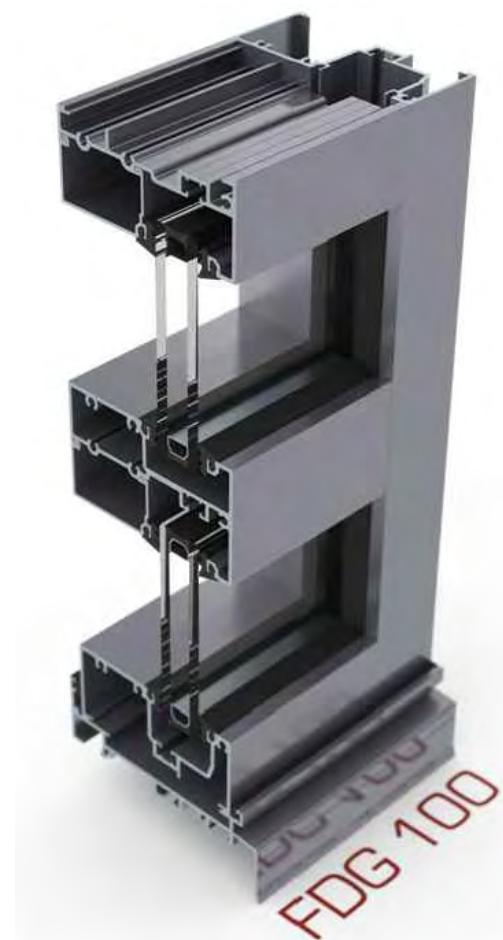


**Max™ 100 x 50mm FRONT DOUBLE GLAZED - 40mm Pocket**  
**Max Framing Systems: M100FDG40 - 1**

## Max 100 Front Double Glazed - 40mm Pocket



### **FEATURES:**

- 100mm Frame Depth
- 50mm Sight Line generally
- Glass Plane-Front
- Compatible with 150mm Front Glazed -40mm Pocket allowing glass in different planes
- Accepts 28mm to 34mm IGU's
- Single Glazed Spandrel adaptor option
- Eliminates ugly visible drain slots in the face of transoms
- Can be Internal or External glazed
- Awning & Casement Sash options
- Hinged, Pivot, Sliding & Multi sliding door tracks
- Accepts standard 45mm Double Beaded & Max 50mm Pocket Glazed Doors
- Dry Glazed with High performance Santoprene Gaskets
  - Anti Stretch Gaskets
  - Anti-Dropout Gasket Design
- Suited to wet glazed if preferred
- Watershed -Concealed Transom drainage system
- Screw fixing in front of glazing pocket to support transom

### **FABRICATION:**

- Easy Screw Flute Joinery Fabrication
- Simple Panelized Assembly

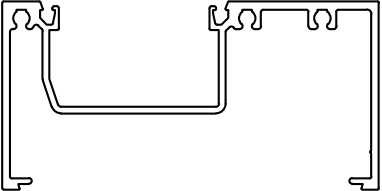
### **PRODUCT APPLICATIONS:**

- Shopfront, Ribbon Windows or Punched Openings
- Generally Single Span, limited to 6.5 metre high applications

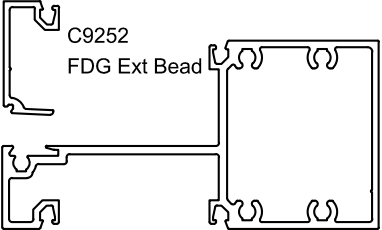


Arte Apartments, Canberra  
MAX™ 100mm Front Double Glazed frames

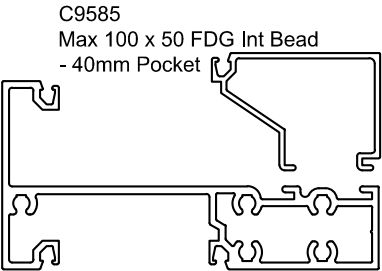
Max™ 100 x 50mm FRONT DOUBLE GLAZED - 40mm Pocket  
Max Framing Systems: M100FDG40 - 2  
Extrusion ID



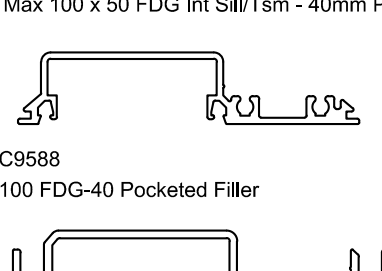
C9582  
Max 100 x 50 FDG Frame - 40mm Pocket



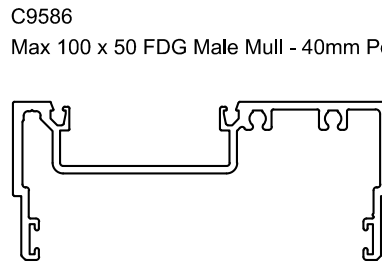
C9252  
FDG Ext Bead




C9583  
Max 100 x 50 FDG Ext Sill/Tsm - 40mm Pocket



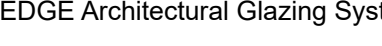
C9585  
Max 100 x 50 FDG Int Bead - 40mm Pocket



C9584  
Max 100 x 50 FDG Int Sill/Tsm - 40mm Pocket



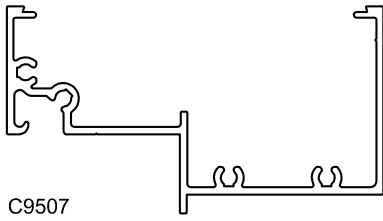
C9588  
100 FDG-40 Pocketed Filler



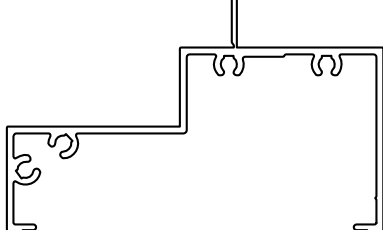
C9586  
Max 100 x 50 FDG Male Mull - 40mm Pocket



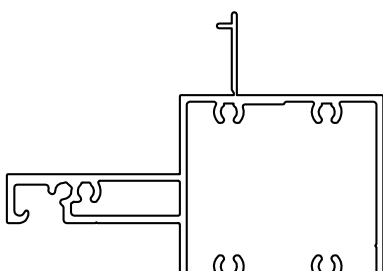
C9587  
Max 100 x 50 FDG Female Mull - 40mm Pocket



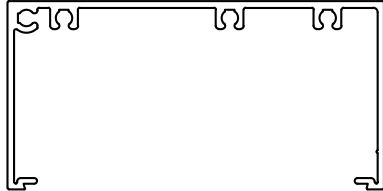
C9507  
100 x 50 Hinge Head



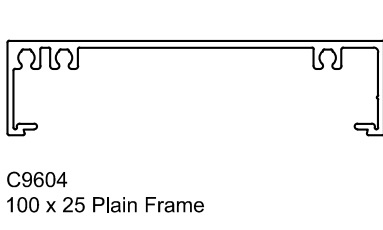
C9508  
100 x 50 Winder Sill



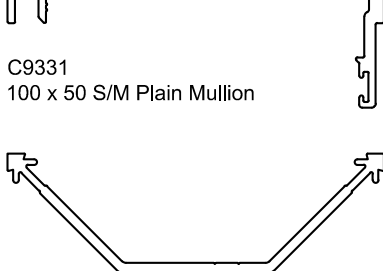
C9515  
Double Hinge Head Transom



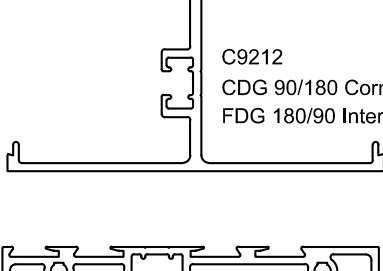
C9502  
100 x 50 Plain Frame



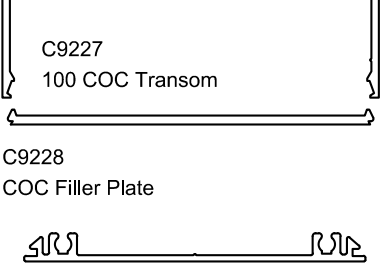
C9604  
100 x 25 Plain Frame



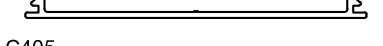
C9331  
100 x 50 S/M Plain Mullion




C9212  
CDG 90/180 Corner  
FDG 180/90 Internal



C9227  
100 COC Transom



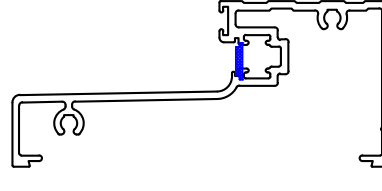
C9228  
COC Filler Plate



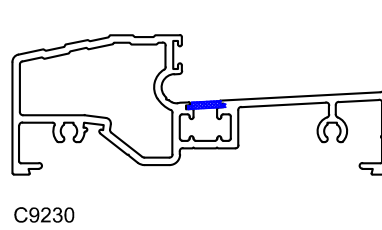
C9321  
100 Flat Filler - screw flutes



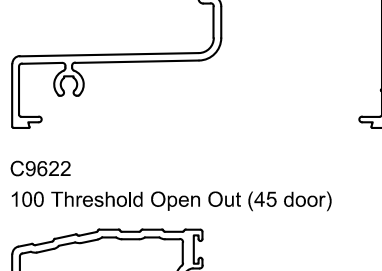
C405  
100 Flat Filler



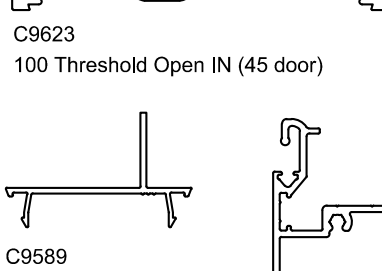
C9229  
100 Threshold Open Out (50 door)



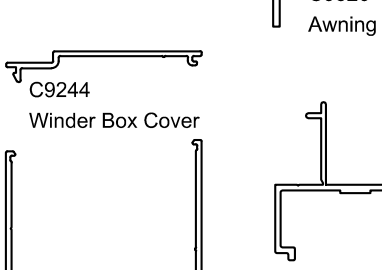
C9230  
100 Threshold Open IN (50 door)




C9622  
100 Threshold Open Out (45 door)



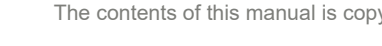
C9623  
100 Threshold Open IN (45 door)



C9589  
FDG Sash Adaptor  
suit C9519, C9241



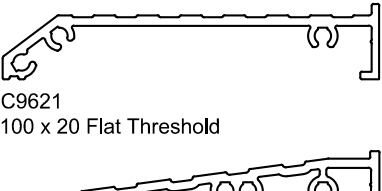
C9244  
Winder Box Cover



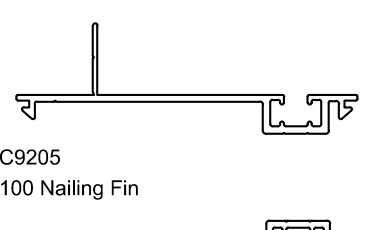
C9243  
Elevation Motorised Winder Box



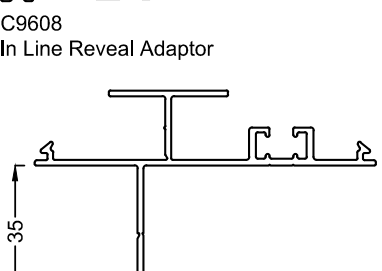
C200R  
25 x 11 Extruded Screen



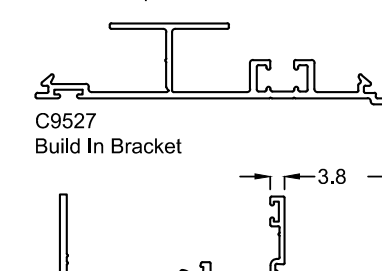
C9621  
100 x 20 Flat Threshold



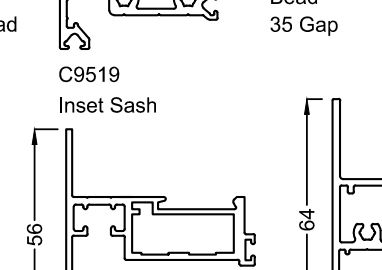
C469  
100 x 13 Wheelchair Threshold



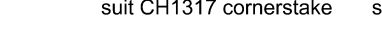
C9205  
100 Nailing Fin



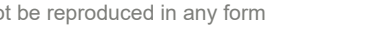
C9608  
In Line Reveal Adaptor



C9266 (replaces C9626)  
Build In Adaptor



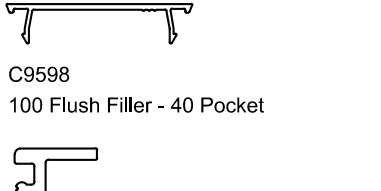
C9527  
Build In Bracket



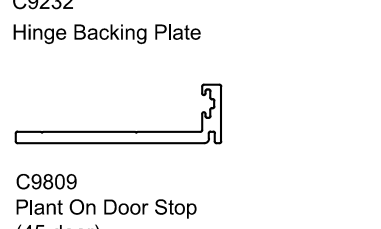
C9241  
46mm Overlap Sash  
suit CH1317 cornerstake



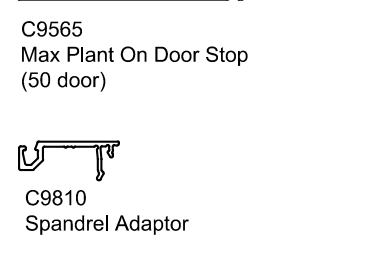
C9523  
46mm HD Overlap Sash (16mm stays)  
suit CH131737 cornerstake



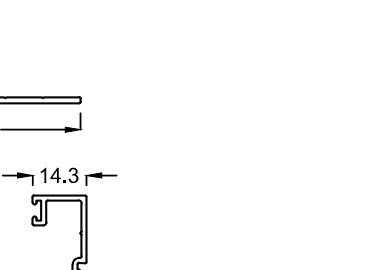
C9598  
100 Flush Filler - 40 Pocket



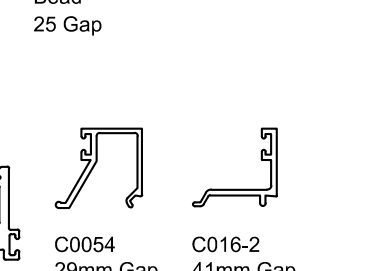
C9232  
Hinge Backing Plate




C9809  
Plant On Door Stop  
(45 door)




C9565  
Max Plant On Door Stop  
(50 door)



C9810  
Spandrel Adaptor



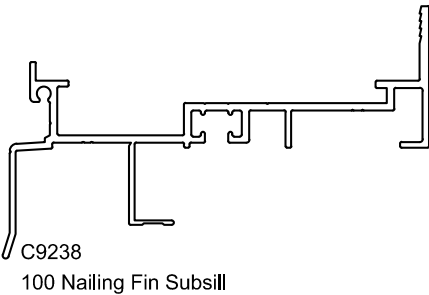
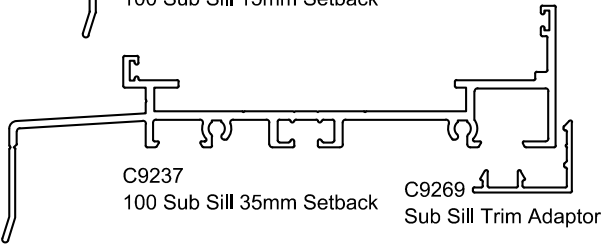
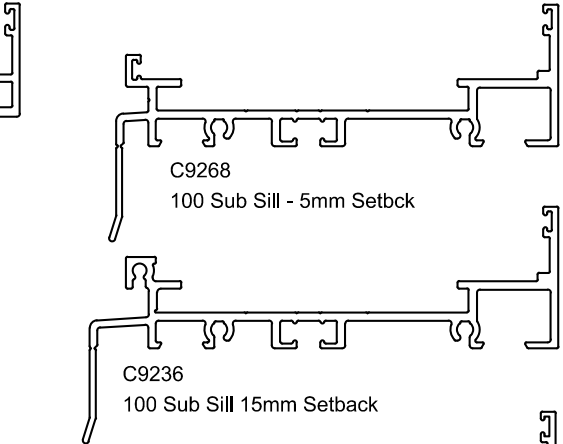
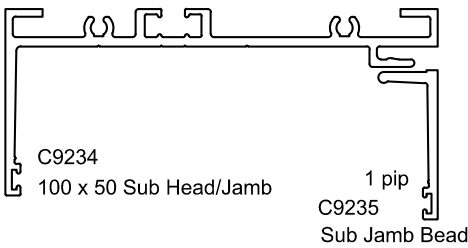
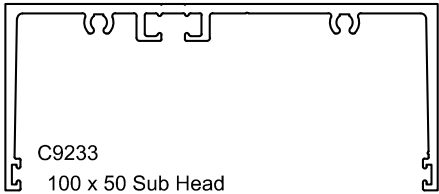
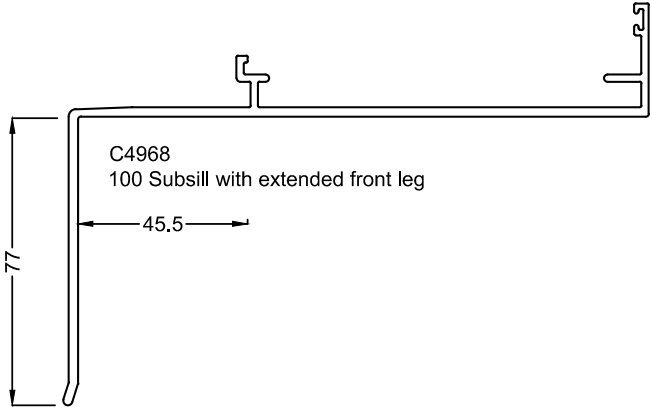
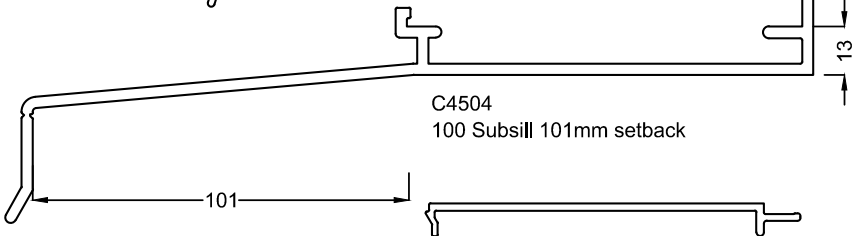
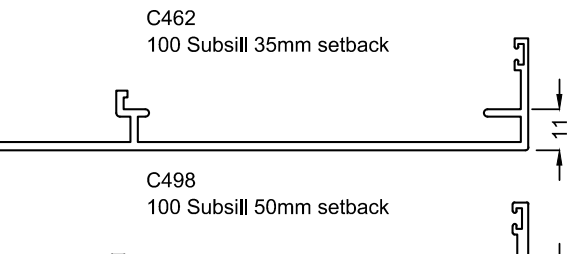
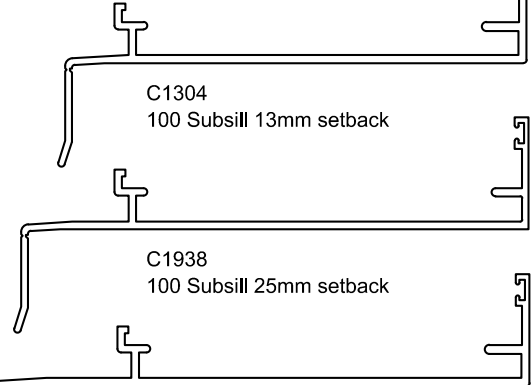
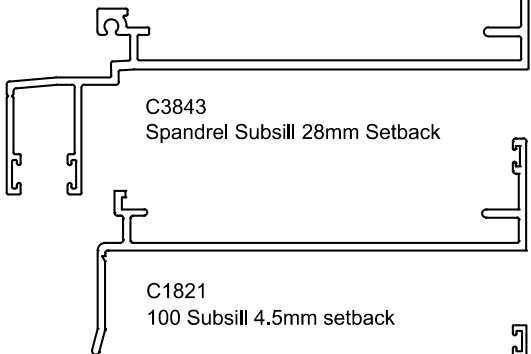
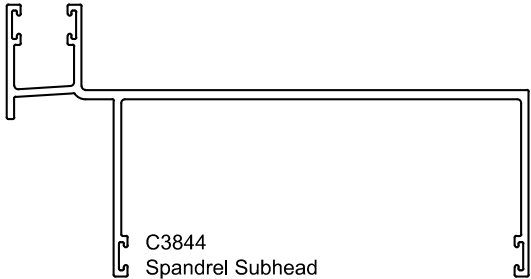
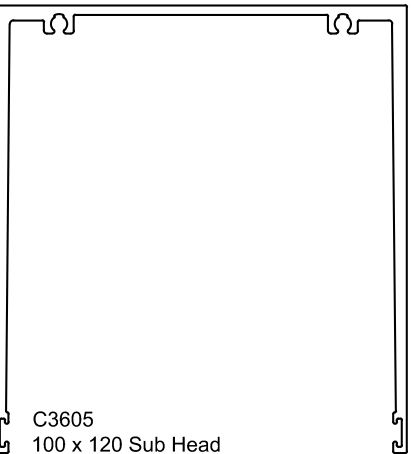
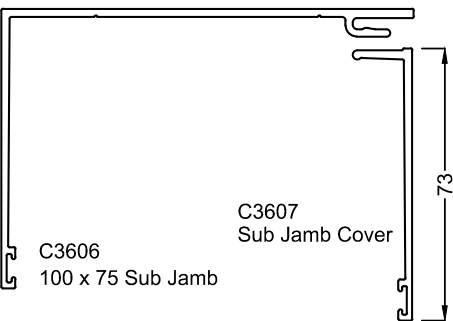
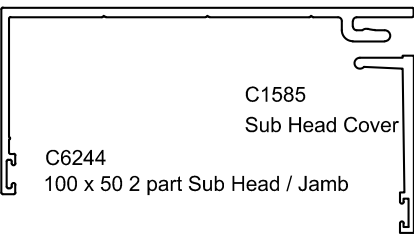
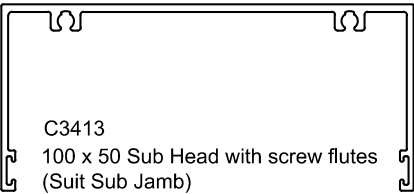
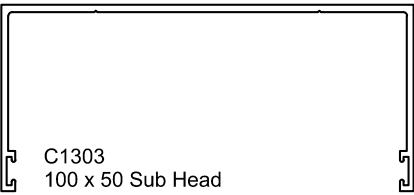
C0054  
29mm Gap



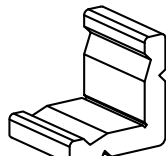
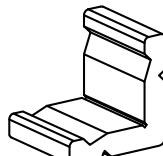
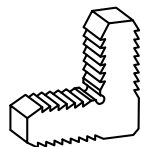
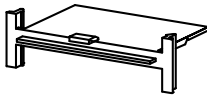
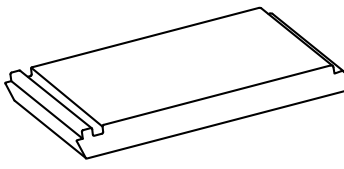
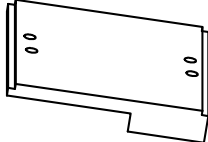
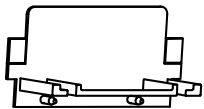
C016-2  
41mm Gap



Max™ 100 x 50mm FRONT DOUBLE GLAZED - 40mm Pocket  
Max Framing Systems: M100FDG40 - 3  
Extrusion ID



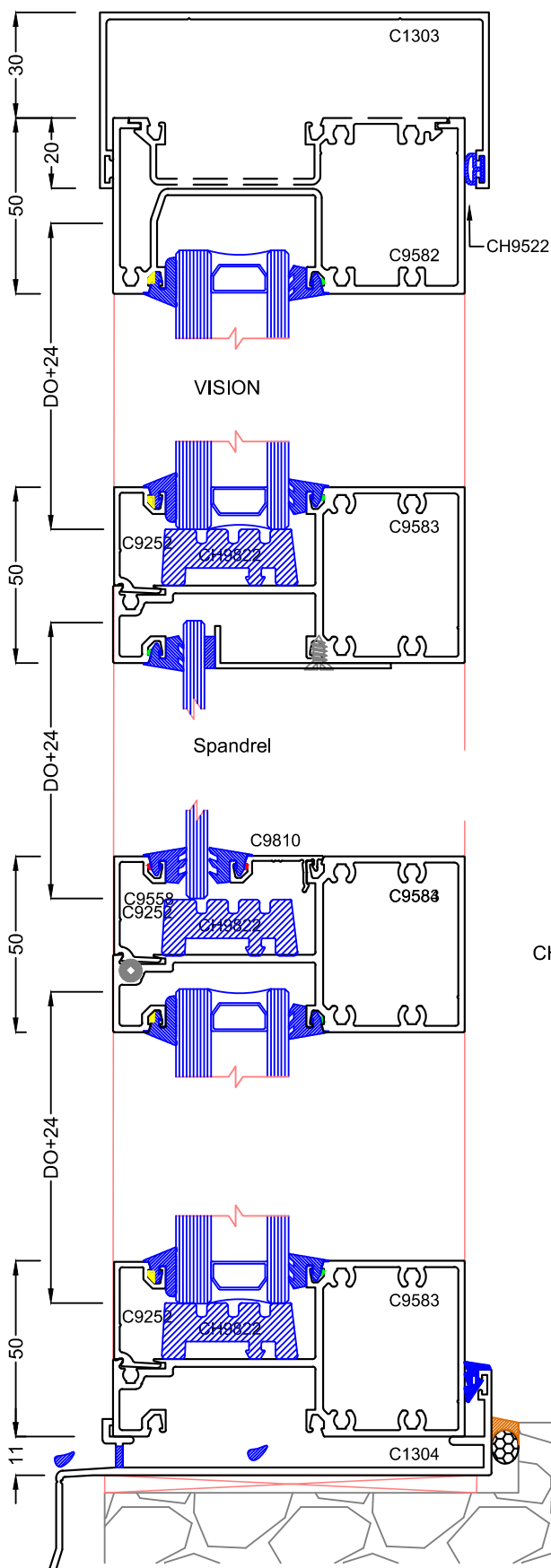
Component ID



# Max™ 100 x 50mm FRONT DOUBLE GLAZED - 40mm Pocket

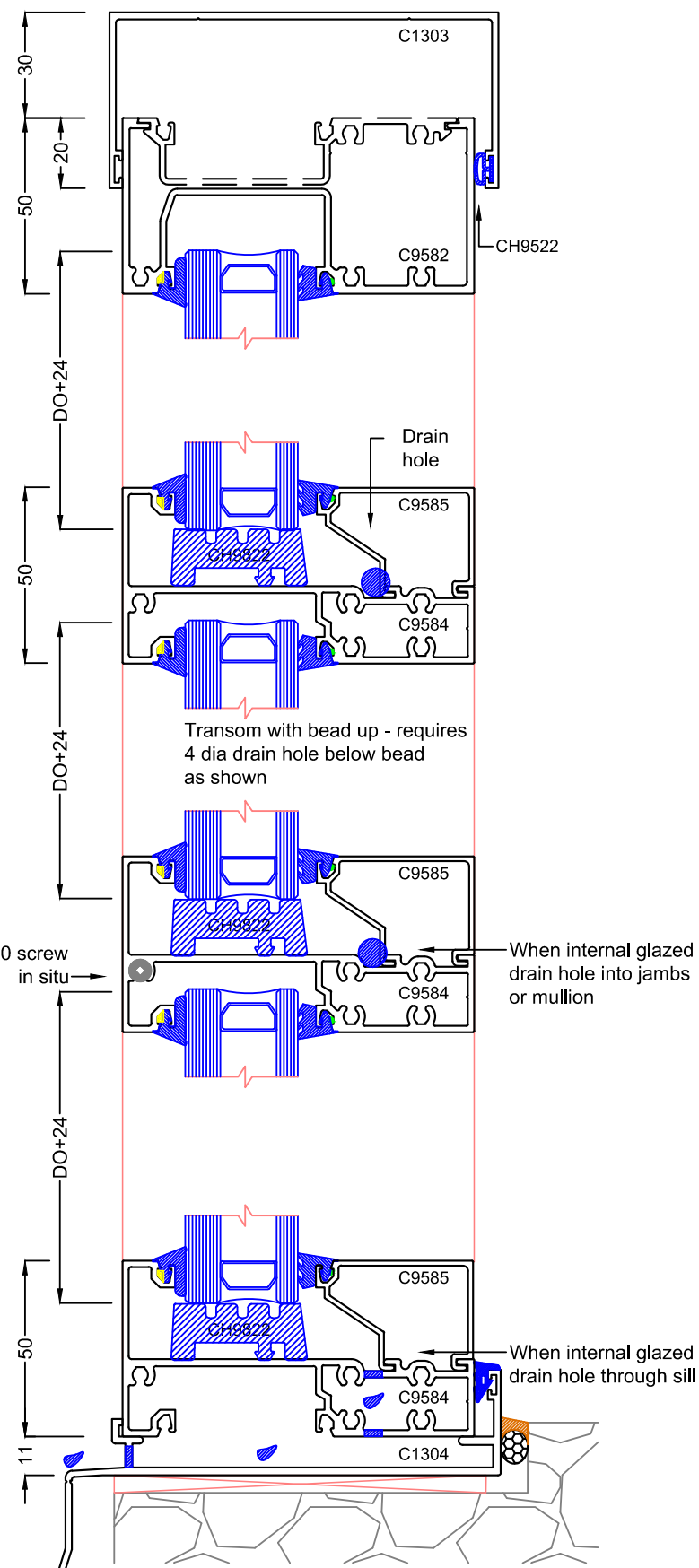
Max Framing Systems: M100FDG40 - 4

50mm Head & Sill External Glazed

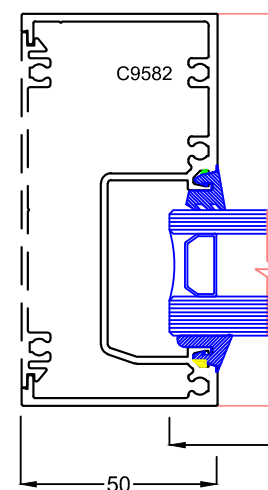


50mm Head & Sill Internal Glazed

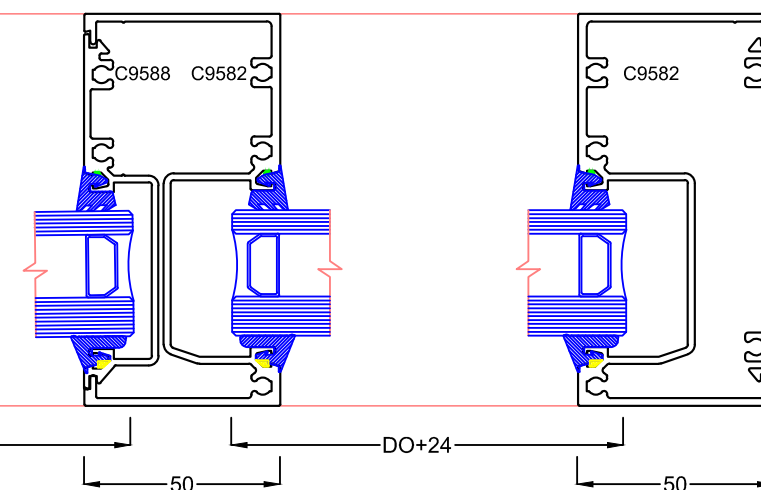
Internally glazed transoms with "bead up"



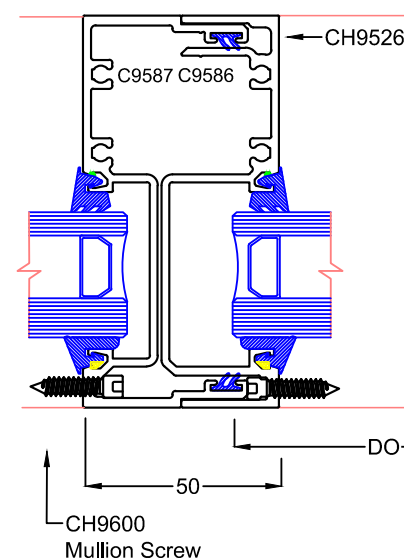
50mm Jamb



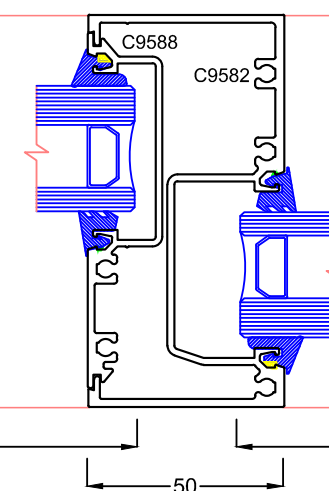
50mm Standard Mullion



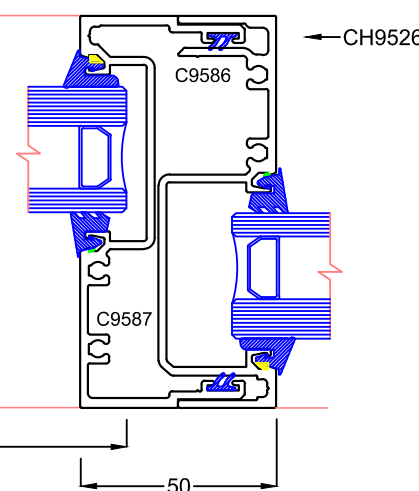
50mm Split Mullion



Front/Reversed Std Mullion



Front/Reversed Split Mullion

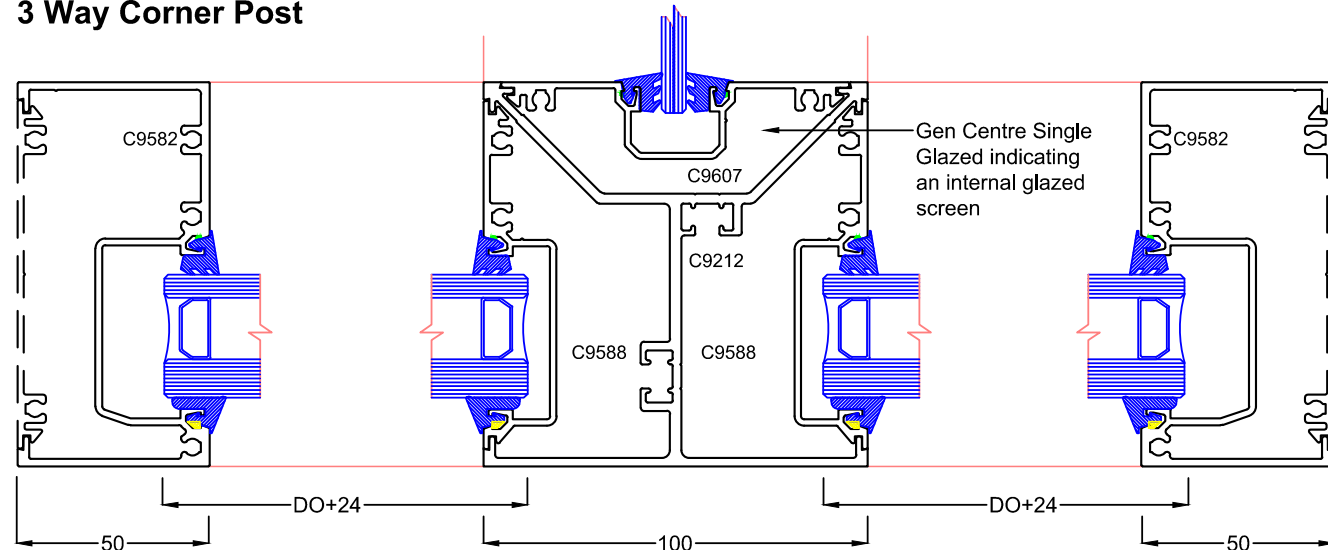




## Max™ 100 x 50mm FRONT DOUBLE GLAZED - 40mm Pocket

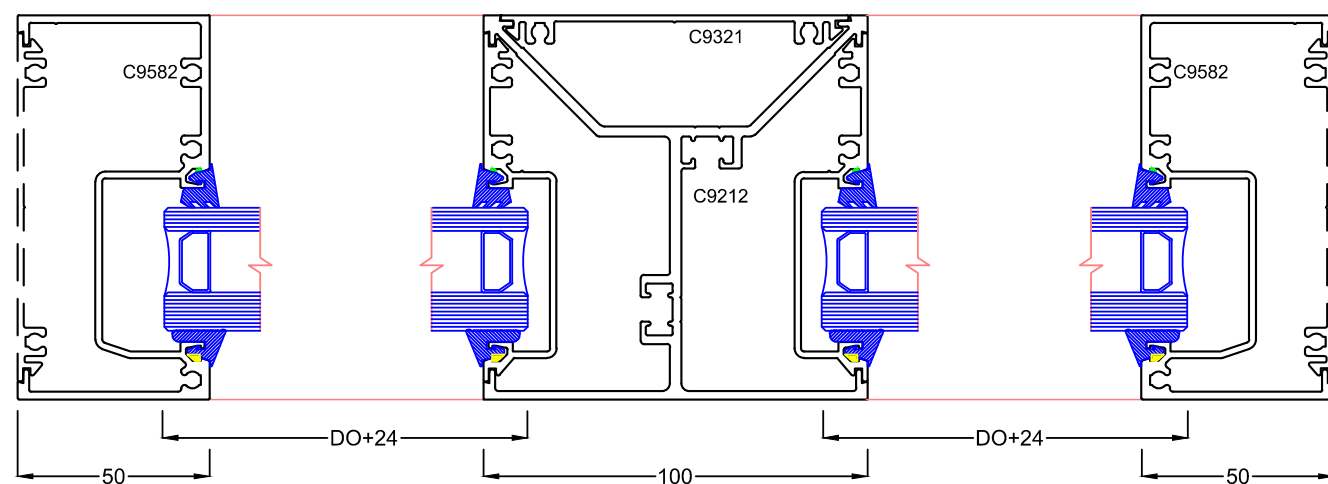
Max Framing Systems: M100FDG40 - 5

### 3 Way Corner Post

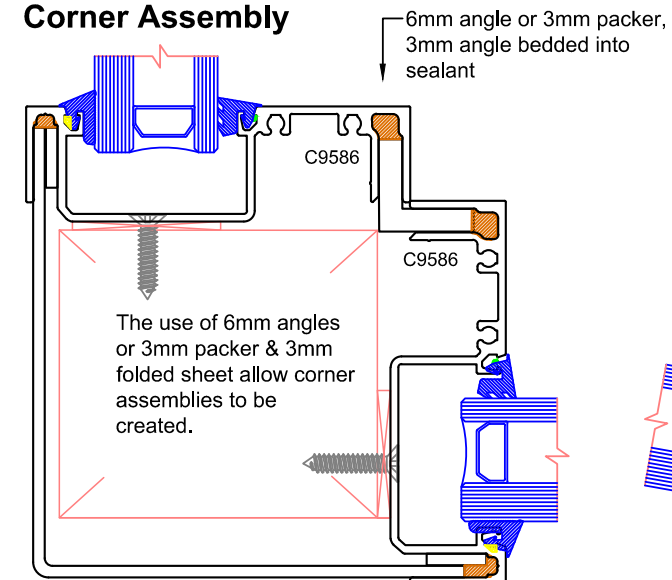


Note:  
A 3 way configuration typically occurs where an internal partition wall adjoins. In this situation the front glazed adaptor cannot be used on the internal side.

### 180 Degree Post

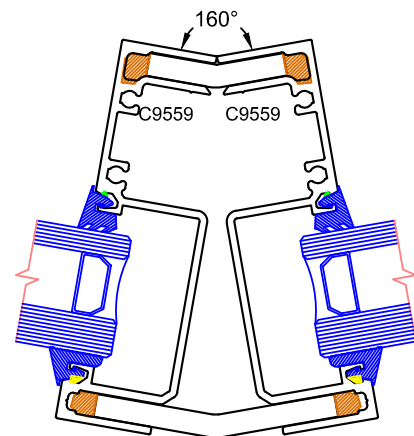


### Corner Assembly

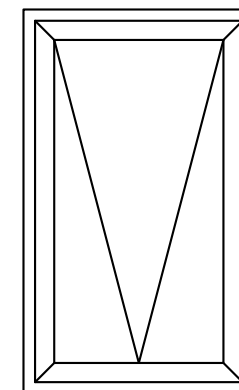


### Splayed corner

6mm folded aluminium plate sleeved inside mullion, siliconed into place. Angles less than 160° would require mullions to be spread further apart.



### Inset Awning Sash

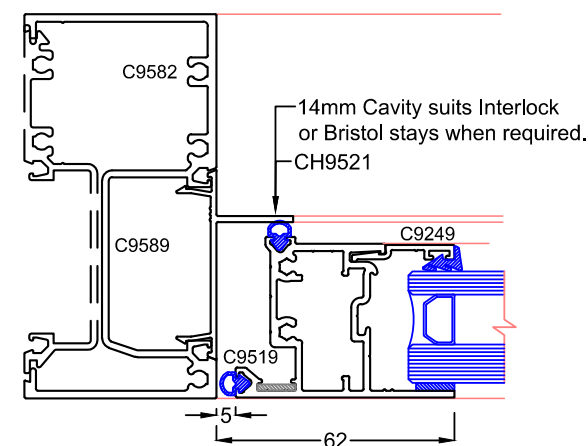


Note:  
Maximum Sash weights generally are 30kg for a single chain winder & 70kg for a dual chain winder & 70kg with stays.

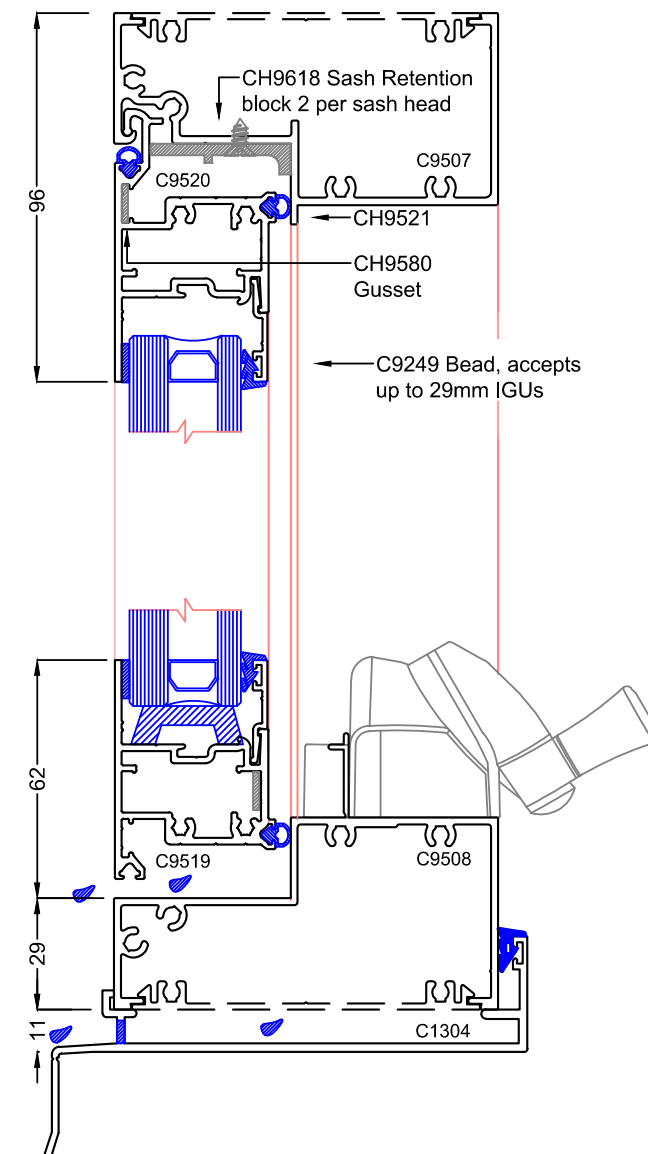
- Max Sash Height: 1600mm
- Min Sash Width: 450mm
- Max Sash Width: 1200mm
- Glass: 6mm - 28mm
- Accepts Q-Lon acoustic seals

Please refer the Sashes segment in the catalogue for further information on sash limits & hardware selection.

### Jamb Detail



### 50mm Hinge Head, Winder Sill

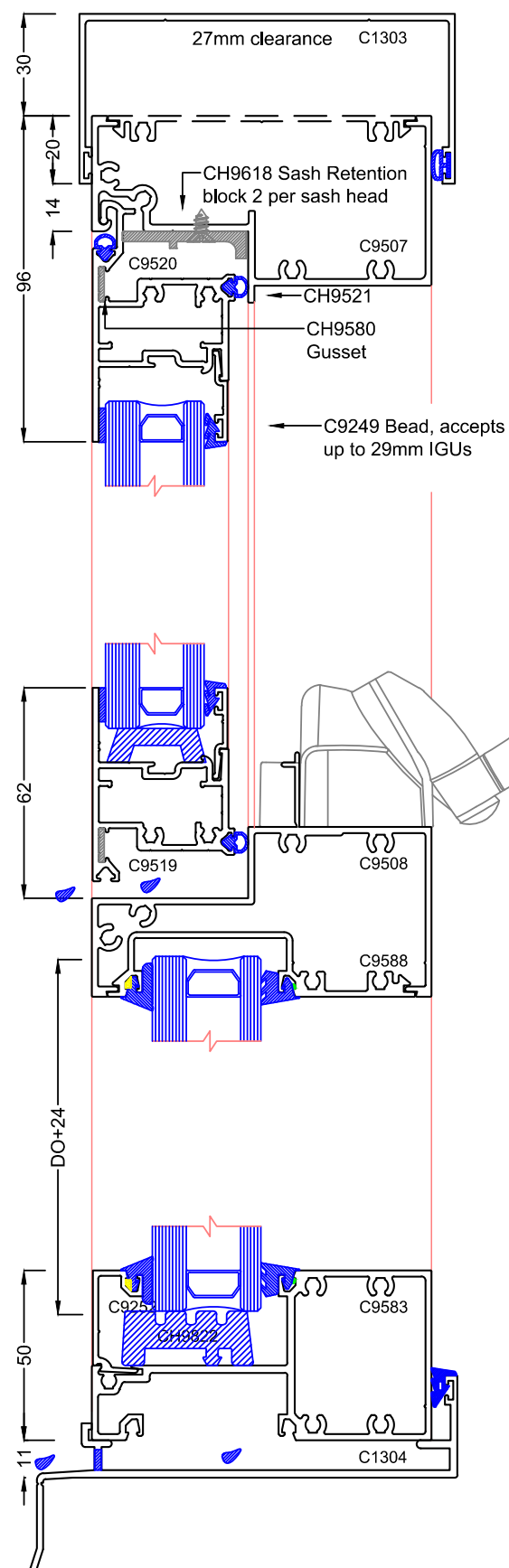


## Max™ 100 x 50mm FRONT DOUBLE GLAZED - 40mm Pocket

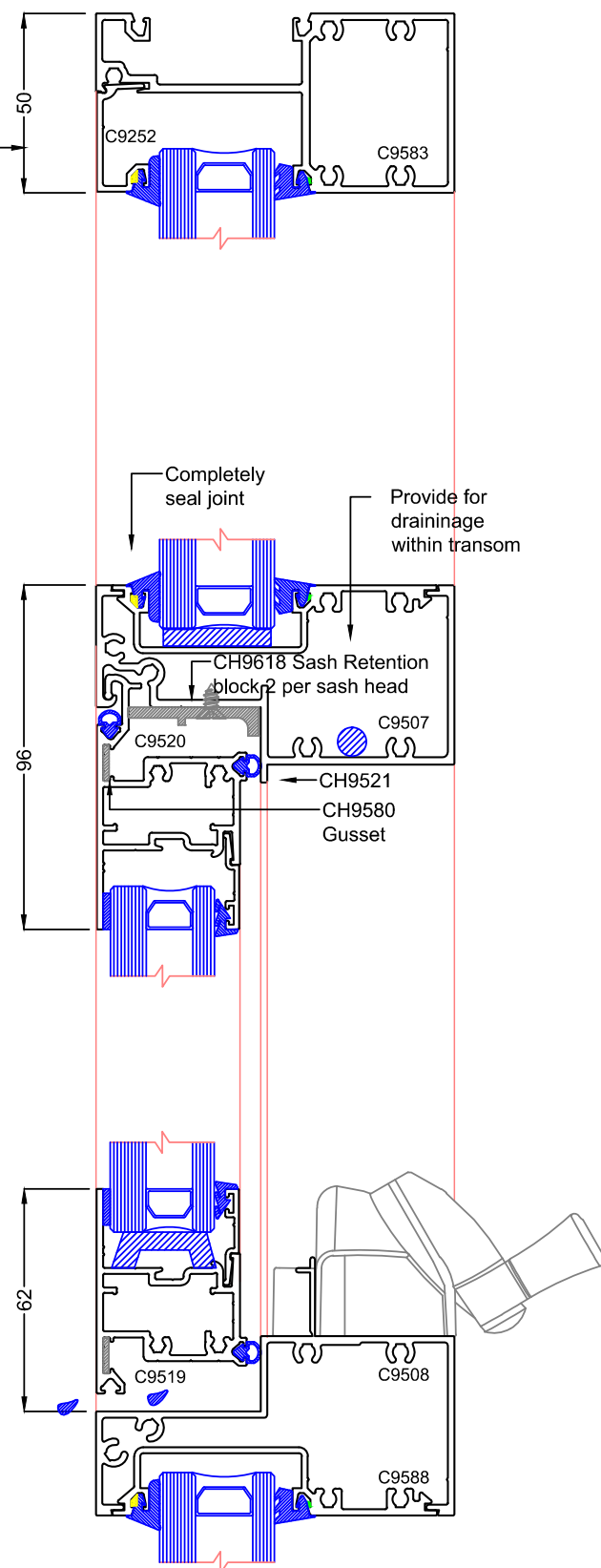
### Max Framing Systems: M100FDG40 - 6

#### 50mm Hinge Head & Winder Sill Transom

with 50mm Head & Sill with Sill Transom

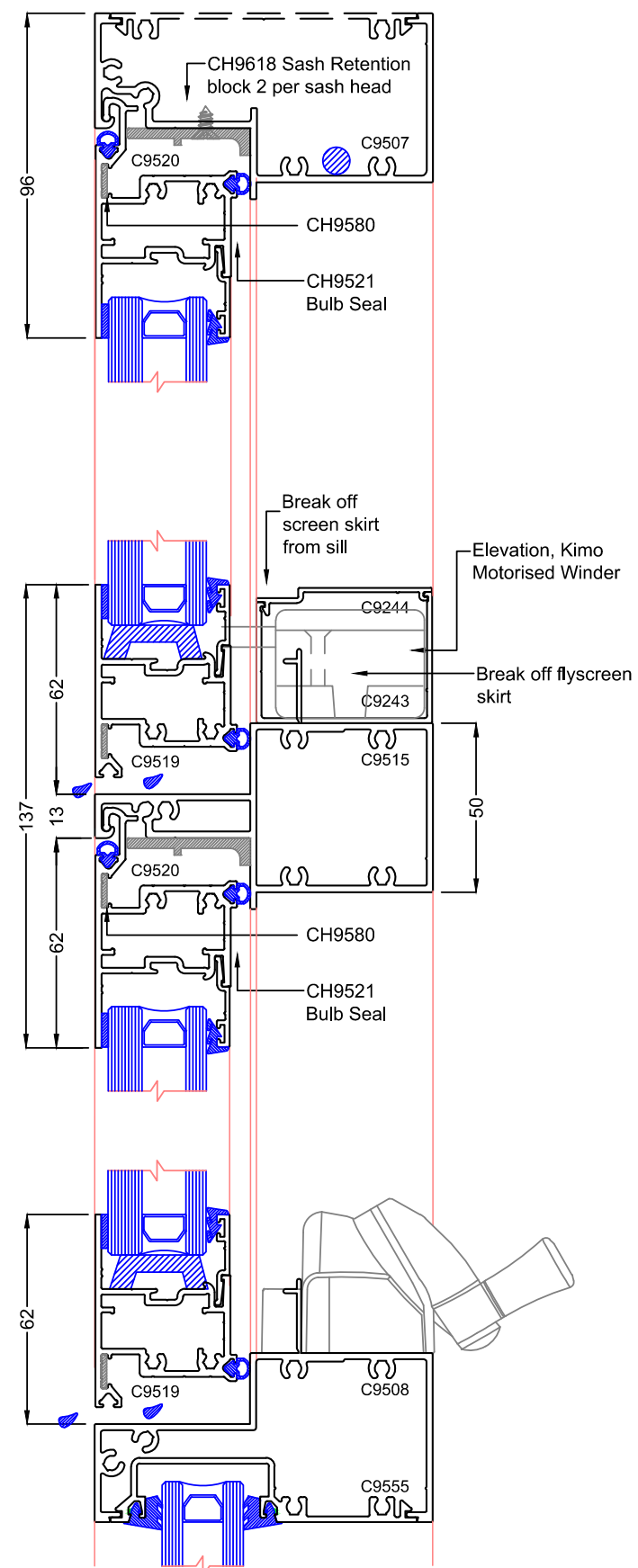


#### 50mm Head & Sill with Head Transom



#### Hinge Head & Double Winder Transom

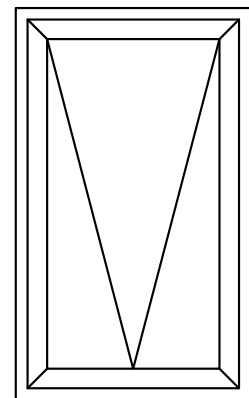
Motorised winder detailed on highlight & concealed winder box (50kg Sash weight). Note transom only suits hinge head sash.



# Max™ 100 x 50mm FRONT DOUBLE GLAZED - 40mm Pocket

## Max Framing Systems: M100FDG40 - 7

### 46mm Overlap Awning Sash



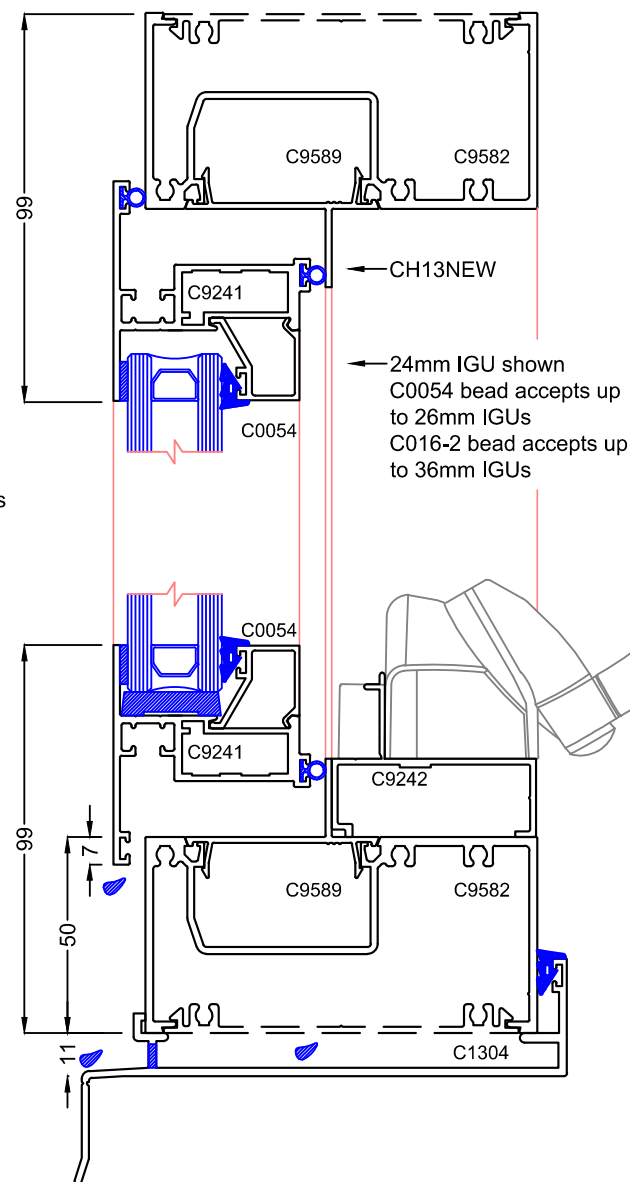
Note:  
The Overlap Sash depicted requires awning stays but elegantly suits the hinge head & winder sill. This Sash is depicted as it matches the glass thickness of the frame.

Maximum Sash weights generally are 30kg for a single chain winder & 70kg for a dual chain winder & 70kg with stays.

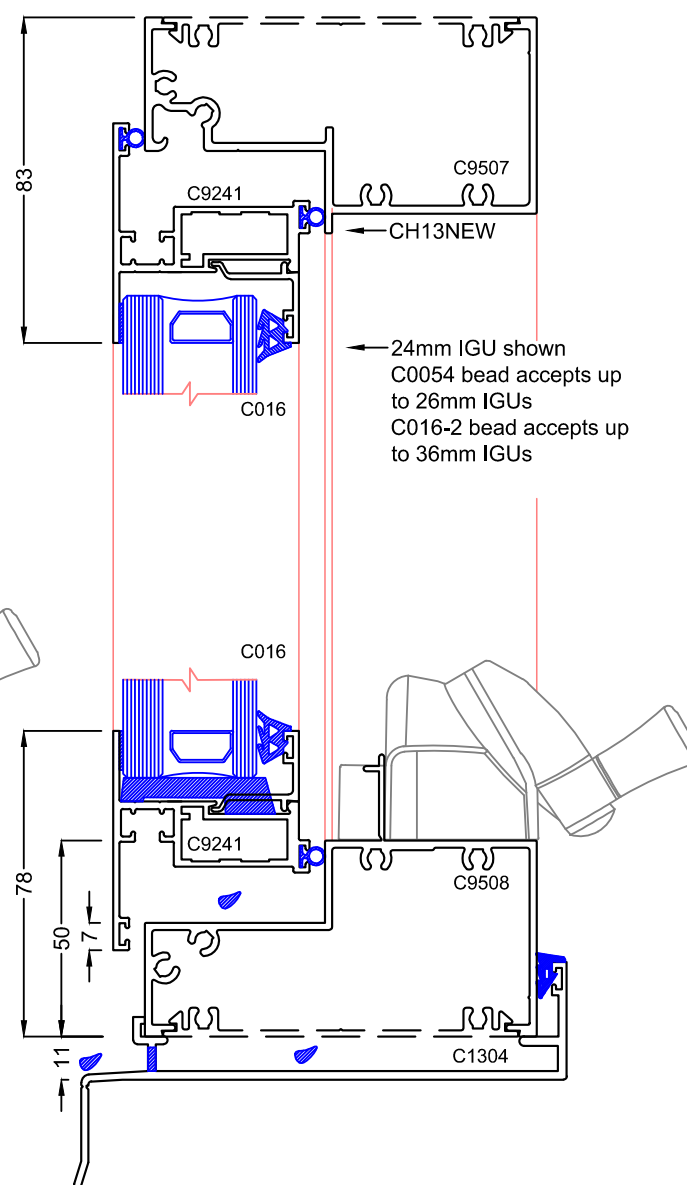
- Max Sash Height: 1600mm
- Min Sash Width: 450mm
- Max Sash Width: 1200mm
- Glass: 6mm - 35mm
- Accepts Q-Lon acoustic seals

Please refer the Sashes segment in the catalogue for further information on sash limits & hardware selection.

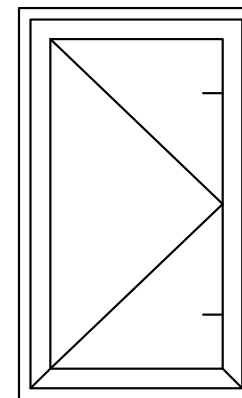
### 50mm Head & Sill



### Hinge Head & Winder Sill with overlap sash on stays



### 46mm Overlap Casement Sash

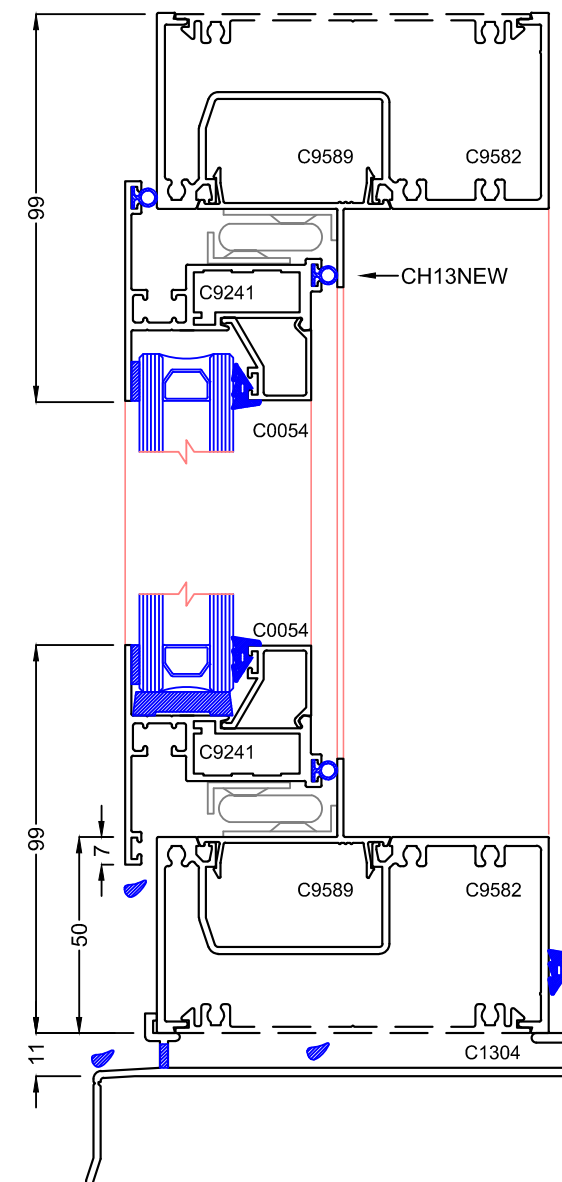


Note:  
Left Hand Sash depicted

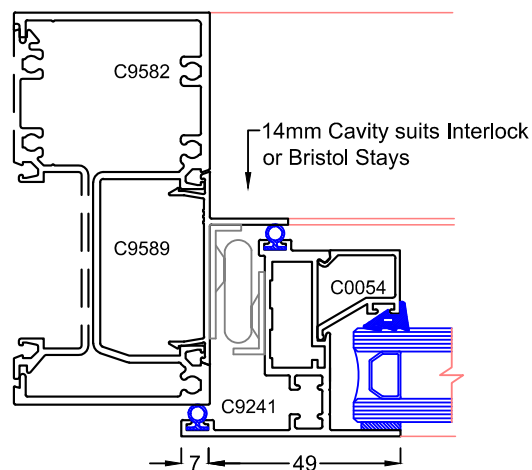
- Maximum Sash weights generally are 30kg, imited by the hardware.
- Maximum Sash width is 900mm.

Please refer the Sashes segment in the catalogue for further information on sash limits & hardware selection.

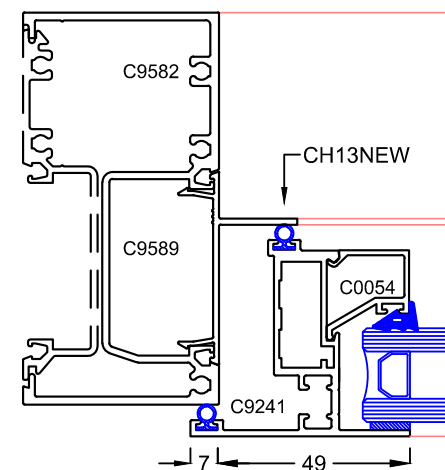
### 50mm Head & Sill



### 50mm Jamb

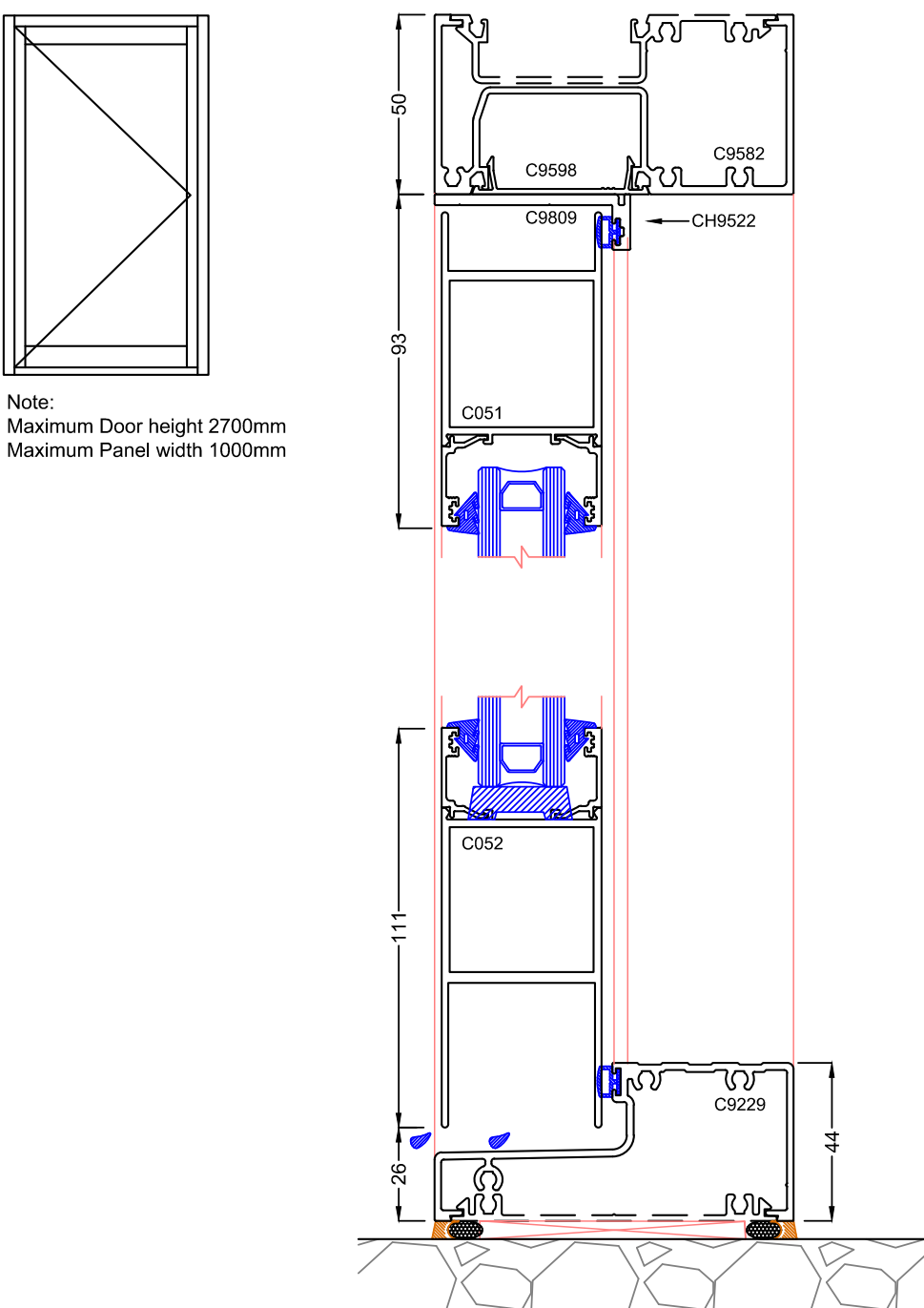


### Casement 50mm Jamb "Hinge Side"

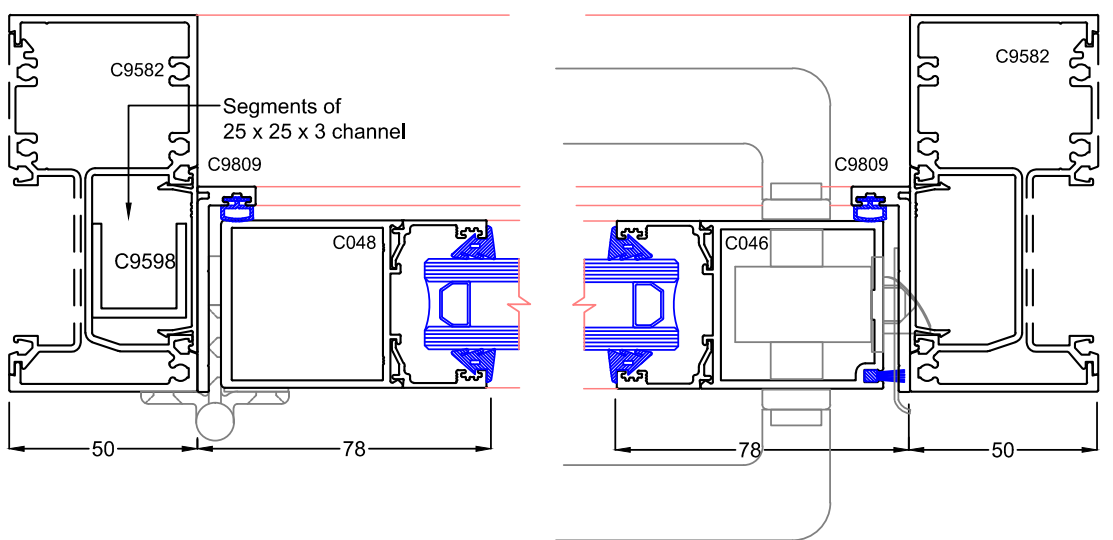




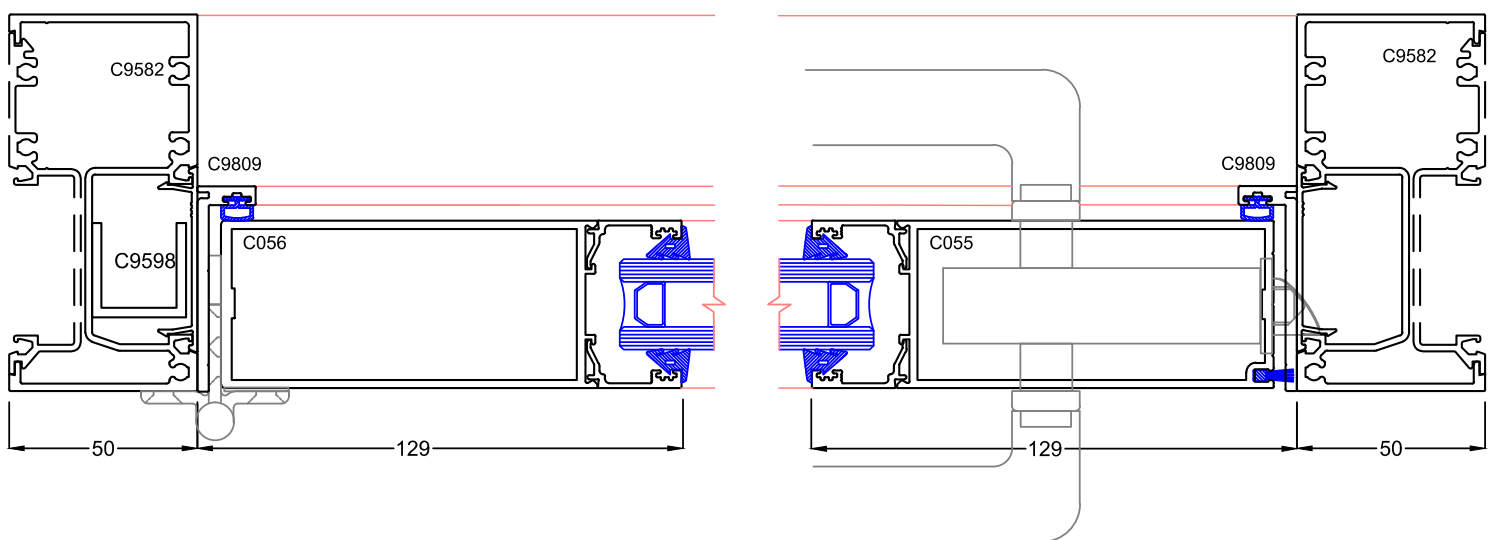
**Max™ 100 x 50mm FRONT DOUBLE GLAZED - 40mm Pocket**  
**Max Framing Systems: M100FDG40 - 8**  
**Hinged Door Open OUT**



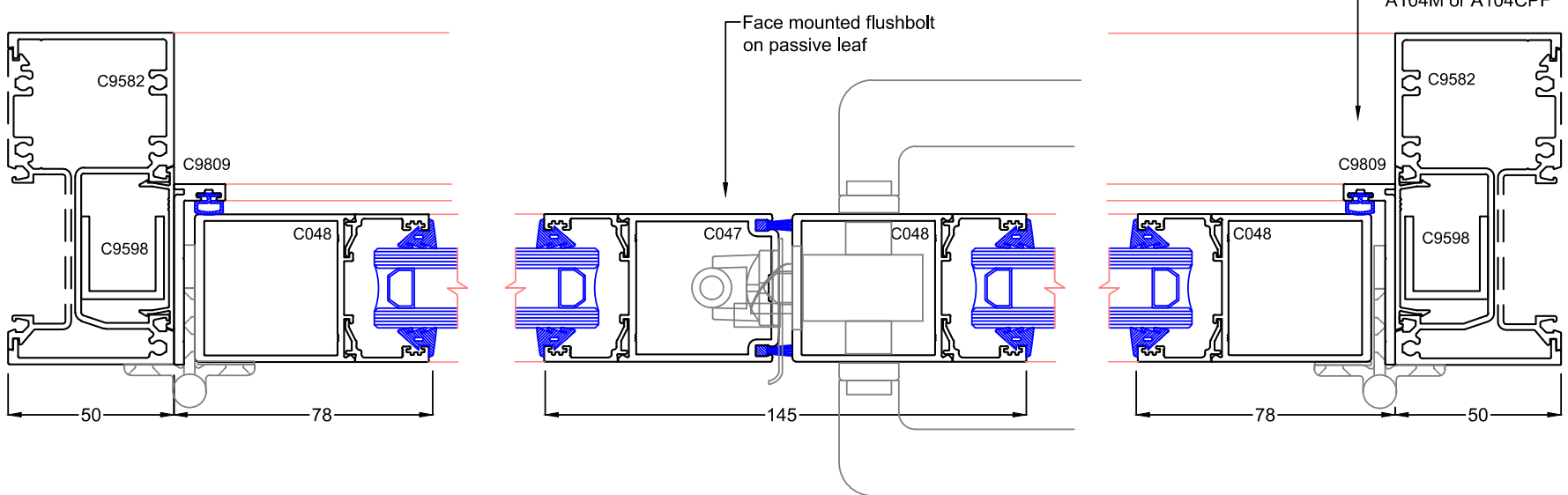
**Left Hand Open OUT**



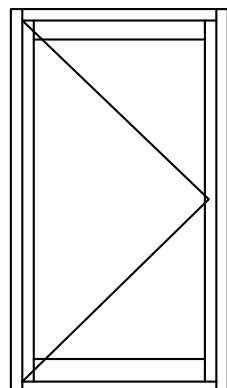
**Left Hand Open OUT Door with Wide Plain & Lock Stile**



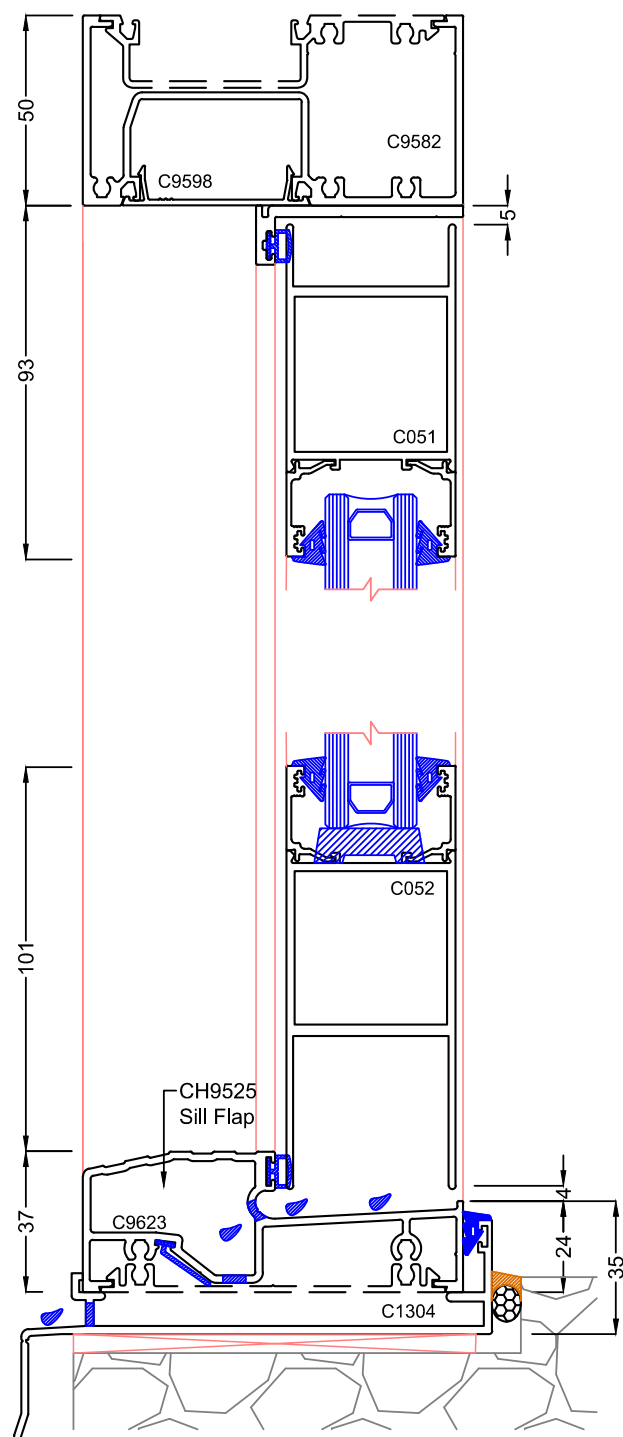
**Pair of Open OUT Hinged doors**



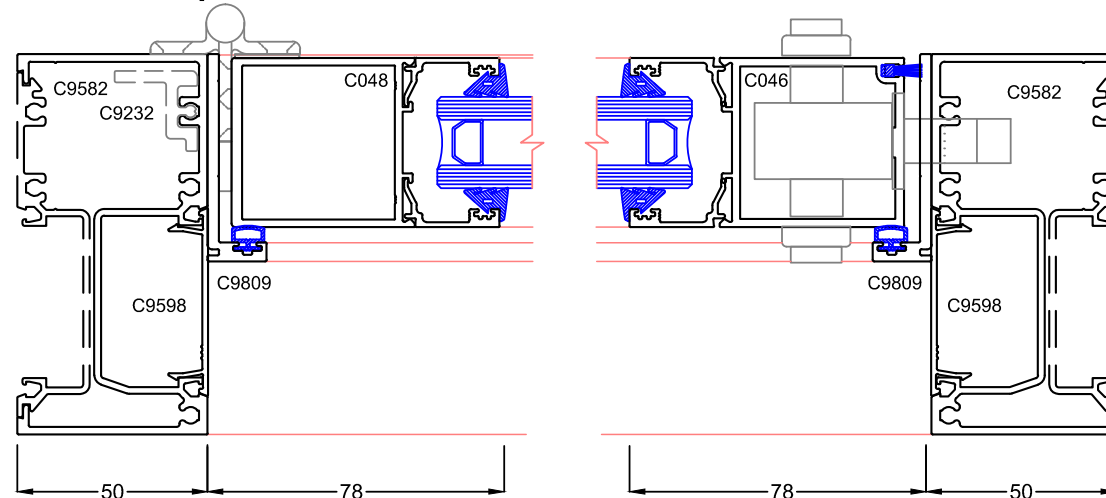
**Max™ 100 x 50mm FRONT DOUBLE GLAZED - 40mm Pocket**  
**Max Framing Systems: M100FDG40 - 9**  
**Hinged Door Open IN**



Note:  
Maximum Door height 2700mm  
Maximum Panel width 1000mm



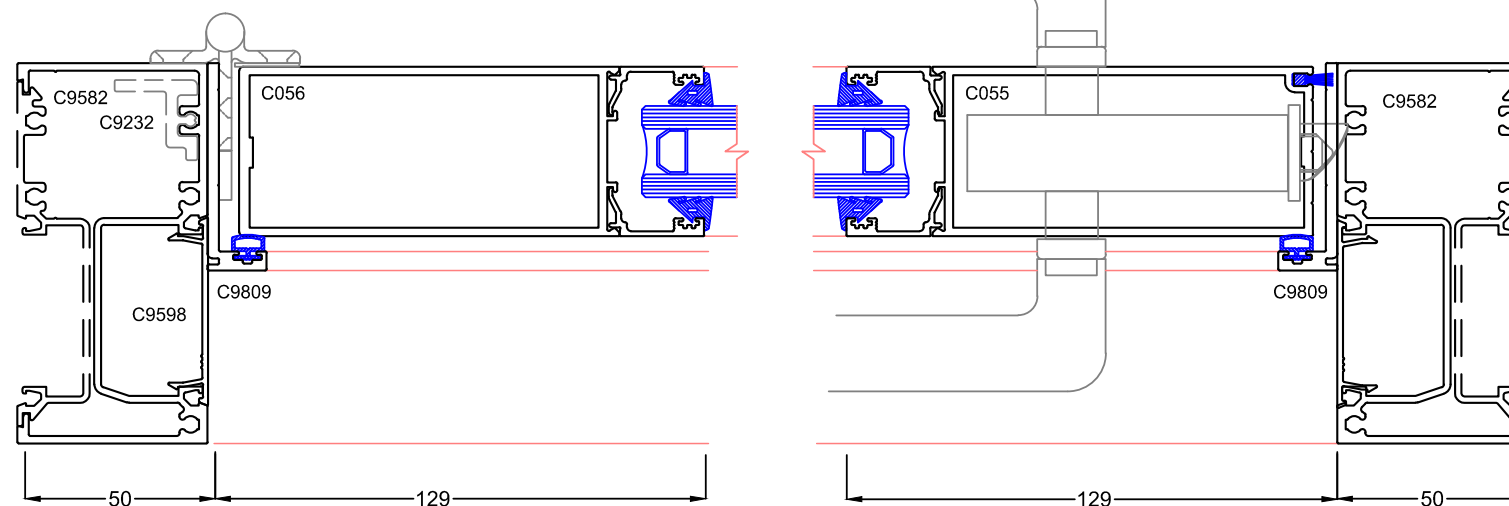
**Left Hand Open IN**



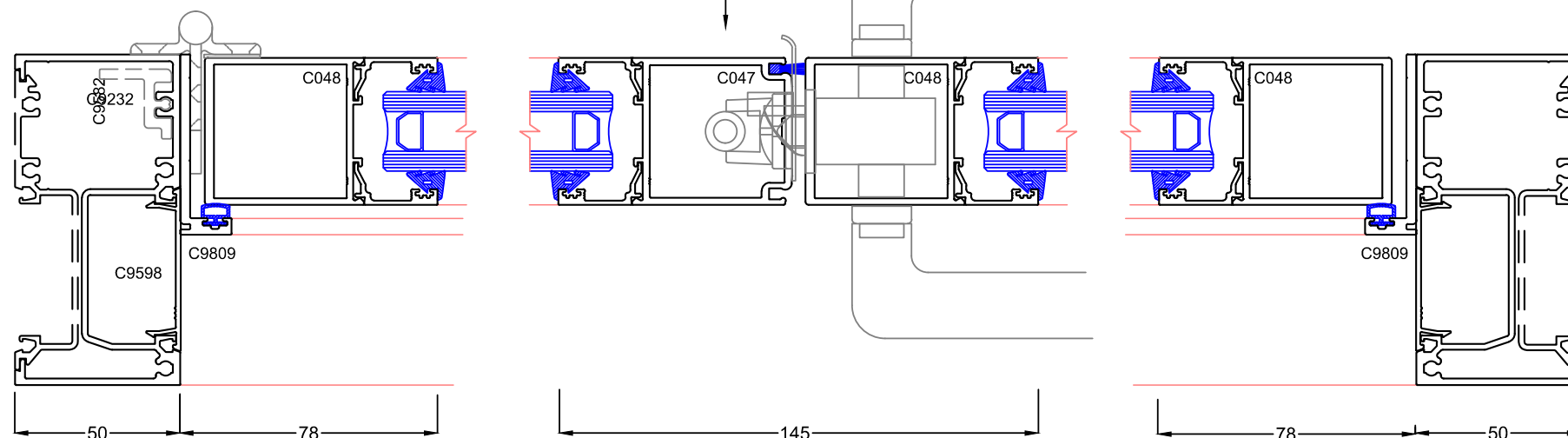
Note:  
Open IN conditions where there are no highlights or sidelights, a door frame is better made using centre glaze extrusions as it allows the use of hinge backing plate

**Left Hand Open In Door with Wide Plain & Lock Stile**

Deep rails are usually used with wide stiles to accentuate the door leaf

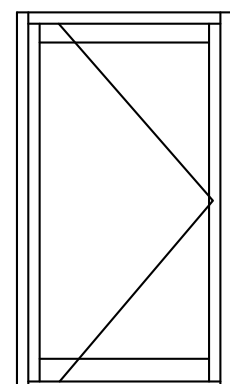


**Pair of Open In Hinged doors**

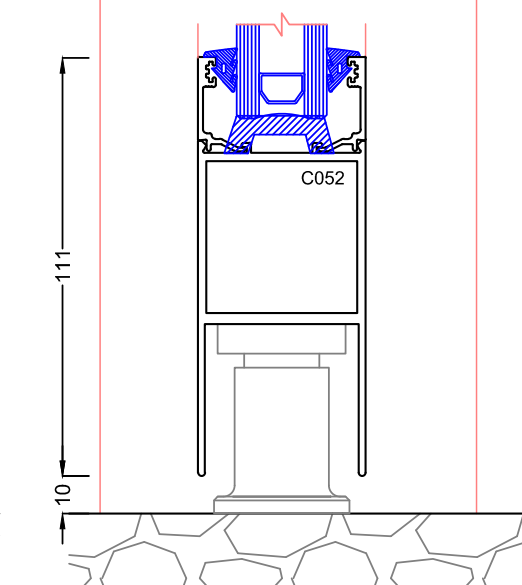
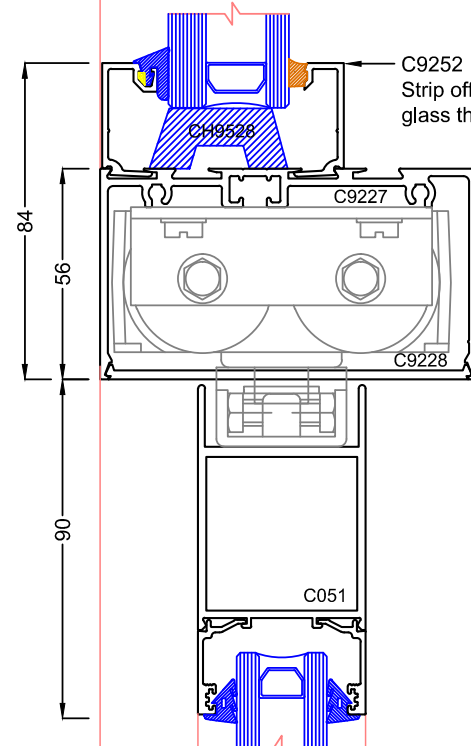
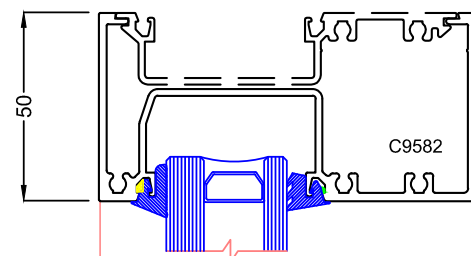
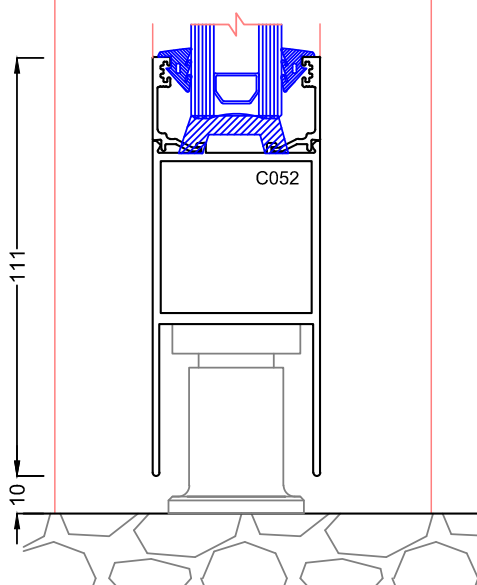
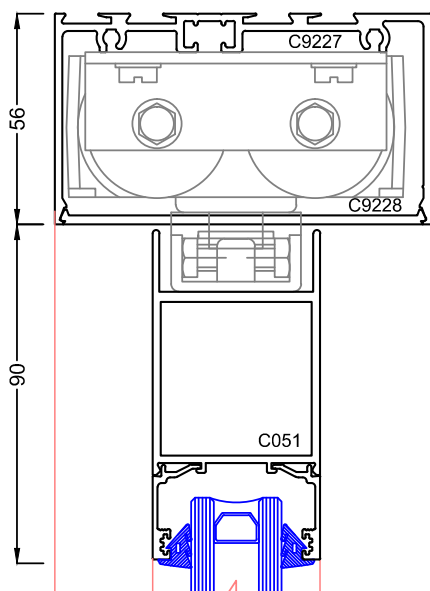


Face mounted flushbolt  
on passive leaf

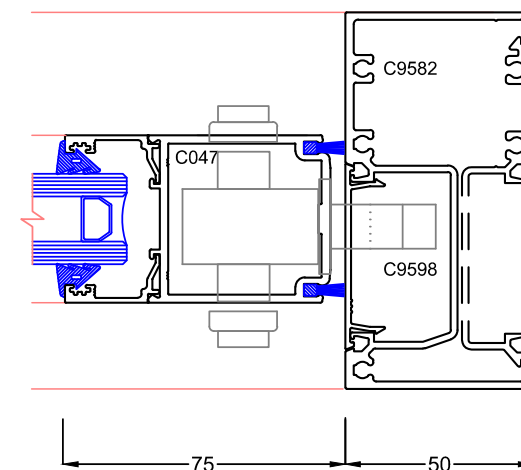
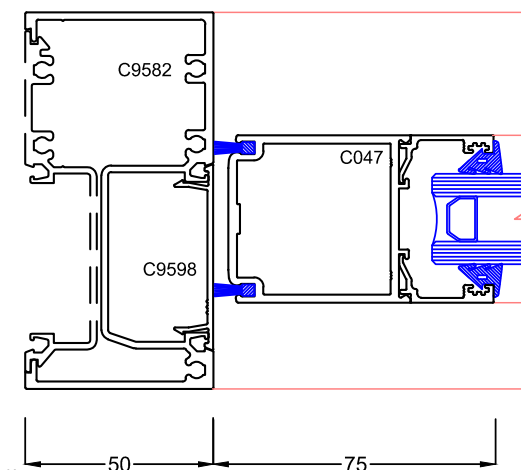
# Max™ 100 x 50mm FRONT DOUBLE GLAZED - 40mm Pocket Max Framing Systems: M100FDG40 - 10 Pivot Doors



Note:  
Maximum door height 2700mm  
Maximum Panel width 1000mm  
Pivot point usually 100mm



## Left Hand Pivot Door

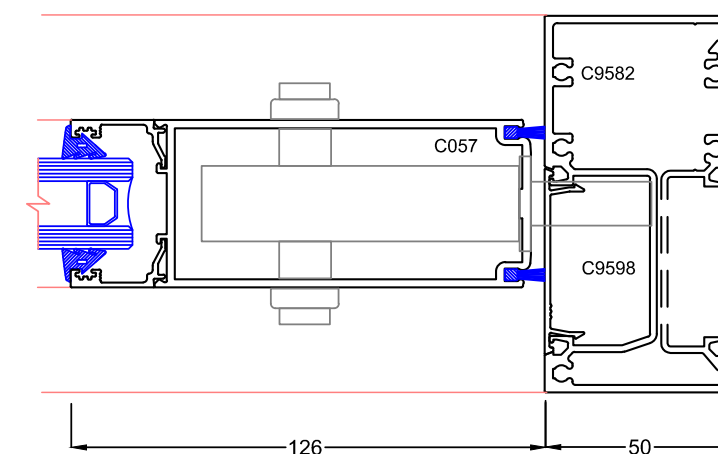
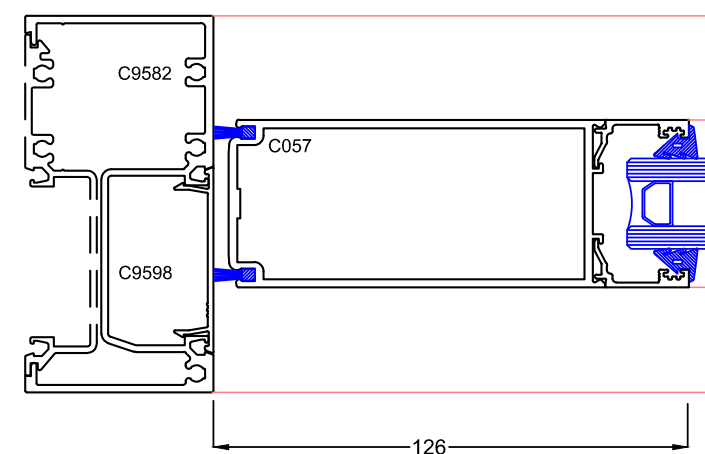


Note:  
Pivot door frames are better  
manufactured from Centre Glaze  
framing where the flush filler is  
centralised on the frame.

Alternatively using a plain frame as a  
jamb or 1/2 mullion will be more  
aesthetically pleasing provided the  
frame does not have a highlight

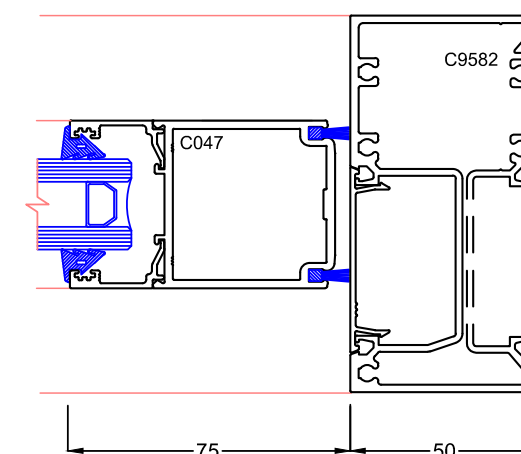
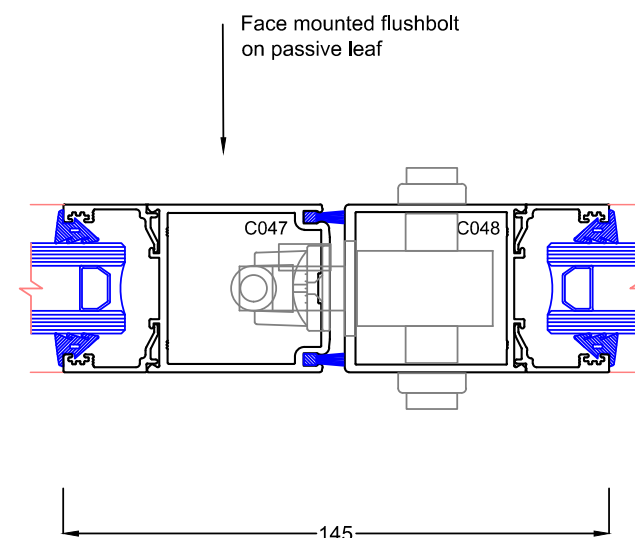
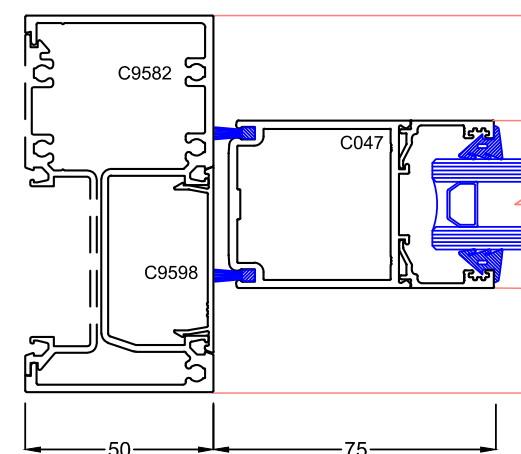
## Left Hand Pivot Door with Wide Stiles

Deep rails are usually used with wide stiles to accentuate the door leaf.



## Pair of Pivot Doors with Plain & Pivot Stiles

Best suited to commercial public access applications where  
doors are not exposed & weathering is not a priority as  
these doors cannot use a weathered threshold.



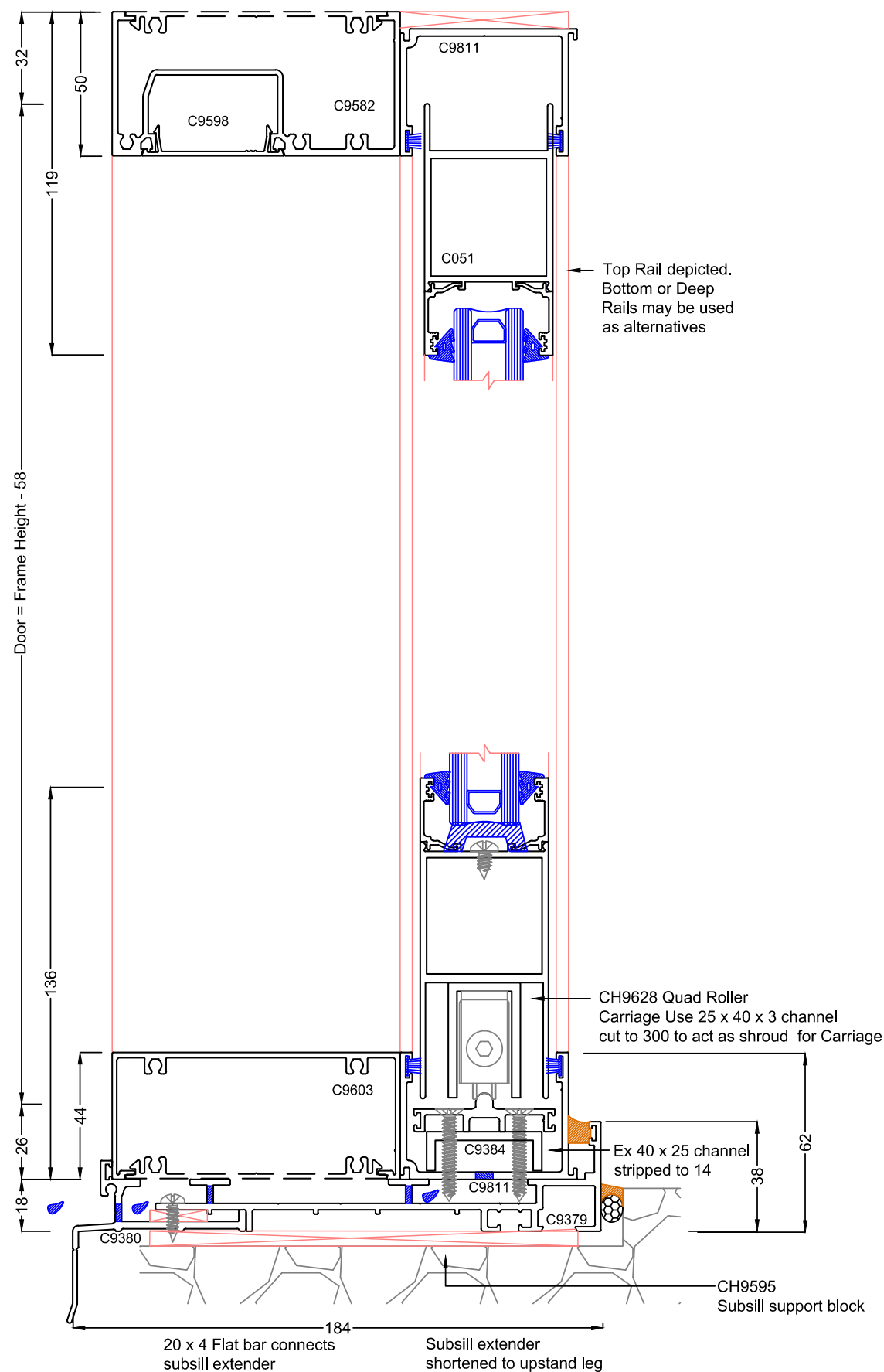


## Max<sup>™</sup> 100 x 50mm FRONT DOUBLE GLAZED - 40mm Pocket

Max Framing Systems: M100FDG40 - 11

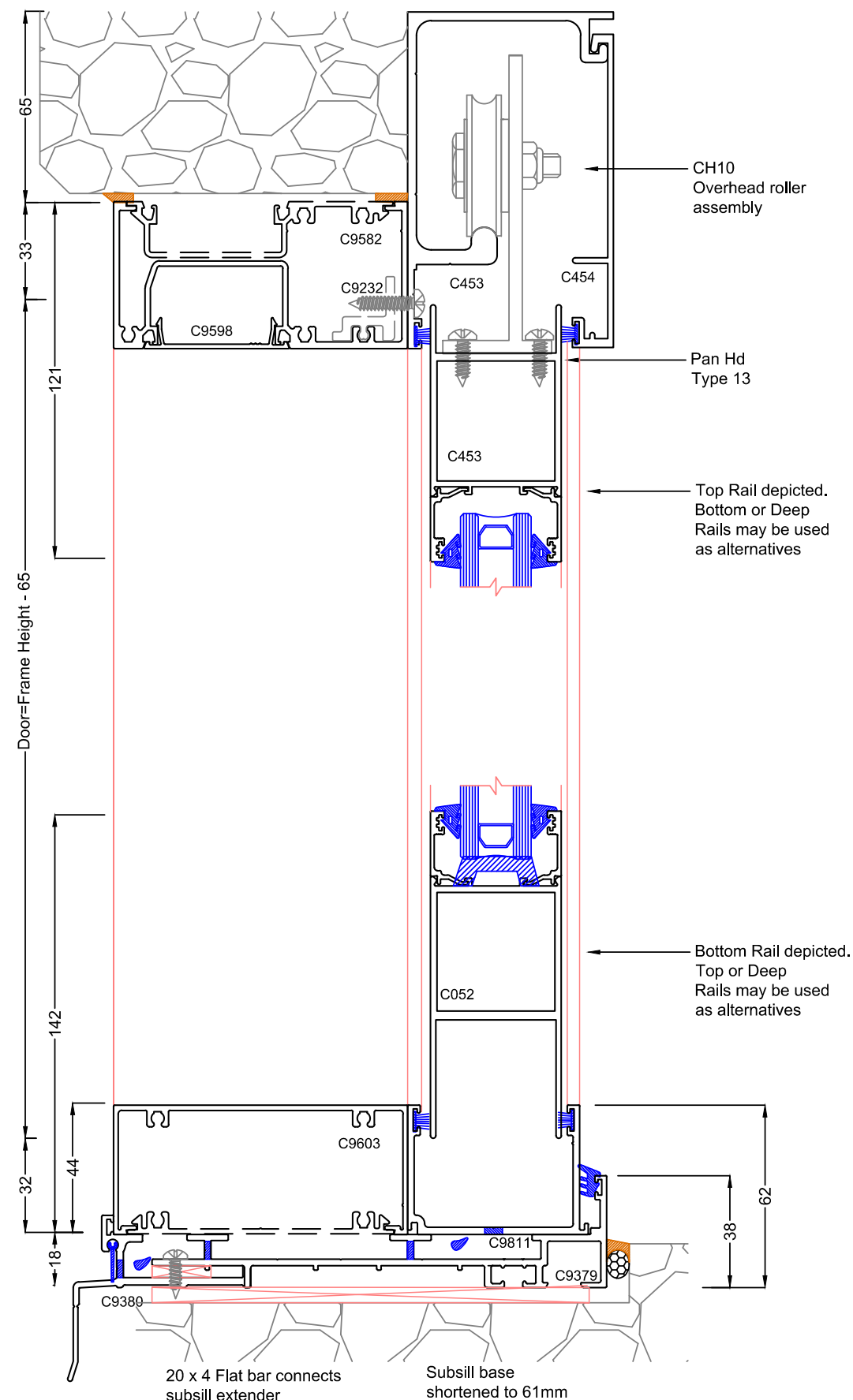
Sliding Bottom Track - 300kg panel weight

using 50mm Head & 44mm sill

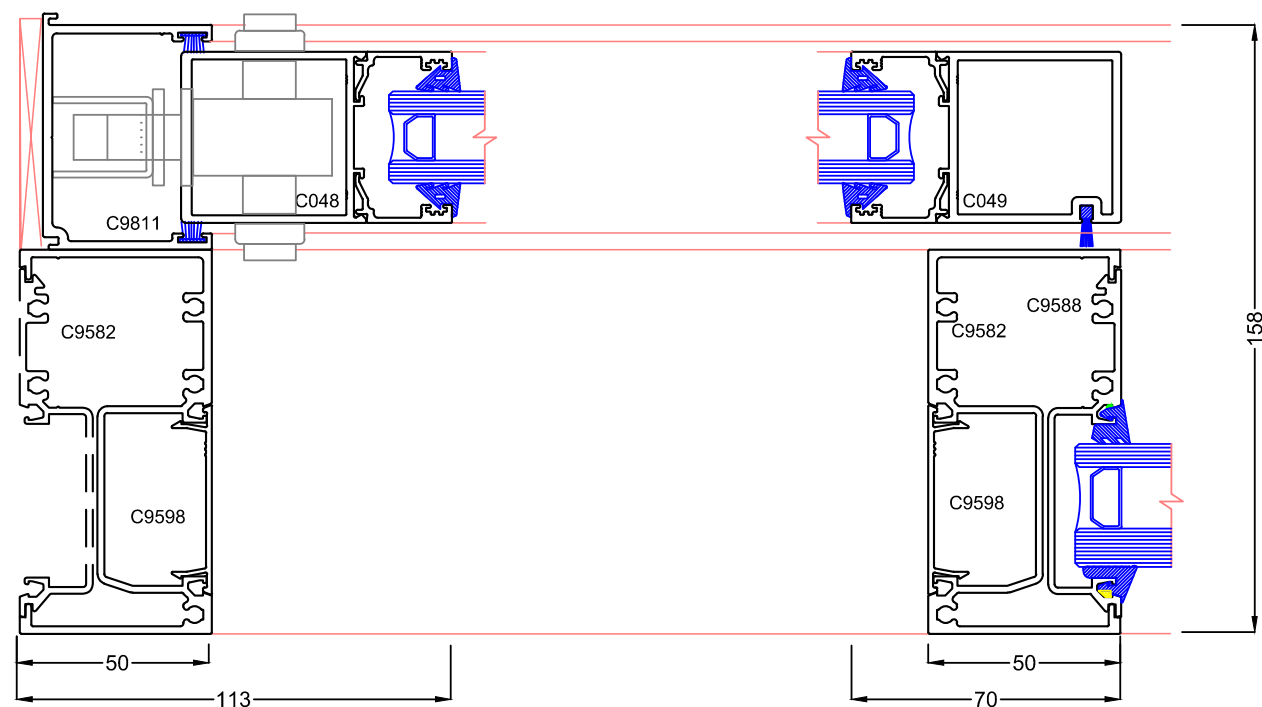


## Overhead Sliding Track - 250kg Panel Weight

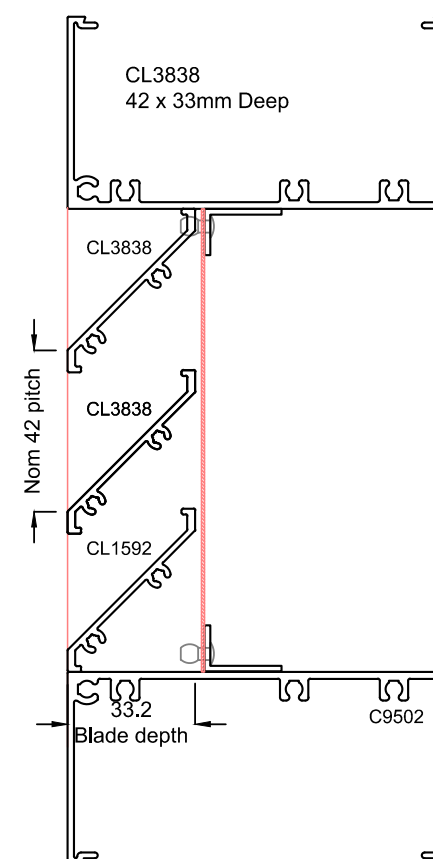
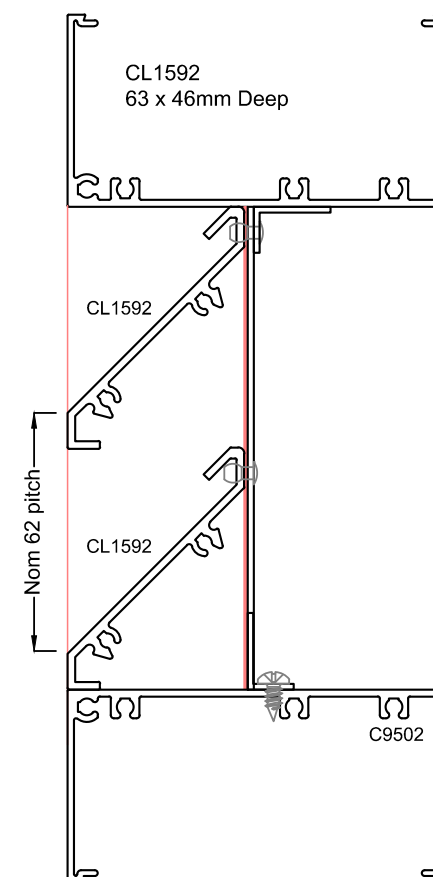
using 50mm Head & 44mm Sill



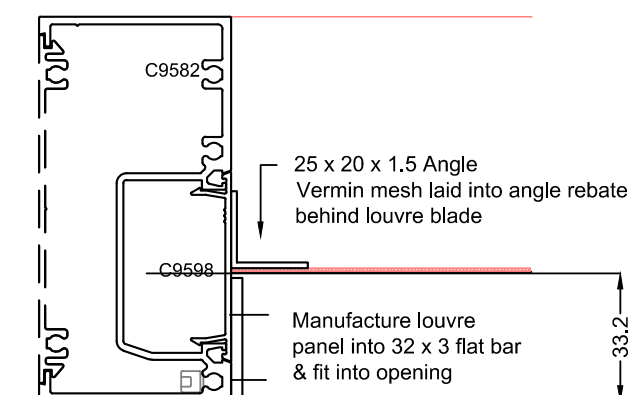
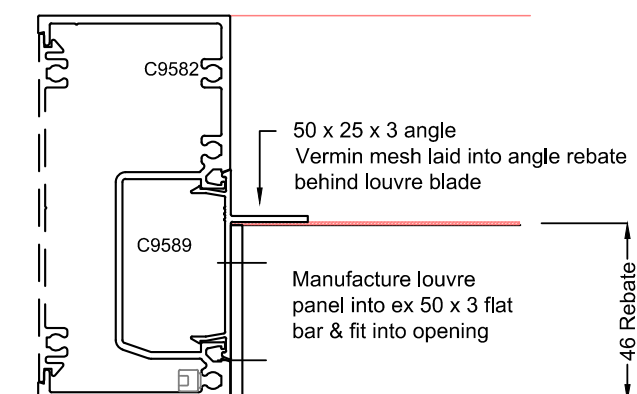
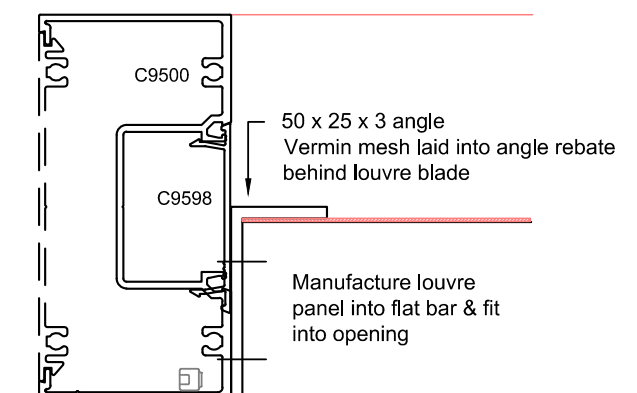
**Max™ 100 x 50mm FRONT DOUBLE GLAZED - 40mm Pocket**  
**Max Framing Systems: M100FDG40 - 12**  
**Sliding Door with Closing Jamb in 100 Fixed framing**



**Louvres**



**Jamb Detail**

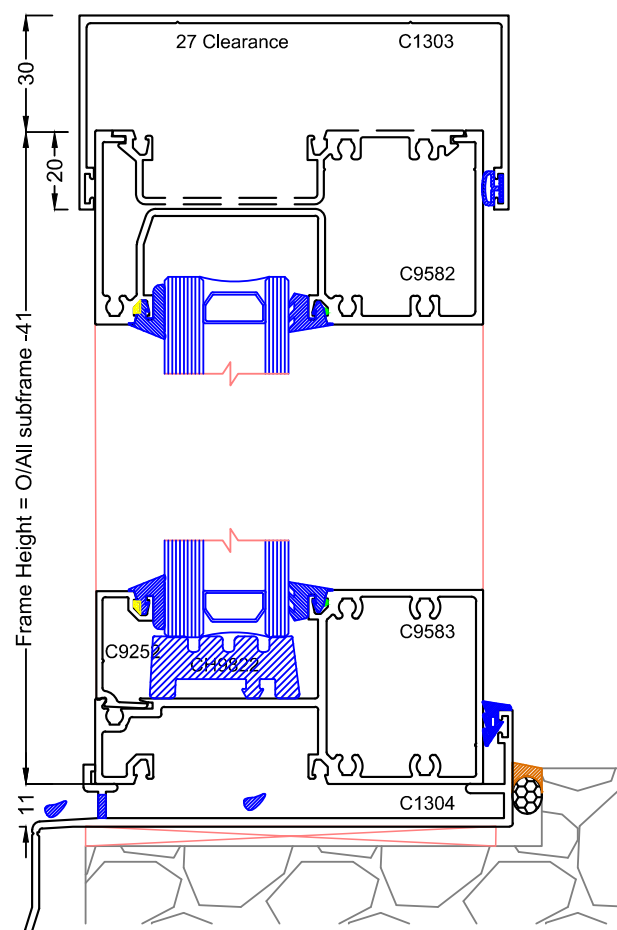


CH9600  
Square drive frame assembly screw,  
fixed through front screw flute

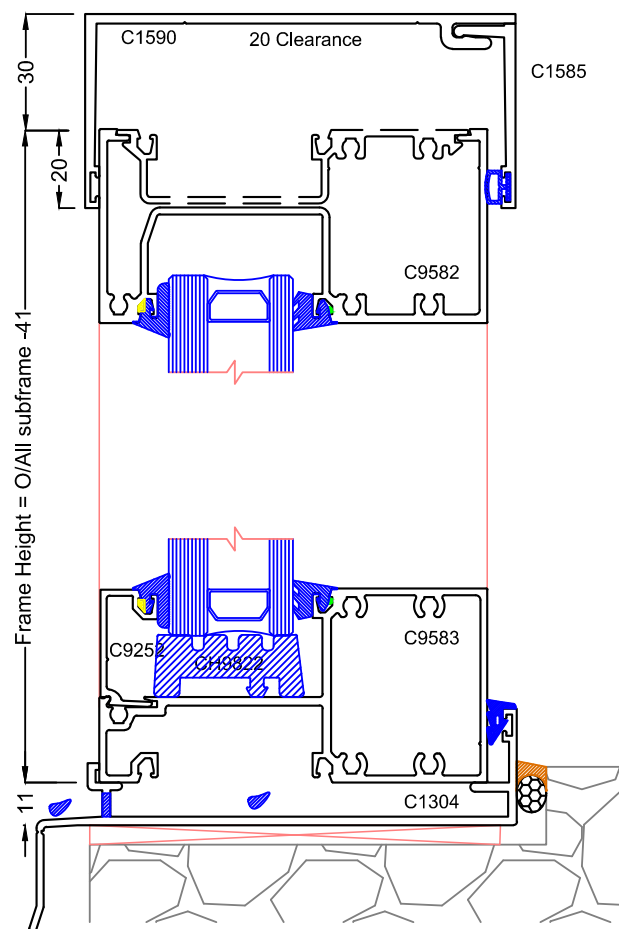
## Max™ 100 x 50mm FRONT DOUBLE GLAZED - 40mm Pocket

Max Framing Systems: M100FDG40 - 13

### One Piece Sub Head (50 deep)

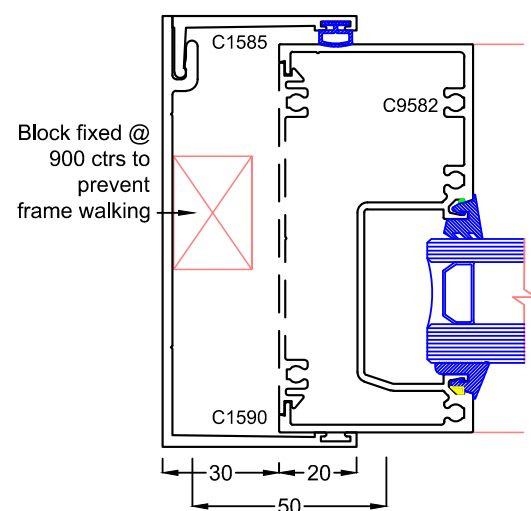


### Two Part Sub Head (50 deep)



### Two Part Sub Jamb

used in conjunction with One Piece or Two Part sub head for internal installation



### The use of Sub frames & subsills

Commercial window systems are designed for drainage through the system. Horizontal members act as "gutters", collecting water & allowing it to flow to Vertical members which act as "downpipes".

It then becomes mandatory to adequately flash frames at the sill - this can be done via a folded flashing, impervious rebate, but usually by the use of a subsill.

The subsill allows easy preparation of an opening & ready access to subsill fixings so they can be appropriately sealed prior to frame installation.

A subsill is fitted with a stop end, which contains water within the subsill & is fitted & sealed around during the fitting of a subsill. Without this, water would run to the ends of the subsill & leak back into the building.

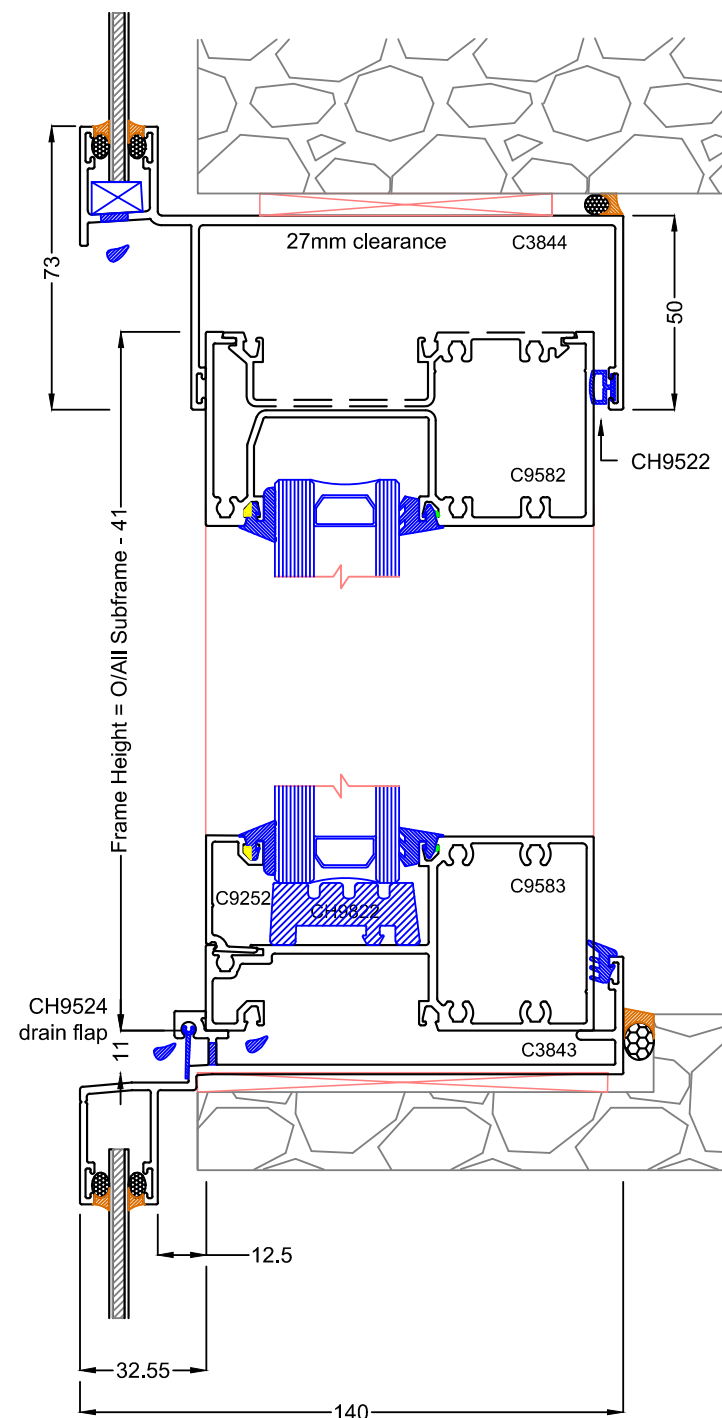
Sub heads are used to allow for either vertical movement or as a more efficient means of installation, especially in above ground installations where it might be desirable to install frames from inside.

Sub frames likewise can be used in this situation, but are especially needed in ventilated cavities (like cavity brick) where there is airflow that may allow water to be driven over subsill stop ends, or it is difficult to contain water within a window opening.

It must be remembered that all window installations require a continuous internal seal especially & the use of subsills & sub frames are especially useful in achieving this.

### Spandrel Sub Head & Subsill

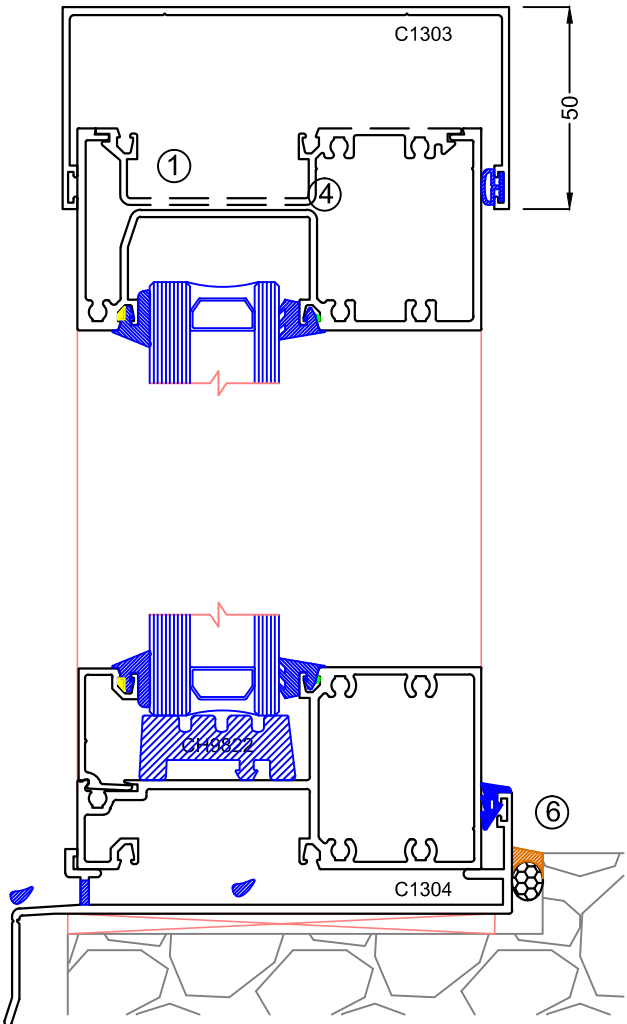
Spandrels areas above or below frames can be captured by the Spandrel sub frames, especially sheet or composite panels.



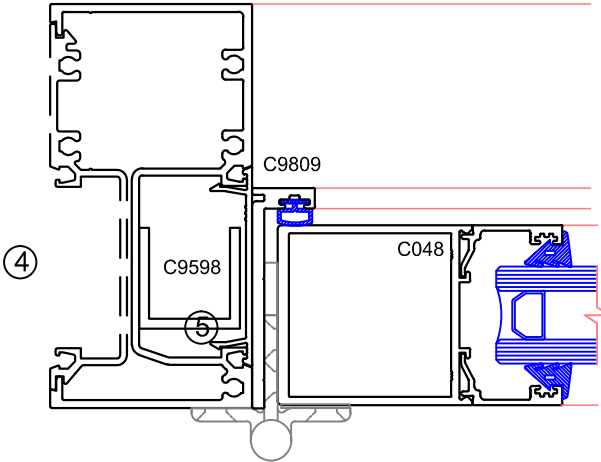
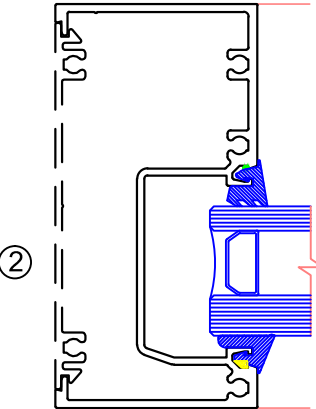


Max™ 100 x 50mm FRONT DOUBLE GLAZED - 40mm Pocket  
Max Framing Systems: M100FDG40 - 14

Principles Adopted in General Arrangement Drawings

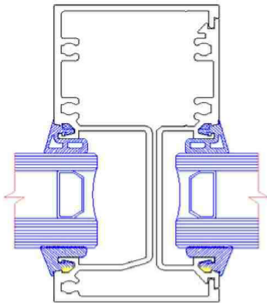


- ① Dashed lines represent typically 100mm long pieces to brace outer frame members or as backings for fixings
- ② Solid lines represent continuous extrusions. Jambs are recommended for use with continuous fillers to maintain frame tolerances & to allow continuous caulk lines.
- ④ Pocketed fillers preferred for support behind jambs, especially on door frames, on heads within a subhead, to stop potential water tracking & at 1/4 points on sill profiles to support the sill from weight of glass & fixings. Lower profile sills & heads however require a flat filler & are depicted this way on drawings.
- ⑤ Hinge backing plates should be used in 200mm segments to support hinges & door tracks where applicable
- ⑥ Rebate details are typical only & indicate internal seals against the back of subsills to exclude air & water entry beyond the back of frames, subsill. Fixing methods vary considerably & are not detailed.



Mullion Structural Tables

Mullion Combination: Max 100-40 Pocket STD C9582 C9588



These tables use theoretical section properties. The resulting Serviceability and Ultimate should be read in conjunction with the requirements of AS1170.

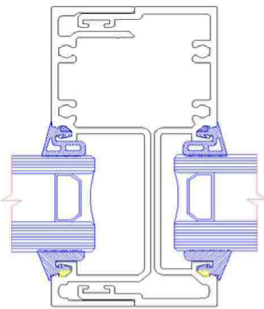
- Note the following:
- Maximum Stress = 110Mpa
  - Serviceability based on Span/250
  - Italics indicate where Serviceability is limited by Ultimate.

This chart is to be used as a guide only. Where Serviceability exceeds 3kPa or for more information, contact Capral.

Frame Height (mm)		Design Wind Pressure (Pa)							
2200	S	2802	2312	2002	1797	1661	1574	1525	1509
	U	4407	3620	3118	2783	2557	2410	2326	2298
2400	S	2140	1757	1511	1346	1232	1154	1104	1075
	U	3669	3000	2570	2277	2074	1933	1839	1785
2600	S	1672	1367	1170	1036	942	875	828	797
	U	3103	2529	2157	1901	1720	1590	1498	1435
2800	S	1331	1085	926	816	737	680	639	610
	U	2659	2161	1837	1613	1451	1333	1247	1184
3000	S	1078	877	745	654				
	U	2304	1869	1584	1386				
3200	S	885	718	609					
	U	2016	1632	1381					
3400	S	736							
	U	1779							
3600	S	618							
	U	1581							
Mullion Centres (mm)		800	1000	1200	1400	1600	1800	2000	2200

Max™ 100 x 50mm FRONT DOUBLE GLAZED - 40mm Pocket  
Max Framing Systems: M100FDG40 - 15  
Mullion Structural Tables

Mullion Combination: Max 100-40 Pocket Split C9586 C9587



These tables use theoretical section properties. The resulting Serviceability and Ultimate should be read in conjunction with the requirements of AS1170.

- Note the following:
- Maximum Stress = 110Mpa
  - Serviceability based on Span/250
  - Italics indicate where Serviceability is limited by Ulltimate.

This chart is to be used as a guide only. Where Serviceability exceeds 3kPa or for more information, contact Capral.

Frame Height (mm)		Design Wind Pressure (Pa)							
2200	S	3720	3069	2657	2385	2205	2089	2024	2003
	U	5859	4812	4145	3700	3400	3204	3092	3055
2400	S	2840	2332	2006	1787	1636	1532	1465	1427
	U	4878	3989	3416	3028	2757	2570	2445	2373
2600	S	2219	1814	1553	1375	1250	1161	1099	1058
	U	41.26	3362	2867	2527	2286	2113	1991	1908
2800	S	1767	1441	1229	1083	979	903	848	809
	U	3535	2873	2442	2144	1930	1773	1658	1575
3000	S	1431	1163	989	869	782	718	670	635
	U	3063	2485	2106	1843	1652	1510	1404	1325
3200	S	1175	953	809	708	635			
	U	2680	2170	1836	1602	1431			
3400	S	977	791	670					
	U	2365	1912	1614					
3600	S	821	664						
	U	2102	1697						
3800	S	696							
	U	1880							
Mullion Centres (mm)		800	1000	1200	1400	1600	1800	2000	2200

Glazing Methodology

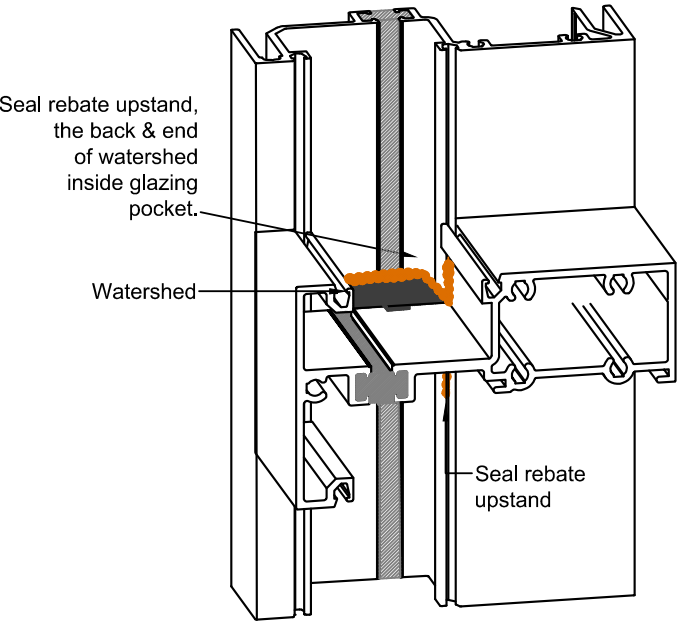
This system has been designed to self drain within the system via a patented watershed component in transoms, traditionally the area most prone to leakage in commercial systems.

Most other commercial systems attempt to deal with drainage through ugly external drain slots or rely on silicone to stop water entry.

Using "top loaded" high performance co-extruded wedges which are shrink resistant, the system allows easy in-factory fitting of backing wedges & easy fitting of wedges on the side from which the system is being glazed.

Wedges are colour coded according to thickness for ease of identification, refer the chart below.

**Note:** This page describes one method of glazing. Wet Glazing or combinations of wet and dry glazing can be done. For further information on Glazing methodology & frame sealing please refer the Information pages in the U-Max Manual.



Preparing the Glazing Rebate:

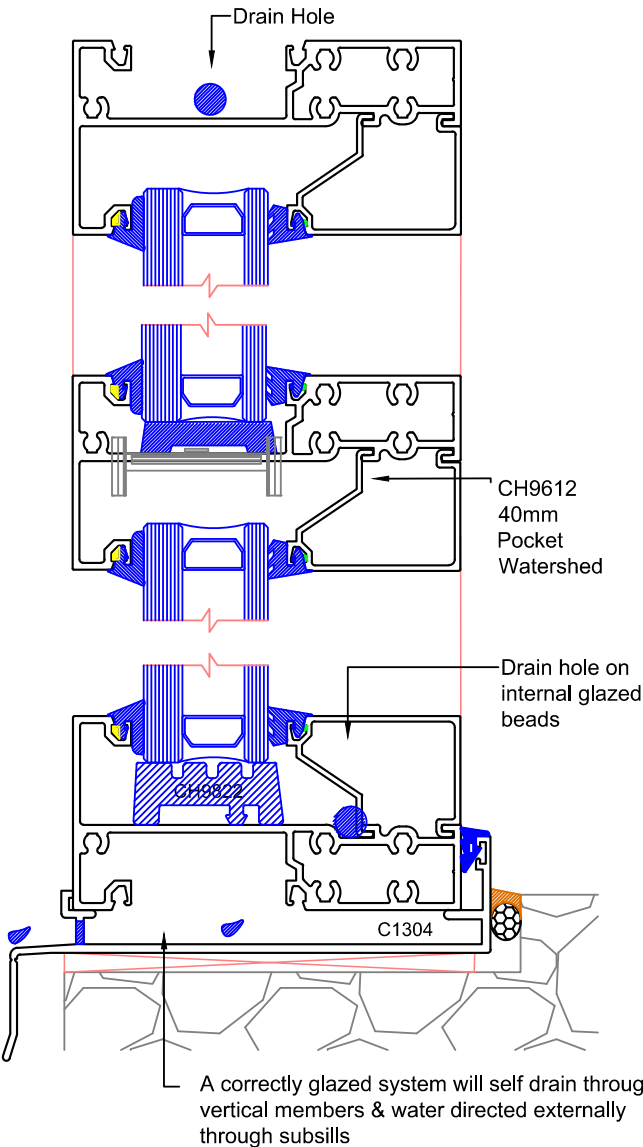
- Ends of horizontal frame joints are end buttered prior to assembly.
- Fit the watershed device while assembling transoms
- Seal into the captive groove on the transom's vertical rebate. This is done on top & below the transom.
- Seal the back end end of watershed within the pocket. DO not seal in front of Watershed as infiltrated water is drained through here.

Backing Wedge (rebate size) Fitting method:  
Backing wedges can be fitted either side dependant on which side it is being glazed: outside for internal glaze or inside for external glaze. The diagram depicted is externally glazed, so backing wedges would be factory fitted to the inside.

- Wedges size appropriate to glass thickness should be cut approx 18mm/metre oversize from DO (Daylight opening).
- Vertical wedges butt between horizontal wedges & are bunched towards corners.
- Pull corners back 50mm & bed into sealant & apply sealant to the butted ends.

- Site Preparation of the glazing rebate:
- Clean the glazing rebate & wipe glazing grooves
  - Check the watershed devices are in place & overseal where appropriate.
  - Place setting blocks at 1/4 points. Setting blocks should be no closer than 150mm from the edge of glass in normal conditions.

- Wedge Fitting method on the glazing side
- Wedges size appropriate to glass thickness should be cut approx 18mm/metre oversize from DO (Daylight opening).
  - If glazing internally, repeat the method of sealing corners as per backing wedges.

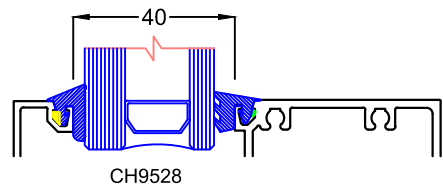




Max™ 100 x 50mm FRONT DOUBLE GLAZED - 40mm Pocket  
Max Framing Systems: M100FDG40 - 16

Wedge glazing charts for Max Framing - 40mm pocket

Note: when different wedges are used, the smaller wedge must go on the rebate side to allow room to fit the glazing bead



CH9505  
1mm wedge SANT  
Black backing



CH9506  
3mm wedge SANT  
Yellow backing



CH9507  
5mm wedge SANT  
Green backing



CH9508  
6mm wedge SANT  
Red backing



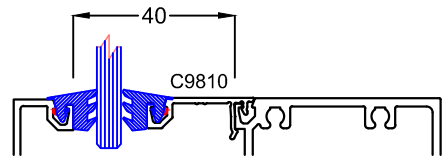
CH9509  
7mm wedge SANT  
Blue backing



CH9510  
9mm wedge SANT  
Purple backing

Spandrel Glazing

Note: C9810 Spandrel adaptor achieves a 19mm pocket



Max Framing	Glass thickness	Example	Rebate wedge	Gap	Glazing wedge	Gap
	28mm	8/12/8	CH9508	6mm	CH9508	6mm
	29mm	8.38/12/8.38	CH9507	5mm	CH9508	6mm
	30mm	10/12/8	CH9507	5mm	CH9507	5mm
	31mm	10.38/12/8.38	CH9507	5mm	CH9507	5mm
	32mm	10/12/10	CH9506	3mm	CH9507	5mm
	33mm	10.38/12/8.38	CH9506	3mm	CH9507	5mm
	34mm	13.52/12/6	CH9505	1mm	CH9507	5mm
Max spandrel Glazing	Glass thickness	Spandrel Adaptor	Rebate wedge	Gap	Glazing wedge	Gap
	6mm	C9810	CH9506	5mm	CH9509	7mm
	8mm	C9810	CH9506	5mm	CH9507	5mm
	10mm	C9810	CH9503	3mm	CH9507	5mm

Urbanest LaTrobe St, Victoria  
MAX™ 100mm Front Double Glazed frames,  
MAX™ 150mm Structural Glazed

