PRODUCT MANUAL March 2019





A product of

LEGAL DISCLAIMER

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

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 www.crealco.co.za or from StarFront.

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

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 adversly 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

**For Cleaning and Maintenance of this system please download the Wispeco Installation, Cleaning and Maintenance Procedures from the Crealco website (www.crealco.co.za)

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



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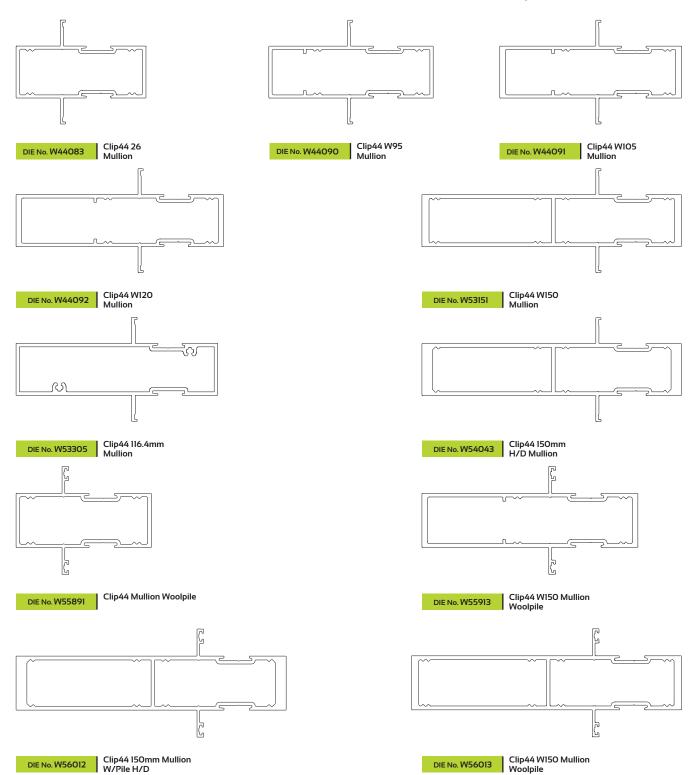
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Profile Identification

Clip44 Other Inserts Profiles





Profile Identification

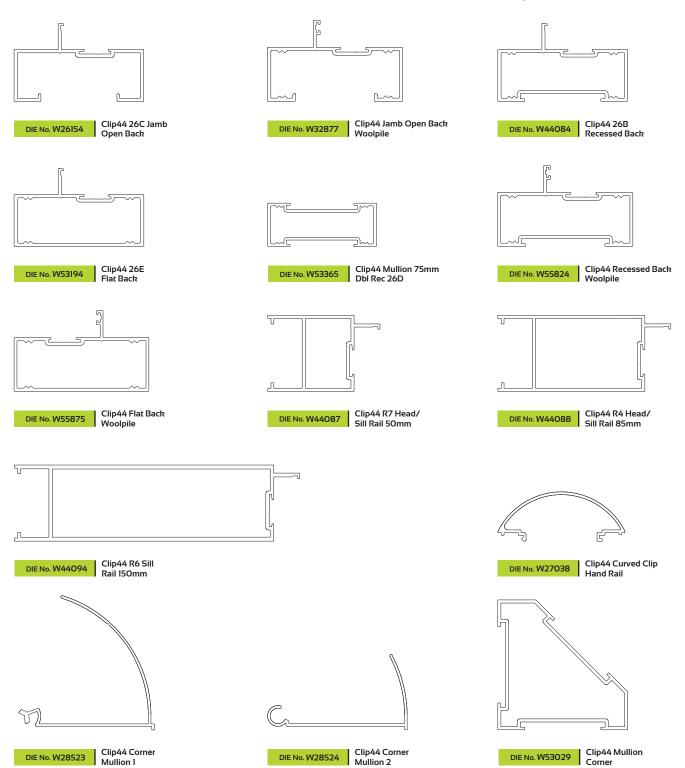
Clip44 Other Inserts Profiles





Profile Identification

Clip44 Other Inserts Profiles





Profile Identification

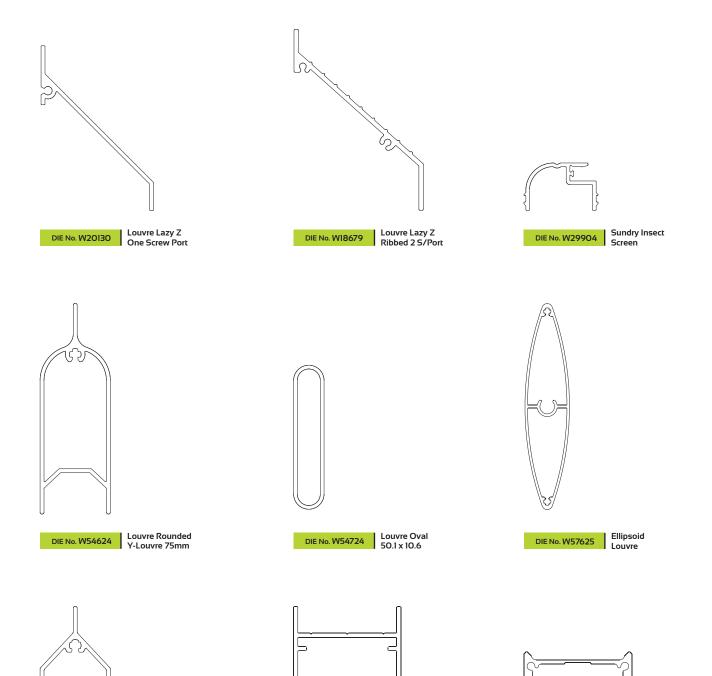
Clip44 Other Inserts Profiles





Profile Identification

Clip44 Other Inserts Profiles





Louvre Y-Louvre

DIE No. W18079

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.

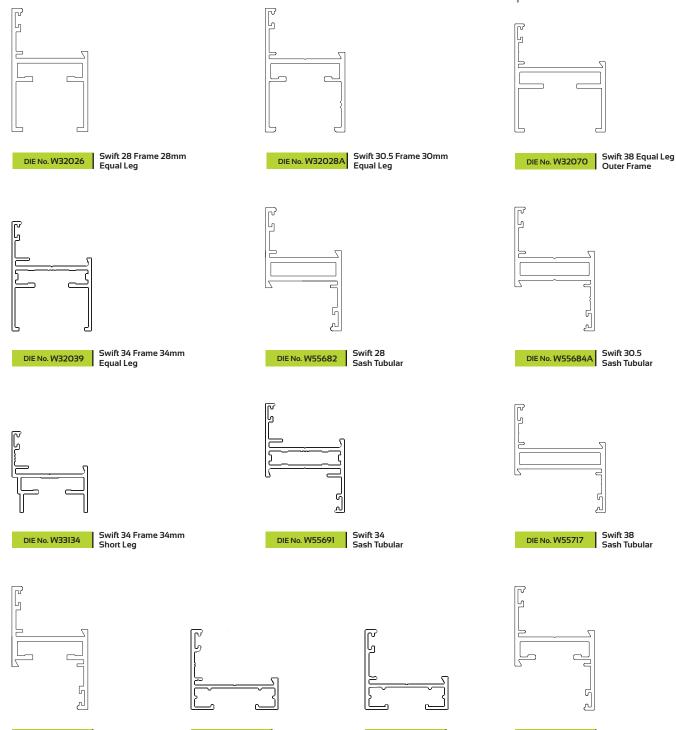
DIE No. W55456 Clip44 Box Spigot

Ellipsoid Louvre Frame

DIE No. W35668

Profile Identification

Clip44 Other Inserts Profiles





DIE No. W36831

Swift 30.5 Short

Leg Outer Frame

DIE No. W32025

Swift 28 Frame

28mm Unequal Leg

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.

DIE No. W32027

Swift 30.5 Frame

30mm Unequal Leg

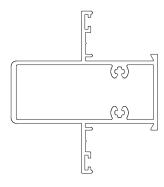
DIE No. W36832

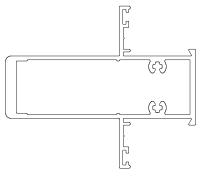
Swift 28 Short

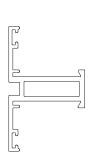
Leg Outer Frame

Profile Identification

Clip44 Other Inserts Profiles



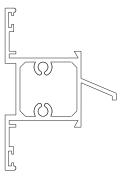




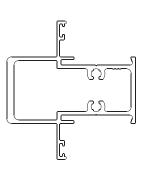
Swift 28 Mullion 54mm DIE No. W54348

Swift 28 DIE No. W54329 Mullion 70mm

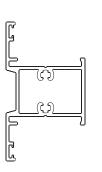
Swift 28 Mullion 28mm Cottage Pane DIE No. W53283





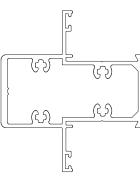


Swift 34 DIE No. W56269 Mullion 54mm

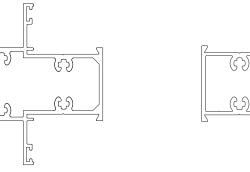




Swift 34 Mullion 34mm



DIE No. W54651A Swift 30.5 Mullion 54mm

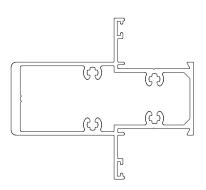


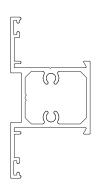
DIE No. <W55683> Swift 28 Mullion 28mm

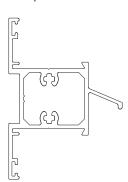


Profile Identification

Clip44 Other Inserts Profiles







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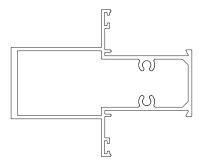
Swift 30.5 Mullion 70mm

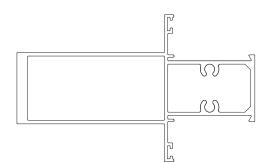
DIE No. W55685A

Swift 30.5 Mullion 30mm Standard

DIE No. W53630

Swift 30.5 Mullion 30mm W/Bar



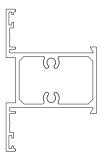


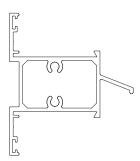
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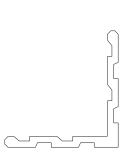
Swift 38 Mullion 76mm

DIE No. W54454

Swift 38 Mullion 100mm







DIE No. W55718

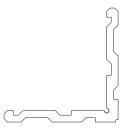
Swift 38 Mullion/Transom

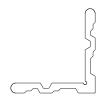
DIE No. W13408

Swift 38 Mullion with W/Bar

DIE No. W52695

Swift 28 Corner Cleat 50mm





CLIO241P

Swift 34 Corner Cleat

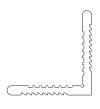


Swift 30.5 Corner Cleat 40mm



Profile Identification

Clip44 Other Inserts Profiles



DIE No. W52538

Osborne Multi Corner Cleat



DIE No. W52693

Swift 28 Bead



DIE No. W31140

Swift 38 Angle Bead 13mm Gap



DIE No. W31137

Swift 28 Bead Multi 13mm Gap



DIE No. W31139A

Swift 30.5 Bead Multi 13mm Gap



DIE No. W33137

Swift 34 Bead Multi 13mm



DIE No. W27991

Swift 30.5 Bead 4 & 5mm



DIE No. W25200

Swift 38 Glazing Bead 7mm-8mm



DIE No. W10083

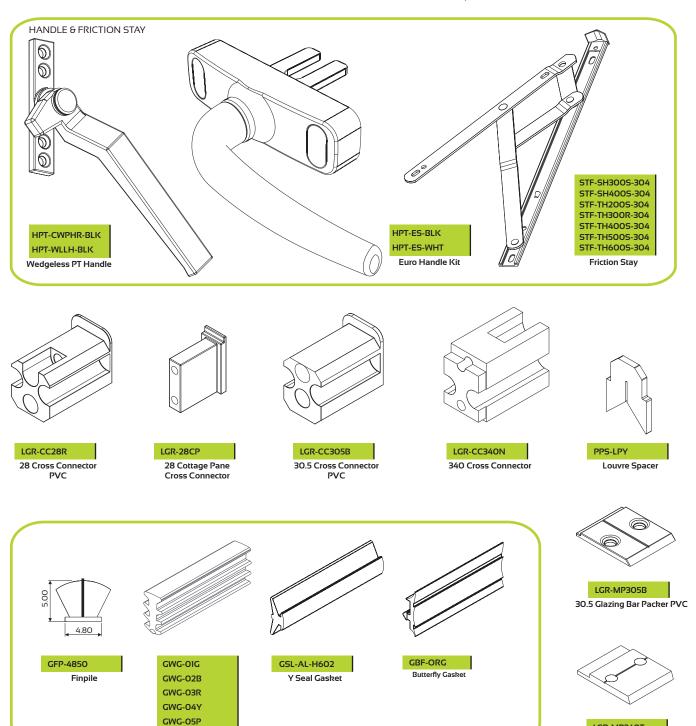
Swift 34 Add-On W/Bar



Hardware Components

RECOMMENDED CLIP44 OTHER INSERTS HARDWARE COMPONENTS

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





Wedge Gasket

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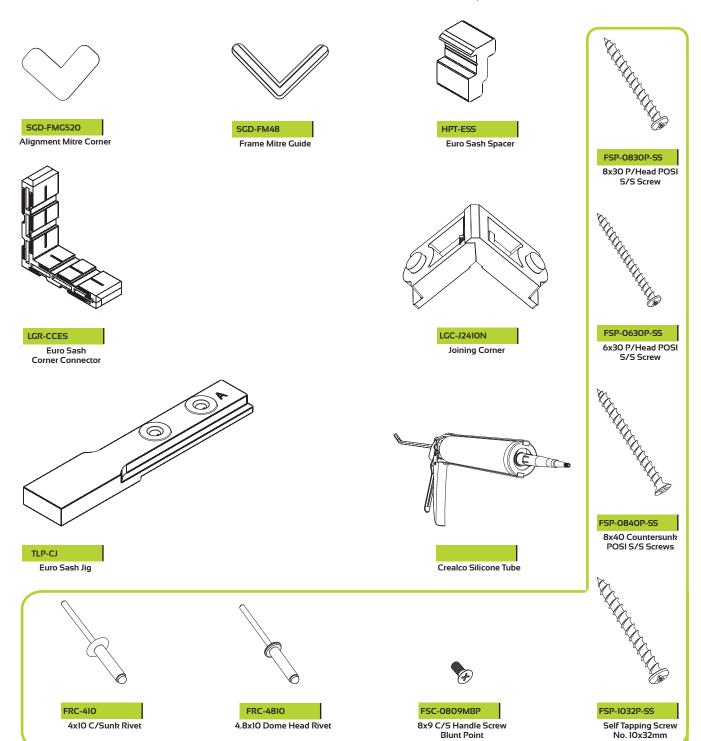
LGR-MP340T

Glazing Bar Packer Alum for 340

Hardware Components

RECOMMENDED CLIP44 OTHER INSERTS HARDWARE COMPONENTS

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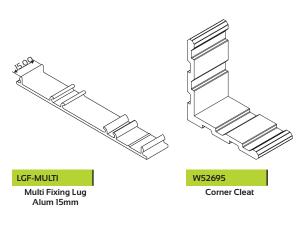


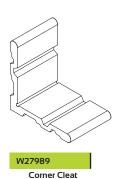


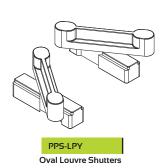
Hardware Components

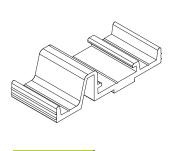
RECOMMENDED CLIP44 OTHER INSERTS HARDWARE COMPONENTS

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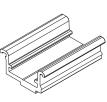














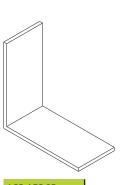
W26228 Frame Spigot

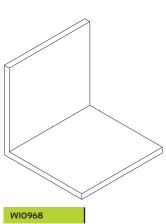
LGS-BS
Box Spigot 4x S/Port

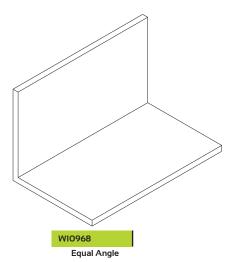
LGS-FS-119.9 LGS-FS-72.7 LGS-FS-55.3 LGS-FS-20.5 LGS-FS-17.7

Clip44 Frame Spigot

Swift 34 Corner Cleat







LGS-AFS-25 44,45X22,22X2,03





Butterfly Gasket & Wedge Codes









Wedge Gasket
GWG-01G



Wedge Gasket
GWG-02B

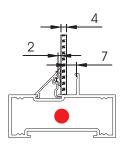


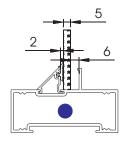
Wedge Gasket
GWG-03R

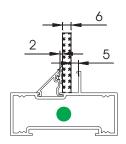


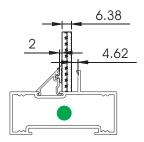
Wedge Gasket
GWG-05P

WEDGES

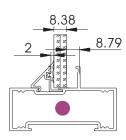


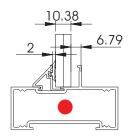


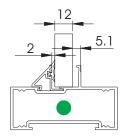


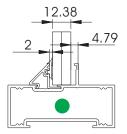


CLIP 44 WITH W31142 BEAD





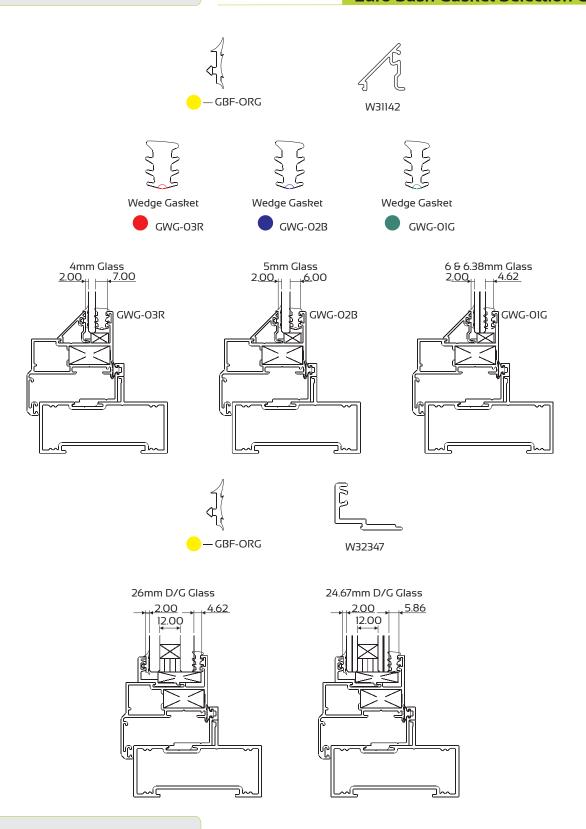




CLIP 44 WITH W30468 BEAD



Euro Sash Gasket Selection Chart





Size Limitation Guide

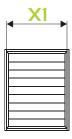
Louvre Inserts

Y-LOUVRE, ROUNDED Y-LOUVRE & LAZY Z-LOUVRE



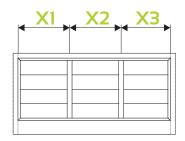
MAXIMUM LOUVRE BLADE LENGTH: X1 = 900mm

ELLIPSOID LOUVRE



MAXIMUM LOUVRE BLADE LENGTH: XI = 1800mm

HORIZONTAL GLASS LOUVRE



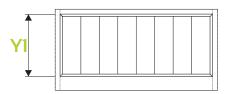
MAXIMUM LOUVRE BLADE LENGTH:

X1 = 900mm

X2 = 900mm

X3 = 900mm

VERTICAL GLASS LOUVRE

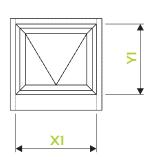


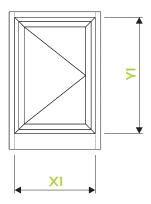
MAXIMUM LOUVRE BLADE LENGTH: YI = 900mm



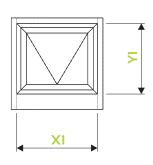
Sash Limitation Guide

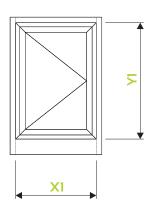
The sash limitations of the system are strictly calculated in accordance to AAMSA guidelines and take into account the aluminium specifications as well as the glass used. Please ensure that these are adhered to as any product produced outside of these limitations will not adhere to AAMSA regulations.





	Top Hung		Side Hung	
	Maximum Vent Width in mm	Maximum Vent Height in mm	Maximum Vent Width in mm	Maximum Vent Height in mm
Casement 28	900	600	600	1200
Casement 30.5	1000	750	600	1200
Casement 38	1500	1200	700	1500
Casement 34	1200	900	700	1500





EURO SASH		Maximum Vent Width in mm	Maximum Vent Height in mm
Top Hung	W57630	1500	1200
Side Hung	VV5/63U	700	1500

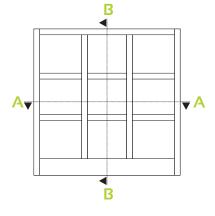


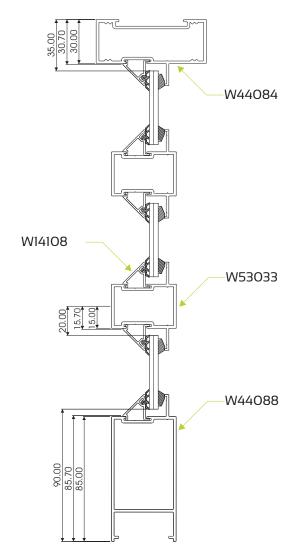
Cross-Sectional Detail

Cottage Pane 3x3 Pane

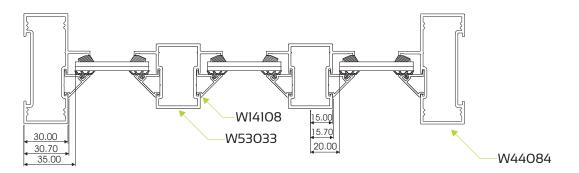
SECTION B-B

Section not to scale





SECTION A - ASection not to scale



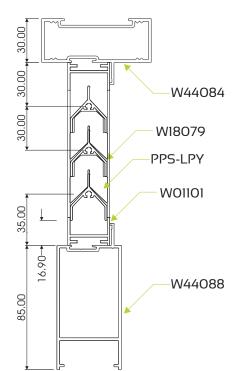


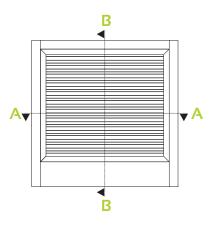
Cross-Sectional Detail

Y-Louvre Configuration

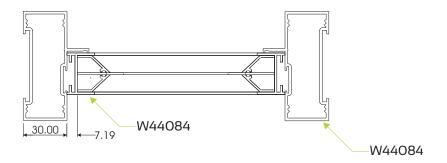
SECTION B-B

Section not to scale





SECTION A - ASection not to scale





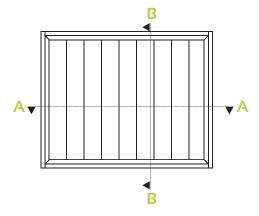
Cross-Sectional Detail

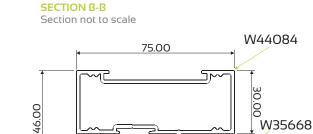
Vertical Louvre Configuration

30.00

30.00

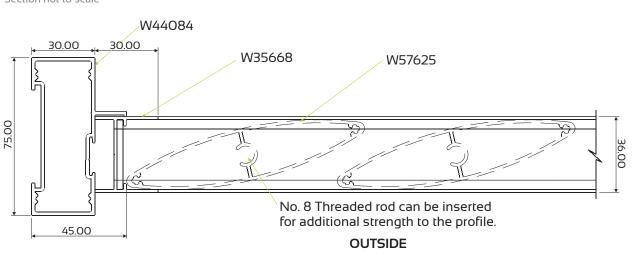
30.00





Louvre Height = Overall Height - 92 (Max Height = 1800mm)

SECTION A - A
Section not to scale



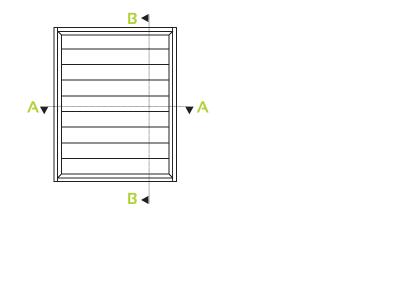
46.00

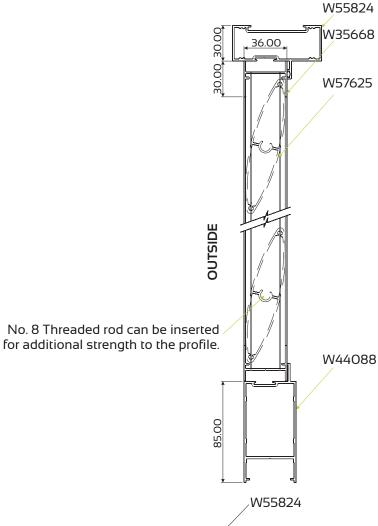


Cross-Sectional Detail

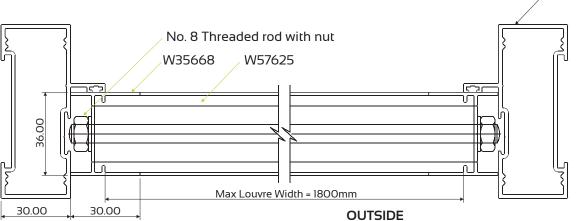
Horizontal Louvre Configuration

SECTION B-BSection not to scale



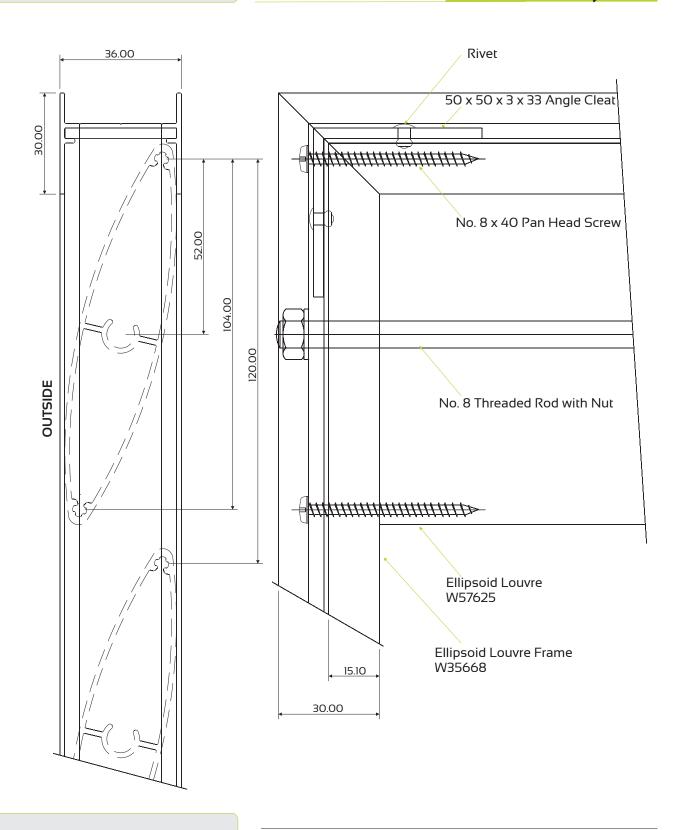


SECTION A - ASection not to scale





Assembly Detail





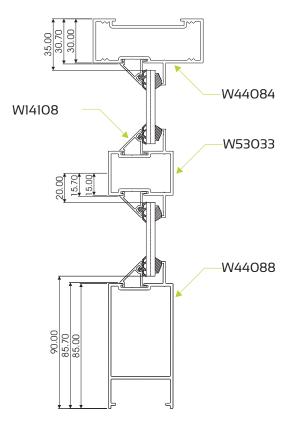
A A

Cross-Sectional Detail

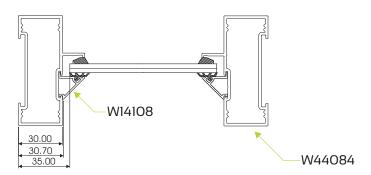
30mm Configuration with Midrail

SECTION B-B

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SECTION A - ASection not to scale





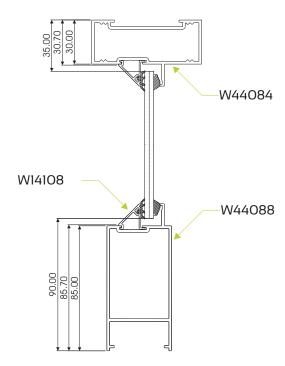
B A

Cross-Sectional Detail

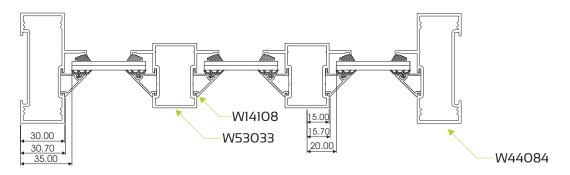
Sill Configuration with 2 Mullions

SECTION B-B

Section not to scale



SECTION A - ASection not to scale





A A

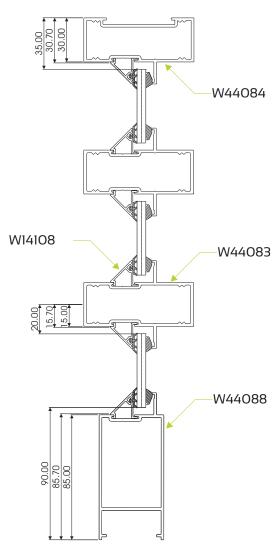
В

Cross-Sectional Detail

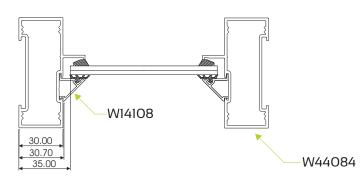
Transom Configuration

SECTION B-B

Section not to scale



SECTION A - ASection not to scale



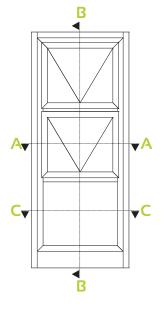


Cross-Sectional Detail

Swift 28 Short Leg Outer Frame in Clip 44

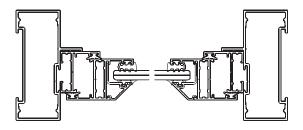
SECTION B-B

Section not to scale



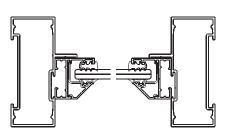
SECTION A - A

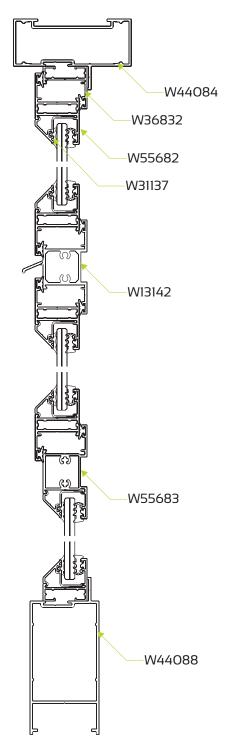
Section not to scale



SECTION C-C

Section not to scale





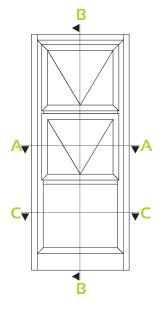


Cross-Sectional Detail

Swift 30.5 Short Leg Outer Frame in Clip 44

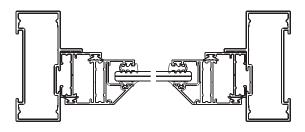
SECTION B-B

Section not to scale



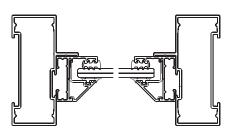
SECTION A - A

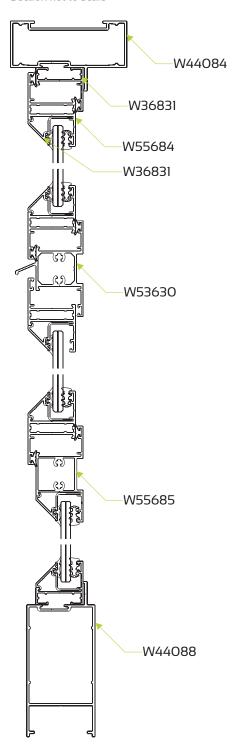
Section not to scale



SECTION C-C

Section not to scale





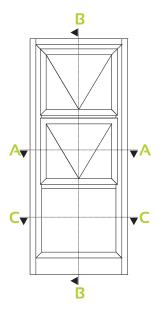


Cross-Sectional Detail

Typical Vertical Section showing the Swift 34 Outer Frame in Clip 44

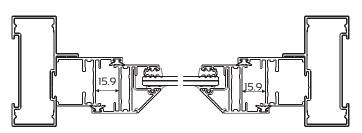
SECTION B-B

Section not to scale



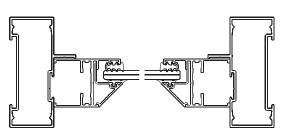
SECTION A - A

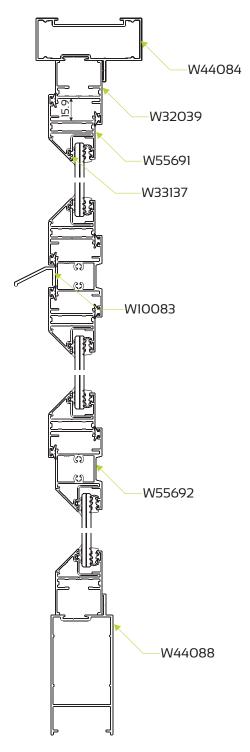
Section not to scale



SECTION C-C

Section not to scale





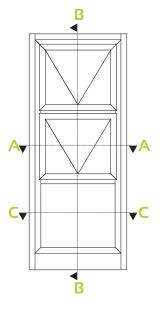


Cross-Sectional Detail

Typical Vertical Section showing the Swift 34 Short Leg Outer Frame in Clip 44

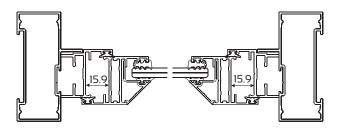
SECTION B-B

Section not to scale



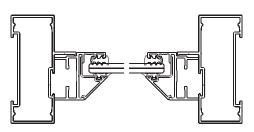
SECTION A - A

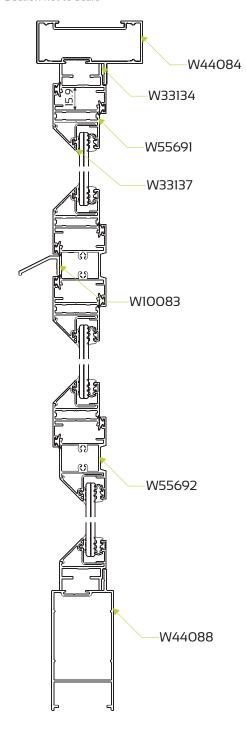
Section not to scale



SECTION C-C

Section not to scale





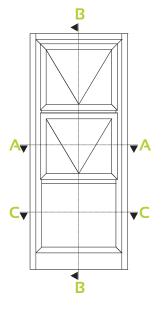


Cross-Sectional Detail

Swift 38 Insert - Two Top Hung Over Fixed

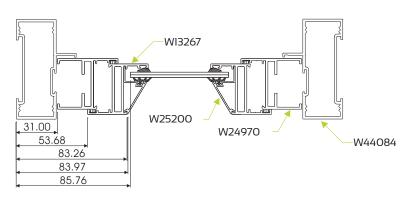
SECTION B-B

Section not to scale



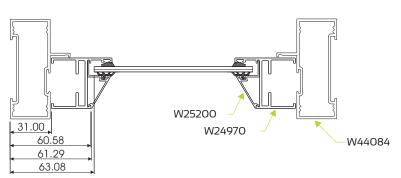
SECTION A - A

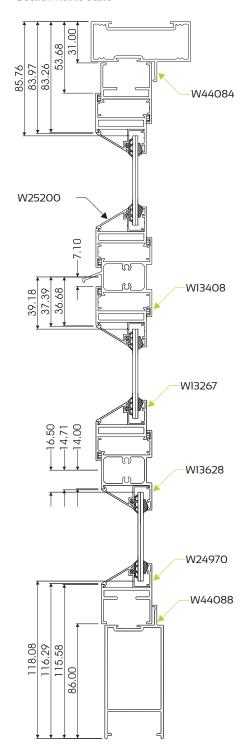
Section not to scale



SECTION C-C

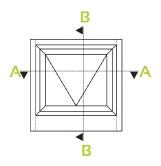
Section not to scale

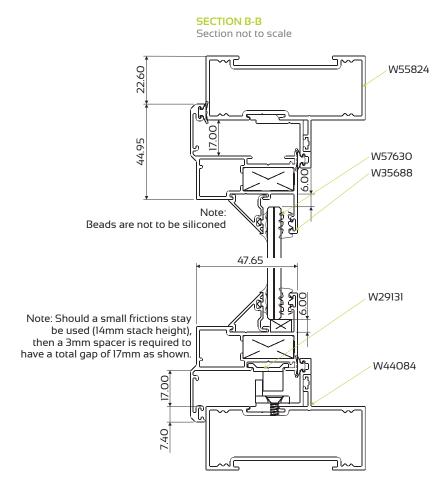




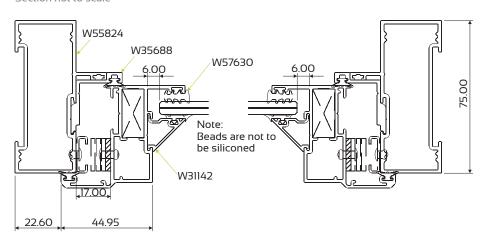


Euro Sash Cross-Sectional Detail





SECTION A - ASection not to scale

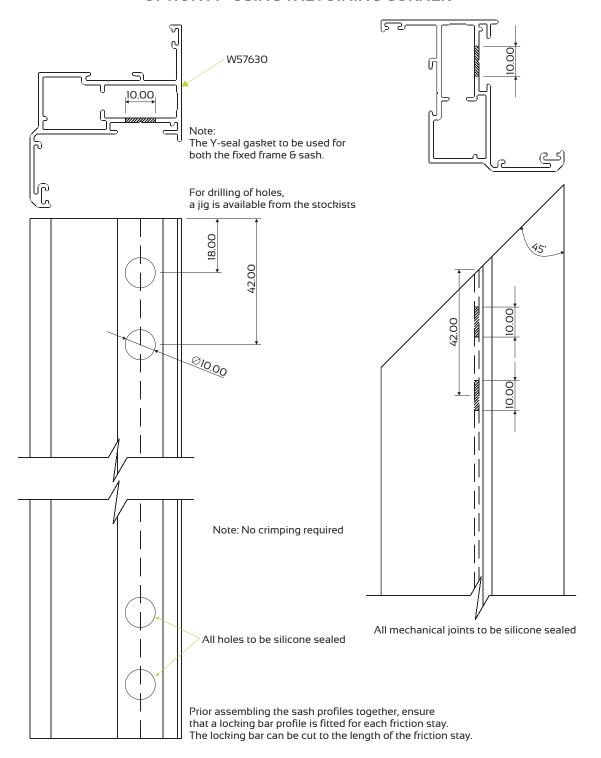




Euro Sash Corner Joint Detail

Option A - Using the Joining Corner

OPTION A - USING THE JOINING CORNER

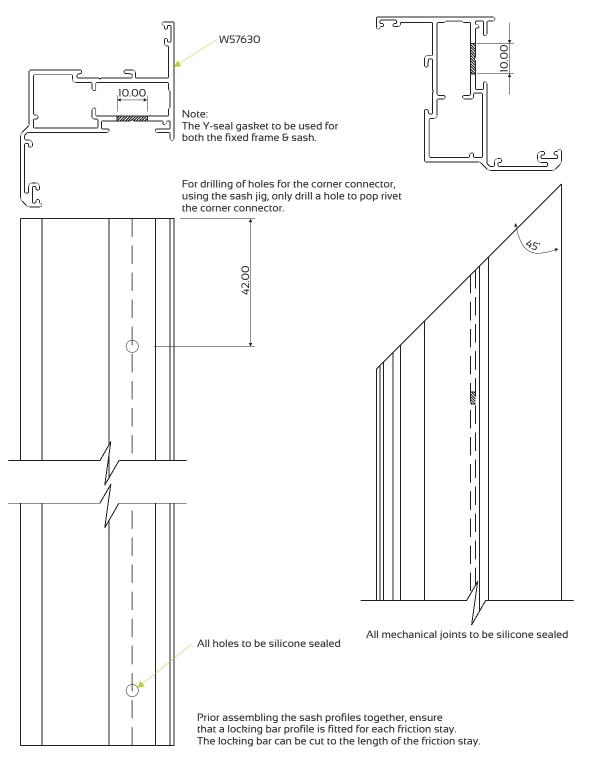




Euro Sash Corner Joint Detail

Option B - Using the Corner Connector

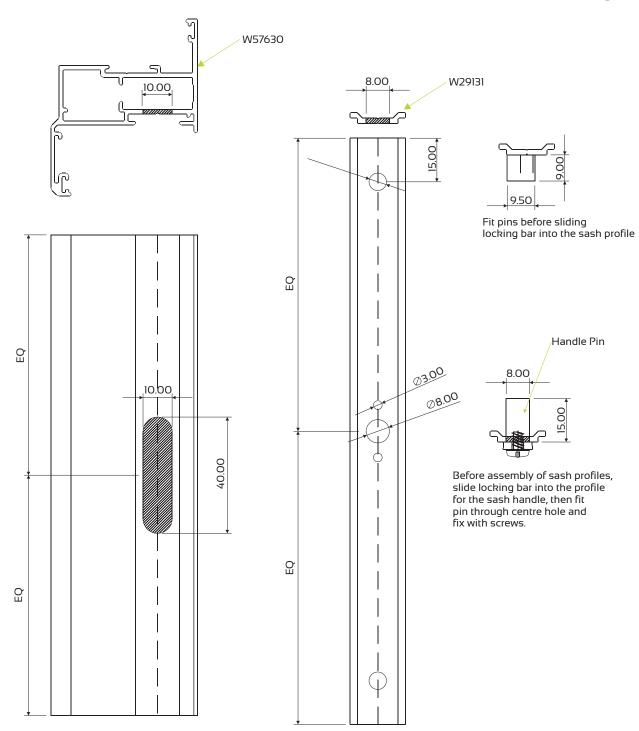
OPTION B - USING THE CORNER CONNECTOR





Machining Detail

Sash & Locking Bar



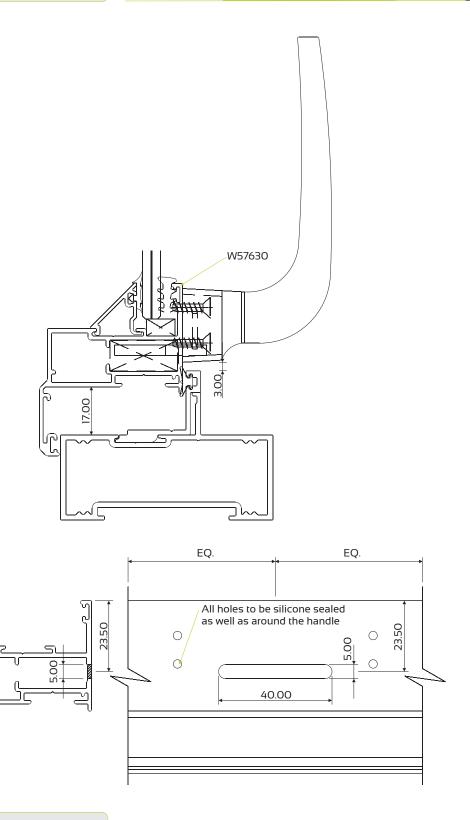
Note:

Before assembly of the sash frame, the locking bar needs to be inserted into the bottom sash profile with the locking pins fitted θ holes drilled to receive the handle pin.



Machining Detail

Handle

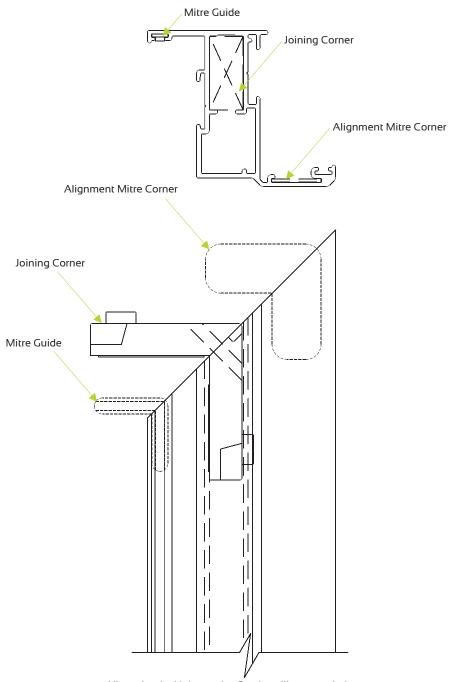




Assembly Detail

Corner Joint

OPTION A - USING THE JOINING CORNER



All mechanical joints to be Crealco silicone sealed

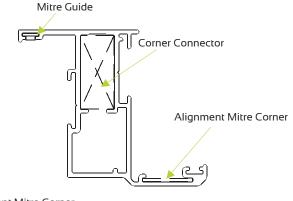
Prior assembling the sash profiles together, ensure that the relevant locking bar profiles are fitted into the sash profiles. The locking bars can be cut to the length of the friction stays.



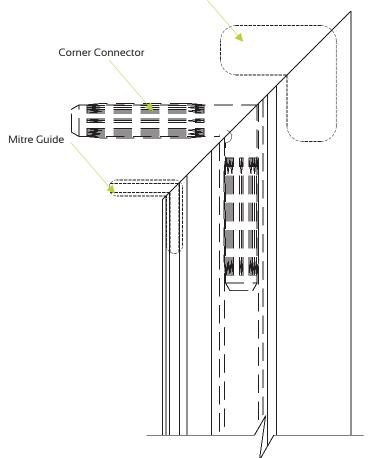
Assembly Detail

Corner Connector

OPTION B - USING CORNER CONNECTOR



Alignment Mitre Corner



All mechanical joints to be Crealco silicone sealed

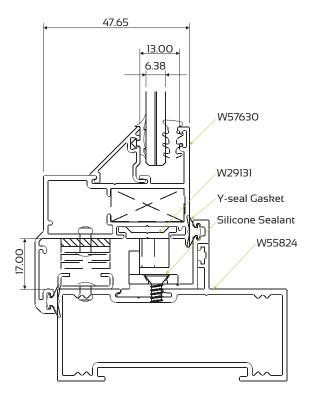
Prior assembling the sash profiles together, ensure that the relevant locking bar profiles are fitted into the sash profiles. The locking bars can be cut to the length of the friction stays.



Locking Angle Detail

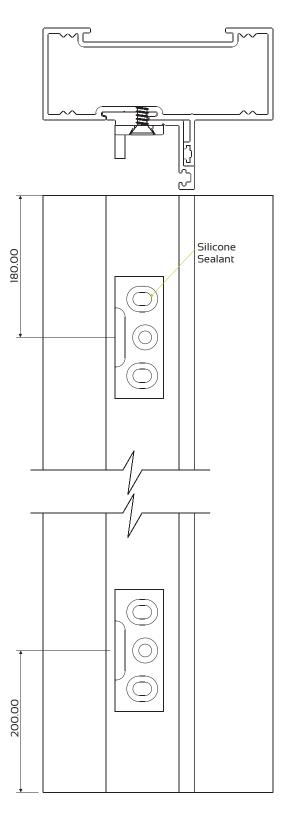
Note:

Beads are not to be siliconed



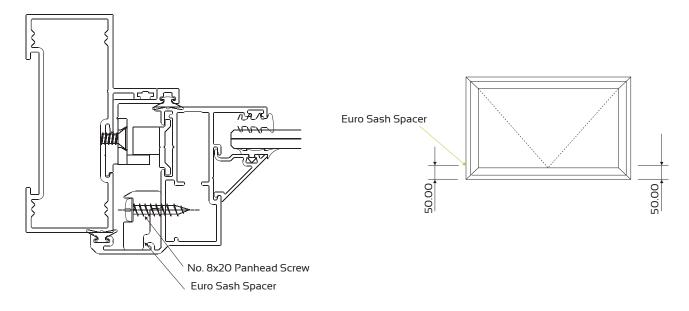
Note:

No Y-seal gasket to be fitted for the bottom sash profile unless the building is over 3 stories high or as required.



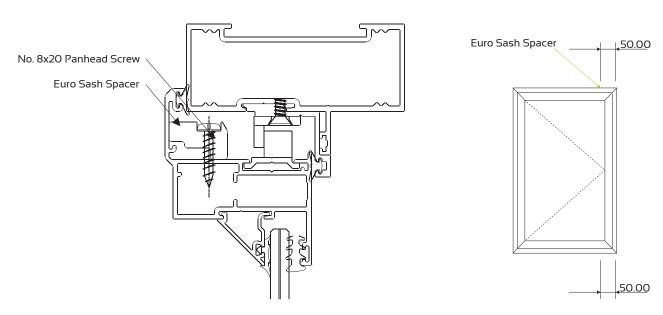


Fitting of Sash Spacer



Note:

To assist the top hung sash in opening θ closing squarely, a Euro sash spacer needs to be fitted as shown on each side of the sash 50mm from the bottom edge.



Note:

To assist the top hung sash in opening θ closing squarely, a Euro sash spacer needs to be fitted as shown on each side of the sash 50mm from the bottom edge.



GLAZING

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.

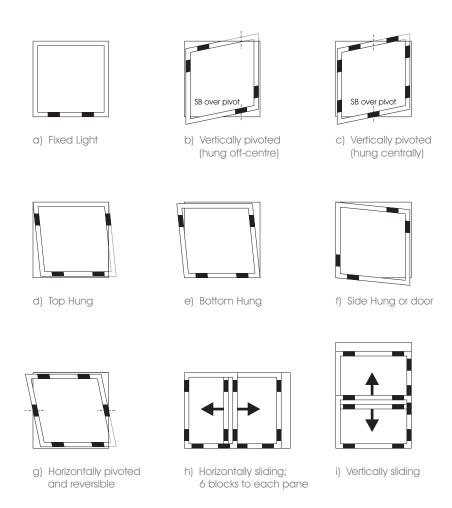


FIGURE 2 - POSITION OF SETTING AND LOCATION BLOCKS

