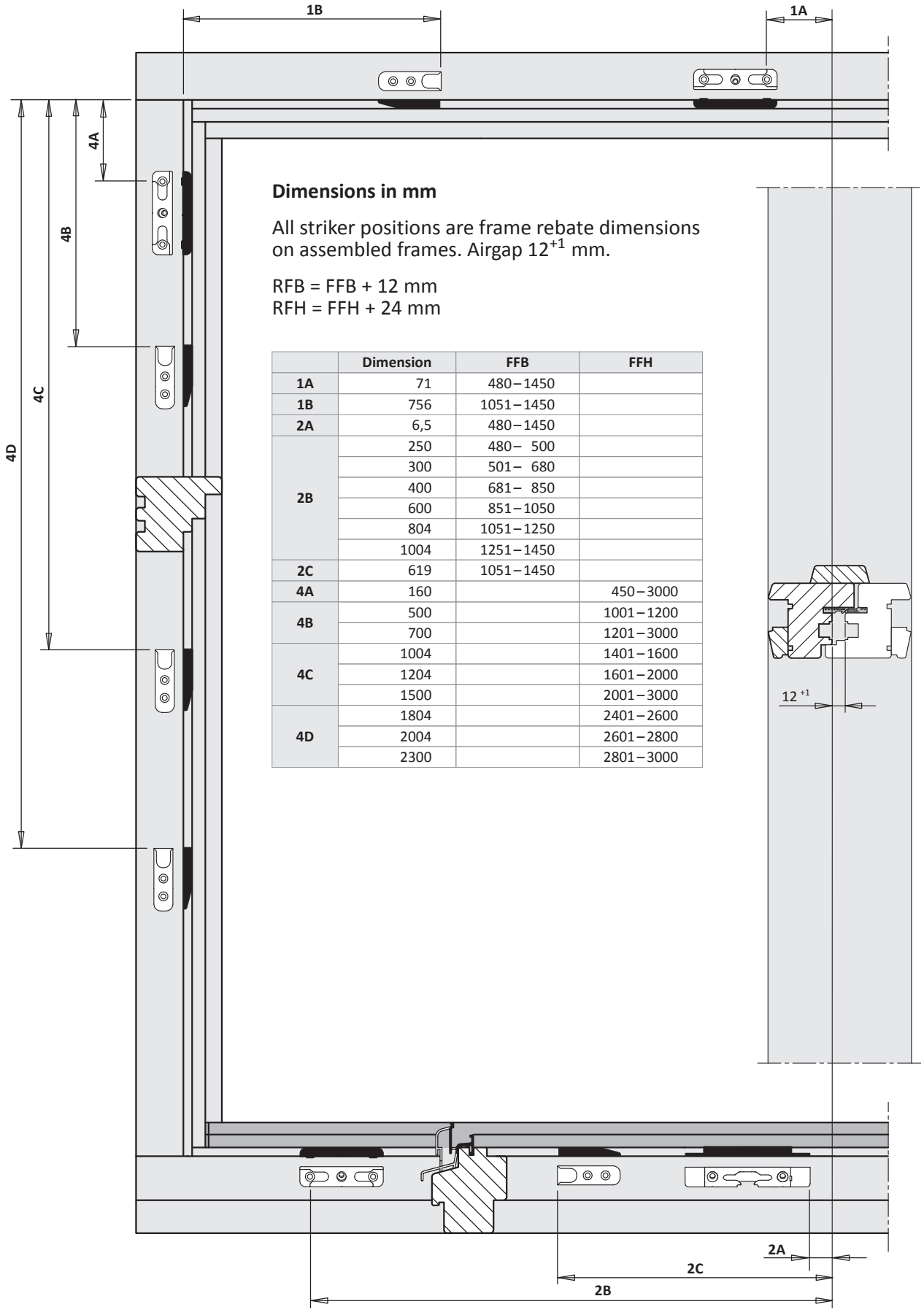
List of fittings main sash

2-sash square tilt-turn/turn DS 16
H12 GK Hinge side axxent 24+



Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Number of frame parts / Pos.		
							20	21	22
25	snapper switchable rh.	TFST0011- ...	1		1801 – 3000				
	snapper switchable lh.	TFST0012- ...			1801 – 3000				

Hinge side turning points						
Pos.	Description	Part number		required as per sash weight		
		surface TS	RAL7037	100 kg	130 kg	150 kg
26	corner hinge AX	Ref. PDB, TBEB41		1	1	1
27	cover cap AX EL	Ref. PDB, TKEL41		1	1	1
28	bottom hinge AX	Ref. PDB, TBEV41		1		
29	bottom hinge AX Ø8	Ref. PDB, TBEV42			1	1
30	supporting dowel AX	TBAV4010-0 ...			1	1



Dimensions in mm

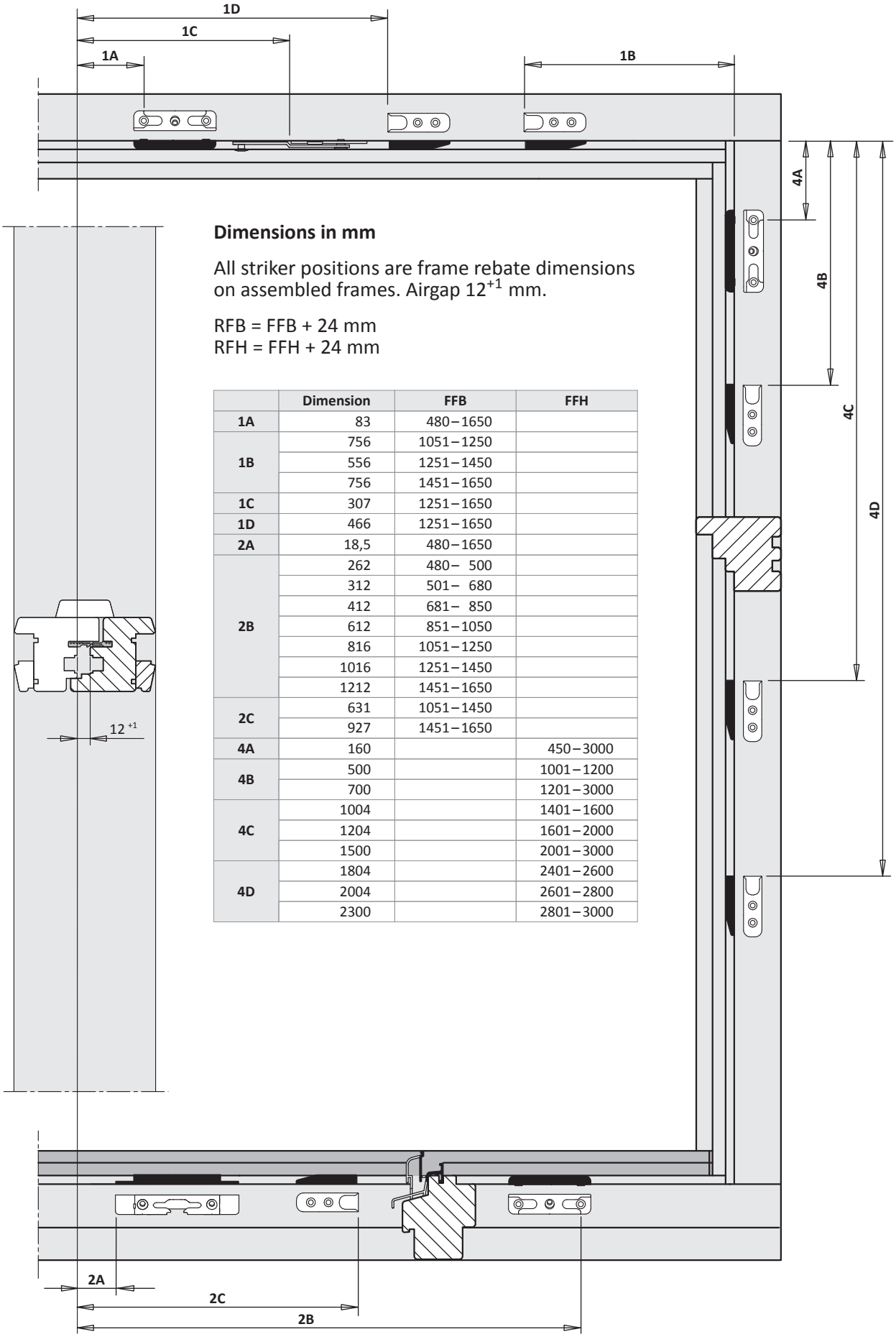
All striker positions are frame rebate dimensions on assembled frames. Airgap 12^{+1} mm.

RFB = FFB + 12 mm
RFH = FFH + 24 mm

	Dimension	FFB	FFH
1A	71	480–1450	
1B	756	1051–1450	
2A	6,5	480–1450	
2B	250	480– 500	
	300	501– 680	
	400	681– 850	
	600	851–1050	
	804	1051–1250	
	1004	1251–1450	
2C	619	1051–1450	
4A	160		450–3000
4B	500		1001–1200
	700		1201–3000
4C	1004		1401–1600
	1204		1601–2000
	1500		2001–3000
4D	1804		2401–2600
	2004		2601–2800
	2300		2801–3000

Frame dimensions main sash

2-sash square tilt-turn/turn DS 16
H12 GK Hinge side axxent 24+



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

	Dimension	FFB	FFH
1A	83	480–1650	
1B	756	1051–1250	
	556	1251–1450	
	756	1451–1650	
1C	307	1251–1650	
1D	466	1251–1650	
2A	18,5	480–1650	
2B	262	480– 500	
	312	501– 680	
	412	681– 850	
	612	851–1050	
	816	1051–1250	
	1016	1251–1450	
	1212	1451–1650	
2C	631	1051–1450	
	927	1451–1650	
4A	160		450–3000
4B	500		1001–1200
	700		1201–3000
4C	1004		1401–1600
	1204		1601–2000
	1500		2001–3000
4D	1804		2401–2600
	2004		2601–2800
	2300		2801–3000

TITAN AF

Installation instructions

RC1

1-sash square tilt before turn (TBT)

timber 12 mm

RC1

fixed handle position

Hinge side axxent 24+

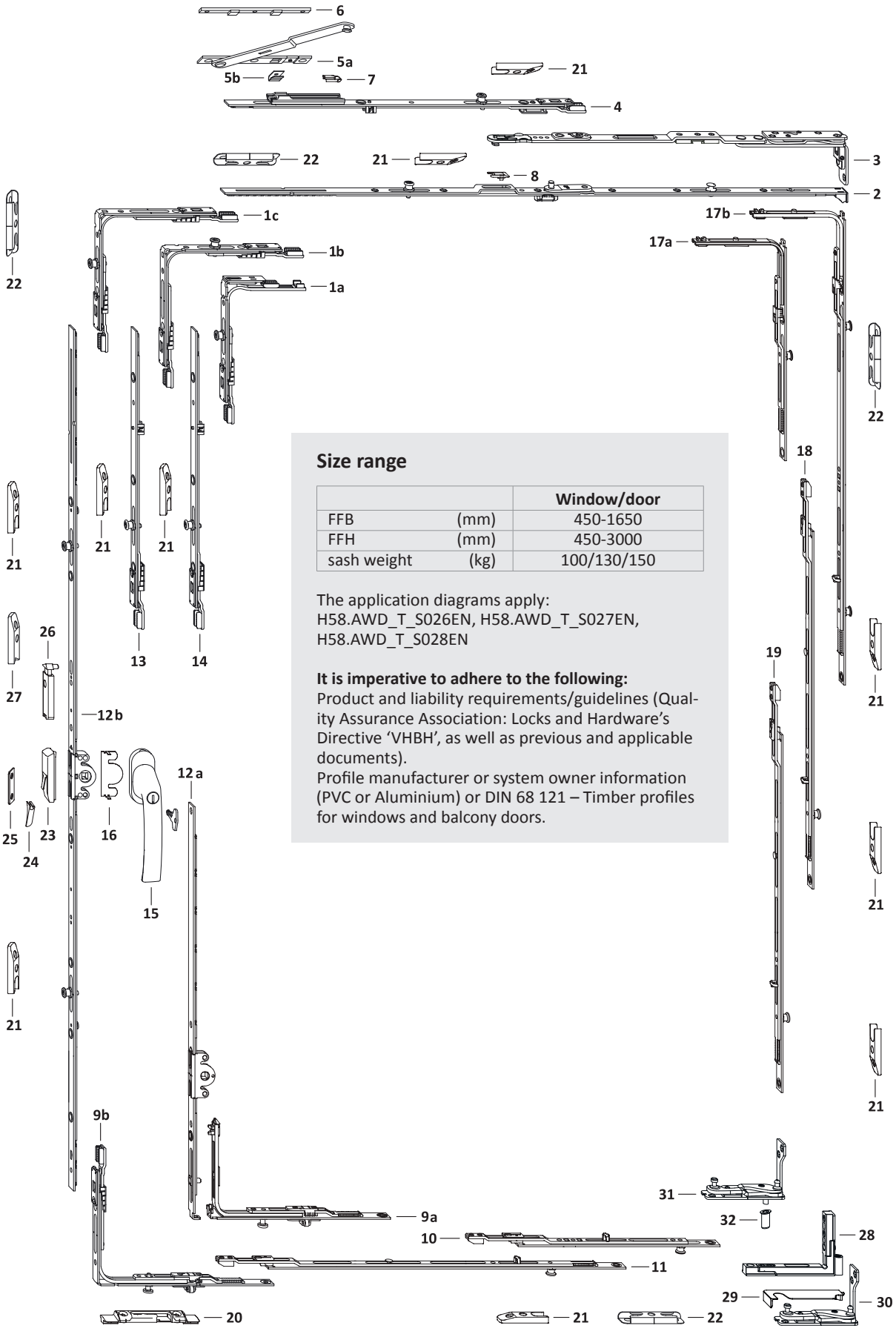
surface TS

backset 15 mm

Hardware set configuration	
General	Locking-points distance 1000
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)
H12 GK Hinge side axxent 24+



Size range

		Window/door
FFB	(mm)	450-1650
FFH	(mm)	450-3000
sash weight	(kg)	100/130/150

The application diagrams apply:
H58.AWD_T_S026EN, H58.AWD_T_S027EN,
H58.AWD_T_S028EN

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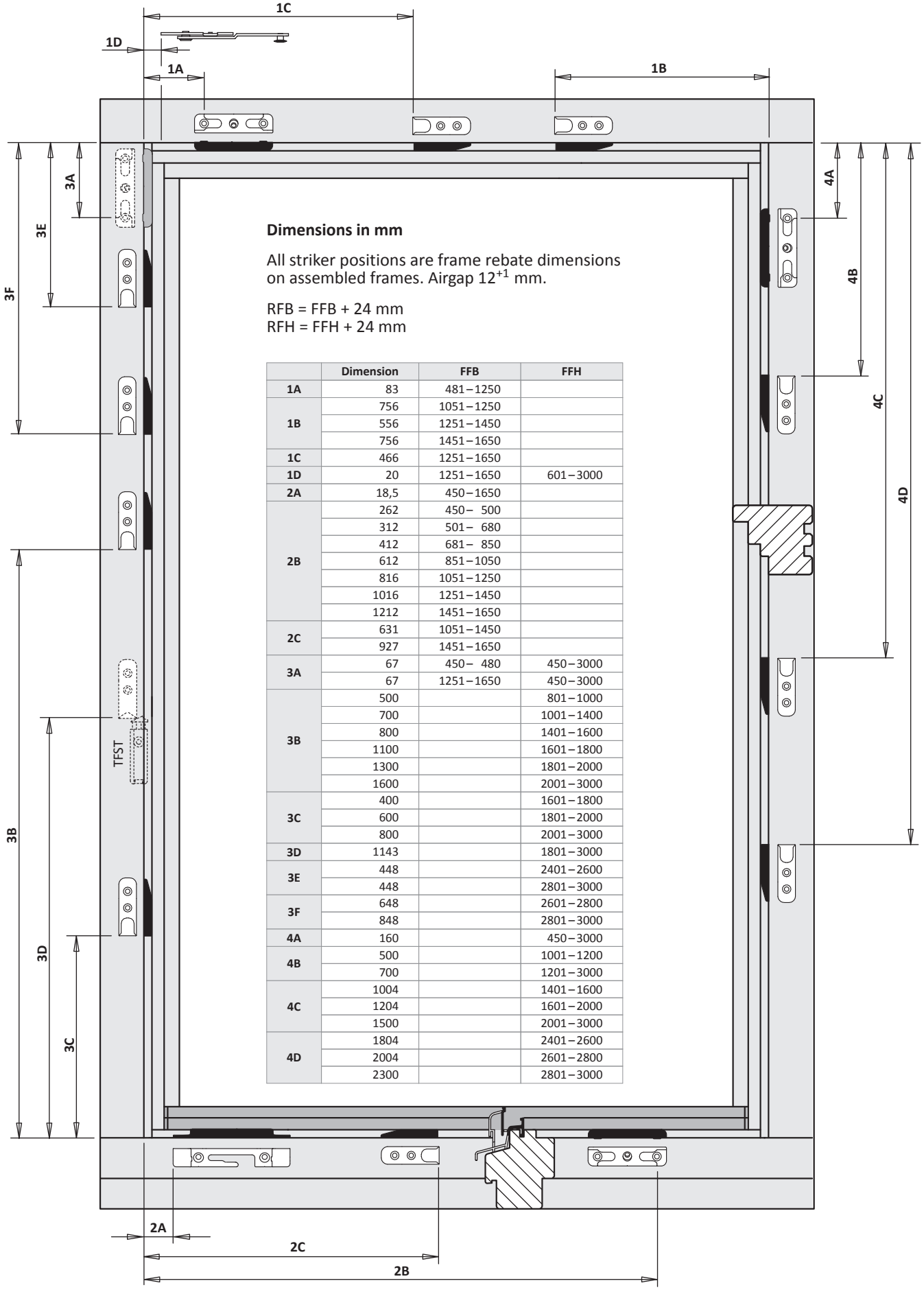
Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Number of frame parts / Pos.		
							20	21	22
1a	corn.drive AF VSO narrow 1RS	TEUL4020- ...	1	450– 480					1
1b	corn.drive VSO 1RS	TEUL4010- ...	1	481–1250					1
1c	corn.drive VSO 1RS	TEUL4010- ...	1	1251–1650					1
2	stay sash part AF AX sz 1	TSSV4000- ...	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					
	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	linkage add. stay AF TBT RS	TZOT1010- ...	1	1251–1650				1	
5	additional stay	Ref. PDB, TSZS	1	1251–1650					
6	packer Z	Ref. PDB, FRUP01	1	1251–1650					
7	tilt restr. additional stay ..	889008	1	1251–1650					
8	tilt restrictor V-V sz 2-4 ..	TFKB0040- ...	1	681–1050	450– 900				
	tilt restrictor V-V sz 5 ..	TFKB0050- ...		1051–1650	450– 900				
9a	locking part VSU/K FH+ 1S	TEVR1400- ...	1	450–1250	450– 600		1		
9b	corn.drive AF VSU/K+ FH 1S	TEUL5010- ...	1	450–1650	601–3000		1		
10	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 5+ 1RS	TVSL0350- ...		851–1050					1
	extension sz 2+ 1RS	TVSL0320- ...		1051–1250					1
	extension sz 4+ 1RS	TVSL0340- ...		1251–1450					1
	extension sz 3+ 1RS	TVSL0330- ...		1451–1650					1
11	linkage BS/FH sz 2+ 1RS	TZBS0190- ...	1	1051–1450				1	
	linkage BS/FH sz 3+ 1RS	TZBS0200- ...		1451–1650				1	
12a	gear 15 sz 30/G180	TGKK3010- ...	1	450–1250	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	anti-drill guard E	TGBS0010- ...	1		450–3000				
17a	corn.drive BSO/K3+ 1RS	TEUL2400- ...	1		450–1000				1
17b	corn.drive BS/K3 sz 1+ 2RS	TEUL2380- ...	1		1001–1200			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						

List of fittings

1-sash square tilt before turn (TBT)
H12 GK Hinge side axxent 24+

Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Number of frame parts / Pos.		
							20	21	22
24	pressure piece	Ref. PDB, TFFD	1						
25	stop	Ref. PDB, FRZF01	1						
26	snapper switchable rh.	TFST0011- ...	1		1801 – 3000				
	snapper switchable lh.	TFST0012- ...			1801 – 3000				
27	frame part snapper	Ref. PDB, TRST	1		1801 – 3000				

Hinge side turning points						
Pos.	Description	Part number		required as per sash weight		
		surface TS	RAL7037	100 kg	130 kg	150 kg
28	corner hinge AX	Ref. PDB, TBEB41		1	1	1
29	cover cap AX EL	Ref. PDB, TKEL41		1	1	1
30	bottom hinge AX	Ref. PDB, TBEV41		1		
31	bottom hinge AX Ø8	Ref. PDB, TBEV42			1	1
32	supporting dowel AX	TBAV4010-0 ...			1	1



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

	Dimension	FFB	FFH
1A	83	481–1250	
1B	756	1051–1250	
	556	1251–1450	
	756	1451–1650	
1C	466	1251–1650	
1D	20	1251–1650	601–3000
2A	18,5	450–1650	
2B	262	450– 500	
	312	501– 680	
	412	681– 850	
	612	851–1050	
	816	1051–1250	
	1016	1251–1450	
	1212	1451–1650	
2C	631	1051–1450	
	927	1451–1650	
3A	67	450– 480	450–3000
	67	1251–1650	450–3000
3B	500		801–1000
	700		1001–1400
	800		1401–1600
	1100		1601–1800
	1300		1801–2000
	1600		2001–3000
3C	400		1601–1800
	600		1801–2000
	800		2001–3000
3D	1143		1801–3000
3E	448		2401–2600
	448		2801–3000
3F	648		2601–2800
	848		2801–3000
4A	160		450–3000
4B	500		1001–1200
	700		1201–3000
4C	1004		1401–1600
	1204		1601–2000
	1500		2001–3000
4D	1804		2401–2600
	2004		2601–2800
	2300		2801–3000

TITAN AF

Installation instructions

RC1

1-sash square tilt-turn

timber 12 mm

RC1

fixed handle position

Hinge side axxent 24+

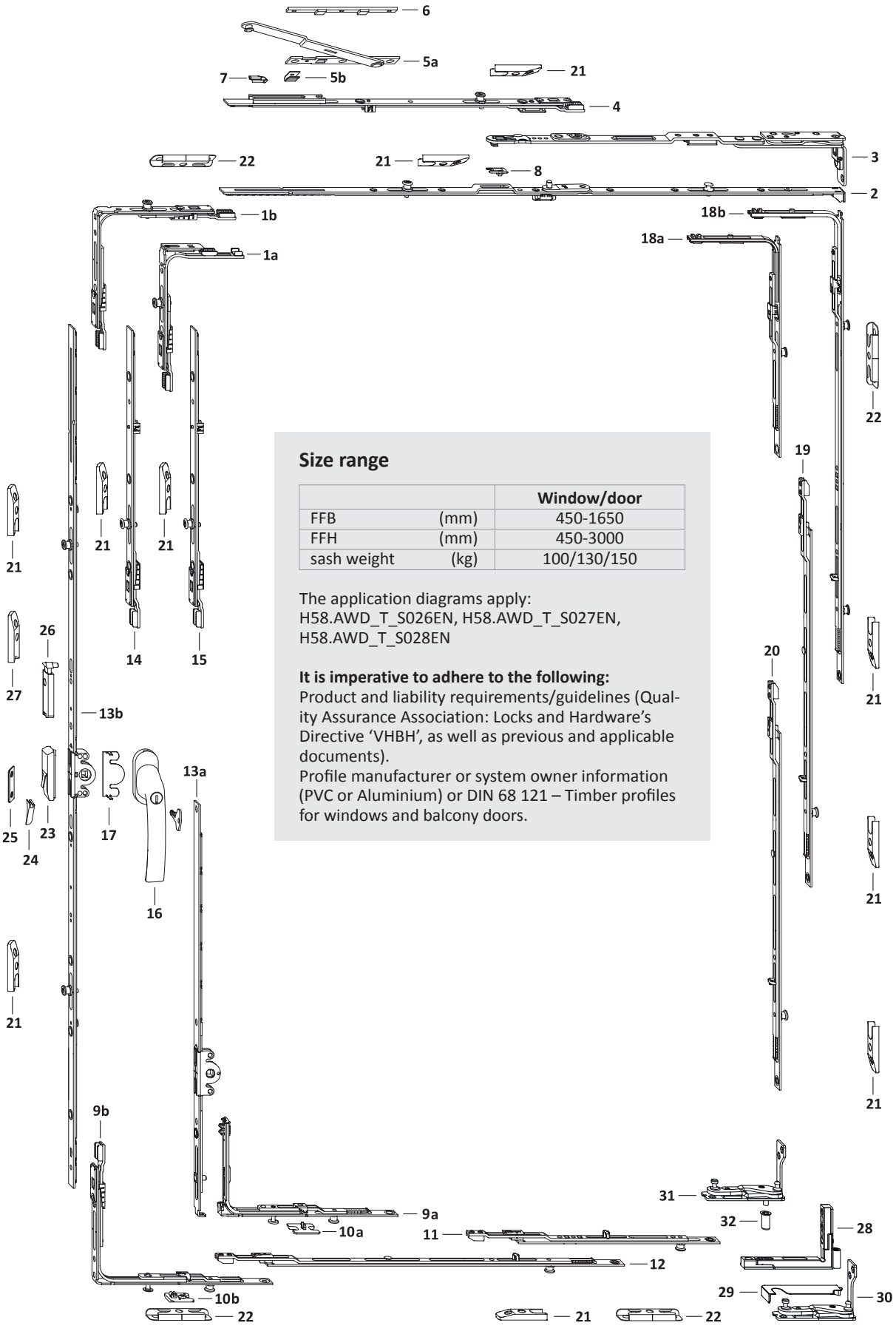
surface TS

backset 15 mm

Hardware set configuration	
General	Locking-points distance 1000
Stay side	two-piece stay ax 24+
Bottom	double cam SB R-RS
Locking side	mishandl. device on gear
Hinge side	corner drive BS sz 1+2 2RS

hardware layout

1-sash square tilt-turn
H12 GK Hinge side axxent 24+



Size range

		Window/door
FFB	(mm)	450-1650
FFH	(mm)	450-3000
sash weight	(kg)	100/130/150

The application diagrams apply:
H58.AWD_T_S026EN, 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

H12 GK Hinge side axxent 24+

TITAN AF

RC1

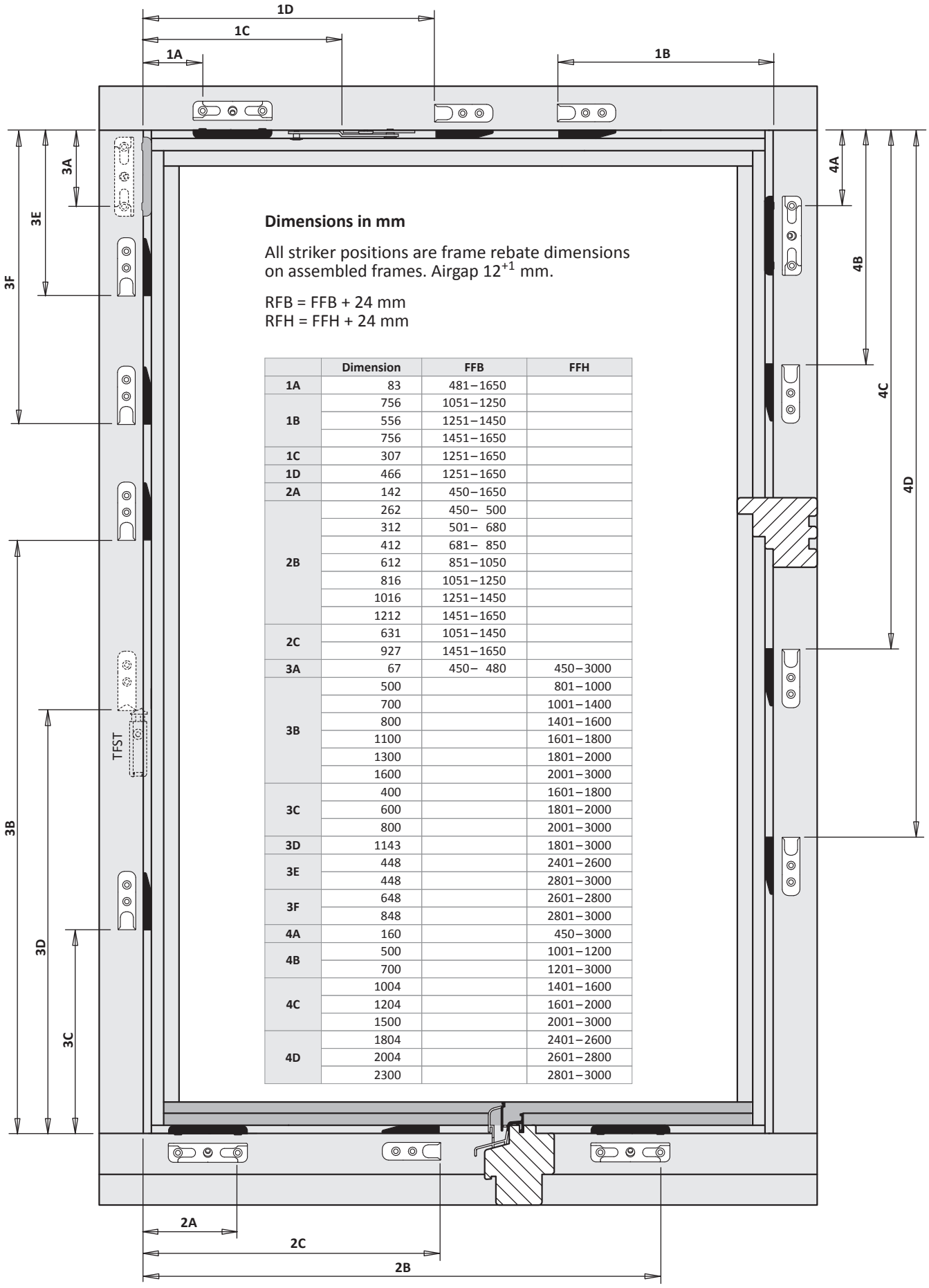
Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Number of frame parts / Pos.	
							21	22
1a	corn.drive AF VSO narrow 1RS	TEUL4020- ...	1	450– 480				1
1b	corn.drive VSO 1RS	TEUL4010- ...	1	481–1650				1
2	stay sash part AF AX sz 1	TSSV4000- ...	1	450– 680				
	stay sash part AF AX 2+3 1RS	TSSV0310- ...		681– 850				
	stay sash part AF AX sz 4 1RS	TSSV0320- ...		851–1050				
	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	linkage additional stay 1RS	TZOK1010- ...	1	1251–1650			1	
5	additional stay	Ref. PDB, TSZS	1	1251–1650				
6	packer Z	Ref. PDB, FRUP01	1	1251–1650				
7	tilt restr. additional stay ..	889008	1	1251–1650				
8	tilt restrictor V-V sz 2-4 ..	TFKB0040- ...	1	681–1050	450– 900			
	tilt restrictor V-V sz 5 ..	TFKB0050- ...		1051–1650	450– 900			
9a	locking part VSU/K 56+ 1S 1RS	TEVR1340- ...	1	450–1250	450– 600			1
9b	corn.drive AF VSU/K 56+ 1S 1RS	TEUL5030- ...	1	450–1650	601–3000			1
10a	run-up plate FH KRL56	Ref. PDB, TRAL01	1	450–1250	450– 600			
10b	run up block AF 13 mm 13	TFFH0080- ...	1	450–1650	601–3000			
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 5+ 1RS	TVSL0350- ...		851–1050				1
	extension sz 2+ 1RS	TVSL0320- ...		1051–1250				1
	extension sz 4+ 1RS	TVSL0340- ...		1251–1450				1
	extension sz 3+ 1RS	TVSL0330- ...		1451–1650				1
12	linkage BS/FH sz 2+ 1RS	TZBS0190- ...	1	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		450–1000			1
18b	corn.drive BS/K3 sz 1+ 2RS	TEUL2380- ...	1		1001–1200		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	striker plate 56	Ref. PDB, FRSB						
22	striker plate S-RS	Ref. PDB, TRSK						
on request								
23	mishandling device	TFBS0010- ...	1					

List of fittings

1-sash square tilt-turn
H12 GK Hinge side axxent 24+

Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Number of frame parts / Pos.	
							21	22
24	pressure piece	Ref. PDB, TFFD	1					
25	stop	Ref. PDB, FRZF01	1					
26	snapper switchable rh.	TFST0011- ...	1		1801 – 3000			
	snapper switchable lh.	TFST0012- ...			1801 – 3000			
27	frame part snapper	Ref. PDB, TRST	1		1801 – 3000			

Hinge side turning points						
Pos.	Description	Part number		required as per sash weight		
		surface TS	RAL7037	100 kg	130 kg	150 kg
28	corner hinge AX	Ref. PDB, TBEB41		1	1	1
29	cover cap AX EL	Ref. PDB, TKEL41		1	1	1
30	bottom hinge AX	Ref. PDB, TBEV41		1		
31	bottom hinge AX Ø8	Ref. PDB, TBEV42			1	1
32	supporting dowel AX	TBAV4010-0 ...			1	1



Dimensions in mm

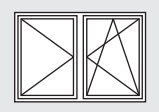
All striker positions are frame rebate dimensions on assembled frames. Airgap 12^{+1} mm.

RFB = FFB + 24 mm
RFH = FFH + 24 mm

	Dimension	FFB	FFH
1A	83	481–1650	
1B	756	1051–1250	
	556	1251–1450	
	756	1451–1650	
1C	307	1251–1650	
1D	466	1251–1650	
2A	142	450–1650	
2B	262	450– 500	
	312	501– 680	
	412	681– 850	
	612	851–1050	
	816	1051–1250	
	1016	1251–1450	
	1212	1451–1650	
2C	631	1051–1450	
	927	1451–1650	
3A	67	450– 480	450–3000
3B	500		801–1000
	700		1001–1400
	800		1401–1600
	1100		1601–1800
	1300		1801–2000
	1600		2001–3000
3C	400		1601–1800
	600		1801–2000
	800		2001–3000
3D	1143		1801–3000
3E	448		2401–2600
	448		2801–3000
3F	648		2601–2800
	848		2801–3000
4A	160		450–3000
4B	500		1001–1200
	700		1201–3000
4C	1004		1401–1600
	1204		1601–2000
	1500		2001–3000
4D	1804		2401–2600
	2004		2601–2800
	2300		2801–3000

TITAN AF

Installation instructions



RC1

2-sash square tilt-turn/turn DS 16

timber 12 mm

RC1

fixed handle position

Hinge side axxent 24+

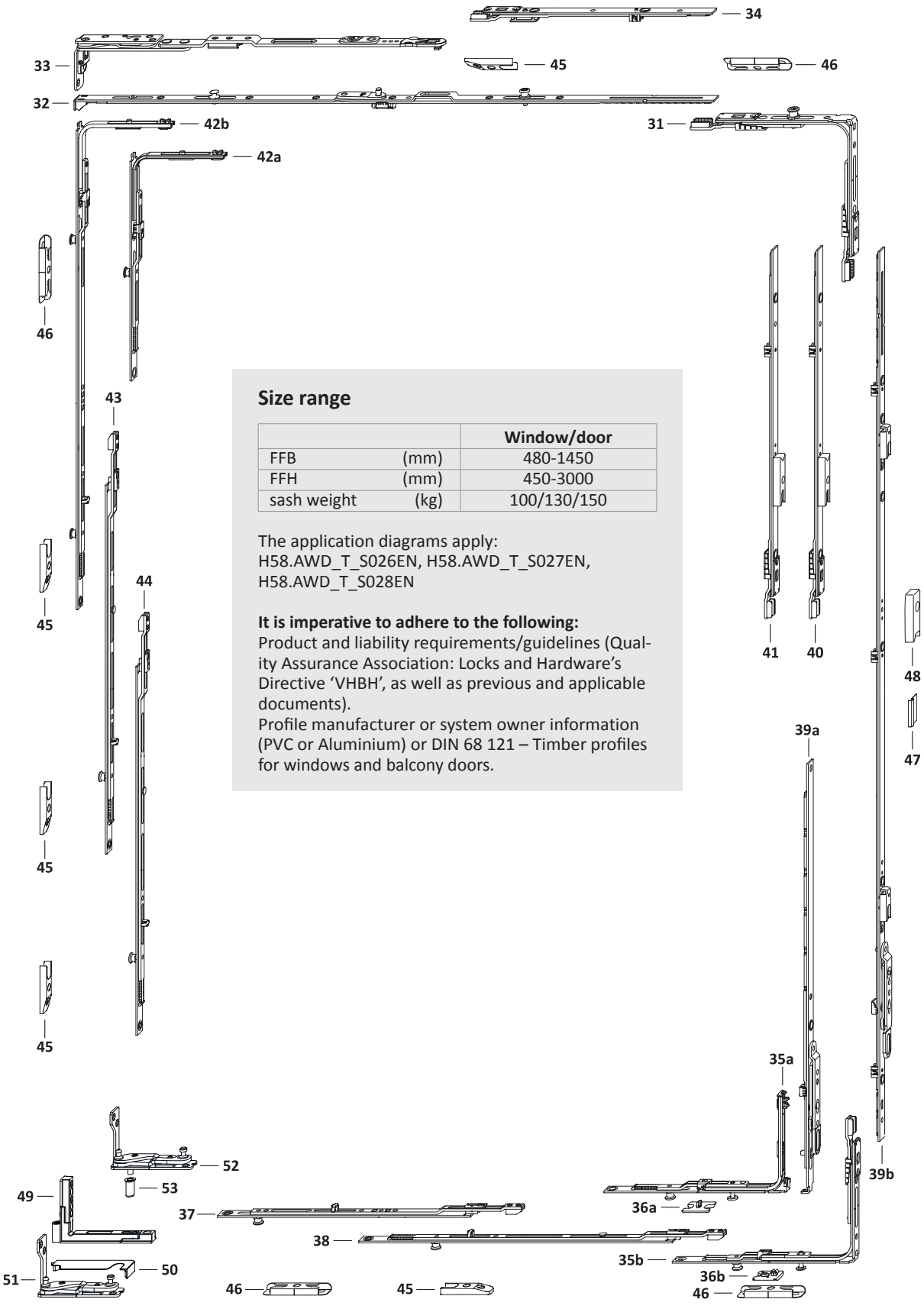
surface TS

backset 15 mm

Hardware set configuration	
General	Locking-points distance 1000
Stay side	two-piece stay ax 24+
Bottom	double cam SB R-RS
Locking side	mishandl. device on gear
Hinge side	corner drive BS sz 1+2 2RS

hardware layout slave sash

2-sash square tilt-turn/turn DS 16
H12 GK Hinge side axxent 24+



Size range

		Window/door
FFB	(mm)	480-1450
FFH	(mm)	450-3000
sash weight	(kg)	100/130/150

The application diagrams apply:
H58.AWD_T_S026EN, H58.AWD_T_S027EN,
H58.AWD_T_S028EN

It is imperative to adhere to the following:
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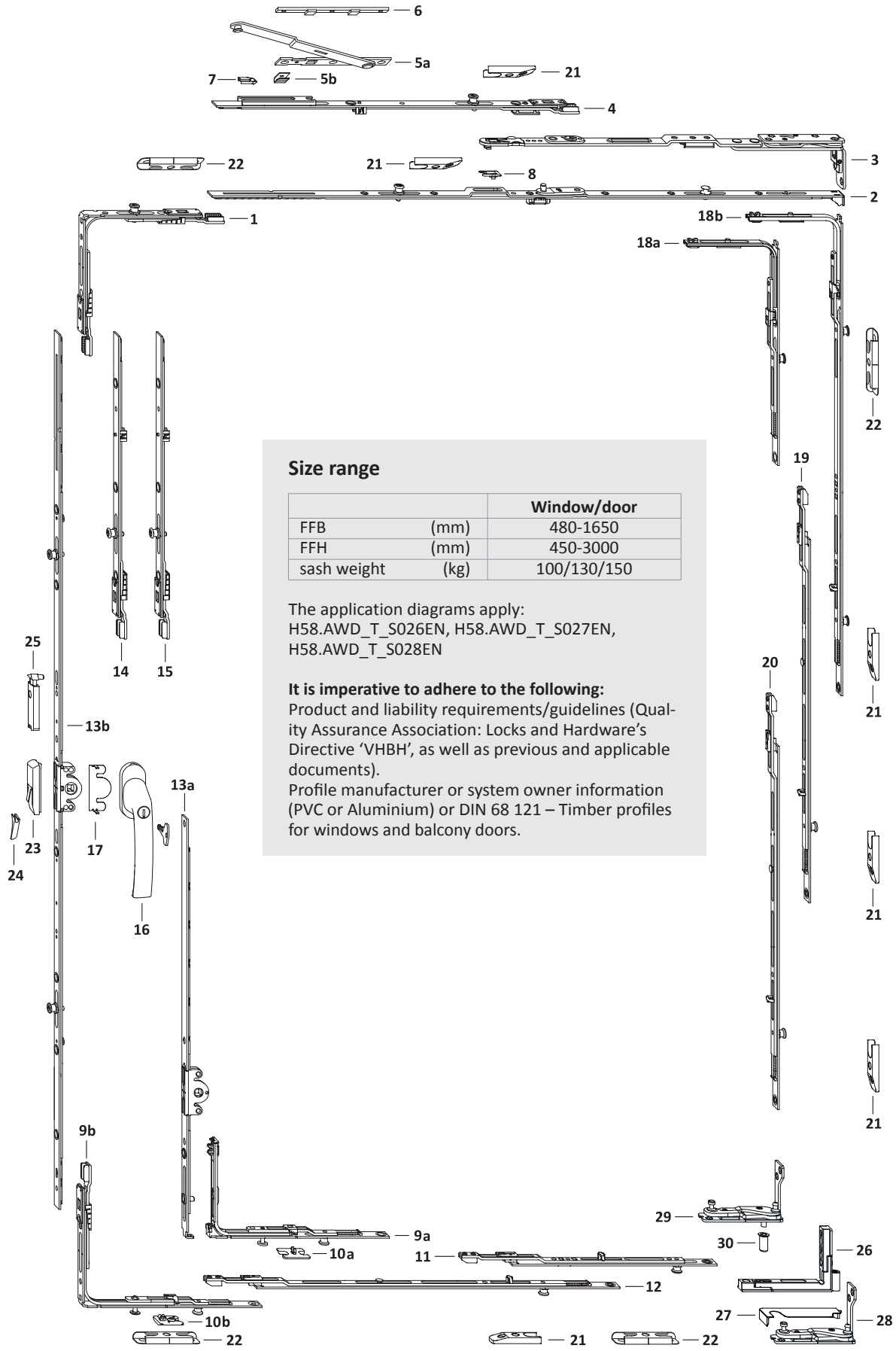
Profile manufacturer or system owner information (PVC or Aluminium) or DIN 68 121 – Timber profiles for windows and balcony doors.



Size range

		Window/door
FFB	(mm)	480-1650
FFH	(mm)	450-3000
sash weight	(kg)	100/130/150

The application diagrams apply:
H58.AWD_T_S026EN, H58.AWD_T_S027EN,
H58.AWD_T_S028EN

It is imperative to adhere to the following:
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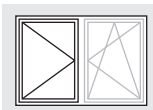
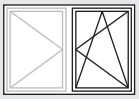
List of fittings slave sash

2-sash square tilt-turn/turn DS 16
H12 GK Hinge side axxent 24+



Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Number of frame parts / Pos.	
						In the main sash	45	46
31	corn.drive VSO 1RS	TEUL4010- ...	1	480–1450				1
32	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				
	stay sash part AF AX sz 5 1RS	TSSV0330- ...		1051–1450			1	
33	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				
34	linkage AF sz 1	TZZS0150- ...	1	1251–1450				
35a	locking part VSU/K 56+ 1S 1RS	TEVR1340- ...	1	480–1450	450– 800			1
35b	corn.drive AF VSU/K 56+ 1S 1RS	TEUL5030- ...	1	480–1450	801–3000			1
36a	run-up plate FH KRL56	Ref. PDB, TRAL01	1	480–1450	450– 800			
36b	run up block AF 13 mm 13	TFFH0080- ...	1	480–1450	801–3000			
37	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 5+ 1RS	TVSL0350- ...		851–1050				1
	extension sz 2+ 1RS	TVSL0320- ...		1051–1250				1
	extension sz 4+ 1RS	TVSL0340- ...		1251–1450				1
38	linkage BS/FH sz 2+ 1RS	TZBS0190- ...	1	1051–1450			1	
39a	sec.sash gear 16 sz 30	TGKS0010- ...	1	480–1250	450– 600	180		
	sec.sash gear 16 AF 60/G300	TGKS4030- ...			601– 800	300		
39b	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		
40	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			
41	linkage AF sz 2 1SB-RS	TZKS1030- ...	1		2601–2800			
	linkage AF sz 2 1SB-RS	TZKS1030- ...			2801–3000			
42a	corn.drive BSO/K3+ 1RS	TEUL2400- ...	1		450–1000			1
42b	corn.drive BS/K3 sz 1+ 2RS	TEUL2380- ...	1		1001–1200		1	1
	corn.drive BS/K3 sz 2+ 2RS	TEUL2390- ...			1201–3000		1	1
43	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	
44	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	
45	striker plate 56	Ref. PDB, FRSB						
46	striker plate S-RS	Ref. PDB, TRSK						
on request								
47	stop	Ref. PDB, FRZF04	1		601–3000			
48	striker snapper A0767	TRST0010- ...	1		1801–3000			

Hinge side turning points						
Pos.	Description	Part number		required as per sash weight		
		surface TS	RAL7037	100 kg	130 kg	150 kg
49	corner hinge AX	Ref. PDB, TBEB41		1	1	1
50	cover cap AX EL	Ref. PDB, TKEL41		1	1	1
51	bottom hinge AX	Ref. PDB, TBEV41		1		
52	bottom hinge AX Ø8	Ref. PDB, TBEV42			1	1
53	supporting dowel AX	TBAV4010-0 ...			1	1



List of fittings main sash

2-sash square tilt-turn/turn DS 16
H12 GK Hinge side axxent 24+

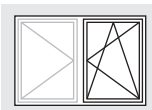
TITAN AF

RC1

Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Number of frame parts / Pos.	
							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				
	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	linkage additional stay 1RS	TZOK1010- ...	1	1251–1650			1	
5	additional stay	Ref. PDB, TSZS	1	1251–1650				
6	packer Z	Ref. PDB, FRUP01	1	1251–1650				
7	tilt restr. additional stay ..	889008	1	1251–1650				
8	tilt restrictor V-V sz 2-4 ..	TFKB0040- ...	1	681–1050	450– 900			
	tilt restrictor V-V sz 5 ..	TFKB0050- ...		1051–1250	450– 900			
9a	locking part VSU/K 56+ 1S 1RS	TEVR1340- ...	1	480–1250	450– 600			1
9b	corn.drive AF VSU/K 56+ 1S 1RS	TEUL5030- ...	1	480–1650	601–3000			1
10a	run-up plate FH KRL56	Ref. PDB, TRAL01	1	480–1250	450– 600			
10b	run up block AF 13 mm 13	TFFH0080- ...	1	480–1650	601–3000			
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 5+ 1RS	TVSL0350- ...		851–1050				1
	extension sz 2+ 1RS	TVSL0320- ...		1051–1250				1
	extension sz 4+ 1RS	TVSL0340- ...		1251–1450				1
	extension sz 3+ 1RS	TVSL0330- ...		1451–1650				1
12	linkage BS/FH sz 2+ 1RS	TZBS0190- ...	1	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		450–1000			1
18b	corn.drive BS/K3 sz 1+ 2RS	TEUL2380- ...	1		1001–1200		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	striker plate 56	Ref. PDB, FRSB						
22	striker plate S-RS	Ref. PDB, TRSK						
on request								
23	mishandling device	TFBS0010- ...	1		601–3000			
24	pressure piece	Ref. PDB, TFFD	1		601–3000			

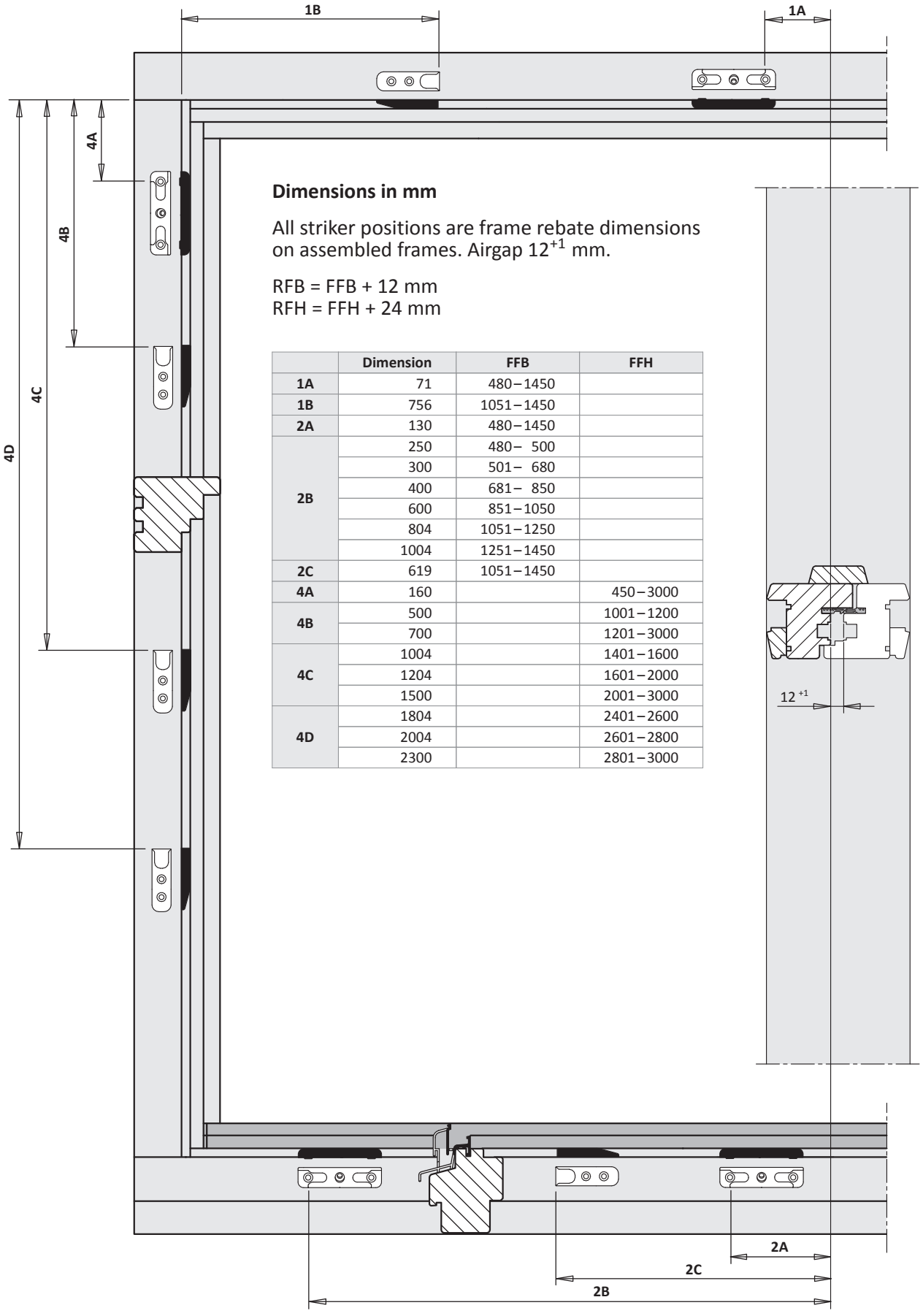
List of fittings main sash

2-sash square tilt-turn/turn DS 16
H12 GK Hinge side axxent 24+



Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Number of frame parts / Pos.	
							21	22
25	snapper switchable rh.	TFST0011- ...	1		1801 – 3000			
	snapper switchable lh.	TFST0012- ...			1801 – 3000			

Hinge side turning points						
Pos.	Description	Part number		required as per sash weight		
		surface TS	RAL7037	100 kg	130 kg	150 kg
26	corner hinge AX	Ref. PDB, TBEB41		1	1	1
27	cover cap AX EL	Ref. PDB, TKEL41		1	1	1
28	bottom hinge AX	Ref. PDB, TBEV41		1		
29	bottom hinge AX Ø8	Ref. PDB, TBEV42			1	1
30	supporting dowel AX	TBAV4010-0 ...			1	1



Dimensions in mm

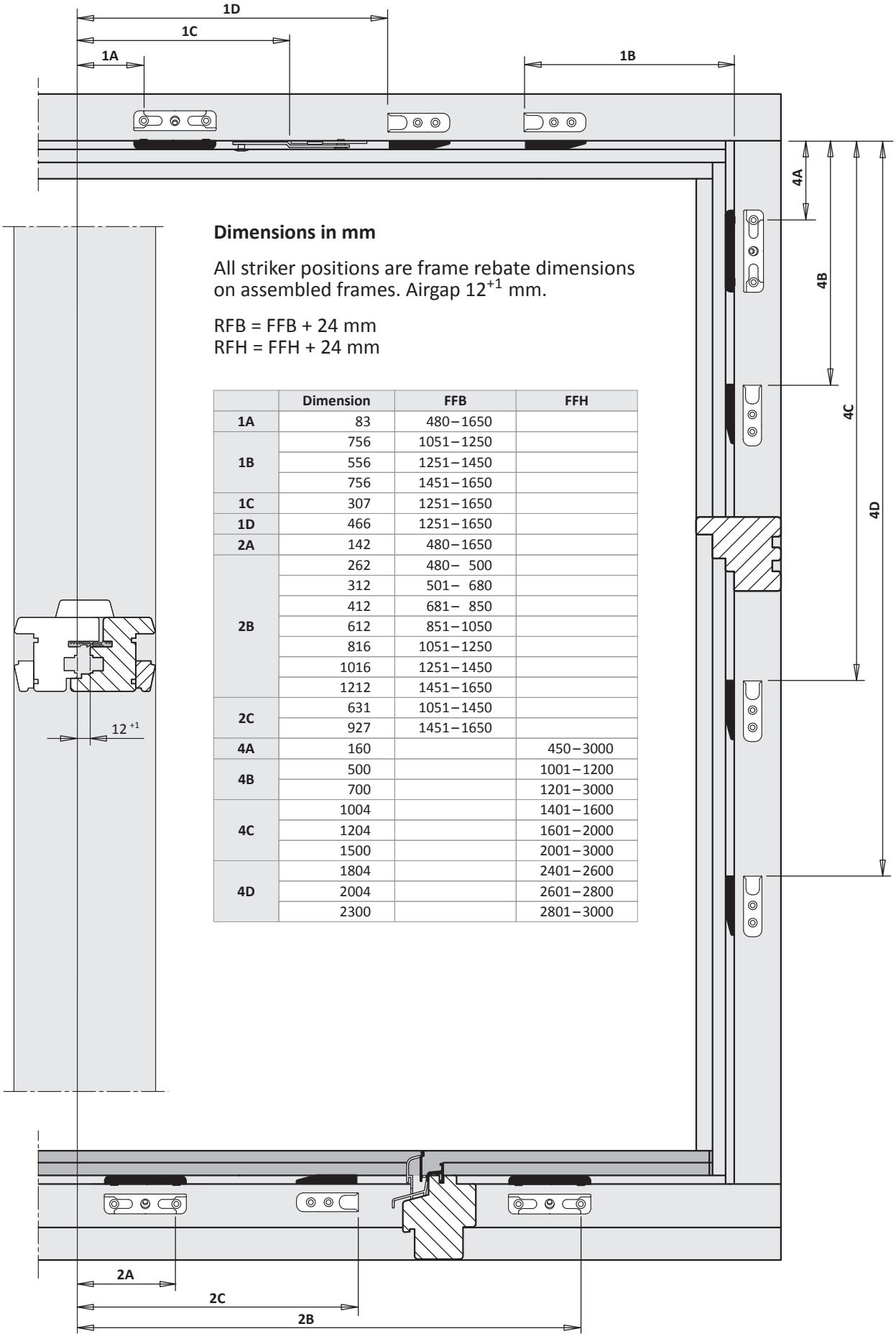
All striker positions are frame rebate dimensions on assembled frames. Airgap 12^{+1} mm.

RFB = FFB + 12 mm
RFH = FFH + 24 mm

	Dimension	FFB	FFH
1A	71	480–1450	
1B	756	1051–1450	
2A	130	480–1450	
2B	250	480– 500	
	300	501– 680	
	400	681– 850	
	600	851–1050	
	804	1051–1250	
	1004	1251–1450	
2C	619	1051–1450	
4A	160		450–3000
4B	500		1001–1200
	700		1201–3000
4C	1004		1401–1600
	1204		1601–2000
	1500		2001–3000
4D	1804		2401–2600
	2004		2601–2800
	2300		2801–3000

Frame dimensions main sash

2-sash square tilt-turn/turn DS 16
H12 GK Hinge side axxent 24+



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

	Dimension	FFB	FFH
1A	83	480 – 1650	
1B	756	1051 – 1250	
	556	1251 – 1450	
	756	1451 – 1650	
1C	307	1251 – 1650	
1D	466	1251 – 1650	
2A	142	480 – 1650	
2B	262	480 – 500	
	312	501 – 680	
	412	681 – 850	
	612	851 – 1050	
	816	1051 – 1250	
	1016	1251 – 1450	
	1212	1451 – 1650	
2C	631	1051 – 1450	
	927	1451 – 1650	
4A	160		450 – 3000
4B	500		1001 – 1200
	700		1201 – 3000
4C	1004		1401 – 1600
	1204		1601 – 2000
	1500		2001 – 3000
4D	1804		2401 – 2600
	2004		2601 – 2800
	2300		2801 – 3000

Bottom Inliner

1-sash square tilt-turn	H48.TAFH2M1S023EN	5 - 3
2-sash square tilt-turn/turn DS 16	H48.TAFH2M1S024EN	5 - 9
Tilt before turn (TBT)		
1-sash square tilt before turn (TBT)	H48.TAFH2M1S025EN	5 - 17

Bottom Double cam SB R-RS

1-sash square tilt-turn	H48.TAFH2M1S403EN	5 - 23
2-sash square tilt-turn/turn DS 16	H48.TAFH2M1S404EN	5 - 29

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Installation instructions

RC1

1-sash square tilt-turn

timber 12 mm

RC1

centre handle pos. (variable)

Hinge side axxent 24+

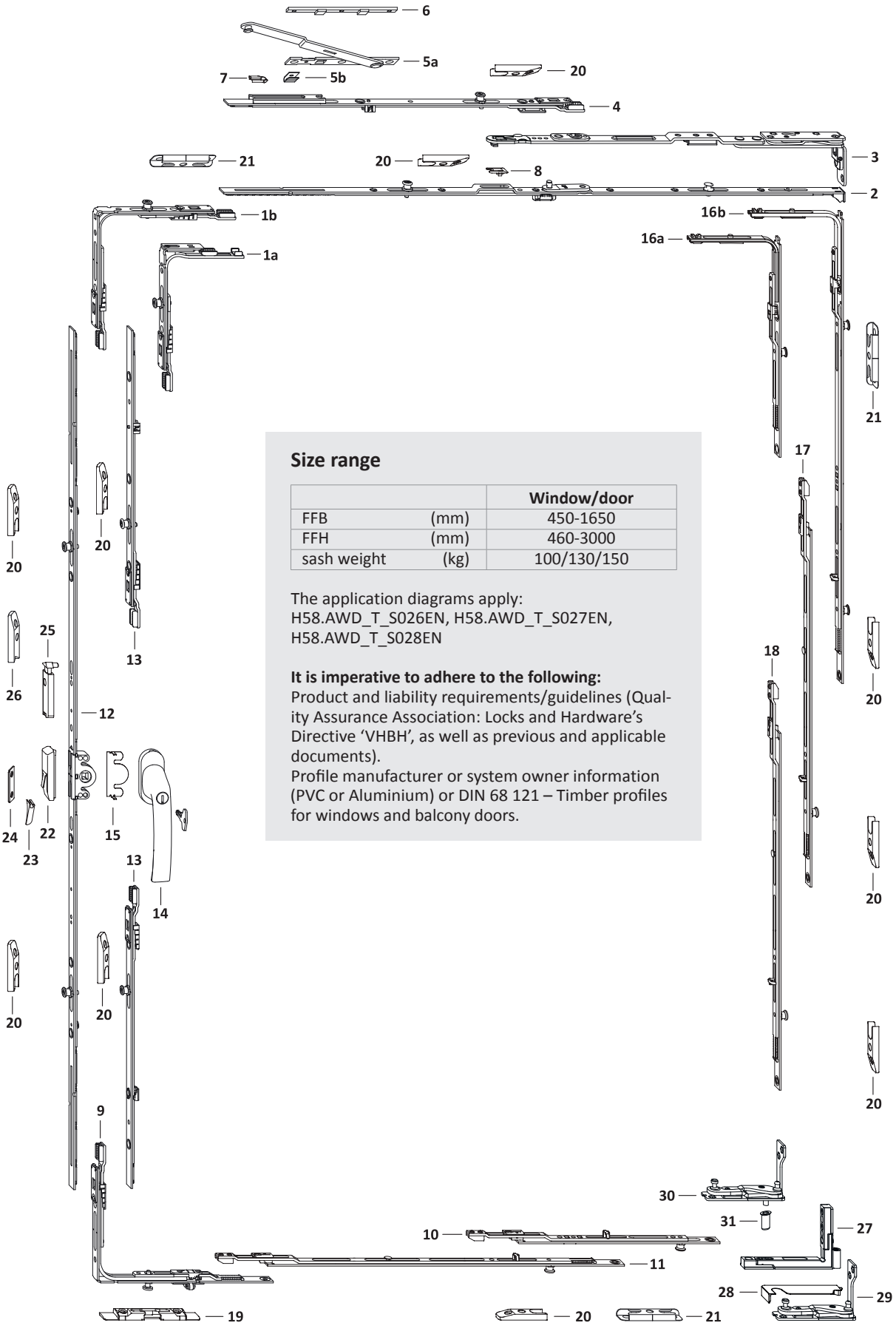
surface TS

backset 15 mm

Hardware set configuration	
General	Locking-points distance 1000
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-turn
H12 GM Hinge side axxent 24+



Size range

		Window/door
FFB	(mm)	450-1650
FFH	(mm)	460-3000
sash weight	(kg)	100/130/150

The application diagrams apply:
H58.AWD_T_S026EN, H58.AWD_T_S027EN,
H58.AWD_T_S028EN

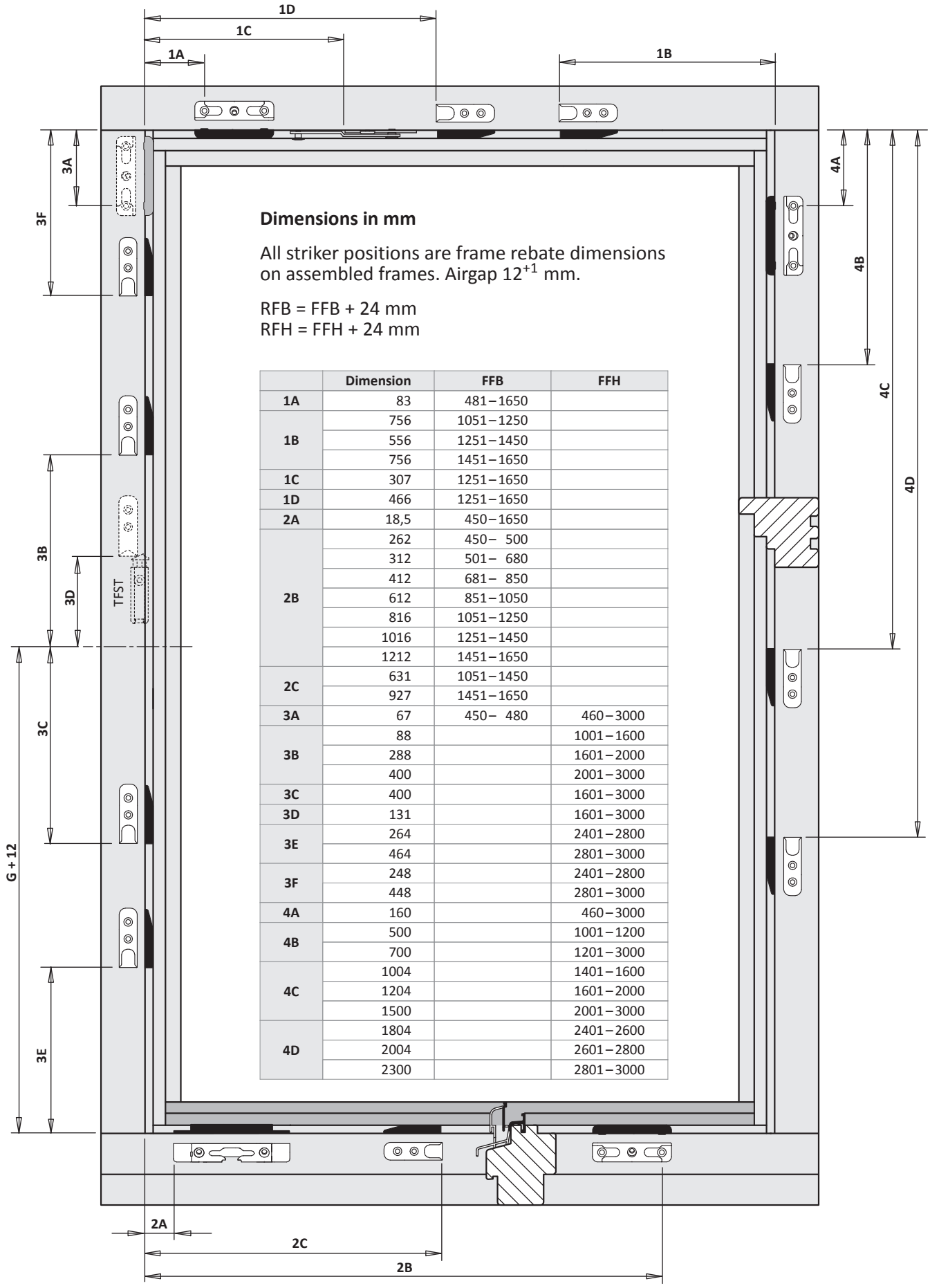
It is imperative to adhere to the following:
Product and liability requirements/guidelines (Quality Assurance Association: Locks and Hardware's Directive 'VHBH', as well as previous and applicable documents).
Profile manufacturer or system owner information (PVC or Aluminium) or DIN 68 121 – Timber profiles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

Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Number of frame parts / Pos.		
							19	20	21
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					
	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	linkage additional stay 1RS	TZOK1010- ...	1	1251–1650				1	
5	additional stay	Ref. PDB, TSZS	1	1251–1650					
6	packer Z	Ref. PDB, FRUP01	1	1251–1650					
7	tilt restr. additional stay ..	889008	1	1251–1650					
8	tilt restrictor V-V sz 2-4 ..	TFKB0040- ...	1	681–1050	460– 900				
	tilt restrictor V-V sz 5 ..	TFKB0050- ...		1051–1650	460– 900				
9	corn.drive AF VSU/K+ FH 1S	TEUL5010- ...	1	450–1650			1		
10	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 5+ 1RS	TVSL0350- ...		851–1050					1
	extension sz 2+ 1RS	TVSL0320- ...		1051–1250					1
	extension sz 4+ 1RS	TVSL0340- ...		1251–1450					1
	extension sz 3+ 1RS	TVSL0330- ...		1451–1650					1
11	linkage BS/FH sz 2+ 1RS	TZBS0190- ...	1	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- ...			601–1000	300– 500			
	gear 15 AF sz 80 1RS	TGMK4040- ...			1001–1200	500– 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 lockable 100Nm	Ref.access. ZHGA100	1		460–3000				
15	anti-drill guard E	TGBS0010- ...	1		460–3000				
16a	corn.drive BSO/K3+ 1RS	TEUL2400- ...	1		460–1000				1
16b	corn.drive BS/K3 sz 1+ 2RS	TEUL2380- ...	1		1001–1200			1	1
	corn.drive BS/K3 sz 2+ 2RS	TEUL2390- ...			1201–3000			1	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							
21	striker plate S-RS	Ref. PDB, TRSK							
on request									
22	mishandling device	TFBS0010- ...	1						
23	pressure piece	Ref. PDB, TFFD	1						
24	stop	Ref. PDB, FRZF01	1						
25	snapper switchable rh.	TFST0011- ...	1		1601–3000				
	snapper switchable lh.	TFST0012- ...			1601–3000				
26	frame part snapper	Ref. PDB, TRST	1		1601–3000				

List of fittings

1-sash square tilt-turn
H12 GM Hinge side axxent 24+

Hinge side turning points						
Pos.	Description	Part number		required as per sash weight		
		surface TS	RAL7037	100 kg	130 kg	150 kg
27	corner hinge AX	Ref. PDB, TBEB41		1	1	1
28	cover cap AX EL	Ref. PDB, TKEL41		1	1	1
29	bottom hinge AX	Ref. PDB, TBEV41		1		
30	bottom hinge AX Ø8	Ref. PDB, TBEV42			1	1
31	supporting dowel AX	TBAV4010-0 ...			1	1



Dimensions in mm

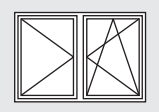
All striker positions are frame rebate dimensions on assembled frames. Airgap 12^{+1} mm.

RFB = FFB + 24 mm
RFH = FFH + 24 mm

	Dimension	FFB	FFH
1A	83	481–1650	
1B	756	1051–1250	
	556	1251–1450	
	756	1451–1650	
1C	307	1251–1650	
1D	466	1251–1650	
2A	18,5	450–1650	
2B	262	450– 500	
	312	501– 680	
	412	681– 850	
	612	851–1050	
	816	1051–1250	
	1016	1251–1450	
	1212	1451–1650	
2C	631	1051–1450	
	927	1451–1650	
3A	67	450– 480	460–3000
3B	88		1001–1600
	288		1601–2000
	400		2001–3000
3C	400		1601–3000
3D	131		1601–3000
3E	264		2401–2800
	464		2801–3000
3F	248		2401–2800
	448		2801–3000
4A	160		460–3000
4B	500		1001–1200
	700		1201–3000
4C	1004		1401–1600
	1204		1601–2000
	1500		2001–3000
4D	1804		2401–2600
	2004		2601–2800
	2300		2801–3000

TITAN AF

Installation instructions



RC1

2-sash square tilt-turn/turn DS 16

timber 12 mm

RC1

centre handle pos. (variable)

Hinge side axxent 24+

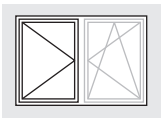
surface TS

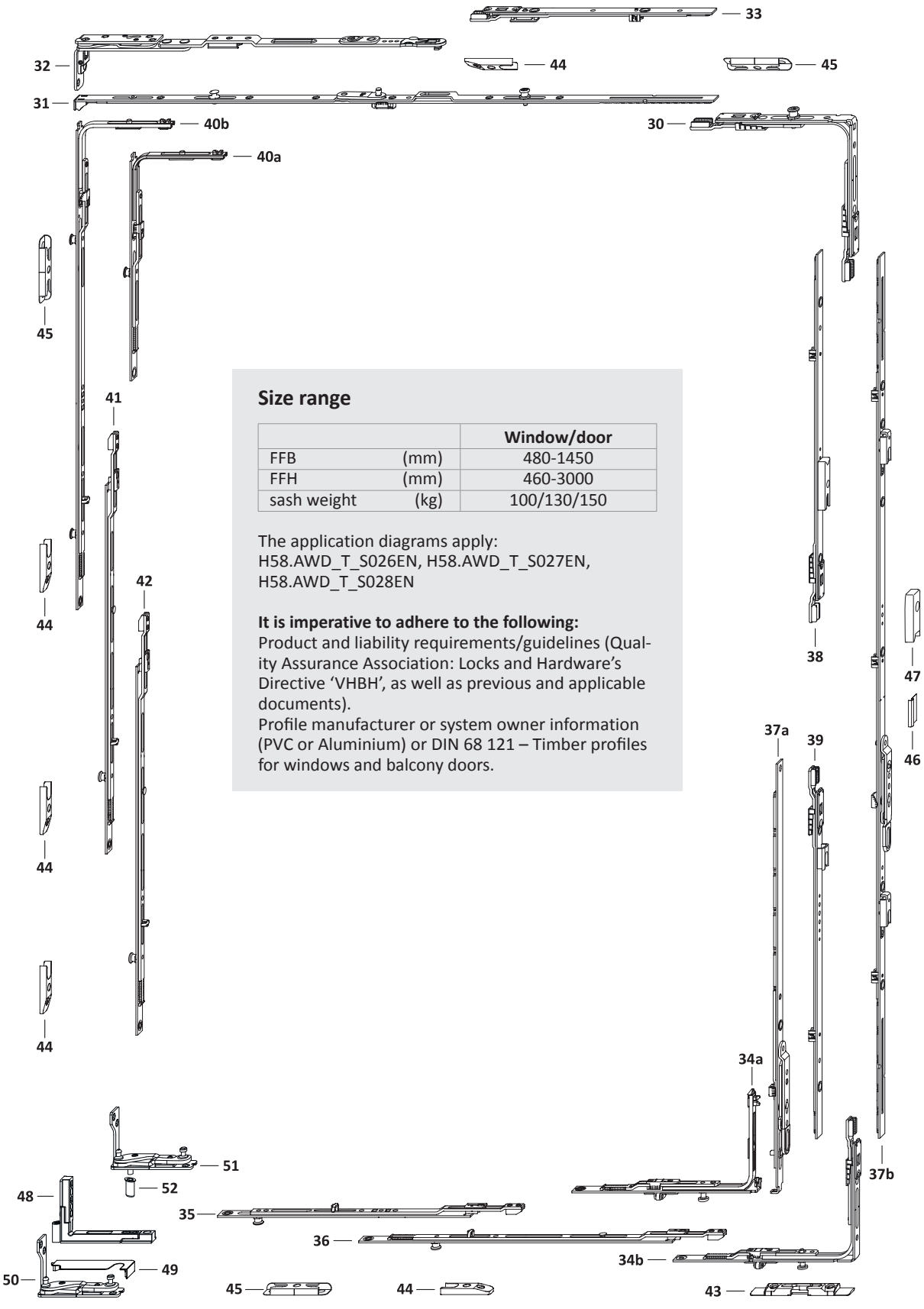
backset 15 mm

Hardware set configuration	
General	Locking-points distance 1000
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 slave sash

2-sash square tilt-turn/turn DS 16
H12 GM Hinge side axxent 24+





Size range

		Window/door
FFB	(mm)	480-1450
FFH	(mm)	460-3000
sash weight	(kg)	100/130/150

The application diagrams apply:
H58.AWD_T_S026EN, H58.AWD_T_S027EN,
H58.AWD_T_S028EN

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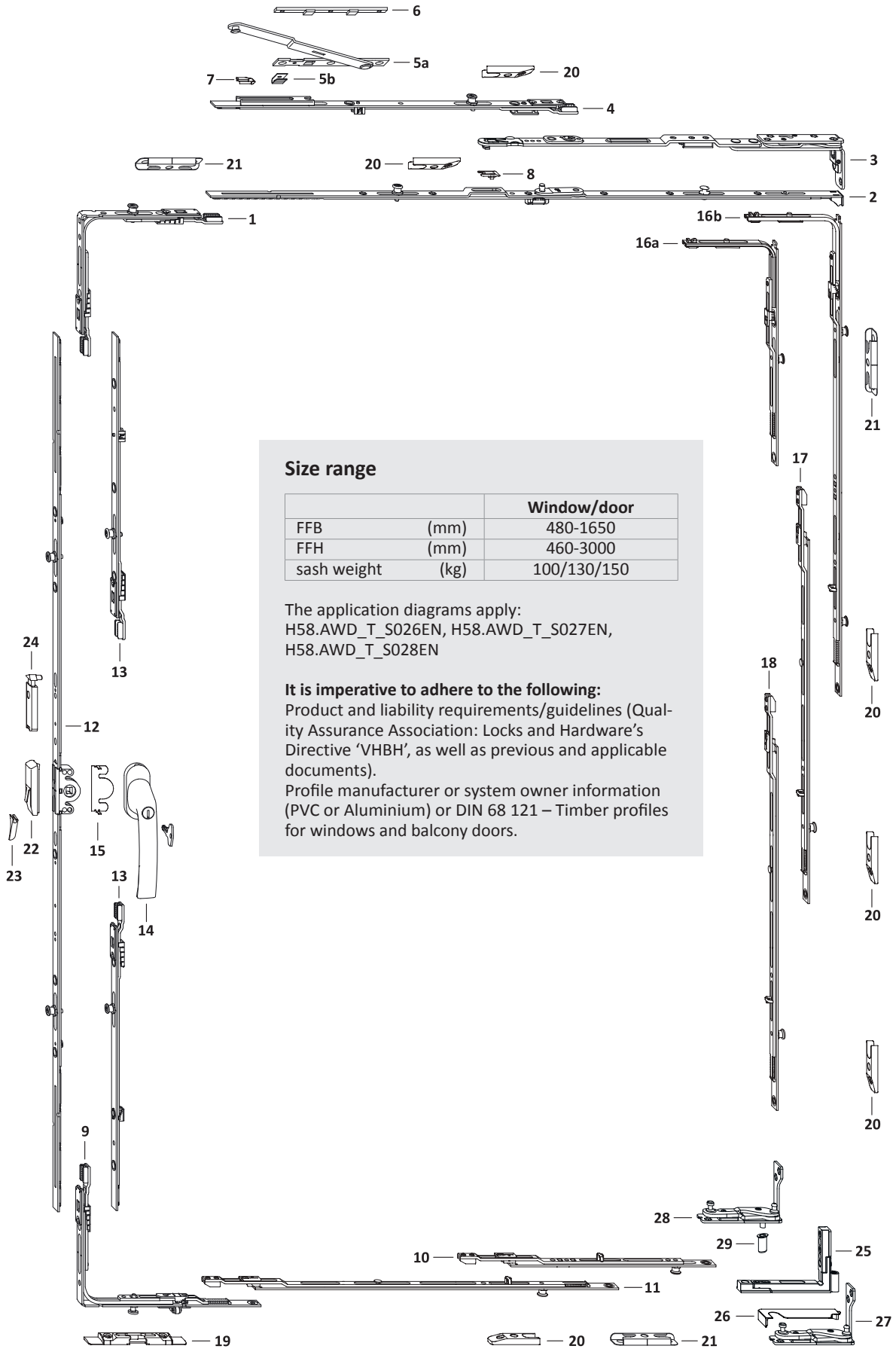

Size range

		Window/door
FFB	(mm)	480-1650
FFH	(mm)	460-3000
sash weight	(kg)	100/130/150

The application diagrams apply:
H58.AWD_T_S026EN, H58.AWD_T_S027EN,
H58.AWD_T_S028EN

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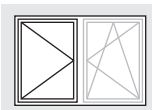
List of fittings slave sash

2-sash square tilt-turn/turn DS 16
H12 GM Hinge side axxent 24+



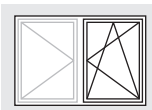
Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Number of frame parts / Pos.		
						In the main sash	43	44	45
30	corn.drive VSO 1RS	TEUL4010- ...	1	480 – 1450					1
31	stay sash part AF AX sz 1	TSSV4000- ...	1	480 – 680					
	stay sash part AF AX 2+3 1RS	TSSV0310- ...		681 – 850					
	stay sash part AF AX sz 4 1RS	TSSV0320- ...		851 – 1050					
	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 AF sz 1	TZZS0150- ...	1	1251 – 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 5+ 1RS	TVSL0350- ...		851 – 1050					1
	extension sz 2+ 1RS	TVSL0320- ...		1051 – 1250					1
	extension sz 4+ 1RS	TVSL0340- ...		1251 – 1450					1
36	linkage BS/FH sz 2+ 1RS	TZBS0190- ...	1	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 – 1000				1
40b	corn.drive BS/K3 sz 1+ 2RS	TEUL2380- ...	1		1001 – 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	stop	Ref. PDB, FRZF04	1		601 – 3000				
47	striker snapper A0767	TRST0010- ...	1		1601 – 3000				

Hinge side turning points						
Pos.	Description	Part number		required as per sash weight		
		surface TS	RAL7037	100 kg	130 kg	150 kg
48	corner hinge AX	Ref. PDB, TBEB41		1	1	1
49	cover cap AX EL	Ref. PDB, TKEL41		1	1	1
50	bottom hinge AX	Ref. PDB, TBEV41		1		
51	bottom hinge AX Ø8	Ref. PDB, TBEV42			1	1
52	supporting dowel AX	TBAV4010-0 ...			1	1

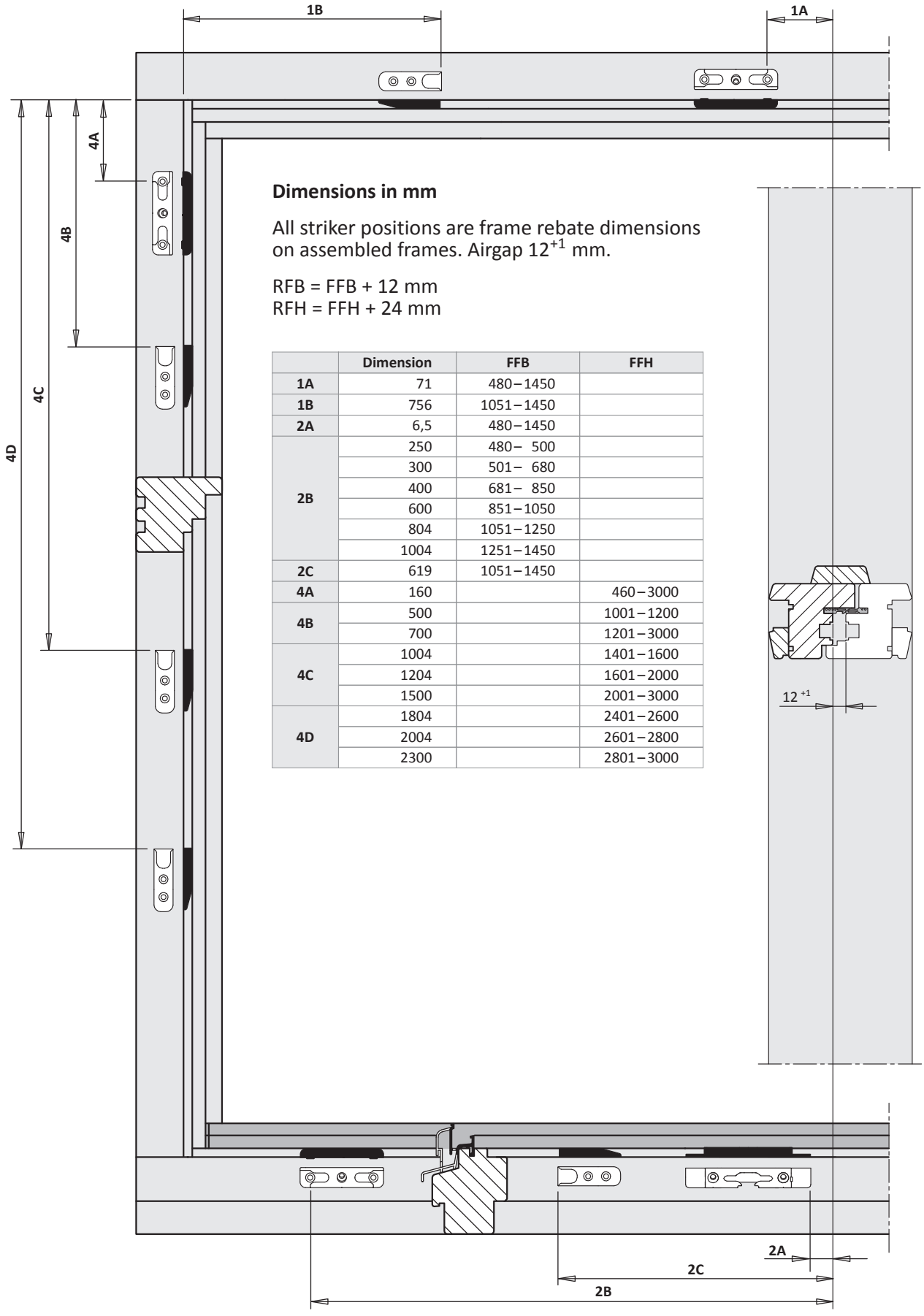
Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Number of frame parts / Pos.		
							19	20	21
1	corn.drive VSO 1RS	TEUL4010- ...	1	480–1650					1
2	stay sash part AF AX sz 1	TSSV4000- ...	1	480– 680					
	stay sash part AF AX 2+3 1RS	TSSV0310- ...		681– 850					
	stay sash part AF AX sz 4 1RS	TSSV0320- ...		851–1050					
	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	linkage additional stay 1RS	TZOK1010- ...	1	1251–1650				1	
5	additional stay	Ref. PDB, TSZS	1	1251–1650					
6	packer Z	Ref. PDB, FRUP01	1	1251–1650					
7	tilt restr. additional stay ..	889008	1	1251–1650					
8	tilt restrictor V-V sz 2-4 ..	TFKB0040- ...	1	681–1050	460– 900				
	tilt restrictor V-V sz 5 ..	TFKB0050- ...		1051–1250	460– 900				
9	corn.drive AF VSU/K+ FH 1S	TEUL5010- ...	1	480–1650			1		
10	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 5+ 1RS	TVSL0350- ...		851–1050					1
	extension sz 2+ 1RS	TVSL0320- ...		1051–1250					1
	extension sz 4+ 1RS	TVSL0340- ...		1251–1450					1
	extension sz 3+ 1RS	TVSL0330- ...		1451–1650					1
11	linkage BS/FH sz 2+ 1RS	TZBS0190- ...	1	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- ...			601–1000	300– 500			
	gear 15 AF sz 80 1RS	TGMK4040- ...			1001–1200	500– 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 lockable 100Nm	Ref.access. ZHGA100	1		460–3000				
15	anti-drill guard E	TGBS0010- ...	1		460–3000				
16a	corn.drive BSO/K3+ 1RS	TEUL2400- ...	1		460–1000				1
16b	corn.drive BS/K3 sz 1+ 2RS	TEUL2380- ...	1		1001–1200			1	1
	corn.drive BS/K3 sz 2+ 2RS	TEUL2390- ...			1201–3000			1	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							
21	striker plate S-RS	Ref. PDB, TRSK							
on request									
22	mishandling device	TFBS0010- ...	1						
23	pressure piece	Ref. PDB, TFFD	1						
24	snapper switchable rh.	TFST0011- ...	1		1601–3000				
	snapper switchable lh.	TFST0012- ...			1601–3000				

List of fittings main sash

2-sash square tilt-turn/turn DS 16
H12 GM Hinge side axxent 24+



Hinge side turning points						
Pos.	Description	Part number		required as per sash weight		
		surface TS	RAL7037	100 kg	130 kg	150 kg
25	corner hinge AX	Ref. PDB, TBEB41		1	1	1
26	cover cap AX EL	Ref. PDB, TKEL41		1	1	1
27	bottom hinge AX	Ref. PDB, TBEV41		1		
28	bottom hinge AX Ø8	Ref. PDB, TBEV42			1	1
29	supporting dowel AX	TBAV4010-0 ...			1	1



Dimensions in mm

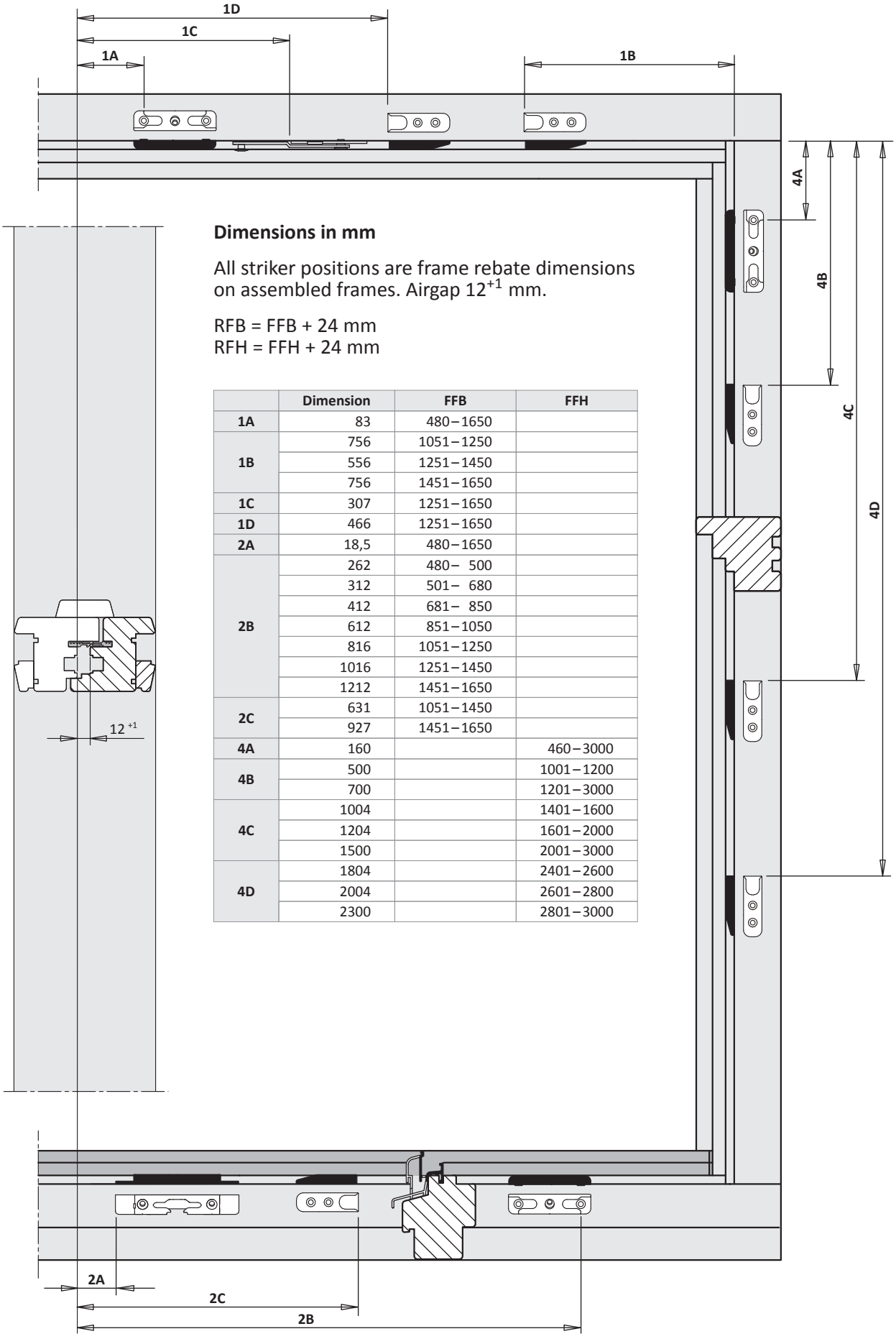
All striker positions are frame rebate dimensions on assembled frames. Airgap 12^{+1} mm.

RFB = FFB + 12 mm
RFH = FFH + 24 mm

	Dimension	FFB	FFH
1A	71	480–1450	
1B	756	1051–1450	
2A	6,5	480–1450	
2B	250	480– 500	
	300	501– 680	
	400	681– 850	
	600	851–1050	
	804	1051–1250	
	1004	1251–1450	
2C	619	1051–1450	
4A	160		460–3000
4B	500		1001–1200
	700		1201–3000
4C	1004		1401–1600
	1204		1601–2000
	1500		2001–3000
4D	1804		2401–2600
	2004		2601–2800
	2300		2801–3000

Frame dimensions main sash

2-sash square tilt-turn/turn DS 16
H12 GM Hinge side axxent 24+



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

	Dimension	FFB	FFH
1A	83	480 – 1650	
1B	756	1051 – 1250	
	556	1251 – 1450	
	756	1451 – 1650	
1C	307	1251 – 1650	
1D	466	1251 – 1650	
2A	18,5	480 – 1650	
2B	262	480 – 500	
	312	501 – 680	
	412	681 – 850	
	612	851 – 1050	
	816	1051 – 1250	
	1016	1251 – 1450	
	1212	1451 – 1650	
2C	631	1051 – 1450	
	927	1451 – 1650	
4A	160		460 – 3000
4B	500		1001 – 1200
	700		1201 – 3000
4C	1004		1401 – 1600
	1204		1601 – 2000
	1500		2001 – 3000
4D	1804		2401 – 2600
	2004		2601 – 2800
	2300		2801 – 3000

TITAN AF

Installation instructions

RC1

1-sash square tilt before turn (TBT)

timber 12 mm

RC1

centre handle pos. (variable)

Hinge side axxent 24+

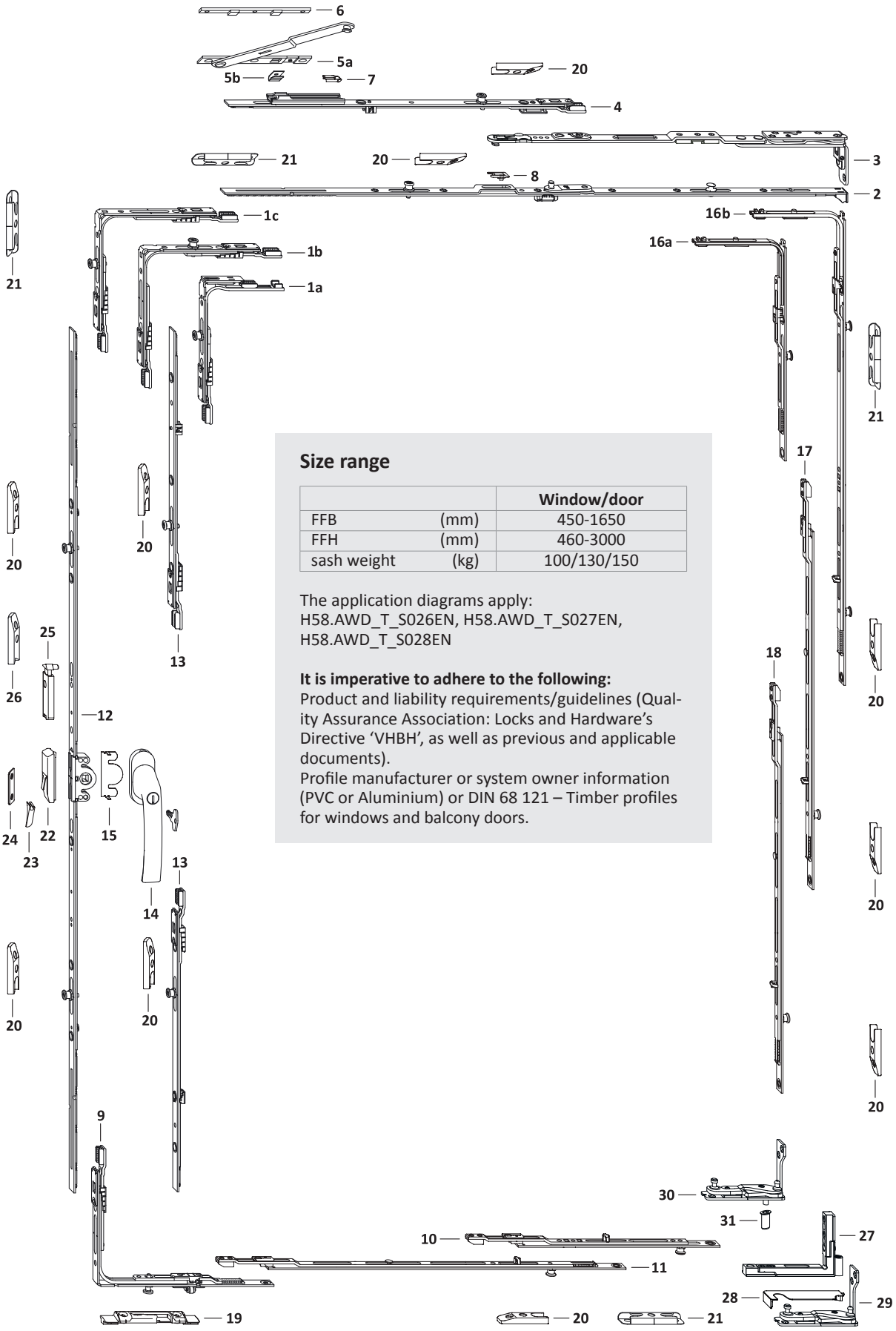
surface TS

backset 15 mm

Hardware set configuration	
General	Locking-points distance 1000
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)
H12 GM Hinge side axxent 24+



Size range

		Window/door
FFB	(mm)	450-1650
FFH	(mm)	460-3000
sash weight	(kg)	100/130/150

The application diagrams apply:
H58.AWD_T_S026EN, H58.AWD_T_S027EN,
H58.AWD_T_S028EN

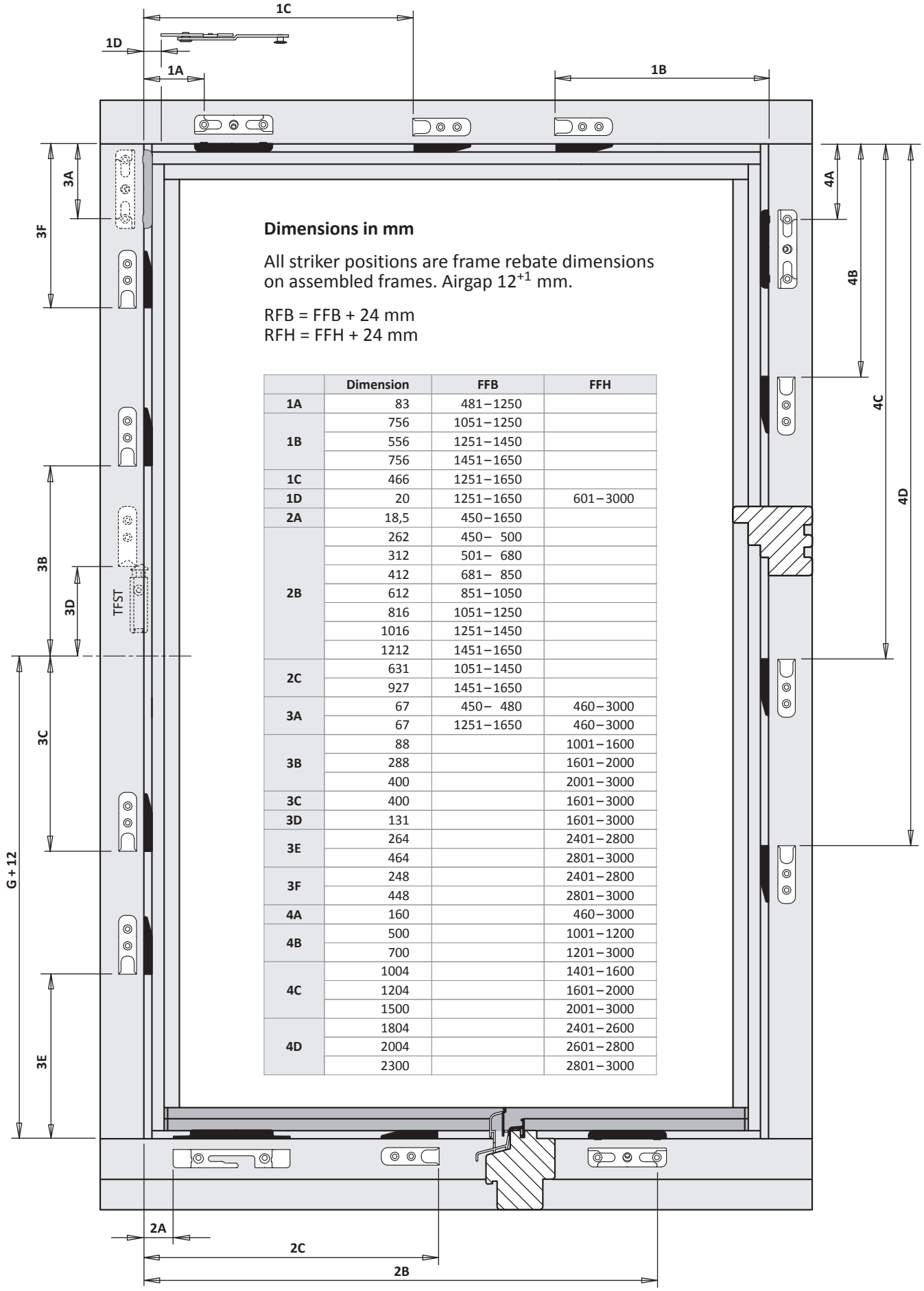
It is imperative to adhere to the following:
Product and liability requirements/guidelines (Quality Assurance Association: Locks and Hardware's Directive 'VHBH', as well as previous and applicable documents).
Profile manufacturer or system owner information (PVC or Aluminium) or DIN 68 121 – Timber profiles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

Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Number of frame parts / Pos.		
							19	20	21
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					
	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	linkage add. stay AF TBT RS	TZOT1010- ...	1	1251–1650				1	
5	additional stay	Ref. PDB, TSZS	1	1251–1650					
6	packer Z	Ref. PDB, FRUP01	1	1251–1650					
7	tilt restr. additional stay ..	889008	1	1251–1650					
8	tilt restrictor V-V sz 2-4 ..	TFKB0040- ...	1	681–1050	460– 900				
	tilt restrictor V-V sz 5 ..	TFKB0050- ...		1051–1650	460– 900				
9	corn.drive AF VSU/K+ FH 1S	TEUL5010- ...	1	450–1650			1		
10	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 5+ 1RS	TVSL0350- ...		851–1050					1
	extension sz 2+ 1RS	TVSL0320- ...		1051–1250					1
	extension sz 4+ 1RS	TVSL0340- ...		1251–1450					1
	extension sz 3+ 1RS	TVSL0330- ...		1451–1650					1
11	linkage BS/FH sz 2+ 1RS	TZBS0190- ...	1	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- ...			601–1000	300– 500			
	gear 15 AF sz 80 1RS	TGMK4040- ...			1001–1200	500– 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	anti-drill guard E	TGBS0010- ...	1		460–3000				
16a	corn.drive BSO/K3+ 1RS	TEUL2400- ...	1		460–1000				1
16b	corn.drive BS/K3 sz 1+ 2RS	TEUL2380- ...	1		1001–1200			1	1
	corn.drive BS/K3 sz 2+ 2RS	TEUL2390- ...			1201–3000			1	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							
21	striker plate S-RS	Ref. PDB, TRSK							
on request									
22	mishandling device	TFBS0010- ...	1						
23	pressure piece	Ref. PDB, TFFD	1						
24	stop	Ref. PDB, FRZF01	1						
25	snapper switchable rh.	TFST0011- ...	1		1601–3000				
	snapper switchable lh.	TFST0012- ...			1601–3000				
26	frame part snapper	Ref. PDB, TRST	1		1601–3000				

List of fittings

1-sash square tilt before turn (TBT)
H12 GM Hinge side axxent 24+

Hinge side turning points						
Pos.	Description	Part number		required as per sash weight		
		surface TS	RAL7037	100 kg	130 kg	150 kg
27	corner hinge AX	Ref. PDB, TBEB41		1	1	1
28	cover cap AX EL	Ref. PDB, TKEL41		1	1	1
29	bottom hinge AX	Ref. PDB, TBEV41		1		
30	bottom hinge AX Ø8	Ref. PDB, TBEV42			1	1
31	supporting dowel AX	TBAV4010-0 ...			1	1



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

	Dimension	FFB	FFH
1A	83	481–1250	
1B	756	1051–1250	
	556	1251–1450	
	756	1451–1650	
1C	466	1251–1650	
1D	20	1251–1650	601–3000
2A	18,5	450–1650	
2B	262	450– 500	
	312	501– 680	
	412	681– 850	
	612	851–1050	
	816	1051–1250	
	1016	1251–1450	
	1212	1451–1650	
2C	631	1051–1450	
	927	1451–1650	
3A	67	450– 480	460–3000
	67	1251–1650	460–3000
3B	88		1001–1600
	288		1601–2000
	400		2001–3000
3C	400		1601–3000
3D	131		1601–3000
3E	264		2401–2800
	464		2801–3000
3F	248		2401–2800
	448		2801–3000
4A	160		460–3000
4B	500		1001–1200
	700		1201–3000
4C	1004		1401–1600
	1204		1601–2000
	1500		2001–3000
4D	1804		2401–2600
	2004		2601–2800
	2300		2801–3000

TITAN AF

Installation instructions

RC1

1-sash square tilt-turn

timber 12 mm

RC1

centre handle pos. (variable)

Hinge side axxent 24+

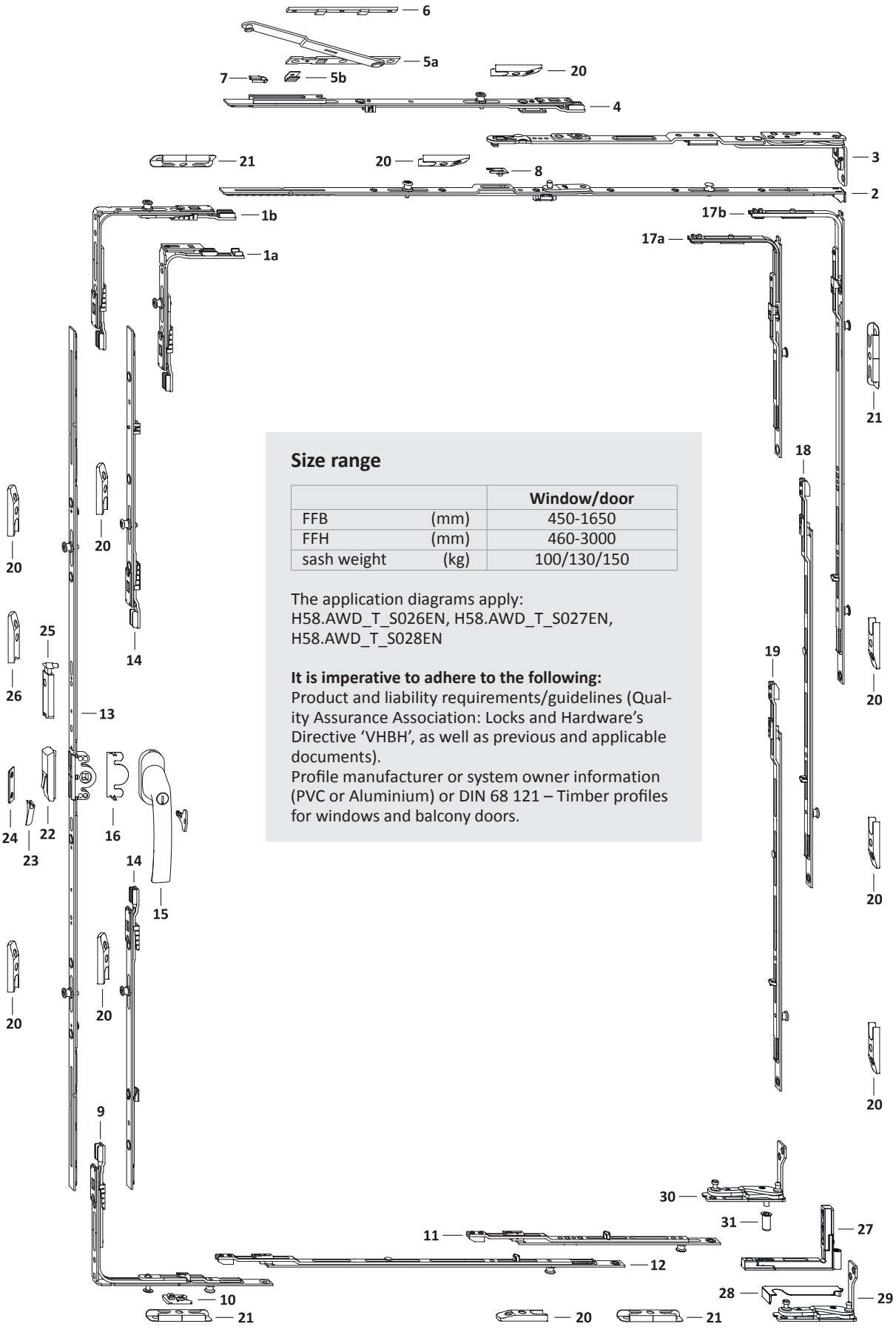
surface TS

backset 15 mm

Hardware set configuration	
General	Locking-points distance 1000
Stay side	two-piece stay ax 24+
Bottom	double cam SB R-RS
Locking side	mishandl. device on gear
Hinge side	corner drive BS sz 1+2 2RS

hardware layout

1-sash square tilt-turn
H12 GM Hinge side axxent 24+



Size range

		Window/door
FFB	(mm)	450-1650
FFH	(mm)	460-3000
sash weight	(kg)	100/130/150

The application diagrams apply:
H58.AWD_T_S026EN, H58.AWD_T_S027EN,
H58.AWD_T_S028EN

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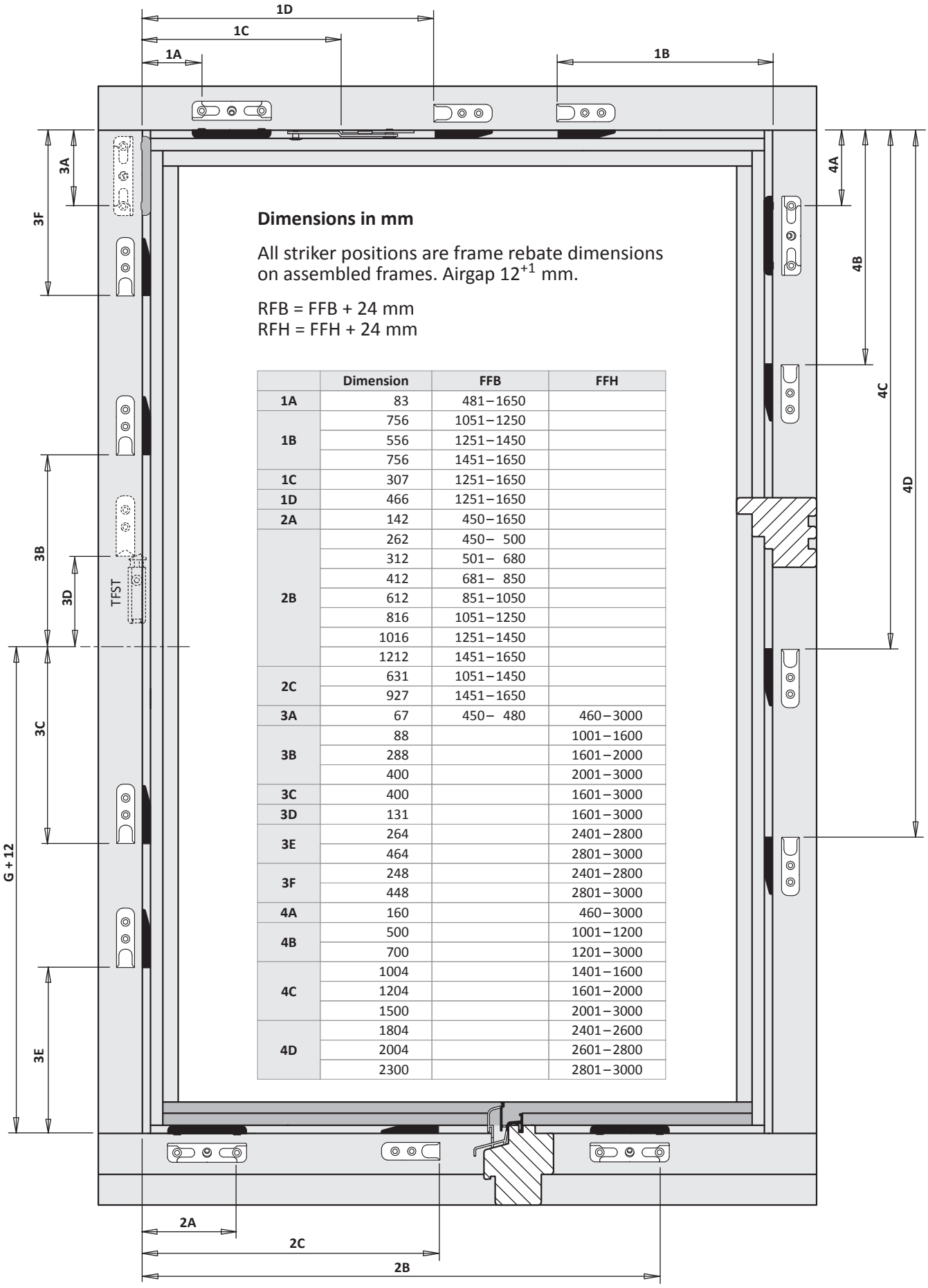
Profile manufacturer or system owner information (PVC or Aluminium) or DIN 68 121 – Timber profiles for windows and balcony doors.

Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Number of frame parts / Pos.	
							20	21
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				
	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	linkage additional stay 1RS	TZOK1010- ...	1	1251–1650			1	
5	additional stay	Ref. PDB, TSZS	1	1251–1650				
6	packer Z	Ref. PDB, FRUP01	1	1251–1650				
7	tilt restr. additional stay ..	889008	1	1251–1650				
8	tilt restrictor V-V sz 2-4 ..	TFKB0040- ...	1	681–1050	460– 900			
	tilt restrictor V-V sz 5 ..	TFKB0050- ...		1051–1650	460– 900			
9	corn.drive AF VSU/K 56+ 1S 1RS	TEUL5030- ...	1	450–1650				1
10	run up block AF 13 mm 13	TFFH0080- ...	1	450–1650				
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 5+ 1RS	TVSL0350- ...		851–1050				1
	extension sz 2+ 1RS	TVSL0320- ...		1051–1250				1
	extension sz 4+ 1RS	TVSL0340- ...		1251–1450				1
	extension sz 3+ 1RS	TVSL0330- ...		1451–1650				1
12	linkage BS/FH sz 2+ 1RS	TZBS0190- ...	1	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- ...			601–1000	300– 500		
	gear 15 AF sz 80 1RS	TGMK4040- ...			1001–1200	500– 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		460–1000			1
17b	corn.drive BS/K3 sz 1+ 2RS	TEUL2380- ...	1		1001–1200		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	striker plate 56	Ref. PDB, FRSB						
21	striker plate S-RS	Ref. PDB, TRSK						
on request								
22	mishandling device	TFBS0010- ...	1					
23	pressure piece	Ref. PDB, TFFD	1					
24	stop	Ref. PDB, FRZF01	1					
25	snapper switchable rh.	TFST0011- ...	1		1601–3000			
	snapper switchable lh.	TFST0012- ...			1601–3000			
26	frame part snapper	Ref. PDB, TRST	1		1601–3000			

List of fittings

1-sash square tilt-turn
H12 GM Hinge side axxent 24+

Hinge side turning points						
Pos.	Description	Part number		required as per sash weight		
		surface TS	RAL7037	100 kg	130 kg	150 kg
27	corner hinge AX	Ref. PDB, TBEB41		1	1	1
28	cover cap AX EL	Ref. PDB, TKEL41		1	1	1
29	bottom hinge AX	Ref. PDB, TBEV41		1		
30	bottom hinge AX Ø8	Ref. PDB, TBEV42			1	1
31	supporting dowel AX	TBAV4010-0 ...			1	1



Dimensions in mm

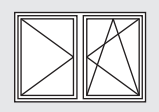
All striker positions are frame rebate dimensions on assembled frames. Airgap 12^{+1} mm.

RFB = FFB + 24 mm
RFH = FFH + 24 mm

	Dimension	FFB	FFH
1A	83	481–1650	
1B	756	1051–1250	
	556	1251–1450	
	756	1451–1650	
1C	307	1251–1650	
1D	466	1251–1650	
2A	142	450–1650	
2B	262	450– 500	
	312	501– 680	
	412	681– 850	
	612	851–1050	
	816	1051–1250	
	1016	1251–1450	
	1212	1451–1650	
2C	631	1051–1450	
	927	1451–1650	
3A	67	450– 480	460–3000
3B	88		1001–1600
	288		1601–2000
	400		2001–3000
3C	400		1601–3000
3D	131		1601–3000
3E	264		2401–2800
	464		2801–3000
3F	248		2401–2800
	448		2801–3000
4A	160		460–3000
4B	500		1001–1200
	700		1201–3000
4C	1004		1401–1600
	1204		1601–2000
	1500		2001–3000
4D	1804		2401–2600
	2004		2601–2800
	2300		2801–3000

TITAN AF

Installation instructions



RC1

2-sash square tilt-turn/turn DS 16

timber 12 mm

RC1

centre handle pos. (variable)

Hinge side axxent 24+

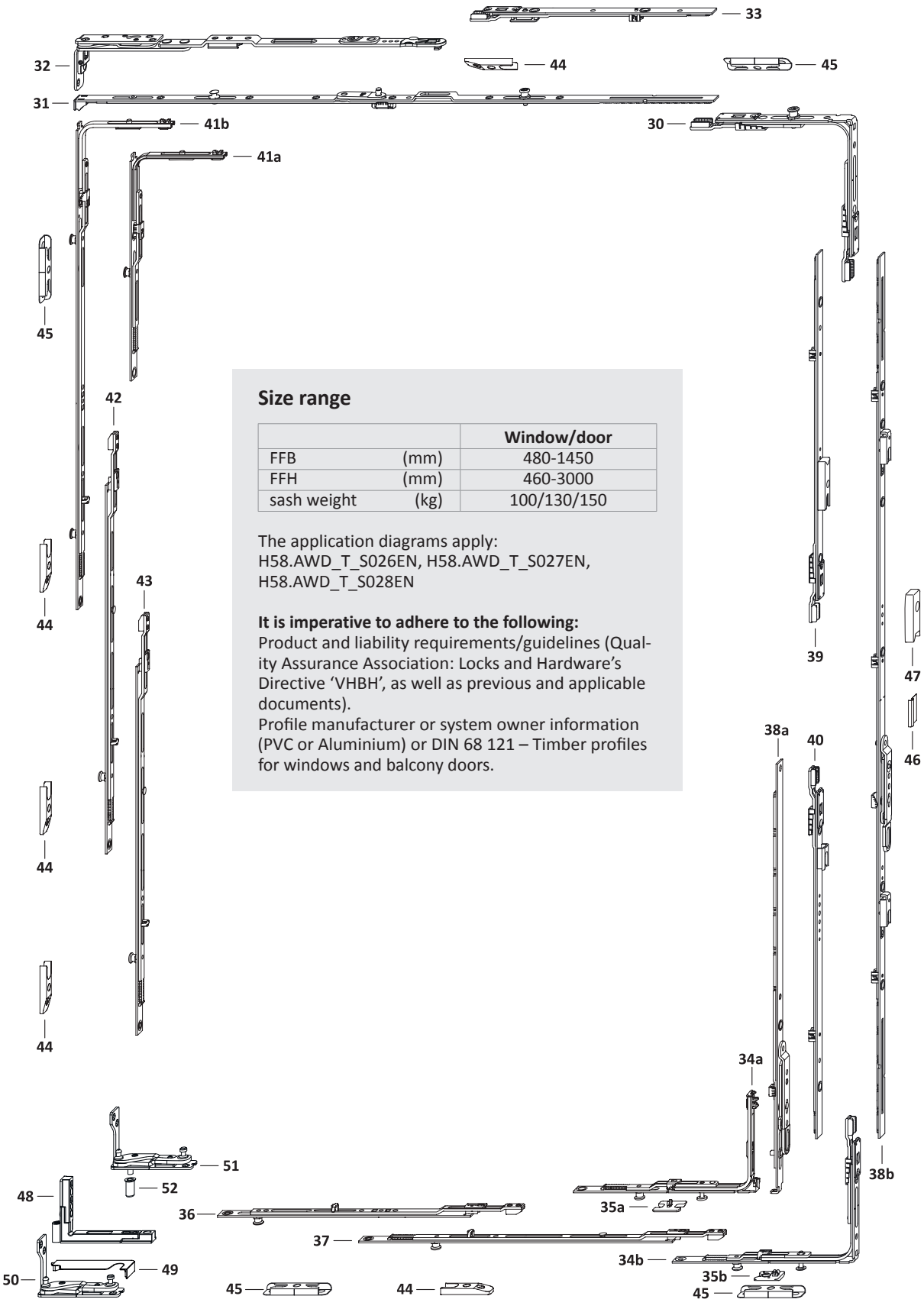
surface TS

backset 15 mm

Hardware set configuration	
General	Locking-points distance 1000
Stay side	two-piece stay ax 24+
Bottom	double cam SB R-RS
Locking side	mishandl. device on gear
Hinge side	corner drive BS sz 1+2 2RS

hardware layout slave sash

2-sash square tilt-turn/turn DS 16
H12 GM Hinge side axxent 24+

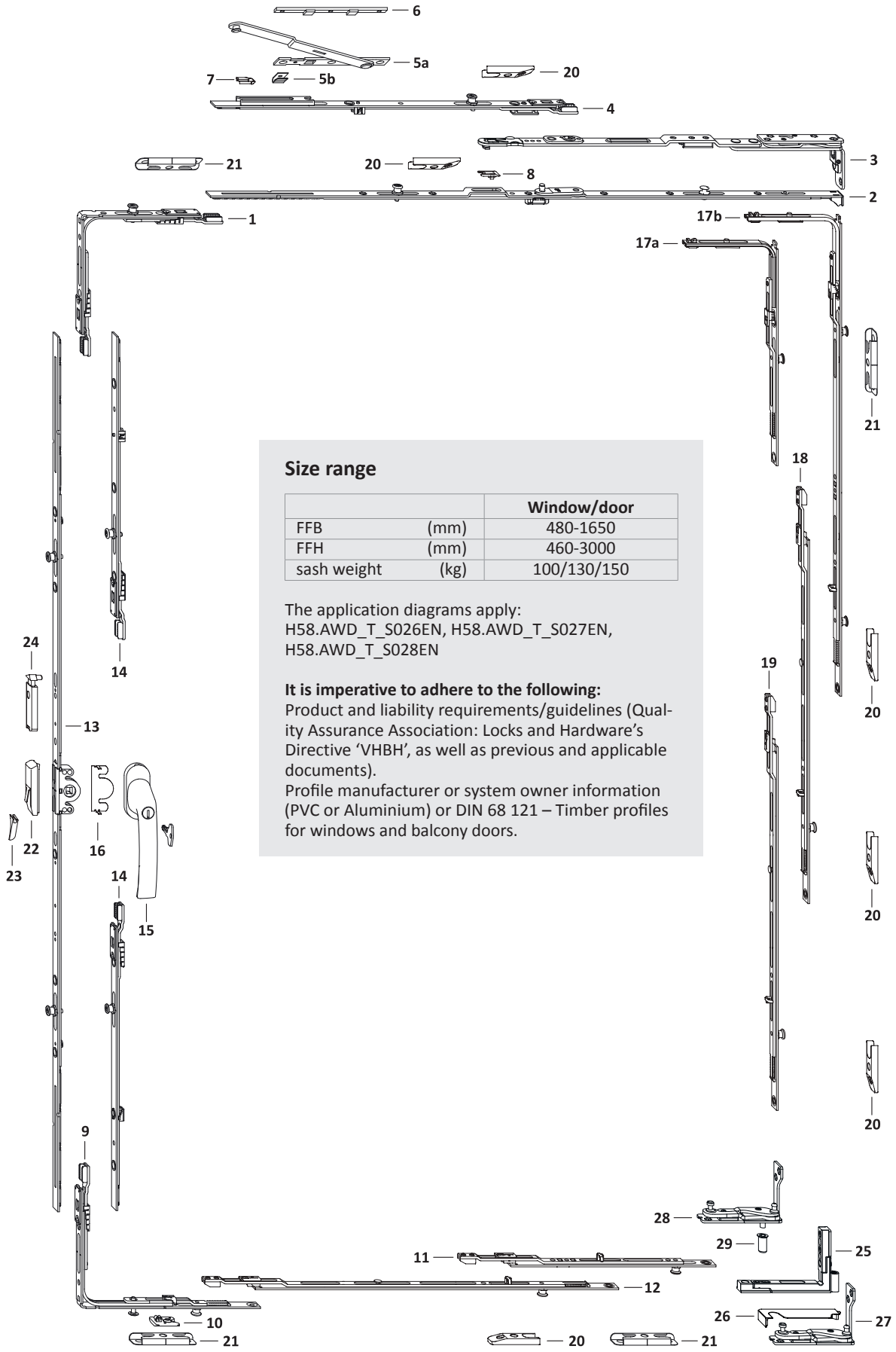


Size range

		Window/door
FFB	(mm)	480-1450
FFH	(mm)	460-3000
sash weight	(kg)	100/130/150

The application diagrams apply:
H58.AWD_T_S026EN, 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.



Size range

		Window/door
FFB	(mm)	480-1650
FFH	(mm)	460-3000
sash weight	(kg)	100/130/150

The application diagrams apply:
H58.AWD_T_S026EN, H58.AWD_T_S027EN,
H58.AWD_T_S028EN

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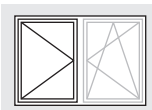
List of fittings slave sash

2-sash square tilt-turn/turn DS 16
H12 GM Hinge side axxent 24+



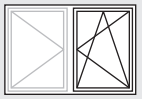
Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Number of frame parts / Pos.	
						In the main sash	44	45
30	corn.drive VSO 1RS	TEUL4010- ...	1	480–1450				1
31	stay sash part AF AX sz 1	TSSV4000- ...	1	480– 680				
	stay sash part AF AX 2+3 1RS	TSSV0310- ...		681– 850				
	stay sash part AF AX sz 4 1RS	TSSV0320- ...		851–1050				
	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 AF sz 1	TZZS0150- ...	1	1251–1450				
34a	locking part VSU/K 56+ 1S 1RS	TEVR1340- ...	1	480–1450	460– 800			1
34b	corn.drive AF VSU/K 56+ 1S 1RS	TEUL5030- ...	1	480–1450	801–3000			1
35a	run-up plate FH KRL56	Ref. PDB, TRAL01	1	480–1450	460– 800			
35b	run up block AF 13 mm 13	TFFH0080- ...	1	480–1450	801–3000			
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 5+ 1RS	TVSL0350- ...		851–1050				1
	extension sz 2+ 1RS	TVSL0320- ...		1051–1250				1
	extension sz 4+ 1RS	TVSL0340- ...		1251–1450				1
37	linkage BS/FH sz 2+ 1RS	TZBS0190- ...	1	1051–1450			1	
38a	sec.sash gear 16 sz 30	TGKS0010- ...	1		460– 600	230– 300		
	sec.sash gear 16 AF 60/G300	TGKS4030- ...			601– 800	300– 400		
38b	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		
39	linkage AF sz 1 1SB-RS	TZKS1020- ...	1		2401–2800			
	linkage AF sz 2 1SB-RS	TZKS1030- ...			2801–3000			
40	linkage AF sz 1 1SB-VSU	TZKS1060- ...	1		2401–2800			
	linkage AF sz 2 1SB-VSU	TZKS1070- ...			2801–3000			
41a	corn.drive BSO/K3+ 1RS	TEUL2400- ...	1		460–1000			1
41b	corn.drive BS/K3 sz 1+ 2RS	TEUL2380- ...	1		1001–1200		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	striker plate 56	Ref. PDB, FRSB						
45	striker plate S-RS	Ref. PDB, TRSK						
on request								
46	stop	Ref. PDB, FRZF04	1		601–3000			
47	striker snapper A0767	TRST0010- ...	1		1601–3000			

Hinge side turning points						
Pos.	Description	Part number		required as per sash weight		
		surface TS	RAL7037	100 kg	130 kg	150 kg
48	corner hinge AX	Ref. PDB, TBEB41		1	1	1
49	cover cap AX EL	Ref. PDB, TKEL41		1	1	1
50	bottom hinge AX	Ref. PDB, TBEV41		1		
51	bottom hinge AX Ø8	Ref. PDB, TBEV42			1	1
52	supporting dowel AX	TBAV4010-0 ...			1	1

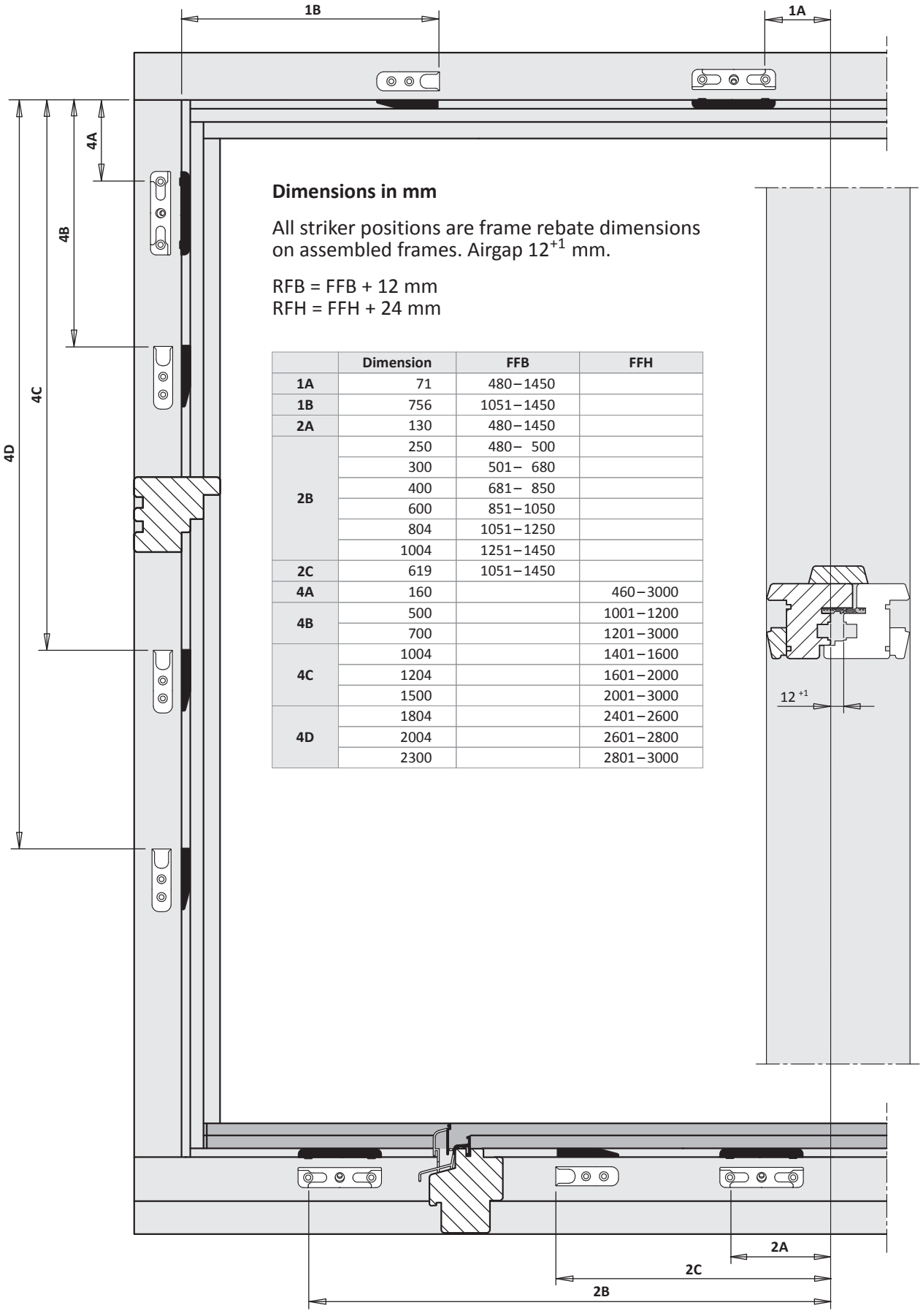
Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Number of frame parts / Pos.	
							20	21
1	corn.drive VSO 1RS	TEUL4010- ...	1	480–1650				1
2	stay sash part AF AX sz 1	TSSV4000- ...	1	480– 680				
	stay sash part AF AX 2+3 1RS	TSSV0310- ...		681– 850				
	stay sash part AF AX sz 4 1RS	TSSV0320- ...		851–1050				
	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	linkage additional stay 1RS	TZOK1010- ...	1	1251–1650			1	
5	additional stay	Ref. PDB, TSZS	1	1251–1650				
6	packer Z	Ref. PDB, FRUP01	1	1251–1650				
7	tilt restr. additional stay ..	889008	1	1251–1650				
8	tilt restrictor V-V sz 2-4 ..	TFKB0040- ...	1	681–1050	460– 900			
	tilt restrictor V-V sz 5 ..	TFKB0050- ...		1051–1250	460– 900			
9	corn.drive AF VSU/K 56+ 1S 1RS	TEUL5030- ...	1	480–1650				1
10	run up block AF 13 mm 13	TFFH0080- ...	1	480–1650				
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 5+ 1RS	TVSL0350- ...		851–1050				1
	extension sz 2+ 1RS	TVSL0320- ...		1051–1250				1
	extension sz 4+ 1RS	TVSL0340- ...		1251–1450				1
	extension sz 3+ 1RS	TVSL0330- ...		1451–1650				1
12	linkage BS/FH sz 2+ 1RS	TZBS0190- ...	1	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- ...			601–1000	300– 500		
	gear 15 AF sz 80 1RS	TGMK4040- ...			1001–1200	500– 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		460–1000			1
17b	corn.drive BS/K3 sz 1+ 2RS	TEUL2380- ...	1		1001–1200		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	striker plate 56	Ref. PDB, FRSB						
21	striker plate S-RS	Ref. PDB, TRSK						
on request								
22	mishandling device	TFBS0010- ...	1					
23	pressure piece	Ref. PDB, TFFD	1					
24	snapper switchable rh.	TFST0011- ...	1		1601–3000			
	snapper switchable lh.	TFST0012- ...			1601–3000			

List of fittings main sash

2-sash square tilt-turn/turn DS 16
H12 GM Hinge side axxent 24+



Hinge side turning points						
Pos.	Description	Part number		required as per sash weight		
		surface TS	RAL7037	100 kg	130 kg	150 kg
25	corner hinge AX	Ref. PDB, TBEB41		1	1	1
26	cover cap AX EL	Ref. PDB, TKEL41		1	1	1
27	bottom hinge AX	Ref. PDB, TBEV41		1		
28	bottom hinge AX Ø8	Ref. PDB, TBEV42			1	1
29	supporting dowel AX	TBAV4010-0 ...			1	1



Dimensions in mm

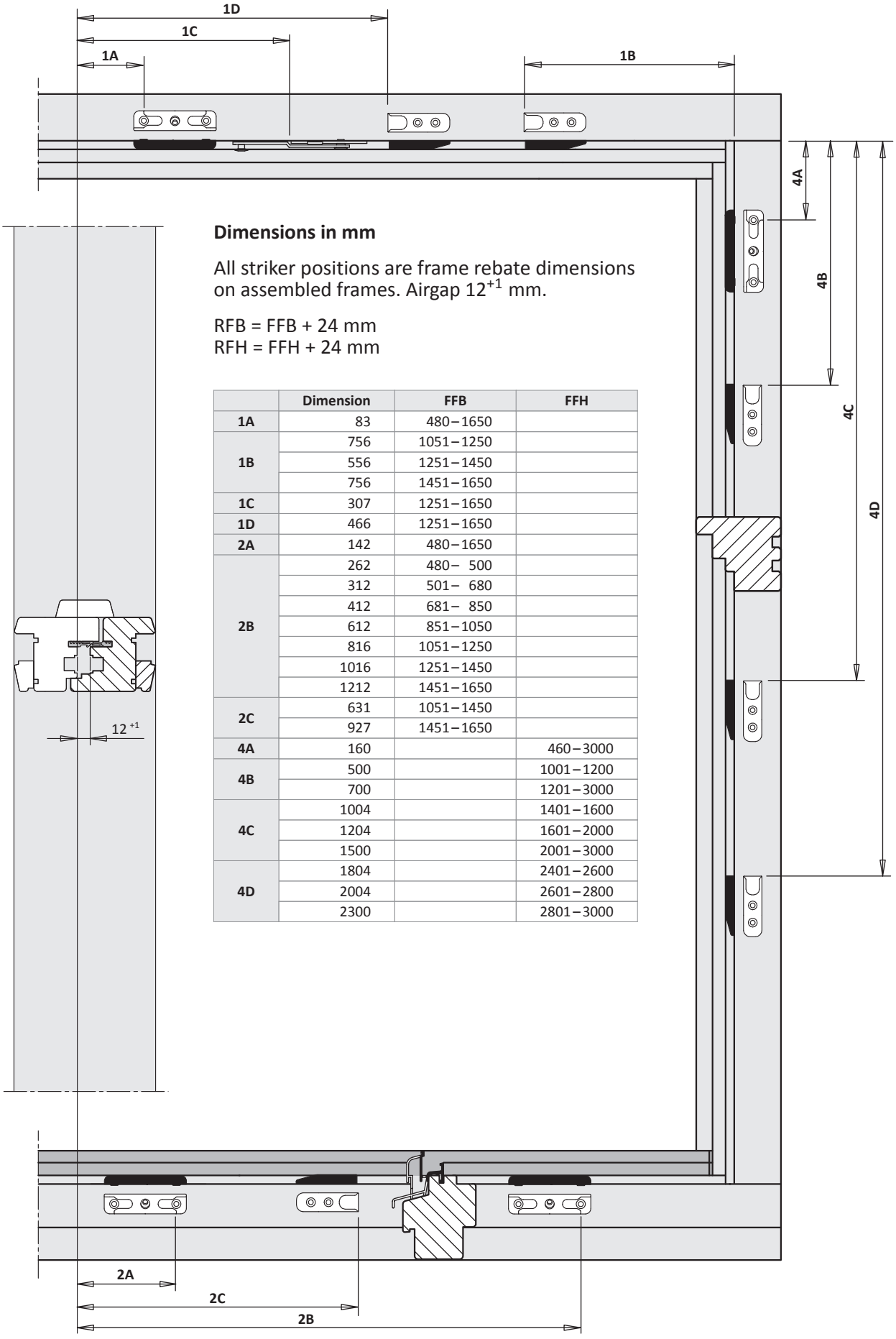
All striker positions are frame rebate dimensions on assembled frames. Airgap 12^{+1} mm.

RFB = FFB + 12 mm
RFH = FFH + 24 mm

	Dimension	FFB	FFH
1A	71	480–1450	
1B	756	1051–1450	
2A	130	480–1450	
2B	250	480– 500	
	300	501– 680	
	400	681– 850	
	600	851–1050	
	804	1051–1250	
	1004	1251–1450	
2C	619	1051–1450	
4A	160		460–3000
4B	500		1001–1200
	700		1201–3000
4C	1004		1401–1600
	1204		1601–2000
	1500		2001–3000
4D	1804		2401–2600
	2004		2601–2800
	2300		2801–3000

Frame dimensions main sash

2-sash square tilt-turn/turn DS 16
H12 GM Hinge side axxent 24+



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

	Dimension	FFB	FFH
1A	83	480 – 1650	
1B	756	1051 – 1250	
	556	1251 – 1450	
	756	1451 – 1650	
1C	307	1251 – 1650	
1D	466	1251 – 1650	
2A	142	480 – 1650	
2B	262	480 – 500	
	312	501 – 680	
	412	681 – 850	
	612	851 – 1050	
	816	1051 – 1250	
	1016	1251 – 1450	
	1212	1451 – 1650	
2C	631	1051 – 1450	
	927	1451 – 1650	
4A	160		460 – 3000
4B	500		1001 – 1200
	700		1201 – 3000
4C	1004		1401 – 1600
	1204		1601 – 2000
	1500		2001 – 3000
4D	1804		2401 – 2600
	2004		2601 – 2800
	2300		2801 – 3000

Bottom Inliner

1-sash square tilt-turn	H48.TAFH2K2+S013EN	6 - 3
2-sash square tilt-turn/turn DS 16	H48.TAFH2K2+S014EN	6 - 9

TITAN AF

Installation instructions

1-sash square tilt-turn

timber 12 mm

RC2

fixed handle position

Hinge side axxent 24+

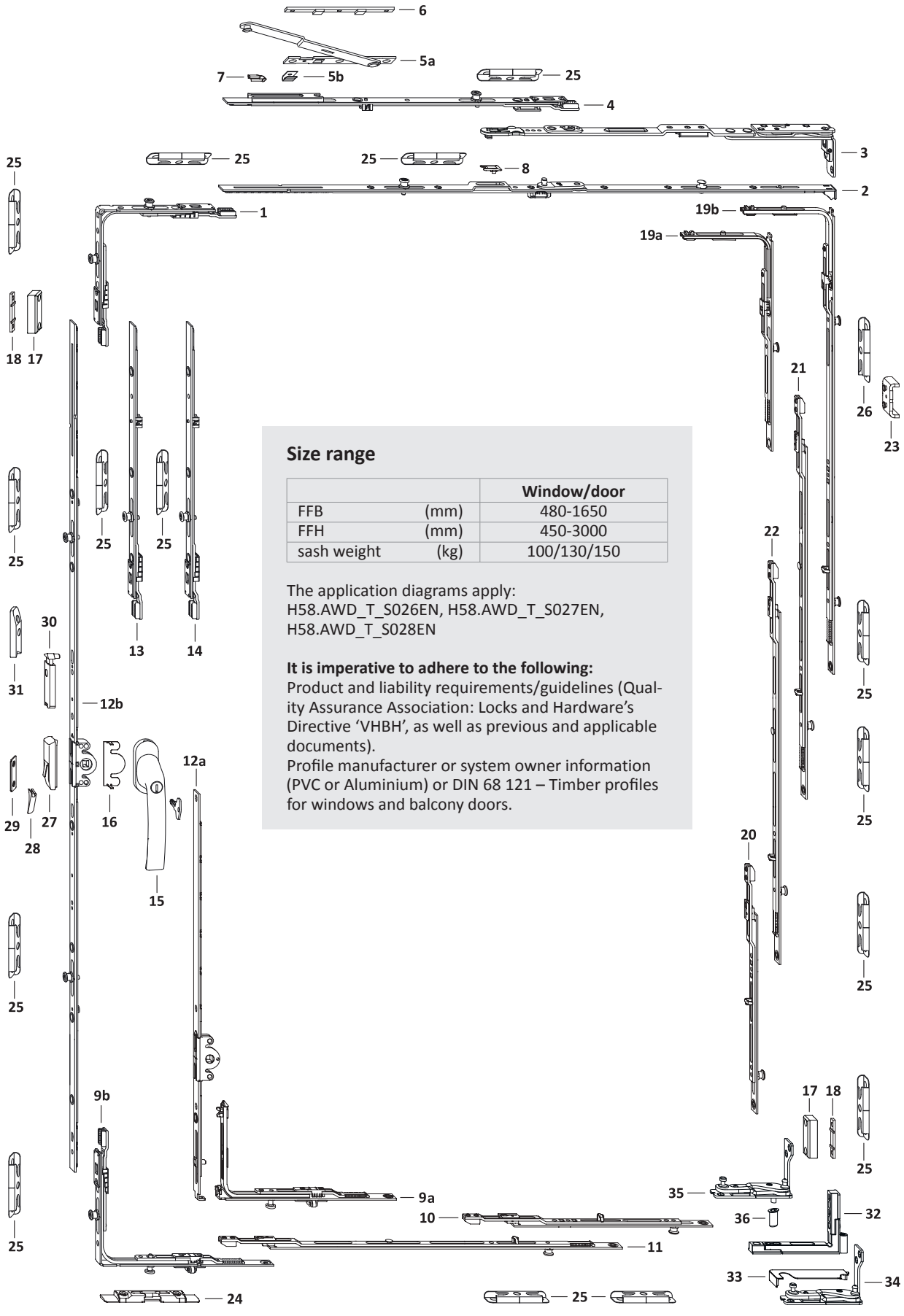
surface TS

backset 15 mm

Hardware set configuration	
General	Locking-points distance 1000
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-turn
H12 GK Hinge side axxent 24+



Size range

		Window/door
FFB	(mm)	480-1650
FFH	(mm)	450-3000
sash weight	(kg)	100/130/150

The application diagrams apply:
H58.AWD_T_S026EN, H58.AWD_T_S027EN,
H58.AWD_T_S028EN

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List of fittings

1-sash square tilt-turn

H12 GK Hinge side axxent 24+

TITAN AF

RC2

Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Number of frame parts / Pos.		
							24	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					
	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	linkage additional stay 1RS	TZOK1010- ...	1	1251–1650				1	
5	additional stay	Ref. PDB, TSZS	1	1251–1650					
6	packer Z	Ref. PDB, FRUP01	1	1251–1650					
7	tilt restr. additional stay ..	889008	1	1251–1650					
8	tilt restrictor V-V sz 2-4 ..	TFKB0040- ...	1	681–1050	450– 900				
	tilt restrictor V-V sz 5 ..	TFKB0050- ...		1051–1250	450– 900				
9a	locking part VSU/K FH+ 1S	TEVR1400- ...	1	480–1250	450– 600		1		
9b	corn.drive AF VSU/K+ FH 1S 1RS A0055	TEUL5020- ...	1	480–1650	601–3000		1	1	
10	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 5+ 1RS	TVSL0350- ...		851–1050				1	
	extension sz 2+ 1RS	TVSL0320- ...		1051–1250				1	
	extension sz 4+ 1RS	TVSL0340- ...		1251–1450				1	
	extension sz 3+ 1RS	TVSL0330- ...		1451–1650				1	
11	linkage BS/FH sz 2+ 1RS	TZBS0190- ...	1	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		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 lockable 100Nm	Ref.access. ZHGA100	1		450–3000				
16	anti-drill guard E	TGBS0010- ...	1		450–3000				
17	Air gap limiter	Ref. PDB, FRFL	2		450–3000				
18	packer RB/FPS	Ref. PDB, FRUP02	2		450–3000				
19a	corn.drive BSO/K3+ 1RS	TEUL2400- ...	1		450–1000				1
19b	corn.drive BS/K3 sz 1+ 2RS	TEUL2380- ...	1		1001–1200			1	1
	corn.drive BS/K3 sz 2+ 2RS	TEUL2390- ...			1201–3000			1	1
20	extension sz 2+ 1RS	TVSL0320- ...	1		601– 800			1	
	extension sz 4+ 1RS	TVSL0340- ...			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	

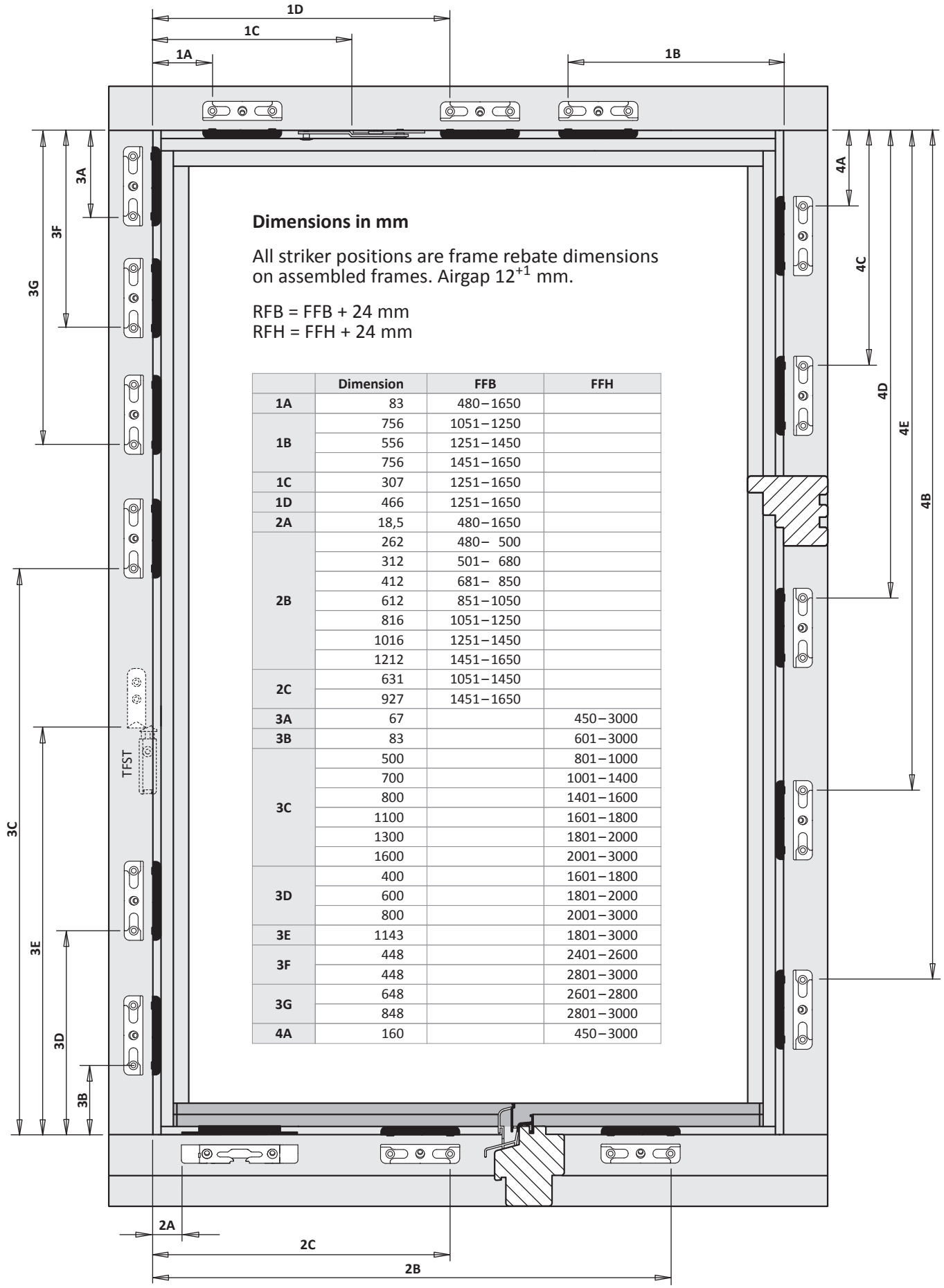
List of fittings

1-sash square tilt-turn
H12 GK Hinge side axxent 24+

Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Number of frame parts / Pos.		
							24	25	26
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		450 – 3000				
24	tilt lock bear. S-ES FH	Ref. PDB, FRKA							
25	striker plate S-RS	Ref. PDB, TRSK							
26	striker plate S-RS WK2BSO	Ref. PDB, TRSK03							
on request									
27	mishandling device	TFBS0010- ...	1						
28	pressure piece	Ref. PDB, TFFD	1						
29	stop	Ref. PDB, FRZF01	1						
30	snapper switchable rh.	TFST0011- ...	1		1801 – 3000				
	snapper switchable lh.	TFST0012- ...			1801 – 3000				
31	frame part snapper	Ref. PDB, TRST	1		1801 – 3000				

6

Hinge side turning points						
Pos.	Description	Part number		required as per sash weight		
		surface TS	RAL7037	100 kg	130 kg	150 kg
32	corner hinge AX	Ref. PDB, TBEB41		1	1	1
33	cover cap AX EL	Ref. PDB, TKEL41		1	1	1
34	bottom hinge AX	Ref. PDB, TBEV41		1		
35	bottom hinge AX Ø8	Ref. PDB, TBEV42			1	1
36	supporting dowel AX	TBAV4010-0 ...			1	1



Dimensions in mm

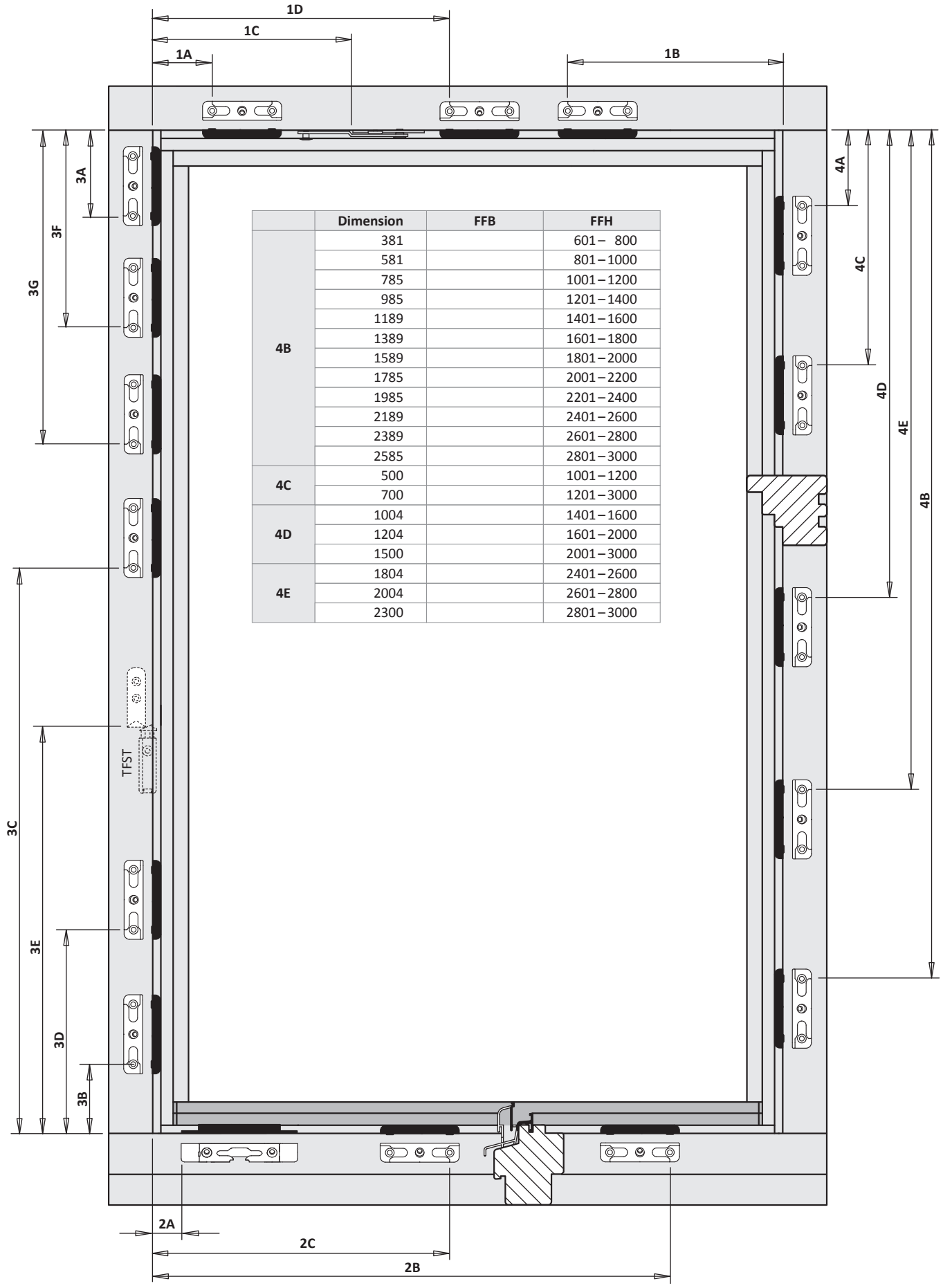
All striker positions are frame rebate dimensions on assembled frames. Airgap 12^{+1} mm.

RFB = FFB + 24 mm
RFH = FFH + 24 mm

	Dimension	FFB	FFH
1A	83	480 – 1650	
1B	756	1051 – 1250	
	556	1251 – 1450	
	756	1451 – 1650	
1C	307	1251 – 1650	
1D	466	1251 – 1650	
2A	18,5	480 – 1650	
2B	262	480 – 500	
	312	501 – 680	
	412	681 – 850	
	612	851 – 1050	
	816	1051 – 1250	
	1016	1251 – 1450	
	1212	1451 – 1650	
2C	631	1051 – 1450	
	927	1451 – 1650	
3A	67		450 – 3000
3B	83		601 – 3000
3C	500		801 – 1000
	700		1001 – 1400
	800		1401 – 1600
	1100		1601 – 1800
	1300		1801 – 2000
	1600		2001 – 3000
3D	400		1601 – 1800
	600		1801 – 2000
	800		2001 – 3000
3E	1143		1801 – 3000
3F	448		2401 – 2600
	448		2801 – 3000
3G	648		2601 – 2800
	848		2801 – 3000
4A	160		450 – 3000

Frame dimensions

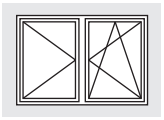
1-sash square tilt-turn
H12 GK Hinge side axxent 24+



	Dimension	FFB	FFH
4B	381		601 – 800
	581		801 – 1000
	785		1001 – 1200
	985		1201 – 1400
	1189		1401 – 1600
	1389		1601 – 1800
	1589		1801 – 2000
	1785		2001 – 2200
	1985		2201 – 2400
	2189		2401 – 2600
	2389		2601 – 2800
	2585		2801 – 3000
4C	500		1001 – 1200
	700		1201 – 3000
4D	1004		1401 – 1600
	1204		1601 – 2000
	1500		2001 – 3000
4E	1804		2401 – 2600
	2004		2601 – 2800
	2300		2801 – 3000

TITAN AF

Installation instructions



RC2

2-sash square tilt-turn/turn DS 16

timber 12 mm

RC2

fixed handle position

Hinge side axxent 24+

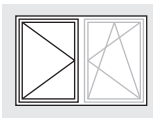
surface TS

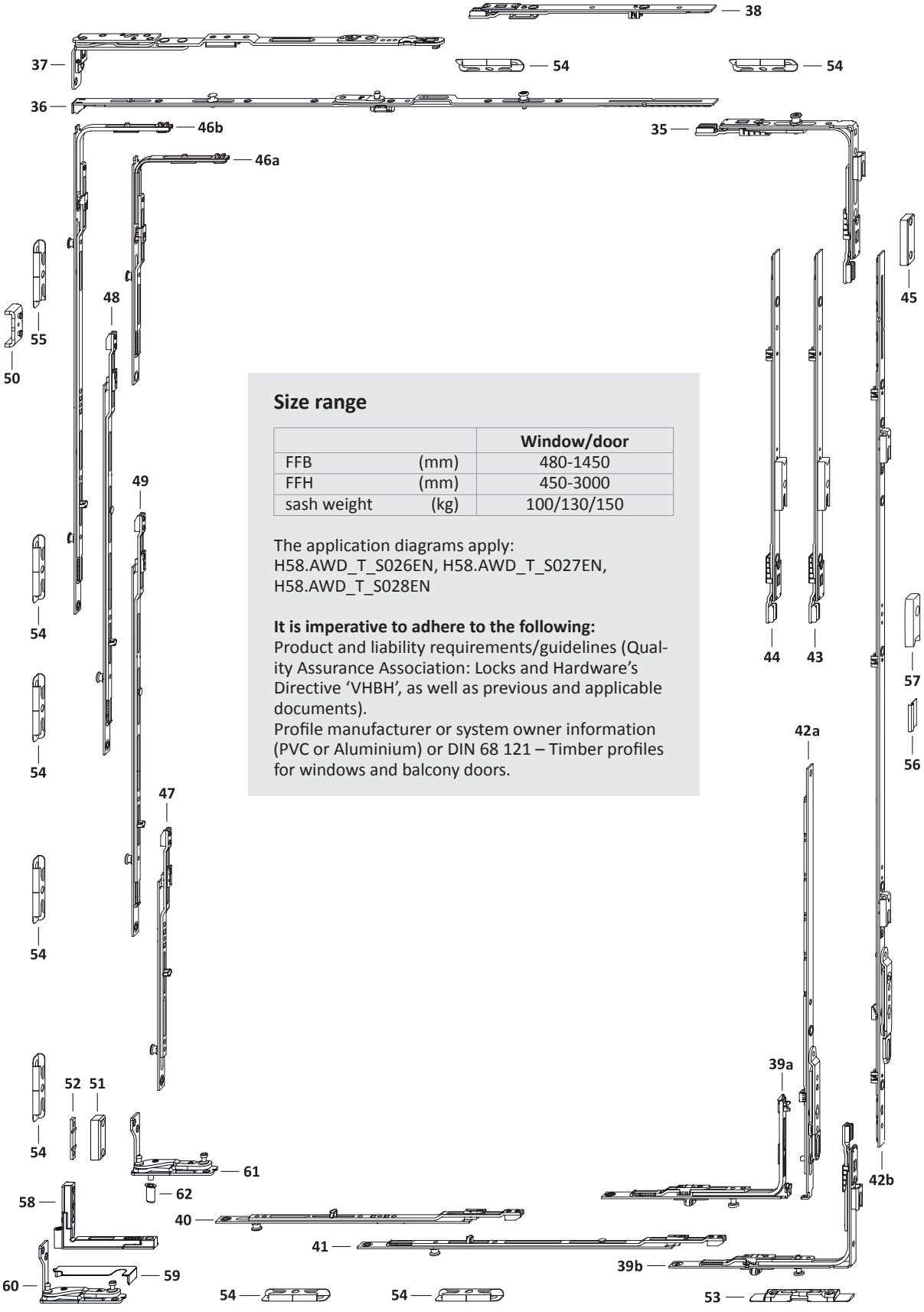
backset 15 mm

Hardware set configuration	
General	Locking-points distance 1000
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 slave sash

2-sash square tilt-turn/turn DS 16
H12 GK Hinge side axxent 24+



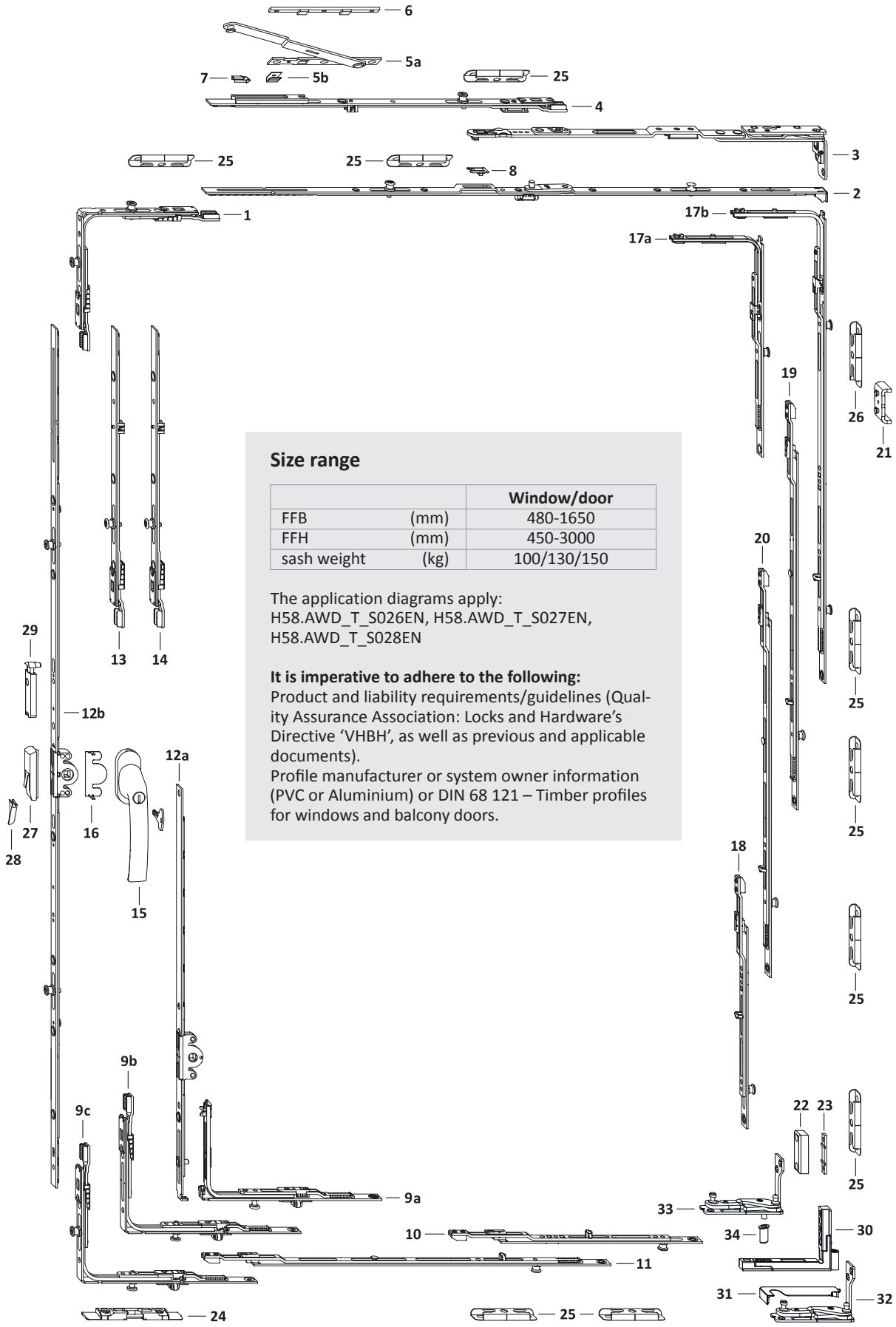


Size range

		Window/door
FFB	(mm)	480-1450
FFH	(mm)	450-3000
sash weight	(kg)	100/130/150

The application diagrams apply:
H58.AWD_T_S026EN, 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.



Size range

		Window/door
FFB	(mm)	480-1650
FFH	(mm)	450-3000
sash weight	(kg)	100/130/150

The application diagrams apply:
H58.AWD_T_S026EN, H58.AWD_T_S027EN,
H58.AWD_T_S028EN

It is imperative to adhere to the following:
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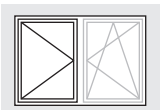
Profile manufacturer or system owner information (PVC or Aluminium) or DIN 68 121 – Timber profiles for windows and balcony doors.

List of fittings slave sash

2-sash square tilt-turn/turn DS 16
H12 GK Hinge side axxent 24+



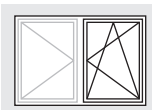
Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Number of frame parts / Pos.		
						In the main sash	53	54	55
35	corn.drive AF VSO WK2 SB 1RS	TEUL4080- ...	1	480–1450				1	
36	stay sash part AF AX sz 1	TSSV4000- ...	1	480– 680					
	stay sash part AF AX 2+3 1RS	TSSV0310- ...		681– 850					
	stay sash part AF AX sz 4 1RS	TSSV0320- ...		851–1050					
	stay sash part AF AX sz 5 1RS	TSSV0330- ...		1051–1450				1	
37	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					
38	linkage AF sz 1	TZZS0150- ...	1	1251–1450					
39a	locking part VSU/K FH+ 1S	TEVR1400- ...	1	480–1450	450– 800		1		
39b	corn.drive AF VSU/K+WK2 FHSB1S	TEUL5110- ...	1	480–1450	801–3000		1		
40	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 5+ 1RS	TVSL0350- ...		851–1050				1	
	extension sz 2+ 1RS	TVSL0320- ...		1051–1250				1	
	extension sz 4+ 1RS	TVSL0340- ...		1251–1450				1	
41	linkage BS/FH sz 2+ 1RS	TZBS0190- ...	1	1051–1450				1	
42a	sec.sash gear 16 sz 30	TGKS0010- ...	1	480–1250	450– 600	180			
	sec.sash gear 16 AF 60/G300	TGKS4030- ...			601– 800	300			
42b	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			
43	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				
44	linkage AF sz 2 1SB-RS	TZKS1030- ...	1		2601–2800				
	linkage AF sz 2 1SB-RS	TZKS1030- ...			2801–3000				
45	air gap limiter F ..	TFFB0010- ...	1		450–3000				
46a	corn.drive BSO/K3+ 1RS	TEUL2400- ...	1		450–1000				1
46b	corn.drive BS/K3 sz 1+ 2RS	TEUL2380- ...	1		1001–1200			1	1
	corn.drive BS/K3 sz 2+ 2RS	TEUL2390- ...			1201–3000			1	1
47	extension sz 2+ 1RS	TVSL0320- ...	1		601– 800			1	
	extension sz 4+ 1RS	TVSL0340- ...			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	
48	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	
49	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	
50	anti-lift device	Ref. PDB, TFAH	1		450–3000				
51	Air gap limiter	Ref. PDB, FRFL	1		450–3000				
52	packer RB/FPS	Ref. PDB, FRUP02	1		450–3000				
53	tilt lock bear. S-ES FH	Ref. PDB, FRKA							
54	striker plate S-RS	Ref. PDB, TRSK							
55	striker plate S-RS WK2BSO	Ref. PDB, TRSK03							
on request									
56	stop	Ref. PDB, FRZF04	1		601–3000				

Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Number of frame parts / Pos.		
						In the main sash	53	54	55
57	striker snapper A0767	TRST0010- ...	1		1801–3000				

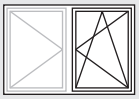
Hinge side turning points						
Pos.	**Description**	**Part number**		**required as per sash weight**		
		surface TS	RAL7037	100 kg	130 kg	150 kg
58	corner hinge AX	Ref. PDB, TBEB41		1	1	1
59	cover cap AX EL	Ref. PDB, TKEL41		1	1	1
60	bottom hinge AX	Ref. PDB, TBEV41		1		
61	bottom hinge AX Ø8	Ref. PDB, TBEV42			1	1
62	supporting dowel AX	TBAV4010-0 ...			1	1

List of fittings main sash

2-sash square tilt-turn/turn DS 16
H12 GK Hinge side axxent 24+



Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Number of frame parts / Pos.		
							24	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					
	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	linkage additional stay 1RS	TZOK1010- ...	1	1251–1650				1	
5	additional stay	Ref. PDB, TSZS	1	1251–1650					
6	packer Z	Ref. PDB, FRUP01	1	1251–1650					
7	tilt restr. additional stay ..	889008	1	1251–1650					
8	tilt restrictor V-V sz 2-4 ..	TFKB0040- ...	1	681–1050	450– 900				
	tilt restrictor V-V sz 5 ..	TFKB0050- ...		1051–1250	450– 900				
9a	locking part VSU/K FH+ 1S	TEVR1400- ...	1	480–1250	450– 600		1		
9b	corn.drive AF VSU/K+ FH 1S	TEUL5010- ...	1	480–1650	601– 800		1		
9c	corn.drive AF VSU/K+ FH 1S 1RS A0055	TEUL5020- ...	1	480–1650	801–3000		1		
10	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 5+ 1RS	TVSL0350- ...		851–1050				1	
	extension sz 2+ 1RS	TVSL0320- ...		1051–1250				1	
	extension sz 4+ 1RS	TVSL0340- ...		1251–1450				1	
	extension sz 3+ 1RS	TVSL0330- ...		1451–1650				1	
11	linkage BS/FH sz 2+ 1RS	TZBS0190- ...	1	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 lockable 100Nm	Ref.access. ZHGA100	1		450–3000				
16	anti-drill guard E	TGBS0010- ...	1		450–3000				
17a	corn.drive BSO/K3+ 1RS	TEUL2400- ...	1		450–1000				1
17b	corn.drive BS/K3 sz 1+ 2RS	TEUL2380- ...	1		1001–1200			1	1
	corn.drive BS/K3 sz 2+ 2RS	TEUL2390- ...			1201–3000			1	1
18	extension sz 2+ 1RS	TVSL0320- ...	1		601– 800			1	
	extension sz 4+ 1RS	TVSL0340- ...			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

H12 GK Hinge side axxent 24+

TITAN AF

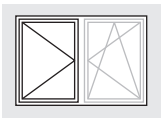
RC2

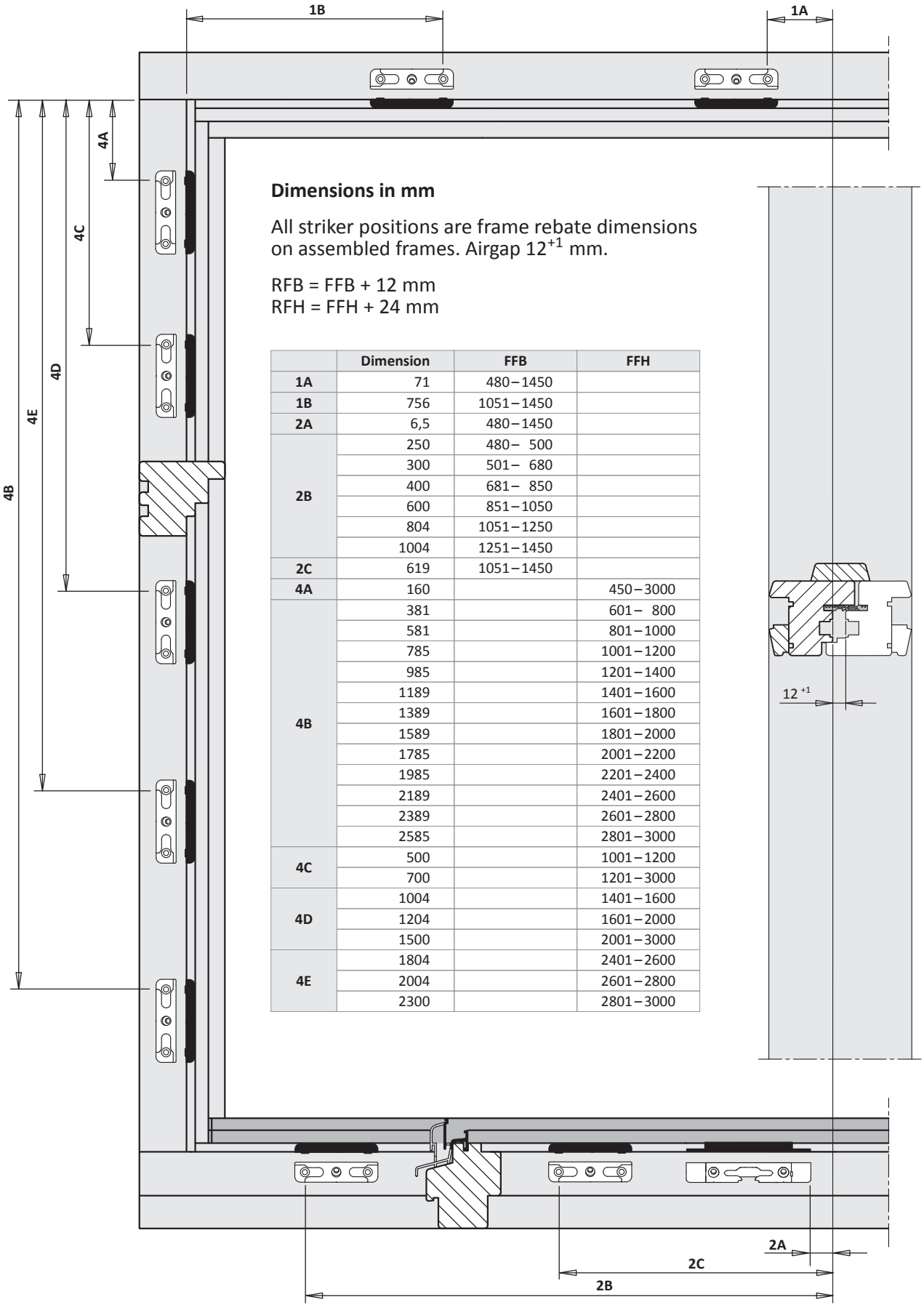
Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Number of frame parts / Pos.		
							24	25	26
19	linkage BS/FH sz 1+ 1RS	TZBS0180- ...	1		1401 – 1600			1	
	linkage BS/FH sz 2+ 1RS	TZBS0190- ...			1601 – 2000			1	
	linkage BS/FH sz 3+ 1RS	TZBS0200- ...			2001 – 3000			1	
20	linkage BS/FH sz 1+ 1RS	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	anti-lift device	Ref. PDB, TFAH	1		450 – 3000				
22	Air gap limiter	Ref. PDB, FRFL	1		450 – 3000				
23	packer RB/FPS	Ref. PDB, FRUP02	1		450 – 3000				
24	tilt lock bear. S-ES FH	Ref. PDB, FRKA							
25	striker plate S-RS	Ref. PDB, TRSK							
26	striker plate S-RS WK2BSO	Ref. PDB, TRSK03							
on request									
27	mishandling device	TFBS0010- ...	1		601 – 3000				
28	pressure piece	Ref. PDB, TFFD	1		601 – 3000				
29	snapper switchable rh.	TFST0011- ...	1		1801 – 3000				
	snapper switchable lh.	TFST0012- ...			1801 – 3000				

Hinge side turning points						
Pos.	Description	Part number		required as per sash weight		
		surface TS	RAL7037	100 kg	130 kg	150 kg
30	corner hinge AX	Ref. PDB, TBEB41		1	1	1
31	cover cap AX EL	Ref. PDB, TKEL41		1	1	1
32	bottom hinge AX	Ref. PDB, TBEV41		1		
33	bottom hinge AX Ø8	Ref. PDB, TBEV42			1	1
34	supporting dowel AX	TBAV4010-0 ...			1	1

Frame dimensions slave sash

2-sash square tilt-turn/turn DS 16
H12 GK Hinge side axxent 24+



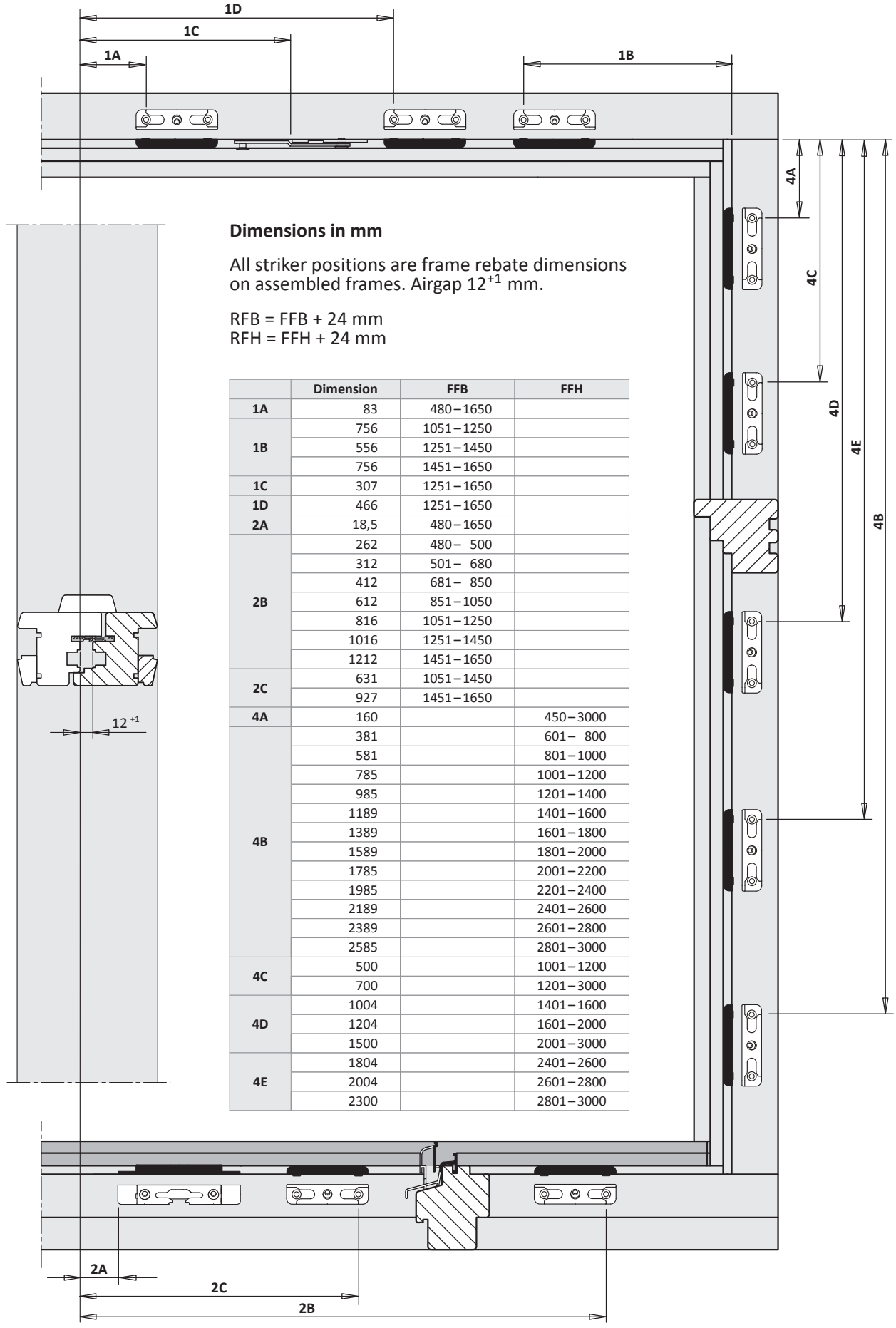


Dimensions in mm

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

RFB = FFB + 12 mm
RFH = FFH + 24 mm

	Dimension	FFB	FFH
1A	71	480–1450	
1B	756	1051–1450	
2A	6,5	480–1450	
2B	250	480– 500	
	300	501– 680	
	400	681– 850	
	600	851–1050	
	804	1051–1250	
	1004	1251–1450	
2C	619	1051–1450	
4A	160		450–3000
4B	381		601– 800
	581		801–1000
	785		1001–1200
	985		1201–1400
	1189		1401–1600
	1389		1601–1800
	1589		1801–2000
	1785		2001–2200
	1985		2201–2400
	2189		2401–2600
	2389		2601–2800
	2585		2801–3000
4C	500		1001–1200
	700		1201–3000
4D	1004		1401–1600
	1204		1601–2000
	1500		2001–3000
4E	1804		2401–2600
	2004		2601–2800
	2300		2801–3000



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

	Dimension	FFB	FFH
1A	83	480–1650	
1B	756	1051–1250	
	556	1251–1450	
	756	1451–1650	
1C	307	1251–1650	
1D	466	1251–1650	
2A	18,5	480–1650	
2B	262	480– 500	
	312	501– 680	
	412	681– 850	
	612	851–1050	
	816	1051–1250	
	1016	1251–1450	
	1212	1451–1650	
2C	631	1051–1450	
	927	1451–1650	
4A	160		450–3000
4B	381		601– 800
	581		801–1000
	785		1001–1200
	985		1201–1400
	1189		1401–1600
	1389		1601–1800
	1589		1801–2000
	1785		2001–2200
	1985		2201–2400
	2189		2401–2600
	2389		2601–2800
	2585		2801–3000
4C	500		1001–1200
	700		1201–3000
4D	1004		1401–1600
	1204		1601–2000
	1500		2001–3000
4E	1804		2401–2600
	2004		2601–2800
	2300		2801–3000

Bottom Inliner

1-sash square tilt-turn	H48.TAFH2M2+S010EN	7 - 3
2-sash square tilt-turn/turn DS 16	H48.TAFH2M2+S011EN	7 - 9

TITAN AF

Installation instructions

RC2

1-sash square tilt-turn

timber 12 mm

RC2

centre handle pos. (variable)

Hinge side axxent 24+

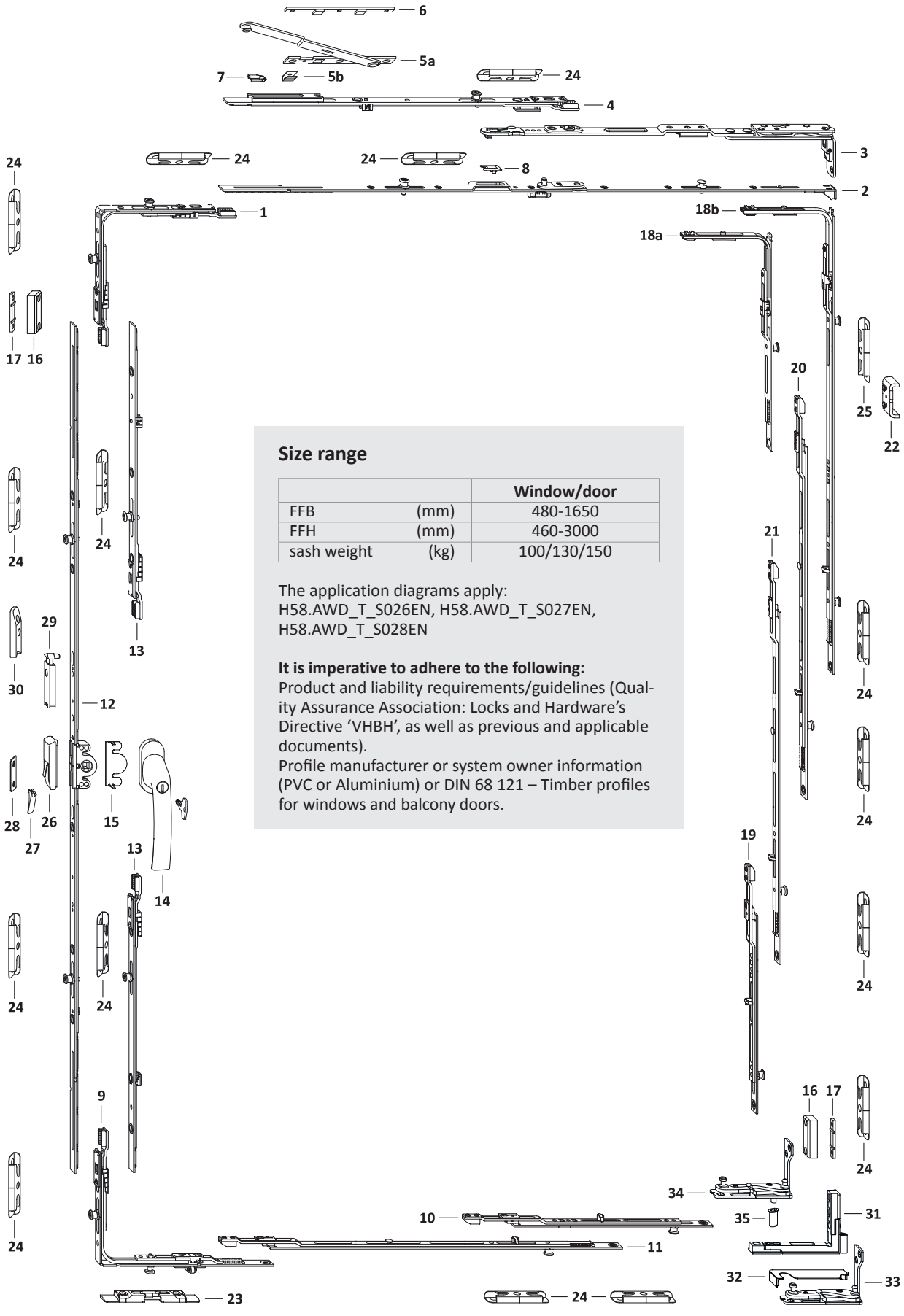
surface TS

backset 15 mm

Hardware set configuration	
General	Locking-points distance 1000
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-turn
H12 GM Hinge side axxent 24+



Size range

		Window/door
FFB	(mm)	480-1650
FFH	(mm)	460-3000
sash weight	(kg)	100/130/150

The application diagrams apply:
H58.AWD_T_S026EN, 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.

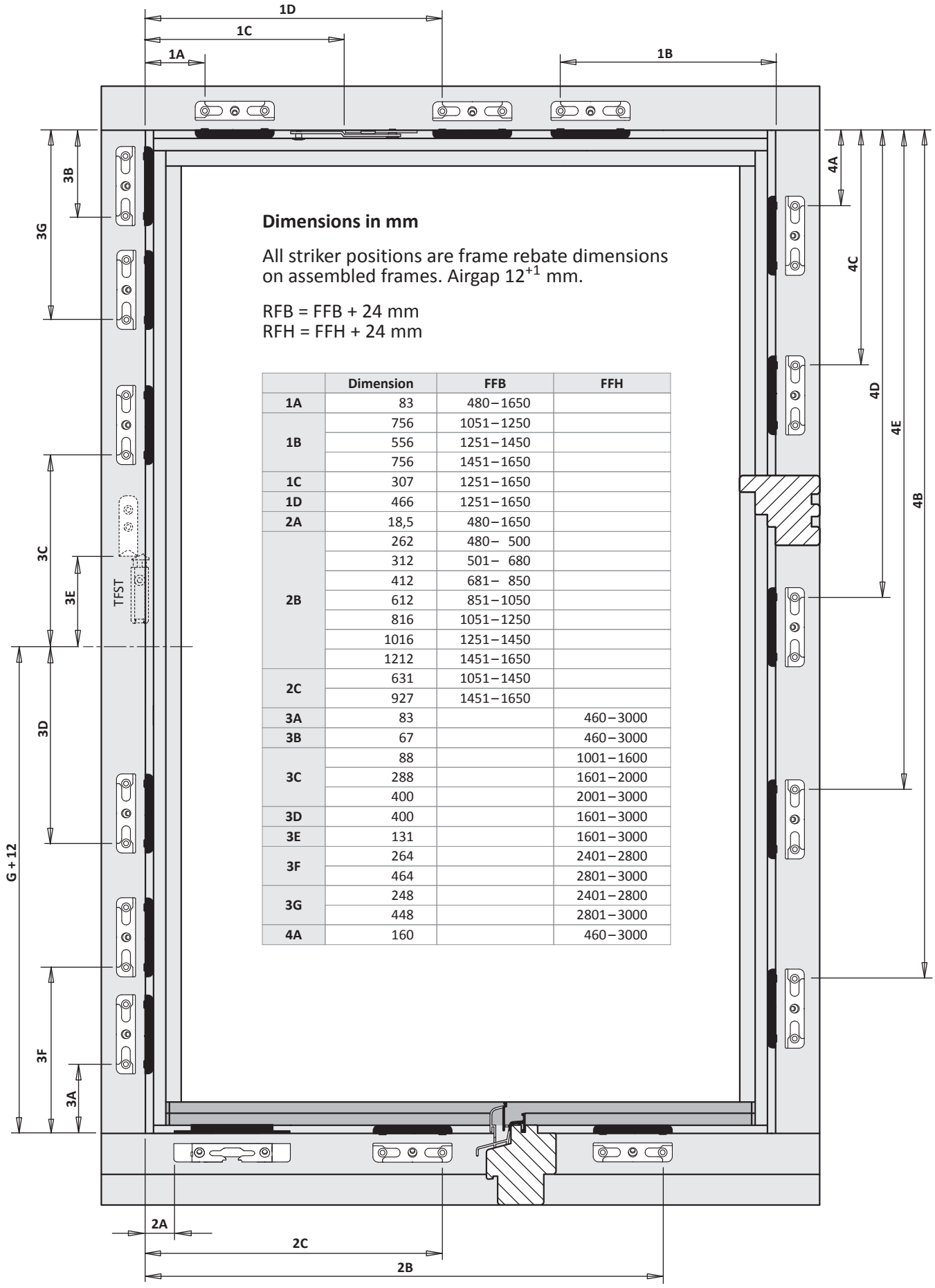
Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Number of frame parts / Pos.		
							23	24	25
1	corn.drive VSO 2RS A0055	TEUL4070- ...	1	480–1650				2	
2	stay sash part AF AX sz 1	TSSV4000- ...	1	480– 680					
	stay sash part AF AX 2+3 1RS	TSSV0310- ...		681– 850					
	stay sash part AF AX sz 4 1RS	TSSV0320- ...		851–1050					
	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	linkage additional stay 1RS	TZOK1010- ...	1	1251–1650				1	
5	additional stay	Ref. PDB, TSZS	1	1251–1650					
6	packer Z	Ref. PDB, FRUP01	1	1251–1650					
7	tilt restr. additional stay ..	889008	1	1251–1650					
8	tilt restrictor V-V sz 2-4 ..	TFKB0040- ...	1	681–1050	460– 900				
	tilt restrictor V-V sz 5 ..	TFKB0050- ...		1051–1250	460– 900				
9	corn.drive AF VSU/K+ FH 1S 1RS A0055	TEUL5020- ...	1	480–1650			1	1	
10	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 5+ 1RS	TVSL0350- ...		851–1050				1	
	extension sz 2+ 1RS	TVSL0320- ...		1051–1250				1	
	extension sz 4+ 1RS	TVSL0340- ...		1251–1450				1	
	extension sz 3+ 1RS	TVSL0330- ...		1451–1650				1	
11	linkage BS/FH sz 2+ 1RS	TZBS0190- ...	1	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- ...			601–1000	300– 500			
	gear 15 AF sz 80 1RS	TGMK4040- ...			1001–1200	500– 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 lockable 100Nm	Ref.access. ZHGA100	1		460–3000				
15	anti-drill guard E	TGBS0010- ...	1		460–3000				
16	Air gap limiter	Ref. PDB, FRFL	2		460–3000				
17	packer RB/FPS	Ref. PDB, FRUP02	2		460–3000				
18a	corn.drive BSO/K3+ 1RS	TEUL2400- ...	1		460–1000				1
18b	corn.drive BS/K3 sz 1+ 2RS	TEUL2380- ...	1		1001–1200			1	1
	corn.drive BS/K3 sz 2+ 2RS	TEUL2390- ...			1201–3000			1	1
19	extension sz 2+ 1RS	TVSL0320- ...	1		601– 800			1	
	extension sz 4+ 1RS	TVSL0340- ...			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	
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		460–3000				
23	tilt lock bear. S-ES FH	Ref. PDB, FRKA							
24	striker plate S-RS	Ref. PDB, TRSK							

List of fittings

1-sash square tilt-turn
H12 GM Hinge side axxent 24+

Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Number of frame parts / Pos.		
							23	24	25
25	striker plate S-RS WK2BSO	Ref. PDB, TRSK03							
on request									
26	mishandling device	TFBS0010- ...	1						
27	pressure piece	Ref. PDB, TFFD	1						
28	stop	Ref. PDB, FRZF01	1						
29	snapper switchable rh.	TFST0011- ...	1		1601–3000				
	snapper switchable lh.	TFST0012- ...			1601–3000				
30	frame part snapper	Ref. PDB, TRST	1		1601–3000				

Hinge side turning points						
Pos.	**Description**	**Part number**		**required as per sash weight**		
		surface TS	RAL7037	100 kg	130 kg	150 kg
31	corner hinge AX	Ref. PDB, TBEB41		1	1	1
32	cover cap AX EL	Ref. PDB, TKEL41		1	1	1
33	bottom hinge AX	Ref. PDB, TBEV41		1		
34	bottom hinge AX Ø8	Ref. PDB, TBEV42			1	1
35	supporting dowel AX	TBAV4010-0 ...			1	1



Dimensions in mm

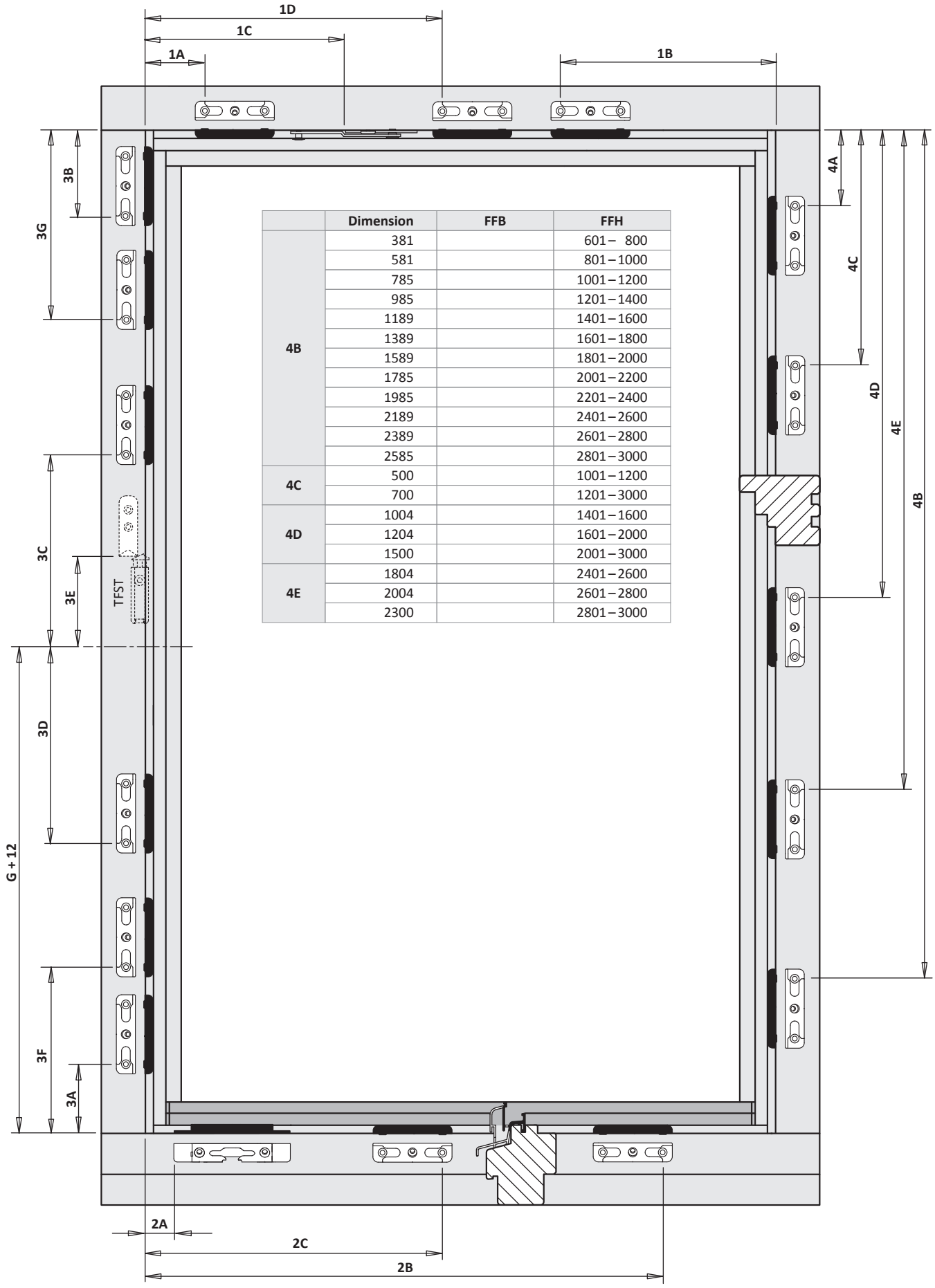
All striker positions are frame rebate dimensions on assembled frames. Airgap 12^{+1} mm.

RFB = FFB + 24 mm
RFH = FFH + 24 mm

	Dimension	FFB	FFH
1A	83	480–1650	
1B	756	1051–1250	
	556	1251–1450	
	756	1451–1650	
1C	307	1251–1650	
1D	466	1251–1650	
2A	18,5	480–1650	
2B	262	480– 500	
	312	501– 680	
	412	681– 850	
	612	851–1050	
	816	1051–1250	
	1016	1251–1450	
	1212	1451–1650	
2C	631	1051–1450	
	927	1451–1650	
3A	83		460–3000
3B	67		460–3000
3C	88		1001–1600
	288		1601–2000
	400		2001–3000
3D	400		1601–3000
3E	131		1601–3000
3F	264		2401–2800
	464		2801–3000
3G	248		2401–2800
	448		2801–3000
4A	160		460–3000

Frame dimensions

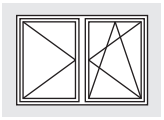
1-sash square tilt-turn
H12 GM Hinge side axxent 24+



	Dimension	FFB	FFH
4B	381		601 – 800
	581		801 – 1000
	785		1001 – 1200
	985		1201 – 1400
	1189		1401 – 1600
	1389		1601 – 1800
	1589		1801 – 2000
	1785		2001 – 2200
	1985		2201 – 2400
	2189		2401 – 2600
	2389		2601 – 2800
	2585		2801 – 3000
4C	500		1001 – 1200
	700		1201 – 3000
4D	1004		1401 – 1600
	1204		1601 – 2000
	1500		2001 – 3000
4E	1804		2401 – 2600
	2004		2601 – 2800
	2300		2801 – 3000

TITAN AF

Installation instructions



RC2

2-sash square tilt-turn/turn DS 16

timber 12 mm

RC2

centre handle pos. (variable)

Hinge side axxent 24+

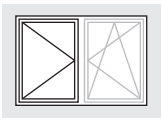
surface TS

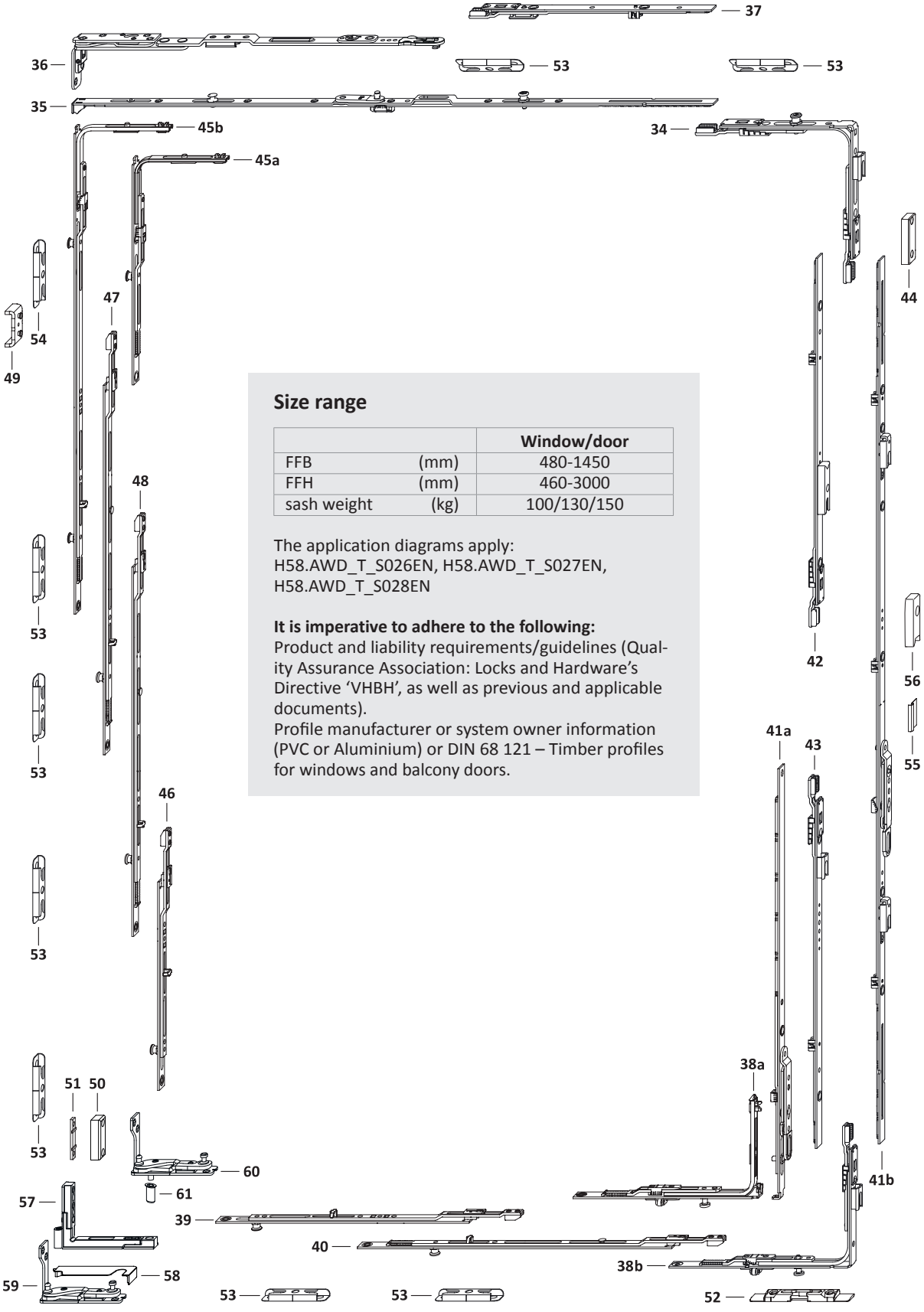
backset 15 mm

Hardware set configuration	
General	Locking-points distance 1000
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 slave sash

2-sash square tilt-turn/turn DS 16
H12 GM Hinge side axxent 24+





Size range

		Window/door
FFB	(mm)	480-1450
FFH	(mm)	460-3000
sash weight	(kg)	100/130/150

The application diagrams apply:
H58.AWD_T_S026EN, H58.AWD_T_S027EN,
H58.AWD_T_S028EN

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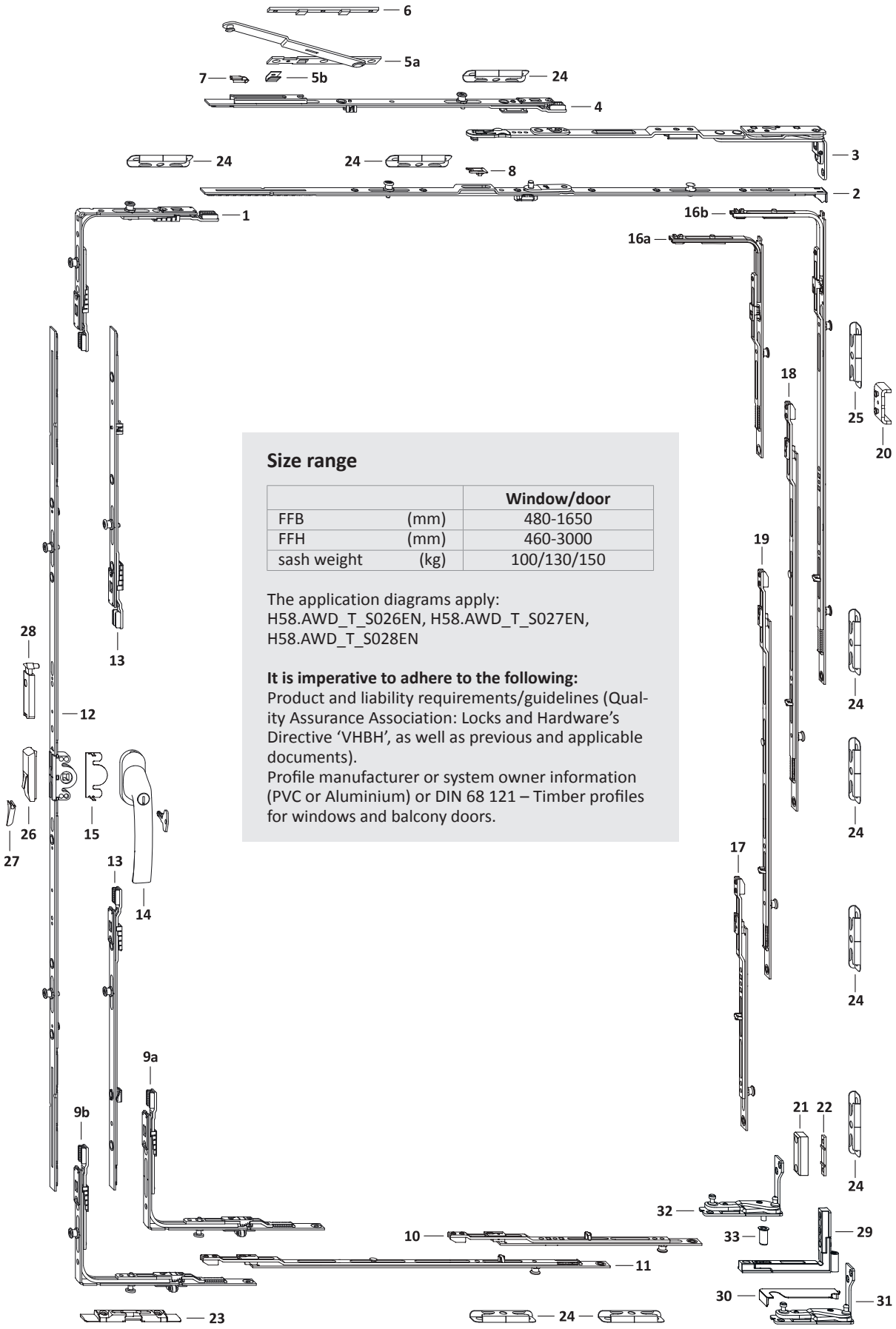

Size range

		Window/door
FFB	(mm)	480-1650
FFH	(mm)	460-3000
sash weight	(kg)	100/130/150

The application diagrams apply:
H58.AWD_T_S026EN, H58.AWD_T_S027EN,
H58.AWD_T_S028EN

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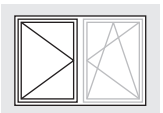
List of fittings slave sash

2-sash square tilt-turn/turn DS 16
H12 GM Hinge side axxent 24+

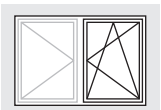


Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Number of frame parts / Pos.		
						In the main sash	52	53	54
34	corn.drive AF VSO WK2 SB 1RS	TEUL4080- ...	1	480–1450				1	
35	stay sash part AF AX sz 1	TSSV4000- ...	1	480– 680					
	stay sash part AF AX 2+3 1RS	TSSV0310- ...		681– 850					
	stay sash part AF AX sz 4 1RS	TSSV0320- ...		851–1050					
	stay sash part AF AX sz 5 1RS	TSSV0330- ...		1051–1450				1	
36	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					
37	linkage AF sz 1	TZZS0150- ...	1	1251–1450					
38a	locking part VSU/K FH+ 1S	TEVR1400- ...	1	480–1450	460– 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 5+ 1RS	TVSL0350- ...		851–1050				1	
	extension sz 2+ 1RS	TVSL0320- ...		1051–1250				1	
	extension sz 4+ 1RS	TVSL0340- ...		1251–1450				1	
40	linkage BS/FH sz 2+ 1RS	TZBS0190- ...	1	1051–1450				1	
41a	sec.sash gear 16 sz 30	TGKS0010- ...	1		460– 600	230– 300			
	sec.sash gear 16 AF 60/G300	TGKS4030- ...			601– 800	300– 400			
41b	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			
42	linkage AF sz 1 1SB-RS	TZKS1020- ...	1		2401–2800				
	linkage AF sz 2 1SB-RS	TZKS1030- ...			2801–3000				
43	linkage AF sz 1 1SB-VSU	TZKS1060- ...	1		2401–2800				
	linkage AF sz 2 1SB-VSU	TZKS1070- ...			2801–3000				
44	air gap limiter F ..	TFFB0010- ...	1		460–3000				
45a	corn.drive BSO/K3+ 1RS	TEUL2400- ...	1		460–1000				1
45b	corn.drive BS/K3 sz 1+ 2RS	TEUL2380- ...	1		1001–1200			1	1
	corn.drive BS/K3 sz 2+ 2RS	TEUL2390- ...			1201–3000			1	1
46	extension sz 2+ 1RS	TVSL0320- ...	1		601– 800			1	
	extension sz 4+ 1RS	TVSL0340- ...			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		460–3000				
50	Air gap limiter	Ref. PDB, FRFL	1		460–3000				
51	packer RB/FPS	Ref. PDB, FRUP02	1		460–3000				
52	tilt lock bear. S-ES FH	Ref. PDB, FRKA							
53	striker plate S-RS	Ref. PDB, TRSK							
54	striker plate S-RS WK2BSO	Ref. PDB, TRSK03							
on request									
55	stop	Ref. PDB, FRZF04	1		601–3000				
56	striker snapper A0767	TRST0010- ...	1		1601–3000				

Hinge side turning points						
Pos.	**Description**	**Part number**		**required as per sash weight**		
		surface TS	RAL7037	100 kg	130 kg	150 kg
57	corner hinge AX	Ref. PDB, TBEB41		1	1	1
58	cover cap AX EL	Ref. PDB, TKEL41		1	1	1
59	bottom hinge AX	Ref. PDB, TBEV41		1		
60	bottom hinge AX Ø8	Ref. PDB, TBEV42			1	1
61	supporting dowel AX	TBAV4010-0 ...			1	1

List of fittings main sash

2-sash square tilt-turn/turn DS 16
H12 GM Hinge side axxent 24+



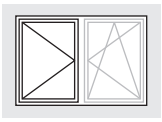
Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Number of frame parts / Pos.		
							23	24	25
1	corn.drive VSO 2RS A0055	TEUL4070- ...	1	480–1650				1	
2	stay sash part AF AX sz 1	TSSV4000- ...	1	480– 680					
	stay sash part AF AX 2+3 1RS	TSSV0310- ...		681– 850					
	stay sash part AF AX sz 4 1RS	TSSV0320- ...		851–1050					
	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	linkage additional stay 1RS	TZOK1010- ...	1	1251–1650				1	
5	additional stay	Ref. PDB, TSZS	1	1251–1650					
6	packer Z	Ref. PDB, FRUP01	1	1251–1650					
7	tilt restr. additional stay ..	889008	1	1251–1650					
8	tilt restrictor V-V sz 2-4 ..	TFKB0040- ...	1	681–1050	460– 900				
	tilt restrictor V-V sz 5 ..	TFKB0050- ...		1051–1250	460– 900				
9a	corn.drive AF VSU/K+ FH 1S	TEUL5010- ...	1	480–1650	460– 800		1		
9b	corn.drive AF VSU/K+ FH 1S 1RS A0055	TEUL5020- ...	1	480–1650	801–3000		1		
10	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 5+ 1RS	TVSL0350- ...		851–1050				1	
	extension sz 2+ 1RS	TVSL0320- ...		1051–1250				1	
	extension sz 4+ 1RS	TVSL0340- ...		1251–1450				1	
	extension sz 3+ 1RS	TVSL0330- ...		1451–1650				1	
11	linkage BS/FH sz 2+ 1RS	TZBS0190- ...	1	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- ...			601–1000	300– 500			
	gear 15 AF sz 80 1RS	TGMK4040- ...			1001–1200	500– 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 lockable 100Nm	Ref.access. ZHGA100	1		460–3000				
15	anti-drill guard E	TGBS0010- ...	1		460–3000				
16a	corn.drive BSO/K3+ 1RS	TEUL2400- ...	1		460–1000				1
16b	corn.drive BS/K3 sz 1+ 2RS	TEUL2380- ...	1		1001–1200			1	1
	corn.drive BS/K3 sz 2+ 2RS	TEUL2390- ...			1201–3000			1	1
17	extension sz 2+ 1RS	TVSL0320- ...	1		601– 800			1	
	extension sz 4+ 1RS	TVSL0340- ...			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	
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	anti-lift device	Ref. PDB, TFAH	1		460–3000				
21	Air gap limiter	Ref. PDB, FRFL	1		460–3000				
22	packer RB/FPS	Ref. PDB, FRUP02	1		460–3000				
23	tilt lock bear. S-ES FH	Ref. PDB, FRKA							

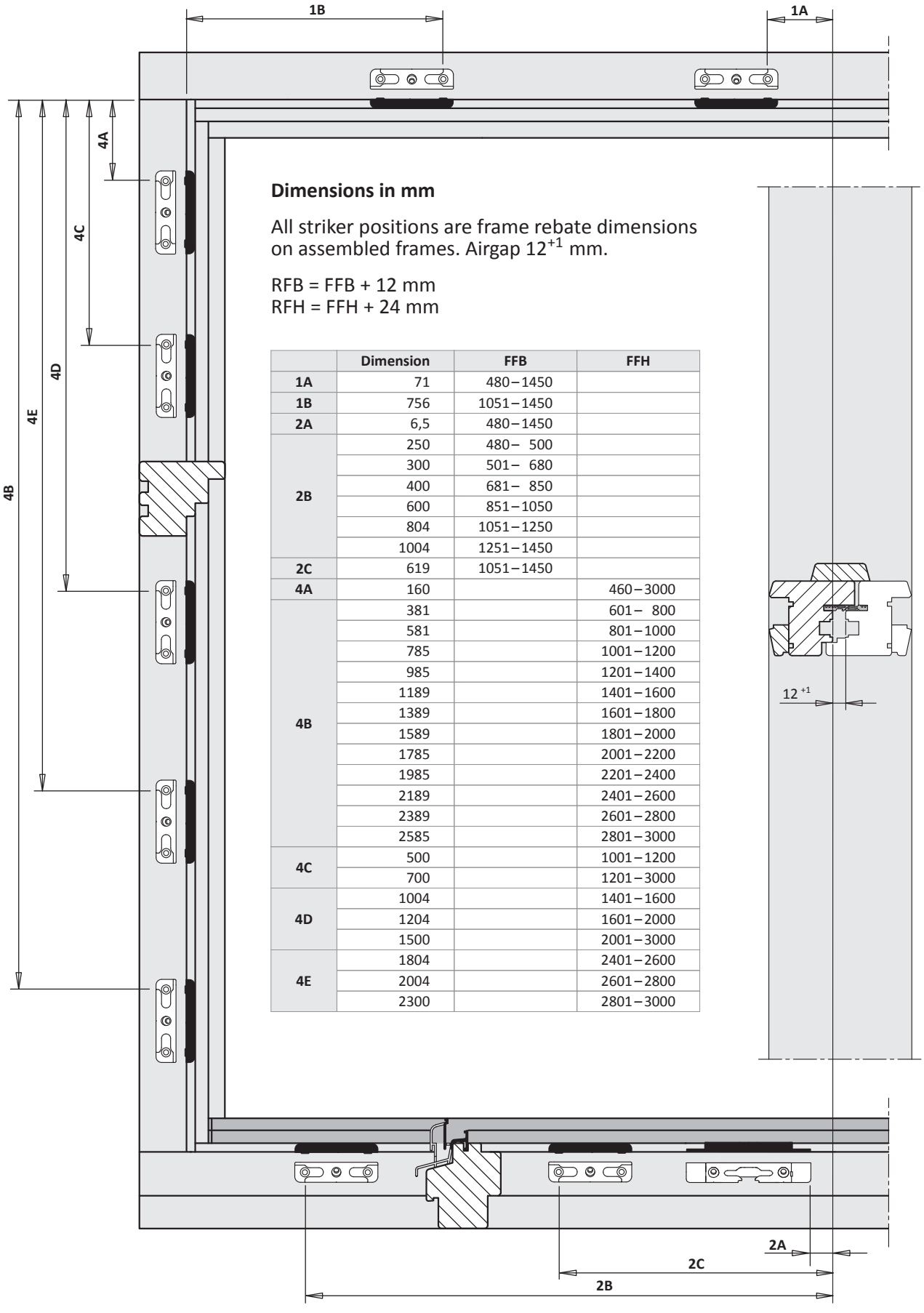
Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Number of frame parts / Pos.		
							23	24	25
24	striker plate S-RS	Ref. PDB, TRSK							
25	striker plate S-RS WK2BSO	Ref. PDB, TRSK03							
on request									
26	mishandling device	TFBS0010- ...	1						
27	pressure piece	Ref. PDB, TFFD	1						
28	snapper switchable rh.	TFST0011- ...	1		1601–3000				
	snapper switchable lh.	TFST0012- ...			1601–3000				

Hinge side turning points						
Pos.	**Description**	**Part number**		**required as per sash weight**		
		surface TS	RAL7037	100 kg	130 kg	150 kg
29	corner hinge AX	Ref. PDB, TBEB41		1	1	1
30	cover cap AX EL	Ref. PDB, TKEL41		1	1	1
31	bottom hinge AX	Ref. PDB, TBEV41		1		
32	bottom hinge AX Ø8	Ref. PDB, TBEV42			1	1
33	supporting dowel AX	TBAV4010-0 ...			1	1

Frame dimensions slave sash

2-sash square tilt-turn/turn DS 16
H12 GM Hinge side axxent 24+



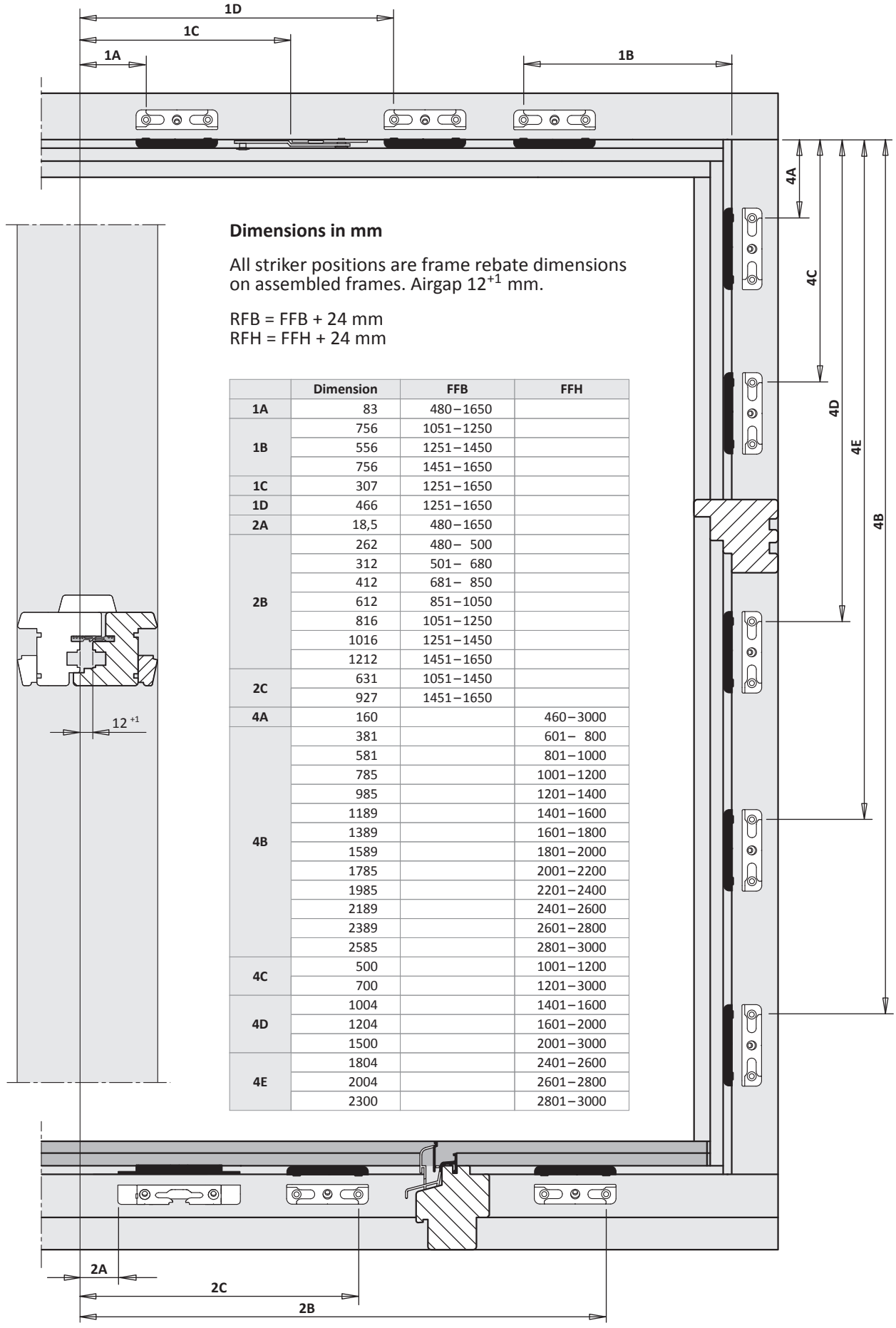


Dimensions in mm

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

RFB = FFB + 12 mm
RFH = FFH + 24 mm

	Dimension	FFB	FFH
1A	71	480–1450	
1B	756	1051–1450	
2A	6,5	480–1450	
2B	250	480– 500	
	300	501– 680	
	400	681– 850	
	600	851–1050	
	804	1051–1250	
	1004	1251–1450	
2C	619	1051–1450	
4A	160		460–3000
4B	381		601– 800
	581		801–1000
	785		1001–1200
	985		1201–1400
	1189		1401–1600
	1389		1601–1800
	1589		1801–2000
	1785		2001–2200
	1985		2201–2400
	2189		2401–2600
	2389		2601–2800
	2585		2801–3000
4C	500		1001–1200
	700		1201–3000
4D	1004		1401–1600
	1204		1601–2000
	1500		2001–3000
4E	1804		2401–2600
	2004		2601–2800
	2300		2801–3000



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

	Dimension	FFB	FFH
1A	83	480–1650	
1B	756	1051–1250	
	556	1251–1450	
	756	1451–1650	
1C	307	1251–1650	
1D	466	1251–1650	
2A	18,5	480–1650	
2B	262	480– 500	
	312	501– 680	
	412	681– 850	
	612	851–1050	
	816	1051–1250	
	1016	1251–1450	
	1212	1451–1650	
2C	631	1051–1450	
	927	1451–1650	
4A	160		460–3000
4B	381		601– 800
	581		801–1000
	785		1001–1200
	985		1201–1400
	1189		1401–1600
	1389		1601–1800
	1589		1801–2000
	1785		2001–2200
	1985		2201–2400
	2189		2401–2600
	2389		2601–2800
	2585		2801–3000
4C	500		1001–1200
	700		1201–3000
4D	1004		1401–1600
	1204		1601–2000
	1500		2001–3000
4E	1804		2401–2600
	2004		2601–2800
	2300		2801–3000

Bottom Inliner

1-sash square tilt-turn	H48.TAFH2K2S016EN	8 - 3
2-sash square tilt-turn/turn DS 16	H48.TAFH2K2S017EN	8 - 9
Tilt before turn (TBT)		
1-sash square tilt before turn (TBT)	H48.TAFH2K2S018EN	8 - 17

Bottom Double cam SB R-RS

1-sash square tilt-turn	H48.TAFH2K2S403EN	8 - 23
2-sash square tilt-turn/turn DS 16	H48.TAFH2K2S404EN	8 - 29

TITAN AF

Installation instructions

RC2
ECO

1-sash square tilt-turn

timber 12 mm

RC2 ECO

fixed handle position

Hinge side axxent 24+

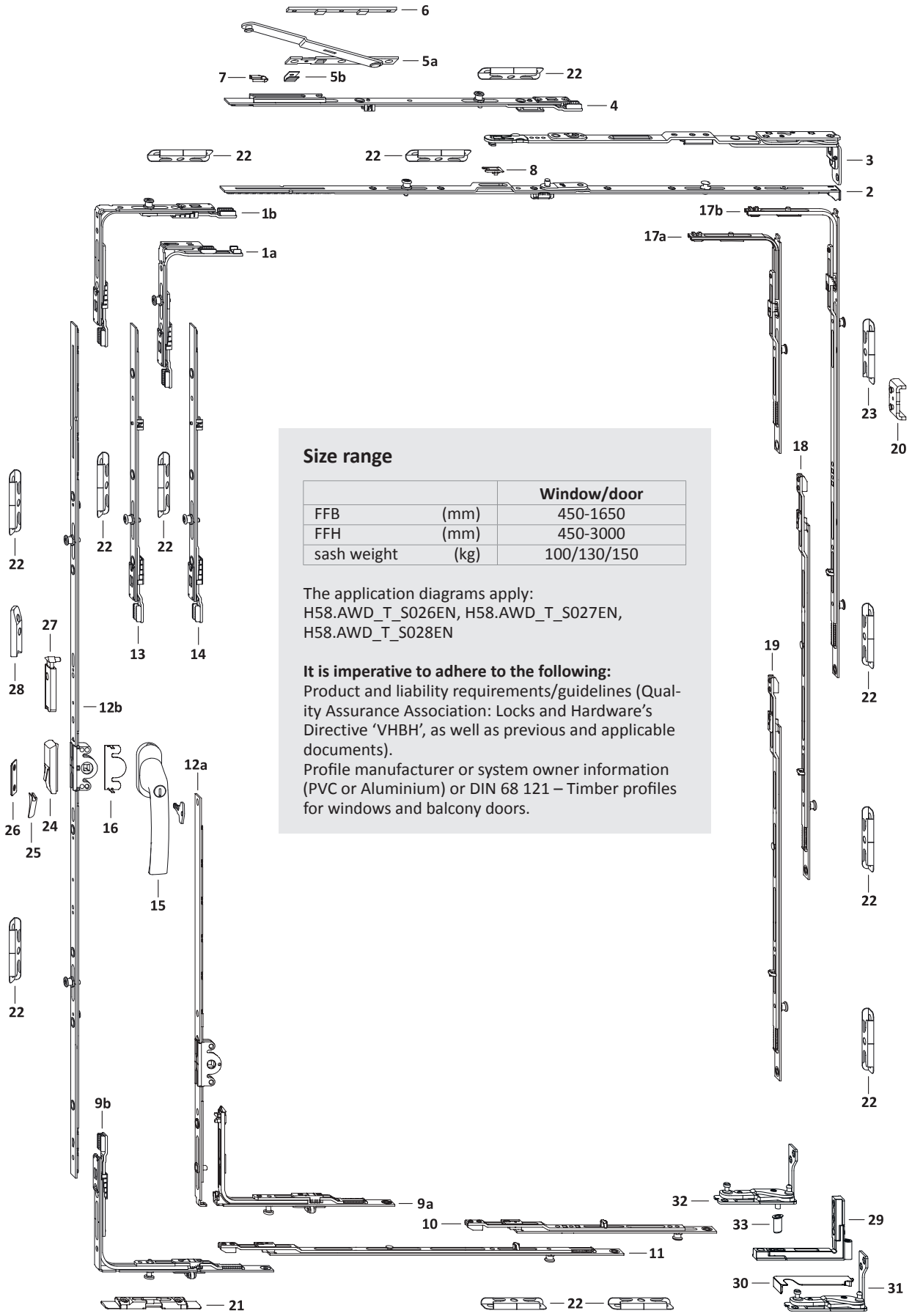
surface TS

backset 15 mm

Hardware set configuration	
General	Locking-points distance 1000
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-turn
H12 GK Hinge side axxent 24+



Size range

		Window/door
FFB	(mm)	450-1650
FFH	(mm)	450-3000
sash weight	(kg)	100/130/150

The application diagrams apply:
H58.AWD_T_S026EN, 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.

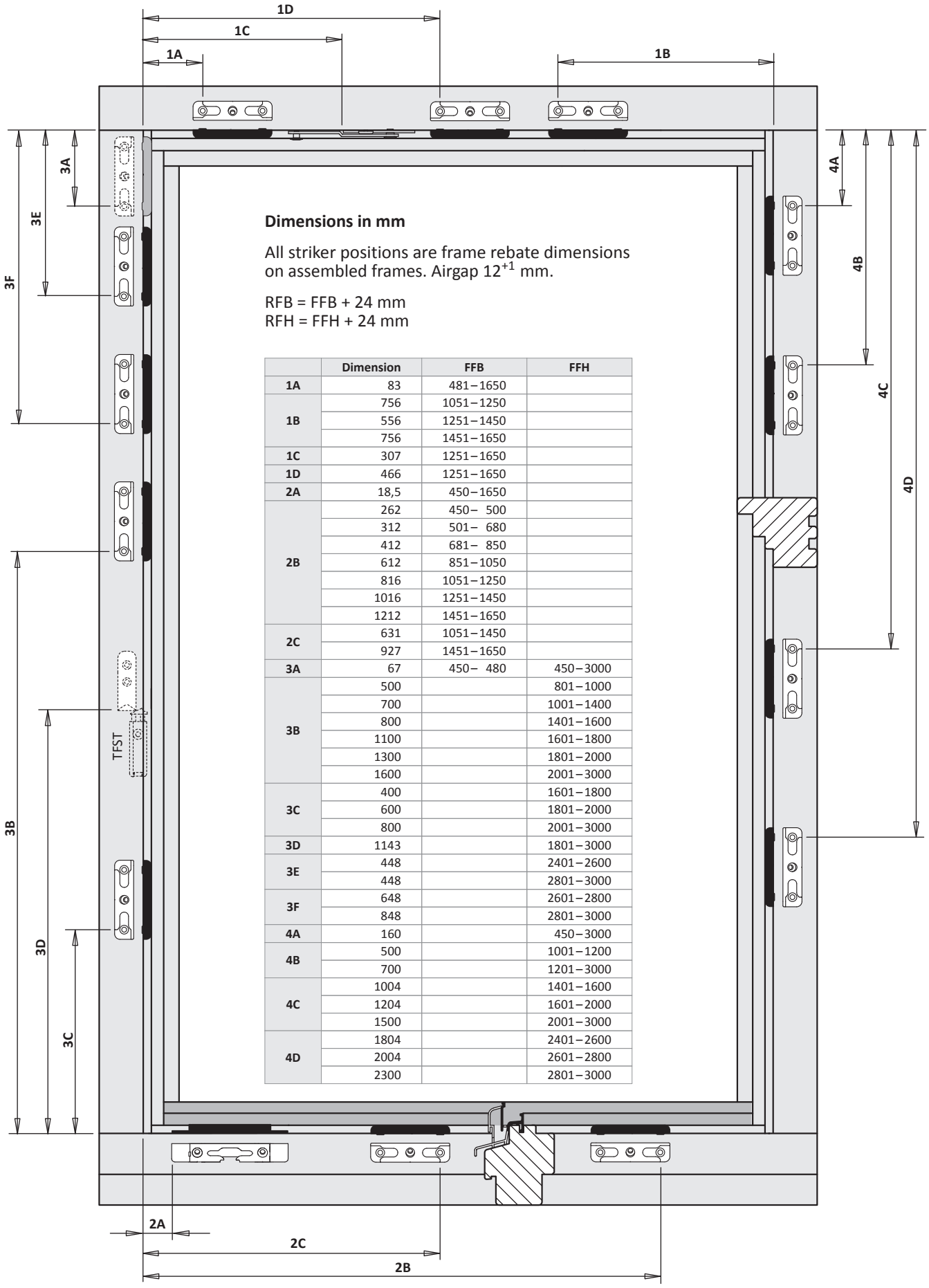
Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Number of frame parts / Pos.		
							21	22	23
1a	corn.drive AF VSO narrow 1RS	TEUL4020- ...	1	450– 480				1	
1b	corn.drive VSO 1RS	TEUL4010- ...	1	481–1650				1	
2	stay sash part AF AX sz 1	TSSV4000- ...	1	450– 680					
	stay sash part AF AX 2+3 1RS	TSSV0310- ...		681– 850					
	stay sash part AF AX sz 4 1RS	TSSV0320- ...		851–1050					
	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	linkage additional stay 1RS	TZOK1010- ...	1	1251–1650				1	
5	additional stay	Ref. PDB, TSZS	1	1251–1650					
6	packer Z	Ref. PDB, FRUP01	1	1251–1650					
7	tilt restr. additional stay ..	889008	1	1251–1650					
8	tilt restrictor V-V sz 2-4 ..	TFKB0040- ...	1	681–1050	450– 900				
	tilt restrictor V-V sz 5 ..	TFKB0050- ...		1051–1250	450– 900				
9a	locking part VSU/K FH+ 1S	TEVR1400- ...	1	450–1250	450– 600		1		
9b	corn.drive AF VSU/K+ FH 1S	TEUL5010- ...	1	450–1650	601–3000		1		
10	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 5+ 1RS	TVSL0350- ...		851–1050				1	
	extension sz 2+ 1RS	TVSL0320- ...		1051–1250				1	
	extension sz 4+ 1RS	TVSL0340- ...		1251–1450				1	
	extension sz 3+ 1RS	TVSL0330- ...		1451–1650				1	
11	linkage BS/FH sz 2+ 1RS	TZBS0190- ...	1	1051–1450				1	
	linkage BS/FH sz 3+ 1RS	TZBS0200- ...		1451–1650				1	
12a	gear 15 sz 30/G180	TGKK3010- ...	1	450–1250	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 lockable 100Nm	Ref.access. ZHGA100	1		450–3000				
16	anti-drill guard E	TGBS0010- ...	1		450–3000				
17a	corn.drive BSO/K3+ 1RS	TEUL2400- ...	1		450–1000				1
17b	corn.drive BS/K3 sz 1+ 2RS	TEUL2380- ...	1		1001–1200			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	anti-lift device	Ref. PDB, TFAH	1		450–3000				
21	tilt lock bear. S-ES FH	Ref. PDB, FRKA							
22	striker plate S-RS	Ref. PDB, TRSK							
23	striker plate S-RS WK2BSO	Ref. PDB, TRSK03							
on request									
24	mishandling device	TFBS0010- ...	1						

List of fittings

1-sash square tilt-turn
H12 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 switchable rh.	TFST0011- ...	1		1801 – 3000				
	snapper switchable lh.	TFST0012- ...			1801 – 3000				
28	frame part snapper	Ref. PDB, TRST	1		1801 – 3000				

Hinge side turning points						
Pos.	**Description**	**Part number**		**required as per sash weight**		
		surface TS	RAL7037	100 kg	130 kg	150 kg
29	corner hinge AX	Ref. PDB, TBEB41		1	1	1
30	cover cap AX EL	Ref. PDB, TKEL41		1	1	1
31	bottom hinge AX	Ref. PDB, TBEV41		1		
32	bottom hinge AX Ø8	Ref. PDB, TBEV42			1	1
33	supporting dowel AX	TBAV4010-0 ...			1	1



Dimensions in mm

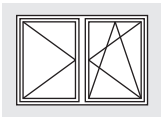
All striker positions are frame rebate dimensions on assembled frames. Airgap 12^{+1} mm.

RFB = FFB + 24 mm
RFH = FFH + 24 mm

	Dimension	FFB	FFH
1A	83	481–1650	
1B	756	1051–1250	
	556	1251–1450	
	756	1451–1650	
1C	307	1251–1650	
1D	466	1251–1650	
2A	18,5	450–1650	
2B	262	450– 500	
	312	501– 680	
	412	681– 850	
	612	851–1050	
	816	1051–1250	
	1016	1251–1450	
	1212	1451–1650	
2C	631	1051–1450	
	927	1451–1650	
3A	67	450– 480	450–3000
3B	500		801–1000
	700		1001–1400
	800		1401–1600
	1100		1601–1800
	1300		1801–2000
	1600		2001–3000
3C	400		1601–1800
	600		1801–2000
	800		2001–3000
3D	1143		1801–3000
3E	448		2401–2600
	448		2801–3000
3F	648		2601–2800
	848		2801–3000
4A	160		450–3000
4B	500		1001–1200
	700		1201–3000
4C	1004		1401–1600
	1204		1601–2000
	1500		2001–3000
4D	1804		2401–2600
	2004		2601–2800
	2300		2801–3000

TITAN AF

Installation instructions



RC2
ECO

2-sash square tilt-turn/turn DS 16

timber 12 mm

RC2 ECO

fixed handle position

Hinge side axxent 24+

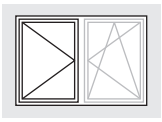
surface TS

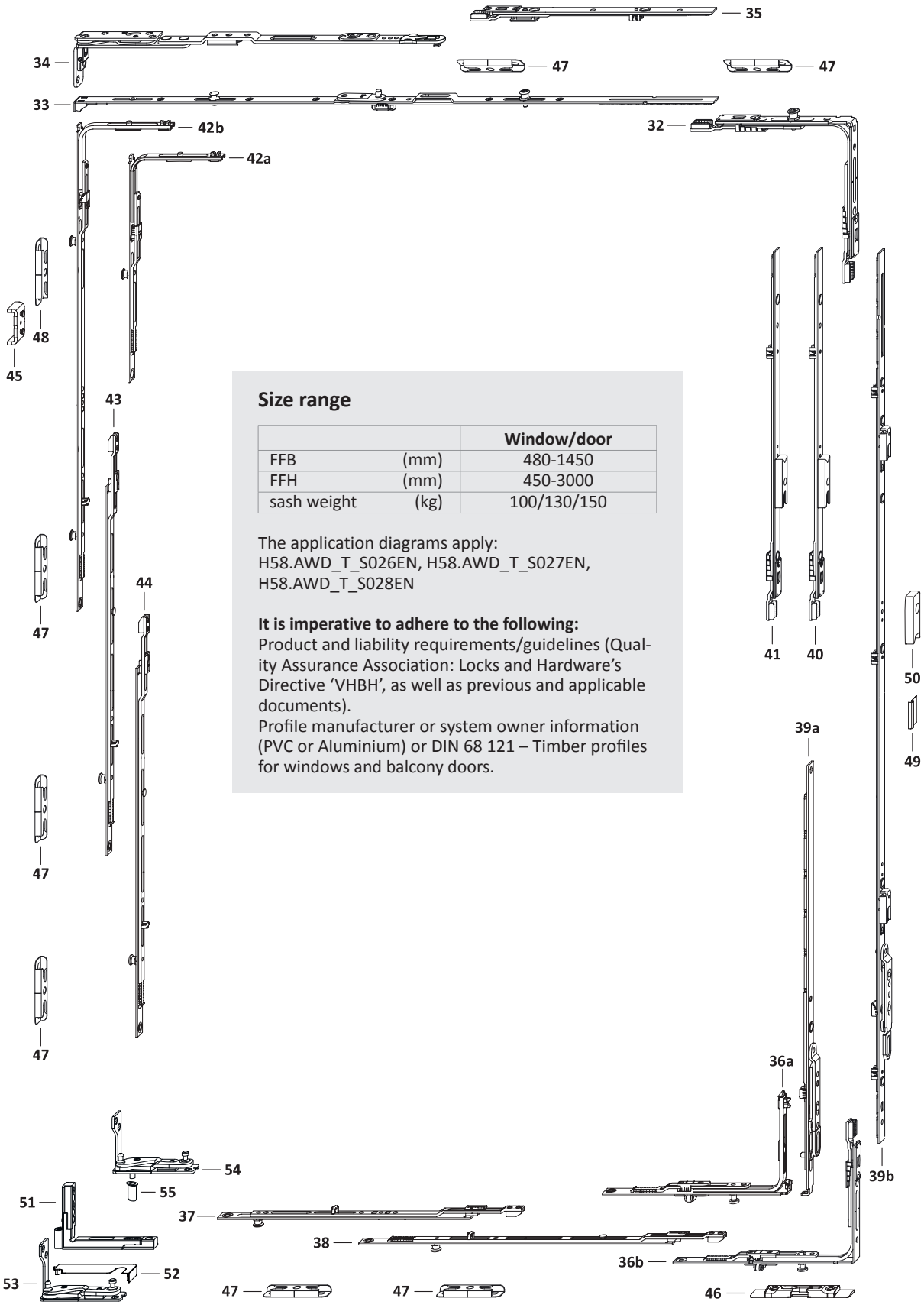
backset 15 mm

Hardware set configuration	
General	Locking-points distance 1000
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 slave sash

2-sash square tilt-turn/turn DS 16
H12 GK Hinge side axxent 24+



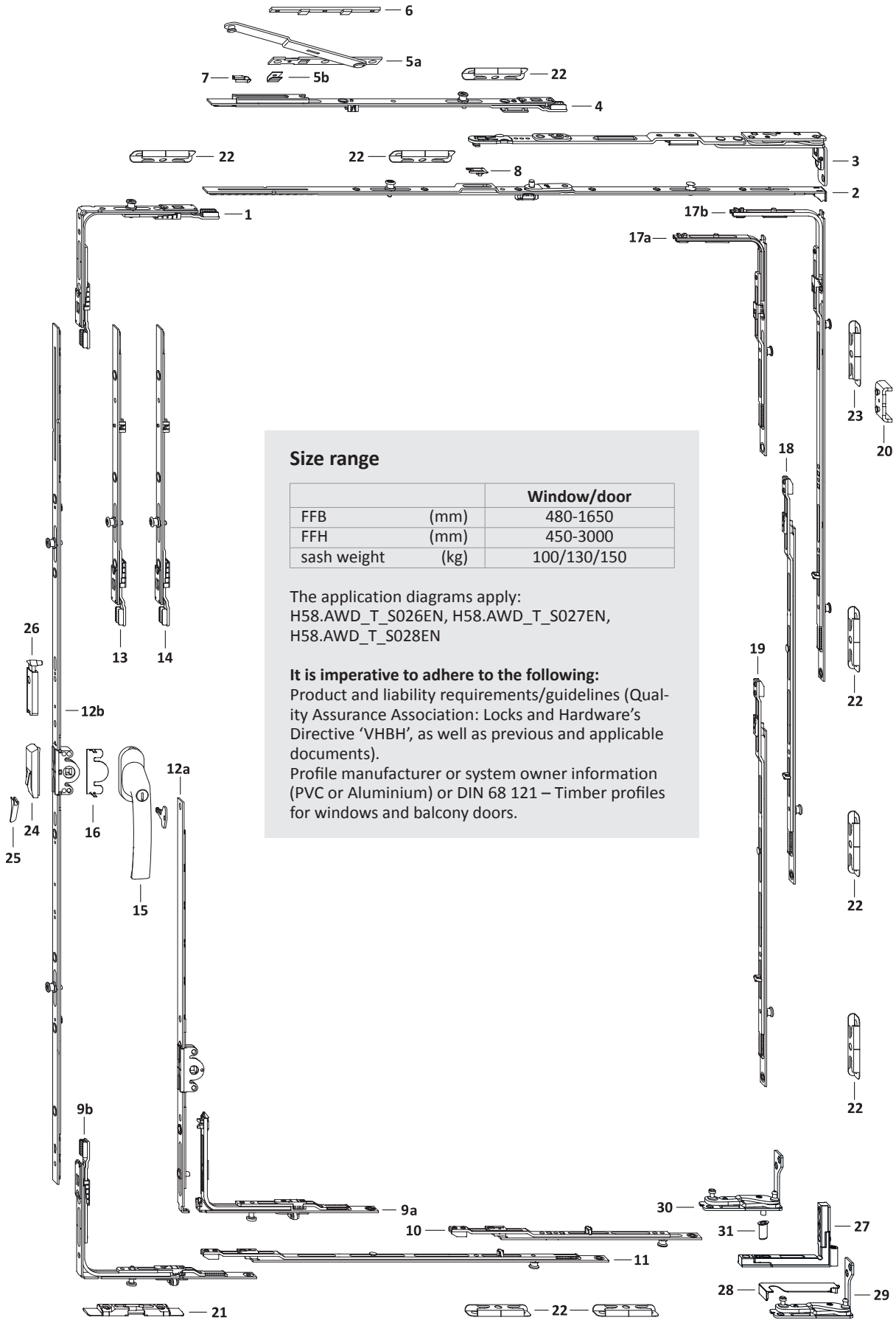


Size range

		Window/door
FFB	(mm)	480-1450
FFH	(mm)	450-3000
sash weight	(kg)	100/130/150

The application diagrams apply:
H58.AWD_T_S026EN, 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.



Size range

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FFB	(mm)	480-1650
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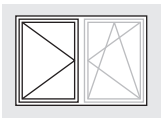
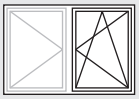
List of fittings slave sash

2-sash square tilt-turn/turn DS 16
H12 GK Hinge side axxent 24+



Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Number of frame parts / Pos.		
						In the main sash	46	47	48
32	corn.drive VSO 1RS	TEUL4010- ...	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					
	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		1051–1450					
35	linkage AF sz 1	TZZS0150- ...	1	1251–1450					
36a	locking part VSU/K FH+ 1S	TEVR1400- ...	1	480–1450	450– 800		1		
36b	corn.drive AF VSU/K+ FH 1S	TEUL5010- ...	1	480–1450	801–3000		1		
37	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 5+ 1RS	TVSL0350- ...		851–1050				1	
	extension sz 2+ 1RS	TVSL0320- ...		1051–1250				1	
	extension sz 4+ 1RS	TVSL0340- ...		1251–1450				1	
38	linkage BS/FH sz 2+ 1RS	TZBS0190- ...	1	1051–1450				1	
39a	sec.sash gear 16 sz 30	TGKS0010- ...	1	480–1250	450– 600	180			
	sec.sash gear 16 AF 60/G300	TGKS4030- ...			601– 800	300			
39b	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			
40	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				
41	linkage AF sz 2 1SB-RS	TZKS1030- ...	1		2601–2800				
	linkage AF sz 2 1SB-RS	TZKS1030- ...			2801–3000				
42a	corn.drive BSO/K3+ 1RS	TEUL2400- ...	1		450–1000				1
42b	corn.drive BS/K3 sz 1+ 2RS	TEUL2380- ...	1		1001–1200			1	1
	corn.drive BS/K3 sz 2+ 2RS	TEUL2390- ...			1201–3000			1	1
43	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	
44	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	
45	anti-lift device	Ref. PDB, TFAH	1		450–3000				
46	tilt lock bear. S-ES FH	Ref. PDB, FRKA							
47	striker plate S-RS	Ref. PDB, TRSK							
48	striker plate S-RS WK2BSO	Ref. PDB, TRSK03							
on request									
49	stop	Ref. PDB, FRZF04	1		601–3000				
50	striker snapper A0767	TRST0010- ...	1		1801–3000				

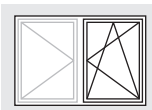
Hinge side turning points						
Pos.	Description	Part number		required as per sash weight		
		surface TS	RAL7037	100 kg	130 kg	150 kg
51	corner hinge AX	Ref. PDB, TBEB41		1	1	1
52	cover cap AX EL	Ref. PDB, TKEL41		1	1	1
53	bottom hinge AX	Ref. PDB, TBEV41		1		
54	bottom hinge AX Ø8	Ref. PDB, TBEV42			1	1
55	supporting dowel AX	TBAV4010-0 ...			1	1



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					
	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	linkage additional stay 1RS	TZOK1010- ...	1	1251–1650				1	
5	additional stay	Ref. PDB, TSZS	1	1251–1650					
6	packer Z	Ref. PDB, FRUP01	1	1251–1650					
7	tilt restr. additional stay ..	889008	1	1251–1650					
8	tilt restrictor V-V sz 2-4 ..	TFKB0040- ...	1	681–1050	450– 900				
	tilt restrictor V-V sz 5 ..	TFKB0050- ...		1051–1250	450– 900				
9a	locking part VSU/K FH+ 1S	TEVR1400- ...	1	480–1250	450– 600		1		
9b	corn.drive AF VSU/K+ FH 1S	TEUL5010- ...	1	480–1650	601–3000		1		
10	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 5+ 1RS	TVSL0350- ...		851–1050				1	
	extension sz 2+ 1RS	TVSL0320- ...		1051–1250				1	
	extension sz 4+ 1RS	TVSL0340- ...		1251–1450				1	
	extension sz 3+ 1RS	TVSL0330- ...		1451–1650				1	
11	linkage BS/FH sz 2+ 1RS	TZBS0190- ...	1	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 lockable 100Nm	Ref.access. ZHGA100	1		450–3000				
16	anti-drill guard E	TGBS0010- ...	1		450–3000				
17a	corn.drive BSO/K3+ 1RS	TEUL2400- ...	1		450–1000				1
17b	corn.drive BS/K3 sz 1+ 2RS	TEUL2380- ...	1		1001–1200			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	anti-lift device	Ref. PDB, TFAH	1		450–3000				
21	tilt lock bear. S-ES FH	Ref. PDB, FRKA							
22	striker plate S-RS	Ref. PDB, TRSK							
23	striker plate S-RS WK2BSO	Ref. PDB, TRSK03							
on request									
24	mishandling device	TFBS0010- ...	1		601–3000				
25	pressure piece	Ref. PDB, TFFD	1		601–3000				

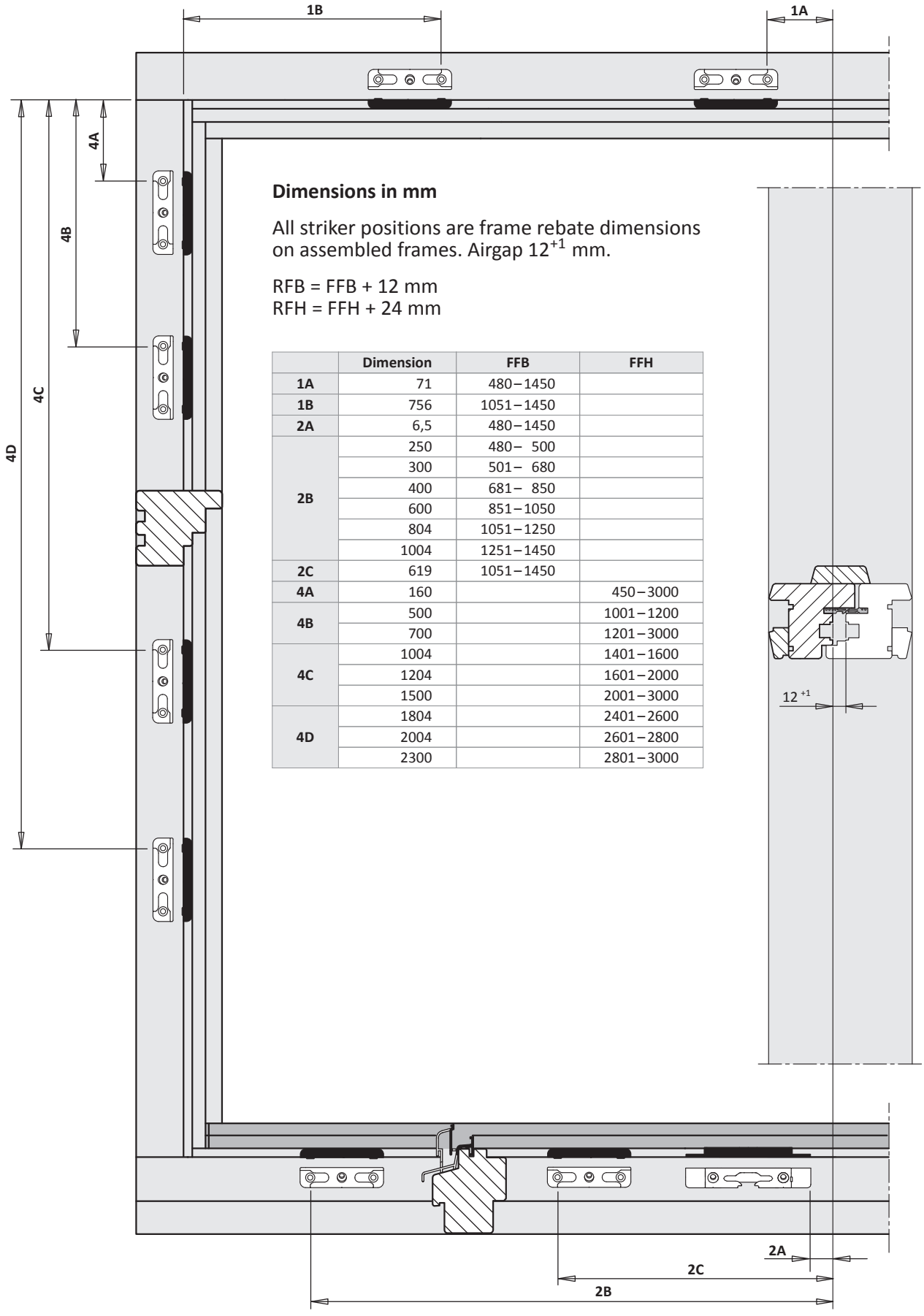
List of fittings main sash

2-sash square tilt-turn/turn DS 16
H12 GK Hinge side axxent 24+



Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Number of frame parts / Pos.		
							21	22	23
26	snapper switchable rh.	TFST0011- ...	1		1801 – 3000				
	snapper switchable lh.	TFST0012- ...			1801 – 3000				

Hinge side turning points						
Pos.	Description	Part number		required as per sash weight		
		surface TS	RAL7037	100 kg	130 kg	150 kg
27	corner hinge AX	Ref. PDB, TBEB41		1	1	1
28	cover cap AX EL	Ref. PDB, TKEL41		1	1	1
29	bottom hinge AX	Ref. PDB, TBEV41		1		
30	bottom hinge AX Ø8	Ref. PDB, TBEV42			1	1
31	supporting dowel AX	TBAV4010-0 ...			1	1



Dimensions in mm

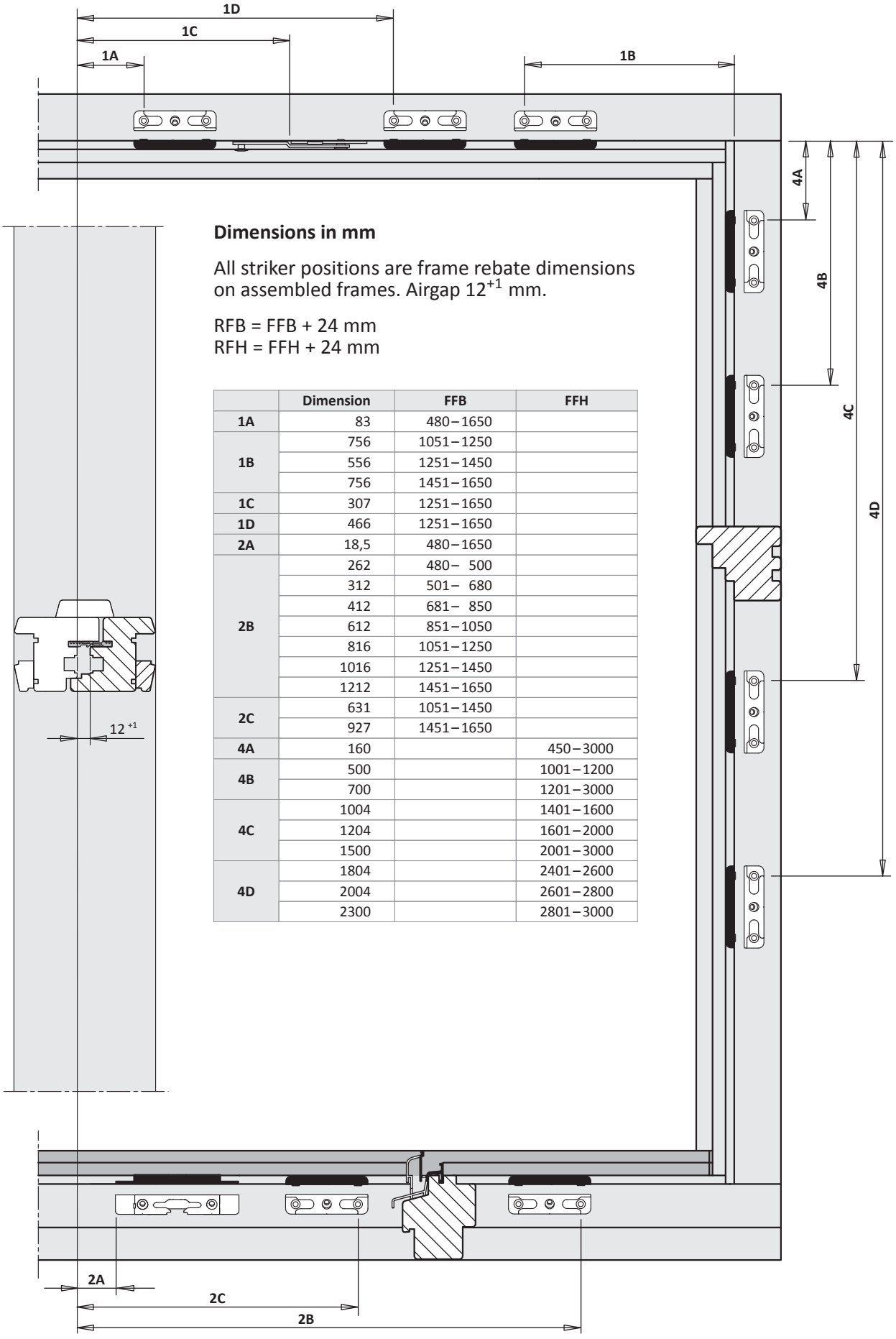
All striker positions are frame rebate dimensions on assembled frames. Airgap 12^{+1} mm.

RFB = FFB + 12 mm
RFH = FFH + 24 mm

	Dimension	FFB	FFH
1A	71	480–1450	
1B	756	1051–1450	
2A	6,5	480–1450	
2B	250	480– 500	
	300	501– 680	
	400	681– 850	
	600	851–1050	
	804	1051–1250	
	1004	1251–1450	
2C	619	1051–1450	
4A	160		450–3000
4B	500		1001–1200
	700		1201–3000
4C	1004		1401–1600
	1204		1601–2000
	1500		2001–3000
4D	1804		2401–2600
	2004		2601–2800
	2300		2801–3000

Frame dimensions main sash

2-sash square tilt-turn/turn DS 16
H12 GK Hinge side axxent 24+



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

	Dimension	FFB	FFH
1A	83	480 – 1650	
1B	756	1051 – 1250	
	556	1251 – 1450	
	756	1451 – 1650	
1C	307	1251 – 1650	
1D	466	1251 – 1650	
2A	18,5	480 – 1650	
2B	262	480 – 500	
	312	501 – 680	
	412	681 – 850	
	612	851 – 1050	
	816	1051 – 1250	
	1016	1251 – 1450	
	1212	1451 – 1650	
2C	631	1051 – 1450	
	927	1451 – 1650	
4A	160		450 – 3000
4B	500		1001 – 1200
	700		1201 – 3000
4C	1004		1401 – 1600
	1204		1601 – 2000
	1500		2001 – 3000
4D	1804		2401 – 2600
	2004		2601 – 2800
	2300		2801 – 3000

TITAN AF

Installation instructions

RC2
ECO

1-sash square tilt before turn (TBT)

timber 12 mm

RC2 ECO

fixed handle position

Hinge side axxent 24+

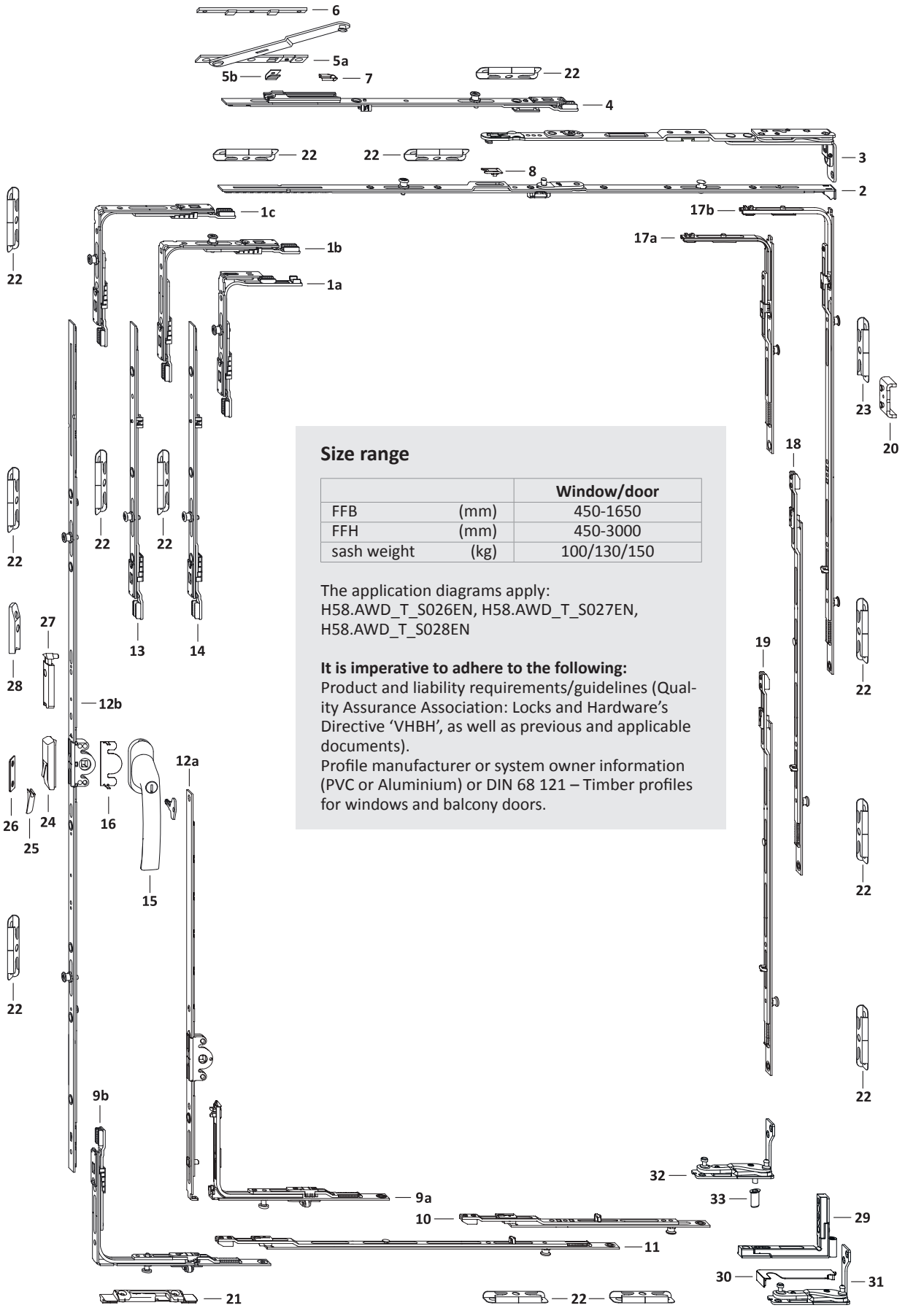
surface TS

backset 15 mm

Hardware set configuration	
General	Locking-points distance 1000
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)
H12 GK Hinge side axxent 24+



Size range

		Window/door
FFB	(mm)	450-1650
FFH	(mm)	450-3000
sash weight	(kg)	100/130/150

The application diagrams apply:
H58.AWD_T_S026EN, H58.AWD_T_S027EN,
H58.AWD_T_S028EN

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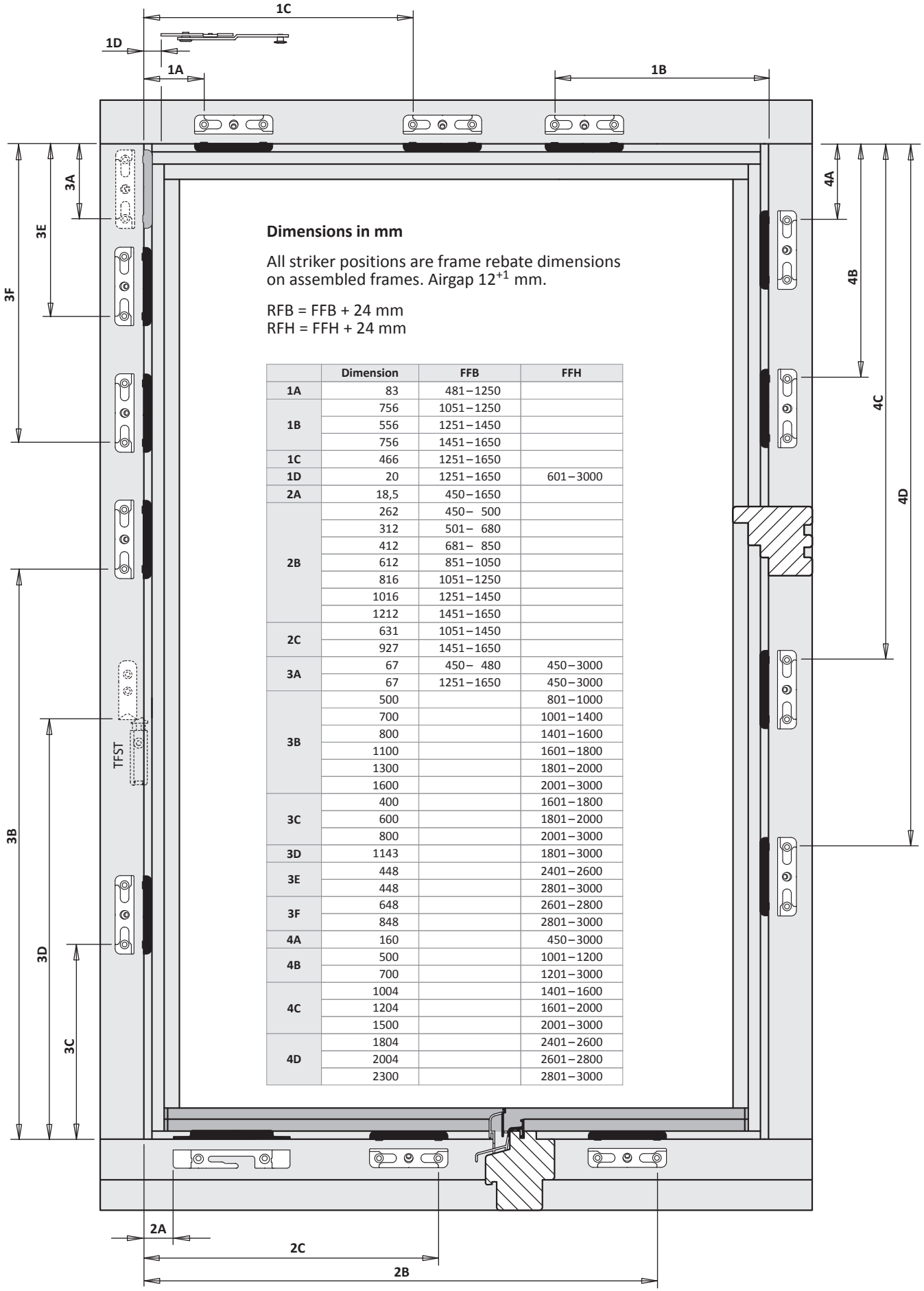
Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Number of frame parts / Pos.		
							21	22	23
1a	corn.drive AF VSO narrow 1RS	TEUL4020- ...	1	450– 480				1	
1b	corn.drive VSO 1RS	TEUL4010- ...	1	481–1250				1	
1c	corn.drive VSO 1RS	TEUL4010- ...	1	1251–1650				1	
2	stay sash part AF AX sz 1	TSSV4000- ...	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					
	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	linkage add. stay AF TBT RS	TZOT1010- ...	1	1251–1650				1	
5	additional stay	Ref. PDB, TSZS	1	1251–1650					
6	packer Z	Ref. PDB, FRUP01	1	1251–1650					
7	tilt restr. additional stay ..	889008	1	1251–1650					
8	tilt restrictor V-V sz 2-4 ..	TFKB0040- ...	1	681–1050	450– 900				
	tilt restrictor V-V sz 5 ..	TFKB0050- ...		1051–1250	450– 900				
9a	locking part VSU/K FH+ 1S	TEVR1400- ...	1	450–1250	450– 600		1		
9b	corn.drive AF VSU/K+ FH 1S	TEUL5010- ...	1	450–1650	601–3000		1		
10	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 5+ 1RS	TVSL0350- ...		851–1050				1	
	extension sz 2+ 1RS	TVSL0320- ...		1051–1250				1	
	extension sz 4+ 1RS	TVSL0340- ...		1251–1450				1	
	extension sz 3+ 1RS	TVSL0330- ...		1451–1650				1	
11	linkage BS/FH sz 2+ 1RS	TZBS0190- ...	1	1051–1450				1	
	linkage BS/FH sz 3+ 1RS	TZBS0200- ...		1451–1650				1	
12a	gear 15 sz 30/G180	TGKK3010- ...	1	450–1250	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	anti-drill guard E	TGBS0010- ...	1		450–3000				
17a	corn.drive BSO/K3+ 1RS	TEUL2400- ...	1		450–1000				1
17b	corn.drive BS/K3 sz 1+ 2RS	TEUL2380- ...	1		1001–1200			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	anti-lift device	Ref. PDB, TFAH	1		450–3000				
21	tilt lock bear. S-ES FH TBT	Ref. PDB, FRKB							
22	striker plate S-RS	Ref. PDB, TRSK							
23	striker plate S-RS WK2BSO	Ref. PDB, TRSK03							

List of fittings

1-sash square tilt before turn (TBT)
H12 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 switchable rh.	TFST0011- ...	1		1801–3000				
	snapper switchable lh.	TFST0012- ...			1801–3000				
28	frame part snapper	Ref. PDB, TRST	1		1801–3000				

Hinge side turning points						
Pos.	Description	Part number		required as per sash weight		
		surface TS	RAL7037	100 kg	130 kg	150 kg
29	corner hinge AX	Ref. PDB, TBEB41		1	1	1
30	cover cap AX EL	Ref. PDB, TKEL41		1	1	1
31	bottom hinge AX	Ref. PDB, TBEV41		1		
32	bottom hinge AX Ø8	Ref. PDB, TBEV42			1	1
33	supporting dowel AX	TBAV4010-0 ...			1	1



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

	Dimension	FFB	FFH
1A	83	481–1250	
1B	756	1051–1250	
	556	1251–1450	
	756	1451–1650	
1C	466	1251–1650	
1D	20	1251–1650	601–3000
2A	18,5	450–1650	
2B	262	450– 500	
	312	501– 680	
	412	681– 850	
	612	851–1050	
	816	1051–1250	
	1016	1251–1450	
	1212	1451–1650	
2C	631	1051–1450	
	927	1451–1650	
3A	67	450– 480	450–3000
	67	1251–1650	450–3000
3B	500		801–1000
	700		1001–1400
	800		1401–1600
	1100		1601–1800
	1300		1801–2000
	1600		2001–3000
3C	400		1601–1800
	600		1801–2000
	800		2001–3000
3D	1143		1801–3000
3E	448		2401–2600
	448		2801–3000
3F	648		2601–2800
	848		2801–3000
4A	160		450–3000
4B	500		1001–1200
	700		1201–3000
4C	1004		1401–1600
	1204		1601–2000
	1500		2001–3000
4D	1804		2401–2600
	2004		2601–2800
	2300		2801–3000

TITAN AF

Installation instructions

RC2
ECO

1-sash square tilt-turn

timber 12 mm

RC2 ECO

fixed handle position

Hinge side axxent 24+

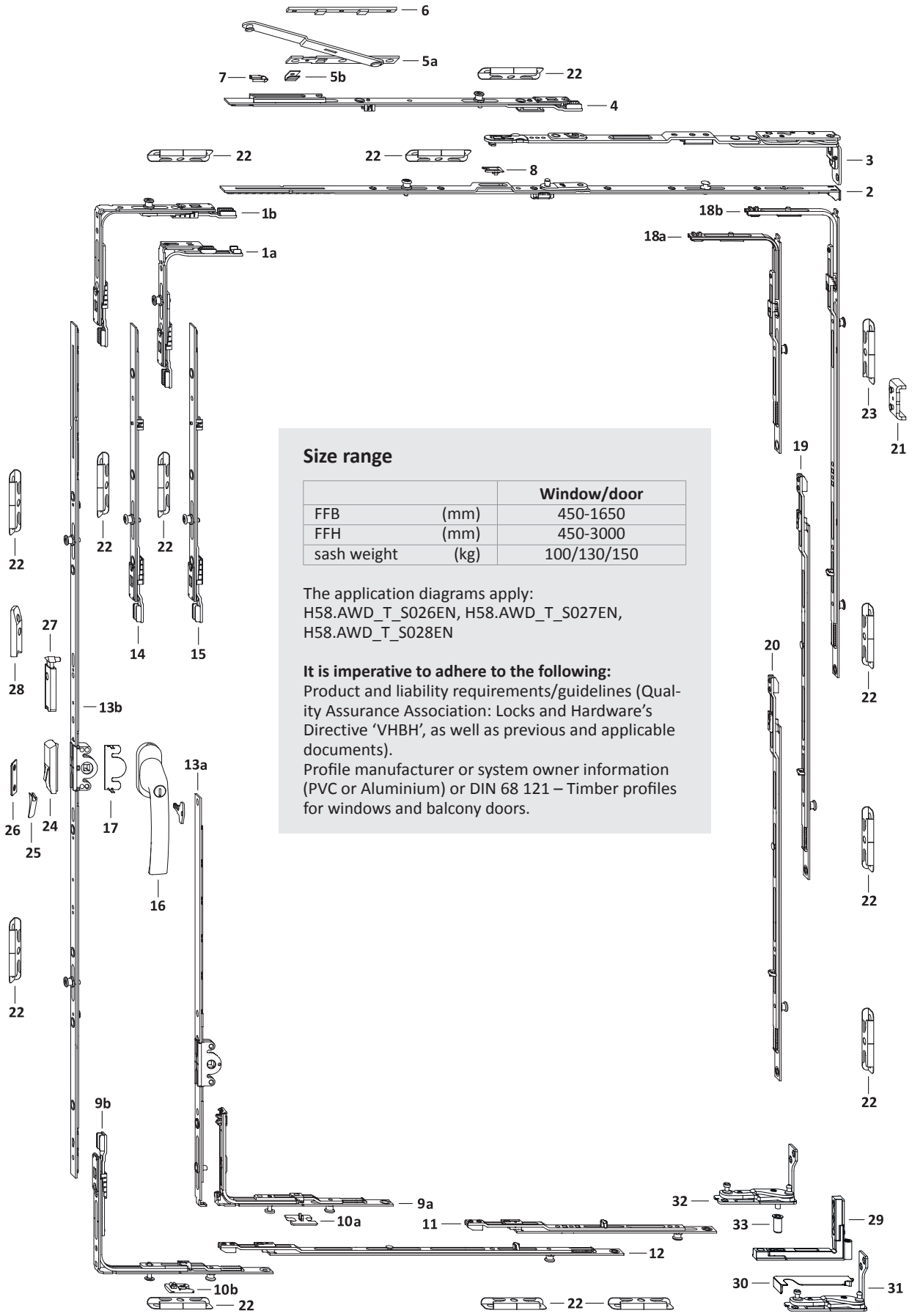
surface TS

backset 15 mm

Hardware set configuration	
General	Locking-points distance 1000
Stay side	two-piece stay ax 24+
Bottom	double cam SB R-RS
Locking side	mishandl. device on gear
Hinge side	corner drive BS sz 1+2 2RS

hardware layout

1-sash square tilt-turn
H12 GK Hinge side axxent 24+



Size range

		Window/door
FFB	(mm)	450-1650
FFH	(mm)	450-3000
sash weight	(kg)	100/130/150

The application diagrams apply:
H58.AWD_T_S026EN, 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.

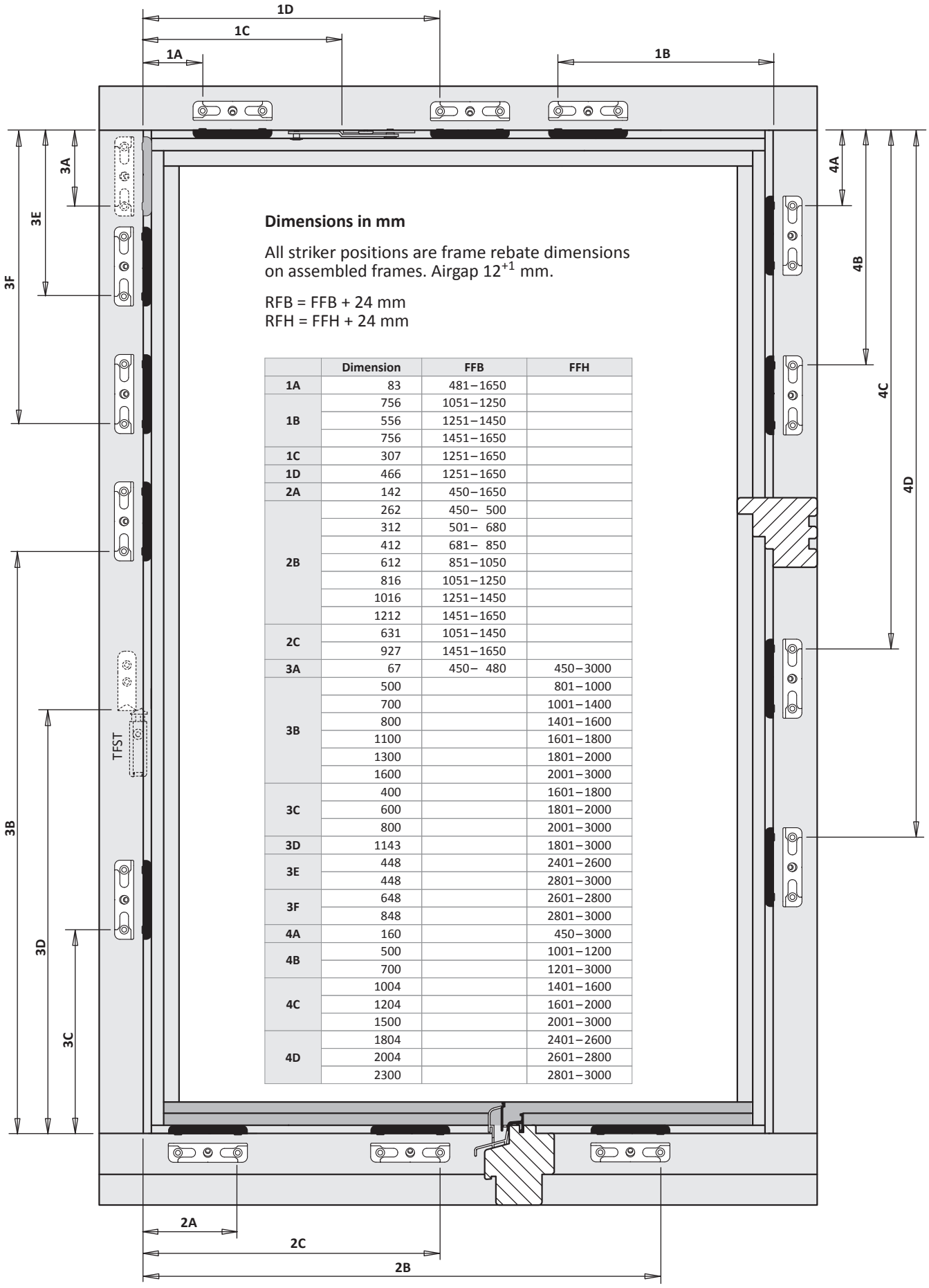
Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Number of frame parts / Pos.	
							22	23
1a	corn.drive AF VSO narrow 1RS	TEUL4020- ...	1	450– 480			1	
1b	corn.drive VSO 1RS	TEUL4010- ...	1	481–1650			1	
2	stay sash part AF AX sz 1	TSSV4000- ...	1	450– 680				
	stay sash part AF AX 2+3 1RS	TSSV0310- ...		681– 850				
	stay sash part AF AX sz 4 1RS	TSSV0320- ...		851–1050				
	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	linkage additional stay 1RS	TZOK1010- ...	1	1251–1650			1	
5	additional stay	Ref. PDB, TSZS	1	1251–1650				
6	packer Z	Ref. PDB, FRUP01	1	1251–1650				
7	tilt restr. additional stay ..	889008	1	1251–1650				
8	tilt restrictor V-V sz 2-4 ..	TFKB0040- ...	1	681–1050	450– 900			
	tilt restrictor V-V sz 5 ..	TFKB0050- ...		1051–1250	450– 900			
9a	locking part VSU/K 56+ 1S 1RS	TEVR1340- ...	1	450–1250	450– 600		1	
9b	corn.drive AF VSU/K 56+ 1S 1RS	TEUL5030- ...	1	450–1650	601–3000		1	
10a	run-up plate FH KRL56	Ref. PDB, TRAL01	1	450–1250	450– 600			
10b	run up block AF 13 mm 13	TFFH0080- ...	1	450–1650	601–3000			
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 5+ 1RS	TVSL0350- ...		851–1050			1	
	extension sz 2+ 1RS	TVSL0320- ...		1051–1250			1	
	extension sz 4+ 1RS	TVSL0340- ...		1251–1450			1	
	extension sz 3+ 1RS	TVSL0330- ...		1451–1650			1	
12	linkage BS/FH sz 2+ 1RS	TZBS0190- ...	1	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		450–1000			1
18b	corn.drive BS/K3 sz 1+ 2RS	TEUL2380- ...	1		1001–1200		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	anti-lift device	Ref. PDB, TFAH	1		450–3000			
22	striker plate S-RS	Ref. PDB, TRSK						
23	striker plate S-RS WK2BSO	Ref. PDB, TRSK03						

List of fittings

1-sash square tilt-turn
H12 GK Hinge side axxent 24+

Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Number of frame parts / Pos.	
							22	23
on request								
24	mishandling device	TFBS0010- ...	1					
25	pressure piece	Ref. PDB, TFFD	1					
26	stop	Ref. PDB, FRZF01	1					
27	snapper switchable rh.	TFST0011- ...	1		1801 – 3000			
	snapper switchable lh.	TFST0012- ...			1801 – 3000			
28	frame part snapper	Ref. PDB, TRST	1		1801 – 3000			

Hinge side turning points						
Pos.	Description	Part number		required as per sash weight		
		surface TS	RAL7037	100 kg	130 kg	150 kg
29	corner hinge AX	Ref. PDB, TBEB41		1	1	1
30	cover cap AX EL	Ref. PDB, TKEL41		1	1	1
31	bottom hinge AX	Ref. PDB, TBEV41		1		
32	bottom hinge AX Ø8	Ref. PDB, TBEV42			1	1
33	supporting dowel AX	TBAV4010-0 ...			1	1



Dimensions in mm

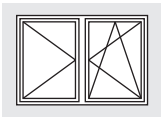
All striker positions are frame rebate dimensions on assembled frames. Airgap 12^{+1} mm.

RFB = FFB + 24 mm
RFH = FFH + 24 mm

	Dimension	FFB	FFH
1A	83	481–1650	
1B	756	1051–1250	
	556	1251–1450	
	756	1451–1650	
1C	307	1251–1650	
1D	466	1251–1650	
2A	142	450–1650	
2B	262	450– 500	
	312	501– 680	
	412	681– 850	
	612	851–1050	
	816	1051–1250	
	1016	1251–1450	
	1212	1451–1650	
2C	631	1051–1450	
	927	1451–1650	
3A	67	450– 480	450–3000
3B	500		801–1000
	700		1001–1400
	800		1401–1600
	1100		1601–1800
	1300		1801–2000
	1600		2001–3000
3C	400		1601–1800
	600		1801–2000
	800		2001–3000
3D	1143		1801–3000
3E	448		2401–2600
	448		2801–3000
3F	648		2601–2800
	848		2801–3000
4A	160		450–3000
4B	500		1001–1200
	700		1201–3000
4C	1004		1401–1600
	1204		1601–2000
	1500		2001–3000
4D	1804		2401–2600
	2004		2601–2800
	2300		2801–3000

TITAN AF

Installation instructions



RC2
ECO

2-sash square tilt-turn/turn DS 16

timber 12 mm

RC2 ECO

fixed handle position

Hinge side axxent 24+

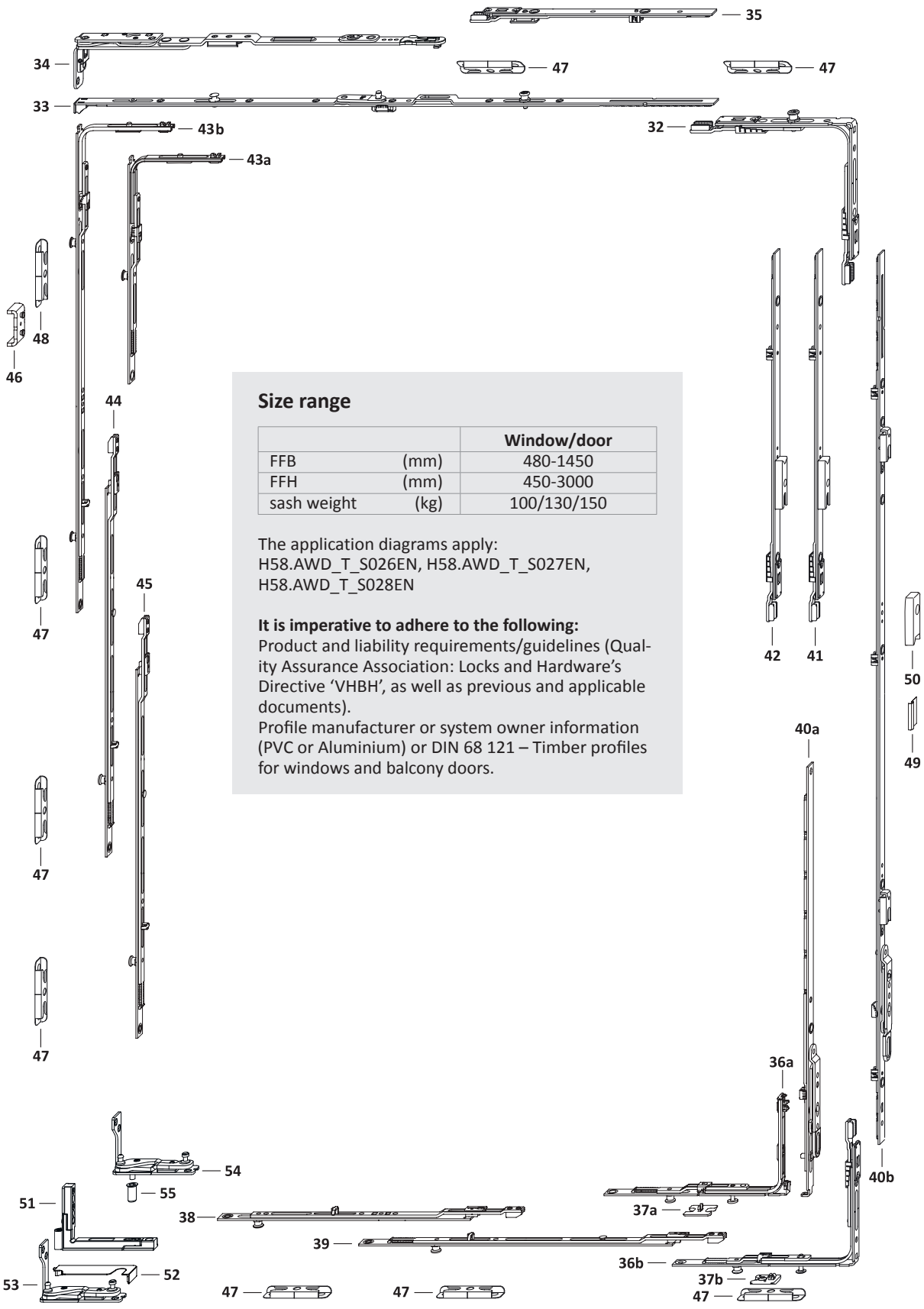
surface TS

backset 15 mm

Hardware set configuration	
General	Locking-points distance 1000
Stay side	two-piece stay ax 24+
Bottom	double cam SB R-RS
Locking side	mishandl. device on gear
Hinge side	corner drive BS sz 1+2 2RS

hardware layout slave sash

2-sash square tilt-turn/turn DS 16
H12 GK Hinge side axxent 24+



Size range

		Window/door
FFB	(mm)	480-1450
FFH	(mm)	450-3000
sash weight	(kg)	100/130/150

The application diagrams apply:
H58.AWD_T_S026EN, H58.AWD_T_S027EN,
H58.AWD_T_S028EN

It is imperative to adhere to the following:
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Profile manufacturer or system owner information (PVC or Aluminium) or DIN 68 121 – Timber profiles for windows and balcony doors.

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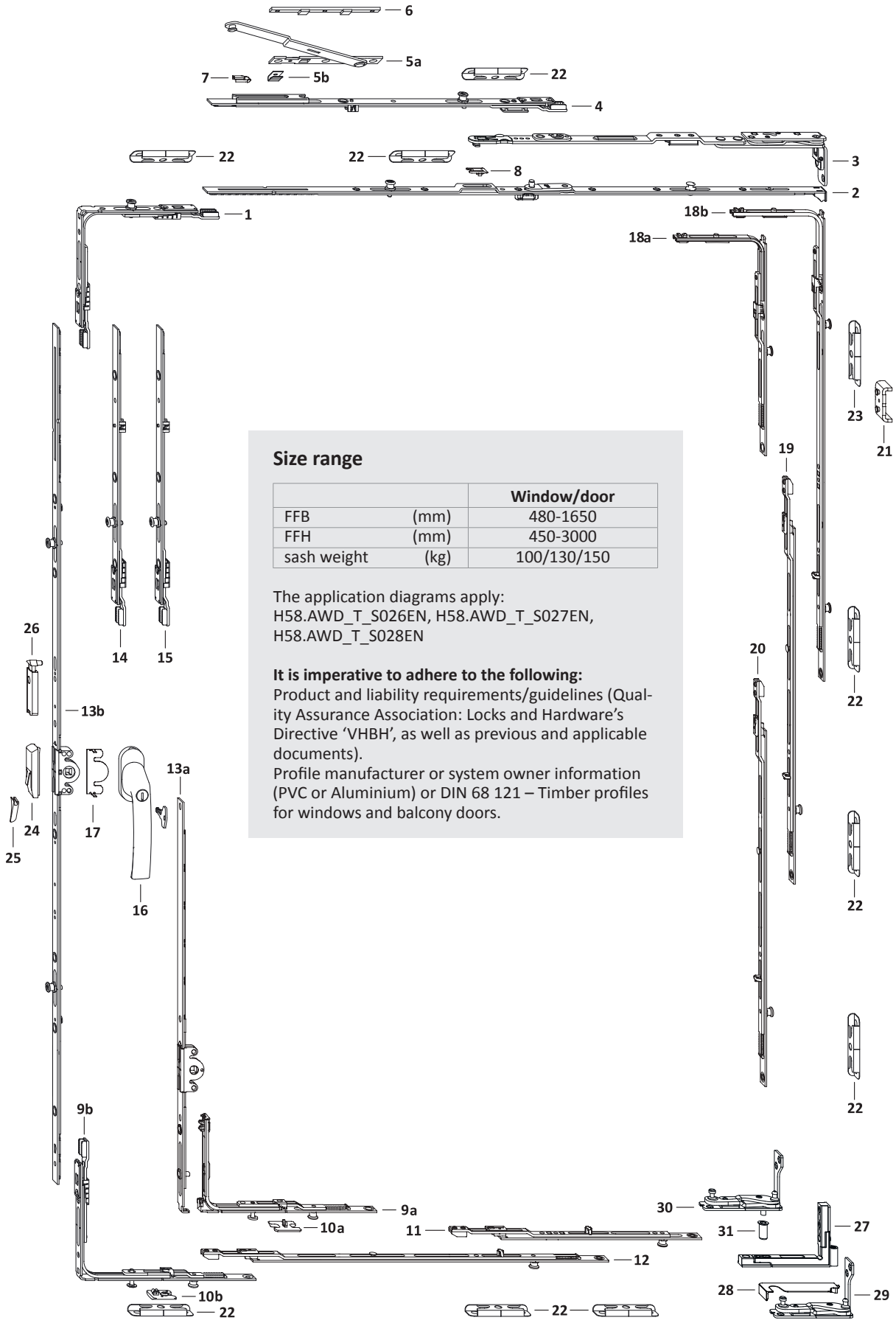

Size range

		Window/door
FFB	(mm)	480-1650
FFH	(mm)	450-3000
sash weight	(kg)	100/130/150

The application diagrams apply:
H58.AWD_T_S026EN, 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).
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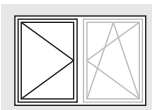
List of fittings slave sash

2-sash square tilt-turn/turn DS 16
H12 GK Hinge side axxent 24+



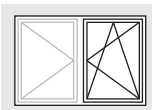
Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Number of frame parts / Pos.	
						In the main sash	47	48
32	corn.drive VSO 1RS	TEUL4010- ...	1	480–1450			1	
33	stay sash part AF AX sz 1	TSSV4000- ...	1	480– 680				
	stay sash part AF AX 2+3 1RS	TSSV0310- ...		681– 850				
	stay sash part AF AX sz 4 1RS	TSSV0320- ...		851–1050				
	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		1051–1450				
35	linkage AF sz 1	TZZS0150- ...	1	1251–1450				
36a	locking part VSU/K 56+ 1S 1RS	TEVR1340- ...	1	480–1450	450– 800		1	
36b	corn.drive AF VSU/K 56+ 1S 1RS	TEUL5030- ...	1	480–1450	801–3000		1	
37a	run-up plate FH KRL56	Ref. PDB, TRAL01	1	480–1450	450– 800			
37b	run up block AF 13 mm 13	TFFH0080- ...	1	480–1450	801–3000			
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 5+ 1RS	TVSL0350- ...		851–1050			1	
	extension sz 2+ 1RS	TVSL0320- ...		1051–1250			1	
	extension sz 4+ 1RS	TVSL0340- ...		1251–1450			1	
39	linkage BS/FH sz 2+ 1RS	TZBS0190- ...	1	1051–1450			1	
40a	sec.sash gear 16 sz 30	TGKS0010- ...	1	480–1250	450– 600	180		
	sec.sash gear 16 AF 60/G300	TGKS4030- ...			601– 800	300		
40b	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		
41	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			
42	linkage AF sz 2 1SB-RS	TZKS1030- ...	1		2601–2800			
	linkage AF sz 2 1SB-RS	TZKS1030- ...			2801–3000			
43a	corn.drive BSO/K3+ 1RS	TEUL2400- ...	1		450–1000			1
43b	corn.drive BS/K3 sz 1+ 2RS	TEUL2380- ...	1		1001–1200		1	1
	corn.drive BS/K3 sz 2+ 2RS	TEUL2390- ...			1201–3000		1	1
44	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	
45	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	
46	anti-lift device	Ref. PDB, TFAH	1		450–3000			
47	striker plate S-RS	Ref. PDB, TRSK						
48	striker plate S-RS WK2BSO	Ref. PDB, TRSK03						
on request								
49	stop	Ref. PDB, FRZF04	1		601–3000			
50	striker snapper A0767	TRST0010- ...	1		1801–3000			

Hinge side turning points						
Pos.	Description	Part number		required as per sash weight		
		surface TS	RAL7037	100 kg	130 kg	150 kg
51	corner hinge AX	Ref. PDB, TBEB41		1	1	1
52	cover cap AX EL	Ref. PDB, TKEL41		1	1	1
53	bottom hinge AX	Ref. PDB, TBEV41		1		
54	bottom hinge AX Ø8	Ref. PDB, TBEV42			1	1
55	supporting dowel AX	TBAV4010-0 ...			1	1

Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Number of frame parts / Pos.	
							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				
	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	linkage additional stay 1RS	TZOK1010- ...	1	1251–1650			1	
5	additional stay	Ref. PDB, TSZS	1	1251–1650				
6	packer Z	Ref. PDB, FRUP01	1	1251–1650				
7	tilt restr. additional stay ..	889008	1	1251–1650				
8	tilt restrictor V-V sz 2-4 ..	TFKB0040- ...	1	681–1050	450– 900			
	tilt restrictor V-V sz 5 ..	TFKB0050- ...		1051–1250	450– 900			
9a	locking part VSU/K 56+ 1S 1RS	TEVR1340- ...	1	480–1250	450– 600		1	
9b	corn.drive AF VSU/K 56+ 1S 1RS	TEUL5030- ...	1	480–1650	601–3000		1	
10a	run-up plate FH KRL56	Ref. PDB, TRAL01	1	480–1250	450– 600			
10b	run up block AF 13 mm 13	TFFH0080- ...	1	480–1650	601–3000			
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 5+ 1RS	TVSL0350- ...		851–1050			1	
	extension sz 2+ 1RS	TVSL0320- ...		1051–1250			1	
	extension sz 4+ 1RS	TVSL0340- ...		1251–1450			1	
	extension sz 3+ 1RS	TVSL0330- ...		1451–1650			1	
12	linkage BS/FH sz 2+ 1RS	TZBS0190- ...	1	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		450–1000			1
18b	corn.drive BS/K3 sz 1+ 2RS	TEUL2380- ...	1		1001–1200		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	anti-lift device	Ref. PDB, TFAH	1		450–3000			
22	striker plate S-RS	Ref. PDB, TRSK						
23	striker plate S-RS WK2BSO	Ref. PDB, TRSK03						
on request								
24	mishandling device	TFBS0010- ...	1		601–3000			

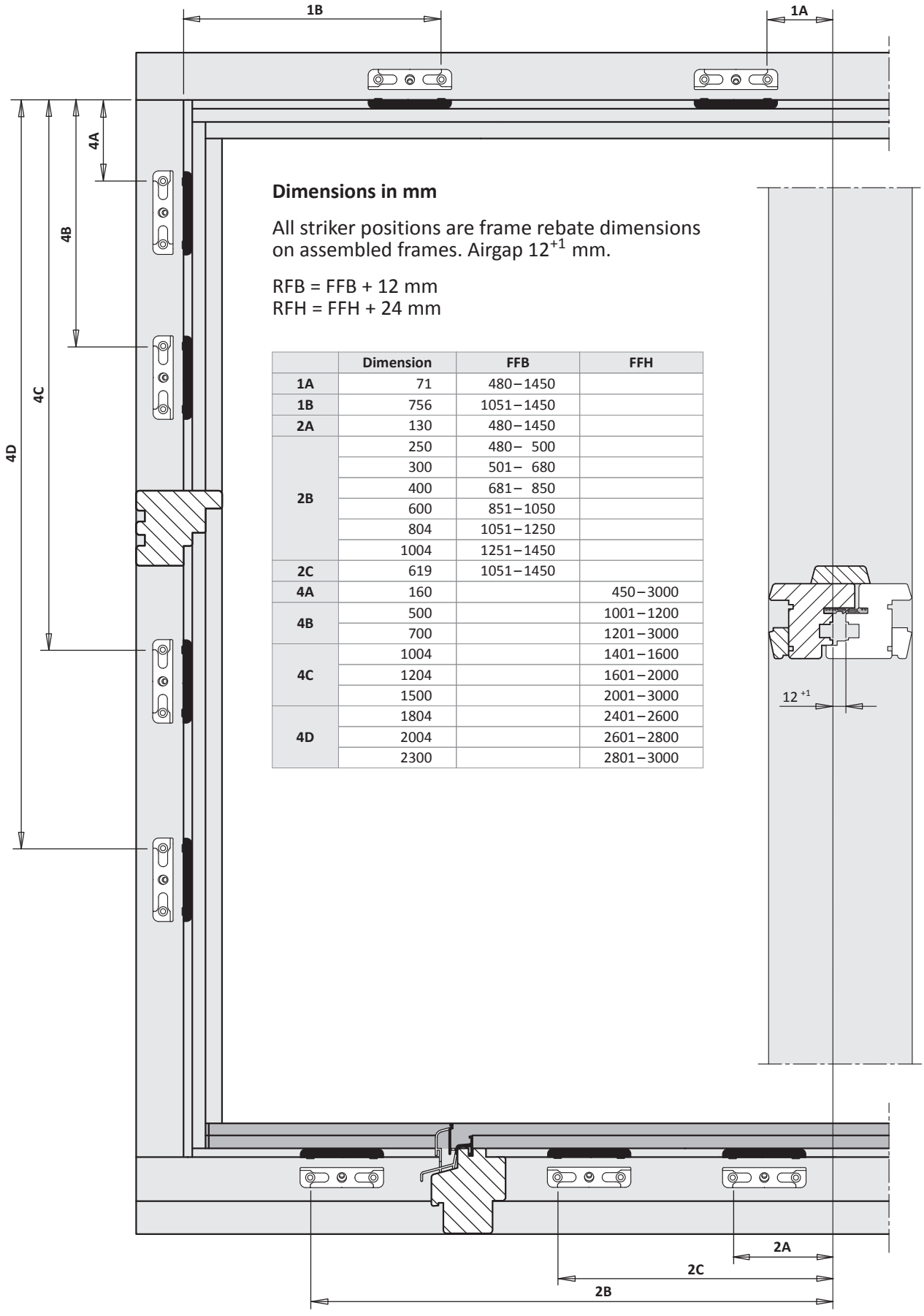
List of fittings main sash

2-sash square tilt-turn/turn DS 16
H12 GK Hinge side axxent 24+



Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Number of frame parts / Pos.	
							22	23
25	pressure piece	Ref. PDB, TFFD	1		601 – 3000			
26	snapper switchable rh.	TFST0011- ...	1		1801 – 3000			
	snapper switchable lh.	TFST0012- ...			1801 – 3000			

Hinge side turning points						
Pos.	Description	Part number		required as per sash weight		
		surface TS	RAL7037	100 kg	130 kg	150 kg
27	corner hinge AX	Ref. PDB, TBEB41		1	1	1
28	cover cap AX EL	Ref. PDB, TKEL41		1	1	1
29	bottom hinge AX	Ref. PDB, TBEV41		1		
30	bottom hinge AX Ø8	Ref. PDB, TBEV42			1	1
31	supporting dowel AX	TBAV4010-0 ...			1	1



Dimensions in mm

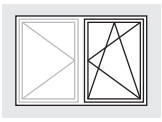
All striker positions are frame rebate dimensions on assembled frames. Airgap 12^{+1} mm.

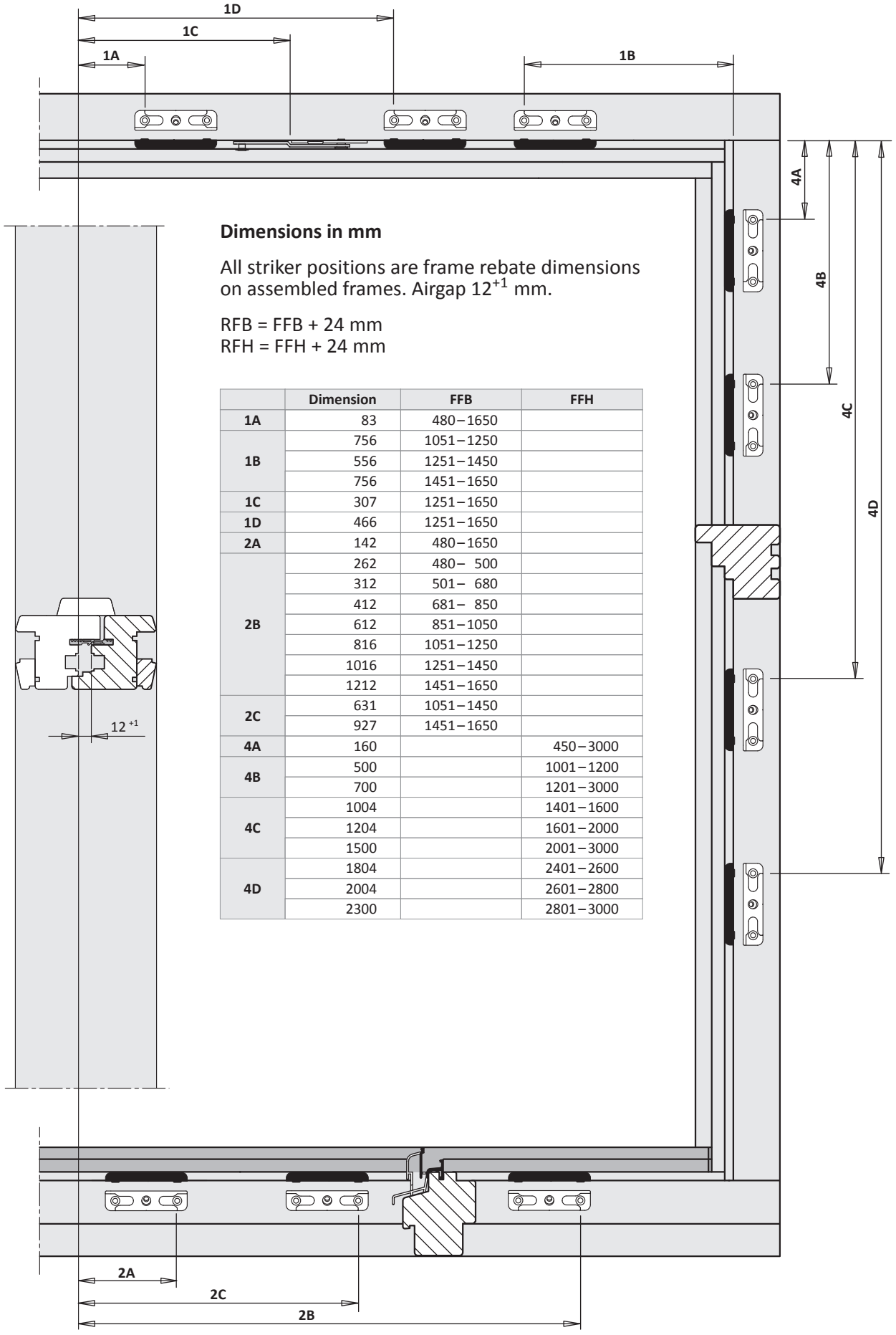
RFB = FFB + 12 mm
RFH = FFH + 24 mm

	Dimension	FFB	FFH
1A	71	480–1450	
1B	756	1051–1450	
2A	130	480–1450	
2B	250	480– 500	
	300	501– 680	
	400	681– 850	
	600	851–1050	
	804	1051–1250	
	1004	1251–1450	
2C	619	1051–1450	
4A	160		450–3000
4B	500		1001–1200
	700		1201–3000
4C	1004		1401–1600
	1204		1601–2000
	1500		2001–3000
4D	1804		2401–2600
	2004		2601–2800
	2300		2801–3000

Frame dimensions main sash

2-sash square tilt-turn/turn DS 16
H12 GK Hinge side axxent 24+





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

	Dimension	FFB	FFH
1A	83	480–1650	
1B	756	1051–1250	
	556	1251–1450	
	756	1451–1650	
1C	307	1251–1650	
1D	466	1251–1650	
2A	142	480–1650	
2B	262	480– 500	
	312	501– 680	
	412	681– 850	
	612	851–1050	
	816	1051–1250	
	1016	1251–1450	
	1212	1451–1650	
2C	631	1051–1450	
	927	1451–1650	
4A	160		450–3000
4B	500		1001–1200
	700		1201–3000
4C	1004		1401–1600
	1204		1601–2000
	1500		2001–3000
4D	1804		2401–2600
	2004		2601–2800
	2300		2801–3000

Bottom Inliner

1-sash square tilt-turn	H48.TAFH2M2S017EN	9 - 3
2-sash square tilt-turn/turn DS 16	H48.TAFH2M2S018EN	9 - 9
Tilt before turn (TBT)		
1-sash square tilt before turn (TBT)	H48.TAFH2M2S019EN	9 - 17

Bottom Double cam SB R-RS

1-sash square tilt-turn	H48.TAFH2M2S403EN	9 - 23
2-sash square tilt-turn/turn DS 16	H48.TAFH2M2S404EN	9 - 29

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Installation instructions

RC2
ECO

1-sash square tilt-turn

timber 12 mm

RC2 ECO

centre handle pos. (variable)

Hinge side axxent 24+

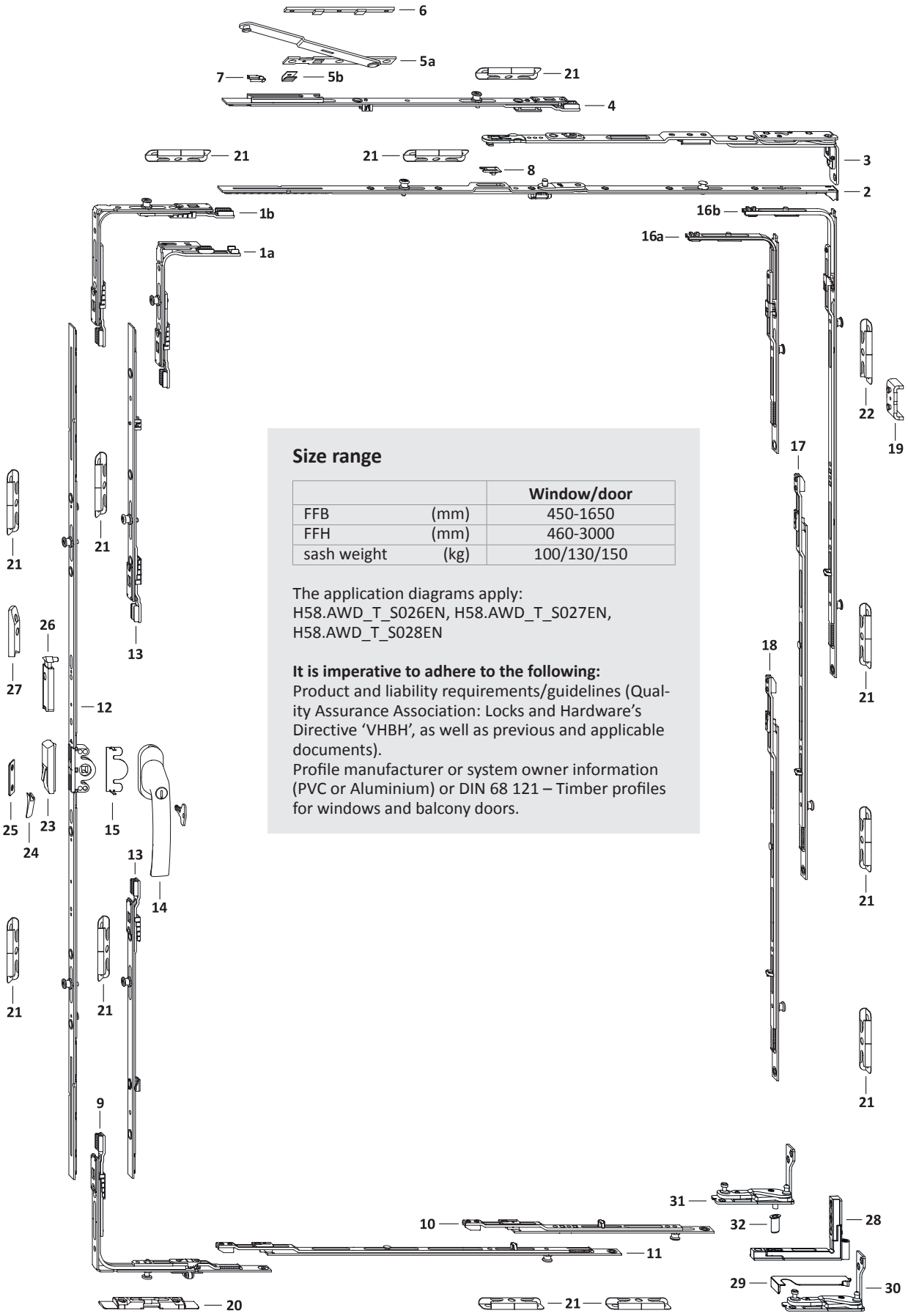
surface TS

backset 15 mm

Hardware set configuration	
General	Locking-points distance 1000
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-turn
H12 GM Hinge side axxent 24+



Size range

		Window/door
FFB	(mm)	450-1650
FFH	(mm)	460-3000
sash weight	(kg)	100/130/150

The application diagrams apply:
H58.AWD_T_S026EN, H58.AWD_T_S027EN,
H58.AWD_T_S028EN

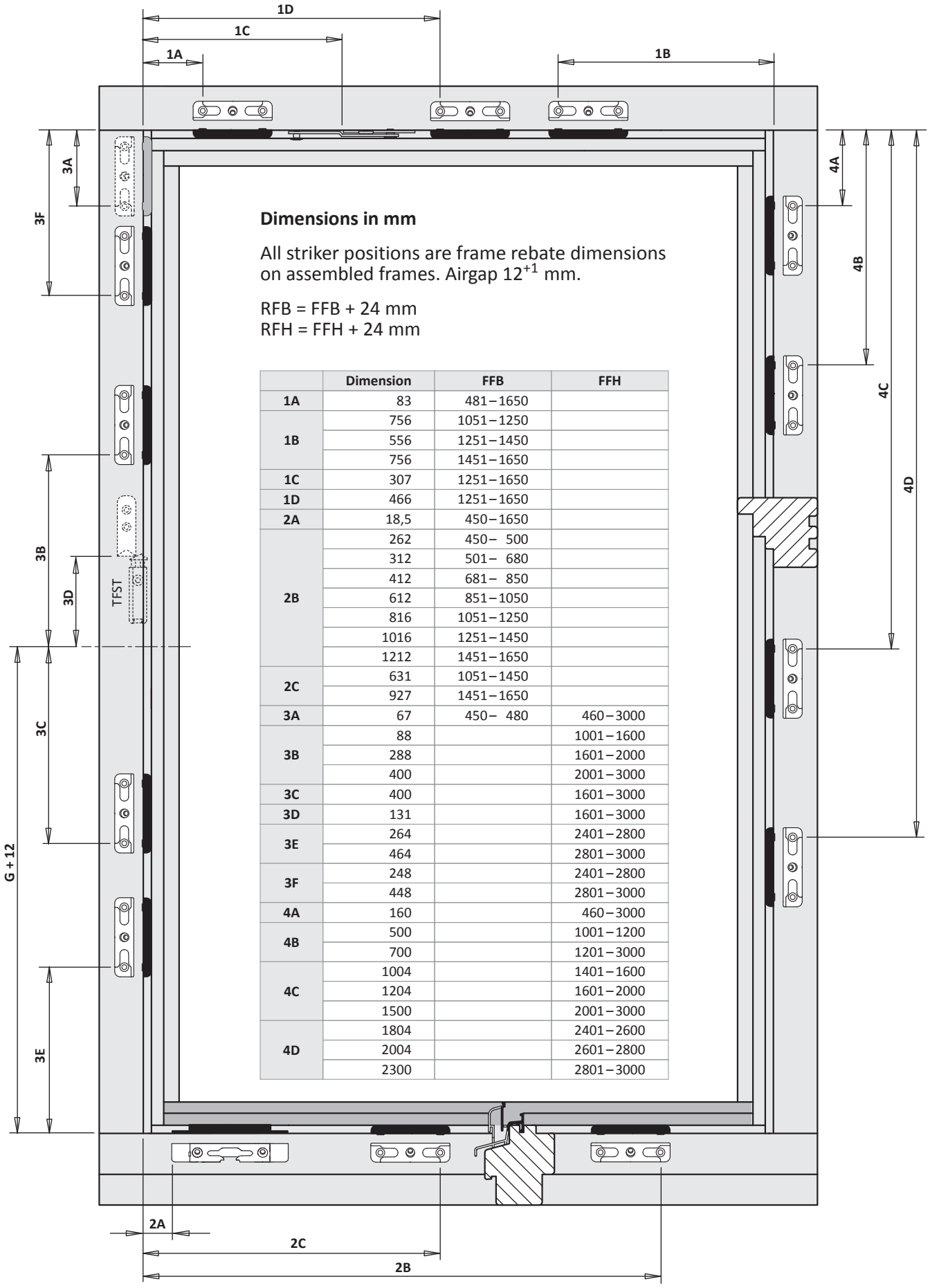
It is imperative to adhere to the following:
Product and liability requirements/guidelines (Quality Assurance Association: Locks and Hardware's Directive 'VHBH', as well as previous and applicable documents).
Profile manufacturer or system owner information (PVC or Aluminium) or DIN 68 121 – Timber profiles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

Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Number of frame parts / Pos.		
							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					
	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	linkage additional stay 1RS	TZOK1010- ...	1	1251–1650				1	
5	additional stay	Ref. PDB, TSZS	1	1251–1650					
6	packer Z	Ref. PDB, FRUP01	1	1251–1650					
7	tilt restr. additional stay ..	889008	1	1251–1650					
8	tilt restrictor V-V sz 2-4 ..	TFKB0040- ...	1	681–1050	460– 900				
	tilt restrictor V-V sz 5 ..	TFKB0050- ...		1051–1250	460– 900				
9	corn.drive AF VSU/K+ FH 1S	TEUL5010- ...	1	450–1650			1		
10	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 5+ 1RS	TVSL0350- ...		851–1050				1	
	extension sz 2+ 1RS	TVSL0320- ...		1051–1250				1	
	extension sz 4+ 1RS	TVSL0340- ...		1251–1450				1	
	extension sz 3+ 1RS	TVSL0330- ...		1451–1650				1	
11	linkage BS/FH sz 2+ 1RS	TZBS0190- ...	1	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- ...			601–1000	300– 500			
	gear 15 AF sz 80 1RS	TGMK4040- ...			1001–1200	500– 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 lockable 100Nm	Ref.access. ZHGA100	1		460–3000				
15	anti-drill guard E	TGBS0010- ...	1		460–3000				
16a	corn.drive BSO/K3+ 1RS	TEUL2400- ...	1		460–1000				1
16b	corn.drive BS/K3 sz 1+ 2RS	TEUL2380- ...	1		1001–1200			1	1
	corn.drive BS/K3 sz 2+ 2RS	TEUL2390- ...			1201–3000			1	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	anti-lift device	Ref. PDB, TFAH	1		460–3000				
20	tilt lock bear. S-ES FH	Ref. PDB, FRKA							
21	striker plate S-RS	Ref. PDB, TRSK							
22	striker plate S-RS WK2BSO	Ref. PDB, TRSK03							
on request									
23	mishandling device	TFBS0010- ...	1						
24	pressure piece	Ref. PDB, TFFD	1						
25	stop	Ref. PDB, FRZF01	1						
26	snapper switchable rh.	TFST0011- ...	1		1601–3000				
	snapper switchable lh.	TFST0012- ...			1601–3000				
27	frame part snapper	Ref. PDB, TRST	1		1601–3000				

List of fittings

1-sash square tilt-turn
H12 GM Hinge side axxent 24+

Hinge side turning points						
Pos.	**Description**	**Part number**		**required as per sash weight**		
		surface TS	RAL7037	100 kg	130 kg	150 kg
28	corner hinge AX	Ref. PDB, TBEB41		1	1	1
29	cover cap AX EL	Ref. PDB, TKEL41		1	1	1
30	bottom hinge AX	Ref. PDB, TBEV41		1		
31	bottom hinge AX Ø8	Ref. PDB, TBEV42			1	1
32	supporting dowel AX	TBAV4010-0 ...			1	1



Dimensions in mm

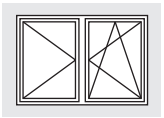
All striker positions are frame rebate dimensions on assembled frames. Airgap 12^{+1} mm.

RFB = FFB + 24 mm
RFH = FFH + 24 mm

	Dimension	FFB	FFH
1A	83	481–1650	
1B	756	1051–1250	
	556	1251–1450	
	756	1451–1650	
1C	307	1251–1650	
1D	466	1251–1650	
2A	18,5	450–1650	
2B	262	450– 500	
	312	501– 680	
	412	681– 850	
	612	851–1050	
	816	1051–1250	
	1016	1251–1450	
	1212	1451–1650	
2C	631	1051–1450	
	927	1451–1650	
3A	67	450– 480	460–3000
3B	88		1001–1600
	288		1601–2000
	400		2001–3000
3C	400		1601–3000
3D	131		1601–3000
3E	264		2401–2800
	464		2801–3000
3F	248		2401–2800
	448		2801–3000
4A	160		460–3000
4B	500		1001–1200
	700		1201–3000
4C	1004		1401–1600
	1204		1601–2000
	1500		2001–3000
4D	1804		2401–2600
	2004		2601–2800
	2300		2801–3000

TITAN AF

Installation instructions



RC2
ECO

2-sash square tilt-turn/turn DS 16

timber 12 mm

RC2 ECO

centre handle pos. (variable)

Hinge side axxent 24+

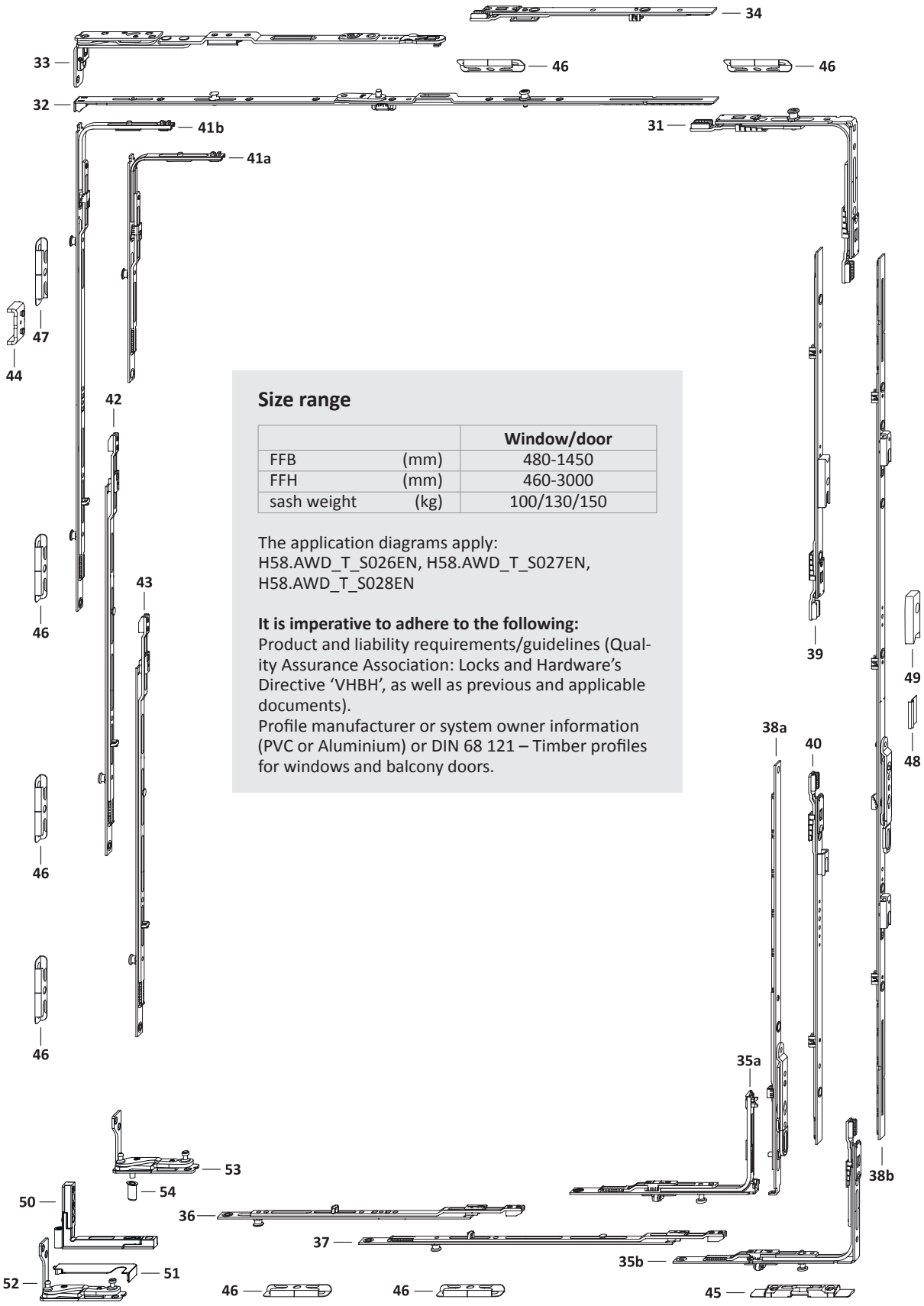
surface TS

backset 15 mm

Hardware set configuration	
General	Locking-points distance 1000
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 slave sash

2-sash square tilt-turn/turn DS 16
H12 GM Hinge side axxent 24+



Size range

		Window/door
FFB	(mm)	480-1450
FFH	(mm)	460-3000
sash weight	(kg)	100/130/150

The application diagrams apply:
H58.AWD_T_S026EN, H58.AWD_T_S027EN,
H58.AWD_T_S028EN

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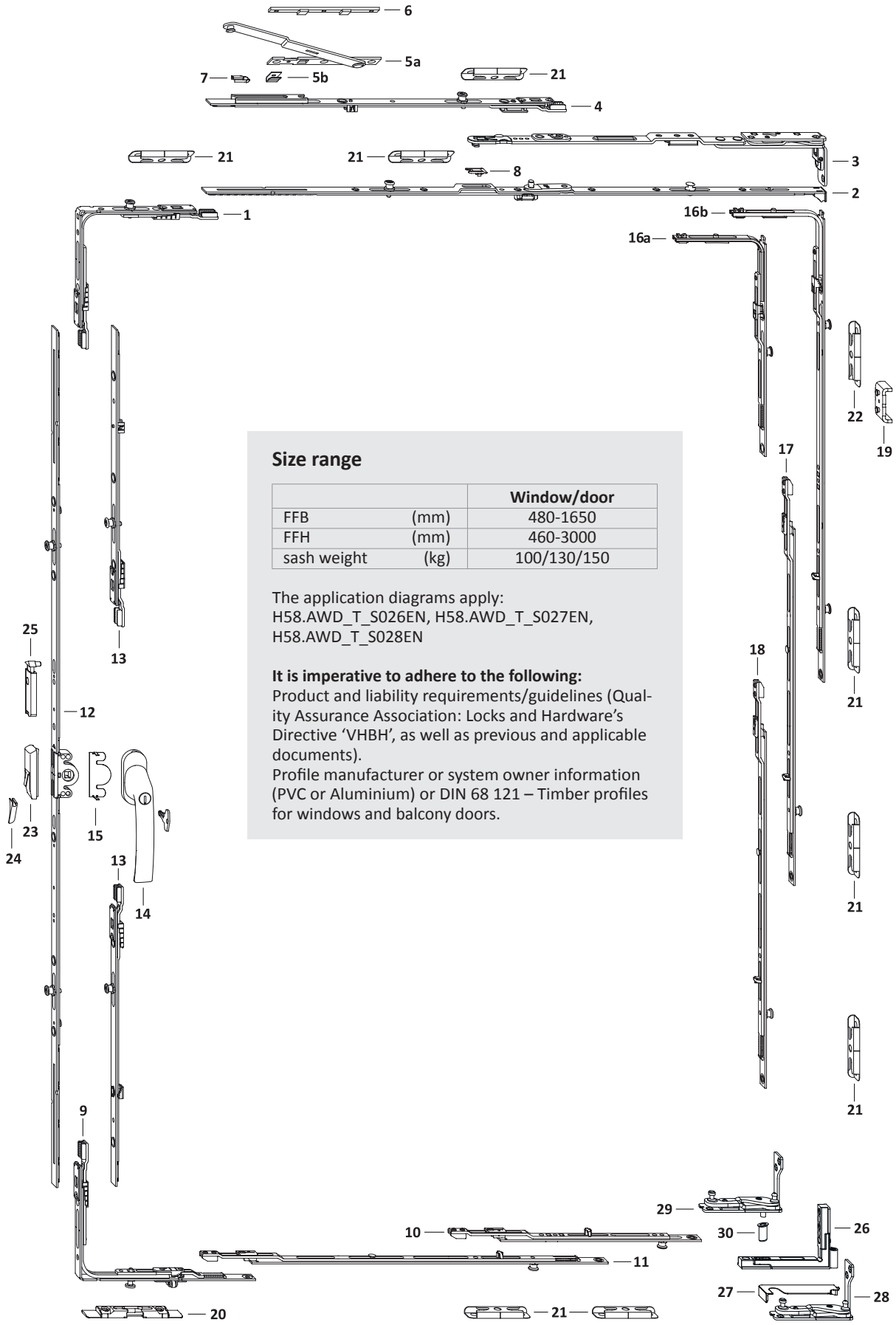

Size range

		Window/door
FFB	(mm)	480-1650
FFH	(mm)	460-3000
sash weight	(kg)	100/130/150

The application diagrams apply:
H58.AWD_T_S026EN, H58.AWD_T_S027EN,
H58.AWD_T_S028EN

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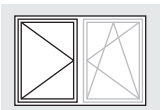
List of fittings slave sash

2-sash square tilt-turn/turn DS 16
H12 GM Hinge side axxent 24+



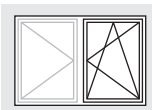
Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Number of frame parts / Pos.		
						In the main sash	45	46	47
31	corn.drive VSO 1RS	TEUL4010- ...	1	480 – 1450				1	
32	stay sash part AF AX sz 1	TSSV4000- ...	1	480 – 680					
	stay sash part AF AX 2+3 1RS	TSSV0310- ...		681 – 850					
	stay sash part AF AX sz 4 1RS	TSSV0320- ...		851 – 1050					
	stay sash part AF AX sz 5 1RS	TSSV0330- ...		1051 – 1450				1	
33	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					
34	linkage AF sz 1	TZZS0150- ...	1	1251 – 1450					
35a	locking part VSU/K FH+ 1S	TEVR1400- ...	1	480 – 1450	460 – 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 5+ 1RS	TVSL0350- ...		851 – 1050				1	
	extension sz 2+ 1RS	TVSL0320- ...		1051 – 1250				1	
	extension sz 4+ 1RS	TVSL0340- ...		1251 – 1450				1	
37	linkage BS/FH sz 2+ 1RS	TZBS0190- ...	1	1051 – 1450				1	
38a	sec.sash gear 16 sz 30	TGKS0010- ...	1		460 – 600	230 – 300			
	sec.sash gear 16 AF 60/G300	TGKS4030- ...			601 – 800	300 – 400			
38b	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			
39	linkage AF sz 1 1SB-RS	TZKS1020- ...	1		2401 – 2800				
	linkage AF sz 2 1SB-RS	TZKS1030- ...			2801 – 3000				
40	linkage AF sz 1 1SB-VSU	TZKS1060- ...	1		2401 – 2800				
	linkage AF sz 2 1SB-VSU	TZKS1070- ...			2801 – 3000				
41a	corn.drive BSO/K3+ 1RS	TEUL2400- ...	1		460 – 1000				1
41b	corn.drive BS/K3 sz 1+ 2RS	TEUL2380- ...	1		1001 – 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	anti-lift device	Ref. PDB, TFAH	1		460 – 3000				
45	tilt lock bear. S-ES FH	Ref. PDB, FRKA							
46	striker plate S-RS	Ref. PDB, TRSK							
47	striker plate S-RS WK2BSO	Ref. PDB, TRSK03							
on request									
48	stop	Ref. PDB, FRZF04	1		601 – 3000				
49	striker snapper A0767	TRST0010- ...	1		1601 – 3000				

Hinge side turning points						
Pos.	Description	Part number		required as per sash weight		
		surface TS	RAL7037	100 kg	130 kg	150 kg
50	corner hinge AX	Ref. PDB, TBEB41		1	1	1
51	cover cap AX EL	Ref. PDB, TKEL41		1	1	1
52	bottom hinge AX	Ref. PDB, TBEV41		1		
53	bottom hinge AX Ø8	Ref. PDB, TBEV42			1	1
54	supporting dowel AX	TBAV4010-0 ...			1	1

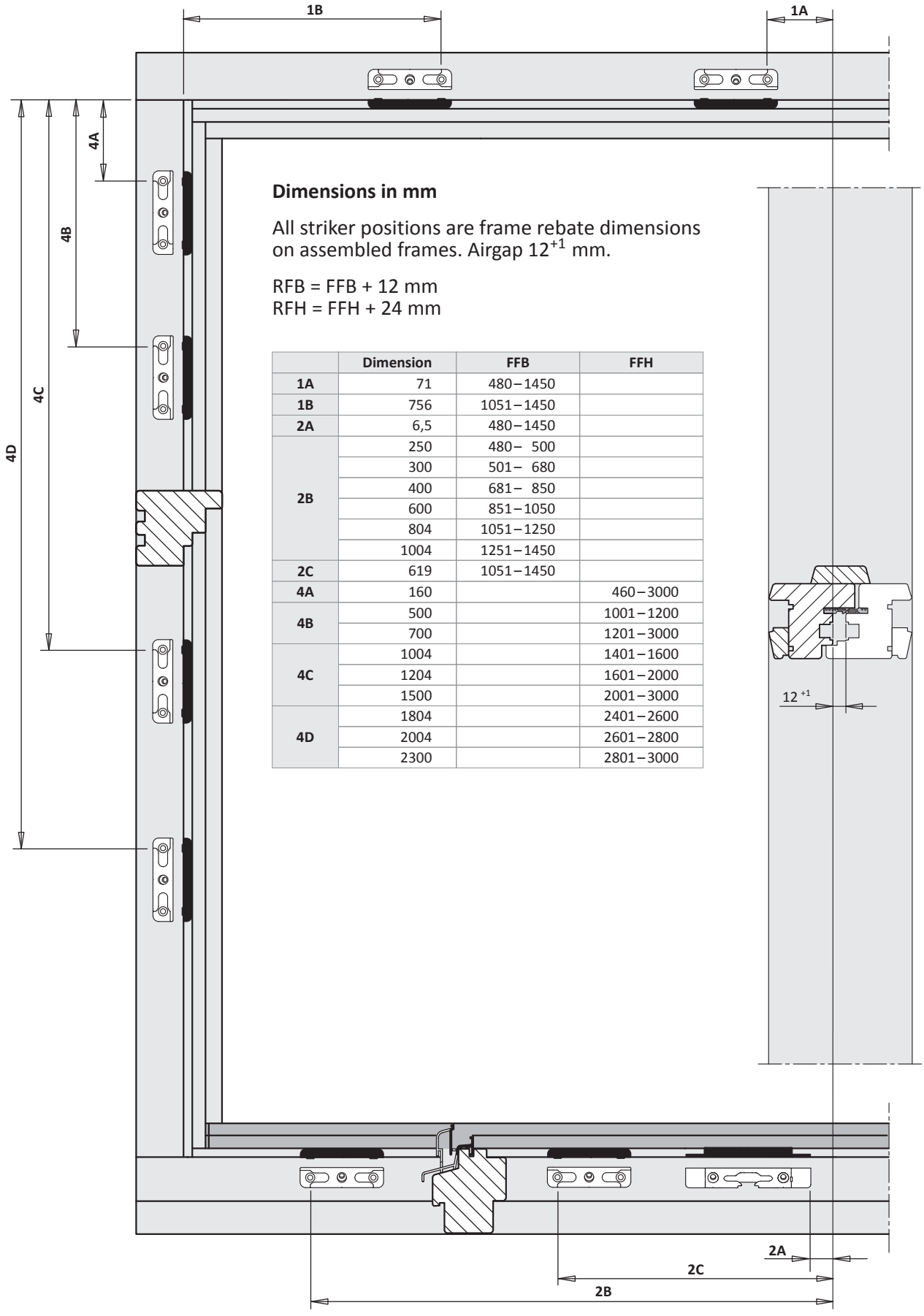
Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Number of frame parts / Pos.		
							20	21	22
1	corn.drive VSO 1RS	TEUL4010- ...	1	480–1650				1	
2	stay sash part AF AX sz 1	TSSV4000- ...	1	480– 680					
	stay sash part AF AX 2+3 1RS	TSSV0310- ...		681– 850					
	stay sash part AF AX sz 4 1RS	TSSV0320- ...		851–1050					
	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	linkage additional stay 1RS	TZOK1010- ...	1	1251–1650				1	
5	additional stay	Ref. PDB, TSZS	1	1251–1650					
6	packer Z	Ref. PDB, FRUP01	1	1251–1650					
7	tilt restr. additional stay ..	889008	1	1251–1650					
8	tilt restrictor V-V sz 2-4 ..	TFKB0040- ...	1	681–1050	460– 900				
	tilt restrictor V-V sz 5 ..	TFKB0050- ...		1051–1250	460– 900				
9	corn.drive AF VSU/K+ FH 1S	TEUL5010- ...	1	480–1650			1		
10	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 5+ 1RS	TVSL0350- ...		851–1050				1	
	extension sz 2+ 1RS	TVSL0320- ...		1051–1250				1	
	extension sz 4+ 1RS	TVSL0340- ...		1251–1450				1	
	extension sz 3+ 1RS	TVSL0330- ...		1451–1650				1	
11	linkage BS/FH sz 2+ 1RS	TZBS0190- ...	1	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- ...			601–1000	300– 500			
	gear 15 AF sz 80 1RS	TGMK4040- ...			1001–1200	500– 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 lockable 100Nm	Ref.access. ZHGA100	1		460–3000				
15	anti-drill guard E	TGBS0010- ...	1		460–3000				
16a	corn.drive BSO/K3+ 1RS	TEUL2400- ...	1		460–1000				1
16b	corn.drive BS/K3 sz 1+ 2RS	TEUL2380- ...	1		1001–1200			1	1
	corn.drive BS/K3 sz 2+ 2RS	TEUL2390- ...			1201–3000			1	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	anti-lift device	Ref. PDB, TFAH	1		460–3000				
20	tilt lock bear. S-ES FH	Ref. PDB, FRKA							
21	striker plate S-RS	Ref. PDB, TRSK							
22	striker plate S-RS WK2BSO	Ref. PDB, TRSK03							
on request									
23	mishandling device	TFBS0010- ...	1						
24	pressure piece	Ref. PDB, TFFD	1						
25	snapper switchable rh.	TFST0011- ...	1		1601–3000				
	snapper switchable lh.	TFST0012- ...			1601–3000				

List of fittings main sash

2-sash square tilt-turn/turn DS 16
H12 GM Hinge side axxent 24+



Hinge side turning points						
Pos.	**Description**	**Part number**		**required as per sash weight**		
		surface TS	RAL7037	100 kg	130 kg	150 kg
26	corner hinge AX	Ref. PDB, TBEB41		1	1	1
27	cover cap AX EL	Ref. PDB, TKEL41		1	1	1
28	bottom hinge AX	Ref. PDB, TBEV41		1		
29	bottom hinge AX Ø8	Ref. PDB, TBEV42			1	1
30	supporting dowel AX	TBAV4010-0 ...			1	1



Dimensions in mm

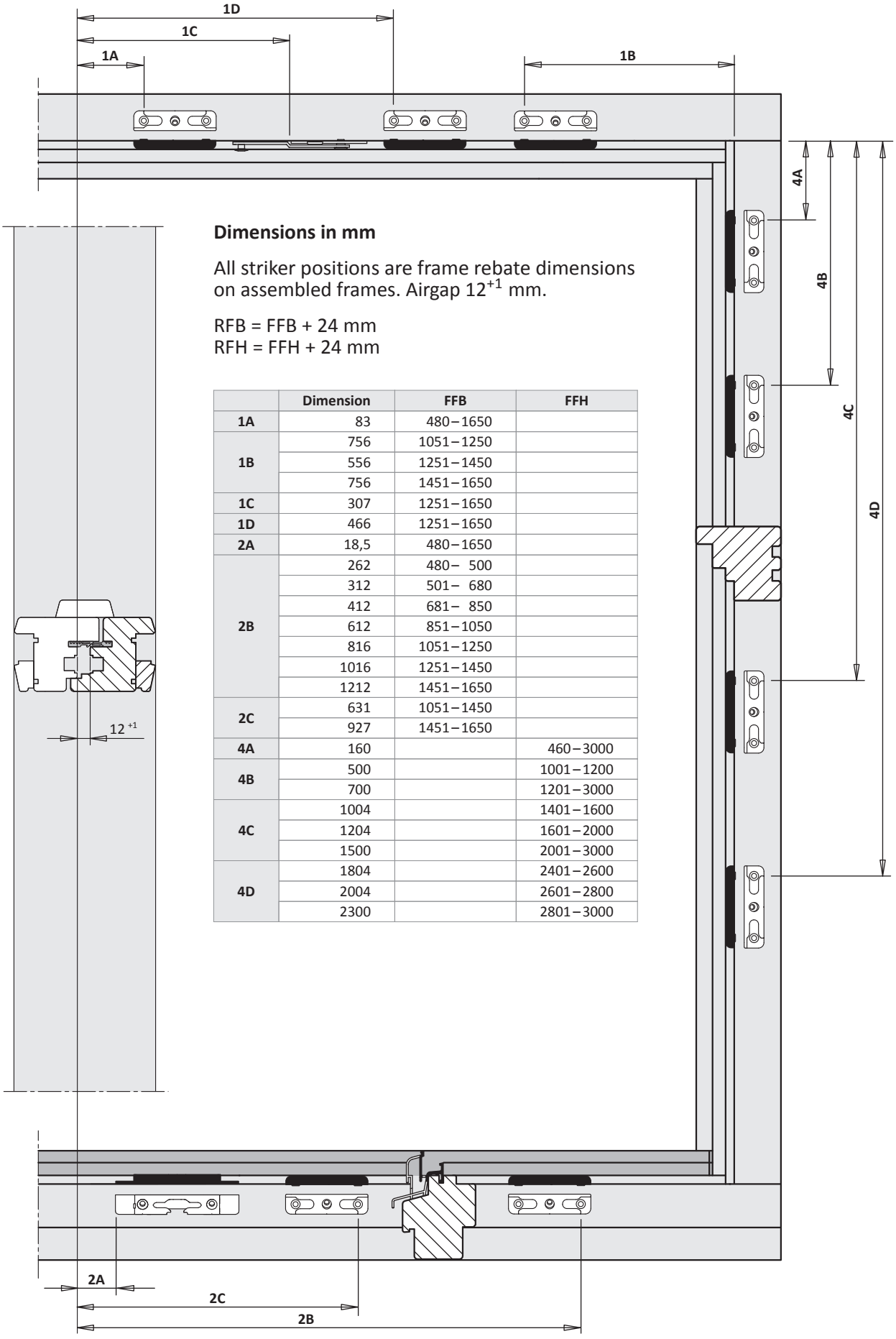
All striker positions are frame rebate dimensions on assembled frames. Airgap 12^{+1} mm.

RFB = FFB + 12 mm
RFH = FFH + 24 mm

	Dimension	FFB	FFH
1A	71	480–1450	
1B	756	1051–1450	
2A	6,5	480–1450	
2B	250	480– 500	
	300	501– 680	
	400	681– 850	
	600	851–1050	
	804	1051–1250	
	1004	1251–1450	
2C	619	1051–1450	
4A	160		460–3000
4B	500		1001–1200
	700		1201–3000
4C	1004		1401–1600
	1204		1601–2000
	1500		2001–3000
4D	1804		2401–2600
	2004		2601–2800
	2300		2801–3000

Frame dimensions main sash

2-sash square tilt-turn/turn DS 16
H12 GM Hinge side axxent 24+



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

	Dimension	FFB	FFH
1A	83	480 – 1650	
1B	756	1051 – 1250	
	556	1251 – 1450	
	756	1451 – 1650	
1C	307	1251 – 1650	
1D	466	1251 – 1650	
2A	18,5	480 – 1650	
2B	262	480 – 500	
	312	501 – 680	
	412	681 – 850	
	612	851 – 1050	
	816	1051 – 1250	
	1016	1251 – 1450	
	1212	1451 – 1650	
2C	631	1051 – 1450	
	927	1451 – 1650	
4A	160		460 – 3000
4B	500		1001 – 1200
	700		1201 – 3000
4C	1004		1401 – 1600
	1204		1601 – 2000
	1500		2001 – 3000
4D	1804		2401 – 2600
	2004		2601 – 2800
	2300		2801 – 3000

TITAN AF

Installation instructions

RC2
ECO

1-sash square tilt before turn (TBT)

timber 12 mm

RC2 ECO

centre handle pos. (variable)

Hinge side axxent 24+

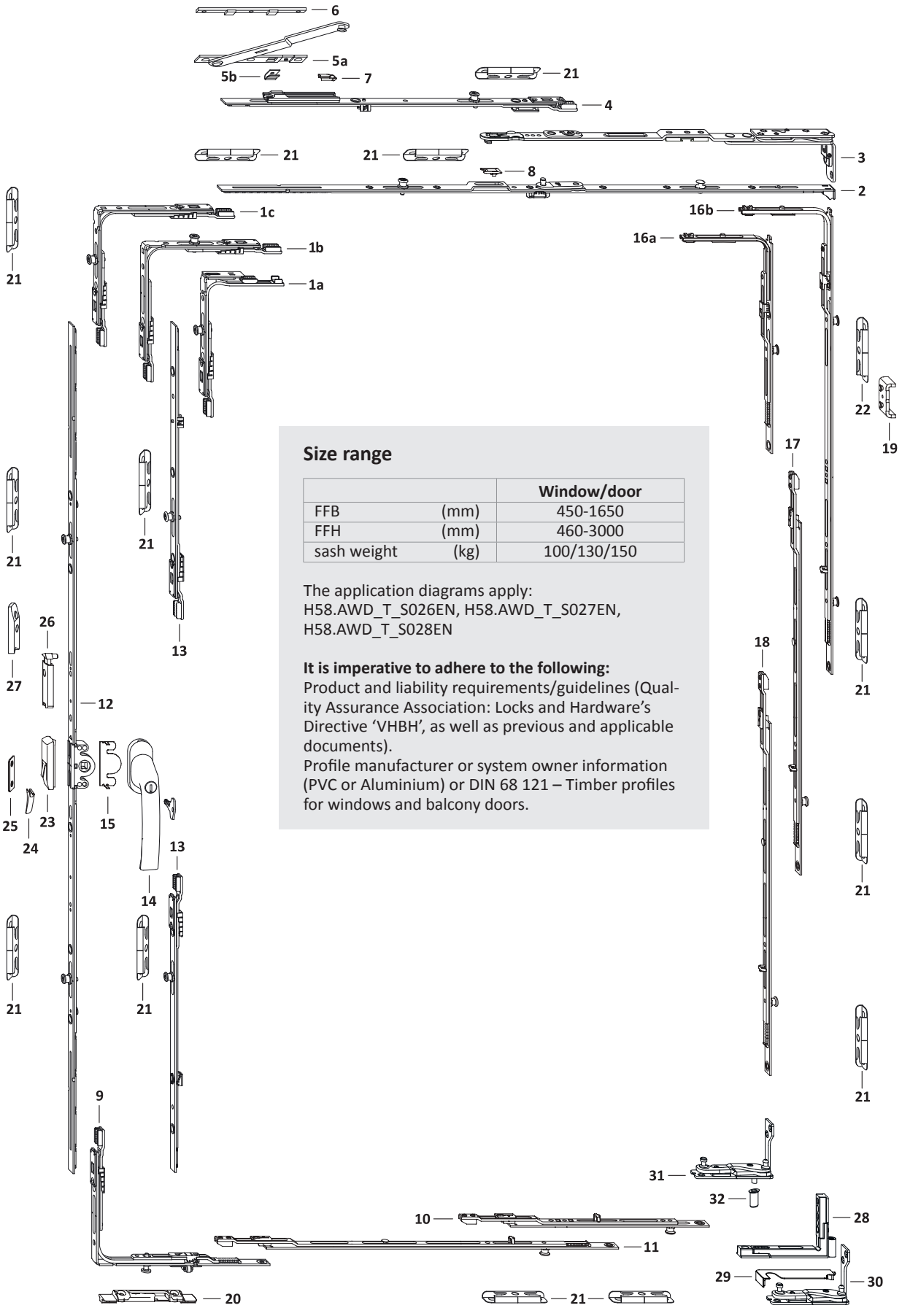
surface TS

backset 15 mm

Hardware set configuration	
General	Locking-points distance 1000
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)
H12 GM Hinge side axxent 24+



Size range

		Window/door
FFB	(mm)	450-1650
FFH	(mm)	460-3000
sash weight	(kg)	100/130/150

The application diagrams apply:
H58.AWD_T_S026EN, H58.AWD_T_S027EN,
H58.AWD_T_S028EN

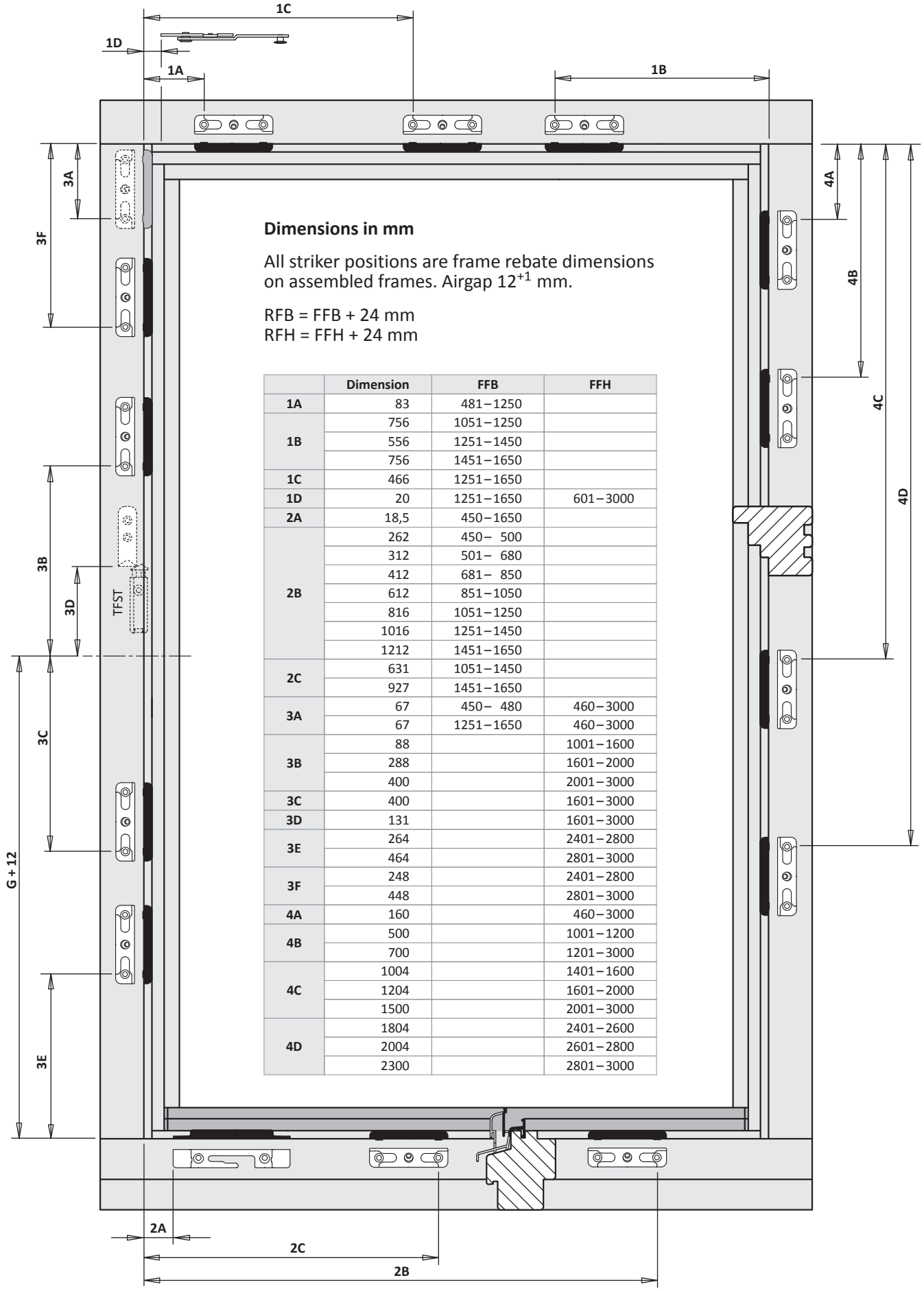
It is imperative to adhere to the following:
Product and liability requirements/guidelines (Quality Assurance Association: Locks and Hardware's Directive 'VHBH', as well as previous and applicable documents).
Profile manufacturer or system owner information (PVC or Aluminium) or DIN 68 121 – Timber profiles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

Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Number of frame parts / Pos.		
							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					
	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	linkage add. stay AF TBT RS	TZOT1010- ...	1	1251–1650				1	
5	additional stay	Ref. PDB, TSZS	1	1251–1650					
6	packer Z	Ref. PDB, FRUP01	1	1251–1650					
7	tilt restr. additional stay ..	889008	1	1251–1650					
8	tilt restrictor V-V sz 2-4 ..	TFKB0040- ...	1	681–1050	460– 900				
	tilt restrictor V-V sz 5 ..	TFKB0050- ...		1051–1250	460– 900				
9	corn.drive AF VSU/K+ FH 1S	TEUL5010- ...	1	450–1650			1		
10	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 5+ 1RS	TVSL0350- ...		851–1050				1	
	extension sz 2+ 1RS	TVSL0320- ...		1051–1250				1	
	extension sz 4+ 1RS	TVSL0340- ...		1251–1450				1	
	extension sz 3+ 1RS	TVSL0330- ...		1451–1650				1	
11	linkage BS/FH sz 2+ 1RS	TZBS0190- ...	1	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- ...			601–1000	300– 500			
	gear 15 AF sz 80 1RS	TGMK4040- ...			1001–1200	500– 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	anti-drill guard E	TGBS0010- ...	1		460–3000				
16a	corn.drive BSO/K3+ 1RS	TEUL2400- ...	1		460–1000				1
16b	corn.drive BS/K3 sz 1+ 2RS	TEUL2380- ...	1		1001–1200			1	1
	corn.drive BS/K3 sz 2+ 2RS	TEUL2390- ...			1201–3000			1	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	anti-lift device	Ref. PDB, TFAH	1		460–3000				
20	tilt lock bear. S-ES FH TBT	Ref. PDB, FRKB							
21	striker plate S-RS	Ref. PDB, TRSK							
22	striker plate S-RS WK2BSO	Ref. PDB, TRSK03							
on request									
23	mishandling device	TFBS0010- ...	1						
24	pressure piece	Ref. PDB, TFFD	1						
25	stop	Ref. PDB, FRZF01	1						
26	snapper switchable rh.	TFST0011- ...	1		1601–3000				
	snapper switchable lh.	TFST0012- ...			1601–3000				
27	frame part snapper	Ref. PDB, TRST	1		1601–3000				

List of fittings

1-sash square tilt before turn (TBT)
H12 GM Hinge side axxent 24+

Hinge side turning points						
Pos.	**Description**	**Part number**		**required as per sash weight**		
		surface TS	RAL7037	100 kg	130 kg	150 kg
28	corner hinge AX	Ref. PDB, TBEB41		1	1	1
29	cover cap AX EL	Ref. PDB, TKEL41		1	1	1
30	bottom hinge AX	Ref. PDB, TBEV41		1		
31	bottom hinge AX Ø8	Ref. PDB, TBEV42			1	1
32	supporting dowel AX	TBAV4010-0 ...			1	1



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

	Dimension	FFB	FFH
1A	83	481–1250	
1B	756	1051–1250	
	556	1251–1450	
	756	1451–1650	
1C	466	1251–1650	
1D	20	1251–1650	601–3000
2A	18,5	450–1650	
2B	262	450– 500	
	312	501– 680	
	412	681– 850	
	612	851–1050	
	816	1051–1250	
	1016	1251–1450	
	1212	1451–1650	
2C	631	1051–1450	
	927	1451–1650	
3A	67	450– 480	460–3000
	67	1251–1650	460–3000
3B	88		1001–1600
	288		1601–2000
	400		2001–3000
3C	400		1601–3000
3D	131		1601–3000
3E	264		2401–2800
	464		2801–3000
3F	248		2401–2800
	448		2801–3000
4A	160		460–3000
4B	500		1001–1200
	700		1201–3000
4C	1004		1401–1600
	1204		1601–2000
	1500		2001–3000
4D	1804		2401–2600
	2004		2601–2800
	2300		2801–3000

TITAN AF

Installation instructions

RC2
ECO

1-sash square tilt-turn

timber 12 mm

RC2 ECO

centre handle pos. (variable)

Hinge side axxent 24+

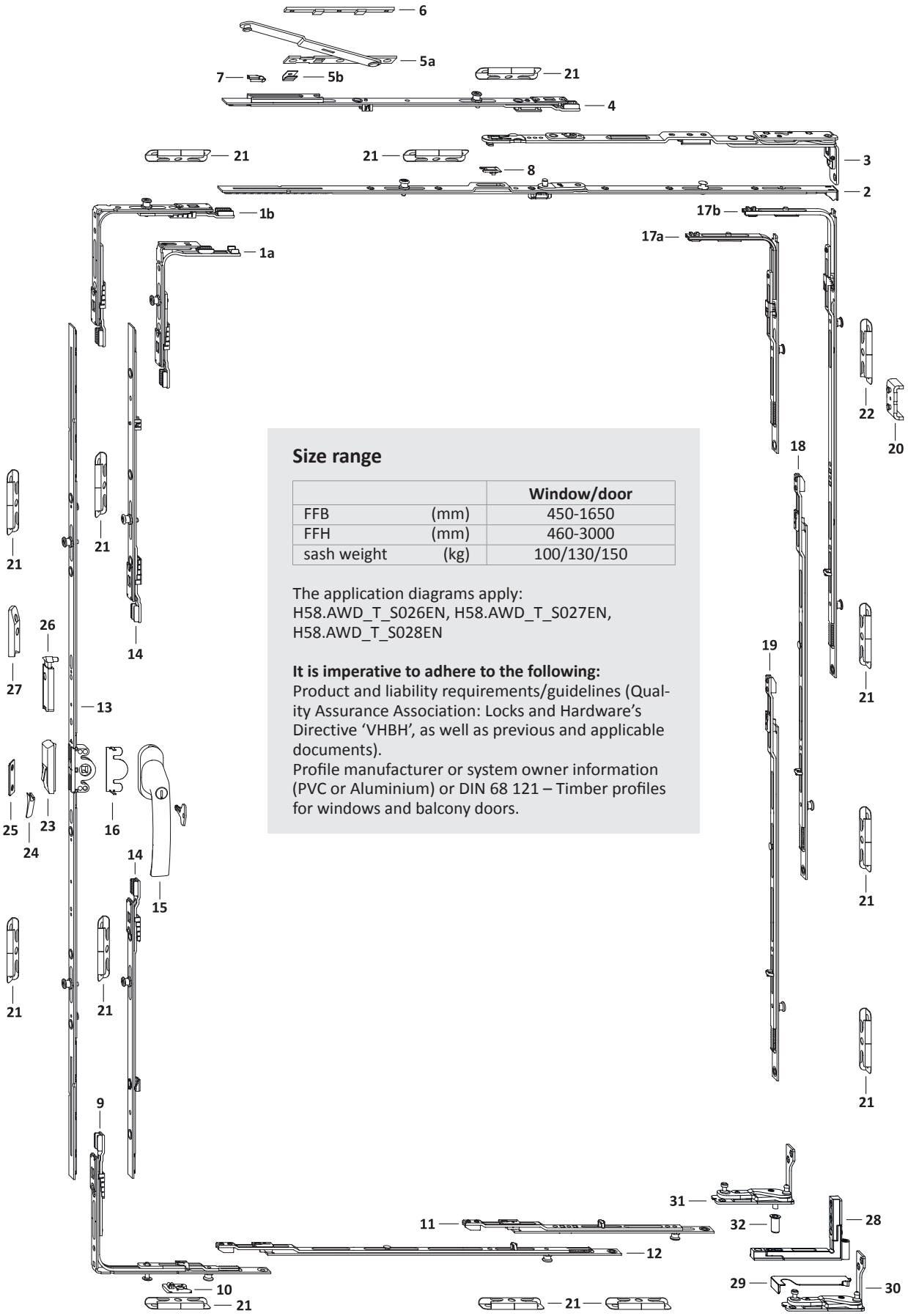
surface TS

backset 15 mm

Hardware set configuration	
General	Locking-points distance 1000
Stay side	two-piece stay ax 24+
Bottom	double cam SB R-RS
Locking side	mishandl. device on gear
Hinge side	corner drive BS sz 1+2 2RS

hardware layout

1-sash square tilt-turn
H12 GM Hinge side axxent 24+



Size range

		Window/door
FFB	(mm)	450-1650
FFH	(mm)	460-3000
sash weight	(kg)	100/130/150

The application diagrams apply:
H58.AWD_T_S026EN, H58.AWD_T_S027EN,
H58.AWD_T_S028EN

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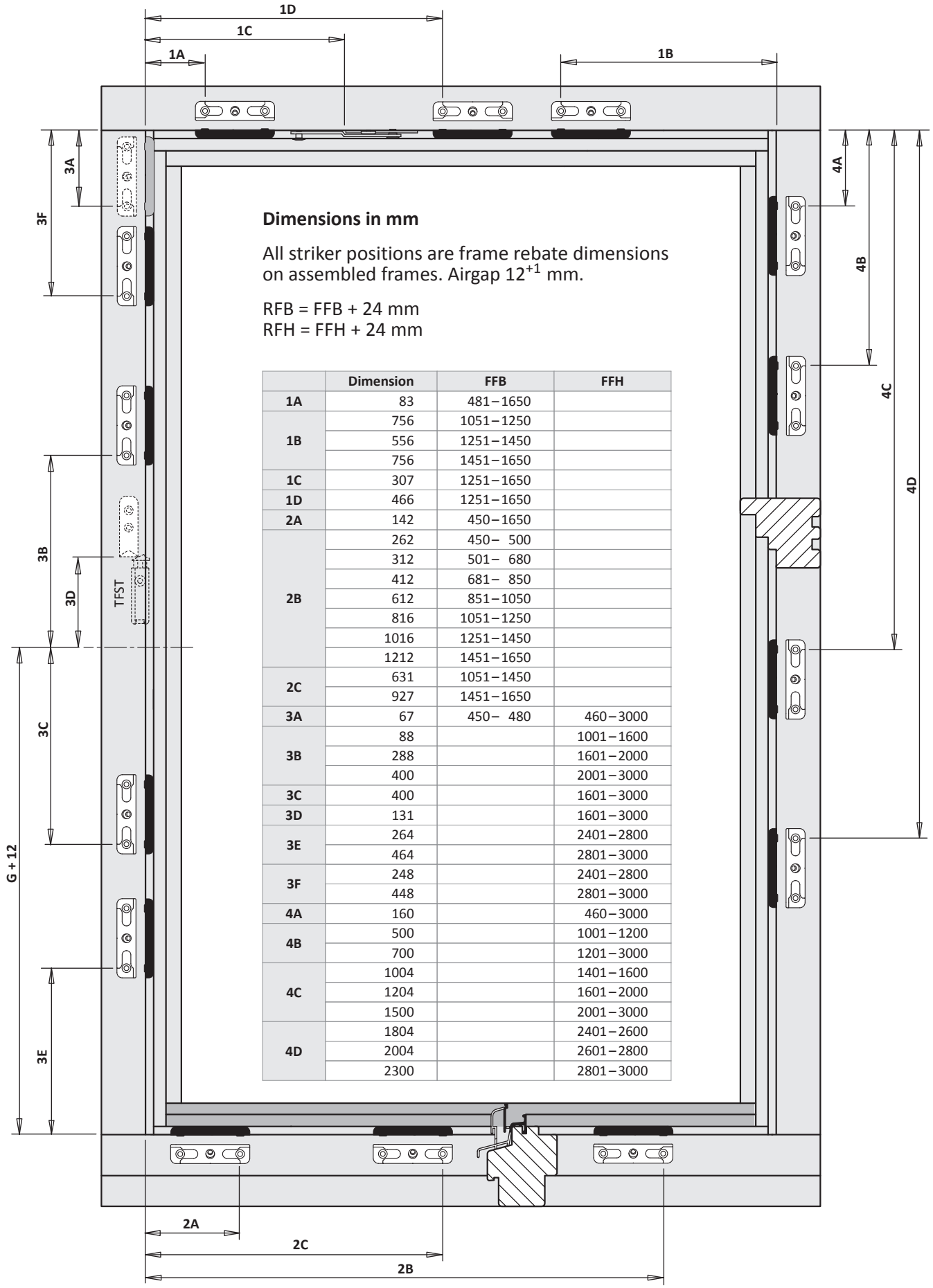
Profile manufacturer or system owner information (PVC or Aluminium) or DIN 68 121 – Timber profiles for windows and balcony doors.

Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Number of frame parts / Pos.	
							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				
	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	linkage additional stay 1RS	TZOK1010- ...	1	1251–1650			1	
5	additional stay	Ref. PDB, TSZS	1	1251–1650				
6	packer Z	Ref. PDB, FRUP01	1	1251–1650				
7	tilt restr. additional stay ..	889008	1	1251–1650				
8	tilt restrictor V-V sz 2-4 ..	TFKB0040- ...	1	681–1050	460– 900			
	tilt restrictor V-V sz 5 ..	TFKB0050- ...		1051–1250	460– 900			
9	corn.drive AF VSU/K 56+ 1S 1RS	TEUL5030- ...	1	450–1650			1	
10	run up block AF 13 mm 13	TFFH0080- ...	1	450–1650				
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 5+ 1RS	TVSL0350- ...		851–1050			1	
	extension sz 2+ 1RS	TVSL0320- ...		1051–1250			1	
	extension sz 4+ 1RS	TVSL0340- ...		1251–1450			1	
	extension sz 3+ 1RS	TVSL0330- ...		1451–1650			1	
12	linkage BS/FH sz 2+ 1RS	TZBS0190- ...	1	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- ...			601–1000	300– 500		
	gear 15 AF sz 80 1RS	TGMK4040- ...			1001–1200	500– 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		460–1000			1
17b	corn.drive BS/K3 sz 1+ 2RS	TEUL2380- ...	1		1001–1200		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	anti-lift device	Ref. PDB, TFAH	1		460–3000			
21	striker plate S-RS	Ref. PDB, TRSK						
22	striker plate S-RS WK2BSO	Ref. PDB, TRSK03						
on request								
23	mishandling device	TFBS0010- ...	1					
24	pressure piece	Ref. PDB, TFFD	1					
25	stop	Ref. PDB, FRZF01	1					
26	snapper switchable rh.	TFST0011- ...	1		1601–3000			
	snapper switchable lh.	TFST0012- ...			1601–3000			
27	frame part snapper	Ref. PDB, TRST	1		1601–3000			

List of fittings

1-sash square tilt-turn
H12 GM Hinge side axxent 24+

Hinge side turning points						
Pos.	**Description**	**Part number**		**required as per sash weight**		
		surface TS	RAL7037	100 kg	130 kg	150 kg
28	corner hinge AX	Ref. PDB, TBEB41		1	1	1
29	cover cap AX EL	Ref. PDB, TKEL41		1	1	1
30	bottom hinge AX	Ref. PDB, TBEV41		1		
31	bottom hinge AX Ø8	Ref. PDB, TBEV42			1	1
32	supporting dowel AX	TBAV4010-0 ...			1	1



Dimensions in mm

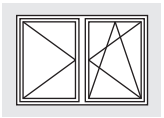
All striker positions are frame rebate dimensions on assembled frames. Airgap 12^{+1} mm.

RFB = FFB + 24 mm
RFH = FFH + 24 mm

	Dimension	FFB	FFH
1A	83	481–1650	
1B	756	1051–1250	
	556	1251–1450	
	756	1451–1650	
1C	307	1251–1650	
1D	466	1251–1650	
2A	142	450–1650	
2B	262	450– 500	
	312	501– 680	
	412	681– 850	
	612	851–1050	
	816	1051–1250	
	1016	1251–1450	
	1212	1451–1650	
2C	631	1051–1450	
	927	1451–1650	
3A	67	450– 480	460–3000
3B	88		1001–1600
	288		1601–2000
	400		2001–3000
3C	400		1601–3000
3D	131		1601–3000
3E	264		2401–2800
	464		2801–3000
3F	248		2401–2800
	448		2801–3000
4A	160		460–3000
4B	500		1001–1200
	700		1201–3000
4C	1004		1401–1600
	1204		1601–2000
	1500		2001–3000
4D	1804		2401–2600
	2004		2601–2800
	2300		2801–3000

TITAN AF

Installation instructions



RC2
ECO

2-sash square tilt-turn/turn DS 16

timber 12 mm

RC2 ECO

centre handle pos. (variable)

Hinge side axxent 24+

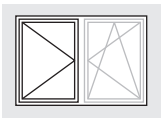
surface TS

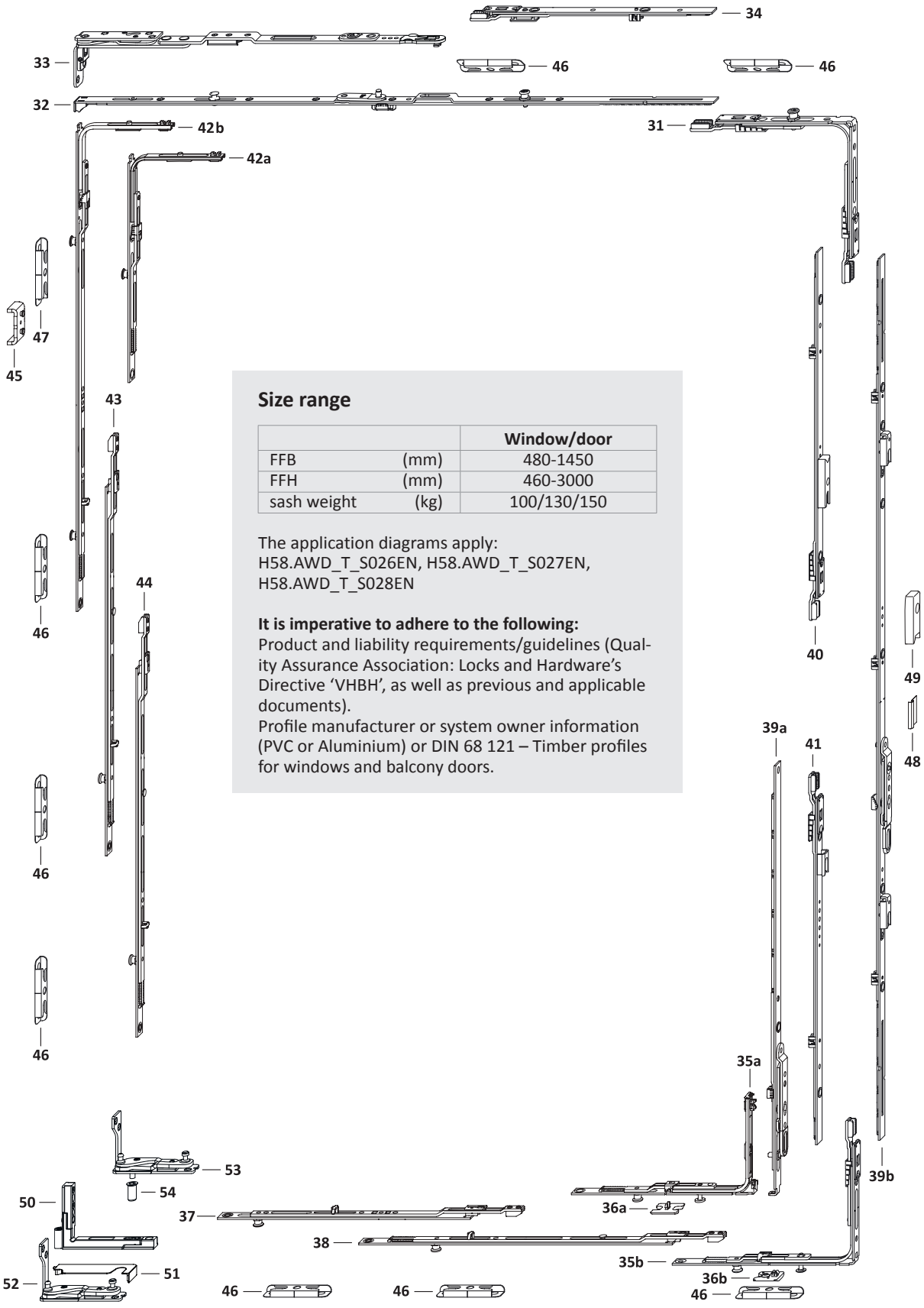
backset 15 mm

Hardware set configuration	
General	Locking-points distance 1000
Stay side	two-piece stay ax 24+
Bottom	double cam SB R-RS
Locking side	mishandl. device on gear
Hinge side	corner drive BS sz 1+2 2RS

hardware layout slave sash

2-sash square tilt-turn/turn DS 16
H12 GM Hinge side axxent 24+



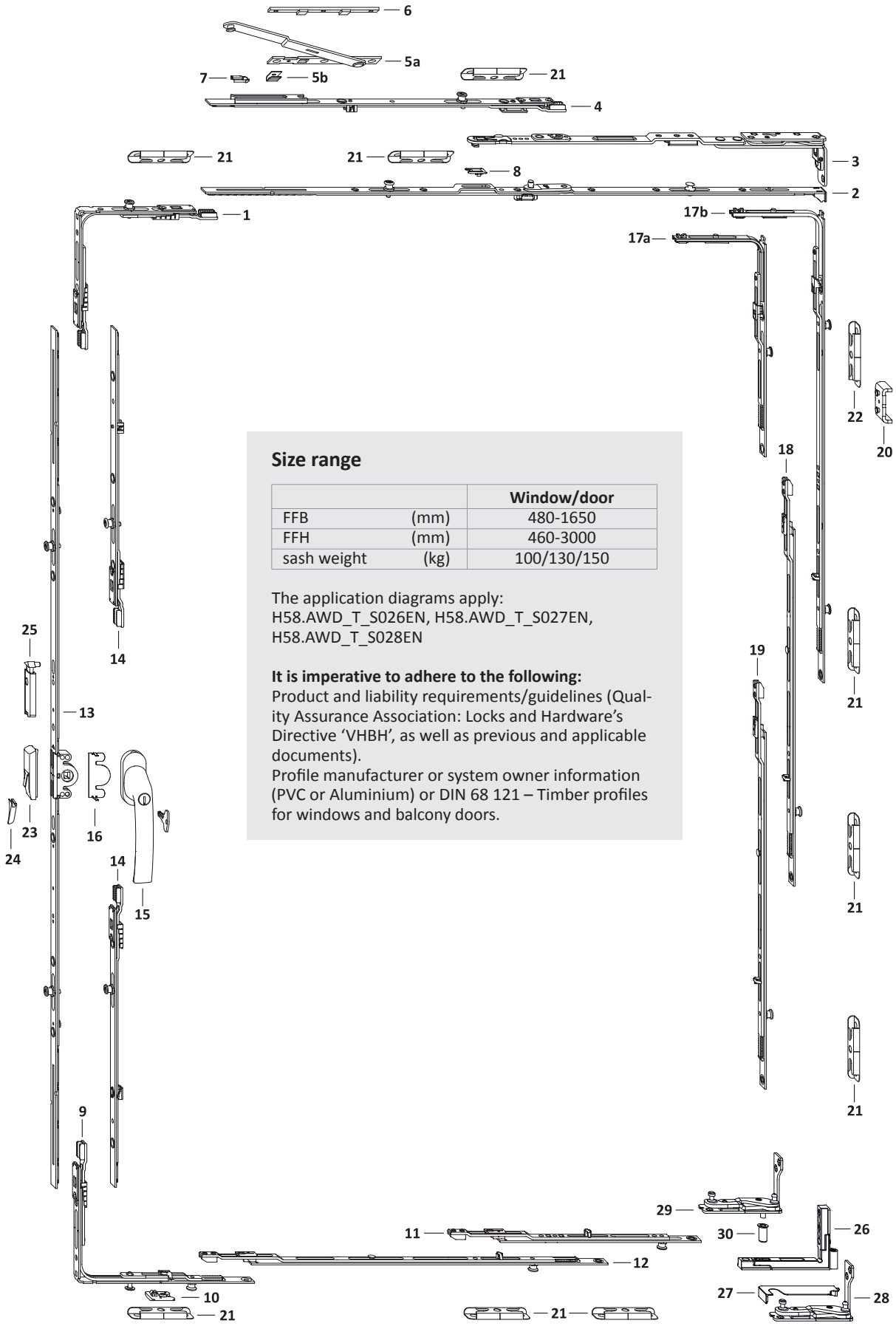


Size range

		Window/door
FFB	(mm)	480-1450
FFH	(mm)	460-3000
sash weight	(kg)	100/130/150

The application diagrams apply:
H58.AWD_T_S026EN, 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.



Size range

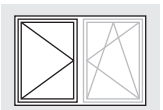
		Window/door
FFB	(mm)	480-1650
FFH	(mm)	460-3000
sash weight	(kg)	100/130/150

The application diagrams apply:
H58.AWD_T_S026EN, 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.

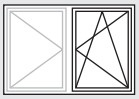
List of fittings slave sash

2-sash square tilt-turn/turn DS 16
H12 GM Hinge side axxent 24+



Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Number of frame parts / Pos.	
						In the main sash	46	47
31	corn.drive VSO 1RS	TEUL4010- ...	1	480–1450			1	
32	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				
	stay sash part AF AX sz 5 1RS	TSSV0330- ...		1051–1450			1	
33	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				
34	linkage AF sz 1	TZZS0150- ...	1	1251–1450				
35a	locking part VSU/K 56+ 1S 1RS	TEVR1340- ...	1	480–1450	460– 800		1	
35b	corn.drive AF VSU/K 56+ 1S 1RS	TEUL5030- ...	1	480–1450	801–3000		1	
36a	run-up plate FH KRL56	Ref. PDB, TRAL01	1	480–1450	460– 800			
36b	run up block AF 13 mm 13	TFFH0080- ...	1	480–1450	801–3000			
37	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 5+ 1RS	TVSL0350- ...		851–1050			1	
	extension sz 2+ 1RS	TVSL0320- ...		1051–1250			1	
	extension sz 4+ 1RS	TVSL0340- ...		1251–1450			1	
38	linkage BS/FH sz 2+ 1RS	TZBS0190- ...	1	1051–1450			1	
39a	sec.sash gear 16 sz 30	TGKS0010- ...	1		460– 600	230– 300		
	sec.sash gear 16 AF 60/G300	TGKS4030- ...			601– 800	300– 400		
39b	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		
40	linkage AF sz 1 1SB-RS	TZKS1020- ...	1		2401–2800			
	linkage AF sz 2 1SB-RS	TZKS1030- ...			2801–3000			
41	linkage AF sz 1 1SB-VSU	TZKS1060- ...	1		2401–2800			
	linkage AF sz 2 1SB-VSU	TZKS1070- ...			2801–3000			
42a	corn.drive BSO/K3+ 1RS	TEUL2400- ...	1		460–1000			1
42b	corn.drive BS/K3 sz 1+ 2RS	TEUL2380- ...	1		1001–1200		1	1
	corn.drive BS/K3 sz 2+ 2RS	TEUL2390- ...			1201–3000		1	1
43	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	
44	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	
45	anti-lift device	Ref. PDB, TFAH	1		460–3000			
46	striker plate S-RS	Ref. PDB, TRSK						
47	striker plate S-RS WK2BSO	Ref. PDB, TRSK03						
on request								
48	stop	Ref. PDB, FRZF04	1		601–3000			
49	striker snapper A0767	TRST0010- ...	1		1601–3000			

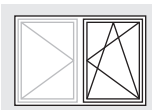
Hinge side turning points						
Pos.	Description	Part number		required as per sash weight		
		surface TS	RAL7037	100 kg	130 kg	150 kg
50	corner hinge AX	Ref. PDB, TBEB41		1	1	1
51	cover cap AX EL	Ref. PDB, TKEL41		1	1	1
52	bottom hinge AX	Ref. PDB, TBEV41		1		
53	bottom hinge AX Ø8	Ref. PDB, TBEV42			1	1
54	supporting dowel AX	TBAV4010-0 ...			1	1



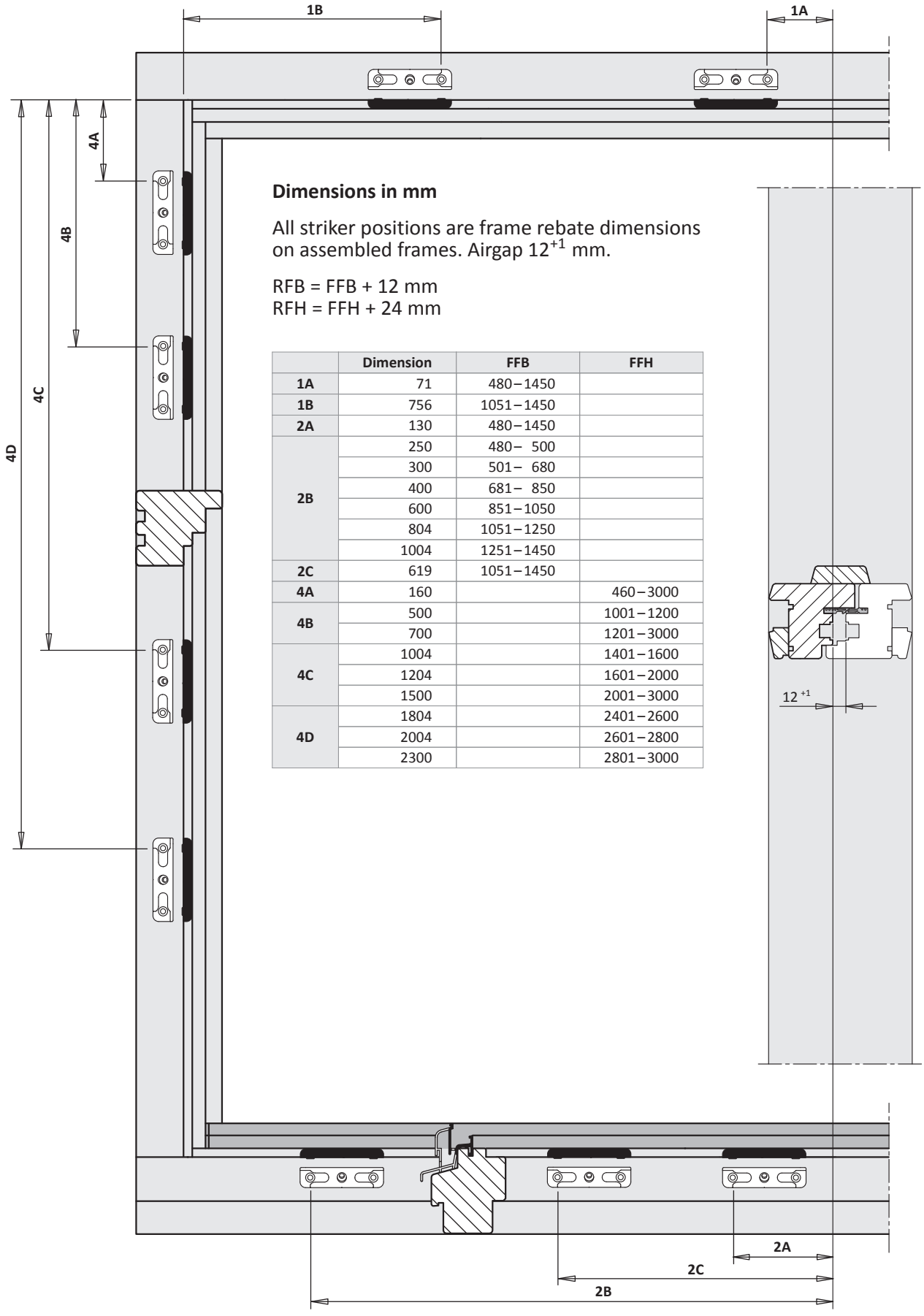
Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Number of frame parts / Pos.	
							21	22
1	corn.drive VSO 1RS	TEUL4010- ...	1	480–1650			1	
2	stay sash part AF AX sz 1	TSSV4000- ...	1	480– 680				
	stay sash part AF AX 2+3 1RS	TSSV0310- ...		681– 850				
	stay sash part AF AX sz 4 1RS	TSSV0320- ...		851–1050				
	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	linkage additional stay 1RS	TZOK1010- ...	1	1251–1650			1	
5	additional stay	Ref. PDB, TSZS	1	1251–1650				
6	packer Z	Ref. PDB, FRUP01	1	1251–1650				
7	tilt restr. additional stay ..	889008	1	1251–1650				
8	tilt restrictor V-V sz 2-4 ..	TFKB0040- ...	1	681–1050	460– 900			
	tilt restrictor V-V sz 5 ..	TFKB0050- ...		1051–1250	460– 900			
9	corn.drive AF VSU/K 56+ 1S 1RS	TEUL5030- ...	1	480–1650			1	
10	run up block AF 13 mm 13	TFFH0080- ...	1	480–1650				
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 5+ 1RS	TVSL0350- ...		851–1050			1	
	extension sz 2+ 1RS	TVSL0320- ...		1051–1250			1	
	extension sz 4+ 1RS	TVSL0340- ...		1251–1450			1	
	extension sz 3+ 1RS	TVSL0330- ...		1451–1650			1	
12	linkage BS/FH sz 2+ 1RS	TZBS0190- ...	1	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- ...			601–1000	300– 500		
	gear 15 AF sz 80 1RS	TGMK4040- ...			1001–1200	500– 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		460–1000			1
17b	corn.drive BS/K3 sz 1+ 2RS	TEUL2380- ...	1		1001–1200		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	anti-lift device	Ref. PDB, TFAH	1		460–3000			
21	striker plate S-RS	Ref. PDB, TRSK						
22	striker plate S-RS WK2BSO	Ref. PDB, TRSK03						
on request								
23	mishandling device	TFBS0010- ...	1					
24	pressure piece	Ref. PDB, TFFD	1					
25	snapper switchable rh.	TFST0011- ...	1		1601–3000			
	snapper switchable lh.	TFST0012- ...			1601–3000			

List of fittings main sash

2-sash square tilt-turn/turn DS 16
H12 GM Hinge side axxent 24+



Hinge side turning points						
Pos.	Description	Part number		required as per sash weight		
		surface TS	RAL7037	100 kg	130 kg	150 kg
26	corner hinge AX	Ref. PDB, TBEB41		1	1	1
27	cover cap AX EL	Ref. PDB, TKEL41		1	1	1
28	bottom hinge AX	Ref. PDB, TBEV41		1		
29	bottom hinge AX Ø8	Ref. PDB, TBEV42			1	1
30	supporting dowel AX	TBAV4010-0 ...			1	1



Dimensions in mm

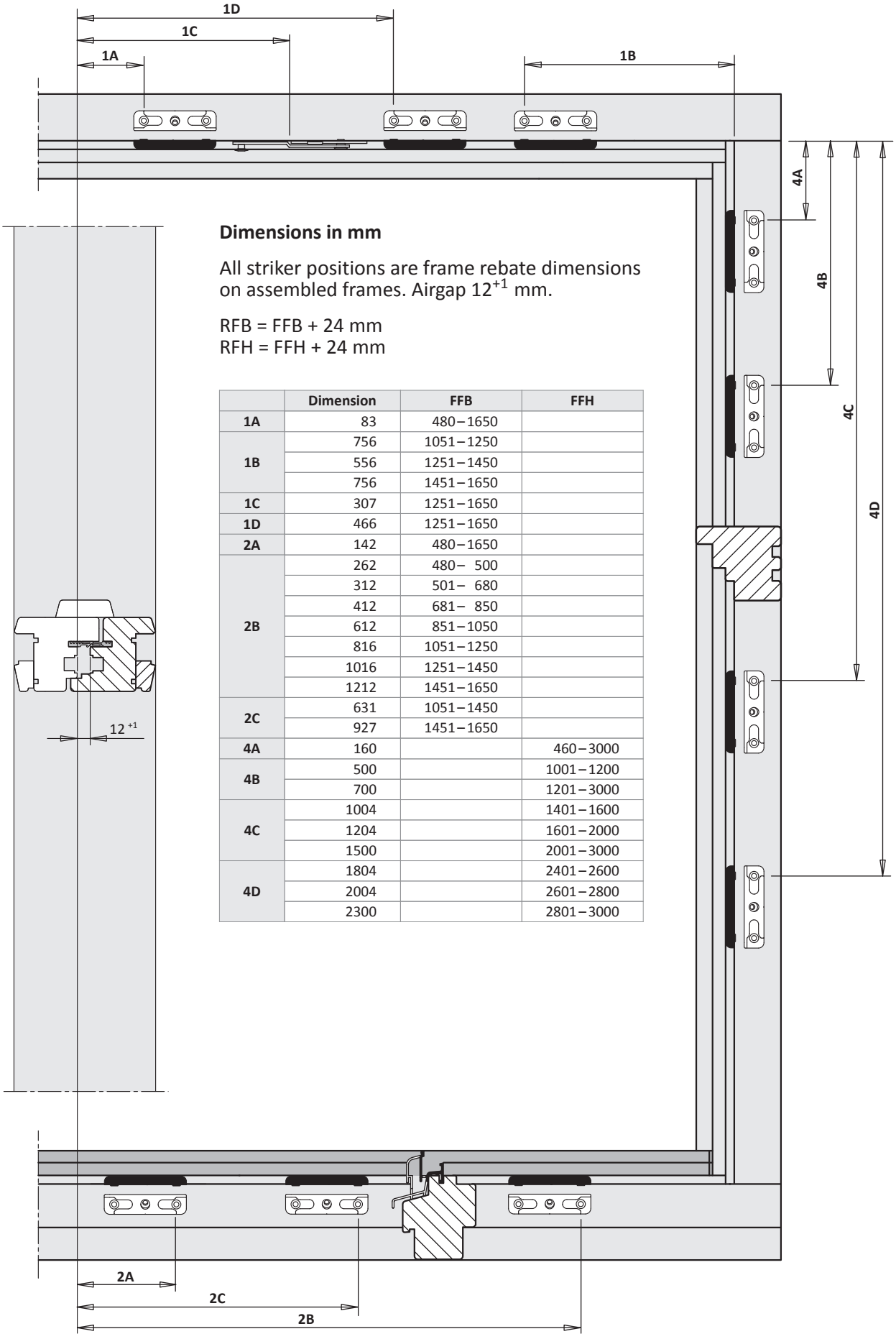
All striker positions are frame rebate dimensions on assembled frames. Airgap 12^{+1} mm.

RFB = FFB + 12 mm
RFH = FFH + 24 mm

	Dimension	FFB	FFH
1A	71	480–1450	
1B	756	1051–1450	
2A	130	480–1450	
2B	250	480– 500	
	300	501– 680	
	400	681– 850	
	600	851–1050	
	804	1051–1250	
	1004	1251–1450	
2C	619	1051–1450	
4A	160		460–3000
4B	500		1001–1200
	700		1201–3000
4C	1004		1401–1600
	1204		1601–2000
	1500		2001–3000
4D	1804		2401–2600
	2004		2601–2800
	2300		2801–3000

Frame dimensions main sash

2-sash square tilt-turn/turn DS 16
H12 GM Hinge side axxent 24+



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

	Dimension	FFB	FFH
1A	83	480 – 1650	
1B	756	1051 – 1250	
	556	1251 – 1450	
	756	1451 – 1650	
1C	307	1251 – 1650	
1D	466	1251 – 1650	
2A	142	480 – 1650	
2B	262	480 – 500	
	312	501 – 680	
	412	681 – 850	
	612	851 – 1050	
	816	1051 – 1250	
	1016	1251 – 1450	
	1212	1451 – 1650	
2C	631	1051 – 1450	
	927	1451 – 1650	
4A	160		460 – 3000
4B	500		1001 – 1200
	700		1201 – 3000
4C	1004		1401 – 1600
	1204		1601 – 2000
	1500		2001 – 3000
4D	1804		2401 – 2600
	2004		2601 – 2800
	2300		2801 – 3000

Basic security

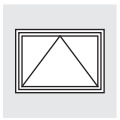
1-sash square tilt	H48.TAFH2M0S048EN	10 - 3

RC1

1-sash square tilt	H48.TAFH2M1S027EN	10 - 7

TITAN AF

Installation instructions



1-sash square tilt

timber 12 mm

basic security

centre handle pos. (variable)

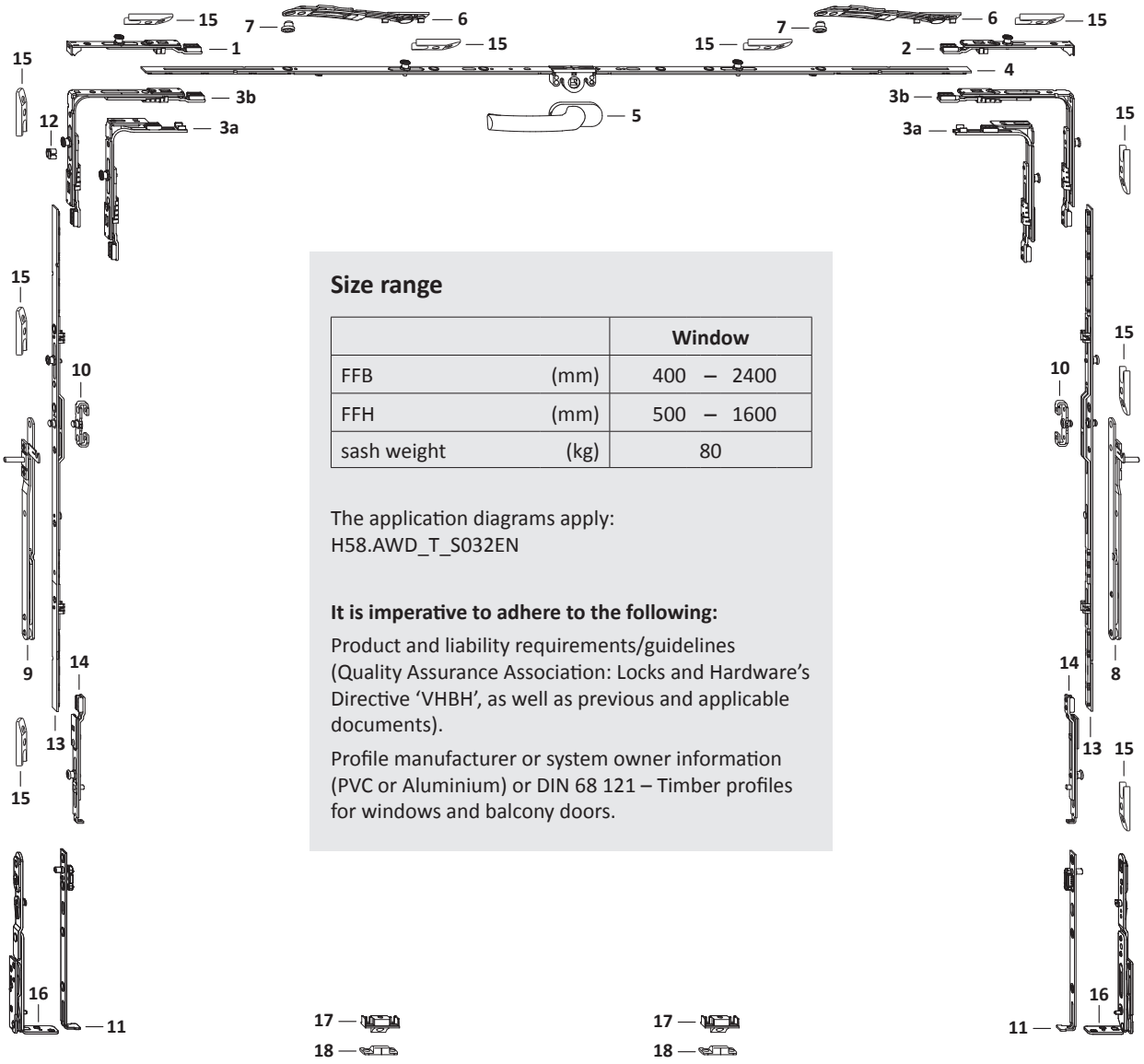
hinge side axxent 24+

surface TS

backset 15 mm

Hardware layout

1-sash square tilt
H12 GM hinge side axxent 24+



Size range

		Window
FFB	(mm)	400 – 2400
FFH	(mm)	500 – 1600
sash weight	(kg)	80

The application diagrams apply:
H58.AWD_T_S032EN

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).

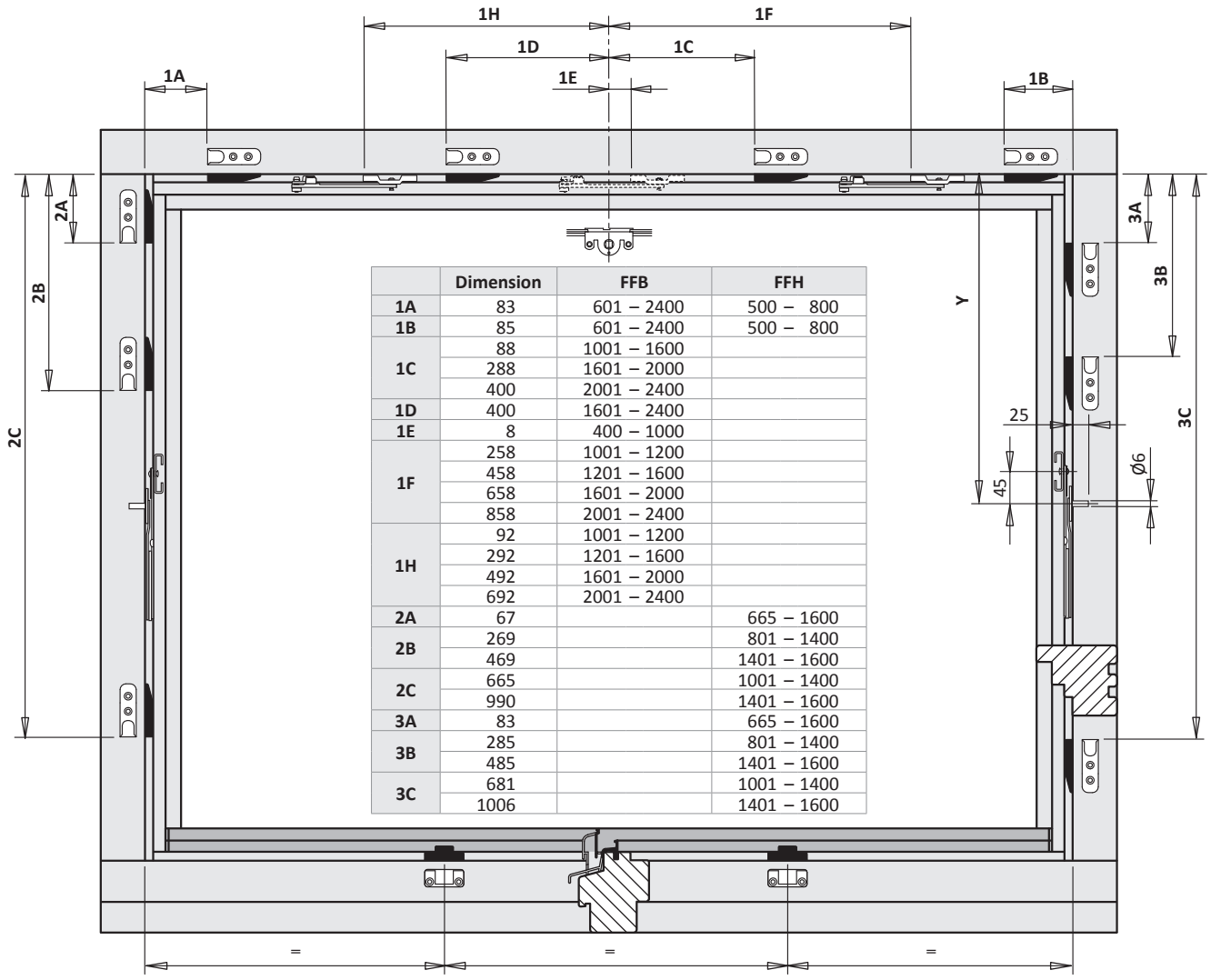
Profile manufacturer or system owner information (PVC or Aluminium) or DIN 68 121 – Timber profiles for windows and balcony doors.

Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Frame Parts Pos. 15
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 VSO 1RS	TEUL4010–...		601 – 2400	801 – 1600		2
4	gear 15 AF sz 60	TGMK4020–...	1	400 – 1000		200 – 500	
	gear 15 AF sz 80 1RS	TGMK4040–...		1001 – 1200		500 – 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 – 1000			
			2	1001 – 2400			
7	telescopic tilt only stay	TFZB0050–...	1	400 – 1000			
			2	1001 – 2400			
8	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–...		601 – 2400	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		
9	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–...		601 – 2400	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		
10	fixing claw UGRP	ZFFP0010–...	2		500 – 800		
11	stay sash part DF V-V 34	TSSV3020–...	2		500 – 1600		
12	travel restrictor	TFHB0010–...	1		665 – 1600		
13	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 below cutting)				1401 – 1600		
14	locking bolt AF VSU/K 1RS	TESC3020–...	2		1001 – 1600		2
15	striker plate 56 A....	ref. PDB, FRSB					

Hinge side turning points					
Pos.	Description	Part number surface TS	QTY - FFB 400 – 1000	1001 – 1800	1801 – 2400
16	stay arm AX DF	ref. PDB, TSAV46	2	2	2
17	sash part MV	ref. PDB, ZFMV01		1	2
18	frame part MV	ref. PDB, ZRZM01		1	2

Frame dimensions

1-sash square tilt
H12 GM hinge side axxent 24+



	Dimension	FFB	FFH
1A	83	601 – 2400	500 – 800
1B	85	601 – 2400	500 – 800
1C	88	1001 – 1600	
	288	1601 – 2000	
	400	2001 – 2400	
1D	400	1601 – 2400	
1E	8	400 – 1000	
1F	258	1001 – 1200	
	458	1201 – 1600	
	658	1601 – 2000	
	858	2001 – 2400	
1H	92	1001 – 1200	
	292	1201 – 1600	
	492	1601 – 2000	
	692	2001 – 2400	
2A	67		665 – 1600
2B	269		801 – 1400
	469		1401 – 1600
2C	665		1001 – 1400
	990		1401 – 1600
3A	83		665 – 1600
3B	285		801 – 1400
	485		1401 – 1600
3C	681		1001 – 1400
	1006		1401 – 1600

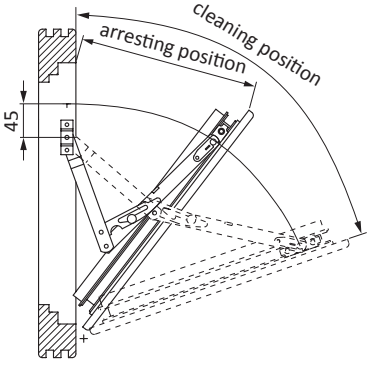
Dimensions in mm

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

RFB = FFB + 24 mm
RFH = FFH + 24 mm

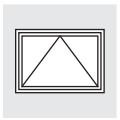
10

80 kg	Dimension	FFB	FFH	ASFP	Opening width – arresting position	Opening angle – cleaning position
Y	272	400 – 600	665 – 800	sz 1	298 – 275	44° – 33°
	402		801 – 1400	sz 1	352 – 263	43° – 18°
	602		1401 – 1600	sz 2	304 – 280	36° – 29°
	120	601 – 2400	500 – 600	sz 1	235 – 228	45° – 36°
	120		601 – 800	sz 2	213 – 205	58° – 41°
	402		801 – 1400	sz 1	352 – 263	43° – 18°
	602		1401 – 1600	sz 2	304 – 280	36° – 29°



TITAN AF

Installation instructions



1-sash square tilt

timber 12 mm

RC1

centre handle pos. (variable)

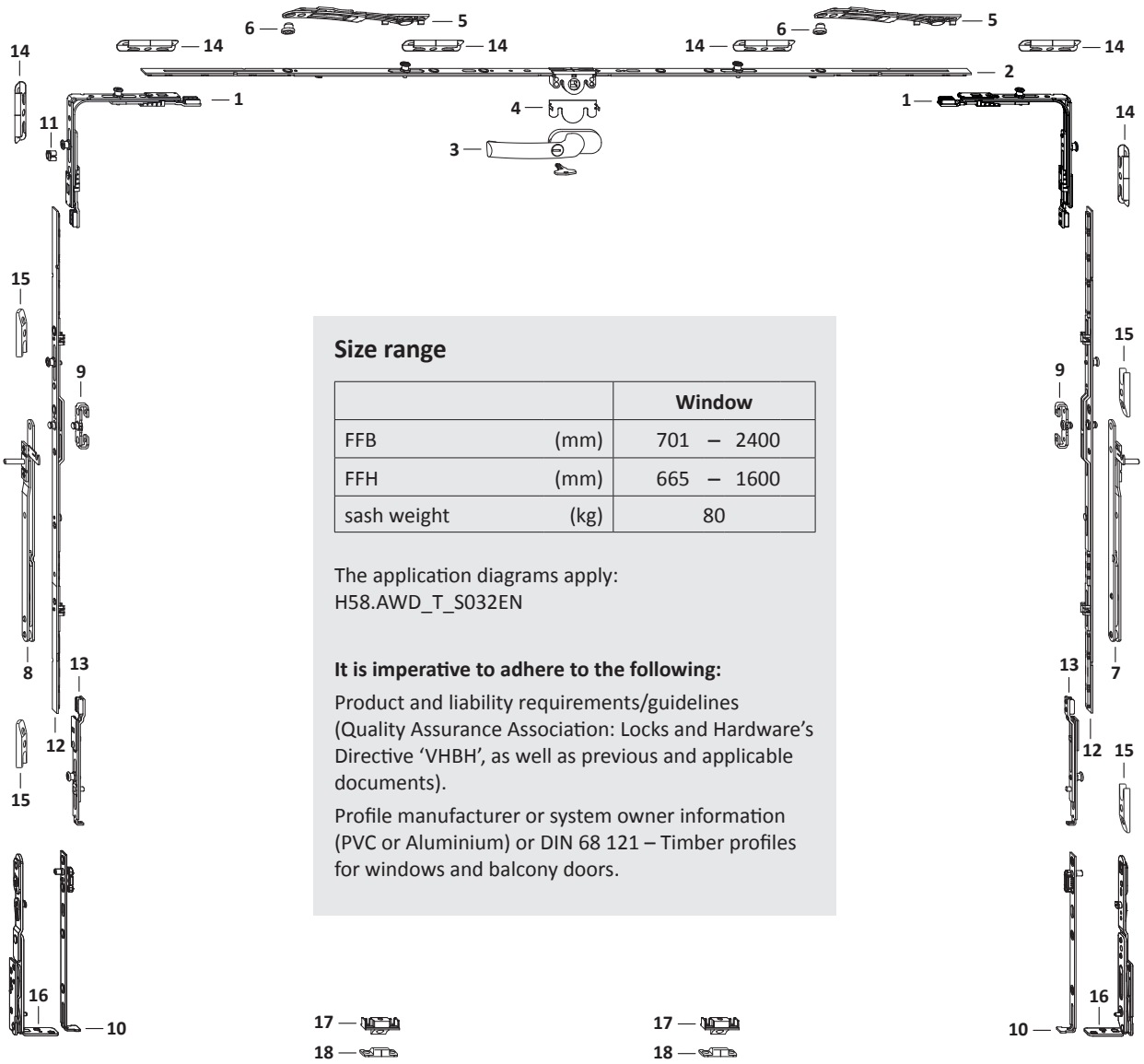
hinge side axxent 24+

surface TS

backset 15 mm

Hardware layout

1-sash square tilt
H12 GM hinge side axxent 24+



Size range

		Window
FFB	(mm)	701 – 2400
FFH	(mm)	665 – 1600
sash weight	(kg)	80

The application diagrams apply:
H58.AWD_T_S032EN

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).

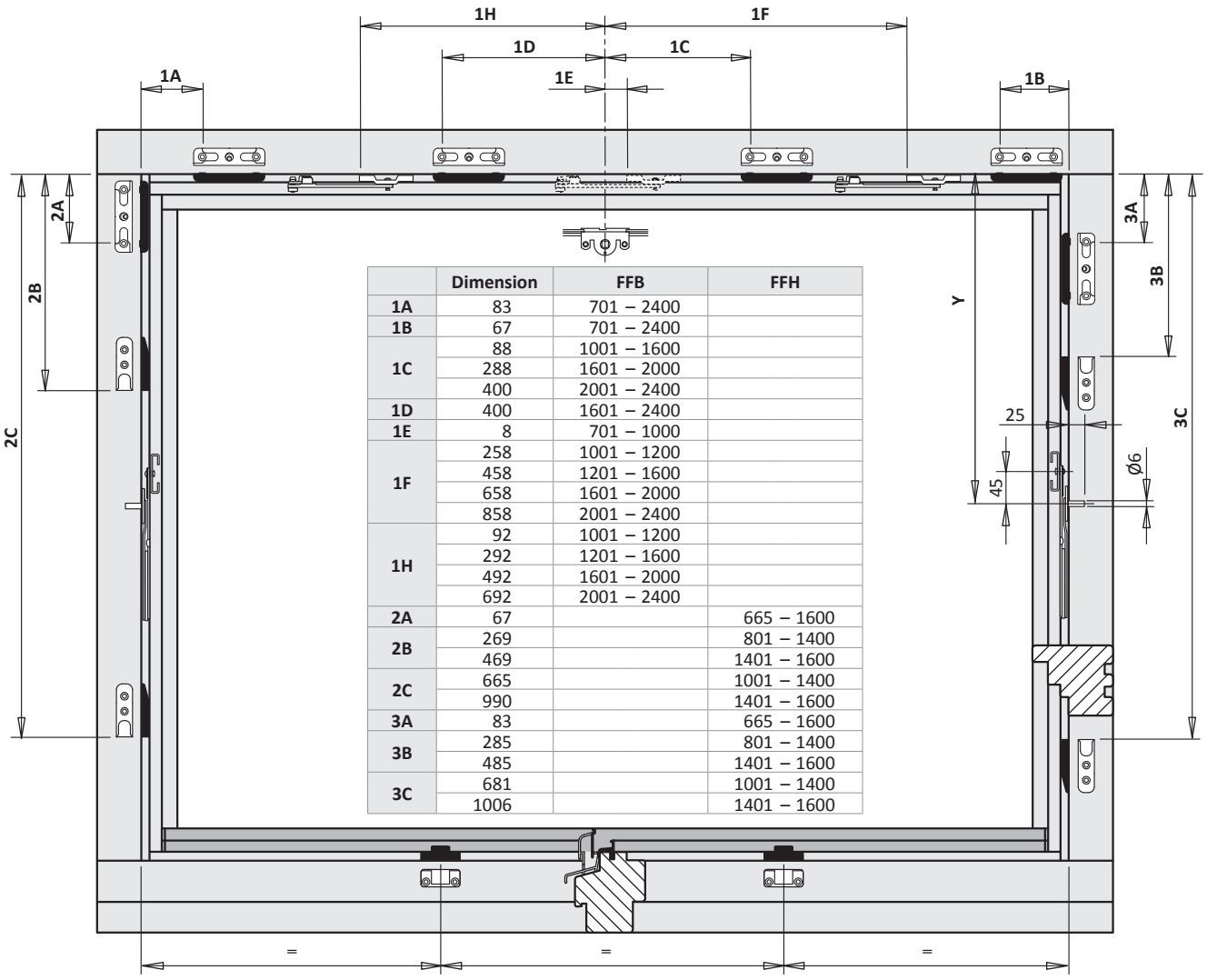
Profile manufacturer or system owner information (PVC or Aluminium) or DIN 68 121 – Timber profiles for windows and balcony doors.

Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Frame Parts	
							Pos. 14	Pos. 15
1	corn.drive AF VSO 2RS A0055	TEUL4070–...	2	701 – 2400			4	
2	gear 15 AF sz 70 1RS	TGMK4030–...	1	701 – 1000		350 – 500	1	
	gear 15 AF sz.80 1RS	TGMK4040–...		1001 – 1200		500 – 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	
3	handle Globe lockable 100Nm	ref. EBS, ZHGA100	1	701 – 2400				
4	anti-drill guard E	TGBS0010–...	1	701 – 2400				
5	telescopic tilt only stay	TSKF0020–...	1	701 – 1000				
			2	1001 – 2400				
6	telescopic tilt only stay	TFZB0050–...	1	701 – 1000				
			2	1001 – 2400				
7	tilt only safety stay 25 sz.1 rh.	ASFP0031–...	1	701 – 2400	665 – 1400			
	tilt only safety stay 25 sz.2 rh.	ASFP0041–...			1401 – 1600			
8	tilt only safety stay 25 sz.1 lh.	ASFP0032–...	1	701 – 2400	665 – 1400			
	tilt only safety stay 25 sz.2 lh.	ASFP0042–...			1401 – 1600			
9	fixing claw UGRP	ZFFP0010–...	2		665 – 800			
10	stay sash part DF V-V 34	TSSV3020–...	2		665 – 1600			
11	travel restrictor	TFHB0010–...	1		665 – 1600			
12	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 below cutting)				1401 – 1600			
13	locking bolt AF VSU/K 1RS	TESC3020–...	2		1001 – 1600			2
14	striker plate SL-RS A....	ref. PDB, TRSK						
15	striker plate 56 A....	ref. PDB, FRSB						

Hinge side turning points				
Pos.	Description	Part number	QTY - FFB	
		surface TS	701 – 1800	1801 – 2400
16	stay arm AX DF	ref. PDB, TSAV46	2	2
17	sash part MV	ref. PDB, ZFMV01	1	2
18	frame part MV	ref. PDB, ZRZM01	1	2

Frame dimensions

1-sash square tilt
H12 GM hinge side axxent 24+



	Dimension	FFB	FFH
1A	83	701 – 2400	
1B	67	701 – 2400	
1C	88	1001 – 1600	
	288	1601 – 2000	
	400	2001 – 2400	
1D	400	1601 – 2400	
1E	8	701 – 1000	
1F	258	1001 – 1200	
	458	1201 – 1600	
	658	1601 – 2000	
	858	2001 – 2400	
1H	92	1001 – 1200	
	292	1201 – 1600	
	492	1601 – 2000	
	692	2001 – 2400	
2A	67		665 – 1600
2B	269		801 – 1400
	469		1401 – 1600
2C	665		1001 – 1400
	990		1401 – 1600
3A	83		665 – 1600
3B	285		801 – 1400
	485		1401 – 1600
3C	681		1001 – 1400
	1006		1401 – 1600

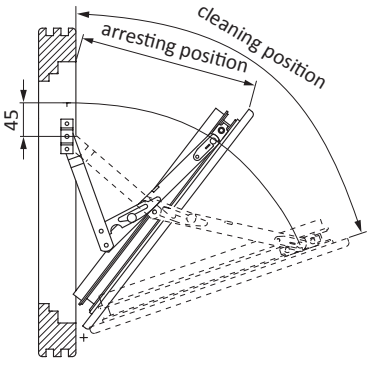
Dimensions in mm

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

RFB = FFB + 24 mm
RFH = FFH + 24 mm

10

80 kg	Dimension	FFB	FFH	ASFP	Opening width – arresting position	Opening angle – cleaning position
Y	272	701 – 2400	665 – 800	Gr.1	298 – 275	44° – 33°
	402		801 – 1400	Gr.1	352 – 263	43° – 18°
	602		1401 – 1600	Gr.2	304 – 280	36° – 29°



Basic security

1-sash square tilt-turn	H48.TAFH2N0S003EN	11 - 3
2-sash square tilt-turn/turn DS 16	H48.TAFH2N0S004EN	11 - 5

Tilt sash

1-sash square tilt	H48.TAFH2M0S051EN	11 - 9

RC1

1-sash square tilt-turn	H48.TAFH2N1S003EN	11 - 13
2-sash square tilt-turn/turn DS 16	H48.TAFH2N1S004EN	11 - 15

RC2

1-sash square tilt-turn	H48.TAFH2N2+S003EN	11 - 19
2-sash square tilt-turn/turn DS 16	H48.TAFH2N2+S004EN	11 - 21

RC2 ECO

1-sash square tilt-turn	H48.TAFH2N2S003EN	11 - 25
2-sash square tilt-turn/turn DS 16	H48.TAFH2N2S004EN	11 - 27

TITAN AF

Installation instructions

GS

AEROCONTROL

1-sash square tilt-turn

timber 12 mm

basic security

fixed handle position and centre handle pos. (variable)

hinge side axxent 24+

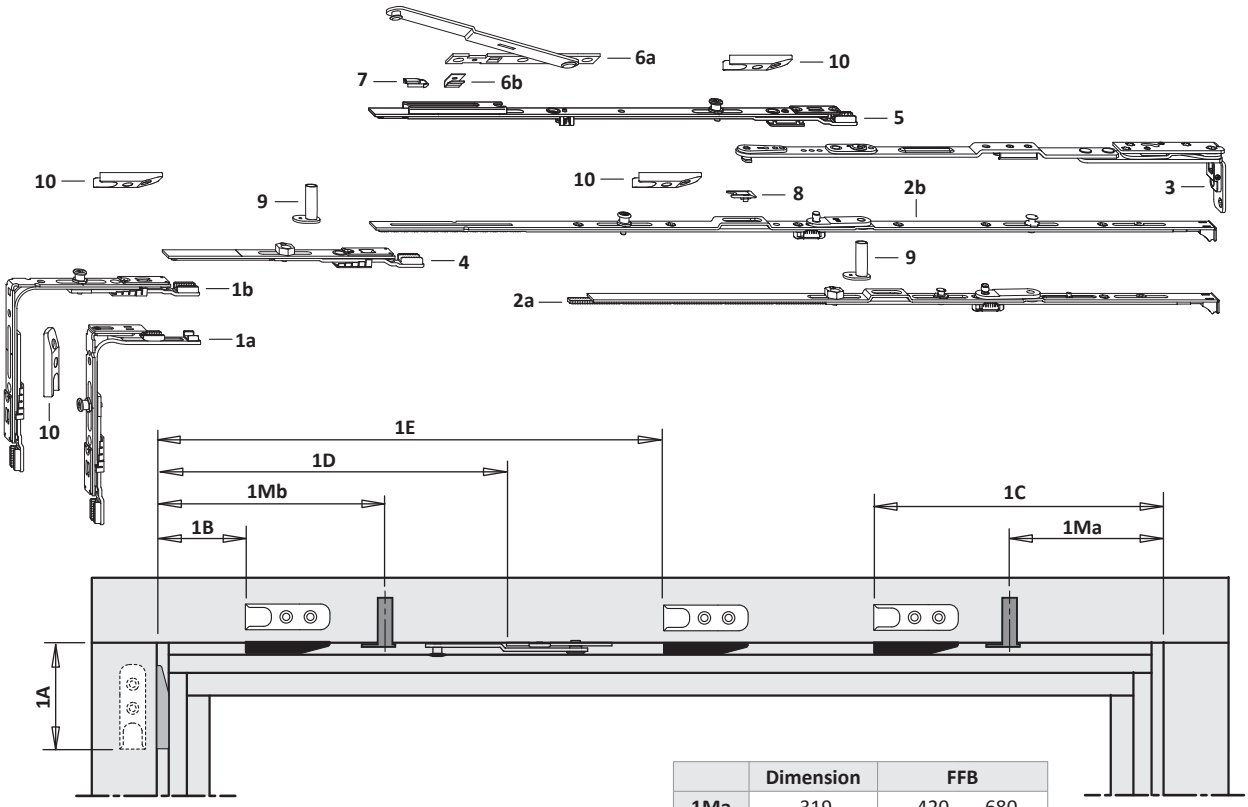
surface TS

All further necessary information on the AEROCONTROL programme (opening and closure monitoring) like magnetic switches, assembly and connection instructions and the extensive accessory programme can be taken from our separate product catalogue DRIVE - AEROCONTROL.

AEROCONTROL

1-sash square tilt-turn
H12 hinge side axxent 24+

FFB 420 – 1650



	Dimension	FFB
1Ma	319	420 – 680
1Mb	286	681 – 1650
1A	67	420 – 520
1B	83	521 – 1650
1C	556	1051 – 1250
	436	1251 – 1450
	556	1451 – 1650
1D	507	1251 – 1650
1E	666	1251 – 1650

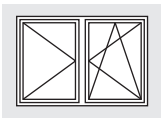
Dimensions in mm
All striker positions are frame rebate dimensions on assembled frames. Airgap 12^{+1} mm.

RFB = FFB + 24 mm
RFH = FFH + 24 mm

Pos.	Description	Part number	QTY	FFB	FFH G - fixed	FFH G - centre	Frame Parts Pos. 10
1a	corn.drive AF VSO narrow 1RS	TEUL4020–...	1	420 – 520	450 – 3000	460 – 3000	1
1b	corn.drive VSO 1RS	TEUL4010–...		521 – 1650	450 – 3000	460 – 3000	1
2a	stay sash part AF AX UE sz 1	TSSV4010–...	1	420 – 680			
2b	stay sash part AF AX sz 1	TSSV4000–...		681 – 880			
	stay sash part AF AX sz 2+3 1RS	TSSV0310–...		881 – 1050			
	stay sash part AF AX sz 4 1RS	TSSV0320–...		1051 – 1250			1
	stay sash part AF AX sz 2+3 1RS	TSSV0310–...		1251 – 1450			1
	stay sash part AF AX sz 4 1RS	TSSV0320–...		1451 – 1650			1
3	stay arm AX sz 1	ref. PDB, TSAV41	1	420 – 880			
	stay arm AX sz 2+3	ref. PDB, TSAV42		881 – 1050			
	stay arm AX sz 4	ref. PDB, TSAV44		1051 – 1250			
	stay arm AX sz 2+3	ref. PDB, TSAV42		1251 – 1450			
	stay arm AX sz 4	ref. PDB, TSAV44		1451 – 1650			
4	linkage AF UE sz 1 1M	TZZS0160–...	1	681 – 1650			
5	linkage additional stay 1RS	TZOK1010–...	1	1251 – 1650			1
6	additional stay	ref. PDB, TSZS	1	1251 – 1650			
7	tilt restr. additional stay	889008	1	1251 – 1650			
8	tilt restrictor V-V sz 2-4	TFKB0040–...	1	881 – 1650	450 – 900	460 – 900	
9	UMS001 VdS-contr. 4p. 6M (25 pieces)	315101	1	420 – 1650			
10	striker plate 56 A....	ref. PDB, FRSB					

TITAN AF

Installation instructions



GS

AEROCONTROL

2-sash square tilt-turn/turn DS 16

timber 12 mm

basic security

fixed handle position and centre handle pos. (variable)

hinge side axxent 24+

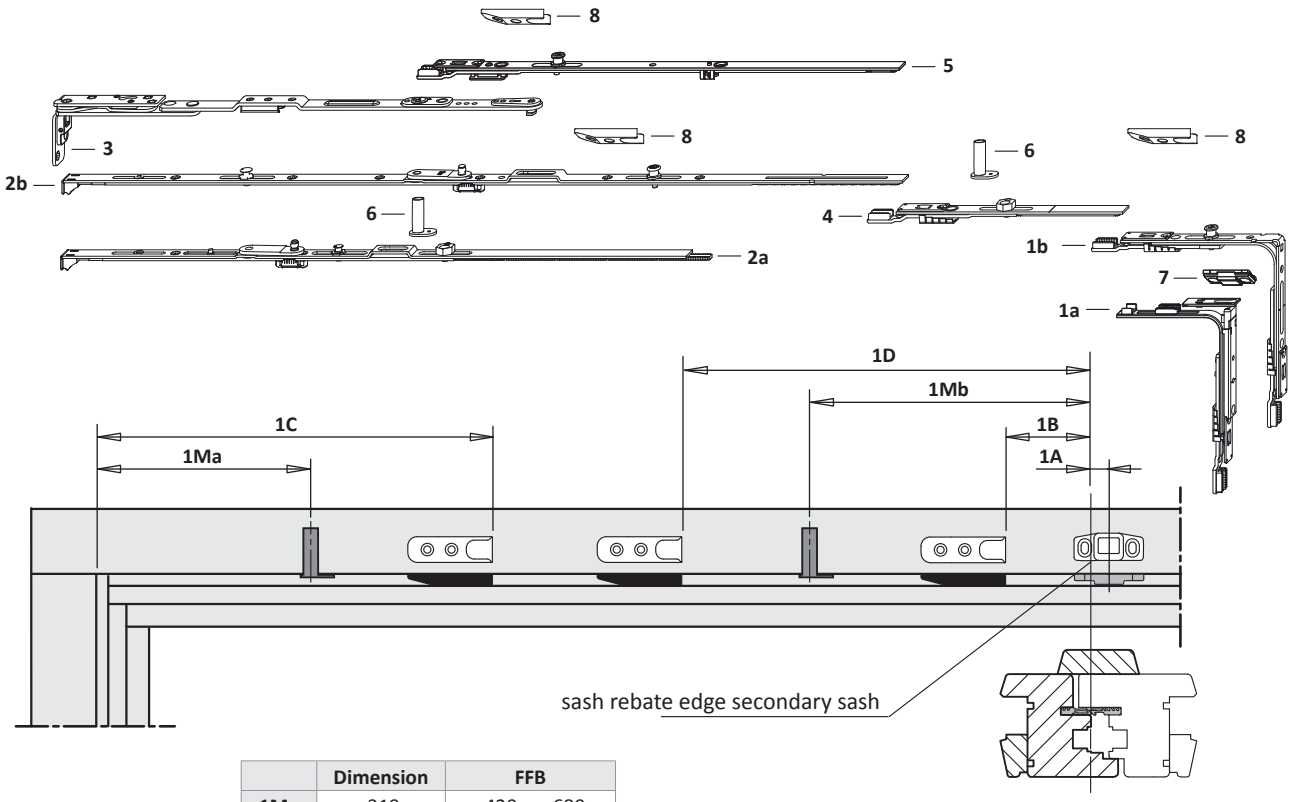
surface TS

All further necessary information on the AEROCONTROL programme (opening and closure monitoring) like magnetic switches, assembly and connection instructions and the extensive accessory programme can be taken from our separate product catalogue DRIVE - AEROCONTROL.

AEROCONTROL slave sash

2-sash square tilt-turn/turn DS 16
H12 hinge side axxent 24+

FFB 420 – 1450



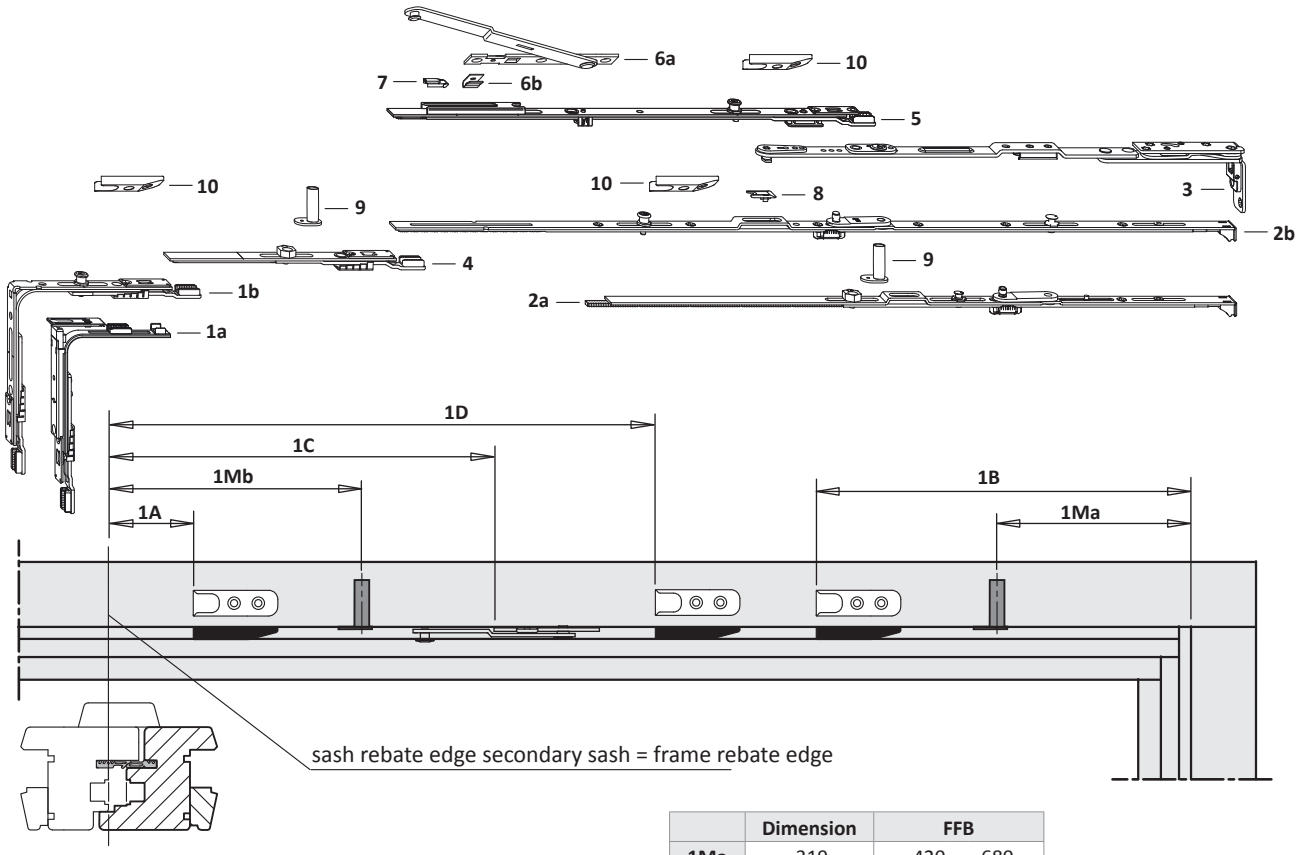
	Dimension	FFB
1Ma	319	420 – 680
1Mb	274	681 – 1450
1A	6	420 – 520
1B	71	521 – 1450
1C	556	1051 – 1250
	436	1251 – 1450
1D	654	1251 – 1450

Dimensions in mm
All striker positions are frame rebate dimensions on assembled frames. Airgap 12^{+1} mm.

RFB = FFB + 12 mm
RFH = FFH + 24 mm

Pos.	Description	Part number	QTY	FFB	FFH G - fixed	FFH G - centre	Frame Parts Pos. 7	Frame Parts Pos. 8
1a	corn.drive VSO narrow RSA/11mm	TEUL4150–...	1	420 – 520	450 – 3000	460 – 3000	1	
1b	corn.drive VSO 1RS	TEUL4010–...		521 – 1450	450 – 3000	460 – 3000		1
2a	stay sash part AF AX UE sz 1	TSSV4010–...	1	420 – 680				
2b	stay sash part AF AX sz 1	TSSV4000–...		681 – 880				
	stay sash part AF AX sz 2+3 1RS	TSSV0310–...		881 – 1050				
	stay sash part AF AX sz 4 1RS	TSSV0320–...		1051 – 1250				1
	stay sash part AF AX sz 2+3 1RS	TSSV0310–...		1251 – 1450				1
3	stay arm AX sz 1	ref. PDB, TSAV41	1	420 – 880				
	stay arm AX sz 2+3	ref. PDB, TSAV42		881 – 1050				
	stay arm AX sz 4	ref. PDB, TSAV44		1051 – 1250				
	stay arm AX sz 2+3	ref. PDB, TSAV42		1251 – 1450				
4	linkage AF UE sz 1 1M	TZZS0160–...	1	681 – 1450				
5	linkage KK/AF sz 2 1RS	TZKK1020–...	1	1251 – 1450				1
6	UMS001 VdS-contr. 4p. 6M (25 pieces)	315101	1	420 – 1450				
7	short striker V kurz A....	ref. PDB, FRZV12						
8	striker plate 56 A....	ref. PDB, FRSB						

FFB 420 – 1650



	Dimension	FFB
1Ma	319	420 – 680
1Mb	286	681 – 1650
1A	83	521 – 1650
1B	556	1051 – 1250
	436	1251 – 1450
	556	1451 – 1650
1C	507	1251 – 1650
1D	666	1251 – 1650

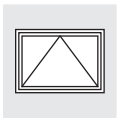
Dimensions in mm
All striker positions are frame rebate dimensions on assembled frames. Airgap 12^{+1} mm.

RFB = FFB + 24 mm
RFH = FFH + 24 mm

Pos.	Description	Part number	QTY	FFB	FFH G - fixed	FFH G - centre	Frame Parts Pos. 10
1a	corn.drive VSO narrow RSA/11mm	TEUL4150–...	1	420 – 520	450 – 3000	460 – 3000	
1b	corn.drive VSO 1RS	TEUL4010–...		521 – 1650	450 – 3000	460 – 3000	1
2a	stay sash part AF AX UE sz 1	TSSV4010–...	1	420 – 680			
2b	stay sash part AF AX sz 1	TSSV4000–...		681 – 880			
	stay sash part AF AX sz 2+3 1RS	TSSV0310–...		881 – 1050			
	stay sash part AF AX sz 4 1RS	TSSV0320–...		1051 – 1250			1
	stay sash part AF AX sz 2+3 1RS	TSSV0310–...		1251 – 1450			1
	stay sash part AF AX sz 4 1RS	TSSV0320–...		1451 – 1650			1
3	stay arm AX sz 1	ref. PDB, TSAV41	1	420 – 880			
	stay arm AX sz 2+3	ref. PDB, TSAV42		881 – 1050			
	stay arm AX sz 4	ref. PDB, TSAV44		1051 – 1250			
	stay arm AX sz 2+3	ref. PDB, TSAV42		1251 – 1450			
	stay arm AX sz 4	ref. PDB, TSAV44		1451 – 1650			
4	linkage AF UE sz 1 1M	TZZS0160–...	1	681 – 1650			
5	linkage additional stay 1RS	TZOK1010–...	1	1251 – 1650			1
6	additional stay	ref. PDB, TSZS	1	1251 – 1650			
7	tilt restr. additional stay	889008	1	1251 – 1650			
8	tilt restrictor V-V sz 2-4	TFKB0040–...	1	881 – 1650	450 – 900	460 – 900	
9	UMS001 VdS-contr. 4p. 6M (25 pieces)	315101	1	420 – 1650			
10	striker plate 56 A....	ref. PDB, FRSB					

TITAN AF

Installation instructions



GS

AEROCONTROL

1-sash square tilt

timber 12 mm

basic security

centre handle pos. (variable)

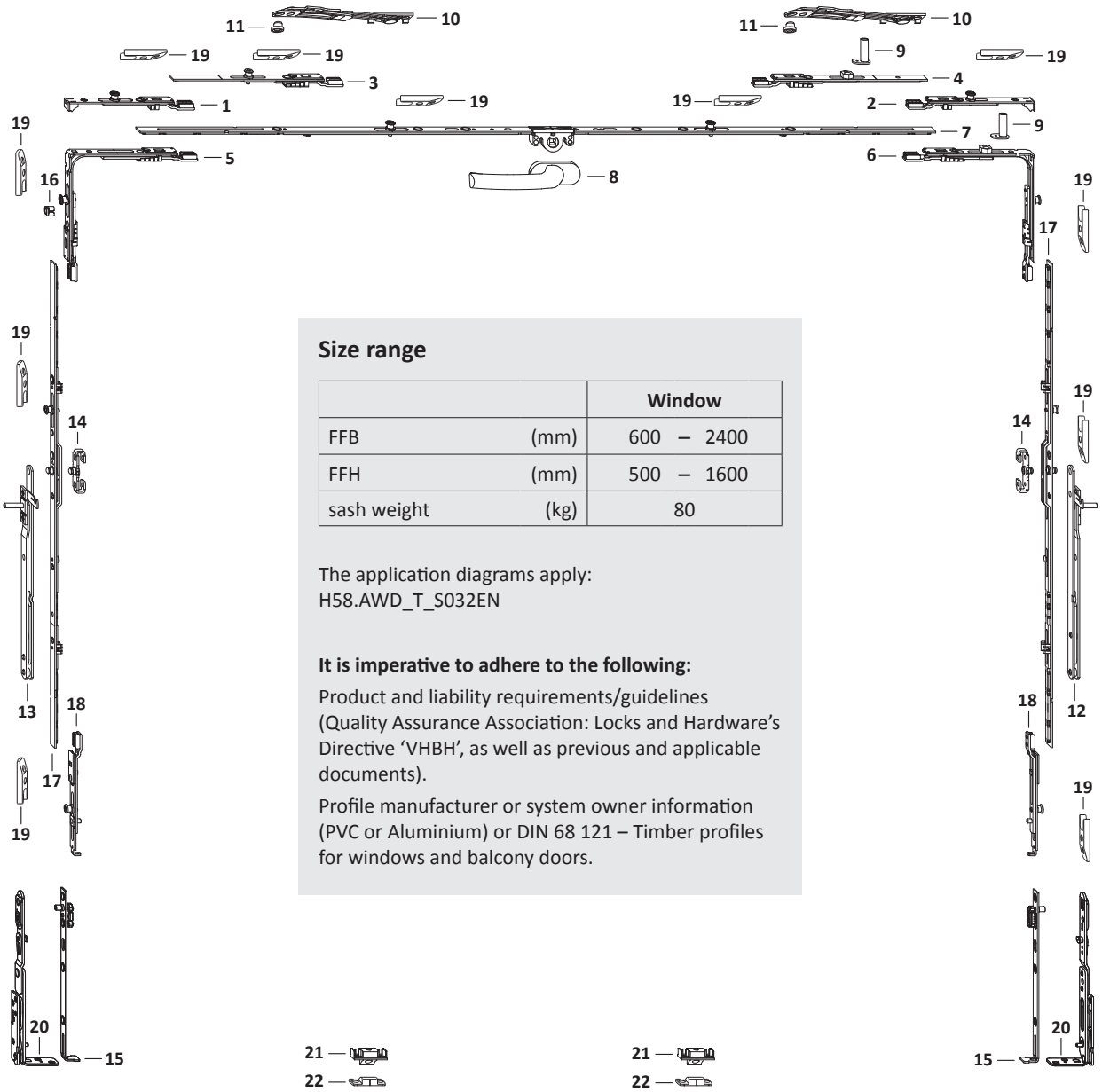
hinge side axxent 24+

surface TS

backset 15 mm

Hardware layout AEROCONTROL

1-sash square tilt
H12 GM hinge side axxent 24+



Size range

		Window
FFB	(mm)	600 – 2400
FFH	(mm)	500 – 1600
sash weight	(kg)	80

The application diagrams apply:
H58.AWD_T_S032EN

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).

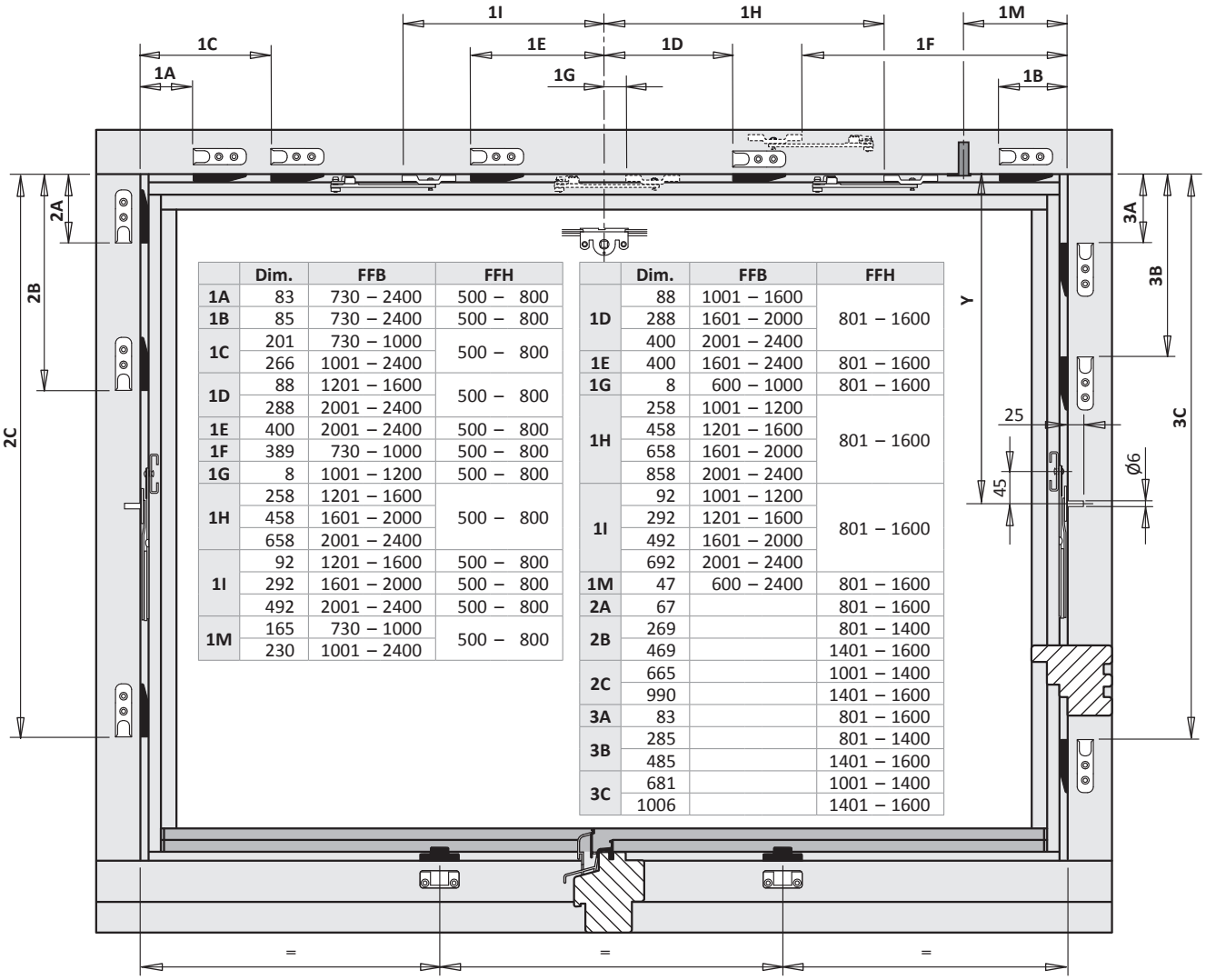
Profile manufacturer or system owner information (PVC or Aluminium) or DIN 68 121 – Timber profiles for windows and balcony doors.

Pos.	Description	Part number	QTY	FFB	FFH	Dimension G	Frame Parts Pos. 19
1	locking bolt AF VS 180° 1RS	TESC2020–...	1	730 – 2400	500 – 800		1
2	locking bolt AF tilt 90° 1RS	TESC2010–...	1	730 – 2400	500 – 800		1
3	linkage AF sz.1 1RS/A (cut 65 mm)	TZZS0200–...	1	730 – 1000	500 – 800		1
	linkage AF sz.1 1RS/A			1001 – 2400			
4	linkage AF UE sz 1 1M (cut 65 mm)	TZZS0160–...	1	730 – 1000	500 – 800		
	linkage AF UE sz 1 1M			1001 – 2400			
5	corn.drive VSO 1RS	TEUL4010–...	1	600 – 2400	801 – 1600		1
6	corn.drive AF VSO UE 1M 1RS	TEUL4100–...	1	600 – 2400	801 – 1600		
7	gear 15 AF sz 20	TGMK4010–...	1	730 – 1000	500 – 800	365 – 500	
	gear 15 AF sz 60	TGMK4020–...		1001 – 1200		500 – 600	
	gear 15 AF sz 80 1RS	TGMK4040–...		1201 – 1600		600 – 800	1
	gear 15 AF sz 120 1RS	TGMK4050–...		1601 – 2000		800 – 1000	1
	gear 15 AF sz 160 2RS 70	TGMK4170–...		2001 – 2400		1000 – 1200	2
	gear 15 AF sz 60	TGMK4020–...		600 – 1000	801 – 1600	300 – 500	
	gear 15 AF sz 80 1RS	TGMK4040–...		1001 – 1200		500 – 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
8	handle Globe	ref. EBS, ZHGS	1	600 – 2400			
9	UMS001 VdS-contr. 4p. 6M (25 pieces)	315101	1	600 – 2400			
10	telescopic tilt only stay	TSKF0020–...	1	730 – 1200	500 – 800		
			2	1201 – 2400			
			1	600 – 1000	801 – 1600		
			2	1001 – 2400			
11	telescopic tilt only stay	TFZB0050–...	1	730 – 1200	500 – 800		
			2	1201 – 2400			
			1	600 – 1000	801 – 1600		
			2	1001 – 2400			
12	tilt only safety stay 25 sz.1 rh.	ASFP0031–...	1	600 – 2400	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		
13	tilt only safety stay 25 sz.1 lh.	ASFP0032–...	1	600 – 2400	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		
14	fixing claw UGRP	ZFFP0010–...	2		500 – 800		
15	stay sash part DF V-V 34	TSSV3020–...	2		500 – 1600		
16	travel restrictor	TFHB0010–...	1		801 – 1600		
17	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 below cutting)				1401 – 1600		
18	locking bolt AF VSU/K 1RS	TESC3020–...	2		1001 – 1600		2
19	striker plate 56 A....	ref. PDB, FRSB					

Hinge side turning points					
Pos.	Description	Part number surface TS	QTY - FFB 600 – 1000	1001 – 1800	1801 – 2400
20	stay arm AX DF	ref. PDB, TSAV46	2	2	2
21	sash part MV	ref. PDB, ZFMV01		1	2
22	frame part MV	ref. PDB, ZRZM01		1	2

Frame dimensions AEROCONTROL

1-sash square tilt
H12 GM hinge side axxent 24+



	Dim.	FFB	FFH
1A	83	730 – 2400	500 – 800
1B	85	730 – 2400	500 – 800
1C	201	730 – 1000	500 – 800
	266	1001 – 2400	
1D	88	1201 – 1600	500 – 800
	288	2001 – 2400	
1E	400	2001 – 2400	500 – 800
1F	389	730 – 1000	500 – 800
1G	8	1001 – 1200	500 – 800
1H	258	1201 – 1600	500 – 800
	458	1601 – 2000	
	658	2001 – 2400	
1I	92	1201 – 1600	500 – 800
	292	1601 – 2000	500 – 800
	492	2001 – 2400	500 – 800
1M	165	730 – 1000	500 – 800
	230	1001 – 2400	

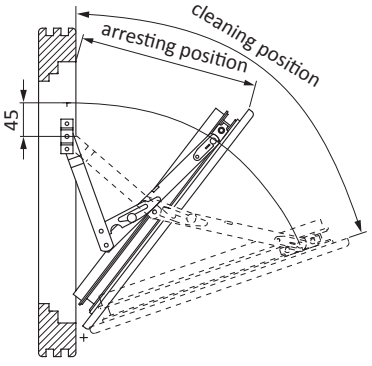
	Dim.	FFB	FFH
1D	88	1001 – 1600	801 – 1600
	288	1601 – 2000	
	400	2001 – 2400	
1E	400	1601 – 2400	801 – 1600
1G	8	600 – 1000	801 – 1600
1H	258	1001 – 1200	801 – 1600
	458	1201 – 1600	
	658	1601 – 2000	
	858	2001 – 2400	
1I	92	1001 – 1200	801 – 1600
	292	1201 – 1600	
	492	1601 – 2000	
	692	2001 – 2400	
1M	47	600 – 2400	801 – 1600
2A	67		801 – 1600
2B	269		801 – 1400
	469		1401 – 1600
2C	665		1001 – 1400
	990		1401 – 1600
3A	83		801 – 1600
3B	285		801 – 1400
	485		1401 – 1600
3C	681		1001 – 1400
	1006		1401 – 1600

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	Dimension	FFB	FFH	ASFP	Opening width – arresting position	Opening angle – cleaning position
Y	120	600 – 2400	500 – 600	Gr.1	235 – 228	45° – 36°
	120		601 – 800	Gr.2	213 – 205	58° – 41°
	402		801 – 1400	Gr.1	352 – 263	43° – 18°
	602		1401 – 1600	Gr.2	304 – 280	36° – 29°



TITAN AF

Installation instructions

RC1

AEROCONTROL

1-sash square tilt-turn

timber 12 mm

RC1

fixed handle position and centre handle pos. (variable)

hinge side axxent 24+

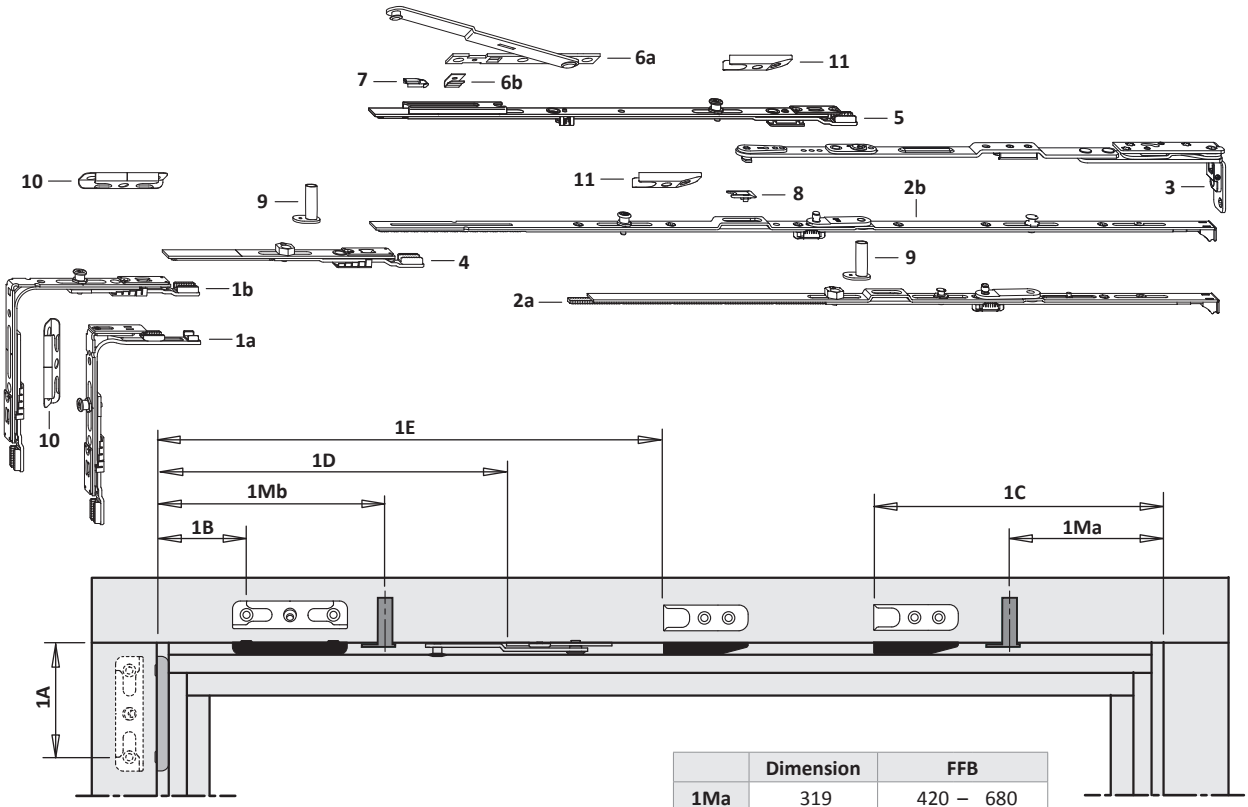
surface TS

All further necessary information on the AEROCONTROL programme (opening and closure monitoring) like magnetic switches, assembly and connection instructions and the extensive accessory programme can be taken from our separate product catalogue DRIVE - AEROCONTROL.

AEROCONTROL

1-sash square tilt-turn
H12 hinge side axxent 24+

FFB 420 – 1650



	Dimension	FFB
1Ma	319	420 – 680
1Mb	286	681 – 1650
1A	67	420 – 520
1B	83	521 – 1650
1C	556	1051 – 1250
	436	1251 – 1450
	556	1451 – 1650
1D	507	1251 – 1650
1E	666	1251 – 1650

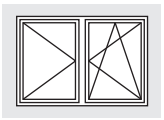
Dimensions in mm
All striker positions are frame rebate dimensions on assembled frames. Airgap 12^{+1} mm.

RFB = FFB + 24 mm
RFH = FFH + 24 mm

Pos.	Description	Part number	QTY	FFB	FFH G - fixed	FFH G - centre	Frame Parts Pos. 10	Frame Parts Pos. 11
1a	corn.drive AF VSO narrow 1RS	TEUL4020–...	1	420 – 520	450 – 3000	460 – 3000	1	
1b	corn.drive VSO 1RS	TEUL4010–...		521 – 1650	450 – 3000	460 – 3000	1	
2a	stay sash part AF AX UE sz 1	TSSV4010–...	1	420 – 680				
2b	stay sash part AF AX sz 1	TSSV4000–...		681 – 880				
	stay sash part AF AX sz 2+3 1RS	TSSV0310–...		881 – 1050				
	stay sash part AF AX sz 4 1RS	TSSV0320–...		1051 – 1250				1
	stay sash part AF AX sz 2+3 1RS	TSSV0310–...		1251 – 1450				1
	stay sash part AF AX sz 4 1RS	TSSV0320–...		1451 – 1650				1
3	stay arm AX sz 1	ref. PDB, TSAV41	1	420 – 880				
	stay arm AX sz 2+3	ref. PDB, TSAV42		881 – 1050				
	stay arm AX sz 4	ref. PDB, TSAV44		1051 – 1250				
	stay arm AX sz 2+3	ref. PDB, TSAV42		1251 – 1450				
	stay arm AX sz 4	ref. PDB, TSAV44		1451 – 1650				
4	linkage AF UE sz 1 1M	TZZS0160–...	1	681 – 1650				
5	linkage additional stay 1RS	TZOK1010–...	1	1251 – 1650				1
6	additional stay	ref. PDB, TSZS	1	1251 – 1650				
7	tilt restr. additional stay	889008	1	1251 – 1650				
8	tilt restrictor V-V sz 2-4	TFKB0040–...	1	881 – 1650	450 – 900	460 – 900		
9	UMS001 VdS-contr. 4p. 6M (25 pieces)	315101	1	420 – 1650				
10	striker plate SL-RS A....	ref. PDB, TRSK						
11	striker plate 56 A....	ref. PDB, FRSB						

TITAN AF

Installation instructions



RC1

AEROCONTROL

2-sash square tilt-turn/turn DS 16

timber 12 mm

RC1

fixed handle position and centre handle pos. (variable)

hinge side axxent 24+

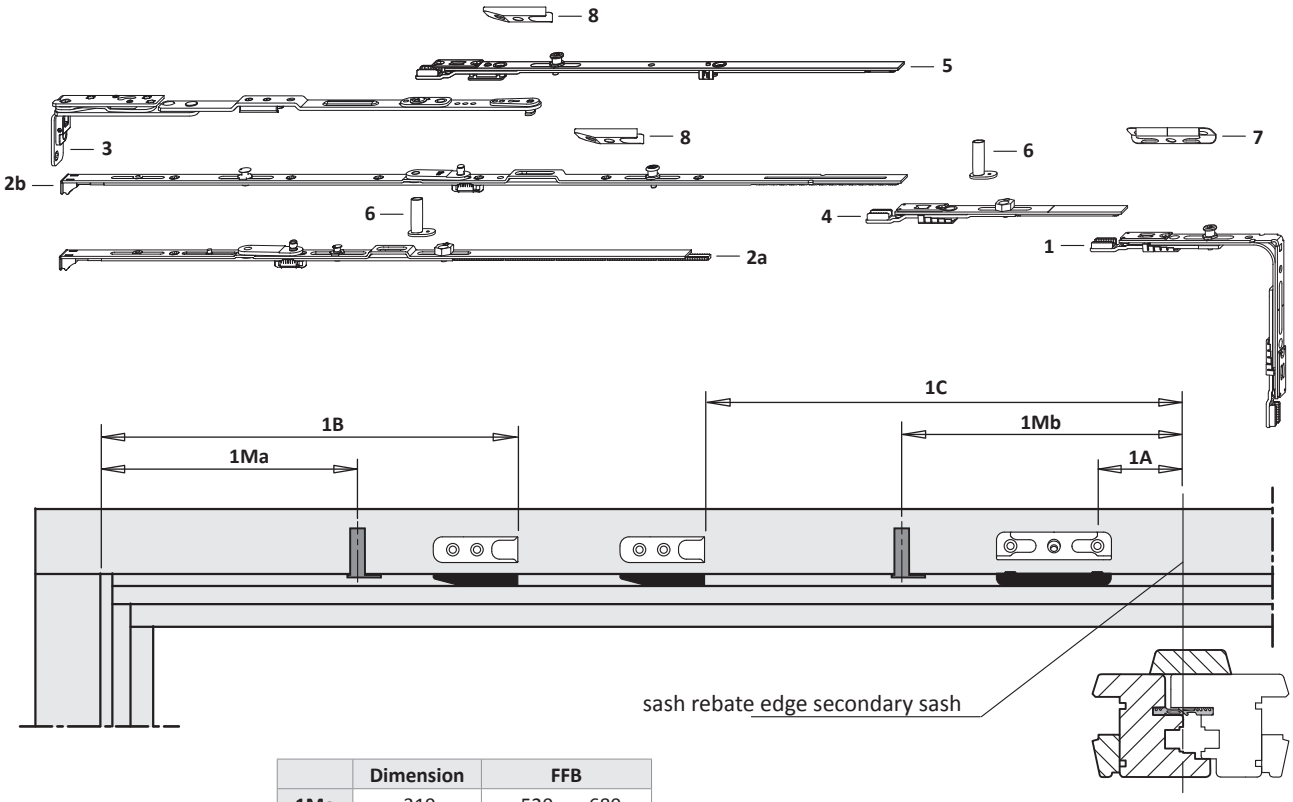
surface TS

All further necessary information on the AEROCONTROL programme (opening and closure monitoring) like magnetic switches, assembly and connection instructions and the extensive accessory programme can be taken from our separate product catalogue DRIVE - AEROCONTROL.

AEROCONTROL slave sash

2-sash square tilt-turn/turn DS 16
H12 hinge side axxent 24+

FFB 520 – 1450



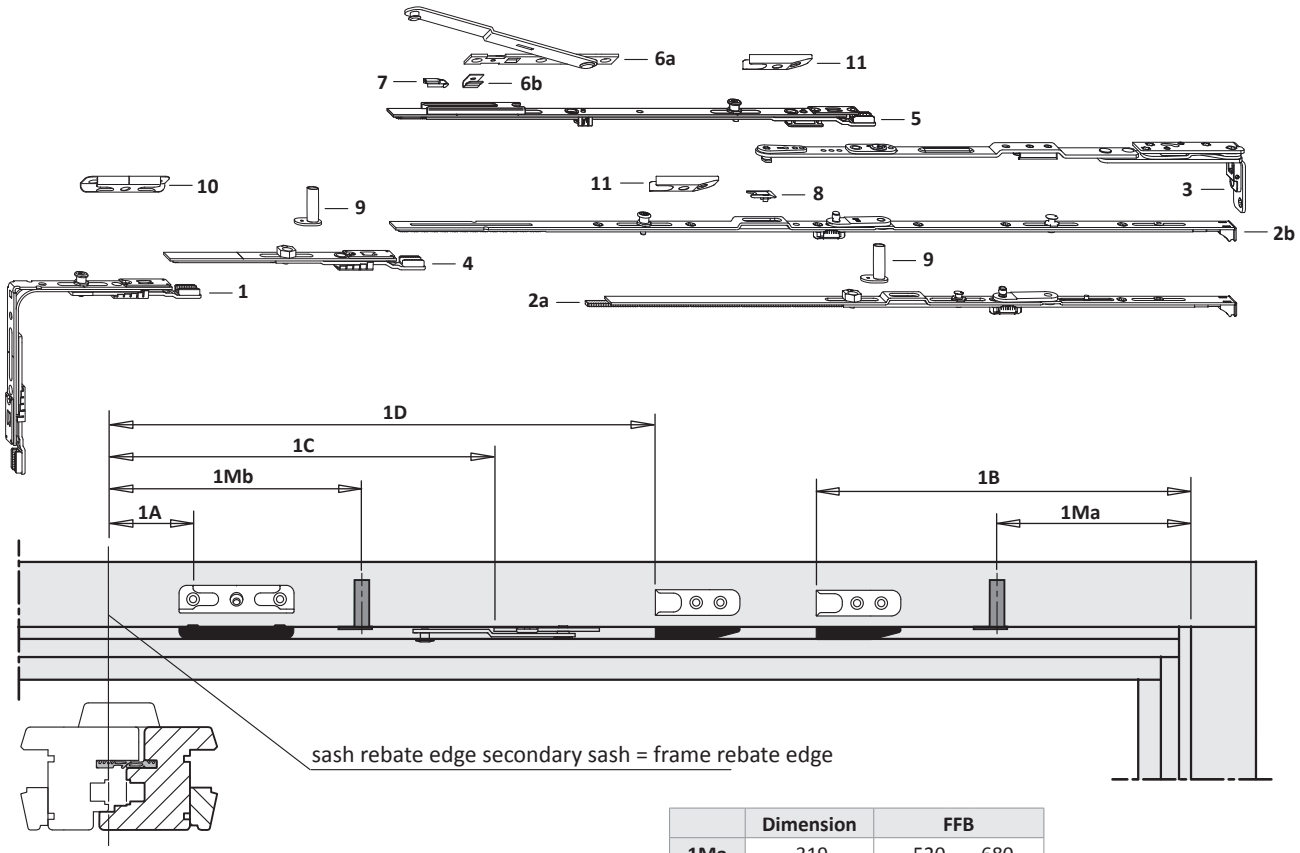
	Dimension	FFB
1Ma	319	520 – 680
1Mb	274	681 – 1450
1A	71	520 – 1450
1B	556	1051 – 1250
	436	1251 – 1450
1C	654	1251 – 1450

Dimensions in mm
All striker positions are frame rebate dimensions on assembled frames. Airgap 12^{+1} mm.

RFB = FFB + 12 mm
RFH = FFH + 24 mm

Pos.	Description	Part number	QTY	FFB	FFH G - fixed	FFH G - centre	Frame Parts Pos. 7	Frame Parts Pos. 8
1	corn.drive VSO 1RS	TEUL4010–...	1	520 – 1450	450 – 3000	460 – 3000	1	
2a	stay sash part AF AX UE sz 1	TSSV4010–...	1	520 – 680				
2b	stay sash part AF AX sz 1	TSSV4000–...		681 – 880				
	stay sash part AF AX sz 2+3 1RS	TSSV0310–...		881 – 1050				
	stay sash part AF AX sz 4 1RS	TSSV0320–...		1051 – 1250				1
	stay sash part AF AX sz 2+3 1RS	TSSV0310–...		1251 – 1450				1
3	stay arm AX sz 1	ref. PDB, TSAV41	1	520 – 880				
	stay arm AX sz 2+3	ref. PDB, TSAV42		881 – 1050				
	stay arm AX sz 4	ref. PDB, TSAV44		1051 – 1250				
	stay arm AX sz 2+3	ref. PDB, TSAV42		1251 – 1450				
4	linkage AF UE sz 1 1M	TZZS0160–...	1	681 – 1450				
5	linkage KK/AF sz 2 1RS	TZKK1020–...	1	1251 – 1450				1
6	UMS001 VdS-contr. 4p. 6M (25 pieces)	315101	1	520 – 1450				
7	striker plate SL-RS A....	ref. PDB, TRSK						
8	striker plate 56 A....	ref. PDB, FRSB						

FFB 520 – 1650



	Dimension	FFB
1Ma	319	520 – 680
1Mb	286	681 – 1650
1A	83	520 – 1650
1B	556	1051 – 1250
	436	1251 – 1450
	556	1451 – 1650
1C	507	1251 – 1650
1D	666	1251 – 1650

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

Pos.	Description	Part number	QTY	FFB	FFH G - fixed	FFH G - centre	Frame Parts Pos. 10	Frame Parts Pos. 11
1	corn.drive VSO 1RS	TEUL4010–...	1	520 – 1650	450 – 3000	460 – 3000	1	
2a	stay sash part AF AX UE sz 1	TSSV4010–...	1	520 – 680				
2b	stay sash part AF AX sz 1	TSSV4000–...		681 – 880				
	stay sash part AF AX sz 2+3 1RS	TSSV0310–...		881 – 1050				
	stay sash part AF AX sz 4 1RS	TSSV0320–...		1051 – 1250				1
	stay sash part AF AX sz 2+3 1RS	TSSV0310–...		1251 – 1450				1
	stay sash part AF AX sz 4 1RS	TSSV0320–...		1451 – 1650				1
3	stay arm AX sz1	ref. PDB, TSAV41	1	520 – 880				
	stay arm AX sz 2+3	ref. PDB, TSAV42		881 – 1050				
	stay arm AX sz 4	ref. PDB, TSAV44		1051 – 1250				
	stay arm AX sz 2+3	ref. PDB, TSAV42		1251 – 1450				
	stay arm AX sz 4	ref. PDB, TSAV44		1451 – 1650				
4	linkage AF UE sz 1 1M	TZZS0160–...	1	681 – 1650				
5	linkage additional stay 1RS	TZOK1010–...	1	1251 – 1650				1
6	additional stay	ref. PDB, TSZS	1	1251 – 1650				
7	tilt restr. additional stay	889008	1	1251 – 1650				
8	tilt restrictor V-V sz 2-4	TFKB0040–...	1	881 – 1650	450 – 900	460 – 900		
9	UMS001 VdS-contr. 4p. 6M (25 pieces)	315101	1	520 – 1650				
10	striker plate SL-RS A....	ref. PDB, TRSK						
11	striker plate 56 A....	ref. PDB, FRSB						

TITAN AF

Installation instructions

RC2

AEROCONTROL

1-sash square tilt-turn

timber 12 mm

RC2

fixed handle position and centre handle pos. (variable)

hinge side axxent 24+

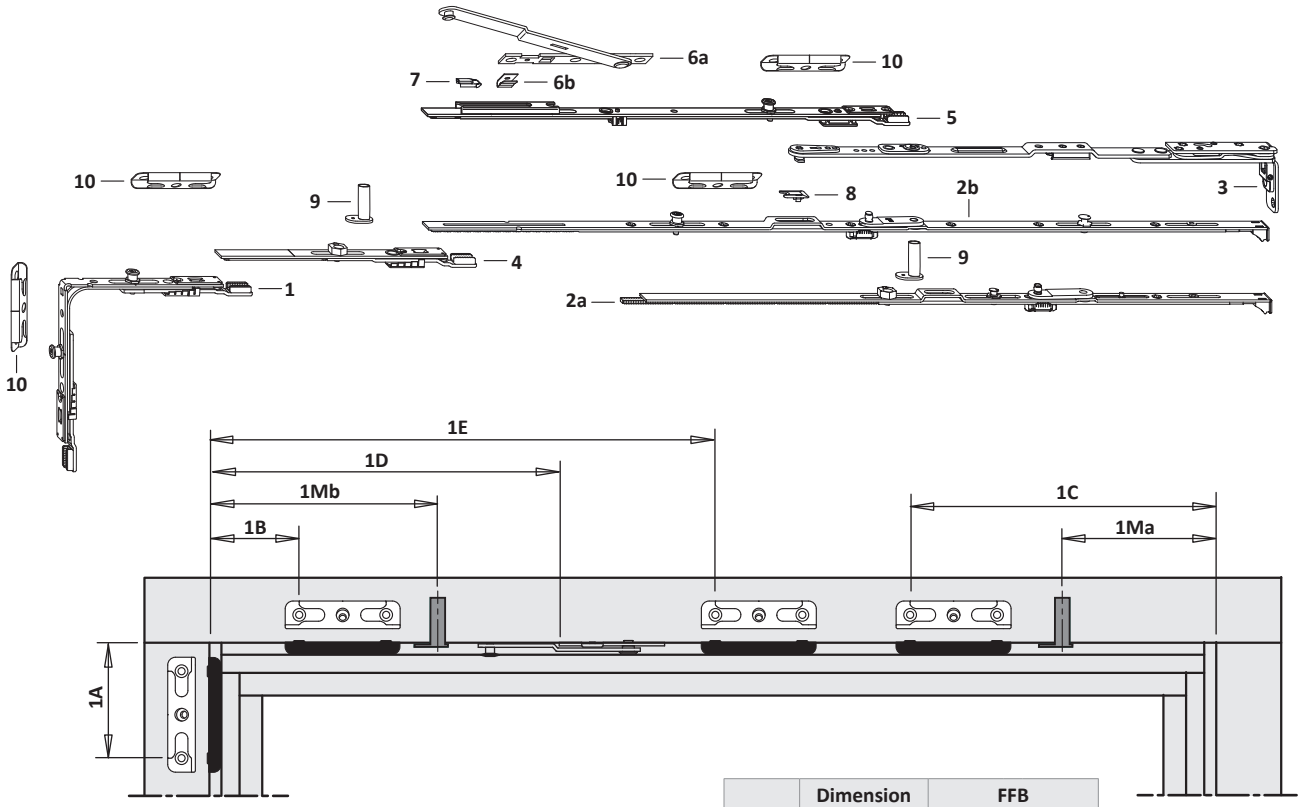
surface TS

All further necessary information on the AEROCONTROL programme (opening and closure monitoring) like magnetic switches, assembly and connection instructions and the extensive accessory programme can be taken from our separate product catalogue DRIVE - AEROCONTROL.

AEROCONTROL

1-sash square tilt-turn
H12 hinge side axxent 24+

FFB 520 – 1650



	Dimension	FFB
1Ma	319	520 – 680
1Mb	286	681 – 1650
1A	67	520 – 1650
1B	83	520 – 1650
1C	556	1051 – 1250
	436	1251 – 1450
	556	1451 – 1650
1D	507	1251 – 1650
1E	666	1251 – 1650

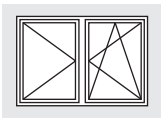
Dimensions in mm
All striker positions are frame rebate dimensions on assembled frames. Airgap 12^{+1} mm.

RFB = FFB + 24 mm
RFH = FFH + 24 mm

Pos.	Description	Part number	QTY	FFB	FFH G - fixed	FFH G - centre	Frame Parts Pos. 10
1	corn.drive VSO 2RS A0055	TEUL4070–...	1	520 – 1650	450 – 3000	460 – 3000	2
2a	stay sash part AF AX UE sz 1	TSSV4010–...	1	520 – 680			
2b	stay sash part AF AX sz 1	TSSV4000–...		681 – 880			
	stay sash part AF AX sz 2+3 1RS	TSSV0310–...		881 – 1050			
	stay sash part AF AX sz 4 1RS	TSSV0320–...		1051 – 1250			1
	stay sash part AF AX sz 2+3 1RS	TSSV0310–...		1251 – 1450			1
	stay sash part AF AX sz 4 1RS	TSSV0320–...		1451 – 1650			1
3	stay arm AX sz 1	ref. PDB, TSAV41	1	520 – 880			
	stay arm AX sz 2+3	ref. PDB, TSAV42		881 – 1050			
	stay arm AX sz 4	ref. PDB, TSAV44		1051 – 1250			
	stay arm AX sz 2+3	ref. PDB, TSAV42		1251 – 1450			
	stay arm AX sz 4	ref. PDB, TSAV44		1451 – 1650			
4	linkage AF UE sz 1 1M	TZZS0160–...	1	681 – 1650			
5	linkage additional stay 1RS	TZOK1010–...	1	1251 – 1650			1
6	additional stay	ref. PDB, TSZS	1	1251 – 1650			
7	tilt restr. additional stay	889008	1	1251 – 1650			
8	tilt restrictor V-V sz 2-4	TFKB0040–...	1	881 – 1650	450 – 900	460 – 900	
9	UMS001 VdS-contr. 4p. 6M (25 pieces)	315101	1	520 – 1650			
10	striker plate SL-RS A....	ref. PDB, TRSK					

TITAN AF

Installation instructions



RC2

AEROCONTROL

2-sash square tilt-turn/turn DS 16

timber 12 mm

RC2

fixed handle position and centre handle pos. (variable)

hinge side axxent 24+

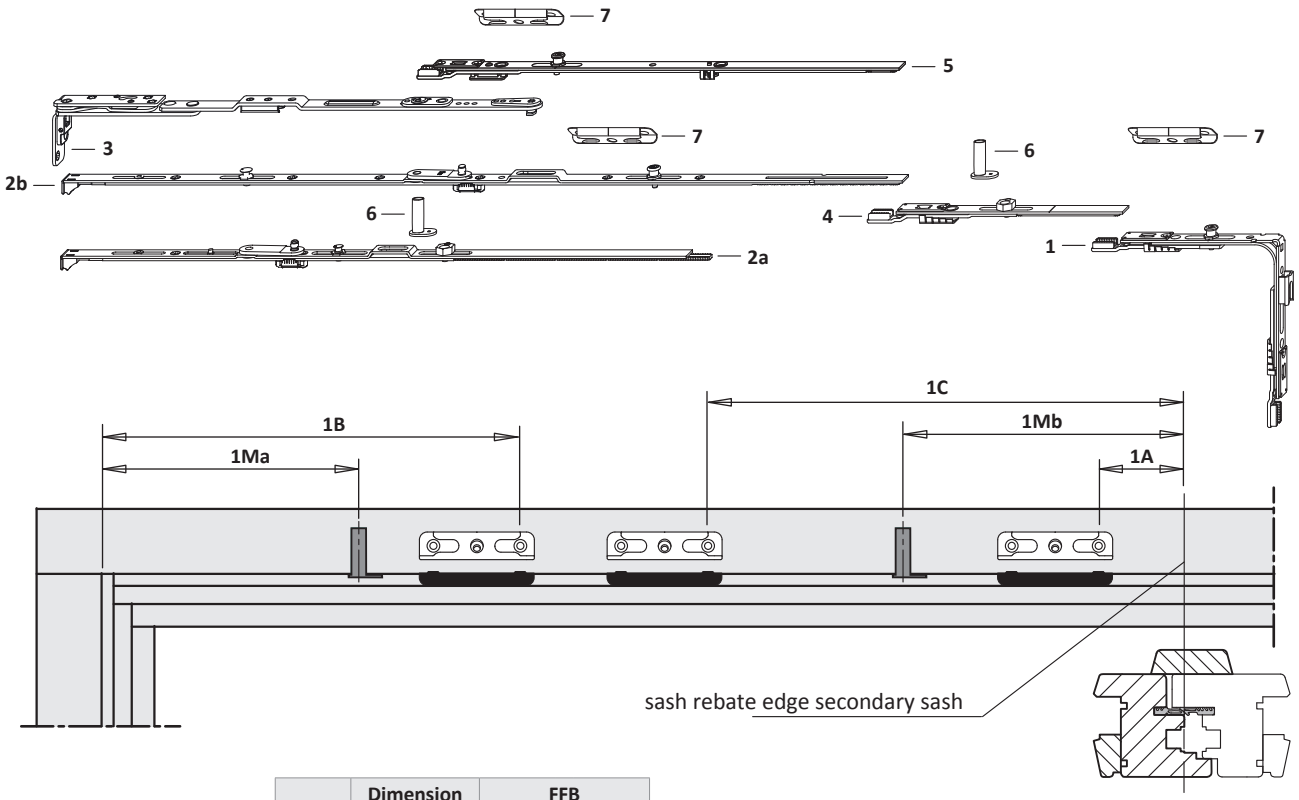
surface TS

All further necessary information on the AEROCONTROL programme (opening and closure monitoring) like magnetic switches, assembly and connection instructions and the extensive accessory programme can be taken from our separate product catalogue DRIVE - AEROCONTROL.

AEROCONTROL slave sash

2-sash square tilt-turn/turn DS 16
H12 hinge side axxent 24+

FFB 520 – 1450



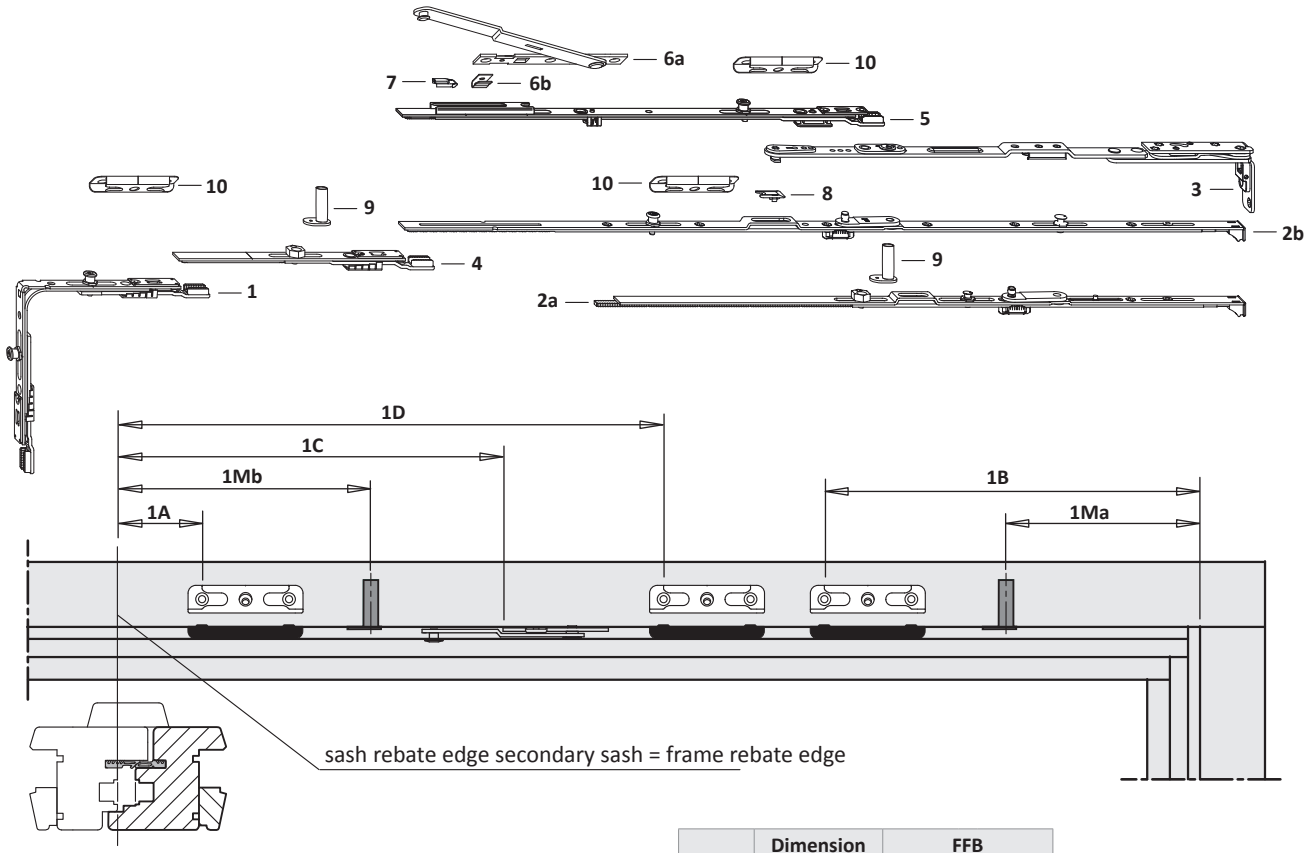
	Dimension	FFB
1Ma	319	520 – 680
1Mb	274	681 – 1450
1A	71	520 – 1450
1B	556	1051 – 1250
	436	1251 – 1450
1C	654	1251 – 1450

Dimensions in mm
All striker positions are frame rebate dimensions on assembled frames. Airgap 12^{+1} mm.

RFB = FFB + 12 mm
RFH = FFH + 24 mm

Pos.	Description	Part number	QTY	FFB	FFH G - fixed	FFH G - centre	Frame Parts Pos. 7
1	corn.drive AF VSO WK2 SB 1RS	TEUL4080–...	1	520 – 1450	450 – 3000	460 – 3000	1
2a	stay sash part AF AX UE sz 1	TSSV4010–...	1	520 – 680			
2b	stay sash part AF AX sz 1	TSSV4000–...		681 – 880			
	stay sash part AF AX sz 2+3 1RS	TSSV0310–...		881 – 1050			
	stay sash part AF AX sz 4 1RS	TSSV0320–...		1051 – 1250			1
	stay sash part AF AX sz 2+3 1RS	TSSV0310–...		1251 – 1450			1
3	stay arm AX sz 1	ref. PDB, TSAV41	1	520 – 880			
	stay arm AX sz 2+3	ref. PDB, TSAV42		881 – 1050			
	stay arm AX sz 4	ref. PDB, TSAV44		1051 – 1250			
	stay arm AX sz 2+3	ref. PDB, TSAV42		1251 – 1450			
4	linkage AF UE sz 1 1M	TZZS0160–...	1	681 – 1450			
5	linkage KK/AF sz 2 1RS	TZKK1020–...	1	1251 – 1450			1
6	UMS001 VdS-contr. 4p. 6M (25 pieces)	315101	1	520 – 1450			
7	striker plate SL-RS A....	ref. PDB, TRSK					

FFB 520 – 1650



	Dimension	FFB
1Ma	319	520 – 680
1Mb	286	681 – 1650
1A	83	520 – 1650
1B	556	1051 – 1250
	436	1251 – 1450
	556	1451 – 1650
1C	507	1251 – 1650
1D	666	1251 – 1650

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

Pos.	Description	Part number	QTY	FFB	FFH G - fixed	FFH G - centre	Frame Parts Pos. 10
1	corn.drive AF VSO 2RS A0055	TEUL4070–...	1	520 – 1650	450 – 3000	460 – 3000	2
2a	stay sash part AF AX UE sz 1	TSSV4010–...	1	520 – 680			
2b	stay sash part AF AX sz 1	TSSV4000–...		681 – 880			
	stay sash part AF AX sz 2+3 1RS	TSSV0310–...		881 – 1050			
	stay sash part AF AX sz 4 1RS	TSSV0320–...		1051 – 1250			1
	stay sash part AF AX sz 2+3 1RS	TSSV0310–...		1251 – 1450			1
	stay sash part AF AX sz 4 1RS	TSSV0320–...		1451 – 1650			1
3	stay arm AX sz1	ref. PDB, TSAV41	1	520 – 880			
	stay arm AX sz 2+3	ref. PDB, TSAV42		881 – 1050			
	stay arm AX sz 4	ref. PDB, TSAV44		1051 – 1250			
	stay arm AX sz 2+3	ref. PDB, TSAV42		1251 – 1450			
	stay arm AX sz 4	ref. PDB, TSAV44		1451 – 1650			
4	linkage AF UE sz 1 1M	TZZS0160–...	1	681 – 1650			
5	linkage additional stay 1RS	TZOK1010–...	1	1251 – 1650			1
6	additional stay	ref. PDB, TSZS	1	1251 – 1650			
7	tilt restr. additional stay	889008	1	1251 – 1650			
8	tilt restrictor V-V sz 2-4	TFKB0040–...	1	881 – 1650	450 – 900	460 – 900	
9	UMS001 VdS-contr. 4p. 6M (25 pieces)	315101	1	520 – 1650			
10	striker plate SL-RS A....	ref. PDB, TRSK					

TITAN AF

Installation instructions

RC2
ECO

AEROCONTROL

1-sash square tilt-turn

timber 12 mm

RC2 ECO

fixed handle position and centre handle pos. (variable)

hinge side axxent 24+

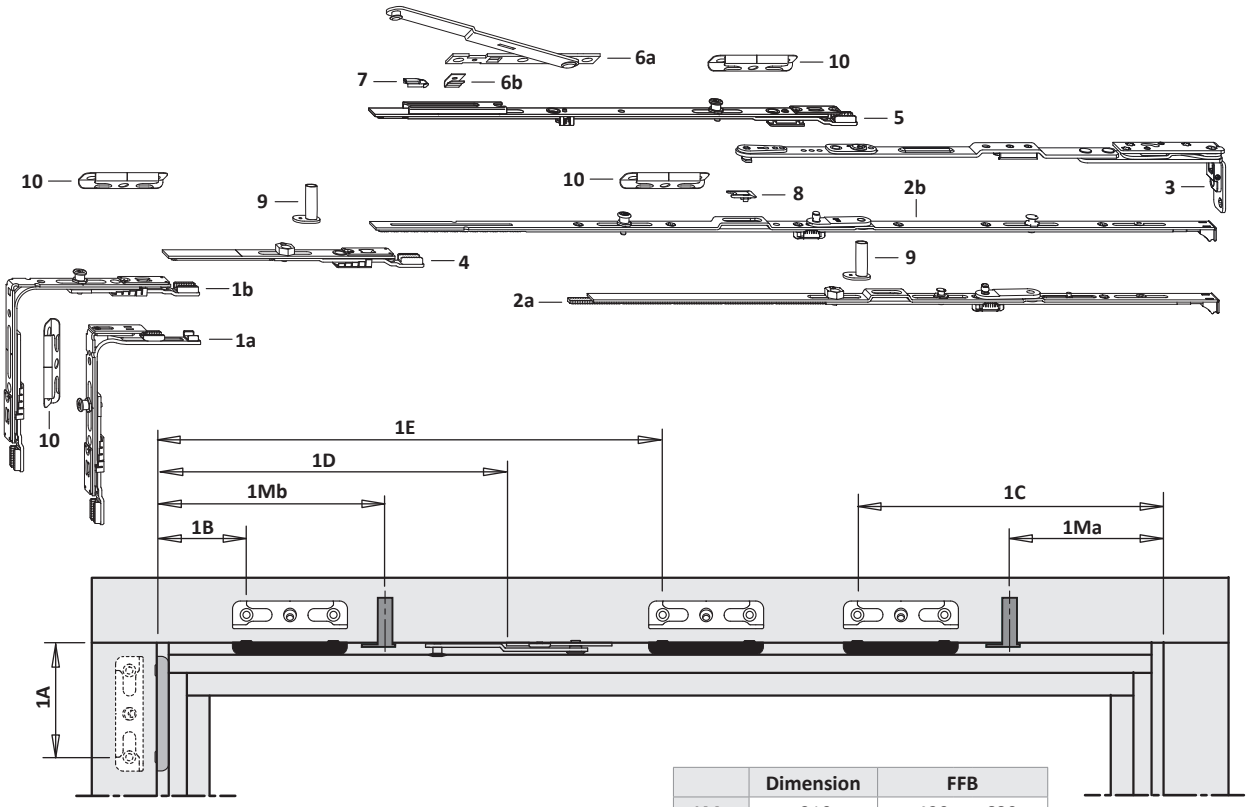
surface TS

All further necessary information on the AEROCONTROL programme (opening and closure monitoring) like magnetic switches, assembly and connection instructions and the extensive accessory programme can be taken from our separate product catalogue DRIVE - AEROCONTROL.

AEROCONTROL

1-sash square tilt-turn
H12 hinge side axxent 24+

FFB 420 – 1650



	Dimension	FFB
1Ma	319	420 – 680
1Mb	286	681 – 1650
1A	67	420 – 520
1B	83	521 – 1650
1C	556	1051 – 1250
	436	1251 – 1450
	556	1451 – 1650
1D	507	1251 – 1650
1E	666	1251 – 1650

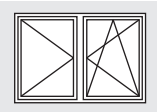
Dimensions in mm
All striker positions are frame rebate dimensions on assembled frames. Airgap 12^{+1} mm.

RFB = FFB + 24 mm
RFH = FFH + 24 mm

Pos.	Description	Part number	QTY	FFB	FFH G - fixed	FFH G - centre	Frame Parts Pos. 10
1a	corn.drive AF VSO narrow 1RS	TEUL4020–...	1	420 – 520	450 – 3000	460 – 3000	1
1b	corn.drive VSO 1RS	TEUL4010–...		521 – 1650	450 – 3000	460 – 3000	1
2a	stay sash part AF AX UE sz 1	TSSV4010–...	1	420 – 680			
2b	stay sash part AF AX sz 1	TSSV4000–...		681 – 880			
	stay sash part AF AX sz 2+3 1RS	TSSV0310–...		881 – 1050			
	stay sash part AF AX sz 4 1RS	TSSV0320–...		1051 – 1250			1
	stay sash part AF AX sz 2+3 1RS	TSSV0310–...		1251 – 1450			1
	stay sash part AF AX sz 4 1RS	TSSV0320–...		1451 – 1650			1
3	stay arm AX sz 1	ref. PDB, TSAV41	1	420 – 880			
	stay arm AX sz 2+3	ref. PDB, TSAV42		881 – 1050			
	stay arm AX sz 4	ref. PDB, TSAV44		1051 – 1250			
	stay arm AX sz 2+3	ref. PDB, TSAV42		1251 – 1450			
	stay arm AX sz 4	ref. PDB, TSAV44		1451 – 1650			
4	linkage AF UE sz 1 1M	TZZS0160–...	1	681 – 1650			
5	linkage additional stay 1RS	TZOK1010–...	1	1251 – 1650			1
6	additional stay	ref. PDB, TSZS	1	1251 – 1650			
7	tilt restr. additional stay	889008	1	1251 – 1650			
8	tilt restrictor V-V sz 2-4	TFKB0040–...	1	881 – 1650	450 – 900	460 – 900	
9	UMS001 VdS-contr. 4p. 6M (25 pieces)	315101	1	420 – 1650			
10	striker plate SL-RS A....	ref. PDB, TRSK					

TITAN AF

Installation instructions



RC2
ECO

AEROCONTROL

2-sash square tilt-turn/turn DS 16

timber 12 mm

RC2 ECO

fixed handle position and centre handle pos. (variable)

hinge side axxent 24+

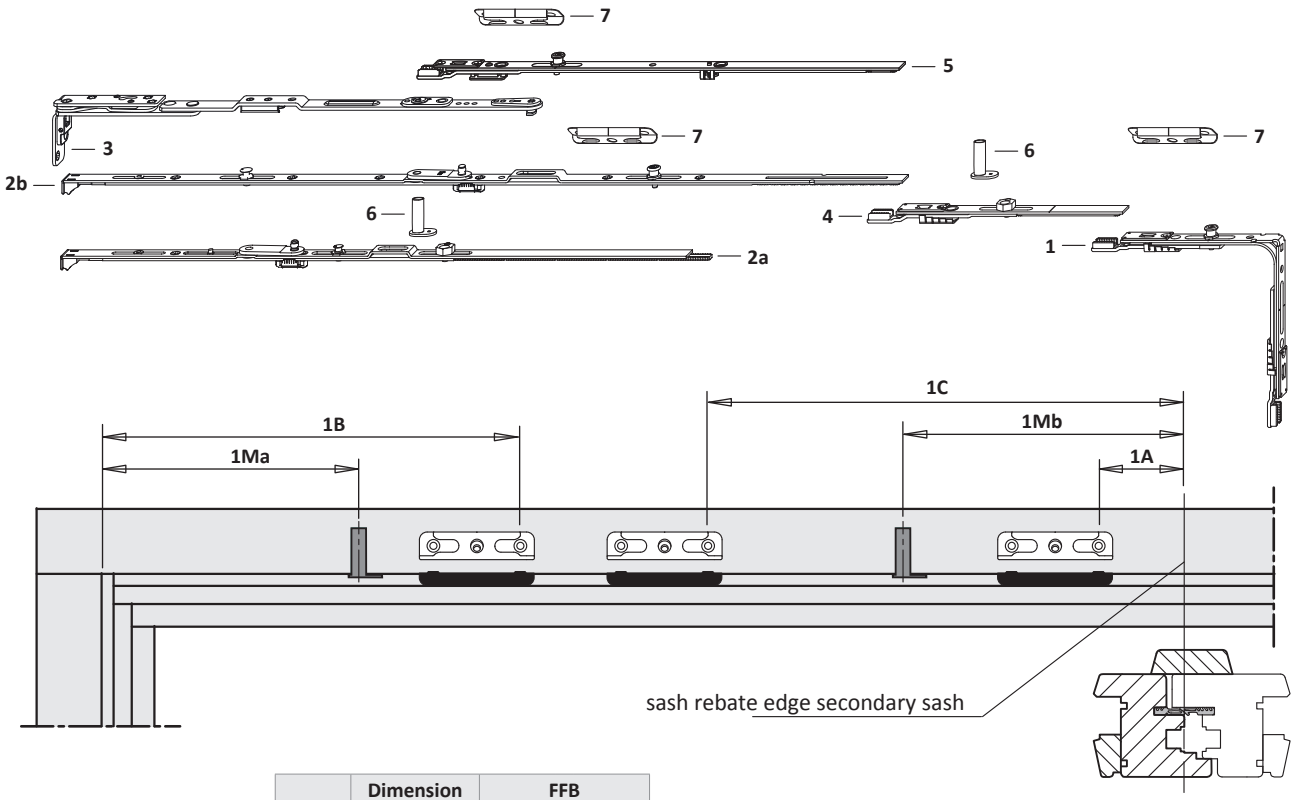
surface TS

All further necessary information on the AEROCONTROL programme (opening and closure monitoring) like magnetic switches, assembly and connection instructions and the extensive accessory programme can be taken from our separate product catalogue DRIVE - AEROCONTROL.

AEROCONTROL slave sash

2-sash square tilt-turn/turn DS 16
H12 hinge side axxent 24+

FFB 520 – 1450



	Dimension	FFB
1Ma	319	520 – 680
1Mb	274	681 – 1450
1A	71	520 – 1450
1B	556	1051 – 1250
	436	1251 – 1450
1C	654	1251 – 1450

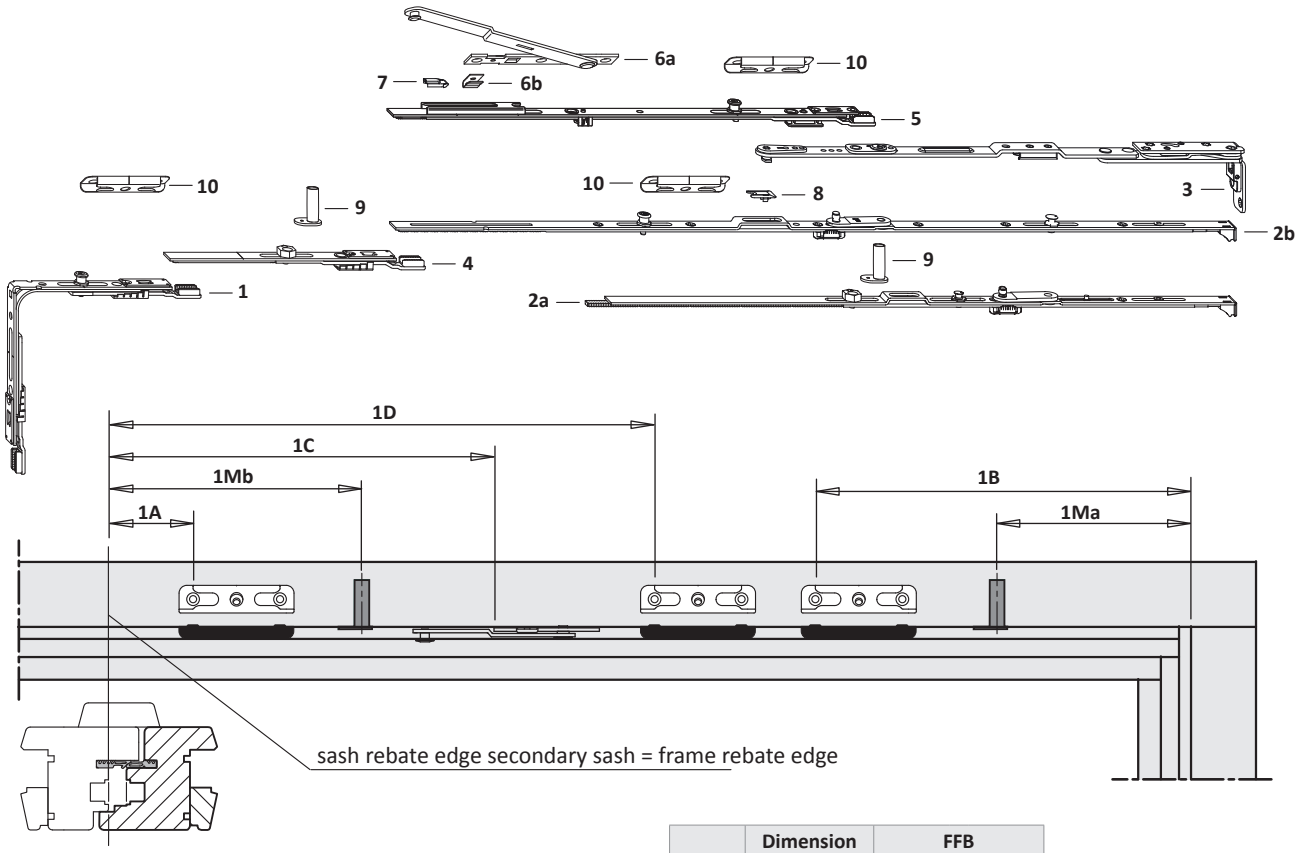
Dimensions in mm

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

RFB = FFB + 12 mm
RFH = FFH + 24 mm

Pos.	Description	Part number	QTY	FFB	FFH G - fixed	FFH G - centre	Frame Parts Pos. 7
1	corn.drive AF VSO 1RS	TEUL4010–...	1	520 – 1450	450 – 3000	460 – 3000	1
2a	stay sash part AF AX UE sz 1	TSSV4010–...	1	520 – 680			
2b	stay sash part AF AX sz 1	TSSV4000–...		681 – 880			
	stay sash part AF AX sz 2+3 1RS	TSSV0310–...		881 – 1050			
	stay sash part AF AX sz 4 1RS	TSSV0320–...		1051 – 1250			1
	stay sash part AF AX sz 2+3 1RS	TSSV0310–...		1251 – 1450			1
3	stay arm AX sz 1	ref. PDB, TSAV41	1	520 – 880			
	stay arm AX sz 2+3	ref. PDB, TSAV42		881 – 1050			
	stay arm AX sz 4	ref. PDB, TSAV44		1051 – 1250			
	stay arm AX sz 2+3	ref. PDB, TSAV42		1251 – 1450			
4	linkage AF UE sz 1 1M	TZZS0160–...	1	681 – 1450			
5	linkage KK/AF sz 2 1RS	TZKK1020–...	1	1251 – 1450			1
6	UMS001 VdS-contr. 4p. 6M (25 pieces)	315101	1	520 – 1450			
7	striker plate SL-RS A....	ref. PDB, TRSK					

FFB 520 – 1650



	Dimension	FFB
1Ma	319	520 – 680
1Mb	286	681 – 1650
1A	83	520 – 1650
1B	556	1051 – 1250
	436	1251 – 1450
	556	1451 – 1650
1C	507	1251 – 1650
1D	666	1251 – 1650

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

Pos.	Description	Part number	QTY	FFB	FFH G - fixed	FFH G - centre	Frame Parts Pos. 10
1	corn.drive AF VSO 1RS	TEUL4010–...	1	520 – 1650	450 – 3000	460 – 3000	1
2a	stay sash part AF AX UE sz 1	TSSV4010–...	1	520 – 680			
2b	stay sash part AF AX sz 1	TSSV4000–...		681 – 880			
	stay sash part AF AX sz 2+3 1RS	TSSV0310–...		881 – 1050			
	stay sash part AF AX sz 4 1RS	TSSV0320–...		1051 – 1250			1
	stay sash part AF AX sz 2+3 1RS	TSSV0310–...		1251 – 1450			1
	stay sash part AF AX sz 4 1RS	TSSV0320–...		1451 – 1650			1
3	stay arm AX sz 1	ref. PDB, TSAV41	1	520 – 880			
	stay arm AX sz 2+3	ref. PDB, TSAV42		881 – 1050			
	stay arm AX sz 4	ref. PDB, TSAV44		1051 – 1250			
	stay arm AX sz 2+3	ref. PDB, TSAV42		1251 – 1450			
	stay arm AX sz 4	ref. PDB, TSAV44		1451 – 1650			
4	linkage AF UE sz 1 1M	TZZS0160–...	1	681 – 1650			
5	linkage additional stay 1RS	TZOK1010–...	1	1251 – 1650			1
6	additional stay	ref. PDB, TSZS	1	1251 – 1650			
7	tilt restr. additional stay	889008	1	1251 – 1650			
8	tilt restrictor V-V sz 2-4	TFKB0040–...	1	881 – 1650	450 – 900	460 – 900	
9	UMS001 VdS-contr. 4p. 6M (25 pieces)	315101	1	520 – 1650			
10	striker plate SL-RS A....	ref. PDB, TRSK					

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