## PRODUCT MANUAL February 2020





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 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 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 (<u>www.crealco.co.za</u>).

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



### **INDEX**

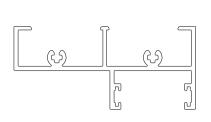
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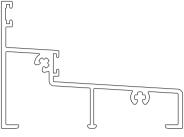
### **Profile Identification**

**Vert 70 Profiles** 



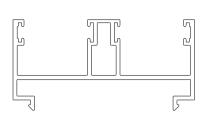
DIE No. W31784

Head Rail Outer Frame



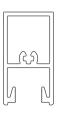
DIE No. W31785

Sill Rail Outer Frame



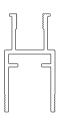
DIE No. W55572

Jamb Outer Frame



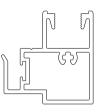
DIE No. W55575

**Head Top Sash** 



DIE No. W31783

Jamb Sash Frame



DIE No. W55574

Interlock Top Sash

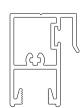


DIE No. W55576

Sill Bottom Sash



DIE No. W34580



DIE No. W55573

Interlock Bottom Sash



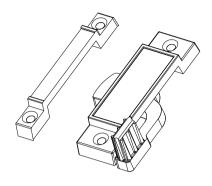
This manual must be read in conjunction with the Installation, Cleaning  $\theta$  Maintenance Document and the Performance Certificates for the relevant system. The manual must also be used in conjunction with the design and cutting list from the latest version of StarFront.

Sill Extender

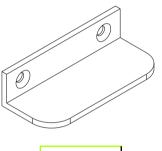
### **Hardware Components**

### **RECOMMENDED VERT70 COMPONENTS**

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



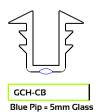
HCC-FCK
Fitch Catch



ISR-FSH Handle



GFP-6760 Finpile





SGD-VSP Spacer



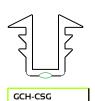
STB-TOC Take-Out Clip



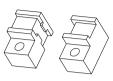
FSP-1032P-SS Screw 10 x 30



Red Pip = 4mm Glass



Green Pip = 6.38mm Glass



SGD-VDE Draft Excluder



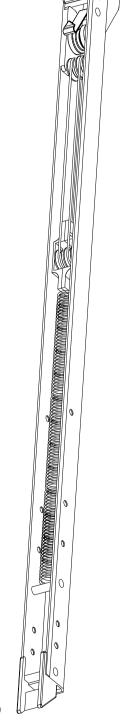
SGD-VST Sash Cam (Left & Right Handed)



SGD-VST + FSP-0820P-SS Stopper with Screw

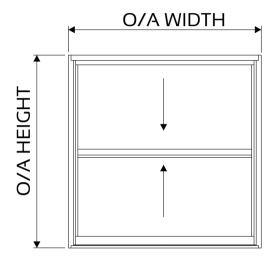








### **Size Limitation Guide**



MINIMUM GLASS SIZE: 4mm

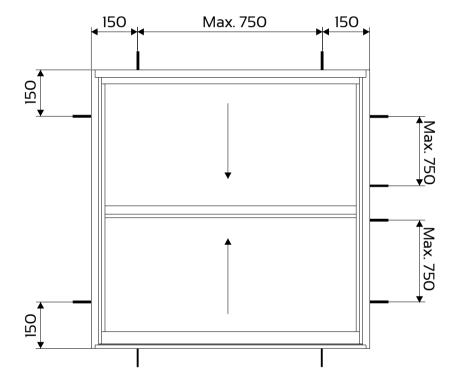
MAXIMUM GLASS SIZE: 7mm

MAXIMUM O/A WIDTH = 1200mm

MAXIMUM O/A HEIGHT = 900mm



### Fixing Details





### **Spring Balance Weight Chart**

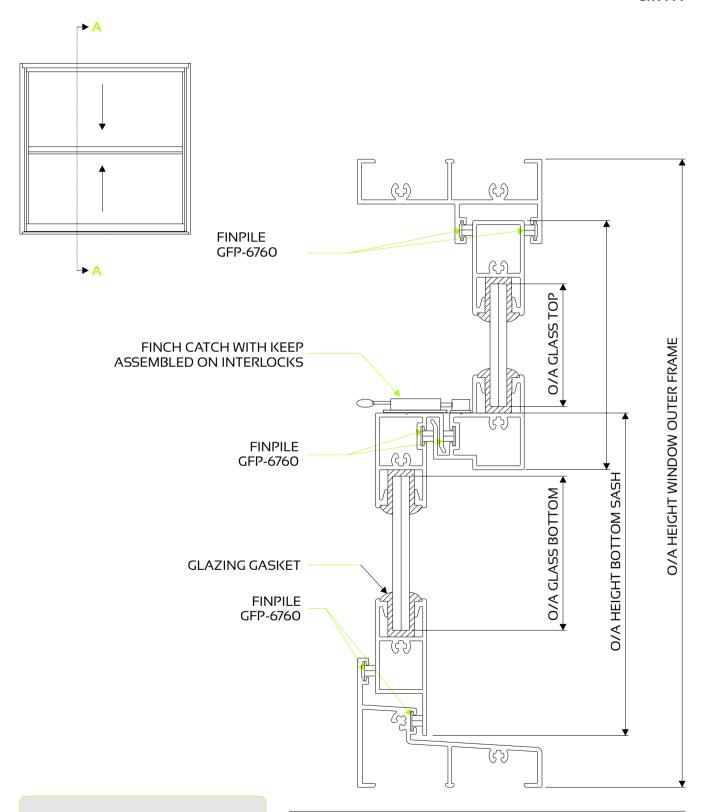


01.4.00								O) (5 D A I I
GLASS		O) (5			D T			OVERALL
THICKNESS	OVERALL FRAME WIDTH IN MM						FRAME	
IN MM								HEIGHT
								IN MM
	600	700	800	900	1000	1100	1200	
4	14B	14B	14B	14B	14B			
5	14B	14B	14D	14D				900
6	14B	14B						
4	14B	14B	14D	14D				
5	14B	14D	14D					1000
6	14B	14D						
4	20C	20C	20C	20C	20D	20D	20D	
5	20C	20C	20C	20D	20D	20D	20D	1200
6	20C	20C	20D	20D	20D			
4	20B	20B	20C	20C	20D	20D	20D	
5	20C	20C	20D	20D	20D	20D		1300
6	20C	20D	20D	20D				
4	20B	20C	20C	20D	20D	20D	20D	
5	20C	20D	20D	20D	20D			1400
6	20D	20D	20D	20D				
4	26B	26C	26C	26C	26D	26D	26D	
5	26C	26C	26C	26D	26D	26D		1500
6	26C	26C	26D	26D			XXX	
4	26B	26C	26C	26C	26D	26D	26D	
5	26C	26C	26D	26D	26D			1600
6	26C	26D	26D	26D				
4	26C	26C	26C	26D			_	
5	26C	26C	26D	26D				1700
6	26C	26C	26D					
4	32B	32B	32B	32C	32C	32D	32D	
5	32B	32C	32B	32D	32D			1800
6	32C	32C	32D					
	BALANCE NUMBER							



### **Cross Sectional Detail**

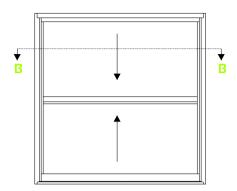
on A-A

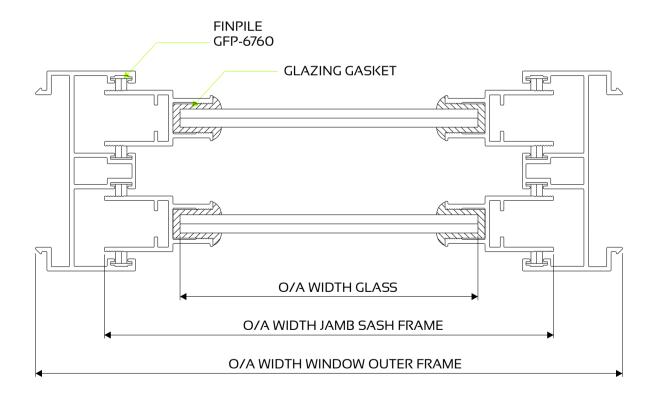




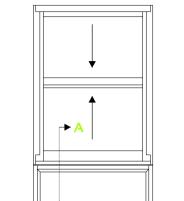
### **Cross Sectional Detail**

on B-B









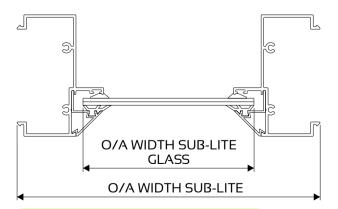
NOTE: CASEMENT 28 FIXED LITE SECTIONS ARE USED IN THIS EXAMPLE. **CASEMENT 30.5 FIXED LITE** SECTIONS CAN ALSO BE USED WITH THIS SYSTEM.

> FOR A DETAILED CROSS SECTIONAL DRAWING OF A SIDE LITE OR TOP LITE PLEASE CONTACT YOUR **NEAREST WISPECO BRANCH**

**SECTION B-B** 

B

Section not to scale

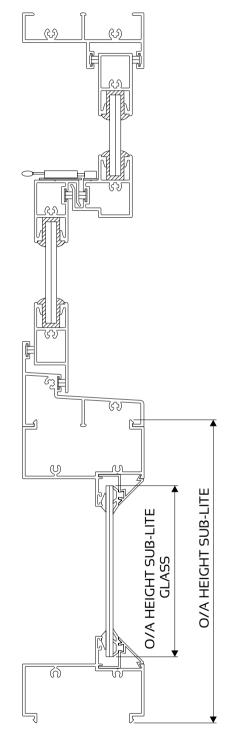




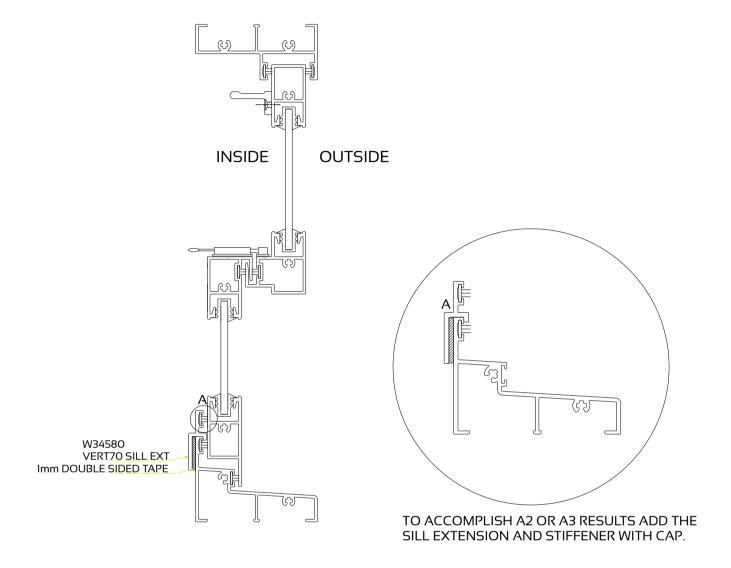
**Showing Position Of Fixed Lite** 

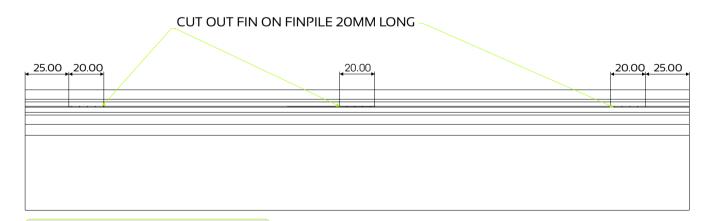
### **SECTION A-A**









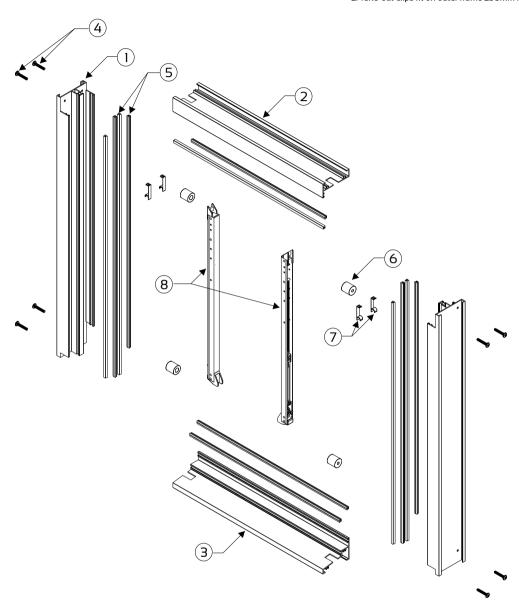




### **Assembly Detail**

**Outer Frame Component** 

 $Assembly\ Notes: \\ 1.\ Stoppers\ fit\ 100mm\ from\ top\ 6\ 100mm\ from\ bottom$  2. Take-out clips fit on outer frame 250mm from the top of sash



### **System Profiles**

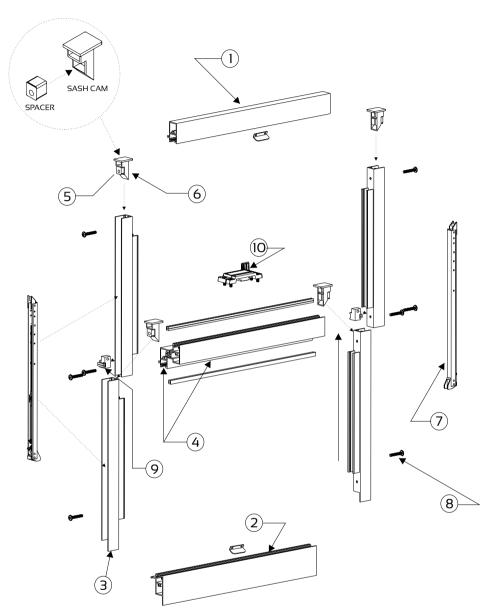
### Hardware

QTY	DIE No.	DESCRIPTION		ITEM	QTY	COMPONENT DESCRIPTION
2	W55572	Jamb Outer Frame		4	8	Fixing Screws
1	W31784	Head Rail Outer Frame		5	8	Finpile
1	W31785	Sill Rail Outer Frame		6	4	Stopper
				7	4	Take-Out Clips
				8	2	Spring Balances
	•	2 W55572 1 W31784	2 W55572 Jamb Outer Frame 1 W31784 Head Rail Outer Frame	2 W55572 Jamb Outer Frame 1 W31784 Head Rail Outer Frame	2       W55572       Jamb Outer Frame       4         1       W31784       Head Rail Outer Frame       5         1       W31785       Sill Rail Outer Frame       6         7       7	2       W55572       Jamb Outer Frame       4       8         1       W31784       Head Rail Outer Frame       5       8         1       W31785       Sill Rail Outer Frame       6       4         7       4



### **Assembly Detail**

Sash Frame Component



### **System Profiles**

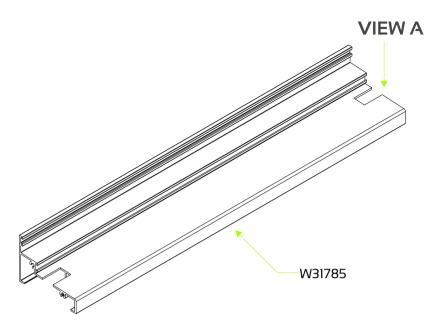
### Hardware

ITEM	QTY	DIE No.	DESCRIPTION	ITEM	QTY	COMPONENT DESCRIPTION
1	1	W55575	Head Top Sash	5	4	Spacer
2	1	W55576	Sill Bottom Sash	6	4	Sash Cam
3	4	W31783	Jamb Sash Frame	7	2	Spring Balance
4	1	W55573	Interlock Bottom Sash	8	8	Fixing Screw
				9	4	Finpile
				10	1	Fitch Catch

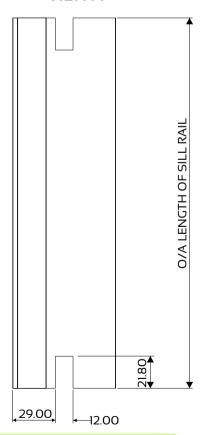


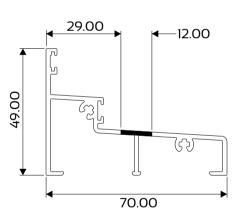
### **Machining Detail**

**Outer Frame Sill Rail** 



### **VIEW A**



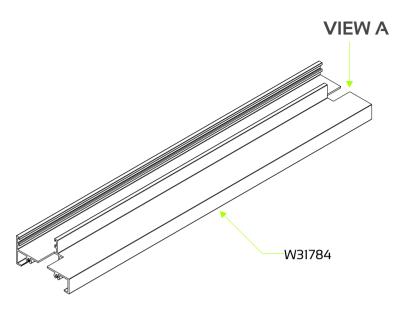


SILL RAIL OUTER FRAME W31785

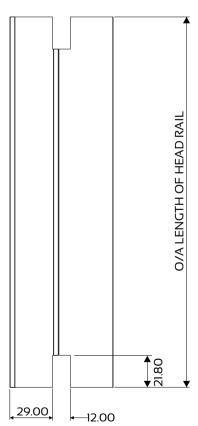


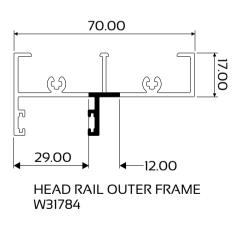
### **Machining Detail**

**Outer Frame Head Rail** 



### **VIEW A**

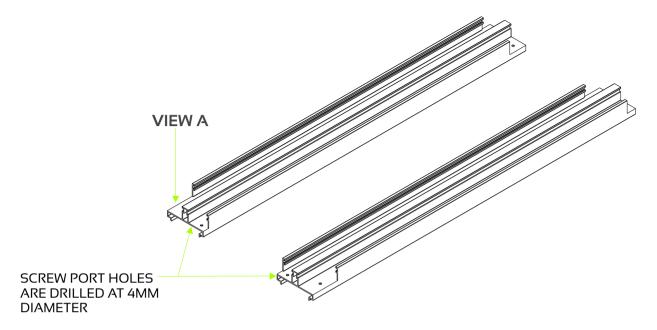






### **Machining Detail**

**Outer Frame Jamb** 

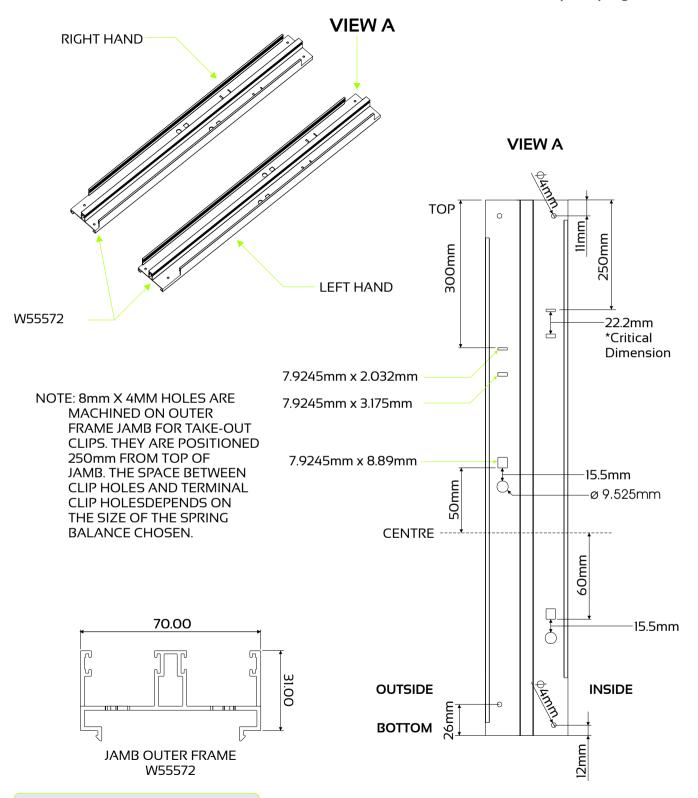


### **VIEW A** 17.00 TOP TOP 0 **OUTSIDE** INSIDE 70.00 35.00 JAMB OUTER FRAME W55572 **BOTTOM** 49.00 **BOTTOM INSIDE** 0 **OUTSIDE**



### **Machining Detail**

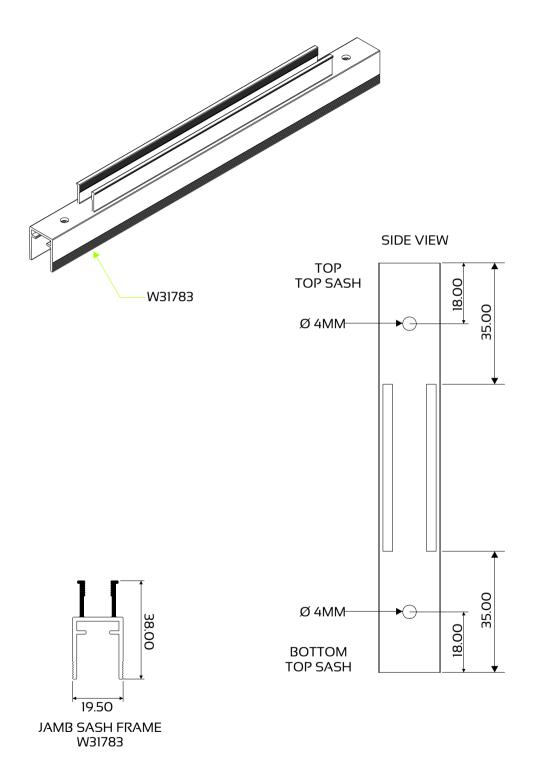
Outer Frame For Take-Out Clips & Spring Balance





### **Machining Detail**

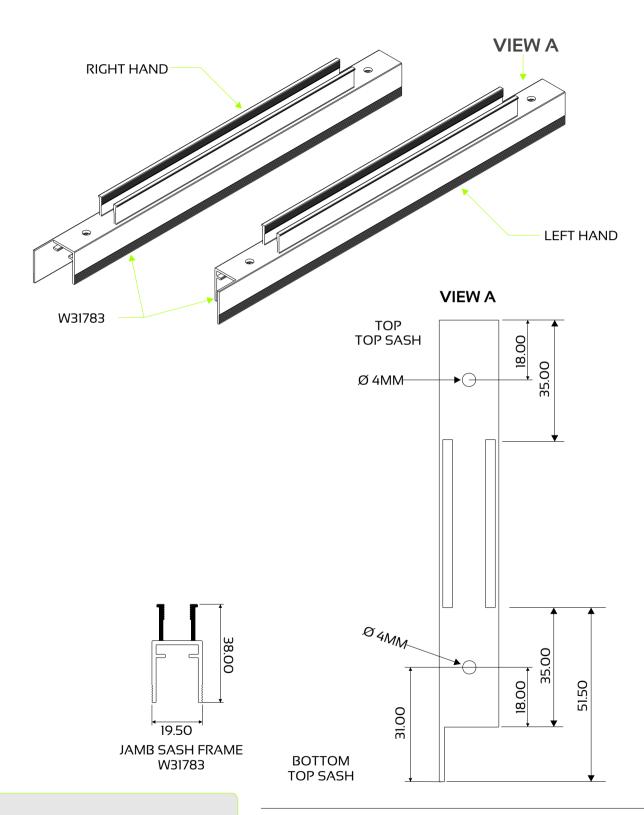
Top Jamb Sash Frame





### **Machining Detail**

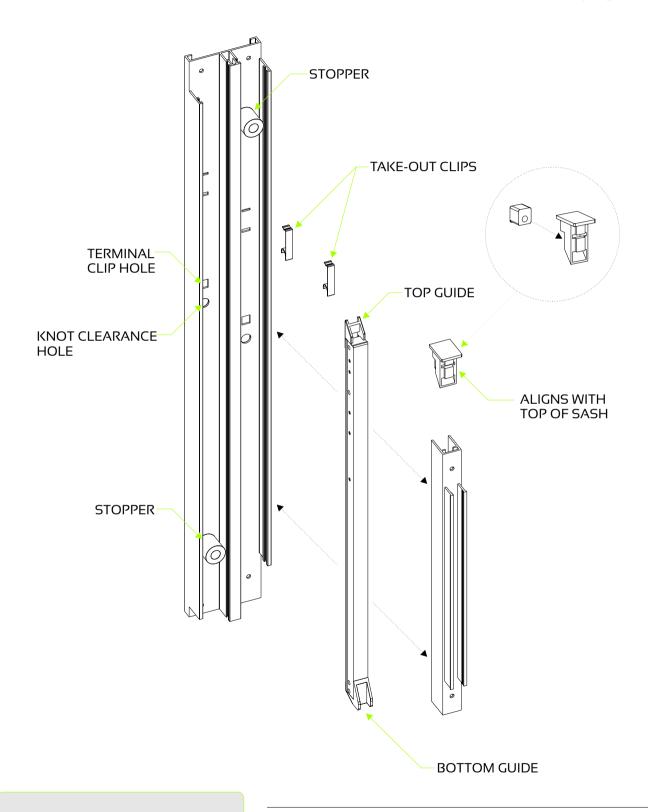
**Bottom Jamb Sash** 





### Assembly Detail

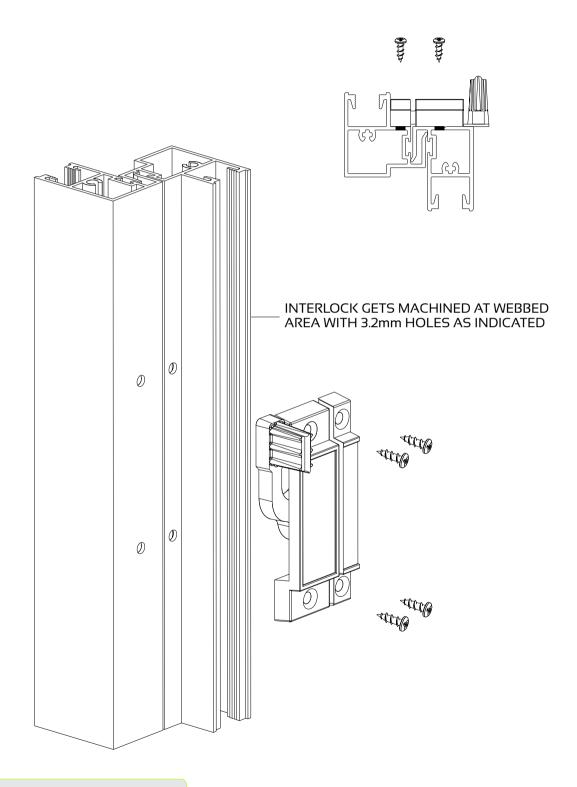
**Spring Balance** 





### **Assembly Detail**

Fitch Catch





### **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.

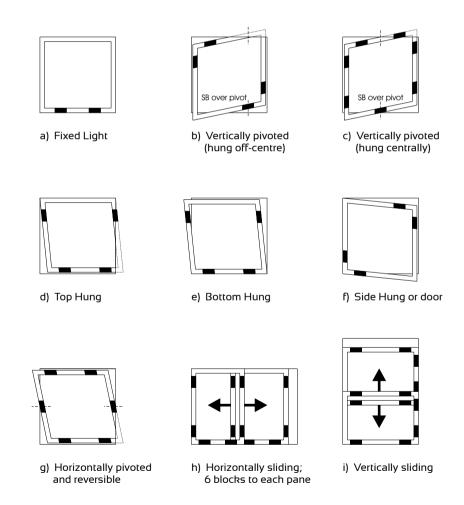


FIGURE 2 - POSITION OF SETTING AND LOCATION BLOCKS

