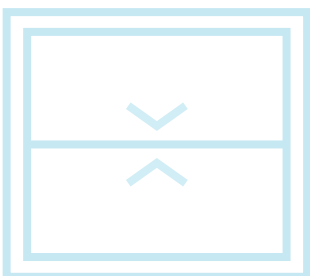
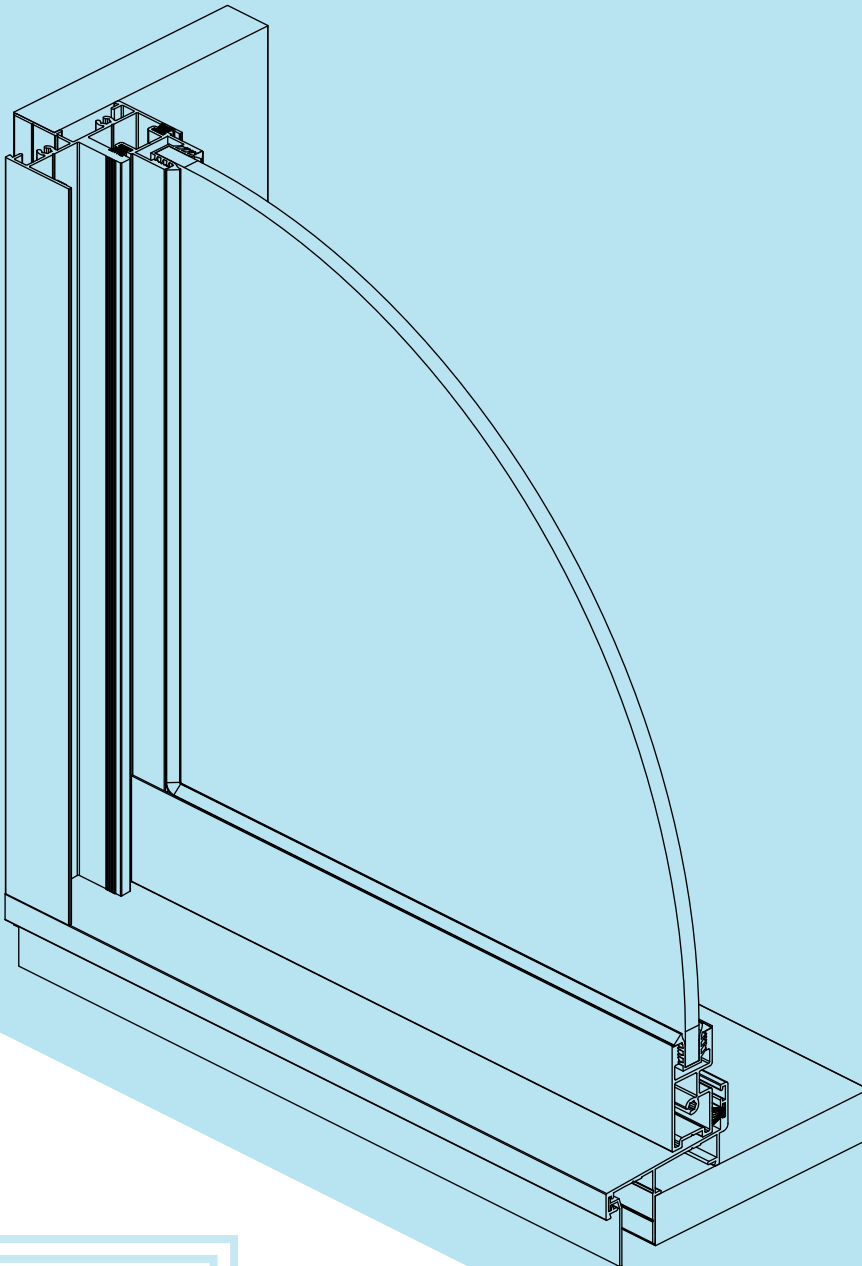


TECHNICAL MANUAL

53mm Double Hung Window System



150mm
101.6mm
76mm

53mm

1800

Structural Deflection
Tested Pressure (Pa)
1/180

0.45

Air Infiltration
Leakage at 150 Pa

200

Water Rated
Tested Pressure (Pa)

2700

Ultimate Strength
Tested Pressure (Pa)



U Value
4.3 - 6.2

Max
10mm



Self
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 Occasionally, some errors or outdated information may require rectification - Darley Aluminium takes no responsibility for any loss or damage as a result of these errors.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), AS/NZS 1170 (Loading Code) and AS/NZS 1664 (Aluminium Structures Code). 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. 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.

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Resources Available

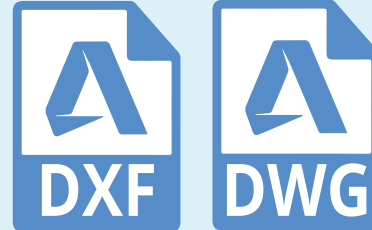


Software Packages



Darley offers our fabrication customers 2 different types of software packages for window and door fabrication: *V6 & Logikal*. This software can be used to generate quotes, orders and bill of materials for our range of aluminium window and door systems.

CAD Drawings

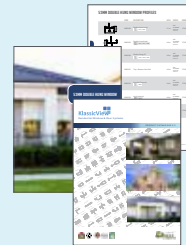


We also give our customers access to CAD drawings of our profiles, assemblies and wall charts. Contact your Account Manager to register for the customer portal on the Darley website www.darleyaluminium.com.au to gain access to these drawings.

Tooling Systems Catalogues & Brochures



We offer a range of tooling machines used to punch/crop extrusions in our KlassicView residential window & door systems. Each tooling machine has been designed and engineered in Australia, made with high quality steel and available in either pneumatic, hydraulic and air-over-hydraulic options.



KlassicView brochures are available for distribution to the end-users, while our NEW KlassicView catalogues provide an overview of the specific profiles that are needed to fabricate the windows and doors in the KlassicView range.

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Welcome

Overview

Darley Aluminium's KlassicView 53mm Double Hung Window is the ideal solution to many residential or low end commercial requirements. The system works seamlessly within the 53mm suite and can also be combined with other Darley systems such as the 76mm suite and commercial suites.

Easily assembled, all of Darley's 76mm and 53mm range can be purchased either in standard lengths, or as a flatpack kit where tooling or time constraints exist. Designed for Australian climatic conditions, the KlassicView 53mm Double Hung Window has been tested and exceeds Australian Standard AS2047, with a variety of interlock options for different wind loads.

Design Features

- Accepts glass thickness from 4mm to 10mm
- Compatible with other Darley Aluminium Commercial Systems
- Tested and Approved by an independent NATA accredited laboratory

Performance Summary

- Tested overall unit height of 1500mm
- Tested overall unit width of 900mm
- Serviceability: 1800Pa Positive and Negative at 1/180 deflection ratio
- Air Infiltration:
 - 0.50 L/s.m² Positive and 0.28 L/s.m² Negative @ 75Pa
 - 0.26 L/s.m² Positive and 0.45 L/s.m² Negative @ 150Pa
- Water Penetration: 200Pa
- Ultimate: 2700Pa Positive and Negative
- (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.

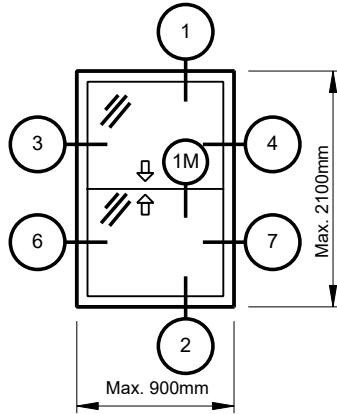
System Requirements

- Engineering, manufacture and installation of frames must meet requirements of:
 - AS2047 (Windows in Buildings)
 - AS/NZS 1170 (Loading Code)
- Glazing selected must meet requirements of AS1288 (Glass in Buildings)

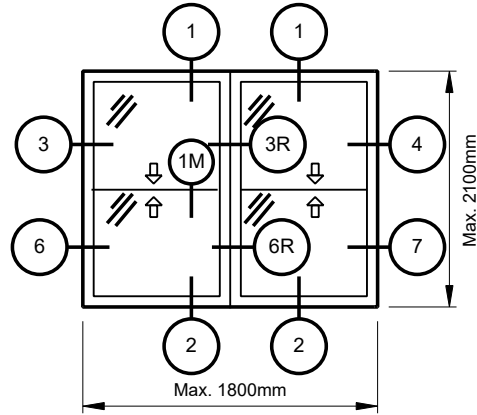
Configuration

General Configuration

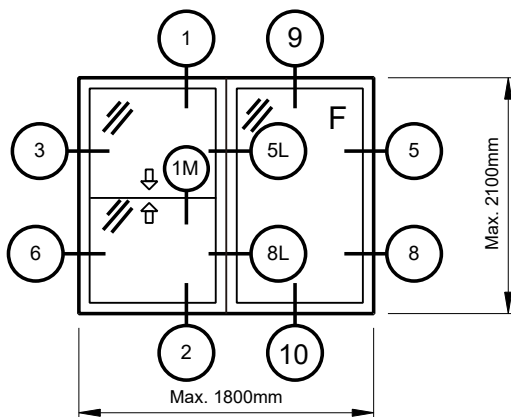
Type: DH



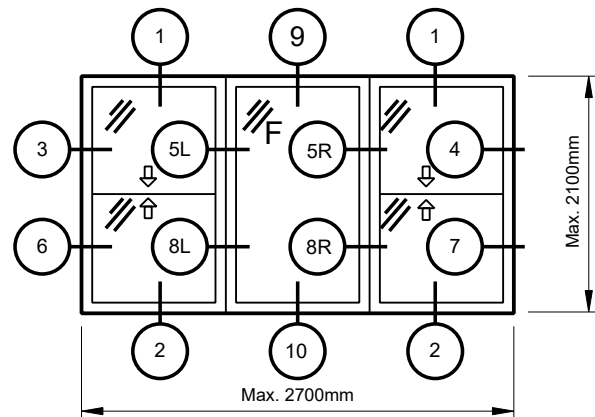
Type: DH-DH



Type: DH-F



Type: DH-F-DH



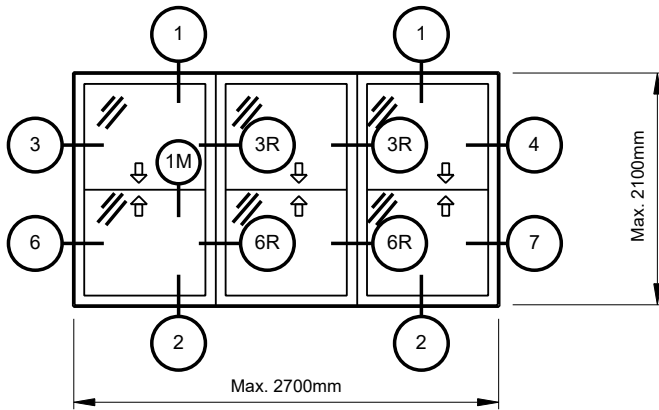
Fabrication

NOTES:

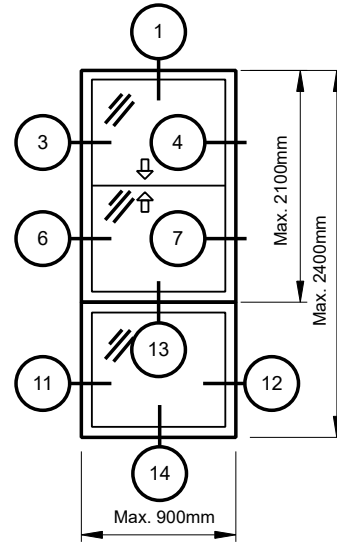
Engineering, manufacture and installation must meet requirements of AS 2047-2048, AS/NZS 1170 and AS/NZS 1664. Glazing selected must meet requirements of AS 1288. Size limitations are governed by design intent, glass selection, and local wind load requirements. An Engineer should be consulted to ensure selected framing and installation meets the requirements as set out by the relevant Australian Standards. N.B.

- For frames, designs, and configurations outside the tested scope, an engineer should be consulted.
- All raw joints need to be sealed with small joint sealer or foam tab option.

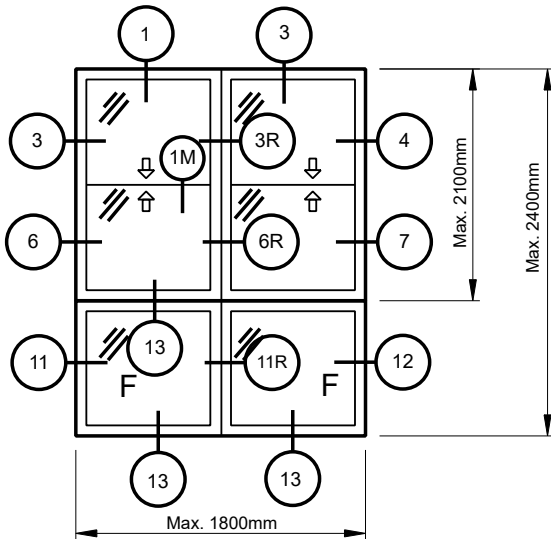
Type: DH-DH-DH



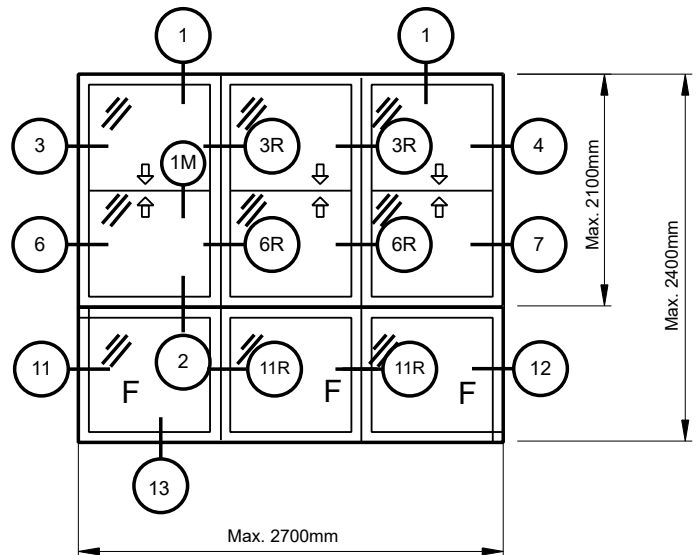
Type: DH/F with Lowlight



Type: DH-DH/F-F with Lowlight

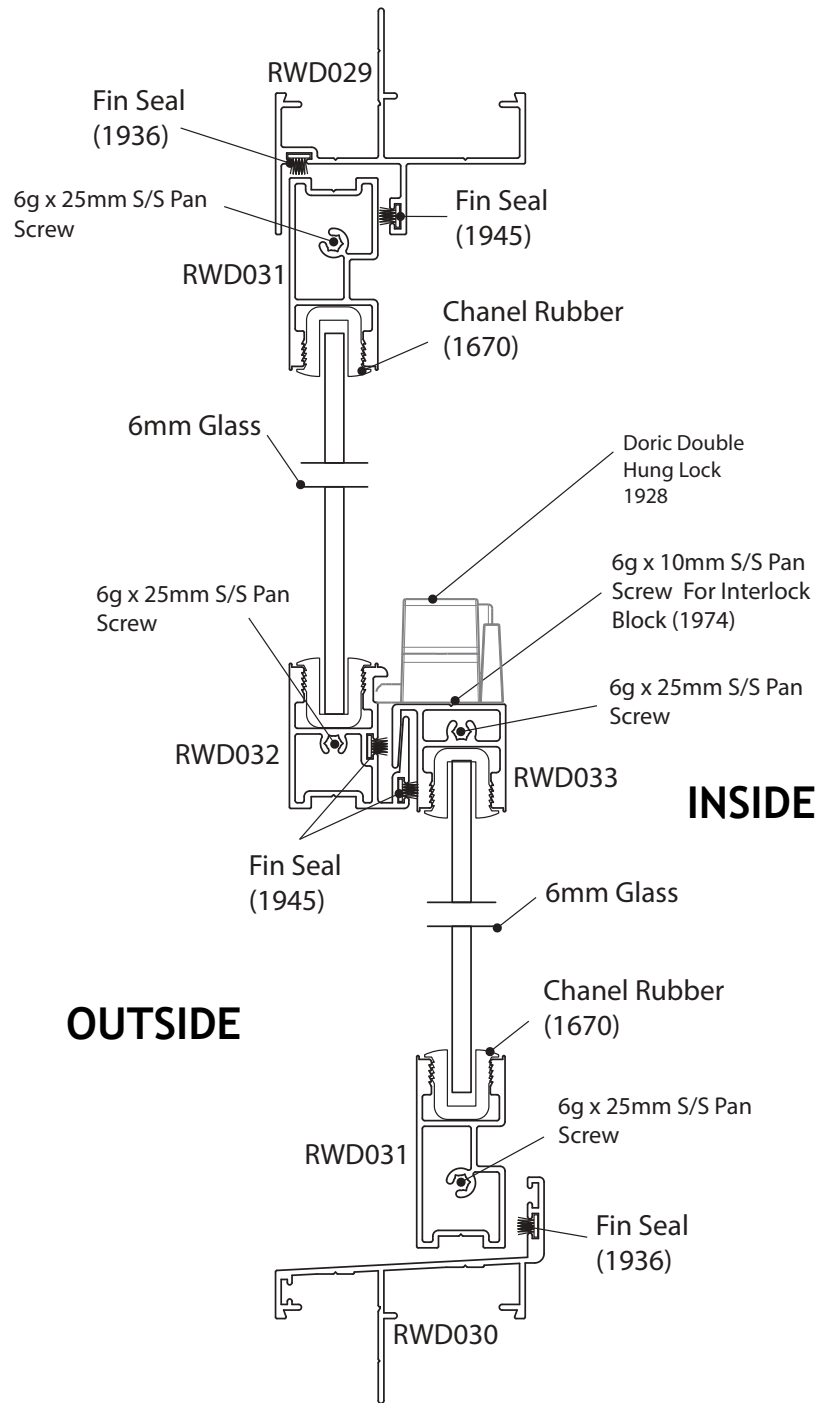


Type: DH-DH-DH/F-F-F with Lowlight



Cross Sections

Head and Sill Option:



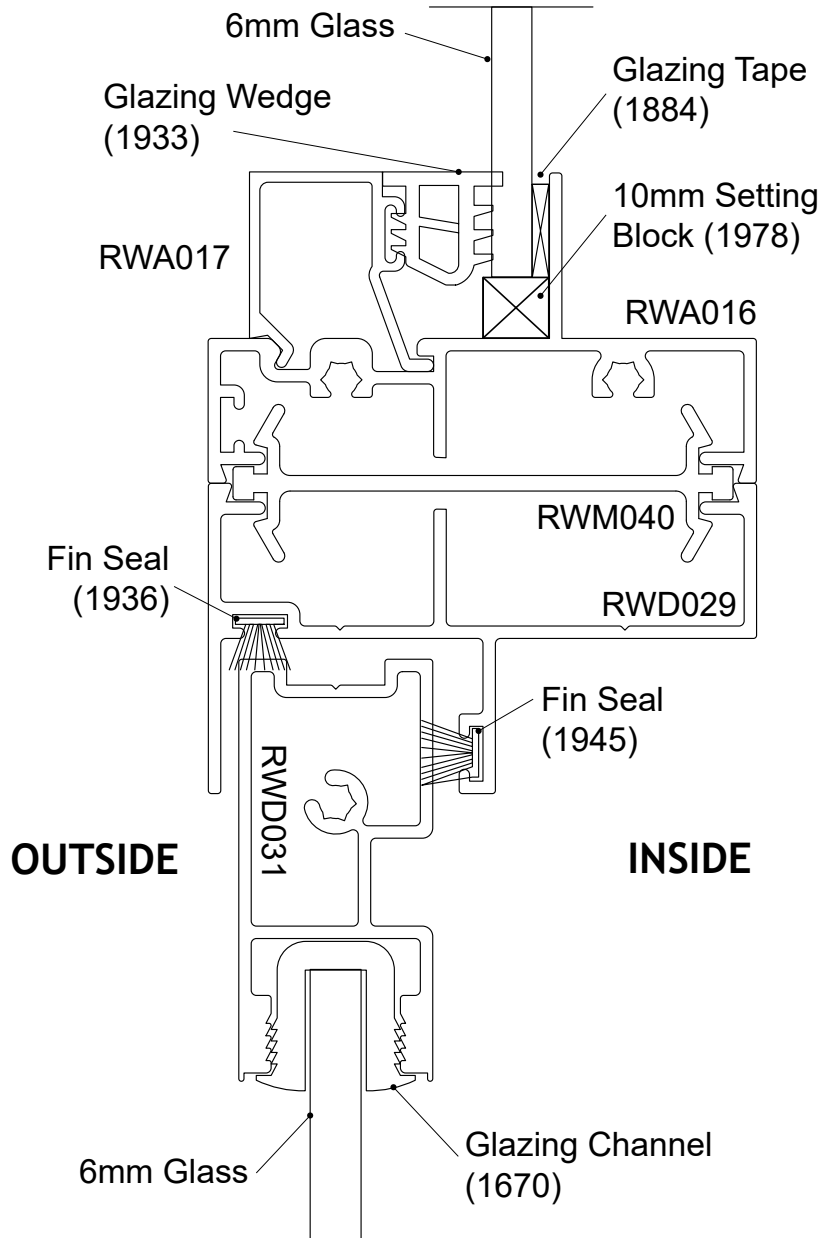
Fabrication

NOTES:

Engineering, manufacture and installation must meet requirements of AS 2047-2048, AS/NZS 1170 and AS/NZS 1664. Glazing selected must meet requirements of AS 1288. Size limitations are governed by design intent, glass selection, and local wind load requirements. An Engineer should be consulted to ensure selected framing and installation meets the requirements as set out by the relevant Australian Standards.

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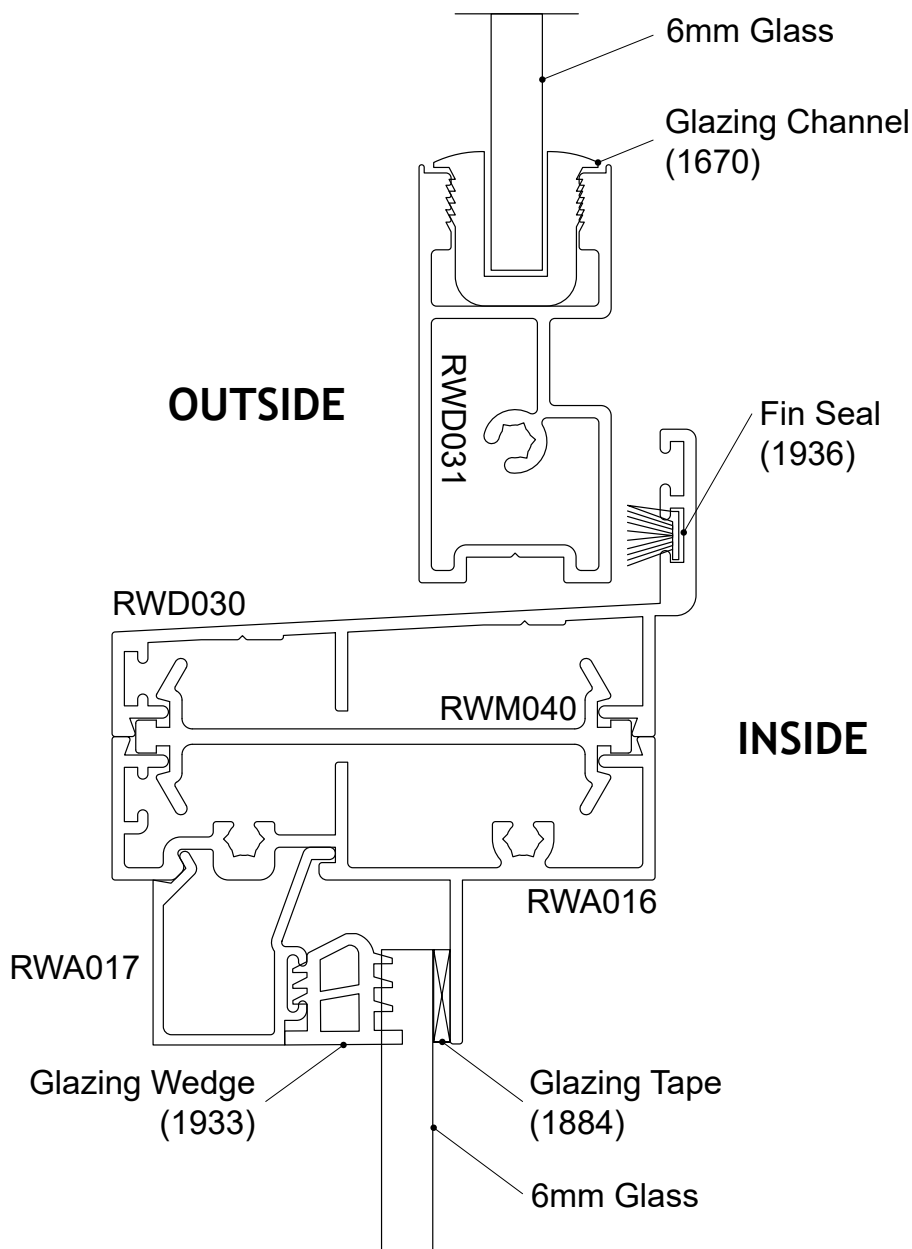


NOTES:

Engineering, manufacture and installation must meet requirements of AS 2047-2048, AS/NZS 1170 and AS/NZS 1664. Glazing selected must meet requirements of AS 1288. Size limitations are governed by design intent, glass selection, and local wind load requirements. An Engineer should be consulted to ensure selected framing and installation meets the requirements as set out by the relevant Australian Standards. N.B.

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

Transom Option: Lowlight



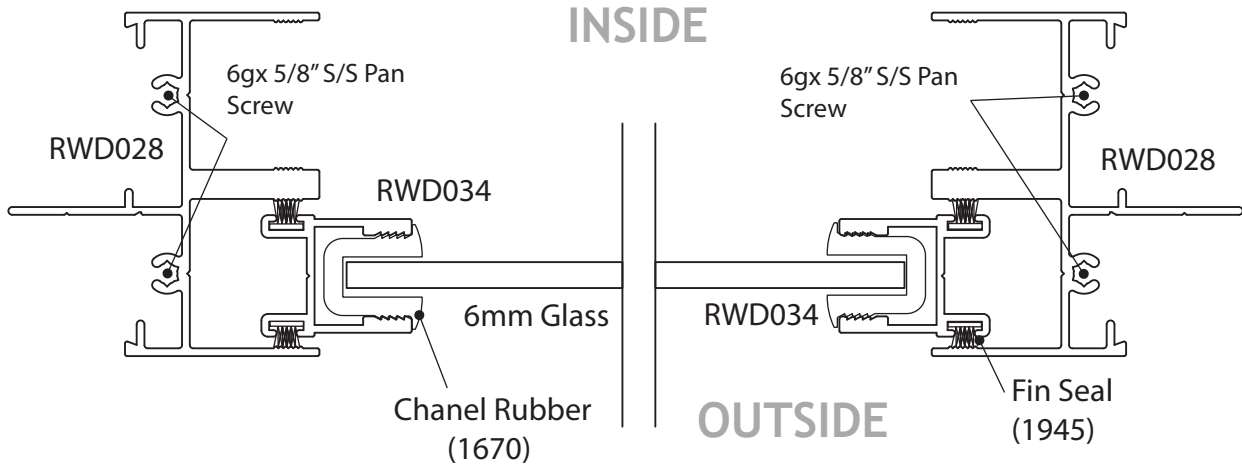
Fabrication

NOTES:

Engineering, manufacture and installation must meet requirements of AS 2047-2048, AS/NZS 1170 and AS/NZS 1664. Glazing selected must meet requirements of AS 1288. Size limitations are governed by design intent, glass selection, and local wind load requirements. An Engineer should be consulted to ensure selected framing and installation meets the requirements as set out by the relevant Australian Standards. N.B.

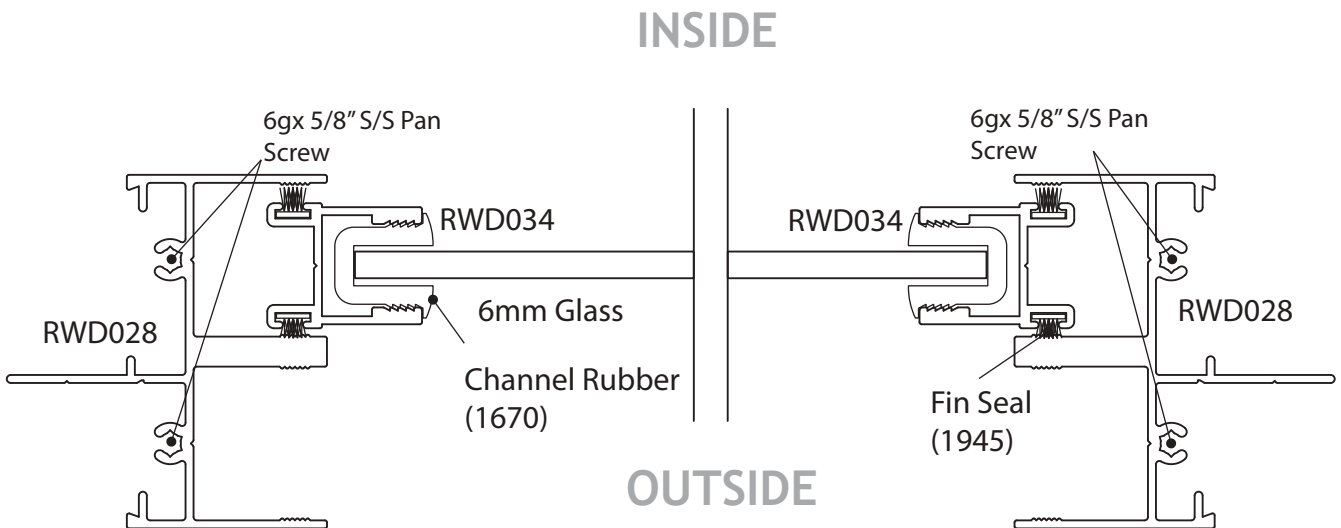
- For frames, designs, and configurations outside the tested scope, an engineer should be consulted.
- All raw joints need to be sealed with small joint sealer or foam tab option.

Jamb Option: Top Sash



NOTE: Crimp both sides of stile to retain weather strip
(See top sash assembly - page 23)

Jamb Option: Bottom Sash



NOTE: Crimp both sides of stile to retain weather strip
(See bottom sash assembly - page 23)

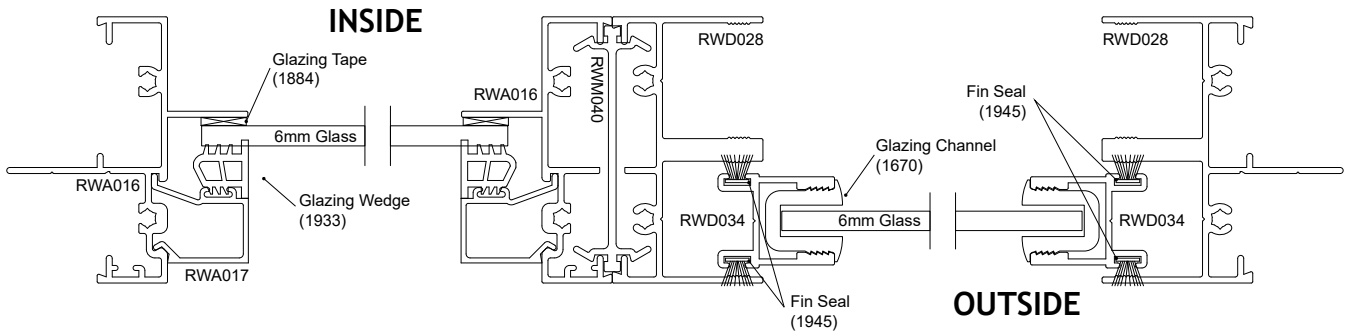
NOTES:

Engineering, manufacture and installation must meet requirements of AS 2047-2048, AS/NZS 1170 and AS/NZS 1664. Glazing selected must meet requirements of AS 1288. Size limitations are governed by design intent, glass selection, and local wind load requirements. An Engineer should be consulted to ensure selected framing and installation meets the requirements as set out by the relevant Australian Standards.

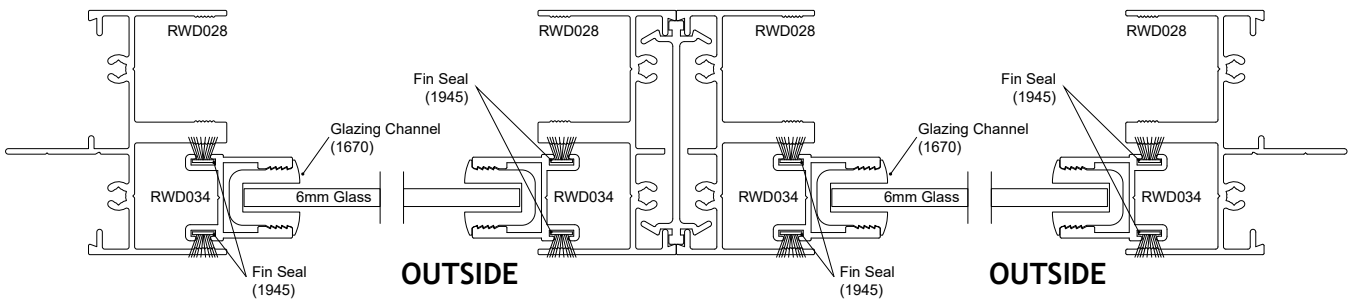
N.B.

- For frames, designs, and configurations outside the tested scope, an engineer should be consulted.
- All raw joints need to be sealed with small joint sealer or foam tab option.

Jamb Option: Fixed Sidelight



Jamb Option: DH-DH Sidelight



Fabrication

NOTES:

Engineering, manufacture and installation must meet requirements of AS 2047-2048, AS/NZS 1170 and AS/NZS 1664. Glazing selected must meet requirements of AS 1288. Size limitations are governed by design intent, glass selection, and local wind load requirements. An Engineer should be consulted to ensure selected framing and installation meets the requirements as set out by the relevant Australian Standards.

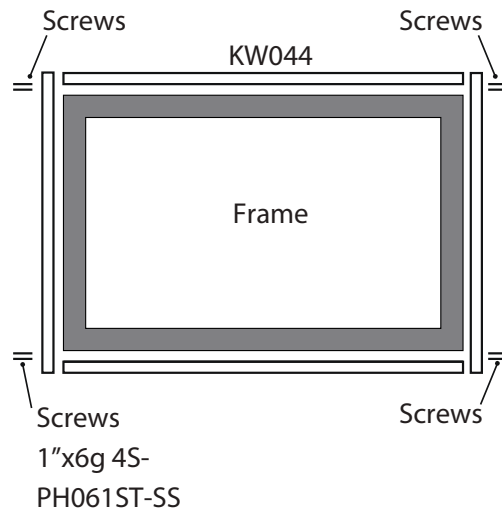
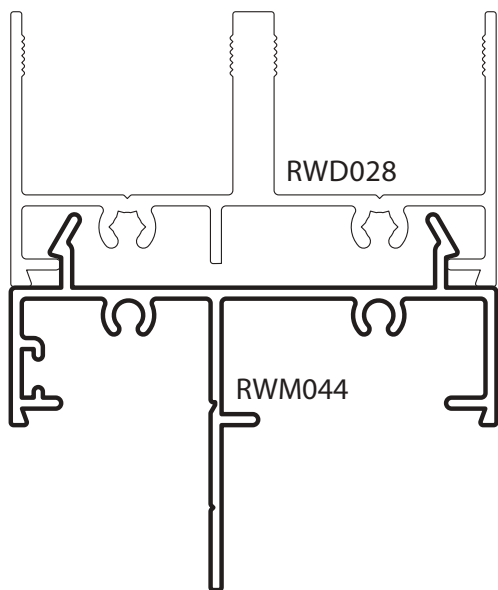
N.B.

- For frames, designs, and configurations outside the tested scope, an engineer should be consulted.
- All raw joints need to be sealed with small joint sealer or foam tab option.

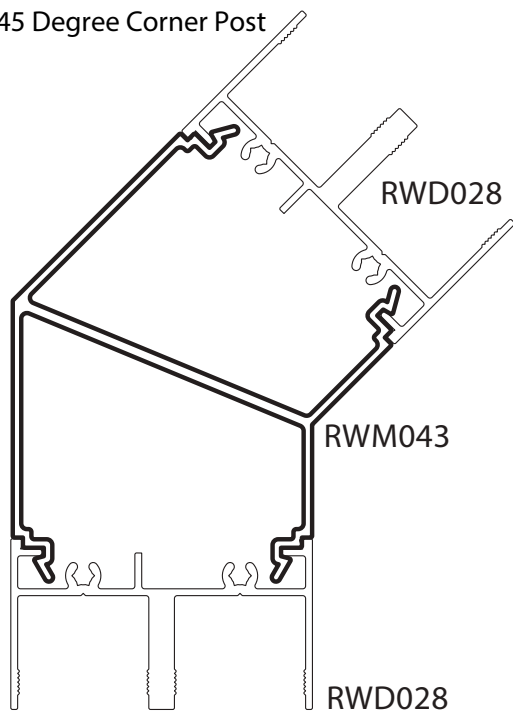
Additional Frame Options

Fabrication

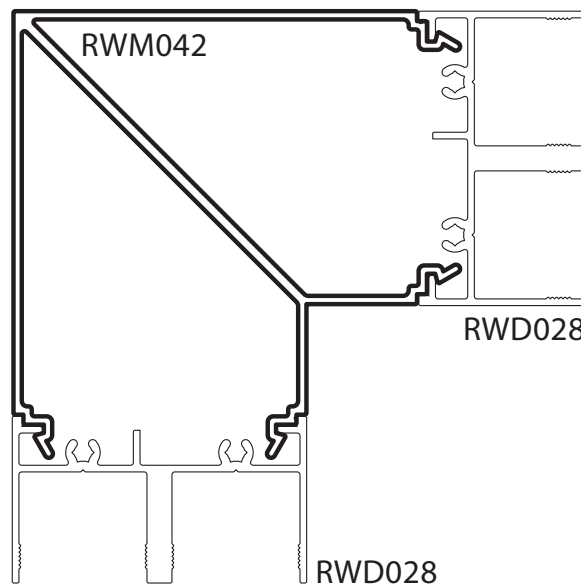
RWM044 Frame Extender



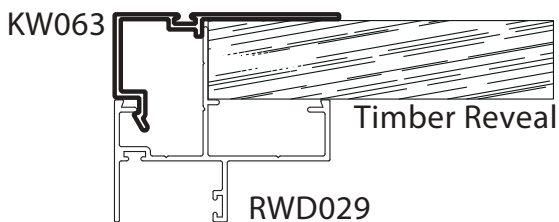
RWM043 45 Degree Corner Post



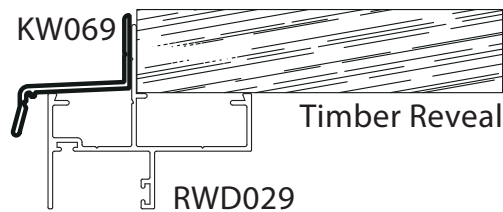
RWM042 90 Degree Corner Post



KW063 Inline Reveal Adaptor

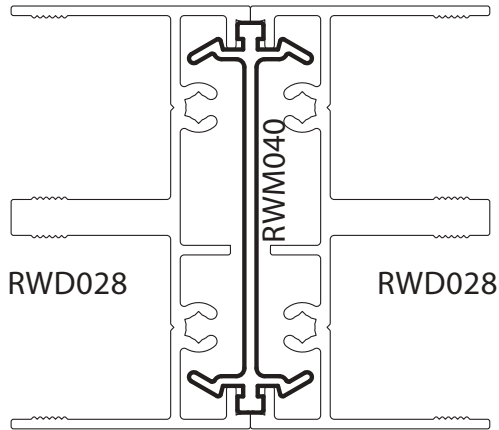


KW069 Drip Mould (Head Flashing)

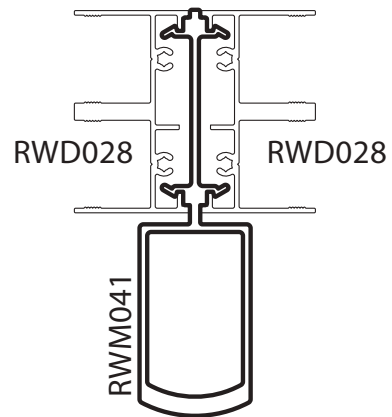


Additional Frame Options

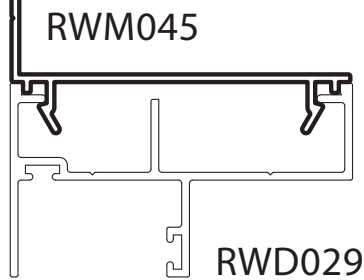
RWM040 Frame Joiner



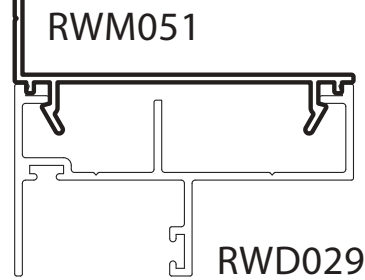
RWM041 Heavy Duty Frame Joiner



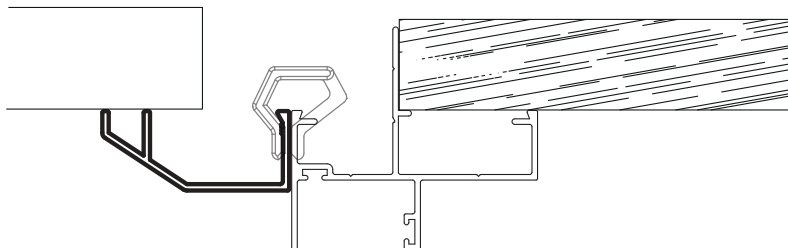
RWM045 Face Fix Adaptor



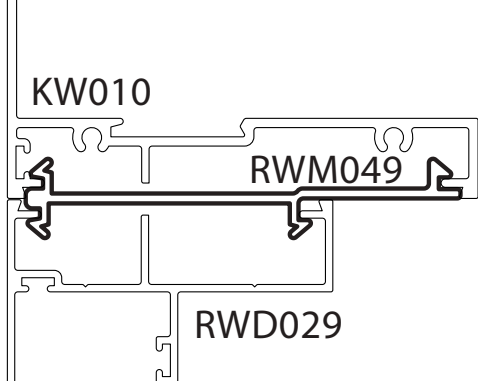
RWM051 40mm Face Fix Adaptor



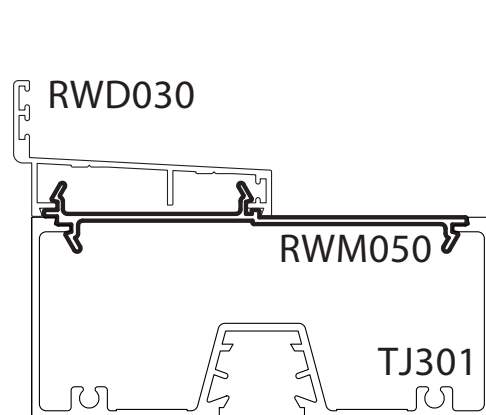
RWM047 Storm Mould



RWM049 53mm to 76mm Adaptor



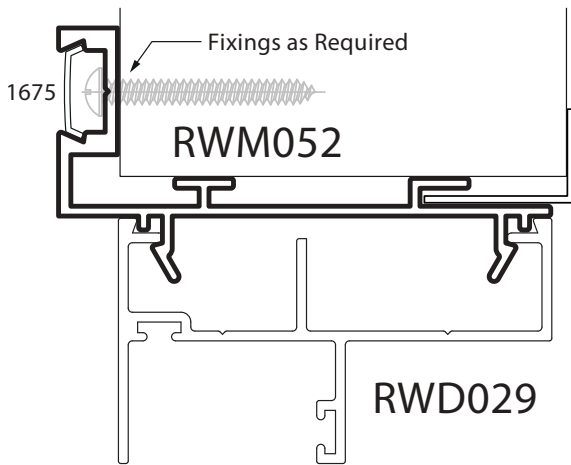
RWM050 53mm to 101.6mm Adaptor



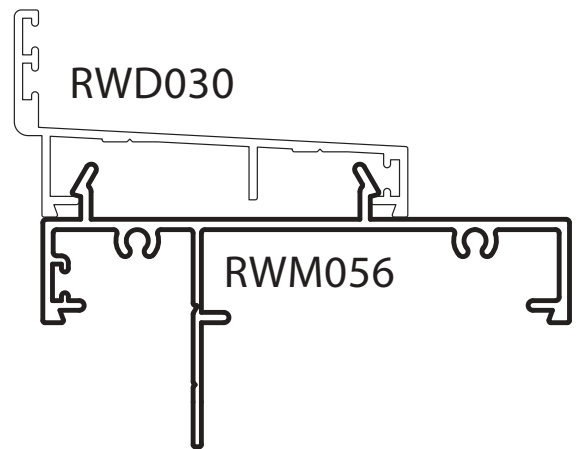
Fabrication

Additional Frame Options

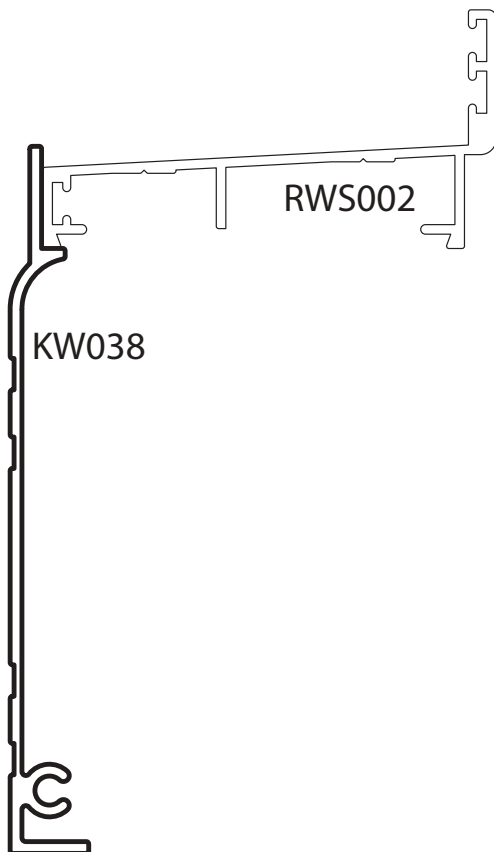
RWM052 53mm Concealed Faced Fixed Adaptor



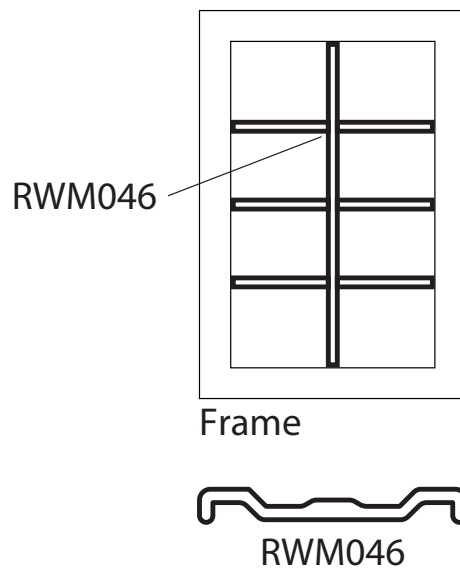
RWM056 53mm to 76mm Frame Extender



KW038 90mm Architrave



RWM046 Colonial Bar



Fabrication

Hardware

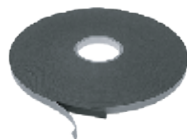
Small Parts



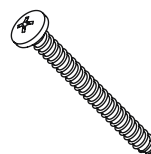
Glazing Channel
Part No.:
4mm - 1923
5mm - 1924
6.38mm - 1670
8.38mm - 1604
10.38mm - 1671



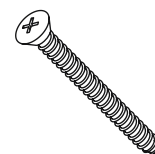
Glazing Wedge
Part No.:
4mm - 1931
5mm - 1623
6.38mm - 1933
8.38mm - 1615
10.38mm - 1620



Glazing Tape
Part No. 1884



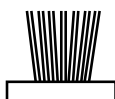
Frame Screws
- 6gx5/8" S/S Pan
4S-PH0658ST-SS
- 6gx1" S/S Pan
4S-PH061ST-SS



Countersunk (CS) Frame Screws
- 6gx3/8" S/S Pan
4S-CH0638ST-SS



53mm Gaskets
Part No.
Head Gasket - 1947
Sill Gasket - 1948



Weather Strips
Part No.
4.7-550 : 1980
4.7-600 : 1936



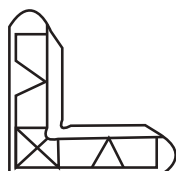
Sill Flap
Part No. 1925



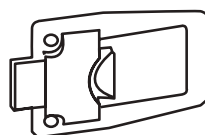
Drain Flap
Part No. 1926



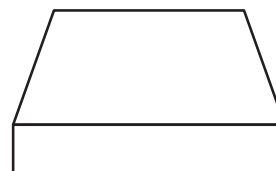
Flyscreen Spring
Part No. 1973



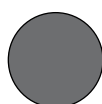
Corner Stake
Part No. 2680



Flyscreen D-Pull and Plunger
Part No. 2846



Finger-Jointed 138mmx18mm Laminated Timber Reveal
Part No.
TR01-138T18M58



Spline
Part No.
2500 (5mm Foam)
2501 (5.7mm Foam)
2502 (6mm Foam)
2503 (5.3mm Foam)



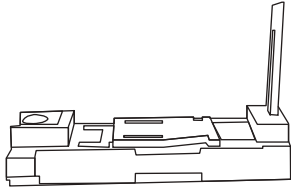
Spline
Part No.
2504 (5mm PVC)
2505 (5.7mm PVC)
2506 (6mm PVC)



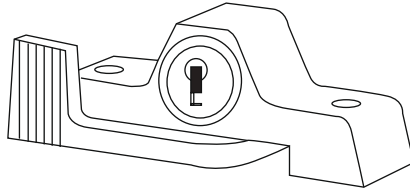
11mm D Pull
Part No. 2800

Fabrication

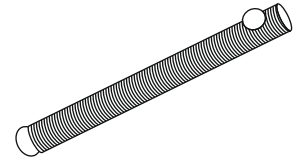
Small Parts



Friction Foot
Part No. 1942



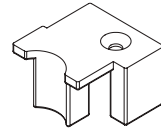
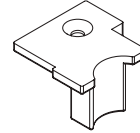
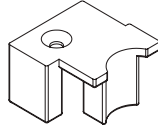
Doric Double Hung
Cam Sash Lock
Part No. 1928



Double Hung Spring
Part No. 1275

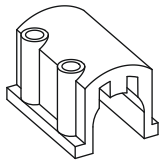


53mm Double Hung
Top Rail Guide

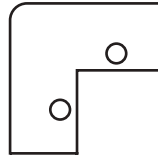


53mm Double Hung Guide
(Left and Right)

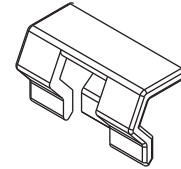
Part No. 1974



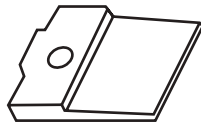
Universal Window Stop
Part No. 1963



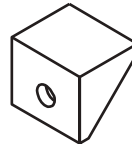
RW Fixed Corner Plate
Part No. 1992



Storm Mould Clip
Part No. 1975



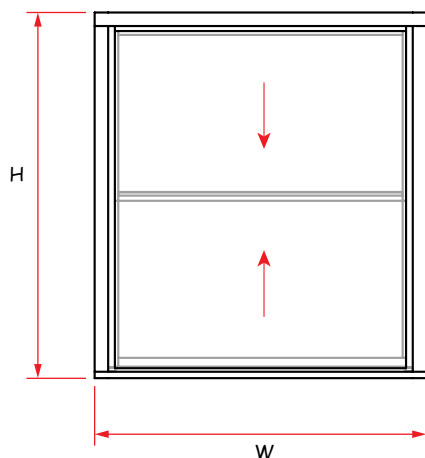
Double Hung Tab
Part No. 2847



Double Hung Stop
Part No. 1943

Machining

Cutting Formula



Fabrication

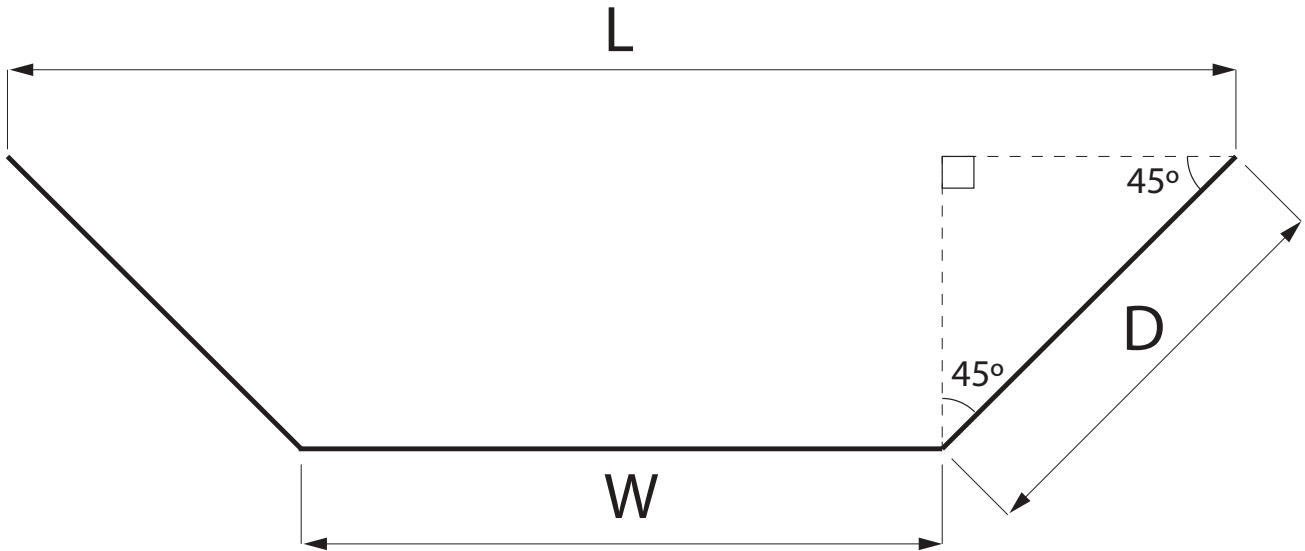
Code	Description	Quantity	Formula
RWD029	Double Hung Window Head	1	Width
RWD030	Double Hung Window Sill	1	Width
RWD028	Double Hung Window Jamb *	2	Height - 25
RWD031	Top Rail	1	Width - 58
RWD032	Top Sash Interlock	1	Width - 58
RWD033	Bottom Sash Interlock	1	Width - 58
RWD031	Bottom Rail	1	Width - 58
RWD034	Top Sash Stile	2	$(\text{Height} - 2)/2$
RWD034	Bottom Sash Stile	2	$(\text{Height} - 2)/2 - 8$
HFF180	Flyscreen Height	2	Height - 22
HFF180	Flyscreen Width	2	Width - 40
	Glass Height	2	$(\text{Height} - 102)/2$
	Glass Width	2	Width - 68

***NOTE: Jambs have 3° bottom cut (see Machining Details for RWD028)**

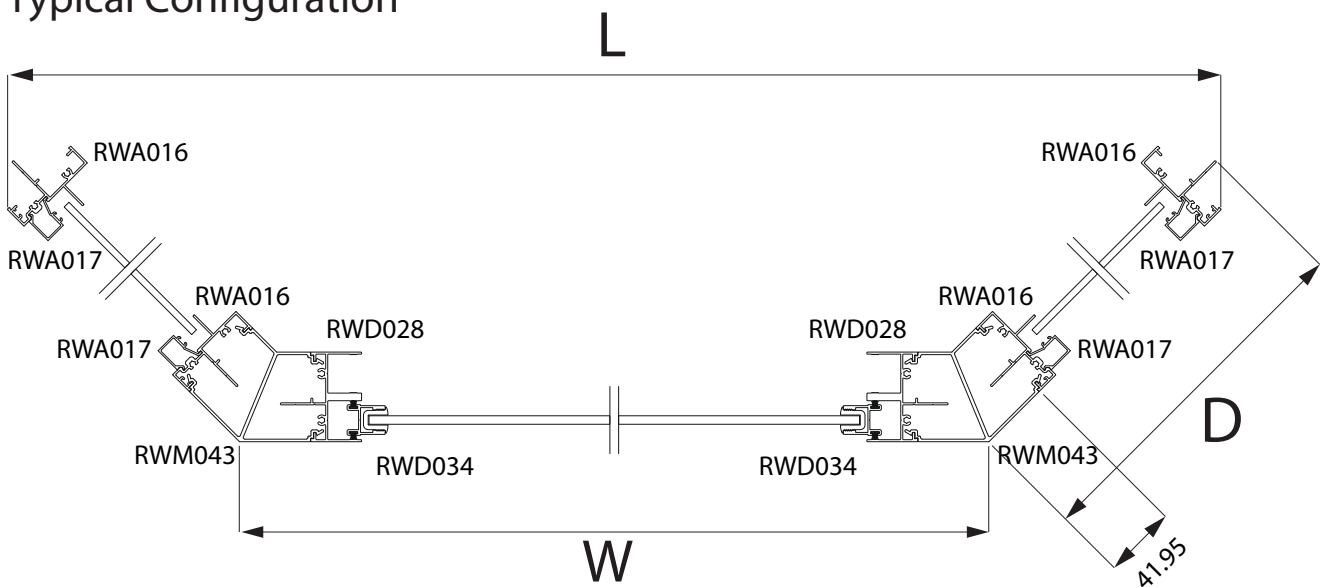
Bay Window Cutting Formula

Fabrication

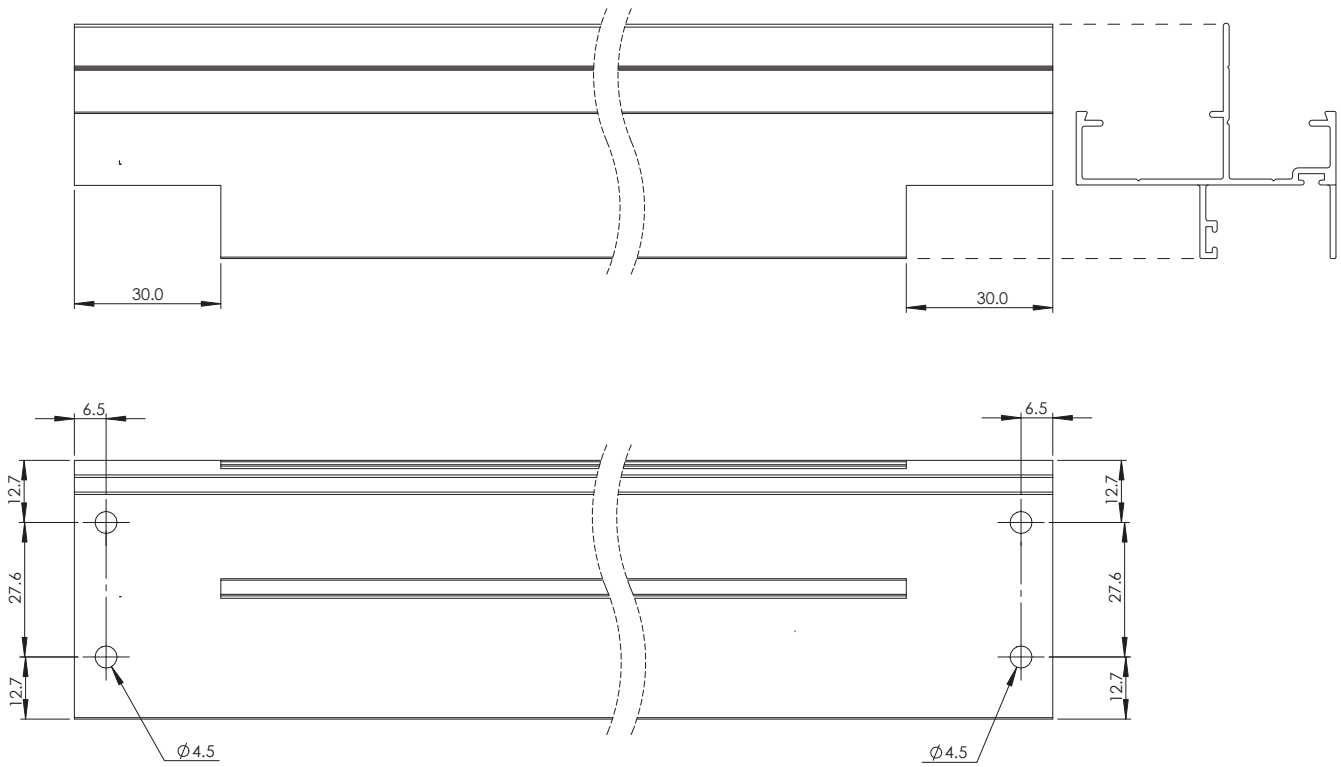
$$D = \frac{L - W}{\sqrt{2}} \quad W = L - \sqrt{2} \times D$$



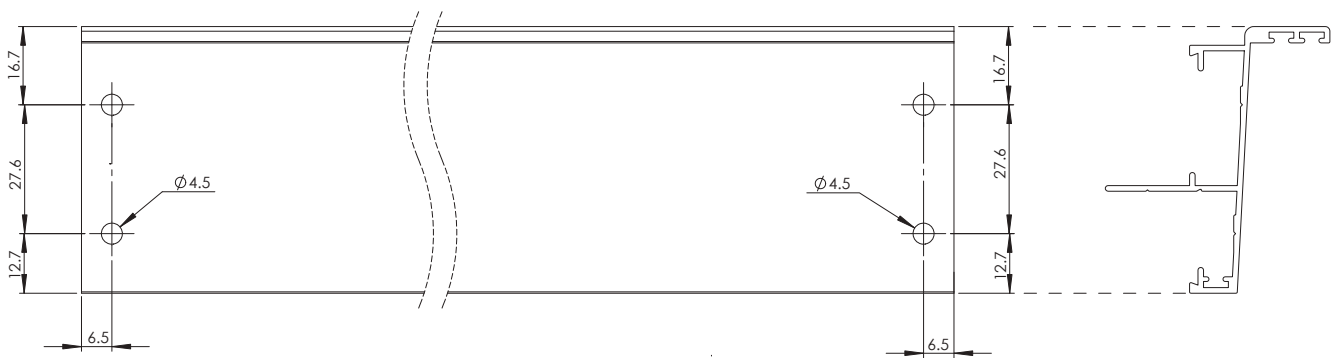
Typical Configuration



RWD029 Head



RWD030 Sill

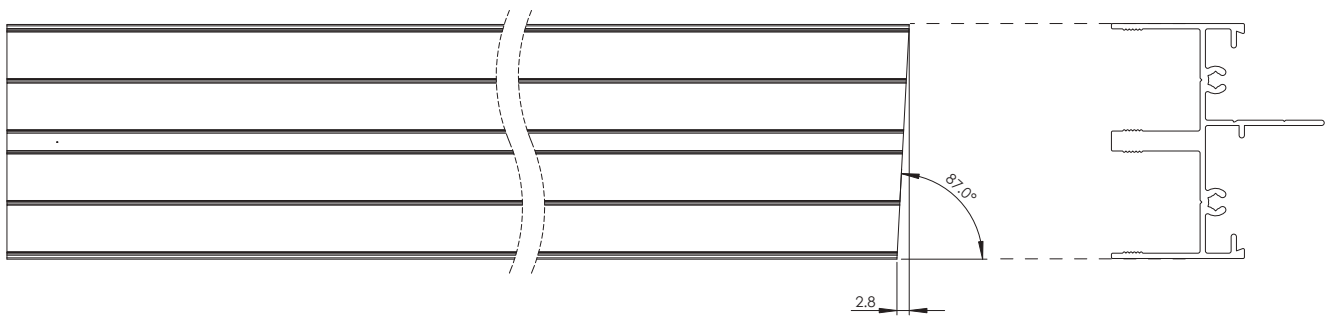


Fabrication

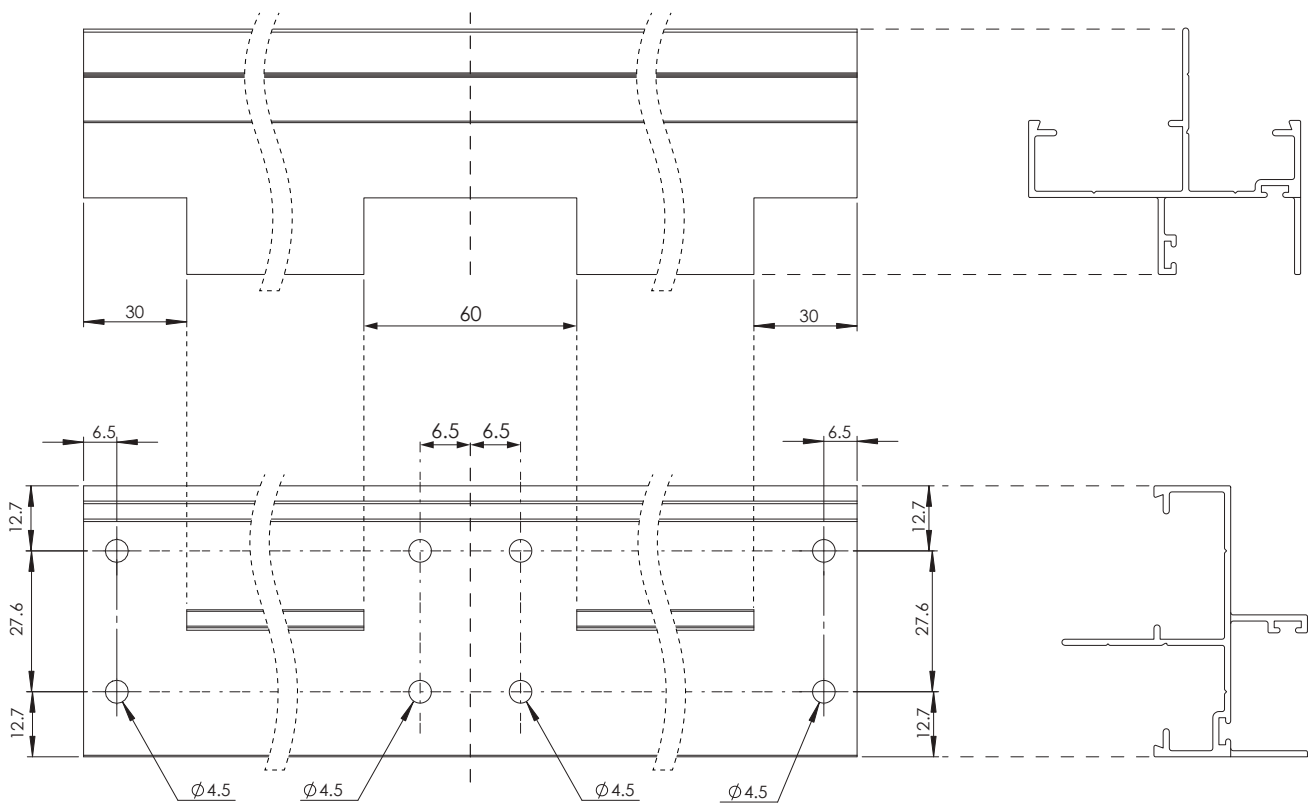
RWD028 Left Jamb



RWD028 Right Jamb

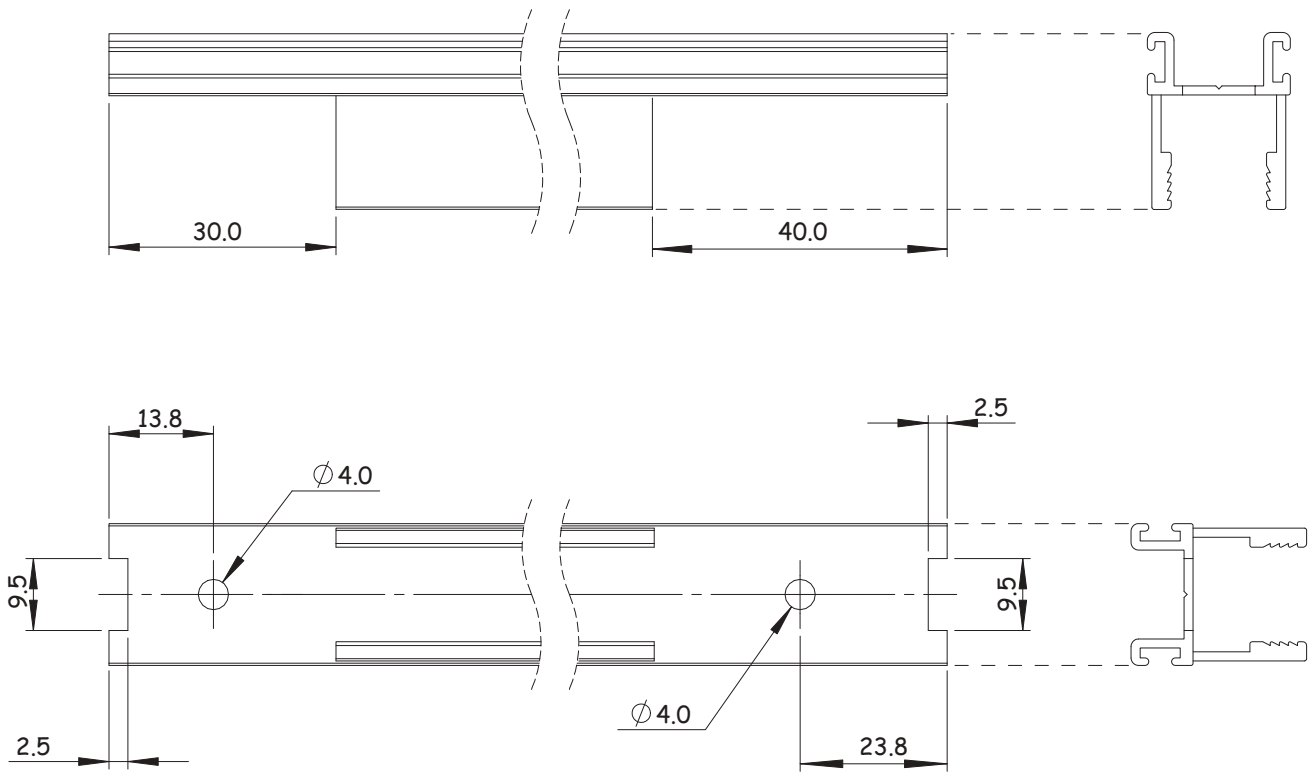


RWD029 Continuous Head
DH/DH with RWM040 Joiner

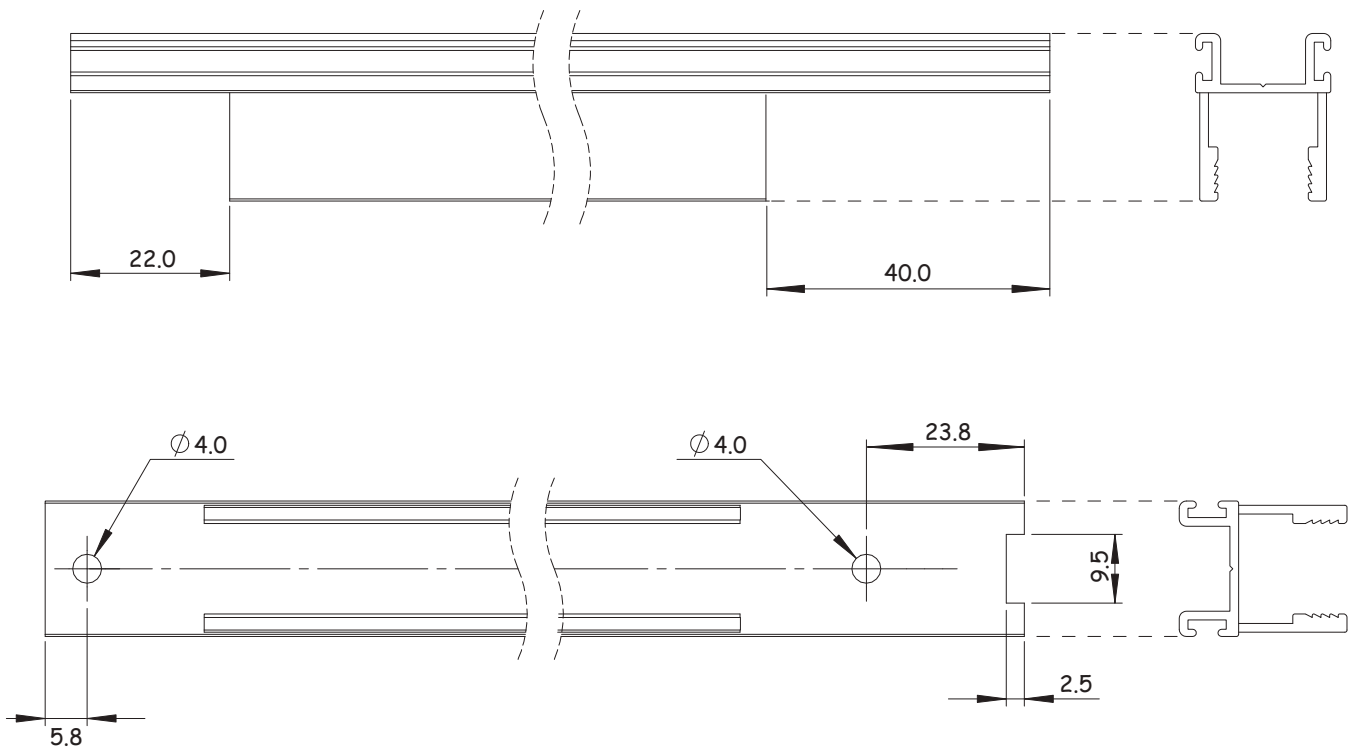


Fabrication

RWD034 Top Sash

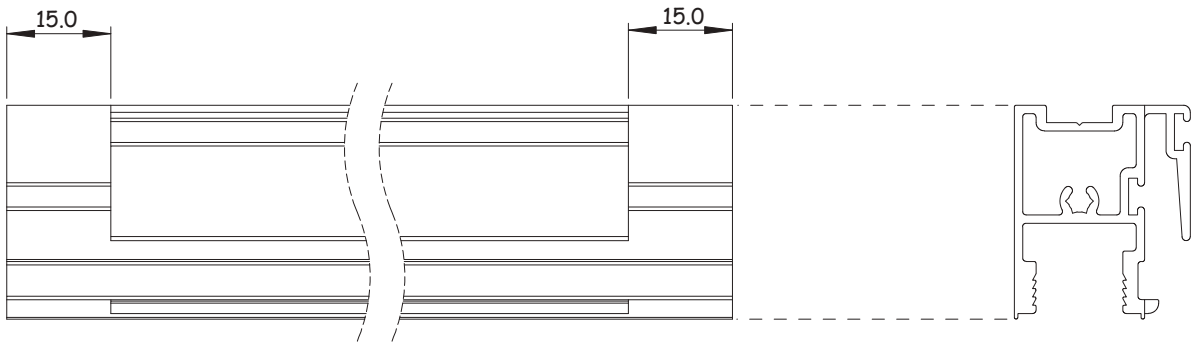


RWD034 Bottom Sash

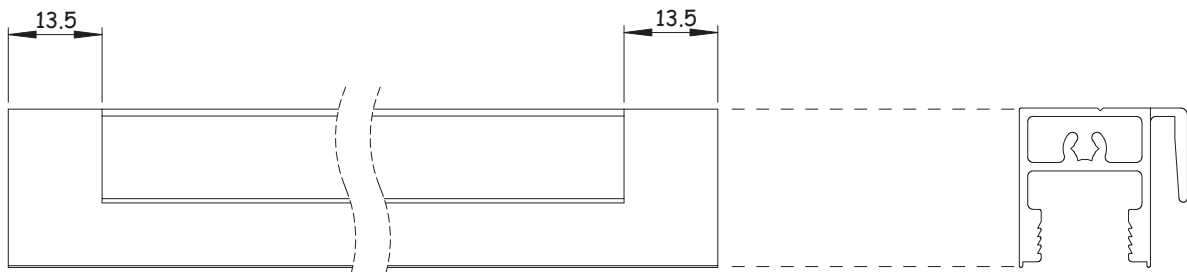


Fabrication

RWD032 Interlock



RWD033 Interlock

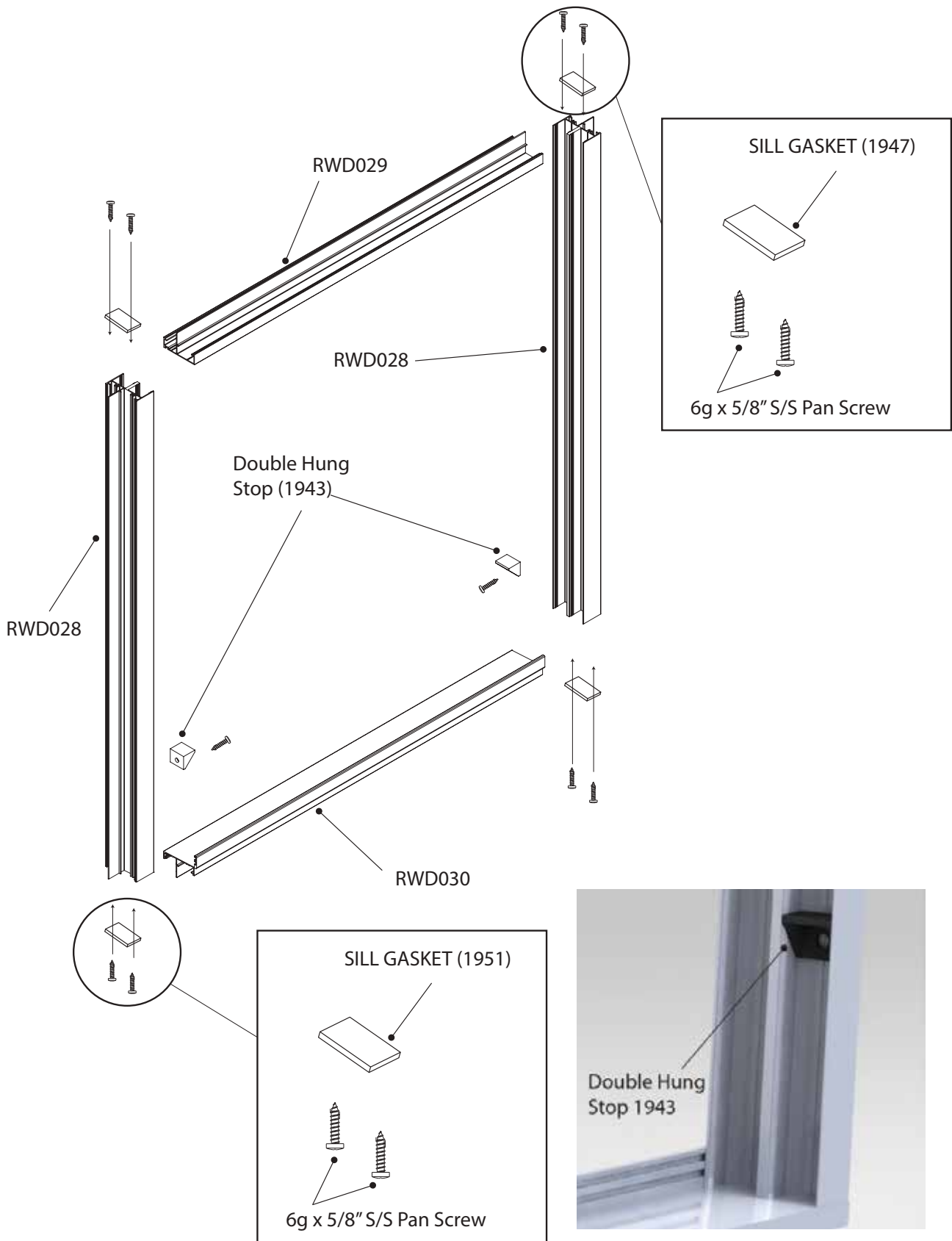


Fabrication

Assembly

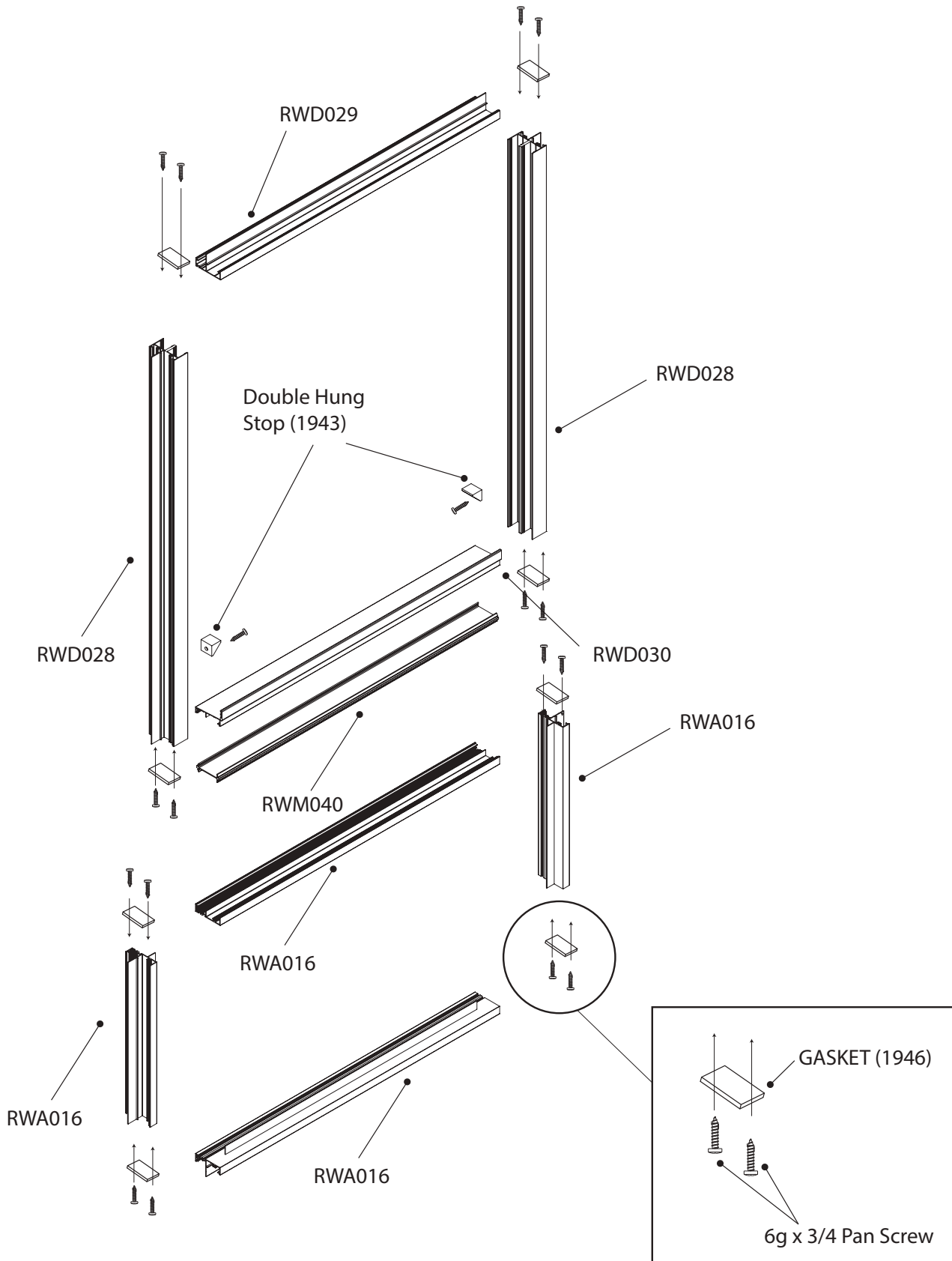
Mainframe Assembly

Fabrication

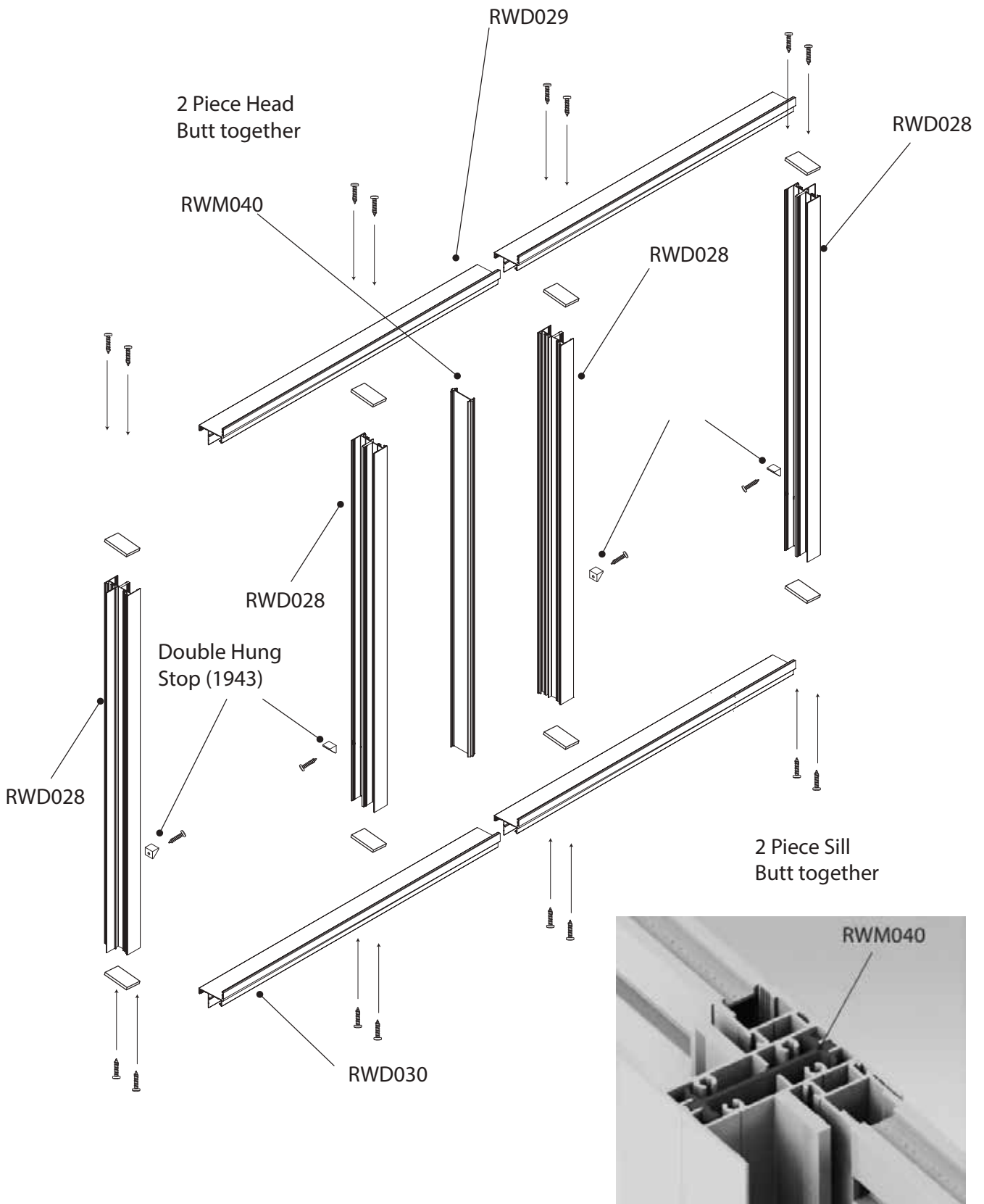


Mainframe & Lowlight Assembly

Fabrication



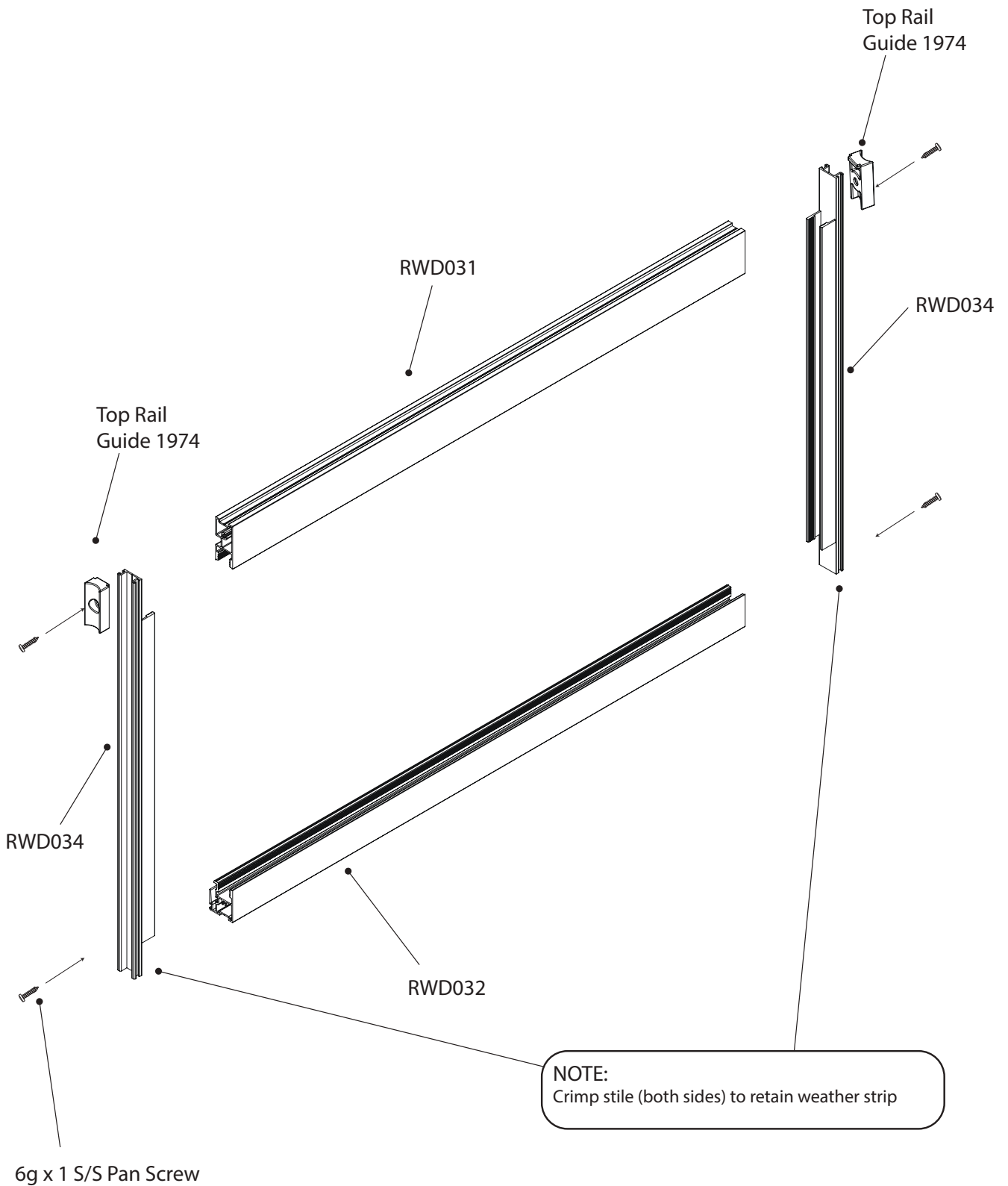
DD Configuration Mainframe Assembly



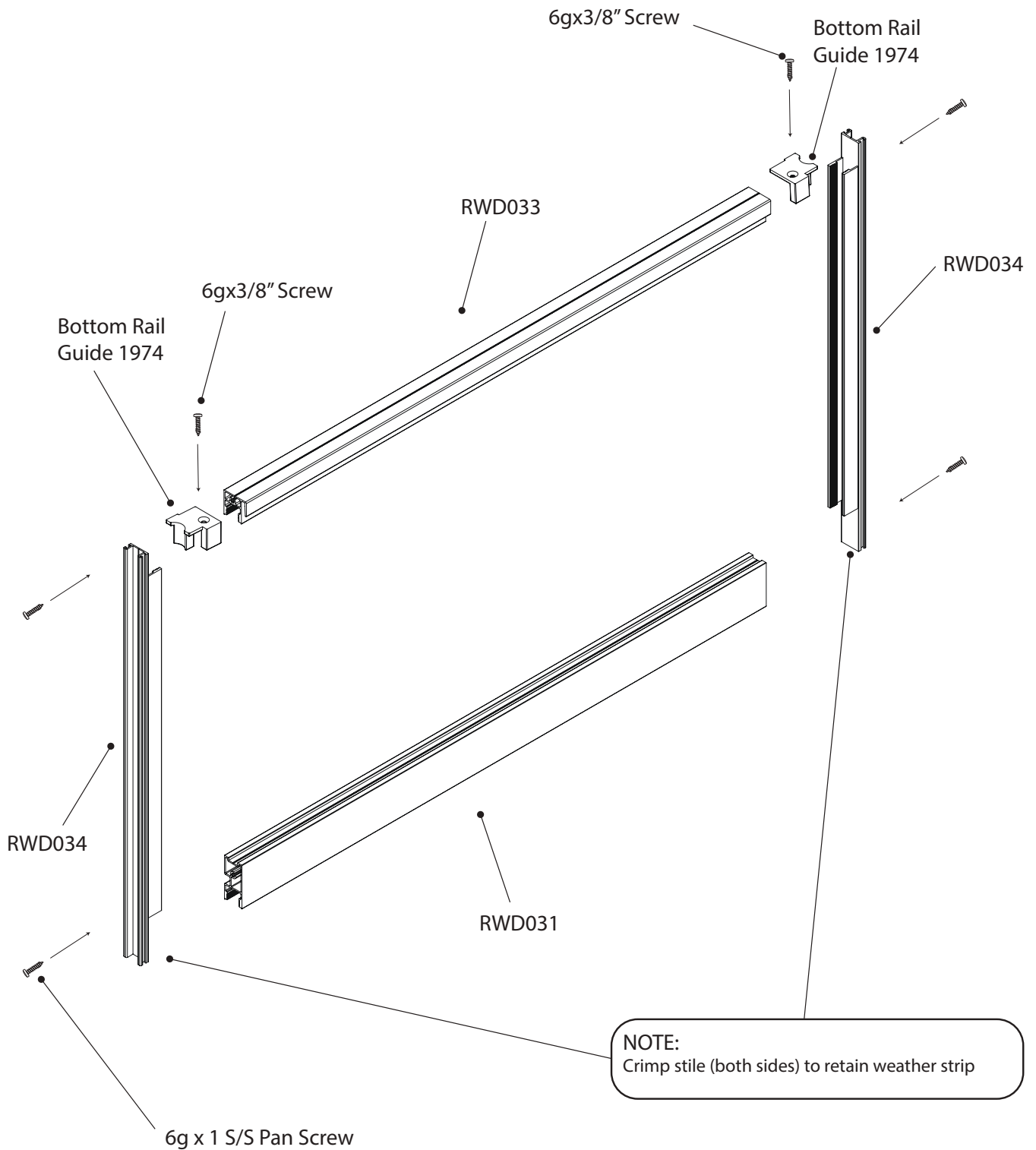
Fabrication

Top Sash Assembly

Fabrication



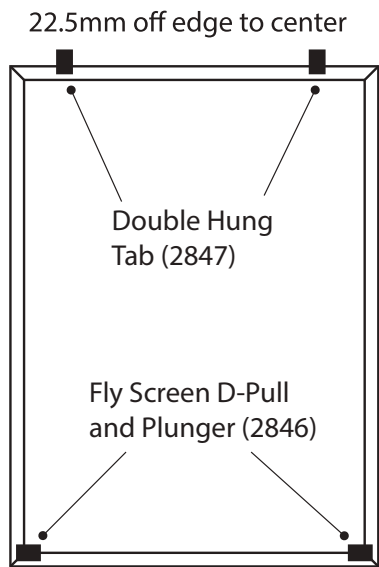
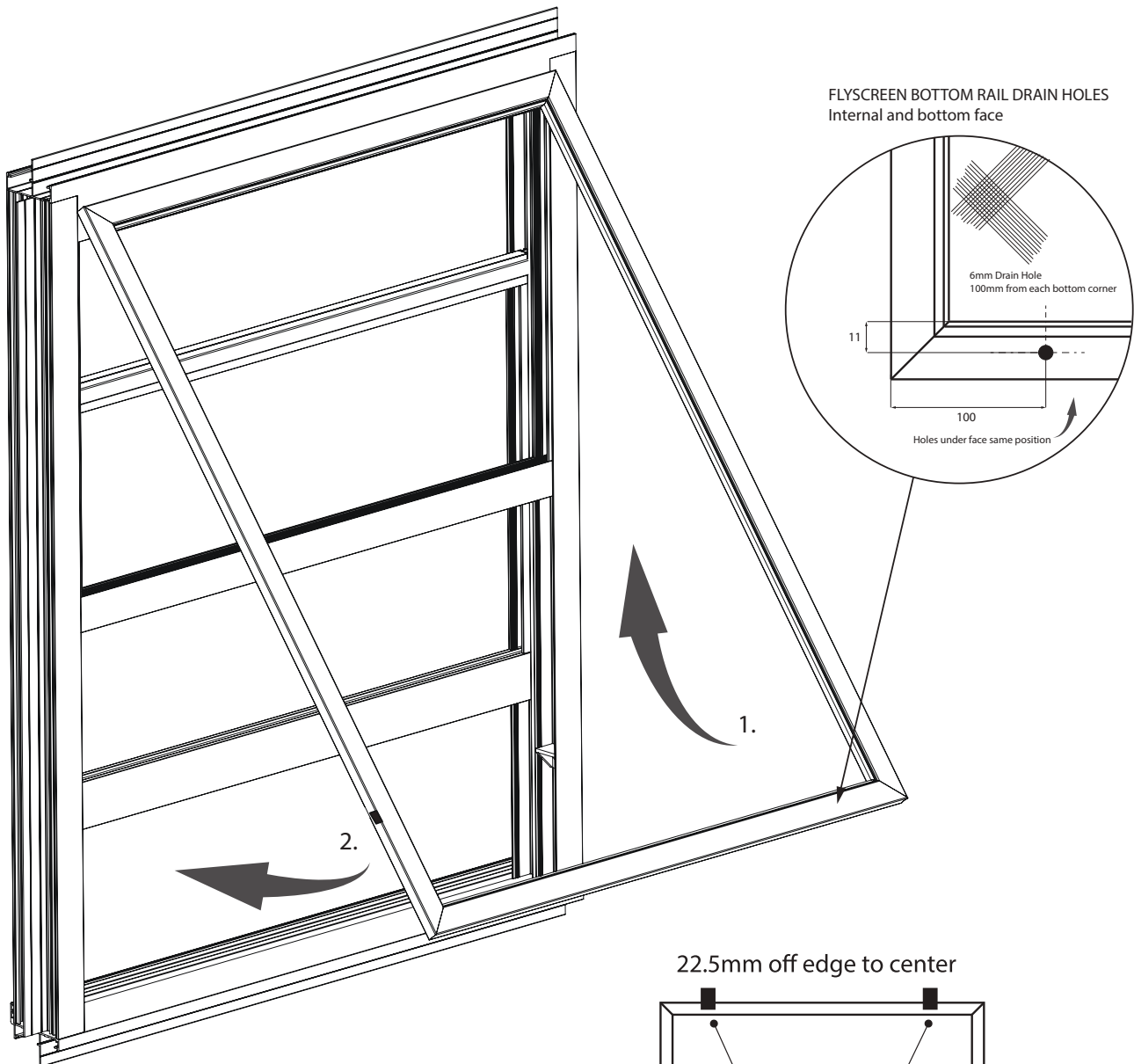
Bottom Sash Assembly



Fabrication

Fly Screen Assembly

Fabrication



11mm from side edge,
31mm up to center of tab

Spring and Friction Foot Assembly

Friction Foot 1929 Assembly



1. Screw springs into jamb
(see page 32 for spring placement)



2. Replace spring plastic wrings with long cord
or string for easier access



3. Install sash(es) into frame



4. Fit friction foot onto end of spring after
removing cord and slide
up into the side of the sash



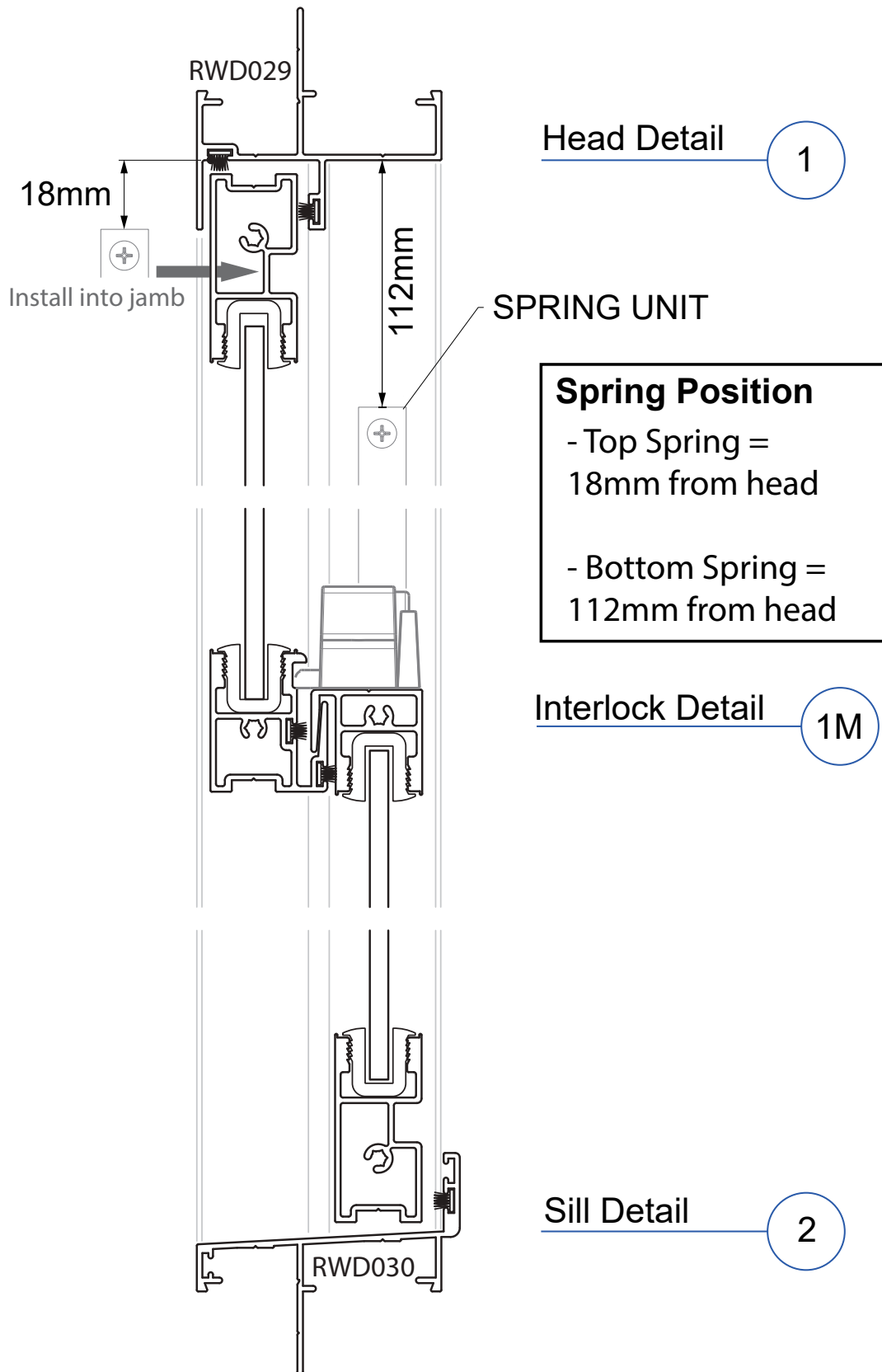
5. Screw/pop-rivet friction feet
onto bottom of sash



6. Push in stile insert


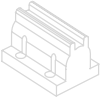


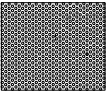
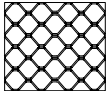


Spring Installation

Fabrication





KIDS DONT FLY RESIDENTIAL PRODUCTS

WINDOW SAFETY PRODUCT TYPE	SLIDING WINDOW	AWNING/ CASEMENT	DOUBLE HUNG	LOUVRE
 Universal Window Stop 1963	✓		✓ 2 - one in each side of frame	
 Universal Window Stop Packer 1964				
 Anti Lift Block 1965	✓			
 Restricted Stays				
 Selected Mesh/DVA*	✓	✓	✓	✓
 Grille*	✓	✓	✓	✓
 Double Hung Stop 1943			✓ For Top Sash Restriction	
 Restricted Chainwinder		✓ Complies if window width is less than 400mm		

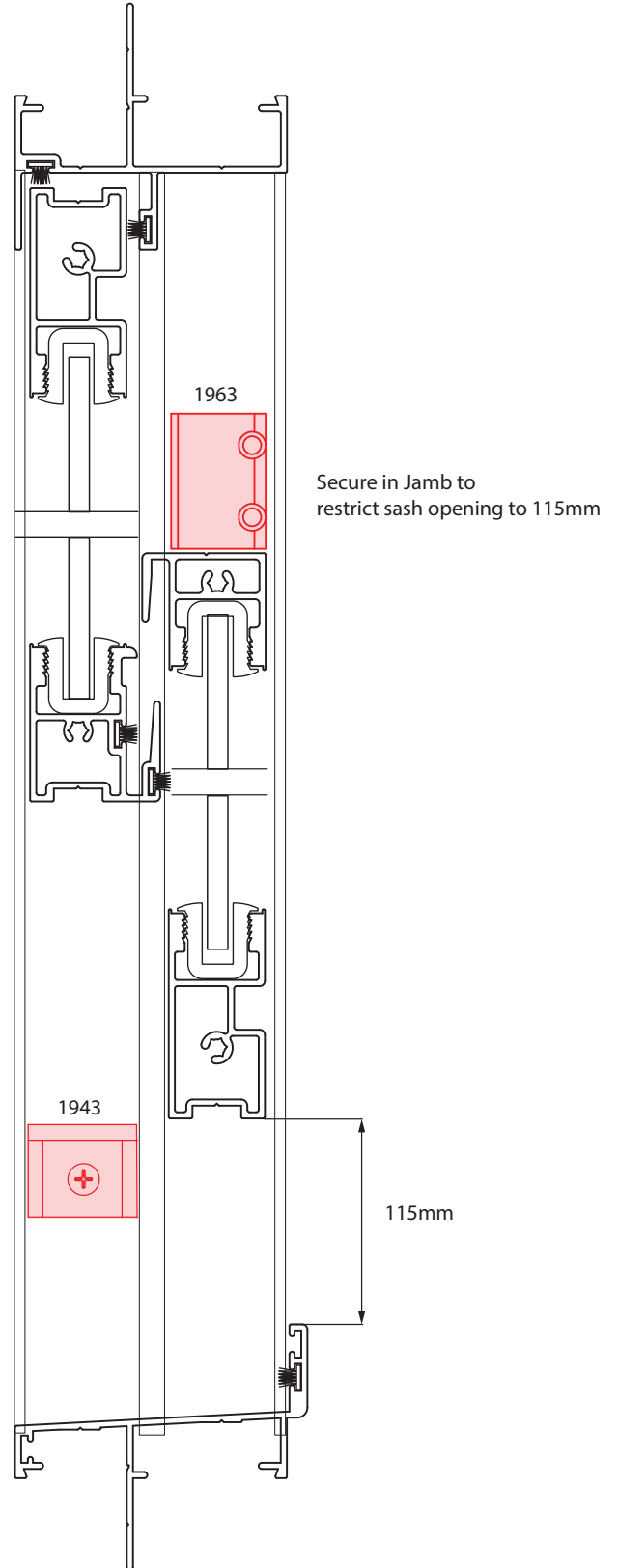
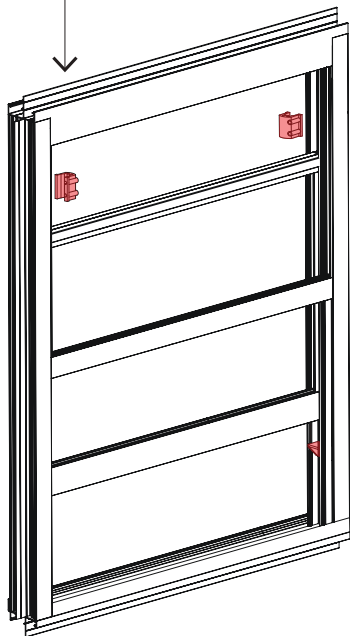
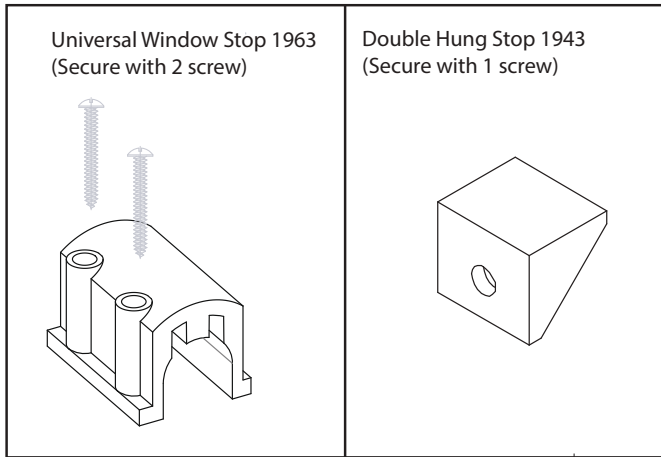
Fabrication

*Selected Mesh/DVA and Grilles must be mechanically fixed to frame

Fall Prevention Assembly Details

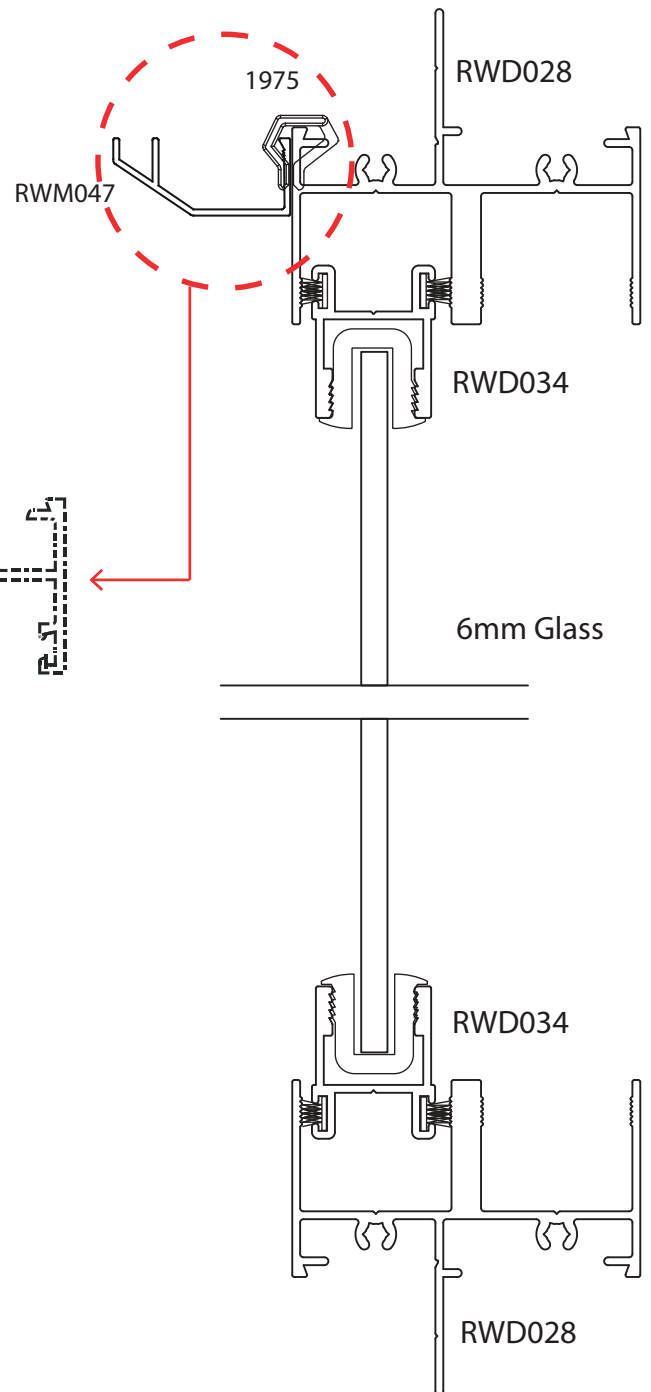
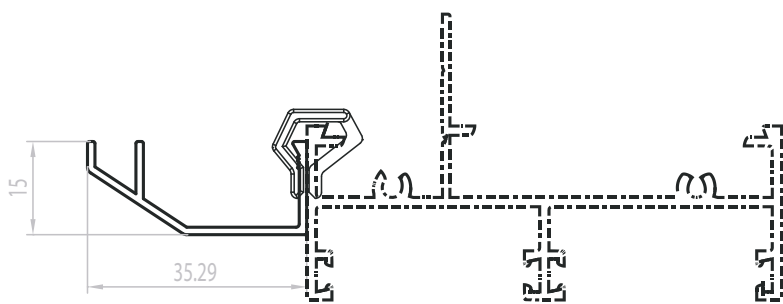
****NOTE :** If Top Sash opening locates within fall prevention height zone on wall, please also restrict Top Sash to 115mm using the same block and fixings as the Bottom Sash, or adjust height of stop block 1943**

Fabrication

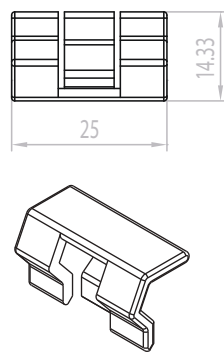


Storm Mould Assembly

Cut RWM047 to length and clip onto frame using an adjustable 1975 Storm mould clip every 300mm.



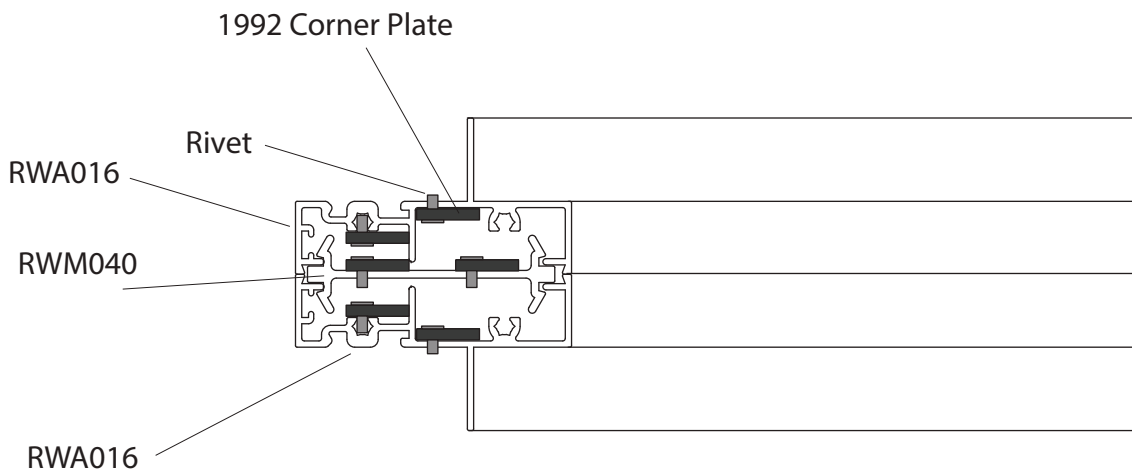
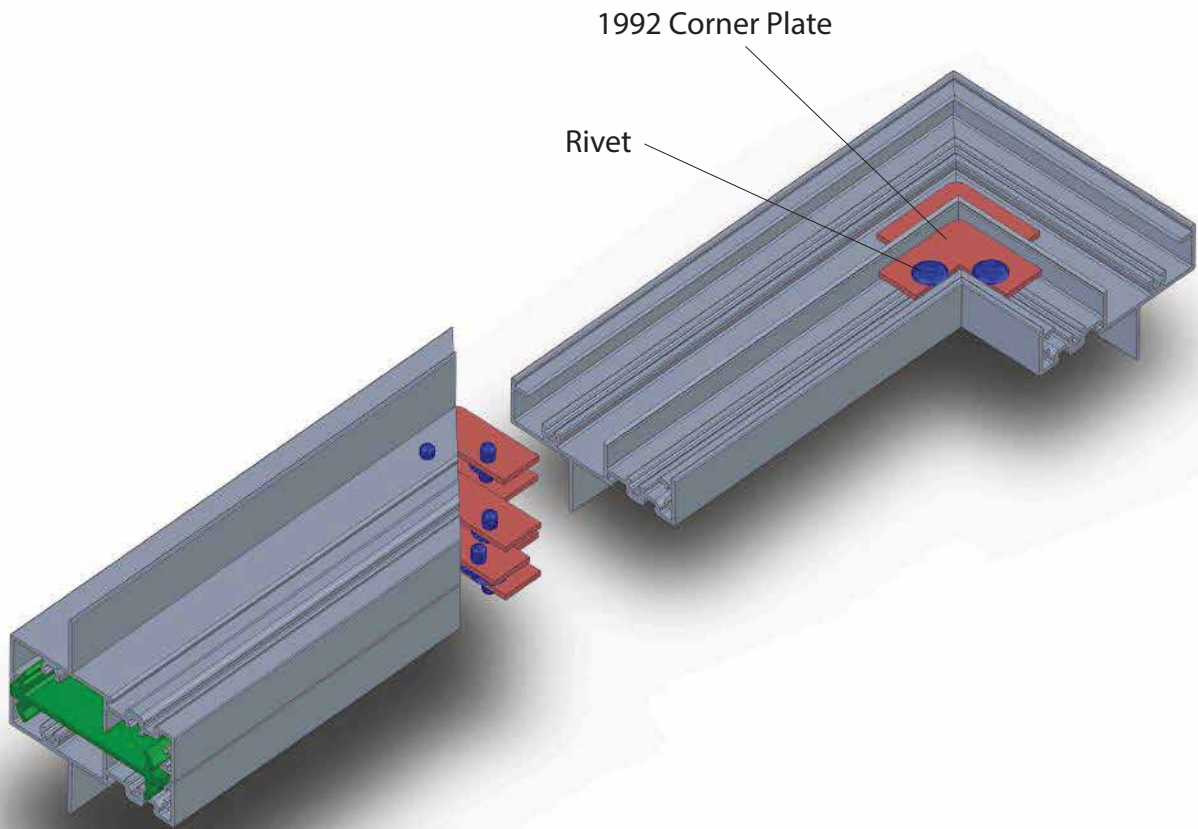
1975 Storm mould clip



Fabrication

Corner Plate Assembly

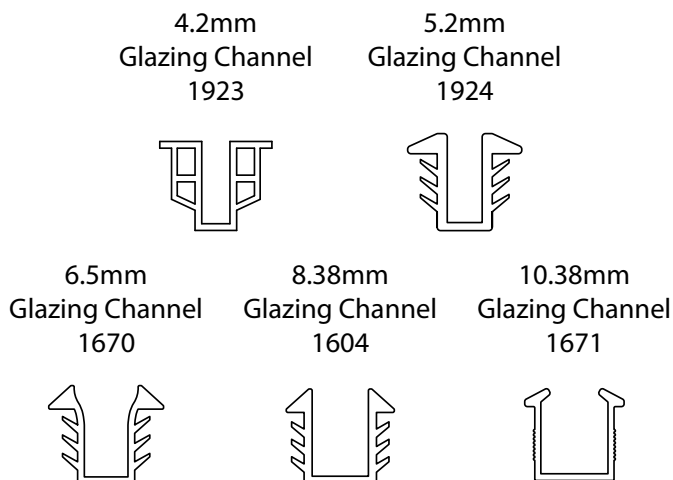
Fabrication



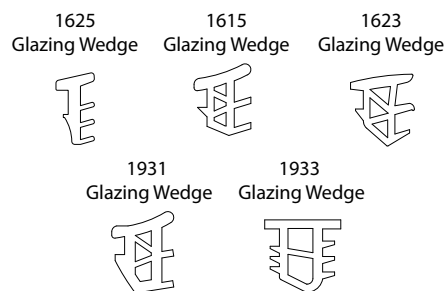
Glazing

Glass & Rubber Combinations

KlassicView 53mm Double Hung		
Glass Thickness	Channel Rubber Required	Pocket Size
4mm	1923	mm 12.5
5mm	1924	
6mm	1670	
8mm	1604	
10mm	1671	



KlassicView 53mm Fixed Framing			
Glass Thickness	Rubber / Tape Required	Bead Required	Pocket Size
4mm	1931 – 1884	RWA017	14 mm
5mm	1923 – 1884		
6mm	1933 – 1884		
8mm	1615 – 1884		
10mm	1625 – 1884		



Glazing

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_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 Ratings

Window ID	Glazing	Uw	SHGC
DAR-041-01	10.38TLam	6	0.55
DAR-041-02	10.38Sn	4.7	0.48
DAR-041-03	4Gy	6.2	0.57
DAR-041-04	10.38VLamSpGn	6	0.44
DAR-041-05	10.38EVSpGn	4.5	0.31
DAR-041-06	10.38EVGy	4.4	0.34
DAR-041-07	10.38CPGy	4.3	0.4
DAR-041-08	10.38CPClr	4.3	0.55
DAR-041-09	10.38GyLam	6	0.5
DAR-041-10	10.38ClrLam	6	0.63
DAR-041-11	10Sn	4.7	0.49
DAR-041-12	6.38CPGy	4.4	0.43
DAR-041-13	6.38CPNtl	4.4	0.44
DAR-041-14	6.38CPGn	4.4	0.43
DAR-041-15	6.38CPClr	4.4	0.58
DAR-041-16	6.38Sn	4.8	0.49
DAR-041-17	6.38TLam	6.1	0.35
DAR-041-18	6.38SnGy	4.7	0.38
DAR-041-19	6.38VLamGy	6.1	0.52
DAR-041-20	6.38VLamClr	6.1	0.67
DAR-041-21	6ET	4.4	0.59
DAR-041-22	6Sn	4.8	0.51
DAR-041-23	6TS21Az	5.4	0.25
DAR-041-24	6EVSpB	4.5	0.32
DAR-041-25	6EVSpGn	4.6	0.32
DAR-041-26	6EVBG	4.5	0.39
DAR-041-27	6EVGy	4.6	0.36
DAR-041-28	6EVClr	4.5	0.53
DAR-041-29	5Clr	6.2	0.7
DAR-041-30	5Gy	6.2	0.52
DAR-041-31	5SpGn	6.2	0.47
DAR-041-32	4Sn	4.8	0.52
DAR-041-33	4Clr	6.2	0.72
DAR-041-34	SOLOS 10.38KSLamGy	4.28	0.4
DAR-041-35	SOLOS 10.38KSLamClr	4.25	0.55
DAR-041-36	SOLOS 6.38KSLamGy	4.37	0.43
DAR-041-37	SOLOS 6.38KSLamNtl	4.39	0.44
DAR-041-38	SOLOS 6.38KSLamGn	4.36	0.43
DAR-041-39	SOLOS 6.38KSLamClr	4.36	0.58
DAR-041-40	SOLOS 6KSClr	4.38	0.59

KEY

Gy = Grey, Ntl = Neutral, Gn = Green, Clr = Clear, B = Blue, Bz = Bronze, Lam = Laminate, ComPls = Comfort Plus, SolT - SolTech, Sp = Super, ET = Energy Tech, EVan = Everage, AZT = Solar Cool Azuria, Sngy = Sunergy.

NOTES

- U is the whole window U-Value
- SHGC is the whole window solar heat gain coefficient
- Tvw is the whole window visible light transmittance
- Percentage improvement figures are compared with using base-case Generic Window 1 (3mm clear in standard aluminium frame)
- A negative percentage improvement figure indicates performance worse than the base-case window
- A positive percentage improvement figure indicates performance better than the base-case window
- Maximum air infiltration is 5.0 L/s.m² at a positive pressure difference of 75Pa as measured according to AS 2047
- Static performance (U, SHFC, Twv, Tdw) Calculated using Window 5.2 and Therm 5.2 software (LBNL), 2000-2003
- Annual energy performance (stars and % improvements) calculated using Nationwide House Energy Rating Software (AccuRate)
- Results disclosed at National fenestration Rating Council (NFRC) regulations

Test Results

Structural Test Report

LABORATORY TEST RESULTS: KlassicView 53mm Double Hung Window

The following data was obtained from the results of the tests on the KlassicView 53mm Double Hung Window as performed in the Azuma Testing Laboratory (NATA Accredited).

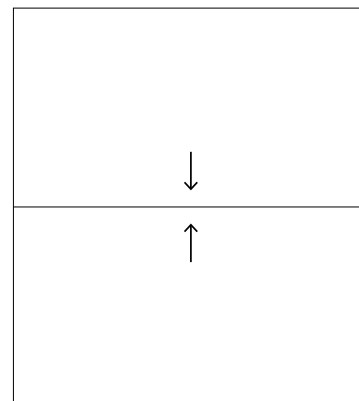
Test Report No. : AZT0224.14

Date: 23/07/2014

Test Size: 1500mm H x 900mm W

Jamb Type: RWD028

Subsill Used: No



Test: Deflection Test

Results: The test unit satisfied the requirement of AS 2047.1 in both positive and negative deflection at the nominated design pressure of 1800 Pa at 1/180 deflection ratio.

Test: Air Infiltration Test

Results: The test unit satisfied the requirements of AS 2047.1. The unit passed 75Pa and 150Pa air pressure in the sealed and unsealed states. Results were as follows:

- 0.50 L/s.m² @75Pa Positive
- 0.28 L/s.m² @75Pa Negative
- 0.26 L/s.m² @150Pa Positive
- 0.45 L/s.m² @150Pa Negative

Test: Operating Force

Results: The test unit satisfied the requirement of AS 2047.

For Sash 1:

- Opening force was initiated at 85N and sustained at 41N.
- Closing force was initiated at 60N and sustained at 27N.

For Sash 2:

- Opening force was initiated at 52N and sustained at 60N.
- Closing force was initiated at 14N and sustained at 42N.

Test: Water Penetration

Results: The test unit satisfied the requirement of AS 2047 in positive pressure at the maximum pressure of 200Pa.

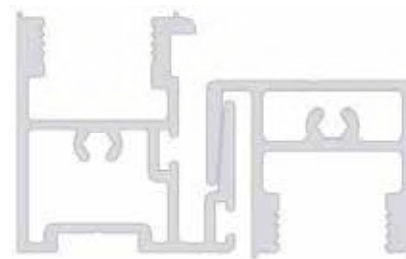
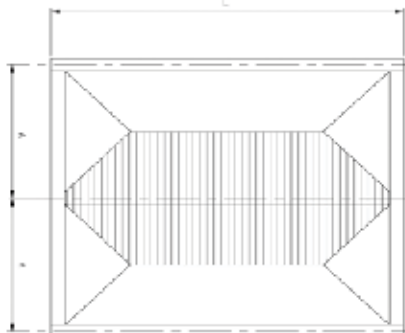
Test: Ultimate Strength Test

Results: The test unit satisfied the requirement of AS 2047 at the maximum pressure of 2700Pa Positive and Negative.

Strength Charts

Interlock Strength Chart: RWD032 + RWD033

I - moment of inertia 25.03
 y - max depth of section from N axis 13.5
 E- Modulus 69
 Ultimate stress 110
 Z - Section modulus 1.9



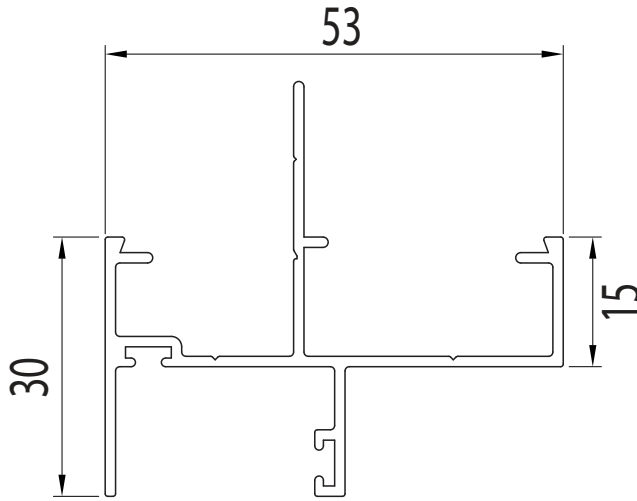
Mullion/Transom Pressure Ratings (Pa): Symmetrical Panels

Darley Aluminium	Serviceability =1/150	Serviceability =1/180	Serviceability =1/250	Ultimate = U	Panel Height (mm) (A)						Limitations: Serviceability to 5000Pa & Ultimate to 8000Pa	-
					650	700	750	800	850	900		
300	5000	5000	5000	5000	5000	5000	5000	5000	4470	3733	150	
	5000	5000	5000	5000	5000	5000	5000	5000	4470	3733	180	
	5000	5000	5000	5000	5000	5000	5000	5000	4470	3733	250	
	8000	8000	8000	8000	8000	8000	8000	8000	6705	5600	U	
400	5000	5000	5000	5000	5000	5000	5000	5000	5000	4992	150	
	5000	5000	5000	5000	5000	5000	5000	5000	5000	4992	180	
	5000	5000	5000	5000	5000	5000	5000	5000	5000	4992	250	
	8000	8000	8000	8000	8000	8000	8000	8000	8000	7489	U	
500	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	150	
	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	180	
	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	250	
	8000	8000	8000	8000	8000	8000	8000	8000	8000	8000	U	
600	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	150	
	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	180	
	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	250	
	8000	8000	8000	8000	8000	8000	8000	8000	8000	8000	U	
700	4793	4757	4794	4914	5000	5000	5000	5000	5000	5000	150	
	4793	4757	4794	4795	4795	4795	4795	4795	4795	4795	180	
	3470	3453	3453	3453	3453	3453	3453	3453	3453	3453	250	
	7189	7135	7192	7372	7704	8000	8000	8000	8000	8000	U	
800	3352	3260	3205	3187	3206	3266	3373	3373	3373	3373	150	
	2913	2856	2822	2811	2811	2811	2811	2811	2811	2811	180	
	2098	2056	2032	2024	2024	2024	2024	2024	2024	2024	250	
	5029	4890	4808	4780	4809	4900	5064	5320	5702	5702	U	
900	2305	2238	2166	2132	2112	2106	2106	2106	2106	2106	150	
	1921	1865	1805	1777	1760	1755	1755	1755	1755	1755	180	
	1383	1343	1300	1279	1267	1264	1264	1264	1264	1264	250	
	3751	3604	3495	3418	3372	3357	3373	3423	3512	3512	U	
1000	1590	1534	1489	1454	1413	1396	1385	1382	1382	1382	150	
	1325	1278	1241	1211	1178	1163	1154	1151	1151	1151	180	
	954	920	893	872	848	837	831	829	829	829	250	
	2922	2786	2677	2593	2528	2483	2456	2447	2457	2457	U	
1100	1181	1098	1061	1030	1005	976	962	952	946	946	150	
	984	915	884	858	838	813	801	793	788	788	180	
	708										250	
	2348	2227	2128	2046	1981	1929	1889	1861	1844	1844	U	
1200	879	840	783	757	736	718	704				150	
	732	700									180	
											250	
	1932	1826	1737	1663	1601	1549	1508				U	

Performance

Section Profiles

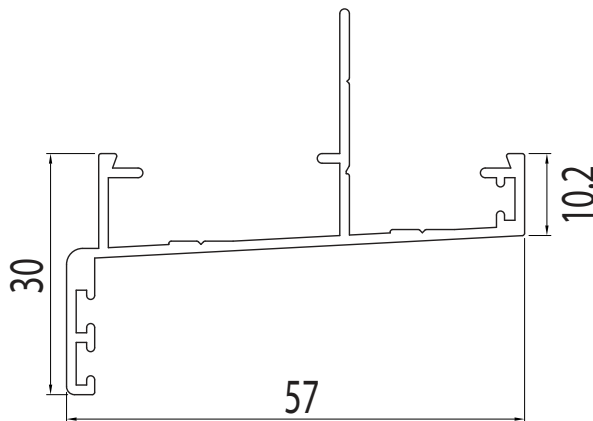
Mainframe Profiles



RWD029
Double Hung Head

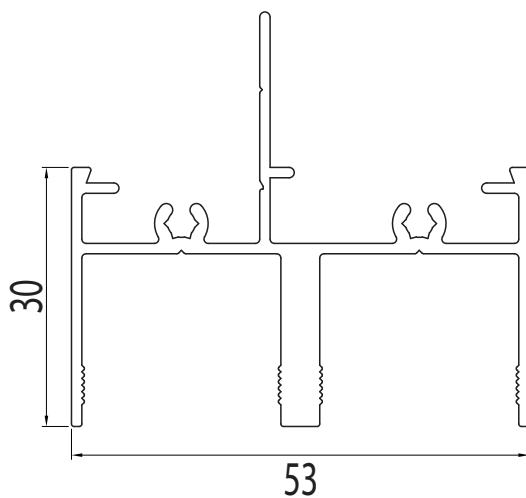
$I_{xx} = 20.002 \times 10^3 \text{ mm}^4$
 $I_{yy} = 57.547 \times 10^3 \text{ mm}^4$

A.P. = 328 mm
P.P. = 163 mm



RWD030
Double Hung Sill

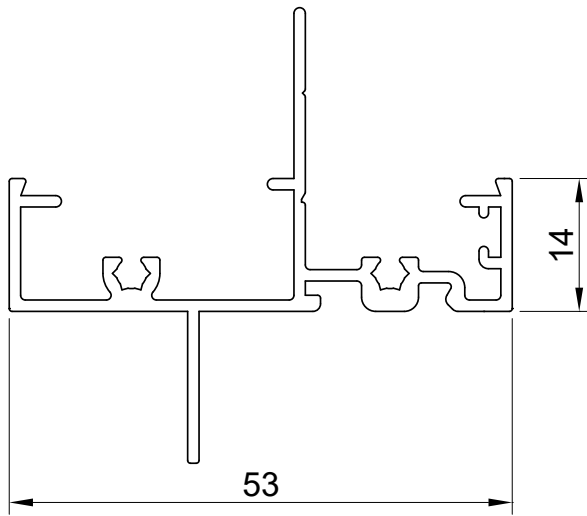
A.P. = 291 mm
P.P. = 137 mm



RWD028
Double Hung Jamb

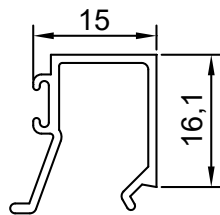
A.P. = 377 mm
P.P. = 201 mm

Mainframe Profiles



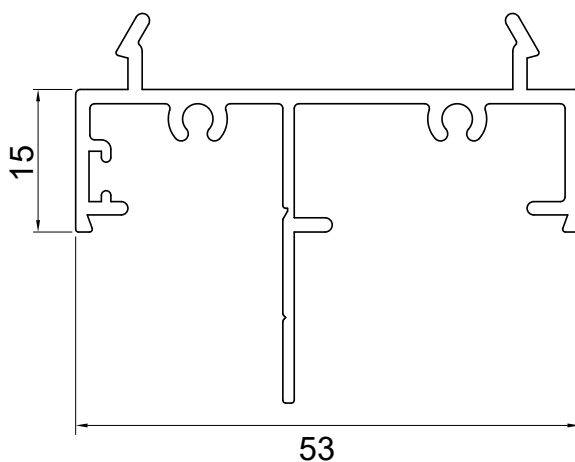
RWA016
Fixed Light Sill

A.P. = 323 mm
P.P. = 124 mm



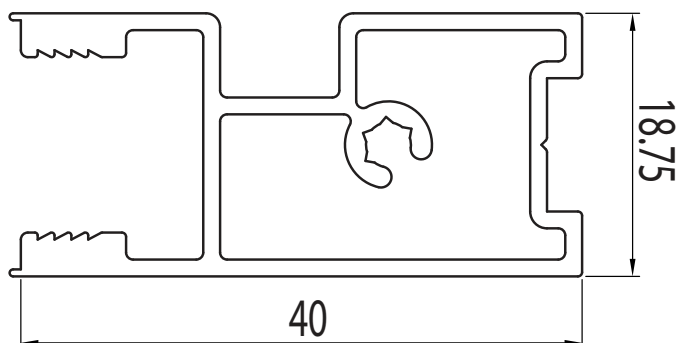
RWA017
Fixed Light Glazing Bead

A.P. = 118 mm
P.P. = - mm



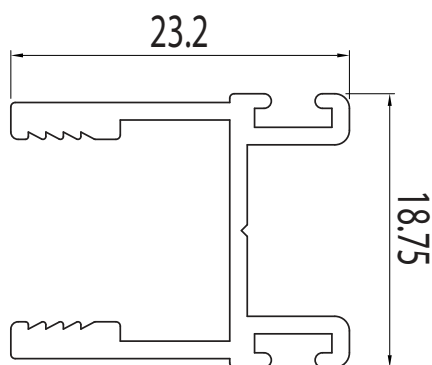
RWM044
Frame Extender

A.P. = 317 mm
P.P. = 100 mm



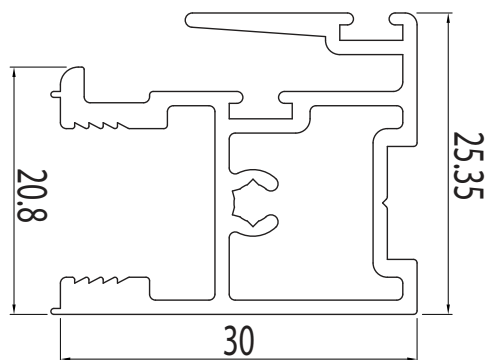
RWD031
Sash Rail

A.P. = 172 mm
P.P. = 172 mm



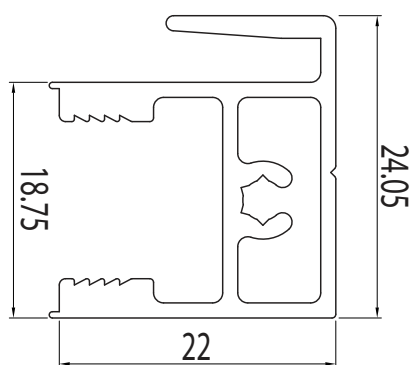
RWD034
Side Stile

A.P. = 152 mm
P.P. = 152 mm



RWD032
Interlock

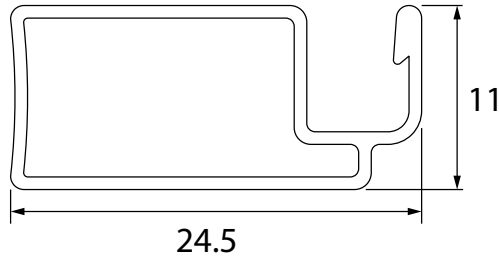
A.P. = 210 mm
P.P. = 210 mm



RWD033
Lock Interlock

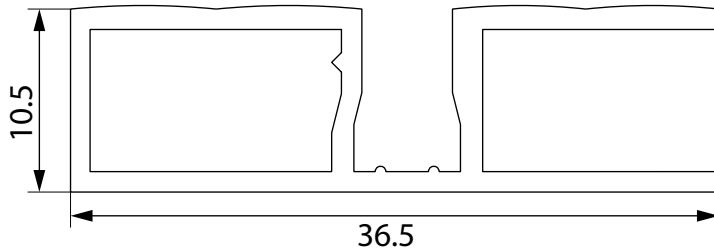
A.P. = 154 mm
P.P. = 154 mm

Flyscreen Profiles



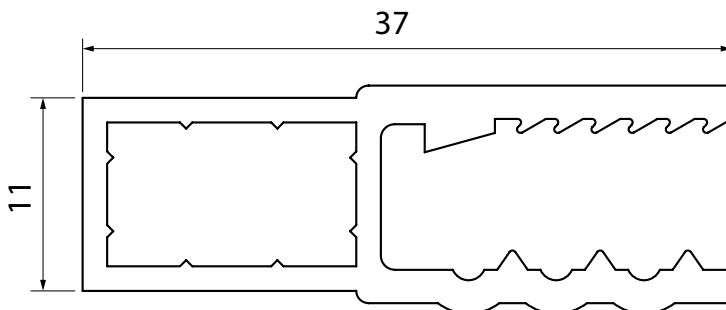
HFF180
11mm Flyscreen

A.P. = 85 mm
P.P. = 100 mm



WF001
Standard Security
Flyscreen

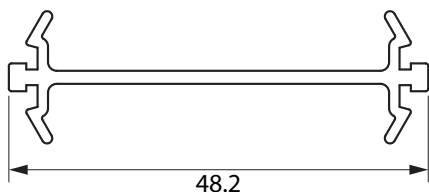
A.P. = 140 mm
P.P. = 100 mm



AU01002
Screnguard Security
Screen

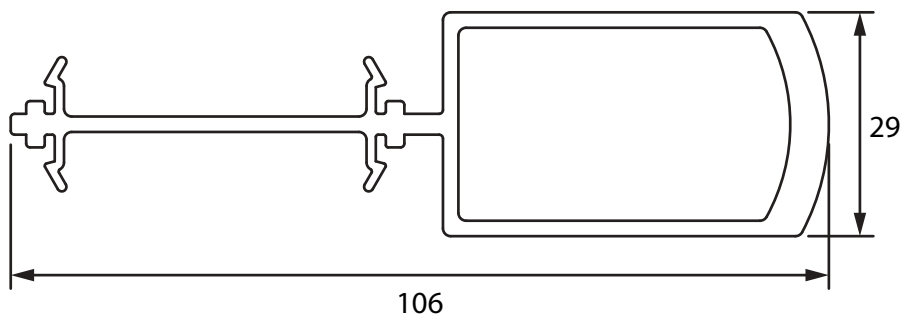
A.P. = 152 mm
P.P. = 100 mm

Additional Profiles



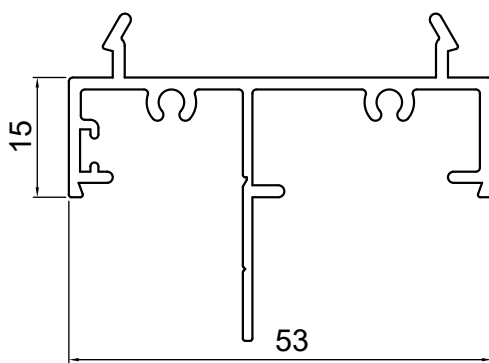
RWM040
Frame Joiner

A.P. = 163 mm
P.P. = - mm



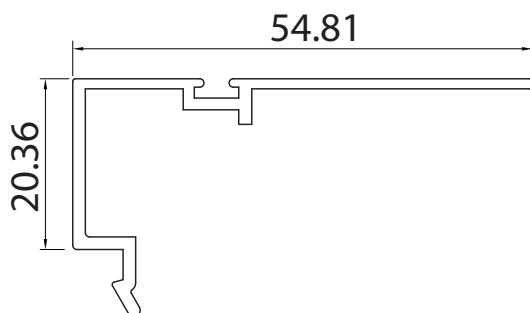
RWM041
Heavy Duty Frame Joiner

A.P. = 337 mm
P.P. = 165 mm



RWM044
Frame Extender

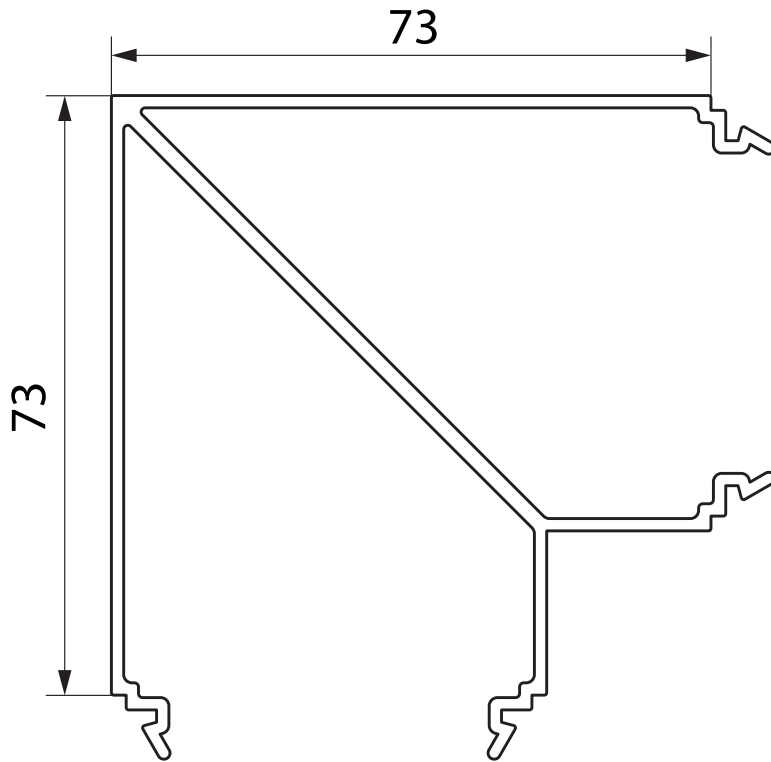
A.P. = 317 mm
P.P. = - mm



KW063
Inline Reveal Adaptor

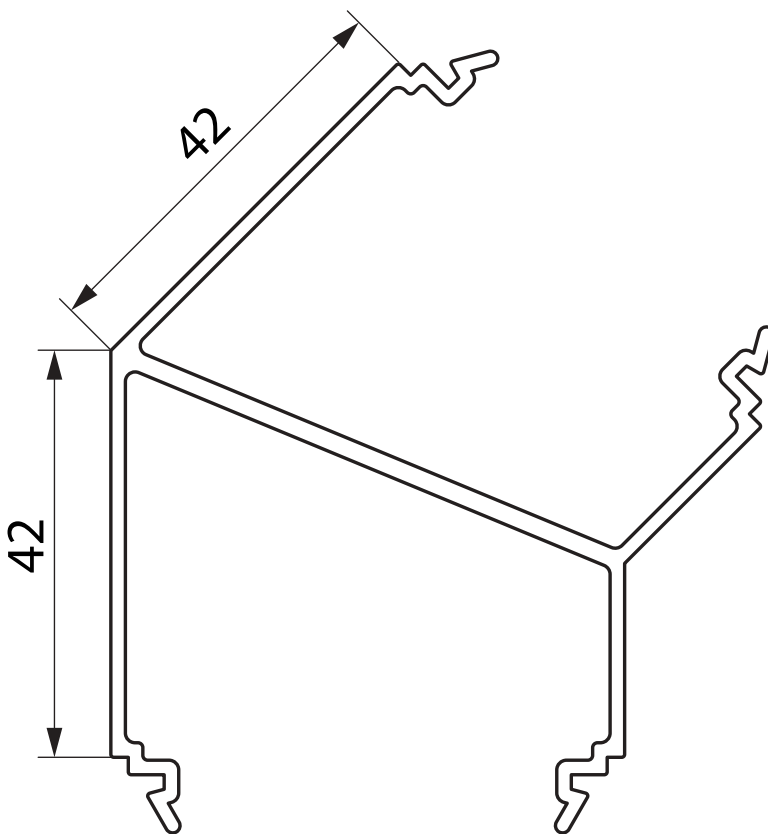
A.P. = 196 mm
P.P. = 100 mm

Additional Profiles



RWM042
90 Degree Corner Post

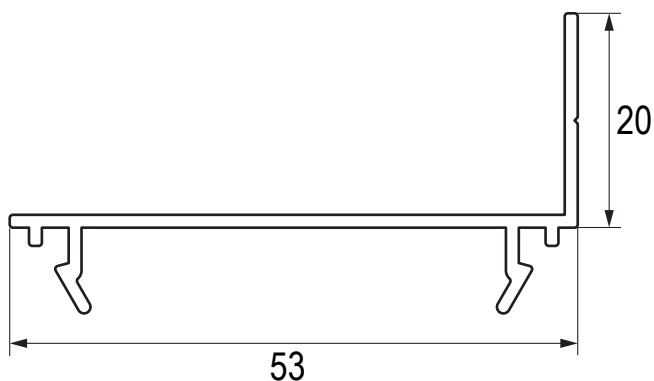
A.P. = 619 mm
P.P. = 200 mm



RWM043
45 Degree Corner Post

A.P. = 464 mm
P.P. = 138 mm

Additional Profiles

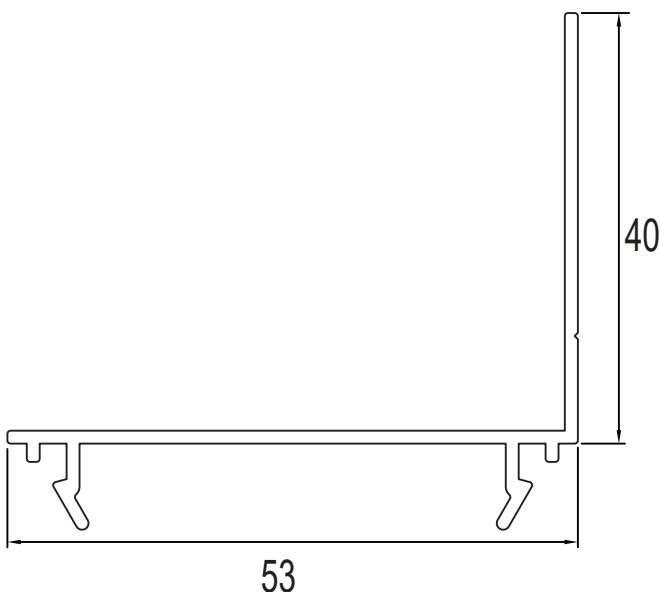


RWM045
Face Fix Adaptor

$$I_{xx} = 3.421 \times 10^3 \text{ mm}^4$$

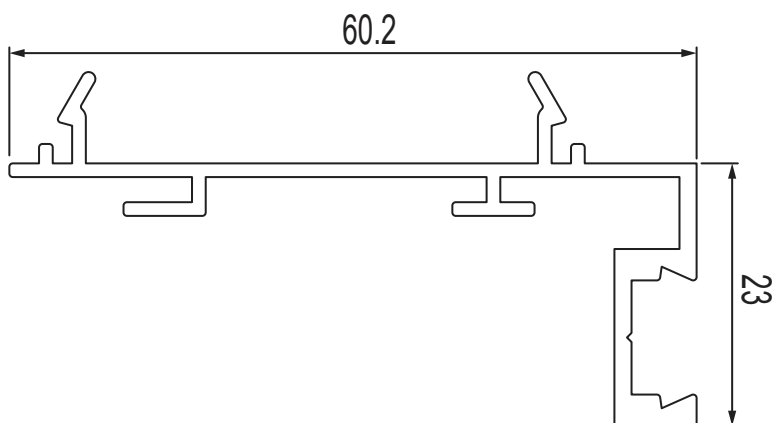
$$I_{yy} = 38.811 \times 10^3 \text{ mm}^4$$

A.P. = 187 mm
P.P. = 100 mm



RWM051
40mm Face Fix Adaptor

A.P. = 227 mm
P.P. = 132 mm



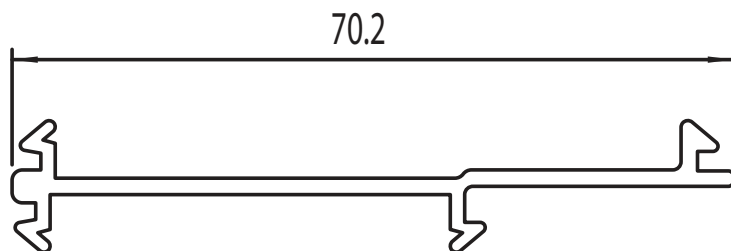
RWM052
Concealed Faced Fix
Adaptor

$$I_{xx} = 10.571 \times 10^3 \text{ mm}^4$$

$$I_{yy} = 68.511 \times 10^3 \text{ mm}^4$$

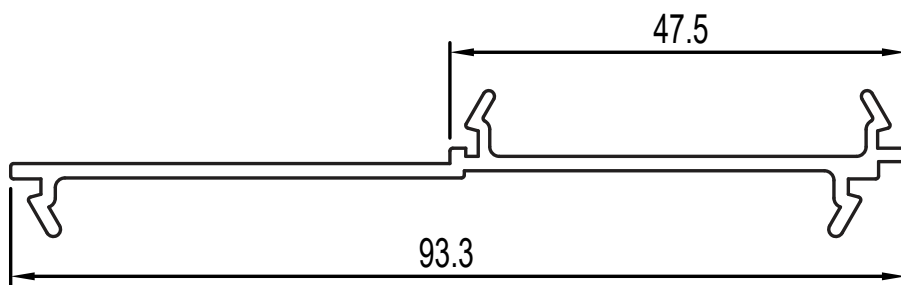
A.P. = 269 mm
P.P. = - mm

Additional Profiles



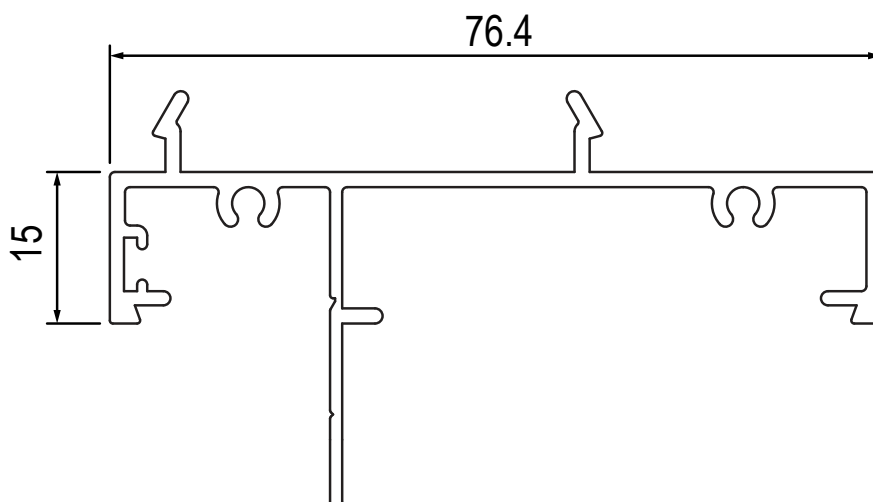
RWM049
53mm to 76mm Adaptor

A.P. = 198 mm
P.P. = - mm



RWM050
53mm to 101.6mm
Adaptor

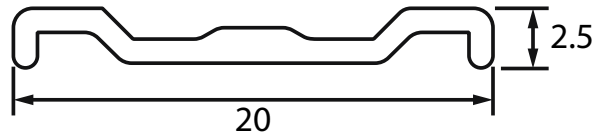
A.P. = 249 mm
P.P. = - mm



RWM056
53mm to 76mm
Frame Extender

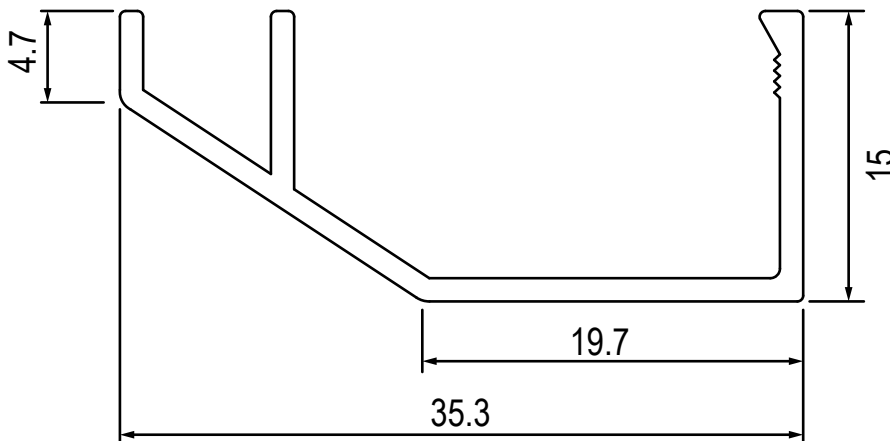
A.P. = 366 mm
P.P. = - mm

Additional Profiles



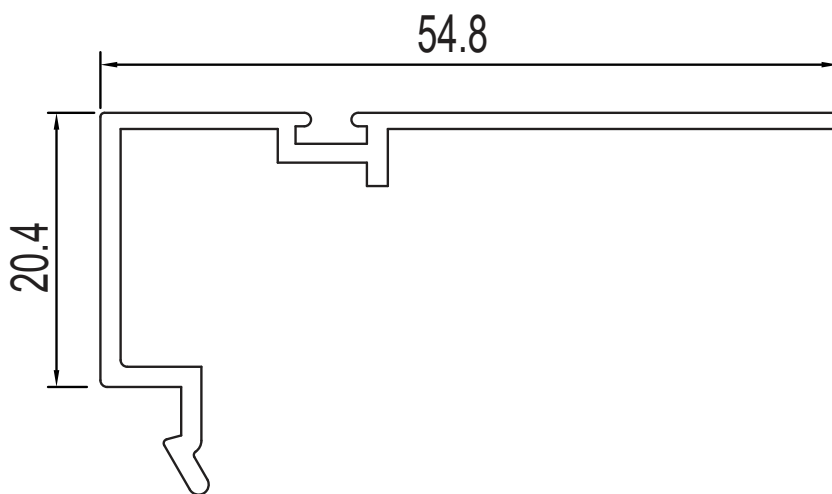
RWM046
Colonial Bar

A.P. = 49 mm
P.P. = - mm



RWM047
Storm Mould

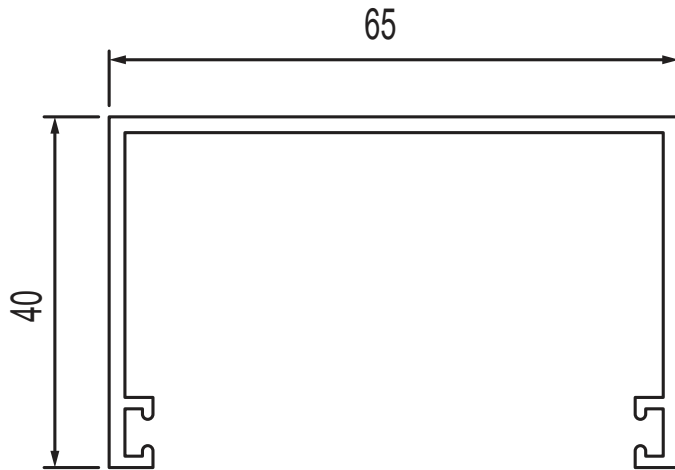
A.P. = 133 mm
P.P. = - mm



KW063
Inline Reveal Adaptor

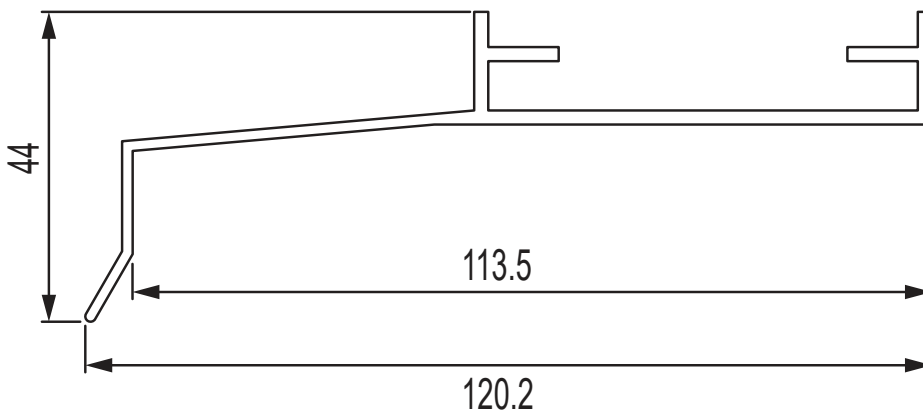
A.P. = 196 mm
P.P. = - mm

Subframing Profiles



RWM054
Subhead

A.P. = 320 mm
P.P. = 155 mm



RWM055
Subsill

A.P. = 380 mm
P.P. = 113 mm



Darley Aluminium

are long standing members of various industry associations including the Australian Window Association (AWA), Window Energy Rating Scheme (WERS) and HIA 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://www.awawers.net/index.php/en/res>

Warranty

Darley Aluminium, Door & Framing extrusions are warranted for a period of 6 years as per AS20147 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: March 2014