Hunter Evo
101.6mm Double Flush Glazed Framing

Technical Manual

February 2024 | ISSUE I

EVERYTHING ALUMINIUM & HARDWARE

COPYRIGHT

DISCLAIMER

Whilst every effort has been made to ensure the technical details contained within this manual are accurate, Aluminium Specialties Group Pty Limited can take no responsibilities for any loss or damage whatsoever arising as a result of any errors contained in this manual.

Also, interpretation of standards or codes within this manual is Aluminium Specialties Group Pty Limited interpretation for such codes. Responsibility for code compliance remains with the user of this manual. In some cases product dimensions may vary or be changed without notice. The user of this manual should not act or rely upon on any information contained in this manual without first obtaining appropriate professional advice relating to their particular circumstances.

Aluminium Specialties Group Pty Limited disclaims all liability for loss or damage suffered by any party who acts or fails to act in reliance of this manual.

Hunter Evo
Double Flush Glazed Framing

Contents

1. Technical Manual Release Notes

This page is intended to record all changes to the **HUNTER EVO 101.6mm DOUBLE FLUSH GLAZED FRAMING** technical manual pages.

Changes or additions to this manual will be itemised with a brief description and date when the amendments were made.

ISSUE	DATE	Amendment Description	Refer to Tech Memo #
A	04/2013	Technical manual initial release	
B	10/2014	Revised test report results, extrusions, accessories and added detail page	
C	08/2015	Amended extrusion page and contract page added	
D	07/2016	Wind load table and acoustic test results	
E	09/2019	Tech manual update & re-release	348
F	10/2020	Silicone detail updated for Internal Glaze on pg 8.3	413
G	06/2021	Added AS2047 Test reports on pg 4.1 & 4.2	471
H	08/2021	Added AS222 to Extrusions on page 5.10	482
I	11/2021	Removed HE406 from page 5.2, HE429 from page 5.7 and HE428 from page 5.8	498

ALUMINIUM
Aluminium frames should be manufactured using Alspec's **HUNTER EVO 101.6mm DOUBLE FLUSH GLAZED FRAMING** system.

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

GLAZING
- Minimum glass thickness is 6mm with standard DG Framing and HE430 Adaptor.
- Maximum glass thickness is 30mm with standard DG Framing.
- Glazing wedges shall be Alspec's wedges for **HUNTER EVO 101.6mm DOUBLE FLUSH GLAZED FRAMING** to suit standard & captive glazing options, refer glazing pages 12.1 to 12.3.

HARDWARE
- All other hardware as per Alspec Technical Manual.

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

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 requirements 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 HUNTER EVO 101.6mm DOUBLE FLUSH GLAZED FRAMING system should seek confirmation of design wind pressure and deflection criteria from the building designer.

3. Loading Tables

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 Window/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
STEP 1 →	2400	S	1770	1450	1250	[illegible]	1010
		U	3440	2810	2410	[illegible]	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
Ixx = xxx x xxx mm4	Panel Width		800	1000	1200	1400	1600

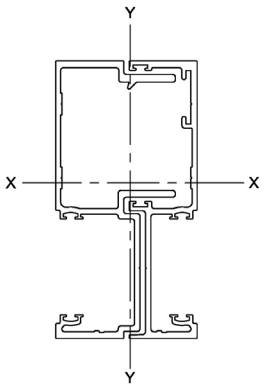
← STEP 3

STEP 2 ↑

Hunter Evo
Double Flush Glazed Framing

HE402 + HE403 Mullion Combination

Max Stress = 110Mpa S = Serviceability limit state l/250 U = Ultimate limit state

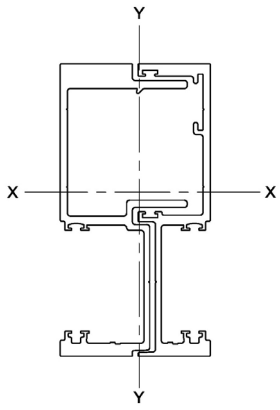
HE402 + HE403 MULLION COMBINATION	Panel Height		Maximum Design Pressure (Pa)						
	4200	S	570						
		U	1890						
	3900	S	710						
		U	2200						
	3600	S	910	610					
		U	2580	1740					
	3300	S	1180	800	610	500			
		U	3080	2080	1590	1310			
	3000	S	1580	1070	830	690	600	540	510
		U	3740	2530	1940	1610	1390	1260	1170
	2700	S	2180	1490	1150	970	850	790	750
		U	4630	3150	2430	2030	1780	1630	1540
	2400	S	3000	2150	1680	1430	1280	1210	1180
		U	5880	4030	3140	2650	2360	2210	2160
	2100	S	3000	3000	2600	2250	2080	2020	1920
		U	7740	5340	4220	3630	3320	3220	3060
	1800	S	3000	3000	3000	3000	3000	3000	3000
		U	9000	7450	6010	5330	5120	4860	4620
Ixx = 1192 x 10^3 mm^4	**Mullion Spacing**		**600**	**900**	**1200**	**1500**	**1800**	**2100**	**2400**

Tables are based on theoretical section properties

3. Loading Tables

HE422 + HE423 H.D. Mullion Combination

Max Stress = 110Mpa S = Serviceability limit state l/250 U = Ultimate limit state

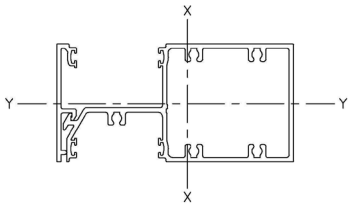
HE422 + HE423 H.D. MULLION COMBINATION	Panel Height		Maximum Design Pressure (Pa)						
	4500	S	640						
		U	2090						
	4200	S	790	530					
		U	2400	1610					
	3900	S	990	670	510				
		U	2780	1870	1420				
	3600	S	1260	850	650	530			
		U	3270	2210	1680	1370			
	3300	S	1640	1110	850	700	610	550	
		U	3900	2640	2020	1660	1430	1270	
	3000	S	2200	1490	1150	960	830	760	710
		U	4740	3210	2470	2040	1770	1590	1480
	2700	S	3000	2070	1610	1350	1190	1090	1040
		U	5870	3990	3090	2570	2250	2060	1950
	2400	S	3000	2980	2340	1990	1790	1680	1650
		U	7460	5110	3980	3360	2990	2800	2740
	2100	S	3000	3000	3000	3000	2890	2820	2680
		U	9000	6770	5350	4600	4210	4090	3890
	1800	S	3000	3000	3000	3000	3000	3000	3000
		U	9000	9000	7620	6760	6490	6160	5850
Ixx = 1656 x 10^3 mm^4	**Mullion Spacing**		**600**	**900**	**1200**	**1500**	**1800**	**2100**	**2400**

Tables are based on theoretical section properties

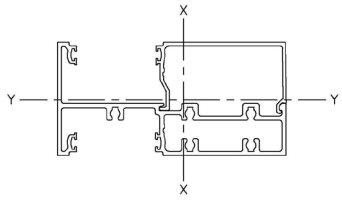
3. Loading Tables

HE412 + HE313 Transom

Max Stress = 110Mpa S = Serviceability limit state l/250 U = Ultimate limit state

HE412 + HE313 TRANSOM	Transom Centres		Maximum Design Loads (Pa)				
	2400	S	3000	2250	1580		
		U	7485	3430	2300		
	2100	S	3000	3000	1670	950	
		U	7879	3620	2430	1460	
	1800	S	3000	3000	1760	980	
		U	8294	3810	2320	1500	
	1500	S	3000	3000	1830	1060	
		U	8730	4010	2420	1640	
	1200	S	3000	3000	2040	1220	
		U	7840	4250	2720	1910	
	900	S	3000	3000	2510	1530	1010
		U	8580	5070	3380	2420	1820
	Max Kg		180	180	150	100	65
Ixx = 561 x 10^3 mm^4 Iyy = 202 x 10^3 mm^4	**Transom length**		**1200**	**1500**	**1800**	**2100**	**2400**

HE410 + HE411 Transom

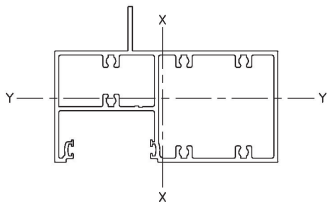
HE410 + HE411 TRANSOM	Transom Centres		Maximum Design Loads (Pa)			
	2400	S	3000	3000		
		U	9000	4570		
	2100	S	3000	3000		
		U	9000	4820		
	1800	S	3000	3000	2280	
		U	9000	5070	3090	
	1500	S	3000	3000	2360	
		U	9000	5340	3220	
	1200	S	3000	3000	2630	
		U	9000	5660	3630	
	900	S	3000	3000	3000	1980
		U	9000	6740	4490	3220
	Max Kg		180	120	70	45
Ixx = 723 x 10^3 mm^4 Iyy = 91 x 10^3 mm^4	**Transom length**		**1200**	**1500**	**1800**	**2100**

Tables are based on theoretical section properties

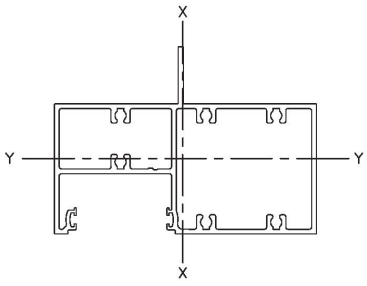
Maximum glass weights have been determined to limit deflection to 5mm, using setting block locations at 1/8 points.

HE424 Transom DG 35mm Sash

Max Stress = 110Mpa S = Serviceability limit state l/250 U = Ultimate limit state

HE424 TRANSOM DG 35mm SASH	Transom Centres		Maximum Design Loads (Pa)						
	1800	S	3000						
		U	9000						
	1500	S	3000	3000	3000				
		U	9000	9000	9000				
	1200	S	3000	3000	3000	3000	3000	3000	
		U	9000	9000	9000	9000	8300	6940	
	900	S	3000	3000	3000	3000	3000	3000	3000
		U	9000	9000	9000	9000	9000	8280	7160
	Max Kg		-	-	-	-	-	-	-
Ixx = 872 x 10^3 mm^4 Iyy = 311 x 10^3 mm^4	**Transom length**		**1000**	**1100**	**1200**	**1300**	**1400**	**1500**	**1600**

HE425 Transom DG 50mm Sash

HE425 TRANSOM DG 50mm SASH	Transom Centres		Maximum Design Loads (Pa)						
	1800	S	3000						
		U	9000						
	1500	S	3000	3000	3000				
		U	9000	9000	9000				
	1200	S	3000	3000	3000	3000	3000	3000	
		U	9000	9000	9000	9000	8130	6800	
	900	S	3000	3000	3000	3000	3000	3000	3000
		U	9000	9000	9000	9000	9000	8110	7020
	Max Kg		-	-	-	-	-	-	-
Ixx = 863 x 10^3 mm^4 Iyy = 318 x 10^3 mm^4	**Transom length**		**1000**	**1100**	**1200**	**1300**	**1400**	**1500**	**1600**

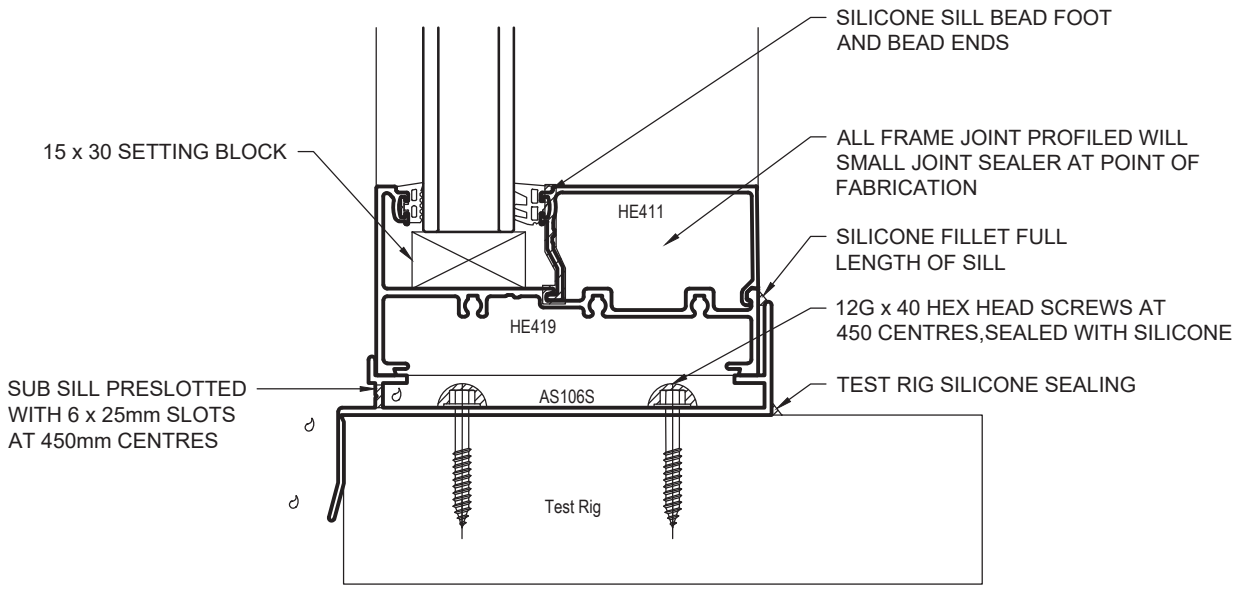
Tables are based on theoretical section properties

Maximum glass weights have been determined to limit deflection to 5mm, using setting block locations at 1/8 points.

4. Test Summary

AS2047 - Fixed/Fixed/Fixed over Fixed

TEST REPORT:	OT20-013
SYSTEM CONFIGURATION	HUNTER EVO 101.6mm DG F/F/F-F WITH HE422 HE423 MULLION & HE410 HE411 TRANSOM
TEST SAMPLE SIZE	2700 H x 3597 W
SERVICEABILITY LOAD	+/- 1700 Pa
ULTIMATE LOAD	+/- 3100 Pa
WATER PENETRATION	607 Pa
AIR INFILTRATION @ 75Pa	+ 0.06 L/s/ms^2 - 0.09 L/s/ms^2

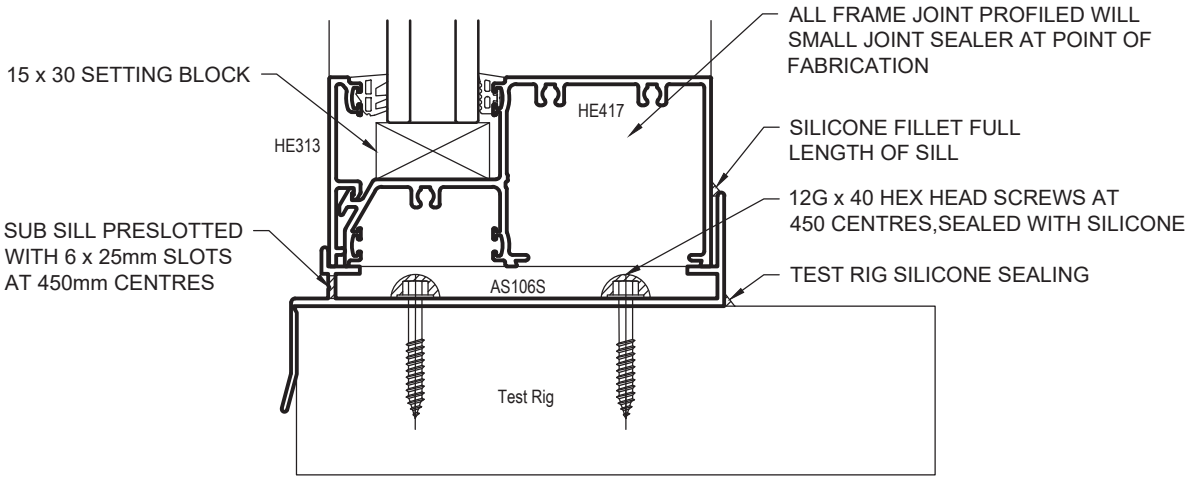


DISCLAIMER:
Please note that the test results shown above reflect specific configurations of a system and are representative only. If a specific high wind load or a different configuration (i.e. changes to frames, transoms, mullions) is required on a project please discuss with Alspec prior to commencement.

4. Test Summary

AS2047 - Fixed/Fixed/Fixed over Fixed

TEST REPORT:	OT20-014
SYSTEM CONFIGURATION	HUNTER EVO 101.6mm DG F/F/F-F WITH HE402 HE403 MULLION & HE412 HE313 TRANSOM
TEST SAMPLE SIZE	2700 H x 3601 W
SERVICEABILITY LOAD	+/- 1200 Pa
ULTIMATE LOAD	+/- 3100 Pa
WATER PENETRATION	493 Pa
AIR INFILTRATION @ 75Pa	+ 0.06 L/s/ms^2 - 0.07 L/s/ms^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

Acoustic Test Result- AS/ NZS ISO 717.1

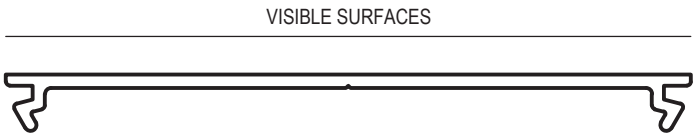
TEST REPORT	PRODUCT DESCRIPTION	SIZE	GLASS	Rw
14-107	HUNTER EVO 101.6mm F/F	2.1m (H) x 1.8m (W)	6.38mm LAMINATE/ 12mm AIR SPACE/ 6.38mm LAMINATE	36
TL636-01-2	HUNTER EVO 101.6mm F-A-F ASW725 SASH, ASW70 HINGED HEAD	1.2m (H) x 1.8m (W)	6.76mm LAMINATE/ 13.5mm ARGON/ 6.76mm LAMINATE	41

Impact - AS/NZ1170.2 Section 2.5.7 & 5.3.2

TEST REPORT	GLASS	SIZE	RESULT
INZ38120-06A	12.4mm GLASSHAPE GEN 2 STORMSHIELD	2.1m (H) x 1.0m (W)	39 m/s
AZT0342.18	16.6mm STORMSAFE LAM	2.38m (H) x 1.18m (W)	36 m/s
AZT0137.18	13.8mm STORMSAFE LAM	2.4m (H) x 1.2m (W)	31 m/s

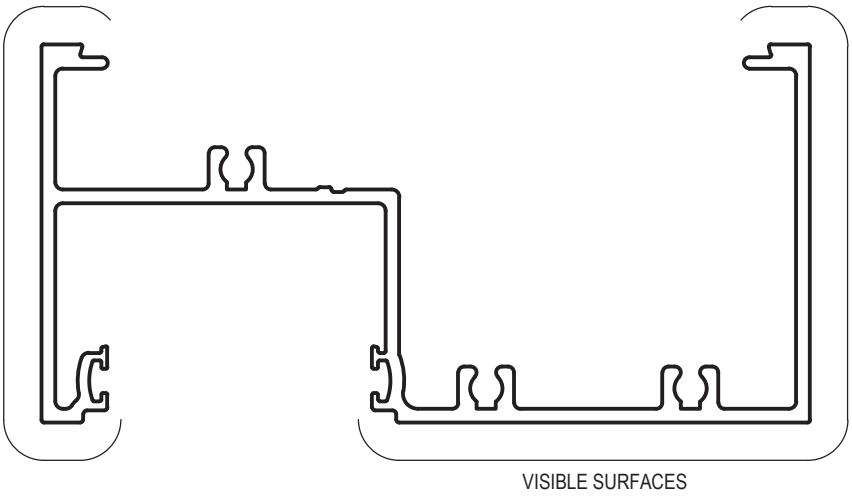
DISCLAIMER:
Please note that the test results shown above reflect specific configurations of a system and are representative only. If a specific high wind load or a different configuration (i.e. changes to frames, transoms, mullions) is required on a project please discuss with Alspec prior to commencement.

Hunter Evo
Double Flush Glazed Framing



AS5
FLUSH ADAPTOR

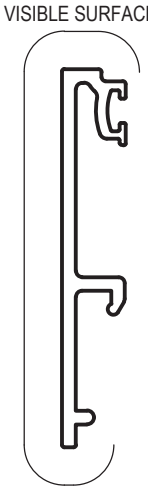
Mass. 0.500 Kg/m
Anod. Per. 213
Paint Per. 100



HE401
101.6mm DG
FRAME / JAMB

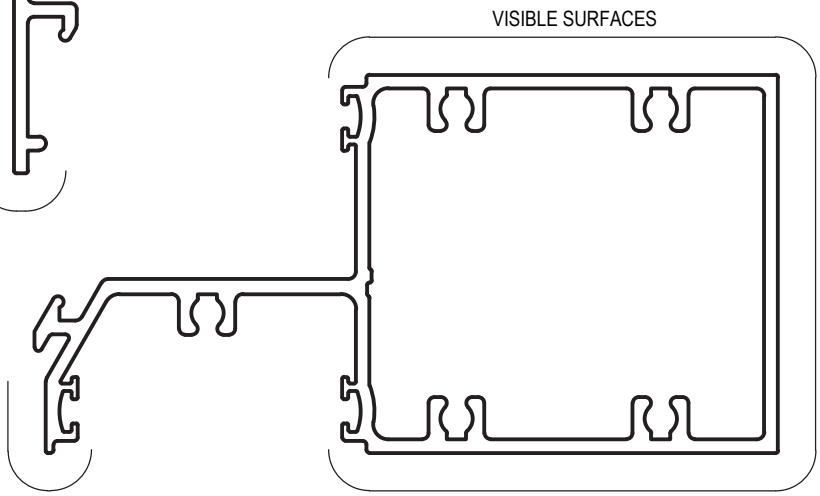
Mass. 1.468 Kg/m
Anod. Per. 592
Paint Per. 172

Ixx = 757.25 x 10^3 mm^4



HE313
FACE GLAZING BEAD

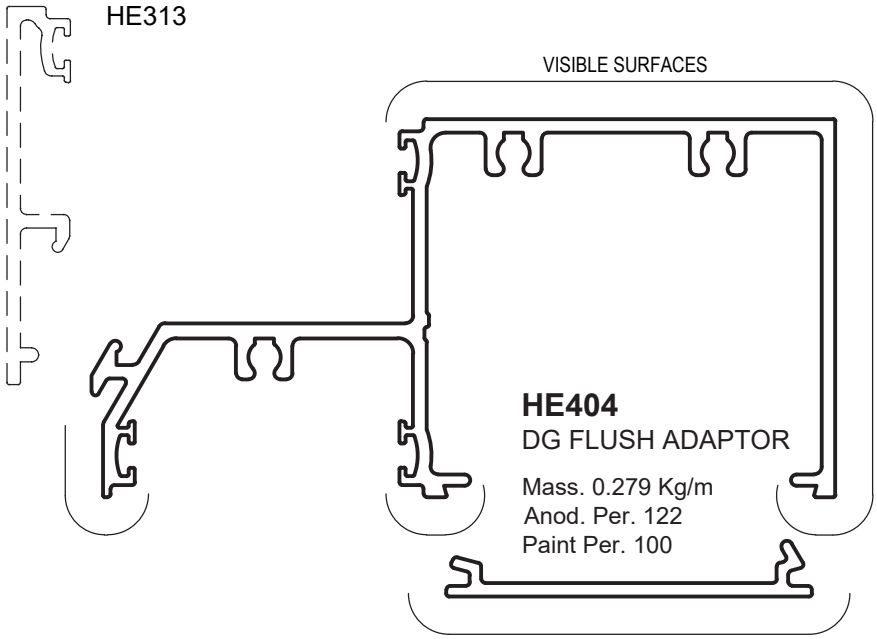
Mass. 0.371 Kg/m
Anod. Per. 160
Paint Per. 100



HE412
DG EXTERNAL
GLAZE TRANSOM

Mass. 1.702 Kg/m
Anod. Per. 399
Paint Per. 170

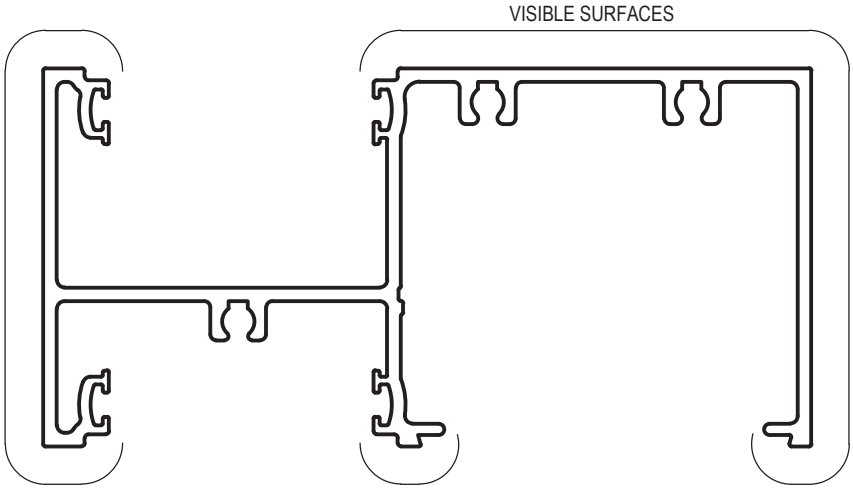
Ixx = 561.20 x 10^3 mm^4
Iyy = 201.78 x 10^3 mm^4



HE417
DG EXTERNAL GLAZESILL

Mass. 1.374 Kg/m
Anod. Per. 558
Paint Per. 121

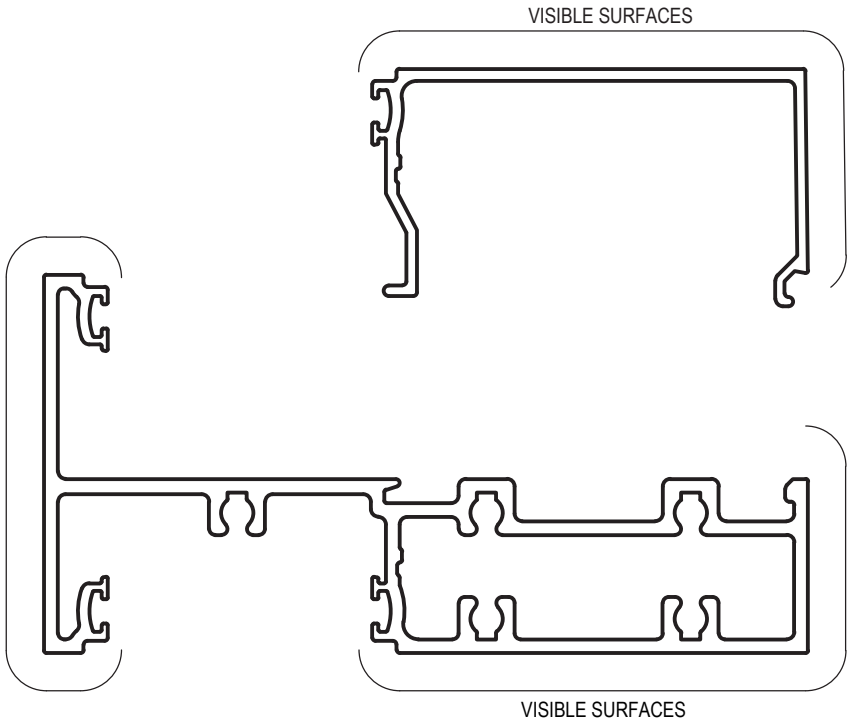
Ixx = 510.49 x 10^3 mm^4



HE416
101.6mm DG FRAME / JAMB 2 WAY GLAZING

Mass. 1.609 Kg/m
Anod. Per. 668
Paint Per. 177

Ixx = 754.29 x 10^3 mm^4



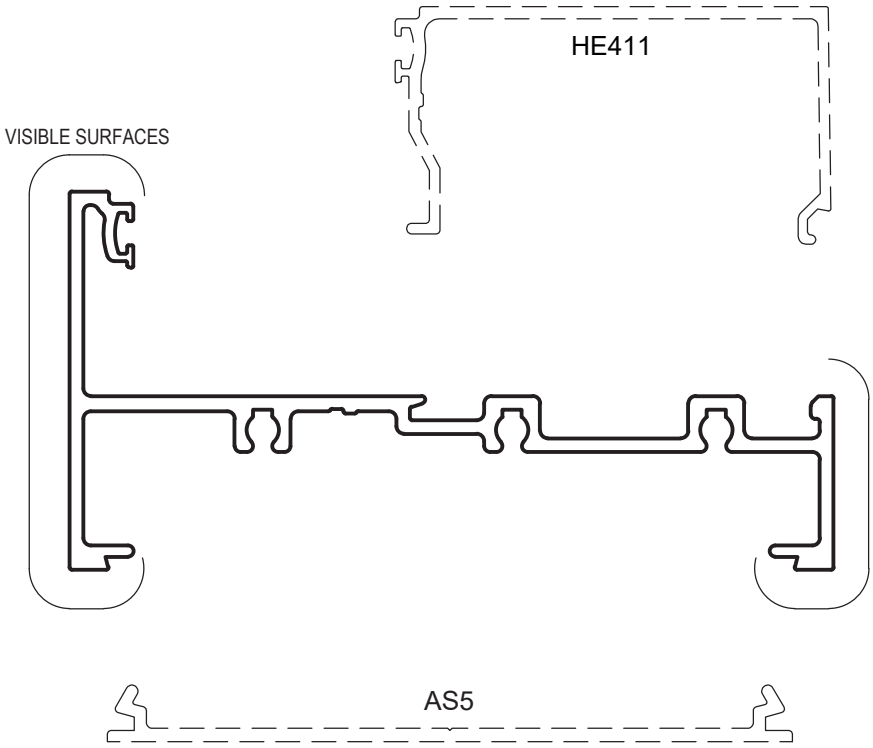
HE411
DG INTERNAL
GLAZING BEAD

Mass. 0.507 Kg/m
Anod. Per. 252
Paint Per. 100

HE410
DG INTERNAL
GLAZE TRANSOM

Mass. 1.689 Kg/m
Anod. Per. 473
Paint Per. 138

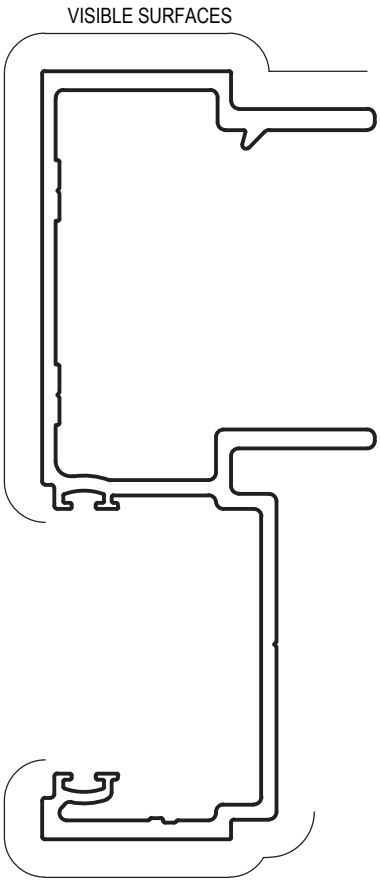
Ixx = 722.85 x 10^3 mm^4
Iyy = 91.18 x 10^3 mm^4



HE419
DG INTERNAL
GLAZE SILL

Mass. 1.219 Kg/m
Anod. Per. 474
Paint Per. 100

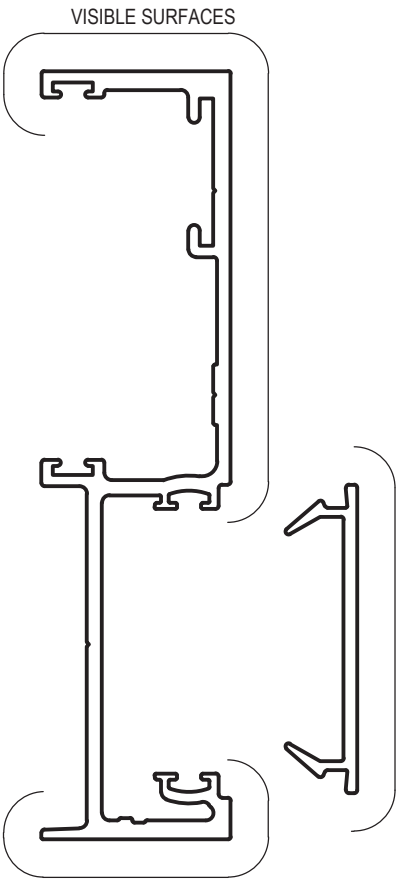
Ixx = 615.14 x 10^3 mm^4



HE402
101.6mm DG
MALE MULLION

Mass. 1.477 Kg/m
Anod. Per. 511
Paint Per. 133

Ixx = 666.03 x 10^3 mm^4



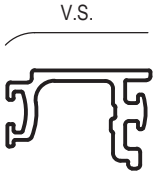
HE403
101.6mm DG
FEMALE MULLION

Mass. 1.130 Kg/m
Anod. Per. 427
Paint Per. 111

Ixx = 526.10 x 10^3 mm^4

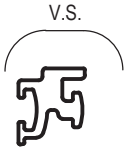
ECO208R
FLUSH POCKET
INFILL DG

Mass. 0.253 Kg/m
Anod. Per. 119
Paint Per. 100



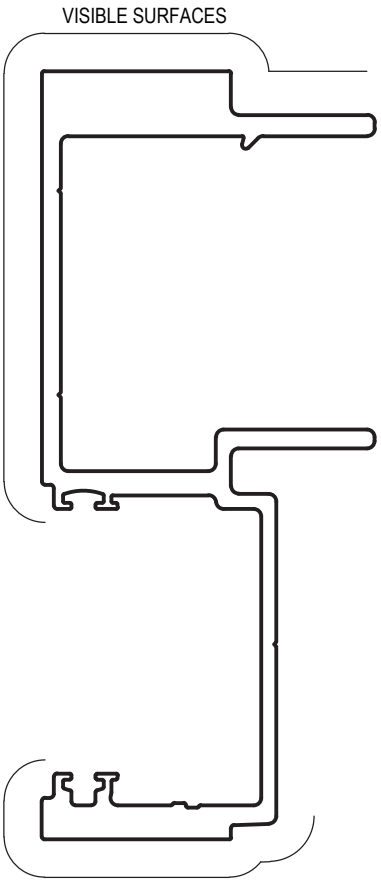
HE430
SINGLE GLAZE
ADAPTOR

Mass. 0.192 Kg/m
Anod. Per. 111
Paint Per. 100



ECO123
GLAZING
ADAPTOR

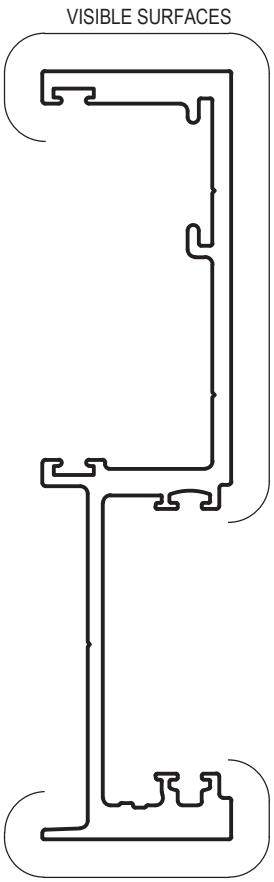
Mass. 0.118 Kg/m
Anod. Per. 100
Paint Per. 100



HE422
101.6mm DG H.D.
MALE MULLION

Mass. 2.060 Kg/m
Anod. Per. 483
Paint Per. 134

Ixx = 1000.85 x 10^3 mm^4



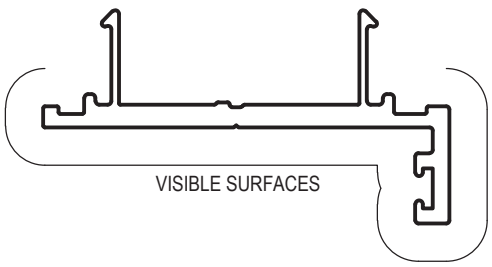
HE423
101.6mm DG H.D.
FEMALE MULLION

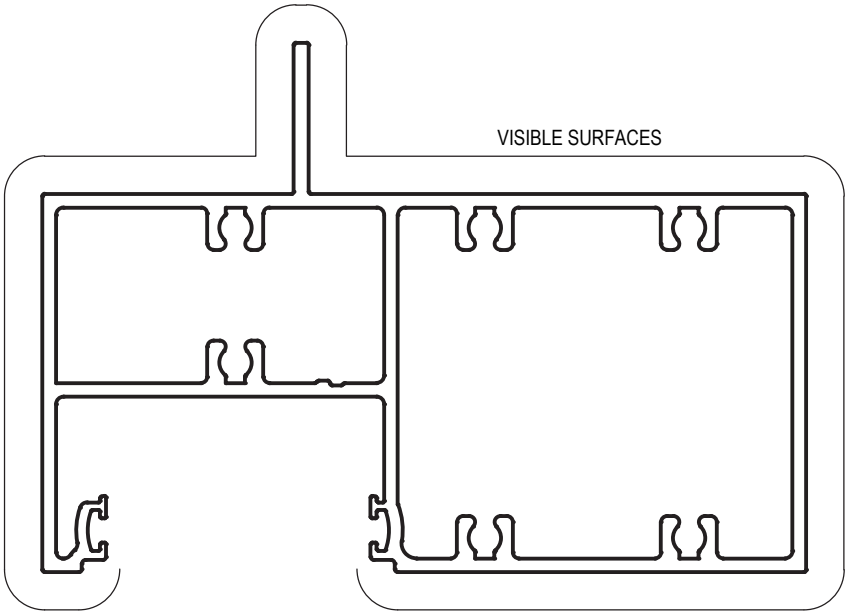
Mass. 1.376 Kg/m
Anod. Per. 407
Paint Per. 115

Ixx = 655.33 x 10^3 mm^4

HE408
45mm DOOR STOP

Mass. 0.601 Kg/m
Anod. Per. 211
Paint Per. 100

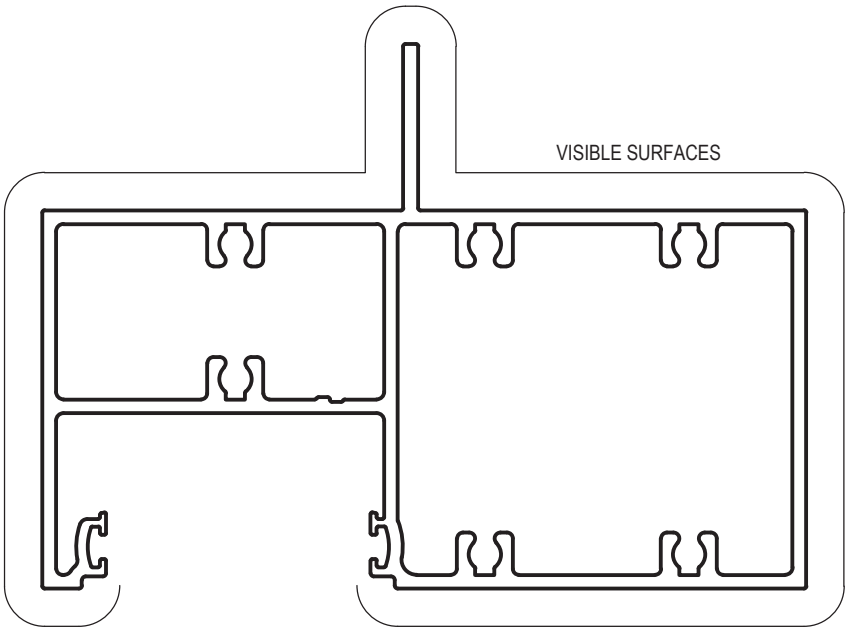




HE424
TRANSOM DG
35mm SASH

Mass. 2.231 Kg/m
Anod. Per. 433
Paint Per. 300

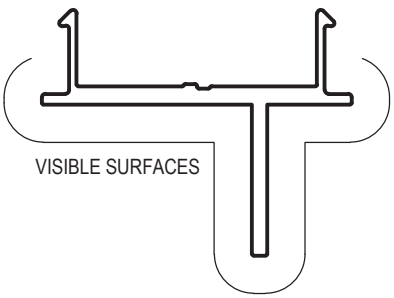
Ixx = 871.91 x 10^3 mm^4
Iyy = 311.33 x 10^3 mm^4



HE425
TRANSOM DG
50mm SASH

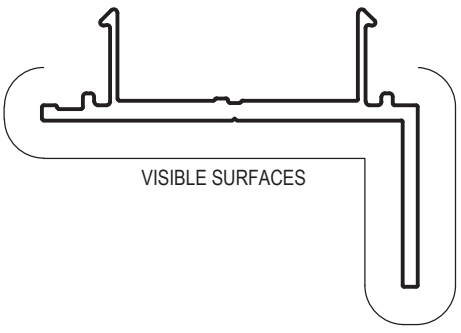
Mass. 2.242 Kg/m
Anod. Per. 437
Paint Per. 308

Ixx = 863.47 x 10^3 mm^4
Iyy = 318.42 x 10^3 mm^4



HE427
35mm SASH
ADAPTOR DG

Mass. 0.418 Kg/m
Anod. Per. 169
Paint Per. 100

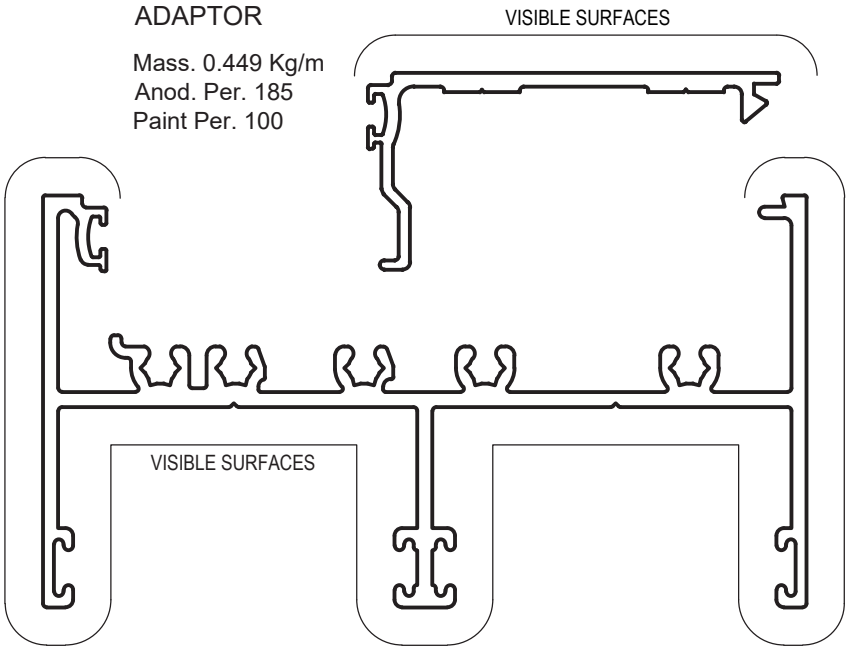


HE421
50mm SASH
ADAPTOR DG

Mass. 0.525 Kg/m
Anod. Per. 205
Paint Per. 100

HE330
DOUBLE GLAZE
ADAPTOR

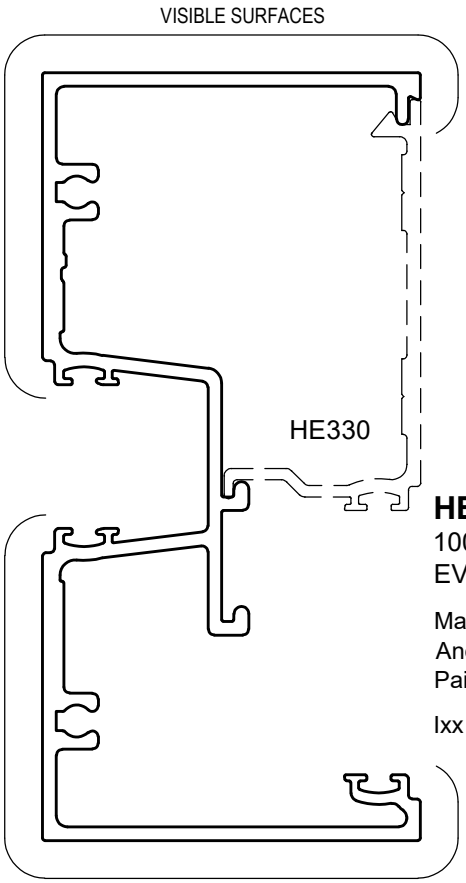
Mass. 0.449 Kg/m
Anod. Per. 185
Paint Per. 100



HE883
HEAD / JAMB
FRONT GLAZED

Mass. 1.809 Kg/m
Anod. Per. 687
Paint Per. 381

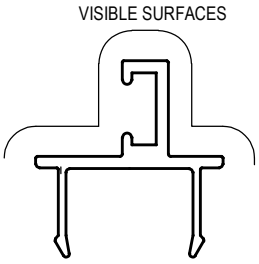
Ixx = 867.03 x 10^3 mm^4
Iyy = 107.90 x 10^3 mm^4



HE341
100mm McARTHUR
EVO DOOR JAMB

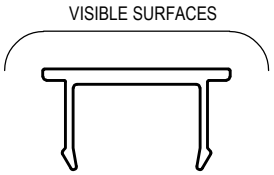
Mass. 1.623 Kg/m
Anod. Per. 629
Paint Per. 186

Ixx = 762.85 x 10^3 mm^4



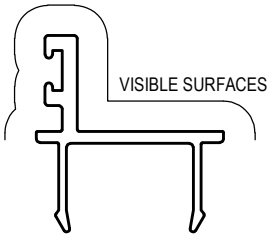
ME7
45mm DOOR STOP

Mass. 0.275 Kg/m
Anod. Per. 138
Paint Per. 100



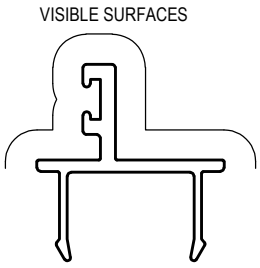
ME8
POCKET FILLER

Mass. 0.181 Kg/m
Anod. Per. 100
Paint Per. 100



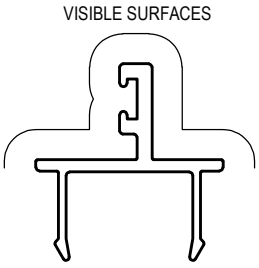
ME35
35mm DOOR STOP

Mass. 0.271 Kg/m
Anod. Per. 136
Paint Per. 100



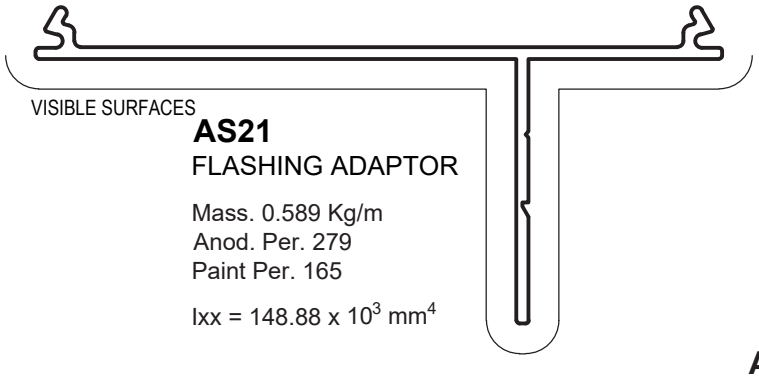
ME40
40mm DOOR STOP

Mass. 0.271 Kg/m
Anod. Per. 136
Paint Per. 100



ME45
45mm DOOR STOP

Mass. 0.271 Kg/m
Anod. Per. 136
Paint Per. 100



AS21
FLASHING ADAPTOR

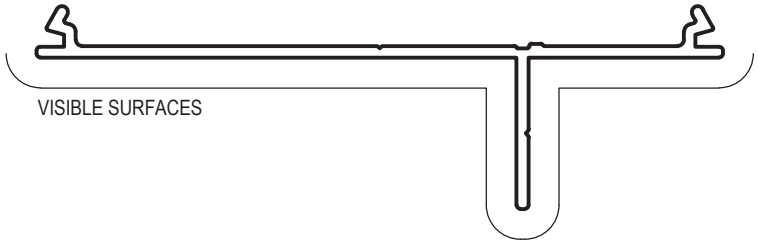
Mass. 0.589 Kg/m
Anod. Per. 279
Paint Per. 165

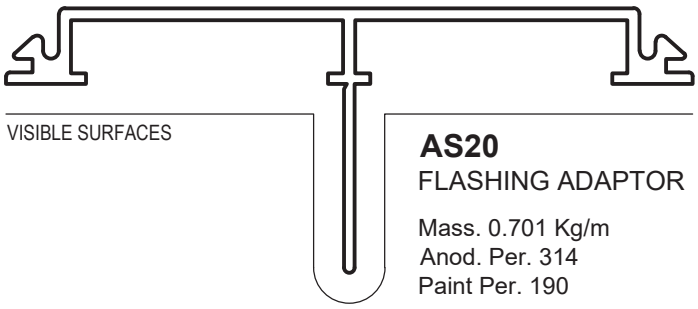
Ixx = 148.88 x 10^3 mm^4

AS221
20mm REVEAL ADAPTOR

Mass. 0.522 Kg/m
Anod. Per. 250
Paint Per. 100

Ixx = 141.90 x 10^3 mm^4





AS20
FLASHING ADAPTOR

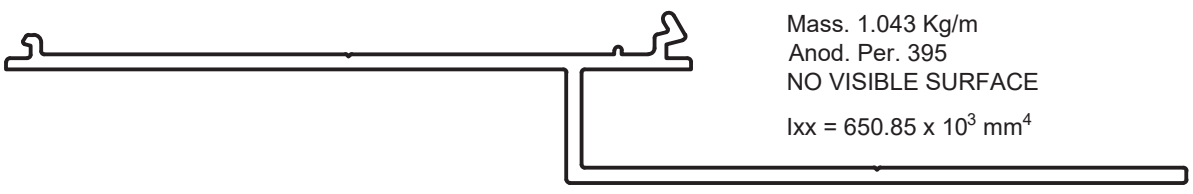
Mass. 0.701 Kg/m
Anod. Per. 314
Paint Per. 190

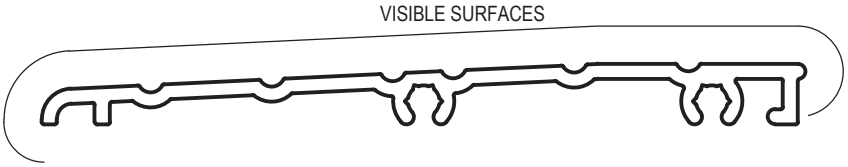
Ixx = 193.39 x 10^3 mm^4

AS222
101.6mm 13mm PLASTERBOARD ADAPTOR

Mass. 1.043 Kg/m
Anod. Per. 395
NO VISIBLE SURFACE

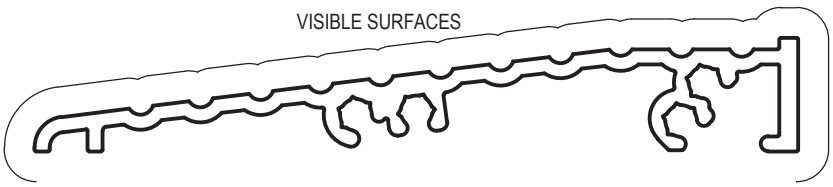
Ixx = 650.85 x 10^3 mm^4





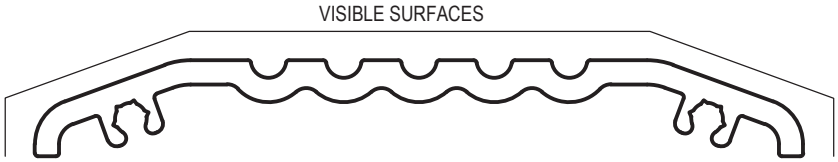
AS1800
100mm DISABLE ACCESS THRESHOLD

Mass. 0.740 Kg/m
Anod. Per. 272
Paint Per. 111



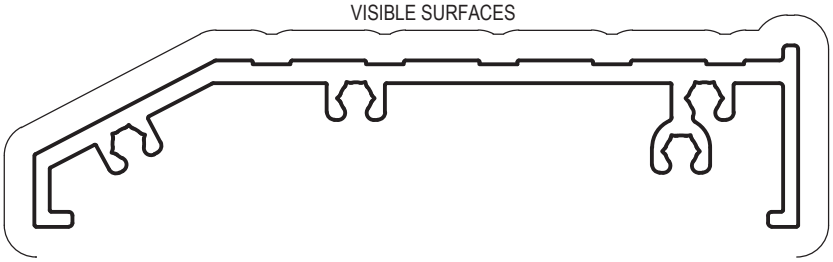
AD008
101.6mm DISABLED RAMP THRESHOLD

Mass. 0.953 Kg/m
Anod. Per. 330
Paint Per.129



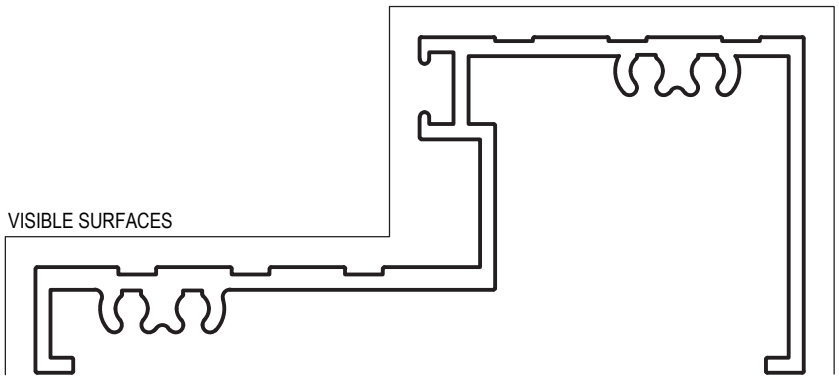
AS1853
101.6mm THRESHOLD

Mass. 1.136 Kg/m
Anod. Per. 277
Paint Per. 131



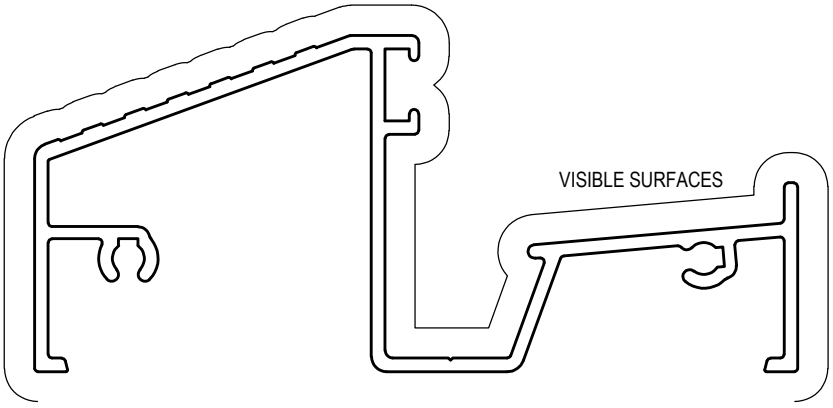
AS1855
101mm THRESHOLD

Mass. 1.202 Kg/m
Anod. Per. 370
Paint Per. 143



AS2366
45mm DOOR THRESHOLD OUTWARD OPENING

Mass. 1.552 Kg/m
Anod. Per. 491
Paint Per. 239



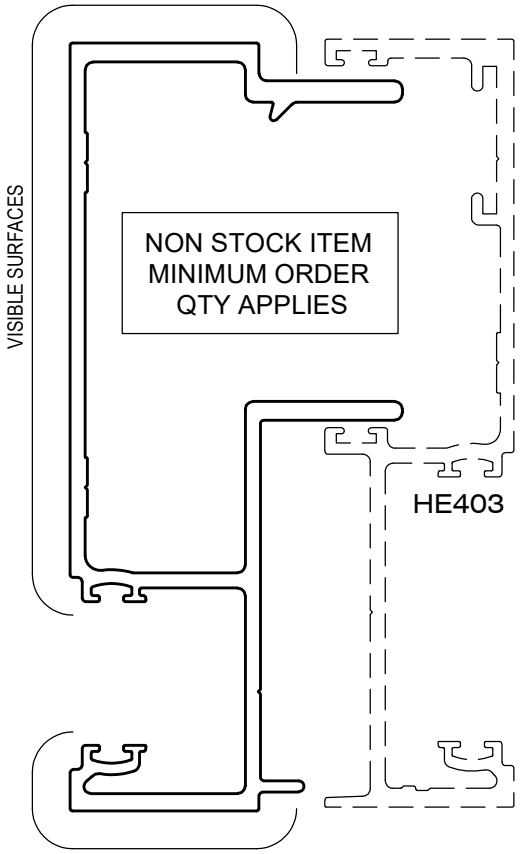
AS2371
45mm DOOR
THRESHOLD
INWARD OPENING

Mass. 1.285 Kg/m
Anod. Per. 523
Paint Per. 245

HE842
SINGLE TO DOUBLE
GLAZED MALE MULLION

Mass. 1.524 Kg/m
Anod. Per. 533
Paint Per. 130

Ixx = 679.25 x 10^3 mm^4



Glazing Wedges

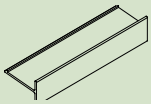
IMAGE	TO SUIT GAP	MATERIAL	PART #	DESCRIPTION
	3mm	PVC	1313055	GR43 GLAZING WEDGE (BROWN) (3mm GAP) PVC x 200m ROLL
		S/PRENE	1313063	GR43S GLAZING WEDGE (BROWN) (3mm GAP) S/PRENE x 200m ROLL
	4mm	PVC	1313056	GR44 GLAZING WEDGE (WHITE) (4mm GAP) PVC x 200m ROLL
		S/PRENE	1313064	GR44S GLAZING WEDGE (WHITE) (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	1313058	GR46 GLAZING WEDGE (YELLOW) (6mm GAP) PVC x 150m ROLL
		S/PRENE	1313066	GR46S GLAZING WEDGE (YELLOW) (6mm GAP) S/PRENE x 150m ROLL
	7mm	PVC	1313059	GR47 GLAZING WEDGE (RED) (7mm GAP) PVC x 150m ROLL
		S/PRENE	1313062	GR47S GLAZING WEDGE (RED) (7mm GAP) S/PRENE x 150m 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

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) S/PRENE x 200m ROLL
	2mm	PVC	1313079	CE36 CO-EXT BACKING GASKET (2mm GAP) PVC x 100m ROLL
		S/PRENE	1313080	CE36S CO-EXT BACKING GASKET (2mm GAP) S/PRENE 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) S/PRENE x 175m ROLL
	4mm	PVC	1313081	CE37 CO-EXT BACKING GASKET (4mm GAP) PVC x 100m ROLL
		S/PRENE	1313082	CE37S CO-EXT BACKING GASKET (4mm GAP) S/PRENE 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) S/PRENE x 100m ROLL
	6mm	PVC	1313083	CE49 CO-EXT BACKING GASKET (6mm GAP) PVC x 100m ROLL
		S/PRENE	1313084	CE49S CO-EXT BACKING GASKET (6mm GAP) S/PRENE x 100m ROLL

6. Hardware & Components

Seals

IMAGE	PART #	FINISH	DESCRIPTION
	1376079	BLACK (034)	CE308 CO-EXT DOOR BUFFER S/PRENE x 200m ROLL
	1376449	BLACK (034)	MS6 MULLION SEAL PVC x 200m
	1376402	BLACK (034)	DB1 DOOR STOP RUBBER x 100m
	1376403	GREY (036)	DB1 DOOR STOP RUBBER GREY x 200m
	1378140	MILL (001)	ECO106 MULLION CLIP x 150mm 6106 T6

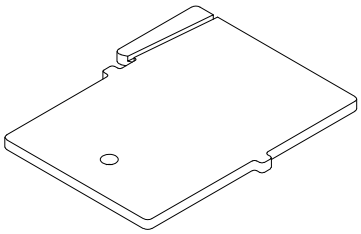
Fasteners

SCREWS			
PART #	HEAD	DESCRIPTION	LOCATION
1382644	SQUARE #2	10g x 1 (25mm) 304SS SQ #2 PAN S/TAP SCREW x 1000	MAIN FRAME
1382659	SQUARE #2	10g x 2 (51mm) 304SS SQ #2 CSK S/TAP SCREW x 1000	MULLION

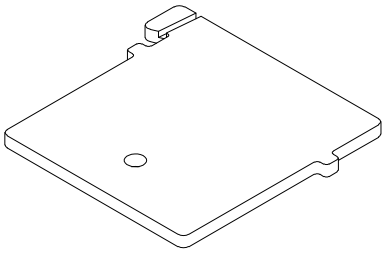
Frame Joint Gaskets

PART #	DESCRIPTION	FINISH
1385509	FJG50 FRAME JOINT GASKET PVC FOAM TAPE 50 x 1.6mm 45.7m	BLACK (034)
		GREY (036)

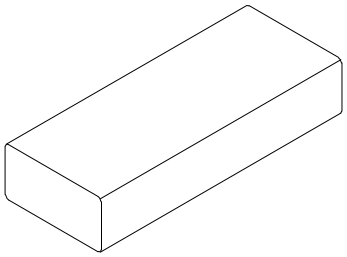
Accessories



HE003 POCKET STOP x 50 (TO SUIT HE401/ HE402/ HE422)	
PART	1378196
FINISH	NOT SPECIFIED (099)
QTY	BAG



HE004 POCKET STOP x 50 (TO SUIT HE403 & HE423)	
PART	1378197
FINISH	NOT SPECIFIED (099)
QTY	BAG



SETTING BLOCK 15x30x75mm	
PART	1376733
FINISH	BLACK (034)
QTY	BAG OF 50

Silicone

100% NEUTRAL CURE SILICONE

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

100% MATTE NEUTRAL CURE SILIICONE

- 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

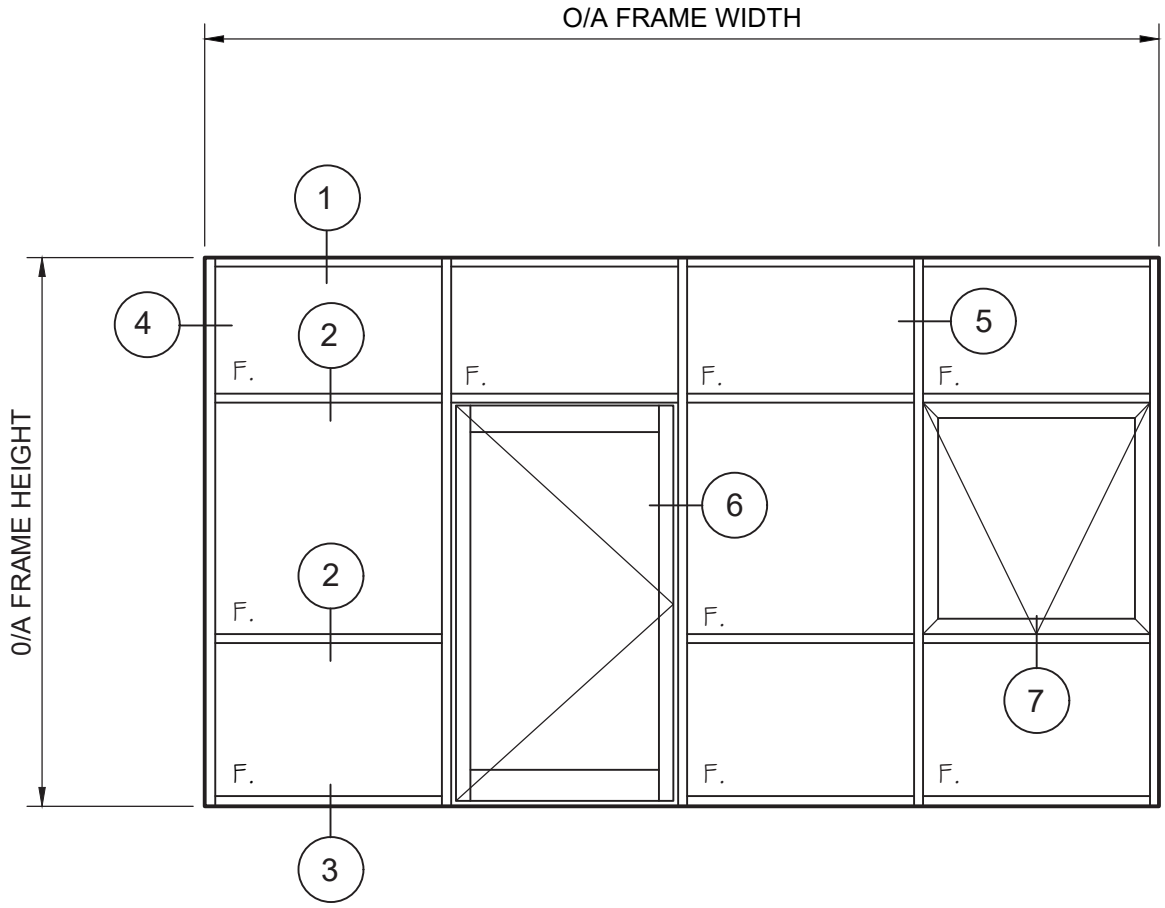
- Premium 100% silicone
- UV Stable
- 2-5 minute skin time
- Flexible + 25%
- No slump

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

Silicone Product Codes

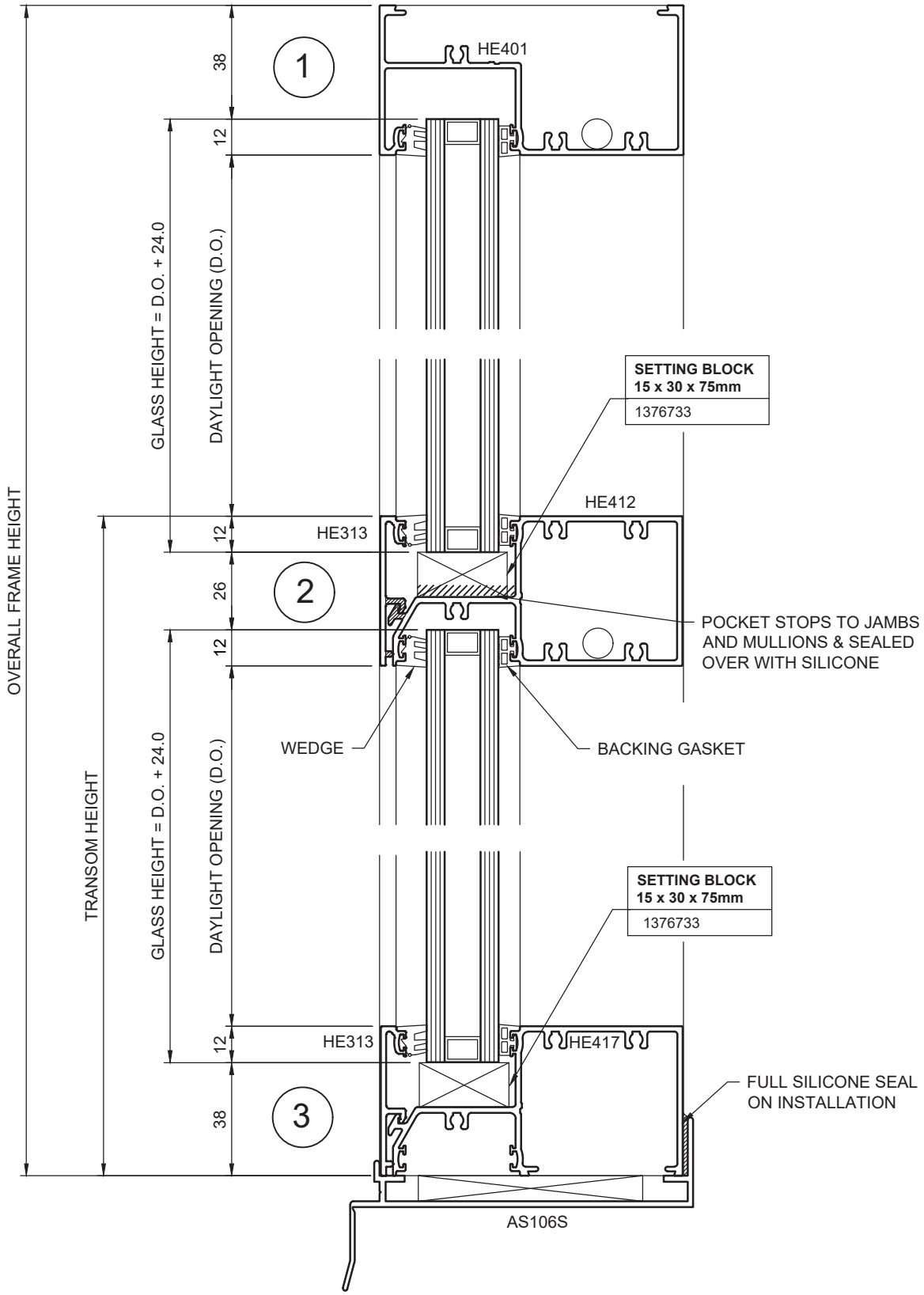
Product Category	Item No.	Alspec Part No. Code	Description	Finish	Pack
ALSPEC 100%	1	1386113	ALSPEC 100% NEUTRAL CURE SILICONE x 310g CAT	ALMOND IVORY	CARTRIDGE
	2	1386114	ALSPEC 100% NEUTRAL CURE SILICONE x 310g CAT	ALUMINIUM	CARTRIDGE
	3	1386105	ALSPEC 100% NEUTRAL CURE SILICONE x 310g CAT	BLACK	CARTRIDGE
	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



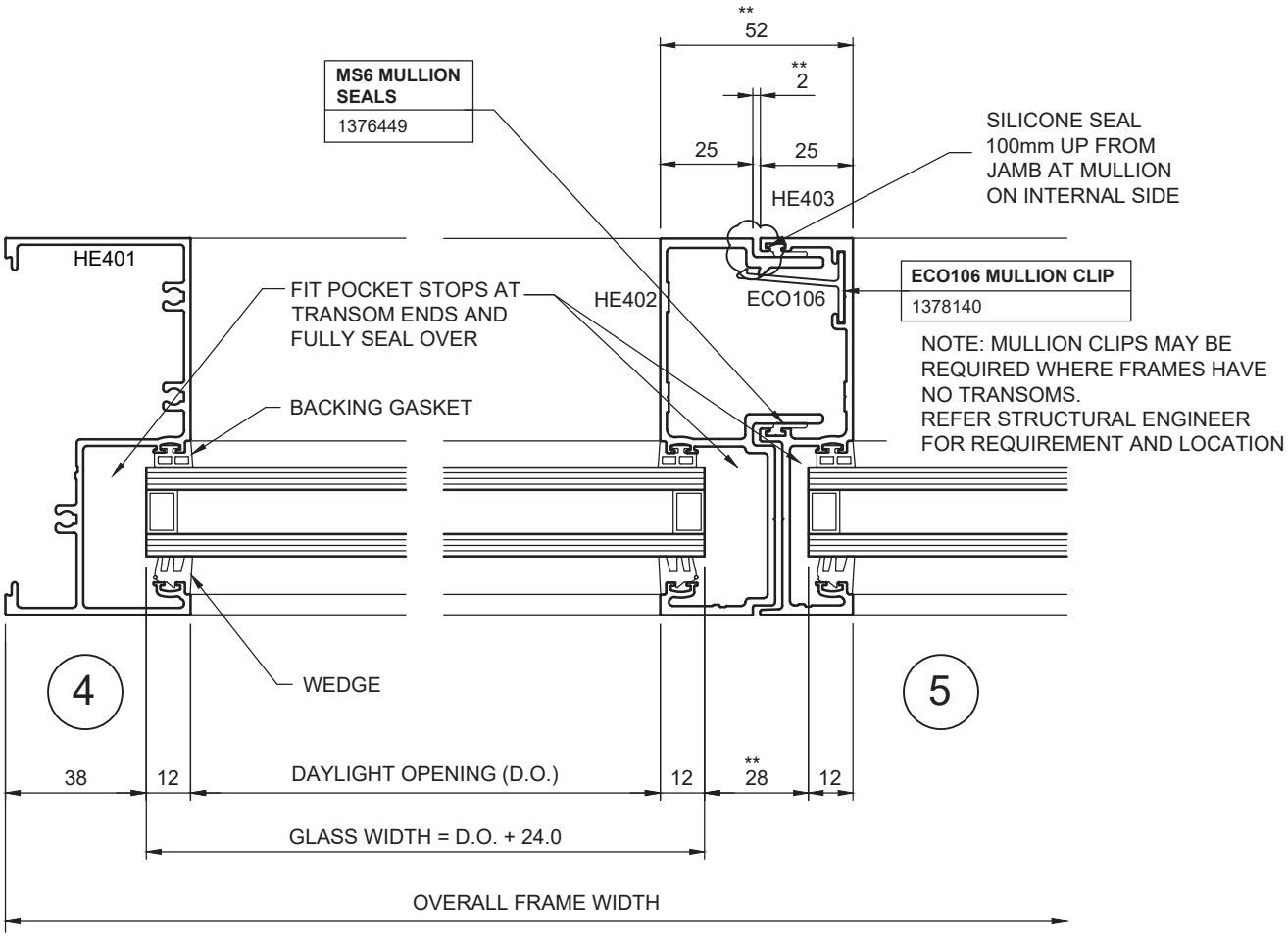
8. Typical Details

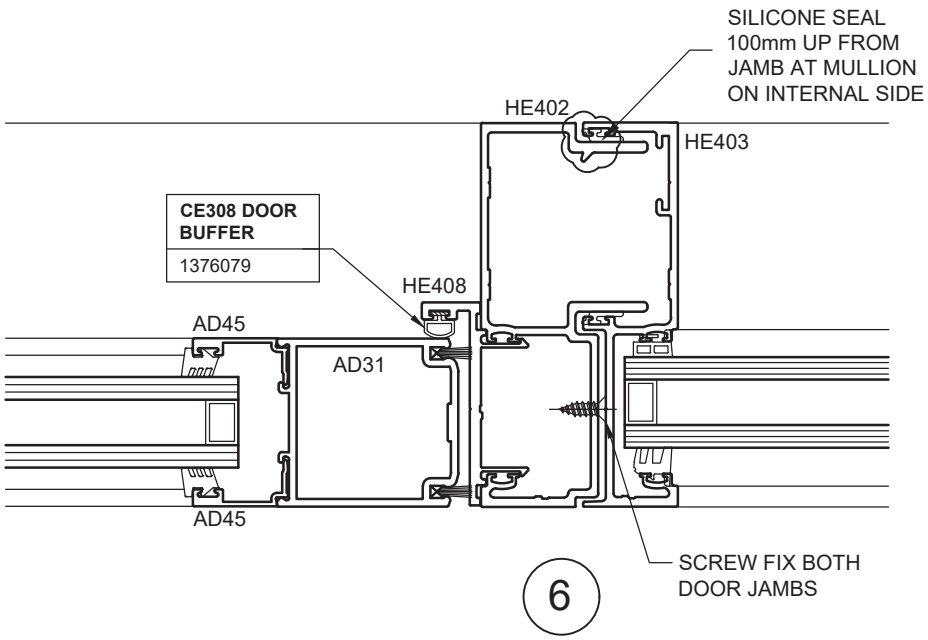
Typical Head, Transom and Sill Details



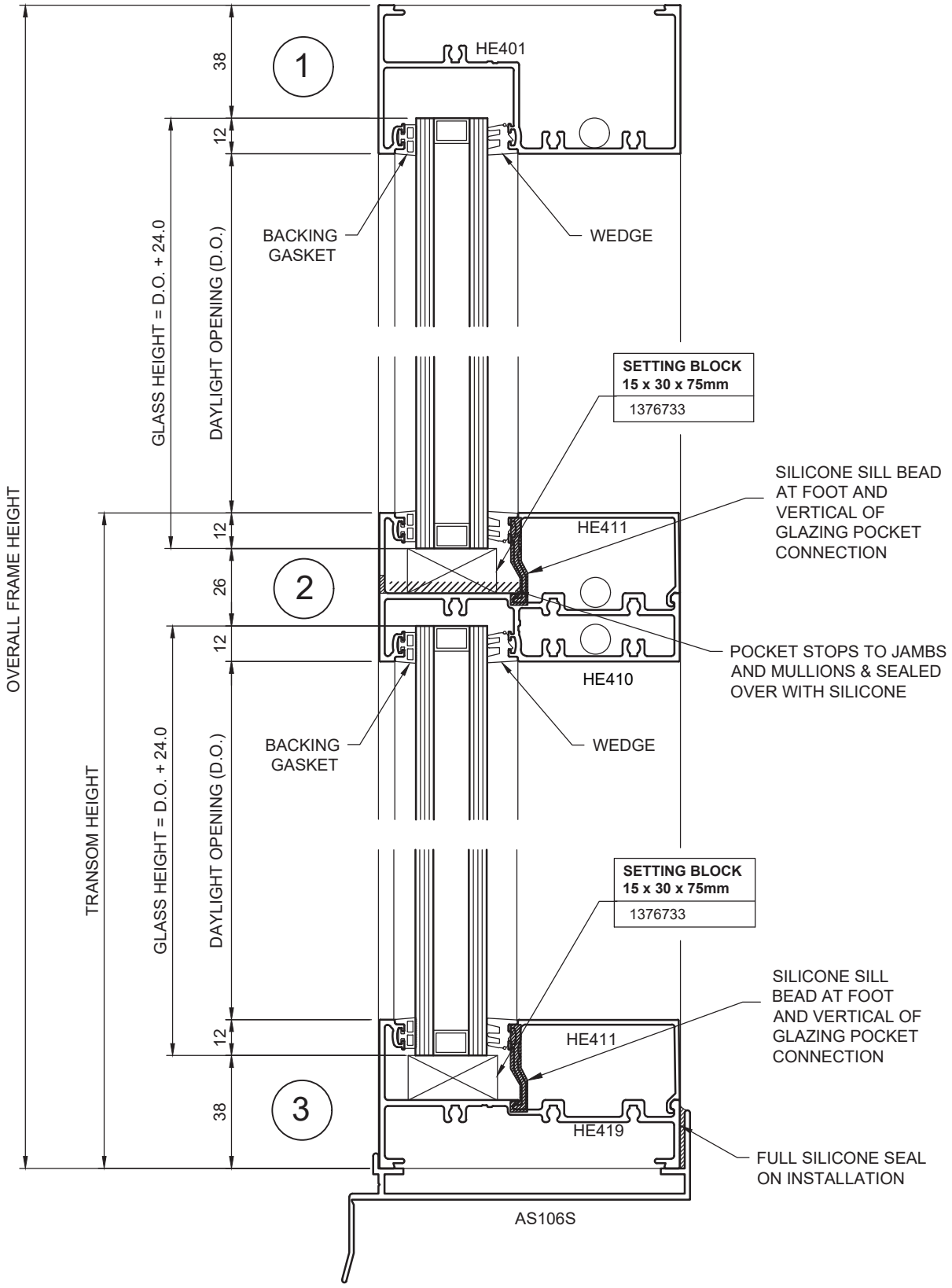
Typical Jamb/ Mullion Details

** NOMINAL DIMENSIONS ONLY. MAY VARY DUE TO PROJECT REQUIREMENTS



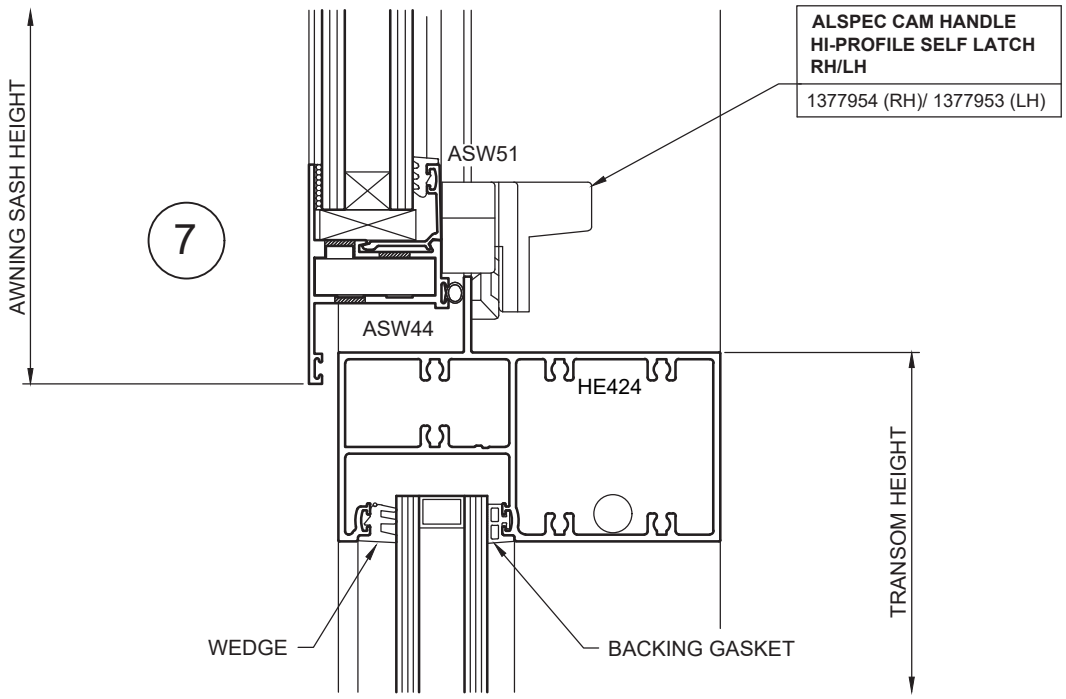


Typical Head, Transom and Sill Details - Internal Glaze

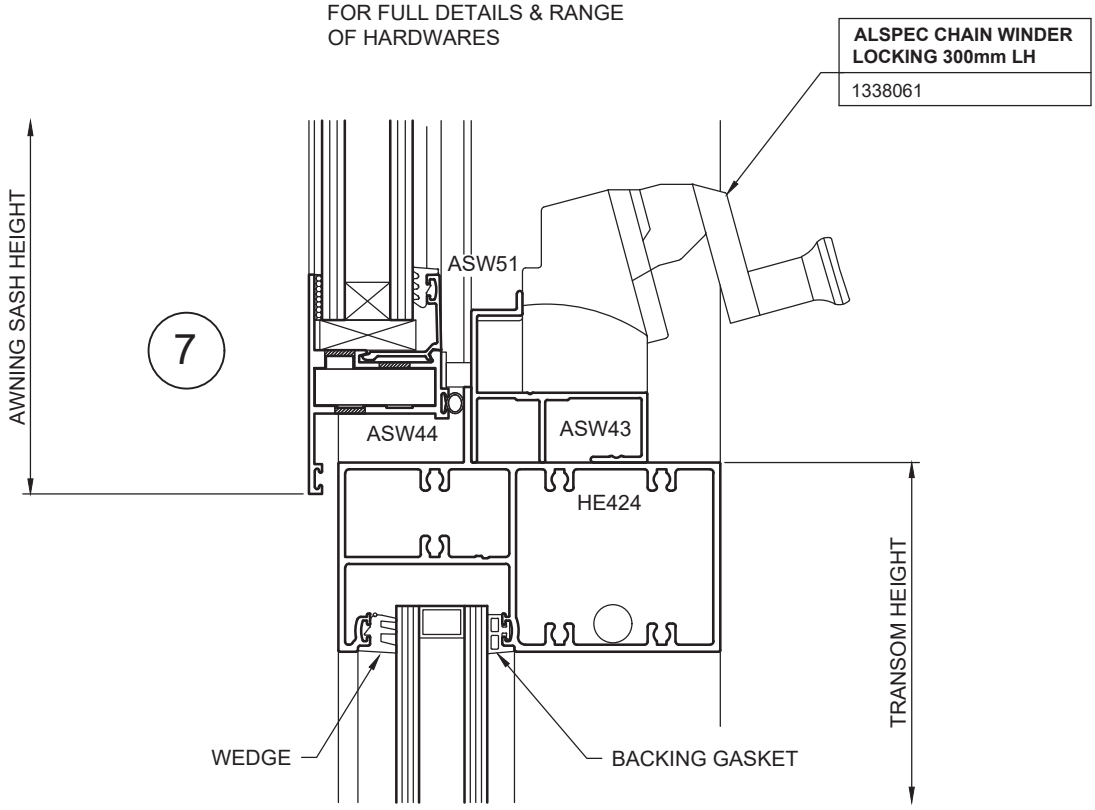


8. Typical Details

Typical Transom Details - 35mm Awning / Fixed

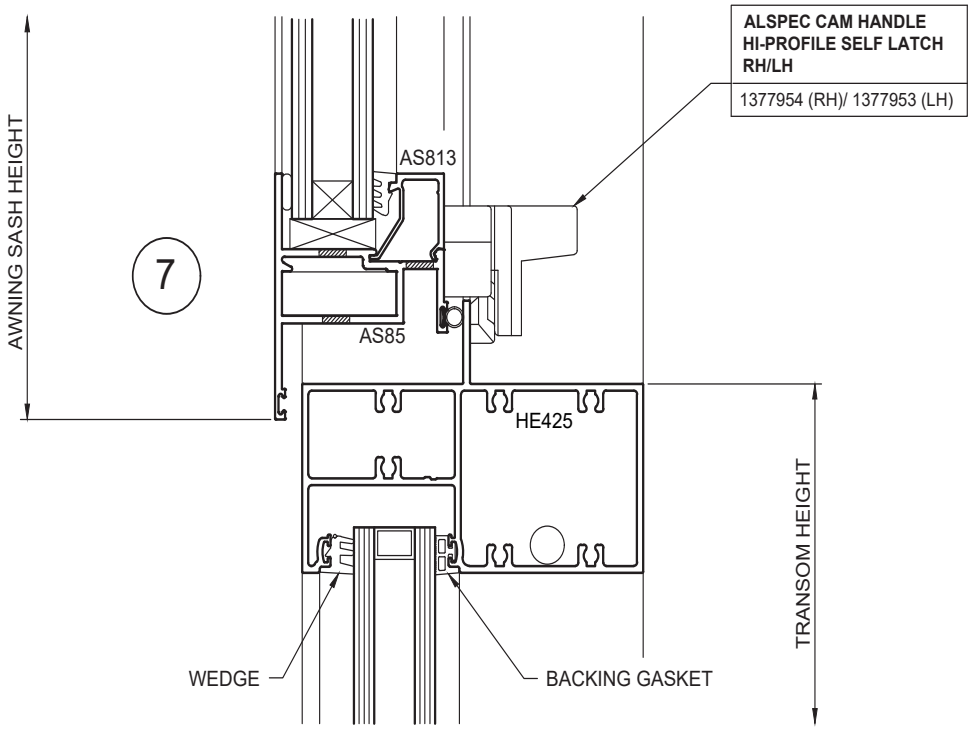


NOTE:
REFER TO AWNING/
CASEMENT TECH MANUALS
FOR FULL DETAILS & RANGE
OF HARDWARES

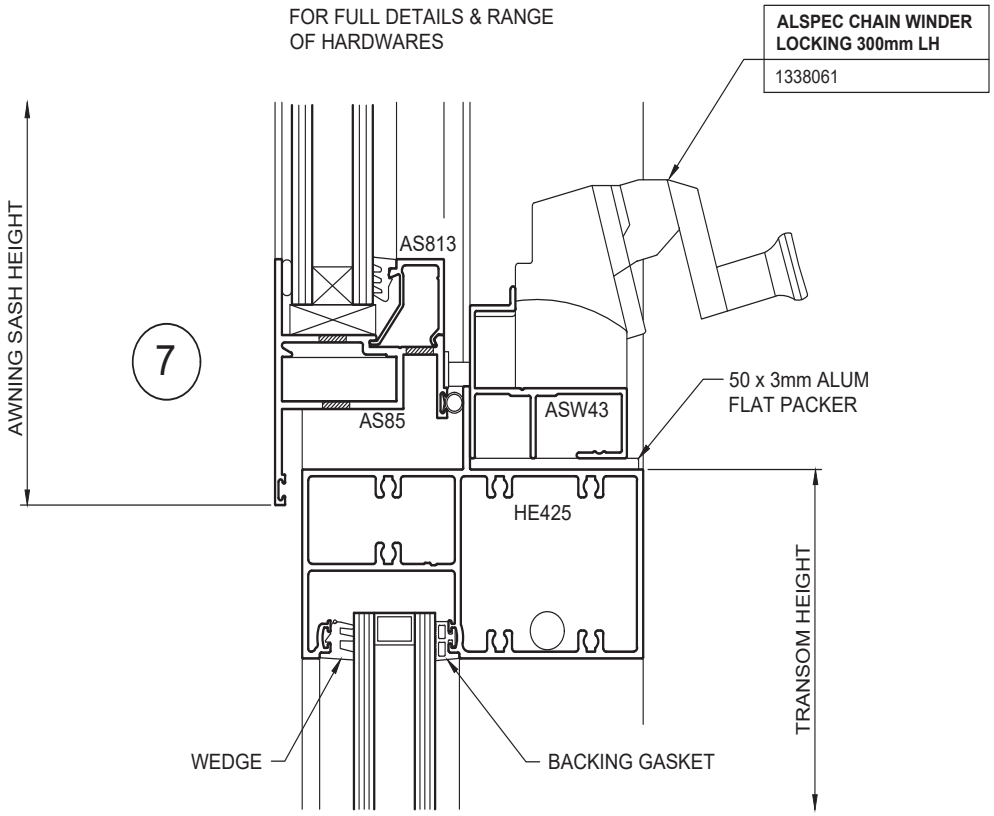


8. Typical Details

Typical Transom Details - 50mm Awning / Fixed

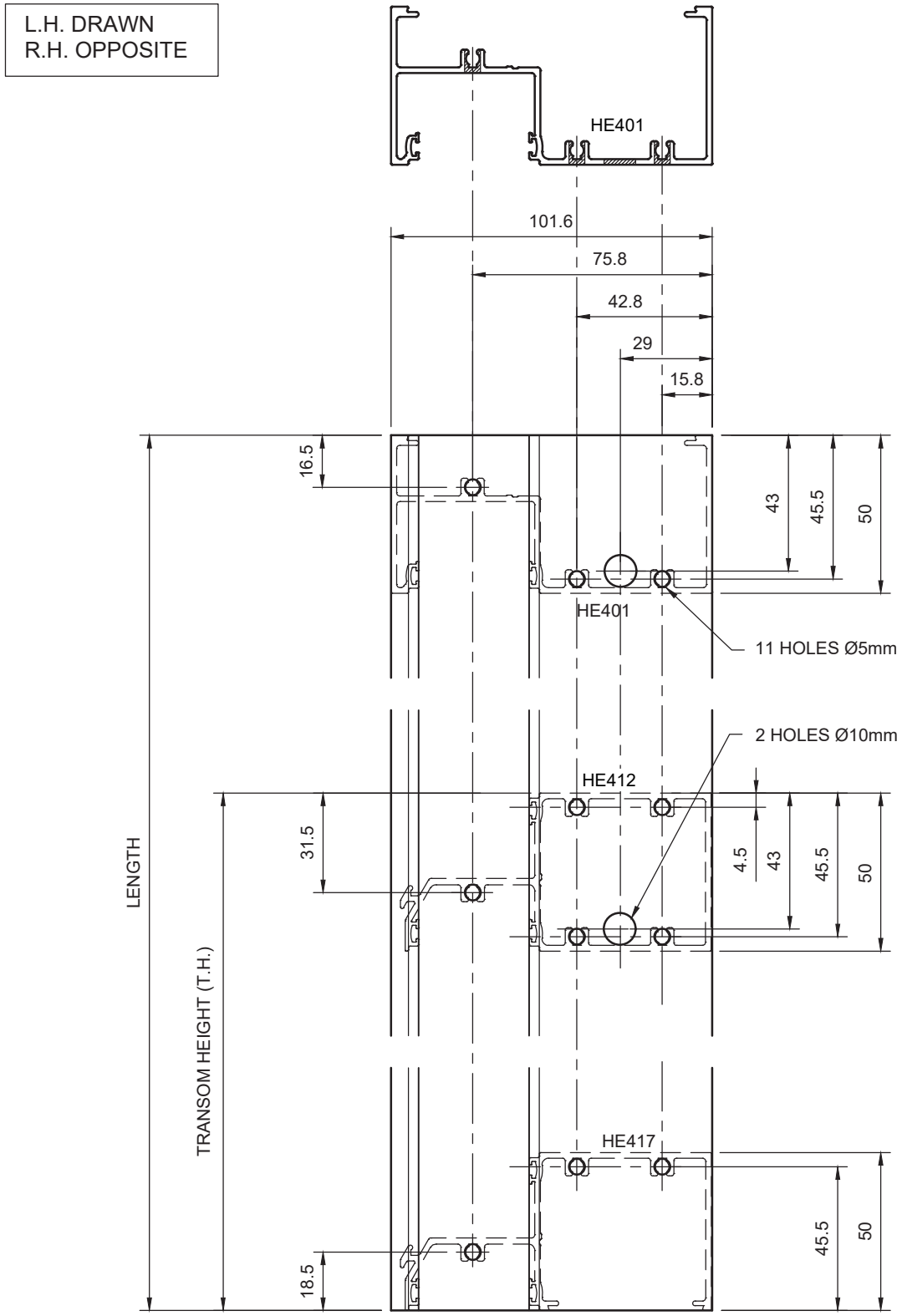


NOTE:
REFER TO AWNING/
CASEMENT TECH MANUALS
FOR FULL DETAILS & RANGE
OF HARDWARES

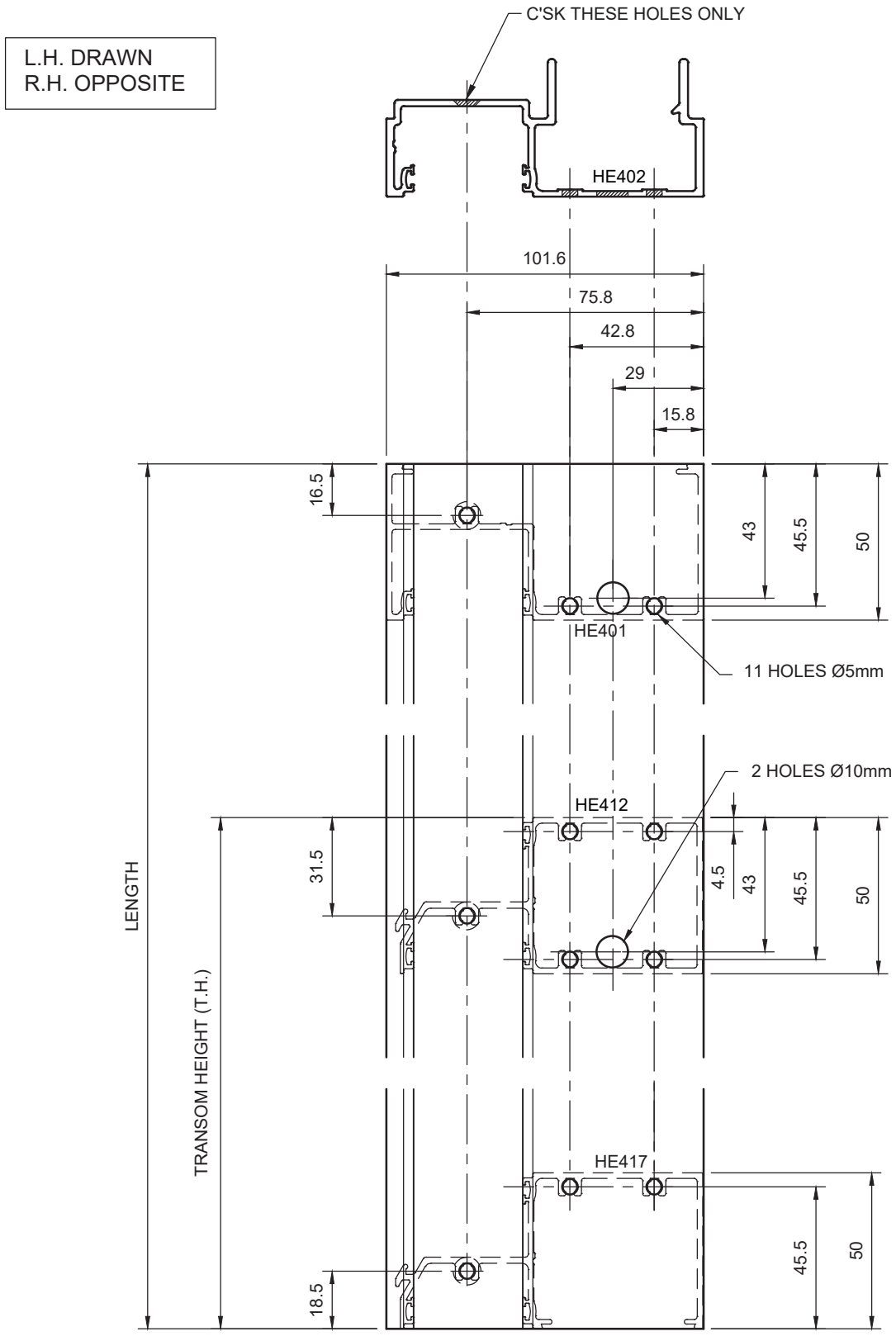


10. Manufacturing Details

Frame Preparation - External Glaze

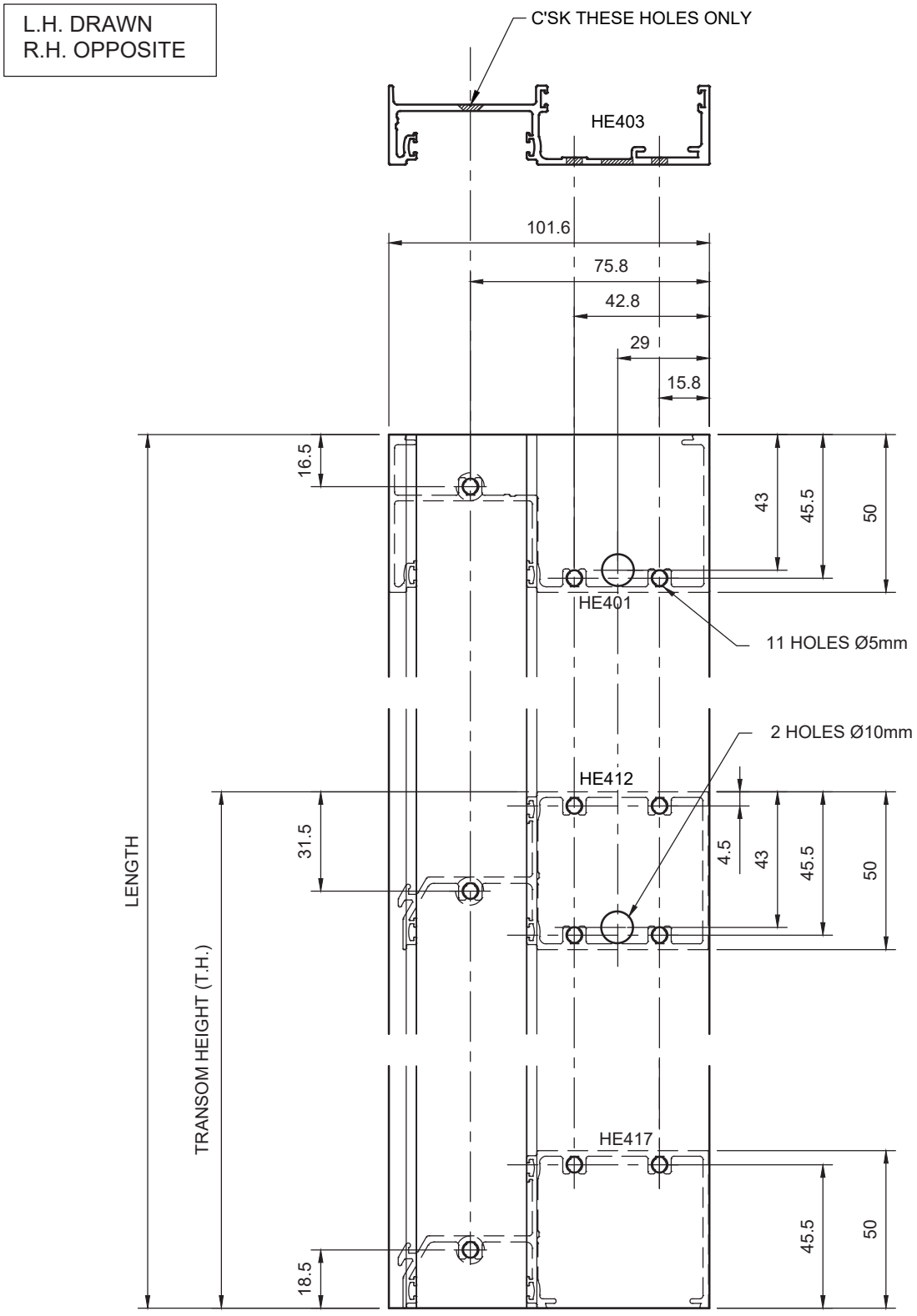


Frame Preparation - External Glaze

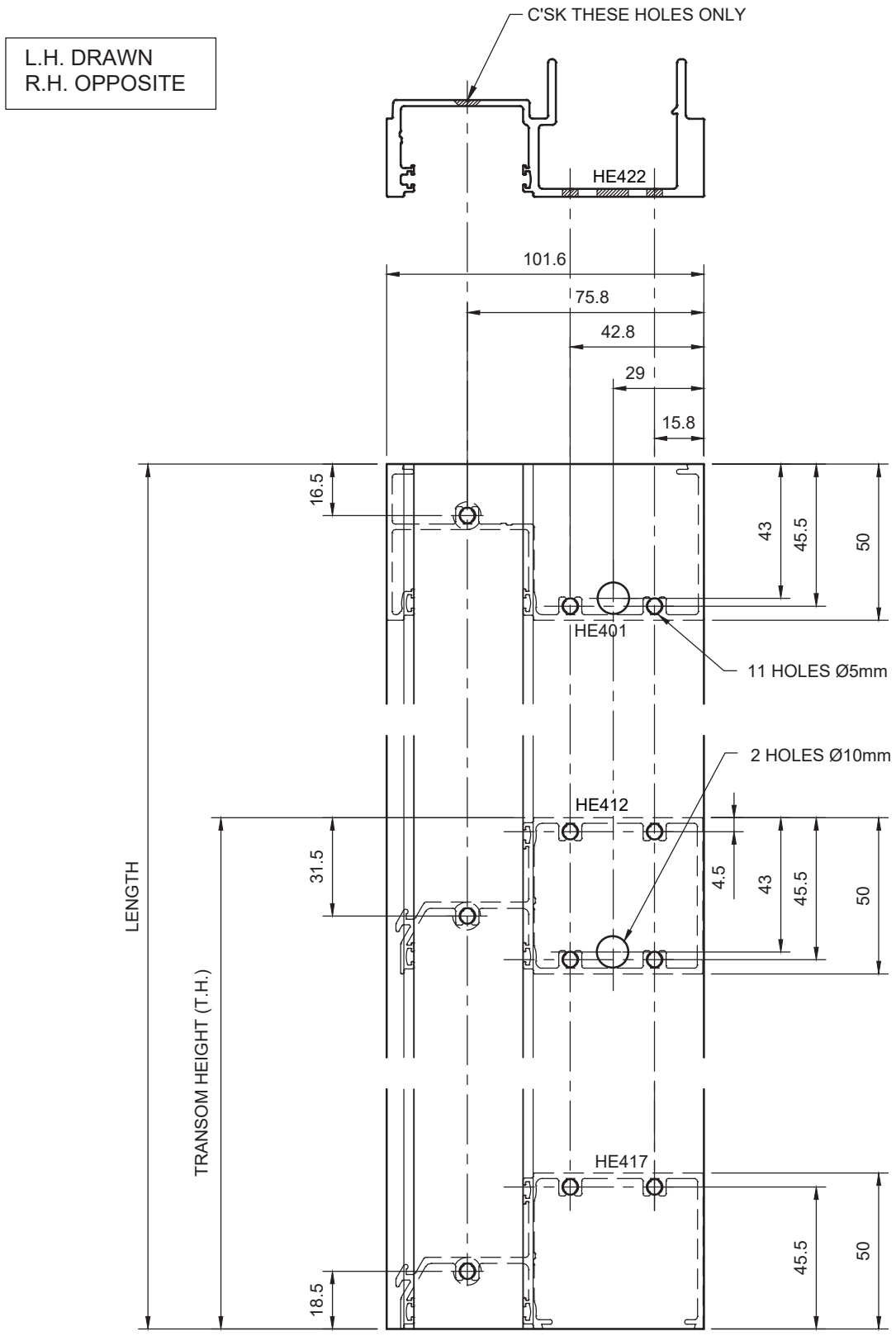


10. Manufacturing Details

Frame Preparation - External Glaze



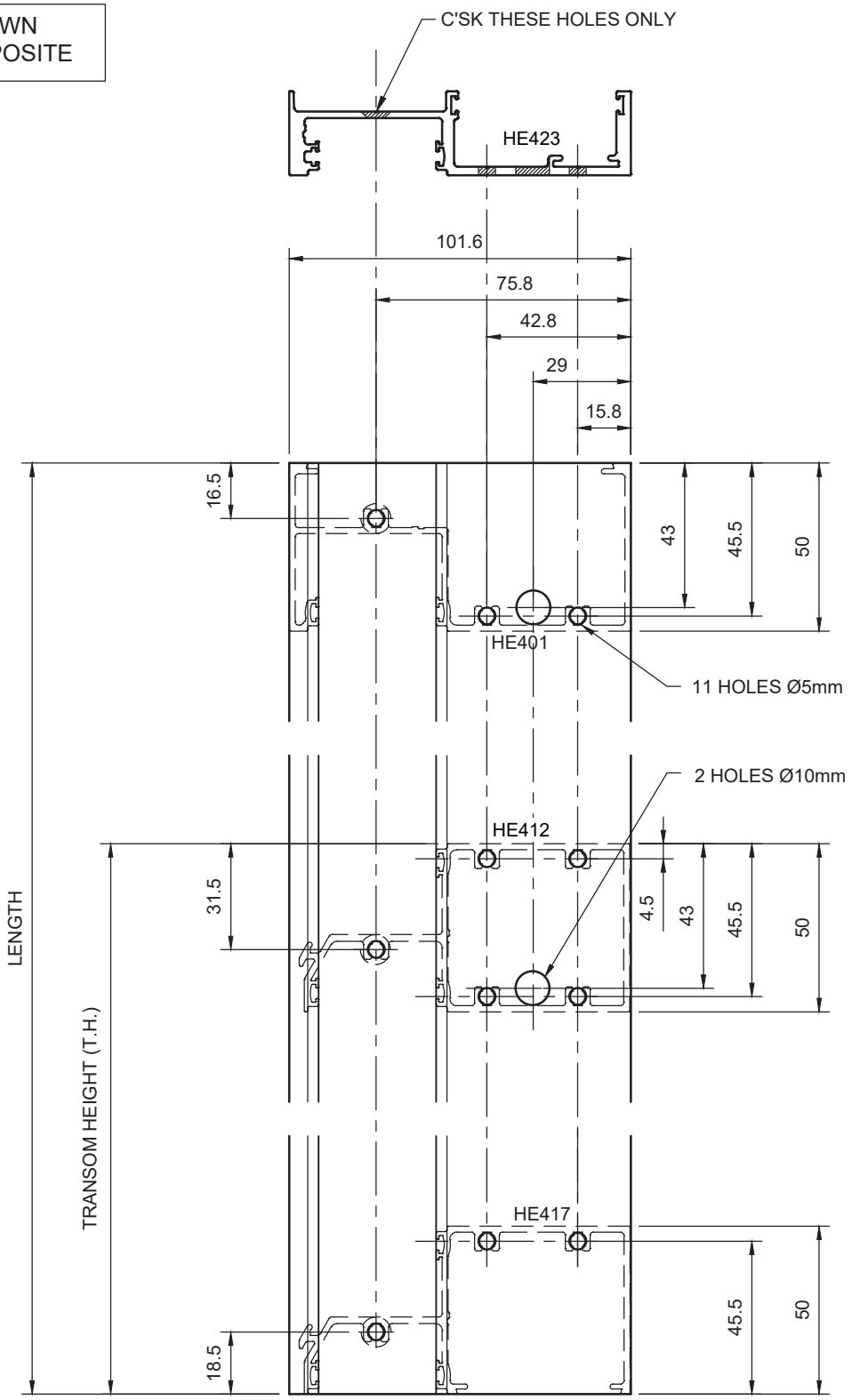
Frame Preparation - External Glaze



10. Manufacturing Details

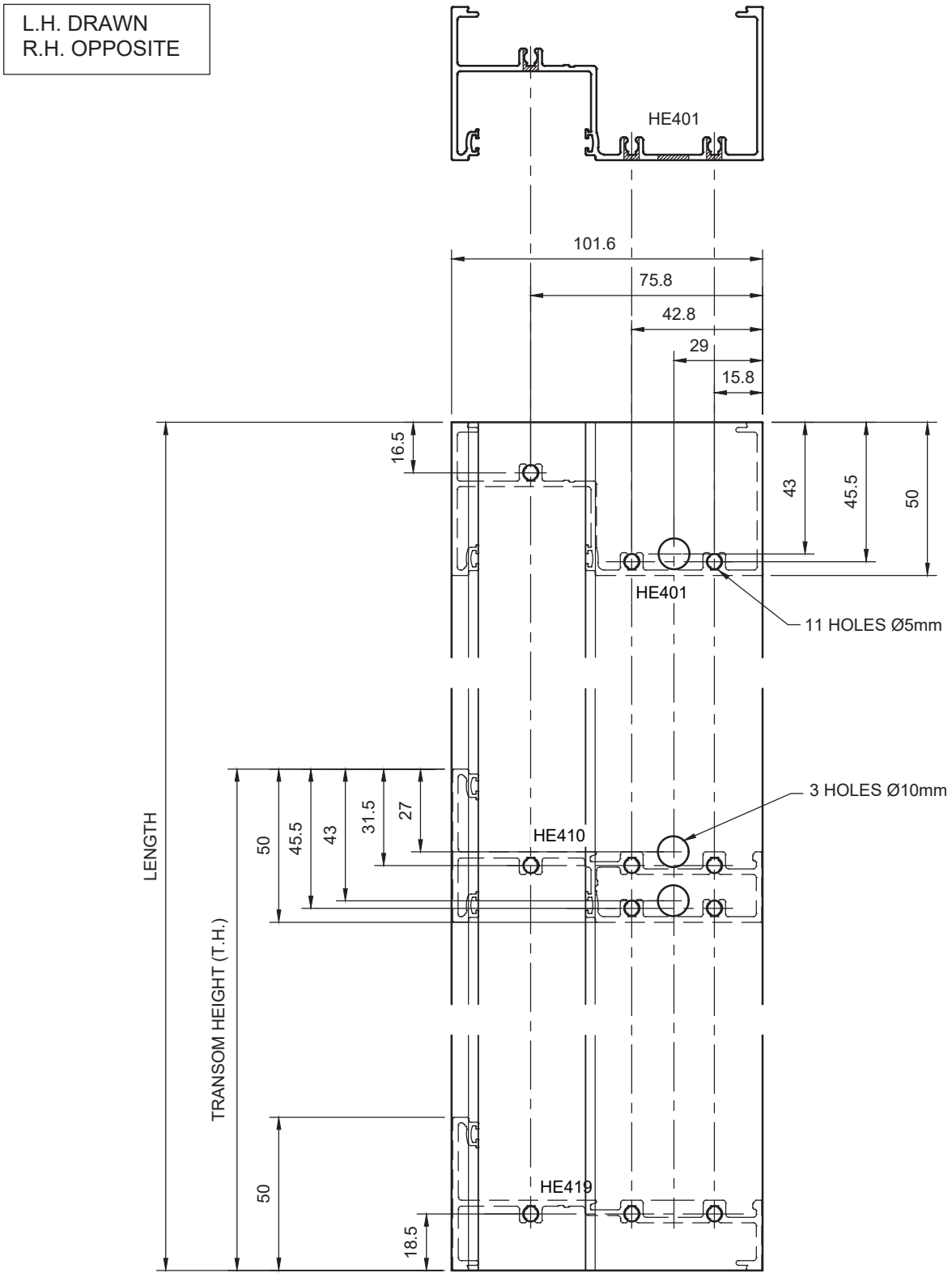
Frame Preparation - External Glaze

L.H. DRAWN
R.H. OPPOSITE



10. Manufacturing Details

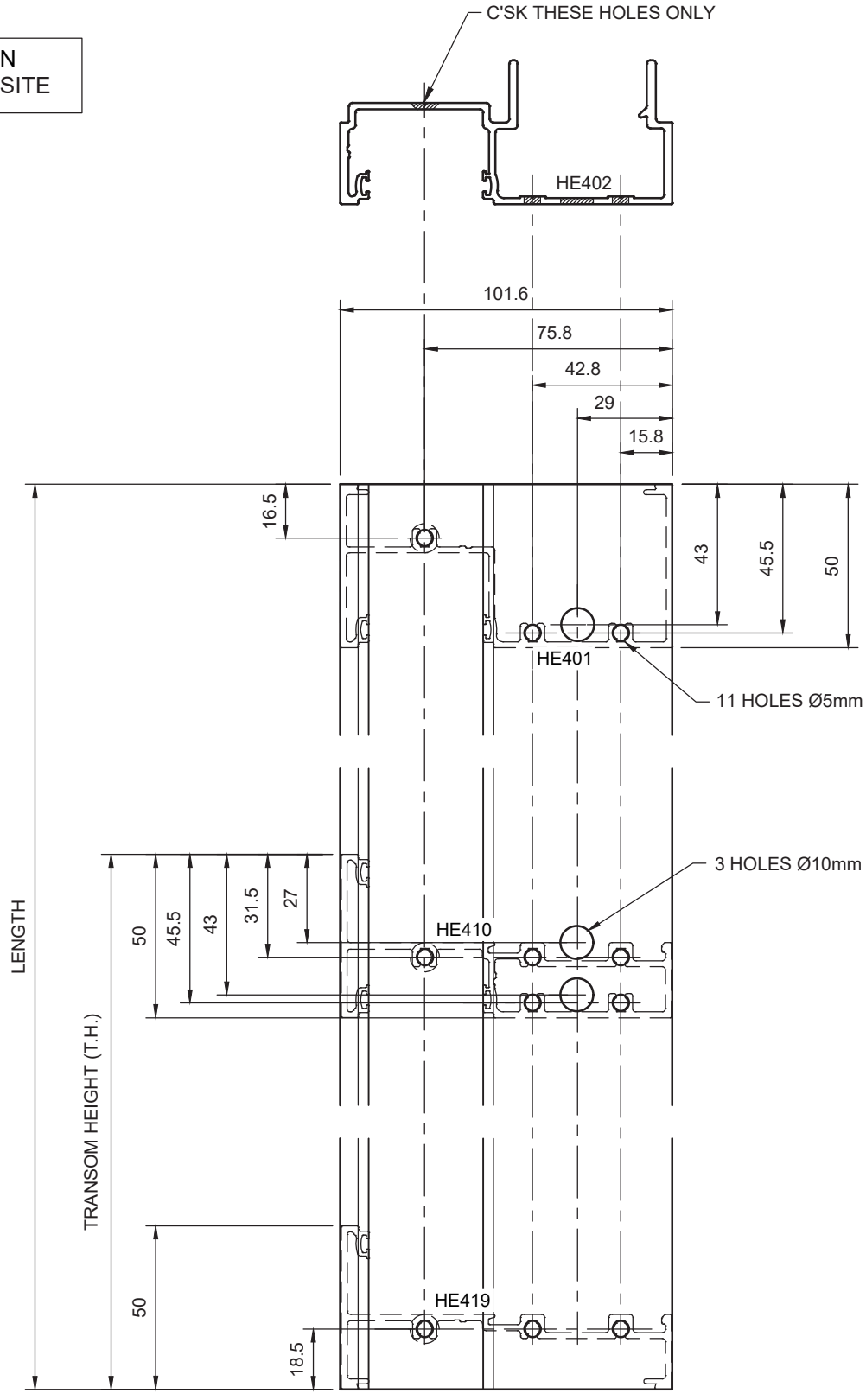
Frame Preparation - Internal Glaze



10. Manufacturing Details

Frame Preparation - Internal Glaze

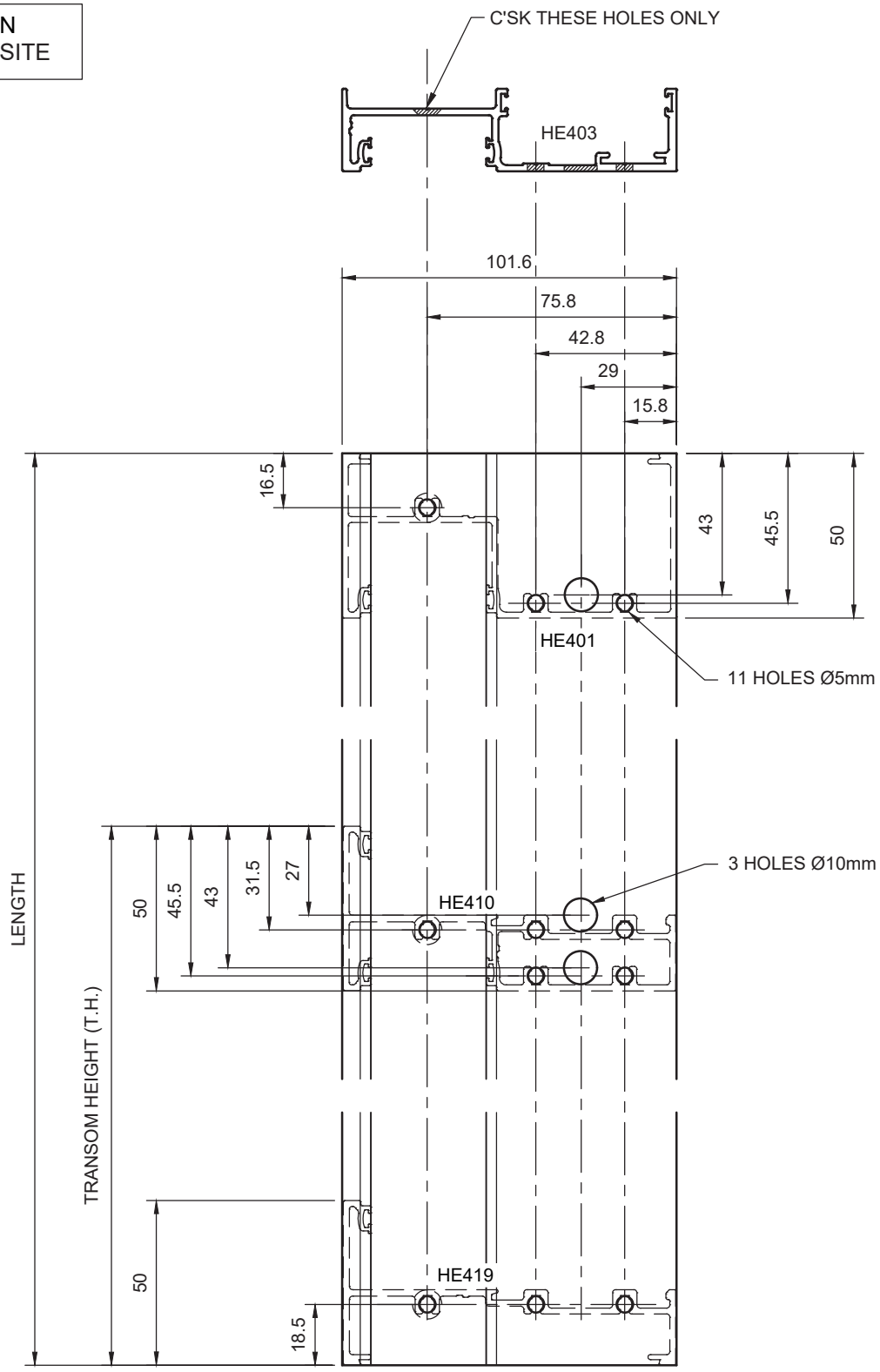
L.H. DRAWN
R.H. OPPOSITE



10. Manufacturing Details

Frame Preparation - Internal Glaze

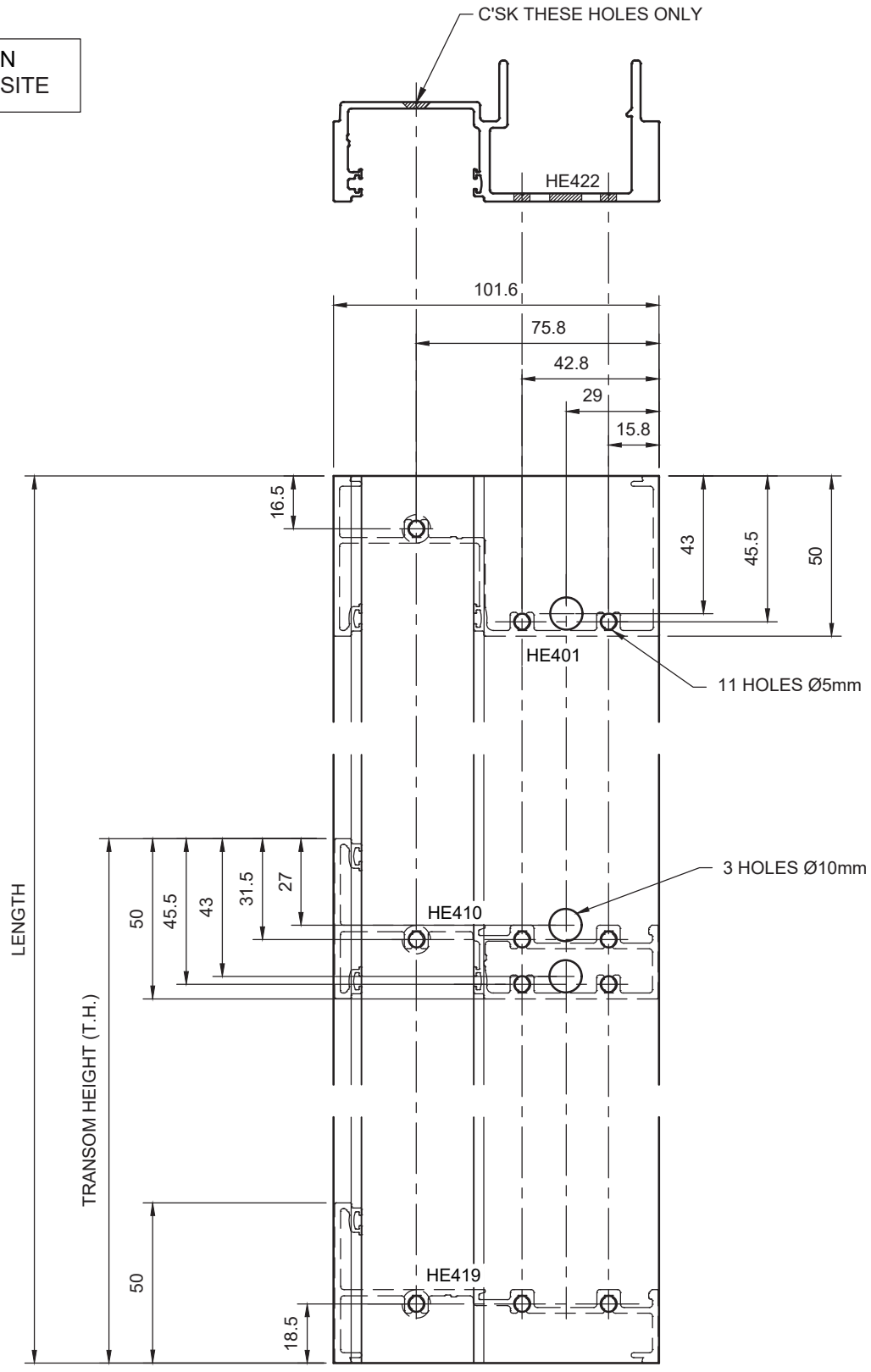
L.H. DRAWN
R.H. OPPOSITE



10. Manufacturing Details

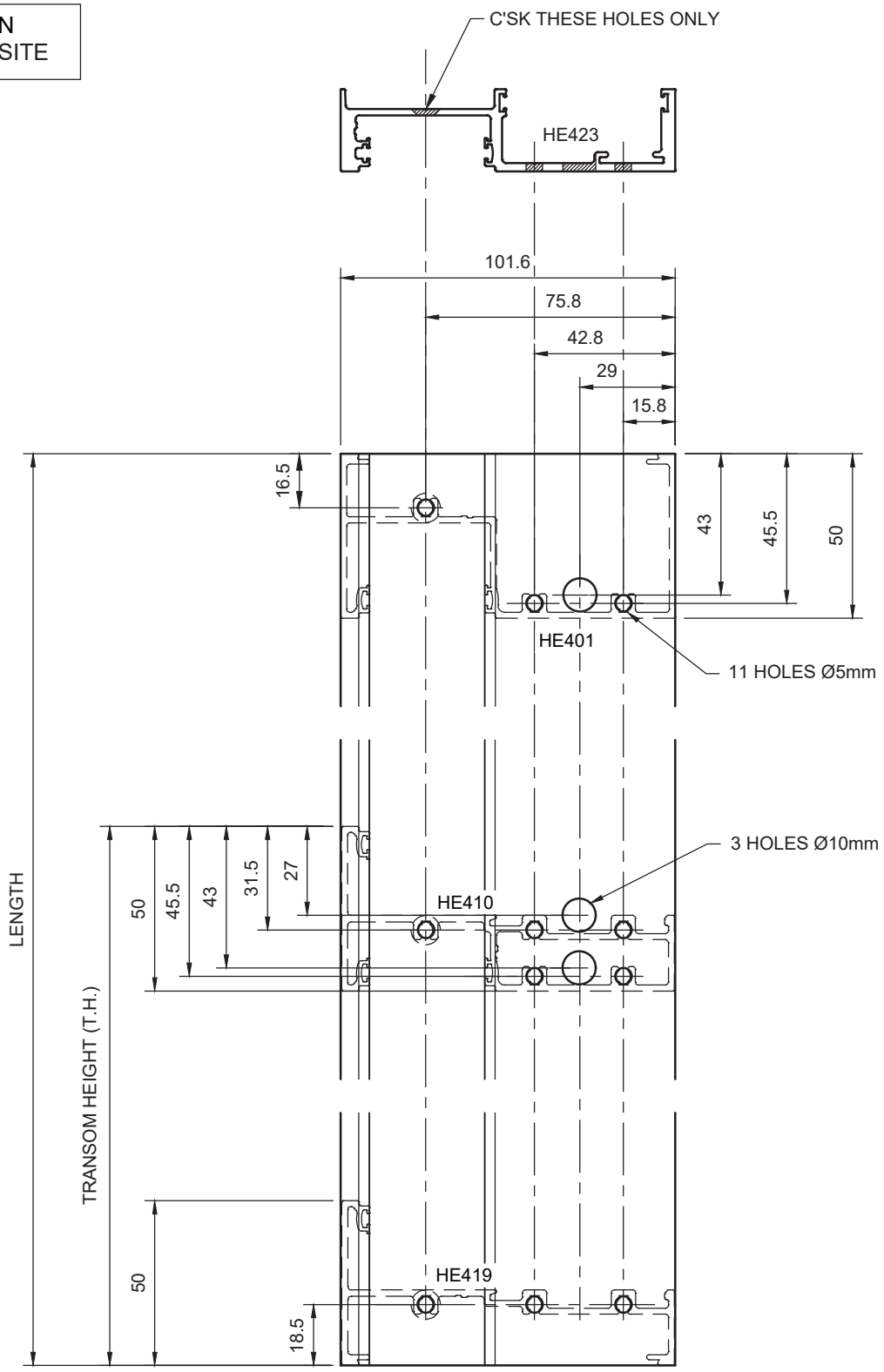
Frame Preparation - Internal Glaze

L.H. DRAWN
R.H. OPPOSITE

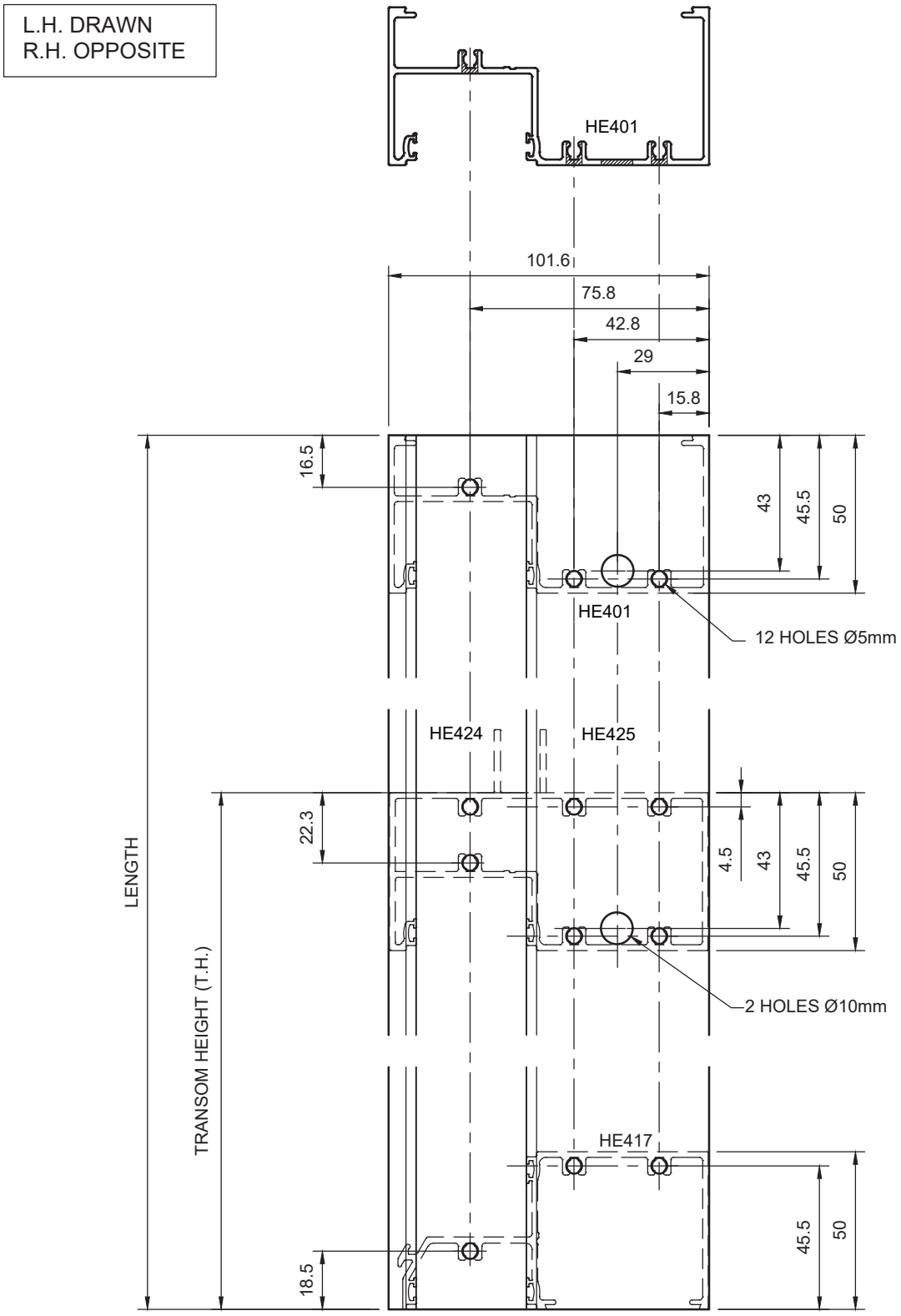


Frame Preparation - Internal Glaze

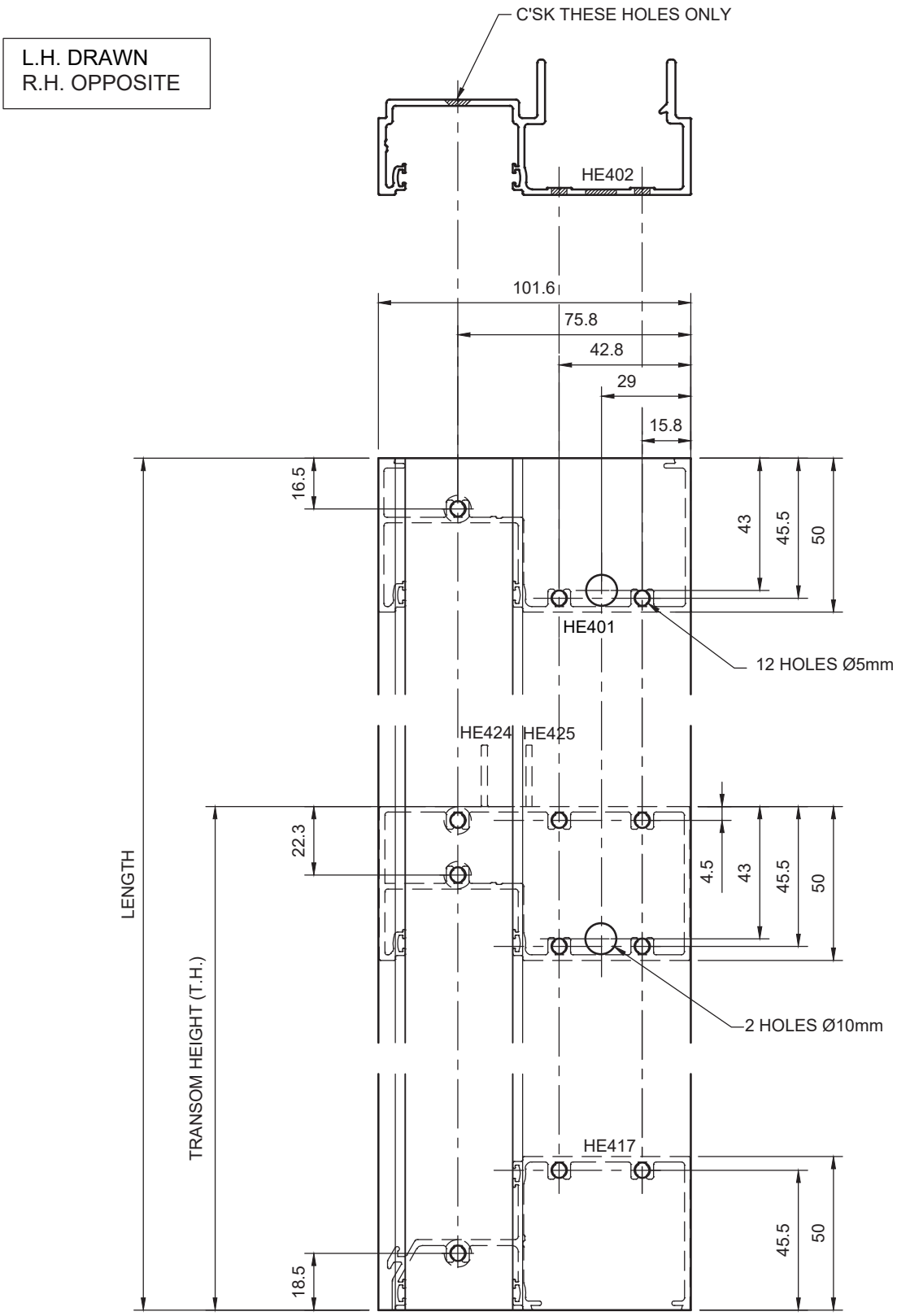
L.H. DRAWN
R.H. OPPOSITE



Frame Preparation - External Glaze with Awning and Lowlite

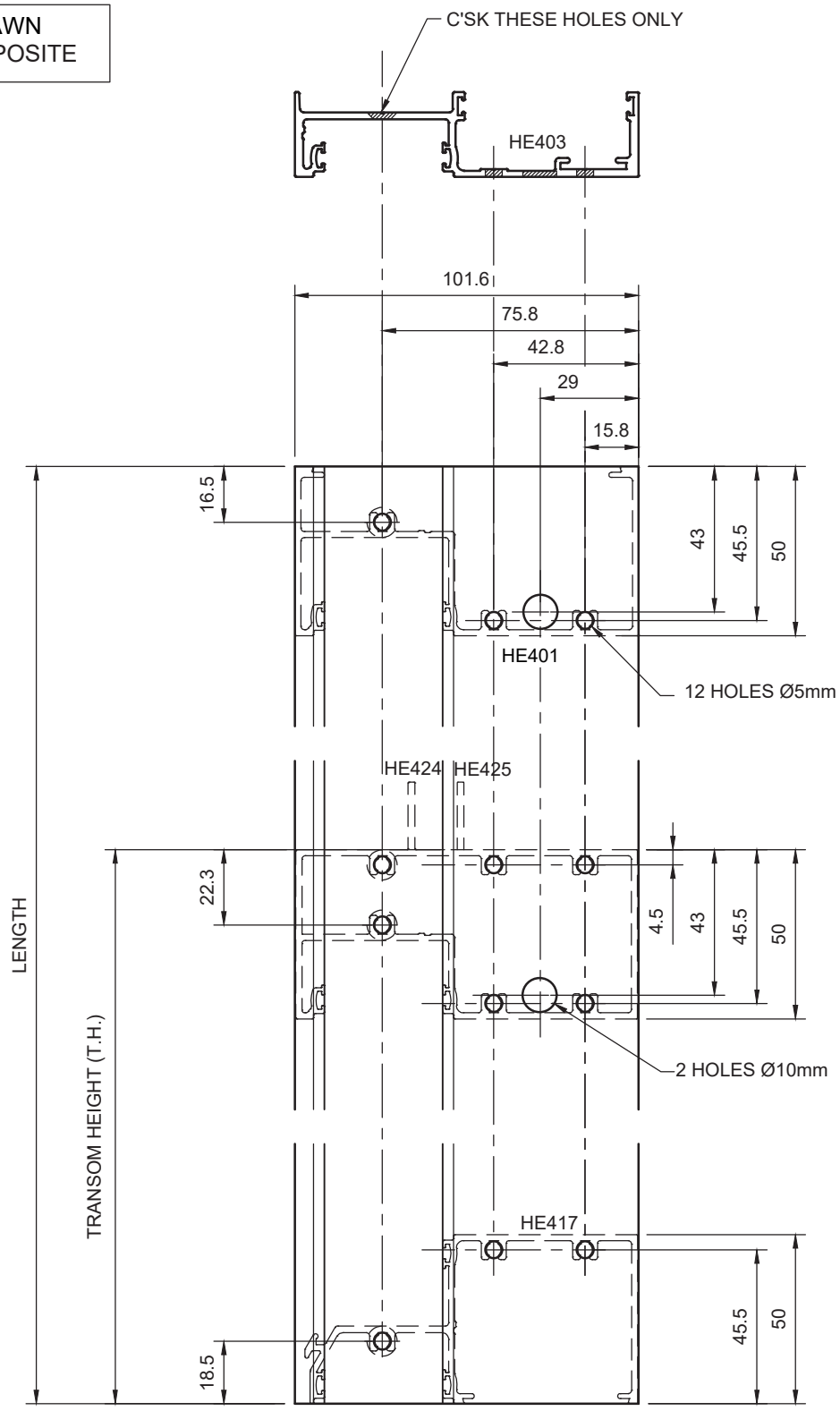


Frame Preparation - External Glaze with Awning and Lowlite

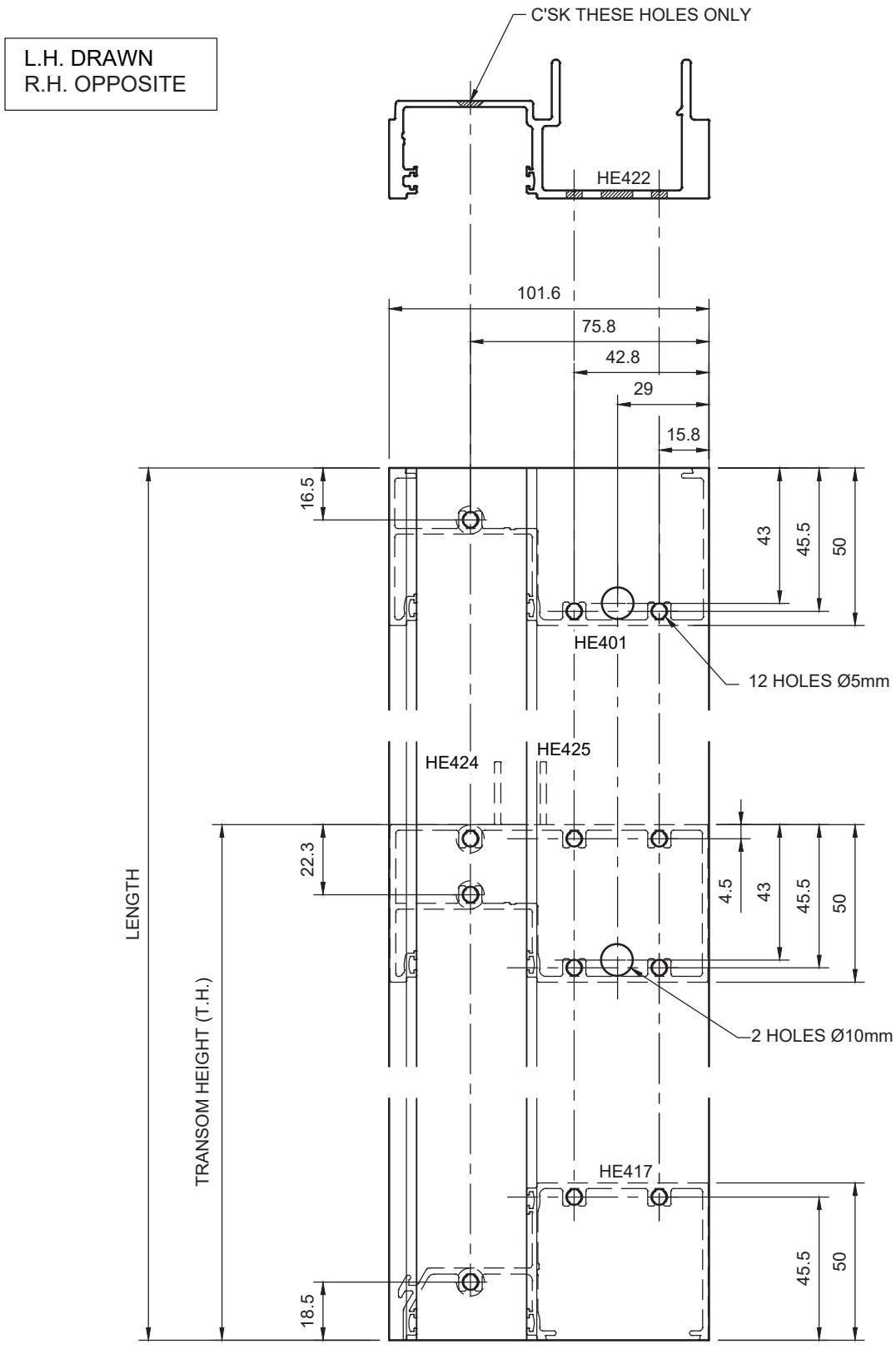


Frame Preparation - External Glaze with Awning and Lowlite

L.H. DRAWN
R.H. OPPOSITE

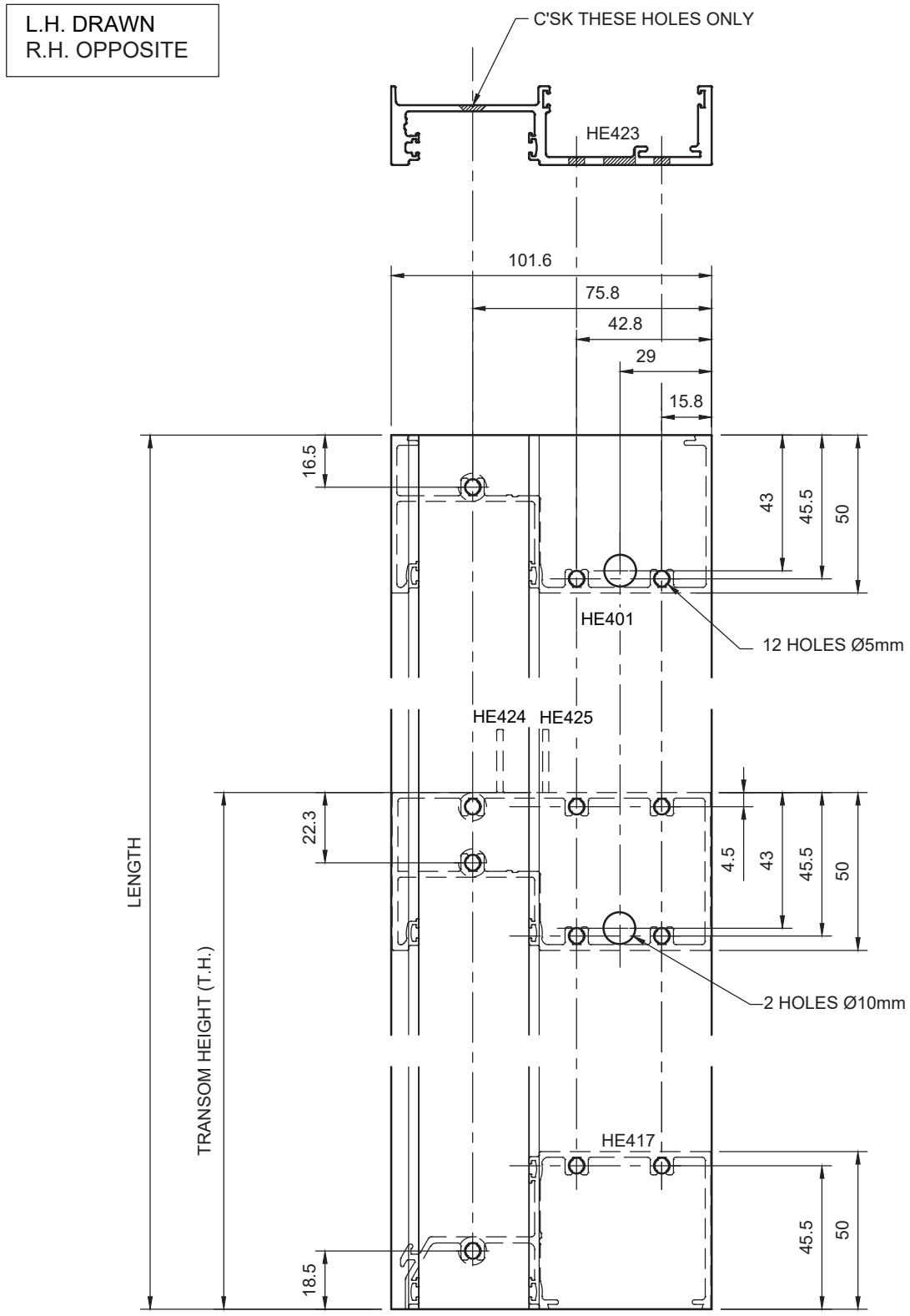


Frame Preparation - External Glaze with Awning and Lowlite

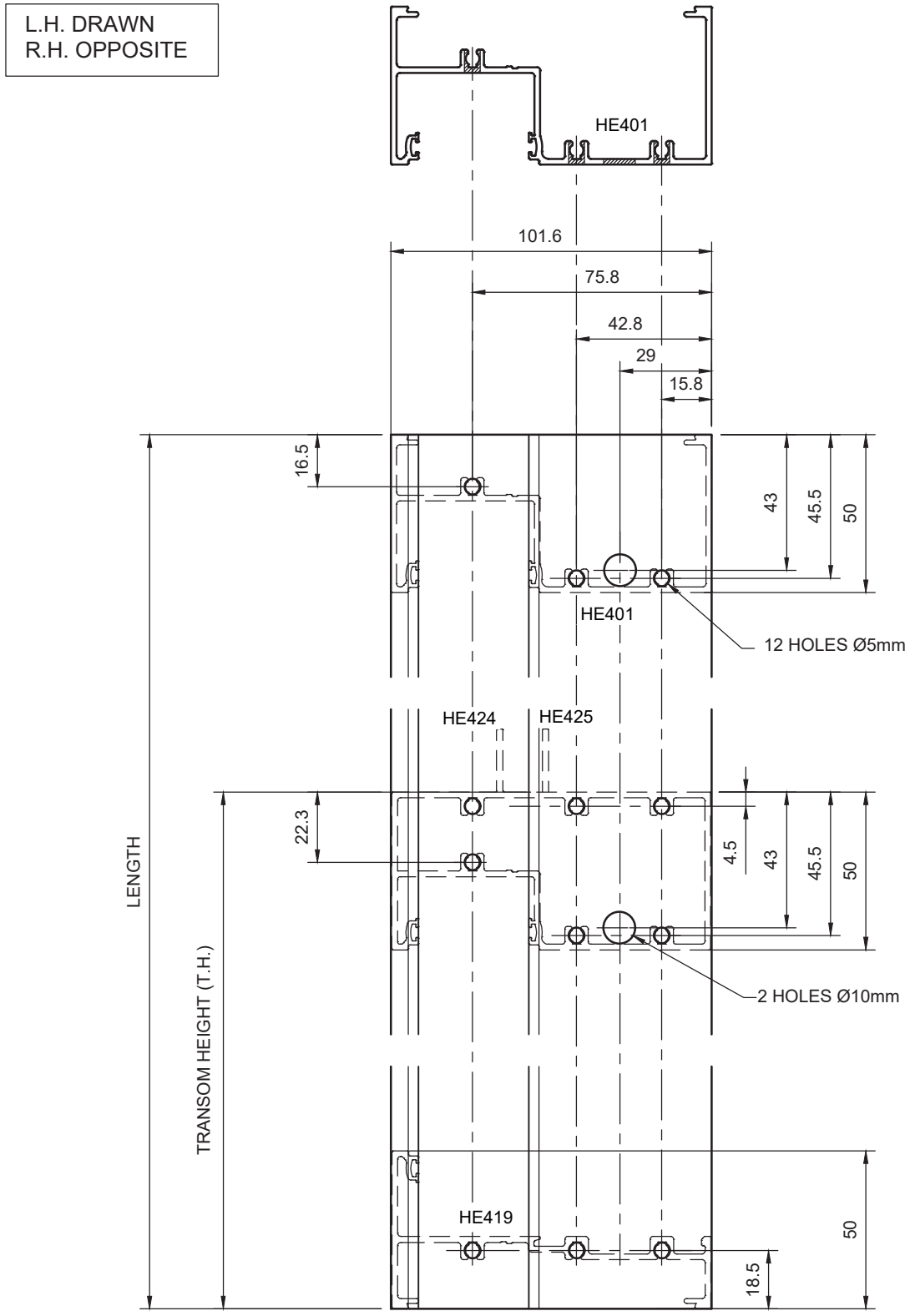


10. Manufacturing Details

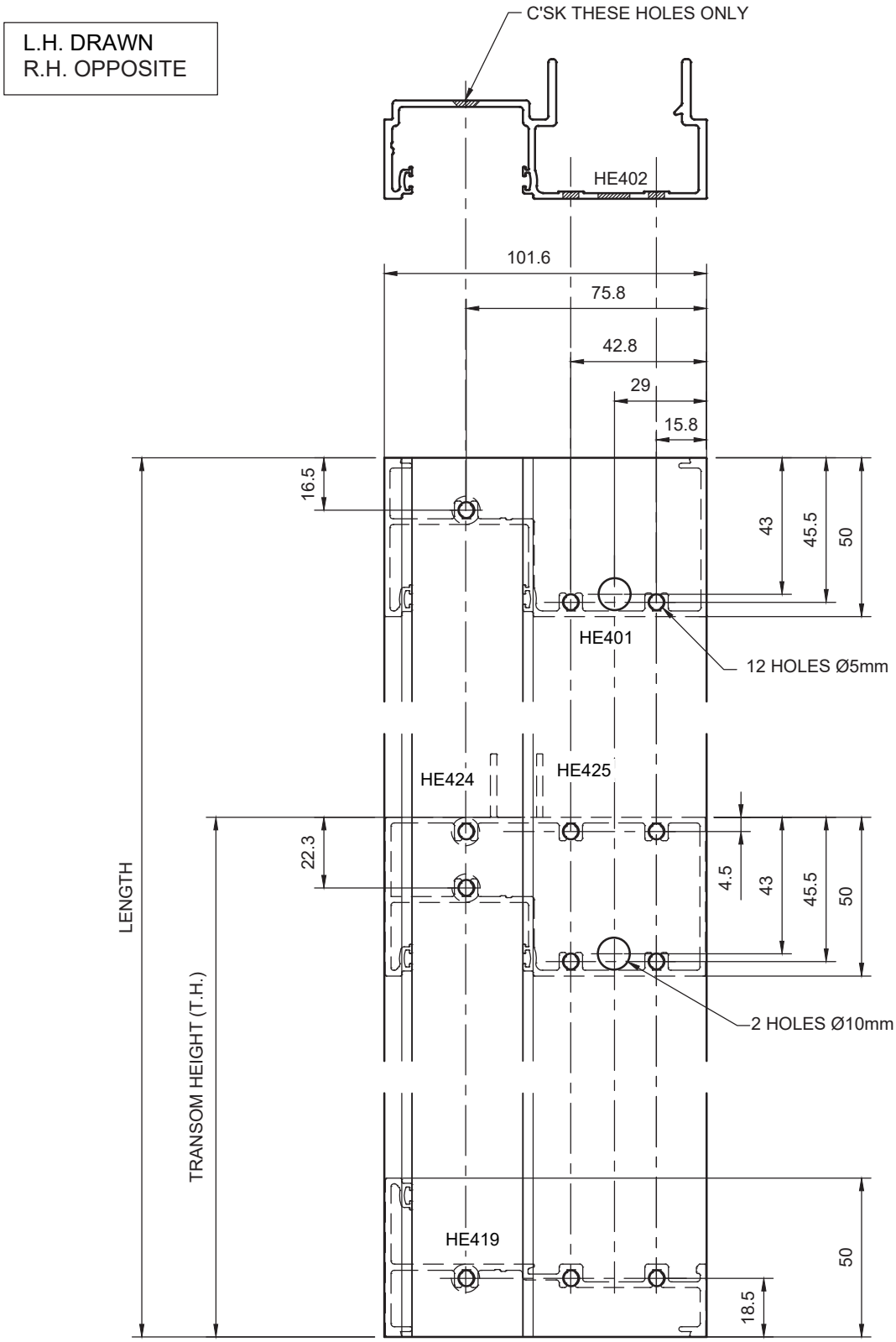
Frame Preparation - External Glaze with Awning and Lowlite



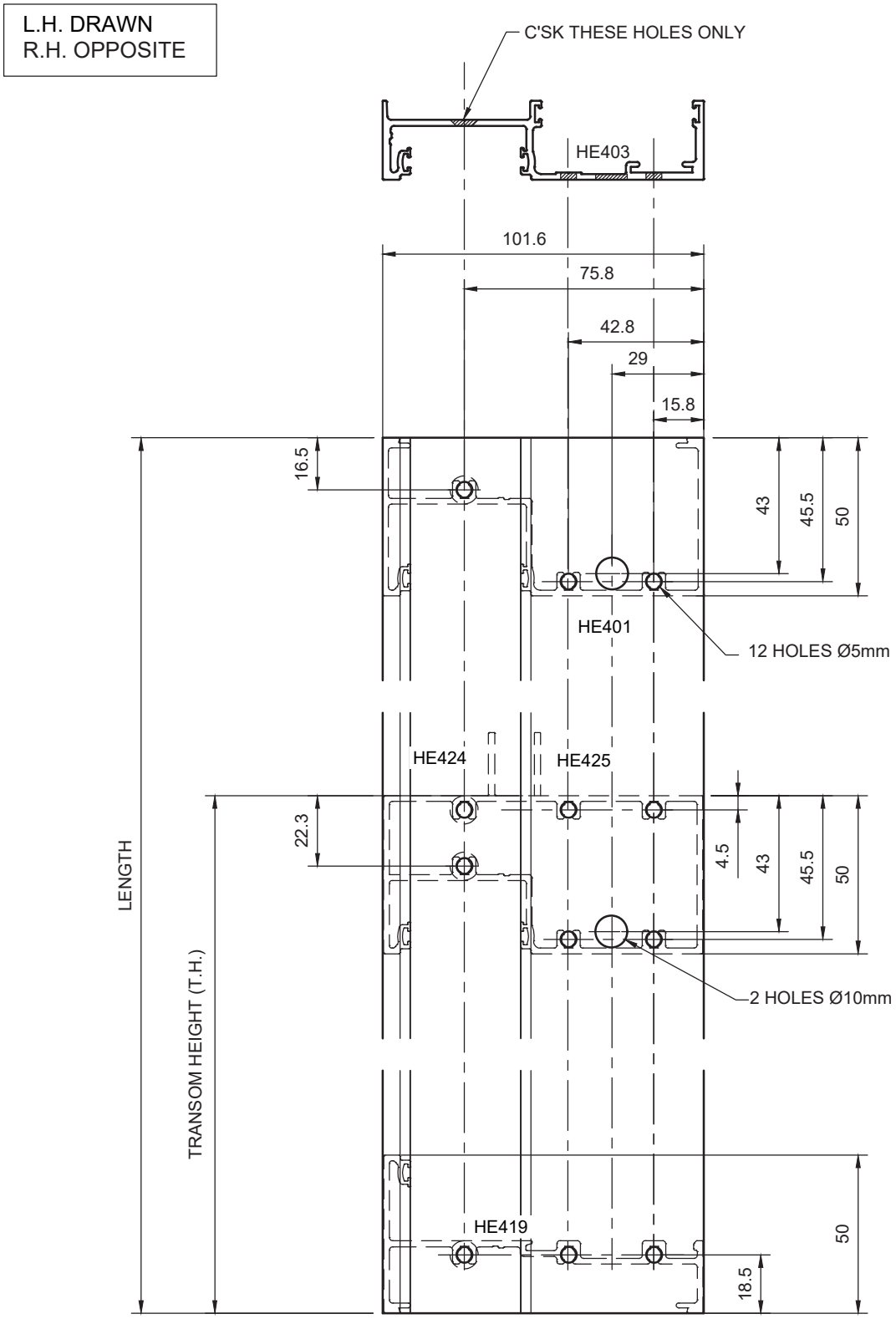
Frame Preparation - Internal Glaze with Awning and Lowlite



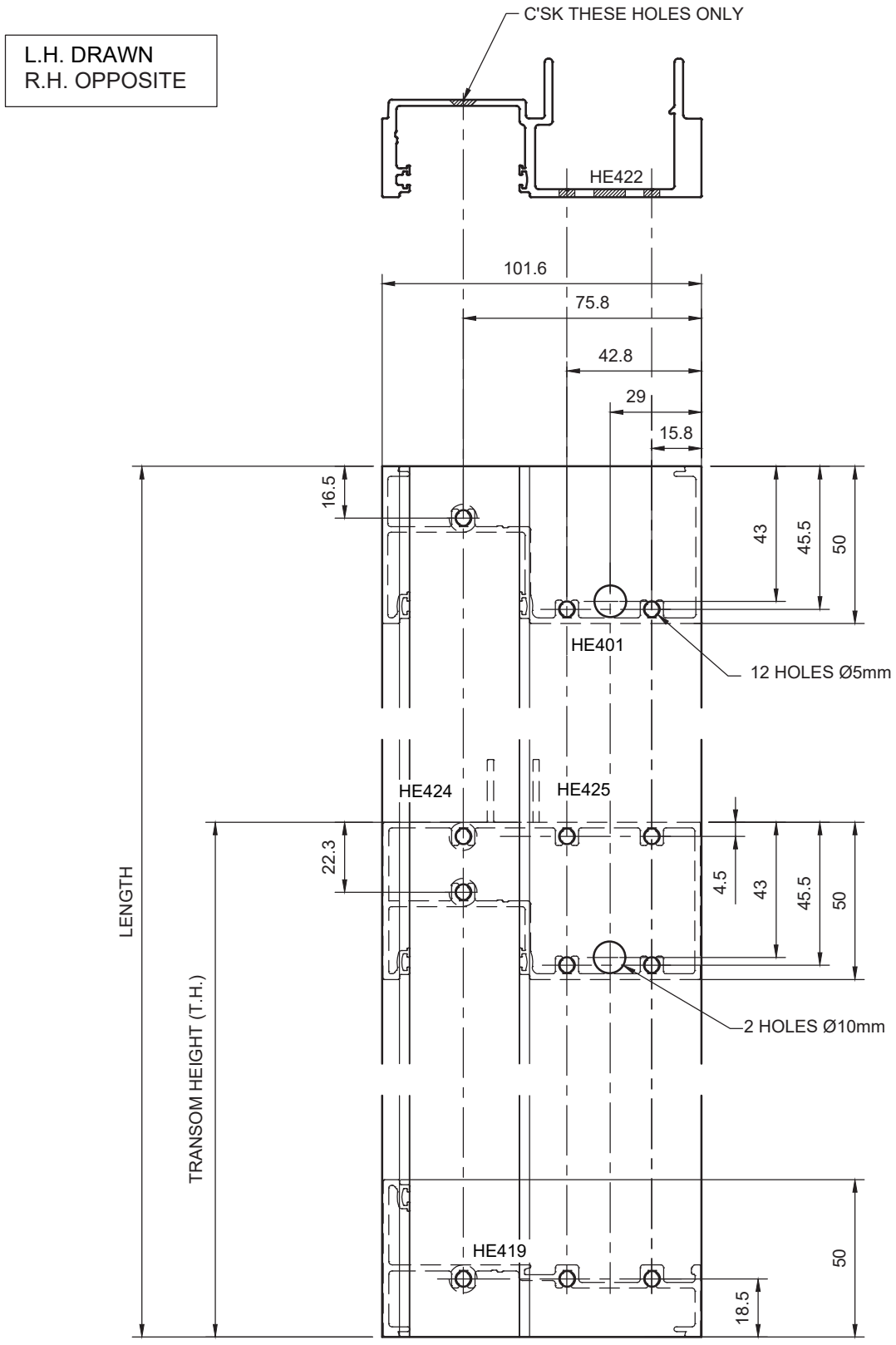
Frame Preparation - Internal Glaze with Awning and Lowlite



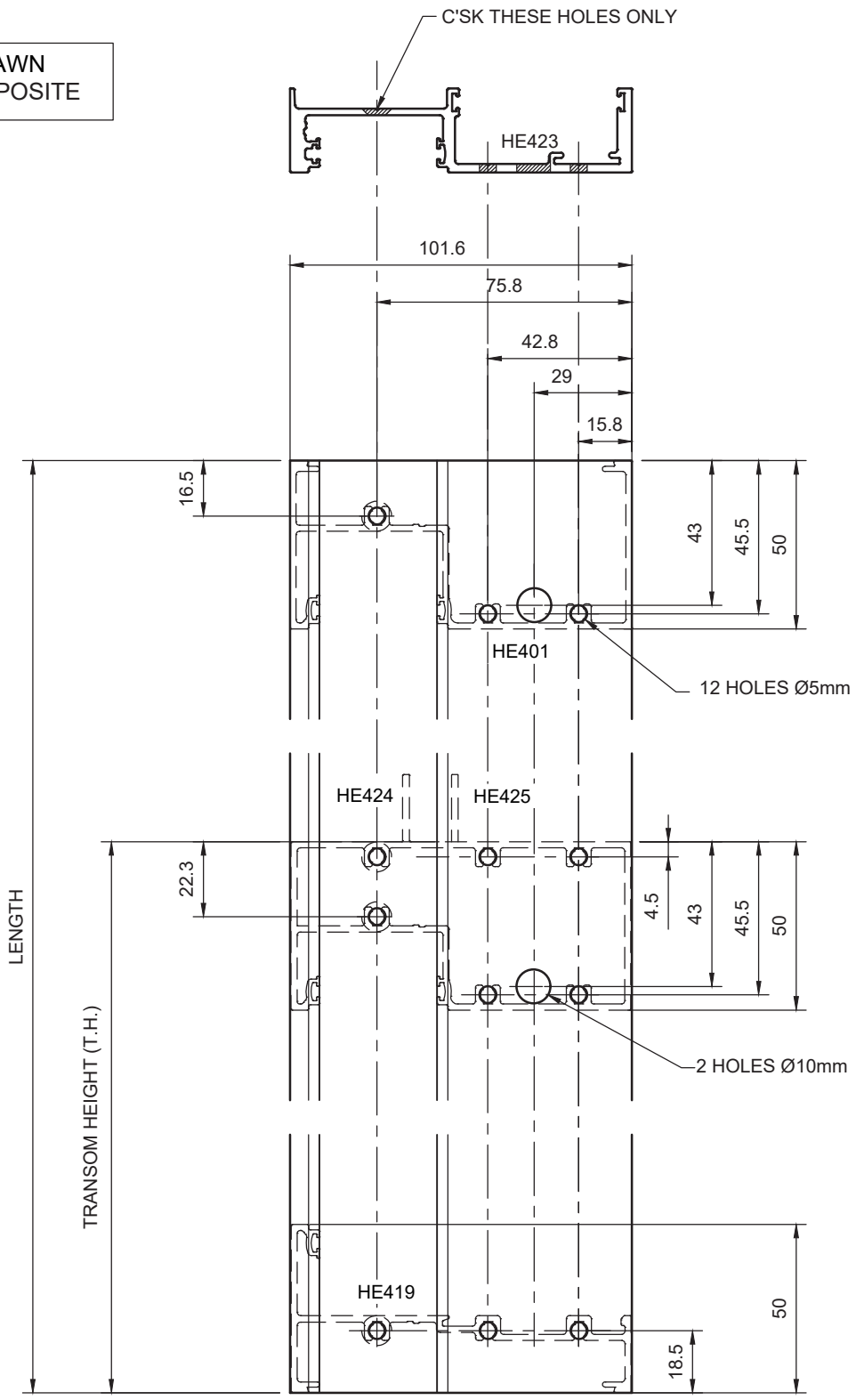
Frame Preparation - Internal Glaze with Awning and Lowlite



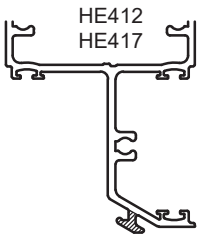
Frame Preparation - Internal Glaze with Awning and Lowlite

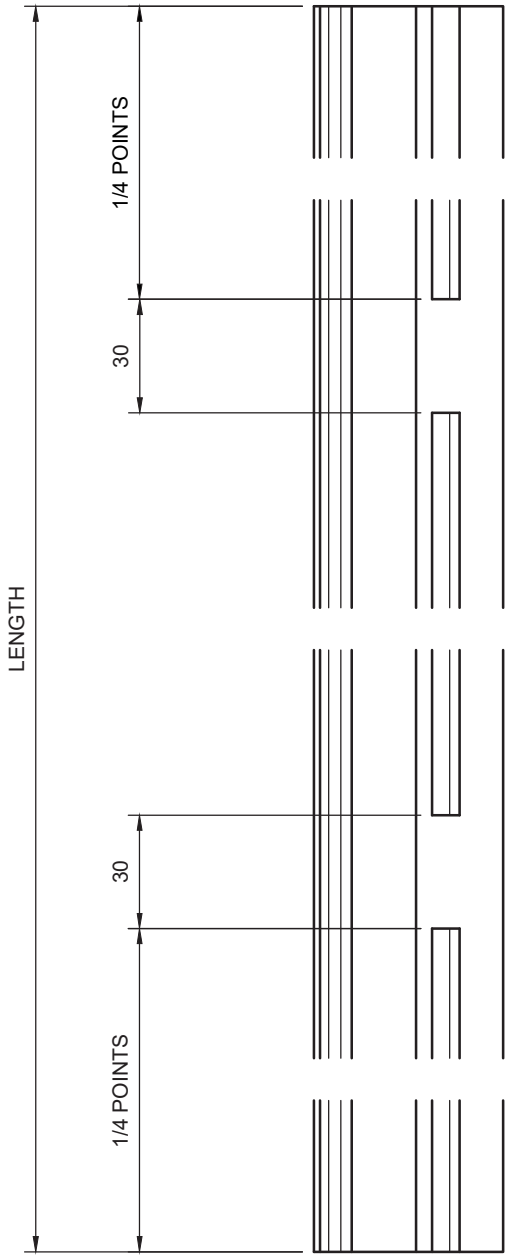


Frame Preparation - Internal Glaze with Awning and Lowlite

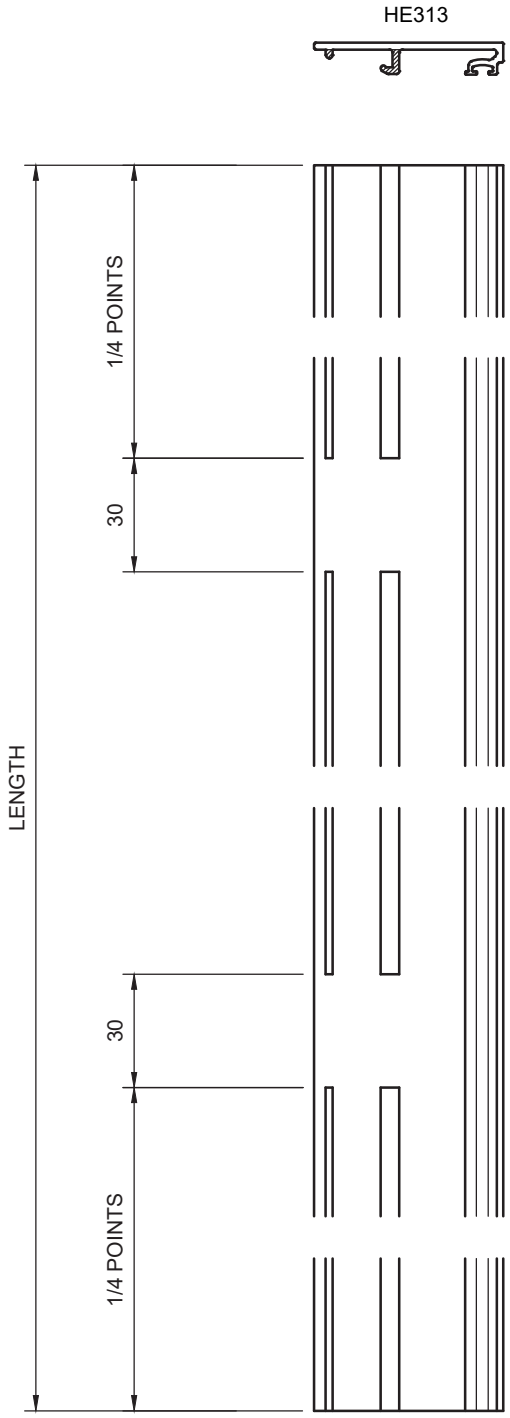


Drainage Preparation - External Glaze Transom

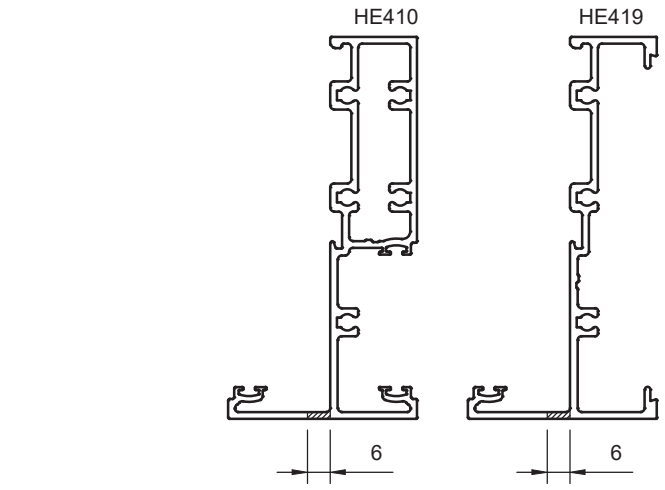


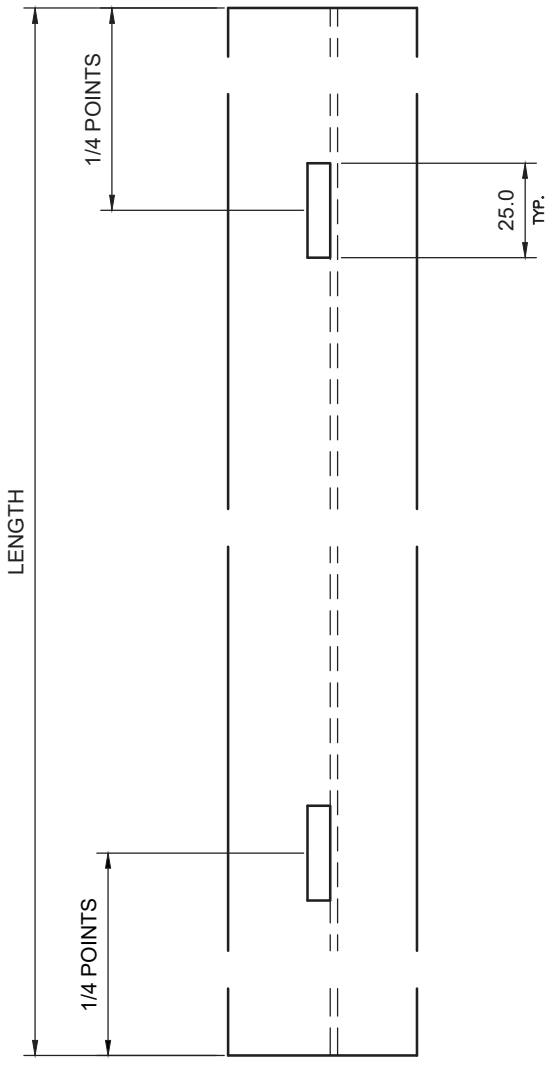


Drainage Preparation - External Glaze Bead



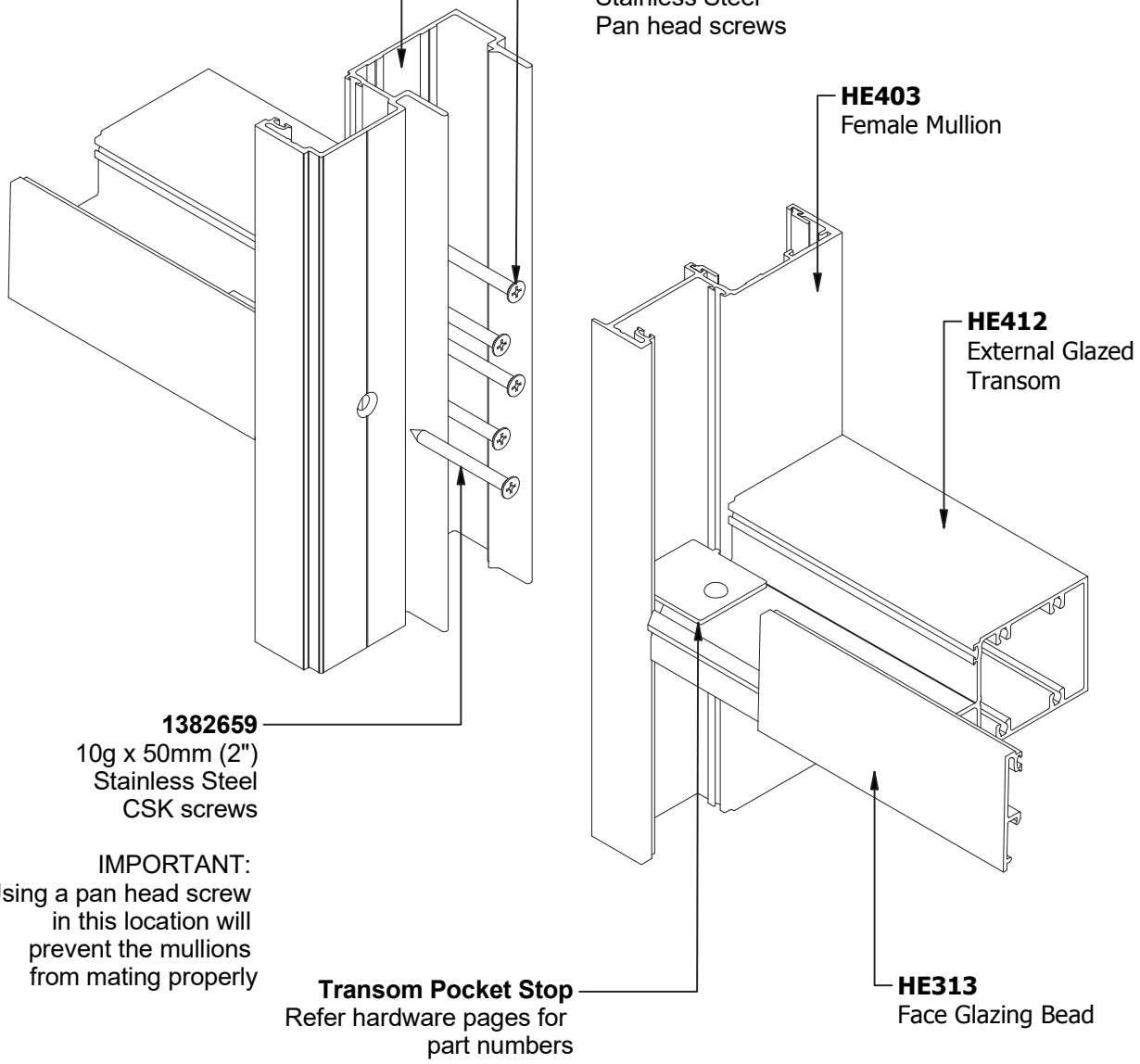
Frame Preparation - Sill / Transom Drainage



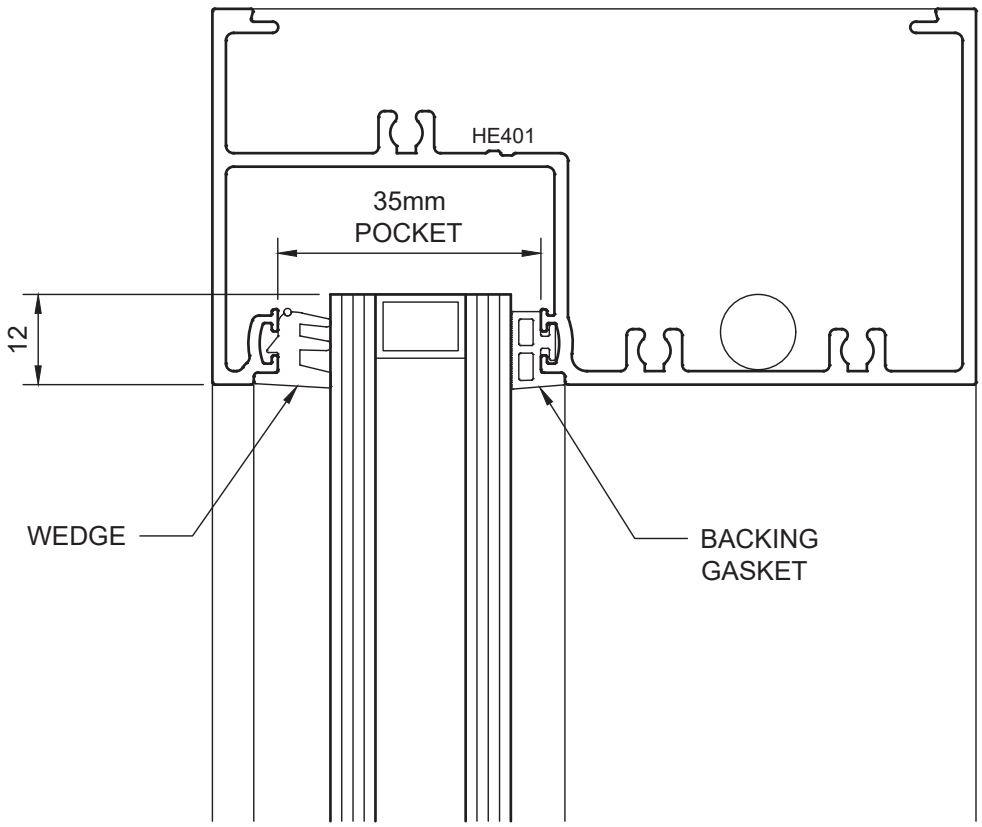


NOTE:
FOR TRANSOM WIDTHS OVER 1300mm ADD AN ADDITIONAL SLOT ON TRANSOM CENTRELINE

Transom Assembly and Sealing Details



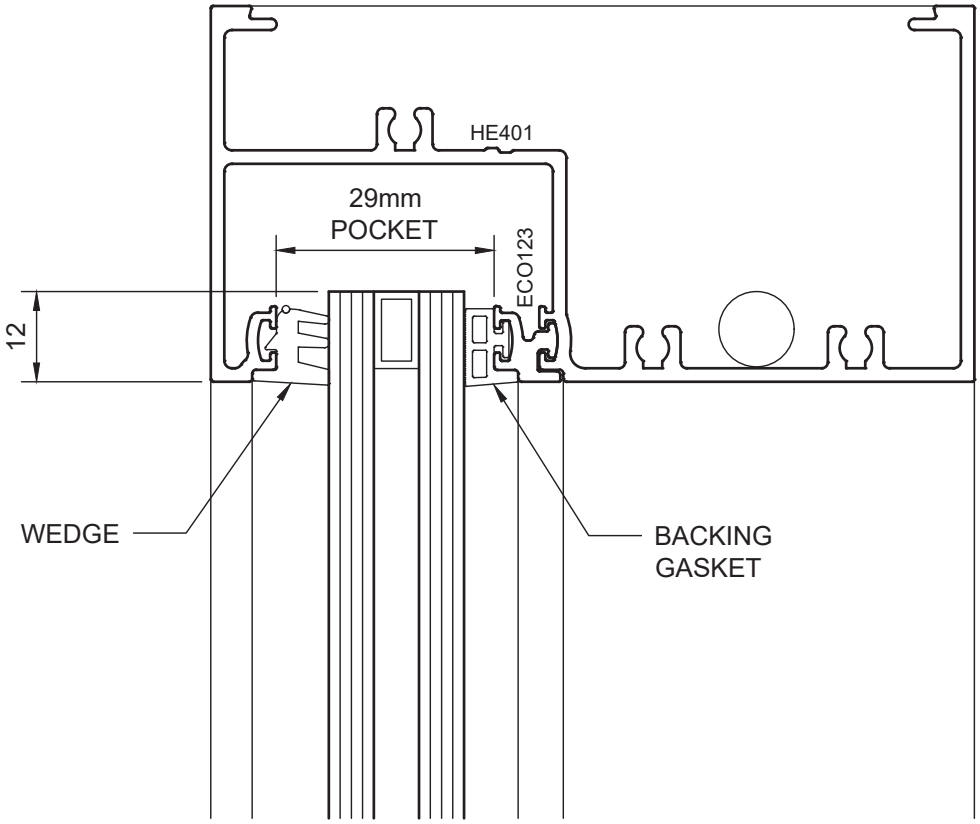
Glazing Details - Captive



	WEDGE		PUSH IN BACKING GASKET	CO-EXTRUDED BACKING GASKET
GLASS THICKNESS	ID COLOUR	REF. (GAP)	REF. (GAP)	REF. (GAP)
22mm	RED	GR47 (7mm)	GR49 (6mm)	CE49 (6mm)
24mm	RED	GR47 (7mm)	GR37 (4mm)	CE37 (4mm)
25mm	YELLOW	GR46 (6mm)	GR37 (4mm)	CE37 (4mm)
28mm	BLUE	GR45 (5mm)	GR36 (2mm)	CE36 (2mm)
30mm	BROWN	GR43 (3mm)	GR36 (2mm)	CE36 (2mm)

REVERSE GLAZING WEDGE COMBINATIONS FOR INTERNAL GLAZING

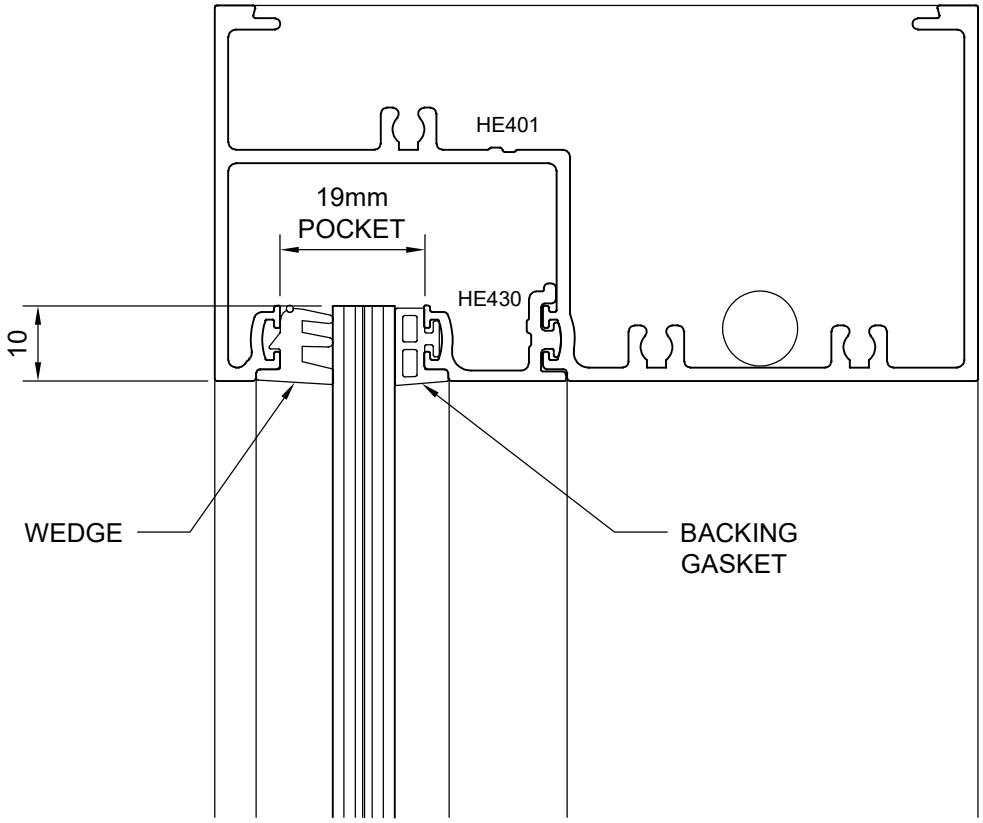
Glazing Details - with ECO123 Glazing Adaptor



	WEDGE		PUSH IN BACKING GASKET	CO-EXTRUDED BACKING GASKET
GLASS THICKNESS	ID COLOUR	REF. (GAP)	REF. (GAP)	REF. (GAP)
15mm	ORANGE	GR48 (8mm)	GR49 (6mm)	CE49 (6mm)
16mm	RED	GR47 (7mm)	GR49 (6mm)	CE49 (6mm)
17mm	YELLOW	GR46 (6mm)	GR49 (6mm)	CE49 (6mm)
18mm	BLUE	GR45 (5mm)	GR49 (6mm)	CE49 (6mm)
20mm	BLUE	GR45 (5mm)	GR37 (4mm)	CE37 (4mm)

REVERSE GLAZING WEDGE COMBINATIONS FOR INTERNAL GLAZING

Glazing Details - With HE430 Glazing Adaptor



	WEDGE		PUSH IN BACKING GASKET	CO-EXTRUDED BACKING GASKET
GLASS THICKNESS	ID COLOUR	REF. (GAP)	REF. (GAP)	REF. (GAP)
6/6.38mm	RED	GR47 (7mm)	GR49 (6mm)	CE49 (6mm)
8/8.38mm	BLUE	GR45 (5mm)	GR49 (6mm)	CE49 (6mm)
10/10.38mm	BLUE	GR45 (5mm)	GR37 (4mm)	CE37 (4mm)
12/12.38mm	BLUE	GR45 (5mm)	GR36 (2mm)	CE36 (2mm)
14mm	BROWN	GR43 (3mm)	GR36 (2mm)	CE36 (2mm)

REVERSE GLAZING WEDGE COMBINATIONS FOR INTERNAL GLAZING

FRAMING

Your new **Hunter Evo 101.6mm Double Flush Glazed Framing** 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 **Hunter Evo 101.6mm Double Flush Glazed** frame will retain it's good looks and resist the elements for years to come.

The **Hunter Evo 101.6mm Double Flush Glazed** 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 **Hunter Evo 101.6mm Double Flush Glazed** 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 **Hunter Evo 101.6mm Double Flush Glazed** 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.

EVERYTHING ALUMINIUM & HARDWARE

HEAD OFFICE | 3 Alspec Place, Eastern Creek NSW 2766
Phone: 02 9834 9500 | Fax: 02 9834 9532 | info@alspec.com.au

ALSPEC SHOWROOMS

AluSpace by Alspec - Sydney | 110 New South Head Road, Edgecliff NSW 2027
Phone: 1300 ALUSPACE (1300 258 772) | design@alspec.com.au

AluSpace by Alspec - Adelaide | 1 Pope Court, Beverley SA 5009
Phone: 08 8150 6960 | adelaidealuspace@alspec.com.au

Brisbane Design Centre | 66 Merivale Street, South Brisbane QLD 4101
Phone: 07 3089 4900 | brisbane@alspec.com.au

MELBOURNE BRANCH
26–40 Pound Road West
Dandenong South VIC 3175
Phone: 03 8787 6333
Fax: 03 8787 6399
melbourne@alspec.com.au

ADELAIDE BRANCH
1 Pope Court
Beverley SA 5009
Phone: 08 8150 6960
Fax: 08 8150 6999
adelaide@alspec.com.au

PERTH BRANCH
30 Holder Way
Malaga WA 6090
Phone: 08 9209 9100
Fax: 08 9209 9199
perth@alspec.com.au

BRISBANE BRANCH
8–22 Jutland Street
Loganlea QLD 4131
Phone: 07 3089 4900
Fax: 07 3089 4999
brisbane@alspec.com.au

NEWCASTLE BRANCH
95 Griffiths Road
Lambton NSW 2299
Phone: 02 4952 9111
Fax: 02 4952 9728
newcastle@alspec.com.au

CAIRNS BRANCH
34–38 Hargreaves Street
Edmonton QLD 4869
Phone: 07 4037 6666
Fax: 07 4037 6699
cairns@alspec.com.au

CANBERRA BRANCH
28 Sheppard Street
Hume ACT 2620
Phone: 02 5134 3300
canberra@alspec.com.au

DARWIN BRANCH
25 Bishop Street
Woolner NT 0820
Phone: 08 8941 7300
darwin@alspec.com.au

SUNSHINE COAST BRANCH
4-8 Empire Crescent
Chevallum QLD 4555
Phone: 07 5437 6123
Fax: 07 5437 6124
chevallum@alspec.com.au

BRENDALE BRANCH
24 Doherty Street
Brendale QLD 4500
Phone: 07 3205 9911
Fax: 07 3205 9915
brendale@alspec.com.au

TOWNSVILLE BRANCH
21 Carroll Street
Mount Louisa QLD 4814
Phone: 07 3089 4965
Fax: 1300 131 747
townsville@alspec.com.au

BUNDABERG BRANCH
17 Production Street
Svensson Heights QLD 4670
Phone: 07 4111 2000
Fax: 07 4111 2099
bundaberg@alspec.com.au