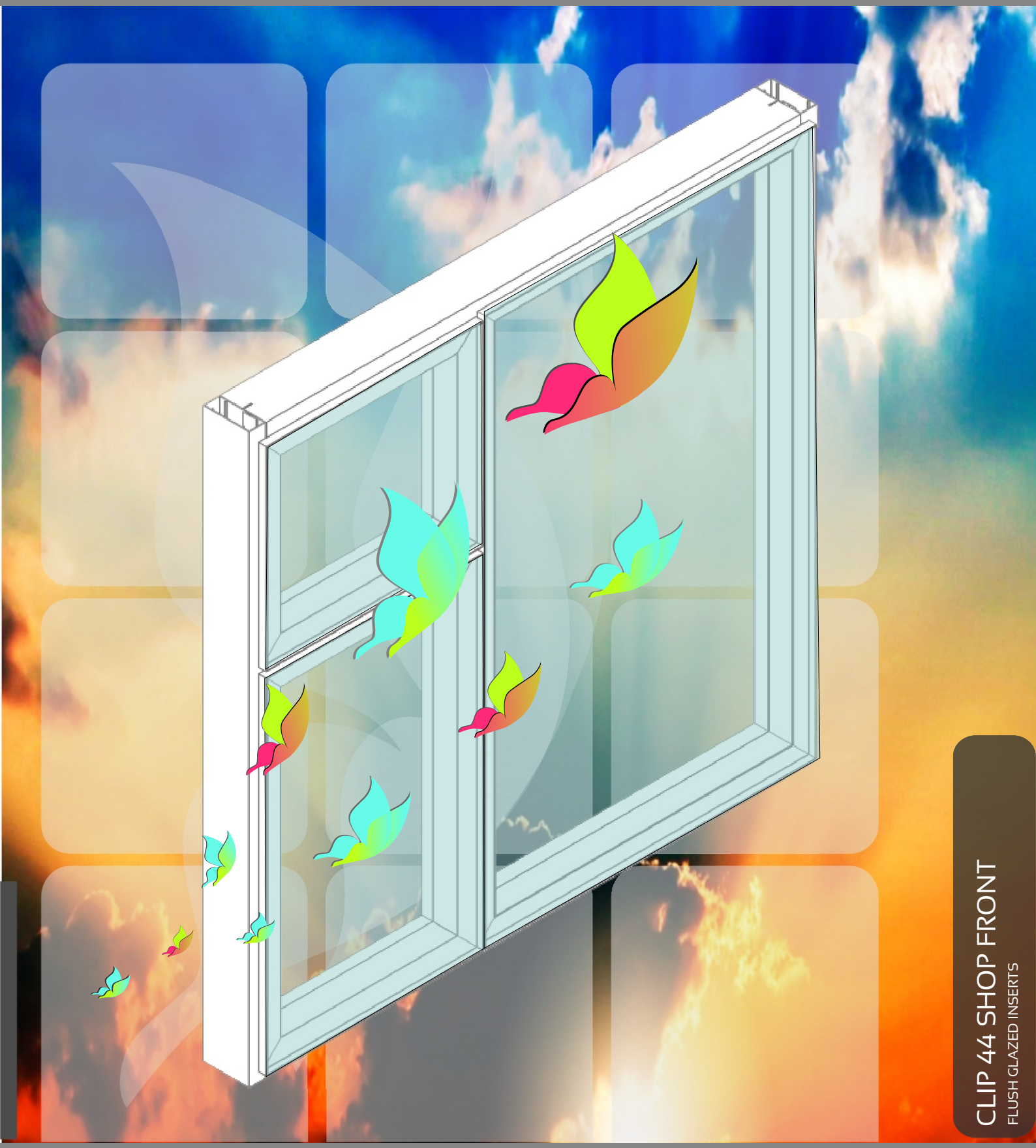
PRODUCT MANUAL

REVISION 2.3



CLIP 44 SHOP FRONT

FLUSH GLAZED INSERTS

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creative aluminium

WISPECO Aluminium

WISPECO Aluminium

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 a Wispeco Technical Representative before proceeding. It is advisable to have all sizing and performance criteria checked by a qualified structural engineer to ensure that all performance and compliance 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.

This Guide may be reproduced in whole or in part in any form or by any means provided the reproduction or transmission acknowledges the origin, revision number and copyright date.

Specifications concerning products and applications
This manual is based on standard configurations only. As there are many configurations not covered in this manual, contact a Wispeco Technical Consultant with regard to a configuration not represented herein.

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 Crealco Silicon. 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.

All drawings in the Wispeco Documentation are shown NOT to scale are used for illustrative purposes only. For correct sizing and machining of system profiles refer to the Wispeco StarFront Aplication.

Wispeco cannot 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.

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 centrers 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.

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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.

CLIP 44 SHOP FRONT
FLUSH GLAZED INSERTS

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WISPECO Aluminium

Introduction & Basic Glazing Procedures

Please note that the Clip 44 flush glazing system is not a curtain wall system & each project should be carefully checked to ensure that the Clip 44 flush glazing system is appropriate. The following notes are basic guidelines & the relevant specialists must be consulted to ensure correct procedures are carried for each application.

1) Before starting any flush glazing project, an adhesion test must be carried out with a sealant testing laboratory; such as Dow Corning; to ensure that the correct silicone is used with the relevant substrates.

2) All surfaces (glass & aluminium) must be clean. dry, dust free & not damaged by outdoor weathering. Refer to the Wispeco cleaning & maintenance manual. (Refer to clause 2.2).

3) All flush glazing glass panels must be polished all round. (If using glass that is low-E coated, ensure coating is on the inside of the building.)

4) The double sided tape should not be less than 6mm thick. The tape liner should only be removed just prior to placing the glass into position followed by the silicone application. Please note that the double sided tape is to be used in conjunction with the structural silicone.

5) Ensure the correct procedures are followed regarding the structural silicone instructions such as preparation, curing time, application temperatures & importantly the correct contact size of silicone on the glass. A minimum fill of 6 mm x 15 mm should be applied, but an approved silicone distributor should be consulted.

6) Dow Corning offer various options on siliconing. A one part application can be used or for a fast curing application a two component silicone can be used.

7) Applying the silicone should be done in a continuous operation with the correct equipment to ensure a positive pressure which will prevent air bubbles forming.

8) Important to not move the glazed units until the silicone has fully cured as required.

9) For double glazed units, glass setting blocks must be used in conjunction with the structural glazing tape.

10) Very important to confirm with the silicone distributor and the structural glazing tape supplier that glass with low-E coatings can be used (especially soft coatings as there could be a loss of adhesion.)

11) A minimum tape width of 15 mm should be applied (to be confirmed by specialist based on glass size & wind load.)

12) All projects over 10m high must have an Engineer or Competent person overseeing the project.

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Silicone Allowance Guide for Fabricators

SEALANTS USAGE CALCULATOR													
RUNNING METER PER 300ml CARTRIDGE													
	WIDTH (mm)												
DEPTH (mm)	2	3	4	5	8	10	12	15	20	25	30	40	50
2	75.0	50.0	37.5	30.0	18.8	15.0	12.5	10.0	7.5	6.0	5.0	3.8	3.0
3	50.0	33.3	25.0	20.0	12.5	10.0	8.3	6.7	5.0	4.0	3.3	2.5	2.0
4	37.5	25.0	18.8	15.0	9.4	7.5	6.3	5.0	3.8	3.0	2.5	1.9	1.5
5	30.0	20.0	15.0	12.0	7.5	6.0	5.0	4.0	3.0	2.4	2.0	1.5	1.2
6	25.0	16.7	12.5	10.0	6.3	5.0	4.2	3.3	2.5	2.0	1.7	1.3	1.0
8	18.8	12.5	9.4	7.5	4.7	3.8	3.1	2.5	1.9	1.5	1.3	0.9	0.8
10	15.0	10.0	7.5	6.0	3.8	3.0	2.5	2.0	1.5	1.2	1.0	0.8	0.6
15	10.0	6.7	5.0	4.0	2.5	2.0	1.7	1.3	1.0	0.8	0.7	0.5	0.4
20	7.5	5.0	3.8	3.0	1.9	1.5	1.3	1.0	0.8	0.6	0.5	0.4	0.3

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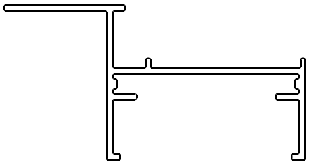
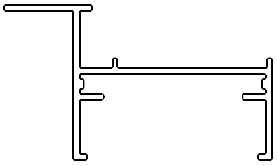
Profile Identification

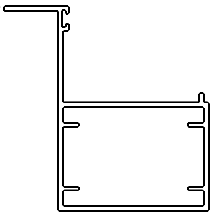
Clip44 Flush Glazed Window Profiles



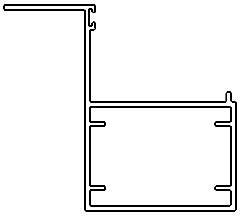
DIE No. W33077 | Clip44 Flush Glaze Frame Double Glazing



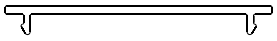
DIE No. W33146 | Clip44 Flush Glaze Frame Single Glazing



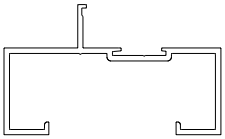
DIE No. W56278 | Clip44 Flush Glaze Sash Single Glazing



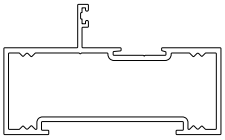
DIE No. W56250 | Clip44 Flush Glaze Sash Double Glazing



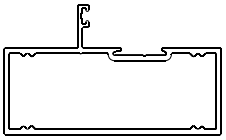
DIE No. W33078 | Clip44 Flush Glaze Frame Cover



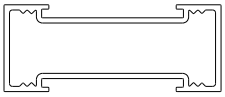
DIE No. W26154 | Clip44 26c Jamb Open Back



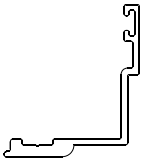
DIE No. W55824 | Clip44 Frame Recessed Back 26BWP



DIE No. W55875 | Clip44 Frame Flat Back 75mm W26E



DIE No. W53365 | Clip44 26D Recessed Back



DIE No. W33080 | Clip44 Flush Glaze Sash Adaptor WP

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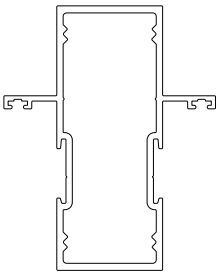
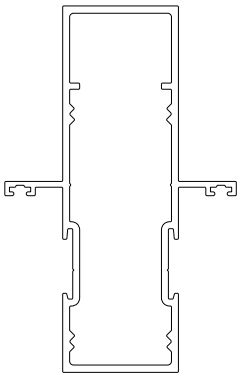
Profile Identification

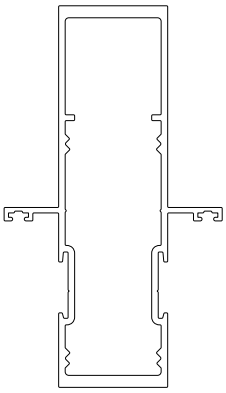
Clip44 Flush Glazed Window Profiles



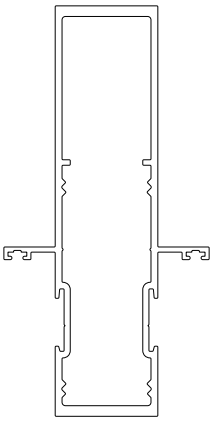
DIE No. W55891 | Clip44 Mullion 75mm 26WP



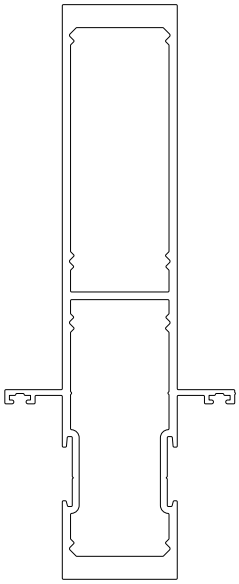
DIE No. W56015 | Clip44 Mullion Woolpile W95



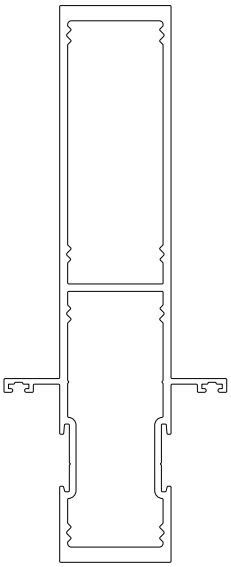
DIE No. W56014 | Clip44 Mullion Woolpile W105



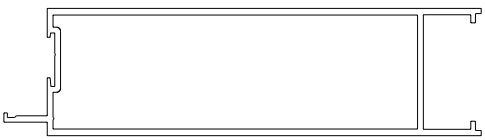
DIE No. W55913 | Clip44 Mullion Woolpile W150



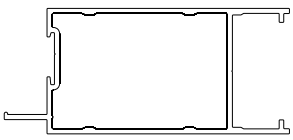
DIE No. W56012 | Clip44 Mullion 150mm Woolpile H/D



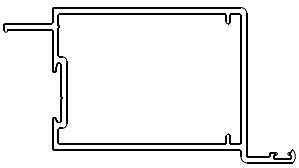
DIE No. W56013 | Clip44 Mullion Mullion W150



DIE No. W44094 | Clip44 R6 Sill Rail 150mm



DIE No. W44088 | Clip44 R4 Head/Sill Rail 85mm



DIE No. W53566 | Clip44 D/Stile 60mm

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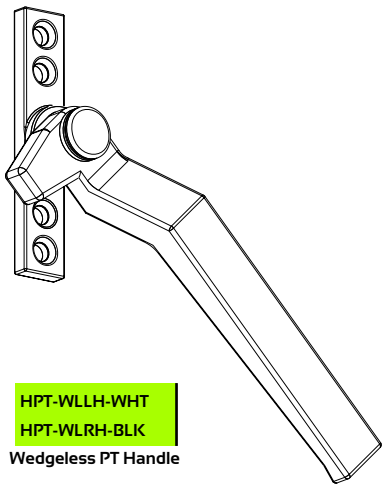
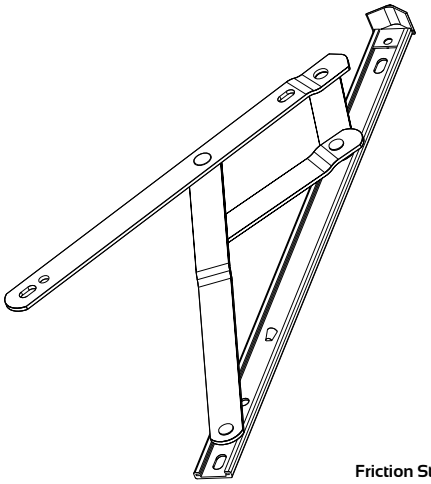
Hardware Components

RECOMMENDED CLIP44 FLUSH GLAZED COMPONENTS

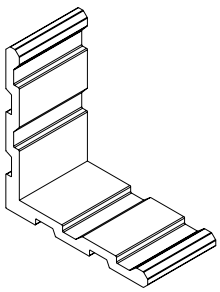
All hardware is available through our Stockists as well as through Crealco Components, and can be viewed on www.crealco-components.com



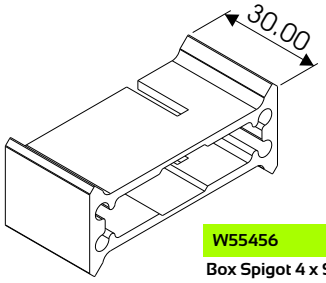
HPT-WLLH-WHT
HPT-WLRH-BLK
Wedgeless PT Handle



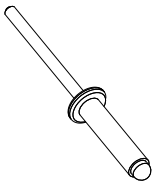
Friction Stay



W52695
28 Cas Corner Cleat 50mm

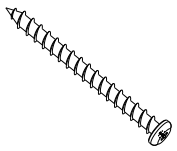


W55456
Box Spigot 4 x S/Port



FRC-4812
Pop Rivet 4.8x12mm

FSC-0809HBP
Handle Screw - Blunt Point 8x9 C/S



FSP-0830P-SS
P/Head POSI 8x30 S/S Screw

GSL-675RB
Bubble Seal

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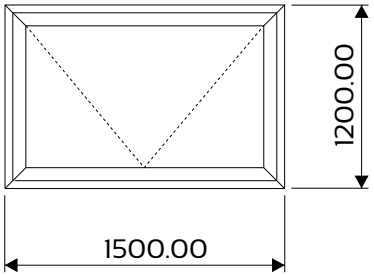
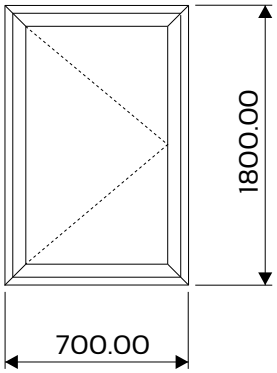
Limitation Charts

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.

	Maximum Vent Width in mm	Maximum Vent Height in mm
Top Hung	1500	1200



	Maximum Vent Width in mm	Maximum Vent Height in mm
Side Hung	700	1800



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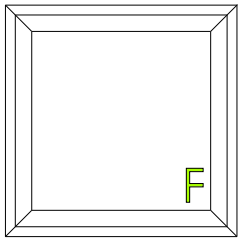
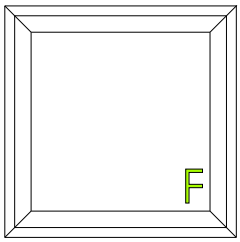
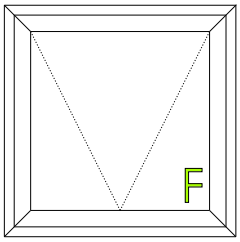


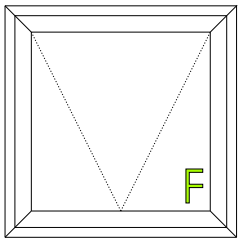
SINGLE GLAZED
FIXED PANEL



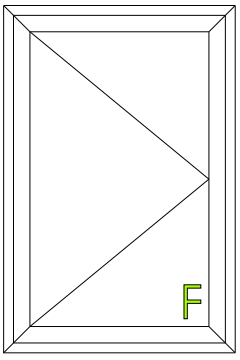
DOUBLE GLAZED
FIXED PANEL



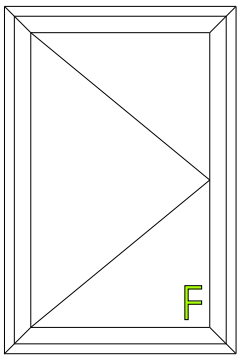
SINGLE GLAZED
TOP HUNG



DOUBLE GLAZED
TOP HUNG



SINGLE GLAZED
SIDE HUNG



DOUBLE GLAZED
SIDE HUNG

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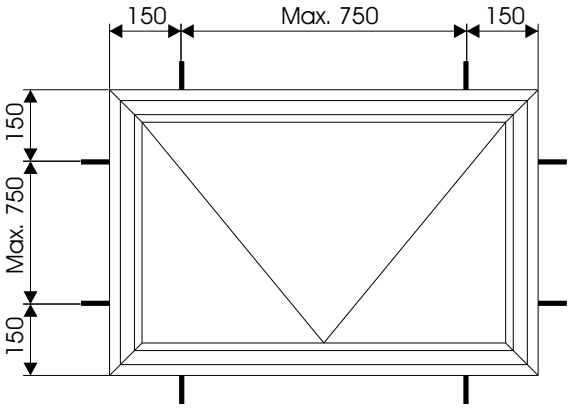
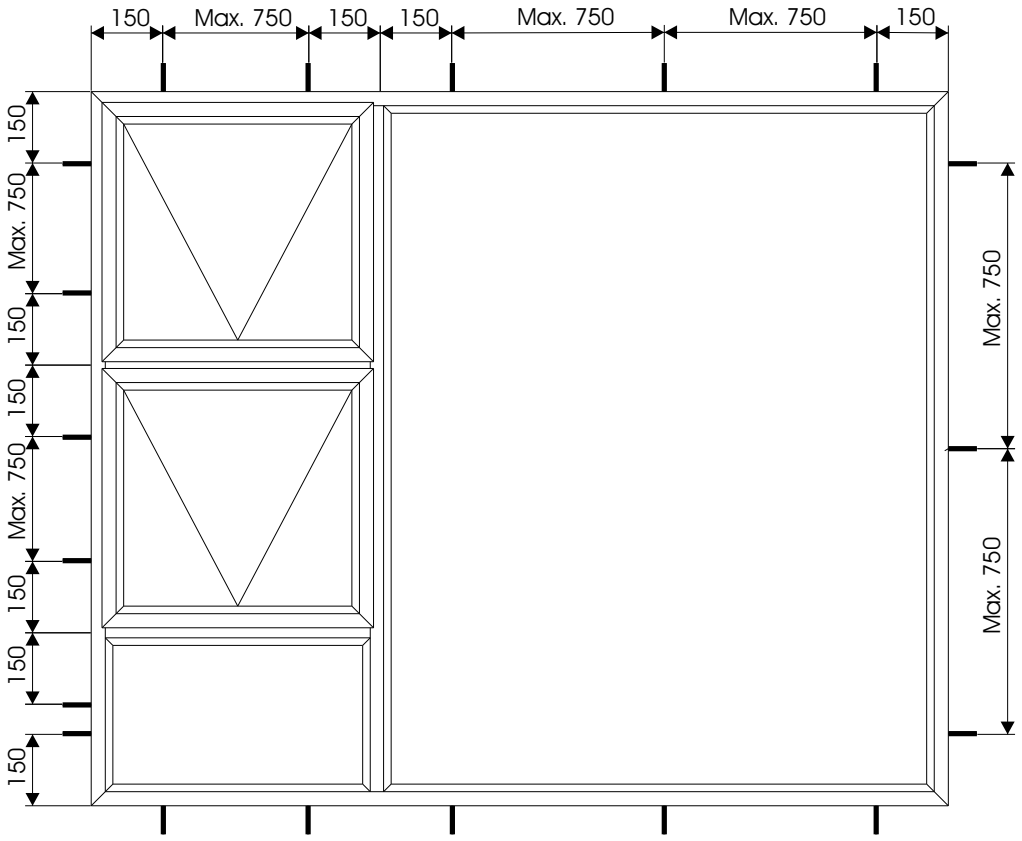
Fastening Positions

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.





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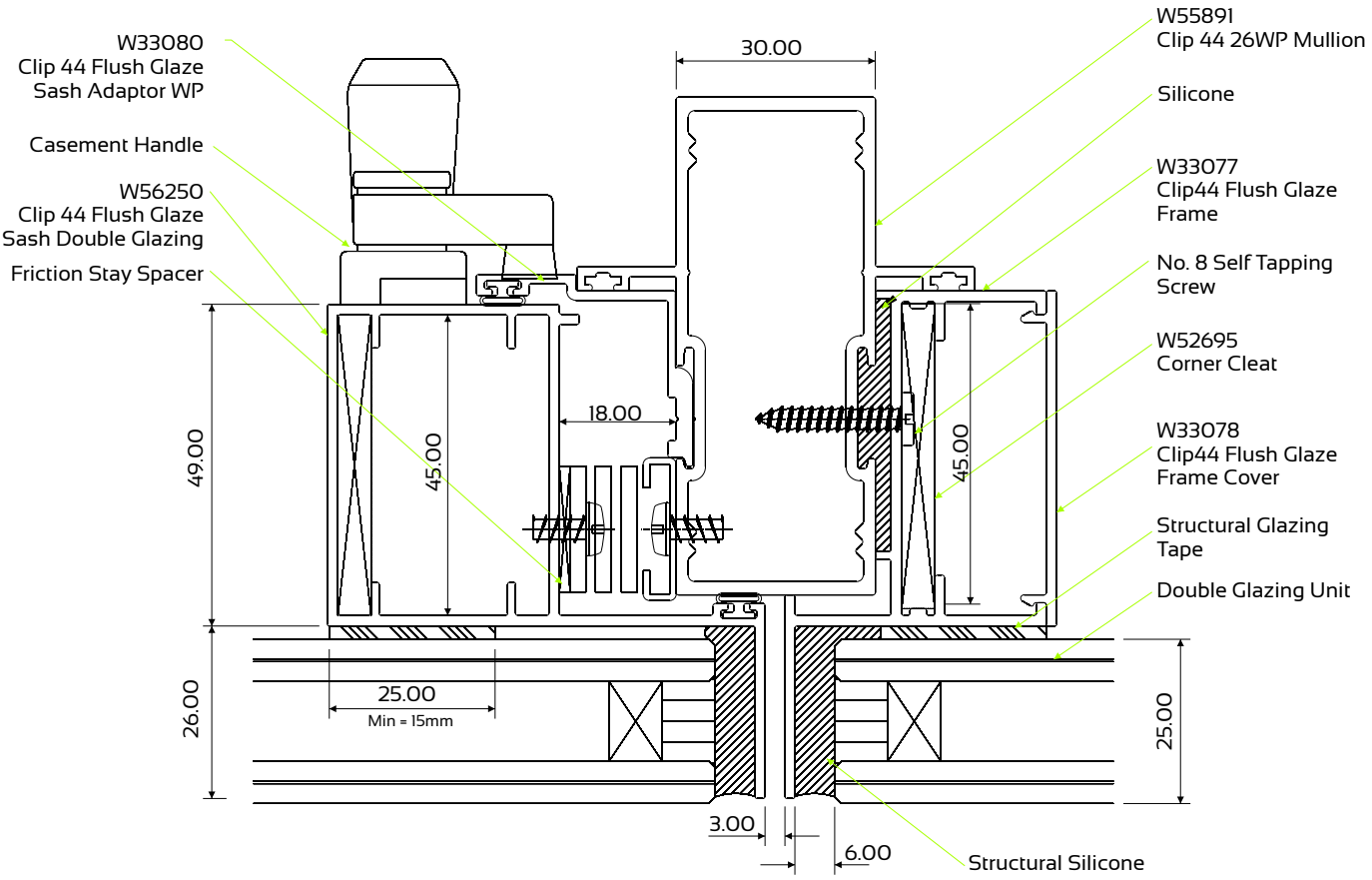
Double Glaze Unit



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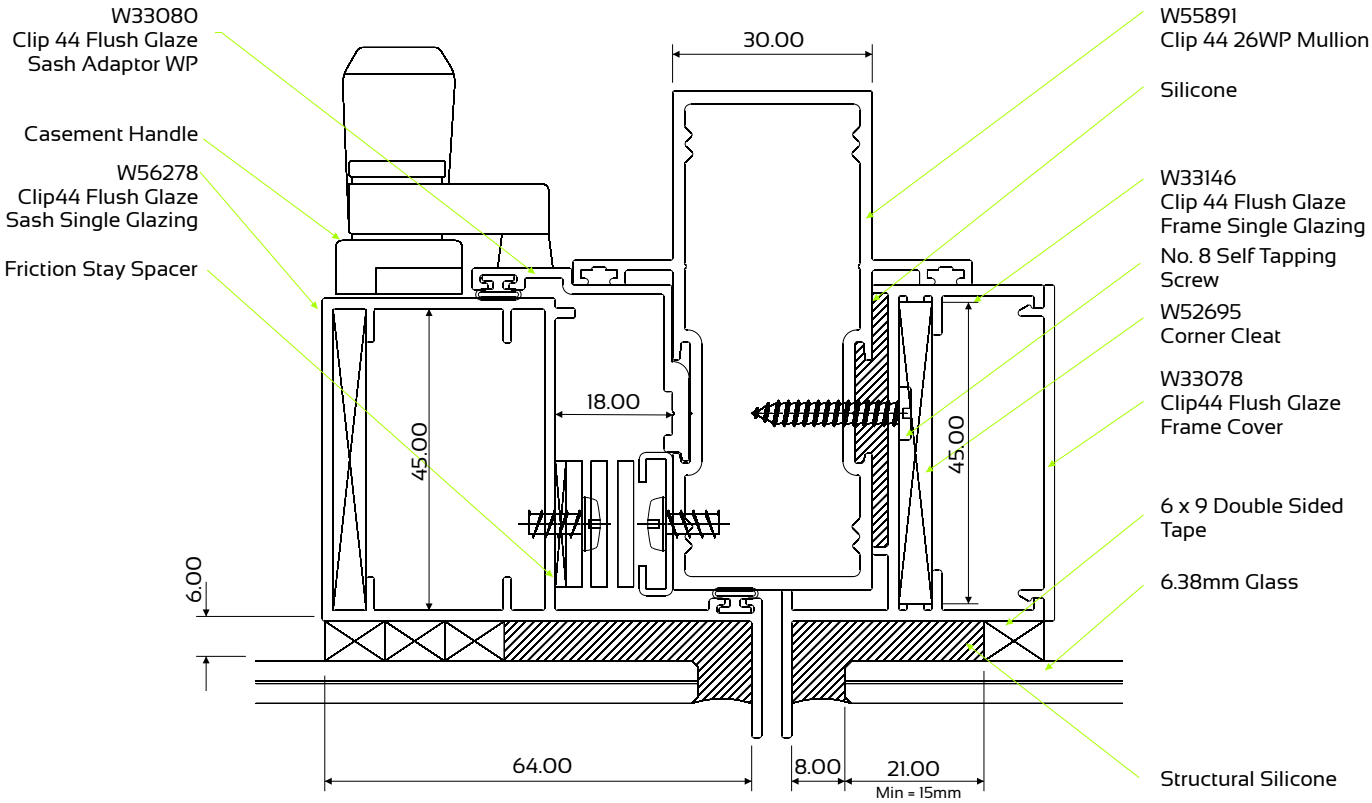
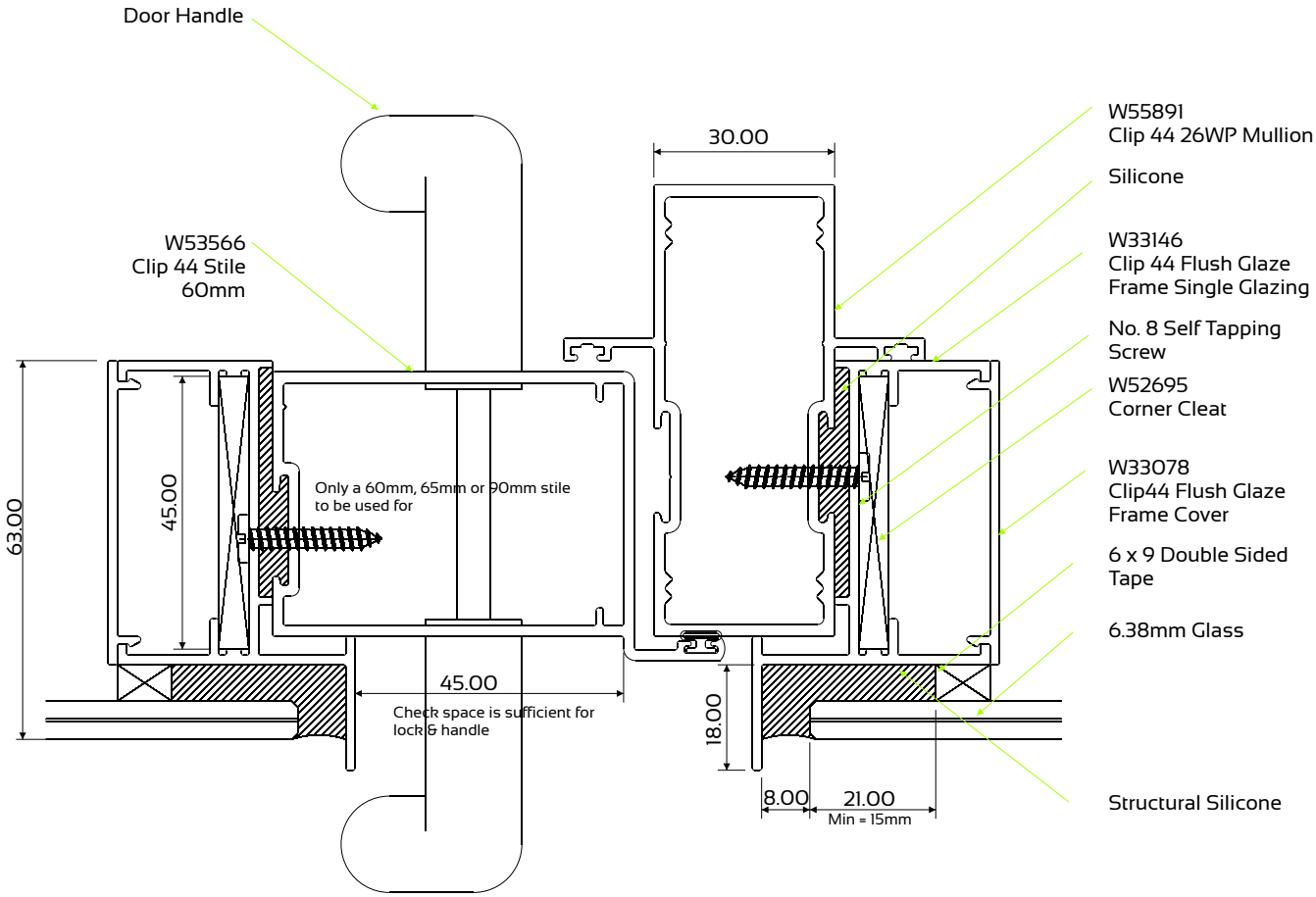


WISPECO Aluminium

Single Glaze Unit with Handle



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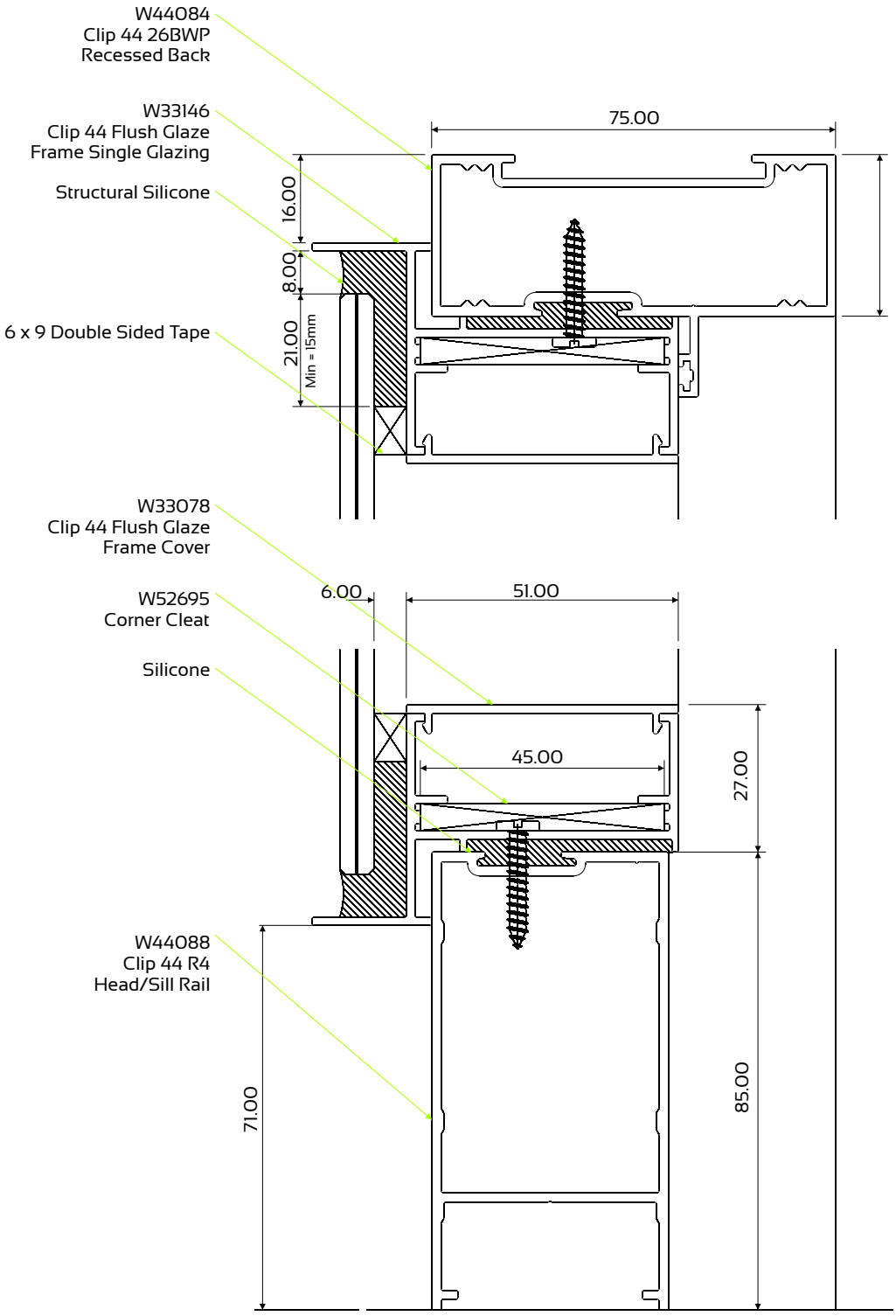
Vertical Head & Sill Detail



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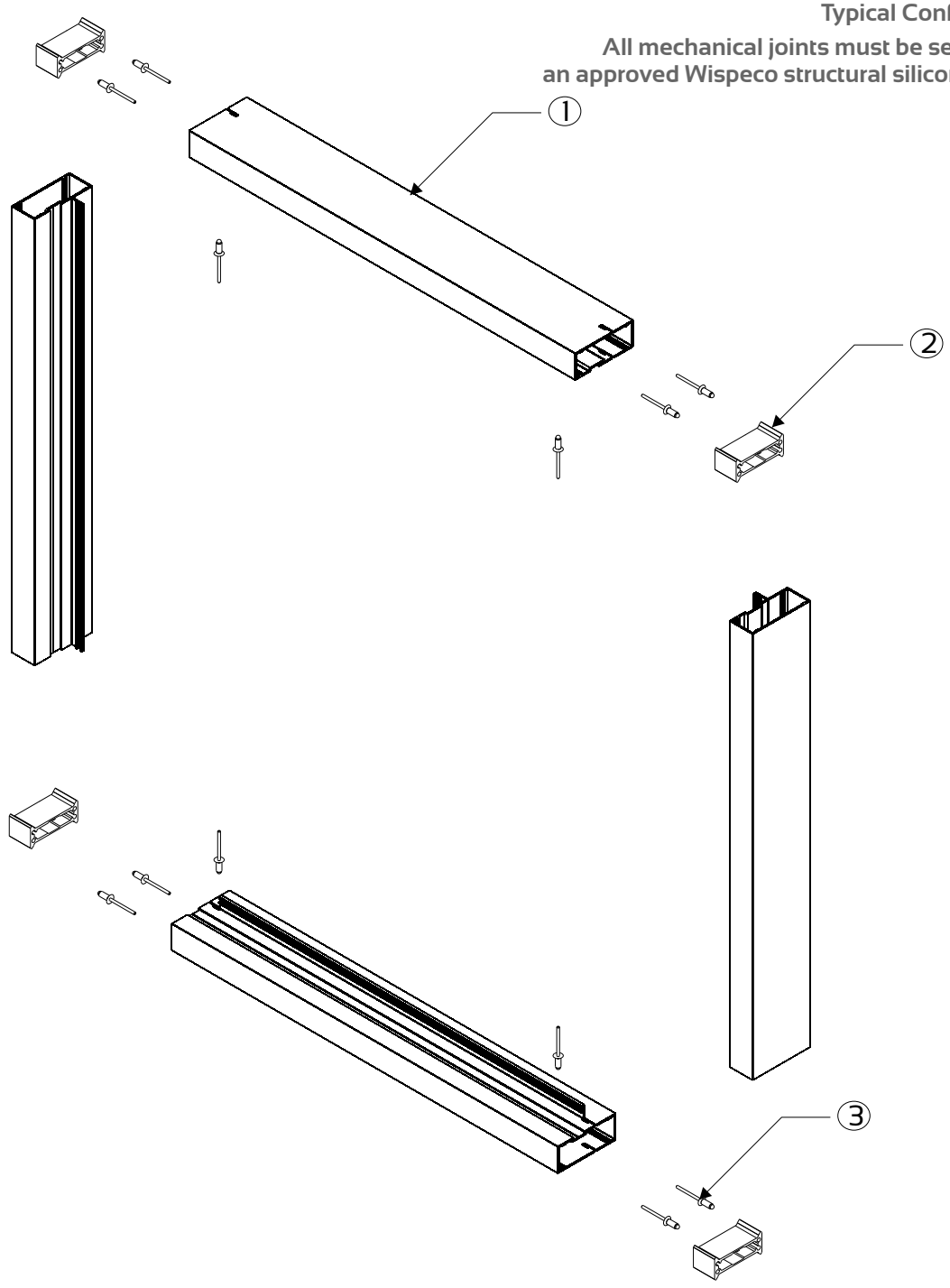
Component Assembly Detail

Typical Configuration

All mechanical joints must be sealed with an approved Wispeco structural silicone sealer.



System Profiles

ITEM	QTY	DIE No.	DESCRIPTION
1	4	W55875	Clip44 Frame Flat Back 75mm W26E

Hardware

ITEM	QTY	COMPONENT	DESCRIPTION
2	4	Box Spigot	Box Spigot
3	12	Pop Rivet	Pop Rivet

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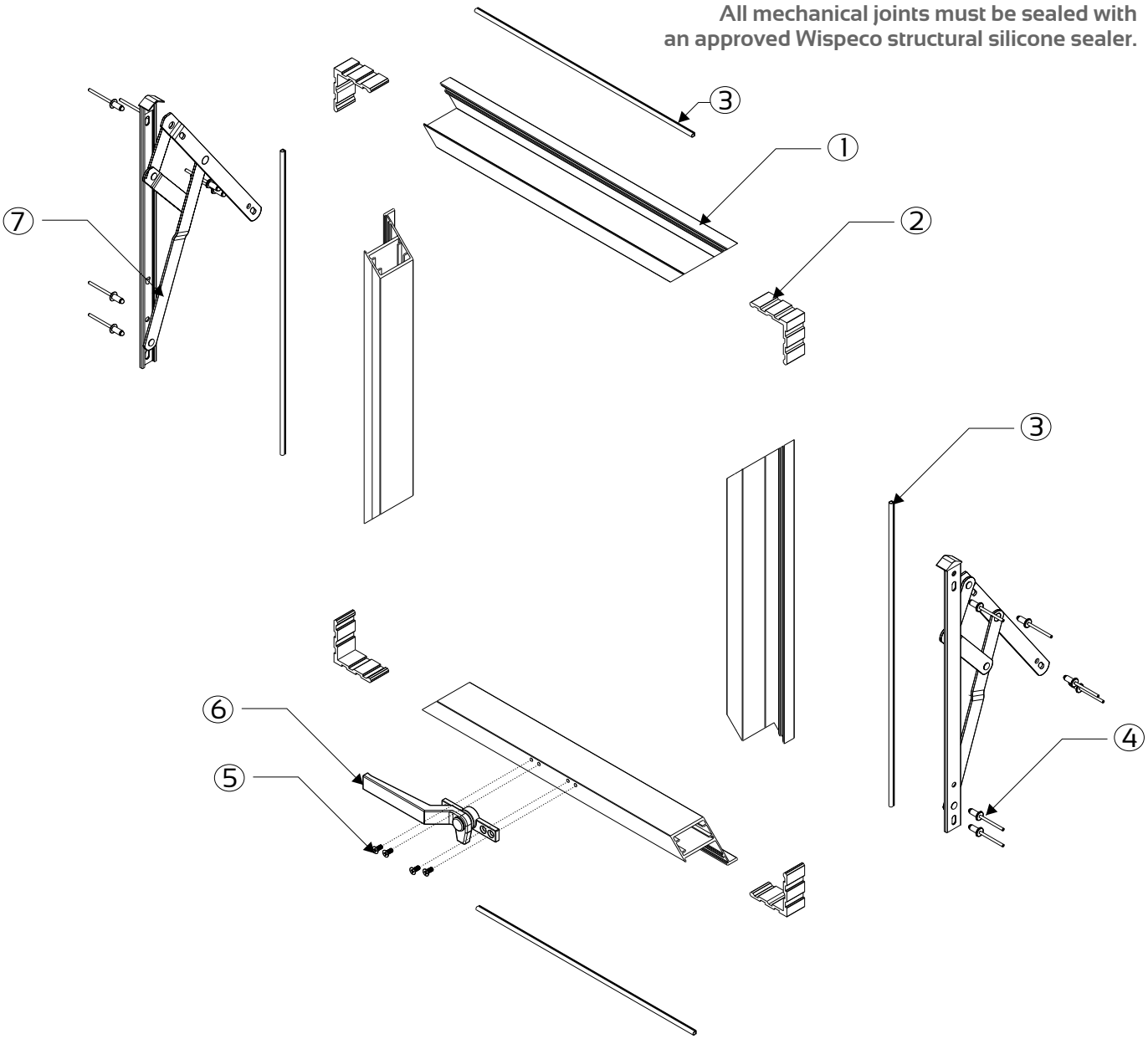
Insert Sash Component Assembly Detail

Typical Configuration

All mechanical joints must be sealed with an approved Wispeco structural silicone sealer.



System Profiles

ITEM	QTY	DIE No.	DESCRIPTION
1	4	W56278	Clip44 Flush Glaze Sash

Hardware

ITEM	QTY	COMPONENT	DESCRIPTION
2	4	Corner Cleat	Corner Cleat
3	4	Bubble Seal	Bubble Seal
4	12	Pop Rivet	Dome Rivet
5	4	Screws	Handle Screw
6	1	Handle	Euroline PT
7	2	Friction Stay	Friction Stay

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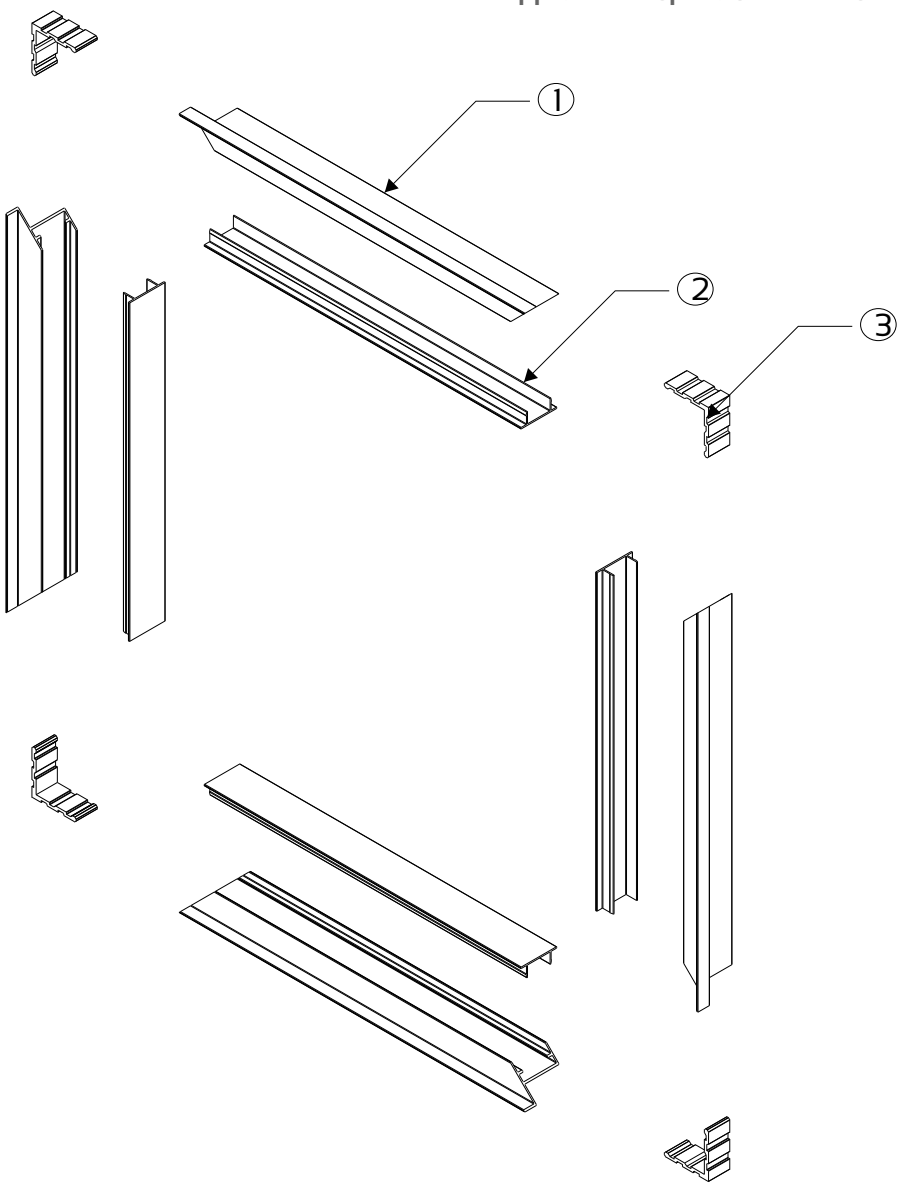
Fixed Panel Insert Component Assembly Detail

Typical Configuration

All mechanical joints must be sealed with an approved Wispeco structural silicone sealer.



System Profiles

ITEM	QTY	DIE No.	DESCRIPTION
1	4	W33077	Clip44 Flush Glaze Frame
2	4	W33078	Clip44 Flush Glaze Frame Cover

Hardware

ITEM	QTY	COMPONENT	DESCRIPTION
3	4	Corner Cleat	Corner Cleat

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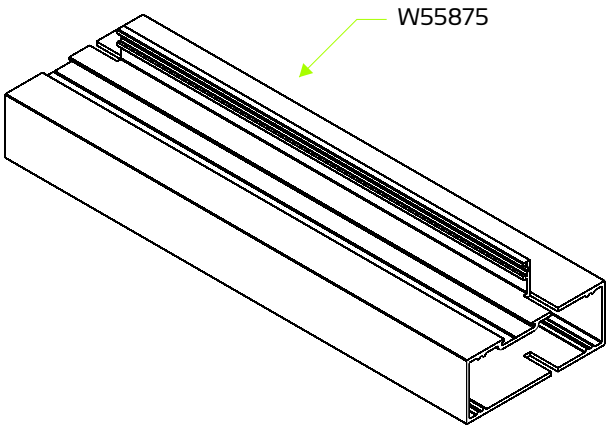
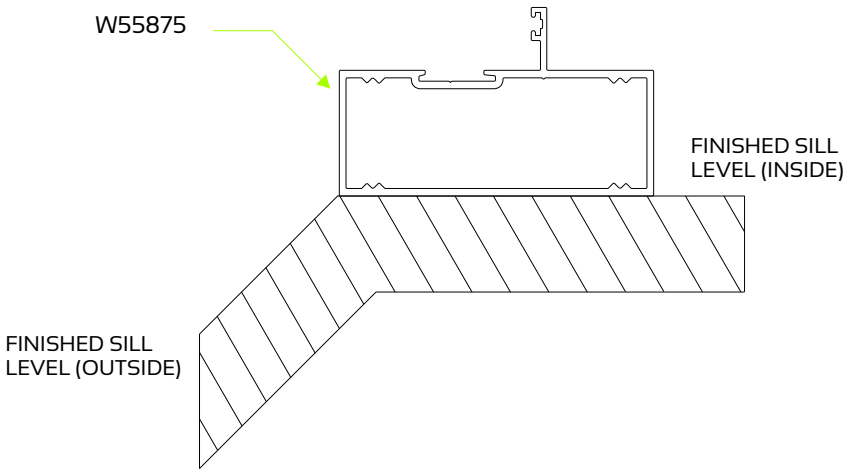
Single Lip Box Sill Level Detail





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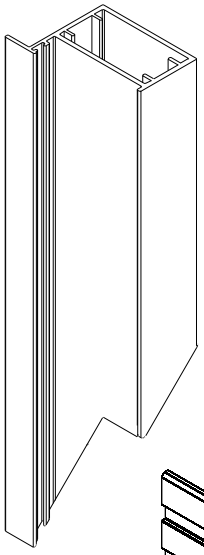
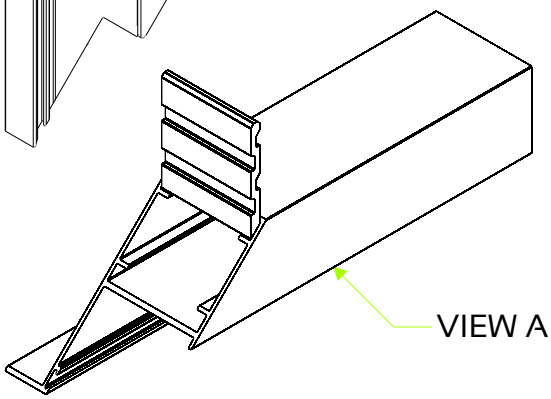
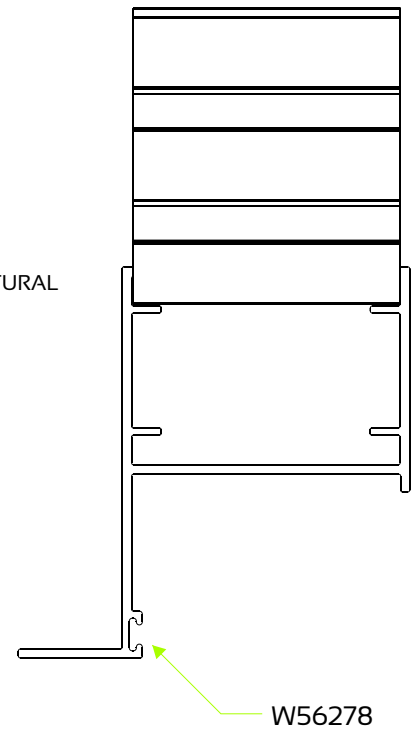
WISPECO Aluminium

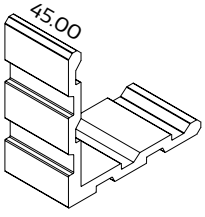
Corner Cleat Assembly Detail For Glazed Sash



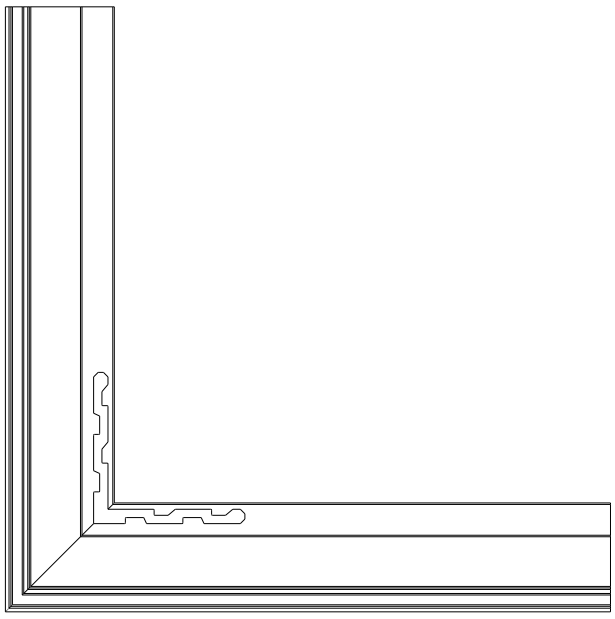
NOTE:
ALL MECHANICAL JOINTS MUST BE SEALED WITH AN APPROVED STRUCTURAL SILICONE.







W52695



VIEW A

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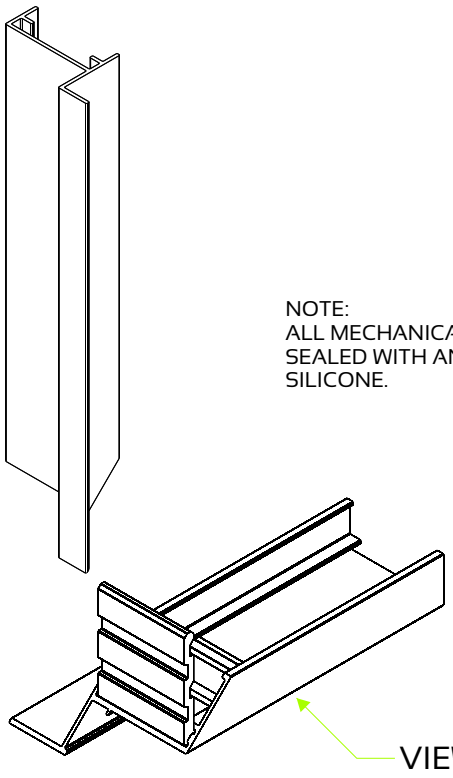
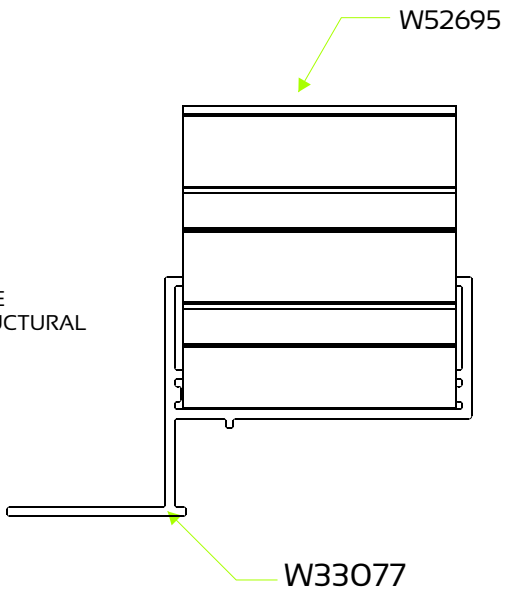
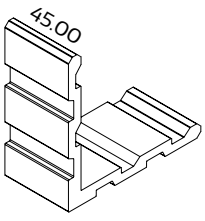
WISPECO Aluminium

Corner Cleat Assembly Detail For Glazed Frame



NOTE:
ALL MECHANICAL JOINTS MUST BE SEALED WITH AN APPROVED STRUCTURAL SILICONE.





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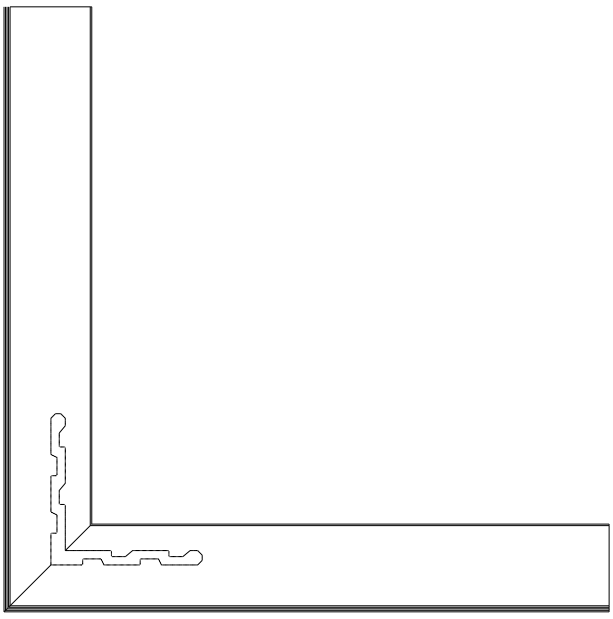

VIEW A

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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.

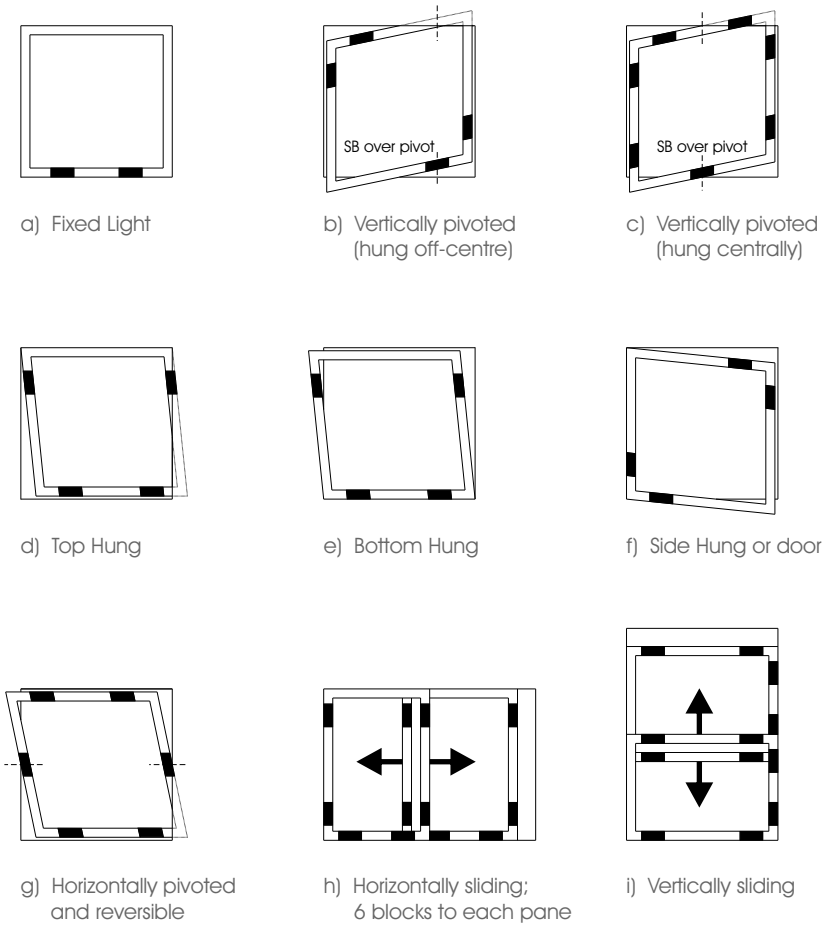
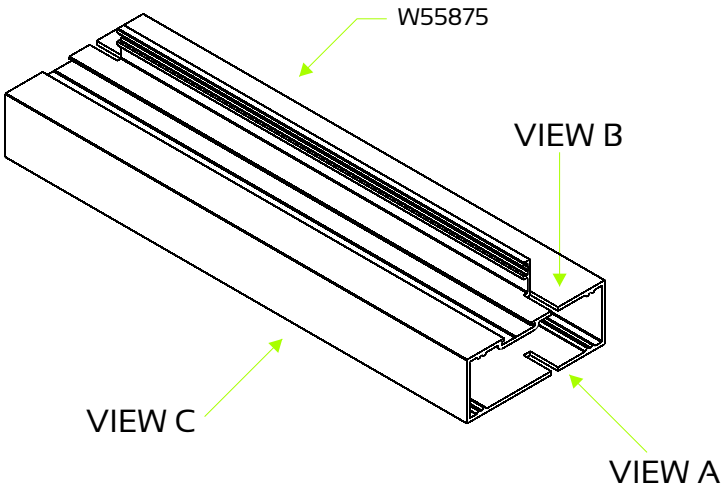
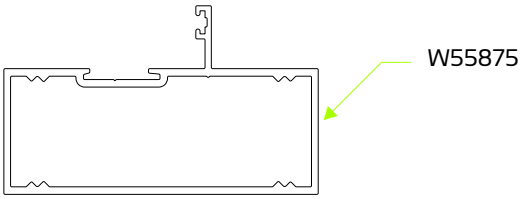


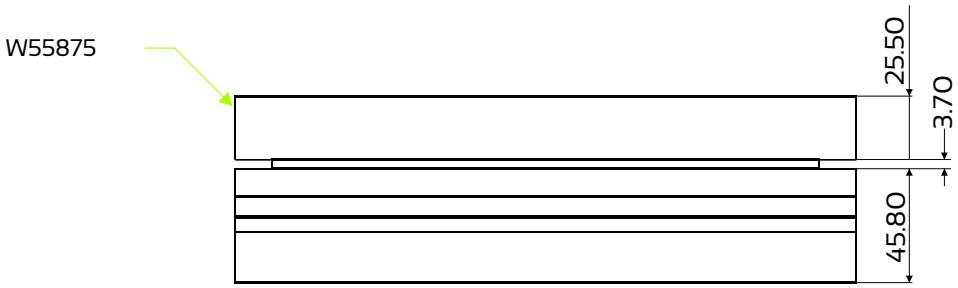
FIGURE 2 - POSITION OF SETTING AND LOCATION BLOCKS

Single Lip Box Machining Detail

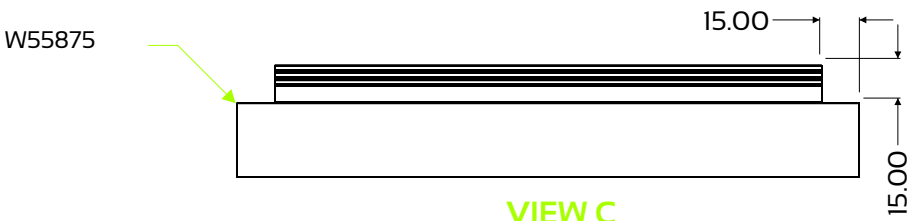




VIEW A



VIEW B



VIEW C

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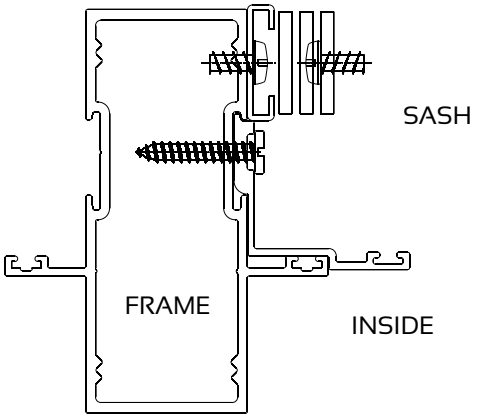
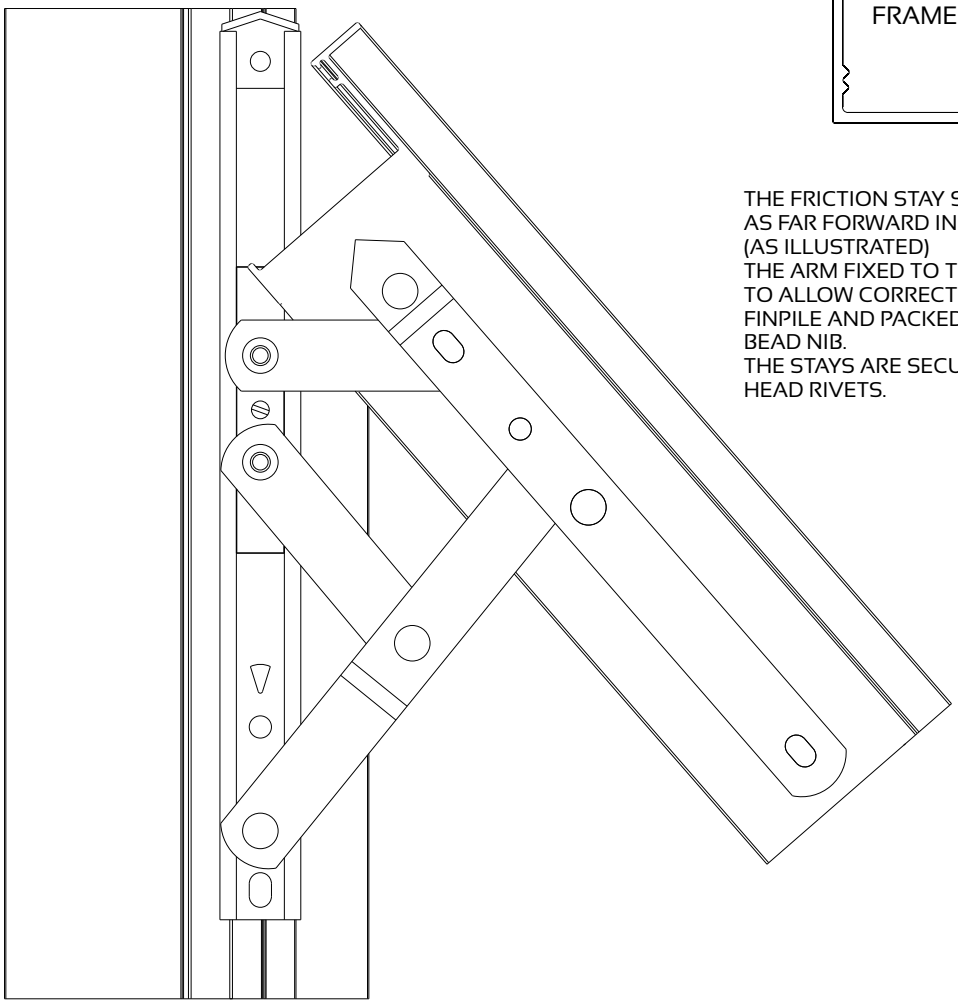
Friction Stay Assembly Detail

NOTE:
ALL MECHANICAL JOINTS TO BE SEALED DURING ASSEMBLY





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.

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