



SERENE™
HEAVY DUTY TILT AND SLIDE DOOR

General Documentation Disclaimer

This manual is intended as a manufacturing and installation advisory document. For correct specifications, sizing of profiles and structural information please consult the StarFront Application. If the information you require is not available through the StarFront Application, please contact your stockist before proceeding. It is advisable to have all sizing and performance criteria checked by a qualified structural engineer to ensure that the required criteria will be met.

All information, recommendations or advice contained in this documentation is given in good faith to the best of Wispeco's knowledge and is based on current procedures in effect.

Since the actual use of this documentation by the user is beyond the control of Wispeco, such use is within the exclusive responsibility of the user. Wispeco cannot be held responsible for any loss incurred through incorrect or faulty use of this documentation. Training of Wispeco systems is important for ensuring correct procedures in the manufacturing of products.

Great care has been taken to ensure that the information provided is correct.

Ensure that you have the latest available manual. The revision number and date can be checked on the latest StarFront version.

Wispeco will accept no responsibility for any errors and/or omissions, which may have inadvertently occurred.

Specifications concerning products and applications

This manual is based on standard configurations only. As there are many configurations not covered in this manual, contact your stockist with regards to a configuration not represented herein if required.

AutoDesk drawings (CAD Symbol Library) are available on request and can be issued with the consent of the Wispeco Technical Department.

All mechanical joints must be sealed with a **Crealco approved joint sealer**. Failure to correctly seal the joints can affect the performance of the system. Information on joint sealing can be found in the Cleaning & Maintenance Manual available for download from the Wispeco website or from StarFront.

All drawings in the Wispeco Documentation are NOT to scale and are used for illustrative purposes only.

Wispeco will not accept responsibility for the use of standard products since Wispeco does not know where these products are being installed.

The hardware recommended in this documentation is suitable for use in most atmospheric environments. When hardware is used in severe coastal environments the manufacturer of the hardware must be consulted.

For the coastal regions and any other high corrosion areas, the following is advised: to minimize phylliform corrosion use SurTec650 RTU spray during the manufacturing of aluminium profile systems. This should be applied, before assembly, on all pre-work aluminium where the powder coating covering has been removed thereby exposing the raw aluminium base.

The use of non-specified hardware or incorrect mechanical fasteners can adversely affect the mechanical and weathering performance of the system and we strongly advise against deviations. A Wispeco Consultant can advise you of any hardware issues and limitations with regard to this system.

The use of anti-magnetic stainless steel screws and aluminium pop rivets is recommended to reduce galvanic corrosion in harsh environments.

Fixing lugs on frames must be positioned as per the user manual and used in accordance to the AAMSA specifications. When profiles are screwed together the screw centres must also be according to the user manual or as specified by an engineer.

All glass used within Wispeco products must comply with SAGGA regulations. Laminated glass must not stand in water.

By continuing to use this documentation you acknowledge that you understand and accept the legal disclaimer.

This manual must be read in conjunction with the Installation, Cleaning & Maintenance Document and the Performance Certificates for the relevant system. The manual must also be used in conjunction with the design and cutting list from the latest version of StarFront.

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HEAVY DUTY TILT AND SLIDE DOOR

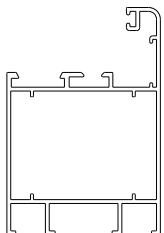


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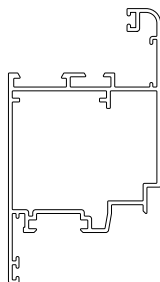
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Profile Identification

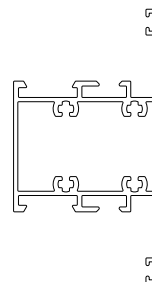
Serene T&S Window Profiles



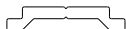
DIE No. W55750 | **Frame 52mm
Tilt & Slide**



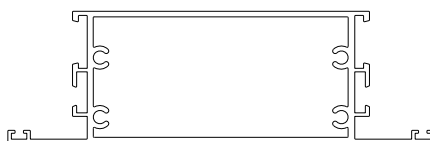
DIE No. W55255 | **Sash
94mm**



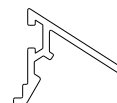
DIE No. W55247 | **Mullion
44mm Flat**



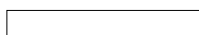
DIE No. W29131 | **Locking Bar**



DIE No. W55481 | **Midrail
101mm**



DIE No. W31263 | **Drip Rail**



DIE No. W0034C | **Flat Bar**



DIE No. W31271 | **Bead Square
13mm**



DIE No. W31273 | **Bead Square
27mm**



DIE No. W31265 | **Bead D/Glazing
Square**

* - NON STOCK ITEM

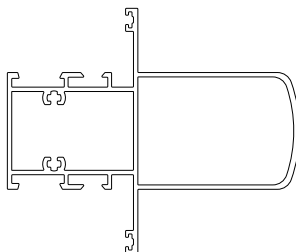


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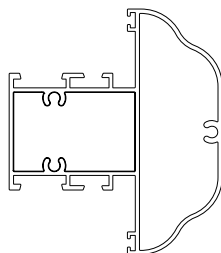
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Profile Identification

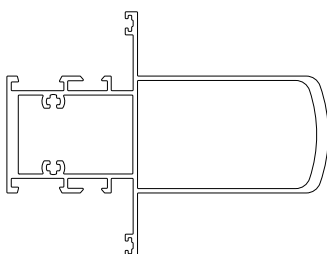
Serene T&S Window Profiles



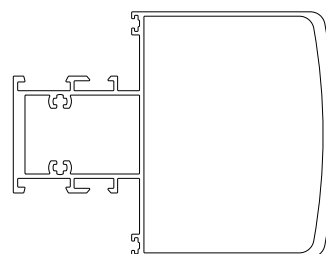
DIE No. W55978 | **Rounded Mullion**
100mm



DIE No. W55480 | **Decorative Mullion**
73mm



DIE No. W56704 | **Extra Heavy Duty Mullion**
110mm



DIE No. W56710 | **Jumbo Mullion**
110mm

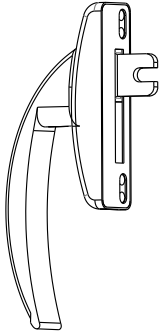
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Hardware Components

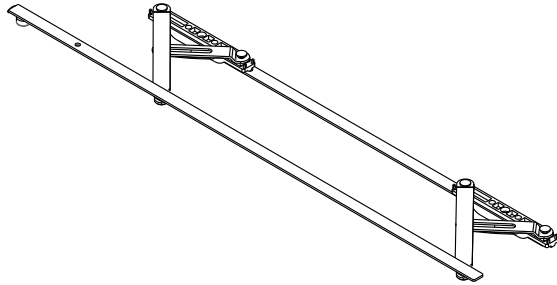
RECOMMENDED SERENE T&S COMPONENTS

All hardware is available through our Stockists as well as through Crealco Components, and can be viewed on www.crealco-components.com

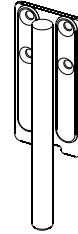
Due to ongoing development, the punch tools may change from time to time. Please check with your stockist that the joining corners can be used on the relevant punch tools.



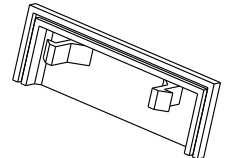
RTT-491338
Geared Black Handle



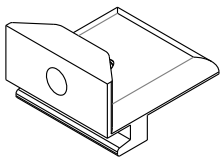
RTT-212633
Scissors-Slider (SB) Size 1 - 931-1280



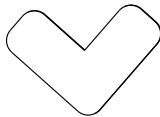
216607EN
Big Pin



PEX-WDC
Drainage Cover



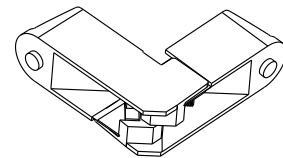
RTT-212633
Striker



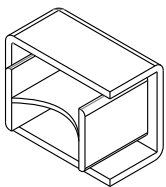
SGD-FMG520
Alignment Mitre Corner



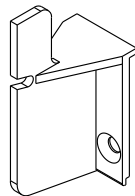
**GWG-01G GWG-02B
GWG-03R GWG-04Y
GWG-05P**
Wedge Gasket



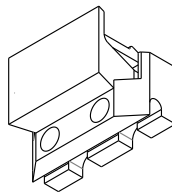
LGC-JC3236
Joining Corner (Frame) - for 94mm sash



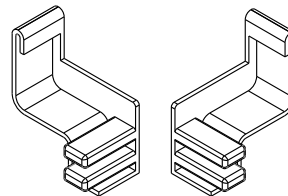
Square Endcap (Left&Right)



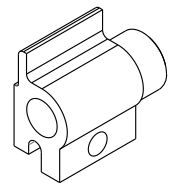
Plastic Bracket



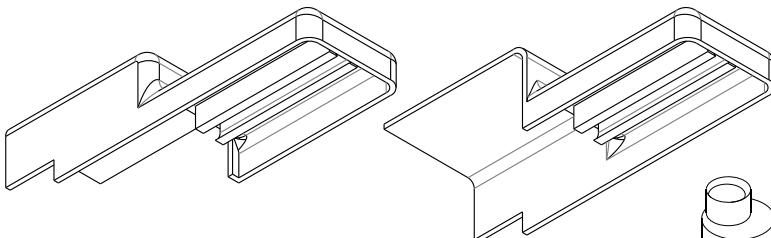
Track Catch



End Cap Top Left/Top Right



Stopper



End Cap Bottom Left/Bottom Right

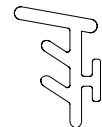
RTT-216607

Pin (Included in Hardware Kit)

KIT



GSL-CG-H702
Center Gasket



GBF-EPVC
Butterfly Euro PVC Backing



GSL-48EPDM
Bubble Seal 4.8mm

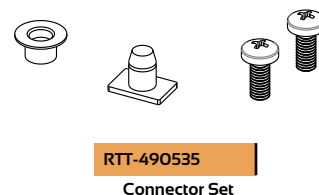
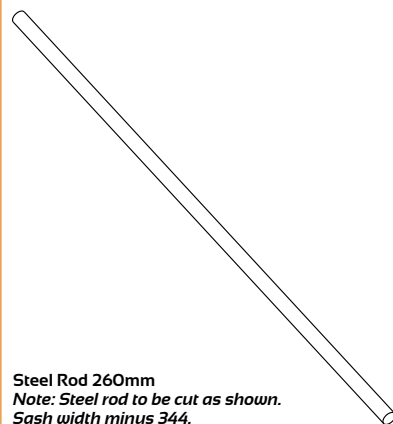
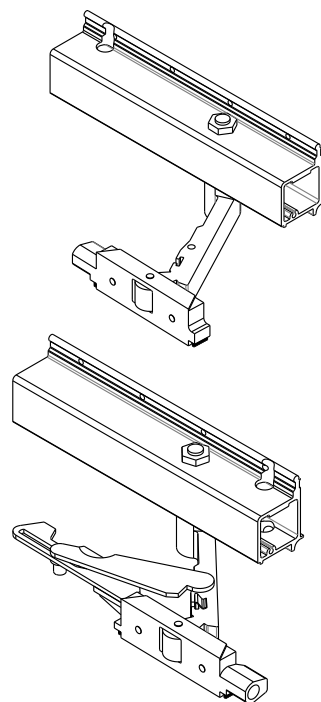
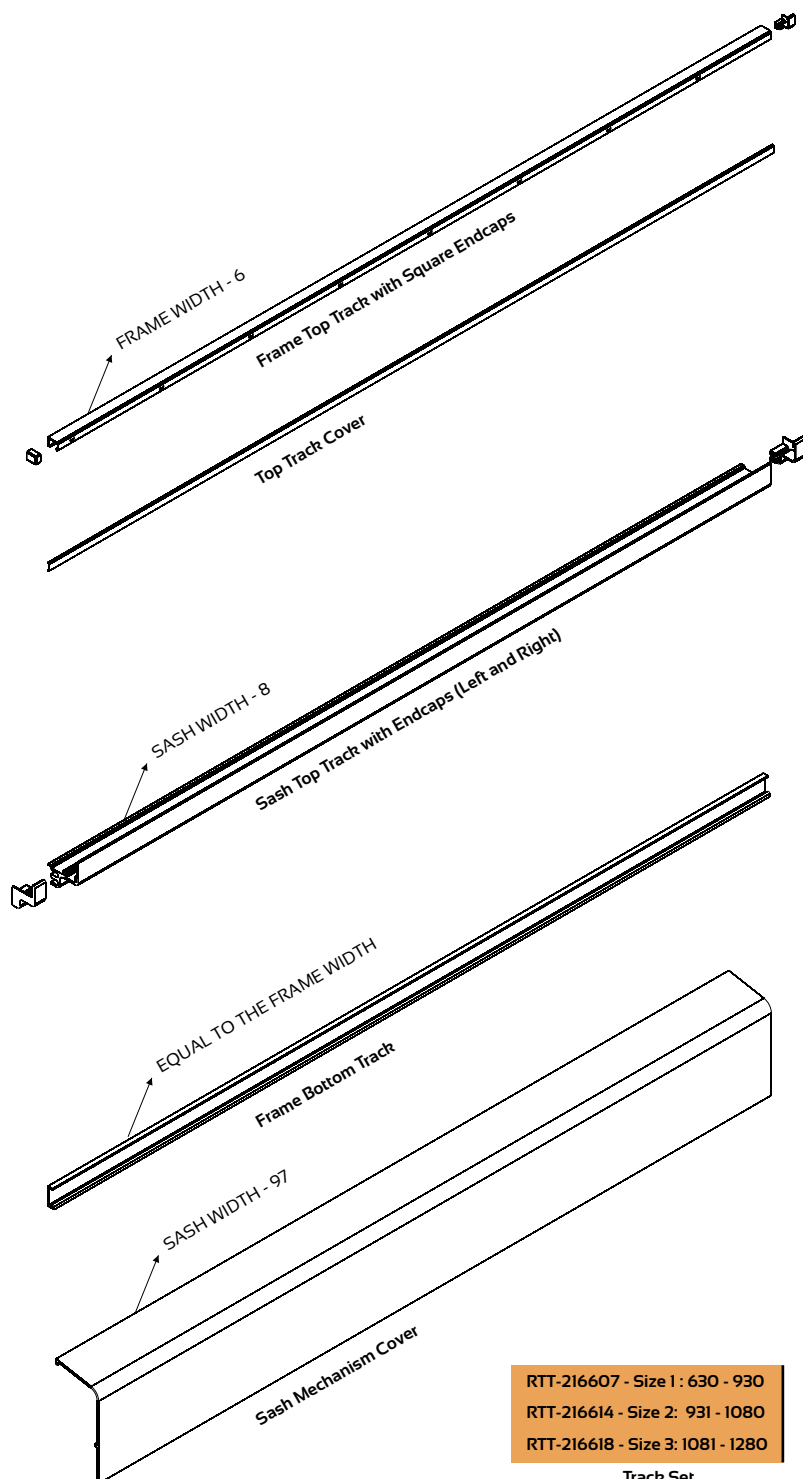


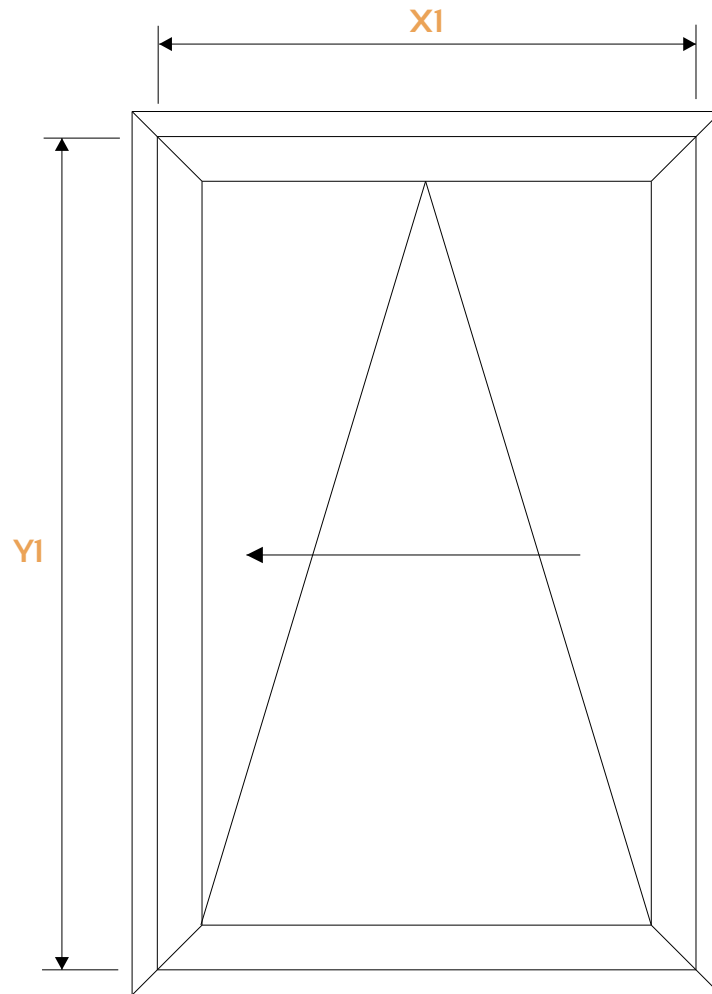
GSL-WSF
Sash Gasket

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Hardware Components

RECOMMENDED SERENE T&S COMPONENTS





NOTE:

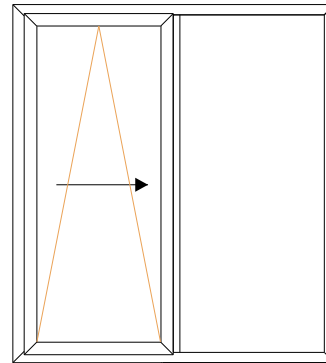
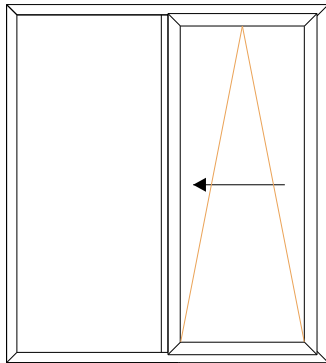
WINDOW AND DOOR LIMITATIONS

MAXIMUM SASH WIDTH: X1 = 1680mm

MINIMUM SASH WIDTH: X1 = 630mm

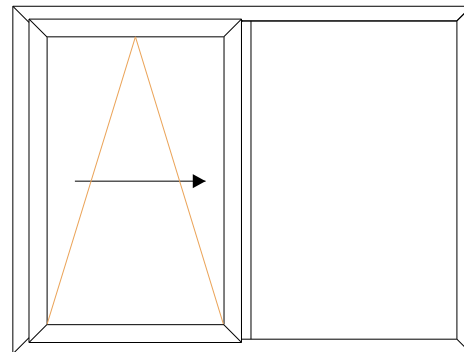
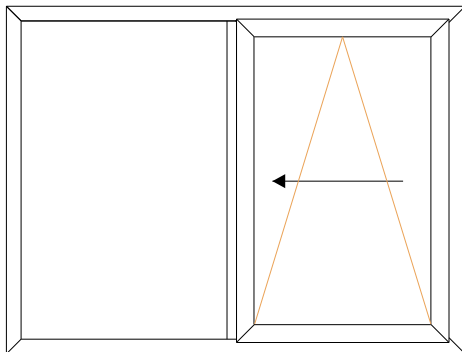
MAXIMUM SASH HEIGHT: Y1 = 2330mm

MINIMUM SASH HEIGHT: Y1 = 930mm

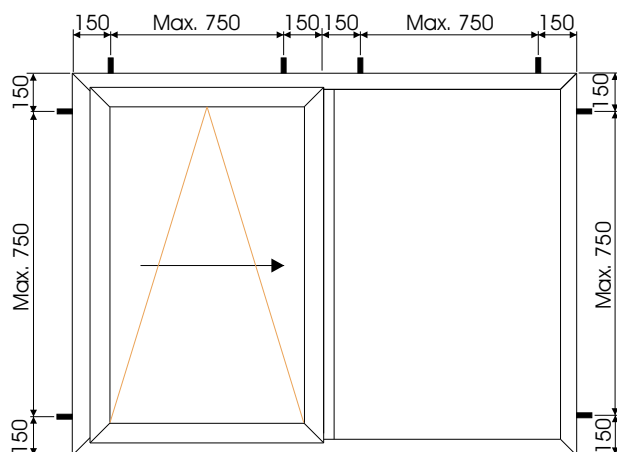


SINGLE TILT & SLIDE DOOR

NOTE: DOORS CAN ALSO HAVE 1,2 OR 3 MIDRAILS



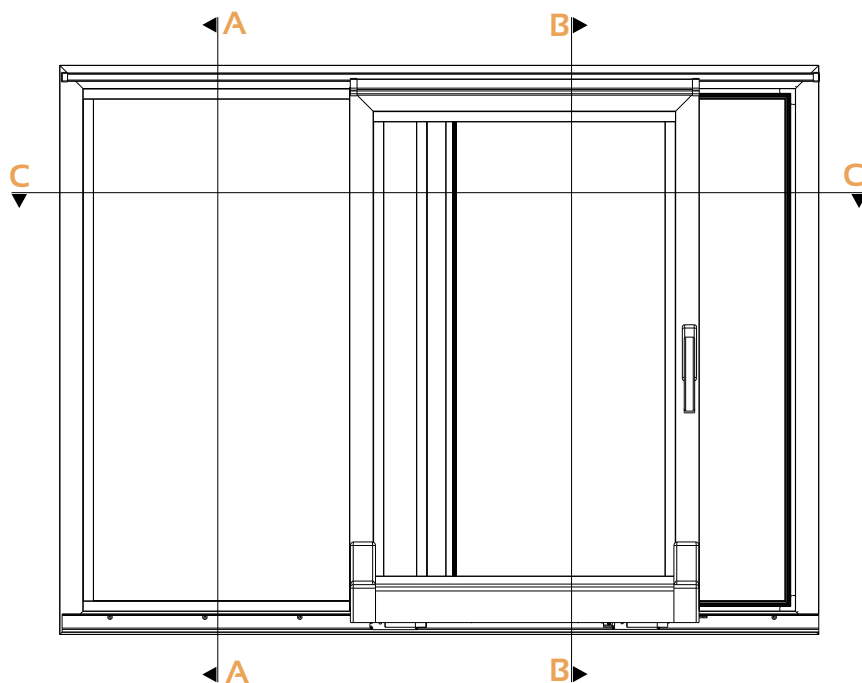
SINGLE TILT & SLIDE WINDOW



TILT & SLIDE WINDOW

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Cross Sectional Detail

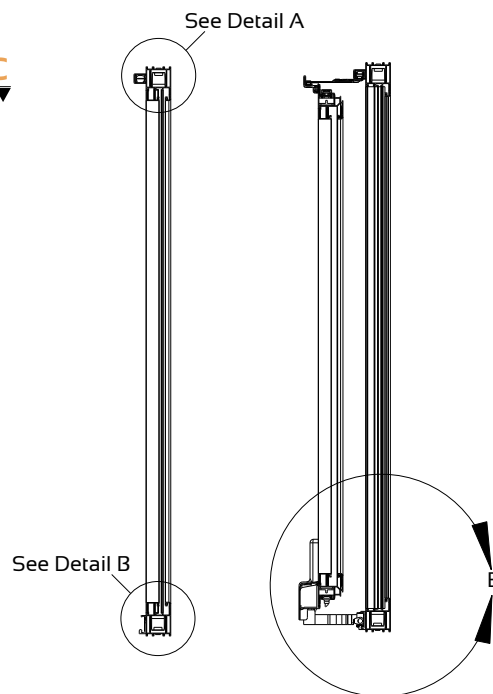


SECTION A-A

Section not to scale

SECTION B-B

Section not to scale



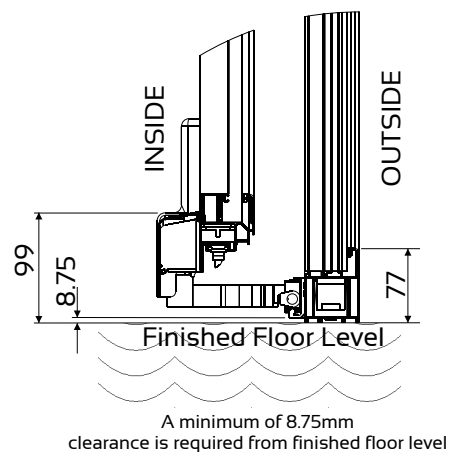
SECTION C-C

Section not to scale



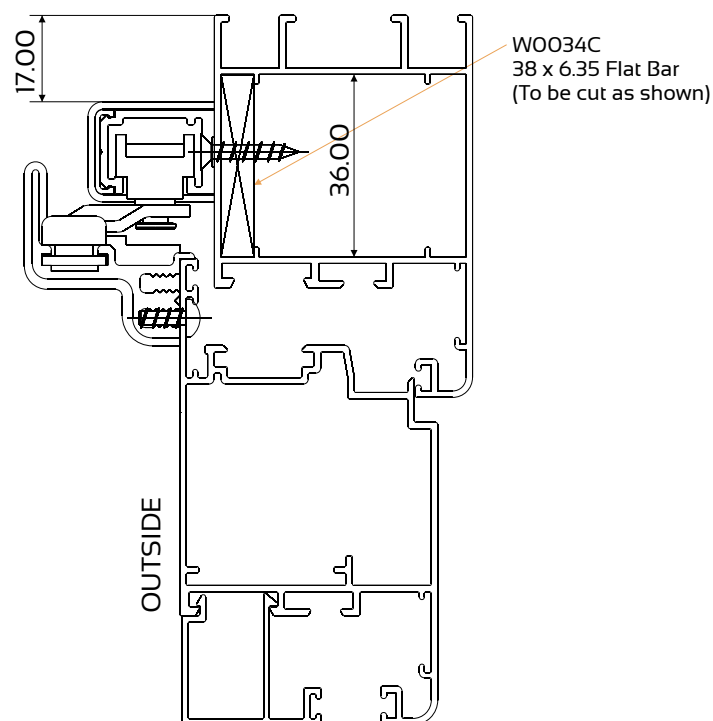
SECTION E-E

Section not to scale

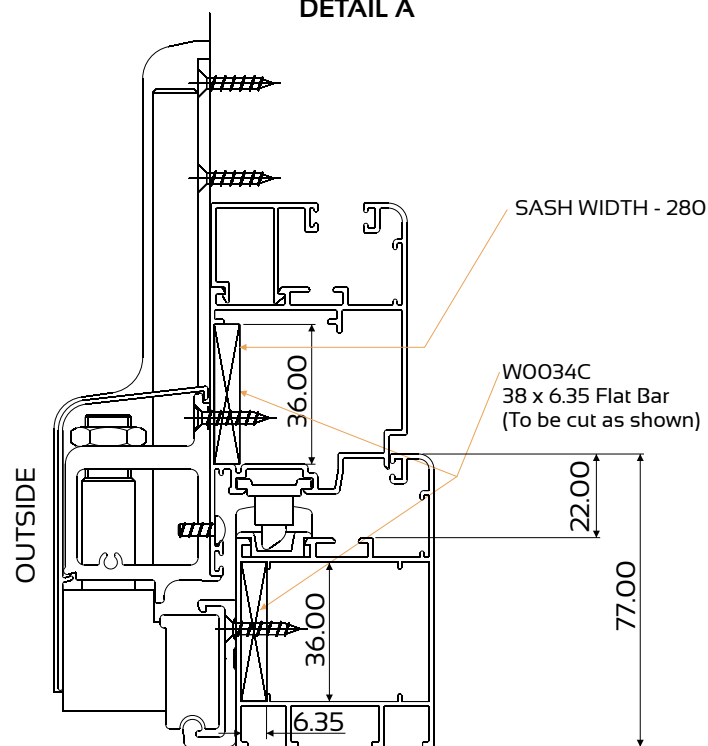


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DETAIL A

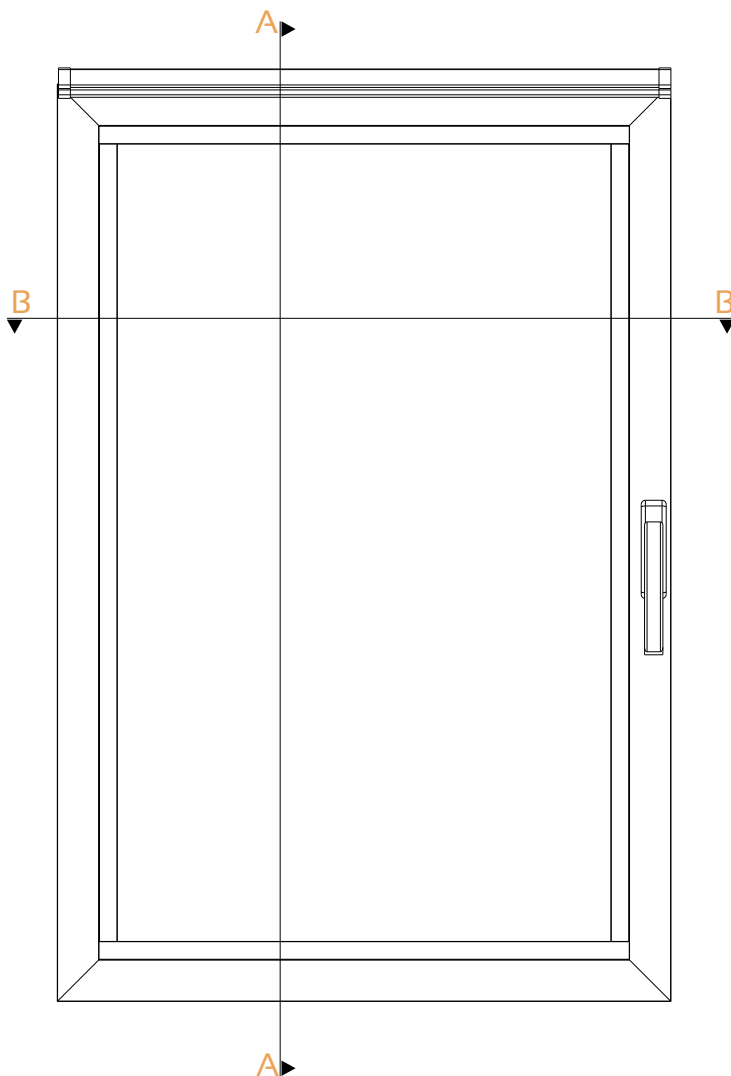


DETAIL B

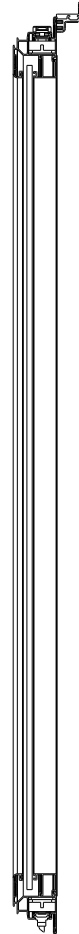
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Cross Sectional Detail

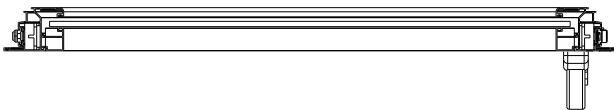
Sash



SECTION A-A
Section not to scale



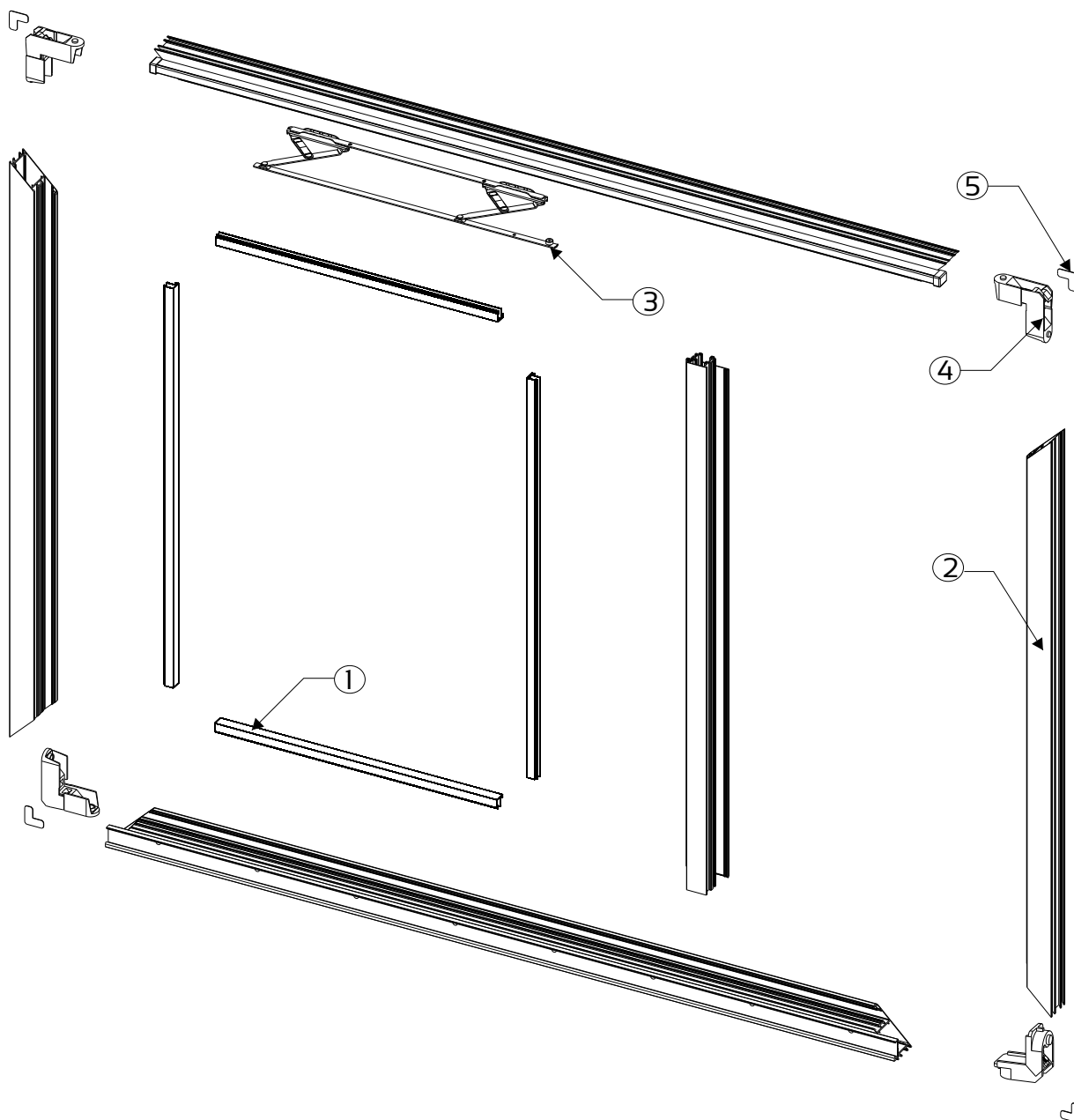
SECTION B-B
Section not to scale



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Exploded View

Frame



System Profiles

ITEM	QTY	DIE No.	DESCRIPTION
1	4	W31271	Bead 13mm Square
2	2	W55750	Frame 52mm Tilt & Slide

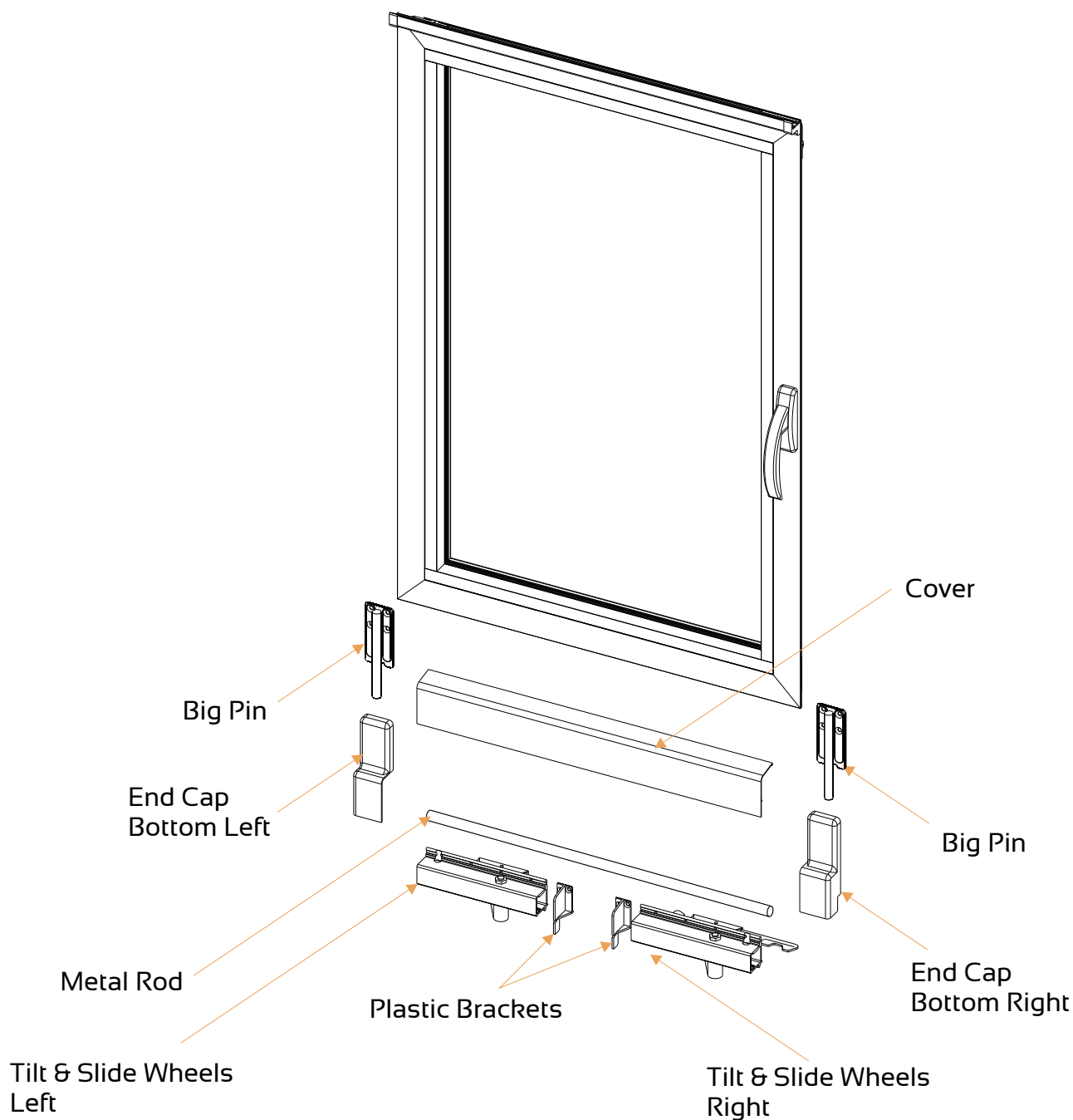
Hardware

ITEM	QTY	COMPONENT DESCRIPTION
3	1	Scissor Slider
4	4	Joining Corner
5	4	Alignment Mitre Corner



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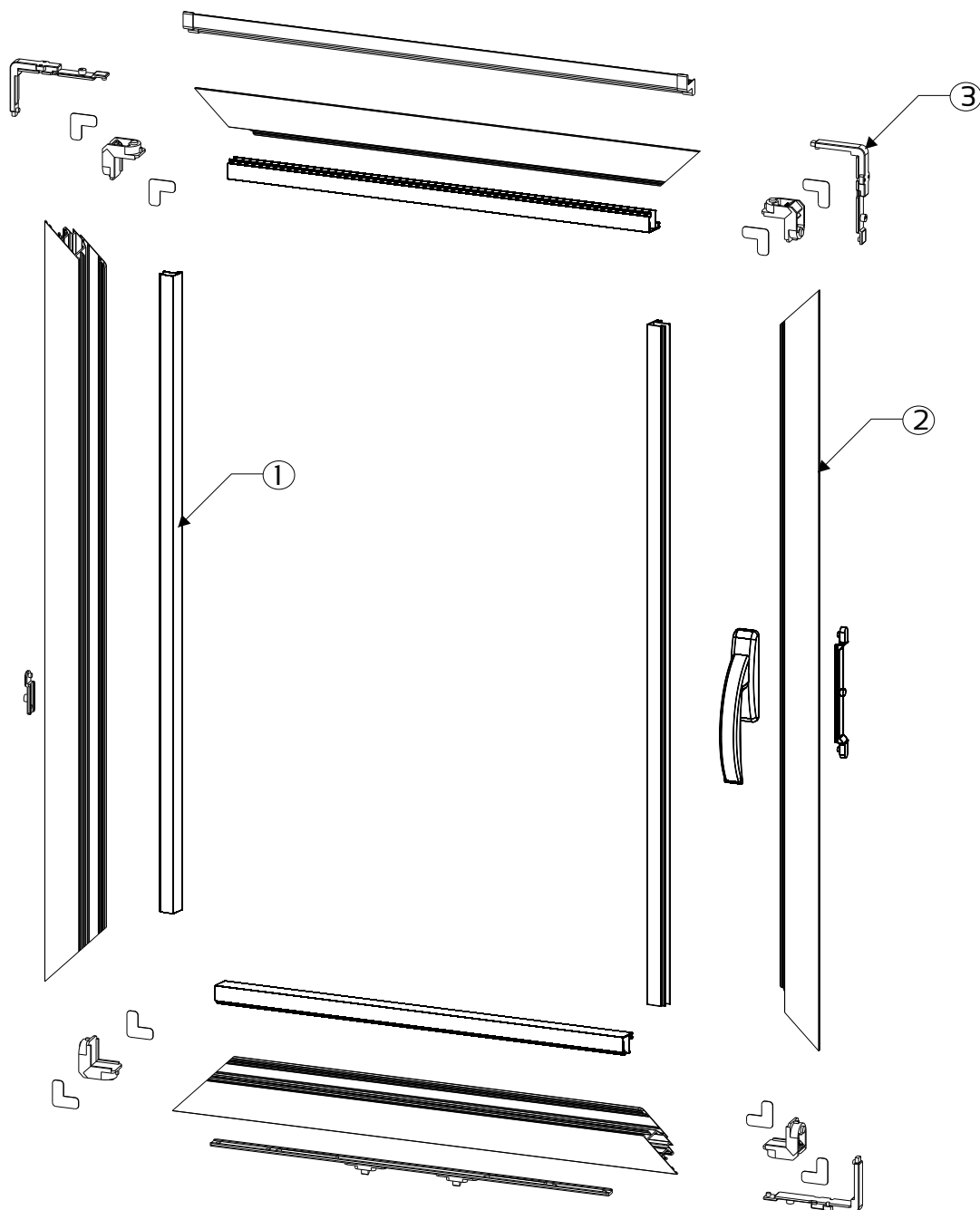
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Exploded View

Sash



System Profiles

ITEM	QTY	DIE No.	DESCRIPTION
1	4	W31271	Bead 13mm Square
2	2	W55255	Frame 52mm Tilt & Slide

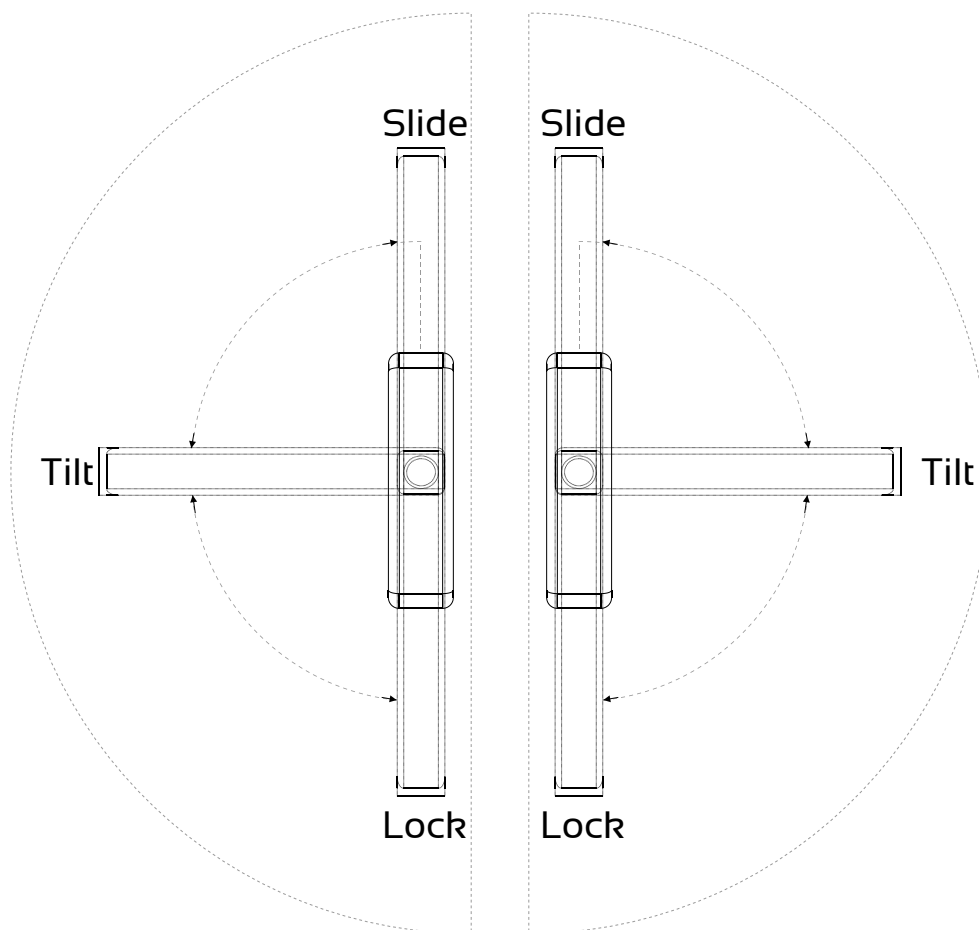
Hardware

ITEM	QTY	COMPONENT DESCRIPTION
3	4	Joining Corner Cup Type



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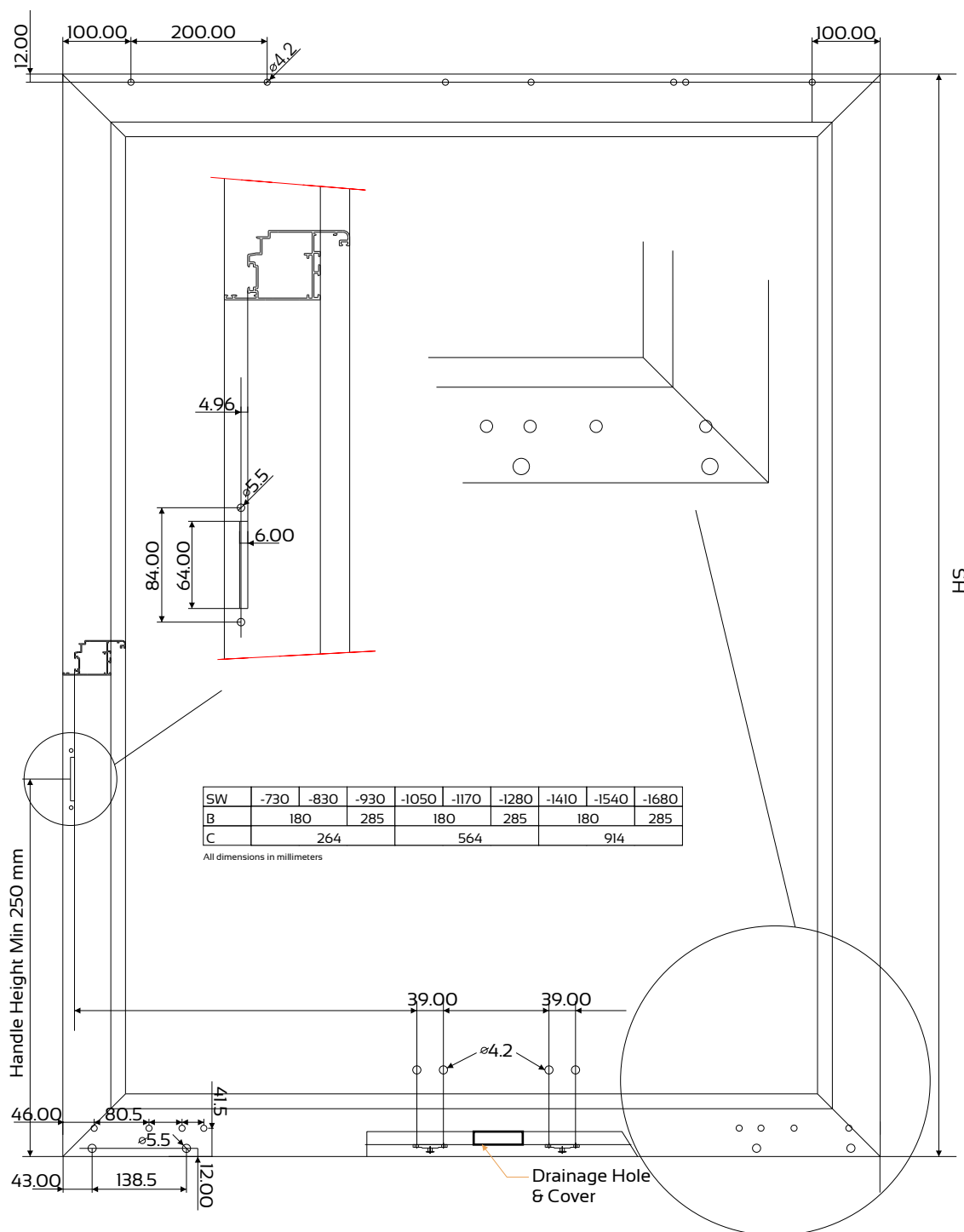


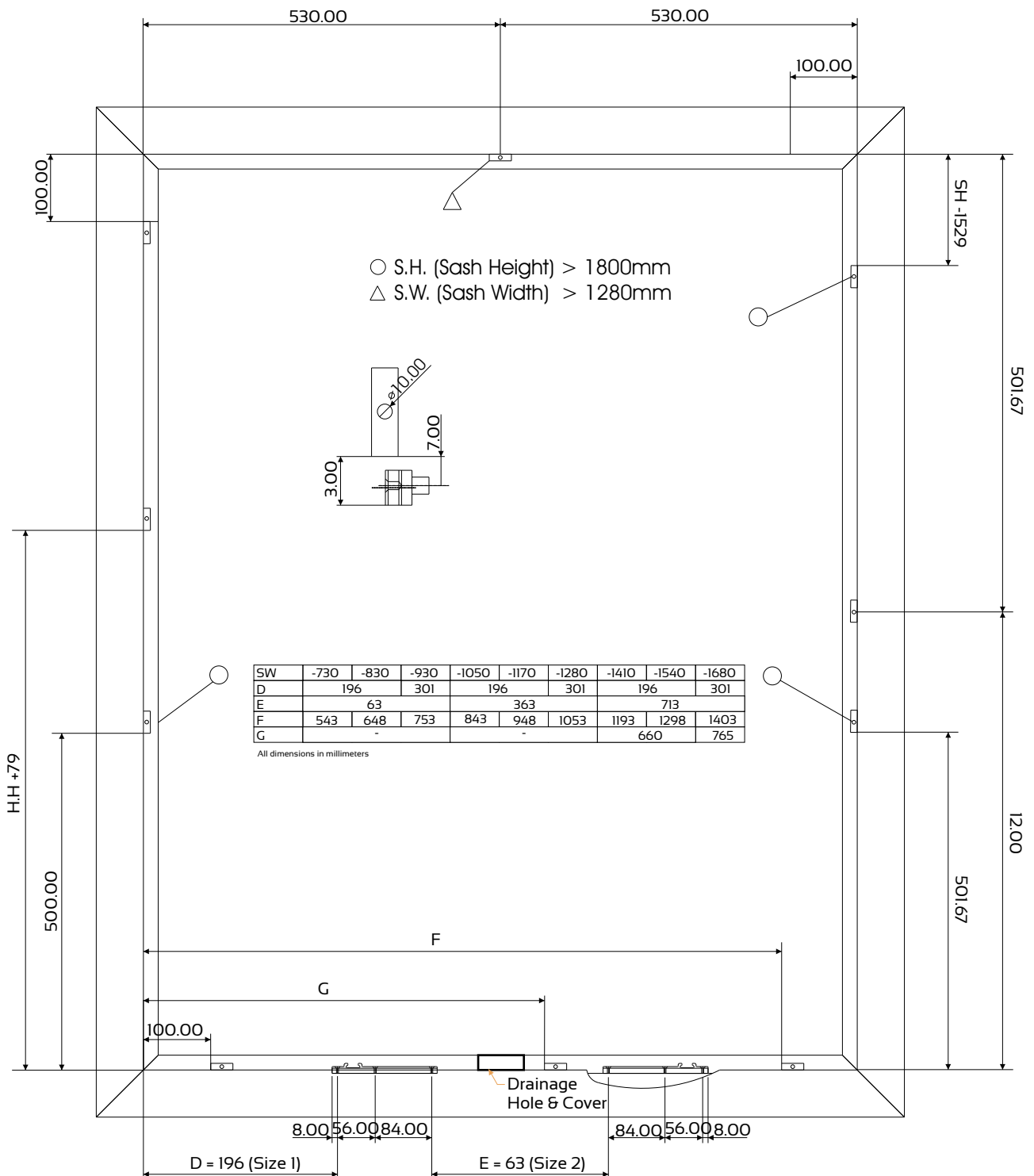
TRANSPARENT STICKERS AVAILABLE

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Hardware Detail

Sash

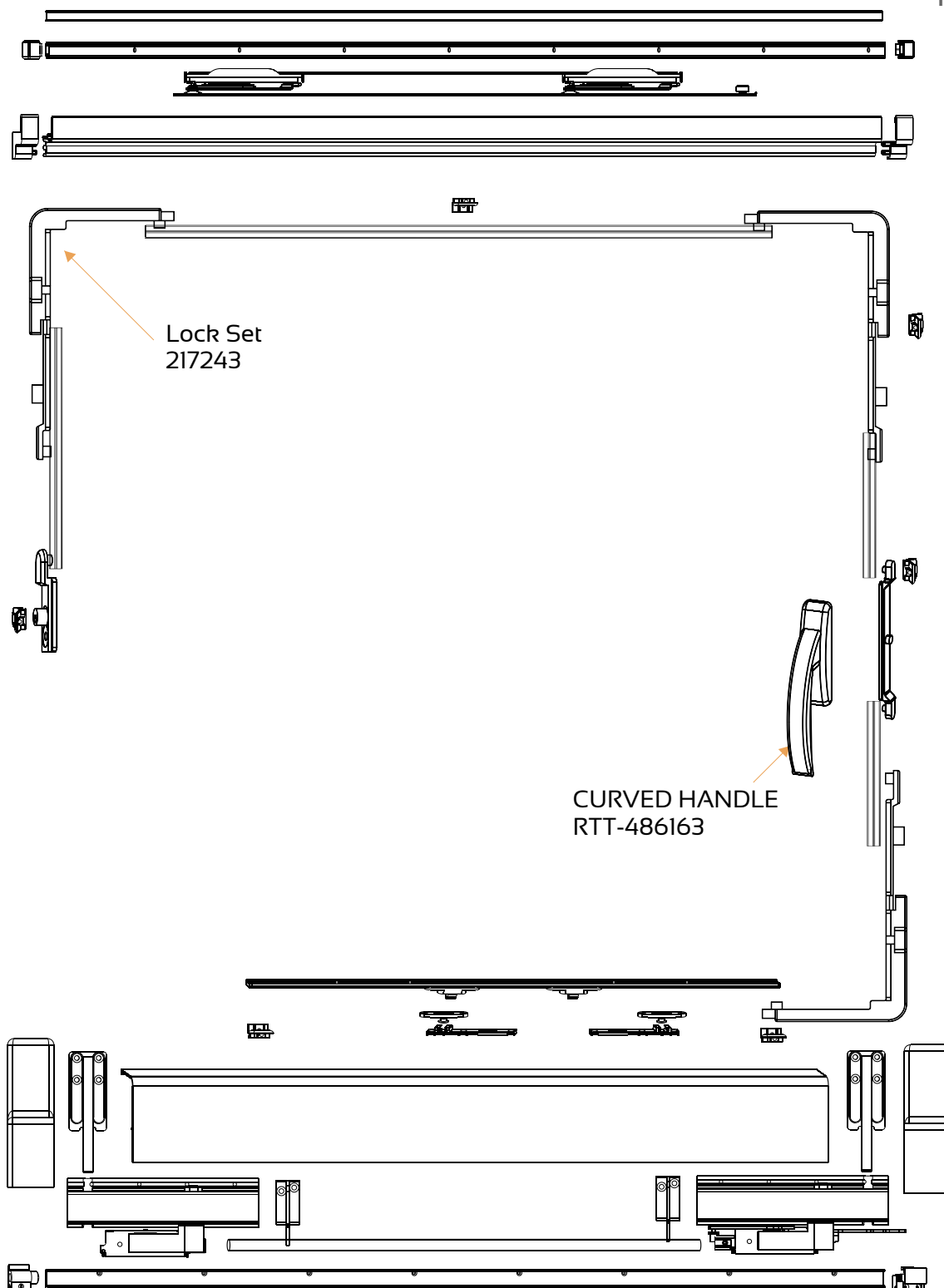


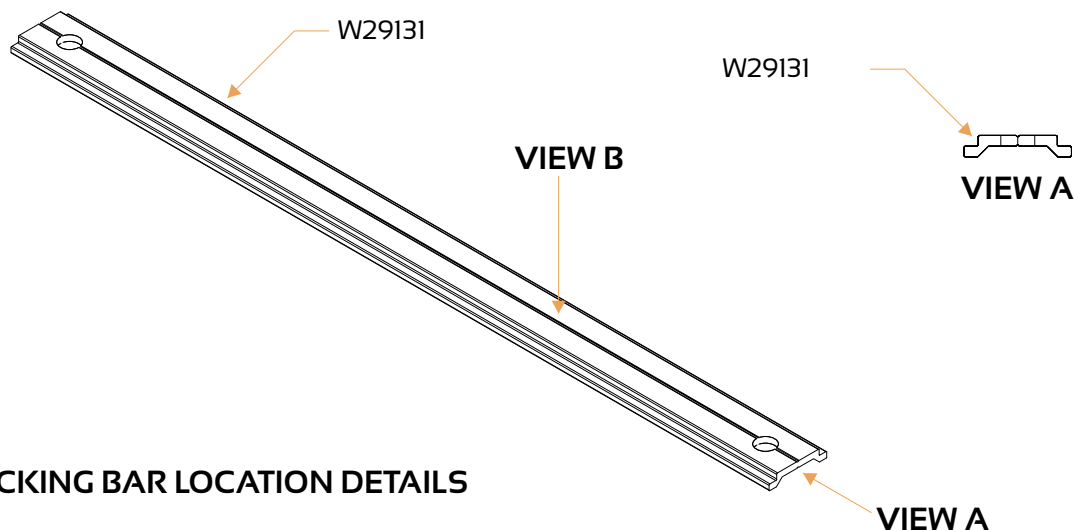


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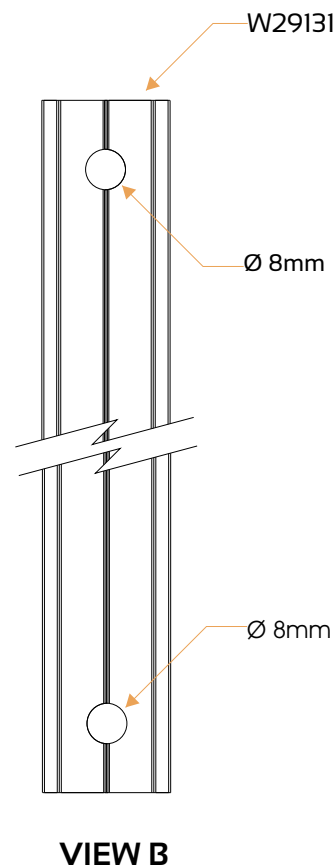
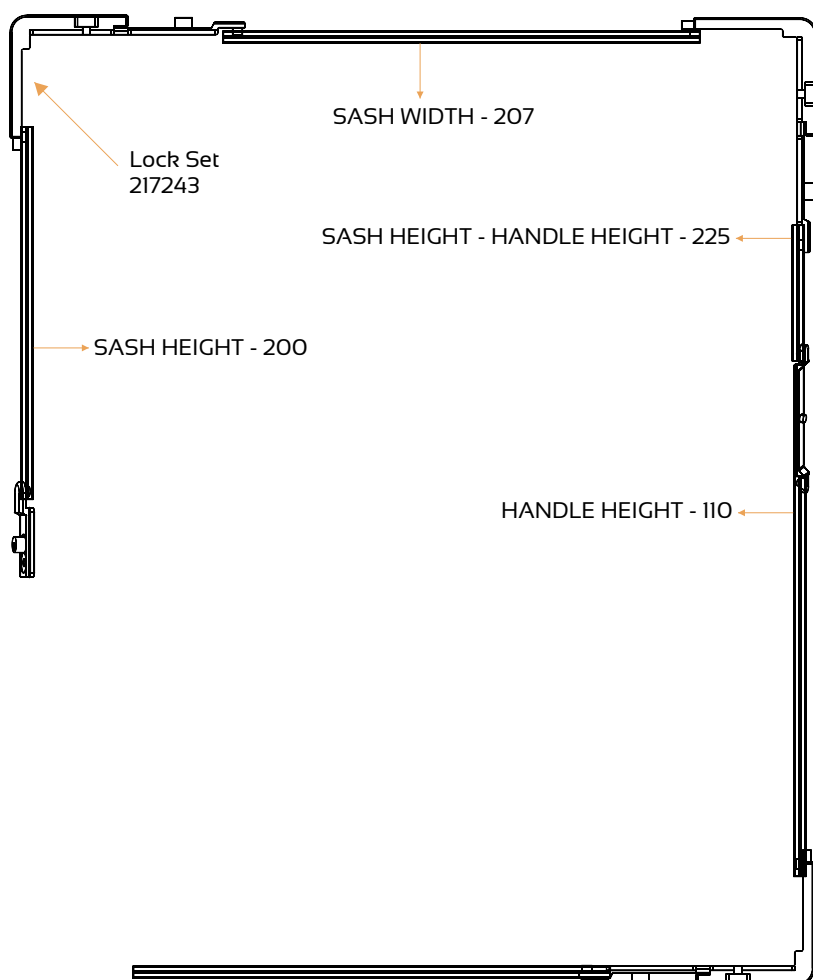
Hardware Detail

Tilt&Slide

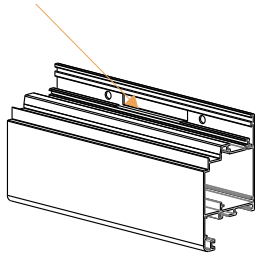




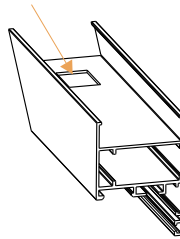
LOCKING BAR LOCATION DETAILS



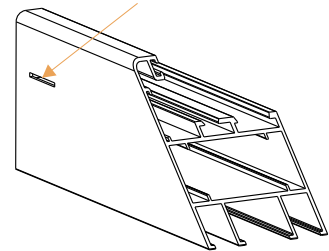
A: Handle Perforation



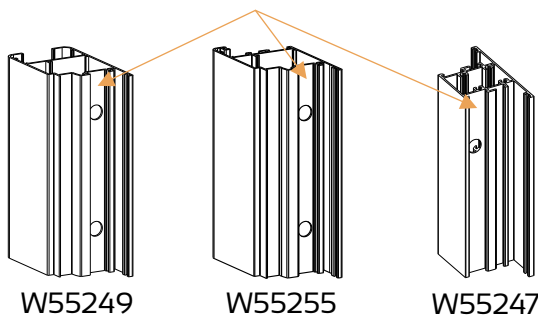
B: Punching for Corner Joint - LGC-JCC



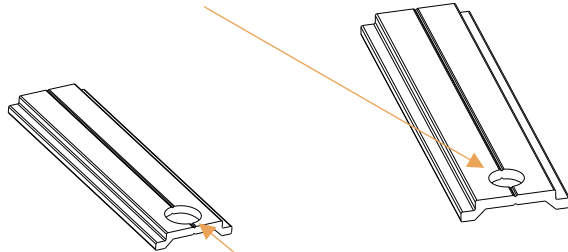
C: Punching for Water Drainage Hole



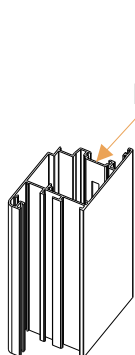
D: Punching for Ø11mm holes for Cross Connector and W55252



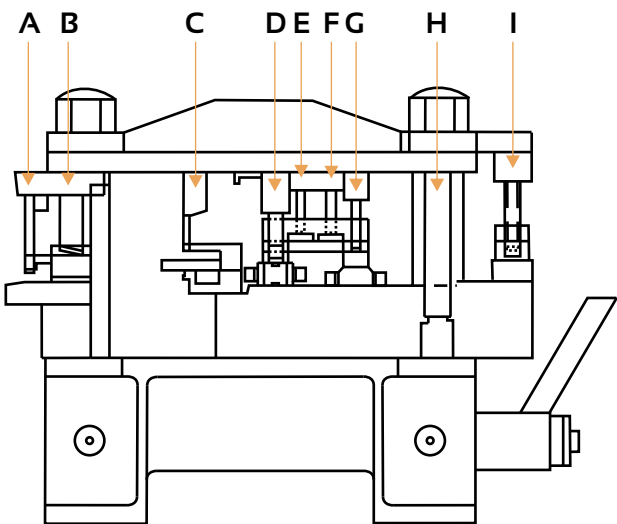
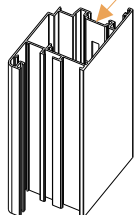
E: Locking Bar - Hole Ø6mm



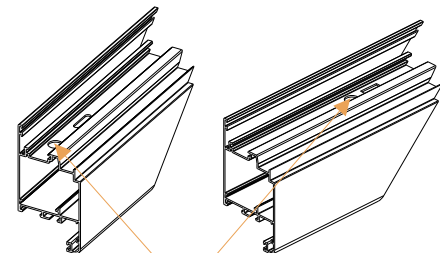
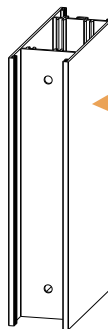
F: Locking Bar Hole Ø8mm



H: Locking Bar Punching for all Wings



G: Punching for Ø6mm Holes for W55252



I: Perforation for Corner Joint LGC-JC3217 and LGC-JC3236

PCR 073

Performance Compliance Report

Non-Transferable

Aluminium System Distributor Wispeco (Pty) Ltd
P O Box 124167
ALRODE
1451

Method of Glazing *Butterfly Gasket*

Elevation & Dimensions of Test Unit

2085mm

2385mm

Glass Types 6.38mm PVB

Extrusions used in manufacture

Detail #	Reference #	Description
1	55750 & 55255	Head assembly
2	55750 & 55255 & 31263	Cill assembly
3	55750 & 55255	Jamb assembly
4	55978 & 555255	Mullion assembly
Throughout	31271	Glazing bead
Throughout	CG003ER & WSG001E & BG050ER	Centre gasket & sash seals
Throughout	BG002PR & H92	Butterfly & Wedge

Test Results

Negative Pressure	2500 Pa
Positive Pressure	2500 Pa
Water Penetration	No leakage at 400Pa
Structural Pressure	3750 Pa
Air infiltration	0.65 l/s/m ²

AAAMSA Standard Achieved **A3**

Comment When manufactured to recommendations stipulated by the system provider, the **520 Tilt & Slide** is able to pass performance criteria **A3** as laid down in AAAMSA's General Specification for aluminium and glass products.

Each individual manufacturer must obtain appropriate AAAMSA Performance Test Certificate to confirm his ability to conform to this Performance Compliance Report. APT 11/013.

This document is to be read in conjunction with the appropriate technical and assembly documentation supplied by Messrs. Wispeco (Pty) Ltd

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AAAMSA
Penetration

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SASEMA
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SAGI
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SSA
Skylight Association of Southern Africa

TISA
Thermal Insulation Association of Southern Africa

TP MA
Thermal Panel Manufacturers Association

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NFRC
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GLAZING

1. SELECTION OF GLAZING METHODS

1.1 SETTING AND LOCATION BLOCKS

Glass-to-metal contact must be avoided at all times by using setting and location blocks having a hardness of 50° to 90° shore A durometer. Use only blocks made of Neoprene, EPDM, Silicone or other elastomeric material.

Setting blocks are to have a minimum thickness of 3mm and must be at least 27mm in length per square metre of glass area.

The position of the setting and location blocks is illustrated in Figure 2.

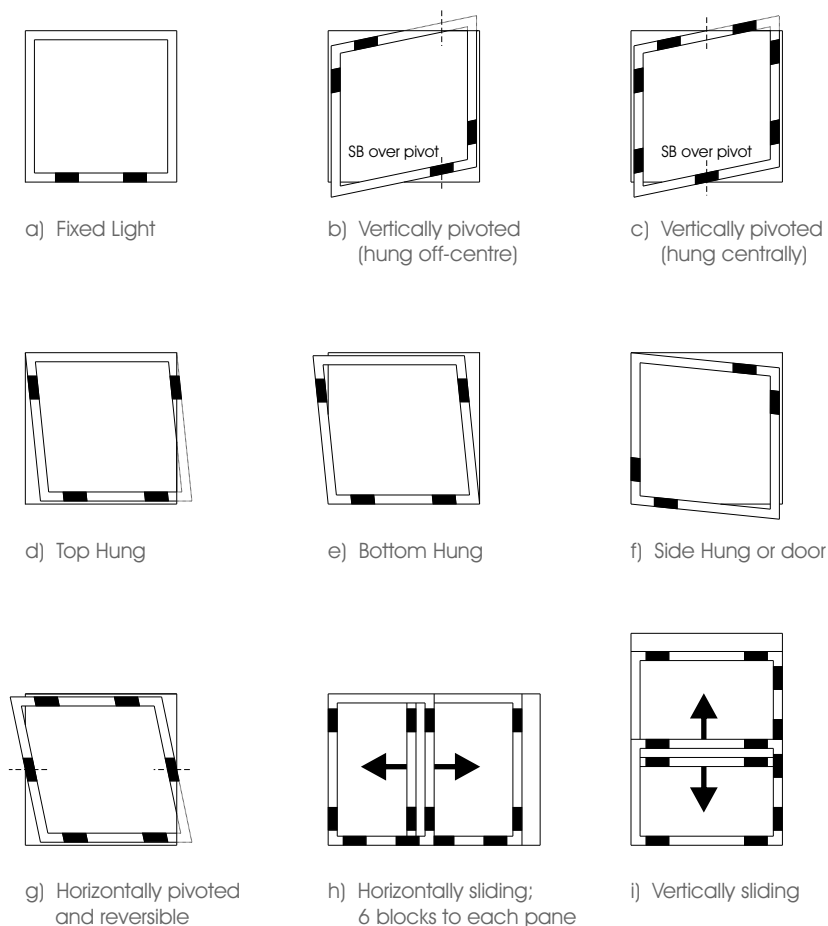


FIGURE 2 - POSITION OF SETTING AND LOCATION BLOCKS