

### **Important Information**

# **Curtain Walling**

Curtain waling cannot be treated in the same way as window or door installations. The following points should be taken into consideration when undertaking curtain wall design, fabrication and installation:

- 1. Correct profiles need to be identified to suit site conditions. Factors including screen sizes, fixing positions, glass weight, barrier loadings & wind loadings will need to be considered. The design process is also likely to include consideration of thermal, structural and acoustic requirements depending on the individual project.
- 2. Detailed design drawings must be prepared to include all perimeter detailing & fixing/bracket positions. Smart Systems can provide the section drawings only.
- 3. All brackets and fixings must be designed to relevant structural codes. It is recommended that drawings are checked by a qualified engineer for suitability.



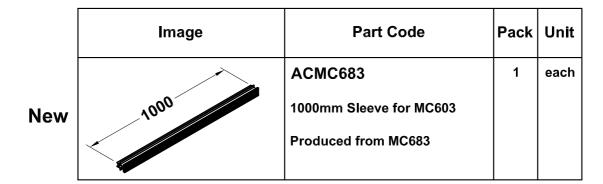


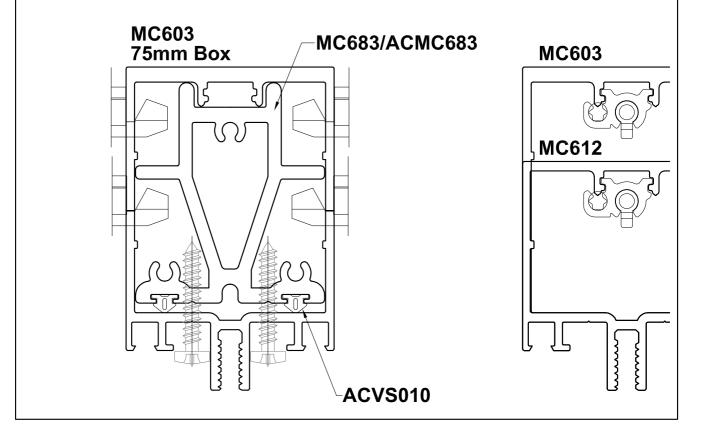
### **Bulletin**

### MC683 is a new sleeve for MC603.

New mullion sleeve designed to accommodate the popular ACMC650 & ACMC651 hooked anti-rotation pins. To be used with ACVS010 PVC inserts to minimise movement. Screw ports accept number 10 screws when used as a top or bottom bracket.

	Number	Perim. mm	Mec. mm	lx(cm4) wx(cm3)	ly(cm4) wy(cm3)	Length	Pack pr.	MF
New	MC683	352	-	29.25  8.84	12.97  5.19	7.0	1	~







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Stick Build and Ladder Frame with Shear Blocks .....

Stick Build and Ladder Frame with Shear Blocks .....

Ladder Frame Assembly using Screw Ports ..... Drainage and Pressure Equalisation .....

Sleeve Detail ..... Splice Joint .....

Glazing .....





#### **GENERAL DESCRIPTION**

MC600 is a new stick build curtain wall system suitable for low to high rise installations in commercial 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 from 6060 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 6496.

#### 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 isolator MC601 can be inserted into the mullions/transoms prior to cutting.

The mullions are marked and drilled using the recommended drill jig ACMC695.

Transoms are drilled using recommended drill jig ACMC691 in preparation for the fixing bracket ACMC600 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.





#### DRAINAGE

As with all dry glazed systems, it is recommended that the system is 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 MC601 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 ACMC600 brackets and a 6.5mm dia. drill bit for the ACMC650 anti-rotation spring pin using the recommended drill jig ACMC695.

Transoms are drilled with a 3mm dia. drill bit using recommended drill jig ACMC691 in preparation for the fixing bracket ACMC600 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.

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. Care should be taken to ensure the transom end pads are not dislodged at this point. The transom is secured into position via the ACMC600 brackets using PUA028 stainless steel self tapping screws.

Moulded corners shall be fitted between the gaskets and sealed using ACMX09830 EPDM adhesive. ACMC630 glazing supports shall be positioned in preparation for the double glazed units.

#### GLAZING

Double glazed units shall be positioned on plastic packers on ACMC630 glazing supports with equal distance on all sides.

Units are secured in position using DK154 with ACDK066 fixing plate held in place by ACMC610 Hex Head Self Tapping Fixing Screw taking care not to exceed torque of 4Nm 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.





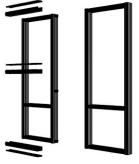


#### **CONSTRUCTION OPTIONS**

The MC600 Curtain Walling System may be installed as a stick, ladder frame or as a screwed system.

Stick build is a fast method of fabrication and installation. The Curtain Wall is taken to 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 to form 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 - ACMC600.

Where ladder frames are used, Shear Blocks (ACMC602/ACMC603) are fixed to the mullions in the factory and 'ladders' built and taken to site ready assembled. The ladders are connected together on site by placing open sided transoms (MC615/MC617) over the shear blocks, fixing from the front through the transom face, into the shear block screwports. A clip plate (MC650/MC651) is then pushed into place to close the transom.



A final method of construction is to use two part mullions/transoms (MC615/MC650 and/or MC617/MC651) and fix using screws through the mullions into screwports within the transoms.







#### MC600 Weather Performance (BS6375)

BS EN 1026: 2000 Air Permeability: BS EN 1027: 2000 Watertightness BS EN 12211: 2000 Resistance to Wind Load: Class 4 600Pa Class 9A 600Pa Class 3 2400Pa

#### MC600 Window U Values

Contact The Technical Department





ROFILES :: Technical Information

Number	Picture	Page	Perim. mm	Mec. mm	lx(cm4) wx(cm3)	ly(cm4) wy(cm3)	Length	Pack pr.	MF	SA	KL	HP	м
DK052		A15	170	96			7	1	~	~	~	~	
DK053		A15	190	98			7	1	~	~	~	✓	
DK154	x y+y x	A17	-	-	- 	-  -	7	1	~				
MC050		A15	206	102			7	1	~	~	~	~	
MC601	→ × × × ×	A17	-	-			7	1	~				
MC603	x y x x	A11	396	205	<b>71.59</b>  14.91	<b>31.68</b>  11.52	7	1	~	~	~	✓	
MC612	x y x	A11	346	155	<b>23.54</b>  7.15	<b>20.66</b>  7.51	7	1	~	~	~	✓	
MC614	x y y x	A12	444	255	<b>120.61</b>  21.65	<b>35.23</b>  12.81	7	1	~	~	~	✓	
MC615	Y Y Y	A12	657	157	1 <b>16.94</b>  20.74	<b>22.68</b>  12.38	7	1	~	~	~	~	
	^					A = Ou B = Ins		GOZ = G W = W Z = BI	hite	SA KL HF	= Basi	er Anodise c Colour cial Colou	





RROFILES :: Technical/Informatic

Number	Picture	Page	Perim. mm	Mec. mm	lx(cm4) wx(cm3)	ly(cm4) wy(cm3)	Length	Pack pr.	MF	SA	KL	HP	м
MC616		A13	496	305	<b>249.97</b>  33.18	<b>45.02</b>  16.37	7	1	✓	~	~	~	
MC617		A13	705	181	<b>232.25</b>  32.22	<b>25.79</b>  14.72	7	1	~	~	~	~	
MC618	x y y x y x x	A14	546	355	<b>380.41</b>  44.62	<b>59.50</b>  21.64	7	1	✓	~	*	✓	
MC619		A14	586	395	<b>575.04</b>  57.03	<b>68.48</b>  24.90	7	1	✓	~	~	✓	
MC644		A18	327	-	<b>91.38</b>  20.72	<b>37.41</b>  15.31	7	1	✓				
MC646		A18	372	-	<b>169.92</b>  30.82	<b>46.71</b>  19.12	7	1	✓				
MC648		A18	424	-	<b>298.89</b>  43.86	<b>56.09</b>  22.96	7	1	✓				
MC649		A18	460	-	<b>416.56</b>  54.05	<b>63.77</b>  26.10	7	1	✓				
MC650	<b>1t</b> v+v x	A12	221	94	-  -	-  -	7	1	✓	✓	•	✓	
						A = Ou B = Ins		GOZ = Go W = W Z = Bl	hite	SA KL	= Basi = Spee	er Anodise	





**RROFILES** :: Technical Nuformation

Number	Picture	Page	Perim. mm	Mec. mm	lx(cm4) wx(cm3)	ly(cm4) wy(cm3)	Length	Pack pr.	MF	SA	KL	HP	м
MC651	<b>1k</b> v+v x	A13	271	119			7	1	~	~	~	~	
MC652		A15	188	97			7	1	~	~	~	~	
MC653		A15	247	154			7	1	~	~	~	~	
MC654		A15	206	105			7	1	~	~	✓	~	
MC655 MC655H MC655V	× ۲	A17 A16 A16	212	-			7	1	~				
MC663		A17	209	42			7	1	~	~	>	~	
MC665		A17	204	39			7	1	~	~	~	~	
MC684	x y y y y y y y y y y y y y y y y y y y	A12	374	-	<b>77.84</b>  17.03	<b>18.35</b>  7.61	6	1	~				
MC686		A13	419	-	1 <b>39.90</b>  23.87	<b>20.12</b>  8.35	6	1	~				
						A = Ou B = Ins		GOZ = G W = W Z = B	hite		= Basi = Spe	Finish er Anodise ic Colour cial Colou I Colour	

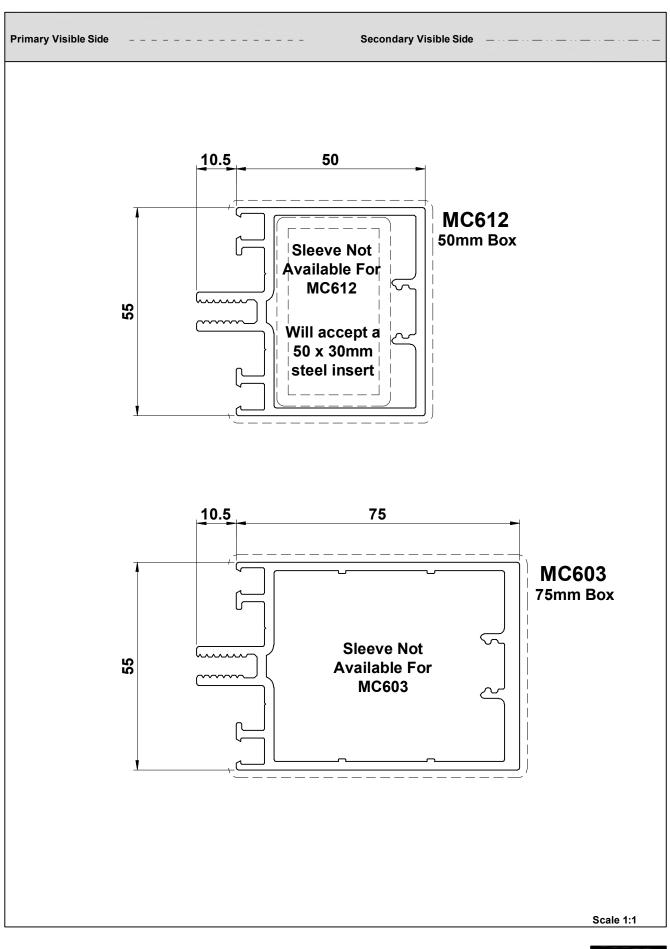




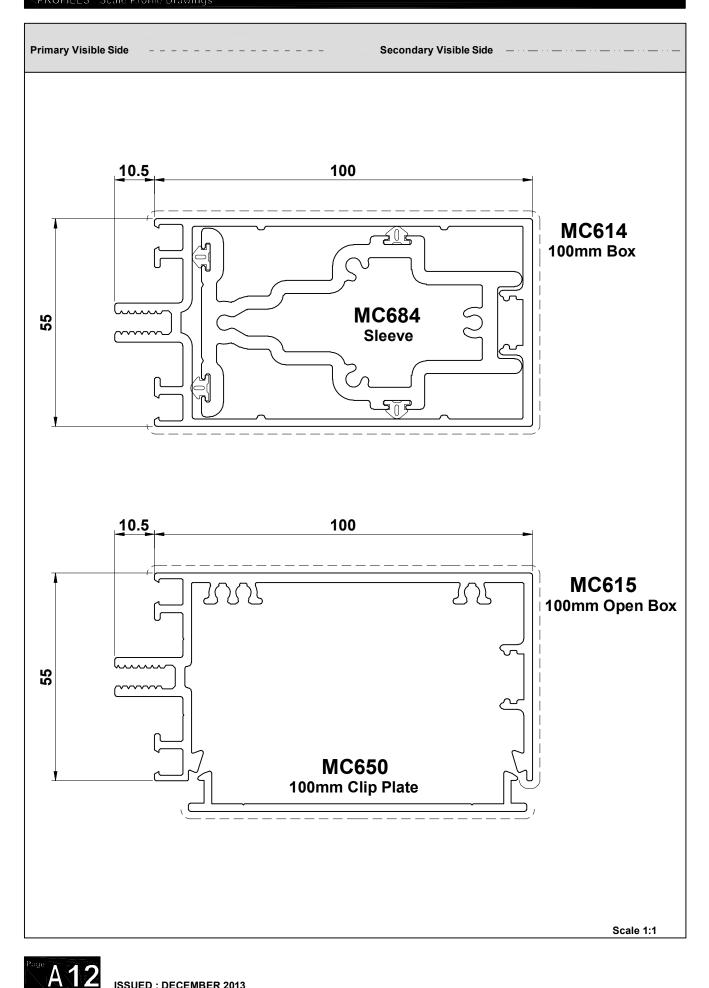
RROFILES :: Technical Information

Number	Picture	Page	Perim. mm	Mec. mm	lx(cm4) wx(cm3)	ly(cm4) wy(cm3)	Length	Pack pr.	MF	SA	KL	HP	м
MC688		A14	500	-	<b>259.25</b>  36.01	<b>23.27</b>  9.66	6	1	~				
MC689		A14	536	-	<b>396.09</b>  47.66	<b>33.11</b>  13.74	6	1	~				
MC900		A17	74.3	-			6	1	~	~	~	~	
						A = Ou B = Ins		GOZ = G W = W Z = Bl	'hite	SA KL HF	= Basi	er Anodise ic Colour cial Colou	



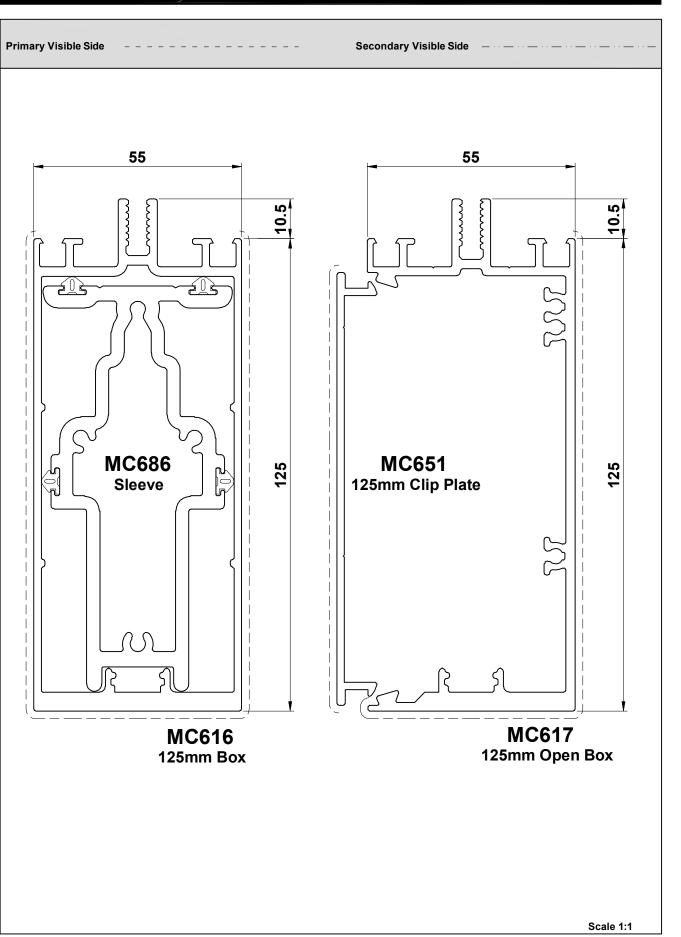


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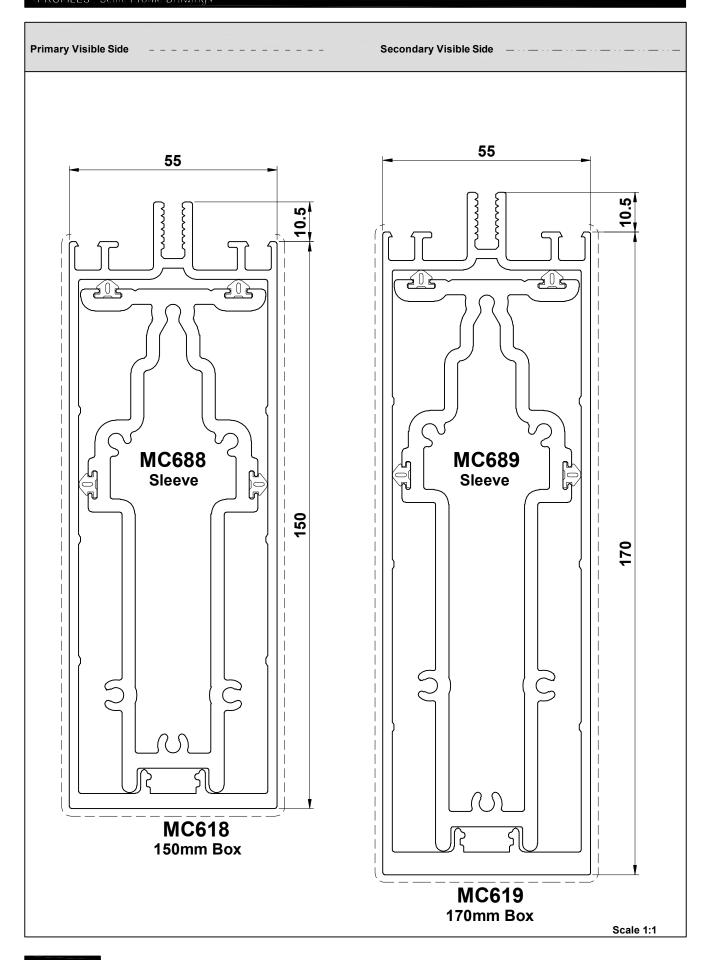


RRORILES : Scale Profile Drawings



architectural aluminium RRORIDES : Scale:Rrofile:Drawings

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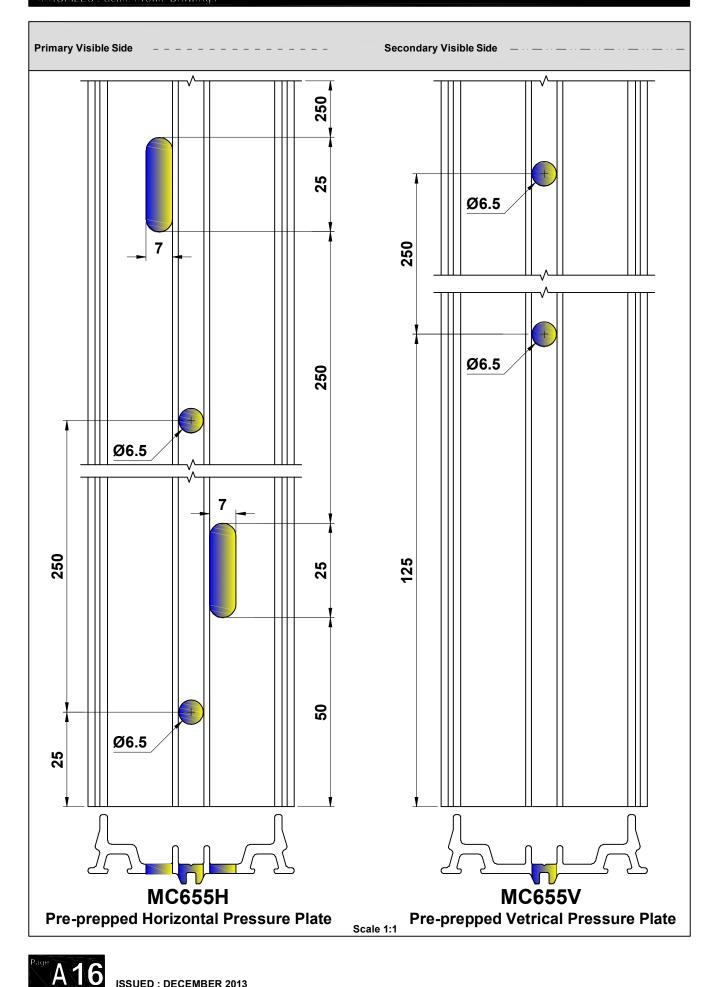
**SMART** architectural aluminium PROEINES Scale Profile Drawin

Primary Visible Side Secondary Visible Side **DK052 MC652 MC653** Horizontal Horizontal 50mm Vertical Capping with Capping Capping Drip 20 50 16 54.5 54.5 54.5 56.5 **DK053** MC654 MC050 Vertical Vertical Vertical Capping Capping Capping 21 25 30 S 54.5 55 54.

**MC600** 

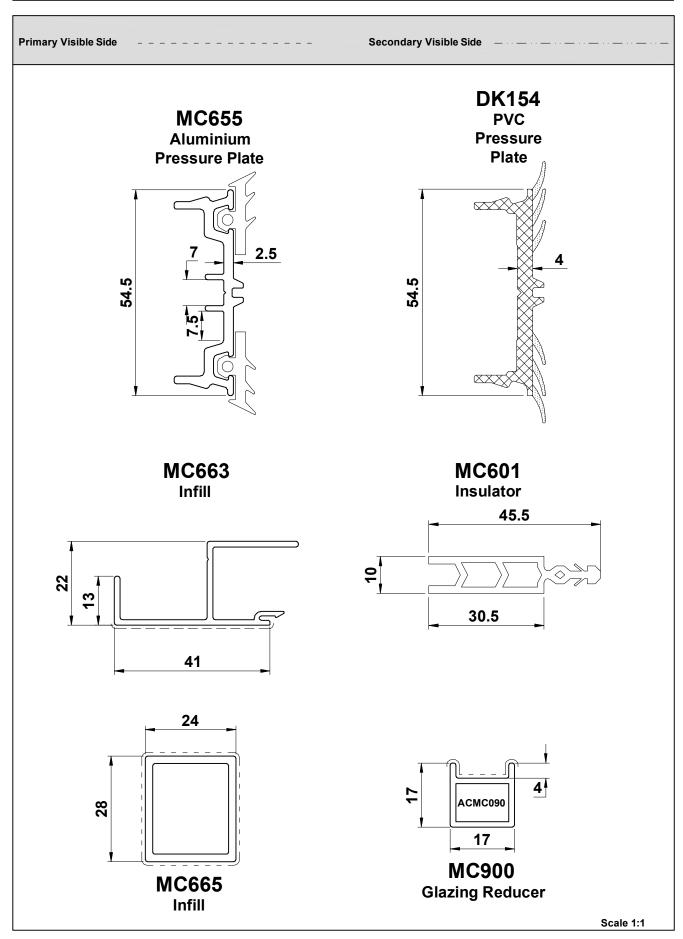
Scale 1:1

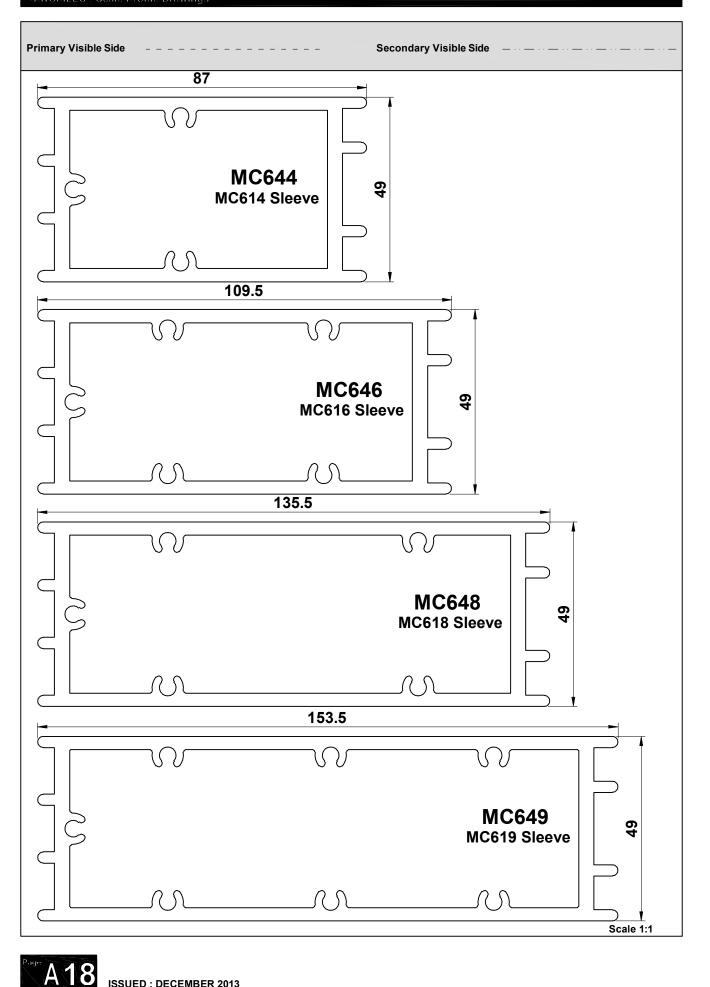






RROFILES : Scale Protile Drawings







# Section B





Image	Part Code	Pack	Unit	Application	Colour
	ACDK066 Fixing Plate for DK154	1	each	DK154	MF ✓   SA    KL    HP    GOZ    W    Z    PC
	ACET060 No. 7 x 1" CSK S/S Self Tapper	100	pack	ACMC600	MF SA KL HP GOZ W Z PC SA
-ananananananan ()	ACET062 No. 10 x 2" CSK S/S Self Tapper	100	pack	UTL057	MF SA SA KL HP GOZ W Z PC SA
X = 9.6mm Y= 13.7 mm	ACMC090 Cleat for Single Glazing Adapter	1	each	MC900	MF ✓ SA KL HP GOZ W GZ PC FC
15	ACMC115 Gasket for 24mm Glazing	100	m	MC613 MC614 MC615 MC616 MC617 MC618 MC619	MF SA KL HP M GOZ W Z ✓ PC
T-BARS ACV G656-2.5rm ACV L150-4.0mm CVL 150-4.0mm Screw (Grub)		Gold White Black	X		F





Image	Part Code	Pack	Unit	Application	Colour
	ACMC150 Gasket for MC150	100	m	MC150	MF SA SA KL HP GOZ W CZ ✓ PC SA
	ACMC600 Transom Bracket	10	pack	MC613 MC614 MC616 MC618 MC619	MF SA KL HP M GOZ W Z PC
76.3	ACMC602 Shear Block for MC615	20	pack	MC615	MF ✓ SA KL HP M GOZ W Z PC V
98.7	ACMC603 Shear Block for MC617	20	pack	MC617	MF ✓ SA KL HP M GOZ W Z PC V
	ACMC604 Transom End Block	20	pack	MC615 MC617	MF SA KL HP GOZ W Z ✓
TBARS ACV/G65=2.5mm ACV/G56=3.0mm ACVL150=4.0mm		Gold W <b>AQO</b> Black	pack		





Image	Part Code	Pack	Unit	Application	Colour
	ACMC606 Transom End Pad for MC603	50	pack	MC603	MF SA KL HP M GOZ W Z ✓ PC
8 53	ACMC610 6.3 x 53mm Hex Head Self Tapper	100	pack	ACDK066 DK154	MF SA KL HP GOZ W Z PC
	ACMC613 Transom End Pad for MC613	50	pack	MC613	MF SA SA KL HP M GOZ W Z ✓ PC FC
	ACMC614 Transom End Pad for MC614	50	pack	MC614	MF SA KL HP M GOZ W Z √ PC V
	ACMC616 Transom End Pad for MC616	50	pack	MC616	MF SA KL HP M GOZ W Z ✓ PC
T-BARS AC/VG65-2.5mm AC/VG66-3.0mm AC/L150-4.0mm		Gold White Black	X		F





Image	Part Code	Pack	Unit	Application	Colour
	ACMC618 Transom End Pad for MC618	50	pack	MC618	MF SA KL HP M GOZ W Z ✓ PC SA
	ACMC619 Transom End Pad for MC619	50	pack	MC619	MF SA KL HP GOZ W GZ √ PC L
	ACMC624 Moulded Corner Gasket for 24mm Units	20	pack	ACMC115 MC613 MC614 MC615 MC616 MC617 MC618 MC619	MF SA KL HP M GOZ W Z √ PC
	ACMC628 Moulded Corner Gasket for 28mm Units	20	pack	ACSC212 MC613 MC614 MC615 MC616 MC617 MC618 MC619	MF SA KL HP M GOZ W Z ✓ PC
	ACMC630 Glazing Support (100mm)	20	pack	MC613 MC614 MC615 MC616 MC617 MC618 MC619	MF SA KL HP M ✓ GOZ W Z PC
TBARS AC/C656-2.5mm AC/V150-4.0mm CV/L150-4.0mm		Gold White Black	X		





Image	Part Code	Pack	Unit	Application	Colour
	ACMC632 Moulded Corner Gasket for 32mm Units	20	pack	ACSC208 MC613 MC614 MC615 MC616 MC617 MC618 MC619	MF SA KL HP GOZ W Z √ PC V
X = 23.7 mm Y = 7.5 mm	ACMC641 Cleat	24	pack	MC641	MF ✓ SA KL HP M GOZ W Z PC
	ACMC644 Cover Cap for Splice Joints	10	pack	ACSC208 MC613 MC614 MC615 MC616 MC617 MC618 MC619	MF SA SA KL HP GOZ W Z PC FOR STATES SA
	ACMC650 Spring Pin with Hook	1	each	MC613 MC614 MC615 MC616 MC617 MC618 MC619	MF SA SA KL HP M GOZ W Z ✓
	ACMC651 Fixed Anti-Rotation Pin with Hook	1	each	MC613 MC614 MC615 MC616 MC617 MC618 MC619	MF SA KL HP GOZ W Z PC S
T-BARS ACV065=25mm ACV065=30mm ACVL150=4.0mm Screw (Grub)		Gold White Black	X		F





Image	Part Code	Pack	Unit	Application	Colour
1000	ACMC684 1000mm Sleeve for MC614 with ACVS010 inserts Produced from MC684	1	each	MC614	MF SA KL HP GOZ W Z PC SA
1000	ACMC686 1000mm Sleeve for MC616 with ACVS010 inserts Produced from MC686	1	each	MC616	MF SA KL HP GOZ W Z PC SA
1000	ACMC688 1000mm Sleeve for MC618 with ACVS010 inserts Produced from MC688	1	each	MC618	MF SA KL HP M GOZ W Z PC
1000	ACMC689 1000mm Sleeve for MC619 with ACVS010 inserts Produced from MC689	1	each	MC619	MF SA KL HP GOZ W Z PC SA
	ACMC691 Transom Drill Jig - Dual Purpose for Transom Brackets and Shear blocks	1	each	MC613 MC614 MC616 MC618 MC619	MF SA KL HP GOZ W Z PC SA
TBARS AC/VG65-2.5mm AC/VG66-3.0mm AC/L150-4.0mm		Gold White Black	X		Þ





Image	Part Code	Pack	Unit	Application	Colour
	ACMC692 Mullion Drill Jig for Shear Block	1	each	MC614 MC615 MC616 MC617 MC618 MC619	MF SA KL HP GOZ W Z PC SA
	ACMC695 Mullion Drill Jig for ACMC650 & ACMC651	1	each	MC613 MC614 MC616 MC618 MC619	MF SA KL HP M GOZ W Z PC V
-7.5-	ACSC208 Gasket for 32mm Glazing	100	m	MC613 MC614 MC615 MC616 MC617 MC618 MC619	MF SA KL HP GOZ GOZ W Z YC PC
	ACSC212 Gasket for 28mm Glazing	100	m	MC613 MC614 MC615 MC616 MC617 MC618 MC619	MF SA KL HP M GOZ W Z ✓ PC
	PUA028 No. 10 x 1" P/H Self Tapper	100	pack	ACMC600	MF SA KL HP GOZ W Z PC S
T-BARS ACVG65=25mm ACVG66=30mm ACVL150=4.0mm		Gold White Black	X		F





Image	Part Code	Pack	Unit	Application	Colour
All postin	ACMX09700 Alu. Polish	1	each		MF ✓ SA ✓ KL ✓ HP ✓ GOZ ✓ W ✓ Z ✓ PC ✓
	ACMX09761 Maxi Gloss	1	each		MF     Image: MF       KL     Image: MF       HP     Image: MF       GOZ     Image: MF       W     Image: MF       Z     Image: MF       PC     Image: MF
	ACMX09762 Alu. Bright	1	each		MF     Image: mail of the sector of
CIRC DI LUBE VI INTERNA VI INTERN	ACMX09763 Teflon Spray	1	each		MF     Image: mail of the sector of
	ACMX09764 Maxi Clean	1	each		MF     Image: mail of the sector of
T-BARS ACV/G56-2.5mm ACV/L150-4.0mm Screw (Grub)	MF = Mill Finish M = Dual C SA = Silver Anodised GOZ = Gold KL = Basic Colour W = White HP = Special Colour Z = Black	Colour	X		





Image	Part Code	Pack	Unit	Application	Colour
EUROPECLEANER BECKLE GOLVOTTER B BUDON BUDON TO B BUDON BUDON BUDON TO B BUDON BUDON TO B BUDON BUDON BUDON TO B BUDON BUDON BUDON TO B BUDON BUDON BUDON TO B BUDON BUDON	ACMX09765 Alu. Cleaner	1	each		MF SA KL HP GOZ W Z PC
	ACMX09770 Roll & Wrap 100mm	1	each		MF SA KL HP GOZ W Z PC
	ACMX09775 Grip Handwrap	1	each		MF SA KL HP GOZ W Z PC
	ACMX09801 Protective Tape 50mm	1	each		MF SA KL HP M GOZ W Z PC
	ACMX09802 Protective Tape 70mm	1	each		MF SA KL HP GOZ W Z PC
T-BARS ACV/G65e-2.5mm ACV/L150=4.0mm CV/L150=4.0mm	MF = Mill Finish M = Dual C SA = Silver Anodised GOZ = Gold KL = Basic Colour W = White HP = Special Colour Z = Black	Colour	X		





Image	Part Code	Pack	Unit	Application	Colour
	ACMX09803 Protective Tape 100mm	1	each		MF SA SA KL HP GOZ W Z PC U
Unionzement	ACMX09830 Rubber Sealant	1	each		MF
	ACSIL04 Sealing Glue Order with suffix of KL colour (eg.ACSIL04KL005) or BL=Black/WP=White/ CL=Clear	1	each		MF Image: matrix state   SA ✓   HP ✓   M ✓   GOZ ✓   W ✓   Z ✓   PC ✓
K	ACSIL08 Silicon Gun	1	each		MF     Image: mail of the second sec
	ACSIL013 Glue for Mitre	1	each		MF SA SA HPP GOZ W CZ PC SA
T-BARS ACVG65e-2.5mm ACVG65e-3.0mm ACVL150=4.0mm Screw (Grub)	MF = Mill Finish M = Dual C SA = Silver Anodised GOZ = Gold KL = Basic Colour W = White HP = Special Colour Z = Black	Colour	X		F

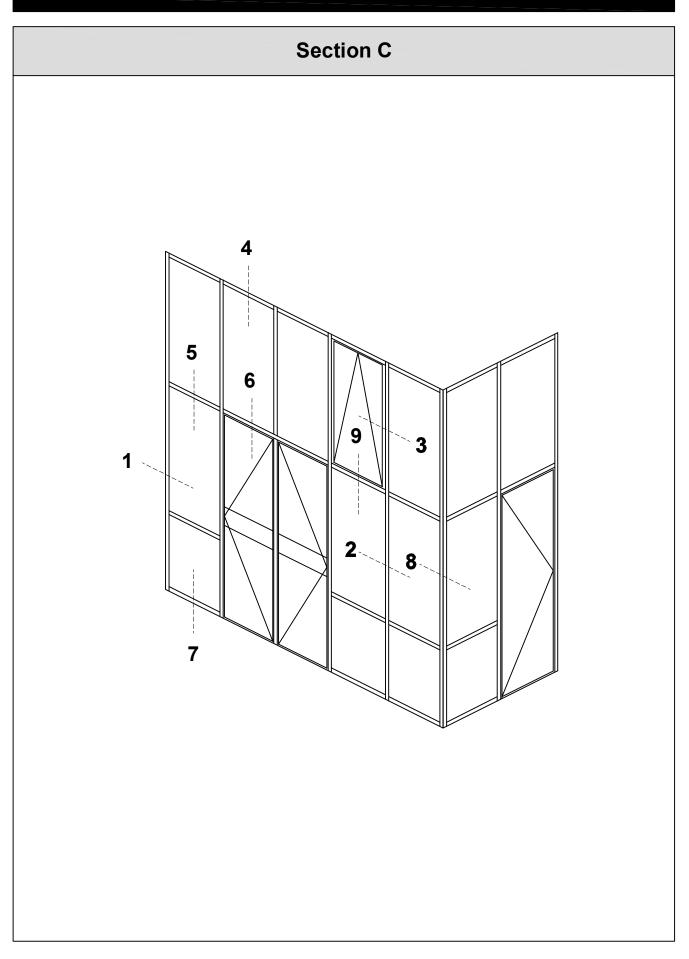




Image	Part Code	Pack	Unit	Application	Colour
					MF SA KL
					HP M
					GOZ W Z
					PC MF
					SA KL HP
					M GOZ
					W Z PC
					MF SA
					KL HP M
					GOZ W
					Z PC
					MF SA KL
					HP M GOZ
					W Z
					PC MF
					SA KL HP
					M GOZ W
					Z PC
T-BARS ACVG66=2.5mm ACVG66=3.0mm ACVL150=4.0mm Screw (Grub)	MF = Mill Finish M = Dual Colour SA = Silver Anodised GOZ = Gold		X		
	KL = Basic Colour W = White HP = Special Colour Z = Black				

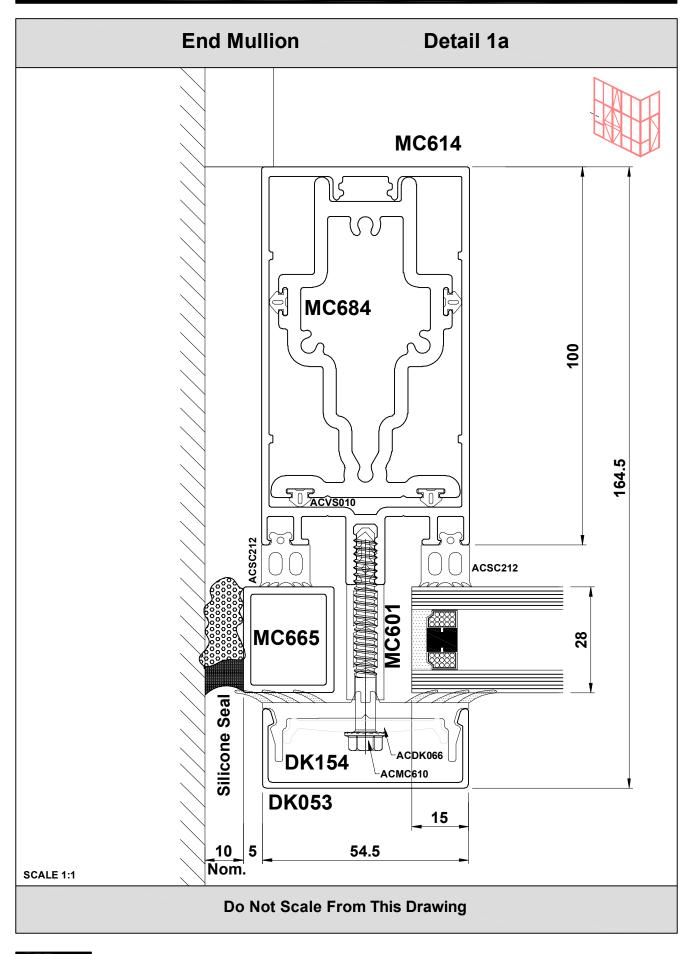




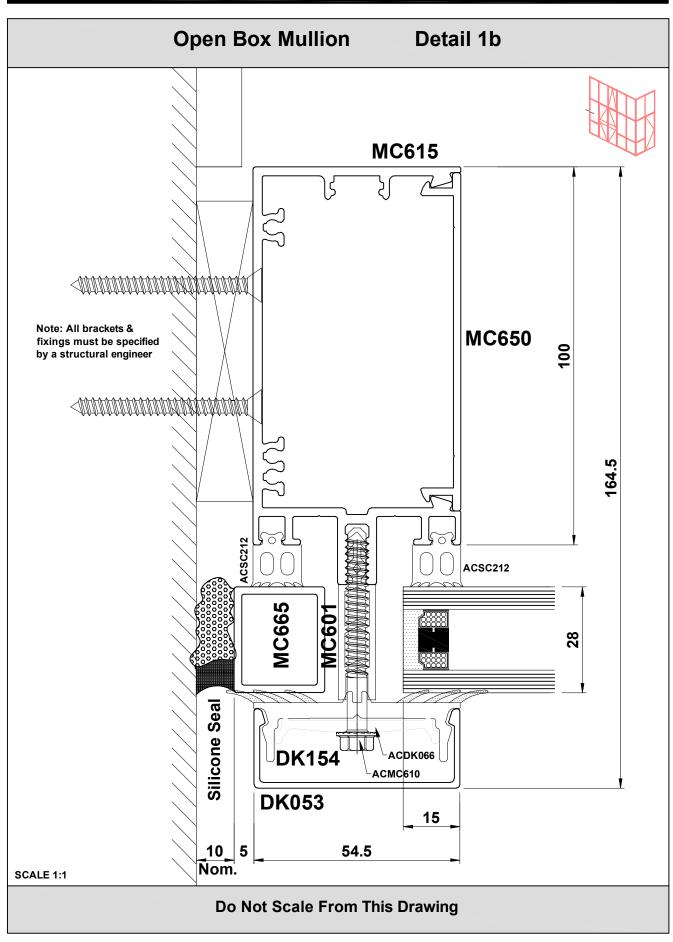






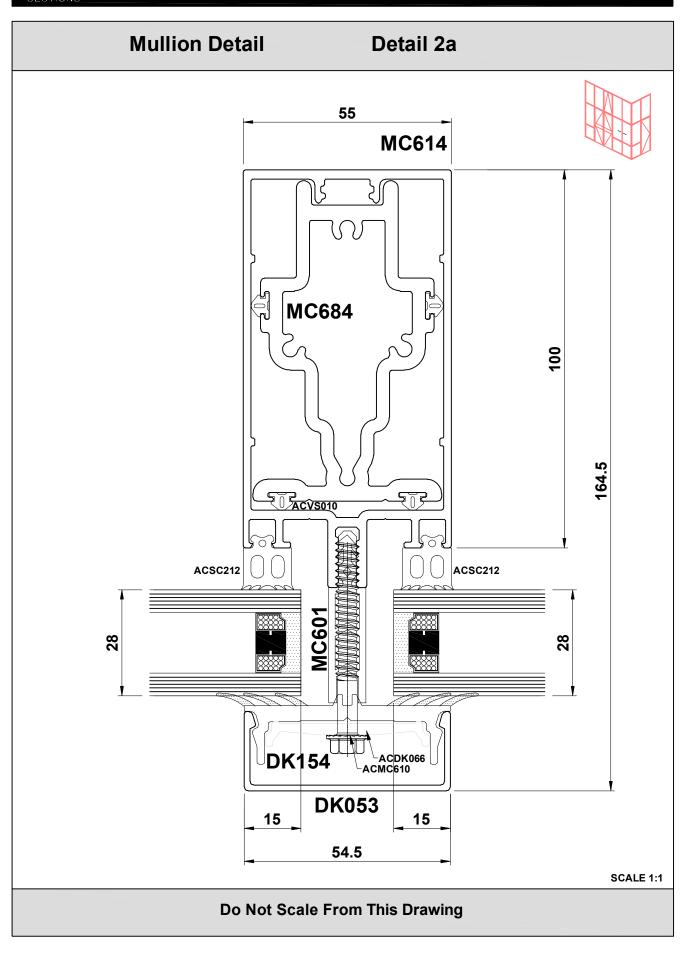




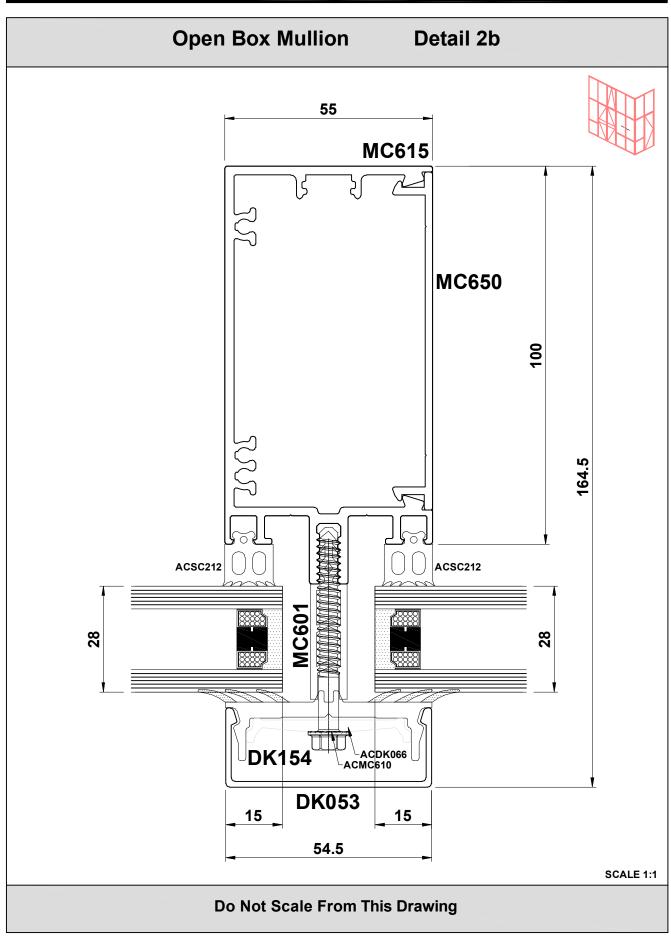




smart architectural aluminium SECTIONS





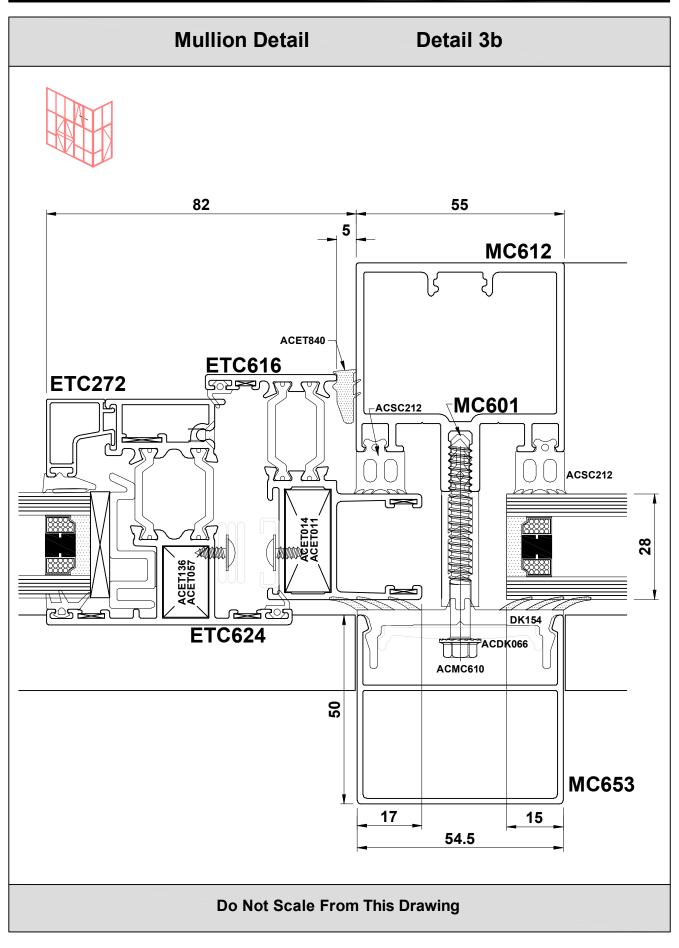




**Detail 3a Mullion Detail** 55 **MC614** ς √ຍ⊓ ⊃( າປ MC684 |-|-ACET840 **ETC308** عوجك ) (TZ 570 To ACVS010 <u>F</u> ACET013 ō ō ACSC212 Į ACET310 C60 **daaaaa**aa 28 28 Ž ACET045 رکنی ACET424 1 ഹി ETC424N DK154 **DK053** 15 77.5 54.5 SCALE 1:1 **Do Not Scale From This Drawing** 

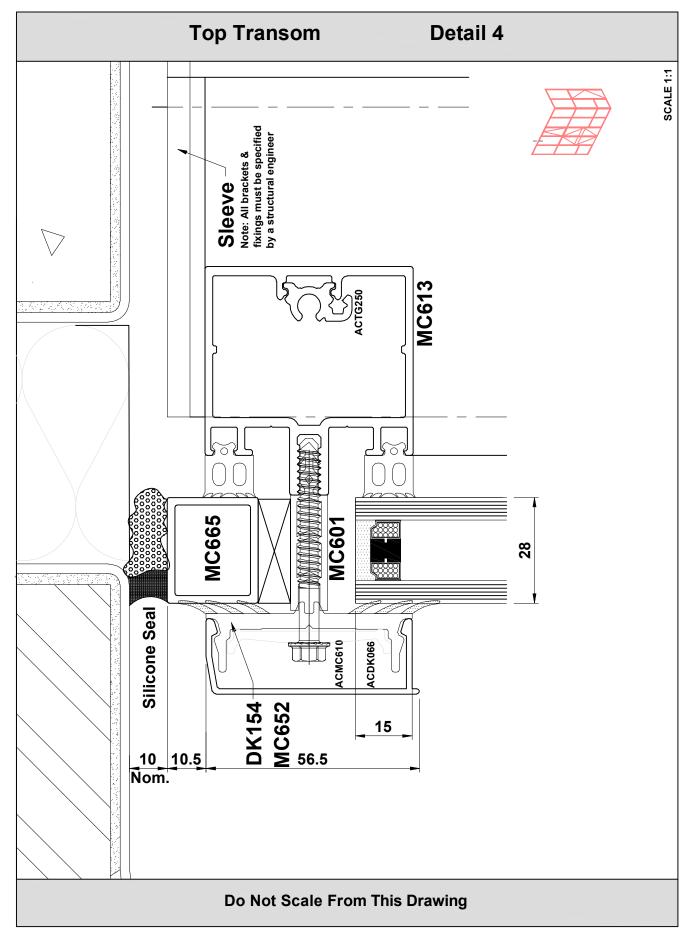






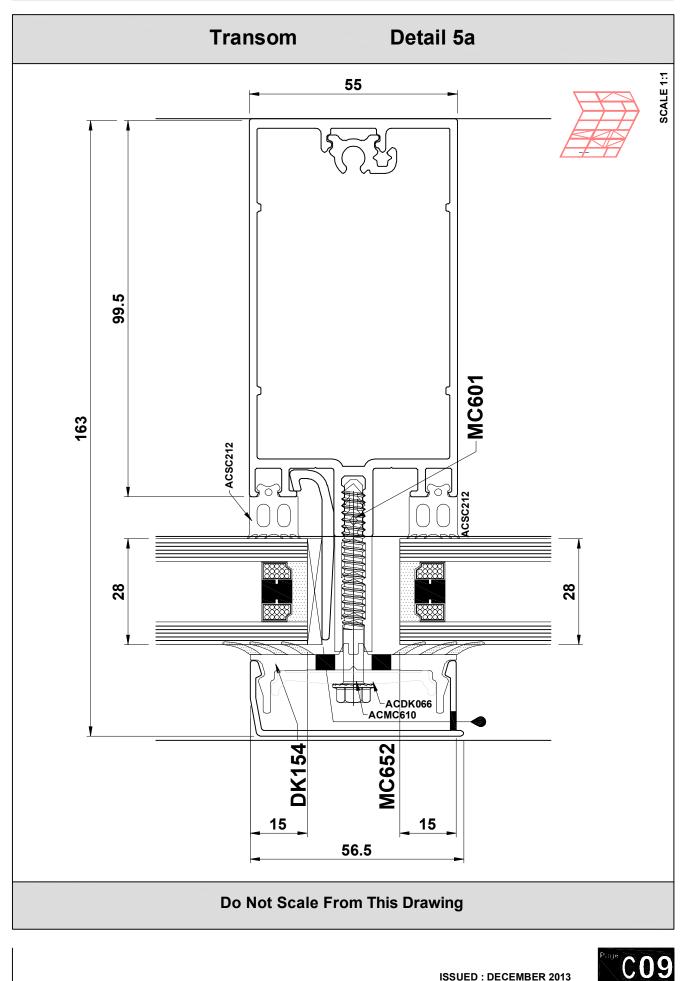
CO



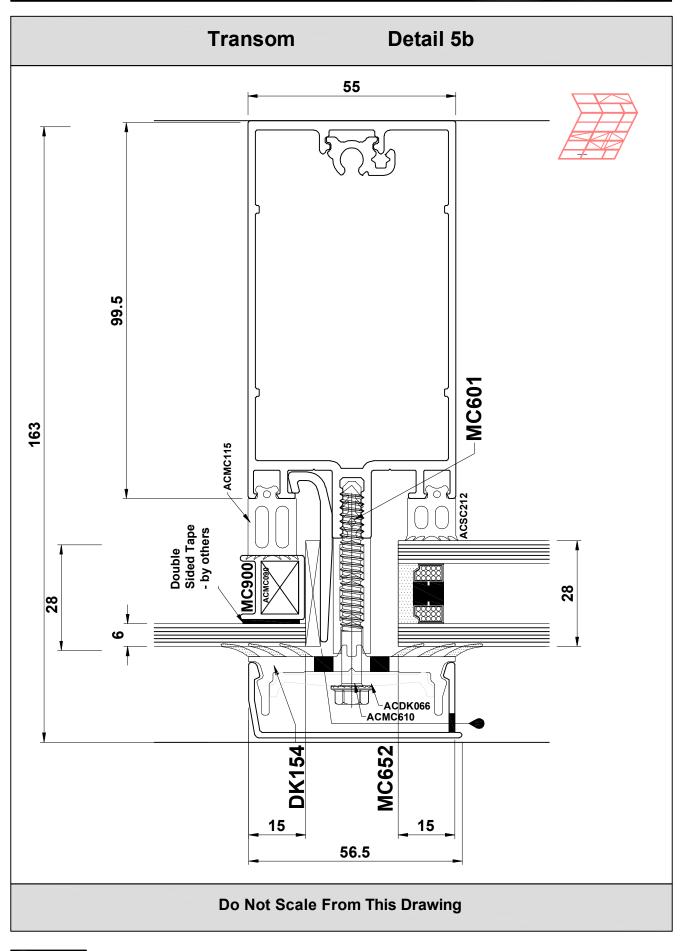






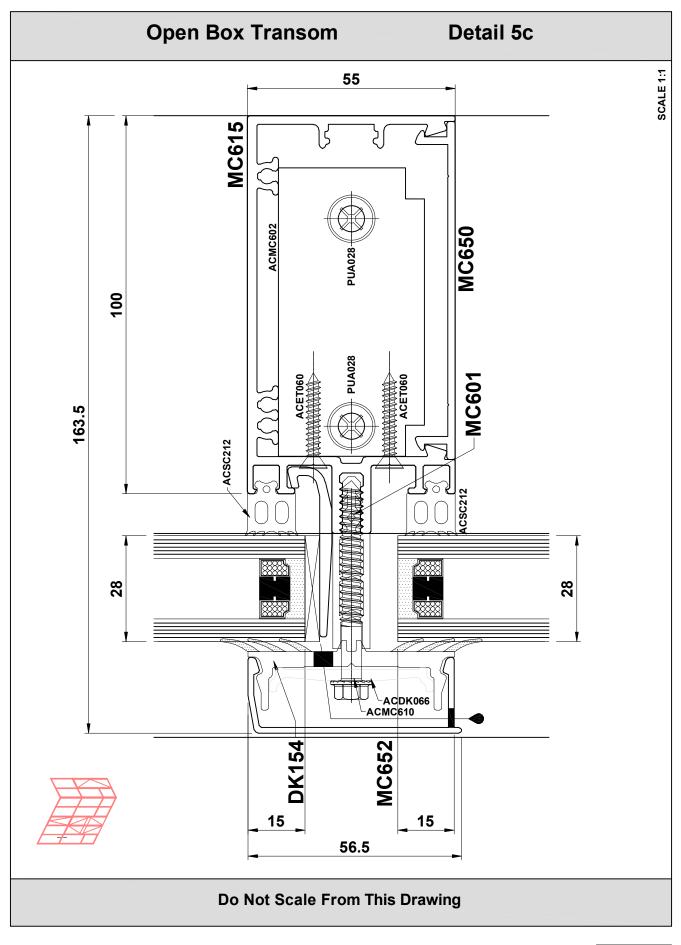






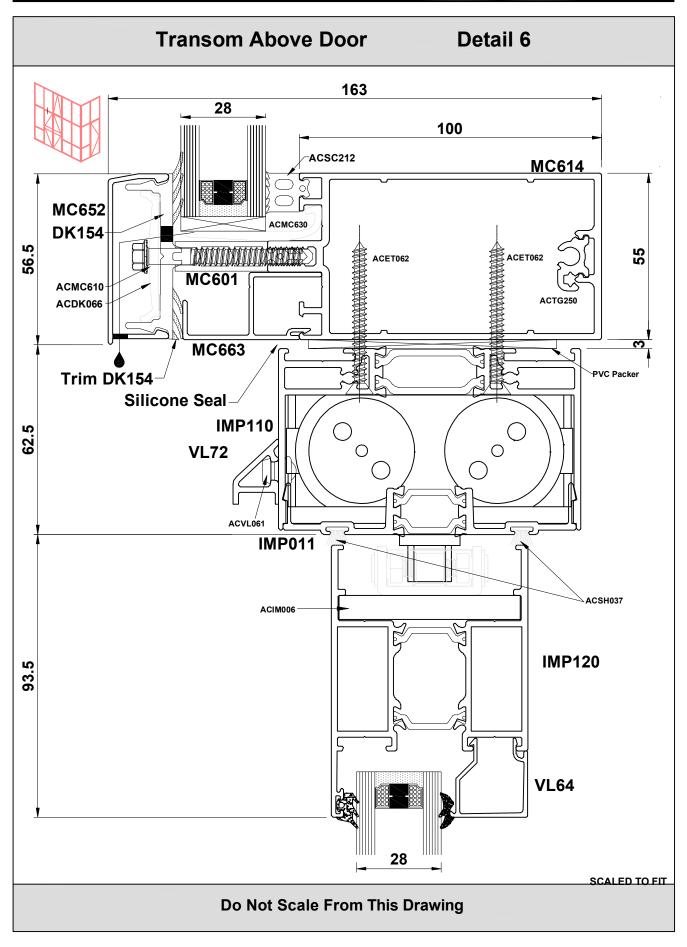






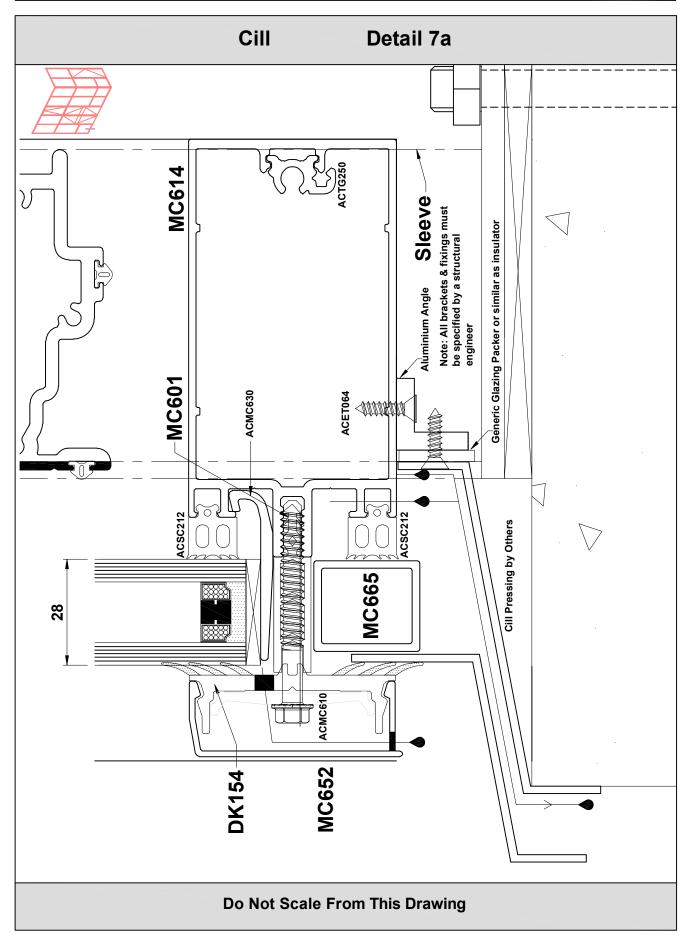






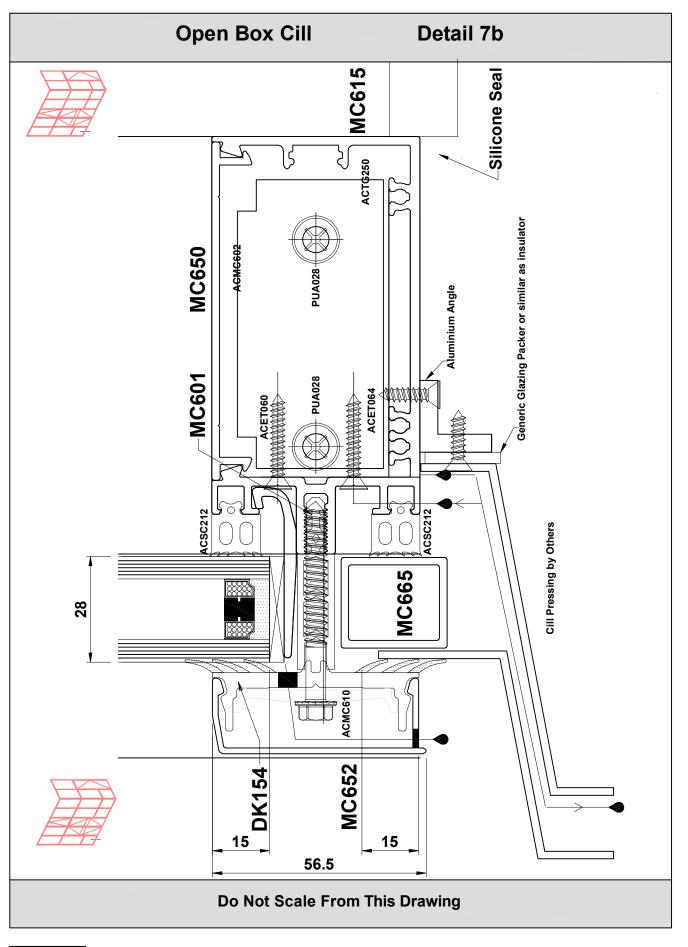






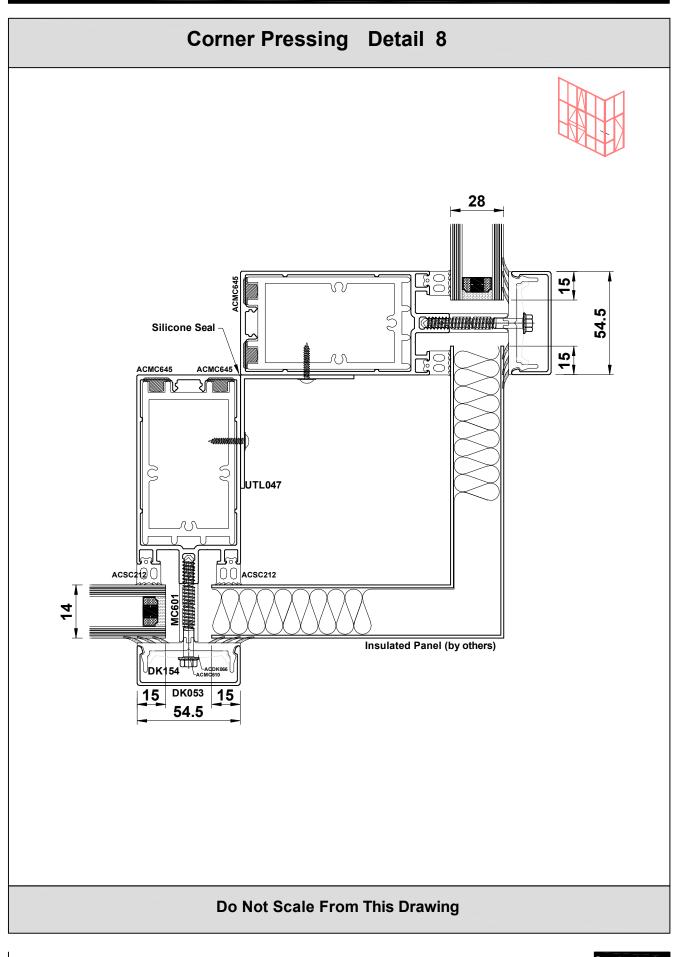






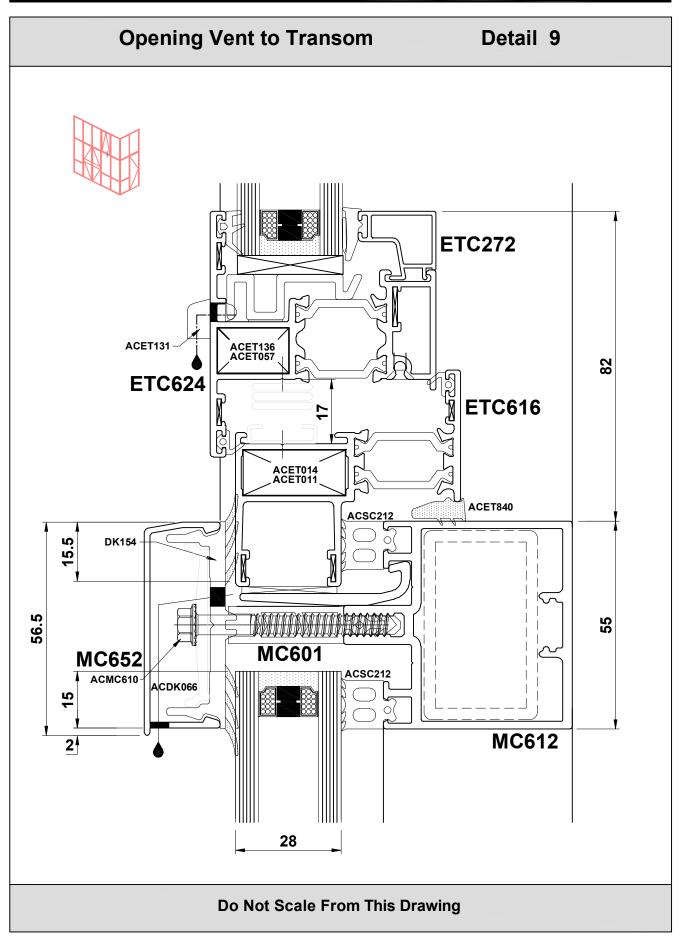






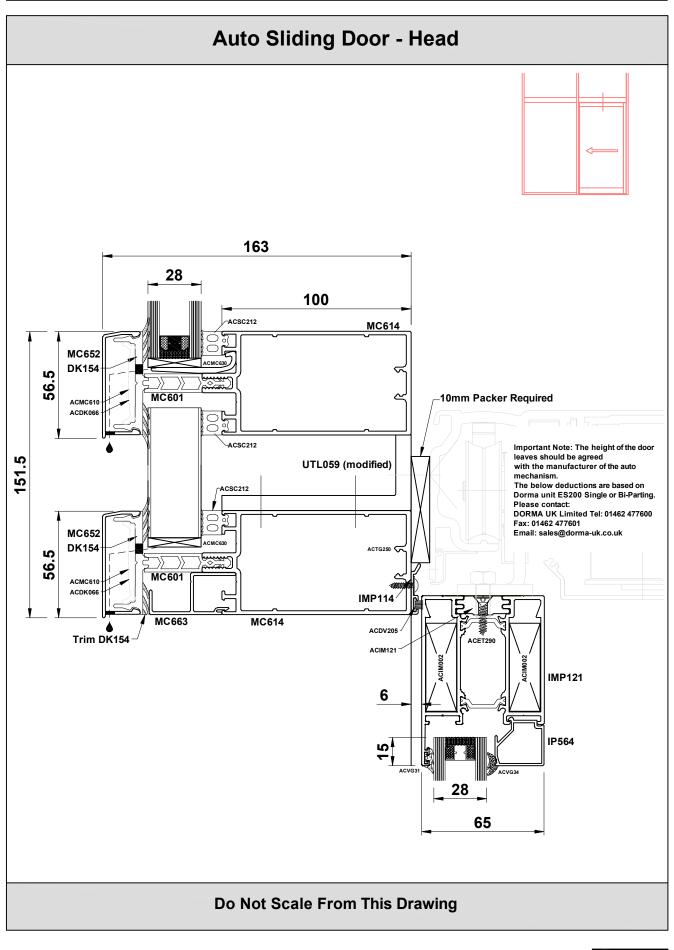
C1





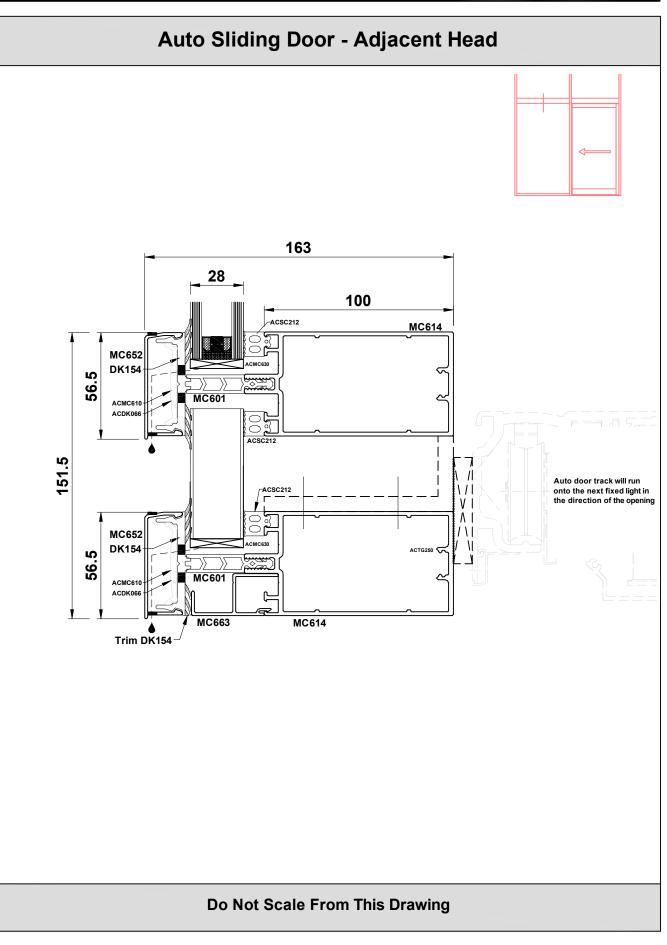




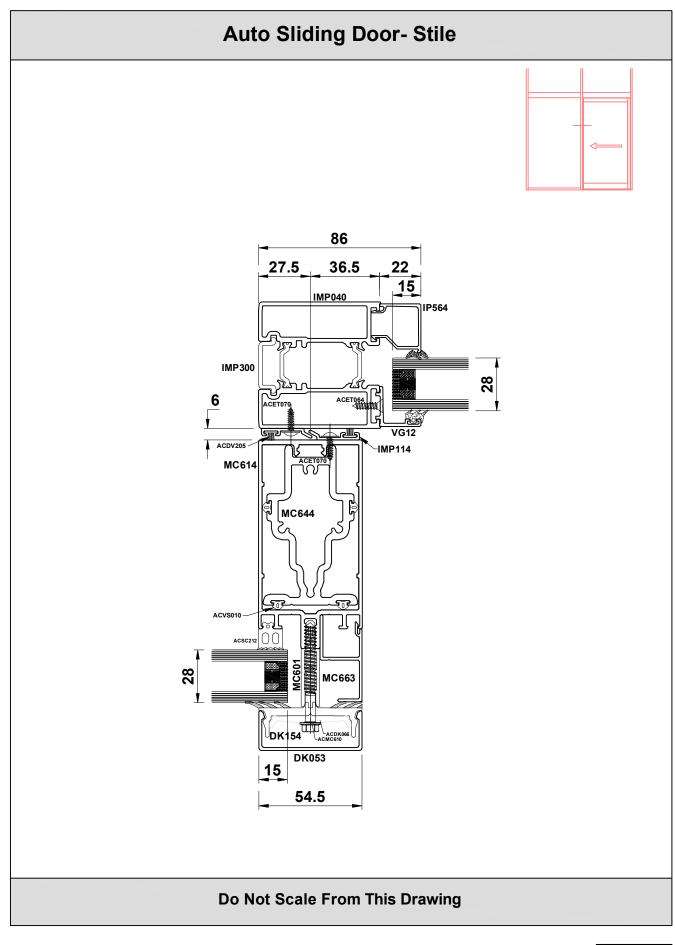






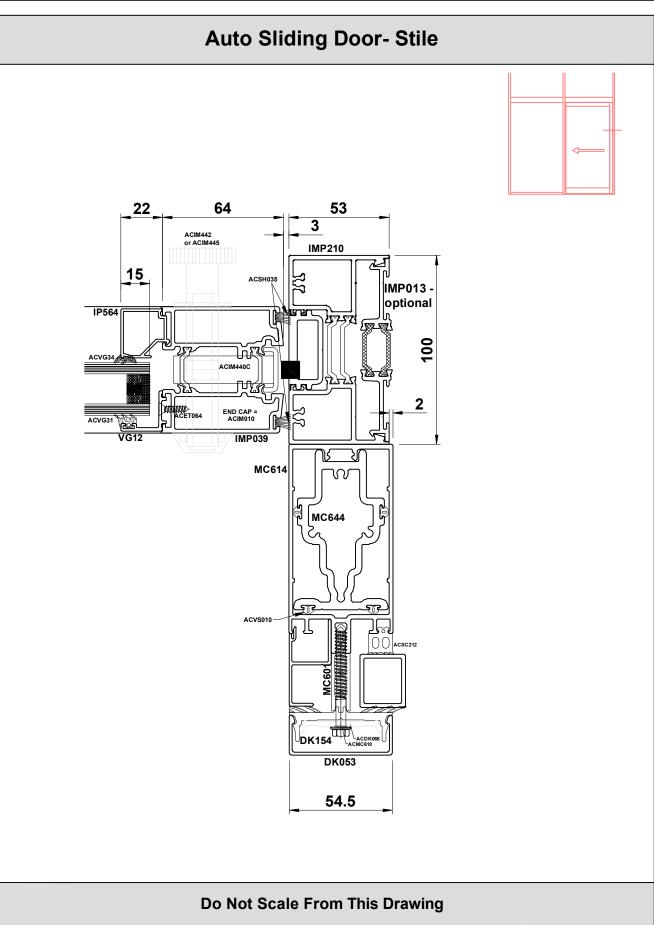














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# Section D





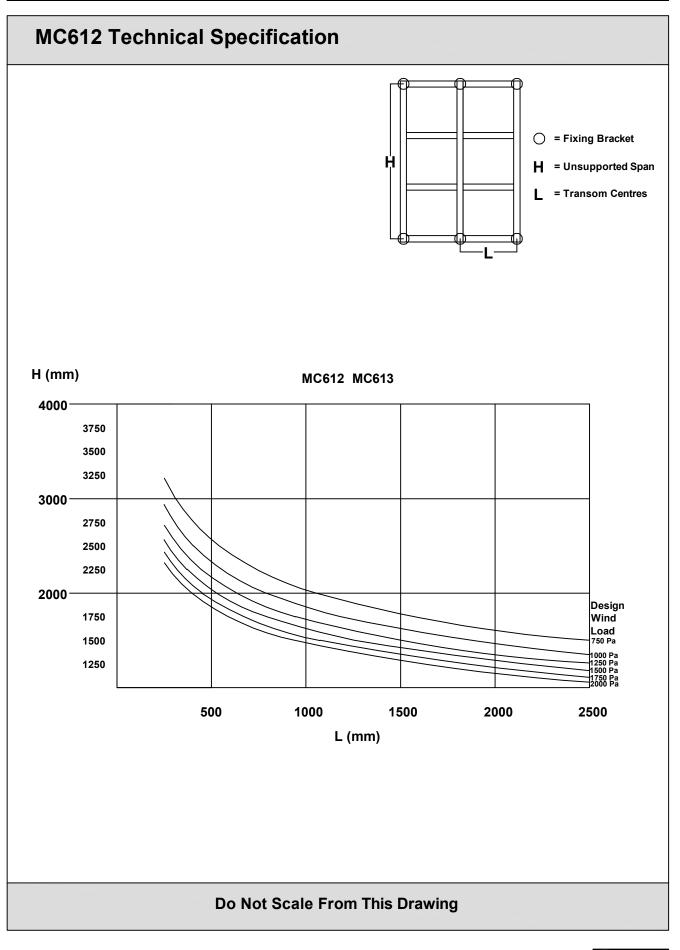
#### Statics

The selection of suitable mullions and transoms should 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

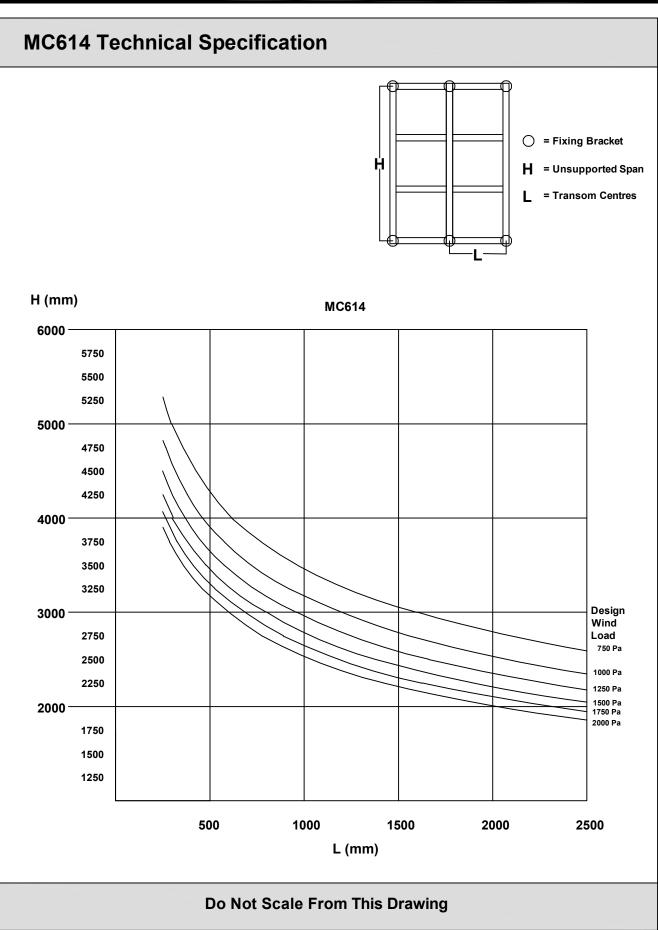






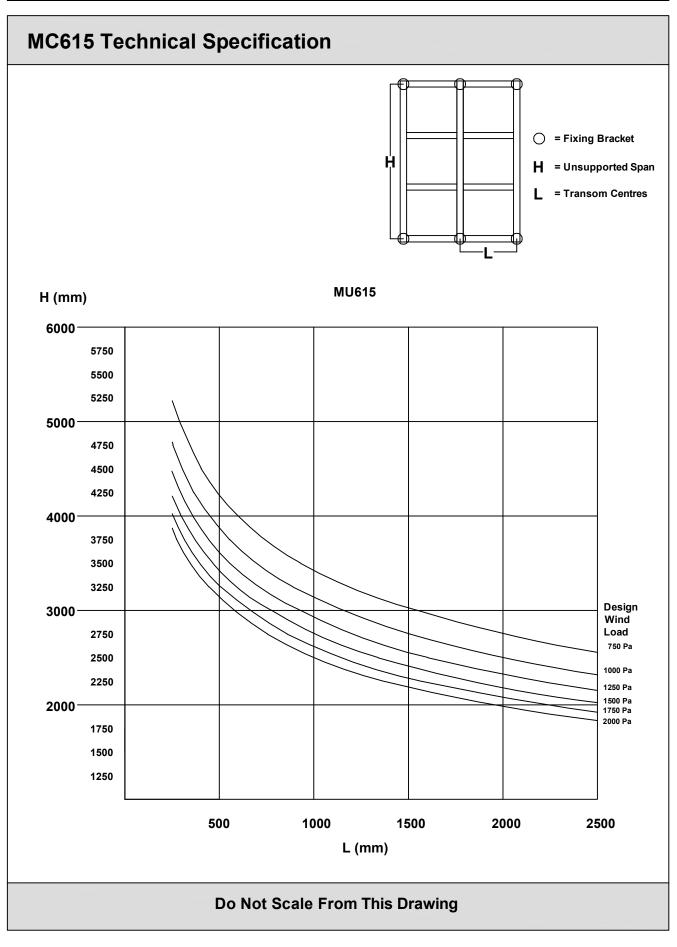






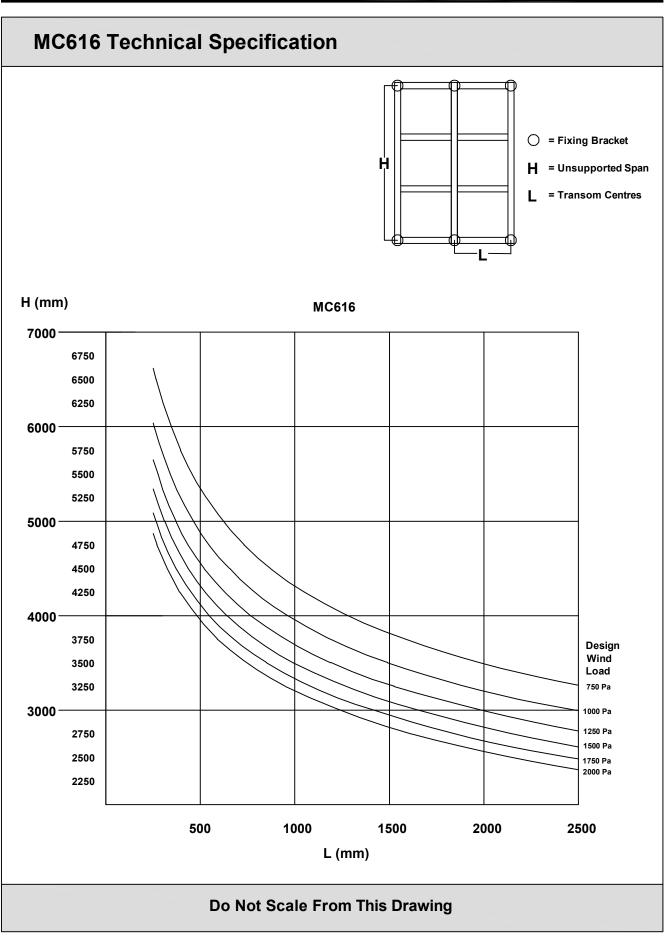






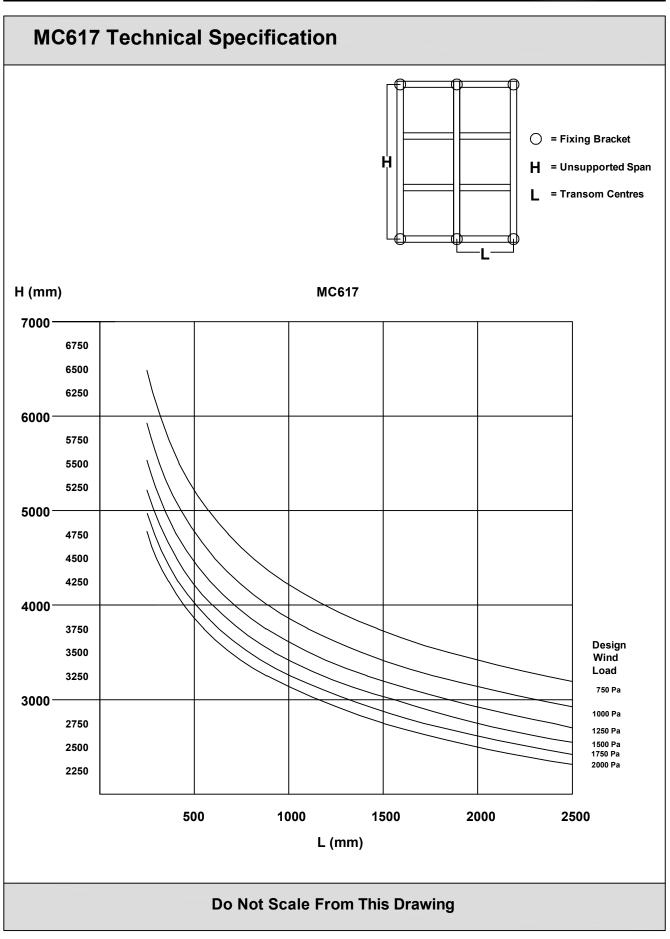






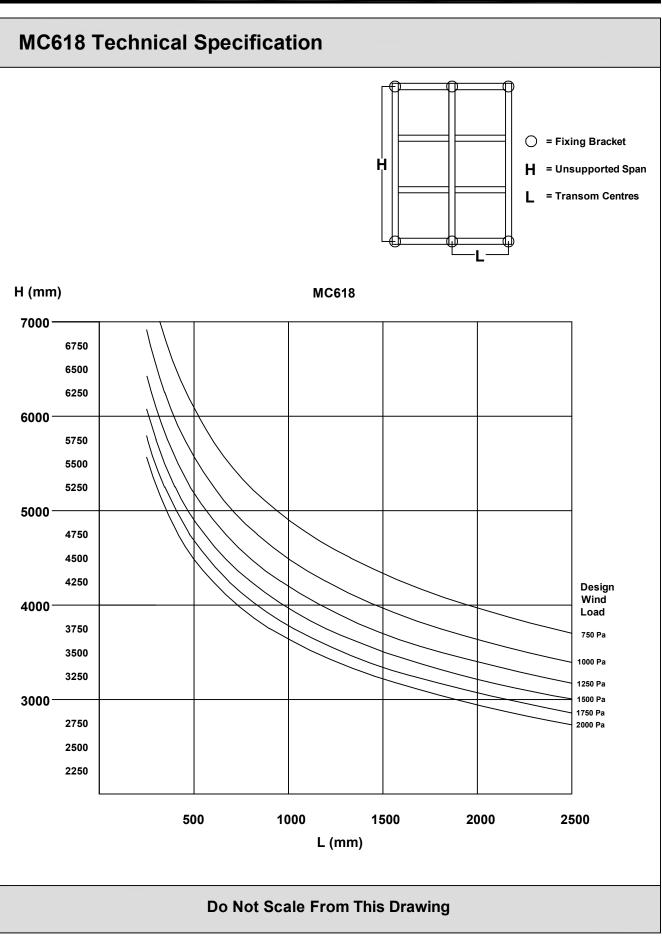








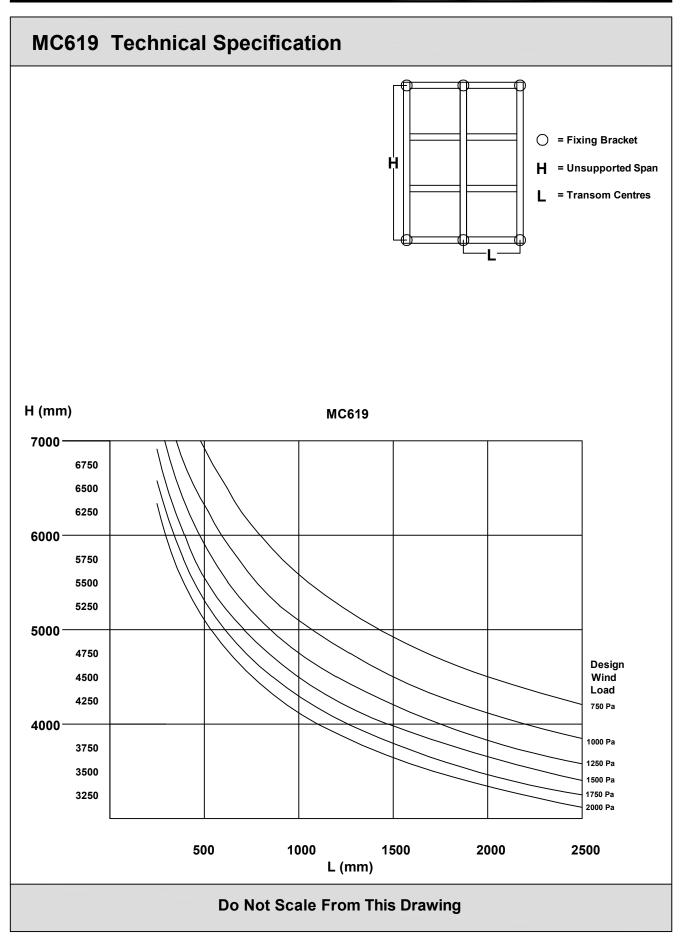






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Section E

#### Construction Drawings Bracket requirement Gui Deductions ...... Mullion Preparation - Sti Transom Preparation - Sti Stick Build and Ladder F Stick Build and Ladder F Ladder Frame assembly Drainage and Pressure E Sleeve Detail ..... Splice Joint ..... Glazing ....

S	
uide	Page E02
	Page E03
tick Build with Spring-Pin and Casting	Page E04
Stick Build with Spring-Pin and Casting	Page E05
Frame with Shear Blocks	Page E06
Frame with Shear Blocks	Page E07
y using Screw Ports	Page E08
Equalisation	Page E09
	Page E10
	Page E11
	Page E12



#### **Bracket Requirement Guide**

#### 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.

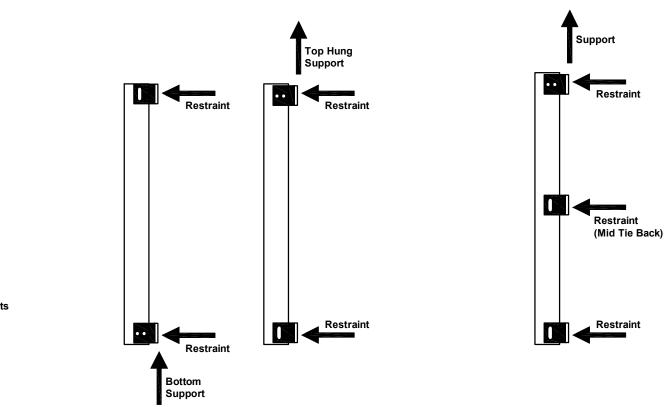
Brackets and fixings on curtain wall are structural and must be designed to relevant structural codes. BS8118. Structural Use of Aluminium

## Single Span

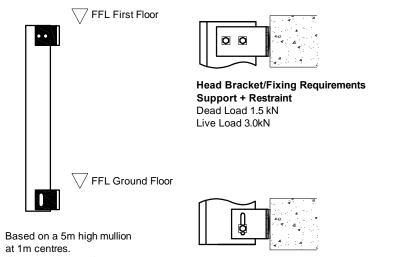
For single span there are two possible arrangements of these fixings for a single storey mullion. The top hung arrangement is more common but the bottom supported arrangement may be used, particularly for low rise construction.

## 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.



# **Typical Load Requirements**

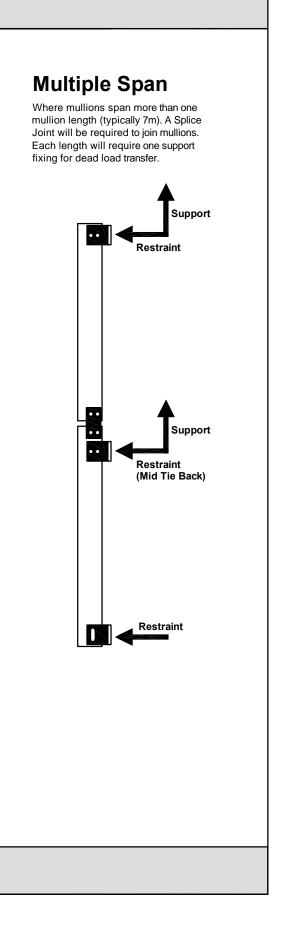


Glass Weight 30kg/m Wind Load 1200Pa



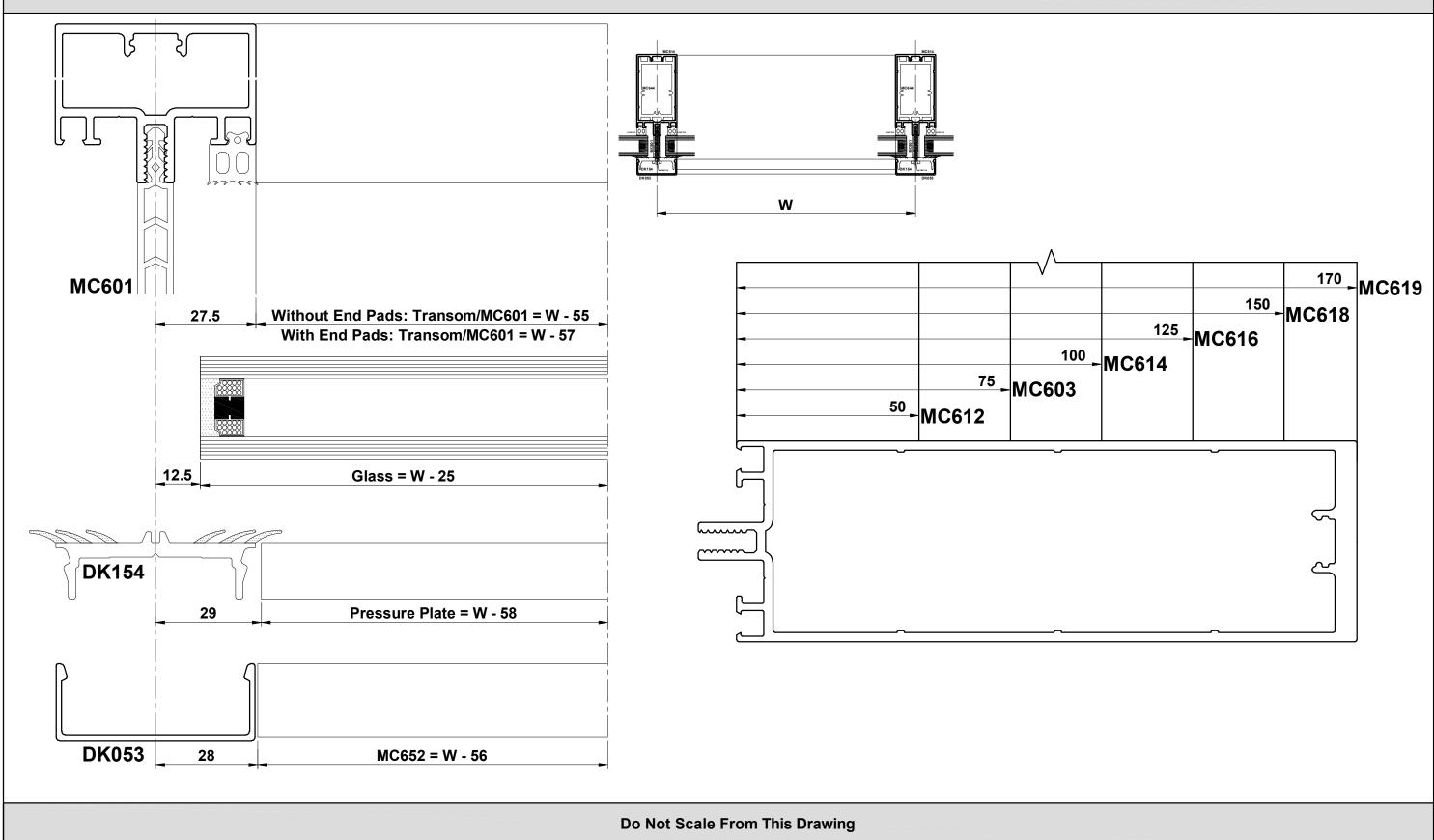
### **Do Not Scale From This Drawing**





## Deductions

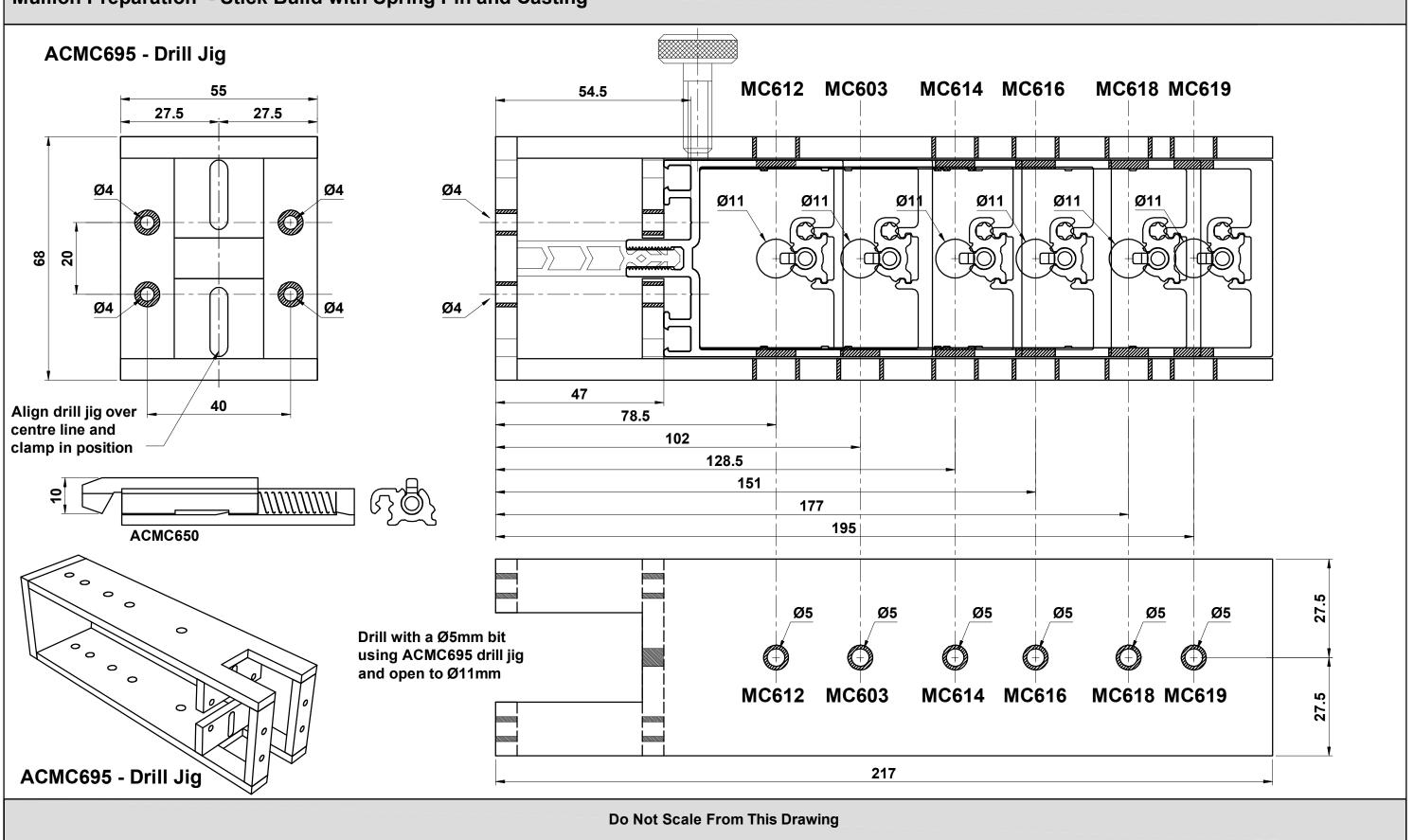
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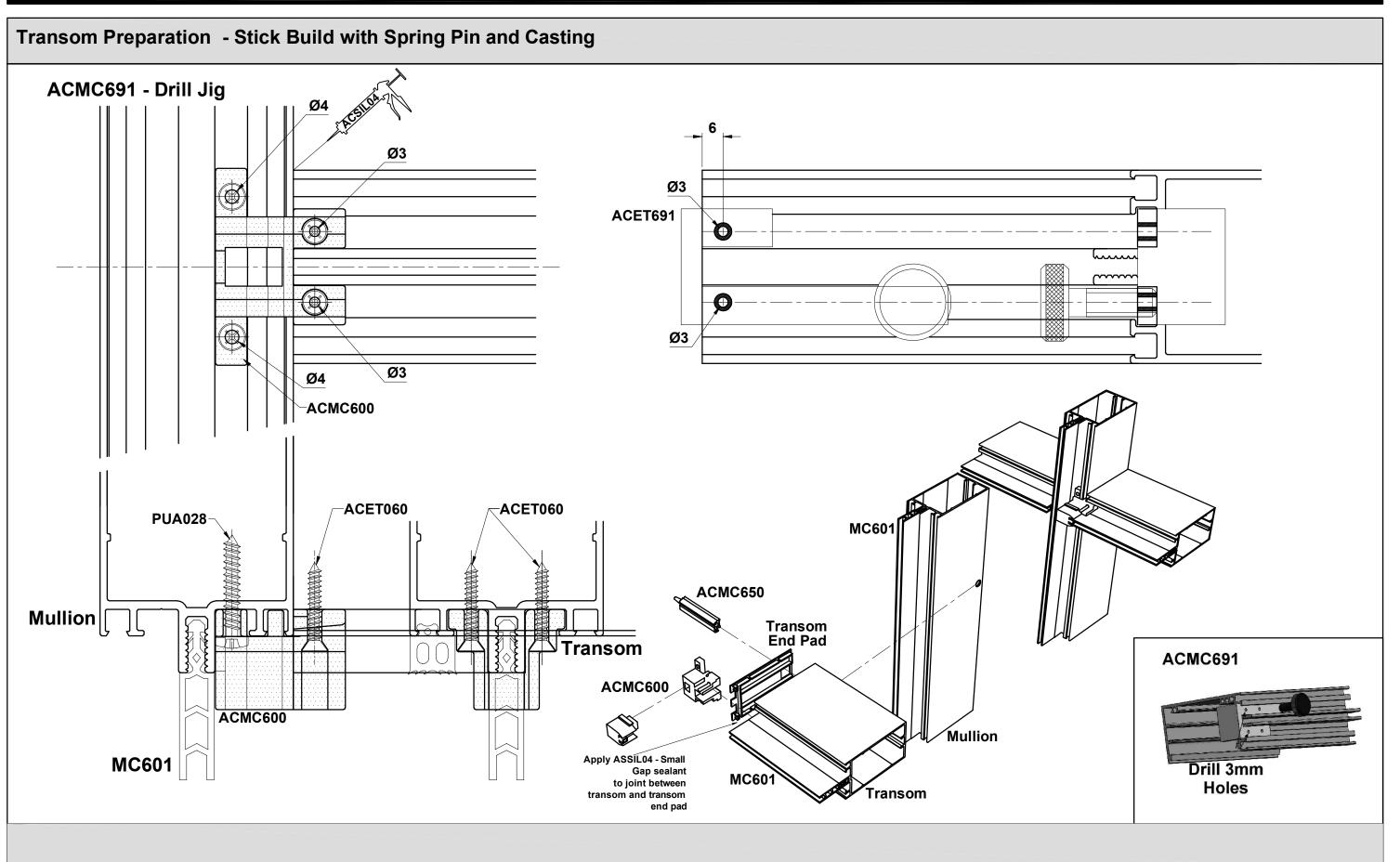


## Mullion Preparation - Stick Build with Spring Pin and Casting



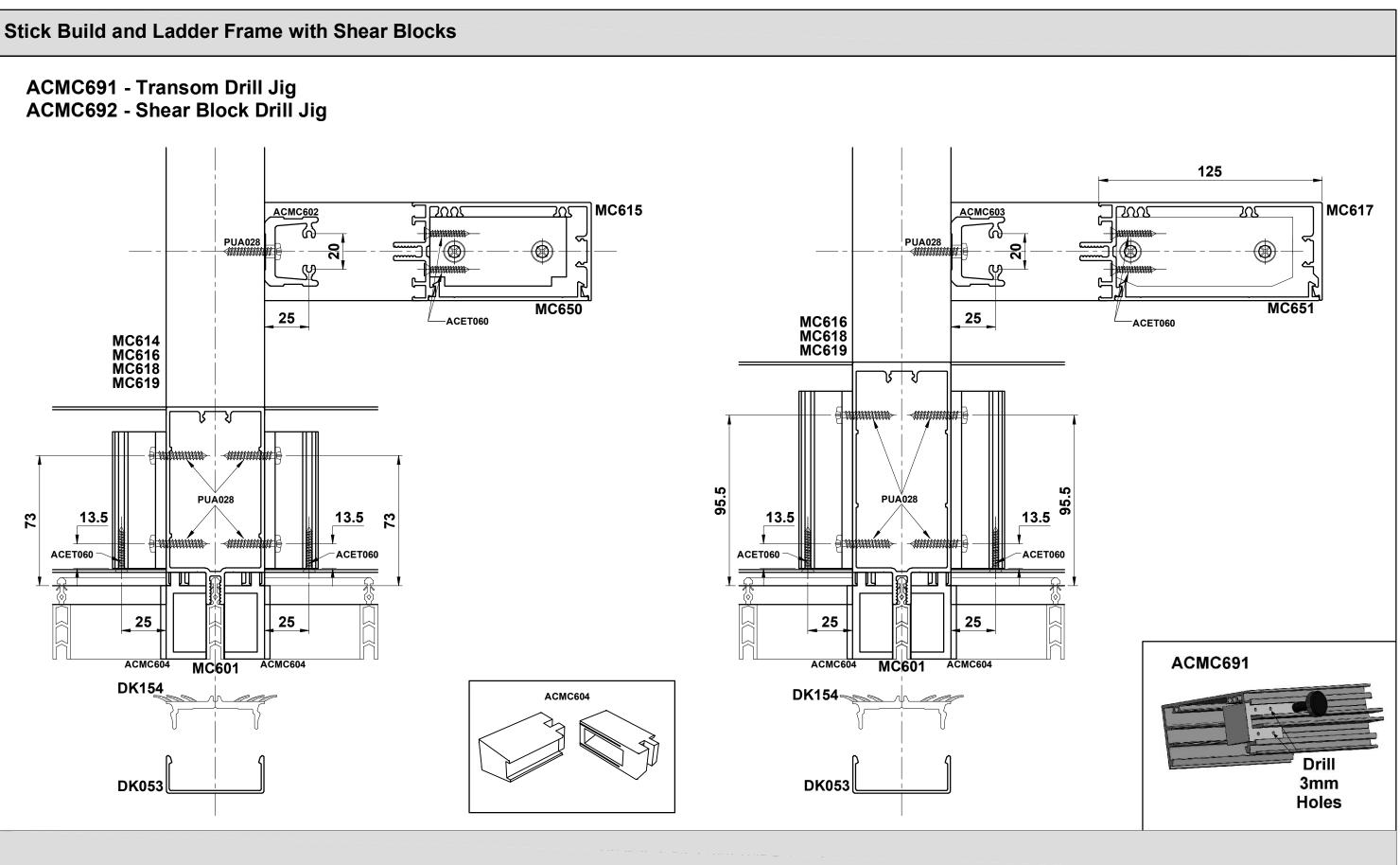




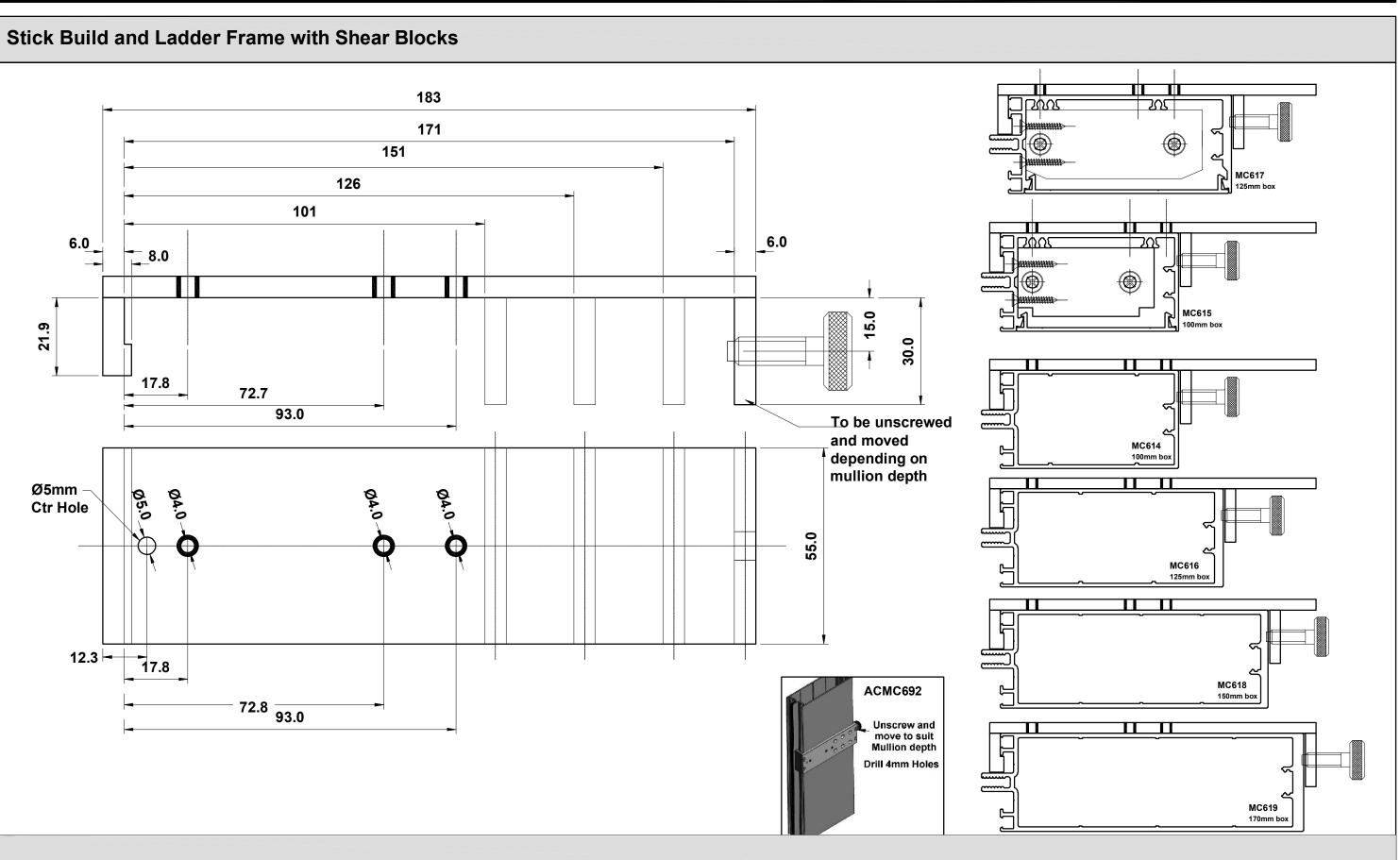




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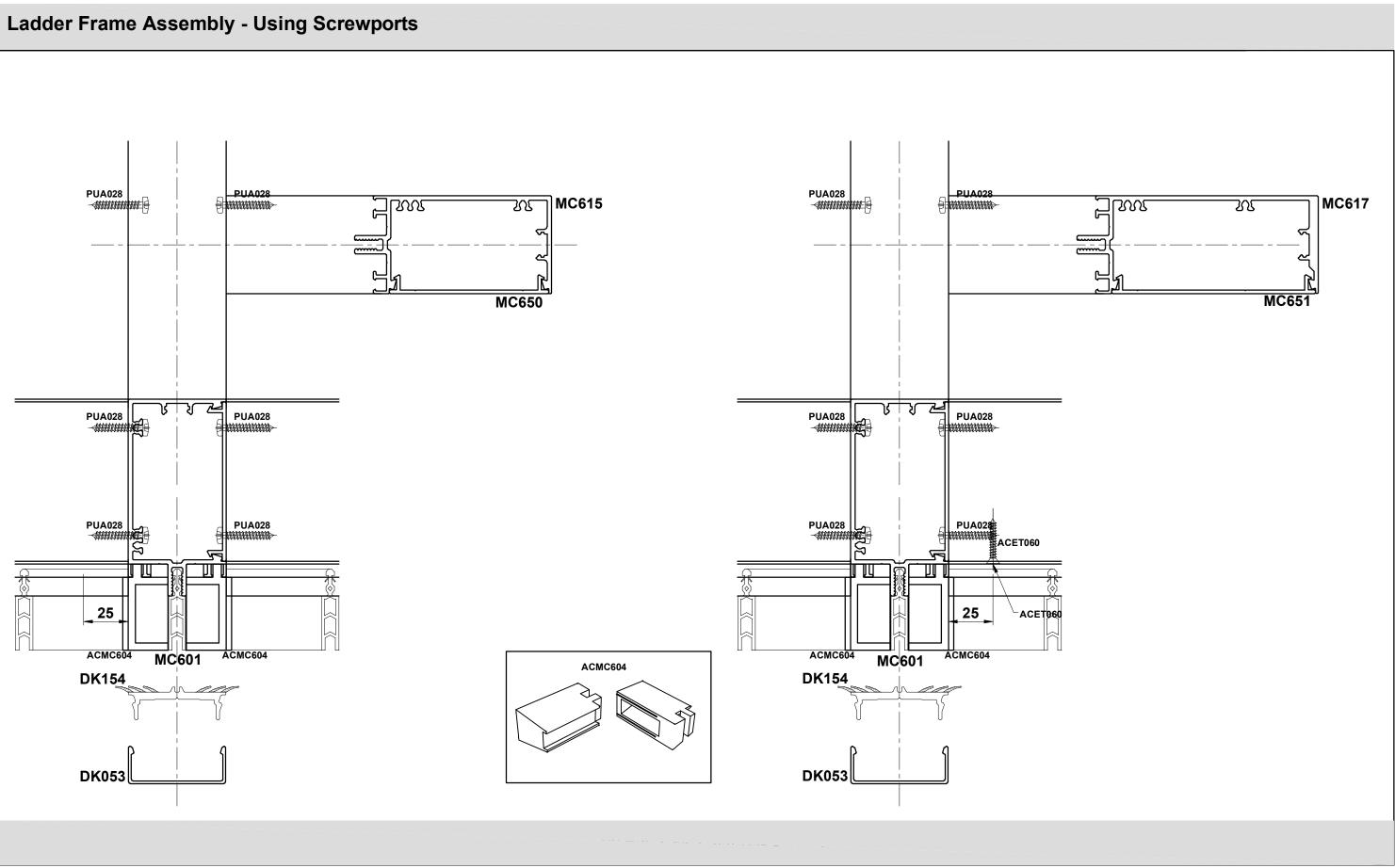








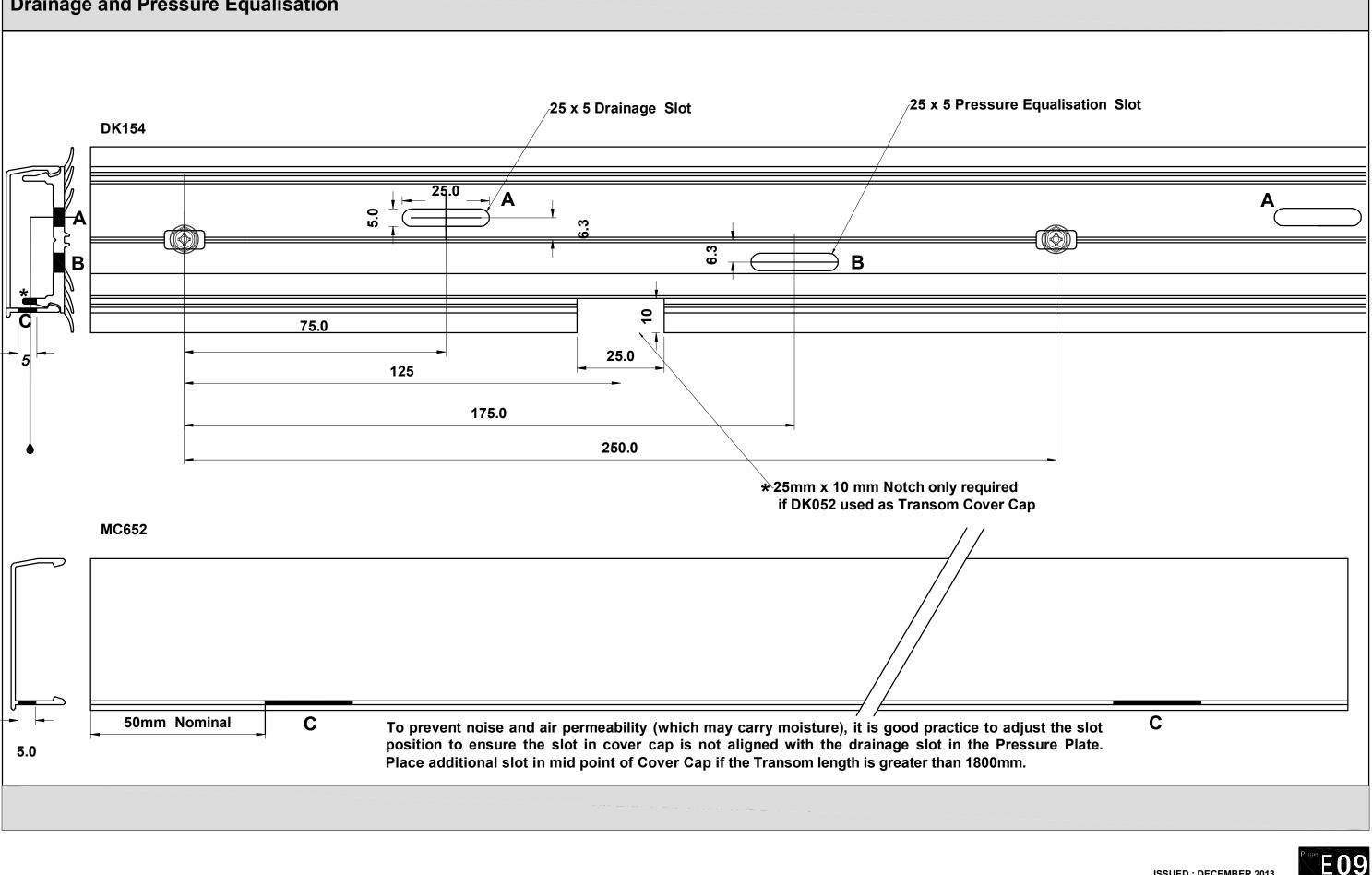




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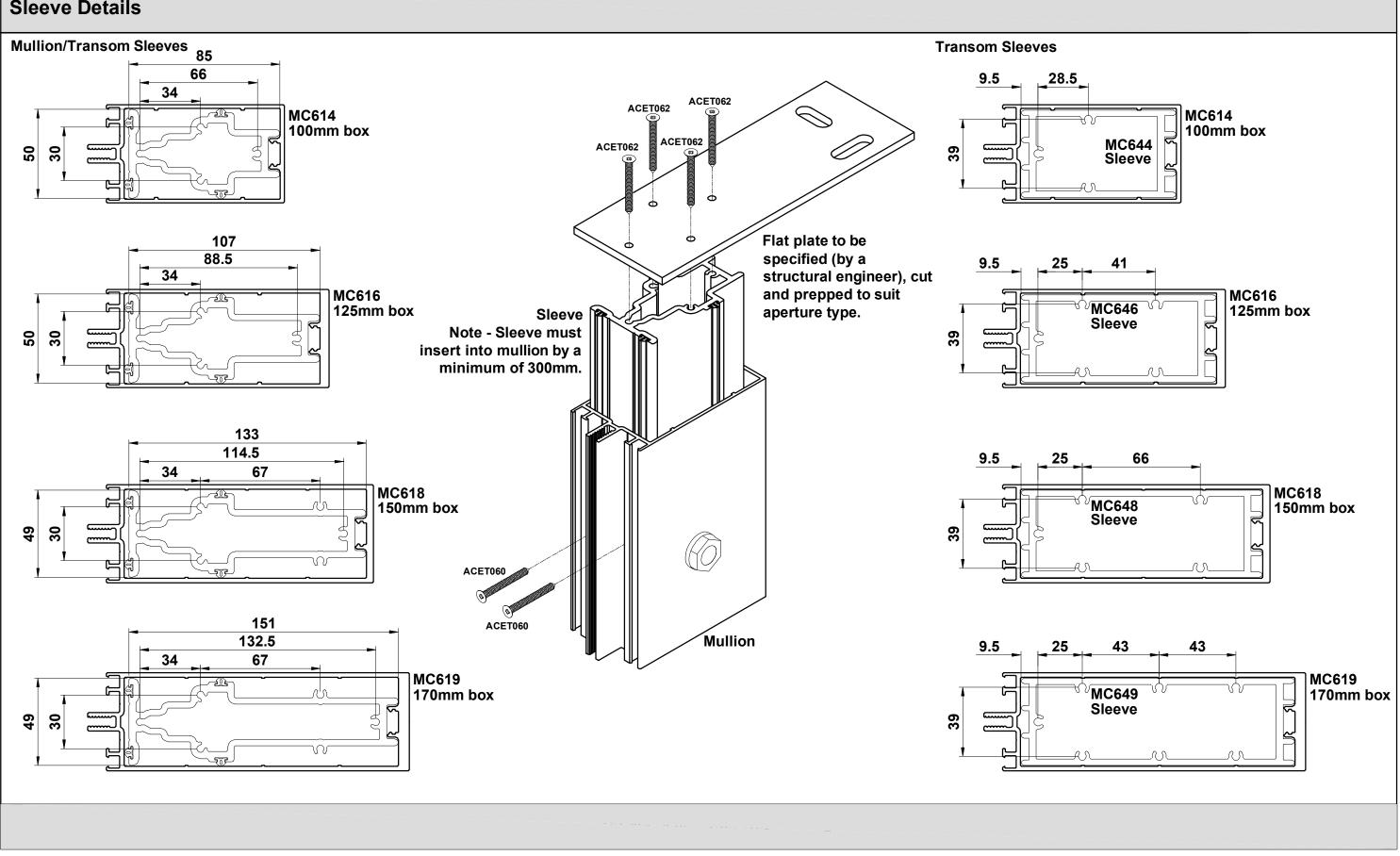


## **Drainage and Pressure Equalisation**



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### **Sleeve Details**

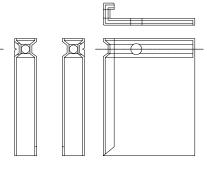


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#### Splice Joint MC050 DK154 100 100 <u>\_</u> G ACMC644 Sleeve 6 MC601 ACMC040 Mullion ACMC644 Ľ j 2 ACSILOR $\bigcirc$ 300 minimum h $\square$ 16 Bracket by others 50 ACMC644 Δ 9 100 50 150 $\triangleleft$ <u>\_</u> $\triangleleft$ 10 Δ . [] ACET060 Position screw to prevent sleeve from dropping during installation. Remove once complete. $\triangleleft$ **6** All brackets & fixings must be specified by a structural engineer

#### ACMC644

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#### Glazing 6.4 **Corner Gaskets** MC900 17 Single Glazing Adaptor ACMC115 Single Glazing: 100 17 Cleat = ACMC090 17 Double glazing: ACMC624 - 24mm Glazing 6 ACMC628 - 28mm Glazing 100 ACMC632 - 32mm Glazing 24 ACMC115 Туре В Type A لے ا Type A Туре В 28 ACSC212 $\circ$ Type B Sh Type A Use ACMX09830 EPDM Туре А 32 Gasket Sealant to join corner gasket to ACSC208 standard gasket 102

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