

Max 150 Front Double Glazed - 40mm Pocket



FEATURES:

- 150mm Frame Depth
- 50mm Sight Line generally
- Glass Plane-Front
- Accepts 29mm to 34mm IGU's with standard 40mm pocket
- Single Glazed Spandrel adaptor option
- Flush Glazed with 12mm Glass Bite in all configurations
- Eliminates ugly visible drain slots in the face of transoms
- External glazed
- Awning & Casement Sash options
- Hinged, Pivot, Sliding & Multi sliding door tracks
- Dry Glazed with High performance Santoprene Gaskets o Anti Stretch Gaskets
 - o 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
- Stack joint detail for low rise curtain walls

NOTE:

This system is completely compatible with U-Max thermally broken framing systems

LIMITATION:

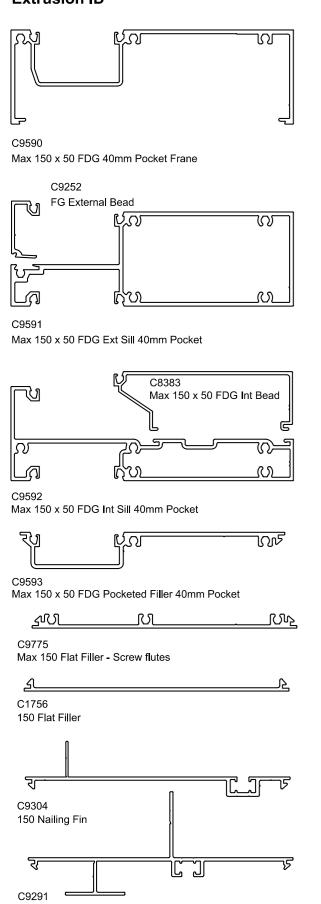
External Glazed option only at this stage May be 2 sided structurally glazed. Not recommended for 4 sided structural glazed

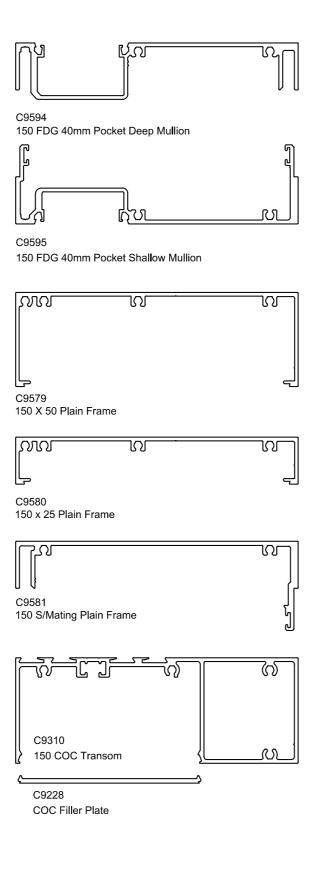
ALTERNATIVES:

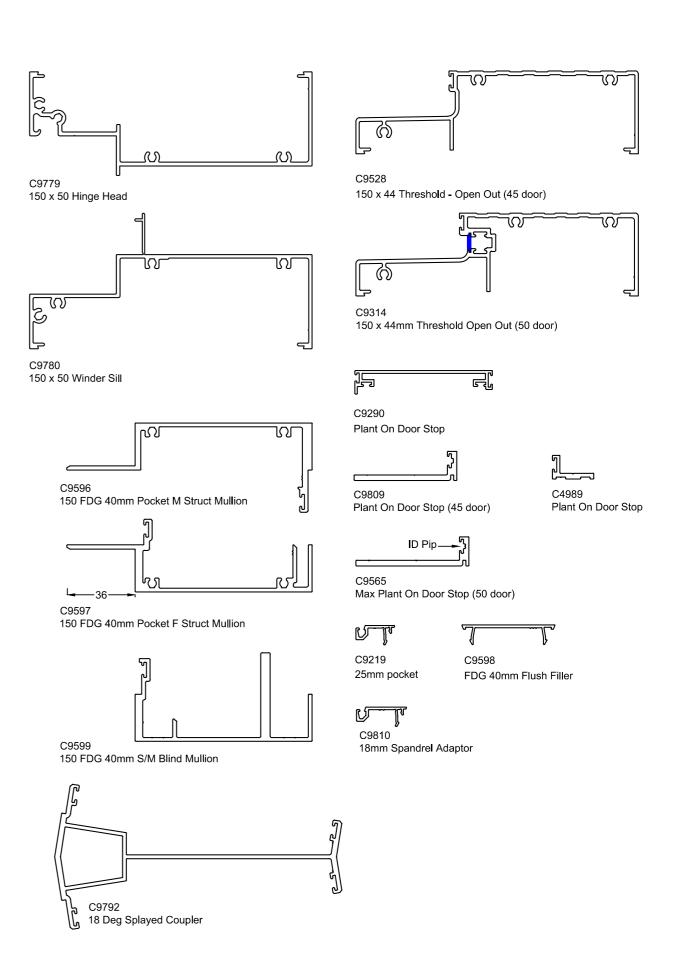
Standard 150mm frame with 34mm pocket









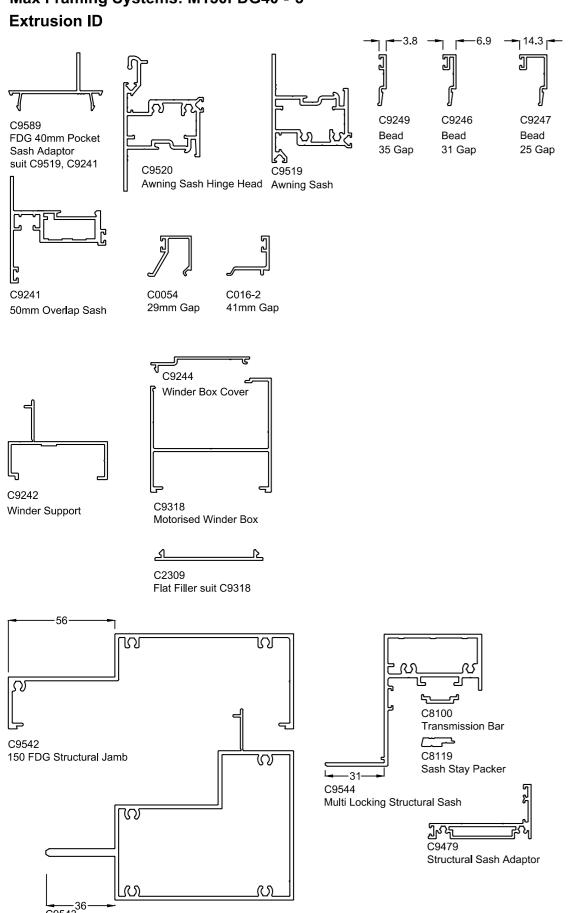


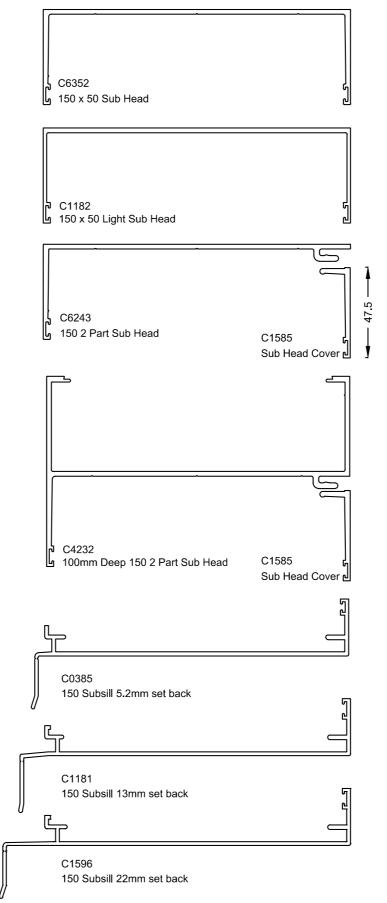
150 Build In Fin

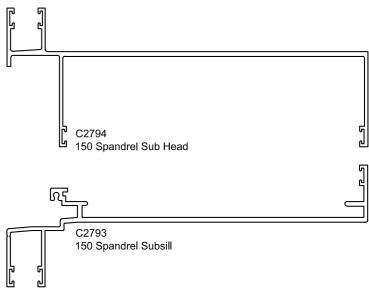
MAXTM



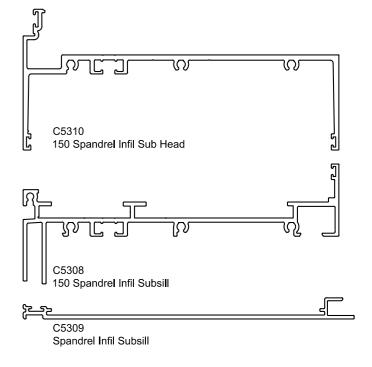
Max[™] 150 x 50mm FRONT DOUBLE GLAZED - 40mm Pocket Max Framing Systems: M150FDG40 - 3





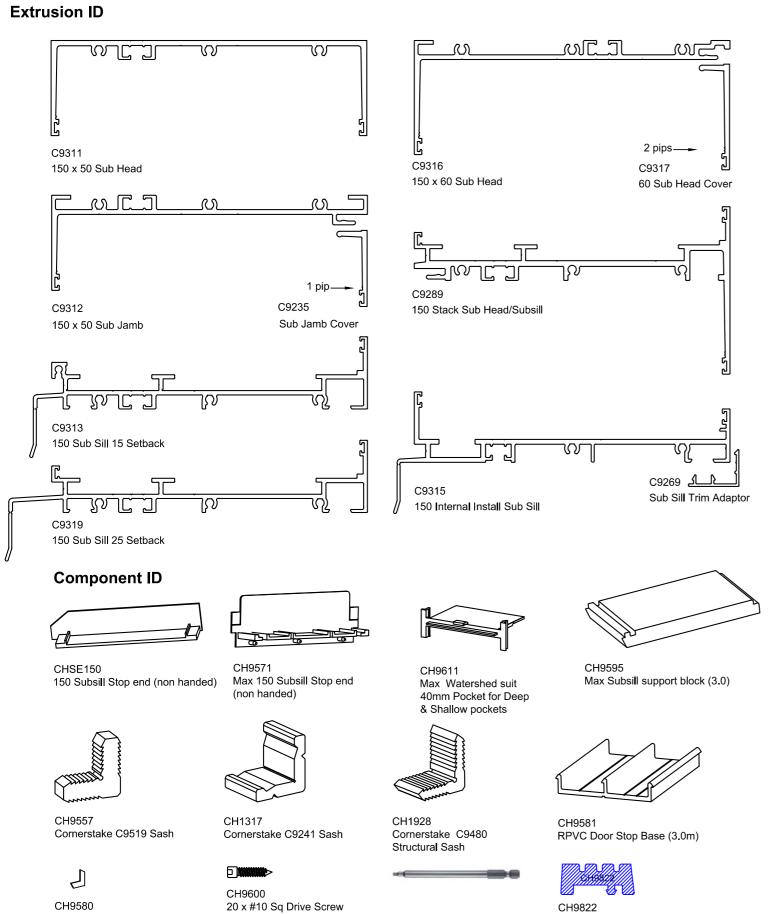


Max Sub Framing ID



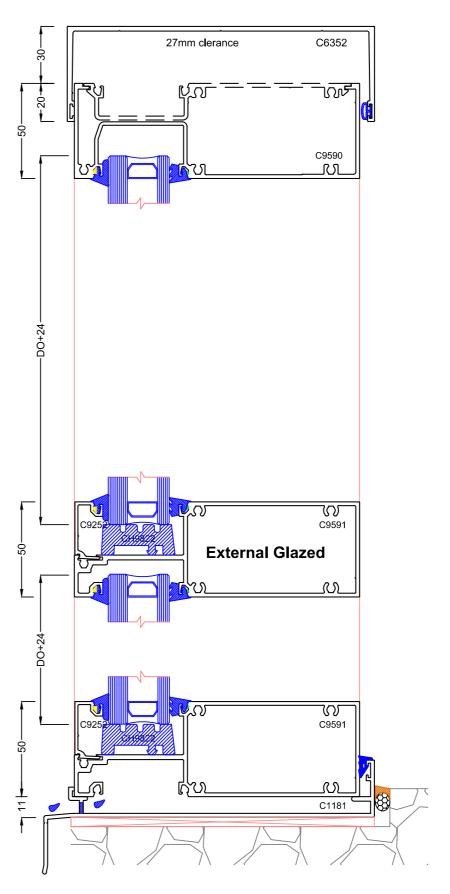
150 FDG Structural Winder Stansom





Wide Setting Block

50mm Head & Sill Details External Glazed



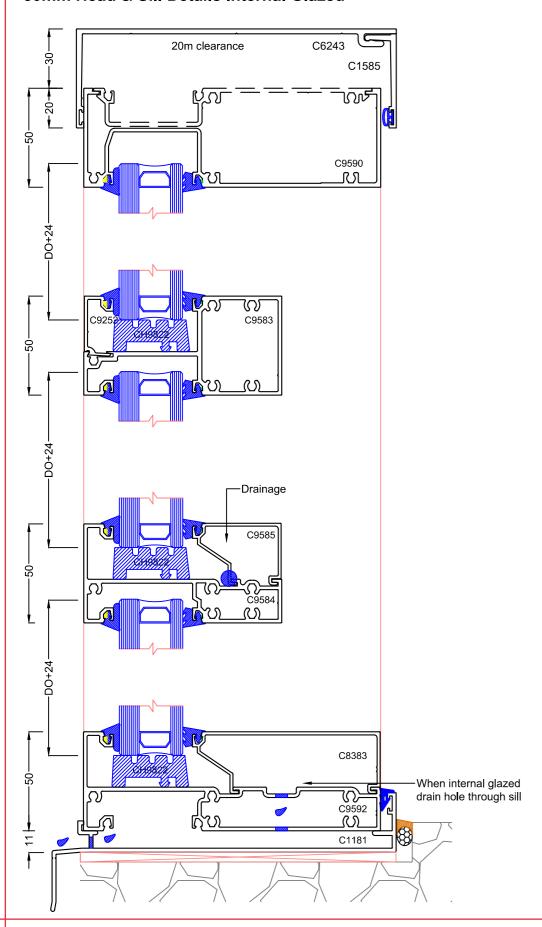
(Front of Glazing Pocket)

Sash Gusset

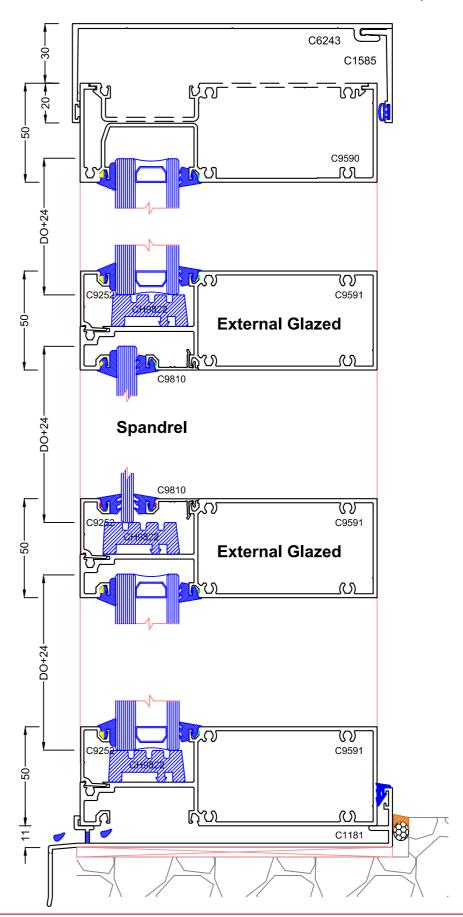
40mm pocket

MAX™ 150 Front Double Glazed -

Max[™]150 x 50mm FRONT DOUBLE GLAZED - 40mm Pocket Max Framing Systems: M150FDG40 - 5 50mm Head & Sill Details Internal Glazed



50mm Head & Sill External Glazed Vision / Spandrel

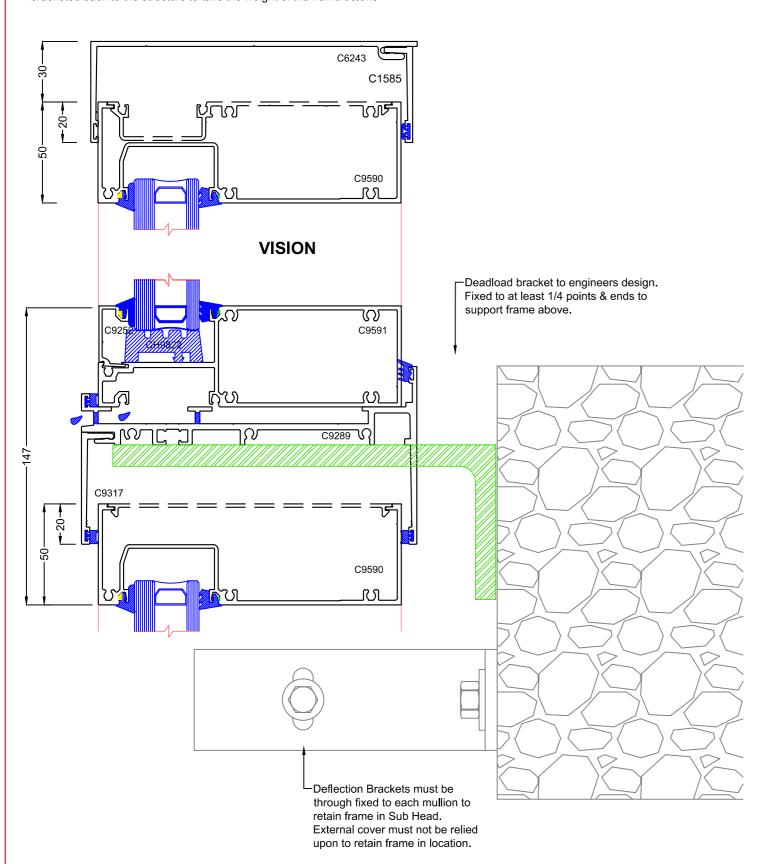


MAX™ 150 Front Double Glazed -

Max[™] 150 x 50mm FRONT DOUBLE GLAZED - 40mm Pocket Max Framing Systems: M150FDG40 - 6

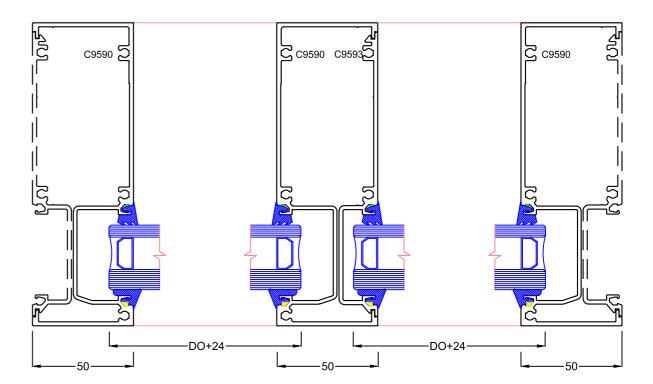
50mm Head & Sill with Stack Sub Head / Sill

Used where mullion fixing isn't available on the frame above, as required by a stack joint. The top frame is retained by a sub head & the stack sub head/sill is bracketed back to the structure to take the weight of the frame below.



50mm Jamb

50mm Standard Mullion

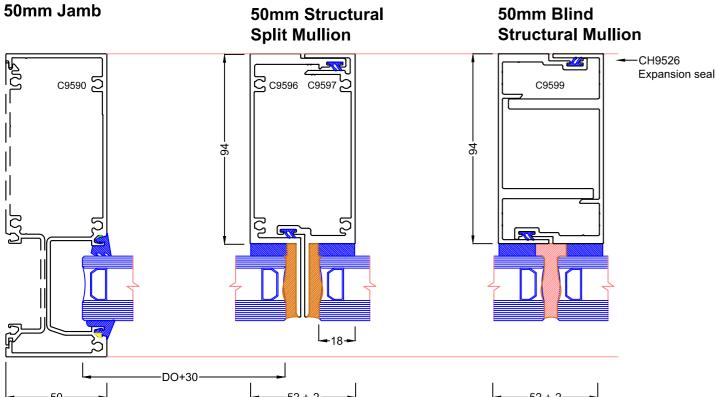


50mm Split Mullion Front Reversed Front Reversed Split Mullion Std Mullion -CH9526 Expansion seal C C9594 ද් c9594 C9595 ට් C9595 -DO+24 -DO+24

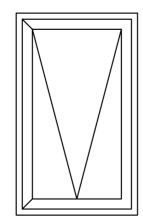
150 Front Double Glazed - 40mm pocket

MAXTM

Max[™]150 x 50mm FRONT DOUBLE GLAZED - 40mm Pocket Max Framing Systems: M150FDG40 - 7



46mm Overlap Awning Sash



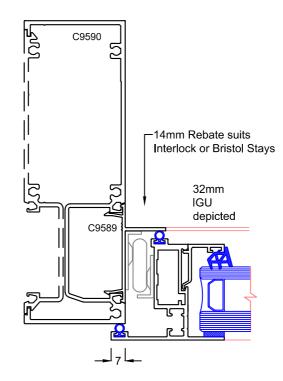
Note:

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.

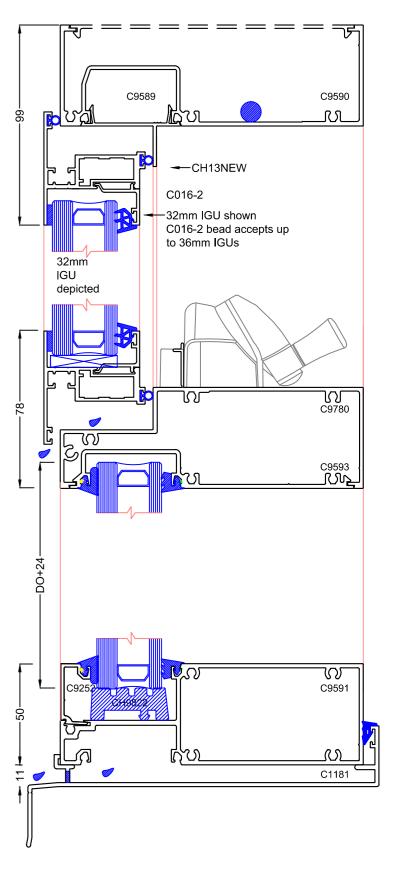
Maximum Sash weights generally are 30kg for a single chain winder & 70kg for a dual chain winder & 70kg with stays.

- 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.

Jamb Detail



50mm Head & Winder Sill Transom





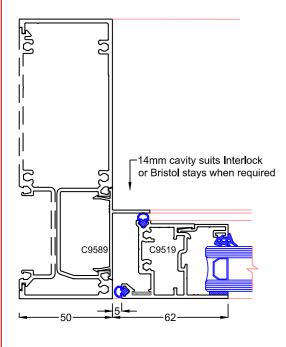
Max[™]150 x 50mm FRONT DOUBLE GLAZED - 40mm Pocket Max Framing Systems: M150FDG40 - 8 Inset Awning Sash 50mm Hinge He

Note:

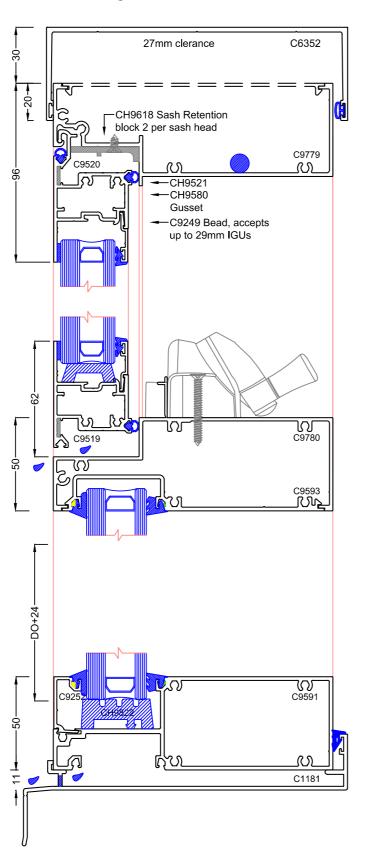
Maximum Sash weights generally are 30kg for a single chain winder & 70kg for a dual chain winder & 70kg with stays.

- Max Sash Height: 1600mm
- Min Sash Width: 450mm
- Max Sash Width: 1200mm
- Glass: 6-28mm
- Accepts Q-Lon acoustic seals Please refer the Sashes segment in the catalogue for further information on sash limits & hardware selection.

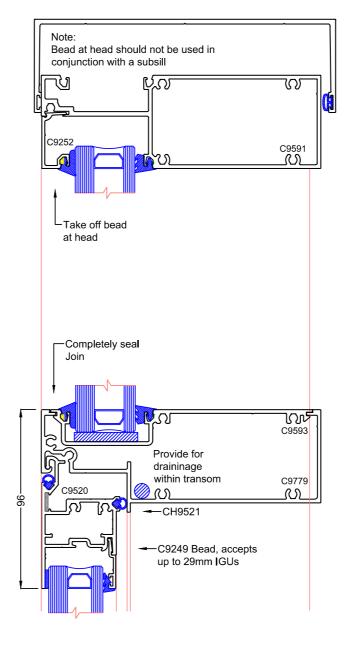
Jamb Detail



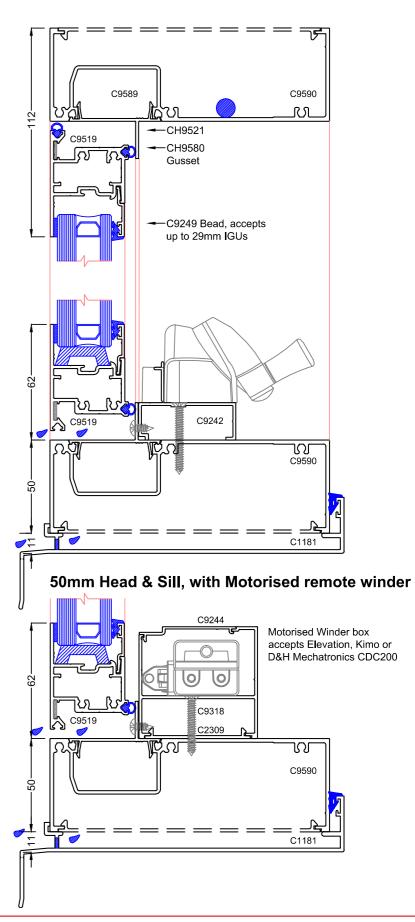
50mm Hinge Head & Winder Transom



50mm Hinge Head Transom



Inset Awning Sash on stays with winder



40mm pocket

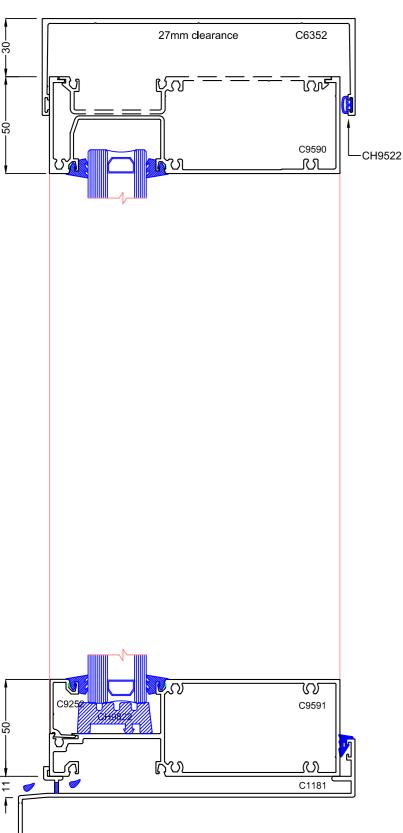
150 Front Double Glazed -

MAXTM

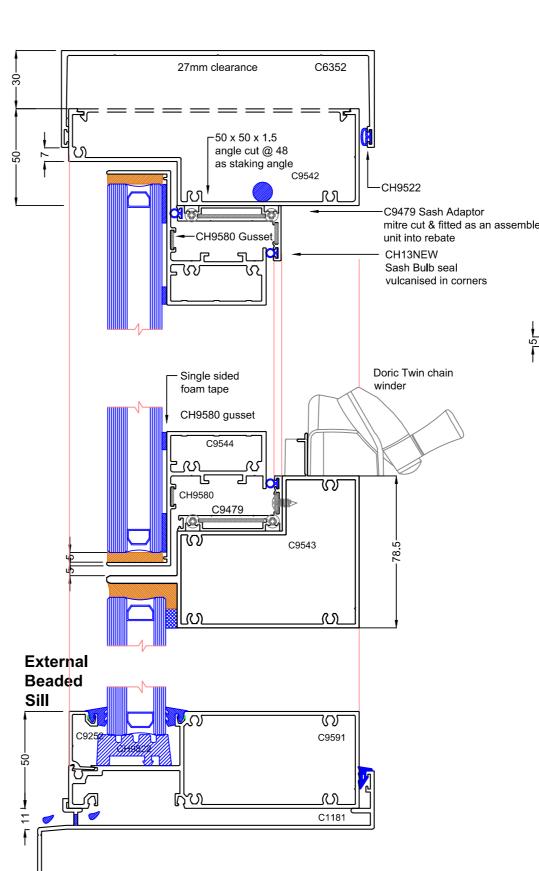
Max[™]150 x 50mm FRONT DOUBLE GLAZED - 40mm Pocket Max Framing Systems: M150FDG40 - 9

Structural Glazed Awning Sash with pocketed frame

This detail was developed for applications where it was preferred to site glaze & where possible to use captivated horizontals. Care needs to be taken with the configurations & machining associated with the mix of structural & pocketed assemblies.



Structural Glazed Sash with Winder transom

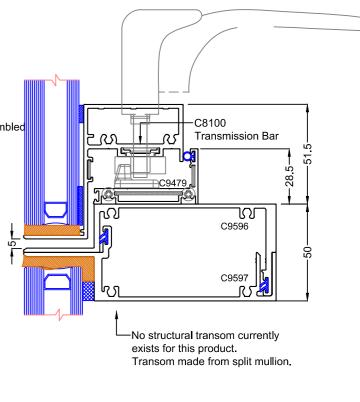


Structural Glazed Sash with Multi locking handle

An alternative means of operationg awning windows, a handle drives multi locking points around the sash. This increases weathertighness & resistance to windloads.

Its function is far superior to conventional cam handles. One handle only is required per Sash & is fitted on the bottom rail of awning Sashes & at an appropriate height on a Sash stile on casements.

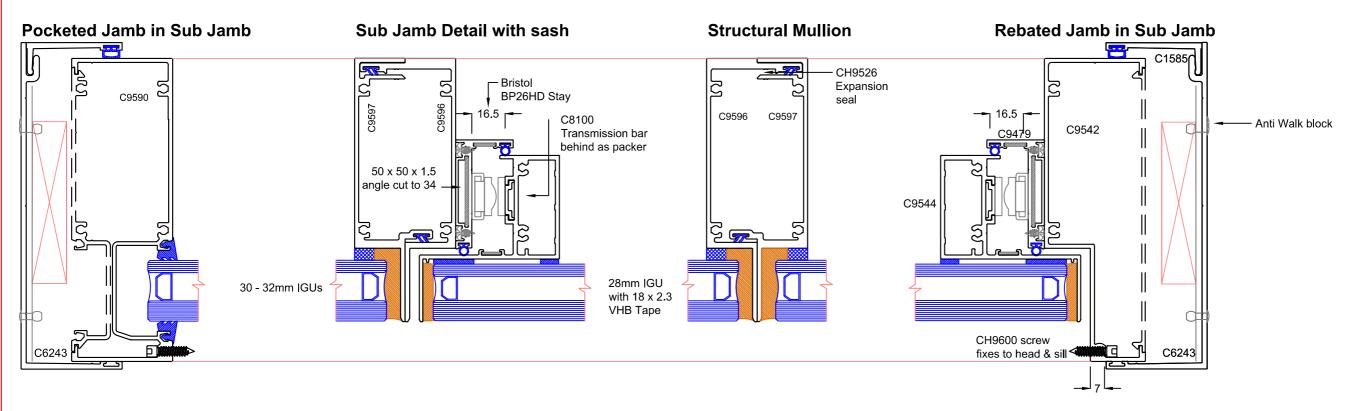
Fitting of flyscreens become difficult & would usually require a retractable



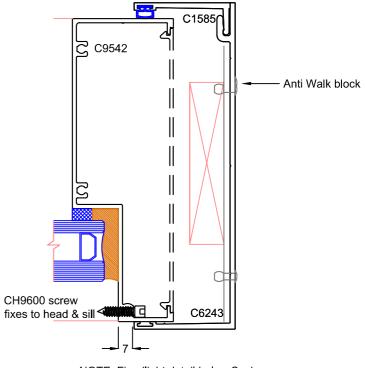


Structural Glazed Sash with pocketed frame

This detail was developed for applications where it was preferred to site glaze & where possible use captivated horizontals. Care needs to be taken with the configurations & machining associated with the mix of structural & pocketed assemblies.



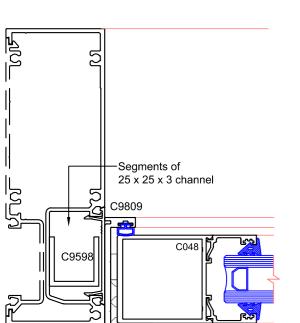
Rebated Jamb in Sub Jamb



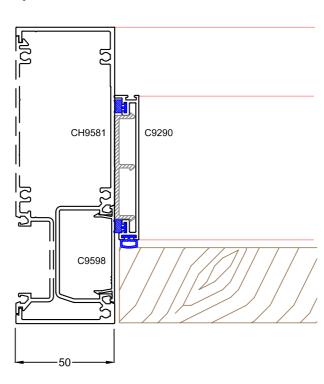
NOTE: Fixedlight detail below Sash, structural glaze into Rebated Jamb



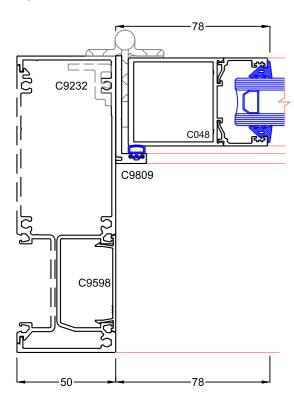
Open OUT Door & 45 door stop



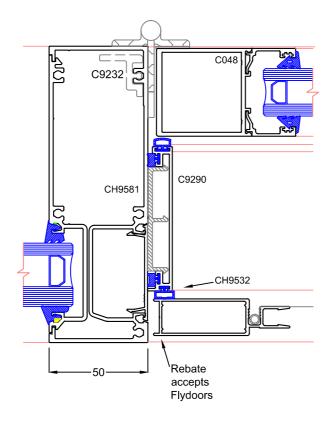
Open OUT Timber Door



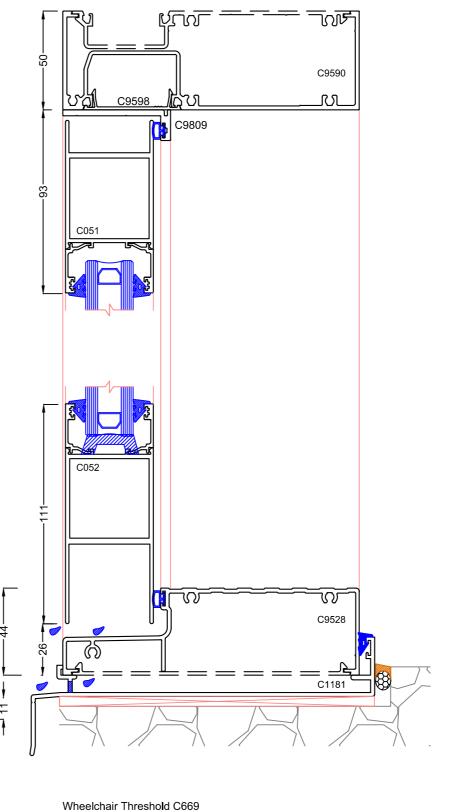
Open IN Door

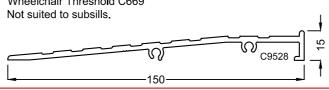


Open IN Door with conceal fix on door stop



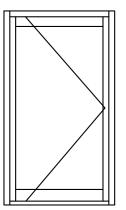
Open OUT Door





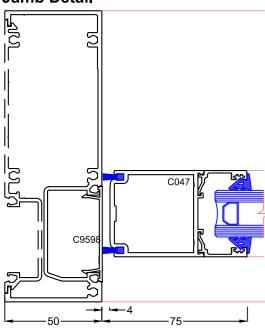


Pivot Door

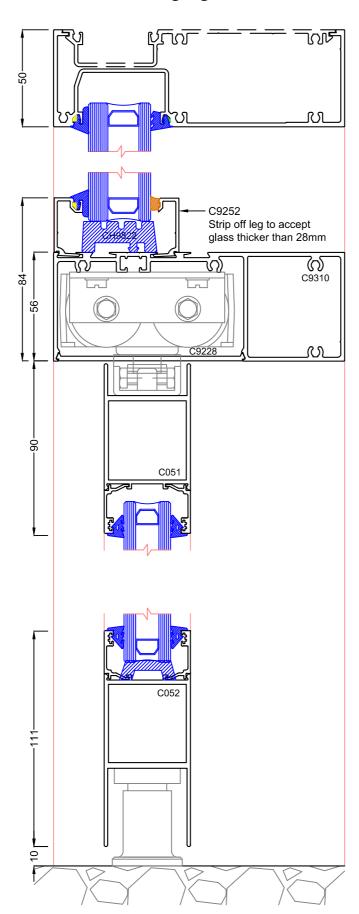


Note: Maximum door height 2700mm Maximum Panel width 1000mm Pivot point usually 100mm

Jamb Detail

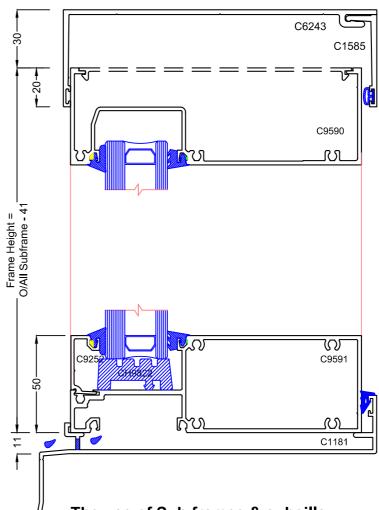


Pivot Door & Highlight



One Piece Sub Head (50 deep)

Typical detail for installation from outside



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 is sealed during installation of the subsill & contains water within the subsill. Without this, water would run to the ends of the subsill & leak back into the building.

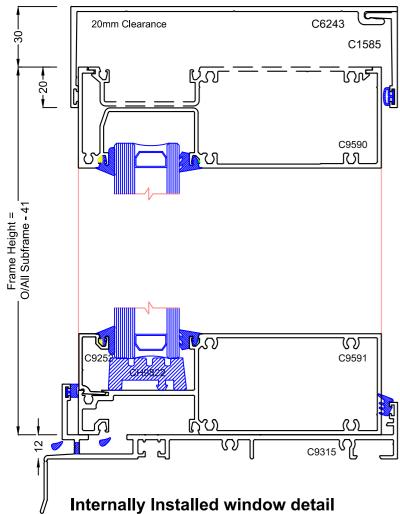
Sub heads are used to allow for either vertical movement or as a more efficient means of installation, especially in above ground installations where it might be desirable to install frames from inside.

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 & subframes are especially useful in achieving this.



Two Part Sub Head & Subsill



This detail depicts a 2 part sub head & unique subsill designed for internal frame installation.

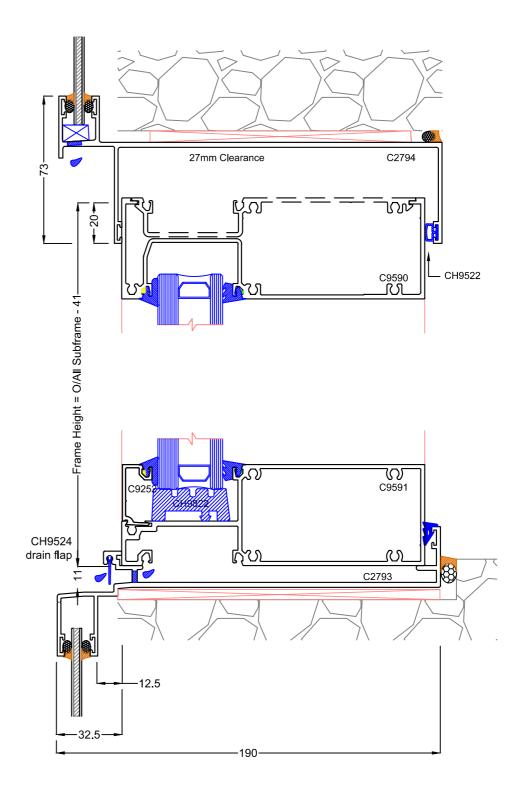
With the sub head & subsill fitted, the frame has an external rebate which aids the installation of frames from inside.

The frame is angled into the subsill first where the external rebate gives it a positive alignment, & is then straightened to vertical & the sub head cover fitted to captivate the head.

Depending on the application this detail can be used with a sub jamb as well.

Spandrel Sub Head & Subsill

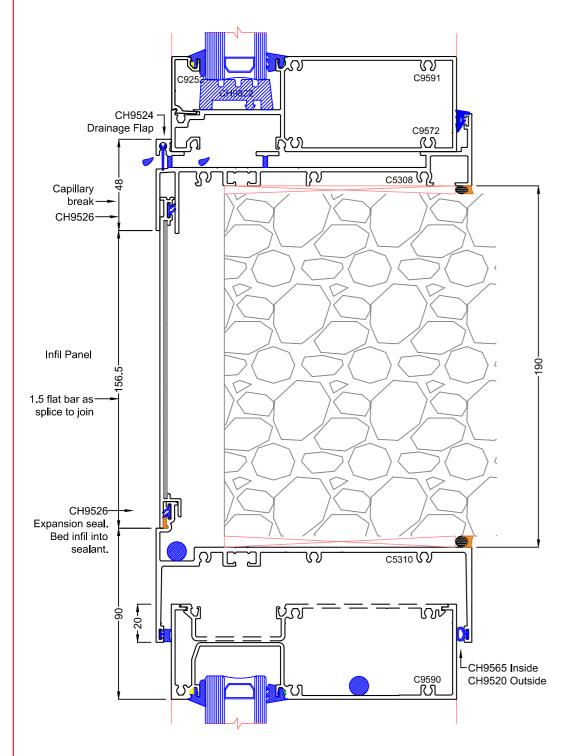
Spandrels areas above or below frames can be captured by the Spandrel sub frames, especially sheet or composite panels.





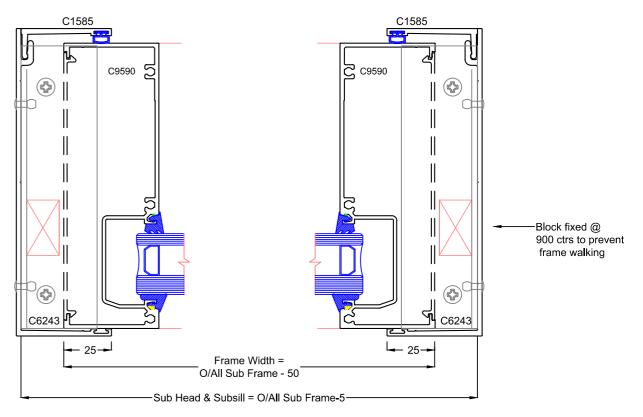
Spandrel Infil Sub Head & Subsill

Used in a similar manner to other spandrel sub framing, this has been especially developed to suit a specific size extruded infil to cover the face of a slab.



Two Part Sub Jamb (50 face)

Typical detail for frame installation from inside.



Sub Jamb Detail

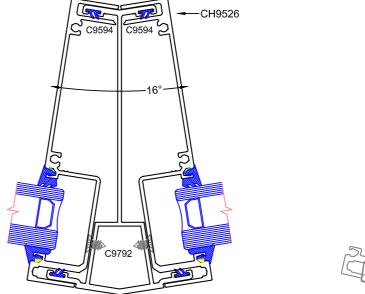
This detail depicts a 2 part sub jamb which is typically used for multi level applications & internal frame installation. The one piece sub head C9311 is usually used with this arrangement.

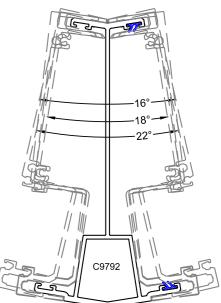
It is designed to be screw assembled & thus can be shipped to site pre-assembled & lifted to the appropriate level. Alternatively it is easy to factory pre-machine & assemble on site.

The 2 part subhead C9316 is not recommended as an alternative to this detail.

Splayed Mullion Coupler

Allows nom 16-22mm splayed angles

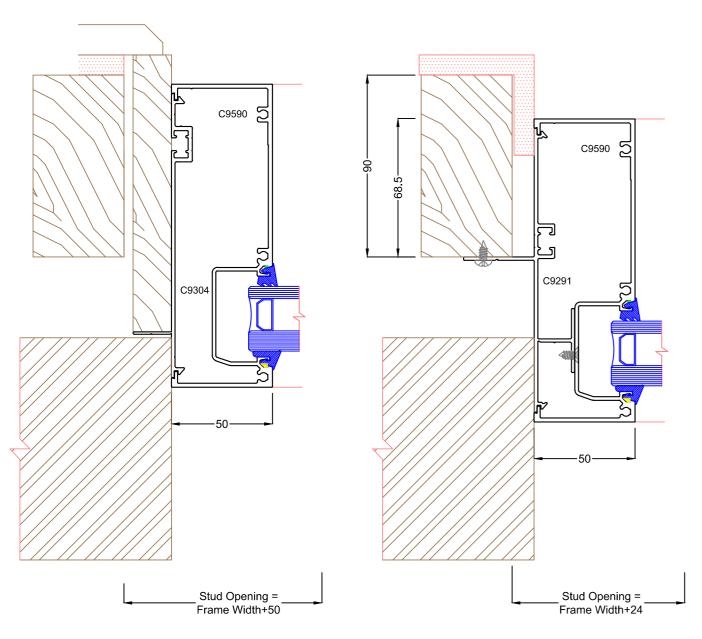






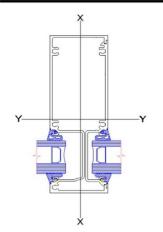
C9304 Reveal adaptor

C9291 Build In adaptor



Mullion Structural Tables

Mullion Combination: Max 150-40 mm Pocket STD C9590, C9593



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.

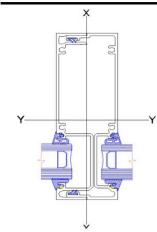
This chart is to be used as a guide only. Where Serviceability exceeds 3kPa or for more information, contact Capral.

Frame Height (mm)		Design Wind Pressure (Pa)									
2200	S	6864	5638	4856	4335	3983	3754	3623	3579		
	U	6864	5638	4856	4335	3983	3754	3623	3579		
2400	S	5688	4651	3984	3531	3215	2996	2851	2767		
	U	5688	4651	3984	3531	3215	2996	2851	2767		
2600	S	4559	3728	3191	2826	2568	2386	2258	2173		
	U	4789	3903	3328	2934	2654	2453	2311	2215		
2800	S	3631	2960	2524	2224	2011	1855	1743	1663		
2000	U	4086	3321	2822	2478	2230	2049	1916	1820		
2000	S	2939	2390	2032	1784	1606	1474	1376	1304		
3000	U	3525	2859	2424	2121	1901	1738	1616	1525		
2022	S	2413	1959	1661	1454	1304	1192	1108	1044		
3200	U	3071	2487	2104	1836	1640	1494	1383	1298		
3400	s	2006	1625	1376	1201	1074	979	906	850		
3400	U	2699	2182	1843	1604	1430	1299	1198	1120		
0000	S	1686	1364	1153	1004	896	814	751	702		
3600	U	2389	1930	1627	1414	1258	1139	1048	976		
3800	S	1431	1156	976	849	755	685	630			
3600	U	2129	1718	1447	1255	1115	1008	924			
4000	S	1225	989	833	724	643					
4000	U	1909	1539	1294	1122	995					
4000	S	1056	852	717	622						
4200	U	1720	1386	1165	1008						
4400	S	917	739	622							
4400	U	1558	1254	1053							
4600	S	802	646								
4600	U	1417	1140								
4000	S	705									
4800	U	1294									
	S	623									
5000	U	1186									
Mullion Centres (mm)		800	1000	1200	1400	1600	1800	2000	2200		



Mullion Structural Tables

Mullion Combination: Max 150-40 mm Pocket Split C9594, C9595



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

Note the following:

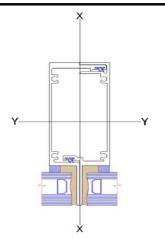
- Maximum Stress = 110Mpa
- Serviceability based on Span/250
- Italics indicate where Serviceability is limited by Ulltimate.

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	9814	8096	7010	6293	5816	5511	5340	5285	
2200	U	10123	8314	7162	6393	5874	5536	5343	5278	
2400	S	7494	6151	5292	4714	4315	4043	3865	3764	
2400	U	8367	6842	5860	5193	4729	4408	4194	4070	
	S	5855	4787	4098	3629	3298	3064	2900	2791	
2600	U	7027	5726	4884	4305	3894	3600	3391	3250	
2000	S	4663	3801	3242	2857	2582	2383	2238	2135	
2800	U	5980	4861	4131	3627	3264	2999	2804	2664	
0000	S	3775	3069	2610	2291	2062	1893	1768	1675	
3000	U	5148	4175	3539	3097	2776	2538	2360	2227	
0000	S	3100	2515	2133	1867	1675	1531	1423	1341	
3200	U	4474	3623	3064	2674	2390	2177	2015	1891	
0.400	S	2577	2088	1767	1543	1379	1257	1163	1091	
3400	U	3923	3172	2678	2332	2079	1888	1741	1627	
2000	S	2165	1752	1480	1290	1151	1045	965	902	
3600	U	3465	2798	2359	2051	1824	1652	1519	1415	
2000	S	1837	1485	1253	1090	970	879	809	754	
3800	U	3081	2485	2093	1817	1613	1458	1338	1243	
4000	S	1573	1270	1070	929	826	747	686	638	
4000	U	2756	2221	1869	1620	1436	1296	1186	1100	
4000	S	1356	1094	921	799	709	640			
4200	U	2478	1996	1678	1453	1286	1159			
4400	S	1178	950	799	692	613				
4400	U	2239	1803	1514	1310	1158				
4600	S	1030	830	697	604					
4600	U	2032	1635	1372	1186					
4800	S	906	729	612						
	U	1852	1489	1249						
E000	S	801	644							
5000	U	1693	1361							
Mullion Centres (mm)		800	1000	1200	1400	1600	1800	2000	2200	

Mullion Structural Tables

Mullion Combination: Max 150-40 Pocket Struct C9596, C9597



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	4938	4056	3493	3118	2865	2701	2606	2575	
	U	4938	4056	3493	3118	2865	2701	2606	2575	
0400	S	3956	3247	2793	2488	2278	2134	2040	1987	
2400	U	4095	3348	2868	2541	2314	2157	2052	1992	
2600	S	3090	2527	2163	1915	1741	1617	1531	1473	
2000	U	3450	2811	2397	2113	1912	1767	1665	1596	
2800	s	2461	2006	1711	1508	1363	1258	1181	1127	
2000	U	2945	2393	2034	1786	1607	1477	1381	1312	
3000	S	1992	1620	1378	1209	1088	999	933	884	
3000	U	2542	2062	1748	1529	1371	1254	1165	1100	
3200	s	1636	1328	1126	986	884	808	751	708	
3200	U	2216	1795	1518	1325	1184	1078	998	937	
3400	s	1360	1102	933	814	728	663	614		
3400	U	1949	1576	1330	1158	1033	938	865		
3600	s	1143	925	781	681	607				
3000	U	1726	1394	1175	1022	909				
3800	s	970	784	661						
3000	U	1539	1242	1046						
4000	S	830	670							
4000	U	1380	1113							
4200	S	716								
	U	1245								
4400	S	622								
4400	U	1128								
Mullion Centres (mm)		800	1000	1200	1400	1600	1800	2000	2200	



Max[™]150 x 50mm FRONT DOUBLE GLAZED - 40mm Pocket Max Framing Systems: M150FDG40 - 17 Glazing Methodology

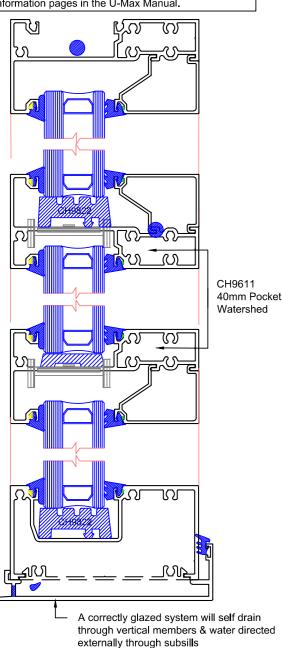
This system has been designed to self drain within the system via a patented watershed component in transoms, traditionally the area most prone to leakage in commercial systems.

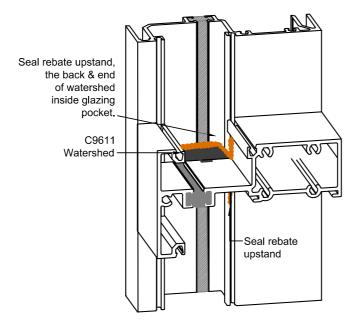
Most other commercial systems attempt to deal with drainage through ugly external drain slots or rely on silicone to stop

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:

a. Ends of horizontal frame joints are end buttered prior to assembly.

- b. Fit the watershed device while assembling transoms
- c. Seal into the captive groove on the transom's vertical rebate. This is done on top & below the transom.
- d. 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

Site Preparation of the glazing rebate:

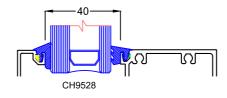
- Clean the glazing rebate & wipe glazing grooves
- Check the watershed devices are in place & overseal where
- Place setting blocks at 1/4 points. Setting blocks should be no closer than 150mm from the edge of glass in normal conditions.

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

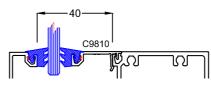
Wedge glazing charts for Max Framing - 40mm pocket

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



Spandrel Glazing

Note: C9810 Spandrel adaptor achieves a 19mm pocket





CH9505 1mm wedge SANT 3mm wedge SANT Black backing



CH9506

CH9507 CH9508 5mm wedge SANT 6mn wedge SANT Green backing Red backing



CH9509 7mm wedge SANT Blue backing



CH9510 9mm wedge SANT Purple backing

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
Max Spar						