

U-Max™ THERMAL BREAK 150 x 60mm FRONT DOUBLE GLAZED - 34mm Pocket
U-Max Framing Systems: U150FDG - 1

U-MAX™ 150 Front Double Glazed - 34mm Pocket



FEATURES:

- 150mm Frame Depth
- 60mm Sight Line generally
- Optional Low profile 44mm Outer Frame
- Stack joint option for low rise curtain walls
- Glass Plane-Front
- Compatible with 150mm Centre & Offset Framing allowing glass in different planes
- Compatible with 150 Front Capped
- Designed for Thermal Break Applications
- Can be offered Non-broken
- Accepts 24mm to 28mm IGU's
- Structural Glazed cap infill either vertically or horizontally
- 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
- Tilt & Turn Sash
- Multi Locking Awning & Casement options
- U-Max Sliding door compatible
- Hinged, Pivot, Sliding & Multi sliding door tracks
- 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:

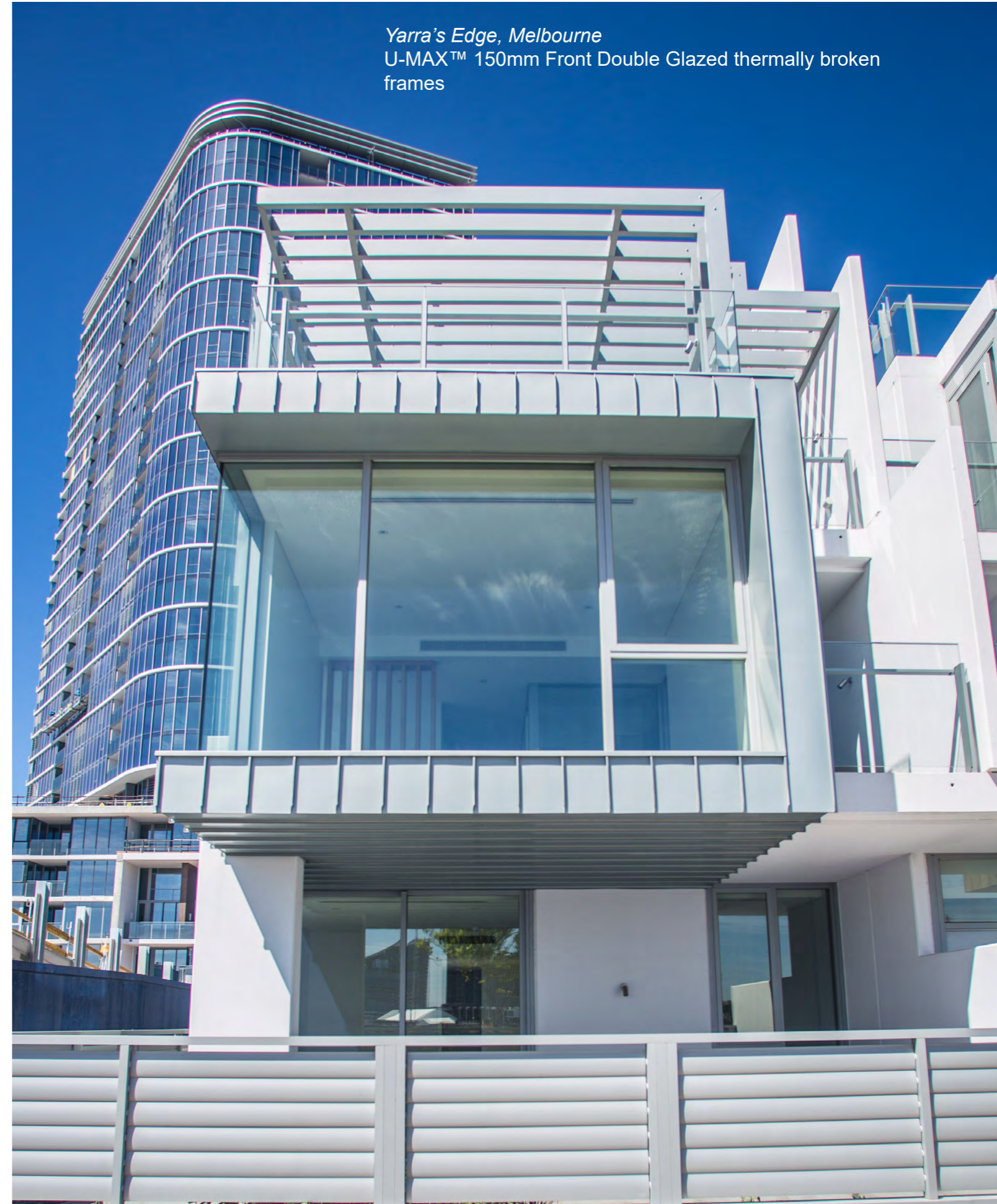
- Shopfront, Ribbon Windows or Punched Openings
- Generally Single Span, limited to 6.5 metre high applications
- Stack joint detail for low rise curtain walls

This system may also be ordered without polyurethane filled cavities for non-thermal applications & is completely compatible with other Max framing systems

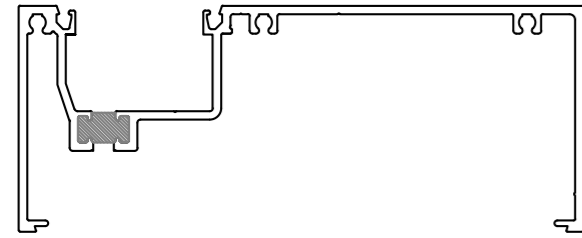
LIMITATION:

May be 2 sided structurally glazed. Not recommended for 4 sided structural glazed

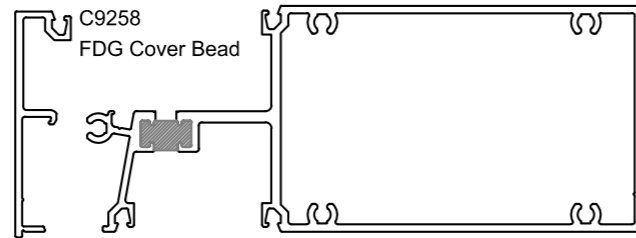
Yarra's Edge, Melbourne
U-MAX™ 150mm Front Double Glazed thermally broken frames



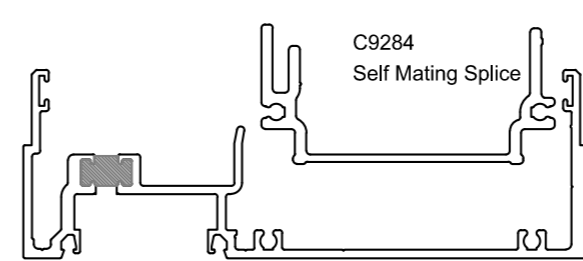
U-Max™ THERMAL BREAK 150 x 60mm FRONT DOUBLE GLAZED - 34mm Pocket
U-Max Framing Systems: U150FDG - 2
Extrusion ID



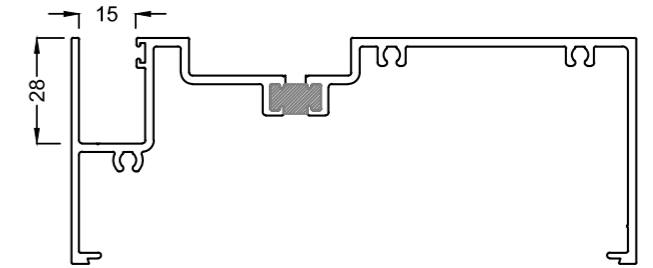
C9270U
150 x 60 FDG Frame



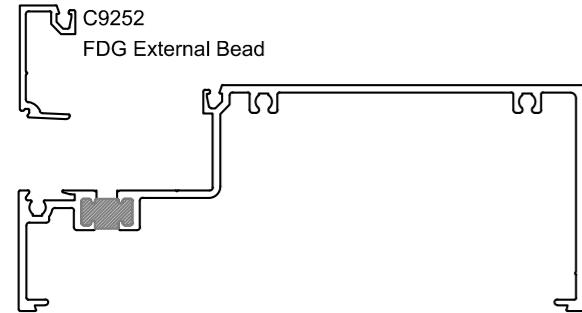
C9258
FDG Cover Bead



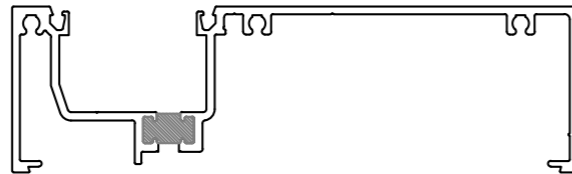
C9284
Self Mating Splice



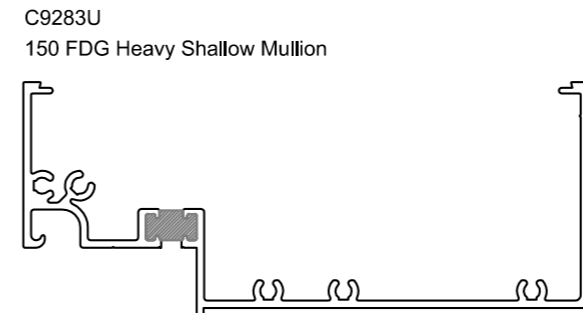
C5311U
Spanel Panel 150 x 60 Head / Sill



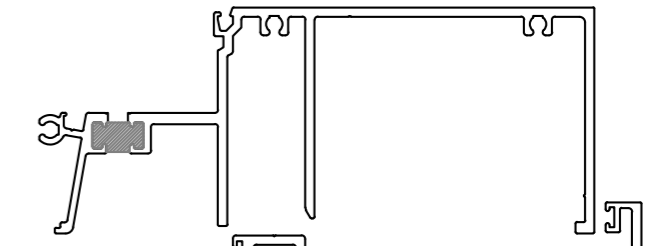
C9252
FDG External Bead



C9279U
150 x 44 FDG Frame

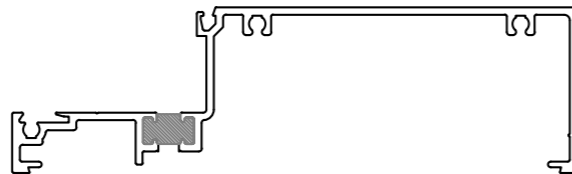


C9283U
150 FDG Heavy Shallow Mullion



C9285U
150 FDG Stack Sill

C9271U
150 x 60 FDG External Head/Sill

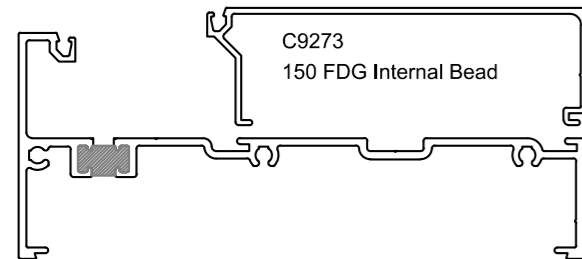


C9280U
150 x 44 FDG External Head/Sill

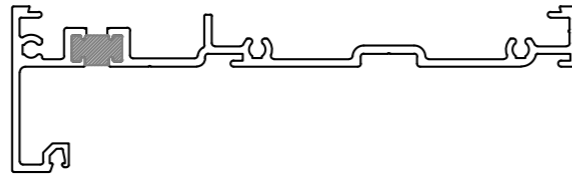
C9298U
Hinge Head 150 x 60



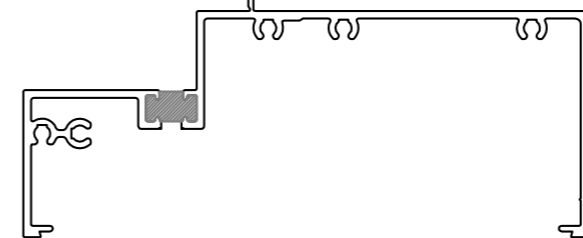
C9286U
150 FDG Stack Head



C9273
150 FDG Internal Bead



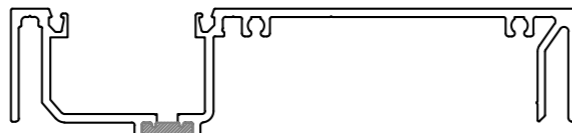
C9281U
150 FDG Internal Head



C9299U
Winder Sill 150 x 60

C9287
150 FDG Stack Joint Splice

C9272U
150 x 60 FDG Internal Head/Sill

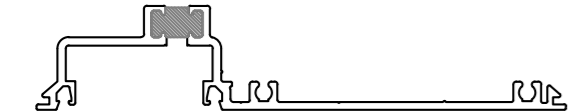


C9277U
150 FDG Deep Mullion

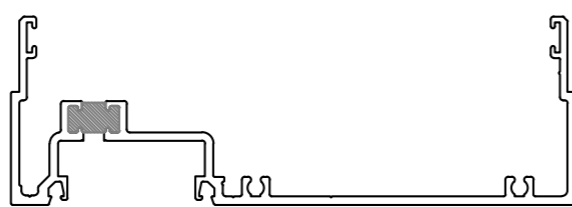


C9331
100mm S/M Plain Mullion or
150mm S/M Blind Mullion

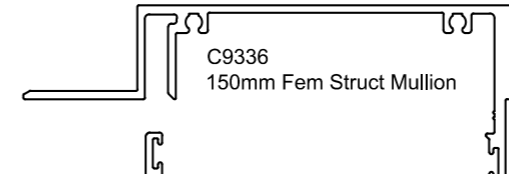
C9477
Rebate Adaptor



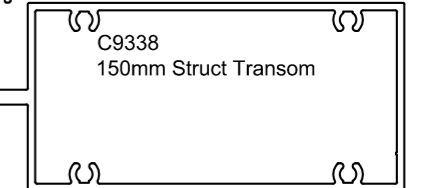
C9274U
150 FDG Pocketed Filler



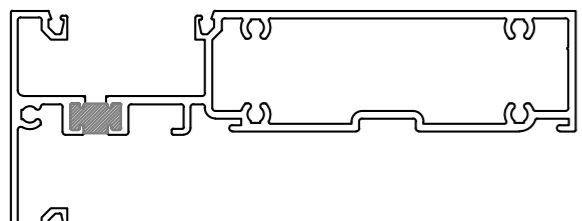
C9278U
150 FDG Shallow Mullion



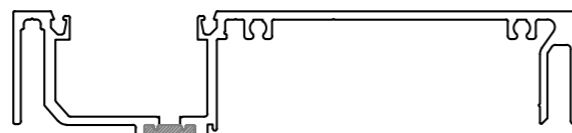
C9336
150mm Fem Struct Mullion



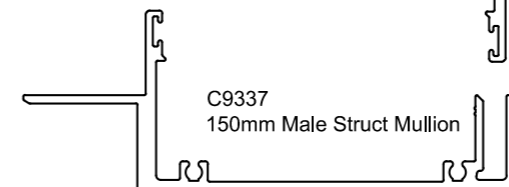
C9338
150mm Struct Transom



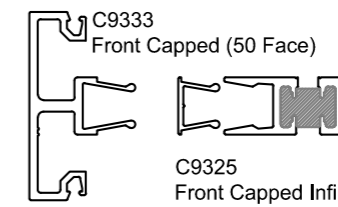
C9275U
150 x 60 FDG Internal Transom



C9282U
150 FDG Heavy Deep Mullion

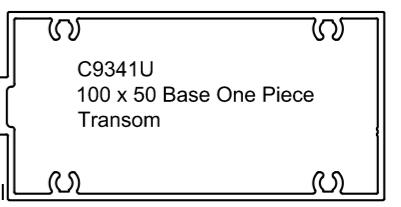


C9337
150mm Male Struct Mullion



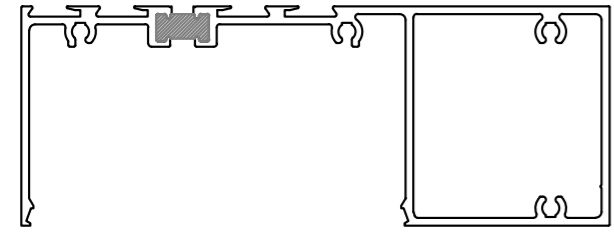
C9333
Front Capped (50 Face)

C9325
Front Capped Infill

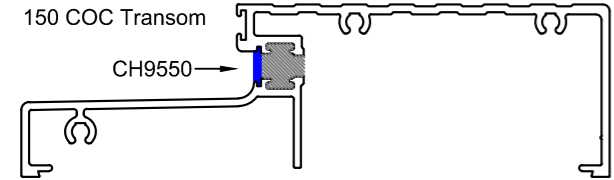


C9341U
100 x 50 Base One Piece
Transom

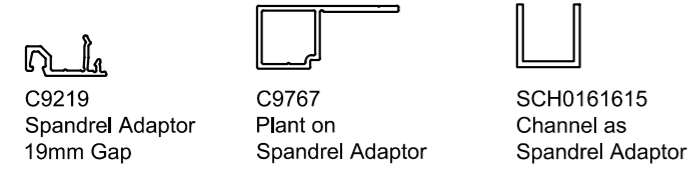
U-Max™ THERMAL BREAK 150 x 60mm FRONT DOUBLE GLAZED - 34mm Pocket
U-Max Framing Systems: U150FDG - 3
Extrusion ID



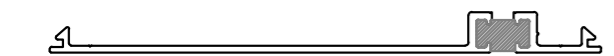
C9310U
150 COC Transom



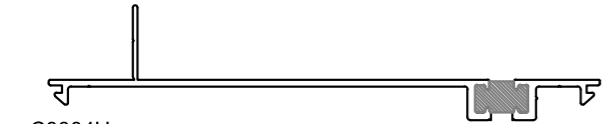
C9314U
Threshold Open OUT



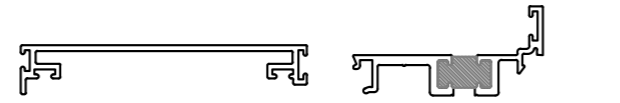
C9219 Spandrel Adaptor 19mm Gap
C9767 Plant on Spandrel Adaptor
SCH0161615 Channel as Spandrel Adaptor



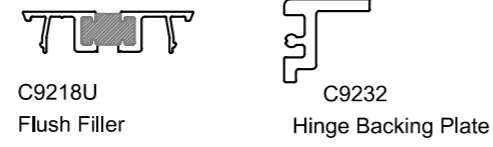
C9303U
150 Flat Filler



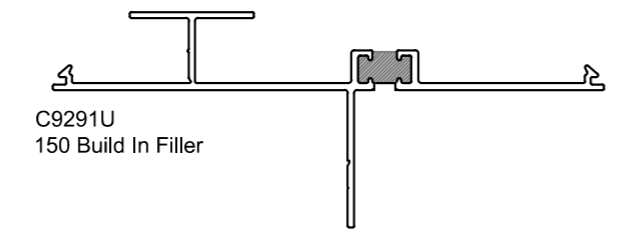
C9304U
150 Nailing Fin Adaptor



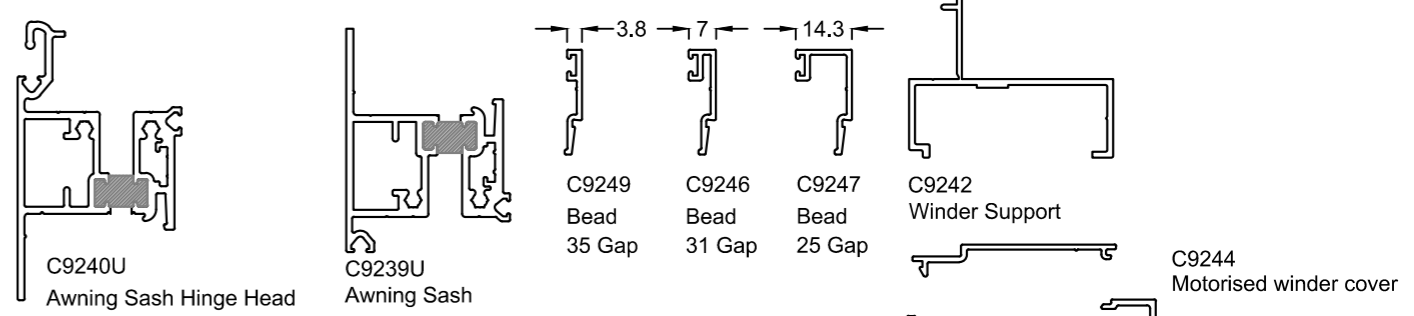
C9290 Plant On Door Stop
C9265U FDG Open OUT Door Stop



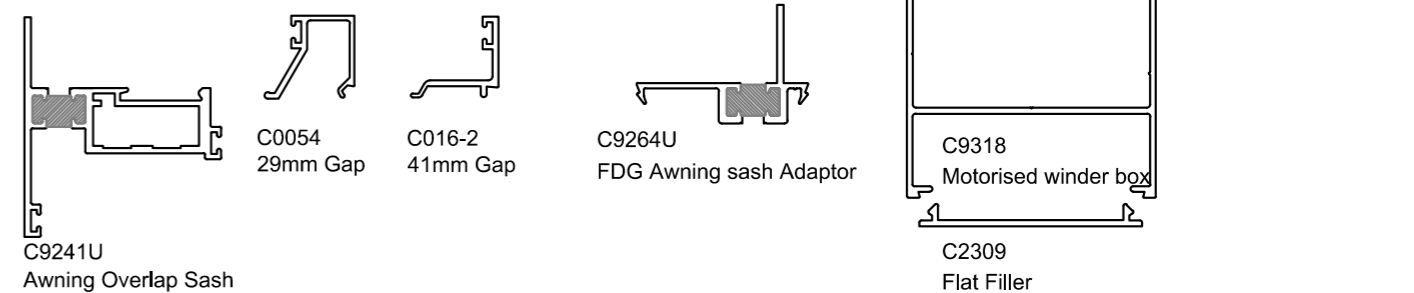
C9218U Flush Filler
C9232 Hinge Backing Plate



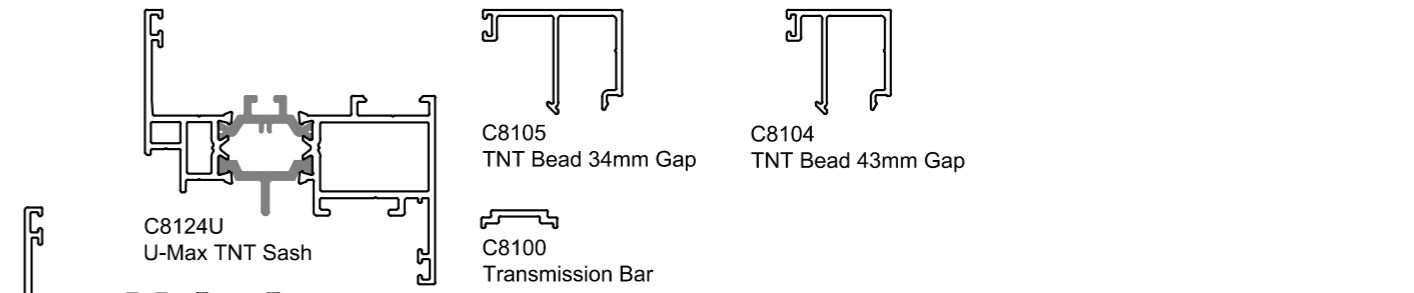
C9291U
150 Build In Filler



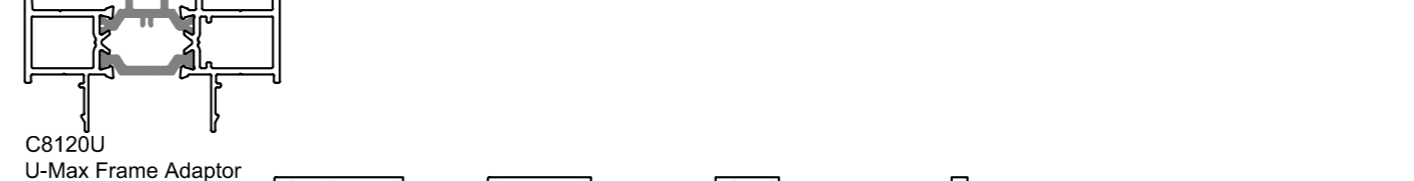
C9240U Awning Sash Hinge Head
C9239U Awning Sash
C9249 Bead 35 Gap
C9246 Bead 31 Gap
C9247 Bead 25 Gap
C9242 Winder Support
C9244 Motorised winder cover



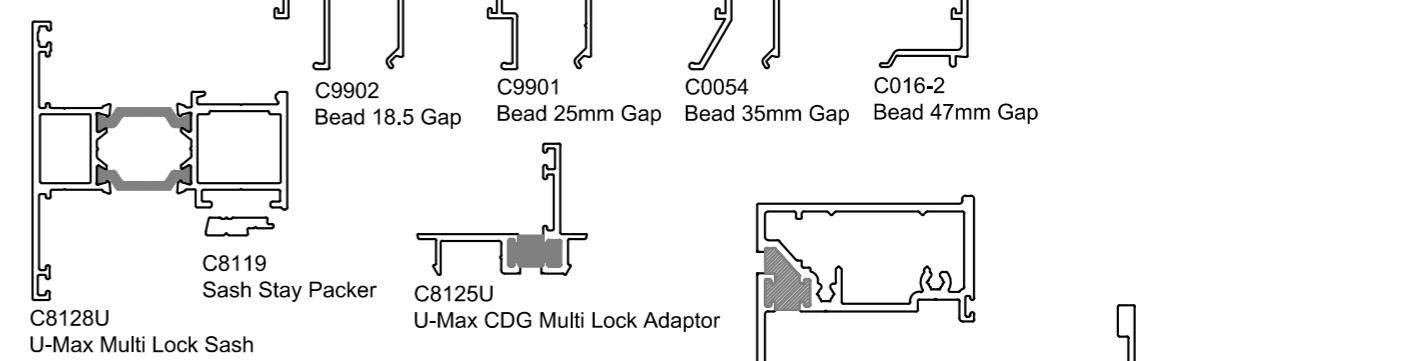
C9241U Awning Overlap Sash
C0054 29mm Gap
C016-2 41mm Gap
C9264U FDG Awning sash Adaptor
C9318 Motorised winder box
C2309 Flat Filler



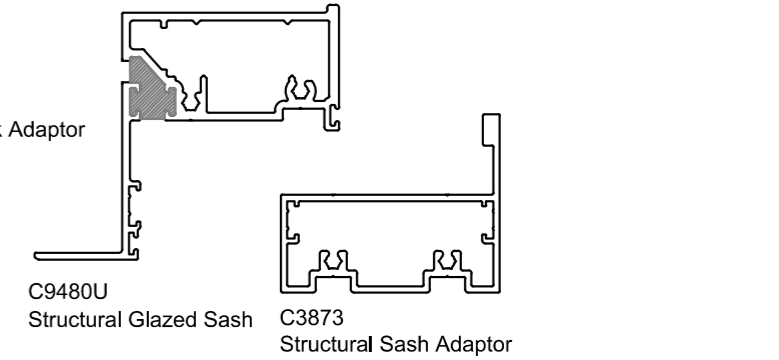
C8105 TNT Bead 34mm Gap
C8104 TNT Bead 43mm Gap
C8100 Transmission Bar



C8124U U-Max TNT Sash
C8120U U-Max Frame Adaptor
C9902 Bead 18.5 Gap
C9901 Bead 25mm Gap
C0054 Bead 35mm Gap
C016-2 Bead 47mm Gap

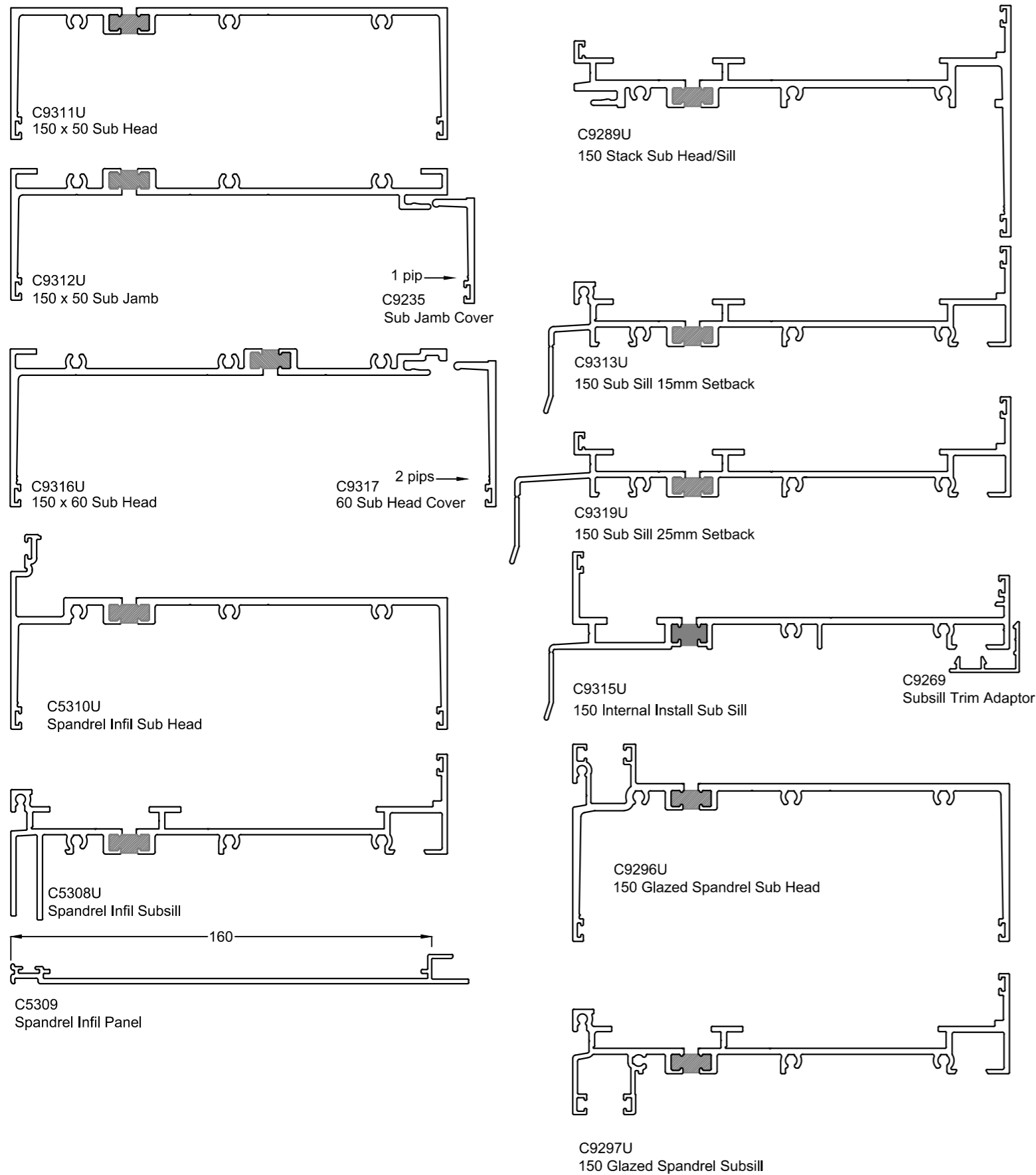


C8119 Sash Stay Packer
C8128U U-Max Multi Lock Sash
C8125U U-Max CDG Multi Lock Adaptor
C9480U Structural Glazed Sash

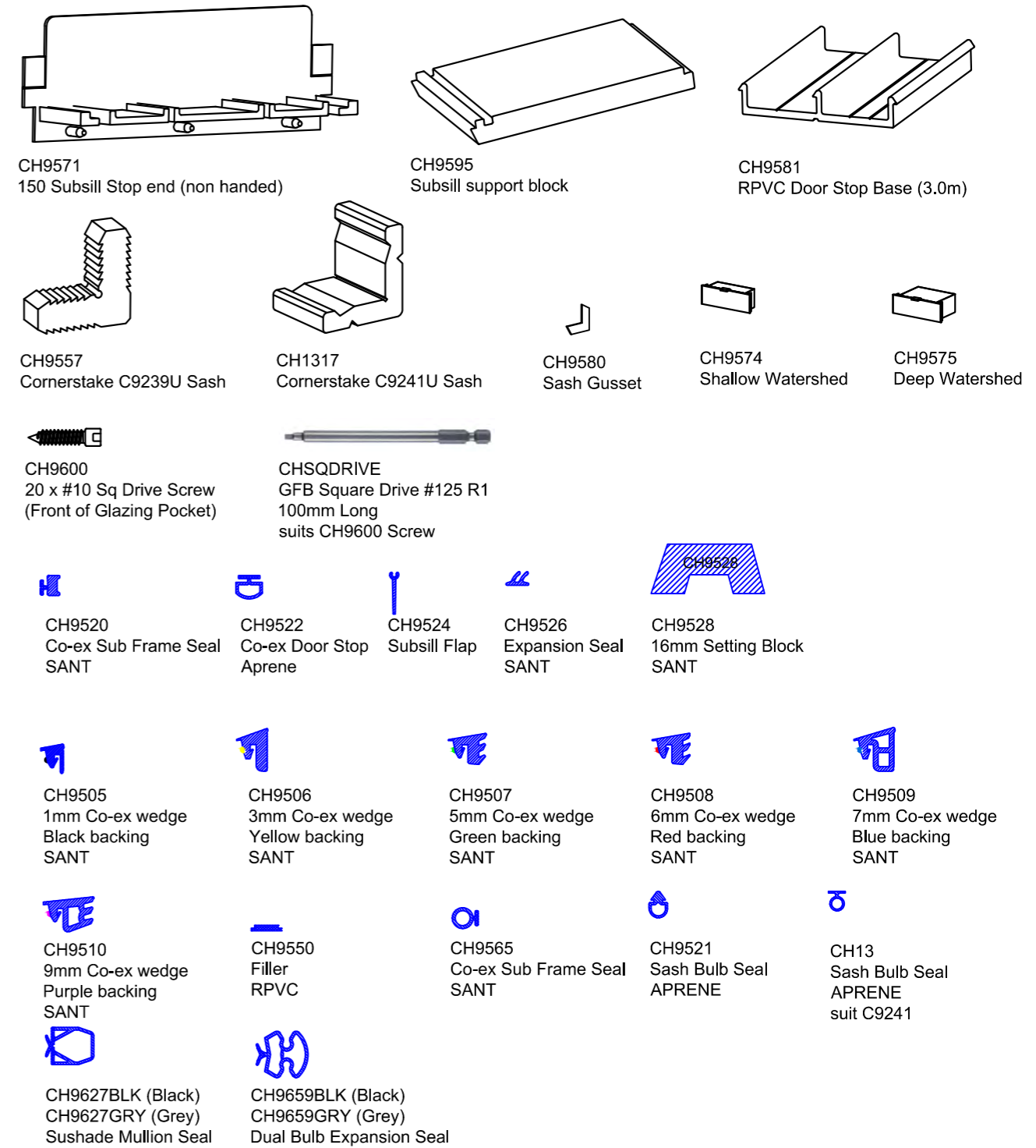


C3873 Structural Sash Adaptor

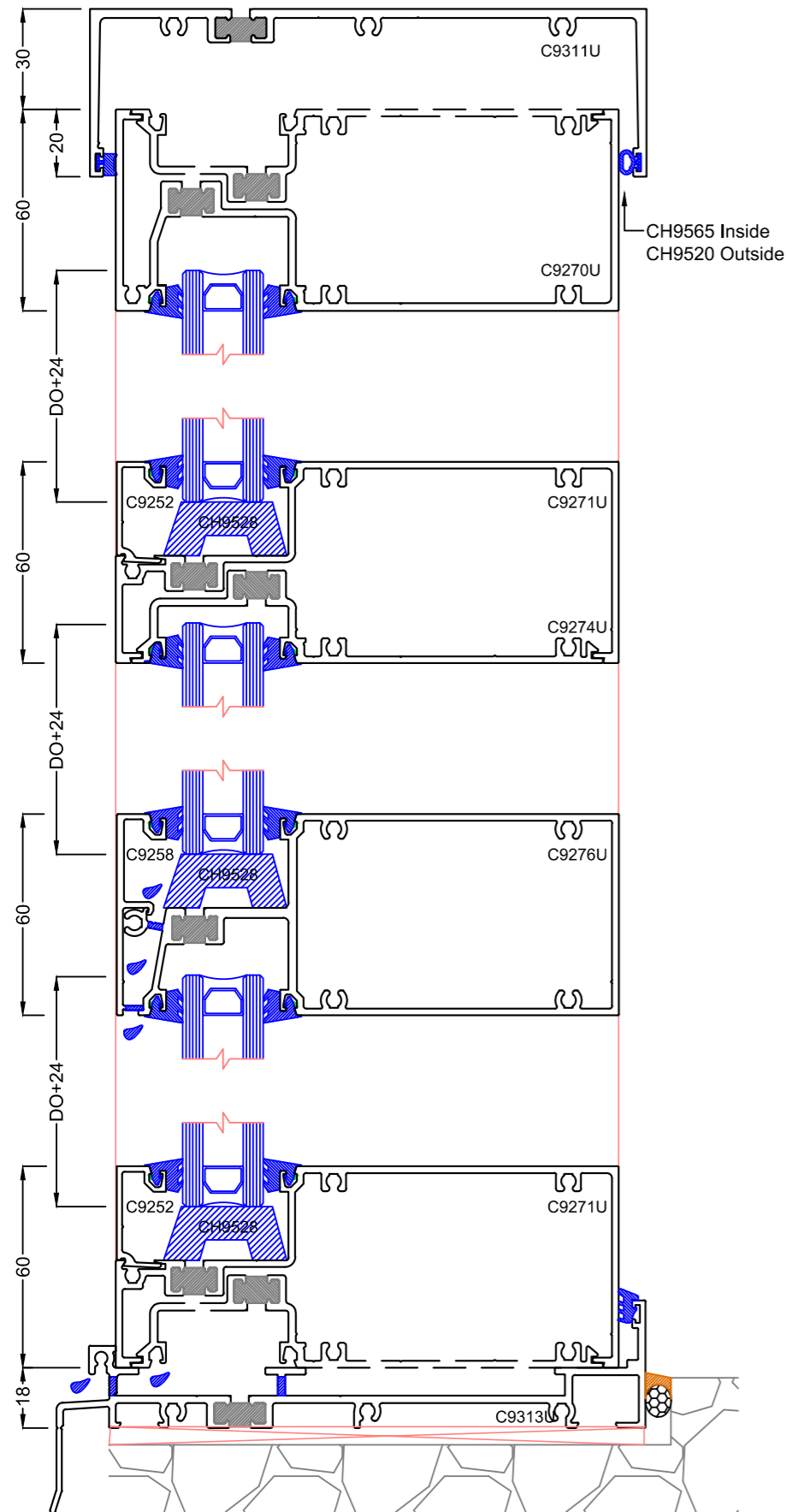
U-Max™ THERMAL BREAK 150 x 60mm FRONT DOUBLE GLAZED - 34mm Pocket
U-Max Framing Systems: U150FDG - 4
Extrusion ID



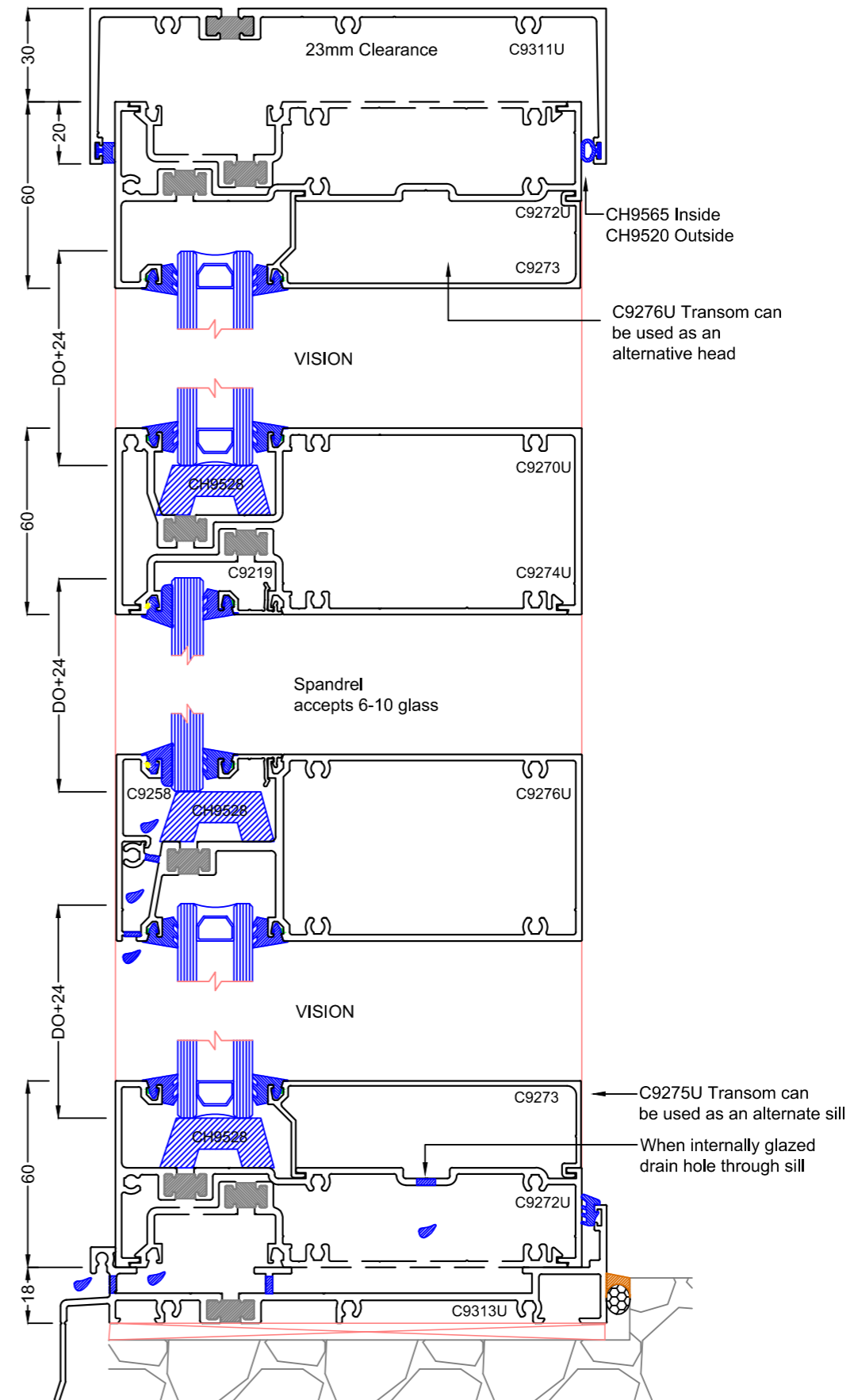
Component ID



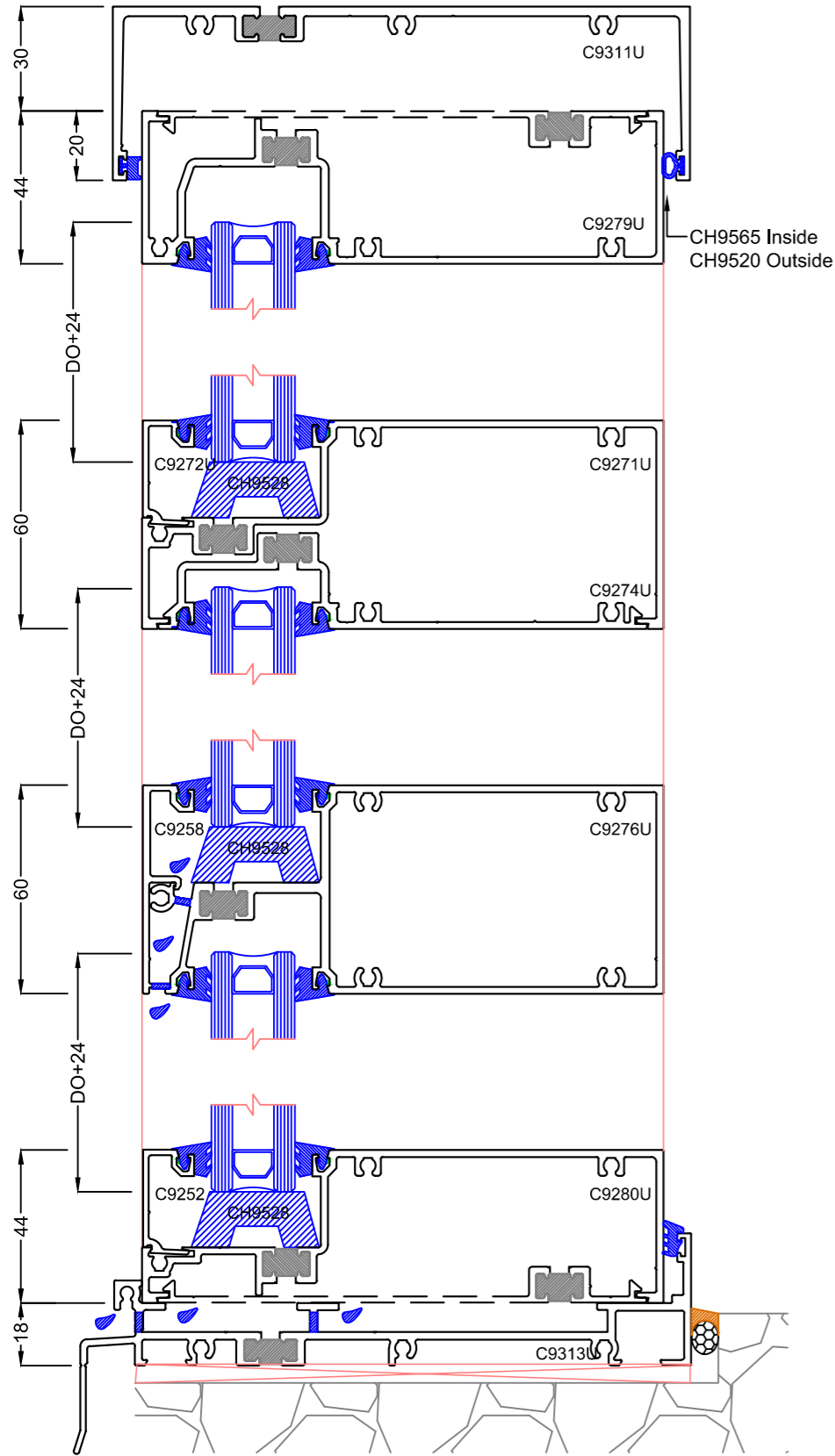
U-Max™ THERMAL BREAK 150 x 60mm FRONT DOUBLE GLAZED - 34mm Pocket
U-Max Framing Systems: U150FDG - 5
60mm Head & Sill External Glazed



60mm Head & Sill Internal Glazed Vision / Spandrel

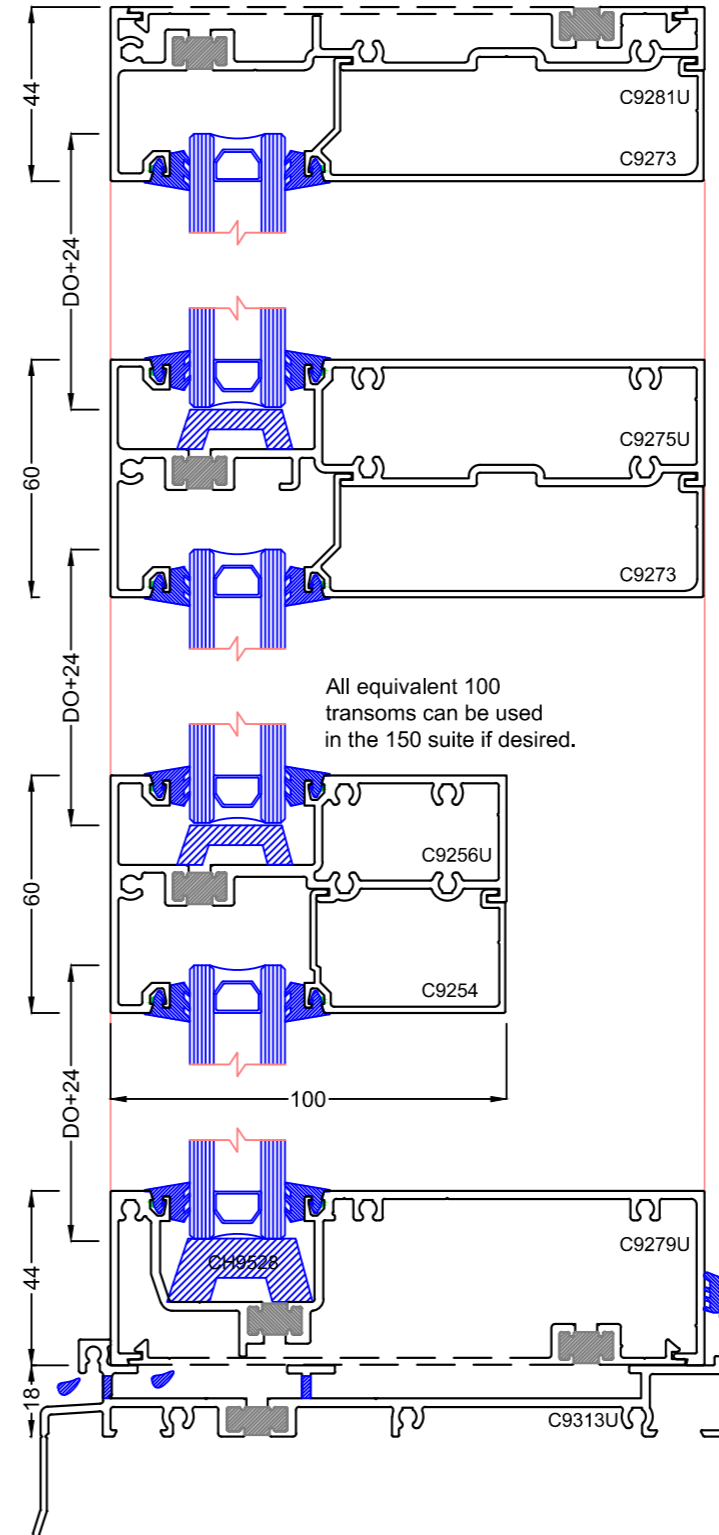


U-Max™ THERMAL BREAK 150 x 60mm FRONT DOUBLE GLAZED - 34mm Pocket
U-Max Framing Systems: U150FDG - 6
44mm Head & Sill External Glazed

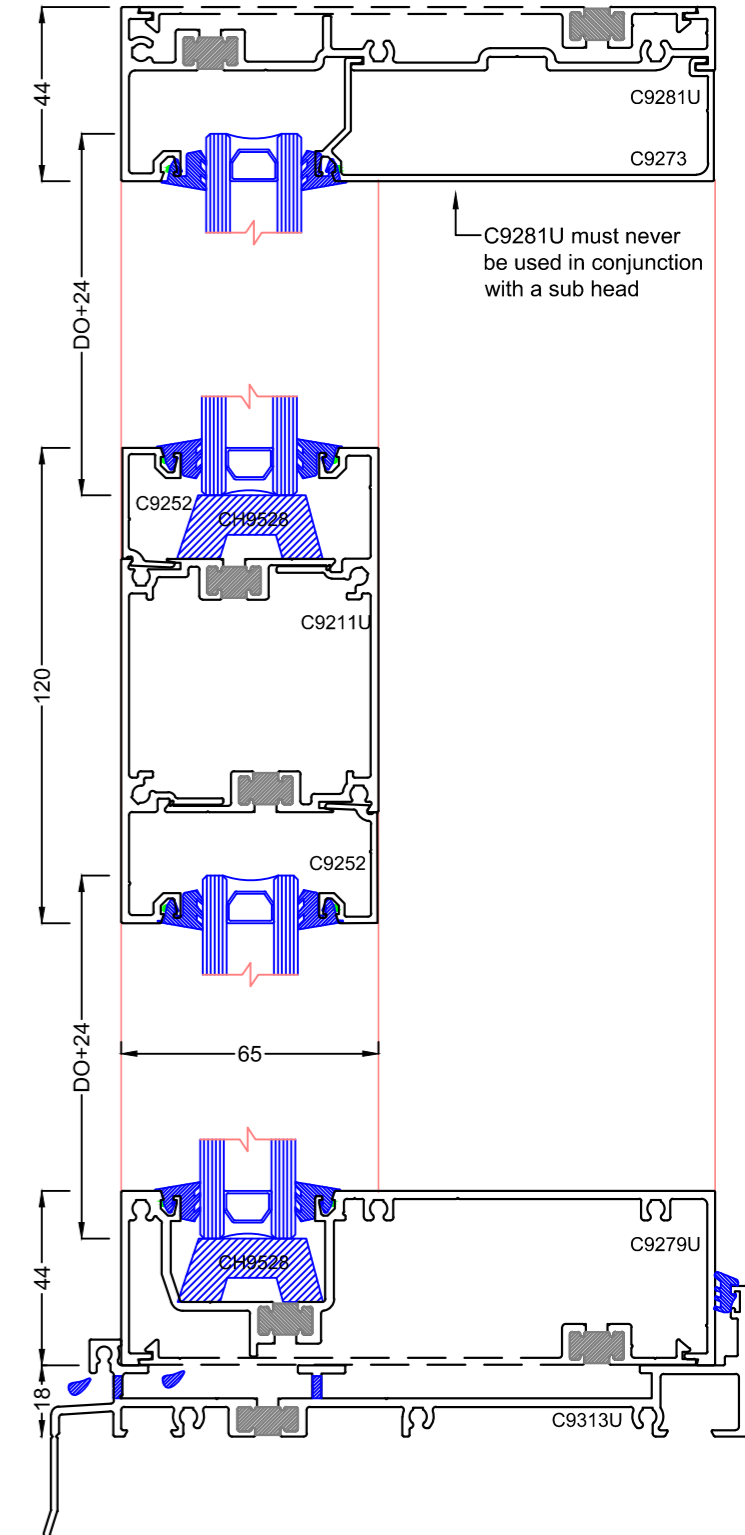


44mm Head & Sill Internal Glazed

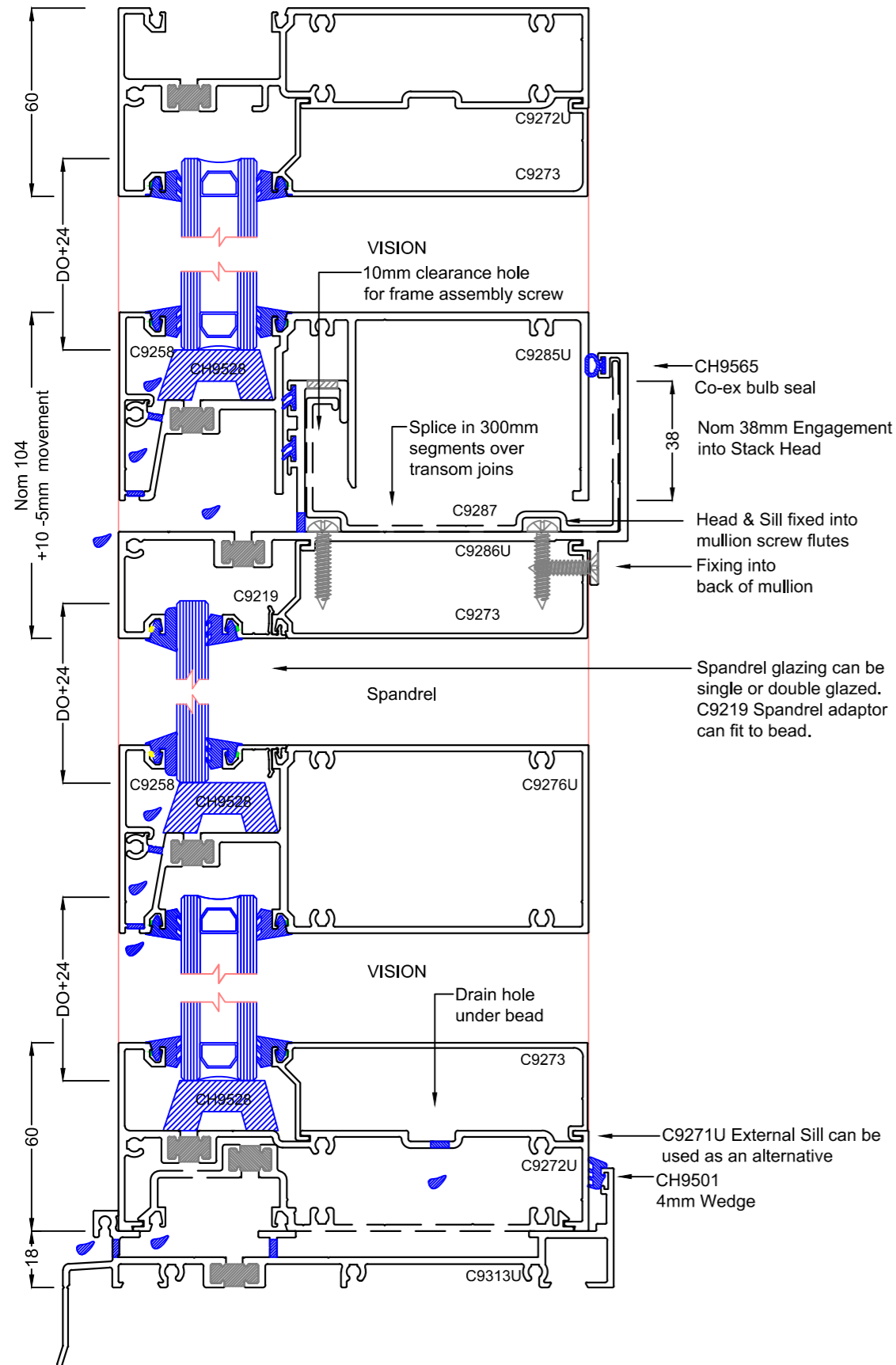
Head cannot be used in a sub head or sub sill.
In this application, bead at head & pocket at sill



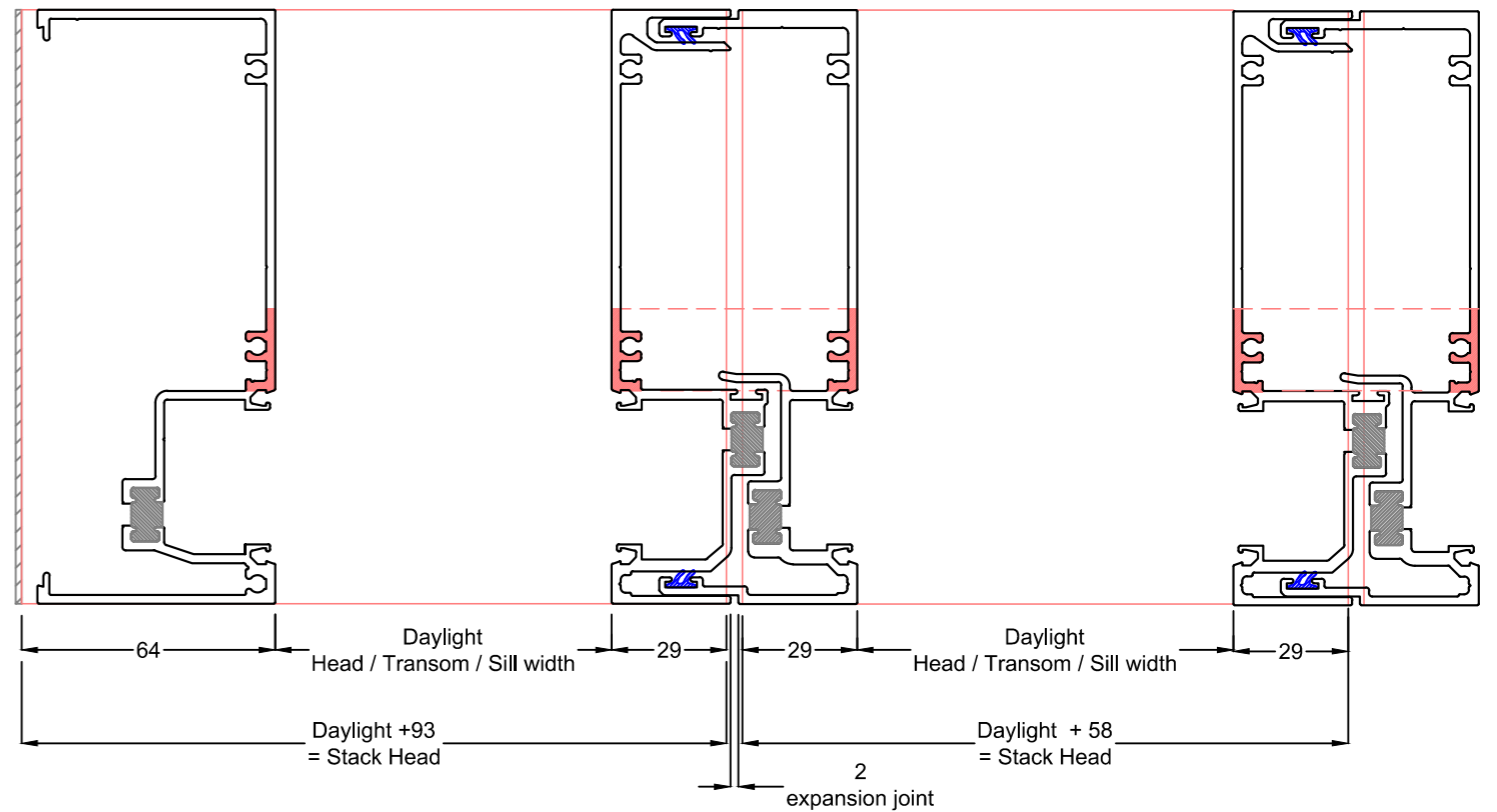
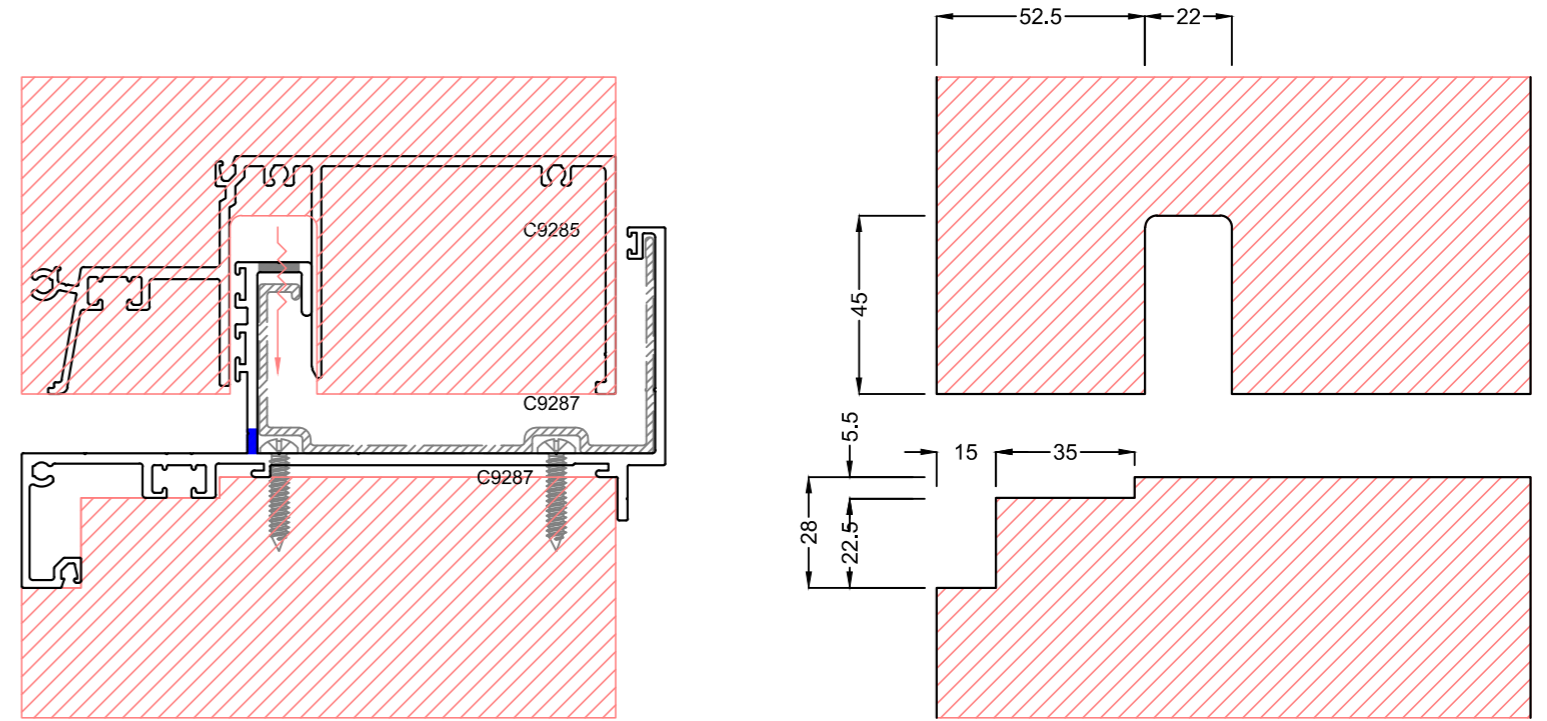
44mm Head & Sill Internal Glazed with 120mm Midrail



U-Max™ THERMAL BREAK 150 x 60mm FRONT DOUBLE GLAZED - 34mm Pocket
U-Max Framing Systems: U150FDG - 7
60mm Head & Sill with Stack Joint Vision / Spandrel



Stack Joint Machining



At Jamb's stack head runs through 4mm to allow frame above to be fitted. Screw fit flat sheet or flat bar to end of Stack Head to act as an end cap.

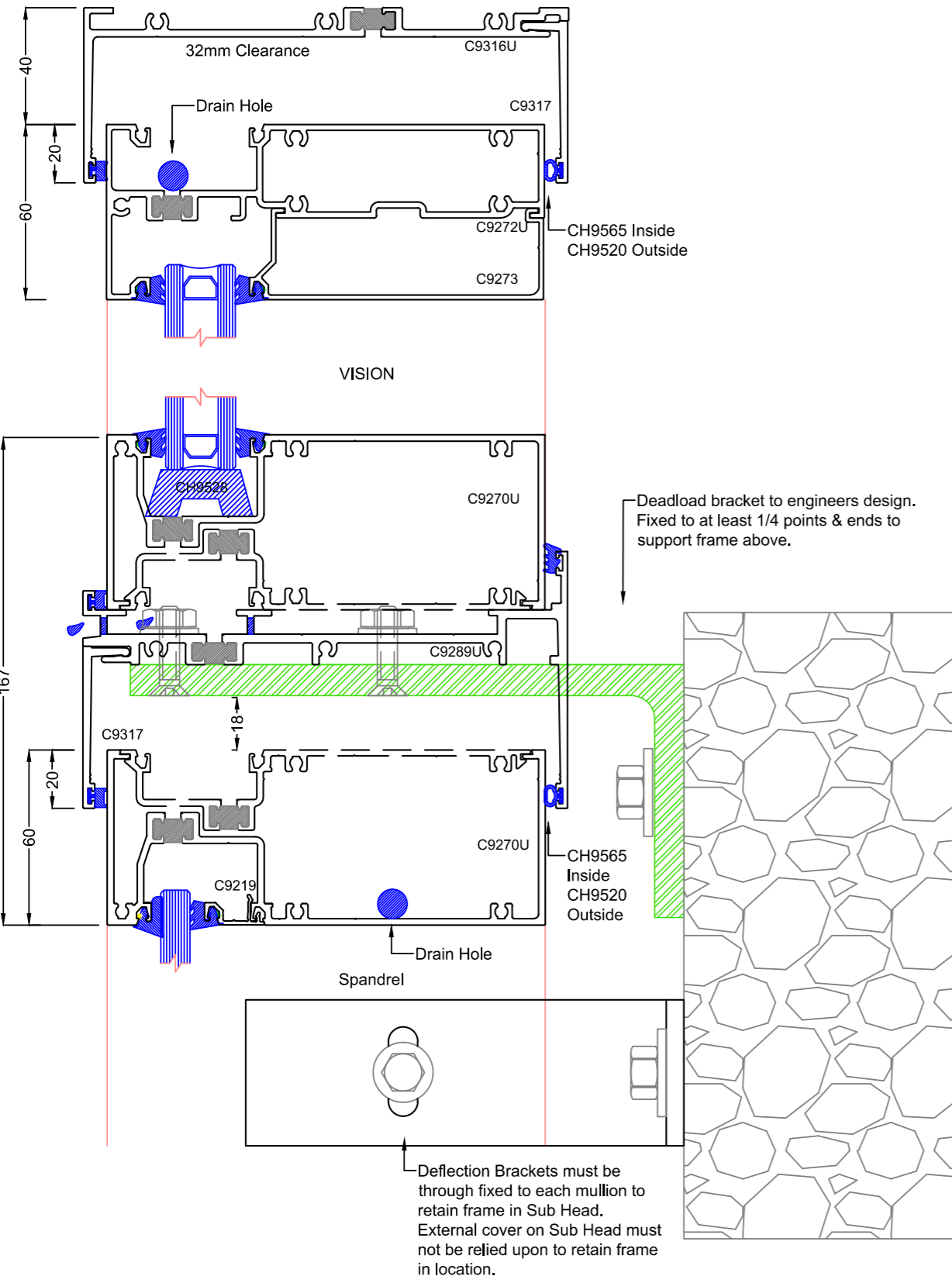
U-Max™ THERMAL BREAK 150 x 60mm FRONT DOUBLE GLAZED - 34mm Pocket

U-Max Framing Systems: U150FDG - 8

60mm 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.

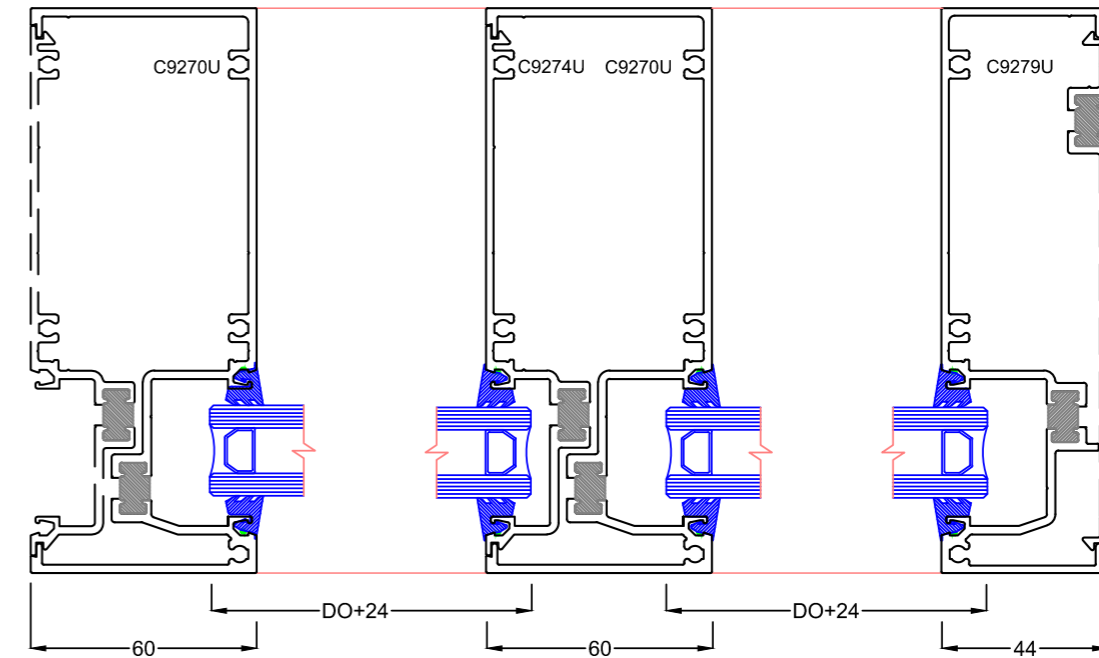
- (a) Deadload supporting bracket to engineers detail
- (b) Deflection brackets required on every mullion. The external subhead must not be relied on alone to retain the frame in location



60mm Jamb

Standard Mullion

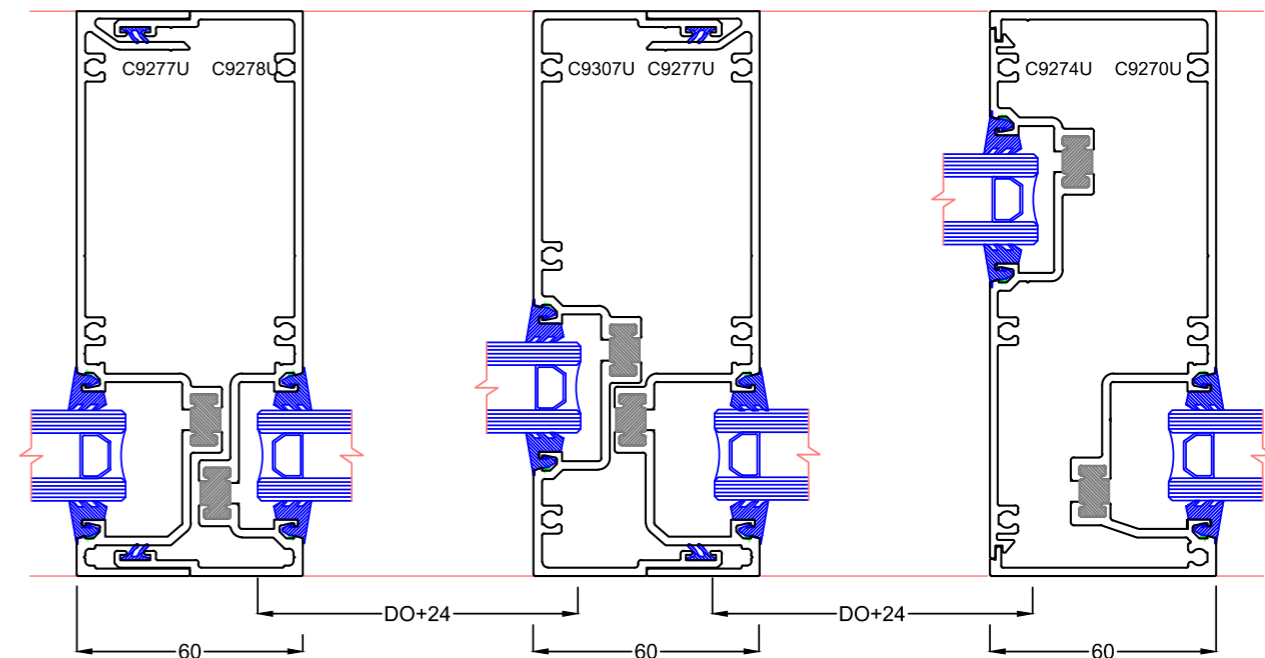
44mm Jamb



60mm Split Mullion

Front / Offset Mullion

Front / Offset Reversed

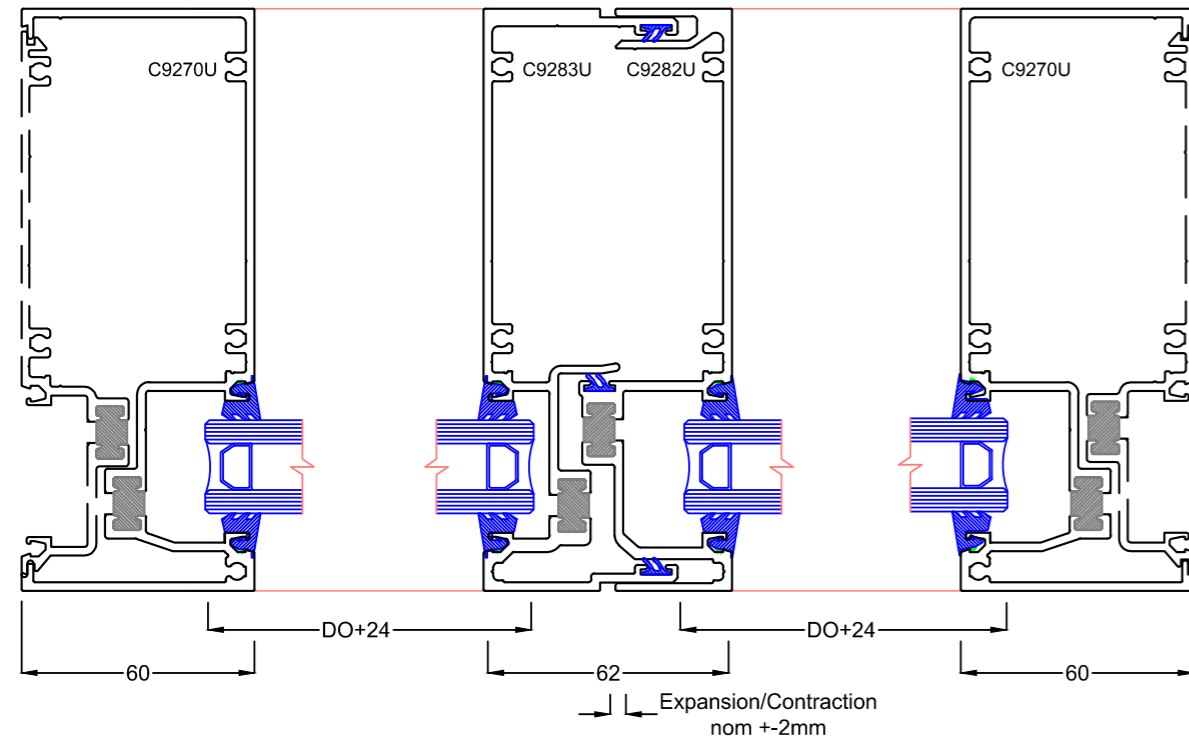


U-Max™ THERMAL BREAK 150 x 60mm FRONT DOUBLE GLAZED - 34mm Pocket

U-Max Framing Systems: U150FDG - 9

60mm Jamb

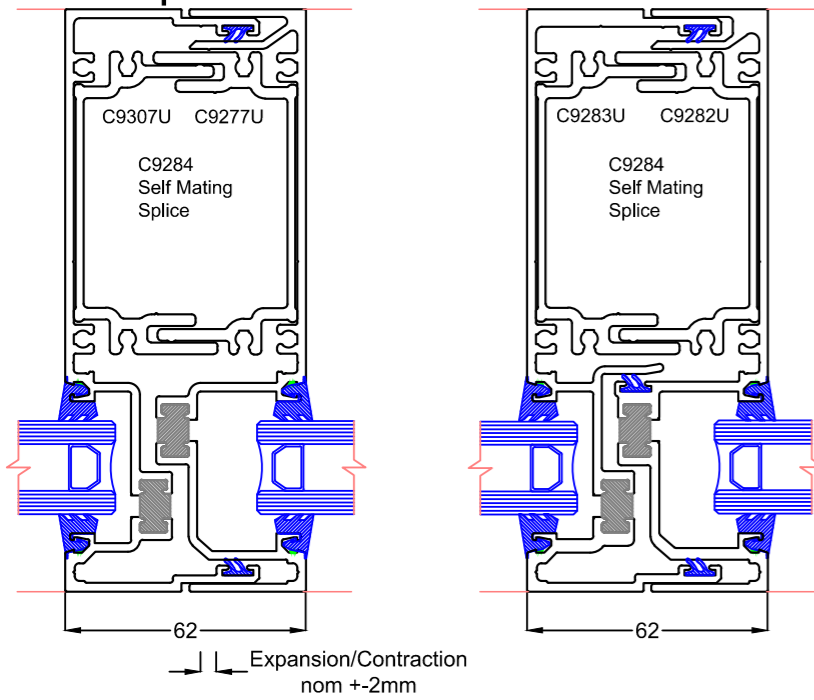
HD Split Mullion



Standard Split Mullion with splice

HD Split Mullion with splice

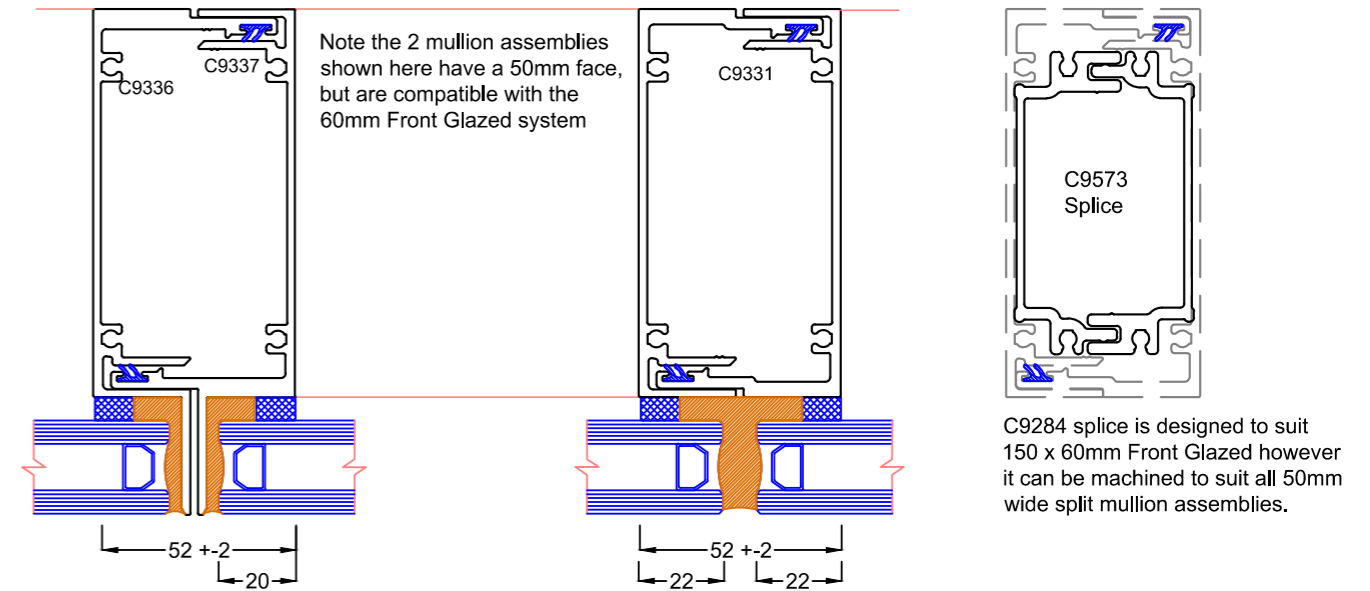
Splices can be used full length to provide additional strength in the mullion configurations shown, or in short lengths where mullions are being joined or as backing behind brackets.



50mm Structural Mullion

50mm Blind Mullion

C9573 Splice Detail
(for 50 wide mullions)



Spandrel Options

There are a number of single glazed or Spandrel adaptor options dependant on the assembly selected & whether the inside is visible.

Jamb

with Spandrel Adaptor

Structural Mullion

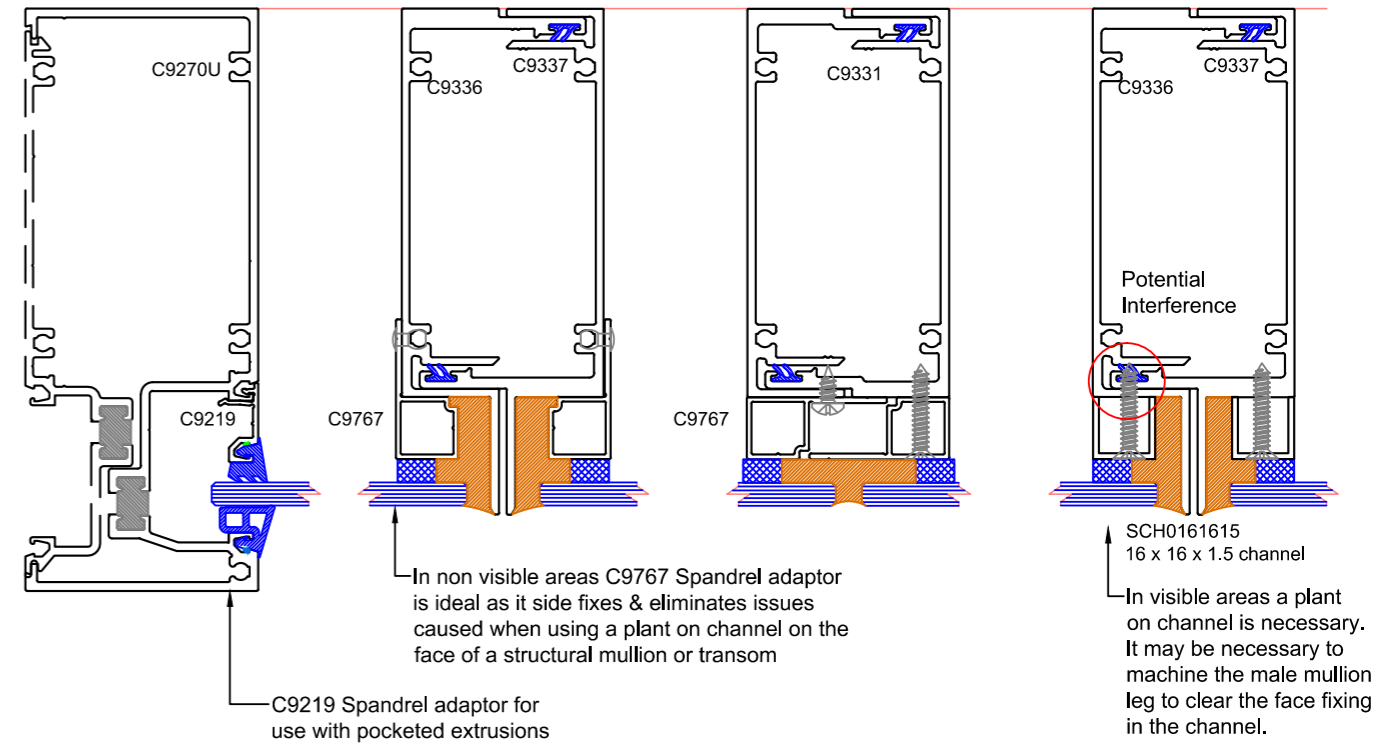
with plant on adaptor

Blind Mullion

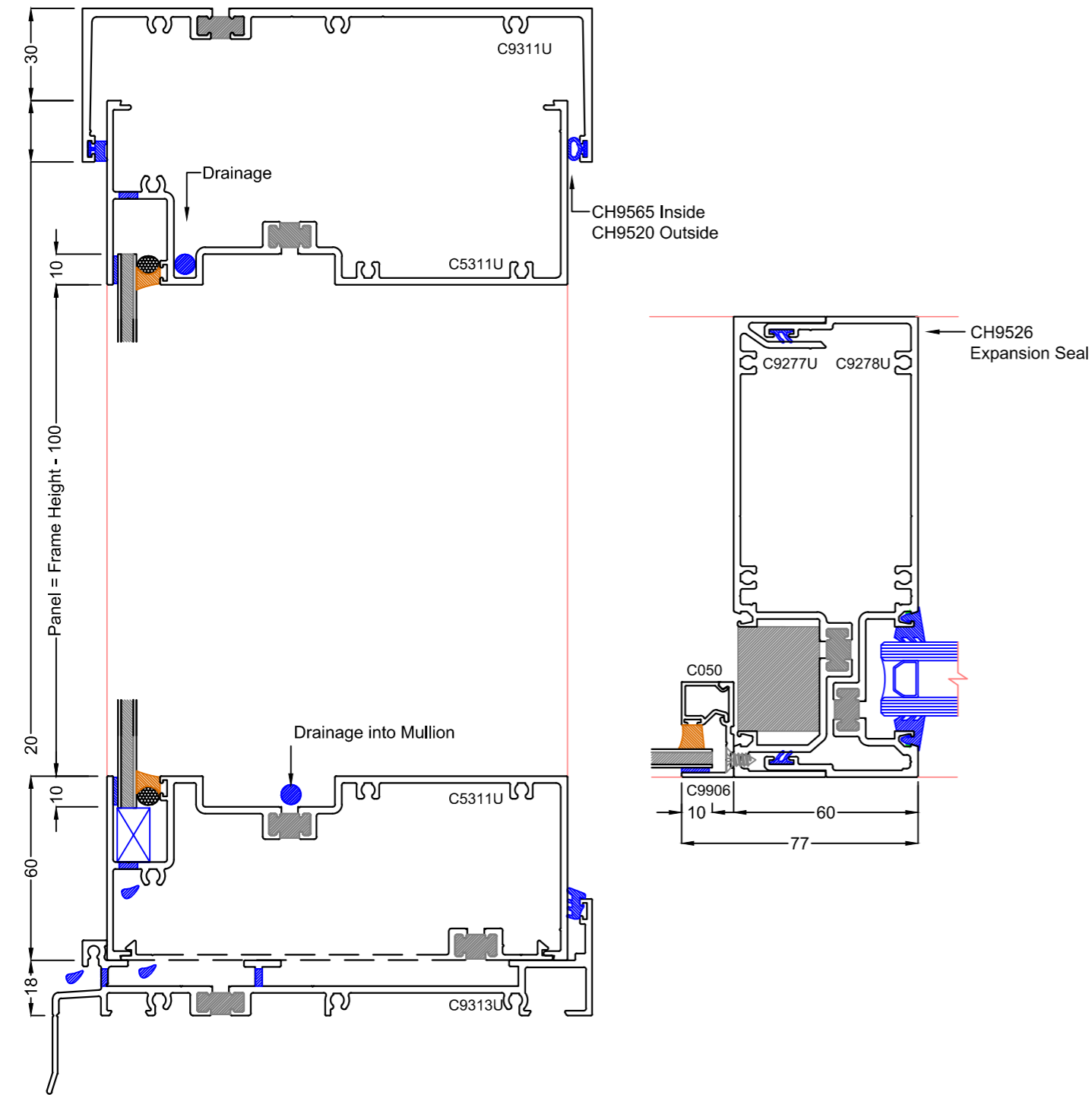
with plant on adaptor

Structural Mullion

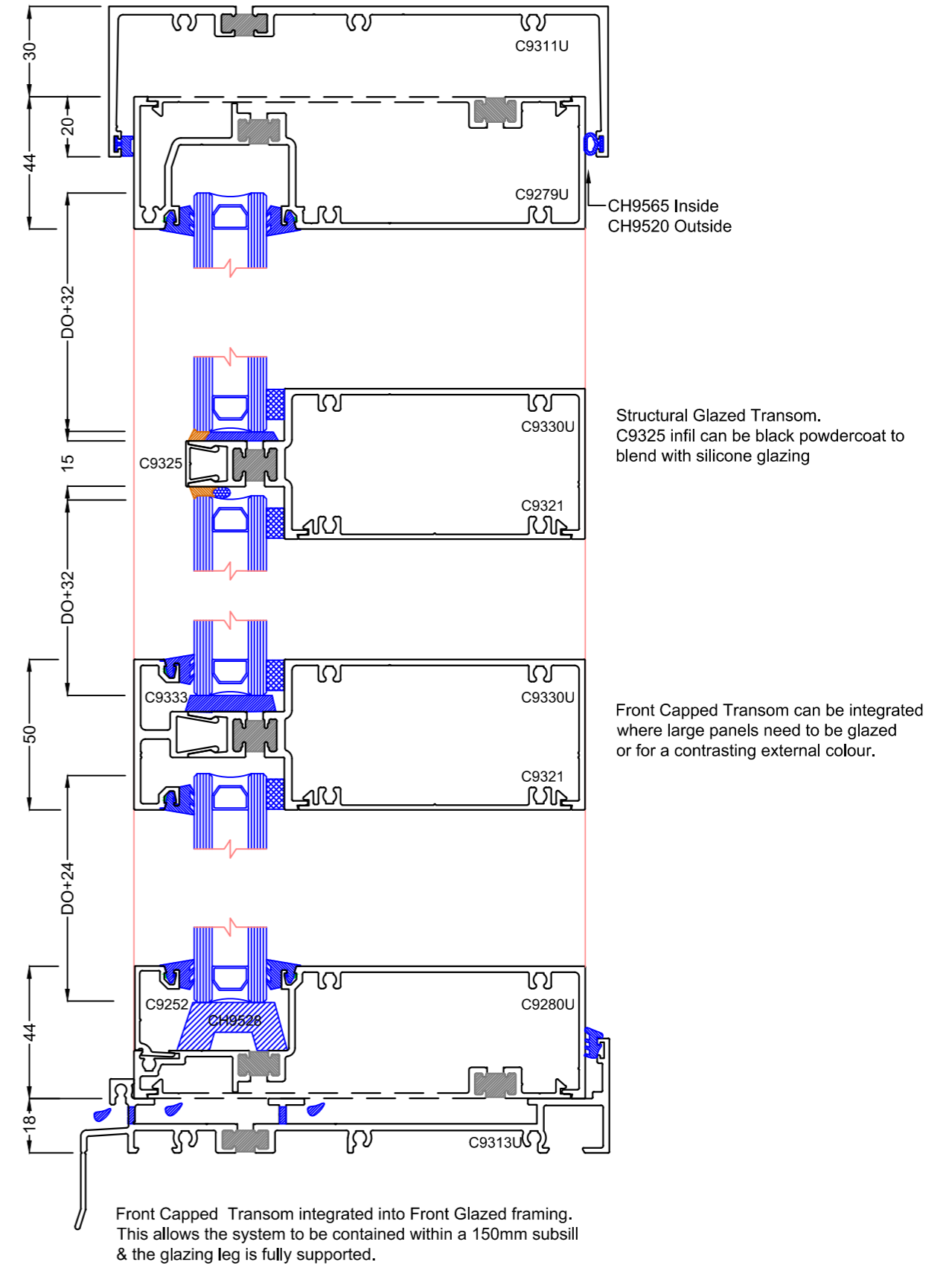
with plant on channel



U-Max™ THERMAL BREAK 150 x 60mm FRONT DOUBLE GLAZED - 34mm Pocket
U-Max Framing Systems: U150FDG - 10
Spandrel Panel Detail

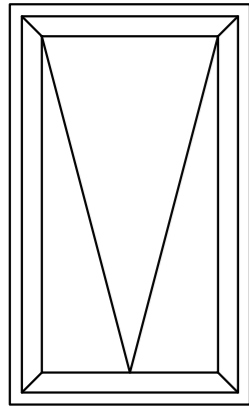


Front Capped Transoms
integrating with Front Glazed Head & Sill



U-MAX™ 150 Front Double Glazed

U-Max™ THERMAL BREAK 150 x 60mm FRONT DOUBLE GLAZED - 34mm Pocket
U-Max Framing Systems: U150FDG - 11
46mm Overlap Awning Sash

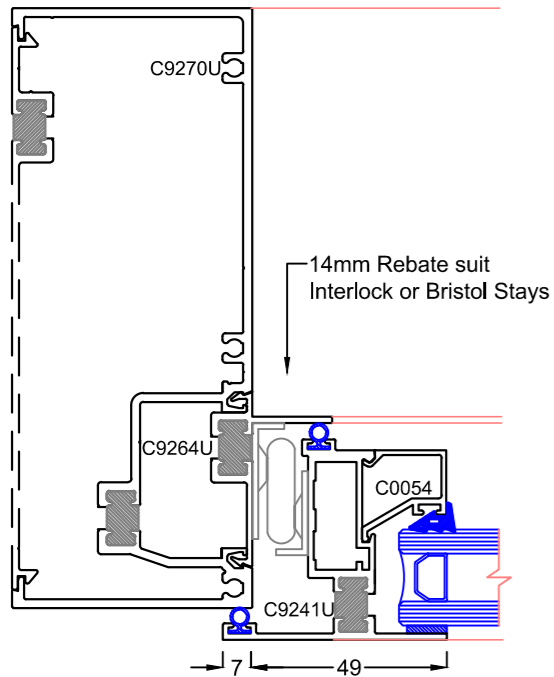


The Overlap Sash depicted requires awning stays but also elegantly suits the hinge head & winder sill for a lower profile appearance. Maximum Sash weights generally are 30kg for a single chain winder & 70kg for a dual chain winder & 70kg with stays.

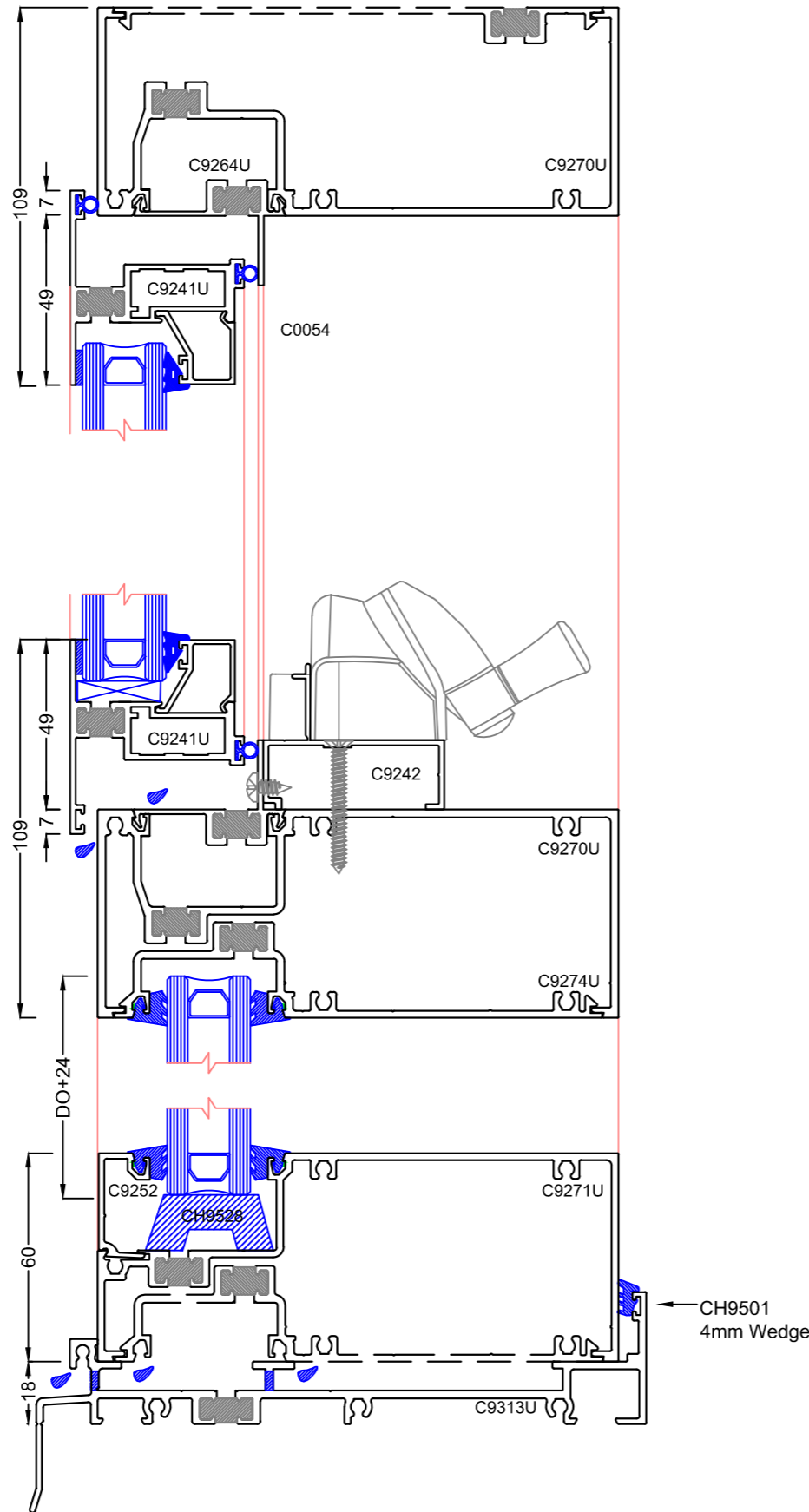
- Max Sash Height: 1600mm
- Min Sash Width: 450mm
- Max Sash Width: 1200mm
- Glass: 6mm - 35mm

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

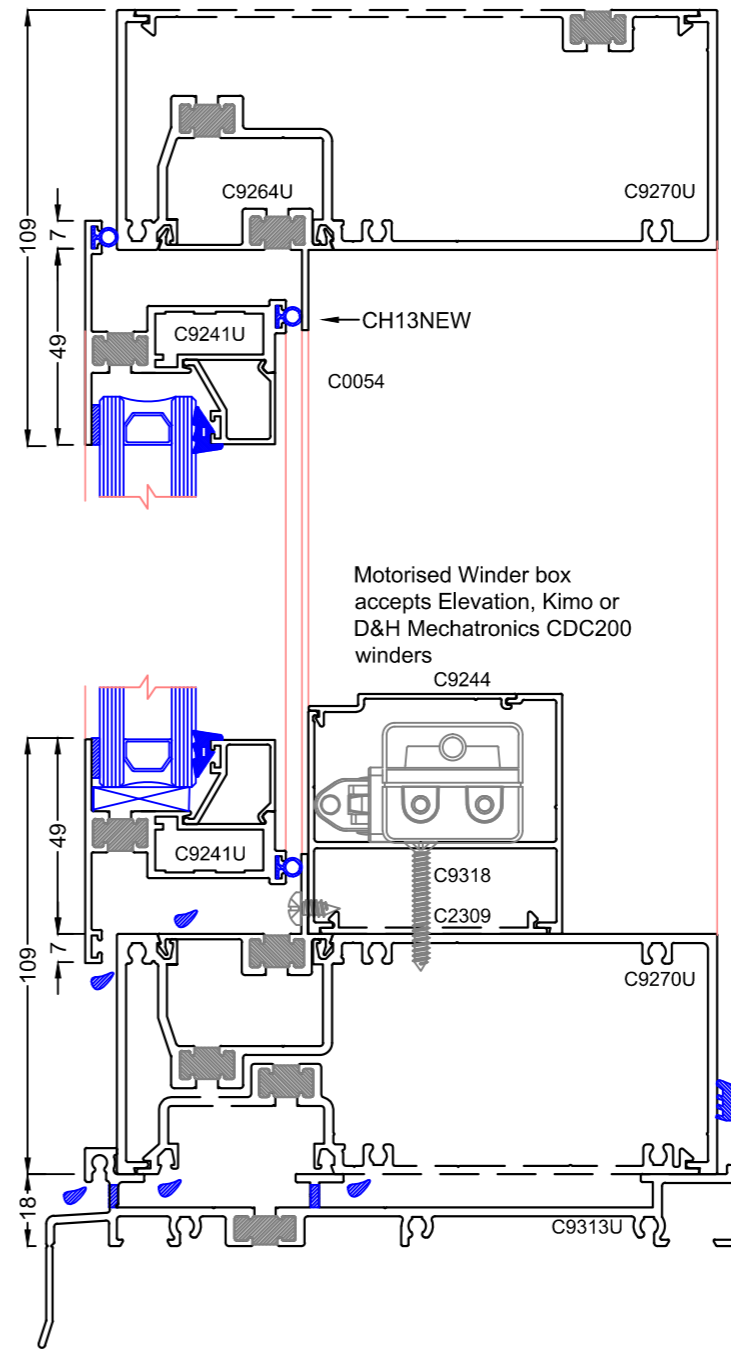
60mm Jamb



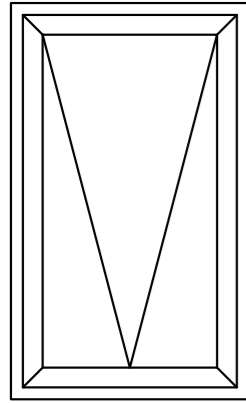
60mm Head & Sill Transom



60mm Head & Sill & Motorised Winder



U-Max™ THERMAL BREAK 150 x 60mm FRONT DOUBLE GLAZED - 34mm Pocket
U-Max Framing Systems: U150FDG - 12
Inset Awning Sash

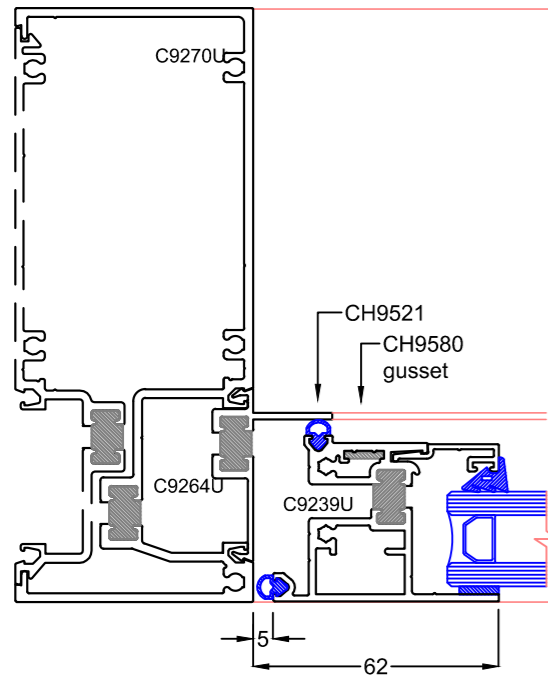


Maximum Sash weights generally are 30kg for a single chain winder & 70kg for a dual chain winder & 70kg with stays.

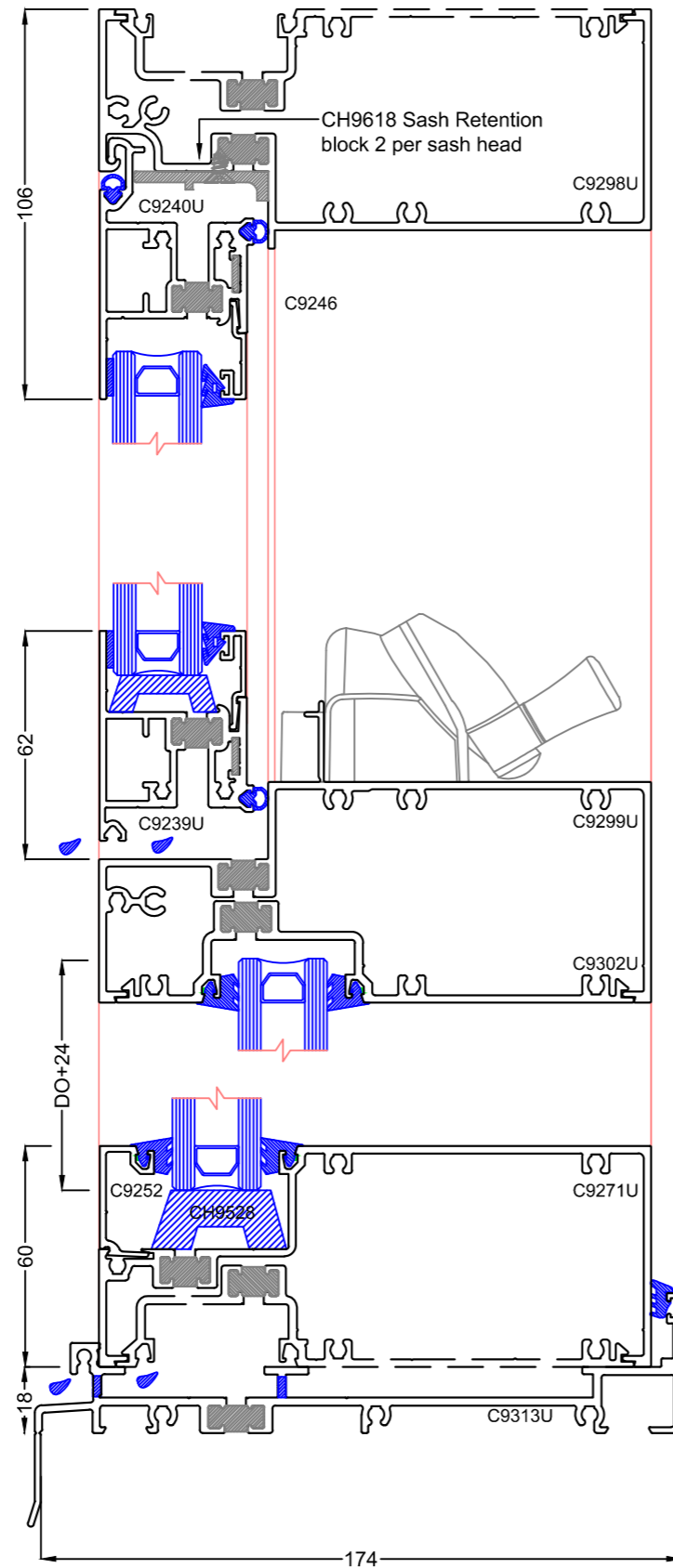
- Max Sash Height: 1600mm
- Min Sash Width: 450mm
- Max Sash Width: 1200mm
- Glass: 6mm - 28mm

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

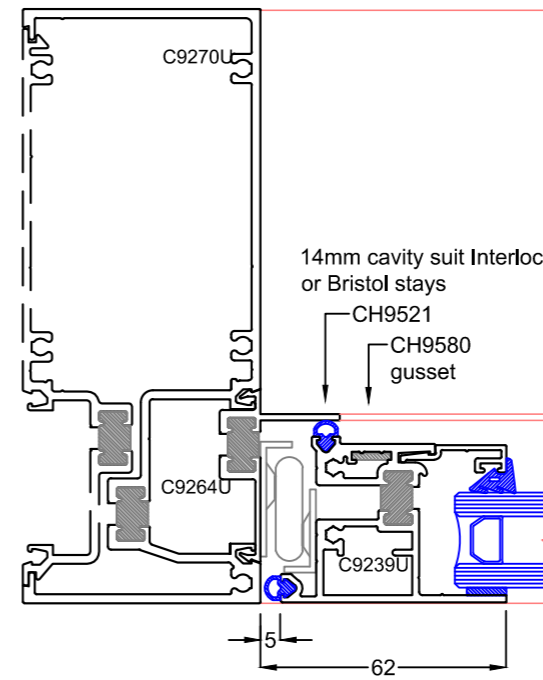
60mm Jamb



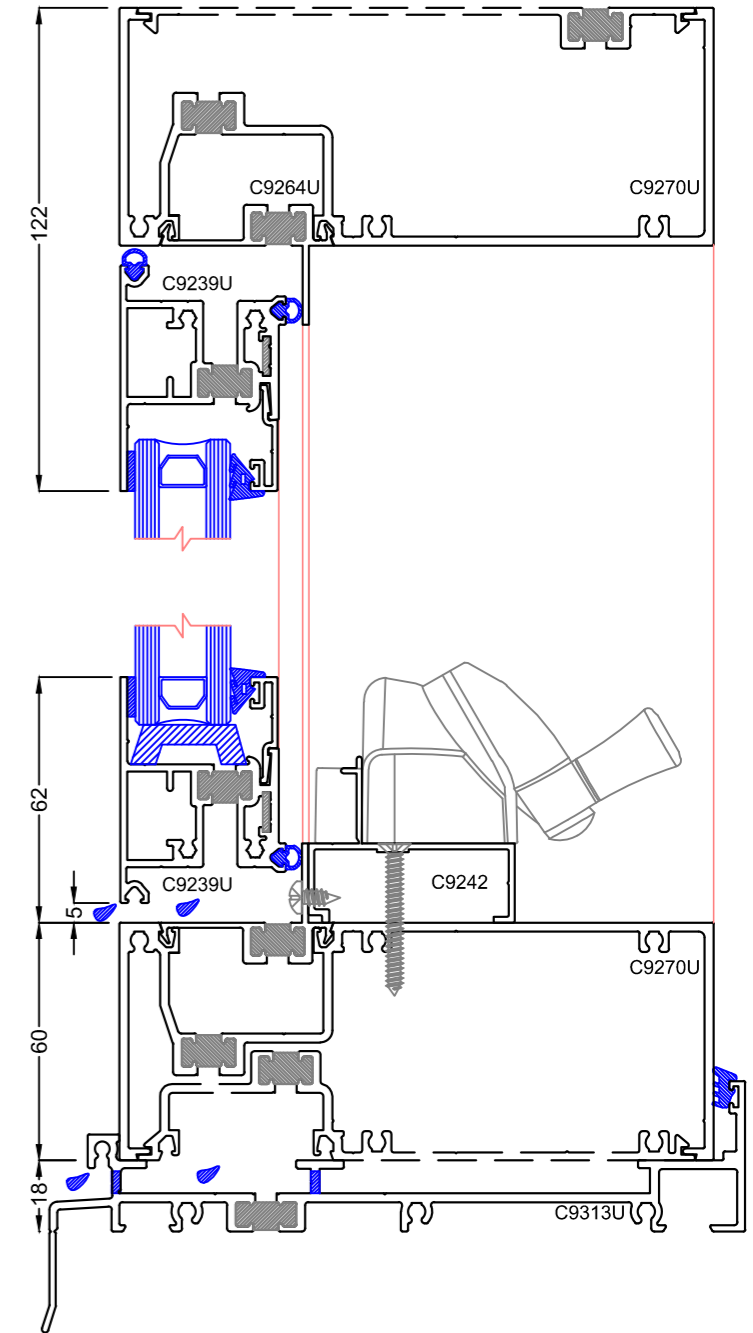
Inset Awning Sash with Hinge Head & Winder Sill



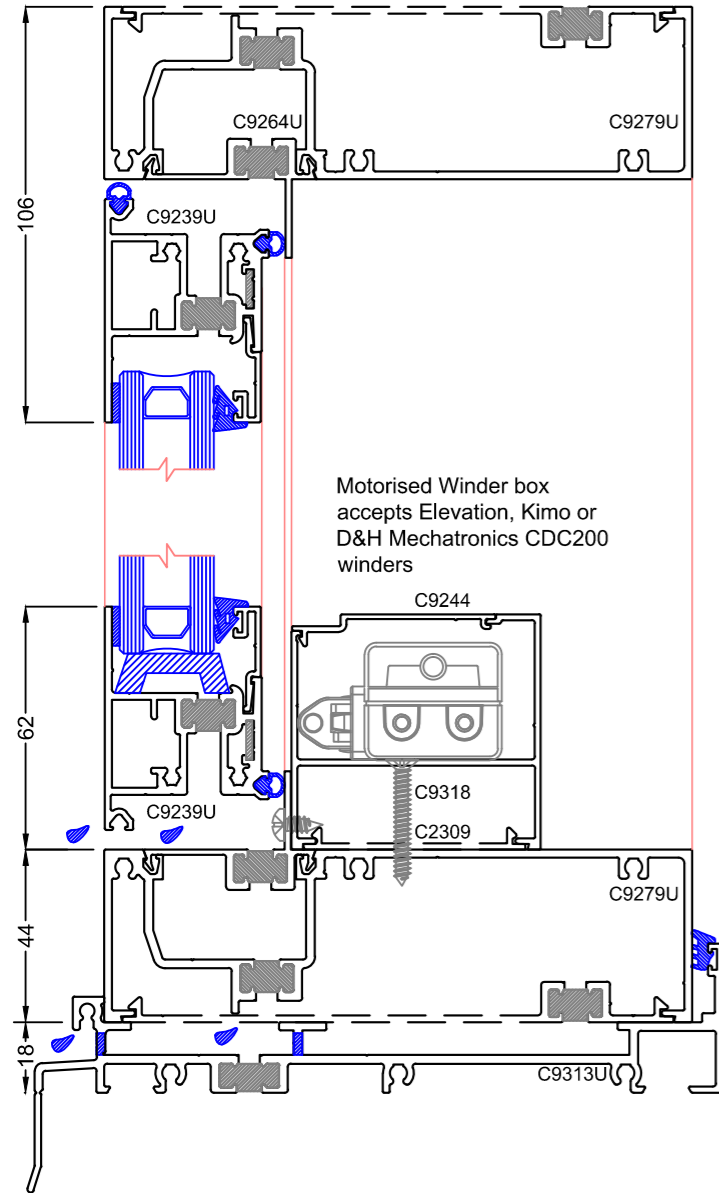
60mm Jamb



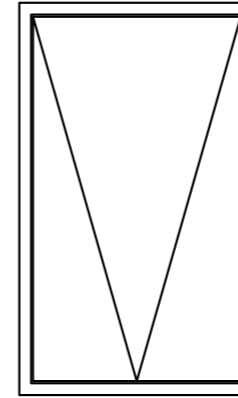
Inset Awning Sash with 60mm Head & Sill
for use with stays



U-Max™ THERMAL BREAK 150 x 60mm FRONT DOUBLE GLAZED - 34mm Pocket
U-Max Framing Systems: U150FDG - 13
Inset Awning Sash with 44mm Head & Sill & Motorised winder



Structural Glazed Sash
with Insert Adaptor

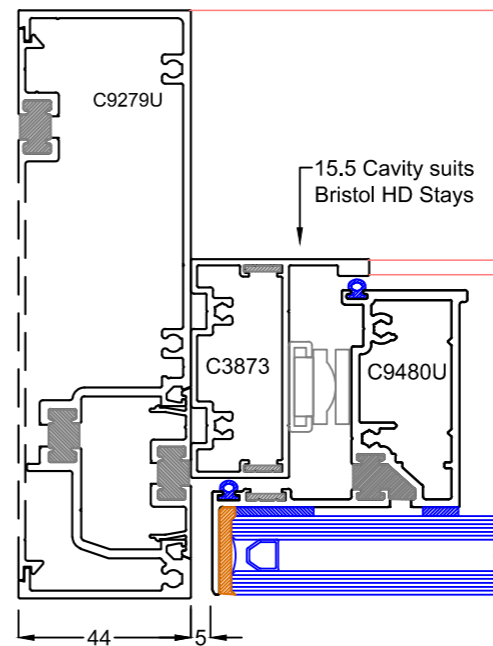


C9480 Sash requires 20mm IGUs with 3M VHB tape, so that the external face of glass aligns with the IGU in the fixed framing.
Overall glass, tape & frame the overall frame must be 150mm +/- .5mm to work within the subhead.

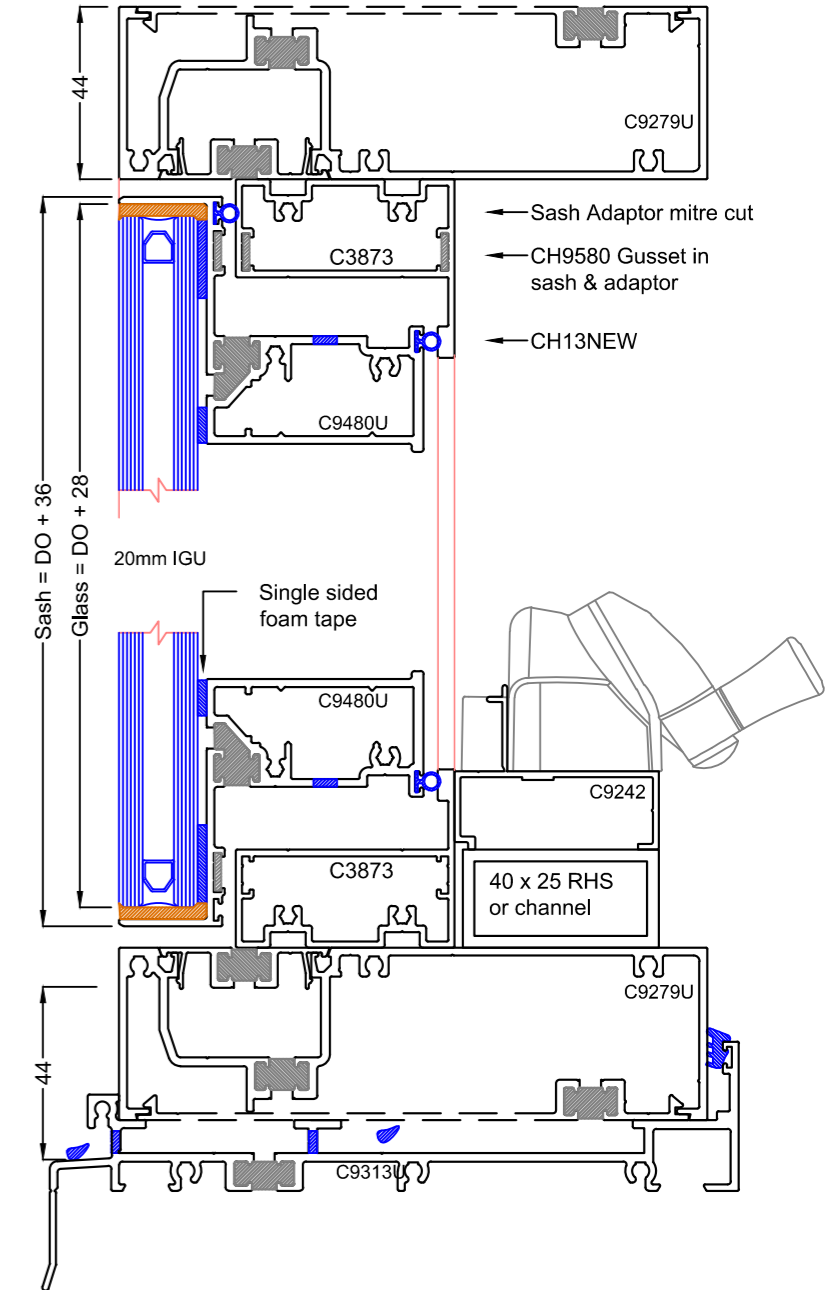
- Accepts Bristol HD Stays, 90kg limit
- Max Sash Height: 1800mm
- Min Sash Width: 450mm
- Max Sash Width: 1200mm
- Glass 16mm - 29mm
- Accepts Q-Ion acoustic seals

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

44mm Jamb with Structural Sash on stays



Structural Sash with 44mm Head & Sill



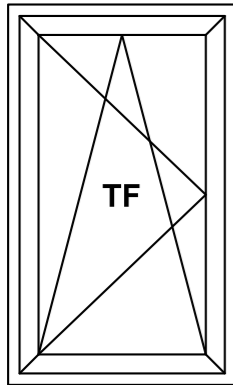
U-Max™ THERMAL BREAK 150 x 60mm FRONT DOUBLE GLAZED - 34mm Pocket

U-Max Framing Systems: U150FDG - 14

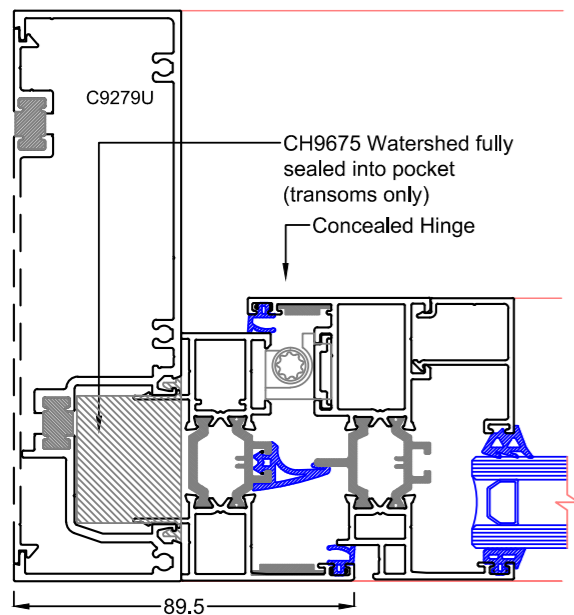
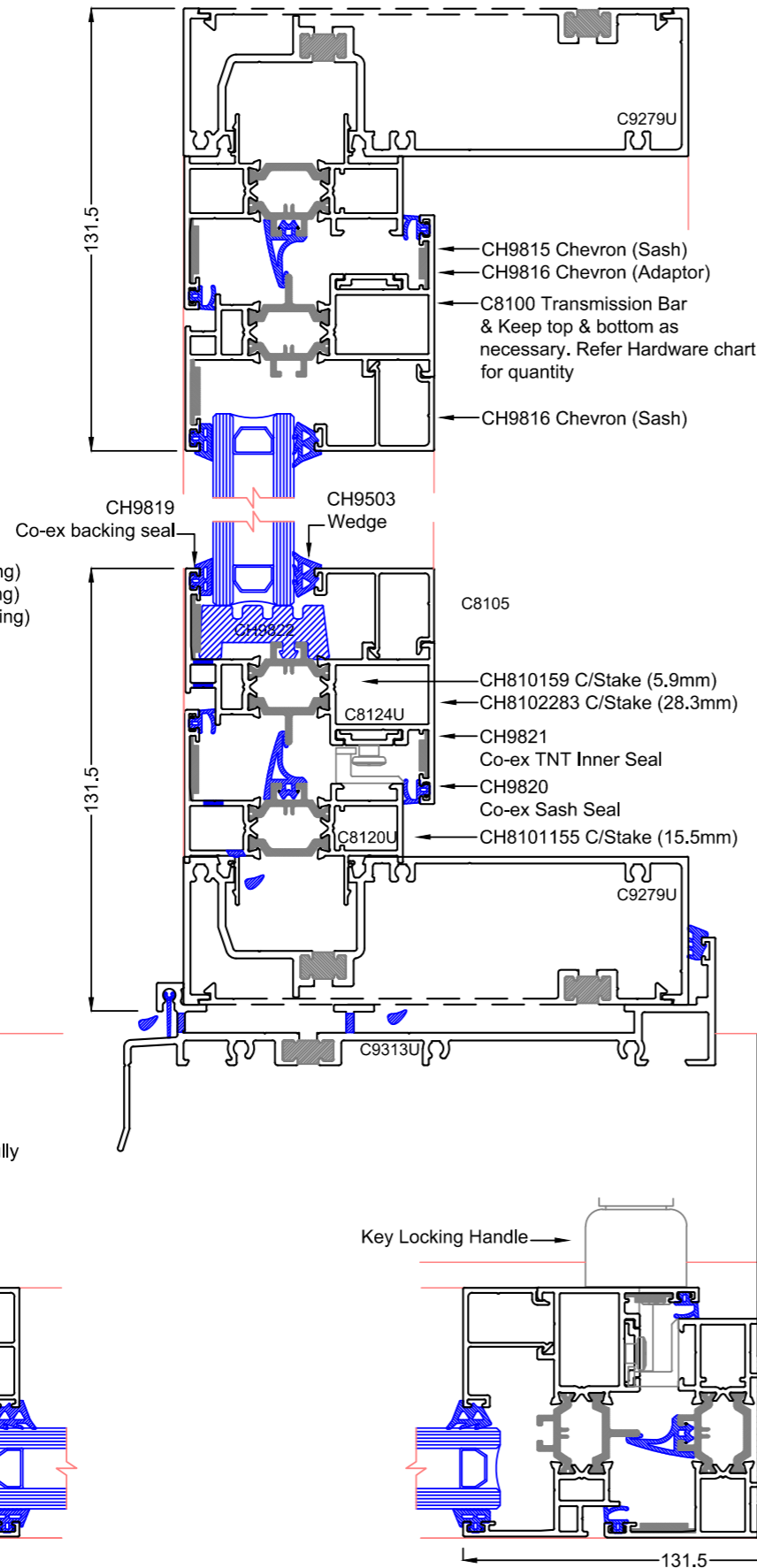
Tilt & Turn Sash (Tilt First)

44mm Frame shown for clarity, C9270U 60mm frame can also be used

44mm Head & Sill

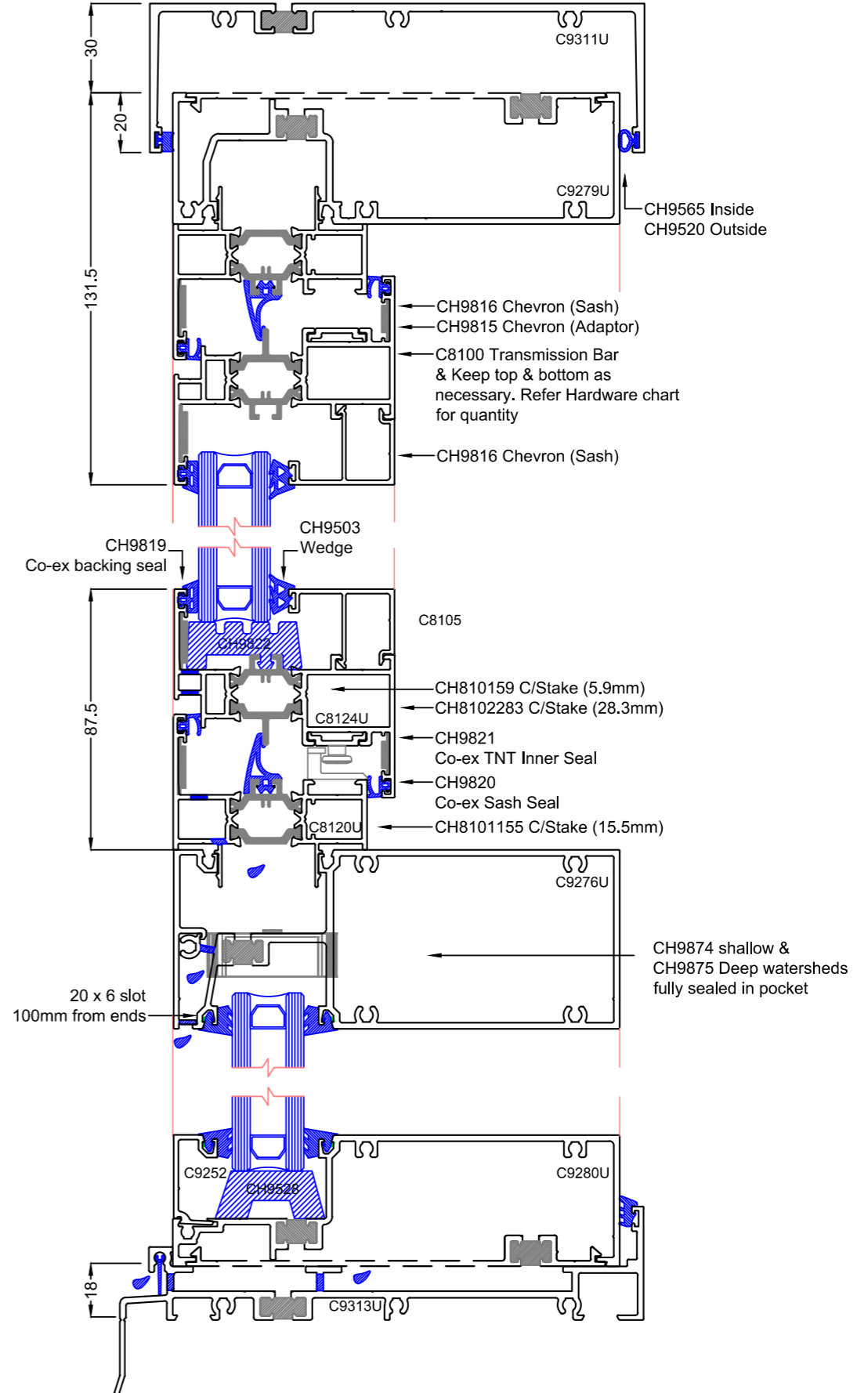


- Maximum Sash weights generally are 150kg with concealed hardware.
 - Heavier hardware options are available
 - Handle Operated key locking
 - Initial tilt in, then key override to hinge as standard function
 - Sash height must exceed Sash width - a tilt only solution may allow this.
 - Min Sash Height: 555 (590 daylight opening)
 - Min Sash Width: 500 (590 daylight opening)
 - Max Sash Width: 1300 (1335 daylight opening)
 - 150kg sash weight
 - Generally suited to 24-28mm IGU
- Please refer the Sashes segment in the catalogue for further information on sash limits & hardware selection.



44mm Head & Sill with drained transom

44mm Frame shown for clarity, C9270U 60mm frame can also be used

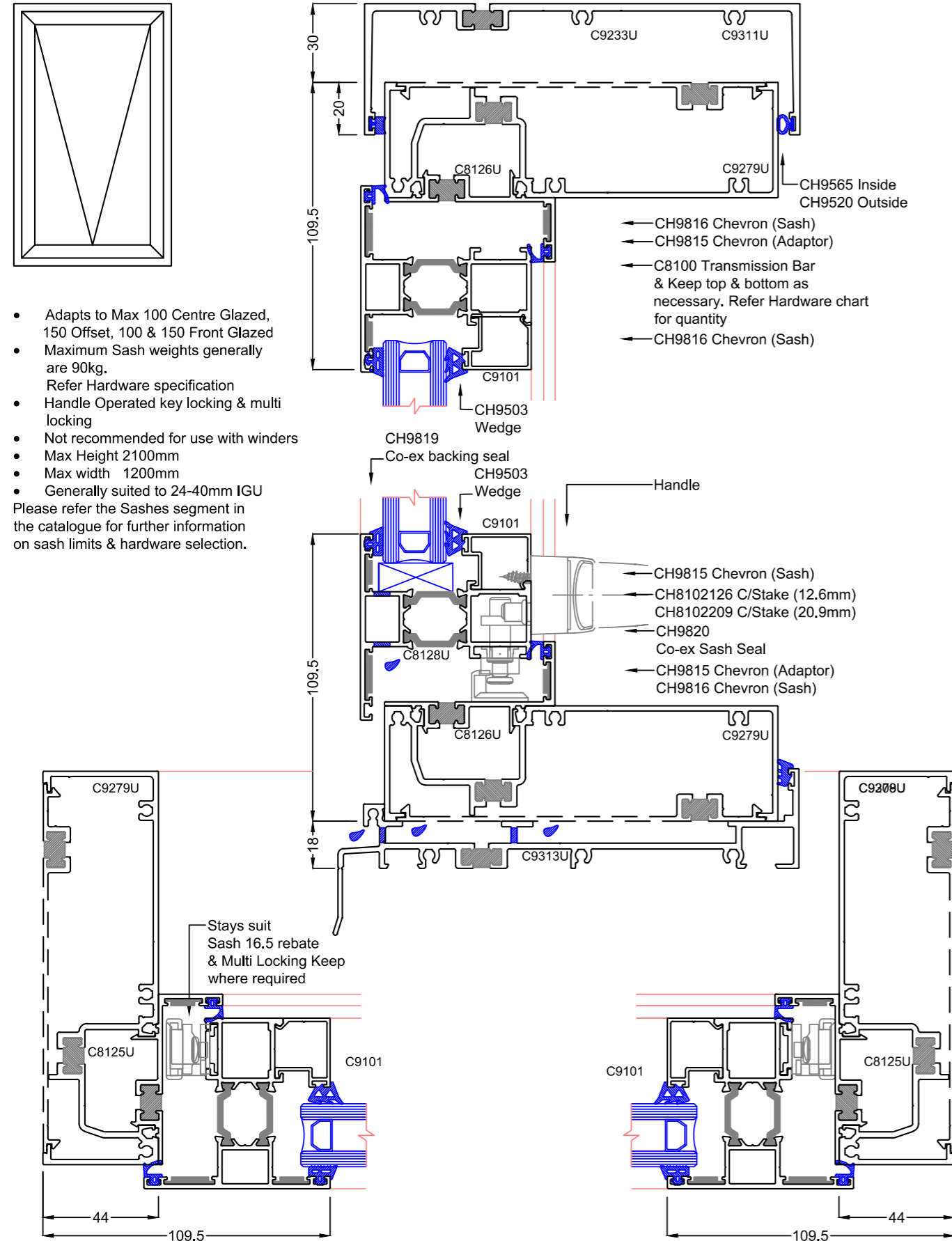


U-Max™ THERMAL BREAK 150 x 60mm FRONT DOUBLE GLAZED - 34mm Pocket

U-Max Framing Systems: U150FDG - 15

Multi Locking Awning Sash 44mm Head & Sill

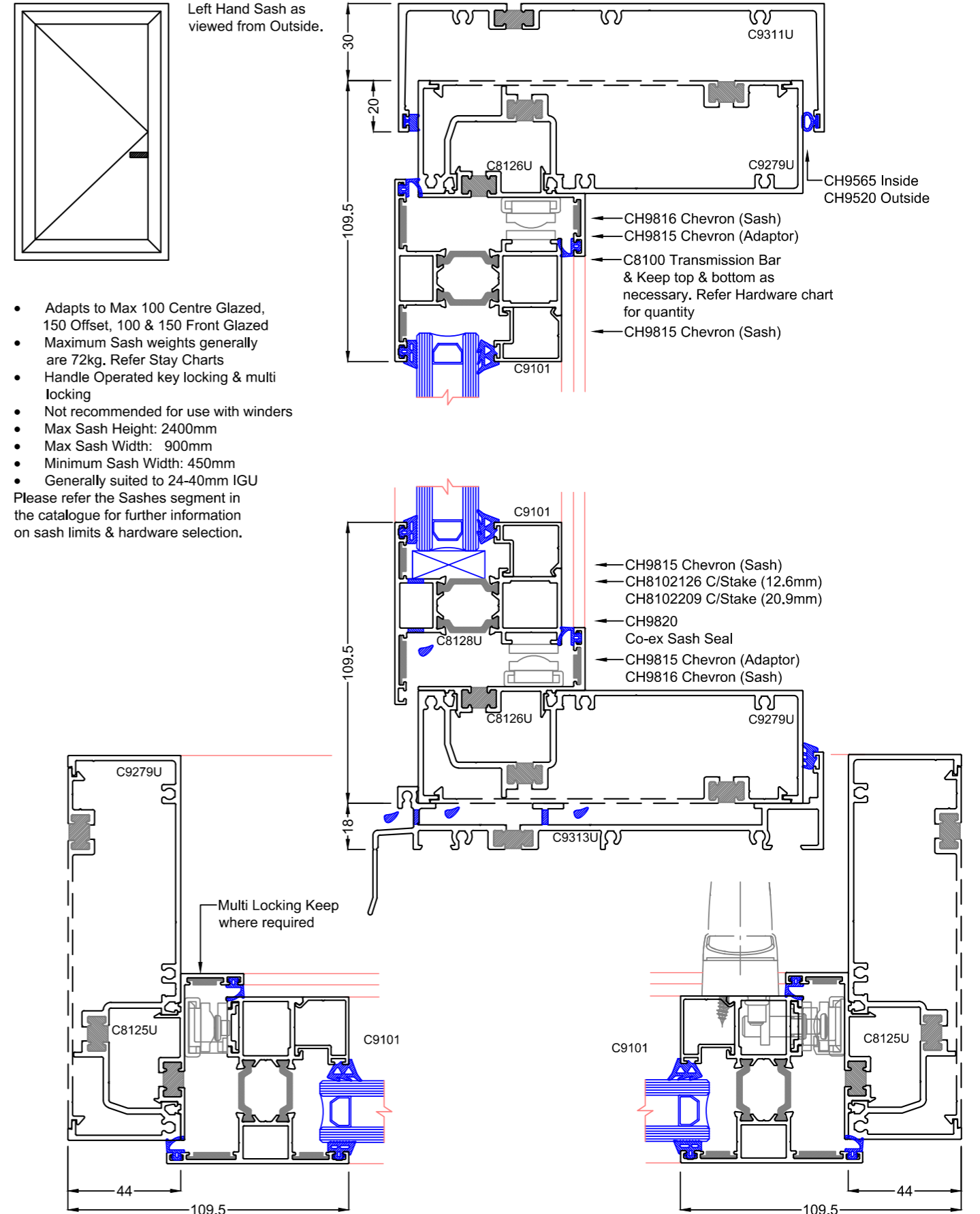
44mm Frame shown for clarity, C9270U 60mm frame can also be used



- Adapts to Max 100 Centre Glazed, 150 Offset, 100 & 150 Front Glazed
 - Maximum Sash weights generally are 90kg. Refer Hardware specification
 - Handle Operated key locking & multi locking
 - Not recommended for use with winders
 - Max Height 2100mm
 - Max width 1200mm
 - Generally suited to 24-40mm IGU
- Please refer the Sashes segment in the catalogue for further information on sash limits & hardware selection.

Multi Locking Casement Sash 44mm Head & Sill

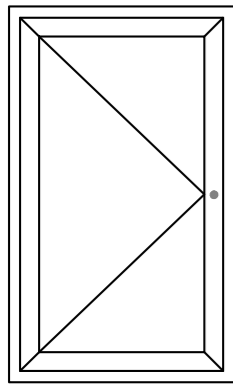
44mm Frame shown for clarity, C9270U 60mm frame can also be used



- Adapts to Max 100 Centre Glazed, 150 Offset, 100 & 150 Front Glazed
 - Maximum Sash weights generally are 72kg. Refer Stay Charts
 - Handle Operated key locking & multi locking
 - Not recommended for use with winders
 - Max Sash Height: 2400mm
 - Max Sash Width: 900mm
 - Minimum Sash Width: 450mm
 - Generally suited to 24-40mm IGU
- Please refer the Sashes segment in the catalogue for further information on sash limits & hardware selection.

Left Hand Sash as viewed from Outside.

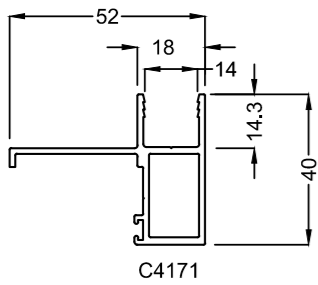
U-Max™ THERMAL BREAK 150 x 60mm FRONT DOUBLE GLAZED - 34mm Pocket
U-Max Framing Systems: U150FDG -16
C4171 Jockey Sash



← Budget Lock

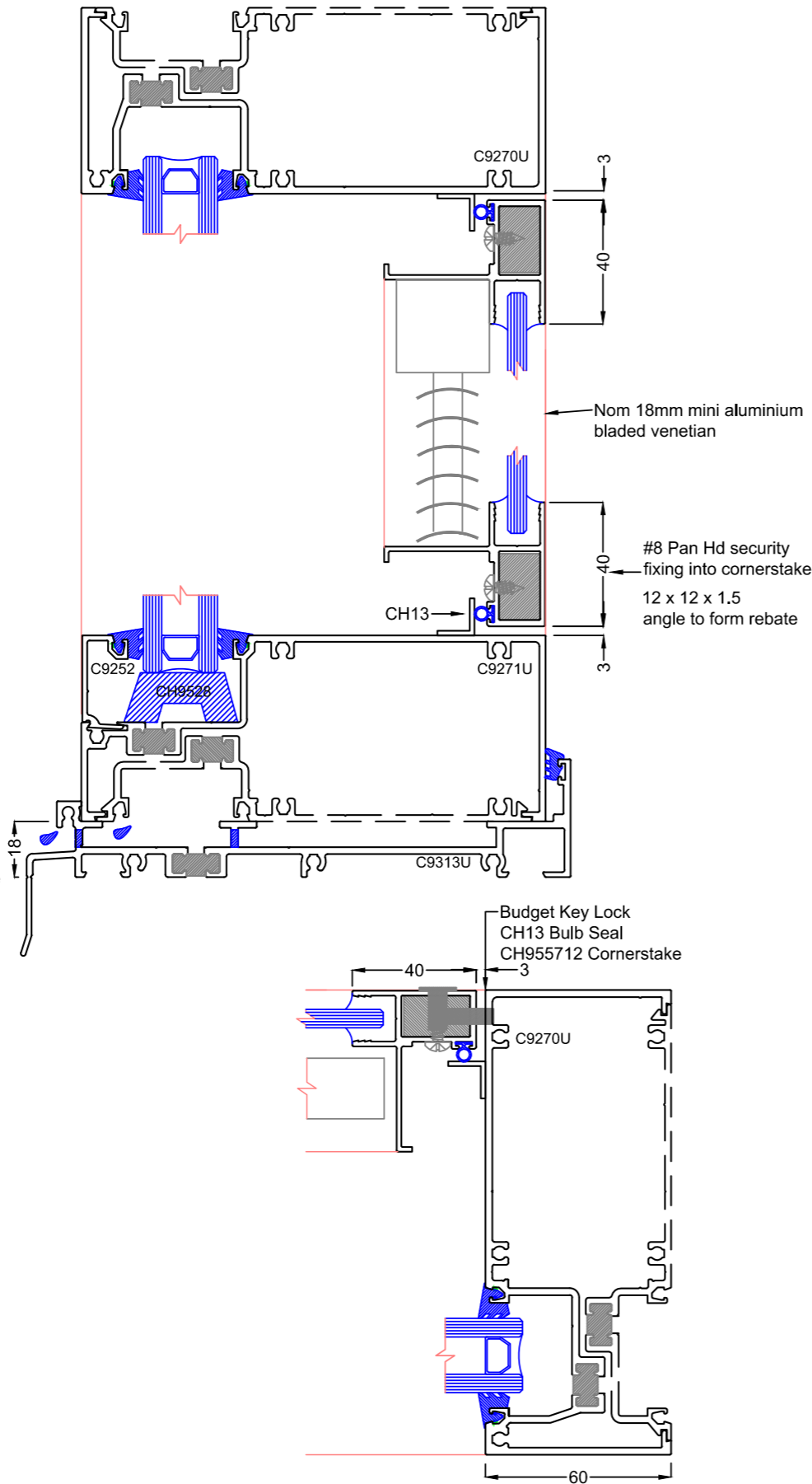
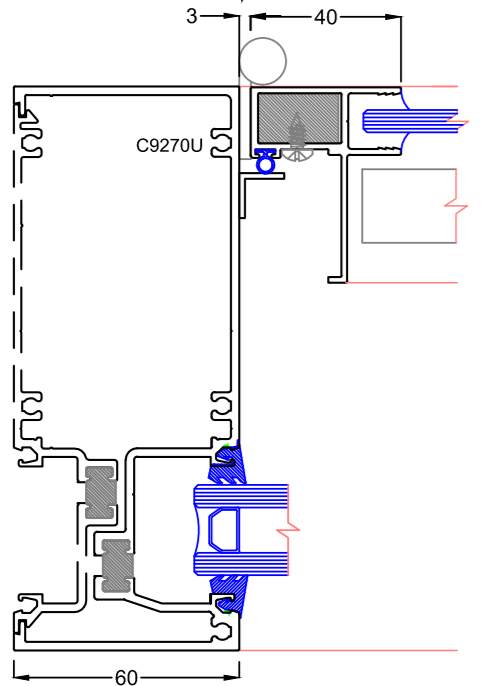
Left Hand sash depicted (viewed from outside)

Used for secondary glazing for acoustics & especially for housing an internal venetian blind where it is behind a protected access panel. The sash itself is not a ventilation product & is designed to be openable via a key lock for maintenance purposes.



C4171

McCallum Butt Hinge
CH13 Bulb Seal
CH955712 Cornerstake

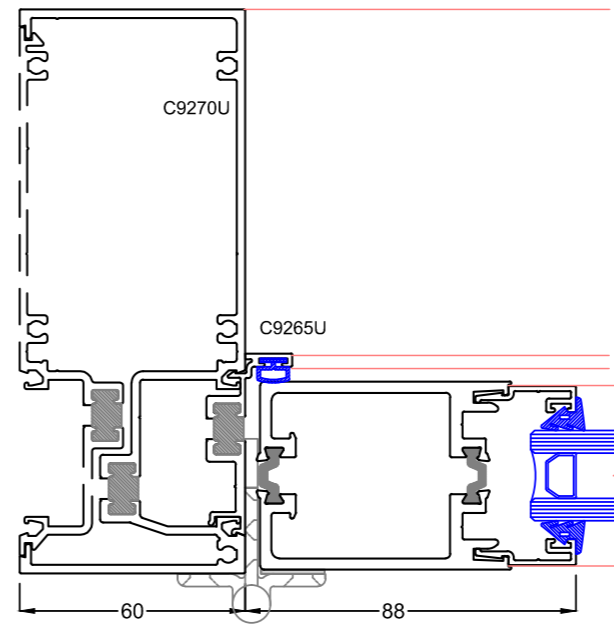


Nom 18mm mini aluminium bladed venetian

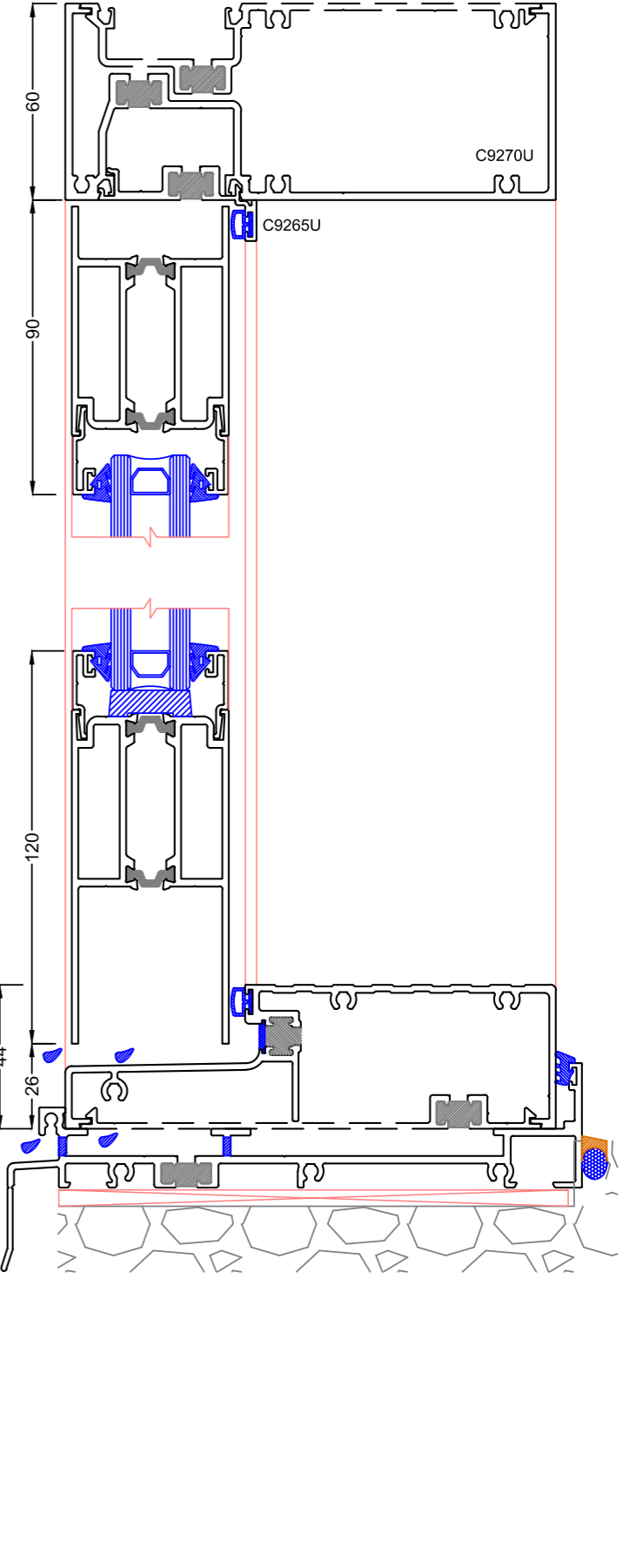
#8 Pan Hd security fixing into cornerstake
12 x 12 x 1.5 angle to form rebate

Budget Key Lock
CH13 Bulb Seal
CH955712 Cornerstake

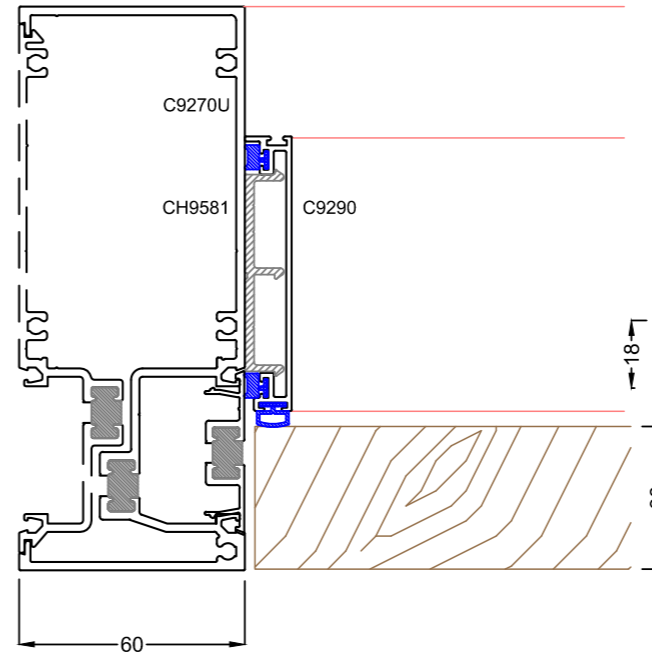
Open OUT Door



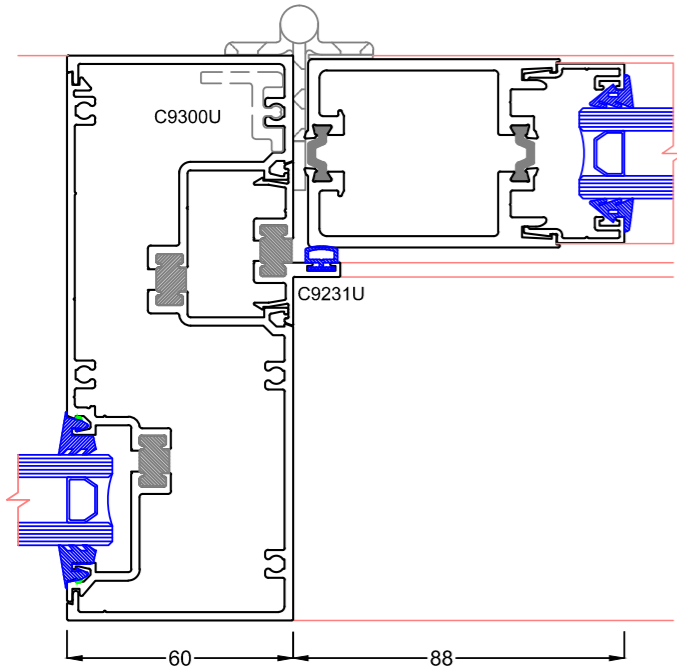
Open OUT Door with Threshold



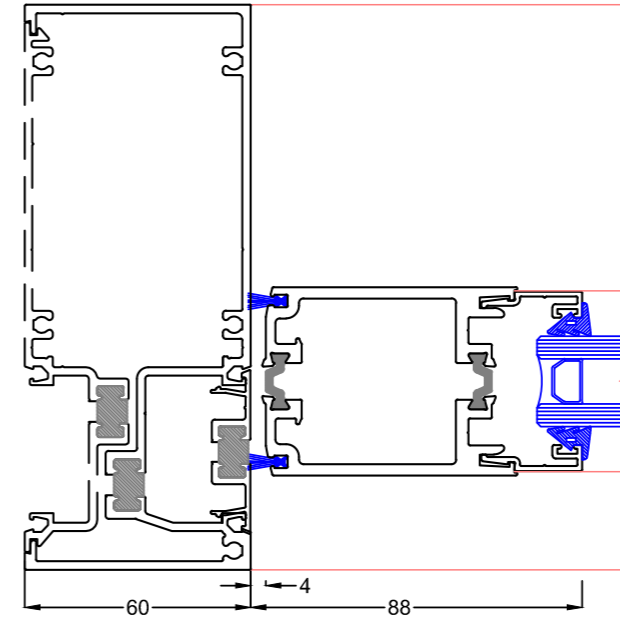
Open OUT Timber Door with plant on door stop



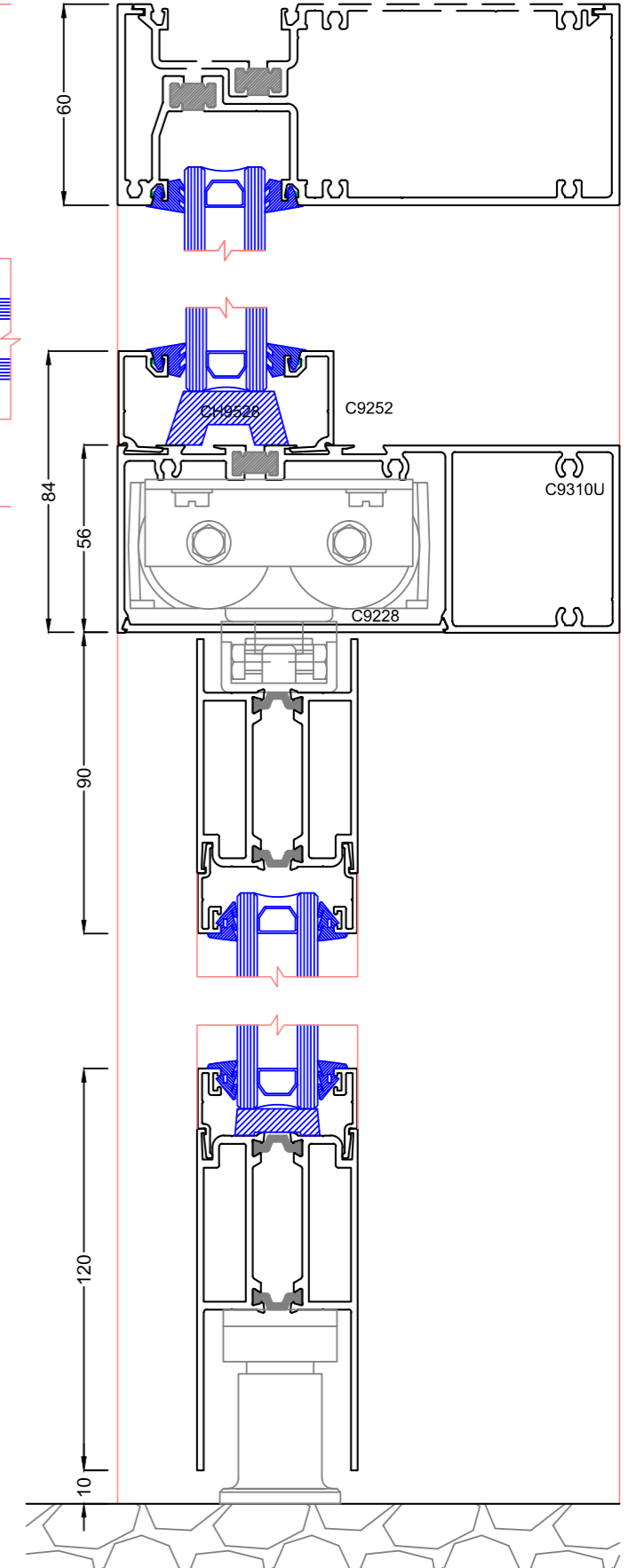
U-Max™ THERMAL BREAK 150 x 60mm FRONT DOUBLE GLAZED - 34mm Pocket
U-Max Framing Systems: U150FDG -17
Open IN Door with reversed 150 Offset frame & door stop



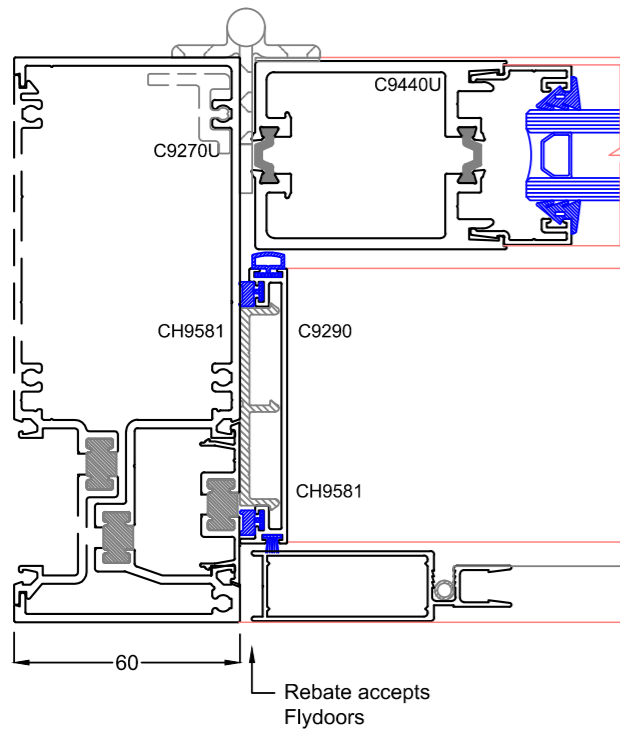
Pivot Door



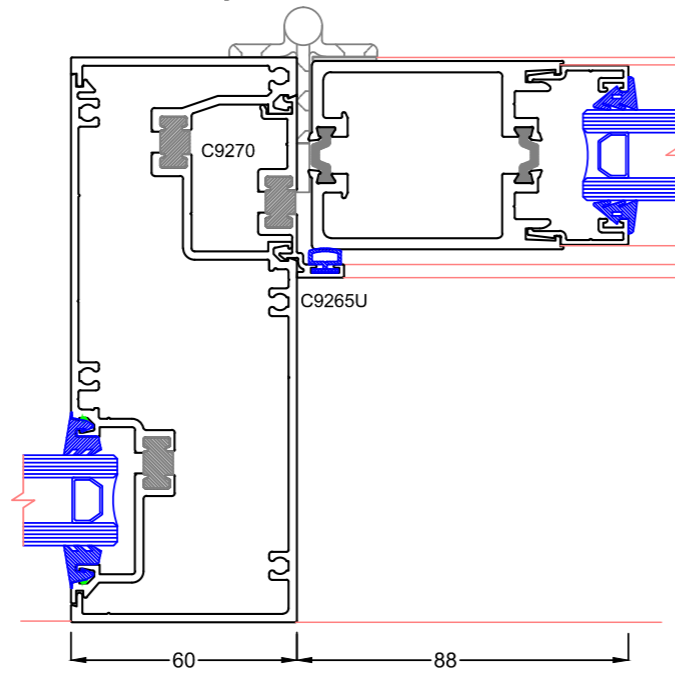
Pivot Door & Highlight



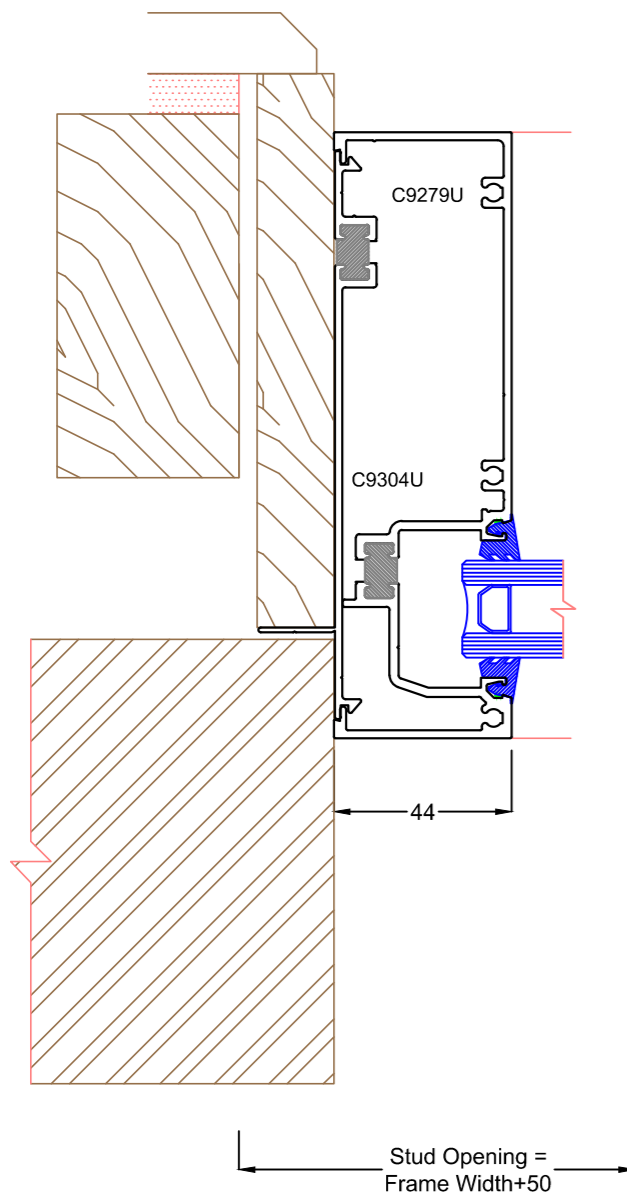
Jamb Detail Open IN Door & Flydoor



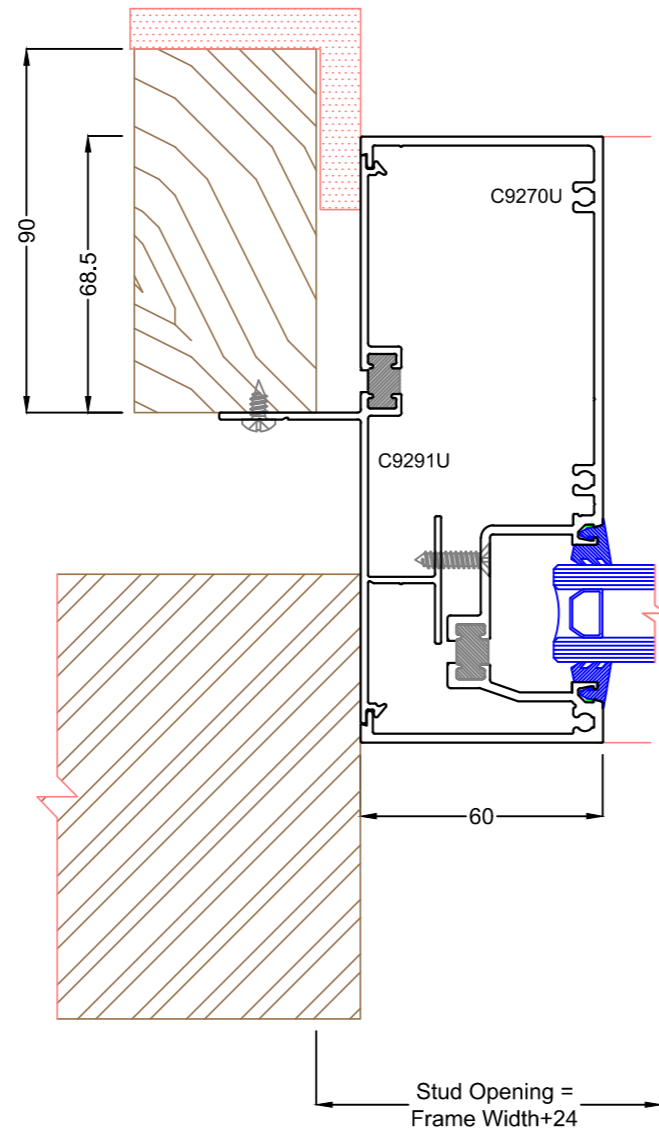
Open IN Door with reversed 150 frame & door stop



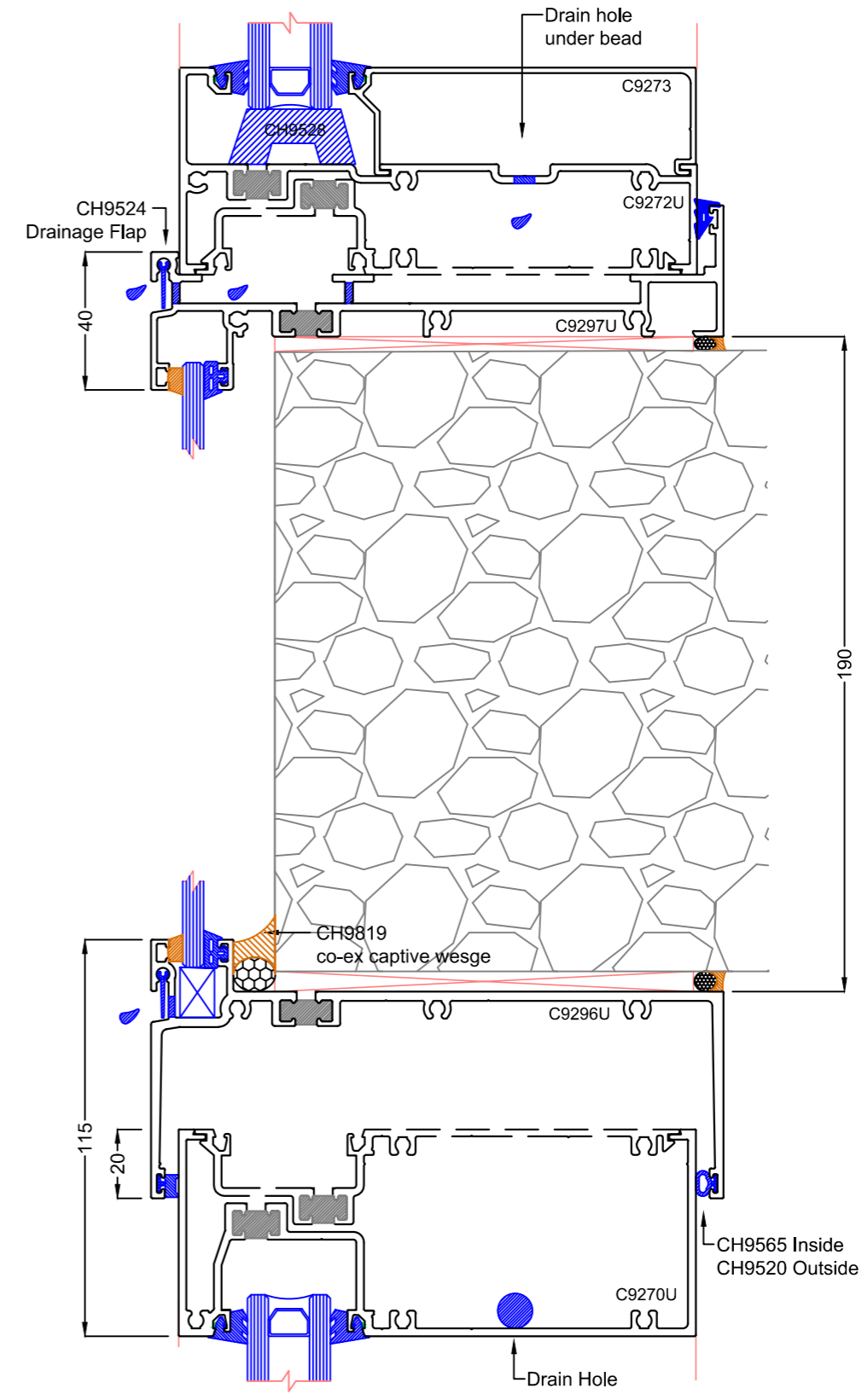
U-Max™ THERMAL BREAK 150 x 60mm FRONT DOUBLE GLAZED - 34mm Pocket
U-Max Framing Systems: U150FDG -18
C9304U Reveal Adaptor



C9291U Build In Adaptor



Glazed Spandrel Sub Head & Subsill

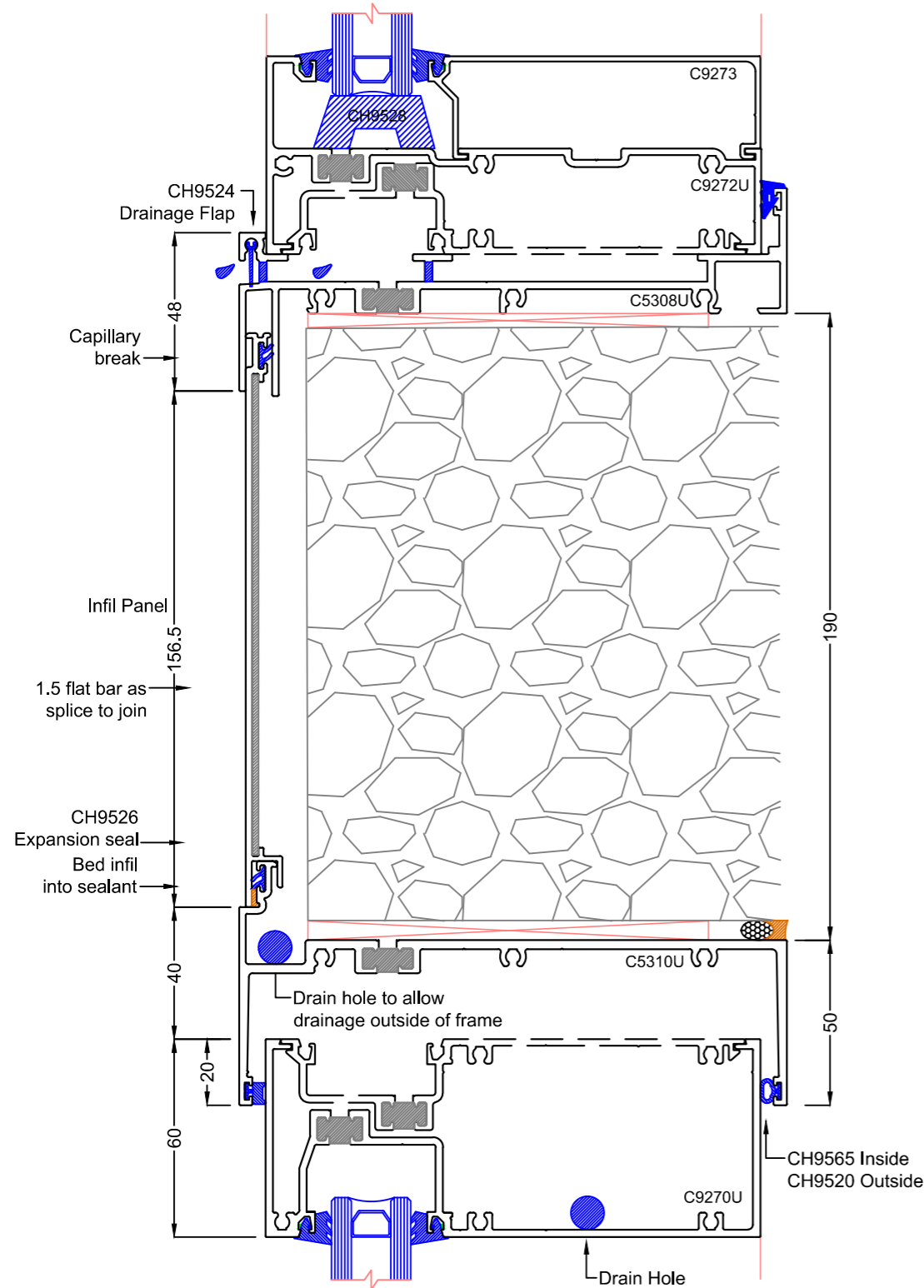


U-Max™ THERMAL BREAK 150 x 60mm FRONT DOUBLE GLAZED - 34mm Pocket

U-Max Framing Systems: U150FDG -19

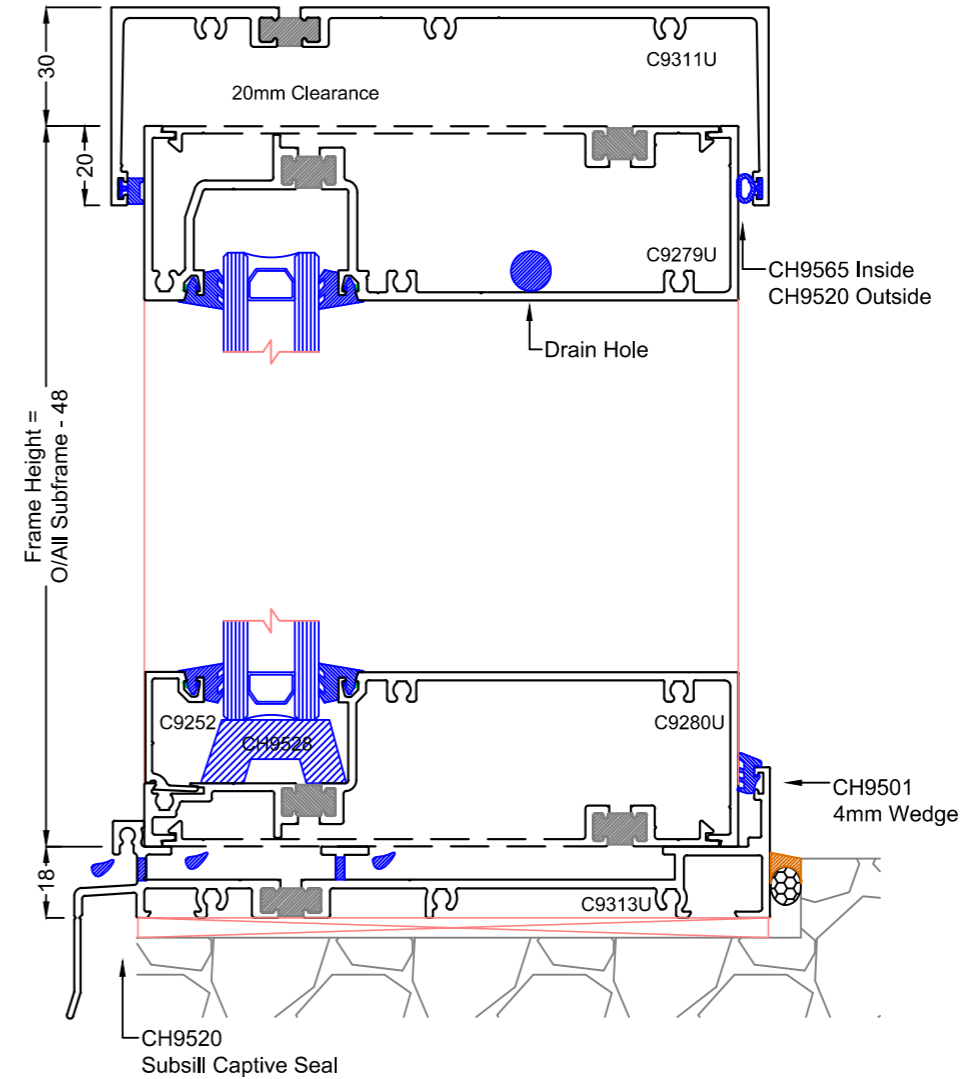
Spandrel Sub Head & Subsill

with custom aluminium infill



One Piece Sub Head (50 deep)

Typical detail for installation from outside.
20mm clearance insufficient to install from inside.



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.

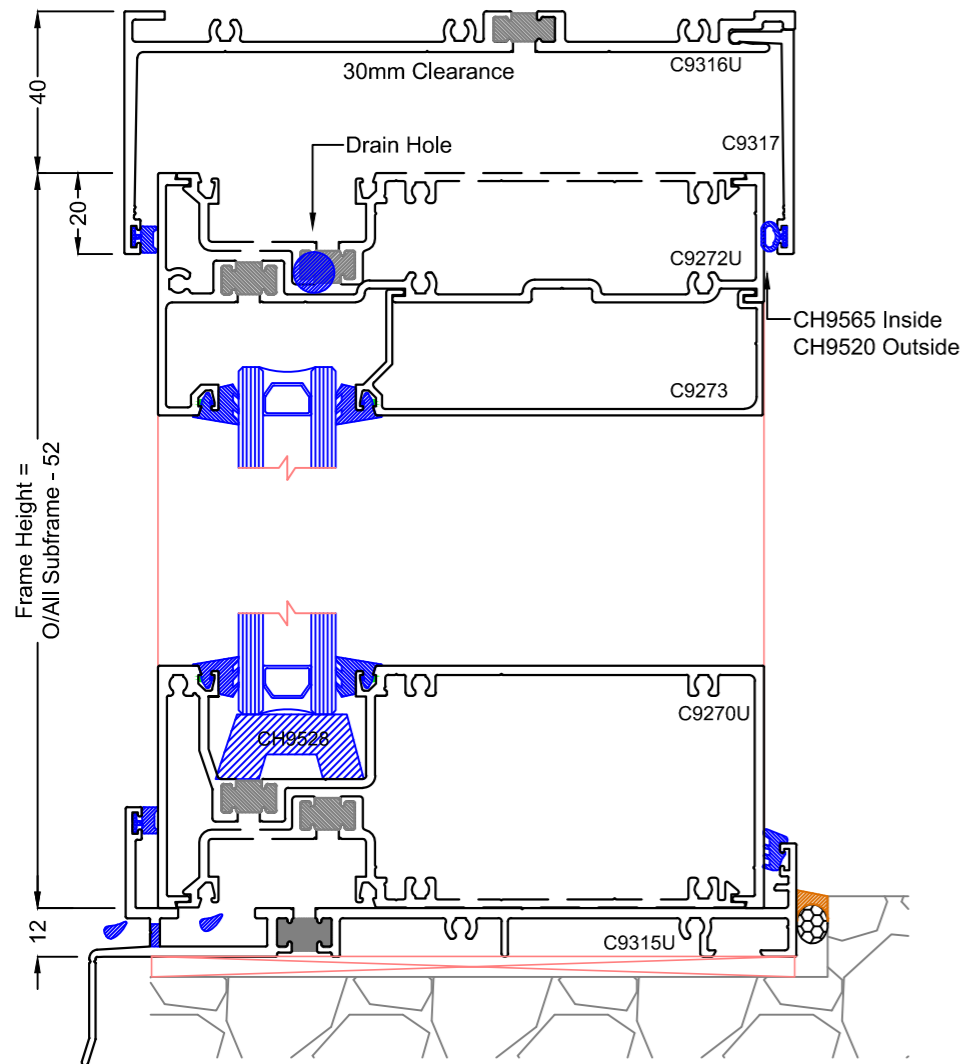
It must be remembered that all window installations require a continuous internal seal especially & the use of subsills & subframes are especially useful in achieving this.

U-Max™ THERMAL BREAK 150 x 60mm FRONT DOUBLE GLAZED - 34mm Pocket

U-Max Framing Systems: U150FDG -20

Two Part Sub Head (60 face)

Typical detail for frame installation from inside



Internally Installed window detail

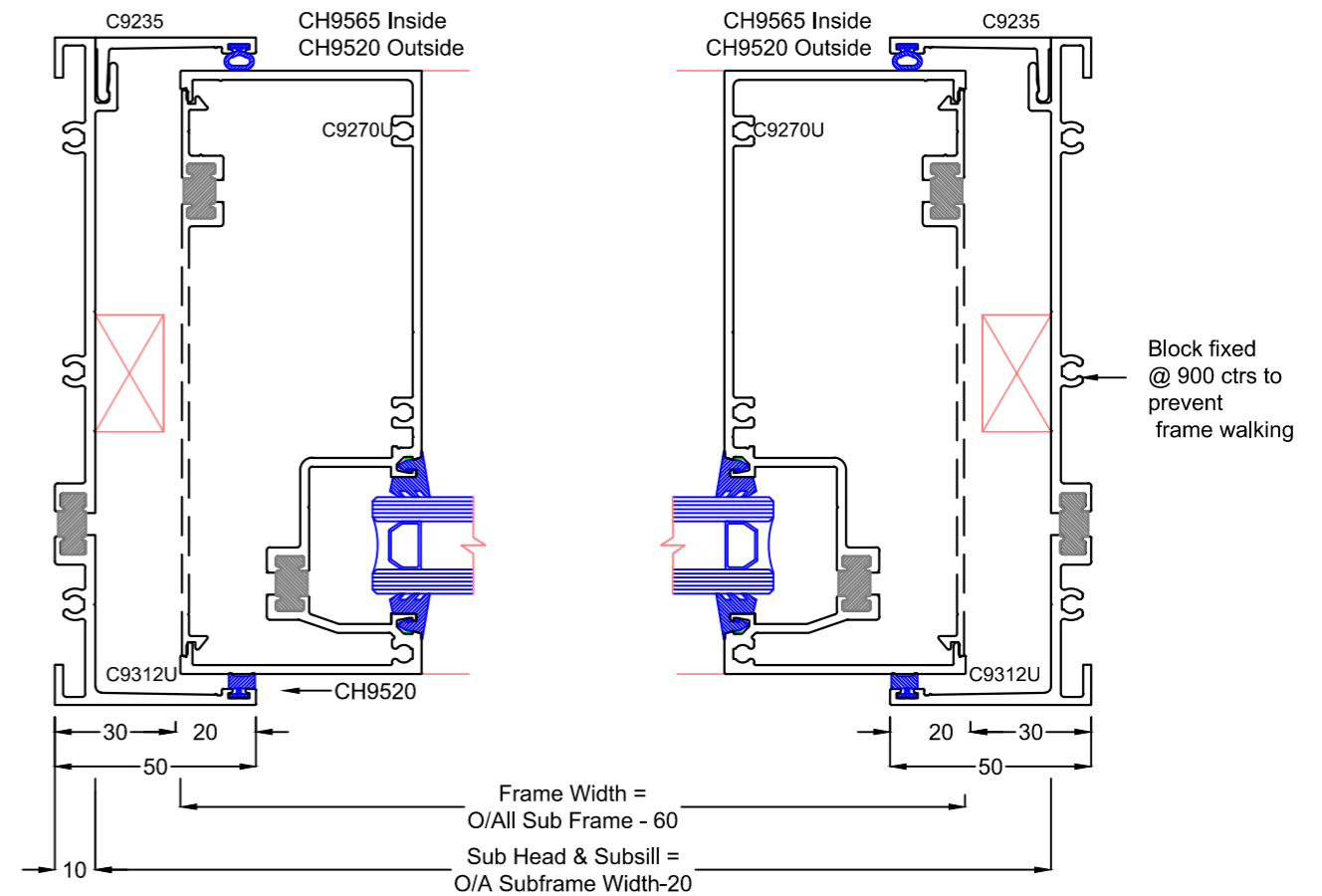
This detail depicts a 2 part sub head & unique subsill designed for internal frame installation. With the sub head & subsill fitted the frame has an external rebate which aids the installation of frames from inside.

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.

Two Part Sub Jamb (50 face)

Typical detail for frame installation from inside



Sub Jamb Detail

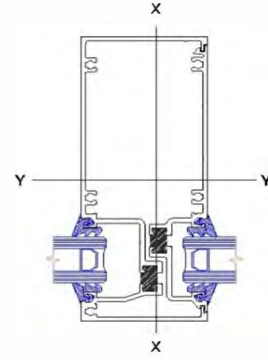
This detail depicts a 2 part sub jamb which is typically used for multi level applications & internal frame installation. The one piece sub head C9311 is usually used with this arrangement.

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 C9316U is not recommended as an alternative to this detail.

U-Max™ THERMAL BREAK 150 x 60mm FRONT DOUBLE GLAZED - 34mm Pocket
U-Max Framing Systems: U150FDG - 21
Mullion Structural Tables

Mullion Combination: U-Max 150 STD FDG C9270, C9274



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

Note the following:

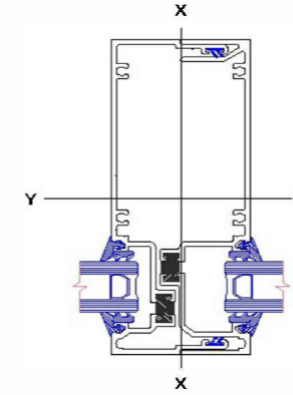
- Maximum Stress = 110Mpa
- Serviceability based on Span/250
- Italics indicate where Serviceability is limited by Ultimate.

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)								
	S	7528	6183	5326	4754	5368	4117	3973	3925
2200	S	7528	6183	5326	4754	4368	4117	3973	3925
	U	7528	6183	5326	4754	4368	4117	3973	3925
2400	S	4247	5108	4375	3877	3531	3291	3131	3307
	U	6247	5108	4375	3877	3531	3291	3131	3039
2600	S	5144	4206	3601	3188	2898	2692	2541	2436
	U	5266	4292	3660	3226	2918	2698	2541	2436
2800	S	4097	3340	2848	2510	2269	2094	1967	1876
	U	4499	3656	3108	2728	2455	2256	2109	2004
3000	S	3317	2697	2293	2013	1812	1663	1553	1472
	U	3886	3152	2672	2338	2096	1916	1782	1681
3200	S	2723	2210	1874	1641	1471	1345	1250	1178
	U	3390	2745	2322	2026	1811	1649	1527	1433
3400	S	2264	1834	1552	1356	1212	1104	1022	959
	U	2983	2412	2036	1773	1580	1435	1324	1237
3600	S	1903	1539	1301	1133	1011	919	848	792
	U	2643	2135	1800	1565	1392	1261	1159	1080
3800	S	1614	1305	1101	958	852	773	711	663
	U	2358	1903	1602	1391	1235	1116	1024	951
4000	S	1382	1116	940	817	726	656	603	
	U	2117	1706	1435	1244	1103	995	911	
4200	S	1192	961	809	702	623			
	U	1910	1538	1293	1119	991			
4400	S	1035	834	702	608				
	U	1731	1394	1170	1013				
4600	S	905	729	613					
	U	1576	1268	1064					
4800	S	796	641						
	U	1441	1159						
5000	S	703							
	U	1322							
Mullion Centres (mm)		800	1000	1200	1400	1600	1800	2000	2200

Mullion Structural Tables

Mullion Combination: U-Max 150 Split FDG C9277, C9278



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

Note the following:

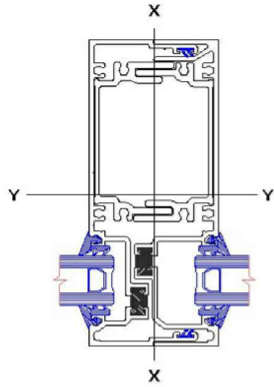
- Maximum Stress = 110Mpa
- Serviceability based on Span/250
- Italics indicate where Serviceability is limited by Ultimate.

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)								
	S	9335	7667	6604	5895	5417	5105	4927	4867
2200	S	9335	7667	6604	5895	5417	5105	4927	4867
	U	9335	7667	6604	5895	5417	5105	4927	4867
2400	S	7734	6324	5416	4800	4371	4074	3876	3762
	U	7734	6324	5416	4800	4371	4074	3876	3762
2600	S	6291	5144	4404	3899	3544	3292	3116	2999
	U	6510	5305	4524	3988	3608	3335	3141	3011
2800	S	5010	4084	3483	3070	2775	2560	2405	2295
	U	5553	4513	3836	3367	3031	2784	2603	2473
3000	S	4056	3298	2804	2462	2216	2034	1899	1800
	U	4790	3885	3293	2881	2583	2362	2196	2072
3200	S	3331	2703	2292	2007	1799	1645	1529	1440
	U	4173	3378	2858	2494	2229	2030	1879	1764
3400	S	2769	2243	1899	1658	1482	1351	1250	1173
	U	3666	2964	2503	2179	1942	1764	1627	1521
3600	S	2327	1882	1591	1386	1236	1123	1036	969
	U	3245	2620	2209	1920	1708	1547	1423	1325
3800	S	1974	1595	1346	1171	1042	945	869	810
	U	2891	2332	1964	1705	1513	1368	1255	1166
4000	S	1690	1364	1150	999	887	803	737	685
	U	2591	2089	1757	1523	1350	1218	1116	1034
4200	S	1458	1176	990	859	762	688	630	
	U	2335	1881	1581	1369	1212	1092	998	
4400	S	1266	1020	858	744	659			
	U	2114	1702	1429	1236	1093			
4600	S	1107	891	749	649				
	U	1922	1547	1298	1122				
4800	S	973	783	658					
	U	1755	1411	1184					
5000	S	860	692						
	U	1608	1293						
Mullion Centres (mm)		800	1000	1200	1400	1600	1800	2000	2200

U-Max™ THERMAL BREAK 150 x 60mm FRONT DOUBLE GLAZED - 34mm Pocket
U-Max Framing Systems: U150FDG - 22
Mullion Structural Tables

Mullion Combination: U-Max 150 Split FDG Splice C9277, C9278, C9284, C9284



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

Note the following:

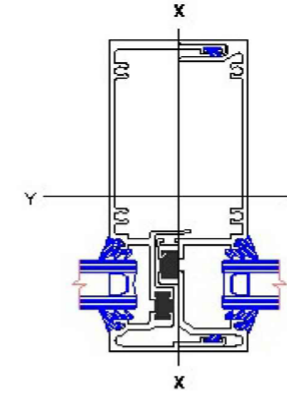
- Maximum Stress = 110Mpa
- Serviceability based on Span/250
- Italics indicate where Serviceability is limited by Ultimate.

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)							
		S	U	S	U	S	U	S	U
2200	S	12026	9877	8508	7594	6978	6577	6347	6270
	U	12026	9877	8508	7594	6978	6577	6347	6270
2400	S	9970	8152	6982	6188	5635	5252	4997	4847
	U	9970	8152	6982	6188	5635	5252	4997	4849
2600	S	8000	6541	5600	4958	4507	4186	3962	3814
	U	8397	6843	5836	5144	4654	4302	4052	3884
2800	S	6371	5193	4429	3903	3528	3256	3058	2918
	U	7167	5825	4951	4346	3912	3594	3360	3192
3000	S	5158	4194	3566	3131	2818	2587	2415	2288
	U	6186	5018	4253	3721	3336	3050	2836	2676
3200	S	4235	3437	2915	2552	2288	2092	1944	1832
	U	5392	4366	3693	3223	2880	2623	2428	2279
3400	S	3521	2852	2414	2108	1885	1717	1590	1491
	U	4740	3832	3236	2818	2512	2281	2104	1966
3600	S	2959	2394	2023	1762	1572	1428	1318	1232
	U	4198	3390	2858	2484	2210	2002	1841	1715
3800	S	2511	2029	1712	1489	1325	1202	1106	1030
	U	3742	3019	2542	2207	1959	1771	1625	1509
4000	S	2149	1735	1462	1270	1128	1021	937	871
	U	3356	2705	2276	1973	1749	1578	1445	1339
4200	S	1853	1495	1258	1092	969	875	802	744
	U	3026	2437	2048	1774	1570	1415	1293	1196
4400	S	1610	1298	1091	946	838	756	691	640
	U	2741	2206	1853	1603	1418	1276	1164	1075
4600	S	1407	1134	953	825	730	658	601	
	U	2494	2006	1684	1456	1286	1156	1054	
4800	S	1237	996	837	724	640			
	U	2278	1832	1537	1327	1172			
5000	S	1094	880	739	639				
	U	2088	1679	1407	1215				
Mullion Centres (mm)		800	1000	1200	1400	1600	1800	2000	2200

Mullion Structural Tables

Mullion Combination: U-Max 150 HD Split FDG C9282, C9283



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

Note the following:

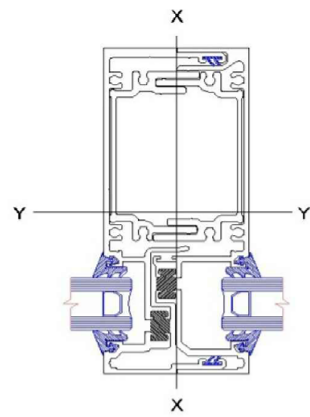
- Maximum Stress = 110Mpa
- Serviceability based on Span/250
- Italics indicate where Serviceability is limited by Ultimate.

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)							
		S	U	S	U	S	U	S	U
2200	S	10829	8894	7661	6838	6283	5922	5715	5646
	U	10829	8894	7661	6838	6283	5922	5715	5646
2400	S	8970	7334	6282	5567	5070	4725	4496	4363
	U	8970	7334	6282	5567	5070	4725	4496	4363
2600	S	7212	5897	5049	4470	4063	3774	3572	3438
	U	7548	6151	5246	4624	4183	3867	3642	3491
2800	S	5744	4682	3993	3519	3181	2935	2757	2631
	U	6437	5232	4447	3904	3513	3228	3018	2867
3000	S	4650	3781	3215	2823	2540	2332	2177	2063
	U	5552	4503	3817	3340	2994	2737	2545	2401
3200	S	3818	3099	2628	2300	2063	1886	1752	1651
	U	4835	3915	3312	2890	2582	2352	2177	2044
3400	S	3174	2572	2177	1901	1699	1548	1433	1345
	U	4247	3434	2899	2525	2250	2044	1885	1762
3600	S	2667	2158	1824	1589	1417	1288	1188	1111
	U	3758	3035	2559	2224	1979	1792	1648	1535
3800	S	2263	1829	1543	1342	1195	1083	997	929
	U	3348	2701	2275	1974	1753	1585	1454	1350
4000	S	1937	1564	1318	1145	1017	920	845	785
	U	3000	2419	2034	1764	1563	1411	1292	1197
4200	S	1671	1348	1135	984	873	789	723	670
	U	2703	2177	1830	1584	1403	1264	1155	1069
4400	S	1451	1170	984	853	756	681	623	
	U	2447	1970	1654	1431	1266	1139	1039	
4600	S	1269	1022	859	744	658			
	U	2224	1790	1502	1298	1147			
4800	S	1116	898	754	652				
	U	2031	1633	1370	1183				
5000	S	986	793	666					
	U	1860	1496	1254					
Mullion Centres (mm)		800	1000	1200	1400	1600	1800	2000	2200

U-Max™ THERMAL BREAK 150 x 60mm FRONT DOUBLE GLAZED - 34mm Pocket
U-Max Framing Systems: U150FDG - 23
Mullion Structural Tables

Mullion Combination: U-Max 150 HD Split FDG Splice C9282, C9283, C9284, C9284



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

Note the following:

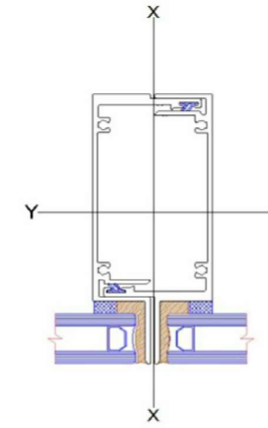
- Maximum Stress = 110Mpa
- Serviceability based on Span/250
- Italics indicate where Serviceability is limited by Ultimate.

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)								
	S	12507	10272	8848	7898	7257	6840	6600	6521
2200	S	12507	10272	8848	7898	7257	6840	6600	6521
	U	12507	10272	8848	7898	7257	6840	6600	6521
2400	S	10367	8477	7260	6434	5860	5461	5194	5043
	U	10367	8477	7260	6434	5860	5461	5196	5043
2600	S	8361	6836	5853	5182	4710	4375	4141	3986
	U	8730	7115	6067	5348	4838	4472	4213	4038
2800	S	6659	5428	4629	4080	3687	3403	3196	3049
	U	7450	6055	5147	4518	4066	3736	3493	3318
3000	S	5391	4383	3727	3272	2945	2704	2524	2392
	U	6430	5215	4421	3868	3468	3170	2948	2781
3200	S	4426	3592	3047	2667	2391	2186	2032	1914
	U	5604	4537	3838	3349	2993	2726	2523	2368
3400	S	3680	2981	2523	2203	1970	1795	1661	1559
	U	4925	3982	3362	2928	2610	2370	2186	2043
3600	S	3092	2502	2114	1842	1643	1493	1377	1288
	U	4361	3522	2970	2581	2296	2080	1913	1782
3800	S	2624	2120	1789	1556	1385	1256	1156	1077
	U	3887	3136	2641	2292	2035	1840	1688	1568
4000	S	2246	1813	1528	1327	1179	1067	979	910
	U	3486	2810	2364	2049	1816	1639	1501	1391
4200	S	1937	1562	1315	1141	1012	914	838	777
	U	3142	2531	2127	1842	1631	1470	1343	1242
4400	S	1683	1356	1141	988	876	790	723	669
	U	2846	2291	1924	1665	1472	1325	1209	1117
4600	S	1471	1185	996	862	763	687	628	
	U	2589	2083	1748	1511	1335	1200	1094	
4800	S	1293	1041	874	756	669	602		
	U	2365	1902	1595	1378	1216	1092		
5000	S	1143	920	772	667				
	U	2168	1743	1461	1261				
Mullion Centres (mm)		800	1000	1200	1400	1600	1800	2000	2200

Mullion Structural Tables

Mullion Combination: Max 150 FDG Struct C9336, C9337



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

Note the following:

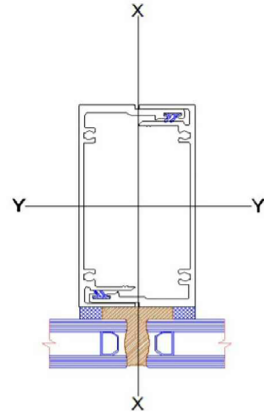
- Maximum Stress = 110Mpa
- Serviceability based on Span/250
- Italics indicate where Serviceability is limited by Ultimate.

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

2200	S	5032	4133	3560	3178	2920	2752	2656	2624
	U	5032	4133	3560	3178	2920	2752	2656	2624
2400	S	3851	3161	2720	2423	2218	2078	1986	1935
	U	4174	3413	2923	2591	2359	2199	2092	2030
2600	S	3009	2460	2106	1865	1695	1575	1490	1435
	U	3517	2867	2445	2155	1949	1802	1697	1627
2800	S	2396	1953	1666	1468	1327	1225	1150	1097
	U	3004	2441	2075	1821	1639	1506	1408	1338
3000	S	1940	1578	1341	1178	1060	973	908	861
	U	2594	2104	1783	1560	1399	1279	1189	1122
3200	S	1593	1293	1096	960	861	787	731	689
	U	2262	1831	1549	1352	1208	1100	1019	956
3400	S	1324	1073	908	793	709	646		
	U	1989	1608	1358	1183	1054	957		
3600	S	1113	900	761	663				
	U	1762	1423	1200	1043				
3800	S	944	763	644					
	U	1572	1268	1068					
4000	S	808	652						
	U	1410	1137						
4200	S	697							
	U	1272							
4400	S	606							
	U	1153							
Mullion Centres (mm)		800	1000	1200	1400	1600	1800	2000	2200

U-Max™ THERMAL BREAK 150 x 60mm FRONT DOUBLE GLAZED - 34mm Pocket
U-Max Framing Systems: U150FDG - 24
Mullion Structural Tables

Mullion Combination: Max 100 SM Blind C9331, C9331



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.

2200	S	4106	3388	2933	2633	2434	2306	2234	2211
	U	5907	4852	4179	3730	3428	3231	3118	3080
2400	S	3136	2574	2215	1972	1806	1692	1617	1575
	U	4896	4003	3429	3039	2767	2579	2454	2381
2600	S	2450	2003	1715	1518	1380	1282	1213	1168
	U	4122	3360	2865	2525	2285	2112	1989	1907
2800	S	1951	1590	1356	1195	1080	997	937	894
	U	3518	2859	2430	2133	1920	1764	1649	1567
3000	S	1580	1284	1092	959	863	792	740	701
	U	3035	2462	2087	1826	1637	1497	1392	1313
3200	S	1297	1053	893	781	701	641		
	U	2645	2142	1812	1581	1413	1287		
3400	S	1078	874	739	646				
	U	2325	1879	1587	1382				
3600	S	906	733	619					
	U	2058	1662	1401					
3800	S	769	621						
	U	1834	1480						
4000	S	658							
	U	1645							
Mullion Centres (mm)		800	1000	1200	1400	1600	1800	2000	2200

Glazing Methodology

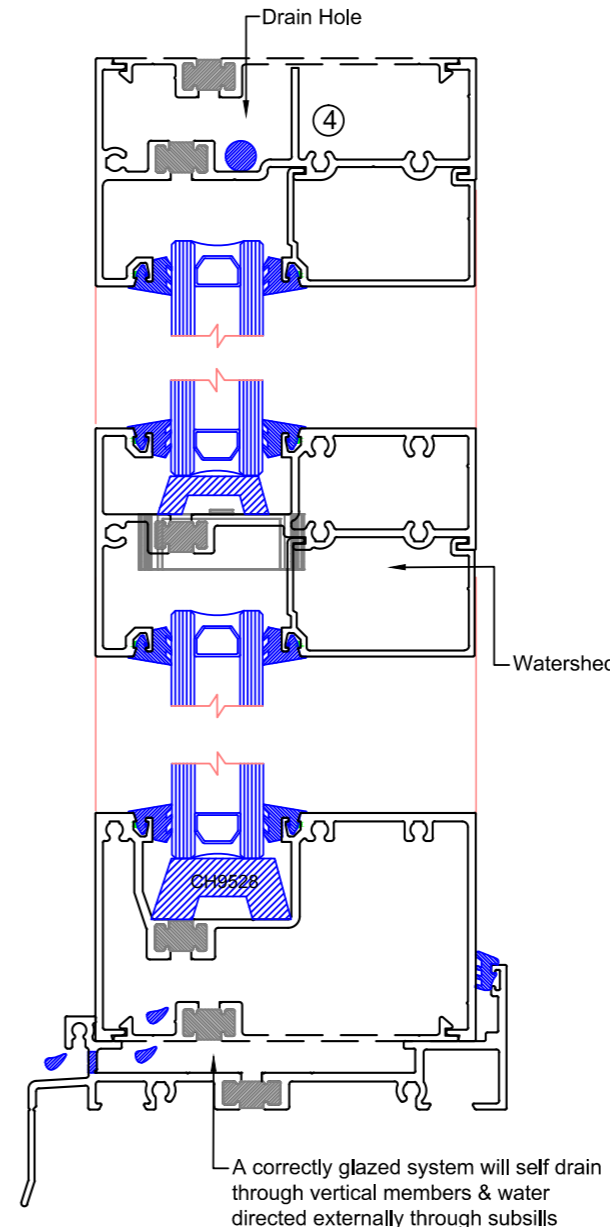
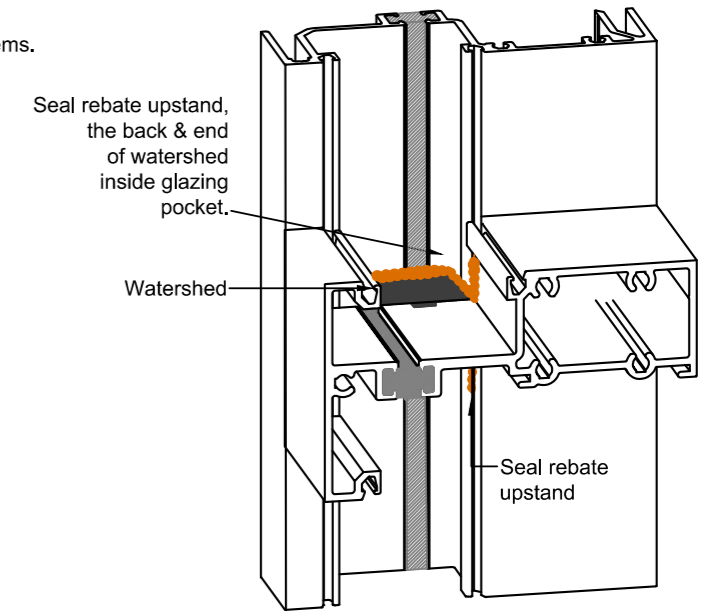
This system has been designed to self drain within the system via a patented watershed component in transom, which is traditionally the area most prone to leakage in commercial systems.

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.

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.

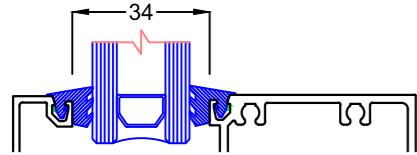
A correctly glazed system will self drain through vertical members & water directed externally through subsills

U-Max™ THERMAL BREAK 150 x 60mm FRONT DOUBLE GLAZED - 34mm Pocket

U-Max Framing Systems: U150FDG - 25

Wedge glazing charts for Max Framing

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

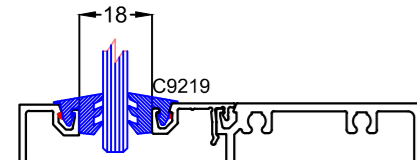


CH9509
7mm wedge SANT
Blue backing



CH9510
9mm wedge SANT
Purple backing

C9219 Spandrel adaptor achieves a 18mm pocket
C9810 Spandrel adaptor achieves a 12mm pocket



	Glass thickness	Example	Rebate wedge	Gap	Glazing wedge	Gap
U-Max Framing	22mm	5/12/5	CH9507	5mm	CH9509	7mm
	23mm	6/12/5	CH9507	5mm	CH9509	7mm
	24mm	6/12/6	CH9507	5mm	CH9507	5mm
	25mm	6.38/12/6	CH9507	4mm	CH9507	5mm
	26mm	8/12/6	CH9506	3mm	CH9507	5mm
	27mm	8.38/12/6	CH9506	3mm	CH9507	5mm
	28mm	8/12/8	CH9505	1mm	CH9507	5mm
	29mm	8/12/8	CH9505	1mm	CH9506	3mm
U-Max Spandrel Glazing	Glass thickness	Spandrel Adaptor	Rebate wedge	Gap	Glazing wedge	Gap
	3mm	C9810	CH9507	7mm	CH9507	5mm
	6mm	C9219	CH9506	5mm	CH9509	7mm
	8mm	C9219	CH9506	5mm	CH9507	5mm
	10mm	C9219	CH9503	3mm	CH9507	5mm