CityView™

TECHNICAL MANUAL

100mm Centre Single Glazed

SLS - 1500 Pa
ULS - 4000 Pa

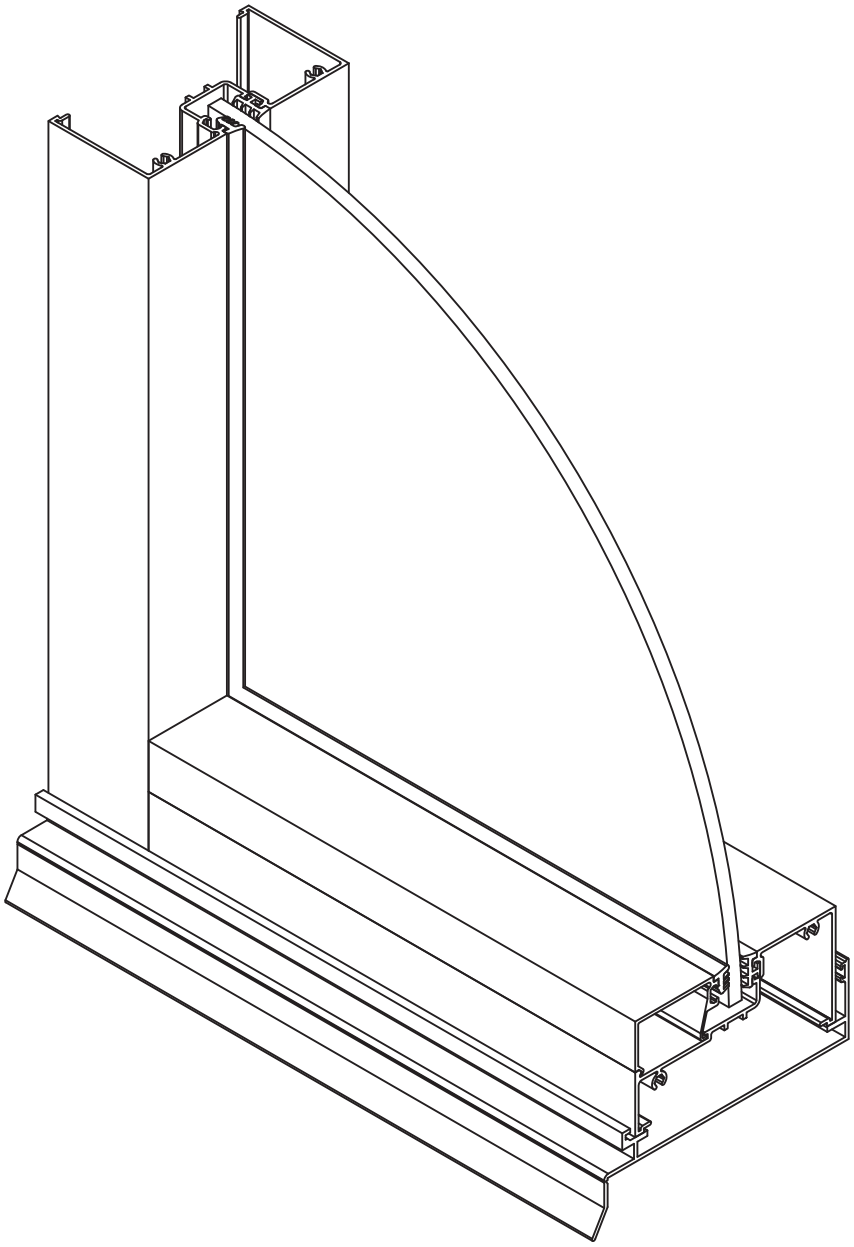
Air - 0.09L
Water - 600 Pa

Acoustic - Rw 38
12.5mm Laminate

Fire Rating
Tested - BAL 40

Single glazed

U VALUE	4.05 to 6.09
SHGC	0.25 to 0.78
TVW	0.07 to 0.80



53mm
76mm
100mm
150mm
165mm
200mm
250mm

10mm Glass Coverage

Max 12.38mm

Subsill Draining

Transom Draining

DARLEY ALUMINIUM

DEC 2025 | Version 1.1

Disclaimer

Darley Aluminium strives to ensure the technical details contained in this manual are complete and correct. Occasionally, some errors or outdated information may require rectification - Darley Aluminium takes no responsibility for any loss or damage as a result of these errors. If you are unsure of any information provided within this manual, please contact your nearest Darley Aluminium office.

Engineering, manufacture and installation of frames must meet requirements of AS2047 (Windows in Buildings).
Glazing selected must meet requirements of AS 1288 (Glass in Buildings).
Size limitations are governed by design intent, glass selection, and local wind load requirements as per AS/NZS 1170.2 (Wind Actions) or AS 4055 (Wind Loads for Housing). An Engineer should be consulted to ensure selected framing and installation meets the requirements as set out by the relevant Australian Standards.

Any reference to an Australian Standard within this manual is based on the interpretations of Darley Aluminium. Code Compliance responsibility remains with the user of this manual. Misuse or misinterpretation of the information in this manual or of the Australian Standards remains the responsibility of the user of this manual.

Engineering, manufacture and installation must meet requirements of AS 2047, AS3959, WERS and Acoustic requirements. Glazing selected must meet requirements of AS 1288. Size limitations are governed by design intent, glass selection, and local wind load requirements as per AS/NZS 1170.2 or AS 4055.
N.B.- For frames, designs, and configurations outside the tested scope, an engineer or suitably qualified person should be consulted.

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Contents

Welcome

Overview

Darley's 100 x 50 mm Centre Single Glazed Framing System is the ideal choice for modern architectural requirements, meeting current design trends as well as performance specifications. The system is ideally suited to shopping centres, offices, show rooms and commercial buildings. It is also widely used in high end residential developments and apartments.
Framing options include hinged or sliding door combinations and can be incorporated with a variety of awnings / casements, sliding windows and double hung windows.
All Darley framing systems are available in powder coated and anodised finishes.
(Refer to Darley Aluminium Product Catalogue for further information.)

Design Features

- Accepts glass thickness from 6mm to 12.38mm.
- Compatible with other Darley Aluminium Commercial and Residential Systems
- Self-draining transom
- Accepts a variety of window options
- Accepts a variety of hinged and sliding door systems
- Range of sub head and sub sill options
- Tested and Approved by an independent NATA accredited laboratory

Performance Summary

100 x 50mm Centre Single Glazed Framing							
MaxTested Size	**SLS**	**ULS**	**Water**	**Air Infiltration**	**Acoustic**	**BAL**	**Glass**
3200 x 1200mm	1200Pa	2500Pa	600Pa	+ 0.09L/s.m^2 - 0.05L/s.m^2	38Rw	Bal40	6-12.38mm

*Estimated based on 100 x 50mm centre glazed frame

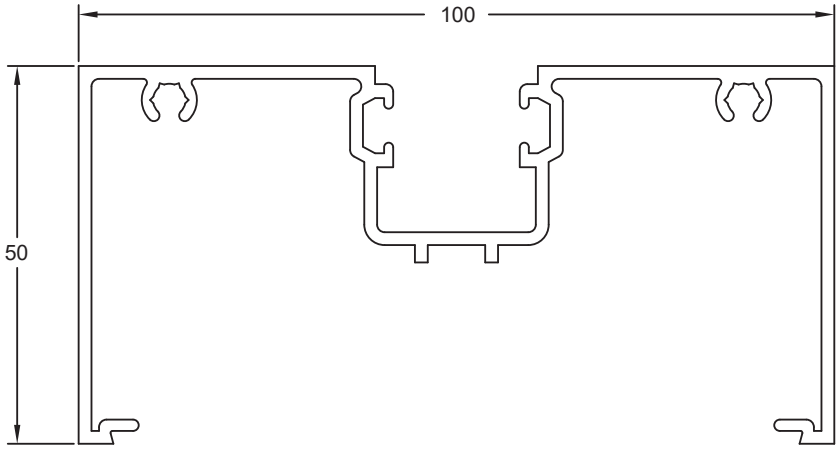
See Performance Section for more detail.
Size limitations are governed by design intent, glass selection and local wind load and deflection requirements. For further technical assistance and fabricator selection contact Darley Aluminium. An Engineer should be consulted to ensure selected framing meets the requirements as set out in the relevant Australian Standards

System Requirements

- Engineering, manufacture and installation of frames must meet requirements of:
  - AS2047-2014 (Windows and external glazed doors in buildings)
- Glazing selected must meet requirements of AS1288:2021 (Glass in Buildings - Selection and Installation)

Section Profiles

Scale 1:1

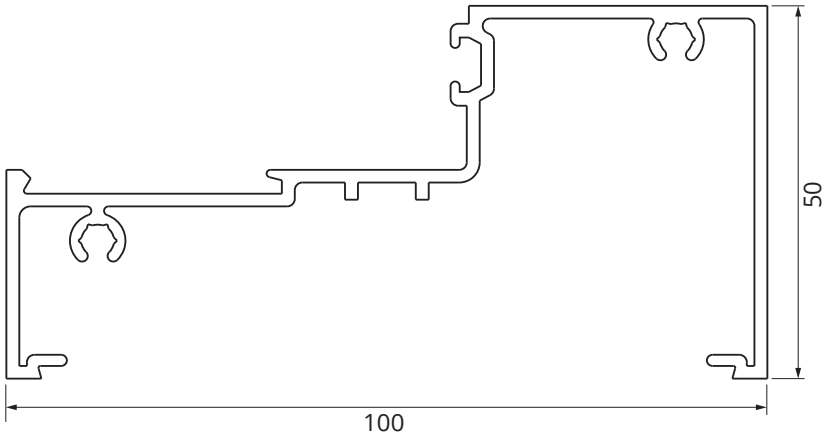


CSG301

MainFrame

I_{xx} = 117.289 x 10^3mm^4
I_{yy} = 658.839 x 10^3 mm^4

A.P. = 594 mm
P.P. = 188 mm

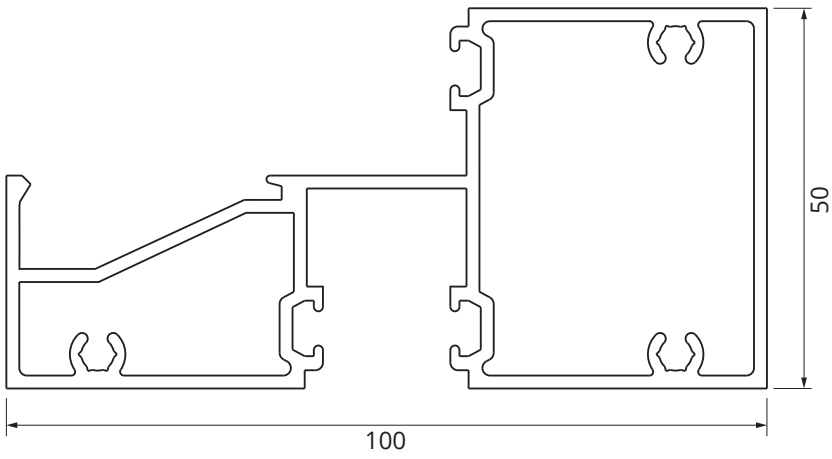


CSG302

Sill

I_{xx} = 93.114 x 10^3 mm^4
I_{yy} = 567.316 x 10^3 mm^4

A.P. = 510 mm
P.P. = 127 mm



CSG362

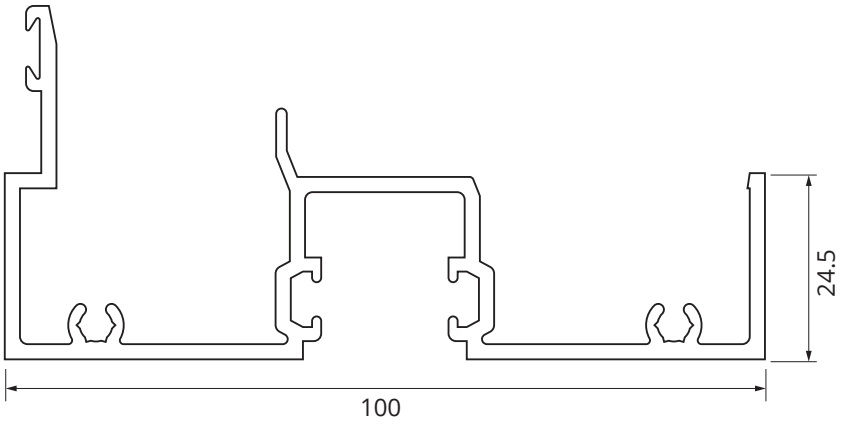
Transom/Sill

I_{xx} = 184.869 x 10^3 mm^4
I_{yy} = 719.278 x 10^3 mm^4

A.P. = 407 mm
P.P. = 196 mm

Mainframe Profiles

Scale 1:1

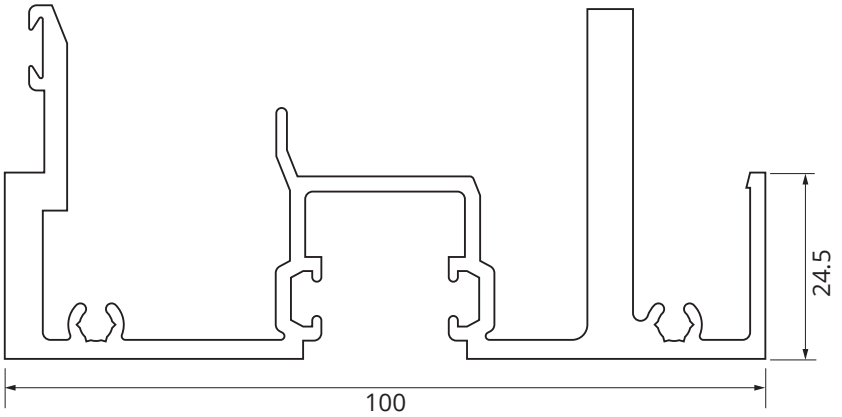


CSG320

Standard Duty
Self Mating Mullion

I_{xx} = 64.02 x 10^3 mm^4
I_{yy} = 575.582 x 10^3 mm^4

A.P. = 516 mm
P.P. = 128 mm

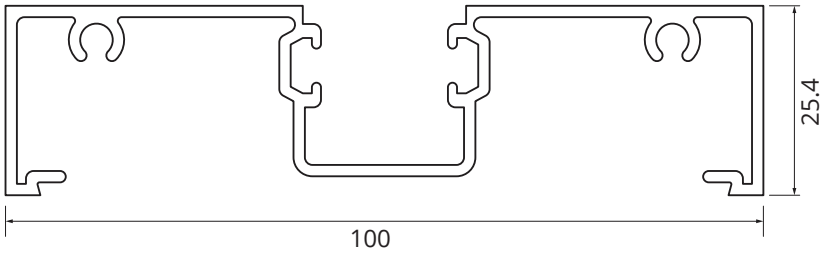


CSG333

Heavy Duty
Self Mating Mullion

I_{xx} = 151.356 x 10^3 mm^4
I_{yy} = 1031.581 x 10^3 mm^4

A.P. = 585 mm
P.P. = 128 mm



CSG360

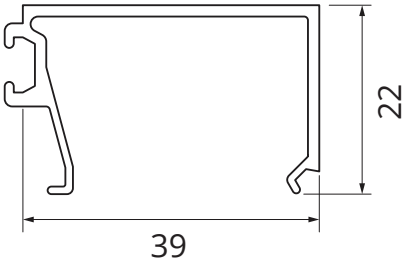
Slim Frame

I_{xx} = 26.734 x 10^3 mm^4
I_{yy} = 417.618 x 10^3 mm^4

A.P. = 484 mm
P.P. = 138 mm

Mainframe Profiles

Scale 1:1

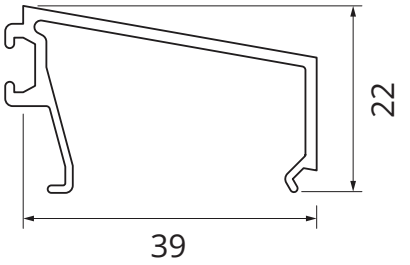


CSG303

Bead

I_{xx} = 8.392 x 10^3 mm^4
I_{yy} = 35.731 x 10^3 mm^4

A.P. = 201 mm
P.P. = - mm

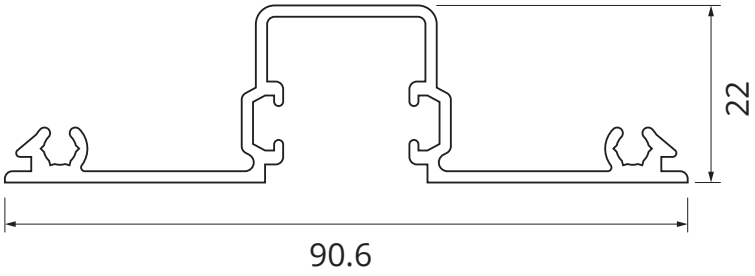


CSG303B

Sloped Bead

I_{xx} = 6.05 x 10^3 mm^4
I_{yy} = 31.128 x 10^3 mm^4

A.P. = 188 mm
P.P. = - mm

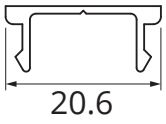


CSG304

Glazing Adaptor

I_{xx} = 17.022 x 10^3 mm^4
I_{yy} = 180.843 x 10^3 mm^4

A.P. = 348 mm
P.P. = - mm

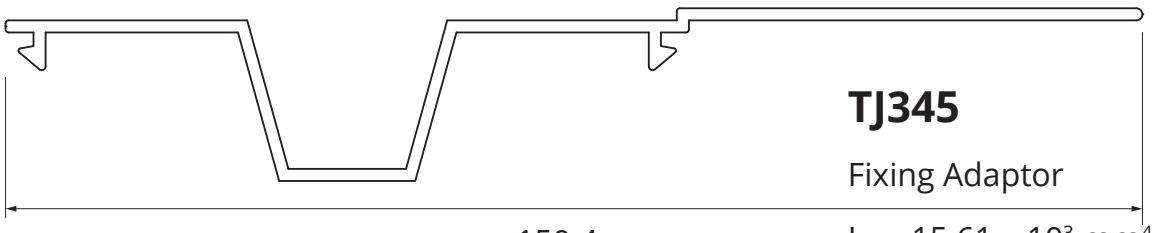


FGS406

Pocket Filler

I_{xx} = 0.3 x 10^3 mm^4
I_{yy} = 2.3 x 10^3 mm^4

A.P. = 74 mm
P.P. = - mm



TJ345

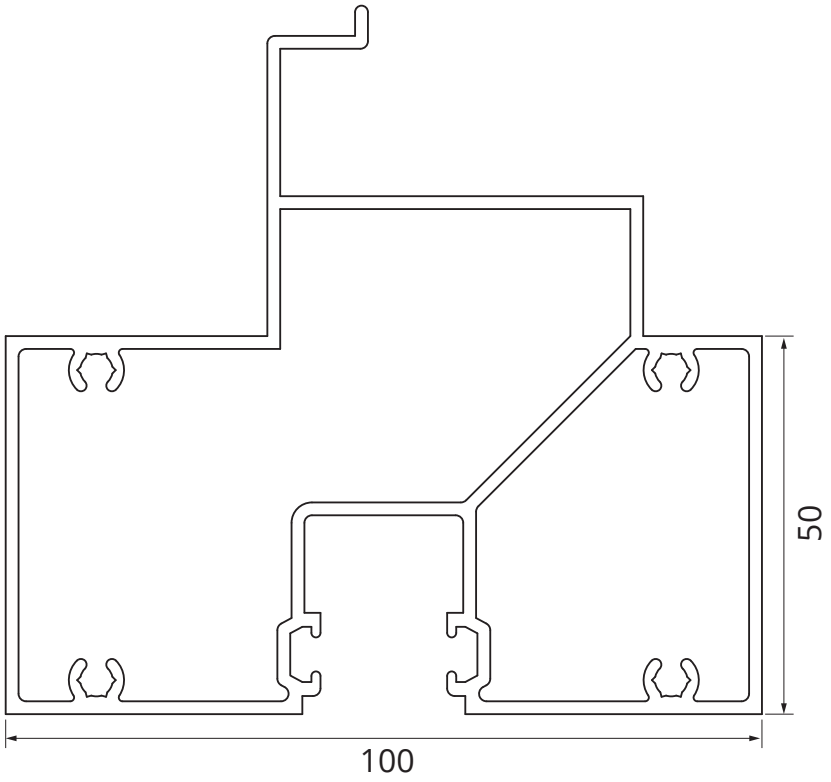
Fixing Adaptor

I_{xx} = 15.61 x 10^3 mm^4
I_{yy} = 541.51 x 10^3 mm^4

A.P. = 389 mm
P.P. = - mm

Mainframe Profiles

Scale 1:1

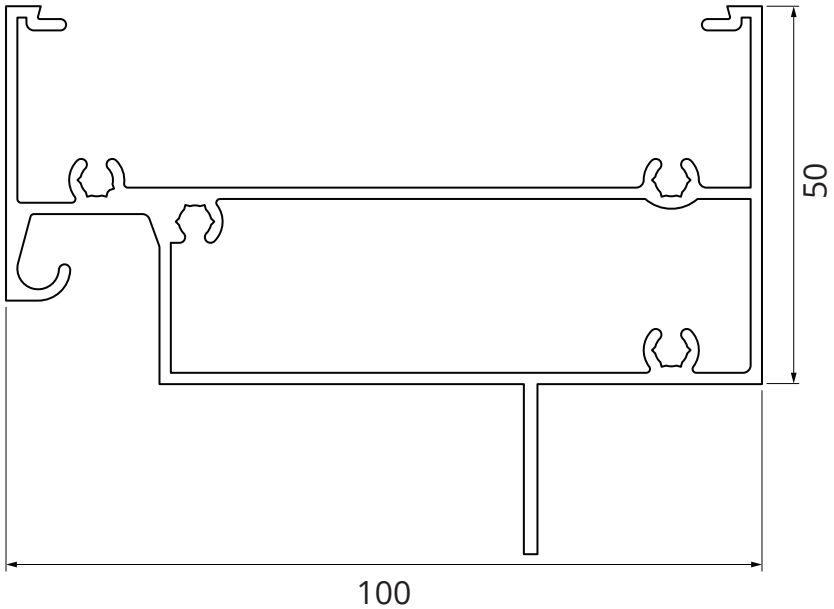


CSG727

35mm Awning Transom

I_{xx} = 598.1 x 10^3 mm^4
I_{yy} = 872.2 x 10^3 mm^4

A.P. = 491 mm
P.P. = 388 mm



CSG728

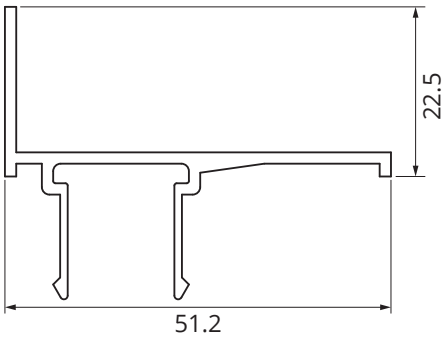
Awning Head/
Transom/ Sill

I_{xx} = 146.3 x 10^3 mm^4
I_{yy} = 733.5 x 10^3 mm^4

A.P. = 497 mm
P.P. = 236 mm

Additional Profiles

Scale 1:1

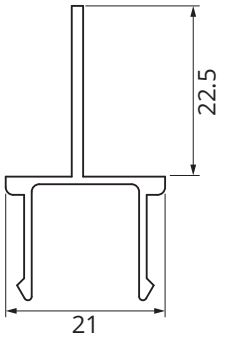


CSG720

35mm Awning Stop

I_{xx} = 6.1 x 10^3 mm^4
I_{yy} = 16.1 x 10^3 mm^4

A.P. = 160 mm
P.P. = - mm

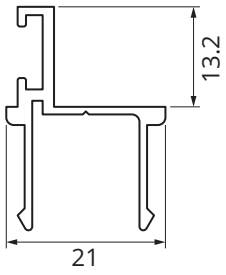


CSG715

50mm Awning Stop

I_{xx} = 4.7 x 10^3 mm^4
I_{yy} = 16.5 x 10^3 mm^4

A.P. = 145 mm
P.P. = - mm

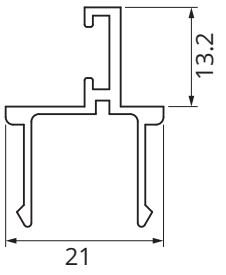


CSG335

35mm Door Stop

I_{xx} = 5.19 x 10^3 mm^4
I_{yy} = 4.07 x 10^3 mm^4

A.P. = 147 mm
P.P. = - mm

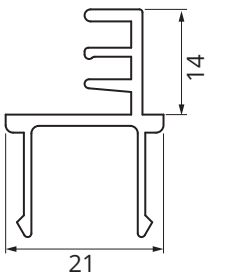


CSG306

45mm or 40mm Door Stop

I_{xx} = 4.3 x 10^3 mm^4
I_{yy} = 53.3 x 10^3 mm^4

A.P. = 199 mm
P.P. = - mm



CSG031

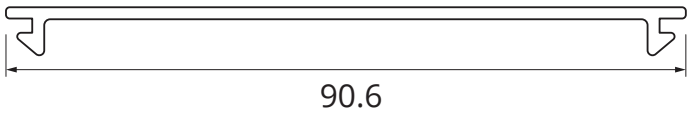
45mm Door Stop

I_{xx} = 7.04 x 10^3 mm^4
I_{yy} = 4.27 x 10^3 mm^4

A.P. = 165 mm
P.P. = - mm

Subframing Profiles

Scale 1:1

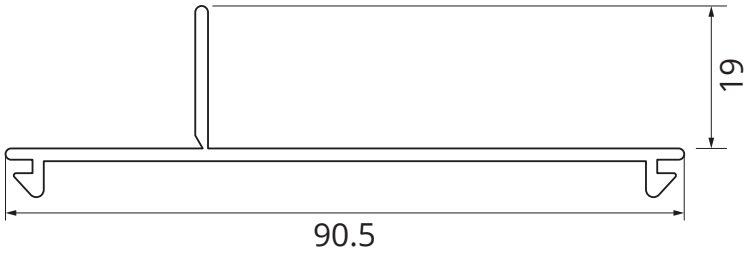


TJ305

Flush Adaptor

I_{xx} = 0.25 x 10^3 mm^4
I_{yy} = 133.8 x 10^3 mm^4

A.P. = 206.1 mm
P.P. = 94 mm

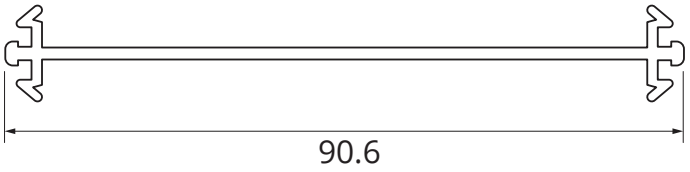


TJ342

Reveal Adaptor

I_{xx} = 4.31 x 10^3 mm^4
I_{yy} = 150.12 x 10^3 mm^4

A.P. = 246 mm
P.P. = - mm

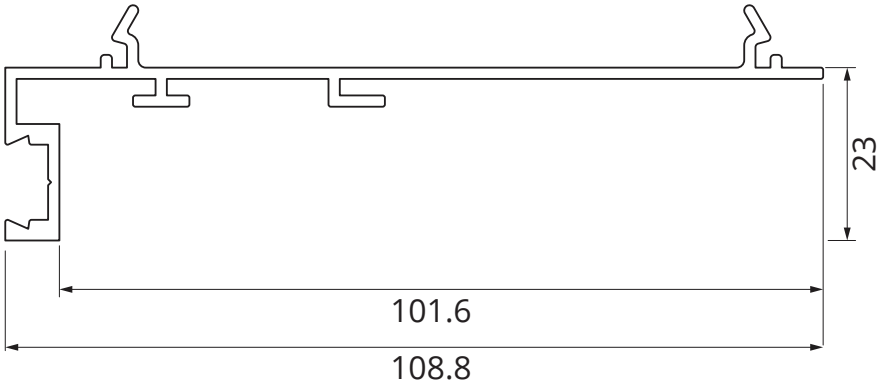


TJ385

Back-to-Back Adaptor

I_{xx} = 0.66 x 10^3 mm^4
I_{yy} = 177.69 x 10^3 mm^4

A.P. = 247 mm
P.P. = - mm



RWM053

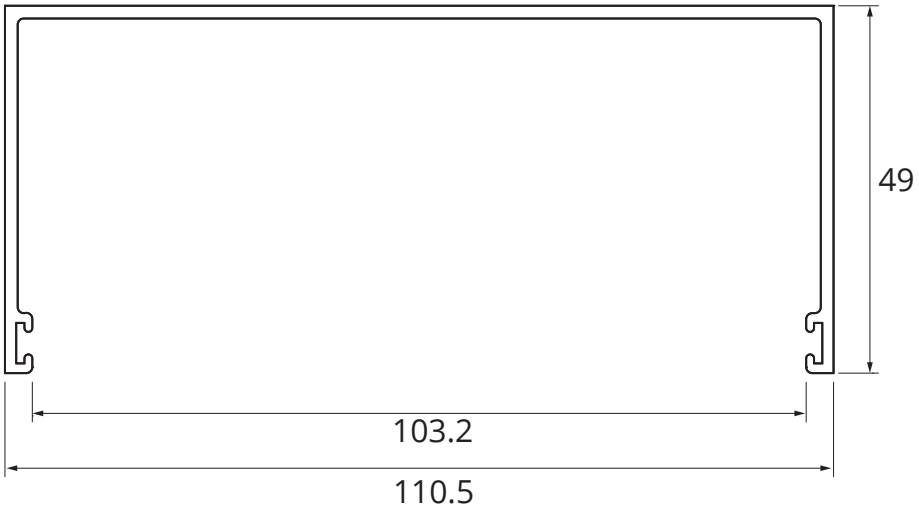
Concealed Face Fix Adaptor

I_{xx} = 11.89 x 10^3 mm^4
I_{yy} = 348.53 x 10^3 mm^4

A.P. = 369 mm
P.P. = - mm

Subframing Profiles

Scale 1:1



TJ309

100mm Sub-Head
49mm Tall

I_{xx} = 101.152 x 10^3 mm^4
I_{yy} = 754.640 x 10^3 mm^4

A.P. = 441 mm
P.P. = 106 mm

TJ392

100mm Sub Head
50mm Tall

I_{xx} = 127.86 x 10^3 mm^4
I_{yy} = 1005.45 x 10^3 mm^4

A.P. = 442 mm
P.P. = 108 mm

TJ431

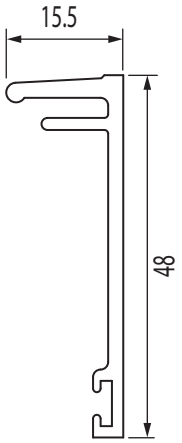
100mm Two Part Sub
Head 50mm Tall

I_{xx} = 69.16 x 10^3 mm^4
I_{yy} = 592.76 x 10^3 mm^4

A.P. = 371 mm
P.P. = - mm

Subframing Profiles

Scale 1:1



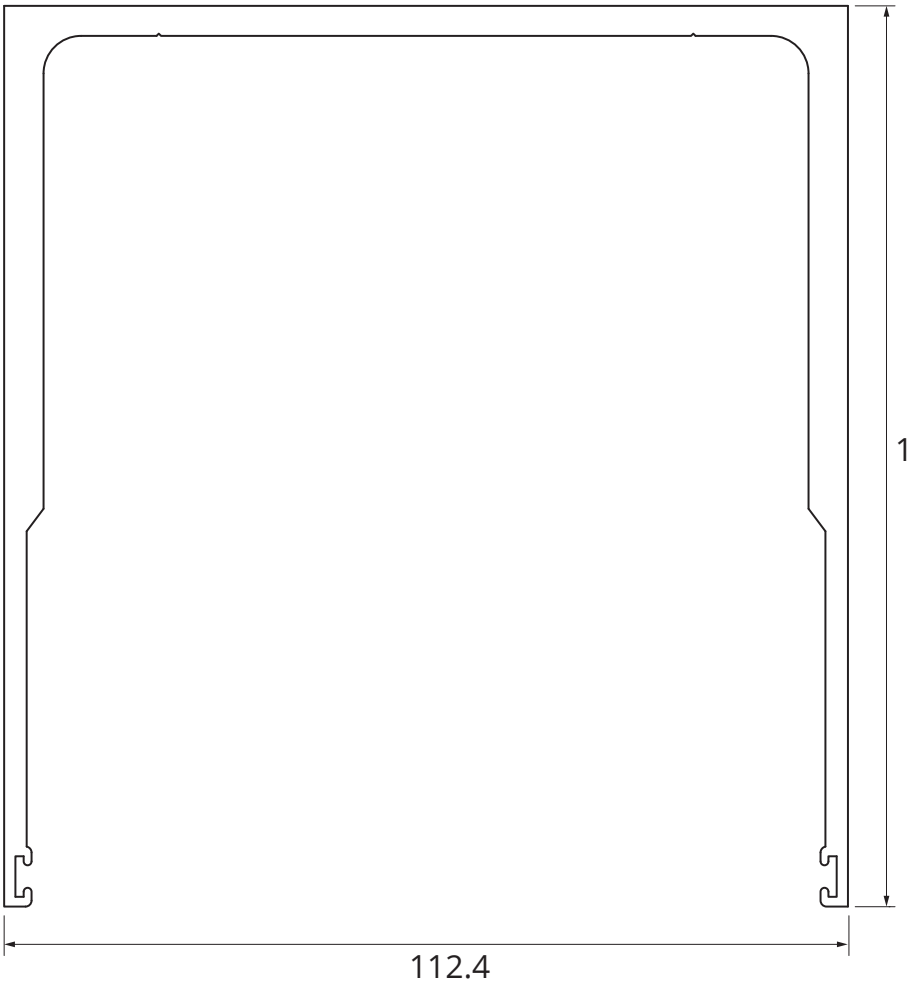
TJ6159

Sub Head/Jamb Cover
50mm Tall

(Covers can suit 100, 150, 165 framing, Thermal & non-thermal)

I_{xx} = 35.87 x 10^3 mm^4
I_{yy} = 2.07 x 10^3 mm^4

A.P. = 155 mm
P.P. = 100 mm



TJ520

100mm Sub Head
120mm Deep

I_{xx} = 1823.1 x 10^3 mm^4
I_{yy} = 3343.96 x 10^3 mm^4

A.P. = 708 mm
P.P. = 246 mm

Subframing Profiles

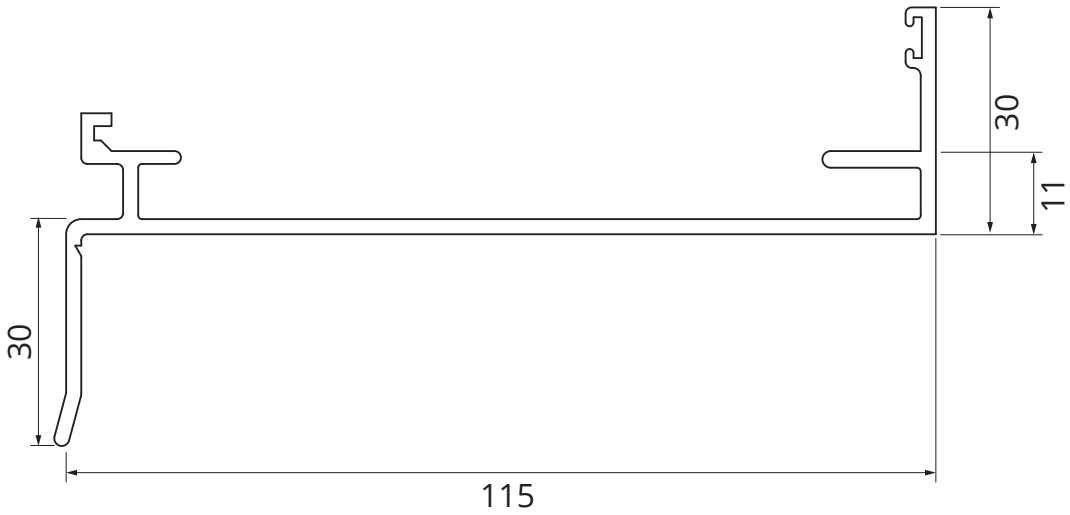
Scale 1:1

TJ692

100mm Sub Head
80mm Deep

I_{xx} = 571.9 x 10^3 mm^4
I_{yy} = 1945.7 x 10^3 mm^4

A.P. = 557 mm
P.P. = 168 mm



TJ368

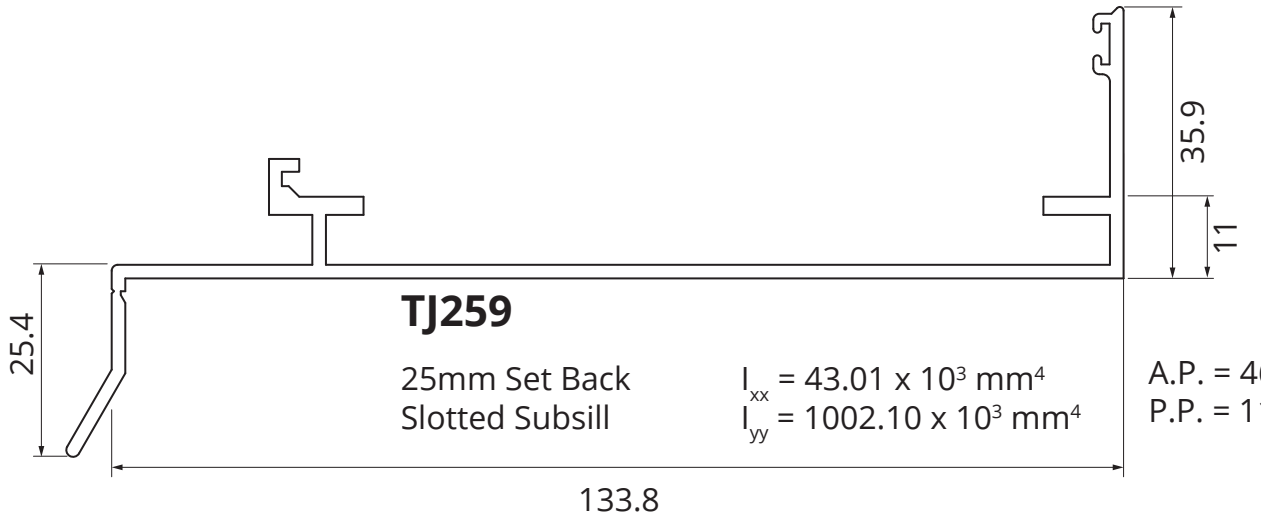
STD Subsill 6mm
Setback Slotted

I_{xx} = 40.20 x 10^3 mm^4
I_{yy} = 790.13 x 10^3 mm^4

A.P. = 422 mm
P.P. = 100 mm

Subframing Profiles

Scale 1:1

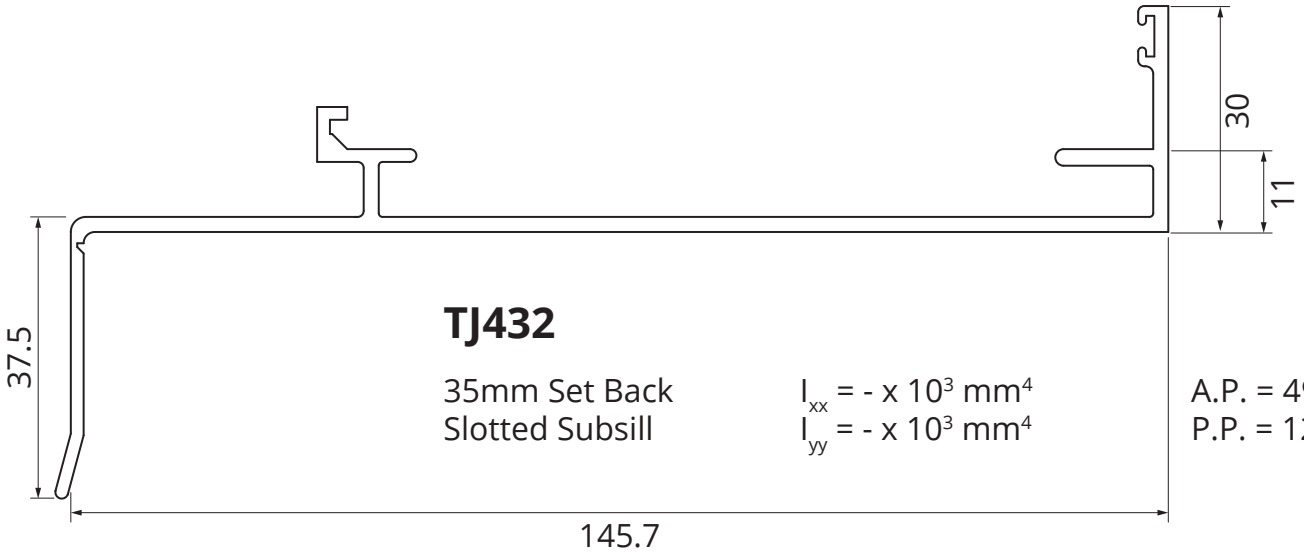


TJ259

25mm Set Back
Slotted Subsill

I_{xx} = 43.01 x 10^3 mm^4
I_{yy} = 1002.10 x 10^3 mm^4

A.P. = 465 mm
P.P. = 115 mm



TJ432

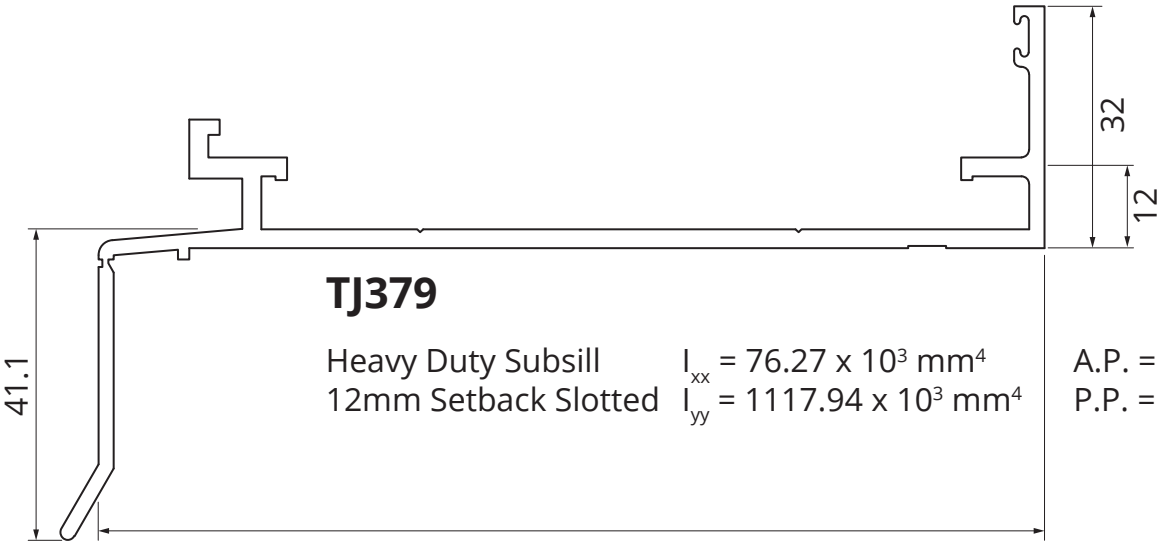
35mm Set Back
Slotted Subsill

I_{xx} = - x 10^3 mm^4
I_{yy} = - x 10^3 mm^4

A.P. = 498 mm
P.P. = 128 mm

Subframing Profiles

Scale 1:1

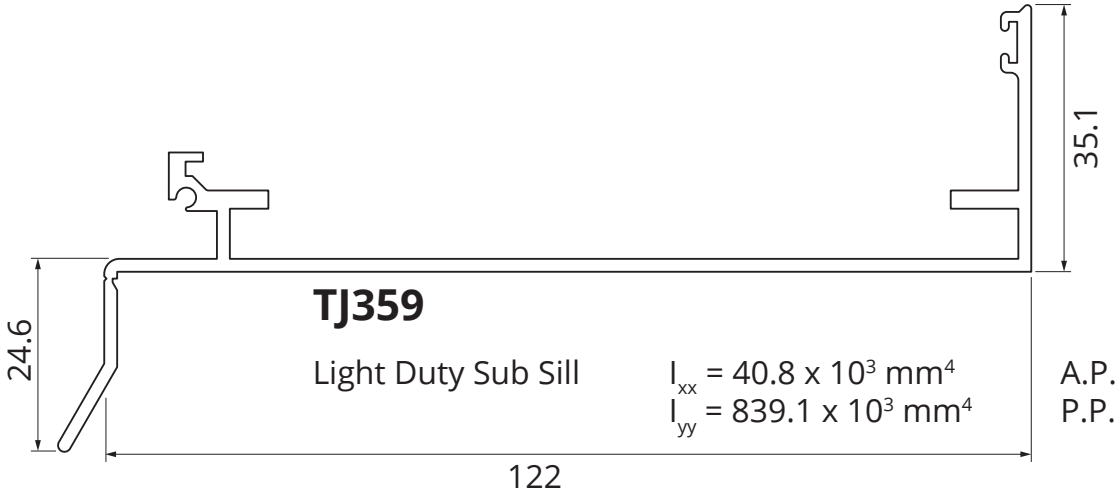


TJ379

Heavy Duty Subsill
12mm Setback Slotted

I_{xx} = 76.27 x 10^3 mm^4
I_{yy} = 1117.94 x 10^3 mm^4

A.P. = 476 mm
P.P. = 118 mm

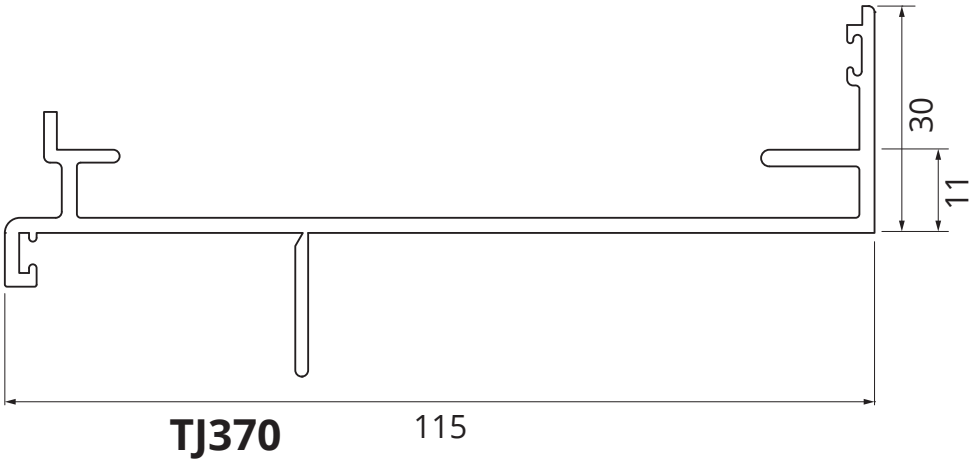


TJ359

Light Duty Sub Sill

I_{xx} = 40.8 x 10^3 mm^4
I_{yy} = 839.1 x 10^3 mm^4

A.P. = 447 mm
P.P. = 106 mm



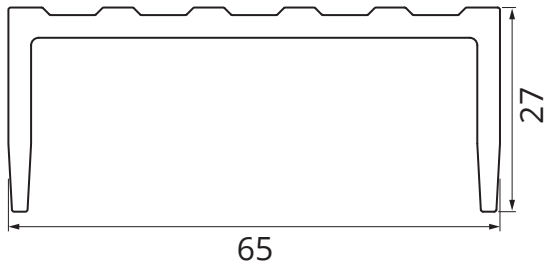
TJ370

Sub Sill with Reveal

I_{xx} = 25.41 x 10^3 mm^4
I_{yy} = 671.71 x 10^3 mm^4

A.P. = 425 mm
P.P. = 100 mm

Scale 1:1

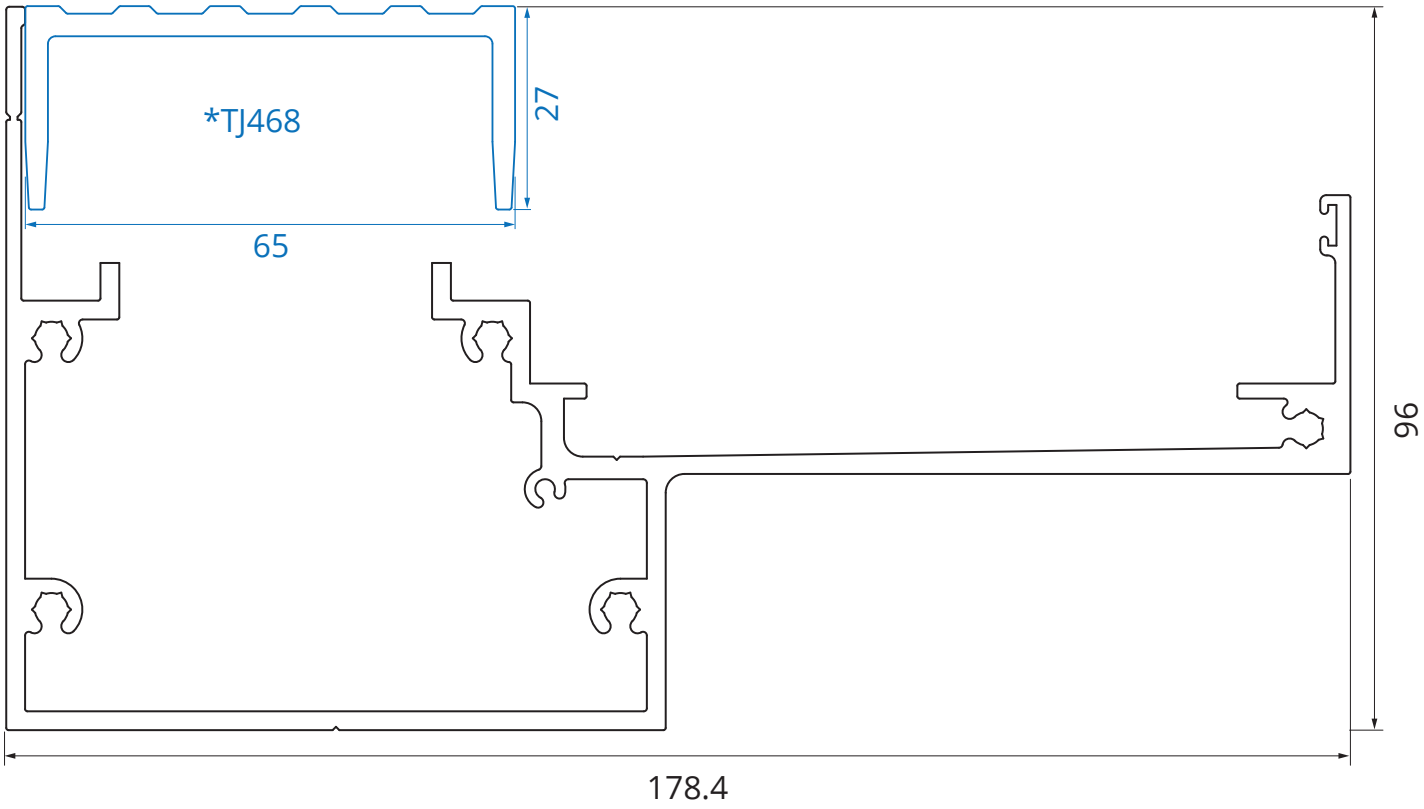


TJ468

Drainage Grate (Fits TJ400 & TJ600)

I_{xx} = 21.32 x 10^3 mm^4
I_{yy} = 214.23 x 10^3 mm^4

A.P. = 232 mm
P.P. = 150 mm



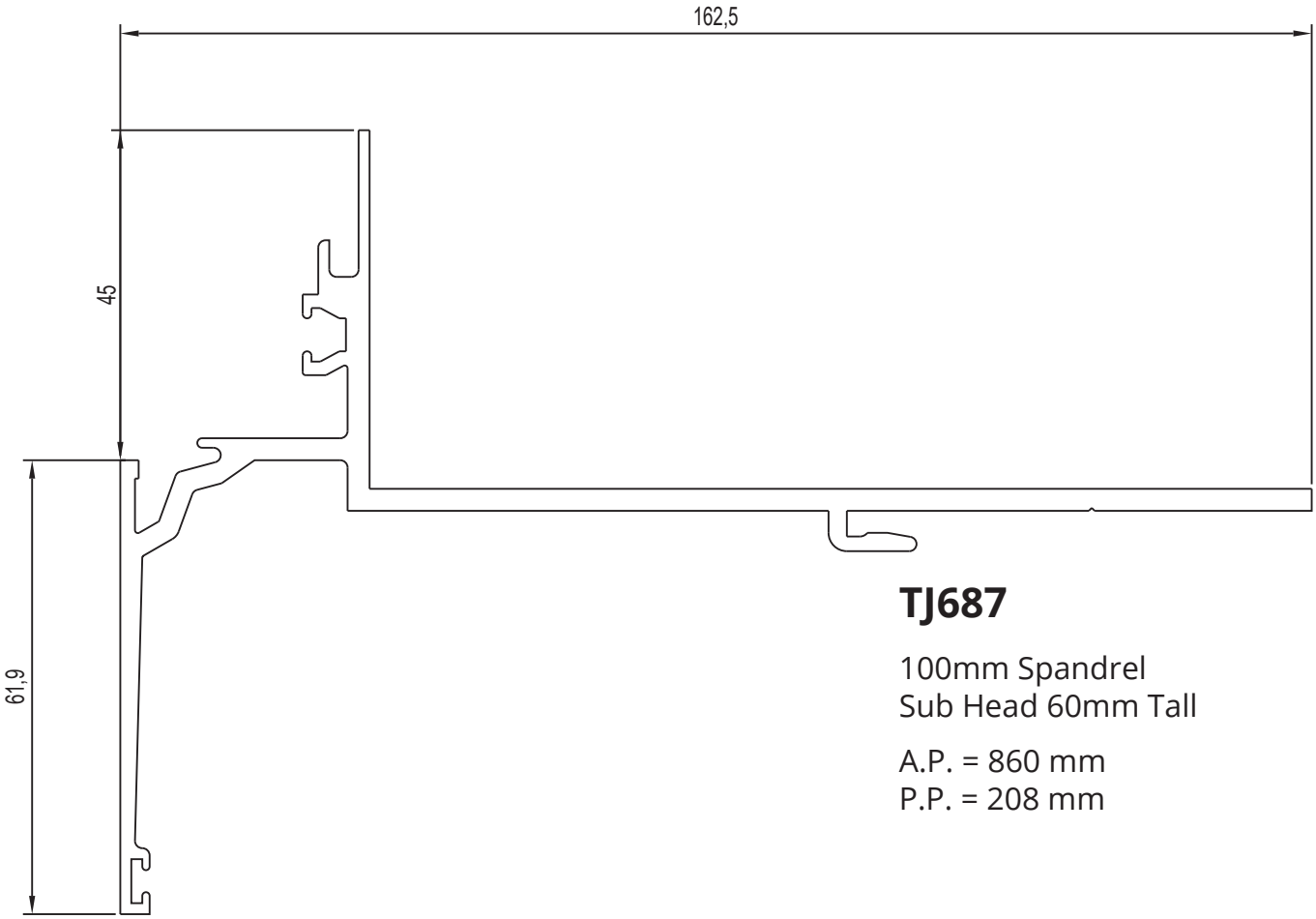
TJ400

100mm Sump Sill

A.P. = 935 mm
P.P. = 357 mm

Spandrel Subframing Profiles

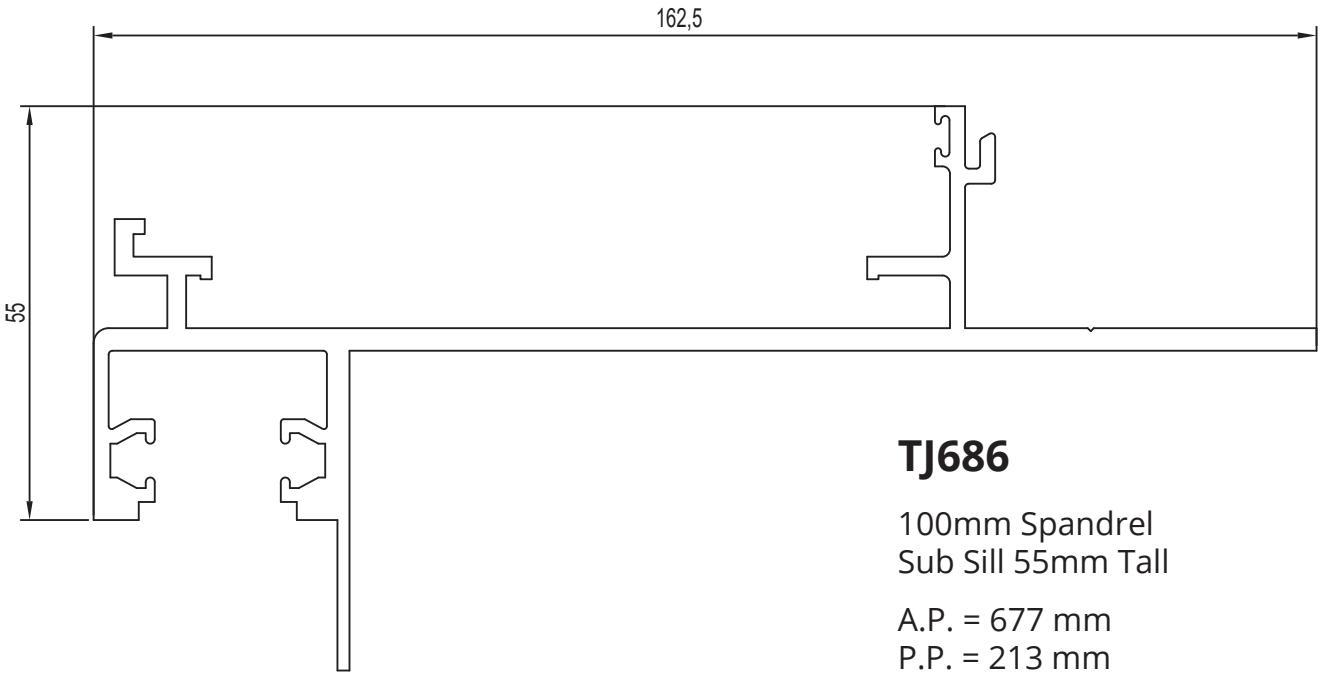
Scale 1:1



TJ687

100mm Spandrel
Sub Head 60mm Tall

A.P. = 860 mm
P.P. = 208 mm



TJ686

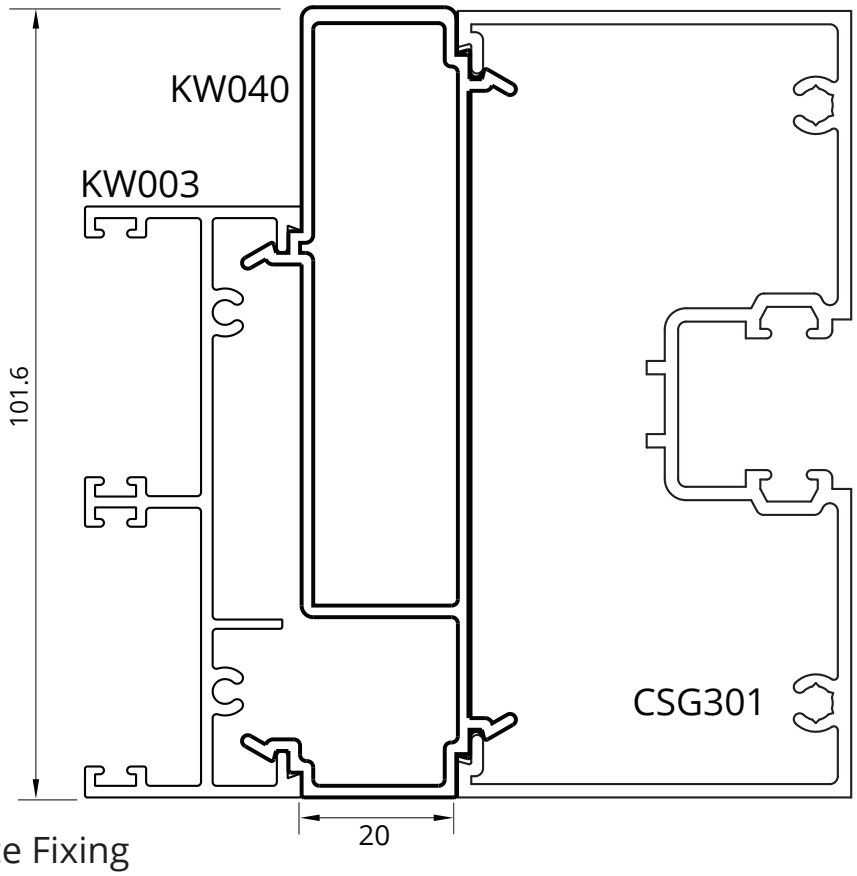
100mm Spandrel
Sub Sill 55mm Tall

A.P. = 677 mm
P.P. = 213 mm

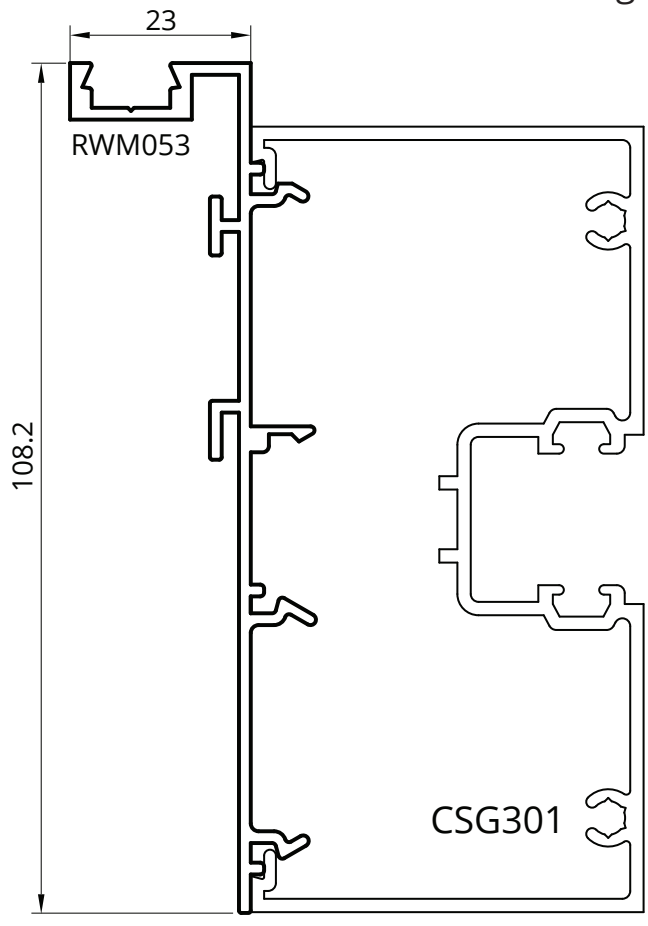
CityView 100mm Adaptors

All raw joints need to be sealed with small joint sealer or foam tab option.

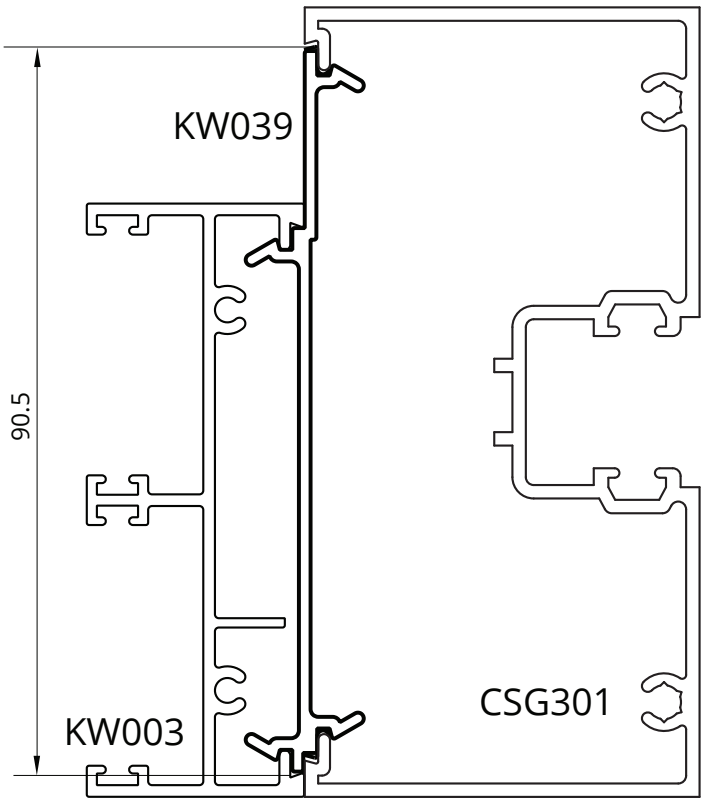
KW040 76mm to 100mm Box Joiner



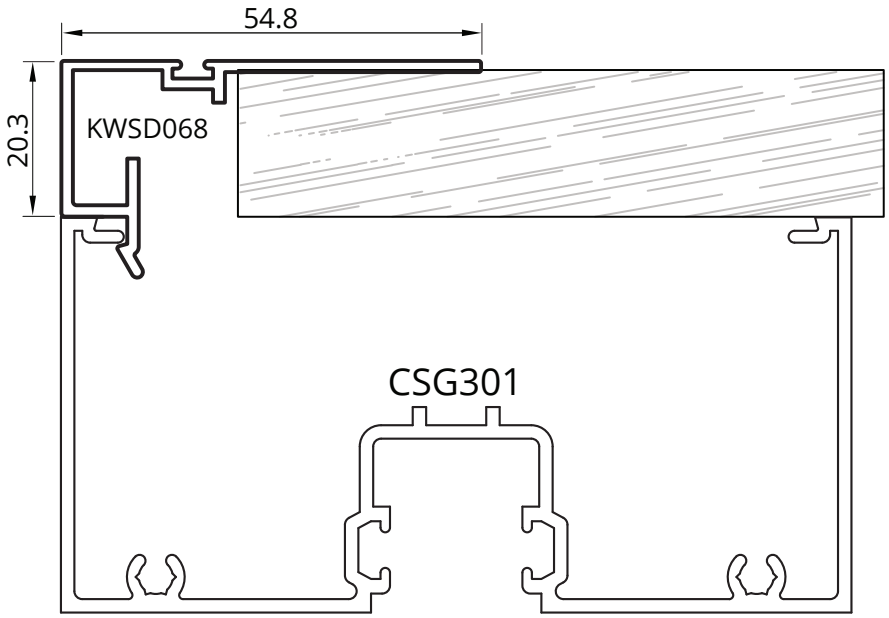
RWM053 Concealed Face Fixing



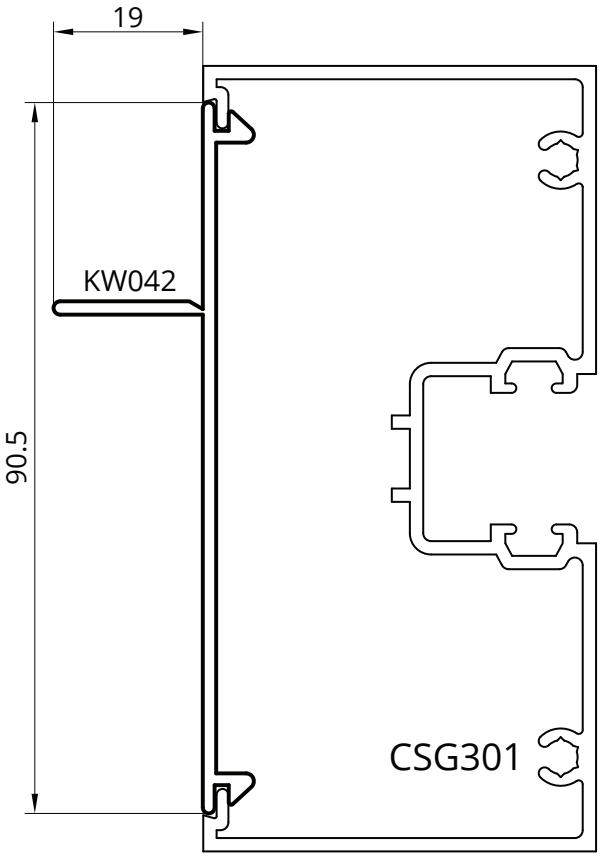
KW039 76mm to 100mm Flat Joiner



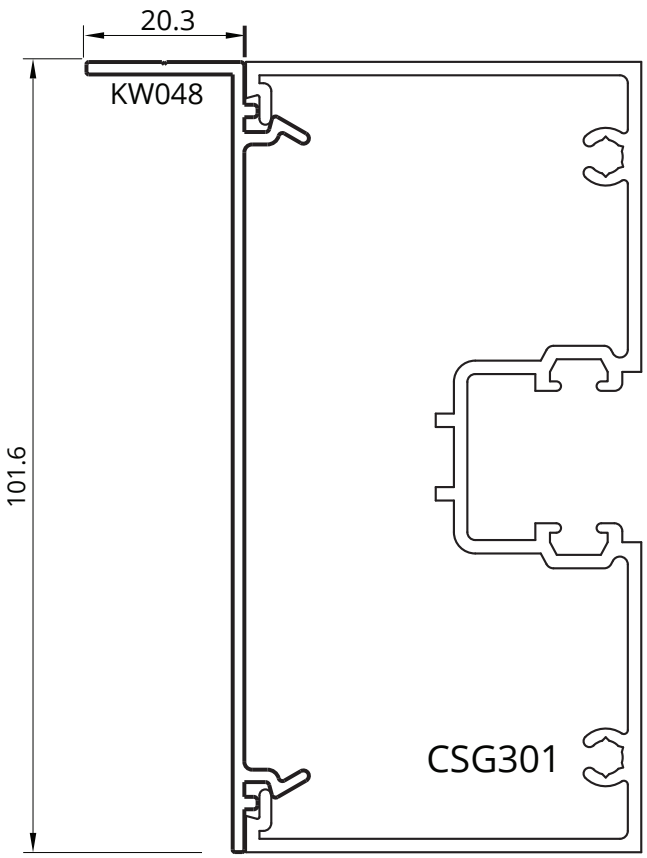
KWSD068 Inline Reveal Option



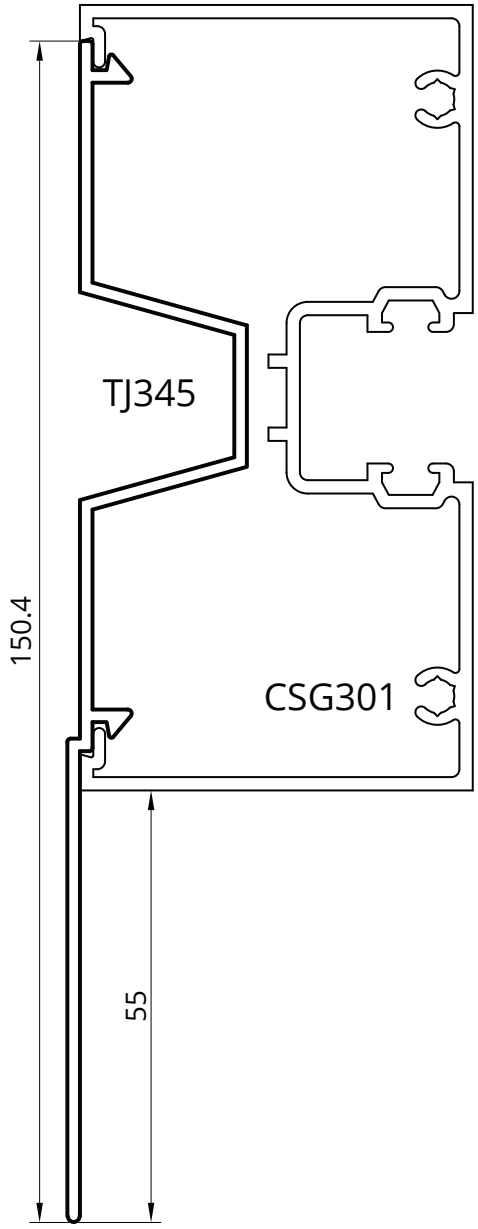
KW042 100mm Fixing Plate



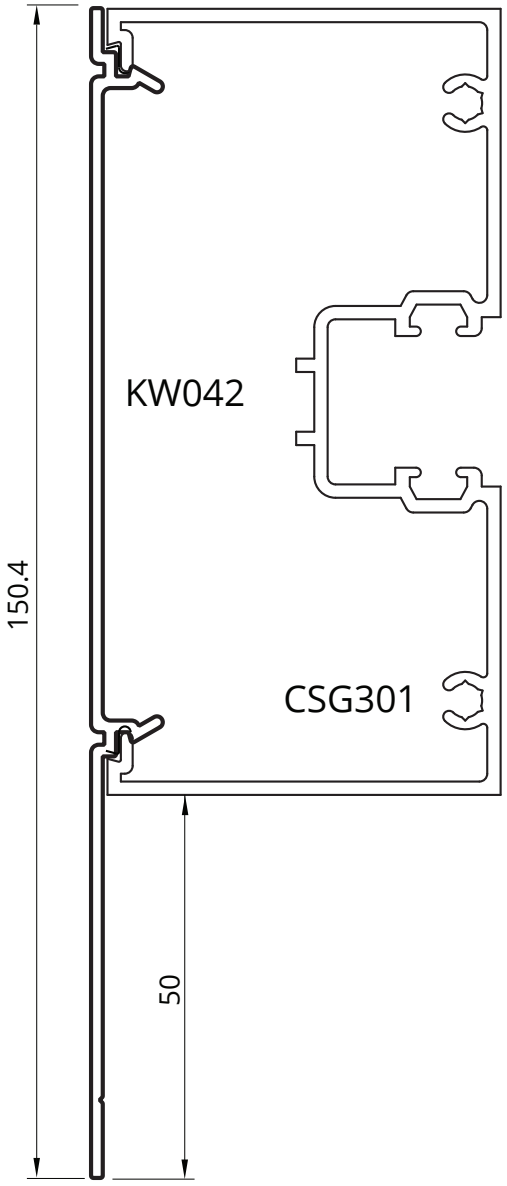
KW048 Concealed Face Fixing



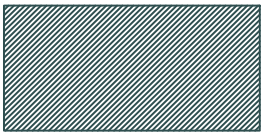
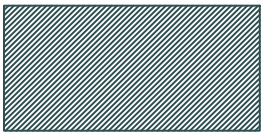
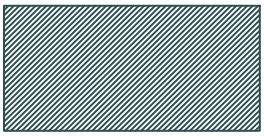
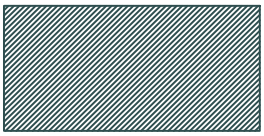
TJ345 100mm Fixing Plate



KW042 100mm Fixing Plate



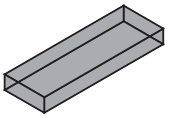
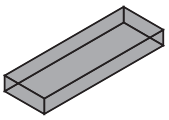
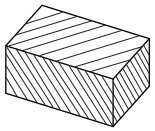
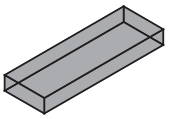
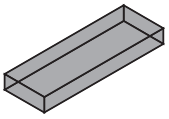
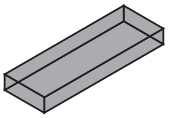
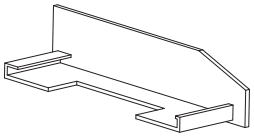
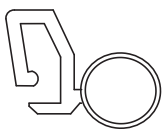
Small Parts

	Code	Description	U.O.M	BOX QTY.
	1472	Water-rated Frame Gasket - 1050 Pieces Roll Suits: 101.6mm Centre Glazed Single	Roll	1
	1473	Foam Seal - 1120 Pieces Roll Suits: 150mm Centre Glazed Single	Roll	1
	1474	Foam Seal - 1050 Pieces Roll Suits: 100mm Front Glazed Single	Roll	1
	1475	Foam Seal - 1120 Pieces Roll Suits 150mm Front Glazed Single	Roll	1
	1493	Foam Plug Suits: Centre Single Glazed Framing (20 Per Sheet)	Roll	1
	1494	Foam Plug Suits: Front Single Glazed Framing (16 Per Sheet)	Roll	1
	1610-M100	6mm Door Stop - 100m	Roll	1
	1611	Weatherstrip 90-900 Black - 150m Roll	Roll	1
	1614	Door Stop Rubber - Large 200m	Roll	1
	1615	Glazing Wedge PVC - 200m Roll	Roll	1
	1620	Glazing Wedge PVC - 200m Roll	Roll	1

Small Parts

	Code	Description	U.O.M	BOX QTY.
	1625	Glazing Wedge PVC for 8.38mm Glass - 250m Roll	Roll	1
	1630	Glazing Wedge PVC - 200m Roll	Roll	1
	1645	Glazing Wedge Captive Co-Extruded Santoprene - 100m Roll	Roll	N/A
	1646	Glazing Wedge Captive Co-Extruded Santoprene - 100m Roll	Roll	N/A
	1647	Glazing Wedge Captive Co-Extruded Santoprene - 100m Roll	Roll	N/A
	1660	V Seal (Mullion Rubber) - 500m Roll	Roll	1
	1900-M	Frame Packers - 1.5mm X 90mm - Blue 100/Bag	Bag	N/A
	1901-M	Frame Packers - 3mm X 90mm - Green 100/Bag	Bag	N/A
	1902-M	Frame Packers - 5mm X 90mm - Ochre 100/Bag	Bag	N/A
	1903-M	Frame Packers - 10mm X 90mm - Black 100/Bag	Bag	N/A
	1906	Aluminium Frame Packers 1mm - 100/Bag	Bag	N/A

Small Parts

	Code	Description	U.O.M	BOX QTY.
	1907	Aluminium Frame Packers 2mm - 100/Bag	Bag	N/A
	1908	Aluminium Frame Packers 5mm - 100/Bag	Bag	N/A
	1909	Aluminium Frame Packers 10mm - 100/Bag	Bag	N/A
	1910	Setting Blocks 3mm Thick - Bag of 1,000	Bag	N/A
	1911	Setting Blocks 5mm Thick - Bag of 1,000	Bag	N/A
	1912	Setting Blocks 10mm Thick - Bag of 500	Bag	N/A
	1977	Setting Blocks 5mm X 25mm - 3m Self Adhesive - Bag of 200	Bag	N/A
	1978	Setting Blocks 10mm X 25mm - 3m Self Adhesive - Bag of 200	Bag	N/A
	1979	Setting Blocks 3mm X 10mm X 25mm - 3m Double Sided Tape - Bag of 200	Bag	N/A
	1930	End Cap To Suit 100mm Subsills - Bag of 50 Pairs (Left & Right)	Bag	N/A
	1608	Co-Expansion Seal - 2.7m	Roll	N/A

Small Parts

	Code	Description	U.O.M	BOX QTY.
	1960	Lanotec General Purpose Liquid Lanolin 400g	Tube	12
	1961	Lanotec "Citra Force" Cleaner Degreaser 400g	Tube	12
	BDX-CV-CS-G/H/AW	CSG Frame / Hinged / Hook Awning Hydraulic Tool		

Performance

Test Results

PERFORMANCE								
System	Test Size	Panel Size	Ser	Water	Ult	Report	Max Panel	Glass
100mm Centre (CSG)	3250 x 2400	3130 x 1200	1200	600	3500	AZT0126.23	3130 H x 1320 W	6-12.38
100mm Centre (CSG) - Fixed Light	2545 x 2450	2500x1200	1200	300	3000	AZT0235.23	3130 H x 1320 W	6-12.38
100mm Centre (CSG) - Fixed Light	2545 x 2455	2500x1200	1500	300	3000	AZT0239.23	3130 H x 1320 W	6-12.38

ACOUSTIC PERFORMANCE				
System	Rw	C : Ctr	Report	Glass
CityView 100 CSG	38	-1 : -2	TL769-08.1	12.5 Hush Lam

BAL FIRE RATING			
System	BAL	Report	Glass
CityView 100 CSG	BAL-40	FRT210417	6mm Toughened

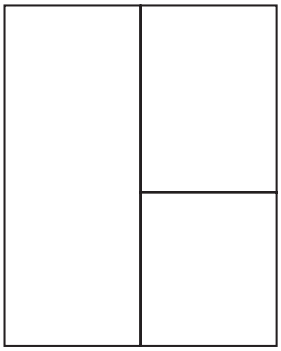
TESTED BY NEUTRAL THIRD PARTIES

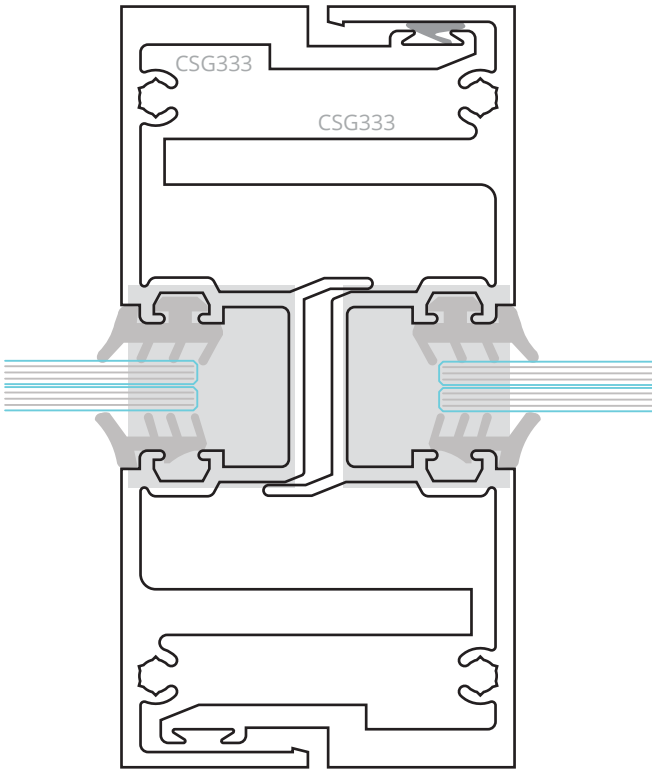
See Performance Section for more detail.
Taller maximums may be achievable via strength charts
Size limitations are governed by design intent, glass selection and local wind load and deflection requirements.

For further technical assistance and fabricator selection contact Darley Aluminium.
An Engineer should be consulted to ensure selected framing meets the requirements as set out in the relevant Australian Standards

Structural Test Report: 100mm Centre (CSG) - Heavy Duty

The following data was obtained from the results of the tests on the 100mm Centre (CSG) - Fixed Light Duty with 35mm AW - CW only + Cams only as performed in the Azuma Testing Laboratory (NATA Accredited).



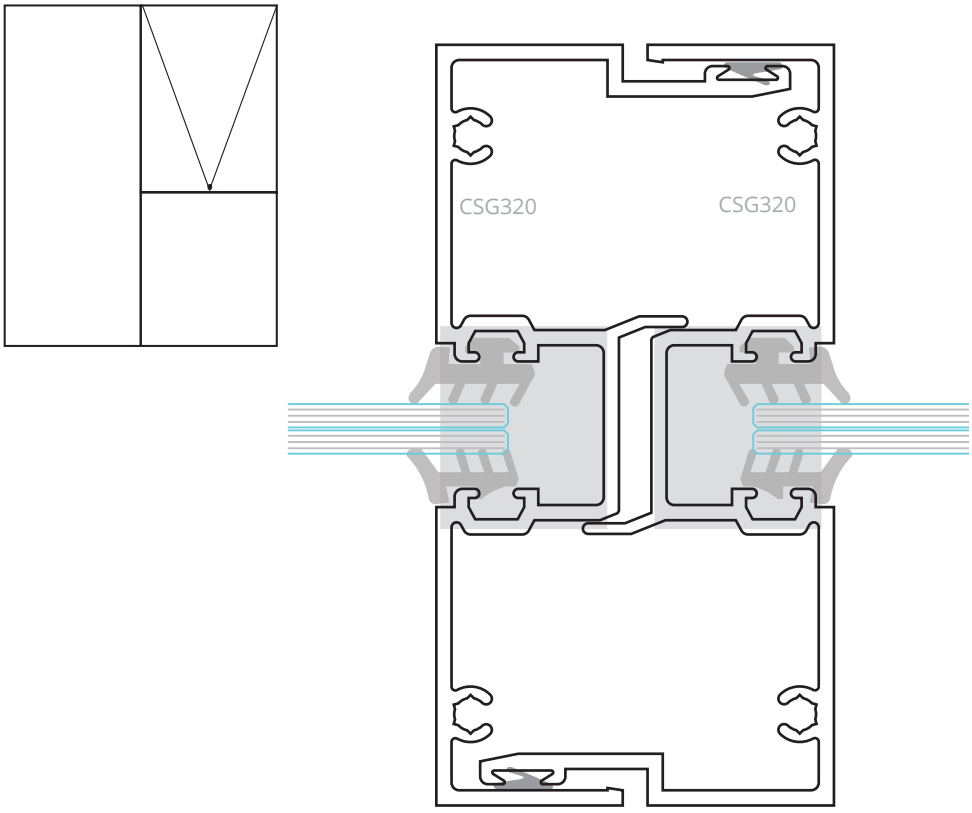


Test & Date	AZT0126.23, 21/04/2023
Test Size	3250mm H x 2450mm W
Mullion/Subsill	CSG333 x2, TJ359
Serviceability Load	+/- 1200 Pa
Air Infiltration	Low
Water Penetration	600 Pa
Ultimate Strength	+ 4000 Pa, - 3500 Pa

Performance

Structural Test Report: 100mm Centre (CSG) - Fixed Light Duty with 35mm AW - CW only

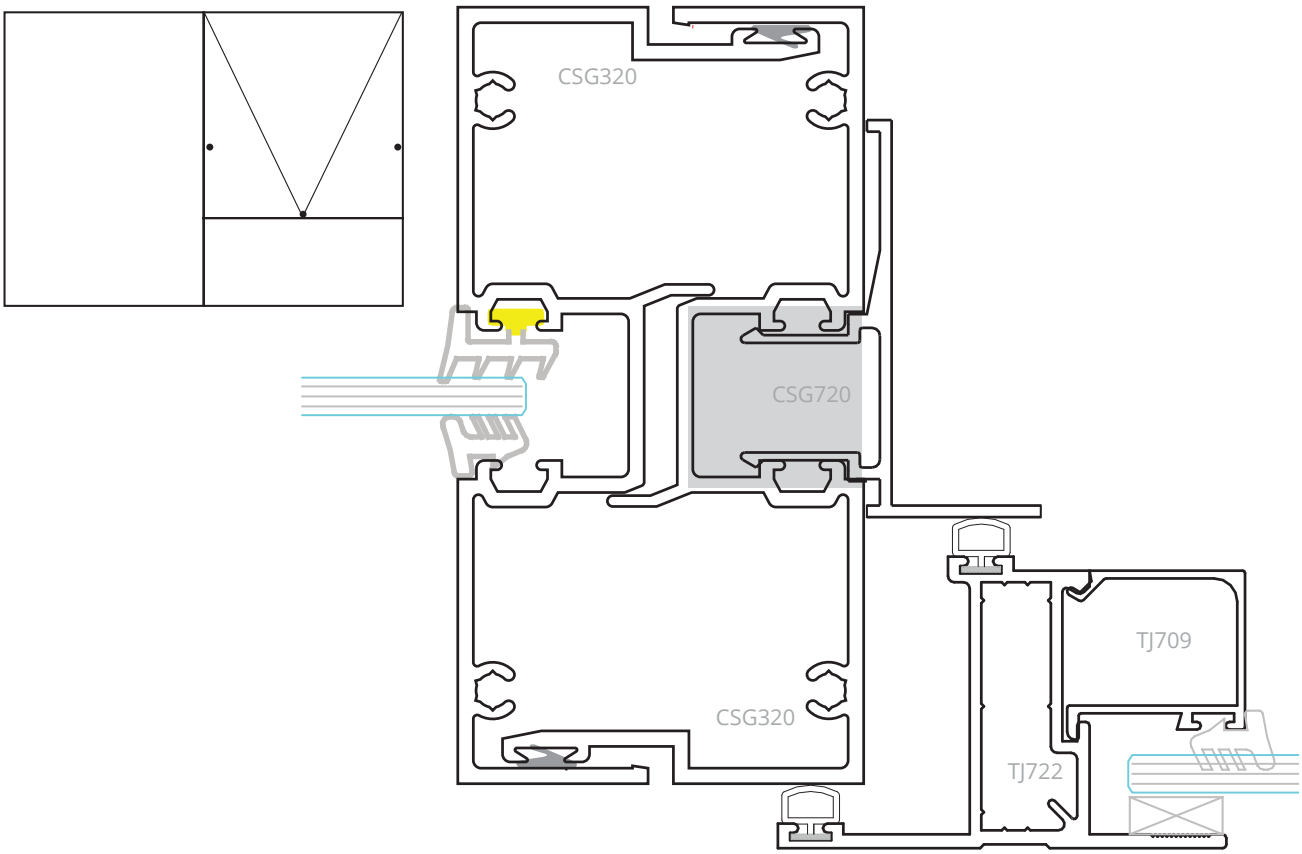
The following data was obtained from the results of the tests on the 100mm Centre (CSG) - Fixed Light Duty with 35mm AW - CW only as performed in the Azuma Testing Laboratory (NATA Accredited).



Test & Date	AZT0235.23, 30/06/2023
Test Size	2545mm H x 2450mm W
Mullion/Subsill	CSG320 x2, TJ368
Serviceability Load	+ 1500 Pa, - 1200 Pa
Air Infiltration	Low
Water Penetration	300 Pa
Ultimate Strength	+/- 3000 Pa

Structural Test Report: 100mm Centre (CSG) - Fixed Light Duty with 35mm AW - CW only + Cams

The following data was obtained from the results of the tests on the 100mm Centre (CSG) - Fixed Light Duty with 35mm AW - CW only + Cams only as performed in the Azuma Testing Laboratory (NATA Accredited).

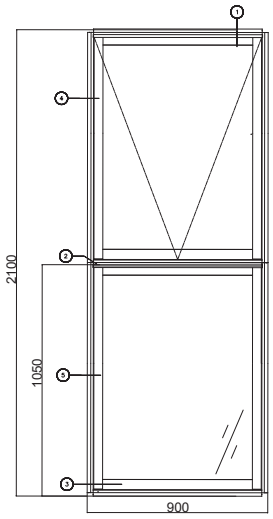


Test & Date	AZT0239.23, 30/06/2023
Test Size	2545mm H x 2455mm W
Mullion/Subsill	CSG320 x2, TJ368
Serviceability Load	+/- 1500 Pa
Air Infiltration	Low
Water Penetration	300 Pa
Ultimate Strength	+/- 3000 Pa

Acoustic Test Report

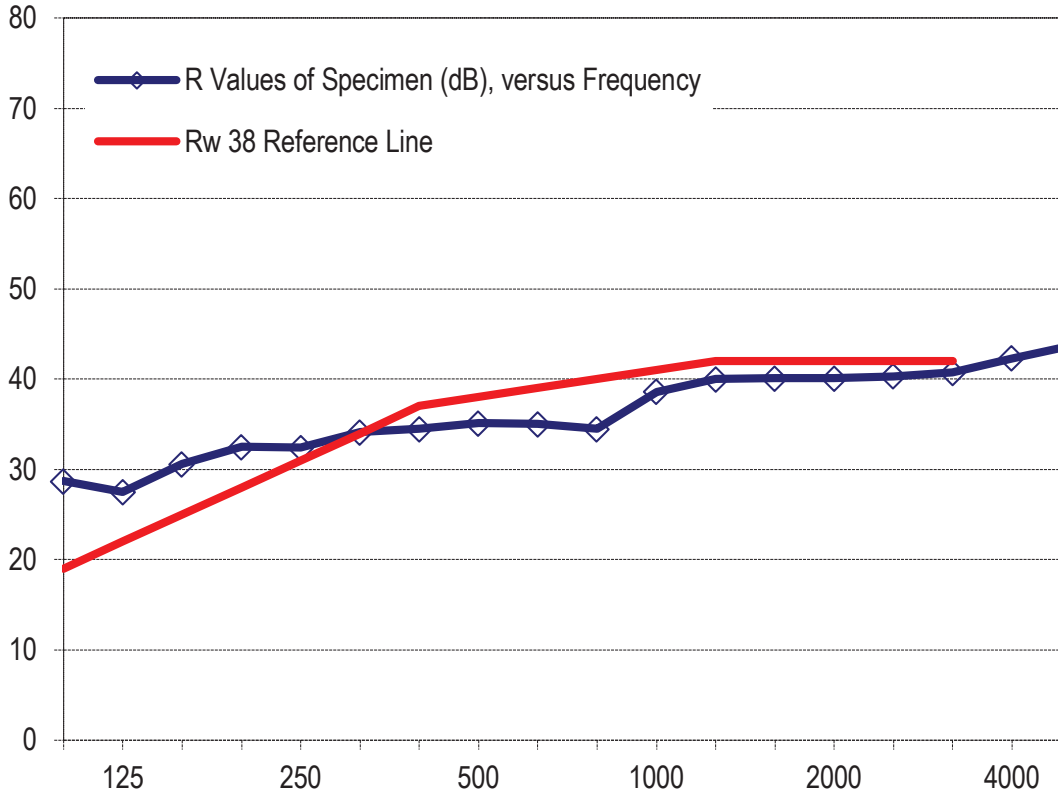
LABORATORY TEST RESULTS: CityView 100mm CSG + 50mm Hook Awning

Test Report No. : TL769-08-1	
Test Date	16/06/2023
Glass Type	12mm Hush
Acoustic Rating Rw(C;Ctr)	38 (-1;-2)dB



Measurement Details & Results[2]

Frequency (Hz)	Specimen R Value (dB) 1/3 Octave	Whole Octave	95 % Conf δ (dB)
100	28.7		1.7
125	27.5	28.8	2.4
160	30.6		1.4
200	32.5		1.4
250	32.4	32.9	1.6
315	34.1		1.0
400	34.5		0.8
500	35.1	34.8	0.5
630	35.0		0.3
800	34.5		0.3
1000	38.6	37.0	0.2
1250	40.0		0.2
1600	40.1		0.2
2000	40.1	40.2	0.2
2500	40.3		0.1
3150	40.7		0.2
4000	42.3	42.1	0.3
5000	43.7		0.5

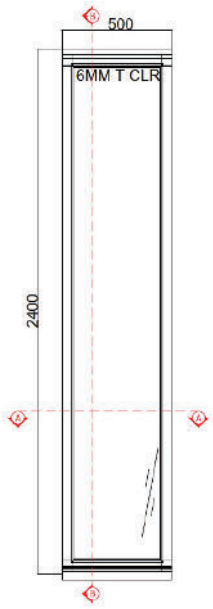


Acoustic

BAL Compliance

Bushfire attack levels achievable with FRT210417

System tested to AS1530.8.1 2018 - BAL 40
Test covers BAL requirements below BAL-40.
Alternatively refer to DTS criteria below for alternative compliance method

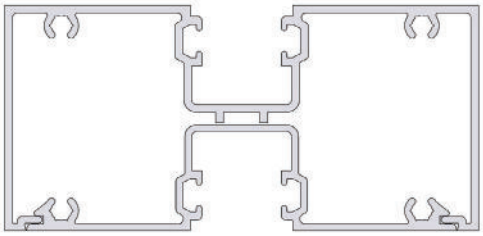


Test Standard: Clauses 14 and 16 of AS 1530.8.1:2018
Test Sponsor: Darley Aluminium Trading Pty Ltd
Product: Darley CityView Combination Window System
Bushfire Attack Level (BAL) Exposure: 40 kW/m^2
Crib Class: AA
Job Number: FRT210417
Test Date: 10 March 2022 **Revision:** R1.0

	BAL-12.5	BAL-19	BAL-29	BAL-40
FRAME	Low-level framing must be manufactured from either: • **Metal**, or • Bushfire resistant timber or • Timber species with a density greater than 650 kg/m3 or • Metal reinforced uPVC.	Low-level framing must be manufactured from either: • **Metal**, or • Bushfire resistant timber or • Timber species with a density greater than 650 kg/m3 or • Metal reinforced uPVC.	Low-level framing must be manufactured from either: • **Metal**, or • Bushfire resistant timber or • Metal reinforced uPVC.	All framing must be **metal**.
GLAZING	Low-level glazing must be Grade A safety glass with a minimum thickness of 4 mm.	Low-level glazing must be Grade A safety glass with a minimum thickness of 5 mm. In all other locations where annealed glass is used, it must be protected by an external screen (see screen requirements).	All glazing must be toughened glass with a minimum thickness of 5 mm. Low-level glazing must be protected by an external screen (see screen requirements).	All glazing must be toughened glass with a minimum thickness of 6 mm. All glazing must be protected by an external screen (see screen requirements).
SCREENS	Openable portions of windows must be screened either internally or externally. Mesh or perforated sheet with a maximum aperture of 2mm manufactured from either: - **Corrosion resistant steel (Screenguard)**, or - Bronze, or - **Aluminium (Perfguard).** Supporting frame must be manufactured from either: • Metal (including aluminium), or • Bushfire resistant timber or • Timber species with a density greater than 650 kg/m3.	Openable portions of windows must be screened either internally or externally. Mesh or perforated sheet with a maximum aperture of 2mm manufactured from either: - **Corrosion resistant steel (Screenguard)**, or - Bronze, or - **Aluminium (Perfguard).** Supporting frame must be manufactured from either: • Metal (including aluminium), or • Bushfire resistant timber or • Timber species with a density greater than 650 kg/m3. Where annealed glass is used, it must be protected by an external screen.	Openable portions of windows must be screened either internally or externally. Mesh or perforated sheet with a maximum aperture of 2mm manufactured from either: - **Corrosion resistant steel (Screenguard)**, or - Bronze, or - **Aluminium (Perfguard).** Supporting frame must be manufactured from either: • Metal (including aluminium), or • Bushfire resistant timber. Low-level glazing must be protected by an external screen. Screen assemblies must be attached using metal fixings.	Fixed and openable portions of windows must be screened either internally or externally. Mesh or perforated sheet with a maximum aperture of 2 mm manufactured from either: **- Corrosion resistant steel (Screenguard)**, or - Bronze. Aluminium mesh or perforated sheet cannot be used. Supporting frame must be manufactured from metal (including aluminium). Screen assemblies must be attached using metal fixings.
SEALS	N/A	N/A	N/A	Seals must be manufactured from **silicone** or have a flammability index less than 5.
HARDWARE	N/A	N/A	Externally fitted hardware that supports the sash in its functions of opening and closing must be metal unless shielded by metal frame components.	Externally fitted hardware that supports the sash in its functions of opening and closing, must be metal.

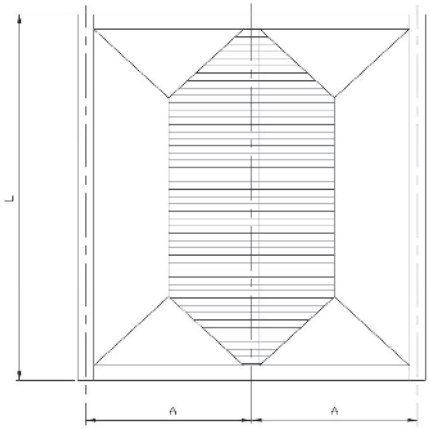
Performance

Mullion Strength Chart: CSG301 + CSG304



CSG301 **CSG304**

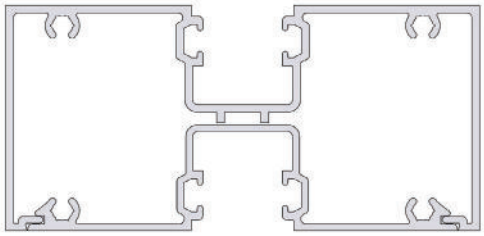
I - moment of inertia	840.05	x 10^3 mm^4
y - max depth of section from N axis	50	mm
E- Modulus	69	GPa
Ultimate stress	110	Mpa
Z - Section modulus	16.8	
Panel Width Increments	100	mm
Window Height Increments	100	mm



Mullion Pressure Ratings (Pa): Symmetrical Panels

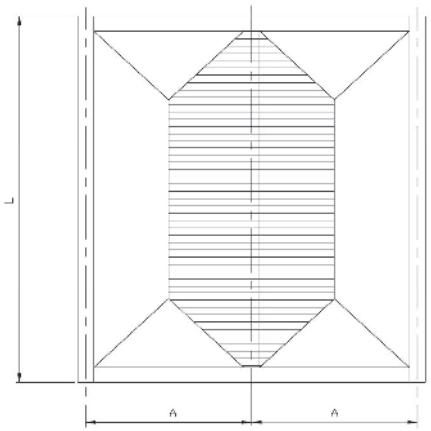
Darley Aluminium			Serviceability 1/250	Ultimate U			Limitations: Serviceability to 5000Pa & Ultimate to 8000Pa			CSG301 CSG304
	Panel Width (mm) (A)									
Window Height (mm) (L)	800	900	1000	1100	1200	1300	1400	1500	1600	Serviceability
1200	5000	5000	5000	5000	5000	5000	5000	5000	5000	250
	8000	8000	8000	8000	8000	8000	8000	8000	8000	U
1300	5000	5000	5000	5000	5000	5000	5000	5000	5000	250
	8000	8000	8000	8000	8000	8000	8000	8000	8000	U
1400	5000	5000	5000	5000	5000	5000	5000	5000	5000	250
	8000	8000	8000	8000	8000	8000	8000	8000	8000	U
1500	5000	5000	5000	4852	4641	4495	4409	4381	4381	250
	8000	8000	7714	7278	6961	6743	6614	6571	6571	U
1600	5000	4782	4427	4155	3949	3797	3693	3630	3610	250
	7875	7174	6640	6232	5923	5696	5539	5446	5414	U
1700	4603	4180	3855	3603	3408	3259	3148	3071	3025	250
	6905	6270	5783	5405	5112	4888	4722	4606	4537	U
1800	3993	3681	3391	3154	2976	2833	2722	2639	2581	250
	6106	5531	5087	4738	4464	4249	4083	3958	3872	U
1900	3345	3076	2867	2703	2495	2395	2317	2256	2190	250
	5441	4918	4512	4192	3936	3733	3572	3446	3352	U
2000	2986	2597	2415	2271	2156	2002	1930	1874	1830	250
	4881	4404	4032	3737	3500	3309	3156	3033	2937	U
2100	2549	2213	2054	1927	1826	1690	1626	1573	1532	250
	4404	3968	3627	3355	3135	2957	2811	2693	2598	U
2200	2193	1901	1761	1650	1559	1486	1383	1335	1296	250
	3994	3595	3281	3029	2826	2659	2522	2410	2318	U
2300	1901	1736	1522	1423	1343	1277	1186	1142	1107	250
	3640	3272	2983	2751	2561	2406	2278	2171	2083	U
2400	1659	1512	1324	1236	1165	1106	1057	986	953	250
	3332	2992	2724	2509	2333	2189	2068	1967	1883	U
2500	1456	1326	1223	1081	1017	964	920	883	827	250
	3061	2747	2499	2299	2135	2000	1887	1792	1712	U
2600	1285	1169	1077	951	893	846	806	772	722	250
	2823	2531	2301	2114	1962	1835	1729	1640	1564	U
2700	1140	1036	953	840	789	746	710	680	654	250
	2612	2340	2125	1952	1809	1691	1591	1507	1436	U
2800	1016	922	848	788	700	661	629	601	578	250
	2423	2170	1970	1807	1674	1563	1469	1390	1323	U
2900	909	824	757	703	624	589	559	534	513	250
	2255	2018	1831	1679	1554	1449	1361	1287	1223	U
3000	817	740	679	630	590	527	500	477	457	250
	2103	1882	1706	1563	1446	1348	1265	1195	1134	U
3100	736	667	612	567	530	473	449	428	410	250
	1967	1759	1594	1460	1349	1257	1179	1112	1055	U

Mullion Strength Chart: CSG301 + CSG304



CSG301 **CSG304**

I - moment of inertia	840.05	x 10^3 mm^4
y - max depth of section from N axis	50	mm
E- Modulus	69	GPa
Ultimate stress	110	Mpa
Z - Section modulus	16.8	
Panel Width Increments	100	mm
Window Height Increments	100	mm



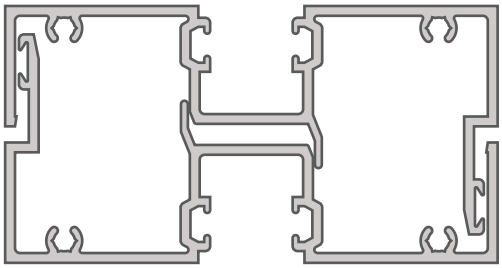
Performance

Mullion Pressure Ratings (Pa): Symmetrical Panels

Darley Aluminium			Serviceability 1/250	Ultimate U			Limitations: Serviceability to 5000Pa & Ultimate to 8000Pa			CSG301 CSG304
	Panel Width (mm) (A)									
Window Height (mm) (L)	1000	1100	1200	1300	1400	1500	1600	1700	1800	Serviceability
1200	5000	5000	5000	5000	5000	5000	5000	5000	5000	250
	8000	8000	8000	8000	8000	8000	8000	8000	8000	U
1300	5000	5000	5000	5000	5000	5000	5000	5000	5000	250
	8000	8000	8000	8000	8000	8000	8000	8000	8000	U
1400	5000	5000	5000	5000	5000	5000	5000	5000	5000	250
	8000	8000	8000	8000	8000	8000	8000	8000	8000	U
1500	5000	4852	4641	4495	4409	4381	4381	4381	4381	250
	7714	7278	6961	6743	6614	6571	6571	6571	6571	U
1600	4427	4155	3949	3797	3693	3630	3610	3610	3610	250
	6640	6232	5923	5696	5539	5446	5414	5414	5414	U
1700	3855	3603	3408	3259	3148	3071	3025	3009	3009	250
	5783	5405	5112	4888	4722	4606	4537	4514	4514	U
1800	3391	3154	2976	2833	2722	2639	2581	2547	2535	250
	5087	4738	4464	4249	4083	3958	3872	3820	3803	U
1900	2867	2703	2495	2395	2317	2256	2190	2159	2141	250
	4512	4192	3936	3733	3572	3446	3352	3286	3247	U
2000	2415	2271	2156	2002	1930	1874	1830	1779	1756	250
	4032	3737	3500	3309	3156	3033	2937	2864	2813	U
2100	2054	1927	1826	1690	1626	1573	1532	1484	1460	250
	3627	3355	3135	2957	2811	2693	2598	2523	2467	U
2200	1761	1650	1559	1486	1383	1335	1296	1265	1228	250
	3281	3029	2826	2659	2522	2410	2318	2243	2185	U
2300	1522	1423	1343	1277	1186	1142	1107	1078	1054	250
	2983	2751	2561	2406	2278	2171	2083	2010	1951	U
2400	1324	1236	1165	1106	1057	986	953	926	904	250
	2724	2509	2333	2189	2068	1967	1883	1813	1755	U
2500	1223	1081	1017	964	920	883	827	802	781	250
	2499	2299	2135	2000	1887	1792	1712	1645	1589	U
2600	1077	951	893	846	806	772	722	699	679	250
	2301	2114	1962	1835	1729	1640	1564	1500	1446	U
2700	953	840	789	746	710	680	654	613	595	250
	2125	1952	1809	1691	1591	1507	1436	1375	1323	U
2800	848	788	700	661	629	601	578	541	524	250
	1970	1807	1674	1563	1469	1390	1323	1265	1215	U
2900	757	703	624	589	559	534	513	494	464	250
	1831	1679	1554	1449	1361	1287	1223	1168	1121	U
3000	679	630	590	527	500	477	457	441	426	250
	1706	1563	1446	1348	1265	1195	1134	1082	1037	U
3100	612	567	530	473	449	428	410	394	381	250
	1594	1460	1349	1257	1179	1112	1055	1006	963	U

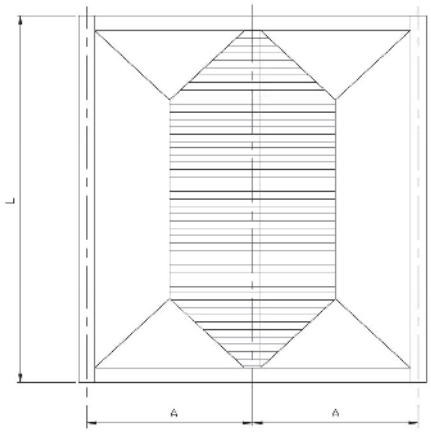
Performance

Mullion Strength Chart: CSG320 + CSG320



CSG320 **CSG320**

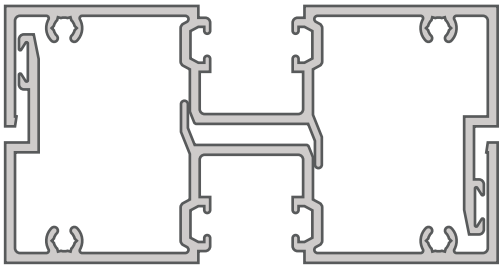
I - moment of inertia	1123.68	x 10^3 mm^4
y - max depth of section from N axis	55.5	mm
E- Modulus	69	GPa
Ultimate stress	110	Mpa
Z - Section modulus	20.2	
Panel Width Increments	100	mm
Window Height Increments	100	mm



Mullion Pressure Ratings (Pa): Symmetrical Panels

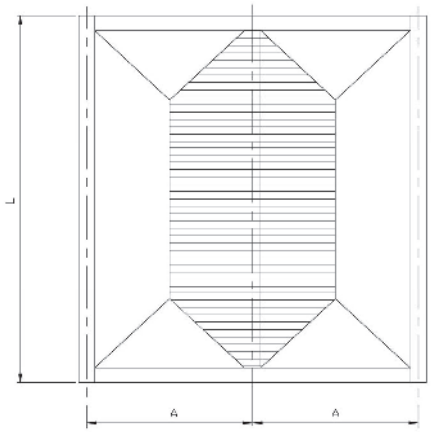
Darley Aluminium			Serviceability 1/250	Ultimate U			Limitations: Serviceability to 5000Pa & Ultimate to 8000Pa			CSG320 CSG320
	Panel Width (mm) (A)									
Window Height (mm) (L)	800	900	1000	1100	1200	1300	1400	1500	1600	Serviceability
1500	5000	5000	5000	5000	5000	5000	5000	5000	5000	250
	8000	8000	8000	8000	8000	8000	7971	7919	7919	U
1600	5000	5000	5000	5000	4759	4576	4450	4375	4350	250
	8000	8000	8000	7510	7138	6864	6675	6562	6525	U
1700	5000	5000	4646	4342	4107	3927	3793	3700	3645	250
	8000	7556	6969	6514	6161	5891	5690	5550	5468	U
1800	4906	4444	4086	3807	3586	3414	3280	3180	3110	250
	7358	6666	6130	5710	5380	5120	4920	4770	4666	U
1900	4371	3951	3625	3367	3162	2999	2870	2769	2693	250
	6557	5927	5438	5051	4744	4498	4304	4153	4040	U
2000	3921	3474	3231	3002	2812	2659	2535	2437	2359	250
	5881	5307	4859	4503	4218	3988	3803	3655	3539	U
2100	3409	2960	2747	2578	2442	2261	2175	2105	2049	250
	5307	4782	4370	4043	3778	3563	3388	3245	3131	U
2200	2934	2543	2356	2207	2086	1988	1849	1786	1734	250
	4814	4332	3953	3651	3405	3205	3040	2904	2793	U
2300	2543	2322	2036	1903	1796	1708	1586	1528	1480	250
	4387	3944	3595	3315	3087	2900	2745	2616	2510	U
2400	2219	2023	1771	1654	1558	1479	1414	1318	1275	250
	4015	3606	3283	3024	2812	2637	2492	2371	2269	U
2500	1947	1773	1636	1446	1360	1290	1231	1181	1106	250
	3689	3310	3011	2770	2573	2410	2274	2160	2063	U
2600	1719	1563	1440	1272	1195	1131	1078	1033	965	250
	3402	3050	2772	2548	2364	2212	2084	1976	1885	U
2700	1524	1385	1275	1124	1055	998	950	909	875	250
	3147	2820	2561	2352	2180	2037	1918	1816	1730	U
2800	1358	1233	1134	1054	937	885	841	804	773	250
	2920	2615	2373	2178	2017	1883	1771	1675	1594	U
2900	1216	1103	1013	941	835	788	748	715	686	250
	2717	2432	2206	2023	1872	1747	1641	1551	1474	U
3000	1092	990	909	843	789	705	669	638	612	250
	2535	2268	2056	1884	1743	1624	1525	1440	1367	U
3100	985	892	818	759	709	633	600	572	548	250
	2370	2120	1921	1759	1626	1515	1421	1341	1272	U
3200	891	807	740	685	640	571	541	515	493	250
	2221	1986	1798	1647	1521	1416	1328	1252	1186	U
3300	809	732	671	621	580	545	489	465	445	250
	2086	1864	1688	1545	1426	1327	1243	1171	1109	U
3400	737	666	610	564	526	495	444	422	403	250
	1963	1753	1587	1452	1340	1246	1167	1099	1040	U

Mullion Strength Chart: CSG320 + CSG320



CSG320 **CSG320**

I - moment of inertia	1123.68	x 10^3 mm^4
y - max depth of section from N axis	55.5	mm
E- Modulus	69	GPa
Ultimate stress	110	Mpa
Z - Section modulus	20.2	
Panel Width Increments	100	mm
Window Height Increments	100	mm

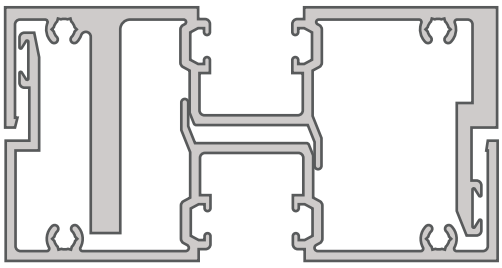


Mullion Pressure Ratings (Pa): Symmetrical Panels

Darley Aluminium			Serviceability 1/250	Ultimate U			Limitations: Serviceability to 5000Pa & Ultimate to 8000Pa			CSG320 CSG320
	Panel Width (mm) (A)									
Window Height (mm) (L)	1200	1300	1400	1500	1600	1700	1800	1900	2000	Serviceability
1900	3162	2999	2870	2769	2693	2640	2608	2598	2598	250
	4744	4498	4304	4153	4040	3960	3912	3896	3896	U
2000	2812	2659	2535	2437	2359	2301	2260	2235	2227	250
	4218	3988	3803	3655	3539	3451	3390	3353	3341	U
2100	2442	2261	2175	2105	2049	1986	1953	1931	1918	250
	3778	3563	3388	3245	3131	3041	2972	2924	2895	U
2200	2086	1988	1849	1786	1734	1692	1643	1619	1602	250
	3405	3205	3040	2904	2793	2703	2633	2579	2540	U
2300	1796	1708	1586	1528	1480	1441	1410	1371	1353	250
	3087	2900	2745	2616	2510	2422	2351	2295	2252	U
2400	1558	1479	1414	1318	1275	1238	1209	1184	1154	250
	2812	2637	2492	2371	2269	2185	2115	2058	2012	U
2500	1360	1290	1231	1181	1106	1072	1044	1021	1002	250
	2573	2410	2274	2160	2063	1982	1915	1858	1812	U
2600	1195	1131	1078	1033	965	935	909	887	869	250
	2364	2212	2084	1976	1885	1808	1743	1688	1642	U
2700	1055	998	950	909	875	820	796	775	758	250
	2180	2037	1918	1816	1730	1657	1594	1541	1496	U
2800	937	885	841	804	773	723	701	682	666	250
	2017	1883	1771	1675	1594	1524	1464	1413	1369	U
2900	835	788	748	715	686	661	621	603	588	250
	1872	1747	1641	1551	1474	1407	1350	1301	1259	U
3000	789	705	669	638	612	589	570	536	522	250
	1743	1624	1525	1440	1367	1304	1250	1203	1162	U
3100	709	633	600	572	548	527	509	479	466	250
	1626	1515	1421	1341	1272	1212	1160	1115	1076	U
3200	640	571	541	515	493	474	457	443	417	250
	1521	1416	1328	1252	1186	1130	1081	1038	1000	U
3300	580	545	489	465	445	427	412	399	375	250
	1426	1327	1243	1171	1109	1056	1009	968	932	U
3400	526	495	444	422	403	387	373	360	349	250
	1340	1246	1167	1099	1040	989	944	905	871	U
3500	480	451	426	384	366	351	338	327	316	250
	1261	1173	1097	1033	977	929	886	849	816	U
3600	438	411	389	350	334	320	308	297	288	250
	1190	1106	1034	973	920	874	833	798	766	U
3700	402	377	356	320	305	292	281	271	262	250
	1124	1044	976	918	867	824	785	751	721	U
3800	369	346	326	310	280	268	257	248	240	250
	1064	988	923	868	820	778	741	708	680	U

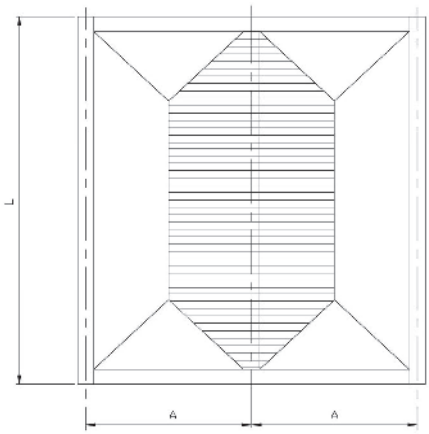
Performance

Mullion Strength Chart: CSG320 + CSG333



CSG320 **CSG333**

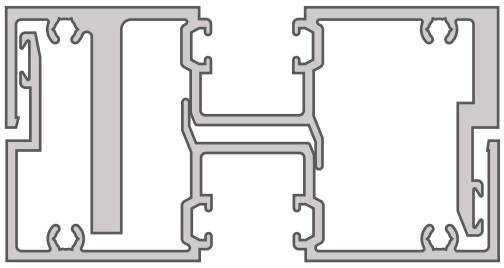
I - moment of inertia	1585.68	x 10^3 mm^4
y - max depth of section from N axis	55.5	mm
E- Modulus	69	GPa
Ultimate stress	110	Mpa
Z - Section modulus	28.6	
Panel Width Increments	100	mm
Window Height Increments	100	mm



Mullion Pressure Ratings (Pa): Symmetrical Panels

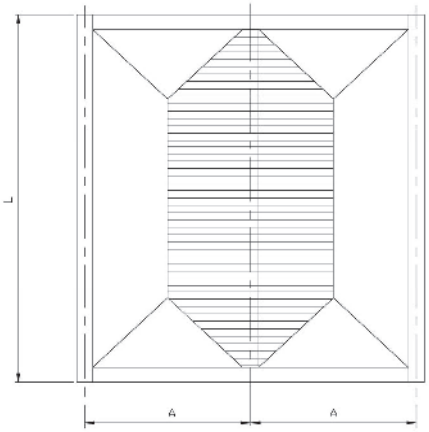
Darley Aluminium			Serviceability 1/250	Ultimate U			Limitations: Serviceability to 5000Pa & Ultimate to 8000Pa			CSG320 CSG333
	Panel Width (mm) (A)									
Window Height (mm) (L)	800	900	1000	1100	1200	1300	1400	1500	1600	Serviceability
1900	5000	5000	5000	4752	4463	4232	4049	3907	3800	250
	8000	8000	7673	7128	6694	6348	6074	5861	5700	U
2000	5000	4902	4559	4237	3968	3752	3577	3438	3329	250
	8000	7490	6857	6355	5952	5628	5366	5157	4994	U
2100	4811	4177	3877	3638	3446	3191	3069	2970	2892	250
	7489	6748	6167	5705	5331	5028	4781	4580	4418	U
2200	4140	3588	3324	3114	2943	2805	2610	2520	2447	250
	6793	6113	5579	5152	4805	4522	4290	4098	3942	U
2300	3589	3276	2873	2686	2535	2411	2238	2157	2089	250
	6191	5565	5072	4677	4356	4092	3873	3692	3542	U
2400	3131	2855	2499	2334	2199	2087	1995	1861	1799	250
	5666	5089	4633	4267	3968	3722	3517	3346	3203	U
2500	2748	2502	2308	2040	1920	1820	1737	1667	1560	250
	5206	4672	4249	3909	3631	3401	3209	3048	2912	U
2600	2425	2206	2033	1794	1686	1596	1521	1458	1362	250
	4801	4304	3912	3596	3336	3121	2941	2789	2660	U
2700	2151	1955	1799	1587	1489	1408	1340	1283	1234	250
	4441	3979	3614	3319	3077	2875	2706	2563	2441	U
2800	1917	1740	1600	1487	1322	1248	1187	1135	1090	250
	4121	3690	3349	3074	2847	2658	2499	2364	2249	U
2900	1716	1556	1430	1327	1178	1112	1056	1009	968	250
	3834	3432	3113	2855	2642	2465	2315	2188	2079	U
3000	1541	1397	1282	1190	1113	995	944	901	863	250
	3577	3200	2901	2659	2459	2292	2152	2032	1929	U
3100	1390	1259	1155	1070	1001	894	847	807	773	250
	3345	2991	2710	2483	2295	2138	2005	1892	1795	U
3200	1258	1139	1044	967	903	806	763	727	696	250
	3134	2802	2538	2324	2147	1999	1873	1766	1674	U
3300	1142	1033	946	876	818	769	690	657	628	250
	2944	2630	2382	2180	2013	1873	1754	1653	1566	U
3400	1040	940	861	796	743	698	626	595	569	250
	2770	2474	2240	2049	1891	1759	1647	1551	1468	U
3500	950	858	785	726	677	636	601	541	517	250
	2611	2332	2110	1929	1780	1655	1549	1458	1379	U
3600	870	785	718	664	618	581	548	494	471	250
	2466	2201	1991	1820	1679	1560	1459	1373	1298	U
3700	798	721	659	608	567	532	502	452	431	250
	2332	2082	1882	1720	1586	1473	1378	1295	1224	U
3800	735	663	606	559	520	488	460	437	395	250
	2209	1971	1782	1628	1501	1394	1303	1224	1157	U

Mullion Strength Chart: CSG320 + CSG333



CSG320 **CSG333**

I - moment of inertia	1585.68	x 10^3 mm^4
y - max depth of section from N axis	55.5	mm
E- Modulus	69	GPa
Ultimate stress	110	Mpa
Z - Section modulus	28.6	
Panel Width Increments	100	mm
Window Height Increments	100	mm

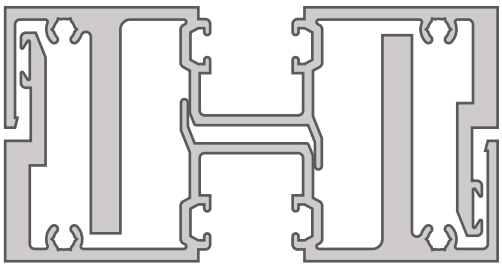


Mullion Pressure Ratings (Pa): Symmetrical Panels

Darley Aluminium			Serviceability 1/250	Ultimate U			Limitations: Serviceability to 5000Pa & Ultimate to 8000Pa			CSG320 CSG333
	Panel Width (mm) (A)									
Window Height (mm) (L)	1200	1300	1400	1500	1600	1700	1800	1900	2000	Serviceability
1900	4463	4232	4049	3907	3800	3725	3681	3666	3666	250
	6694	6348	6074	5861	5700	5588	5521	5498	5498	U
2000	3968	3752	3577	3438	3329	3247	3189	3154	3143	250
	5952	5628	5366	5157	4994	4870	4784	4732	4714	U
2100	3446	3191	3069	2970	2892	2802	2757	2725	2707	250
	5331	5028	4781	4580	4418	4291	4195	4127	4086	U
2200	2943	2805	2610	2520	2447	2388	2319	2284	2261	250
	4805	4522	4290	4098	3942	3815	3715	3639	3585	U
2300	2535	2411	2238	2157	2089	2034	1990	1935	1909	250
	4356	4092	3873	3692	3542	3418	3318	3238	3177	U
2400	2199	2087	1995	1861	1799	1748	1706	1671	1628	250
	3968	3722	3517	3346	3203	3083	2985	2904	2840	U
2500	1920	1820	1737	1667	1560	1513	1474	1441	1415	250
	3631	3401	3209	3048	2912	2798	2702	2622	2557	U
2600	1686	1596	1521	1458	1362	1319	1282	1252	1226	250
	3336	3121	2941	2789	2660	2551	2459	2381	2317	U
2700	1489	1408	1340	1283	1234	1157	1123	1094	1070	250
	3077	2875	2706	2563	2441	2338	2249	2174	2110	U
2800	1322	1248	1187	1135	1090	1021	989	962	940	250
	2847	2658	2499	2364	2249	2151	2066	1994	1932	U
2900	1178	1112	1056	1009	968	933	876	851	830	250
	2642	2465	2315	2188	2079	1986	1906	1836	1776	U
3000	1113	995	944	901	863	832	804	757	737	250
	2459	2292	2152	2032	1929	1840	1764	1697	1640	U
3100	1001	894	847	807	773	744	719	676	657	250
	2295	2138	2005	1892	1795	1710	1638	1574	1519	U
3200	903	806	763	727	696	669	645	625	589	250
	2147	1999	1873	1766	1674	1594	1525	1464	1411	U
3300	818	769	690	657	628	603	581	563	529	250
	2013	1873	1754	1653	1566	1490	1424	1366	1315	U
3400	743	698	626	595	569	546	526	508	493	250
	1891	1759	1647	1551	1468	1396	1333	1278	1229	U
3500	677	636	601	541	517	496	477	461	447	250
	1780	1655	1549	1458	1379	1310	1250	1198	1152	U
3600	618	581	548	494	471	451	434	419	406	250
	1679	1560	1459	1373	1298	1233	1176	1126	1081	U
3700	567	532	502	452	431	412	396	382	370	250
	1586	1473	1378	1295	1224	1162	1108	1060	1017	U
3800	520	488	460	437	395	378	363	350	338	250
	1501	1394	1303	1224	1157	1097	1046	1000	959	U

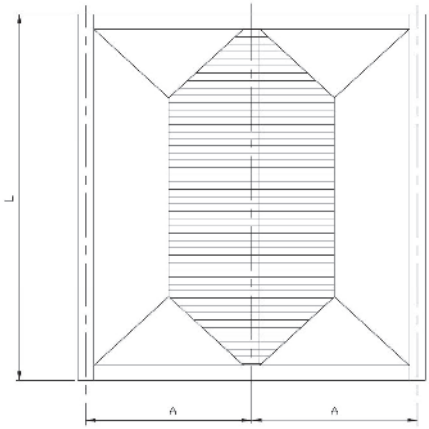
Performance

Mullion Strength Chart: CSG333 + CSG333



CSG333 CSG333

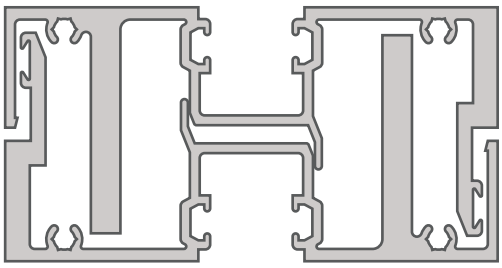
I - moment of inertia	2047.68	x 10^3 mm^4
y - max depth of section from N axis	51.2	mm
E- Modulus	69	GPa
Ultimate stress	110	Mpa
Z - Section modulus	40.0	
Panel Width Increments	100	mm
Window Height Increments	100	mm



Mullion Pressure Ratings (Pa): Symmetrical Panels

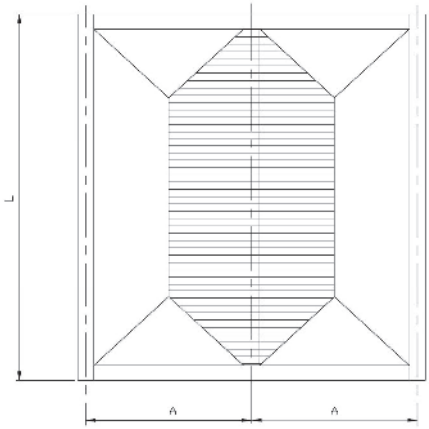
Darley Aluminium			Serviceability 1/250	Ultimate U			Limitations: Serviceability to 5000Pa & Ultimate to 8000Pa			CSG333 CSG333
	Panel Width (mm) (A)									
Window Height (mm) (L)	800	900	1000	1100	1200	1300	1400	1500	1600	Serviceability
2100	5000	5000	5000	4698	4450	4120	3963	3836	3734	250
	8000	8000	8000	7985	7463	7038	6692	6411	6185	U
2200	5000	4634	4293	4021	3801	3622	3370	3254	3159	250
	8000	8000	7809	7211	6727	6330	6005	5737	5518	U
2300	4634	4231	3710	3469	3273	3113	2891	2785	2698	250
	8000	7790	7100	6547	6097	5728	5422	5168	4958	U
2400	4043	3686	3228	3013	2839	2696	2577	2403	2323	250
	7931	7123	6485	5973	5555	5210	4923	4683	4483	U
2500	3549	3232	2981	2635	2479	2350	2243	2153	2015	250
	7288	6539	5948	5472	5083	4761	4492	4266	4076	U
2600	3132	2849	2625	2317	2177	2061	1964	1883	1759	250
	6720	6025	5476	5033	4670	4369	4117	3904	3724	U
2700	2778	2524	2323	2049	1923	1818	1730	1657	1594	250
	6217	5571	5059	4646	4307	4025	3788	3588	3417	U
2800	2476	2247	2067	1920	1707	1612	1532	1465	1408	250
	5768	5166	4688	4302	3985	3720	3498	3309	3148	U
2900	2215	2009	1846	1714	1522	1436	1364	1302	1250	250
	5367	4804	4358	3996	3698	3450	3241	3063	2911	U
3000	1991	1804	1656	1536	1438	1285	1219	1163	1115	250
	5007	4479	4061	3722	3442	3209	3012	2844	2700	U
3100	1795	1626	1491	1382	1293	1154	1094	1043	999	250
	4682	4187	3794	3475	3212	2993	2807	2648	2512	U
3200	1625	1470	1348	1248	1166	1041	986	939	898	250
	4388	3922	3553	3253	3005	2798	2622	2472	2343	U
3300	1475	1334	1222	1131	1056	993	891	848	811	250
	4120	3682	3334	3051	2817	2622	2456	2314	2192	U
3400	1343	1214	1112	1028	959	902	808	769	735	250
	3877	3464	3135	2868	2647	2462	2305	2170	2054	U
3500	1227	1108	1014	937	874	821	776	699	667	250
	3655	3264	2953	2701	2492	2317	2168	2040	1930	U
3600	1123	1014	928	857	799	750	708	638	608	250
	3451	3082	2787	2548	2350	2184	2043	1922	1817	U
3700	1031	931	851	786	732	686	648	583	556	250
	3264	2914	2635	2408	2220	2062	1928	1813	1714	U
3800	949	856	782	722	672	630	595	564	510	250
	3092	2760	2495	2279	2101	1951	1823	1714	1619	U
3900	875	789	721	665	619	580	547	519	468	250
	2934	2617	2366	2161	1991	1848	1727	1623	1532	U
4000	866	729	665	614	571	535	504	478	455	250
	2787	2486	2246	2051	1890	1754	1638	1539	1452	U

Mullion Strength Chart: CSG333 + CSG333



CSG333 CSG333

I - moment of inertia	2047.68	x 10^3 mm^4
y - max depth of section from N axis	51.2	mm
E- Modulus	69	GPa
Ultimate stress	110	Mpa
Z - Section modulus	40.0	
Panel Width Increments	100	mm
Window Height Increments	100	mm

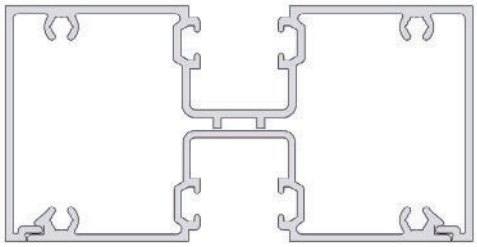


Mullion Pressure Ratings (Pa): Symmetrical Panels

Darley Aluminium			Serviceability 1/250	Ultimate U			Limitations: Serviceability to 5000Pa & Ultimate to 8000Pa			CSG333 CSG333
	Panel Width (mm) (A)									
Window Height (mm) (L)	1200	1300	1400	1500	1600	1700	1800	1900	2000	Serviceability
2100	4450	4120	3963	3836	3734	3618	3560	3519	3495	250
	7463	7038	6692	6411	6185	6007	5872	5777	5720	U
2200	3801	3622	3370	3254	3159	3084	2994	2950	2919	250
	6727	6330	6005	5737	5518	5340	5200	5094	5018	U
2300	3273	3113	2891	2785	2698	2627	2569	2499	2465	250
	6097	5728	5422	5168	4958	4785	4644	4533	4447	U
2400	2839	2696	2577	2403	2323	2257	2202	2158	2103	250
	5555	5210	4923	4683	4483	4316	4178	4065	3975	U
2500	2479	2350	2243	2153	2015	1954	1903	1861	1827	250
	5083	4761	4492	4266	4076	3916	3782	3670	3579	U
2600	2177	2061	1964	1883	1759	1703	1656	1616	1583	250
	4670	4369	4117	3904	3724	3571	3442	3334	3243	U
2700	1923	1818	1730	1657	1594	1494	1450	1413	1382	250
	4307	4025	3788	3588	3417	3272	3149	3043	2954	U
2800	1707	1612	1532	1465	1408	1318	1277	1243	1214	250
	3985	3720	3498	3309	3148	3011	2892	2791	2704	U
2900	1522	1436	1364	1302	1250	1205	1131	1099	1072	250
	3698	3450	3241	3063	2911	2780	2667	2570	2487	U
3000	1438	1285	1219	1163	1115	1074	1038	977	951	250
	3442	3209	3012	2844	2700	2576	2469	2376	2295	U
3100	1293	1154	1094	1043	999	961	928	873	849	250
	3212	2993	2807	2648	2512	2394	2292	2203	2126	U
3200	1166	1041	986	939	898	863	833	807	760	250
	3005	2798	2622	2472	2343	2232	2135	2050	1976	U
3300	1056	993	891	848	811	779	751	726	684	250
	2817	2622	2456	2314	2192	2086	1993	1912	1841	U
3400	959	902	808	769	735	705	679	656	637	250
	2647	2462	2305	2170	2054	1954	1866	1789	1721	U
3500	874	821	776	699	667	640	616	595	577	250
	2492	2317	2168	2040	1930	1834	1750	1677	1612	U
3600	799	750	708	638	608	583	561	541	524	250
	2350	2184	2043	1922	1817	1726	1646	1576	1514	U
3700	732	686	648	583	556	533	512	494	478	250
	2220	2062	1928	1813	1714	1627	1551	1483	1424	U
3800	672	630	595	564	510	488	469	452	437	250
	2101	1951	1823	1714	1619	1536	1464	1399	1343	U
3900	619	580	547	519	468	448	430	414	400	250
	1991	1848	1727	1623	1532	1453	1384	1322	1268	U
4000	571	535	504	478	455	412	396	381	368	250
	1890	1754	1638	1539	1452	1377	1310	1252	1200	U

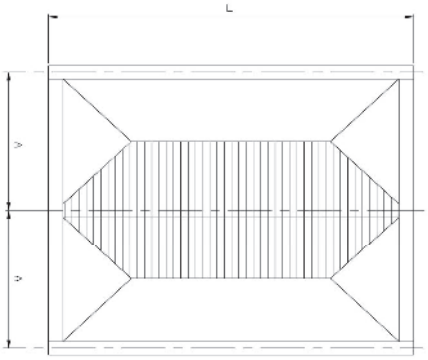
Performance

Transom Strength Chart: CSG301 + CSG304



CSG301 **CSG304**

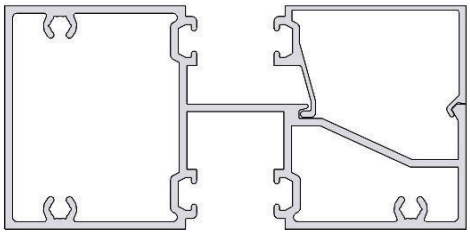
I - moment of inertia	840.05	x 10^3
y - max depth of section from N axis	50	mm
E- Modulus	69	Gpa
Ultimate stress	110	Mpa
Z - Section modulus	16.8	
Panel Height Increments	100	mm
Window Width Increments	100	mm



Transom Pressure Ratings (Pa): Symmetrical Panels

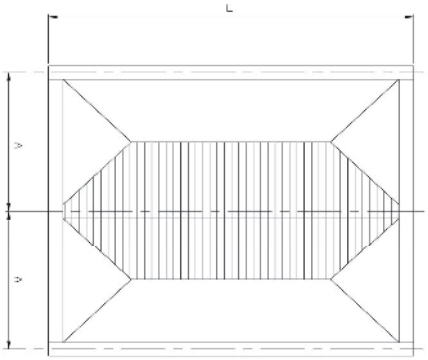
Darley Aluminium			Serviceability 1/250	Ultimate U			Limitations: Serviceability to 5000Pa & Ultimate to 8000Pa			CSG301 CSG304
Window Height (mm)	**1500**	**1700**	**1900**	**2100**	**2300**	**2500**	**2700**	**2900**	**3100**	
	Panel Height (mm) (A)									
Window Width (mm) (L)	**750**	**850**	**950**	**1050**	**1150**	**1250**	**1350**	**1450**	**1550**	**Serviceability**
600	5000	5000	5000	5000	5000	5000	5000	5000	5000	**250**
	8000	8000	8000	8000	8000	8000	8000	8000	8000	**U**
700	5000	5000	5000	5000	5000	5000	5000	5000	5000	**250**
	8000	8000	8000	8000	8000	8000	8000	8000	8000	**U**
800	5000	5000	5000	5000	5000	5000	5000	5000	5000	**250**
	8000	8000	8000	8000	8000	8000	8000	8000	8000	**U**
900	5000	5000	5000	5000	5000	5000	5000	5000	5000	**250**
	8000	8000	8000	8000	8000	8000	8000	8000	8000	**U**
1000	5000	5000	5000	5000	5000	5000	5000	5000	5000	**250**
	8000	8000	8000	8000	8000	8000	8000	8000	8000	**U**
1100	5000	5000	5000	5000	5000	5000	5000	5000	5000	**250**
	8000	8000	8000	8000	8000	8000	8000	8000	8000	**U**
1200	5000	5000	5000	5000	5000	5000	5000	5000	5000	**250**
	8000	8000	8000	8000	8000	8000	8000	8000	8000	**U**
1300	5000	5000	5000	5000	5000	5000	5000	5000	5000	**250**
	8000	8000	8000	8000	8000	8000	8000	8000	8000	**U**
1400	5000	5000	5000	5000	5000	5000	5000	5000	5000	**250**
	8000	8000	8000	8000	8000	8000	8000	8000	8000	**U**
1500	5000	5000	5000	4987	4738	4560	4445	4388	4381	**250**
	8000	8000	7984	7480	7106	6840	6668	6582	6571	**U**
1600	5000	5000	4593	4282	4044	3867	3739	3656	3615	**250**
	8000	7500	6889	6422	6067	5800	5609	5484	5422	**U**
1700	4863	4377	4007	3721	3500	3328	3199	3105	3044	**250**
	7294	6566	6011	5582	5249	4992	4798	4658	4566	**U**
1800	4185	3827	3530	3268	3062	2900	2773	2677	2607	**250**
	6458	5800	5295	4902	4593	4350	4160	4016	3911	**U**
1900	3702	3202	2965	2780	2555	2442	2354	2285	2210	**250**
	5760	5163	4703	4343	4057	3829	3648	3505	3396	**U**
2000	3136	2706	2501	2339	2211	2044	1964	1900	1850	**250**
	5171	4627	4207	3876	3612	3400	3228	3091	2982	**U**
2100	2679	2308	2129	1987	1874	1782	1656	1598	1551	**250**
	4669	4172	3787	3483	3239	3041	2880	2749	2643	**U**
2200	2308	2093	1827	1702	1602	1521	1410	1357	1314	**250**
	4237	3782	3429	3148	2922	2738	2588	2463	2362	**U**
2300	2002	1813	1580	1470	1381	1308	1249	1163	1124	**250**
	3863	3445	3119	2861	2651	2480	2339	2222	2125	**U**
2400	1747	1581	1451	1278	1199	1134	1080	1004	969	**250**
	3538	3152	2851	2611	2417	2258	2126	2015	1923	**U**
2500	1535	1387	1271	1118	1047	989	941	901	841	**250**
	3252	2895	2616	2394	2213	2065	1941	1837	1750	**U**

Transom Strength Chart: CSG303 + CSG362



CSG303 **CSG362**

I - moment of inertia	715.01	x 10^3
y - max depth of section from N axis	54.3	mm
E- Modulus	69	Gpa
Ultimate stress	110	Mpa
Z - Section modulus	13.2	
Panel Height Increments	100	mm
Window Width Increments	100	mm



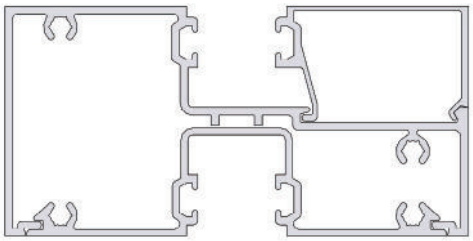
Transom Pressure Ratings (Pa): Symmetrical Panels

Darley Aluminium			Serviceability 1/250	Ultimate U			Limitations: Serviceability to 5000Pa & Ultimate to 8000Pa			CSG302 CSG362
Window Height (mm)	**1500**	**1700**	**1900**	**2100**	**2300**	**2500**	**2700**	**2900**	**3100**	
	Panel Height (mm) (A)									
Window Width (mm) (L)	**750**	**850**	**950**	**1050**	**1150**	**1250**	**1350**	**1450**	**1550**	**Serviceability**
600	5000	5000	5000	5000	5000	5000	5000	5000	5000	**250**
	8000	8000	8000	8000	8000	8000	8000	8000	8000	**U**
700	5000	5000	5000	5000	5000	5000	5000	5000	5000	**250**
	8000	8000	8000	8000	8000	8000	8000	8000	8000	**U**
800	5000	5000	5000	5000	5000	5000	5000	5000	5000	**250**
	8000	8000	8000	8000	8000	8000	8000	8000	8000	**U**
900	5000	5000	5000	5000	5000	5000	5000	5000	5000	**250**
	8000	8000	8000	8000	8000	8000	8000	8000	8000	**U**
1000	5000	5000	5000	5000	5000	5000	5000	5000	5000	**250**
	8000	8000	8000	8000	8000	8000	8000	8000	8000	**U**
1100	5000	5000	5000	5000	5000	5000	5000	5000	5000	**250**
	8000	8000	8000	8000	8000	8000	8000	8000	8000	**U**
1200	5000	5000	5000	5000	5000	5000	5000	5000	5000	**250**
	8000	8000	8000	8000	8000	8000	8000	8000	8000	**U**
1300	5000	5000	5000	5000	5000	5000	5000	5000	5000	**250**
	8000	8000	8000	8000	8000	7929	7911	7911	7911	**U**
1400	5000	5000	4901	4620	4422	4294	4231	4223	4223	**250**
	8000	7930	7352	6930	6633	6441	6346	6334	6334	**U**
1500	4994	4523	4172	3908	3713	3574	3484	3439	3433	**250**
	7491	6785	6258	5862	5570	5361	5226	5159	5150	**U**
1600	4341	3919	3599	3356	3170	3031	2931	2866	2833	**250**
	6512	5878	5399	5033	4755	4546	4396	4298	4250	**U**
1700	3811	3431	3141	2917	2743	2609	2507	2434	2386	**250**
	5717	5146	4711	4375	4114	3913	3761	3650	3578	**U**
1800	3374	3030	2767	2561	2400	2273	2174	2098	2043	**250**
	5061	4545	4150	3842	3600	3409	3261	3147	3065	**U**
1900	3010	2698	2457	2269	2120	2001	1906	1831	1774	**250**
	4514	4046	3686	3403	3179	3001	2859	2747	2661	**U**
2000	2669	2303	2128	1991	1882	1740	1672	1615	1558	**250**
	4053	3626	3297	3038	2831	2664	2530	2422	2337	**U**
2100	2281	1964	1812	1691	1595	1517	1410	1360	1321	**250**
	3659	3270	2968	2730	2539	2384	2257	2155	2071	**U**
2200	1964	1782	1555	1449	1364	1294	1200	1155	1119	**250**
	3321	2964	2687	2467	2290	2146	2028	1931	1851	**U**
2300	1704	1543	1345	1251	1175	1114	1063	990	956	**250**
	3028	2700	2445	2242	2078	1944	1833	1741	1665	**U**
2400	1487	1346	1235	1088	1020	965	920	855	824	**250**
	2773	2470	2234	2047	1894	1769	1666	1580	1507	**U**
2500	1306	1180	1082	952	891	842	801	767	716	**250**
	2548	2269	2050	1876	1735	1618	1521	1440	1372	**U**

Performance

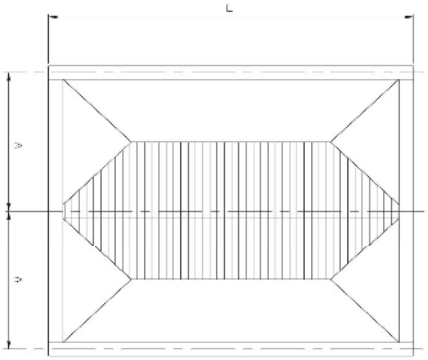
Transom Strength Chart: CSG302 + CSG303 + CSG304

CSG303



CSG302 **CSG304**

I - moment of inertia	702.4	x 10^3
y - max depth of section from N axis	54.6	mm
E- Modulus	69	Gpa
Ultimate stress	110	Mpa
Z - Section modulus	12.9	
Panel Height Increments	100	mm
Window Width Increments	100	mm



Transom Pressure Ratings (Pa): Symmetrical Panels

Darley Aluminium			Serviceability 1/250	Ultimate U			Limitations: Serviceability to 5000Pa & Ultimate to 8000Pa			CSG302 CSG303 CSG304
Window Height (mm)	**1500**	**1700**	**1900**	**2100**	**2300**	**2500**	**2700**	**2900**	**3100**	
	Panel Height (mm) (A)									
Window Width (mm) (L)	**750**	**850**	**950**	**1050**	**1150**	**1250**	**1350**	**1450**	**1550**	**Serviceability**
600	5000	5000	5000	5000	5000	5000	5000	5000	5000	**250**
	8000	8000	8000	8000	8000	8000	8000	8000	8000	**U**
700	5000	5000	5000	5000	5000	5000	5000	5000	5000	**250**
	8000	8000	8000	8000	8000	8000	8000	8000	8000	**U**
800	5000	5000	5000	5000	5000	5000	5000	5000	5000	**250**
	8000	8000	8000	8000	8000	8000	8000	8000	8000	**U**
900	5000	5000	5000	5000	5000	5000	5000	5000	5000	**250**
	8000	8000	8000	8000	8000	8000	8000	8000	8000	**U**
1000	5000	5000	5000	5000	5000	5000	5000	5000	5000	**250**
	8000	8000	8000	8000	8000	8000	8000	8000	8000	**U**
1100	5000	5000	5000	5000	5000	5000	5000	5000	5000	**250**
	8000	8000	8000	8000	8000	8000	8000	8000	8000	**U**
1200	5000	5000	5000	5000	5000	5000	5000	5000	5000	**250**
	8000	8000	8000	8000	8000	8000	8000	8000	8000	**U**
1300	5000	5000	5000	5000	5000	5000	5000	5000	5000	**250**
	8000	8000	8000	8000	7881	7746	7729	7729	7729	**U**
1400	5000	5000	4788	4514	4320	4195	4133	4126	4126	**250**
	8000	7747	7182	6770	6480	6293	6200	6188	6188	**U**
1500	4879	4419	4076	3818	3627	3492	3404	3360	3354	**250**
	7318	6629	6114	5727	5441	5238	5105	5040	5031	**U**
1600	4241	3829	3517	3278	3097	2961	2863	2800	2768	**250**
	6362	5743	5275	4918	4645	4441	4295	4199	4152	**U**
1700	3724	3352	3068	2849	2680	2548	2449	2378	2331	**250**
	5585	5027	4602	4274	4019	3823	3674	3566	3496	**U**
1800	3297	2960	2703	2502	2345	2220	2124	2050	1996	**250**
	4945	4441	4054	3753	3517	3331	3185	3075	2994	**U**
1900	2940	2635	2401	2217	2071	1954	1862	1789	1733	**250**
	4410	3953	3601	3325	3106	2932	2793	2684	2600	**U**
2000	2622	2263	2091	1956	1844	1709	1642	1578	1522	**250**
	3959	3543	3221	2968	2766	2603	2472	2366	2283	**U**
2100	2240	1930	1780	1661	1567	1490	1385	1336	1297	**250**
	3575	3195	2900	2667	2480	2329	2205	2105	2024	**U**
2200	1929	1750	1528	1423	1340	1272	1179	1135	1099	**250**
	3244	2896	2625	2411	2238	2097	1981	1886	1808	**U**
2300	1674	1516	1321	1229	1155	1094	1044	973	940	**250**
	2958	2638	2388	2190	2030	1899	1791	1701	1627	**U**
2400	1461	1322	1213	1068	1002	948	903	840	810	**250**
	2709	2413	2183	1999	1851	1729	1628	1543	1473	**U**
2500	1283	1160	1063	935	876	827	787	753	703	**250**
	2490	2216	2003	1833	1695	1581	1486	1407	1340	**U**

Glass & Rubber Combinations

Glazing

100/150mm x 50mm CENTRE/FRONT SG			
Glass Thickness	**Specific Profiles Required**	**Wedge Required**	**Pocket Size**
6mm		1615 – 1615 1620 – 1645	16.75mm
8mm		1620 – 1620 1625 – 1645	
10mm		1620 – 1646	
12mm		1630 – 1630 1630 – 1647	

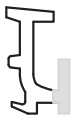
Glazing Wedge 1615

Glazing Wedge 1620

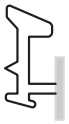
Glazing Wedge 1625

Glazing Wedge 1630

Glazing Wedge 1645



Glazing Wedge 1646



Glazing Wedge 1647

Energy Rating Definitions

All Darley products have been rated under the Australian Fenestration Ratings Council (AFRC) Energy Rating Scheme.

Definitions

The following are terms used in describing the energy ratings of windows as defined by the Window Energy Rating Scheme (WERS). For further information go to www.wers.net.

U-Value (U_w)

U-Value measures how well a product prevents heat from escaping. It is a measure of the rate of non solar heat loss or gain through a material or assembly. U-Value ratings generally fall between 2.0 - 10.0 W/m^2 for Australian products. The rate of heat is indicated in the terms of the U-Value of a window assembly which includes the effect of the grame, glass, seals and any spacers. The lower the U-value, the greater a window's resistance to heat flow and the better its insulating value. The U-Value for a window takes account for the various U-values for the components making up the window, so you may see these in technical literature:

UW is the value for the whole window and because of it's importance is usually abbreviated to U.
U_c is the value at the centre of glass.
U_f is the value for the frame.

Solar Heat Gain Coefficient ($SHGC_w$)

SHGC measures how well a product blocks heat caused by sunlight. The SHGC is a fraction of incident solar radiation admitted through a window, both directly transmitted, and absorbed and subsequently released inward. SHGC is expressed as a number between 0 and 1. The lower a window's SHGC, the less solar heat it transmits.

Visible Transmittance (T_{vw})

Visible transmittance measures how much light comes in through a product. It is an optical property that indicates the amount of visible light transmitted. T_{vw} is expressed as a number between 0 and 1. The higher the number, the more light is transmitted.

Energy Rating: CityView 100mm Centre Single Glazed

Window Id	Glass Supplier	Glass	Uw	SHGCw	TVw	Air Infil.
DAR-072-043	OCEANIA	6SpGy	6.028	0.32	0.076	0.09
DAR-072-042	OCEANIA	6SpGn	6.028	0.476	0.597	0.09
DAR-072-040	OCEANIA	6SolTNtl	4.19	0.482	0.567	0.09
DAR-072-041	OCEANIA	6SolTGy	4.219	0.333	0.273	0.09
DAR-072-027	VIRIDIAN	6Sn	4.511	0.532	0.62	0.09
DAR-072-044	<UNKNOWN>	6Pb	4.242	0.629	0.725	0.09
DAR-072-039	<UNKNOWN>	6i89	4.162	0.656	0.779	0.09
DAR-072-038	OCEANIA	6Gy	6.028	0.524	0.374	0.09
DAR-072-037	OCEANIA	6Gn	6.028	0.556	0.688	0.09
DAR-072-036	OCEANIA	6EVSpGn	4.356	0.336	0.44	0.09
DAR-072-029	OCEANIA	6EVSpBl	4.338	0.329	0.347	0.09
DAR-072-030	OCEANIA	6EVGy	4.338	0.372	0.287	0.09
DAR-072-035	OCEANIA	6EvGn	4.226	0.251	0.256	0.09
DAR-072-034	OCEANIA	6EVClr	4.338	0.564	0.597	0.09
DAR-072-032	OCEANIA	6EVBz	4.338	0.411	0.339	0.09
DAR-072-033	OCEANIA	6EVBG	4.226	0.294	0.291	0.09
DAR-072-031	OCEANIA	6ET	4.171	0.63	0.73	0.09
DAR-072-028	GENERIC	6Clr	6.028	0.744	0.791	0.09
DAR-072-026	OCEANIA	6AB	6.028	0.47	0.471	0.09
DAR-072-023	OCEANIA	6.38TransLam	5.978	0.611	0.598	0.09
DAR-072-024	OCEANIA	6.38GyLam	5.978	0.559	0.395	0.09
DAR-012-004	OCEANIA	6.38CPNtl	4.499	0.467	0.517	0.07
DAR-072-020	OCEANIA	6.38CPNtl	4.194	0.465	0.527	0.09
DAR-072-019	OCEANIA	6.38CPGy	4.165	0.449	0.349	0.09
DAR-072-021	OCEANIA	6.38CPGn	4.166	0.457	0.637	0.09
DAR-072-022	OCEANIA	6.38CPClr	4.166	0.618	0.735	0.09
DAR-072-025	GENERIC	6.38ClrLam	5.978	0.709	0.784	0.09
DAR-072-046	<UNKNOWN>	5PbG	4.286	0.642	0.732	0.09
DAR-072-045	GENERIC	5Clr	6.06	0.749	0.794	0.09
DAR-072-048	VIRIDIAN	4Sn	4.632	0.526	0.598	0.09
DAR-072-049	<UNKNOWN>	4Pb	4.328	0.659	0.739	0.09
DAR-072-047	GENERIC	4Clr	6.092	0.785	0.809	0.09
DAR-072-002	<UNKNOWN>	12Gy	5.844	0.403	0.173	0.09
DAR-072-001	OCEANIA	12Clr	5.844	0.657	0.755	0.09

KEY
Lam = Laminate, Sp = Super, EV = Evantage, CP = Comfort Plus, Ntl = Neutral, Pb = Planibel G, SolT - SolTech, ET = Energy Tech, Sn = Sunergy, LE = Low E, i89 = i89, Clr = Clear, Gy = Grey, Gn = Green, B = Blue, Bz = Bronze, BG = Blue Green, AB = Arctic Blue, Trans = Translucent,

NOTES
1. Percentage improvement figures are compared with using base-case Generic Window 1 (3mm clear in standard aluminium frame)
2. A negative percentage improvement figure indicates performance worse than the base-case window
3. A positive percentage improvement figure indicates performane better than the base-case window
4. Maximum air infiltration is 5.0 L/s.m^2 at a positive pressure difference of 75Pa as measured according to AS 2047
5. Static performance (U, SHFC, Tvw, Tdw) Calculated using Window 5.2 and Therm 5.2 software (LBNL), 2000-2003
6. Annual energy performance (stars and % improvements) calculated using Nationwide House Energy Rating Software (AccuRate)
7. Results disclosed at National fenestration Rating Council (NFRC) regulations

Window Id	Glass Supplier	Glass	Uw	SHGCw	TVw	Air Infil.
DAR-072-004	OCEANIA	12.38GyLam	5.809	0.528	0.385	0.09
DAR-072-003	OCEANIA	12.38ClrLam	5.809	0.664	0.763	0.09
DAR-072-050	<UNKNOWN>	11.52LE	4.053	0.561	0.703	0.09
DAR-072-005	GENERIC	11.52ClrLam	5.722	0.655	0.764	0.09
DAR-072-014	OCEANIA	10SolTNtl	4.16	0.471	0.553	0.09
DAR-072-017	VIRIDIAN	10Sn	4.472	0.526	0.61	0.09
DAR-072-016	OCEANIA	10Gy	5.904	0.432	0.222	0.09
DAR-072-015	OCEANIA	10ET	4.13	0.594	0.709	0.09
DAR-072-018	GENERIC	10Clr	5.904	0.679	0.765	0.09
DAR-072-006	OCEANIA	10.38SpGn	5.868	0.463	0.59	0.09
DAR-072-009	OCEANIA	10.38GyLam	5.868	0.532	0.388	0.09
DAR-072-008	OCEANIA	10.38EVSpGn	4.27	0.329	0.435	0.09
DAR-072-007	OCEANIA	10.38EVGy	4.252	0.358	0.284	0.09
DAR-072-013	OCEANIA	10.38CPNtl	4.109	0.459	0.561	0.09
DAR-072-010	OCEANIA	10.38CPGy	4.091	0.437	0.364	0.09
DAR-072-012	OCEANIA	10.38CPClr	4.122	0.569	0.707	0.09
DAR-072-011	OCEANIA	10.38Clr	5.868	0.67	0.768	0.09

KEY
Lam = Laminate, Sp = Super, EV = Evantage, CP = Comfort Plus, Ntl = Neutral, Pb = Planibel G, SolT - SolTech, ET = Energy Tech, Sn = Sunergy, LE = Low E, i89 = i89, Clr = Clear, Gy = Grey, Gn = Green, B = Blue, Bz = Bronze, BG = Blue Green, AB = Arctic Blue, Trans = Translucent,

NOTES
1. Percentage improvement figures are compared with using base-case Generic Window 1 (3mm clear in standard aluminium frame)
2. A negative percentage improvement figure indicates performance worse than the base-case window
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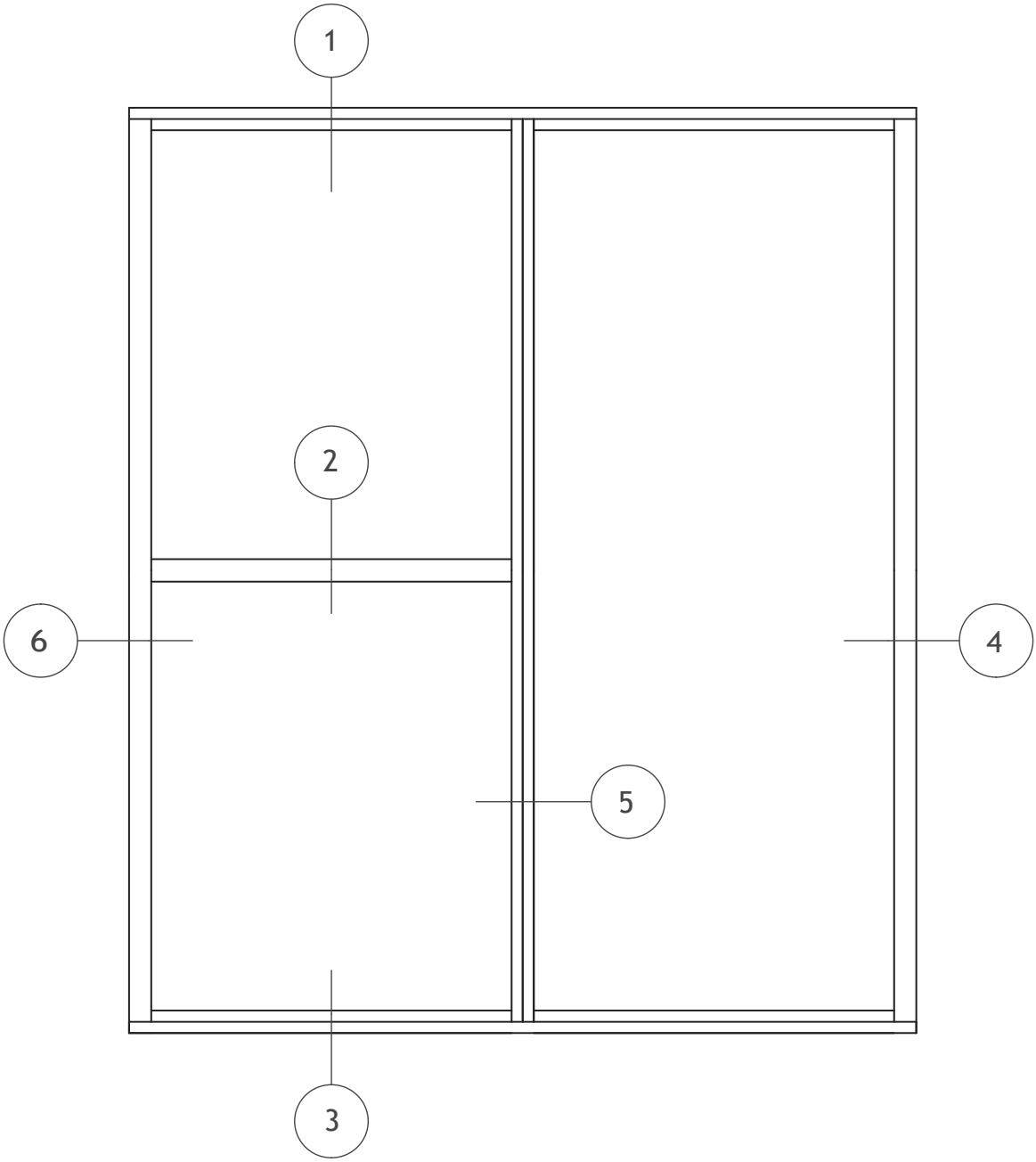
6. Annual energy performance (stars and % improvements) calculated using Nationwide House Energy Rating Software (AccuRate)
7. Results disclosed at National fenestration Rating Council (NFRC) regulations

General Configuration

All raw joints need to be sealed with small joint sealer or foam tab option.

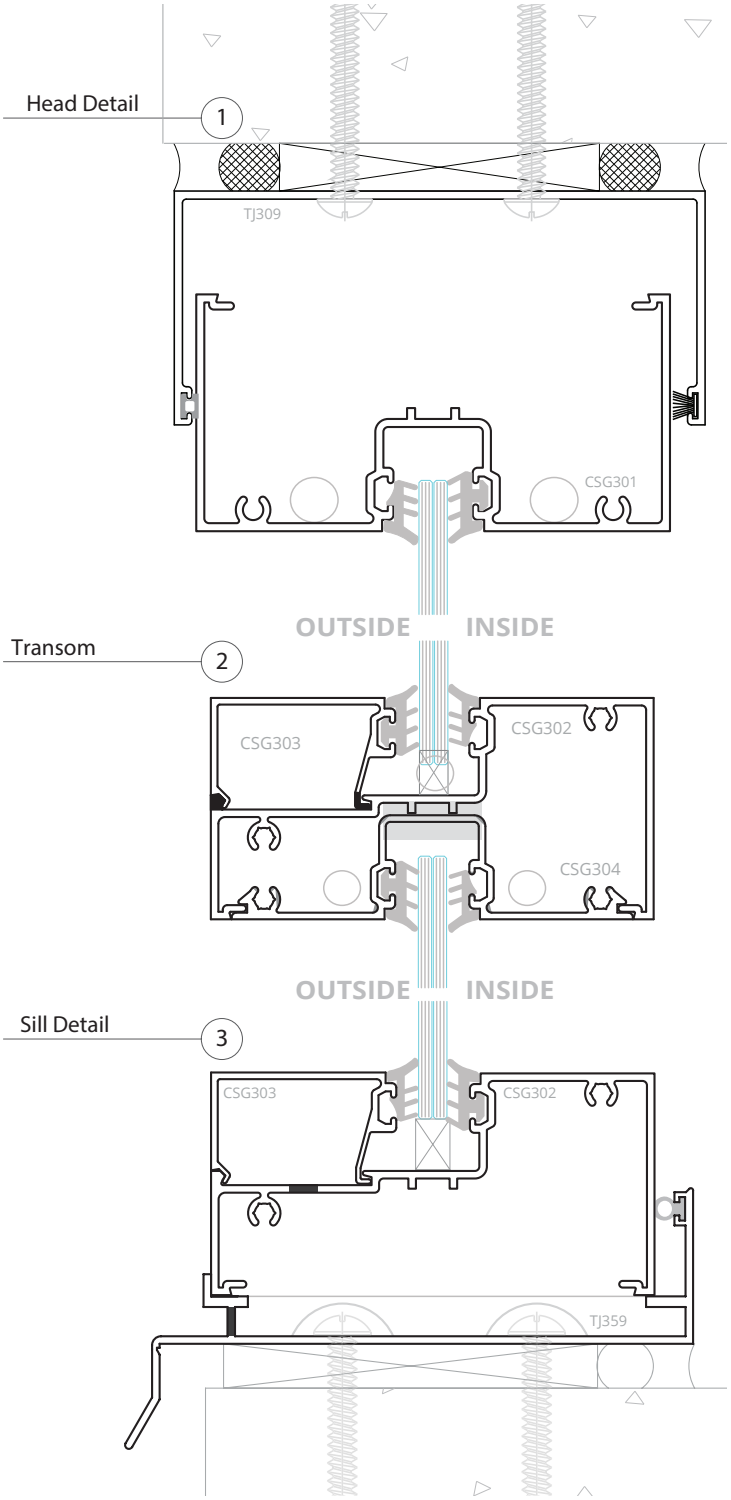
Configuration

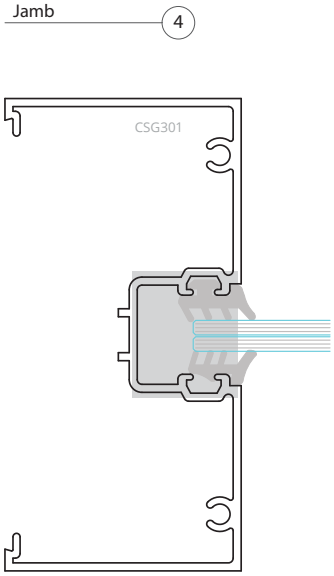


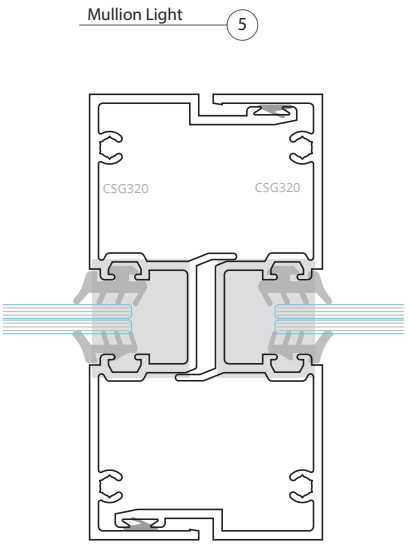
See also: Disclaimer and Copyright information on page 3

Fabrication

Cross Sections

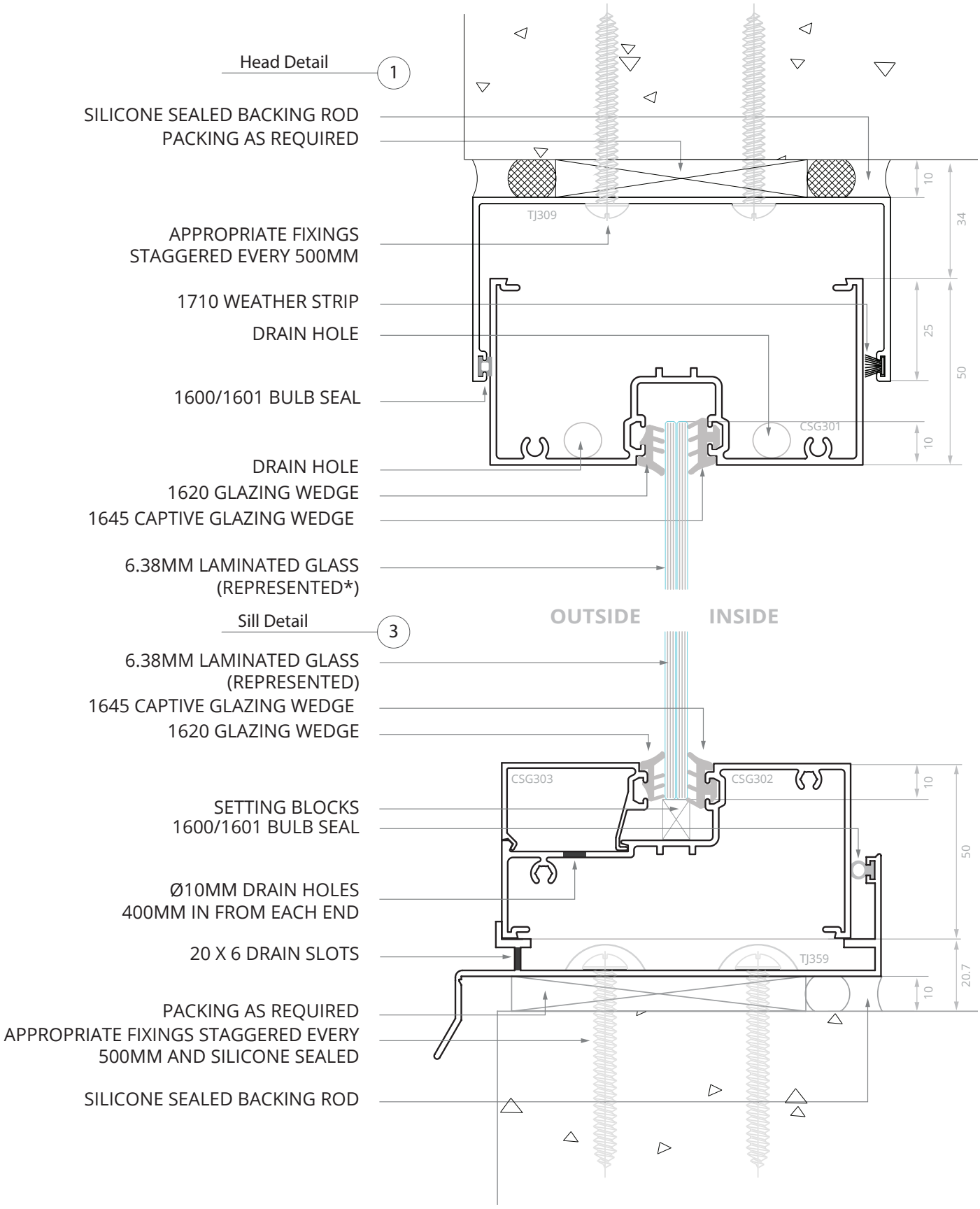






Head & Sill Option

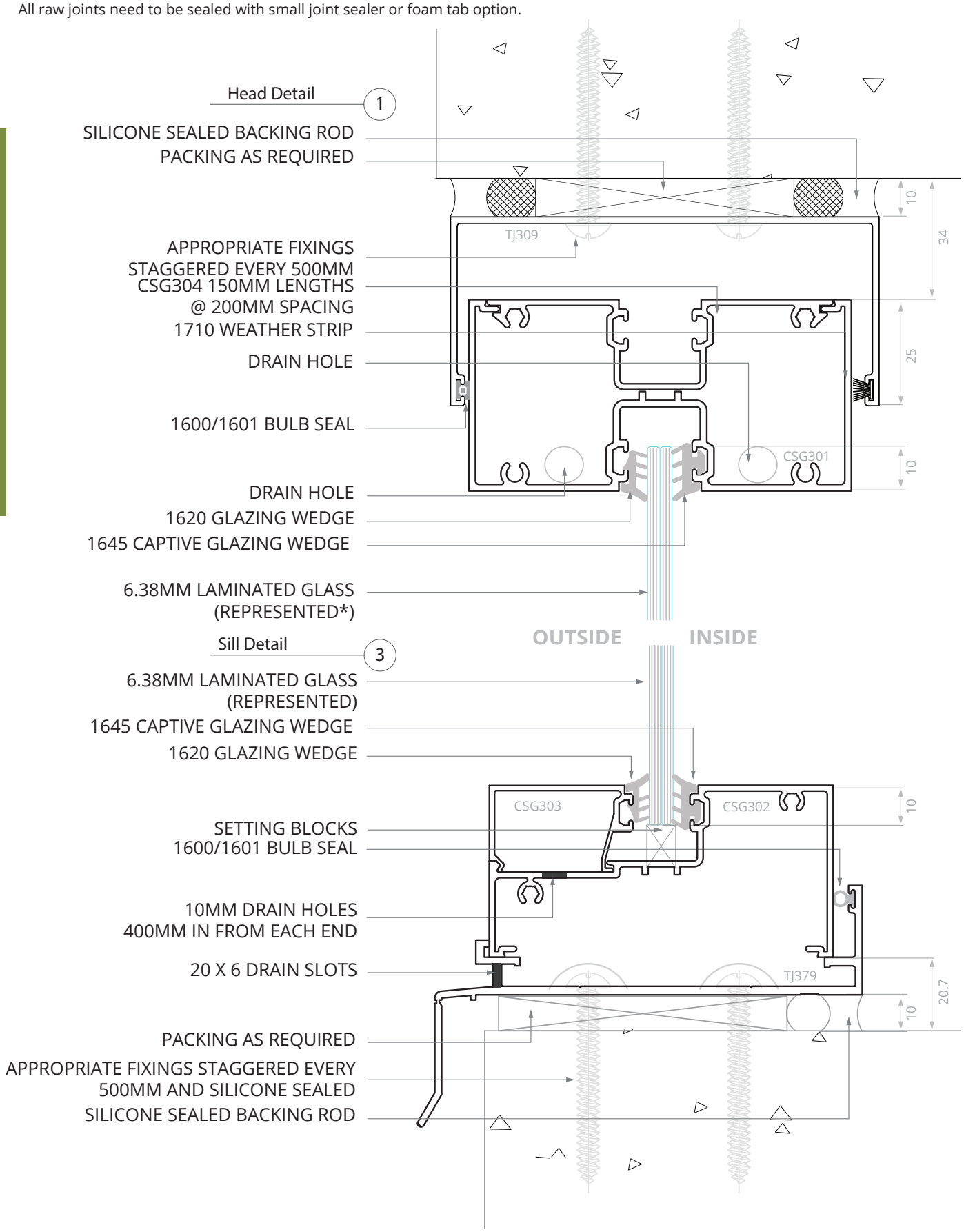
All raw joints need to be sealed with small joint sealer or foam tab option.



See also: Disclaimer and Copyright information on page 3

Head & Sill Option

All raw joints need to be sealed with small joint sealer or foam tab option.

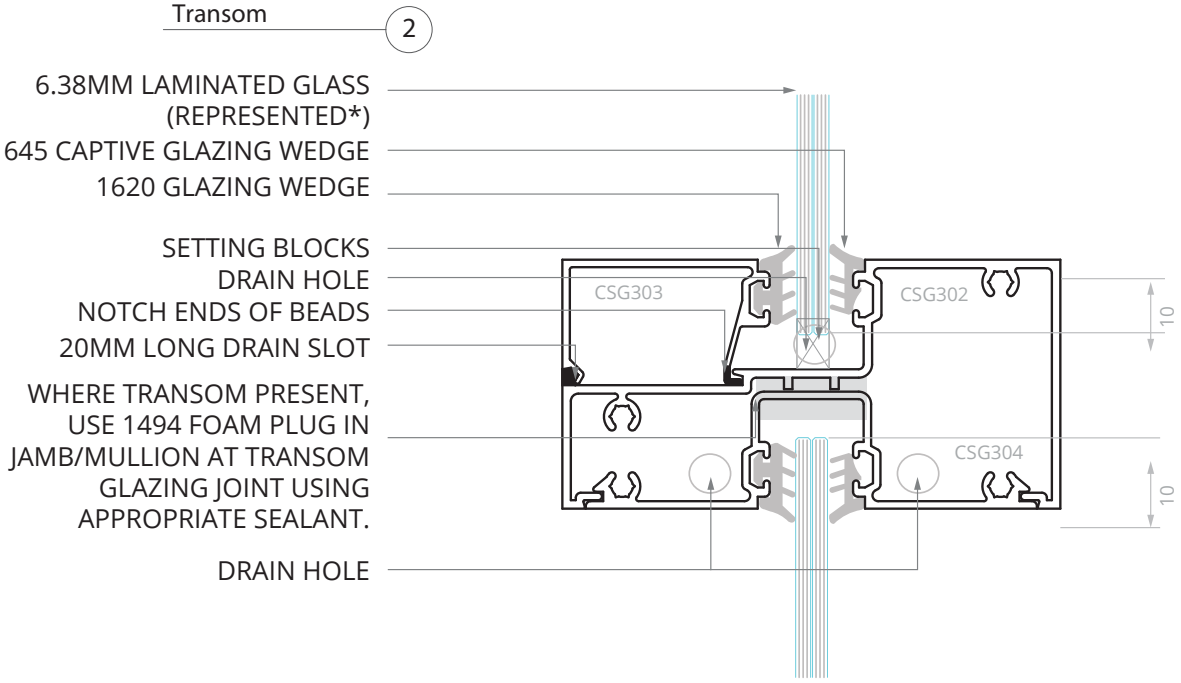


See also: Disclaimer and Copyright information on page 3

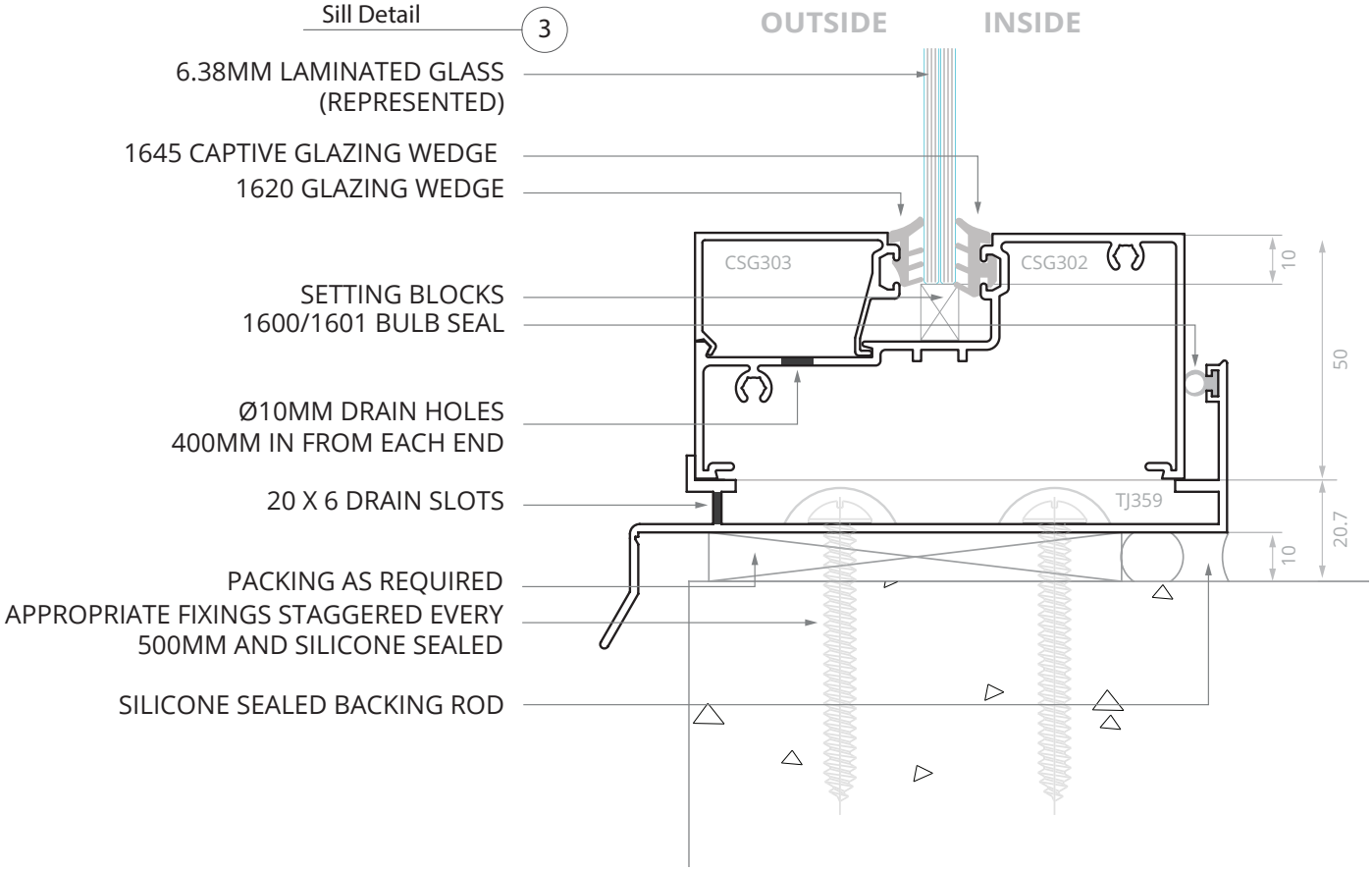
Transom Option

All raw joints need to be sealed with small joint sealer or foam tab option.

Transom 2



Sill Detail 3

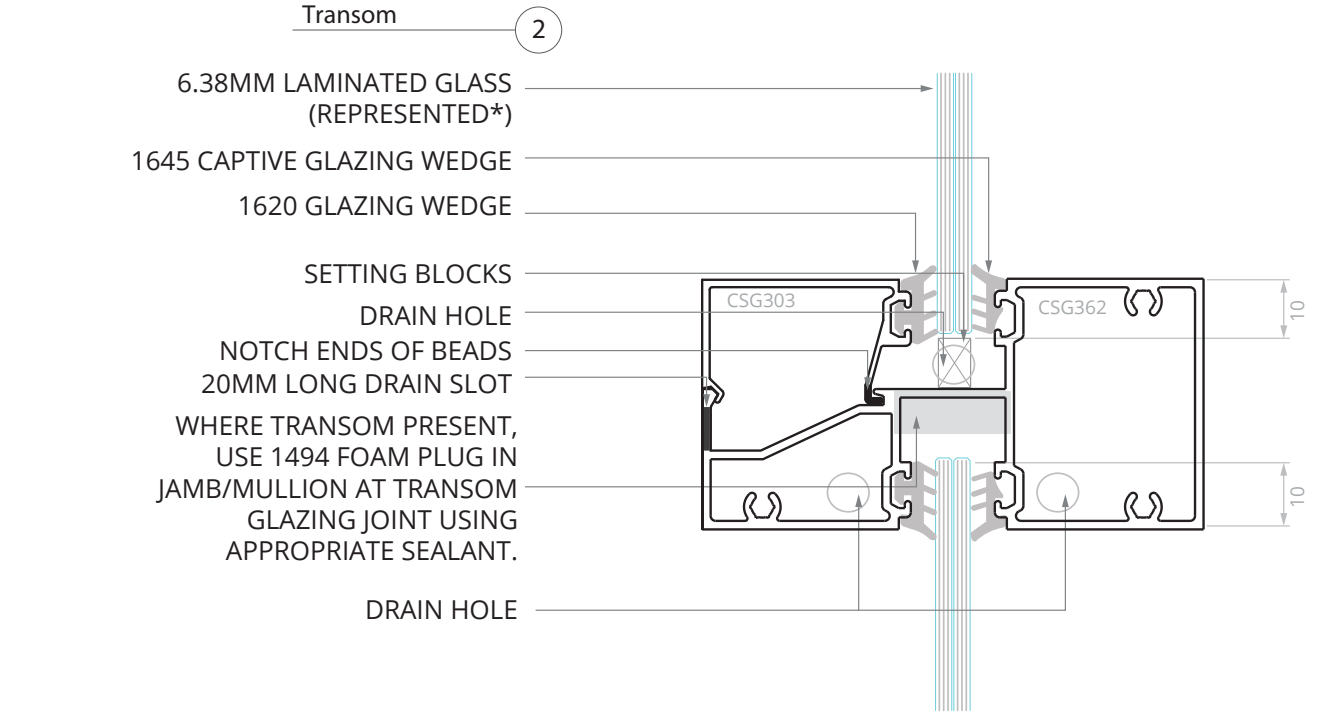


See also: Disclaimer and Copyright information on page 3

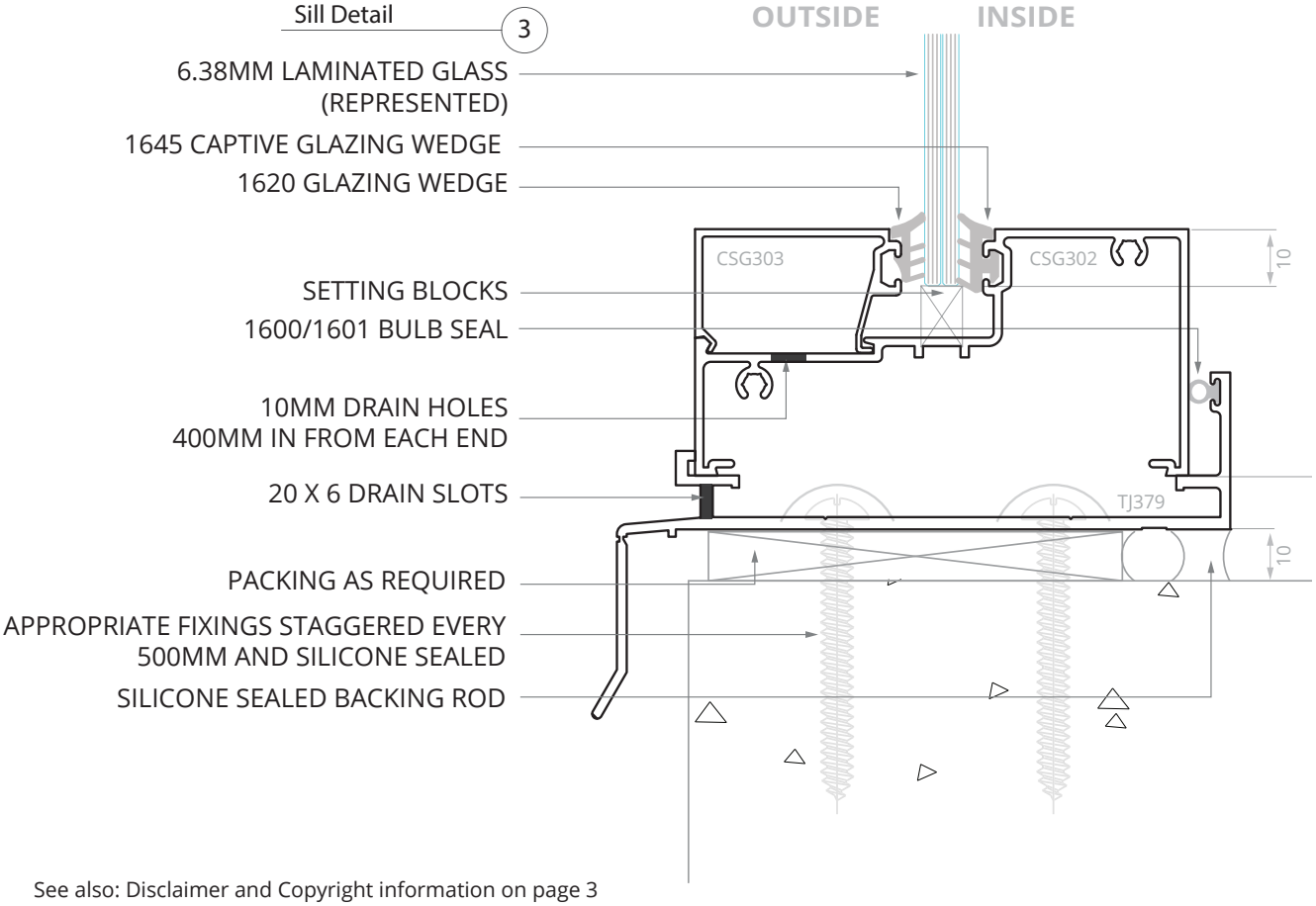
Transom Option

All raw joints need to be sealed with small joint sealer or foam tab option.

Transom 2



Sill Detail 3



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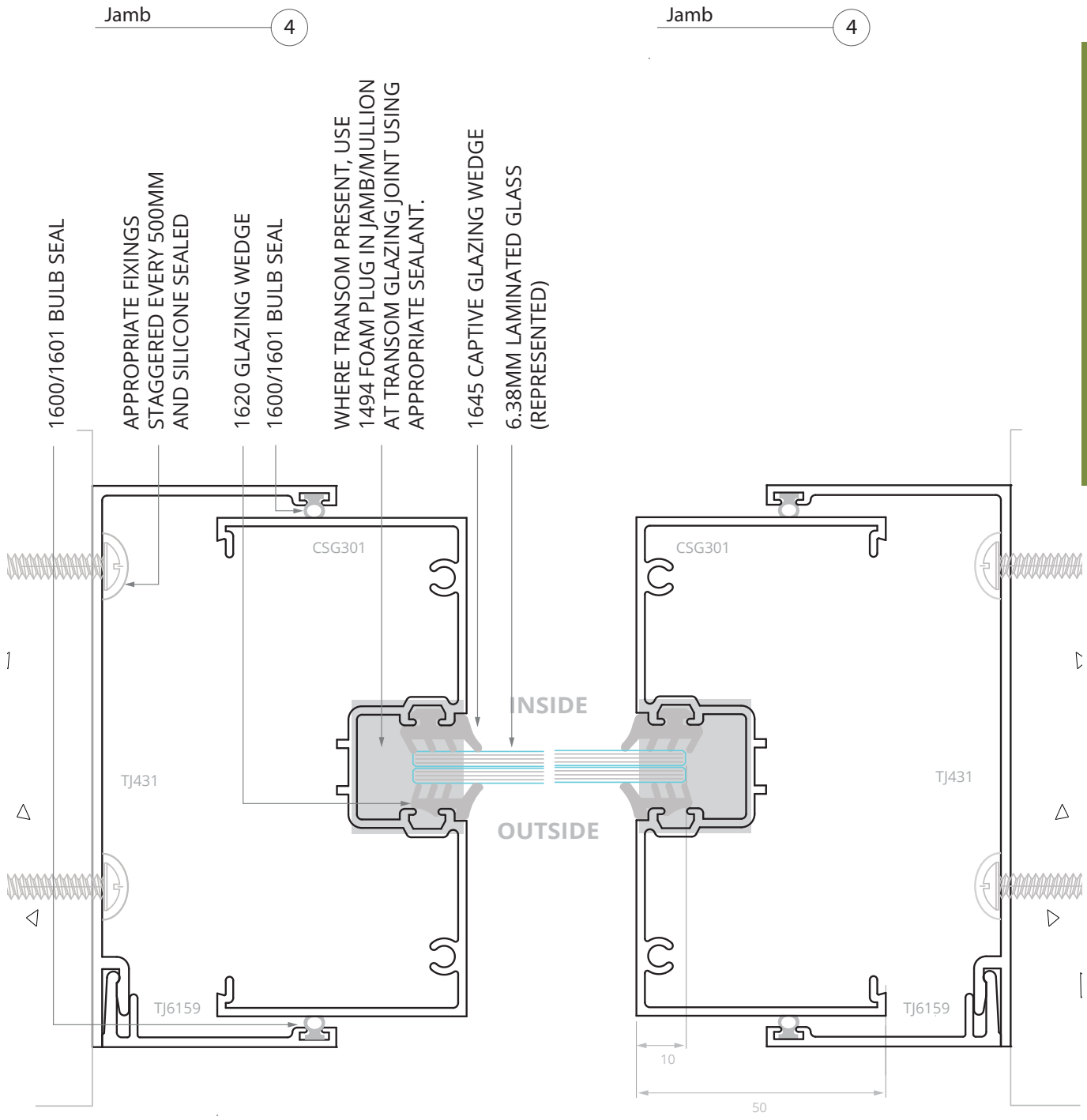
Jamb Option: Sub Jamb

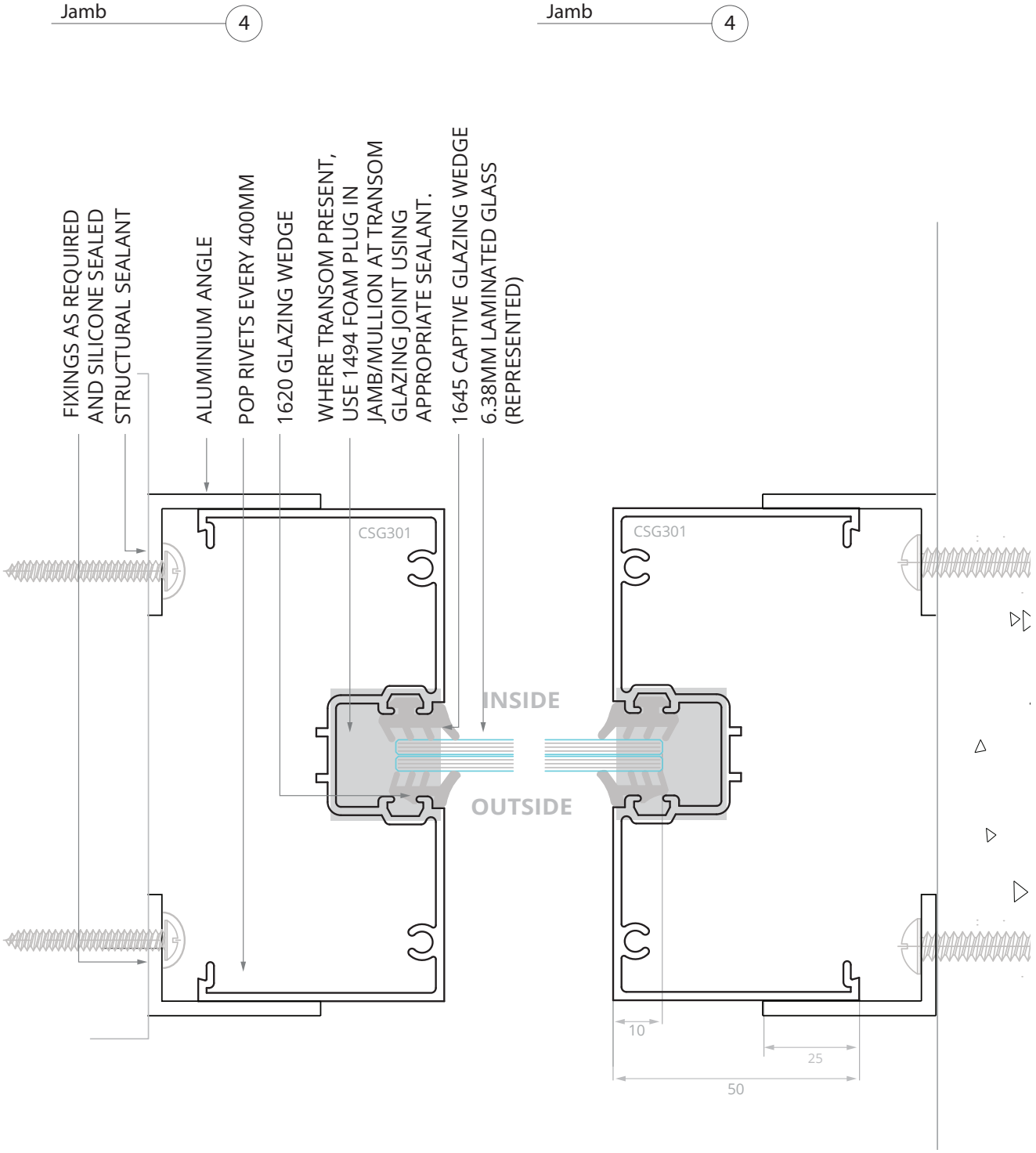
All raw joints need to be sealed with small joint sealer or foam tab option.



See also: Disclaimer and Copyright information on page 3

Jamb Option: Angle

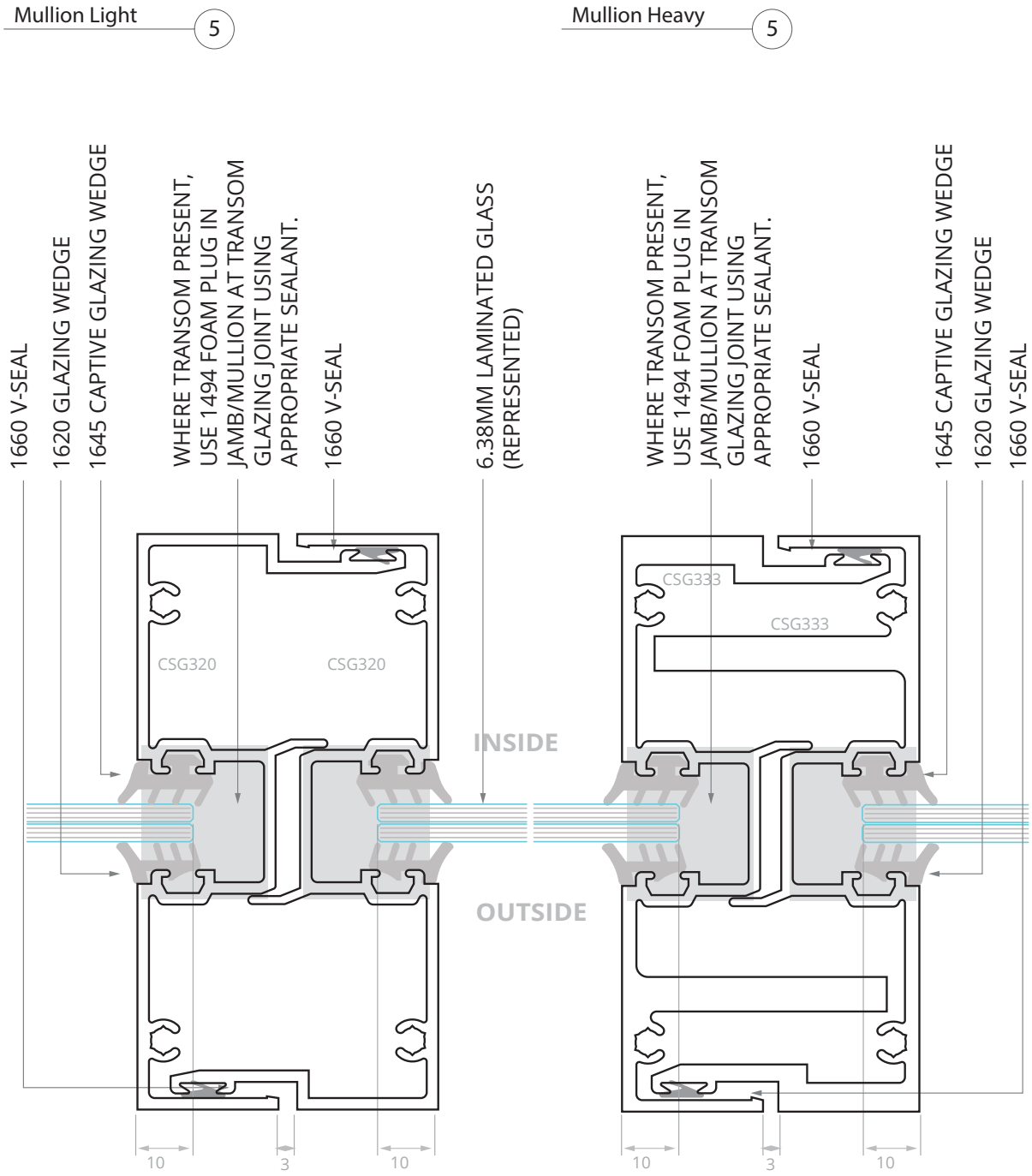
All raw joints need to be sealed with small joint sealer or foam tab option.



See also: Disclaimer and Copyright information on page 3

Mulion

All raw joints need to be sealed with small joint sealer or foam tab option.



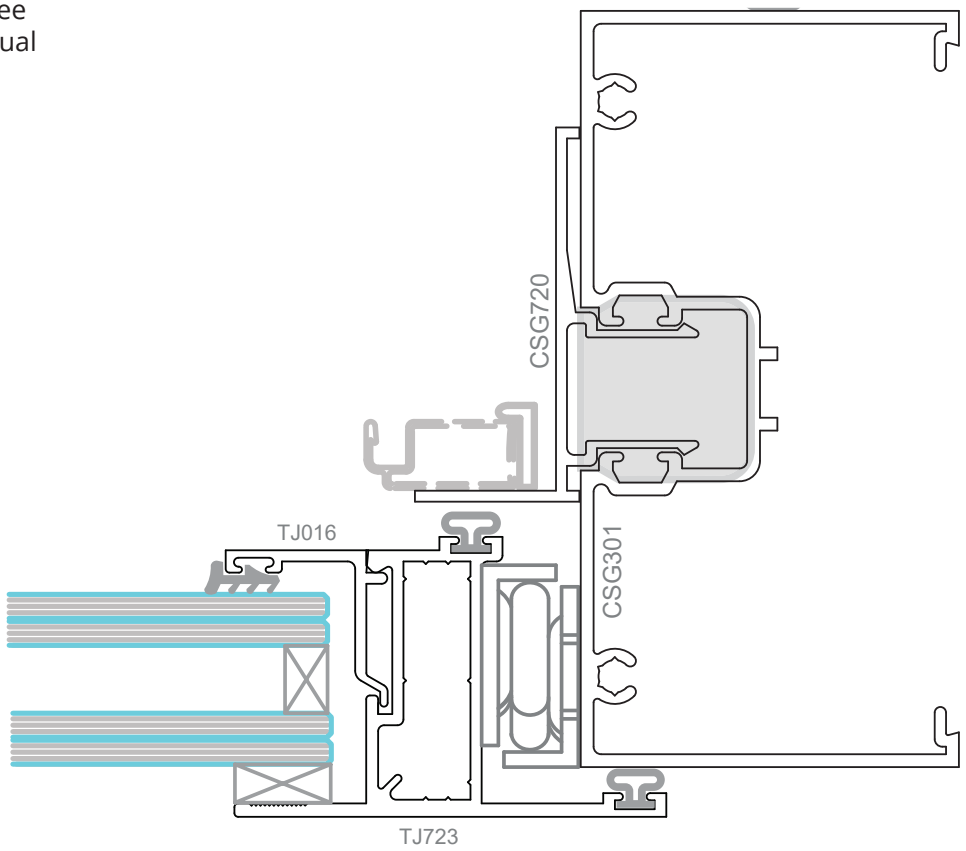
See also: Disclaimer and Copyright information on page 3

Fabrication

CityView 35mm Awning

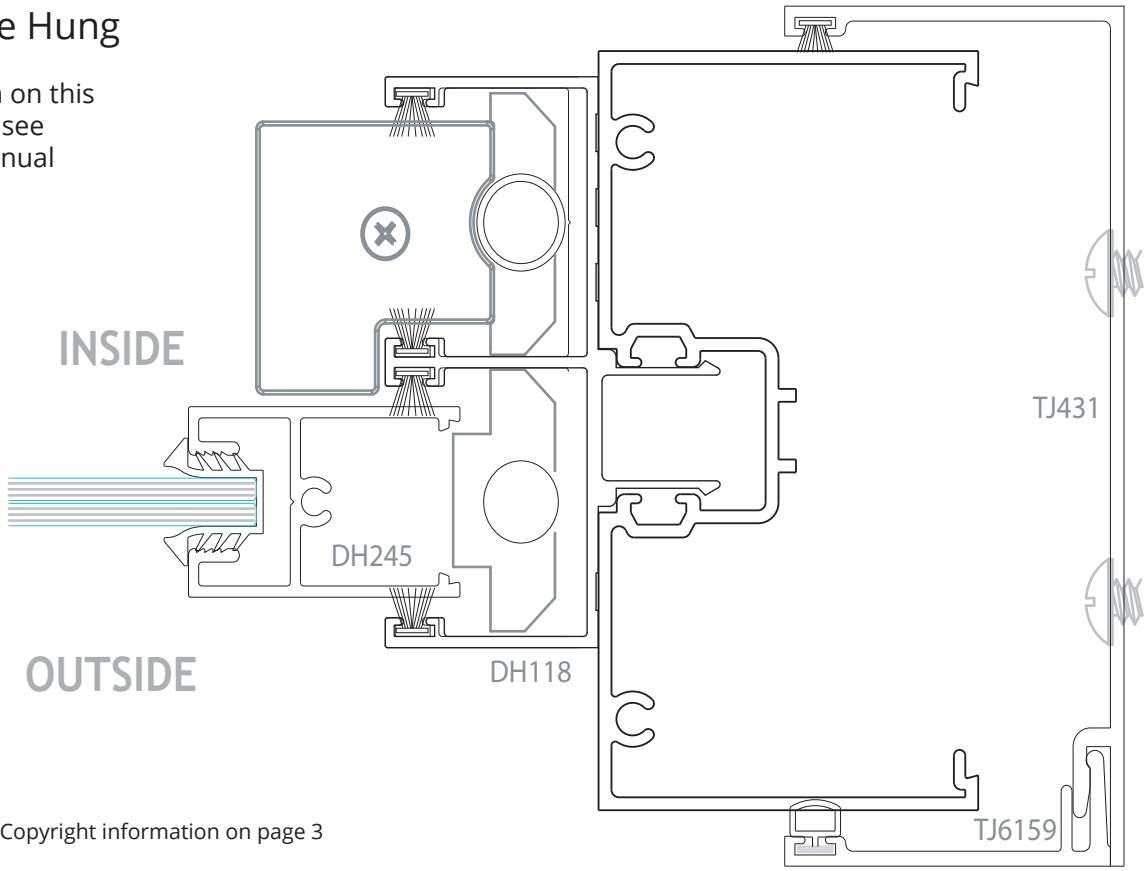
Scale 1:1

For more information on this configuration, please see relevent technical manual



CityView Double Hung

For more information on this configuration, please see relevent technical manual

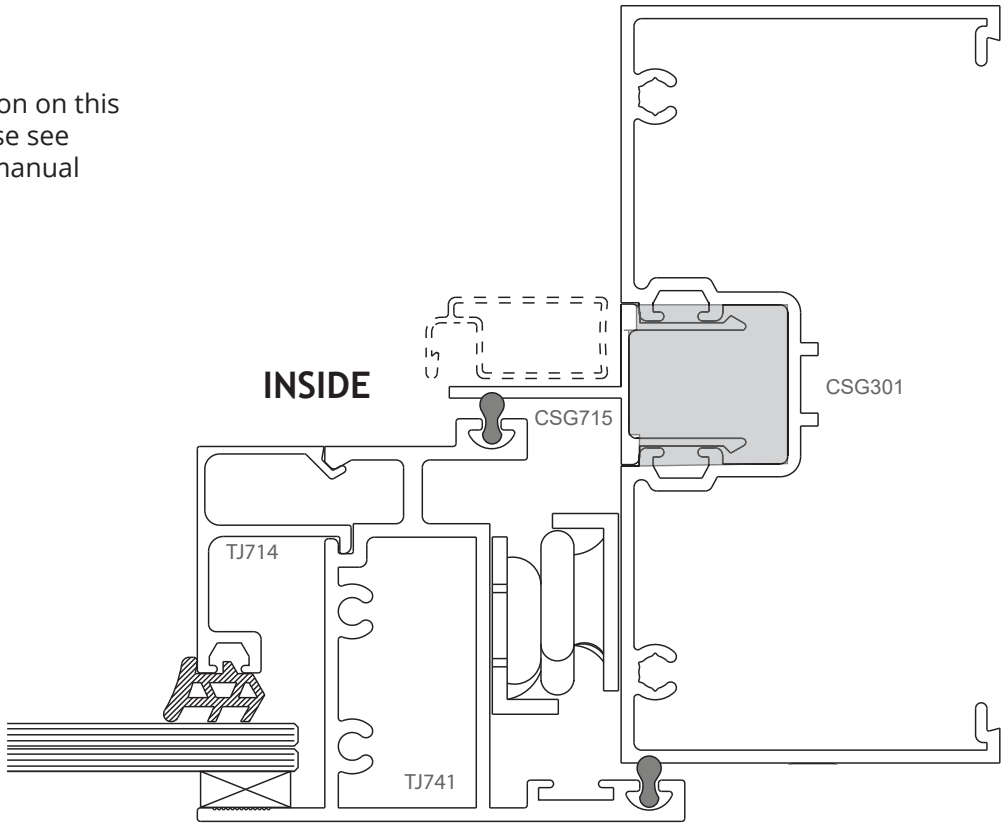


See also: Disclaimer and Copyright information on page 3

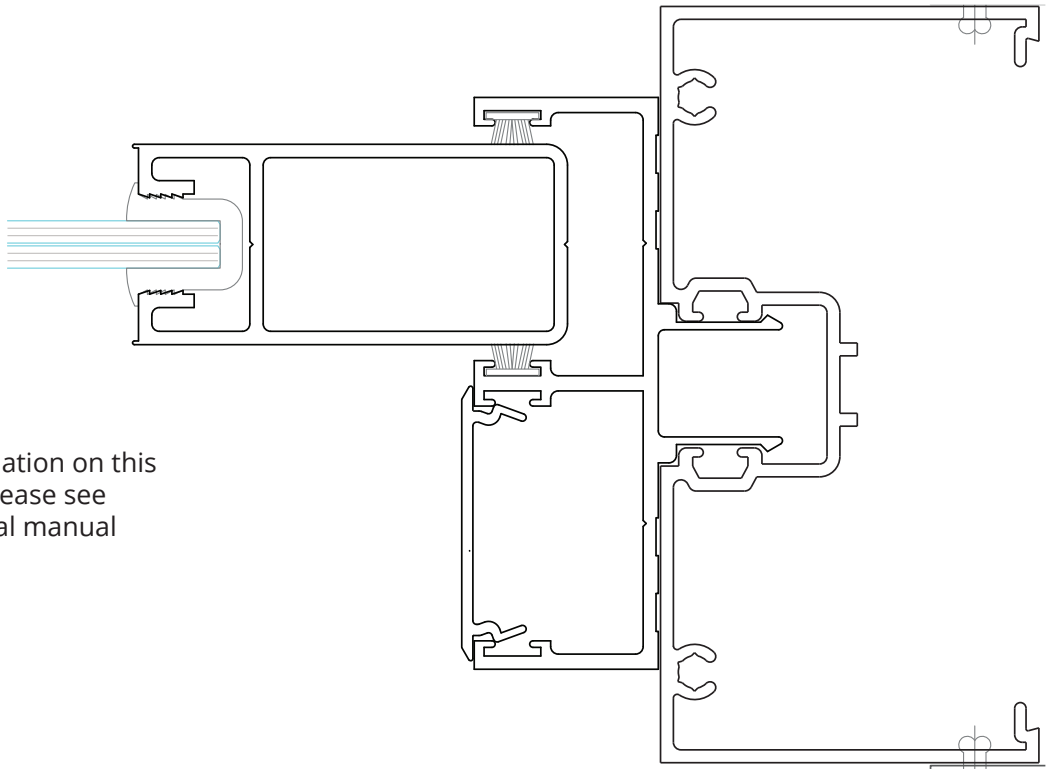
CityView 50mm Awning/Casement

Scale 1:1

For more information on this configuration, please see relevent technical manual



CityView Sliding Window - Single Piece



For more information on this configuration, please see relevent technical manual

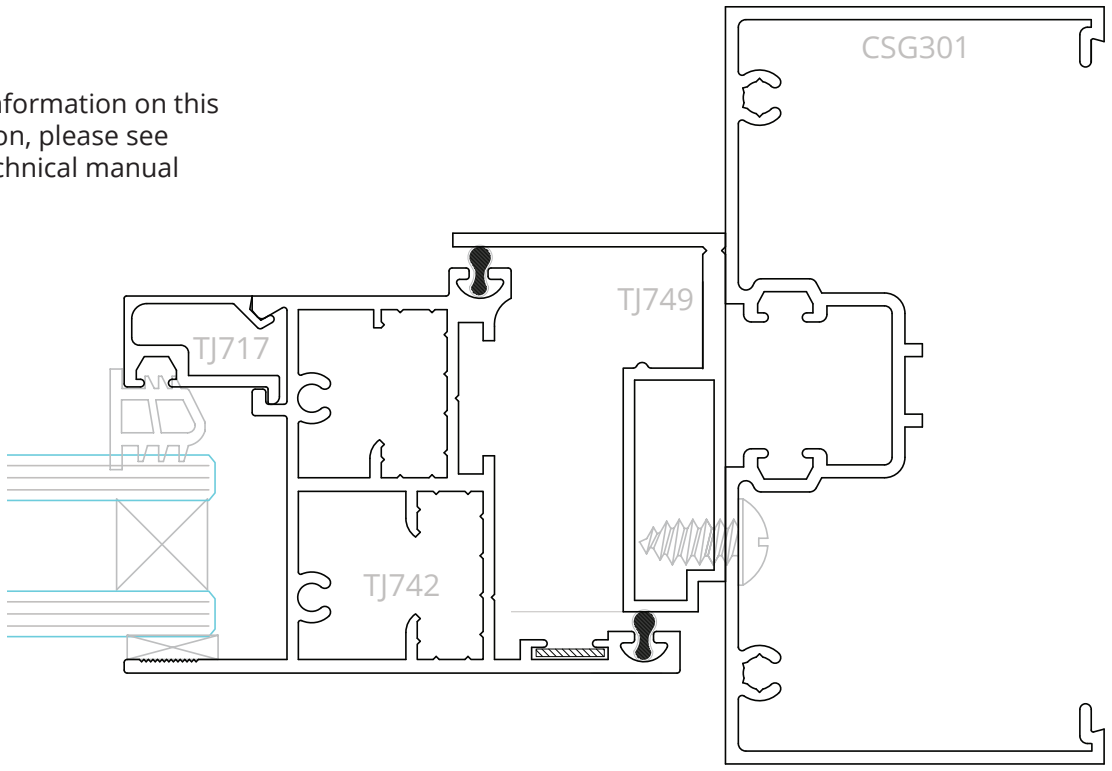
See also: Disclaimer and Copyright information on page 3

Fabrication

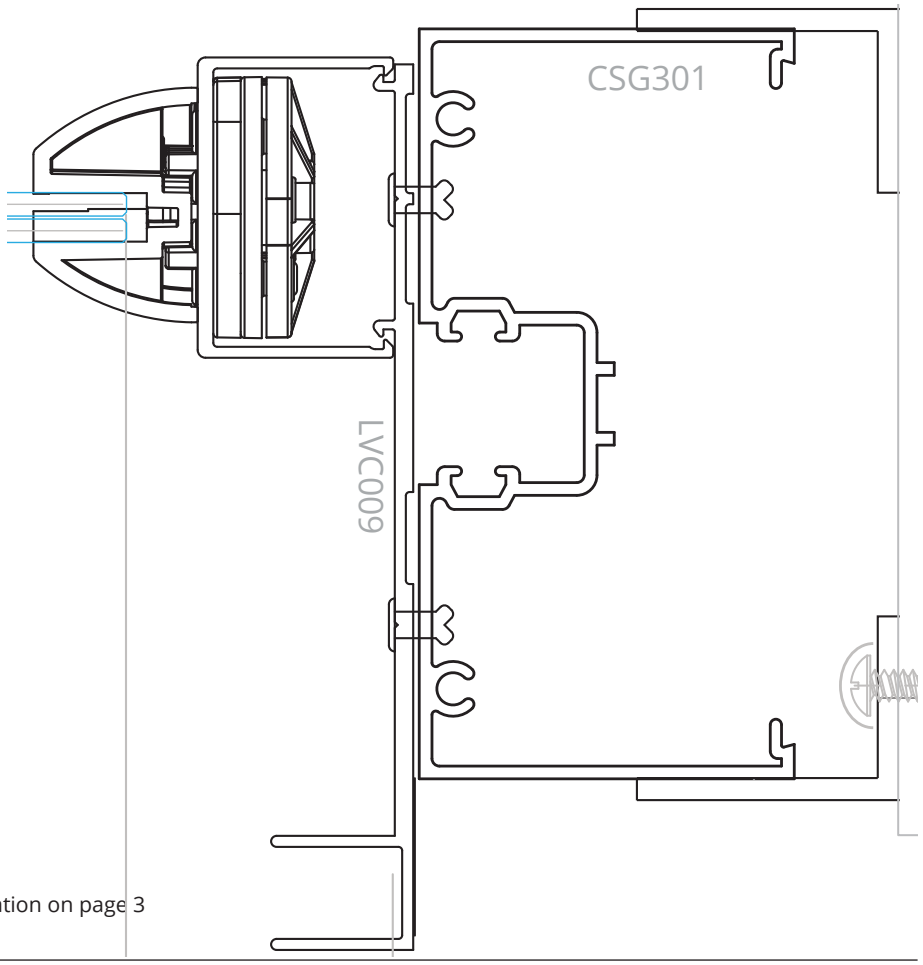
CityView 50mm Hook Awning

Scale 1:1

For more information on this configuration, please see relevent technical manual



CityView Louvre Window

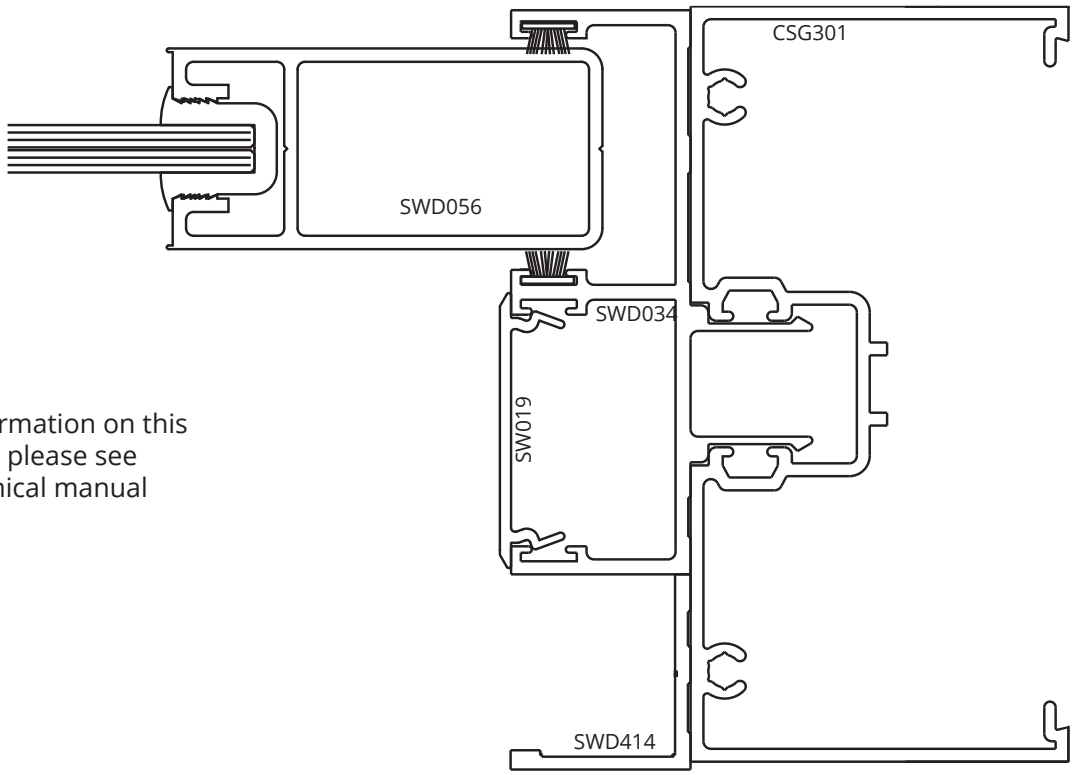


For more information on this configuration, please see relevent technical manual

See also: Disclaimer and Copyright information on page 3

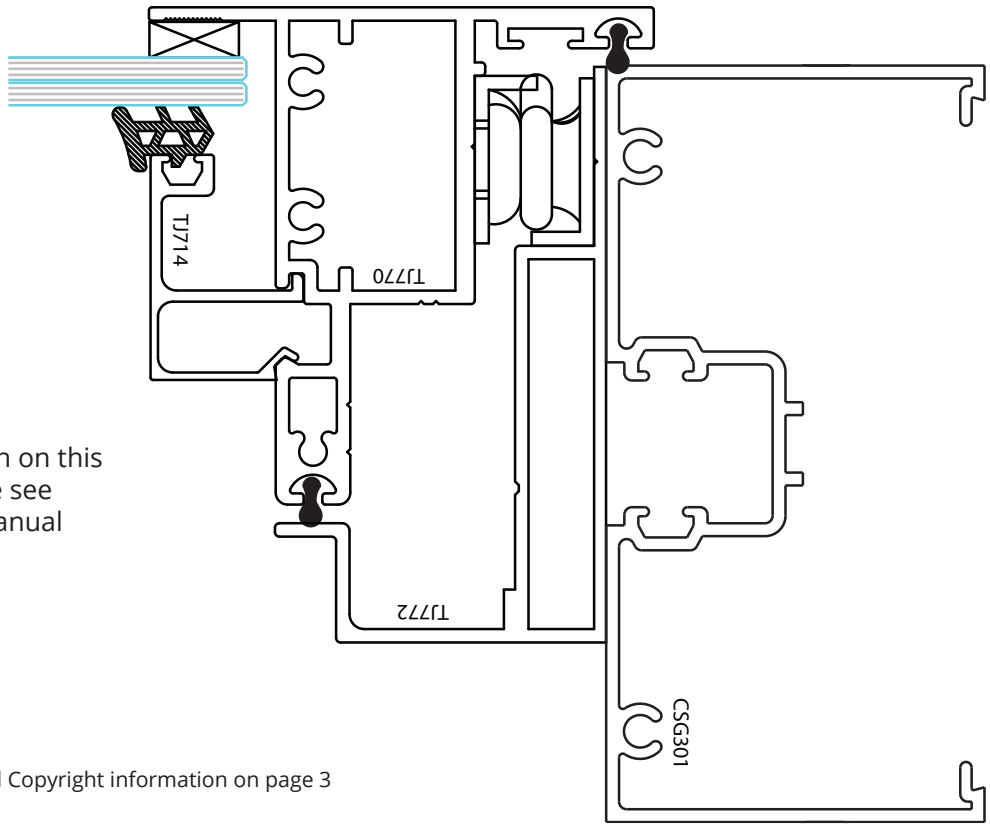
CityView Patio Door - Single Piece

Scale 1:1



For more information on this configuration, please see relevent technical manual

CityView Truth Awning

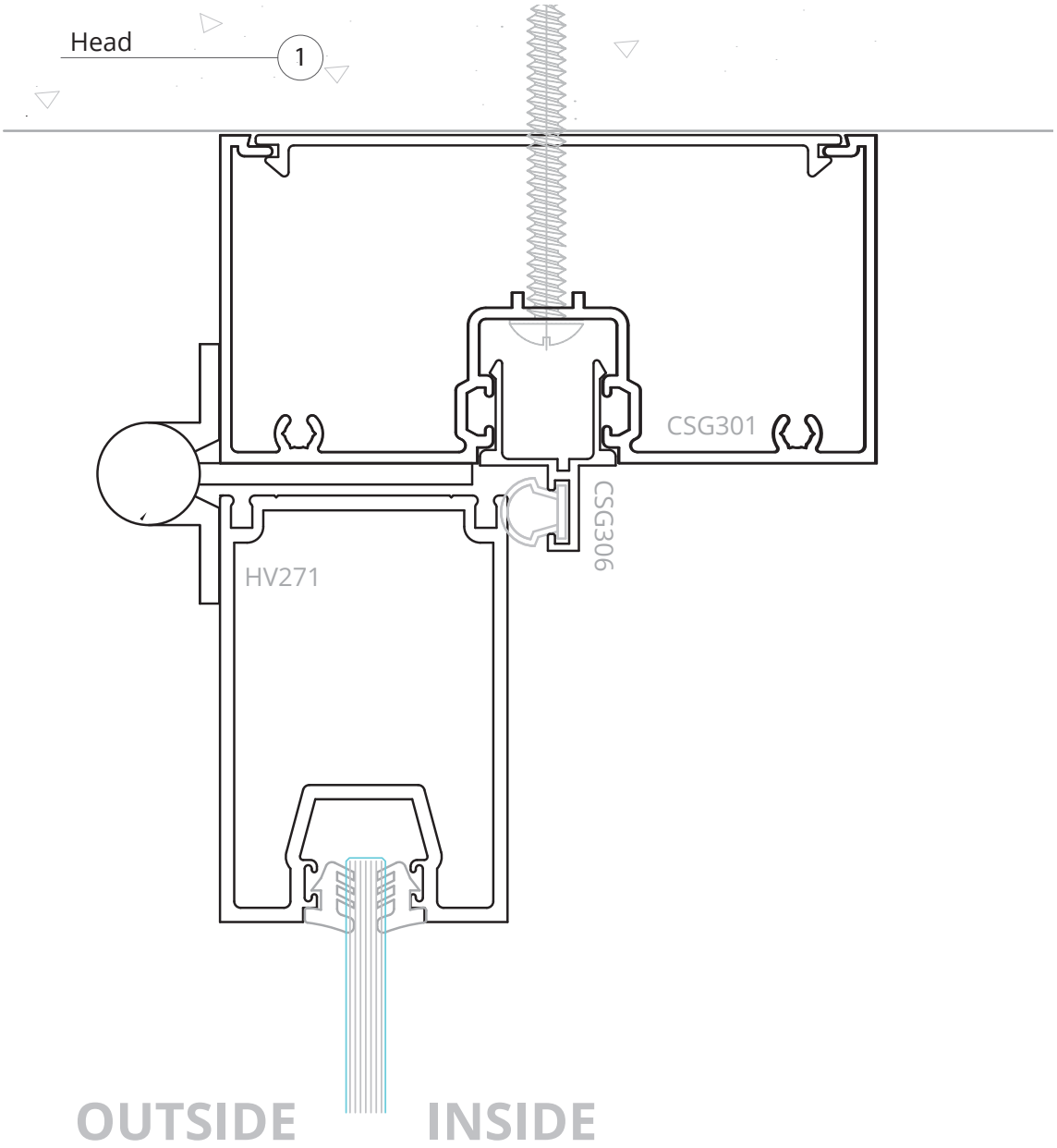


For more information on this configuration, please see relevent technical manual

See also: Disclaimer and Copyright information on page 3

CityView Servery Strut Window

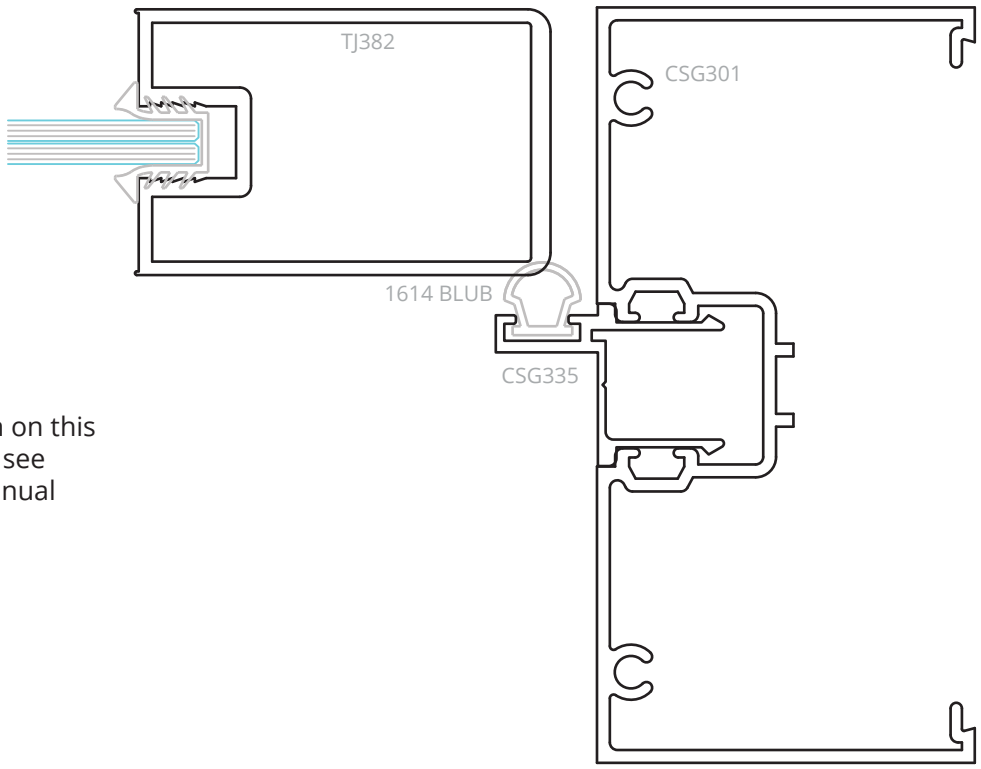
Scale 1:1



See also: Disclaimer and Copyright information on page 3

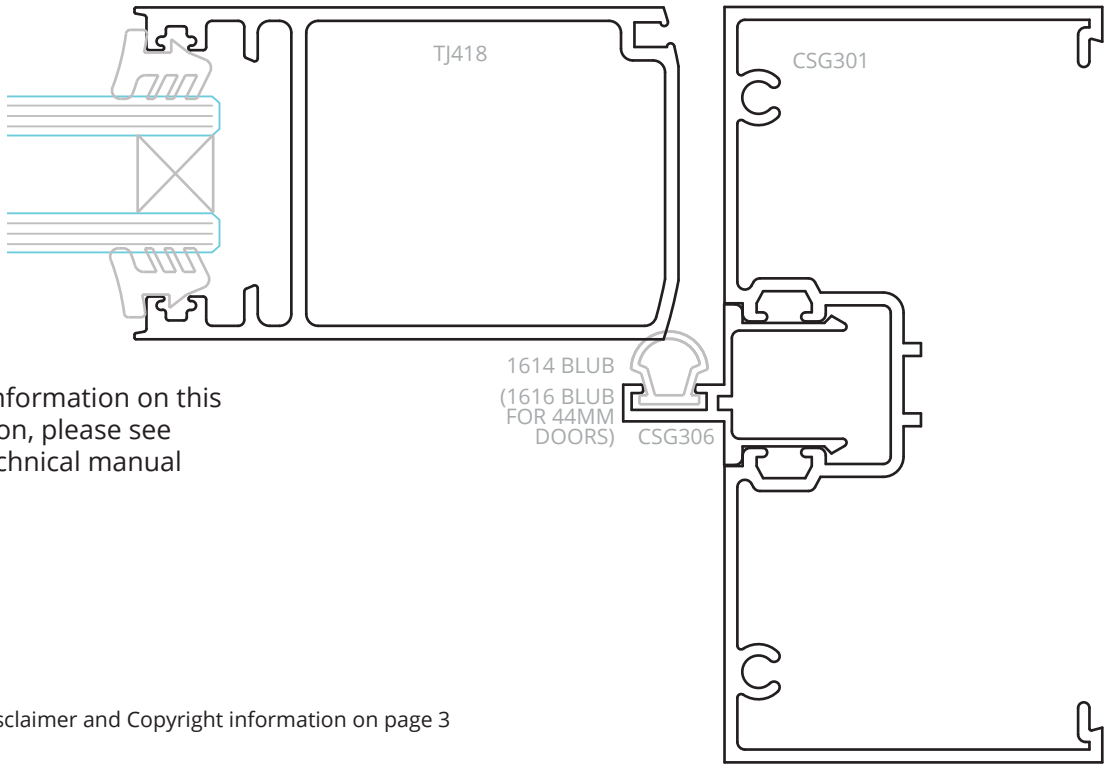
CityView 35mm Hinge Door

Scale 1:1



For more information on this configuration, please see relevent technical manual

CityView 40/44mm Hinge Door

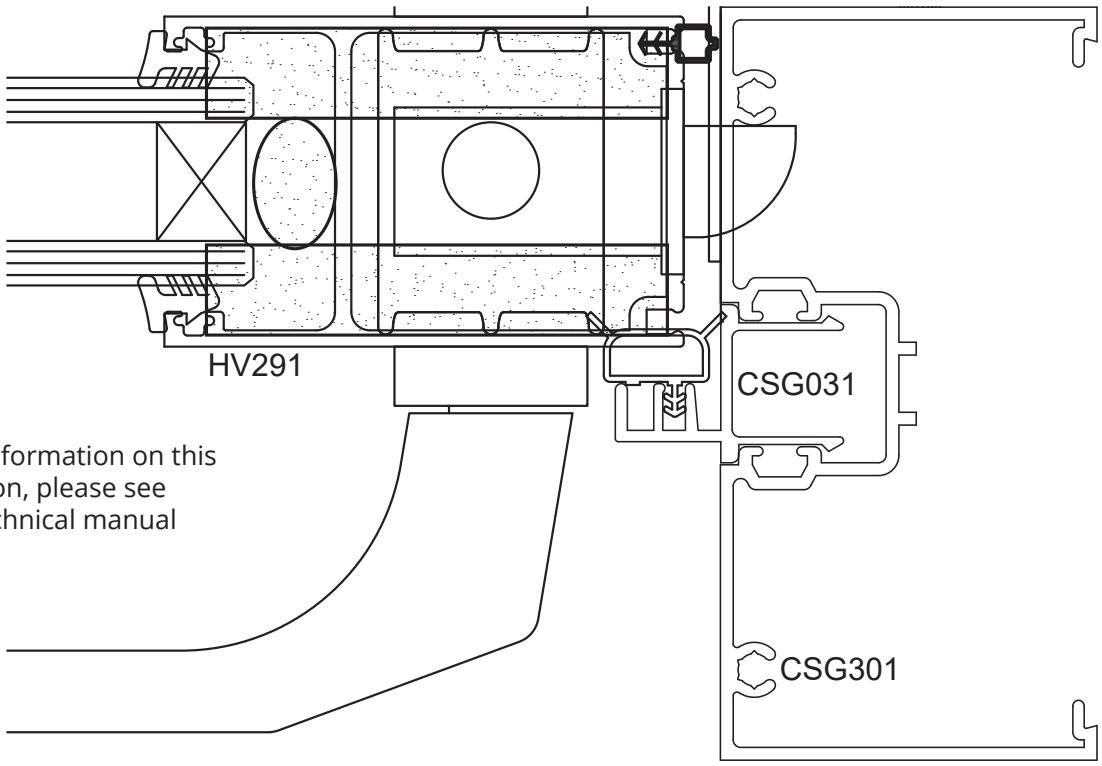


For more information on this configuration, please see relevent technical manual

See also: Disclaimer and Copyright information on page 3

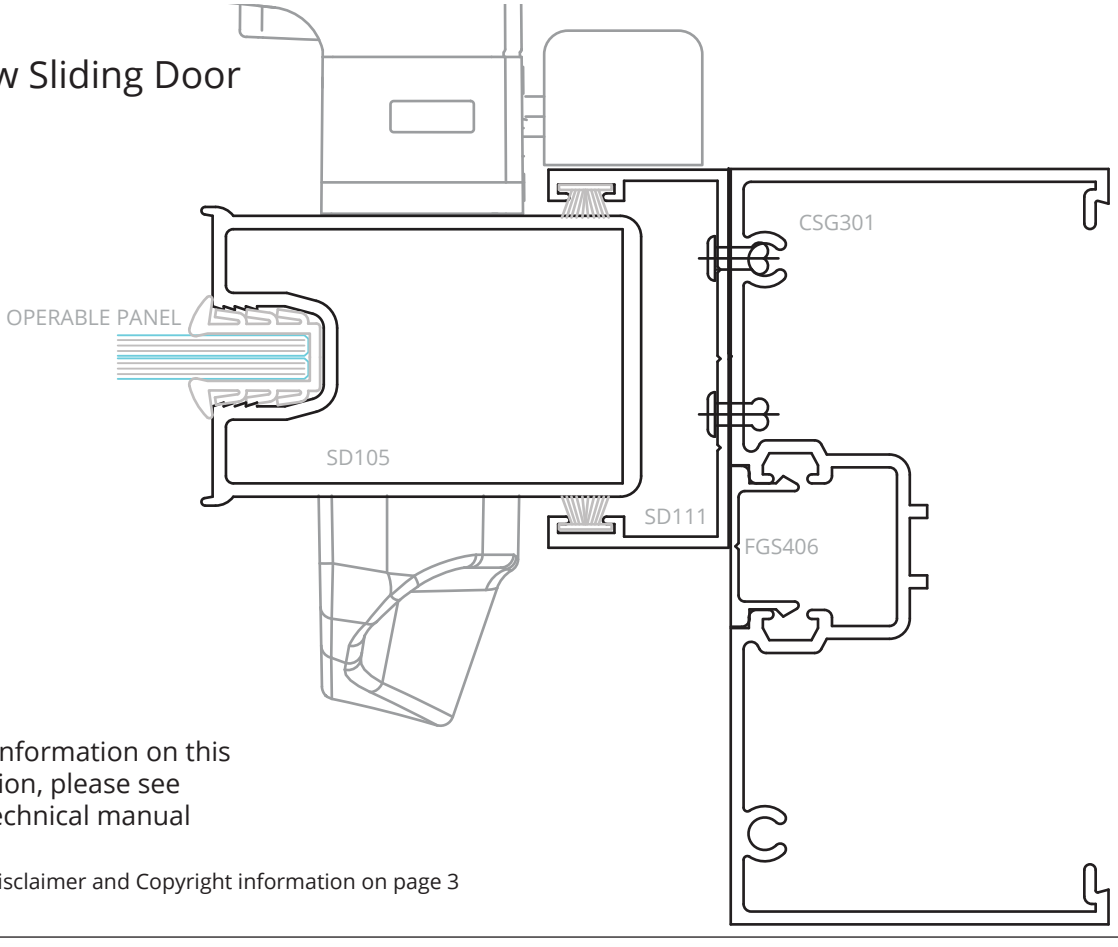
CityView 45mm Hinge Door

Scale 1:1



For more information on this configuration, please see relevent technical manual

CityView Sliding Door



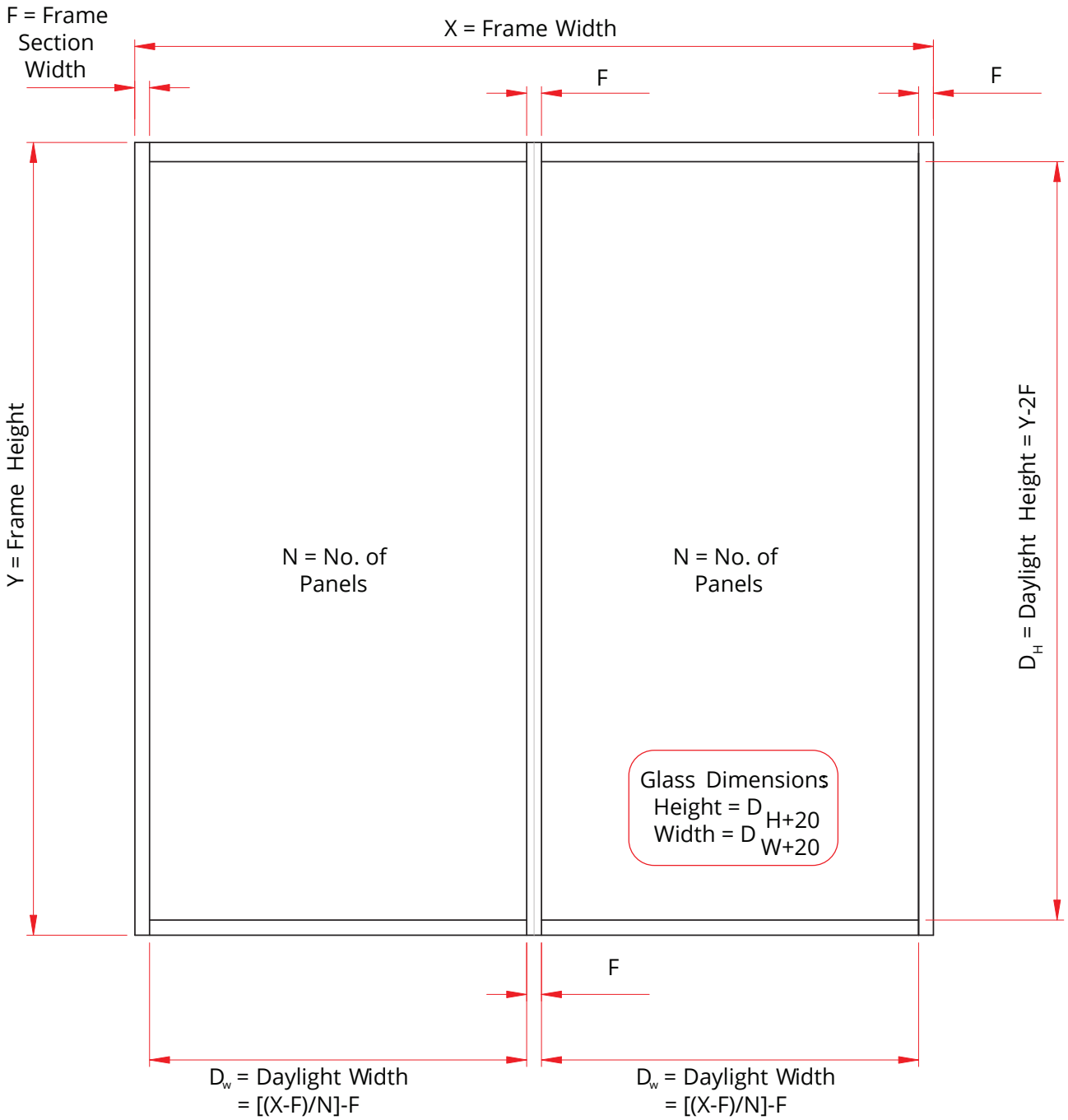
For more information on this configuration, please see relevent technical manual

See also: Disclaimer and Copyright information on page 3

Cutting Formula

All raw joints need to be sealed with small joint sealer or foam tab option.

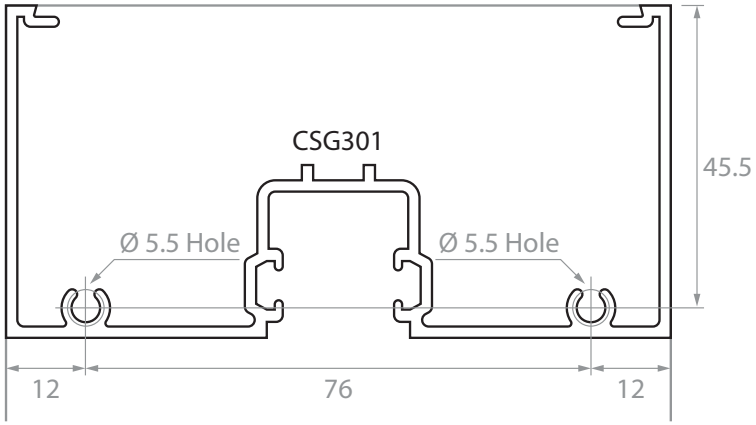
Machining



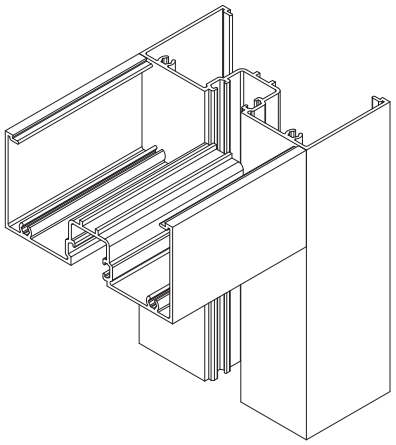
See also: Disclaimer and Copyright information on page 3

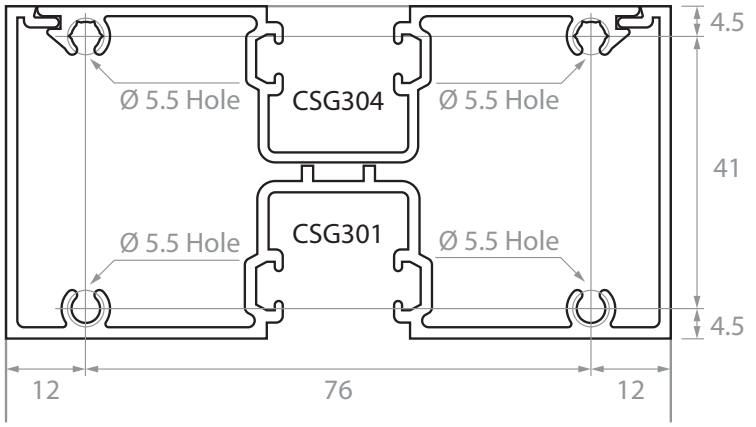
Machining Details: Head

All raw joints need to be sealed with small joint sealer or foam tab option.

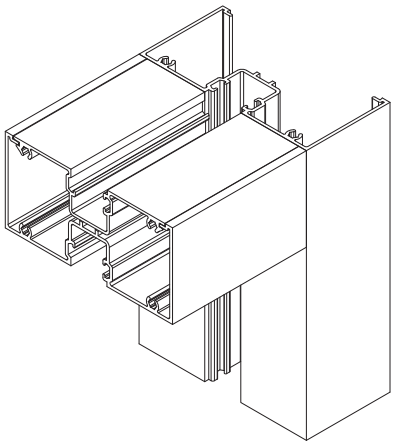


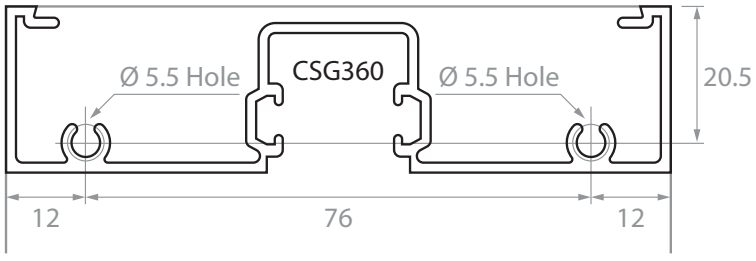
CSG301





CSG301 + CSG304





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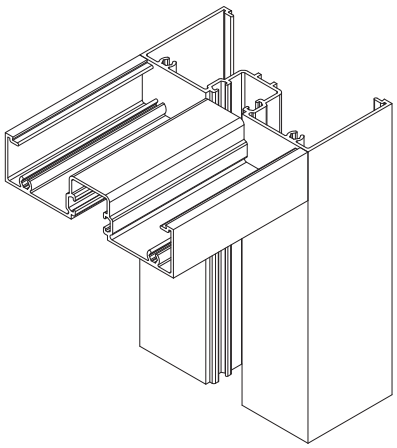
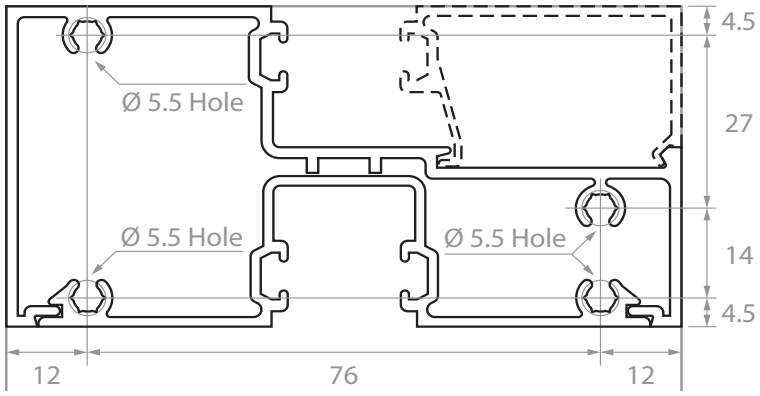


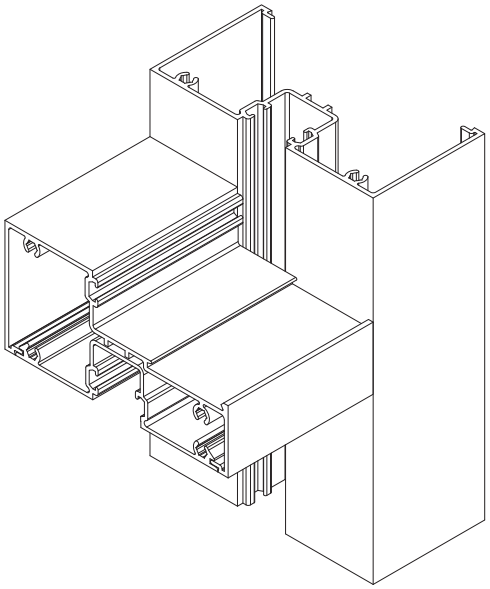
See also: Disclaimer and Copyright information on page 3

Machining Details: Transom

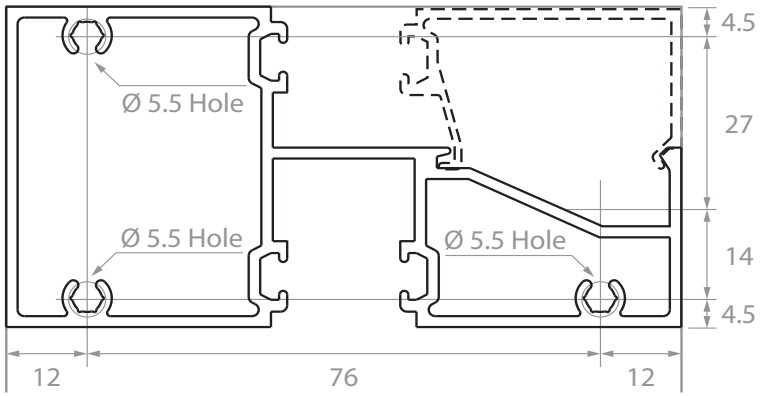
All raw joints need to be sealed with small joint sealer or foam tab option.

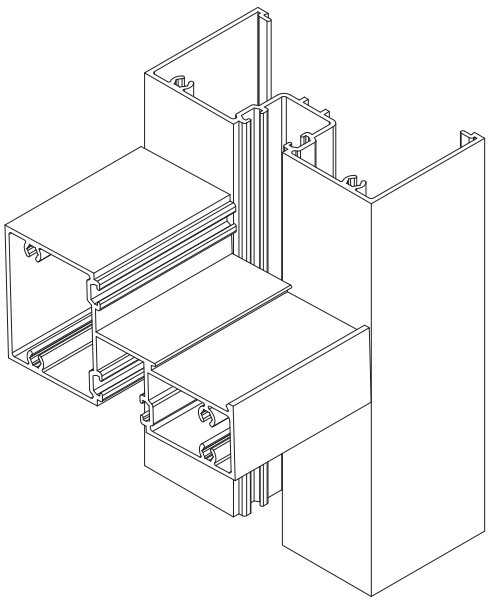
CSG302 + CSG304





CSG362



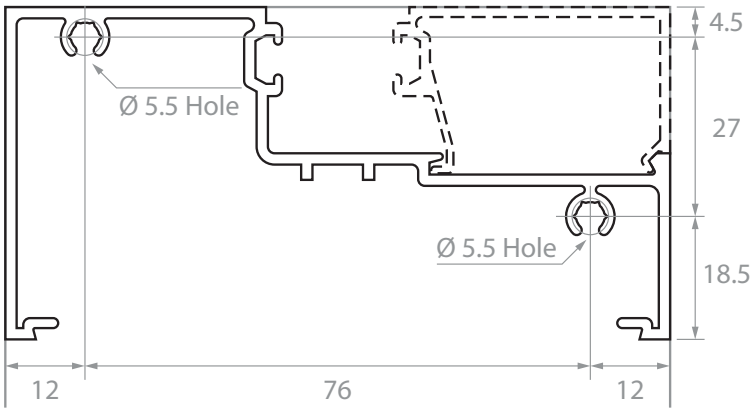


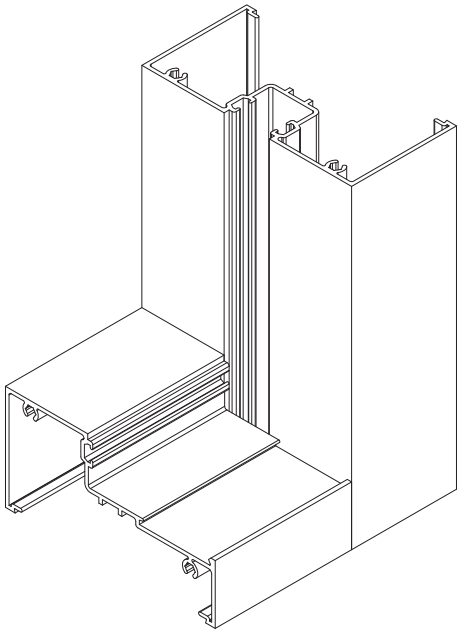
See also: Disclaimer and Copyright information on page 3

Machining Details: Sill

All raw joints need to be sealed with small joint sealer or foam tab option.

CSG302





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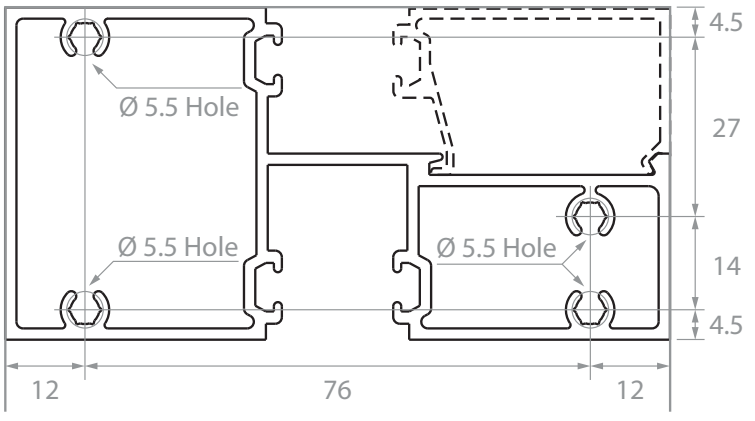
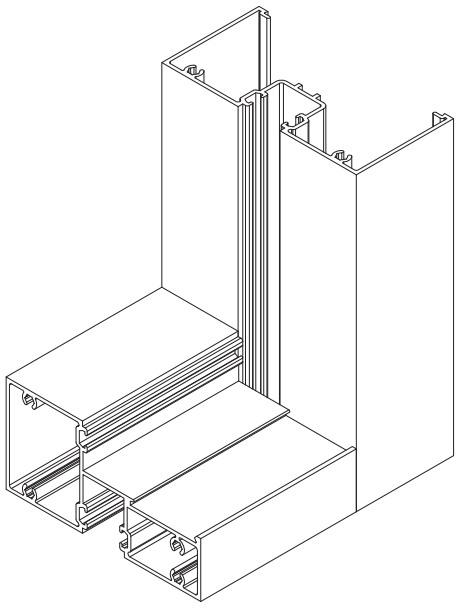


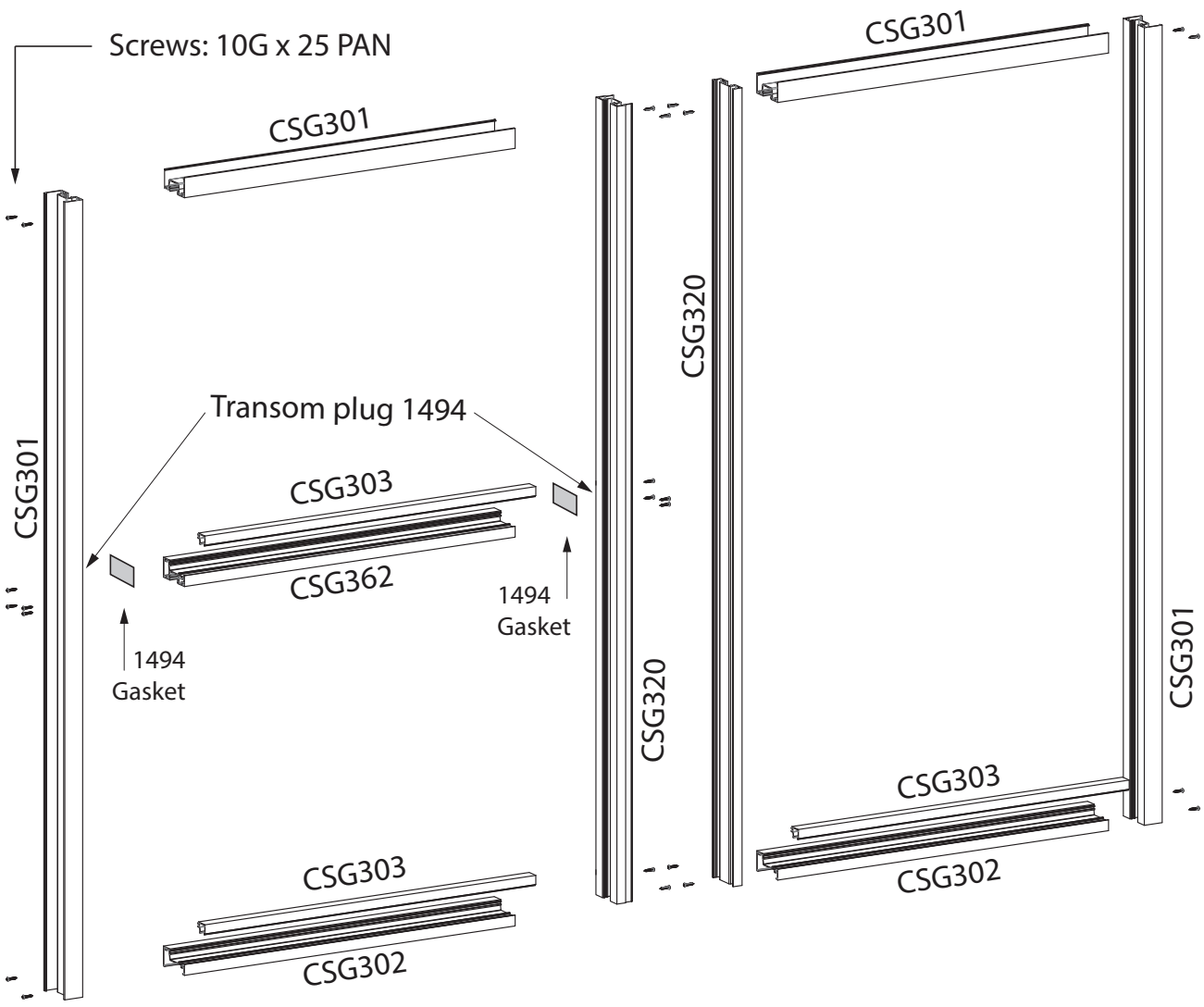


See also: Disclaimer and Copyright information on page 3

Exploded Assembly Overview

All raw joints need to be sealed with small joint sealer or foam tab option.

Assembly

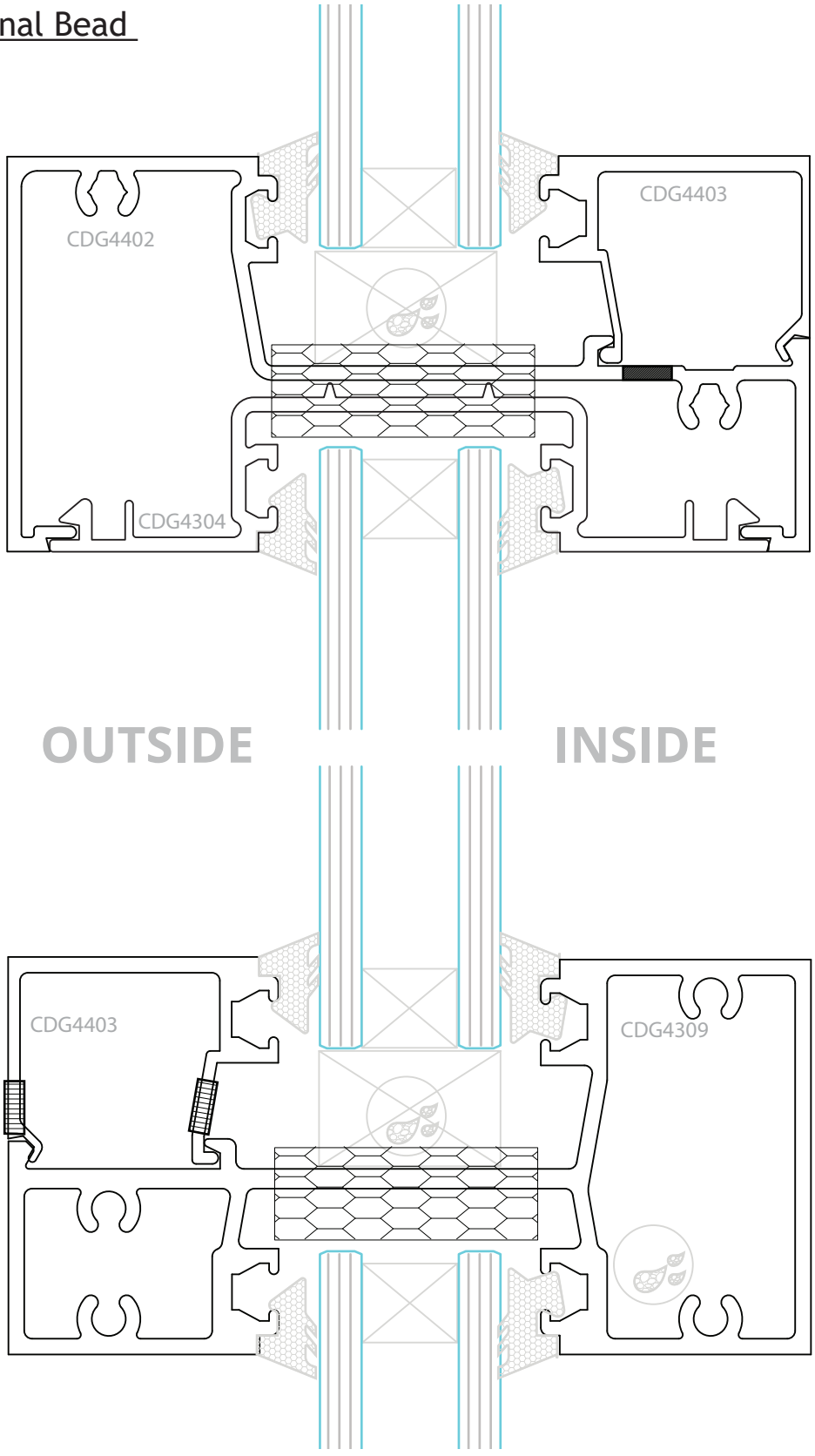


See also: Disclaimer and Copyright information on page 3

Transom Plug Insertion

All raw joints need to be sealed with small joint sealer or foam tab option.

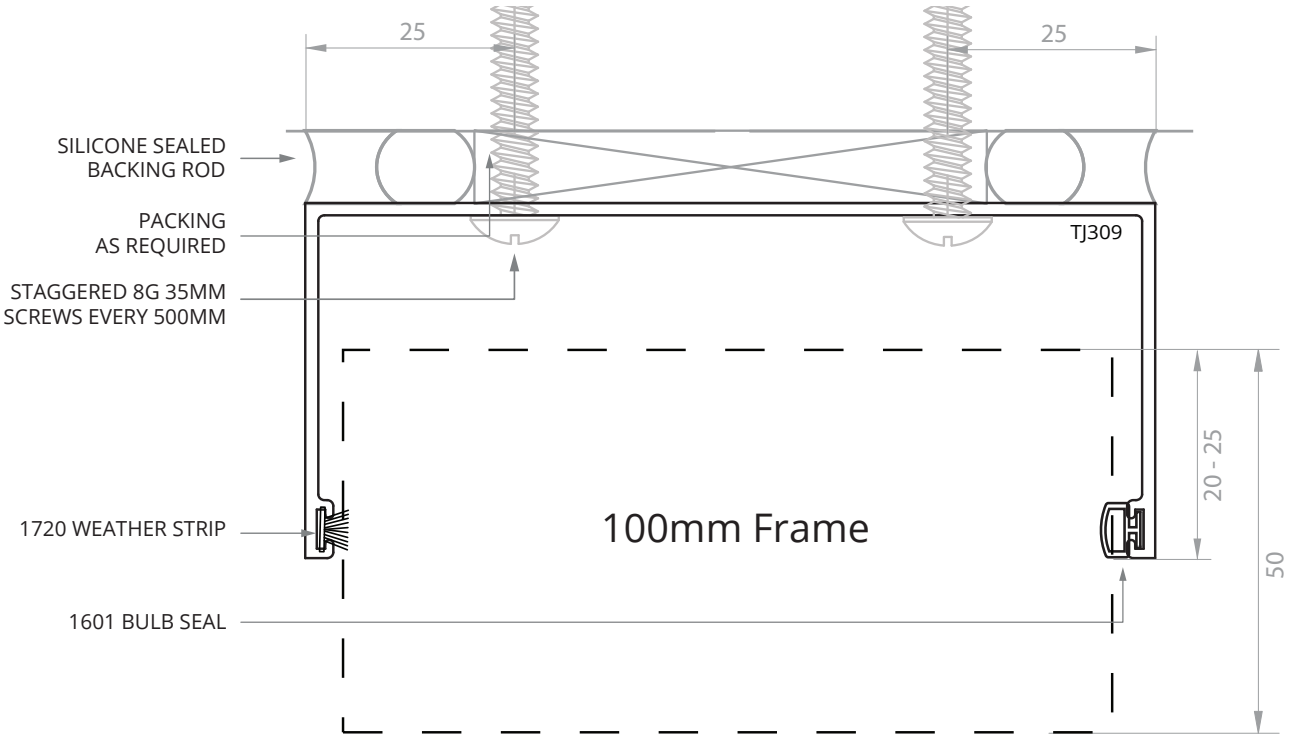
External Bead

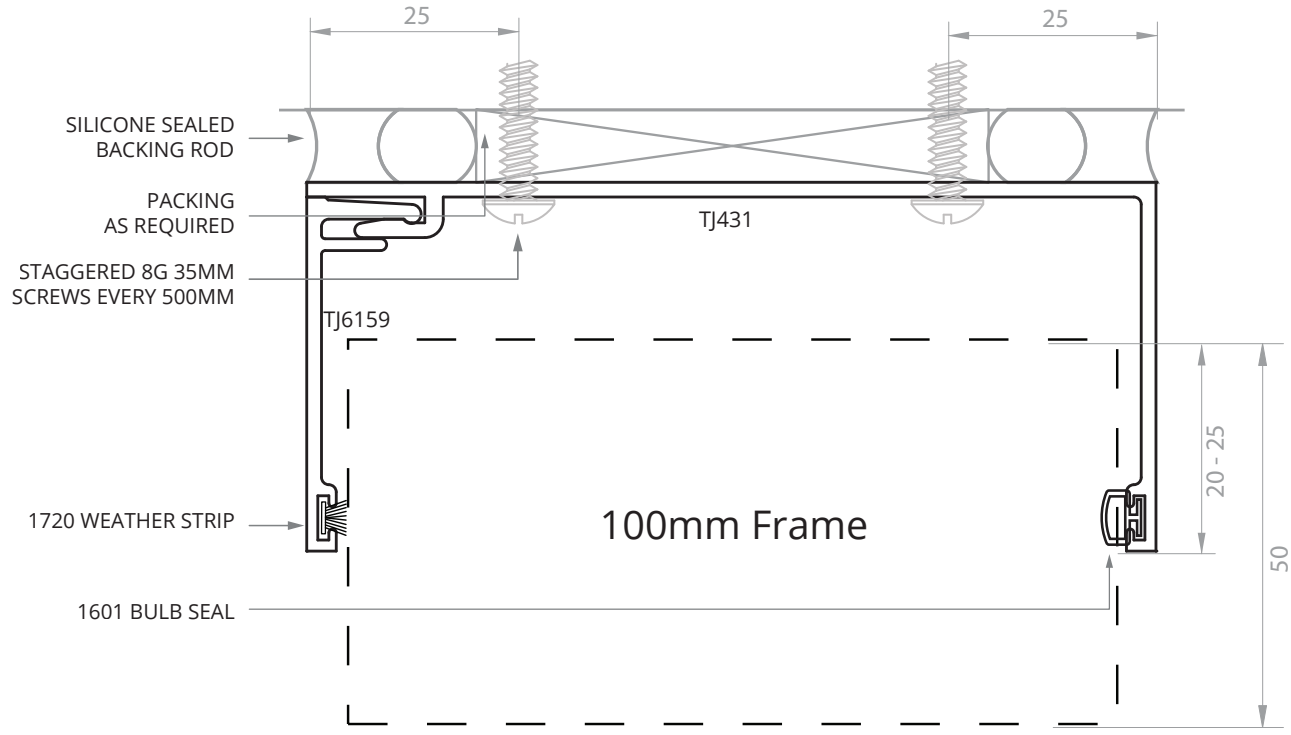


See also: Disclaimer and Copyright information on page 3

100mm Subhead Options

All raw joints need to be sealed with small joint sealer or foam tab option.

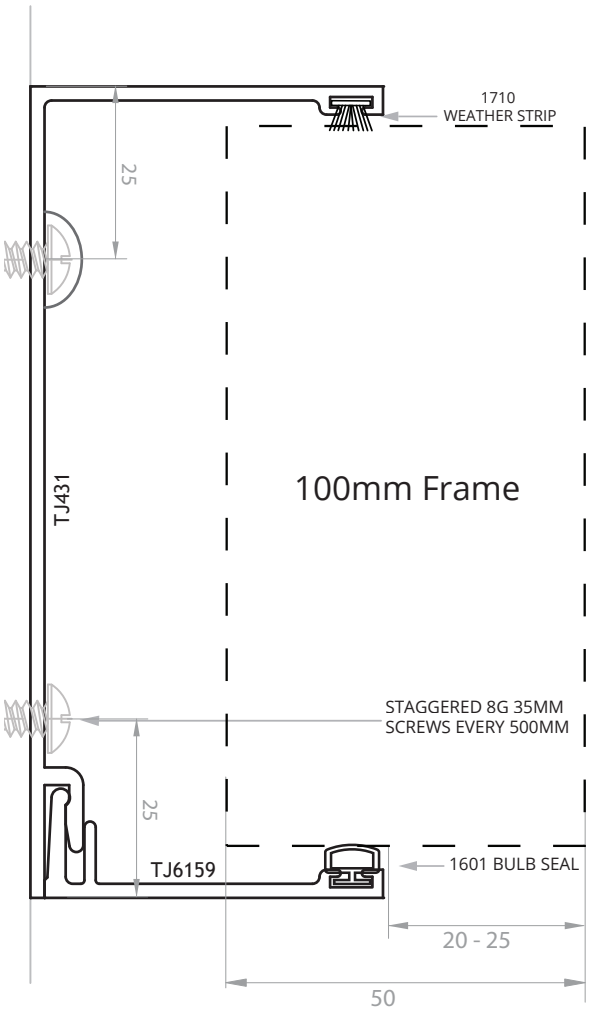


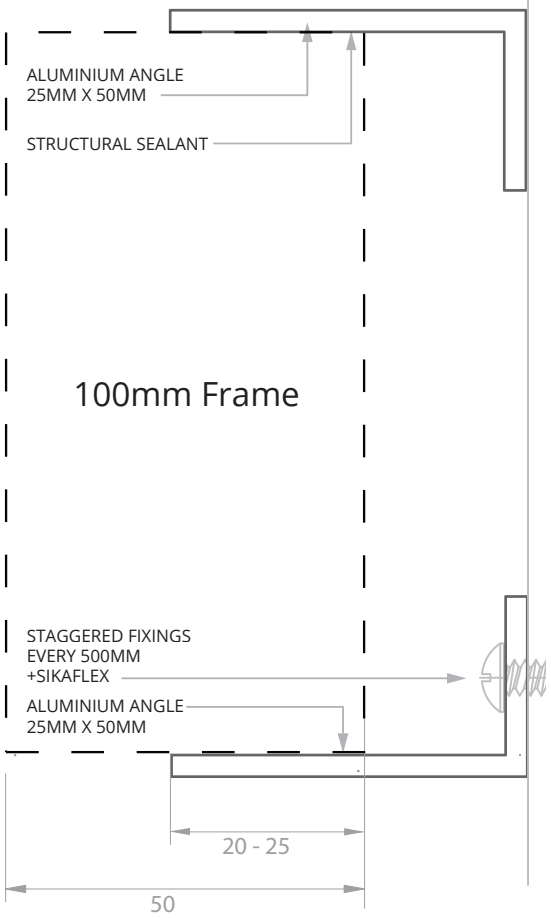


See also: Disclaimer and Copyright information on page 3

100mm SubJamb Options

All raw joints need to be sealed with small joint sealer or foam tab option.



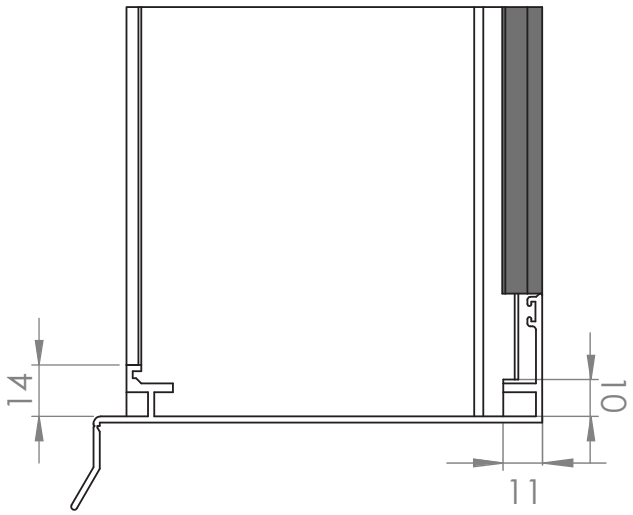


See also: Disclaimer and Copyright information on page 3

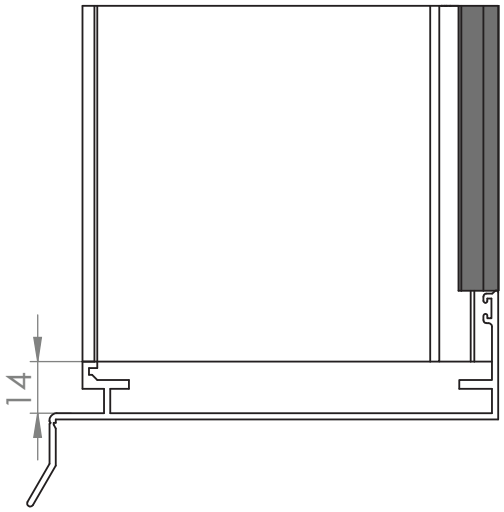
100mm Subframe Internal Bead

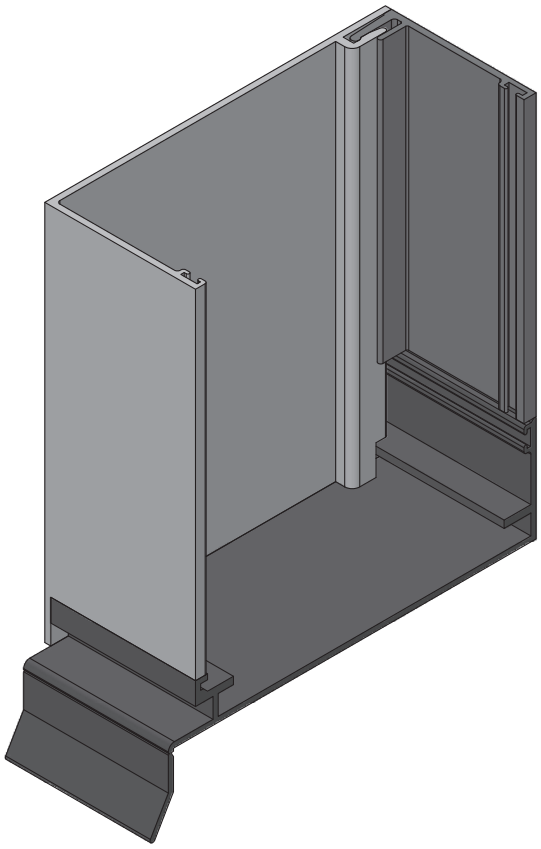
All raw joints need to be sealed with small joint sealer or foam tab option.

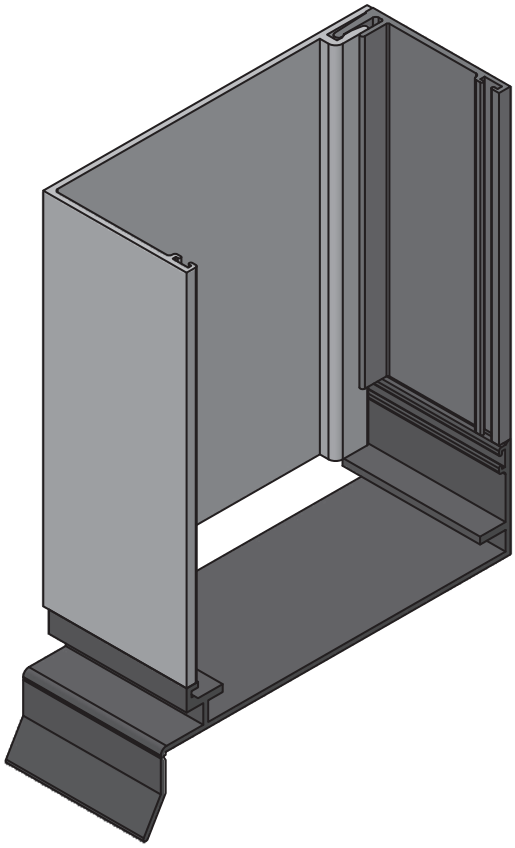
SQUARE CUT (INTERNAL BEAD)



MACHINED (INTERNAL BEAD)





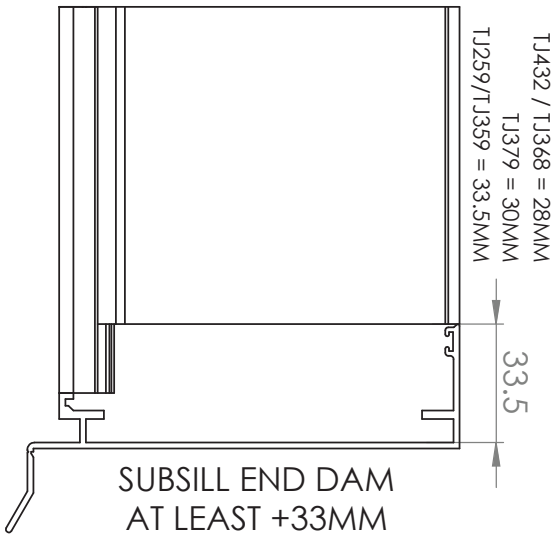


See also: Disclaimer and Copyright information on page 3

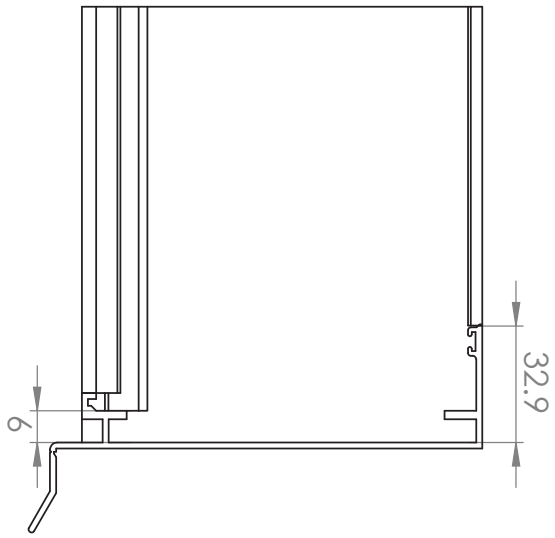
100mm Subframe External Bead

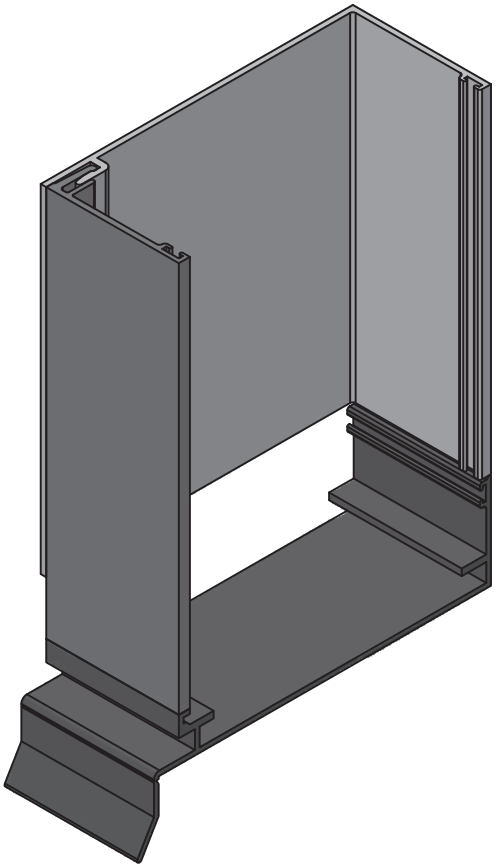
All raw joints need to be sealed with small joint sealer or foam tab option.

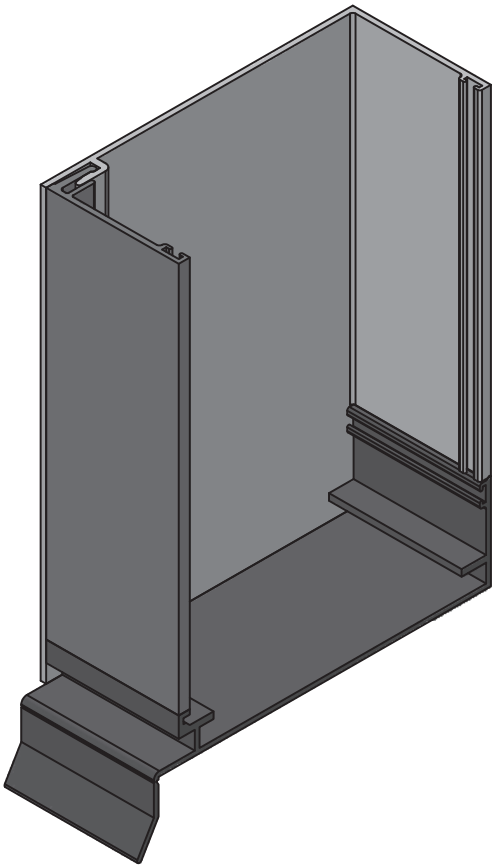
SQUARE CUT (EXTERNAL BEAD)



MACHINED (EXTERNAL BEAD)



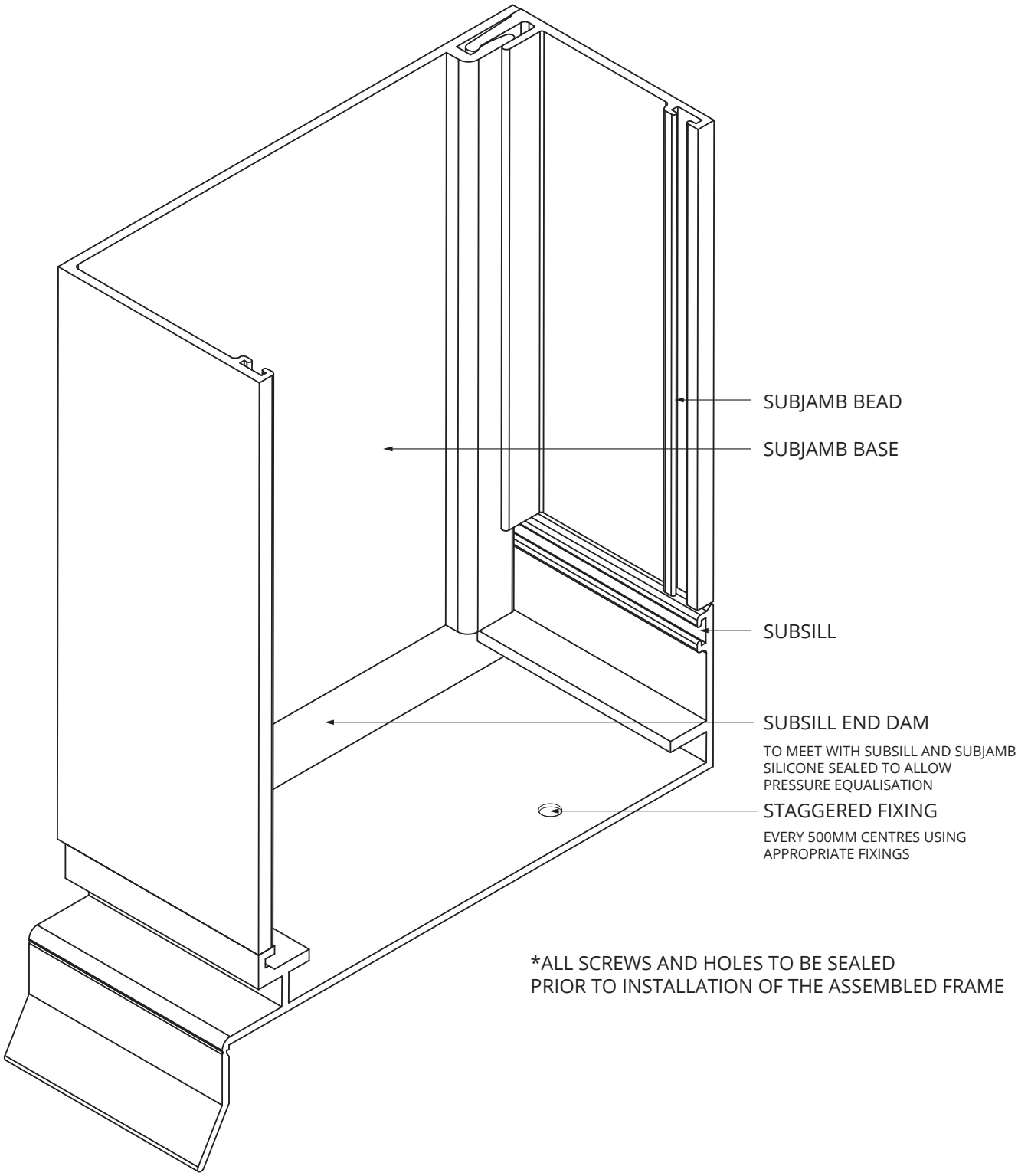




See also: Disclaimer and Copyright information on page 3

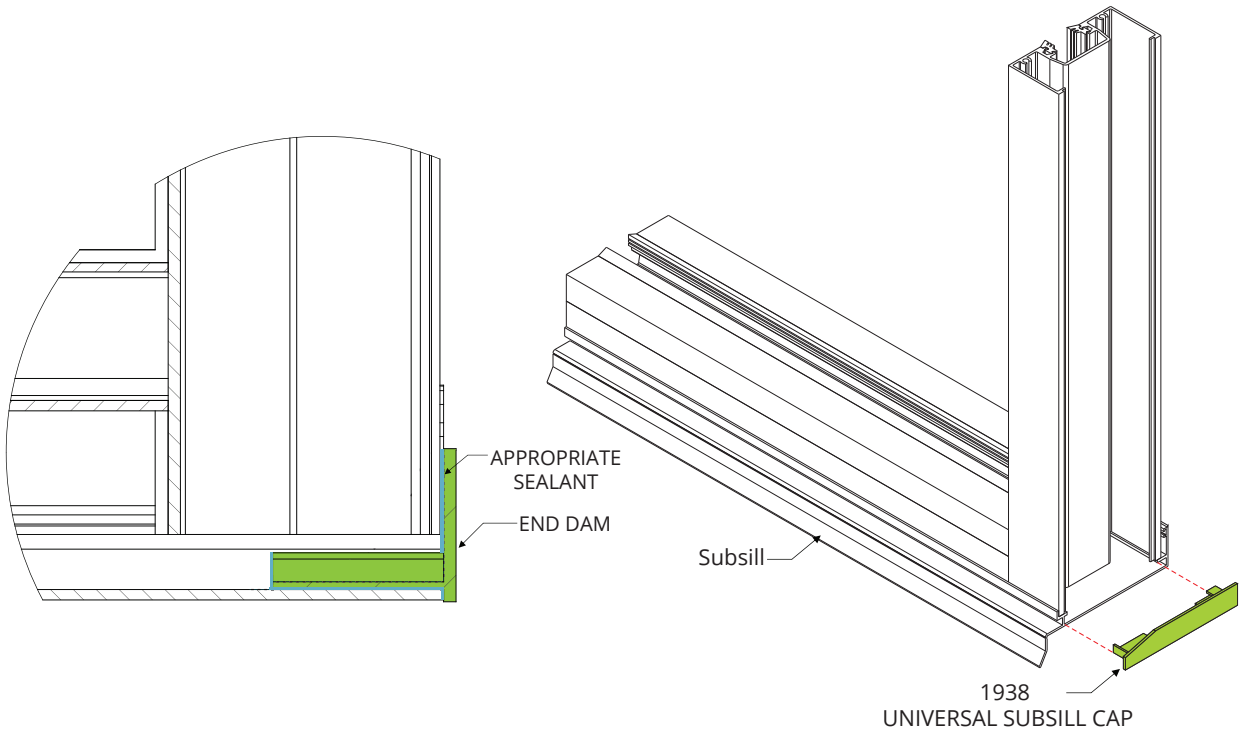
Subsill End-Dam Installation

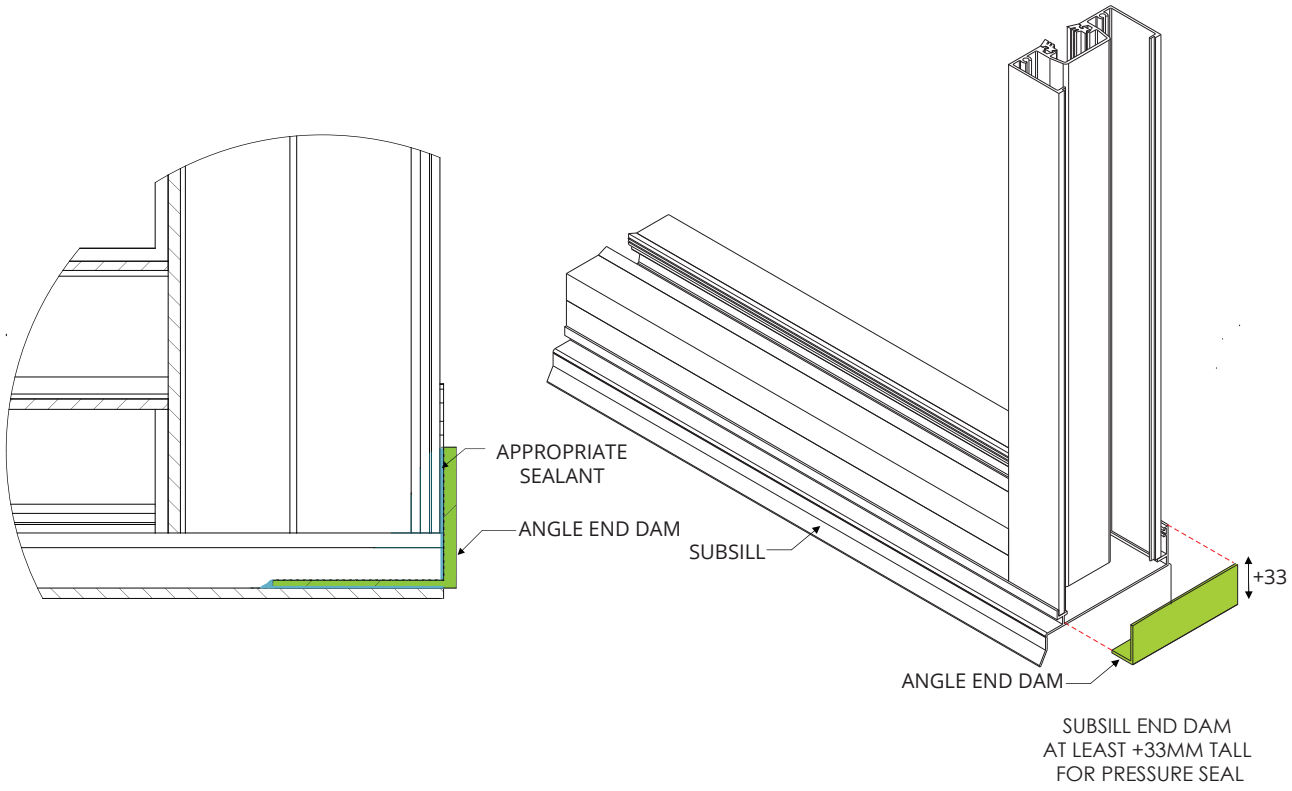
All raw joints need to be sealed with small joint sealer or foam tab option.



See also: Disclaimer and Copyright information on page 3

All raw joints need to be sealed with small joint sealer or foam tab option.

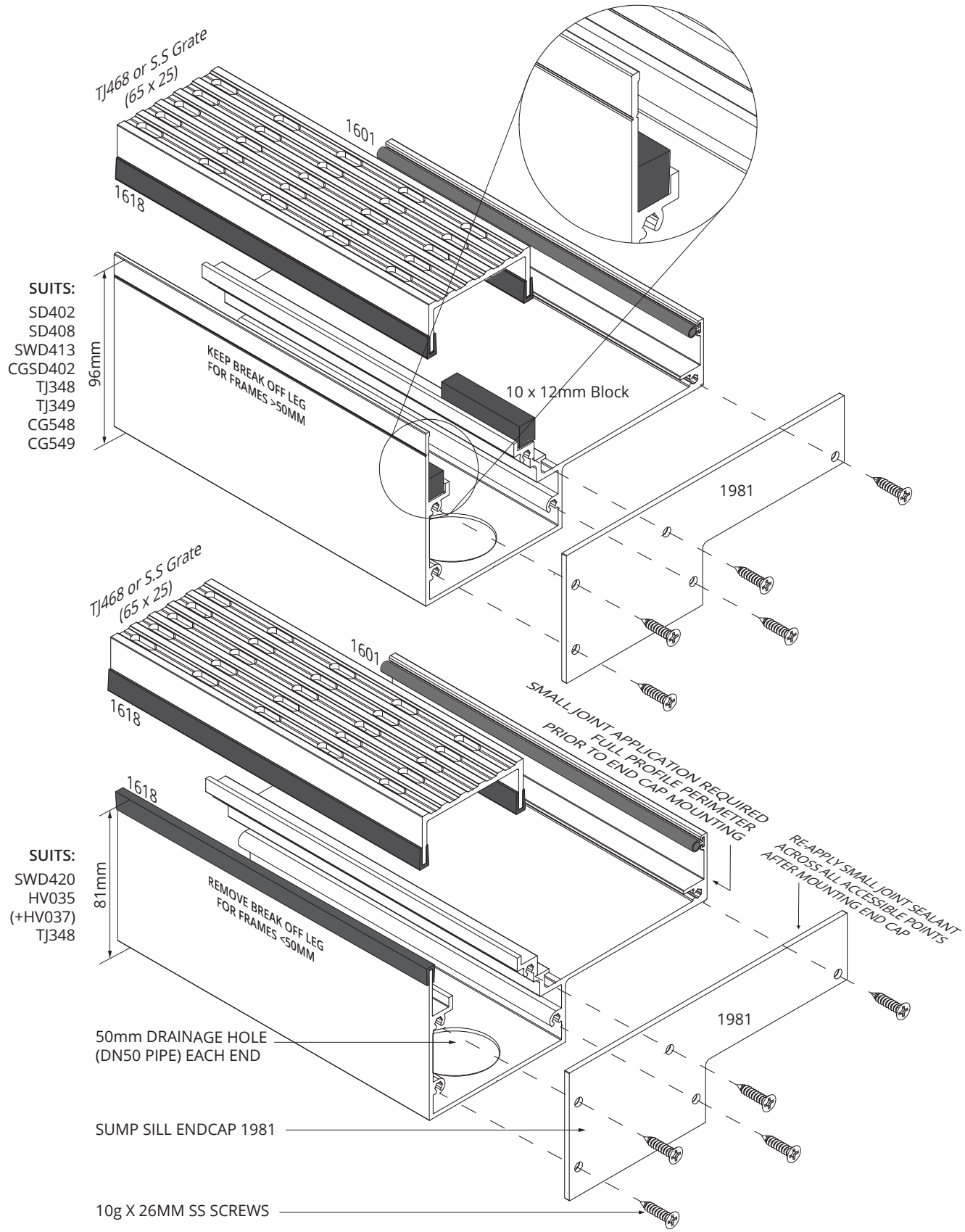




See also: Disclaimer and Copyright information on page 3

100mm Sump Sill

All raw joints need to be sealed with small joint sealer or foam tab option.

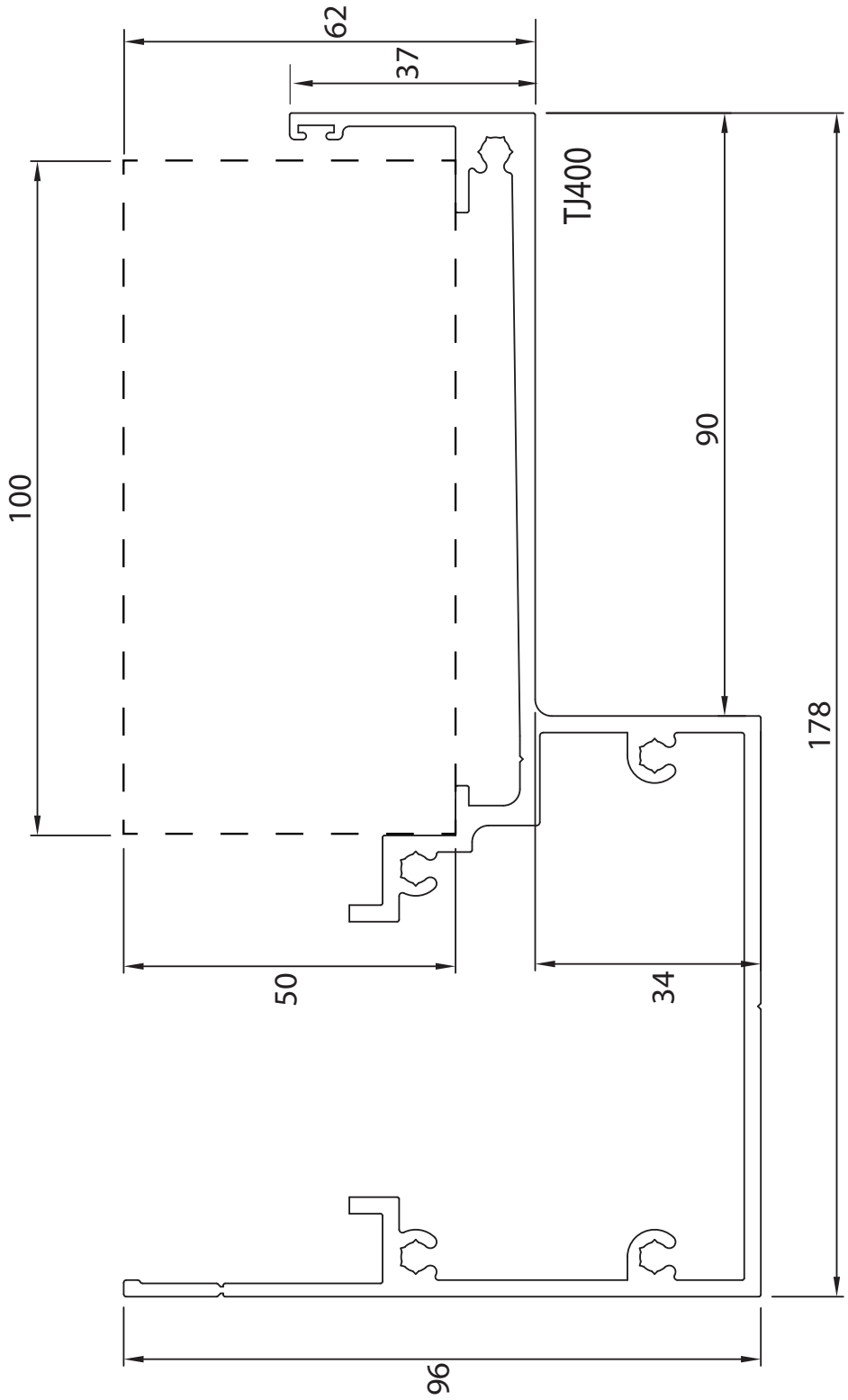


See also: Disclaimer and Copyright information on page 3

Fabrication

TJ400 Slab Recess Details (1:1)

All raw joints need to be sealed with small joint sealer or foam tab option.



See also: Disclaimer and Copyright information on page 3

All raw joints need to be sealed with small joint sealer or foam tab option.

Tooling

BDX-CV-CSG/H/AW

CSG Frame / Hinged /Hook Awning

CSG301	100mm Standard Main Frame
CSG303	CSG Bead
CSG303B	CSG Sloped Bead
CSG304	Glazing Adaptor
CSG320	Standard Duty Self Mating Mullion
CSG333	Heavy Duty Self Mating Mullion
CSG360	100mm Centre Glazed Slim Frame
CSG362	CSG Transom/Sill
CSG390	100mm Light Duty Frame
CSG601	150mm Standard Main Frame
CSG603	CSG Bead
CSG604	Glazing Adaptor
CSG633	Self Mating Mullion
CDG4301	100mm Centre Double Glazed Main Frame
CDG4303	Sill Bead
CDG4303M	Sill Sloped bead
CDG4304	Glazing Adaptor
CDG4310	Male Split Mullion
CDG4311	Female Split Mullion
CDG4312	H/D Male Split Mullion
CDG4313	H/D Female Split Mullion
CDG4314	Male Light Split Mullion
CDG4315	Female Light Split Mullion
CDG4390	Transom/Sill
CDG6501	150mm Centre DG Main Frame
CDG6503	Sill Bead
CDG6504	Glazing Adaptor
CDG6510	Male Split Mullion
CDG6511	Female Split Mullion
CDG6512	H/D Male Split Mullion
CDG6513	H/D Female Split Mullion
HV271	Door Stile
HV272	Hinge Stile
HV273	Large Rail
HV275	Large DG Rail
HV277	Small DG Rail
HV289	Small Rail
HV291	DG Stile
HV322	Sliding Door stile
TJ154	114mm Hinge Stile
TJ155	114mm Lock Stile
TJ158	114mm Pivot Stile
TJ159	114mm Sliding Stile
TJ311	Hinge Stile
TJ312	Lock Stile
TJ313	Door Top Rail
TJ315	Door Bottom Rail
TJ322	Sliding Door Stile
TJ327	Meeting Stile
TJ416	73mm Open Pocket Sliding Stile
TJ417	73mm Open Pocket Hinge Stile
TJ418	73mm Open Pocket Lock Stile
TJ419	DG Top Rail
TJ420	DG Bottom Rail
TJ428	114mm Open Pocket Sliding Stile
TJ435	114mm Open Pocket Hinge Stile
TJ436	114mm Open Pocket Lock Stile
TJ437	114mm Open Pocket Plain Stile
TJ440	73mm Open Pocket Lock Stile
TJ441	73mm Open Pocket Hinge Stile
TJ443	73mm Open Pocket Sliding Stile
TJ444	73mm Open Pocket Plain Stile
TJ450	73mm Open Pocket Meeting Stile
TJ451	114mm Open Pocket Lock Stile
TJ452	114mm Open Pocket Hinge Stile
TJ453	114mm Open Pocket Sliding Stile
TJ725	114mm Open Pocket Plain Stile
TJ737	Flyscreen Adaptor/Winder Support
TJ742	Awning Stile/Rail
TJ747	Hook Awning Sash Rail
TJ749	Hook Awning Sash Stop

BDX-CV-CSG/H/AW tool set information

Weight	900kg
Dimensions	1420 x 1140 x 800mm (H x W x D)
Outriger	Yes

See also: Disclaimer and Copyright information on page 3

Tooling

All raw joints need to be sealed with small joint sealer or foam tab option.

CARE & MAINTENANCE

KlassicView / CityView / ClimateGuard

Tooling Operation Manual

The following guidelines should be observed to ensure safe and efficient use, longevity and quality production.

All users are responsible for the safe operation and maintenance of tools.

* Read the entire Manual before starting machinery. Machinery may cause serious injury if not correctly operated.
* Never leave machine unattended. Turn power off and wait until machine has come to a complete stop before leaving the machine unattended.
* Disconnect main power before servicing machine. Make sure all power switches are in the off position and air disconnected and make sure all moving parts have come to a complete stop.
* Keep machine well-guarded. Do not remove guards and ensure all guards are in place prior to operation.
* Electric pump will shut down to prevent further damage if there is not enough lubricant.

General Maintenance:

* Please keep tooling lubricated. We recommend using kerosene poured into a spray bottle. Lubricate all pins & blades before starting the machine. (PIC 1)
* We also recommend fortnightly cleaning and lubrication of the guide pins and bushes at the front and rear on both decks. (PIC 2)

  Note! Do not use silicon based lubricant under any circumstances as this will build up on the cutting edges of the tool and result in shorter operating life and poor quality results.

Operation:

* Check machine over before operating. Check machine for damaged parts, loose bolts, loose connections, keys and wrenches left on the machine and any other conditions that may affect the machines operation. Repair and replace damaged parts.
* Do not use extrusion that are not specified for this machine.
* Do not use burred, heavy coated or bent extrusions or force extrusions into the tool.

  Note that manufacturing tolerance on aluminium can vary. Never hit or force extrusions into die guides.
* While operating do not remove guards and always keep hands outside of the guards.
* Empty swarf trays when required to prevent build up obstructing clearance of discarded aluminium.

  Periodically, the die and punches will need sharpening. This must be carried out by experienced toolmaker.

See also: Disclaimer and Copyright information on page 3

Tooling

All raw joints need to be sealed with small joint sealer or foam tab option.

CARE & MAINTENANCE

Exchange or replace die:

* This is only to be carried out by suitability qualified persons:

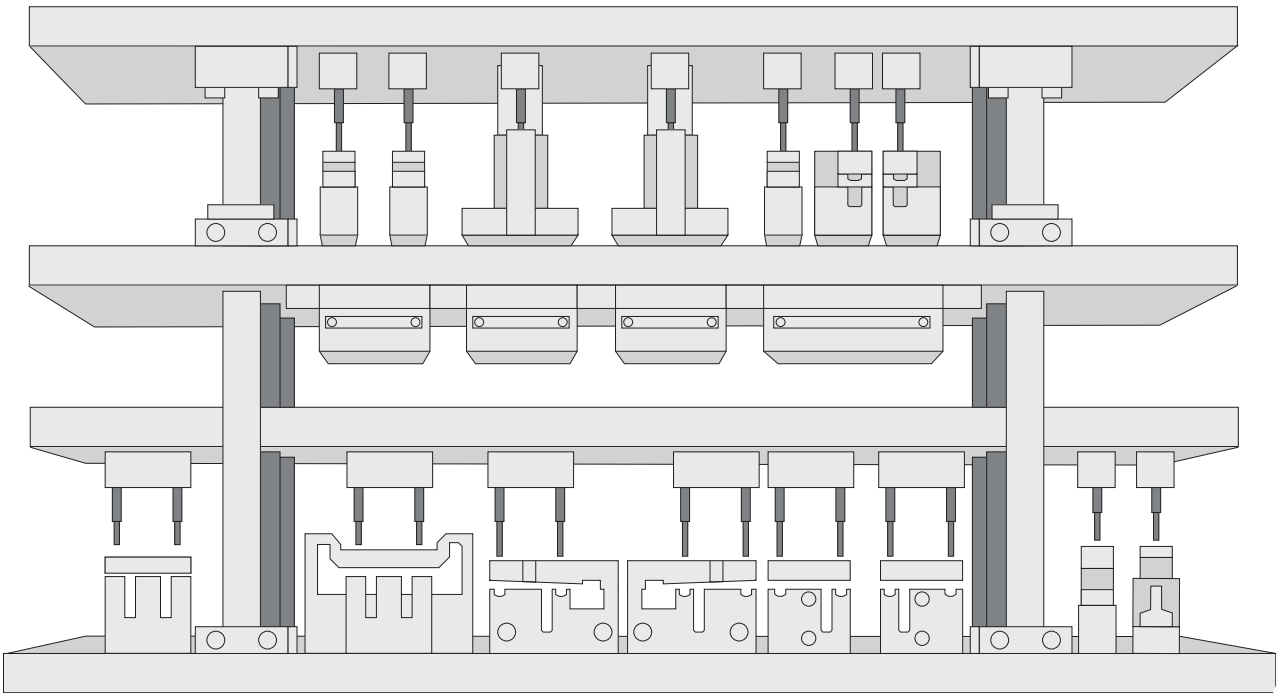
1. Switch off the machine and isolate power point. Removing front covers and swarf trays.
2. Remove top and bottom screws from the die. Carefully take out the old die block.
3. Reconnect the power and switch on the machine. Turn to INCHING MODE, press foot valve to ensure the machine desk is on lowest level.
4. Placing the new block and pins units inside and fixed back into their original positions, then release the inching mode back to operation mode.

Ordering procedure for Replacement or spare parts:

* Please provide following details to your sales representative

- Machine serial number:
- Port (DIE) location:
- List of extrusion involved:
- Take photo of the issues:

(PIC 1) Lubricate all dark grey areas fortnightly with kerosene



See also: Disclaimer and Copyright information on page 3

Maintenance & Warranty

AUSTRALIAN GLASS & WINDOW ASSOCIATION

Heating Cooling WINDOW ENERGY RATING SCHEME®

Darley Aluminium

are long standing members of various industry associations including the Australian Glass & Window Association (AGWA) and the Window Energy Rating Scheme (WERS) and as such we conform to an Industry Code of Conduct designed to protect consumers.

Manufacturing Standards;

All aluminium extrusions supplied to by Darley Aluminium have been supplied in accordance with Australian Standard AS1866 - 'Aluminium and Aluminium alloy: Extruded rod, bar, solid and hollow shapes'. All Anodised and Painted Extrusions are as per AS1231 Aluminium and Aluminium Alloys - 'Anodic Oxidation Coatings' and AS3715 - 'Metal Finishing-Thermoset Powder Coatings for Architectural Applications of Aluminium and Aluminium Alloys'.

Product Testing and Compliance;

Darley Aluminium products are tested in NATA accredited independent laboratories to ensure they meet the relevant Australian Standards. Energy ratings can also be found on the Window Energy Rating Scheme (WERS) website:

https://agwa.imiscloud.com/WERS/

Maintenance & Warranty

Care & Maintenance

- A gentle wash with a soft non-abrasive brush or cloth using a mild detergent followed by a fresh water rinse will maintain the long term performance of the powder coat or anodised finish.
- If paint splashes, sealants or other residue need to be removed, then methylated spirits or white spirits can be applied with a soft cloth and gentle wiping only.
- In rural or normal urban environments, cleaning should occur at least every 12 months.
- In areas of pollution, industrial or coastal areas back one kilometre from the water, cleaning should occur at least every 3 months.
- In hazardous locations such as beachfronts, severe marine environments or areas of high industrial pollution, the frequency of cleaning should be increased to monthly.
- Special maintenance may be required in some extended warranty applications.

Tracks:

Keep tracks free from obstruction and excessive dirt or water.

Guides and Spindles:

To be greased with good quality automotive grease every 6 months.

Rollers:

As per manufacturer's instructions.

Hinges, Hangers & Flush Bolts:

Visible surfaces should be cleaned using a damp cloth and mild detergent, then wiped dry. Apply a light application of non-corrosive preventative lubricant to all surfaces and internals, using a dry cloth to remove excess. Repeat at intervals no greater than 3 months.

Seals and PVC Product:

An occasional wipe with a damp cloth or a wash with warm soapy water is all that is required.

Glass:

Simply wipe over the surface with a few drops of methylated spirits on a damp cloth, then polish the surface with a dry, lint-free, non-abrasive cloth.

Release Notes

Darley Aluminium
Commercial Framing 100 x 50mm Centre Single Glazed

1.Technical Manual Release Notes

This page is intended to record all changes to the 100 x 50mm Centre Single Glazed technical manual pages. Changes or additions to this manual will be itemised with a brief description and date when the amendments were made. It is important that a copy of the page be issued with the update and inserted as the first page in the customers technical manual.

ISSUE	DATE	DESCRIPTION OF CHANGE	REFER TO PAGE
1.0	4/12/2025	Structural Report drawing adjusted to refect Heavy Mullion	27

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