



Swift™ 38 Window SANS 613 2000 Pa A3

SWIFT™ 38
WINDOW (38 mm)

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 www.crealco.co.za 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.

****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.

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.

Index	ii
Legal Disclaimer.....	1

General System

Profile Identification.....	3-4
Hardware Components	5-6
Butterfly Gasket & Wedge Codes	7
Sash Limitation Guides	8
Typical Fastening Positions.....	9
Typical Cross Sectional Details.....	
Double Top Hung Over Fixed.....	10
Side Hung Over Fixed.....	11
Typical Outer Frame Construction.....	12
Typical Sash Frame Construction.....	13
Typical Outer Frame Machining Details	
Equal Leg	14
Typical Mullion/Transom Machining Details.....	
Standard Machining Detail for End Milling on Equal Leg Outer Frame.....	15
Typical Transom with W/Bar Machining Details.....	
for End Milling on Equal Leg Outer Frame	16
Typical 76mm Mullion Machining Detail.....	
for End Milling on Equal Leg Outer Frame	17
Typical 100mm Mullion Machining Detail.....	
for End Milling on Equal Leg Outer Frame	18
Typical Corner Cleat Assembly Detail.....	
for Tubular Sash.....	19
Typical Mullion Packer Frame Joint Assembly Detail	20
Typical Cross Connector Assembly Detail.....	21
Typical Details.....	22
Typical Friction Stay Assembly Detail.....	23
Typical Handle Assembly Detail.....	24
Typical Bead Cut-Out for Setting Block.....	25

Multi Lock Sash

Typical Cross-Sectional Details.....	26
Typical Corner Joint Detail.....	
Option A - Using the Joining Corner.....	27
Option B - Using the Corner Connector.....	28
Typical Machining Detail.....	
Sash & Locking Bar.....	29
Handle.....	30
Typical Cutting Detail for Bead.....	31
Typical Assembly Detail.....	
Corner Joint.....	32
Corner Connector.....	33

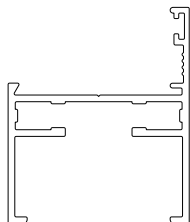
This manual must be read in conjunction with the Installation, Cleaning & Maintenance Document and the Performance Certificates for the relevant system. The manual must also be used in conjunction with the design and cutting list from the latest version of StarFront.

SWIFT™ 38
WINDOW (38 mm)

Typical Locking Angle Detail	34
Typical Outer Frame Drainage Detail.....	35
Typical Fitting of Sash Spacer.....	36
Typical Locking Bar Detail.....	37
Typical Detail showing the Swift 38 Multi Lock.....	38
Typical Glazing Procedure.....	39-40

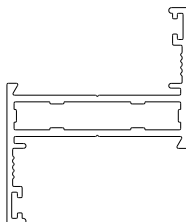
Typical Profile Identification

Swift 38 Window Profiles



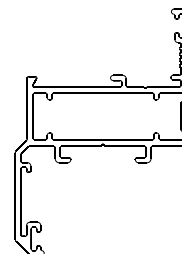
DIE No. W32070

Swift 38 Frame
38mm Equal Leg



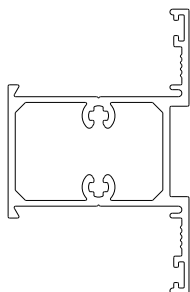
DIE No. W55717

Swift 38
Sash Tubular



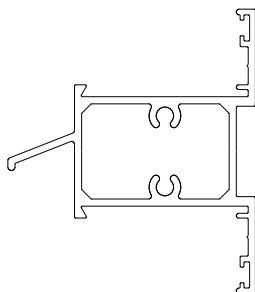
DIE No. W57508

Swift 38 Sash
Multi Lock



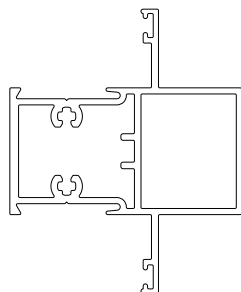
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Swift 38
Mullion 38mm



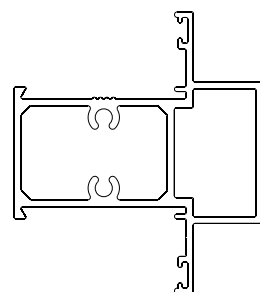
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Swift 38 Mullion
38mm Weather Bar



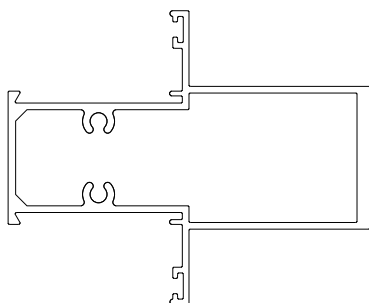
DIE No. W56796

Swift 38
Mullion 54mm



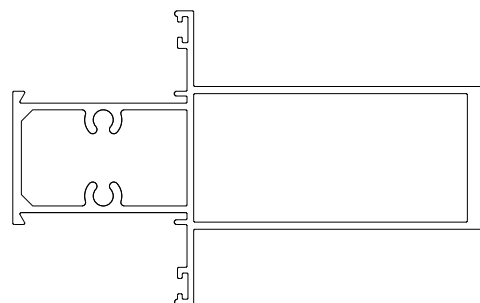
DIE No. W56797

Swift 38
Mullion 70mm



DIE No. W54455

Swift 38
Mullion 76mm

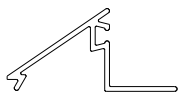


DIE No. W54454

Swift 38
Mullion 100mm

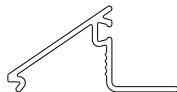
Typical Profile Identification

Swift 38 Window Profiles



DIE No. W25200

Swift 38 Bead
7mm - 8mm



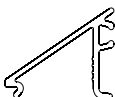
DIE No. W31140

Swift 38 Bead Multi
13mm Gap



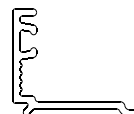
DIE No. W30312

Swift 38 Bead
D/G 31mm Gap



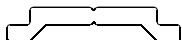
DIE No. W35510

Swift 38 Bead
Multi Lock 13mm Gap



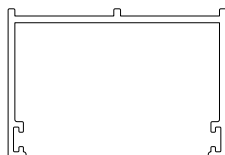
DIE No. W36022

Swift 38 Bead Multi Lock
D/G 31mm Gap



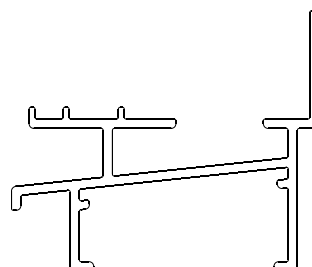
DIE No. W29131

Locking Bar



DIE No. *W31412

Swift 38
Compensating Channel



DIE No. *W34529

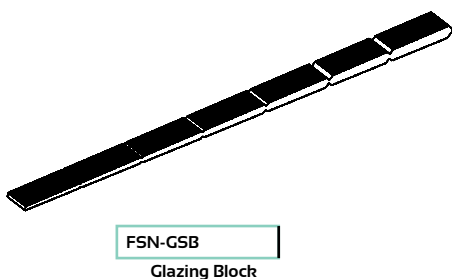
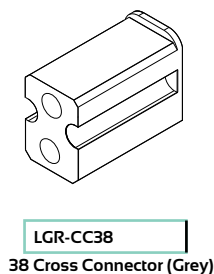
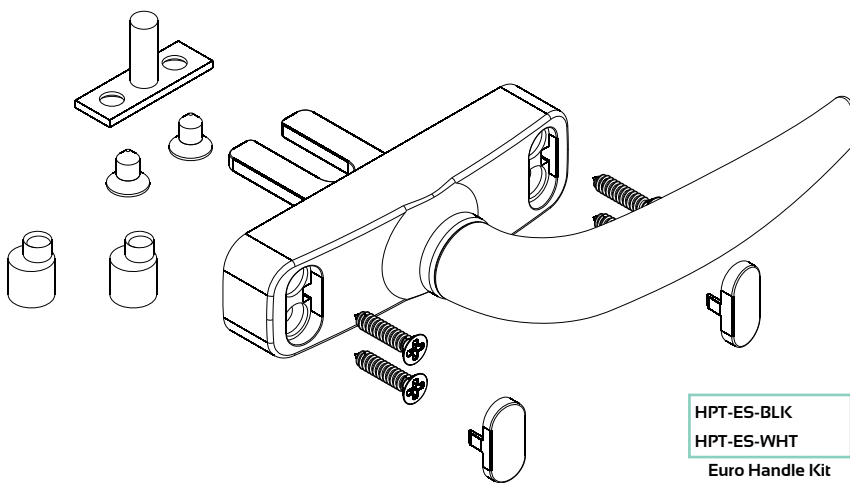
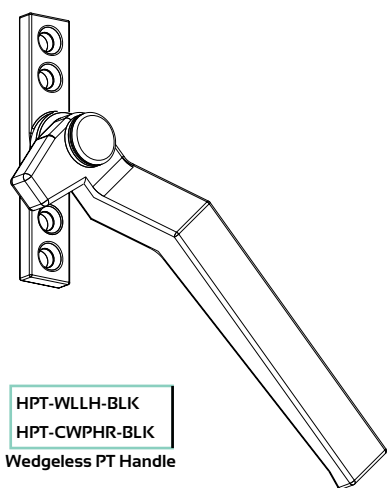
Swift 38
Sill Rail

* - Non-Stock Die (Available from the Mill only)

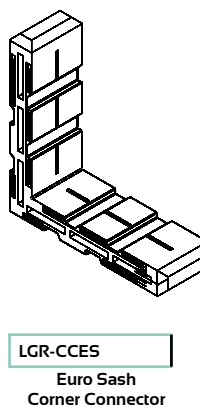
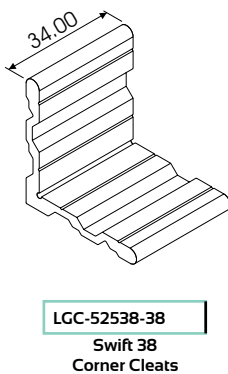
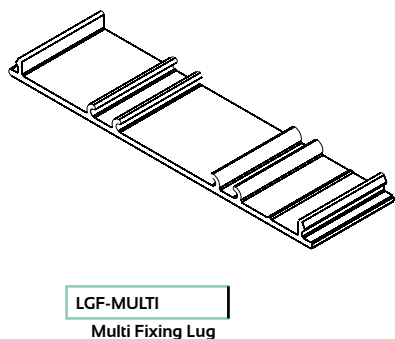
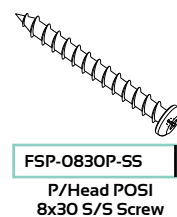
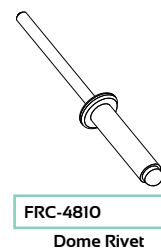
Hardware Components

RECOMMENDED SWIFT 38 COMPONENTS

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



FASTENERS



Hardware Components

RECOMMENDED SWIFT 38 COMPONENTS

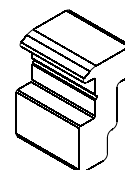
All hardware is available through our Stockists as well as through Crealco Components, and can be viewed on www.crealco-components.com



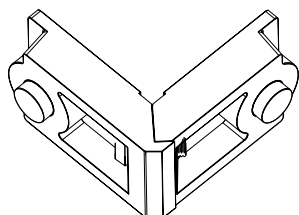
SGD-FM48
Frame Mitre Guide



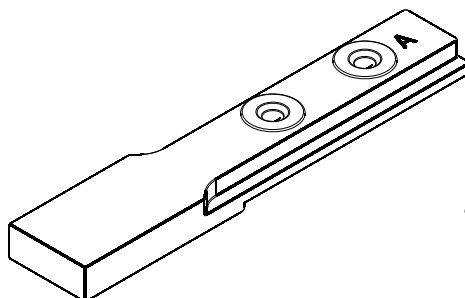
SGD-FMG520
Alignment Mitre Corner



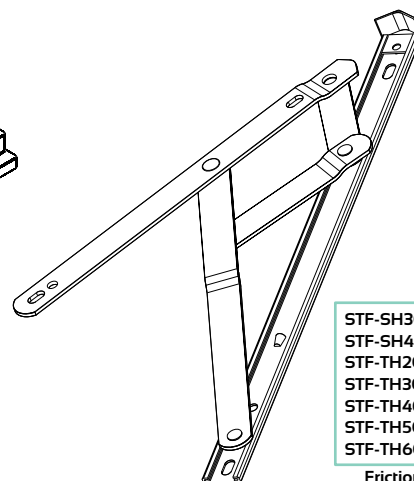
HPT-ESS
Euro Sash Spacer



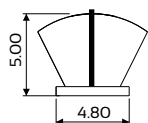
LGC-J2410N
Joining Corner



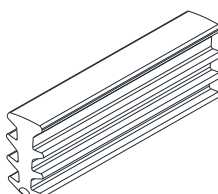
TLP-CJ
Euro Sash Jig



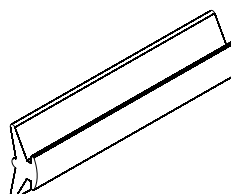
STF-SH3005-304
STF-SH4005-304
STF-TH2005-304
STF-TH300R-304
STF-TH4005-304
STF-TH5005-304
STF-TH6005-304
Friction Stay



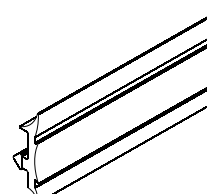
GFP-4850
Finpile



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



GSL-AL-H602
Y Seal Gasket



GBF-ORG
Butterfly Gasket



GBF-ORG
A Butterfly Orange
H500 Gasket



DIE No. W31140 Swift 38 Bead Multi
13mm Gap



Wedge Gasket
B GWG-03R

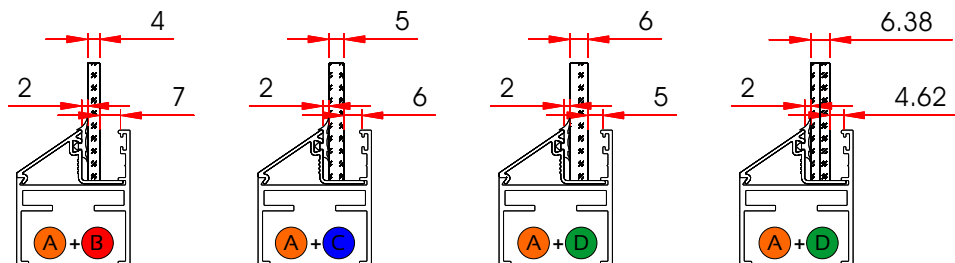


Wedge Gasket
C GWG-02B



Wedge Gasket
D GWG-01G

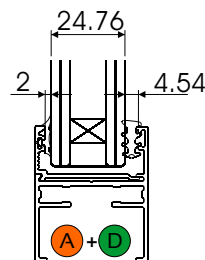
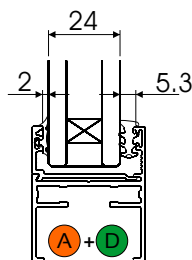
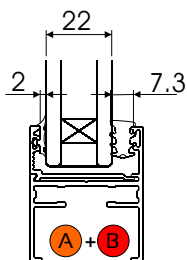
WEDGES



GBF-ORG
A Butterfly Orange
H500 Gasket



DIE No. W30312 Swift 38 Bead
D/G 31mm Gap



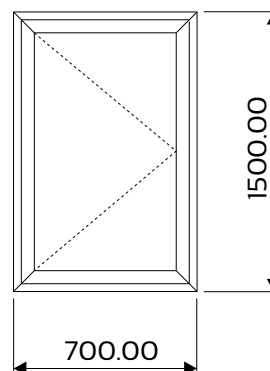
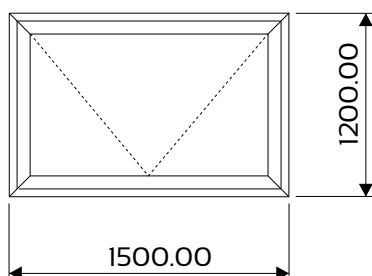
Wedge Gasket Chart

Code	Description	Wedge Gap To Fit
GWG-01G	Wedge 01 Green 6mm & 6.38mm Glass	4.10mm To 5.50mm
GWG-02B	Wedge 02 Blue 5mm Glass	5.60mm To 6.70mm
GWG-03R	Wedge 03 Red 4mm Glass	6.80mm To 7.50mm
GWG-05P	Wedge 01 Purple 20mm Double Glazing	7.60mm To 8.80mm

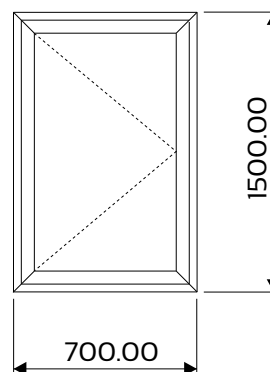
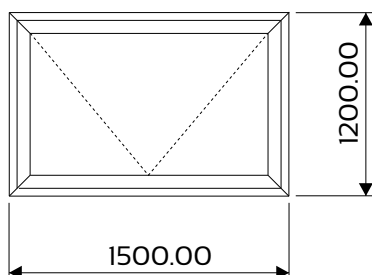
Sash Limitation Guide

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.

Swift 38 Sash Tubular		Maximum Vent Width in mm	Maximum Vent Height in mm
Top Hung	W55717	1500	1200
Side Hung		700	1500



Swift 38 Sash Multi Lock		Maximum Vent Width in mm	Maximum Vent Height in mm
Top Hung	W57508	1500	1200
Side Hung		700	1500



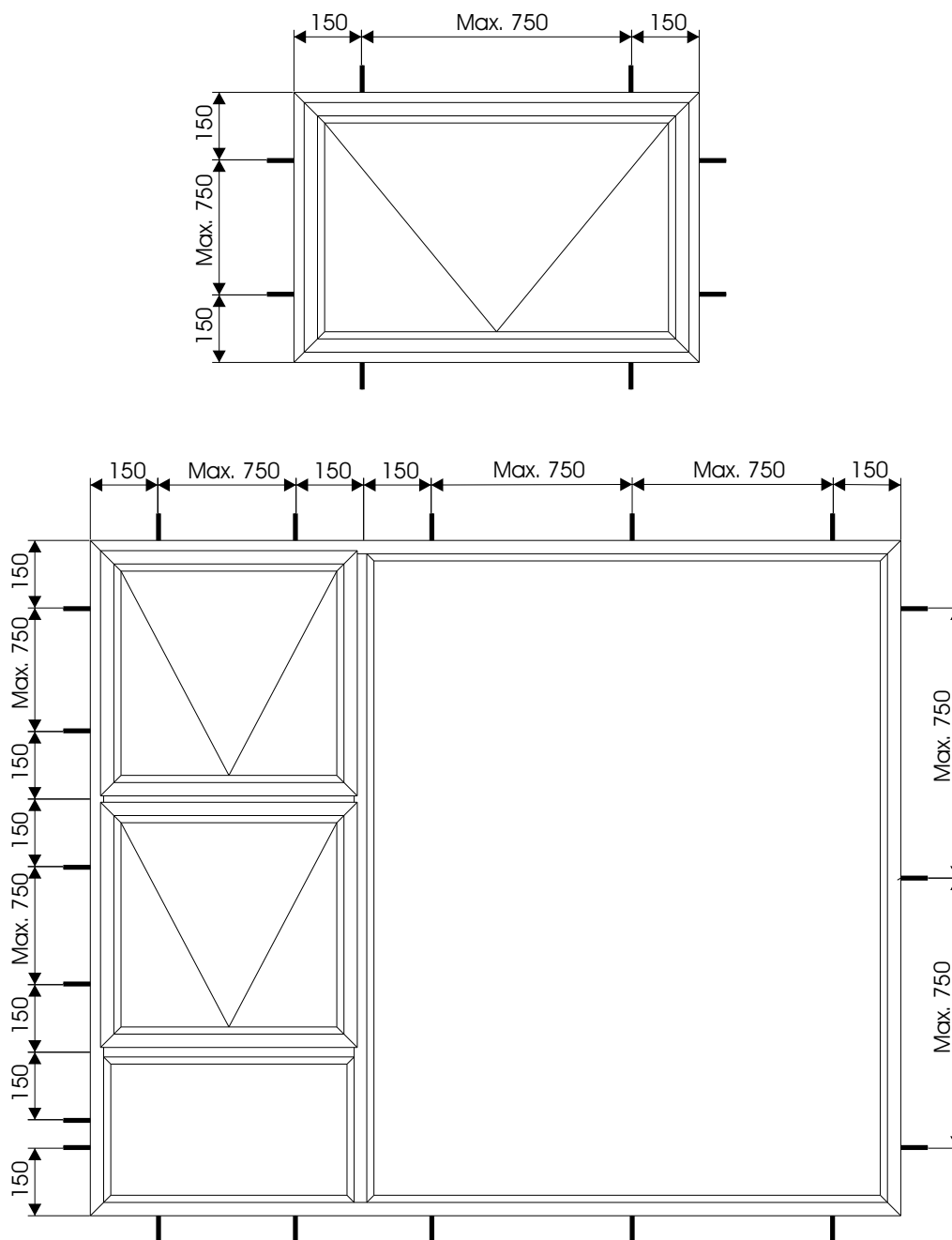
Typical Fastening Positions

IMPORTANT:

As there are many different methods of fixing the window to the structure, the illustration below is a general fixation detail. The illustration defines the general method and hole fixing. Before installation or machining of the holes, please ensure that you have checked the required fixing method with the appropriated building engineer and that your chosen methods meets their specifications

Failure to fix the window to correct building or engineer specifications will result in the door not meeting the required specifications.

DISCLAIMER: Please note that fixation of the frame to the structure is an element which **MUST** be specified and certified by an appropriate engineer and is not the responsibility of Wispeco.

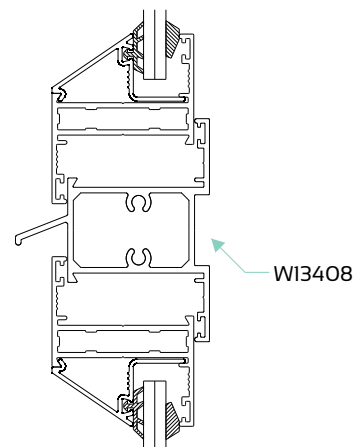
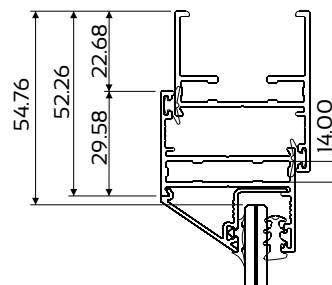


Typical Cross-sectional Details

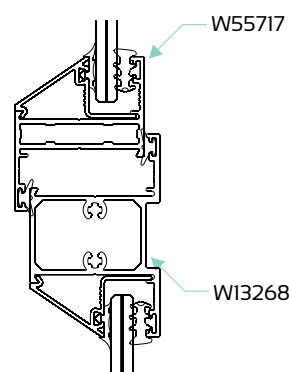
Double Top Hung Over Fixed

SECTION B-B

Section not to scale

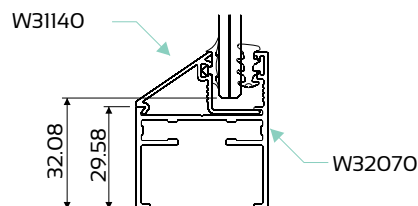


W13408



W55717

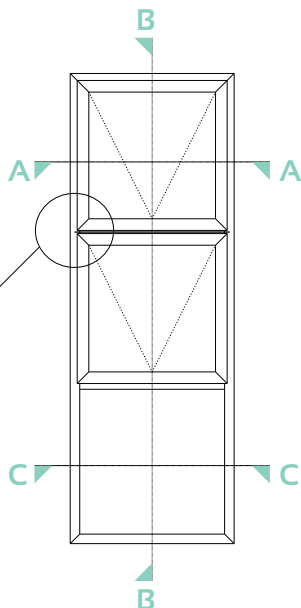
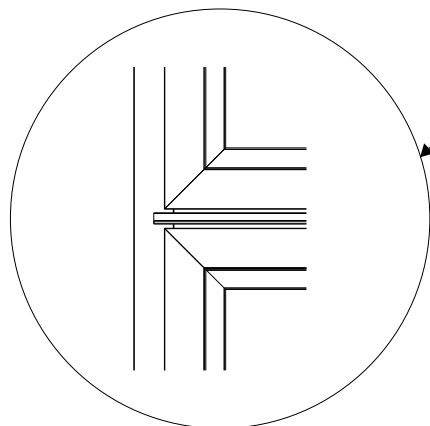
W13268



W31140

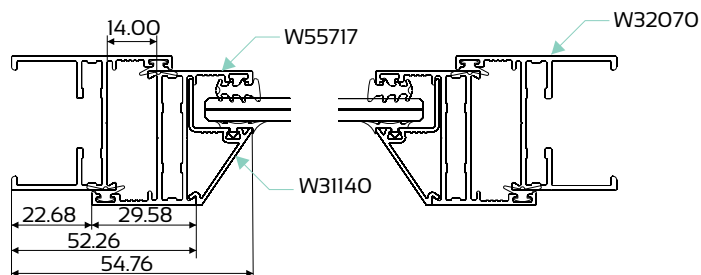
W32070

SHOWING TRANSOM WITH
WEATHER BAR OVERLAP



SECTION A - A

Section not to scale



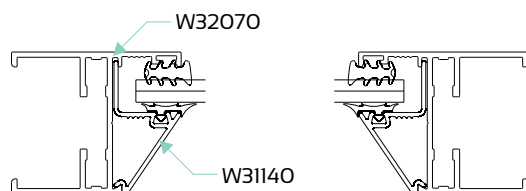
W55717

W32070

W31140

SECTION C-C

Section not to scale



W32070

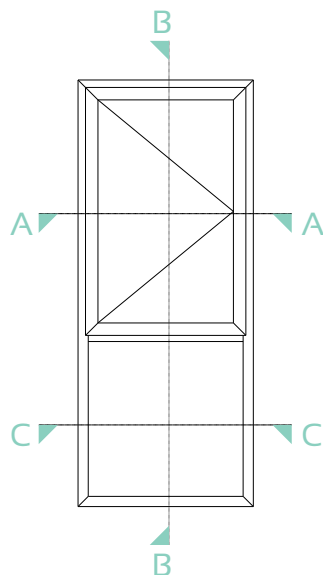
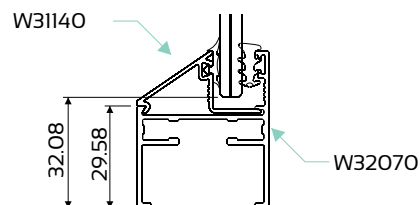
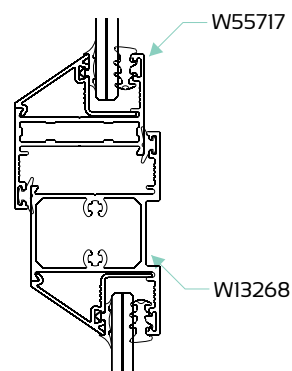
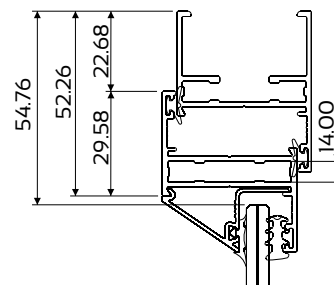
W31140

Typical Cross-sectional Details

Side Hung Over Fixed

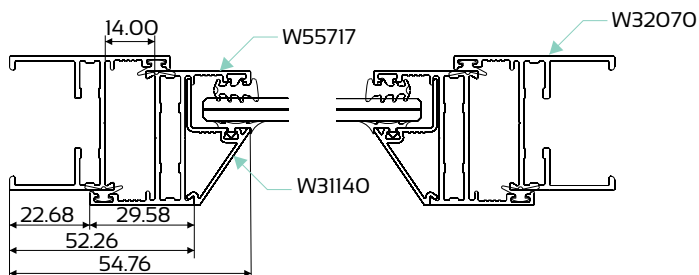
SECTION B-B

Section not to scale



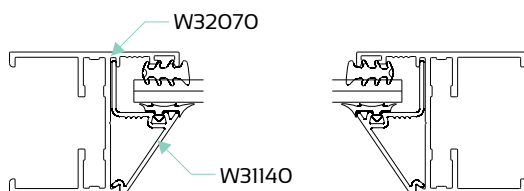
SECTION A - A

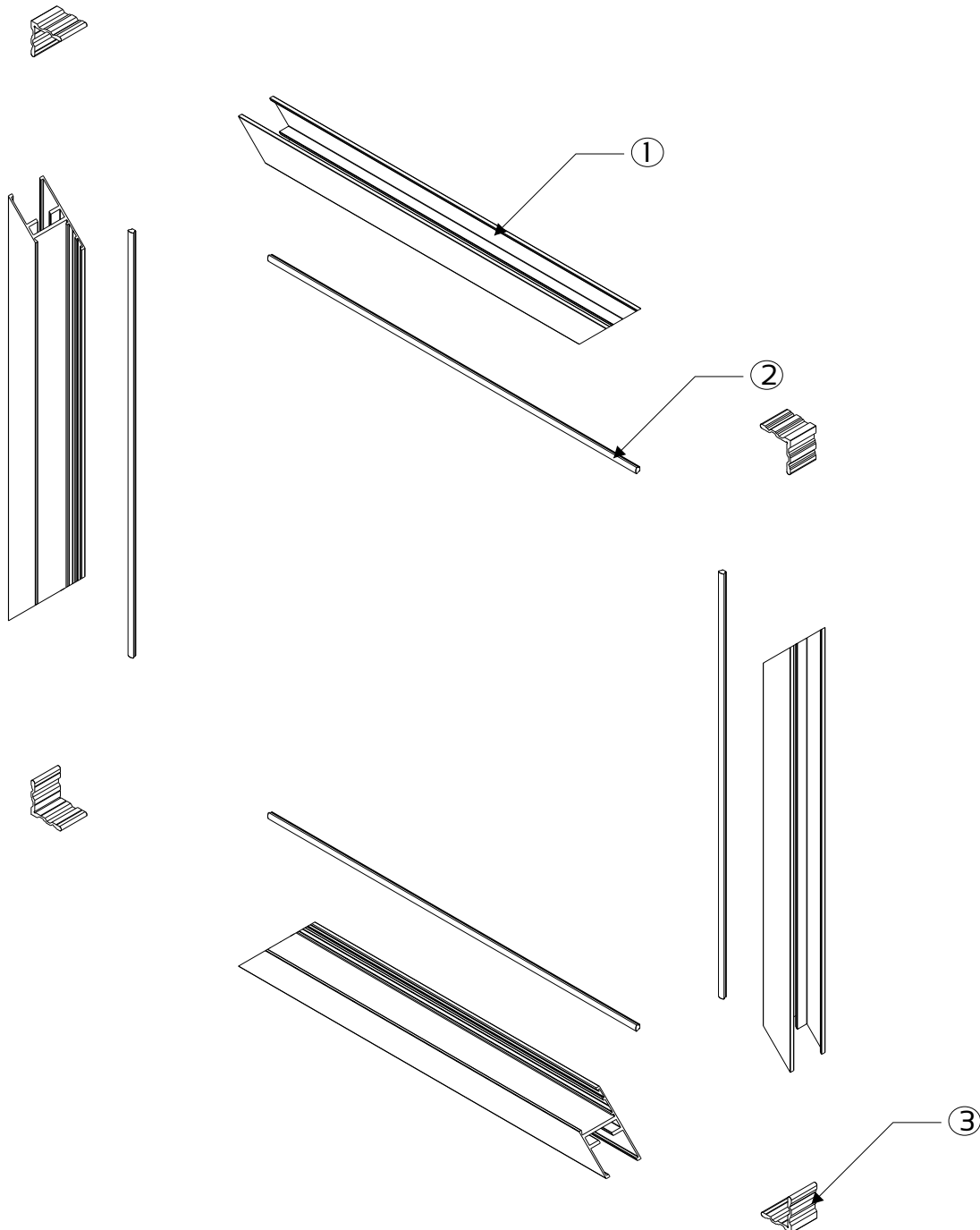
Section not to scale



SECTION C-C

Section not to scale





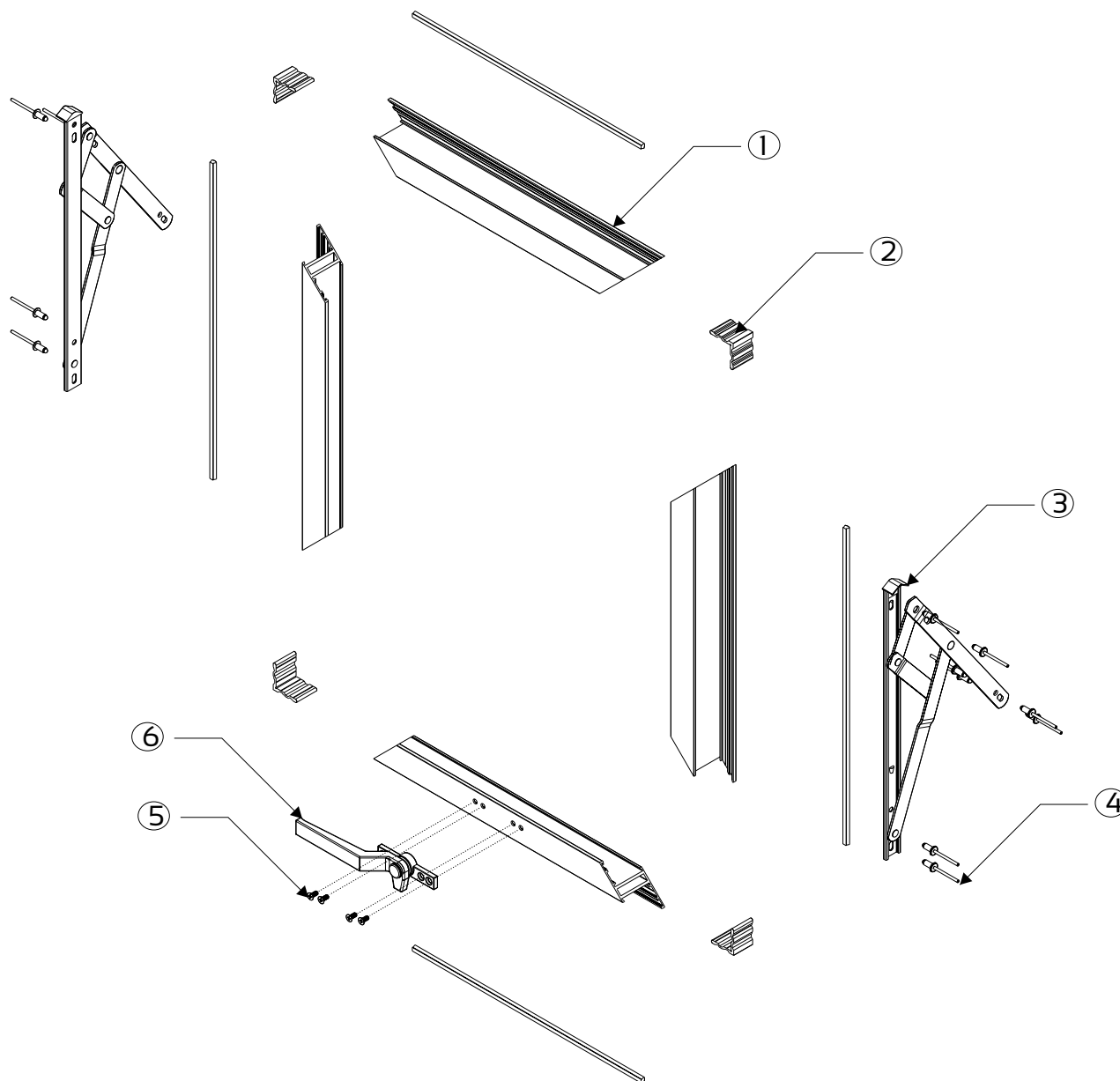
System Profiles

ITEM	QTY	DIE No.	DESCRIPTION
1	4	W32070	Swift 38 Frame Equal Leg

Hardware

ITEM	QTY	COMPONENT	DESCRIPTION
2	4	Woolpile	Woolpile
3	4	Corner Cleat	38 Corner Cleat

Typical Sash Frame Construction



System Profiles

ITEM	QTY	DIE No.	DESCRIPTION
1	4	W55717	Swift 38 Sash Tubular

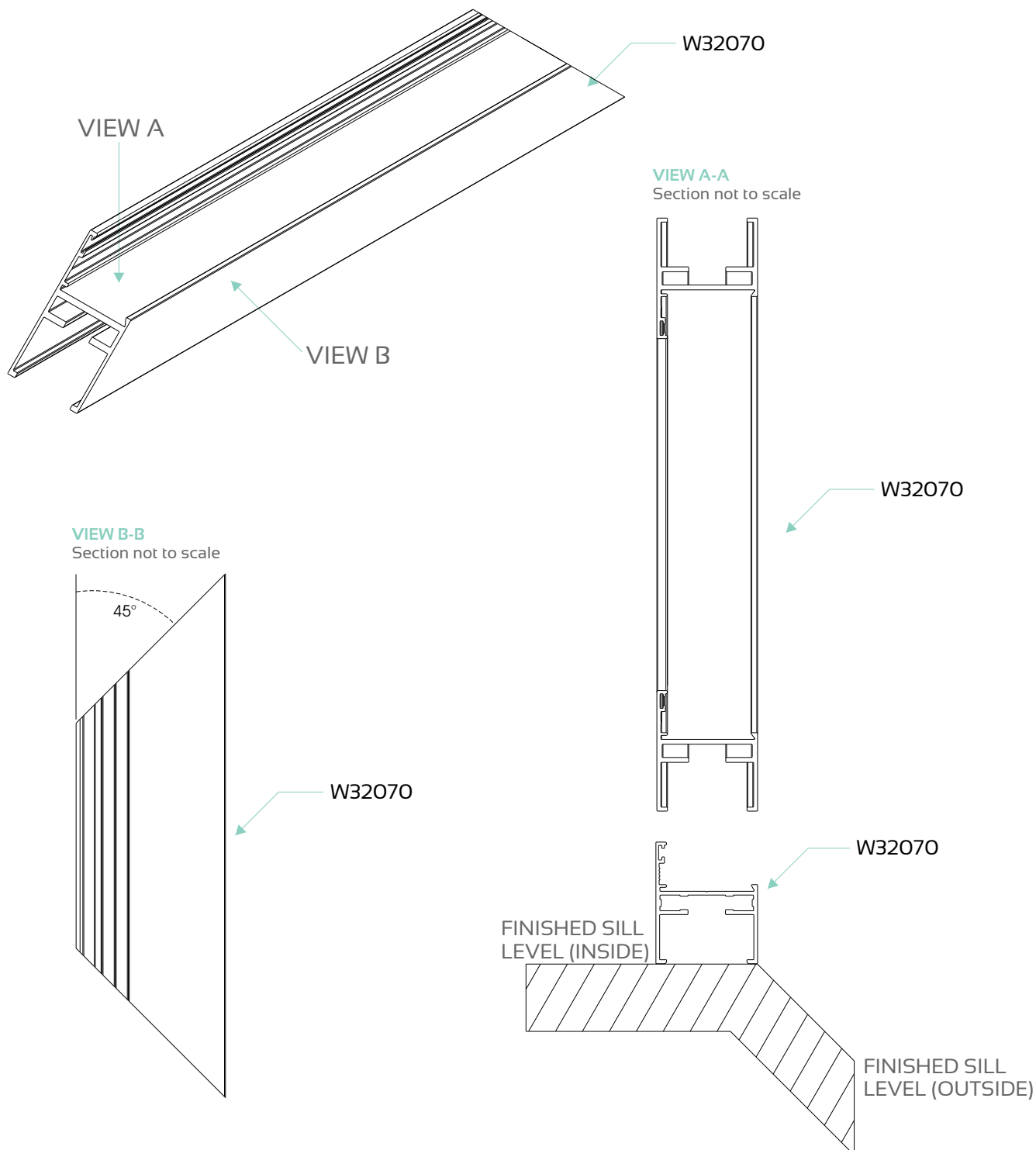
Hardware

ITEM	QTY	COMPONENT	DESCRIPTION
2	4	Corner Cleat	38 Corner Cleat
3	2	Friction Stay	Friction Stay
4	12	Pop Rivet	Dome Rivet
5	4	Screw	Handle Screw Blunt Point
6	1	Handle	Euroline PT Handle

Typical Outer Frame Machining Details

Equal Leg

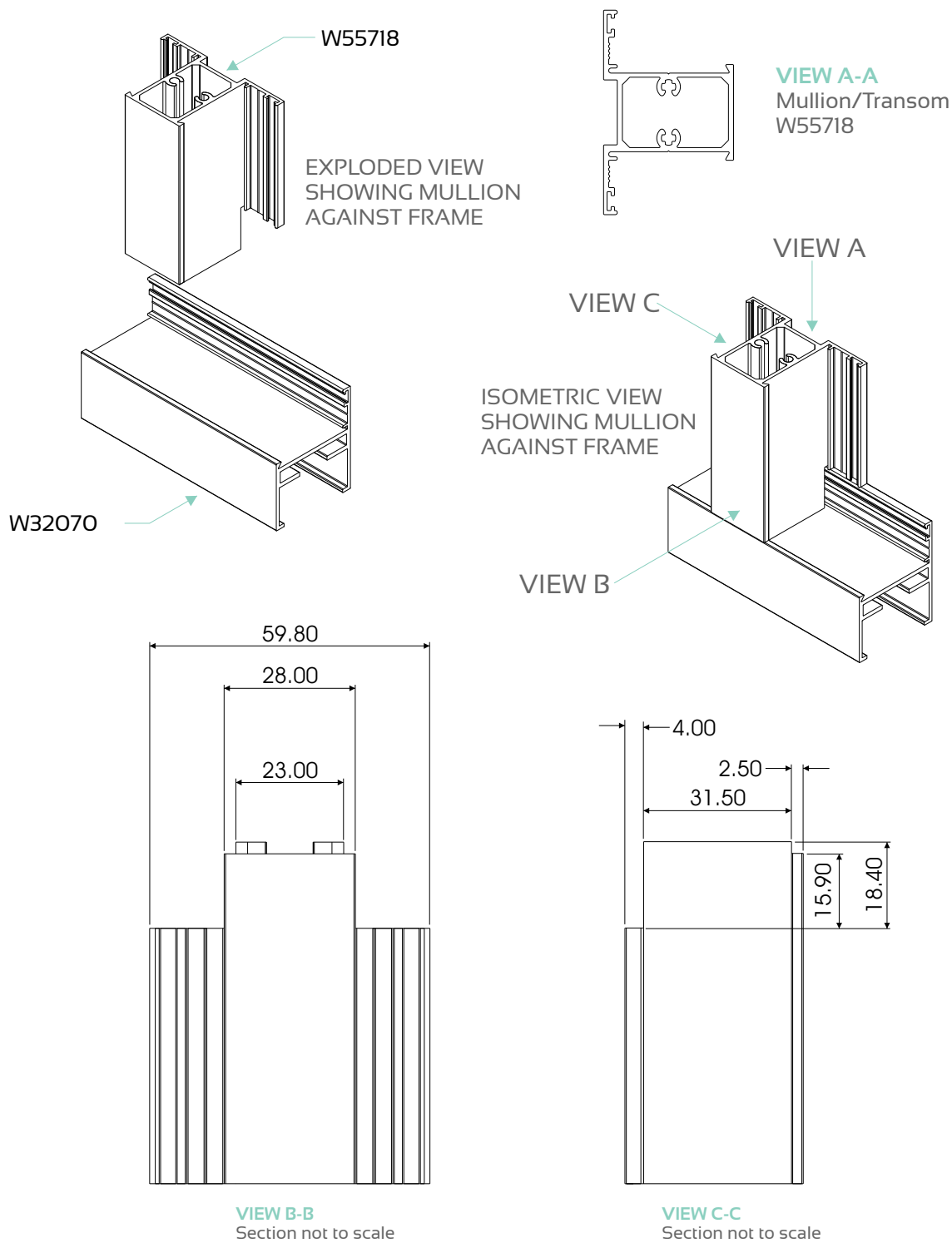
Please Note: These details pertain to the machining of profiles. Lengths of profiles and cutting lists need to be confirmed using the StarFront Program to ensure compliance to the SANS Building Regulations.



Typical Mullion/Transom Machining Details

Standard Machining Detail for End Milling on Equal Leg Outer Frame

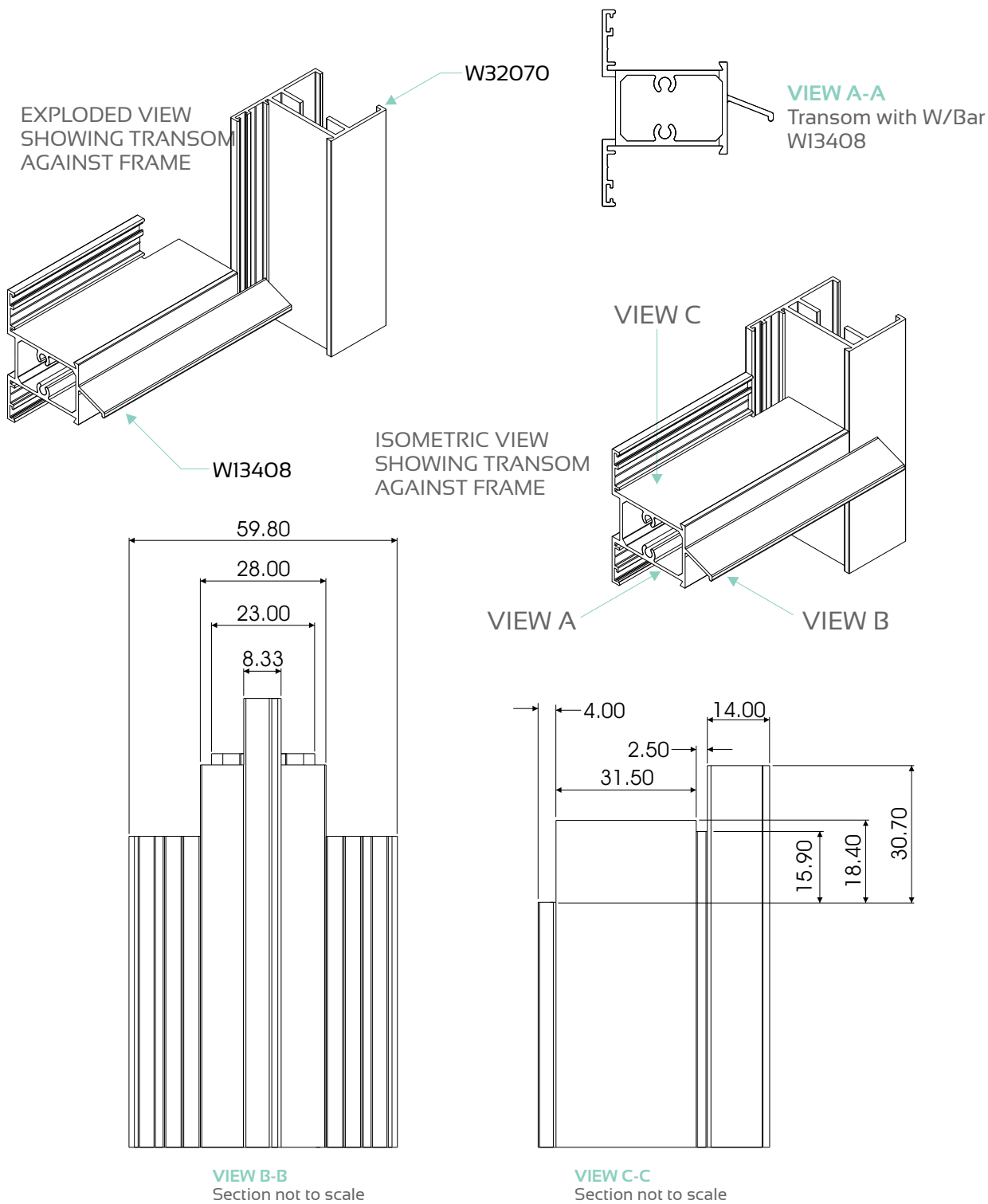
Please Note: These details pertain to the machining of profiles. Lengths of profiles and cutting lists need to be confirmed using the StarFront Program to ensure compliance to the SANS Building Regulations.



Typical Transom with W/Bar Machining Detail

for End Milling on Equal Leg Outer Frame

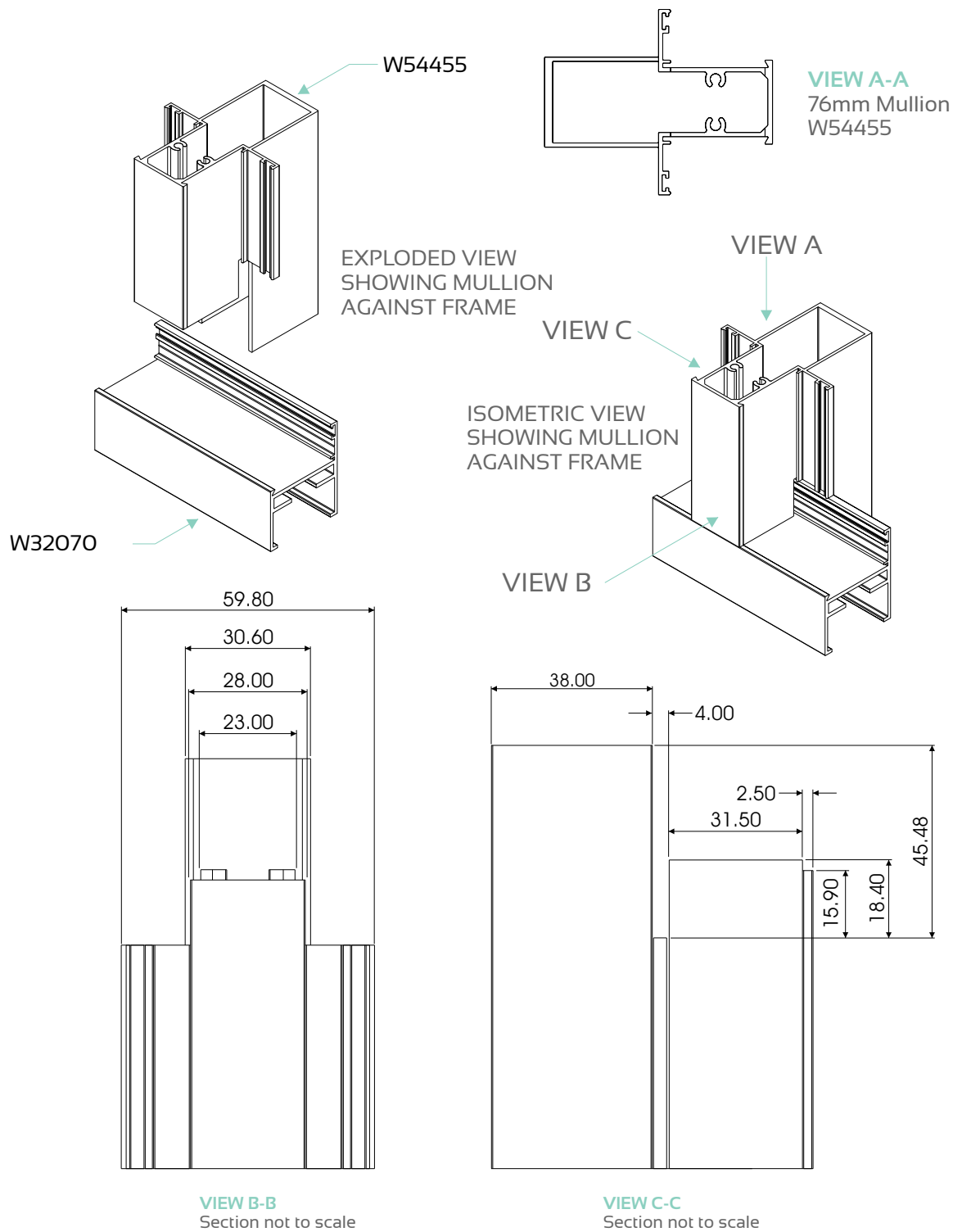
Please Note: These details pertain to the machining of profiles. Lengths of profiles and cutting lists need to be confirmed using the StarFront Program to ensure compliance to the SANS Building Regulations.



Typical 76mm Mullion Machining Detail

for End Milling on Equal Leg Outer Frame

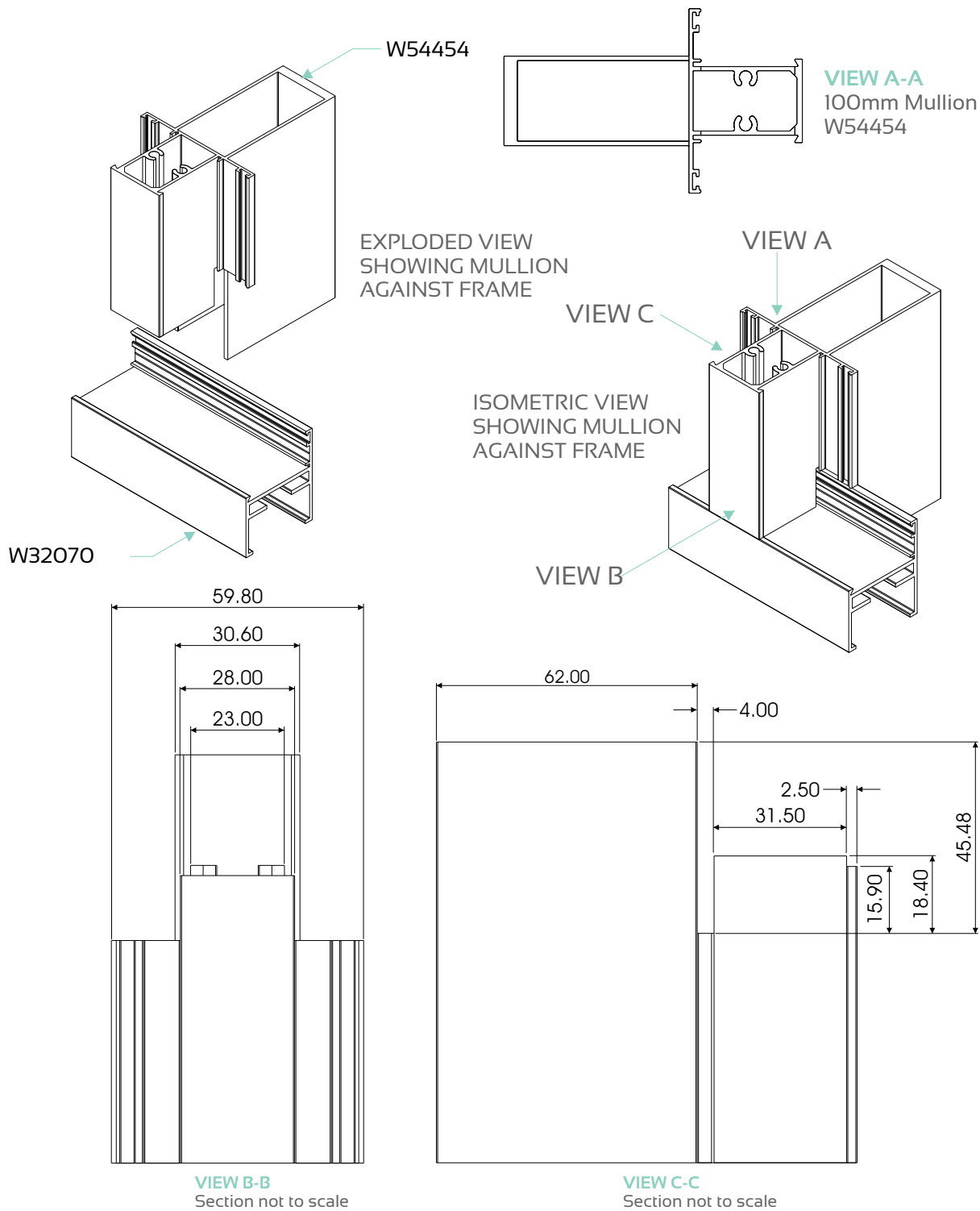
Please Note: These details pertain to the machining of profiles. Lengths of profiles and cutting lists need to be confirmed using the StarFront Program to ensure compliance to the SANS Building Regulations.



Typical 100mm Mullion Machining Detail

for End Milling on Equal Leg Outer Frame

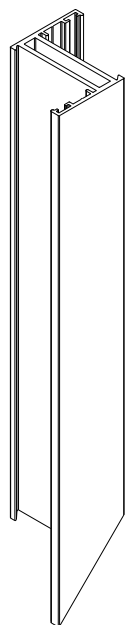
Please Note: These details pertain to the machining of profiles. Lengths of profiles and cutting lists need to be confirmed using the StarFront Program to ensure compliance to the SANS Building Regulations.



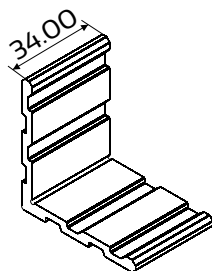
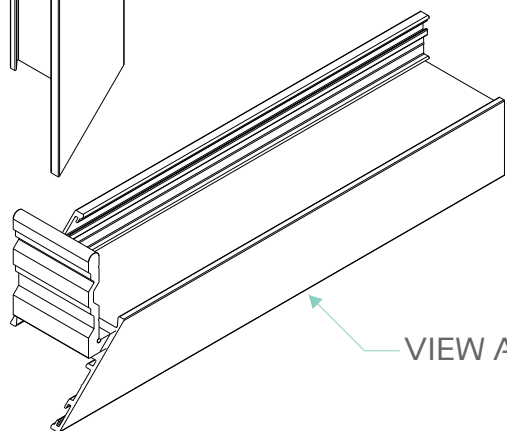
Typical Corner Cleat Assembly Detail

for Tubular Sash

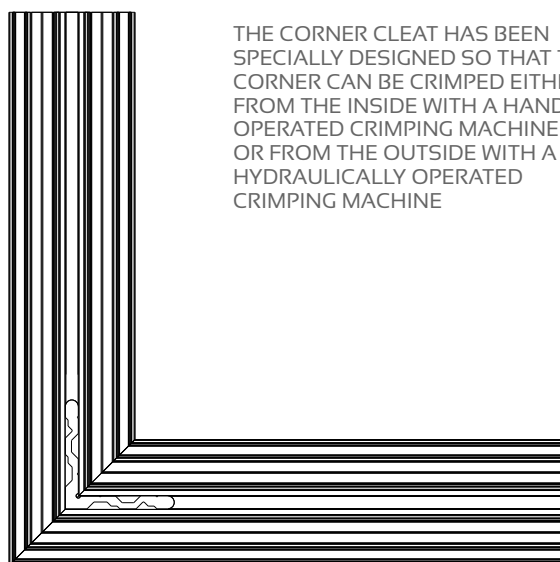
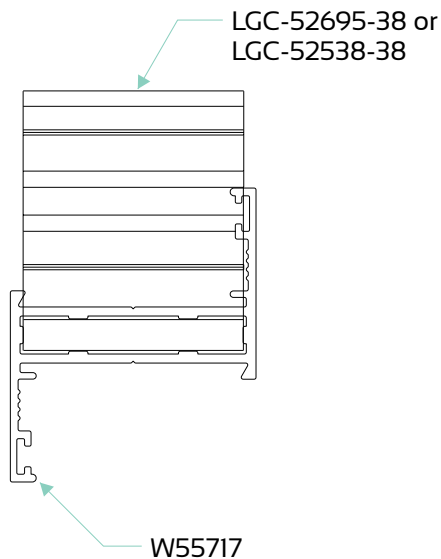
Please Note: These details pertain to the machining of profiles. Lengths of profiles and cutting lists need to be confirmed using the StarFront Program to ensure compliance to the SANS Building Regulations.



NOTE:
ALL JOINTS MUST BE SEALED WITH
SMALL JOINT SEALANT. FINPILE
MUST BE FITTED TO SASH AND
CORRESPONDING SURFACES OF
FRAME BEFORE CRIMPING (NOT
TO AREAS TO BE GLAZED)



LGC-52695-38 or
LGC-52538-38



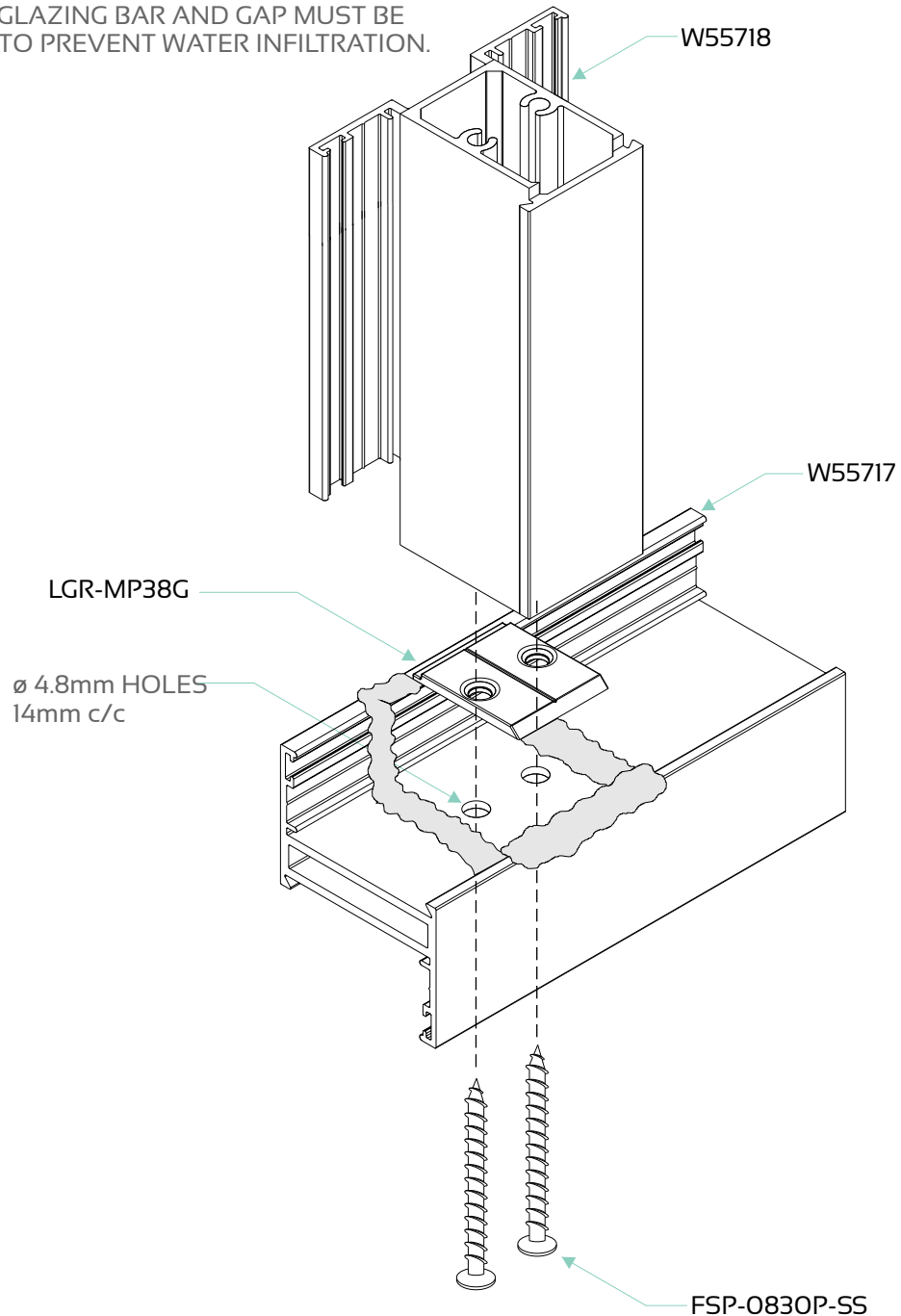
THE CORNER CLEAT HAS BEEN
SPECIALLY DESIGNED SO THAT THE
CORNER CAN BE CRIMPED EITHER
FROM THE INSIDE WITH A HAND
OPERATED CRIMPING MACHINE
OR FROM THE OUTSIDE WITH A
HYDRAULICALLY OPERATED
CRIMPING MACHINE

VIEW A-A

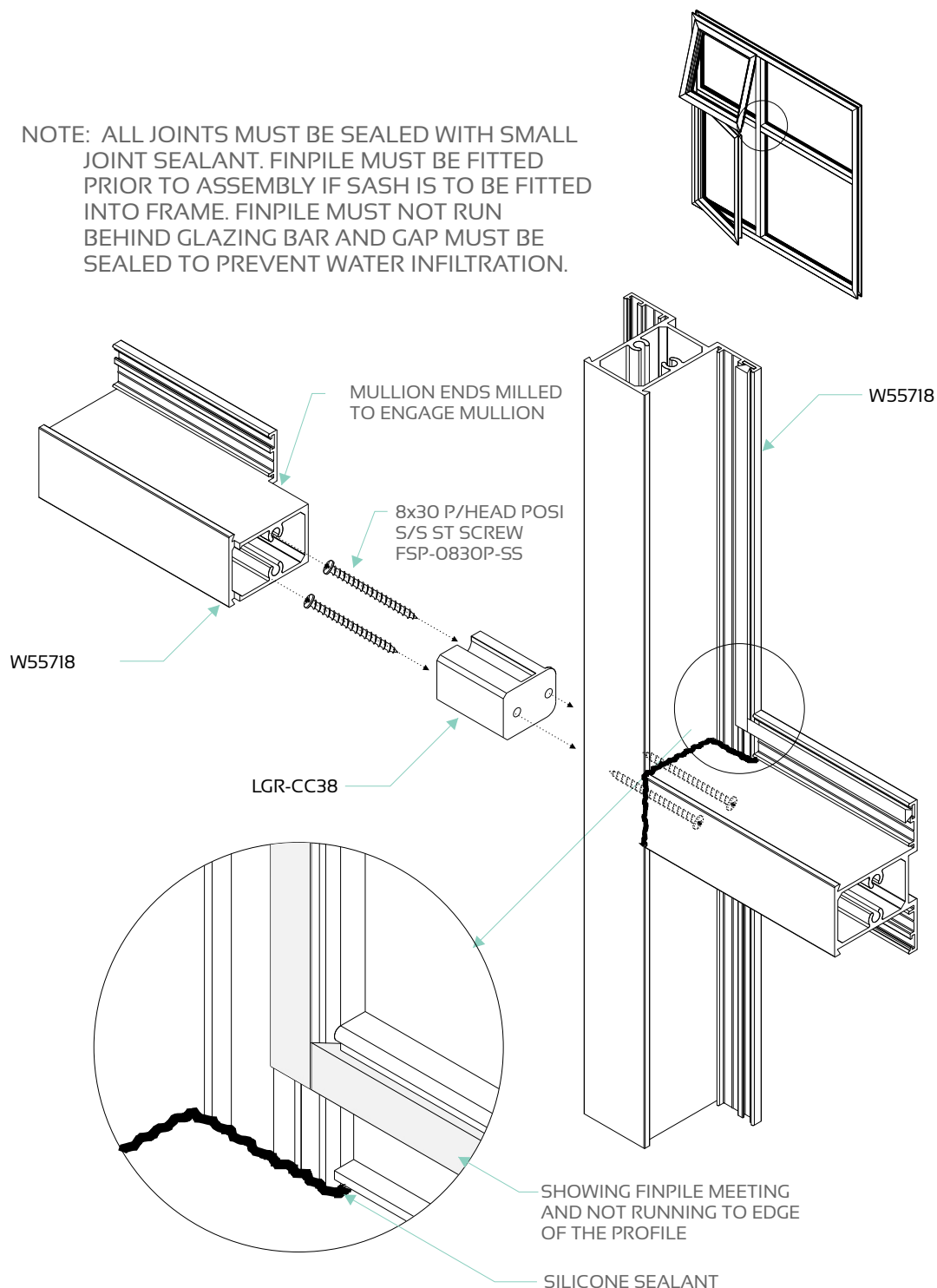
Typical Mullion Packer Frame Joint

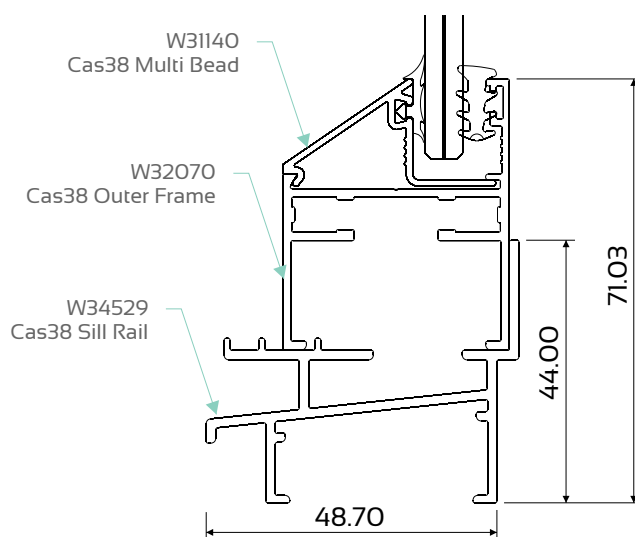
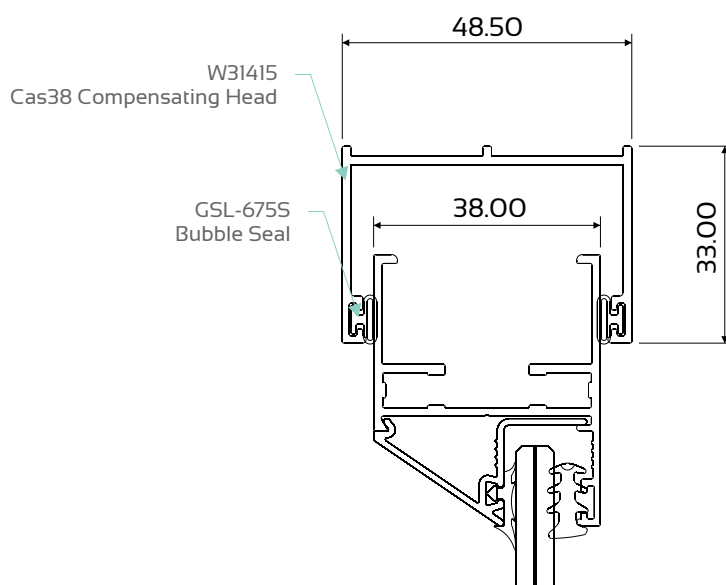
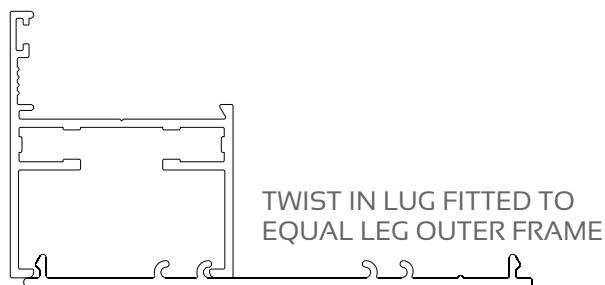
Assembly Detail

NOTE: ALL JOINTS MUST BE SEALED WITH SMALL JOINT SEALANT. FINPILE MUST BE FITTED PRIOR TO ASSEMBLY IF SASH IS TO BE FITTED INTO FRAME. FINPLIE MUST NOT RUN BEHIND GLAZING BAR AND GAP MUST BE SEALED TO PREVENT WATER INFILTRATION.



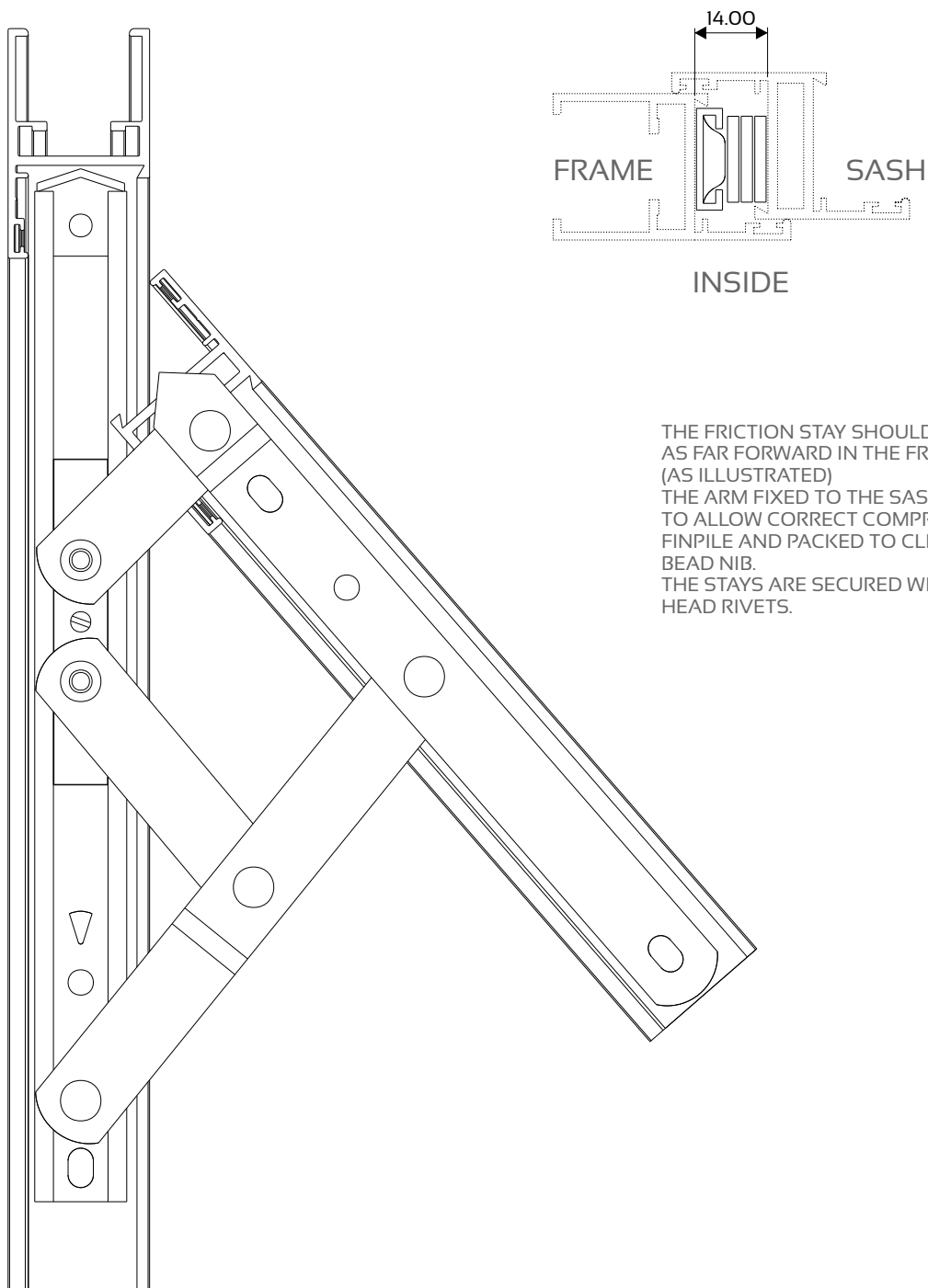
NOTE: ALL JOINTS MUST BE SEALED WITH SMALL JOINT SEALANT. FINPILE MUST BE FITTED PRIOR TO ASSEMBLY IF SASH IS TO BE FITTED INTO FRAME. FINPILE MUST NOT RUN BEHIND GLAZING BAR AND GAP MUST BE SEALED TO PREVENT WATER INFILTRATION.



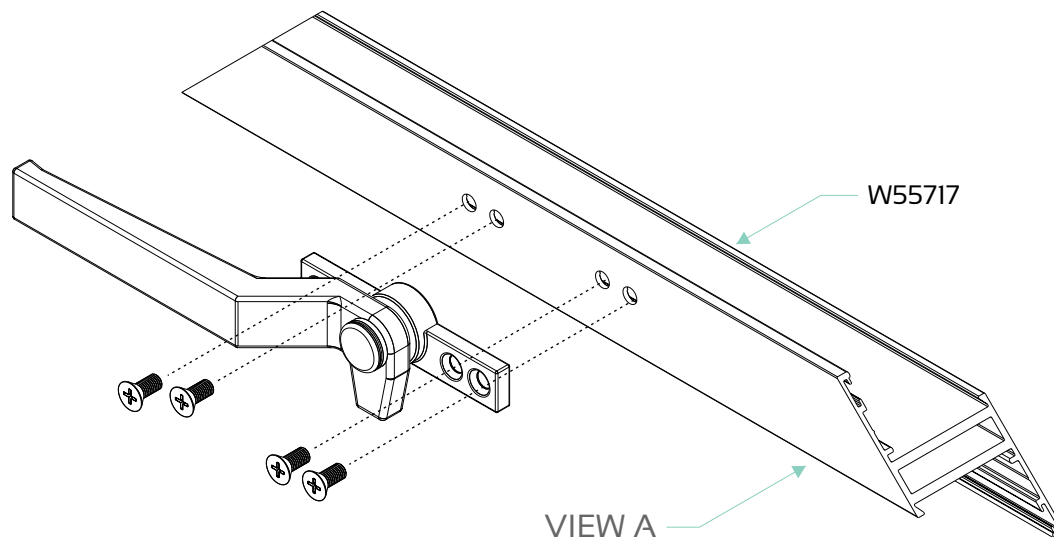


Typical Vertical Section showing Comp & Sill Rail Detail

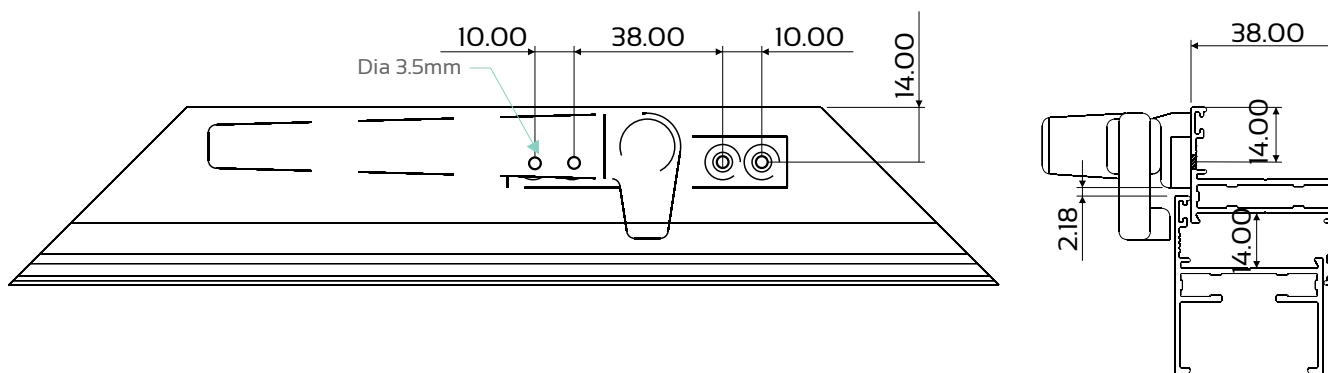
Typical Friction Stay Assembly Detail



THE FRICTION STAY SHOULD ALWAYS BE FITTED AS FAR FORWARD IN THE FRAME AS POSSIBLE. (AS ILLUSTRATED)
THE ARM FIXED TO THE SASH SHOULD BE FITTED TO ALLOW CORRECT COMPRESSION OF THE FINPILE AND PACKED TO CLEAR GLAZING BEAD NIB.
THE STAYS ARE SECURED WITH 4.8 x 10 DOME HEAD RIVETS.

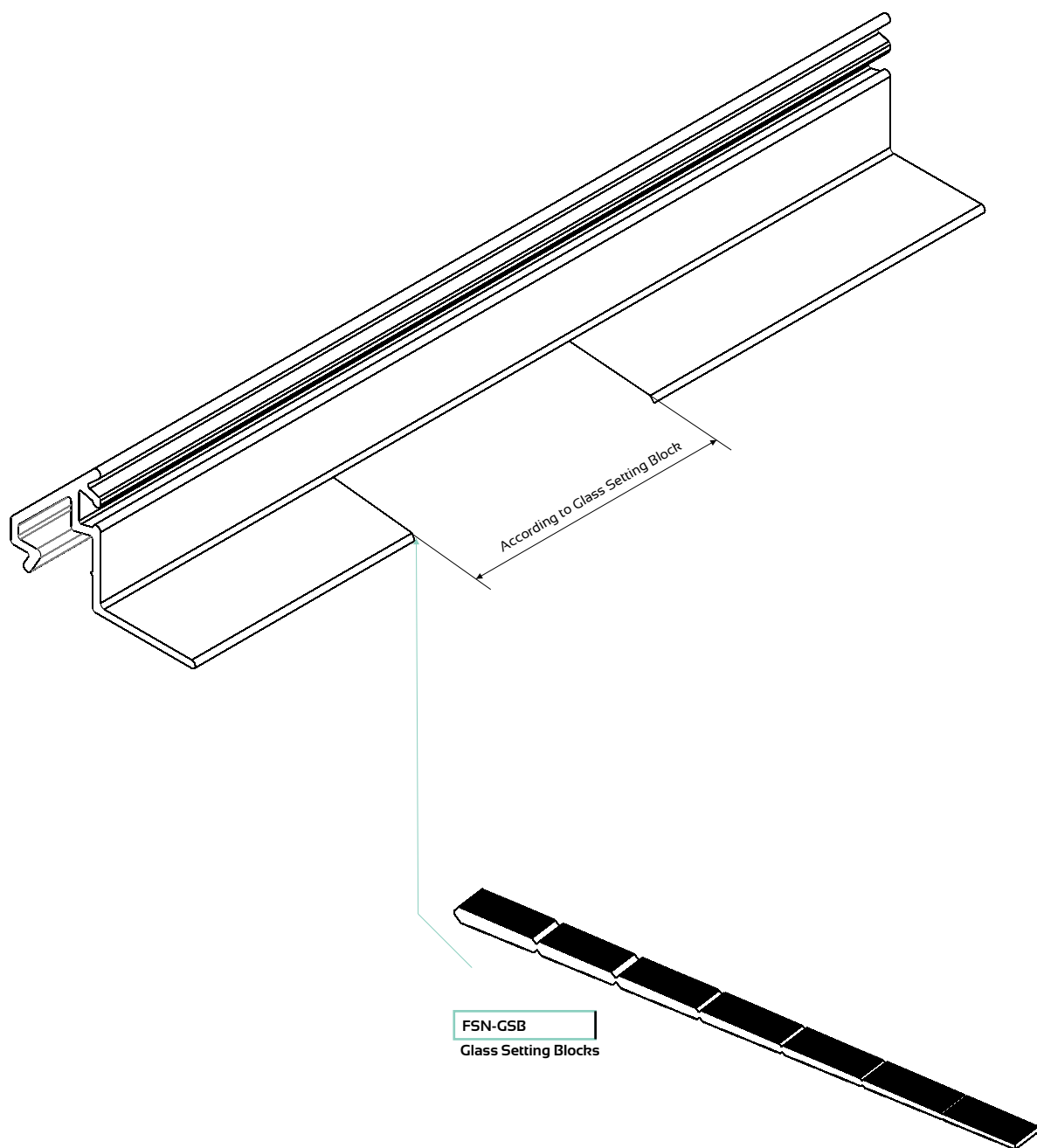


NO 8 x 10 COUNTERSUNK SELF-TAPPING
FLAT END SCREWS



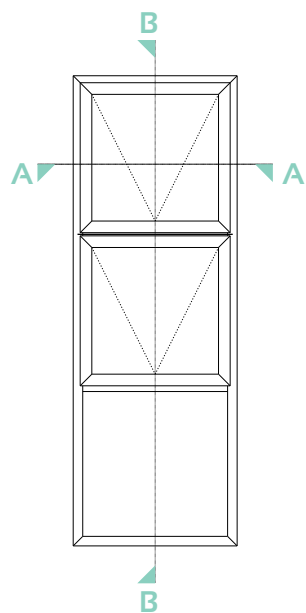
Typical Bead Cut-Out for Setting Block

Bead must be notched out at position of all glass setting blocks according to the length of the glass setting block used.



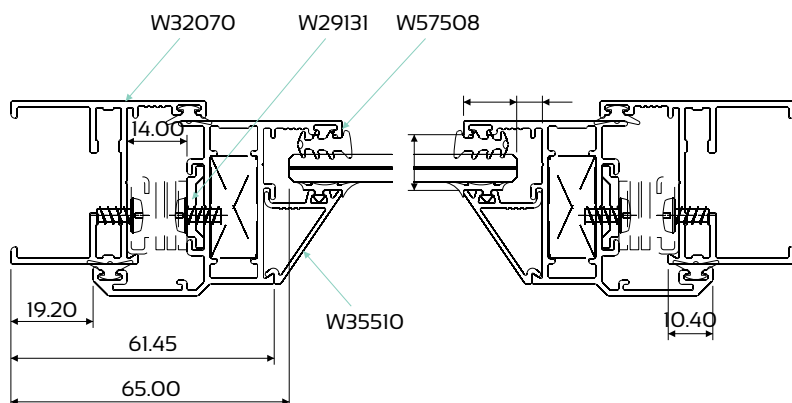
Typical Multi Lock Sash Typical Cross-Sectional Details

Double Top Hung Over Fixed



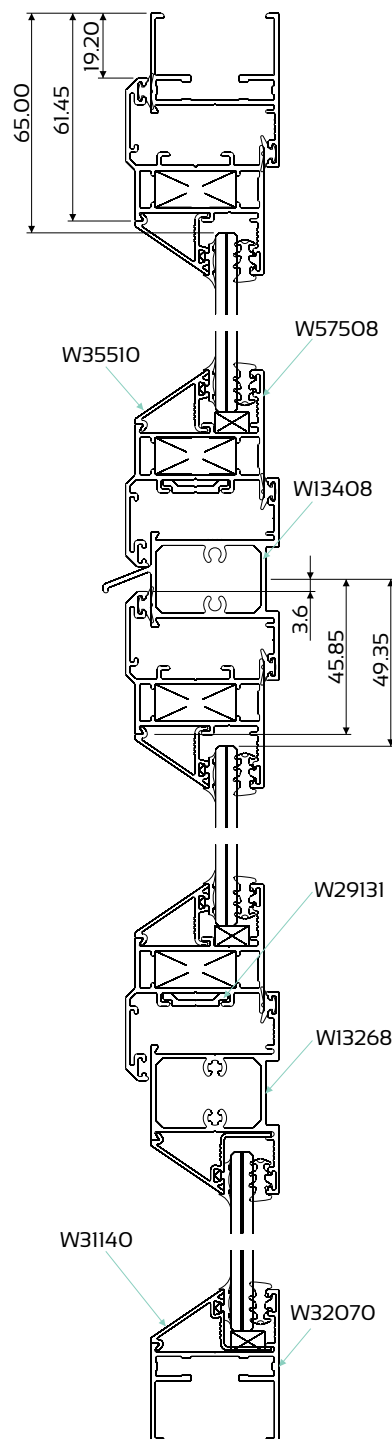
SECTION A - A

Section not to scale

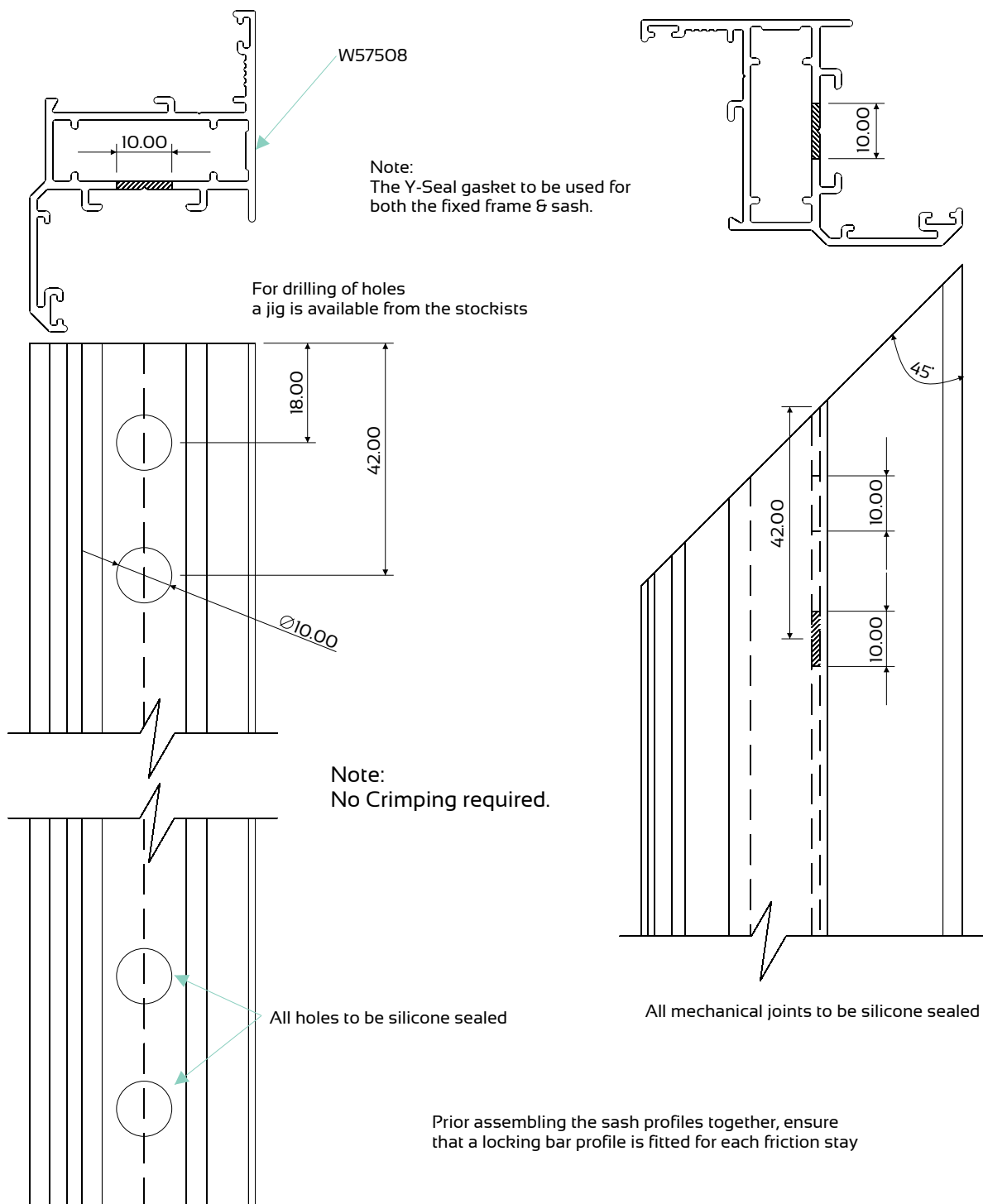


SECTION B-B

Section not to scale



OPTION A - USING THE JOINING CORNER



Prior assembling the sash profiles together, ensure that a locking bar profile is fitted for each friction stay

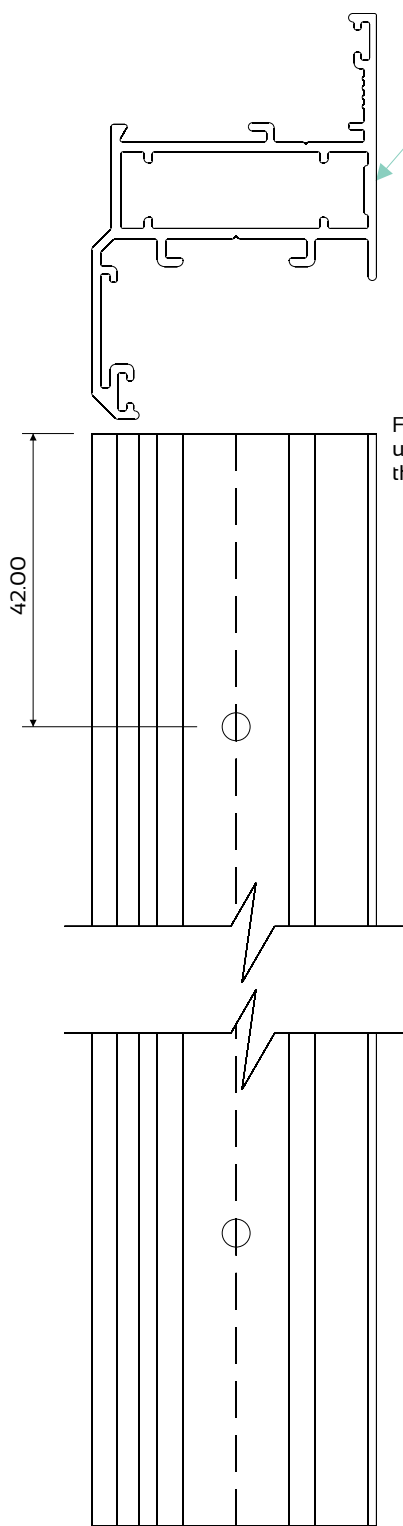
Typical Multi Lock Sash Corner Joint Detail

Option B - Using the Corner Connector

OPTION B - USING THE CORNER CONNECTOR

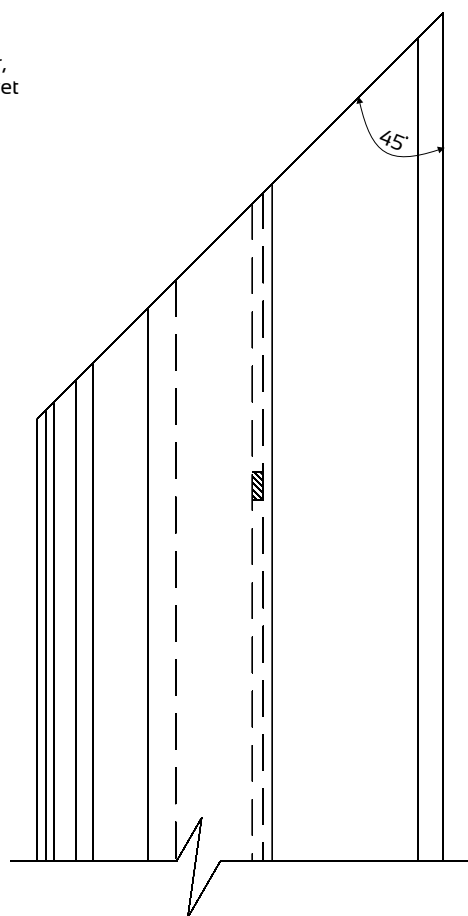
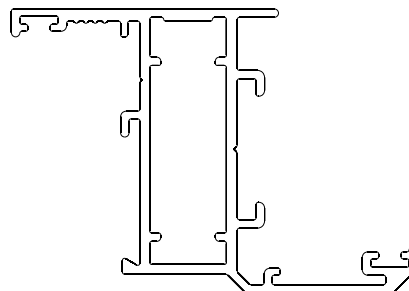
W57508

Note:
The Y-Seal gasket to be used for
both the fixed frame & sash.



For drilling of holes for the corner connector,
using the sash jig, only drill a hole to pop rivet
the corner connector.

Note:
No Crimping required.

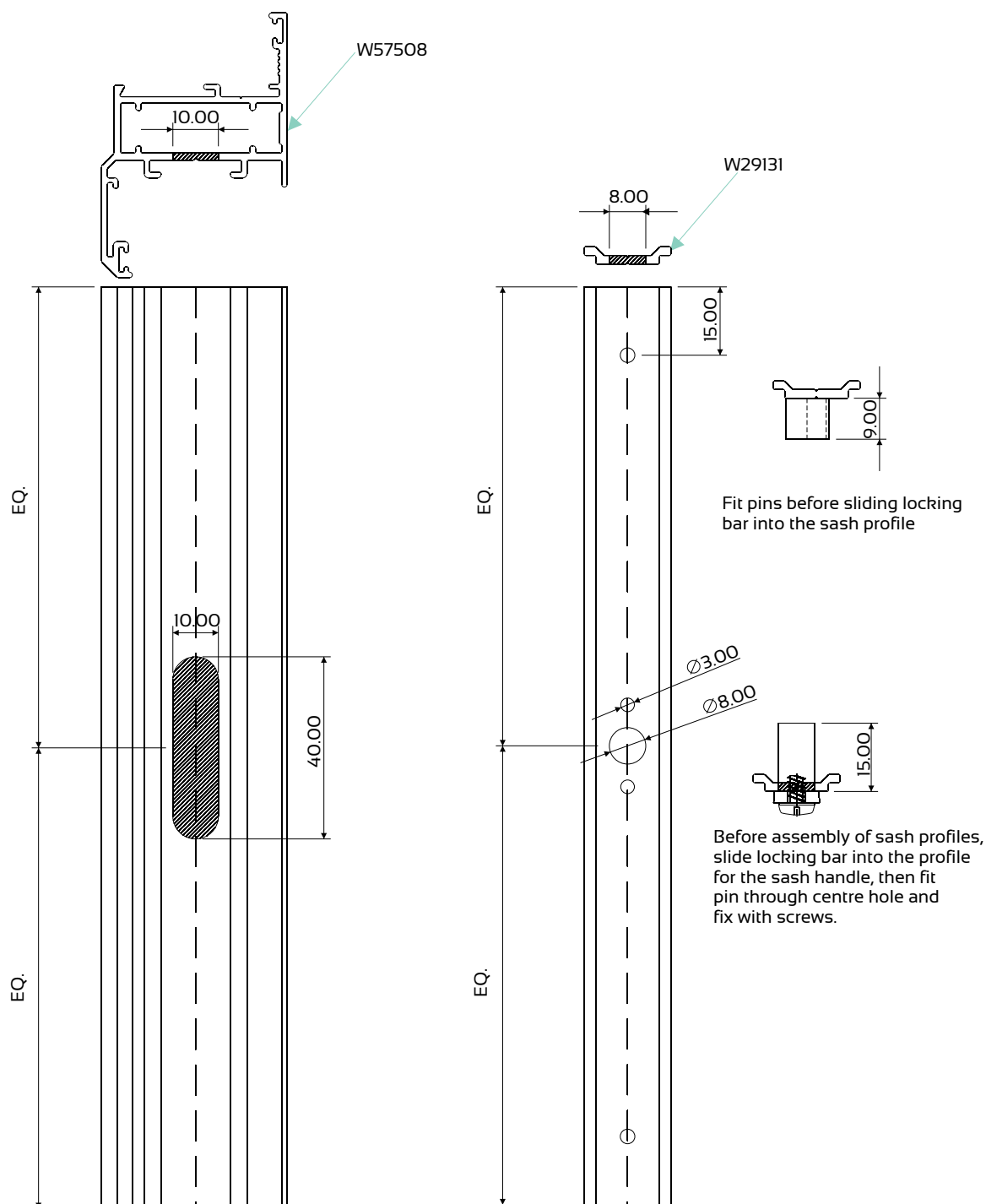


All mechanical joints to be silicone sealed

Prior assembling the sash profiles together, ensure
that a locking bar profile is fitted for each friction stay

Typical Multi Lock Sash Machining Detail

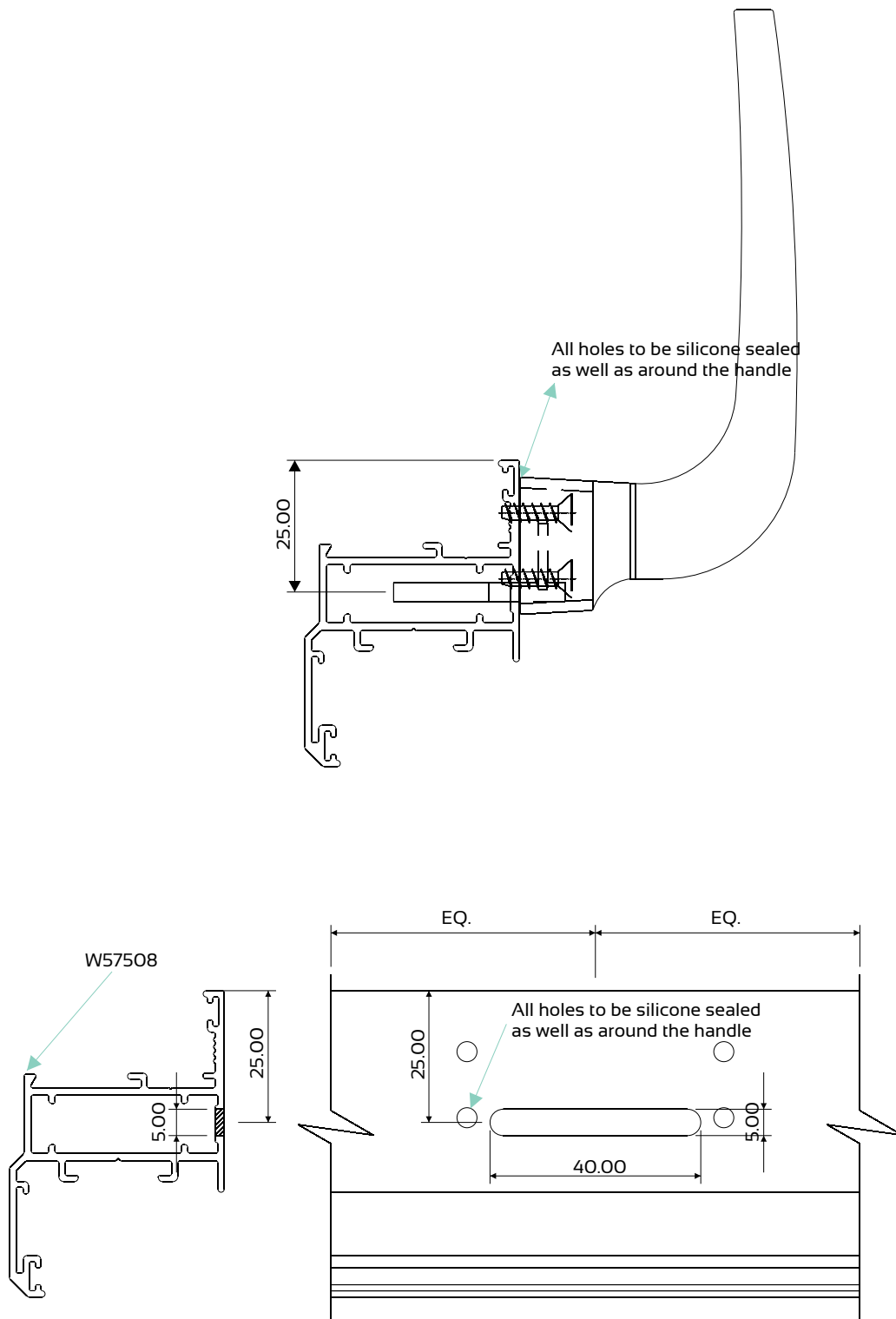
Sash & Locking Bar

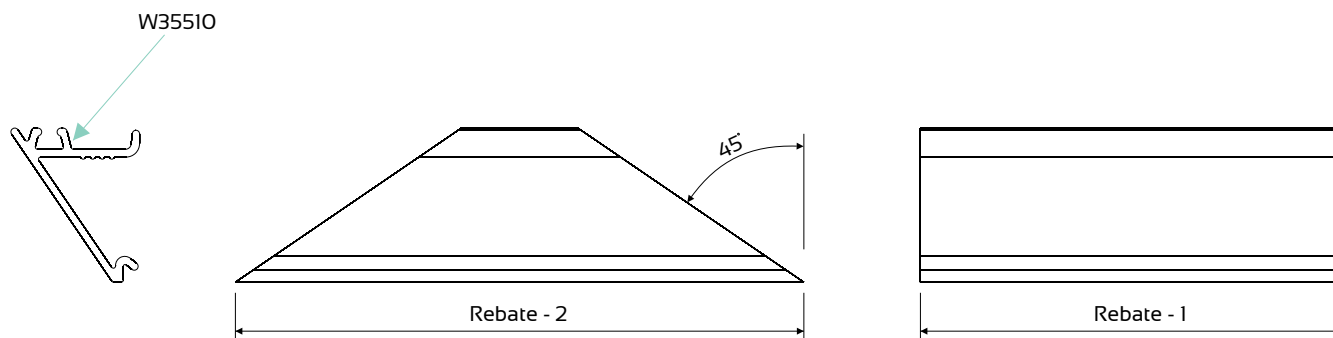


Note:
Before assembly of the sash frame, the locking bar needs to be inserted into the bottom sash profile with the locking pins fitted & holes drilled to receive the handle pin.

Typical Multi Lock Sash Machining Detail

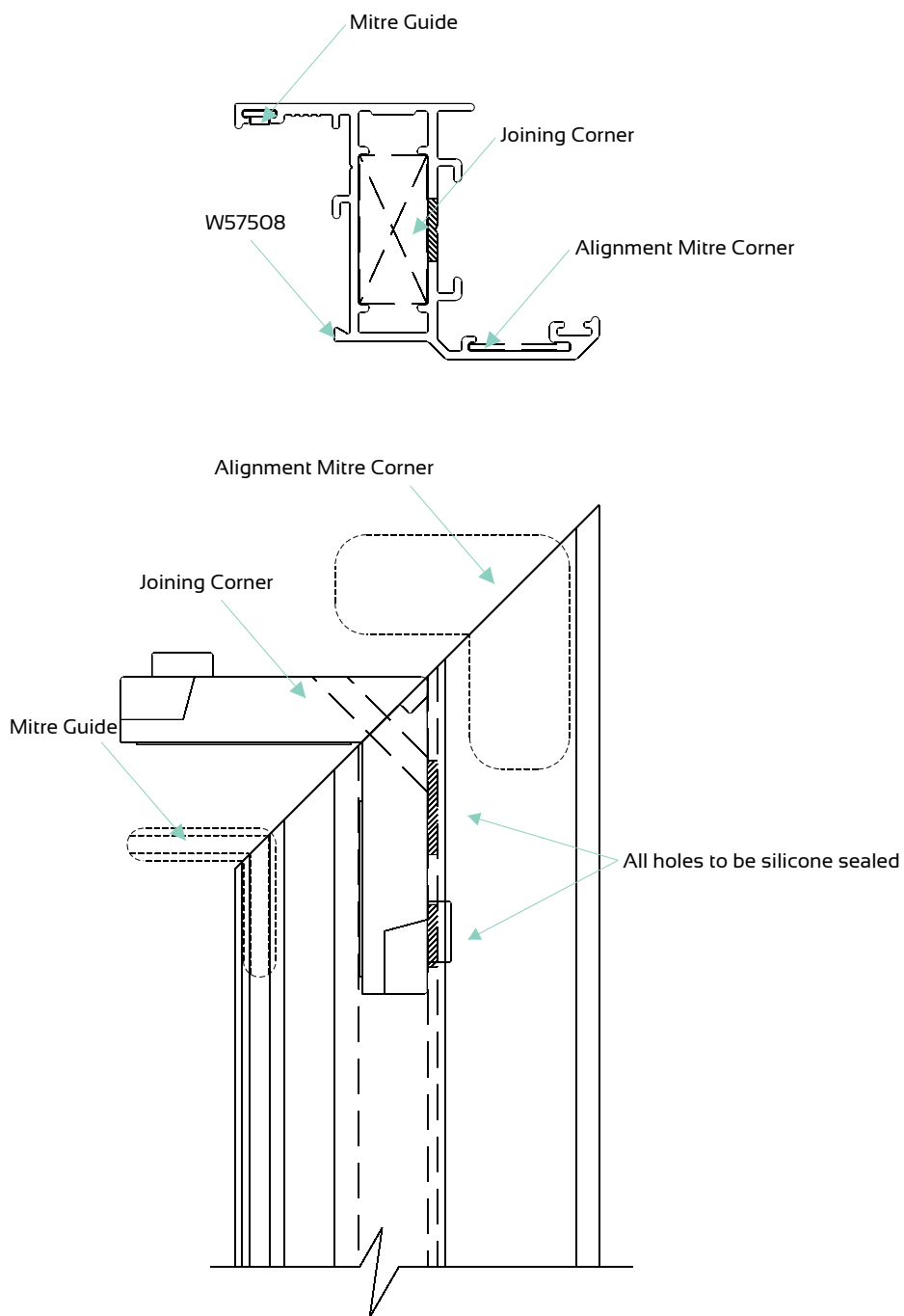
Handle





Typical Multi Lock Sash Assembly Detail

Corner Joint

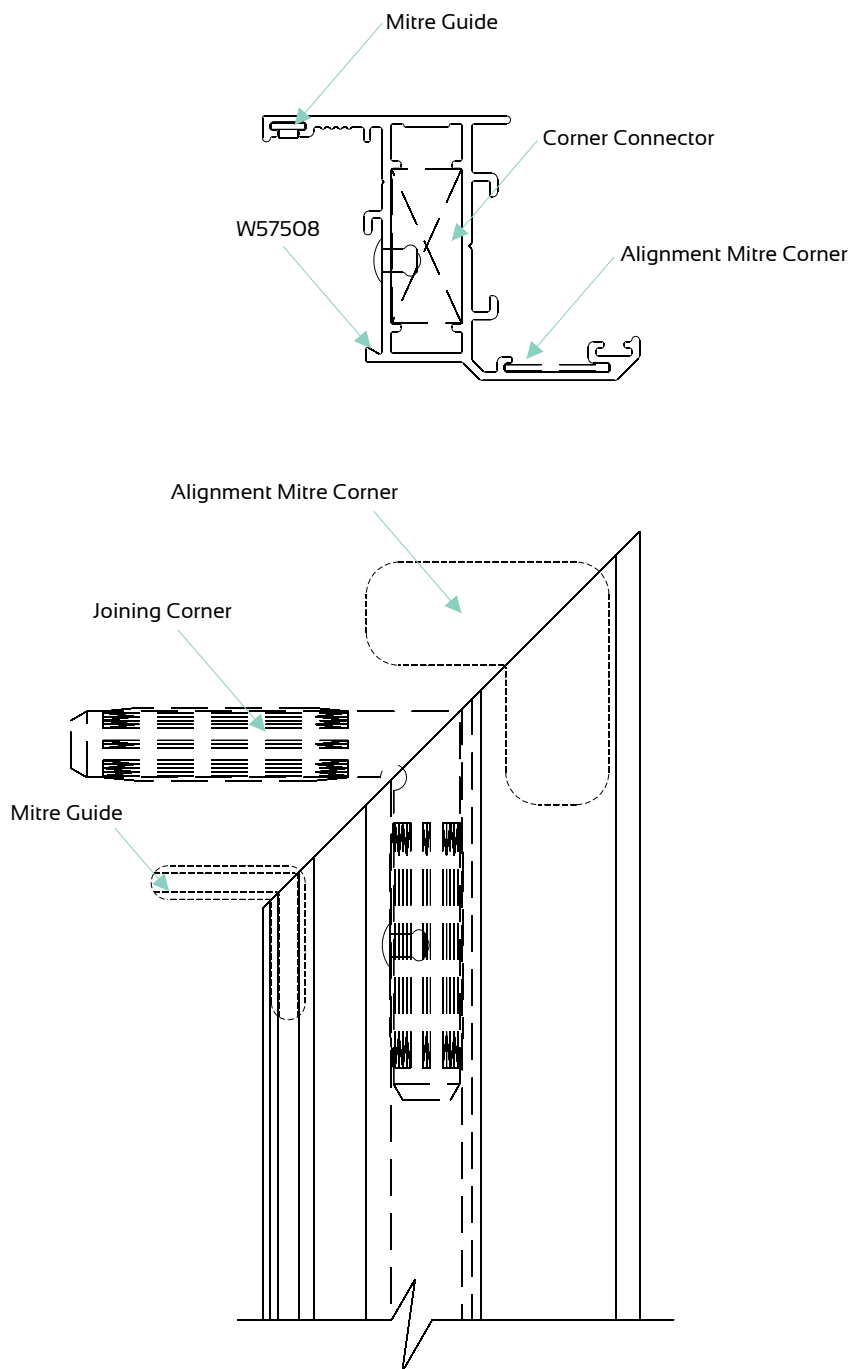


All mechanical joints to be silicone sealed

Note:
Remember to fit the locking bars for friction stays
before assembly of sash frame.

Typical Multi Lock Sash Assembly Detail

Corner Connector

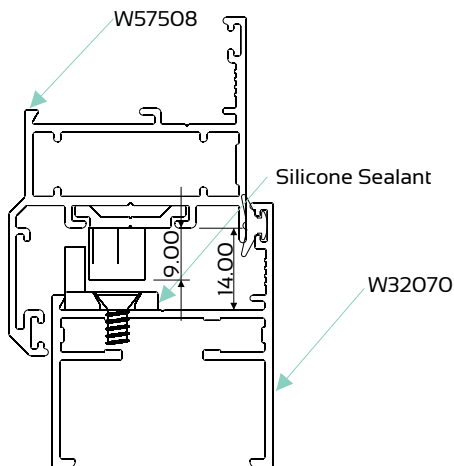


All mechanical joints to be silicone sealed

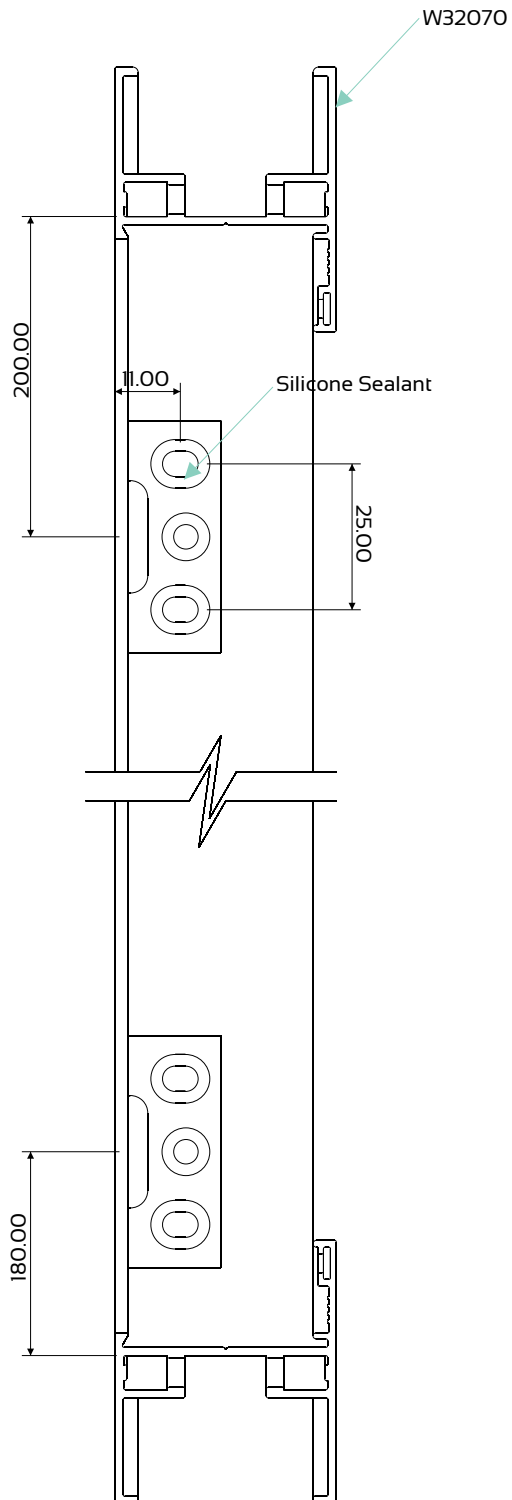
Note:

Remember to fit the locking bars for friction stays before assembly of sash frame.

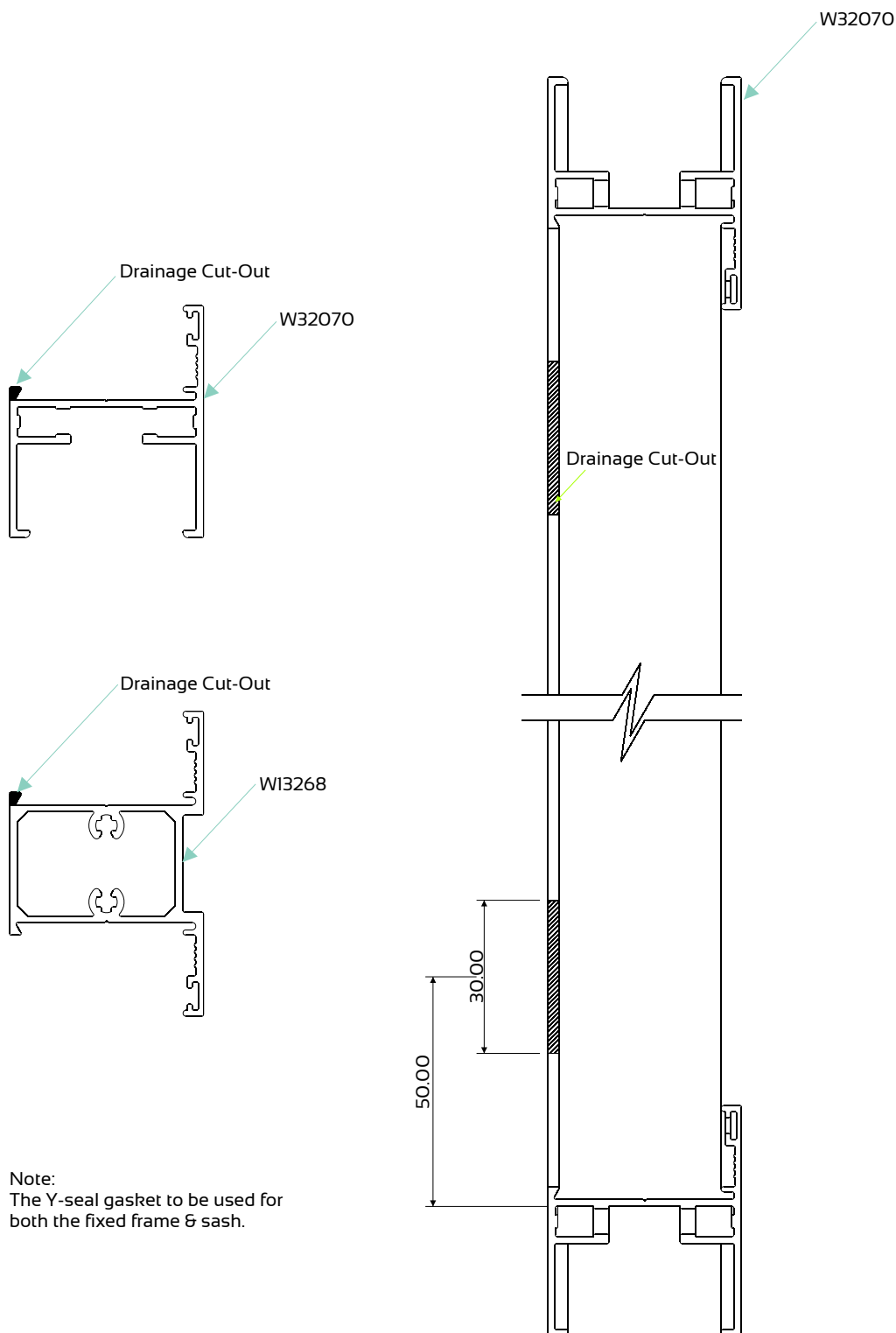
Typical Multi Lock Sash Locking Angle Detail



Note:
No Y-seal gasket to be fitted for the bottom sash profile unless the building is over 5 stories high. Ensure the Y-seal gasket sits between the drainage cut-out.

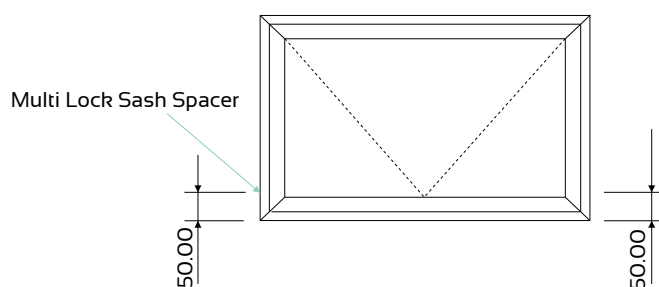
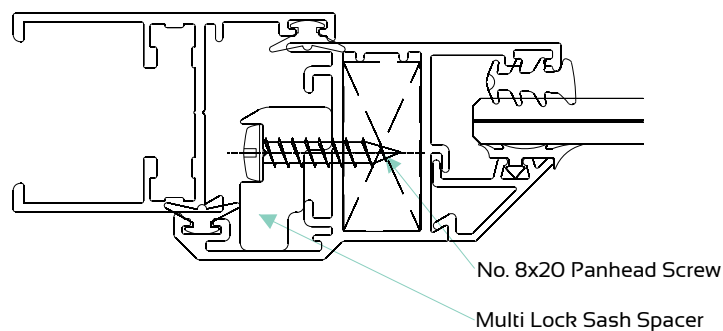


Typical Multi Lock Sash Outer Frame Drainage Detail

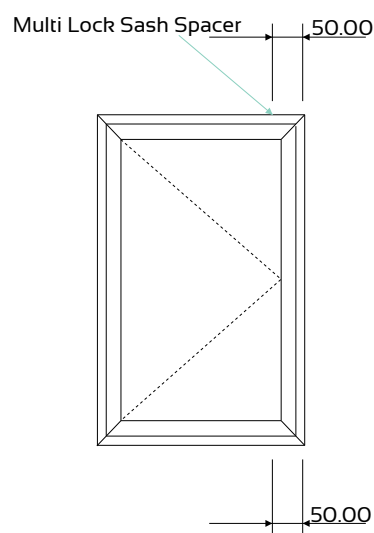
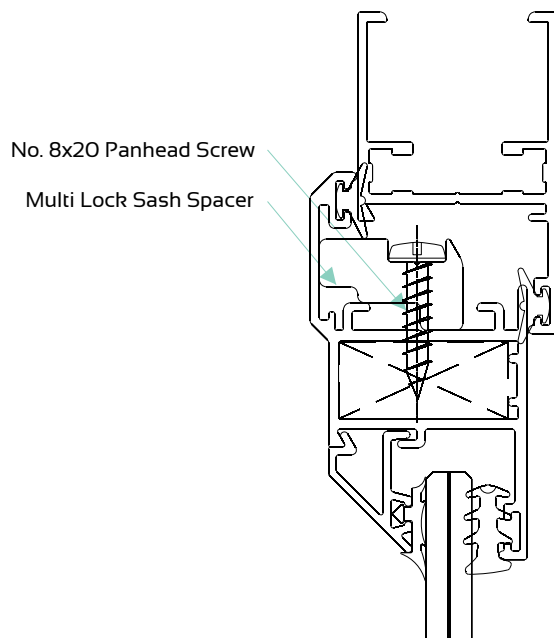


Note:
The Y-seal gasket to be used for
both the fixed frame & sash.

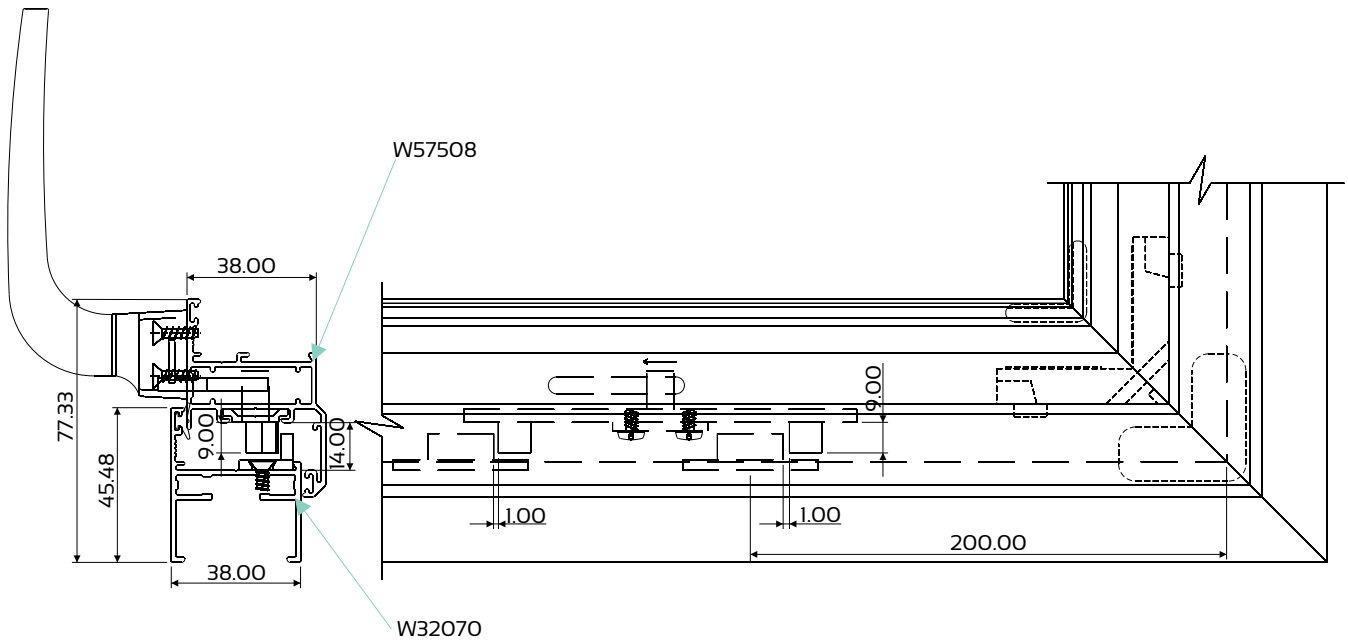
Typical Fitting of Multi Lock Sash Spacer



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

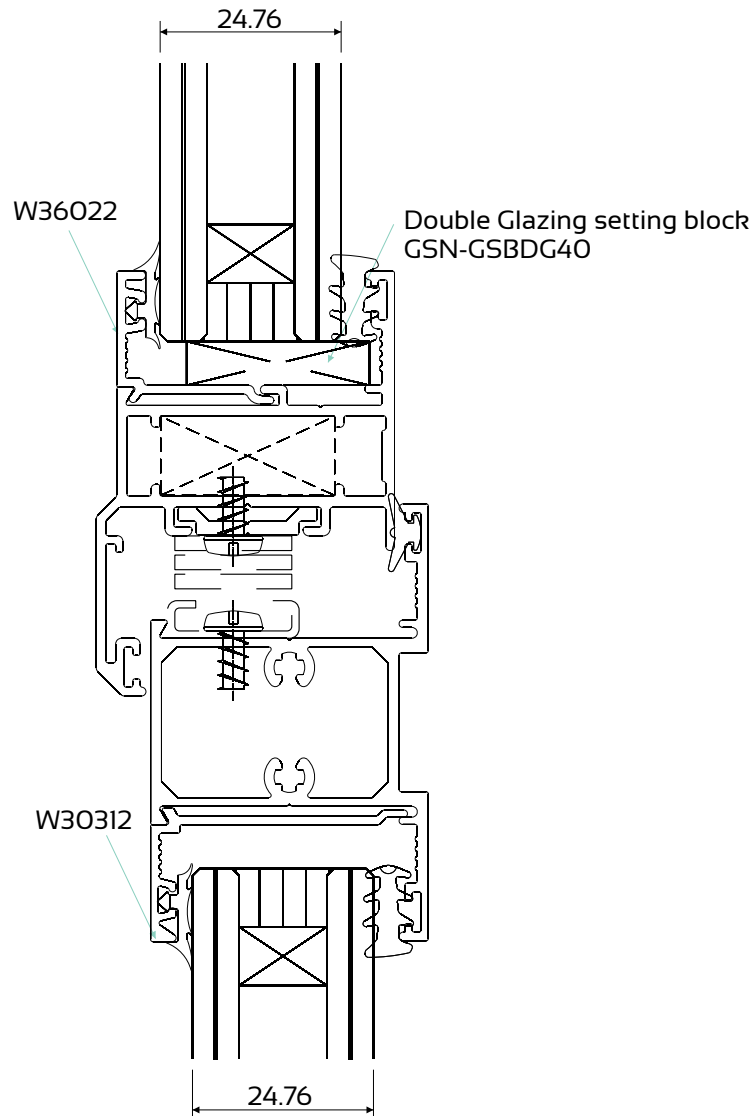


Note:
To assist the side hung sash in opening & closing squarely, a Euro sash spacer needs to be fitted as shown on each side of the sash 50mm from the bottom edge.



Typical Detail showing the Swift 38 Multi Lock

Double Glaze Bead & the Swift 38 Standard Double Glaze Bead



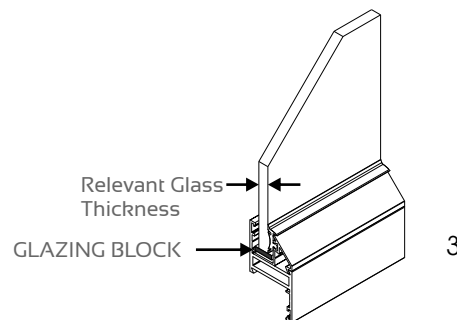
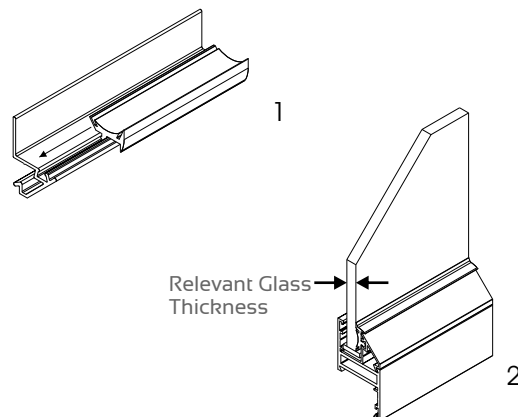
Note:

Insert the pull-in vinyl gasket into the glazing bead by sliding or pressing it into the groove (1). Before cutting the gasket, ensure that it has not been stretched & cut 6mm longer so that the corners are in compression at all times.

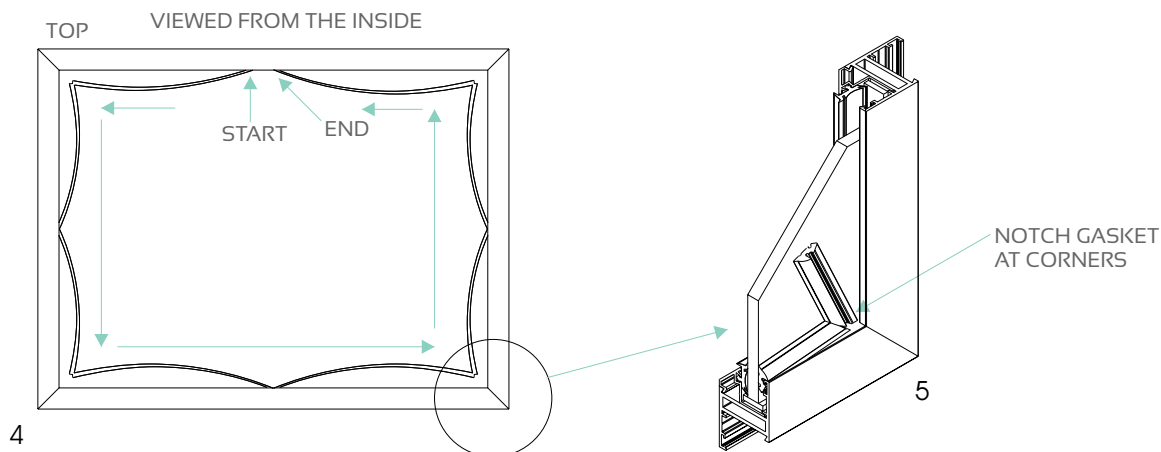
Position the bottom glazing bead in the glazing bead rebate of the relevant profile (2).

Insert the top then the side glazing beads ensuring that they are correctly positioned into place.

Starting from the top centre, insert the wedge gasket (4) without stretching it. Stop 150mm from the corner & partly cut the wedge gasket 6mm longer than the vertical bead. Insert the gasket into the corner & then roll in remaining 150mm (5). Repeat this on the other sides. Where the gasket end meets, cut the gasket 6mm longer, then insert.

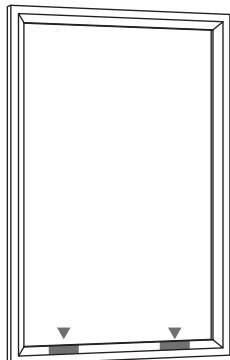


ENSURE GASKETS ARE NOT STRETCHED AT ANY STAGE



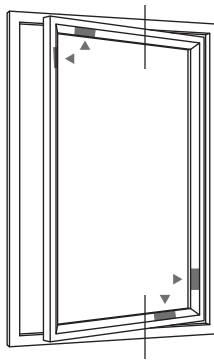
Typical Glazing Procedure

FIXED

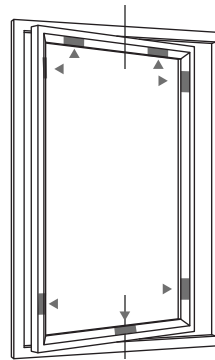


Fixed Light

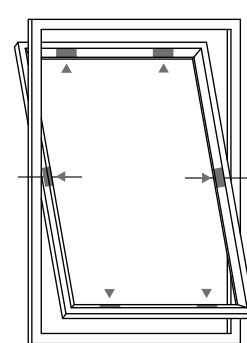
PIVOTING



Vertical Pivot
(hung off-centre)

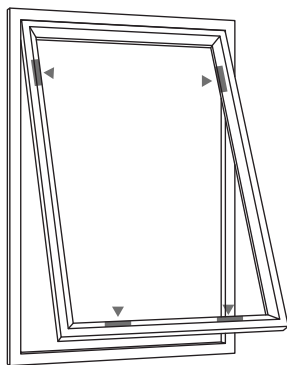


Vertical Pivot
(hung centrally)

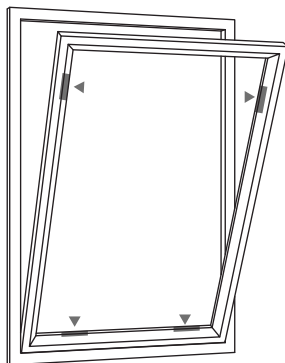


Horizontal Pivot
and reversible

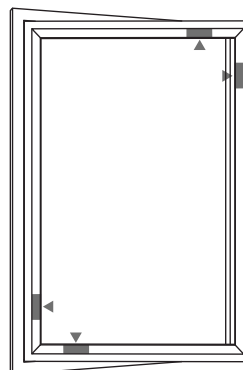
CASEMENT



Top Hung

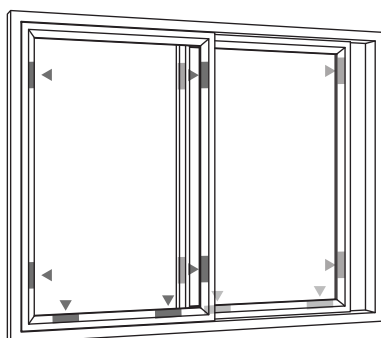


Bottom Hung

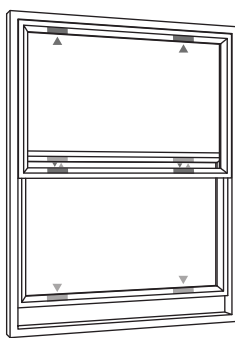


Side Hung

SLIDING



Horizontally sliding
6 setting blocks per pane



Vertically sliding
6 setting blocks per pane

GLAZING

1. Selection of glazing methods.

1.1 Glass Setting Blocks

Glass to metal contact must be avoided at all times by using approved Crealco setting blocks which have a shore hardness of 50 to 90 shore hardness.

Use only setting blocks made of Neoprene, EPDM, Silicone or other elastomeric materials.

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