



Dualair

Secondary Glazed Louvre
Component System

Dualair®

Secondary Glazed Louvre Component System

Technical Manual

February 2024 / ISSUE B

al spec®
EVERYTHING ALUMINIUM
& HARDWARE

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ALUMINIUM

Aluminium frames should be manufactured using Alspec's McArthur Evo 150mm Framing or Hunter Evo 150mm Acoustic Framing systems combined with Breezway's Altair® Louvre Galleries and framing inserts to create the **DUALAIR® Secondary Glazed Louvre Component System**.

Refer to wind load tables for maximum panel heights and widths.

HARDWARE

The hardware shall be Alspec's specific backing gaskets and colour coded wedges for DUALAIR®.

- 6mm Glass thickness only to be used with Breezway Altair® Galleries.
- Maximum Glass Blade lengths are :
 - 152mm Blade is 900mm
 - Stronghold Blade is 1127mm (glass must be toughened)
- Aluminium Blades as nominated in Technical Manual.
- Minimum glass thickness for fixed lite frame is 6mm thick.
- Maximum glass thickness for fixed lite frame is 14mm thick.
- Glazing wedges shall be Alspec's wedges for DUALAIR® framing to suit standard and captive glazing options, refer glazing pages 12.1 and 12.2

FINISHES

- All powder coated material shall be produced to AS3715
- All anodised material shall be produced to AS1231

TESTING

Product shall have a test report to show compliance to AS2047.

All products are available from Alspec (A.B.N. 63 001 252 259) as detailed in the "Alspec" catalogue or on the Internet at www.alspec.com.au. All such framing is to be constructed, assembled and fixed to meet the requirement of AS2047 (windows in buildings), AS1170 (loading code). All glass, glazing rubbers, seals and gaskets shall be applied in accordance with the requirements of AS1288 (glass in buildings - selection and installation).

Fabricators of the DUALAIR® framing system should seek confirmation of design wind pressure and deflection criteria from the building designer.

Loading Table Guide

The following pages contain wind pressure tables that may be used as a guide to the suitability of Alspec Aluminium Systems framing for various wind loads and frame sizes.

In most situations the Design Wind Pressure for a particular building should be available from the building designer or engineer.

Framing must be checked for suitability.

For a door frame, which is 2400mm high and 1000mm wide, refer to the table below;

Step 1: Locate the height

Step 2: Locate the width

Step 3: Determine the Maximum wind pressure based on the height and width.

SECTION PART NO.	Panel Height	Maximum Design Pressure (Pa)					
	2850	S	1040	840	720	630	570
		U	2410	1960	1660	1460	1310
	2700	S	1230	1000	850	750	680
		U	2700	2190	1870	1640	1480
	2550	S	1460	1200	1020	910	830
		U	3040	2470	2210	1860	1690
	2400	S	1770	1450	1250	1080	1010
		U	3440	2810	2410	2100	1940
	2250	S	2160	1780	1530	1370	1270
		U	3940	3230	2780	2470	2270
	2100	S	2670	2210	1920	1730	1610
		U	4550	3750	3240	2900	2680
lxx = xxx x xxx mm4	Panel Width	800	1000	1200	1400	1600	

Diagram illustrating the steps to find the Maximum Design Pressure (Pa) for a door frame (2400mm high, 1000mm wide):

- STEP 1:** Locate the height (2400mm) in the Panel Height column.
- STEP 2:** Locate the width (1000mm) in the Panel Width row.
- STEP 3:** Determine the Maximum wind pressure based on the height and width. The intersection of the 2400mm height row and the 1000mm width column shows a pressure of 1450 Pa (Suction) and 2810 Pa (Uplift).

Table is based on theoretical section properties

3. Loading Tables

Loading Tables - ME61 + ME64 Mullion

Max Stress = 110Mpa

S = Serviceability limit state I/250

U = Ultimate limit state

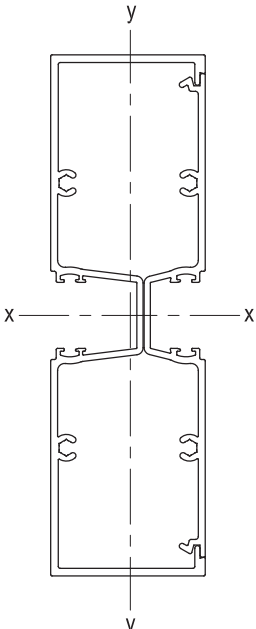
ME61 + ME64 MULLION	Panel Height	Maximum Design Pressure (Pa)							
	2600	S	3000	3000	3000	3000	3000	2900	2690
		U	7190	6200	5470	4900	4450	4090	3800
	2400	S	3000	3000	3000	3000	3000	3000	3000
		U	8460	7310	6450	5790	5280	4860	4520
	2200	S	3000	3000	3000	3000	3000	3000	3000
		U	9000	8750	7740	6960	6350	5870	5470
	2000	S	3000	3000	3000	3000	3000	3000	3000
		U	9000	9000	9000	8530	7810	7240	6780
	1800	S	3000	3000	3000	3000	3000	3000	3000
		U	9000	9000	9000	9000	9000	9000	8650
	1600	S	3000	3000	3000	3000	3000	3000	3000
		U	9000	9000	9000	9000	9000	9000	9000
	1400	S	3000	3000	3000	3000	3000	3000	3000
		U	9000	9000	9000	9000	9000	9000	9000
	1200	S	3000	3000	3000	3000	3000	3000	3000
		U	9000	9000	9000	9000	9000	9000	9000
	1000	S	3000	3000	3000	3000	3000	3000	3000
		U	9000	9000	9000	9000	9000	9000	9000
	800	S	3000	3000	3000	3000	3000	3000	3000
		U	9000	9000	9000	9000	9000	9000	9000
	600	S	3000	3000	3000	3000	3000	3000	3000
		U	9000	9000	9000	9000	9000	9000	9000
$I_{xx} = 2442 \times 10^3 \text{ mm}^4$	Mullion Centres		600	700	800	900	1000	1100	1200

Table is based on theoretical section properties

3. Loading Tables

Loading Tables - ME66 Self Mating Mullion

Max Stress = 110Mpa

S = Serviceability limit state I/250

U = Ultimate limit state

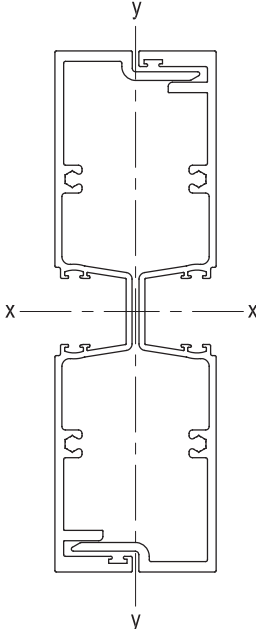
ME66 SELF MATING MULLION	Panel Height	Maximum Design Pressure (Pa)							
	2600	S	3000	3000	3000	3000	3000	3000	3000
		U	9000	9000	8220	7370	6700	6160	5710
	2400	S	3000	3000	3000	3000	3000	3000	3000
		U	9000	9000	9000	8710	7930	7310	6790
	2200	S	3000	3000	3000	3000	3000	3000	3000
		U	9000	9000	9000	9000	9000	8820	8230
	2000	S	3000	3000	3000	3000	3000	3000	3000
		U	9000	9000	9000	9000	9000	9000	9000
	1800	S	3000	3000	3000	3000	3000	3000	3000
		U	9000	9000	9000	9000	9000	9000	9000
	1600	S	3000	3000	3000	3000	3000	3000	3000
		U	9000	9000	9000	9000	9000	9000	9000
	1400	S	3000	3000	3000	3000	3000	3000	3000
		U	9000	9000	9000	9000	9000	9000	9000
	1200	S	3000	3000	3000	3000	3000	3000	3000
		U	9000	9000	9000	9000	9000	9000	9000
	1000	S	3000	3000	3000	3000	3000	3000	3000
		U	9000	9000	9000	9000	9000	9000	9000
	800	S	3000	3000	3000	3000	3000	3000	3000
		U	9000	9000	9000	9000	9000	9000	9000
600	S	3000	3000	3000	3000	3000	3000	3000	
	U	9000	9000	9000	9000	9000	9000	9000	
Ixx = 3867 x 10³ mm⁴	Mullion Centres		600	700	800	900	1000	1100	1200

Table is based on theoretical section properties

3. Loading Tables

Loading Tables - ME76 + ME68 Std Mullions

Max Stress = 110Mpa

S = Serviceability limit state I/250

U = Ultimate limit state

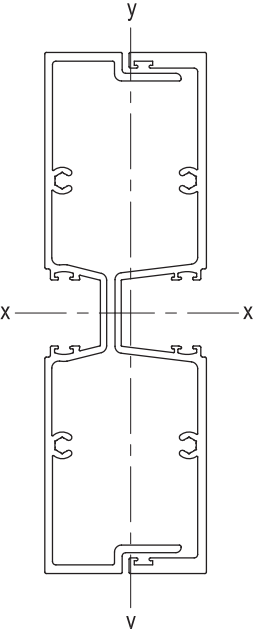
ME67 + ME68 STD MULLIONS	Panel Height	Maximum Design Pressure (Pa)							
	2600	S	3000	3000	3000	3000	3000	3000	3000
		U	9000	8410	7410	6650	6040	5550	5150
	2400	S	3000	3000	3000	3000	3000	3000	3000
		U	9000	9000	8750	7860	7160	6590	6130
	2200	S	3000	3000	3000	3000	3000	3000	3000
		U	9000	9000	9000	9000	8620	7960	7420
	2000	S	3000	3000	3000	3000	3000	3000	3000
		U	9000	9000	9000	9000	9000	9000	9000
	1800	S	3000	3000	3000	3000	3000	3000	3000
		U	9000	9000	9000	9000	9000	9000	9000
	1600	S	3000	3000	3000	3000	3000	3000	3000
		U	9000	9000	9000	9000	9000	9000	9000
	1400	S	3000	3000	3000	3000	3000	3000	3000
		U	9000	9000	9000	9000	9000	9000	9000
	1200	S	3000	3000	3000	3000	3000	3000	3000
		U	9000	9000	9000	9000	9000	9000	9000
	1000	S	3000	3000	3000	3000	3000	3000	3000
		U	9000	9000	9000	9000	9000	9000	9000
	800	S	3000	3000	3000	3000	3000	3000	3000
		U	9000	9000	9000	9000	9000	9000	9000
	600	S	3000	3000	3000	3000	3000	3000	3000
		U	9000	9000	9000	9000	9000	9000	9000
I_{xx} = 3312 x 10³ mm⁴	Mullion Centres		600	700	800	900	1000	1100	1200

Table is based on theoretical section properties

3. Loading Tables

Loading Tables - HE952 + HE953 Mullions

Max Stress = 110Mpa

S = Serviceability limit state l/250

U = Ultimate limit state

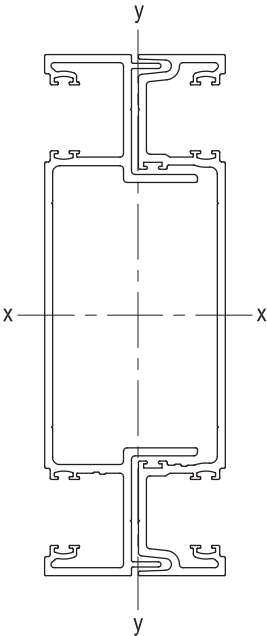
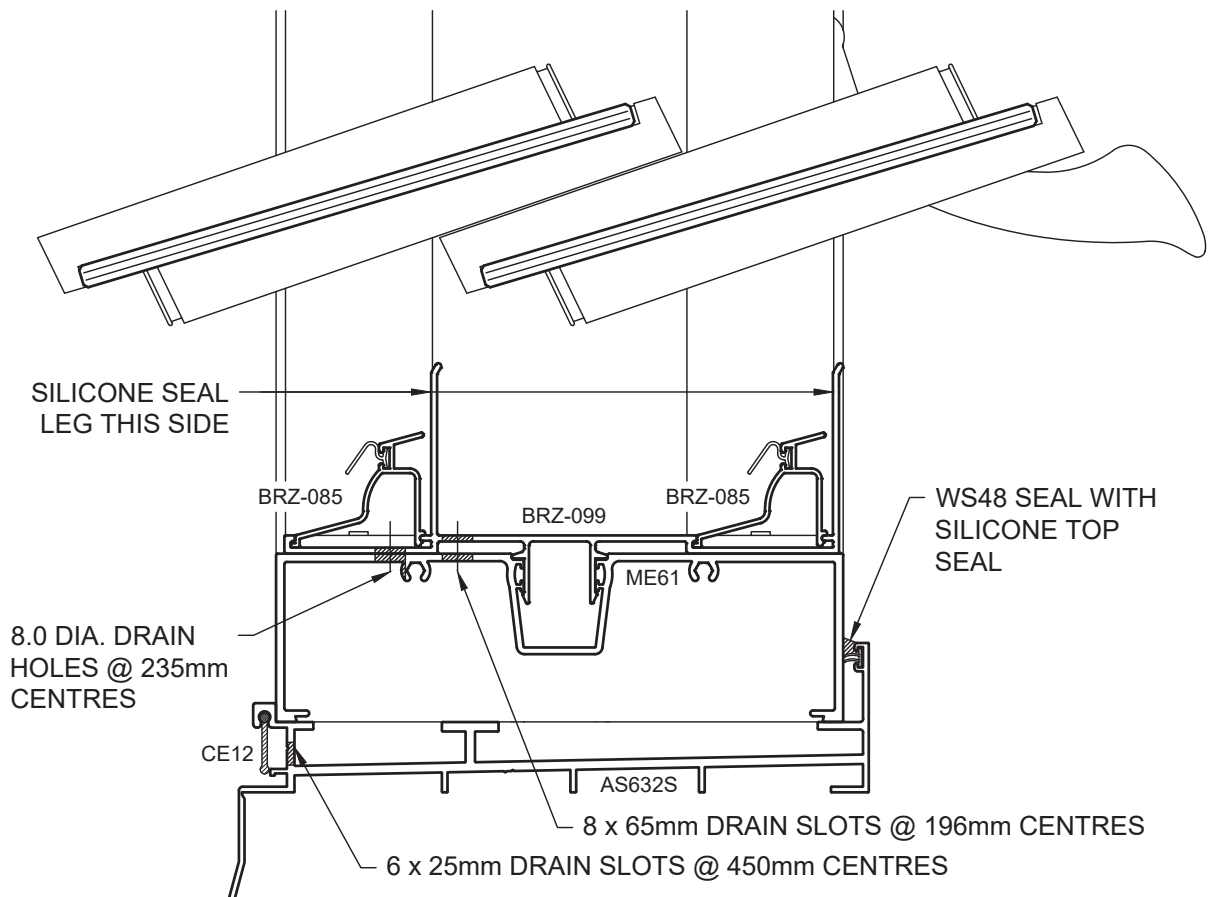
HE952 + HE953 MULLIONS	Panel Height	Maximum Design Pressure (Pa)						
	2600	S	3000	3000	3000	3000	3000	3000
		U	9000	9000	8500	7620	6930	5910
	2400	S	3000	3000	3000	3000	3000	3000
		U	9000	9000	9000	9000	8200	7020
	2200	S	3000	3000	3000	3000	3000	3000
		U	9000	9000	9000	9000	9000	8510
	2000	S	3000	3000	3000	3000	3000	3000
		U	9000	9000	9000	9000	9000	9000
	1800	S	3000	3000	3000	3000	3000	3000
		U	9000	9000	9000	9000	9000	9000
	1600	S	3000	3000	3000	3000	3000	3000
		U	9000	9000	9000	9000	9000	9000
	1400	S	3000	3000	3000	3000	3000	3000
		U	9000	9000	9000	9000	9000	9000
	1200	S	3000	3000	3000	3000	3000	3000
		U	9000	9000	9000	9000	9000	9000
	1000	S	3000	3000	3000	3000	3000	3000
		U	9000	9000	9000	9000	9000	9000
	800	S	3000	3000	3000	3000	3000	3000
		U	9000	9000	9000	9000	9000	9000
	600	S	3000	3000	3000	3000	3000	3000
		U	9000	9000	9000	9000	9000	9000
$I_{xx} = 3796 \times 10^3 \text{ mm}^4$	Mullion Centres		600	700	800	900	1000	1100
								1200

Table is based on theoretical section properties

AS2047 - McArthur Frame - Power / Manual

TEST REPORT:	20180205
SYSTEM CONFIGURATION	McARTHUR EVO FRAME, DUALAIR LOUVRE GALLERY 17 BLADES, EXTERNAL POWER, INTERNAL MANUAL, STRONGHOLD TOUGHENED GLASS BLADES
TEST SAMPLE SIZE	2.568m high x 1.289m wide
ULTIMATE LOAD	+/- 2.0 kPa
WATER PENETRATION	550 Pa
AIR INFILTRATION @ 75Pa	+ 2.83L/s/m ²



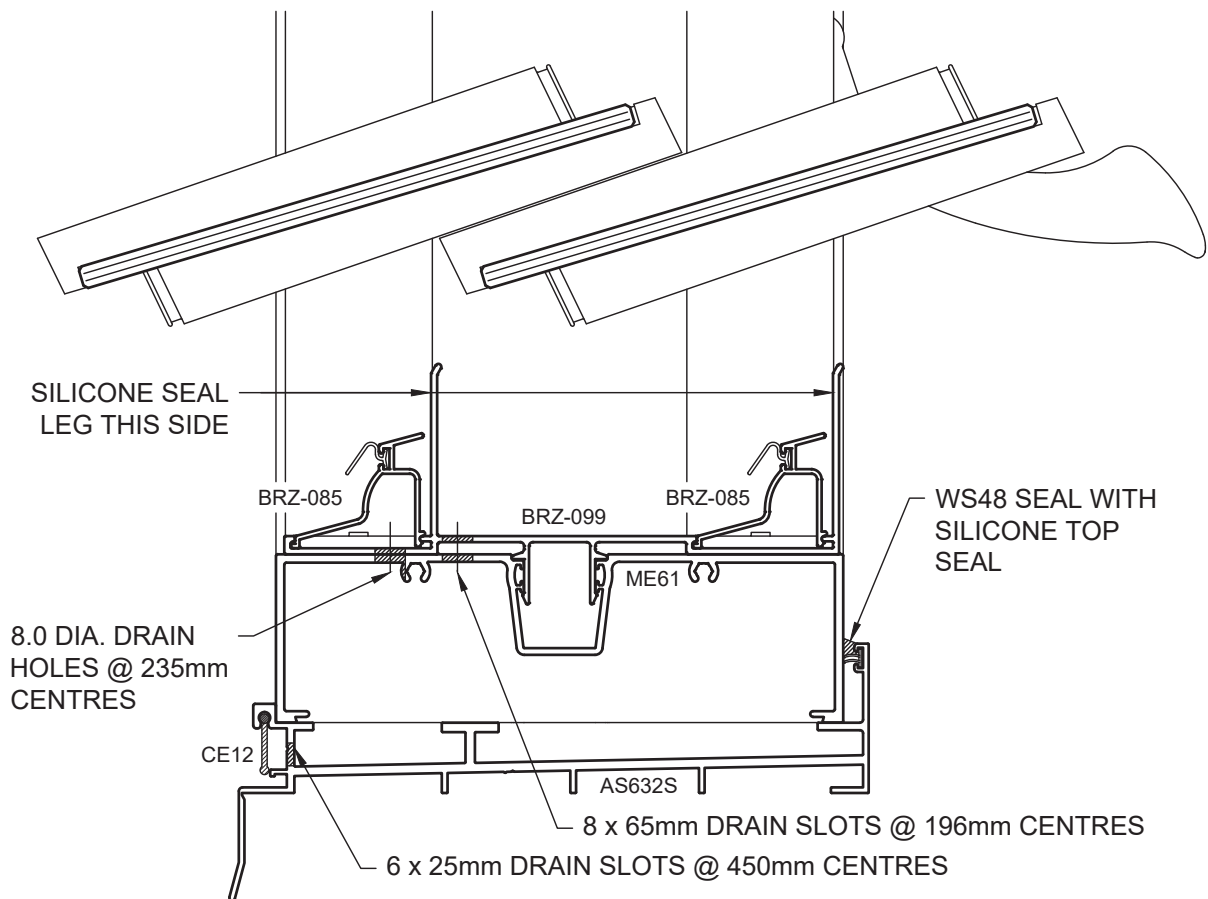
DISCLAIMER:

Please note that the test results shown above reflect specific configurations of a system and are representative only. If a specific high wind load or a different configuration (i.e. changes to frames, transoms, mullions) is required on a project please discuss with Alspec prior to commencement.

4. Test Summary

AS2047 - McArthur Frame - Power / Manual

TEST REPORT:	20180302
SYSTEM CONFIGURATION	McARTHUR EVO FRAME, DUALAIR LOUVRE GALLERY 17 BLADES, EXTERNAL POWER, INTERNAL MANUAL, STRONGHOLD TOUGHENED GLASS BLADES
TEST SAMPLE SIZE	2.568m high x 1.062m wide
ULTIMATE LOAD	+/- 3.4 kPa
WATER PENETRATION	600 Pa
AIR INFILTRATION @ 75Pa	+ 2.88 L/s/m ²

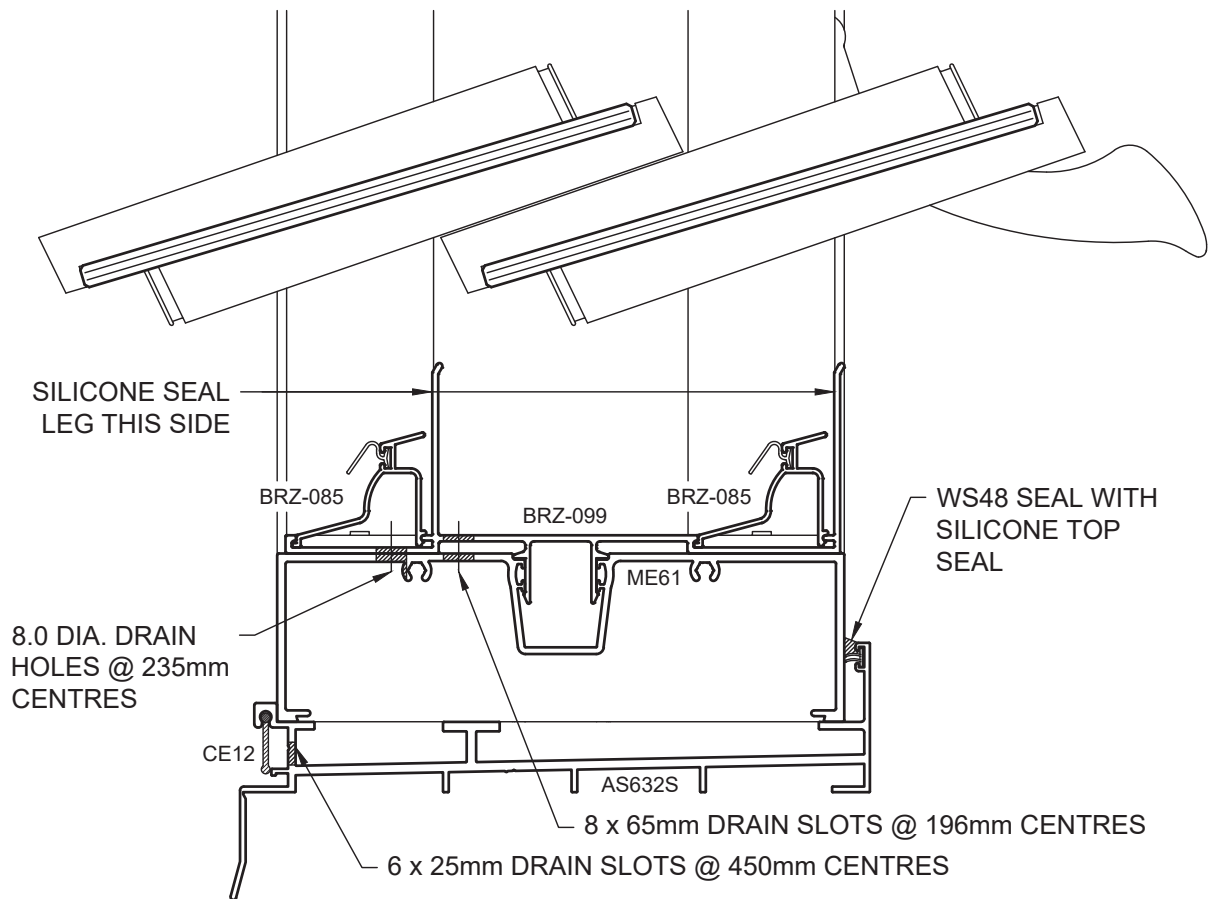


DISCLAIMER:

Please note that the test results shown above reflect specific configurations of a system and are representative only. If a specific high wind load or a different configuration (i.e. changes to frames, transoms, mullions) is required on a project please discuss with Alspeg prior to commencement.

AS2047 - McArthur Frame - Power / Manual

TEST REPORT:	20180723
SYSTEM CONFIGURATION	McARTHUR EVO FRAME, DUALAIR LOUVRE GALLERY 17 BLADES, EXTERNAL POWER, INTERNAL MANUAL, STRONGHOLD TOUGHENED GLASS BLADES
TEST SAMPLE SIZE	2.568m high x 0.897m wide
ULTIMATE LOAD	+/- 5.0 kPa
WATER PENETRATION	620Pa
AIR INFILTRATION @ 75Pa	+ 3.13 L/s/m ²

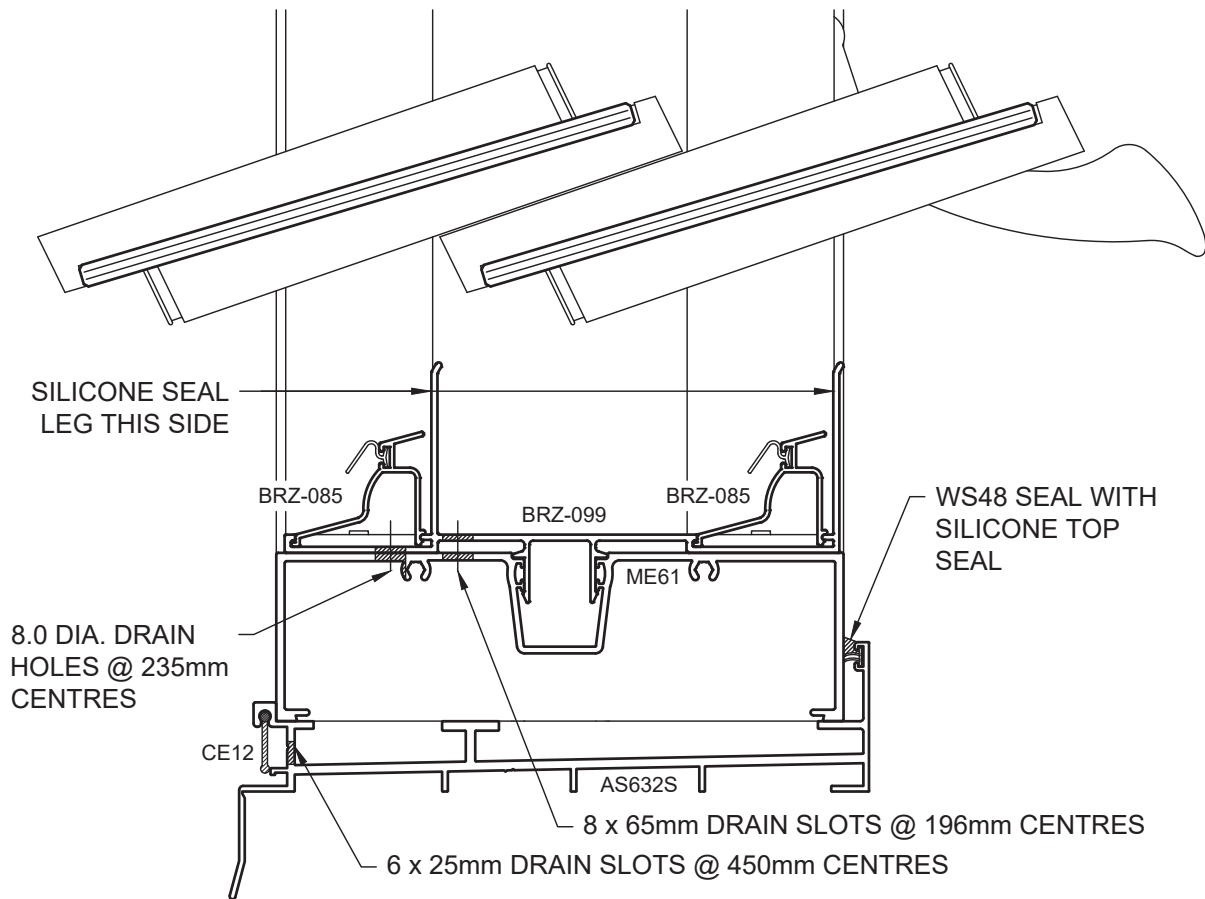


DISCLAIMER:

Please note that the test results shown above reflect specific configurations of a system and are representative only. If a specific high wind load or a different configuration (i.e. changes to frames, transoms, mullions) is required on a project please discuss with Alspec prior to commencement.

AS2047 - McArthur Frame - Power / Manual

TEST REPORT:	AS18-361
SYSTEM CONFIGURATION	McARTHUR EVO FRAME, DUALAIR LOUVRE GALLERY 17 BLADES, EXTERNAL POWER, INTERNAL MANUAL
TEST SAMPLE SIZE	2.568m high x 0.897m wide
ULTIMATE LOAD	+/- 6.0 kPa



DISCLAIMER:

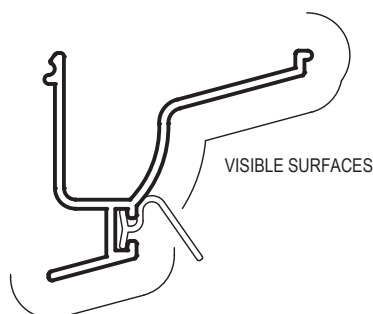
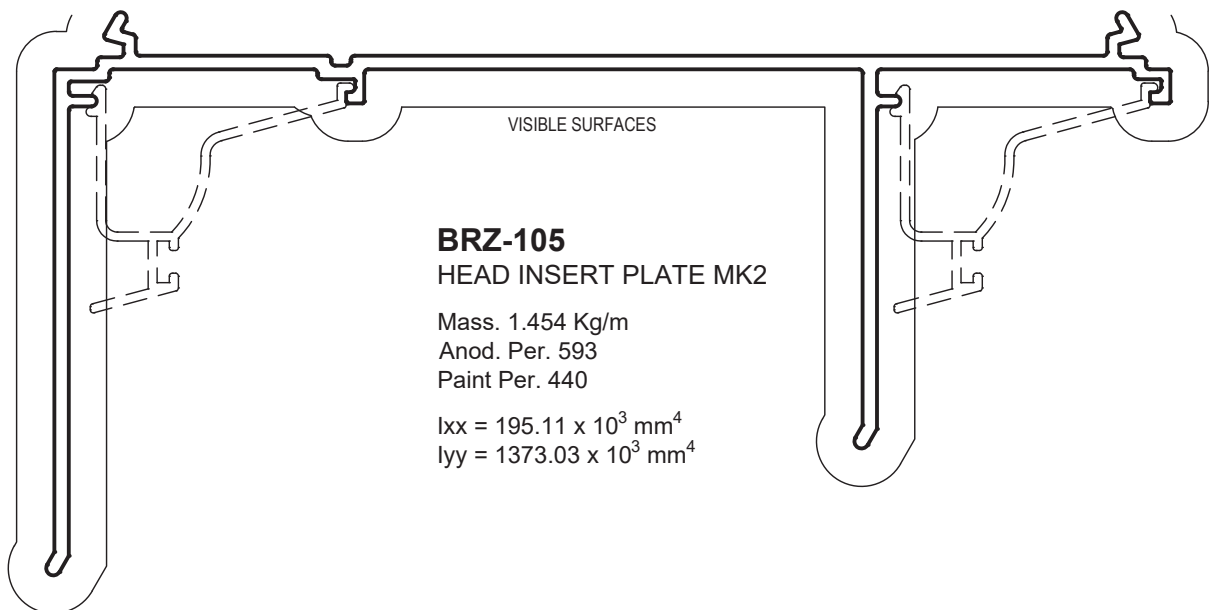
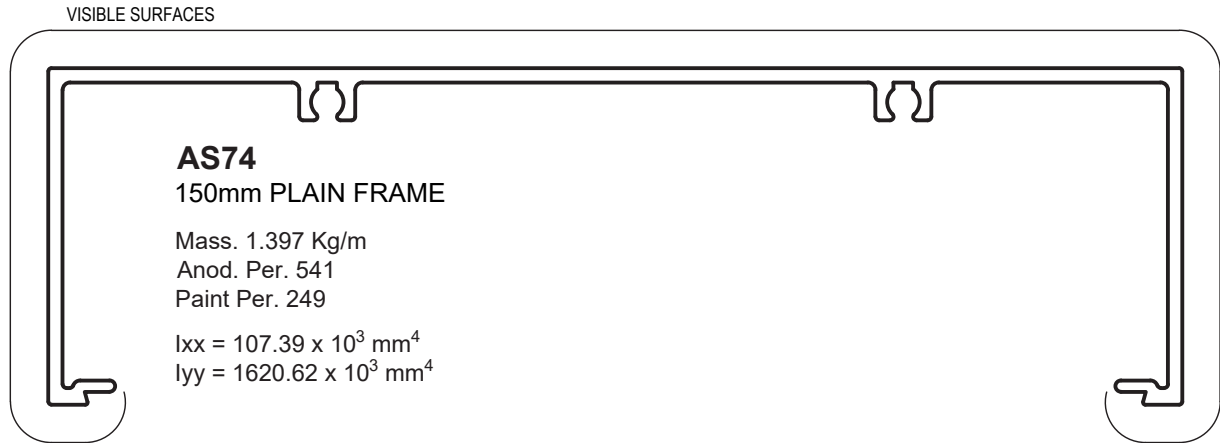
Please note that the test results shown above reflect specific configurations of a system and are representative only. If a specific high wind load or a different configuration (i.e. changes to frames, transoms, mullions) is required on a project please discuss with Alspec prior to commencement.

4. Test Summary

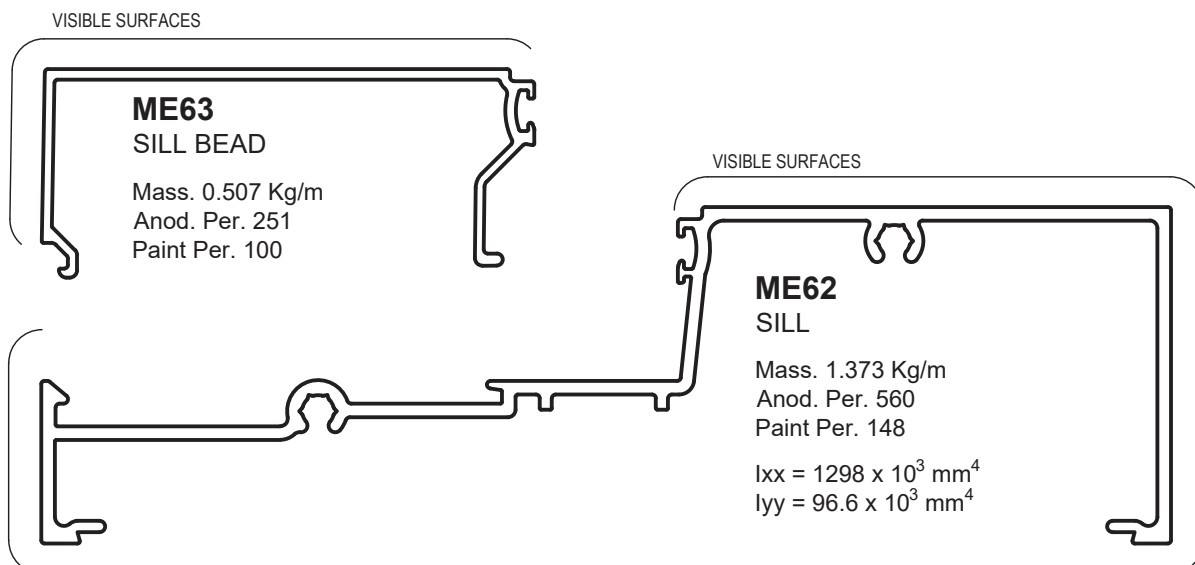
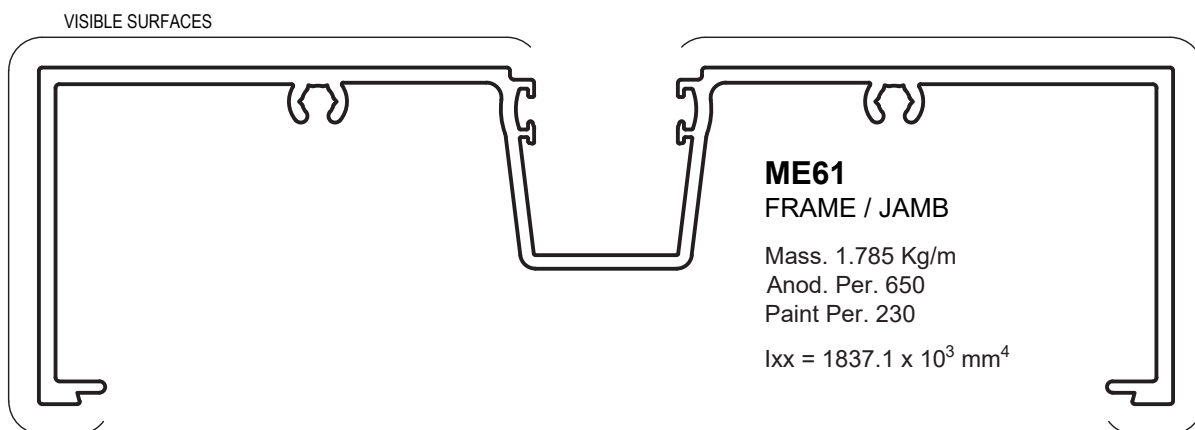
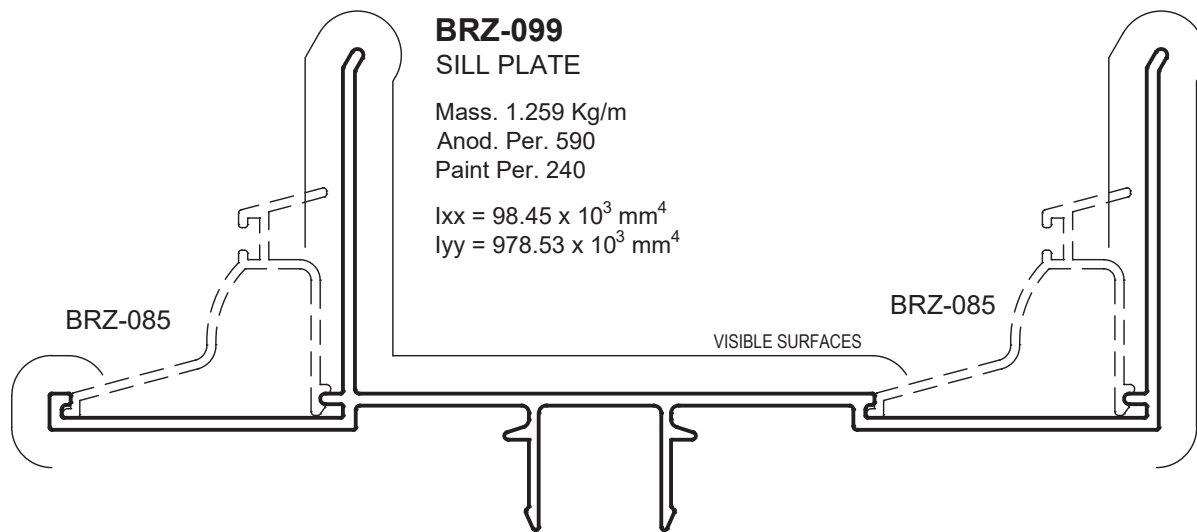
Acoustic - AS/NZS ISO 717.1

TEST REPORT	PRODUCT DESCRIPTION	SIZE	GLASS	Rw
TL638-01-1	McARTHUR EVO FRAME, DUALAIR LOUVRE, EXTERNAL POWER, INTERNAL MANUAL	1.22m (H) x 1.1m (W)	6mm CLR TOUGHENED OUTER + 6mm CLR TOUGHENED INNER	35 (-1, -3)
TL638-02-1	McARTHUR EVO FRAME, DUALAIR LOUVRE, EXTERNAL POWER, INTERNAL MANUAL	1.22m (H) x 1.1m (W)	6mm ALUMINIUM BLADE OUTER + 6mm CLR TOUGHENED INNER	35 (-2, -4)

McArthur Evo Framing



McArthur Evo Framing



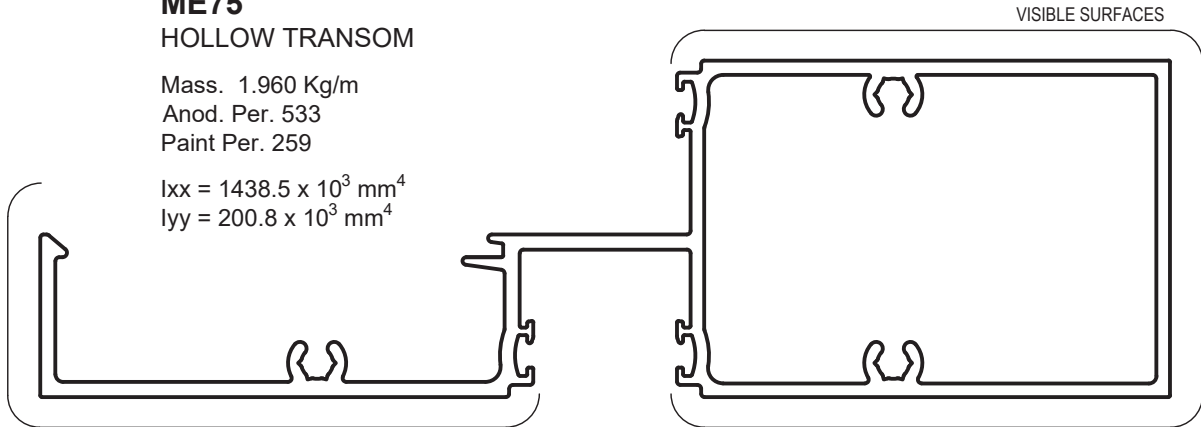
McArthur Evo Framing

ME75**HOLLOW TRANSOM**

Mass. 1.960 Kg/m

Anod. Per. 533

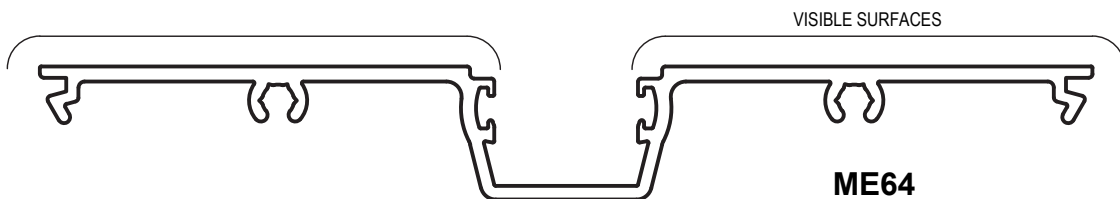
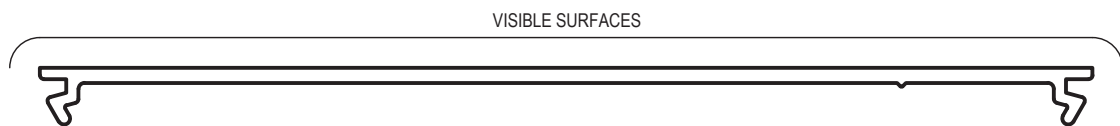
Paint Per. 259

 $I_{xx} = 1438.5 \times 10^3 \text{ mm}^4$ $I_{yy} = 200.8 \times 10^3 \text{ mm}^4$ **AS605****150mm FLUSH ADAPTOR**

Mass. 0.810 Kg/m

Anod. Per. 310

Paint Per. 140

 $I_{xx} = 539.1 \times 10^3 \text{ mm}^4$ **ME64****GLAZING ADAPTOR**

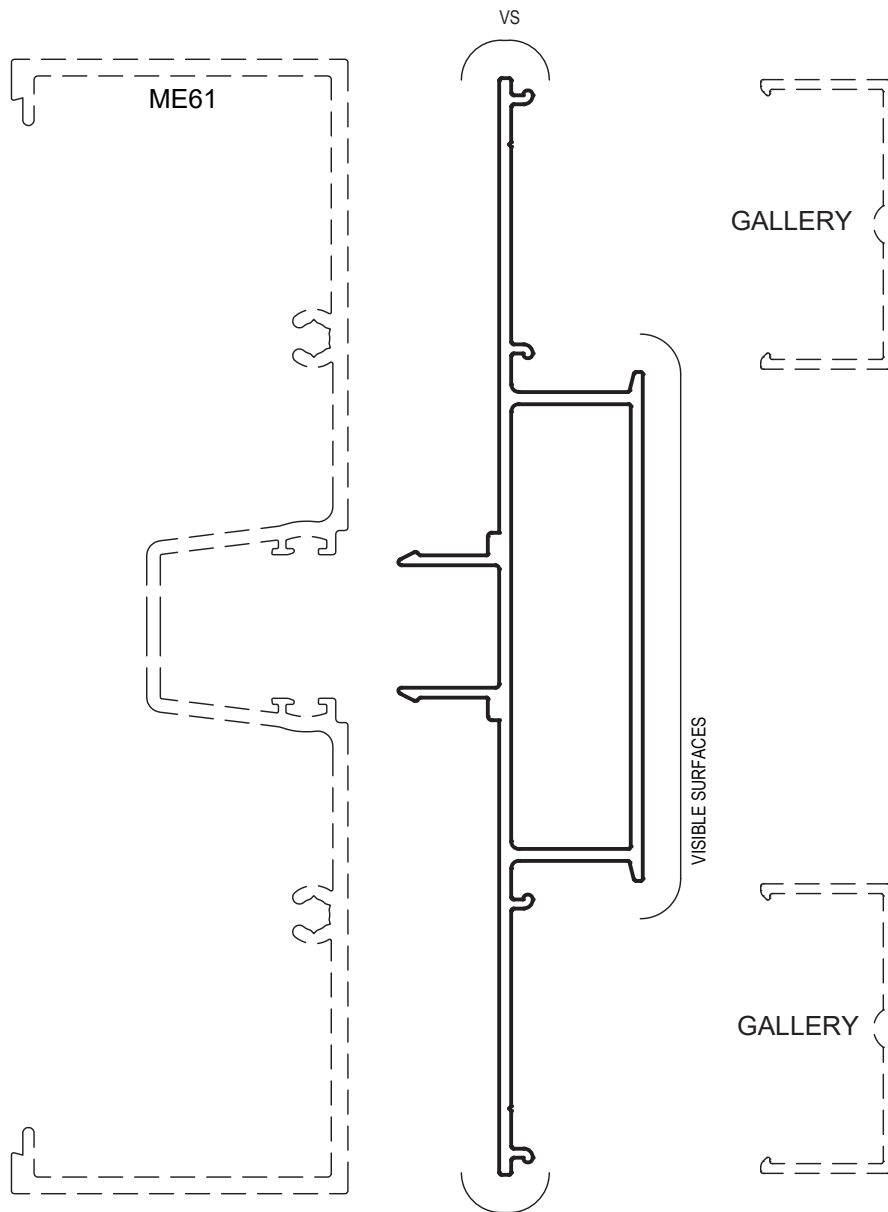
Mass. 1.080 Kg/m

Anod. Per. 423

Paint Per. 121

 $I_{xx} = 605.4 \times 10^3 \text{ mm}^4$

McArthur Evo Framing

**BRZ-103**

INSIDE JAMB PLATE-
McARTHUR EVO

Mass. 1.212 Kg/m

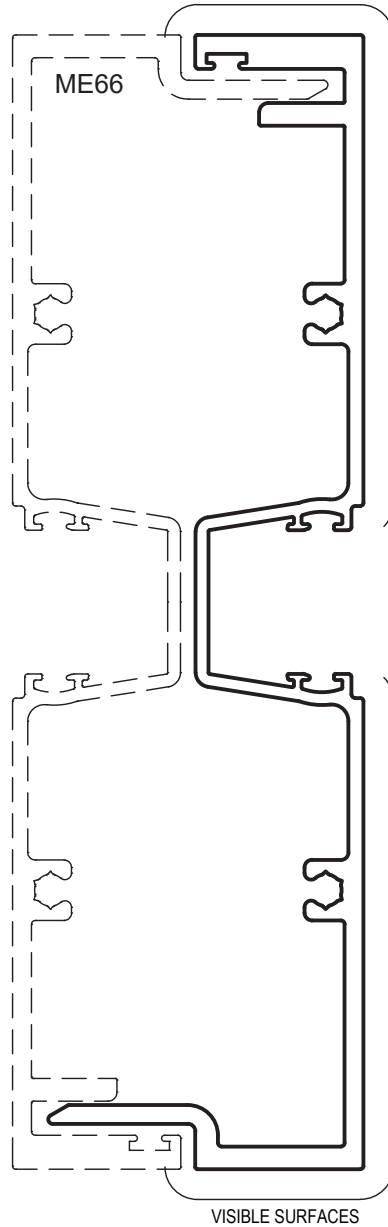
Anod. Per. 410

Paint Per. 100

$I_{xx} = 543.16 \times 10^3 \text{ mm}^4$

$I_{yy} = 30.34 \times 10^3 \text{ mm}^4$

McArthur Evo Framing

**ME66****SELF MATING MULLION**

Mass. 1.869 Kg/m

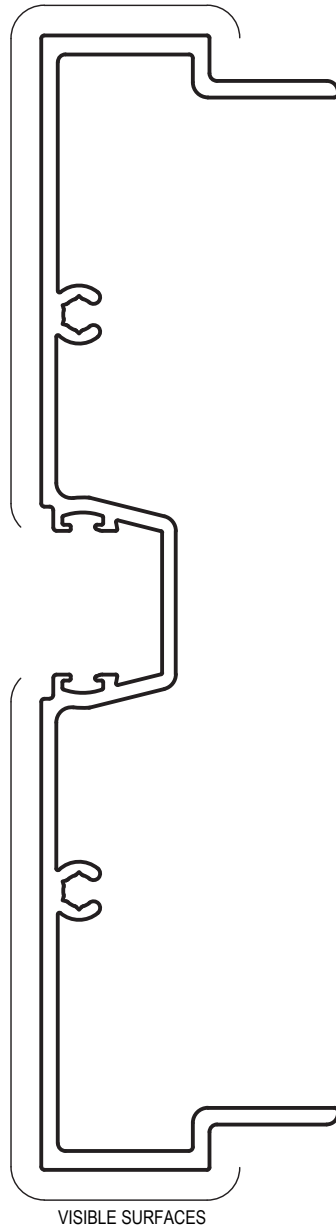
Anod. Per. 593

Paint Per. 182

 $I_{xx} = 1933.7 \times 10^3 \text{ mm}^4$

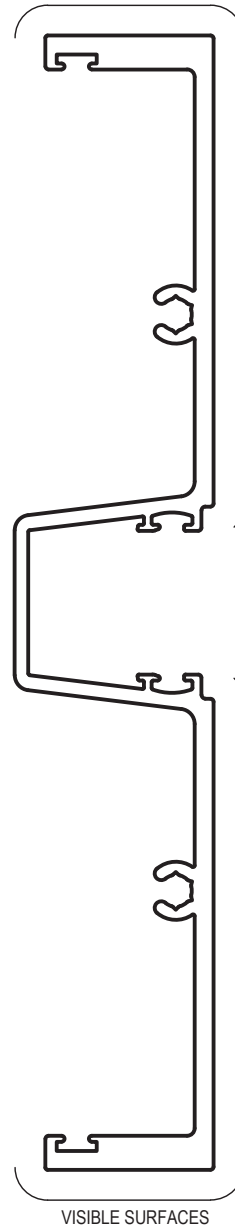
Note: Glass edge cover is limited to 8mm in this section, therefore a maximum glass thickness of 10.38mm applies as per AS1288.

McArthur Evo Framing


ME67
 MALE MULLION

Mass. 1.682 Kg/m
 Anod. Per. 588
 Paint Per. 180

$I_{xx} = 1688.5 \times 10^3 \text{ mm}^4$

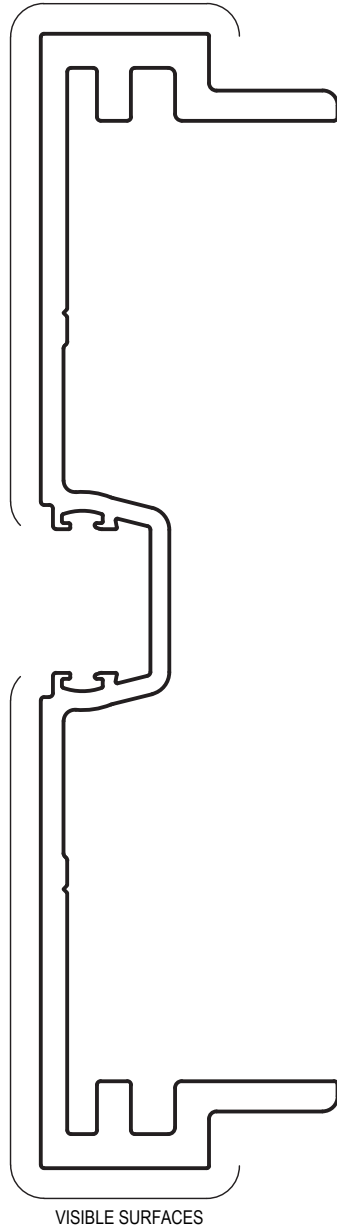

ME68
 FEMALE MULLION

Mass. 1.789 Kg/m
 Anod. Per. 546
 Paint Per. 180

$I_{xx} = 1624.0 \times 10^3 \text{ mm}^4$

Note: Glass edge cover is limited to 8mm in this section, therefore a maximum glass thickness of 10.38mm applies as per AS1288.

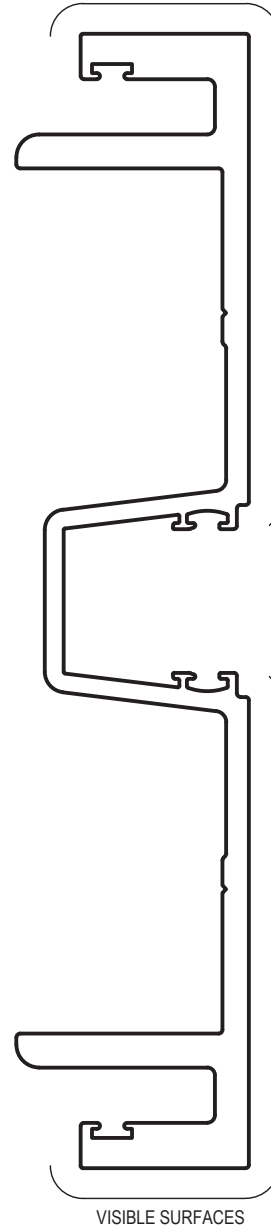
McArthur Evo Framing

**ME69****HD MALE MULLION**

Mass. 2.655 Kg/m

Anod. Per. 568

Paint Per. 182

 $I_{xx} = 3018.1 \times 10^3 \text{ mm}^4$ **ME70****HD FEMALE MULLION**

Mass. 2.882 Kg/m

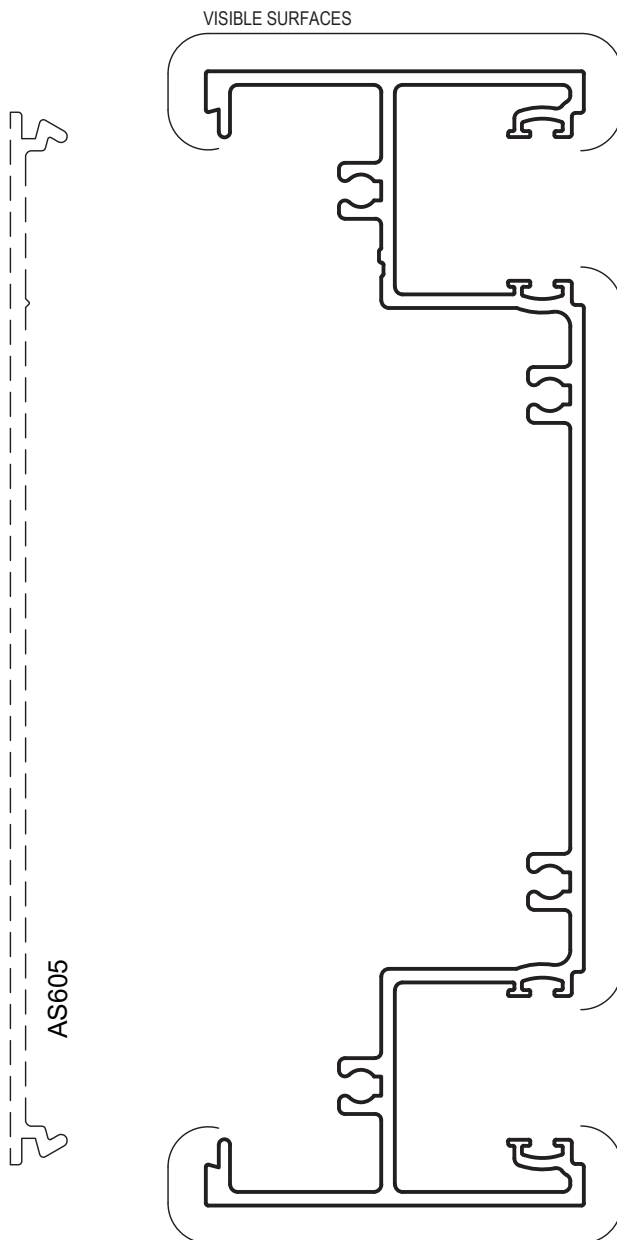
Anod. Per. 605

Paint Per. 180

 $I_{xx} = 2983.6 \times 10^3 \text{ mm}^4$

Note: Glass edge cover is limited to 8mm in this section, therefore a maximum glass thickness of 10.38mm applies as per AS1288.

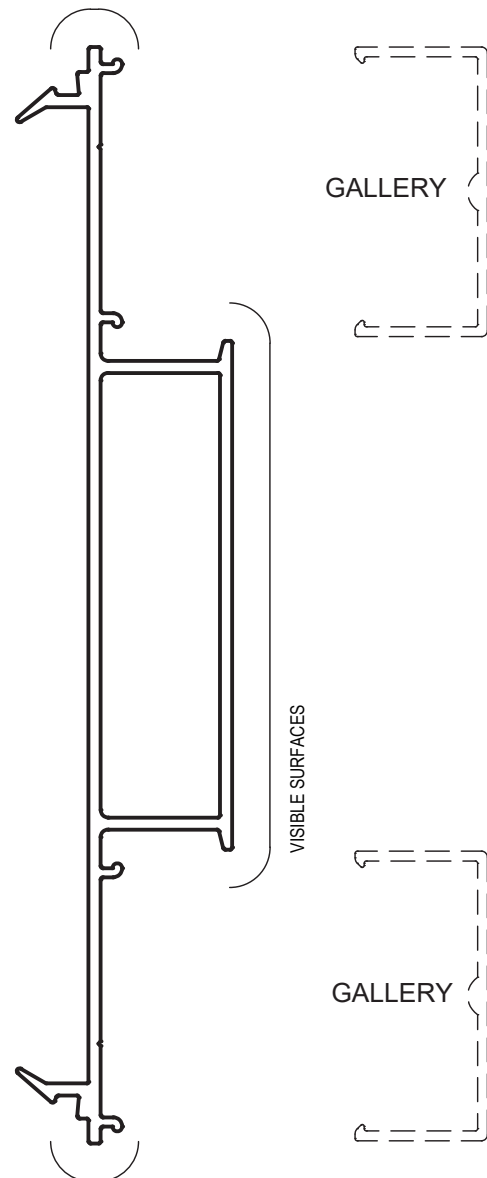
Hunter Evo Acoustic Framing

**HE951****150mm ACOUSTIC FRAME**

Mass. 1.956 Kg/m

Anod. Per. 797

Paint Per. 220

 $I_{xx} = 2287.69 \times 10^3 \text{ mm}^4$ **BRZ-104****OUTSIDE JAMB PLATE-
HUNTER EVO**

Mass. 1.199 Kg/m

Anod. Per. 399

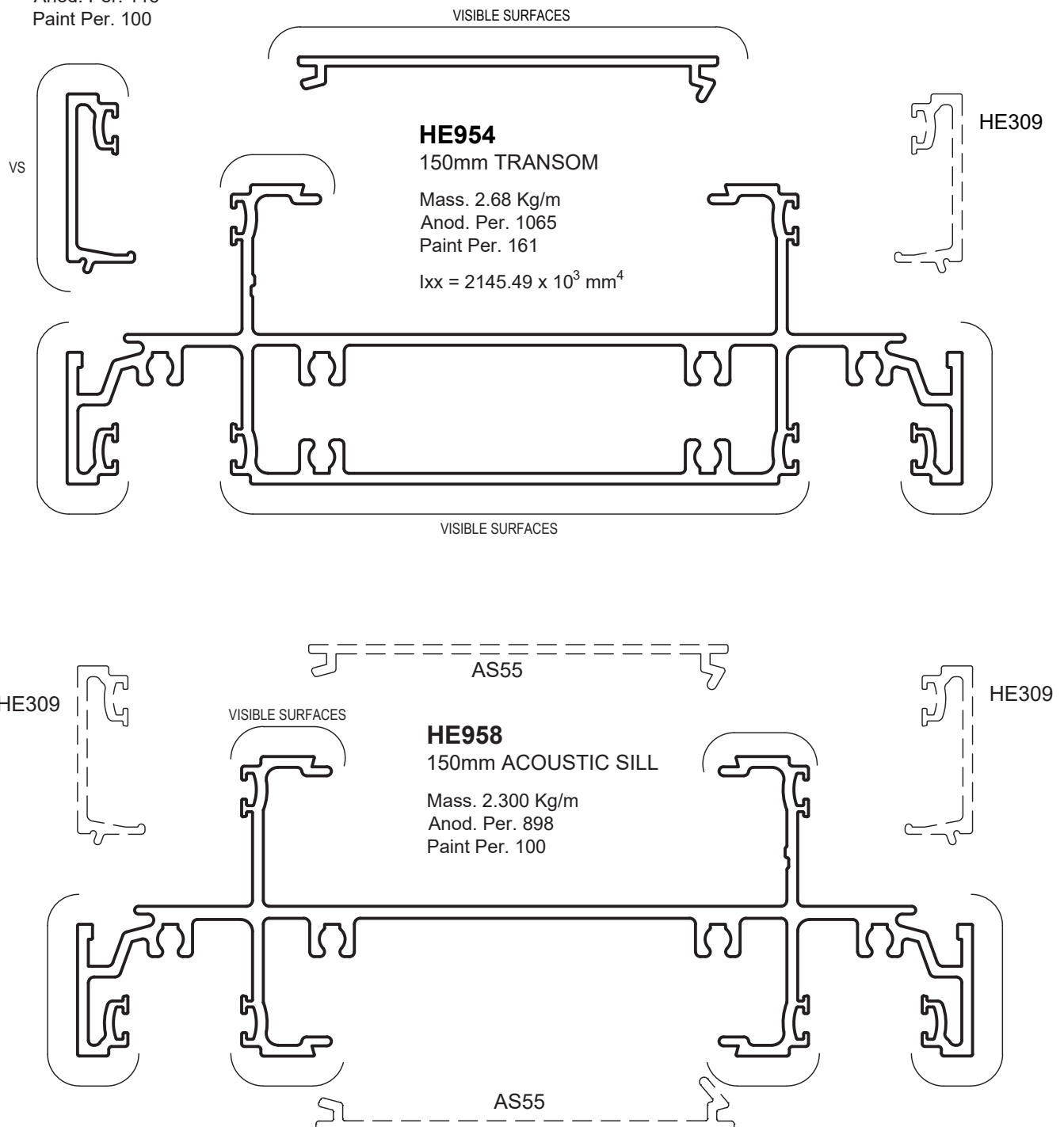
Paint Per. 100

 $I_{xx} = 705.95 \times 10^3 \text{ mm}^4$ $I_{yy} = 27.89 \times 10^3 \text{ mm}^4$

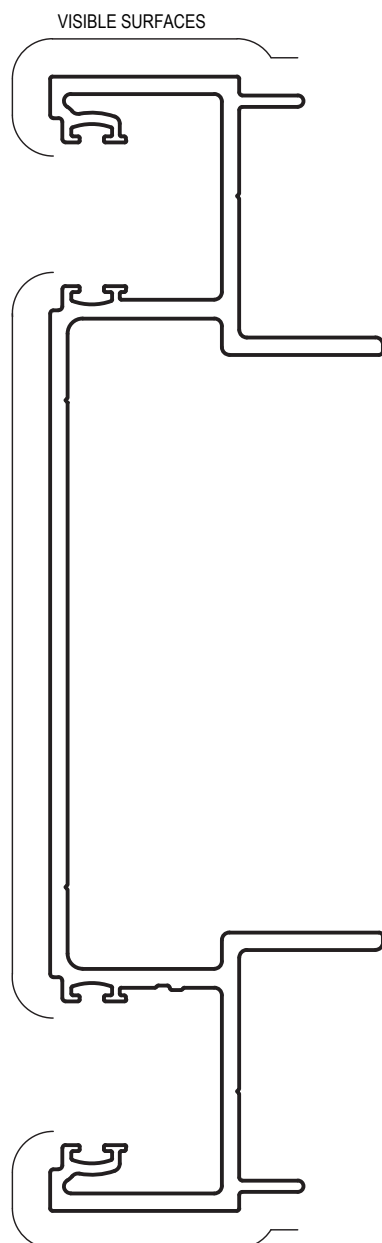
Hunter Evo Acoustic Framing

HE309EXTERNAL GLAZE
PRESSURE BEAD
 Mass. 0.239 Kg/m
 Anod. Per. 116
 Paint Per. 100
AS55

76mm FLAT INFILL

 Mass. 0.356 Kg/m
 Anod. Per. 169
 Paint Per. 100
 $I_{xx} = 65.14 \times 10^3 \text{ mm}^4$ 

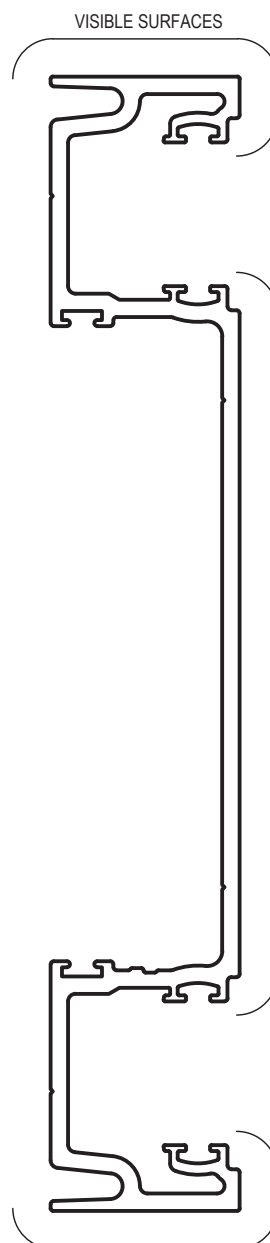
Hunter Evo Acoustic Framing

**HE952**

150mm ACOUSTIC MALE
MULLION

Mass. 2.042 Kg/m
 Anod. Per. 700
 Paint Per. 157

$I_{xx} = 1996.54 \times 10^3 \text{ mm}^4$

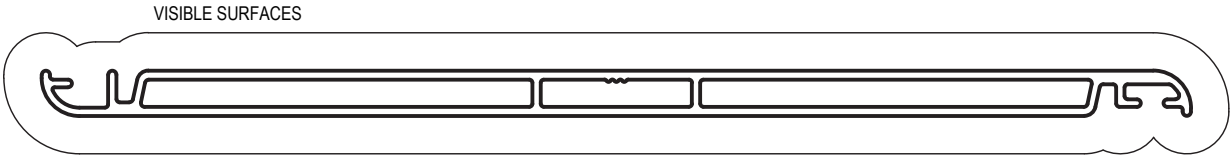
**HE953**

150mm FEMALE
MULLION

Mass. 1.758 Kg/m
 Anod. Per. 619
 Paint Per. 156

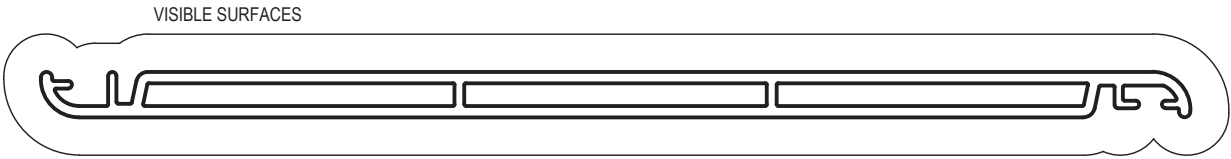
$I_{xx} = 1800.93 \times 10^3 \text{ mm}^4$

Alspec Aluminium Louvre Blades



AF152
LOUVRE 152mm
ALUM BLADE

Mass. 1.024 kg/m
Anod Per. 349
Paint Per. 288



AF152M
LOUVRE 152mm
ALUM BLADE

Mass. 1.245 kg/m
Anod Per. 348
Paint Per. 348

Glazing Wedges

IMAGE	TO SUIT GAP	MATERIAL	PART #	DESCRIPTION
	2mm	PVC	1376132	GR32 GLAZING WEDGE (2mm GAP) x 200m ROLL
	3mm	PVC	1313055	GR43 GLAZING WEDGE (BROWN) (3mm GAP) PVC x 200m ROLL
		S/PRENE	1313063	GR43S GLAZING WEDGE (BROWN) (3mm GAP) S/PRENE x 200m ROLL
	4mm	PVC	1313056	GR44 GLAZING WEDGE (WHITE) (4mm GAP) PVC x 200m ROLL
		S/PRENE	1313064	GR44S GLAZING WEDGE (WHITE) (4mm GAP) S/PRENE x 200m ROLL
	5mm	PVC	1313057	GR45 GLAZING WEDGE (BLUE) (5mm GAP) PVC x 150m ROLL
		S/PRENE	1313065	GR45S GLAZING WEDGE (BLUE) (5mm GAP) S/PRENE x 150m ROLL
	6mm	PVC	1313056	GR46 GLAZING WEDGE (WHITE) (4mm GAP) PVC x 200m ROLL
		S/PRENE	1313064	GR46S GLAZING WEDGE (WHITE) (4mm GAP) S/PRENE x 200m ROLL
	7mm	PVC	1313056	GR47 GLAZING WEDGE (WHITE) (4mm GAP) PVC x 200m ROLL
		S/PRENE	1313064	GR447S GLAZING WEDGE (WHITE) (4mm GAP) S/PRENE x 200m ROLL
	8mm	PVC	1313060	GR48 GLAZING WEDGE (ORANGE) (8mm GAP) PVC x 150m ROLL
		S/PRENE	1313067	GR48S GLAZING WEDGE (ORANGE) (8mm GAP) S/PRENE x 150m ROLL
	9mm	PVC	1313076	GR50 GLAZING WEDGE (GREEN) (9mm GAP) PVC x 100m ROLL

Backing Gaskets

IMAGE	TO SUIT GAP	MATERIAL	PART #	DESCRIPTION
	2mm	PVC	1313052	GR36 BACKING GASKET - PUSH IN (2mm GAP) PVC x 200m ROLL
		S/PRENE	1313053	GR36S BACKING GASKET - PUSH IN (2mm GAP) SANTOPRENE x 200m ROLL
	2mm	PVC	1313079	CE36 CO-EXTRUDED BACKING GASKET (2mm GAP) PVC x 100m ROLL
		S/PRENE	1313080	CE36S CO-EXTRUDED BACKING GASKET (2mm GAP) SANTOPRENE x 100m ROLL
	4mm	PVC	1313054	GR37 BACKING GASKET - PUSH IN (4mm GAP) PVC x 175m ROLL
		S/PRENE	1313069	GR37S BACKING GASKET - PUSH IN (4mm GAP) SANTOPRENE x 175m ROLL
	4mm	PVC	1313081	CE37 CO-EXTRUDED BACKING GASKET (4mm GAP) PVC x 100m ROLL
		S/PRENE	1313082	CE37S CO-EXTRUDED BACKING GASKET (4mm GAP) SANTOPRENE x 100m ROLL
	6mm	PVC	1313074	GR49 BACKING GASKET - PUSH IN (6mm GAP) PVC x 100m ROLL
		S/PRENE	1313075	GR49S BACKING GASKET - PUSH IN (6mm GAP) SANTOPRENE x 100m ROLL
	6mm	PVC	1313083	CE49 CO-EXTRUDED BACKING GASKET (6mm GAP) PVC x 100m ROLL
		S/PRENE	1313084	CE49S CO-EXTRUDED BACKING GASKET (6mm GAP) SANTOPRENE x 100m ROLL

Seals

IMAGE	PART #	DESCRIPTION	FINISH/MATERIAL
	1376742	CE57 CO-EXTRUDED LOUVRE WEATHER SEAL x 250m ROLL	BLACK (034) SANTOPRENE
	1376757	CE57 CO-EXTRUDED LOUVRE WEATHER SEAL x 1m	BLACK (034) SANTOPRENE
	1376449	MS6 MULLION SEAL PVC x 200m	BLACK (034) PVC

Frame Joint Gaskets

PART #	DESCRIPTION	FINISH
1385552	FJG003 45mm x 150mm 1010 PER ROLL	BLACK (034)
		GREY (036)
1385556	FJG006 50mm x 150mm 910 PER ROLL	BLACK (034)
		GREY (036)

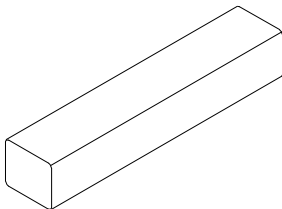
Fasteners

SCREWS			
PART #	HEAD	DESCRIPTION	LOCATION
1382644	SQUARE #2	10g x 1" (25mm) 304SS SQ #2 PAN S/TAP SCREW x 1000	FRAMING
1382054	PHILLIPS #2	10g x 1" (25mm) SS PHILLIPS PAN S/TAP SCREW x 500	
1382659	SQUARE #2	10g x 2" (51mm) 304SS SQ #2 CSK S/TAP SCREW x 1000	MULLIONS
1382021	PHILLIPS #2	10g x 2" (25mm) SS PHILLIPS CSK S/TAP SCREW x 200	
1382579	SQUARE #2	DRIVER BIT SQUARE #2 100mm x 1	FRAMING
1391421	PHILLIPS #2	DRIVER BIT PHILLIPS #2 90mm x 1	

DRILL BITS		
PART #	DESCRIPTION	FINISH
1391300	DRILL JOBBER 4mm x 10	MILL (001)
1390305	DRILL JOBBER 5mm x 10	MILL (001)
1391317	DRILL JOBBER 8mm x 5	MILL (001)
1391299	DRILL JOBBER 10mm x 5	MILL (001)

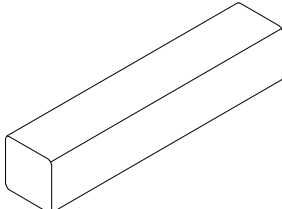
6. Hardware & Components

Accessories



(McArthur Evo Framing)

SETTING BLOCK 13mm x 15mm x 75mm LONG	
PART	1376730
FINISH	GREY (036)
QTY	50 PER BAG



(Hunter Evo Acoustic Framing)

SETTING BLOCK 15mm x 15mm x 75mm LONG	
PART	1376735
FINISH	BLACK (034)
QTY	50 PER BAG



POWERLOUVRE APPTIVATE CONTROL - SINGLE CHANNEL	
PART	1643112
FINISH	NOT SPECIFIED (099)
QTY	EACH (Operates up to 6 motors)



POWERLOUVRE APPTIVATE CONTROL - DUAL CHANNEL	
PART	1643113
FINISH	NOT SPECIFIED (099)
QTY	EACH (Operates up to 12 motors)



POWERLOUVRE 2 AMP TRANSFORMER	
PART	1643114
FINISH	NOT SPECIFIED (099)
QTY	EACH



ALTAIR® MAP ROD	
PART	1643110
FINISH	MILL (001)
QTY	LENGTH



TELESCOPIC MAP ROD 1.86m to 3.46m	
PART	1636239
FINISH	10UM CLR ANOD (002)
QTY	EACH

6. Hardware & Components

Dualair Components Order Form

Please tick your options tabled below.

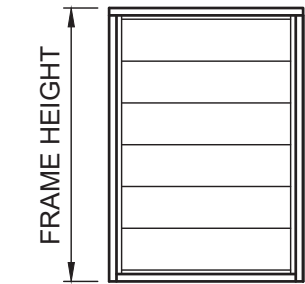
FRAME TYPE (Refer pages 6.6)	
McArthur Evo 150mm	
Hunter Evo 150mm Acoustic	
GALLERY SET (Refer page 6.7)	
Powerlouvre - Louvre	
Powerlouvre - Keylock	
Powerlouvre - Powerlouvre	
No. BLADES (Refer pages 6.6)	
Dualair 2 Blade System	
Dualair 3 Blade System	
Dualair 4 Blade System	
Dualair 5 Blade System	
Dualair 6 Blade System	
Dualair 7 Blade System	
Dualair 8 Blade System	
Dualair 9 Blade System	
Dualair 10 Blade System	
Dualair 11 Blade System	
Dualair 12 Blade System	
Dualair 13 Blade System	
Dualair 14 Blade System	
Dualair 15 Blade System	
Dualair 16 Blade System	
Dualair 17 Blade System	
Dualair 18 Blade System	
HANDLE TYPE (Refer page 6.8)	
Standard Handle	
Low Profile Handle	
Ring Pull (P13)	
Handle Not Applicable	
COLOUR MATCH - CLIP & HANDLE	
No Colour Match (refer available colours below)	
Anodic Bronze	
Arctic White	
Black	
Bone White	
Bronco	
Canvas Cloth	
Charcoal Metallic	
Dark Grey	
Desert Sand	

French Grey	
Hammersley brown	
Karaka	
Lichen	
Magnolia	
Mid Bronze	
Mist Green	
Mist grey	
Mountain Blue	
Natural Grey	
New Ironsand	
Notredame	
NZ Almond	
Off White	
Permanent Green	
Pottery	
Precious Silver Pearl	
Primrose	
Ragoon Green	
Red Cedar	
Rivergum Beige	
Sandstone Grey	
Scoria	
Silver Pearl	
Slate Blue	
Slate Grey	
Stone Beige	
Titania	
White	
White Birch	
Wizard	
Colour Match (If applicable)	
Other Colour Match	
CLIP DESIGN	
Altair MK2 Clip	
Stronghold Clip	
HANDLE SIDE - INNER	
Left hand	
Right Hand	
No Handle	

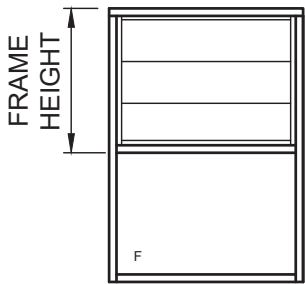
BLADE TYPE - INNER	
Glass Blade Toughened	
Glass Blade Heat Soaked	
Aluminium Blade	
Aluminium Blade Decowood	
Unglazed	
GLAZING COLOUR - INNER	
Bronze Glass	
Clear glass	
Dark Grey glass	
Green Glass	
Grey Glass	
Neutral Glass	
Western Red Cedar	
White Glass	
BLADE TYPE - OUTER	
Glass Blade Toughened	
Glass Blade Heat Soaked	
Aluminium Blade	
Aluminium Blade Decowood	
Unglazed	
GLAZING COLOUR - OUTER	
Bronze Glass	
Clear glass	
Dark Grey glass	
Green Glass	
Grey Glass	
Neutral Glass	
Western Red Cedar	
White Glass	

6. Hardware & Components

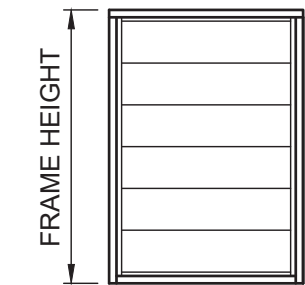
Dualair Components - Frame Type and Gallery Set Heights



McARTHUR EVO 150mm FULL HEIGHT FRAME	
HEAD	AS74
SILL	ME61
JAMB	ME61
MULLIONS	ME61/ME64 or ME66 (x2) or ME67/ME68 or ME69/ ME70



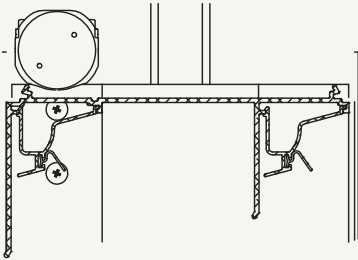
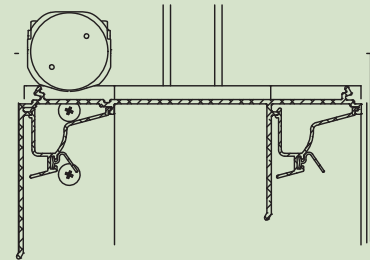
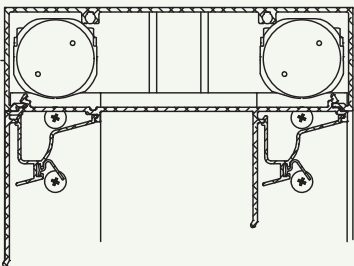
McARTHUR EVO 150mm GALLERY + LOWLITE	
HEAD	AS74
SILL	ME61
JAMB	ME61
MULLIONS	ME61/ME64 or ME66 (x2) or ME67/ME68 or ME69/ ME70



HUNTER EVO 150mm ACOUSTIC FULL HEIGHT FRAME	
HEAD	AS74
SILL	ME61
JAMB	HE951
MULLIONS	HE952 / HE953

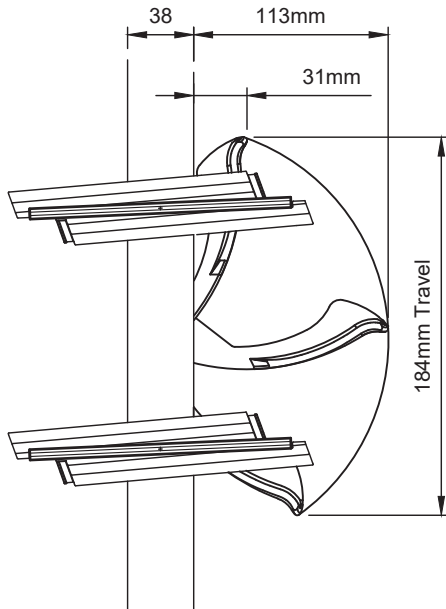
DESCRIPTION	FRAME HEIGHT (mm)	DAYLIGHT (mm)	ALSPEC CODE
DUALAIR 2 BLADE SYSTEM	418	328	1643002
DUALAIR 3 BLADE SYSTEM	558	468	1643003
DUALAIR 4 BLADE SYSTEM	698	608	1643004
DUALAIR 5 BLADE SYSTEM	838	748	1643005
DUALAIR 6 BLADE SYSTEM	978	888	1643006
DUALAIR 7 BLADE SYSTEM	1118	1028	1643007
DUALAIR 8 BLADE SYSTEM	1258	1168	1643008
DUALAIR 9 BLADE SYSTEM	1398	1308	1643009
DUALAIR 10 BLADE SYSTEM	1538	1448	1643010
DUALAIR 11 BLADE SYSTEM	1678	1588	1643011
DUALAIR 12 BLADE SYSTEM	1818	1728	1643012
DUALAIR 13 BLADE SYSTEM	1958	1868	1643013
DUALAIR 14 BLADE SYSTEM	2098	2008	1643014
DUALAIR 15 BLADE SYSTEM	2238	2148	1643015
DUALAIR 16 BLADE SYSTEM	2378	2288	1643016
DUALAIR 17 BLADE SYSTEM	2518	2428	1643017
DUALAIR 18 BLADE SYSTEM	2658	2568	1643018

Dualair Components - Gallery Set Options

GALLERY SET OPTIONS	
	POWERLOUVRE / LOUVRE
	POWERLOUVRE / KEY LOUVRE
	POWERLOUVRE / POWERLOUVRE

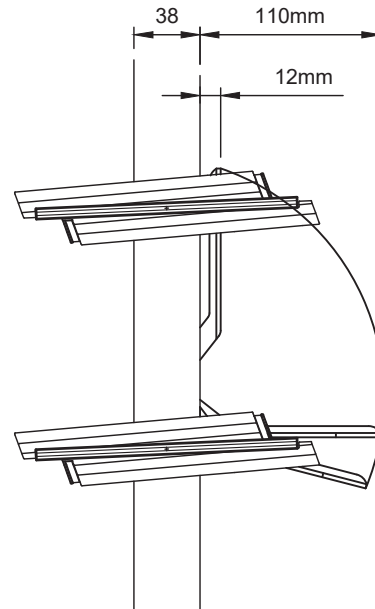
6. Hardware & Components

Dualair Components - Handle Types



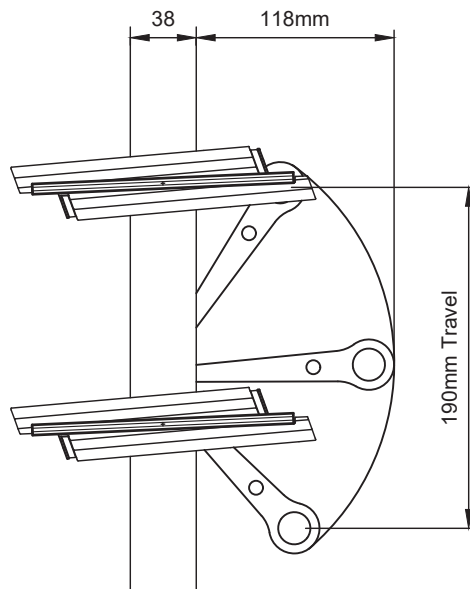
STANDARD HANDLE

- Acetal Handle
- Ergonomic design for comfortable use



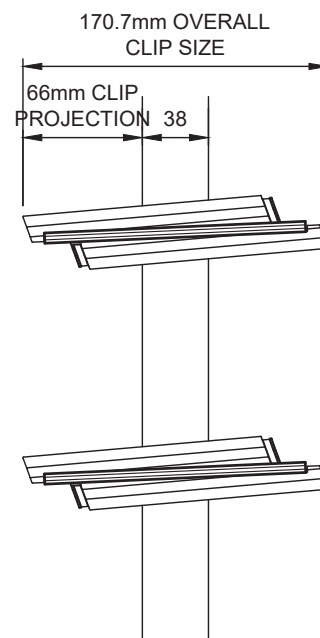
LOW PROFILE HANDLE

- Stainless steel handle
- Substitute for Standard Handle when inserting into bi-folding and sliding door panels



RING HANDLE (P13)

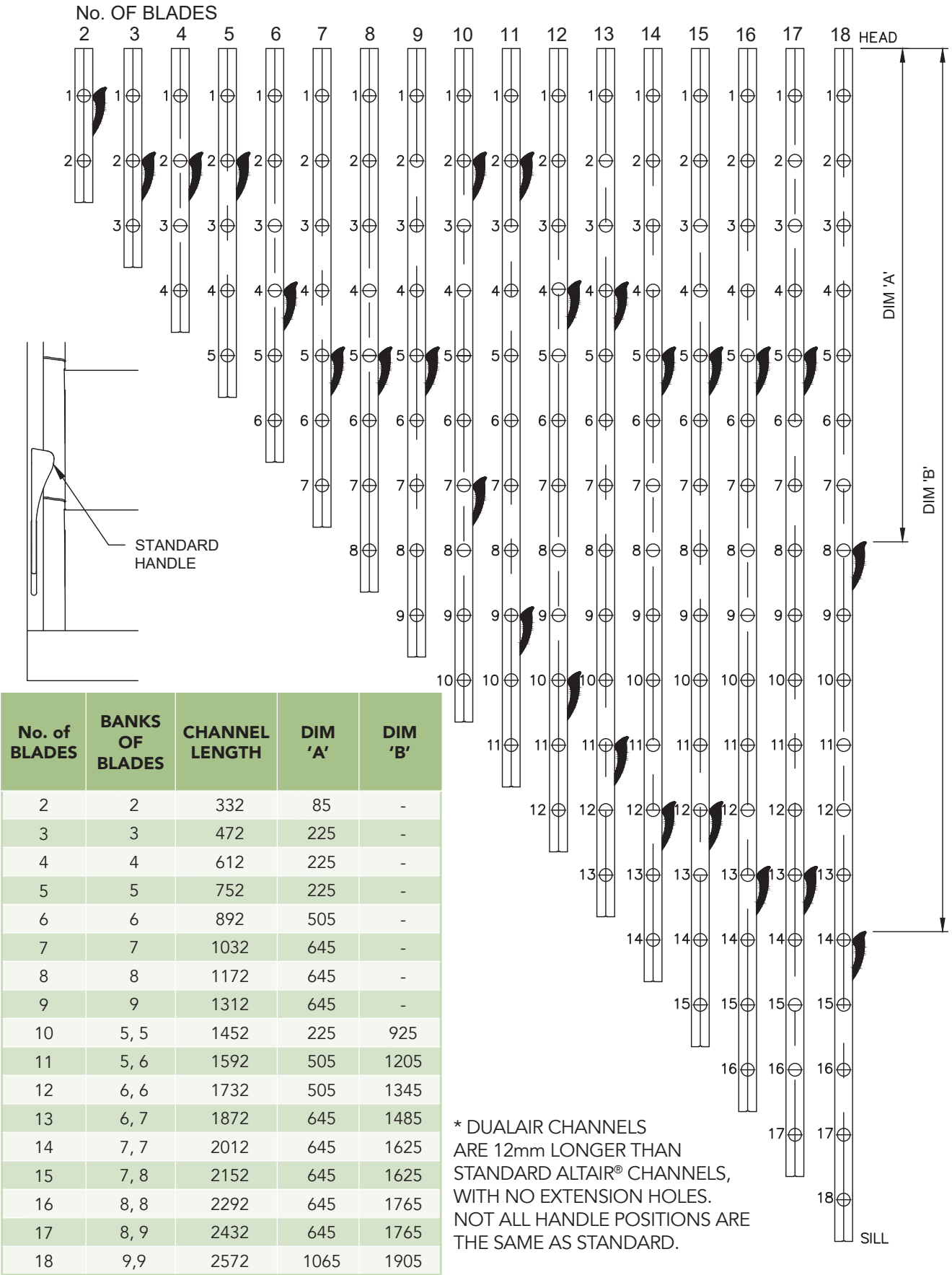
- Acetal handle for manual operation with Breezway Map Rod when installed out of reach
- Use Map Rod to operate when installed out of arm's reach



POWERLOUVRE GALLERY

- Concealed motors and connectors for use with Remote Window Control Systems (Keylock not available)

Dualair Components - Handle Locations



Silicone

**100% NEUTRAL CURE SILICONE**

- Premium 100% silicone
- UV Stable
- Superior adhesion
- Flexible + 25%
- AS4020 Approved

**100% MATTE NEUTRAL CURE SILICONE**

- Premium 100% silicone
- Matte finish
- UV Stable
- Outstanding elongation
- Higher strength

**41 CLADDING SILICONE**

- Premium 100% silicone
- UV Stable
- Superior adhesion
- Movement capability + 50%

**WET AREA SILICONE**

- Premium 100% silicone
- Mould inhibited
- Movement capability + 25%
- UV Stable
- Non corrosive
- Superior adhesion

**HYBRID PU ADHESIVE SEALANT**

- No isocyanates
- Internal/External
- No shrinking/staining
- Paintable
- Excellent adhesion

**20 ACETIC CURE SILICONE**

- Premium 100% silicone
- UV Stable
- Superior adhesion
- Flexible + 25%

**D60 SILICONE**

- Premium 100% silicone
- UV Stable
- 2-5 minute skin time
- Flexible + 25%
- No slump

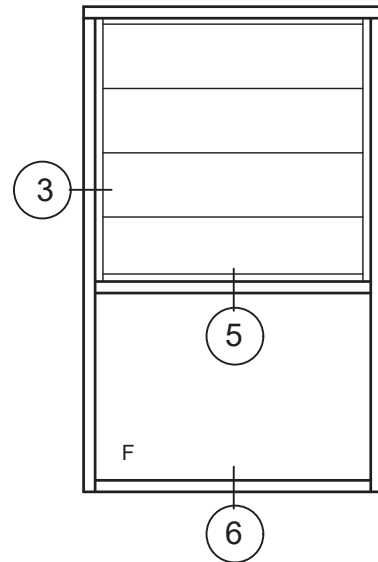
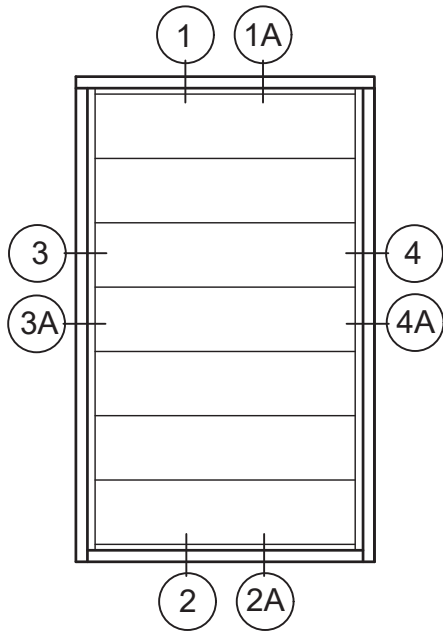
*For more information on silicones,
please refer to Alspec Silicone Brochure.

Silicone Product Codes

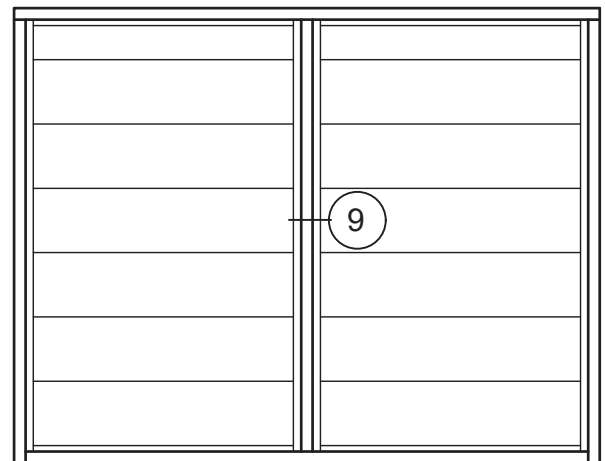
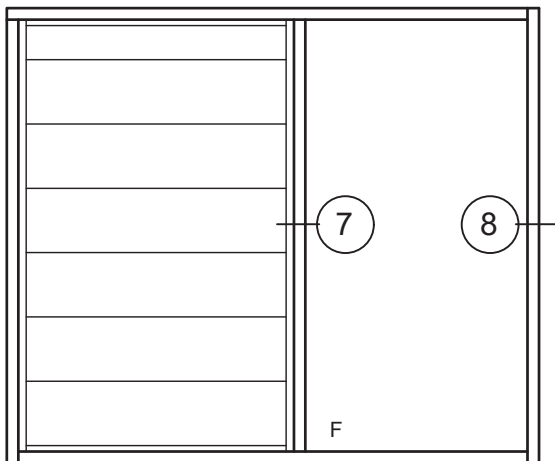
Product Category	Item No.	Alspec Part No. Code	Description	Finish	Pack
ALSPEC 100%	1	1386113	ALSPEC 100% NEUTRAL CURE SILICONE x 310g CAT	ALMOND IVORY	CARTRIDGE
	2	1386114	ALSPEC 100% NEUTRAL CURE SILICONE x 310g CAT	ALUMINIUM	CARTRIDGE
	3	1386105	ALSPEC 100% NEUTRAL CURE SILICONE x 310g CAT	BLACK	CARTRIDGE
	4	1386140	ALSPEC 100% NEUTRAL CURE SILICONE x 310g CAT	CAULFIELD GREEN	CARTRIDGE
	5	1386111	ALSPEC 100% NEUTRAL CURE SILICONE x 310g CAT	CLASSIC CREAM	CARTRIDGE
	6	1386108	ALSPEC 100% NEUTRAL CURE SILICONE x 310g CAT	GREY	CARTRIDGE
	7	1386138	ALSPEC 100% NEUTRAL CURE SILICONE x 310g CAT	MONUMENT	CARTRIDGE
	8	1386112	ALSPEC 100% NEUTRAL CURE SILICONE x 310g CAT	OFF WHITE	CARTRIDGE
	9	1386141	ALSPEC 100% NEUTRAL CURE SILICONE x 310g CAT	STONE BEIGE	CARTRIDGE
	10	1386101	ALSPEC 100% NEUTRAL CURE SILICONE x 310g CAT	TRANSLUCENT	CARTRIDGE
	11	1386106	ALSPEC 100% NEUTRAL CURE SILICONE x 310g CAT	WHITE	CARTRIDGE
	12	1386143	ALSPEC 100% NEUTRAL CURE SILICONE x 310g CAT	WOODLAND GREY	CARTRIDGE
ALSPEC 100% MATT	13	1386103	ALSPEC 100% NEUTRAL CURE SILICONE x 420g CAT	BLACK MATT	CARTRIDGE
	14	1386107	ALSPEC 100% NEUTRAL CURE SILICONE x 420g CAT	GREY MATT	CARTRIDGE
	15	1386144	ALSPEC 100% NEUTRAL CURE SILICONE x 420g CAT	WHITE MATT	CARTRIDGE
ALSPEC 20	16	1386115	ALSPEC 20 SILICONE x 310g CAT	TRANSLUCENT	CARTRIDGE
ALSPEC 41 CLADDING	17	1386159	ALSPEC 41 SILICONE x 400g CAT	BLACK MATT	CARTRIDGE
	18	1386117	ALSPEC 41 SILICONE x 600ml SAU	BLACK MATT	SAUSAGE
	19	1386158	ALSPEC 41 SILICONE x 400g CAT	LIGHT GREY MATT	CARTRIDGE
	20	1386118	ALSPEC 41 SILICONE x 600ml SAU	LIGHT GREY MATT	SAUSAGE
	21	1386157	ALSPEC 41 SILICONE x 400g CAT	WHITE MATT	CARTRIDGE
	22	1386145	ALSPEC 41 SILICONE x 600ml SAU	WHITE MATT	SAUSAGE
ALSPEC D60	23	1386121	ALSPEC D60 SILICONE x 310g CAT	BLACK	CARTRIDGE
	25	1386123	ALSPEC D60 SILICONE x 310g CAT	GREY	CARTRIDGE
	26	1386120	ALSPEC D60 SILICONE x 310g CAT	TRANSLUCENT	CARTRIDGE
	27	1386124	ALSPEC D60 SILICONE x 310g CAT	WHITE	CARTRIDGE
ALSPEC HYBRID PU	28	1386127	ALSPEC HYBRID PU x 480g CAT	BLACK	CARTRIDGE
	29	1386126	ALSPEC HYBRID PU x 600ml SAU	BLACK	SAUSAGE
	30	1386160	ALSPEC HYBRID PU x 480g CAT	GREY	CARTRIDGE
	31	1386128	ALSPEC HYBRID PU x 600ml SAU	GREY	SAUSAGE
	32	1386130	ALSPEC HYBRID PU x 480g CAT	WHITE	CARTRIDGE
	33	1386129	ALSPEC HYBRID PU x 600ml SAU	WHITE	SAUSAGE
ALSPEC WET AREA	34	1386137	ALSPEC WET AREA SILICONE x 310g CAT	ALMOND IVORY	CARTRIDGE
	35	1386139	ALSPEC WET AREA SILICONE x 310g CAT	BLACK	CARTRIDGE
	36	1386146	ALSPEC WET AREA SILICONE x 310g CAT	BLUESTONE	CARTRIDGE
	37	1386147	ALSPEC WET AREA SILICONE x 310g CAT	CHARCOAL	CARTRIDGE
	38	1386136	ALSPEC WET AREA SILICONE x 310g CAT	LIGHT GREY	CARTRIDGE
	39	1386148	ALSPEC WET AREA SILICONE x 310g CAT	MID GREY	CARTRIDGE
	40	1386149	ALSPEC WET AREA SILICONE x 310g CAT	OFF WHITE	CARTRIDGE
	41	1386150	ALSPEC WET AREA SILICONE x 310g CAT	PEWTER	CARTRIDGE
	42	1386151	ALSPEC WET AREA SILICONE x 310g CAT	STONE BEIGE	CARTRIDGE
	43	1386154	ALSPEC WET AREA SILICONE x 310g CAT	TAUPE	CARTRIDGE
	44	1386152	ALSPEC WET AREA SILICONE x 310g CAT	TILE GREY	CARTRIDGE
	45	1386133	ALSPEC WET AREA SILICONE x 310g CAT	TRANSLUCENT	CARTRIDGE
	46	1386153	ALSPEC WET AREA SILICONE x 310g CAT	TRAVERTINE	CARTRIDGE
	47	1386134	ALSPEC WET AREA SILICONE x 310g CAT	WHITE	CARTRIDGE

7. Typical Elevation

McArthur Evo 150mm Framing

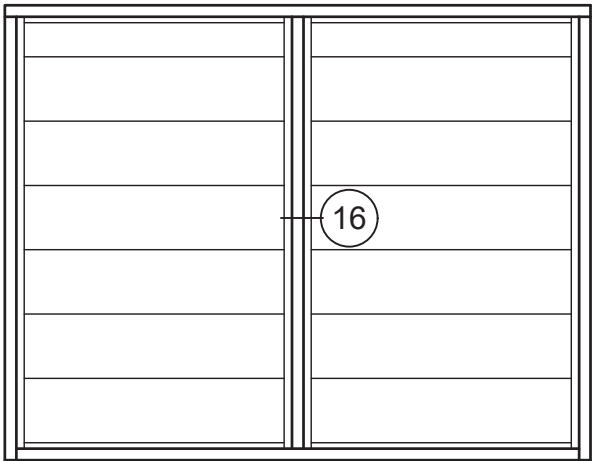
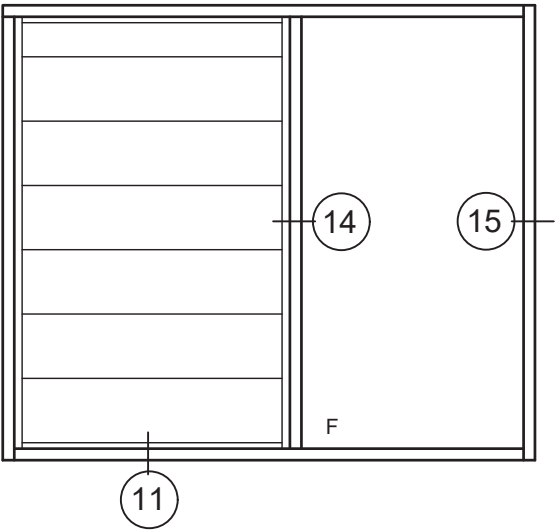
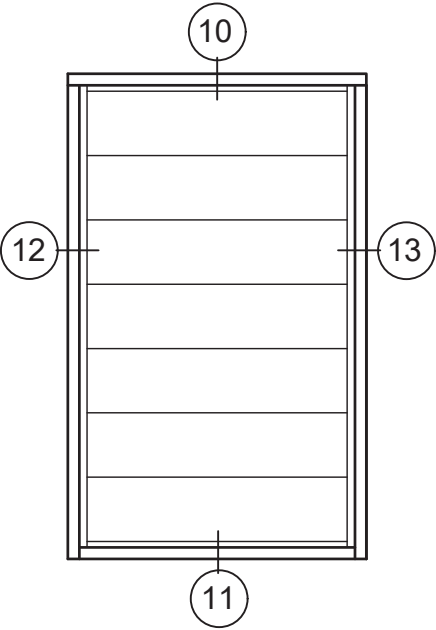


NOTE: DETAILS 1A, 2A, 3A AND 4A REFER TO POWER / POWER OPTION

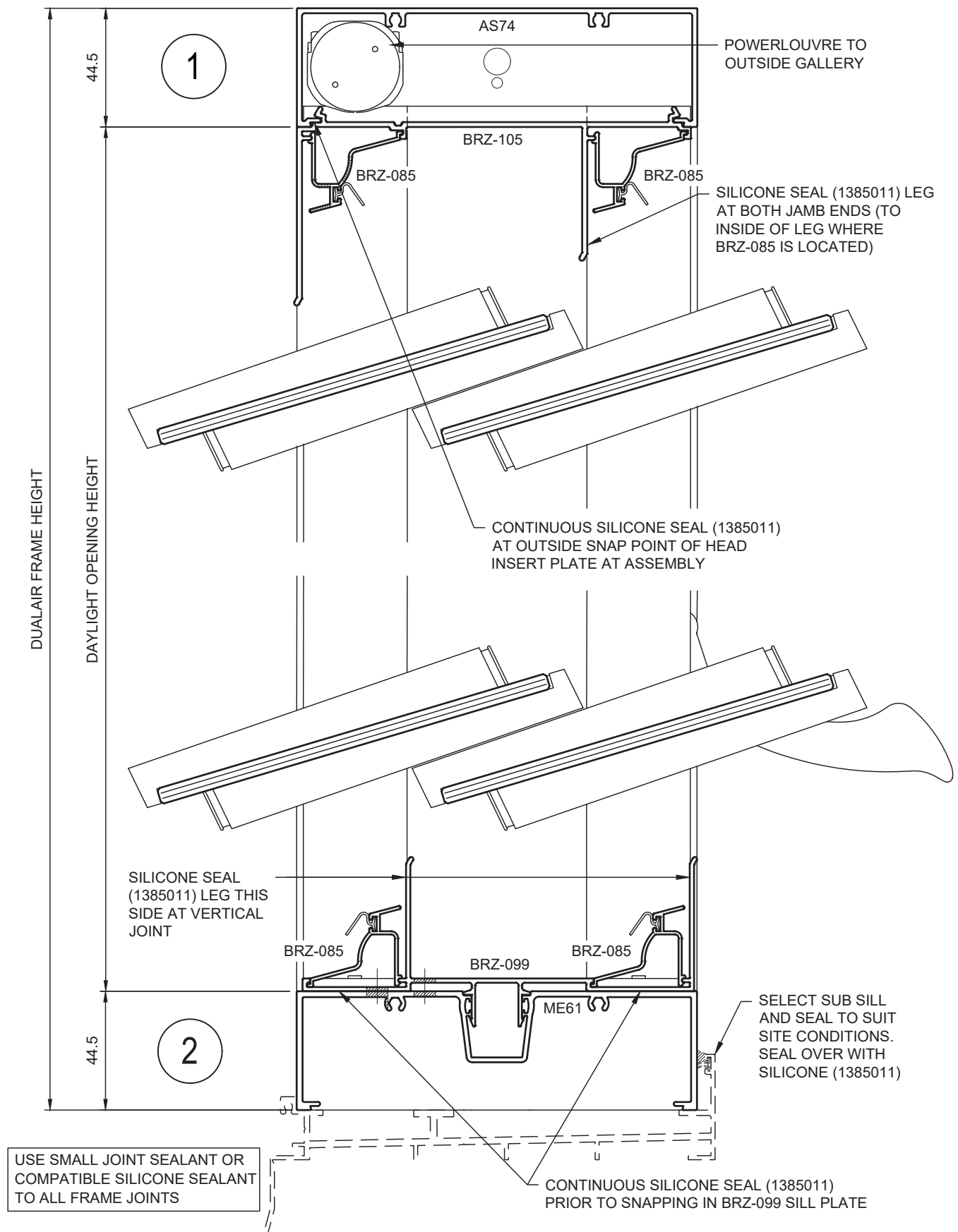


7. Typical Elevation

Hunter Evo 150mm Acoustic Framing

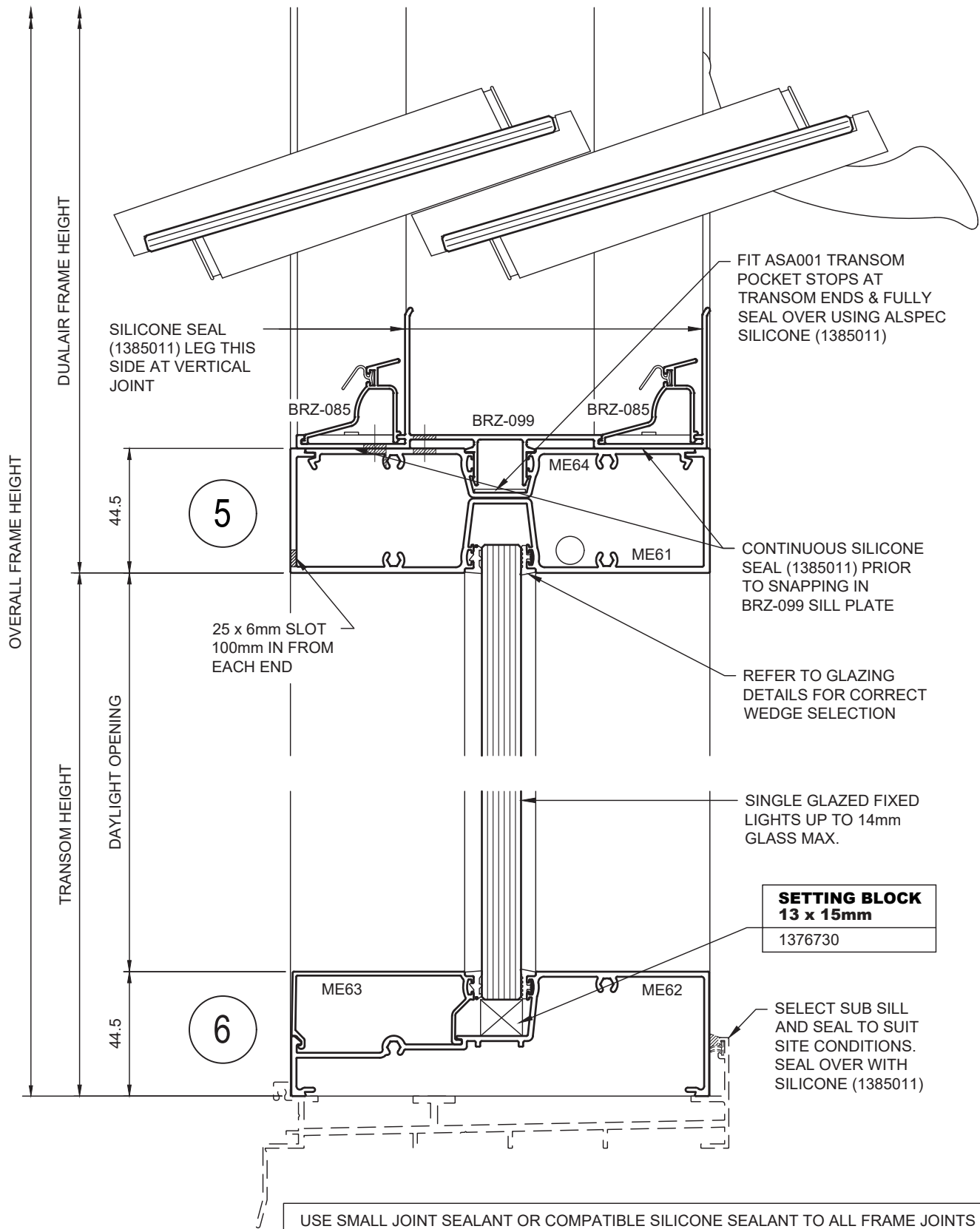


Typical Head and Sill Details - McArthur Evo Power / Manual



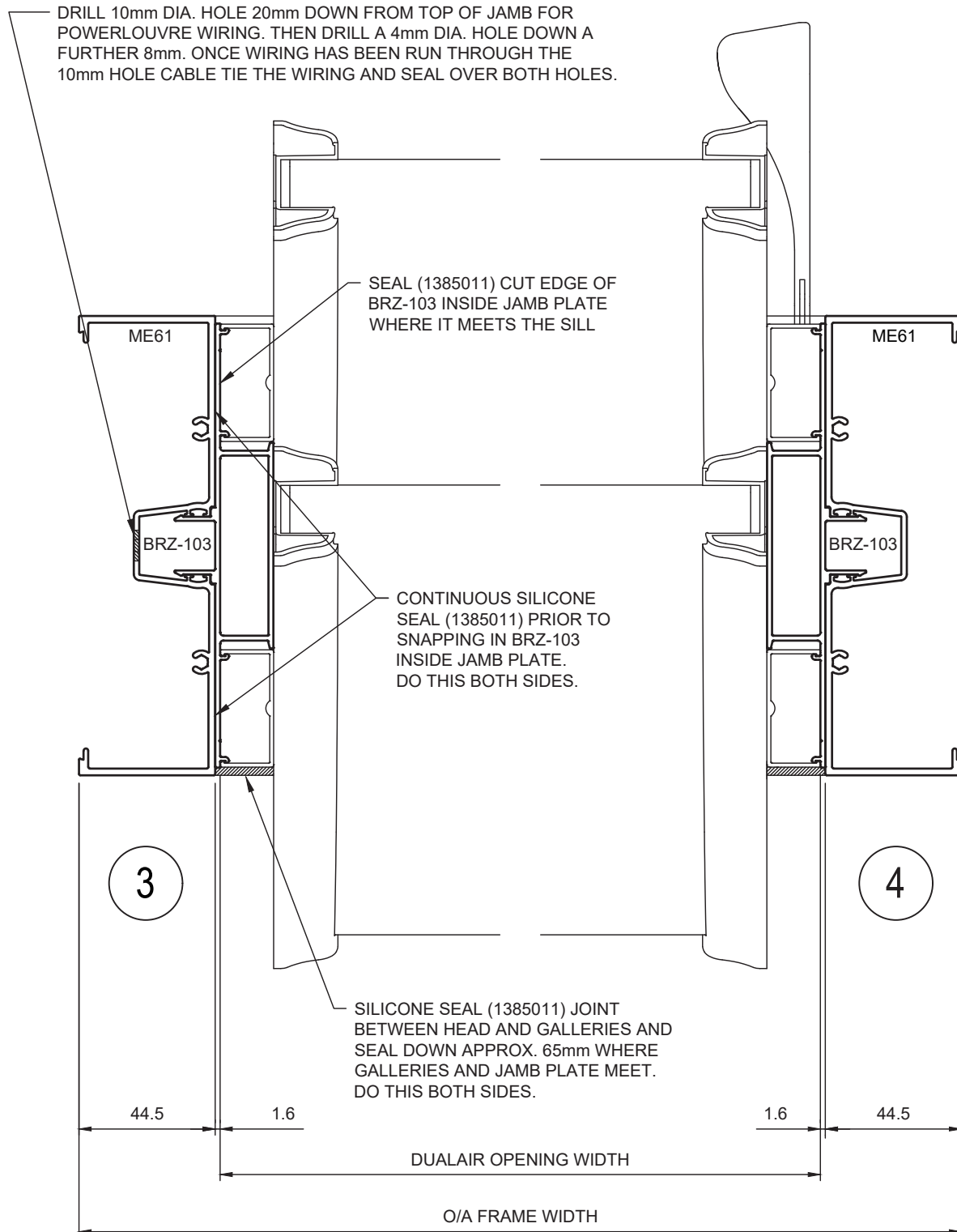
8. Typical Details

Typical Transom and Sill Details - McArthur Evo Power / Manual



8. Typical Details

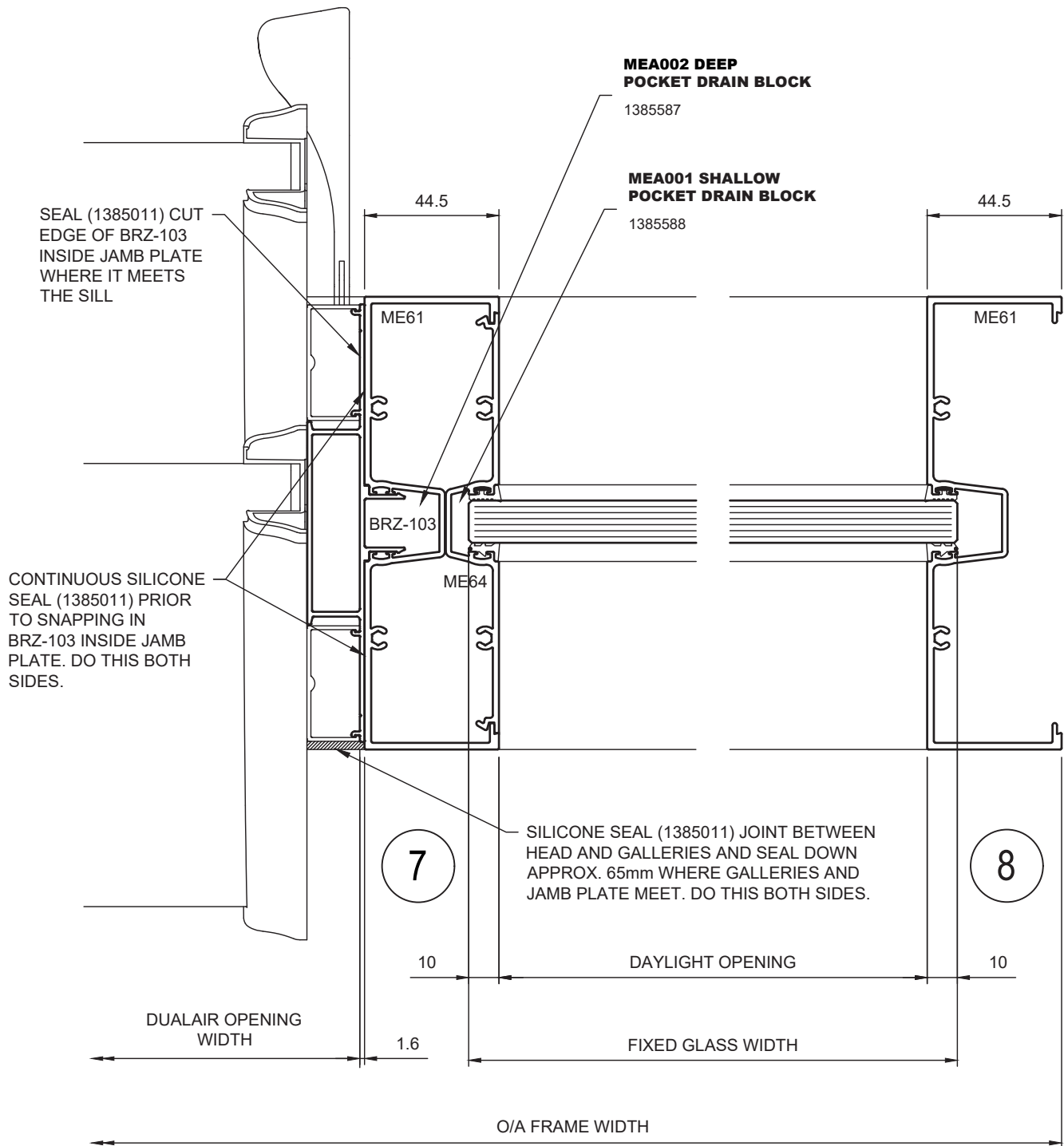
Typical Jamb Details - McArthur Evo Power / Manual



USE SMALL JOINT SEALANT OR COMPATIBLE SILICONE SEALANT TO ALL FRAME JOINTS

8. Typical Details

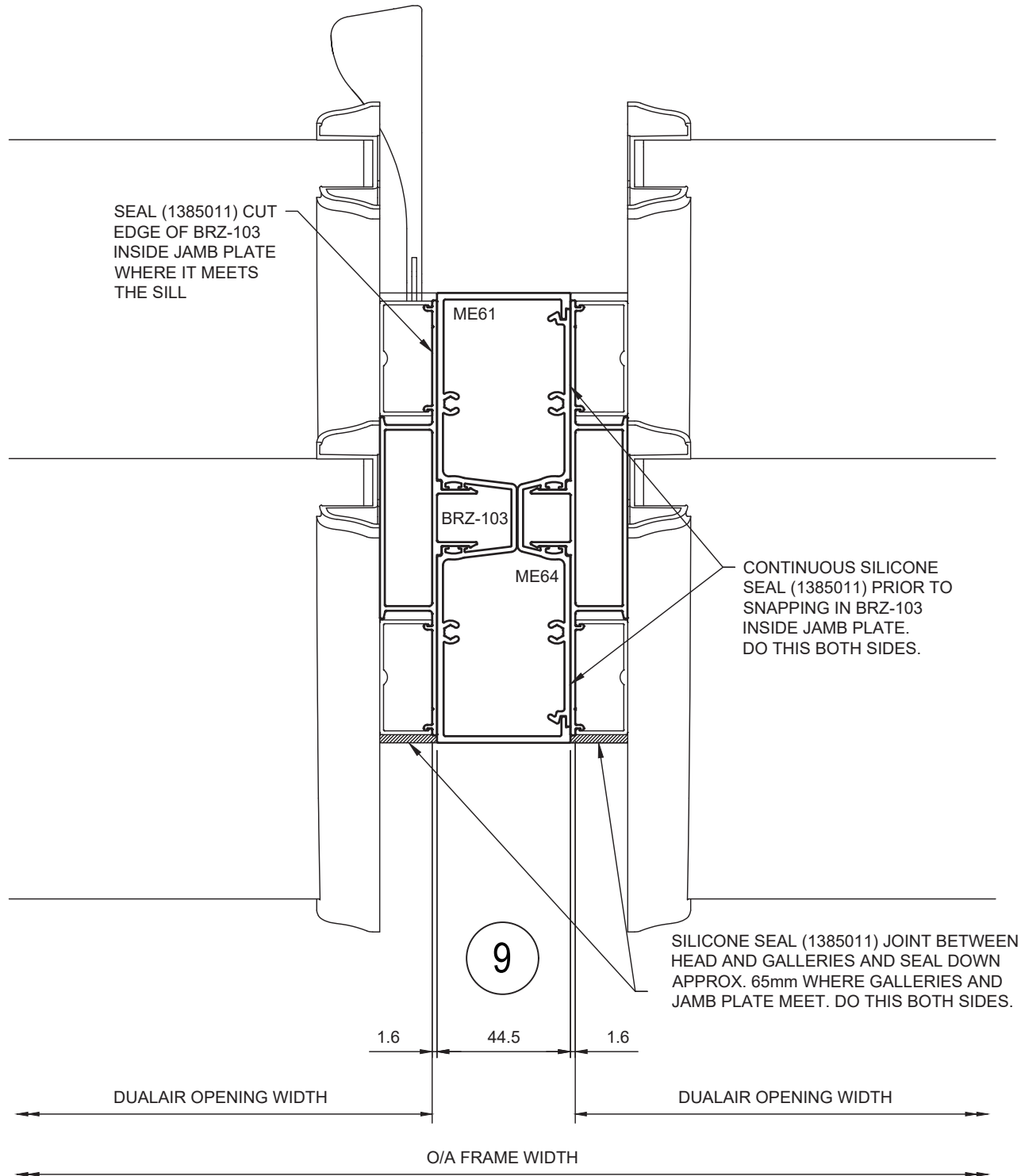
Typical Mullion and Fixed Jamb Details - McArthur Evo Power / Manual



USE SMALL JOINT SEALANT OR COMPATIBLE SILICONE SEALANT TO ALL FRAME JOINTS

8. Typical Details

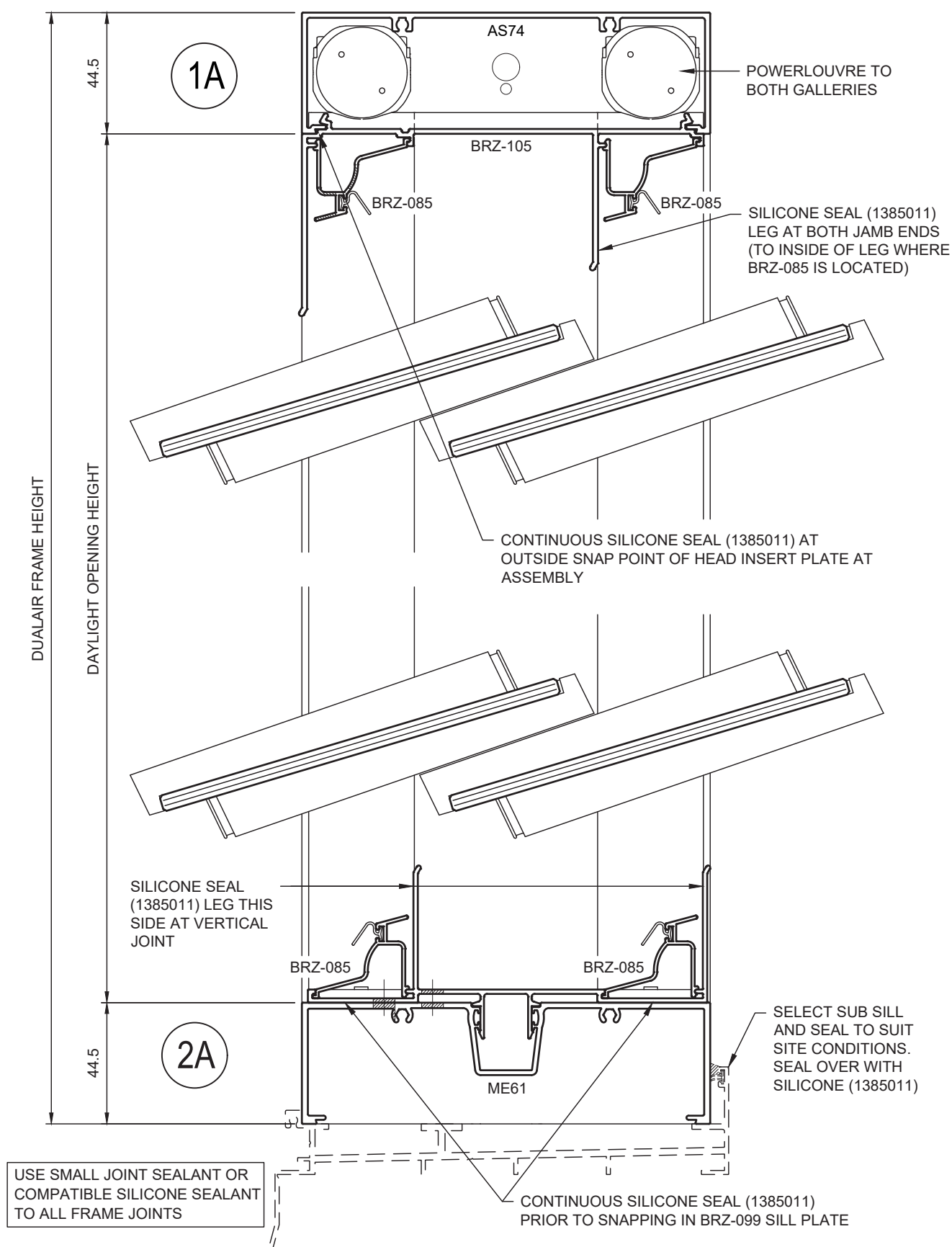
Typical Mullion Detail Louvre / Louvre - McArthur Evo Power / Manual



USE SMALL JOINT SEALANT OR COMPATIBLE SILICONE SEALANT TO ALL FRAME JOINTS

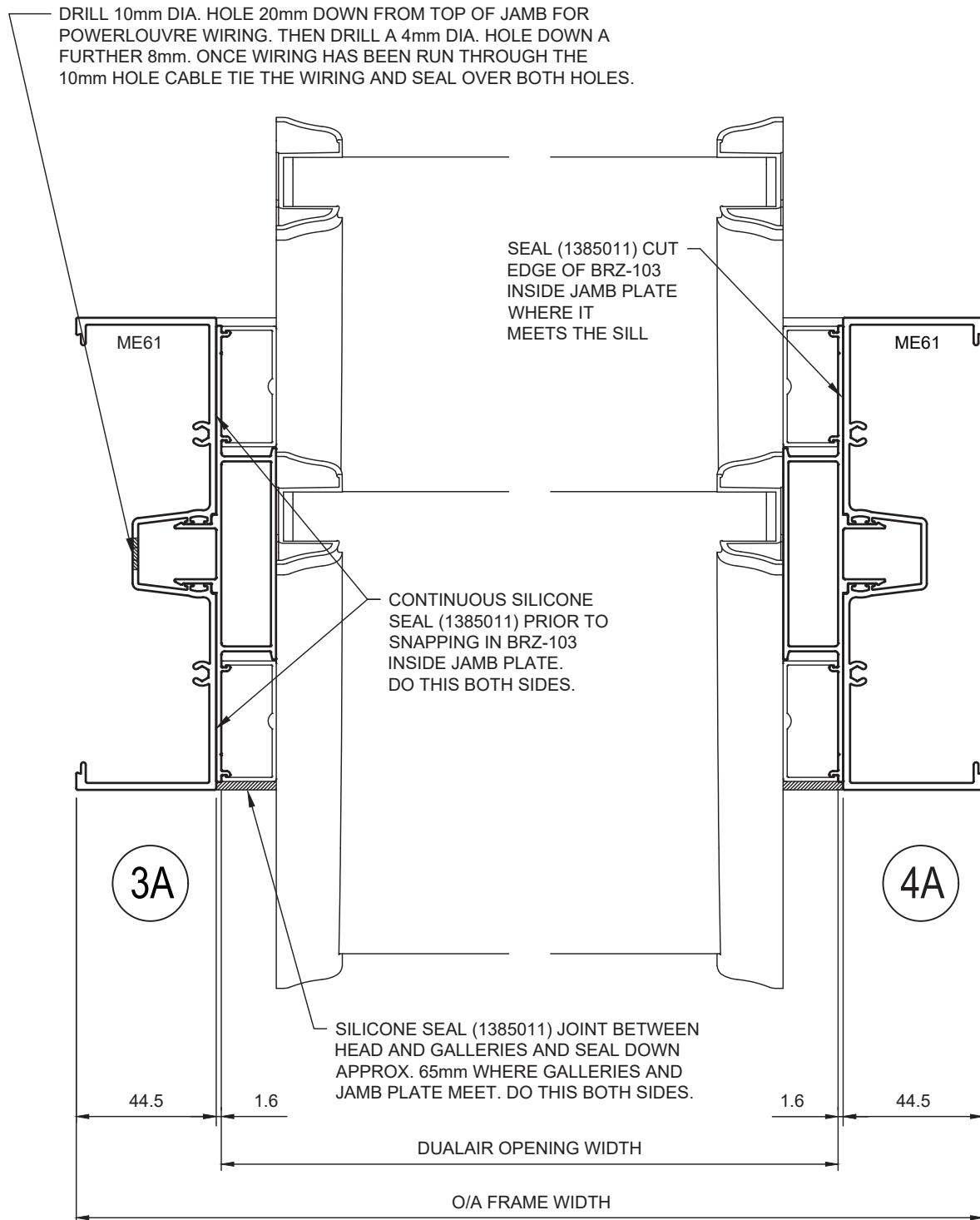
8. Typical Details

Typical Head and Sill Details - McArthur Evo Power / Power



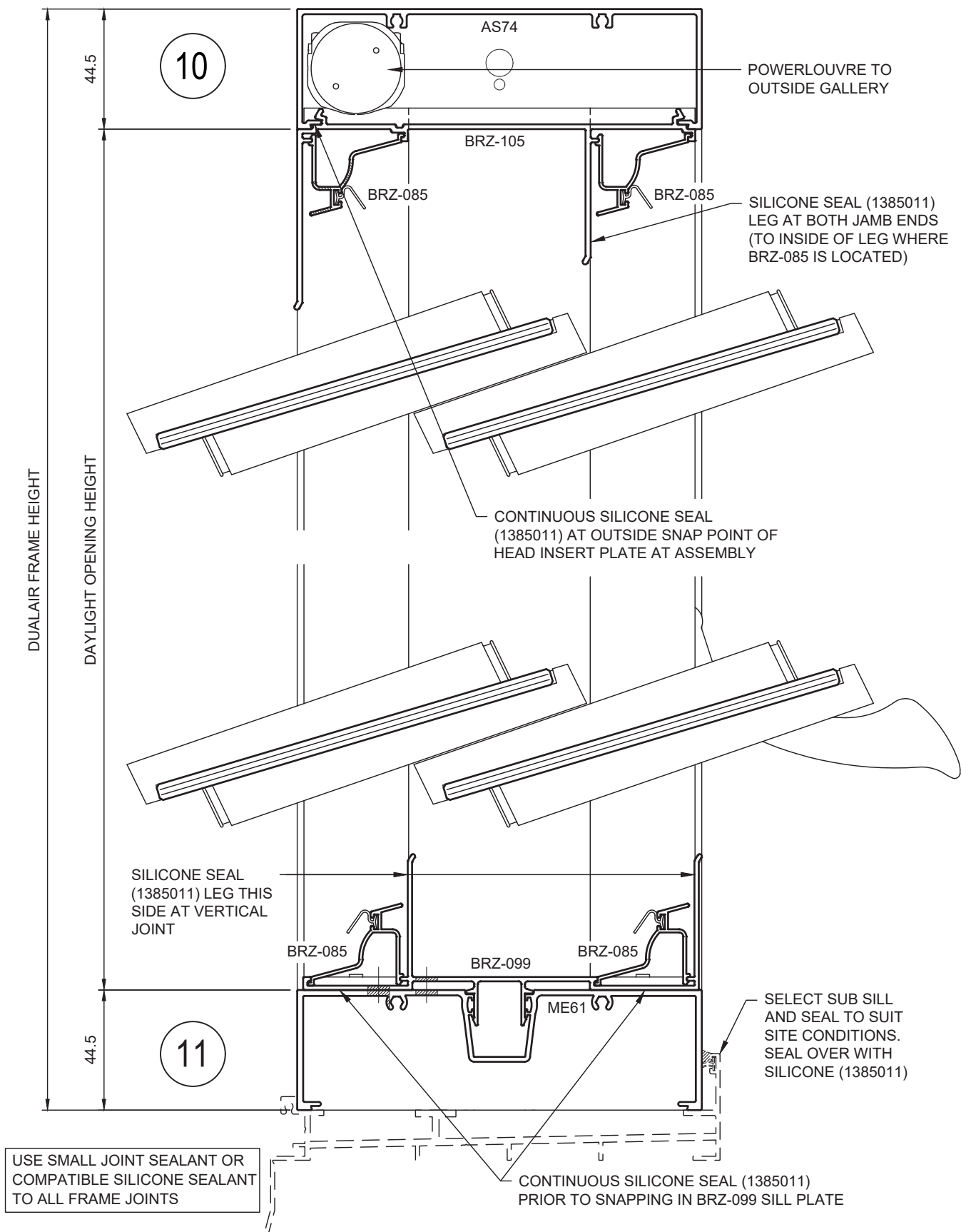
8. Typical Details

Typical Jamb Details - McArthur Evo Power / Power



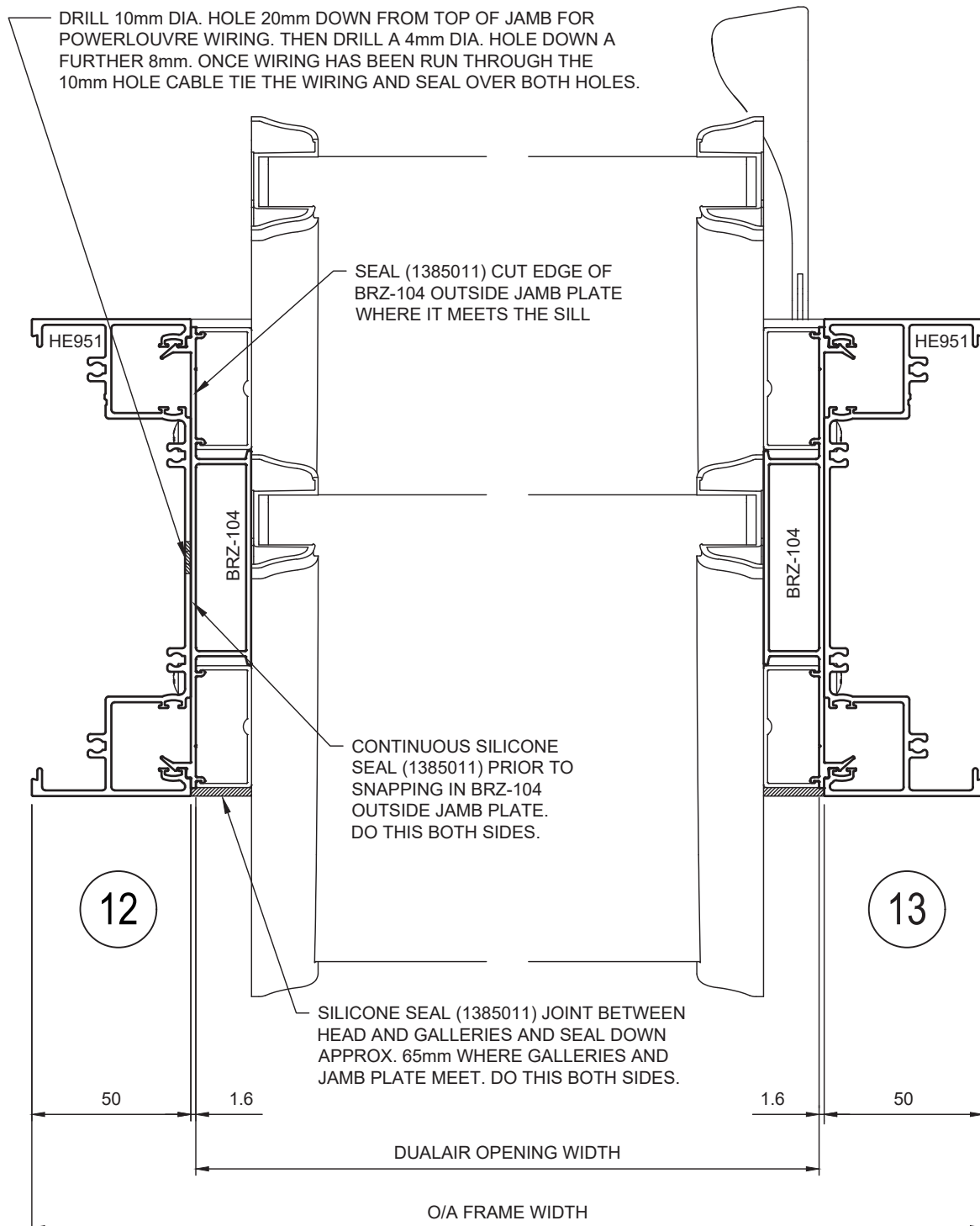
USE SMALL JOINT SEALANT OR COMPATIBLE SILICONE SEALANT TO ALL FRAME JOINTS

Typical Head and Sill Details - McArthur Evo Power / Manual



8. Typical Details

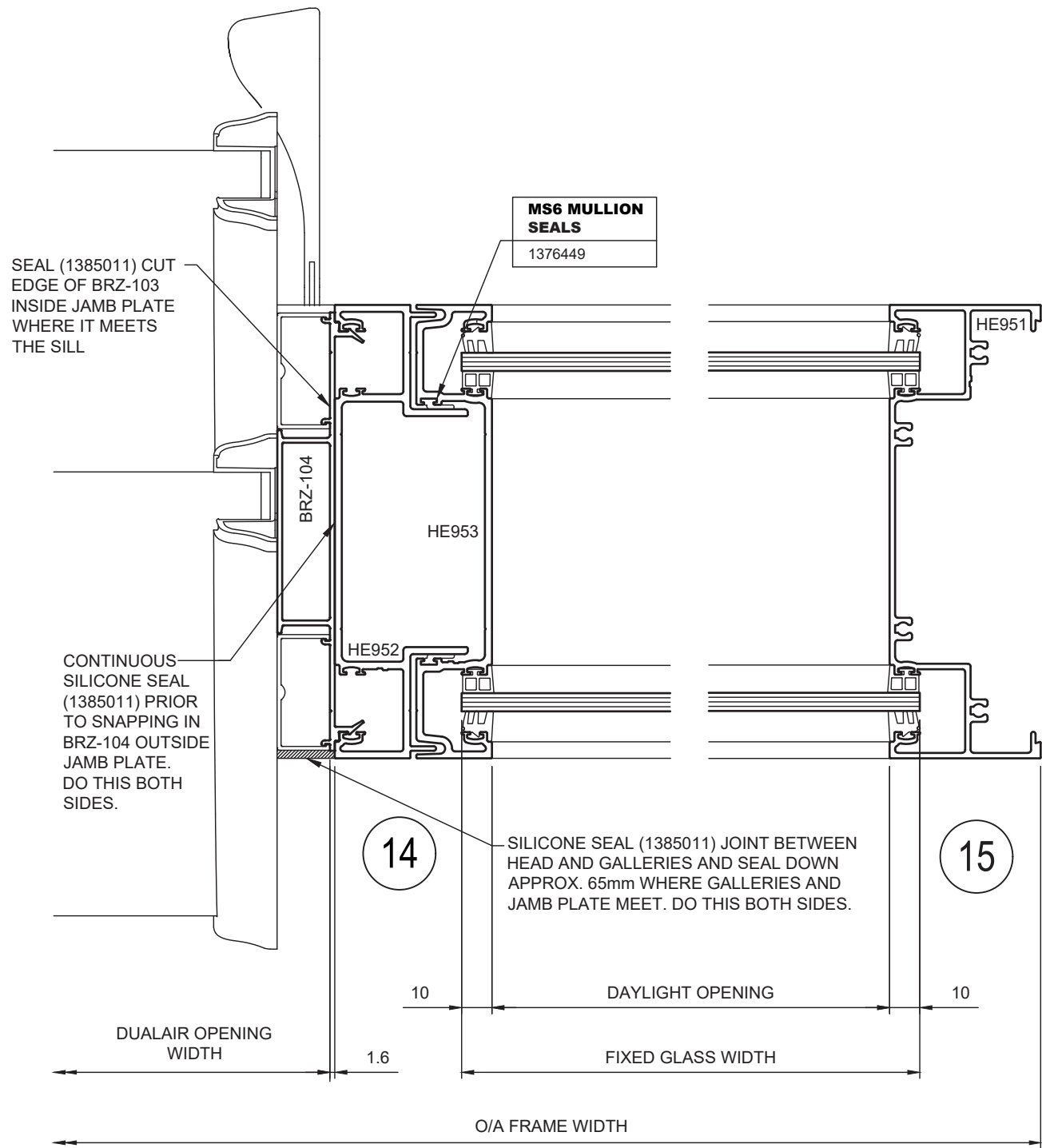
Typical Jamb Details - Hunter Evo Power / Manual



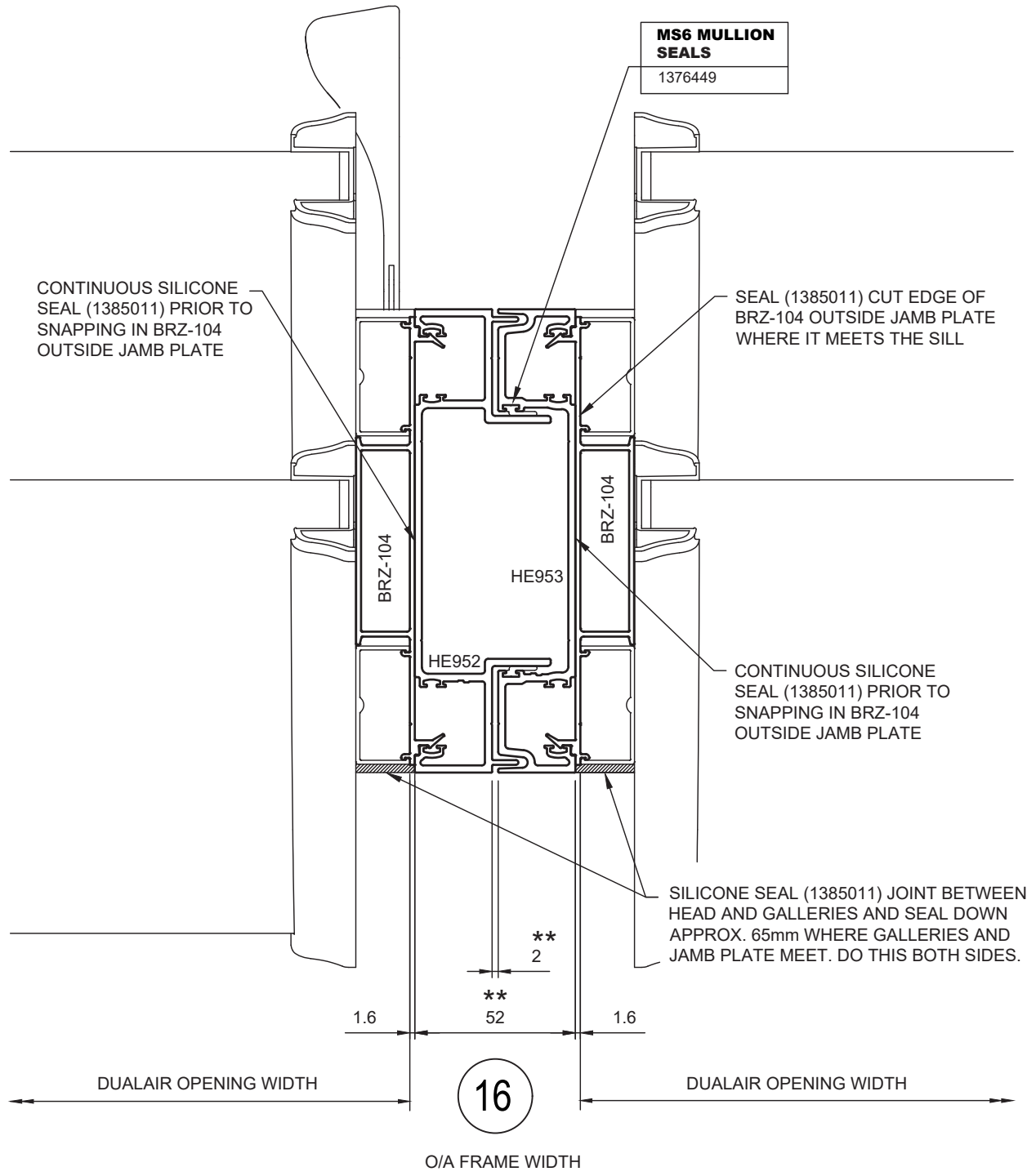
USE SMALL JOINT SEALANT OR COMPATIBLE SILICONE SEALANT TO ALL FRAME JOINTS

8. Typical Details

Typical Mullion and Fixed Jamb Details - Hunter Evo Power / Manual



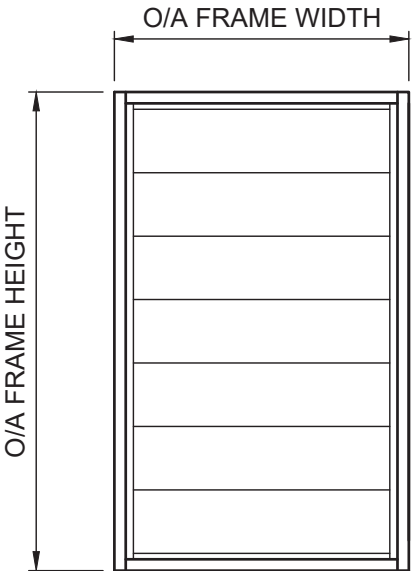
Typical Mullion Detail Louvre / Louvre - Hunter Evo Power / Manual

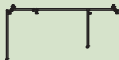


** NOMINAL DIMENSION ONLY
 MULLION EXPANSION GAP MAY VARY TO SUIT PROJECT REQUIREMENTS

USE SMALL JOINT SEALANT OR COMPATIBLE SILICONE SEALANT TO ALL FRAME JOINTS

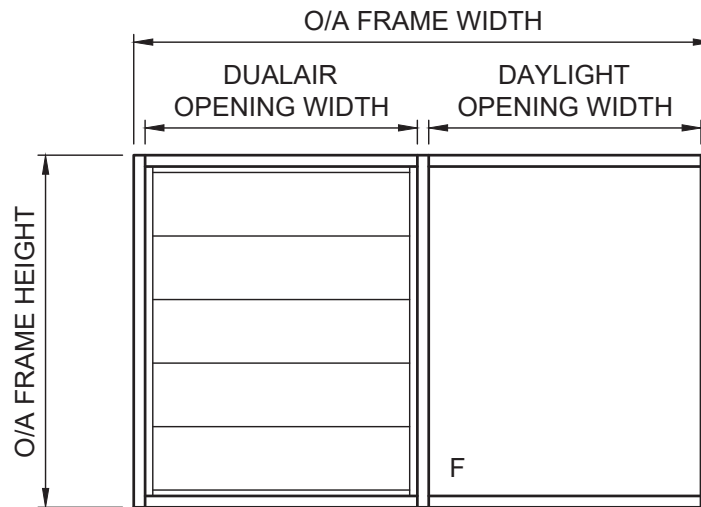
McArthur Evo Frame - Dualair Gallery

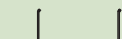
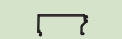


PROFILE	SECTION NO.	DESCRIPTION	CUTTING FORMULA	QTY
	AS74	Head	O/A Frame Width - 89mm	1
	ME61	Sill	O/A Frame Width - 89mm	1
	ME61	Jamb	O/A Frame Height	2
	BRZ-105	Head Insert Plate MK2	O/A Frame Width - 90mm	1
	BRZ-099	Sill Plate	O/A Frame Width - 90mm	1
	BRZ-103	Inside Jamb Plate	O/A Frame Height - 86mm	2
	BRZ-085	Weatherstrip Insert	O/A Frame Width - 129mm	4
Dualair Gallery			O/A Frame Height - 86mm	Pair
			O/A Frame Width - 92.2mm	
Glass	Glass Blade Width		O/A Frame Width - 145mm	Pg. 6.6
	Stronghold Glass Blade Width		O/A Frame Width - 141mm	

Note: Refer to page 6.6. for Gallery heights to determine glass louvre quantities.

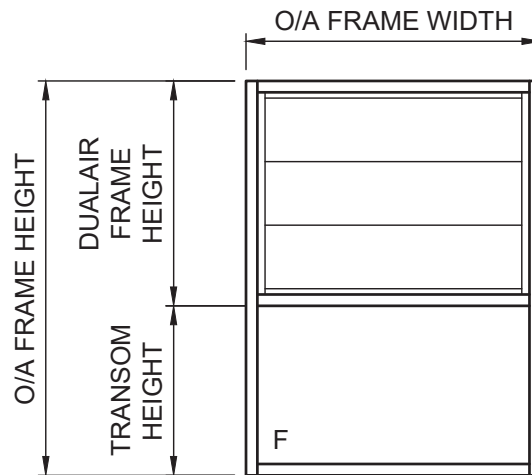
McArthur Evo Frame - Dualair Gallery with Fixed Side Lite

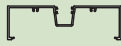
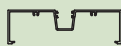
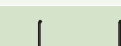


PROFILE	SECTION NO.	DESCRIPTION	CUTTING FORMULA	QTY
	AS74	Louvre Head	O/A Frame Width - Daylight Opening Width - 130.3mm	1
	ME61	Louvre Sill	O/A Frame Width - Daylight Opening Width - 130.3mm	1
	ME61	Jambs / Mullion	O/A Frame Height	3
	ME64	Mullion Glz Adaptor	O/A Frame Height	1
	BRZ-105	Head Insert Plate MK2	O/A Frame Width - Daylight Opening Width - 129.5mm	1
	BRZ-099	Sill Plate	O/A Frame Width - Daylight Opening Width - 129.5mm	1
	BRZ-103	Inside Jamb Plate	O/A Frame Height - 86mm	2
	BRZ-085	Weatherstrip Insert	O/A Frame Width - Daylight Opening Width - 169mm	4
	ME61	Fixed Lite Head	O/A Frame Width - Dualair Opening Width - 133.5mm	1
	ME63	Fixed Lite Sill Bead	O/A Frame Width - Dualair Opening Width - 133.5mm	1
	ME62	Fixed Lite Sill	O/A Frame Width - Dualair Opening Width - 133.5mm	1
Dualair Gallery			O/A Frame Height - 86mm	Pair
			O/A Frame Width - Daylight Opening Width - 133.5mm	
Glass	Glass Blade Width		O/A Frame Width - Daylight Opening Width - 185.5mm	Pg. 6.6
	Stronghold Glass Blade Width		O/A Frame Width - Daylight Opening Width - 181.5mm	
	Fixed Glass Height		O/A Frame Height - 69	1
	Fixed Glass Width		O/A Frame Width - Dualair Opening Width - 113.5mm	

Note: Refer to page 6.6. for Gallery heights to determine glass louvre quantities.

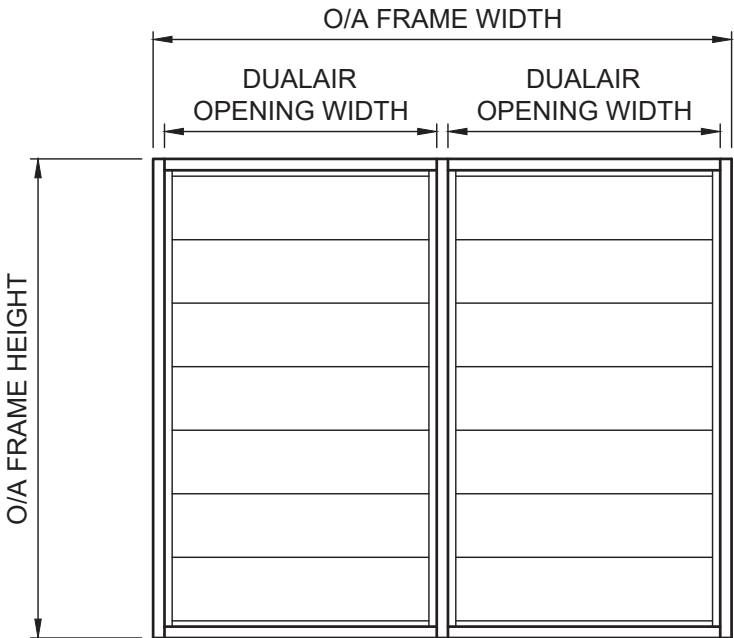
McArthur Evo Frame - Dualair Gallery with Fixed Low Lite



PROFILE	SECTION NO.	DESCRIPTION	CUTTING FORMULA	QTY
	AS74	Head	O/A Frame Width - 89mm	1
	ME61	Transom	O/A Frame Width - 89mm	1
	ME64	Transom Glz Adaptor	O/A Frame Width - 89mm	1
	ME63	Sill Bead	O/A Frame Width - 89mm	1
	ME62	Sill	O/A Frame Width - 89mm	1
	ME61	Jamb	O/A Frame Height	2
	BRZ-105	Head Insert Plate MK2	O/A Frame Width - 90mm	1
	BRZ-099	Sill Plate	O/A Frame Width - 90mm	1
	BRZ-103	Inside Jamb Plate	O/A Frame Height - Transom Height - 86mm	2
	BRZ-085	Weatherstrip Insert	O/A Frame Width - 129mm	4
Dualair Gallery			O/A Frame Height - Transom Height - 86mm	Pair
			O/A Frame Width - 92.2mm	
Glass	Glass Blade Width		O/A Frame Width - 145mm	Pg. 6.6
	Stronghold Glass Blade Width		O/A Frame Width - 141mm	
	Fixed Glass Height		O/A Frame Height - Dualair Frame Height - 24.5mm	1
	Fixed Glass Width		O/A Frame Width - 69mm	

Note: Refer to page 6.6. for Gallery heights to determine glass louvre quantities.

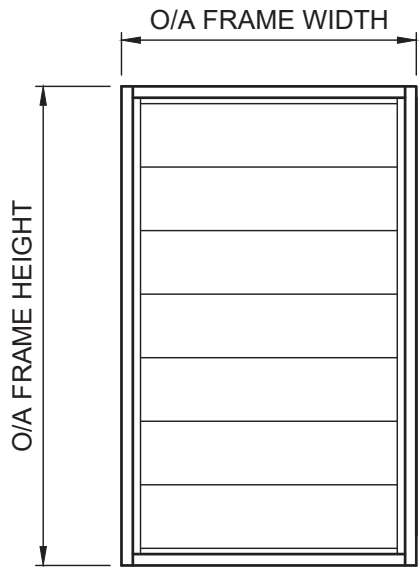
McArthur Evo Frame - Dualair Double Gallery

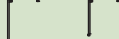


PROFILE	SECTION NO.	DESCRIPTION	CUTTING FORMULA	QTY
	AS74	Louvre Head	O/A Frame Width - Dualair Opening Width - 130.3mm	2
	ME61	Louvre Sill	O/A Frame Width - Dualair Opening Width - 130.3mm	2
	ME61	Jambs / Mullion	O/A Frame Height	3
	ME64	Mullion Glz adaptor	O/A Frame Height	1
	BRZ-105	Head Insert Plate MK2	O/A Frame Width - Dualair Opening Width - 129.5mm	2
	BRZ-099	Sill Plate	O/A Frame Width - Dualair Opening Width - 129.5mm	2
	BRZ-103	Inside Jamb Plate	O/A Frame Height - 86mm	4
	BRZ-085	Weatherstrip Insert	O/A Frame Width - Dualair Opening Width - 169mm	8
Dualair Gallery			O/A Frame Height - 86mm	2 Pair
			O/A Frame Width - Dualair Opening Width - 133.5mm	
Glass	Glass Blade Width		O/A Frame Width - Dualair Opening Width - 185.5mm	Pg. 6.6
	Stronghold Glass Blade Width		O/A Frame Width - Dualair Opening Width - 181.5mm	

Note: Refer to page 6.6. for Gallery heights to determine glass louvre quantities.

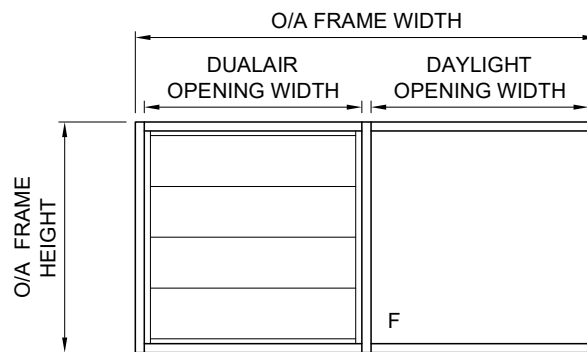
Hunter Evo Acoustic Frame - Dualair Gallery

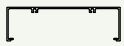
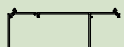
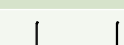
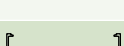
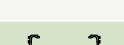


PROFILE	SECTION NO.	DESCRIPTION	CUTTING FORMULA	QTY
	AS74	Head	O/A Frame Width - 100mm	1
	ME61	Sill	O/A Frame Width - 100mm	1
	HE951	Jamb	O/A Frame Height	2
	BRZ-105	Head Insert Plate MK2	O/A Frame Width - 101mm	1
	BRZ-099	Sill Plate	O/A Frame Width - 101mm	1
	BRZ-104	Outside Jamb Plate	O/A Frame Height - 86mm	2
	BRZ-085	Weatherstrip Insert	O/A Frame Width - 140mm	4
Dualair Gallery			O/A Frame Height - 86mm	Pair
			O/A Frame Width - 103.2mm	
Glass	Glass Blade Width		O/A Frame Width - 156mm	Pg. 6.6
	Stronghold Glass Blade Width		O/A Frame Width - 152mm	

Note: Refer to page 6.6. for Gallery heights to determine glass louvre quantities.

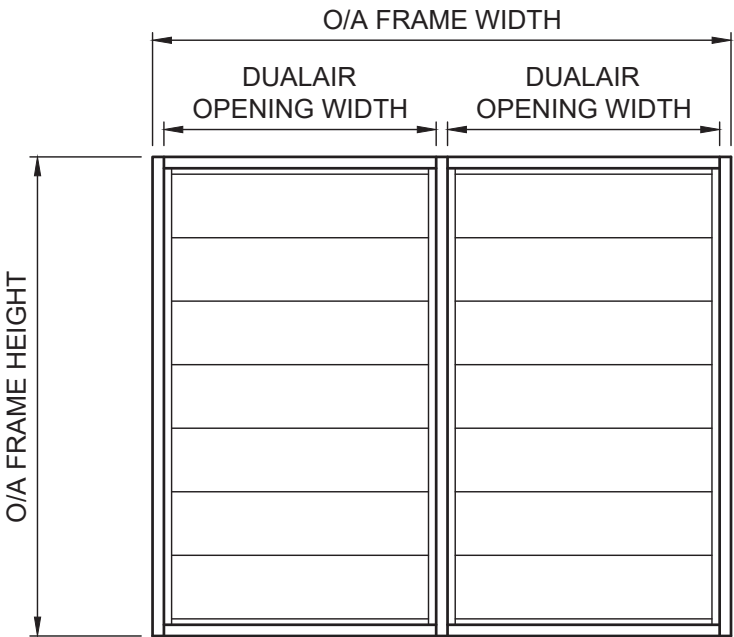
Hunter Evo Acoustic Frame - Dualair Gallery with Fixed Side Lite



PROFILE	SECTION NO.	DESCRIPTION	CUTTING FORMULA	QTY
	AS74	Louvre Head	O/A Frame Width - Daylight Opening Width - 130.3mm	1
	ME61	Louvre Sill	O/A Frame Width - Daylight Opening Width - 130.3mm	1
	HE951	Jamb	O/A Frame Height	2
	HE952	Male Mullion	O/A Frame Height	1
	HE953	Female Mullion	O/A Frame Height	1
	BRZ-105	Head Insert Plate MK2	O/A Frame Width - Daylight Opening Width - 129.5mm	1
	BRZ-099	Sill Plate	O/A Frame Width - Daylight Opening Width - 129.5mm	1
	BRZ-103	Inside Jamb Plate	O/A Frame Height - 86mm	2
	BRZ-085	Weatherstrip Insert	O/A Frame Width - Daylight Opening Width - 169mm	4
	HE951	Fixed Lite Head	O/A Frame Width - Dualair Opening Width - 133.5mm	1
	AS55	Flush Adaptor	O/A Frame Width - Dualair Opening Width - 133.5mm	1
	HE958	Fixed Lite Sill	O/A Frame Width - Dualair Opening Width - 133.5mm	1
	HE309	Fixed Lite Sill Bead	O/A Frame Width - Dualair Opening Width - 133.5mm	2
Dualair Gallery			O/A Frame Height - 86mm	Pair
			O/A Frame Width - Daylight Opening Width - 133.5mm	
Glass	Glass Blade Width		O/A Frame Width - Daylight Opening Width - 185.5mm	Pg. 6.6
	Stronghold Glass Blade Width		O/A Frame Width - Daylight Opening Width - 181.5mm	
	Fixed Glass Height		O/A Frame Height - 80	1
	Fixed Glass Width		O/A Frame Width - Dualair Opening Width - 113.5mm	

Note: Refer to page 6.6. for Gallery heights to determine glass louvre quantities.

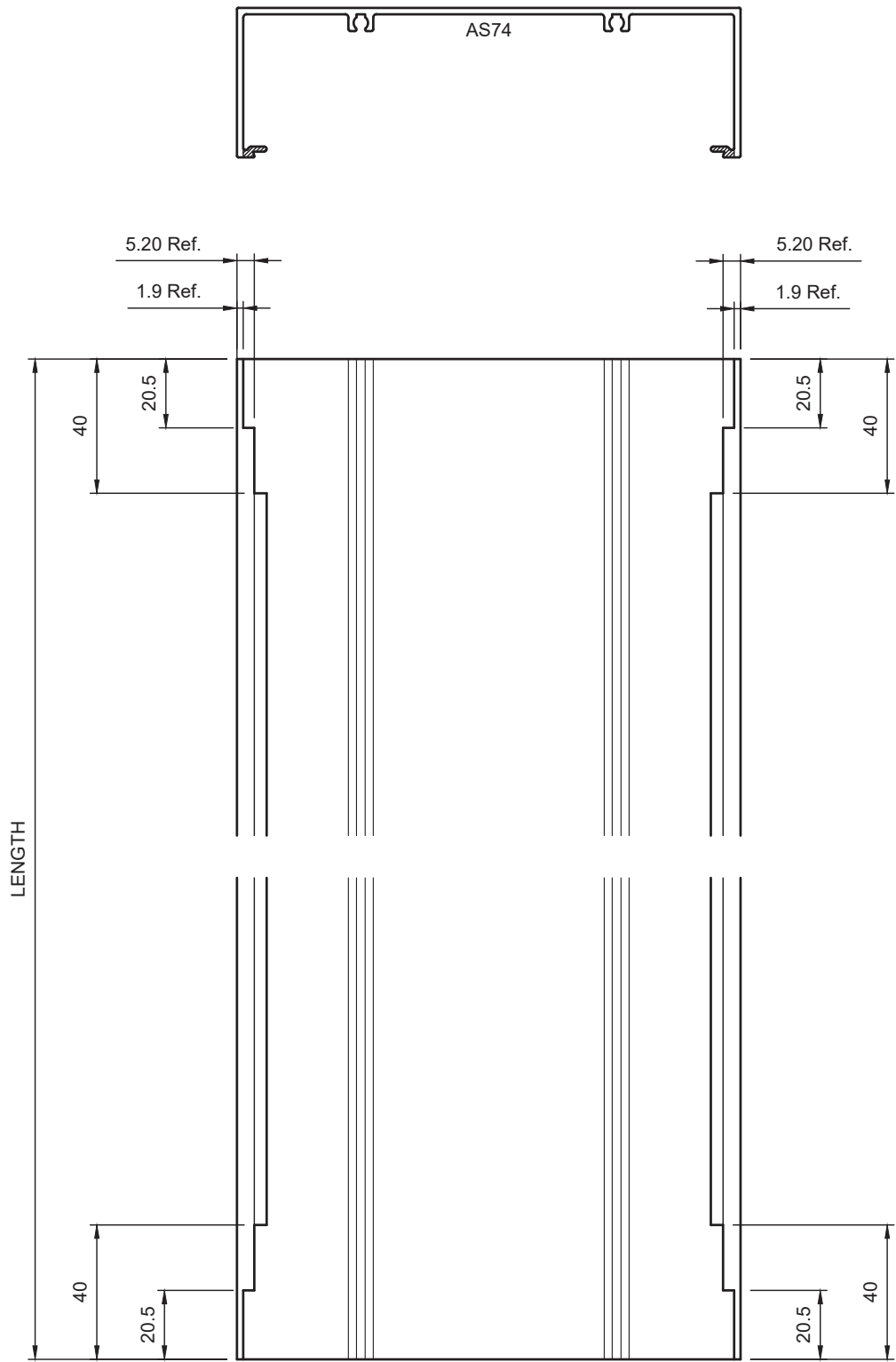
Hunter Evo Acoustic Frame - Dualair Double Gallery



PROFILE	SECTION NO.	DESCRIPTION	CUTTING FORMULA	QTY
	AS74	Louvre Head	O/A Frame Width - Dualair Opening Width - 130.5mm	2
	ME61	Louvre Sill	O/A Frame Width - Dualair Opening Width - 130.5mm	2
	HE951	Jamb	O/A Frame Height	2
	HE952	Male Mullion	O/A Frame Height	1
	HE953	Female Mullion	O/A Frame Height	1
	BRZ-105	Head Insert Plate MK2	O/A Frame Width - Dualair Opening Width - 129.5mm	2
	BRZ-099	Sill Plate	O/A Frame Width - Dualair Opening Width - 129.5mm	2
	BRZ-103	Inside Jamb Plate	O/A Frame Height - 86mm	4
	BRZ-085	Weatherstrip Insert	O/A Frame Width - Dualair Opening Width - 169mm	8
Dualair Gallery			O/A Frame Height - 86mm	2 Pair
			O/A Frame Width - Dualair Opening Width - 133.5mm	
Glass	Glass Blade Width		O/A Frame Width - Dualair Opening Width - 185.5mm	Pg. 6.6
	Stronghold Glass Blade Width		O/A Frame Width - Dualair Opening Width - 181.5mm	

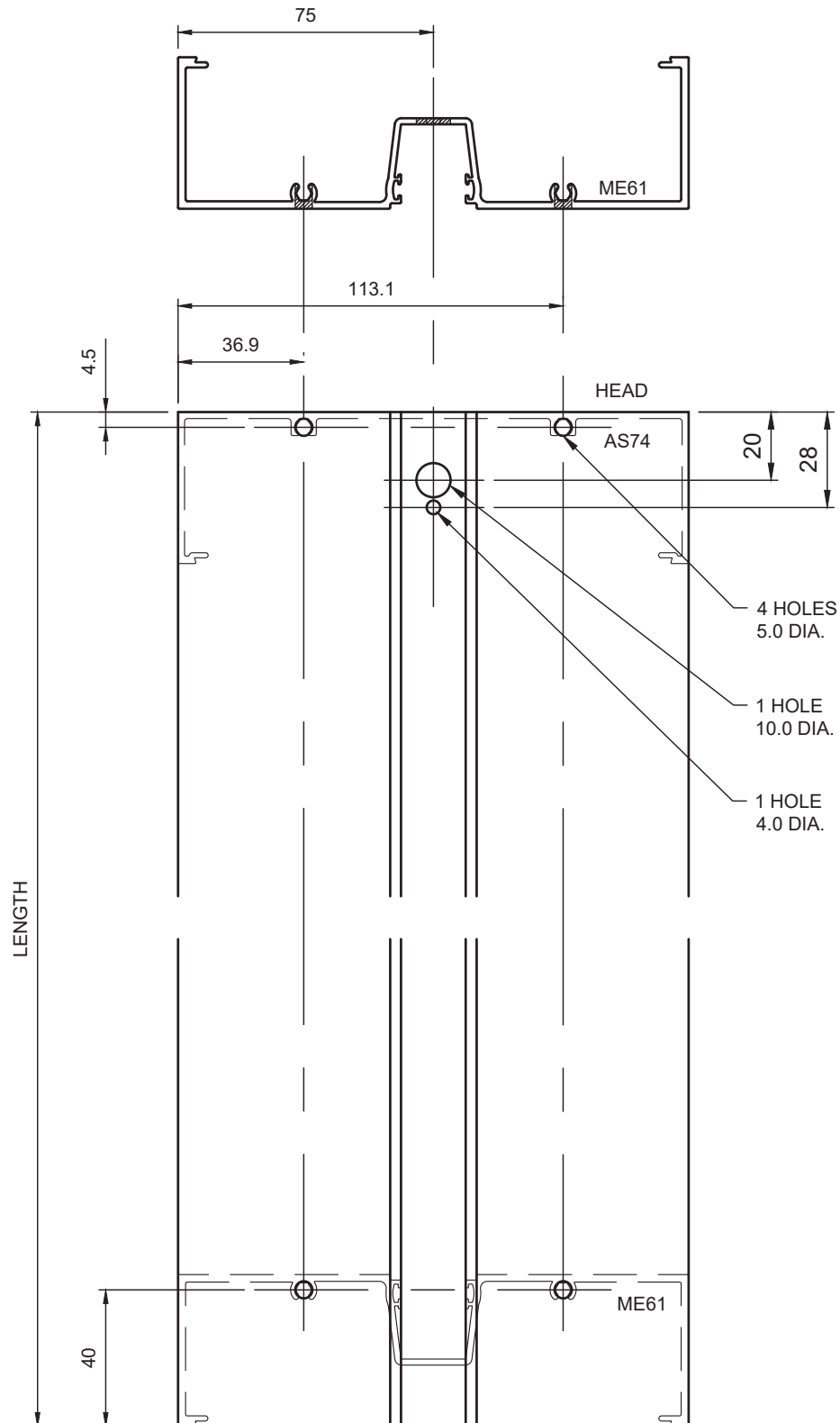
Note: Refer to page 6.6. for Gallery heights to determine glass louvre quantities.

Head Preparation



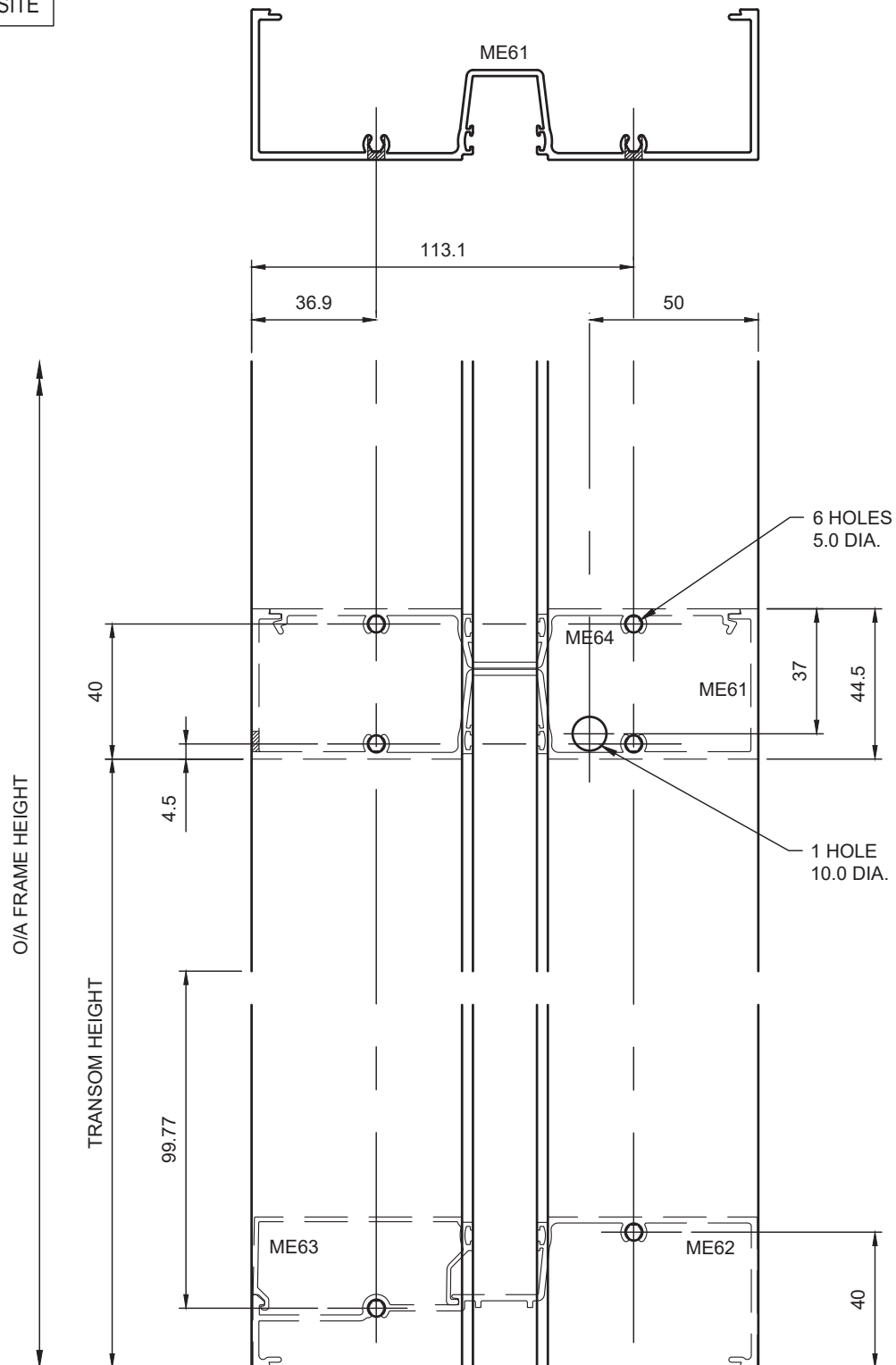
McArthur Evo Jamb Preparation

L.H. DRAWN
R.H. OPPOSITE

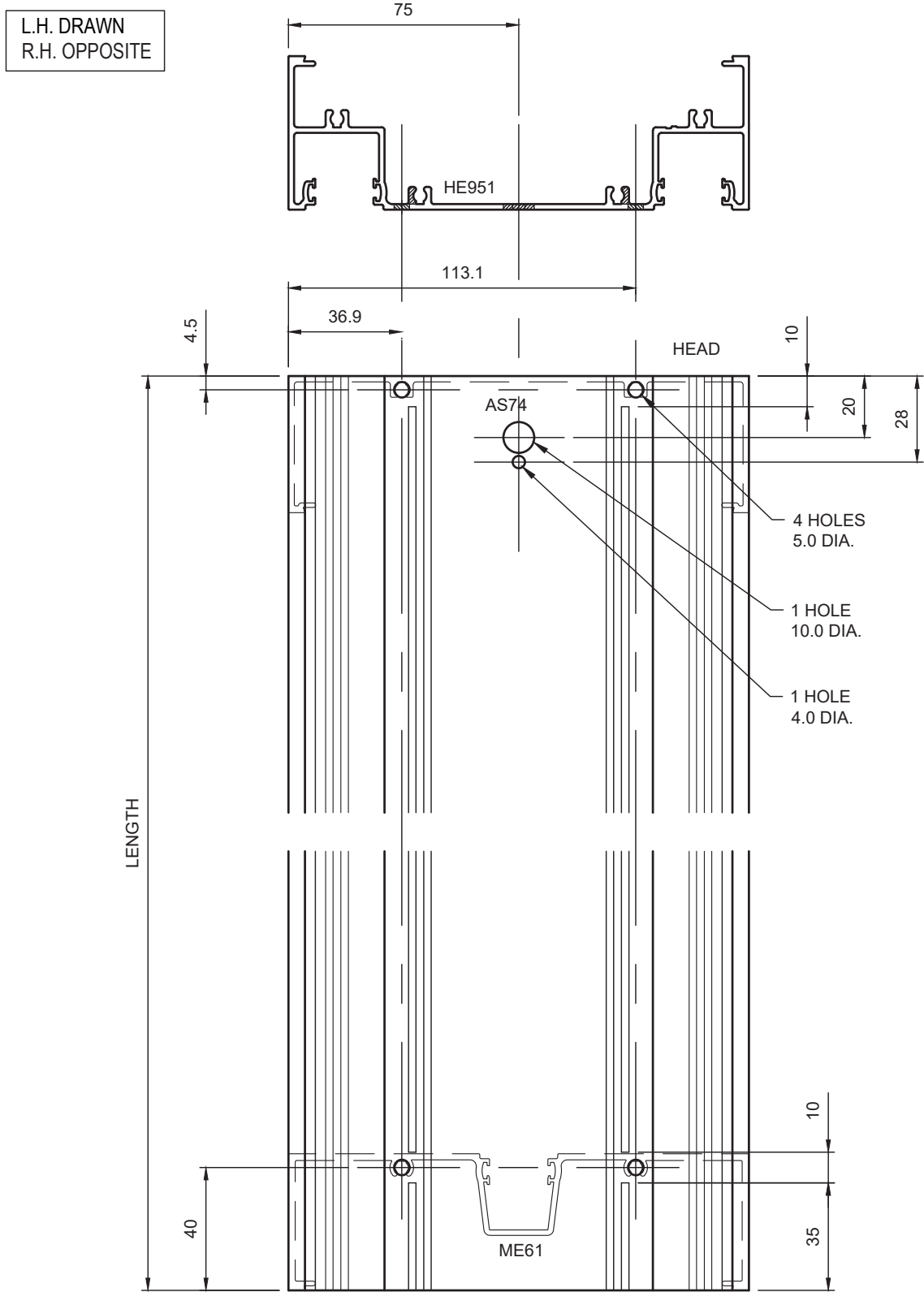


McArthur Evo Jamb Preparation - Louvre / Fixed Transom

L.H. DRAWN
R.H. OPPOSITE



Hunter Evo Acoustic Jamb Preparation



McArthur Evo Sill and Transom Adaptor Preparation

SLOT QTY'S:

Up to 800mm = 3 Slots
 801mm - 1000mm = 4 Slots
 Over 1001mm = 5 Slots

SLOT EQUATIONS:

To Align slots with Sill Plate BRZ-099

1. Sill Length - 1mm
2. Divide by (number of slots + 1) for spacing
3. End slots have + 0.5mm added to each end

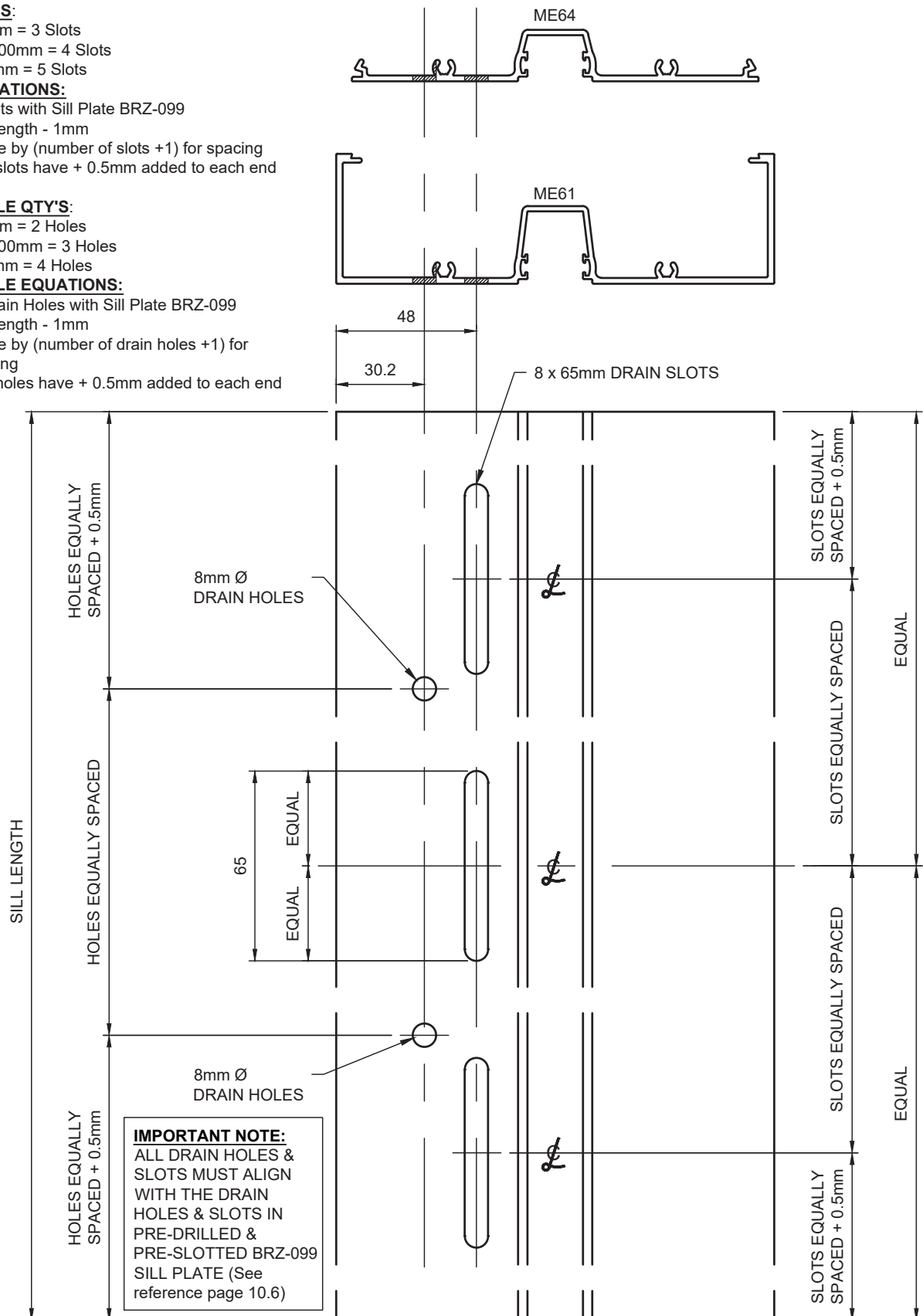
DRAIN HOLE QTY'S:

Up to 750mm = 2 Holes
 751mm - 1000mm = 3 Holes
 Over 1001mm = 4 Holes

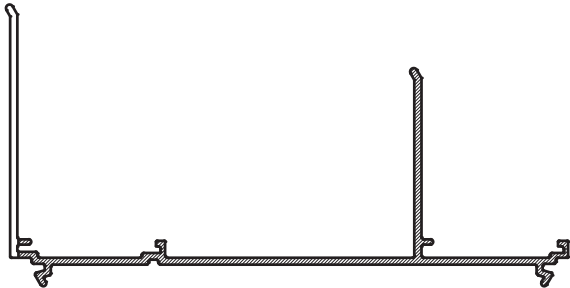
DRAIN HOLE EQUATIONS:

To Align Drain Holes with Sill Plate BRZ-099

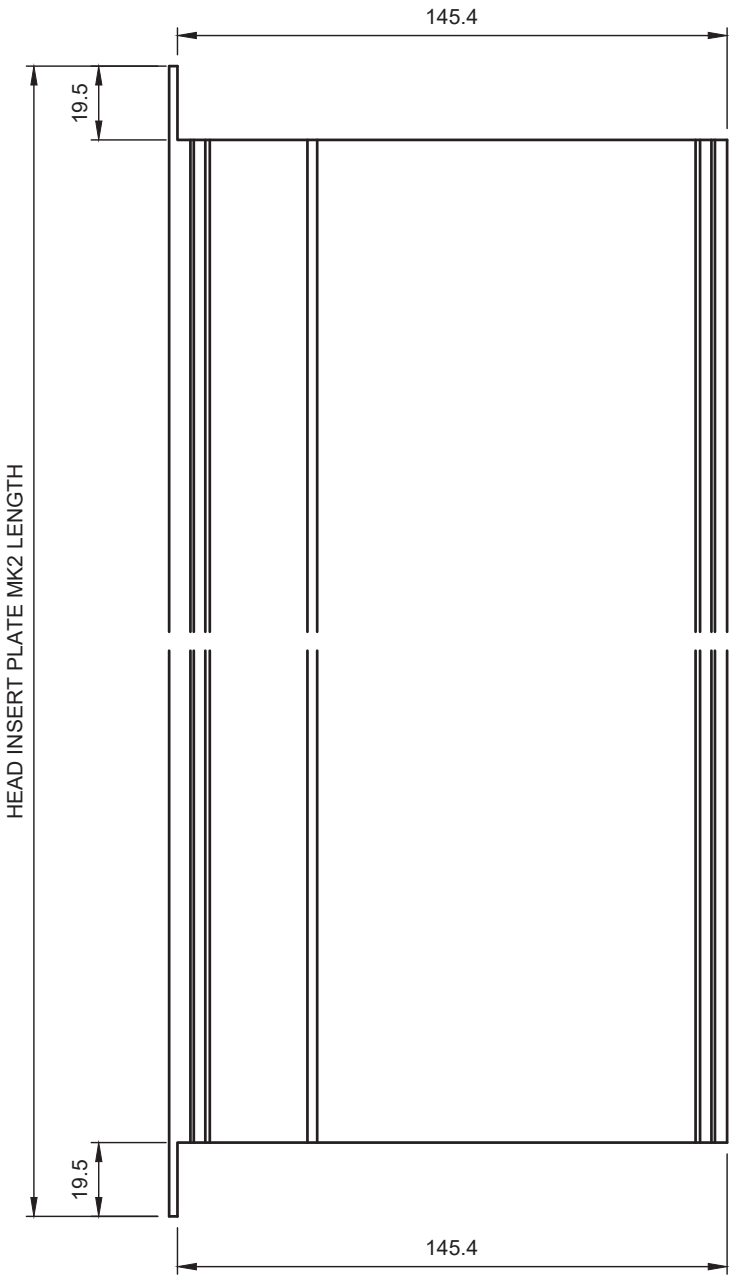
1. Sill Length - 1mm
2. Divide by (number of drain holes + 1) for spacing
3. End holes have + 0.5mm added to each end



BRZ-105 Head Insert Plate MK2 Preparation



BRZ-105



BRZ-099 Sill Plate Preparation - MANUFACTURING REFERENCE FOR ME61 ONLY!

SLOT QTY'S:

Up to 799mm = 3 Slots
 800mm - 999mm = 4 Slots
 Over 1000mm = 5 Slots

SLOT EQUATIONS:

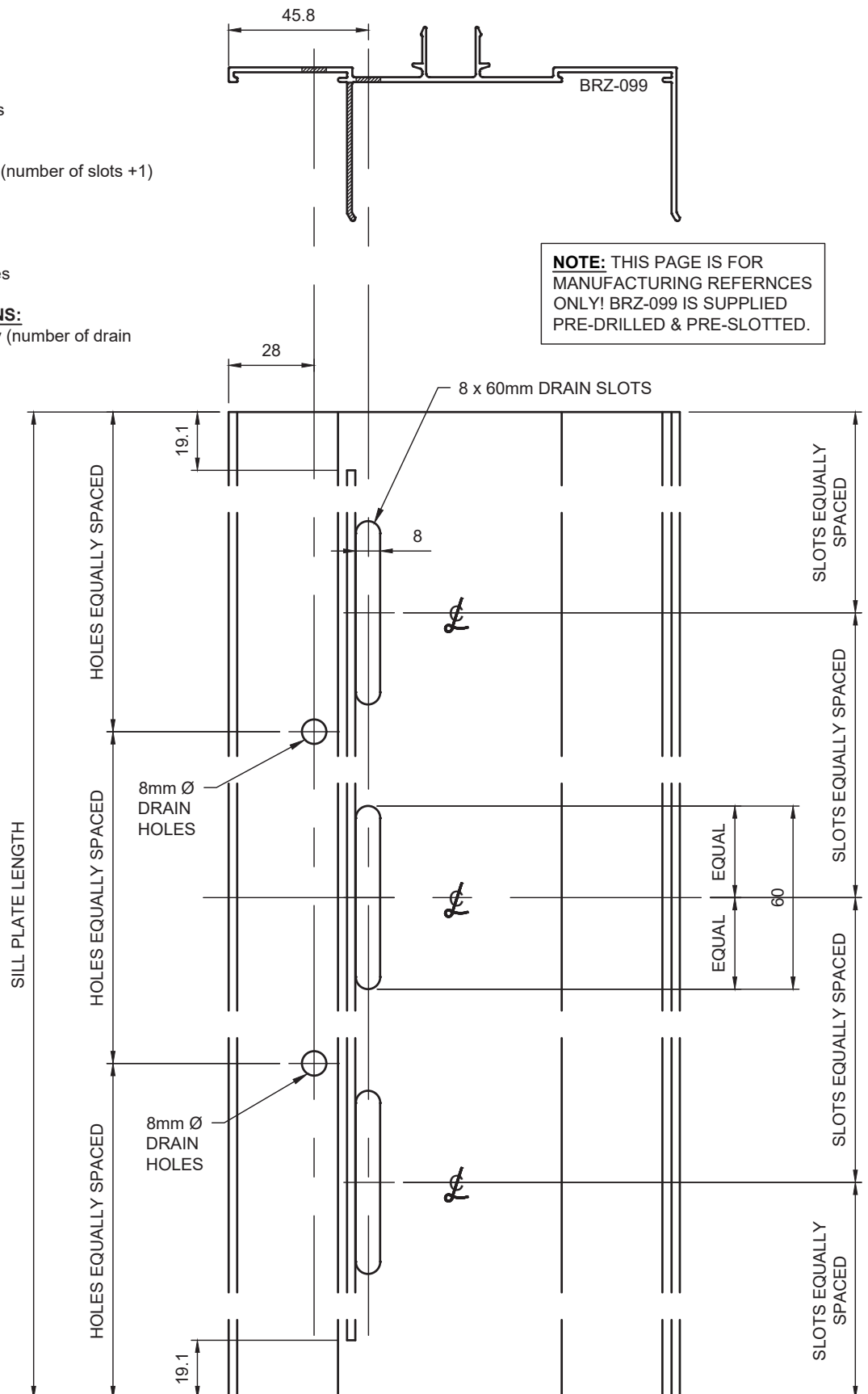
Divide Sill Plate length by (number of slots + 1)
 for spacing

DRAIN HOLE QTY'S:

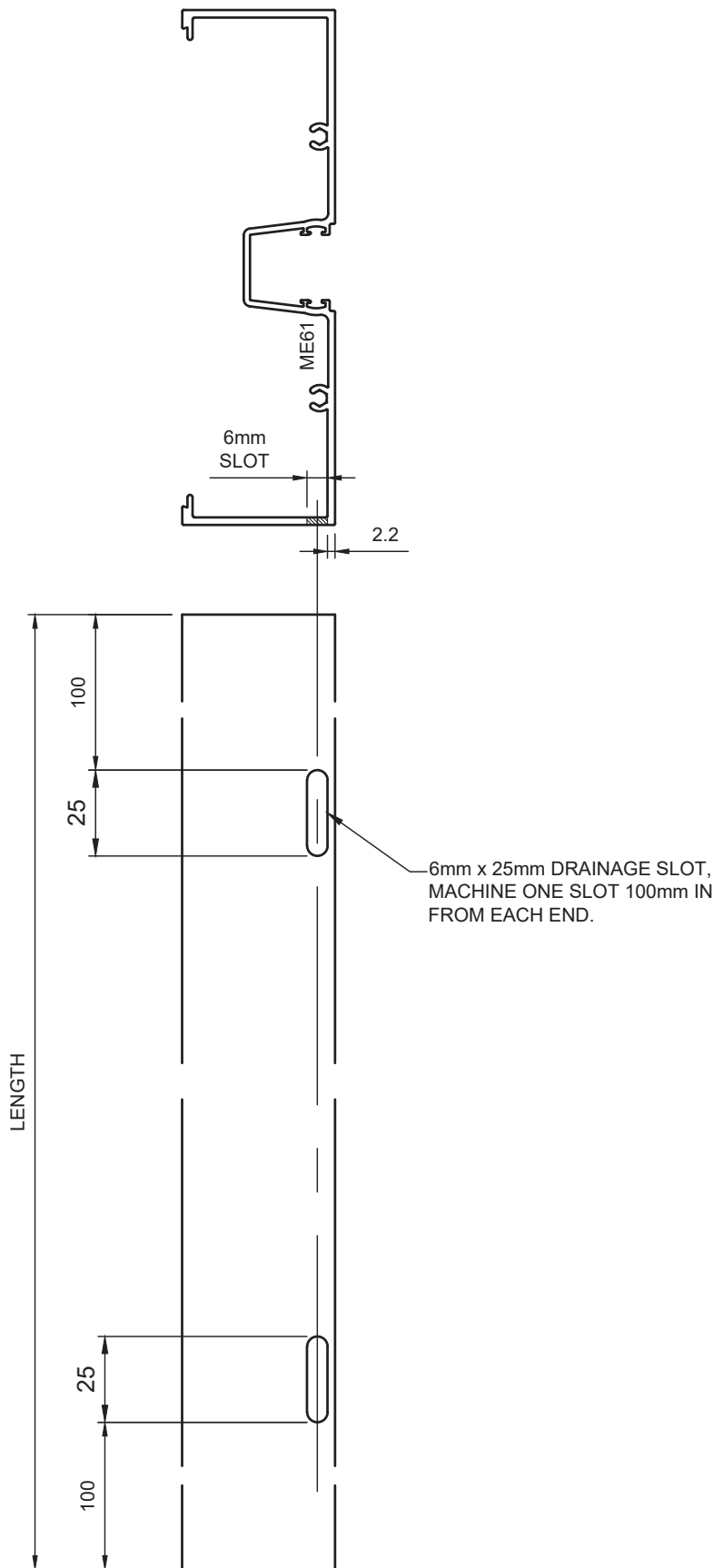
Up to 749mm = 2 Holes
 750mm - 999mm = 3 Holes
 Over 1000mm = 4 Holes

DRAIN HOLE EQUATIONS:

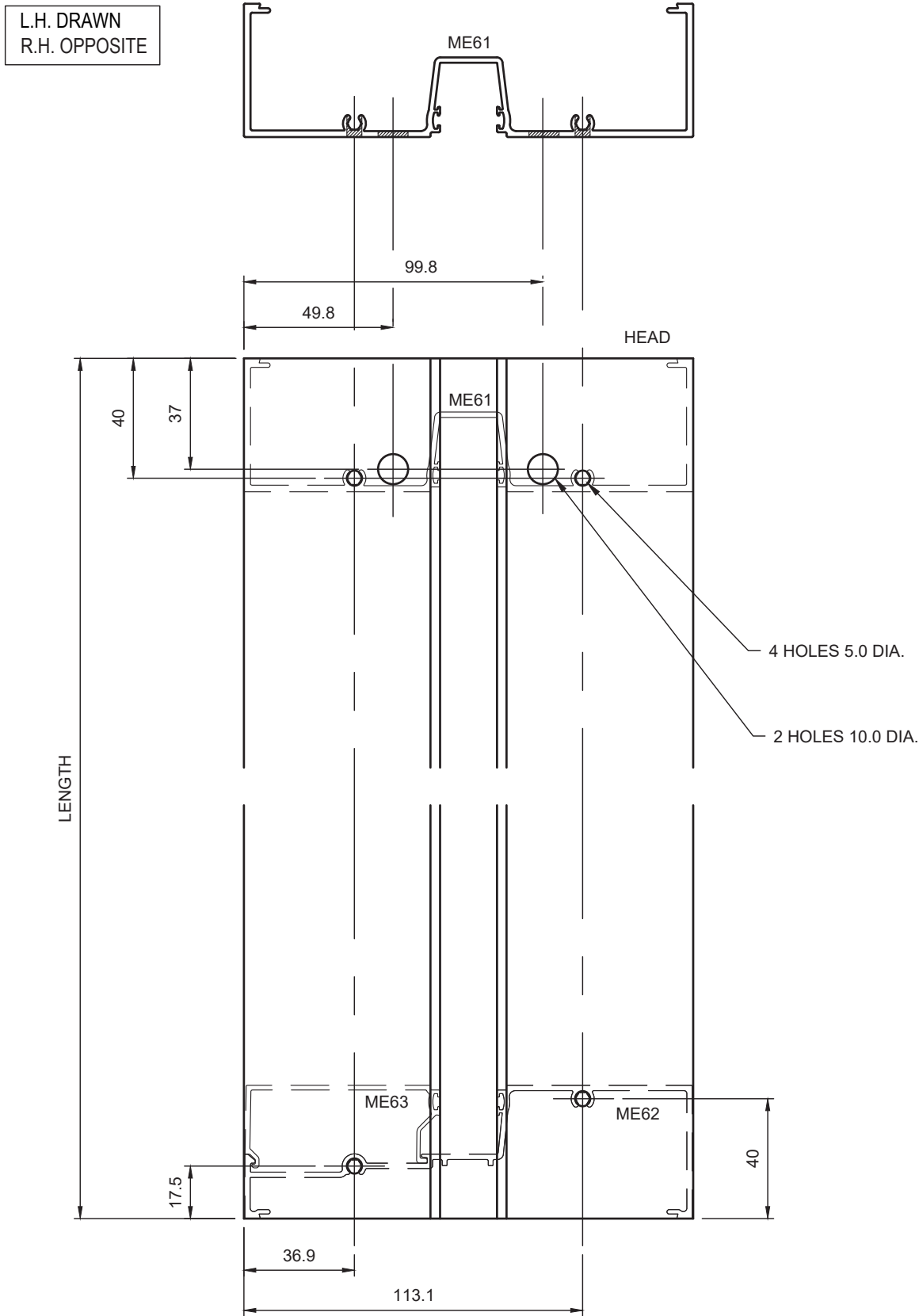
Divide Sill Plate Length by (number of drain
 holes + 1) for spacing



McArthur Evo Transom Preparation - Louvre / Fixed

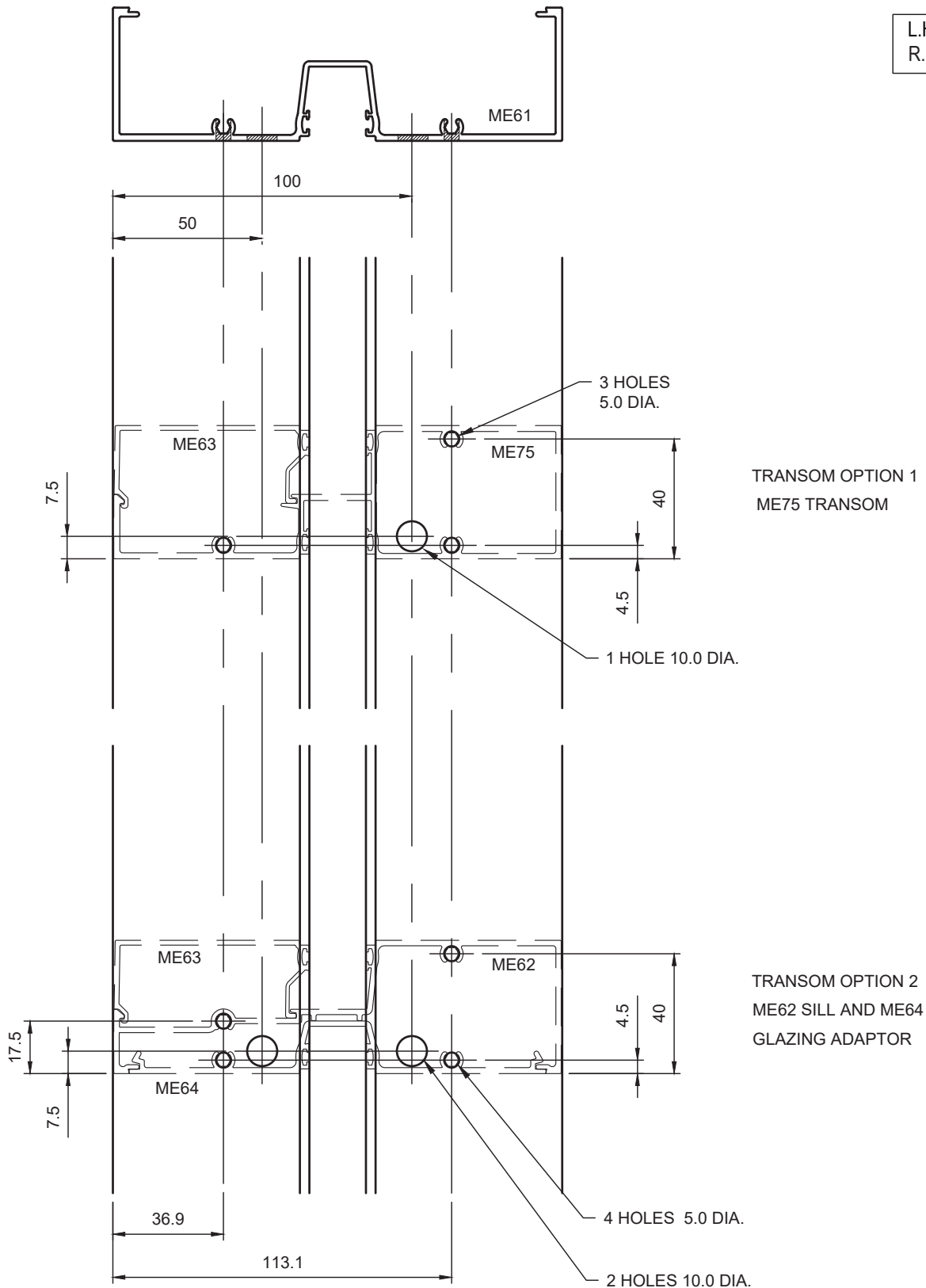


McArthur Evo Fixed Glass Framing Mullion - Head / Sill Preparation



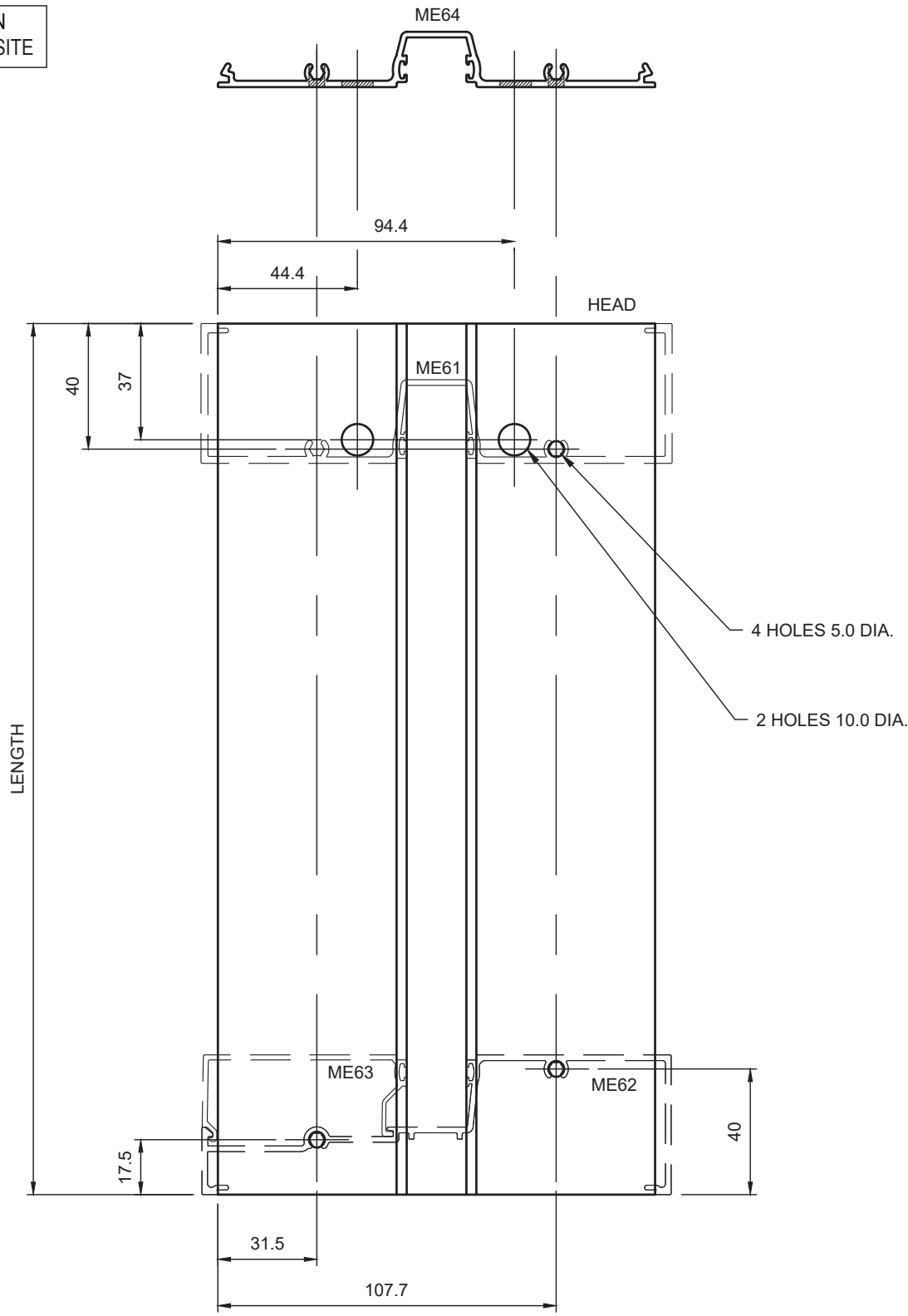
McArthur Evo Fixed Framing Jamb Preparation - Transoms

L.H. DRAWN
R.H. OPPOSITE



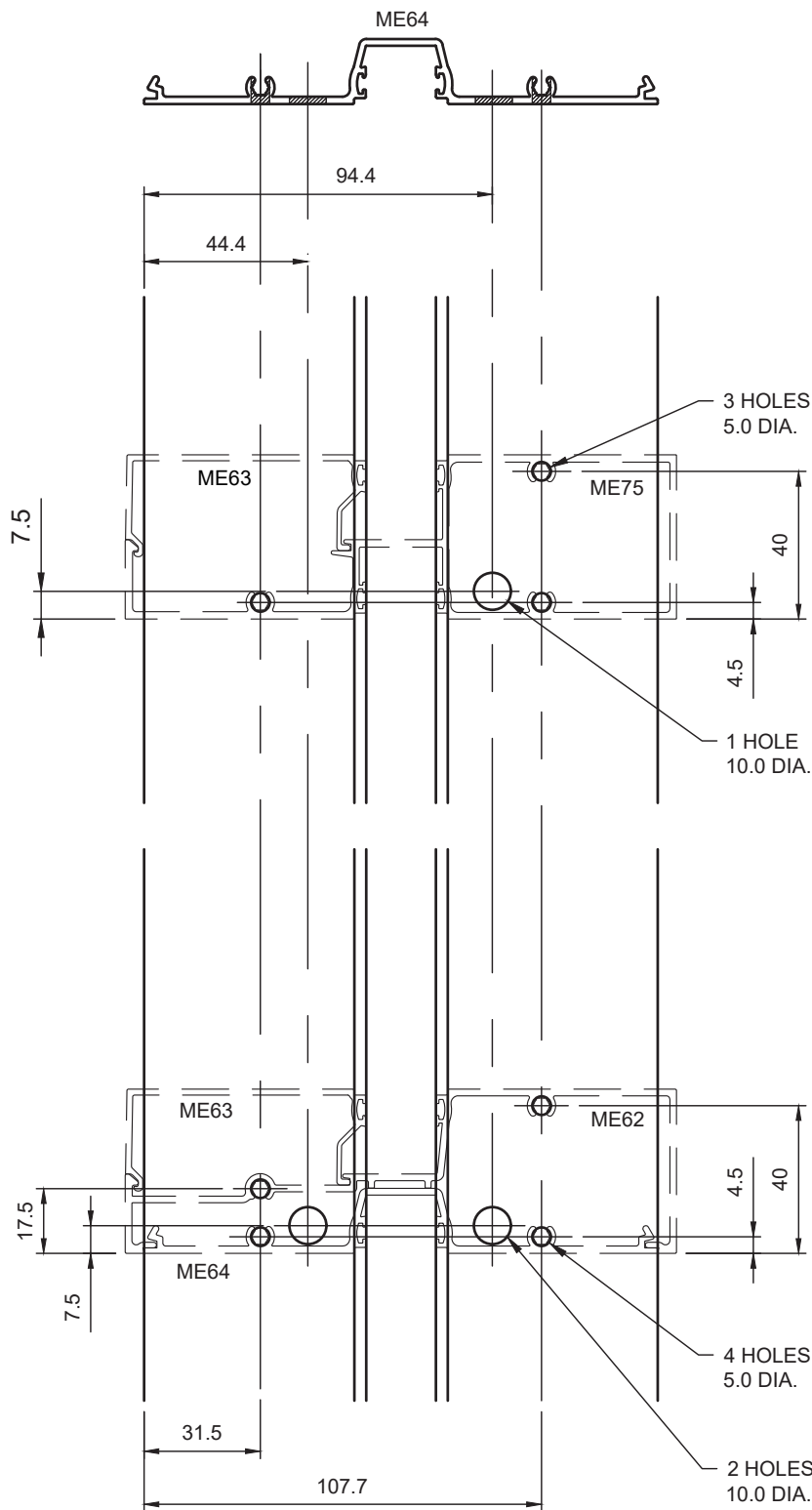
McArthur Evo Fixed Framing Mullion Glazing Adaptor Preparation

L.H. DRAWN
R.H. OPPOSITE



McArthur Evo Fixed Framing Mullion Glazing Adaptor Preparation - Transoms

L.H. DRAWN
R.H. OPPOSITE

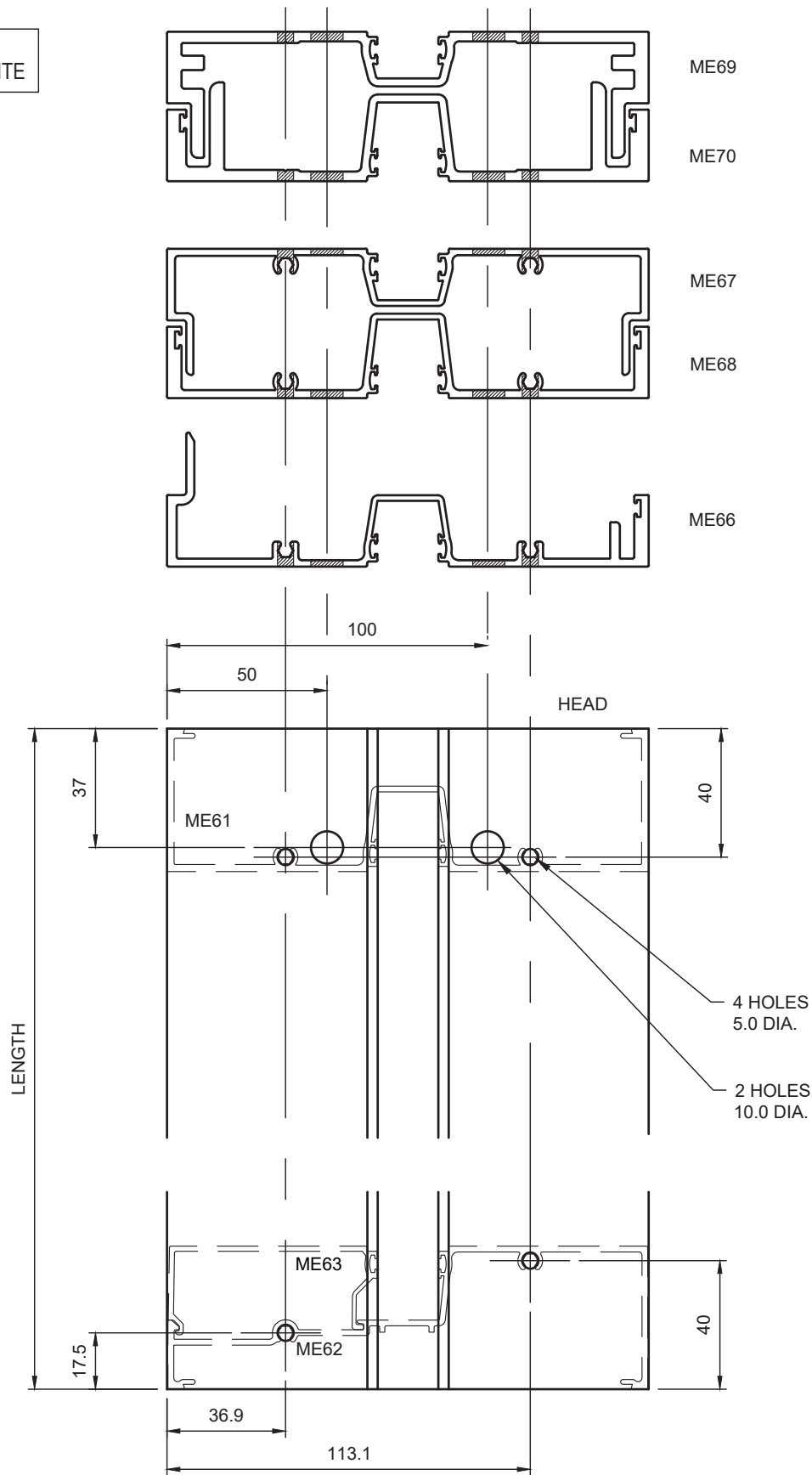


TRANSOM OPTION 1
ME75 TRANSOM

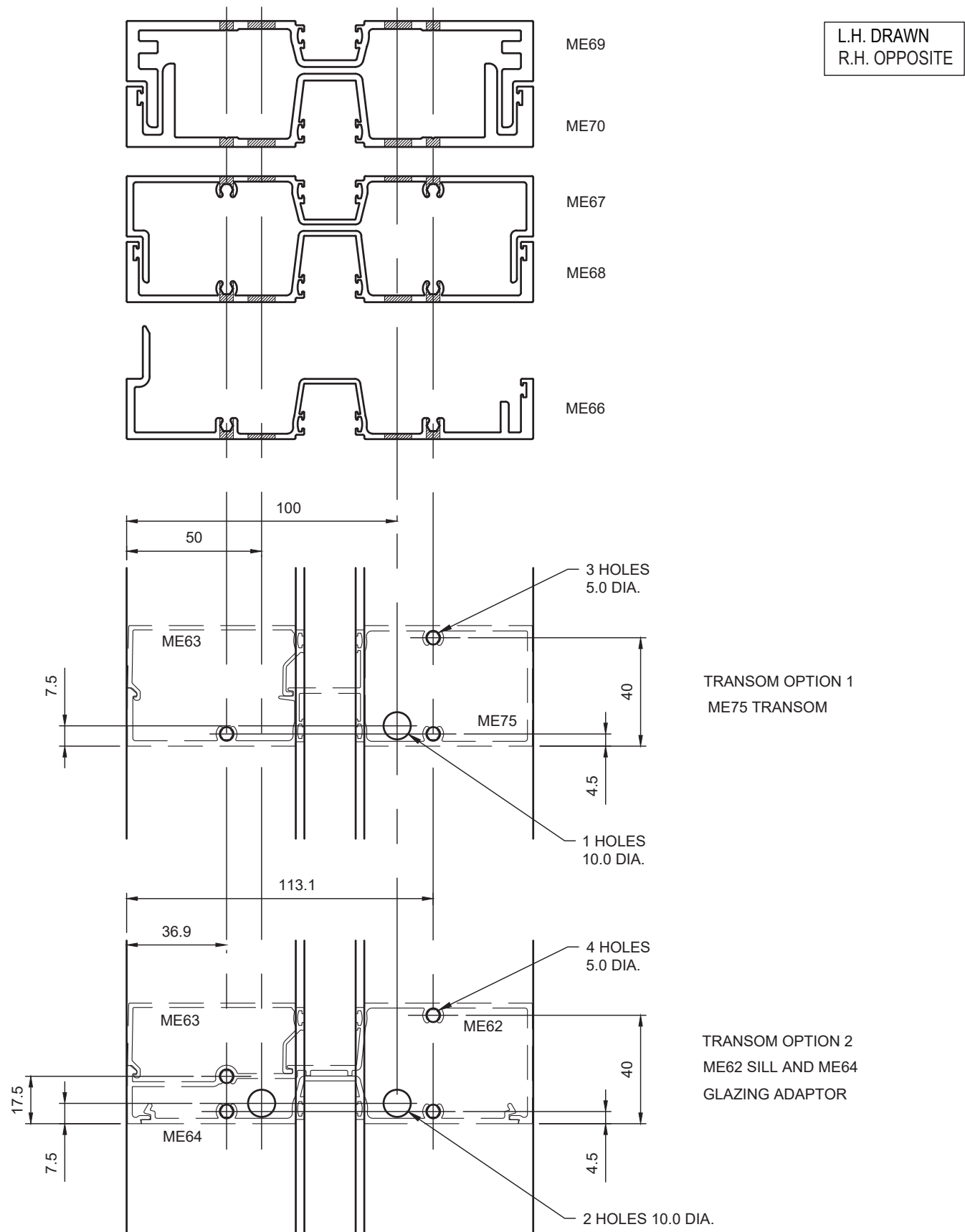
TRANSOM OPTION 2
ME62 SILL AND ME64
GLAZING ADAPTOR

McArthur Evo Fixed Glass Framing Split Mullion - Head / Sill Preparation

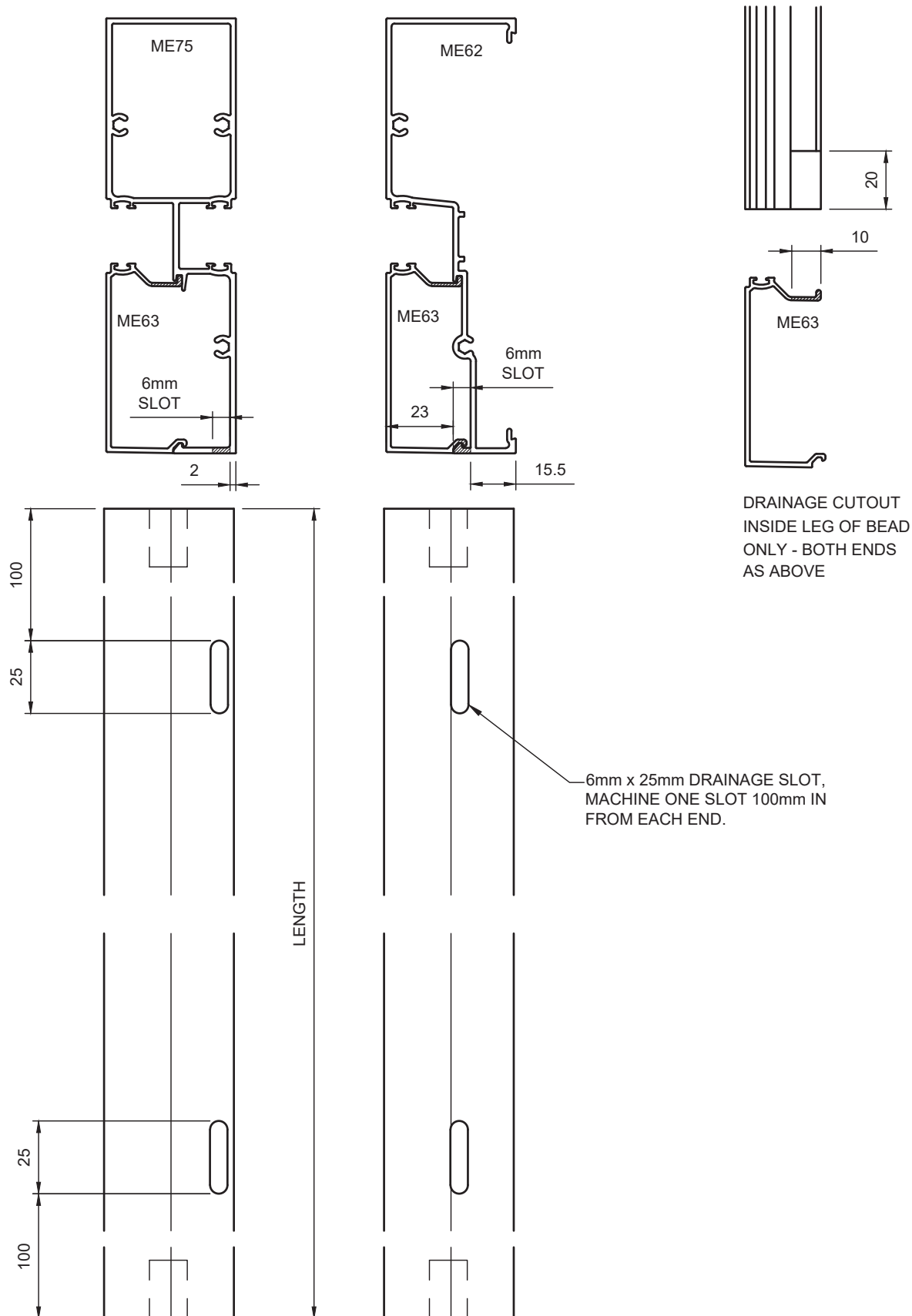
L.H. DRAWN
R.H. OPPOSITE



McArthur Evo Fixed Glass Framing Split Mullion - Transom Preparation

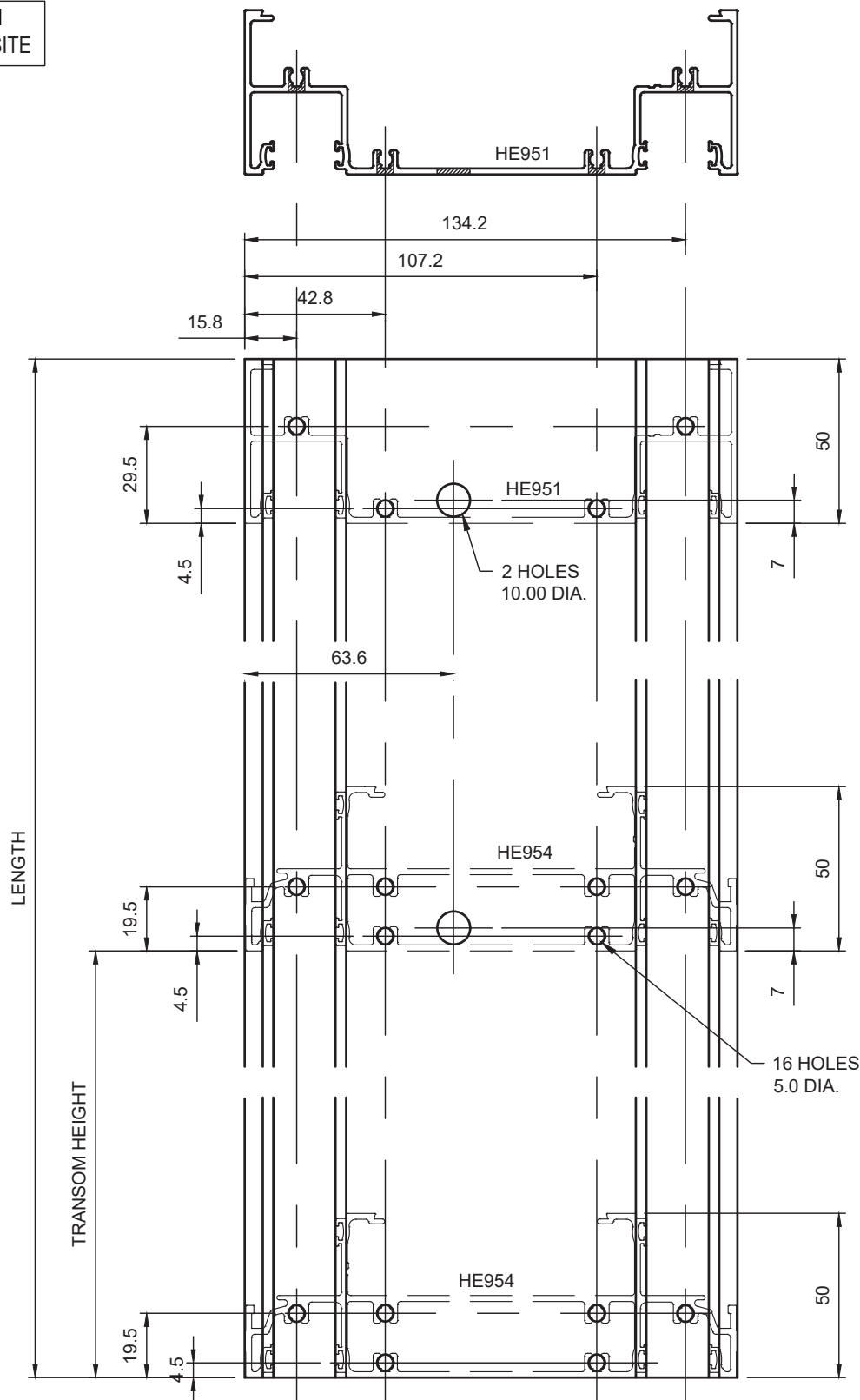


McArthur Evo Fixed Glass Framing Transom Drainage Preparation



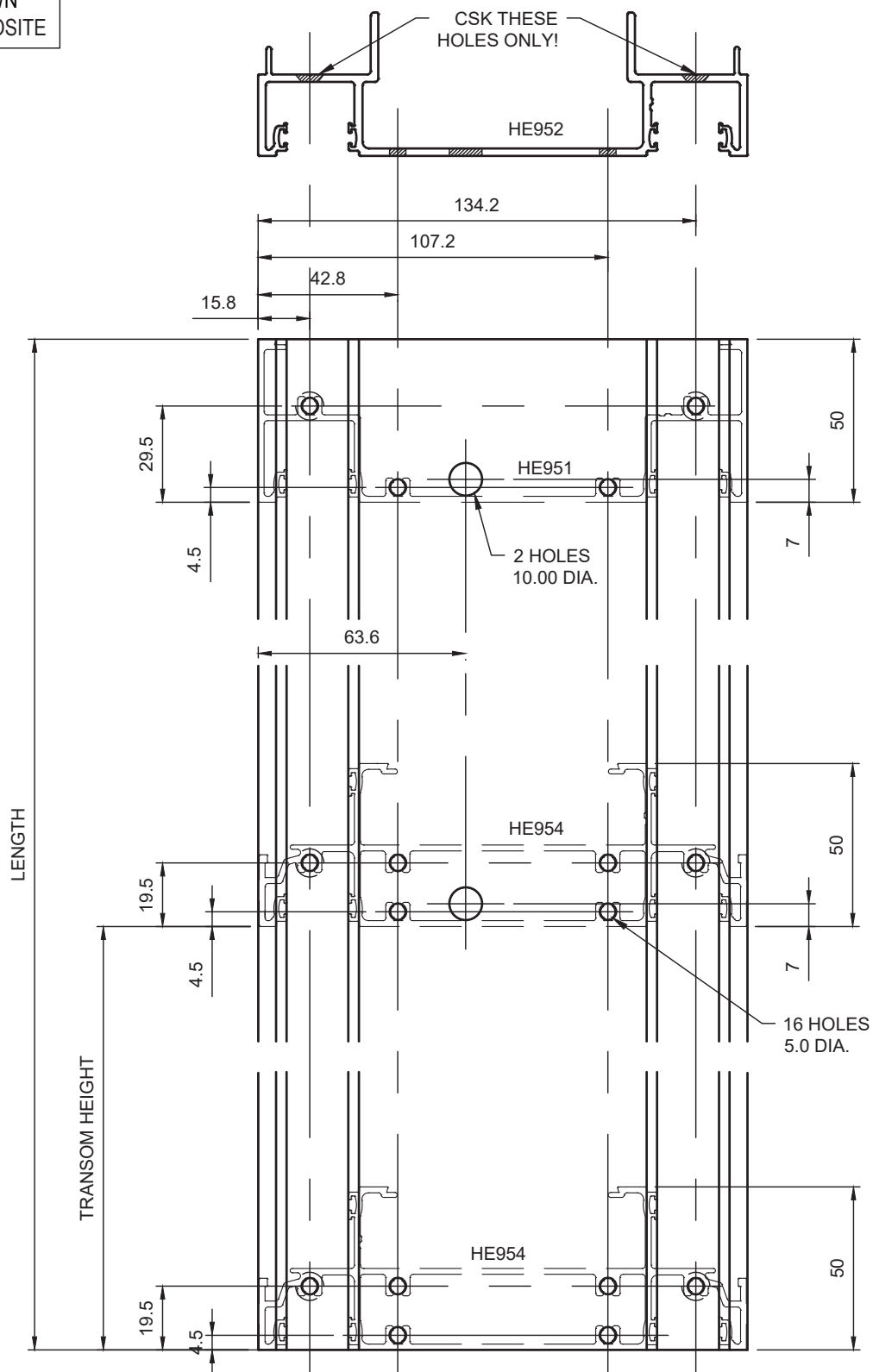
Hunter Evo Acoustic Fixed Glass Framing Jamb Preparation

L.H. DRAWN
R.H. OPPOSITE



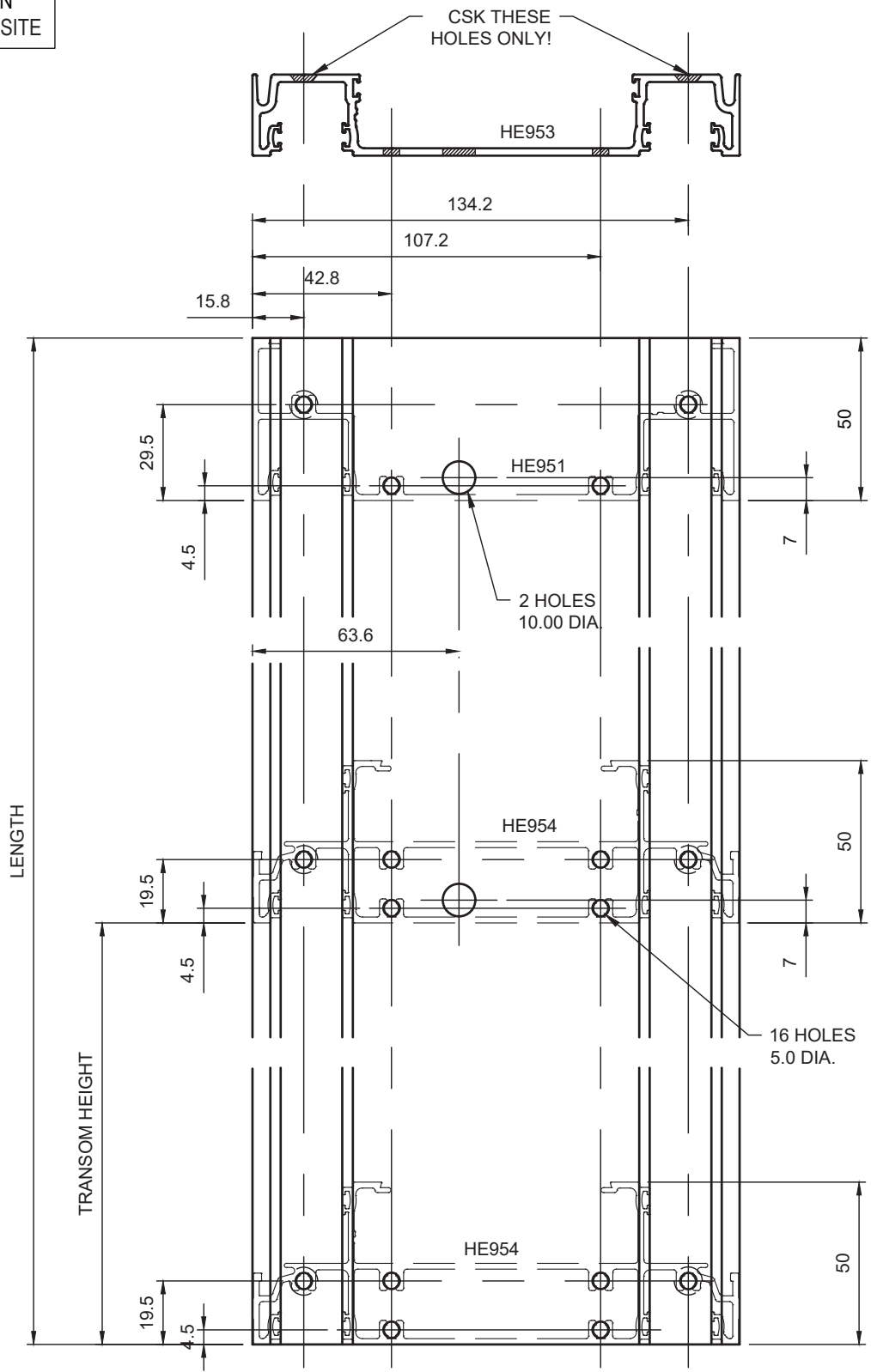
Hunter Evo Acoustic Fixed Glass Framing Male Mullion Preparation

L.H. DRAWN
R.H. OPPOSITE

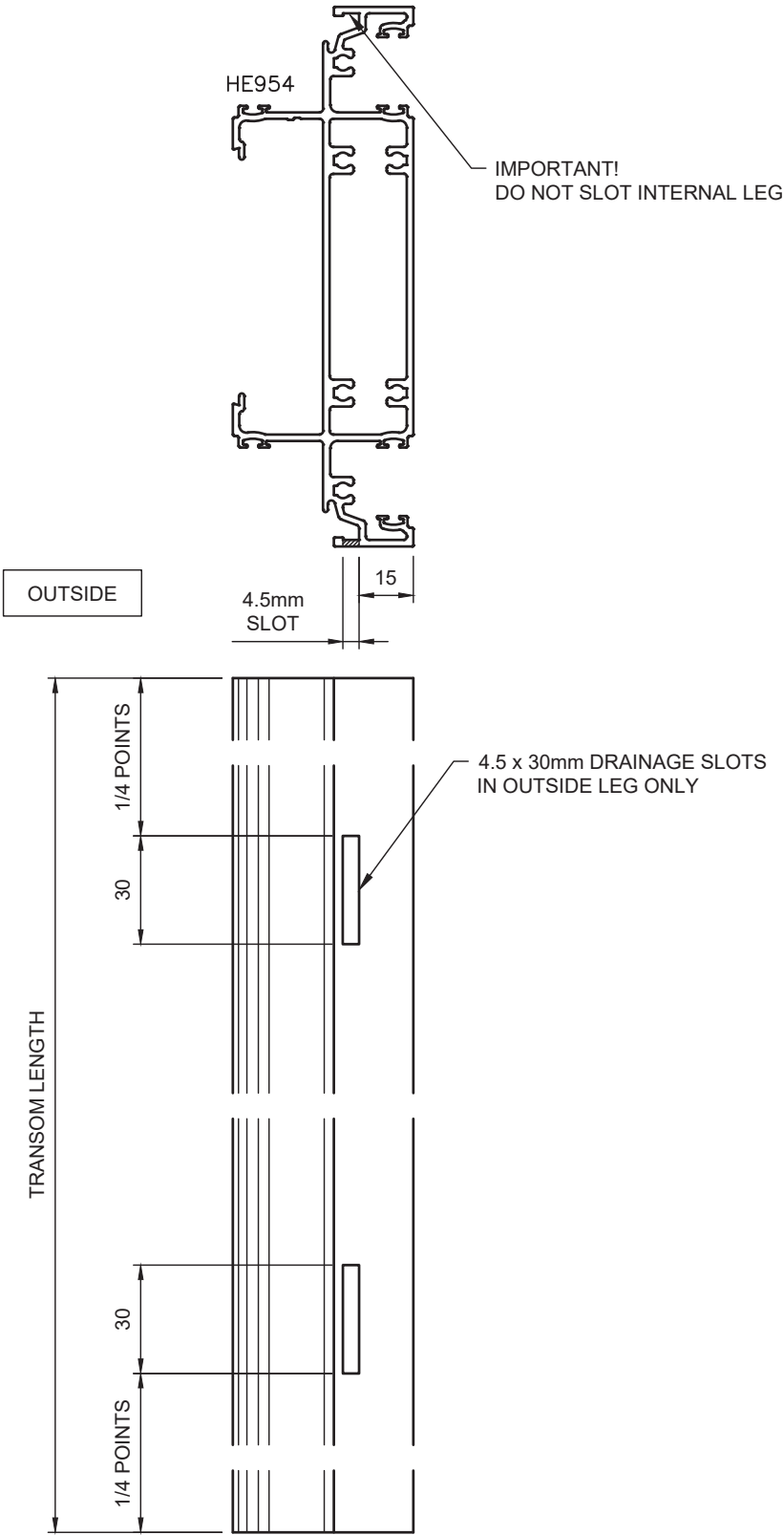


Hunter Evo Acoustic Fixed Glass Framing Female Mullion Preparation

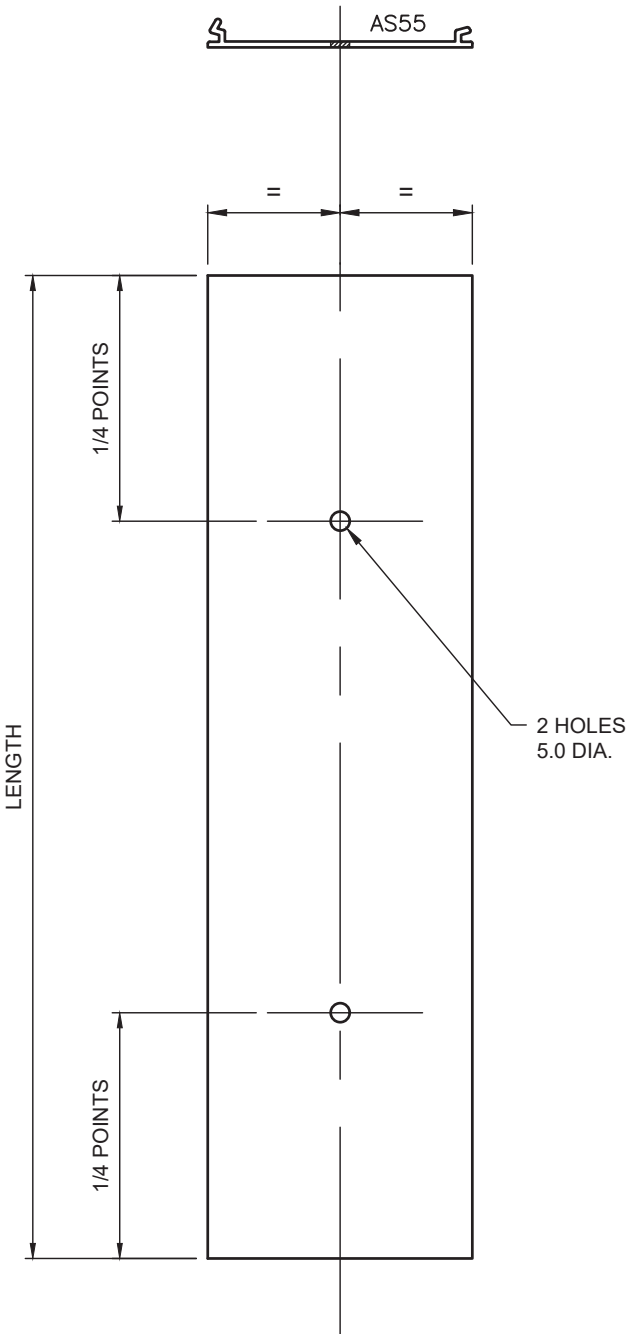
L.H. DRAWN
R.H. OPPOSITE



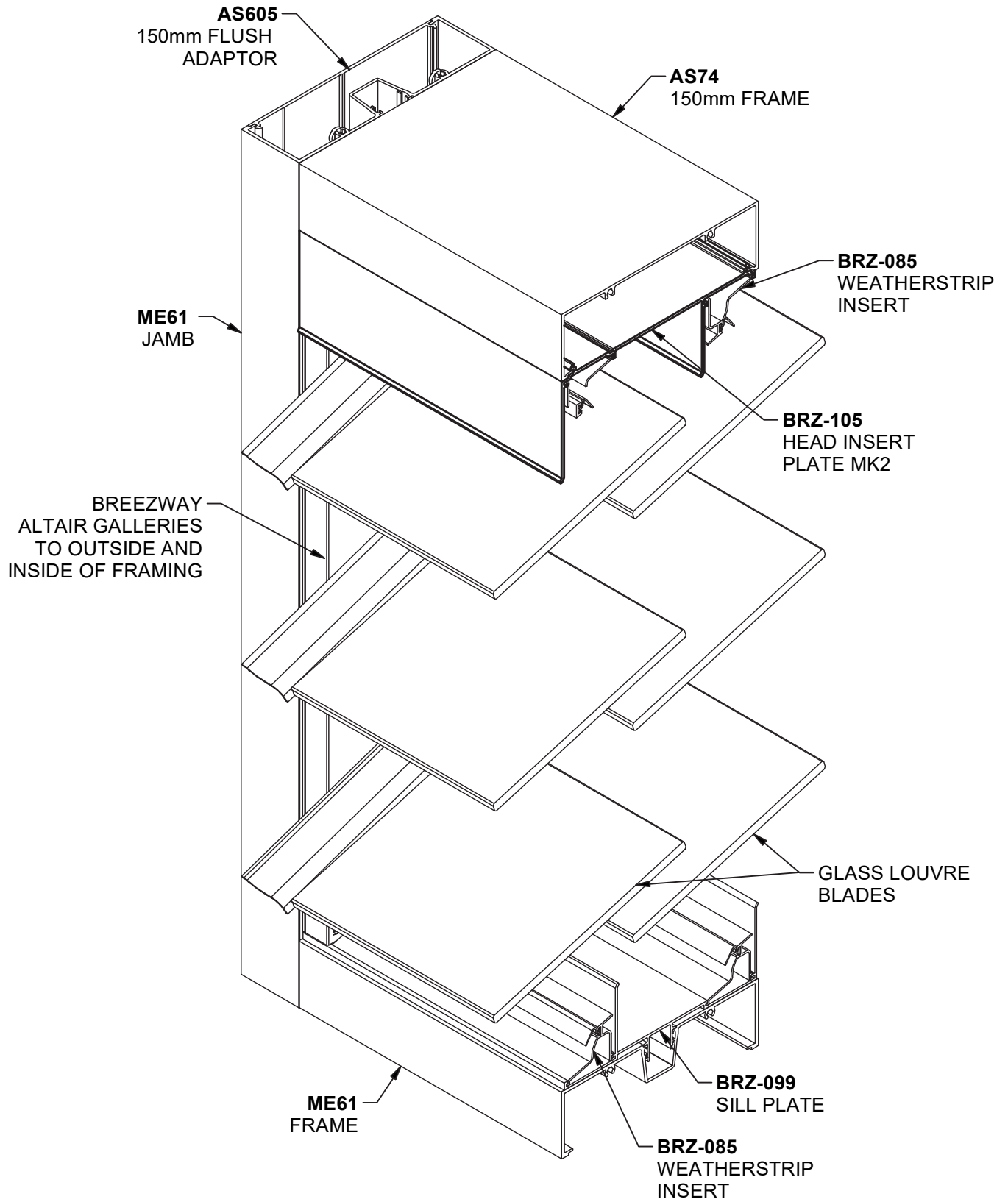
Hunter Evo Acoustic Fixed Glass Framing Transom Preparation



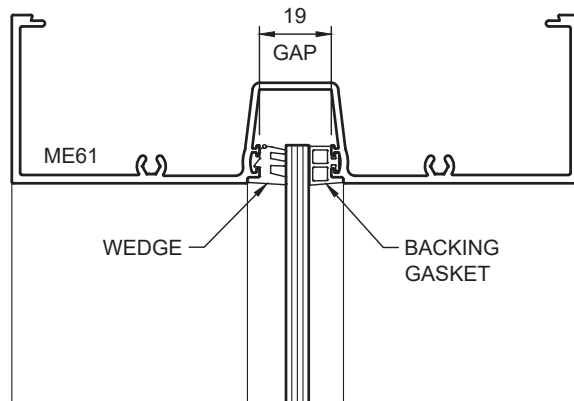
Hunter Evo Acoustic Transom Adaptor Preparation



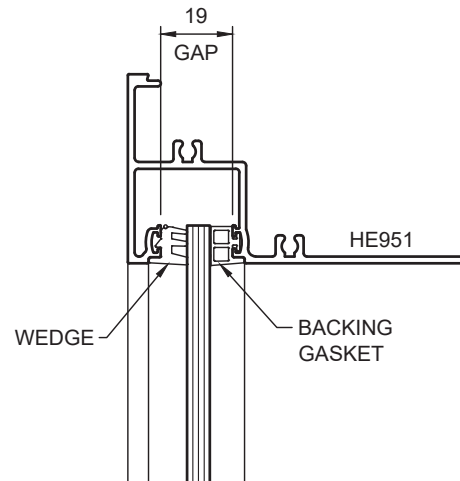
3D Section Render



Captive Glazing



McArthur Evo Framing



Hunter Evo Acoustic Framing

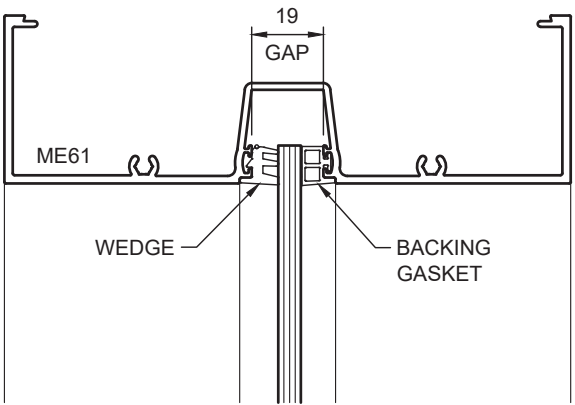
GLASS THICKNESS	WEDGE		CO-EXTRUDED BACKING GASKET
	ID COLOUR	REF. (GAP)	REF. (GAP)
6mm - 6.38mm	RED	GR47 (7mm)	CE49 (6mm)
8mm - 8.38mm	BLUE	GR45 (5mm)	CE49 (6mm)
9.5mm	BLUE	GR45 (5mm)	CE37 (4mm)
10mm - 10.38mm	BLUE	GR45 (5mm)	CE37 (4mm)
11.5mm	BLUE	GR45 (5mm)	CE36 (2mm)
12mm - 12.38mm	BLUE	GR45 (5mm)	CE36 (2mm)
13.5mm	BROWN	GR43 (3mm)	CE36 (2mm)
14mm	BROWN	GR43 (3mm)	CE36 (2mm)

Notes:

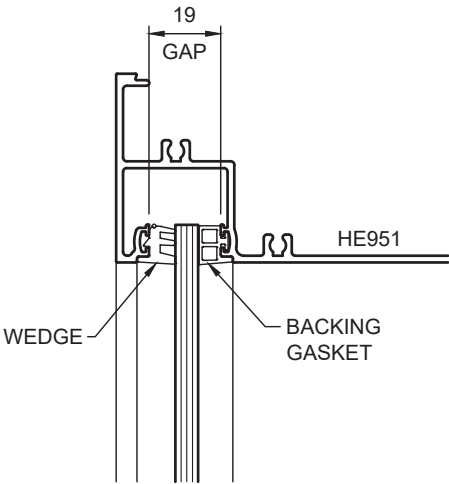
For window & door systems requiring a co-extruded captive gasket on the external side of the glazed pocket, Santoprene is the recommended material to be applied.

Reverse glazing wedge combinations for internal glazing.

Non Captive Glazing



McArthur Evo Framing



Hunter Evo Acoustic Framing

	WEDGE INNER		WEDGE OUTER	
GLASS THICKNESS	ID COLOUR	REF. (GAP)	ID COLOUR	REF. (GAP)
6mm - 6.38mm	RED	GR47 (7mm)	YELLOW	GR46 (6mm)
8mm - 8.38mm	BLUE	GR45 (5mm)	YELLOW	GR46 (6mm)
9.5mm	BLUE	GR45 (5mm)	WHITE	GR44 (4mm)
10mm - 10.38mm	BLUE	GR45 (5mm)	WHITE	GR44 (4mm)
11.5mm	BROWN	GR43 (3mm)	WHITE	GR44 (4mm)
12mm - 12.38mm	BROWN	GR43 (3mm)	BROWN	GR43 (3mm)
13.5mm	BLACK	GR32 (2mm)	BROWN	GR43 (3mm)
14mm	BROWN	GR43 (3mm)	BLACK	GR32 (2mm)

Note: For window & door systems requiring a co-extruded captive gasket on the external side of the glazed pocket, Santoprene is the recommended material to be applied.

FRAMING

Your new **DUALAIR®** frames have been manufactured using the highest quality materials available to the Architectural industry. Constructed from Architectural grade aluminium, these products are highly corrosion resistant and exceptionally strong. With a moderate amount of maintenance, the **DUALAIR®** frame will retain it's good looks and resist the elements for years to come.

The **DUALAIR®** frames are the product of extensive research and development and designed to resist corrosion and rusting, but as with all external elements on the building require some maintenance to keep them looking good and performing well. Depending on how harsh the environment elements are, the maintenance period will vary. Refer to recommended maintenance table below.

Your **DUALAIR®** frames should only ever need to be washed down with a soft bristled brush using warm water and mild detergent. Rinse well with fresh water and remove any detergent residue. Strong detergents and abrasive cleaners should never be used to clean the **DUALAIR®** frames as they may scratch or damage the surface finish.

MAINTENANCE PERIOD TABLE

ENVIRONMENT	RECOMMENDED MAXIMUM MAINTENANCE INTERVAL
Mild	Six Months
Moderate	Three Months
Tropical/Severe	One Month

Environmental Definitions:

Mild – Being rural, away from the coast and remote from industry and urban activity.

Moderate – Being mainly urban, inland and away from heavy industry.

Tropical – Being coastal/marine, subject to salt deposition and within 15km of the Eastern coast or 10km of the Western coast of Australia.

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All pictures shown in this catalogue are for illustration purposes only. Actual product may vary due to product enhancement.