

100mm Front Single Glazed

TECHNICAL MANUAL



SLS - 1575Pa
ULS - 2600Pa



Air - OL
Water - 800Pa



Acoustic - Rw 38*
Estimate

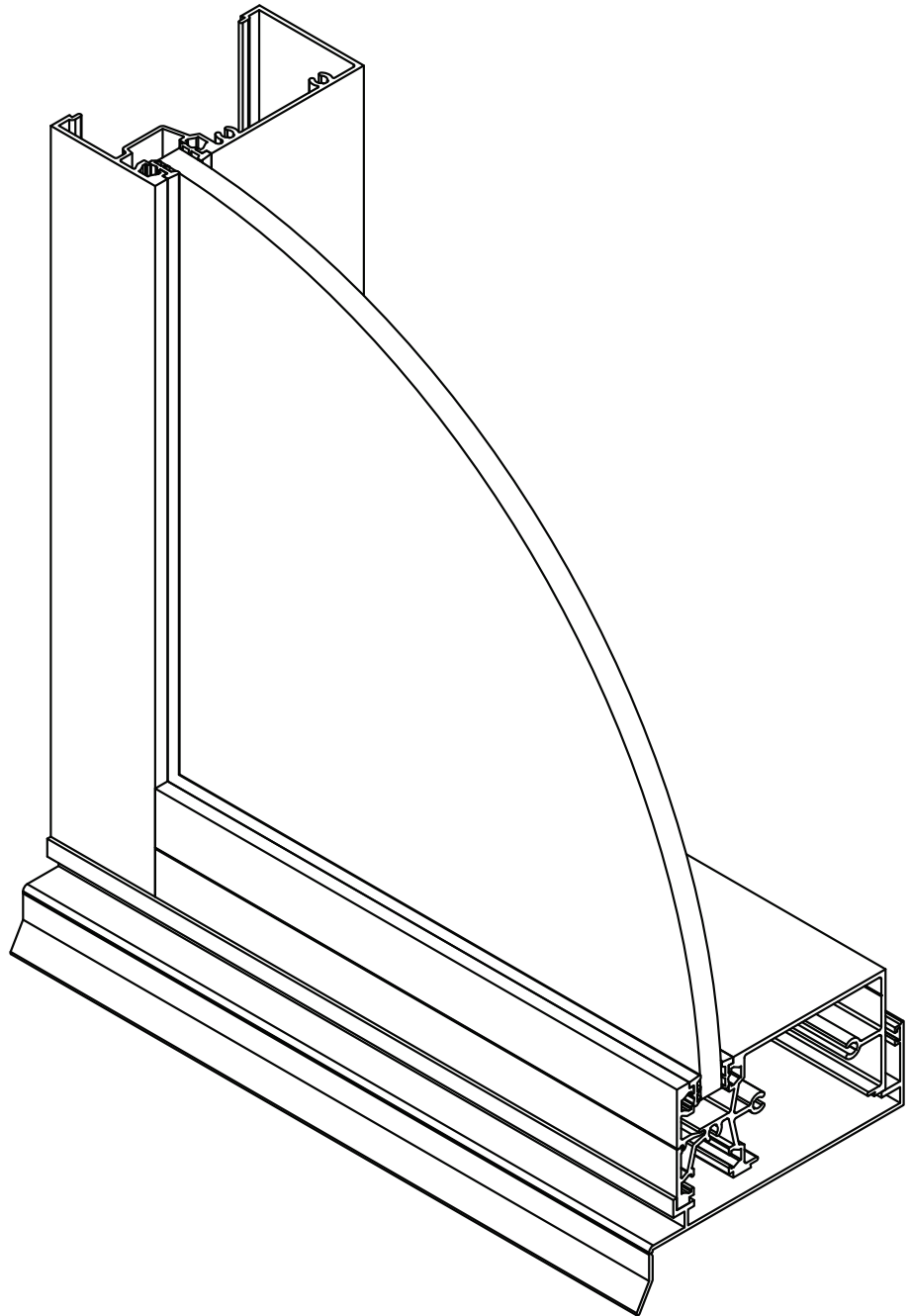


Fire Rating Tested
- BAL 40



Double Glazed

U VALUE	4.12 to 6.12
SHGC	0.27 to 0.73
TVW	0.07 to 0.79



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

JUN 2026 | VERSION 1.1



Max
12.38mm



Subsill & Sump
Draining



Transom
Draining



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 Occasionally, some errors or outdated information may require rectification - Darley Aluminium takes no responsibility for any loss or damage as a result of these errors.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

Introduction	5
Welcome	5
Overview.....	5
Design Features.....	5
Performance Summary	5
System Requirements.....	5
1:1 Section Profiles	6
Adaptors	20
Hardware	23
Performance	26
Test Results	26
Acoustic Test Report	31
BAL Compliance	32
Glazing	39
Energy Rating Definitions	40
Fabrication	42
Configuration	42
Cross Sections	43
Head & Sill Option	44
Jamb Option	47
Mullion	49
Machining	57
Cutting Formula.....	57
Component Assembly	62
Sub-Framing Details	64
Tooling	72
Appendix	75
Maintenance & Warranty	75
Release Notes	77

Welcome

Overview

Darley's 100 x 50 mm Front 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 too 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							
Max Tested 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 front glazed frame

See Performance Section for more detail.

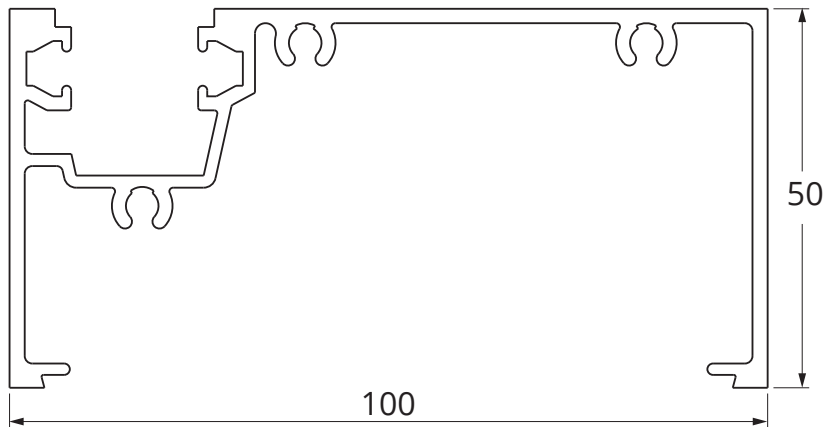
Size limitations are governed by design intent, glass selection and local wind load and deflection requirements. For further technical assistance and fabricator selection contact Darley Aluminium. An Engineer should be consulted to ensure selected framing meets the requirements as set out in the relevant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

**FGS401**

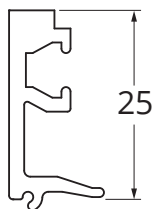
Frame

$$I_{xx} = 134.5 \times 10^3 \text{ mm}^4$$

$$I_{yy} = 817.1 \times 10^3 \text{ mm}^4$$

A.P. = 567 mm

P.P. = 188 mm

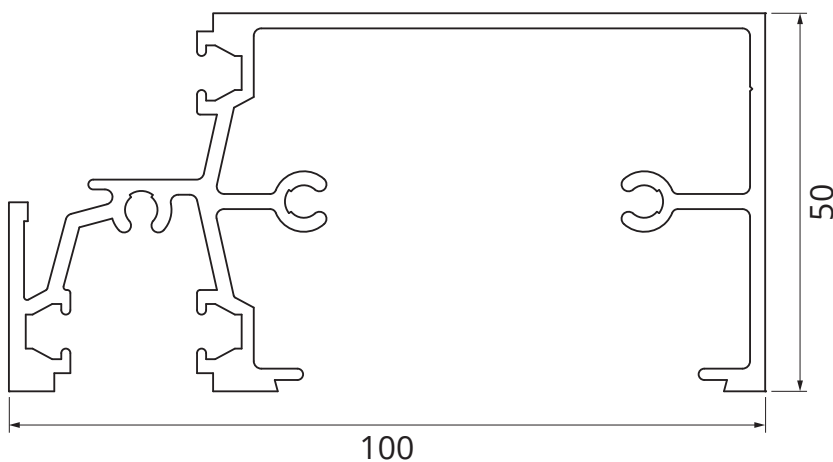
**FGS403**External Bead
(suits FGS402)

$$I_{xx} = 7.69 \times 10^3 \text{ mm}^4$$

$$I_{yy} = 0.85 \times 10^3 \text{ mm}^4$$

A.P. = 105 mm

P.P. = 50 mm

**FGS402**

Sill/Transom

$$I_{xx} = 184 \times 10^3 \text{ mm}^4$$

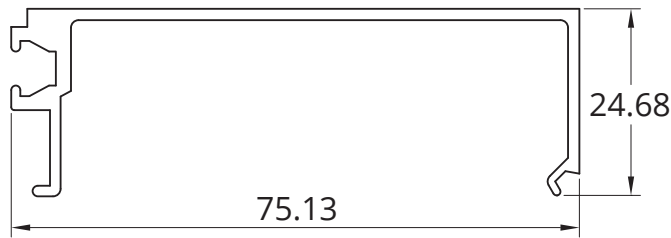
$$I_{yy} = 808.3 \times 10^3 \text{ mm}^4$$

A.P. = 658 mm

P.P. = 175 mm

Mainframe Profiles

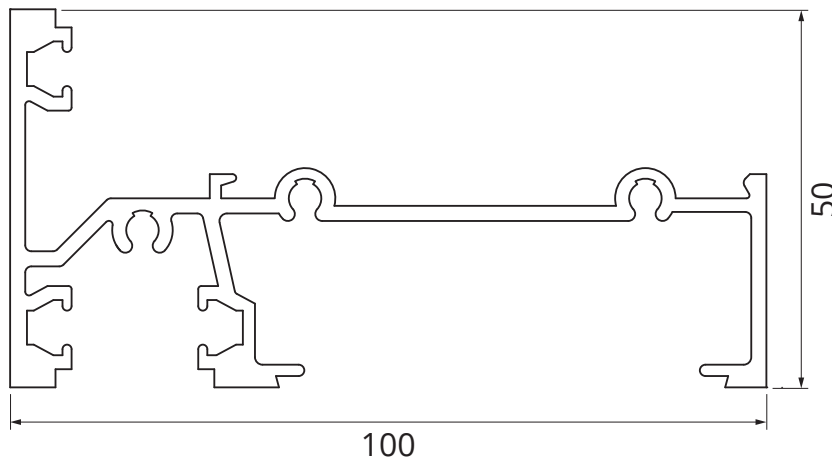
Scale 1:1


FGS410

$$I_{xx} = 1.11 \times 10^3 \text{ mm}^4$$

$$I_{yy} = 17.16 \times 10^3 \text{ mm}^4$$

A.P. = 266 mm
P.P. = 100 mm

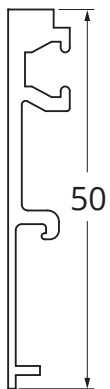

FGS409

Sill/Transom

$$I_{xx} = 88.6 \times 10^3 \text{ mm}^4$$

$$I_{yy} = 712.6 \times 10^3 \text{ mm}^4$$

A.P. = 570 mm
P.P. = 110 mm

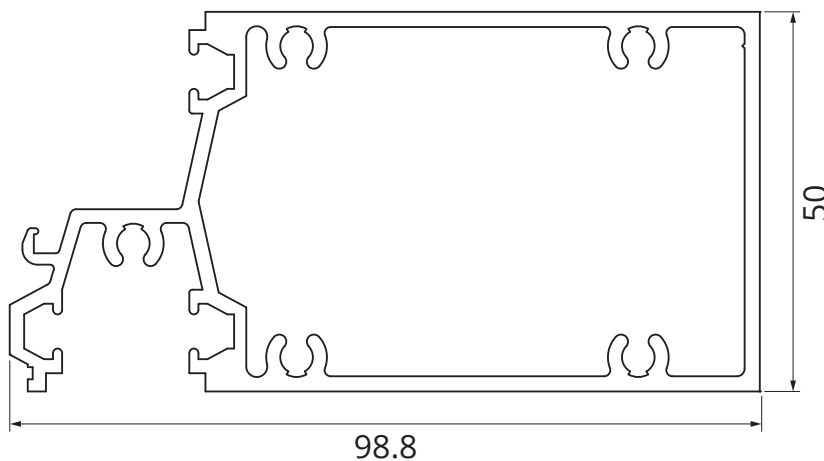

FGS428

Face Bead (fits FGS411)

$$I_{xx} = 0.6 \times 10^3 \text{ mm}^4$$

$$I_{yy} = 26.3 \times 10^3 \text{ mm}^4$$

A.P. = 151 mm
P.P. = 70 mm


FGS411

Transom - Face Bead

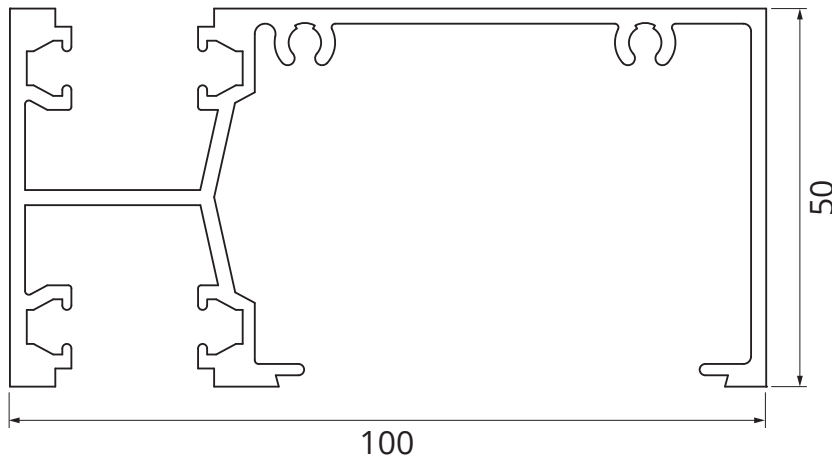
$$I_{xx} = 270.3 \times 10^3 \text{ mm}^4$$

$$I_{yy} = 722.4 \times 10^3 \text{ mm}^4$$

A.P. = 413 mm
P.P. = 198 mm

Mainframe Profiles

Scale 1:1

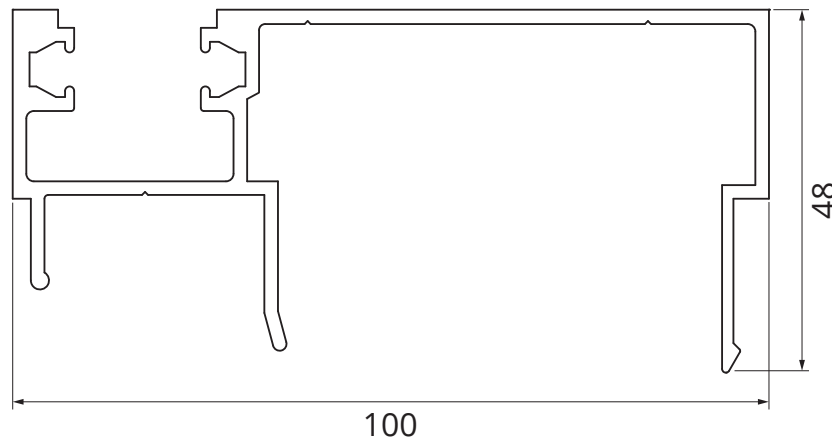
**FGS404**Mullion / Awning
Transom

$$I_{xx} = 211.1 \times 10^3 \text{ mm}^4$$

$$I_{yy} = 876.4 \times 10^3 \text{ mm}^4$$

A.P. = 651 mm

P.P. = 202 mm

**FGS428**

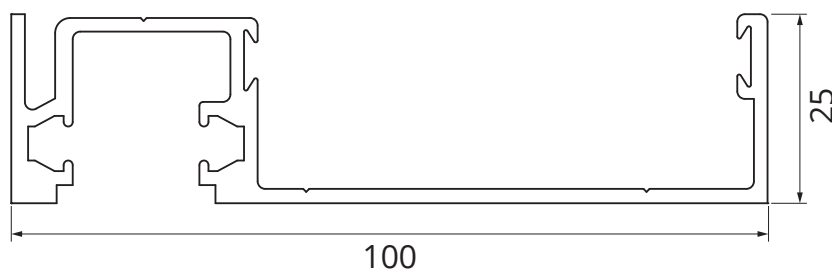
Male Expansion Mullion

$$I_{xx} = 85.1 \times 10^3 \text{ mm}^4$$

$$I_{yy} = 609.6 \times 10^3 \text{ mm}^4$$

A.P. = 516 mm

P.P. = 130 mm

**FGS427**

Female Expansion Mullion

$$I_{xx} = 32 \times 10^3 \text{ mm}^4$$

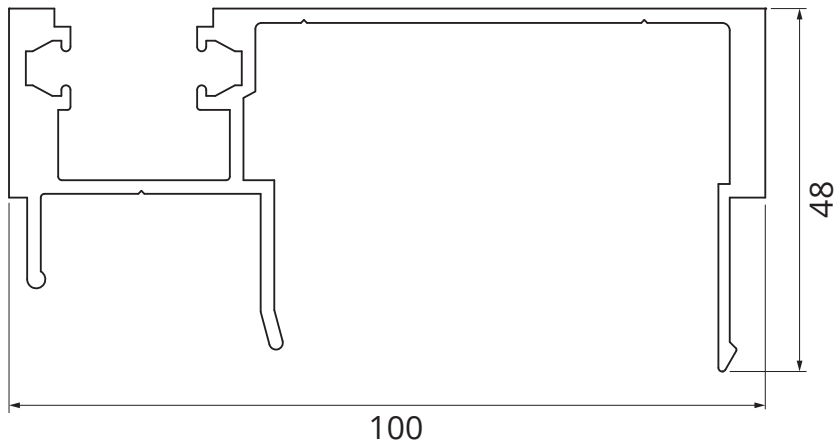
$$I_{yy} = 502.8 \times 10^3 \text{ mm}^4$$

A.P. = 418 mm

P.P. = 130 mm

Mainframe Profiles

Scale 1:1



FGS429

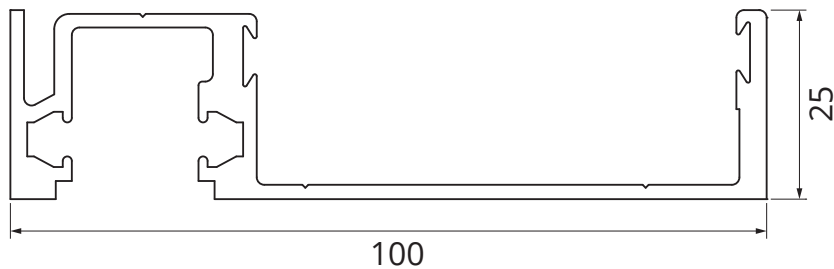
Heavy Duty Male Split Mullion

$$I_{xx} = 88.6 \times 10^3 \text{ mm}^4$$

$$I_{yy} = 848.3 \times 10^3 \text{ mm}^4$$

A.P. = 502 mm

P.P. = 130 mm



FGS430

Heavy Duty Female Split Mullion

$$I_{xx} = 34 \times 10^3 \text{ mm}^4$$

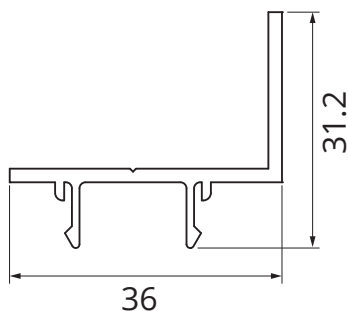
$$I_{yy} = 575.6 \times 10^3 \text{ mm}^4$$

A.P. = 410 mm

P.P. = 130 mm

Additional Profiles

Scale 1:1

**FGS416**

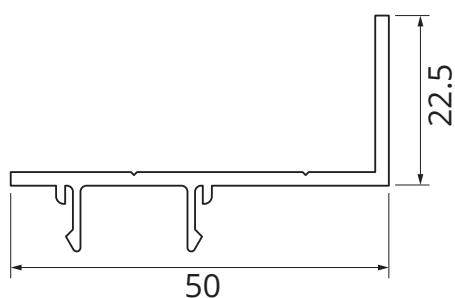
35mm Awning Stop

$$I_{xx} = 6.1 \times 10^3 \text{ mm}^4$$

$$I_{yy} = 16.9 \times 10^3 \text{ mm}^4$$

A.P. = 160 mm

P.P. = 85 mm

**FGS419**

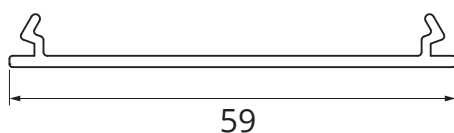
Awning Stop

$$I_{xx} = 8.23 \times 10^3 \text{ mm}^4$$

$$I_{yy} = 18.67 \times 10^3 \text{ mm}^4$$

A.P. = 160 mm

P.P. = 100 mm

**FGS417**

Flat Filler

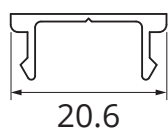
Fits FGS402/404/409

$$I_{xx} = 0.21 \times 10^3 \text{ mm}^4$$

$$I_{yy} = 37.1 \times 10^3 \text{ mm}^4$$

A.P. = 146 mm

P.P. = 60 mm

**FGS406**

Pocket Filler

$$I_{xx} = 0.3 \times 10^3 \text{ mm}^4$$

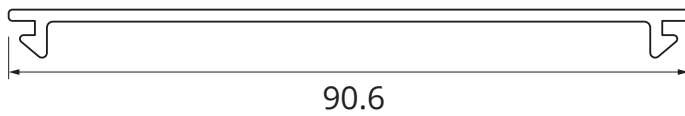
$$I_{yy} = 2.3 \times 10^3 \text{ mm}^4$$

A.P. = 74 mm

P.P. = 21 mm

Subframing Profiles

Scale 1:1


TJ305

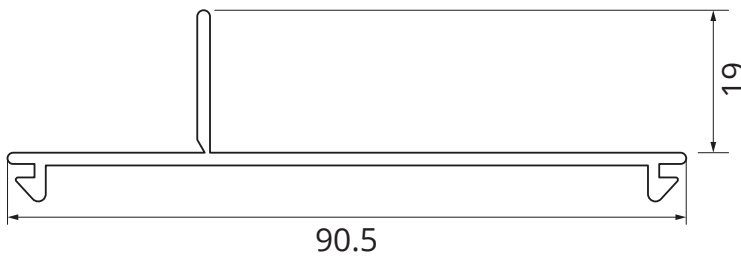
Flush Adaptor

$$I_{xx} = 0.25 \times 10^3 \text{ mm}^4$$

$$I_{yy} = 133.8 \times 10^3 \text{ mm}^4$$

A.P. = 206.1 mm

P.P. = 94 mm


TJ342

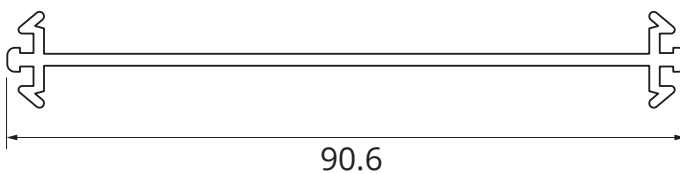
Reveal Adaptor

$$I_{xx} = 4.31 \times 10^3 \text{ mm}^4$$

$$I_{yy} = 150.12 \times 10^3 \text{ mm}^4$$

A.P. = 246 mm

P.P. = - mm


TJ385

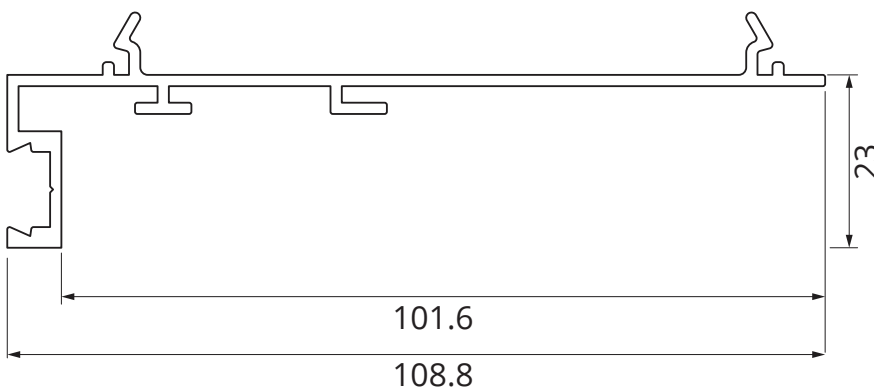
Back-to-Back Adaptor

$$I_{xx} = 0.66 \times 10^3 \text{ mm}^4$$

$$I_{yy} = 177.69 \times 10^3 \text{ mm}^4$$

A.P. = 247 mm

P.P. = - mm


RWM053

Concealed Face Fix Adaptor

$$I_{xx} = 11.89 \times 10^3 \text{ mm}^4$$

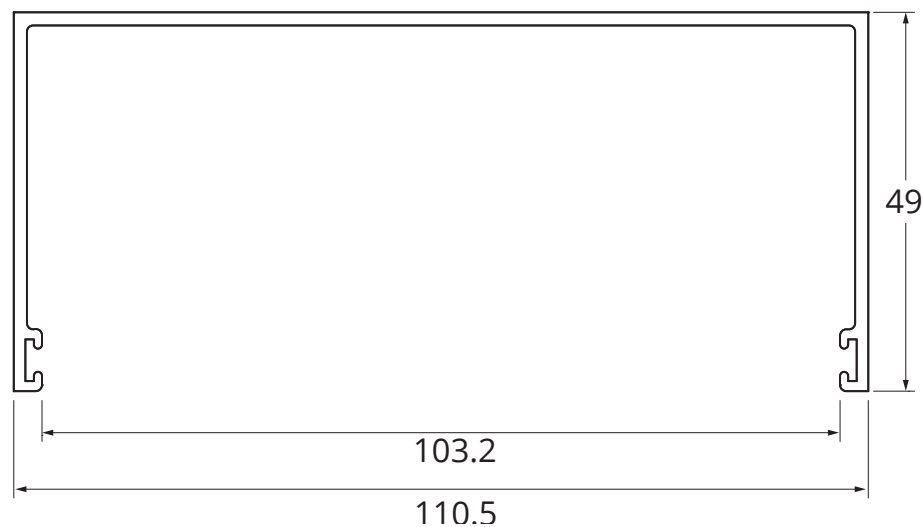
$$I_{yy} = 348.53 \times 10^3 \text{ mm}^4$$

A.P. = 369 mm

P.P. = - mm

Subframing Profiles

Scale 1:1

**TJ309**

100mm Sub-Head
49mm Tall

$$I_{xx} = 101.152 \times 10^3 \text{ mm}^4$$

$$I_{yy} = 754.640 \times 10^3 \text{ mm}^4$$

A.P. = 441 mm

P.P. = 106 mm

**TJ392**

100mm Sub Head
50mm Tall

$$I_{xx} = 127.86 \times 10^3 \text{ mm}^4$$

$$I_{yy} = 1005.45 \times 10^3 \text{ mm}^4$$

A.P. = 442 mm

P.P. = 108 mm

**TJ431**

100mm Two Part Sub
Head 50mm Tall

$$I_{xx} = 69.16 \times 10^3 \text{ mm}^4$$

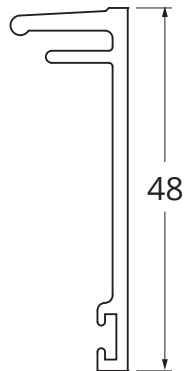
$$I_{yy} = 592.76 \times 10^3 \text{ mm}^4$$

A.P. = 371 mm

P.P. = - mm

Subframing Profiles

Scale 1:1



TJ6159

Sub Head/Jamb Cover
50mm Tall

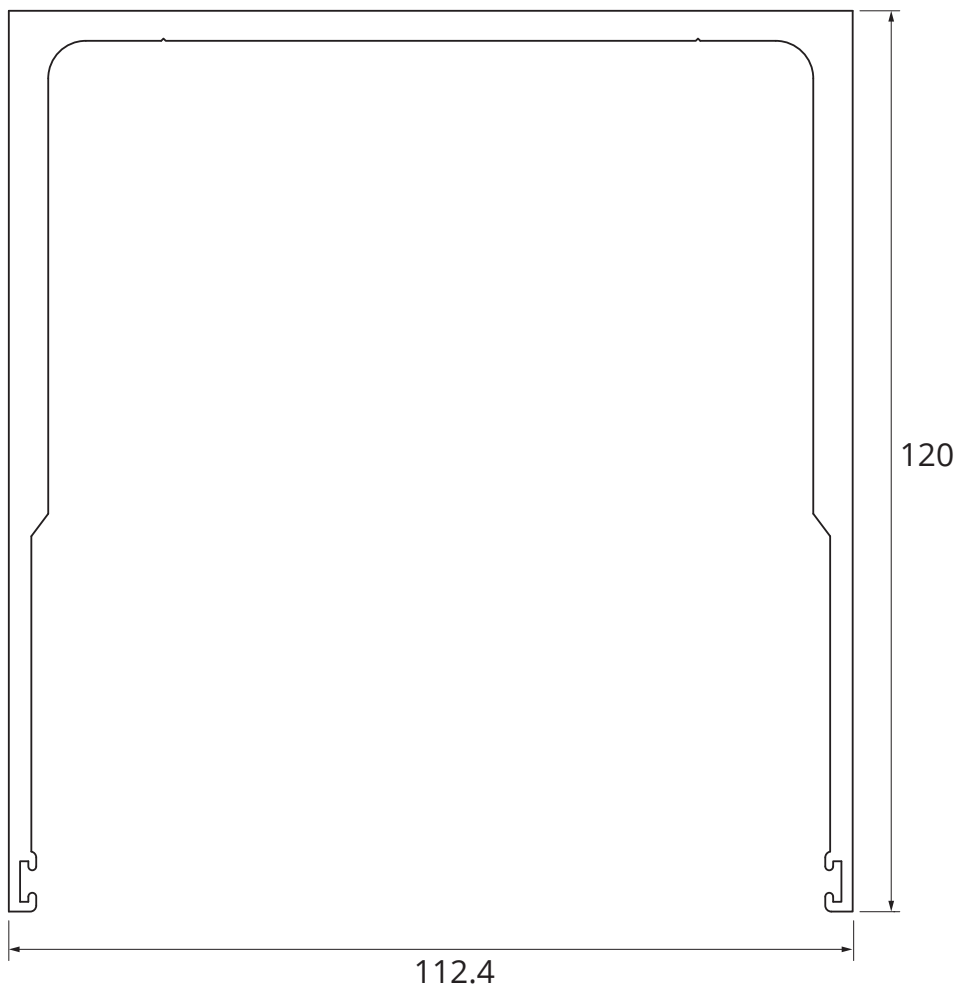
*(Covers can suit 100, 150,
165 framing, Thermal &
non-thermal)*

$$I_{xx} = 35.87 \times 10^3 \text{ mm}^4$$

$$I_{yy} = 2.07 \times 10^3 \text{ mm}^4$$

A.P. = 155 mm

P.P. = 100 mm



TJ520

100mm Sub Head
120mm Deep

$$I_{xx} = 1823.1 \times 10^3 \text{ mm}^4$$

$$I_{yy} = 3343.96 \times 10^3 \text{ mm}^4$$

A.P. = 708 mm

P.P. = 246 mm

Subframing Profiles

Scale 1:1

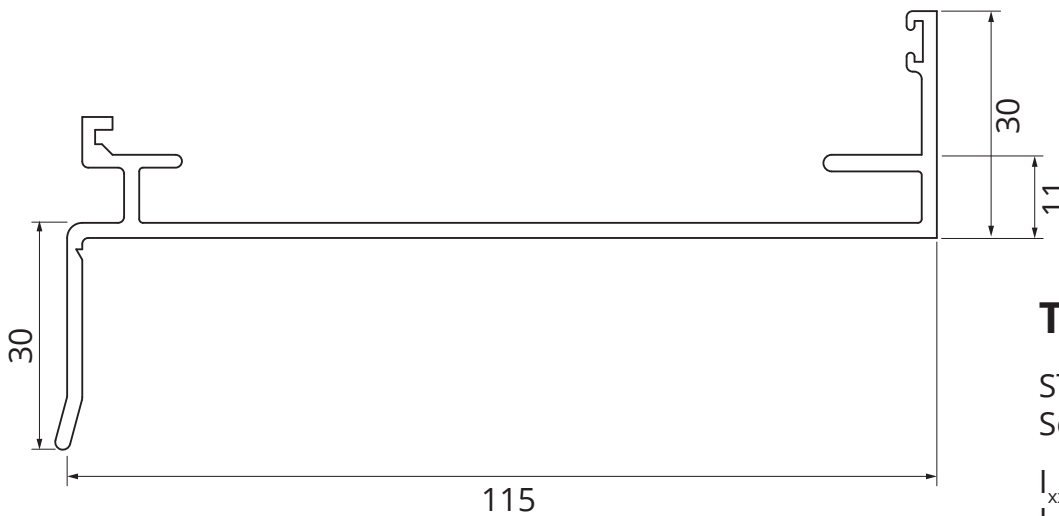
**TJ692**

100mm Sub Head
80mm Deep

$$I_{xx} = 571.9 \times 10^3 \text{ mm}^4$$

$$I_{yy} = 1945.7 \times 10^3 \text{ mm}^4$$

80
A.P. = 557 mm
P.P. = 168 mm

**TJ368**

STD Subsill 6mm
Setback Slotted

$$I_{xx} = 40.20 \times 10^3 \text{ mm}^4$$

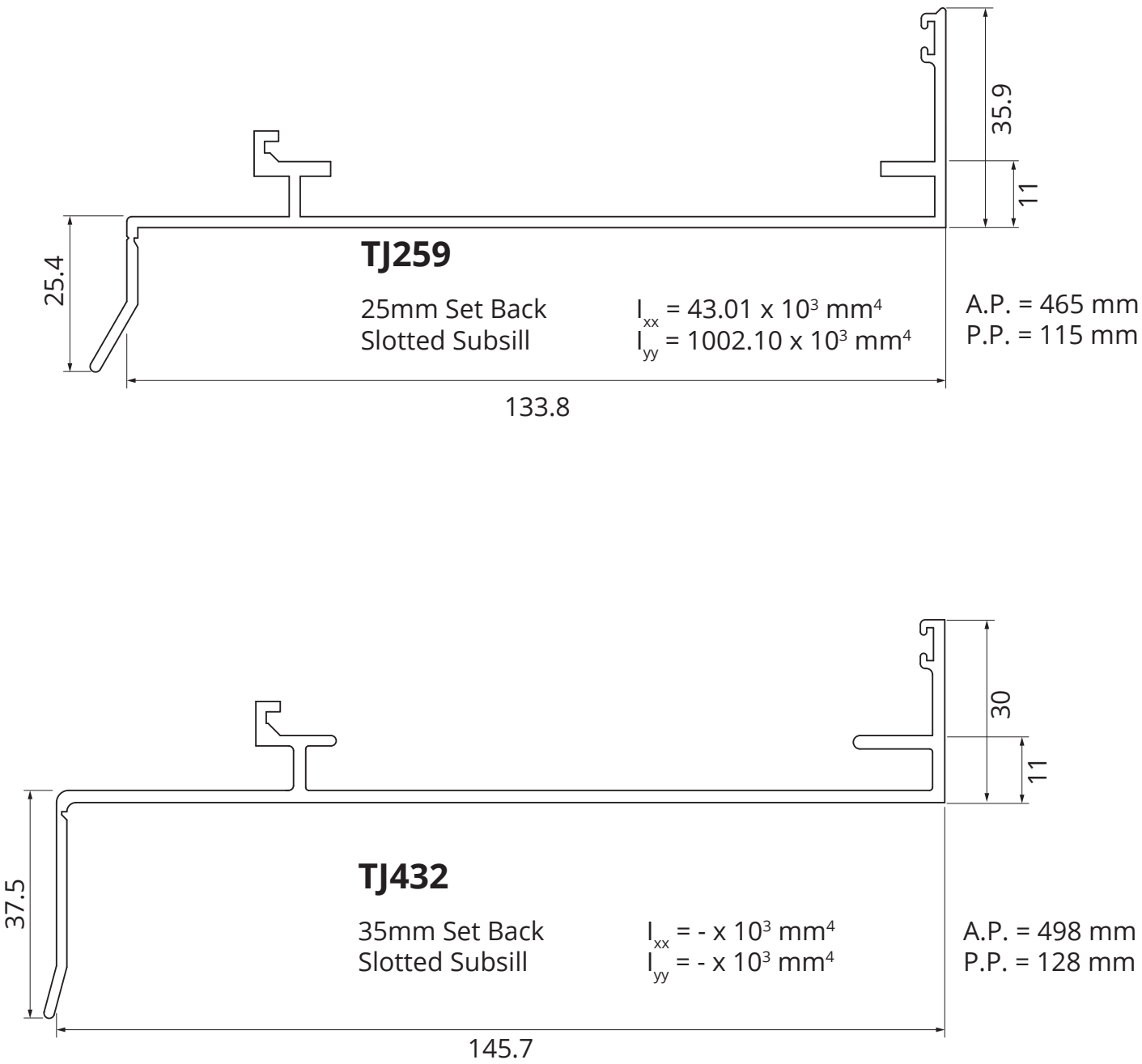
$$I_{yy} = 790.13 \times 10^3 \text{ mm}^4$$

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

100 X 50 FRONT SG FRAMING SYSTEM

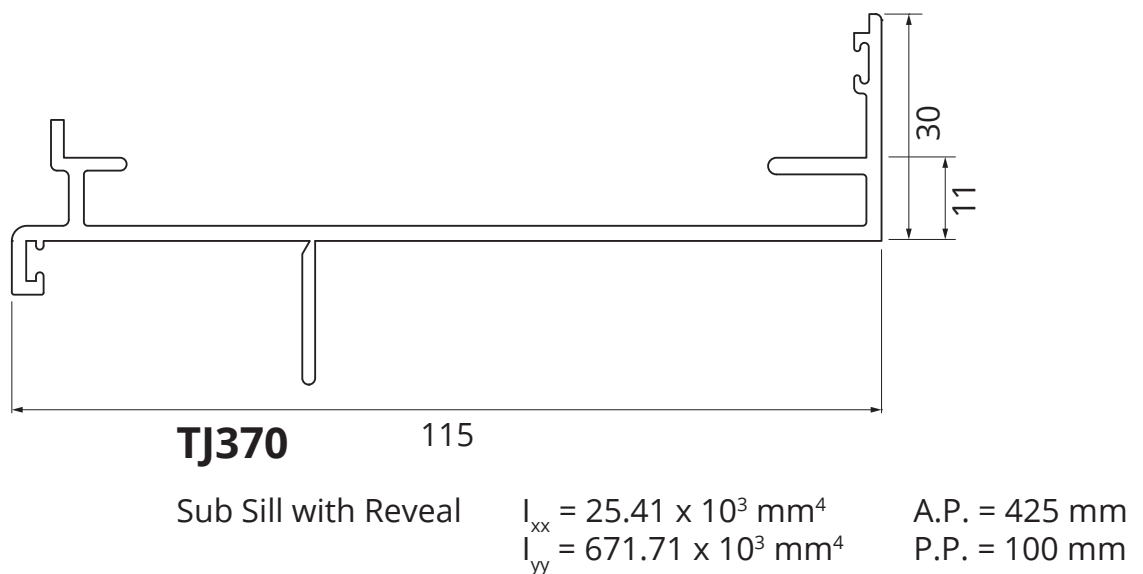
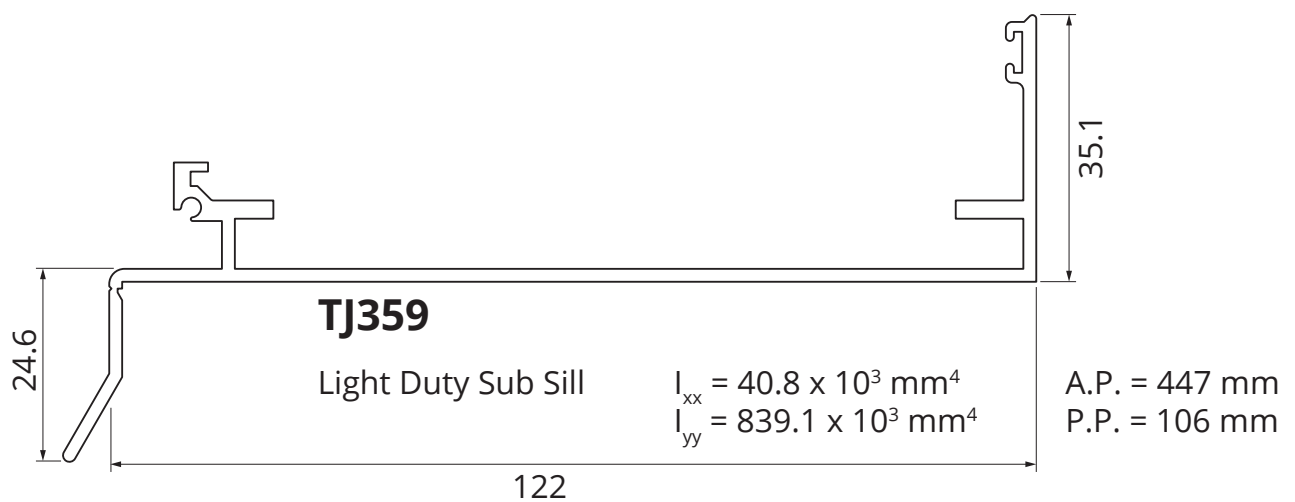
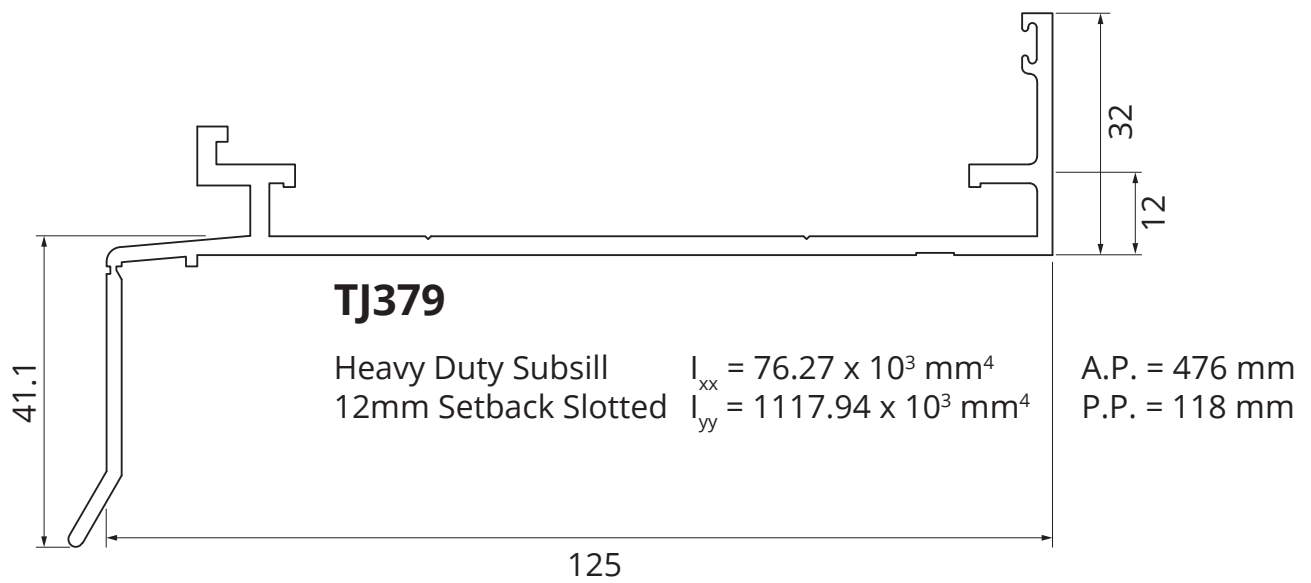
Subframing Profiles

Scale 1:1



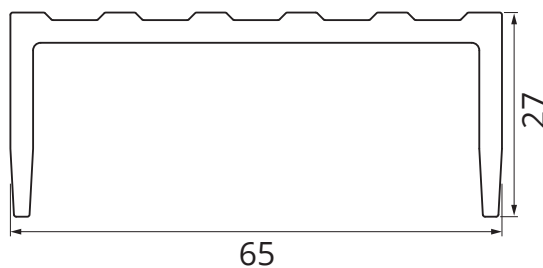
Subframing Profiles

Scale 1:1



Subframing Profiles

Scale 1:1

**TJ468**

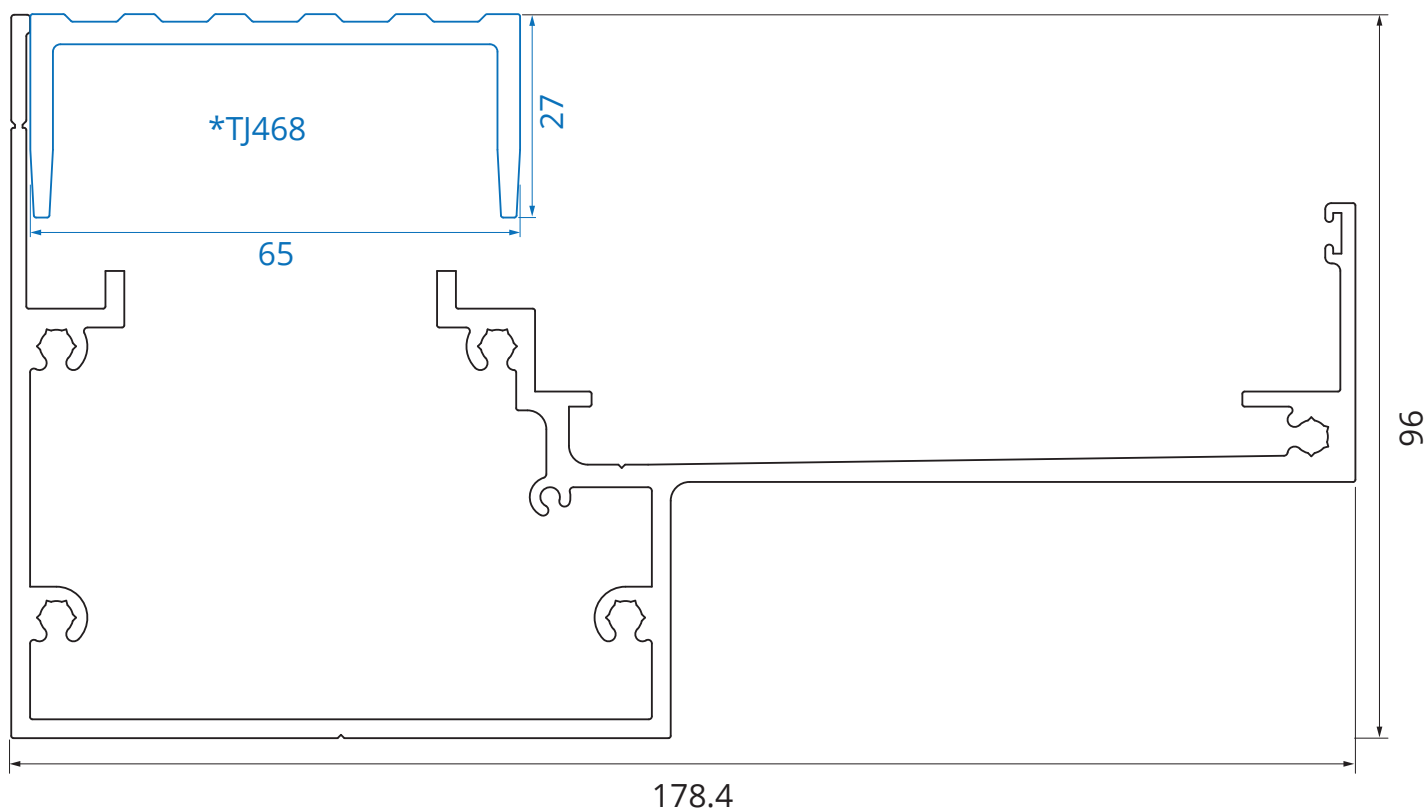
Drainage Grate (Fits TJ400 & TJ600)

$$I_{xx} = 21.32 \times 10^3 \text{ mm}^4$$

$$I_{yy} = 214.23 \times 10^3 \text{ mm}^4$$

A.P. = 232 mm

P.P. = 150 mm

**TJ400**

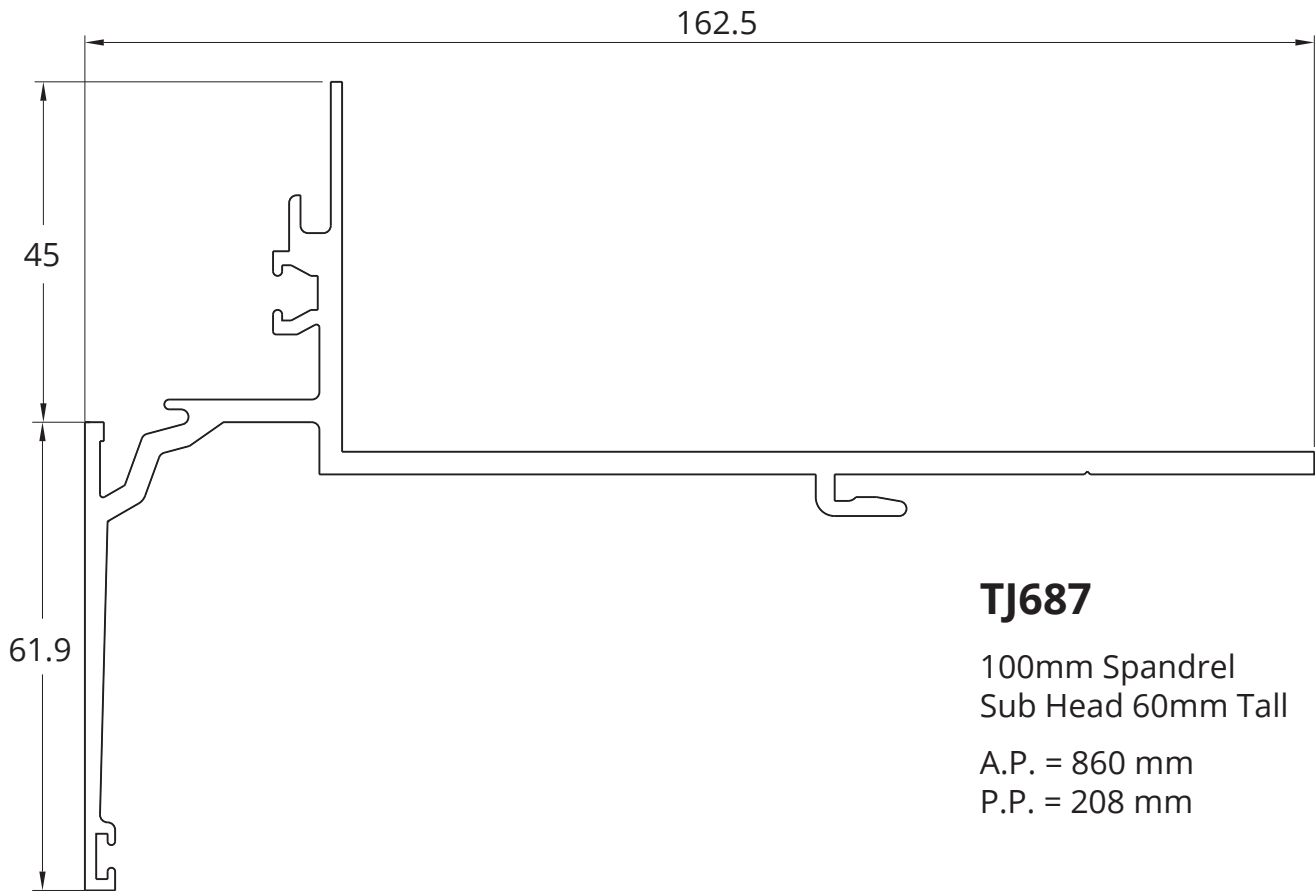
100mm Sump Sill

A.P. = 935 mm

P.P. = 357 mm

Spandrel Subframing Profiles

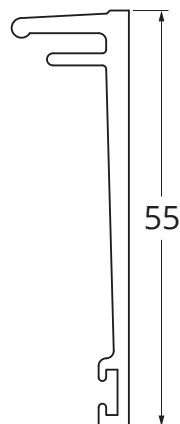
Scale 1:1

**TJ687**

100mm Spandrel
Sub Head 60mm Tall

A.P. = 860 mm

P.P. = 208 mm

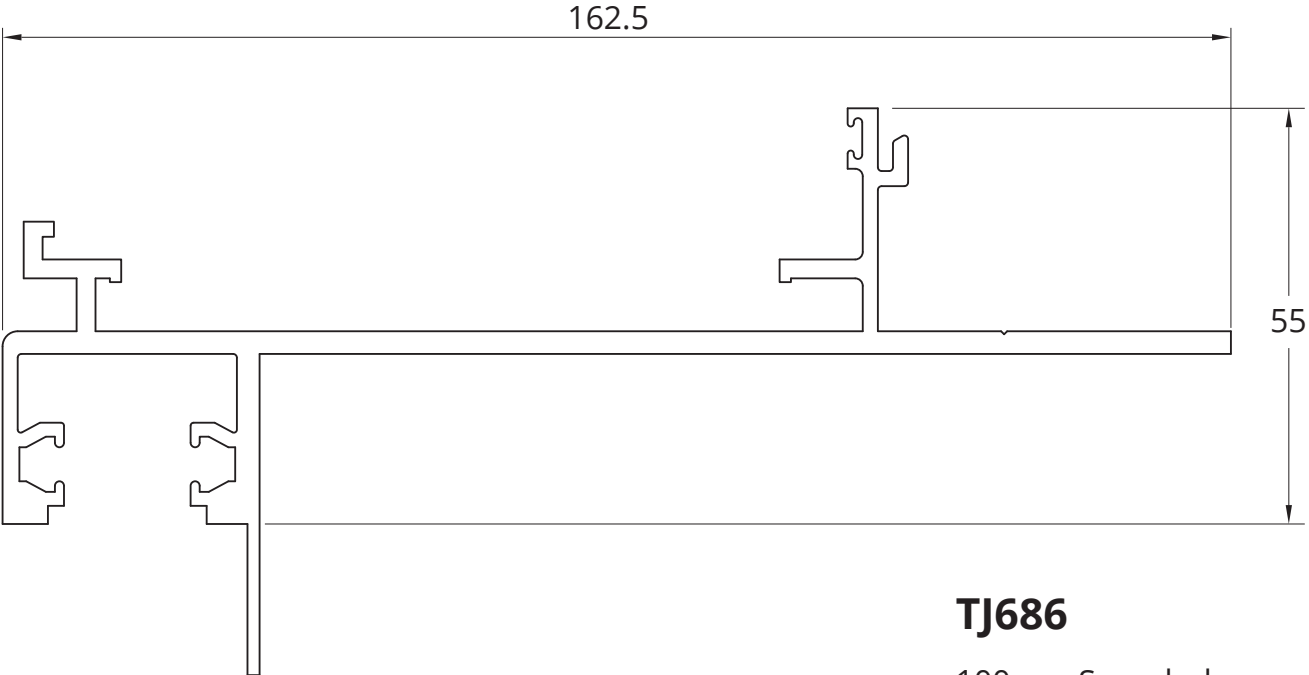
**TJ688**

$I_{xx} = 54.40 \times 10^3 \text{ mm}^4$

$I_{yy} = 2.15 \times 10^3 \text{ mm}^4$

A.P. = 166 mm

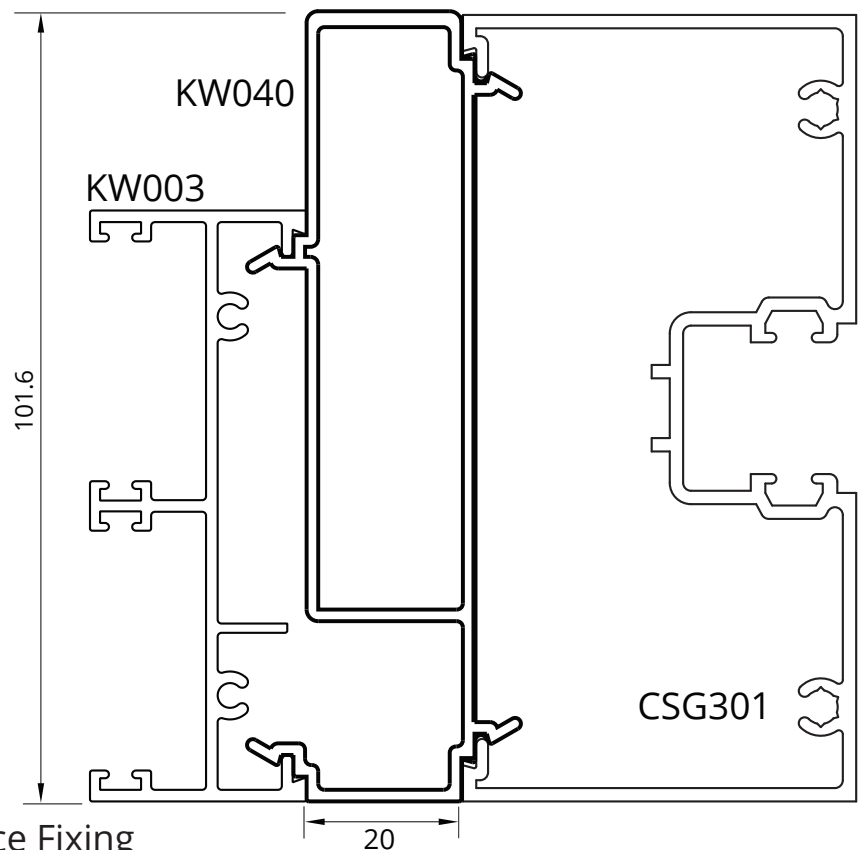
P.P. = 100 mm



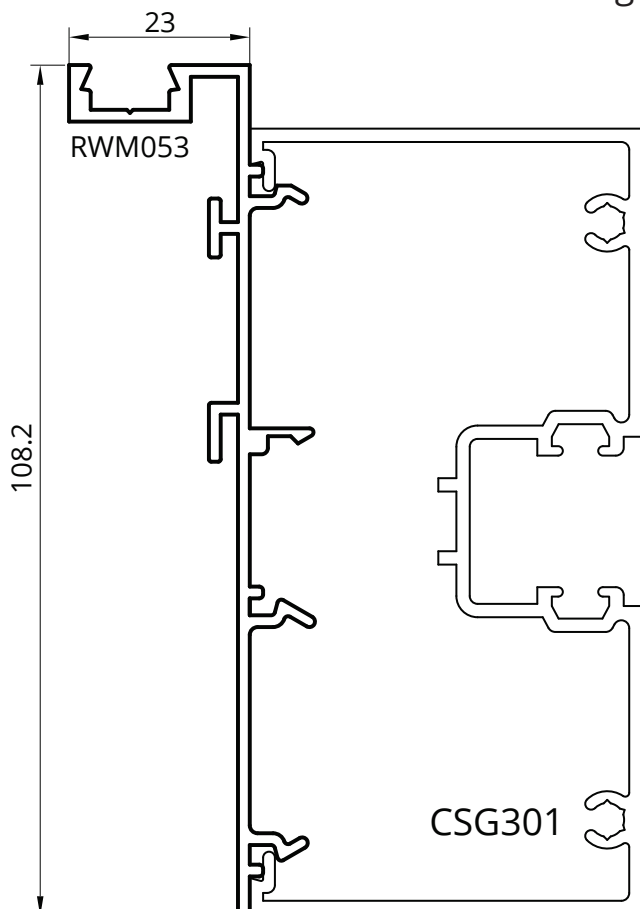
TJ686
100mm Spandrel
Sub Sill 55mm Tall
A.P. = 677 mm
P.P. = 213 mm

CityView 100mm Adaptors

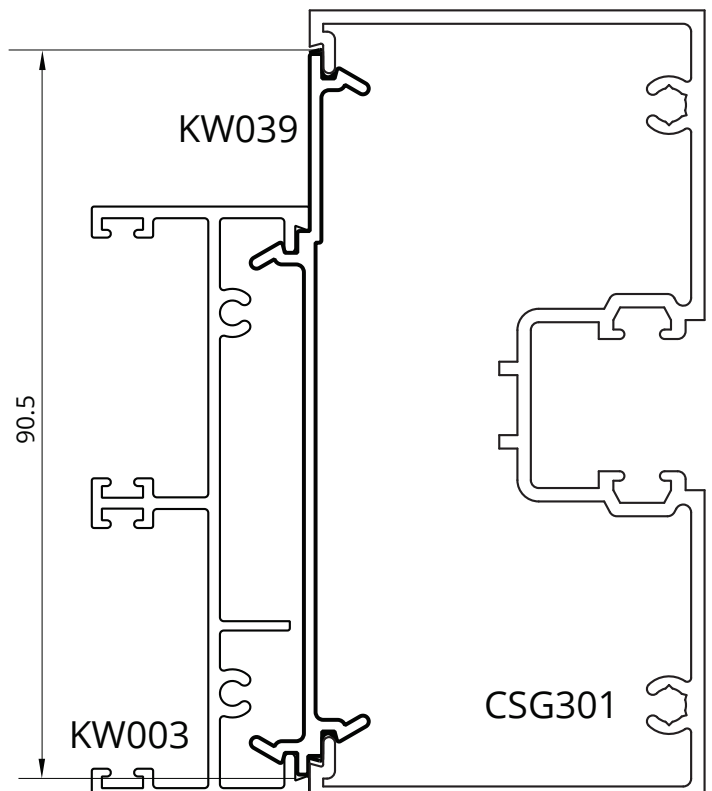
KW040 76mm to 100mm Box Joiner



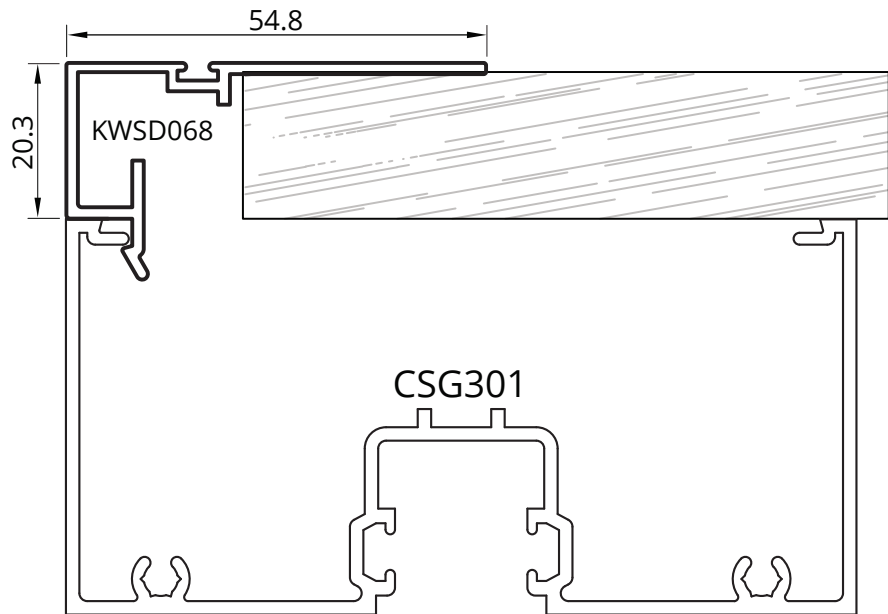
RWM053 Concealed Face Fixing



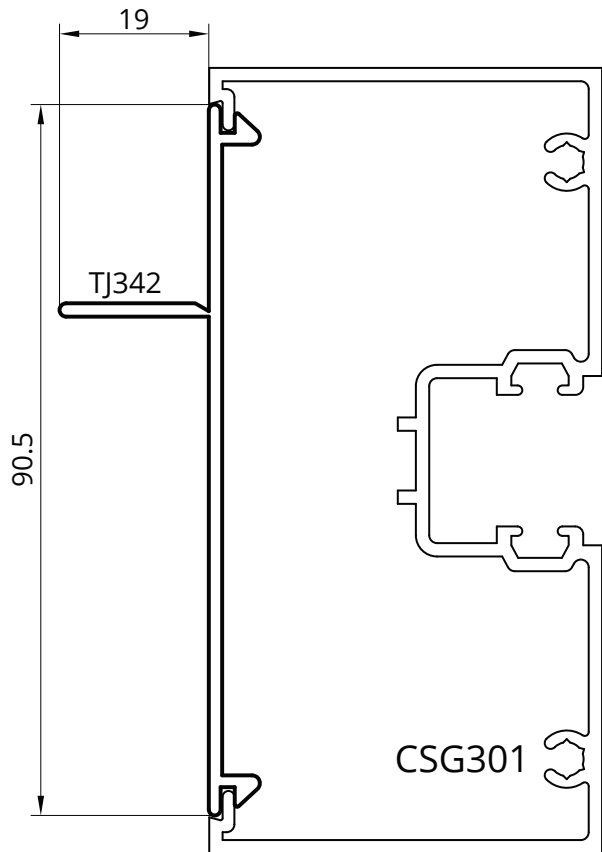
KW039 76mm to 100mm Flat Joiner



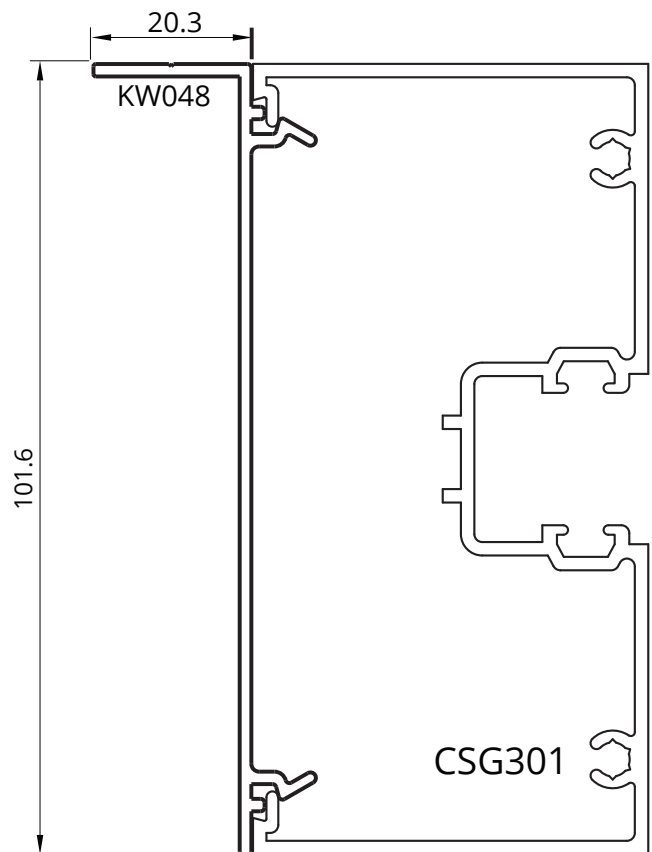
KWSD068 Inline Reveal Option



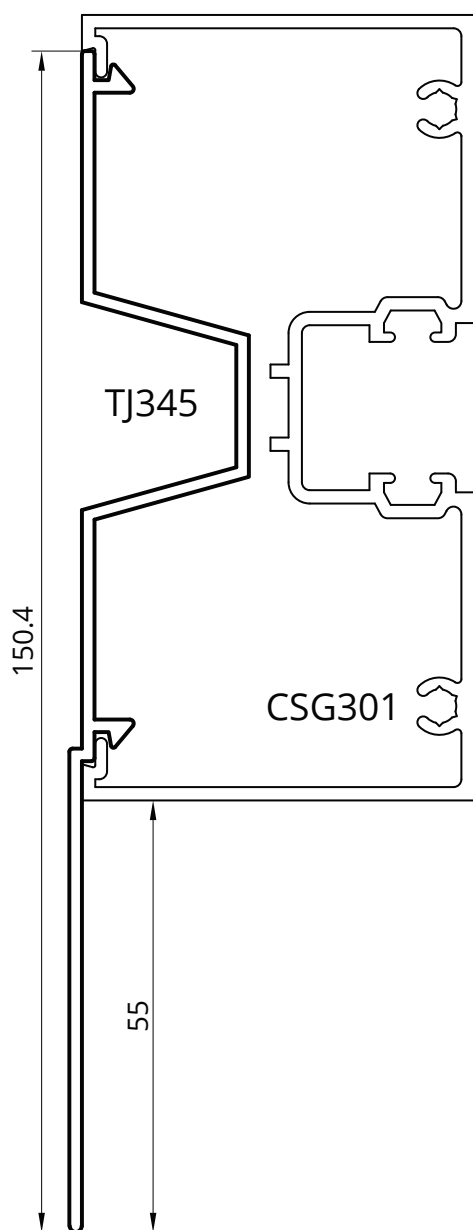
TJ342 100mm Reveal Adaptor



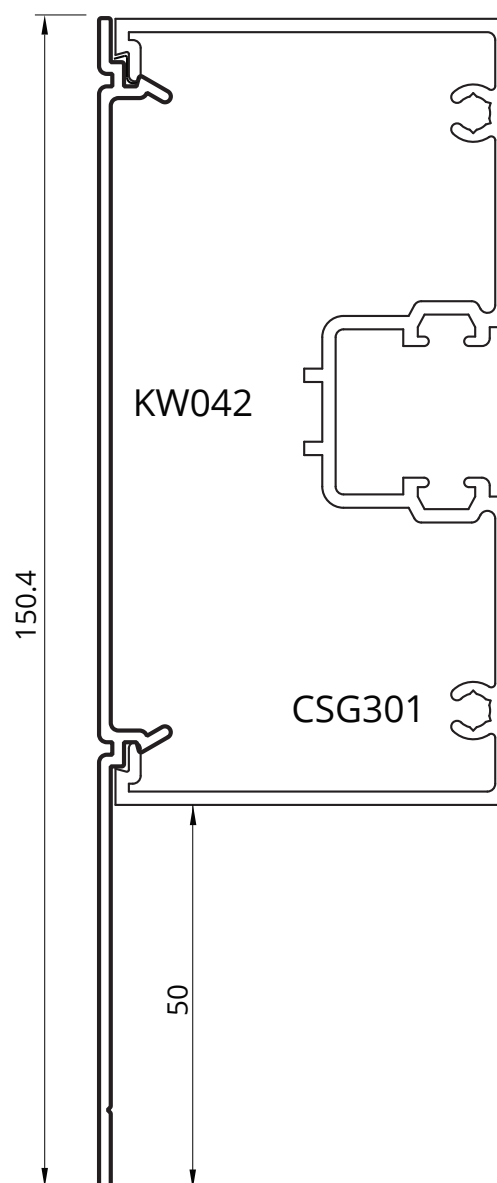
RWM048 Face Fix Adaptor



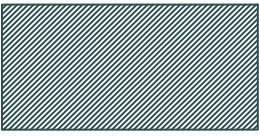
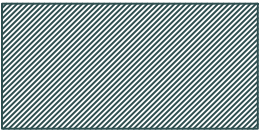
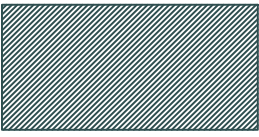
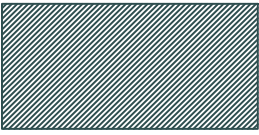
TJ345 100mm Fixing Plate



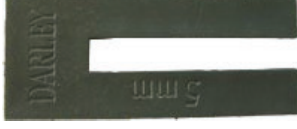
KW042 100mm Fixing Plate



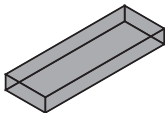
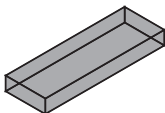
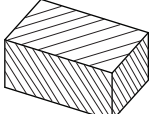
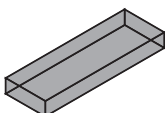
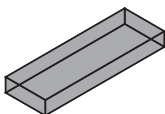
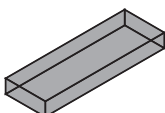
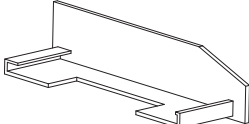
Small Parts

	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

Test Results

Performance

PERFORMANCE							
System	Test Size	Panel Size	Ser	Water	Ult	Report	Glass
100mm Front Single Glazed Heavy Duty Mullion	3062 x 3650	3000 x 1200	1000	800	2500	AZT0273.24	6 - 12.38mm
100mm Front Single Glazed Heavy Duty Mullion	2400 x 2400	2260 x 1200	1575	800	2600	AZT0175.08	6 - 12.38mm
100mm Front Single Glazed Heavy Duty Mullion with Low Light	2435 x 2400	2435 x 1200	1500	500	2600	AZT0318.14	6 - 12.38mm
100mm Front Single Glazed with 50mm Awning	2690 x 2460	2690 x 1205	1450	700	2500	AZT0397.15	6 - 12.38mm

ACOUSTIC PERFORMANCE				
System	Rw	C : C _{TR}	Report	Glass
Estimate based on 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

See Performance Section for more detail.

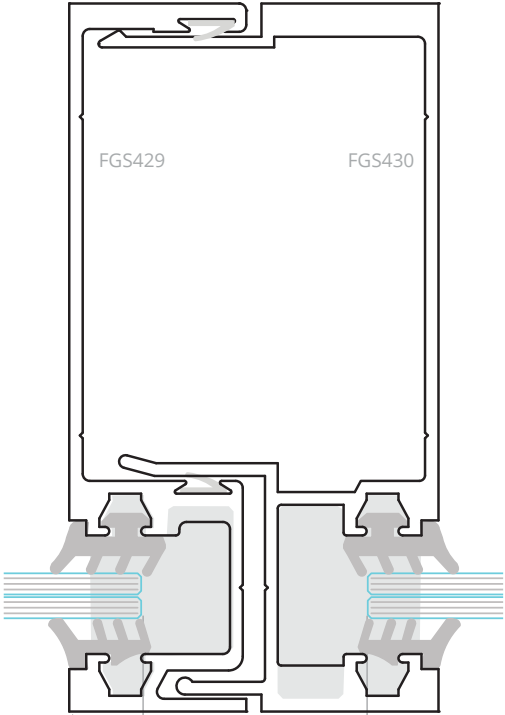
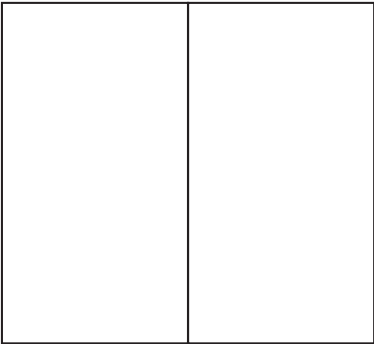
Taller maximums may be achievable via strength charts

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: 100 x 50mm Front Single Glazed Framing Heavy Mullion

The following data was obtained from the results of the tests on the 100mm Front (FSG) performed in the Azuma Testing Laboratory (NATA Accredited).



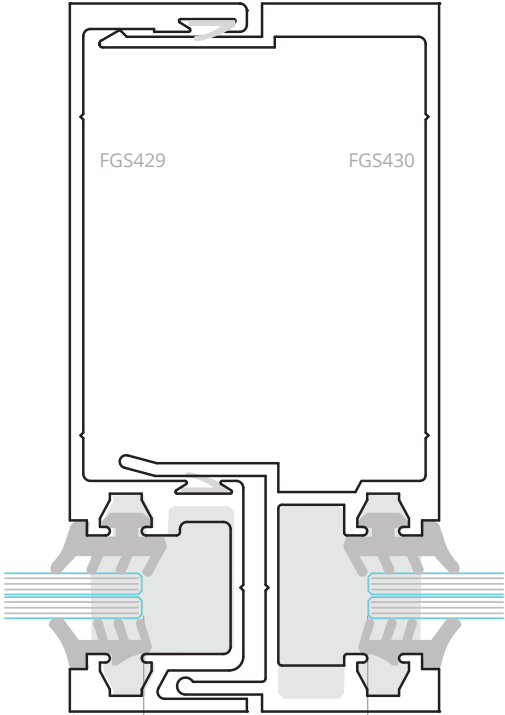
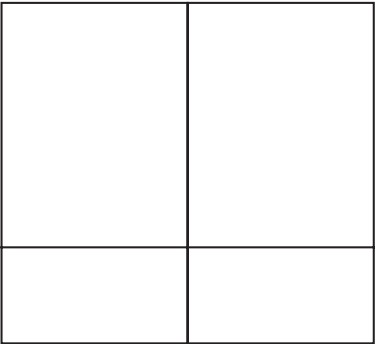
Performance

Test & Date	AZT0175.08, 12/11/2008
Test Size	2400mm H x 2400mm W
Panel Size	2260 H x 1200mm W
Serviceability Load	+/- 1575 Pa
Air Infiltration	+/- 75 Pa = 0.05 L/s.m2 +/- 150 Pa = 0.03 L/s.m2
Water Penetration	800 Pa
Ultimate Strength	+/- 2600 Pa

Structural Test Report: 100 x 50mm Front Single Glazed Framing Heavy Mullion

The following data was obtained from the results of the tests on the 100 x 50mm Front Single Glazed Framing Heavy Mullion, as performed in the Azuma Testing Laboratory (NATA Accredited).

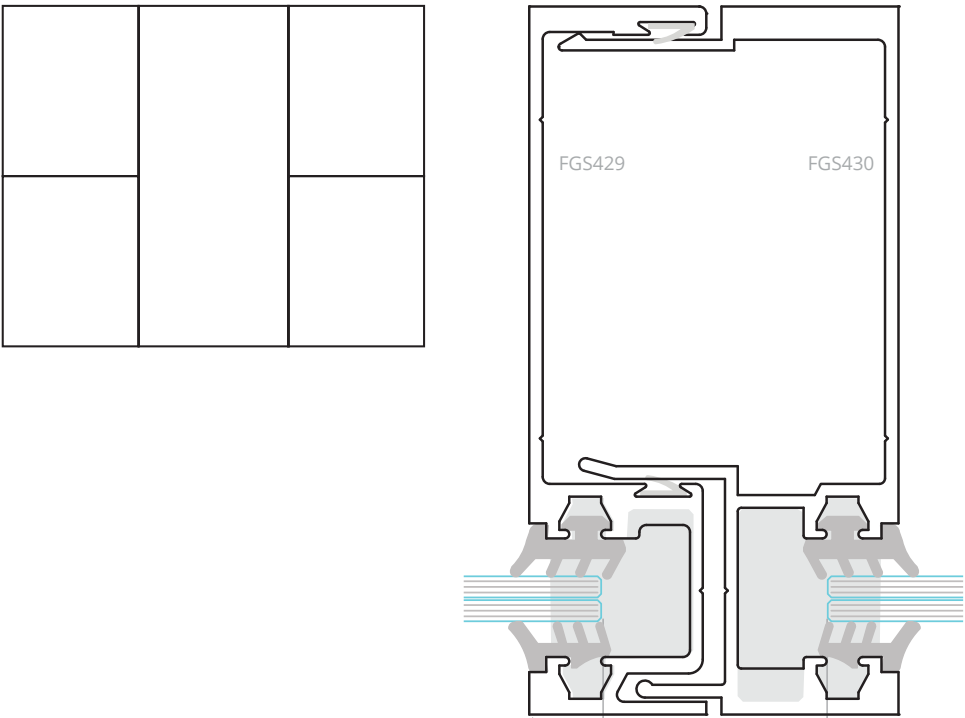
Performance



Test & Date	AZT0318.14, 12/11/2008
Test Size	2435mm H x 2400mm W
Panel Size	2435mm H x 1200mm W
Serviceability Load	+/- 1500 Pa
Air Infiltration	+75 Pa = 0.09 L/s.m2 -75 Pa = 0.09 L/s.m2 +150 Pa = 0.06 L/s.m2 -150 Pa = 0.06 L/s.m2
Water Penetration	500 Pa
Ultimate Strength	+/- 2600 Pa

Structural Test Report: 100 x 50mm Front Single Glazed Framing Heavy Mullion with Low Light

The following data was obtained from the results of the tests on the 100 x 50mm Front Single Glazed Framing Heavy Mullion with Low Light, as performed in the Azuma Testing Laboratory (NATA Accredited).

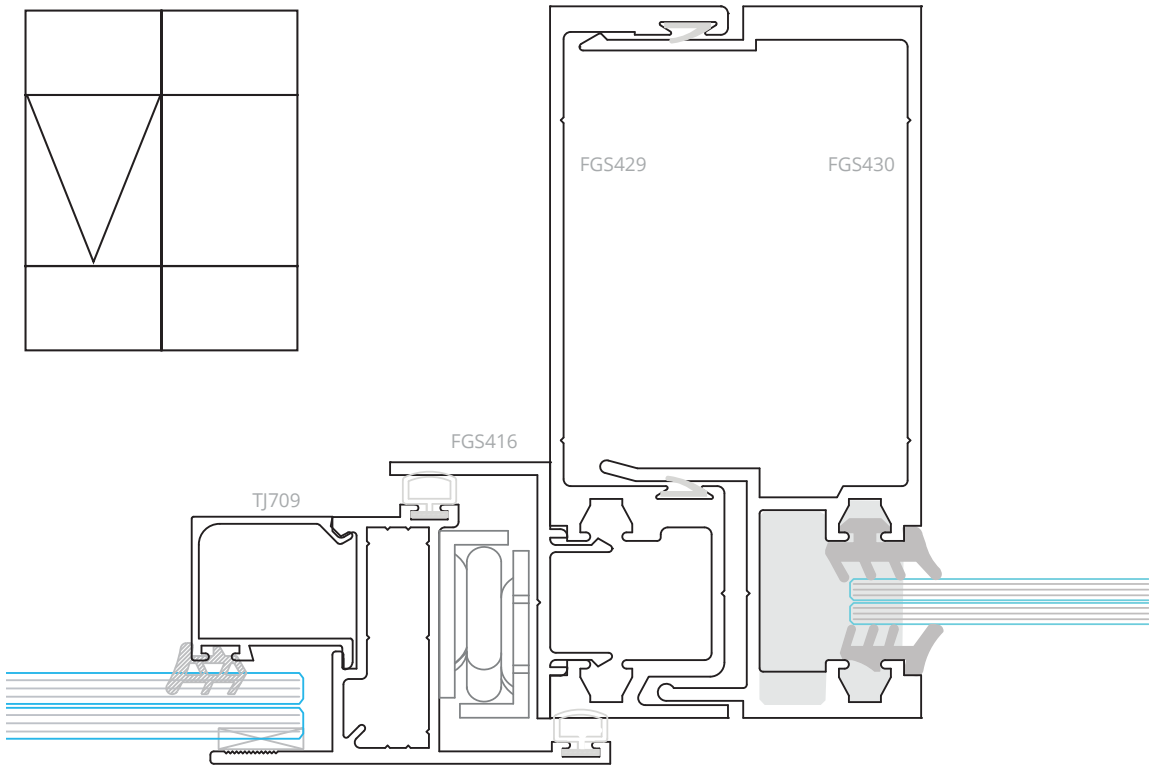


Test & Date	AZT0273.24, 06/10/2024
Test Size	3062mm H x 3650mm W
Panel Size	3000mm H x 1200mm W
Serviceability Load	+/- 1000 Pa
Air Infiltration	+75 Pa = 0.97 L/s.m2 -75 Pa = 0.90 L/s.m2
Water Penetration	800 Pa
Ultimate Strength	+/- 2500 Pa

Structural Test Report: 100 x 50mm Front Single Glazed Framing with 50mm Awning Recessed Stop

The following data was obtained from the results of the tests on the 100 x 50mm Front Single Glazed Framing with 50mm Awning Recessed Stop, as performed in the Azuma Testing Laboratory (NATA Accredited).

Performance

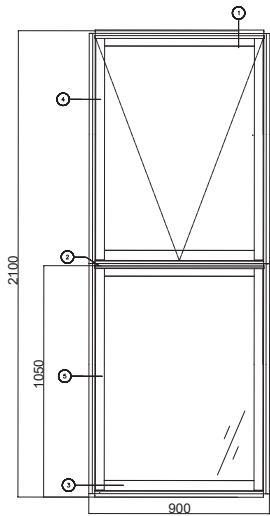


Test & Date	AZT0397.15, 26/11/2015
Test Size	2690mm H x 2469mm W
Panel Size	2690mm H x 1205mm W
Serviceability Load	+/- 1450 Pa
Air Infiltration	+75 Pa = 0.0 L/s.m2 -75 Pa = 0.6 L/s.m2
Water Penetration	700 Pa
Ultimate Strength	+/- 2500 Pa

Acoustic Test Report

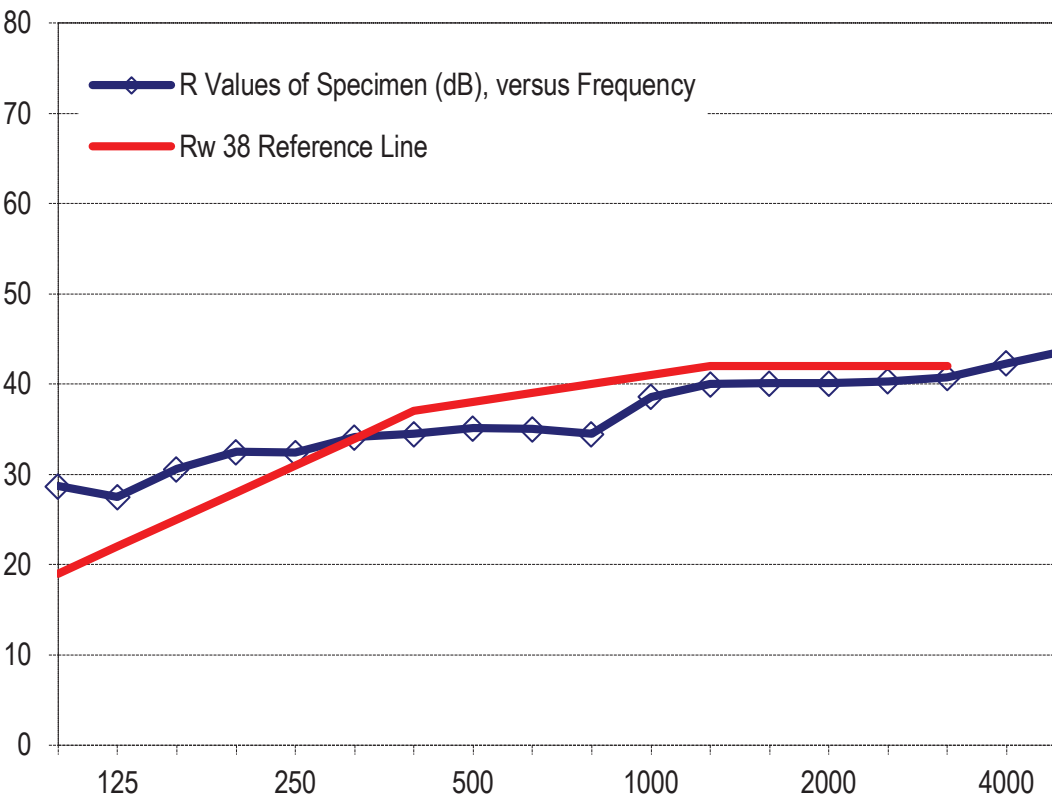
LABORATORY TEST RESULTS: CityView 100mm CSG + 50mm Hook Awning

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 & Results²

Frequency (Hz)	Specimen R Value (dB)		95 % Conf δ (dB)
	1/3 Octave	Whole Octave	
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



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

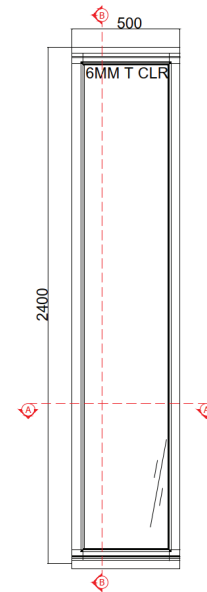
Product: Darley CityView Combination Window System

Bushfire Attack Level (BAL) Exposure: 40 kW/m²

Crib Class: AA

Job Number: FRT210417

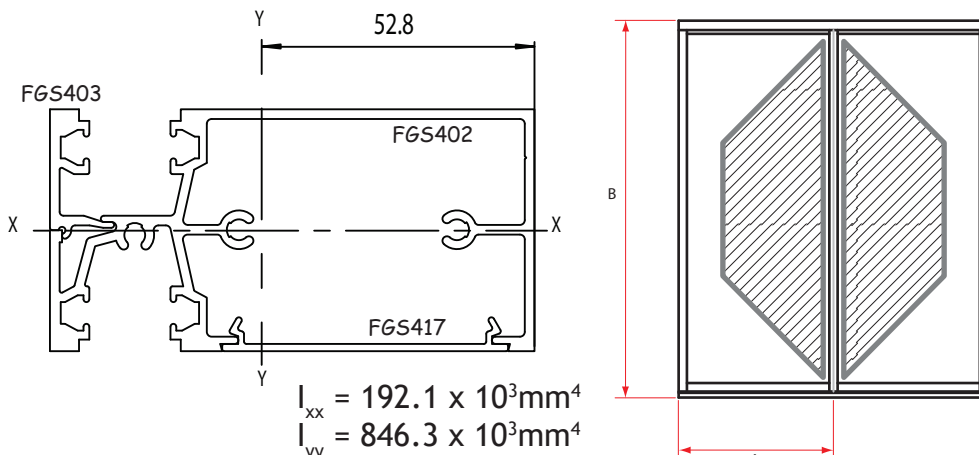
Test Date: 10 March 2022 **Revision:** R1.0



	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 4mm.	Low-level glazing must be Grade A safety glass with a minimum thickness of 5mm. 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 5mm. 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 650kg/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 2mm 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.

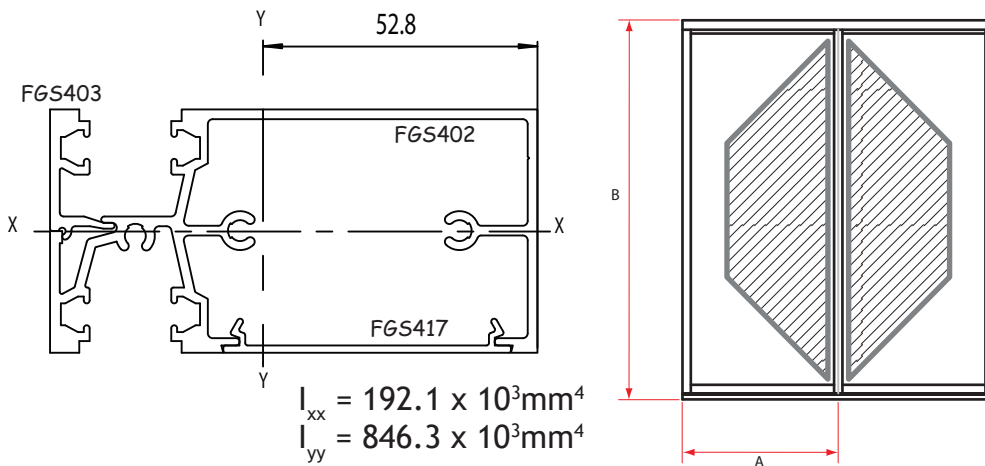
BAL

Transom Strength Chart: FGS402 + FGS403 + FGS417



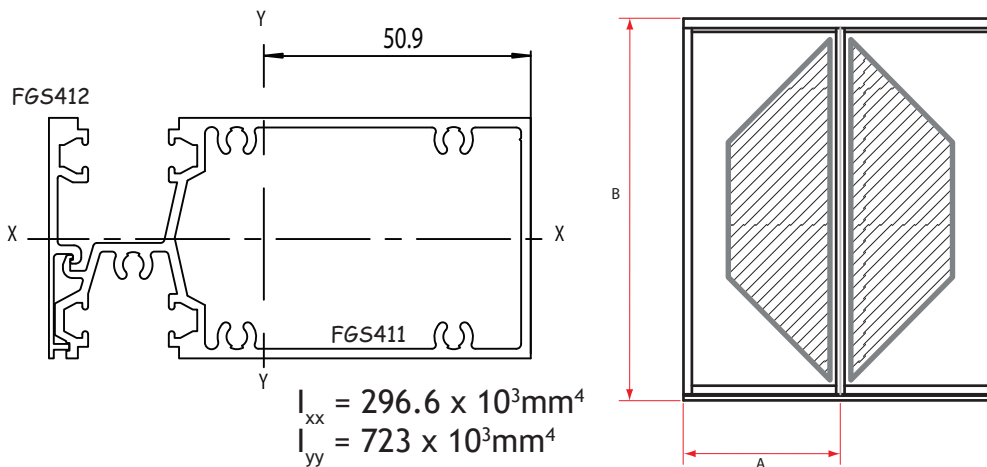
Darley 100 x 50 Front Glazed	Deflection Ratio's Serviceability =1/150		Serviceability =1/180		Serviceability =1/250		Ultimate = U	Limitations: Serviceability to 5000 Pa & Ultimate to 8000 Pa		Extrusions: FGS402 + FGS403 + FGS417	
	Glazing Width either side of the mullion in mm (A)										
Window Height (mm) (B)	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800
2200	2541	2286	2087	1927	1797	1691	1604	1533	1474	1427	1389
	2541	2286	2087	1927	1797	1691	1604	1533	1474	1427	1389
	2222	2004	1833	1697	1587	1498	1425	1365	1317	1278	1248
	3811	3429	3130	2890	2696	2537	2406	2299	2211	2140	2084
2400	2119	1903	1733	1596	1484	1392	1315	1251	1198	1153	1116
	2119	1903	1733	1596	1484	1392	1315	1251	1198	1153	1116
	1697	1527	1393	1285	1198	1127	1067	1018	977	943	915
	3179	2855	2599	2394	2226	2088	1973	1877	1797	1730	1674
2600	1795	1610	1463	1345	1248	1167	1100	1043	995	954	920
	1795	1610	1463	1345	1248	1167	1100	1043	995	954	920
	1326	1190	1084	998	928	870	822	781	747	718	694
	2693	2415	2195	2017	1872	1751	1650	1565	1492	1431	1380
2800	1541	1380	1253	1150	1065	994	935	884	841	804	773
	1466	1315	1195	1099	1019	954	898	852	812	778	749
	1056	947	861	791	734	687	647	613	585	560	539
	2312	2070	1879	1724	1597	1491	1402	1326	1262	1207	1159
3000	1338	1197	1085	994	920	857	805	760	721	688	660
	1187	1063	965	886	821	766	721	682	648	620	595
	855	766	695	638	591	552	519				
	2007	1795	1628	1492	1380	1286	1207	1140	1082	1032	989
3200	1170	1047	949	869	803	748	701	661	626	596	570
	975	872	791	725	671	625	587	555	527	502	
	702	628	569	522							
	1758	1572	1424	1304	1204	1121	1051	991	939	894	855
3400	972	869	788	721	667	621	582	549	521		
	810	725	656	601	556	517					
	583	522									
	1554	1388	1256	1149	1061	987	924	870	823		
3600	817	730	661	605	559	520					
	681	608	551	504							
	1383	1235	1117	1021	942	875					
3800	693	619	560	512							
	693	619	560	512							
	1239	1106	1000	914							

Transom Strength Chart: FGS402 + FGS403 + FGS417



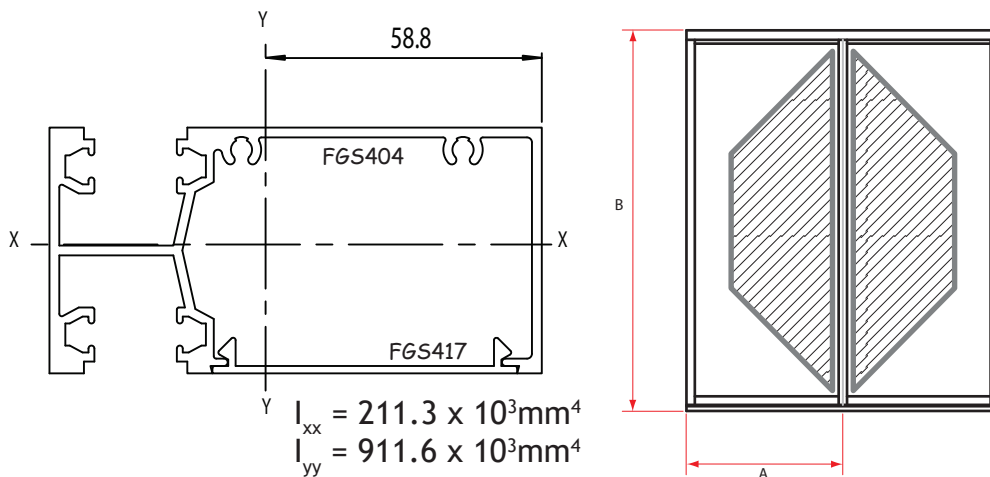
Darley 100 x 50 Front Glazed	Deflection Ratio's Serviceability =1/150		Serviceability =1/180		Serviceability =1/250		Ultimate = U	Limitations: Serviceability to 5000 Pa & Ultimate to 8000 Pa		Extrusions: FGS402 + FGS403 + FGS417	
	Glazing Width either side of the mullion in mm (A)										
Window Height (mm) (B)	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800
2200	2541	2286	2087	1927	1797	1691	1604	1533	1474	1427	1389
	2541	2286	2087	1927	1797	1691	1604	1533	1474	1427	1389
	2222	2004	1833	1697	1587	1498	1425	1365	1317	1278	1248
	3811	3429	3130	2890	2696	2537	2406	2299	2211	2140	2084
2400	2119	1903	1733	1596	1484	1392	1315	1251	1198	1153	1116
	2119	1903	1733	1596	1484	1392	1315	1251	1198	1153	1116
	1697	1527	1393	1285	1198	1127	1067	1018	977	943	915
	3179	2855	2599	2394	2226	2088	1973	1877	1797	1730	1674
2600	1795	1610	1463	1345	1248	1167	1100	1043	995	954	920
	1795	1610	1463	1345	1248	1167	1100	1043	995	954	920
	1326	1190	1084	998	928	870	822	781	747	718	694
	2693	2415	2195	2017	1872	1751	1650	1565	1492	1431	1380
2800	1541	1380	1253	1150	1065	994	935	884	841	804	773
	1466	1315	1195	1099	1019	954	898	852	812	778	749
	1056	947	861	791	734	687	647	613	585	560	539
	2312	2070	1879	1724	1597	1491	1402	1326	1262	1207	1159
3000	1338	1197	1085	994	920	857	805	760	721	688	660
	1187	1063	965	886	821	766	721	682	648	620	595
	855	766	695	638	591	552	519				
	2007	1795	1628	1492	1380	1286	1207	1140	1082	1032	989
3200	1170	1047	949	869	803	748	701	661	626	596	570
	975	872	791	725	671	625	587	555	527	502	
	702	628	569	522							
	1758	1572	1424	1304	1204	1121	1051	991	939	894	855
3400	972	869	788	721	667	621	582	549	521		
	810	725	656	601	556	517					
	583	522									
	1554	1388	1256	1149	1061	987	924	870	823		
3600	817	730	661	605	559	520					
	681	608	551	504							
	1383	1235	1117	1021	942	875					
3800	693	619	560	512							
	693	619	560	512							
	1239	1106	1000	914							

Transom Strength Chart: FGS411 and FGS412



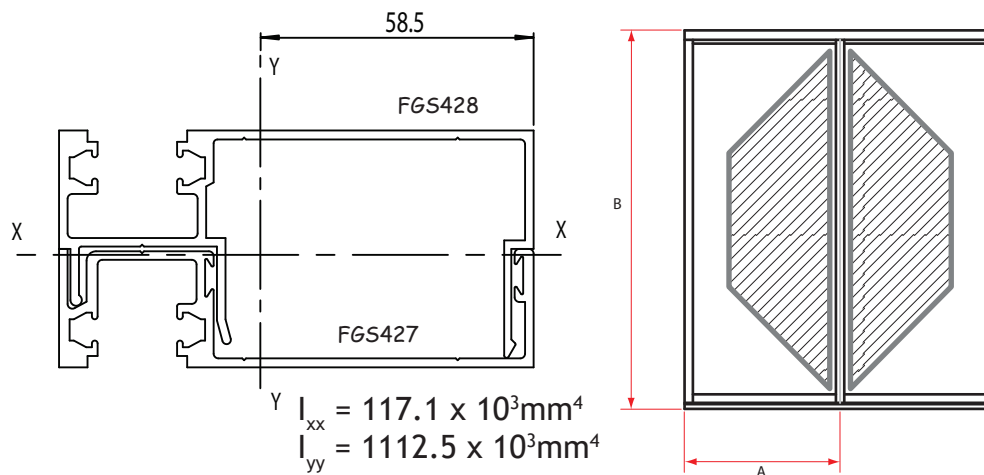
Darley 100 x 50 Front Glazed	Deflection Ratio's Serviceability =1/150		Serviceability =1/180		Serviceability =1/250		Ultimate = U	Limitations: Serviceability to 5000 Pa & Ultimate to 8000 Pa		Extrusions: FGS411 + FGS412	
	Glazing Width either side of the mullion in mm (A)										
Window Height (mm) (B)	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800
2200	2251	2026	1849	1708	1593	1499	1422	1358	1306	1264	1231
	2251	2026	1849	1708	1593	1499	1422	1358	1306	1264	1231
	1898	1712	1566	1450	1356	1280	1217	1166	1125	1092	1066
	3377	3039	2774	2561	2389	2248	2133	2037	1960	1897	1847
2400	1878	1687	1536	1414	1315	1234	1166	1109	1061	1022	989
	1878	1687	1536	1414	1315	1234	1166	1109	1061	1022	989
	1449	1304	1190	1098	1024	962	912	870	835	806	782
	2817	2530	2303	2121	1973	1850	1748	1663	1592	1533	1484
2600	1591	1427	1297	1192	1106	1034	975	924	882	846	815
	1573	1412	1286	1184	1101	1032	975	924	882	846	815
	1132	1017	926	853	793	743	702	667	638	613	593
	2387	2140	1945	1788	1659	1552	1462	1387	1323	1268	1223
2800	1366	1223	1110	1019	944	881	828	784	745	713	685
	1253	1123	1021	939	871	815	767	728	694	665	640
	902	809	735	676	627	587	553	524			
	2049	1835	1665	1528	1415	1321	1242	1175	1118	1069	1027
3000	1185	1061	962	881	815	760	713	673	639	610	585
	1014	908	825	757	701	655	616	582	554	530	509
	730	654	594	545	505						
	1778	1591	1442	1322	1223	1140	1070	1010	959	915	877
3200	999	894	811	743	688	641	602	569	540	515	
	833	745	676	619	573	534	502				
	600	536									
	1558	1393	1262	1155	1067	994	931	878	832	793	
3400	831	743	673	616	570	530					
	692	619	561	514							
	1377	1230	1113	1019	940	874					
3600	698	624	565	517							
	582	520									
	1226	1094	990	905							
3800	592	529									
	592	529									
	1098	980									

Transom Strength Chart: FGS404 and FGS417



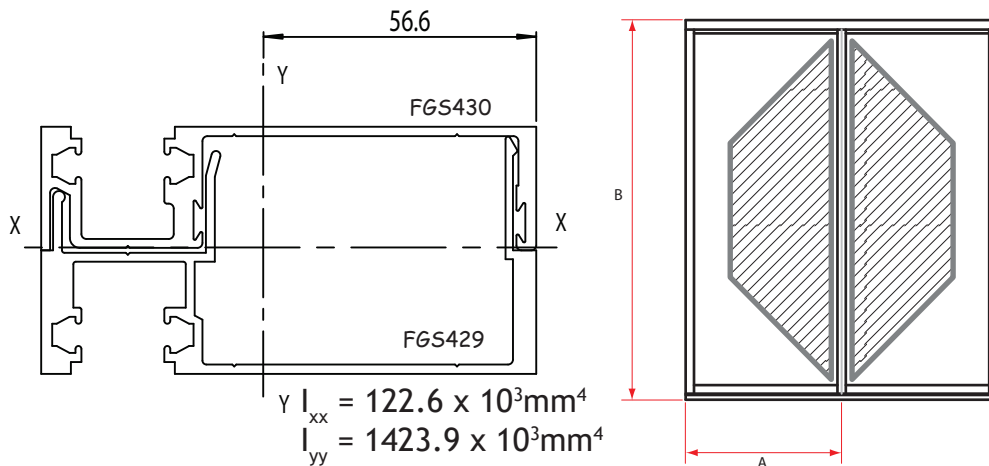
Darley 100 x 50 Front Glazed	Deflection Ratio's Serviceability =1/150		Serviceability =1/180		Serviceability =1/250		Ultimate = U	Limitations: Serviceability to 5000 Pa & Ultimate to 8000 Pa		Extrusions: FGS404 + FGS417	
	Glazing Width either side of the mullion in mm (A)										
Window Height (mm) (B)	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800
2200	2457	2211	2018	1864	1738	1636	1552	1483	1426	1380	1344
	2457	2211	2018	1864	1738	1636	1552	1483	1426	1380	1344
	2393	2158	1975	1828	1710	1613	1535	1471	1418	1377	1344
	3686	3317	3027	2796	2608	2454	2328	2224	2139	2070	2016
2400	2050	1841	1676	1544	1436	1346	1272	1210	1159	1115	1080
	2050	1841	1676	1544	1436	1346	1272	1210	1159	1115	1080
	1828	1644	1500	1385	1291	1213	1150	1096	1052	1016	986
	3075	2761	2514	2315	2153	2019	1908	1815	1738	1673	1620
2600	1737	1557	1415	1301	1207	1129	1064	1009	962	923	890
	1737	1557	1415	1301	1207	1129	1064	1009	962	923	890
	1428	1282	1167	1075	1000	937	885	841	804	773	747
	2605	2336	2123	1951	1810	1694	1596	1513	1444	1384	1334
2800	1491	1335	1212	1112	1030	961	904	855	814	778	747
	1491	1335	1212	1112	1030	961	904	855	814	778	747
	1137	1020	927	852	791	739	697	660	630	603	581
	2236	2002	1817	1668	1545	1442	1356	1283	1220	1167	1121
3000	1294	1158	1049	962	890	829	778	735	698	666	638
	1279	1145	1040	954	884	825	776	734	698	666	638
	921	825	749	687	636	594	559	529	503		
	1941	1736	1574	1443	1334	1244	1168	1102	1047	999	957
3200	1134	1014	918	841	777	723	678	639	606	577	552
	1050	940	852	781	723	674	633	597	567	541	519
	756	676	613	562	520	485					
	1701	1520	1377	1261	1165	1085	1017	958	908	865	827
3400	1002	895	810	741	684	636	596	561	531	505	482
	873	780	707	648	598	557	523	493			
	628	562	509								
	1503	1343	1215	1112	1026	954	893	841	796	757	723
3600	880	787	712	652	602	560	524	494			
	733	655	593	543	501						
	528										
	1338	1195	1080	988	911	847	792	745			
3800	747	667	604	552	509						
	747	667	604	552	509						
	1199	1070	967	884	814						

Mullion Strength Chart: FGS427 and FGS428



Darley 100 x 50 Front Glazed	Deflection Ratio's Serviceability =1/150		Serviceability =1/180		Serviceability =1/250		Ultimate = U	Limitations: Serviceability to 5000 Pa & Ultimate to 8000 Pa		Extrusions: FGS427 + FGS428	
	Glazing Width either side of the mullion in mm (A)										
Window Height (mm) (B)	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800
2200	3014	2713	2476	2286	2132	2007	1903	1819	1749	1693	1648
	3014	2713	2476	2286	2132	2007	1903	1819	1749	1693	1648
	2921	2634	2410	2231	2086	1969	1873	1795	1731	1680	1640
	4521	4069	3713	3429	3199	3010	2855	2728	2624	2539	2473
2400	2514	2258	2056	1893	1761	1651	1561	1485	1421	1368	1324
	2514	2258	2056	1893	1761	1651	1561	1485	1421	1368	1324
	2230	2007	1831	1690	1575	1481	1403	1338	1284	1240	1203
	3771	3387	3084	2840	2641	2477	2341	2227	2132	2052	1987
2600	2130	1910	1736	1596	1480	1385	1305	1238	1181	1132	1091
	2130	1910	1736	1596	1480	1385	1305	1238	1181	1132	1091
	1742	1565	1425	1312	1220	1144	1080	1027	982	944	912
	3195	2865	2604	2393	2221	2077	1957	1856	1771	1698	1637
2800	1829	1638	1486	1364	1263	1179	1109	1049	998	954	917
	1829	1638	1486	1364	1263	1179	1109	1049	998	954	917
	1388	1244	1131	1040	965	902	850	806	768	736	709
	2743	2456	2229	2046	1895	1769	1663	1574	1497	1432	1375
3000	1587	1420	1287	1180	1091	1017	955	902	856	817	783
	1560	1398	1269	1165	1079	1007	947	896	852	815	783
	1123	1006	914	838	777	725	682	645	614	587	563
	2381	2130	1931	1770	1637	1526	1432	1352	1284	1225	1174
3200	1391	1243	1126	1031	953	887	831	784	743	707	677
	1281	1147	1040	953	882	822	772	729	692	660	633
	922	826	749	686	635	592	556	525	498		
	2086	1865	1689	1547	1429	1330	1247	1176	1114	1061	1015
3400	1229	1098	994	909	839	780	731	688	651	619	591
	1065	952	863	790	730	680	638	601	570	543	520
	767	686	621	569	526						
	1844	1647	1491	1364	1259	1171	1096	1032	977	929	887
3600	1074	960	869	795	734	683	640	603	571	543	519
	895	800	724	663	612	569	533	502			
	644	576	521								
	1641	1465	1325	1212	1117	1038	971	914	864	821	783
3800	911	814	737	674	621	578	541	509			
	911	814	737	674	621	578	541	509			
	547										
	1470	1312	1186	1084	999	928	867	815			

Mullion Strength Chart: FGS429 and FGS430

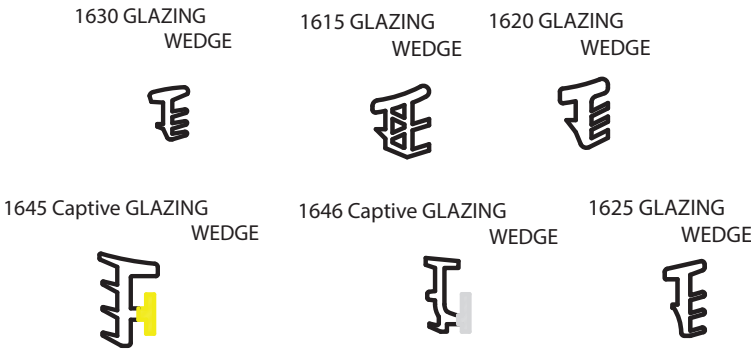


Darley 100 x 50 Front Glazed	Deflection Ratio's Serviceability =1/150		Serviceability =1/180		Serviceability =1/250		Ultimate = U	Limitations: Serviceability to 5000 Pa & Ultimate to 8000 Pa		Extrusions: FGS429 + FGS430	
	Glazing Width either side of the mullion in mm (A)										
Window Height (mm) (B)	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800
2200	3987	3588	3275	3024	2821	2655	2518	2406	2314	2239	2181
	3987	3588	3275	3024	2821	2655	2518	2406	2314	2239	2181
	3738	3371	3084	2855	2670	2520	2397	2297	2216	2150	2099
	5981	5383	4912	4536	4231	3982	3777	3609	3471	3359	3271
2400	3326	2987	2720	2505	2329	2185	2064	1964	1880	1810	1752
	3326	2987	2720	2505	2329	2185	2064	1964	1880	1810	1752
	2855	2568	2343	2163	2016	1895	1796	1713	1644	1587	1540
	4989	4481	4080	3757	3494	3277	3097	2946	2820	2715	2628
2600	2818	2527	2297	2111	1958	1832	1726	1637	1562	1498	1444
	2818	2527	2297	2111	1958	1832	1726	1637	1562	1498	1444
	2230	2003	1824	1679	1561	1464	1382	1314	1256	1208	1167
	4227	3790	3445	3166	2938	2748	2589	2456	2343	2247	2165
2800	2419	2166	1966	1804	1671	1560	1467	1388	1320	1262	1213
	2419	2166	1966	1804	1671	1560	1467	1388	1320	1262	1213
	1776	1593	1448	1331	1235	1155	1088	1032	984	943	908
	3628	3249	2949	2706	2507	2340	2200	2082	1980	1894	1819
3000	2100	1878	1703	1561	1444	1346	1263	1193	1132	1080	1035
	1997	1789	1624	1491	1381	1289	1212	1147	1091	1043	1002
	1438	1288	1169	1073	994	928	873	826	785	751	721
	3149	2818	2554	2341	2165	2019	1895	1789	1698	1620	1553
3200	1840	1645	1490	1364	1260	1173	1100	1037	983	936	895
	1640	1467	1331	1220	1129	1052	988	933	886	845	810
	1181	1057	958	878	813	758	711	672	638	609	583
	2760	2467	2235	2046	1890	1760	1649	1555	1474	1404	1343
3400	1626	1453	1315	1203	1110	1032	967	910	862	819	782
	1363	1219	1104	1011	935	871	816	770	730	695	665
	982	878	795	728	673	627	588	554	525	501	
	2439	2179	1972	1804	1665	1549	1450	1365	1292	1229	1174
3600	1375	1228	1112	1018	940	874	819	771	730	695	664
	1146	1024	927	848	783	729	682	643	609	579	553
	825	737	667	611	564	525	491				
	2171	1938	1753	1603	1478	1374	1285	1209	1143	1086	1035
3800	1167	1042	943	862	795	739	692	651	616	585	558
	1167	1042	943	862	795	739	692	651	616	585	558
	700	625	566	517							
	1945	1736	1569	1434	1322	1227	1147	1078	1018	966	921

Glass & Rubber Combinations

Glazing

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



NOT TO SCALE

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/m² 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 frame, 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:

U_w is the value for the whole window and because of its importance is usually abbreviated to U.

U_g 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 Front Single Glazed

Window Id	Glass Supplier	Glass	Uw	SHGCw	TVw	Air Infil.
DAR-008-001	GENERIC	6Clr	6.123	0.725	0.766	5
DAR-008-002	OCEANIA	6Gy	6.123	0.511	0.38	5
DAR-008-003	<UNKNOWN>	6TS21	5.395	0.279	0.176	5
DAR-008-004	OCEANIA	6.38CPNtl	4.374	0.46	0.51	5
DAR-008-005	OCEANIA	6.38CPGn	4.349	0.453	0.617	5
DAR-008-006	OCEANIA	6.38CPGy	4.354	0.445	0.338	5
DAR-008-007	OCEANIA	6EcAdGy	4.521	0.373	0.278	5
DAR-008-008	OCEANIA	6SolarE	4.403	0.471	0.52	5
DAR-008-009	OCEANIA	6SolarEGy	4.406	0.326	0.259	5
DAR-008-010	OCEANIA	6.38CPClr	4.267	0.622	0.731	5
DAR-008-011	OCEANIA	10.38CPGy	4.211	0.429	0.339	5
DAR-008-012	OCEANIA	10.38GyLam	5.94	0.533	0.366	5
DAR-008-013	OCEANIA	6EVClr	4.451	0.578	0.607	5
DAR-008-014	OCEANIA	10.38CPClr	4.189	0.447	0.517	5
DAR-008-015	GENERIC	6.38ClrLam	6.042	0.736	0.794	5
DAR-008-016	OCEANIA	6AB	6.104	0.474	0.469	5
DAR-008-017	OCEANIA	6EVAB	4.45	0.335	0.345	5
DAR-008-018	OCEANIA	6EVBG	4.45	0.416	0.503	5
DAR-008-019	OCEANIA	6EVSpGn	4.469	0.341	0.438	5
DAR-008-020	OCEANIA	6SpGn	6.105	0.48	0.593	5
DAR-008-021	OCEANIA	10.38ClrLam	5.948	0.674	0.764	5
DAR-008-300	OCEANIA	6SpGy	6.098	0.324	0.076	5
DAR-008-301	OCEANIA	6EVGy	4.447	0.377	0.285	5
DAR-008-302	<UNKNOWN>	9.52mm SOL-XT Grey 32	4.203	0.285	0.283	5
DAR-008-303	<UNKNOWN>	11.52LE	4.129	0.573	0.708	5
DAR-008-304	GENERIC	11.52ClrLam	5.801	0.657	0.759	5
DAR-008-305	GENERIC	10Clr	5.984	0.682	0.76	5
DAR-008-306	OCEANIA	10Gy	5.984	0.436	0.22	5
DAR-008-307	OCEANIA	6SolTNtl	4.302	0.487	0.564	5
DAR-008-308	OCEANIA	6SolTGy	4.33	0.338	0.271	5

KEY

Lam = Laminate, Sp = Super, EV = Eantage, 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 performance better than the base-case window
4. Maximum air infiltration is 5.0 L/s.m² at a positive pressure difference of 75Pa as measured according to AS 2047
5. Static performance (U, SHFC, Tw, 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 (AFRC) regulations

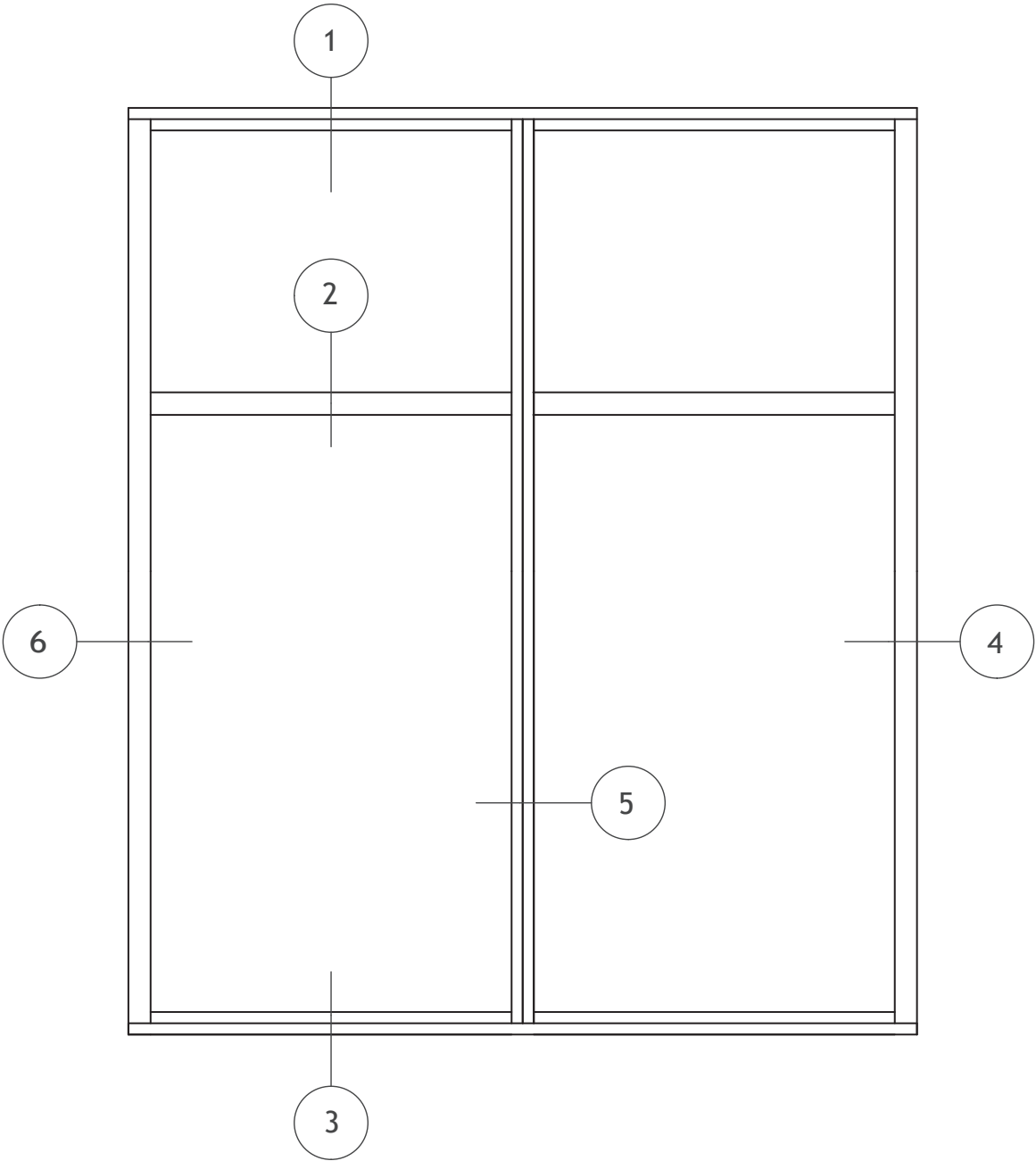
100 X 50 FRONT SG FRAMING SYSTEM

General Configuration

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

Configuration

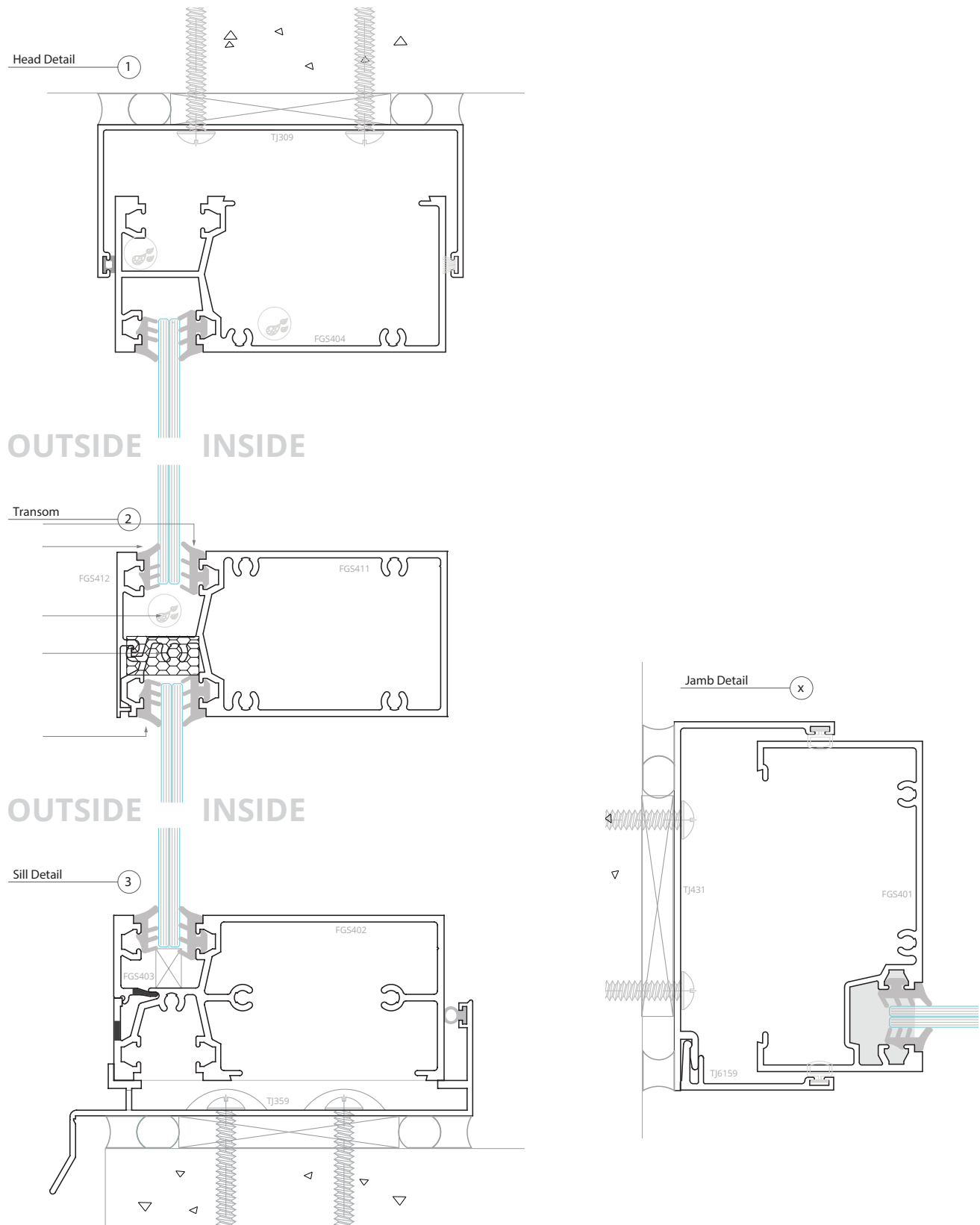
Fabrication



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

Cross Sections



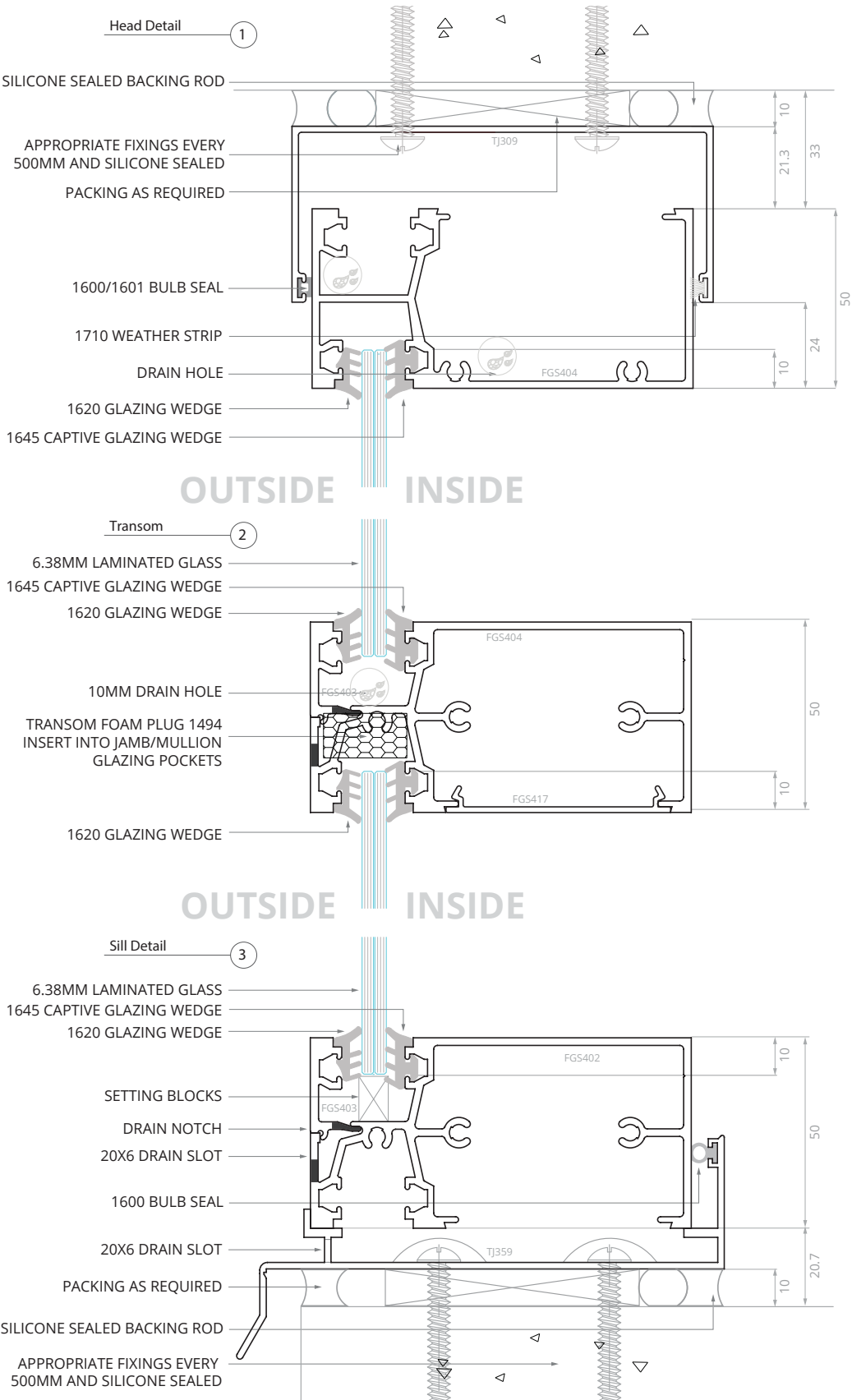
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100 X 50 FRONT SG FRAMING SYSTEM

Head & Sill Option

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

Fabrication

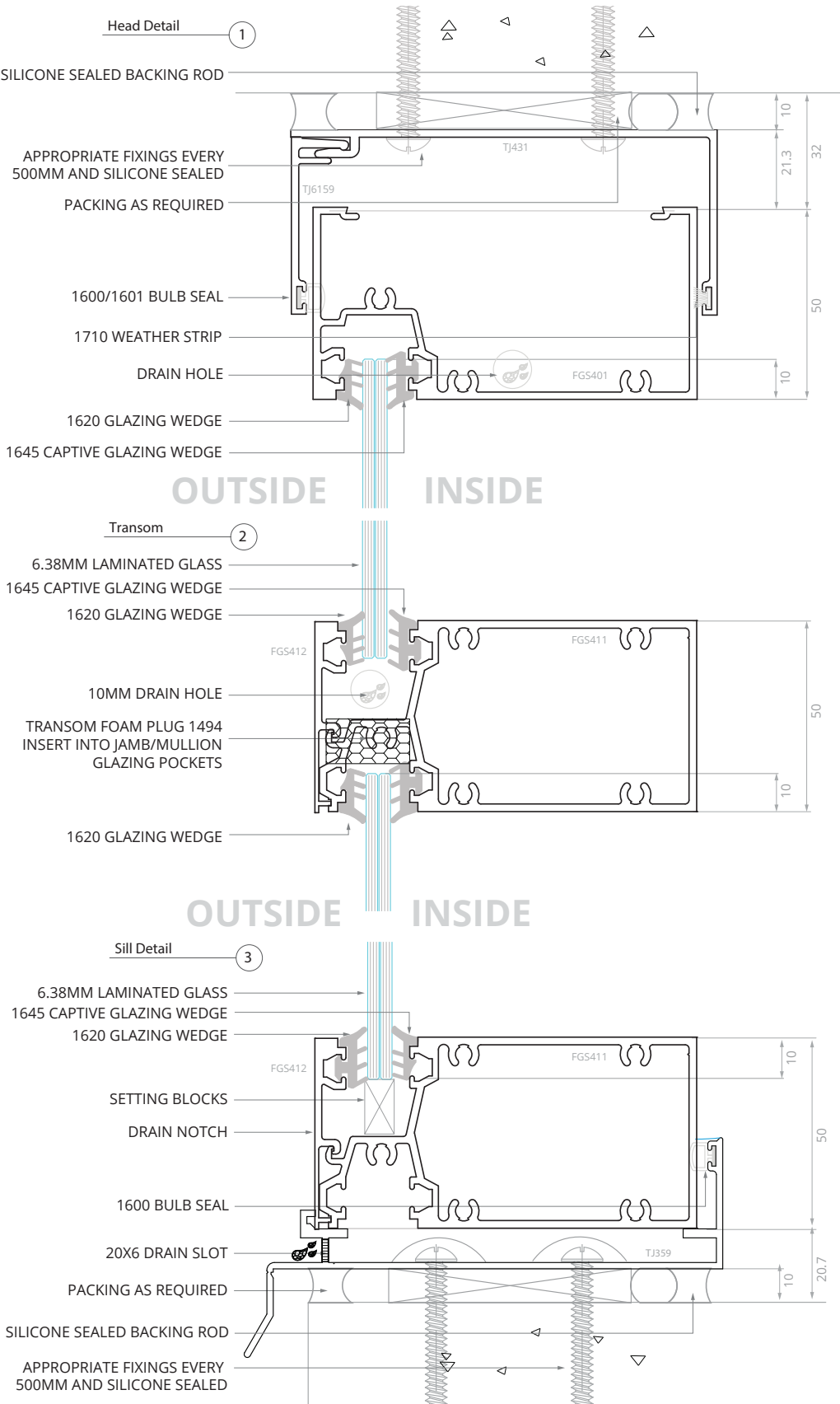


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100 X 50 FRONT SG FRAMING SYSTEM

Head & Sill Option

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



Fabrication

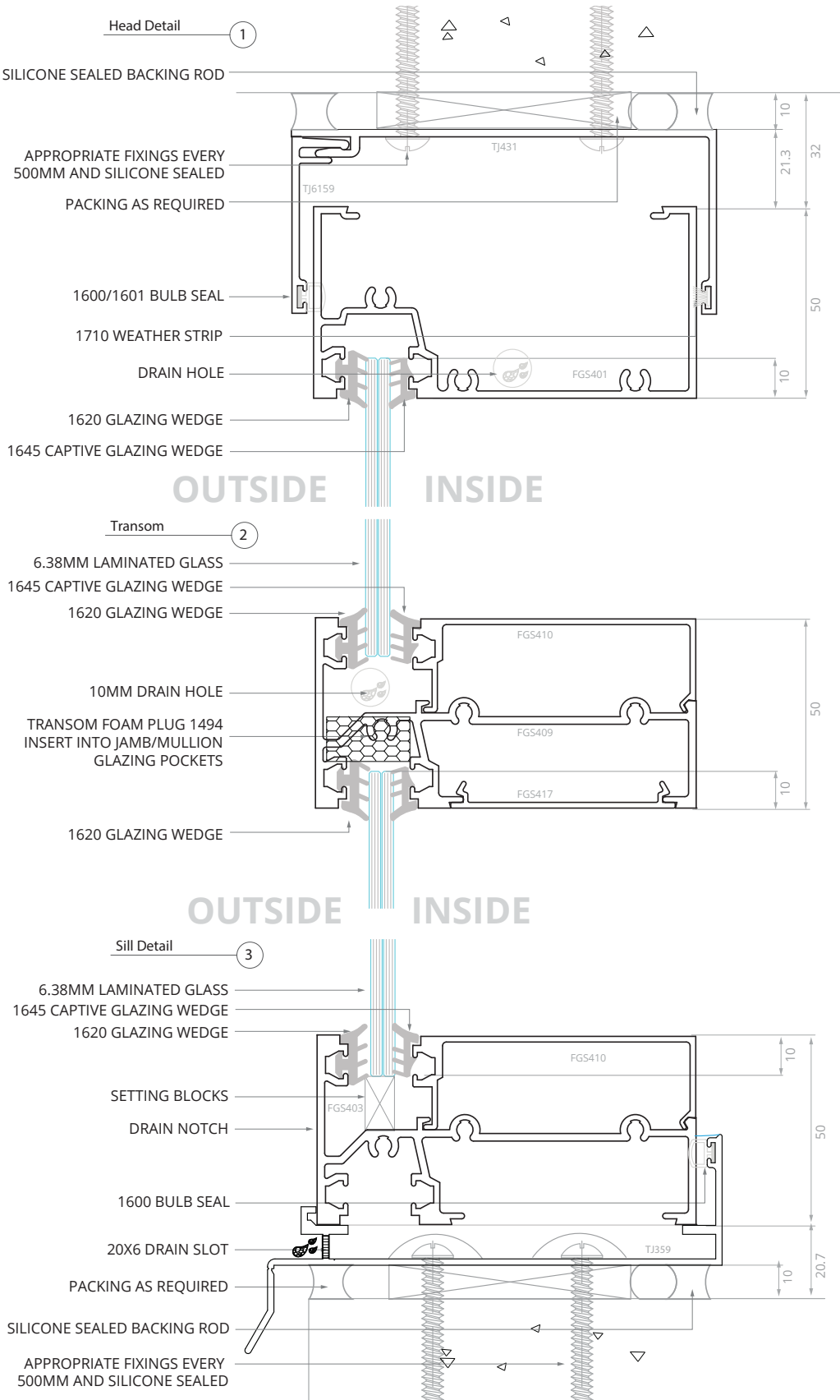
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100 X 50 FRONT SG FRAMING SYSTEM

Head & Sill Option

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

Fabrication

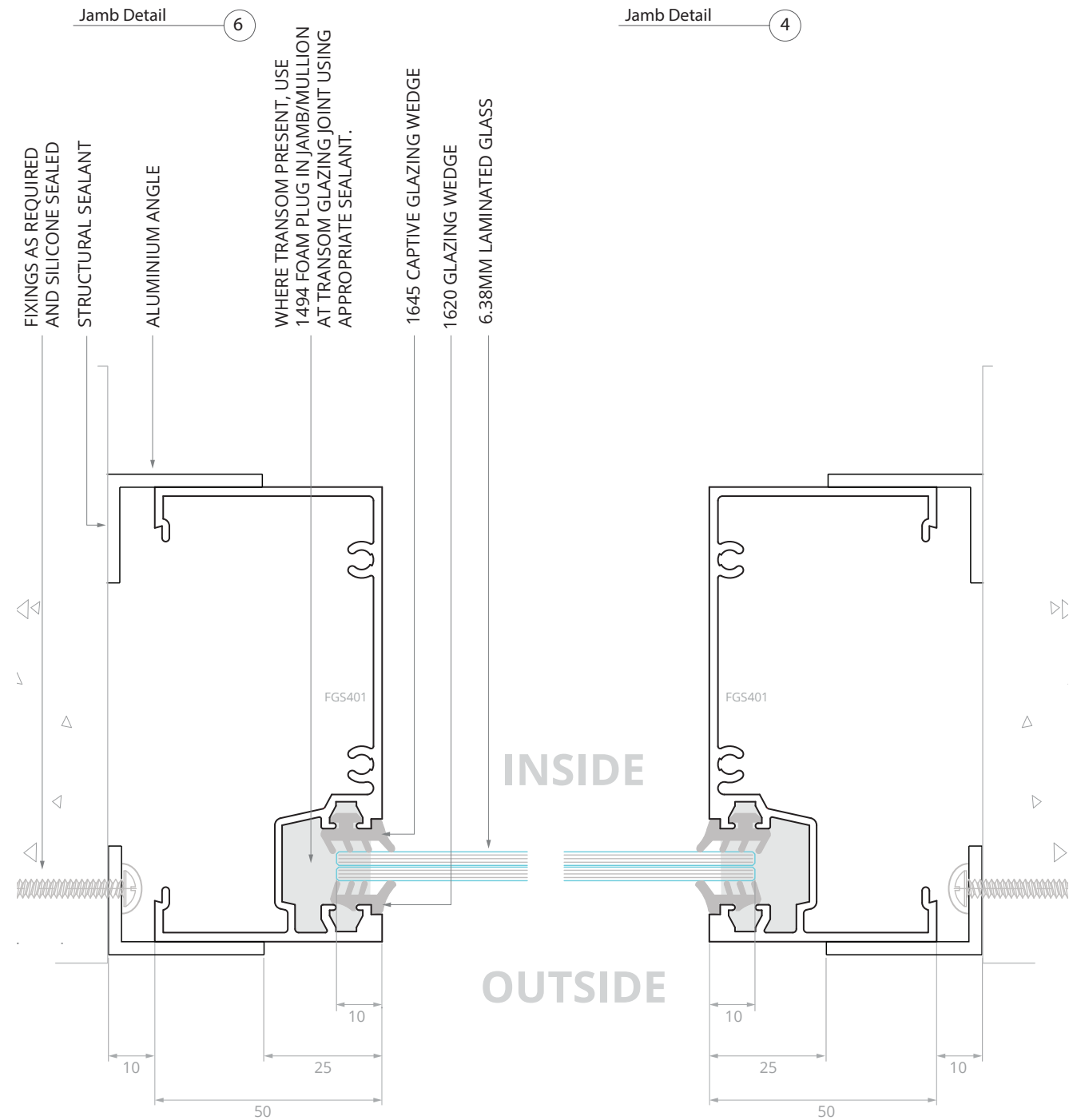


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100 X 50 FRONT SG FRAMING SYSTEM

Jamb Option: Angle

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



Fabrication

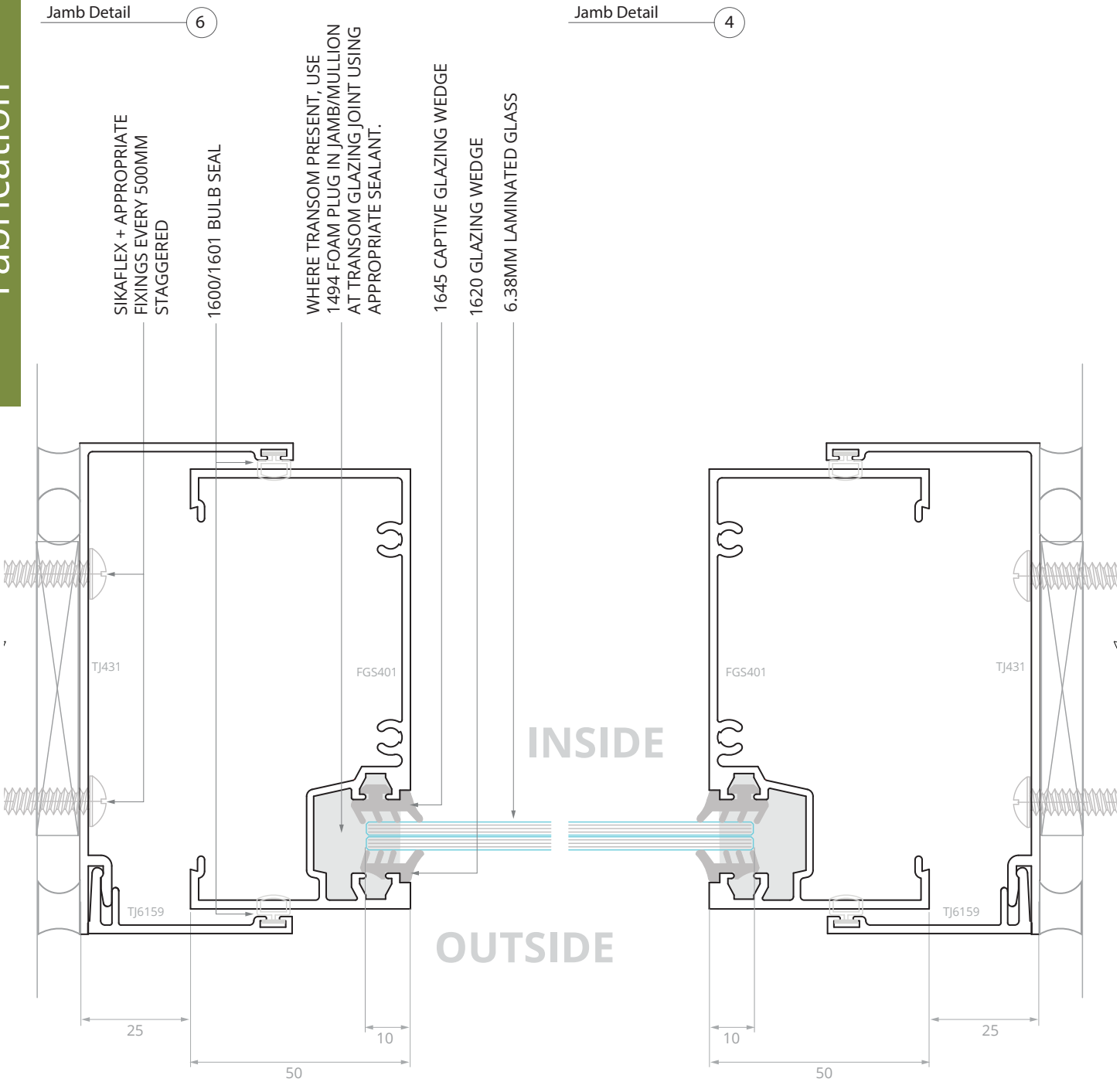
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100 X 50 FRONT SG FRAMING SYSTEM

Jamb Option: Sub Jamb

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

Fabrication

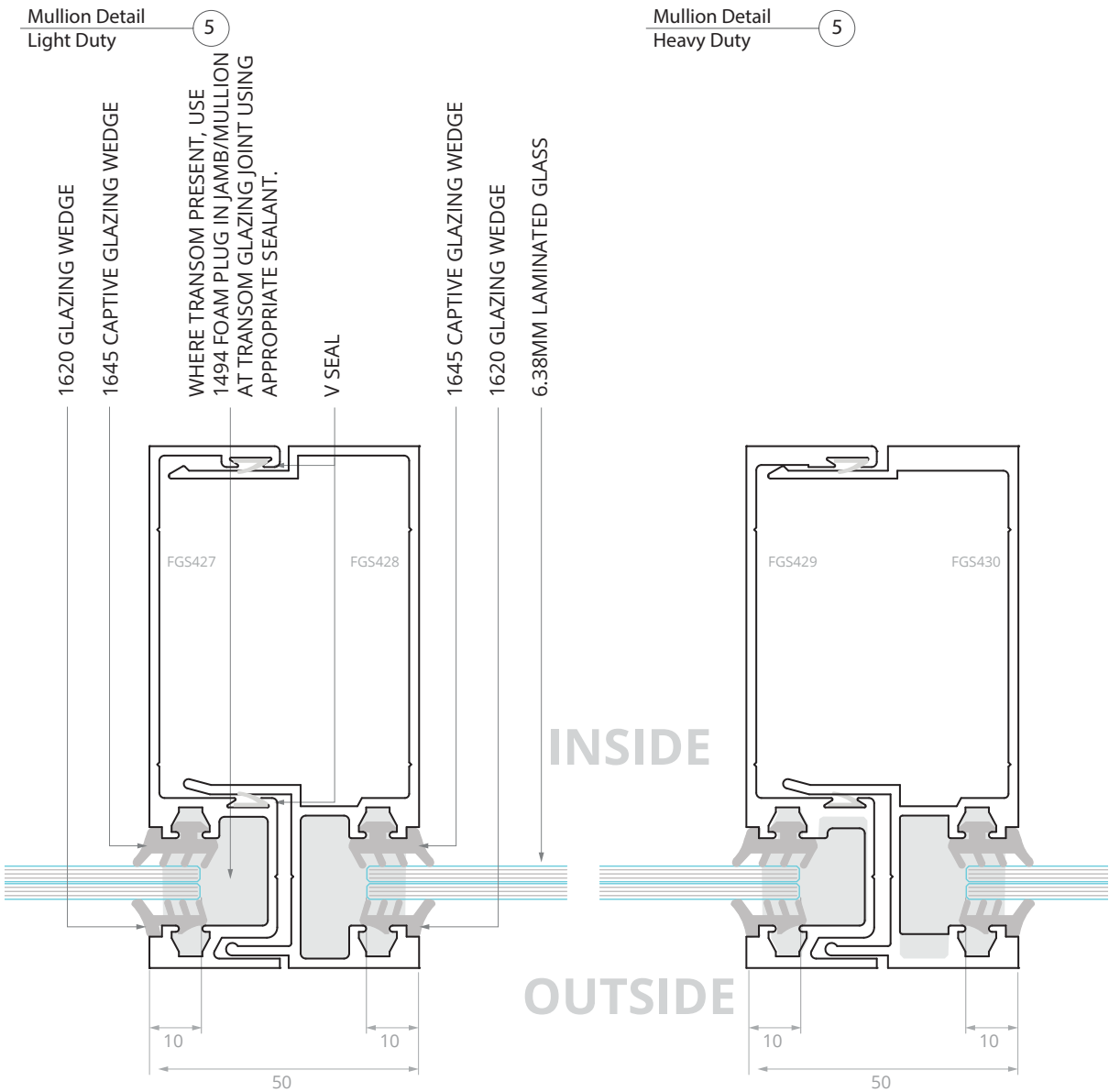


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100 X 50 FRONT SG FRAMING SYSTEM

Mullion

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

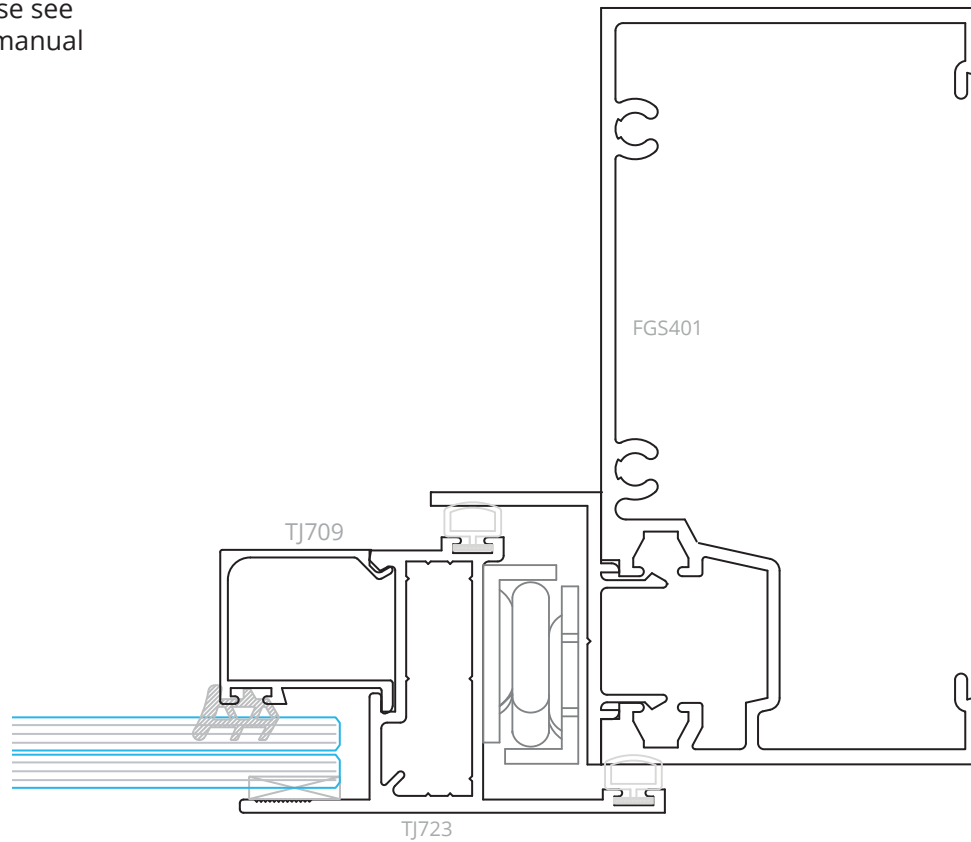


Fabrication

CityView 35mm awning

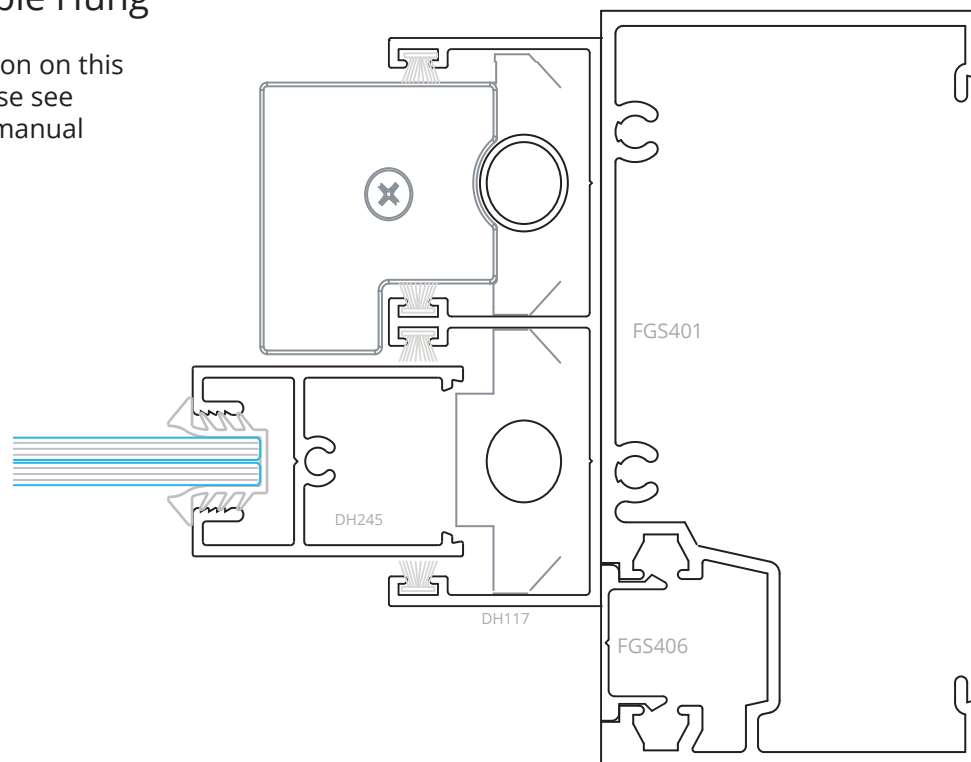
Scale 1:1

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



CityView Double Hung

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

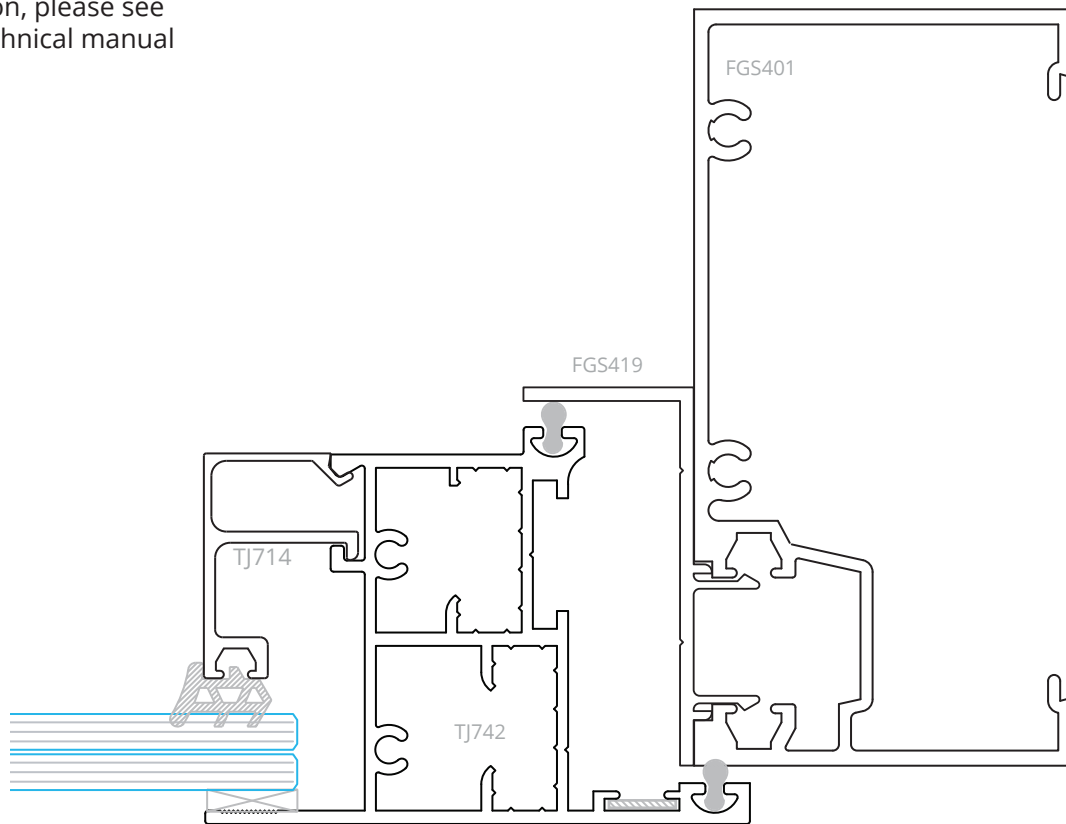


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CityView 50mm Awning/Casement

Scale 1:1

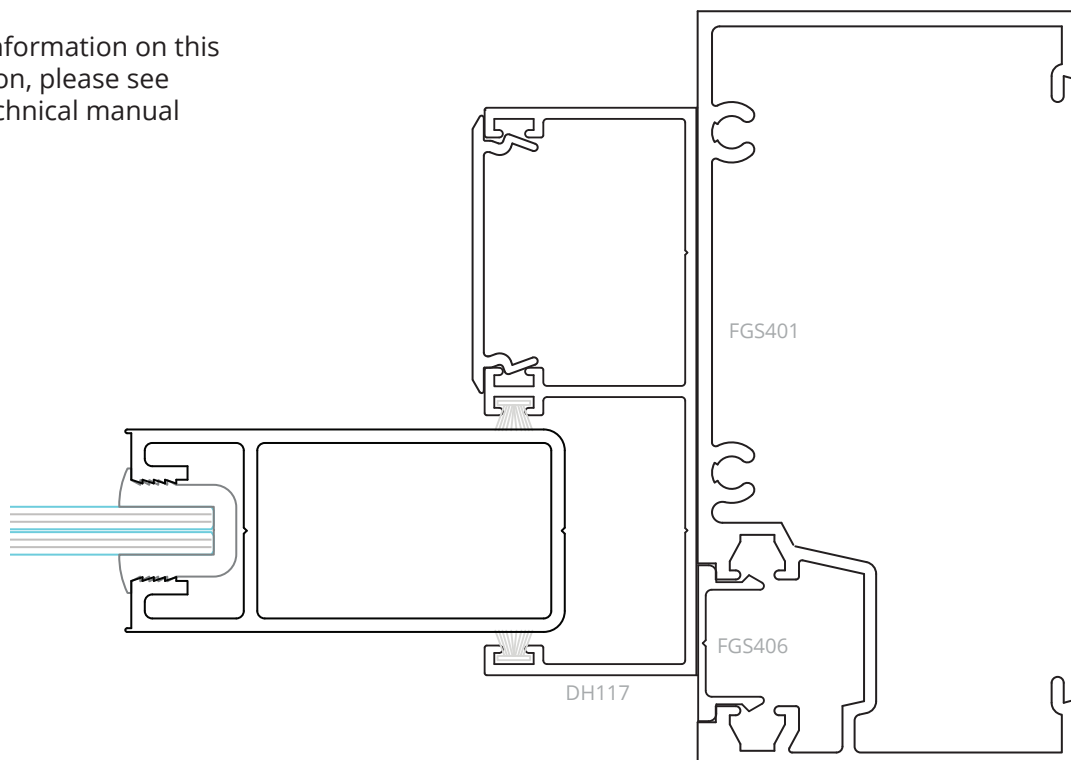
For more information on this configuration, please see relevant technical manual



Fabrication

CityView Sliding Window - Single Piece

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

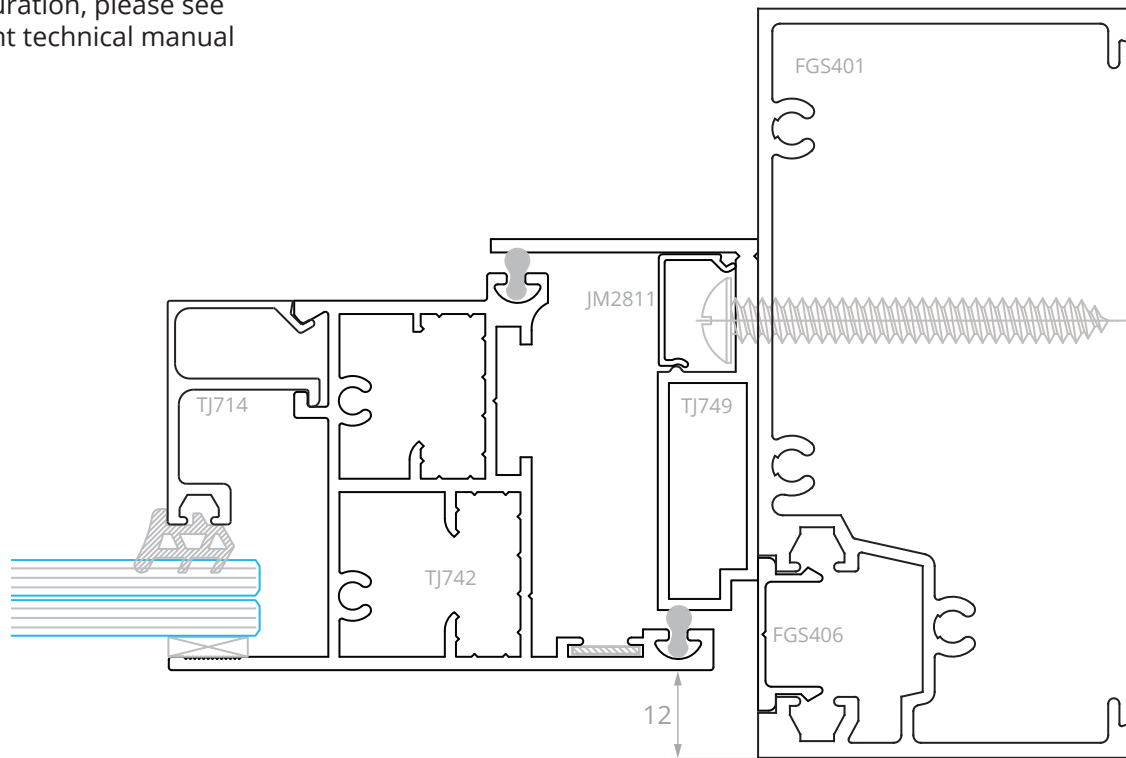


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CityView 50mm Hook Awning

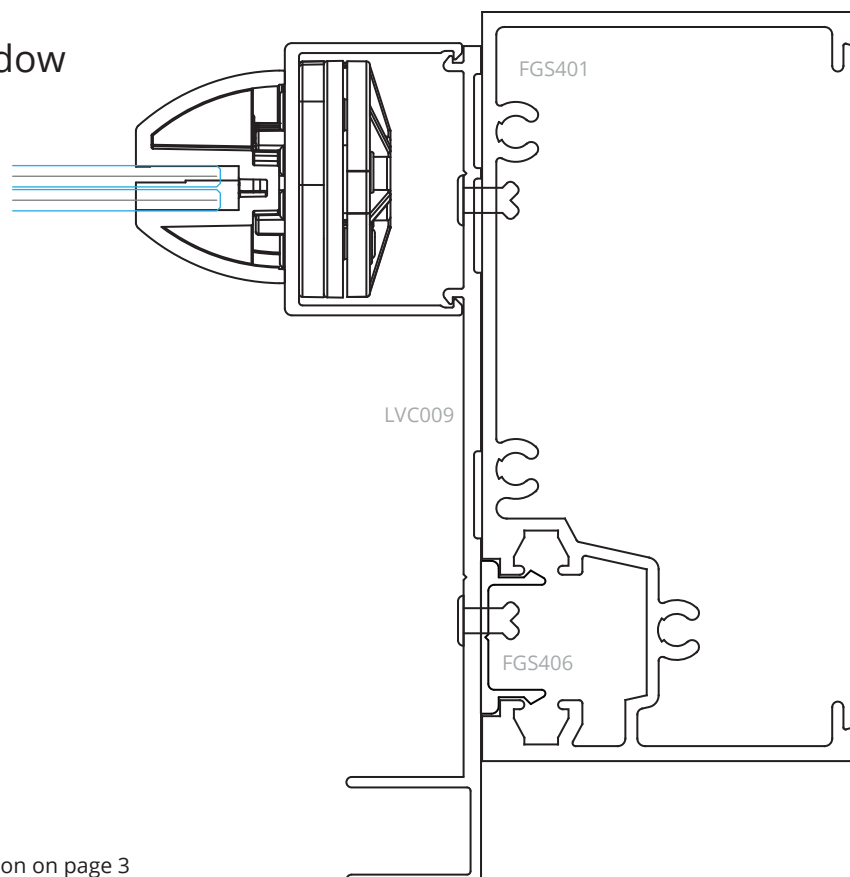
Scale 1:1

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



CityView Louvre Window

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

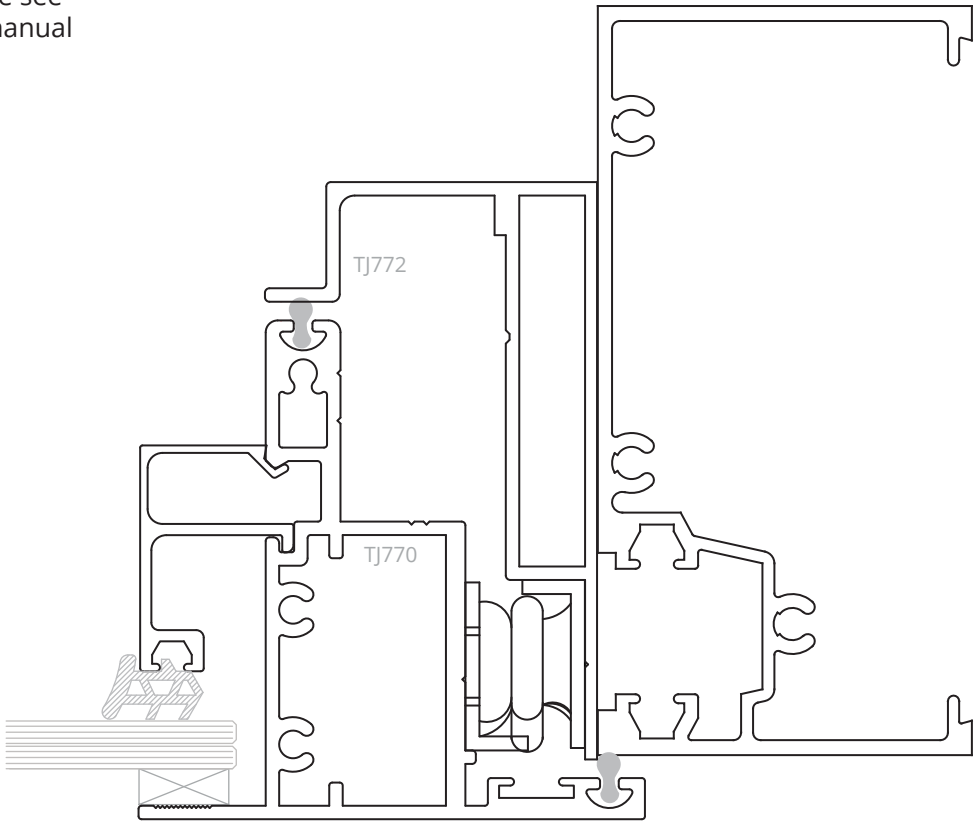


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CityView Truth Awning

Scale 1:1

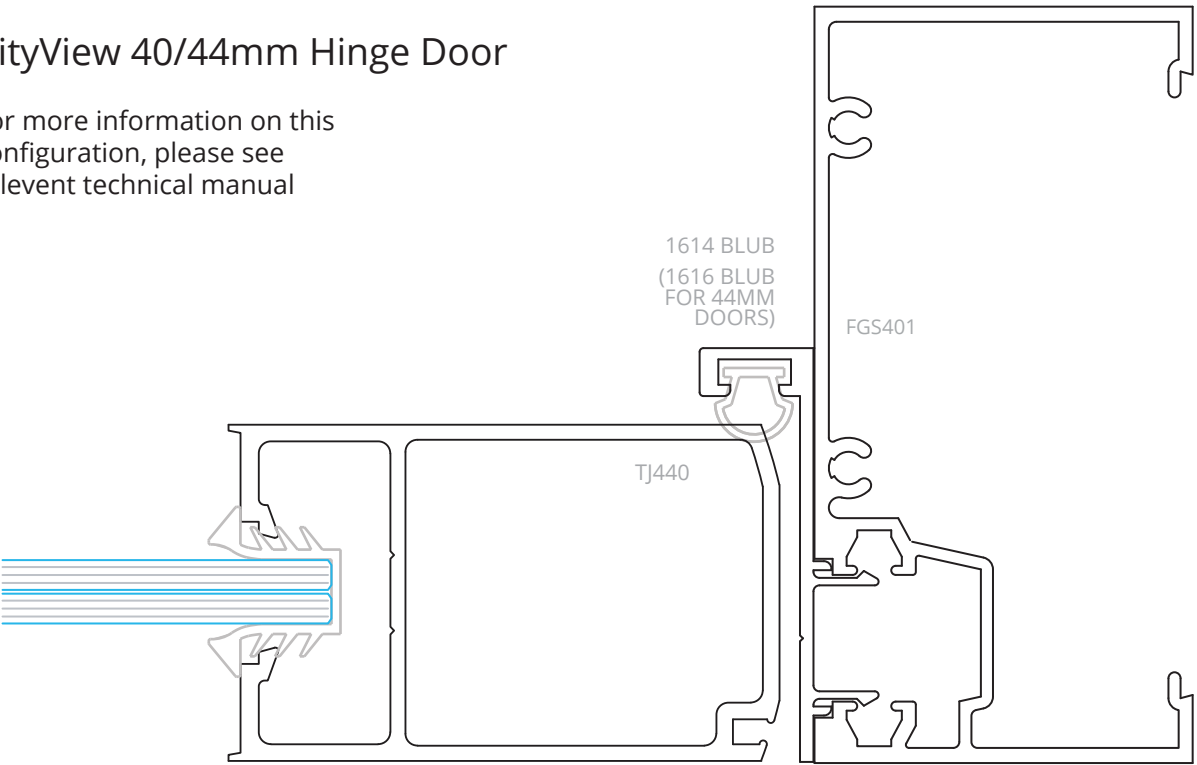
For more information on this configuration, please see relevant technical manual



Fabrication

CityView 40/44mm Hinge Door

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



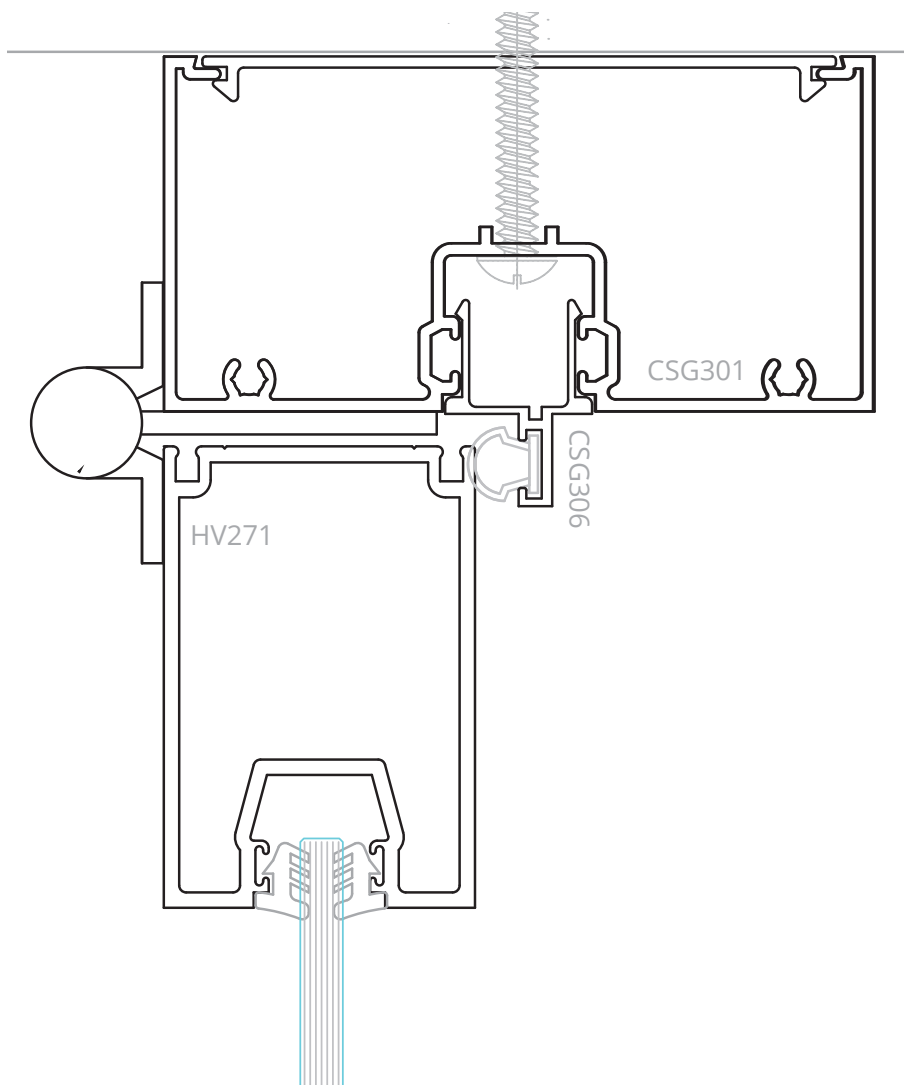
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CityView Servery Strut Window

Scale 1:1

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

Fabrication

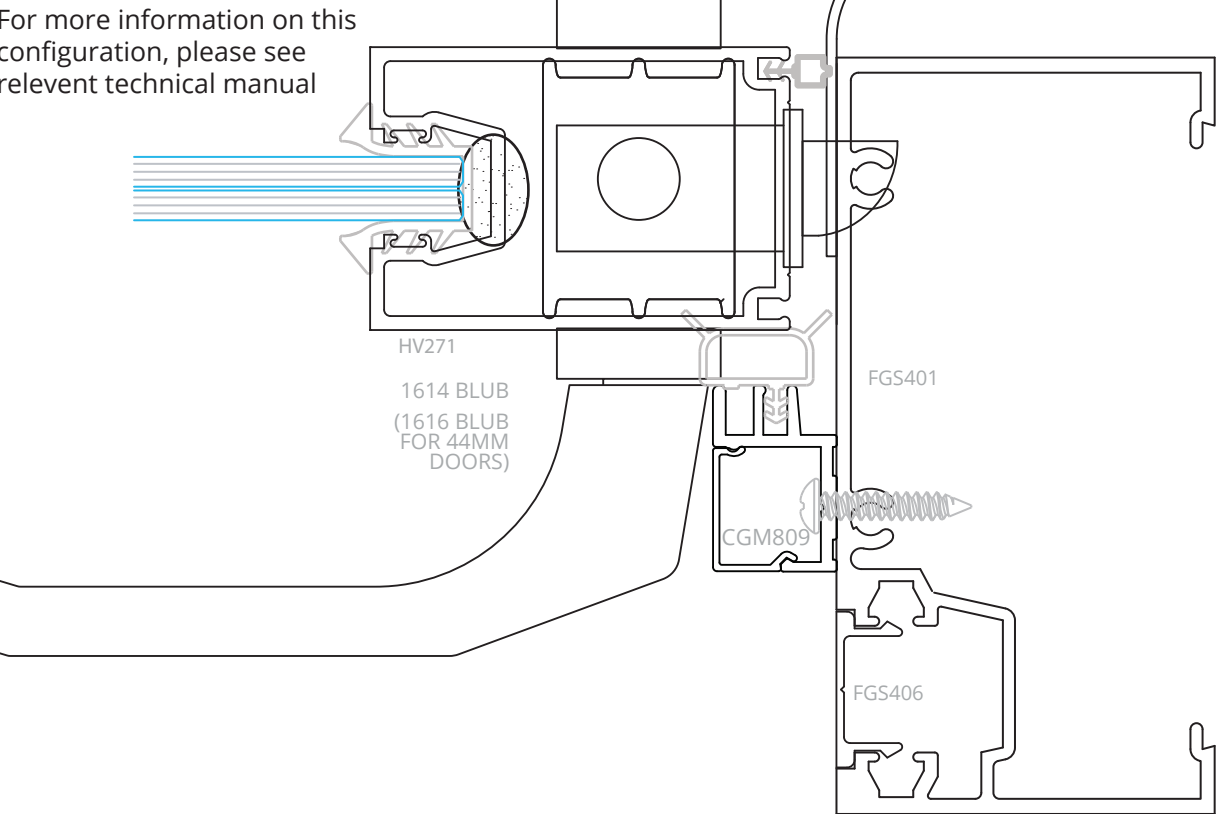


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CityView 45mm Hinge Door

Scale 1:1

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



Fabrication

Copyright and important information on page 3

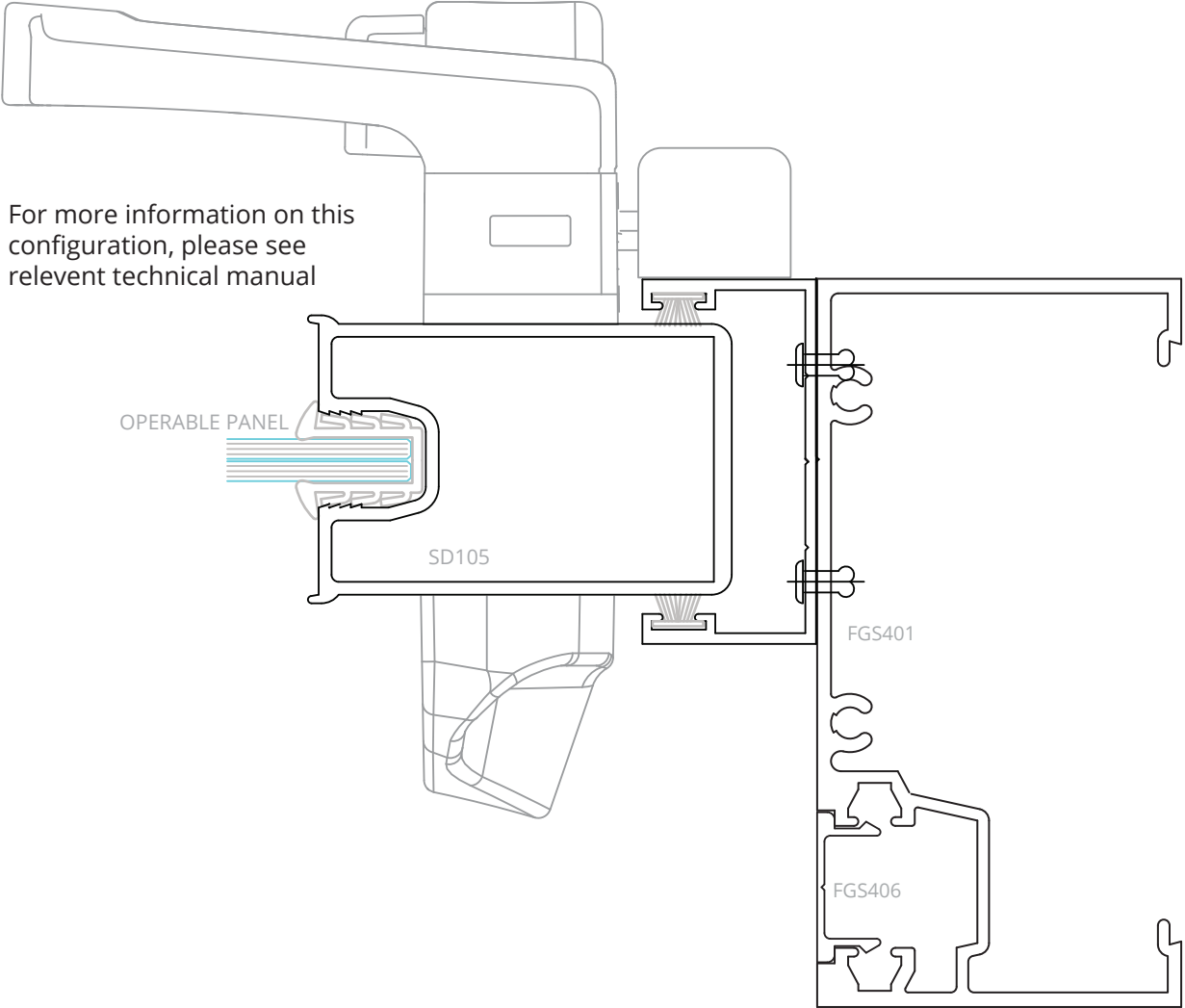
CityView 45mm Hinge Door

Scale 1:1

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

Fabrication

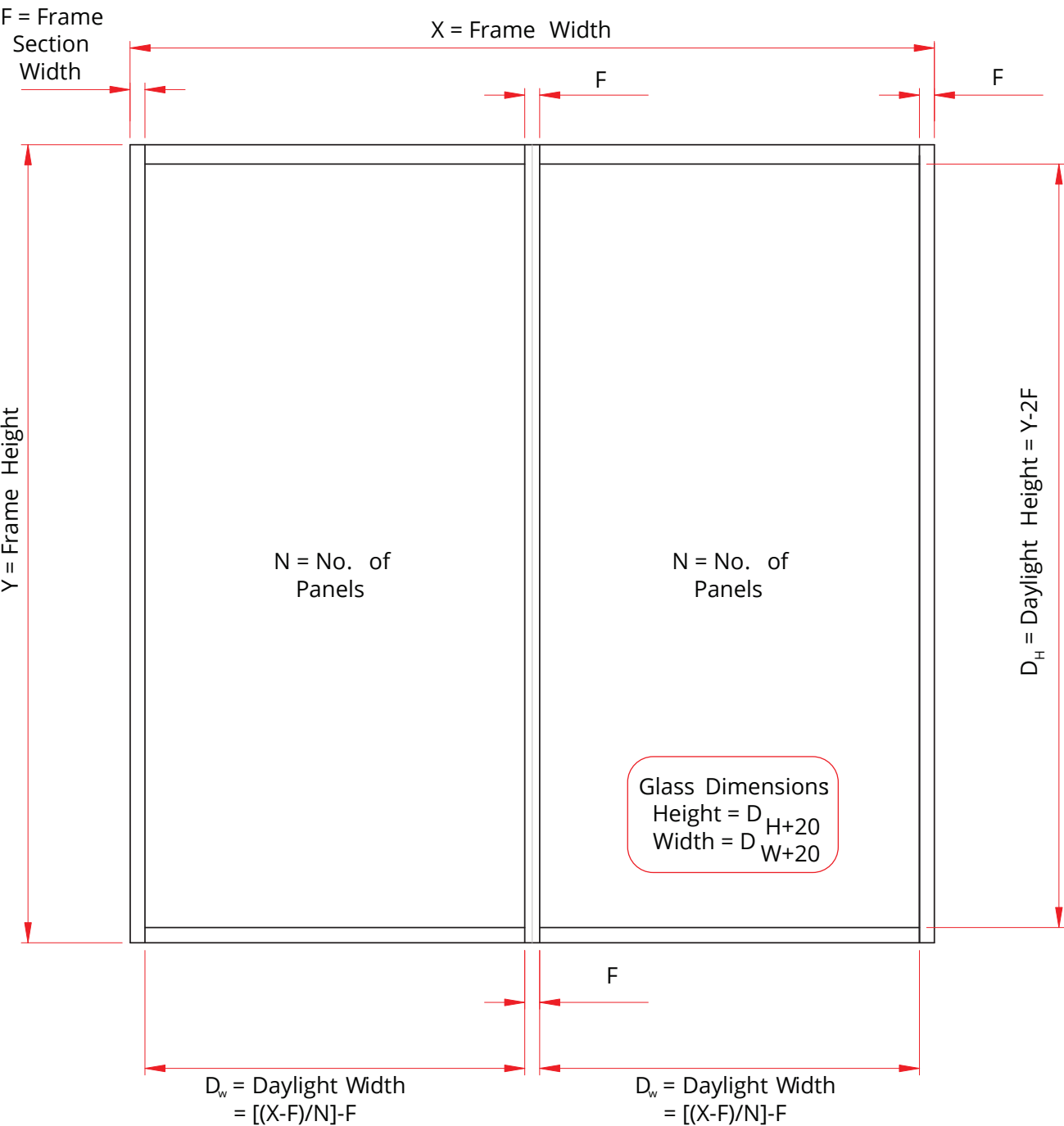
For more information on this configuration, please see relevant technical manual



Cutting Formula

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

Machining



Fabrication

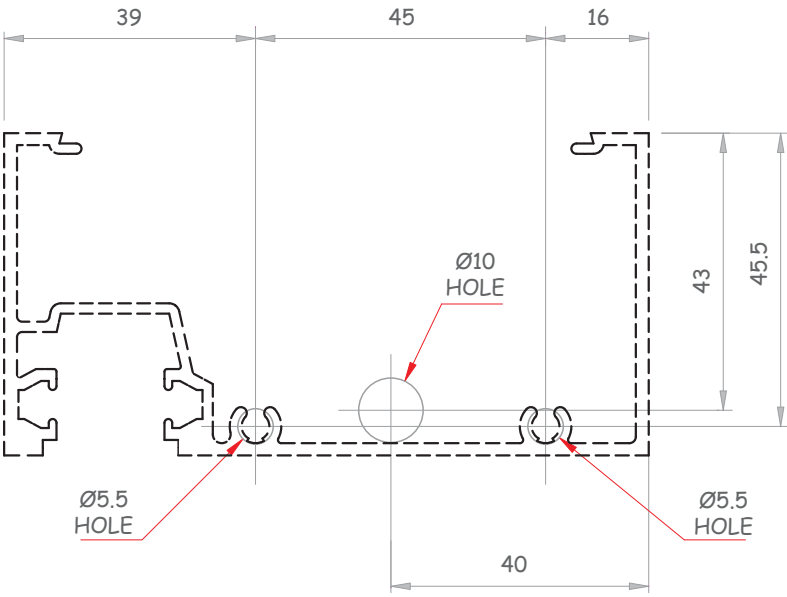
Copyright and important information on page 3

100 X 50 FRONT SG FRAMING SYSTEM

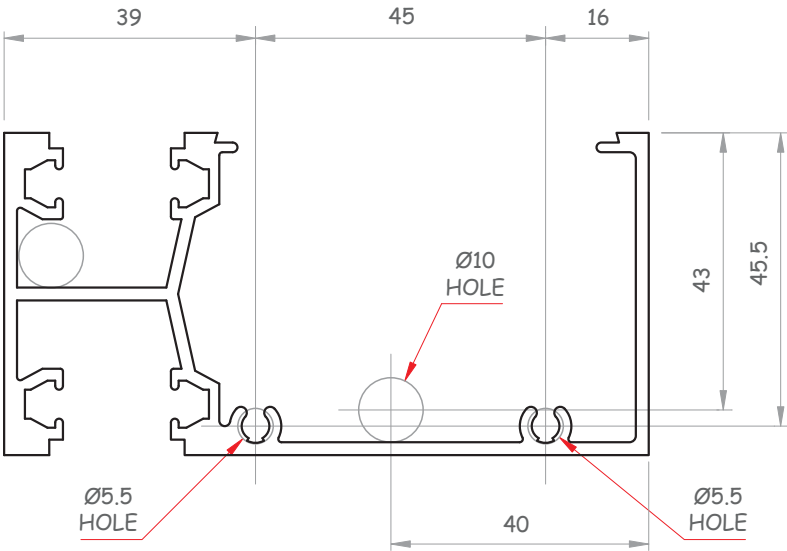
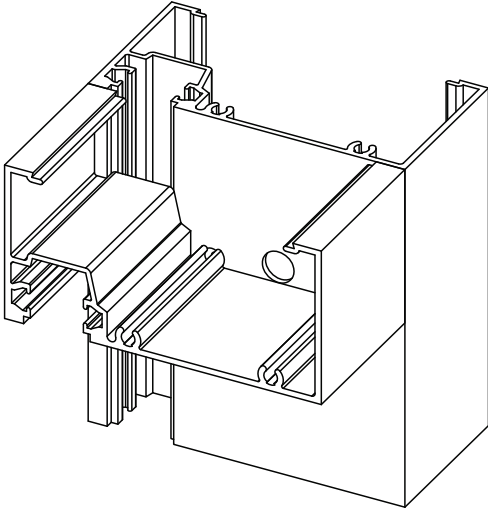
Machining Details: Head

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

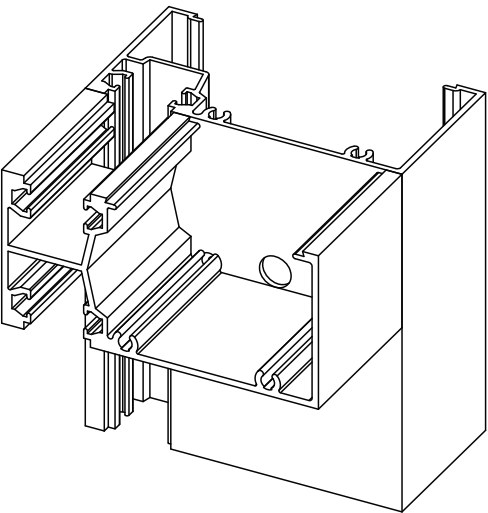
Fabrication



FGS401



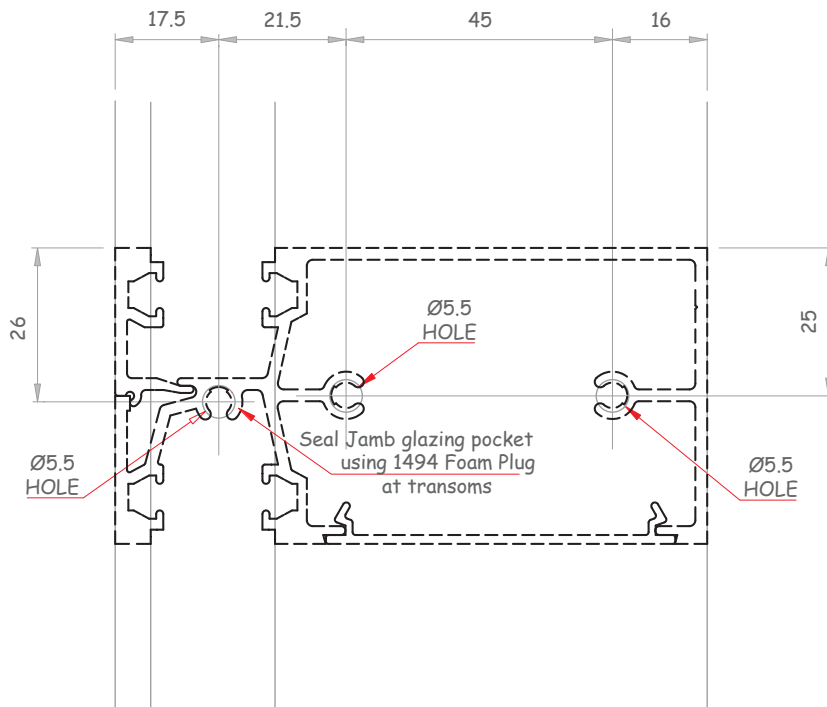
FGS404



FGS404 can be used as a jamb - however it does not fit into available tooling. Holes must be drilled manually.

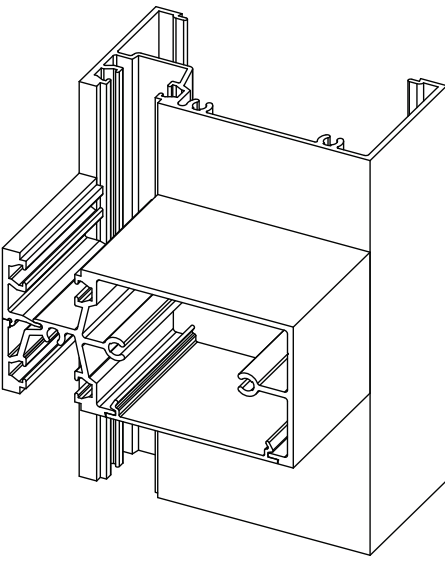
Machining Details: Transom

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

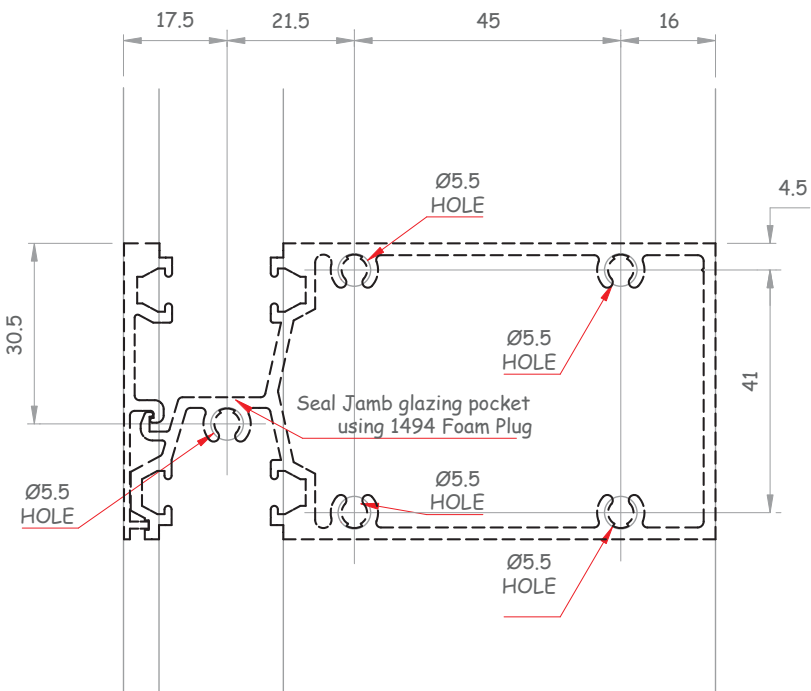


External Bead Sill & Transom

FGS402

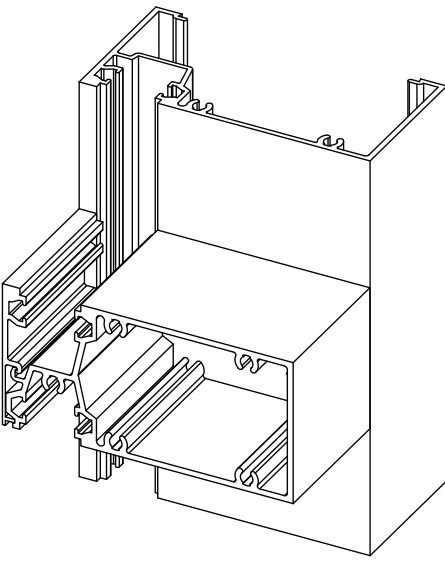


Fabrication



Face Bead Transom

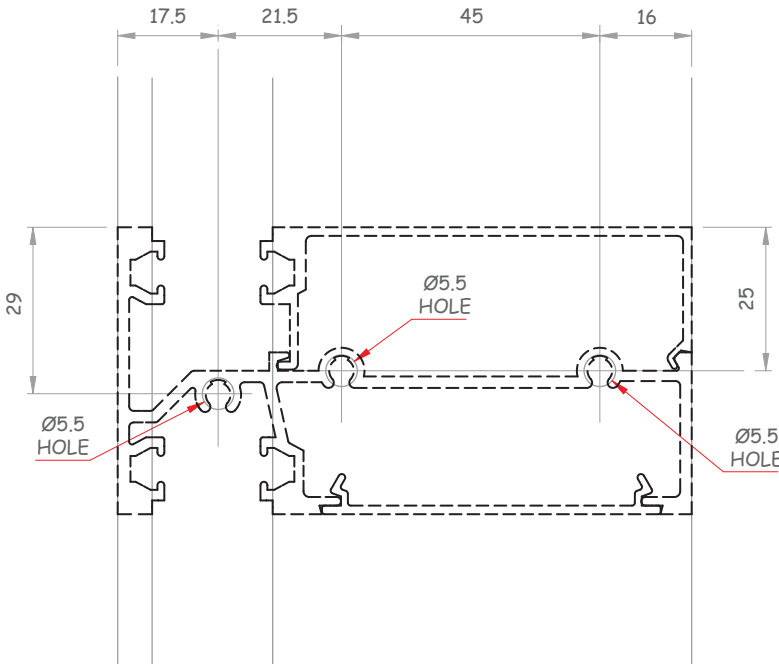
FGS411



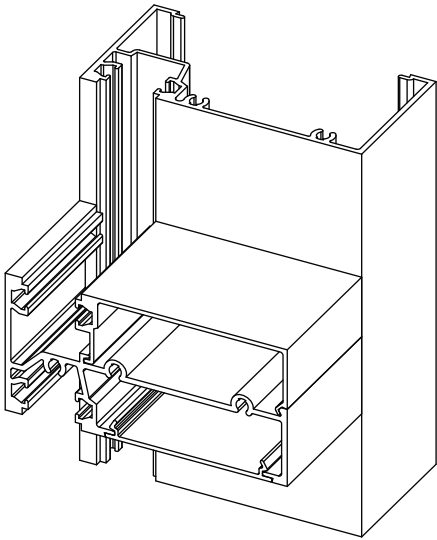
Machining Details: Transom

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

Fabrication



FGS409

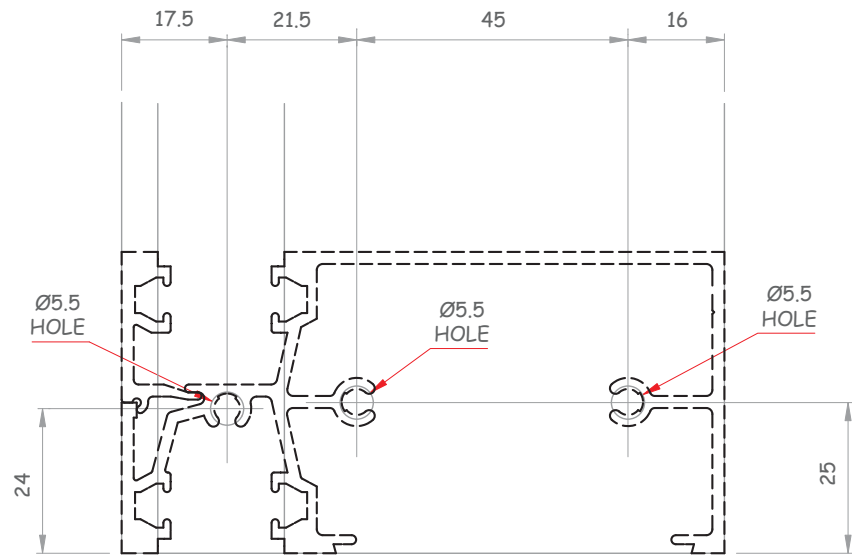


Internal Bead Sill & Transom

100 X 50 FRONT SG FRAMING SYSTEM

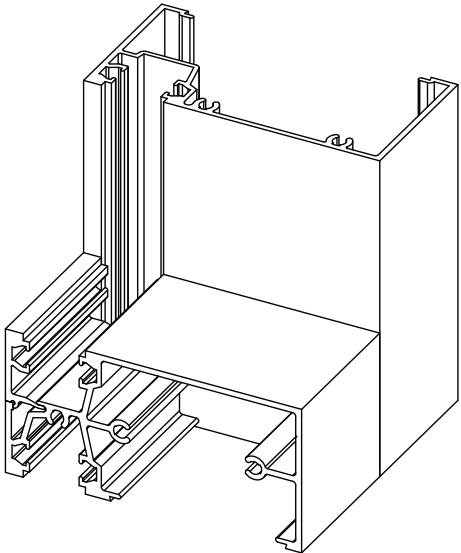
Machining Details: Sill

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

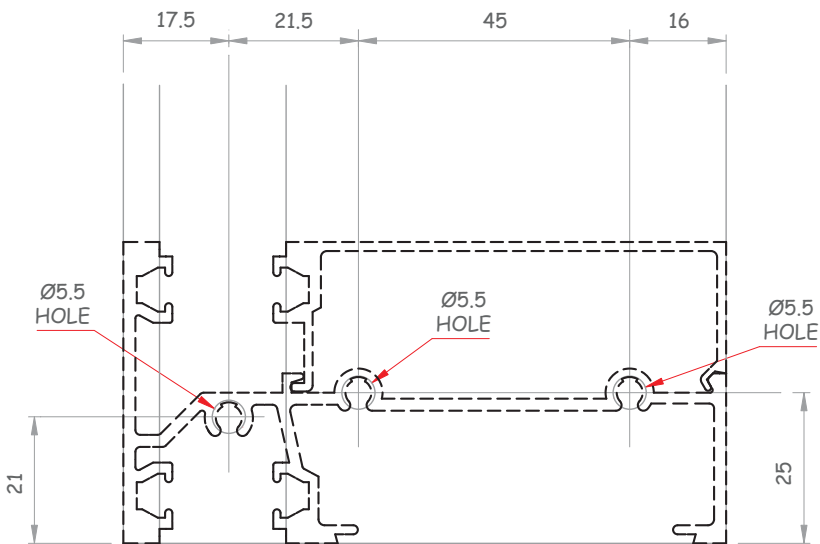


External Bead Sill

FGS402

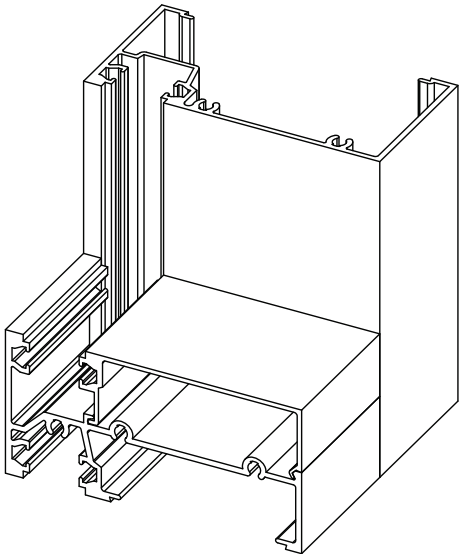


Fabrication



Face Bead Sill

FGS409



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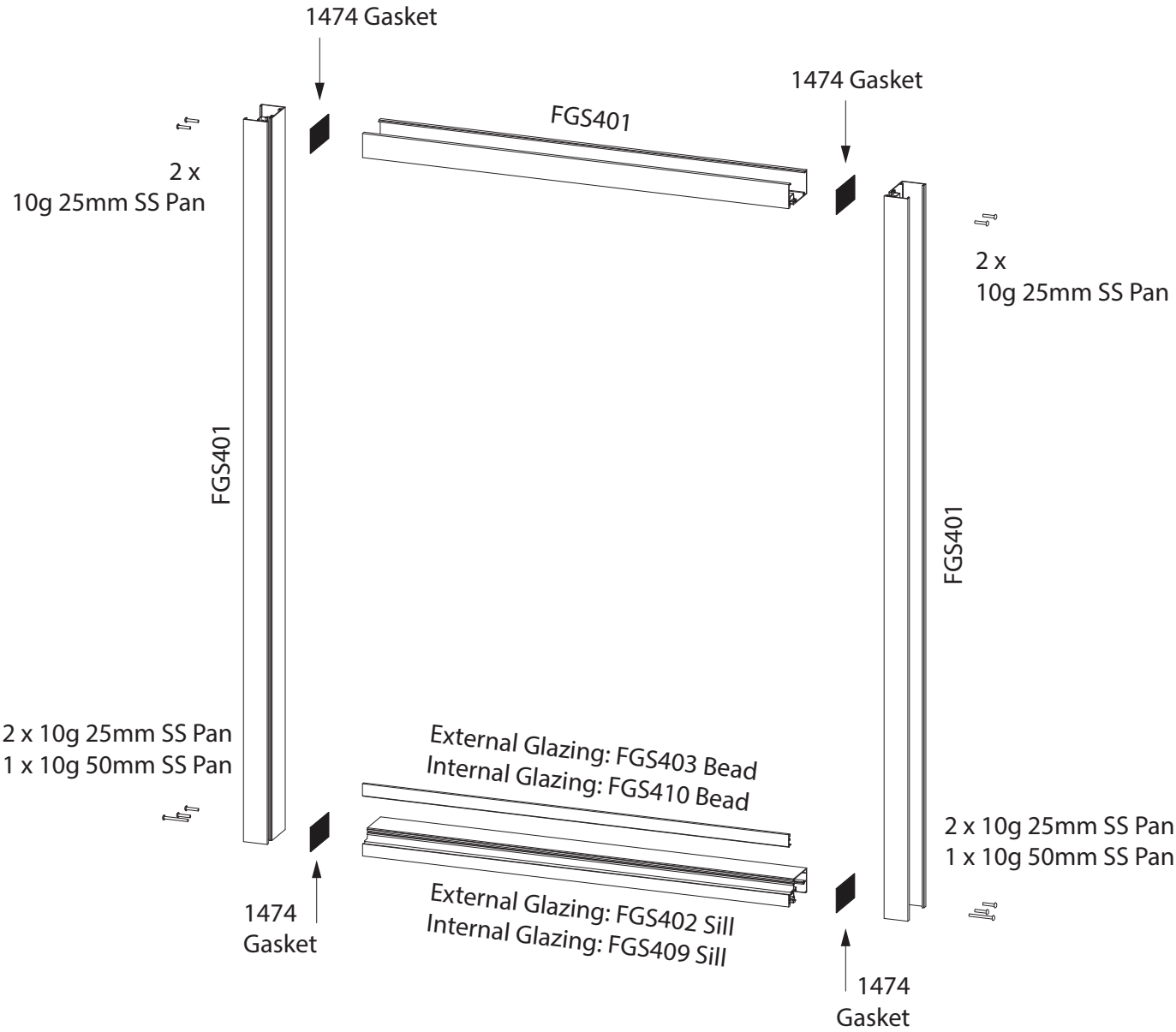
100 X 50 FRONT SG FRAMING SYSTEM

Exploded Assembly Overview

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

Assembly

Fabrication

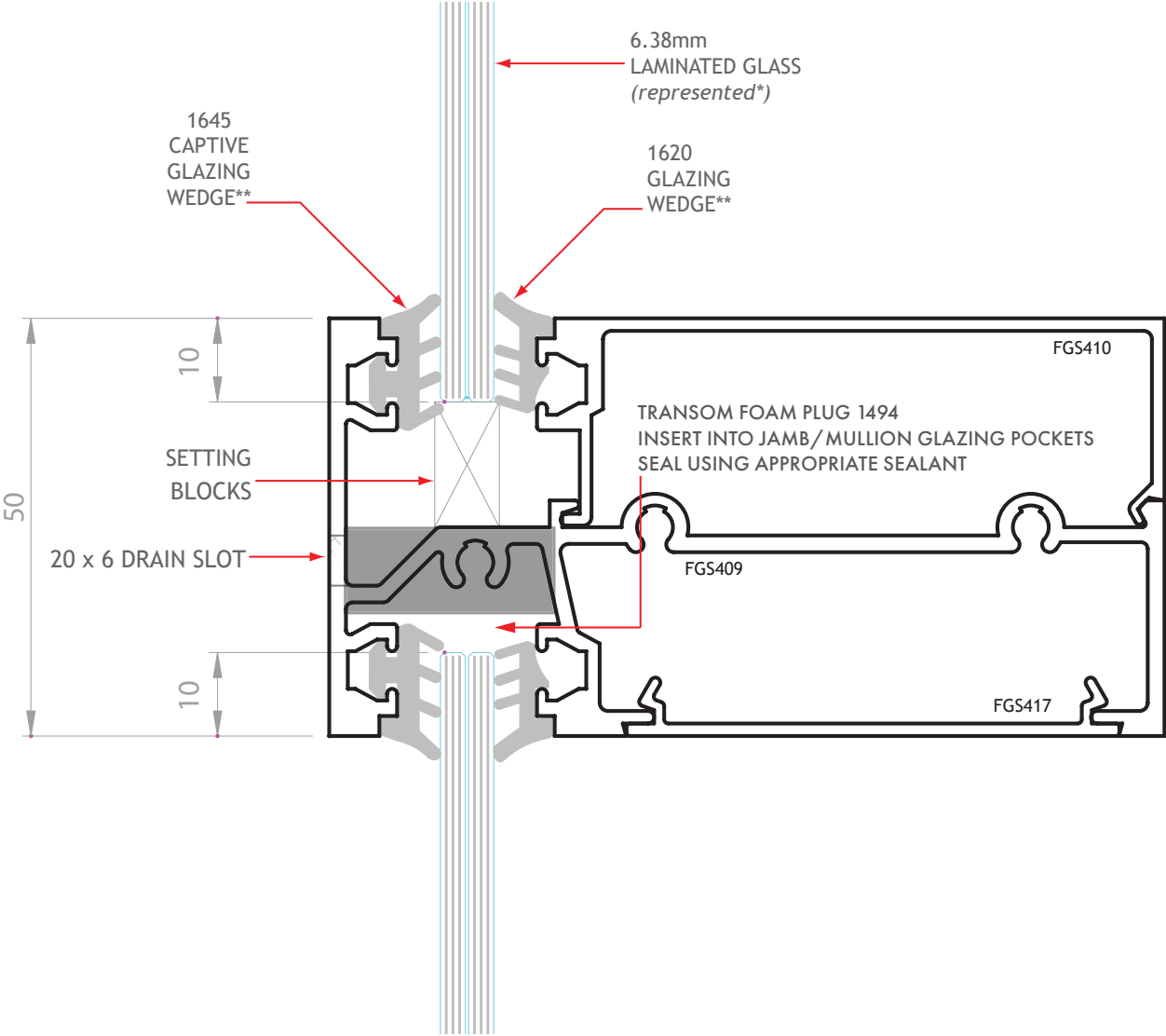


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100 X 50 FRONT SG FRAMING SYSTEM

Transom Plug Insertion

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



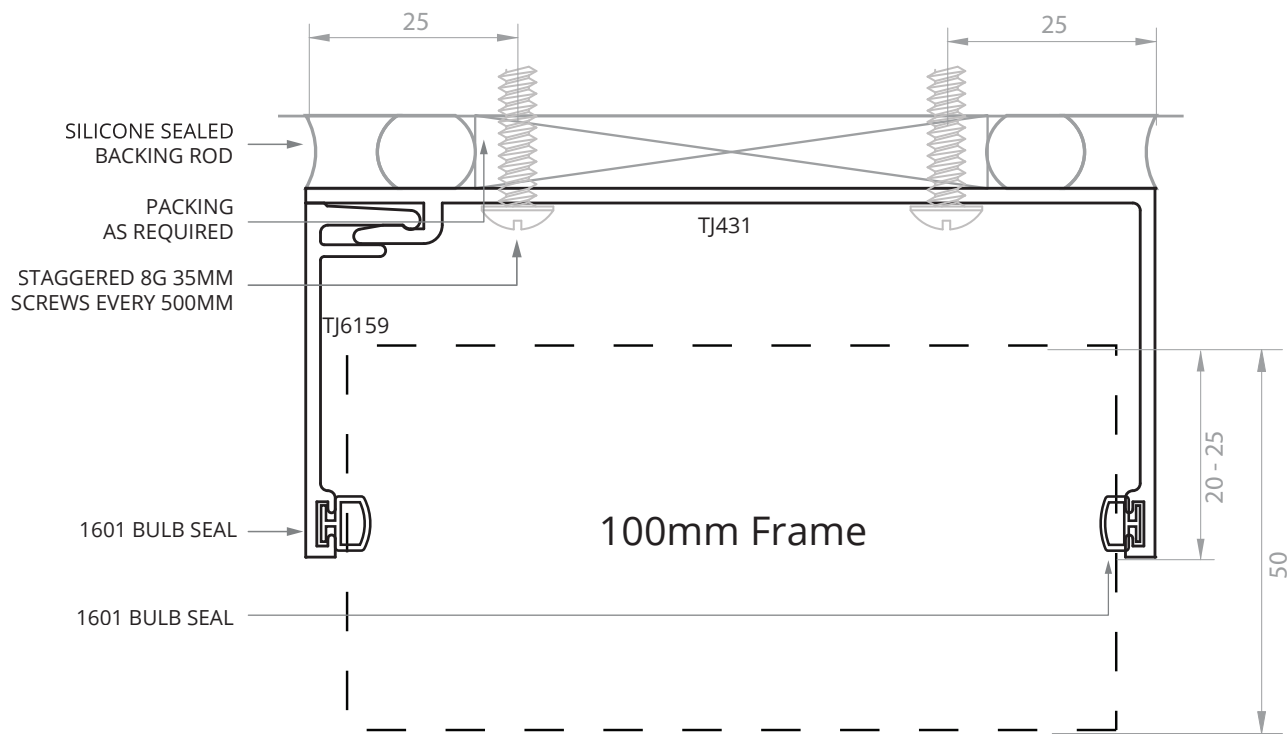
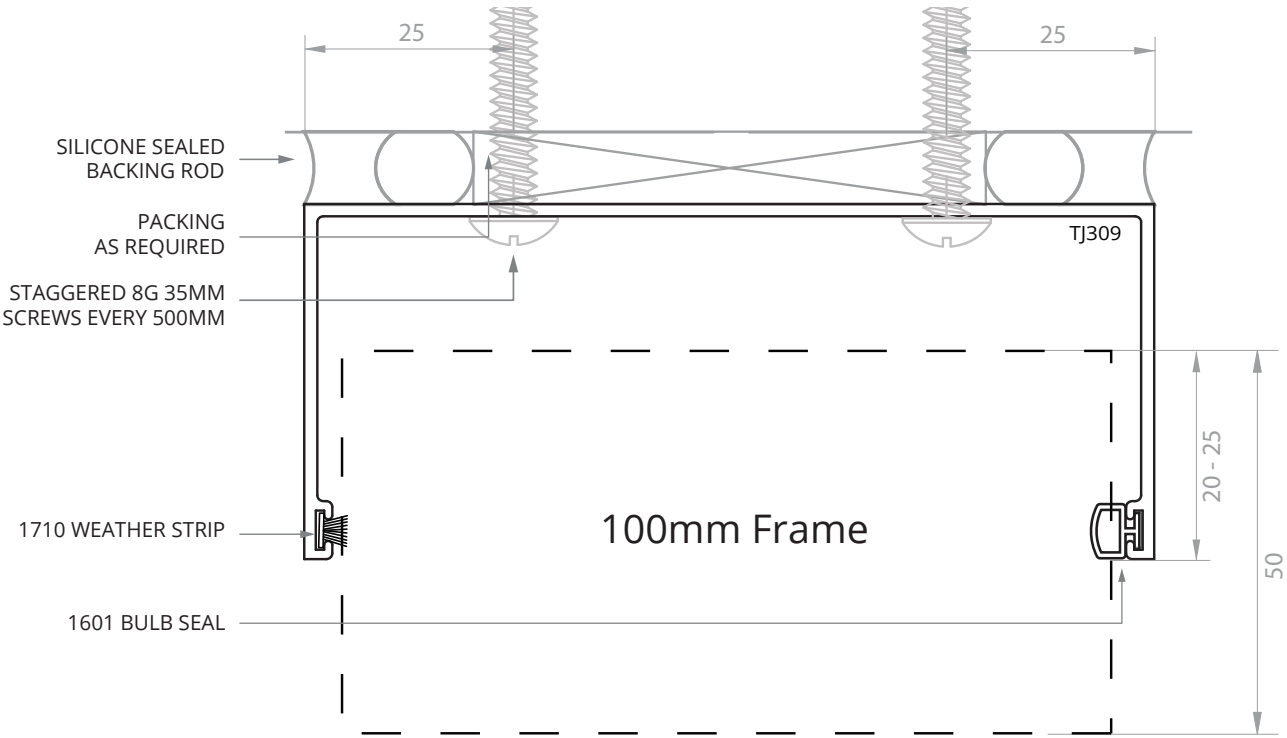
Fabrication

100 X 50 FRONT SG FRAMING SYSTEM

100mm Subhead Options

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

Fabrication

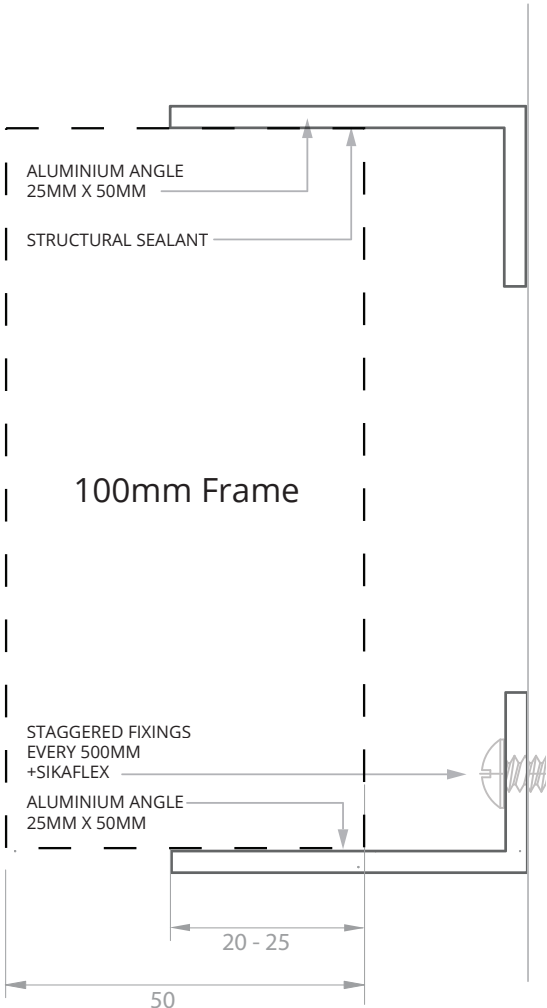
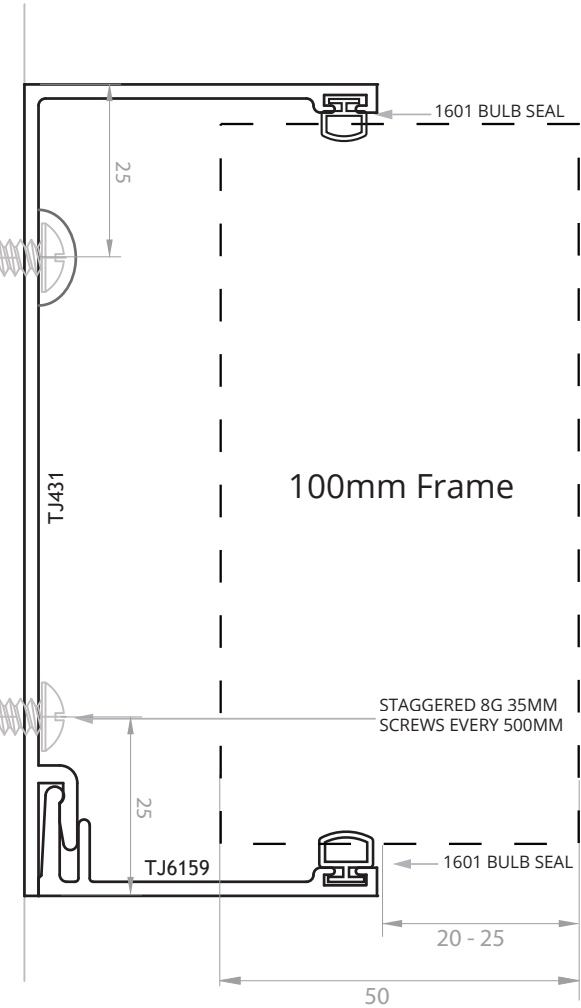


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100 X 50 FRONT SG FRAMING SYSTEM

100mm SubJamb Options

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



Fabrication

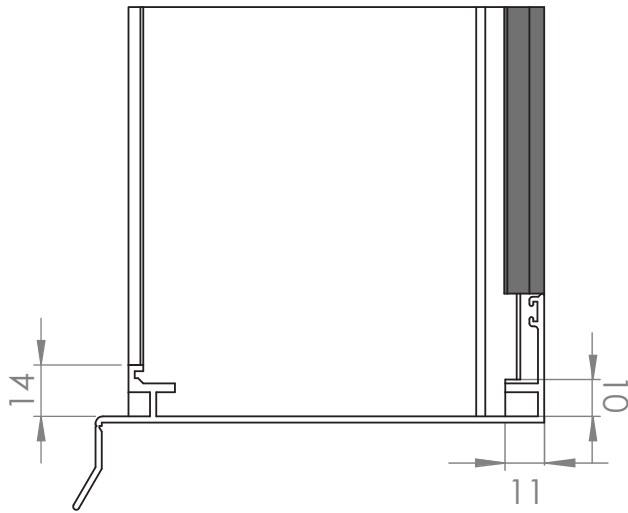
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100mm Subframe Internal Bead

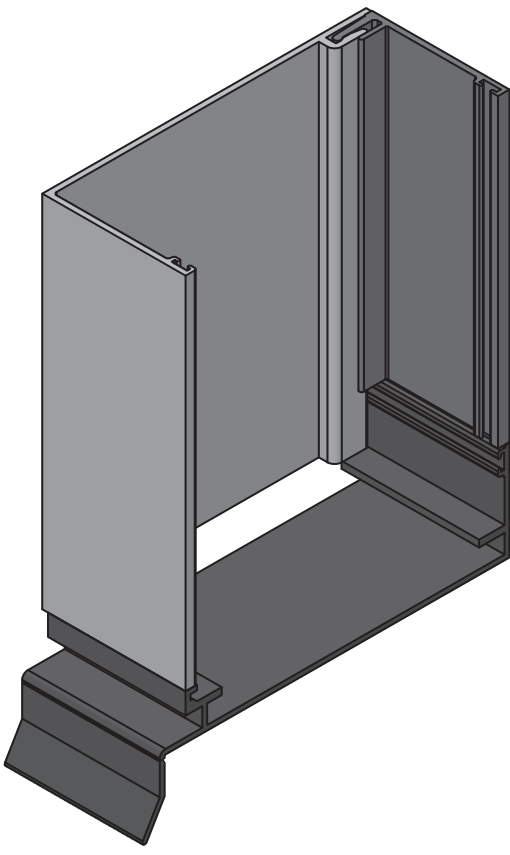
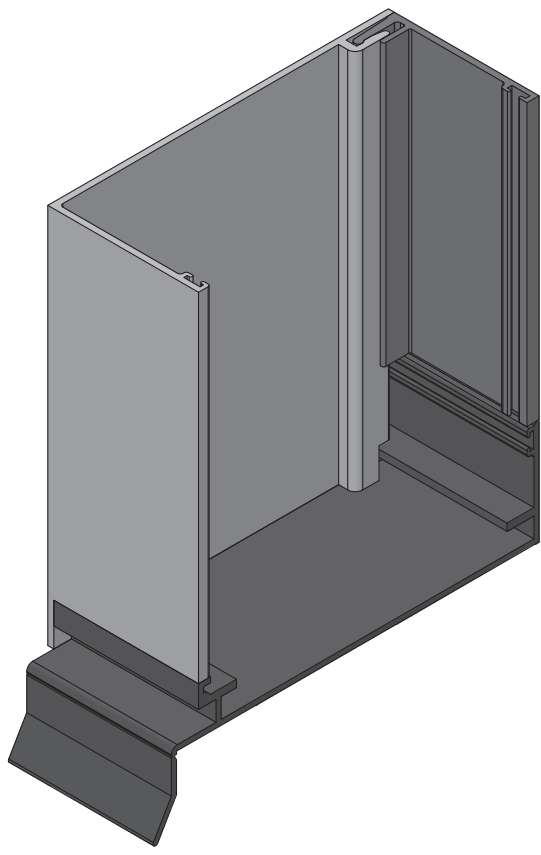
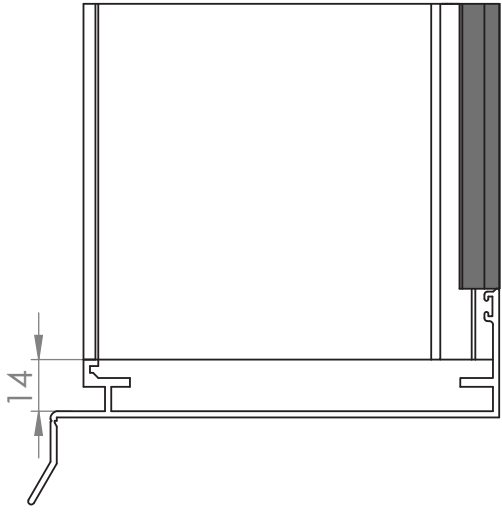
All raw joints need to be sealed with small joint sealer or foam tab option.

Fabrication

SQUARE CUT (INTERNAL BEAD)



MACHINED (INTERNAL BEAD)



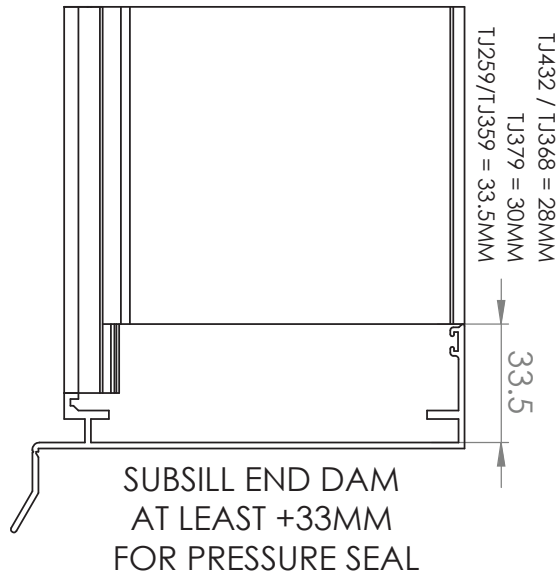
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100 X 50 FRONT SG FRAMING SYSTEM

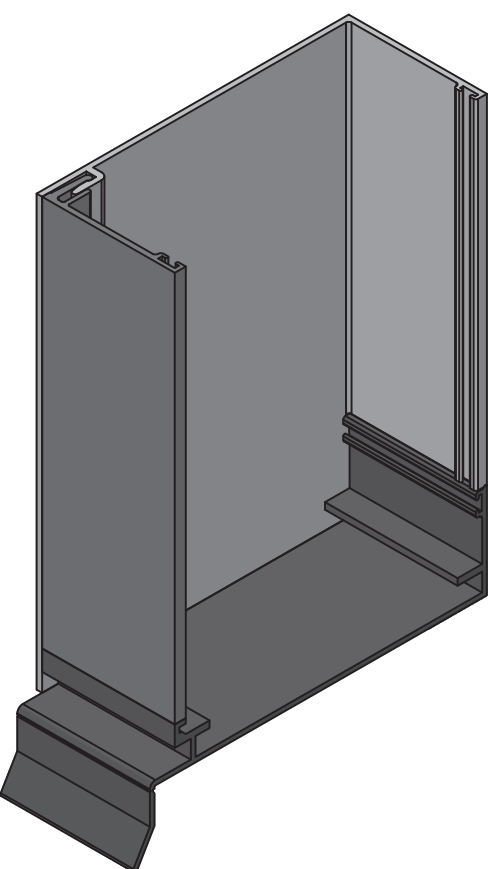
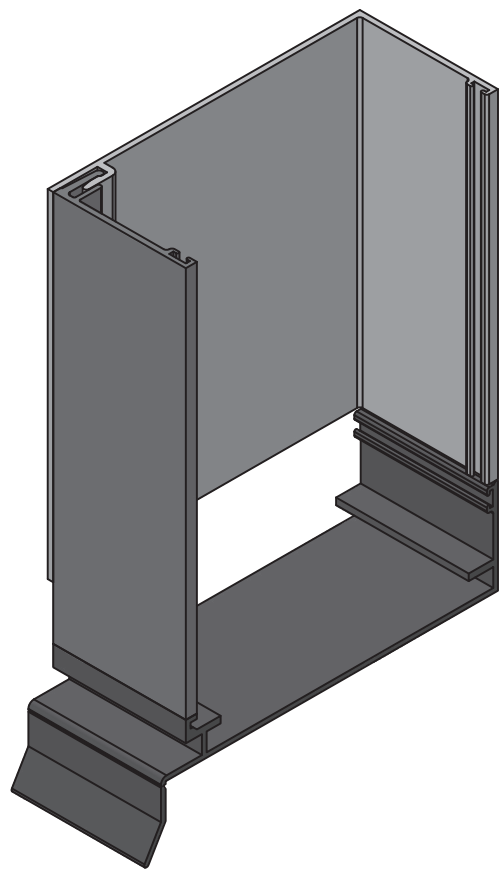
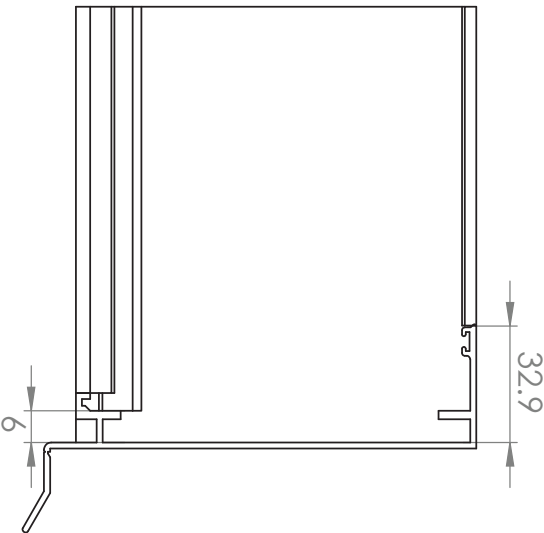
100mm Subframe External Bead

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

SQUARE CUT (EXTERNAL BEAD)



MACHINED (EXTERNAL BEAD)



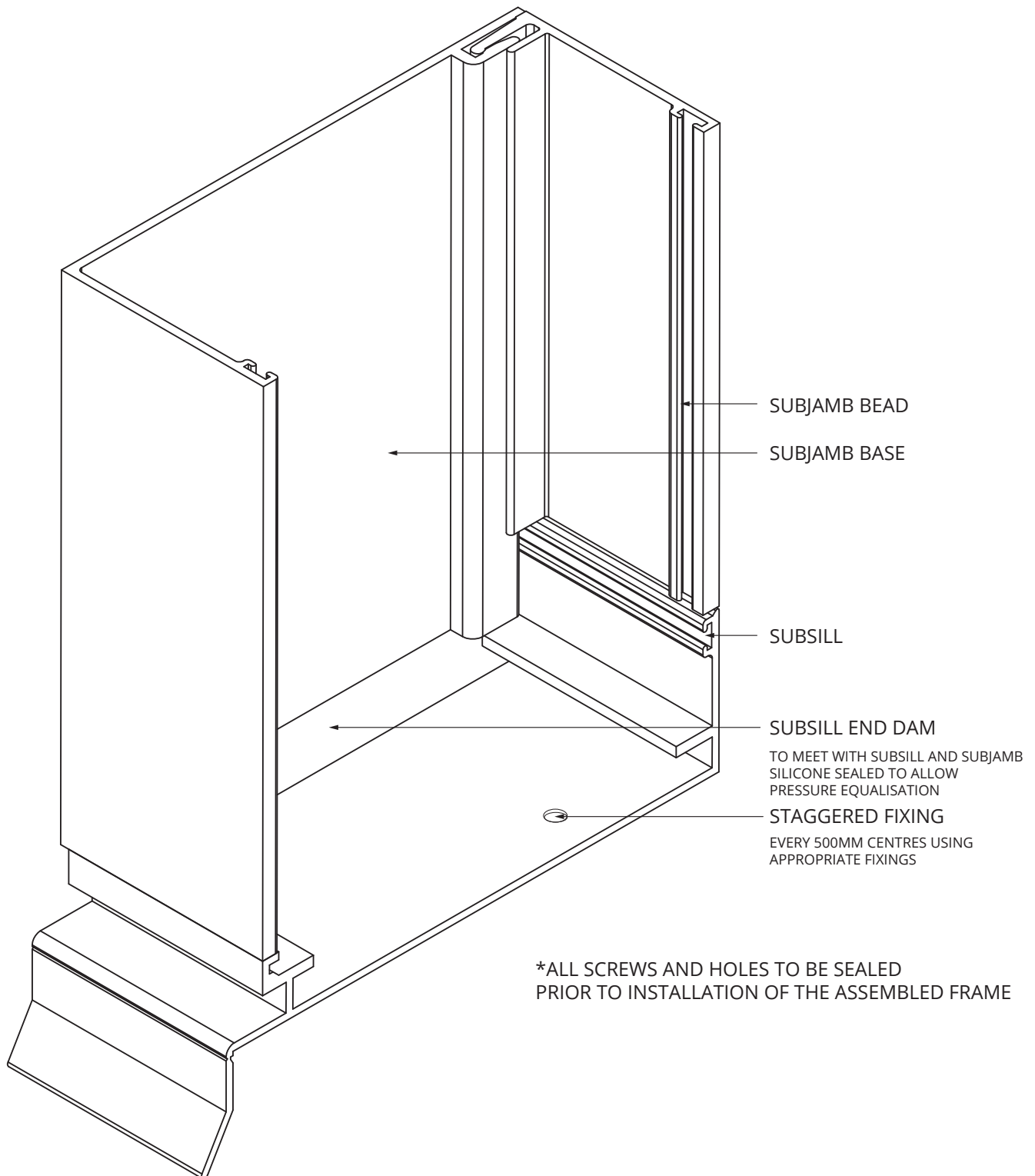
Fabrication

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Subsill End-Dam Installation

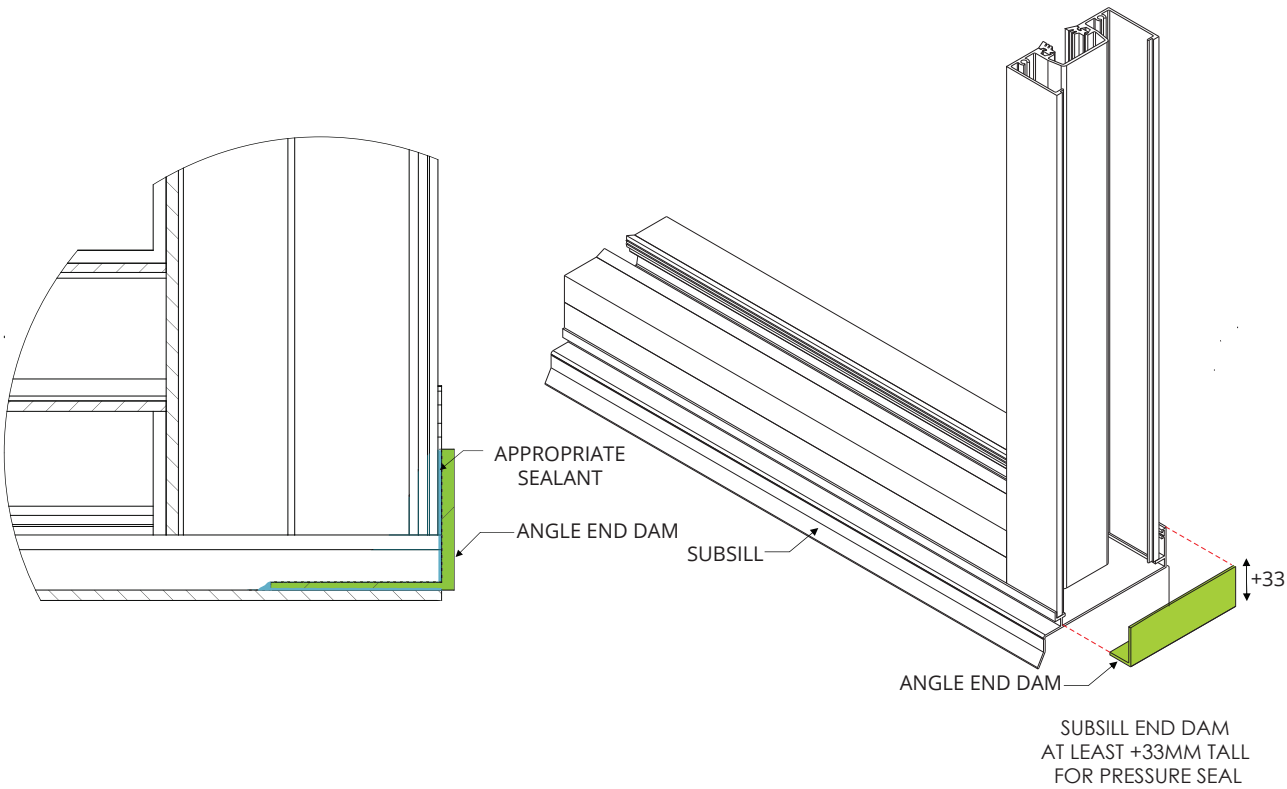
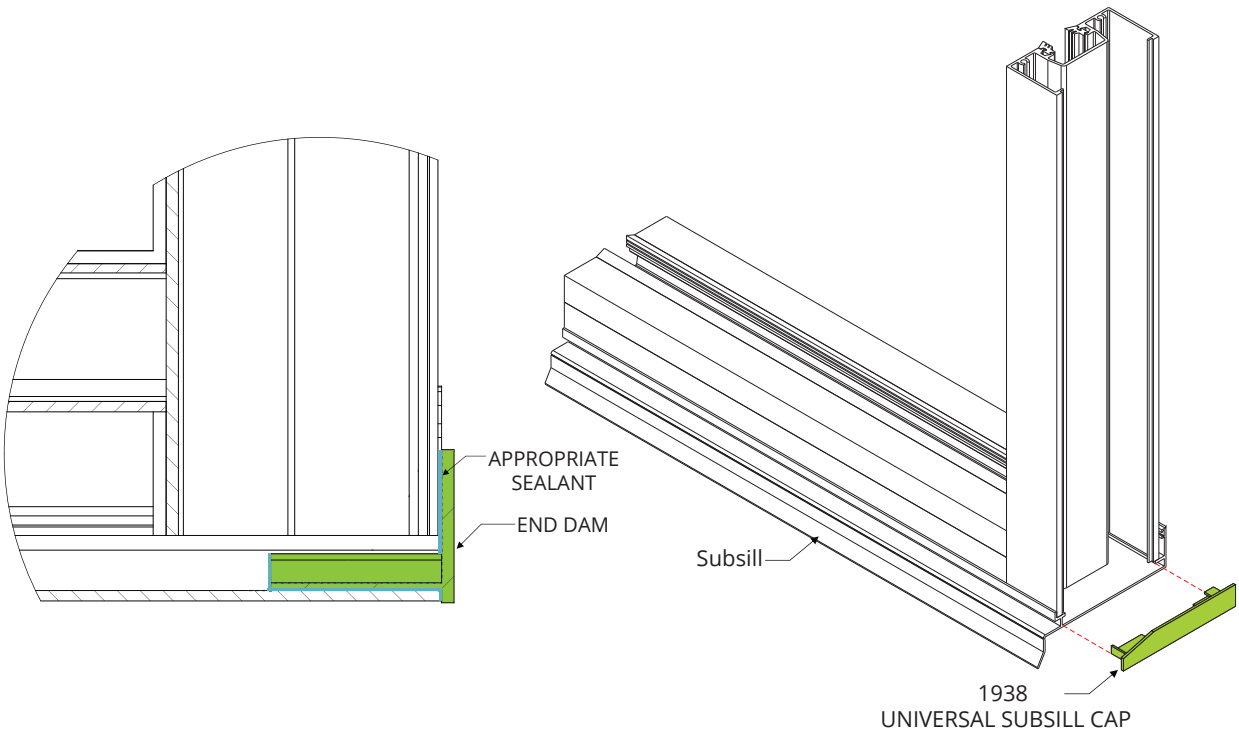
All raw joints need to be sealed with small joint sealer or foam tab option.

Fabrication



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

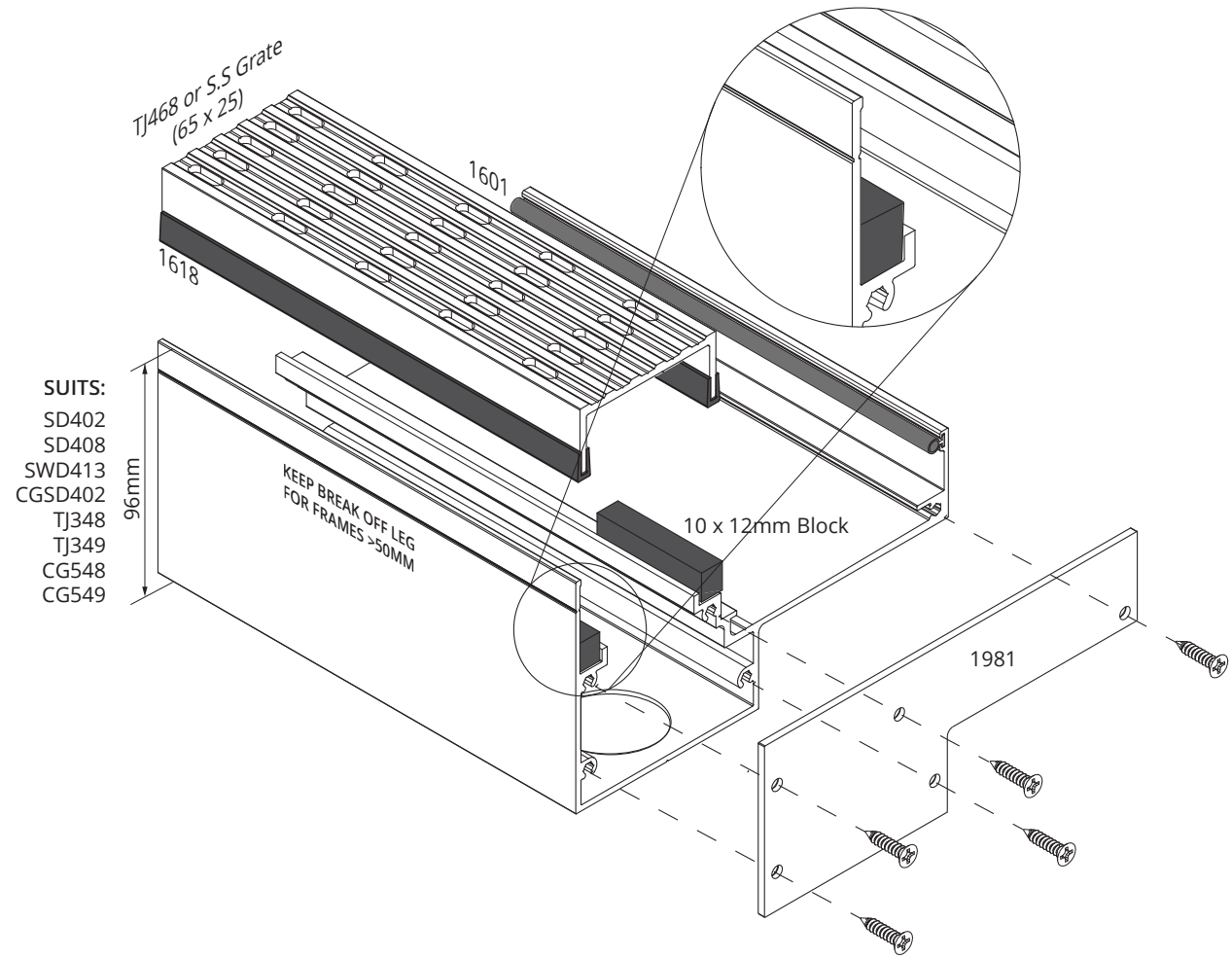


100 X 50 FRONT SG FRAMING SYSTEM

100mm Sump Sill

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

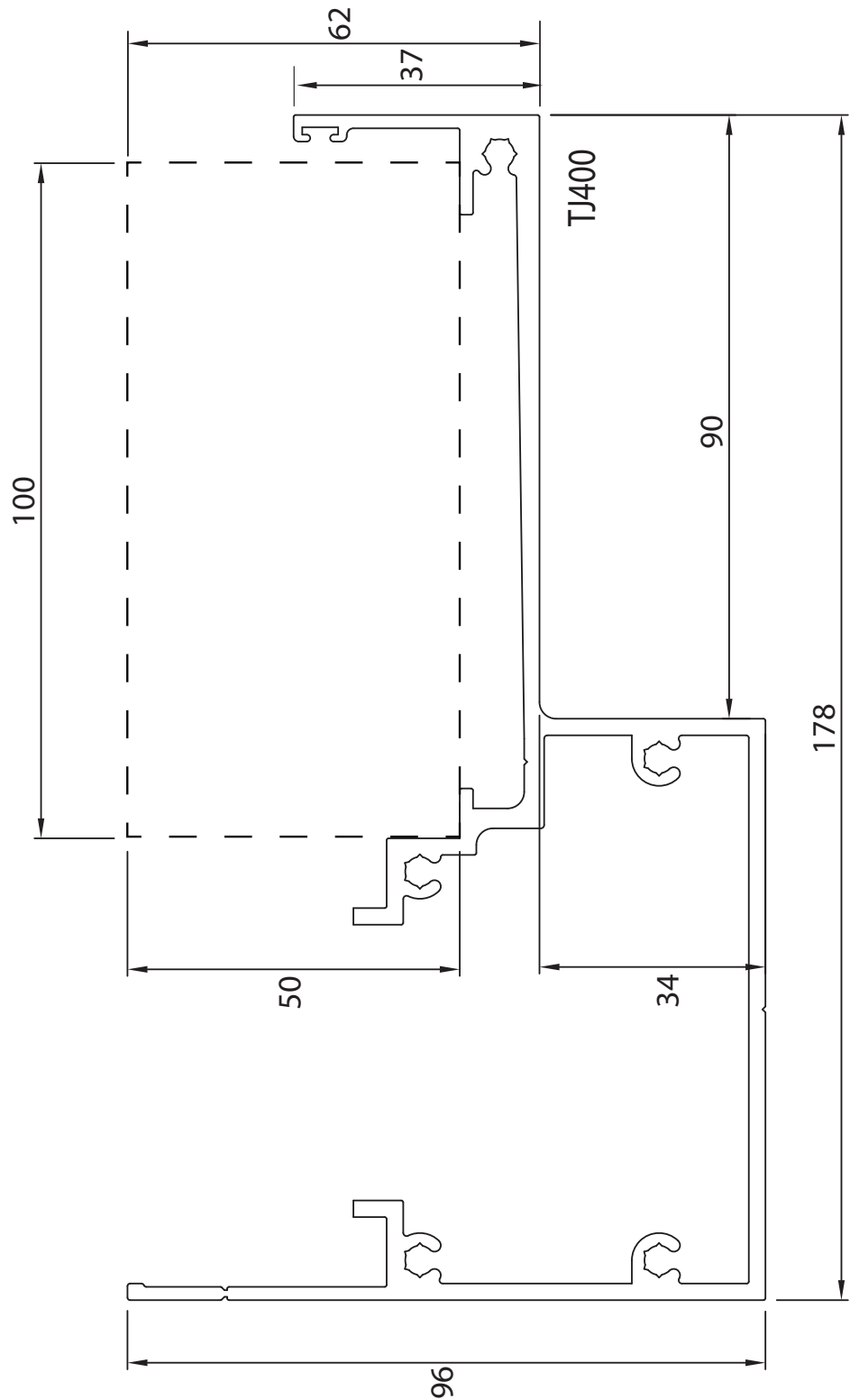
Fabrication



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TJ400 Slab Recess Details (1:1)

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



Fabrication

Copyright and important information on page 3

Tooling

BDX-CV-FGS-AW (MK1)

100 x 50mm Front Single Glazed

DGF253	External Bead
FGS401	Main Frame
FGS403	External Bead
FGS427	Split Mullion Female
FGS428	Split Mullion Male
FGS429	H/D Split Mullion Female
FGS430	H/D Split Mullion Male
FGS601	Main Frame
FGS627	Split Mullion Female
FGS628	Split Mullion Male
FGS629	H/D Split Mullion Female
FGS630	H/D Split Mullion Male
TJ742	50mm Universal Awning/Casement Sash
TJ747	50mm Universal Awning/Casement Sash
TJ749	Awning Sash Stop

[BDX-CV-FGS \(MK1\) Tool Set Information](#)

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



BDX-CV-DGF-AW (MK1)

150 x 50mm Front Double Glazed

DGF4501	Main Frame
DGF4530	Expansion Mullion Female
DGF4531	Expansion Mullion Male
DGF6561	Main Frame
DGF6582	Expansion Mullion Female
DGF6583	Expansion Mullion Male
TJ749	Awning Sash Stop

[BDX-CV-DGF \(MK1\) Tool Set Information](#)

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

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.

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:

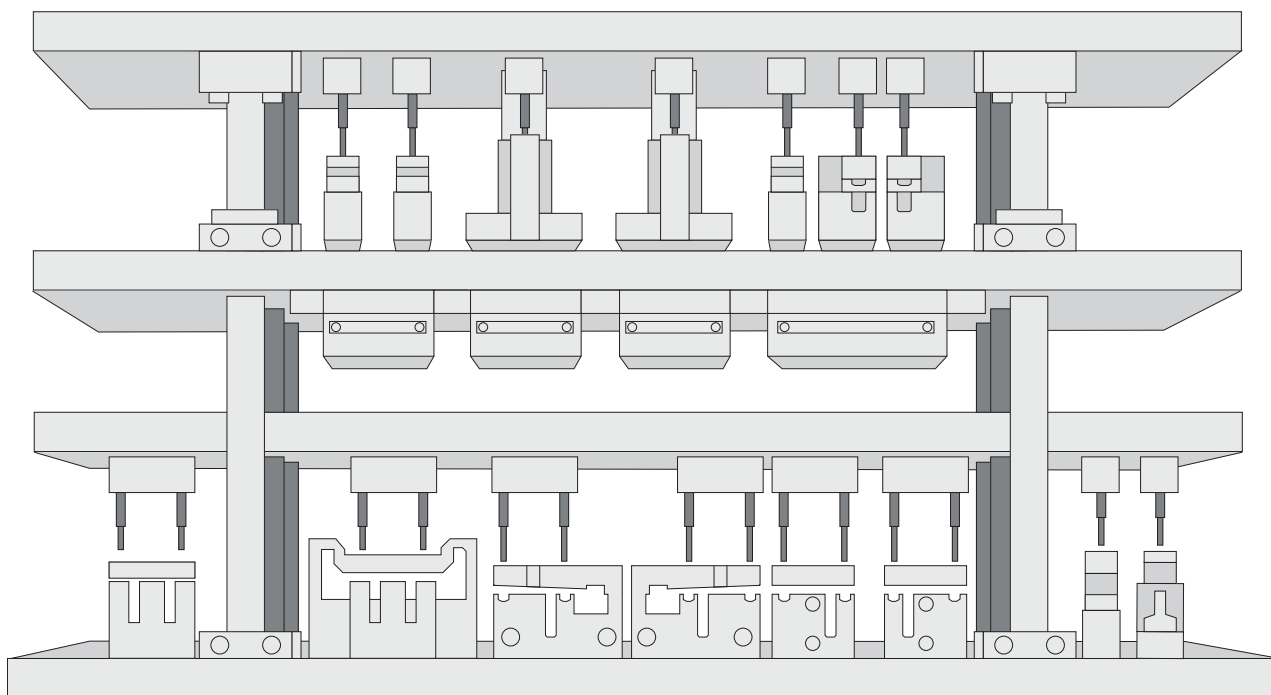
1. Switch off the machine and isolate power point. Removing front covers and swarf trays.
2. Remove top and bottom screws from the die. Carefully take out the old die block.
3. Reconnect the power and switch on the machine. Turn to INCHING MODE, press foot valve to ensure the machine desk is on lowest 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:

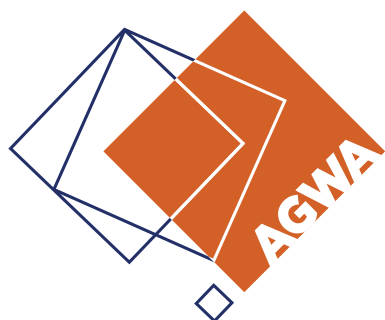
* Please provide following details to your sales representative

- 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



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AUSTRALIAN
**GLASS &
WINDOW**
ASSOCIATION
M E M B E R



Darley Aluminium

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/>

DARLEYALUMINIUM.COM.AU



ABN 14 076 364 657

NEW SOUTH WALES

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salesnsw@darleyaluminium.com.au

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salesvic@darleyaluminium.com.au

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Fax: (08) 9437 1024
saleswa@darleyaluminium.com.au

QUEENSLAND

29 Access Avenue, Yatala QLD 4207
Tel: (07) 3287 1888
Fax: (07) 3287 2088
saleqlld@darleyaluminium.com.au



Warranty

Darley Aluminium, Door & Framing extrusions are warranted for a period of 6 years as per AS2047 requirements, unless otherwise specified. Powder coat and anodised finished can be warranted for extended periods subject to application. Warranty is subject to the following conditions:

- ☐ The product is installed in accordance with the relevant Building Codes practices and maintained as per the recommended Care & Maintenance.
- ☐ The product has not been subject to misuse, physical abuse or neglect.
- ☐ Claims under this warranty should be made within one month of defect arising in the product.
- ☐ A documented maintenance schedule is required to obtain extended 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.

Ver 3: August 2023

DARLEYALUMINIUM.COM.AU | **ABN 14 076 364 657**

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Release Notes

Darley Aluminium
Commercial Framing 100 x 50mm Front Single Glazed

1. Technical Manual Release Notes

This page is intended to record all changes to the 100 x 50mm Front 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 SECTION

Darley Aluminium delivers complete, high-performance aluminium window, door and framing solutions for residential, commercial or architectural projects – combining Australian design, reliable supply, and expert support to make every project easier.

Window, Door and Framing



High-performance commercial window, door and framing systems designed for flexibility, durability, and seamless integration into modern architectural projects.



Premium multi-fold door systems that deliver expansive openings, smooth operation, and architectural sophistication for high-end spaces.



Modern, versatile window and door systems that bring style, flexibility, and reliable performance to any home.



Energy-efficient window and door systems designed to keep interiors comfortable while reducing heat transfer.

Security



Advanced heavy-duty security screens that provide maximum protection without compromising visibility, airflow, or style.



Durable, corrosion-resistant aluminium screening that combines security, strength, and design versatility for any application.

Outdoor Screening and Enclosure



Durable, all-weather enclosures that let you enjoy open-air living with protection from insects and the elements.



A sleek, easy-to-install screening solution that enhances privacy and style across any space.

What sets Darley Aluminium apart?

- **Complete Solutions** – Everything you need from system to support that simplifies specification, fabrication, and installation.
- **Australian Designed** – Built for local conditions and standards, delivering lasting quality and compliance.
- **Proven Reliability** – Trusted for over 30 years with a national distribution network delivering consistent supply and dependable service



Darley Aluminium understands how important it is to receive trusted solutions, quality products, and reliable supply. That's why we are committed to delivering high standards and friendly, dependable service you can rely on.

Contact your local Darley Aluminium distributor or fabricator today.

New South Wales Head Office

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Victoria and South Australia

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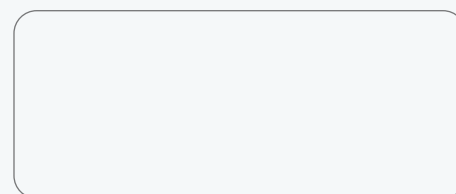
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