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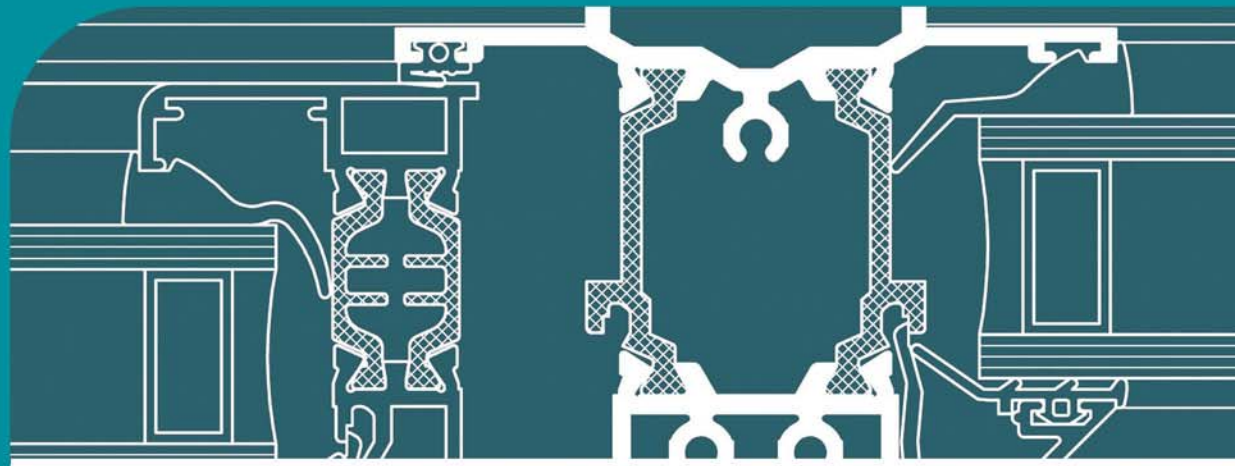
ARCHITECTURAL ALUMINIUM SOLUTIONS



Crown Casement Window

CROWN

Product Manual

CROWN

Crown Casement Window

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Specification

Scope

This specification details materials, construction, finish and size limitations for the Crown Casement window system. This range is designed to meet high performance requirements in a variety of applications. The suite of profiles can be constructed to form fixed lights and top or side hung windows.

Materials

Aluminium profiles are extruded from aluminium alloy 6063 or 6060 T6 complying with the recommendations of BS EN 755-9:2001. Polyester powder coat finishes are available to BS EN 12206-1:2004 in a wide range of colours.

Weatherstripping is a TPE seal internally and externally, both set in undercut grooves in the sash and frame.

The thermal barrier is achieved using two polyamide extrusions separating the internal and external faces.

Construction

Frame members are mitre cut at 45°. Corners are reinforced with stainless steel corner ties and a combination of, extruded/pressed aluminium or die cast zinc corner cleats. All joints shall be sealed during fabrication against water entry.

The thermal barrier section is achieved using two separate aluminium extrusions and two polyamide extrusions mechanically jointed to form a single compound profile.

Assembly and Installation

Detailed instructions are provided in this publication, which must be strictly conformed to. Only parts supplied by Sapa should be used in the manufacture of Crown Windows.

Thermal Performance

Crown windows can meet and surpass the area weighted average U values stipulated in Part L of the Building Regulations. Lower U-values can be achieved using double glazed units with enhanced thermal insulation, such as ‘soft coat’ low emissivity glass, argon gas filling and thermally enhanced spacer bar.

Hardware

Opening lights are hung on concealed, stainless steel variable geometry friction hinges. Espagnolette locking system constructed with stainless steel shoot rods, and zinc plated die cast keeps. Handles and are zinc die castings. Optional hinge bolts must be fitted when enhanced security to BS7950 is required. Cockspur locking also available on a limited number of frame profiles. Saracen vent frame specific locking system is also available, comprising of two end shoot bolts and centre keep locking.

Glazing

Drainage in accordance with details listed in this manual meets the requirements of “Ventilated and Drained Glazing System”, as specified in BS6262. Glass must conform to BS6262 for thickness and type. Insulating glass units of 24mm, 28mm can be accommodated.

Glass is set against co-extruded PVCu / Nitrile gaskets retained in undercut grooves within the aluminium profile. Final retention of the glass is achieved by the application of a co-extruded PVCu / Nitrile wedge gasket between the inner face of the glass and bead or frame.

Performance

When tested in accordance with BS6375:Part 1:2009 The products listed in this manual, when manufactured installed and glazed strictly to the enclosed details, will meet UK exposure category 2000.

Opening Lights

Water Tightness	Class 9A (600 Pascals)
Air Permeability	Class 3 (600 Pascals)
Wind Resistance	Class B5 (2000 Pascals)**

Fixed Lights

Water Tightness	Class 9A (600 Pascals)
Air Permeability	Class 3 (600 Pascals)
Wind Resistance	Class B5 (2000 Pascals)**

** Exposure category varies with Width/Height of window and mullion / transom used, as these are the only unsupported members. An accurate figure can be obtained using BS6399:Part 2 calculations and inertia values given on pages 2-25 & 2-26.

Maximum fixed light area = 5m^2.

Size Limitations

Note

All sizes given are in millimetres, all vent maximum and minimum sizes relate to the overall size of the vent frame and not the outerframe.

Vent frame = “B” size + 13mm (see page 4-1 for an explanation of “B” size)

Fixed Light

Maximum area 5 sq.m

The sizes listed on this page are used in Sapa Logic, more detailed size/glass weight combinations can be found on the following page.

Side Hung Casement

Stay Size	8”	12”	16”
Max Width	436	636	736
Max Height	1336	1336	1336
Max Weight	18kg	22kg	24kg
Min Width	236	336	436
Min Height	386	386	386

Egress Stays are limited to a minimum ventframe width of 555mm, to comply with approved document Part B Fire Safety.

Top Hung Casement

Stay Size	6”	8”	10”	12”	16”	20”	24”
Max Width	1200	1200	1200	1200	1200	1200	1200
Max Height	336	386	436	586	816	1136	1336
Max Weight	10kg	12kg	16kg	20kg	21kg	26kg	40kg
Min Width	386	386	386	386	386	386	386
Min Height	200	236	311	386	536	736	886

Specification

Maximum Height x Width Combination Charts

Top Hung Casement - 6" Stay 10kg Max Weight - Min Width 386			
12mm Glazing Thickness		8mm Glazing Thickness	
Height	Width	Height	Width
336	969	336	1200
321	1014	321	1200
306	1064	306	1200
291	1120	291	1200
276	1181	276	1200
261	1200	261	1200
245	1200	245	1200
230	1200	230	1200
215	1200	215	1200
200	1200	200	1200

Top Hung Casement - 8" Stay 12kg Max Weight - Min Width 386			
12mm Glazing Thickness		8mm Glazing Thickness	
Height	Width	Height	Width
386	1012	386	1200
369	1057	369	1200
353	1107	353	1200
336	1162	336	1200
320	1200	320	1200
303	1200	303	1200
286	1200	286	1200
270	1200	270	1200
253	1200	253	1200
236	1200	236	1200

Top Hung Casement - 10" Stay 16kg Max Weight - Min Width 386			
12mm Glazing Thickness		8mm Glazing Thickness	
Height	Width	Height	Width
436	1195	436	1200
422	1200	422	1200
408	1200	408	1200
394	1200	394	1200
380	1200	380	1200
367	1200	367	1200
353	1200	353	1200
339	1200	339	1200
325	1200	325	1200
311	1200	311	1200

Top Hung Casement - 12" Stay 20kg Max Weight - Min Width 386			
12mm Glazing Thickness		8mm Glazing Thickness	
Height	Width	Height	Width
586	1111	586	1200
564	1155	564	1200
542	1200	542	1200
519	1200	519	1200
497	1200	497	1200
475	1200	475	1200
453	1200	453	1200
430	1200	430	1200
408	1200	408	1200
386	1200	386	1200

Top Hung Casement - 16" Stay 21kg Max Weight - Min Width 386			
12mm Glazing Thickness		8mm Glazing Thickness	
Height	Width	Height	Width
816	838	816	1200
785	871	785	1200
754	907	754	1200
723	946	723	1200
692	988	692	1200
660	1035	660	1200
629	1086	629	1200
598	1143	598	1200
567	1200	567	1200
536	1200	536	1200

Top Hung Casement - 20" Stay 26kg Max Weight - Min Width 386			
12mm Glazing Thickness		8mm Glazing Thickness	
Height	Width	Height	Width
1136	745	1136	1118
1092	775	1092	1163
1047	808	1047	1200
1003	844	1003	1200
958	883	958	1200
914	926	914	1200
869	974	869	1200
825	1026	825	1200
780	1084	780	1200
736	1150	736	1200

Top Hung Casement - 24" Stay 40kg Max Weight - Min Width 386			
12mm Glazing Thickness		8mm Glazing Thickness	
Height	Width	Height	Width
1336	975	1336	1200
1286	1013	1286	1200
1236	1053	1236	1200
1186	1098	1186	1200
1136	1146	1136	1200
1086	1199	1086	1200
1036	1200	1036	1200
986	1200	986	1200
936	1200	936	1200
886	1200	886	1200

Side Hung Casement - 8" Stay 18kg Max Weight - Min Height 386			
12mm Glazing Thickness		8mm Glazing Thickness	
Height	Width	Height	Width
1336	436	1336	436
1336	414	1336	414
1336	392	1336	392
1336	369	1336	369
1336	347	1336	347
1336	325	1336	325
1336	303	1336	303
1336	281	1336	281
1336	258	1336	258
1336	236	1336	236

Side Hung Casement - 12" Stay 22kg Max Weight - Min Height 386			
12mm Glazing Thickness		8mm Glazing Thickness	
Height	Width	Height	Width
1126	636	1336	636
1188	603	1336	603
1258	569	1336	569
1336	536	1336	536
1336	503	1336	503
1336	469	1336	469
1336	436	1336	436
1336	403	1336	403
1336	369	1336	369
1336	336	1336	336

Side Hung Casement - 16" Stay 24kg Max Weight - Min Height 386			
12mm Glazing Thickness		8mm Glazing Thickness	
Height	Width	Height	Width
1061	736	1336	736
1112	703	1336	703
1167	669	1336	669
1228	636	1336	636
1296	603	1336	603
1336	569	1336	569
1336	536	1336	536
1336	503	1336	503
1336	469	1336	469
1336	436	1336	436

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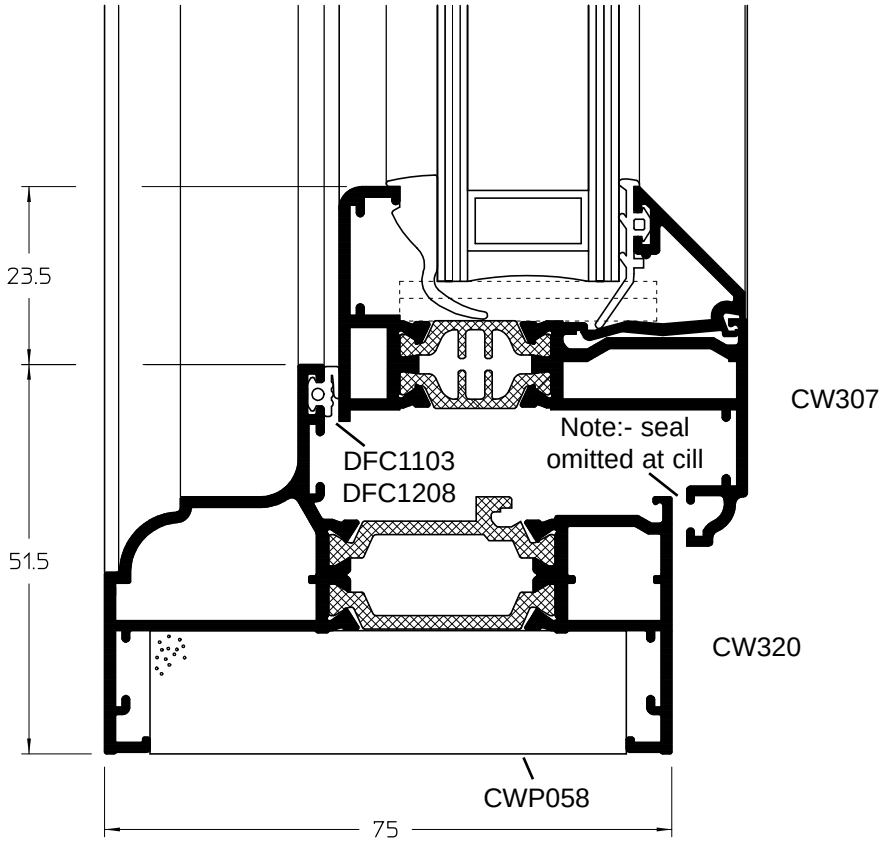
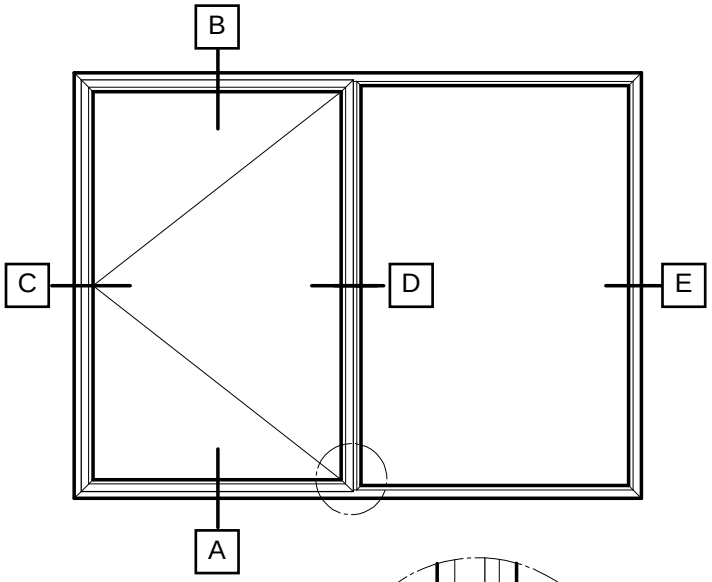
General Arrangements

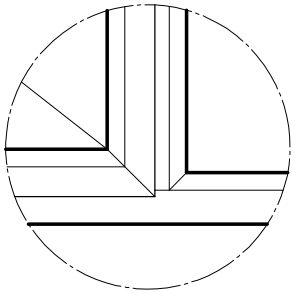
A Cill

Standard softline outerframe & softline ventframe.





Typical casement window showing general arrangement reference codes.

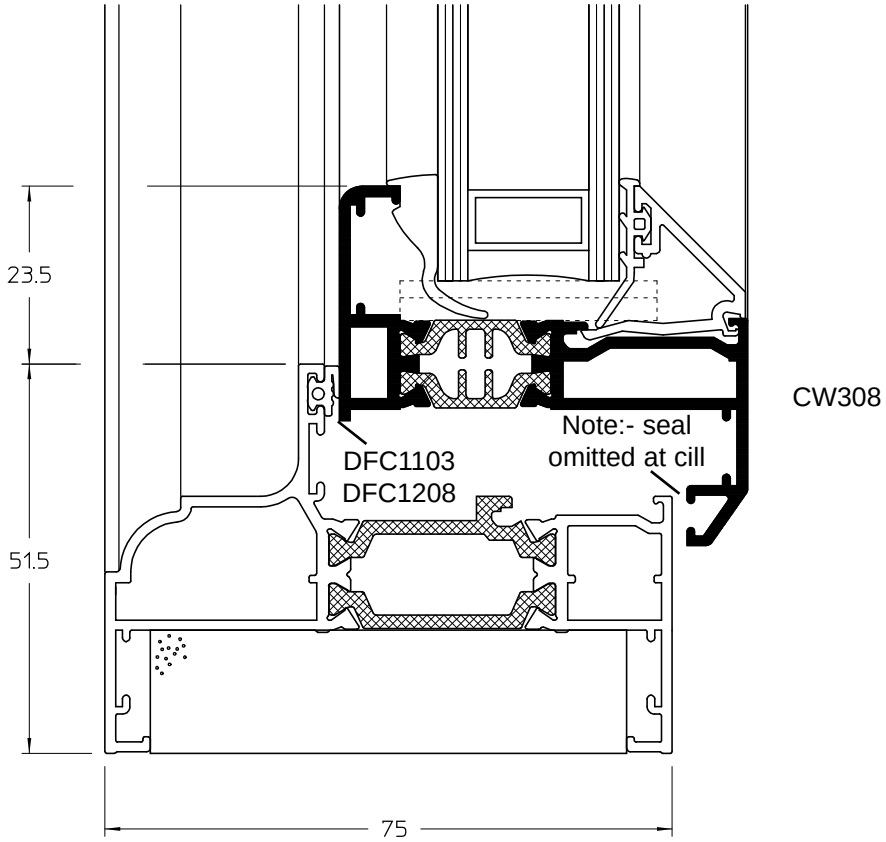


Mullion joint view

General Arrangements

A Cill

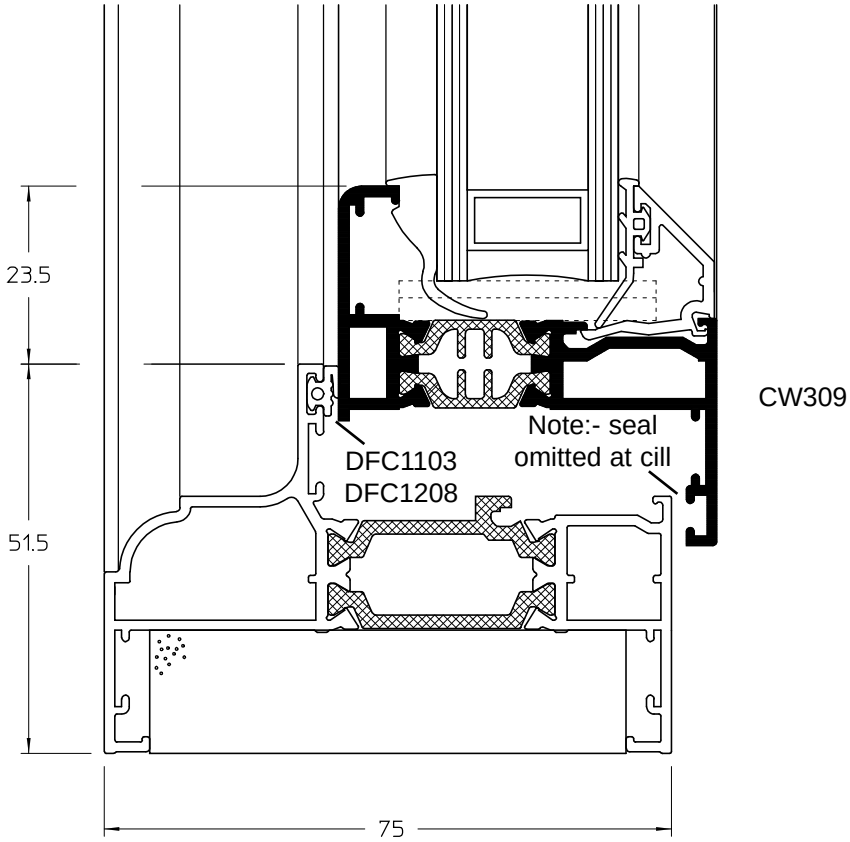
Chamfered ventframe.



A Cill

Flat ventframe.

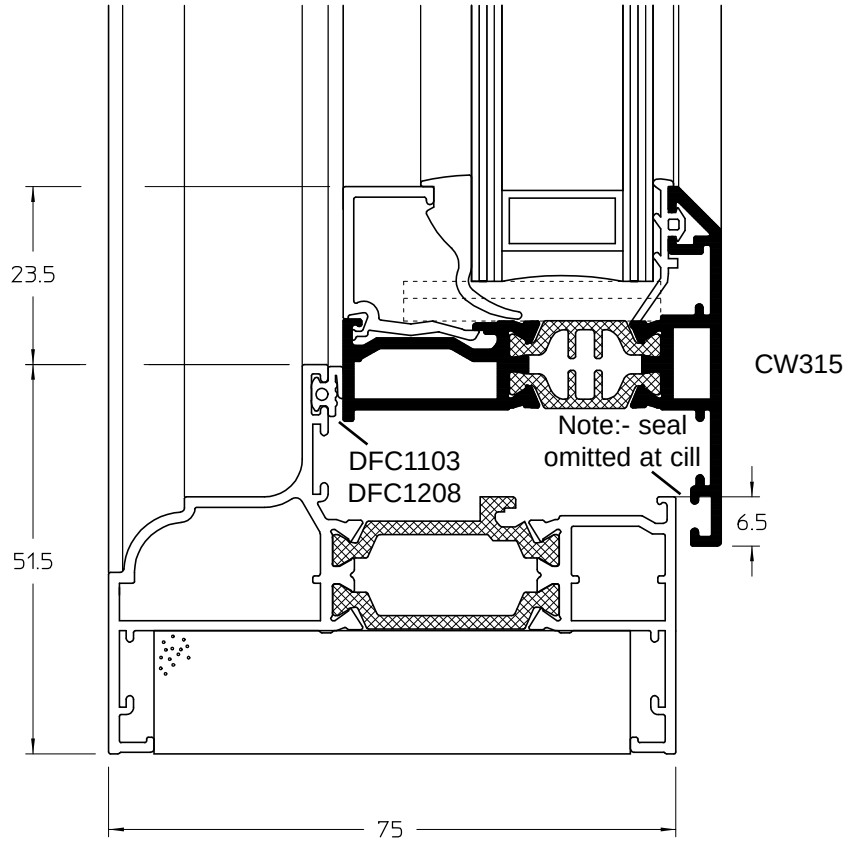
Note Flat/Saracen vent glazing beads are <u>not</u> compatible with any other profile.



General Arrangements

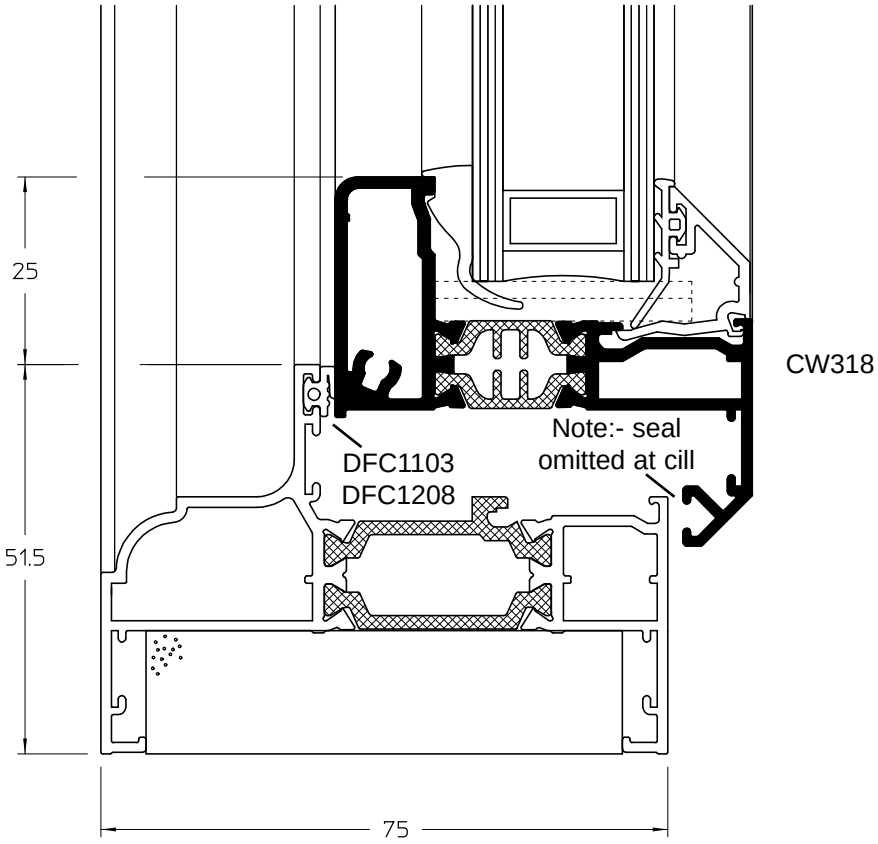
A Cill

Glaze in ventframe.
Note glaze in vent glazing beads are <u>not</u> compatible with any other profile.



A Cill

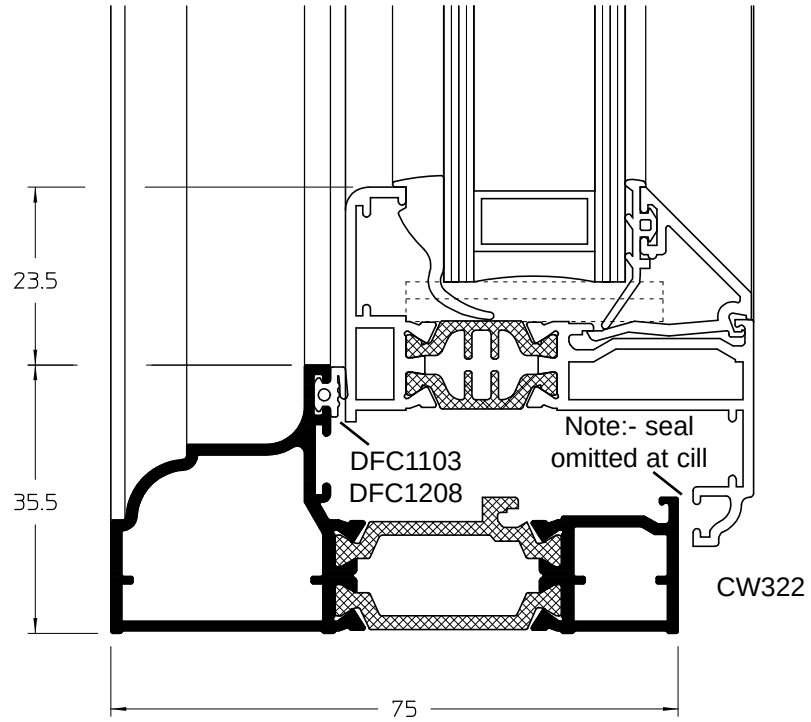
Saracen Ventframe.
Note Flat/Saracen vent glazing beads are <u>not</u> compatible with any other profile.



General Arrangements

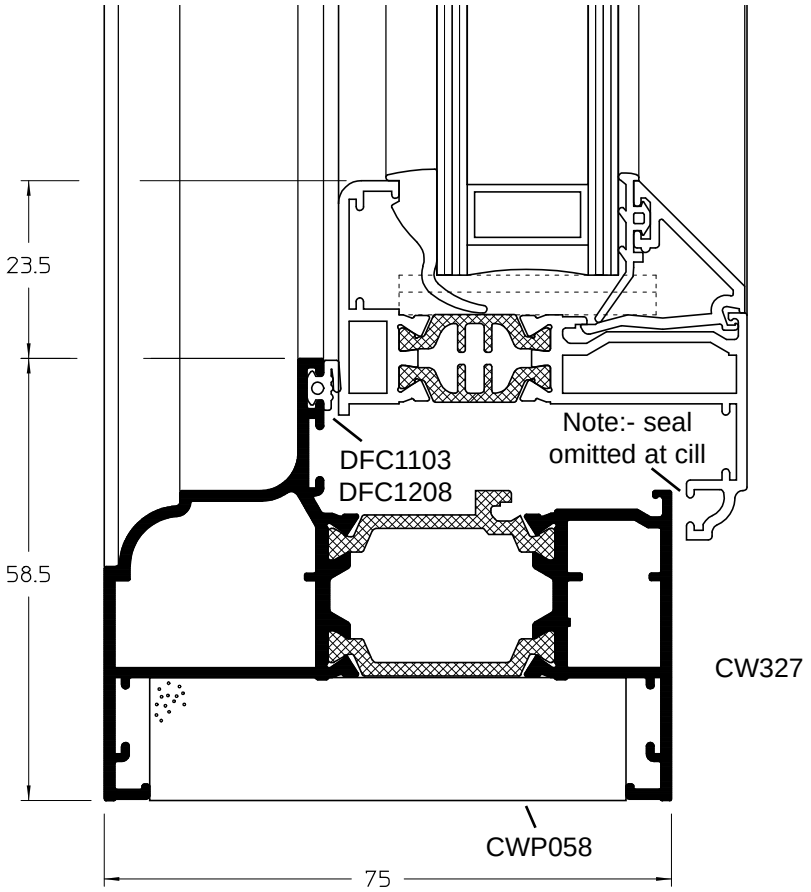
A Cill

Slim softline outerframe.



A Cill

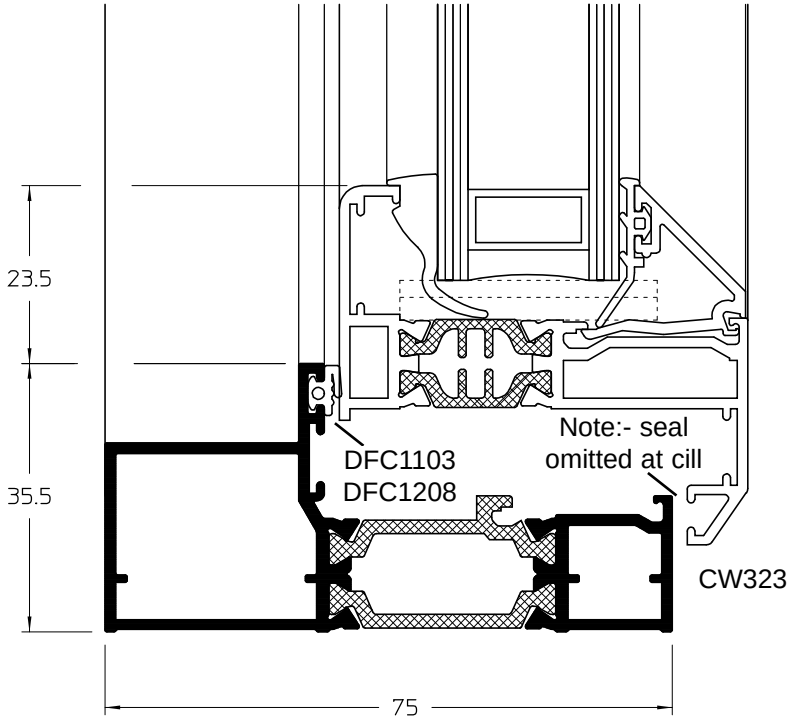
Extended softline outerframe.



General Arrangements

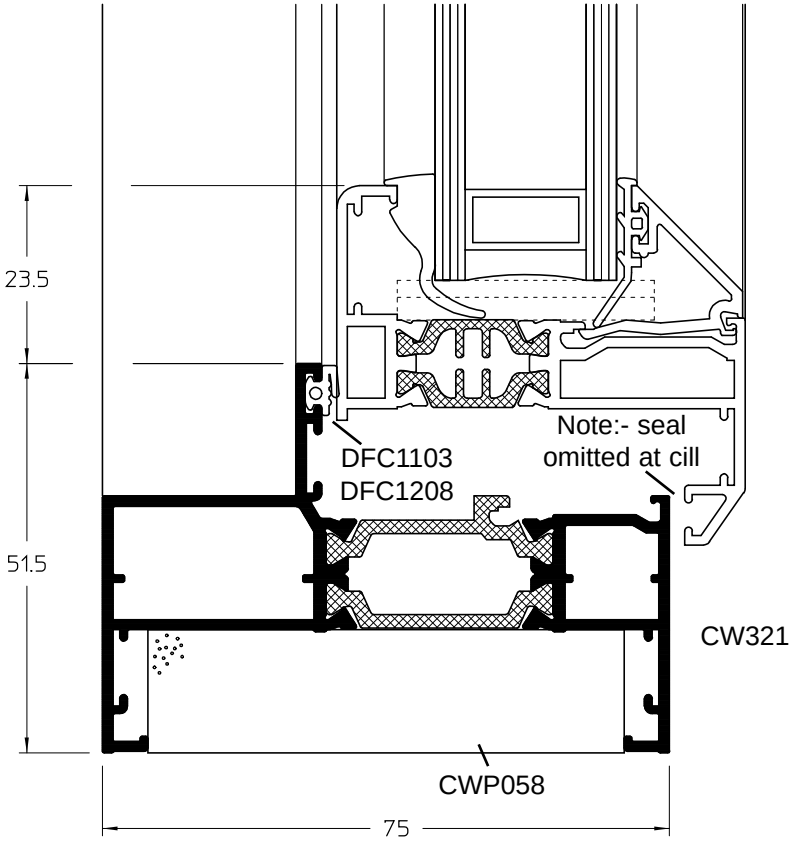
A Cill

Slim square outerframe.



A Cill

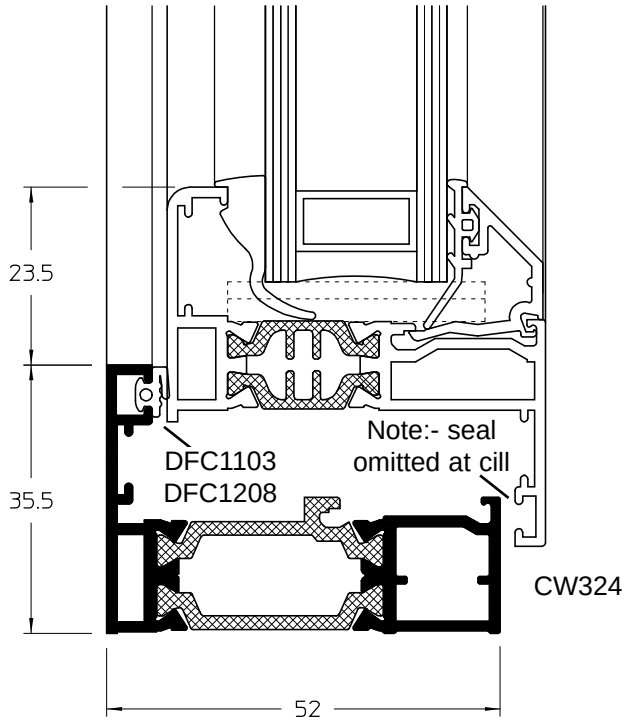
Standard square outerframe.



General Arrangements

A Cill

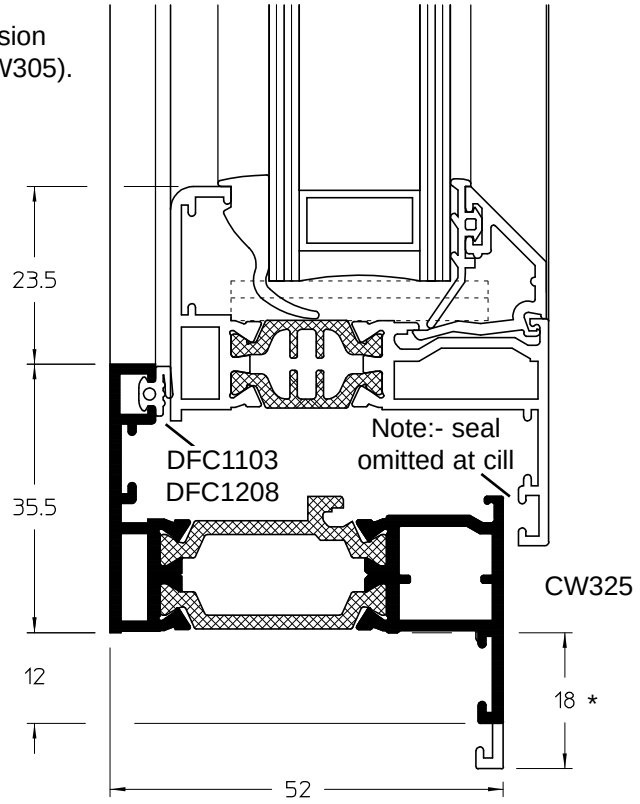
52mm outerframe.
All 52mm Frames can be corner jointed with each other



A Cill

52mm outerframe (12mm & 18mm) unequal leg.
All 52mm Frames can be corner jointed with each other

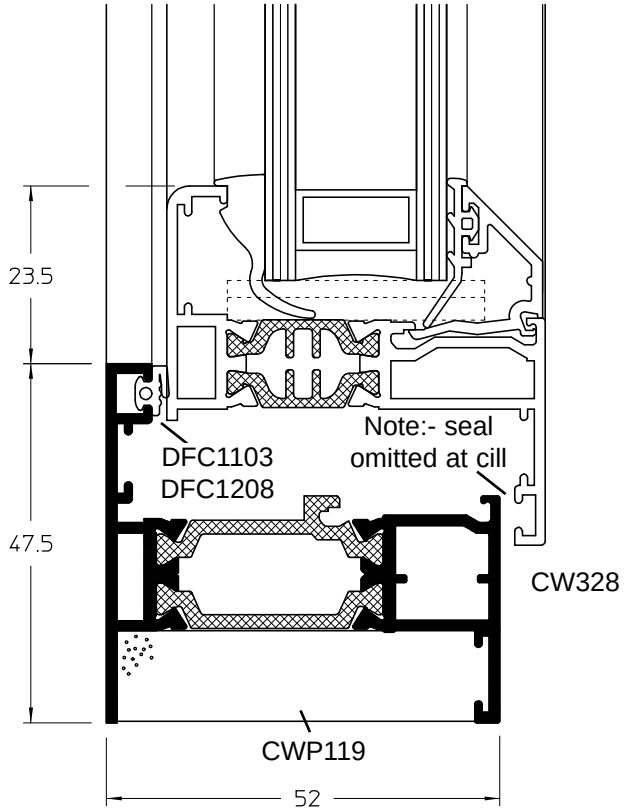
* 18mm leg version
also available (CW305).



General Arrangements

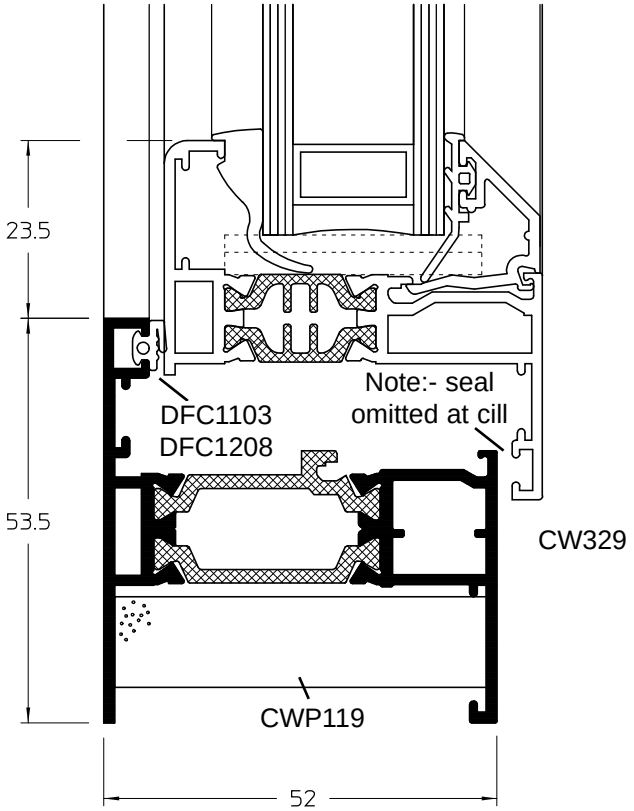
A Cill

52mm outerframe 12mm equal leg.
All 52mm Frames can be corner jointed with each other



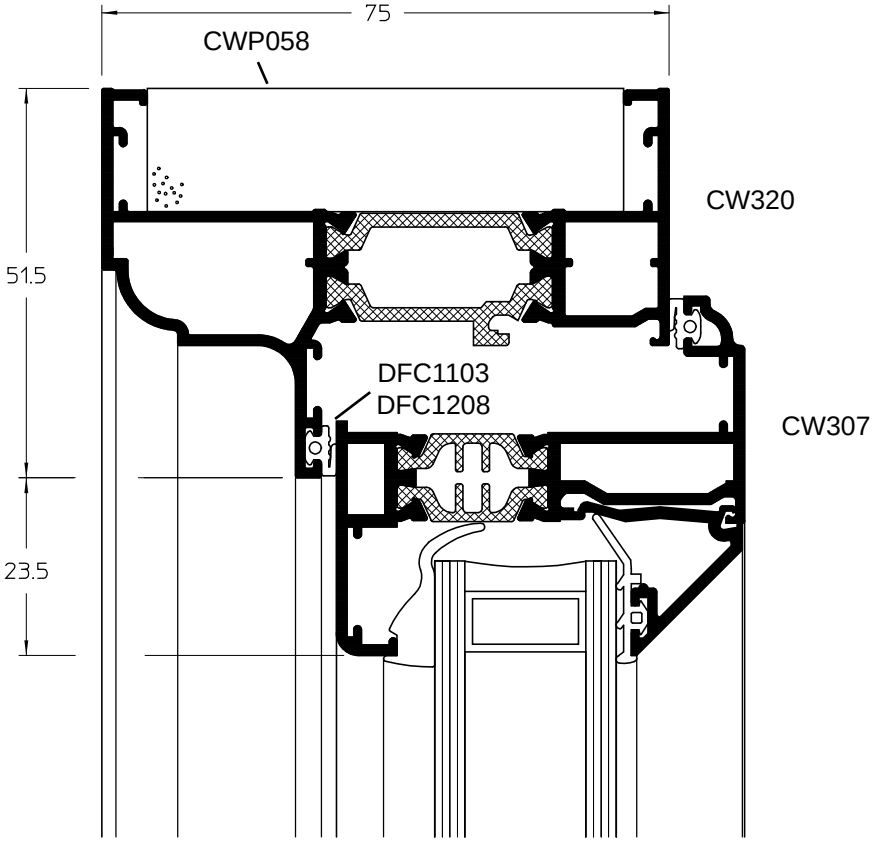
A Cill

52mm outerframe 18mm equal leg.
All 52mm Frames can be corner jointed with each other

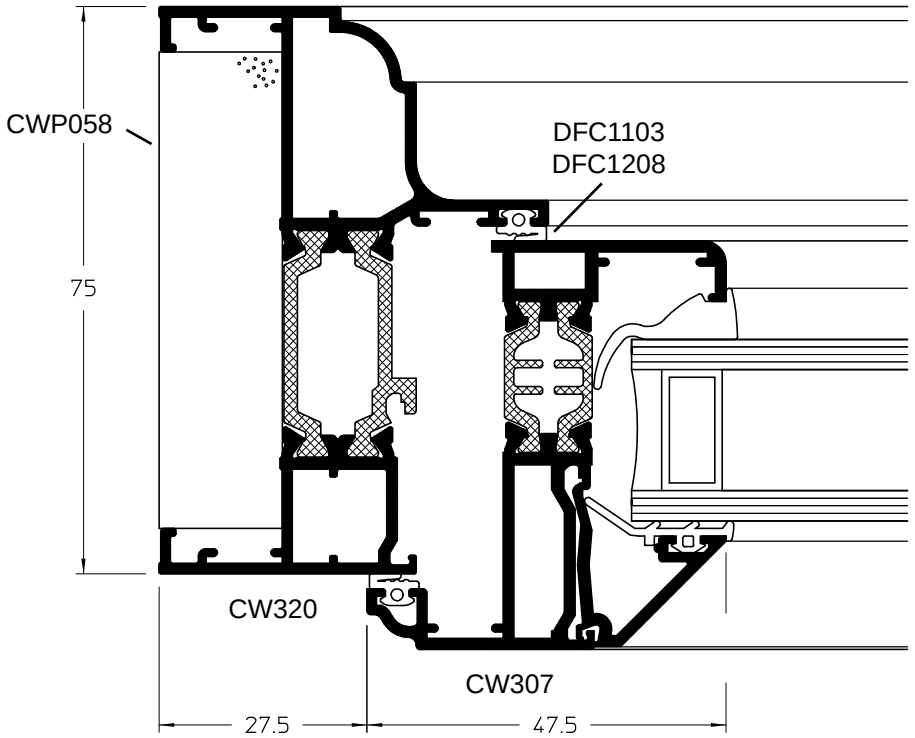


General Arrangements

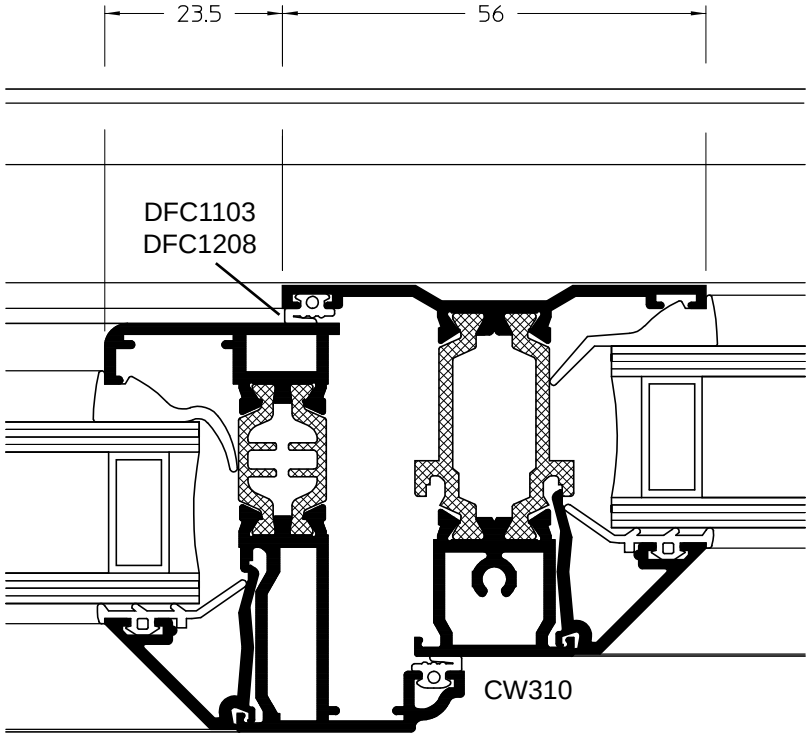
B Head



C Opening Light Jamb

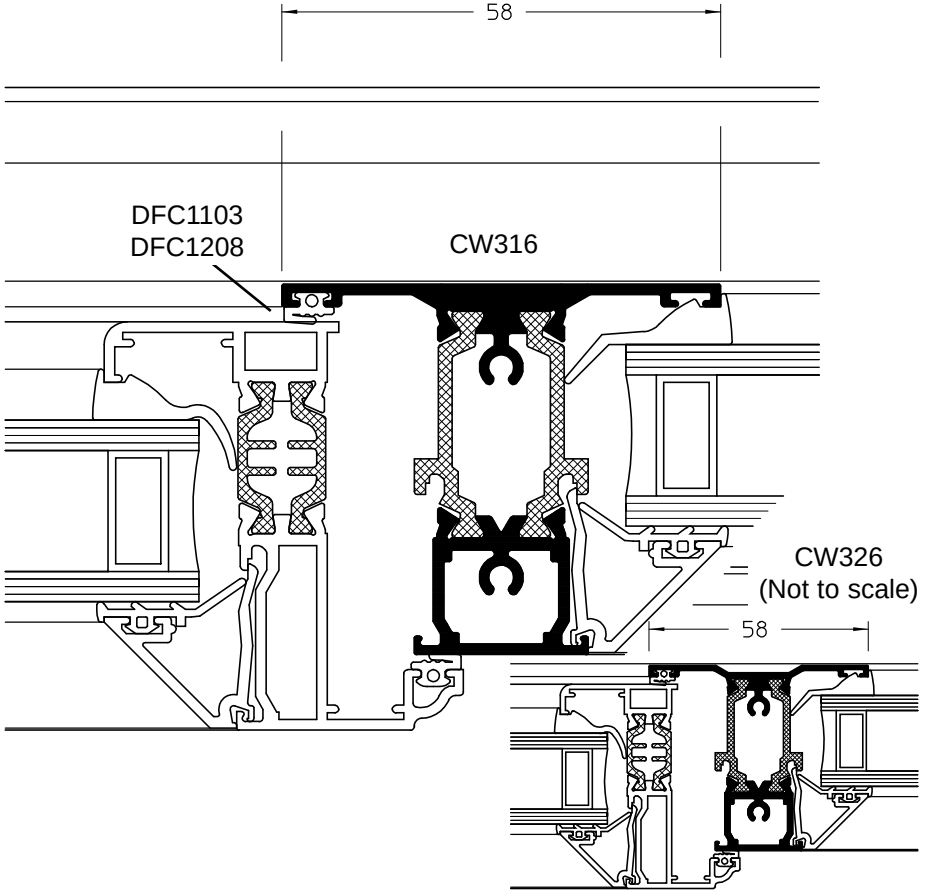


D Mullion / Transom



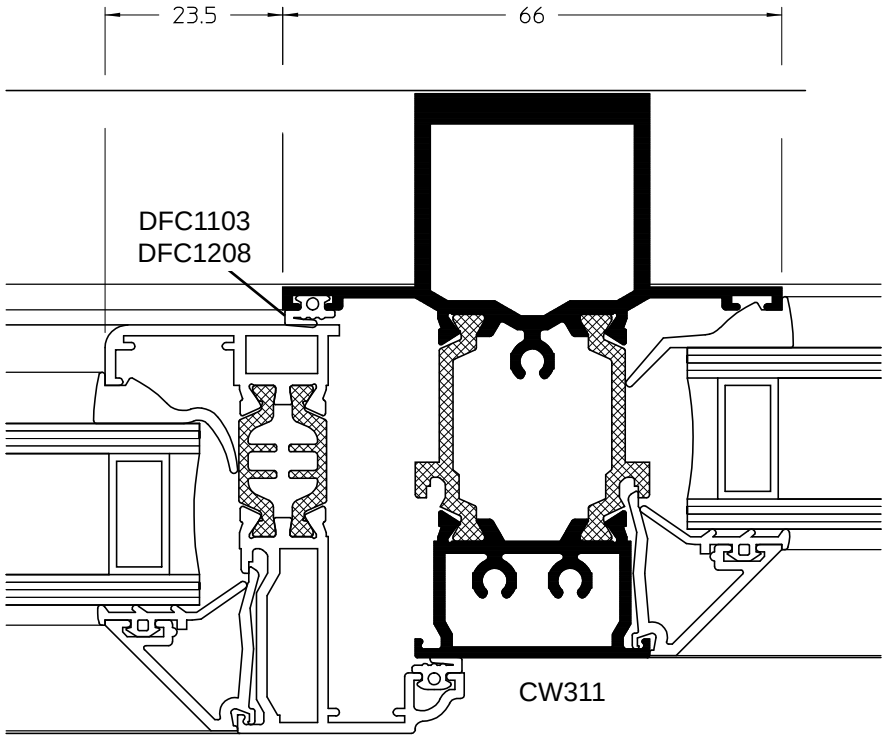
D 28mm Mullion / Transom

Showing alternative 58mm mullion / transom.
(Flat & Recessed versions)



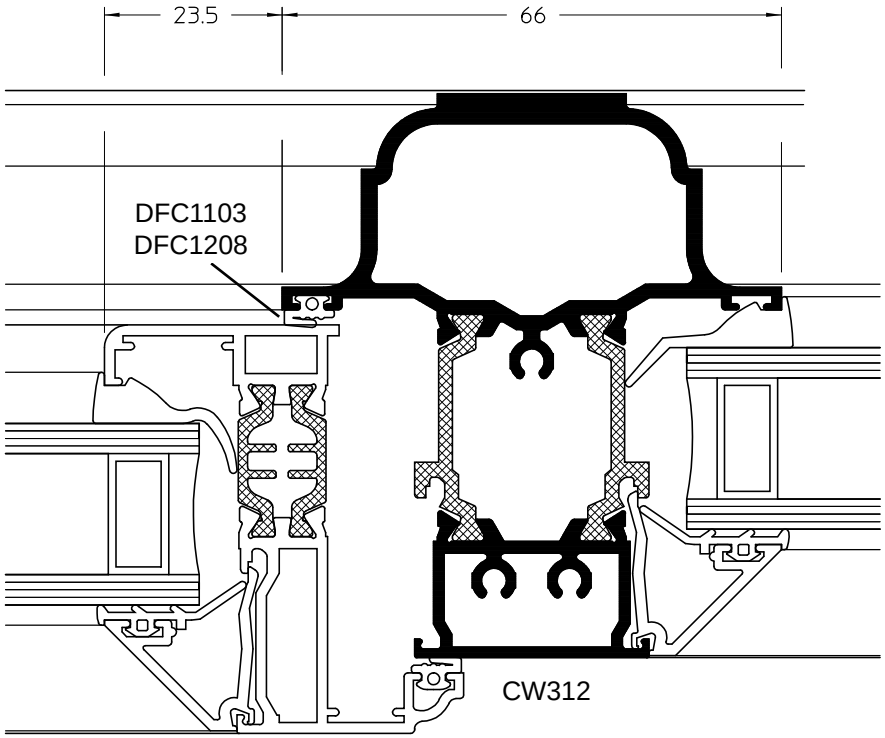
D HD Square Mullion / Transom

Showing alternative heavy duty square mullion / transom.
Do not use with softline outerframes.



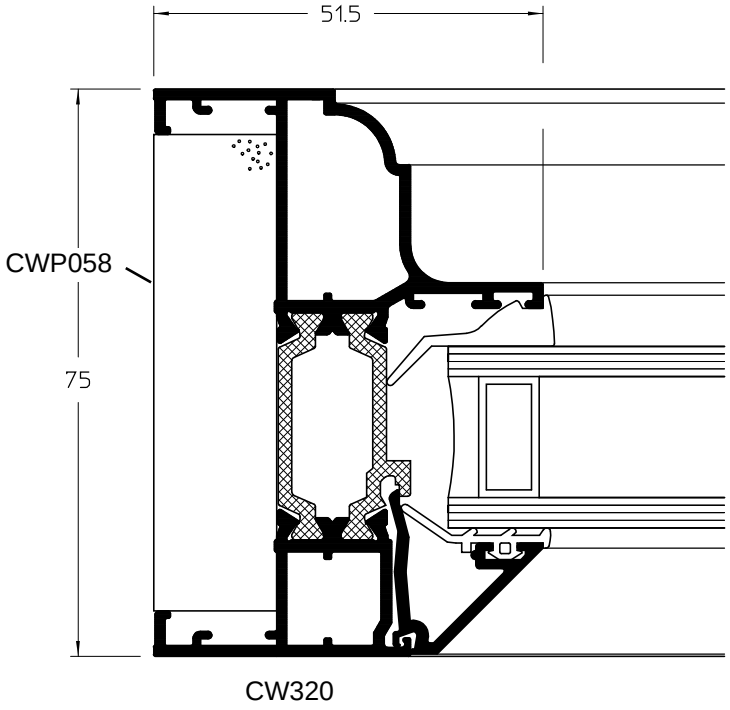
D HD Softline Mullion / Transom

Showing alternative heavy duty softline mullion / transom.



General Arrangements

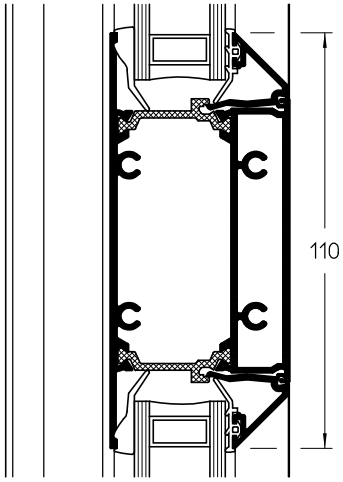
E Fixed Light Jamb

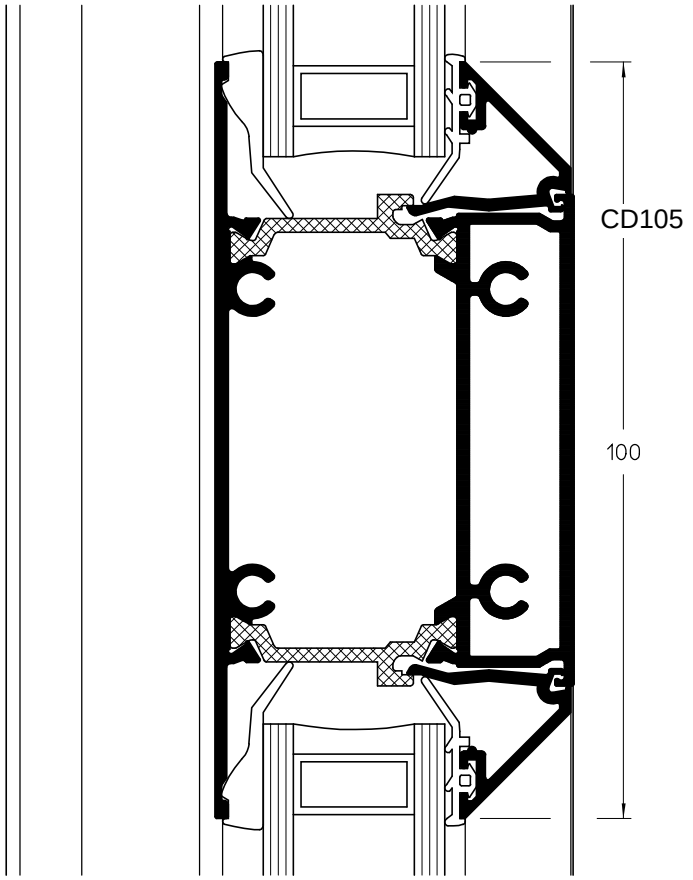


Door Midrail (100mm & 110mm versions)

Note opening lights must not close onto a midrail, and midrails are for horizontal use only.

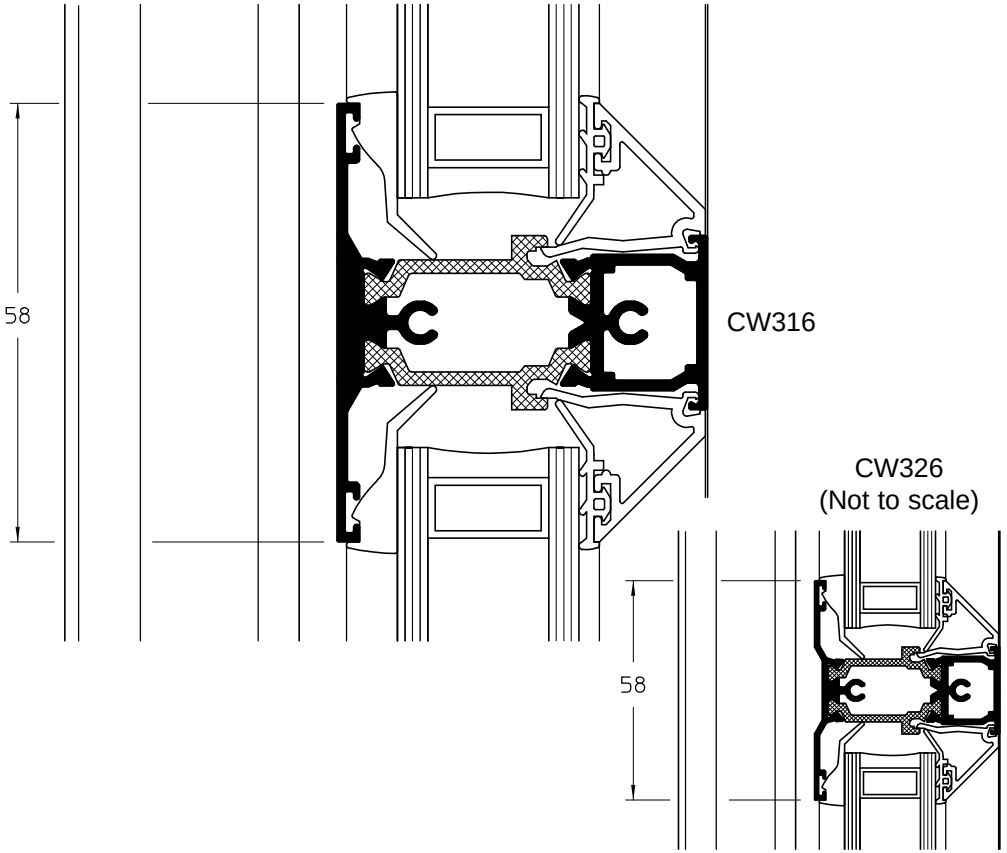
CD109
(Not to scale)





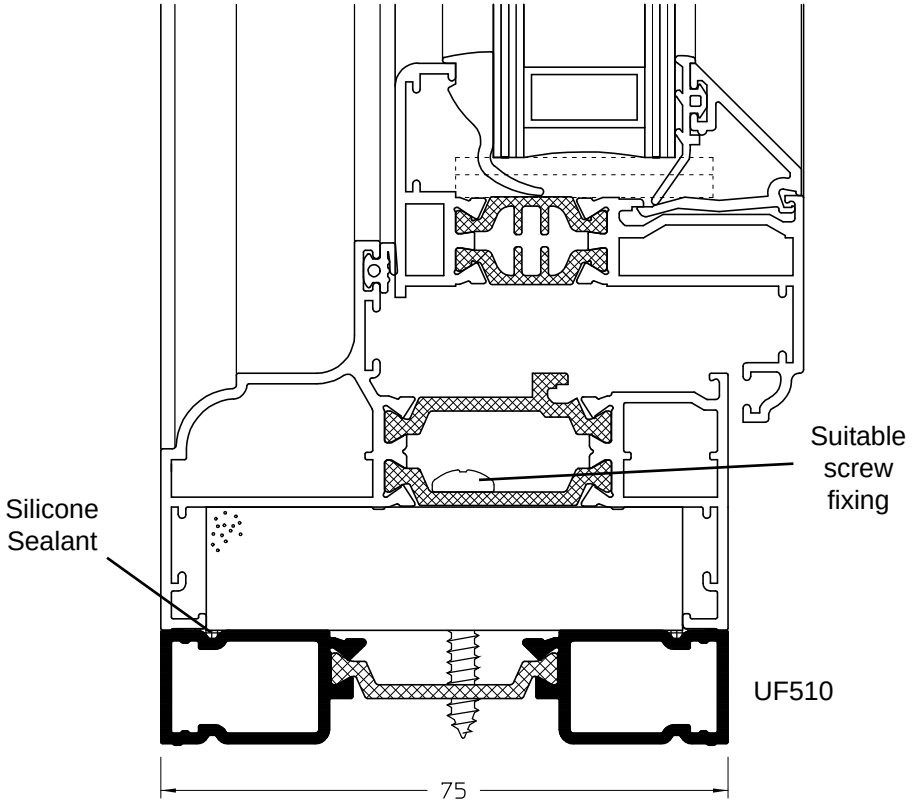
Dummy Mullion/Transom

Only use on CW307 and CW308 vents.
(Flat & Recessed versions)



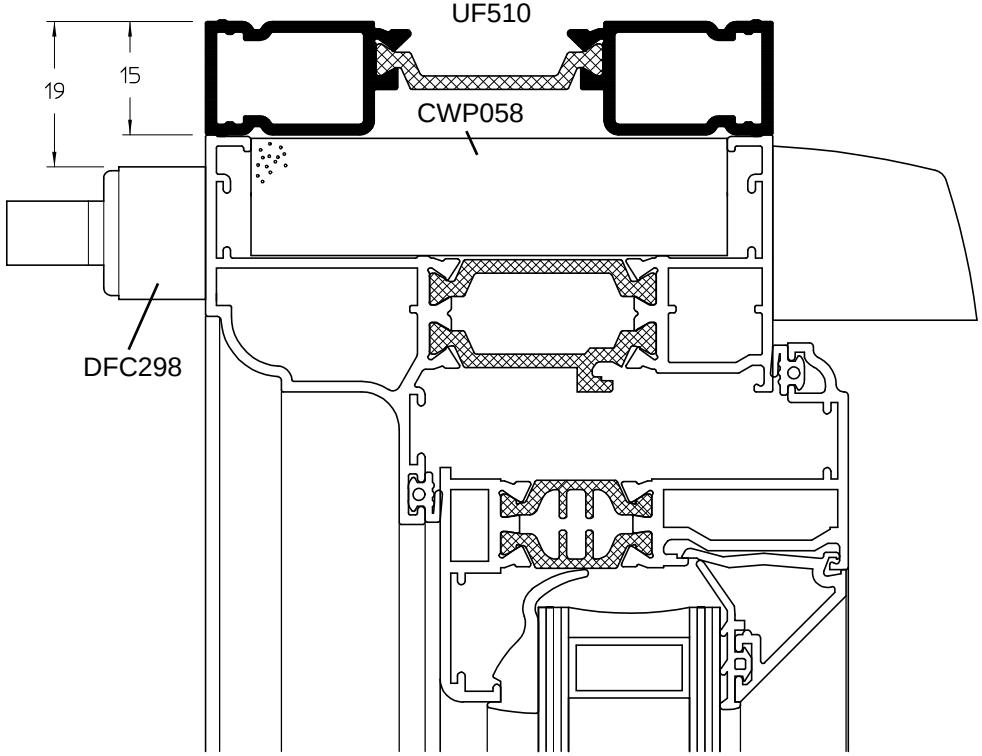
15mm Frame Extender

UF510 can also be used as a coupler.

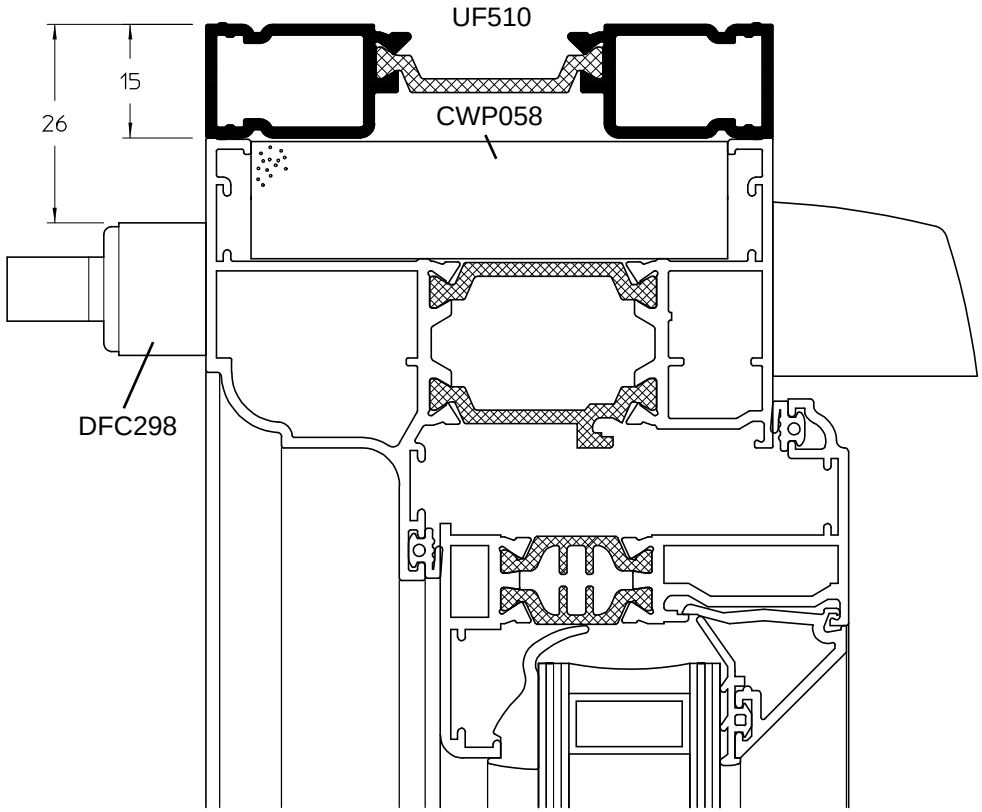


Head Vent

Showing optional trickle vent.
15mm frame extender with CW320 frame shown.
CW321 frame option available, not shown.

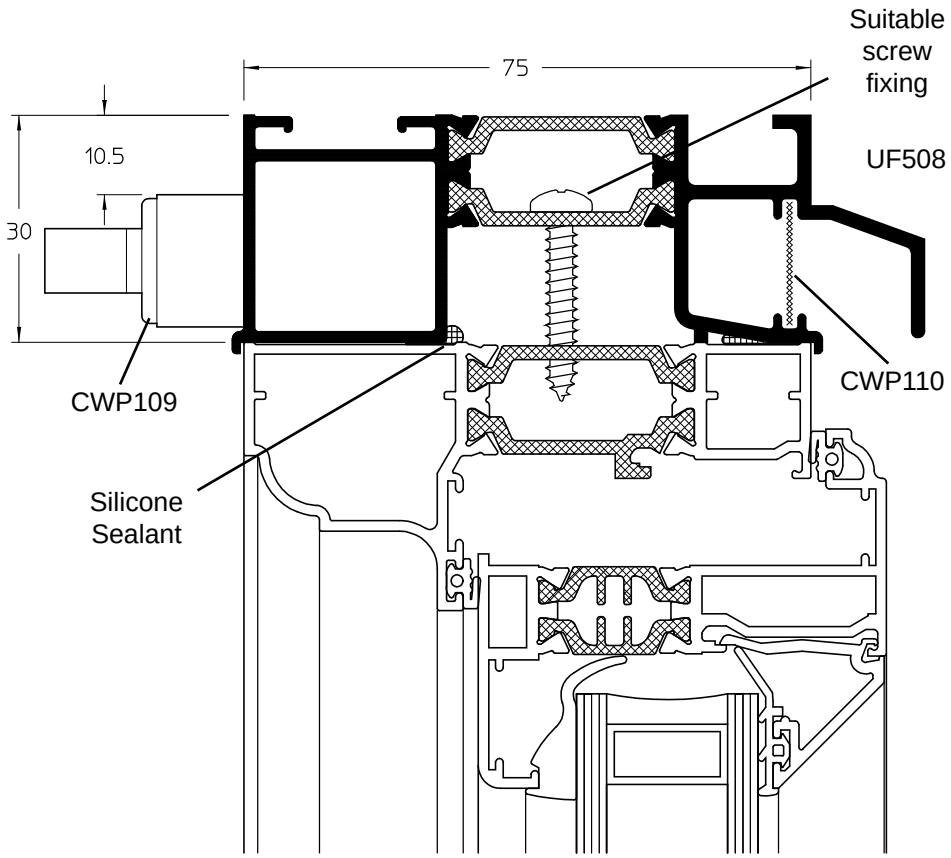


Showing optional trickle vent.
15mm frame extender with CW327 frame shown.

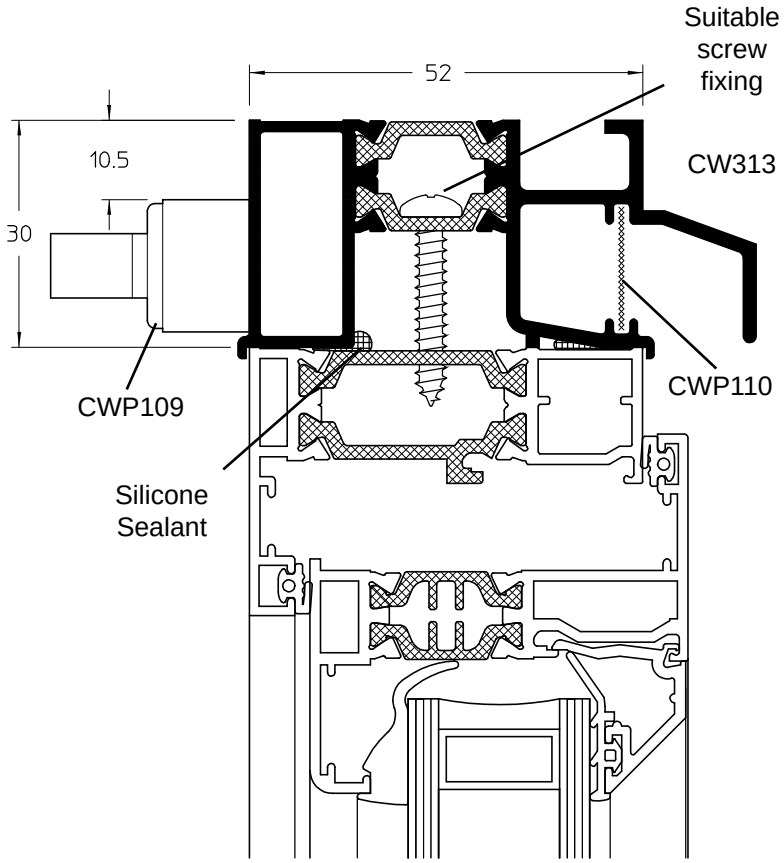


Head Vent Profile

Showing optional trickle vent profile in 75mm frame.
CW322 frame shown, other frame / vent profile combinations available.

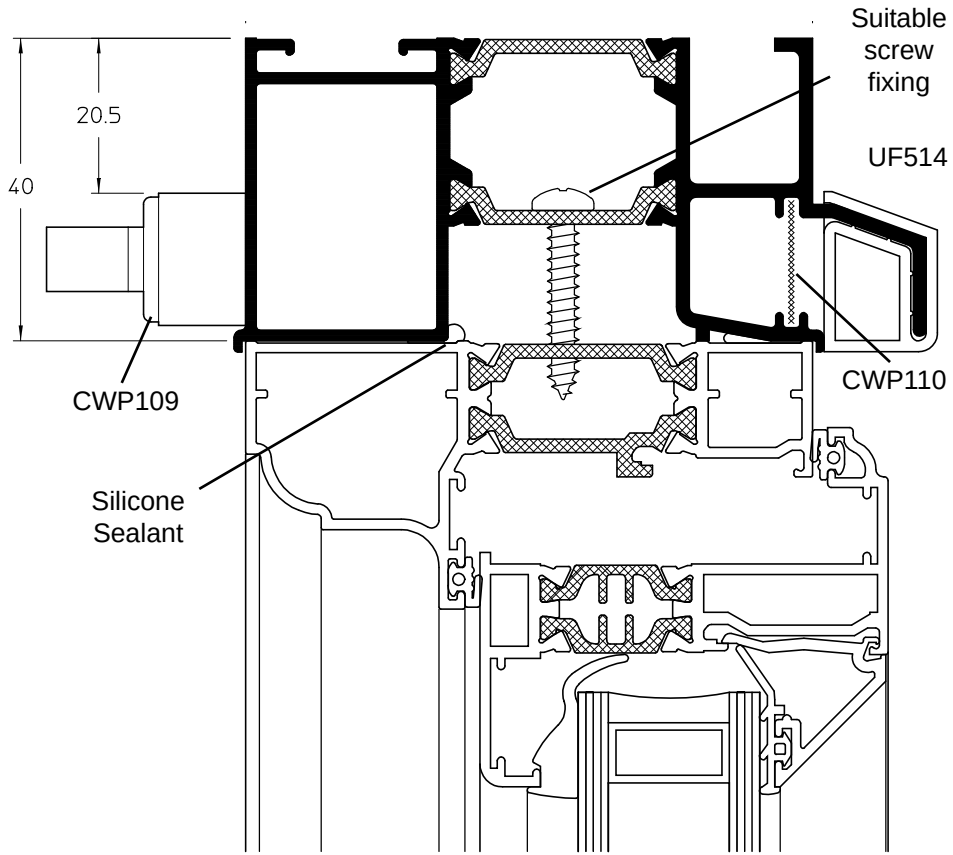


Showing optional trickle vent profile in 52mm frame.
CW324 frame shown, CW328 & CW329 frame option also available.

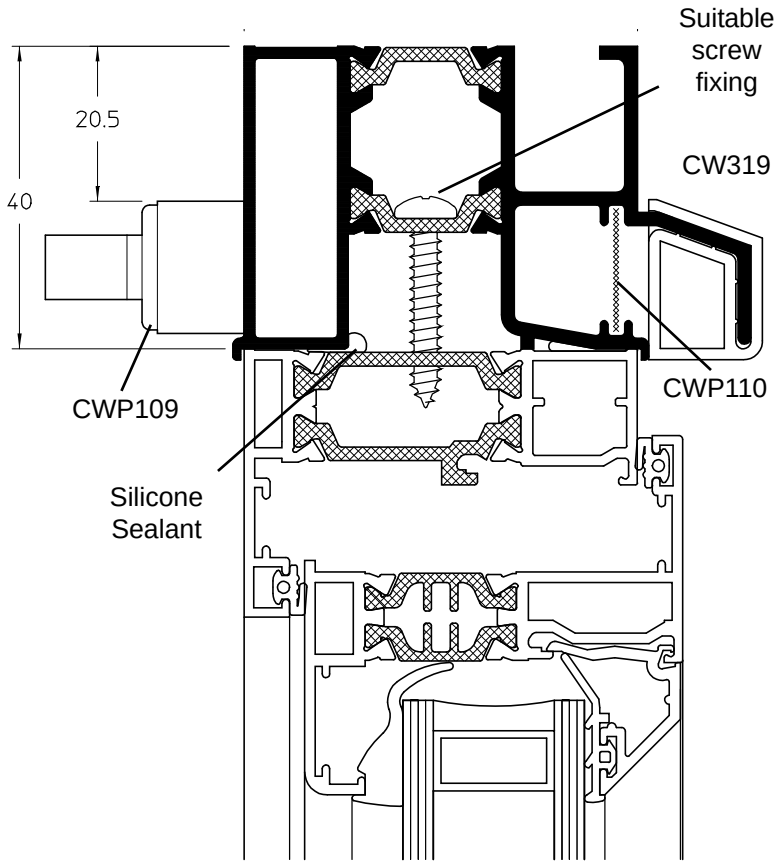


Deep Head Vent Profile

Showing optional deep trickle vent profile in 75mm frame.
CW322 frame shown, other frame / vent profile combinations available.

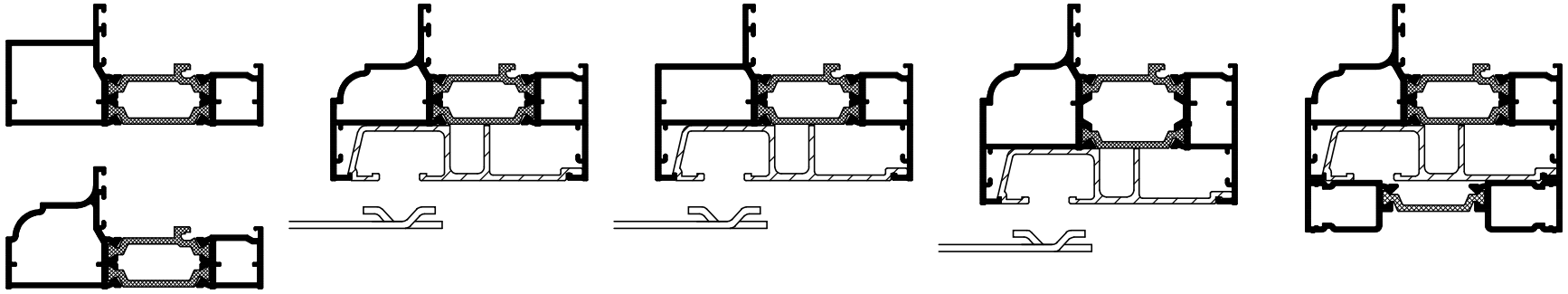


Showing optional deep trickle vent profile in 52mm frame.
CW324 frame shown, CW328 & CW329 frame option also available.

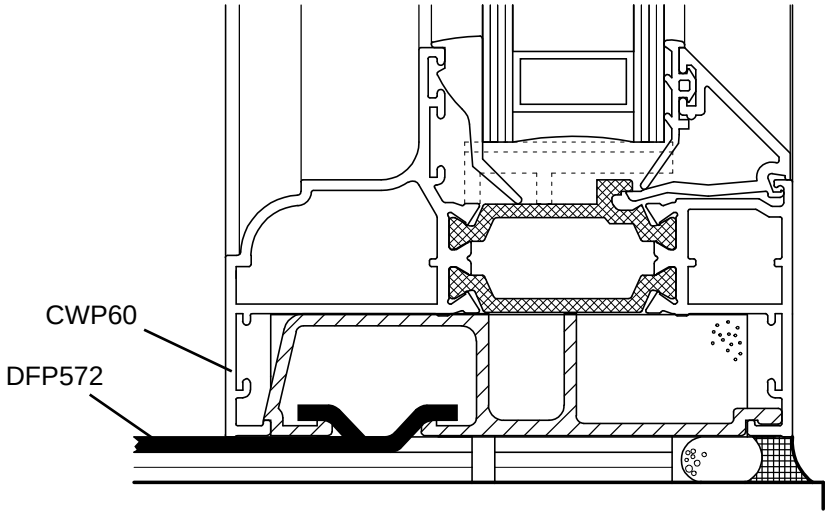


Frame Fixing

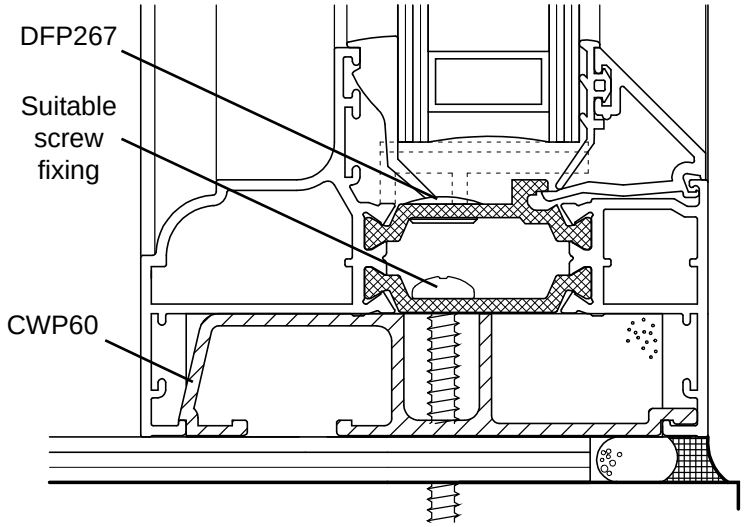
Typical Frame Fixing Options



Fixing Lug, CWP060 frame brace *and CW320 frame.*



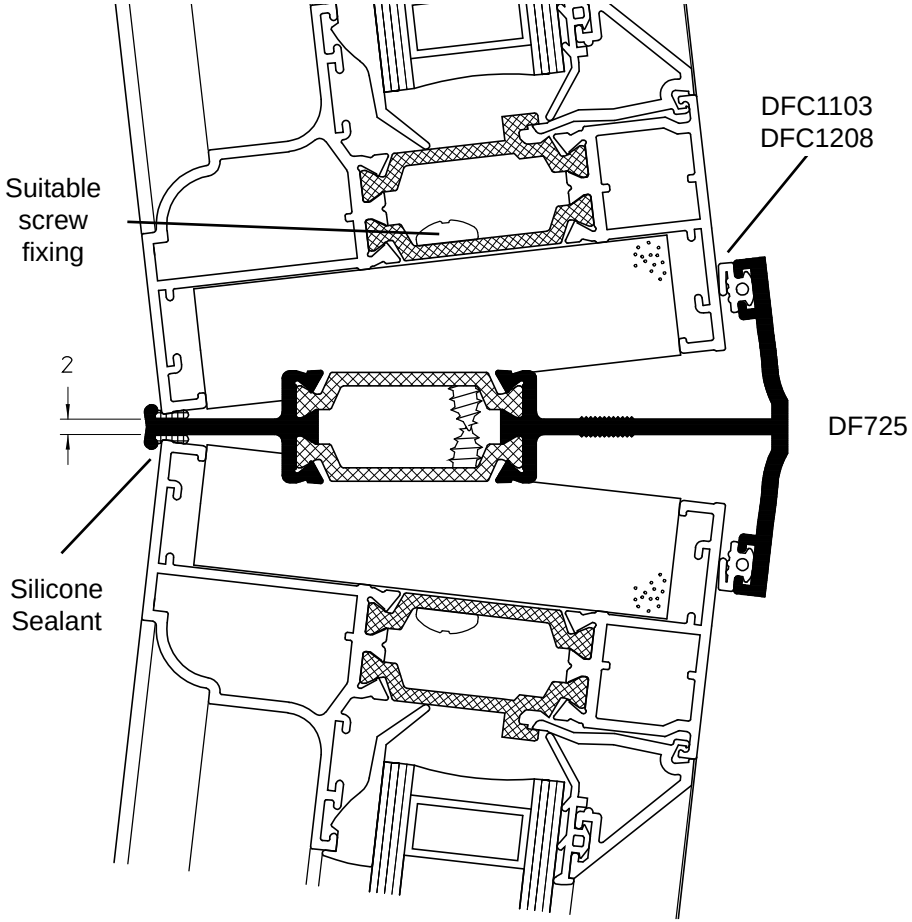
Screw fixing, CWP060 frame brace *and CW320 frame.*



General Arrangements

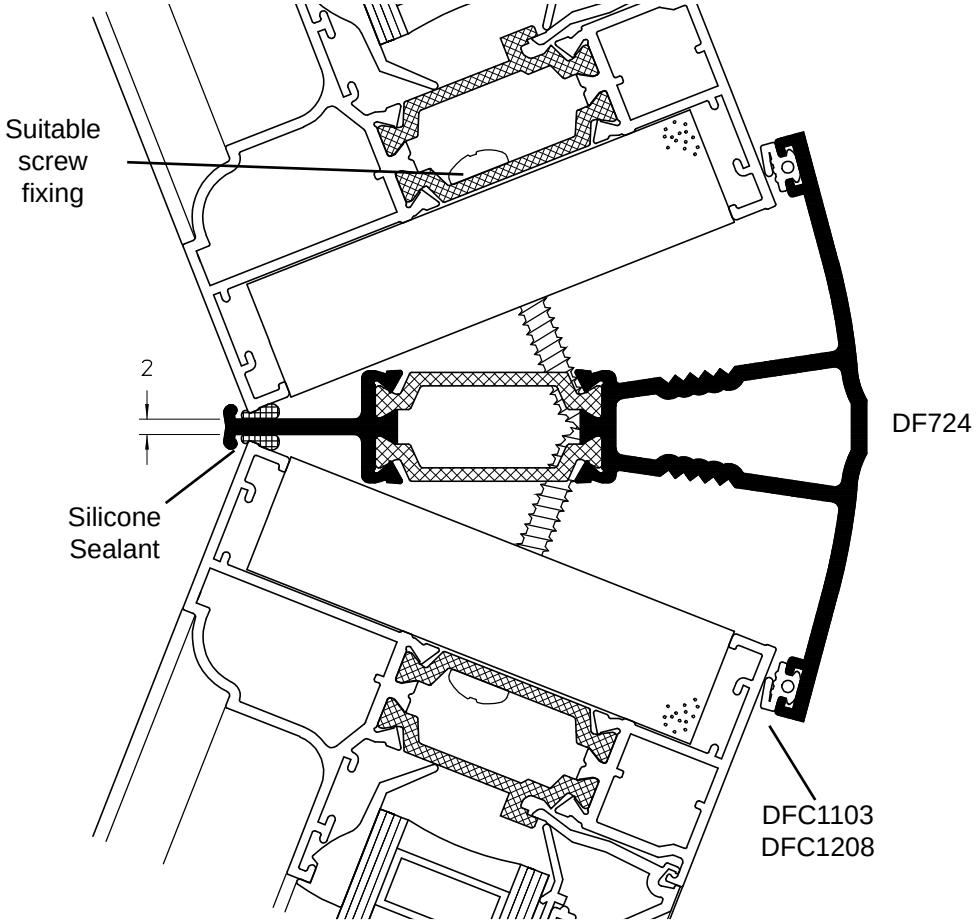
Variable Baypole 162° - 175°

Do not use with slim outerframes CW322, CW323



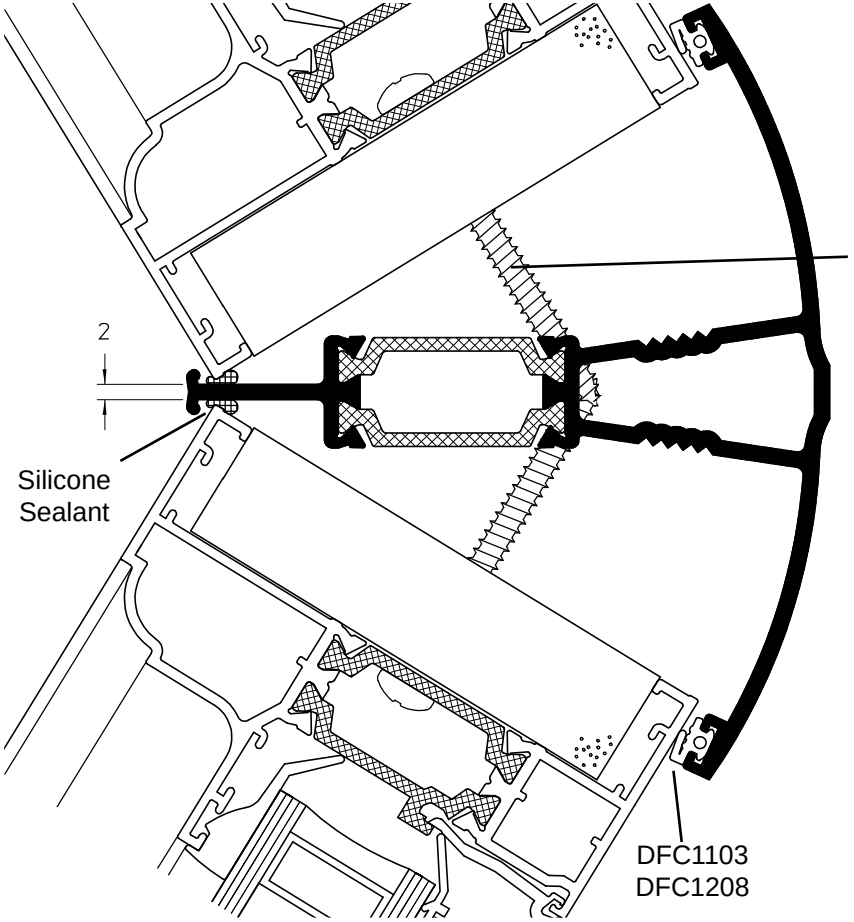
Variable Baypole 133° - 163°

Do not use with slim outerframes CW322, CW323

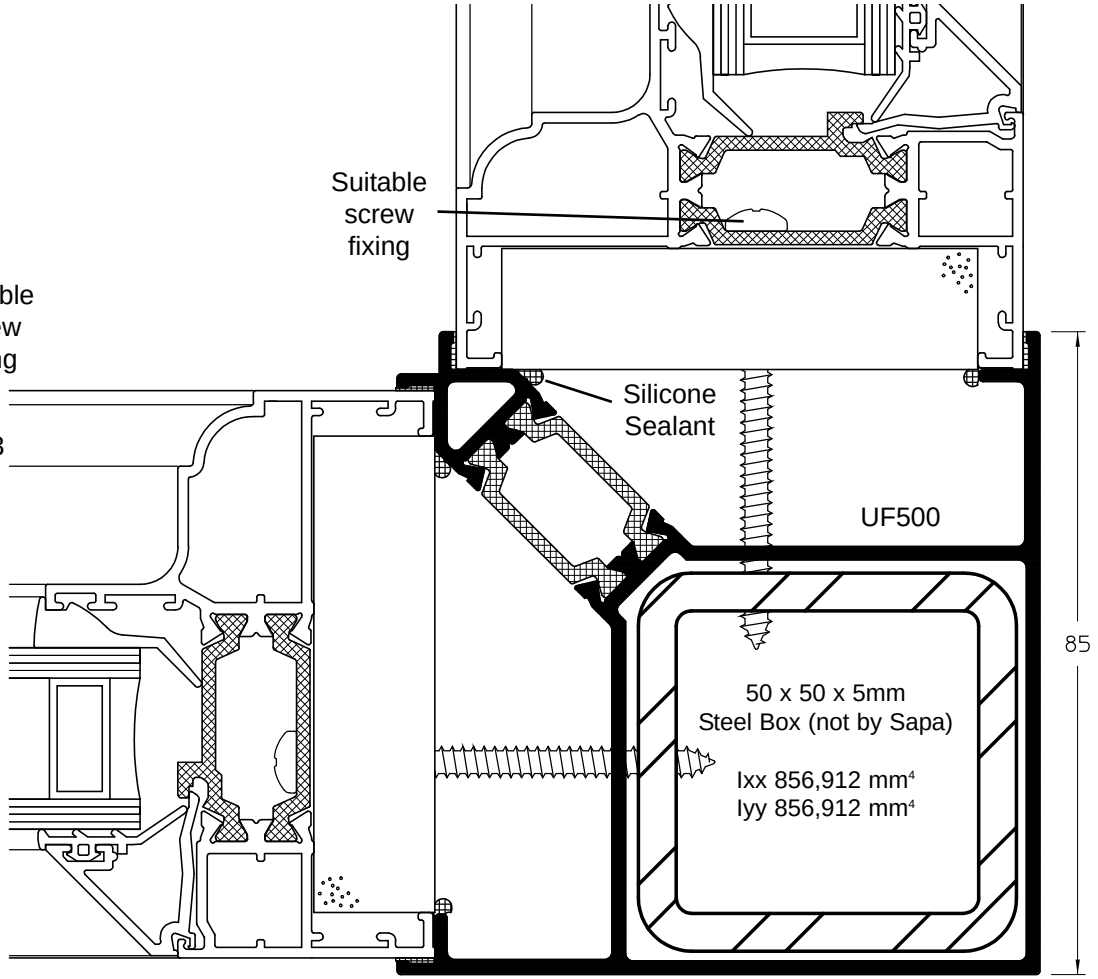


Variable Baypole 115° - 134°

Do not use with slim outerframes CW322, CW323

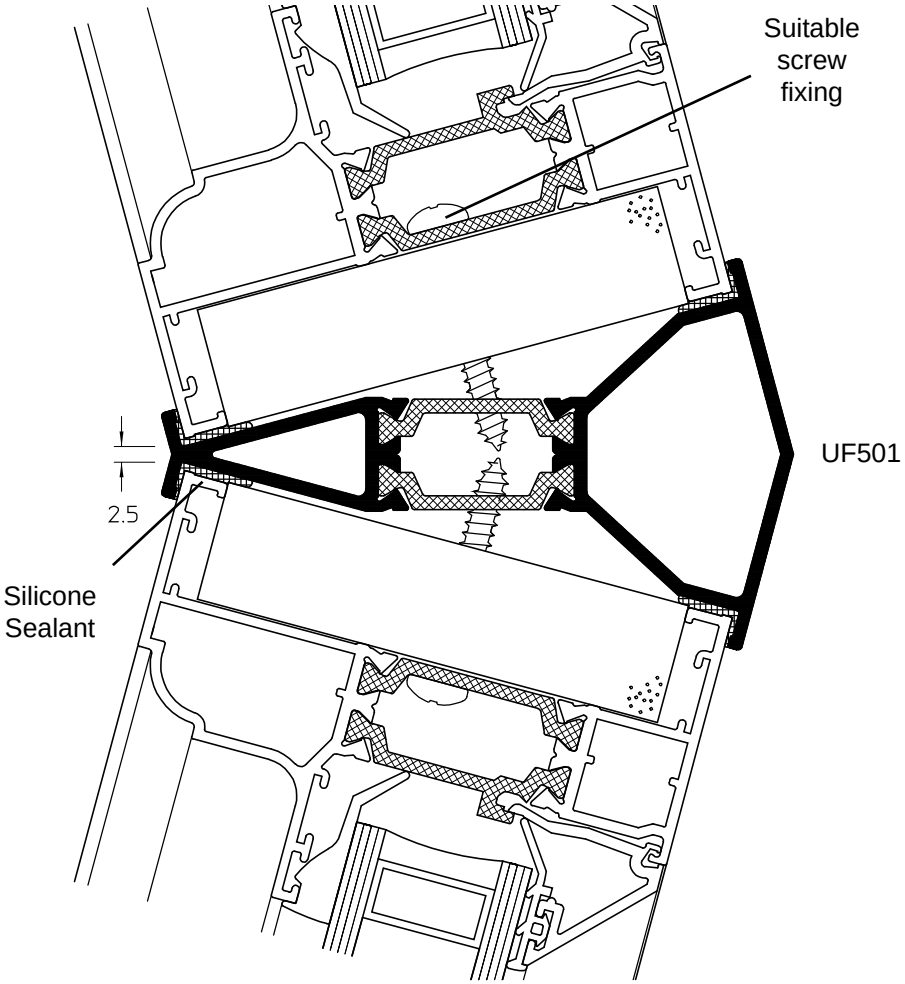


90° Corner Post

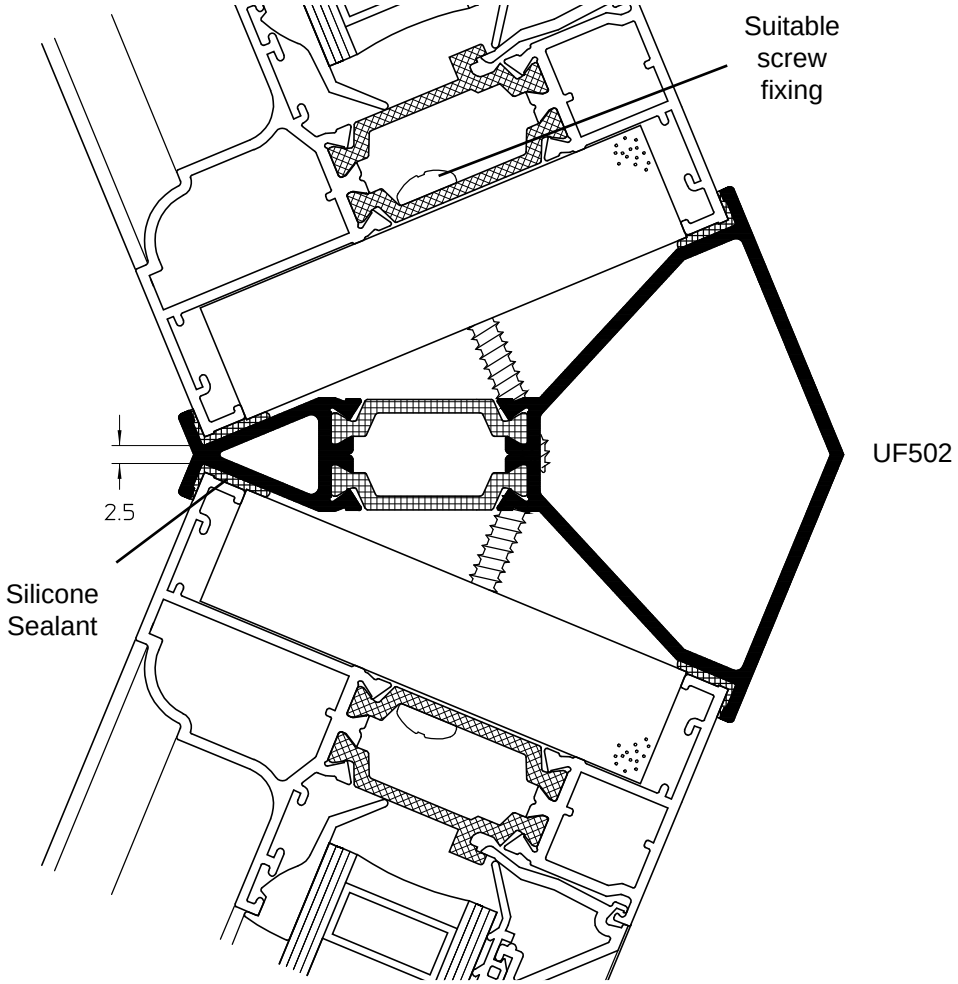


General Arrangements

150° Baypole

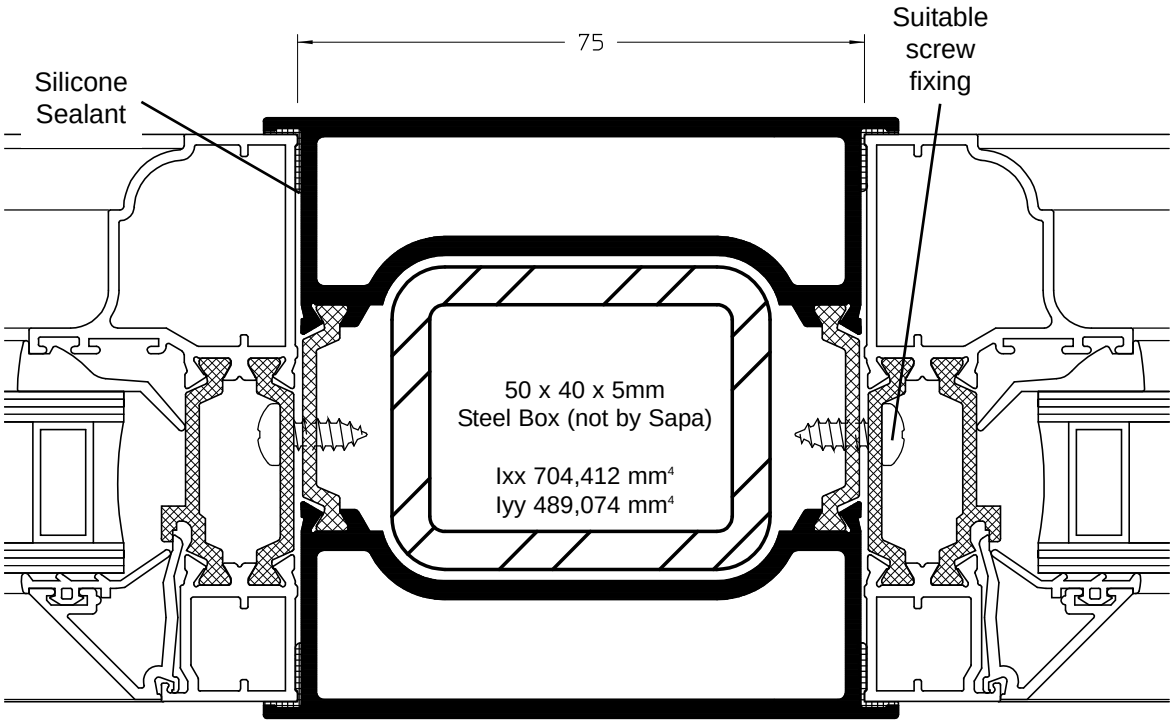


135° Baypole



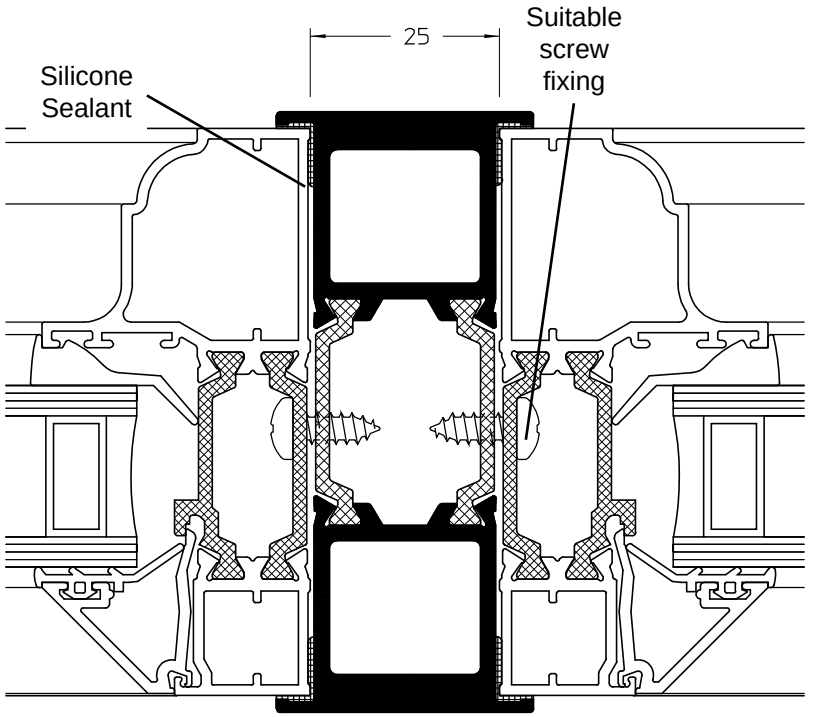
General Arrangements

75mm Heavy Duty Coupler



UF503

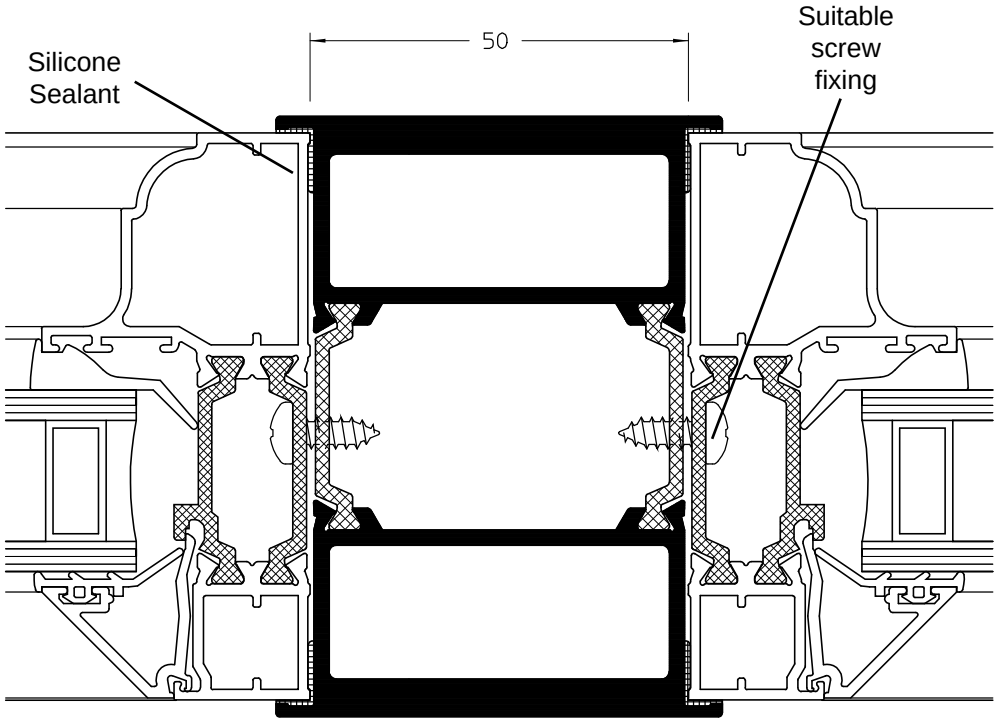
25mm Heavy Duty Coupler



UF504

General Arrangements

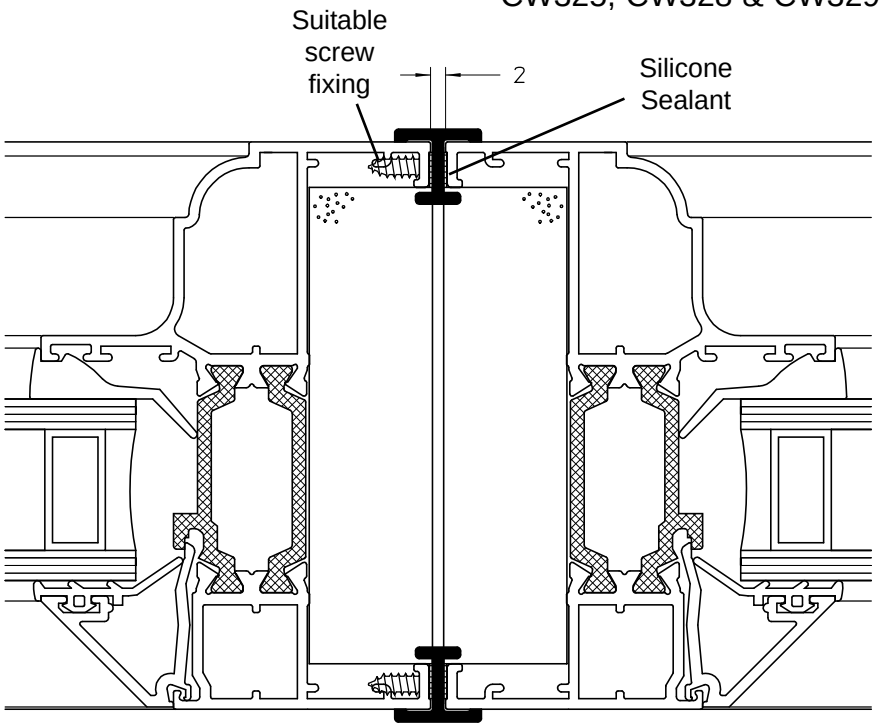
50mm Heavy Duty Coupler



UF505

Back To Back Coupler

CW079 cannot be used on profiles CW302, CW322, CW323, CW324, CW325, CW328 & CW329



CW079

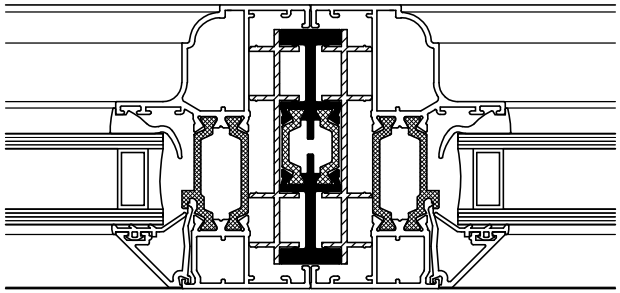
Concealed Coupler

The concealed coupler can be used with Crown Windows and Crown doors using 75mm outerframe profiles.

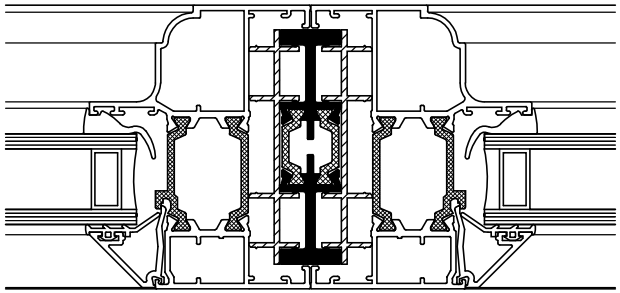
See various illustrated options.

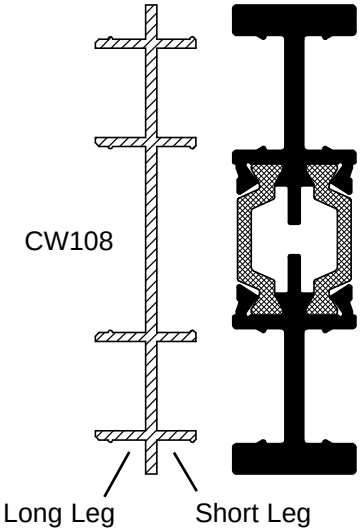
Crown Window to Window

CW320 or CW321



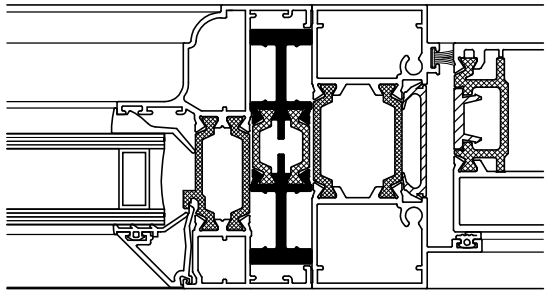
CW327



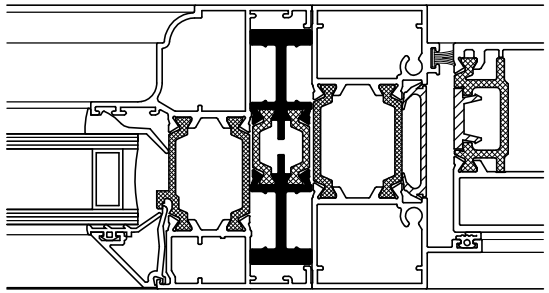


Crown Window to Door

CW320 or CW321

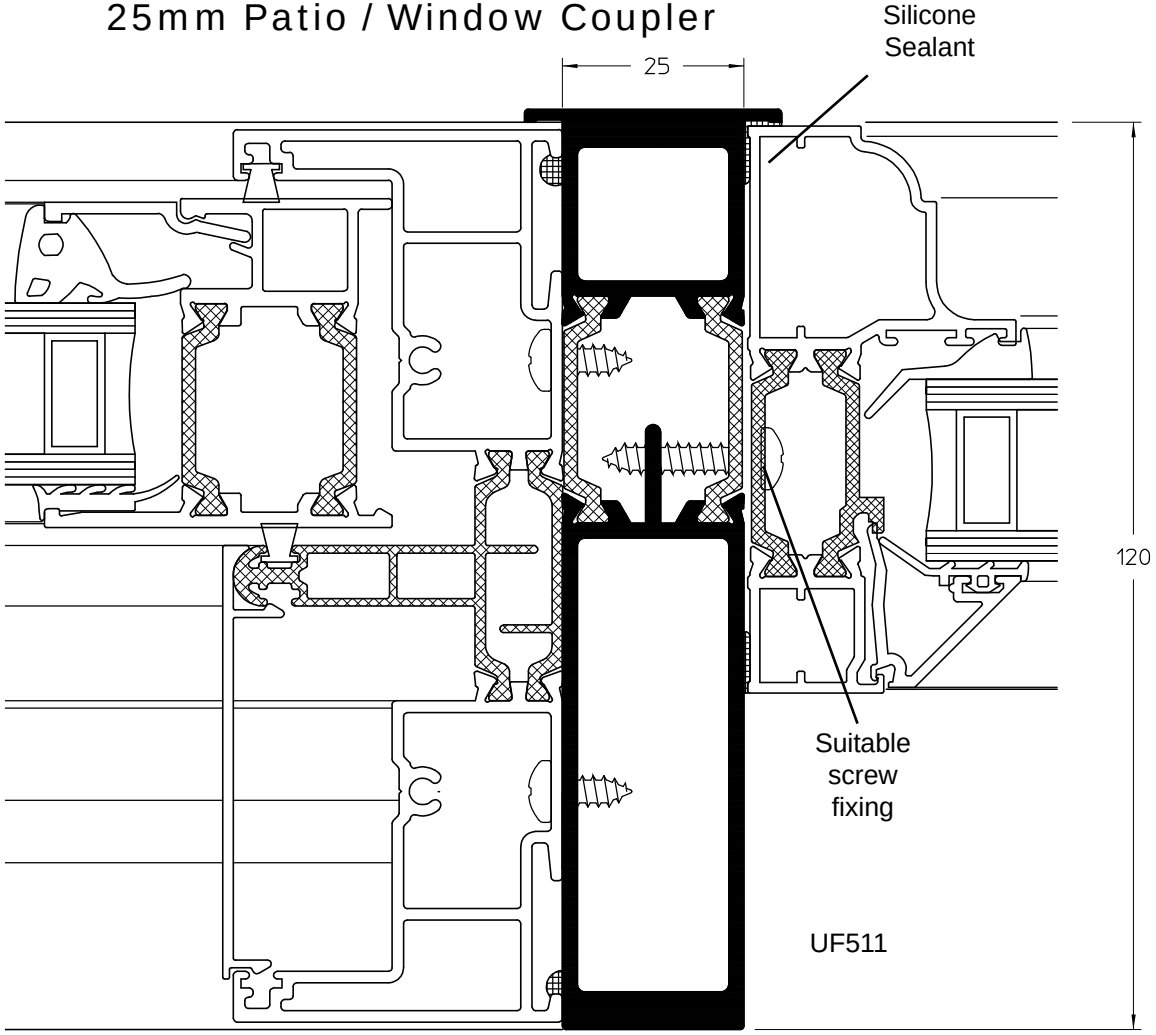


CW327

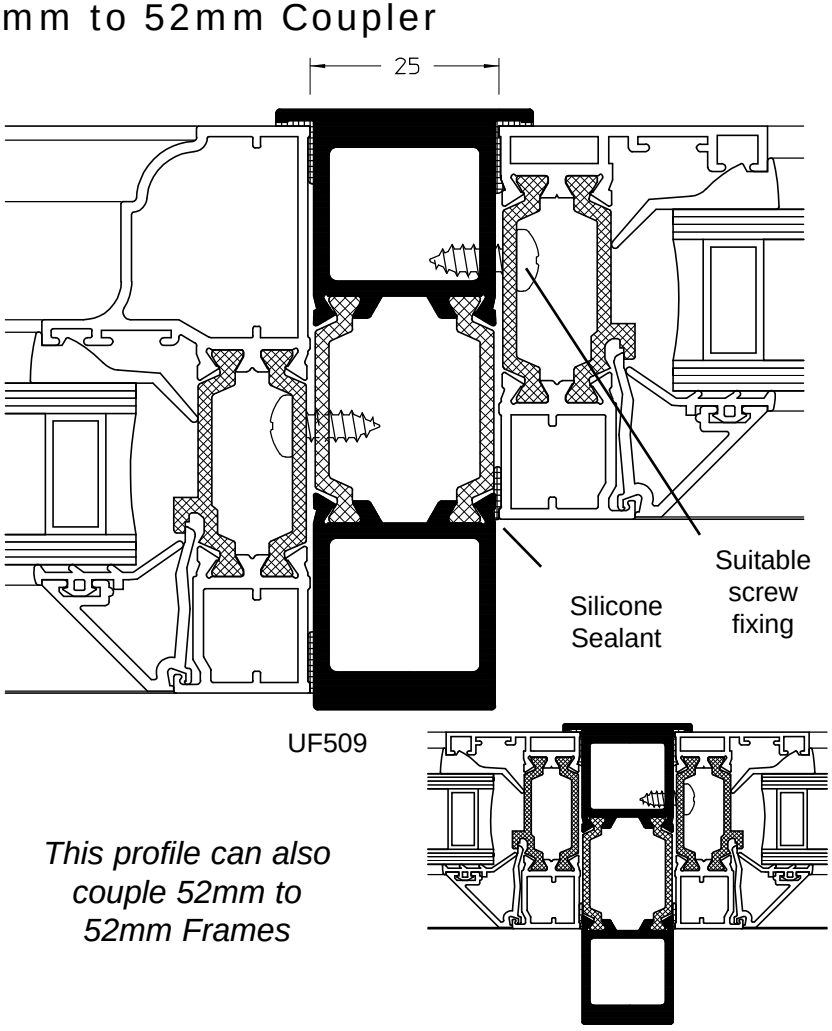


General Arrangements

25mm Patio / Window Coupler

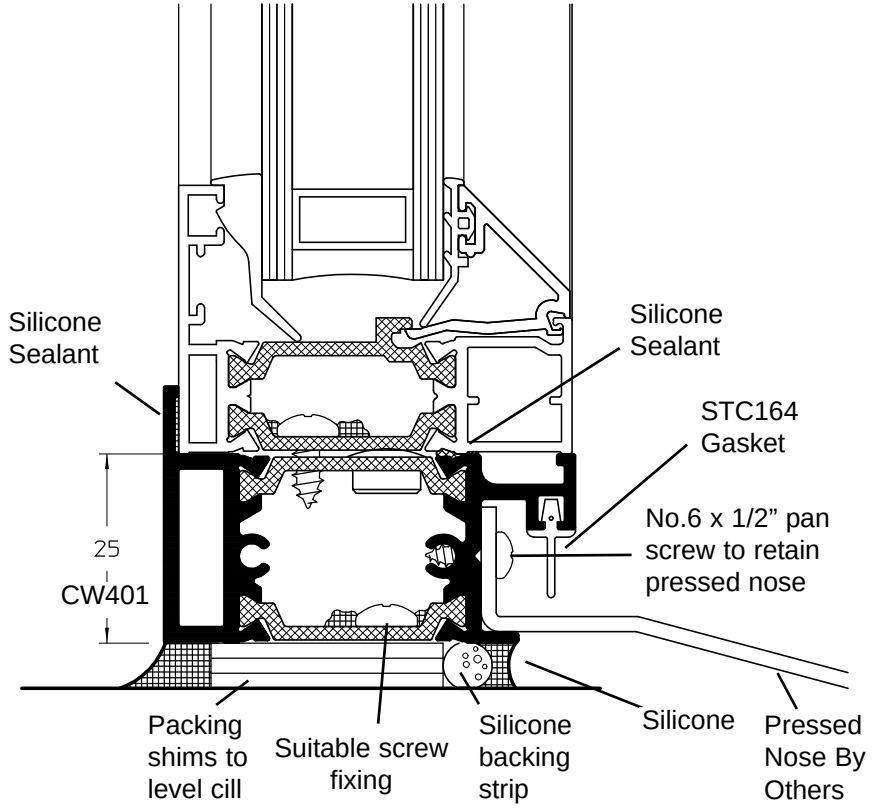


75mm to 52mm Coupler



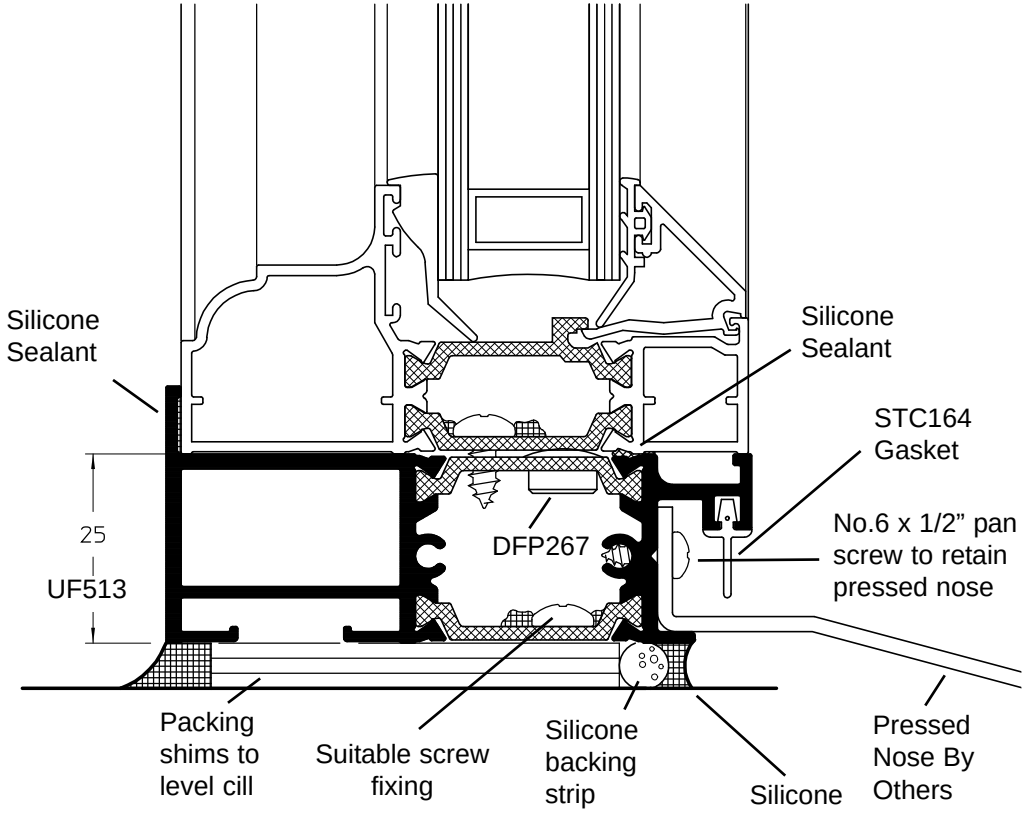
This profile can also couple 52mm to 52mm Frames

52mm Frame Subcill With Applied Nose



75mm Frame Subcill With Applied Nose

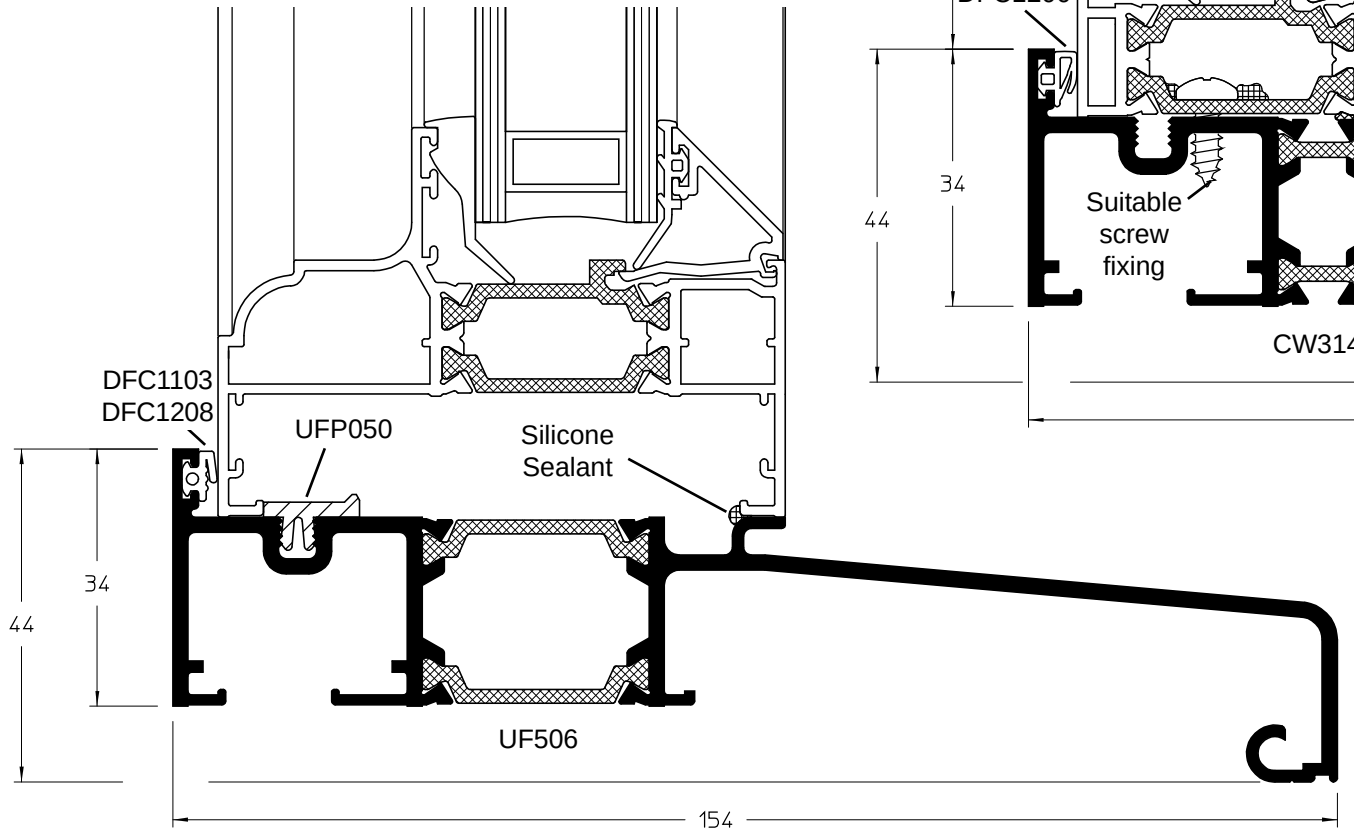
Lug fixing available with this profile



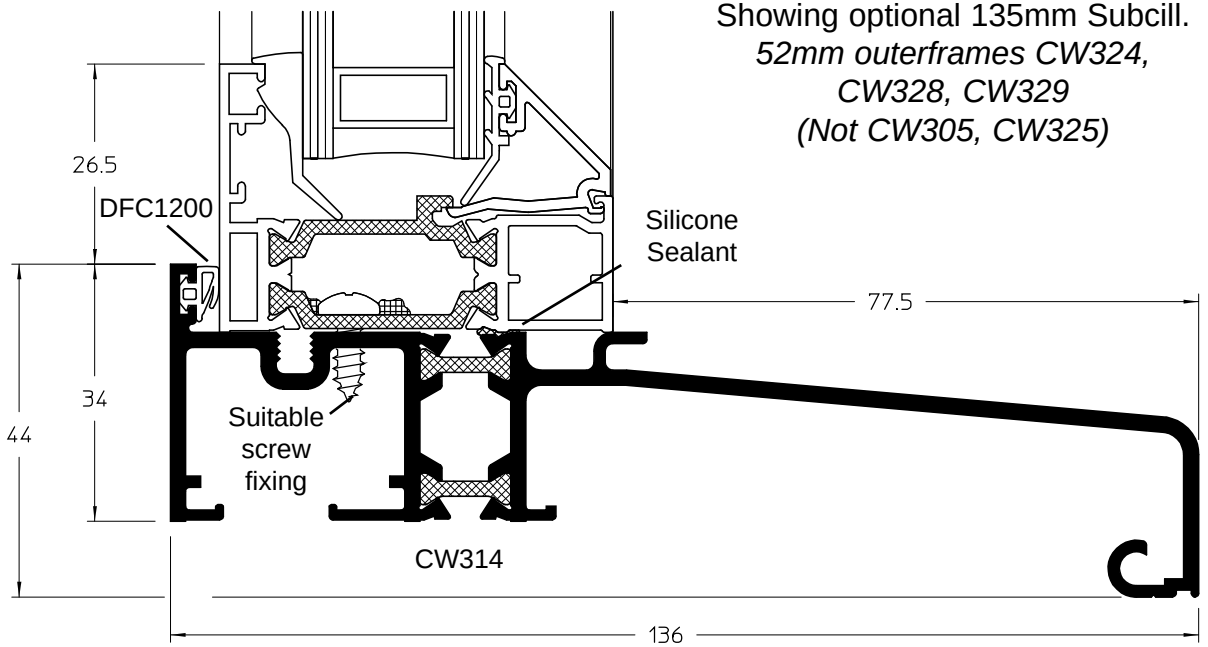
General Arrangements

Subcills

Showing optional 155mm Subcill.
75mm outerframe.



Showing optional 135mm Subcill.
52mm outerframes CW324, CW328, CW329
(Not CW305, CW325)



UFP050 Frame location strip cannot be used with profiles, CW322 and CW323. Therefore alternative screw fixing is required to secure the frame to the subcill.

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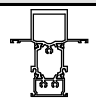
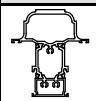
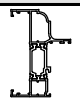
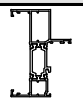
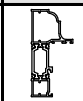
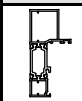
Profile Inertia Values

This page gives information on the inertia values of the framing profiles calculated in accordance with :- BS EN 14024 : 2004.
BS6399 Part 2 must be used to calculate the inertia value required.

The table gives inertia values for varying spans of profile.
Select the nearest span BELOW the actual span and use the value shown to compare against the inertia required.

Loading shown with orientation of illustrated profiles.

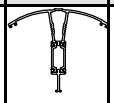
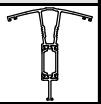
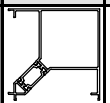
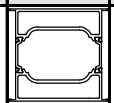
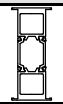
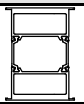
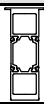
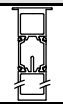
Profile	CD105	CD109	CW305	CW307	CW308	CW309	CW310	CW311	CW312	CW315	CW316	CW318	CW320	CW321	CW322	CW323	CW324	CW325
Values shown are mm^4																		
	Inertia Ixx	Inertia Ixx	Inertia Ixx	Inertia Ixx	Inertia Ixx	Inertia Ixx	Inertia Ixx	Inertia Ixx	Inertia Ixx	Inertia Ixx	Inertia Ixx	Inertia Ixx	Inertia Ixx	Inertia Ixx	Inertia Ixx	Inertia Ixx	Inertia Ixx	Inertia Ixx
Span 750mm	55,220	58,158	47,372	51,840	51,818	42,325	37,875	130,399	128,670	36,282	41,963	53,007	101,672	106,305	80,748	85,650	40,317	45,838
Span 900mm	68,097	71,822	56,918	59,562	59,528	48,917	45,363	151,065	149,144	42,479	51,042	62,529	119,403	124,679	93,807	99,215	48,151	54,994
Span 1050mm	80,646	85,334	65,237	66,266	66,240	54,604	51,816	170,910	168,848	47,905	59,221	71,174	135,555	141,426	105,301	111,186	54,825	62,957
Span 1200mm	92,471	98,253	72,366	71,965	71,930	59,404	57,263	189,363	187,123	52,519	66,417	78,768	149,820	156,245	115,164	121,488	60,408	69,725
Span 1350mm	103,359	110,259	78,331	76,750	76,683	63,402	61,819	206,091	203,753	56,407	72,564	85,368	162,243	169,088	123,527	130,223	65,058	75,429
Span 1500mm	113,094	121,274	83,341				65,575	221,036	218,640		77,879		172,912	180,197	130,603	137,569	68,908	80,170
Span 1650mm	121,912	131,173	87,493				68,746	234,257	231,837		82,340		181,981	189,657	136,523	143,730	72,047	84,136
Span 1800mm	129,708	140,104	91,043				71,355	245,837	243,425		86,180		189,760	197,760	141,464	148,938	74,662	87,403
Span 1950mm	136,552	147,967	94,009				73,515	255,995	253,616		89,458		196,442	204,778	145,670	153,307	76,895	90,184
Span 2100mm	142,651	155,036	96,479				75,321	264,968	262,460		92,221		202,116	210,702	149,245	157,059	78,760	92,472
Span 2250mm	147,996	161,259	98,599				76,911	272,711	270,364		94,581		207,084	215,818	152,221	160,223	80,298	94,528
Span 2400mm	152,662	166,840	100,437				78,254	279,570	277,204		96,702		211,323	220,204	154,878	162,935	81,572	96,191
Inertia Iyy	298,076	413,934	26,035	19,058	18,972	17,517	30,075	86,357	113,526	23,512	35,946	28,889	42,365	42,808	24,015	24,661	17,249	21,623

Profile Inertia Values

This page gives information on the inertia values of the framing profiles calculated in accordance with :- BS EN 14024 : 2004.
BS6399 Part 2 must be used to calculate the inertia value required.

The table gives inertia values for varying spans of profile.
Select the nearest span BELOW the actual span and use the value shown to compare against the inertia required.

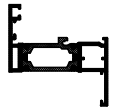
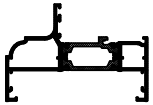
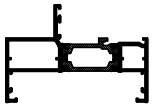
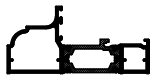
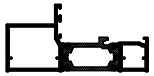
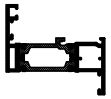
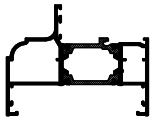
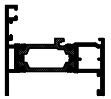
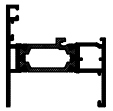
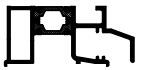
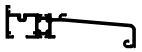
Loading shown with orientation of illustrated profiles.

Profile	CW326	CW327	CW328	CW329	CW400	DF723	DF724	DF725	UF500	UF501	UF502	UF503	UF504	UF505	UF509	UF510	UF511
Values shown are mm^4																	
	Inertia Ixx	Inertia Ixx	Inertia Ixx	Inertia Ixx	Inertia Ixx	Inertia Ixx	Inertia Ixx	Inertia Ixx	Inertia Ixx	Inertia Ixx	Inertia Ixx	Inertia Ixx	Inertia Ixx	Inertia Ixx	Inertia Ixx	Inertia Ixx	Inertia Ixx
Span 750mm	39,341	111,078	47,643	49,986	65,746	135,095	132,038	119,942	430,572	106,019	133,990	193,491	151,916	202,505	147,673	53,148	525,346
Span 900mm	47,377	130,636	57,471	60,565	75,780	155,099	151,479	137,465	443,678	124,107	153,199	231,827	182,776	242,898	177,507	63,706	586,848
Span 1050mm	54,504	148,906	66,125	69,916	84,884	172,890	168,705	152,686	455,592	140,612	170,623	272,115	213,008	284,823	206,644	73,791	648,930
Span 1200mm	60,627	165,376	73,503	77,988	92,905	188,313	183,570	165,603	466,120	155,204	186,001	312,949	241,655	326,878	234,183	83,090	709,302
Span 1350mm	65,820	180,023	79,764	84,896	99,861	201,448	196,196	176,405	475,214	167,931	199,307	353,151	268,142	368,031	259,502	91,469	766,520
Span 1500mm	70,257	192,793	85,090	90,688	105,819	212,616	206,820	185,463	483,036	178,830	210,663	392,070	292,195	407,286	282,470	98,966	819,812
Span 1650mm	73,944	203,817	89,499	95,634	110,900	221,984	215,749	192,941	489,716	188,233	220,425	428,912	313,876	444,199	303,058	105,532	868,625
Span 1800mm	77,090	213,458	93,145	99,804	115,246	229,894	223,287	199,188	495,414	196,193	228,697	463,643	333,100	478,736	321,368	111,273	913,058
Span 1950mm	79,674	221,733	96,260	103,307	118,951	236,591	229,692	204,500	500,283	203,027	235,818	496,215	350,141	510,489	337,535	116,309	953,014
Span 2100mm	81,992	228,851	98,956	106,236	122,117	242,322	235,054	208,926	504,447	208,904	241,887	525,878	365,258	539,567	351,815	120,723	989,047
Span 2250mm	83,890	235,085	101,145	108,760	124,819	247,181	239,717	212,656	508,007	213,917	247,097	553,554	378,654	566,238	364,409	124,549	1,021,453
Span 2400mm	85,493	240,487	103,158	110,956	127,172	251,413	243,672	215,937	511,095	218,334	251,559	578,714	390,550	590,683	375,534	127,968	1,050,448
Inertia Iyy	34,660	69,005	28,151	38,455	5,424				As above			668,873	43,773	261,434	40,563	7,186	61,101

sapa: buildingsystem
ARCHITECTURAL ALUMINIUM SOLUTIONS

Parts List

NOTE - 'A' and 'B' ref in brackets after some profiles relates to reference for SP/SP finish only

Illustration	Part No.	Description
Outerframe Profiles		
	CW305	52mm Outerframe 18mm Unequal Leg
	CW320	Standard Softline Outerframe
	CW321	Standard Square Outerframe
	CW322	Slim Softline Outerframe
	CW323	Slim Square Outerframe
	CW324	52mm Outerframe
	CW325	52mm Outerframe 12mm Unequal Leg
	CW327	Extended Softline Outerframe
	CW328	52mm Outerframe 12mm Equal Leg
	CW329	52mm Outerframe 18mm Equal Leg
Couplers & Misc Profiles		
	CW079	Back To Back Coupler
	CW108	Concealed Coupler Packer
	CW313	Trickle Vent Body (52mm Frame)
	CW314	135mm Subcill (52mm Outerframe)

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Parts List

NOTE - 'A' and 'B' ref in brackets after some profiles relates to reference for SP/SP finish only

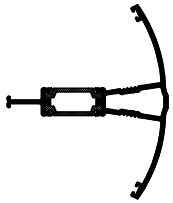
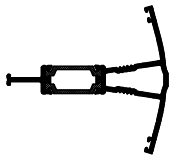
Illustration	Part No.	Description
	CW319	Deep Trickle Vent Body (52mm Frame)
	CW400	Concealed Coupler
	CW401	Subcill With Applied Nose (52mm Frame)
	DF723	Variable 115°-134° Baypole
	DF724	Variable 133°-163° Baypole

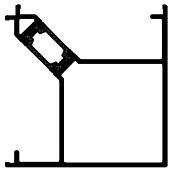
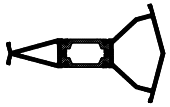
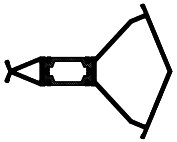
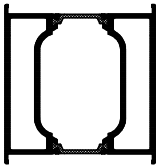
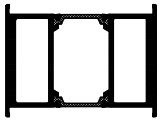
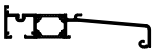
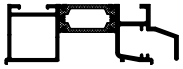
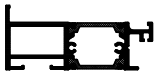
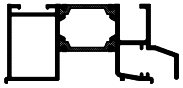
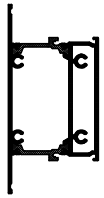
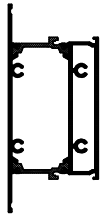
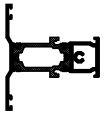
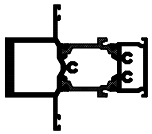
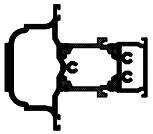
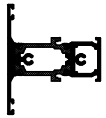
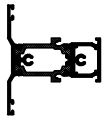
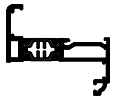
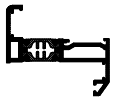
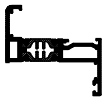
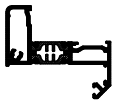
Illustration	Part No.	Description
	DF725	Variable 162°-175° Baypole
	UF500	90° Corner Post
	UF500-A	External - 90° Corner Post
	UF500-B	Internal - 90° Corner Post
	UF501	150° Baypole
	UF502	135° Baypole
	UF503	75mm Heavy Duty Coupler
	UF504	25mm Heavy Duty Coupler

Illustration	Part No.	Description
	UF505	50mm Heavy Duty Coupler
	UF506	155mm Subcill (75mm Outerframe)
	UF508	Trickle Vent Body (75mm Frame)
	UF509	(55mm to 75mm) Coupler (25mm)
	UF510	Frame Extender (15mm)
	UF511	Window / Patio Coupler (25mm)
	UF513	Subcill With Applied Nose (75mm Frame)
	UF514	Deep Trickle Vent Body (75mm Frame)

Parts List

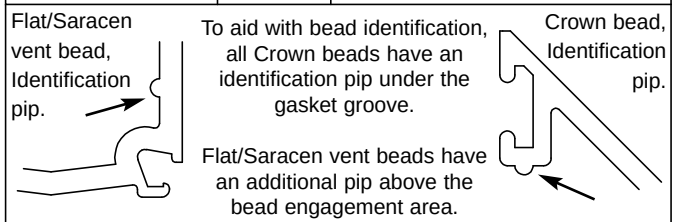
NOTE - 'A' and 'B' ref in brackets after some profiles relates to reference for SP/SP finish only

Illustration	Part No.	Description
Mullion & Transom Profiles		
	CD105	Mid Rail (100mm)
	CD105-B	Mid Rail (100mm)
	CD109	Mid Rail (110mm)
	CD109-B	Mid Rail (110mm)
	CW310	Mullion/Transom
	CW311	Heavy Duty Square Mullion/Transom
	CW312	Heavy Duty Softline Mullion/Transom
	CW316	58mm Mullion/Transom
	CW326	58mm Mullion/Transom Recessed
Ventframe Profiles		
	CW307	Softline Ventframe
	CW308	Chamfered Ventframe
	CW309	Flat Ventframe
	CW315	Glaze In Flat Ventframe
	CW318	Saracen Chamfered Ventframe

Parts List

Illustration	Part No.	Description
Glazing Beads		
	CW068	24mm Bead (CW307 & CW308)
	CW069	28mm Bead (CW307 & CW308)
	CW070	28mm Hooded Bead (CW307 & CW308)
	CW071	Flat/Saracen Vent 24mm Bead (CW309 & CW318)
	CW072	Flat/Saracen Vent 28mm Bead (CW309 & CW318)
	CW082	24mm Full Sloping Bead (CW307 & CW308)
	CW083	Flat/Saracen Vent 24mm Full Sloping Bead (CW309 & CW318)
	CW084	Square 24mm Bead (CW307 & CW308)

Illustration	Part No.	Description
	CW085	Square 28mm Bead (CW307 & CW308)
	CW088	Glaze In Flat Vent 28mm Bead (CW315)
	CW089	Glaze In Flat Vent 24mm Bead (CW315)
	CW093	24mm Hooded Bead (CW307 & CW308)
	CW097	Flat/Saracen Vent 28mm Square Bead (CW309 & CW318)



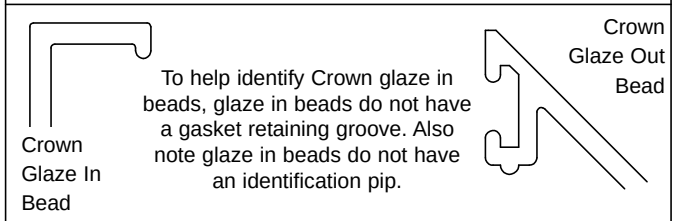


Illustration	Part No.	Description
Gaskets & Weatherseals		
	CWC055	2mm Retained Security Gasket (White security pip) (100M)
	CWC070	2mm Retained Security Gasket (Hard Back) (100M)
	DFC1103	Frame/Vent Seal (400M)
	DFC1200	(52mm Frame) Subcill Seal (100M)
	DFC1203	(Nominal) 6-7mm Wedge Gasket With Leg (50M)
	DFC1208	Flipper Seal (Hard Back) (400M)
	DFC1509	(Optional) 4-5mm Wedge Gasket With Leg (50M)
	STC164	Flipper Gasket (UF513 - CW401) (100M Coil)

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Parts List

SR = Sash Rebate (O/A vent size - 36mm)

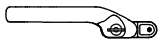
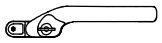
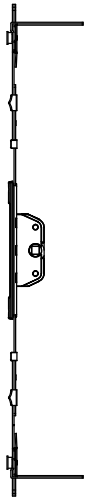
Illustration	Part No.	Description
Hardware		
	CWP062	Casement Cranked Locking Handle LH (Pack 1 or 25)
	CWP063	Casement Cranked Locking Handle RH (Pack 1 or 25)
	CWP064	Casement Locking Handle (Pack 1 or 25)
	CWP065	LH Locking Gear & Keeps SR 350 - 409mm (Pack 20)
	CWP066	LH Locking Gear & Keeps SR 410 - 529mm (Pack 20)
	CWP067	LH Locking Gear & Keeps SR 530 - 709mm (Pack 20)
	CWP068	LH Locking Gear & Keeps SR 710 - 944mm (Pack 20)
	CWP069	LH Locking Gear & Keeps SR 945 - 1300mm (Pack 20)

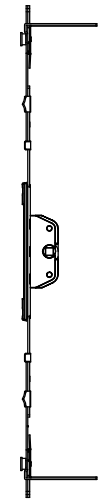
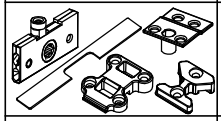
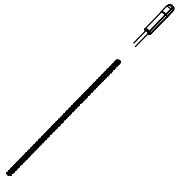
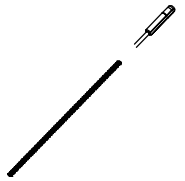
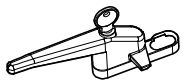
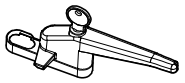
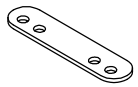
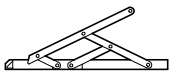
Illustration	Part No.	Description
	CWP071	RH Locking Gear & Keeps SR 350 - 409mm (Pack 20)
	CWP072	RH Locking Gear & Keeps SR 410 - 529mm (Pack 20)
	CWP073	RH Locking Gear & Keeps SR 530 - 709mm (Pack 20)
	CWP074	RH Locking Gear & Keeps SR 710 - 944mm (Pack 20)
	CWP075	RH Locking Gear & Keeps SR 945 - 1300mm (Pack 20)
	CWP127	Cockspur Strike Plate 4-6mm (Pack 100)
	CWP144	Saracen Gearbox Pack (Including Keeps) (Pack 25)
	CWP145	Saracen Shoot Rods SR 350 - 550 (Pack 50)
	CWP146	Saracen Shoot Rods SR 551 - 800 (Pack 50)

Illustration	Part No.	Description
	CWP147	Saracen Shoot Rods SR 801 - 1050 (Pack 50)
	CWP148	Saracen Shoot Rods SR 1051 - 1300 (Pack 50)
	DFP480	Cockspur LH Locking Handle (Pack 1 or 50) Cockspur handle option not available for CW320 CW322 CW323 CW327 CW315
	DFP481	Cockspur RH Locking Handle (Pack 1 or 50)
	DFP482	Cockspur Packer Plate CW305, CW324, CW325, CW328, CW329 (Pack 50)
	DFP1262	Standard 10" Top Hung Friction Stay (Pack 25 pairs)
	DFP1263	Standard 12" Top Hung Friction Stay (Pack 25 pairs)
	DFP1264	Standard 16" Top Hung Friction Stay (Pack 25 pairs)
	DFP1265	Standard 20" Top Hung Friction Stay (Pack 25 pairs)

Parts List

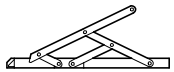
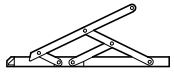
Illustration	Part No.	Description
	DFP1266	Standard 24” Top Hung Friction Stay (Pack 25 pairs)
	DFP1267	Standard 12” Side Hung Friction Stay (Pack 25 pairs)
	DFP1268	Standard 16” Side Hung Friction Stay (Pack 25 pairs)
	DFP1269	Restrictor 12” Top Hung Friction Stay (Pack 25 pairs)
	DFP1270	Restrictor 16” Top Hung Friction Stay (Pack 25 pairs)
	DFP1271	Restrictor 20” Top Hung Friction Stay (Pack 25 pairs)
	DFP1272	Restrictor 24” Top Hung Friction Stay (Pack 25 pairs)
	DFP1273	Restrictor 12” Left Hand Side Hung Friction Stay (Pack 25 singles)
	DFP1274	Restrictor 12” Right Hand Side Hung Friction Stay (Pack 25 singles)

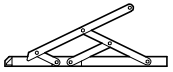
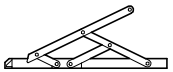
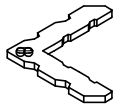
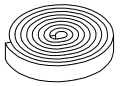
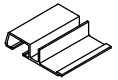
Illustration	Part No.	Description
	DFP1275	Restrictor 16” Left Hand Side Hung Friction Stay (Pack 25 singles)
	DFP1276	Restrictor 16” Right Hand Side Hung Friction Stay (Pack 25 singles)
	DFP1277	Easyclean 12” Side Hung Friction Stay (Pack 25 pairs)
	DFP1278	Egress 16” Side Hung Friction Stay (Pack 25 pairs)
Accessories		
	AW100	16.3mm Corner Tie (Pack 500)
	AW101	9.6mm Corner Tie (Pack 500)
	CWP052	3.18 x 11.2mm Corner Cleat (UF510) (Pack 50)
	CWP053	22.6 x 4.75mm Corner Cleat (Pack 50)
	CWP054	18.6 x 4.75mm Corner Cleat (Pack 50)

Illustration	Part No.	Description
	CWP056	Mullion/Transom Moulding (Pack 25)
	CWP058	Foam Infill 70 x 14mm (10M)
	CWP059	Cruciform Bracket ‘A’ (Pack 50)
	CWP060	Frame Brace (CW320, CW321, CW327) (Pack 50)
	CWP061	4.7 x 9.27mm Corner Cleat (Pack 50)
	CWP076	Cruciform Bracket ‘B’ (Pack 25)
	CWP109	Trickle Vent Operator (Pack 10)
	CWP110	Trickle Vent Mesh (3 x 10M)
	CWP111	Trickle Vent Sponge ‘A’ (Pack 20)

Parts List

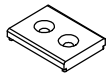
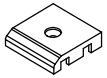
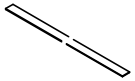
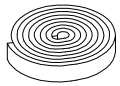
Illustration	Part No.	Description
	CWP112	Trickle Vent Sponge ‘B’ (Pack 20)
	CWP115	Ventframe Riser Block (Pack 50)
	CWP116	Outerframe Riser Block (Pack 50)
	CWP117	Egress/Non Locking Handle Adaptor (Pack 70)
	CWP118	Glaze In Vent Stay Tapping Plate (Pack 10)
	CWP119	Foam Infill 51 x 12mm (10M)
	CWP120	26.1 x 4.75mm Corner Cleat (Pack 50)
	CWP121	12 x 4.75mm Corner Cleat (Pack 50)
	CWP129	Cruciform Bracket ‘C’ (Pack 50)

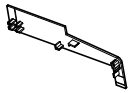
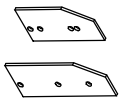
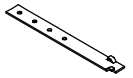
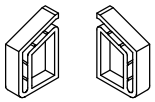
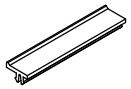
Illustration	Part No.	Description
	CWP135	26.1 x 11mm Corner Cleat (Pack 50)
	DFP134	8.9mm Corner Tie (Pack 500)
	DFP188	Corner Cleat (DFP327) (Pack 50)
	DFP206 DFP207	LH End Cap 135/155mm (Pack 20) RH End Cap 135/155mm (Pack 20)
	DFP226	Fixed Light Glazing Packers (Pack 50)
	DFP267	9mm Hole Plug (Pack 1000)
	DFP298	Trickle Vent Pack (Pack 10)
	DFP324	Ventframe Glazing Packers (Pack 50)
	DFP492 DFP797	Sub Cill Stop End (CW401) (Pack 50) Sub Cill Stop End (UF513) (Pack 50)

Illustration	Part No.	Description
	DFP572	Frame Fixing Lug (Pack 50)
	DFP664	Trickle Vent End Caps (Pack 25 Pairs)
	DFP788	14mm Corner Tie (Pack 500)
	DFP1071	Drive In Pins (Pack 50)
	DFP1500	Outerframe Corner Cleat (Pack 50)
	DFP1540	Security Hinge Bolt (Pack 20)
	UFP050	Universal Subcill Frame Location Strip (Pack 20)
	UFP051	150° Subcill Nose Joint Bracket (Pack 20)
	UFP052	135° Subcill Nose Joint Bracket (Pack 20)

Parts List

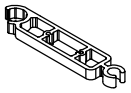
Illustration	Part No.	Description
	UFP053	90° Subcill Nose Joint Bracket (Pack 20)
	UFP054	Universal Subcill Corner Joint Bracket (Pack 20)
Fixings		
	AF60	No.8 x 3/8” Csk Pozi Self Tap Screw (Pack 100)
	AF192	No.8 x 1” Pan Pozi Self Tap Screw (Pack 500)
	AF301	No.8 x 1.1/4” Pan Pozi Self Tap Screw (Pack 100)
	AF302	No.8 x 3/4” Csk Pozi Self Tap Screw (Pack 100)
	AW331	No.10 x 1.1/2” Pan Pozi Self Tap Screw (Pack 250)
	AW332	No.10 x 1 1/4” Pan Pozi Self Tap Screw (Pack 100)

Illustration	Part No.	Description
	CWP100	No.6 x 1” Pan Pozi Self Tap Screw (Pack 100)
	CWP101	No.6 x 1 1/2” Csk Pozi Self Tap Screw (Pack 100)
	CWP102	No.6 x 1 1/2” Pan Pozi Self Tap Screw (Pack 100)
	CWP103	No.6 x 2” Csk Pozi Self Tap Screw (Pack 100)
	CWP104	No.6 x 60 Pan Pozi Self Tap Screw (Pack 100)
	CWP105	No.6 x 70 Pan Pozi Self Tap Screw (Pack 100)
	CWP107	No.6 x 1” Csk Pozi Self Tap Screw (Pack 100)
	CWP125	No.8 x 3/8” Flange Pozi Self Tap Screw (Pack 100)
	CWP126	No.8 x 1/2” Flange Pozi Self Tap Screw (Pack 100)

Illustration	Part No.	Description
	DFP507	No.8 x 5/8” Csk Pozi Self Tap Screw (Pack 100)
	DFP508	No.10 x 3/4” Pan Pozi Self Tap Screw (Pack 100)
	DFP620	No.8 x 1.1/4” Csk Pozi Self Tap Screw (Pack 100)
	DFP699	No.8 x 1/2” Csk Pozi Self Tap Screw (Pack 100)
	DFP1184	M5 x 12 Csk Pan Pozi Machine Screw (Pack 100)
	DFP1185	No.10 x 1 1/4” Csk Pozi Self Tap Screw (Pack 100)
	GFP535	No.10 x 1/2” Csk Pozi Self Tap Screw (Pack 100)
	STP124	No.6 x 1/2” Pan Pozi Self Tap Screw (Pack 100)

Parts List

Illustration	Part No.	Description
Tooling		
	CWP079	Crimper Head Set CW305, 324, 325, 328, 329
	CWP080	Crimper Head Set CW307, 308, 309, 315
	CWP083	Crimper Anvil Pack CW307, 308, 309, 315
	CWP084	Crimper Anvil Pack CW305, 322, 323, 324, 325, 328, 329
	CWP087	Crimper Anvil Pack CW320, 321
	CWP088	Crimper Anvil Pack CW327
	CWC090	Mullion/Transom Drill Jig
	CWC091	Cruciform Transom Drill Jig

Illustration	Part No.	Description
	CWC094	Ventframe First Hole Stay Fixing Drill Jig
	CWC095	Handle Drill Jig
	CWC096	90° Int & Ext Subcill Joint Drill Jig
	CWC097	135° & 150° Subcill Joint Drill Jig
	CWC098	Subcill Nose Drill Jig
	CWC099	Crimper Setting Block
	CWP122	3.25 Crimper Packer CW315
	CWP124	Crimper Head Set CW320, 321, 322, 323, 327
	CWC130	Espag End Guide Drill Jig

Illustration	Part No.	Description
	CWC131	58mm Mullion/Transom & Door Midrail Drill Jig
	CWC132	Ventframe Hinge Bolt Drill Jig
	CWC133	Cockspur Handle Drill Jig
	CWC134	Dummy Mullion/Transom Drill Jig
	CWC140	Saracen Ventframe Handle Drill Jig
	CWC141	Saracen Ventframe Corner Drill Jig
	CWP142	Saracen Crimper Head Set CW318
	CWP143	Saracen Crimper Anvil Pack CW318
	DFP235	Base Crimper Set

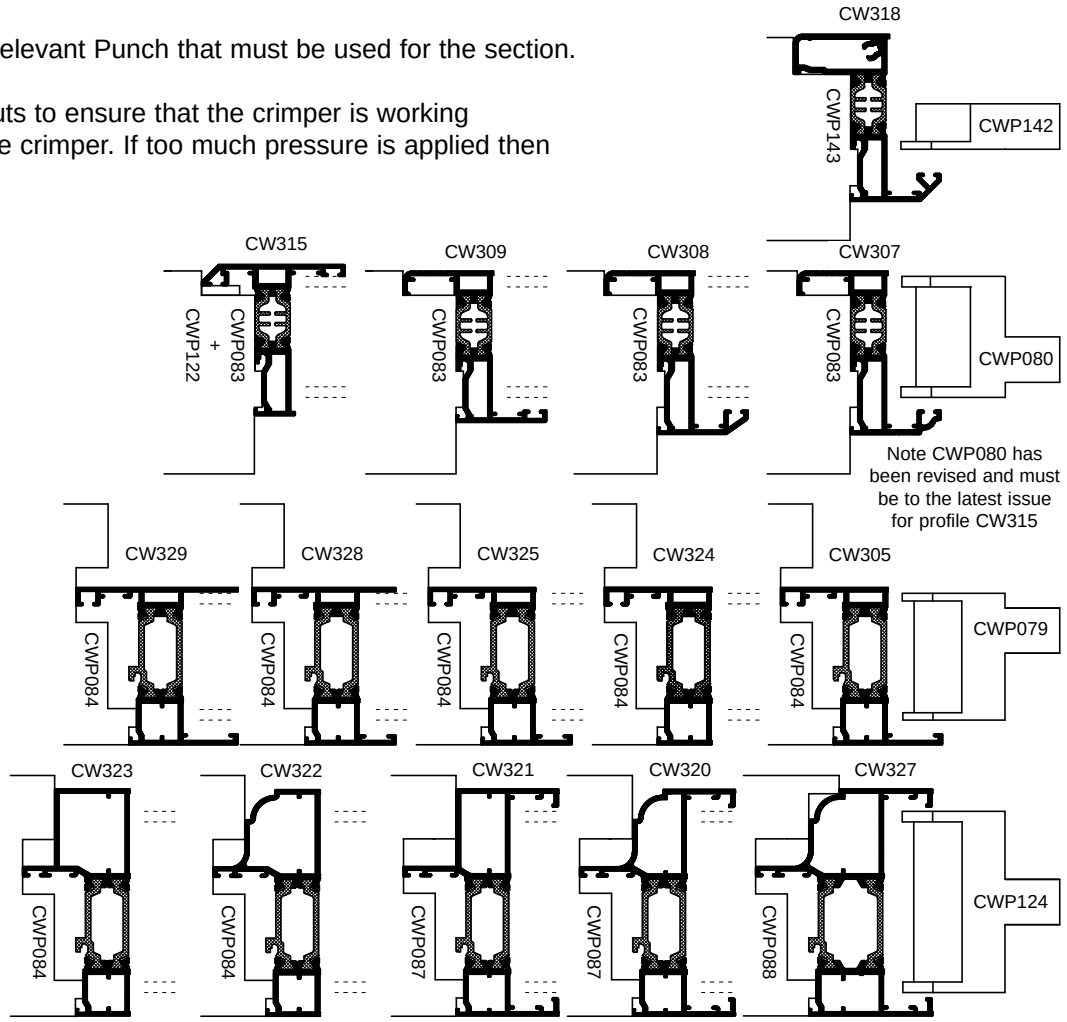
Crimper Setup

Crimper Punches & Anvils

This page shows the correct relationships for the Anvil / Section selection and the relevant Punch that must be used for the section.

Prior to beginning crimping the actual windows, trial crimps must be made on off-cuts to ensure that the crimper is working correctly. Care must also be taken with the clamp that holds the section down to the crimper. If too much pressure is applied then the bottom joint will be forced open and a visually poor joint created.

1. Remove head clamp from top of anvil.
2. Fit the required anvil insert into the anvil and tighten the locking bolts.
3. Fit the required punches to both crimper arms ensuring the correct orientation.
4. Slacken off both machine bolts to the top of the anvil, so that they are only just hand tight.
5. Slacken off fully both adjusting nuts (including the locking nuts) to the rear of the anvil.
6. Place the section onto the anvil, and then position the crimper setting block onto the section.
7. Bring both crimper arms in towards the setting block.
8. Adjust the anvil backward or forward as necessary, with the use of the nuts to the rear of the anvil, so that the cutting edge of the crimper punches slide parallel with the setting block crimping notches, just making contact with sides of the notches.
9. Slacken off both crimping arms by releasing both machine bolts securing them to the crimper bed upstand, so that they are only just hand tight.
10. Slacken off both crimping arms depth of crimp bolts, situated at the end of each of the crimper bed upstands.
11. Adjust the crimper arm travel (depth of crimp) so that the crimper arms lock out with the crimper punches just touching the section, and then wind in a further one and a half turns on the arm depth setting bolts, fine tune depth of crimp if necessary. Setting the bite of the crimper punch too deep is to be discouraged and will result in the section being distorted.
12. Fully tighten all nuts and machine bolts, making sure when in pairs that they are tightened together evenly.
13. Replace the head clamp to the anvil and set clamping pressure (a firm two finger pressure) with a sample corner of the section to be crimped. If the head clamp pressure is too strong, distortion of the profile will occur, resulting in a poor crimp.
14. With a short mitred sample consisting of all the correct corner cleats, make a sample crimp.



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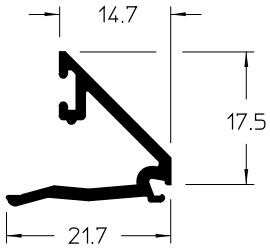

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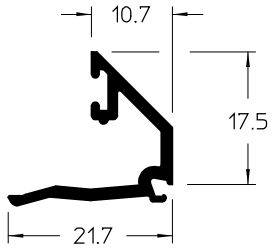

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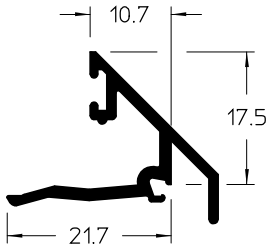

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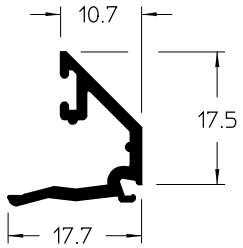

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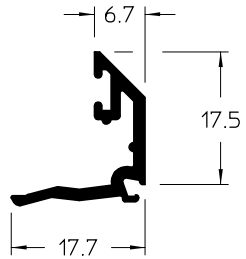

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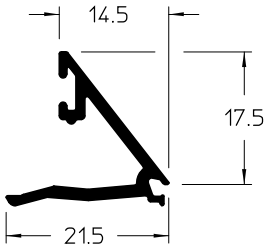

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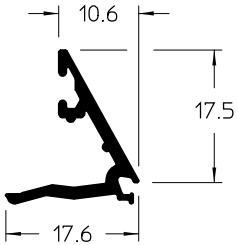

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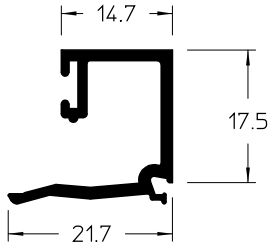

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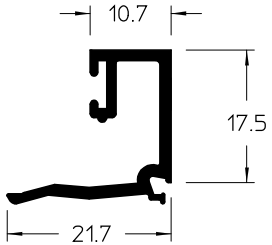

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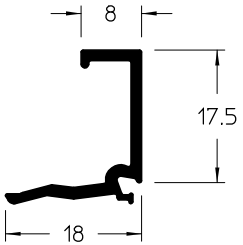

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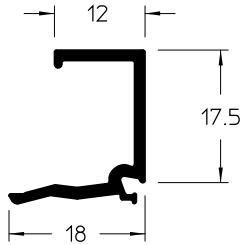

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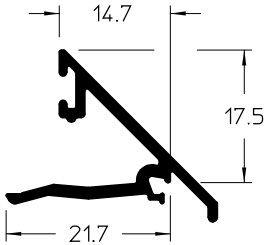

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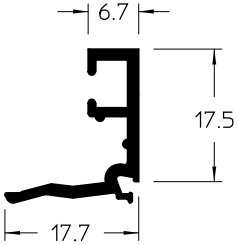

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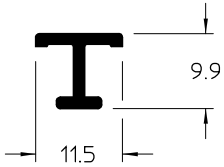

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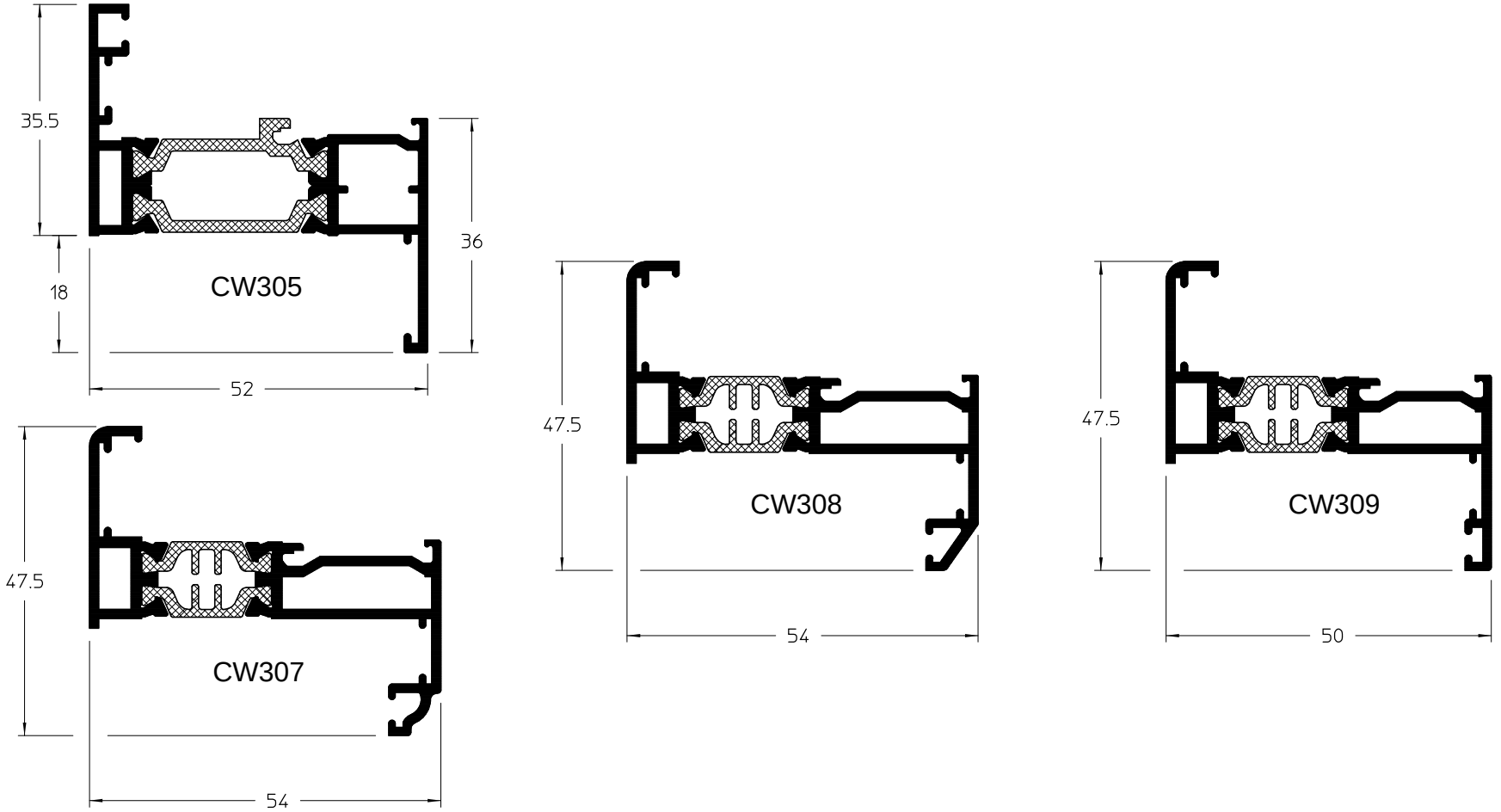

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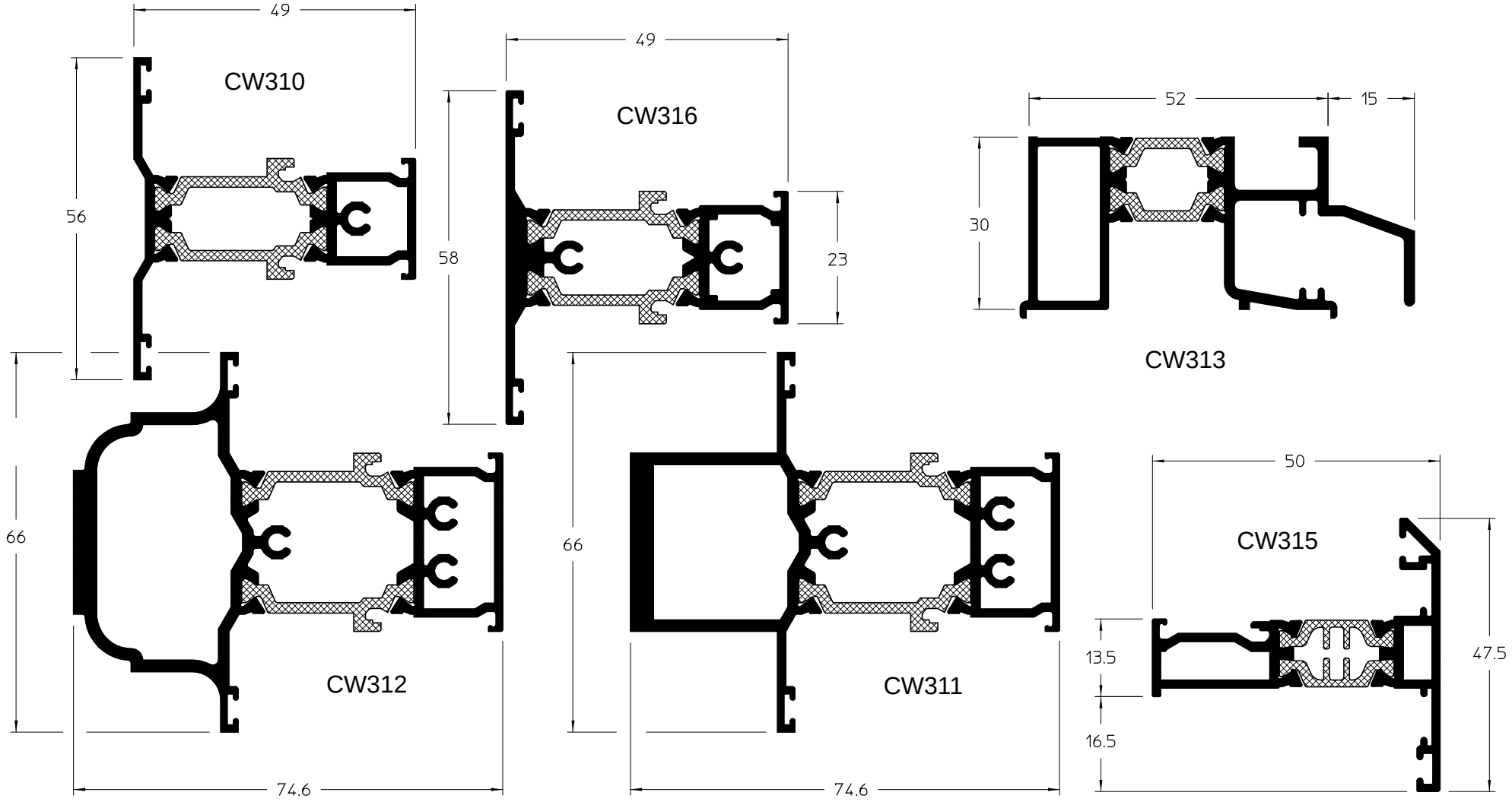

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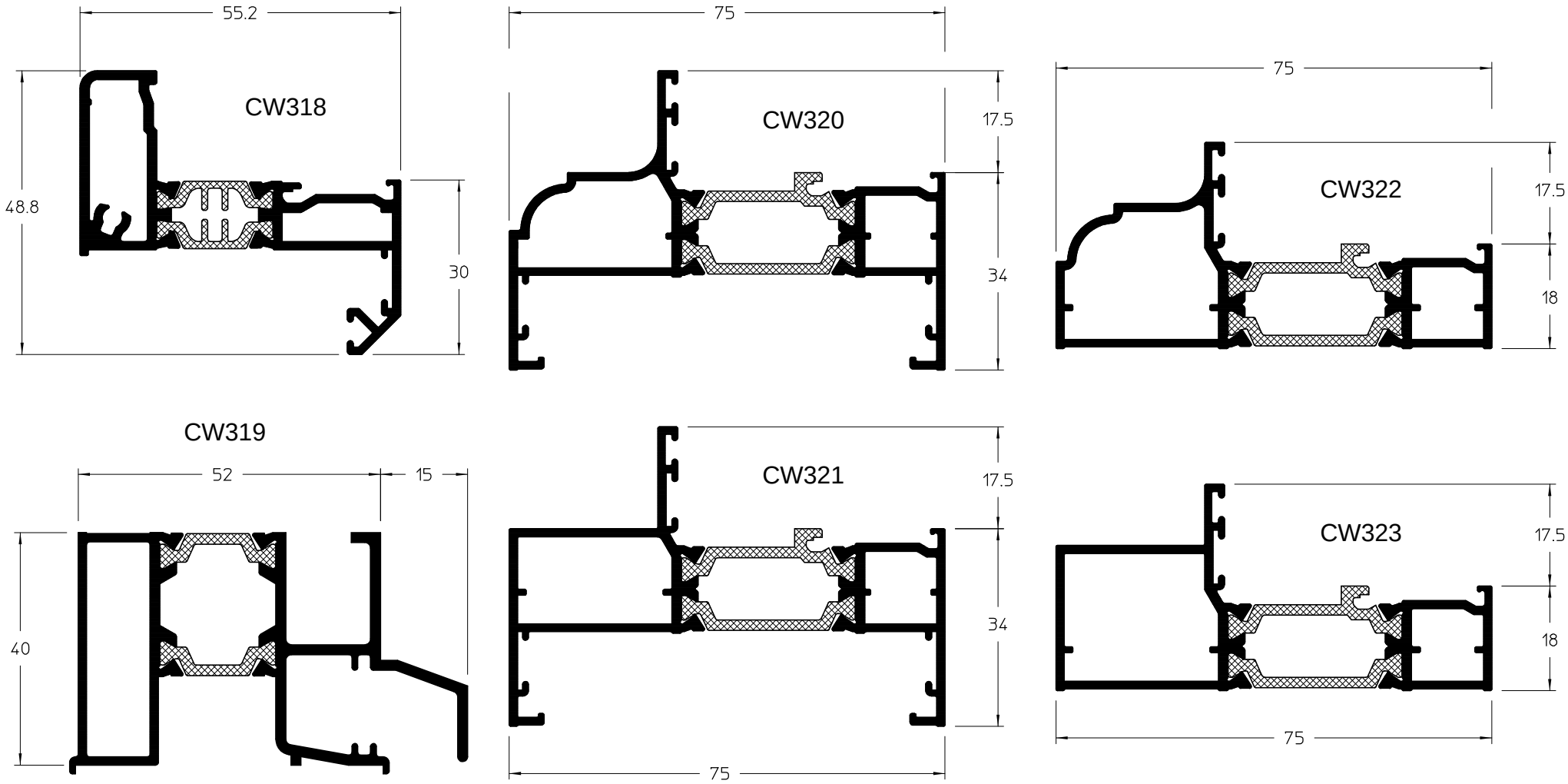

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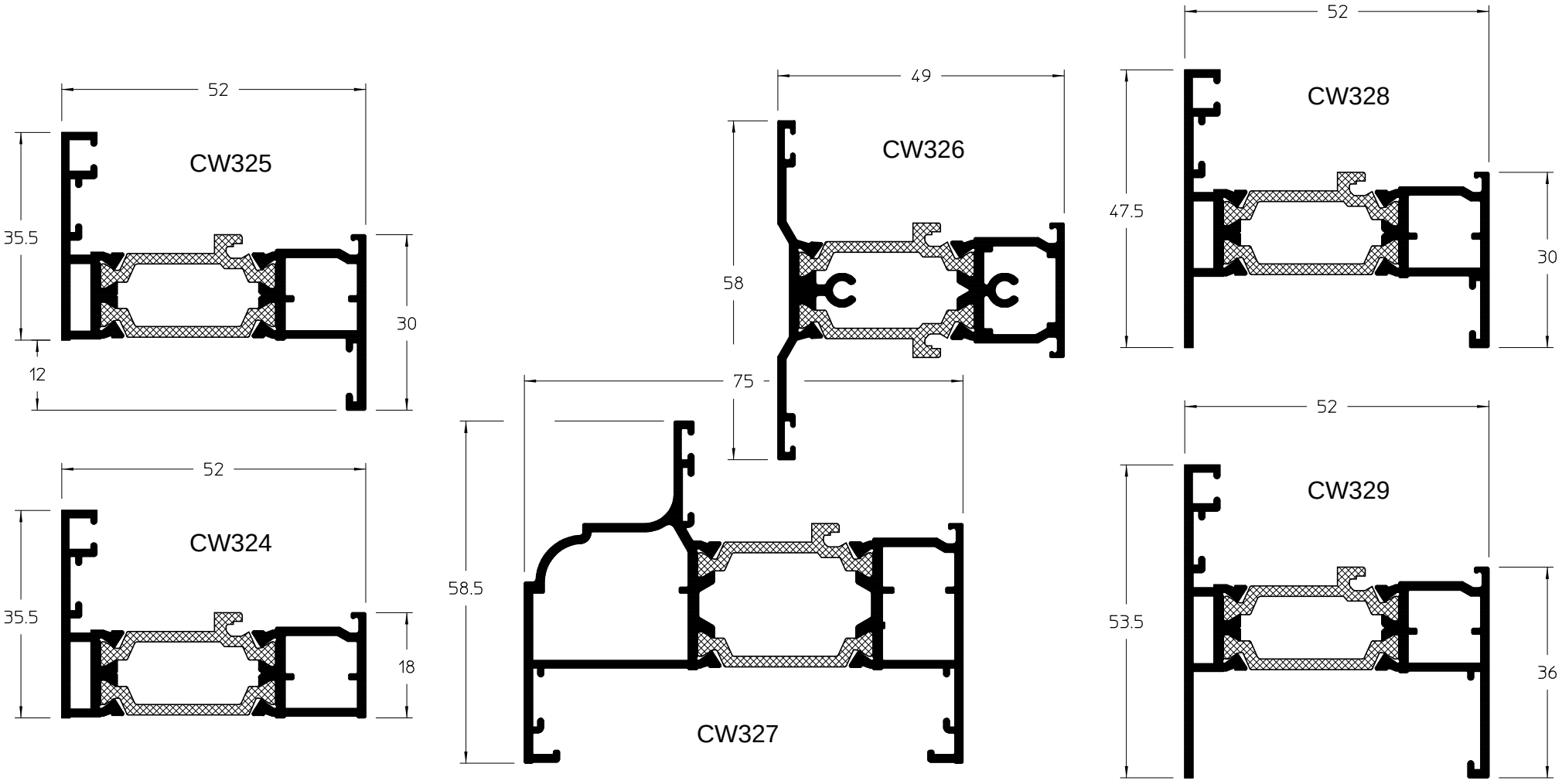

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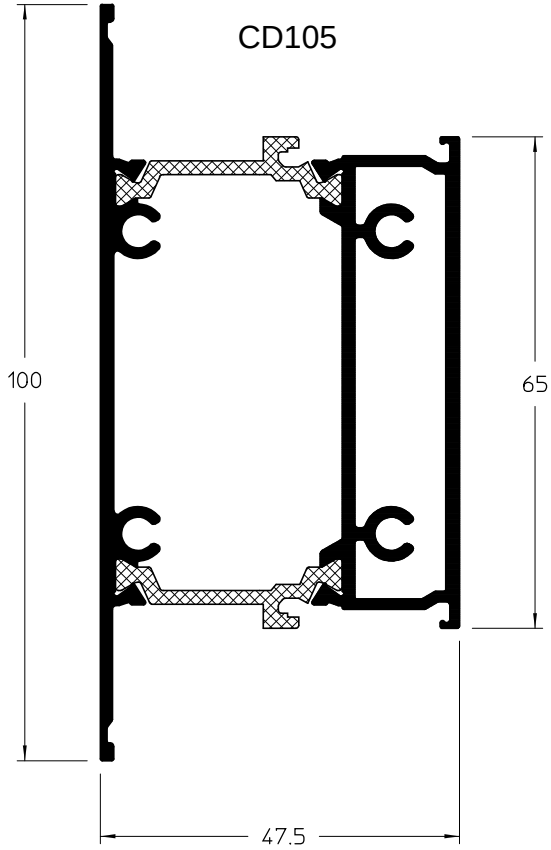

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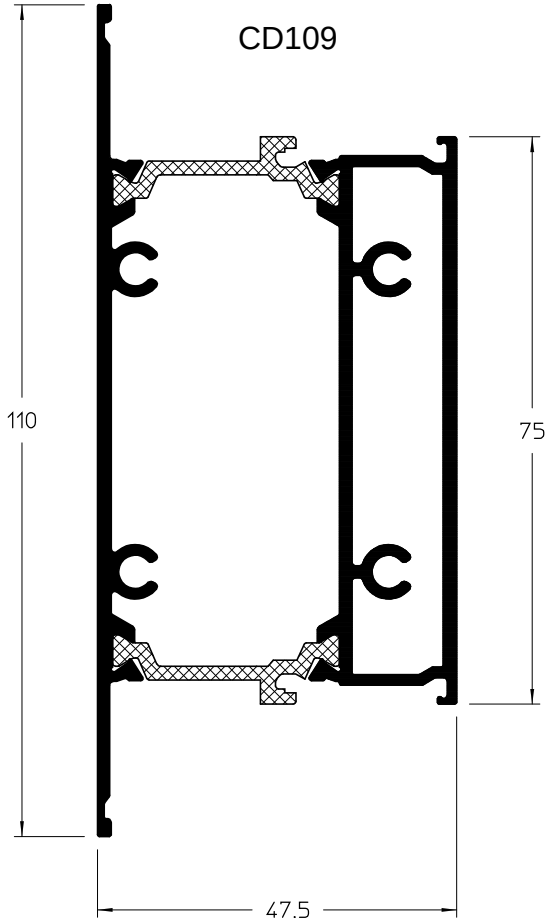

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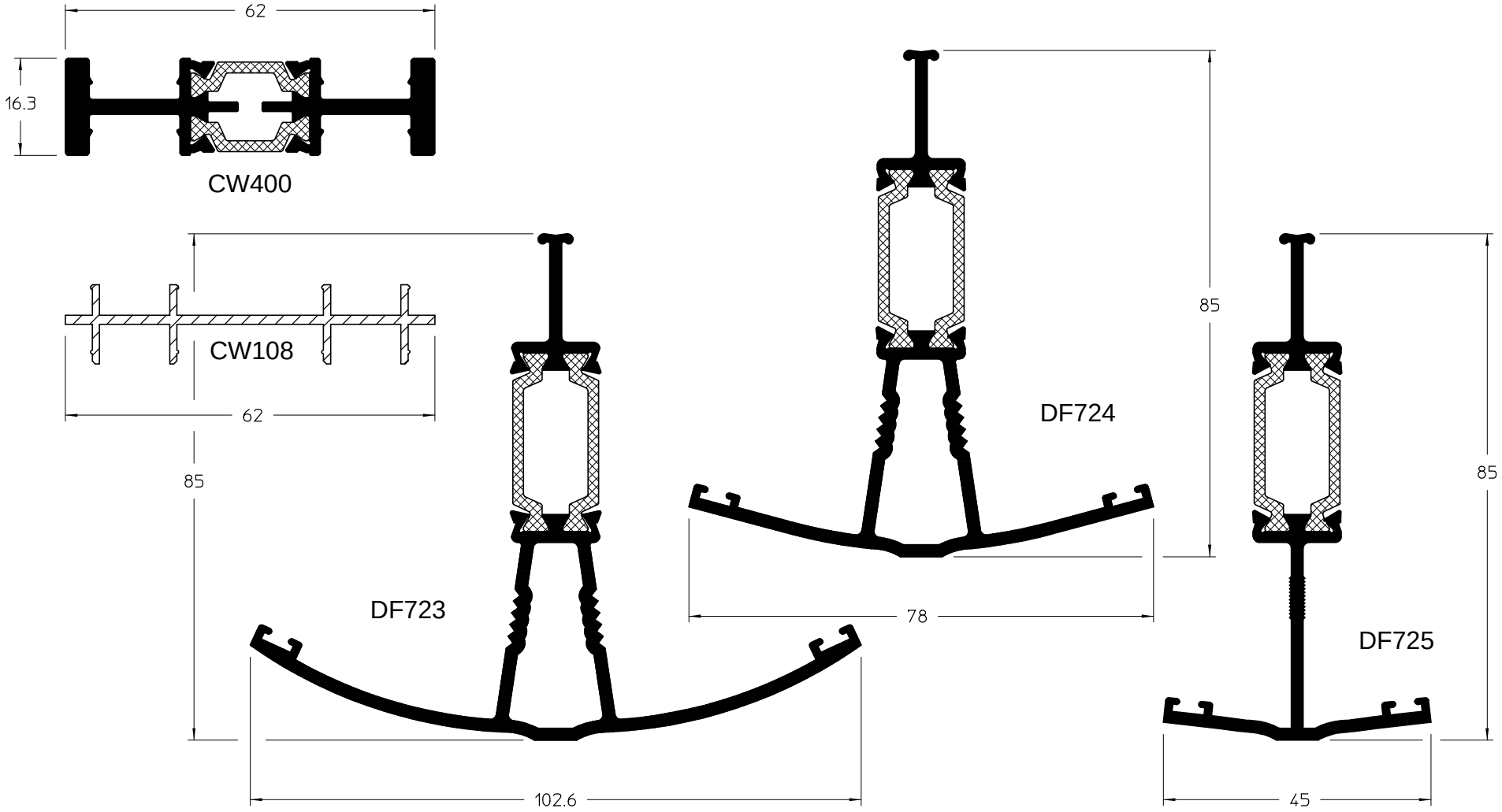

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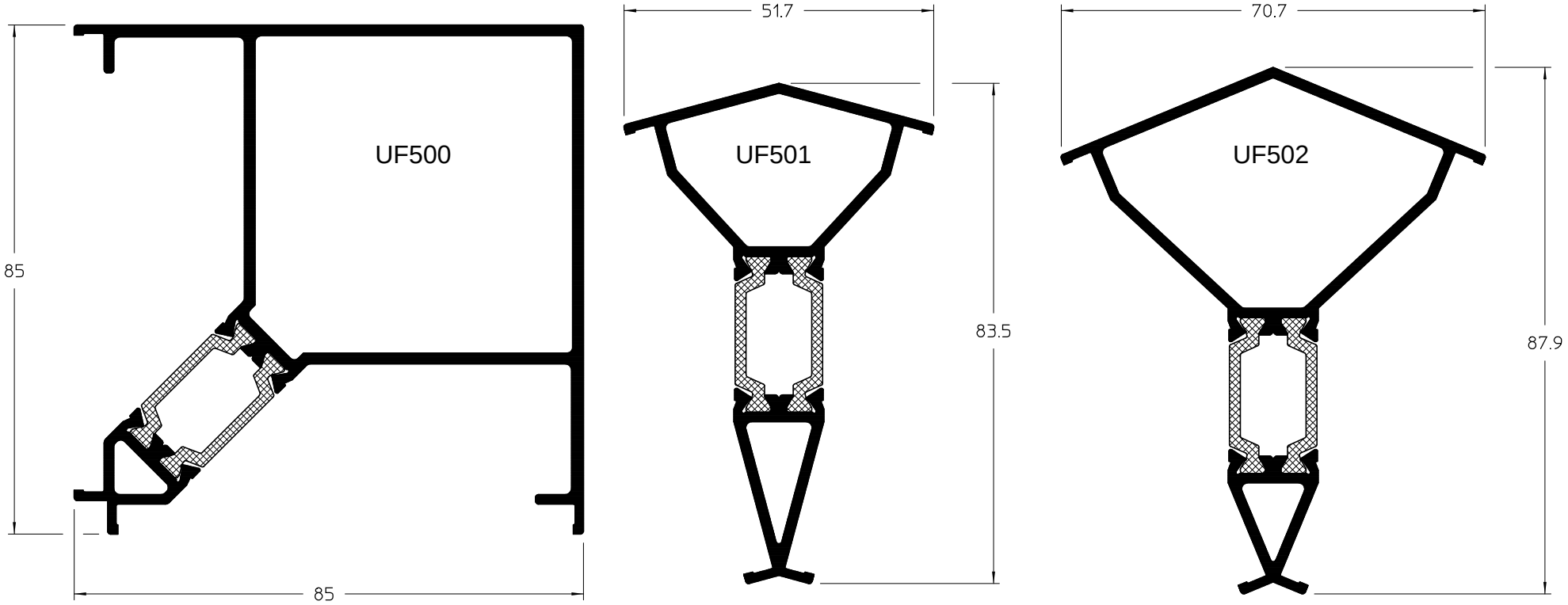

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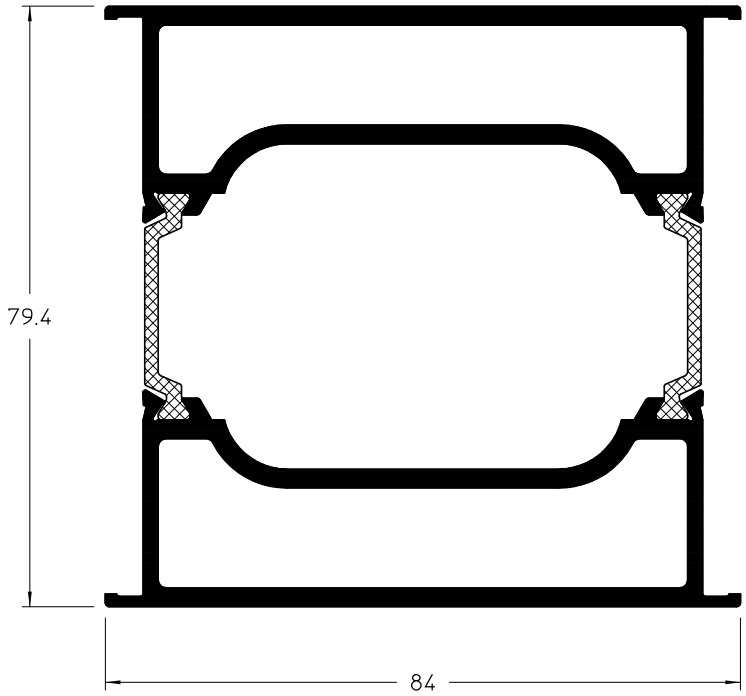

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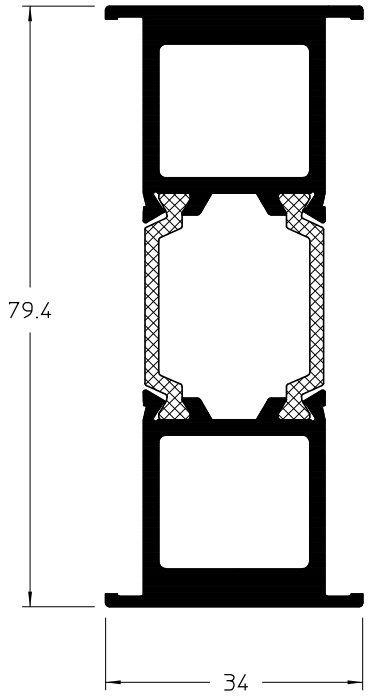

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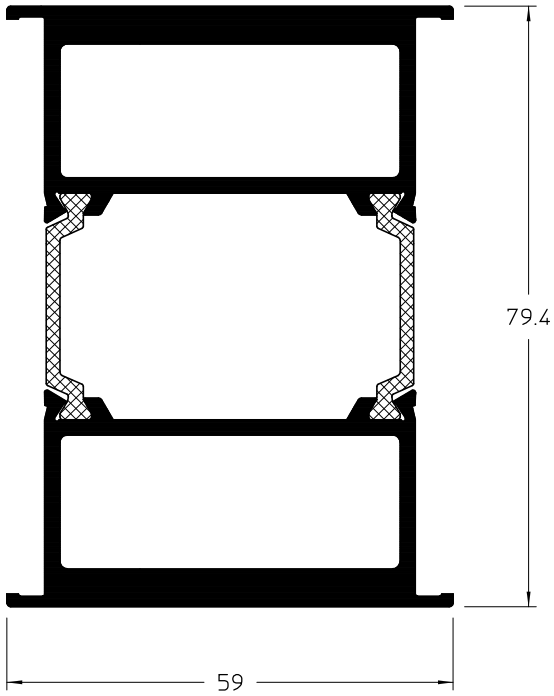

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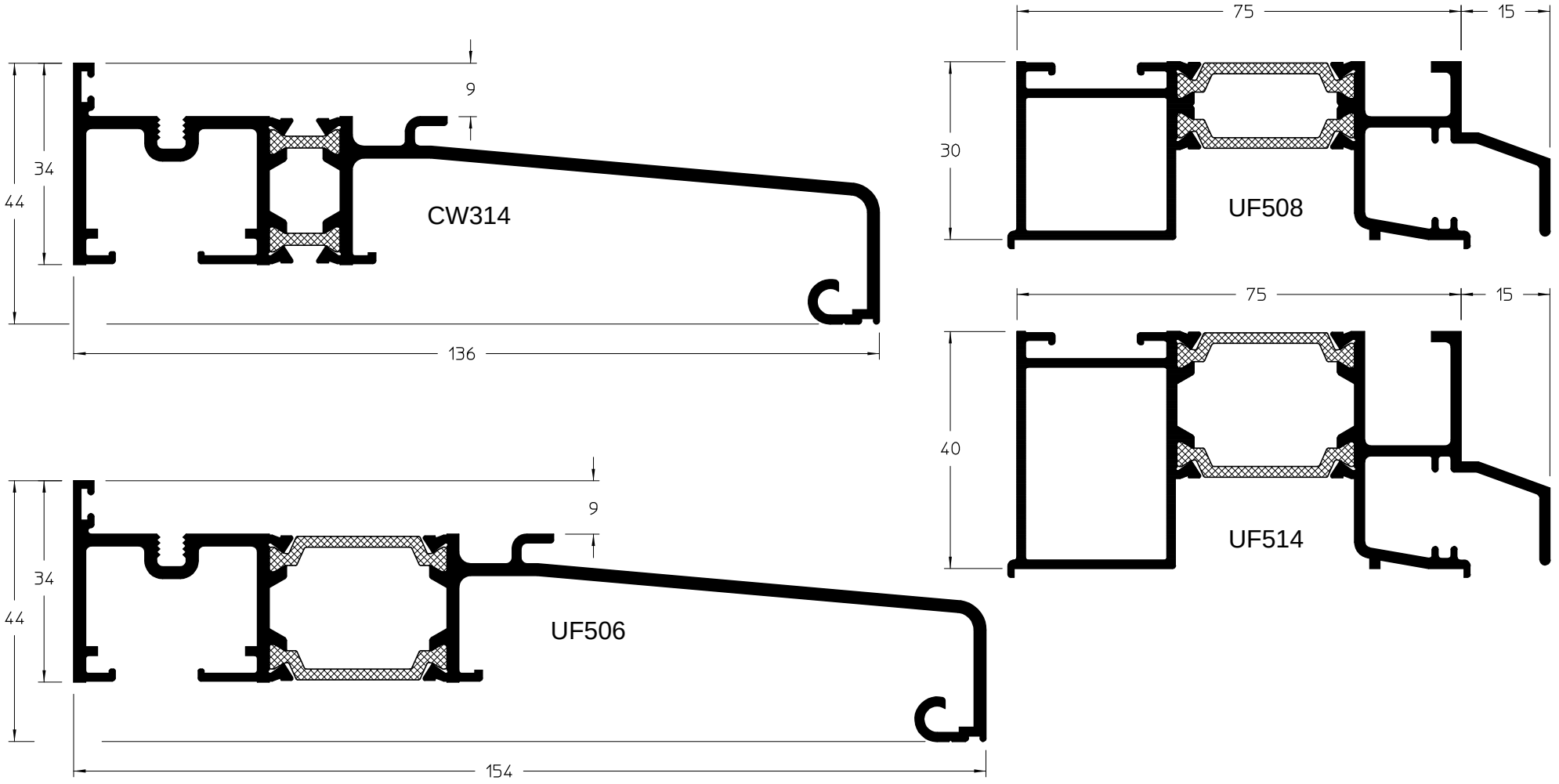
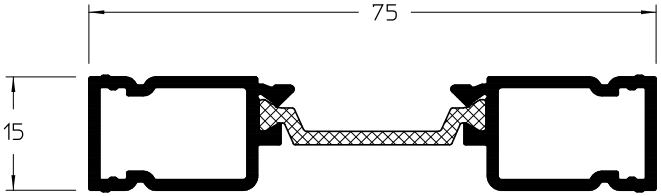


Profile Identification



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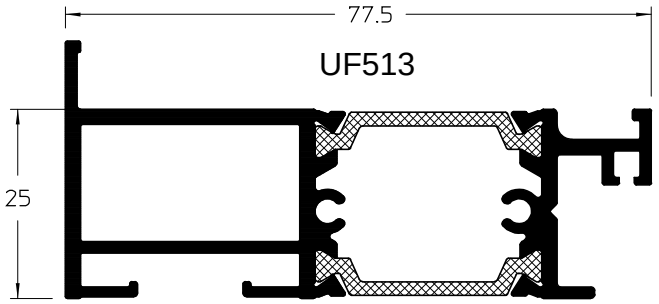

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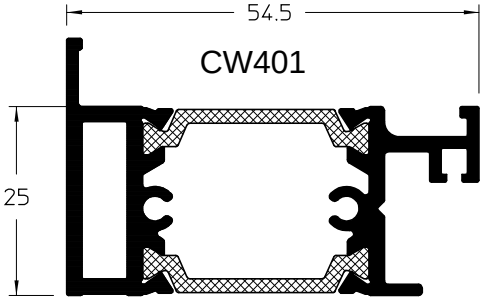
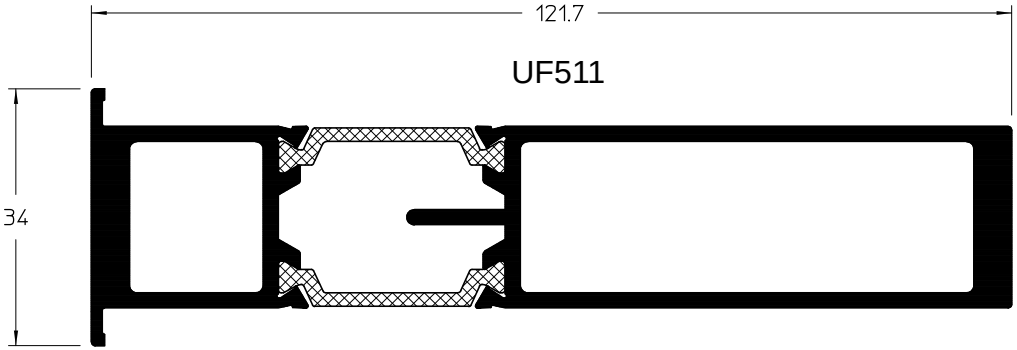


CW401



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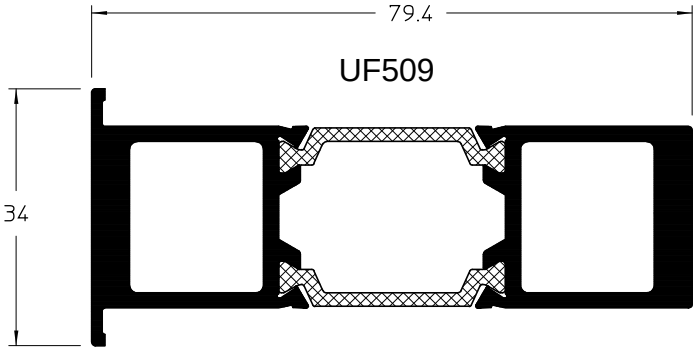


UF509

Clamping Guidance

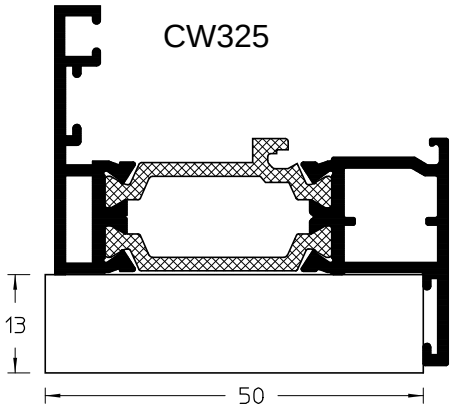
Outerframe Clamping Guidance

Care must be taken when clamping profiles to avoid any possible profile distortion during cutting, and where necessary, appropriate support blocks are to be used.

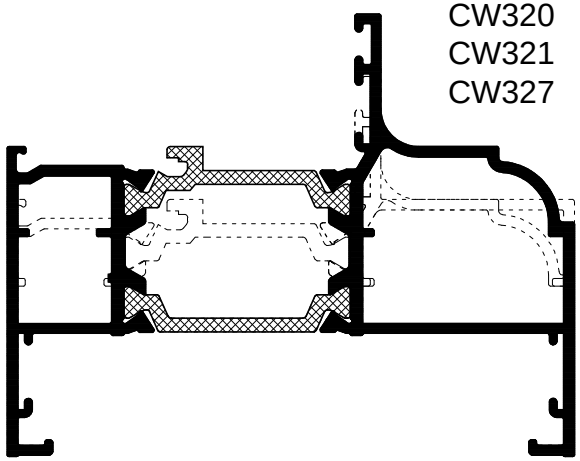
Due to the variation in manufacturing machinery and the range of available profiles, the typical clamping details shown on this page and the next page are for guidance only.

It is the responsibility of the fabricator to ensure that mitred cuts are acceptable for crimping. When using a section for the first time, cut a sample corner and offer to the crimper anvil using hand pressure to align. The corner can now be checked to see if a satisfactory joint will be achieved when crimped.

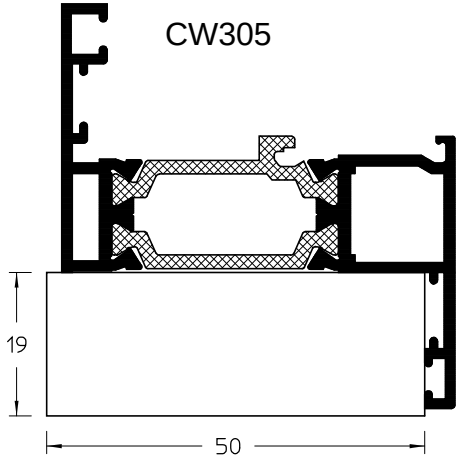
CW325



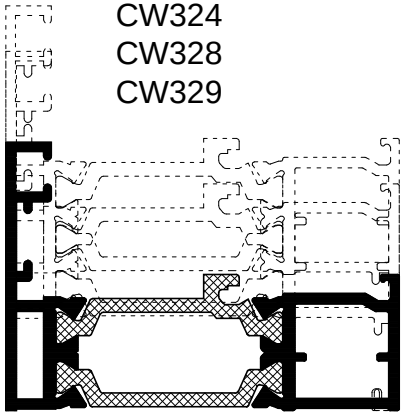
CW320
CW321
CW327



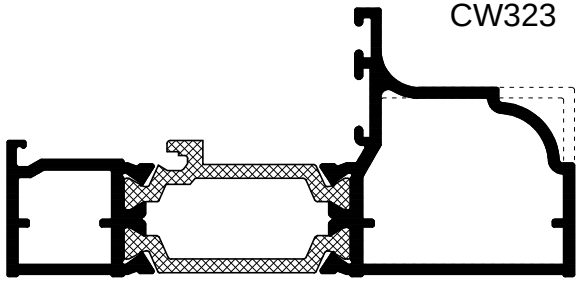
CW305



CW324
CW328
CW329



CW322
CW323



Clamping Guidance

Ventframe Clamping Guidance

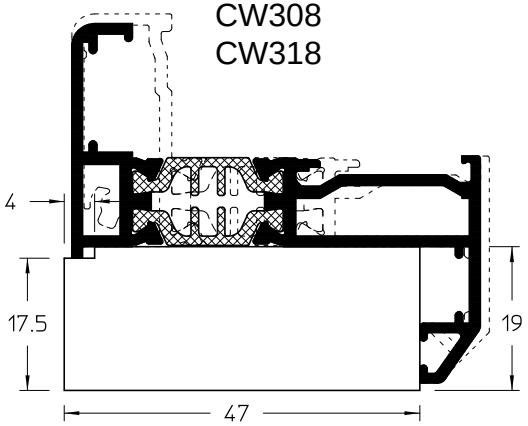
Care must be taken when clamping profiles to avoid any possible profile distortion during cutting, and where necessary, appropriate support blocks are to be used.

Due to the variation in manufacturing machinery and the range of available profiles, the typical clamping details shown on this page and the previous page are for guidance only.

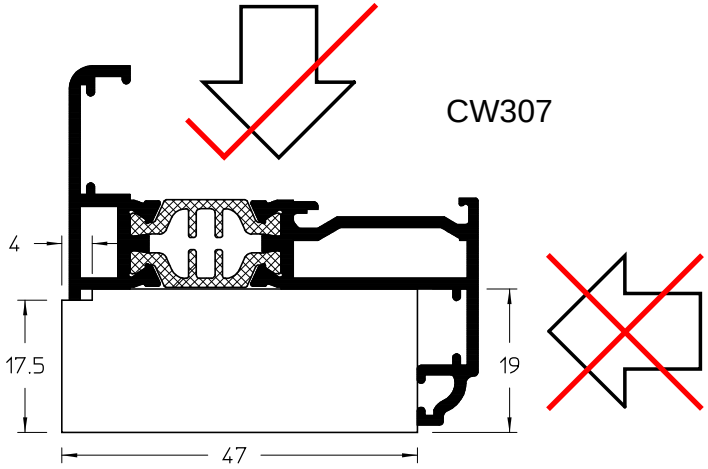
It is the responsibility of the fabricator to ensure that mitred cuts are acceptable for crimping. When using a section for the first time, cut a sample corner and offer to the crimper anvil using hand pressure to align. The corner can now be checked to see if a satisfactory joint will be achieved when crimped.

Note recommended clamping direction.

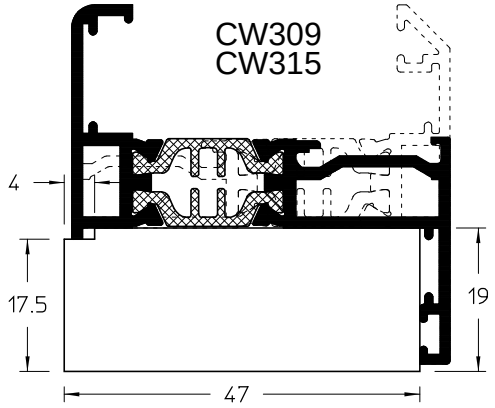
CW308
CW318



CW307



CW309
CW315



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Preparation for Fabrication

Establishing Dimensions

It is essential that work sizes are based on correct site dimensions and with adequate clearances around the window to allow for correct positioning/fixing. Where separate units are coupled together using a coupling mullion, the relevant gap must be allowed for coupling.

Preliminaries

Ensure that the window design is within the parameters given in the specification. Ascertain the vertical and horizontal work sizes for each individual window unit. Consideration must be given to any cill conditions which will affect the work size height. Ascertain the basic window design i.e. number and positions of mullions/transoms and opening lights. The correct profile required can be calculated using BS6399:Part 2 and inertia value calculation sheet on pages 2-25 & 2-26. Ascertain the type of outerframe which is needed so that the appropriate profile can be used.

Metal and Glass Cutting

Refer to the data and diagrams on the subsequent pages to determine all bar lengths and glass sizes.

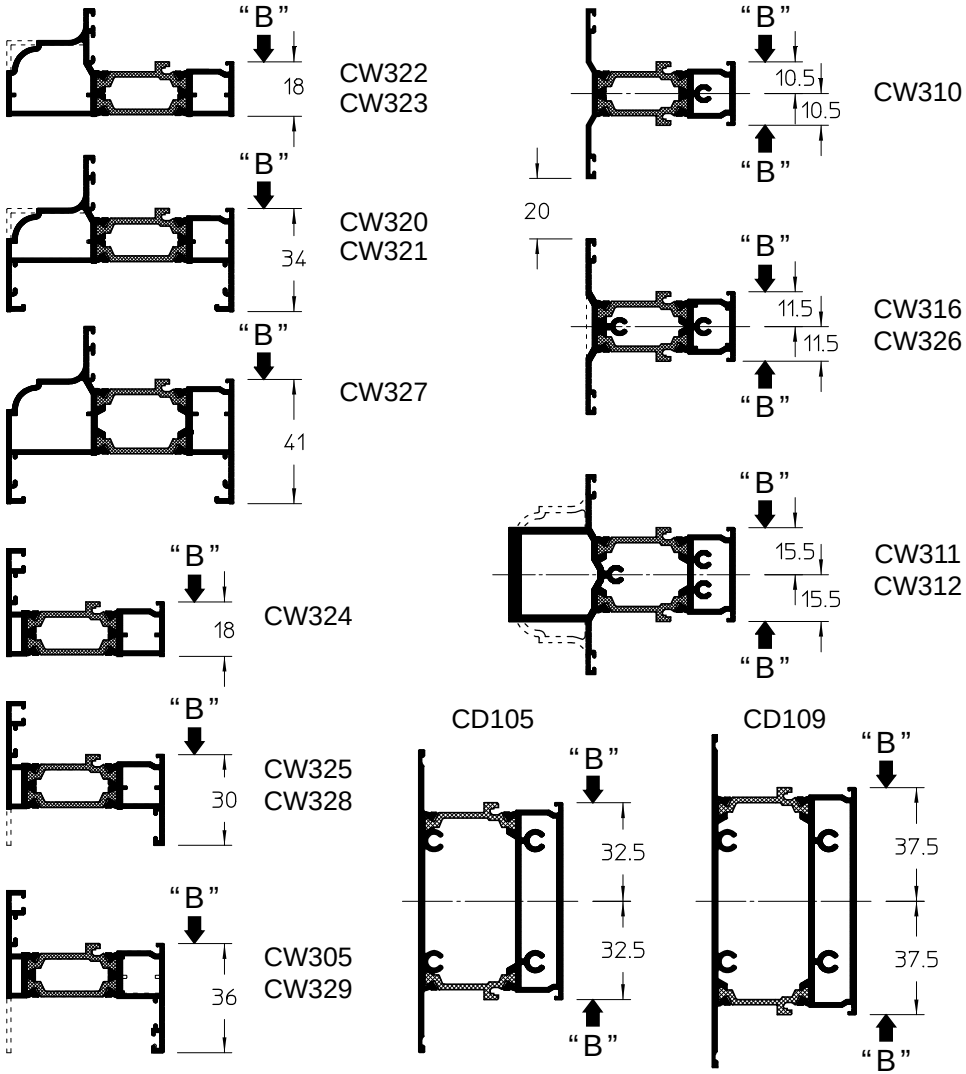
When calculating bar lengths requirements, an allowance of 37mm at each end of the bar must be made for any profile which has powder coat or anodised finish to allow for jig/contact marks. These marks must be removed individually or as part of the first and last cut whether square or mitred.

Details of actual end preparation required, Square/Mitred are fully detailed for individual profiles on the following pages. Also detailed are the position and size of any holes and the appropriate tooling.

Cutting Calculations

To allow for all possible combinations and simplify calculations, the listed formulae are related to basic dimension ‘B’ which is arrived at by taking away the allowances detailed opposite from the overall window unit or mullion/transom centre line.

Metal tolerance of plus or minus 0.5mm - Glass tolerance of plus 0mm, minus 3.0mm.



Cutting Sizes

Metal Sizes

Outerframe *(Sections CW305, CW320, CW321, CW322, CW323, CW324, CW325, CW327, CW328, CW329)*

	O/A Window	Mitre/Mitre

Mullion / Transom *(Sections CW310, CW316, CW326, CD105, CD109)*

	Basic Size “B”	Square/Square

Note that a cruciform joint is not available for CD105, CD109 profile.

HD Mullion / Transom *(Section CW311)*

	Basic Size “B”	Square/Square
To CW305, CW324, CW325	Basic Size “B” plus 18 (one end)	Square
To CW328	Basic Size “B” plus 30 (one end)	Square
To CW329	Basic Size “B” plus 36 (one end)	Square

HD Mullion / Transom *(Section CW312)*

To CW322 Frame	Basic Size “B” plus 3 (one end)	Shaped
To CW320 Frame	Basic Size “B” plus 10 (one end)	Shaped
To CW327 Frame	Basic Size “B” plus 10 (one end)	Shaped
To CW312 Mullion/Transom	Basic Size “B” plus 3 (one end)	Shaped

Note that the cutting calculations for HD Mullion/Transom CW312 is for one end only, also note that a cruciform joint is not available with this profile.

Ventframe (Section CW307, CW308, CW309, CW315, CW318)

	Basic Size “B” Plus 13mm	Mitre/Mitre

Dummy Mullion / Transom *(Section CW316, CW326)*

Basic “B” minus 47 (Where each dummy mullion occurs deduct a further 23mm from dummy transoms and divide by number of panes in width)

Note dummy mullion / transoms can only be fitted in CW307 & CW308 ventframes.

All glazing beads should be cut oversize and then trimmed to suit opening.

Glazing Bead *(Section CW068)*

Horizontal Beads (Fxd)	Basic Size “B”	Square/Square
Vertical Beads (Fxd)	Basic Size “B” minus 7mm	Mitre/Mitre
Horizontal Beads (Vent)	Basic Size “B” minus 47mm	Square/Square
Vertical Beads (Vent)	Basic Size “B” minus 54mm	Mitre/Mitre

Glazing Bead *(Section CW069)*

Horizontal Beads (Fxd)	Basic Size “B”	Square/Square
Vertical Beads (Fxd)	Basic Size “B” minus 15mm	Mitre/Mitre
Horizontal Beads (Vent)	Basic Size “B” minus 47mm	Square/Square
Vertical Beads (Vent)	Basic Size “B” minus 62mm	Mitre/Mitre

Glazing Bead *(Section CW070, CW093)* - For drainage bead only

Horizontal Beads (Fxd)	Basic Size “B”	Square/Square

Glazing Bead *(Section CW071) - For use with CW309, CW318 only*

Horizontal Beads (Vent)	Basic Size “B” minus 47mm	Square/Square
Vertical Beads (Vent)	Basic Size “B” minus 62mm	Mitre/Mitre

Glazing Bead *(Section CW072) - For use with CW309, CW318 only*

Horizontal Beads (Vent)	Basic Size “B” minus 47mm	Square/Square
Vertical Beads (Vent)	Basic Size “B” minus 70mm	Mitre/Mitre

Glazing Bead *(Section CW082)*

Horizontal Beads (Fxd)	Basic Size “B”	Square/Square
Vertical Beads (Fxd)	Basic Size “B”	52°Mitre/52°Mitre
Horizontal Beads (Vent)	Basic Size “B” minus 47mm	Square/Square
Vertical Beads (Vent)	Basic Size “B” minus 47mm	52°Mitre/52°Mitre

Glazing Bead *(Section CW083) - For use with CW309, CW318 only*

Horizontal Beads (Vent)	Basic Size “B” minus 47mm	Square/Square
Vertical Beads (Vent)	Basic Size “B” minus 47mm	61°Mitre/61°Mitre

Glazing Bead *(Section CW084, CW085)*

Horizontal Beads (Fxd)	Basic Size “B”	Square/Square
Vertical Beads (Fxd)	Basic Size “B” minus 35	Square/Square
Horizontal Beads (Vent)	Basic Size “B” minus 47mm	Square/Square
Vertical Beads (Vent)	Basic Size “B” minus 82mm	Square/Square

Glazing Bead *(Section CW088, CW089) - For use with CW315 only*

Horizontal Beads (Vent)	Basic Size “B” minus 47mm	Square/Square
Vertical Beads (Vent)	Basic Size “B” minus 82mm	Square/Square

IMPORTANT! for side hung glaze in windows, see bead note on page 4-24

Glazing Bead *(Section CW097) - For use with CW309, CW318 only*

Horizontal Beads (Vent)	Basic Size “B” minus 47mm	Square/Square
Vertical Beads (Vent)	Basic Size “B” minus 82mm	Square/Square

Glass Sizes

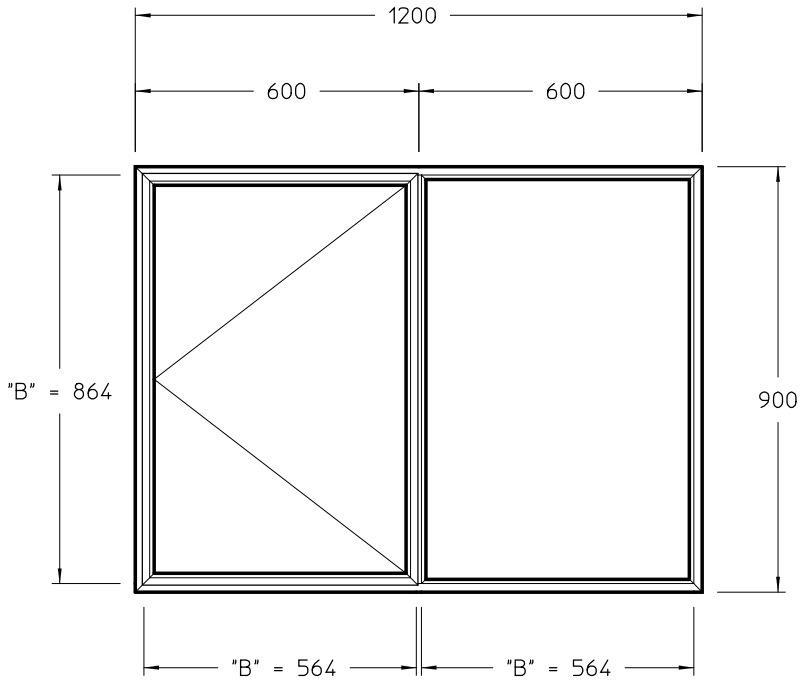
Fixed Light	Basic Size “B” minus 10mm
Opening Light	Basic Size “B” minus 57mm

Where a dummy mullion/transom occurs within an opening light deduct 33mm for each mullion/transom and divide by number of panes)

--- IMPORTANT!!! SMALL WINDOWS ---

Window vent sizes under 311mm in width (side hung) or 311mm in height (top hung) are to be reduced by 3mm in width (side hung) or 3mm in height (top hung). Please adjust vent, glazing units and any dummy mullion/ transoms sizes accordingly.

Example Window - Metal/Glass Sizes



Overall Window Size Adjustments.

Note special considerations should be made when using subcills, extended leg profiles, add on trickle vent body and coupling mullions as these items will affect the overall window size.
See general arrangements for size details.

Metal Sizes

Outerframe			
CW322	O/A window width	= 2 x 1200mm	(cut 45° x 45°)
CW322	O/A window height	= 2 x 900mm	(cut 45° x 45°)
Mullion			
CW310	Basic 'B' (900 - 18 - 18)	= 864mm	(cut 90° x 90°)
Ventframe			
CW307	Basic 'B' (600 - 18 - 10.5) + 13	= 2 x 584.5mm	(cut 45° x 45°)
CW307	Basic 'B' (900 - 18 - 18) + 13	= 2 x 877mm	(cut 45° x 45°)
Glazing Beads for Fixed Light			
CW068 (Horz)	Basic 'B' (600 - 18 - 10.5)	= 2 x 571.5mm	(cut 90° x 90°)
CW068 (Vert)	Basic 'B' (900 - 18 - 18) - 7	= 2 x 857mm	(cut 45° x45°)
Glazing Beads for Vent			
CW068 (Horz)	Basic 'B' (600 - 18 - 10.5) - 47mm	= 2 x 524.5mm	(cut 90° x 90°)
CW068 (Vert)	Basic 'B' (900 - 18 - 18) - 54	= 2 x 810mm	(cut 45° x 45°)

Glass Sizes

Fixed Light		
Glass Width	Basic ‘B’ (600 - 18 - 10.5) - 10	= 561.5mm
Glass Height	Basic ‘B’ (900 - 18 - 18) - 10	= 854mm
Vent Frame		
Glass Width	Basic ‘B’ (600 - 18 - 10.5) - 57	= 514.5mm
Glass Height	Basic ‘B’ (900 - 18 - 18) - 57	= 807mm