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Updates

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Specification

GENERAL DESCRIPTION

The "Alitherm Heritage HD" window system described in this manual is designed to offer a modern aluminium thermally broken replacement to steel windows. Taking inspiration from traditional steel windows, Alitherm Heritage HD features signature slim sightlines and attractive aesthetic contours coupled with polyamide thermal break technology giving Alitherm Heritage HD enhanced thermal performance and narrow sightlines.

Alitherm Heritage HD is designed to be built as a series of horizontal or vertical modules which can be stacked using horizontal couplers to form a multi-part window featuring a specially design drip bar between modules.

Applications:

Windows:

- Fixed windows
- Side hung open out casements
- Top hung open out casements

Corner assembly of Alitherm Heritage HD is crimping only.

PROFILE SPECIFICATION

The window frame are constructed of aluminium alloy extrusion to BS EN 755-9 and BS EN 12020, extruded from 6060 T6 alloy. The internal and external extrusions are separated with a polyamide thermal break.

The external 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. Dual colour is available.

Specification

GENERAL MANUFACTURING

Outer and vent frames are made by cutting the frame profiles with accurate 45° mitred ends using Tungsten Carbide Tipped Saw Blades, operating at approximately 3000 rpm.

The corners are joined using the Alitherm Heritage HD crimping cleats to form a cold forged corner joint (made by deforming small slugs of metal into the groove of the corner cleat).

The ends of transoms and mullions are profiled to fit the frame and fixed using self-tapping screws with a small joint sealant.

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.

For advise on window sizes outside of the recommended design limitations, please contact the Technical Department at Smart Systems Ltd Tel: 01934 876100

Specification

WINDOW DRAINAGE

As with all dry glazed systems, it is recommended that the window system is adequately drained and ventilated. Refer to drainage details in manual, if in doubt ask The Technical Department.

In order to get maximum performance and weather resistance it is recommended that drips are used over all vents.

OUTER FRAME MANUFACTURING INFORMATION

The outer frame members are cut with 45° mitred ends to the overall size required, measured to the longest point of the metal.

Prior to corner crimping the centre line position of any transoms or mullions should be marked on the outer frame members. Where the transom/mullion runs right through, it should be marked out on both jambs or head and cill members in pairs to ensure accurate alignment of the sections.

Using the marked centre line, Drill the transom/mullion fixing holes using a 5mm dia. drill bit.

Corners are formed by coating the cut faces to be joined with a suitable small gap sealer. Into the mitred corner insert the cleat glue and the required corner cleats and, where required, the aluminium corner chevrons. The two mitred ends are then brought together and crimped. The small gap sealer ensures a permanent joint and guards against the ingress of moisture and joint movement. After crimping the corner joint, special care should be taken to ensure any excess sealer is removed from painted surfaces.

Transoms or mullions are cut with square ends to the sizes calculated on the cutting formula sheets. The ends are then profiled to allow them to fit into the outer frame. Special tooling is available on request to profile the end of transom/mullion.

Prior to fixing of transoms and mullions smear the cut ends with a suitable small gap sealer. After fixing, special care should be taken to ensure any excess is cleared from painted surfaces.

Specification

GLAZING

All beads are cut to suit the glazing aperture on the fully assembled window for glazing either at factory or on site as required.

EXTERNALLY BEADED GLAZING

Glazing beads are fitted to openings by cutting the horizontal beads square to head and cill of each vent and fixed light area. Vertical beads are cut at 45° or 90° both ends. When using glazing beads W20362, W20365 and W20366 slide retained ACET845 gasket into section and ensure it is not stretched. Insert bottom beads and two setting blocks to ensure glass will be centralized in vertical dimension of opening (glazing blocks must be full width of cavity to fully support glass or sealed unit), then insert top bead followed by side beads. Finish glazing by insertion of internal gaskets all round. We advise to seal all beads with silicon in high exposed areas.

INTERNALLY BEADED GLAZING

Glazing beads are fitted to openings by cutting the horizontal beads square to head and cill of each vent and fixed light area. Vertical beads are cut square at both ends. Insert bottom beads and two setting blocks to ensure glass will be centralized in vertical dimension of opening (glazing blocks must be full width of cavity to fully support glass or sealed unit), then insert top bead followed by side beads. Finish glazing by insertion of internal gaskets all round except in the case of 28mm glazing where glazing tape is used in conjunction with vent profile W20320 & W20325. We advise to seal all beads with silicon in high exposed areas.

Specification

Kitemark™ Certificate No. KM 81580

WINDOW DESIGN LIMITATIONS & PERFORMANCE CHARACTERISTICS

Window Type	Width (mm) Maximum	Height (mm) Maximum	Weight (kg) Maximum	Area (M²) Maximum	Friction Stays (up to and including)	Transom/Mullion Length (mm) inc frame - Maximum	Air Permeability classification	Water tightness classification	Resistance to Wind classification	Exposure category as given in Table 1 of BS 6375-1:2009
Sash dimensions for windows with approved sash profiles:										
Projecting top hung Internally beaded	1400	1400	40	-	24"	-	4	7A	AE2400	2000+
Projecting top hung Externally beaded	1400	1400	40	-	24"	-	4	5A	AE2400	2000+
Projecting side hung Internally beaded	600	1400	28	-	16"	-	4	7A	AE2400	2000+
Projecting side hung Externally beaded	600	1400	28	-	16"	-	4	5A	AE2400	2000+
Overall dimensions for windows with approved outer frame profiles:										
Fixed Internally Beaded	2100	2100	-	4.2	-	-	4	7A	AE2400	2000+
Fixed Externally Beaded	2100	2100	-	4.2	-	-	4	5A	AE2400	2000+
Overall dimensions for approved outer frames & transom/mullion profiles:										
Multilights* W2035 T/M Internally Beaded	2100	2100	-	2.5	-	1450	4	7A	AE2400	2000+
Multilights* W2035 T/M Externally Beaded	2100	2100	-	2.5	-	1450	4	5A	AE2400	2000+

*Transom/mullion subject to
lxx/lyy requirements

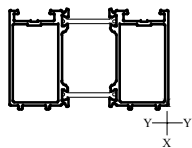
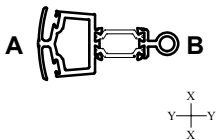
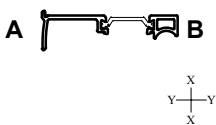
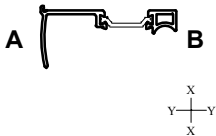
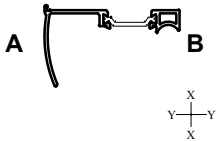
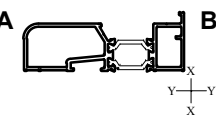
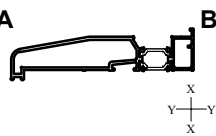
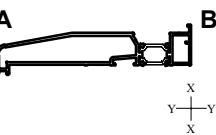
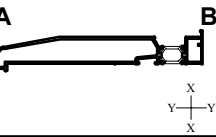
Please see pages B36, 37 & 38 for more
guidance on vent sizes, limitations &
hardware selection.

⚠ Important! ⚠

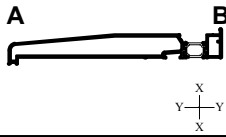
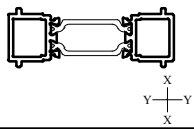
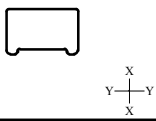
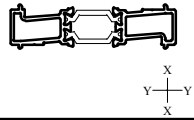
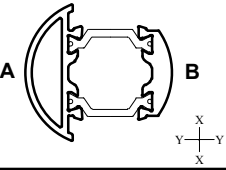
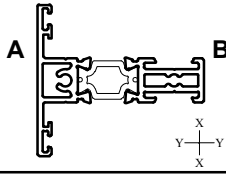
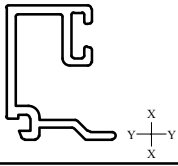
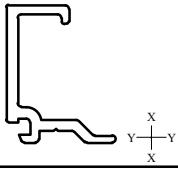
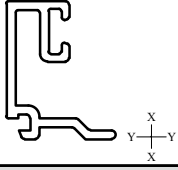
The size parameters shown against Kitemark are the maximum allowed without the need for further testing. Please note these are not necessarily the system parameters which may be smaller or larger. Please refer to fabrication parameters in this manual.

Specification

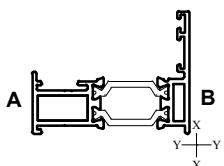
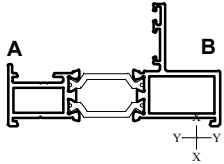
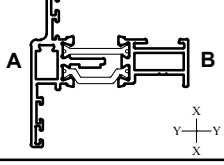
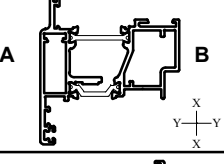
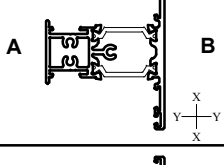
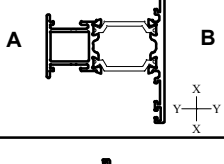
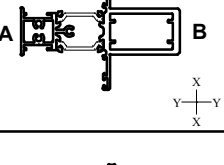
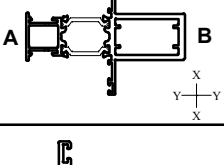
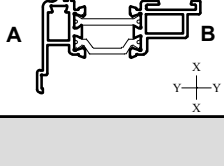
PROFILES : TECHNICAL INFORMATION

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DV515		A26	356	85	27.16 — 7.76	14.38 — 6.75	6.5	1	✓	✓	✓	✓	✓
ETC080		A25	334	61	25.58 ----- 5.47	4.88 ----- 2.57	6.5	1	✓	✓	✓	✓	✓
ETC081		A25	197	35	13.85 ----- 3.8	0.36 ----- 0.52	6.5	1	✓	✓	✓	✓	✓
ETC082		A25	221	47	16.21 ----- 4.19	1.15 ----- 1.29	6.5	1	✓	✓	✓	✓	✓
ETC083		A25	248	58	17.66 ----- 4.32	2.64 ----- 2.36	6.5	1	✓	✓	✓	✓	✓
ETC451		A33	271	180	32.44 ----- 7.29	3.46 ----- 2.79	6.5	1	✓	✓	✓	✓	✓
ETC452		A33	414	382	122.46 ----- 18.03	6.01 ----- 3.34	6.5	1	✓	✓	✓	✓	✓
ETC457		A33	444	412	163.27 ----- 21.60	6.79 ----- 3.73	6.5	1	✓	✓	✓	✓	✓
ETC458		A33	524	492	313.62 ----- 32.63	8.87 ----- 4.79	6.5	1	✓	✓	✓	✓	✓
								A = Outside B = Inside		MF = Mill Finish SA = Silver Anodised KL = Basic Colour HP = Special Colour M = Dual Colour			

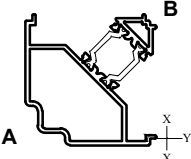
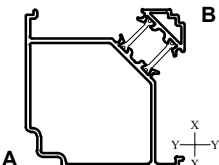
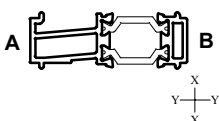
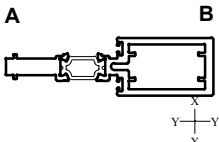
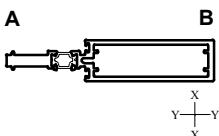
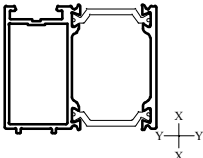
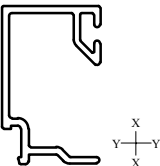
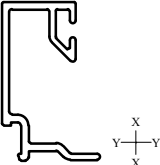
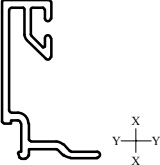
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ETC479N		A34	594	559	501.64 ----- 44.04	9.72 ----- 5.34	6.5	1	✓	✓	✓	✓	✓
ETC853		A32	219	54	23.28 ----- 6.65	1.94 ----- 1.43	6.5	1	✓	✓	✓	✓	✓
SPD750		A19	31	31	- ----- -	- ----- -	4	1	✓	✓	✓	✓	✓
UN3000		A31	200	43.5	15.8 ----- 4.51	0.79 ----- 0.84	6.5	1	✓	✓	✓	✓	✓
W20069		A23	192	71	5.05 ----- 2.55	2.00 ----- 1.12	5	1	✓	✓	✓	✓	✓
W20135N		A19	270	64	7.37 ----- 4.12	1.82 ----- 0.86	6.5	1	✓	✓	✓	✓	✓
W20168		A27	110	27	- ----- -	- ----- -	5	1	✓	✓	✓	✓	
W20170		A28	83	24	- ----- -	- ----- -	4	1	✓	✓	✓	✓	
W20171		A28	105	34	- ----- -	- ----- -	4	1	✓	✓	✓	✓	
								A = Outside B = Inside		MF = Mill Finish SA = Silver Anodised KL = Basic Colour HP = Special Colour M = Dual Colour			

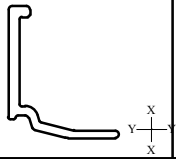
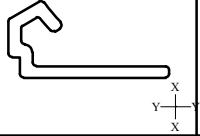
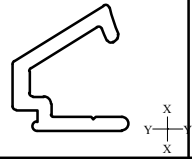
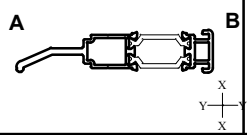
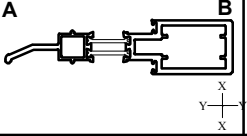
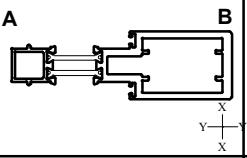
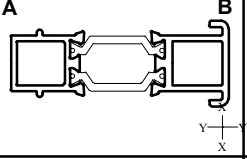
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W20310		A17	268	66	11.07 — 3.74	2.55 — 1.91	6.5	1	✓	✓	✓	✓	✓
W20317		A17	307	83	18.50 — 5.07	2.89 — 2.26	6.5	1	✓	✓	✓	✓	✓
W20320		A18	335	75	10.15 — 3.12	3.17 — 1.37	6.5	1	✓	✓	✓	✓	✓
W20325		A18	439	124	22.41 — 6.14	12 — 3.51	6.5	1	✓	✓	✓	✓	✓
W20330		A20	402	105	16.50 — 5.34	7.58 — 2.23	6.5	1	✓	✓	✓	✓	✓
W20331		A21	369	105	14.98 — 4.55	7.51 — 2.21	6.5	1	✓	✓	✓	✓	✓
W20332		A20	482	185	63.83 — 12.49	11.51 — 3.39	6.5	1	✓	✓	✓	✓	✓
W20333		A21	450	185	56.57 — 10.53	11.43 — 3.36	6.5	1	✓	✓	✓	✓	✓
W20345		A22	281	62	8.30 — 2.57	2.21 — 0.99	6.5	1	✓	✓	✓	✓	✓
								A = Outside B = Inside		MF = Mill Finish SA = Silver Anodised KL = Basic Colour HP = Special Colour M = Dual Colour			

PROFILES : TECHNICAL INFORMATION

Number	Picture	Page	Perim. mm	Mec. mm	lx(cm4) wx(cm3)	ly(cm4) wy(cm3)	Length	Pack pr.	MF	SA	KL	HP	M
W20348		A24	281	114	14.09 — 5.14	14.09 — 5.16	6.5	1	✓	✓	✓	✓	✓
W20349		A24	409	139	39.81 — 10.70	39.81 — 11.31	6.5	1	✓	✓	✓	✓	✓
W20350		A31	204	36	7.88 — 2.97	0.67 — 0.74	6.5	1	✓	✓	✓	✓	✓
W20351		A23	304	126	70.43 — 13.14	4.78 — 3.54	6.5	1	✓	✓	✓	✓	✓
W20354		A23	384	212	184.38 — 25.75	22.41 — 6.12	6.5	1	✓	✓	✓	✓	✓
W20356		A26	294	85.5	7.25 — 3.19	12.51 — 4.65	6.5	1	✓	✓	✓	✓	✓
W20362		A27	141	36.5	- — -	- — -	6.5	1	✓	✓	✓	✓	
W20365		A28	133	32.5	- — -	- — -	6.5	1	✓	✓	✓	✓	
W20366		A29	125	28.5	- — -	- — -	6.5	1	✓	✓	✓	✓	
								A = Outside B = Inside		MF = Mill Finish SA = Silver Anodised KL = Basic Colour HP = Special Colour M = Dual Colour			

PROFILES : TECHNICAL INFORMATION

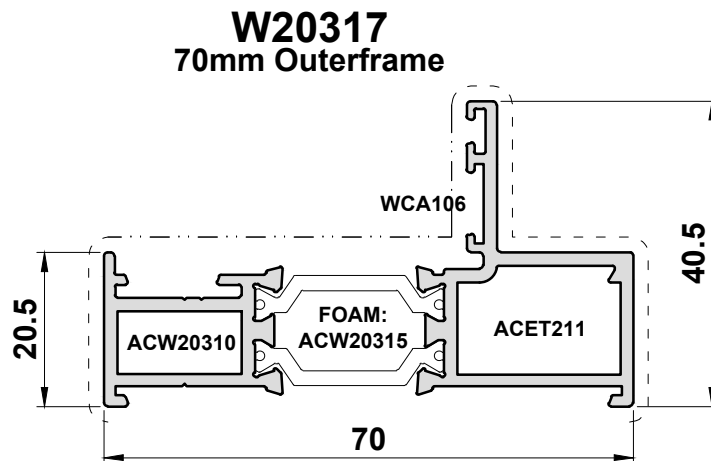
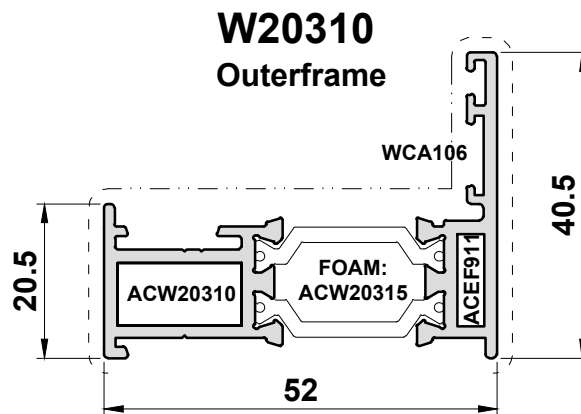
Number	Picture	Page	Perim. mm	Mec. mm	lx(cm4) wx(cm3)	ly(cm4) wy(cm3)	Length	Pack pr.	MF	SA	KL	HP	M
W20370		A29 & A30	63	15.5	- -	- -	6.5	1	✓	✓	✓	✓	
W20371		A23	70	19	- -	- -	6.5	1	✓	✓	✓	✓	
W20372		A23	79	26.5	- -	- -	6.5	1	✓	✓	✓	✓	
W20385		A30	259	101	24.65 5.24	0.76 0.87	6.5	1	✓	✓	✓	✓	✓
W20386		A30	375	198	102.48 12.84	6.57 4.47	6.5	1	✓	✓	✓	✓	✓
W20387		A31	312	135	54.56 9.15	6.47 4.31	6.5	1	✓	✓	✓	✓	✓
W20389		A31	209	47	10.28 3.26	0.92 0.81	6.5	1	✓	✓	✓	✓	✓
													
													
								A = Outside B = Inside		MF = Mill Finish SA = Silver Anodised KL = Basic Colour HP = Special Colour M = Dual Colour			

PROFILES : TECHNICAL INFORMATION

Number	Picture	Page	Perim. mm	Mec. mm	lx(cm4) wx(cm3)	ly(cm4) wy(cm3)	Length	Pack pr.	MF	SA	KL	HP	M
													
													
													
													
													
													
													
													
													
								A = Outside B = Inside		MF = Mill Finish SA = Silver Anodised KL = Basic Colour HP = Special Colour M = Dual Colour			

Primary Visible Side

Secondary Visible Side



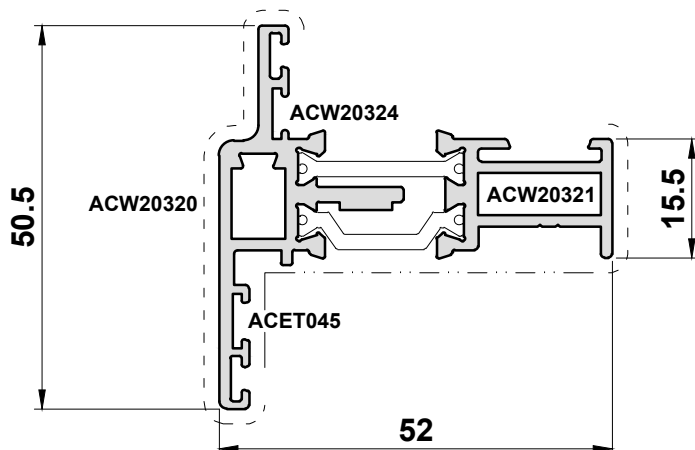
Scale 1:1

Primary Visible Side

Secondary Visible Side

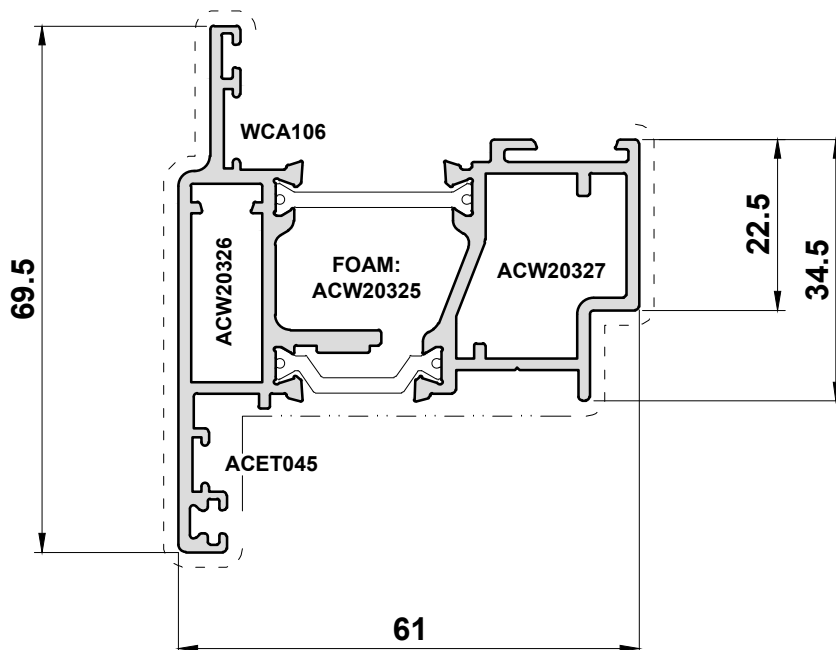
W20320

Vent



W20325

Deep Vent

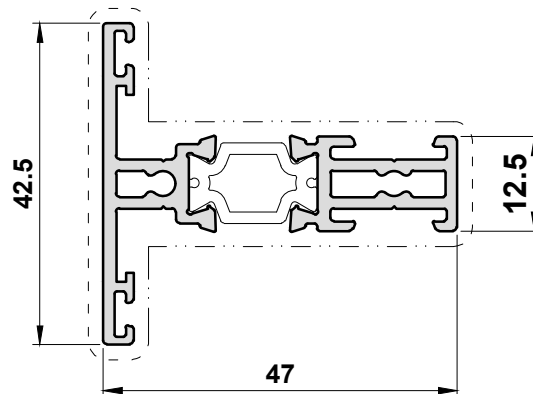


Scale 1:1

Primary Visible Side

Secondary Visible Side

W20135N
Dummy Transom

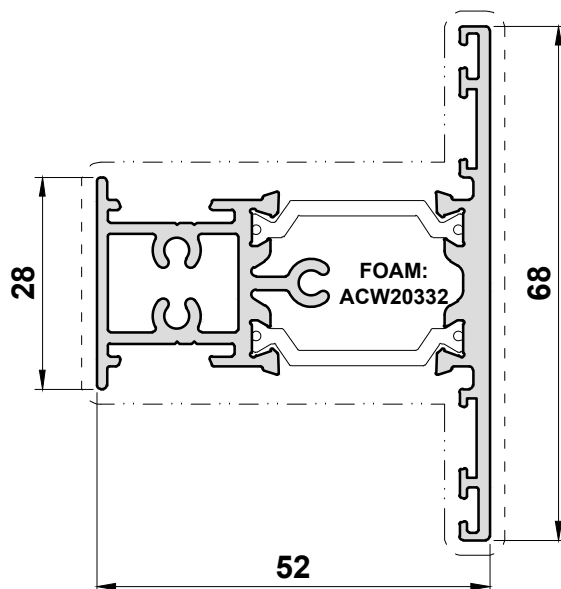


Scale 1:1

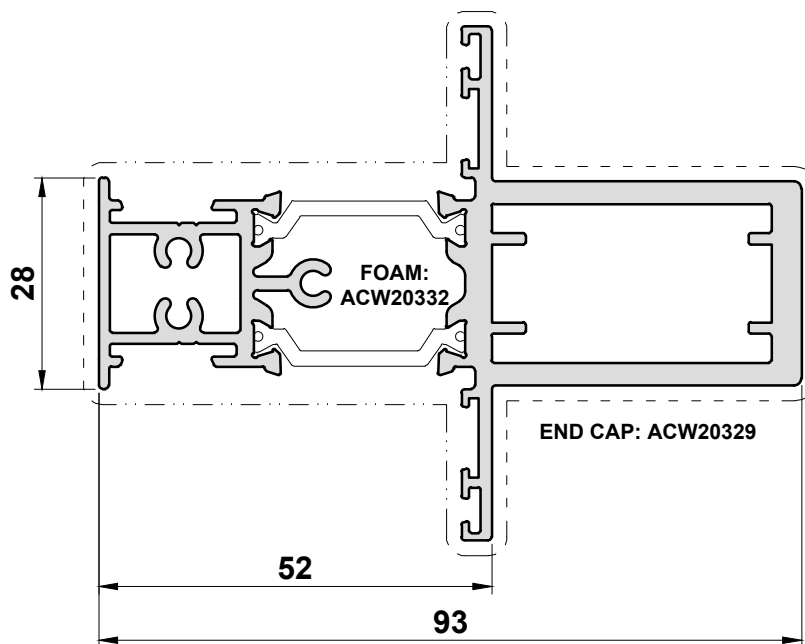
Primary Visible Side

Secondary Visible Side

W20330
Transom / Mullion



W20332
Reinforced Transom / Mullion



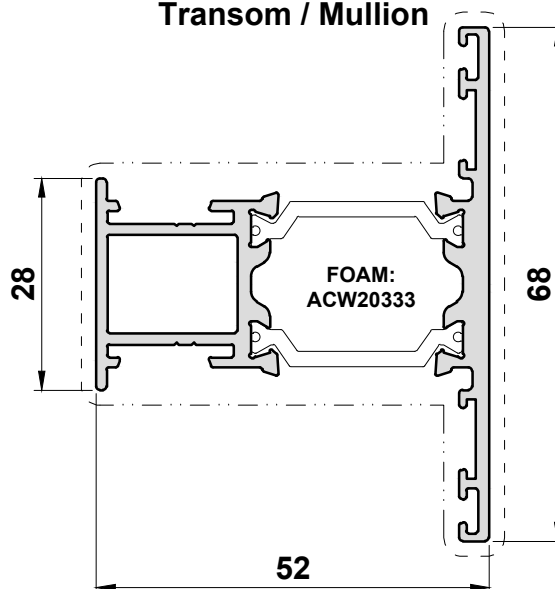
Scale 1:1

Primary Visible Side

Secondary Visible Side

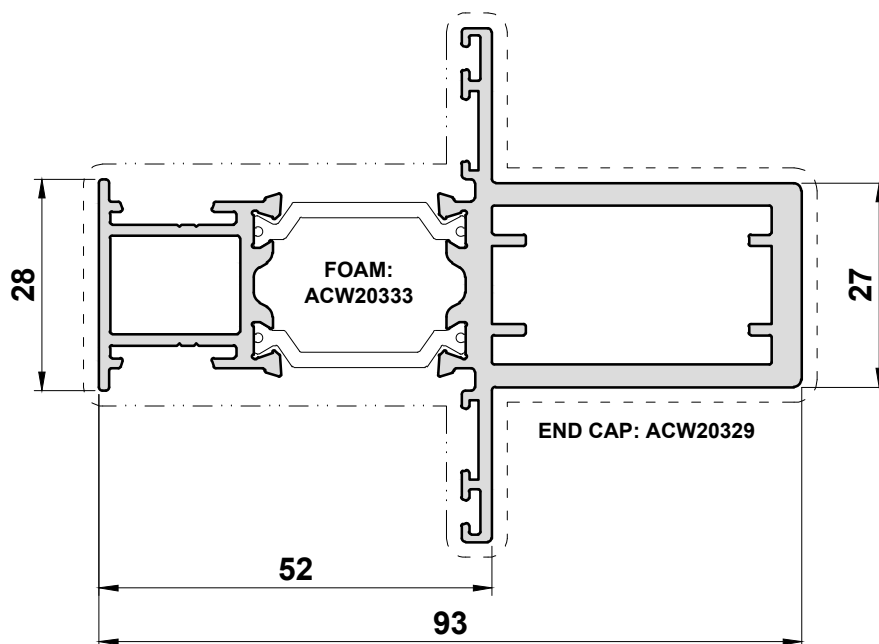
W20331

Transom / Mullion



W20333

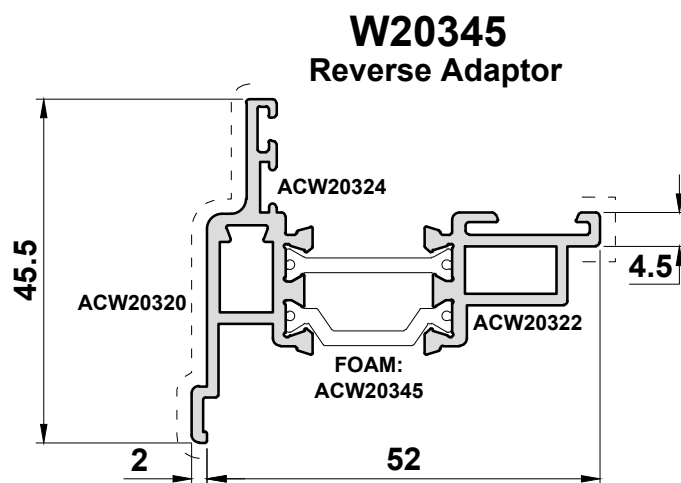
Reinforced Transom / Mullion



Scale 1:1

Primary Visible Side

Secondary Visible Side



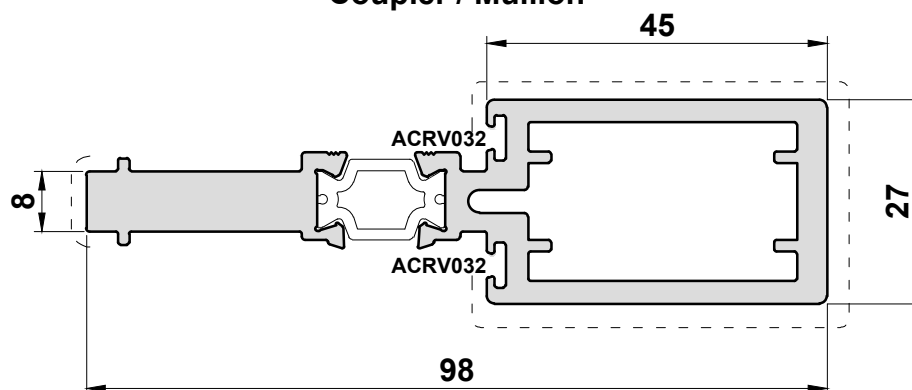
Scale 1:1

Primary Visible Side

Secondary Visible Side

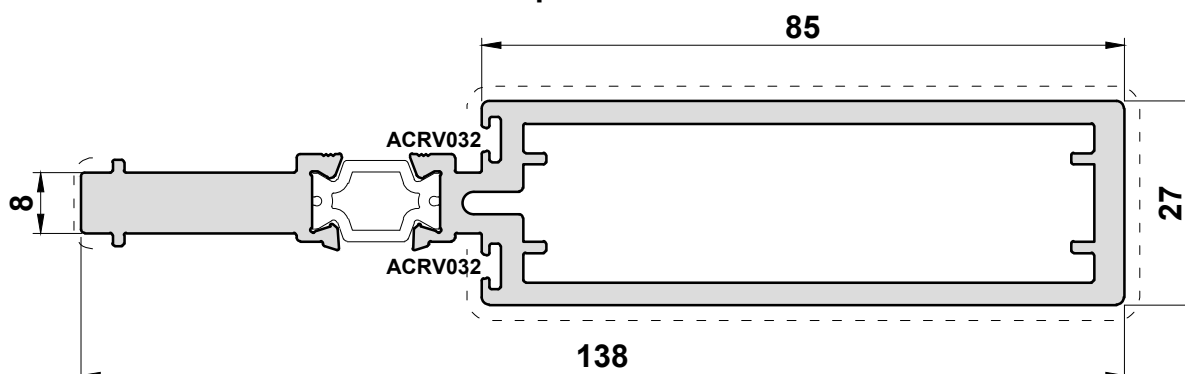
W20351

Coupler / Mullion



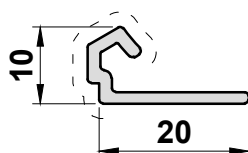
W20354

Coupler / Mullion



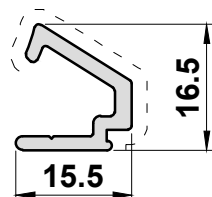
W20371

Bay Pole Adaptor



W20372

Bay Pole Adaptor



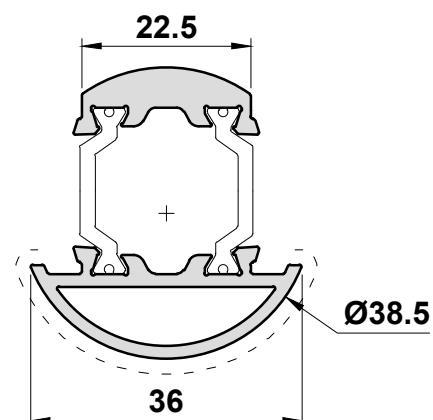
SPD750

Cill Infill



W20069

W20310 Bay Pole

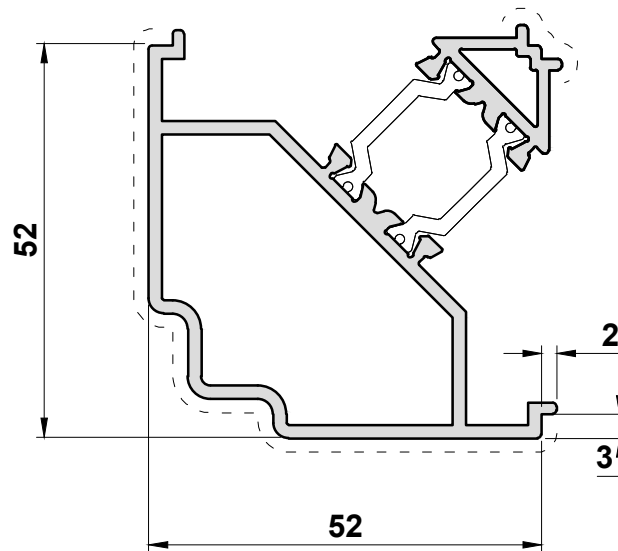


Scale 1:1

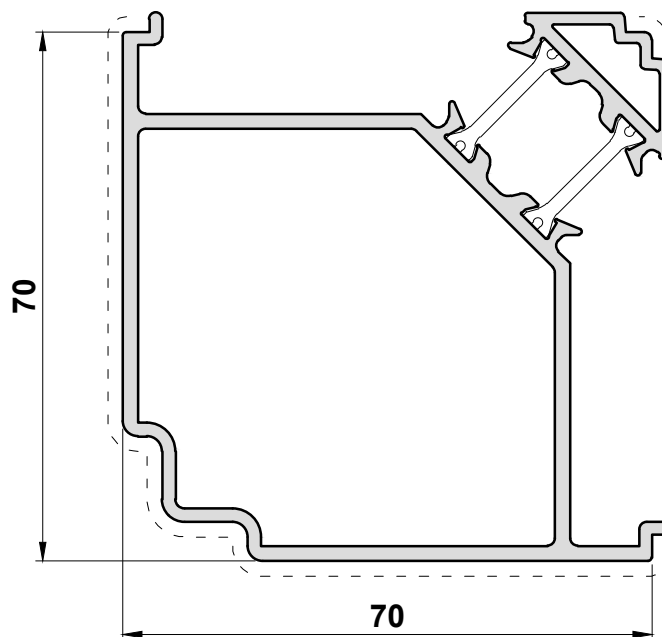
Primary Visible Side

Secondary Visible Side

W20348
52mm 90° Corner Post



W20349
70mm 90° Corner Post



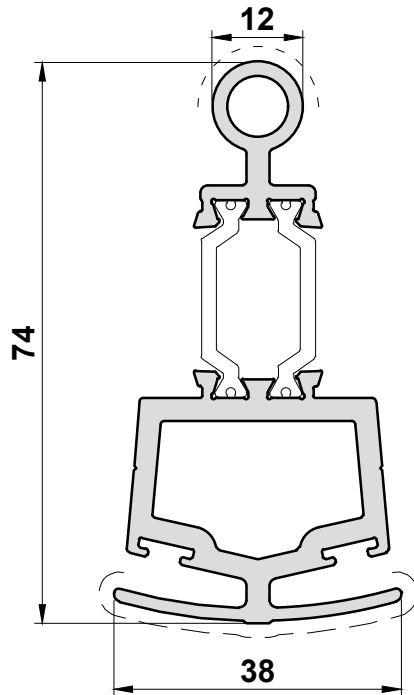
Scale 1:1

Primary Visible Side

Secondary Visible Side

ETC080

Bay Pole

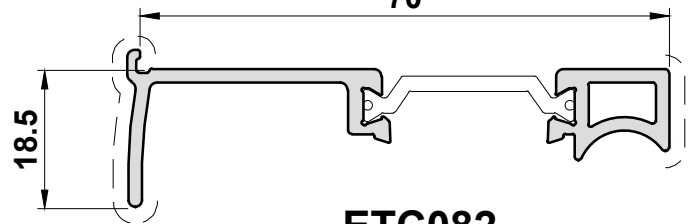


ETC081

169° - 150°

Bay Pole Adaptor

70

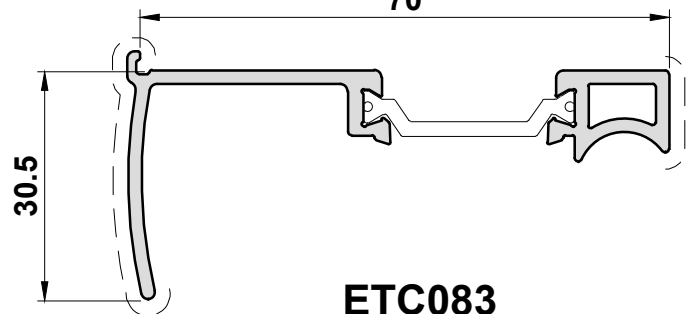


ETC082

149° - 130°

Bay Pole Adaptor

70

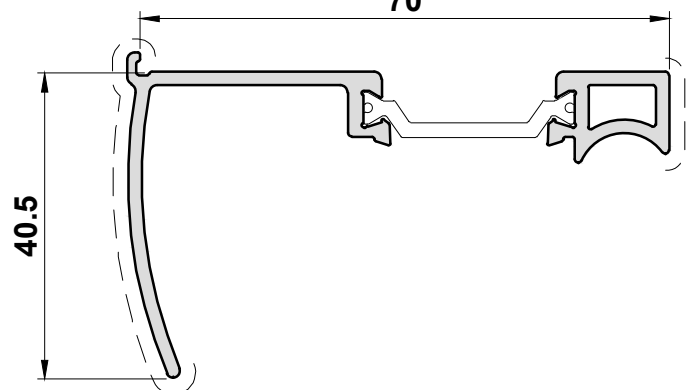


ETC083

129° - 115°

Bay Pole Adaptor

70



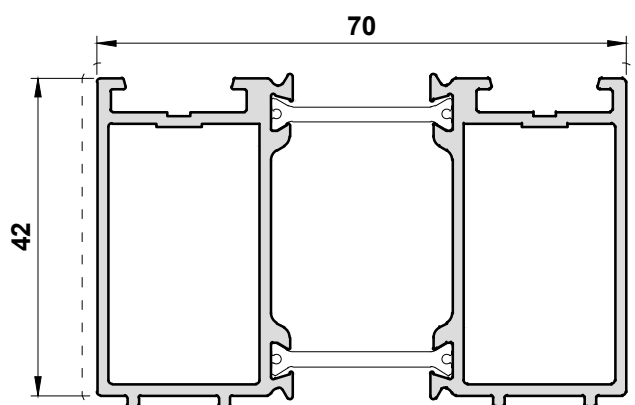
Scale 1:1

Primary Visible Side

Secondary Visible Side

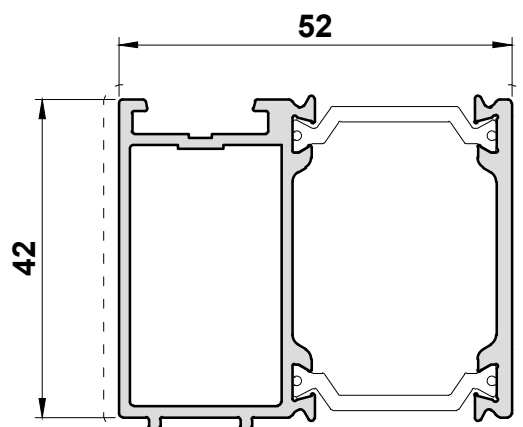
DV515

70 x 42mm Head Extension



W20356

52 x 42mm Head Extension

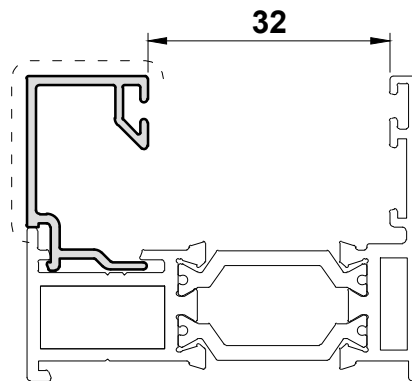


Scale 1:1

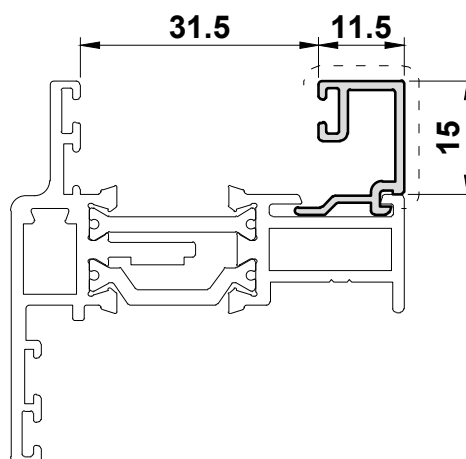
Primary Visible Side

Secondary Visible Side

W20362
24mm Square Bead



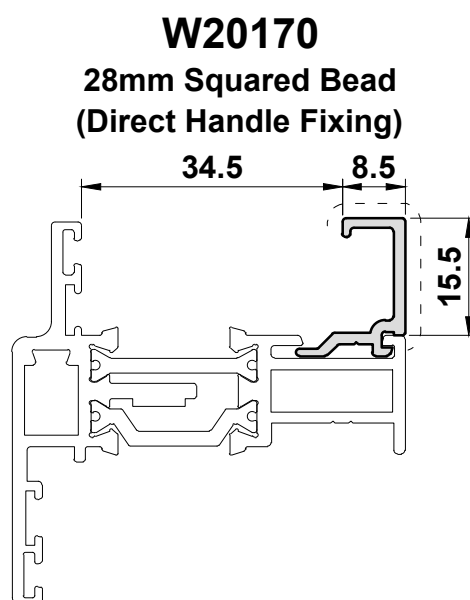
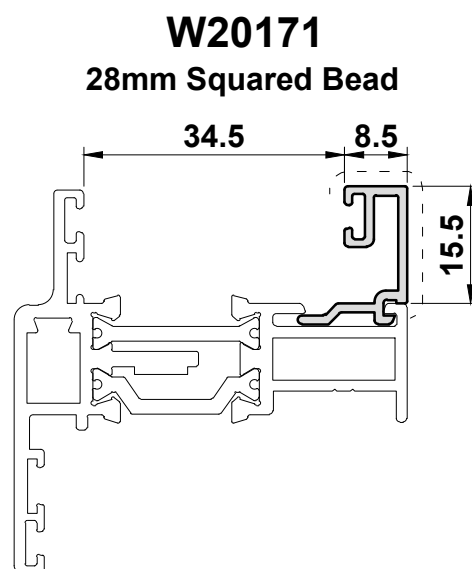
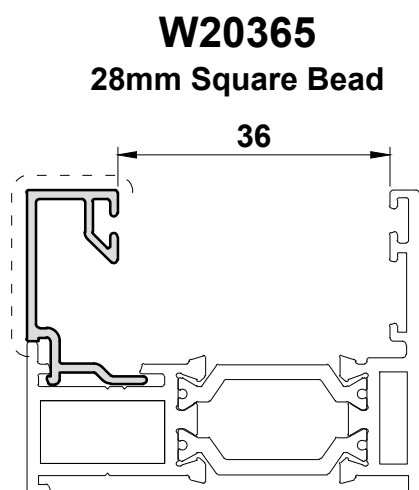
W20168
24mm Squared Bead



Scale 1:1

Primary Visible Side

Secondary Visible Side



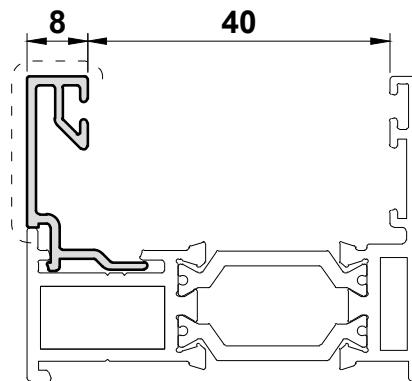
Scale 1:1

Primary Visible Side

Secondary Visible Side

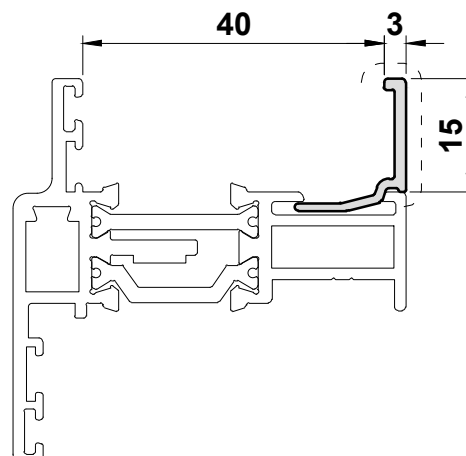
W20366

32mm Square Bead



W20370

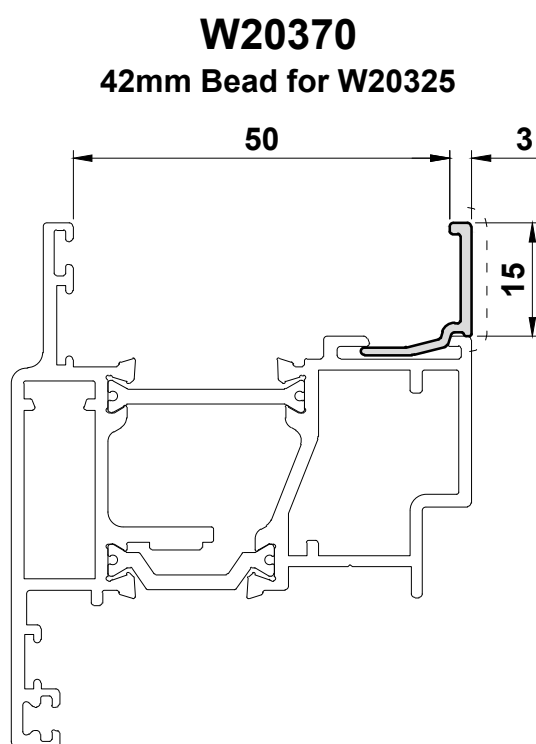
32mm Bead for W20320



Scale 1:1

Primary Visible Side

Secondary Visible Side



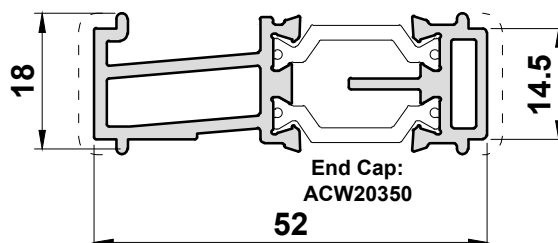
Scale 1:1

Primary Visible Side

Secondary Visible Side

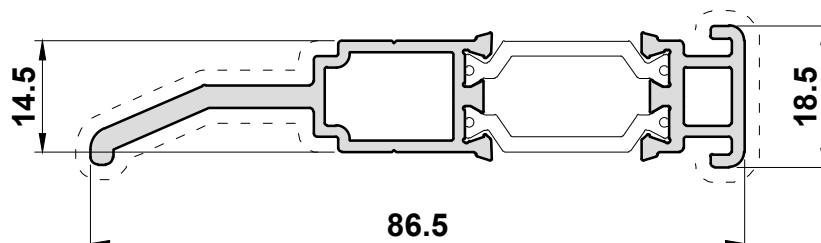
W20350

Horizontal Coupler



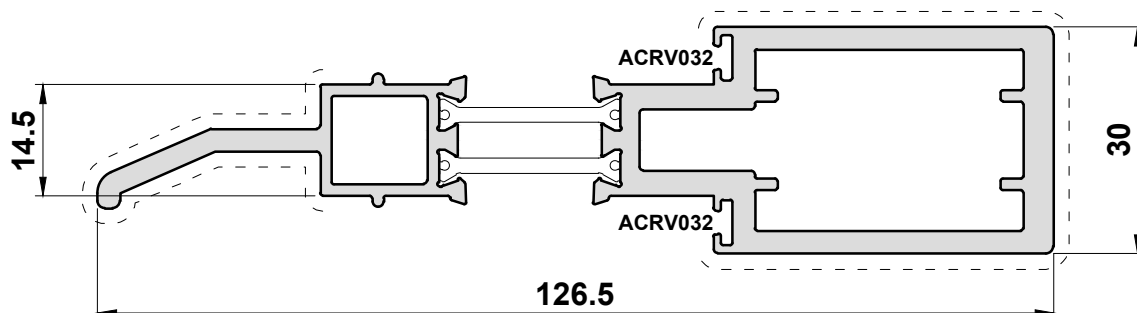
W20385

Horizontal Coupler with Drip Bar



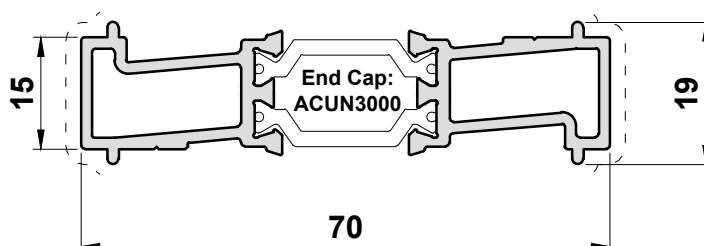
W20386

45mm Box Horizontal Coupler with Drip Bar



UN3000

Horizontal Coupler

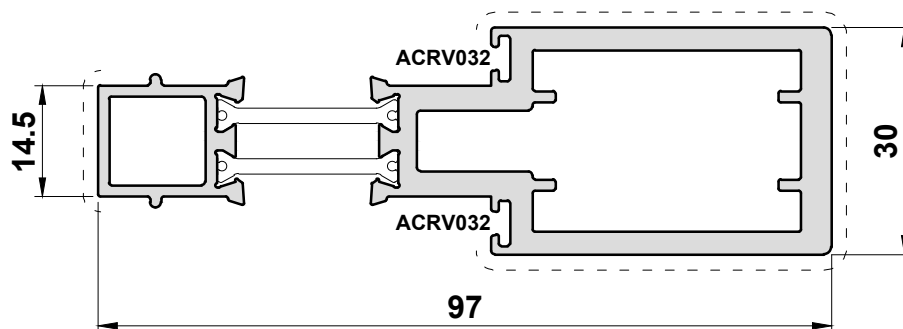


Scale 1:1

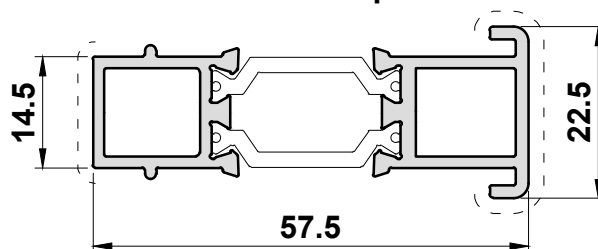
Primary Visible Side

Secondary Visible Side

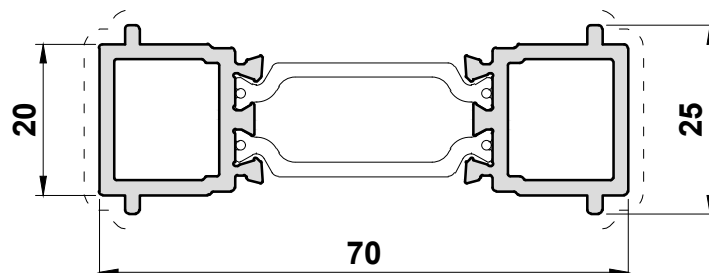
W20387
45mm Box Vertical Coupler



W20389
Vertical Coupler



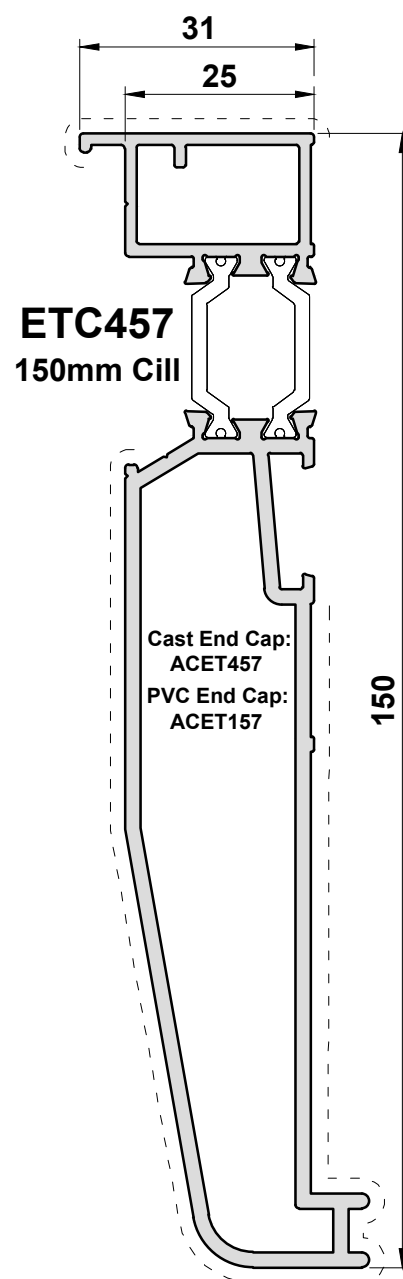
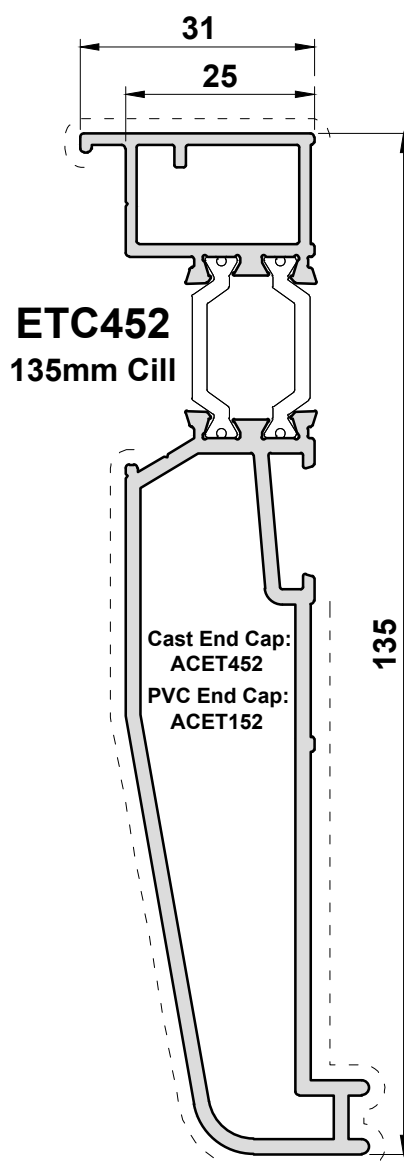
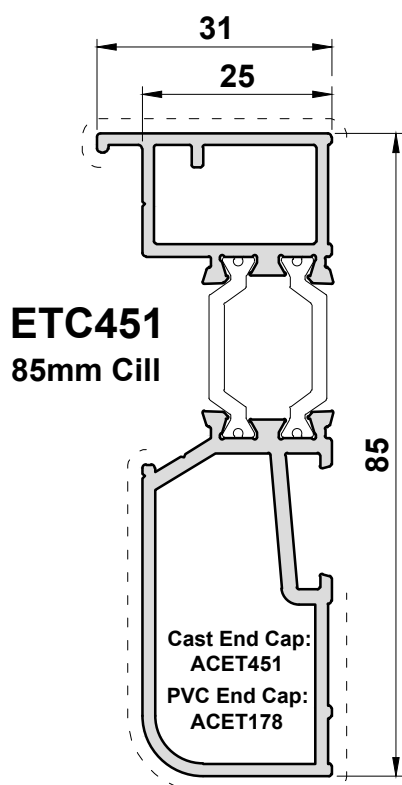
ETC853
Coupler



Scale 1:1

Primary Visible Side

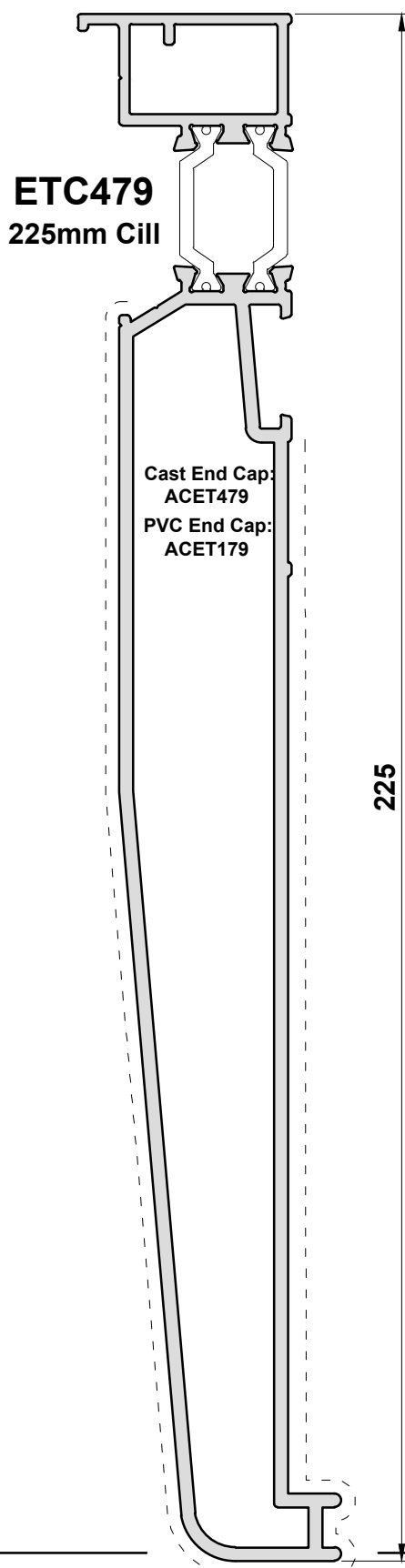
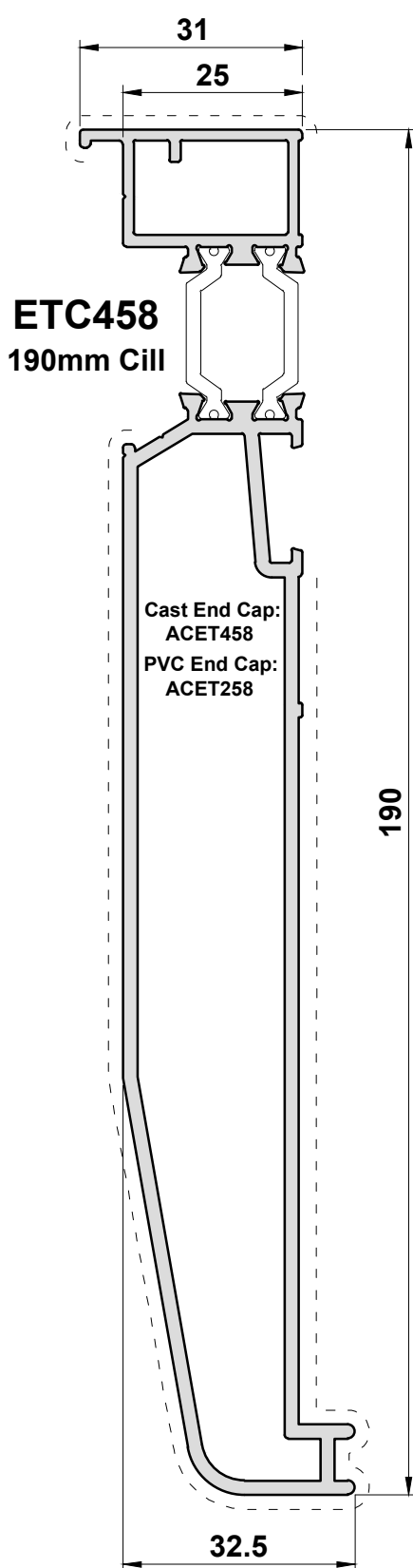
Secondary Visible Side



Scale 1:1

Primary Visible Side

Secondary Visible Side



Scale 1:1

Section B

Accessories

Photos & Drawings

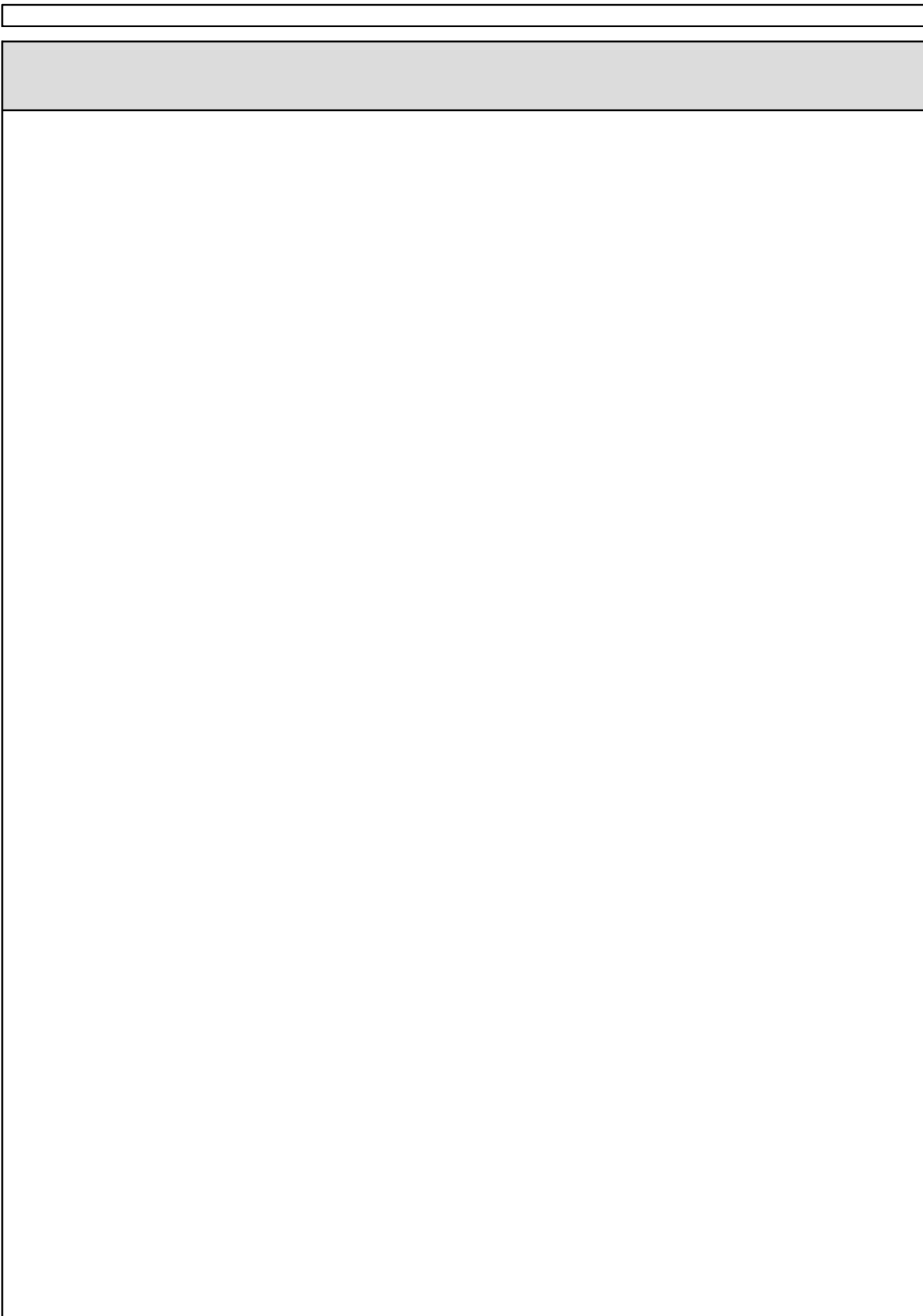


Image	Part Code	Pack	Unit	Application	Colour
	ACEF911 Crimping Cleat	24	pack	W20310 W23011	MF ☒
					SA ☐
					KL ☐
					HP ☐
					SSC ☐
					SMC ☐
					W ☐
					Z ☐
					PC ☐
	ACET041 Cill Nose Bracket	1	each	ETC451 ETC452 ETC457 ETC458 ETC479	MF ☒
					SA ☐
					KL ☐
					HP ☐
					SSC ☐
					SMC ☐
					W ☐
					Z ☐
					PC ☐
	ACET045 Stainless Steel Chevron	100	pack	W20320	MF ☒
					SA ☐
					KL ☐
					HP ☐
					SSC ☐
					SMC ☐
					W ☐
					Z ☐
					PC ☐
	ACET060 No. 7 x 25 S/S Self Tapping CSK Screw	100	pack		MF ☒
					SA ☐
					KL ☐
					HP ☐
					SSC ☐
					SMC ☐
					W ☐
					Z ☐
					PC ☐
	ACET062 No. 10 x 50 S/S Self Tapping CSK Screw	100	pack		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 SA = Silver Anodised KL = Basic Colour HP = Special Colour SSC = Smooth Satin Chrome SMC = Smokey Chrome PC = Polished Chrome W = White Z = Black				

ACCESSORIES : PHOTOS & DRAWINGS

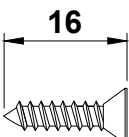
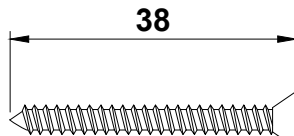
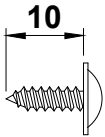
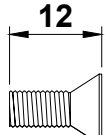
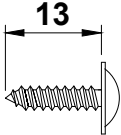
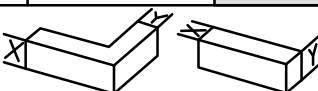
Image	Part Code	Pack	Unit	Application	Colour
	ACET064 No. 8 x 16 S/S Self Tapping CSK Screw	100	pack		MF ☒
					SA ☐
					KL ☐
					HP ☐
					SSC ☐
					SMC ☐
					W ☐
					Z ☐
					PC ☐
	ACET066 No. 7 x 38 S/S Self Tapping CSK Screw	100	pack		MF ☒
					SA ☐
					KL ☐
					HP ☐
					SSC ☐
					SMC ☐
					W ☐
					Z ☐
					PC ☐
	ACET068 No. 8 x 10 S/S Self Tapping Flange Screw	100	pack	Friction Hinges	MF ☒
					SA ☐
					KL ☐
					HP ☐
					SSC ☐
					SMC ☐
					W ☐
					Z ☐
					PC ☐
	ACET069 M5 x 12 S/S CSK Machine Screw	100	pack	ACET165	MF ☒
					SA ☐
					KL ☐
					HP ☐
					SSC ☐
					SMC ☐
					W ☐
					Z ☐
					PC ☐
	ACET070 No. 8 x 13 S/S Self Tapping Flange Screw	100	pack		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 SA = Silver Anodised KL = Basic Colour HP = Special Colour SSC = Smooth Satin Chrome SMC = Smokey Chrome PC = Polished Chrome	W = White Z = Black		

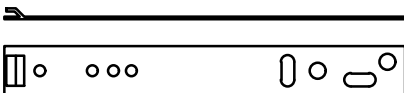
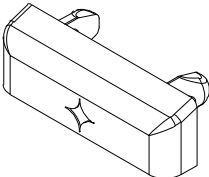
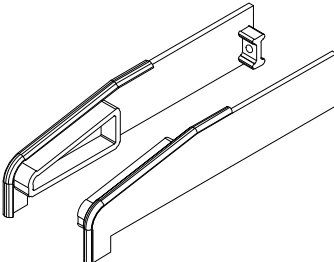
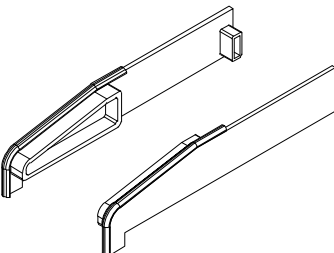
Image	Part Code	Pack	Unit	Application	Colour
	ACET130 Fixing Strap	1	100		MF
					SA
					KL
					HP
					SSC
					SMC
					W
					Z
					PC
					
SA					
KL					
HP					
SSC					
SMC					
W					
Z					
PC					
	ACET152 PVC Cill End Caps	10	pair	ETC452	
					SA
					KL
					HP
					SSC
					SMC
					W
					Z
					PC
					
SA					
KL					
HP					
SSC					
SMC					
W					
Z					
PC					
	ACET160r Flipper Gasket	100	m		
					SA
					KL
					HP
					SSC
					SMC
					W
					Z
					PC
					 T-BARS ACVG65=2.5mm ACVG66=3.0mm ACVL150=4.0mm

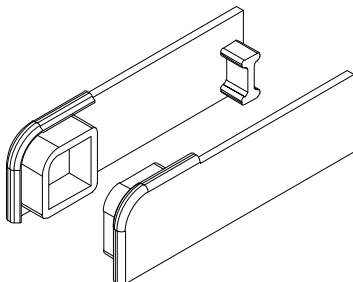
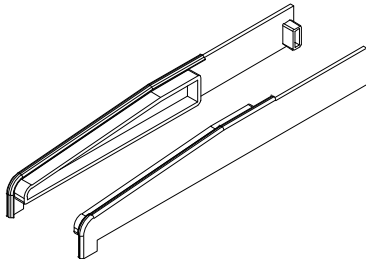
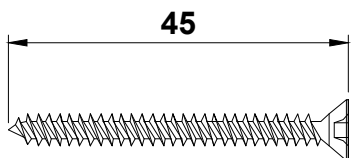
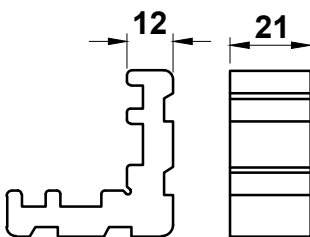
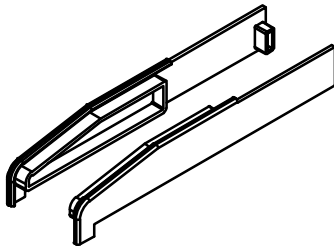
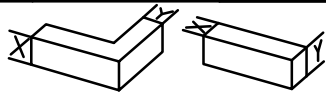
Image	Part Code	Pack	Unit	Application	Colour	
	ACET178 PVC Cill End Caps	10	pair	ETC451	MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	✓
					Z	✓
					PC	
	ACET179 PVC Cill End Caps	10	pair	ETC479	MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	✓
					Z	✓
					PC	
	ACET190 4.3 x 45mm CSK Polyamide Screw	1000	Pack		MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	
					Z	✓
					PC	
	ACET211 Corner Cleat	24	pack	W20317	MF	✓
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	
					Z	
					PC	
	ACET258 PVC Cill End Cap	10	pair	ETC458	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 SA = Silver Anodised KL = Basic Colour HP = Special Colour SSC = Smooth Satin Chrome SMC = Smokey Chrome PC = Polished Chrome	W = White Z = Black			

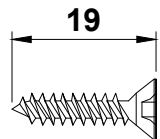
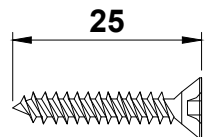
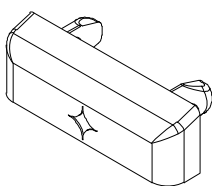
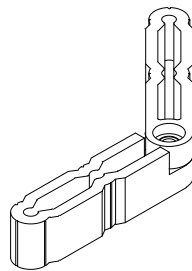
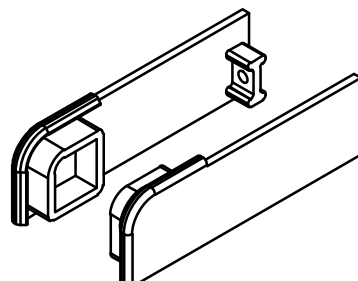
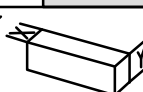
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	ACET290 4.3 x 19mm CSK Polyamide Screw	1000	Pack		MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	
					Z	✓
					PC	
	ACET390 4.3 x 25mm CSK Polyamide Screw	200	Pack		MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	
					Z	✓
					PC	
	ACET431 Colour Match Drainage Cover Cap	8	pack		MF	
					SA	
					KL	✓
					HP	✓
					SSC	
					SMC	
					W	✓
					Z	✓
					PC	
	ACET440 90° - 180° Variable Angle Cill / Bracket	10	pack	ETC451 ETC452 ETC457 ETC458 ETC479	MF	
					SA	✓
					KL	
					HP	
					SSC	
					SMC	
					W	
					Z	
					PC	
	ACET451 Cast Cill End Caps	1	pair	ETC451	MF	✓
					SA	
					KL	✓
					HP	✓
					SSC	
					SMC	
					W	✓
					Z	✓
					PC	
 		MF = Mill Finish SA = Silver Anodised KL = Basic Colour HP = Special Colour SSC = Smooth Satin Chrome SMC = Smokey Chrome PC = Polished Chrome		W = White Z = Black		 

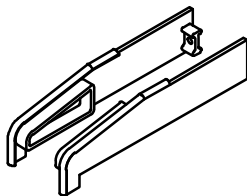
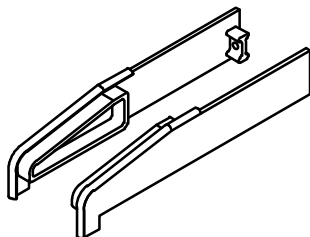
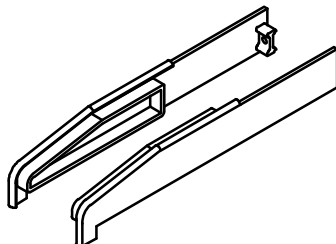
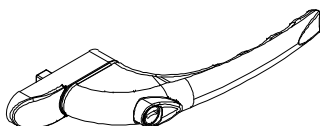
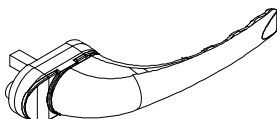
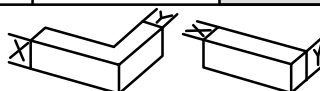
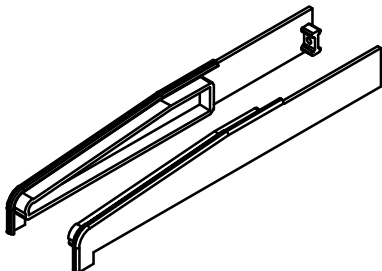
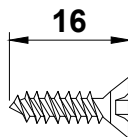
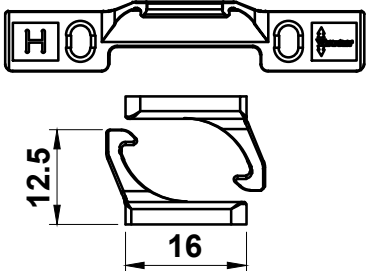
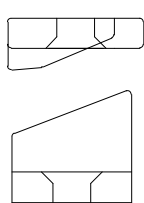
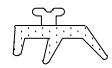
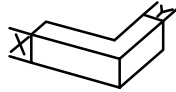
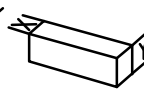
Image	Part Code	Pack	Unit	Application	Colour	
	ACET452 Cast Cill End Caps	1	Pair	ETC452	MF	☒
					SA	☐
					KL	☒
					HP	☒
					SSC	☐
					SMC	☐
					W	☒
					Z	☒
					PC	☐
	ACET457 Cast Cill End Caps	1	Pair	ETC457	MF	☒
					SA	☐
					KL	☒
					HP	☒
					SSC	☐
					SMC	☐
					W	☒
					Z	☒
					PC	☐
	ACET458 Cast Cill End Caps	1	Pair	ETC458	MF	☐
					SA	☐
					KL	☒
					HP	☒
					SSC	☐
					SMC	☐
					W	☒
					Z	☒
					PC	☐
	ACET460 Inline Espagnolette Handle 9mm Spindle	1	Each		MF	☐
					SA	☐
					KL	☒
					HP	☒
					SSC	☒
					SMC	☒
					W	☒
					Z	☒
					PC	☒
	ACET464 Non-Locking Tilt & Turn Handle	1	Each		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 SA = Silver Anodised KL = Basic Colour HP = Special Colour SSC = Smooth Satin Chrome SMC = Smokey Chrome PC = Polished Chrome	W = White Z = Black				

Image	Part Code	Pack	Unit	Application	Colour
	ACET479 Cast Cill End Caps	1	Pair	ETC479	MF ☒
					SA ☐
					KL ☒
					HP ☒
					SSC ☐
					SMC ☐
					W ☒
					Z ☒
					PC ☐
	ACET490 4.3 x 16mm CSK Polyamide Screw	1000	Pack		MF ☐
					SA ☐
					KL ☐
					HP ☐
					SSC ☐
					SMC ☐
					W ☐
					Z ☒
					PC ☐
	ACET516 16mm Cavity Hinge Protector 4 Per Set (2 pairs)	50	sets		MF ☐
					SA ☐
					KL ☐
					HP ☐
					SSC ☐
					SMC ☐
					W ☐
					Z ☐
					PC ☐
	ACET652 Pull-In Blocks	50	pack		MF ☐
					SA ☐
					KL ☐
					HP ☐
					SSC ☐
					SMC ☐
					W ☐
					Z ☐
					PC ☐
	ACET835 4mm External Low Line Captive Bead Gasket	200	m		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 SA = Silver Anodised KL = Basic Colour HP = Special Colour SSC = Smooth Satin Chrome SMC = Smokey Chrome PC = Polished Chrome				W = White Z = Black
					 

ACCESSORIES : PHOTOS & DRAWINGS

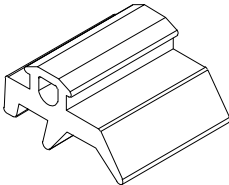
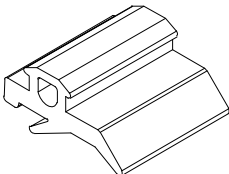
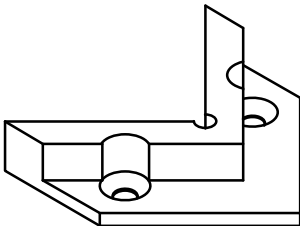
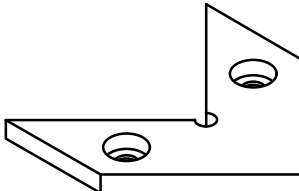
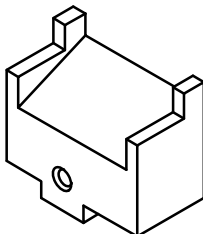
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	ACET842 3mm Low Line External Gasket	200	m		MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	
					Z	✓
					PC	
	ACET843 2mm Low Line External Gasket	200	m		MF	✓
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	
					Z	
					PC	
	ACET975 Vee Block Packer	1	Each	W20320	MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	
					Z	
					PC	
	ACET978 Punch Tool	1	Each	W20317	MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	
					Z	
					PC	
	ACET979 Vee Block	1	Each	W20310 W20317	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 SA = Silver Anodised KL = Basic Colour HP = Special Colour SSC = Smooth Satin Chrome SMC = Smokey Chrome PC = Polished Chrome	W = White Z = Black			

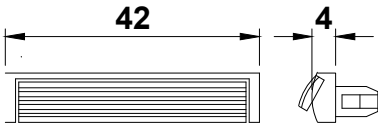
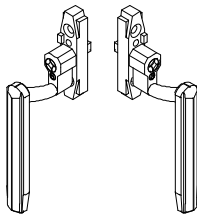
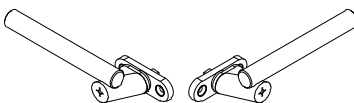
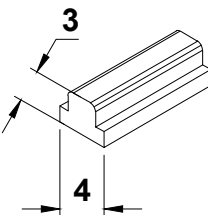
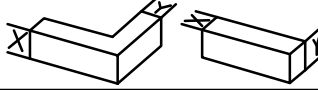
Image	Part Code	Pack	Unit	Application	Colour	
	ACGSL045 Drainage Cap	100	pack		MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	✓
					Z	✓
					PC	
	ACSM002 L/R Art Deco Window Handles	1	each		MF	
					SA	
					KL	✓
					HP	
					SSC	
					SMC	
					W	✓
					Z	✓
					PC	
	ACSM010 L/R Stainless Steel Casement Window Handle	1	each		MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	
					Z	
					PC	
	ACRV032 Sealing Gasket for Coupler	50	m	W20351 W20354 W20386 W20387	MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	
					Z	✓
					PC	
	ACUL025 Anti-Twist Clip	100	pack	W20330 W20331 W20332 W20333	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 SA = Silver Anodised KL = Basic Colour HP = Special Colour SSC = Smooth Satin Chrome SMC = Smokey Chrome PC = Polished Chrome	W = White Z = Black			

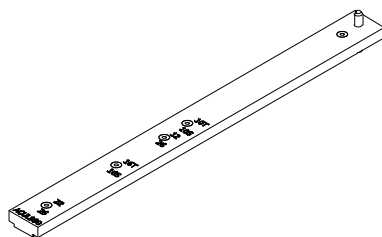
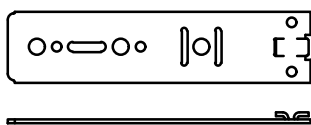
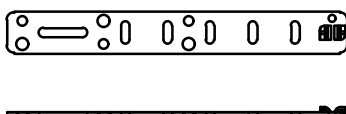
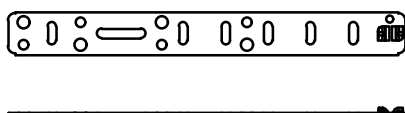
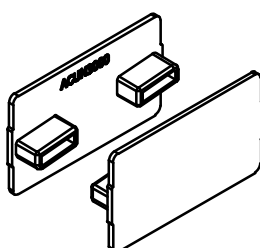
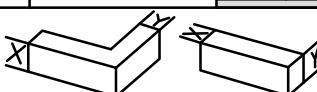
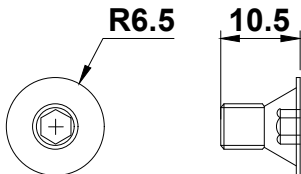
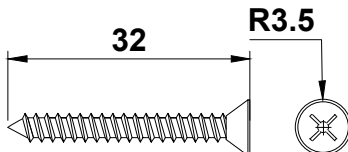
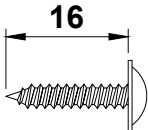
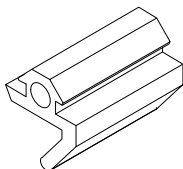
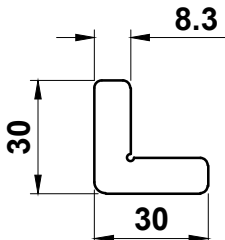
Image	Part Code	Pack	Unit	Application	Colour
	ACUL990 Friction Hinge Drill Jig	1	Each		MF
					SA
					KL
					HP
					SSC
					SMC
					W
					Z
					PC
	ACUN230 160mm Fixing Lug	100	pack		MF
					SA
					KL
					HP
					SSC
					SMC
					W
					Z
					PC
	ACUN232 240mm Fixing Lug	100	pack		MF
					SA
					KL
					HP
					SSC
					SMC
					W
					Z
					PC
	ACUN233 280mm Fixing Lug	100	pack		MF
					SA
					KL
					HP
					SSC
					SMC
					W
					Z
					PC
	ACUN3000 End Cap for UN3000	10	Pairs	UN3000	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 SA = Silver Anodised KL = Basic Colour HP = Special Colour SSC = Smooth Satin Chrome SMC = Smokey Chrome PC = Polished Chrome	W = White Z = Black		

Image	Part Code	Pack	Unit	Application	Colour
	ACUN3503 M6 x 10mm CSK SKT Screw				MF SA KL HP SSC SMC W Z PC ☒
	ACUN3512 No. 8 x 32mm CSK SS Pozi Screw	100	pack		MF SA KL HP SSC SMC W Z PC
	ACUN3535 No. 8 x 16 S/S Self Tapping Flange Screw	100	pack		MF SA KL HP SSC SMC W Z PC ☒
	ACVL032 EPDM Flipper Gasket	100	m		MF SA KL HP SSC SMC W Z PC ☒
	ACW20024 Stainless Steel Chevron	100	pack	W20310	MF SA KL HP SSC SMC W Z PC ☒
 T-BARS ACVG65=2.5mm ACVG66=3.0mm ACVL150=4.0mm Screw (Grub)	MF SA KL HP SSC SMC PC = Mill Finish = Silver Anodised = Basic Colour = Special Colour = Smooth Satin Chrome = Smokey Chrome = Polished Chrome	W Z = White = Black			

ACCESSORIES : PHOTOS & DRAWINGS

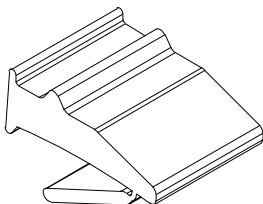
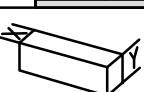
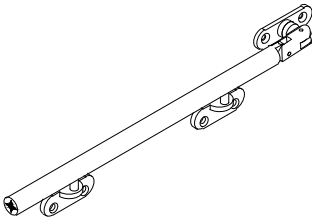
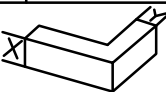
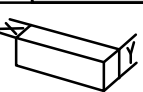
Image	Part Code	Pack	Unit	Application	Colour
	ACW20038 4-3mm Tear-away Low-line EPDM Wedge Gasket	200	m		MF
					SA
					KL
					HP
					SSC
					SMC
					W
					Z
					PC
	ACW20100 L/R Monkey Tail Espag Handle Black or Pewter	1	each	ACW201 ACW202 ACW203 ACW204 ACW205	MF
					SA
					KL
					HP
					SSC
					SMC
					W
					Z
					PC
	ACW20101 L/R Bulb End Espag Handle Black or Pewter	1	each	ACW201 ACW202 ACW203 ACW204 ACW205	MF
					SA
					KL
					HP
					SSC
					SMC
					W
					Z
					PC
	ACW20102 8" Monkey Tail Peg Stay Black or Pewter	1	each		MF
					SA
					KL
					HP
					SSC
					SMC
					W
					Z
					PC
	ACW20103 10" Monkey Tail Peg Stay Black or Pewter	1	each		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 SA = Silver Anodised KL = Basic Colour HP = Special Colour SSC = Smooth Satin Chrome SMC = Smokey Chrome PC = Polished Chrome		W = White Z = Black	 

Image	Part Code	Pack	Unit	Application	Colour
	ACW20104 12" Monkey Tail Peg Stay Black or Pewter	1	each		MF
					SA
					KL
					HP
					SSC
					SMC
					W
					Z
					PC
	ACW20105 8" Bulb End Peg Stay Black or Pewter	1	each		MF
					SA
					KL
					HP
					SSC
					SMC
					W
					Z
					PC
	ACW20106 10" Bulb End Peg Stay Black or Pewter	1	each		MF
					SA
					KL
					HP
					SSC
					SMC
					W
					Z
					PC
	ACW20107 12" Bulb End Peg Stay Black or Pewter	1	each		MF
					SA
					KL
					HP
					SSC
					SMC
					W
					Z
					PC
	ACW20108 Stainless Steel Peg Stay	1	each		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 SA = Silver Anodised KL = Basic Colour HP = Special Colour SSC = Smooth Satin Chrome SMC = Smokey Chrome PC = Polished Chrome	W = White Z = Black	 	

ACCESSORIES : PHOTOS & DRAWINGS

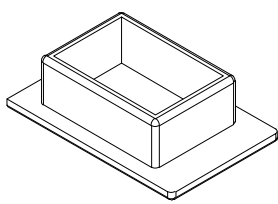
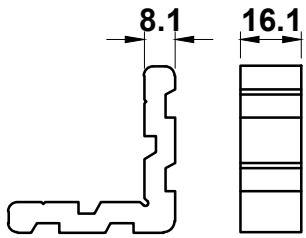
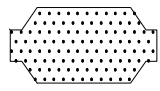
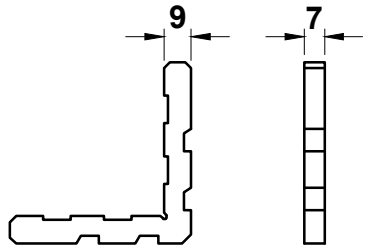
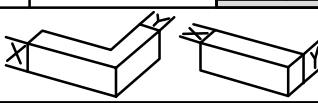
Image	Part Code	Pack	Unit	Application	Colour	
	ACW20165 L/R Art Deco Espag Handle Antique Brass & Satin Nickle Plate	1	each		MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	
					Z	
					PC	
	ACW20239 End Cap for W20332 & W20333	20	pack	W20332 W20333	MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	✓
					Z	✓
					PC	
	ACW20310 Crimping Cleat	24	pack	W20310 W23017	MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	
					Z	
					PC	
	ACW20315 Infill Foam for W20310 & W20317	1	each	W20310 W20317	MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	
					Z	
					PC	
	ACW20320 Extended Sash Cleat	1	each	W20320 W23045	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 SA = Silver Anodised KL = Basic Colour HP = Special Colour SSC = Smooth Satin Chrome SMC = Smokey Chrome PC = Polished Chrome		W = White Z = Black		

Image	Part Code	Pack	Unit	Application	Colour
	ACW20321 Extended Sash Cleat	24	pack	W20320	MF
					SA
					KL
					HP
					SSC
					SMC
					W
					Z
					PC
	ACW20322 Crimping Cleat	24	pack	W20345	MF
					SA
					KL
					HP
					SSC
					SMC
					W
					Z
					PC
	ACW20324 Stainless Steel Chevron	100	pack	W20320 W20345	MF
					SA
					KL
					HP
					SSC
					SMC
					W
					Z
					PC
	ACW20325 Infill Foam for W20325	1	each	W20325	MF
					SA
					KL
					HP
					SSC
					SMC
					W
					Z
					PC
	ACW20326 Crimping Cleat	24	pack	W20325	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 SA = Silver Anodised KL = Basic Colour HP = Special Colour SSC = Smooth Satin Chrome SMC = Smokey Chrome PC = Polished Chrome	W = White Z = Black		

ACCESSORIES : PHOTOS & DRAWINGS

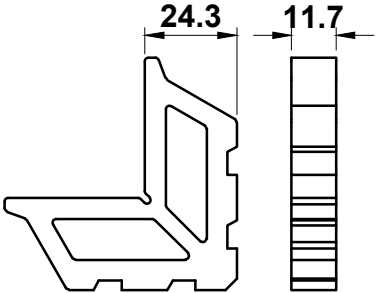
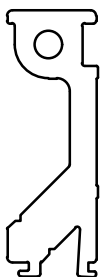
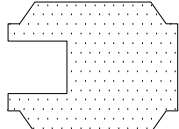
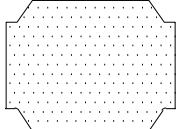
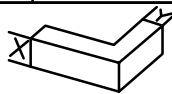
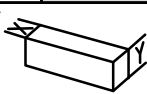
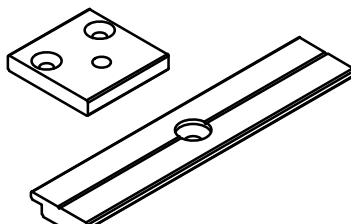
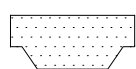
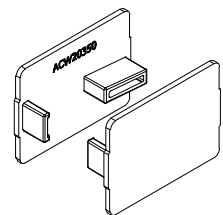
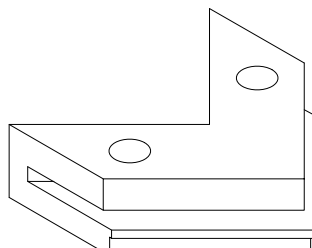
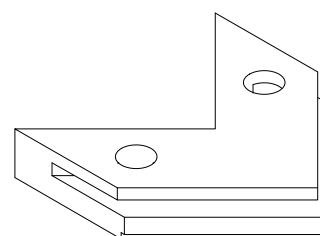
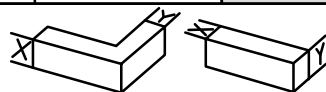
Image	Part Code	Pack	Unit	Application	Colour
	ACW20327 Crimping Cleat	24	pack	W20325	MF
					SA
					KL
					HP
					SSC
					SMC
					W
					Z
					PC
	ACW20330 End Packer for W20330	50	Pack	W20330	MF
					SA
					KL
					HP
					SSC
					SMC
					W
					Z
					PC
	ACW20331 Cruciform Bracket	10	Pack	W20331 W20333	MF
					SA
					KL
					HP
					SSC
					SMC
					W
					Z
					PC
	ACW20332 Infill Foam for W20330 & W20332	1	each	W20330 W20332	MF
					SA
					KL
					HP
					SSC
					SMC
					W
					Z
					PC
	ACW20333 Infill Foam for W20331 & W20333	1	each	W20330 W20333	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 SA = Silver Anodised KL = Basic Colour HP = Special Colour SSC = Smooth Satin Chrome SMC = Smokey Chrome PC = Polished Chrome		W = White Z = Black	 

Image	Part Code	Pack	Unit	Application	Colour
	ACW20344 W20345 Fixing Kit	1	each	W20345	MF
					SA
					KL
					HP
					SSC
					SMC
					W
					Z
					PC
	ACW20345 Infill Foam for W20345	1	each	W20345	MF
					SA
					KL
					HP
					SSC
					SMC
					W
					Z
					PC
	ACW20350 End Cap for W20350	10	Pairs	W20350	MF
					SA
					KL
					HP
					SSC
					SMC
					W
					Z
					PC
	ACW20390 Vee Block Packer	1	Each	W20310 W20317	MF
					SA
					KL
					HP
					SSC
					SMC
					W
					Z
					PC
	ACW20393 Vee Block Packer	1	Each	W20325	MF
					SA
					KL
					HP
					SSC
					SMC
					W
					Z
					PC
 	MF = Mill Finish SA = Silver Anodised KL = Basic Colour HP = Special Colour SSC = Smooth Satin Chrome SMC = Smokey Chrome PC = Polished Chrome	W = White Z = Black			

ACCESSORIES : PHOTOS & DRAWINGS

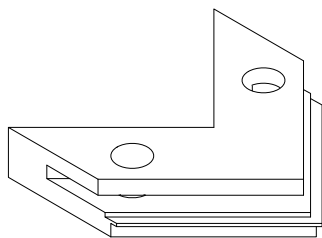
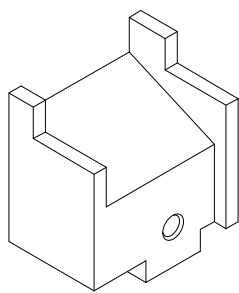
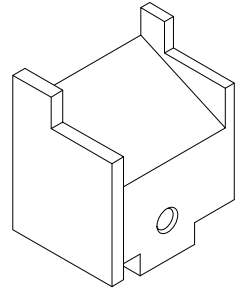
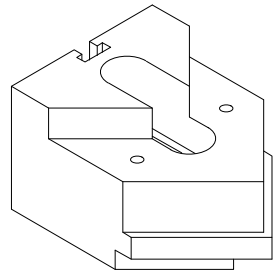
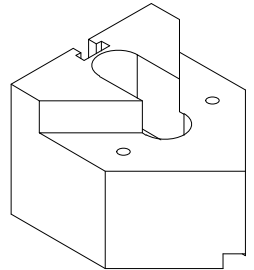
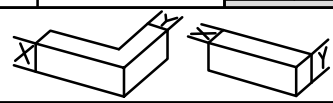
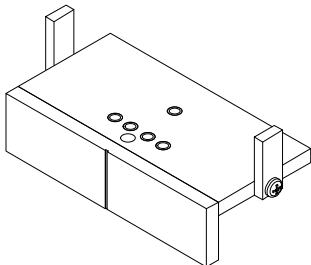
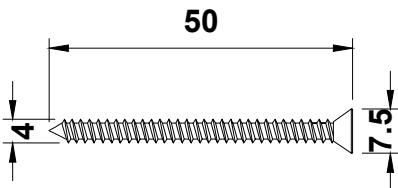
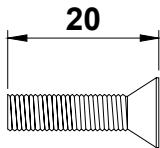
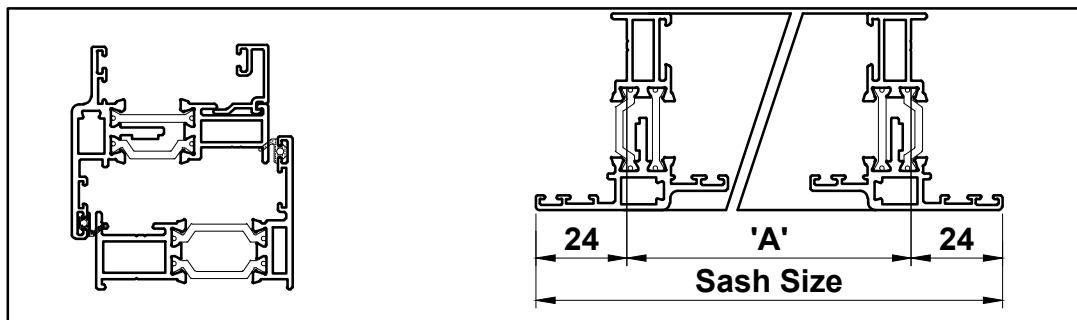
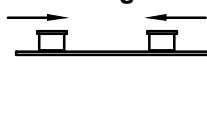
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	ACW20394 Vee Block Packer	1	Each	W20345	MF
					SA
					KL
					HP
					SSC
					SMC
					W
					Z
					PC
	ACW20395 Punch Tool	1	Each	W20345	MF
					SA
					KL
					HP
					SSC
					SMC
					W
					Z
					PC
	ACW20396 Punch Tool	1	Each	W20320 W20325	MF
					SA
					KL
					HP
					SSC
					SMC
					W
					Z
					PC
	ACW20397 Vee Block	1	Each	W20310 W20317	MF
					SA
					KL
					HP
					SSC
					SMC
					W
					Z
					PC
	ACW906 Vee Block	1	Each	W20320 W20325 W20345	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 SA = Silver Anodised KL = Basic Colour HP = Special Colour SSC = Smooth Satin Chrome SMC = Smokey Chrome PC = Polished Chrome	W = White Z = Black		

Image	Part Code	Pack	Unit	Application	Colour
	ACW936 Drilling Jig	1	Each	W20031 W20331 W20310	MF
					SA
					KL
					HP
					SSC
					SMC
					W
					Z
					PC
	MUA067SSZ No.7 x 50mm CS Pozi Self Tap	24	pack		MF ✓
					SA
					KL
					HP
					SSC
					SMC
					W
					Z
					PC
	WCA134 Stainless M5 x 20mm Pozi Csk Machine Screw	100	pack		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 = Mill Finish SA = Silver Anodised KL = Basic Colour HP = Special Colour SSC = Smooth Satin Chrome SMC = Smokey Chrome PC = Polished Chrome				W = White
					Z = Black

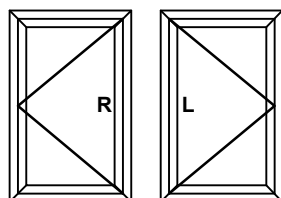
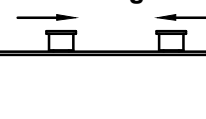


Part Code	Rod Length (mm)	Number of Keeps	Sash Rebate Size ('A')		Pack Size
			Minimum	Maximum	
ACW301L	335	2	340	505	20
ACW301R					
ACW302L	500	2	506	755	20
ACW302R					
ACW303L	750	2	756	1005	20
ACW303R					
ACW304L	1000	4	1006	1255	20
ACW304R					
ACW305L	1250	4	1256	1400	20
ACW305R					

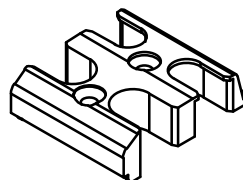
Cam Locking Direction



Cam Locking Direction



OUTSIDE VIEW



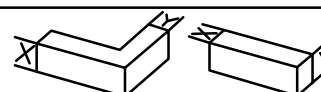
T-BARS
ACVG65=2.5mm
ACVG66=3.0mm
ACVL150=4.0mm

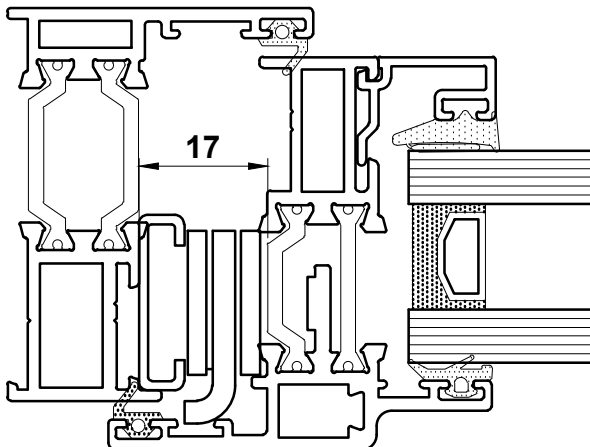


Screw (Grub)

MF = Mill Finish
SA = Silver Anodised
KL = Basic Colour
HP = Special Colour
SSC = Smooth Satin Chrome
SMC = Smokey Chrome
PC = Polished Chrome

W = White
Z = Black





Hinge Code Top Hung	Hinge Length (mm)	Max Vent Weight (kg)	Min Vent Height (mm)	Max Vent Height (mm)	Opening Angle (+/-2.5°)
ACINS10	262	40	315	640	50
ACINS12	313	50	640	800	50
ACINS16	415	65	800	1100	50
ACINS22	567	100	1090	1500	45
ACINS22W	567	100	1500	2000	20
ACINS26	680	180	2000	2500	20
Side Hung	Hinge Length (mm)	Max Vent Weight (kg)	Min Vent Width (mm)	Max Vent Width (mm)	Opening Angle (+/-2.5°)
ACINSSH10	262	38	327	660	85
ACINSSH16	415	55	450	838	60

Please Note:

1. Dimensions shown in table are sash sizes - not rebate sizes.
2. The minimum sash sizes for ACINS10 & ACINSSH10 can both be reduced to 281mm where cockspur handles are used.
3. Top hung height & side hung width sizes to be reduced by 2mm where size is 450mm or smaller.
4. Vents of 100kg must be fitted with ACINS09 cam adjustment devices, which are optional on lighter vents
5. Separate restrictors (ACINS30 & ACINS31) vent holding devices may be required to hold large vents in a selected ventilation position against variable wind pressure.



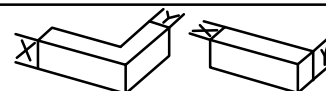
T-BARS
ACVG65=2.5mm
ACVG66=3.0mm
ACVL150=4.0mm



Screw (Grub)

MF = Mill Finish
SA = Silver Anodised
KL = Basic Colour
HP = Special Colour
SSC = Smooth Satin Chrome
SMC = Smokey Chrome
PC = Polished Chrome

W = White
Z = Black





T-BARS
ACVG65=2.5mm
ACVG66=3.0mm
ACVL150=4.0mm



Screw (Grub)

MF = Mill Finish
SA = Silver Anodised
KL = Basic Colour
HP = Special Colour
SSC = Smooth Satin Chrome
SMC = Smokey Chrome
PC = Polished Chrome

W = White
Z = Black

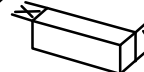
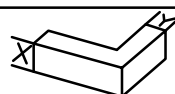


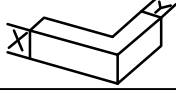
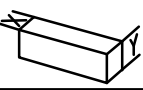
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	ACMX09700 Alu. Polish	1	each		MF ☒
					SA ☐
					KL ☐
					HP ☐
					SSC ☐
					SMC ☐
					W ☐
					Z ☐
					PC ☐
	ACMX09761 Maxi Gloss	1	each		MF ☐
					SA ☐
					KL ☐
					HP ☐
					SSC ☐
					SMC ☐
					W ☐
					Z ☐
					PC ☐
	ACMX09762 Alu. Bright	1	each		MF ☐
					SA ☐
					KL ☐
					HP ☐
					SSC ☐
					SMC ☐
					W ☐
					Z ☐
					PC ☐
	ACMX09763 Teflon Spray	1	each		MF ☐
					SA ☐
					KL ☐
					HP ☐
					SSC ☐
					SMC ☐
					W ☐
					Z ☐
					PC ☐
	ACMX09764 Maxi Clean	1	each		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 SA = Silver Anodised KL = Basic Colour HP = Special Colour SSC = Smooth Satin Chrome SMC = Smokey Chrome PC = Polished Chrome		W = White Z = Black	 

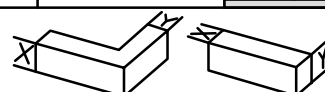
Image	Part Code	Pack	Unit	Application	Colour
	ACMX09765 Alu. Cleaner	1	each		MF
					SA
					KL
					HP
					SSC
					SMC
					W
					Z
					PC
	ACMX09770 Roll & Wrap 100mm	1	each		MF
					SA
					KL
					HP
					SSC
					SMC
					W
					Z
					PC
	ACMX09775 Grip Handwrap	1	each		MF
					SA
					KL
					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	 Screw (Grub)	MF = Mill Finish SA = Silver Anodised KL = Basic Colour HP = Special Colour SSC = Smooth Satin Chrome SMC = Smokey Chrome PC = Polished Chrome	W = White Z = Black		

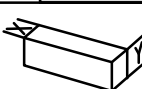
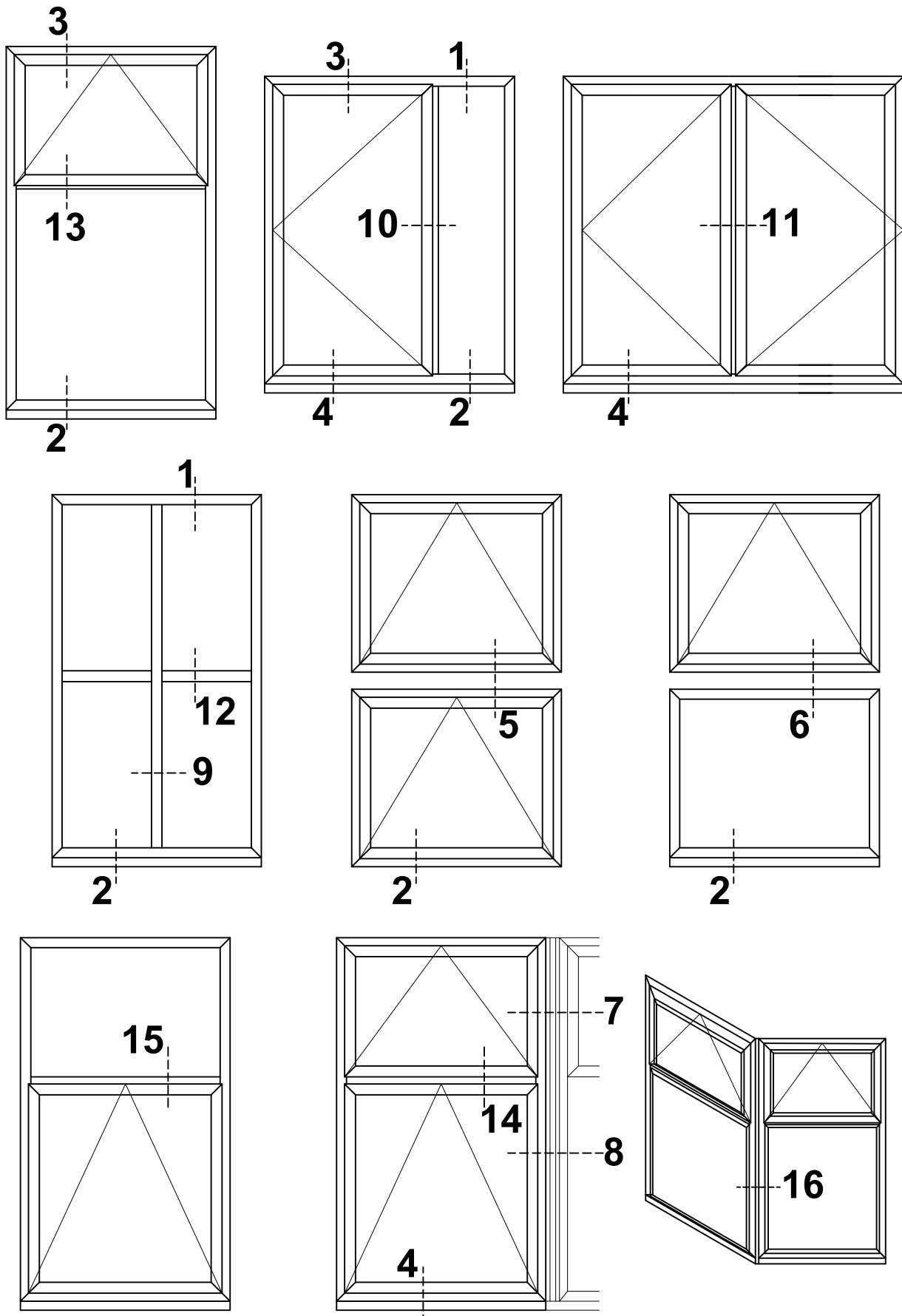
Image	Part Code	Pack	Unit	Application	Colour	
	ACMX09803 Protective Tape 100mm	1	each		MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	
					Z	
					PC	
	ACSIL04 Sealing Glue Order with suffix of KL colour (eg.ACSIL04KL005) or BL=Black/WP=White/ CL=Clear	1	each		MF	
					SA	
					KL	✓
					HP	
					SSC	
					SMC	
					W	✓
					Z	✓
					PC	
	ACSIL05 Rubber Sealant	1	each		MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	
					Z	
					PC	
	ACSIL08 Silicon Gun	1	each		MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	
					Z	
					PC	
	ACSIL013 Glue for Mitre	1	each		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 SA = Silver Anodised KL = Basic Colour HP = Special Colour SSC = Smooth Satin Chrome SMC = Smokey Chrome PC = Polished Chrome		W = White Z = Black	 	

Image	Part Code	Pack	Unit	Application	Colour	
	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	
					W	
					Z	
					PC	
					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 SA = Silver Anodised KL = Basic Colour HP = Special Colour SSC = Smooth Satin Chrome SMC = Smokey Chrome PC = Polished Chrome				MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	
					Z	
					PC	
						

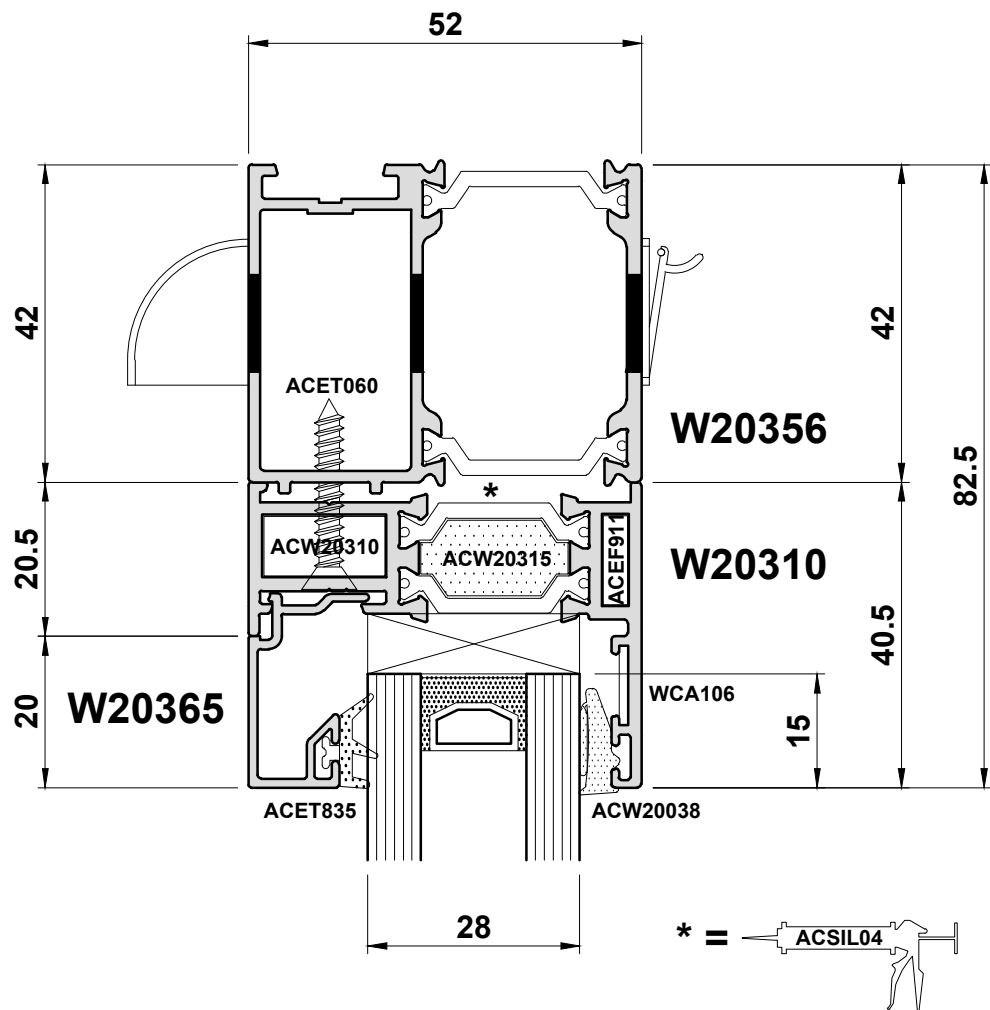
Section C

Sections

Scale Elevations

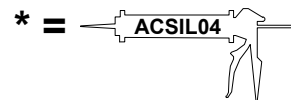
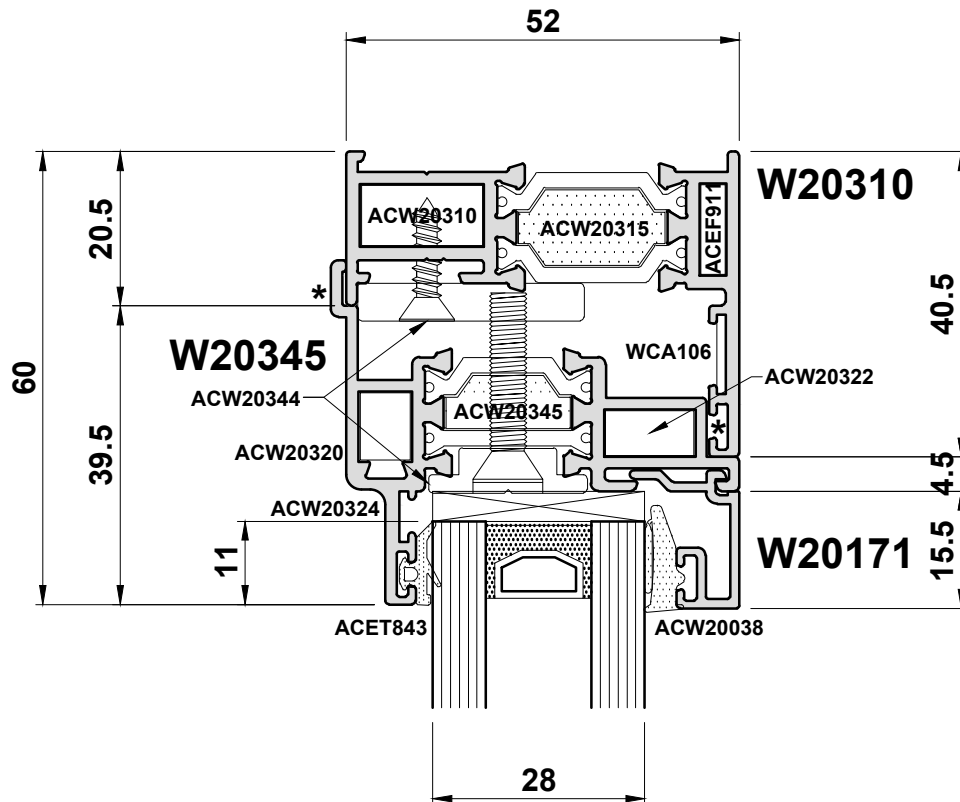
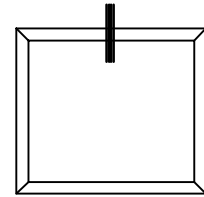


Detail 1A



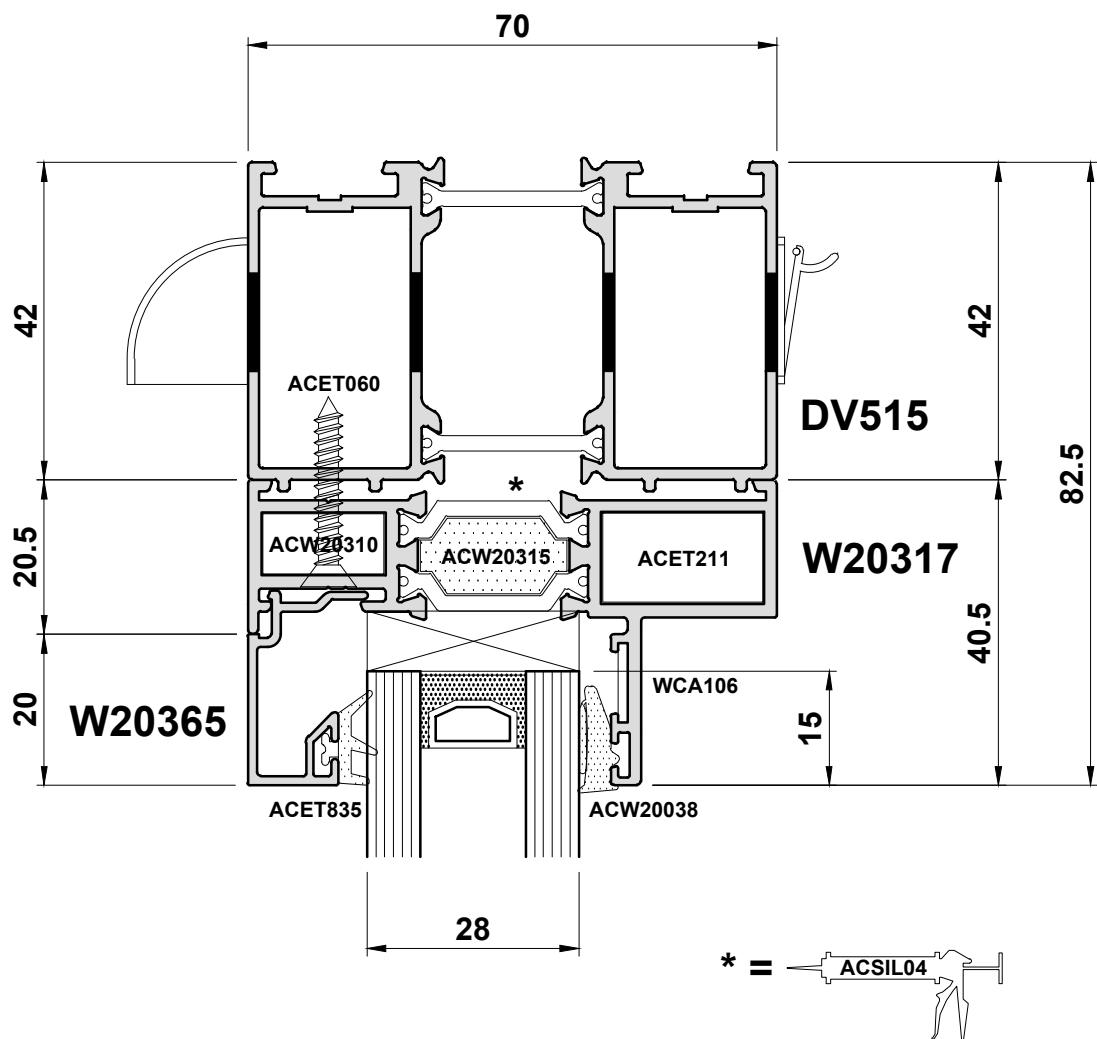
Do Not Scale From This Drawing

Detail 1B



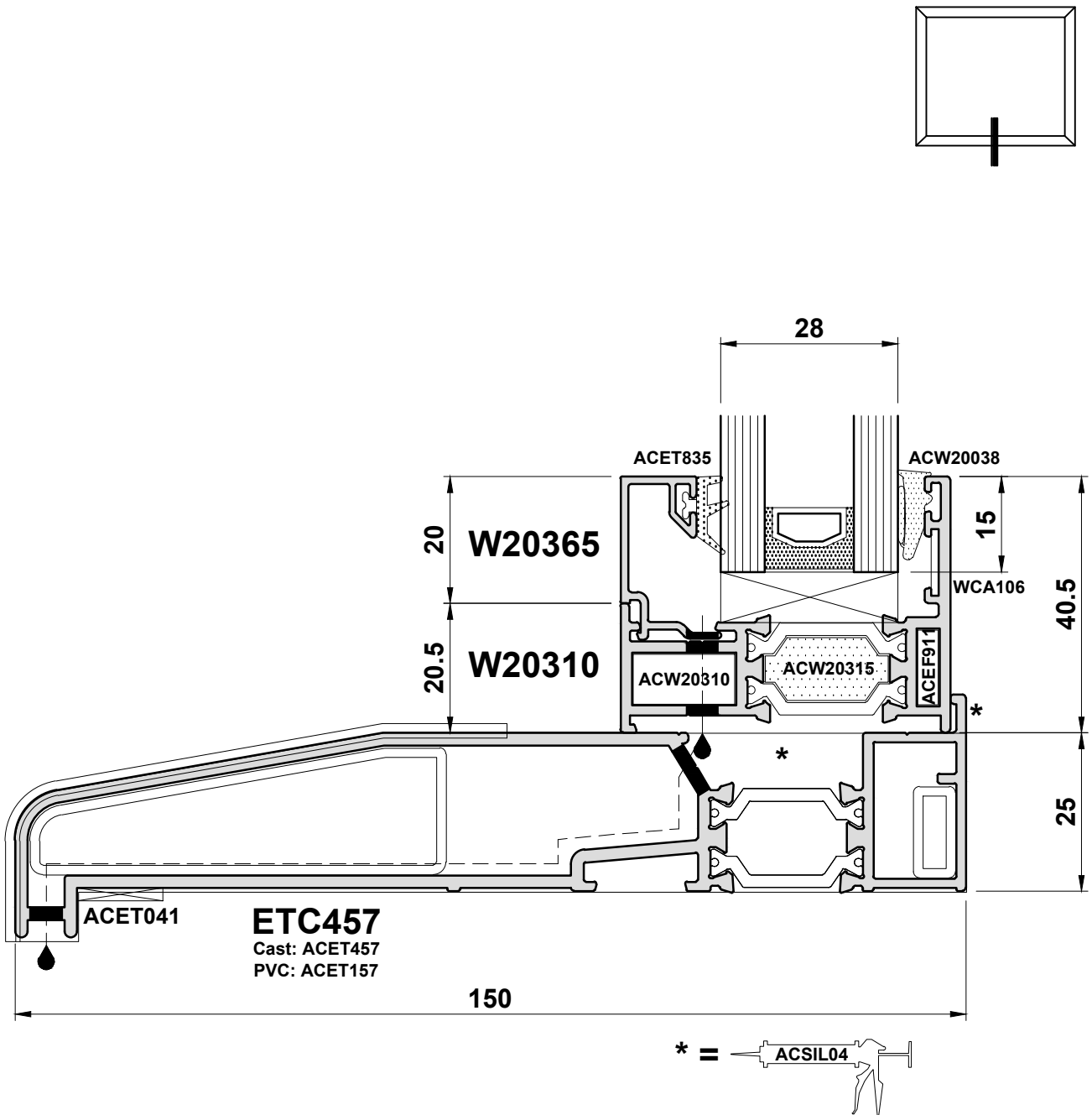
Do Not Scale From This Drawing

Detail 1C



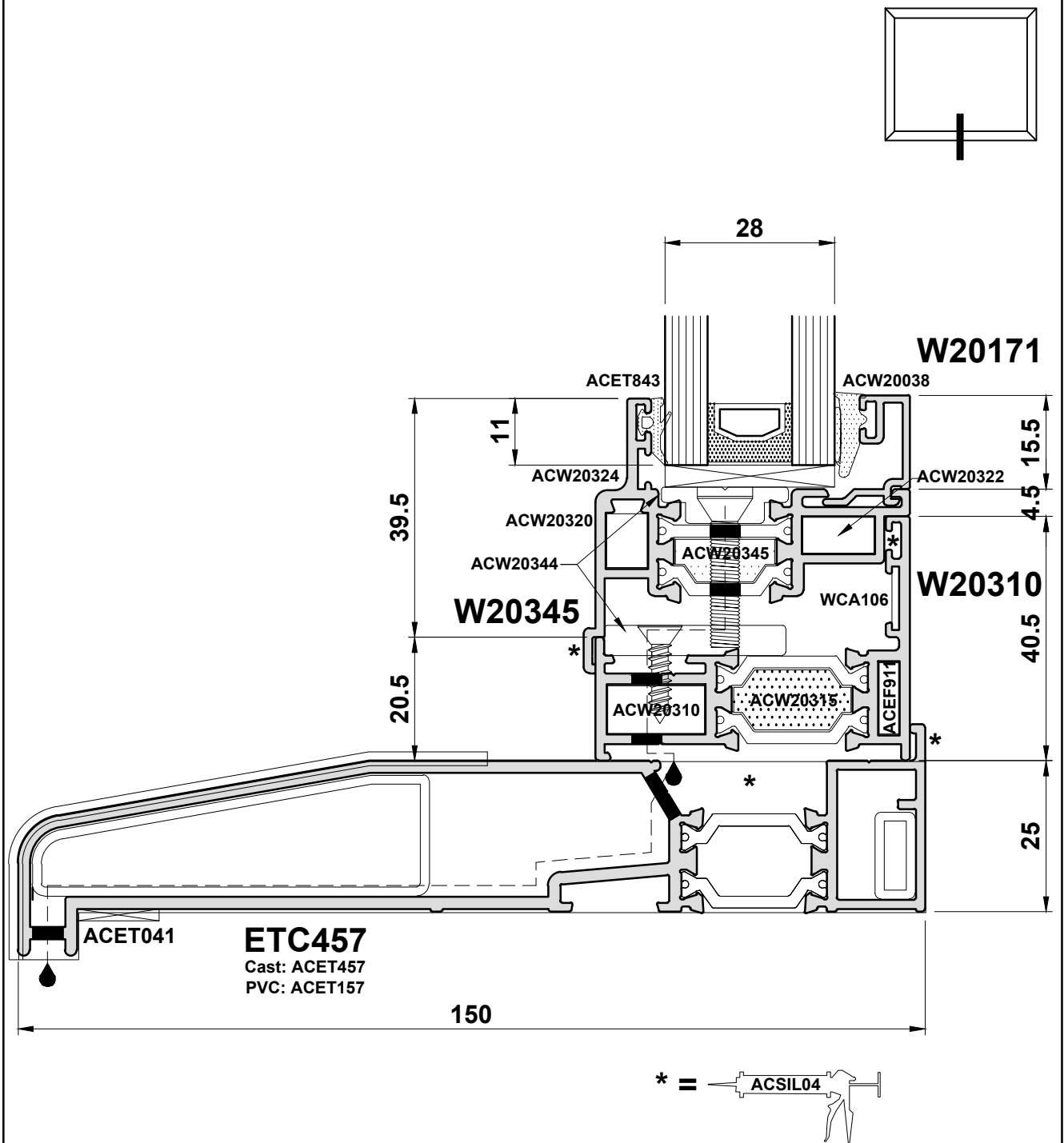
Do Not Scale From This Drawing

Detail 2A



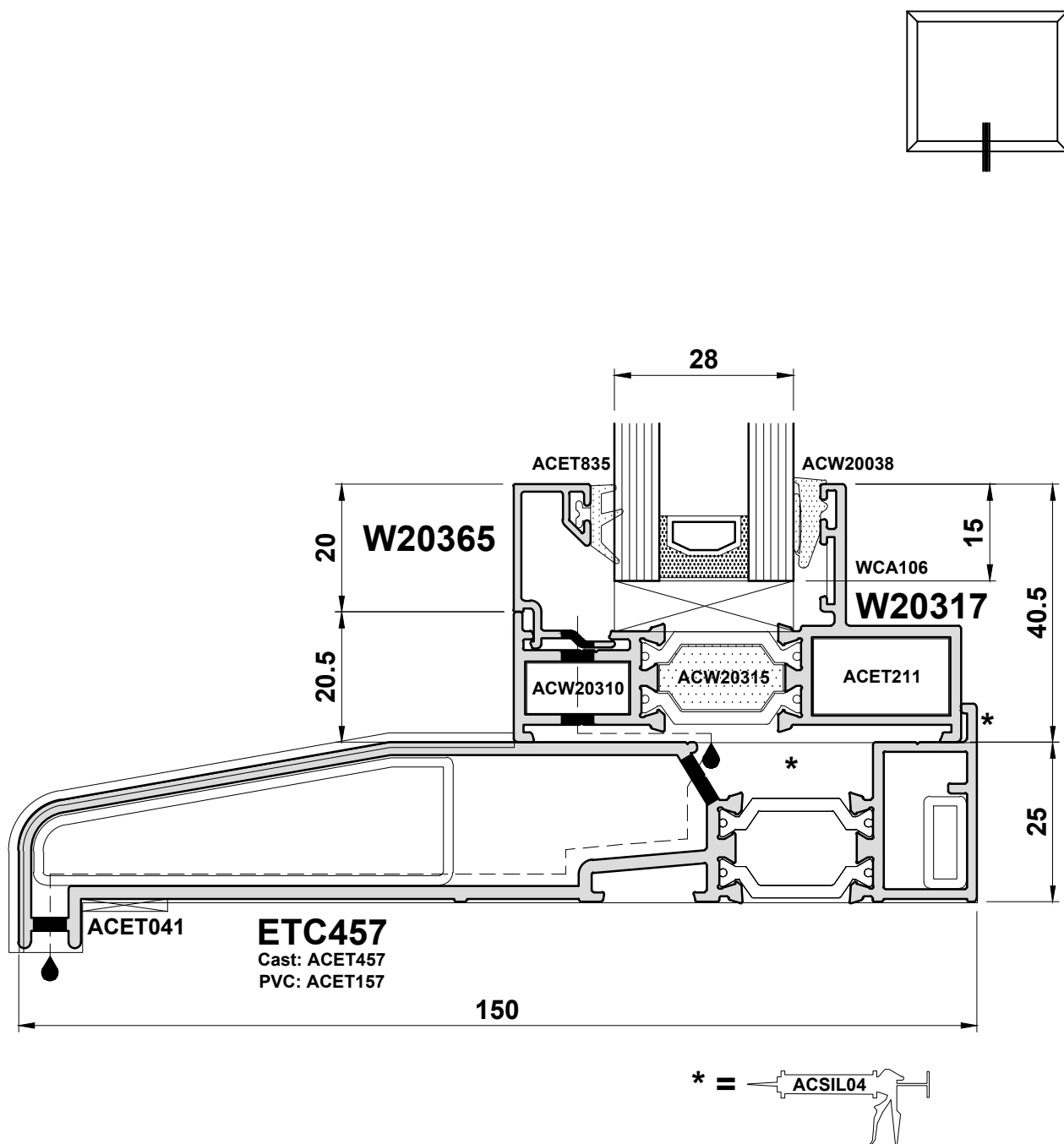
Do Not Scale From This Drawing

Detail 2B



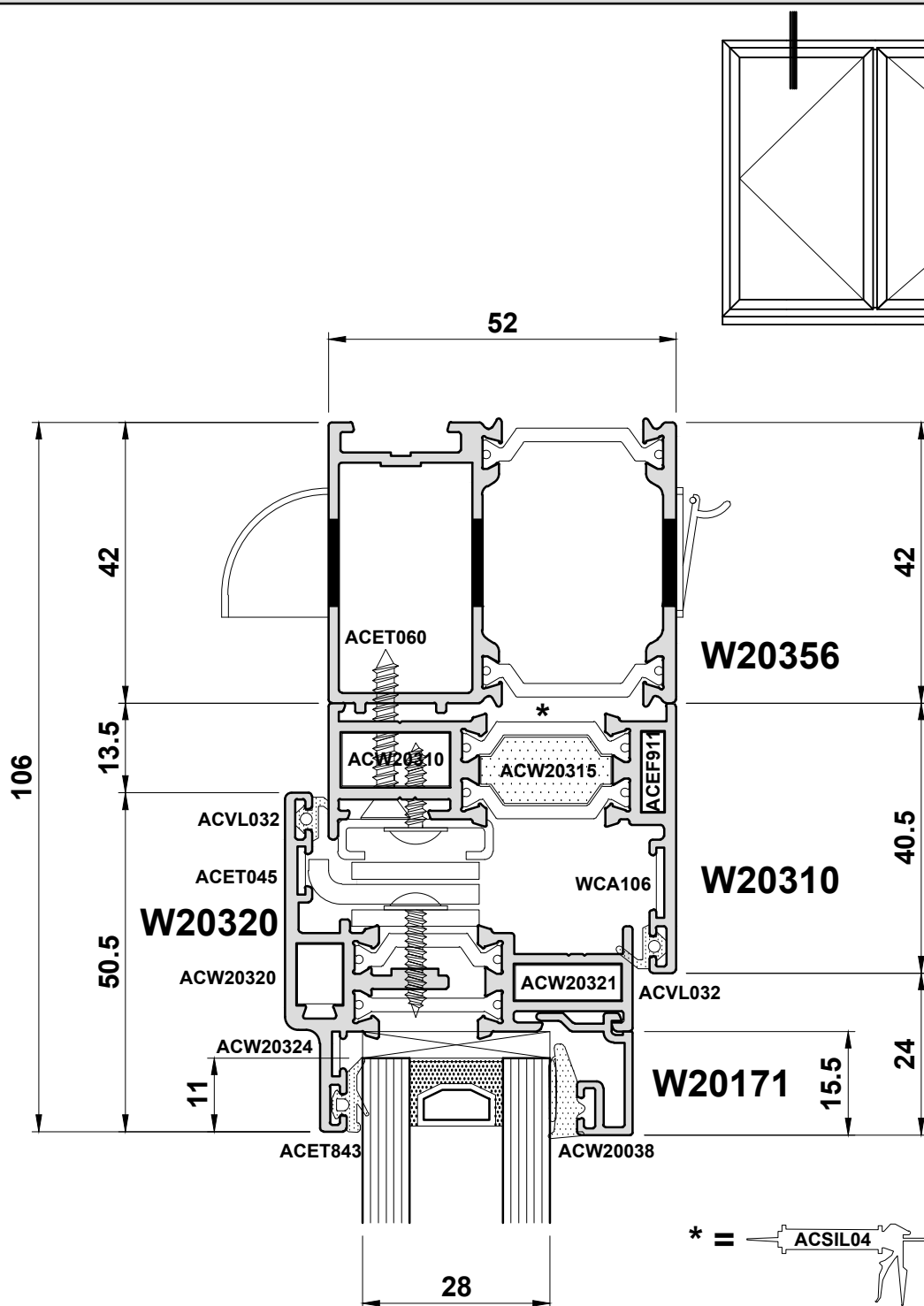
Do Not Scale From This Drawing

Detail 2C



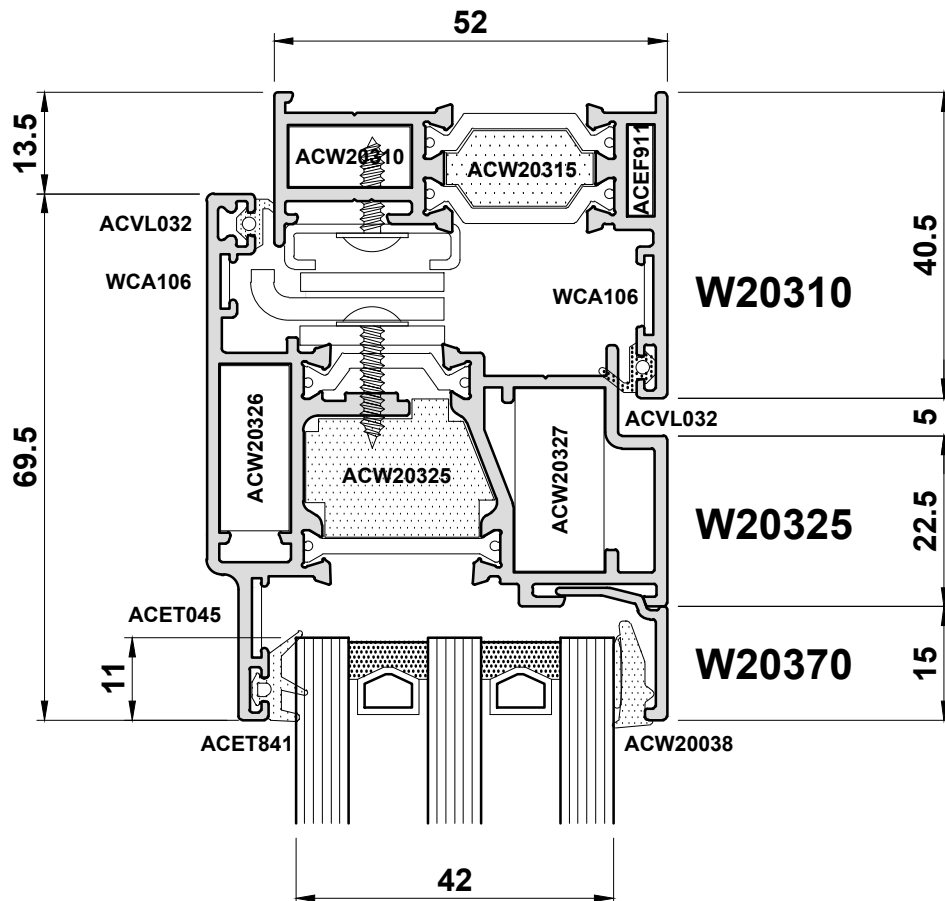
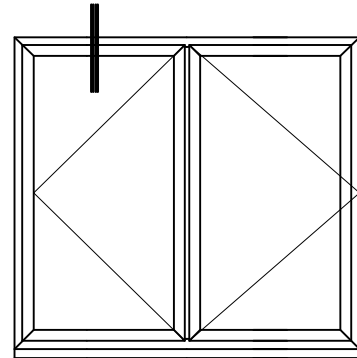
Do Not Scale From This Drawing

Detail 3A



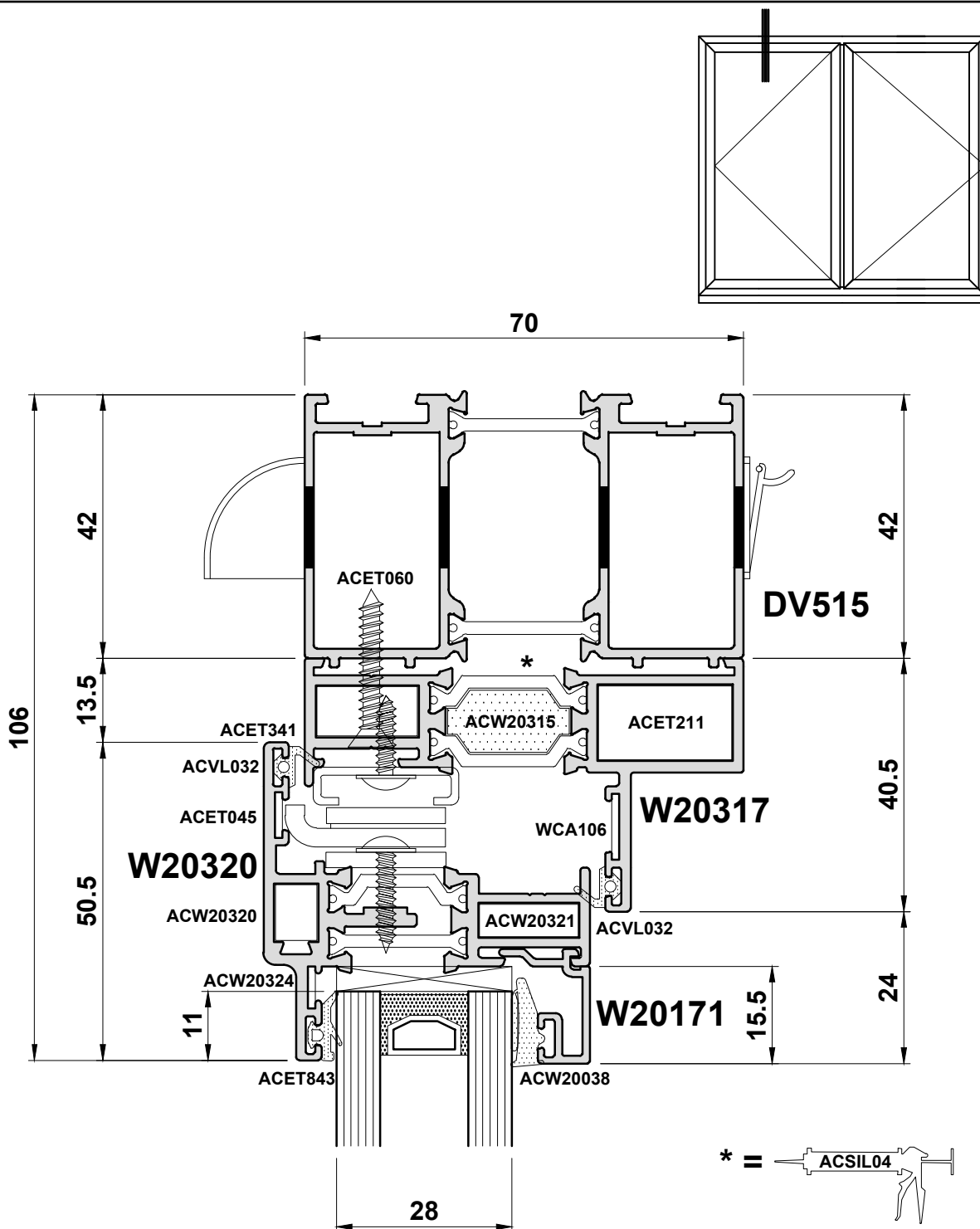
Do Not Scale From This Drawing

Detail 3B



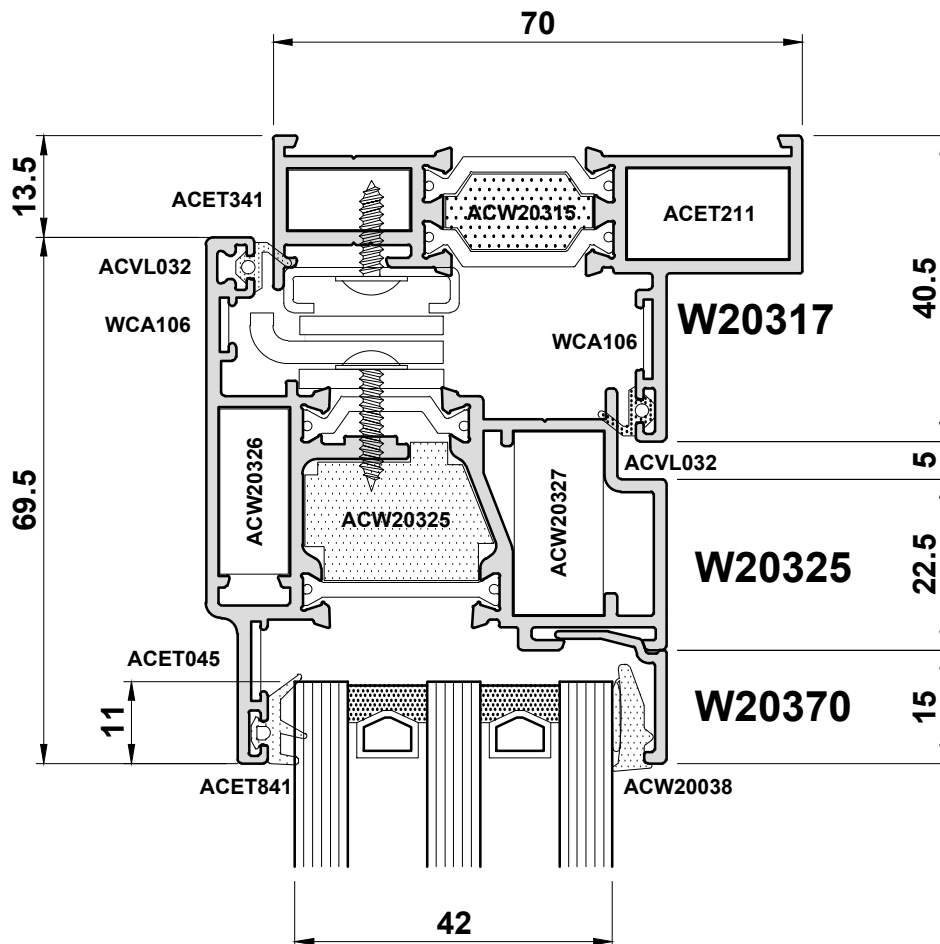
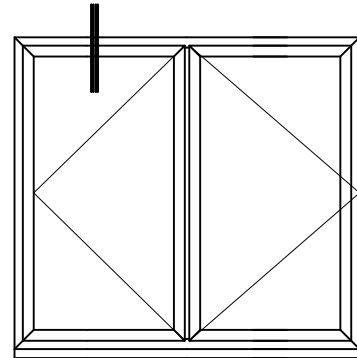
Do Not Scale From This Drawing

Detail 3C



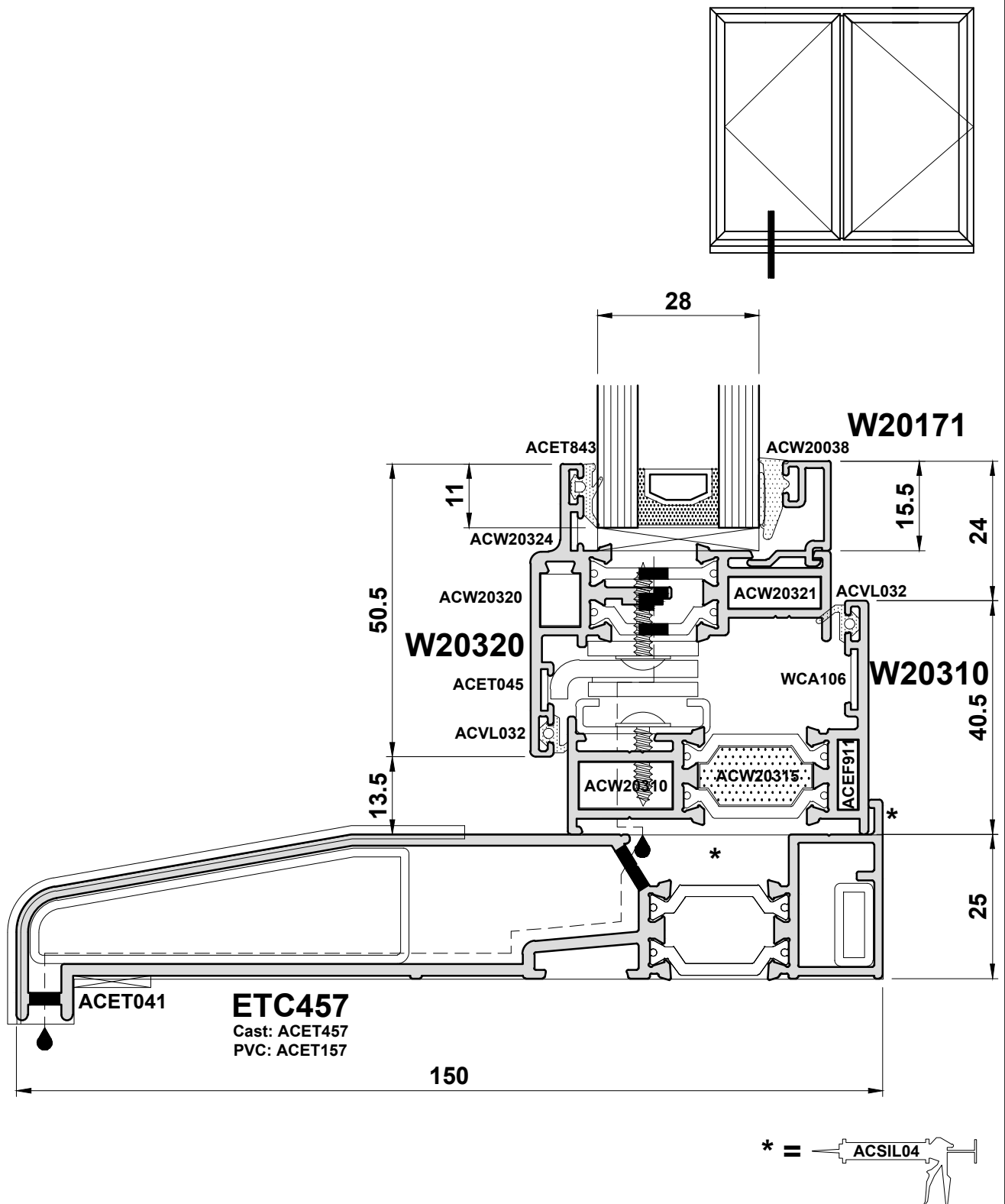
Do Not Scale From This Drawing

Detail 3D



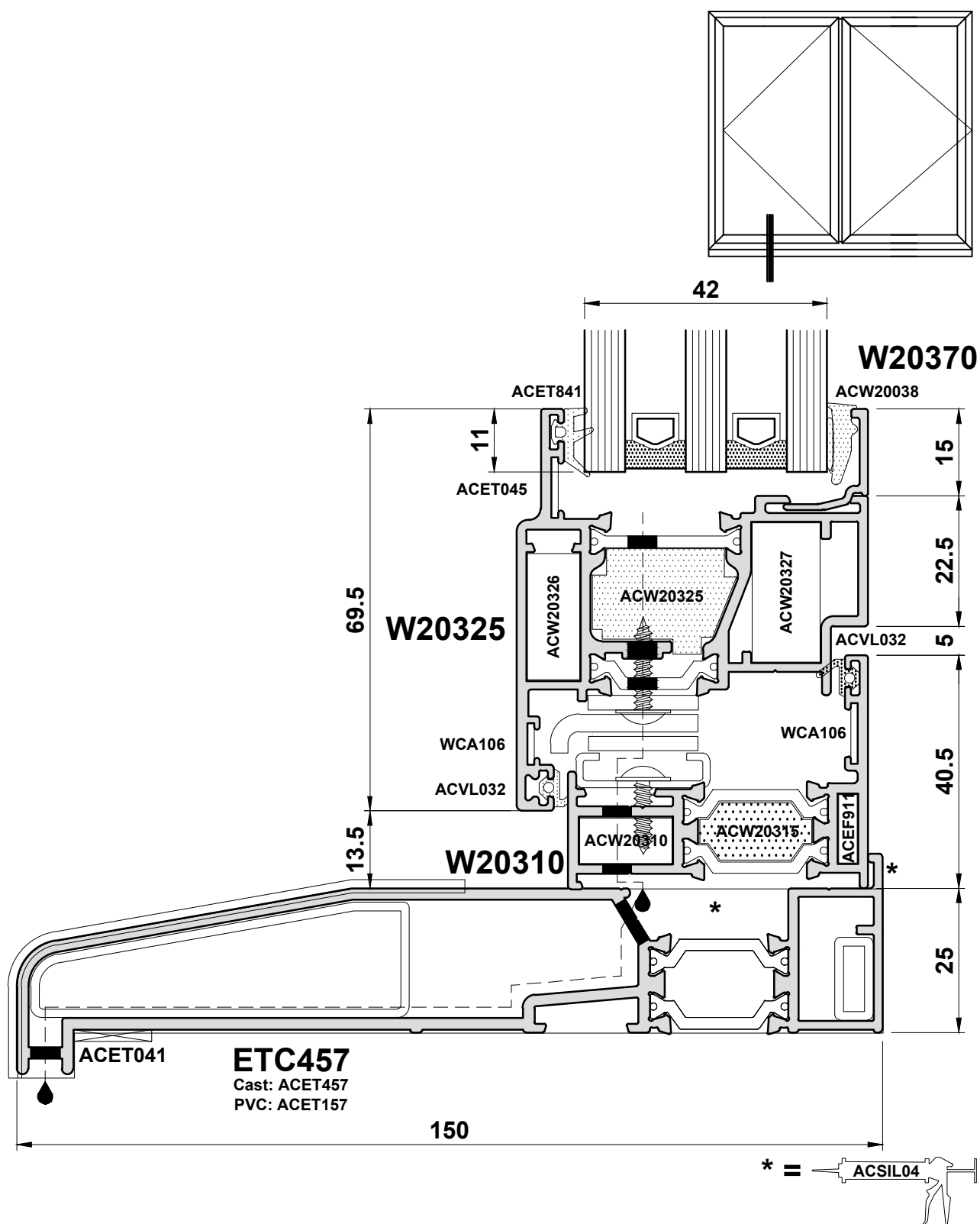
Do Not Scale From This Drawing

Detail 4A



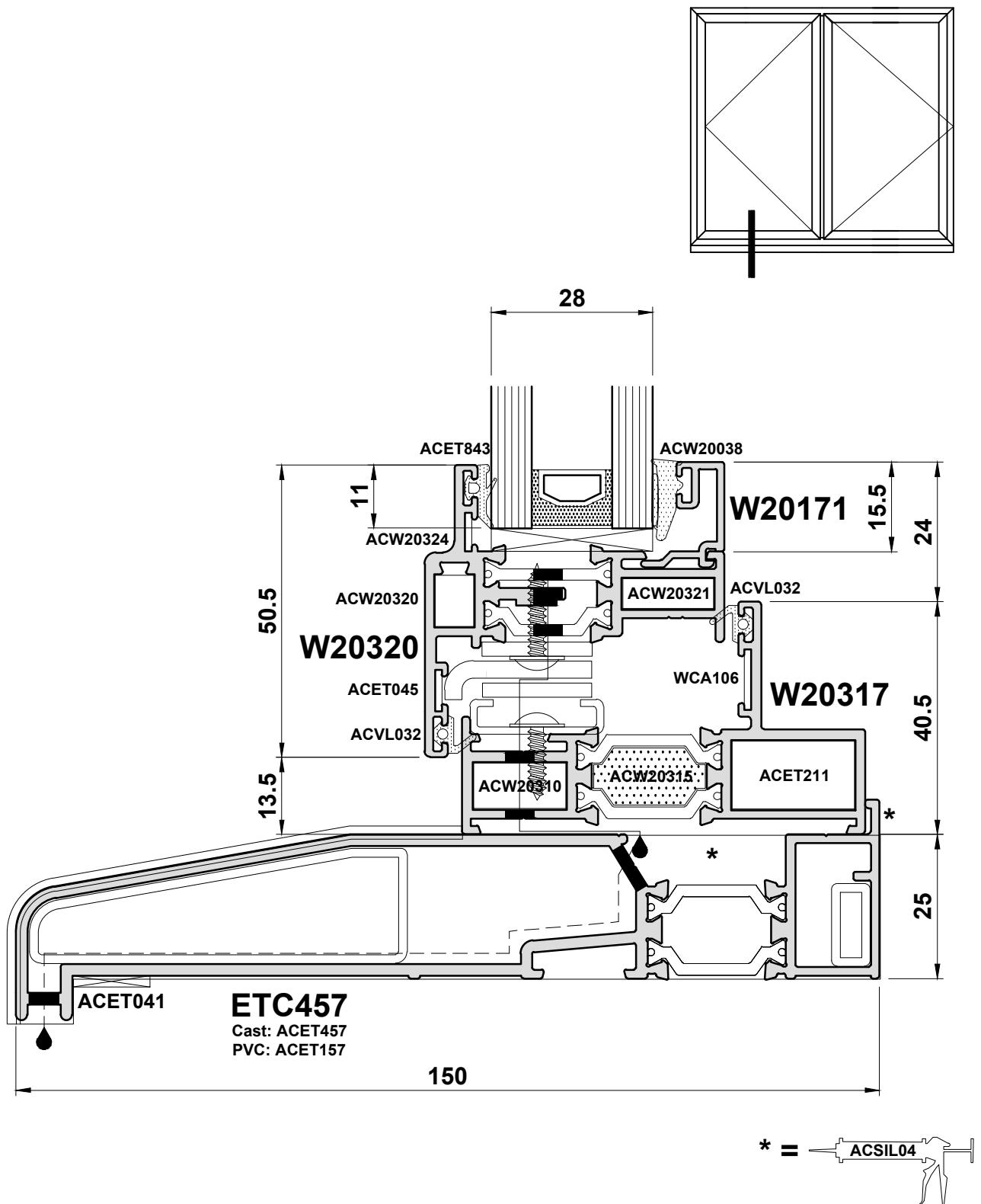
Do Not Scale From This Drawing

Detail 4B



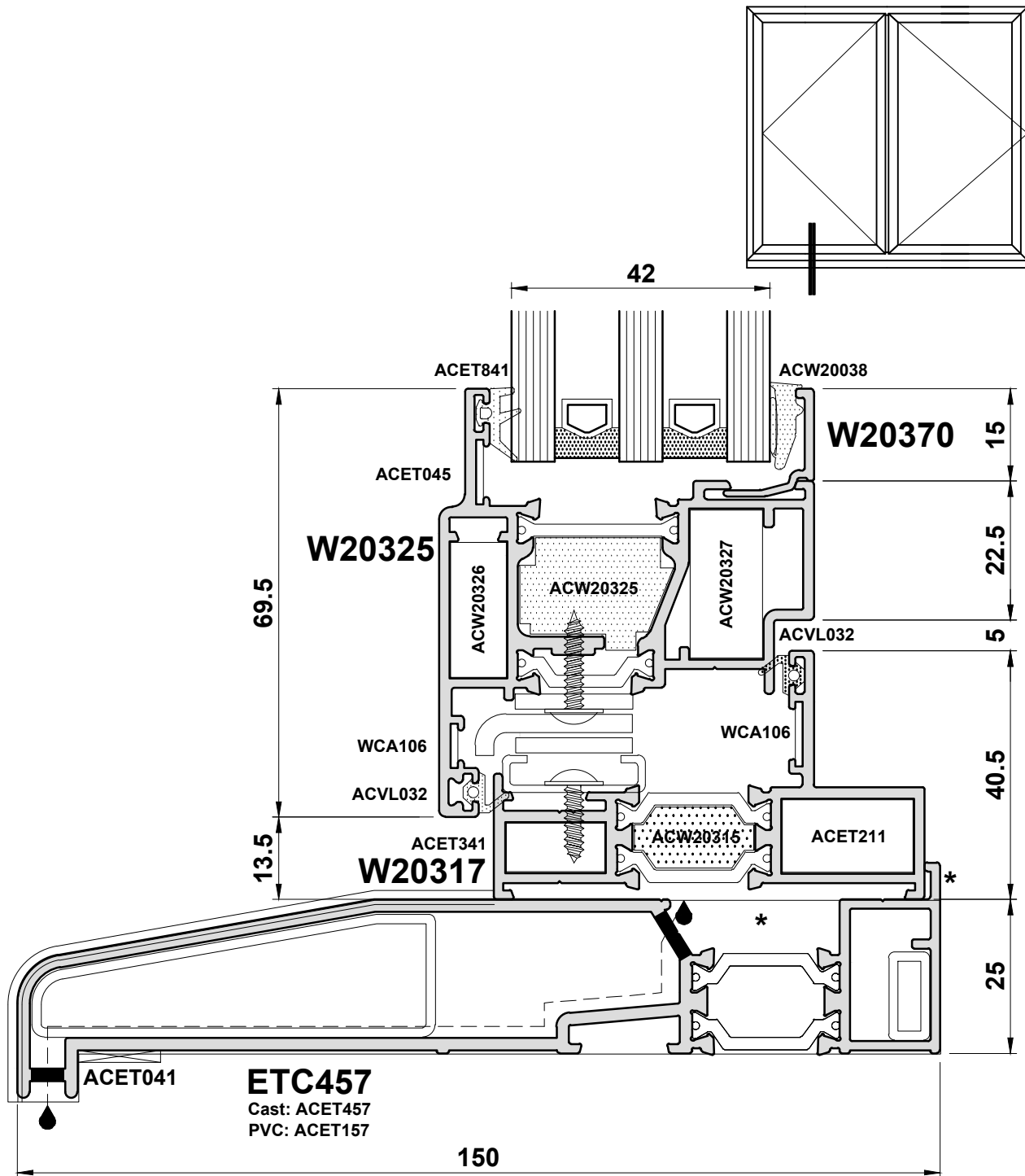
Do Not Scale From This Drawing

Detail 4C



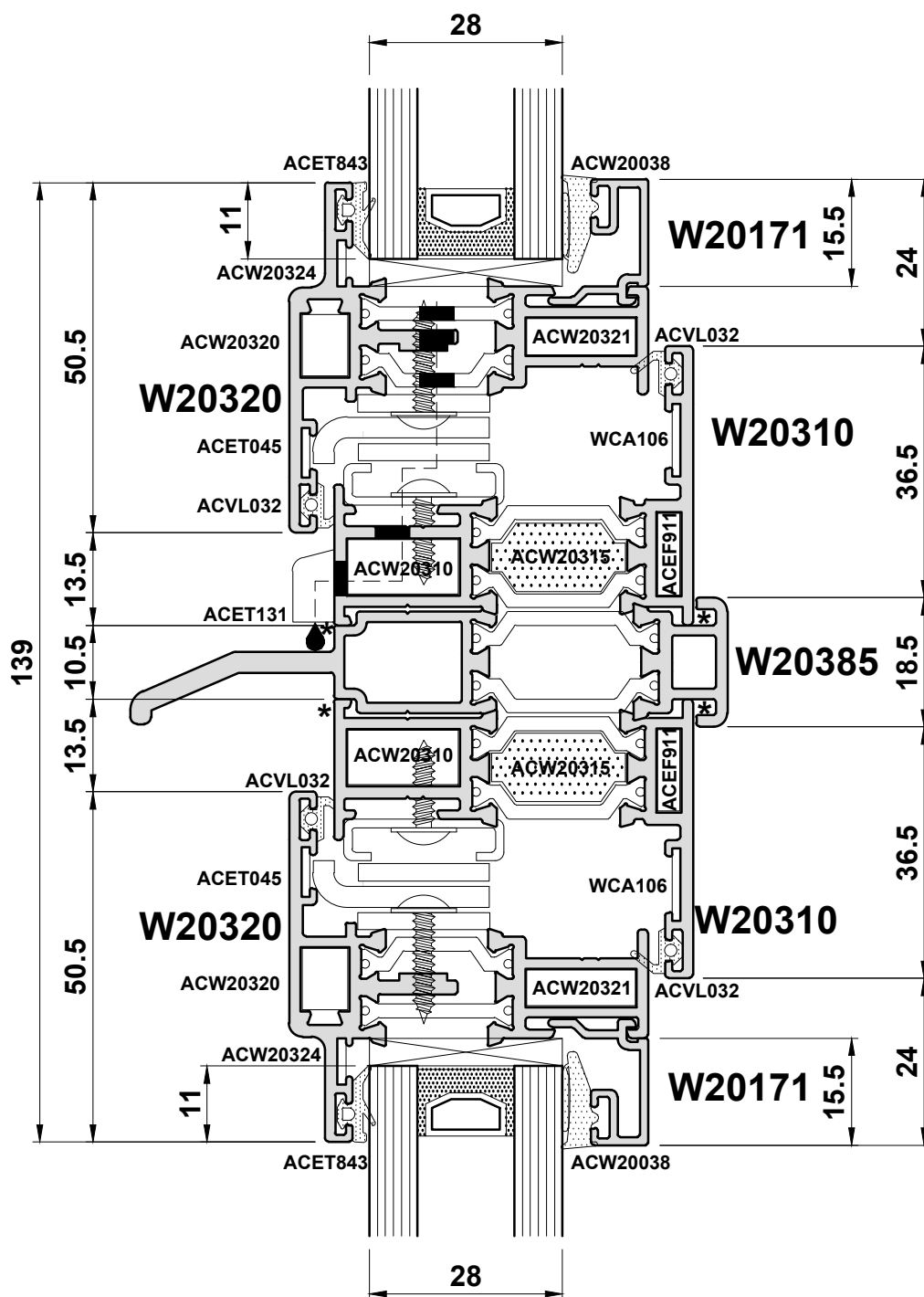
Do Not Scale From This Drawing

Detail 4D



Do Not Scale From This Drawing

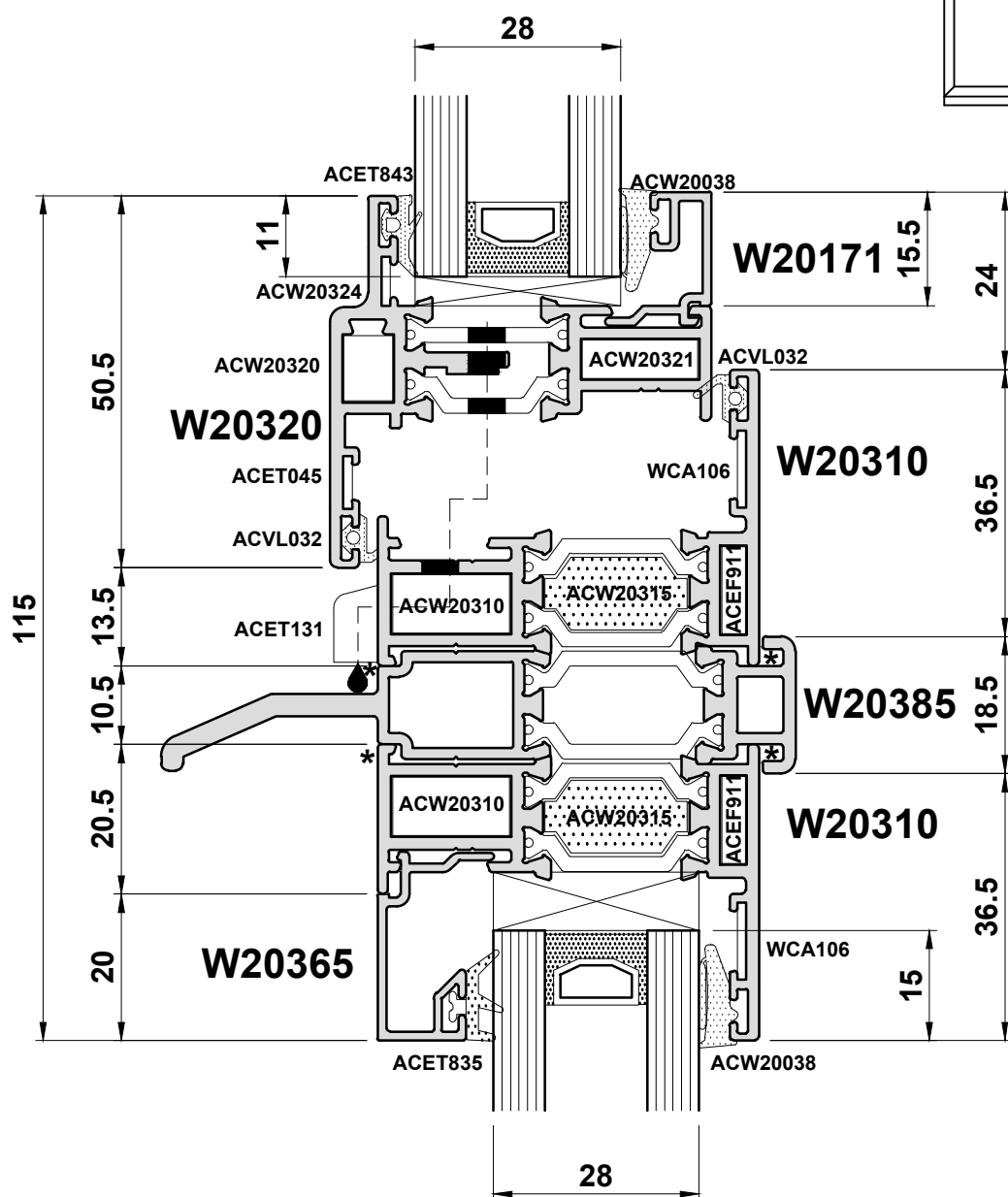
Detail 5



Coupler fixing not shown for clarity

Do Not Scale From This Drawing

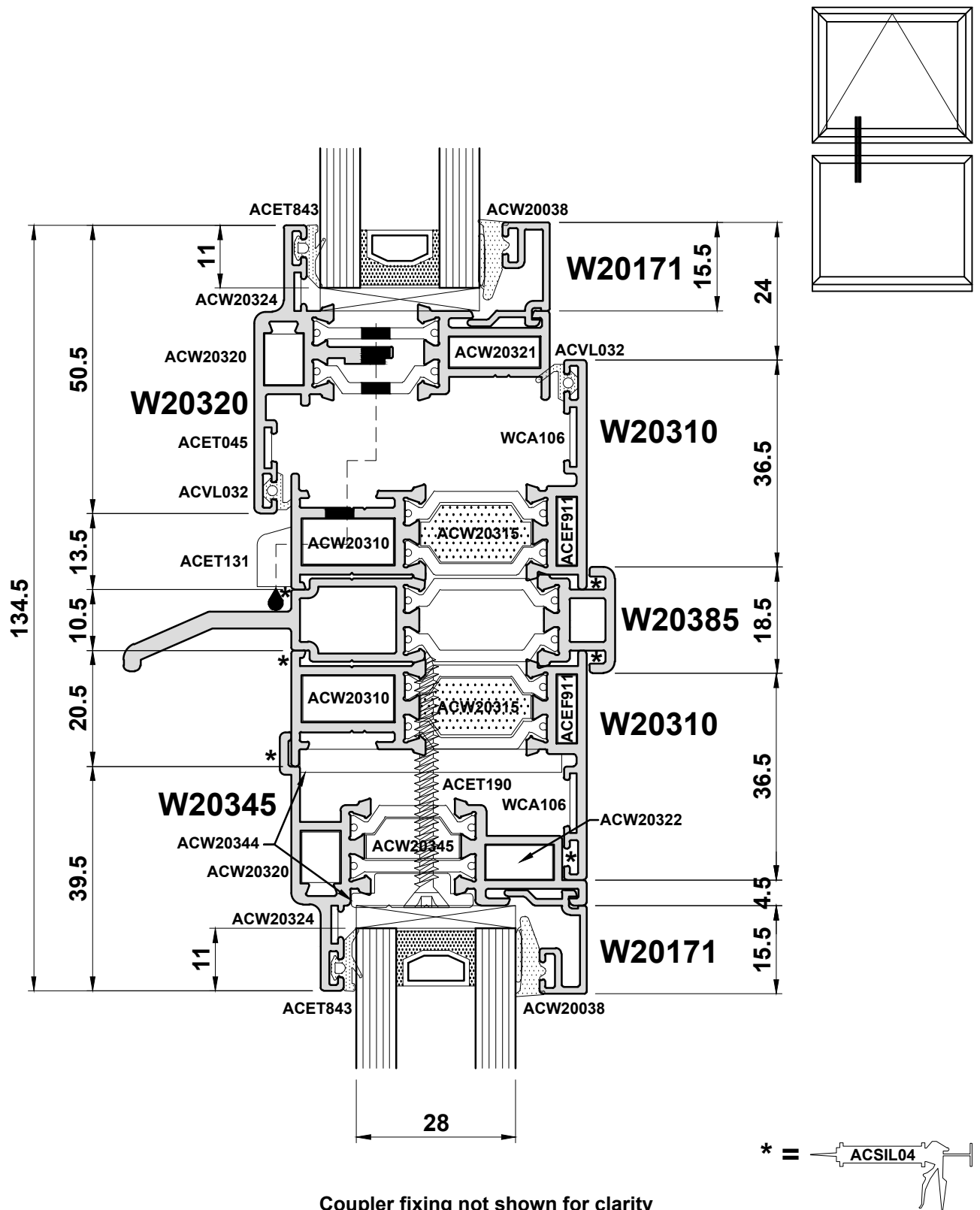
Detail 6A



Coupler fixing not shown for clarity

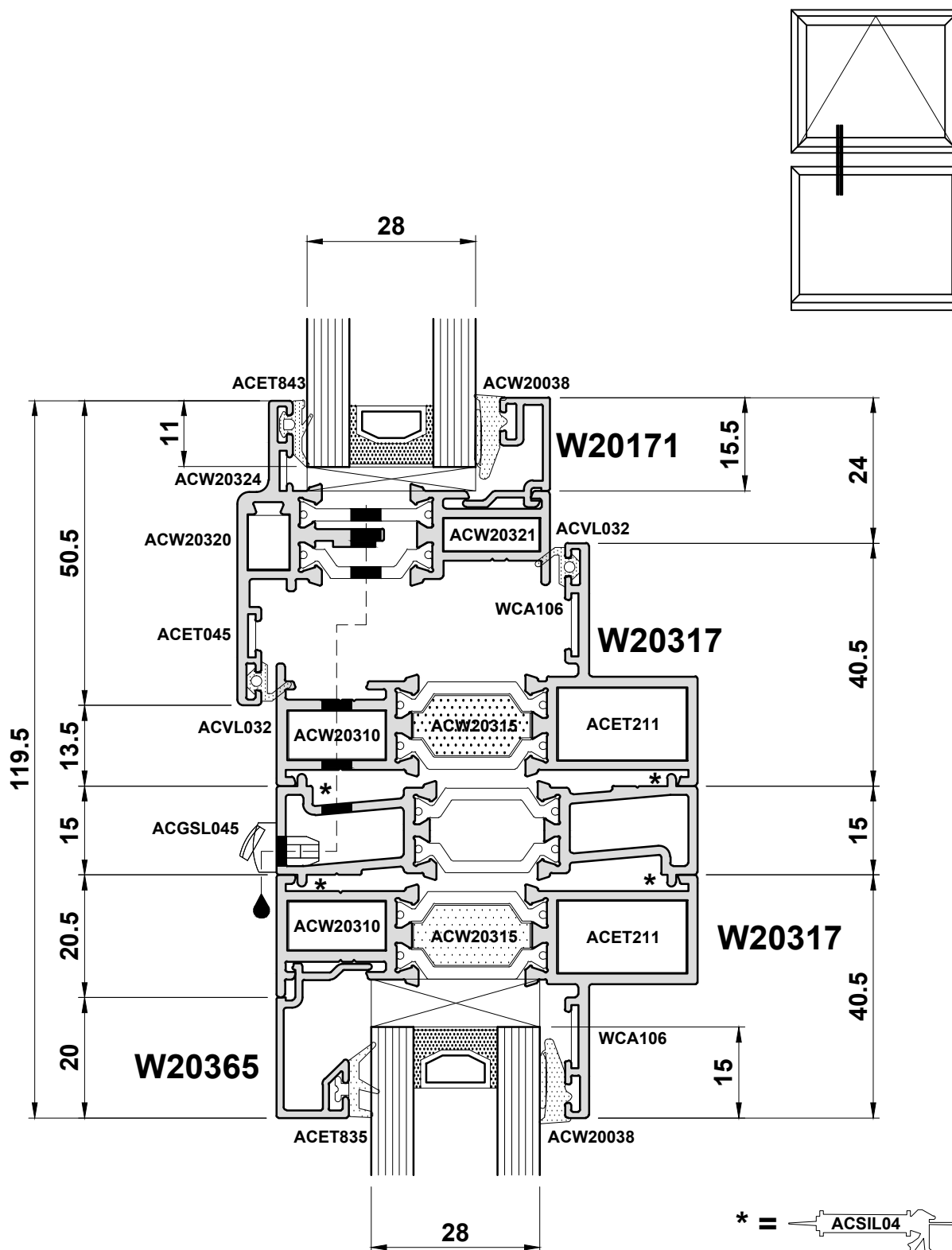
Do Not Scale From This Drawing

Detail 6B



Do Not Scale From This Drawing

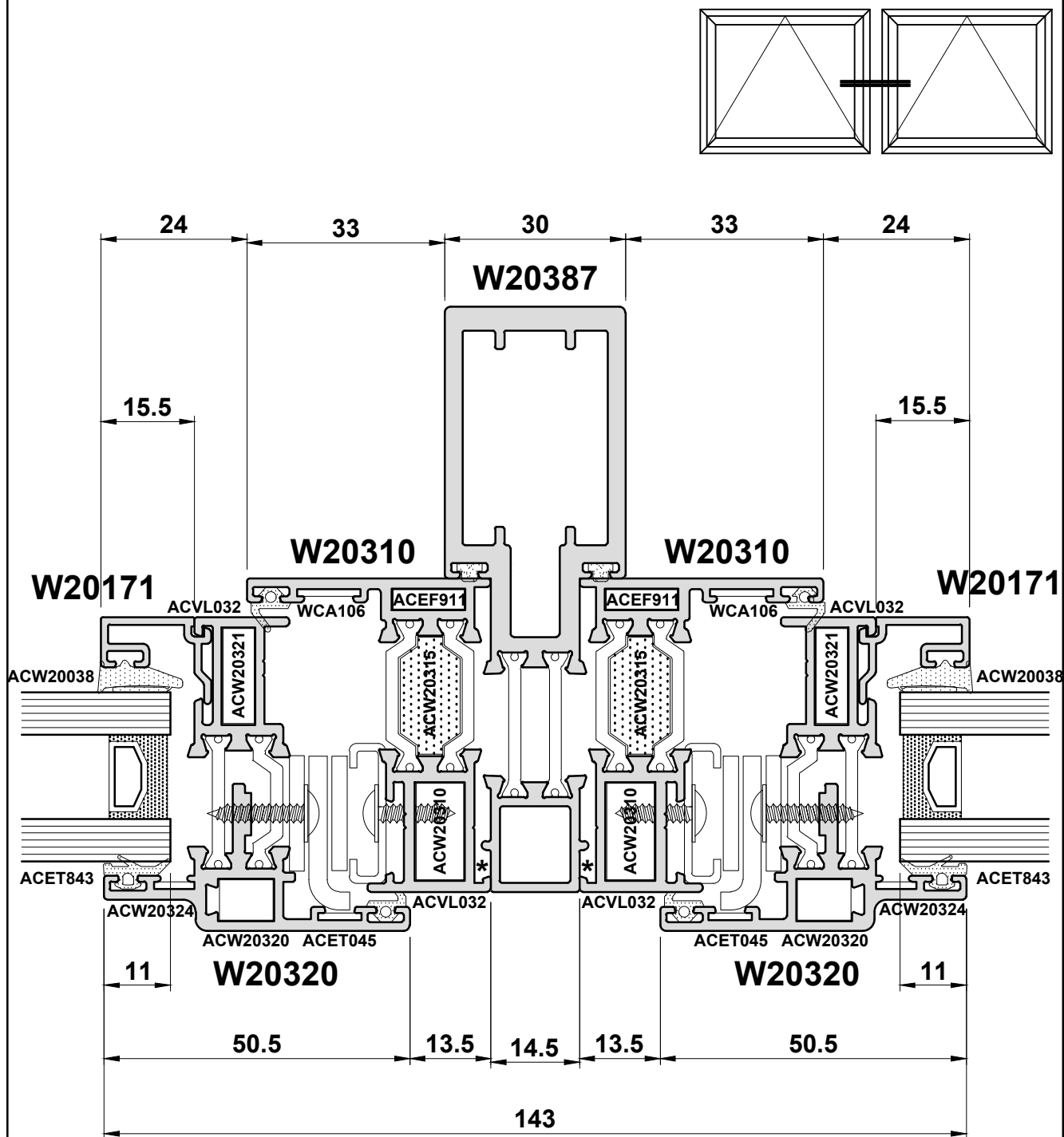
Detail 6C



Coupler fixing not shown for clarity

Do Not Scale From This Drawing

Detail 7

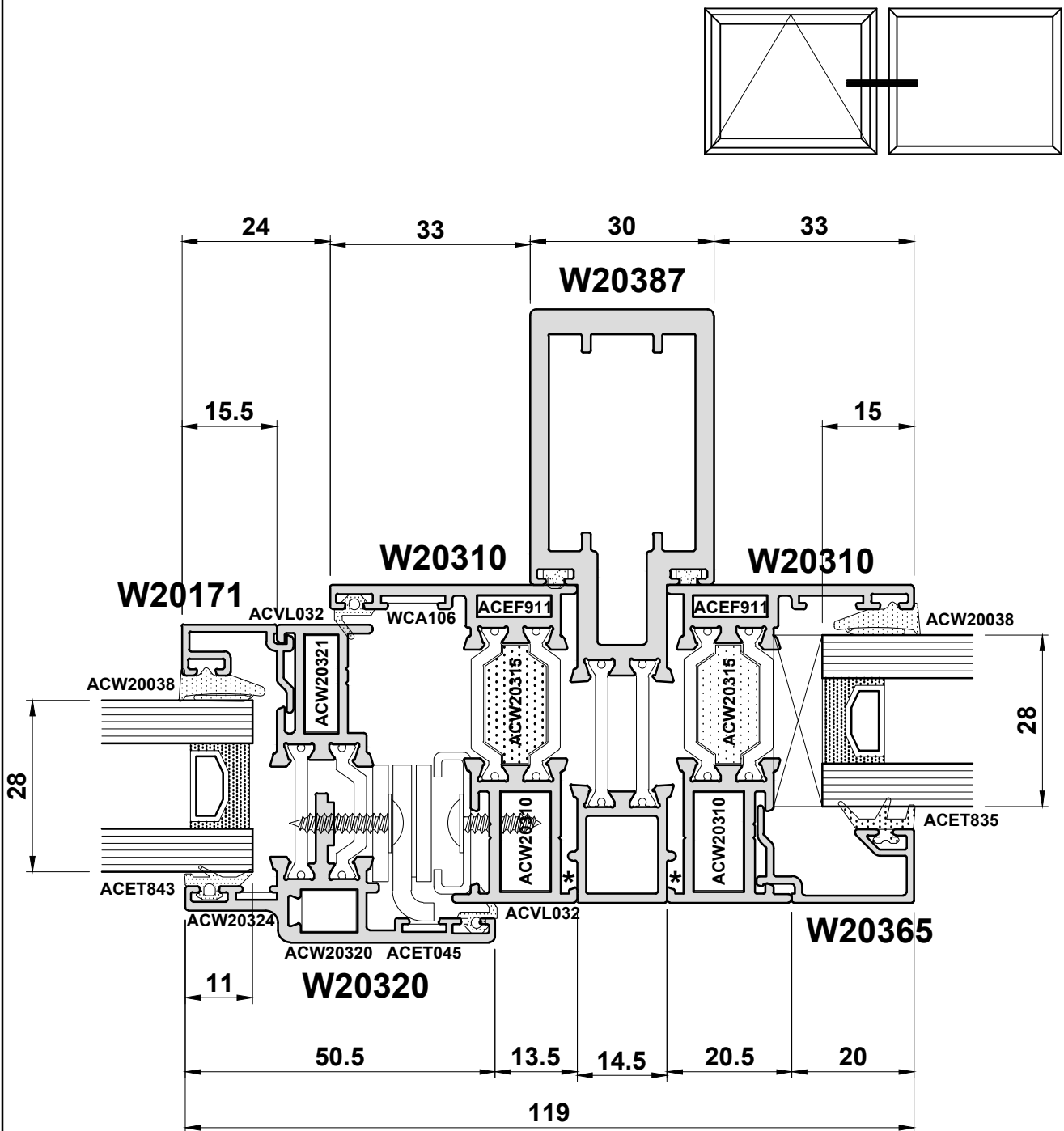


* =  ACSIL04

Coupler fixing not shown for clarity

Do Not Scale From This Drawing

Detail 8A

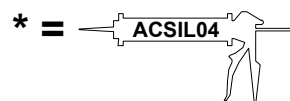
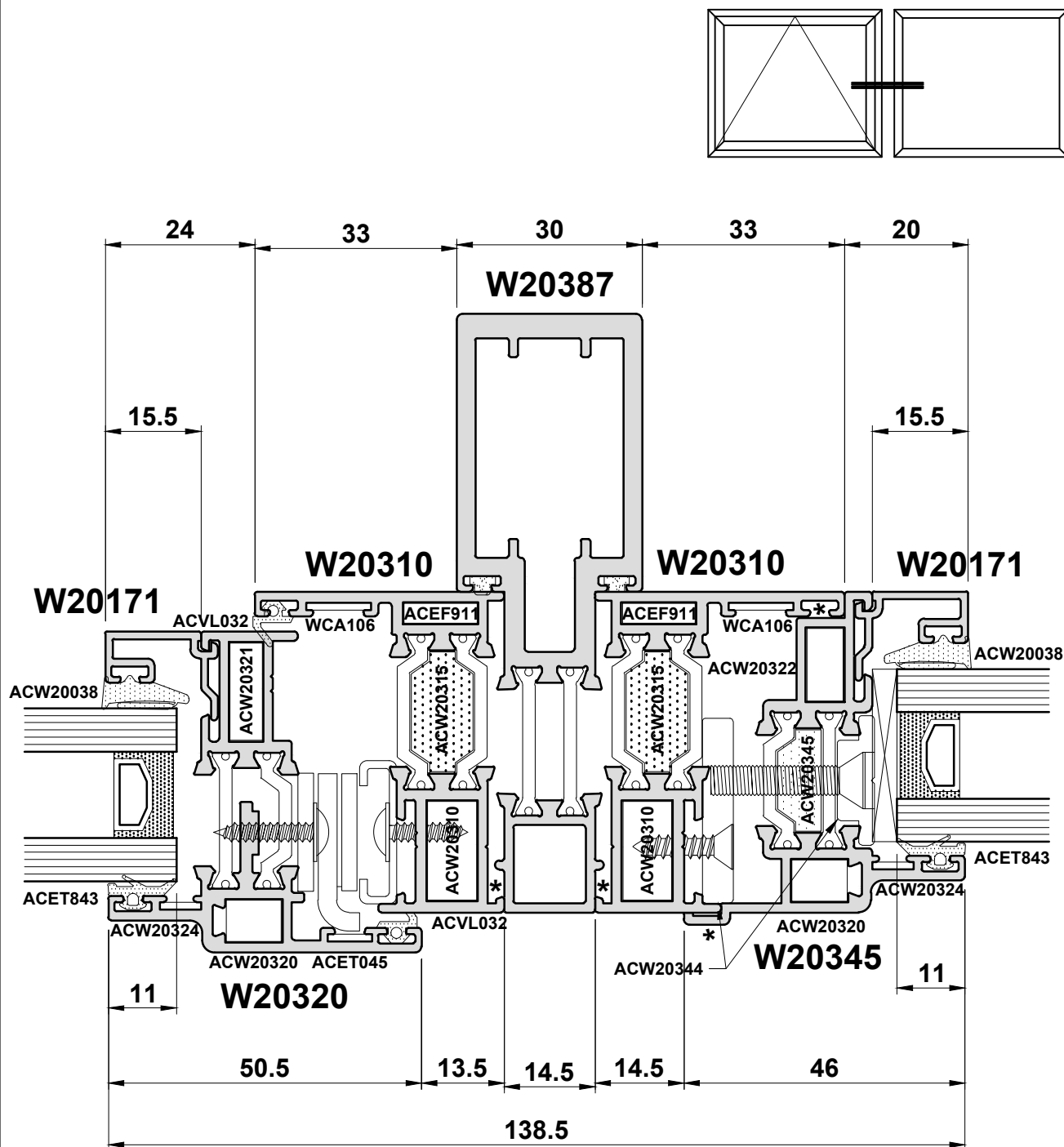


* =  ACSIL04

Coupler fixing not shown for clarity

Do Not Scale From This Drawing

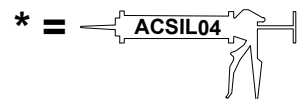
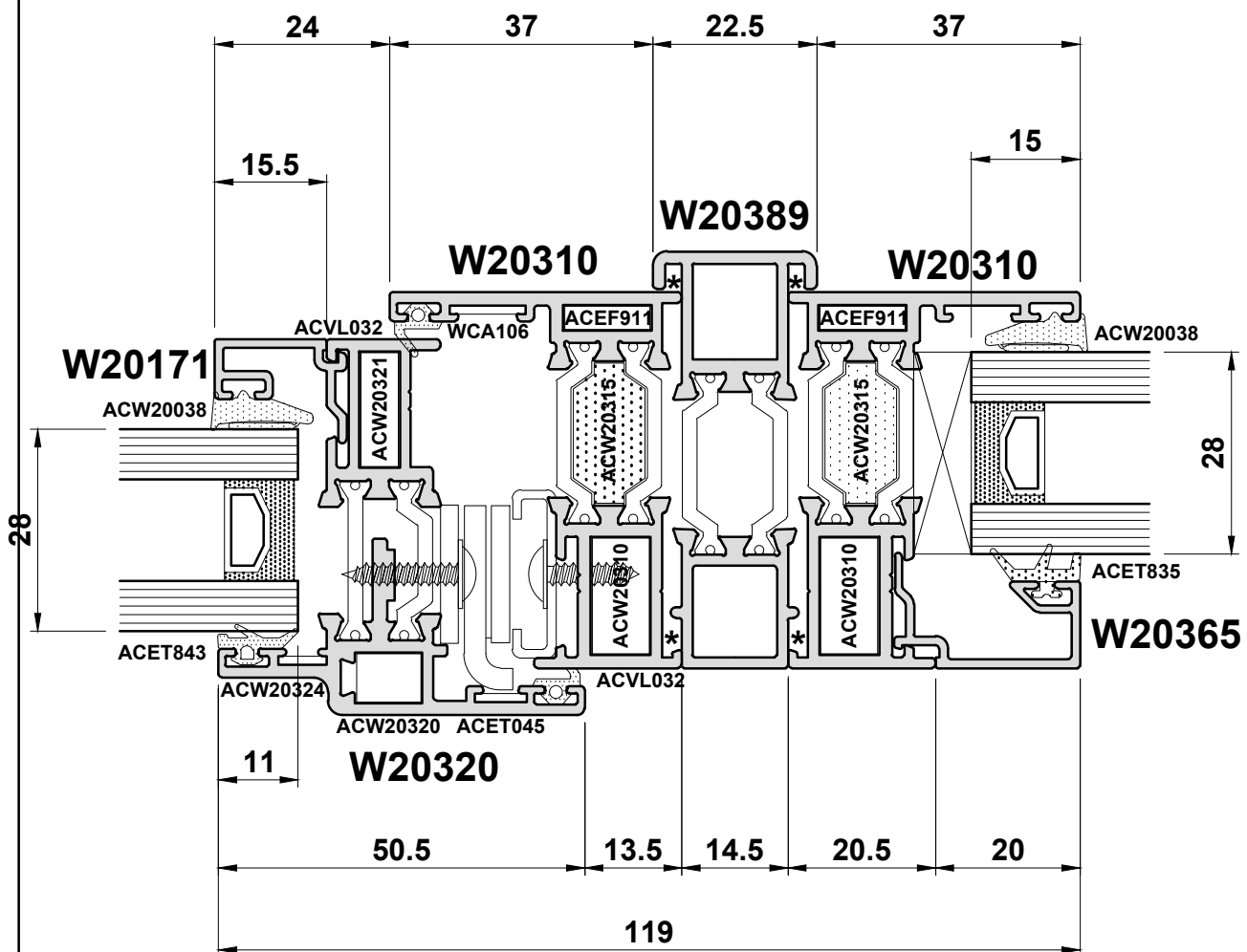
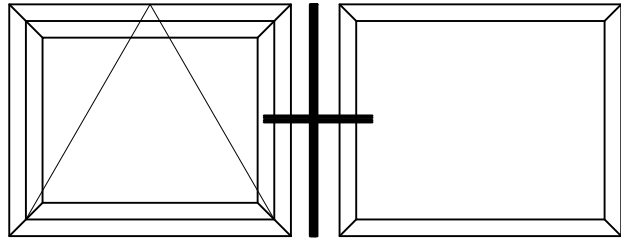
Detail 8B



Coupler fixing not shown for clarity

Do Not Scale From This Drawing

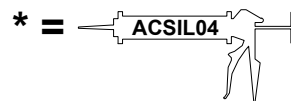
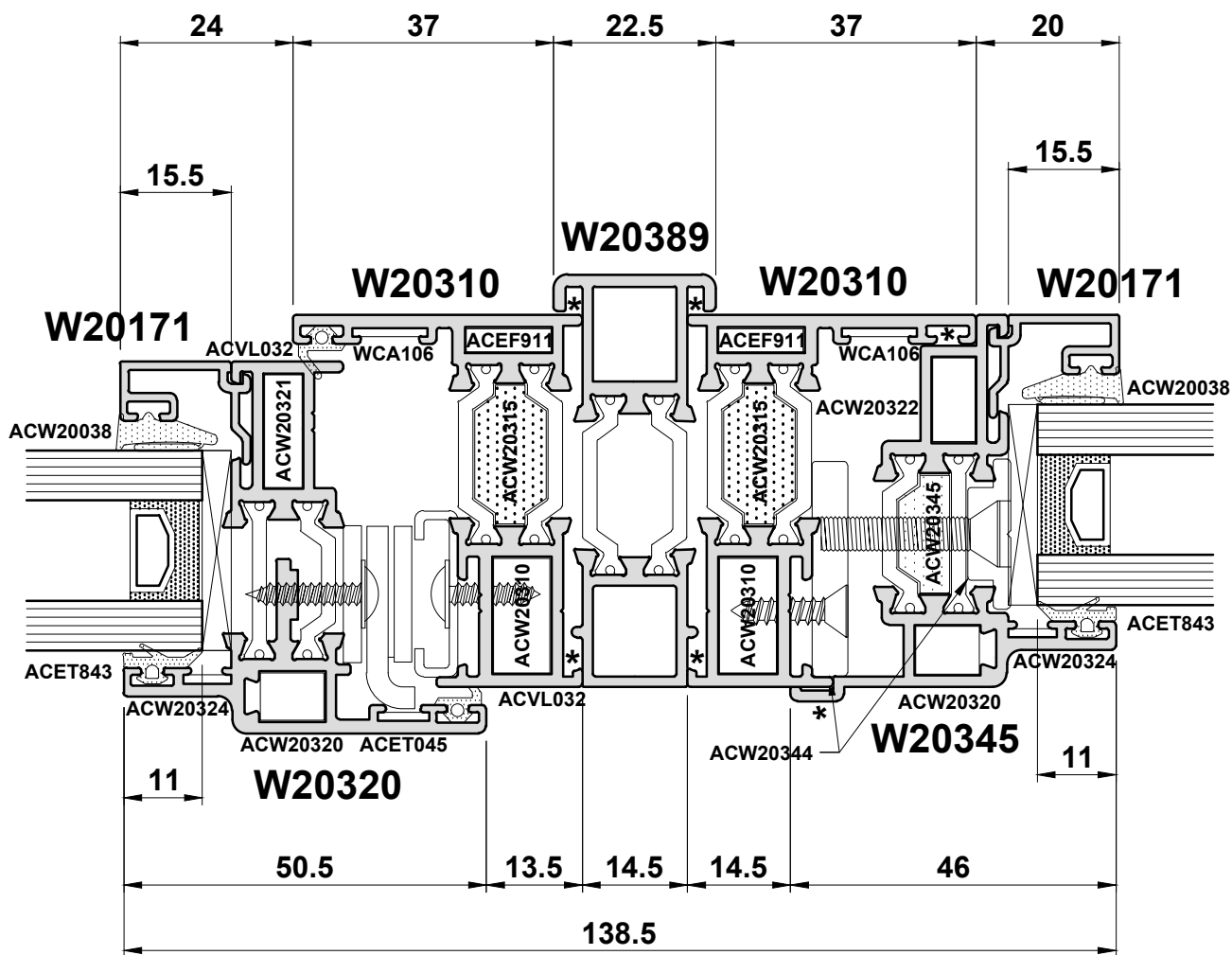
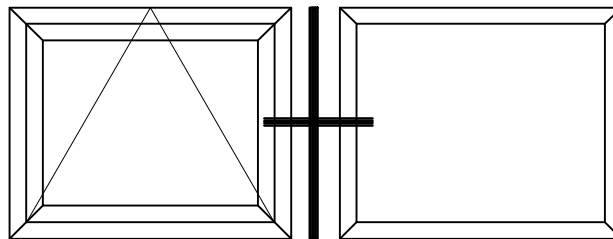
Detail 8C



Coupler fixing not shown for clarity

Do Not Scale From This Drawing

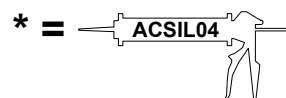
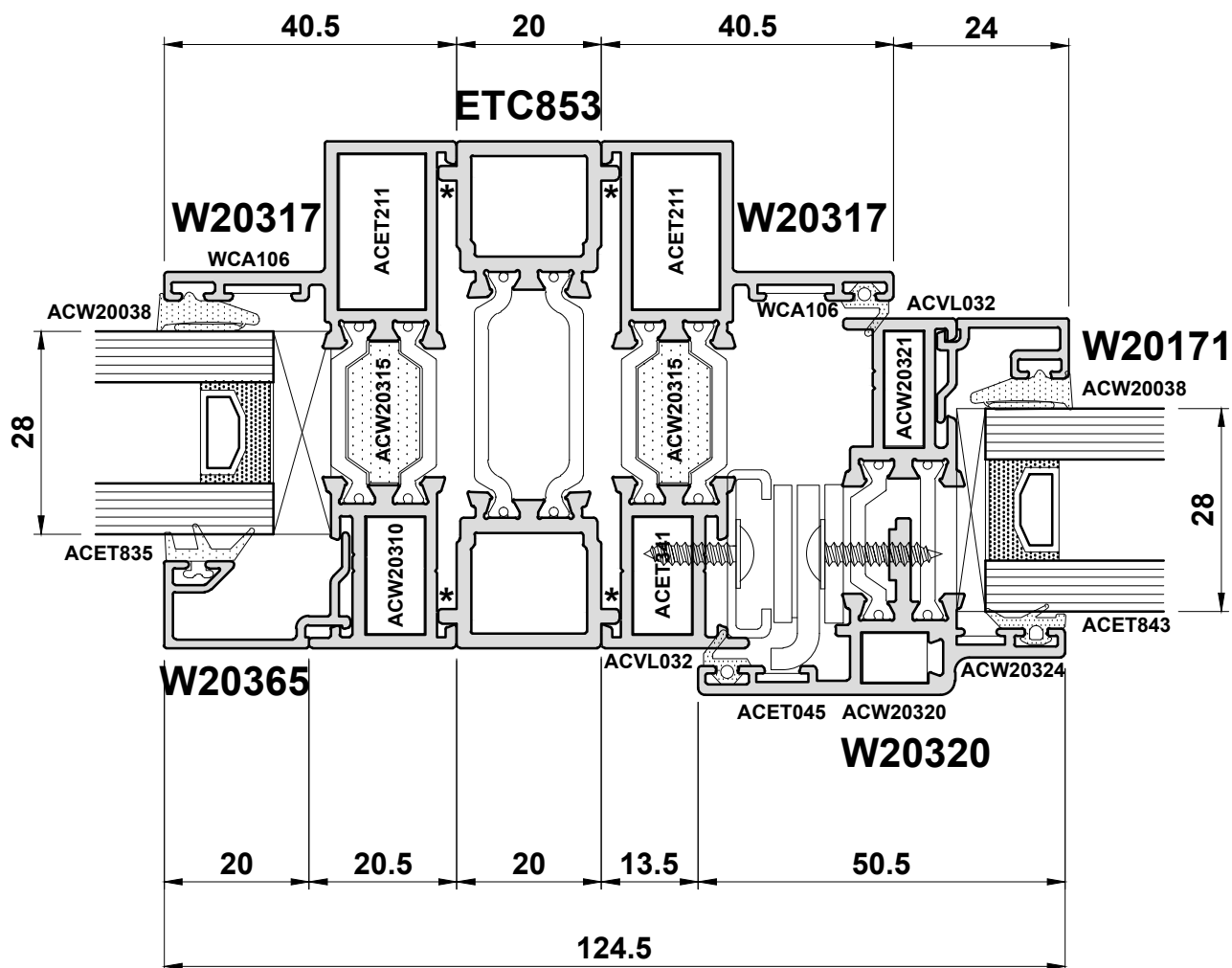
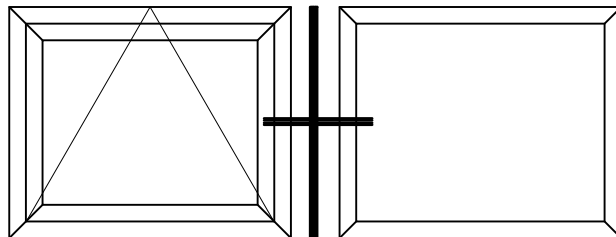
Detail 8D



Coupler fixing not shown for clarity

Do Not Scale From This Drawing

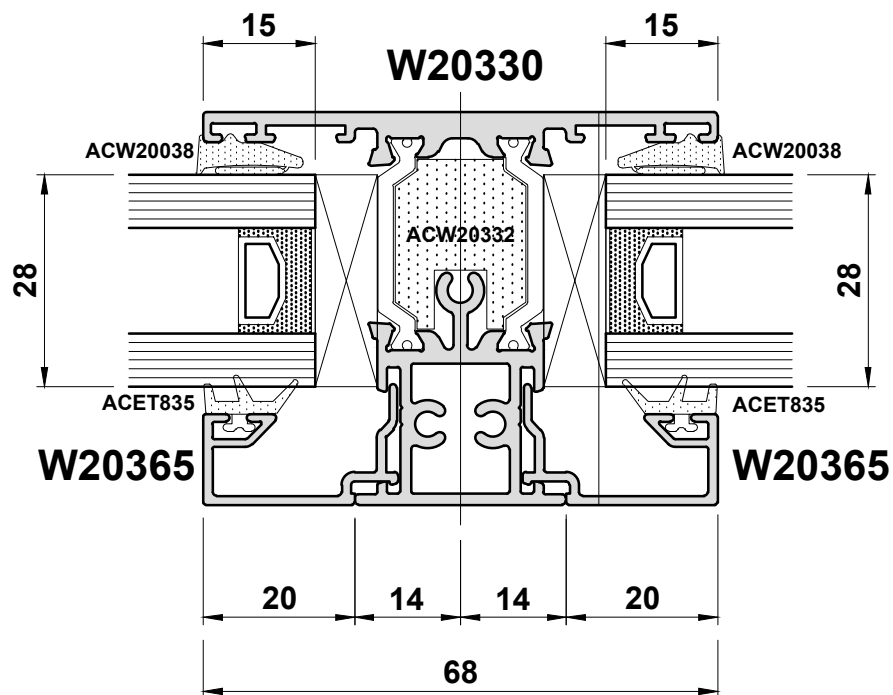
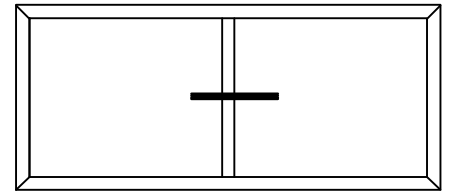
Detail 8E



Coupler fixing not shown for clarity

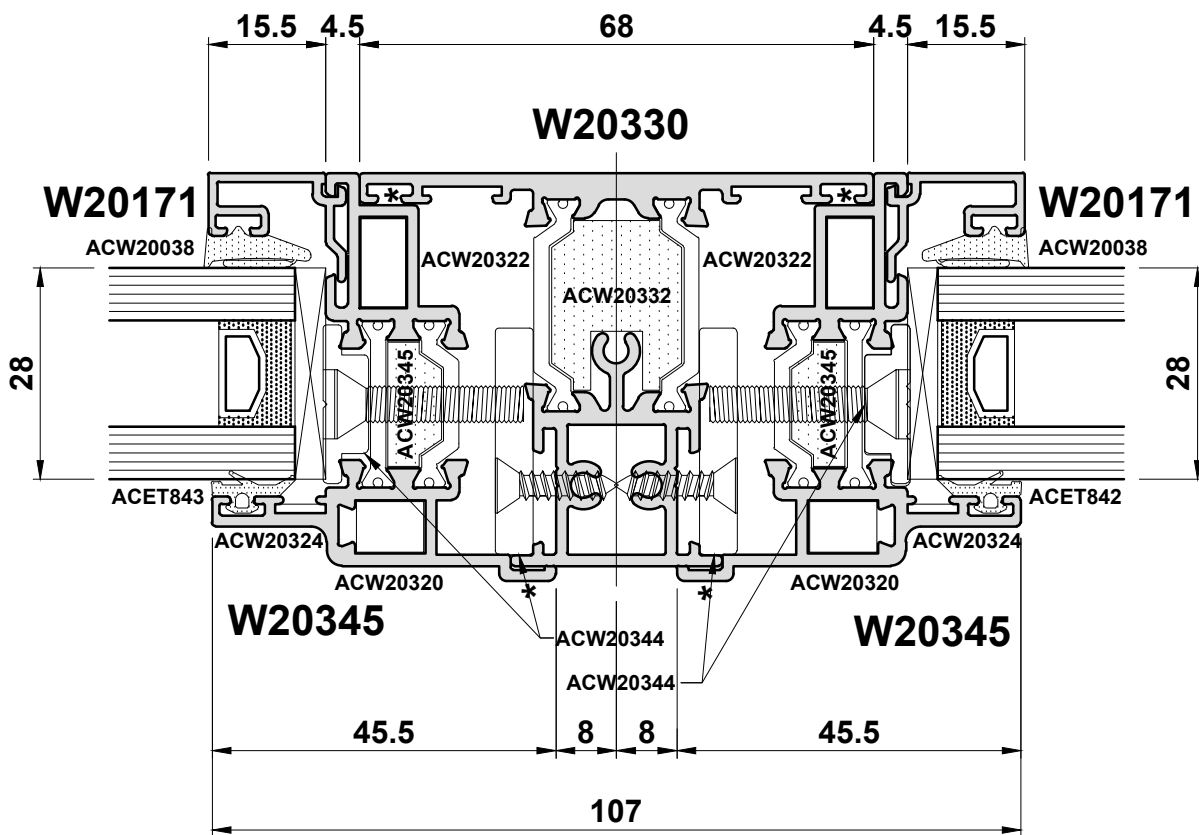
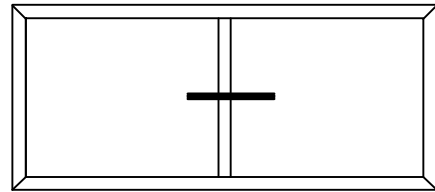
Do Not Scale From This Drawing

Detail 9A



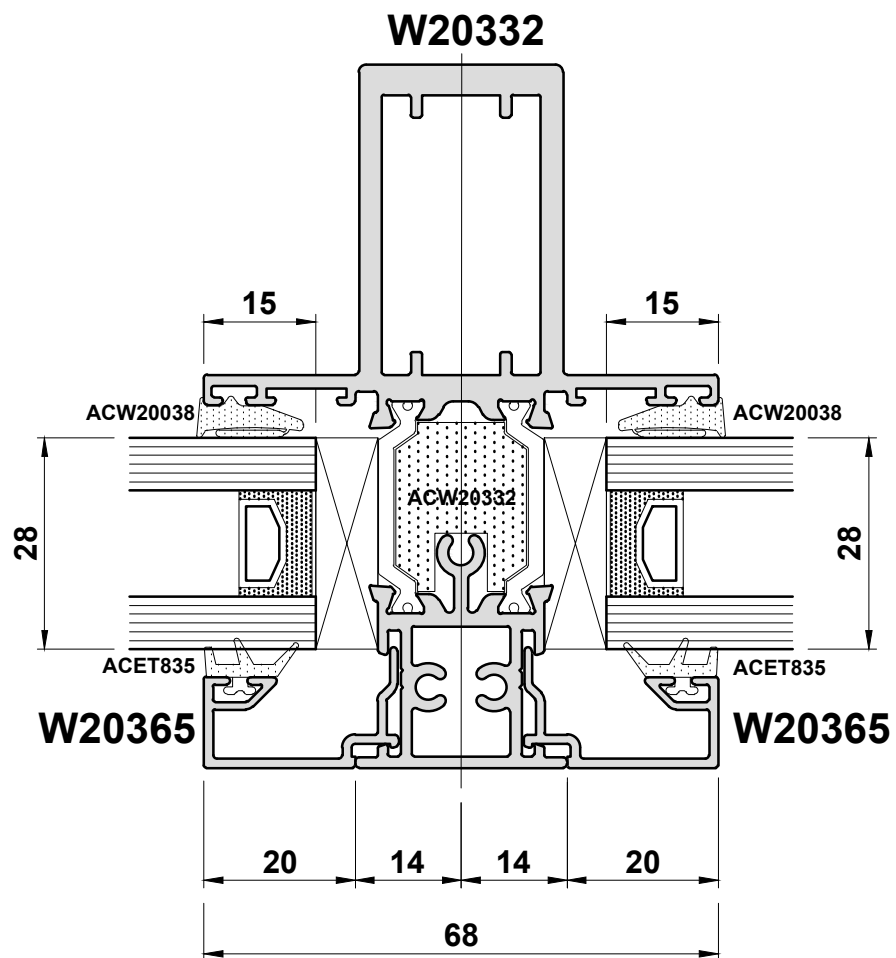
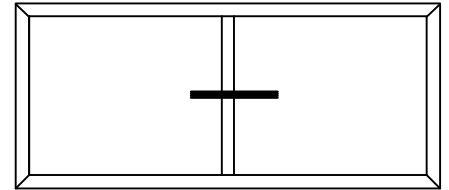
Do Not Scale From This Drawing

Detail 9B



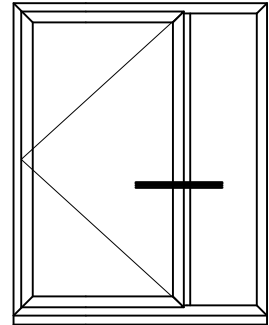
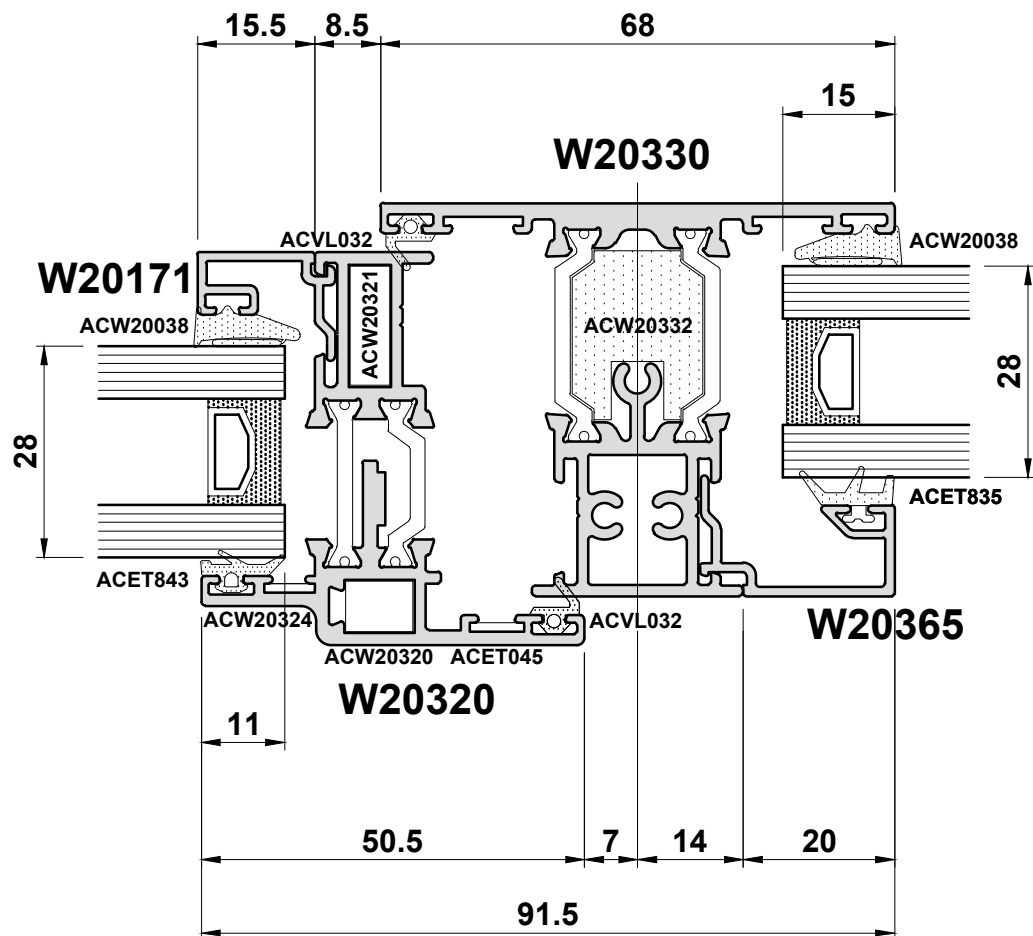
Do Not Scale From This Drawing

Detail 9C



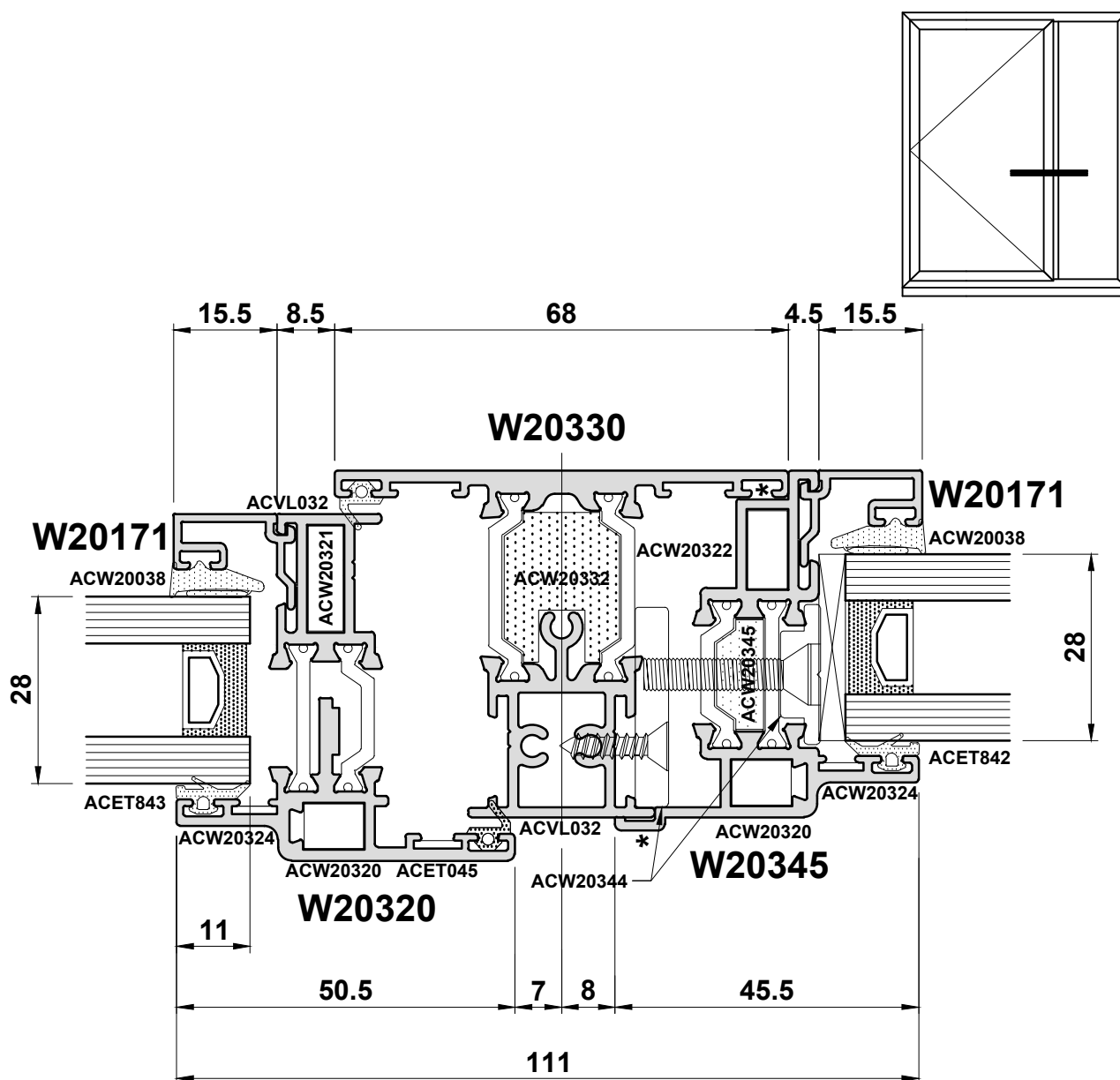
Do Not Scale From This Drawing

Detail 10A



Do Not Scale From This Drawing

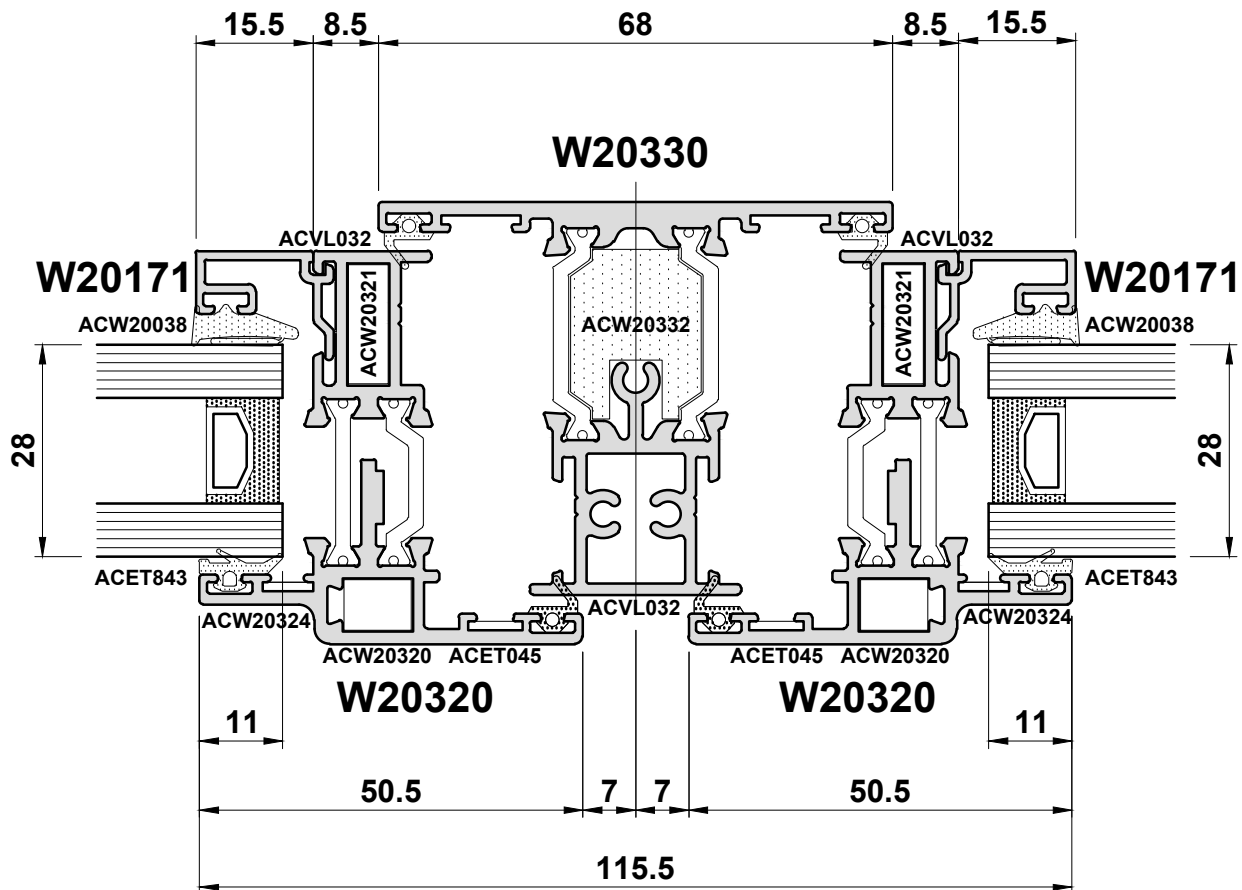
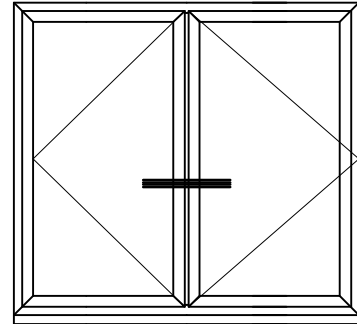
Detail 10B



* = 

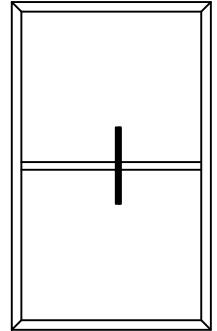
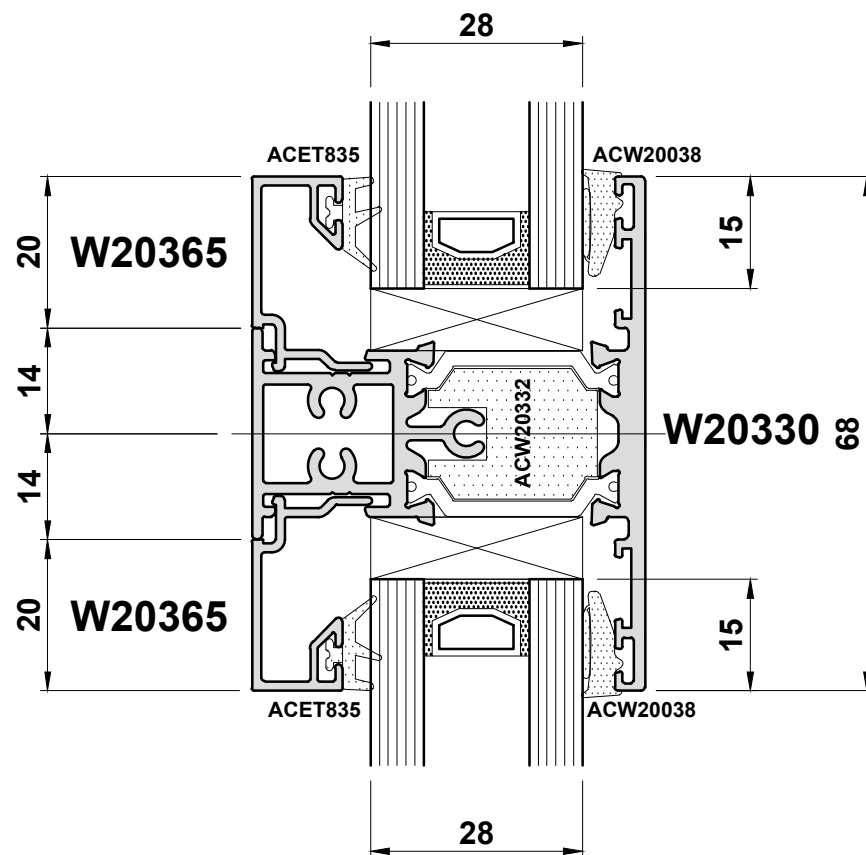
Do Not Scale From This Drawing

Detail 11



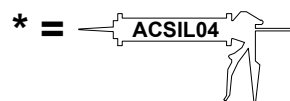
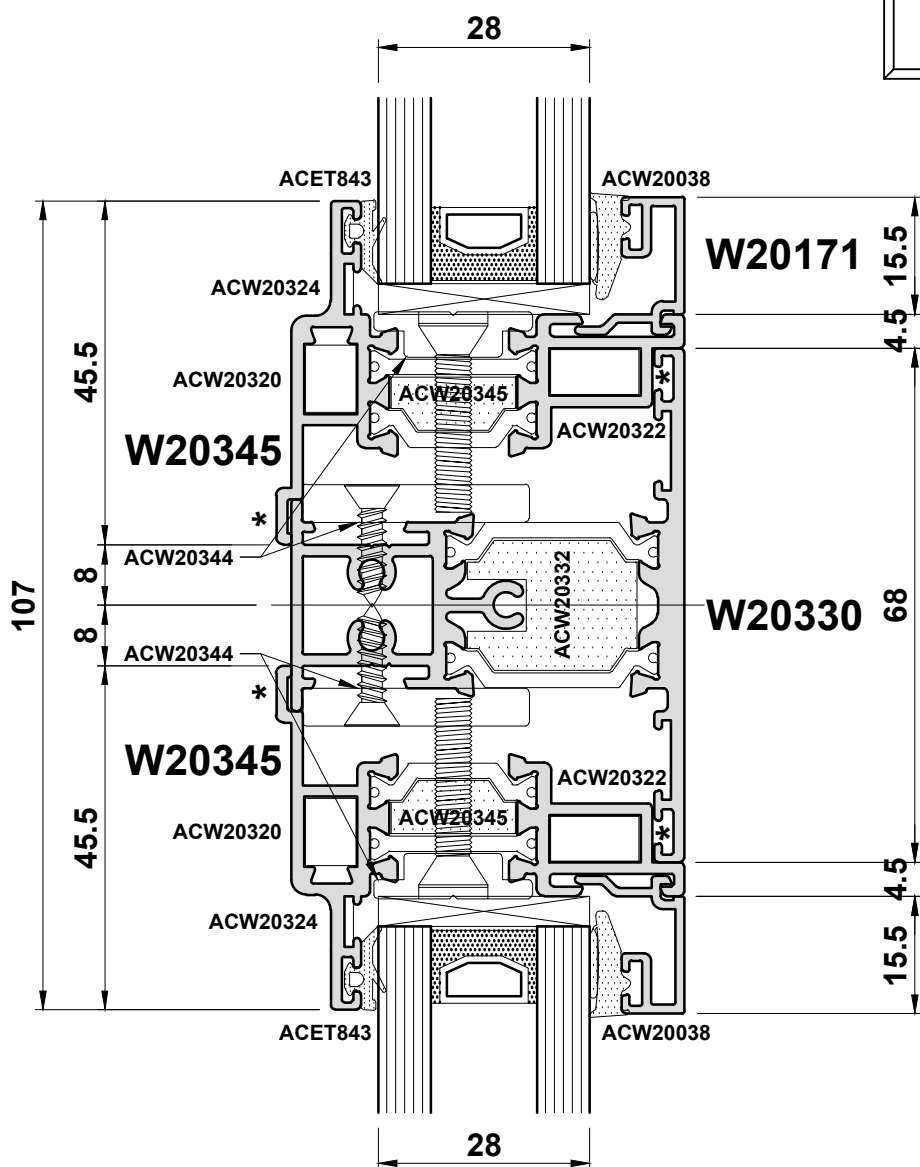
Do Not Scale From This Drawing

Detail 12A



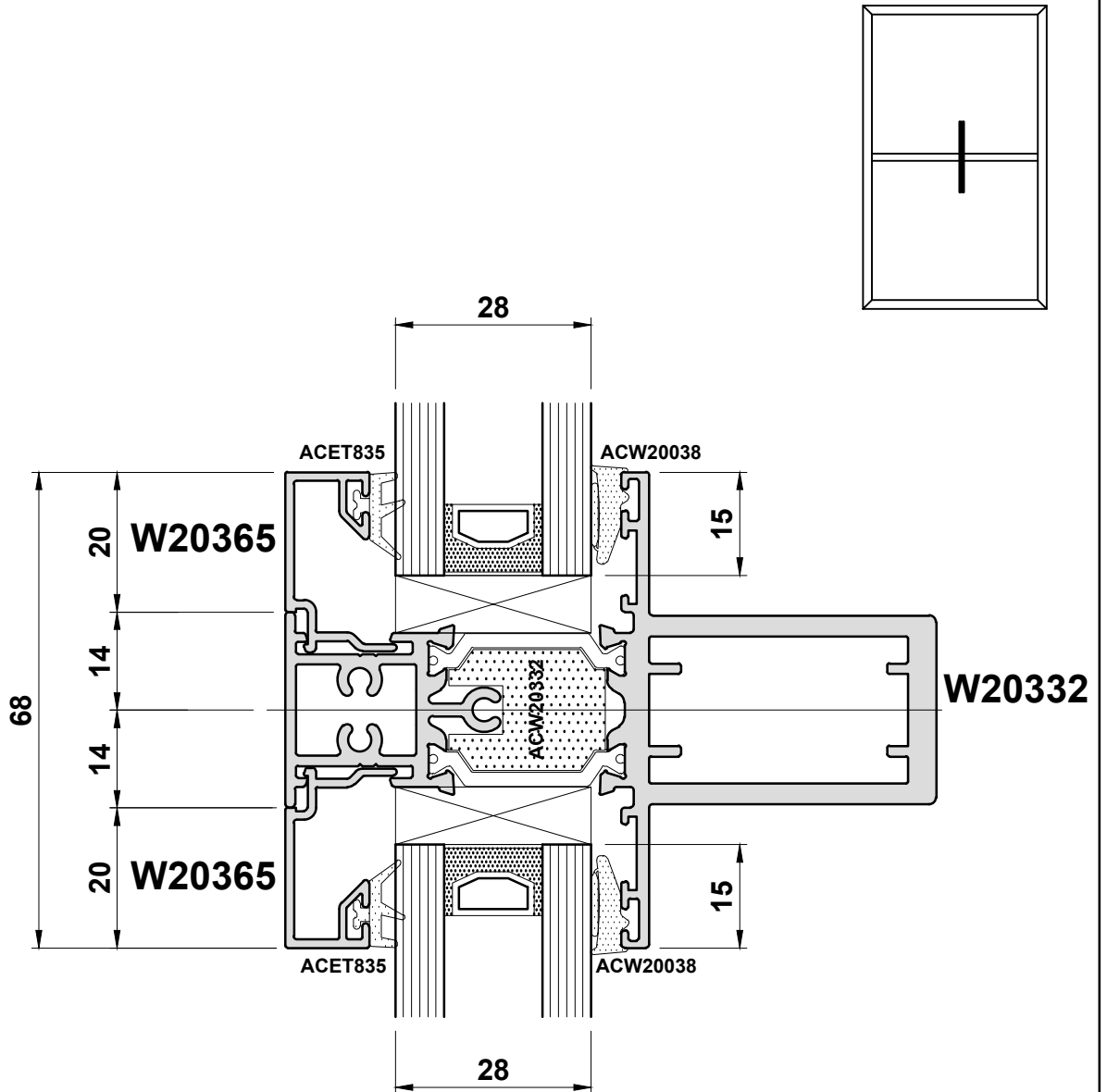
Do Not Scale From This Drawing

Detail 12B



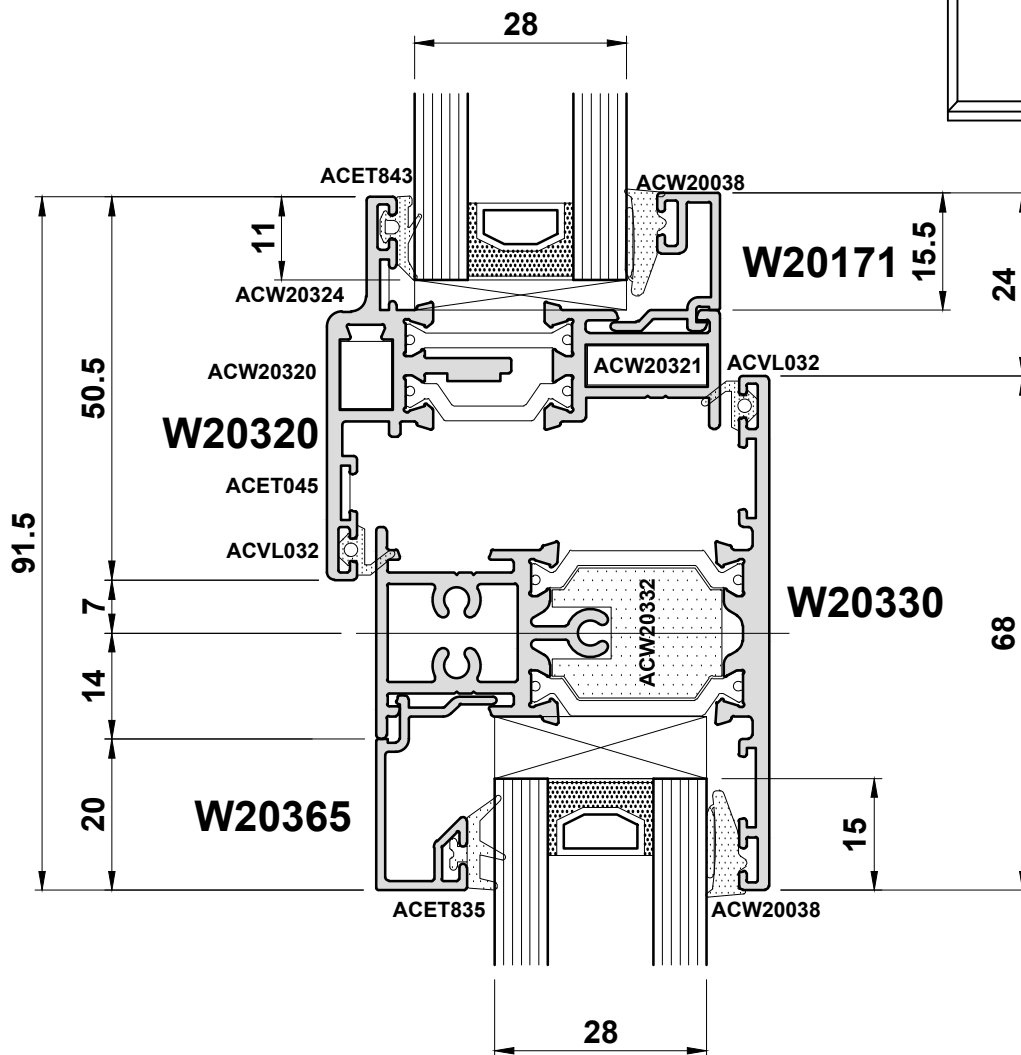
Do Not Scale From This Drawing

Detail 12C



Do Not Scale From This Drawing

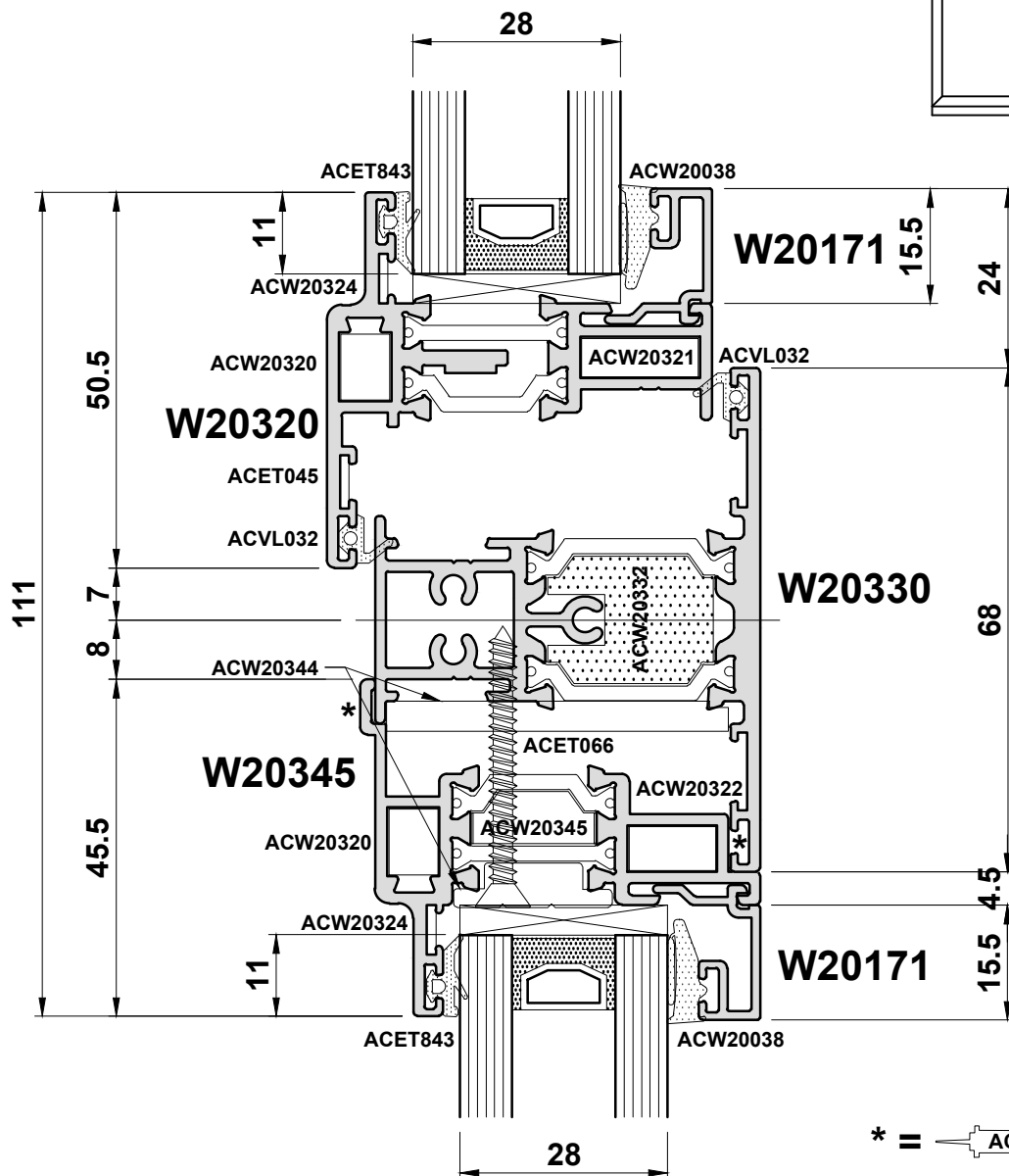
Detail 13A



Note: Transoms will drain through the join to the outerframe.

Do Not Scale From This Drawing

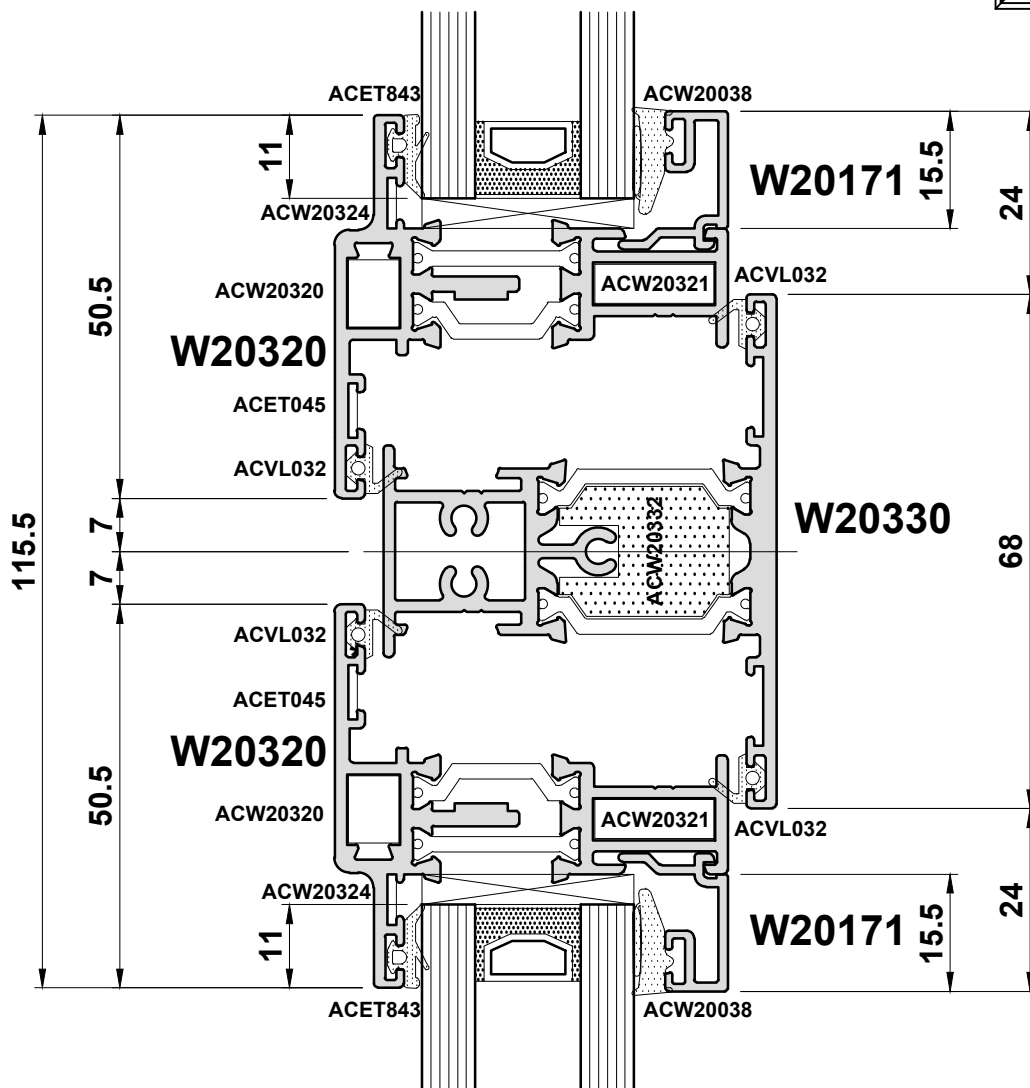
Detail 13B



Note: Transoms will drain through the join to the outerframe.

Do Not Scale From This Drawing

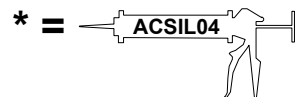
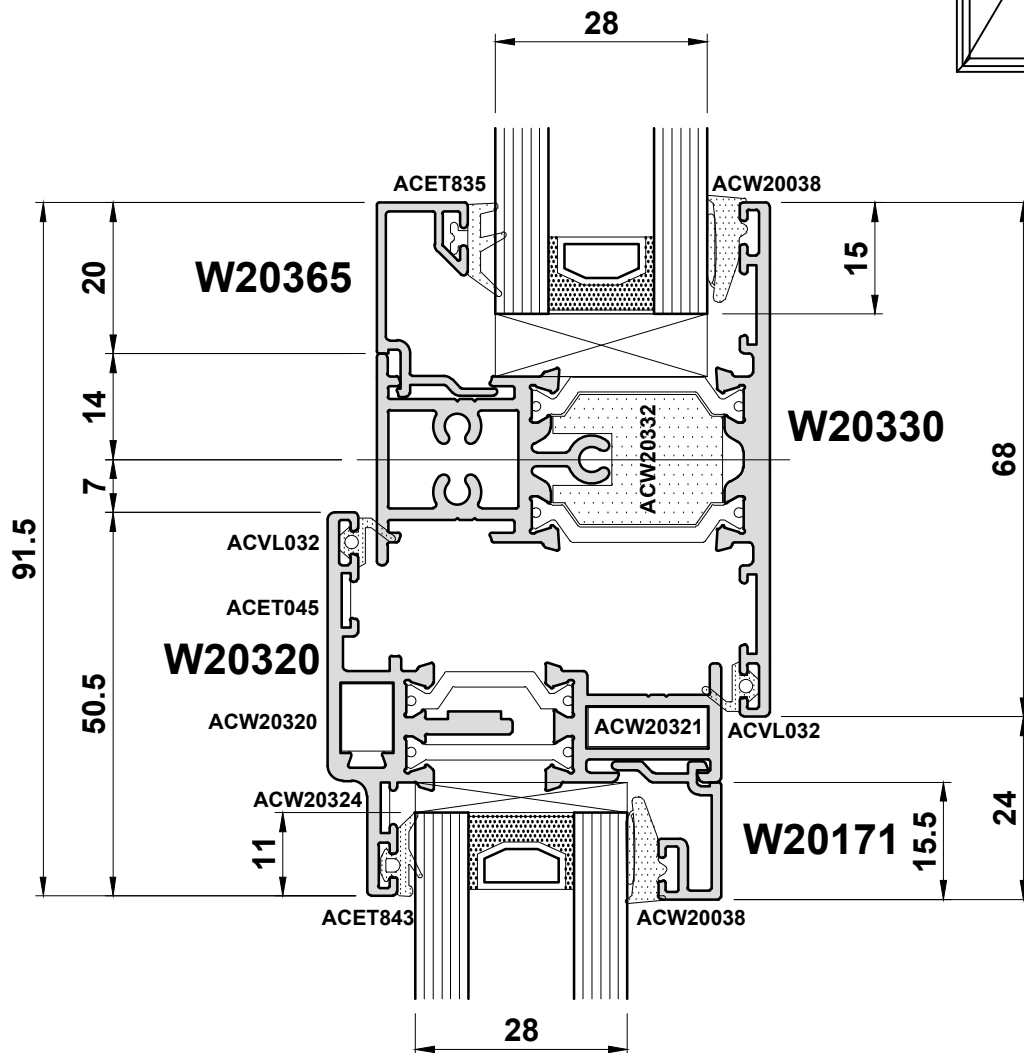
Detail 14



Note: Transoms will drain through the join to the outerframe.

Do Not Scale From This Drawing

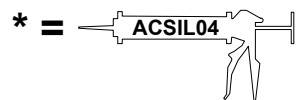
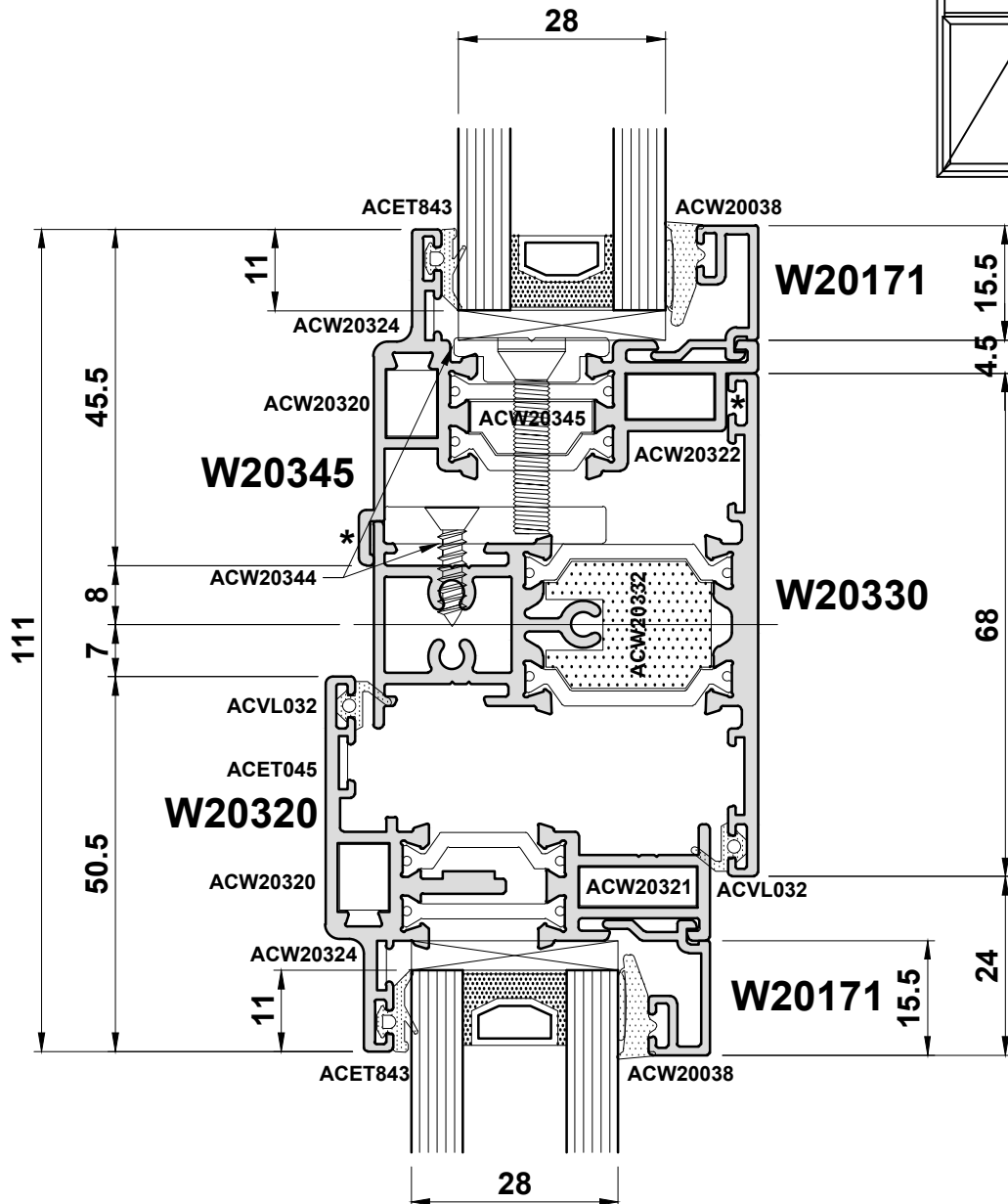
Detail 15A



Note: Transoms will drain through the join to the outerframe.

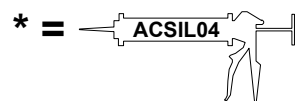
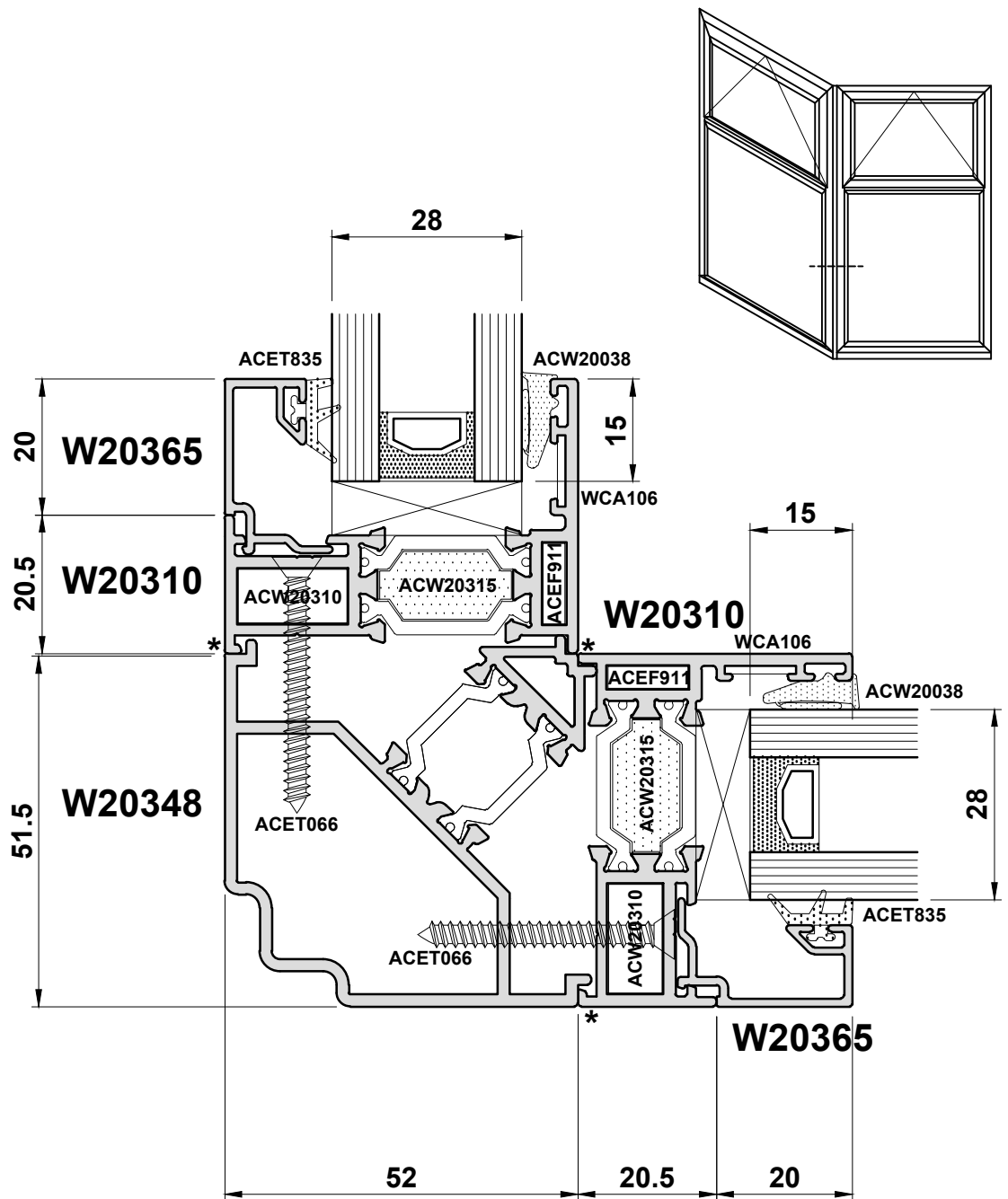
Do Not Scale From This Drawing

Detail 15B

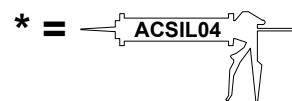
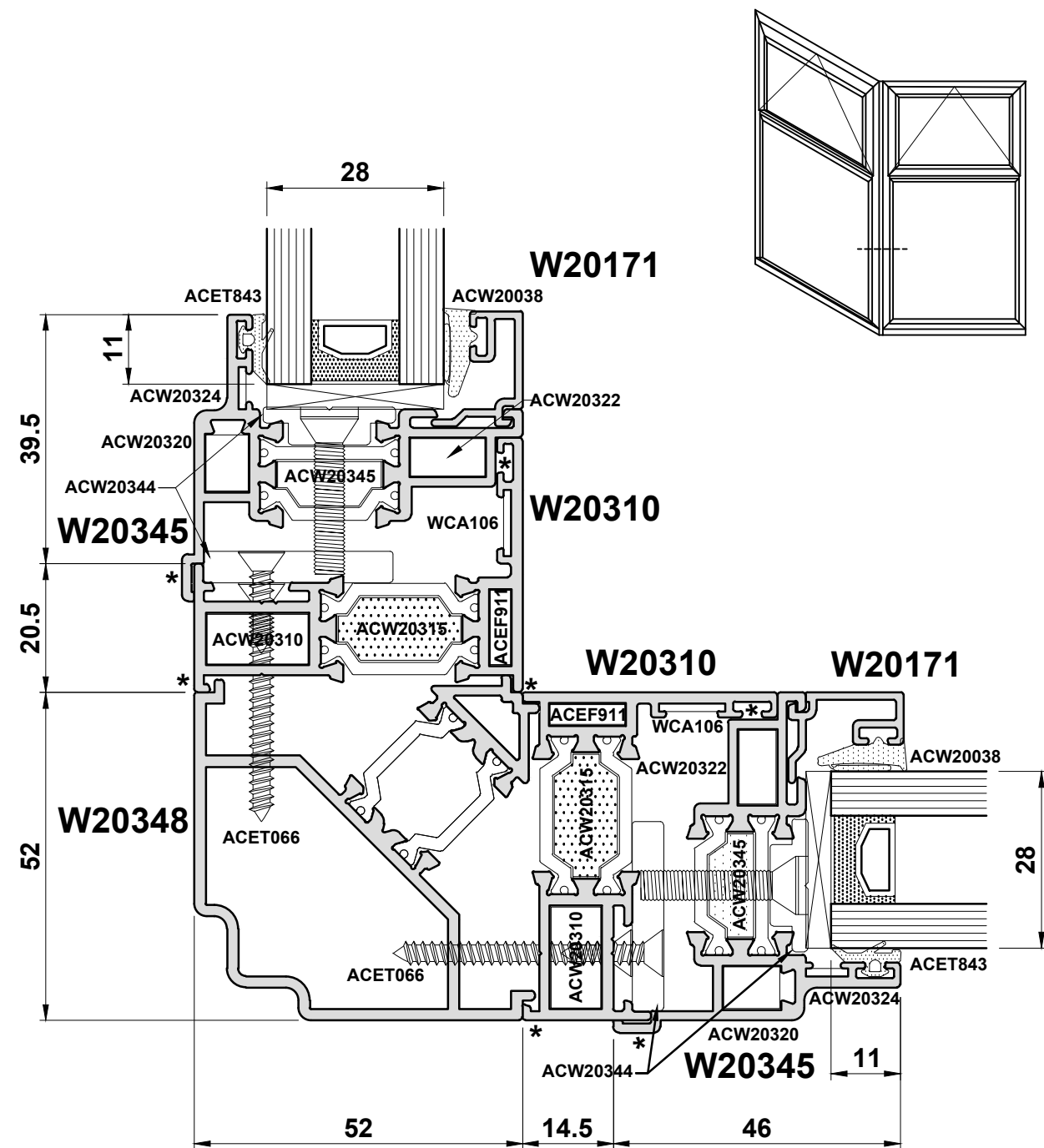


Note: Transoms will drain through the join to the outerframe.

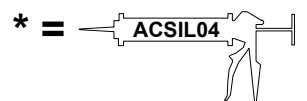
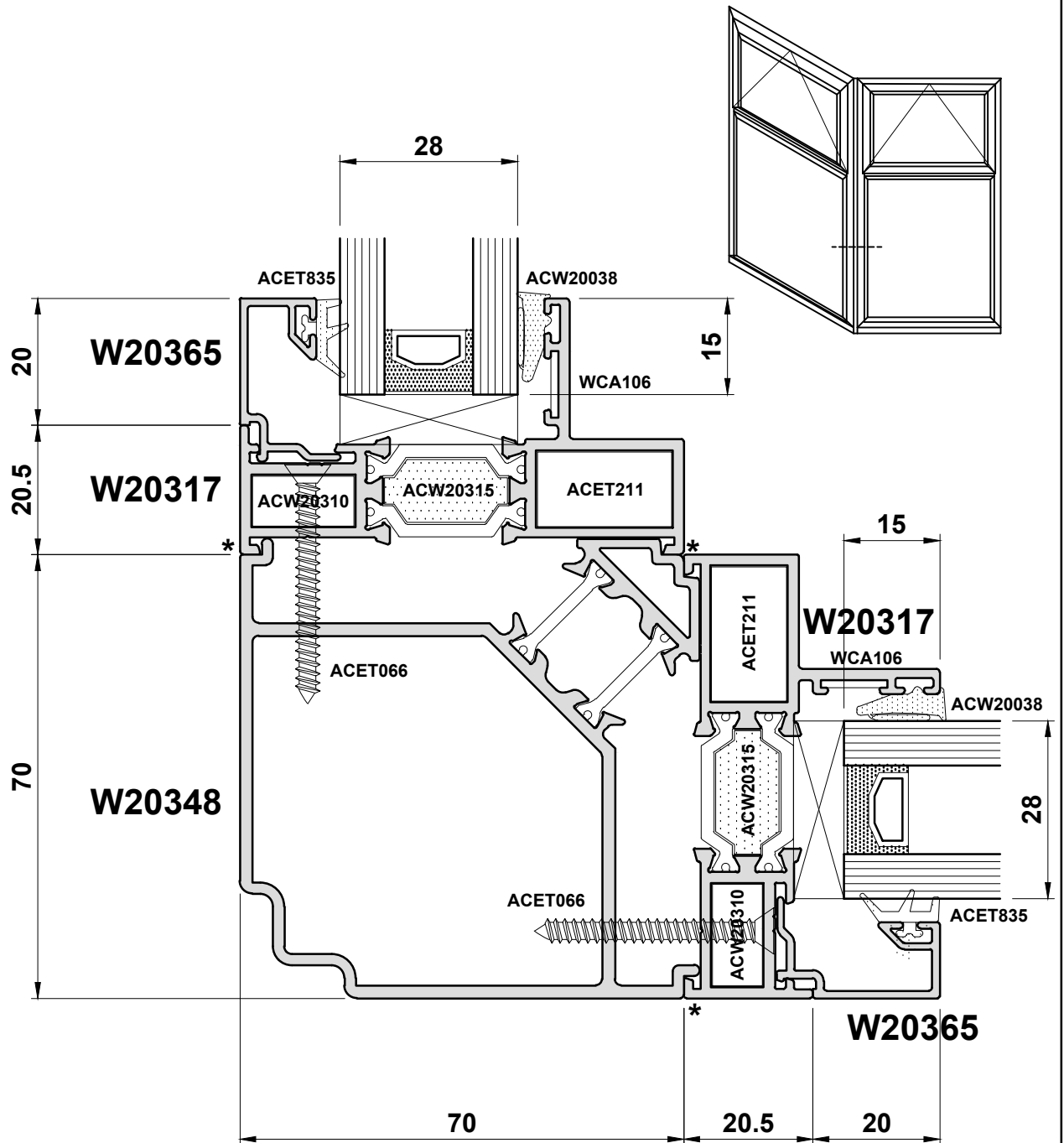
Do Not Scale From This Drawing



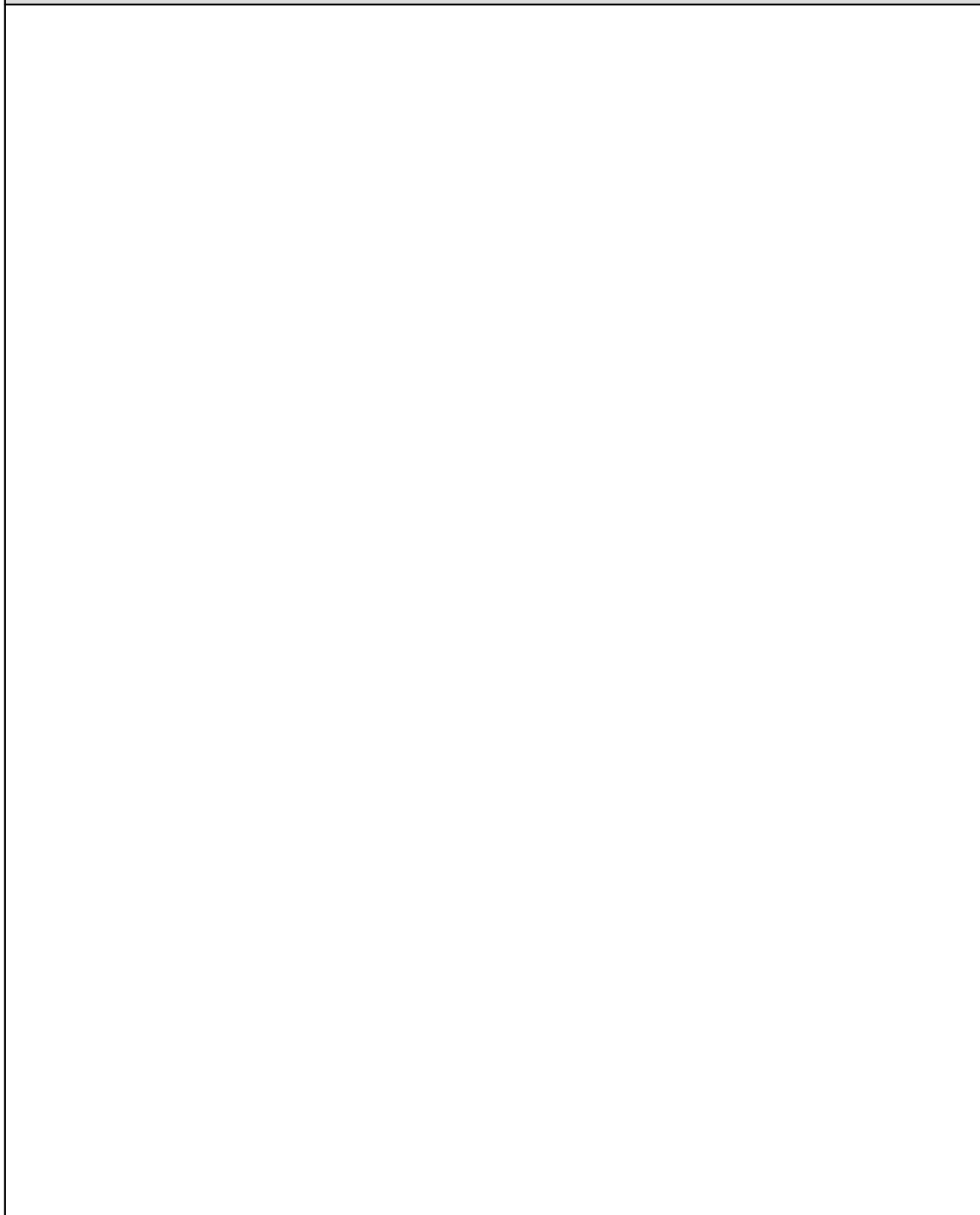
Do Not Scale From This Drawing



Do Not Scale From This Drawing



Do Not Scale From This Drawing



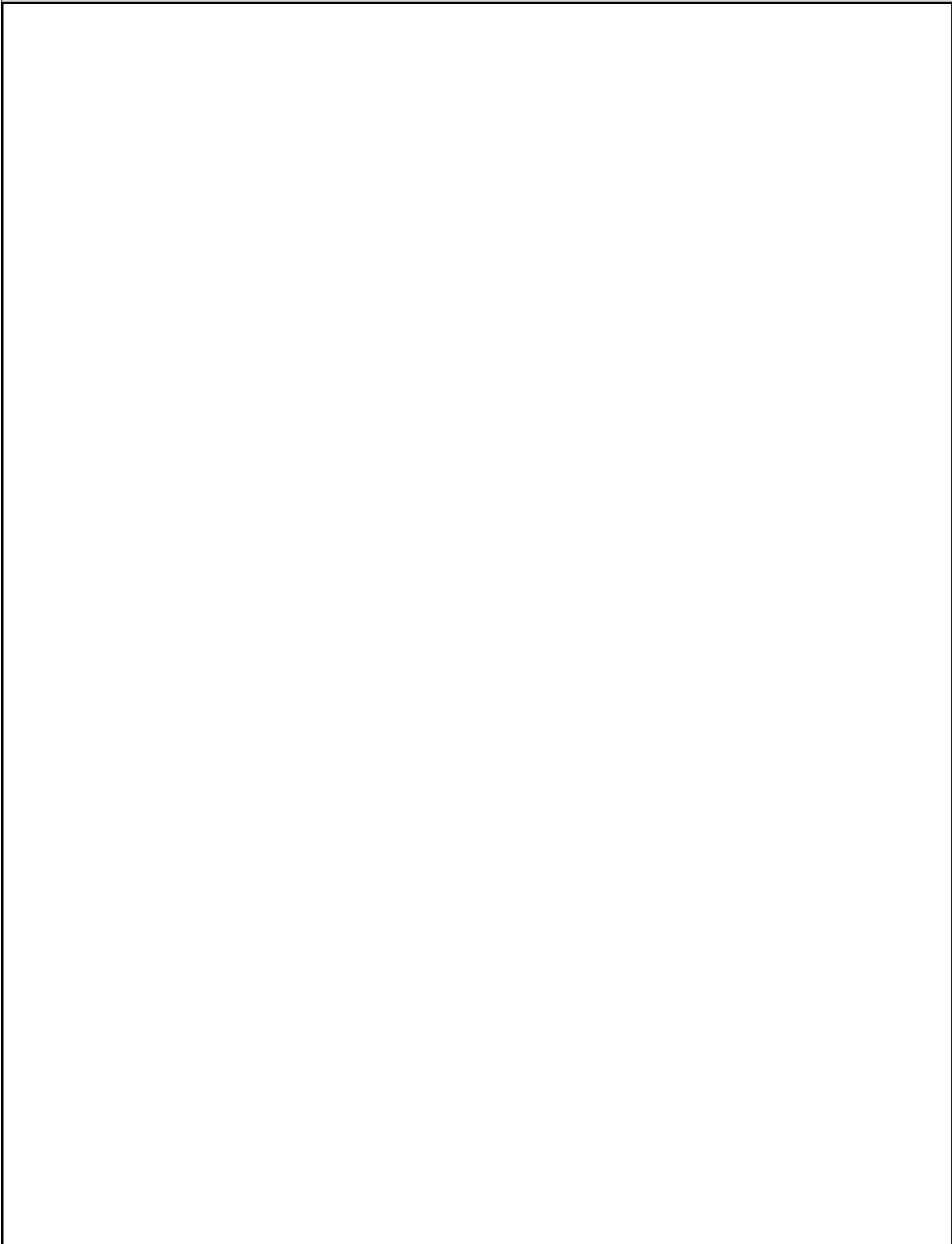
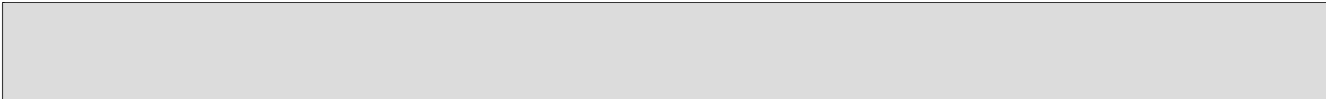
Do Not Scale From This Drawing

Section D

Statics

General Size Limitations are shown on Page A02.

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



Section E



Construction Drawings

Corner Joint Detail.....	E03
Crimping Detail.....	E04
Drainage Detail.....	E05 - E07
Installation of ACW20345 using ACW20344.....	E08
Mullion/Transom Detail.....	E09 - E10
Friction Stay Detail.....	E11 - E12
Lock Detail.....	E13 - E14
Peg Stay Detail.....	E15
Coupler Detail.....	E16
Glazing Chart.....	E17 - E18
Bay Pole Detail.....	E19 - E20
Fixing Strap Guide.....	E21
Example Layout.....	E22



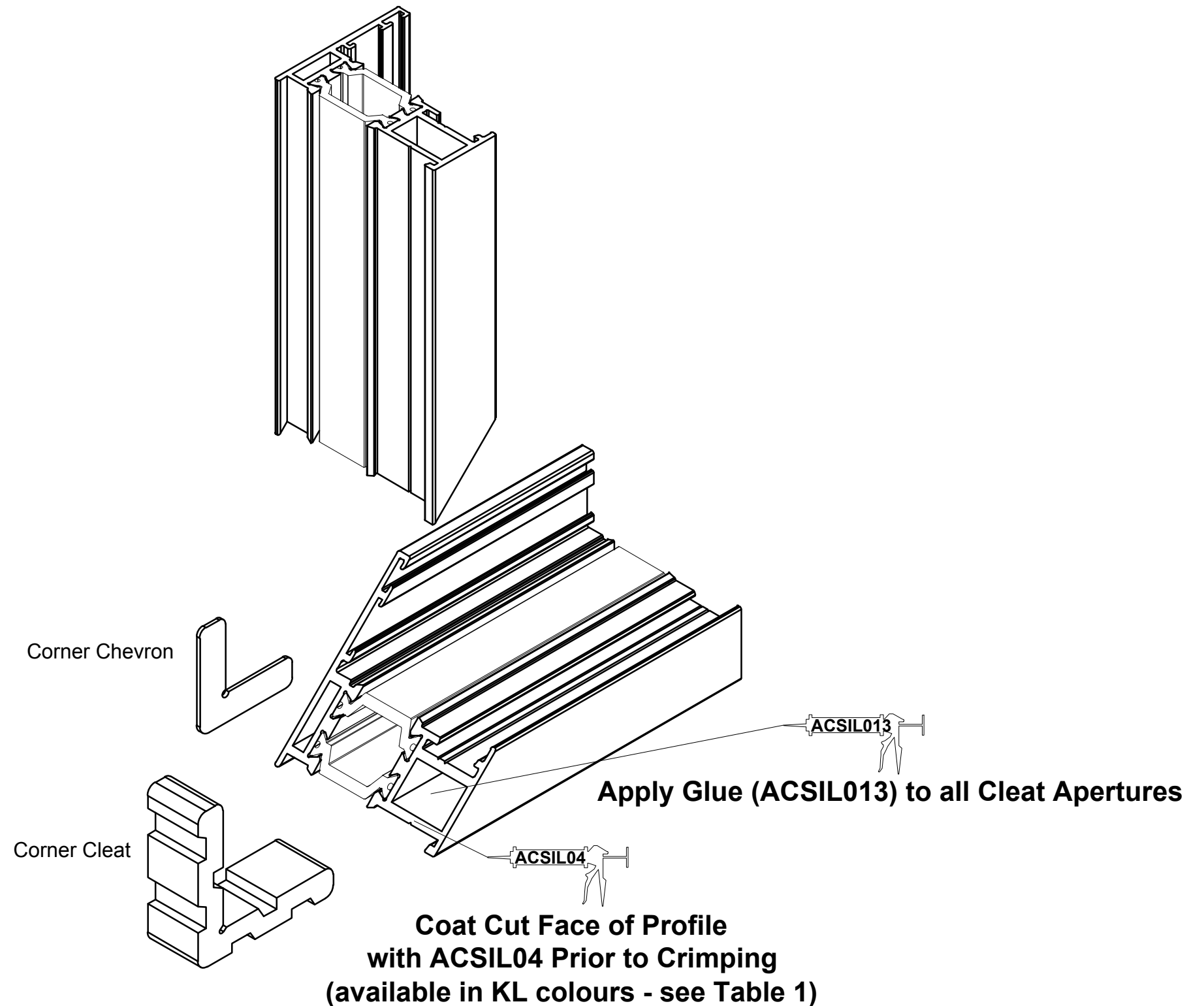
Corner Joint Details

Notes

1. Degrease mitre sections
2. Cover mitred faces with ACSIL04
3. Apply ACSIL013 to cleat chamber
4. Apply ACSIL04 to any fractures formed by crimping to make watertight

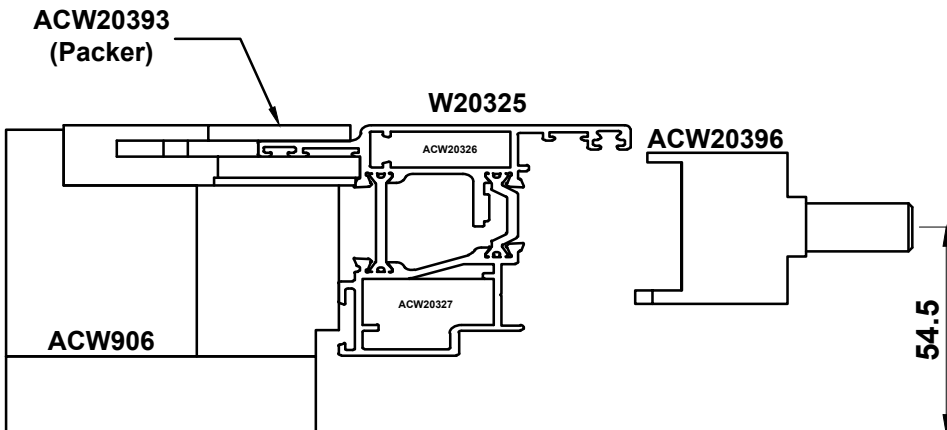
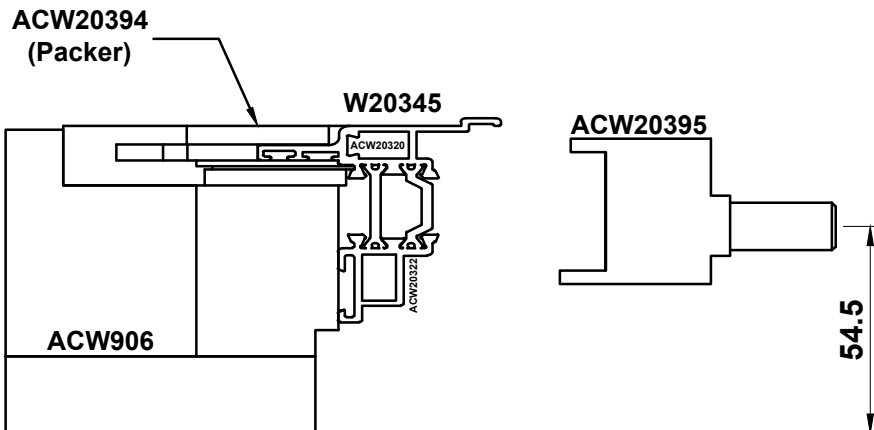
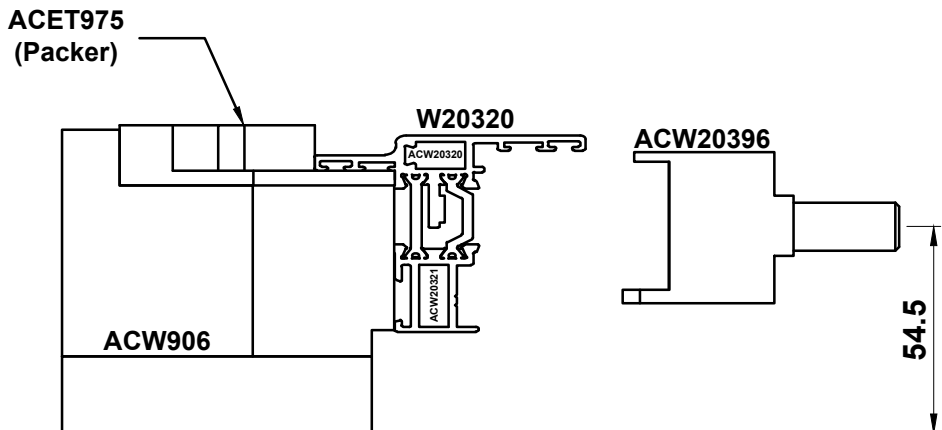
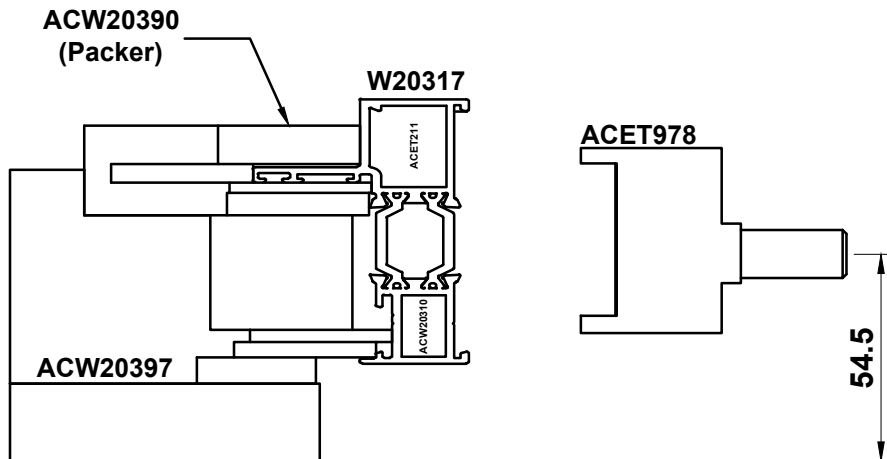
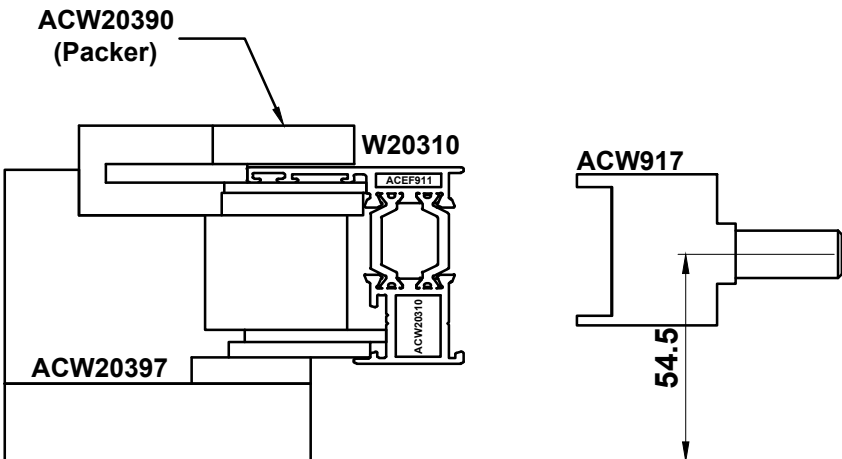
Table 1

KL Colour	Sealant Part Number
Black	ACSIL04BL
White	ACSIL04WP
Clear	ACSIL04CL
KL001	ACSIL04KL001
KL002	ACSIL04KL002
KL003	ACSIL04KL003
KL004	ACSIL04KL004
KL005	ACSIL04KL005
KL006	ACSIL04KL006
KL007	ACSIL04KL007
KL010	ACSIL04KL010
KL011	ACSIL04KL011
KL012	ACSIL04KL012
KL013	ACSIL04KL013



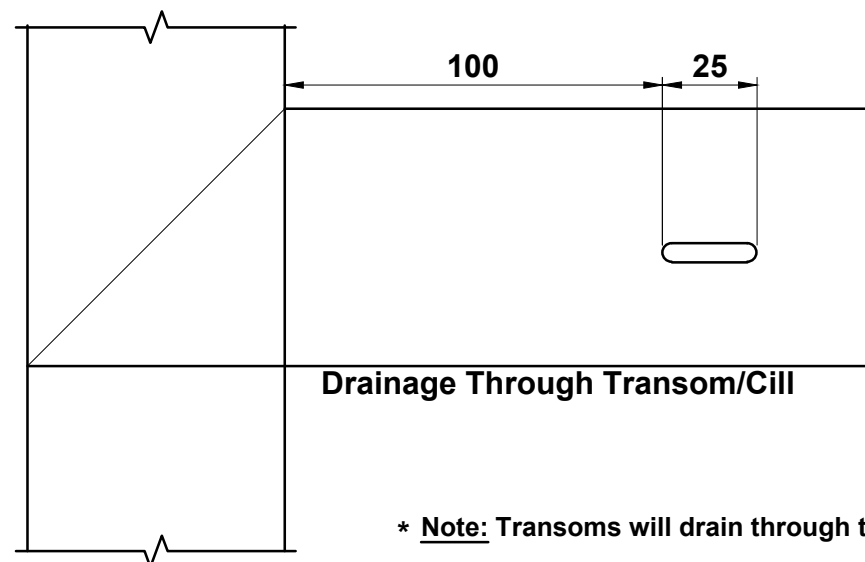
Do Not Scale From This Drawing

Crimping Detail

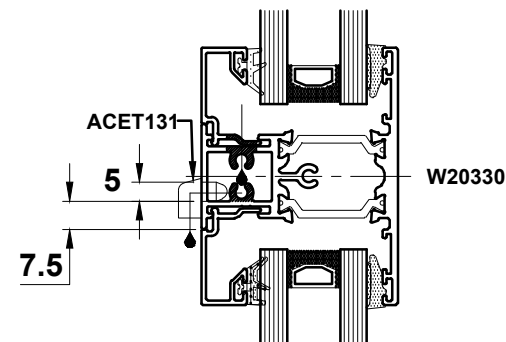


Do Not Scale From This Drawing

Drainage Details

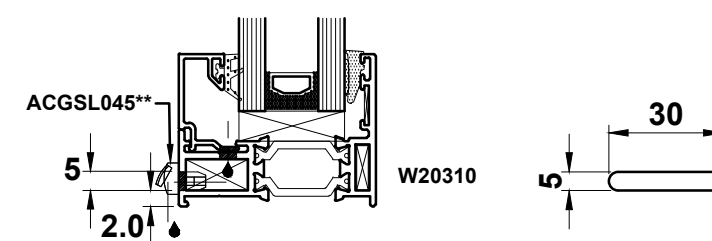


Drainage Through Transom/Cill



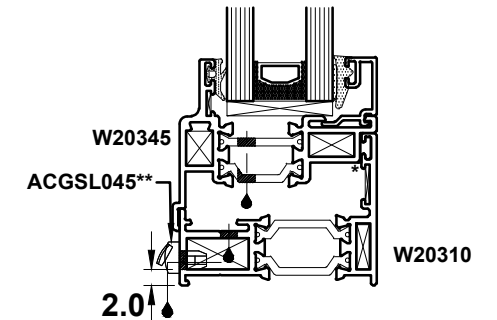
Transom Fixed Light*

* **Note:** Transoms will drain through the join to the outerframe.

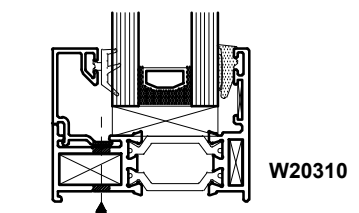
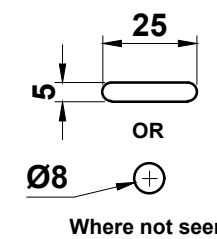


Outerframe without cill

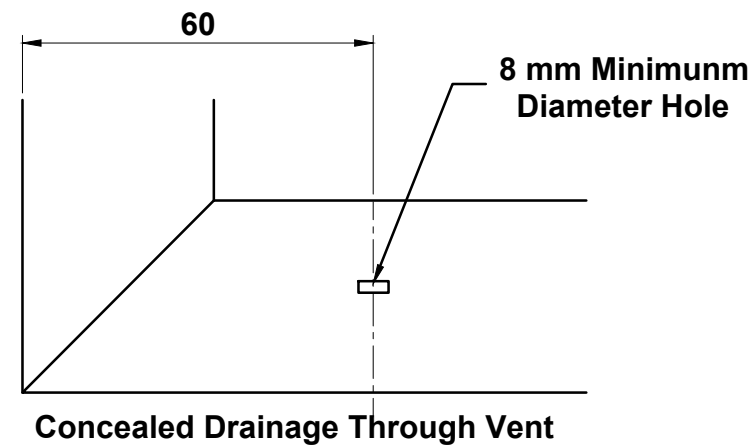
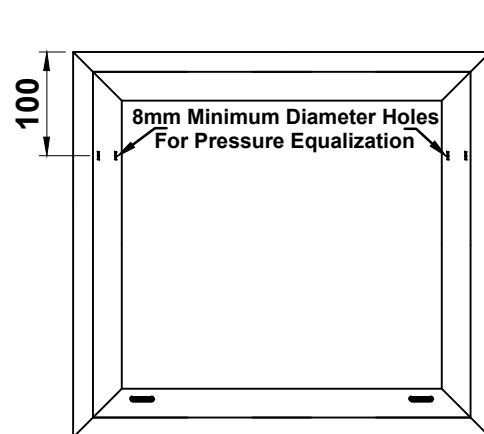
**ACGSL045 must be used here as water drains through the front of the cap.
ACGSL045 may also be used throughout the system.



Outerframe with reverse adaptor

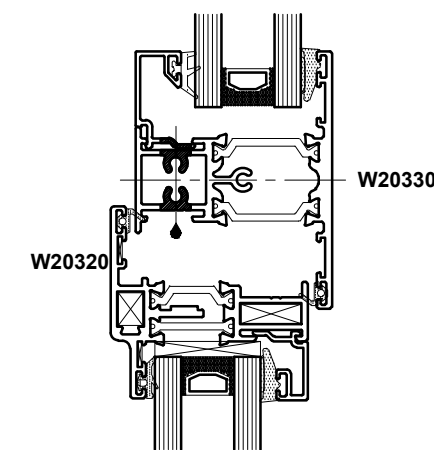
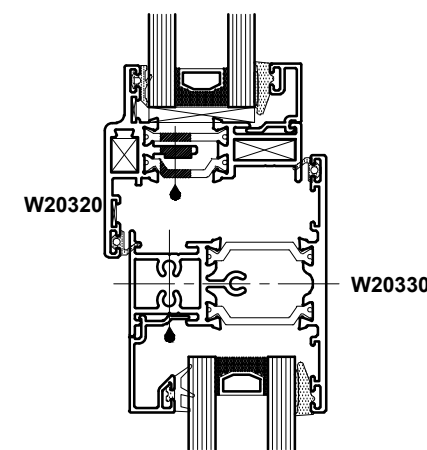


Outerframe with cill



Concealed Drainage Through Vent

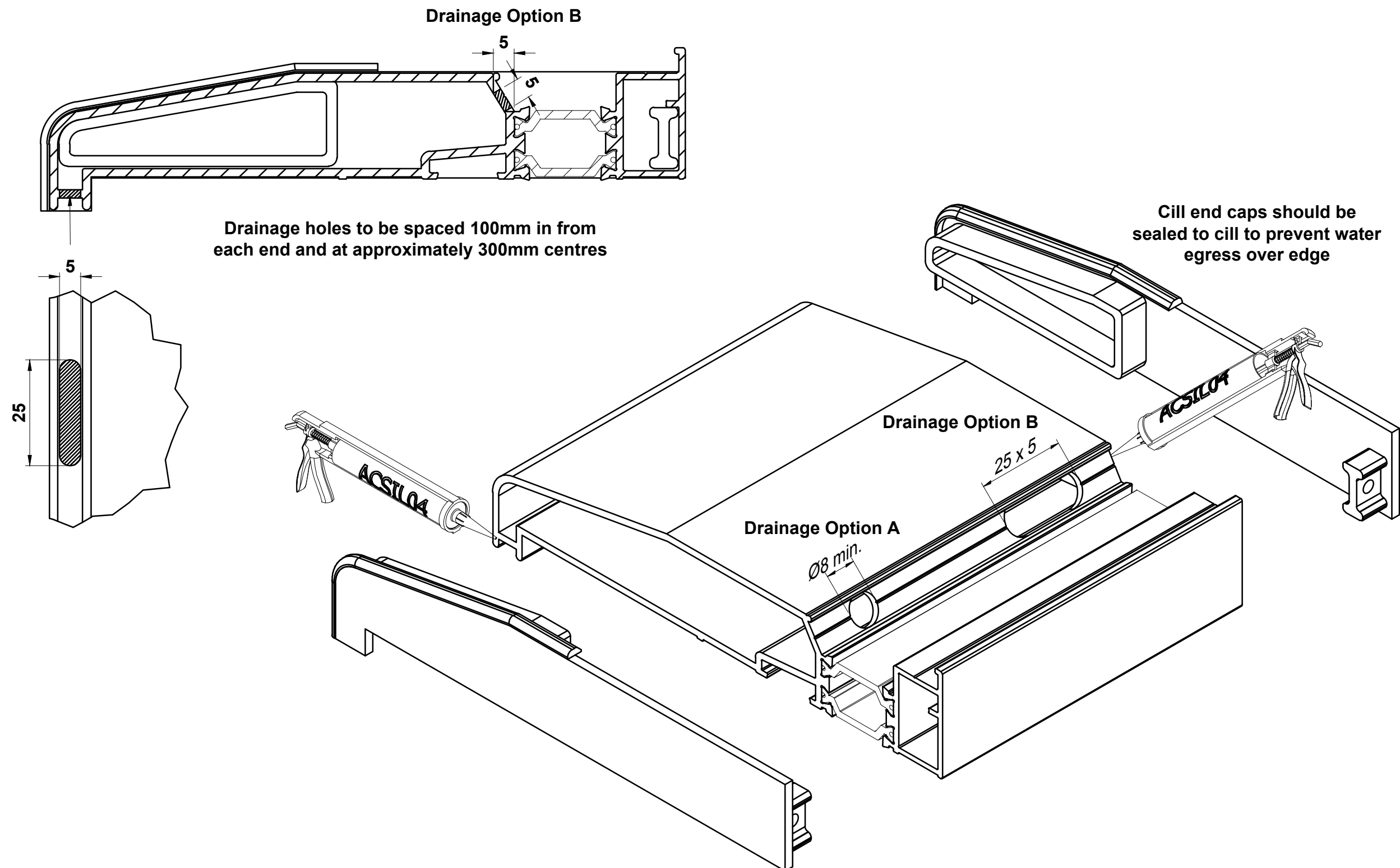
Important Note: All exposed aluminium should be coated using ACSIL014 or painted to match the frame.



Note: Transoms will drain through the join to the outerframe.

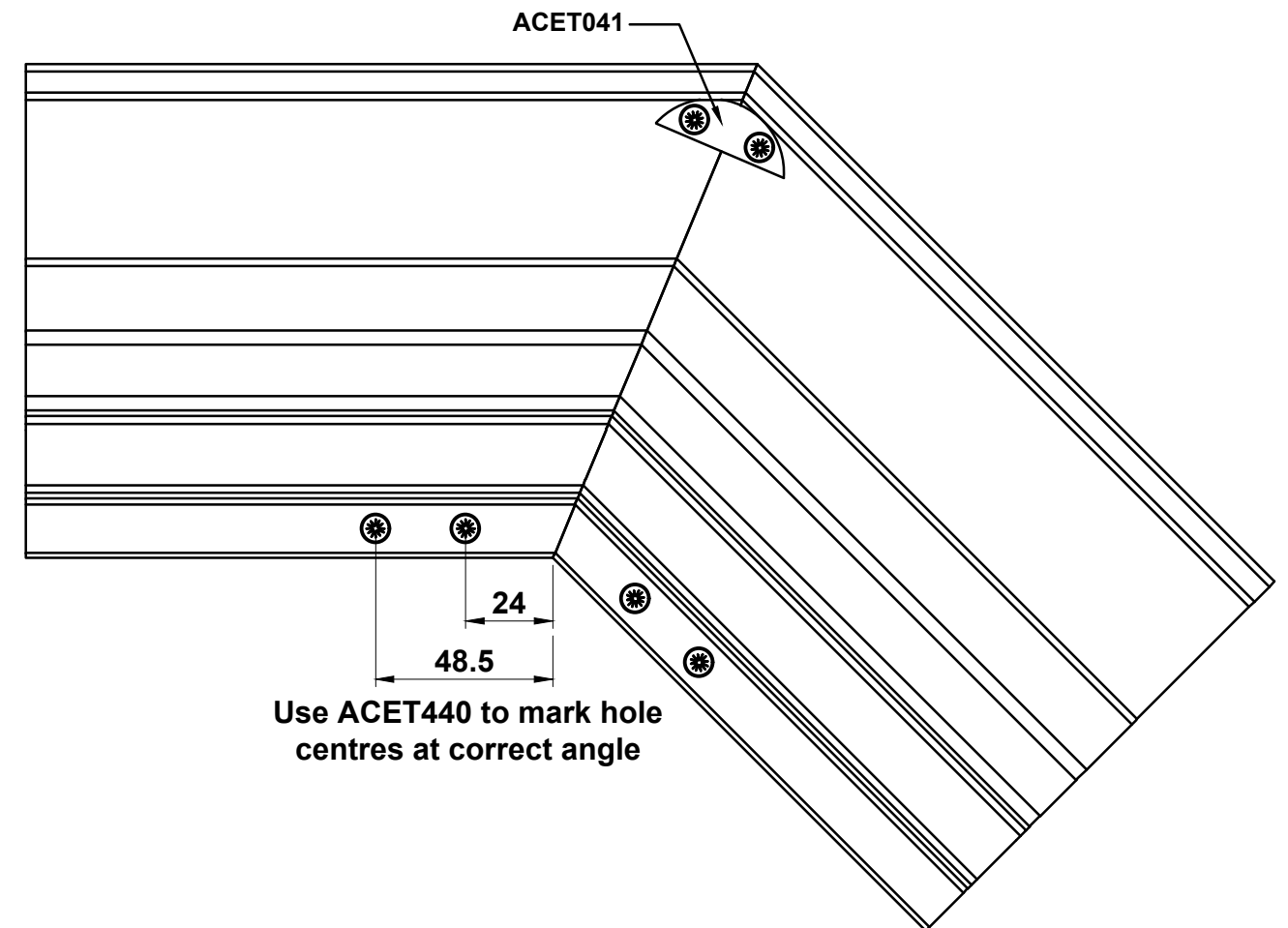
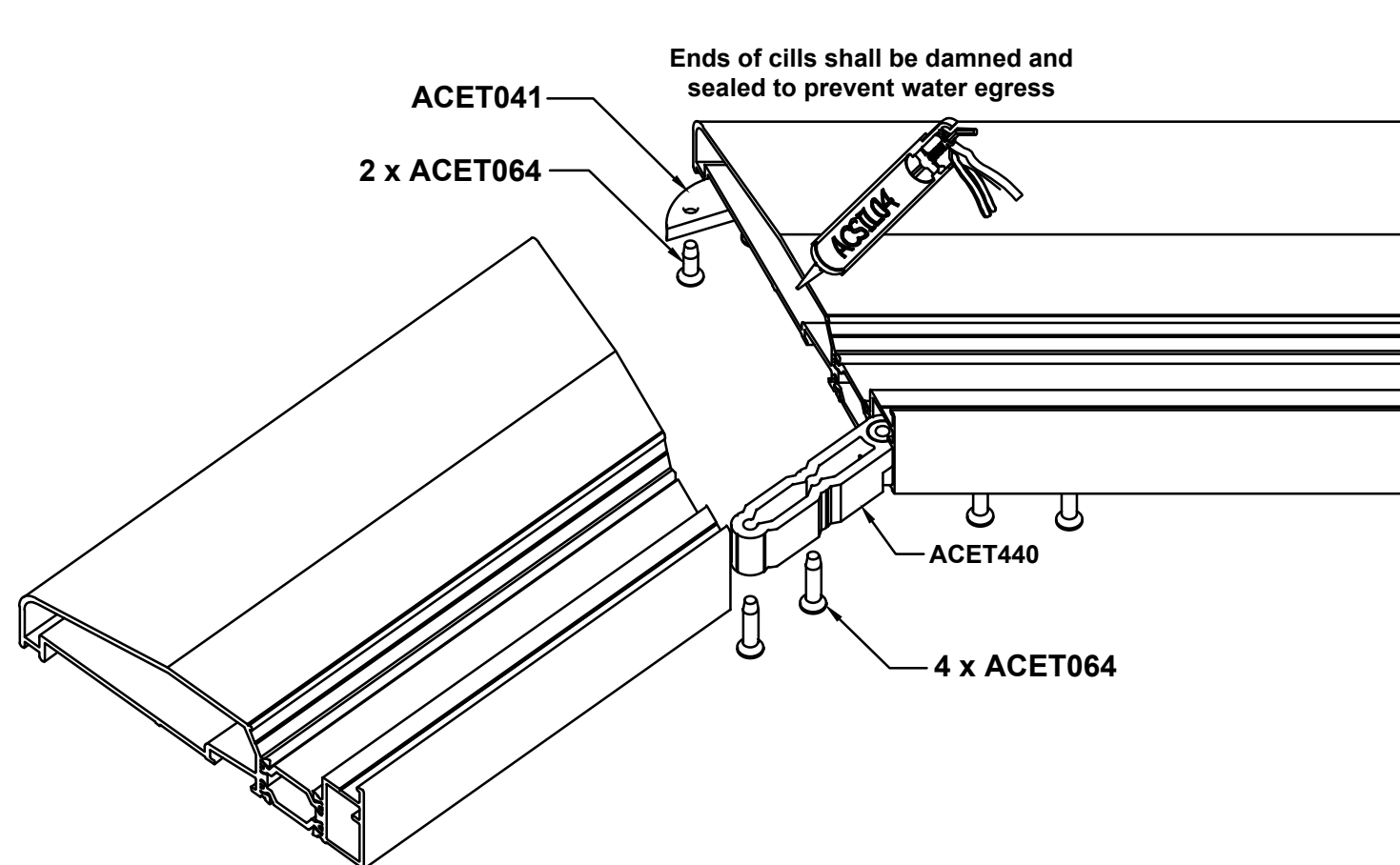
Do Not Scale From This Drawing

Sub Cill Drainage



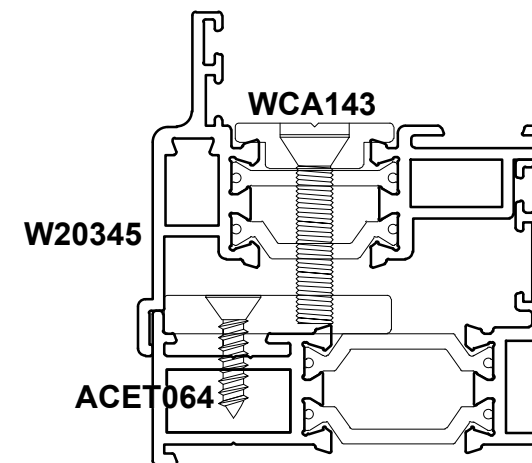
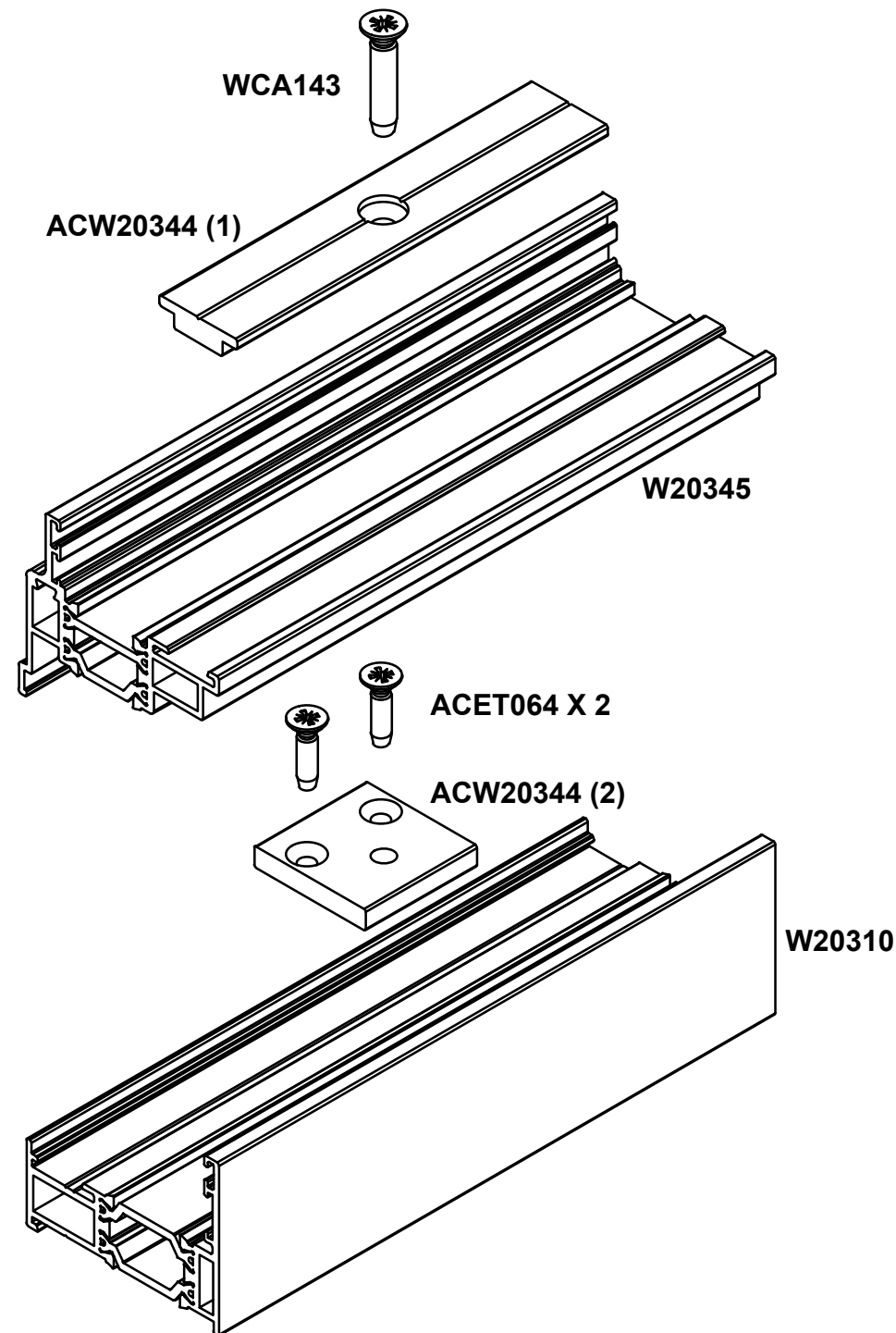
Do Not Scale From This Drawing

Angled Sub Cill

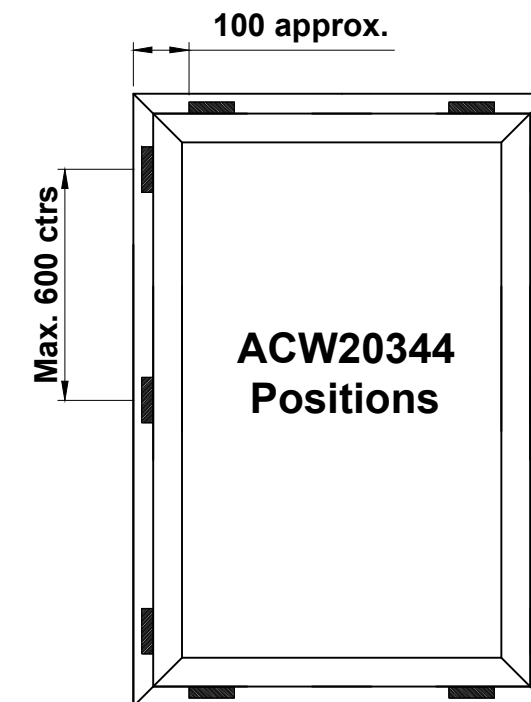


Do Not Scale From This Drawing

Installation of W20345 using ACW20344



W20310
W20317
W20330
W20331
W20332
W20333

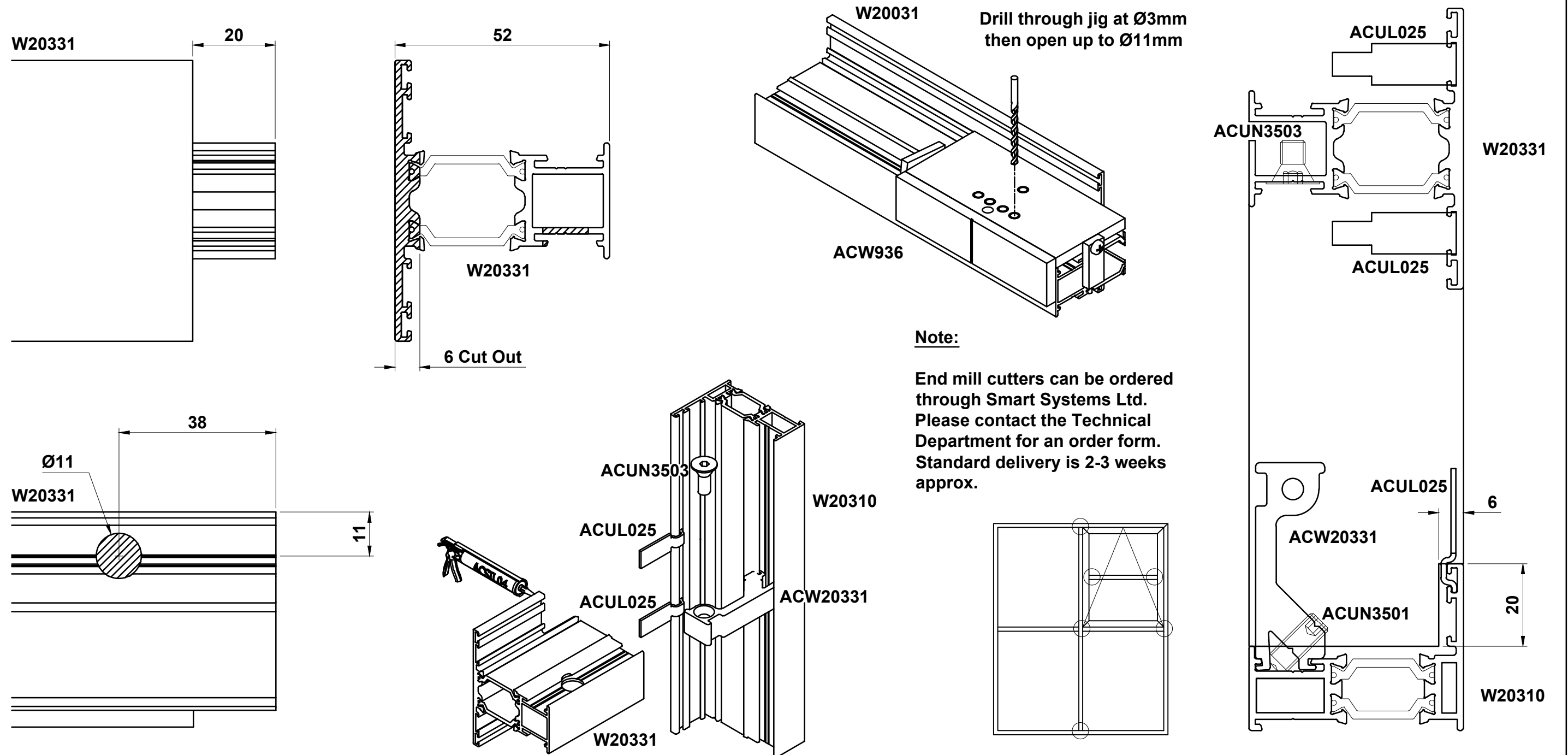


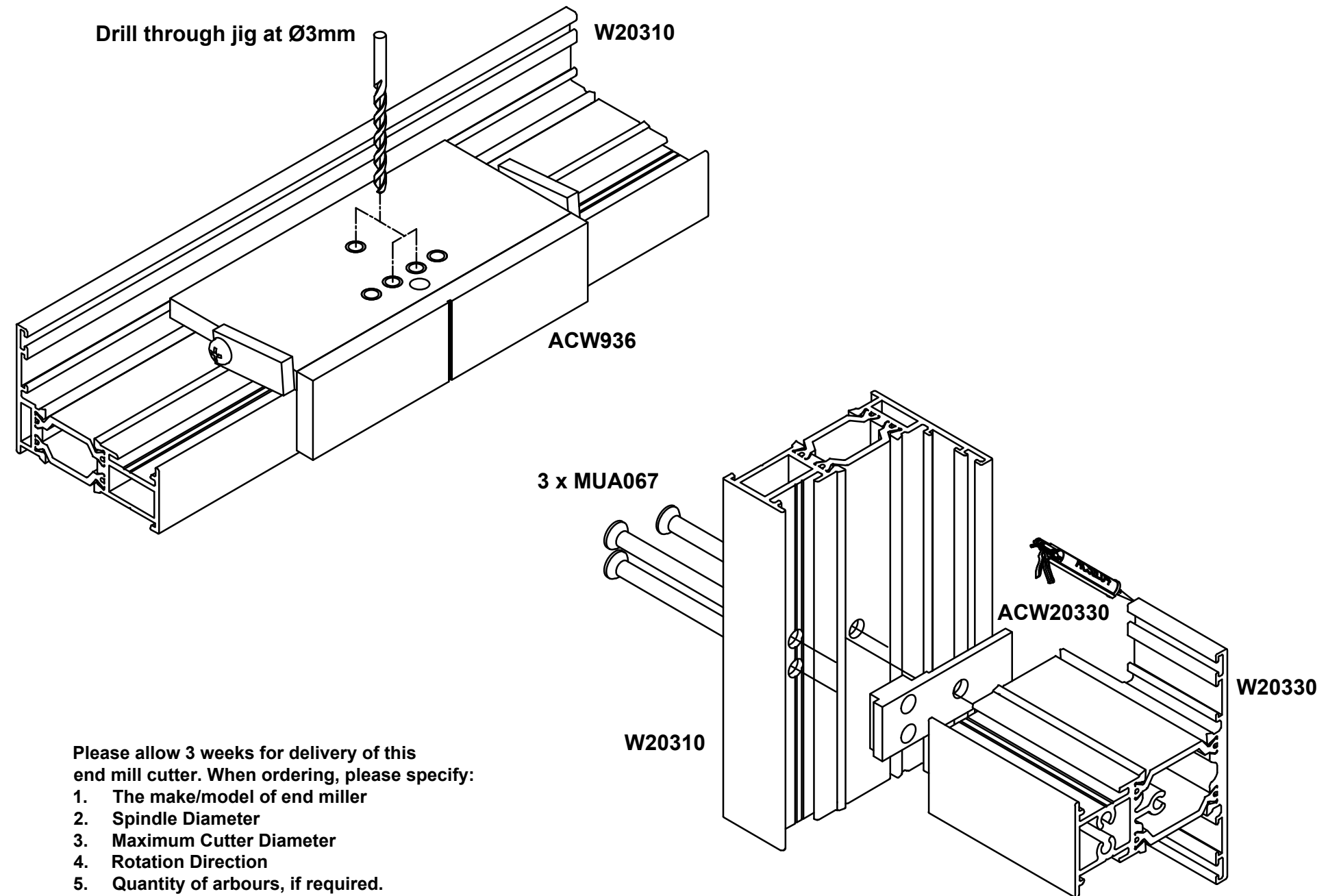
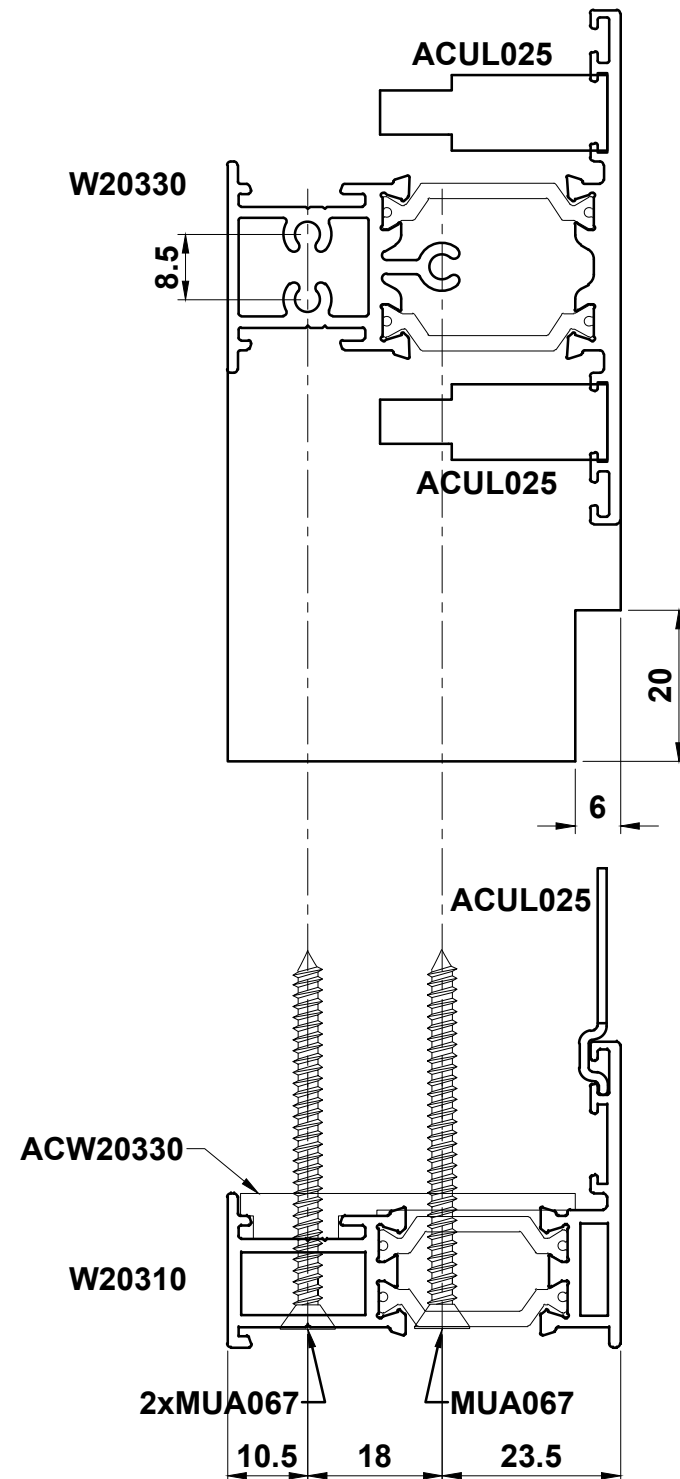
Steps on how to fix Outerframe/Mullion to W20345 using ACW20344:

1. Butt ACW20344 (2) up to where W20345 meets the outer frame (mullion/transom) as shown in the drawing.
2. Use 2 x ACET064 to fix ACW20344 (2) to outer frame.
3. Use WCA143 machine screw to fix ACW20344 (1) into ACW20344 (2).

Do Not Scale From This Drawing

Mullion/Transom Detail

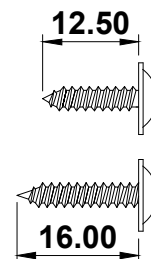
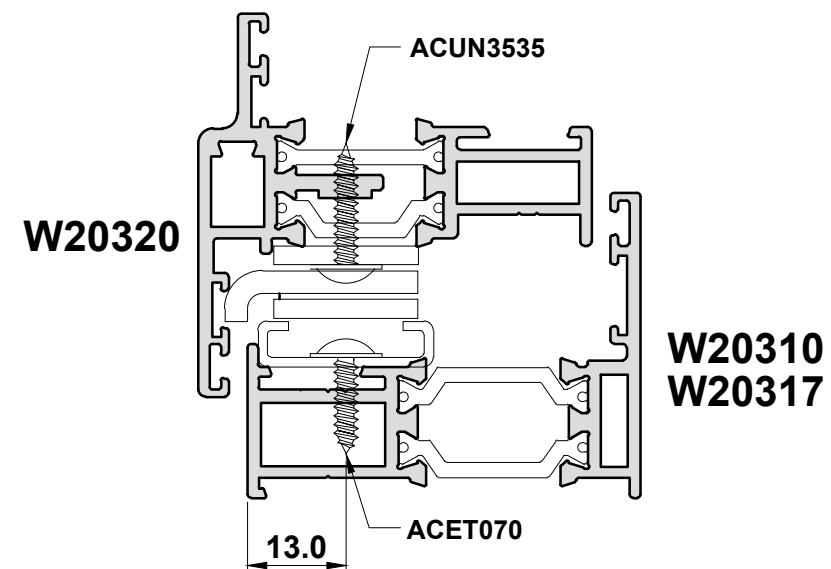




Do Not Scale From This Drawing

Friction Stay Accessories

**Vent Sizes 450mm or Smaller
to be Reduced by 2mm**



ACET070 = Recommended screw
for fixing stay to outer frame

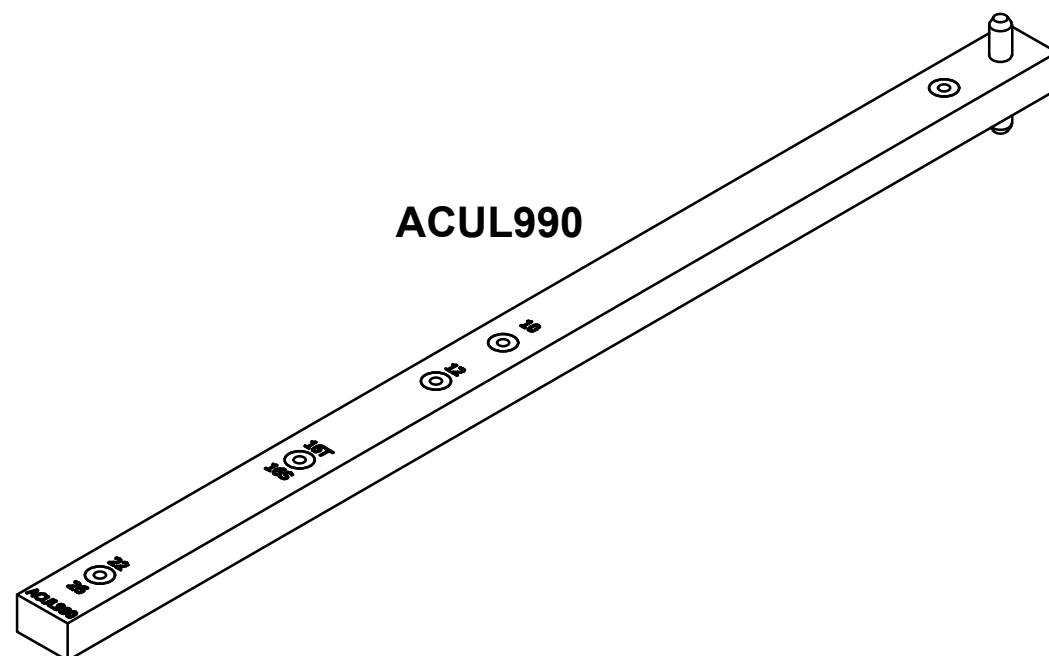
ACUN3535 = Recommended screw
for fixing stay to sash

Heavy Duty (Sterling) Stays

Hinge Code Top Hung	Hinge Length (mm)	Max Vent Weight (kg)	Min Vent Height (mm)	Max Vent Height (mm)	Opening Angle (+/-2.5°)
ACINS10	262	40	315	640	50
ACINS12	313	50	640	800	50
ACINS16	415	65	800	1100	50
ACINS22	567	100	1090	1500	45
ACINS22W	567	100	1500	2000	20
ACINS26	680	180	2000	2500	20
Side Hung	Hinge Length (mm)	Max Vent Weight (kg)	Min Vent Width (mm)	Max Vent Width (mm)	Opening Angle (+/-2.5°)
ACINSSH10	262	38	327	660	85
ACINSSH16	415	55	450	838	60

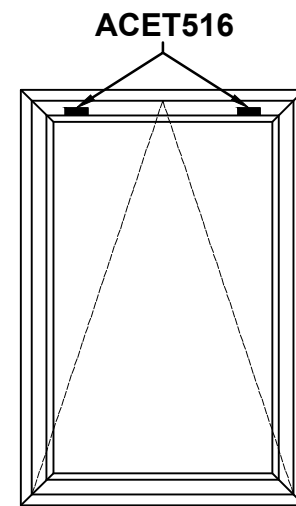
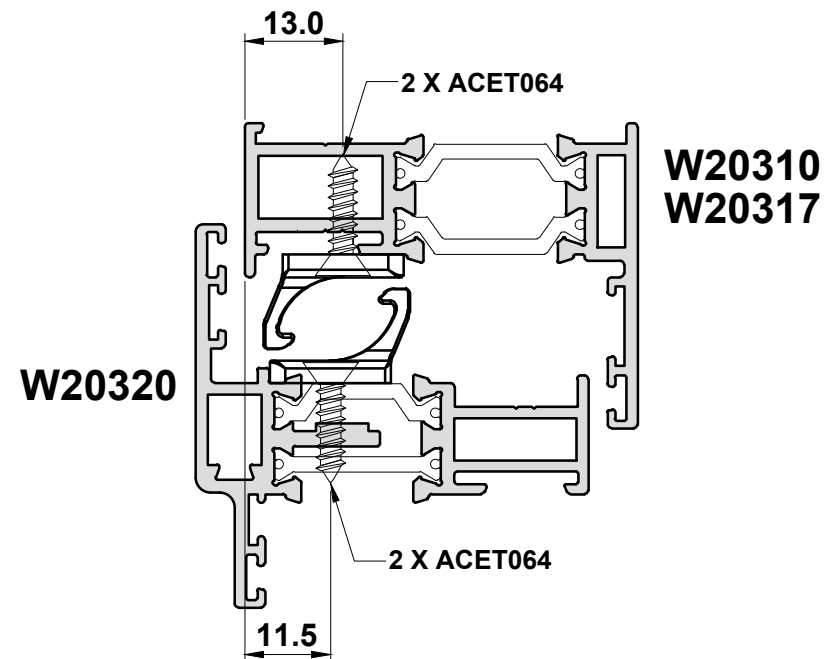
Please Note:

1. Dimensions shown in table are sash sizes - not rebate sizes.
2. The minimum sash sizes for ACINS10 & ACINSSH10 can both be reduced to 281mm where cockspur handles are used.
3. Top hung height & side hung width sizes to be reduced by 2mm where size is 450mm or smaller.
4. Vents of 100kg must be fitted with ACINS09 cam adjustment devices, which are optional on lighter vents
5. Separate restrictors (ACINS30 & ACINS31) vent holding devices may be required to hold large vents in a selected ventilation position against variable wind pressure.

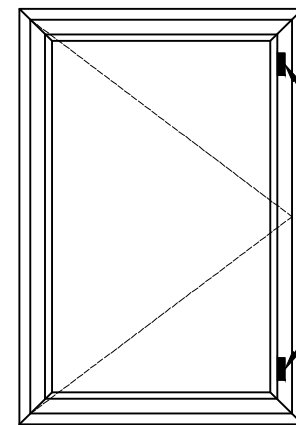


Do Not Scale From This Drawing

Hinge Protectors & Pull In Blocks



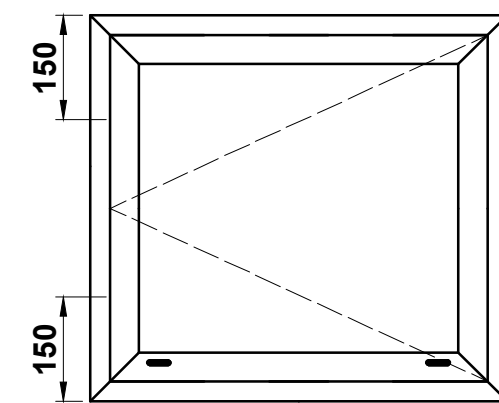
Top Hung



Side Hung

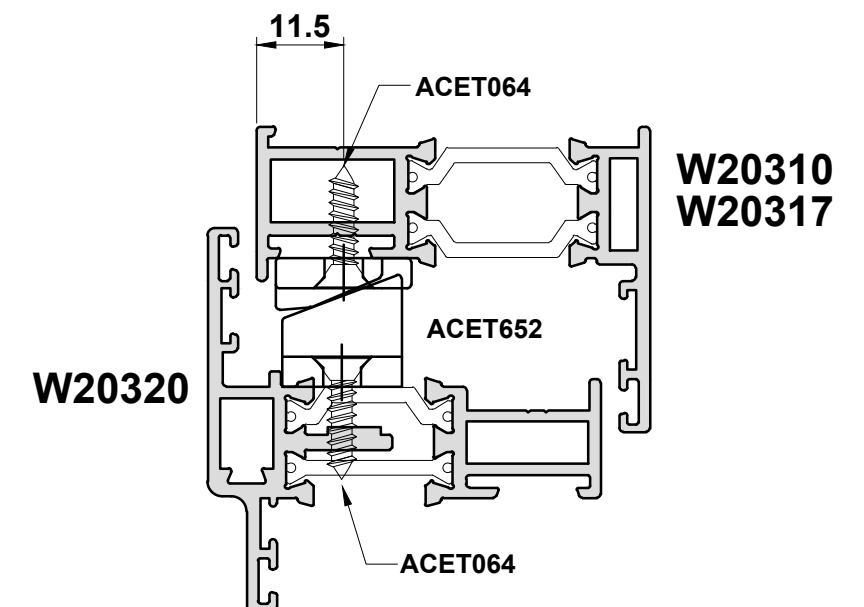
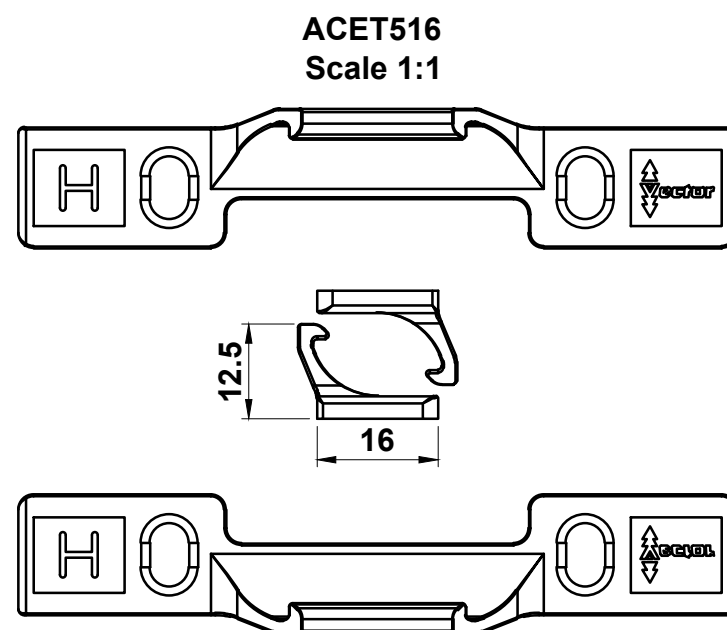
Please Note:

- 2 pairs per opening vent to be fitted to hinged side of window
- Each pair must be fitted with the hook centre within 100mm of each hinge



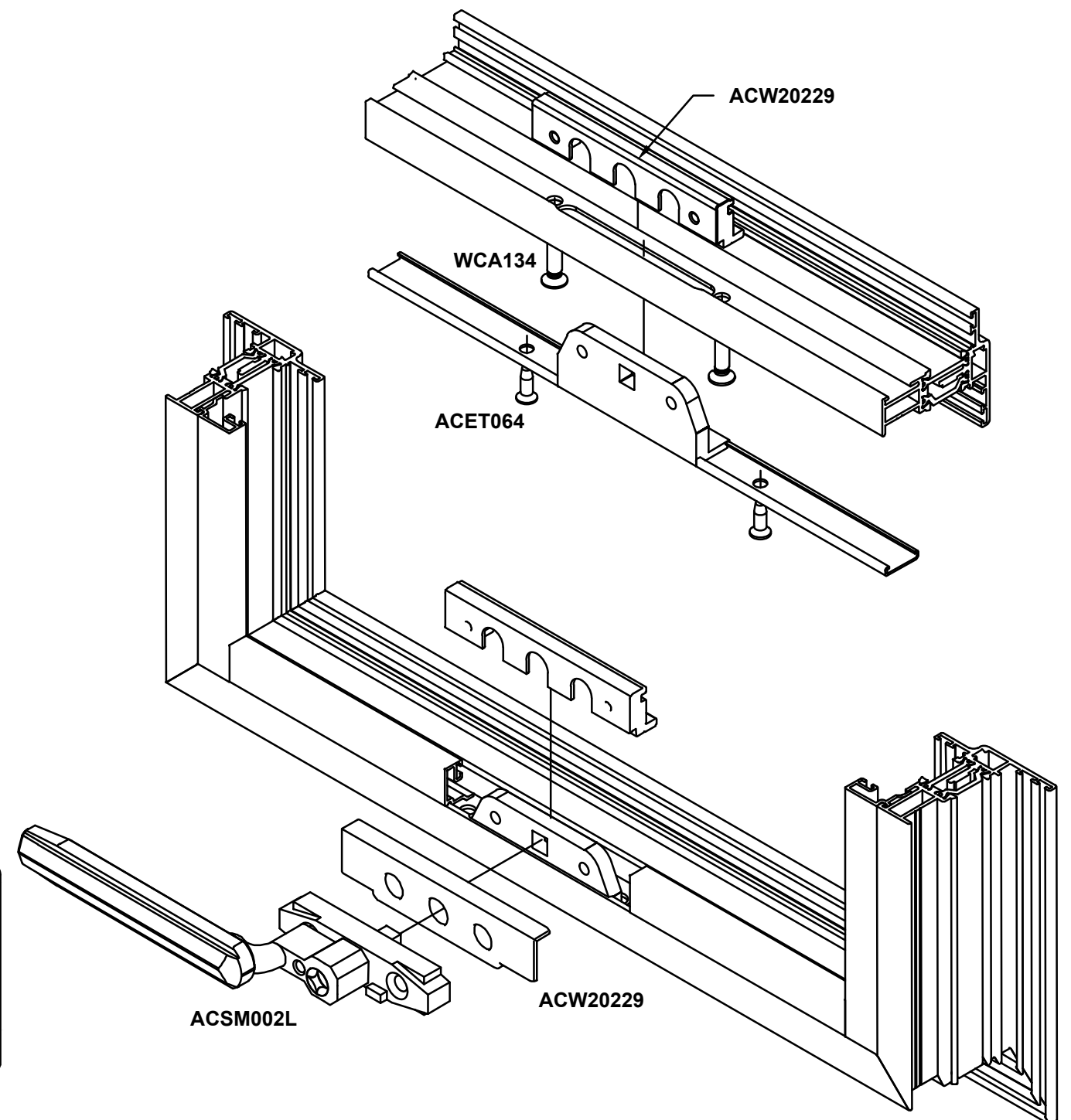
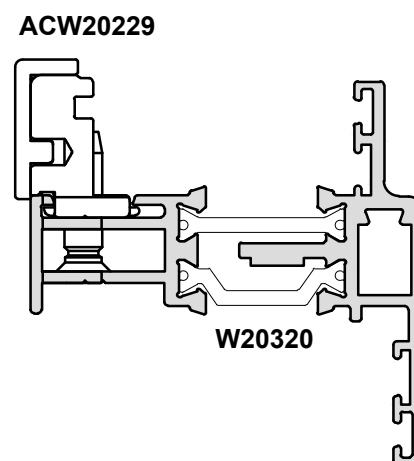
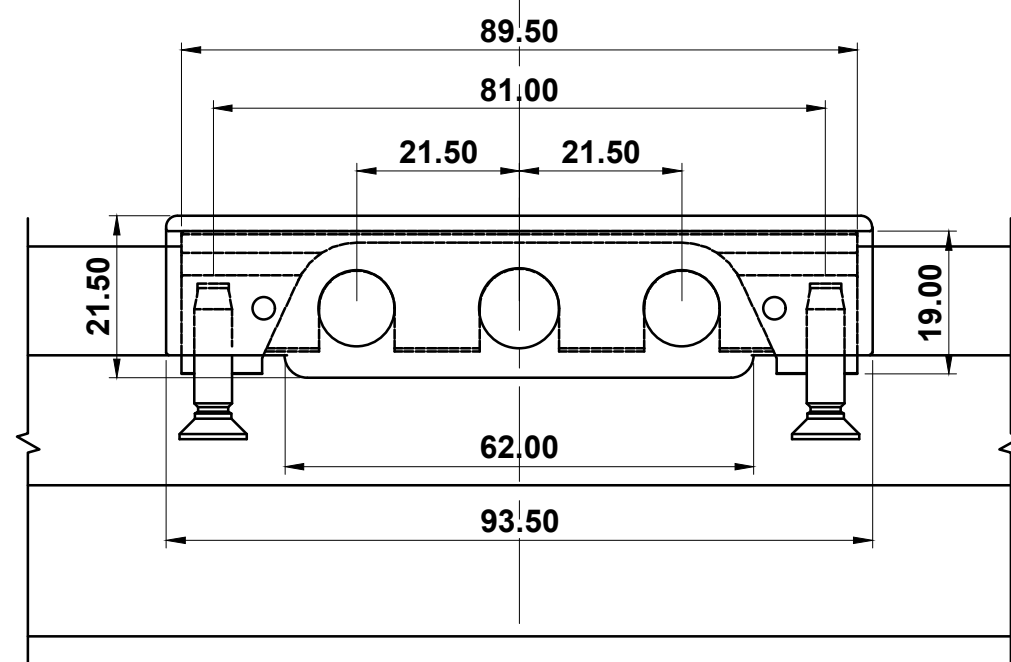
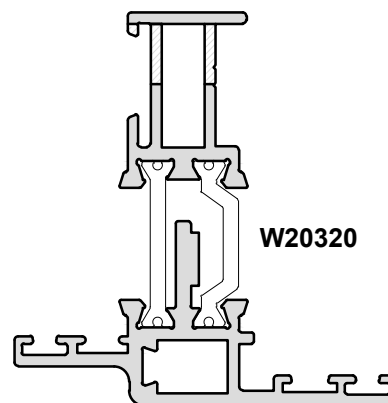
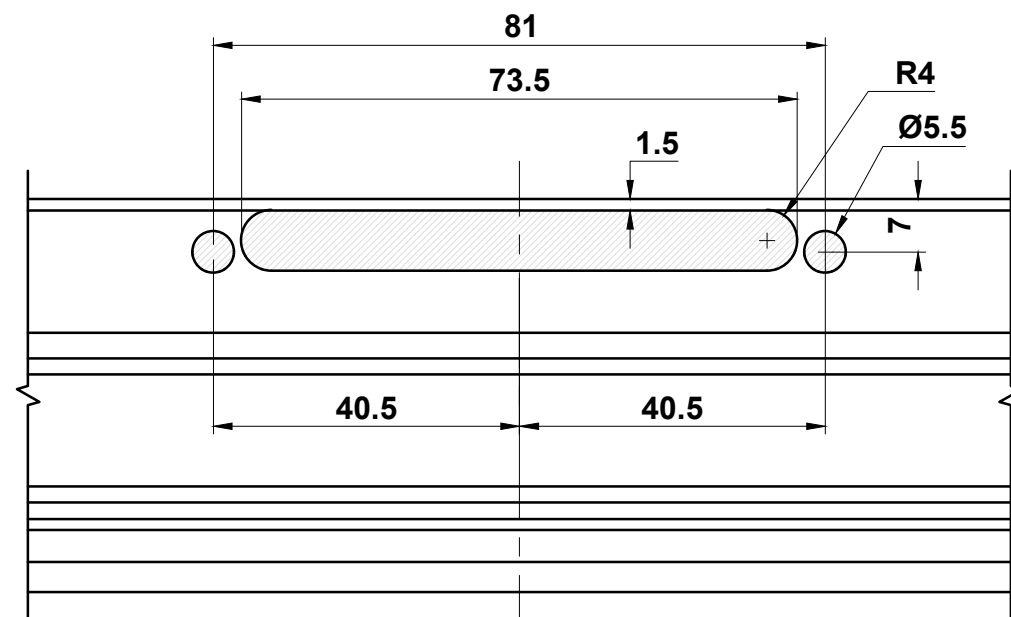
Please Note:

- 2 pairs per opening vent to be fitted to hinged side of window
- Each pair must be fitted with the wedge centre within 150mm of each hinge and in the centre of the window when sash height is greater than 800mm.



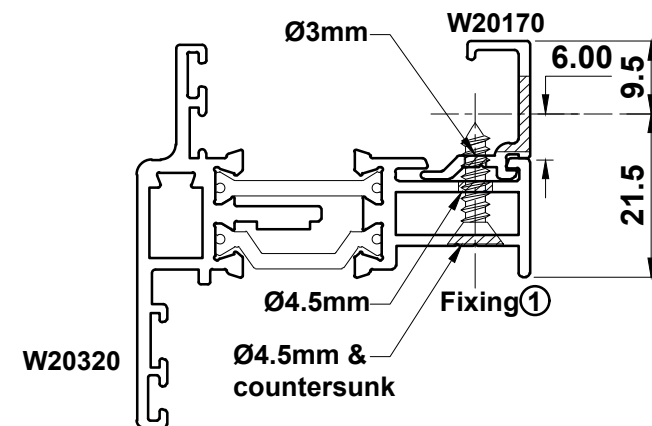
Do Not Scale From This Drawing

Espag Locking Details with ACSM002L using ACW20229

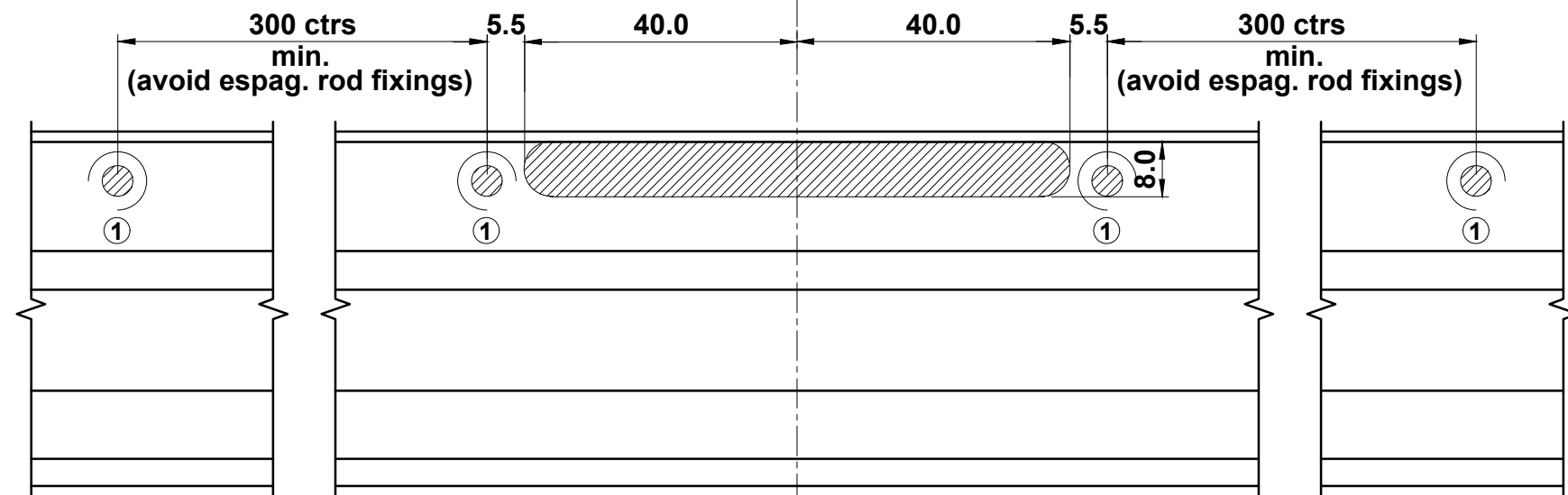
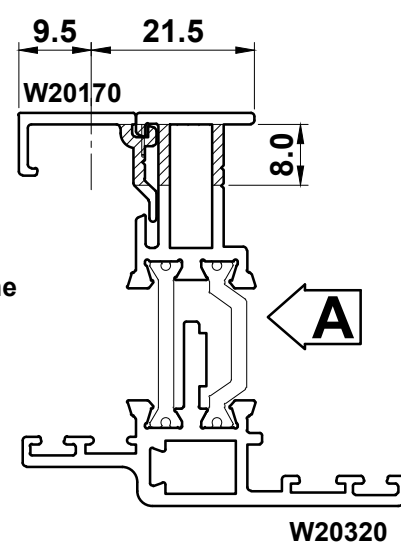
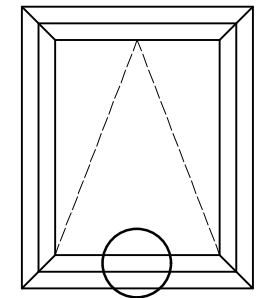
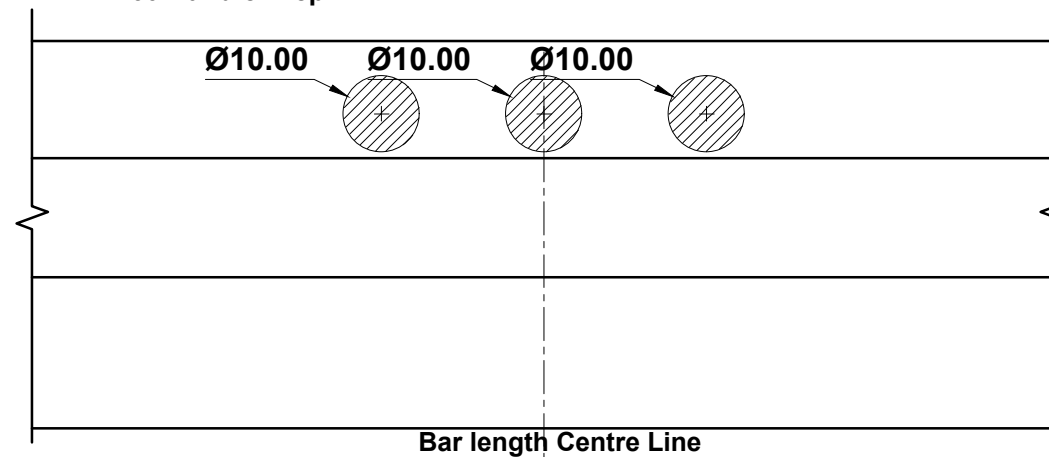


Do Not Scale From This Drawing

Espag Locking Details with ACET460, ACW20100 Monkey Tail & ACW20101 Bulb End Handles



ACET460 Handle Prep

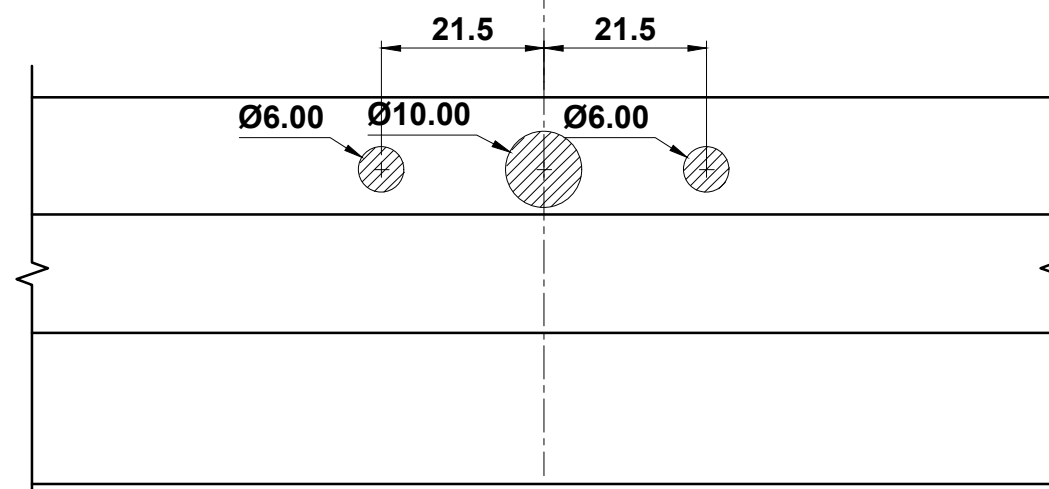
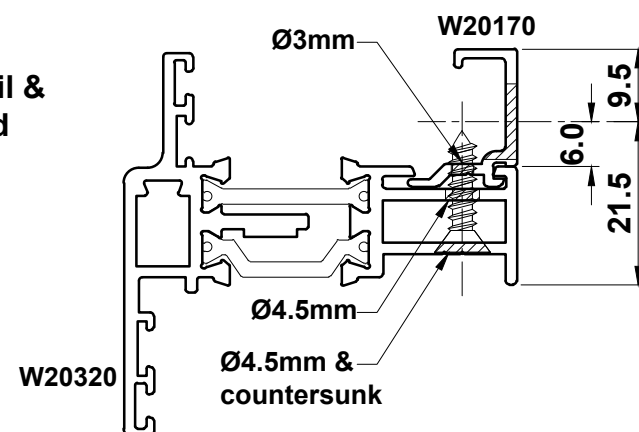


View on arrow - A

Steps:

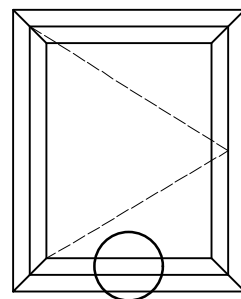
1. Cut bead to length and align centre of bead with centre of sash
2. Secure bead into sash using ACET064 screws as shown (Fixing 1) ensuring the bead cannot move
3. Route and drill for lock and handle
4. Remove bead and assemble sash
5. Refit bead and secure at a minimum of 300mm centres
6. Fit espag locking rod and handle.

ACW20100 Monkey Tail & ACW20101 Bulb End Handle Prep



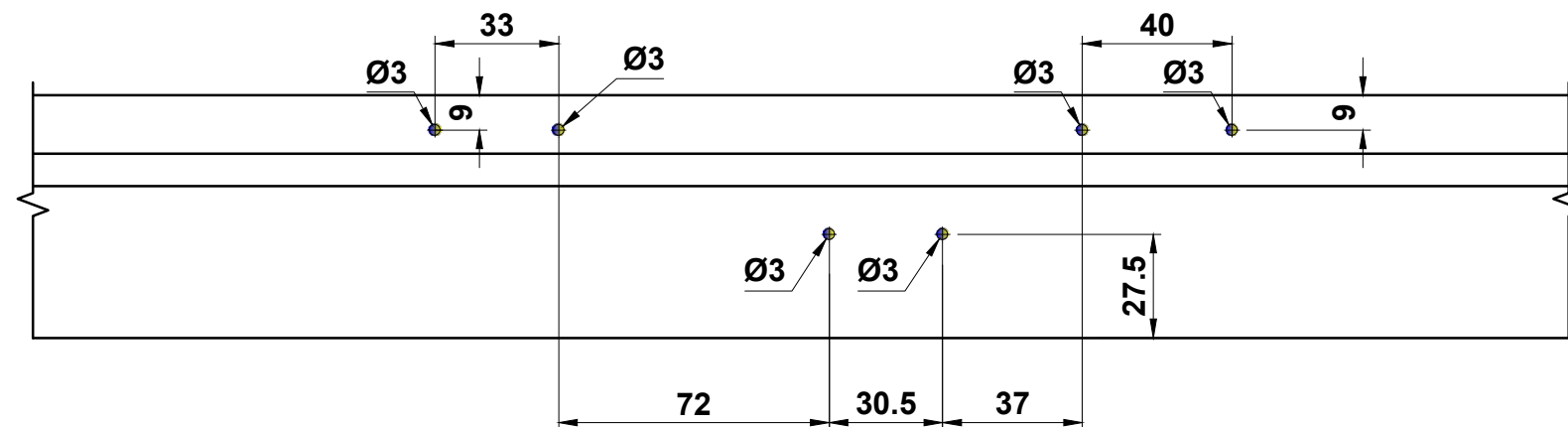
Do Not Scale From This Drawing

Peg Stay Detail



TOP HUNG WITH PEG STAY HAS
NOT BEEN TESTED AS ADDITIONAL
HANDLE CAN NOT BE FITTED

Typical layout for 10" peg stay



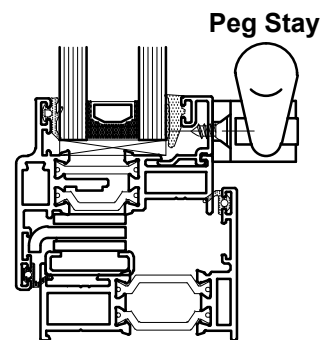
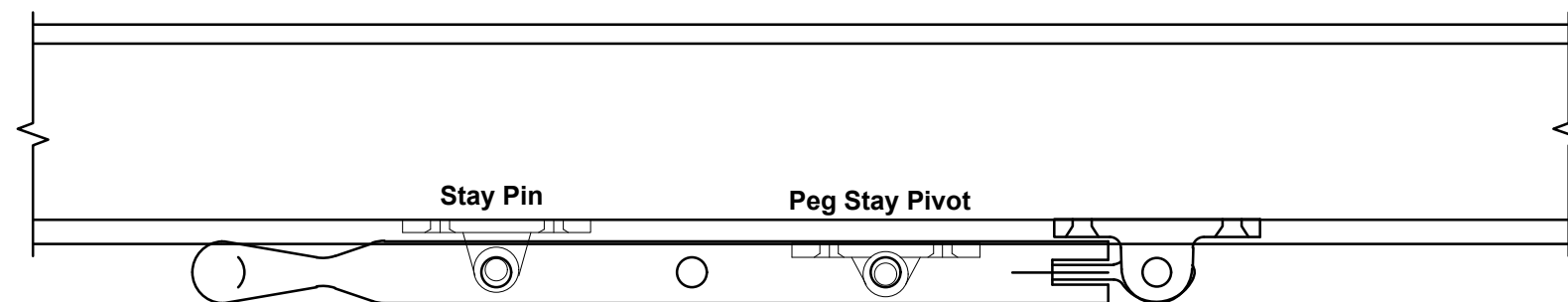
Please use the above dimensions for guidance only.
As each peg stay is hand made, the dimensions will vary slightly.



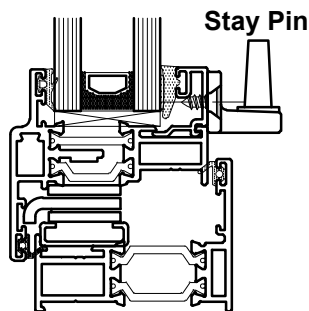
Monkey Tail
Peg Stay



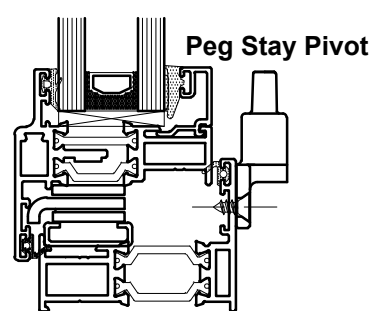
Bulb End
Peg Stay



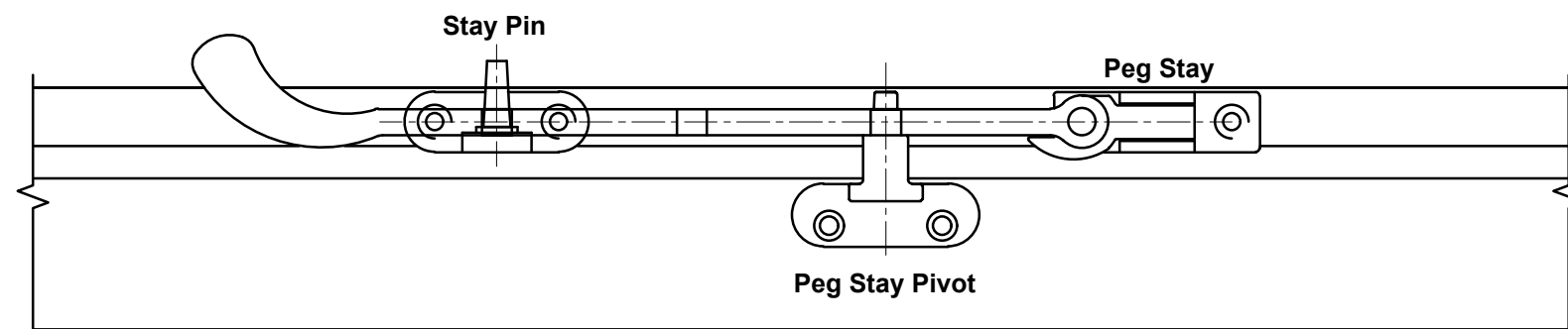
Peg Stay



Stay Pin

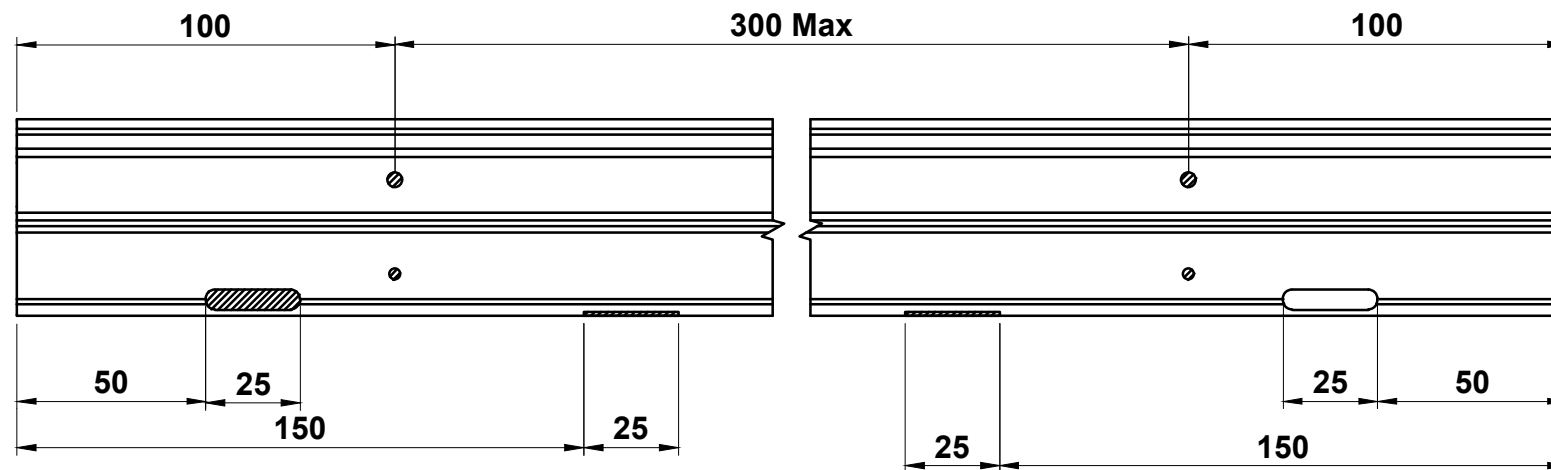


Peg Stay Pivot

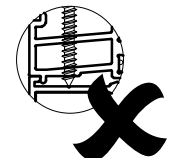


Do Not Scale From This Drawing

W20350 Horizontal Coupler Detail

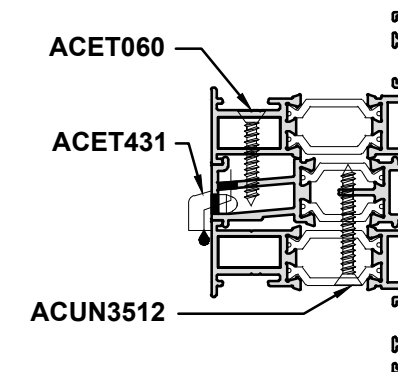


Important Note: Do not screw through drainage channel.

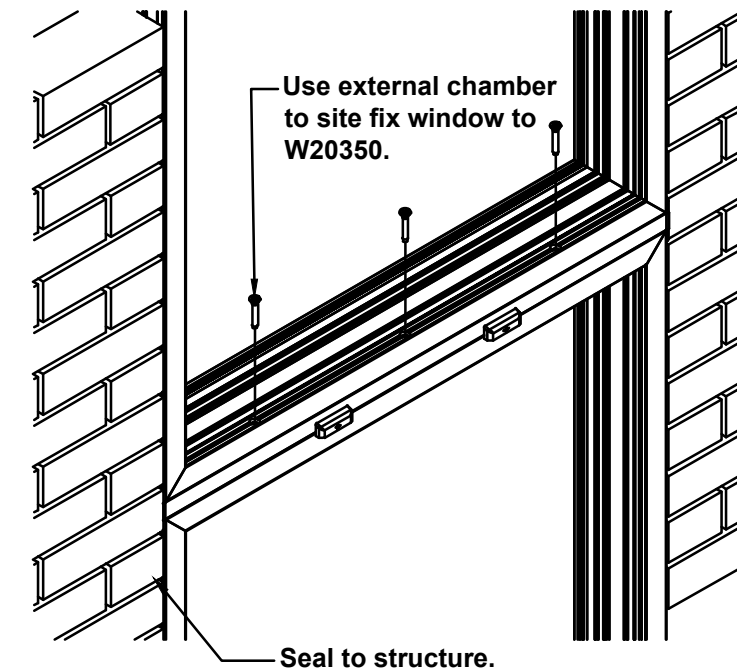
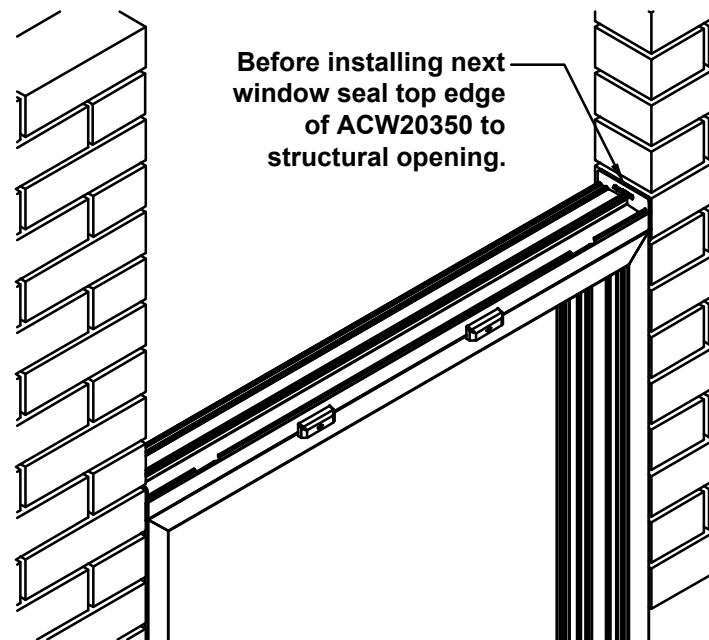
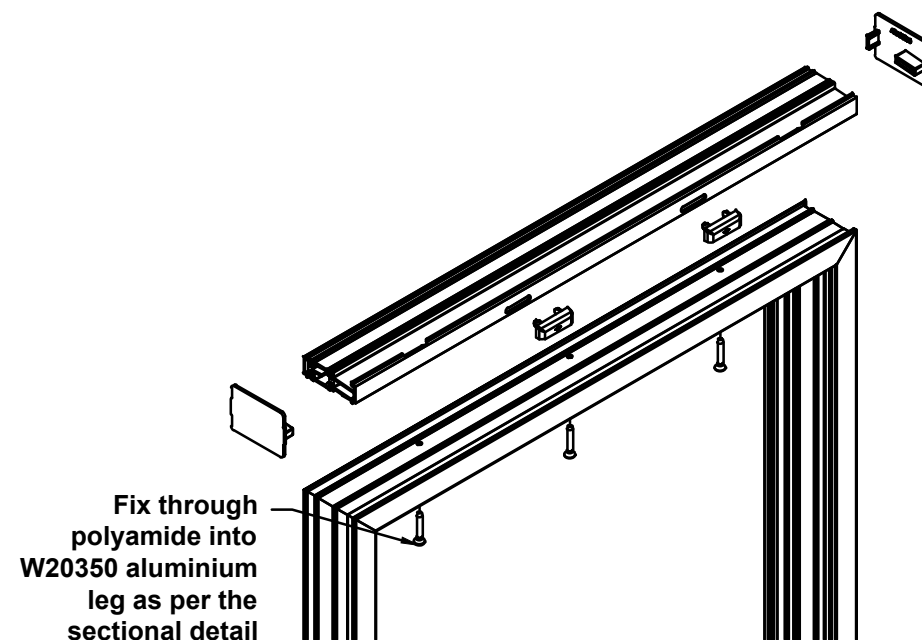


Zone Drainage of Jamb Cavity

CWCT Built up wall guidance recommends drainage of Jamb Cavity



W20310

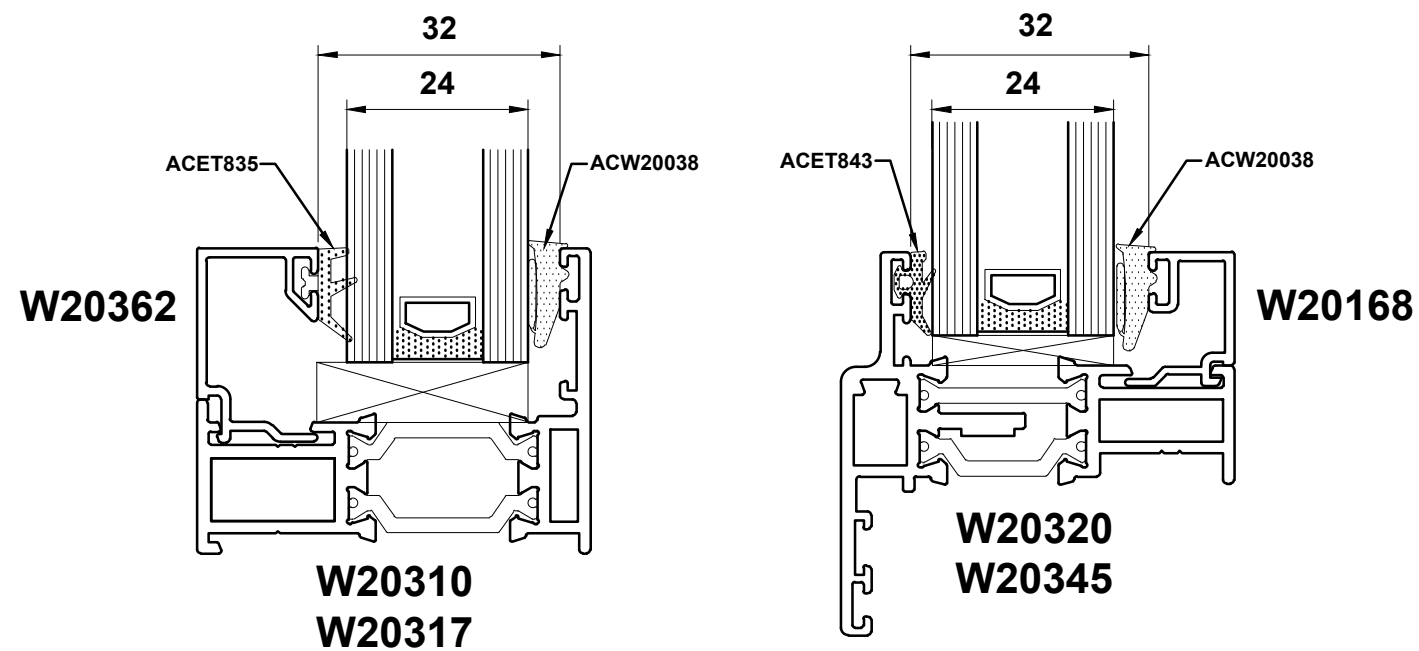


Do Not Scale From This Drawing

Glazing Chart

24mm Glazing

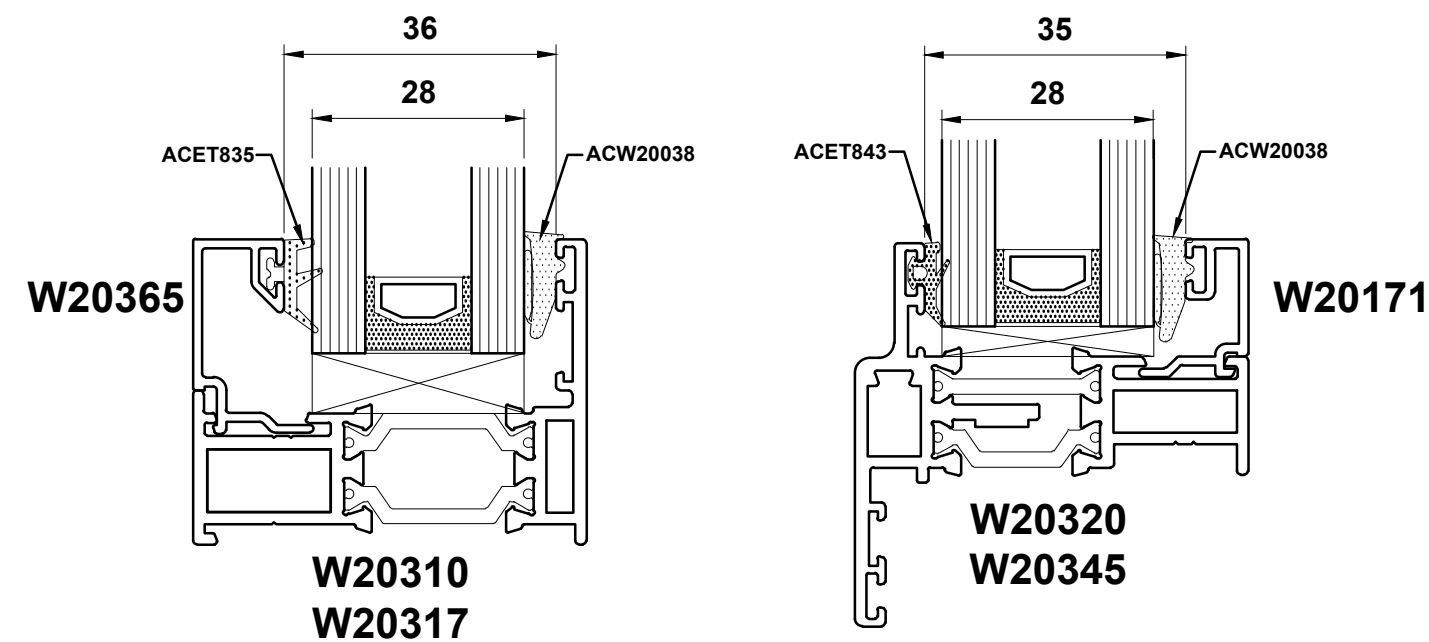
Gasket Glazed



Note: We advise to silicon seal bead in high exposed areas.

28mm Glazing

Gasket Glazed



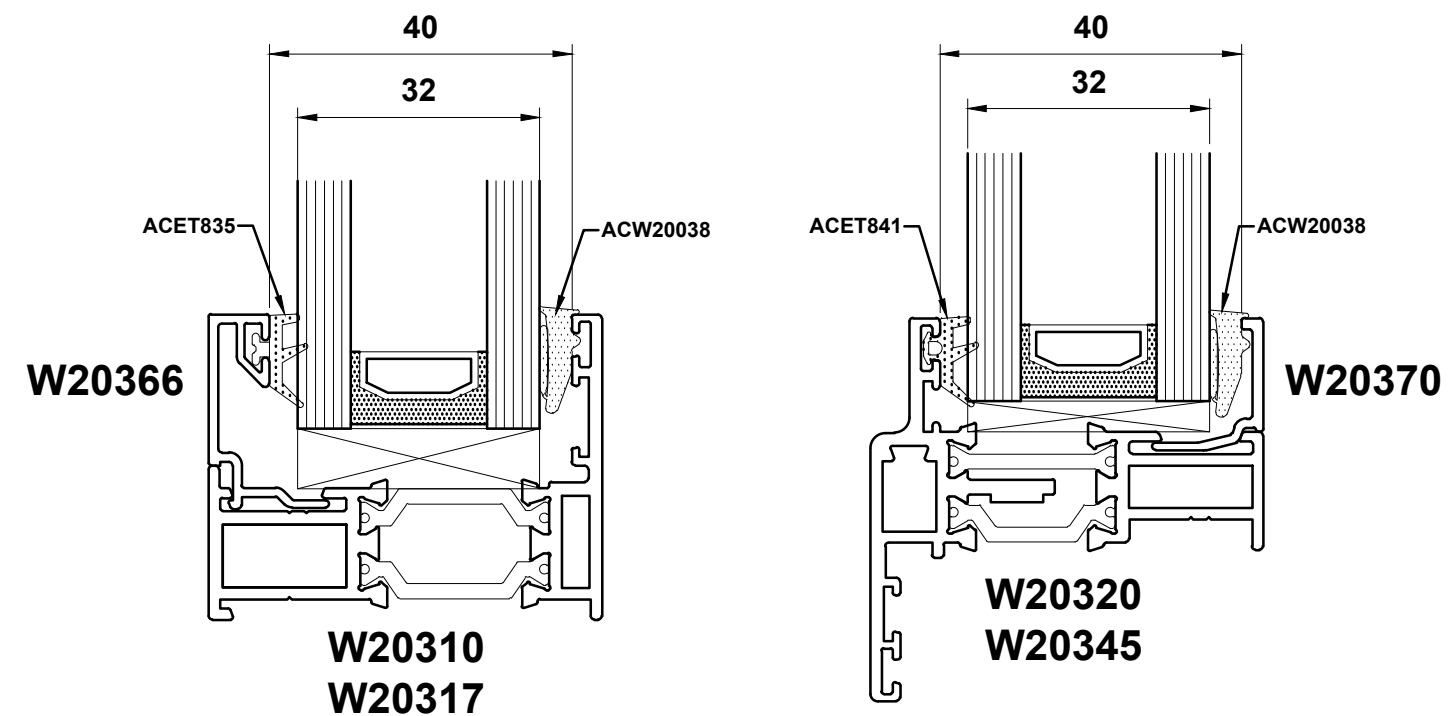
Note: We advise to silicon seal bead in high exposed areas.

Do Not Scale From This Drawing

Glazing Chart

32mm Glazing

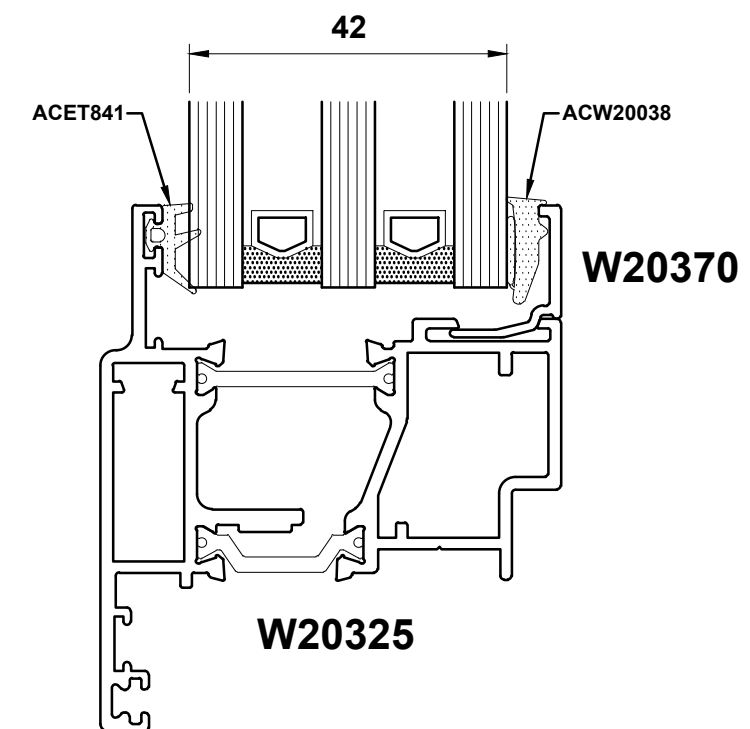
Gasket Glazed



Note: We advise to silicon seal bead in high exposed areas.

42mm Glazing

Gasket Glazed

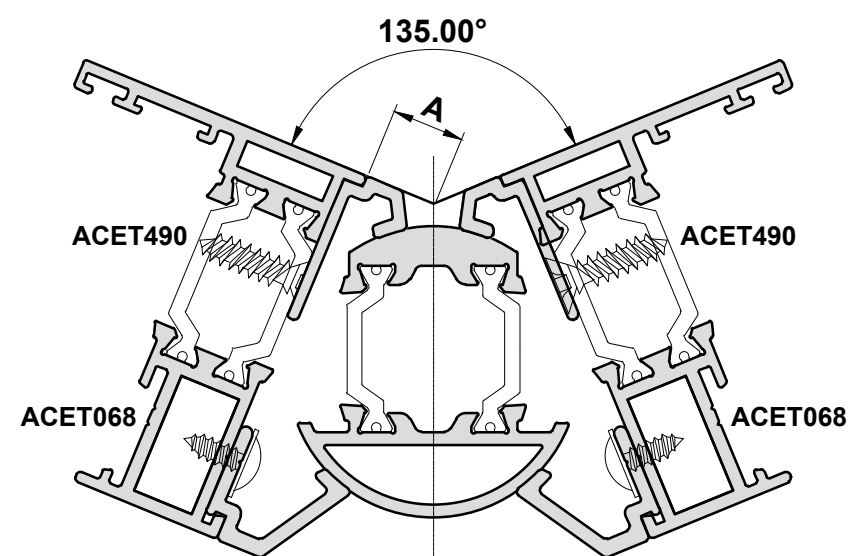
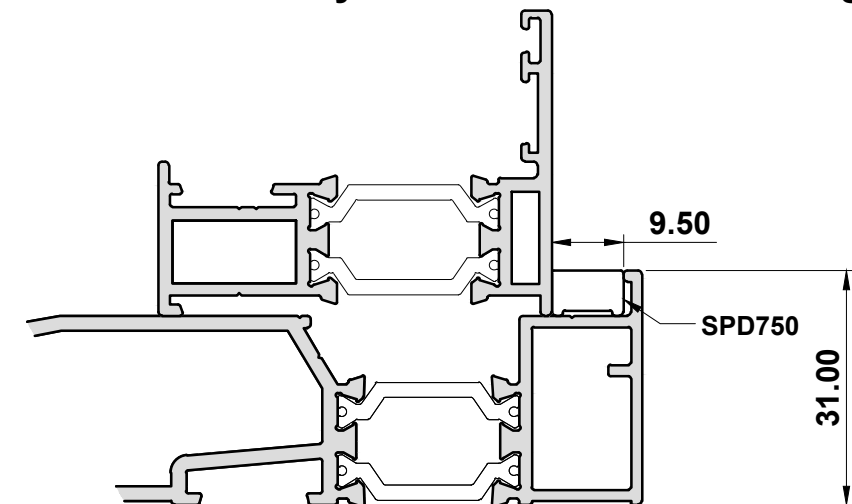
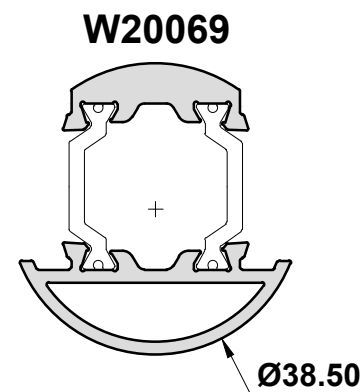
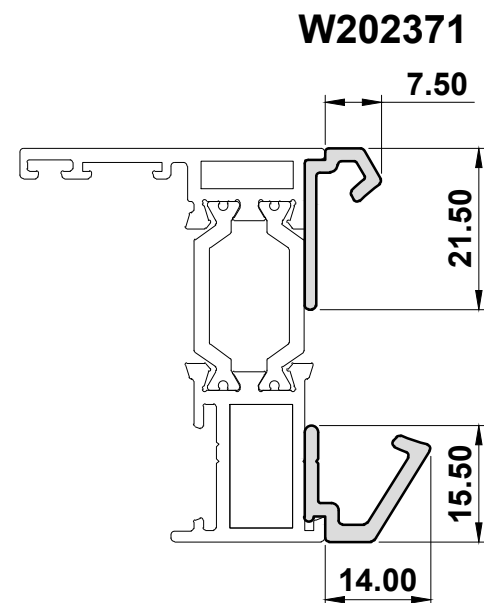


Note: We advise to silicon seal bead in high exposed areas.

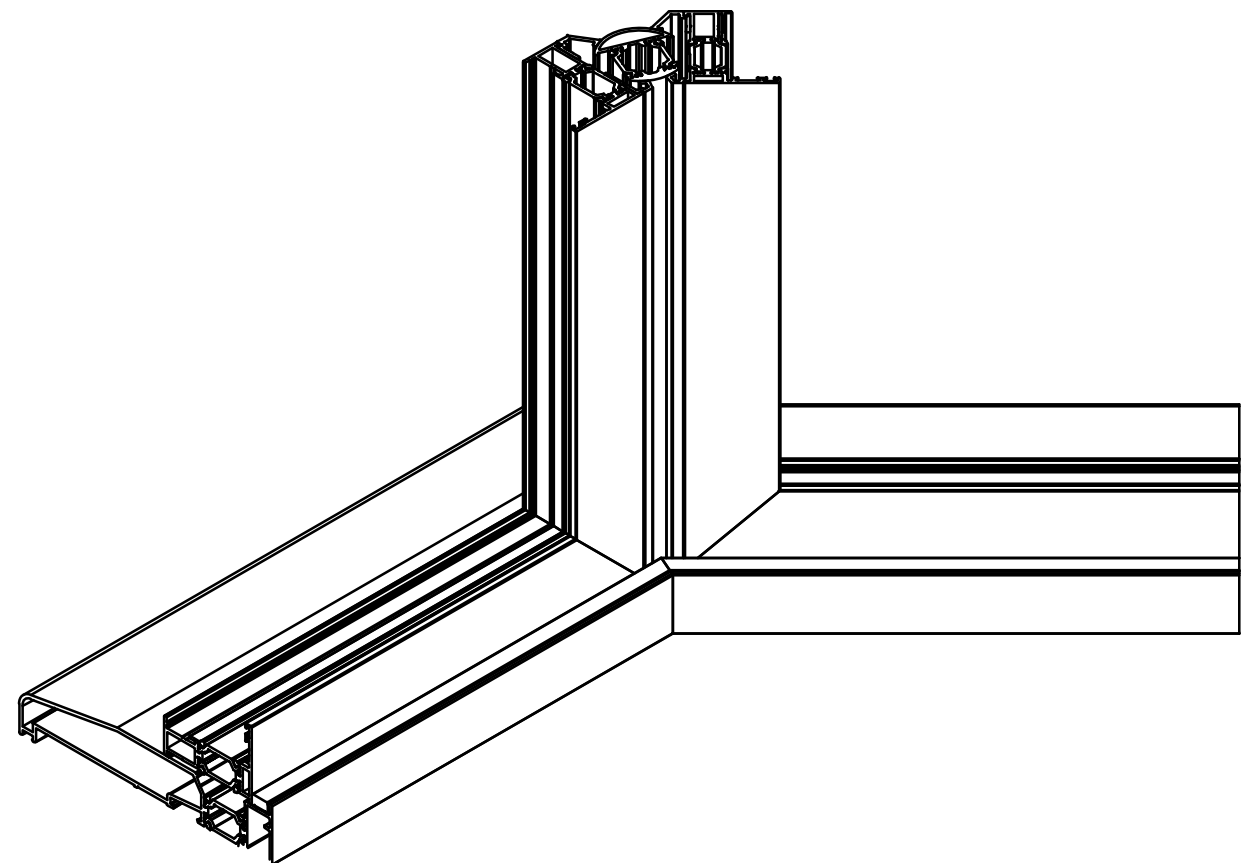
Do Not Scale From This Drawing

W20015 Bay Pole Selection

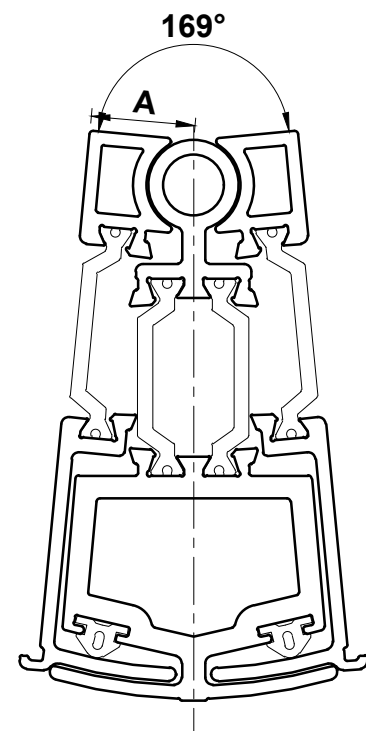
When using W20069 on a cill, we recommend using SPD750 infill to position the assembly forward over the drainage channel.



ANGLE	DEDUCTION 'A'
180°	18
175°	17
170°	16
165°	15.5
160°	14.5
155°	13.5
150°	12.5
145°	11.5
140°	10.5
135°	9.5
130°	8.5
125°	7.5
120°	6.5
115°	5

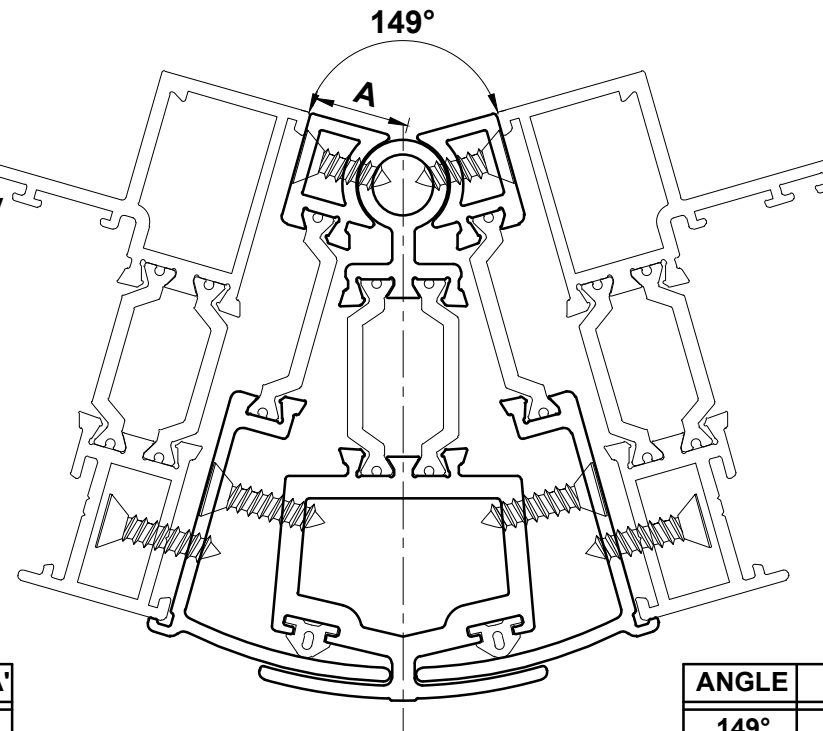


W20017 Bay Pole Selection

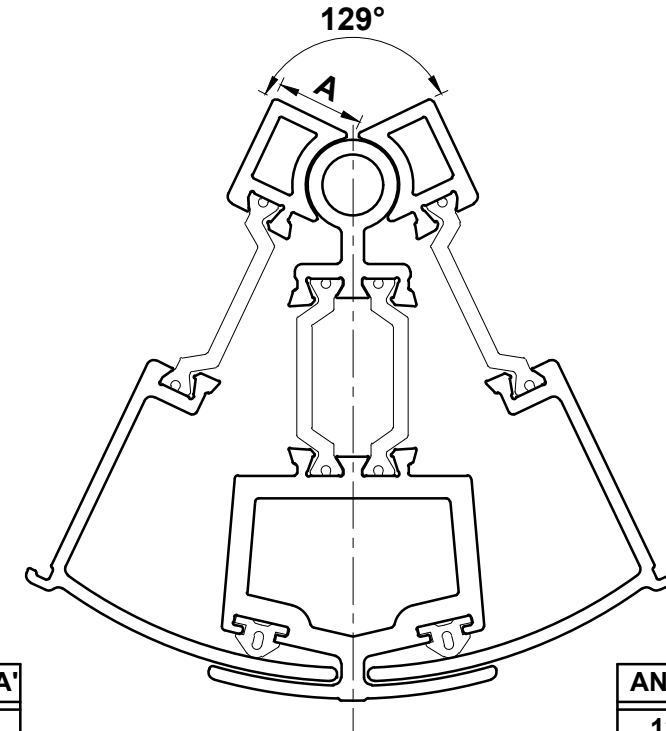


Important Note:
All joints must be adequately sealed using ACSIL04

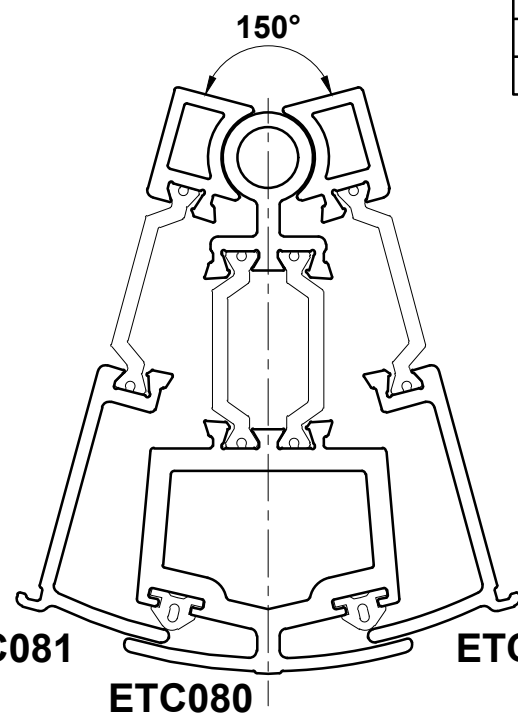
ANGLE	DEDUCTION 'A'
169°	14
165°	13.5
160°	13.6
155°	13
150°	13



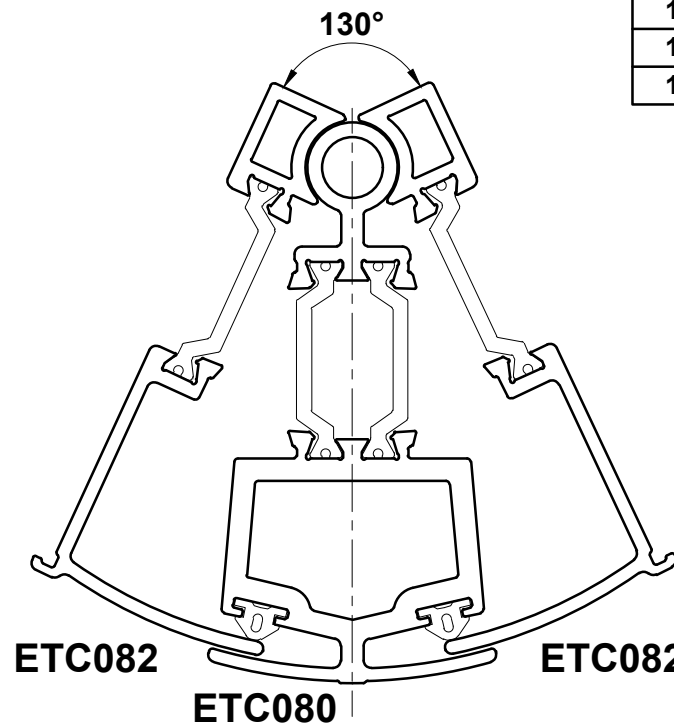
ANGLE	DEDUCTION 'A'
149°	12.5
145°	12.5
140°	12
135°	12
130°	11.5



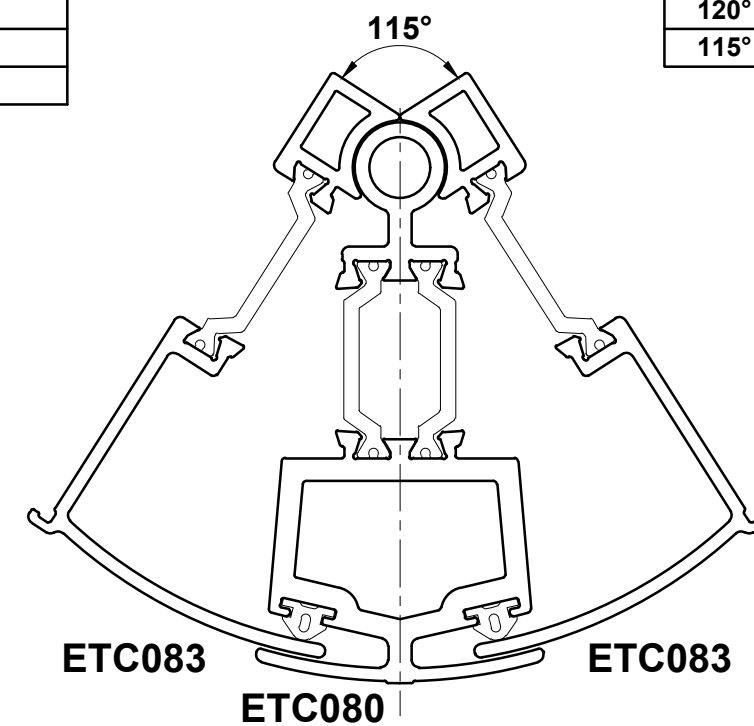
ANGLE	DEDUCTION 'A'
129°	11.5
125°	11.5
120°	11
115°	10.5



ETC081 ETC081
ETC080



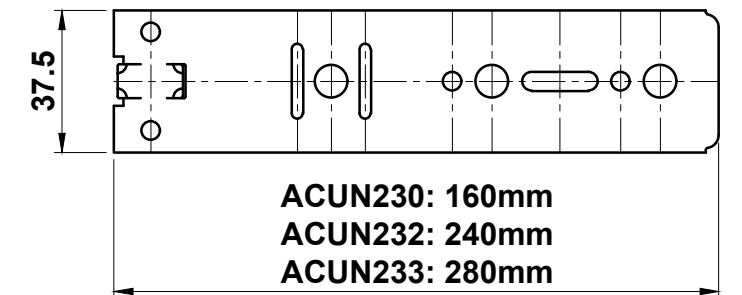
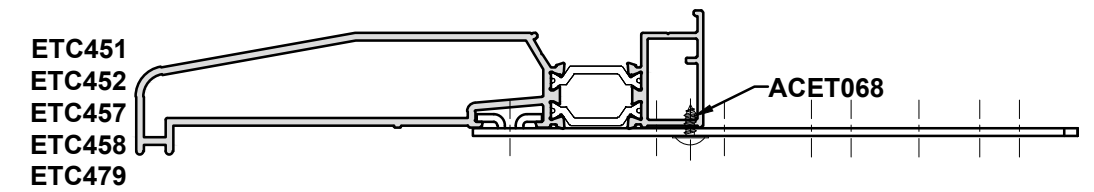
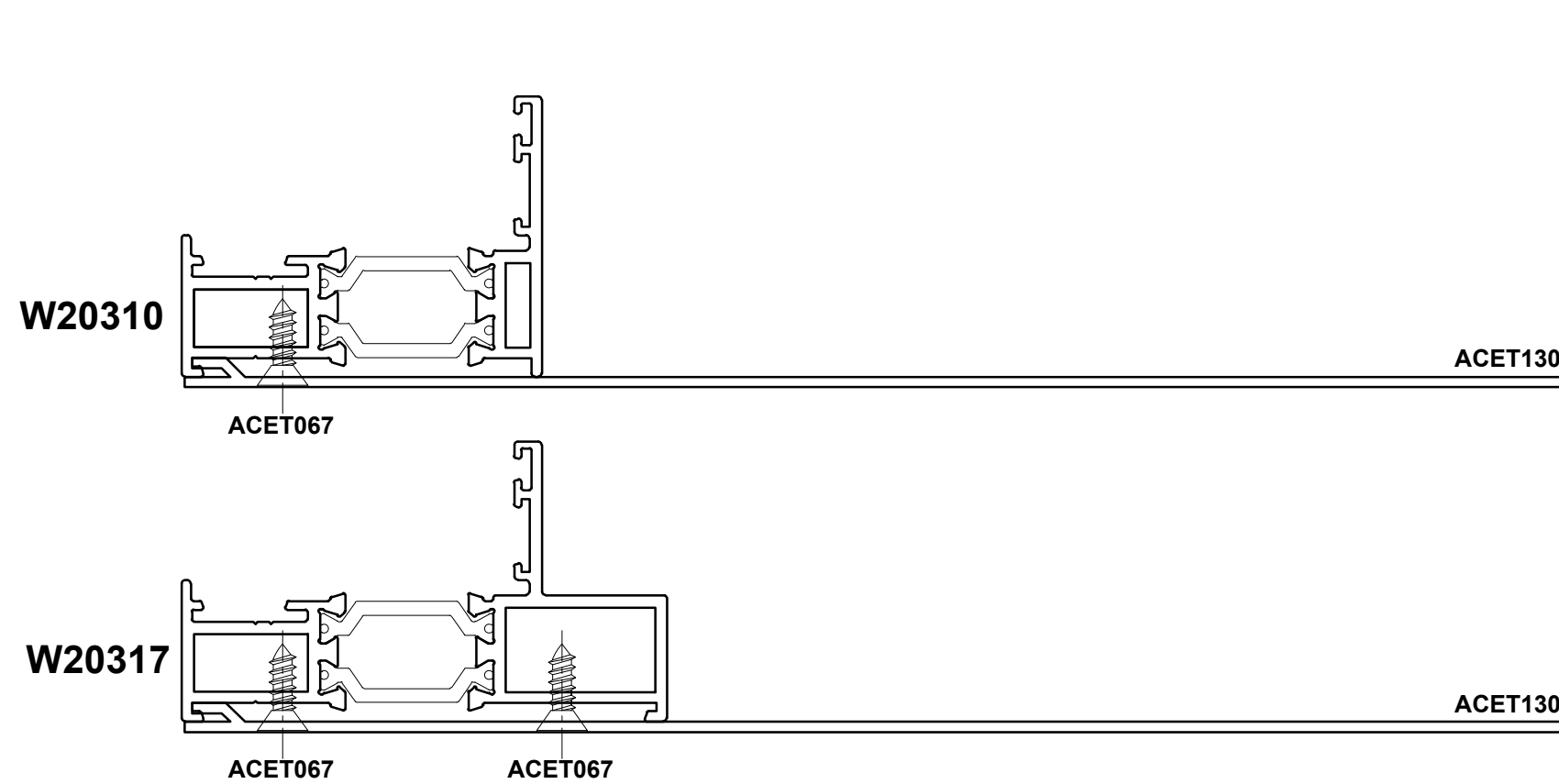
ETC082 ETC082
ETC080



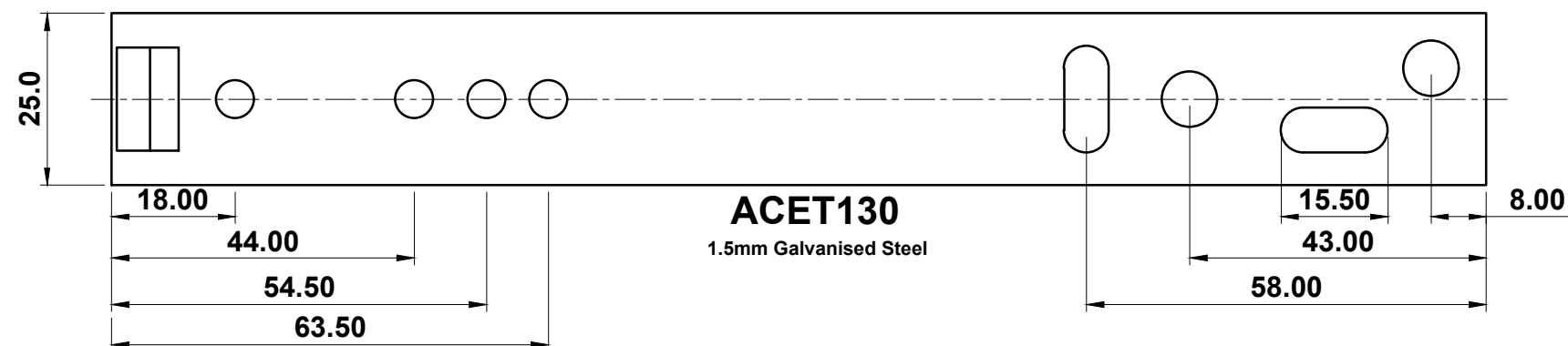
ETC083 ETC083
ETC080

Do Not Scale From This Drawing

Fixing Strap Guide

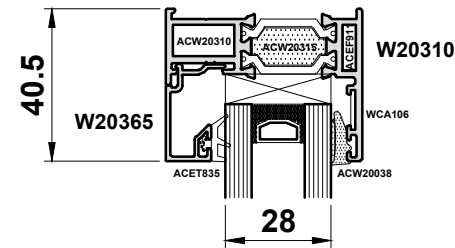


NOTE:
Fixing straps should be spaced a minimum of 150mm in from each end & at a maximum of 300mm apart.

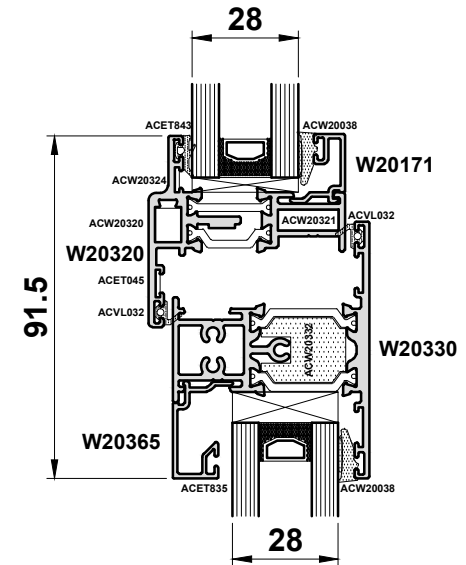
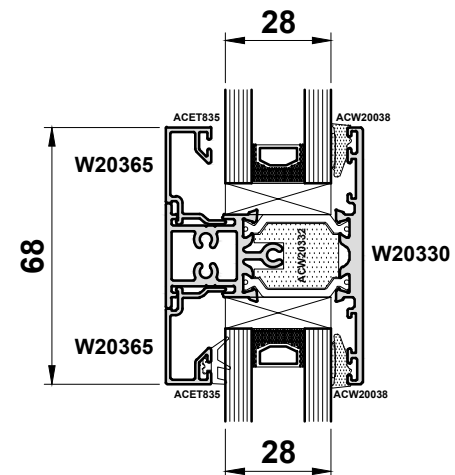
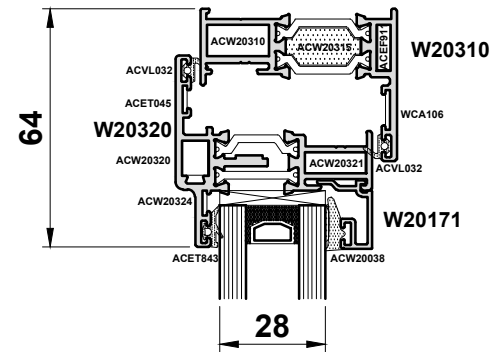


Example Layout

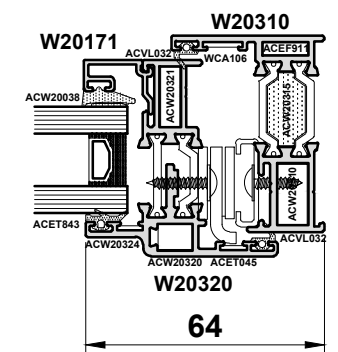
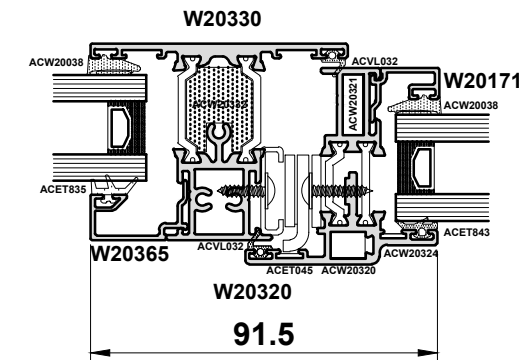
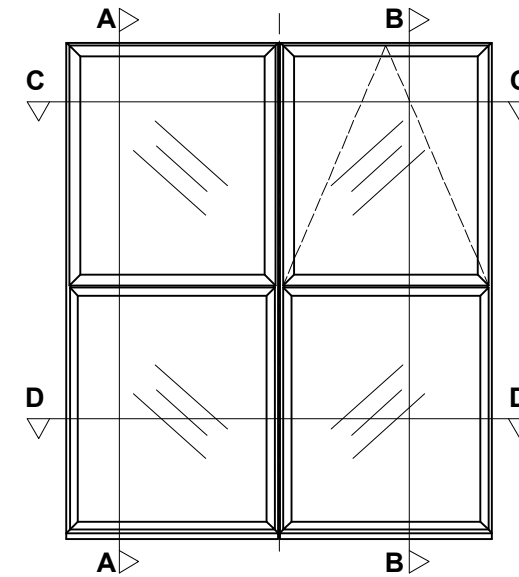
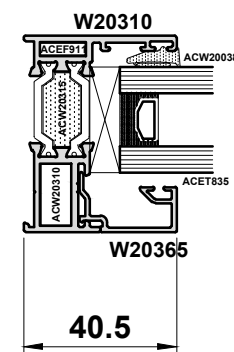
AA



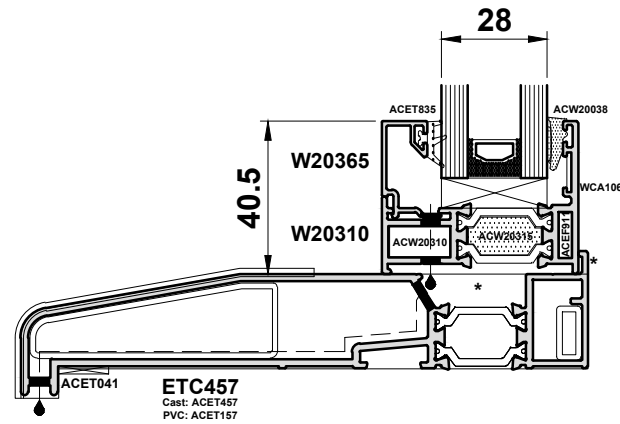
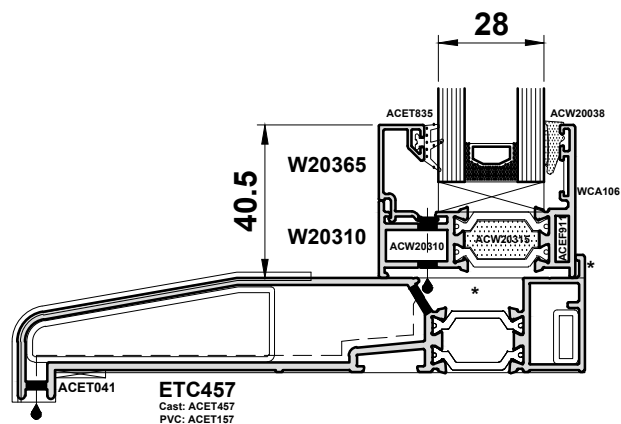
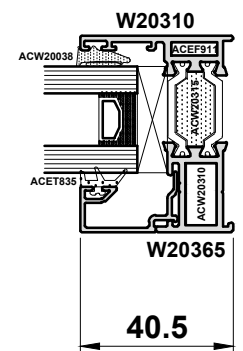
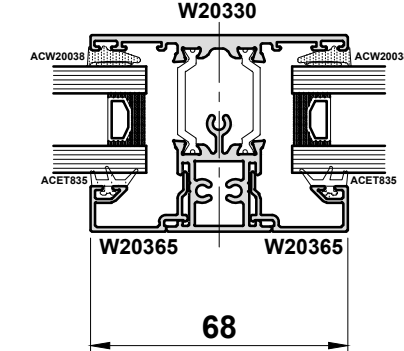
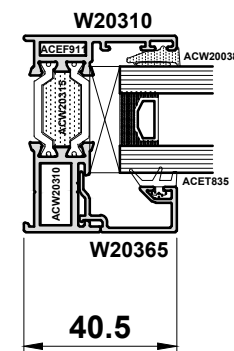
BB



CC



DD



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Section F



Sawing Tables

Cutting Information.....	F03
Cutting Information.....	F04
Cutting Information.....	F05
Cutting Information.....	F06

Section F

Cutting Information

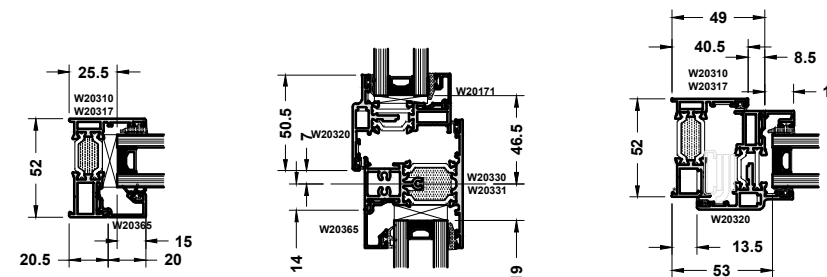
PART DESCRIPTIONS		TYPICAL STYLES															
Outer Frame	Head & Cill		W	W	W	W	W	W	W	W	W	W	W	W	W	W	W
	Jambs		H	H	H	H	H	H	H	H	H	H	H	H	H	H	H
	Transoms			W - 41		W - 41	W - 41	W - 41	OF to €M - 34.5	W - 50		OF to €M - 34.5	€M to €M - 34.5	W - 50	OF to €M - 34.5	W - 50	
	Mullions							H - 41	H - 41	OF to €T - 28	H - 41	H - 41	H - 41	OF to €T - 28	H - 41		
Vent (1)	Horizontal Members				W - 27	W - 27	W - 27	W - 27	OF to €M - 20.5	OF to €M - 20.5	OF to €M - 20.5	OF to €M - 20.5	OF to €M - 20.5	OF to €M - 20.5	OF to €M - 20.5	OF to €M - 20.5	W - 27
	Vertical Members				H - 27	OF to €T - 20.5	OF to €T - 20.5	€T to €T - 14	H - 27	H - 27	OF to €T - 20.5	H - 27	OF to €T - 20.5	H - 27	OF to €T - 20.5	OF to €T - 20.5	OF to €T - 20.5
	Glass Width				W - 106	W - 106	W - 106	W - 106	OF to €M - 99.5	OF to €M - 99.5	OF to €M - 99.5	OF to €M - 99.5	OF to €M - 99.5	OF to €M - 99.5	OF to €M - 99.5	OF to €M - 99.5	W - 106
	Glass Height				H - 106	OF to €T - 99.5	OF to €T - 99.5	€T to €T - 99.5	H - 106	H - 106	OF to €T - 99.5	H - 106	OF to €T - 99.5	H - 106	OF to €T - 99.5	OF to €T - 99.5	OF to €T - 99.5
Vent (2)	Horizontal Members						W - 27		OF to €M - 20.5				OF to €M - 20.5	€M to €M - 14	€M to €M - 14	OF to €M - 14	
	Vertical Members						OF to €T - 20.5		OF to €T - 20.5				OF to €T - 20.5	OF to €T - 20.5	OF to €T - 20.5	OF to €T - 20.5	
	Glass Width						W - 99.5		OF to €M - 99.5				OF to €M - 99.5	€M to €M - 93	€M to €M - 93	OF to €M - 93	
	Glass Height						OF to €T - 99.5		OF to €T - 99.5				OF to €T - 99.5	OF to €T - 99.5	OF to €T - 99.5	OF to €T - 99.5	
Fixed Pane (1)	Horizontal Members		W - 41	W - 41		W - 41		W - 41	OF to €M - 34.5	OF to €M - 34.5	W - 41	€M to €M - 34.5	€M to €M - 28	€M to €M - 28	W - 41	OF to €M - 34.5	W - 41
	Vertical Members		H - 41	OF to €T - 34.5		OF to €T - 34.5		OF to €T - 34.5	H - 41	OF to €T - 34.5	OF to €T - 34.5	H - 41	H - 41	OF to €T - 34.5	OF to €T - 34.5	H - 41	OF to €T - 34.5
	Glass Width		W - 51	W - 51		W - 51		W - 51	OF to €M - 44.5	OF to €M - 44.5	W - 51	€M to €M - 38	€M to €M - 38	€M to €M - 38	W - 51	OF to €M - 44.5	W - 51
	Glass Height		H - 51	OF to €T - 44.5		OF to €T - 44.5		OF to €T - 44.5	H - 51	OF to €T - 44.5	OF to €T - 44.5	H - 51	H - 51	OF to €T - 44.5	OF to €T - 44.5	H - 51	OF to €T - 44.5

Legend

W	=	Outer Frame Width (Longest Leg)
H	=	Outer Frame Height (Longest Leg)
€T	=	Centre Line of Transom
€M	=	Centre Line of Mullion
OF	=	Edge of Outer Frame (Longest Leg)

Sections

Outer Frame:	W20310, W20317
Sash:	W20320
Fixed Light:	Beaded
Transom/Mullion:	W20330, W20331, W20332, W20333



Do Not Scale From This Drawing

Cutting Information

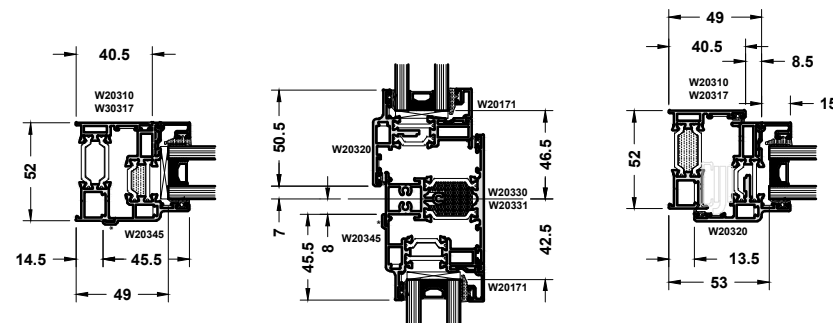
PART DESCRIPTIONS		TYPICAL STYLES															
Outer Frame	Head & Cill		W	W	W	W	W	W	W	W	W	W	W	W	W	W	W
	Jambs		H	H	H	H	H	H	H	H	H	H	H	H	H	H	H
	Transoms			W - 41		W - 41	W - 41	W - 41		OF to €M - 34.5	W - 50		OF to €M - 34.5	€M to €M - 34.5	W - 50	OF to €M - 34.5	W - 50
	Mullions								H - 41	H - 41	OF to €T - 28	H - 41	H - 41	H - 41	OF to €T - 28	H - 41	
Vent (1)	Horizontal Members				W - 27	W - 27	W - 27	W - 27	OF to €M - 20.5	OF to €M - 20.5	OF to €M - 20.5	OF to €M - 20.5	OF to €M - 20.5	OF to €M - 20.5	OF to €M - 20.5	OF to €M - 20.5	W - 27
	Vertical Members				H - 27	OF to €T - 20.5	OF to €T - 20.5	€T to €T - 14	H - 27	H - 27	OF to €T - 20.5	H - 27	OF to €T - 20.5	H - 27	OF to €T - 20.5	OF to €T - 20.5	OF to €T - 20.5
	Glass Width				W - 106	W - 106	W - 106	W - 106	OF to €M - 99.5	OF to €M - 99.5	OF to €M - 99.5	OF to €M - 99.5	OF to €M - 99.5	OF to €M - 99.5	OF to €M - 99.5	OF to €M - 99.5	W - 106
	Glass Height				H - 106	OF to €T - 99.5	OF to €T - 99.5	€T to €T - 99.5	H - 106	H - 106	OF to €T - 99.5	H - 106	OF to €T - 99.5	H - 106	OF to €T - 99.5	OF to €T - 99.5	OF to €T - 99.5
Vent (2)	Horizontal Members						W - 27		OF to €M - 20.5				OF to €M - 20.5	€M to €M - 14	€M to €M - 14	OF to €M - 14	
	Vertical Members						OF to €T - 20.5		OF to €T - 20.5				OF to €T - 20.5	OF to €T - 20.5	OF to €T - 20.5	OF to €T - 20.5	
	Glass Width						W - 99.5		OF to €M - 99.5				OF to €M - 99.5	€M to €M - 93	€M to €M - 93	OF to €M - 93	
	Glass Height						OF to €T - 99.5		OF to €T - 99.5				OF to €T - 99.5	OF to €T - 99.5	OF to €T - 99.5	OF to €T - 99.5	
Fixed Pane (1)	Horizontal Members		W - 29	W - 29		W - 29		W - 29	OF to €M - 22.5	OF to €M - 22.5	W - 38	€M to €M - 25	€M to €M - 16	€M to €M - 16	W - 38	OF to €M - 25	W - 38
	Vertical Members		H - 29	OF to €T - 22.5		OF to €T - 22.5		OF to €T - 22.5	H - 38	OF to €T - 25	OF to €T - 25	H - 38	H - 38	OF to €T - 25	OF to €T - 25	H - 38	OF to €T - 25
	Glass Width		W - 98	W - 98		W - 98		W - 98	OF to €M - 91.5	OF to €M - 91.5	W - 98	€M to €M - 85	€M to €M - 85	€M to €M - 85	W - 98	OF to €M - 91.5	W - 98
	Glass Height		H - 98	OF to €T - 91.5		OF to €T - 91.5		OF to €T - 91.5	H - 98	OF to €T - 91.5	OF to €T - 91.5	H - 98	H - 98	OF to €T - 91.5	OF to €T - 91.5	H - 98	OF to €T - 91.5

Legend

W = Outer Frame Width (Longest Leg)
H = Outer Frame Height (Longest Leg)
€T = Centre Line of Transom
€M = Centre Line of Mullion
OF = Edge of Outer Frame (Longest Leg)

Sections

Outer Frame: W20310, W20317
Sash: W20320
Fixed Light: W20345
Transom/Mullion: W20330, W20331, W20332, W20333



Do Not Scale From This Drawing

Cutting Information

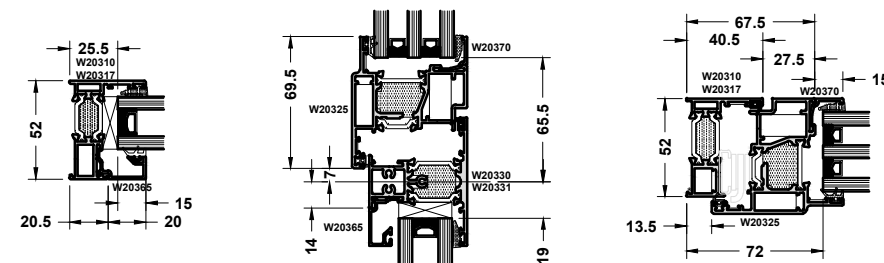
PART DESCRIPTIONS		TYPICAL STYLES															
Outer Frame	Head & Cill		W	W	W	W	W	W	W	W	W	W	W	W	W	W	W
	Jambs		H	H	H	H	H	H	H	H	H	H	H	H	H	H	H
	Transoms			W - 41		W - 41	W - 41	W - 41	OF to €M - 34.5	W - 50		OF to €M - 34.5	€M to €M - 34.5	W - 50	OF to €M - 34.5	W - 50	
	Mullions							H - 41	H - 41	OF to €T - 28	H - 41	H - 41	H - 41	OF to €T - 28	H - 41		
Vent (1)	Horizontal Members				W - 27	W - 27	W - 27	W - 27	OF to €M - 20.5	OF to €M - 20.5	OF to €M - 20.5	OF to €M - 20.5	OF to €M - 20.5	OF to €M - 20.5	OF to €M - 20.5	OF to €M - 20.5	W - 27
	Vertical Members				H - 27	OF to €T - 20.5	OF to €T - 20.5	€T to €T - 14	H - 27	H - 27	OF to €T - 20.5	H - 27	OF to €T - 20.5	H - 27	OF to €T - 20.5	OF to €T - 20.5	OF to €T - 20.5
	Glass Width				W - 144	W - 144	W - 144	W - 144	OF to €M - 137.5	OF to €M - 137.5	OF to €M - 137.5	OF to €M - 137.5	OF to €M - 137.5	OF to €M - 137.5	OF to €M - 137.5	OF to €M - 137.5	W - 144
	Glass Height				H - 144	OF to €T - 137.5	OF to €T - 137.5	€T to €T - 137.5	H - 144	H - 144	OF to €T - 137.5	H - 144	OF to €T - 137.5	H - 144	OF to €T - 137.5	OF to €T - 137.5	OF to €T - 137.5
Vent (2)	Horizontal Members						W - 27		OF to €M - 20.5			OF to €M - 20.5	€M to €M - 14	€M to €M - 14	OF to €M - 14		
	Vertical Members						OF to €T - 20.5		OF to €T - 20.5			OF to €T - 20.5	OF to €T - 20.5	OF to €T - 20.5	OF to €T - 20.5	OF to €T - 20.5	
	Glass Width						W - 137.5		OF to €M - 137.5			OF to €M - 137.5	€M to €M - 131	€M to €M - 131	OF to €M - 131		
	Glass Height						OF to €T - 137.5		OF to €T - 137.5			OF to €T - 137.5	OF to €T - 137.5	OF to €T - 137.5	OF to €T - 137.5	OF to €T - 137.5	
Fixed Pane (1)	Horizontal Members		W - 41	W - 41		W - 41		W - 41	OF to €M - 34.5	OF to €M - 34.5	W - 41	€M to €M - 34.5	€M to €M - 28	€M to €M - 28	W - 41	OF to €M - 34.5	W - 41
	Vertical Members		H - 41	OF to €T - 34.5		OF to €T - 34.5		OF to €T - 34.5	H - 41	OF to €T - 34.5	OF to €T - 34.5	H - 41	H - 41	OF to €T - 34.5	OF to €T - 34.5	H - 41	OF to €T - 34.5
	Glass Width		W - 51	W - 51		W - 51		W - 51	OF to €M - 44.5	OF to €M - 44.5	W - 51	€M to €M - 38	€M to €M - 38	€M to €M - 38	W - 51	OF to €M - 44.5	W - 51
	Glass Height		H - 51	OF to €T - 44.5		OF to €T - 44.5		OF to €T - 44.5	H - 51	OF to €T - 44.5	OF to €T - 44.5	H - 51	H - 51	OF to €T - 44.5	OF to €T - 44.5	H - 51	OF to €T - 44.5

Legend

W = Outer Frame Width (Longest Leg)
H = Outer Frame Height (Longest Leg)
€T = Centre Line of Transom
€M = Centre Line of Mullion
OF = Edge of Outer Frame (Longest Leg)

Sections

Outer Frame: W20310, W20317
Sash: W20325
Fixed Light: Beaded
Transom/Mullion: W20330, W20331, W20332, W20333



Do Not Scale From This Drawing

Cutting Information

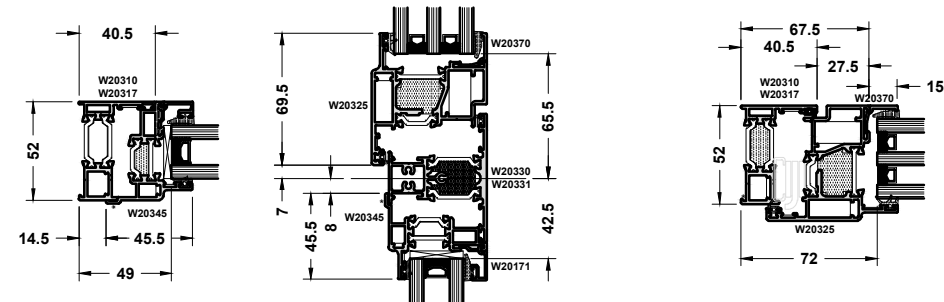
PART DESCRIPTIONS		TYPICAL STYLES															
Outer Frame	Head & Cill		W	W	W	W	W	W	W	W	W	W	W	W	W	W	W
	Jambs		H	H	H	H	H	H	H	H	H	H	H	H	H	H	H
	Transoms			W - 41		W - 41	W - 41	W - 41		OF to €M - 34.5	W - 50		OF to €M - 34.5	€M to €M - 34.5	W - 50	OF to €M - 34.5	W - 50
	Mullions								H - 41	H - 41	OF to €T - 28	H - 41	H - 41	H - 41	OF to €T - 28	H - 41	
Vent (1)	Horizontal Members				W - 27	W - 27	W - 27	W - 27	OF to €M - 20.5	OF to €M - 20.5	OF to €M - 20.5	OF to €M - 20.5	OF to €M - 20.5	OF to €M - 20.5	OF to €M - 20.5	OF to €M - 20.5	W - 27
	Vertical Members				H - 27	OF to €T - 20.5	OF to €T - 20.5	€T to €T - 14	H - 27	H - 27	OF to €T - 20.5	H - 27	OF to €T - 20.5	H - 27	OF to €T - 20.5	OF to €T - 20.5	OF to €T - 20.5
	Glass Width				W - 144	W - 144	W - 144	W - 144	OF to €M - 137.5	OF to €M - 137.5	OF to €M - 137.5	OF to €M - 137.5	OF to €M - 137.5	OF to €M - 137.5	OF to €M - 137.5	OF to €M - 137.5	W - 144
	Glass Height				H - 144	OF to €T - 137.5	OF to €T - 137.5	€T to €T - 137.5	H - 144	H - 144	OF to €T - 137.5	H - 144	OF to €T - 137.5	H - 144	OF to €T - 137.5	OF to €T - 137.5	OF to €T - 137.5
Vent (2)	Horizontal Members						W - 27		OF to €M - 20.5			OF to €M - 20.5	€M to €M - 14	€M to €M - 14	OF to €M - 14		
	Vertical Members						OF to €T - 20.5		OF to €T - 20.5			OF to €T - 20.5	OF to €T - 20.5	OF to €T - 20.5	OF to €T - 20.5	OF to €T - 20.5	
	Glass Width						W - 137.5		OF to €M - 137.5			OF to €M - 137.5	€M to €M - 131	€M to €M - 131	OF to €M - 131		
	Glass Height						OF to €T - 137.5		OF to €T - 137.5			OF to €T - 137.5	OF to €T - 137.5	OF to €T - 137.5	OF to €T - 137.5	OF to €T - 137.5	
Fixed Pane (1)	Horizontal Members		W - 29	W - 29		W - 29		W - 29	OF to €M - 22.5	OF to €M - 22.5	W - 38	€M to €M - 25	€M to €M - 16	€M to €M - 16	W - 38	OF to €M - 25	W - 38
	Vertical Members		H - 29	OF to €T - 22.5		OF to €T - 22.5		OF to €T - 22.5	H - 38	OF to €T - 25	OF to €T - 25	H - 38	H - 38	OF to €T - 25	OF to €T - 25	H - 38	OF to €T - 25
	Glass Width		W - 98	W - 98		W - 98		W - 98	OF to €M - 91.5	OF to €M - 91.5	W - 98	€M to €M - 85	€M to €M - 85	€M to €M - 85	W - 98	OF to €M - 91.5	W - 98
	Glass Height		H - 98	OF to €T - 91.5		OF to €T - 91.5		OF to €T - 91.5	H - 98	OF to €T - 91.5	OF to €T - 91.5	H - 98	H - 98	OF to €T - 91.5	OF to €T - 91.5	H - 98	OF to €T - 91.5

Legend

W = Outer Frame Width (Longest Leg)
H = Outer Frame Height (Longest Leg)
€T = Centre Line of Transom
€M = Centre Line of Mullion
OF = Edge of Outer Frame (Longest Leg)

Sections

Outer Frame: W20310, W20317
Sash: W20325
Fixed Light: W20345
Transom/Mullion: W20330, W20331, W20332, W20333



Do Not Scale From This Drawing