

IMPORTANT NOTE

Curtain Walling

Please note both CWCT and NHBC consider all storey height glazing to be a curtain wall and therefore should be designed as such. Curtain walling cannot be treated in the same way as window and door installations.

The following are requirements in undertaking a Curtain Walling project:

- Full elevation drawings must be produced. These drawings should clearly indicate all perimeter interface details typically showing water / vapour barriers, pressings / trims, fixing brackets / fixings along with any fire stopping that may be required. This is not an exhaustive list as other details may be required to suit specific projects.
- All bracketry and fixings should be backed up by calculations from a structural engineer to confirm suitability and meet site requirements. Also, profiles need to be identified to suit site conditions. These factors include screen sizes, fixing positions, glass weight, barrier loadings & wind loadings.
- It may be a requirement to include for on-site water testing and pull out testing. NHBC would require certification to the CWCT weather test where glazing may span a floor as opposed to a BS6375-1 window / door weather test.

Please also consider acoustic, thermal and structural performance when specifying curtain wall configuration and components.

IMPORTANT NOTE:

It would be expected that one or more members of installation teams have been certified by the Systems supplier to demonstrate competence and understanding of the system being installed.





Main Index Index MC **Profiles** Technical Information...... A09 - A14 Scale Profile Drawings...... A15 - A26 MC **Accessories** MC **Sections** MC MC **Construction Drawings** NHBC Notice...... E03 Bracket requirements..... E04 Stick Build Mullion Preparation - ACMC650...... E06 Stick Build Transom Preparation..... E07 Stick Build Assembly & Assembly E08 - E10 Drainage & Pressure Equalisation..... E11 Reinforcing Sleeves..... E12 Splice Joints..... E13 Sleeves...... E14 Raked Head..... E15 Glazing Details..... E16



		Updates
DATE		DESCRIPTION
	i	



PROFILES: SPECIFICATION PAGES

Specification

GENERAL DESCRIPTION

MC600 Plus is a stick build curtain wall system suitable for low rise installations, up to three stories, in commercial & domestic buildings.

Designed for quick and easy workshop preparation and on-site installation, MC600 is a cost effective system which offers a high quality finish.

PROFILE SPECIFICATION

The sections are constructed of aluminium alloy extrusion to BS EN 755-9 and BS EN 12020, extruded to 6063 T6 alloy.

The aluminium alloy extrusion is pre-treated and finished either:-

- a) Anodised to BS 3987: 1987, grade AA25 to a natural self colour.
- b) Polyester powder organic coating to BS EN 12206-1.

GENERAL MANUFACTURING

After careful inspection of the extrusions, all visible areas shall be taped using our recommended protective tape to help protect against any scratches.

Sections are cut with accurate 90° ends using Tungsten Carbide Tipped Saw Blades, operating at approximately 3000 rpm. The isolators, MC005, 006, 009 can be inserted into the mullions/transoms prior to cutting.

The mullions are marked and drilled using the recommended drill jig ACMC696.

Transoms are drilled using recommended drill jig ACMC691 in preparation for the fixing bracket ACMC611 which is secured into position using ACET060 stainless steel self tapping screws.

On polyester powder coated finishes, great care should be taken to avoid getting gap sealer on visible surfaces and should be removed as soon as possible with a clean cloth.

Care should be exercised when using products not supplied by Smart Systems Ltd as no responsibility can be accepted.



PROFILES: SPECIFICATION PAGES

Specification

DRAINAGE

As with all dry glazed systems, the system must be adequately drained and ventilated. Refer to drainage details in manual, if in doubt ask the Technical Department.

WORKSHOP MANUFACTURING INFORMATION

After careful inspection of the extrusions, all visible areas shall be taped using our recommended protective tape to help protect against any scratches.

Sections are cut with accurate 90° ends using Tungsten Carbide Tipped Saw Blades, operating at approximately 3000 rpm. The isolator MC005, 006, 009 can be inserted into the mullions/transoms prior to cutting.

The mullions are marked to show the centre line of the transoms and are drilled with a 4mm dia. drill bit for the ACMC611 brackets and a 6.5mm dia. drill bit, then opened up to 11mm, for the ACMC650 anti-rotation spring pin using the recommended drill jig ACMC696.

Transoms are drilled with a 3mm dia. drill bit using recommended drill jig ACMC691 in preparation for the fixing bracket ACMC611 which is secured into position using ACET060 stainless steel self tapping screws. The ACMC650 anti-rotation spring pin is slid into the position and secured by tightening the grub screw.

IMPORTANT NOTE: Maximum weight on ACMC611 is 500kg.

Seal transom end pads to ends of transom with ACSIL04.

All gaskets and transom end pads may be fitted in the workshop to save time on site.

ON SITE ASSEMBLY INFORMATION

After mullions are secured into position, the transoms are inserted between the vertical members until the ACMC650 anti-rotation spring pin engages into the predrilled hole. Transom end pads should be sealed using ACSIL04. Care should be taken to ensure the transom end pads are not dislodged at this point. The transom is secured into position via the ACMC611 brackets using ACIM062 stainless steel self tapping screws. Ensure mullions are fully pushed against end of transoms to avoid relying on transom brackets to pull actual mullions into position.

Gasket to gasket joints to be bonded using EPDM adhesive. ACMC6030 glazing supports shall be positioned in preparation for the double glazed units.

PROFILES: SPECIFICATION PAGES

Specification

GLAZING

Double glazed units shall be positioned on plastic packers on glazing supports with equal distance on all sides.

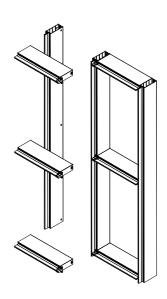
Units are secured in position using MC150 with ACMC151 held in place by ACMC6345 Self Tapping Fixing Screw taking care not to exceed torque of 5Nm to 6Nm at the recommended speed of 1500-1800rpm. Stitch plates may be used to secure the units temporarily until all units are in position. Pressure plates shall be fitted at the top first, working downwards to help avoid uneven fixings.

The cover caps are clipped in position using a rubber mallet taking care to strike the corners only to avoid denting the section. Vertical cover caps are fitted first followed by the horizontal caps.

Construction Options

The MC600 Plus Curtain Walling System shall be installed as stick build only.

Stick build is a fast method of fabrication and installation. The Curtain Wall is taken to a site in stick form and the mullions are first to be assembled - usually from the centre outwards. The transoms are then fitted from the front of the Curtain Wall. Spring Pins (ACMC650) fixed to the transoms, locate in pre-drilled holes in the mullions and the transoms are then secured using a face mounted bracket - ACMC611, 615, 6112 or 6116.





PROFILES: SPECIFICATION PAGES

Specification

MC600 Weather Performance (CWCT - Standard for Systemised Building Envelopes)

BS EN 12152 Air Permeability:

BS EN 12154 Watertightness:

Class 4 600Pa

Class R7 600Pa

BS EN 13116 Resistance to Wind Load:

Class 2400 2400Pa

MC600 also successfully passed the 'Resistance to Impact'.

MC600 U Values

Contact Technical Department

MC600 PAS24 Infill Removal & Soft Body Impact Test

Using Pin Hex Button Self-Tapping anti-tamper screws, MC600 has achieved PAS24.

Anti-tamper screws are supplied by Fastenright (www.fastenright.com). Screw lengths will differ depending on glazing thickness - see glazing chart.

Use two anti-tamper screws in each corner of each unit.



Number	Picture	Page	Perim.	Mec.	İX(cm ⁴) WX(cm ³)	iy(cm ⁴) wy(cm ³)	Length (m)	Pack pr.	MF	SA	KL	НР	M
DK052	$\begin{bmatrix} x \\ y \\ x \end{bmatrix}$	A18	170	96	1	-	7 6.5	1	✓	✓	✓	\	
DK053	X Y—Y X	A18	190	98	ı	-	7 6.5	1	✓	✓	√	✓	
ETC090		A17	68	-	ı	-	5	1	✓	✓	✓	✓	
ETC091	X Y-X	A17	75	1	i	-	5	1	✓	√	√	✓	
MC005		A20	-	-	ı	-	7	1	✓				
MC006	X X X X X X X X X X X X X X X X X X X	A20	-	-	ı	-	7	1	✓				
MC009	X Y—X	A20	-	-	•	-	7	1	✓				
MC050	X	A18	206	102	-	-	7	1	✓	✓	√	✓	
MC150	X Y—Y	A20	185	-	-	-	7	1	✓				
A = Outside B = Inside									MF = Mill Finish SA = Silver Anodised KL = Basic Colour HP = Special Colour M = Dual Colour				

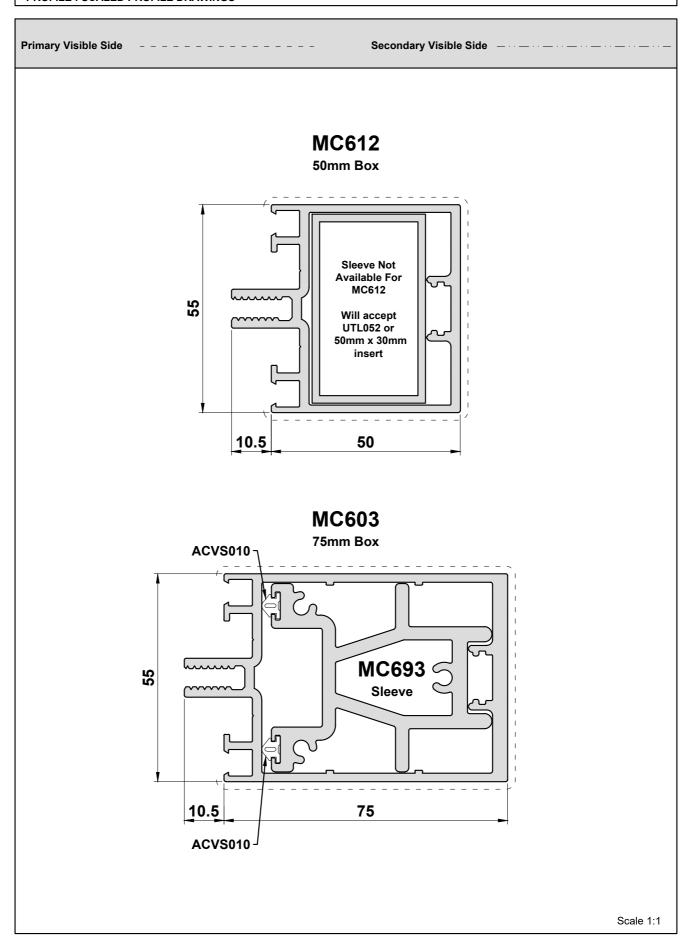
Number	Picture	Page	Perim.	Mec.	jX(cm ⁴) WX(cm ³)	iy(cm ⁴) wy(cm ³)	Length (m)	Pack pr.	MF	SA	KL	НР	М
MC150D	X Y—X	A21	185	•	-	-	7	1	✓				
MC165	X X X	A19	91	1	-	-	7	1	✓	✓	✓	✓	
MC166	X	A19	103	1	-	-	7	1	✓	✓	✓	✓	
MC603	X Y—X X	A13	396	205	71.6 — 14.9	31.7 — 11.5	7	1	✓	✓	✓	✓	
MC612	x y x x x	A13	346	155	23.5 — 7.2	20.7 — 7.5	7	1	✓	√	✓	✓	
MC614	X Y—X	A14	444	255	120.6 — 21.7	35.2 — 12.8	7	1	✓	✓	✓	✓	
MC616	X Y—X X	A14	496	305	250 33.2	45 — 16.4	7	1	✓	✓	✓	√	
MC618	Y-Y-Y	A15	546	355	380.4 — 44.6	59.5 — 21.6	7	1	✓	✓	✓	√	
MC619	T X X X X X X X X X X X X X X X X X X X	A15	586	395	575 — 57	68.5 — 24.9	7	1	√	✓	✓	✓	
	Î							= Outside = Inside		SA KL HP	= Basic	Anodise Colour al Colou	

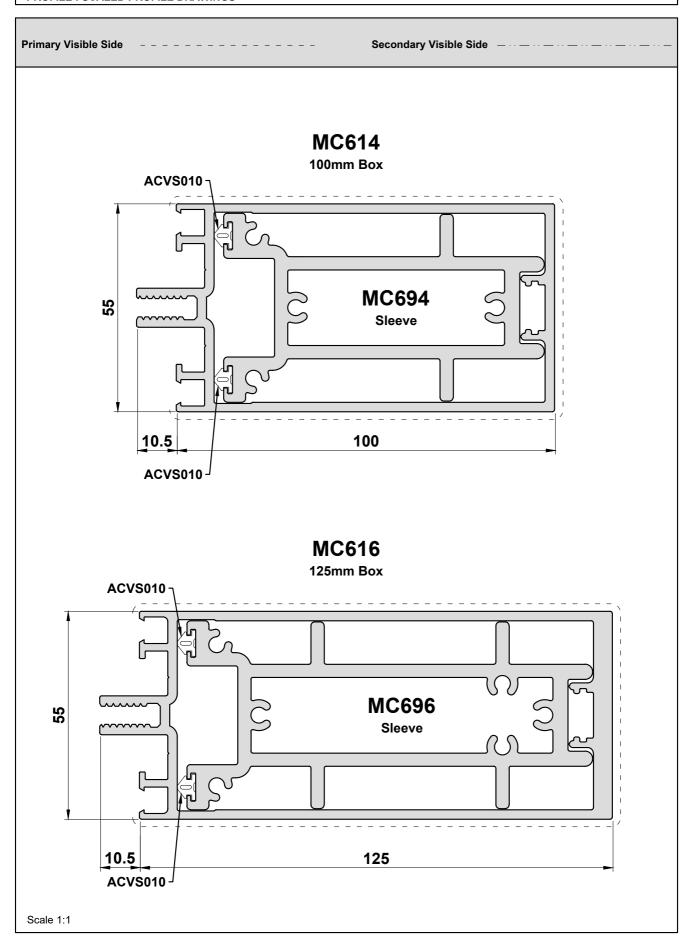


Number	Picture	Page	Perim.	Mec.	İX(cm ⁴) WX(cm ³)	iy(cm ⁴) wy(cm ³)	Length (m)	Pack pr.	MF	SA	KL	НР	М
MC620	X Y—X	A16	695	505	1453.2 110.42	114.3 41.6	7	1	✓	✓	✓	✓	
MC625	X Y X	A17	625	353	521.3 — 57.4	69.9 —- 25.4	7	1	✓	✓	✓	✓	
MC652	X $Y \xrightarrow{X}$	A18	188	97	-	-	7	1	✓	✓	✓	✓	
MC653	X Y—Y X	A18	247	154	ı	-	7	1	√	√	√	✓	
MC654	X Y—X X	A18	206	105	-	-	7	1	✓	✓	√	~	
MC665	$\begin{bmatrix} & & & \\ & & \\ & & & \\ & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & $	A19	103	103	-	-	7	1	✓	✓	✓	✓	
MC666	X Y—X	A19	127	127	-	-	7	1	✓	√	√	✓	
MC667	Y—X X	A19	-	-	<u>-</u>	-	7	1	✓	✓	✓	✓	
MC693	John Stranger	A13	336	-	23.1 — 7.6	13.8 —- 5.5	6	1	✓				
A = Outside B = Inside									MF = Mill Finish SA = Silver Anodised KL = Basic Colour HP = Special Colour M = Dual Colour				

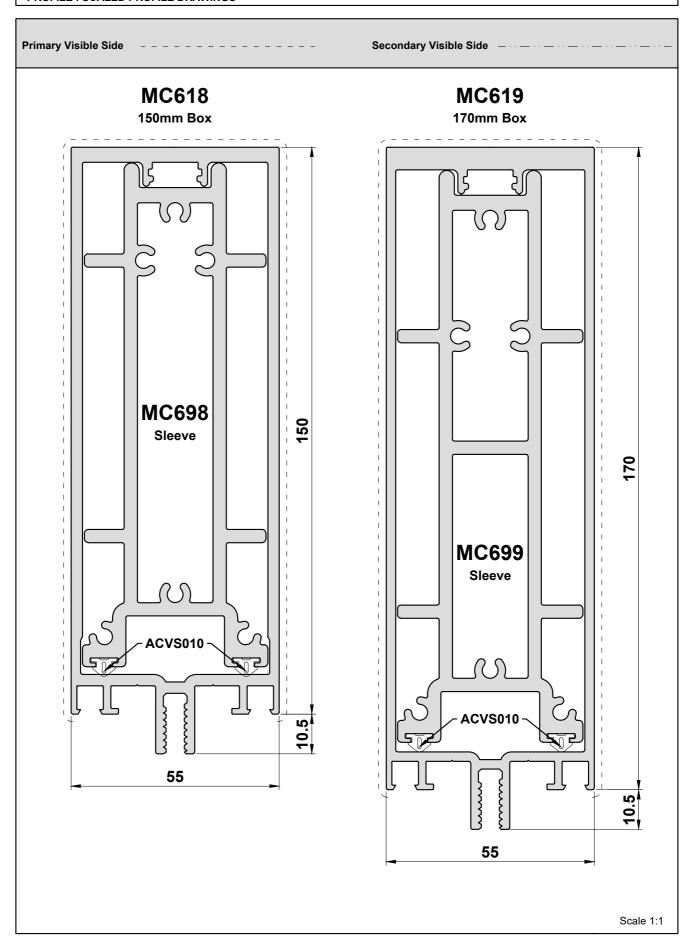
Number	Picture	Page	Perim.	Mec.	İX(cm ⁴) WX(cm ³)	iy(cm ⁴) wy(cm ³)	Length (m)	Pack pr.	MF	SA	KL	НР	М
MC694		A14	375	-	69.7 — 15.8	17 — 6.8	7	1	✓				
MC696		A14	462	1	142.9 — 37.7	22.3 — 8.9	7	1	√				
MC698		A15	507	•	258.9 — 37.7	23.9 — 9.8	7	1	✓				
MC699		A15	547	ı	353.1 — 44.8	26.3 — 10.7	7	1	√				
UTL026	X Y—X	A17	160	160	ı	-	6	1	>	✓	✓	>	
UTL052	X Y—Y	A17	160	160	ı	-	6	1	√	✓	✓	✓	
A = Outside B = Inside									MF = Mill Finish SA = Silver Anodised KL = Basic Colour HP = Special Colour M = Dual Colour				





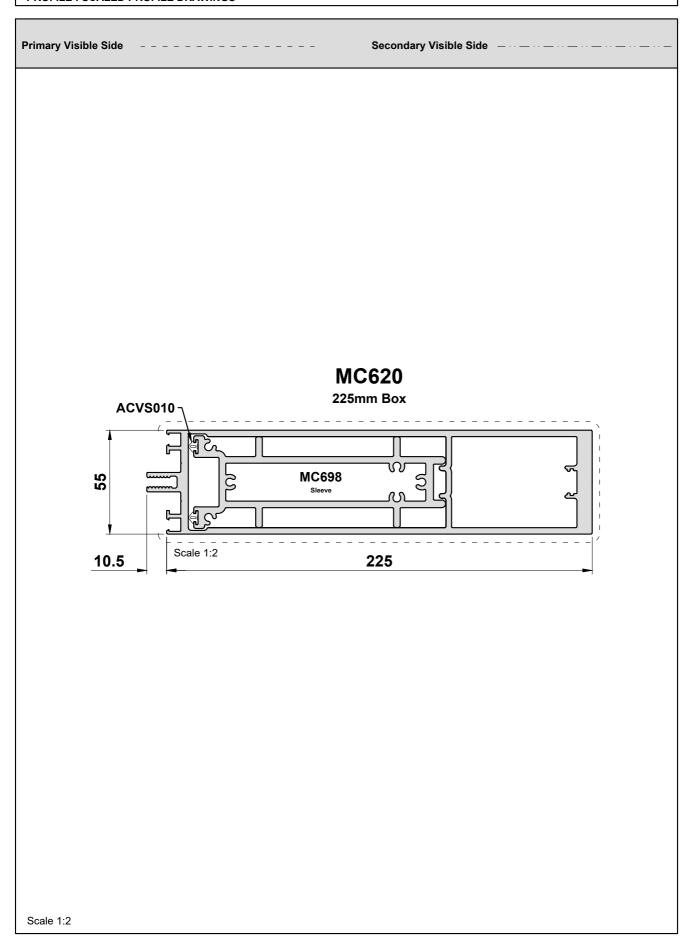






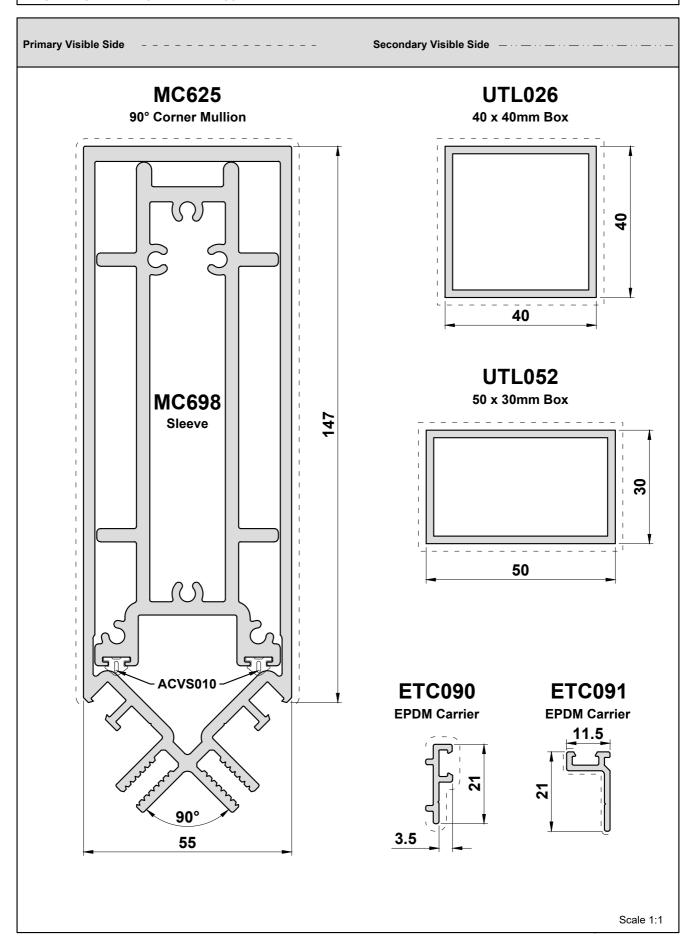


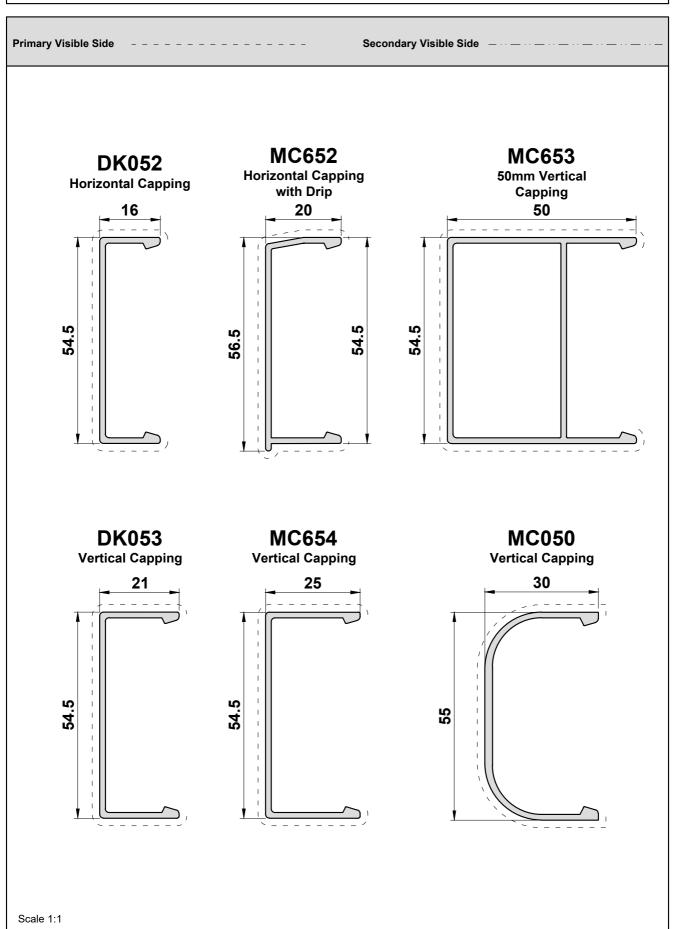
PROFILE: SCALED PROFILE DRAWINGS



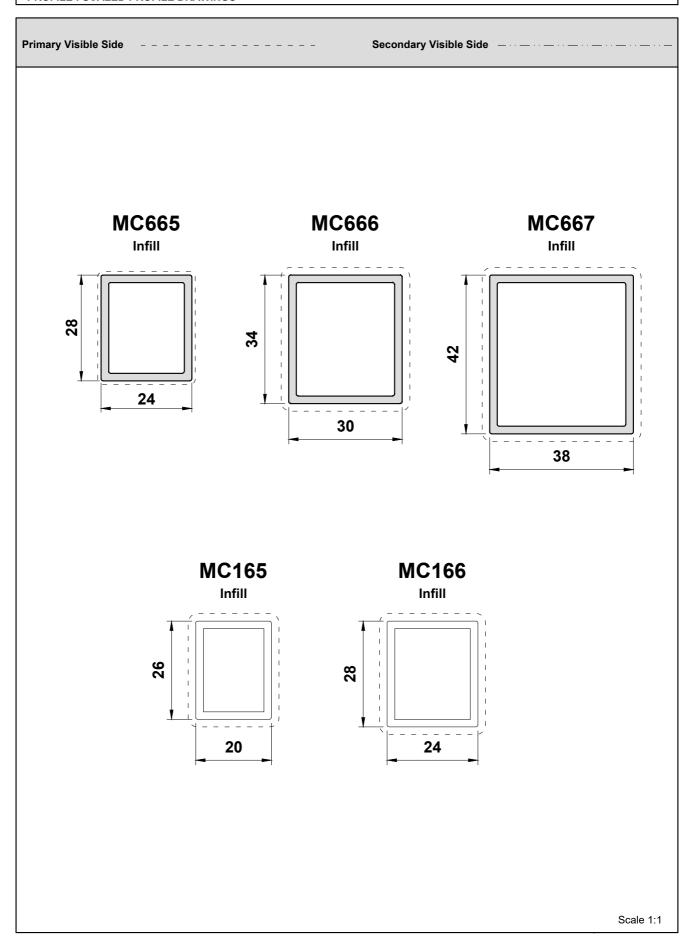
PAGE **A16**









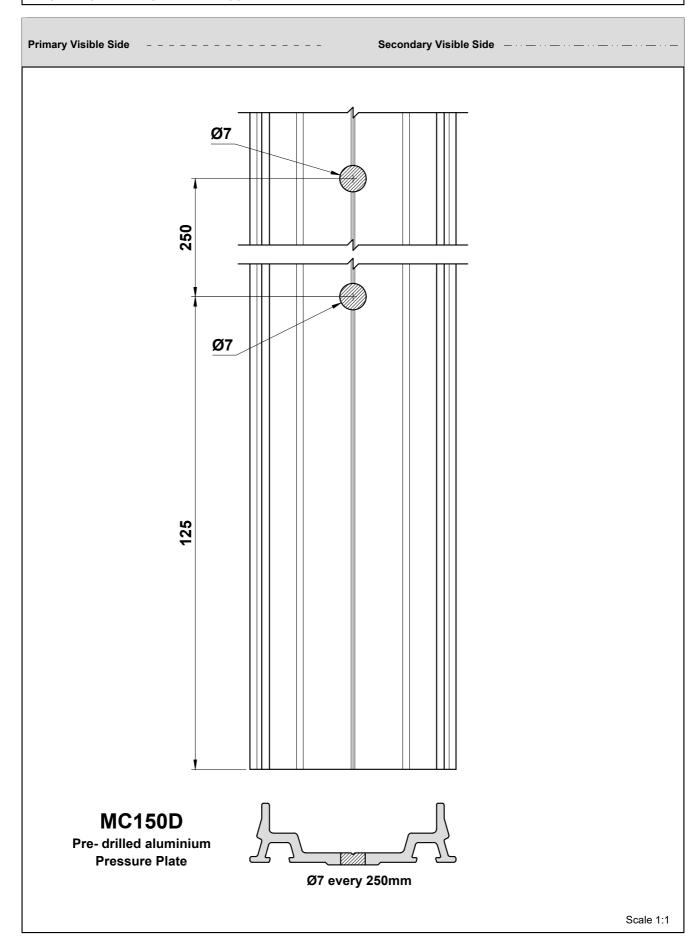


PROFILE: SCALED PROFILE DRAWINGS

Primary Visible Side Secondary Visible Side - - -MC005 Insulator Insulator MC009 Insulator MC150 **Aluminium Pressure Plate** 54.5 ACMC151 -ACMC151

Scale 1:1





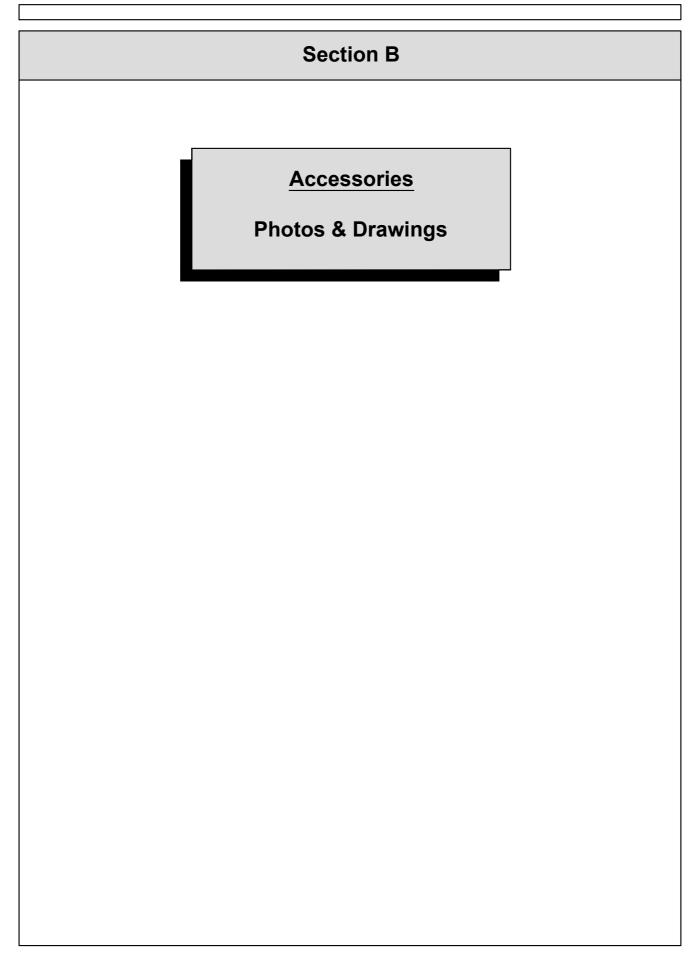


PROFILE: SCALED PROFILE DRAWINGS

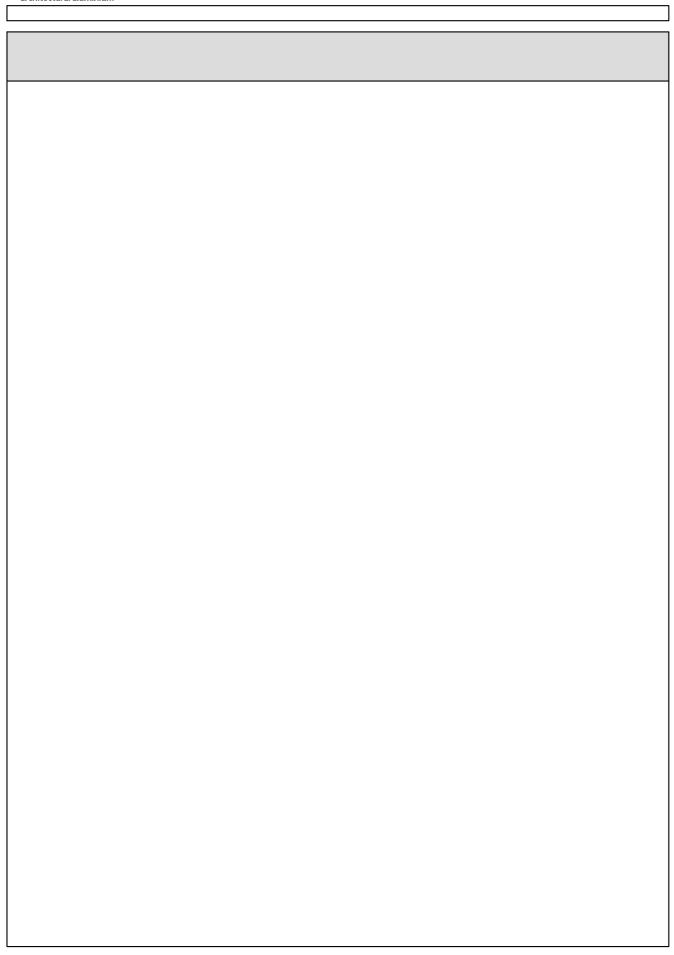
Primary Visible Side		Secondary Visible Side — —	
	THIS PAGE IS INTENTION	ONALLY LEFT BLANK	
Scale 1:1			

PAGE A22 ISSUED: JULY 2025







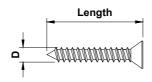


PAGE B02 ISSUED: JULY 2025



ACCESSORIES : PHOTOS & DRAWINGS

Countersunk Screws



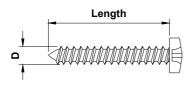
Gauge	'D' (mm)
No.6	3.5
No.7	3.8
No.8	4
No.10	5
No.12	6

Part Number	Gauge	x	Length	Description	Box Qty.
ACUN3530	No.6	х	5/8"	Countersunk Pozi Self Tapper S/S	100
MUA025SSZ	No.6	X	1"	Countersunk Pozi Self Tapper S/S	100
ACET067	No.7	x	1/2"	Countersunk Pozi Self Tapper S/S	100
ACET060	No.7	X	1"	Countersunk Pozi Self Tapper S/S	100
ACET066	No.7	Х	1 1/2"	Countersunk Pozi Self Tapper S/S	100
MUA067SSZ	No.7	X	2"	Countersunk Pozi Self Tapper S/S	100
ACUN3544	No.7	X	3/4"	Countersunk Pozi Self Tapper S/S	100
ACET064	No.8	X	5/8"	Countersunk Pozi Self Tapper S/S	100
ACUN3512	No.8	X	1 1/4"	Countersunk Pozi Self Tapper S/S	100
ACUN3513	No.8	Х	1 3/4"	Countersunk Pozi Self Tapper S/S	100
ACET072	No.8	X	2 1/2"	Countersunk Pozi Self Tapper S/S	100
ACET490	4.3mm	X	16mm	Countersunk PH2 Polyamide Screw	1000
ACET290	4.3mm	X	20mm	Countersunk PH2 Polyamide Screw	100
ACET390	4.3mm	X	25mm	Countersunk PH2 Polyamide Screw	200
ACET190	4.3mm	X	45mm	Countersunk PH2 Polyamide Screw	1000
ACVS062	4.3mm	Х	65mm	Countersunk PH2 Polyamide Screw	1000
ACET048	No.10	х	3/8"	Countersunk Pozi Self Tapper S/S	100
ACIM062	No.10	х	1 1/4"	Countersunk Pozi Self Tapper S/S	100
ACET062	No.10	х	2"	Countersunk Pozi Self Tapper S/S	100
ACET076	No.10	Х	2 1/2"	Countersunk Pozi Self Tapper S/S	100



ACCESSORIES : PHOTOS & DRAWINGS

Pan Head Screws



Gauge	'D' (mm)
No.6	3.5
No.7	3.8
No.8	4
No.10	5
No.12	6

Part Number	Gauge	х	Length	Description	Box Qty.
ACET068	No.8	Х	3/8"	Pozi Flange AB	100
ACET063	No.8	Х	1/2"	Pan Head Self Tapper	100
ACET070	No.8	х	1/2"	Pozi Flange Self Tapper S/S	100
ACUN3535	No.8	Х	5/8"	Pan Head Pozi S/S	100
ACET099	No.8	Х	3/4"	Pozi Flange Self Tapper S/S	100
ACDR050	4.8mm	Х	32mm	Pan Head Pozi S/S	200
PUA028	No.10	х	1"	Pan Head Pozi S/S	100
ACDR052	No.10	х	2"	Pan Head Self Tapper S/S	200
ACET079	No.10	Х	2 1/2"	Pan Head Pozi S/S	100
ACW20160	No.12	Х	1"	Flange Head Self Tapper S/S	100
ACMC109	6.3mm	Х	38mm	DIN7981 - Pan Head Self Tapper	200



ACCESSORIES: PHOTOS & DRAWINGS

Pressure Plate Screws

ACMC6325

DIN7981 TX M6.3x25 x 200

ACMC6332

DIN7981 TX M6.3x32 x 200

ACMC6338

DIN7981 TX M6.3x38 x 200

ACMC6345

DIN7981 TX M6.3x45 x 200

ACMC6350

DIN7981 TX M6.3x50 x 200

ACMC6360

DIN7981 TX M6.3x60 x 200

ACMC6370

DIN7981 M6.3x70 x 200

ACMC6380

DIN7981 M6.3x80

x 200

ACMC6390

DIN7981 M6.3x90 x 200

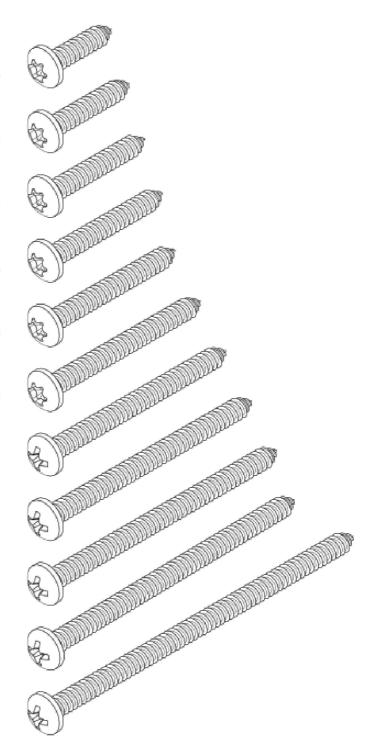
ACMC63100

DIN7981 M6.3x100 x 200

ACMC63120

DIN7981 M6.3x120

x 200



ACCESSORIES : PHOTOS & DRAWINGS

Glazing Gaskets

Mullion & Transom Gaskets

			ACMC702
	2mm		300m
	,,	• •	BL
		222	ACMC703
et	3mm		300m
Mullion & Transom Gasket			BL
om (ACMC704
rans	4mm		200m
λ	,		BL
ullior			ACMC705
M	5mm		150m
	;		BL
			ACMC706
	6mm		150m
			BL

Pressure Plate Gaskets

et			ACMC150
Pressure Plate Gasket	3mm		100m
ate (,,,	11 13 11	BL
re PI	3mm		ACMC151
nsse			150m
Pre	• • •		BL

SS		Part number
nickne	Drawing	Coil length
T		Available Colours



ACCESSORIES . FILOTOS & DIAMINOS						
Image	Part Code	Pack	Unit	Application	Colour	
	ACMC611 Two Part Transom to Mullion Bracket Glazing 28-30mm	1	each	MC603 MC612 MC614 MC616 MC618 MC619 MC620 MC625	MF SA KL HP SSC SMC W Z PC	
	ACMC615 Two Part Transom to Mullion Bracket Glazing 40-44mm	1	each	MC603 MC612 MC614 MC616 MC618 MC619 MC620 MC625	MF SA KL HP SSC SMC W Z PC	
45	ACMC631 Glazing Support (100mm) for 40mm - 44mm	20	pack	MC603 MC612 MC614 MC616 MC618 MC619	MF SA KL HP SSC SMC W Z PC	
55	ACMC633 Glazing Support (100mm) for 50mm - 54mm	20	pack	MC603 MC612 MC614 MC616 MC618 MC619	MF V SA KL HP SSC SMC W Z PC	
53.5	ACMC646 Foam End Block for Raked Heads For Glazing 28mm - 36mm	50	pack	MC612 MC614 MC616 MC618 MC619	MF ✓ SA KL HP SSC SMC W Z PC	
T-BARS ACVG65=2 5mm ACVG66=3 0mm ACVL150=4 0mm Screw (Grub)	MF = Mill Finish W SA = Silver Anodised Z KL = Basic Colour HP = Special Colour SSC = Smooth Satin Chrome SMC = Smokey Chrome PC = Polished Chrome	= White = Black	X			



ACCESSORIES . PHOTOS & DRAWINGS							
Image	Part Code	Pack	Unit	Application	Colour		
625	ACMC647 Foam End Block for Raked Heads For Glazing 40mm - 54mm	50	pack	MC612 MC614 MC616 MC618 MC619	MF SA KL HP SSC SMC W Z PC		
	ACMC650 Spring Pin With Hook	1	each	MC612 MC614 MC616 C618 MC619	MF ✓ SA KL HP SSC SMC W Z PC		
	ACMC660 End Cap	50	pack	DK053	MF SA KL HP SSC SMC W Z PC		
	ACMC661 End Cap	50	pack	DK052	MF SA KL HP SSC SMC W Z PC		
	ACMC663 1000mm Sleeve for MC603 with ACVS010 inserts Produced from MC693	1	each	MC603	MF SA KL HP SSC SMC W Z PC		
T-BARS ACVG65=2 5mm ACVC66=3 0mm ACVL150=4 0mm Screw (Grub)	CA — Cilven Annelised 7	= White = Black	X	77			



lmage	Part Code	Pack	Unit	Application	Colour
	ACMC664 1000mm Sleeve for MC614 with ACVS010 inserts Produced from MC694	1	each	MC614	MF ✓ SA KL HP SSC SMC W Z PC
	ACMC666 1000mm Sleeve for MC616 with ACVS010 inserts Produced from MC696	1	each	MC616	MF SA KL HP SSC SMC W Z PC
	ACMC668 1000mm Sleeve for MC618 with ACVS010 inserts Produced from MC698	1	each	MC618 MC620 MC625	MF ✓ SA KL HP SSC SMC W Z PC
	ACMC669 1000mm Sleeve for MC619 with ACVS010 inserts Produced from MC699	1	each	MC619	MF ✓ SA KL HP SSC SMC W Z PC
	ACMC691 Transom Drill Jig Dual Purpose: -Transom Brackets -Shear Blocks	1	each	MC612 MC614 MC616 MC618 MC619	MF ✓ SA KL HP SSC SMC W Z PC
T-BARS ACVG65=2.5mm ACVC66=3.0mm ACVL150=4.0mm Screw (Grub)		= White = Black	X	77	



ACCESSORIES . PHOTOS & DRAWINGS						
Image	Part Code	Pack	Unit	Application	Colour	
	ACMC693 Raked Head Drill Jig	1	each	MC614 MC615 MC616 MC617 MC618 MC619	MF SA KL HP SSC SMC W Z PC	
	ACMC696 Mullion Drill Jig for ACMC650 & ACMC651	1	each	MC612 MC614 MC616 MC618 MC619	MF SA KL HP SSC SMC W Z PC	
	ACMC6012 MC612 End Pad	50	pack	MC612	MF SA KL HP SSC SMC W Z PC	
	ACMC6013 MC603 End Pad	50	pack	MC603	MF SA KL HP SSC SMC W Z ✓	
	ACMC6014 MC614 End Pad	50	pack	MC614	MF SA KL HP SSC SMC W Z ✓	
T-BARS AC/G65=2 5mm AC/G66=3 0mm ACVL150=4.0mm Screw (Grub)		- White - Black	X	7 ₹		



ACCESSORIES . FROTOS & DRAWINGS				,.	
Image	Part Code	Pack	Unit	Application	Colour
	ACMC6016 MC616 End Pad	50	pack	MC616	MF SA KL HP SSC
					SMC W Z ✓ PC MF
	ACMC6019 MC619 End Pad	50	pack	MC619	SA KL HP SSC SMC W Z PC
	ACMC6030 Glazing Support (100mm) for 28mm - 36mm	20	pack	MC603 MC612 MC614 MC616 MC618 MC619	MF SA KL HP SSC SMC W Z PC
35	ACMC6035 Transom Membrane	20m	Coil	MC603 MC612 MC614 MC616 MC618 MC619	MF SA KL HP SSC SMC W Z PC
	ACMC6044 Cover Cap for Splice Joint	10	pack	ACMC203 MC612 MC614 MC616 MC618 MC619 MC620	MF SA KL HP SSC SMC W Z PC
T-BARS ACVG65-25mm ACVC66-3.0mm ACVL150-4.0mm Screw (Grub)	04 09	= White = Black	X	77	



Image	Part Code	Pack	Unit	Application	Colour
30	ACMC6052 Angle Bracket for MC612	1	each	MC612	MF ✓ SA KL HP SSC SMC W Z PC
53.5	ACMC6053 Angle Bracket for MC603	1	each	MC603	MF SA KL HP SSC SMC W Z PC
80	ACMC6054 Angle Bracket for MC614	1	each	MC614	MF ✓ SA KL HP SSC SMC W Z PC
102.5	ACMC6056 Angle Bracket for MC616	1	each	MC616	MF ✓ SA KL HP SSC SMC W Z PC
128	ACMC6058 Angle Bracket for MC618	1	each	MC618	MF ✓ SA KL HP SSC SMC W Z PC
T-BARS ACVG56-2.5mm ACVG66-3.0mm ACVL150-4.0mm Screw (Grub)		= White = Black	X		



ACCESSORIES . PHOTOS & DRAWINGS						
Image	Part Code	Pack	Unit	Application	Colc	our
					MF	√
.5	ACMC6059	1	each	MC619	SA	
146.5	Angle Procket for MC640				KL HP	
	Angle Bracket for MC619				SSC	
					SMC	
					W	
					Ζ	
					PC	
	A CM CC440			MCCOS	MF	
	ACMC6112	1	each	MC603 MC612	SA	
	Tive Don't Thomas in to Mullion			MC612 MC614	KL HP	
	Two Part Transom to Mullion Bracket			MC616	SSC	
	Diacket			MC618	SMC	
	Glazing 32-36mm			MC619	W	
				MC620	Z	
				MC625	PC	
		_	_	_	MF	
	ACMC6116	1	each	MC603	SA	
				MC612 MC614	KL	
	Two Part Transom to Mullion			MC616	HP SSC	
	Bracket			MC618	SMC	
	Glazing 50-54mm			MC619	W	
				MC620	Z	
				MC625	PC	
			_		MF	
	ACMC6120	20	pack	MC603	SA	
				MC612	KL	
	Mullion End Pad			MC614 MC616	HP SSC	
				MC618	SMC	
				MC619	W	
t				MC620	Z	✓
				MC625	PC	
					MF	
	IPCH004KRZ	1	each	Gasket	SA	
					KL	
	Degreaser				HP SSC	
					SMC	
					W	
					Z	
					PC	
T-BARS ACVG65-2.5mm	CA — Cilven Americani 7 -	= White = Black	¬	/Z/ =		_/;
ACVG66-3 Omm ACVL150-4 Omm	KL = Basic Colour	Didok	🐧			1
	HP = Special Colour SSC = Smooth Satin Chrome					
	SMC = Smooth Satin Chrome					
	PC = Polished Chrome					



Image	Part Code	Pack	Unit	Application	Colour
	ACUN3615 EPDM Sealant. 600ml.	1	each	Gasket	MF SA KL HP SSC SMC W Z PC
	ACVS010 Spacer for Inserts	7.3	m	MC693 MC694 MC696 MC698 MC699	MF SA KL HP SSC SMC W Z PC
					MF SA KL HP SSC SMC W Z PC
					MF SA KL HP SSC SMC W Z PC
					MF SA KL HP SSC SMC W Z PC
T-BARS ACVG65-2 5mm ACVG68-3 0mm ACVL150-4 0mm Screw (Grub)		- White - Black	X	7 ?	



STANDARD ACCESSORIES Pack Unit Application **Part Code** Colour **Image** ACMX09700 1 each SA KL ΗP Alu. Polish SSC SMC W Ζ PC MF ACMX09761 1 each SA KL **Maxi Gloss** ΗP SSC SMC W Ζ РС MF ACMX09762 1 each SA KLHP Alu. Bright SSC SMC W Z РС MF ACMX09763 1 each SA KLHP **Teflon Spray** SSC SMC W Z PC MF ACMX09764 1 each MAXI - CLEANE KL HP Maxi Clean SSC SMC W Ζ PC MF = Mill Finish = White SA = Silver Anodised = Black KL = Basic Colour ΗP = Special Colour SSC = Smooth Satin Chrome SMC = Smokey Chrome

PC

= Polished Chrome



Image	Part Code	Pack	Unit	Application	Colour	
GLUE-CLEANER BECALE CONTYPITER BI BLOOM: REMOVER BI CONTINUE ALLE LAMPETTY BI STREET LAND ALLE LAMPETTY BI STREET LAND ALLE LAMPETTY BI STREET LAND ALLE LAMPETTY BI STREET LAND ALLE LAMPETTY BI STREET LAND ALLE CONTINUE STREET LAND ALLE CONTINUE STREET LAND ALLE CONTINUE STREET LAND ALLE STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STR	ACMX09765 Alu. Cleaner	1	each		MF SA KL HP SSC SMC W Z PC	
	ACMX09770 Roll & Wrap 100mm	1	each		MF SA KL HP SSC SMC W Z PC	
	ACMX09775 Grip Handwrap	1	each		MF SA KL HP SSC SMC W Z PC	
	ACMX09801 Protective Tape 50mm	1	each		MF SA KL HP SSC SMC W Z PC	
	ACMX09802 Protective Tape 70mm	1	each		MF SA KL HP SSC SMC W Z PC	
T-BARS ACVG65-2.5mm ACVG66-3.0mm ACVL150=4.0mm	0.1	White Black	X	7 ₹		

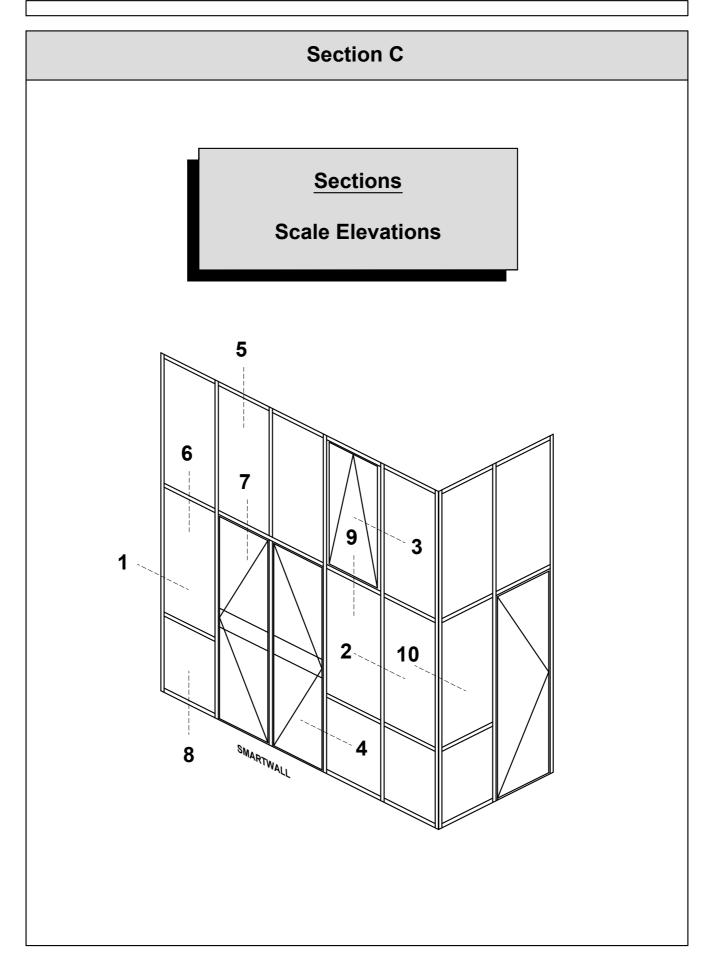


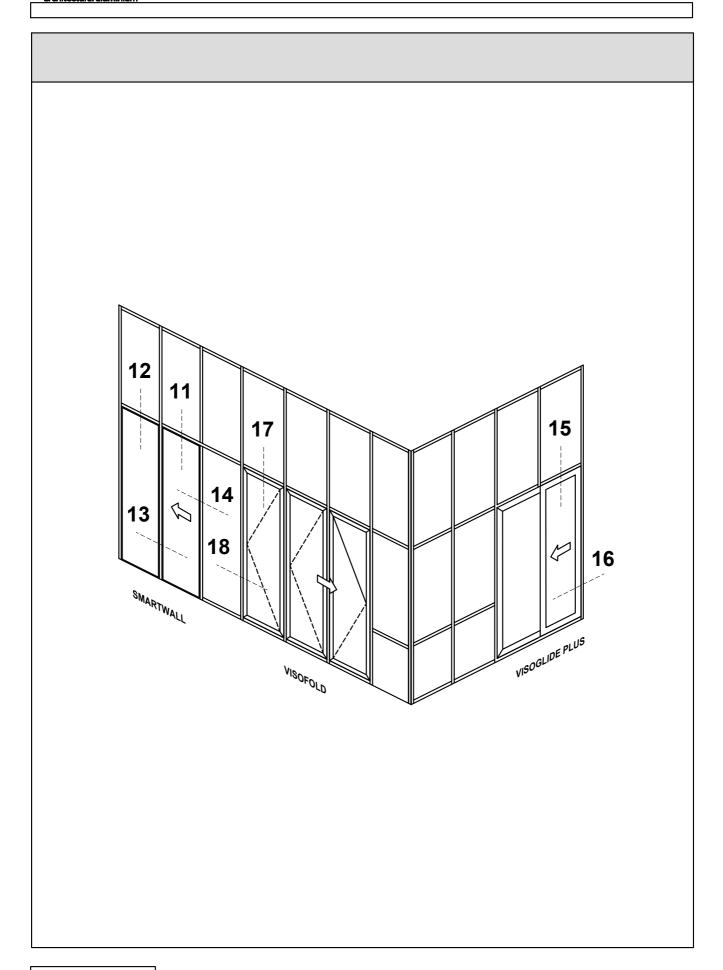
STANDARD ACCESSORIES							
lmage	Part Code	Pack	Unit	Application	Colour		
	1011/2000				MF		
	ACMX09803	1	each		SA		
	D 4 41 T 400				KL		
	Protective Tape 100mm				HP SSC		
					SMC		
					W		
					Z		
					PC		
					MF		
	ACSIL04	1	each		SA		
					KL ✓		
	Sealing Glue				HP		
The state of the s	Order with suffix of KL colour (eg.ACSIL04KL005)				SSC		
	or BL=Black/WP=White/				SMC W ✓		
	CL=Clear				Z 🗸		
					PC		
					MF		
	ACSIL05	1	each		SA		
(Soft)					KL		
	Rubber Sealant				HP		
a line					SSC		
					SMC		
					W Z		
					PC		
		+			ME		
0.5	ACSIL08	1	each		MF SA		
	71331233	-			KL		
	Silicon Gun				HP		
					SSC		
C "					SMC		
1					W Z		
\					PC		
	ACSIL013	1	each		MF		
	ASSILVIS	'	cacii		SA KL		
	Glue for Mitre				HP		
					SSC		
					SMC		
					W		
					Z PC		
	ME - MILLES-IS-	= \A/b;4-		<u>/سا</u>	FC		
T-BARS ACVG65-2.5mm ACVG66-3.0mm Screw (Grub)	MF = Mill Finish W SA = Silver Anodised Z	= White = Black	>	~_//\?			
ACVG66=3.0mm ACVL150=4.0mm	KL = Basic Colour		^				
	HP = Special Colour SSC = Smooth Satin Chrome			-			
	SMC = Smokey Chrome						
	PC = Polished Chrome						



Image	Part Code	Pack	Unit	Application	Colour	
nlipta est	ACSIL014 Anti-Corrosion Coating	1	each		MF SA KL HP SSC SMC W Z PC	✓
	ACUN3900 Gasket Roller	1	each		MF SA KL HP SSC SMC W Z PC	
					MF SA KL HP SSC SMC V Z PC	
					MF SA KL HP SSC SMC W Z PC	
					MF SA KL HP SSC SMC W Z PC	
T-BARS ACVG65e2 5mm ACVG66e3 0mm ACVL150=4.0mm	0.1	White Black	X	77		

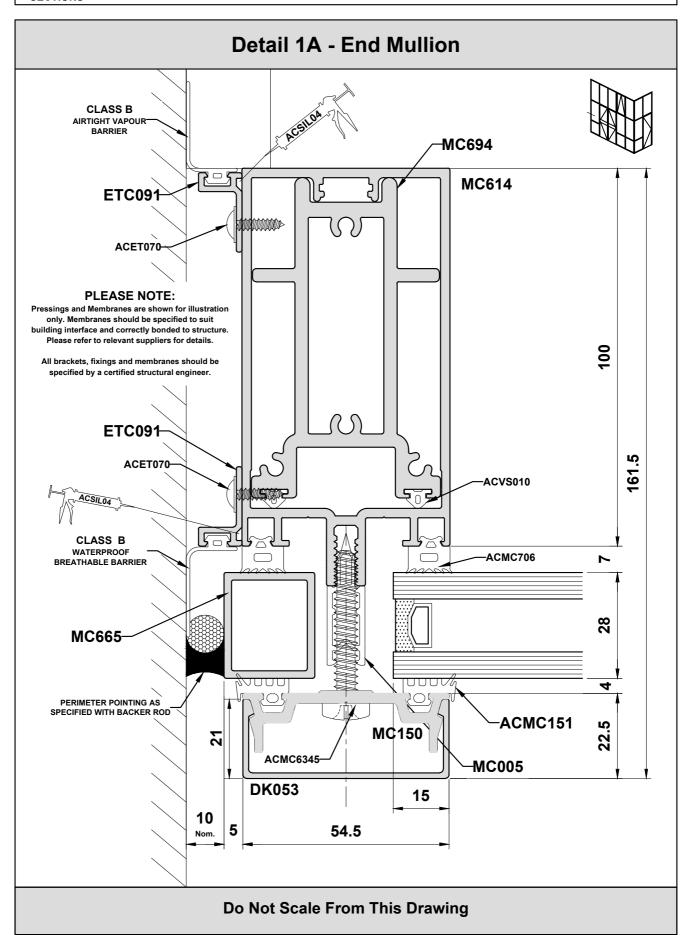




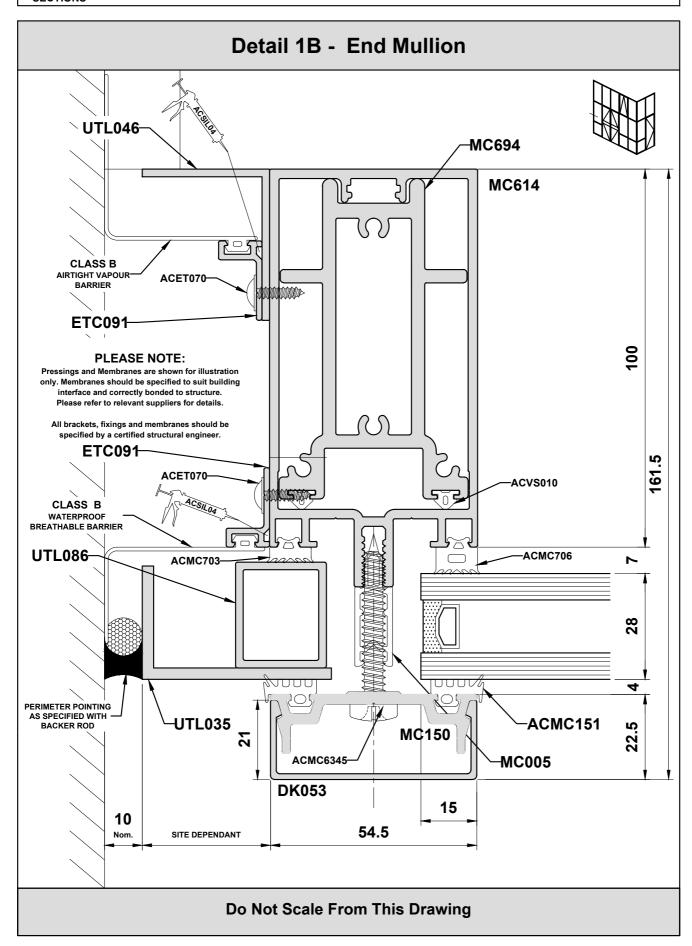






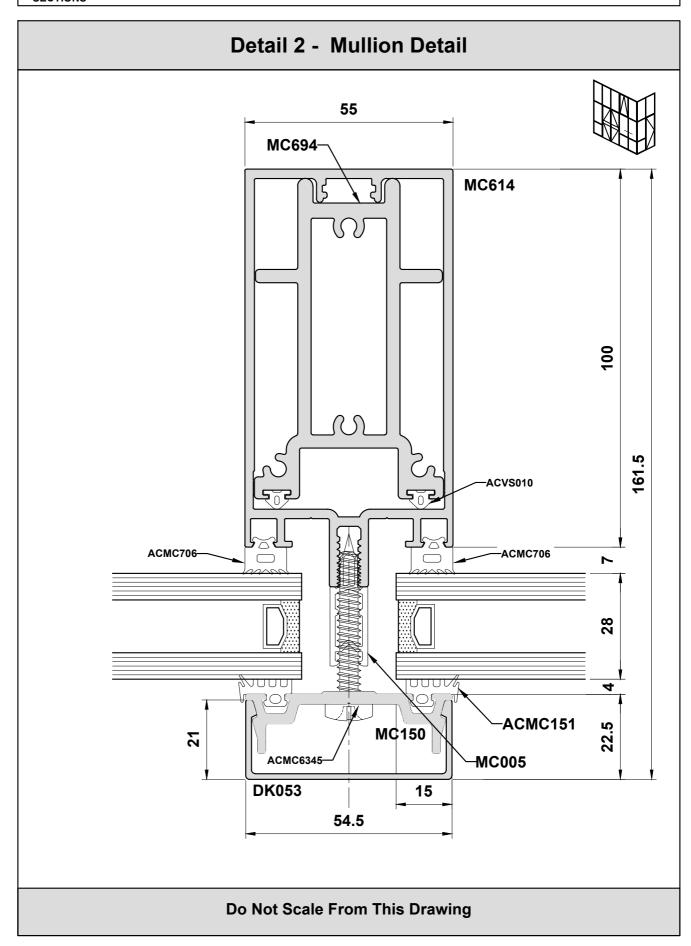




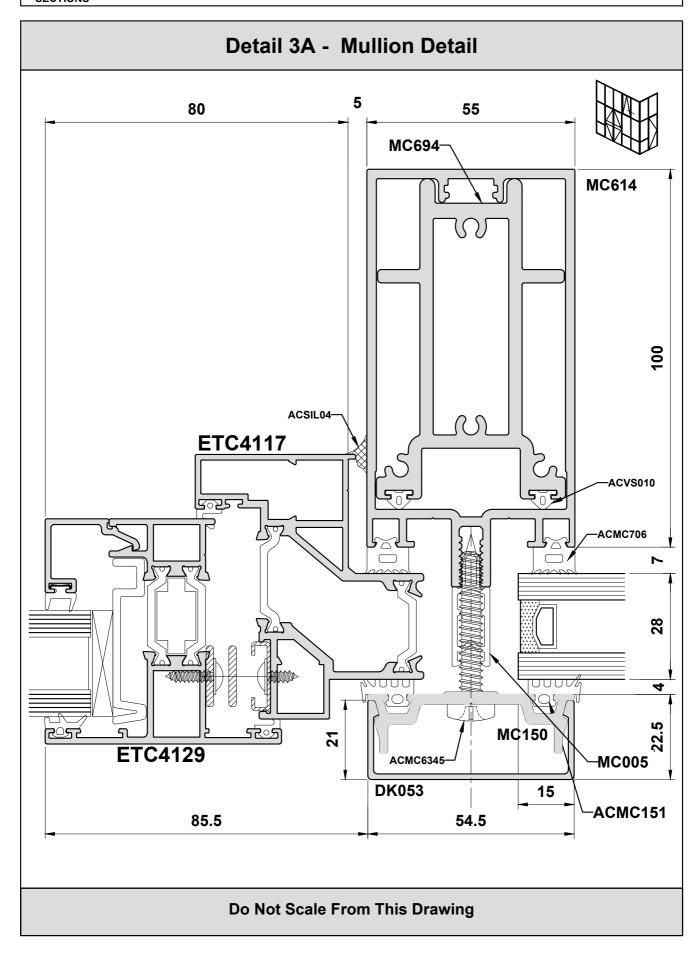




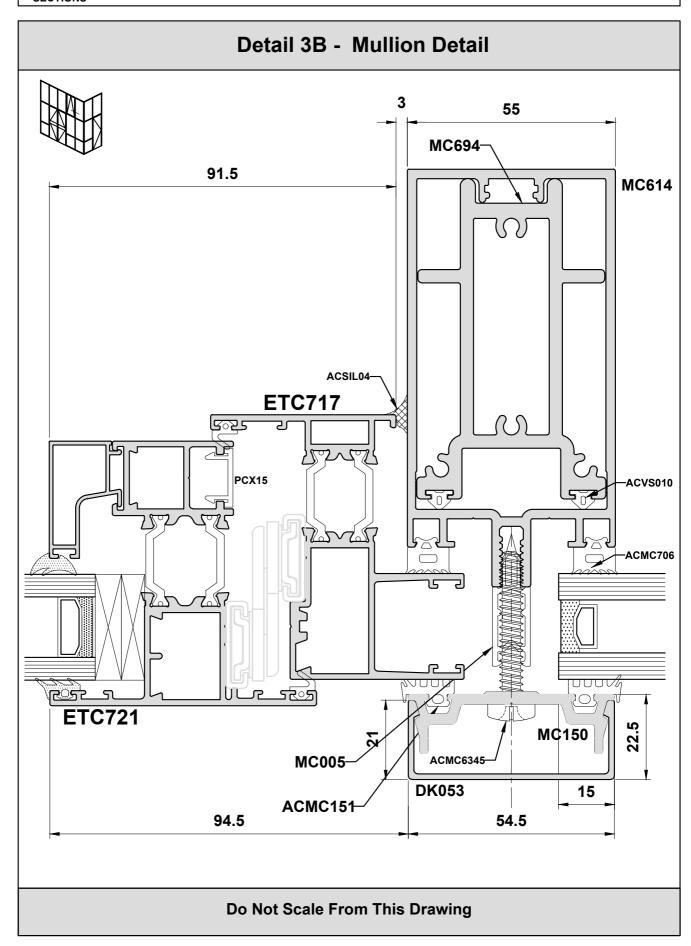




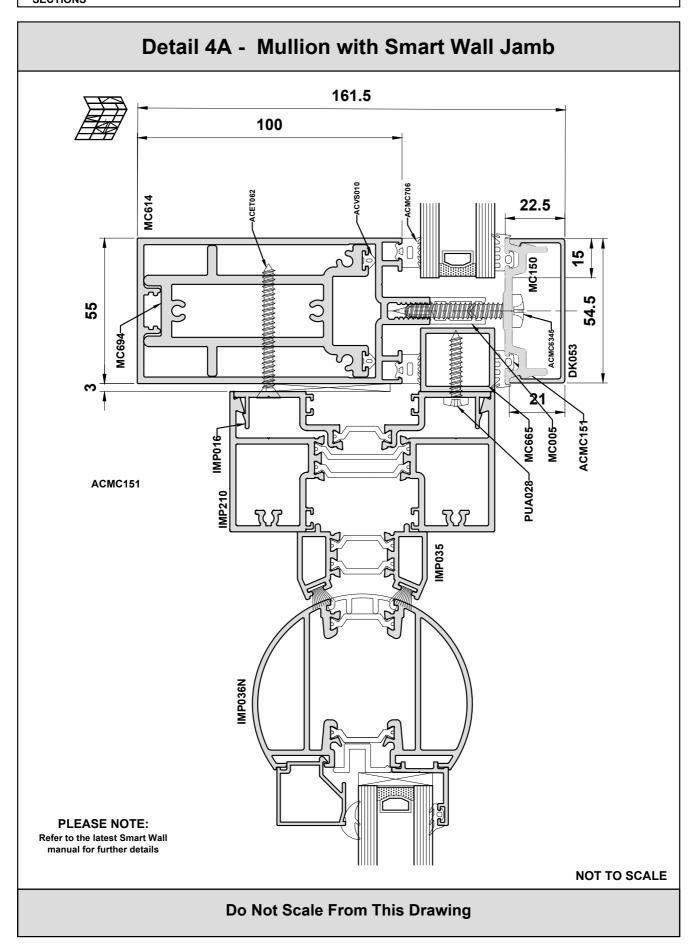


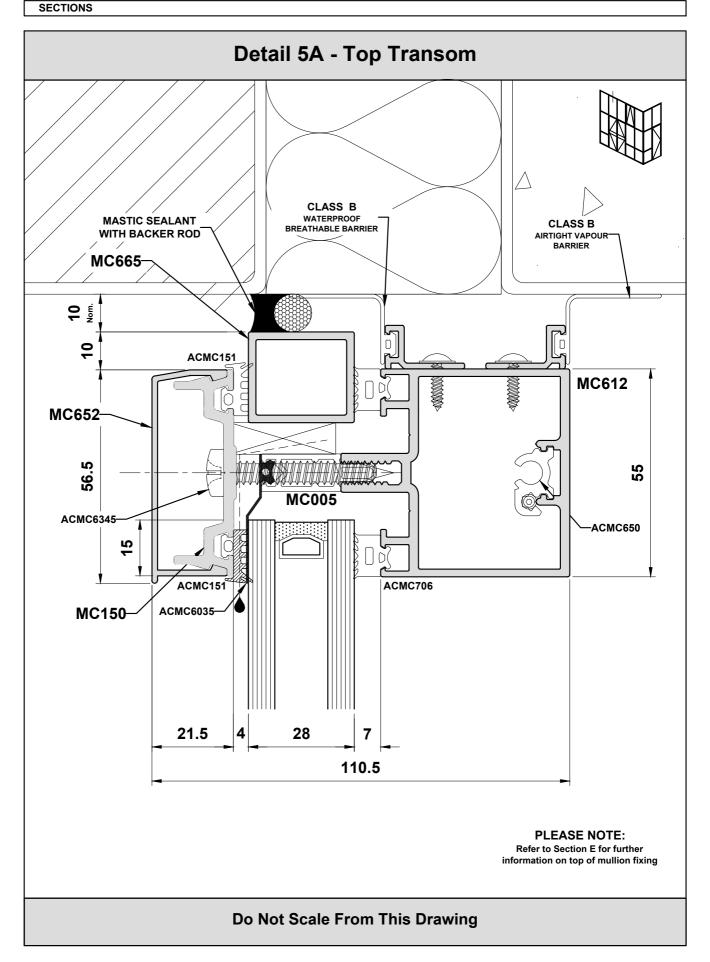


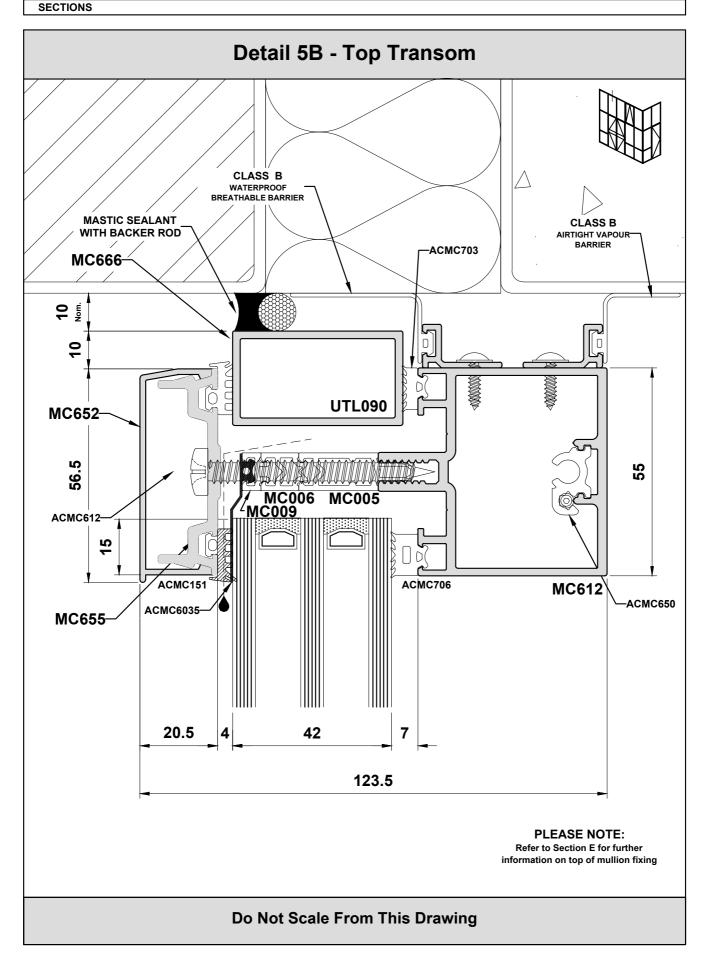




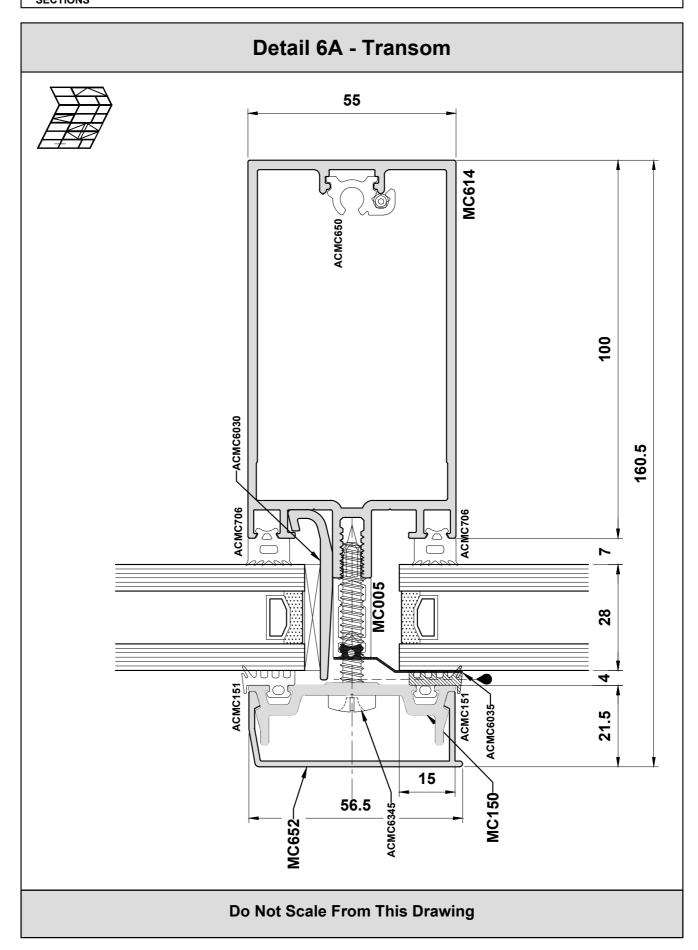


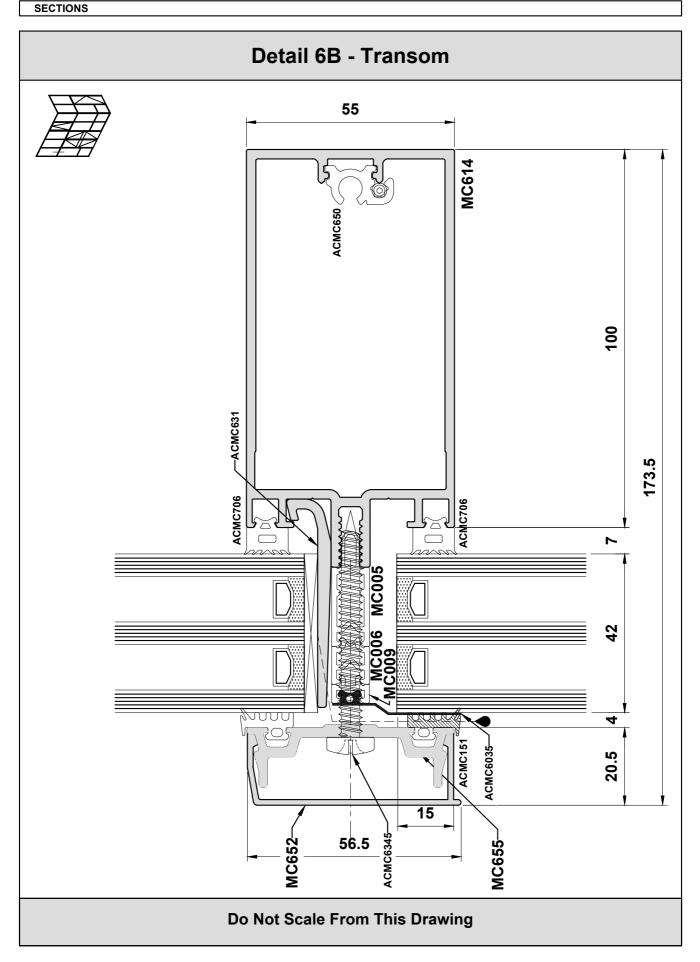






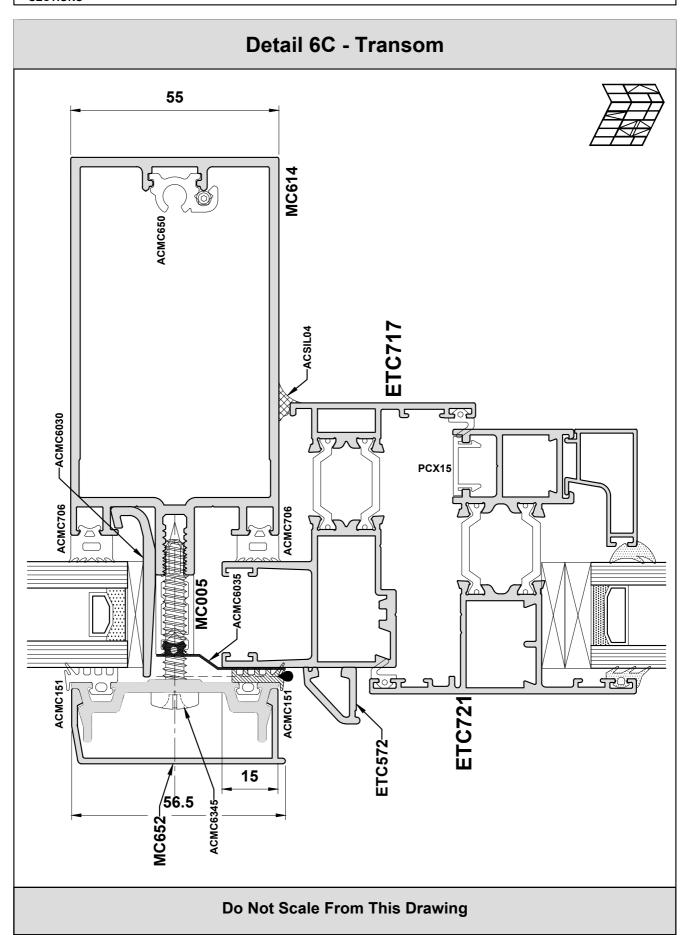




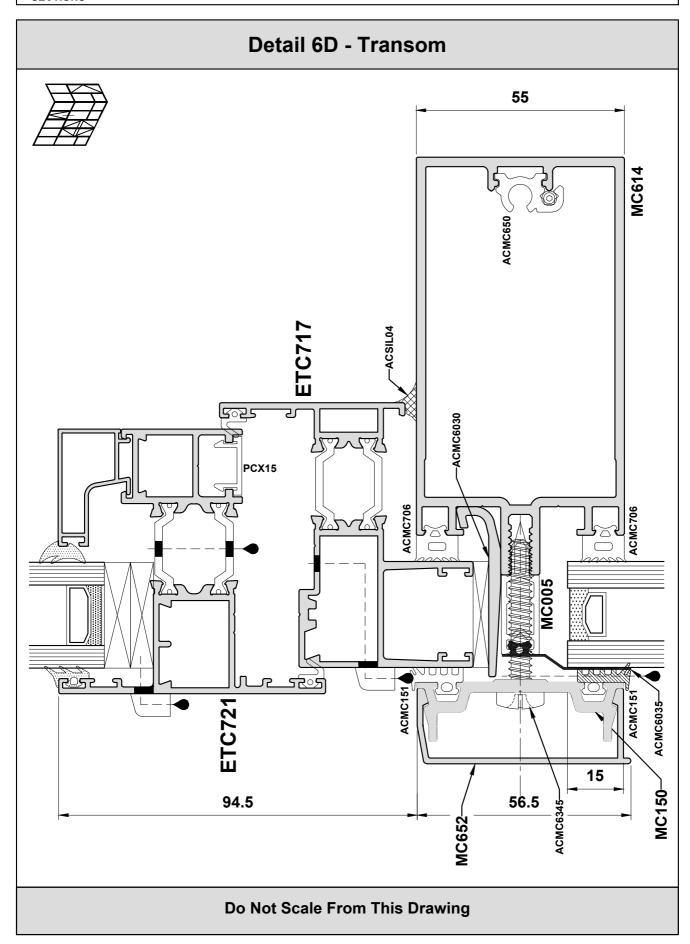




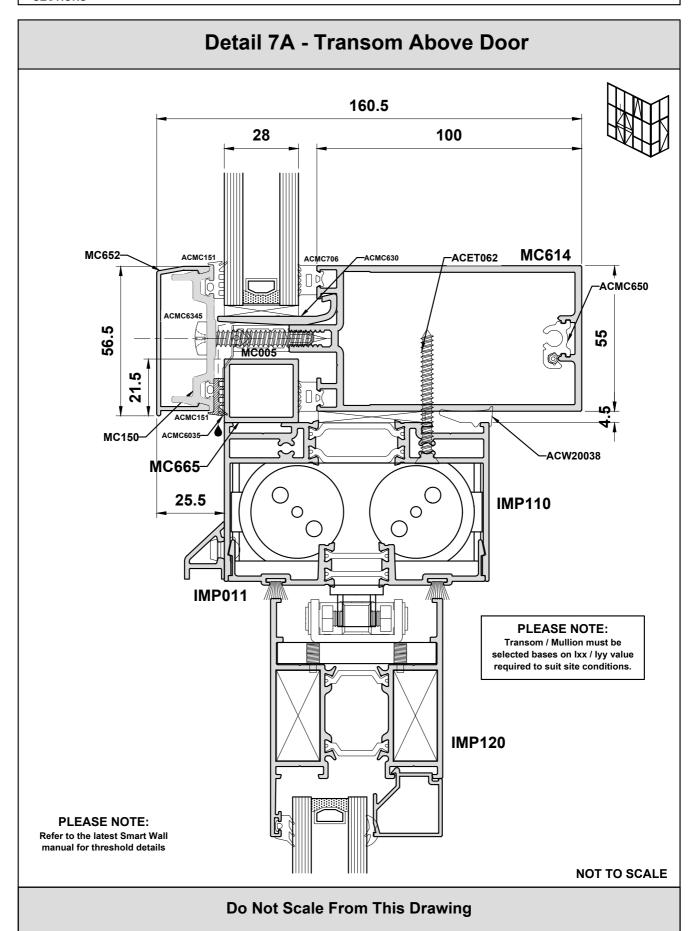




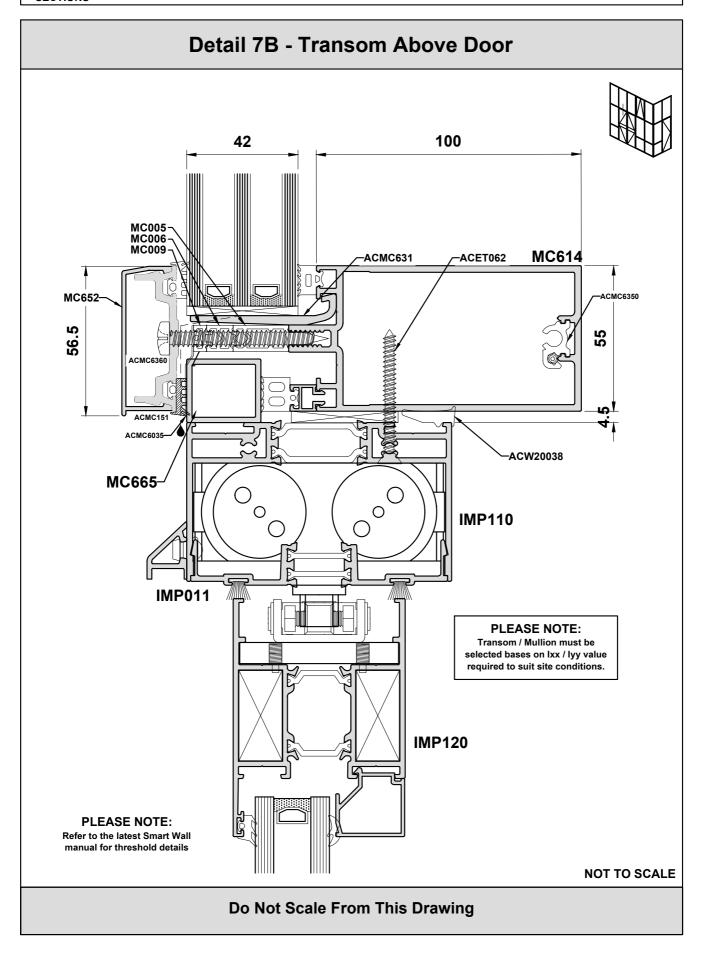






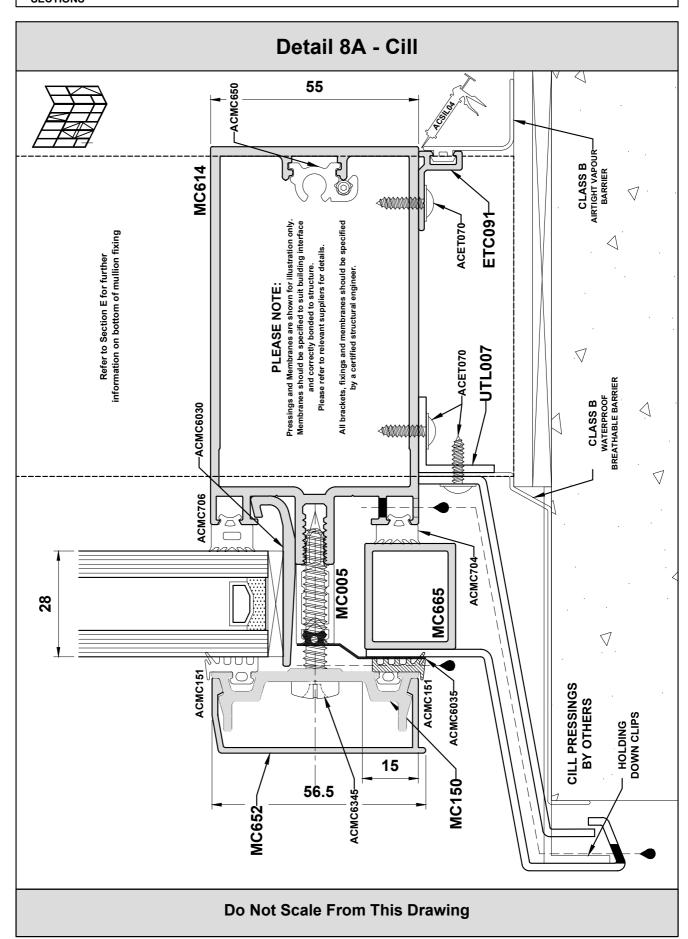




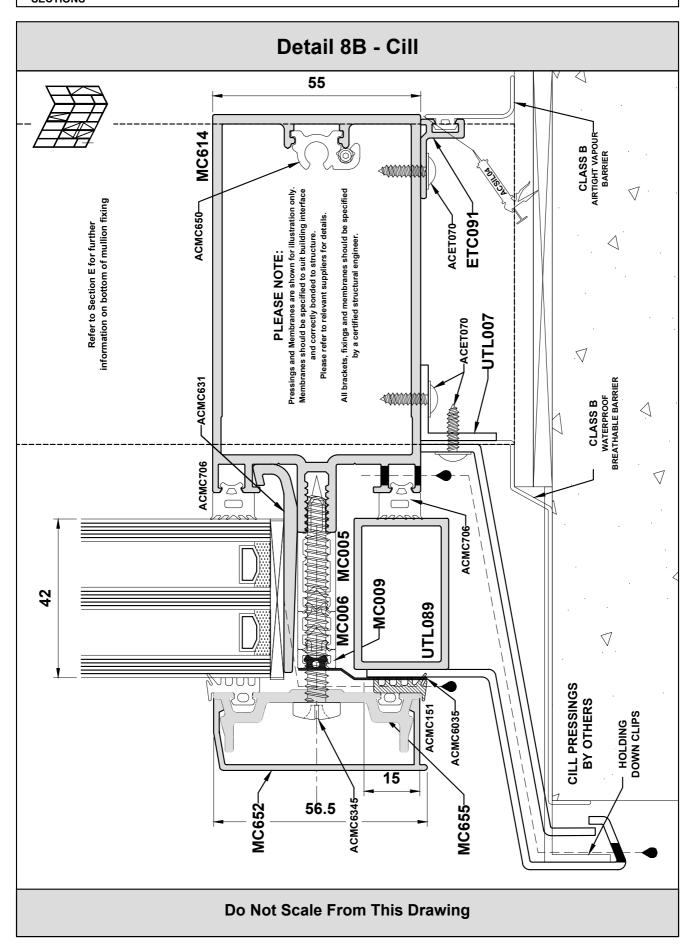




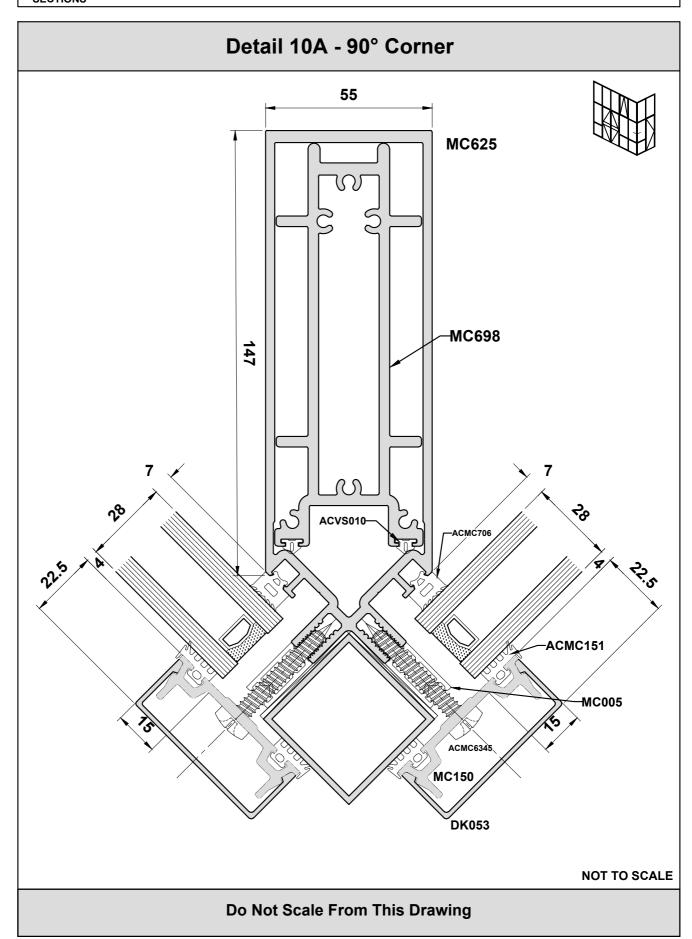






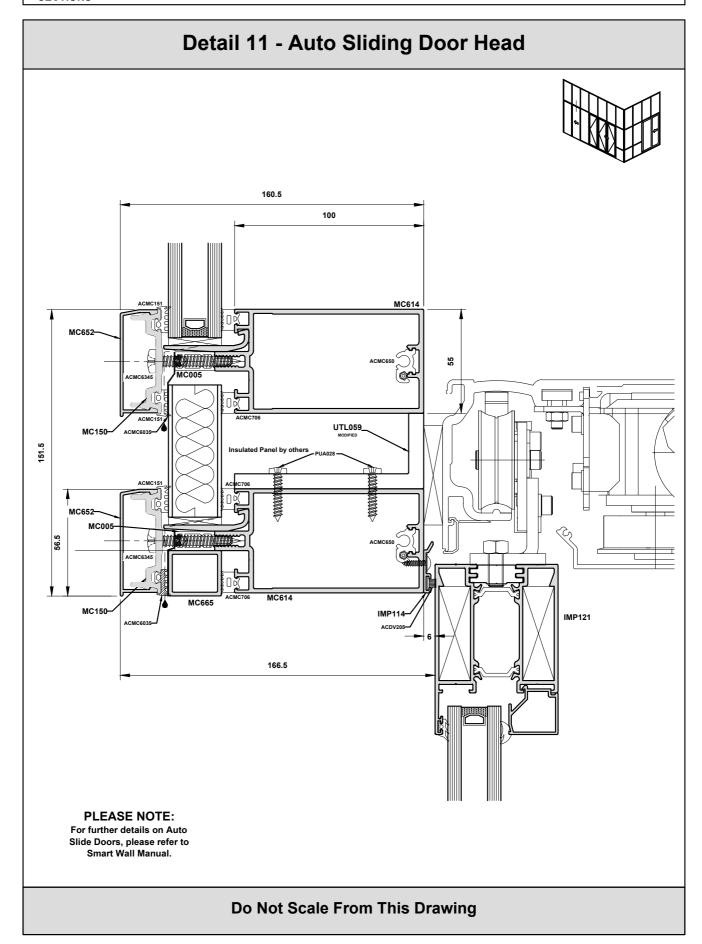




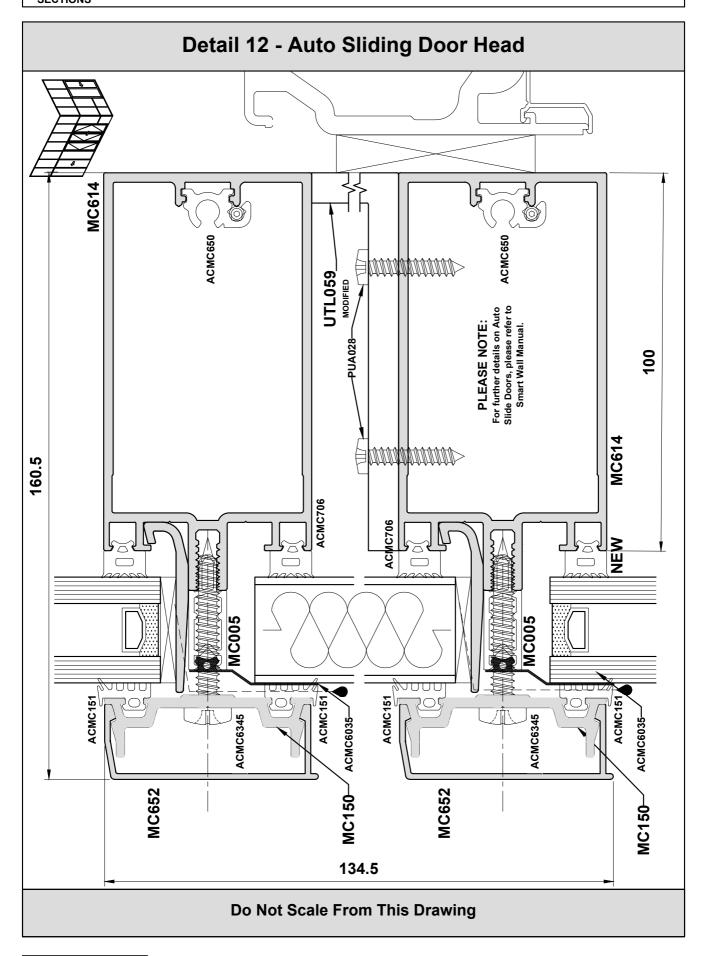


Detail 10B - 90° Corner **PLEASE NOTE:** Brackets and Fixing shown are for illustration only. Brackets and Fixings should be specified by a structural engineer. 55 MC694 9 UTL047 161.5 7 DK053 15 54.5 **NOT TO SCALE** Do Not Scale From This Drawing

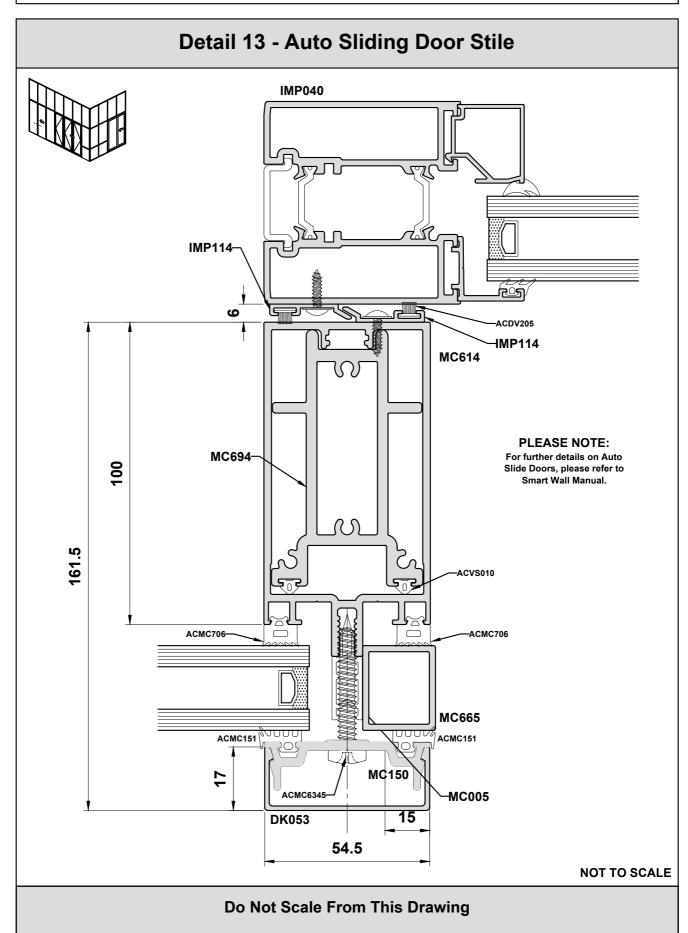




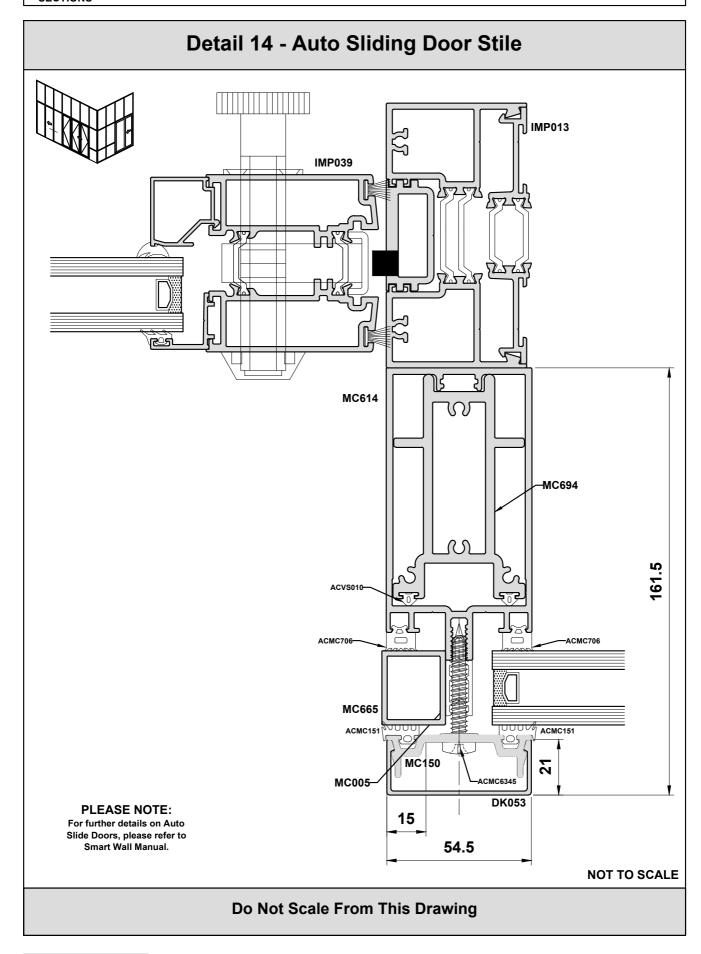




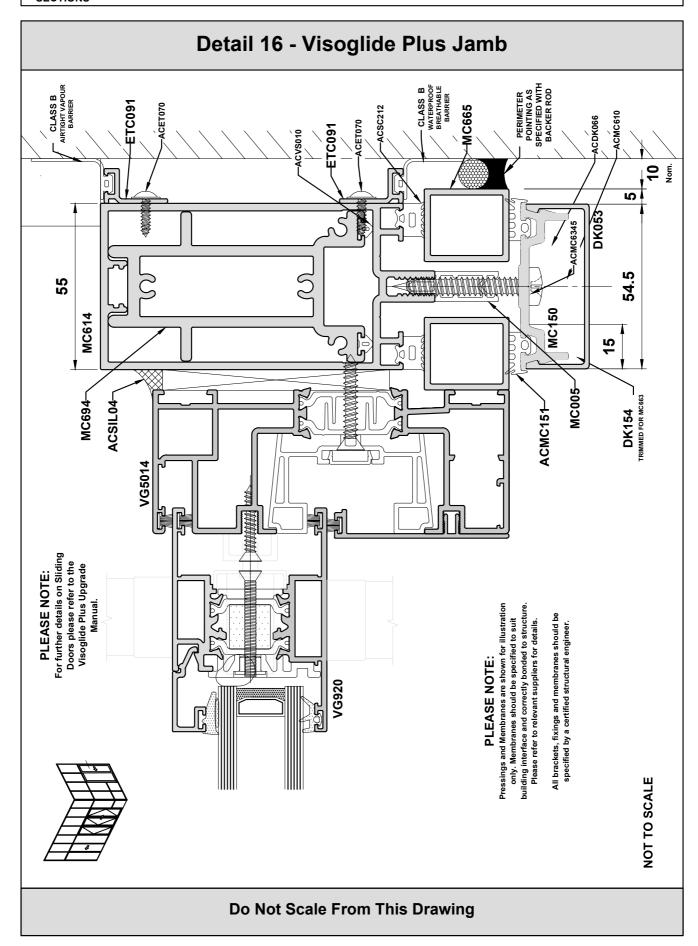




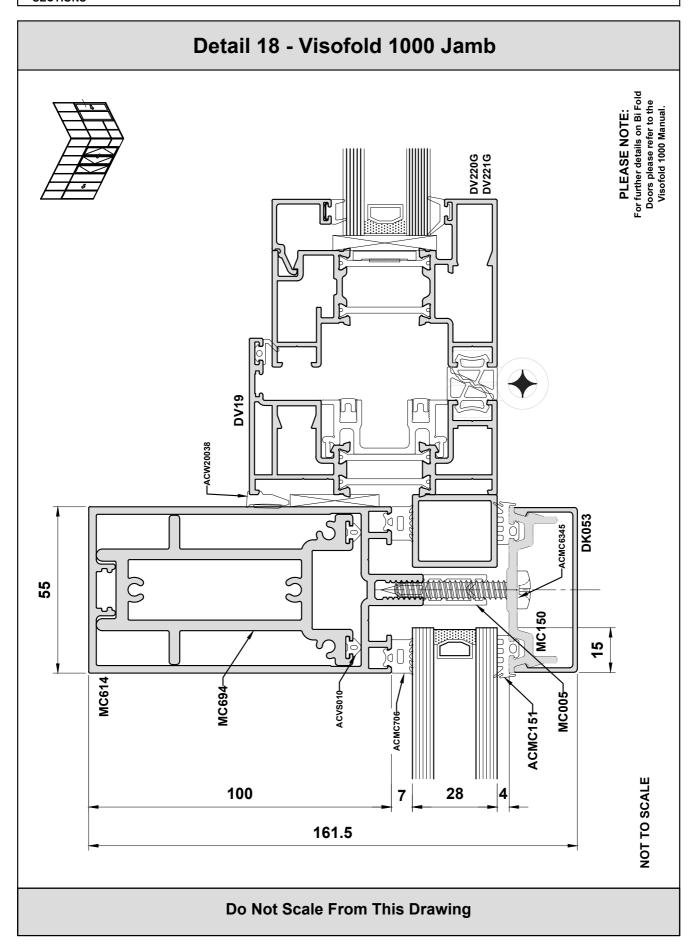














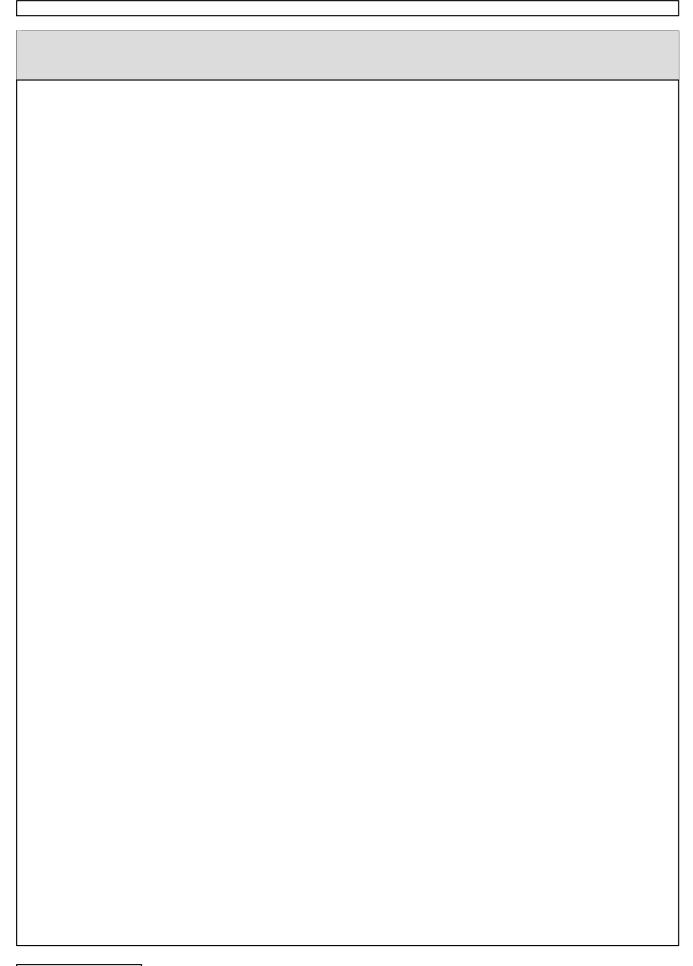
Section D

Statics

General Size Limitations are shown on Page A02.

For Wind Loading Limitations, Please Contact The Technical Department - T: 01934 833100







Statics

Statics

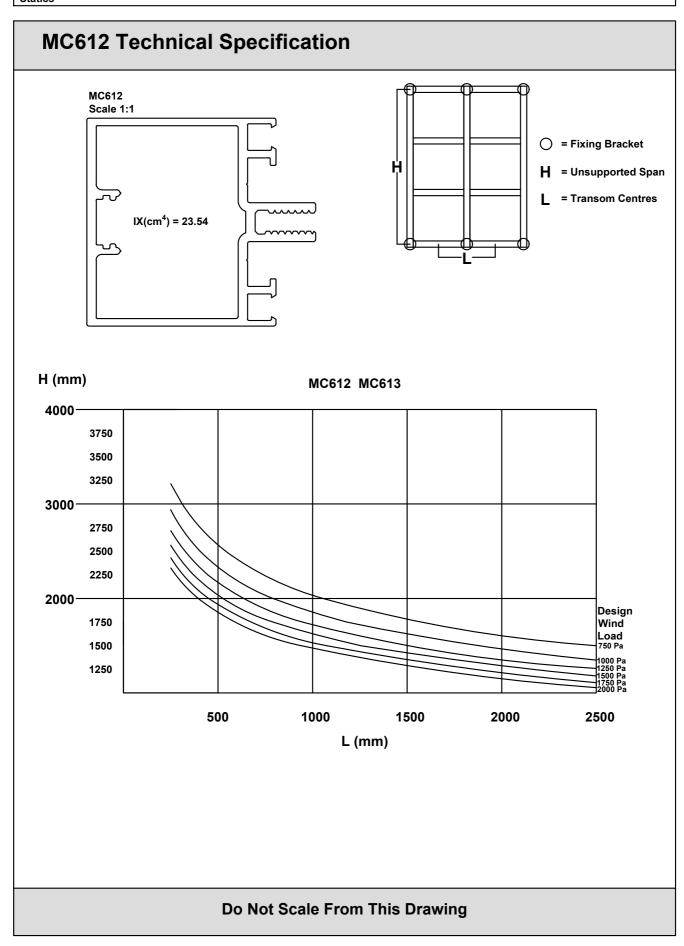
Important Note

The selection of suitable mullions and transoms with suitable ixx/iyy values shall be based on the design wind load of the structure based on criteria including location; exposure; average wind speeds etc. The following pages will assist with the selection of suitable mullions and transoms. For specific details regarding wind loading limitations or further advice, please contact our Technical Department.

Do Not Scale From This Drawing

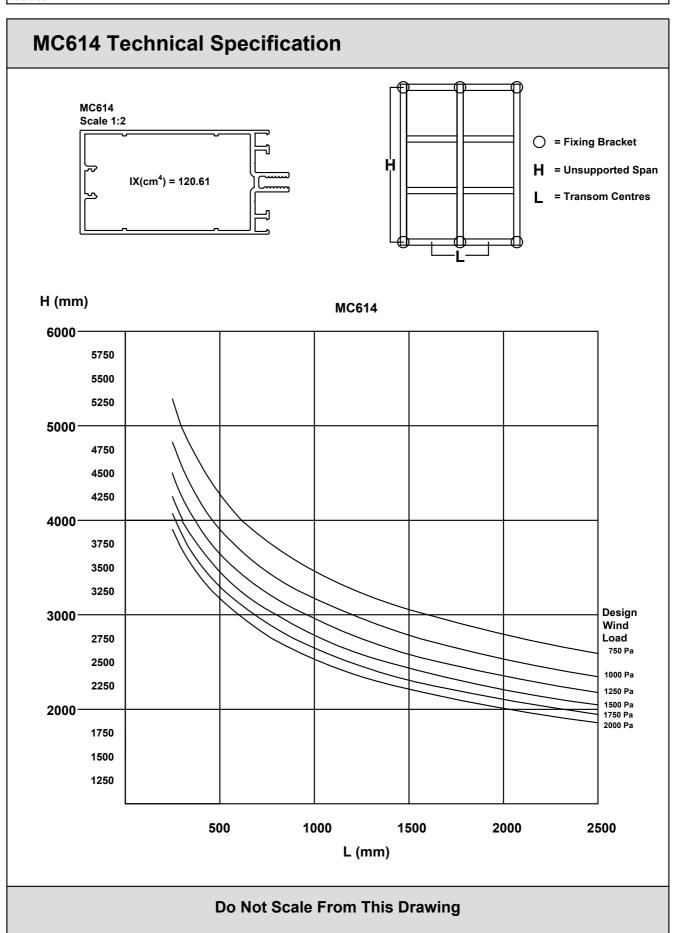


Statics



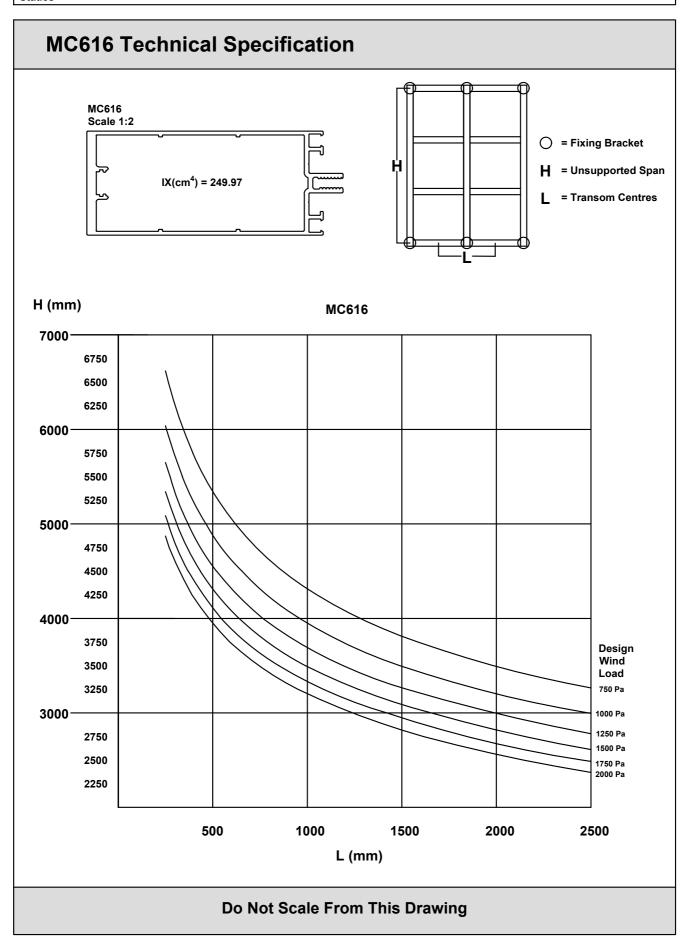


Statics



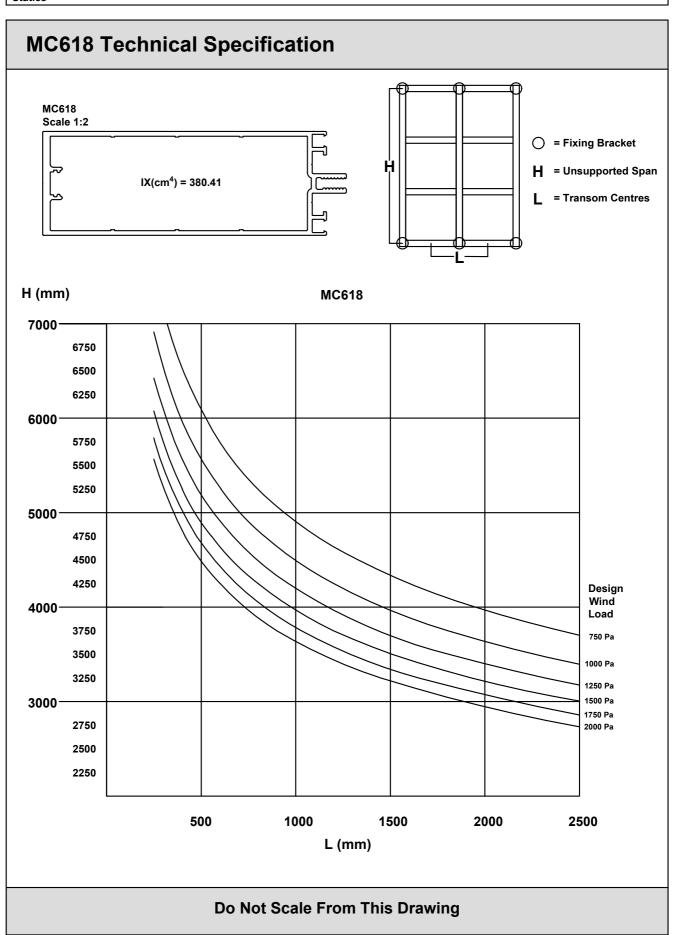


Statics



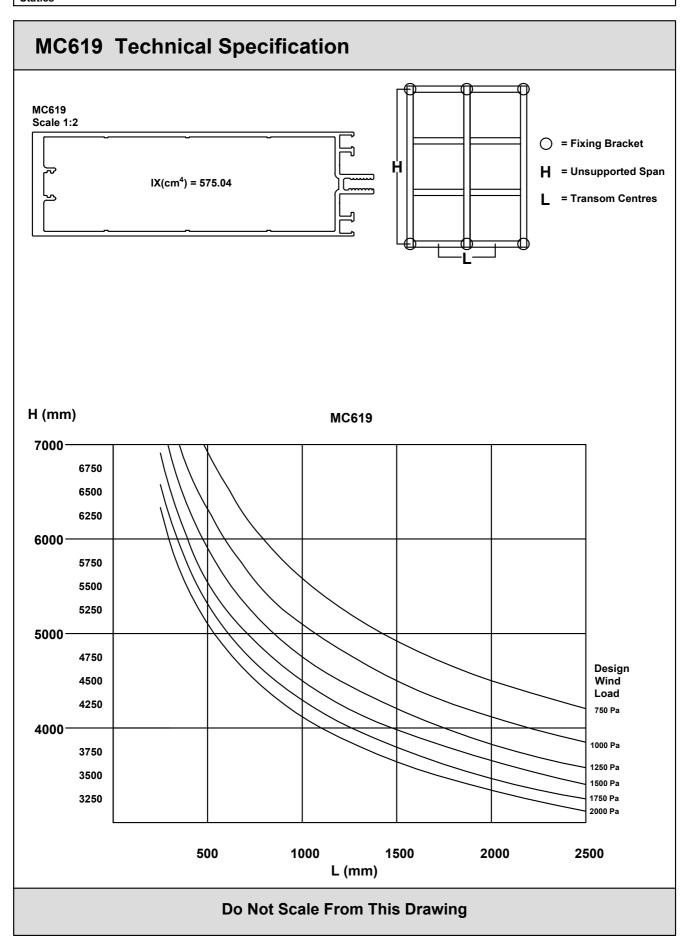


Statics



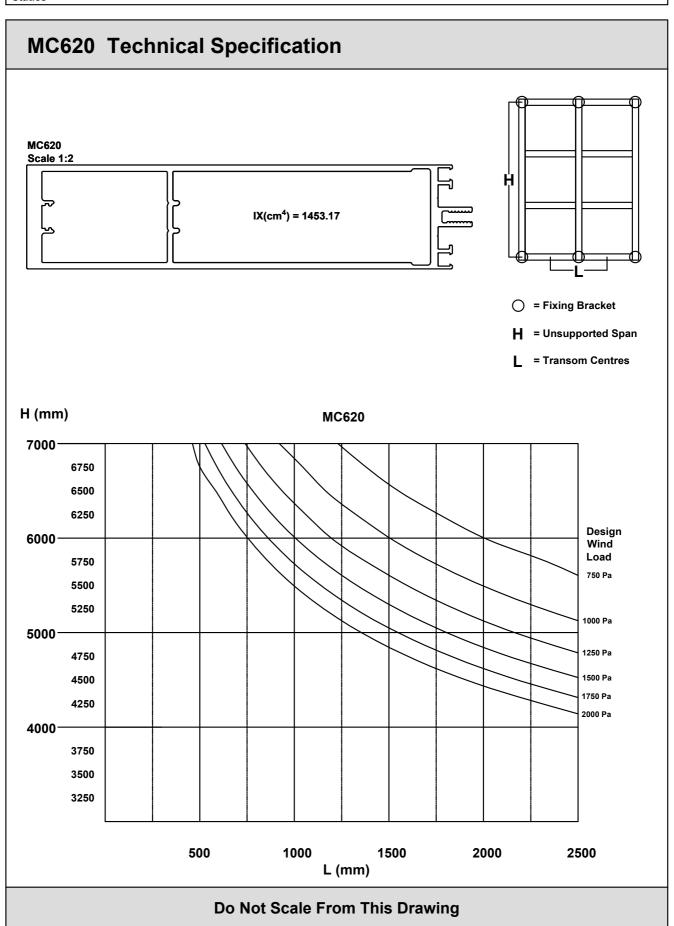


Statics





Statics





MC 600 Plus

Statics						
Do	Not Scale From This Drawing					
	, and the second					

PAGE D10



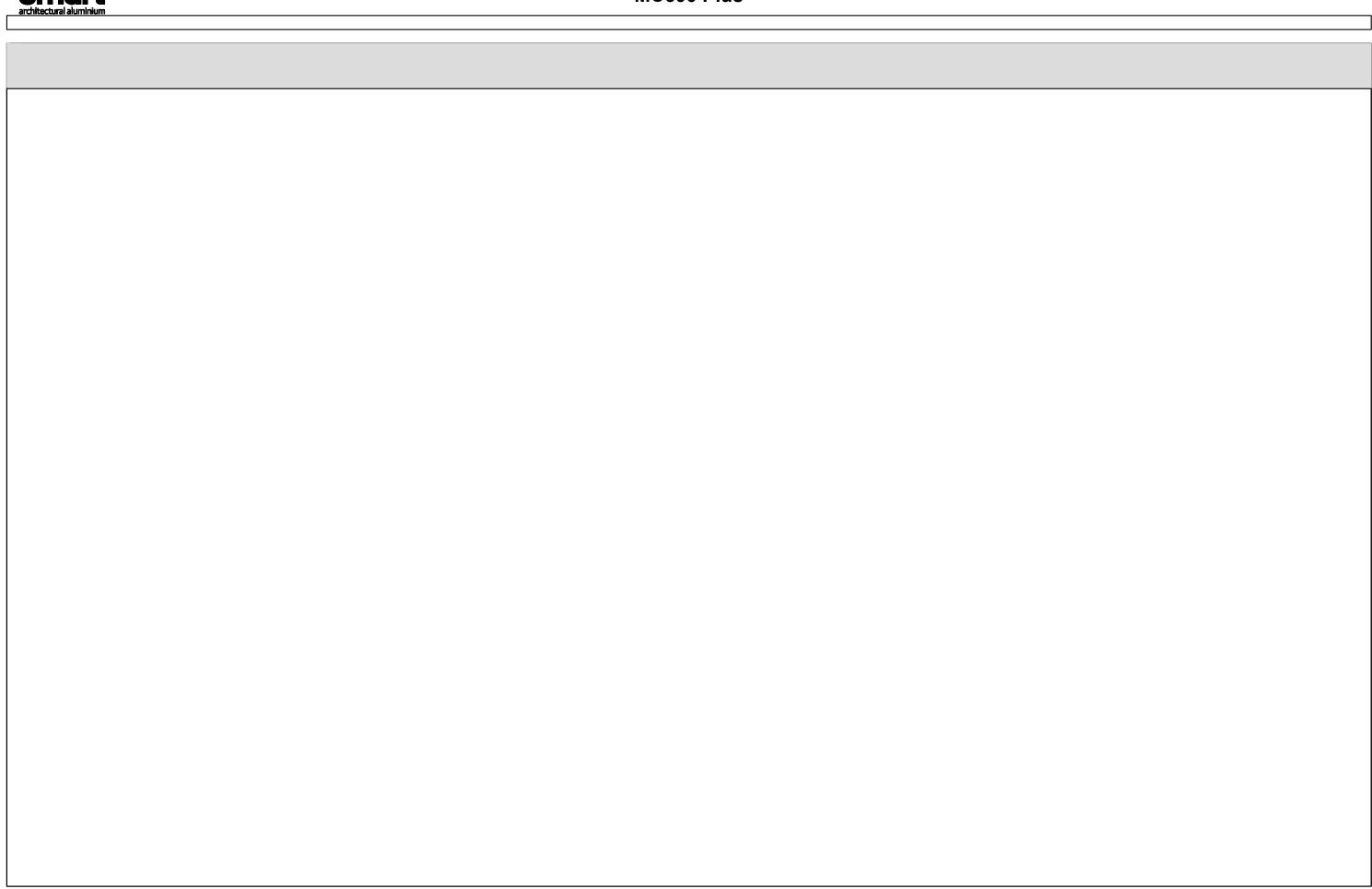
Section E



Construction Drawings

NHBC Notice	E03		
Bracket requirements	E04		
Horizontal Deductions	E05		
Stick Build Mullion Preparation - ACMC650	E06		
Stick Build Transom Preparation			
Stick Build Assembly & Assembly			
Drainage & Pressure Equalisation			
Reinforcing Sleeves	E12		
Splice Joints	E13		
Sleeves	E14		
Raked Head			
Glazing Details	F16		





NHBC

Before undertaking any Curtain Wall job, please refer to:

NHBC - Curtain Walling & Cladding - Chapter 6.9

Please note both CWCT and NHBC consider all storey height glazing to be a curtain wall and therefore should be designed as such.

Curtain walling cannot be treated in the same way as window and door installations.

The following are requirements in undertaking a Curtain Walling project:

- Full elevation drawings must be produced. These drawings should clearly indicate all perimeter interface details typically showing water / vapour barriers, pressings / trims, fixing brackets / fixings along with any fire stopping that may be required. This is not an exhaustive list as other details may be required to suit specific projects.
- All bracketry and fixings should be backed up by calculations from a structural engineer to confirm suitability and meet site
 requirements. Also, profiles need to be identified to suit site conditions. These factors include screen sizes, fixing positions, glass
 weight, barrier loadings & wind loadings.
- It may be a requirement to include for on-site water testing and pull out testing. NHBC would require certification to the CWCT weather test where glazing may span a floor as opposed to a BS6375-1 window / door weather test.

Please also consider acoustic, thermal and structural performance when specifying curtain wall configuration and components.

It would be expected that one or more members of installation teams have been certified by the Systems supplier to demonstrate competence and understanding of the system being installed.

IF IN DOUBT - CONTACT TECHNICAL DEPARTMENT:



01934 876 100 stechnical@smartsystems.co.uk



The latest NHBC documentation can be found at:

https://nhbc-standards.co.uk/6-superstructure-excluding-roofs/6-9-curtain-walling-and-cladding/

Do Not Scale From This Drawing

Bracket Requirments

Structural Curtain Wall Brackets

Brackets form the link between the curtain wall and the structure. These are critically important to the safety and serviceability of the wall.

Brackets need to be designed to transfer all the loads from the curtain wall to the structure safely, whilst accommodate tolerances and movement. The screen will depend on the availability of a suitable support structure (tie back positions).

The loads will vary on the size of the screen and the location of the building. Brackets need to be designed to interface with a suitable support structure/building frame. Detail drawings will be required to identify the location and position of any brackets.

Dead loads - Support

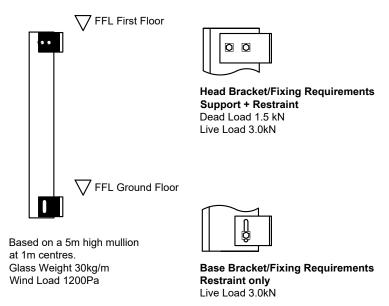
The weight of the curtain wall needs to be transferred to the structure.

Live Loads - Restraint

Wind loads in the form of negative (suction) or positive pressures are usually the dominant load case.

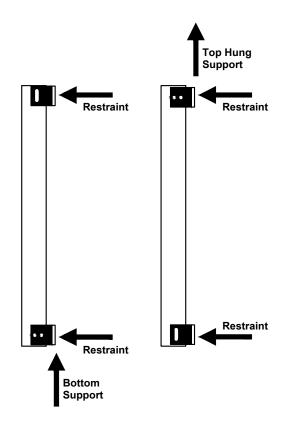
Brackets and fixings on curtain wall are structural and must be designed to relevant structural codes. BS8118. Structural Use of Aluminium

Typical Load Requirements



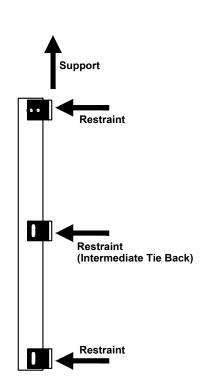
Single Span

For single span there are two possible arrangements of these fixings for a single storey mullion. The top hung arrangement is more common but the bottom supported arrangement may be used, particularly for low rise construction.



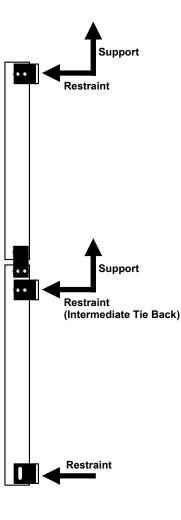
Multiple Tie Back

Where mullions span more than one storey, restraint fixings are usually provided at intermediate floors. By providing mid point tie back restraints the required mullion strength may be reduced.



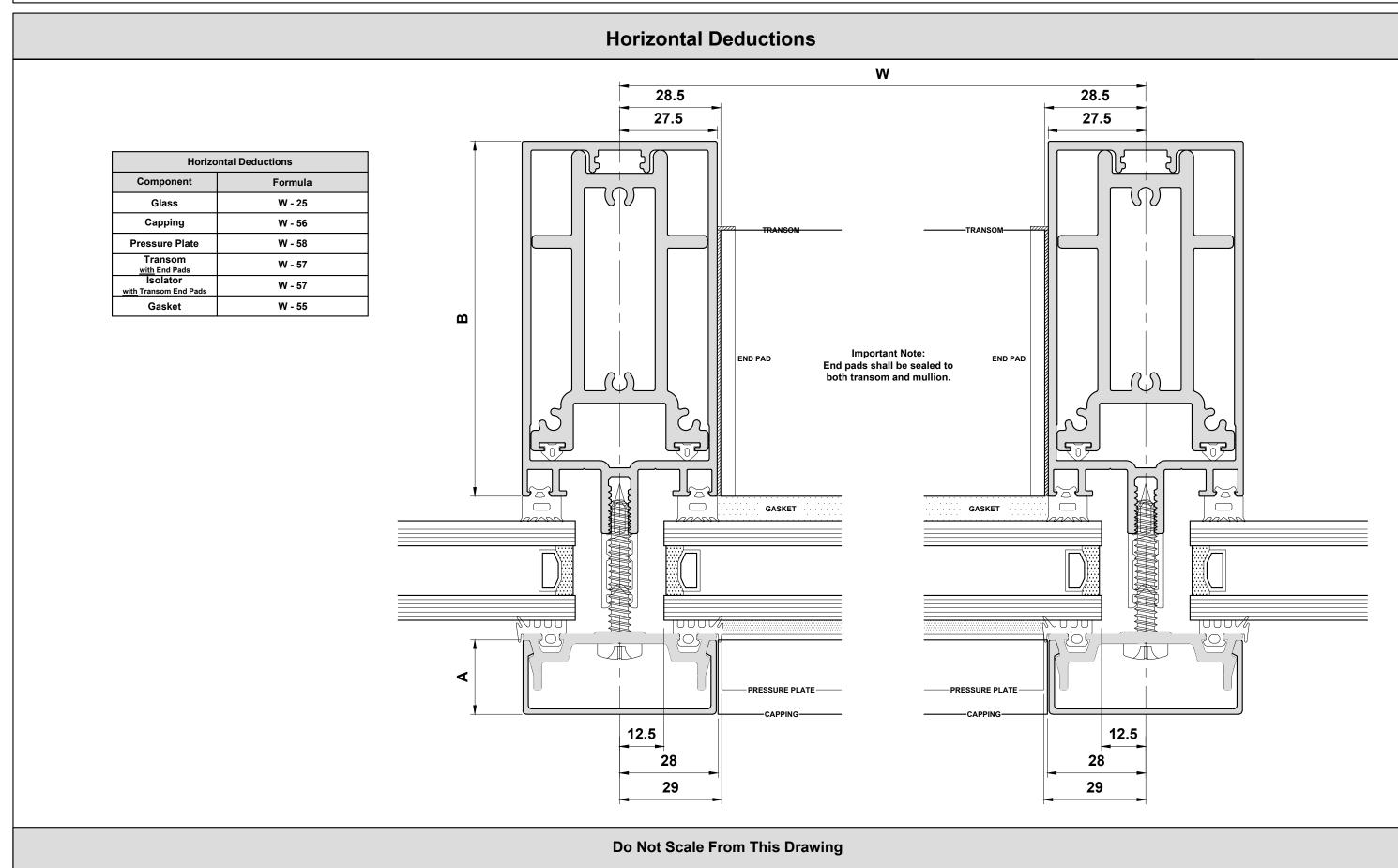
Multiple Span

Where mullions span more than one mullion length (typically 7m). A Splice Joint will be required to join mullions. Each length will require one support fixing for dead load transfer.

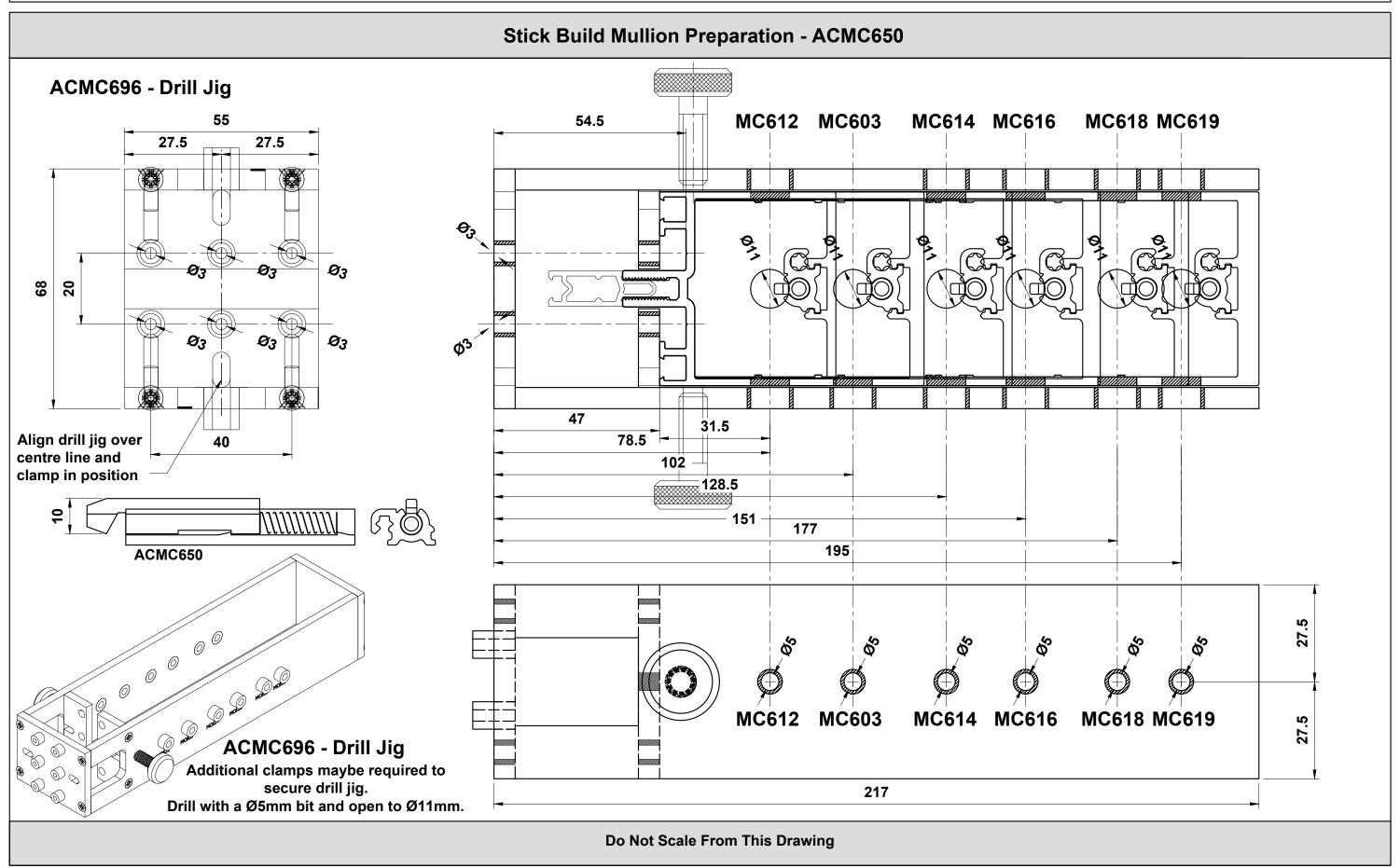


Do Not Scale From This Drawing











ACMC615

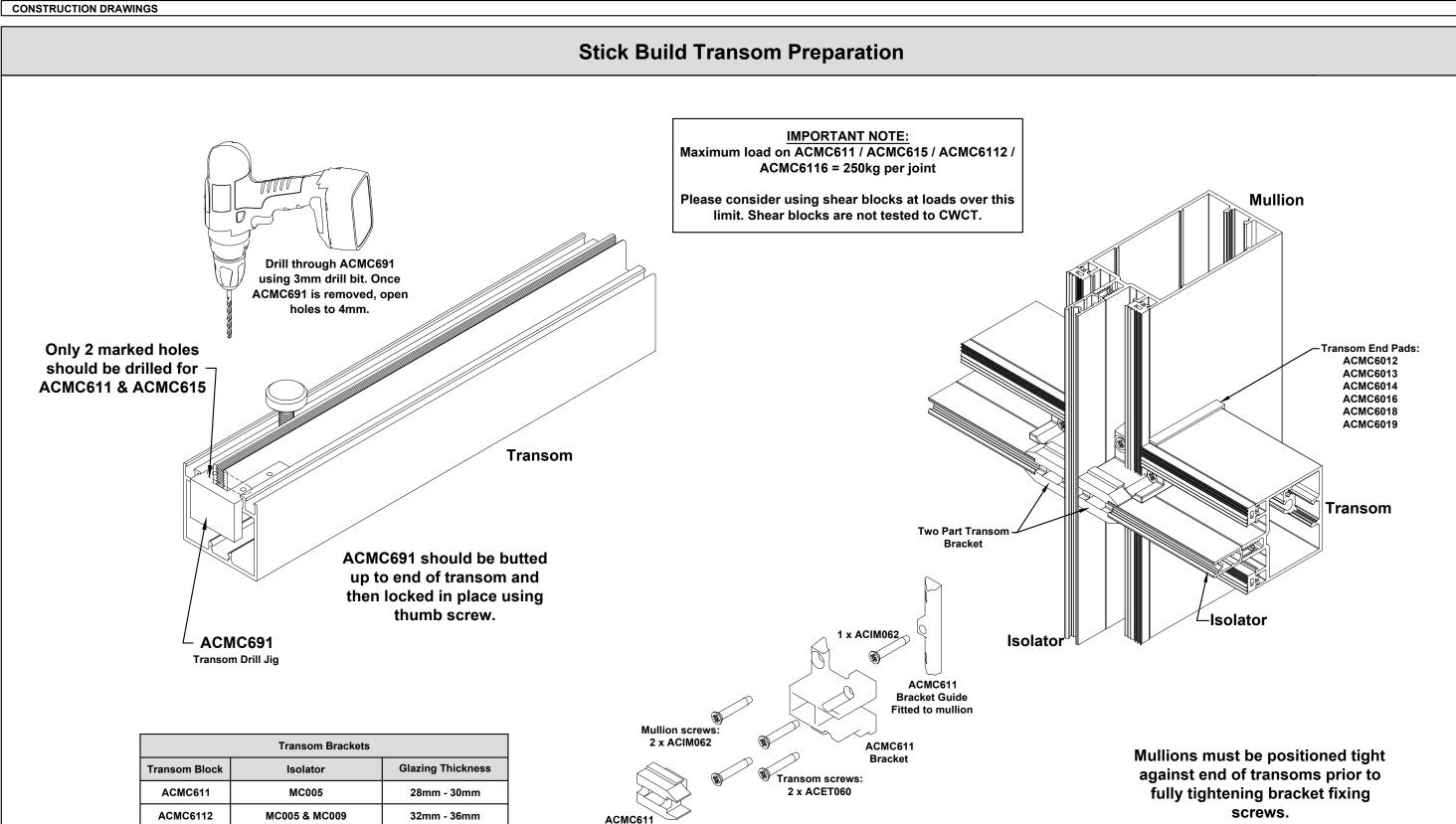
ACMC6116

MC005, MC006 & MC009

MC005, 2x MC006 & MC009

34mm - 42mm

50mm - 54mm



Do Not Scale From This Drawing

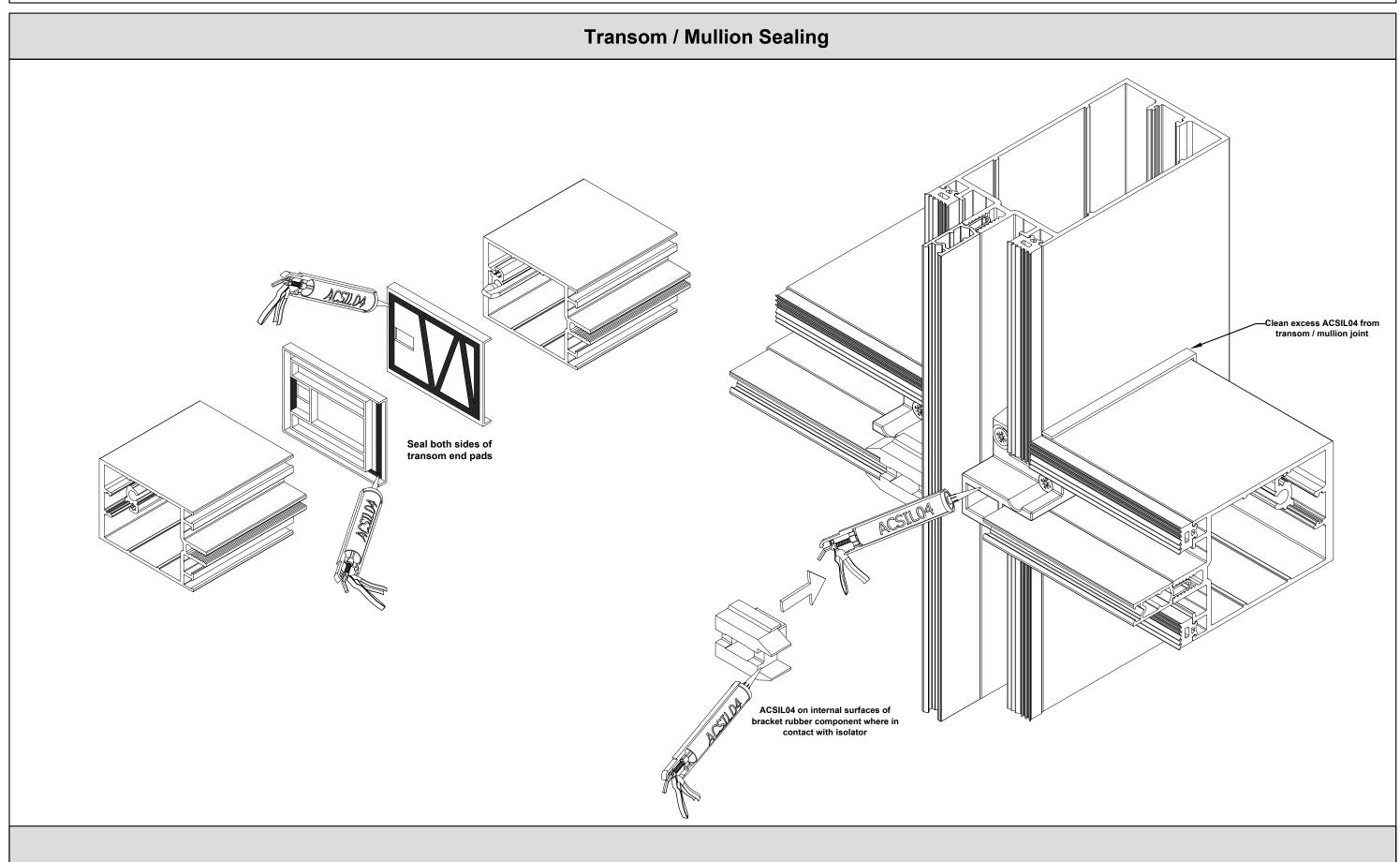
Rubber Insert



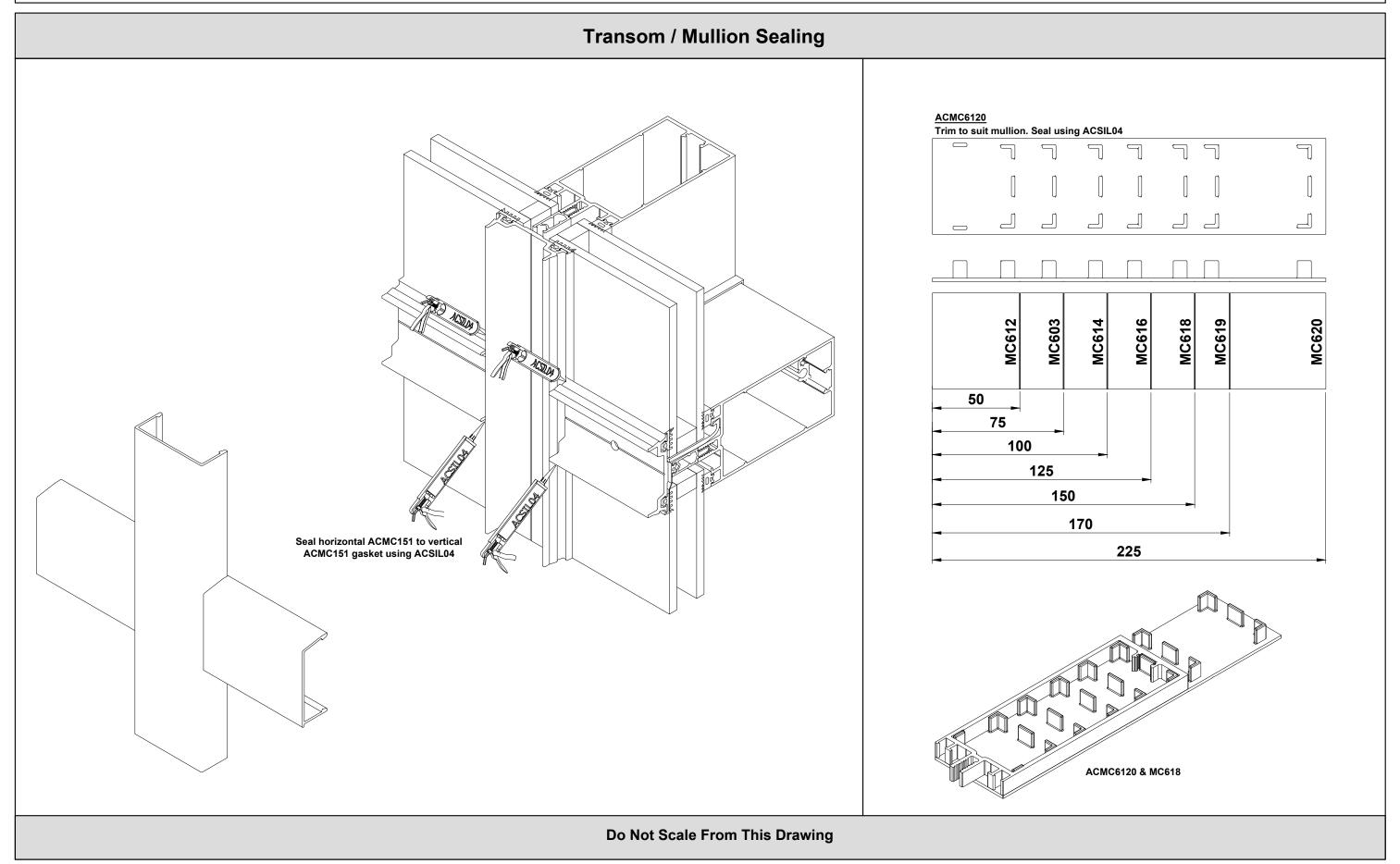
Stick Build Assembly - ACMC650 Spring Pin **General Steps** ACMC611 In workshop: Mark transom locations on mullion and drill using jig ACMC696 Secure angled brackets to mullion using ACIM062 screws Vertical pressure plate & capping not shown for clarity Mark and drill transoms using ACMC691 drill jig Secure ACIM611/ACMC615/ACMC6112/ACMC6116 main bracket to Mullion transom using ACET060 screws Secure ACMC650 spring pins to transoms Apply sealant to transom side of end pads to bond in position ACIM062 Fit mullions in position, leaving room for adjustment -Degrease area for Apply sealant to mullion side of transom end pads transom pads Position transoms over the angled bracket pre-fitted to the mullions and loosely secure using ACIM062 screws 10. Push mullions tight to the transoms, using straps if required 11. Tighten the ACIM062 mullion screws ensuring a tight seal. ACMC6035 to run continuous across facade notched over vertical isolator as shown. ACMC6035 ACMC6012 ACMC6013 ACMC151 Transom ACMC6014 ACMC6016 ន្តីនិACMC151* ACMC6018 ACMC6019 ACMC6345 *Notched for drainage as shown MC652 on page E11 2 x ACIM062 MC005 2 x ACET060 ACMC151 ACMC151 ACMC6345 MC652 **ACMC6030 Do Not Scale From This Drawing**



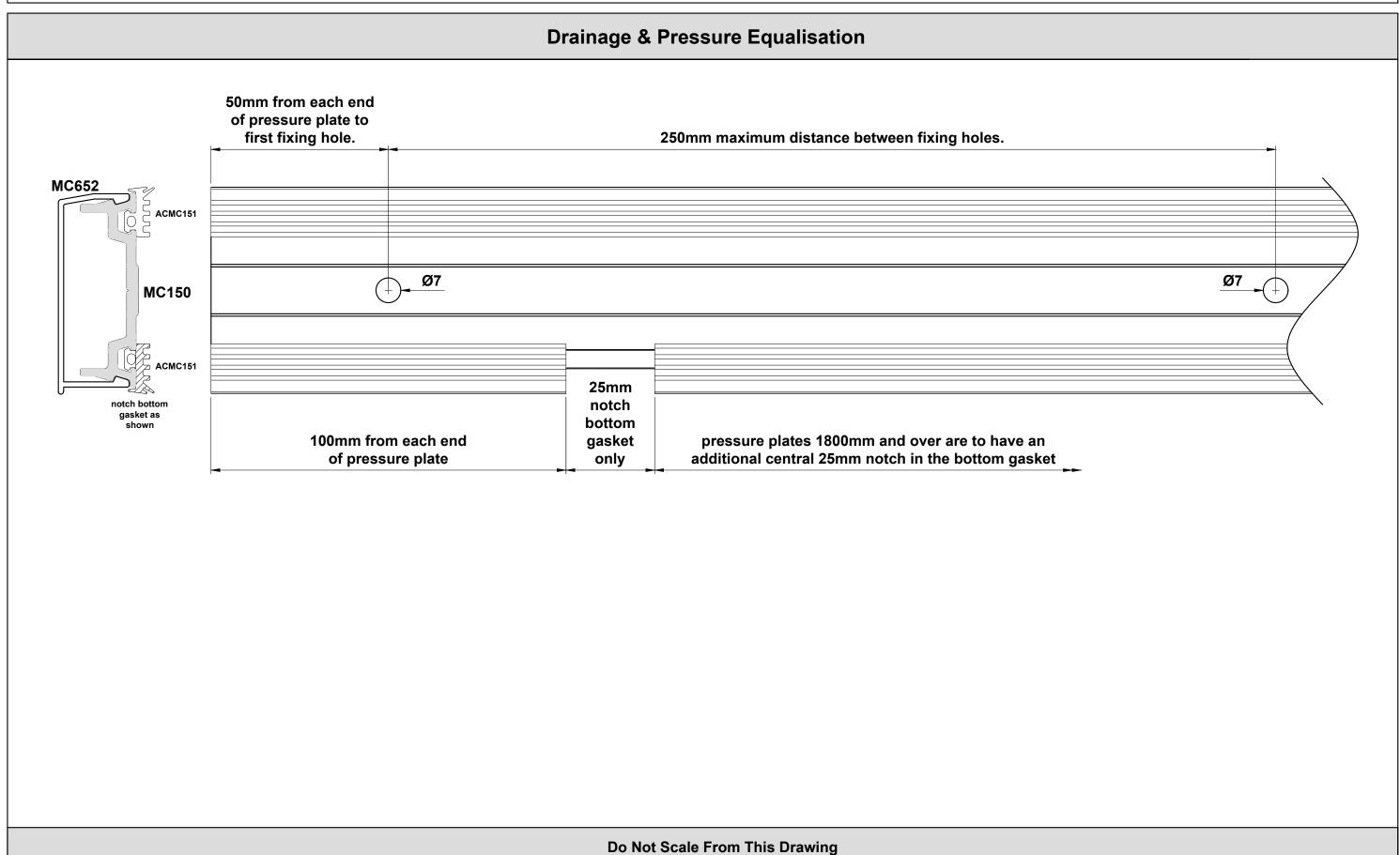


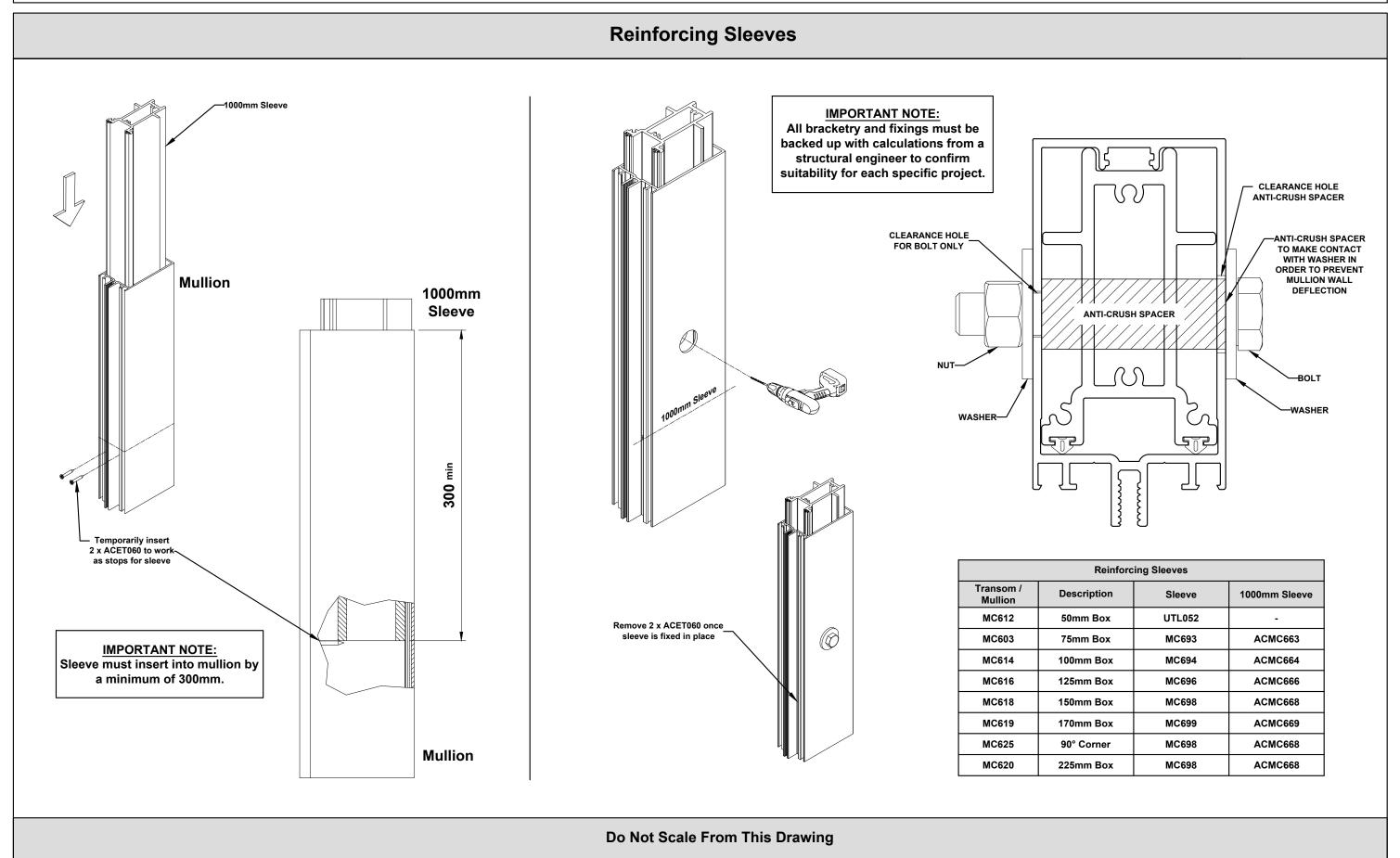




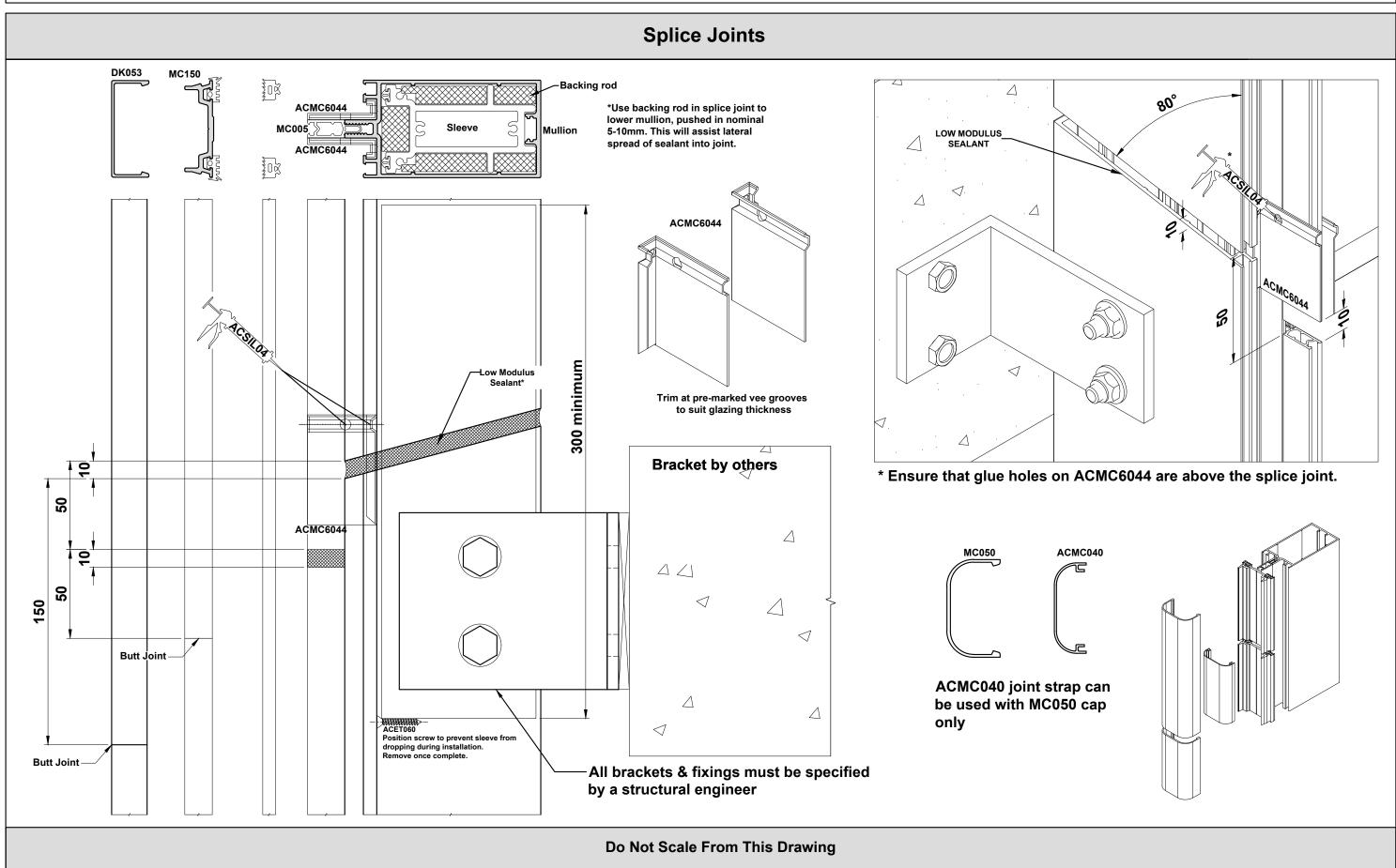


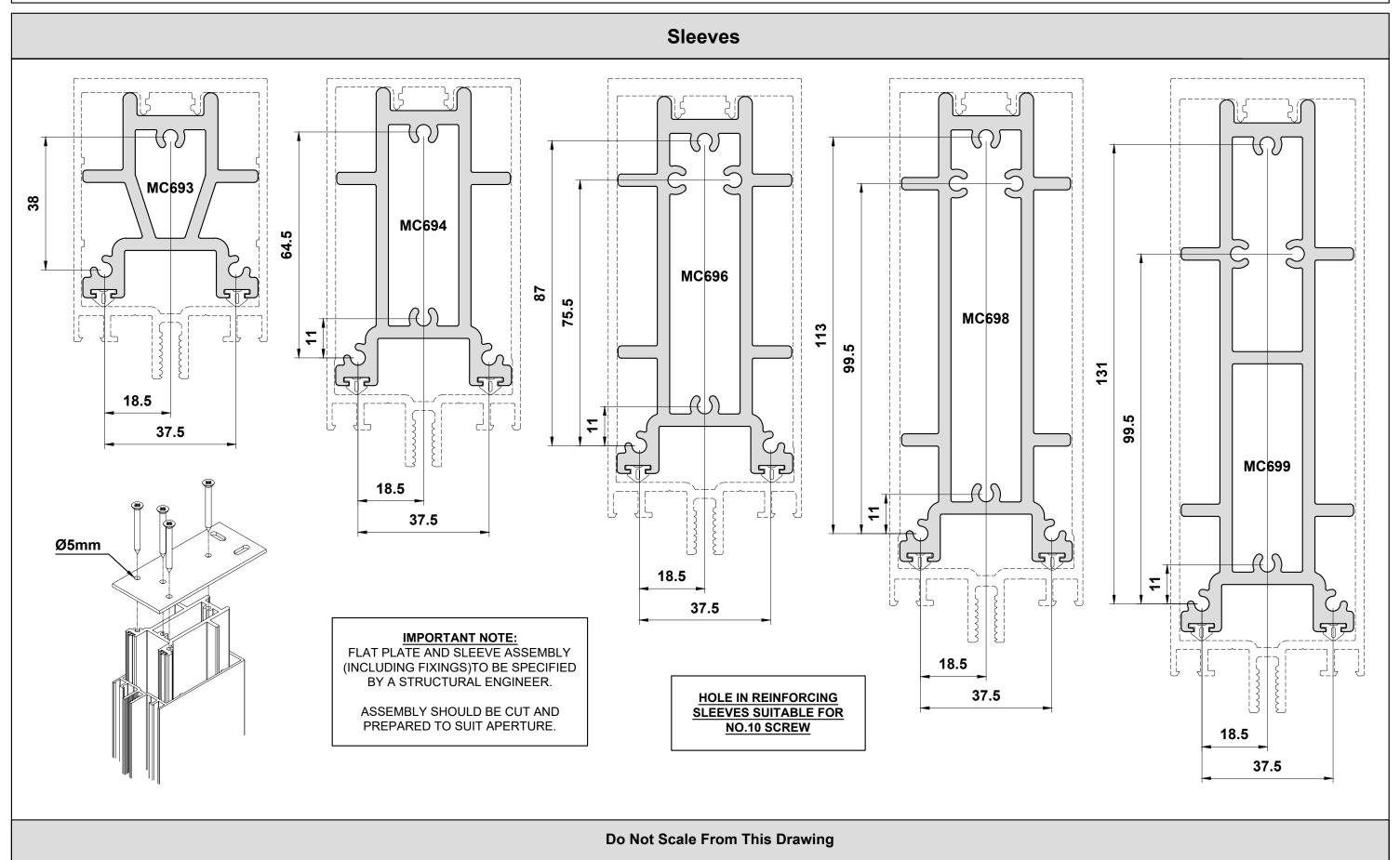










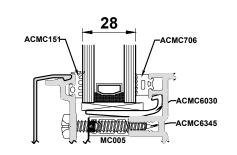


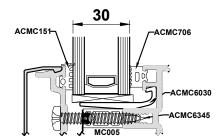
Raked Head -Shear Block Use appropriate ACMC605* Shear Block and Transom cut at desired angle for fixing locations. 2 x PUA028--Shear Block PRE-DRILL MULLIONS IN FACTORY AND INSTALL SHEAR **BLOCKS ON SITE.** IF SCREW LOCATIONS IN SHEAR BLOCK CLASH WITH **REINFORCING SLEEVE, CONSIDER: DRILLING NEW LOCATIONS IN SHEAR BLOCKS** USING SHORTER SCREWS OR CUTTING SCREWS DOWN DRILLING HOLES IN REINFORCING SLEEVE Ø4 ACMC693-ACMC646 or -ACMC647 **Shear Block** X (mm) Y (mm) ACMC6052 30 ACMC6053 53.5 23.5 **Transom** ACMC6054 80 50 102.5 ACMC6056 Drill Ø4mm through bushes for 2 x PUA028 ACMC6058 128 98 **IMPORTANT NOTE: ACMC6059** 146.5 116.5 Shear blocks are not tested to CWCT. **Do Not Scale From This Drawing**

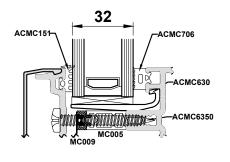


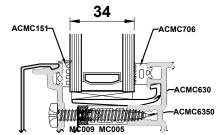
Glazing Details

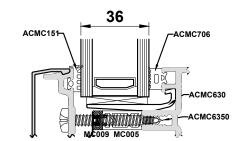
		External Gasket	Internal Gasket	Glazing Support	Isolator	Screw	Transom Bracket
Glazing Thickness (mm)	28	ACMC151	ACMC706	ACMC6030	MC005	ACMC6345	ACMC611
	30			ACMC6030	MC005	ACMC6345	ACMC611
	32			ACMC6030	MC005 MC009	ACMC6350	ACMC6112
	34			ACMC6030	MC005 MC009	ACMC6350	ACMC6112
	36			ACMC6030	MC005 MC009	ACMC6350	ACMC6112
	40			ACMC631	MC005 MC006 MC009	ACMC6360	ACMC615
	42			ACMC631	MC005 MC006 MC009	ACMC6360	ACMC615
	44			ACMC631	MC005 MC006 MC009	ACMC6360	ACMC615
	50			ACMC633	MC005 MC006 x 2 MC009	ACMC6370	ACMC6116
	52			ACMC633	MC005 MC006 x 2 MC009	ACMC6370	ACMC6116
	54			ACMC633	MC005 MC006 x 2 MC009	ACMC6370	ACMC6116

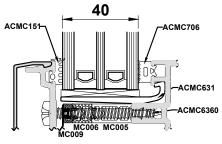


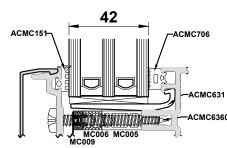


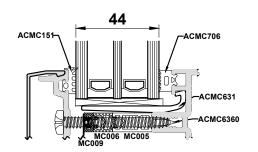


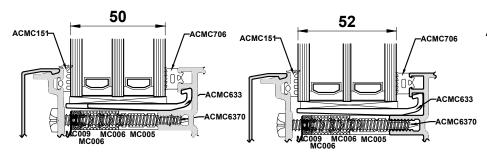


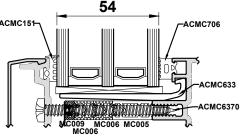












Do Not Scale From This Drawing