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Main Index

F

W

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Updates

DATE	PAGE	DESCRIPTION
27-01-17	E.33-E.36	The glazing wedge gasket ACW20038 Has been replaced with ACET840 as the original was too loose in the section. This amendment only applies to section W20122
04-07-17	E.23	ACSB787 updated to new number ACSZ905
13-02-18	B28, E15 & E16	Added Handle fixing blocks
	A12, A25, A27, A29 & E05	Added Sections W20132, W20133, W20145, W20172 & W20173
	B32	Added ACINDP24 Stay
	B17 & B25	Added Handles ACSM010L/R & Peg Stay ACW20108
13-03-18	A14	Amended ETC047 lxx and lyy values.
05-09-18	ALL SECTIONS	Added Sections; W20111 - Long Leg Outerframe W20112 - Long Leg Outerframe W20131 - Reinforced Tilt and Turn Mullion W20139 - Reinforced Transom / Mullion W20171 - Internal Square Bead W20176 - 36mm Glazing Bead Added Accessories; ACET463 - Locking Tilt and Turn Handle ACET464 - Non-Locking Tilt and Turn Handle
02-01-18	ALL SECTIONS	Tilt & Turn dimensions corrected
03-05-21	ALL SECTIONS	Manual split between Doors and Windows Tilt & Turn transom in sash detail added Added Sections; UL048 - 90 Degree Corner Post for W20114 UL055 - Coupler for W20114 UL056 - Head extension for W20114 W20114 - 80mm Tilt & Turn Outerframe W20134 - Tilt & Turn Transom/Mullion for W20114 W20135N - Dummy Transom renamed to W20135 Added Accessories; ACET844 - 2mm Low Line External Gasket ACUL902 - Punches for W20114 ACUN3140 - Outer Frame Cleat for W20114 ACUN3512 - Screw ACW20114 - Punches for W20114 ACW926 - Vee Block & Packer for W20114

Specification

DATE	PAGE	DESCRIPTION
		Superseded Sections; ETC381 - 24mm Glazing Bead W20037 - Dummy Transom W20137 - Dummy Transom W20168 - 24mm Glazing Bead Superseded by W20168N W20170 - 28mm Glazing Bead Superseded by W20170N W20171 - 28mm Glazing Bead Superseded by W20171N Superseded Accessories; ACINDRSH12 - Stay Restriction superseded by ACETSH1312L/R ACINDRSH16 - Stay Restriction superseded by ACETSH1316L/R
18/10/21	ALL SECTIONS	Sections; ETC371 - 28mm Square Glazing Bead Superseded by W20161 ETC375 - 28mm Chamfered Glazing Bead Superseded by W20162 W20244 - French Casement Mullion Added UN3220 - Astragal Bar UN3225 - Astragal Bar Added Accessories; ACUN3220 - Astragal Bar Steel Clip ACUN3222 - Astragal Bar Cruciform Joint ACW20220 - W20110 Variable Angle Cleat ACW20221 - W20120 Variable Angle Cleat ACW20225 - M4 Fixing Plate ACW20242 - Shootbolt Guide for W20244 ACW20244 - W20244 End Cap ACW20421 - Keep for W20244 ACW937 - Drill Jig for W20110 ACW938 - Drill Jig for W20120

Specification

GENERAL DESCRIPTION

The "Alitherm Heritage" 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 features signature slim sightlines and attractive aesthetic contours coupled with polyamide thermal break technology giving Alitherm Heritage enhanced thermal performance and narrow sightlines.

The Alitherm Heritage 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
- Tilt & Turn

Corner assembly of Alitherm Heritage is crimping only.

RECOMMENDED DESIGN TILT/TURN LIMITATIONS

Windows

Tilt & Turn Vents:

Maximum Width: 1200mm

Minimum Width: 402mm

Maximum Height: 2100mm

Minimum Height: 600mm (SB Chrono)
500mm (Fapim)

Maximum Weight: 90kg

See page E25 for more details

SEE PAGE A05 FOR CASEMENT DESIGN LIMITATIONS

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

Specification

Kitemark™ Certificate No. KM 81580

WINDOW DESIGN LIMITATIONS & PERFORMANCE CHARACTERISTICS

Window Type	Width (mm) Maximum	Height (mm) Maximum	Weight (kg) Maximum	Area (M ²) 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	9A	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+
Tilt/Turns Internal beaded	1200	2100	-	-	-	-	4	9A	BE2400	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	9A	AE2400	2000+
Overall dimensions for approved outer frames & transom/mullion profiles:										
Multilights* W20035 T/M Internally Beaded	2100	2100	-	2.5	-	1450	4	7A	AE2400	2000+
Multilights* W20035 T/M Externally Beaded	2100	2100	-	2.5	-	1450	4	9A	AE2400	2000+
Multilights* W20130 T/M Internally Beaded	2100	2100	-	-	-	-	4	7A	AE2400	2000+

*Transom/mullion subject to lxx/lyy requirements

⚠ 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.

Please see pages B33, B34 & B35 for more guidance on vent sizes, limitations & hardware selection.

Specification

PROFILE SPECIFICATION

The window frames are constructed of aluminium alloy extrusion to BS EN 755-9 and BS EN 12020, extruded to 6063 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:-

Anodised to BS 3987: 1987, grade AA25 to a natural self colour.

- a) Anodised to BS 3987 : 1987, grade AA25 to a natural colour.
- b) Polyester powder organic coating to BS 6496. Dual colour is available.

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 crimping tools 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.

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.

VENT

Corners are formed by coating the cut faces to be joined with a suitable gap sealer. In the mitred corner insert the cleat glue and the required corner cleats and chevrons. The 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. Care should be taken to ensure any excess sealer is removed from the surfaces.

The cutting sizes produce vent frames with a cavity of 13mm.

When fixing, the friction stays into both the outer and vent frame, care should be taken to ensure that holes are located on 'V' grooves in the aluminium extrusions.

Specification

INTERNALLY BEADED ADAPTOR FRAME

The internally beaded adaptor frame members are cut with 45° mitred ends to the overall size required, measured to the longest point of metal. Care should be taken when measuring and cutting the frame members as only nominal clearance is required when the assembled frame is fixed in the outer frame.

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 a corner cleat and the required corner chevrons. The small gap sealer ensures a permanent joint and guards against the ingress of moisture and joint movements. Care should be taken to ensure any excess sealer is removed from painted surfaces.

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. We recommend using black spacer bars.

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 ETC364, ETC370, ETC376, ETC377, ETC378, ETC379, W20161 & W20162 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.

INTERNALLY BEADED GLAZING

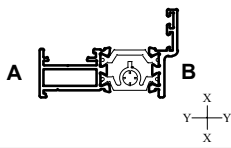
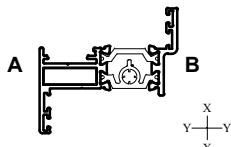
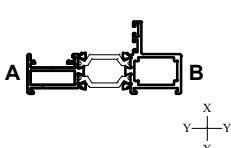
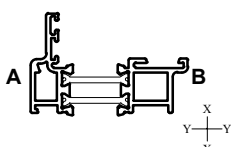
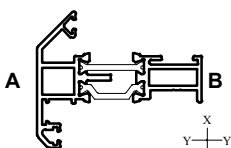
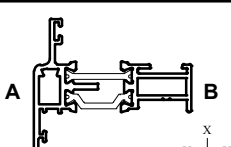
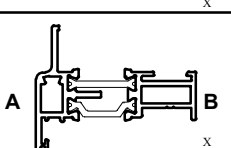
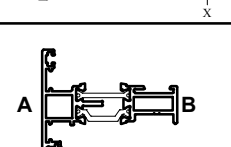
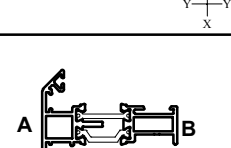
Glazing beads are fitted to openings by cutting the horizontal beads square to head and cill of each vent and fixed light area. Vertical beads are cut square at both ends. Insert bottom beads and two setting blocks to ensure glass will be centralized in vertical dimension of opening (glazing blocks must 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 W20026.

Alitherm Heritage Window U Values

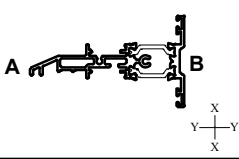
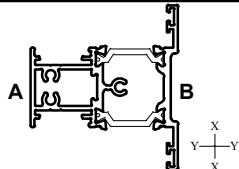
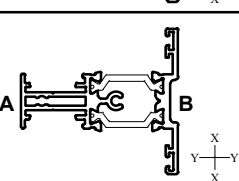
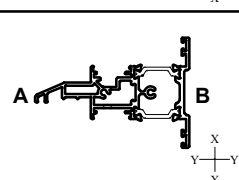
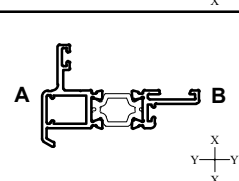
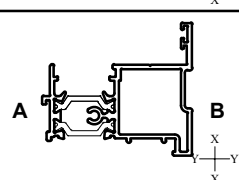
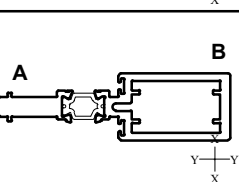
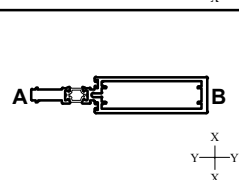
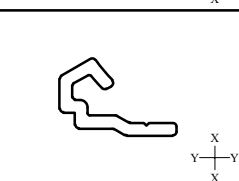
Please refer to the Smart Systems' Document L White Paper or contact the Technical Department.

Specification

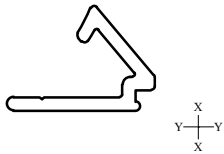
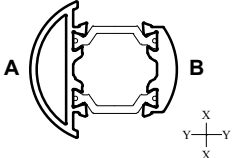
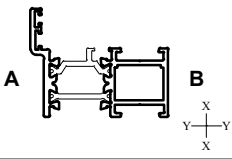
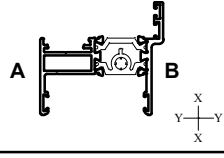
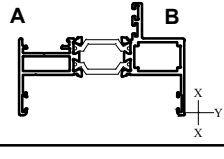
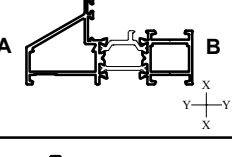
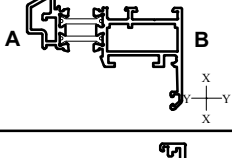
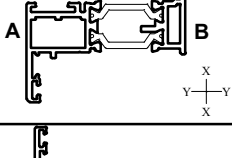
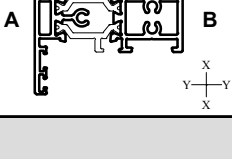
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W20017		A21	297	74	27.70 ----- 6.35	2.37 ----- 2.41	6.5	1	✓	✓	✓	✓	✓
W20018		A23	262	63	9.74 ----- 3.08	2.42 ----- 1.07	6.5	1	✓	✓	✓	✓	✓
W20024		A24	334	75	11.91 ----- 5.17	2.87 ----- 1.25	6.5	1	✓	✓	✓	✓	✓
W20025		A24	309	74	9.74 ----- 3.08	2.42 ----- 1.07	6.5	1	✓	✓	✓	✓	✓
W20026		A24	302	72	9.67 ----- 2.24	3.08 ----- 0.98	6.5	1	✓	✓	✓	✓	✓
W20028		A25	340	73	12.57 ----- 3.61	3.02 ----- 1.32	6.5	1	✓	✓	✓	✓	✓
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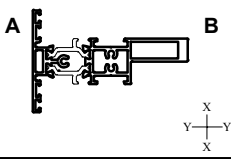
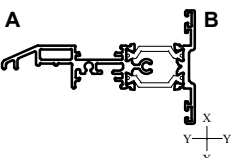
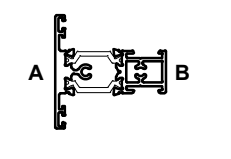
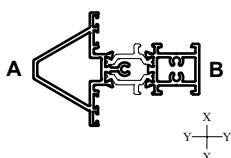
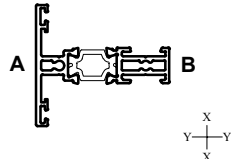
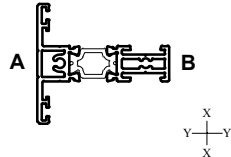
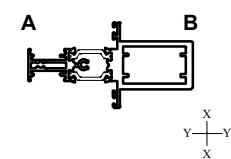
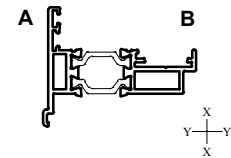
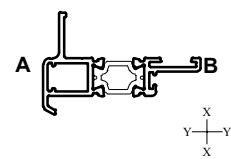
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W20034		A28	392	90	14.43 ----- 4.99	5.81 ----- 2.00	6.5	1	✓	✓	✓	✓	✓
W20035		A28	351	78	10.67 ----- 3.45	2.72 ----- 1.13	6.5	1	✓	✓	✓	✓	✓
W20039		A29	479	173	28.96 ----- 5.67	5.79 ----- 2.00	6.5	1	✓	✓	✓	✓	✓
W20047		A31	237	45	5.39 ----- 1.64	1.08 ----- 0.74	6.5	1	✓	✓	✓	✓	✓
W20048		A27	338	37	11.91 ----- 3.75	4.93 ----- 2.5	6.5	1	✓	✓	✓	✓	✓
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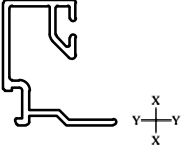
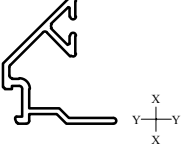
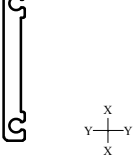
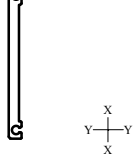
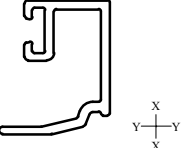
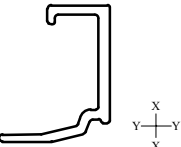
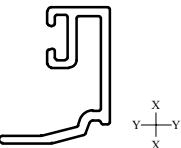
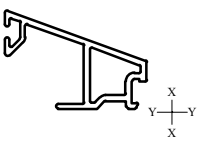
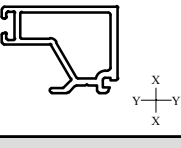
PROFILES : TECHNICAL INFORMATION

Number	Picture	Page	Perim. mm	Mec. mm	lx(cm4) wx(cm3)	ly(cm4) wy(cm3)	Length	Pack pr.	MF	SA	KL	HP	M
W20066		A32	74	15	- ----- -	- ----- -	5	1	✓	✓	✓	✓	
W20069		A32	192	71	5.05 ----- 2.55	2.00 ----- 1.12	5	1	✓	✓	✓	✓	✓
W20110		A23	297	76	10.64 ----- 4.01	3.05 ----- 1.95	6.5	1	✓	✓	✓	✓	✓
W20111		A22	301	100	10.81 ----- 4.00	3.15 ----- 1.37	6.5	1	✓	✓	✓	✓	✓
W20112		A22	340	113	22.77 ----- 6.14	3.48 ----- 1.50	6.5	1	✓	✓	✓	✓	✓
W20114		A23	332.9	93.2	28.7 ----- 7	4.3 ----- 2.9	6.5	1	✓	✓	✓	✓	✓
W20120		A26	367	90	16.66 ----- 5.00	4.47 ----- 1.77	6.5	1	✓	✓	✓	✓	✓
W20122		A26	310	78	12.96 ----- 4.89	3.41 ----- 1.49	6.5	1	✓	✓	✓	✓	✓
W20130		A30	378	117	14.39 ----- 4.89	4.30 ----- 1.59	6.5	1	✓	✓	✓	✓	✓
								A = Outside B = Inside		MF = Mill Finish SA = Silver Anodised KL = Basic Colour HP = Special Colour M = Dual Colour			

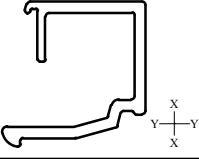
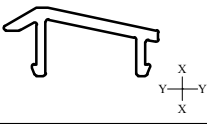
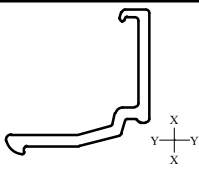
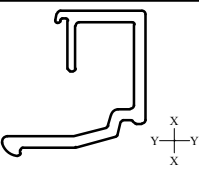
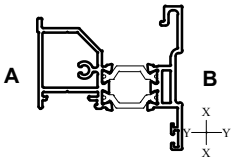
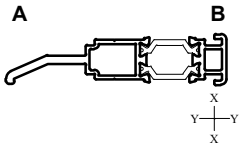
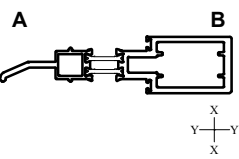
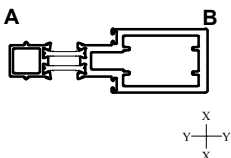
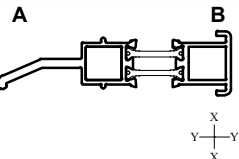
PROFILES : TECHNICAL INFORMATION

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W20131		A26	438	146	40.44 ----- 8.66	4.99 ----- 1.97	6.5	1	✓	✓	✓	✓	✓
W20132		A29	392	164	25.92 ----- 5.12	2.92 ----- 1.28	6.5	1	✓	✓	✓	✓	✓
W20133		A30	258	94	9.94 ----- 3.43	2.89 ----- 1.2	6.5	1	✓	✓	✓	✓	✓
W20134		A30	367.2	124.7	28.2 ----- 6.9	6 ----- 2.2	6.5	1	✓	✓	✓	✓	✓
W20135		A27	270	64	7.37 ----- 4.12	1.82 ----- 0.86	6.5	1	✓	✓	✓	✓	✓
W20136		A27	270	64	7.37 ----- 4.12	1.82 ----- 0.86	6.5	1	✓	✓	✓	✓	✓
W20139		A28	428	175	57.16 ----- 11.08	7.32 ----- 3.05	6.5	1	✓	✓	✓	✓	✓
W20145		A31	237	85	9.12 ----- 2.79	2.07 ----- 1.04	6.5	1	✓	✓	✓	✓	✓
W20147		A31	224	43	5.33 ----- 1.64	0.96 ----- 0.66	6.5	1	✓	✓	✓	✓	✓
									A = Outside B = Inside		MF = Mill Finish SA = Silver Anodised KL = Basic Colour HP = Special Colour M = Dual Colour		

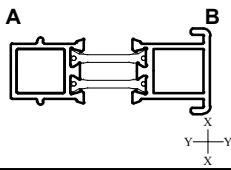
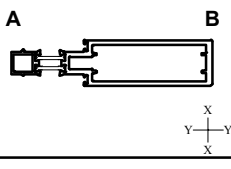
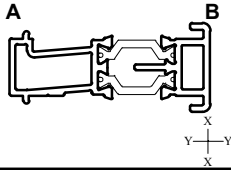
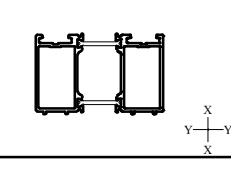
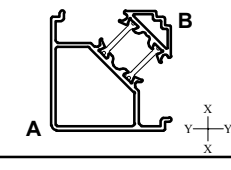
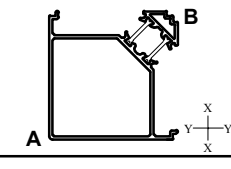
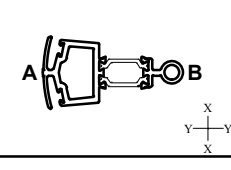
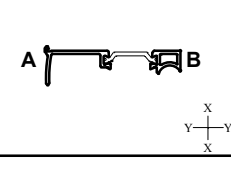
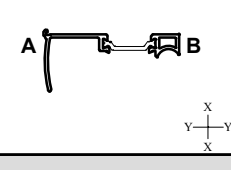
PROFILES : TECHNICAL INFORMATION

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W20161		A38	131	28	- ----- -	- ----- -	6.5	1	✓	✓	✓	✓	
W20162		A38	110	21	- ----- -	- ----- -	6.5	1	✓	✓	✓	✓	
W20165		A35	68	32	- ----- -	- ----- -	4	1	✓	✓	✓	✓	
W20166		A35	100	48	- ----- -	- ----- -	4	1	✓	✓	✓	✓	
W20168N		A36	104	27	- ----- -	- ----- -	5	1	✓	✓	✓	✓	
W20170N		A36	77	25	- ----- -	- ----- -	4	1	✓	✓	✓	✓	
W20171N		A36	99	22	- ----- -	- ----- -	4	1	✓	✓	✓	✓	
W20172		A37	128	48	- ----- -	- ----- -	6.5	1	✓	✓	✓	✓	
W20173		A37	105	50	- ----- -	- ----- -	6.5	1	✓	✓	✓	✓	
								A = Outside B = Inside		MF = Mill Finish SA = Silver Anodised KL = Basic Colour HP = Special Colour M = Dual Colour			

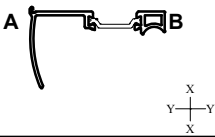
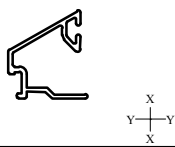
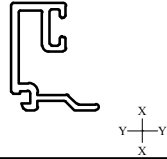
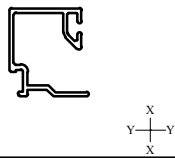
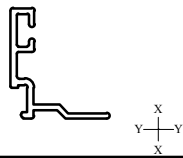
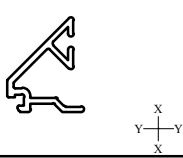
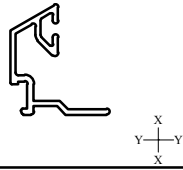
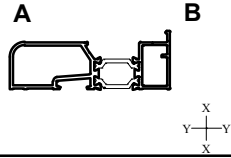
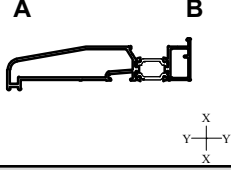
PROFILES : TECHNICAL INFORMATION

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W20174		A37	112	32	- ---	- ---	6.5	1	✓	✓	✓	✓	
W20175		A36	69	23	- ---	- ---	4	1	✓	✓			
W20176		A38	76	19	- ---	- ---	6.5	1	✓	✓	✓	✓	
W20178		A37	104	28	- ---	- ---	6.5	1	✓	✓	✓	✓	
W20244		A27	343	100	13.09 ----- 4.38	5.31 ----- 2.18	6.5	1	✓	✓	✓	✓	✓
W20485		A39	259	222	21.12 ----- 4.67	0.76 ----- 0.87	6.5	1	✓	✓	✓	✓	✓
W20486		A39	374	198	94.15 ----- 12.25	6.57 ----- 4.45	6.5	1	✓	✓	✓	✓	✓
W20487		A39	312	135	50.37 ----- 8.96	6.47 ----- 4.31	6.5	1	✓	✓	✓	✓	✓
W20488		A40	272	111	22.30 ----- 4.84	1.01 ----- 0.94	6.5	1	✓	✓	✓	✓	✓
								A = Outside B = Inside		MF = Mill Finish SA = Silver Anodised KL = Basic Colour HP = Special Colour M = Dual Colour			

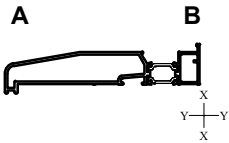
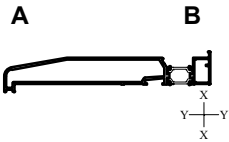
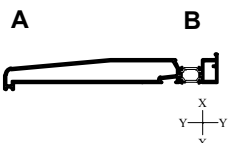
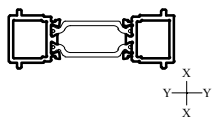
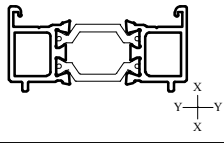
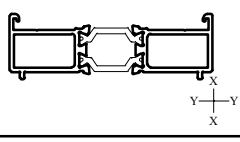
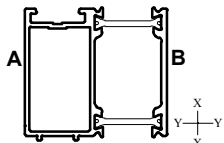
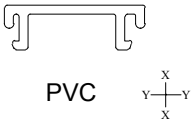
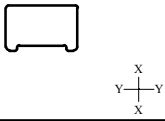
PROFILES : TECHNICAL INFORMATION

Number	Picture	Page	Perim. mm	Mec. mm	lx(cm4) wx(cm3)	ly(cm4) wy(cm3)	Length	Pack pr.	MF	SA	KL	HP	M
W20489		A40	209	47	8.06 ----- 2.81	0.92 ----- 0.81	6.5	1	✓	✓	✓	✓	✓
W20490		A40	366	218	142.14 ----- 18.83	10.86 ----- 7.24	6.5	1	✓	✓	✓	✓	✓
W20492		A41	180	23	8.63 ----- 3.02	0.88 ----- 0.77	6.5	1	✓	✓	✓	✓	✓
DV515		A34	356	85	27.16 ----- 7.76	14.38 ----- 6.75	6.5	1	✓	✓	✓	✓	✓
ETC047		A33	276	115	11.68 ----- 4.67	11.68 ----- 4.77	6.5	1	✓	✓	✓	✓	✓
ETC048		A33	414	152	42.64 ----- 11.72	42.64 ----- 11.81	6.5	1	✓	✓	✓	✓	✓
ETC080		A44	344	61	25.58 ----- 5.47	4.88 ----- 2.57	6.5	1	✓	✓	✓	✓	✓
ETC081		A44	197	35	13.85 ----- 3.8	0.36 ----- 0.52	6.5	1	✓	✓	✓	✓	✓
ETC082		A44	221	47	16.21 ----- 4.19	1.15 ----- 1.29	6.5	1	✓	✓	✓	✓	✓
								A = Outside B = Inside		MF = Mill Finish SA = Silver Anodised KL = Basic Colour HP = Special Colour M = Dual Colour			

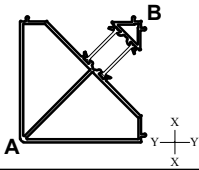
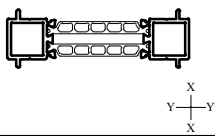
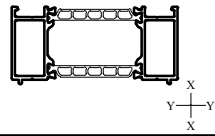
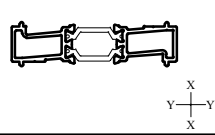
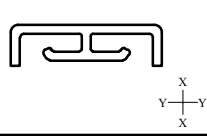
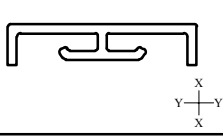
PROFILES : TECHNICAL INFORMATION

Number	Picture	Page	Perim. mm	Mec. mm	lx(cm4) wx(cm3)	ly(cm4) wy(cm3)	Length	Pack pr.	MF	SA	KL	HP	M
ETC083		A44	243	58	17.66 ----- 4.32	2.64 ----- 2.36	6.5	1	✓	✓	✓	✓	✓
ETC364		A38	122	28	- ----- -	- ----- -	6.5	1	✓	✓	✓	✓	✓
ETC366		A37	106	24	- ----- -	- ----- -	6.5	1	✓	✓	✓	✓	✓
ETC370		A38	141	32	- ----- -	- ----- -	6.5	1	✓	✓	✓	✓	
ETC376		A38	100	20	- ----- -	- ----- -	6.5	1	✓	✓	✓	✓	
ETC378		A37	96	21	- ----- -	- ----- -	6.5	1	✓	✓	✓	✓	
ETC379		A38	112	21	- ----- -	- ----- -	6.5	1	✓	✓	✓	✓	
ETC451		A42	271	180	32.44 ----- 7.29	3.46 ----- 2.79	6.5	1	✓	✓	✓	✓	✓
ETC452		A42	414	382	122.46 ----- 18.03	6.01 ----- 3.34	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
ETC457		A42	444	412	163.27 ----- 21.60	6.79 ----- 3.73	6.5	1	✓	✓	✓	✓	✓
ETC458		A43	524	492	313.62 ----- 32.63	8.87 ----- 4.79	6.5	1	✓	✓	✓	✓	✓
ETC479N		A43	594	559	501.64 ----- 44.04	9.72 ----- 5.34	6.5	1	✓	✓	✓	✓	✓
ETC853		A41	219	53.7	23.28 ----- 6.65	1.94 ----- 1.43	6.5	1	✓	✓	✓	✓	✓
ETD056		A34	204.8	172	6.31 ----- 2.69	0.82 ----- 0.77	6.5	1	✓	✓	✓	✓	✓
ETD057		A34	250.8	217	16.30 ----- 4.66	1.12 ----- 1.07	6.5	1	✓	✓	✓	✓	✓
ETD058		A34	294	85	9.92 ----- 4.22	7.25 ----- 3.4	6.5	1	✓	✓	✓	✓	✓
PCX41		A36	65	-	- ----- -	- ----- -	6.5	1	✓				
SPD750		A35	31	10	- ----- -	- ----- -	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

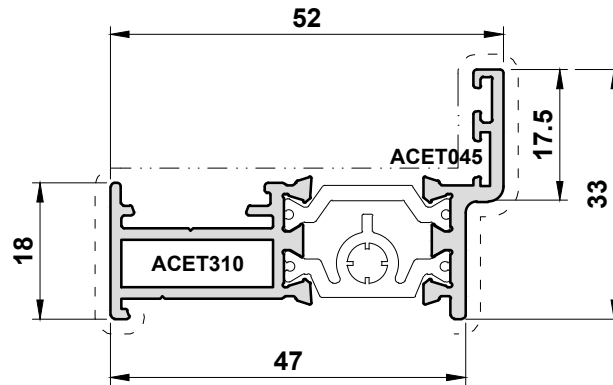
Number	Picture	Page	Perim. mm	Mec. mm	lx(cm4) wx(cm3)	ly(cm4) wy(cm3)	Length	Pack pr.	MF	SA	KL	HP	M
UL048		A33	428	161	67.01 ----- 14.96	67.01 ----- 17.59	6.5	1	✓	✓	✓	✓	✓
UL055		A41	224	37	26.65 ----- 6.66	1.29 ----- 1.13	6.5	1	✓	✓	✓	✓	✓
UL056		A35	300	71	38.49 ----- 9.62	5.74 ----- 3.15	6.5	1	✓	✓	✓	✓	✓
UN3000		A41	200	43.24	15.8 ----- 4.51	0.79 ----- 0.84	6.5	1	✓	✓	✓	✓	✓
UN3220		A35	84	30	- ----- -	- ----- -	4	1	✓	✓	✓	✓	
UN3225		A35	95	35	- ----- -	- ----- -	4	1	✓	✓	✓	✓	
													
													
													
								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

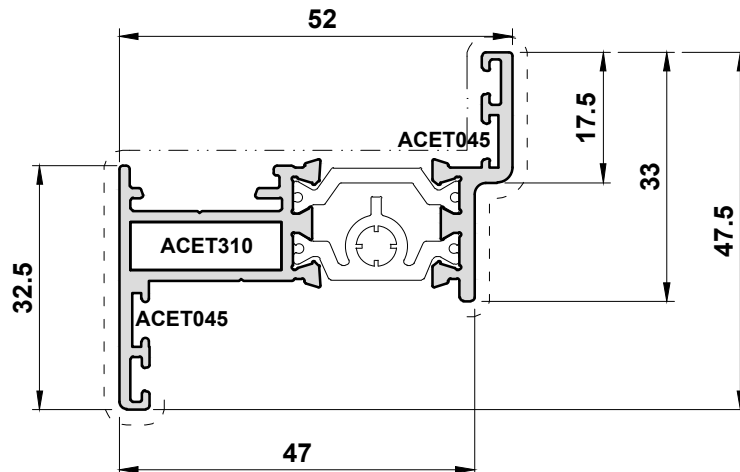
W20015

Outer Frame



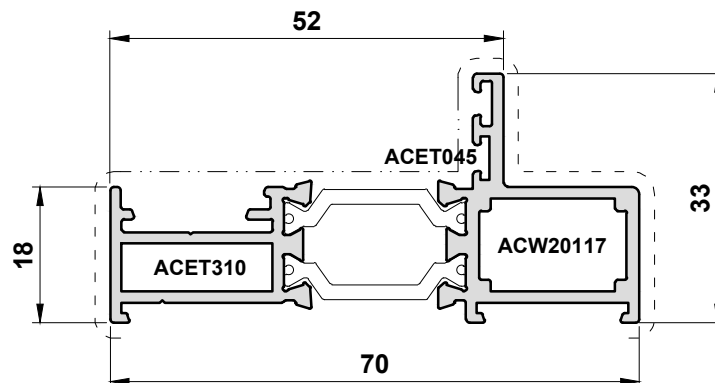
W20016

Odd Leg Outer Frame



W20017

70mm Outer Frame

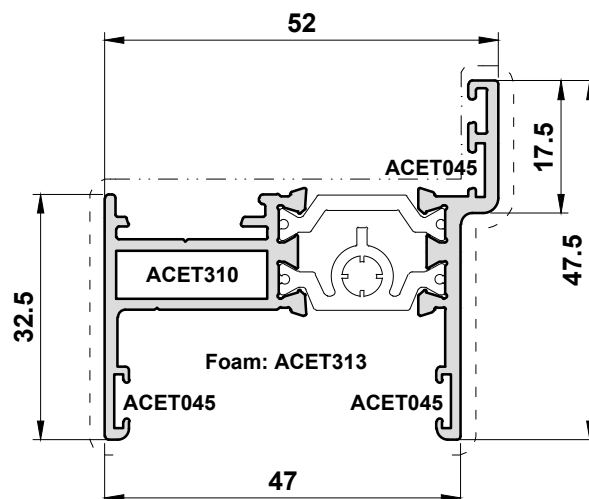


Scale 1:1

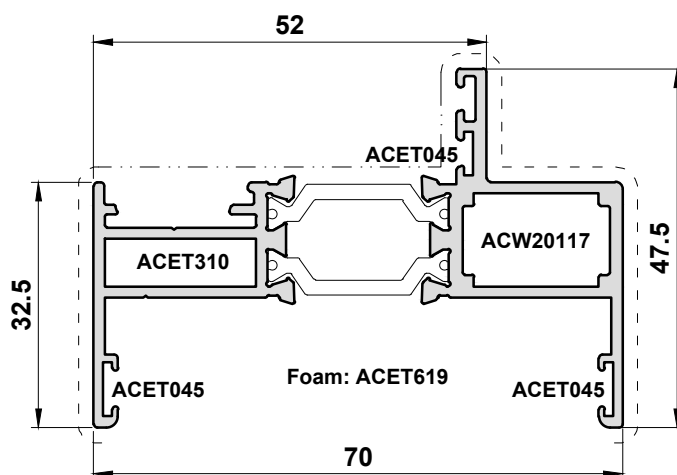
Primary Visible Side

Secondary Visible Side

W20111 47mm Long Leg Outer Frame



W20112 70mm Long Leg Outer Frame



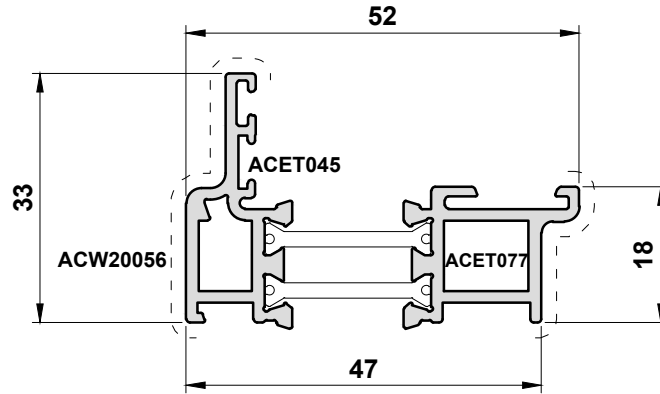
Scale 1:1

Primary Visible Side

Secondary Visible Side

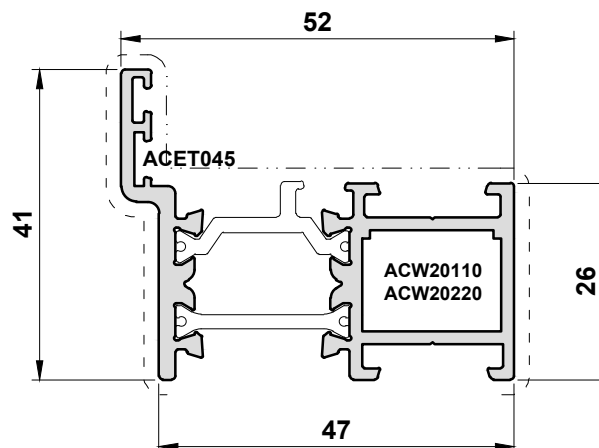
W20018

Internally Beaded Fixed
Light Outer Frame



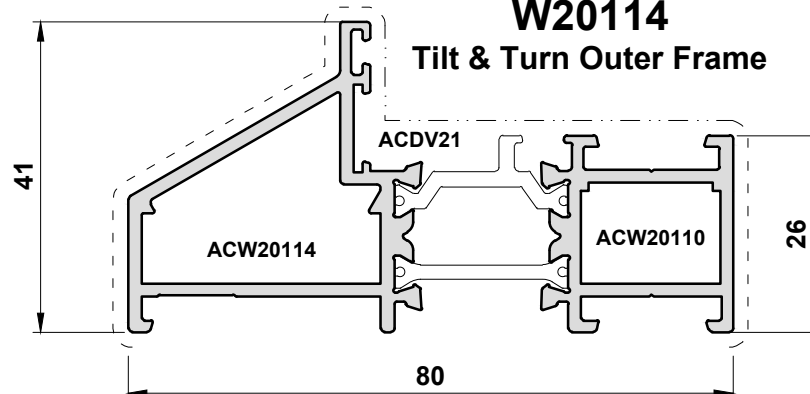
W20110

Tilt & Turn Outer Frame



W20114

Tilt & Turn Outer Frame

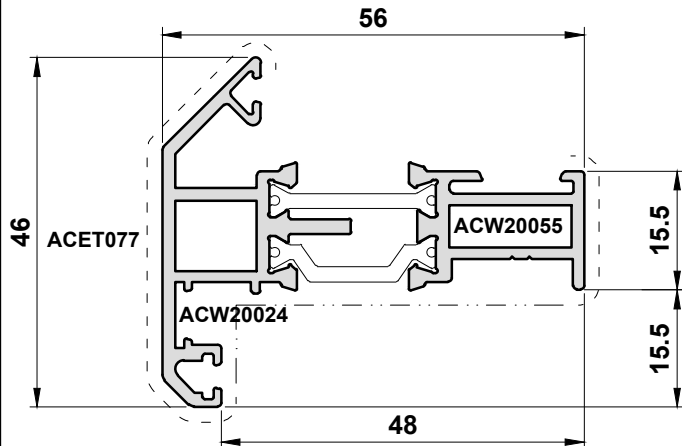


Scale 1:1

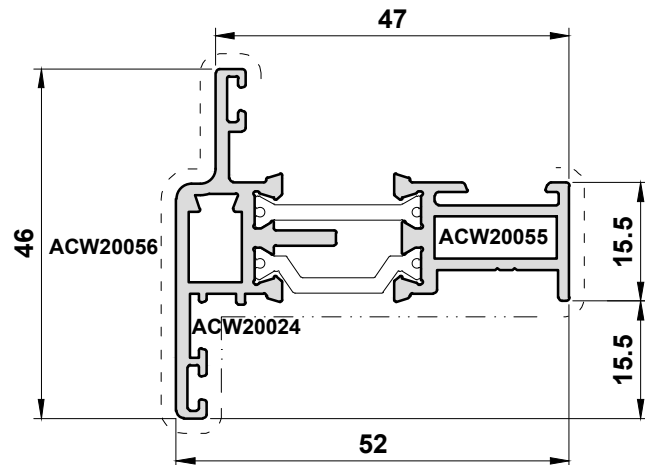
Primary Visible Side

Secondary Visible Side

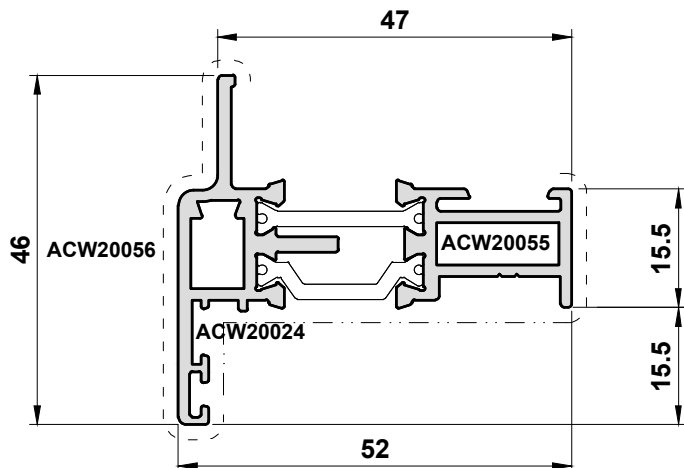
W20024
Chamfered Vent



W20025
Vent



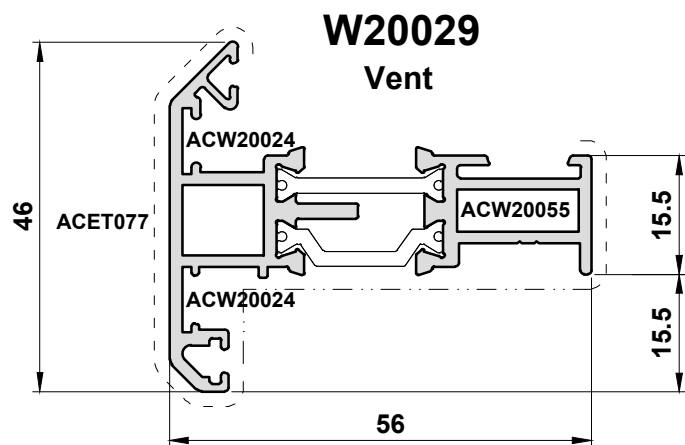
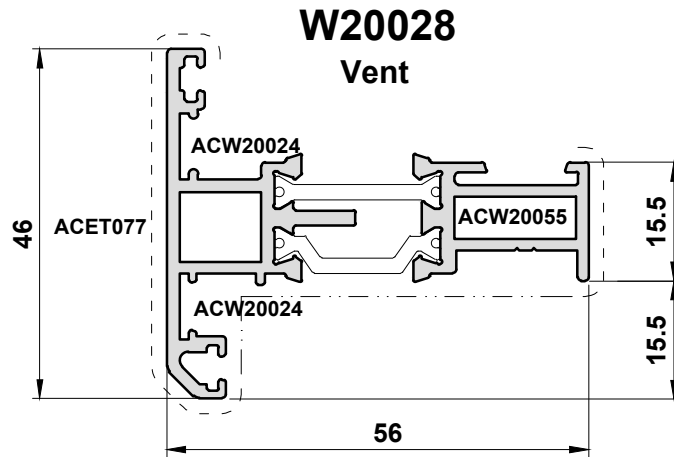
W20026
Vent - Tape Glazing



Scale 1:1

Primary Visible Side

Secondary Visible Side



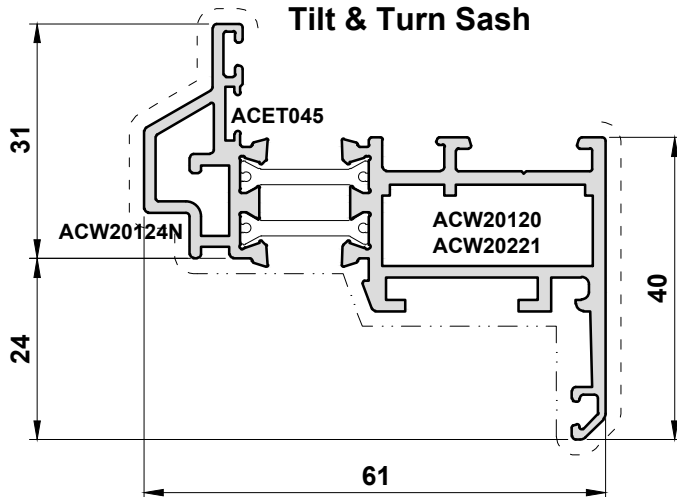
Scale 1:1

Primary Visible Side

Secondary Visible Side

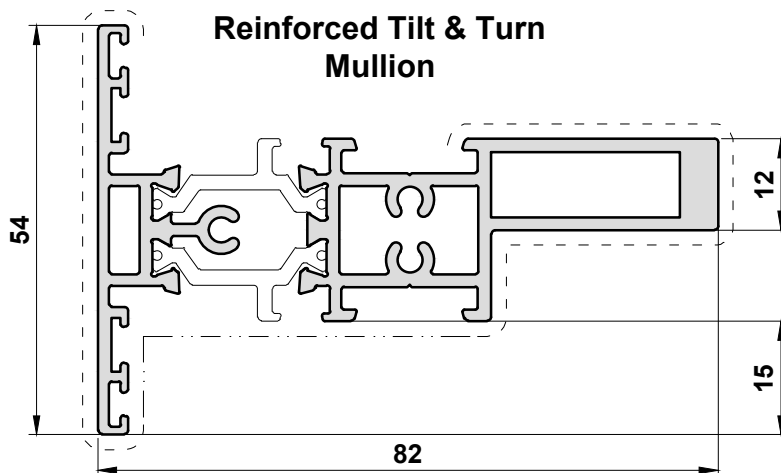
W20120

Tilt & Turn Sash



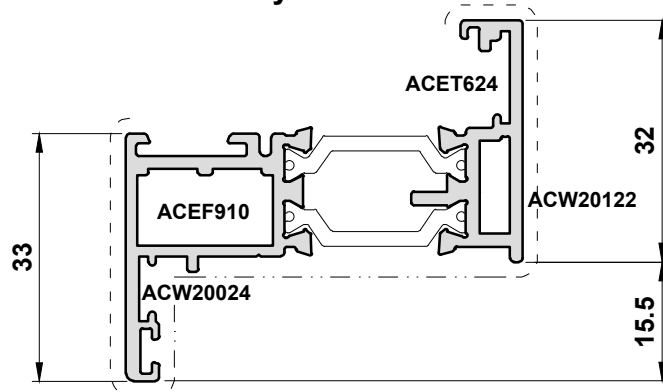
W20131

Reinforced Tilt & Turn
Mullion



W20122

Externally Beaded Sash

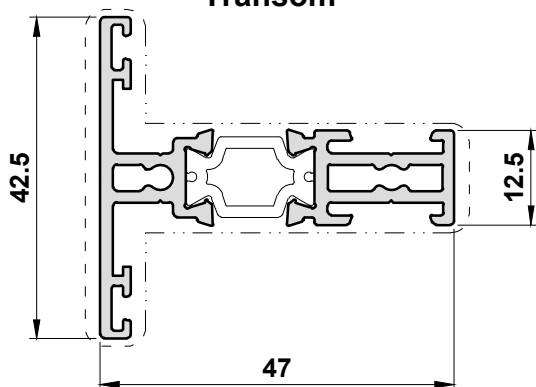


Scale 1:1

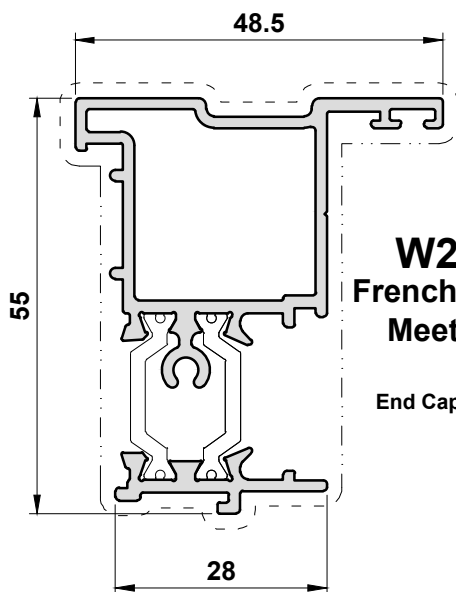
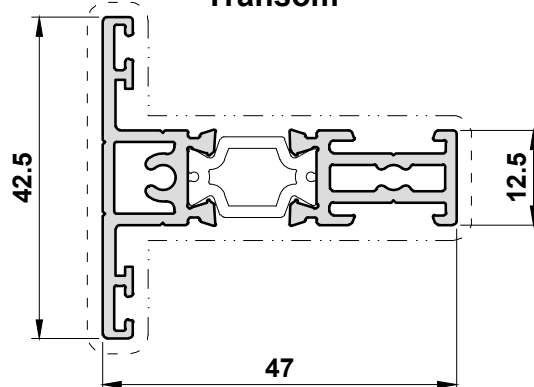
Primary Visible Side

Secondary Visible Side

W20135
Transom



W20136
Transom

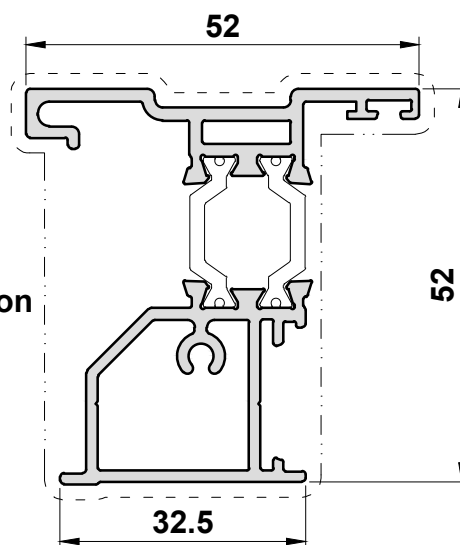


W20048
French Casement
Meeting Stile

End Cap = ACW20048

W20244
French Casement Mullion

End Cap = ACW20224

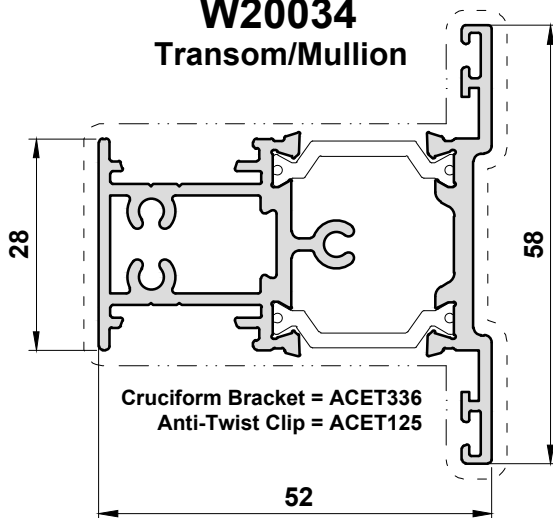


Scale 1:1

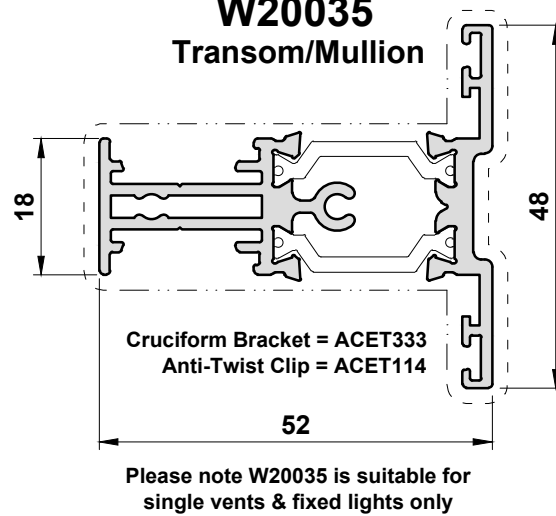
Primary Visible Side

Secondary Visible Side

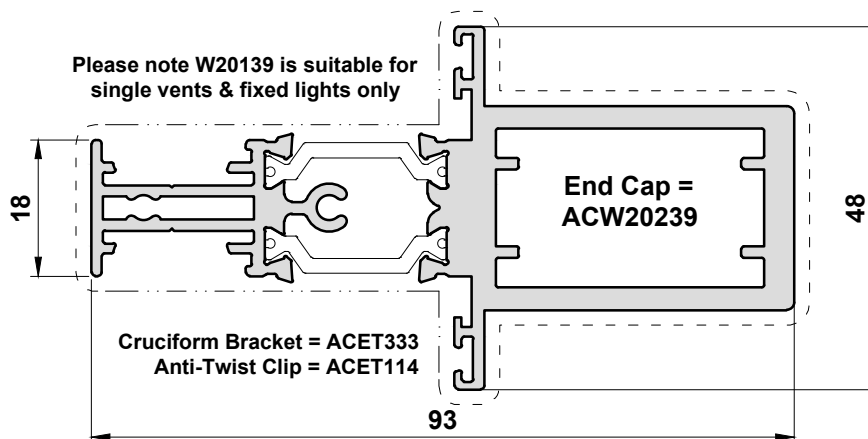
W20034
Transom/Mullion



W20035
Transom/Mullion



W20139
Reinforced Transom/Mullion

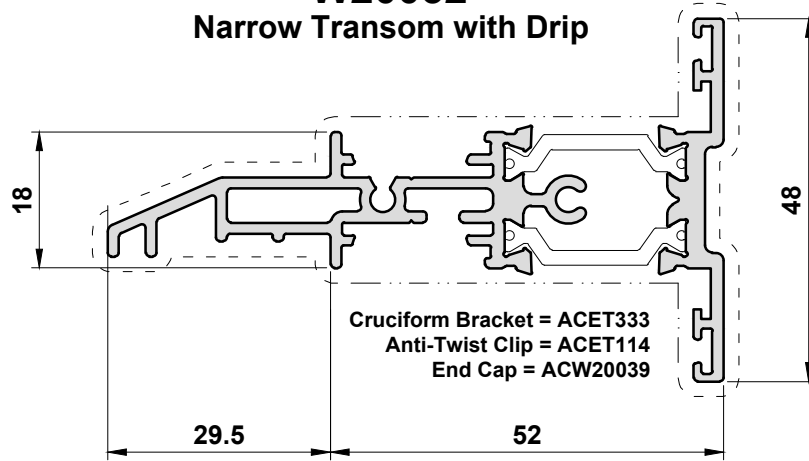


Scale 1:1

Primary Visible Side

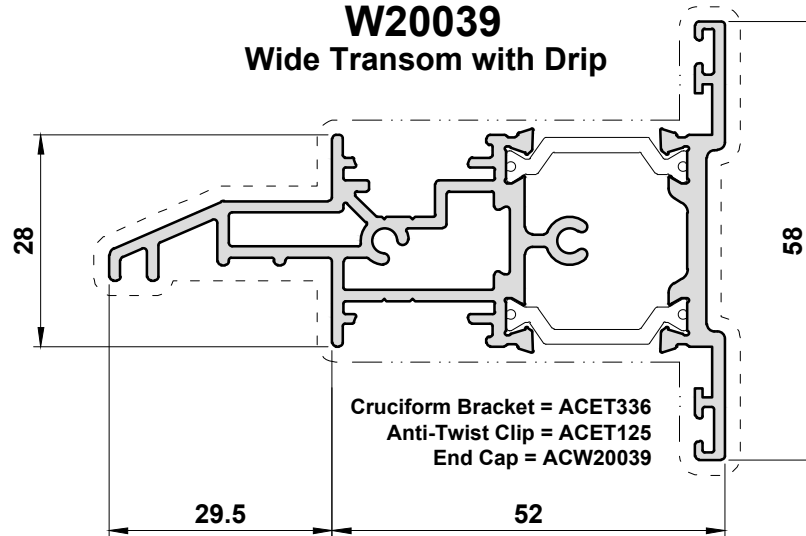
Secondary Visible Side

W20032
Narrow Transom with Drip

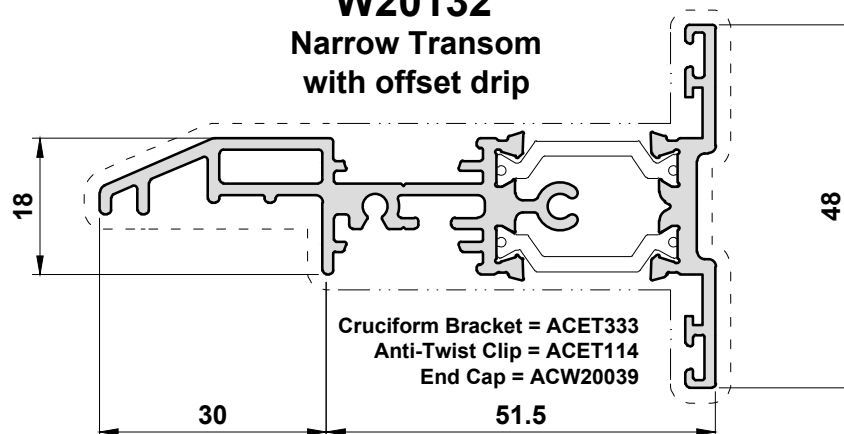


Please note W20032 is suitable for fixed lights only

W20039
Wide Transom with Drip



W20132
Narrow Transom with offset drip



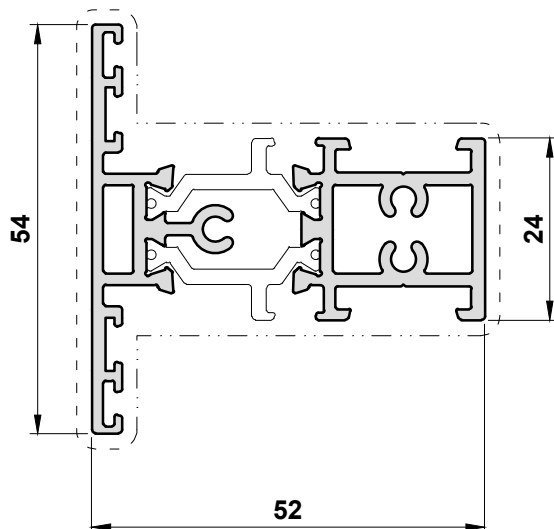
Scale 1:1

Primary Visible Side

Secondary Visible Side

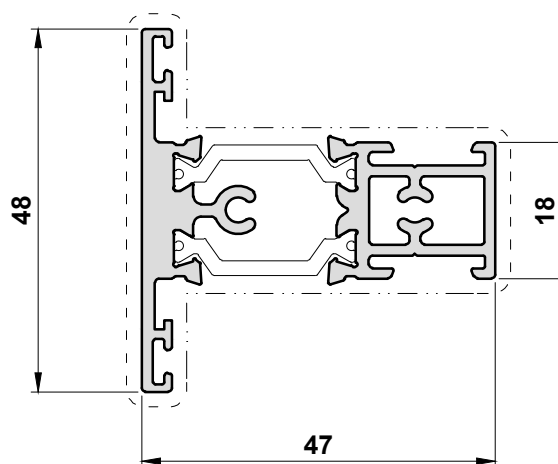
W20130

Tilt & Turn Transom/Mullion



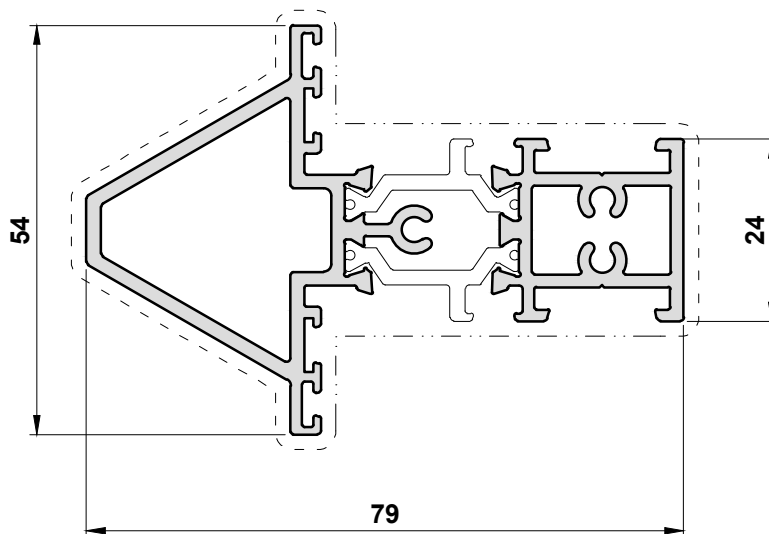
W20133

Dummy Transom



W20134

**Tilt & Turn Transom/Mullion
for W20114**

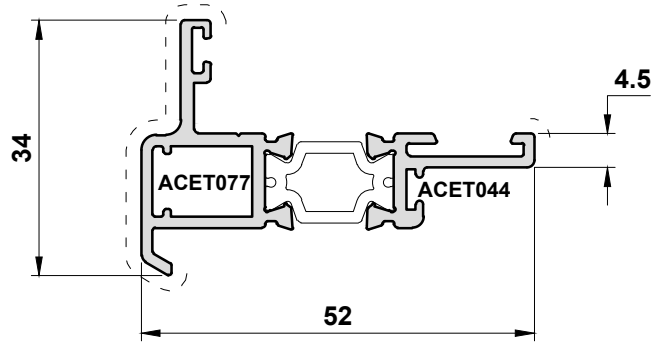


Scale 1:1

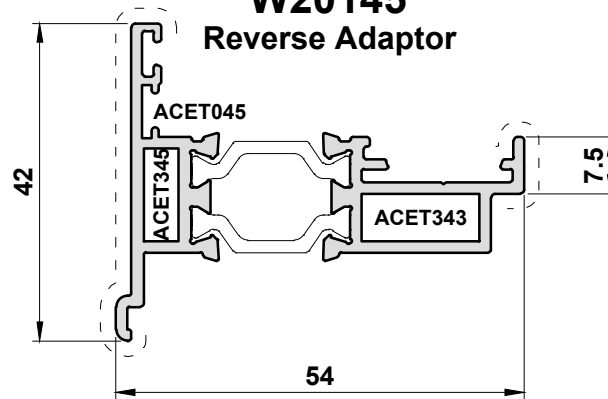
Primary Visible Side

Secondary Visible Side

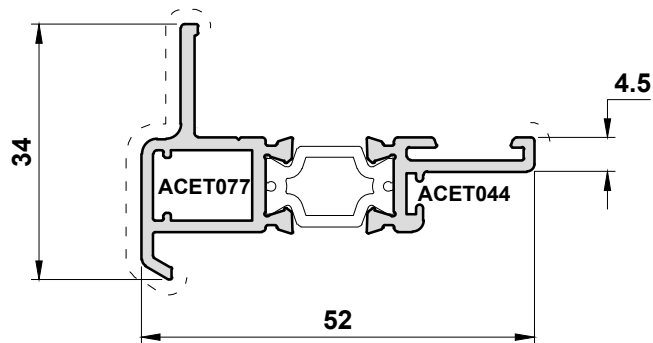
W20047 Reverse Adaptor



W20145 Reverse Adaptor



W20147 Reverse Adaptor - Tape Glazing

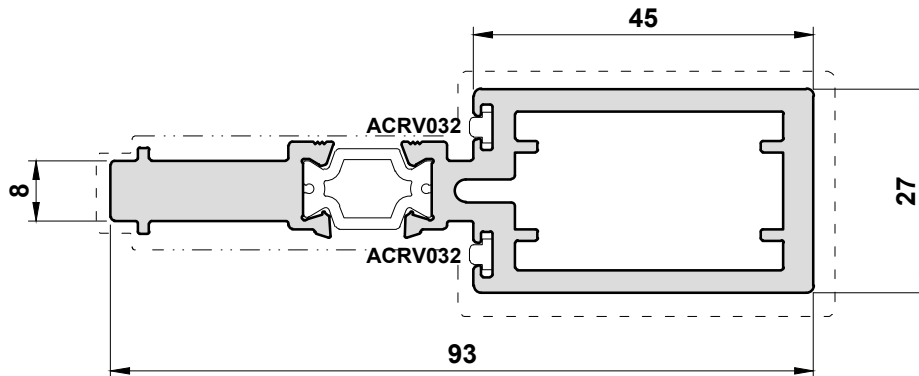


Scale 1:1

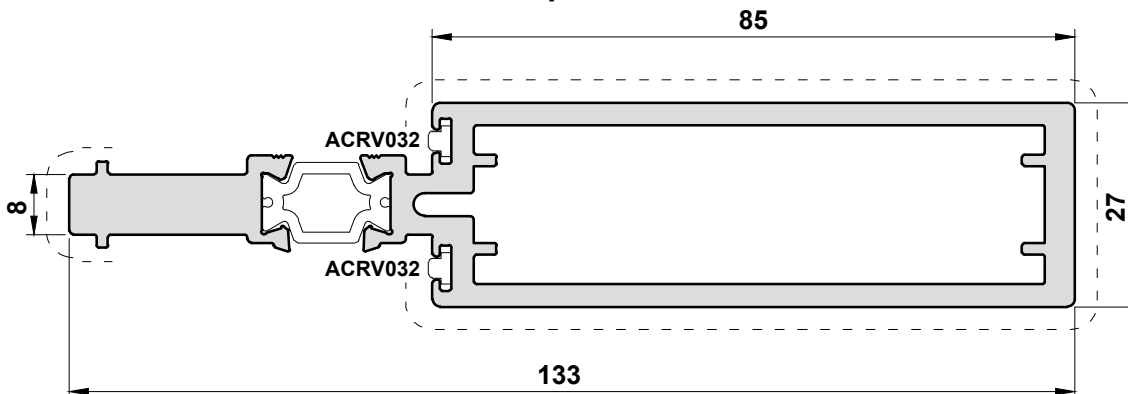
Primary Visible Side

Secondary Visible Side

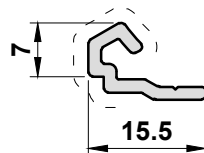
W20051
Coupler / Mullion



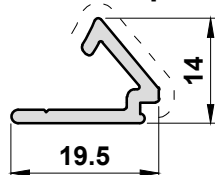
W20054
Coupler / Mullion



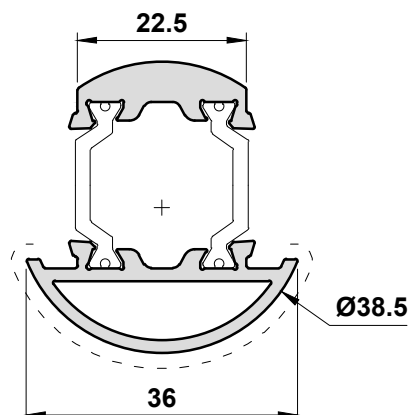
W20065
Bay Pole Adaptor



W20066
Bay Pole Adaptor



W20069
W20015 Bay Pole



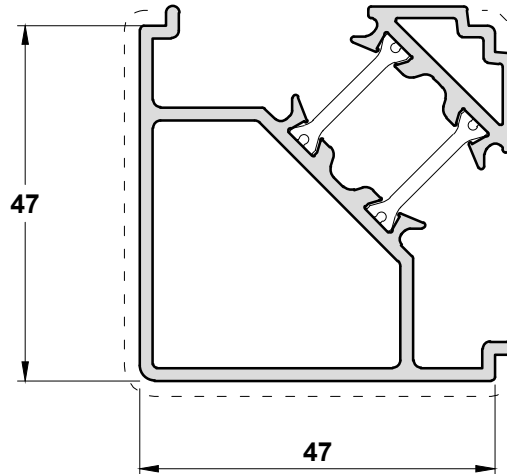
Scale 1:1

Primary Visible Side

Secondary Visible Side

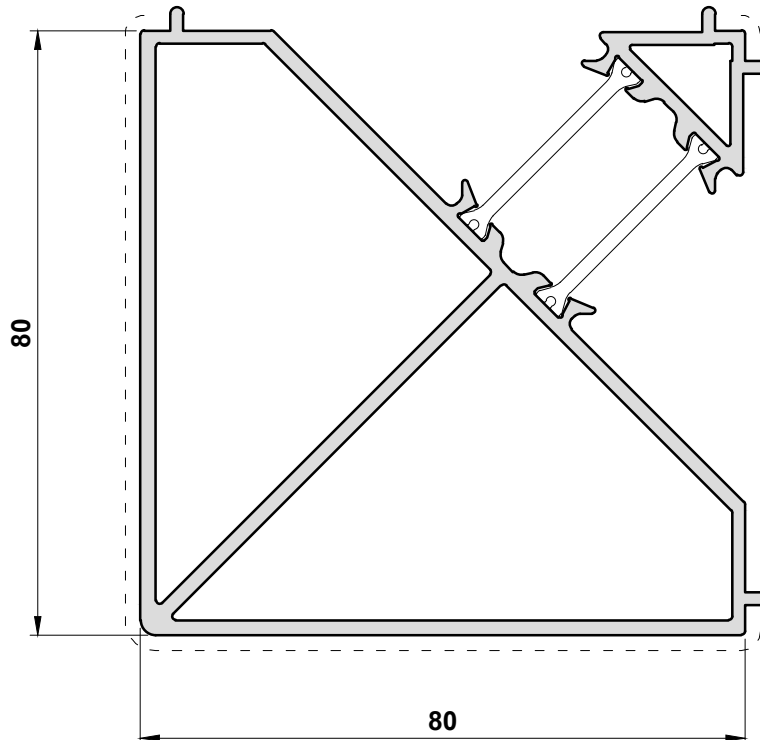
ETC047

47mm 90° Corner Post
W20015, W20110 & W20111 only



UL048

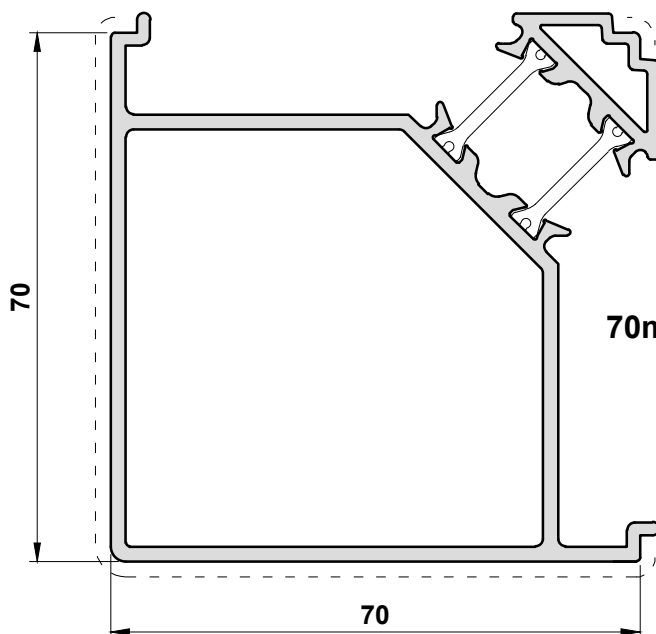
80mm 90° Corner Post
W20114 Only



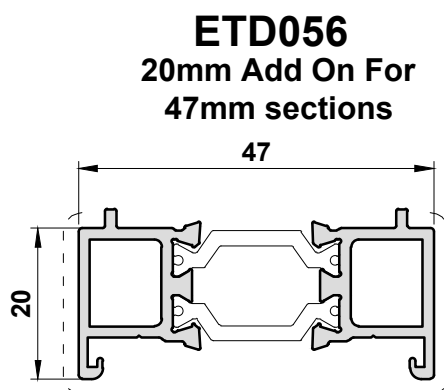
Scale 1:1

Primary Visible Side

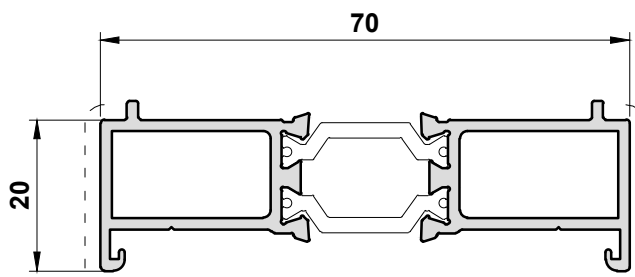
Secondary Visible Side



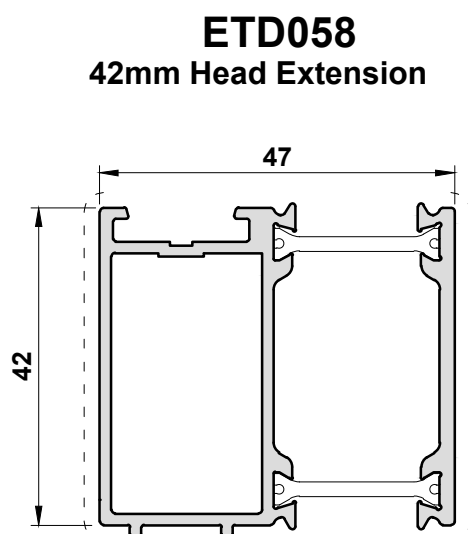
ETC048
70mm 90° Corner Post



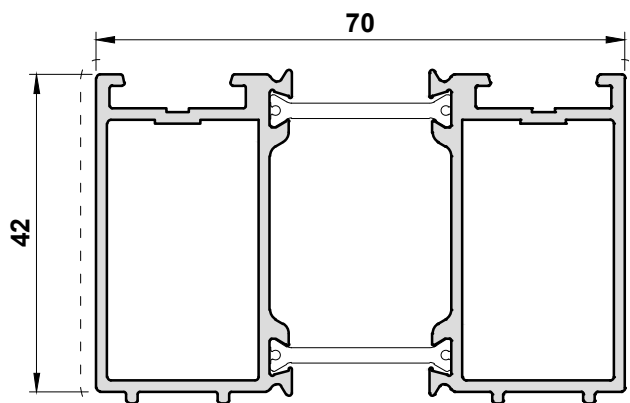
ETD056
20mm Add On For
47mm sections



ETD057
20mm Add On For W20017



ETD058
42mm Head Extension



DV515
42mm Head Extension

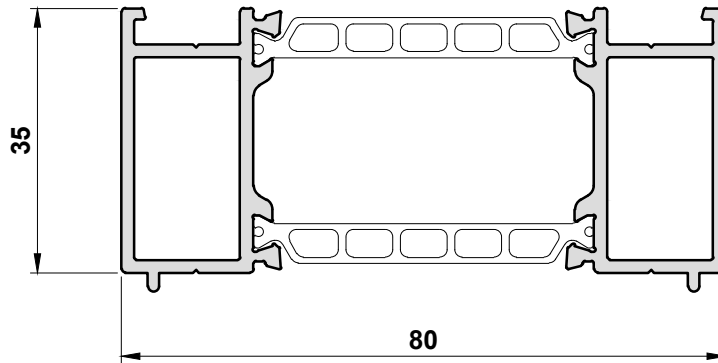
Scale 1:1

Primary Visible Side

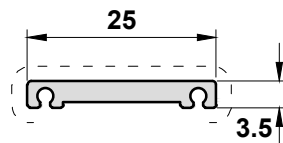
Secondary Visible Side

UL056

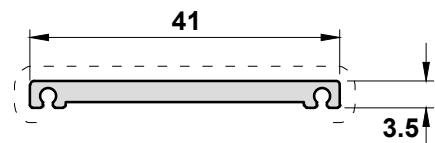
35mm Head Extension For W20114



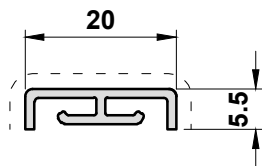
W20165 25mm Astragal Bar



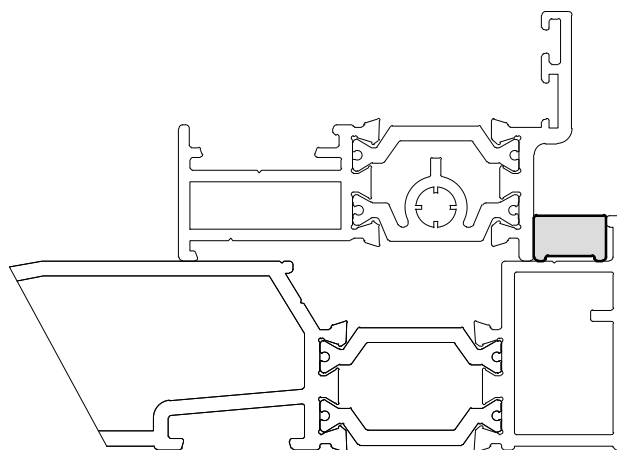
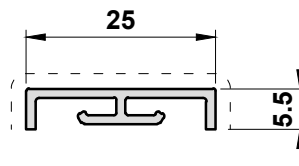
W20166 41mm Astragal Bar



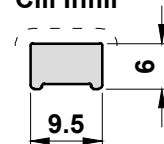
UN3220 Astragal Bar



UN3225 Astragal Bar



SPD750 Cill Infill

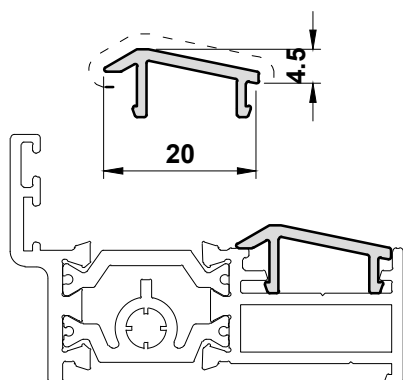


Scale 1:1

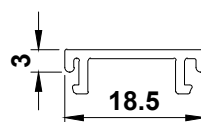
Primary Visible Side

Secondary Visible Side

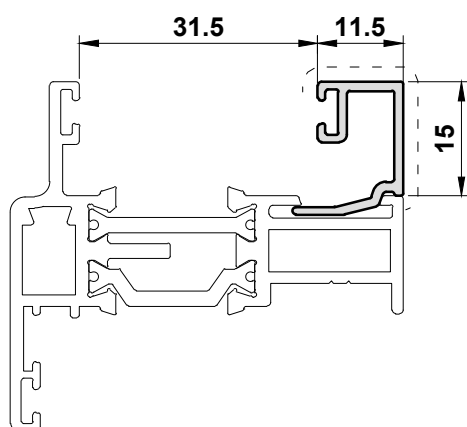
W20175
Threshold Infill



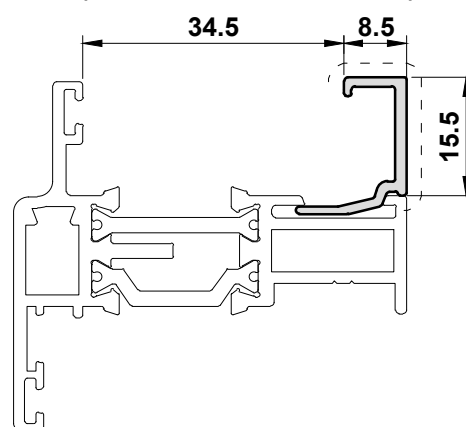
PCX41
Outer Frame Infill



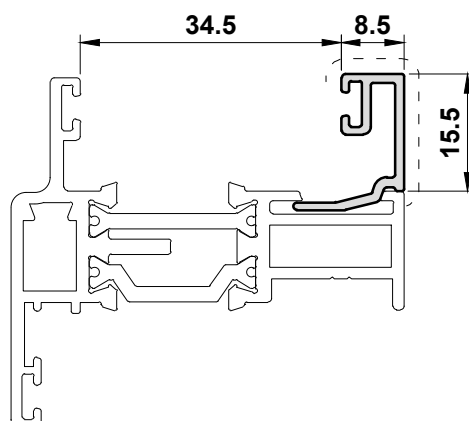
W20168N
Internal Square Bead



W20170N
Internal Square Bead
(Direct Fix Handle to Bead)



W20171N
Internal Square Bead
(Handle Blocks required when using this Bead)



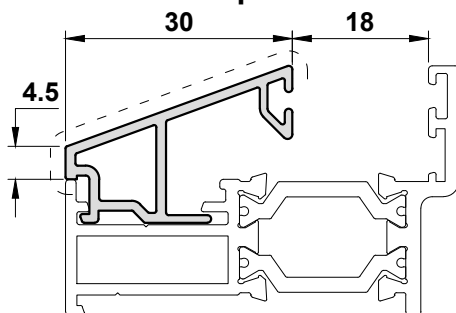
Scale 1:1

Primary Visible Side

Secondary Visible Side

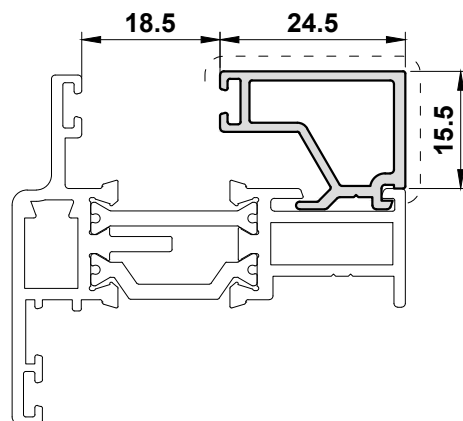
W20172

External Sloped Bead



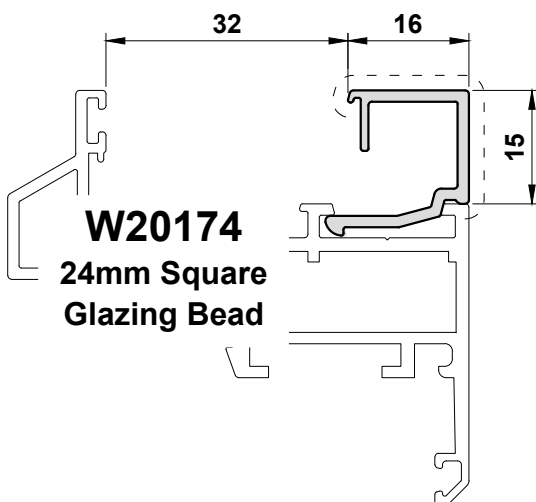
W20173

Internal Square Bead



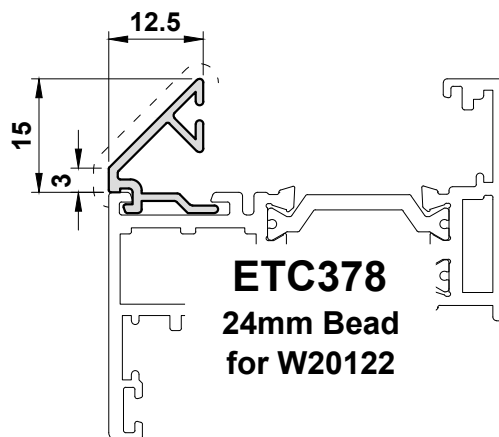
W20174

24mm Square
Glazing Bead



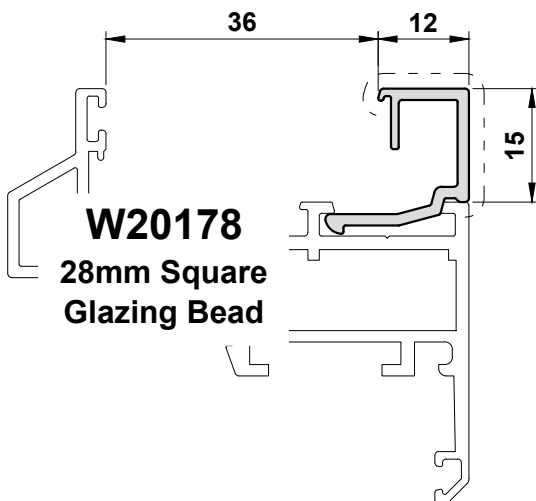
ETC378

24mm Bead
for W20122



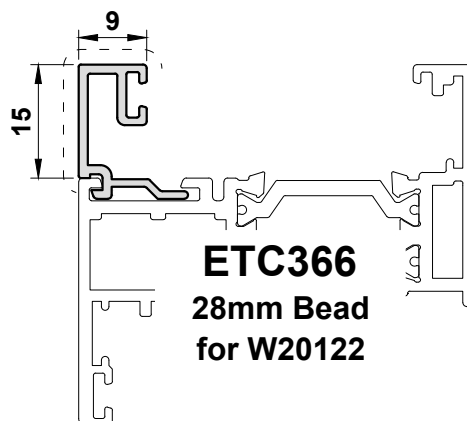
W20178

28mm Square
Glazing Bead



ETC366

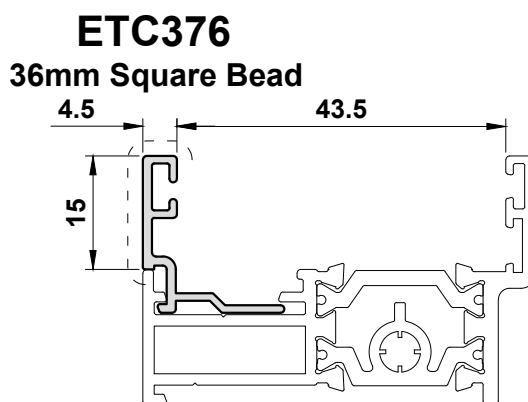
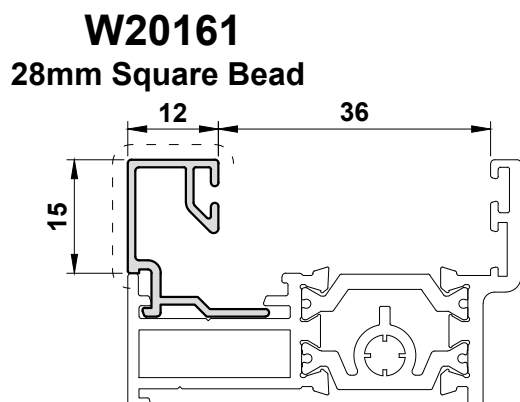
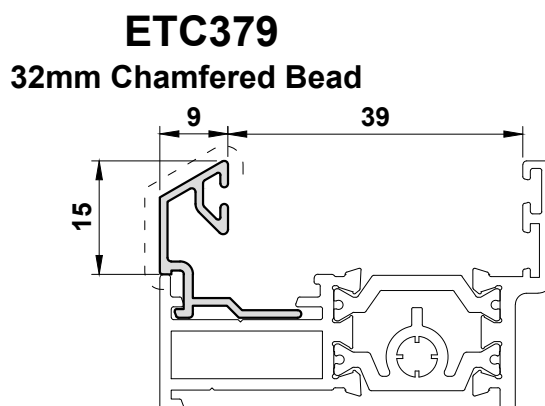
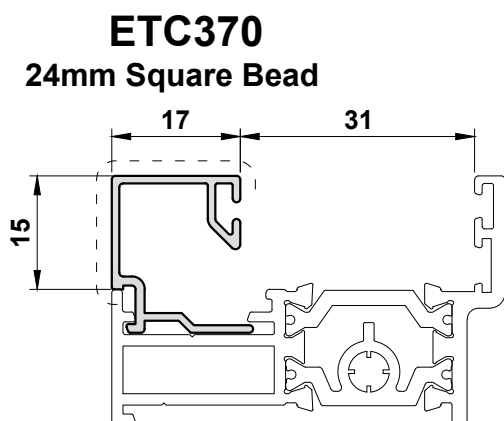
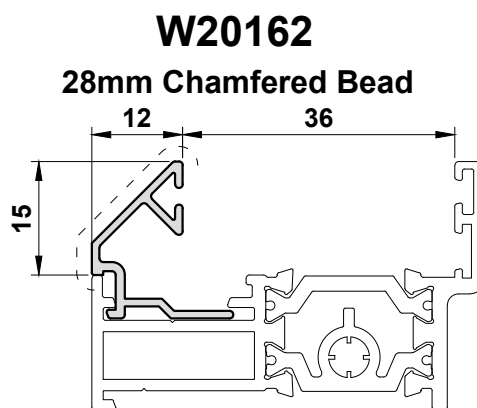
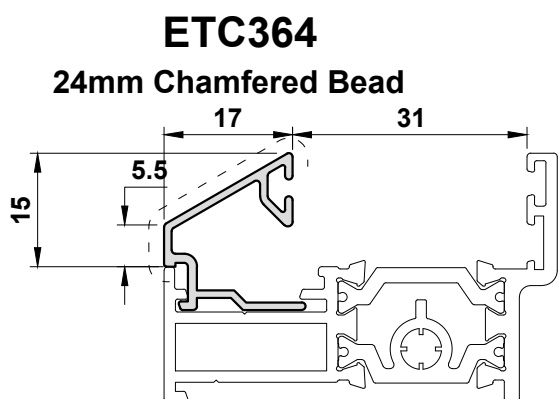
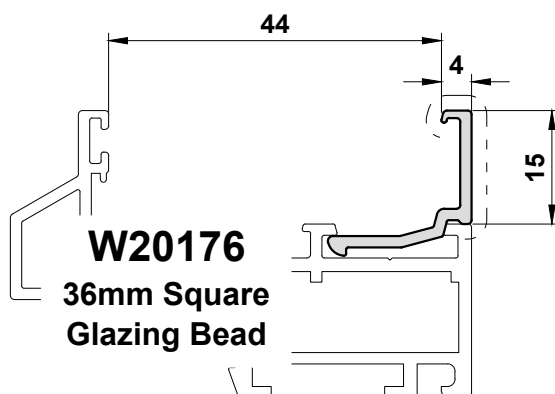
28mm Bead
for W20122



Scale 1:1

Primary Visible Side

Secondary Visible Side

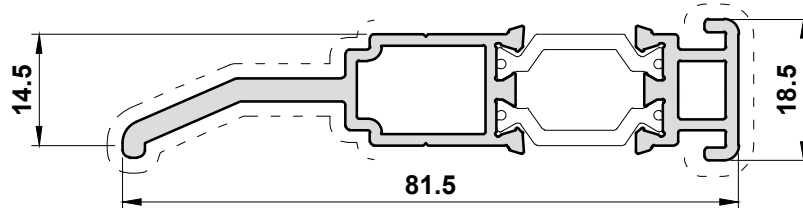


Scale 1:1

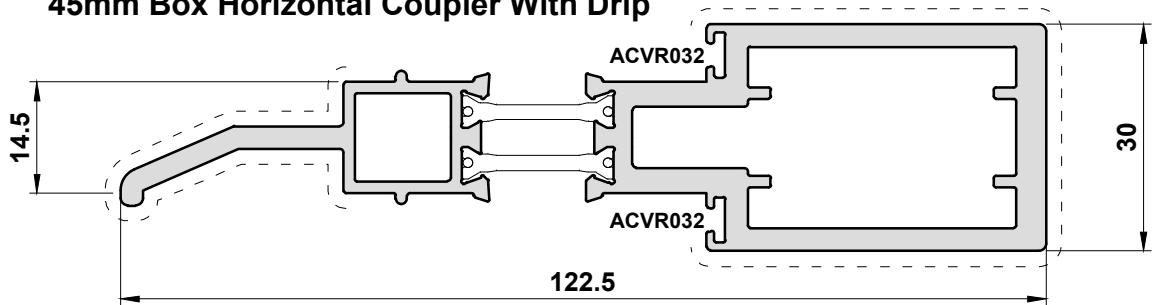
Primary Visible Side

Secondary Visible Side

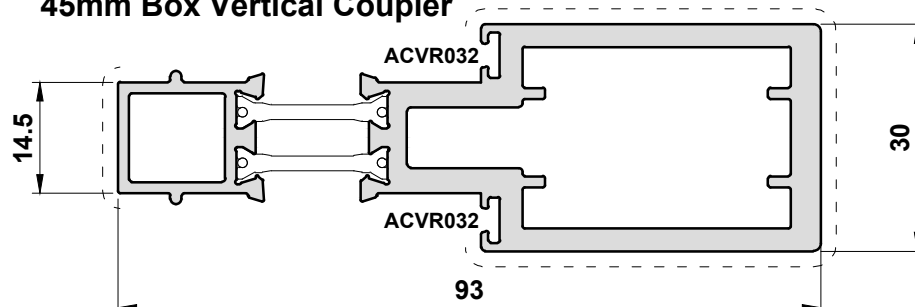
W20485
Horizontal Coupler with Drip Bar



W20486
45mm Box Horizontal Coupler With Drip



W20487
45mm Box Vertical Coupler

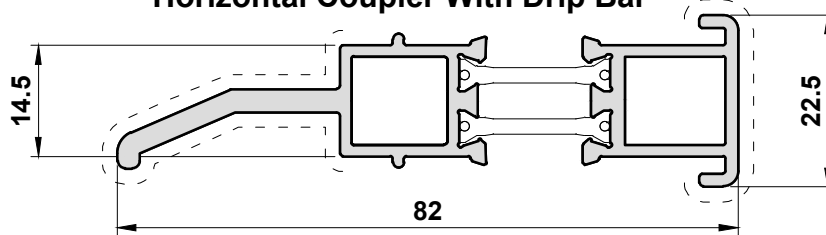


Scale 1:1

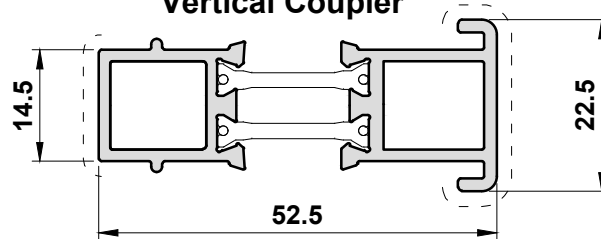
Primary Visible Side

Secondary Visible Side

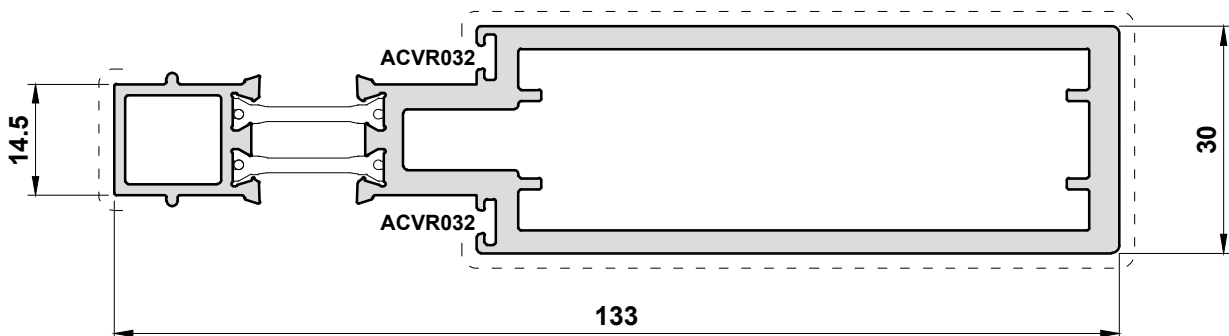
W20488
Horizontal Coupler With Drip Bar



W20489
Vertical Coupler



W20490
Coupler



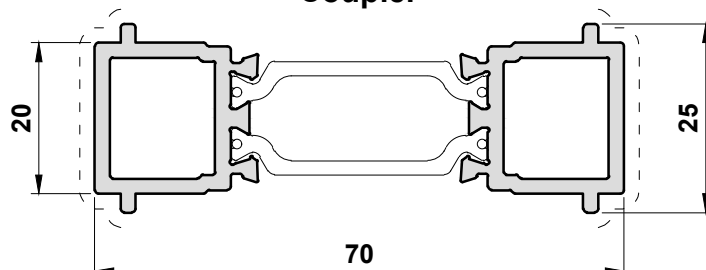
Scale 1:1

Primary Visible Side

Secondary Visible Side

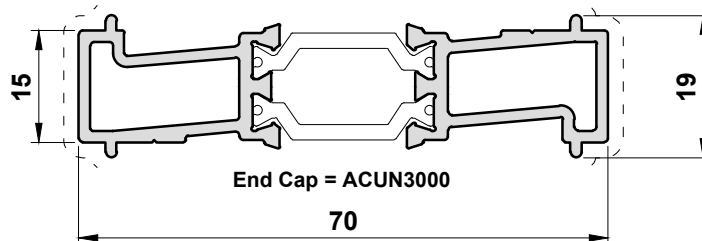
ETC853

Coupler



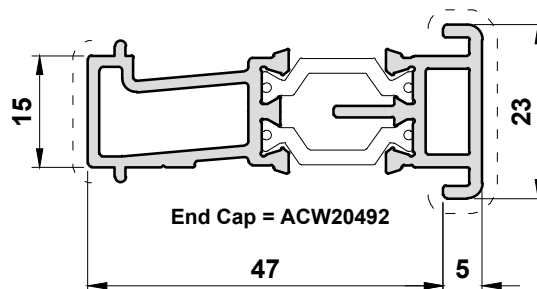
UN3000

Horizontal Coupler



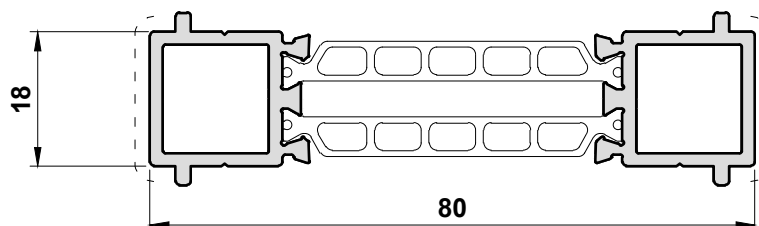
W20492

47mm Horizontal Coupler



UL055

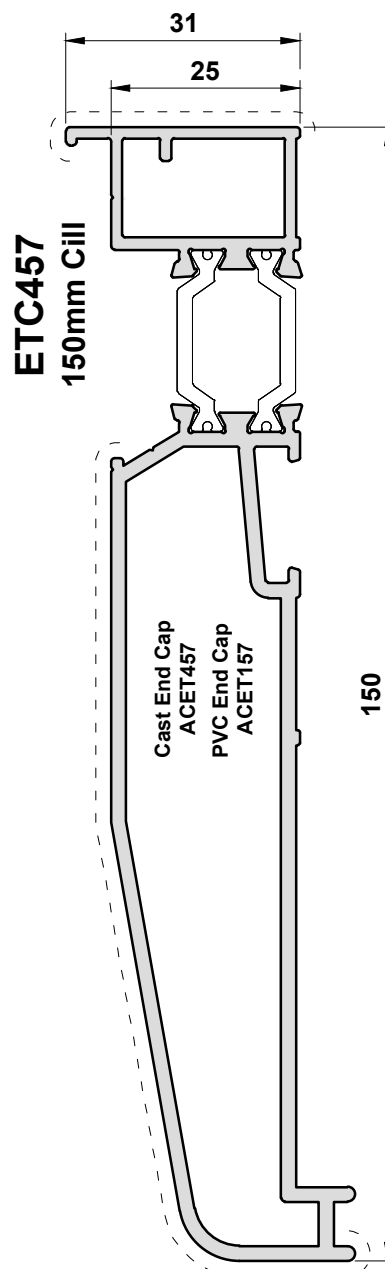
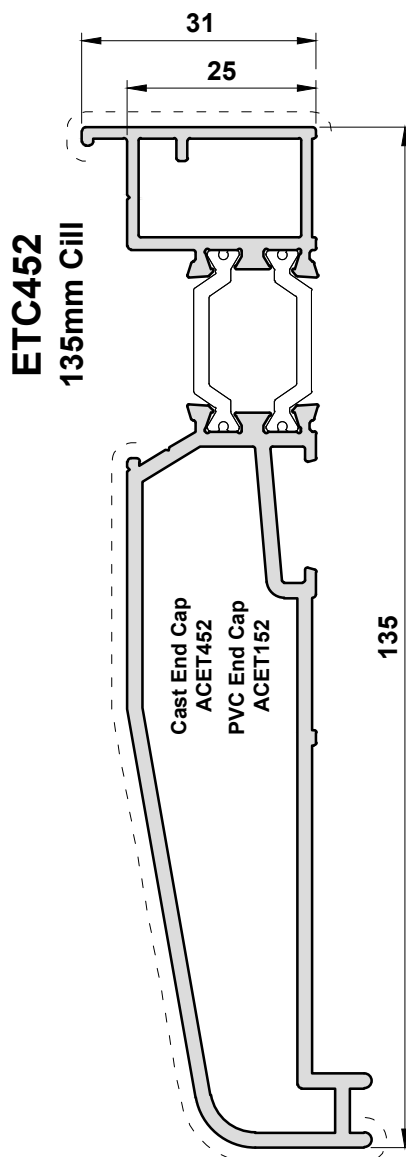
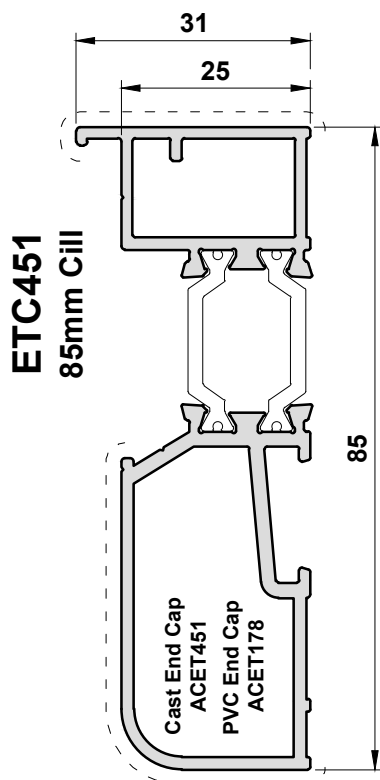
Coupler For W20114



Scale 1:1

Primary Visible Side

Secondary Visible Side

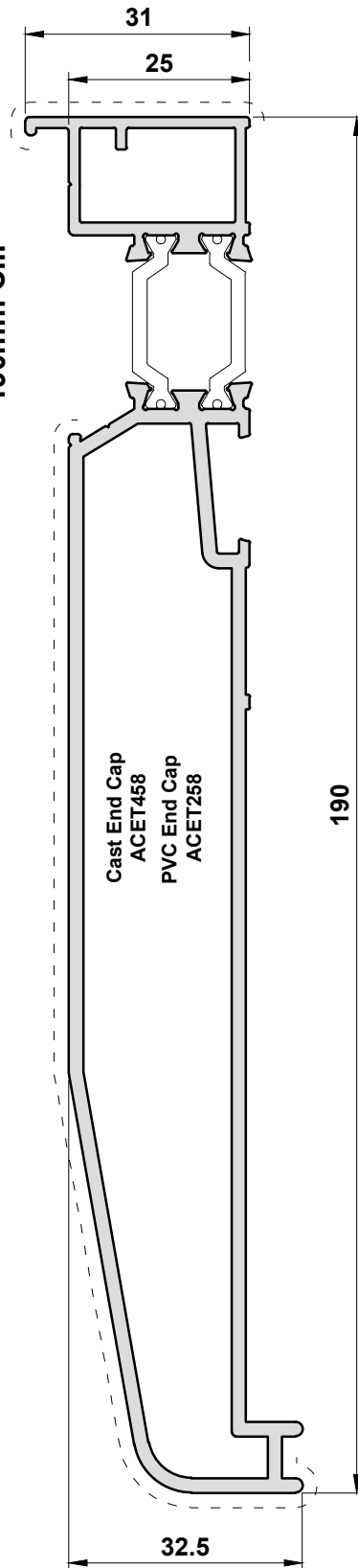


Scale 1:1

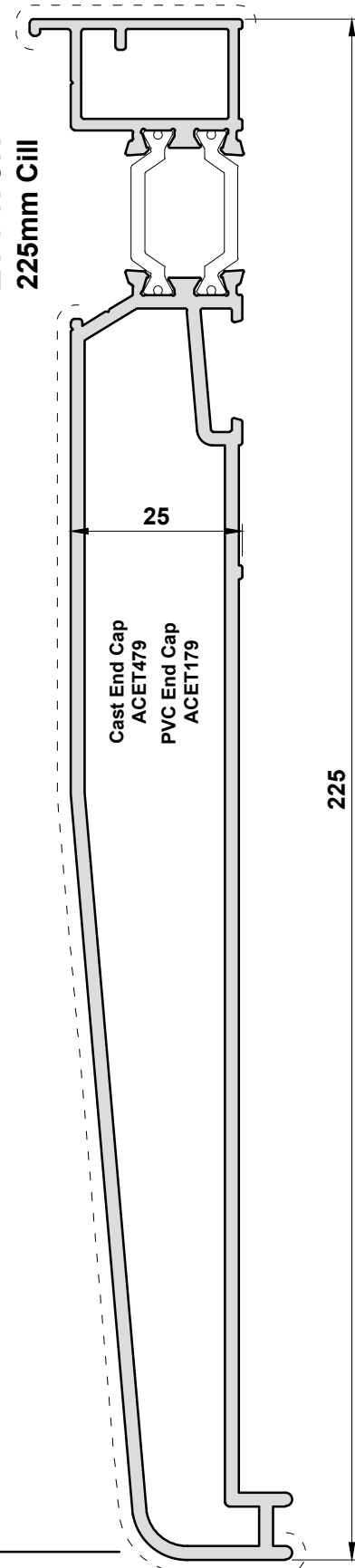
Primary Visible Side

Secondary Visible Side

ETC458
190mm Cill



ETC479N
225mm Cill

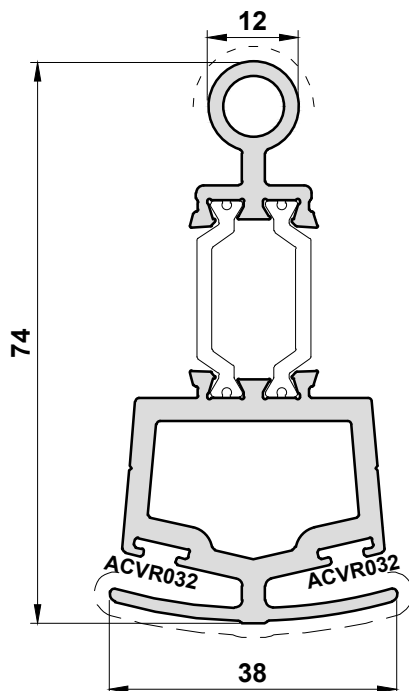


Scale 1:1

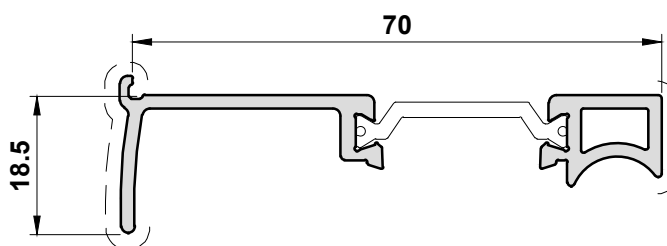
Primary Visible Side

Secondary Visible Side

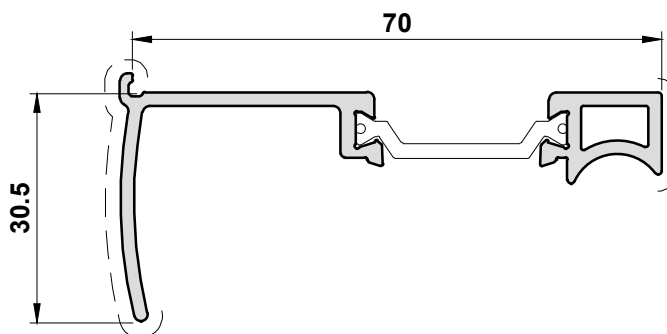
ETC080
Bay Pole



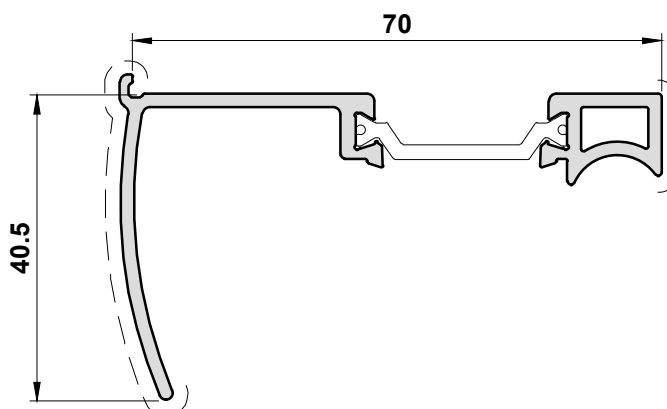
ETC081
169° - 150°
Bay Pole Adaptor



ETC082
149° - 130°
Bay Pole Adaptor



ETC083
129° - 115°
Bay Pole Adaptor

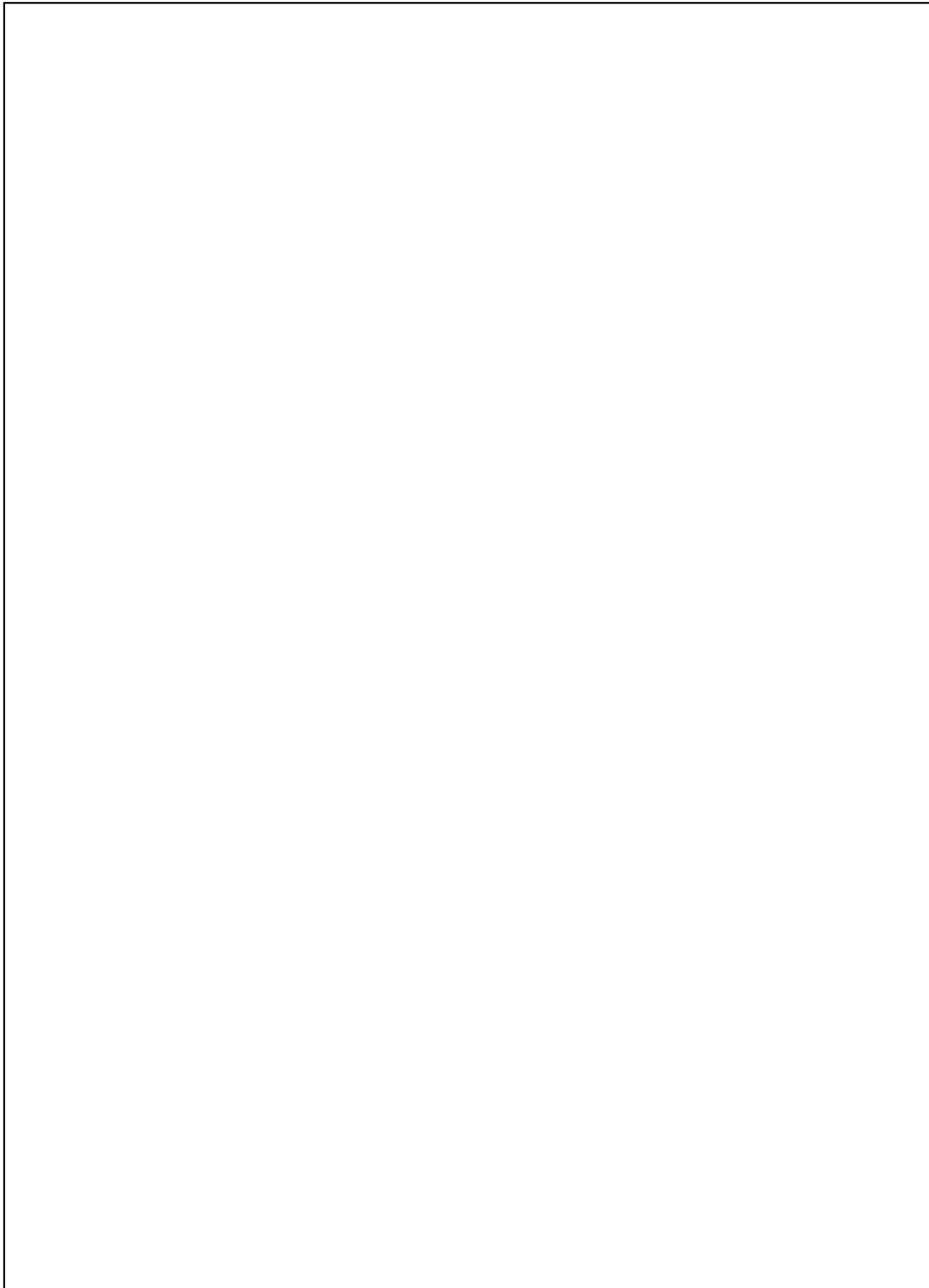
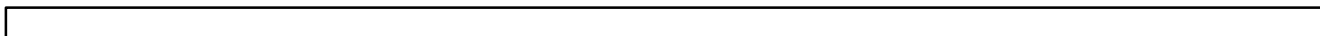


Scale 1:1

Section B

Accessories

Photos & Drawings



ACCESSORIES : PHOTOS & DRAWINGS

Image	Part Code	Pack	Unit	Application	Colour
	ACEF910 Crimping Cleat	24	pack	W20122	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 ☐
	ACET044 Stainless Steel Chevron	100	pack	W20017 W20047 W20126 W20047 W20147	MF ☒
					SA ☐
					KL ☐
					HP ☐
					SSC ☐
					SMC ☐
					W ☐
					Z ☐
					PC ☐
	ACET045 Stainless Steel Chevron	100	pack	W20015 W20016 W20018 W20110 W20120 W20125 W20145	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 ☐
T-BARS ACV665=2.5mm ACV666=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		

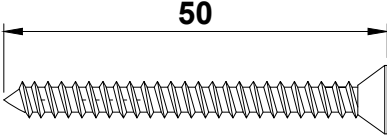
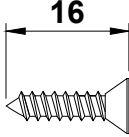
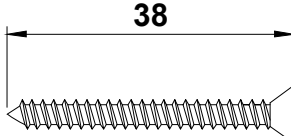
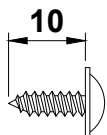
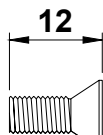
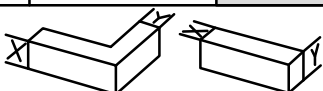
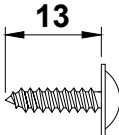
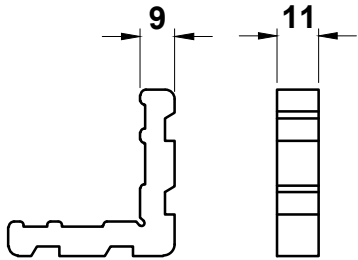
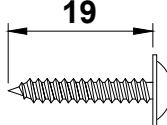
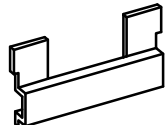
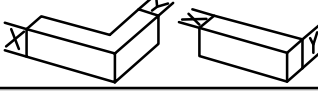
Image	Part Code	Pack	Unit	Application	Colour
	ACET062 No. 10 x 50 S/S Self Tapping CSK Screw	100	pack		MF ☒
					SA ☐
					KL ☐
					HP ☐
					SSC ☐
					SMC ☐
					W ☐
					Z ☐
					PC ☐
	ACET064 No. 8 x 16 S/S Self Tapping CSK Screw	100	pack		MF ☒
					SA ☐
					KL ☐
					HP ☐
					SSC ☐
					SMC ☐
					W ☐
					Z ☐
					PC ☐
	ACET066 No. 7 x 38 S/S Self Tapping CSK Screw	100	pack	W20032 W20034 W20035 W20039 W20132 W20139	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 ☐
 T-BARS ACV/G66=2.5mm ACV/G66=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
	ACET070 No. 8 x 13 S/S Self Tapping Flange Screw	100	pack	Friction Hinges	MF ☒
					SA ☐
					KL ☐
					HP ☐
					SSC ☐
					SMC ☐
					W ☐
					Z ☐
					PC ☐
	ACET077 Corner Cleat	24	pack	W20018 W20024 W20028 W20029 W20047 W20147	MF ☒
					SA ☐
					KL ☐
					HP ☐
					SSC ☐
					SMC ☐
					W ☐
					Z ☐
					PC ☐
	ACET099 No. 8 x 19 S/S Self Tapping Flange Screw	100	pack	Friction Hinges	MF ☒
					SA ☐
					KL ☐
					HP ☐
					SSC ☐
					SMC ☐
					W ☐
					Z ☐
					PC ☐
	ACET114 Stainless Steel Anti-Twist Clip	100	pack	W20032 W20035	MF ☒
					SA ☐
					KL ☐
					HP ☐
					SSC ☐
					SMC ☐
					W ☐
					Z ☐
					PC ☐
	ACET125 Stainless Steel Anti-Twist Clip	100	pack	W20034 W20039	MF ☒
					SA ☐
					KL ☐
					HP ☐
					SSC ☐
					SMC ☐
					W ☐
					Z ☐
					PC ☐
 T-BARS ACVG66=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

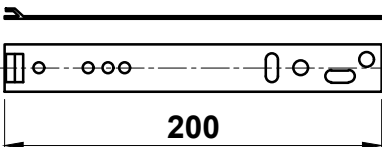
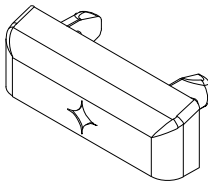
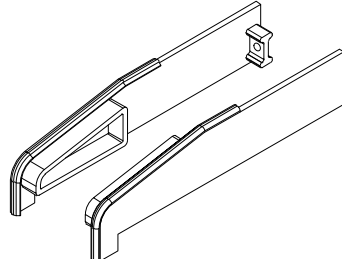
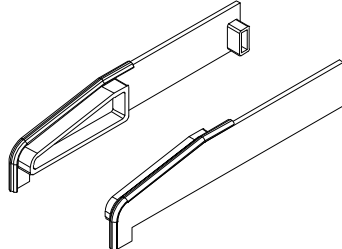
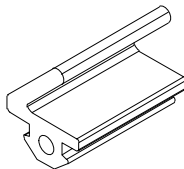
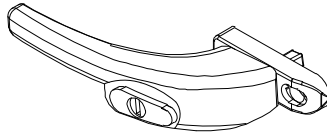
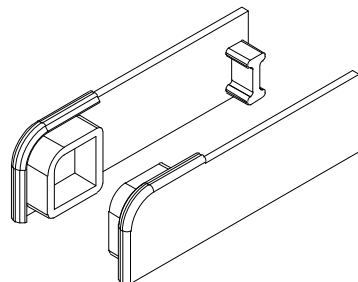
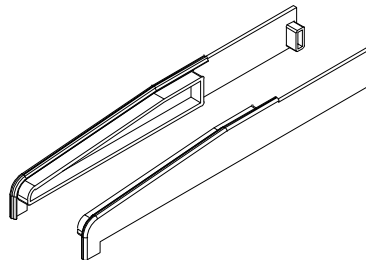
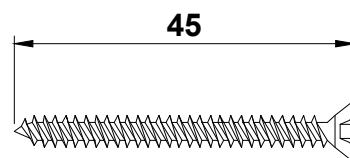
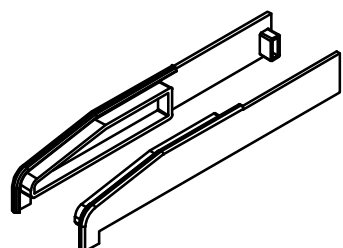
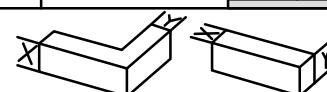
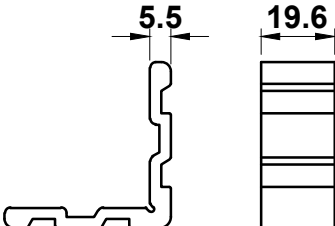
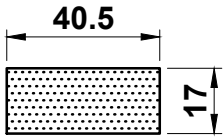
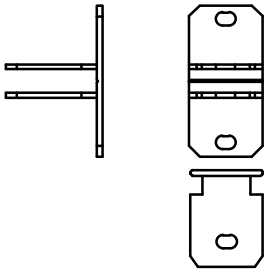
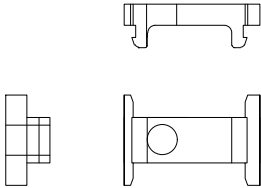
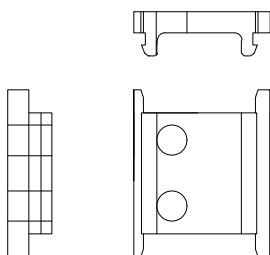
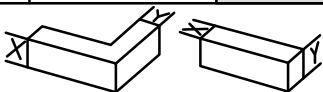
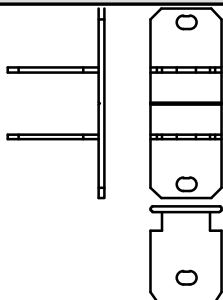
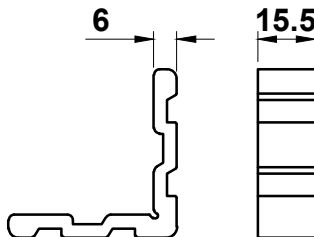
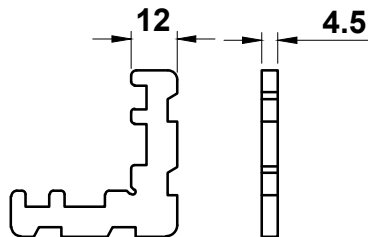
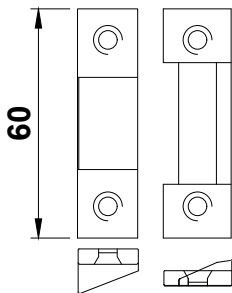
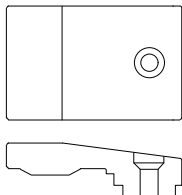
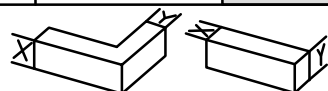
Image	Part Code	Pack	Unit	Application	Colour	
	ACET130 Galvanised Steel Fixing Strap 200mm x 25mm x 1.5mm	100	pack	W20015 W20016 W20017 W20018 W20110	MF	✓
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	
					Z	
					PC	
						ACET131 Drainage Cap for colour match drainage cap - see ACET432
SA						
KL						
HP						
SSC						
SMC						
W	✓					
Z	✓					
PC						
	ACET152 PVC Cill End Caps	10	pair	ETC452		
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	✓
					Z	✓
					PC	
						ACET157 PVC Cill End Caps
SA						
KL						
HP						
SSC						
SMC						
W	✓					
Z	✓					
PC						
	ACET160R EPDM Flipper Gasket	100	m	W20015 W20027 W20127		
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	
					Z	✓
					PC	
					 T-BARS ACVG65=2.5mm ACVG66=3.0mm ACVL150=4.0mm	 Screw (Grub)

Image	Part Code	Pack	Unit	Application	Colour	
	ACET165 Espagnolette Handle 9mm Spindle	1	each	ACW201 ACW202 ACW203 ACW204 ACW205	MF	✓
					SA	✓
					KL	
					HP	
					SSC	
					SMC	
					W	✓
					Z	✓
					PC	✓
	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	W20048 W20025 W20027	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 ACVG66=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	
	ACET310 Corner Cleat	24	pack	W20015 W20016 W20017 W20111 W20112	MF	☒
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	
					Z	
					PC	
	ACET313 Foam Infill 1250mm Lengths	1	each	W20111	MF	☒
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	
					Z	
					PC	
	ACET333 Cruciform Block	24	pack	W20032 W20035	MF	☒
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	
					Z	
					PC	
	ACET334 Transom Locator Block	100	pack	W20032 W20035	MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	
					Z	☒
					PC	
	ACET335 Transom Locator Block	100	pack	W20034 W20039	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

Image	Part Code	Pack	Unit	Application	Colour	
	ACET336 Cruciform Block	24	pack	W20034 W20039	MF	✓
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	
					Z	
					PC	
	ACET343 Crimping Cleat	24	pack	W20145	MF	✓
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	
					Z	
					PC	
	ACET345 Crimping Cleat	24	pack	W20145	MF	✓
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	
					Z	
					PC	
	ACET352 Hinge Pull-in Block	50	pairs	W20015 W20016 W20017 W20024 W20025 W20111 W20112	MF	✓
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	✓
					Z	✓
					PC	
	ACET380 Run Up Block	100	pack	W20015 W20016 W20017 W20111 W20112	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

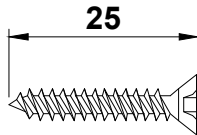
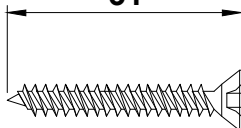
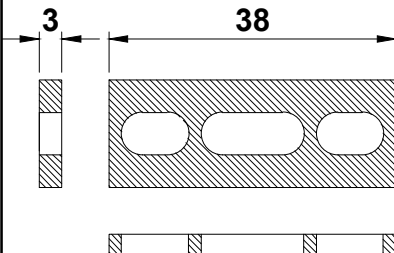
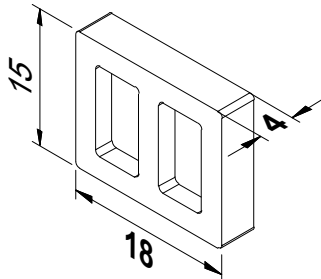
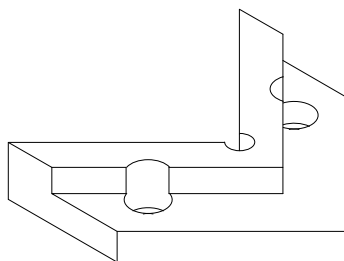
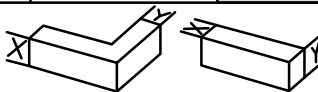
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	ACET390 4.3 x 25mm CSK Polyamide Screw	200	Pack	ACW20067 W20015 W20016 W20017 W20111 W20112	MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	
					Z	
					PC	
	ACET392 4.3 x 31mm CSK Polyamide Screw	100	pack	W20129 W20149	MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	
					Z	
					PC	
	ACET394 Keep and Stay Packer	25	pack	W20015 W20016 W20017 W20024 W20025 W20111 W20112	MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	
					Z	
					PC	
	ACET393 Packer for W20047/W20147	50	Pack	W20047 W20147	MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	
					Z	
					PC	
	ACET397 8.6mm Packer	1	each	W20122	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		

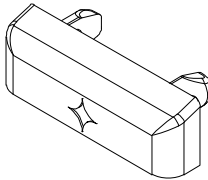
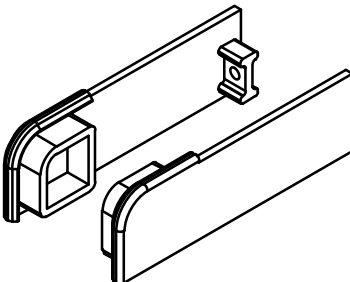
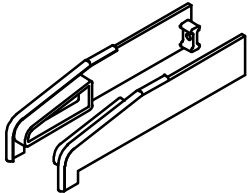
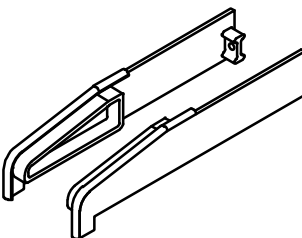
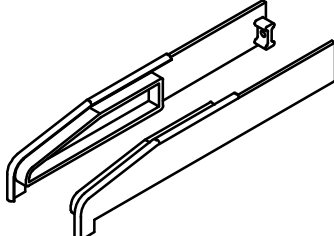
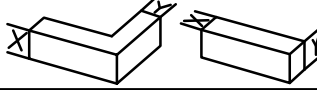
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	ACET432 Colour Match Drainage Cover Cap	8	pack		MF	
					SA	✓
					KL	✓
					HP	
					SSC	
					SMC	✓
					W	✓
					Z	
					PC	
	ACET451 Cast Cill End Caps (Pair)	1	pair	ETC451	MF	✓
					SA	
					KL	✓
					HP	✓
					SSC	
					SMC	
					W	✓
					Z	✓
					PC	
	ACET452 Cast Cill End Caps (Pair)	1	Pair	ETC452	MF	✓
					SA	
					KL	✓
					HP	✓
					SSC	
					SMC	
					W	✓
					Z	✓
					PC	
	ACET457 Cast Cill End Caps (Pair)	1	Pair	ETC457	MF	✓
					SA	
					KL	✓
					HP	✓
					SSC	
					SMC	
					W	✓
					Z	✓
					PC	
	ACET458 Cast Cill End Caps (Pair)	1	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			

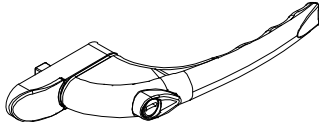
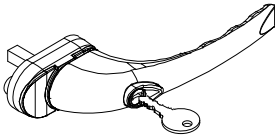
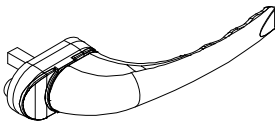
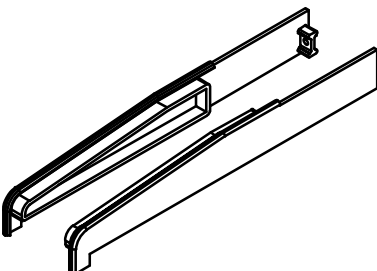
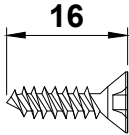
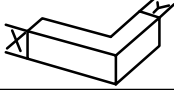
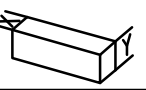
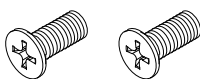
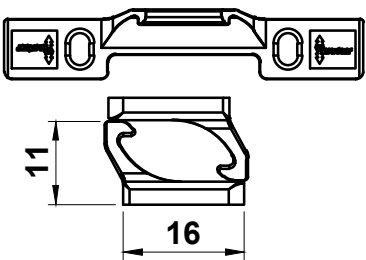
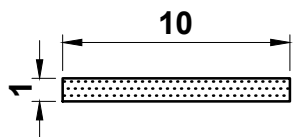
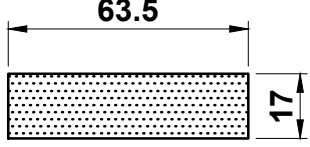
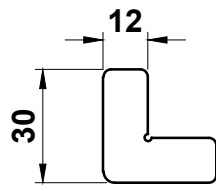
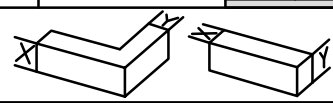
Image	Part Code	Pack	Unit	Application	Colour	
	ACET460 Inline Espagnolette Handle 9mm Spindle	1	Each	ACW201 ACW202 ACW203 ACW204 ACW205	MF	✓
					SA	
					KL	✓
					HP	
					SSC	✓
					SMC	✓
					W	✓
					Z	✓
					PC	✓
	ACET463 Locking Tilt & Turn Handle 9mm Spindle	1	Each	ACSZ905	MF	✓
					SA	
					KL	✓
					HP	
					SSC	✓
					SMC	✓
					W	✓
					Z	✓
					PC	✓
	ACET464 Non-Locking Tilt & Turn Handle 9mm Spindle	1	Each	ACSZ905	MF	✓
					SA	
					KL	
					HP	
					SSC	✓
					SMC	✓
					W	✓
					Z	✓
					PC	✓
	ACET479N Cast Cill End Caps (Pair)	1	Pair	ETC479	MF	✓
					SA	
					KL	✓
					HP	✓
					SSC	
					SMC	
					W	✓
					Z	✓
					PC	
	ACET490 4.3 x 16mm CSK Polyamide Screw	1000	Pack	ACW20060	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	
	ACET495 2no. M5 x 12 SS CSK Machine Screw	1	Pack	ACET460	MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	
					Z	
					PC	
	ACET513 13mm Cavity Security Hinge Protector 4 Per Set (2 Pairs)	4	Sets	W20015 W20016 W20017 W20024 W20025 W20111 W20112	MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	
					Z	✓
					PC	
	ACET569 Astragal Bar Tape 10mm x 1mm	50	m	W20165	MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	
					Z	
					PC	
	ACET619 Foam Infill 1250mm Lengths	1	each	W20112	MF	✓
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	
					Z	
					PC	
	ACET624 Stainless Steel Chevron	100	Pack	W20122	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

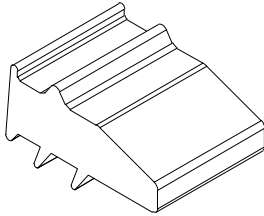
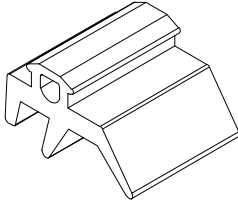
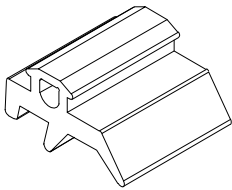
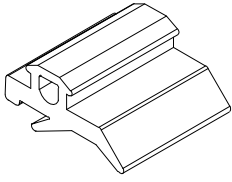
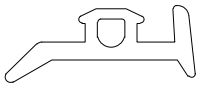
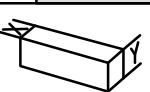
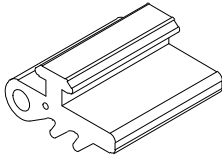
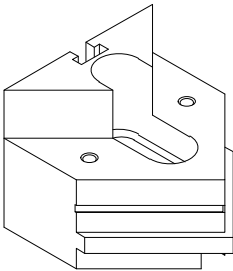
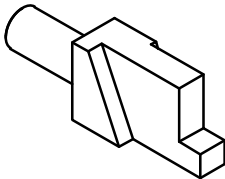
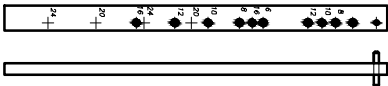
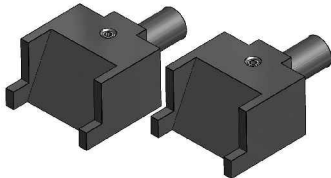
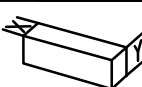
Image	Part Code	Pack	Unit	Application	Colour
	ACET840N 5mm Low Line Internal EPDM Wedge Gasket	150	m		MF
					SA
					KL
					HP
					SSC
					SMC
					W
					Z
					PC
	ACET841 4mm Low Line External EPDM Gasket	200	m		MF
					SA
					KL
					HP
					SSC
					SMC
					W
					Z
					PC
	ACET842 3mm Low 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
	ACET844 2mm Low Line External 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	 	

Image	Part Code	Pack	Unit	Application	Colour
	ACET845 3mm Low Line External EPDM Gasket with Rigid Backing Slides into glazing bead	100	m		MF
					SA
					KL
					HP
					SSC
					SMC
					W
					Z
					PC
	ACET889 Vee Block	1	each	W20122	MF
					SA
					KL
					HP
					SSC
					SMC
					W
					Z
					PC
	ACET904 Punches	1	pair	W20015 W20016 W20110	MF
					SA
					KL
					HP
					SSC
					SMC
					W
					Z
					PC
	ACET911 Friction Hinge Drill Jig	1	each	W20024 W20025 W20026 W20027 W20028 W20029	MF
					SA
					KL
					HP
					SSC
					SMC
					W
					Z
					PC
	ACET918 Punches	1	pair	W20018	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

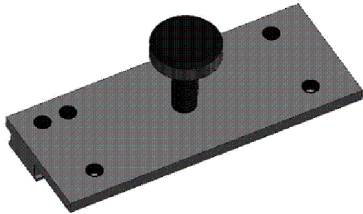
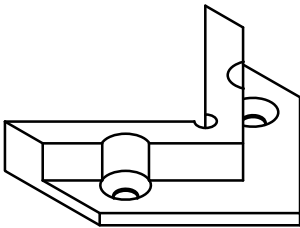
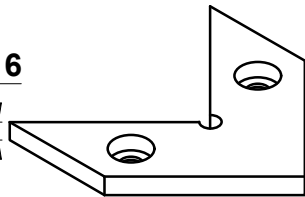
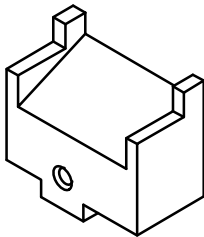
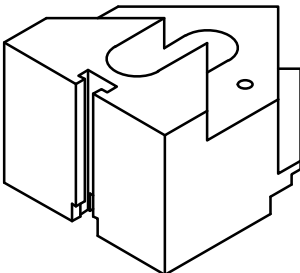
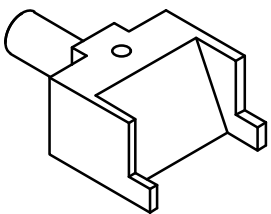
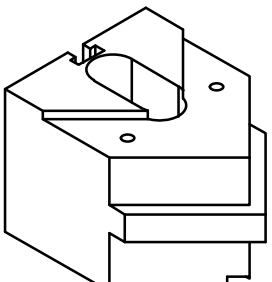
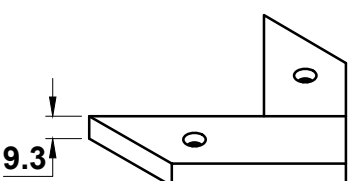
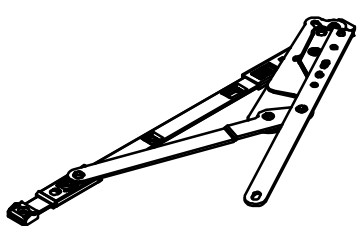
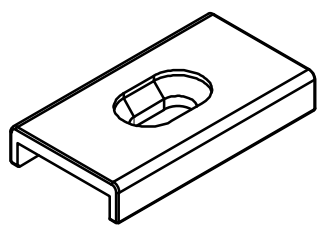
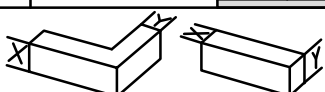
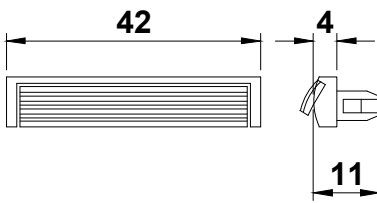
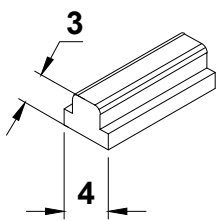
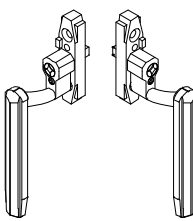
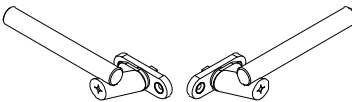
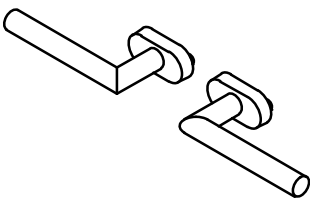
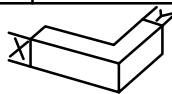
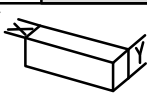
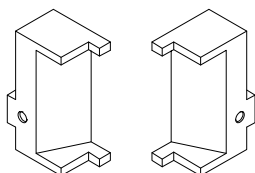
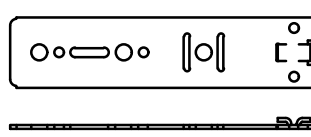
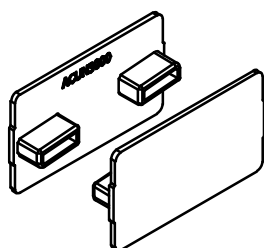
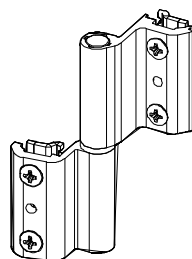
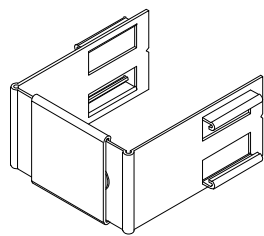
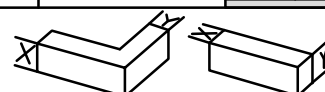
Image	Part Code	Pack	Unit	Application	Colour
	ACET945 Transom/Mullion Drill Jig	1	each	W20032 W20034 W20035 W20039 W20132 W20139	MF ☒
					SA ☐
					KL ☐
					HP ☐
					SSC ☐
					SMC ☐
					W ☐
					Z ☐
					PC ☐
	ACET975 4mm Tufnel Packer	1	each	W20026 W20027 W20028 W20029	MF ☒
					SA ☐
					KL ☐
					HP ☐
					SSC ☐
					SMC ☐
					W ☐
					Z ☐
					PC ☐
	ACET977 6mm Packer	1	each	W20028 W20029 W20147	MF ☒
					SA ☐
					KL ☐
					HP ☐
					SSC ☐
					SMC ☐
					W ☐
					Z ☐
					PC ☐
	ACET978 Punches	1	pair	W20017	MF ☒
					SA ☐
					KL ☐
					HP ☐
					SSC ☐
					SMC ☐
					W ☐
					Z ☐
					PC ☐
	ACET979 Vee Block	1	each	W20017	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	
	ACET981 Punches	1	pair	W20047 W20147	MF	✓
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	
					Z	
					PC	
	ACET982 Vee Block	1	each	W20015 W20016	MF	✓
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	
					Z	
					PC	
	ACET990 9.3mm Packer	1	each	W20110	MF	✓
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	
					Z	
					PC	
	ACETME13 13.5mm Egress Hinge	1	pair	ACETME13 ACET394	MF	✓
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	
					Z	
					PC	
	ACETME99 Easy Clean Immobiliser for Sashes Over 600mm	100	pack	ACETME13	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
	ACGSL045 Drainage Cap	100	pack	W20110 W20130	MF
					SA
					KL
					HP
					SSC
					SMC
					W
					Z
					PC
	ACRV032 Sealing Gasket for Coupler	50	m	ETC080 W20016 W20051 W20054	MF
					SA
					KL
					HP
					SSC
					SMC
					W
					Z
					PC
	ACSM002 L/R Art Deco Window Handles 9mm Spindle	1	each	ACW201 ACW202 ACW203 ACW204 ACW205	MF
					SA
					KL
					HP
					SSC
					SMC
					W
					Z
					PC
	ACSM010 L/R Stainless Steel Casement Window Handle 9mm Spindle	1	each	ACW201 ACW202 ACW203 ACW204 ACW205	MF
					SA
					KL
					HP
					SSC
					SMC
					W
					Z
					PC
	ACSM011 L/R Stainless Steel Tilt & Turn Window Handle	1	each	ACSZ905	MF
					SA
					KL
					HP
					SSC
					SMC
					W
					Z
					PC
 T-BARS ACVG66=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	
	ACUL902 Punches	1	each	W20114	MF	✓
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	
					Z	
					PC	
	ACUN23X Screw Fixing Lug B x 38mm x 2mm ACUN230: B = 160mm ACUN232: B = 240mm ACUN233: B = 280mm	100	Pack	ETC451 ETC452 ETC457 ETC458 ETC478 ETC479 W20110	MF	✓
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	
					Z	
					PC	
	ACUN3000 UN3000 End Cap	10	pack	UN3000	MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	
					Z	✓
					PC	
	ACUN3140 Hinge Weight Limit - 90 kg	1	each	W20114 W20134	MF	✓
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	
					Z	
					PC	
	ACUN3220 Astragal Steel Clip	100	pack	UN3220 UN3225	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

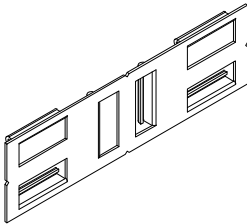
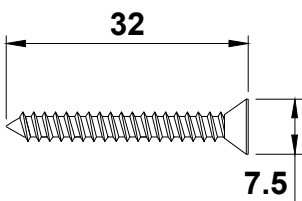
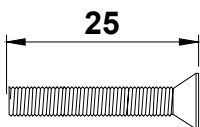
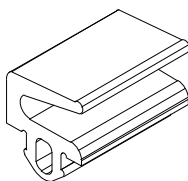
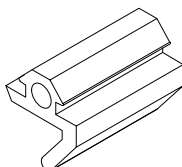
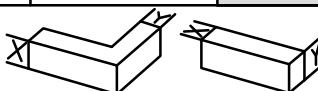
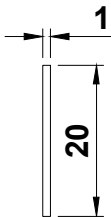
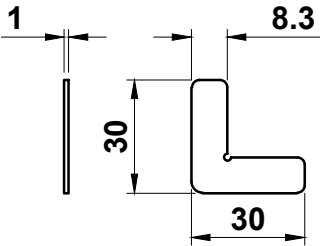
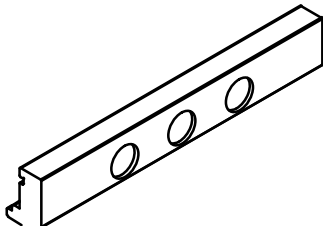
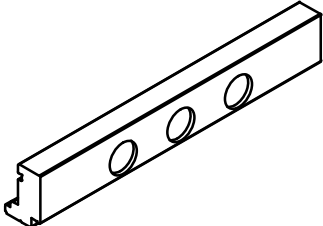
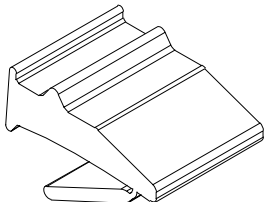
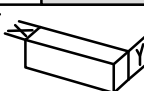
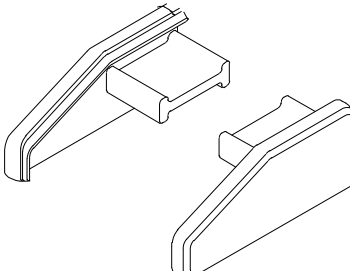
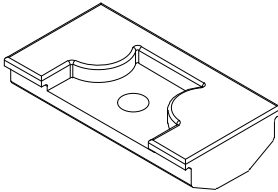
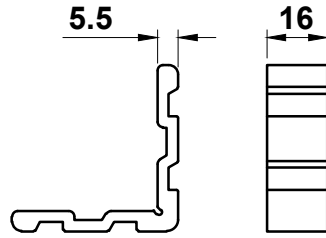
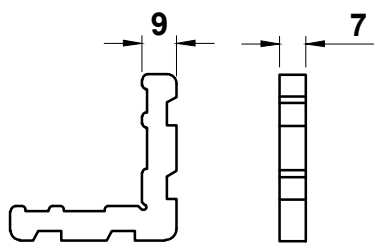
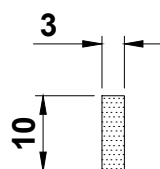
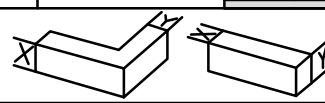
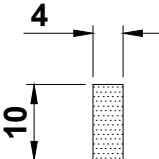
Image	Part Code	Pack	Unit	Application	Colour	
	ACUN3222 Astragal Cruciform Joint	50	pack	UN3220 UN3225	MF	✓
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	
					Z	
					PC	
	ACUN3512 No. 8 x 32mm CSK SS Pozi Screw	100	pack	UL048 W20114	MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	
					Z	
					PC	
	ACUN3537 M4 X 25mm Pozi CSK M/C Screw	100	pack	ACET269 W20015 W20016 W20017 W20111 W20112	MF	✓
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	
					Z	
					PC	
	ACVL031 EPDM Flipper Gasket	100	m	W20120	MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	
					Z	✓
					PC	
	ACVL032 EPDM Flipper Gasket	100	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			

Image	Part Code	Pack	Unit	Application	Colour	
	ACVL069 Astragal Bar Tape 20mm x 1mm	33	m	W20166	MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	
					Z	✓
					PC	
	ACW20024 Stainless Steel Chevron	100	pack	W20024 W20025 W20026 W20027 W20028 W20029 W20122	MF	✓
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	
					Z	
					PC	
	ACW20028 Handle Fixing Block for use with W20168N bead only	1	each	W20168N	MF	✓
					SA	
					KL	✓
					HP	
					SSC	
					SMC	
					W	✓
					Z	✓
					PC	
	ACW20029 Handle Fixing Block for use with W20171N bead only	1	each	W20171N	MF	✓
					SA	
					KL	✓
					HP	
					SSC	
					SMC	
					W	✓
					Z	✓
					PC	
	ACW20038 4-3mm Tear-away Low-line EPDM Wedge Gasket Black Only	200	m		MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	
					Z	✓
					PC	
 T-BARS ACVG65=2.5mm ACVG66=3.0mm ACVL150=4.0mm	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	 
 Screw (Grub)						

ACCESSORIES : PHOTOS & DRAWINGS

Image	Part Code	Pack	Unit	Application	Colour	
	ACW20039 Transom End Caps	10	pairs	W20032 W20039 W20132	MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	✓
					Z	✓
					PC	
	ACW20049 Meeting Stile Keep Packer	50	pack	W20048	MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	
					Z	✓
					PC	
	ACW20055 Corner Cleat	24	pack	W20024 W20025 W20026 W20028 W20029	MF	✓
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	
					Z	
					PC	
	ACW20056 Corner Cleat	24	pack	W20025 W20026 W20027 W20127	MF	✓
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	
					Z	
					PC	
	ACW20073 3mm x 10mm Glazing Tape	20	m	W20026 W20127	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
	ACW20074 4mm x 10mm Glazing Tape	15	m	W20026 W20127	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	W20015 W20016 W20017 W20024 W20025 W20111	MF ☐
					SA ☐
					KL ☐
					HP ☐
					SSC ☐
					SMC ☐
					W ☐
					Z ☐
					PC ☐
	ACW20103 10" Monkey Tail Peg Stay Black or Pewter	1	each	W20015 W20016 W20024 W20025 W20111	MF ☐
					SA ☐
					KL ☐
					HP ☐
					SSC ☐
					SMC ☐
					W ☐
					Z ☐
					PC ☐
 T-BARS ACVG66=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

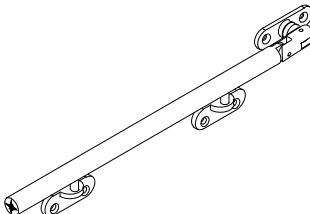
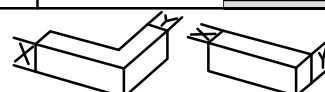
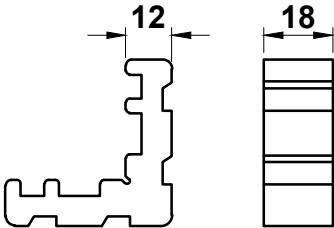
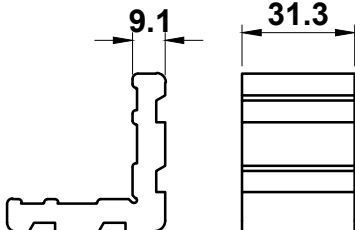
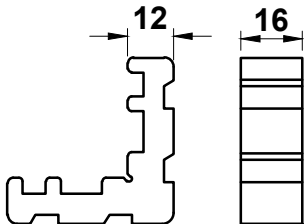
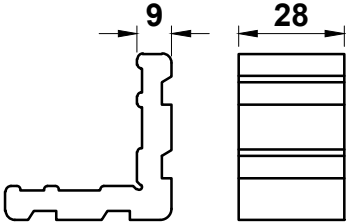
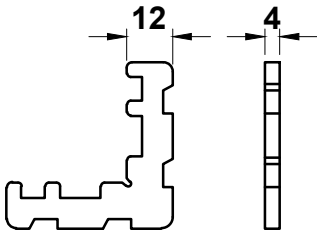
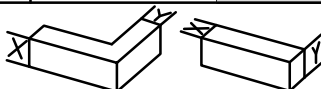
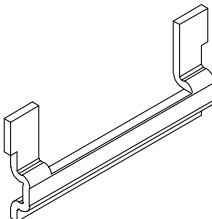
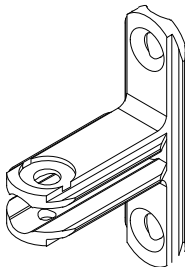
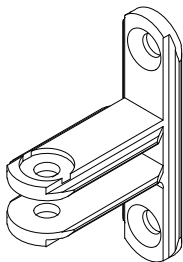
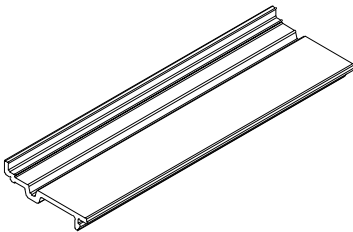
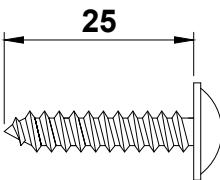
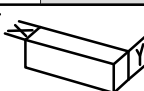
Image	Part Code	Pack	Unit	Application	Colour
	ACW20104 12" Monkey Tail Peg Stay Black or Pewter	1	each	W20015 W20016 W20024 W20025 W20111	MF
					SA
					KL
					HP
					SSC
					SMC
					W
					Z
					PC
	ACW20105 8" Bulb End Peg Stay Black or Pewter	1	each	W20015 W20016 W20017 W20024 W20025 W20111	MF
					SA
					KL
					HP
					SSC
					SMC
					W
					Z
					PC
	ACW20106 10" Bulb End Peg Stay Black or Pewter	1	each	W20015 W20016 W20024 W20025 W20111	MF
					SA
					KL
					HP
					SSC
					SMC
					W
					Z
					PC
	ACW20107 12" Bulb End Peg Stay Black or Pewter	1	each	W20015 W20016 W20024 W20025 W20111	MF
					SA
					KL
					HP
					SSC
					SMC
					W
					Z
					PC
	ACW20108 Stainless Steel Peg Stay	1	each	W20015 W20016 W20024 W20025 W20111	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
	ACW20110 Crimping Cleat	24	pack	W20110	MF ☒
					SA ☐
					KL ☐
					HP ☐
					SSC ☐
					SMC ☐
					W ☐
					Z ☐
					PC ☐
	ACW20114 Crimping Cleat	24	pack	W20114	MF ☒
					SA ☐
					KL ☐
					HP ☐
					SSC ☐
					SMC ☐
					W ☐
					Z ☐
					PC ☐
	ACW20117 Crimping Cleat	24	pack	W20017 W20112	MF ☒
					SA ☐
					KL ☐
					HP ☐
					SSC ☐
					SMC ☐
					W ☐
					Z ☐
					PC ☐
	ACW20120 Crimping Cleat	24	pack	W20120	MF ☒
					SA ☐
					KL ☐
					HP ☐
					SSC ☐
					SMC ☐
					W ☐
					Z ☐
					PC ☐
	ACW20122 Crimping Cleat	24	pack	W20122	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

Image	Part Code	Pack	Unit	Application	Colour	
	ACW20124N Crimping Cleat	24	pack	W20120	MF	✓
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	
					Z	
					PC	
	ACW20130 Central Gasket	100	m	W20110 W20130 ACW20133	MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	
					Z	✓
					PC	
	ACW20131 Outer Frame External Gasket	100	m	W20110 W20130	MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	
					Z	✓
					PC	
	ACW20133 Corner Moulding to suit ACW20130	12	pack	W20110 W20130 ACW20130	MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	
					Z	✓
					PC	
	ACW20135 Cruciform Bracket	10	pack	W20130	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	
	ACW20136 Transom/Mullion Anti-Twist Clip	100	pack	W20130	MF	✓
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	
					Z	
					PC	
	ACW20137 Transom Bracket	24	pack	W20018	MF	✓
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	
					Z	
					PC	
	ACW20139 Transom Bracket	24	pack	W20135	MF	✓
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	
					Z	
					PC	
	ACW20157 Bridge Packer	100	pack	W20110 W20120 W20130	MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	
					Z	✓
					PC	
	ACW20160 No.12 x 1" Pozi Flange Stainless Steel Self Tapper	100	pack	W20015 W20016 W20111	MF	✓
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	
					Z	
					PC	
 T-BARS ACVG66=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

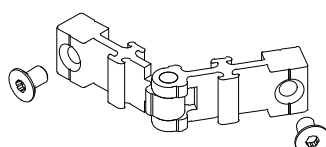
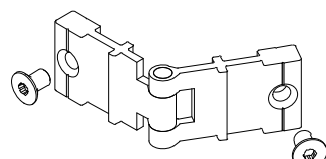
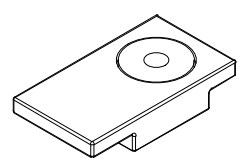
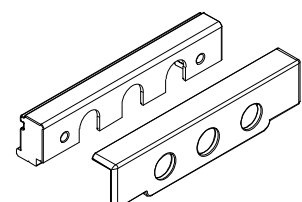
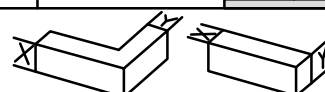
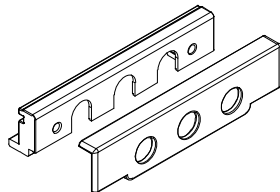
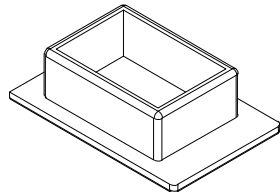
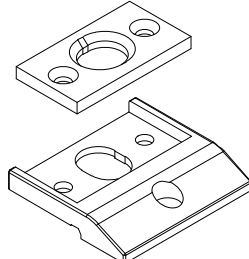
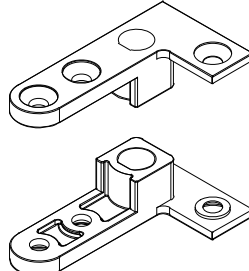
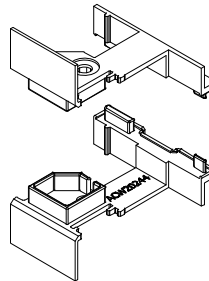
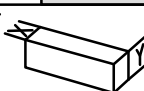
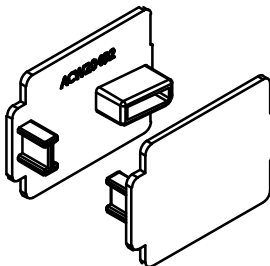
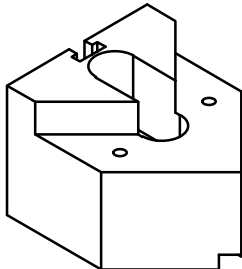
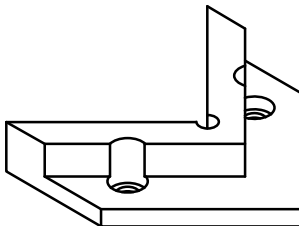
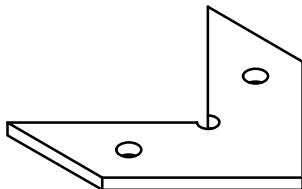
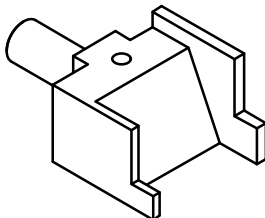
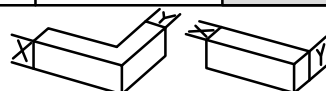
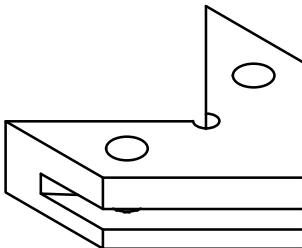
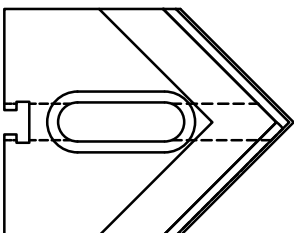
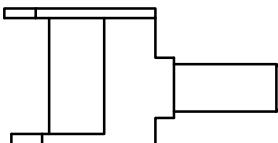
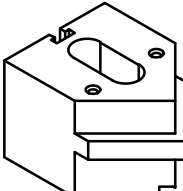
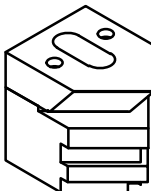
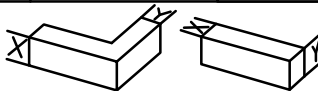
Image	Part Code	Pack	Unit	Application	Colour	
	ACW20165 L/R Art Deco Espag Handle Antique Brass & Satin Nickle Plate Included Screws	1	each	ACW201 ACW202 ACW203 ACW204 ACW205	MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	
					Z	
					PC	
	ACW20220 Variable Cleat	24	pack	W20110	MF	✓
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	
					Z	
					PC	
	ACW20221 Variable Cleat	24	pack	W20120	MF	✓
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	
					Z	
					PC	
	ACW20225 M4 Fixing Plate	10	pack	W20024 W20025 W20026 W20028 W20029	MF	✓
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	
					Z	
					PC	
	ACW20228 24mm Handle Fixing Block 2 piece	1	each	W20027 W20127 W20168N	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	
	ACW20229 28mm Handle Fixing Block 2 piece	1	each	W20027 W20127 W20171	MF	✓
					SA	
					KL	✓
					HP	
					SSC	
					SMC	
					W	✓
					Z	✓
					PC	
	ACW20239 End Cap for W20139	20	pack	W20139	MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	✓
					Z	✓
					PC	
	ACW20241 Keep & Packer	1	kit	W20244 ACUN3050	MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	
					Z	✓
					PC	
	ACW20242 Shootbolt Guide	1	pair	W20244 ACUN3050	MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	
					Z	✓
					PC	
	ACW20244 W20244 End Cap	1	pair	W20244	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		 

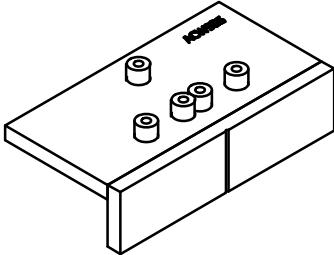
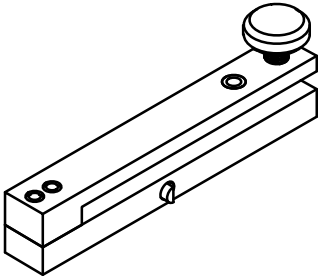
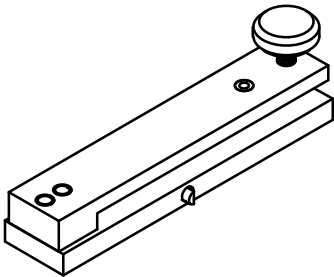
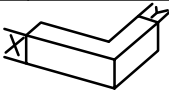
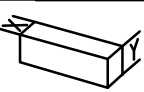
ACCESSORIES : PHOTOS & DRAWINGS

Image	Part Code	Pack	Unit	Application	Colour	
	ACW20492 End Cap for W20492	10	pack	W20492	MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	
					Z	✓
					PC	
	ACW906 Vee Block	1	each	W20024 W20025 W20026 W20028 W20029 W20127 W20047 W20120 W20145 W20147	MF	✓
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	
					Z	
					PC	
	ACW907 5.6mm Tufnel Packer	1	each	W20015 W20016 W20024 W20025 W20047 W20120 W20127 W20145 W20147	MF	✓
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	
					Z	
					PC	
	ACW908 4mm Packer	1	each	W20026 W20028 W20047 W20145	MF	✓
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	
					Z	
					PC	
	ACW909 Punches	1	pair	W20024 W20025 W20026 W20028 W20029	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				

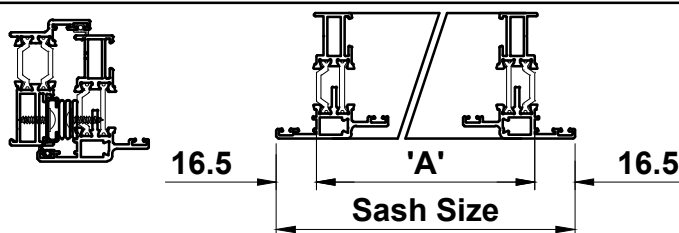
ACCESSORIES : PHOTOS & DRAWINGS

Image	Part Code	Pack	Unit	Application	Colour	
	ACW916 Support Packer	1	each	W20017	MF	✓
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	
					Z	
					PC	
	ACW918 Vee Block	1	each	W20018	MF	✓
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	
					Z	
					PC	
	ACW919 Punches	1	pair	W20120 W20145	MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	
					Z	
					PC	
	ACW922 Vee Block	1	each	W20110	MF	✓
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	
					Z	
					PC	
	ACW926 Vee Block	1	each	W20114	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
	ACW935 Transom Drill Jig	1	each	ACW20135 W20130	MF ☒
					SA ☐
					KL ☐
					HP ☐
					SSC ☐
					SMC ☐
					W ☐
					Z ☐
					PC ☐
	ACW937 Drill Jig for W20110	1	each	ACW20220 W20110	MF ☒
					SA ☐
					KL ☐
					HP ☐
					SSC ☐
					SMC ☐
					W ☐
					Z ☐
					PC ☐
	ACW938 Drill Jig for W20120	1	each	ACW20221 W20120	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				 

Friction Hinge Stays
13mm Stack (Standard)



Top Hung Windows

Top Hung	Type of Hinge / Stay	Max. Vent	Height ('A')		Opening Angle (+/- 2.5°)
		Weight (kgs)	Minimum	Maximum	
ACINDS10	Standard	16	275	400	80°
ACINDS16		21	400	780	80°
ACINDS20		26	700	1100	50°
ACINDS24		40	850	1300	37.5°
ACINDP24		50	850	1500	32°
ACINDA10	Austenitic	16	275	400	80°
ACINDA16		21	400	780	80°
ACINDA20		26	700	1100	50°
ACINDA24		40	850	1300	37.5°
ACINDR12	Restricted	20	350	550	14°/65°
ACINDR16		21	500	780	10°/59°
ACINDR20		26	700	1100	8°/50°
ACINDR24		40	850	1300	7°/37.5°

Side Hung Windows

Side Hung	Type of Hinge / Stay	Max. Vent	Width ('A')		Opening Angle (+/- 2.5°)
		Weight (kgs)	Minimum	Maximum	
ACINDSSH12	Standard	22	300	600	60°
ACINDSSH16		24	400	600	60°
ACINDASH12	Austenitic	22	300	600	60°
ACINDASH16		24	400	600	60°
ACETSH1312L ACETSH1312R	Restricted Left Hand R/H Non-Restricted Right Hand L/H Non-Restricted	22	300	600	13°/58°
ACETSH1316L ACETSH1316R	VIEWED FROM OUTSIDE L/H Restricted R/H Restricted	24	400	600	11°/58°
ACETME13	Egress *use with ACET352 pull in blocks	40	365	865	90°

Note1: Vent Height / Width is measured in mm from rebate to rebate (not overall size or outer frame)

Note2: Top hung height and side hung width sizes to be reduced by 2mm where size is 450mm or smaller

Note3: Typical Dimensions based on Max. Size and Glass 30kg/metre

Note4: For additional security use ACET513 hinge protectors

Note5: Kitemark specification covers Top Hung Max. height up to 1400mm. ACINDP24 Max. height is 1500mm

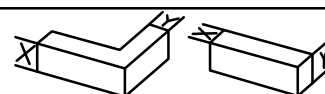
Note6: For sashes over 600mm, ACETME99 is recommended for ACETME13 to disable easy clean function

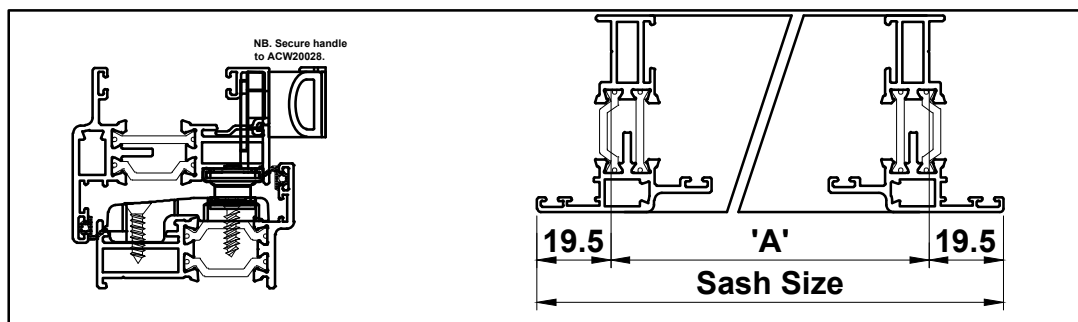


T-BARS
ACVG66=2.5mm
ACVG66=3.0mm
ACVL150=4.0mm



Screw (Grub)





Part Code	Rod Length (mm)	Number of Keeps	Sash Rebate Size ('A')	
			Minimum	Maximum
ACW201L	335	2	340	505
ACW201R				
ACW202L	500	2	506	755
ACW202R				
ACW203L	750	2	756	1005
ACW203R				
ACW204L	1000	4	1006	1255
ACW204R				
ACW205L	1250	4	1256	1400
ACW205R				

Note:

1, To Suit Handle ACET165.

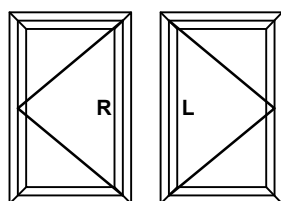
2, Not suitable for W20122.

3, When using ACW20060 as a window hinge, locks require a further 2mm deduction from the sash locking edge for sashes between 601-700mm.

Cam Locking Direction



Cam Locking Direction



OUTSIDE VIEW



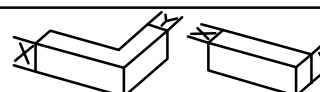
Keep



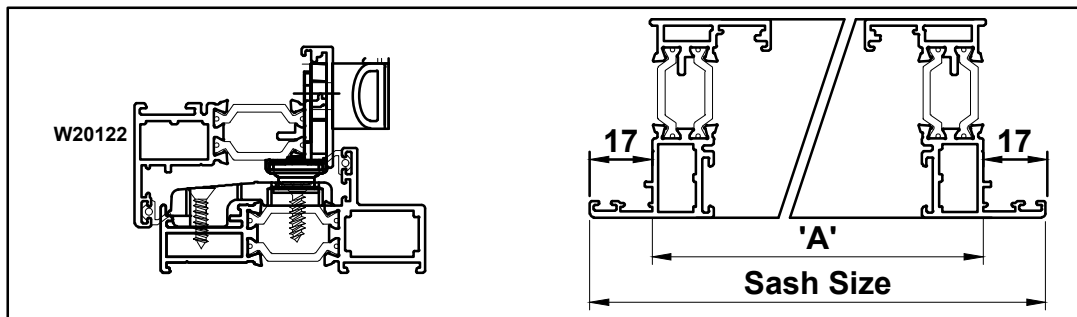
T-BARS
ACVG65=2.5mm
ACVG66=3.0mm
ACVL150=4.0mm



Screw (Grub)

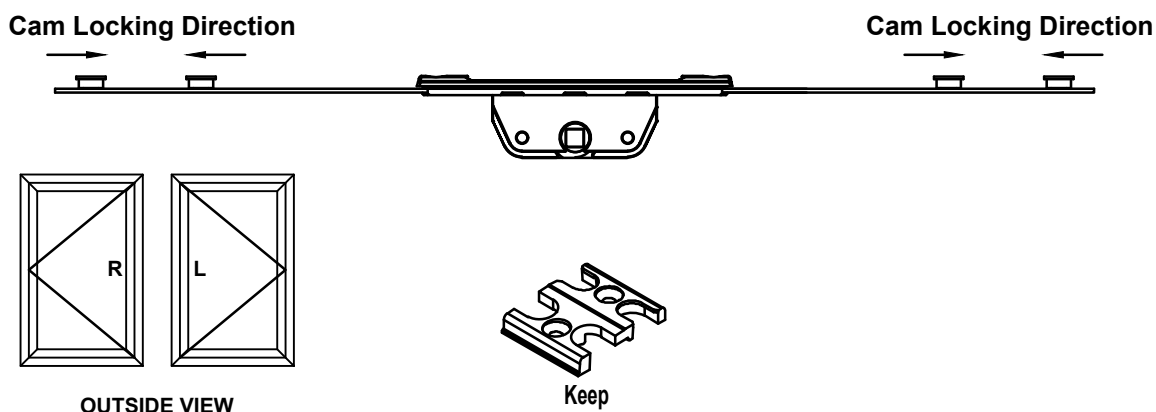


W20122 Lock Options



Part Code	Rod Length (mm)	Number of Keeps	Sash Rebate Size ('A')	
			Minimum	Maximum
ACET301L	335	2	340	505
ACET301R				
ACET302L	500	2	506	755
ACET302R				
ACET303L	750	2	756	1005
ACET303R				
ACET304L	1000	4	1006	1255
ACET304R				
ACET305L	1250	4	1256	1400
ACET305R				

Note: To Suit Handle ACET165



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



Screw (Grub)

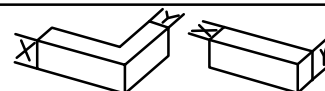


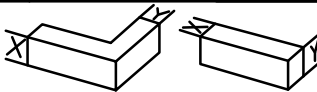
Image	Part Code	Pack	Unit	Application	Colour																		
	ACMX09700 Alu-Polish Cleaning emulsion for aluminium oxide.	1	each		<table><tr><td>MF</td><td>✓</td></tr><tr><td>SA</td><td></td></tr><tr><td>KL</td><td></td></tr><tr><td>HP</td><td></td></tr><tr><td>SSC</td><td></td></tr><tr><td>SMC</td><td></td></tr><tr><td>W</td><td></td></tr><tr><td>Z</td><td></td></tr><tr><td>PC</td><td></td></tr></table>	MF	✓	SA		KL		HP		SSC		SMC		W		Z		PC	
MF	✓																						
SA																							
KL																							
HP																							
SSC																							
SMC																							
W																							
Z																							
PC																							
	ACMX09761 Maxi Gloss Protection for painted and anodised surfaces.	1	each		<table><tr><td>MF</td><td></td></tr><tr><td>SA</td><td></td></tr><tr><td>KL</td><td></td></tr><tr><td>HP</td><td></td></tr><tr><td>SSC</td><td></td></tr><tr><td>SMC</td><td></td></tr><tr><td>W</td><td></td></tr><tr><td>Z</td><td></td></tr><tr><td>PC</td><td></td></tr></table>	MF		SA		KL		HP		SSC		SMC		W		Z		PC	
MF																							
SA																							
KL																							
HP																							
SSC																							
SMC																							
W																							
Z																							
PC																							
	ACMX09762 Alu. Bright Cleaner for rough, anodised or enamelled aluminium frames.	1	each		<table><tr><td>MF</td><td></td></tr><tr><td>SA</td><td></td></tr><tr><td>KL</td><td></td></tr><tr><td>HP</td><td></td></tr><tr><td>SSC</td><td></td></tr><tr><td>SMC</td><td></td></tr><tr><td>W</td><td></td></tr><tr><td>Z</td><td></td></tr><tr><td>PC</td><td></td></tr></table>	MF		SA		KL		HP		SSC		SMC		W		Z		PC	
MF																							
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KL																							
HP																							
SSC																							
SMC																							
W																							
Z																							
PC																							
	ACMX09763 Teflon Spray Lubricant	1	each		<table><tr><td>MF</td><td></td></tr><tr><td>SA</td><td></td></tr><tr><td>KL</td><td></td></tr><tr><td>HP</td><td></td></tr><tr><td>SSC</td><td></td></tr><tr><td>SMC</td><td></td></tr><tr><td>W</td><td></td></tr><tr><td>Z</td><td></td></tr><tr><td>PC</td><td></td></tr></table>	MF		SA		KL		HP		SSC		SMC		W		Z		PC	
MF																							
SA																							
KL																							
HP																							
SSC																							
SMC																							
W																							
Z																							
PC																							
	ACMX09764 Maxi Cleaner For cleaning oily surfaces.	1	each		<table><tr><td>MF</td><td></td></tr><tr><td>SA</td><td></td></tr><tr><td>KL</td><td></td></tr><tr><td>HP</td><td></td></tr><tr><td>SSC</td><td></td></tr><tr><td>SMC</td><td></td></tr><tr><td>W</td><td></td></tr><tr><td>Z</td><td></td></tr><tr><td>PC</td><td></td></tr></table>	MF		SA		KL		HP		SSC		SMC		W		Z		PC	
MF																							
SA																							
KL																							
HP																							
SSC																							
SMC																							
W																							
Z																							
PC																							
 T-BARS ACVG66=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																						

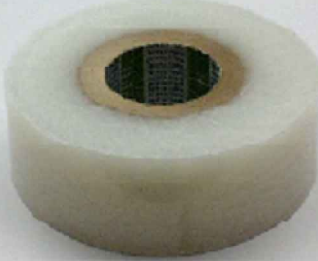
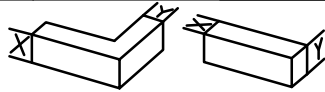
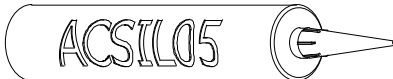
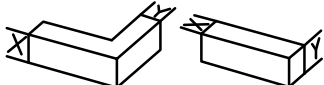
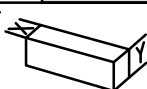
Image	Part Code	Pack	Unit	Application	Colour
	ACMX09765 Glue Cleaner De-grease and silicone remover (1 Litre).	1	each		MF
					SA
					KL
					HP
					SSC
					SMC
					W
					Z
					PC
	ACMX09770 Roll & Wrap 100mm	1	each		MF
					SA
					KL
					HP
					SSC
					SMC
					W
					Z
					PC
	ACMX09775 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 ACVG66=2.5mm ACVG66=3.0mm ACVL150=4.0mm  Screw (Grub)		W = White Z = Black			
MF = Mill Finish SA = Silver Anodised KL = Basic Colour HP = Special Colour SSC = Smooth Satin Chrome SMC = Smokey Chrome PC = Polished Chrome					

Image	Part Code	Pack	Unit	Application	Colour
	ACMX09803 Protective Tape 100mm	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
	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
	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		

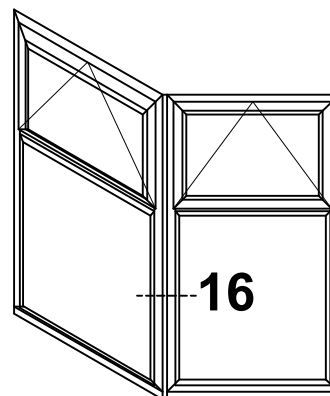
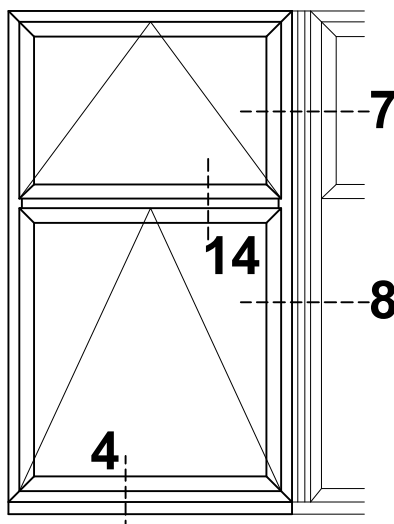
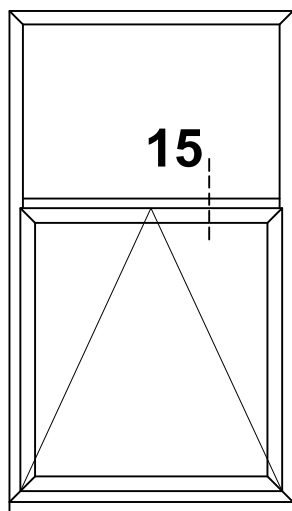
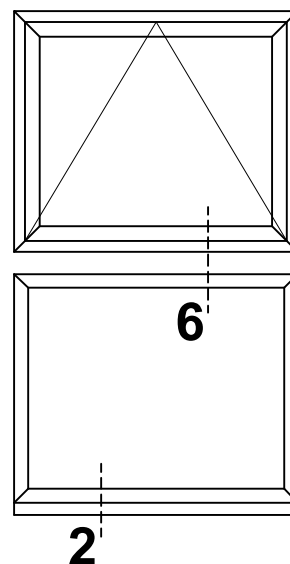
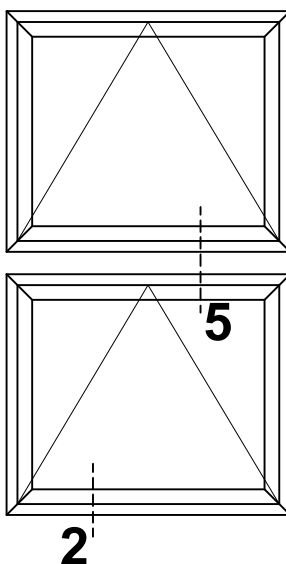
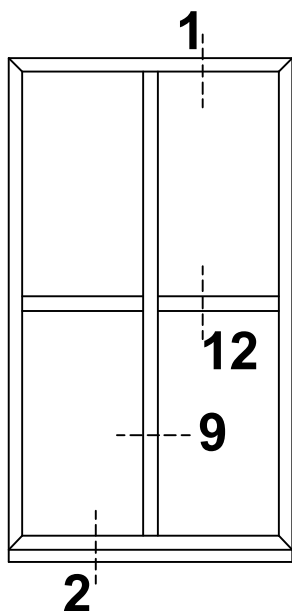
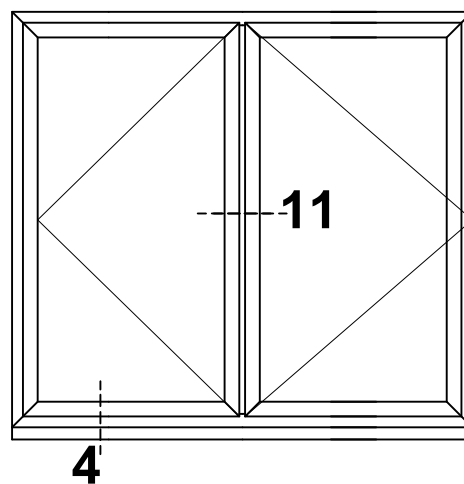
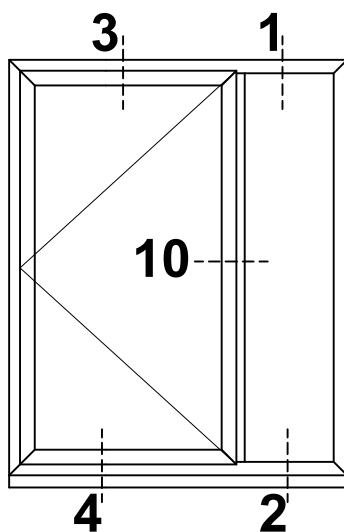
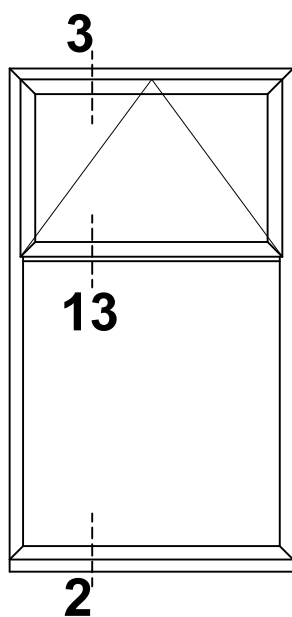
STANDARD ACCESSORIES

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	Wedge Gaskets	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	
				 		

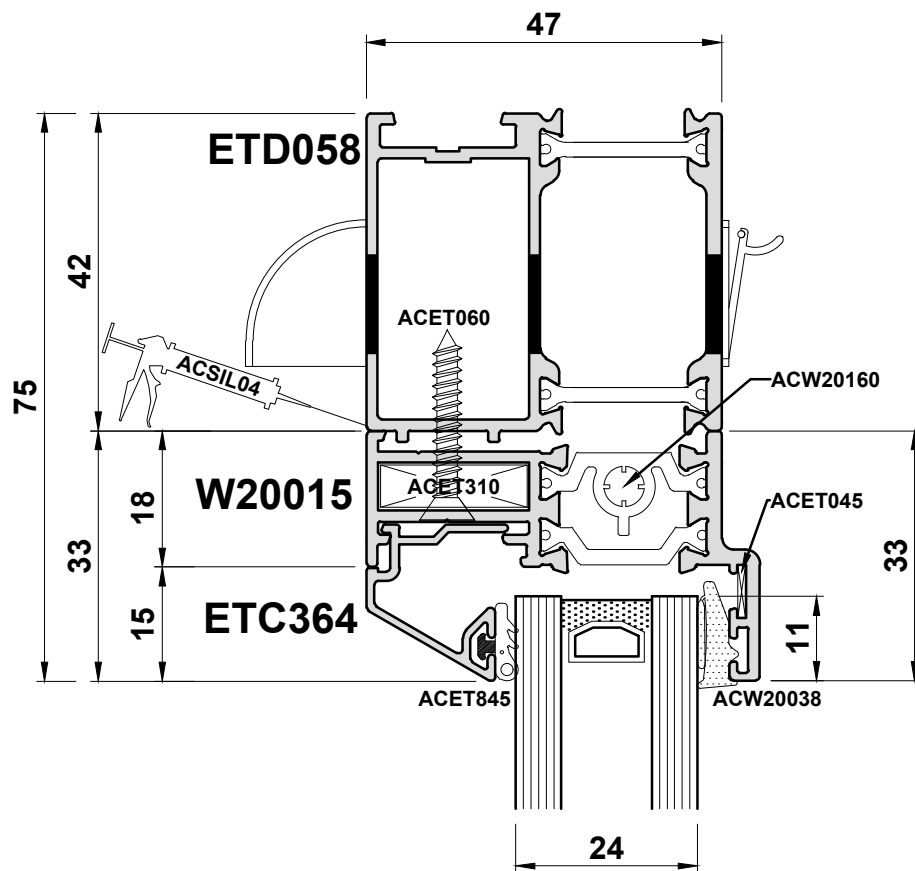
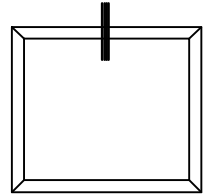
Section C

Sections

Scale Elevations

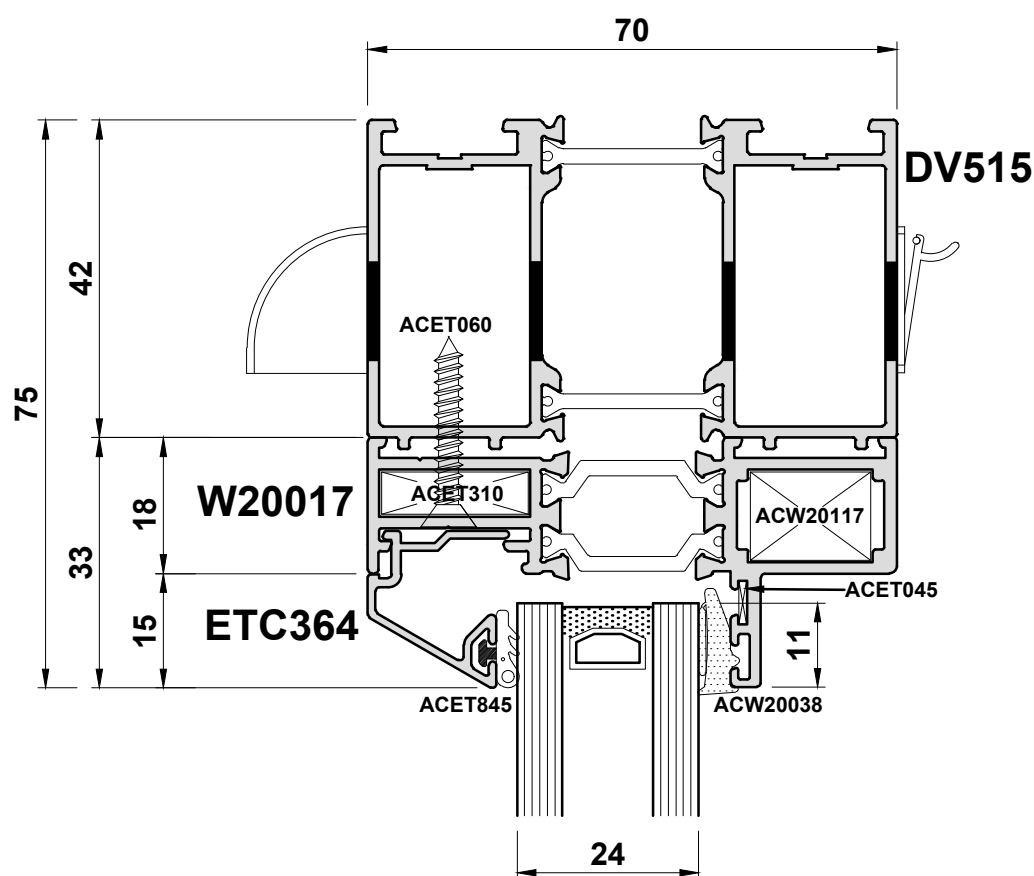
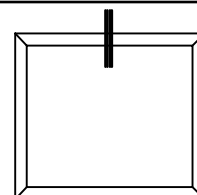


Detail 1A



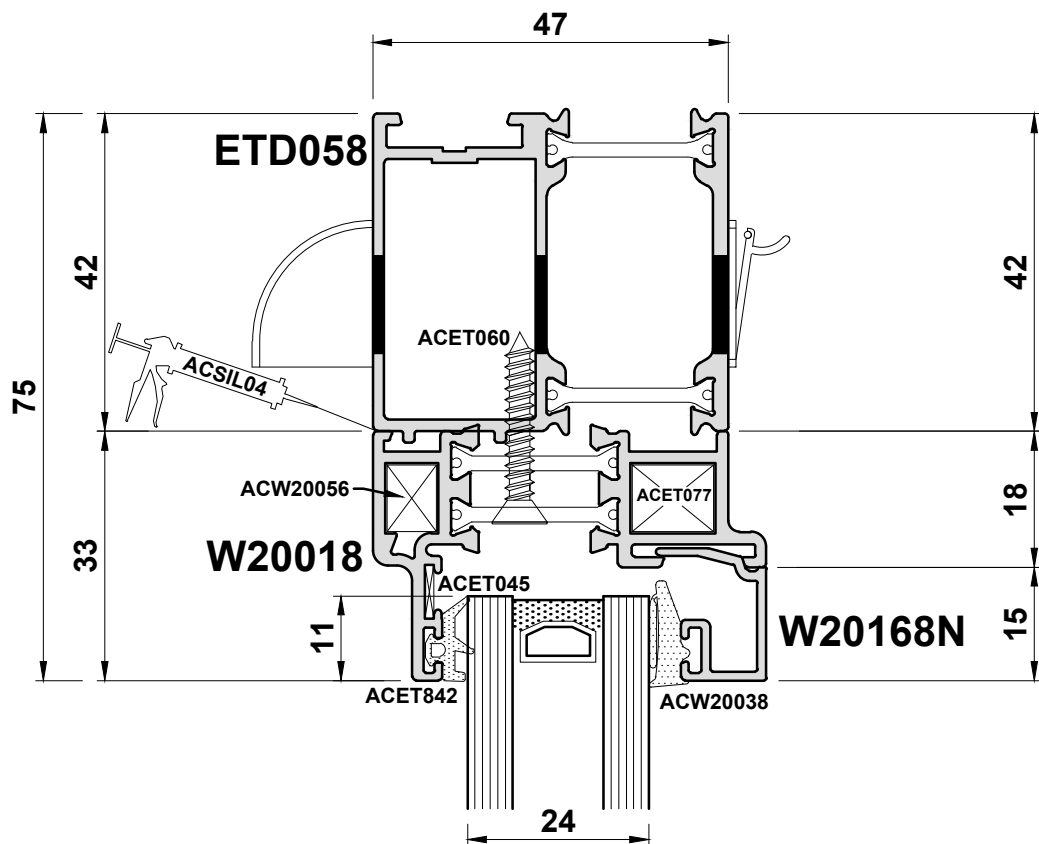
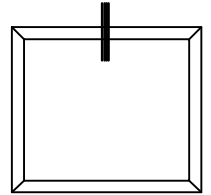
Do Not Scale From This Drawing

Detail 1B



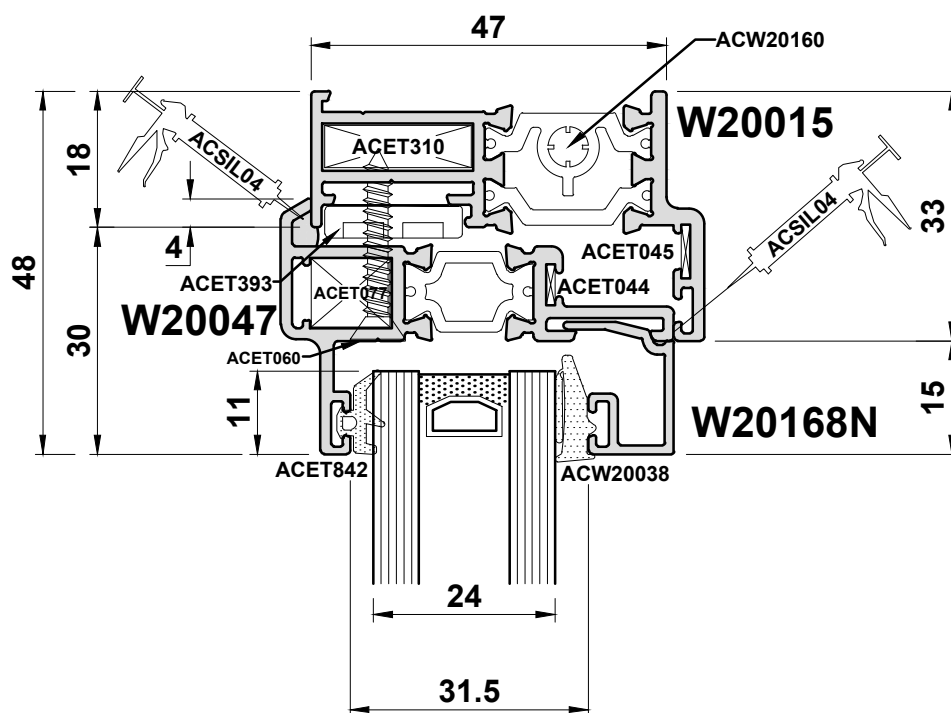
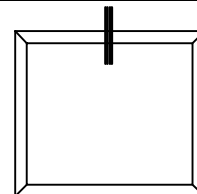
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Detail 1C



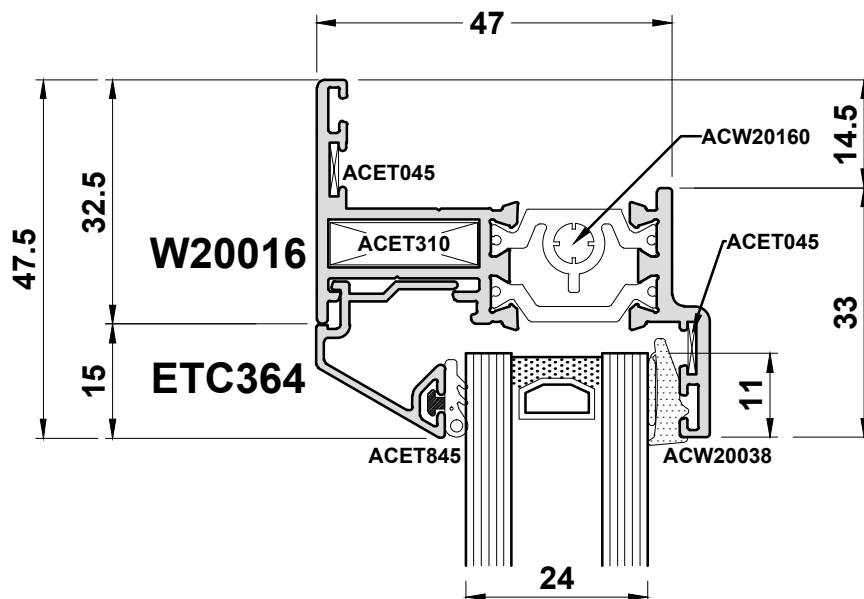
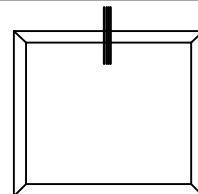
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Detail 1D



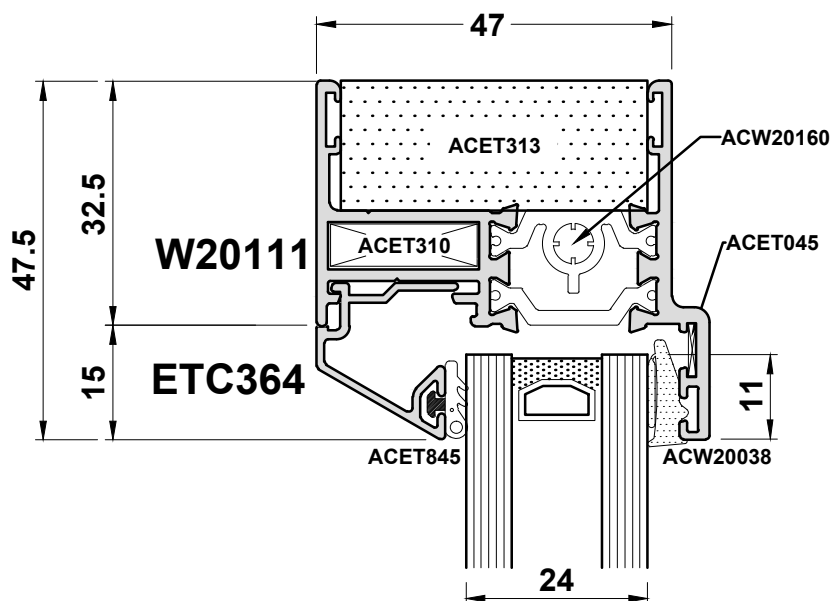
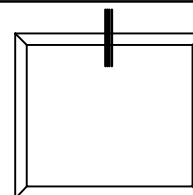
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Detail 1E



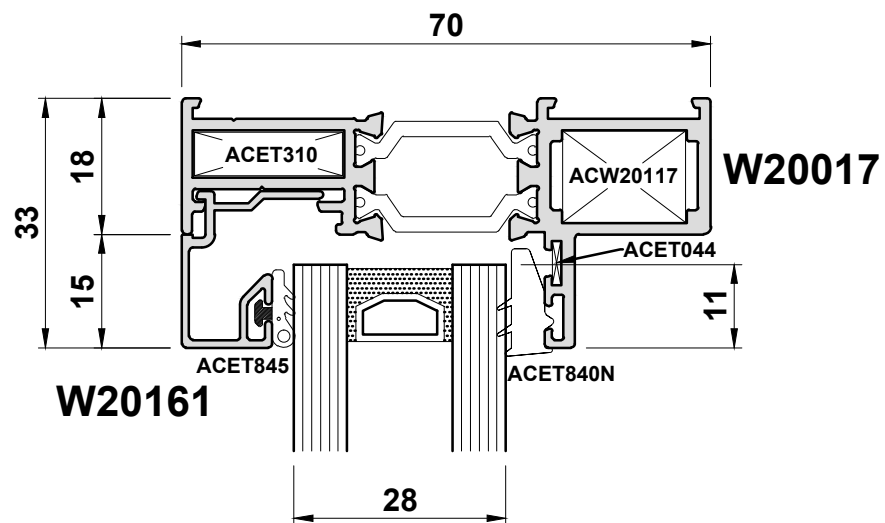
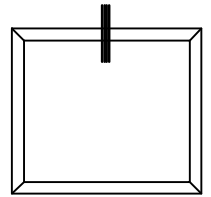
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Detail 1F



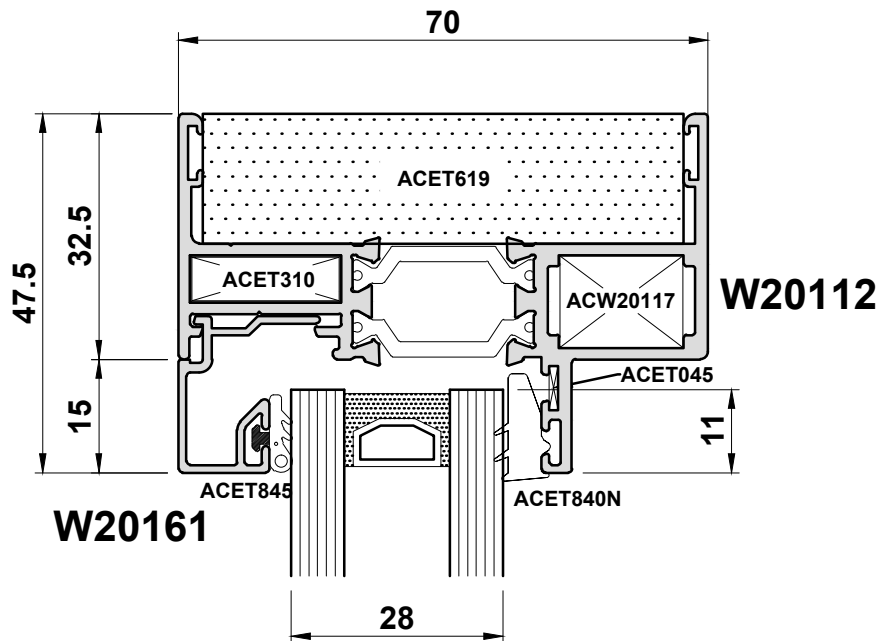
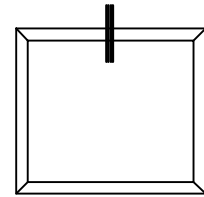
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Detail 1G



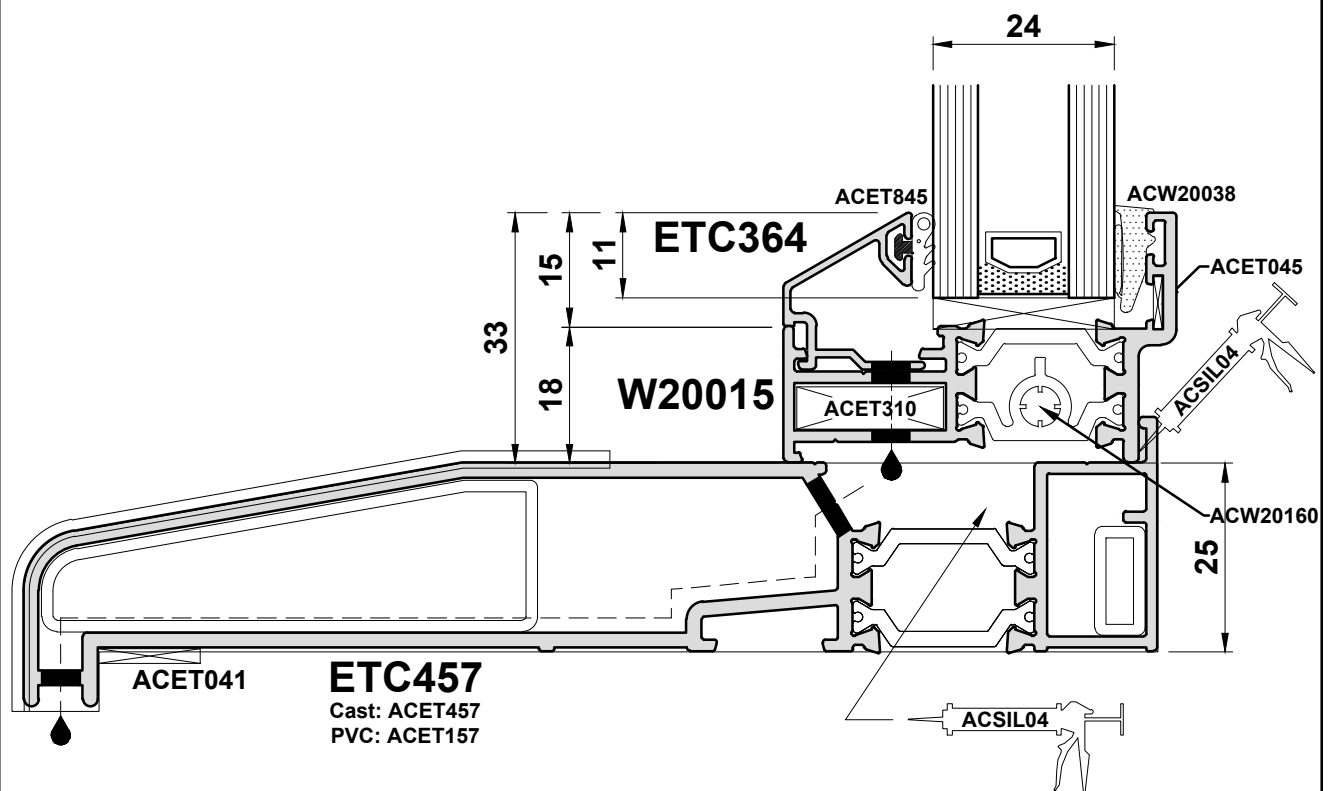
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Detail 1H



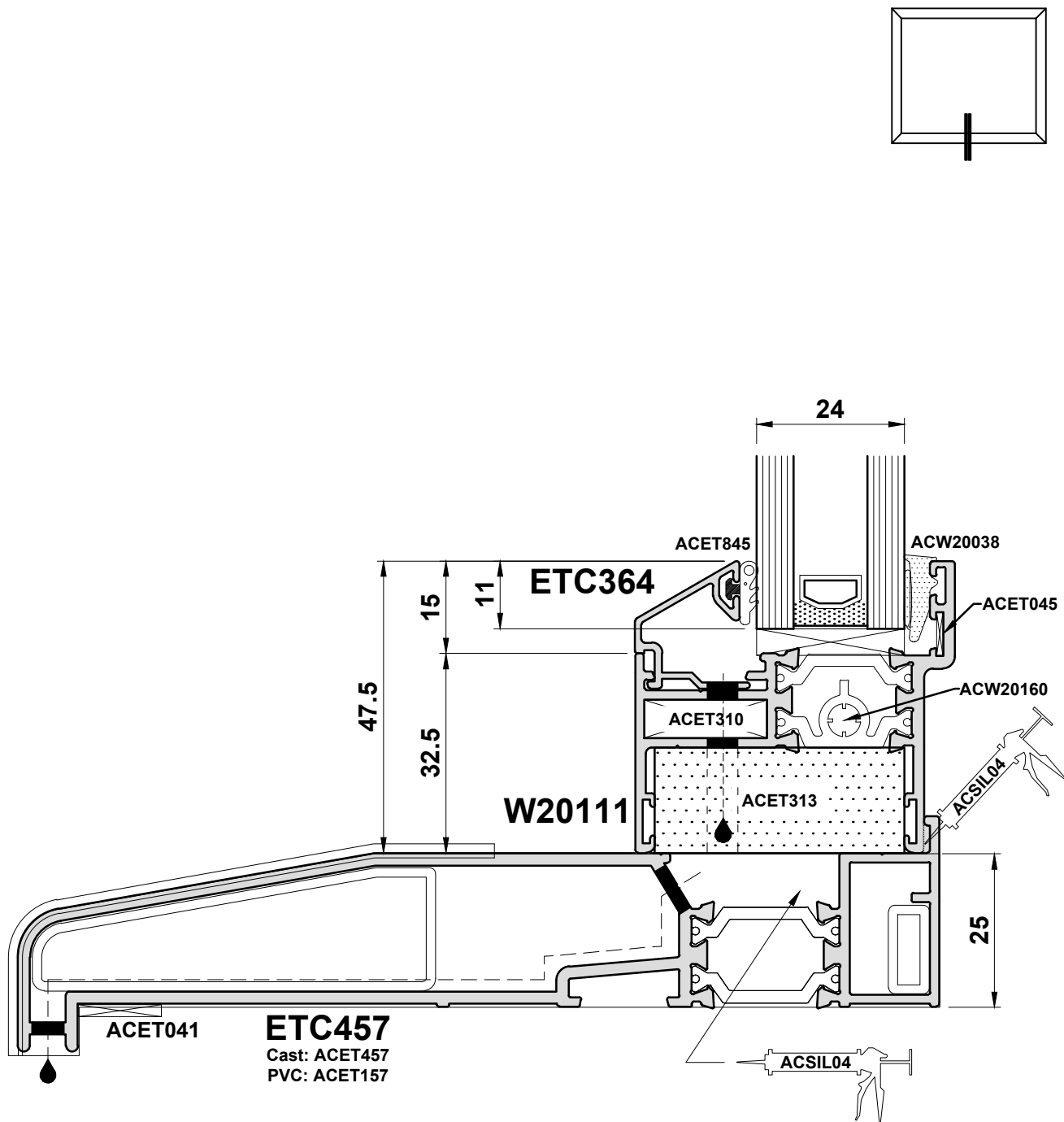
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Detail 2A



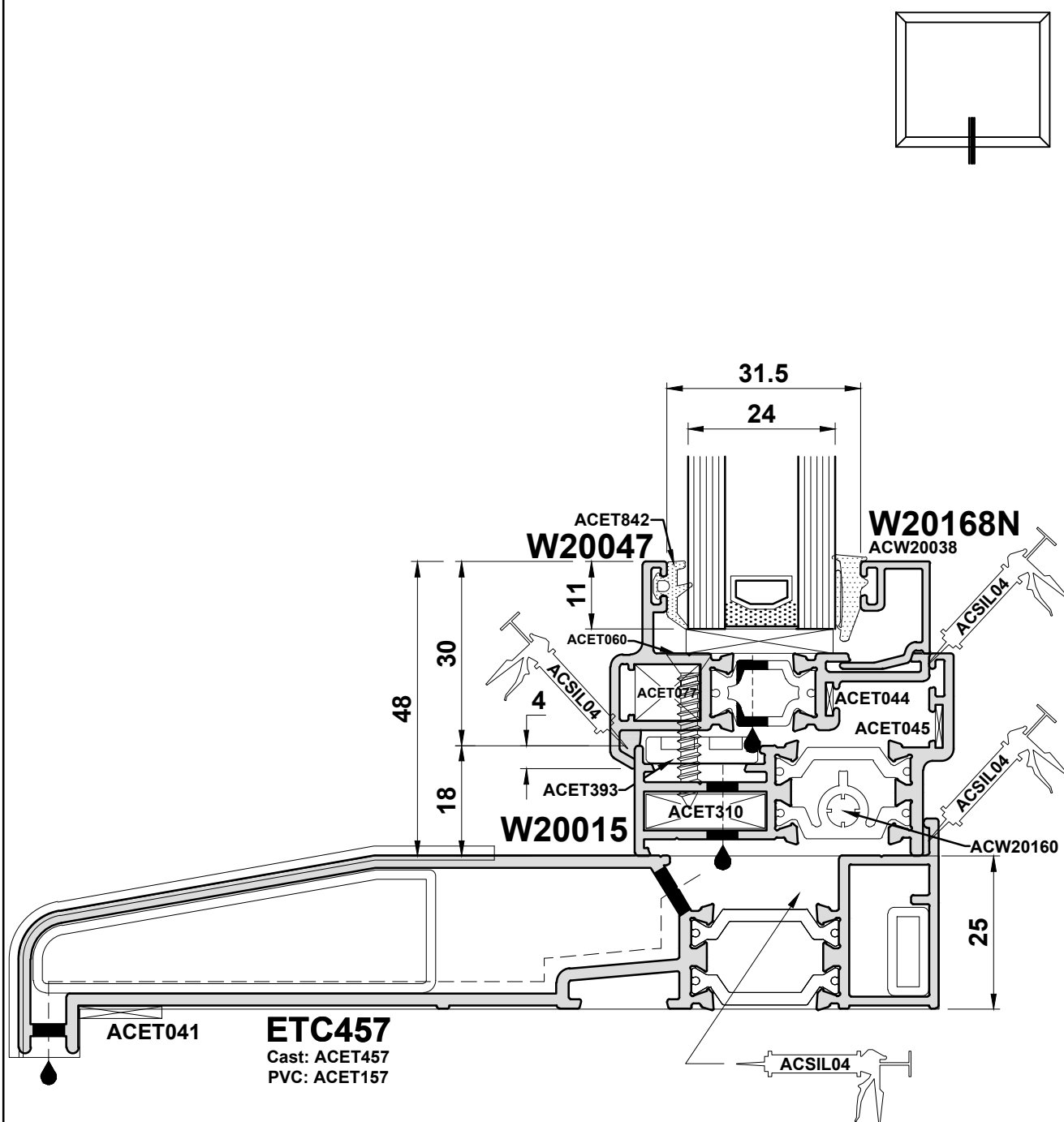
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Detail 2B



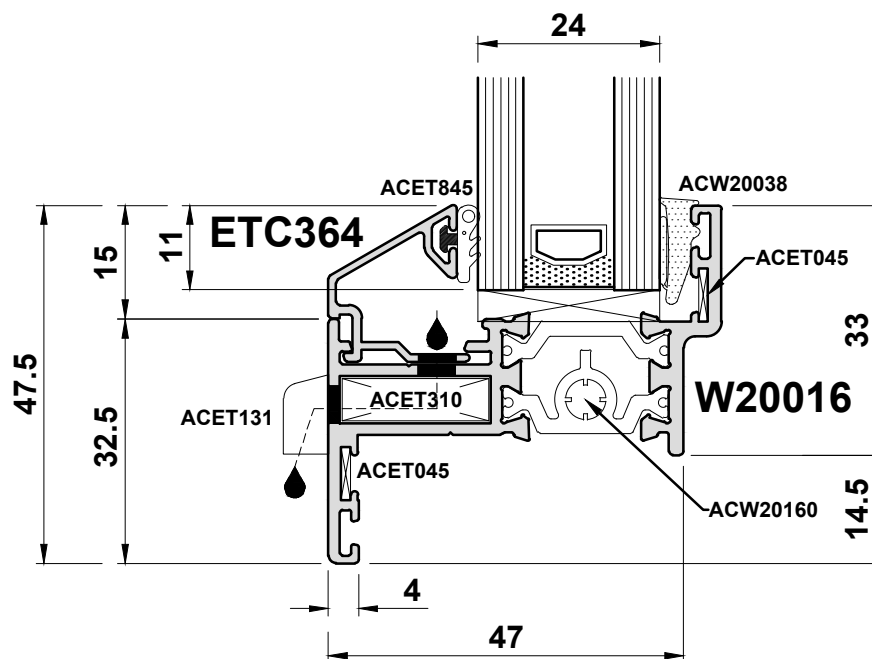
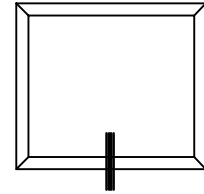
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Detail 2C



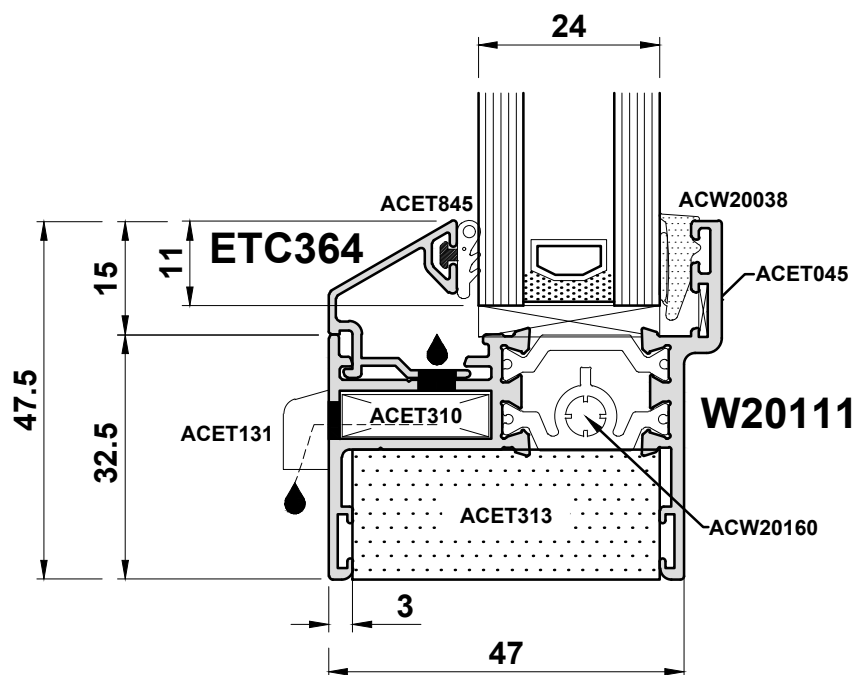
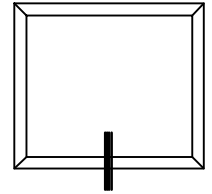
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Detail 2D



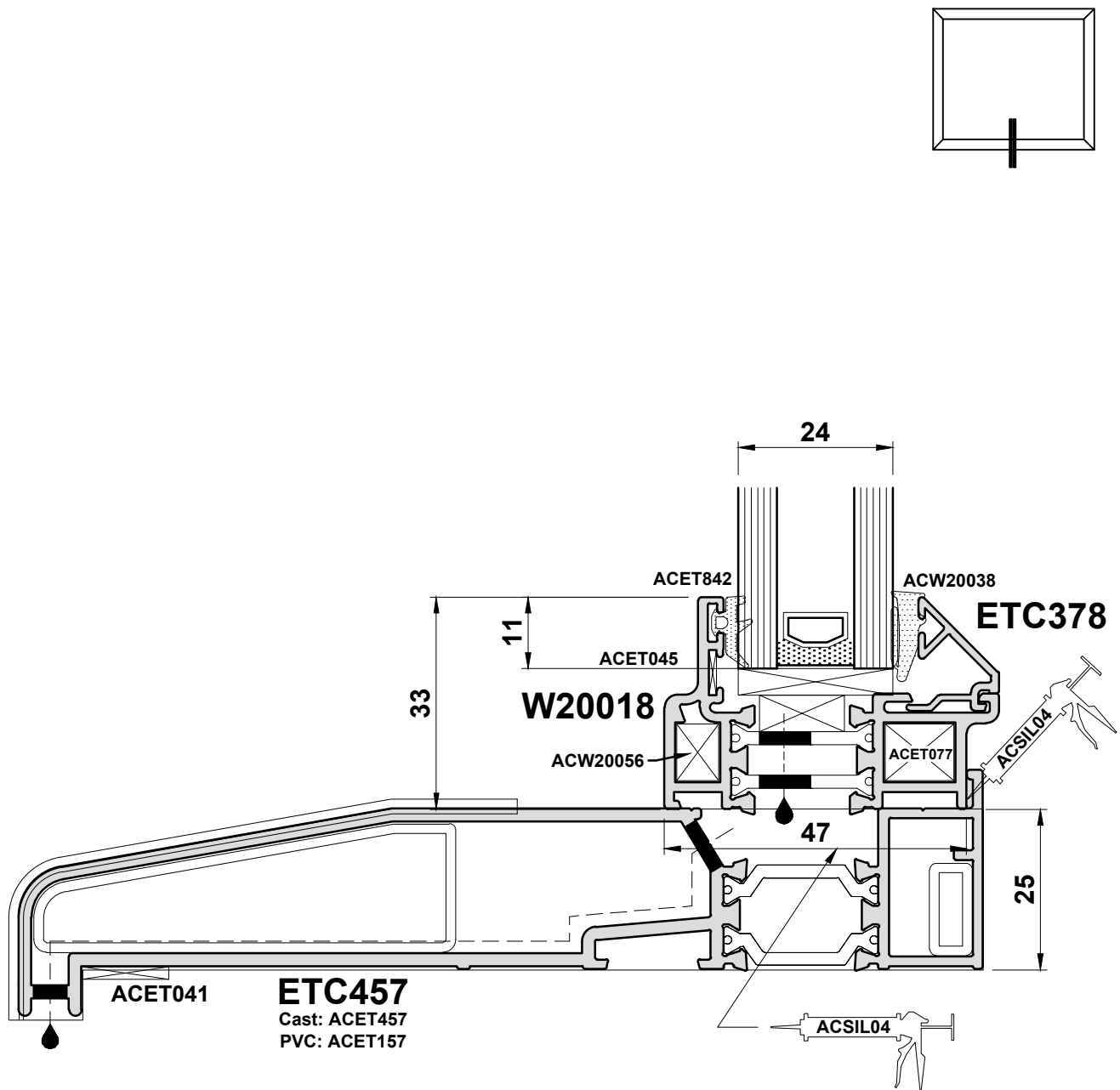
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Detail 2E



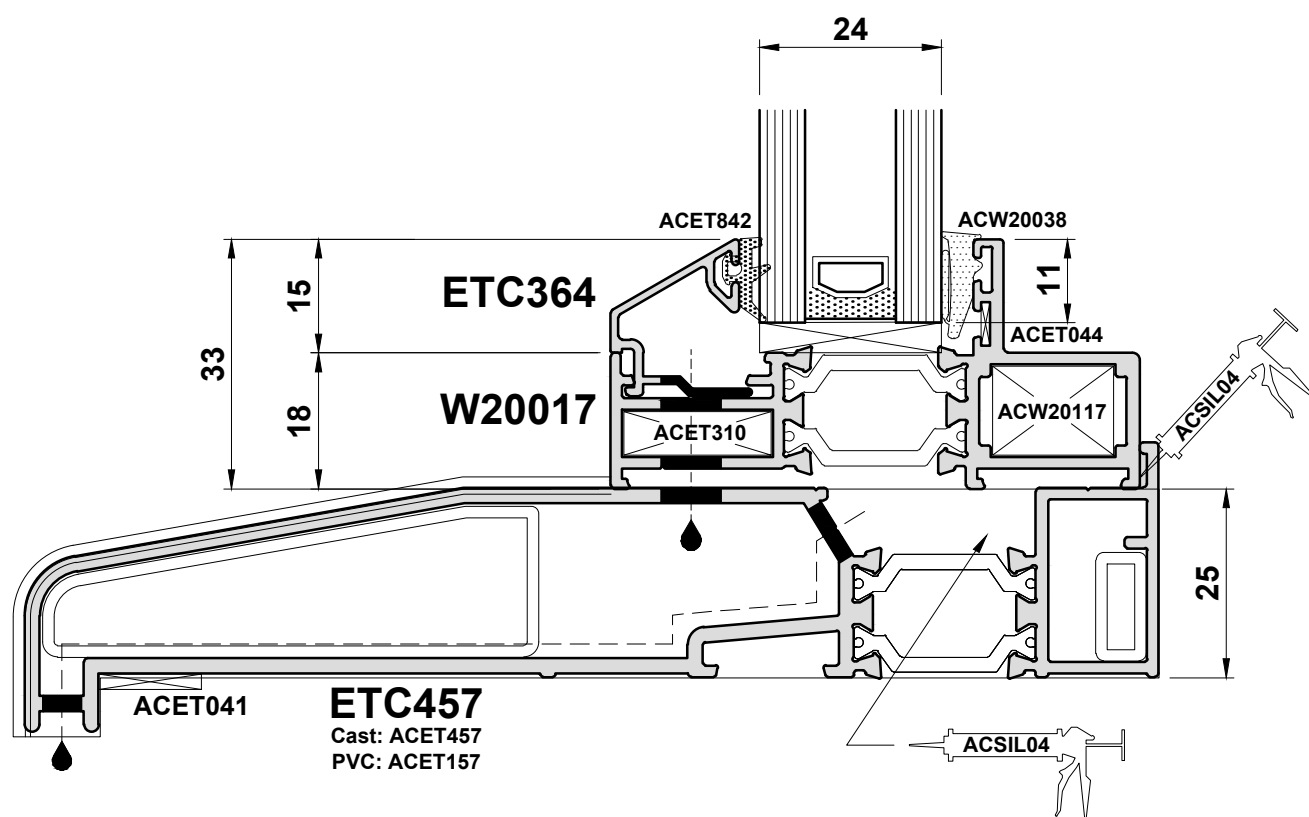
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Detail 2F



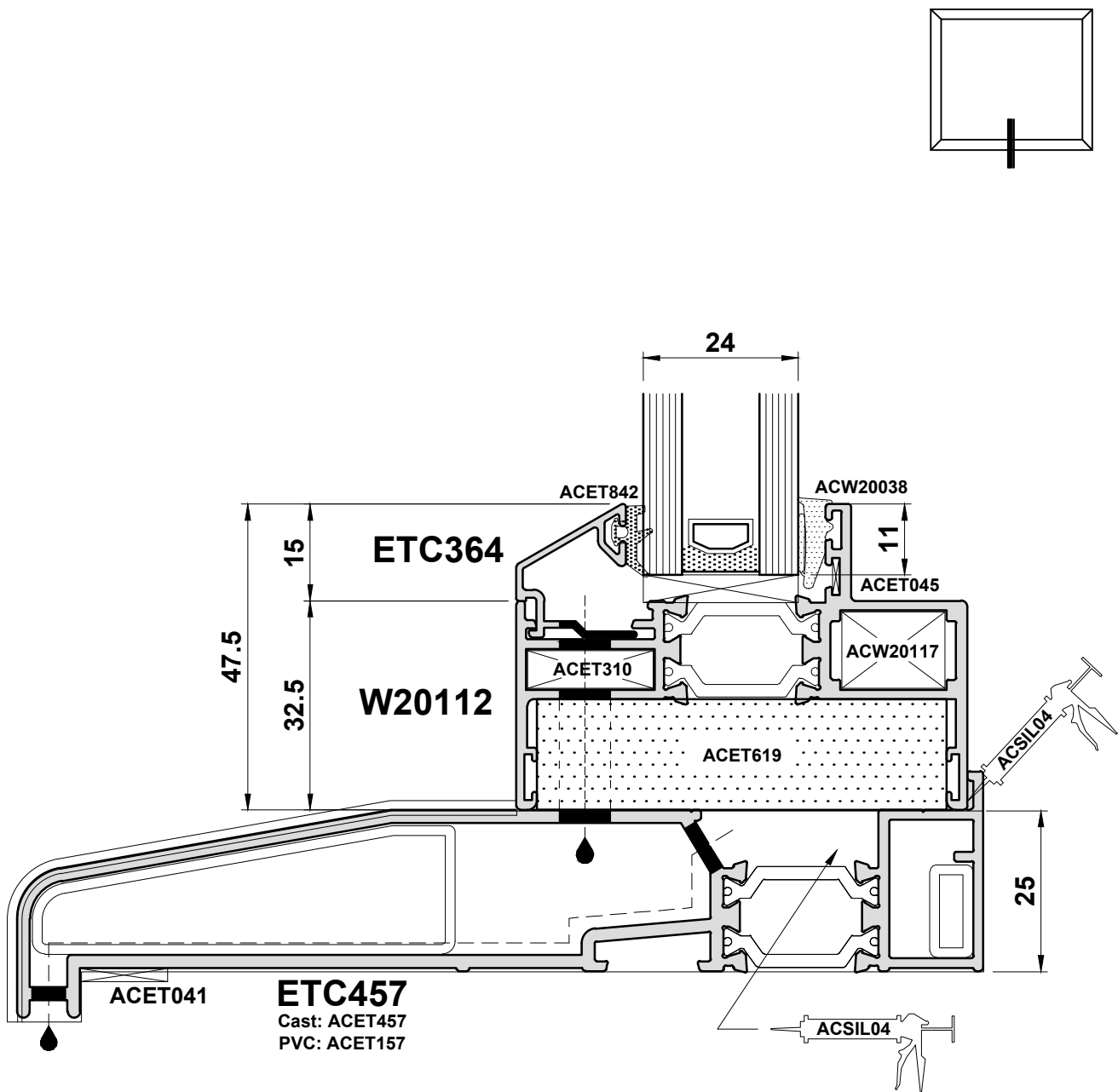
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Detail 2G



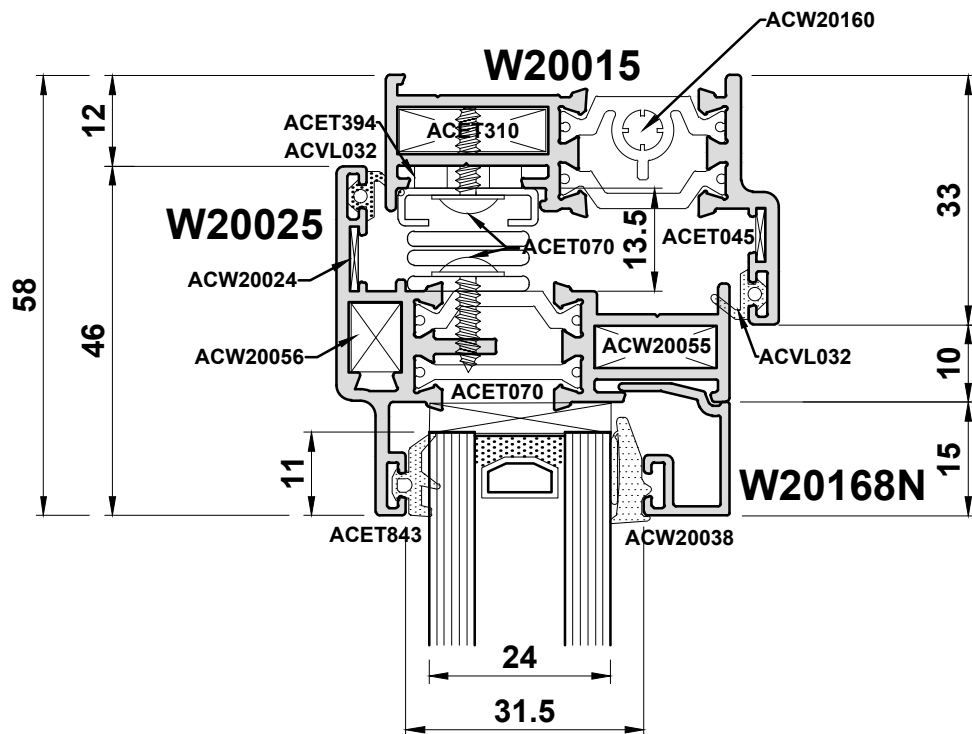
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Detail 2H



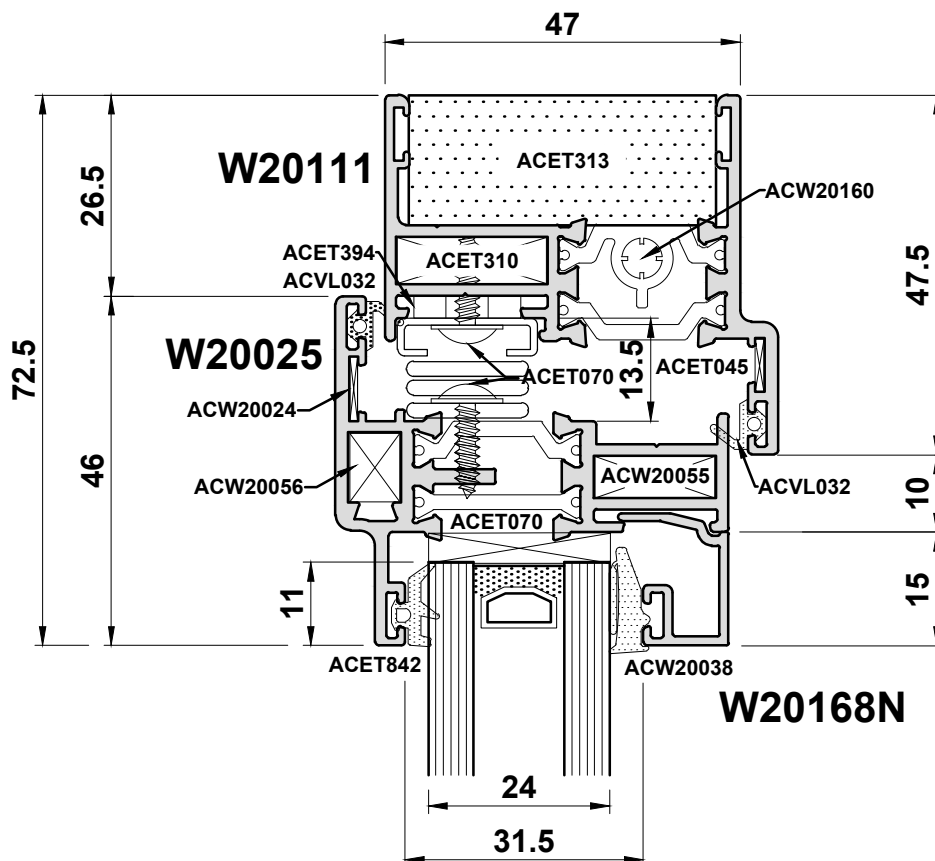
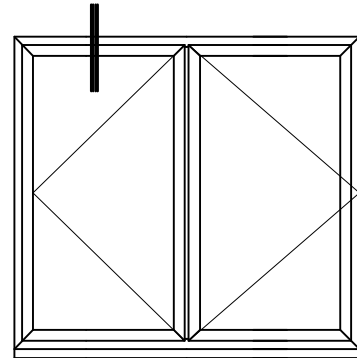
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Detail 3A



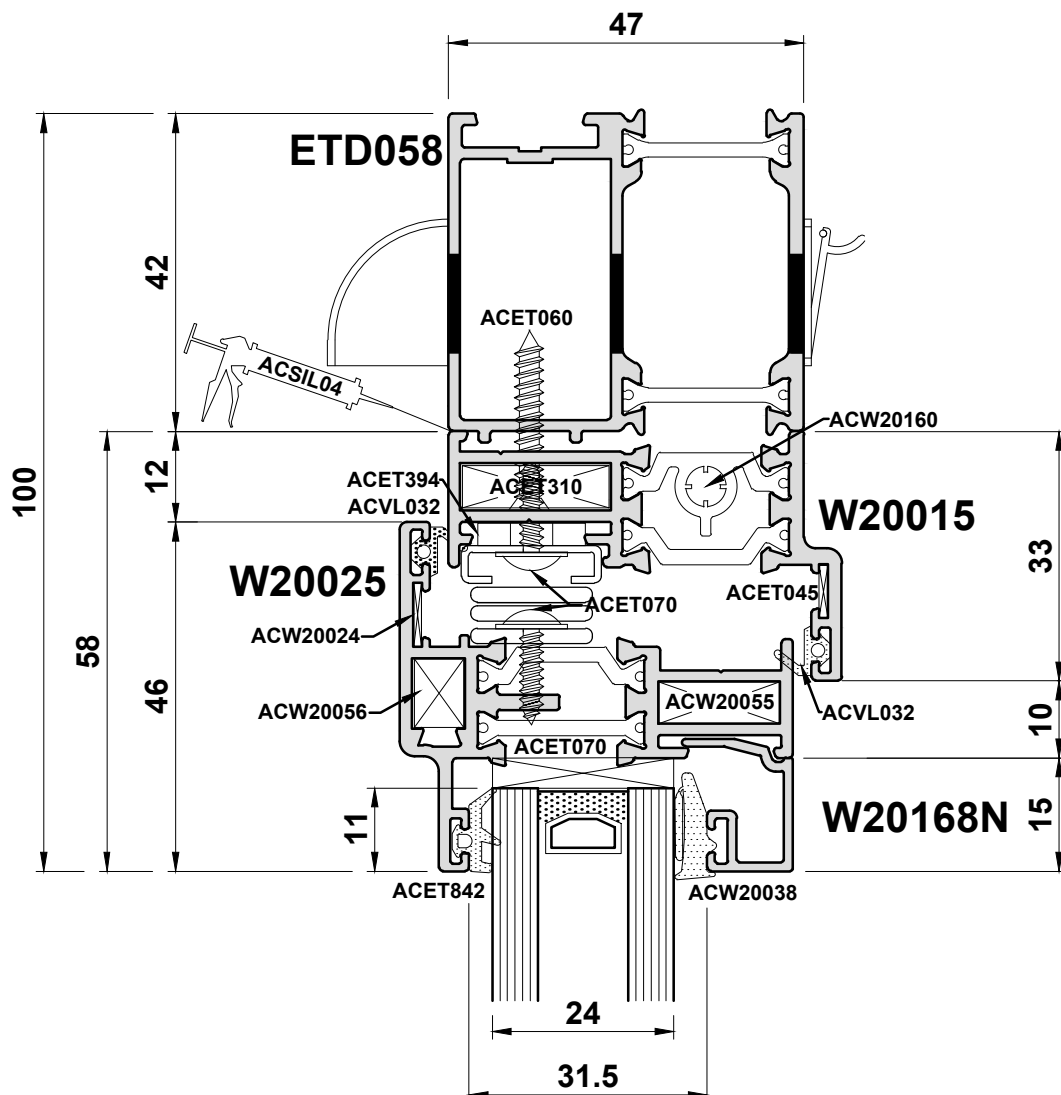
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Detail 3B



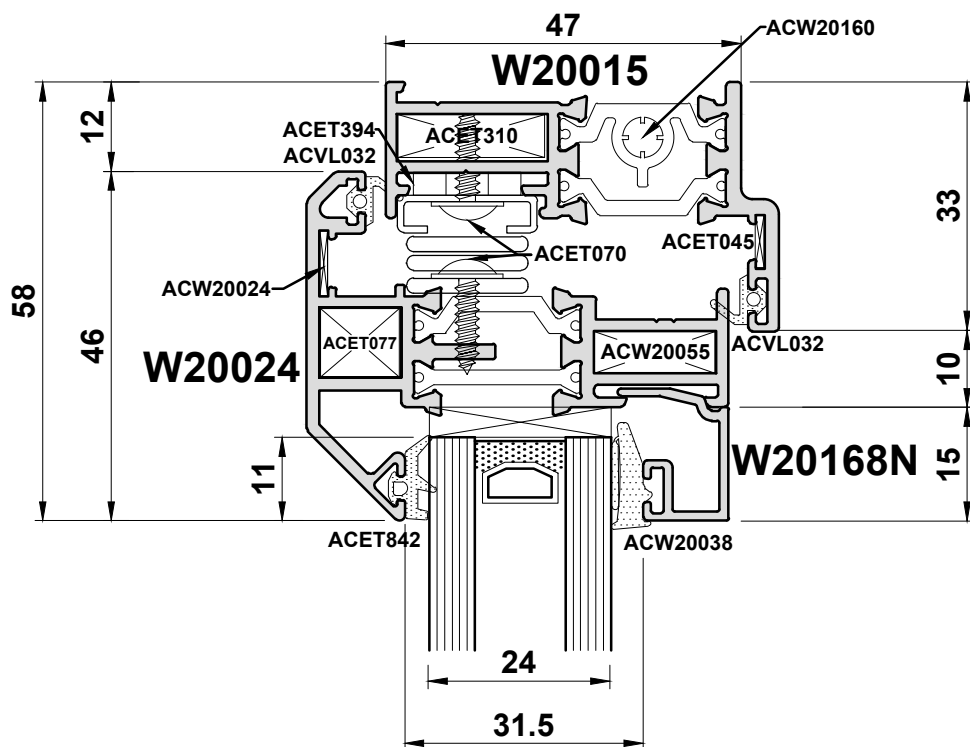
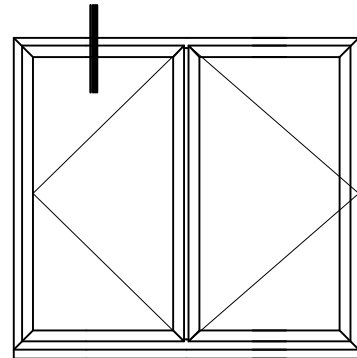
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Detail 3C



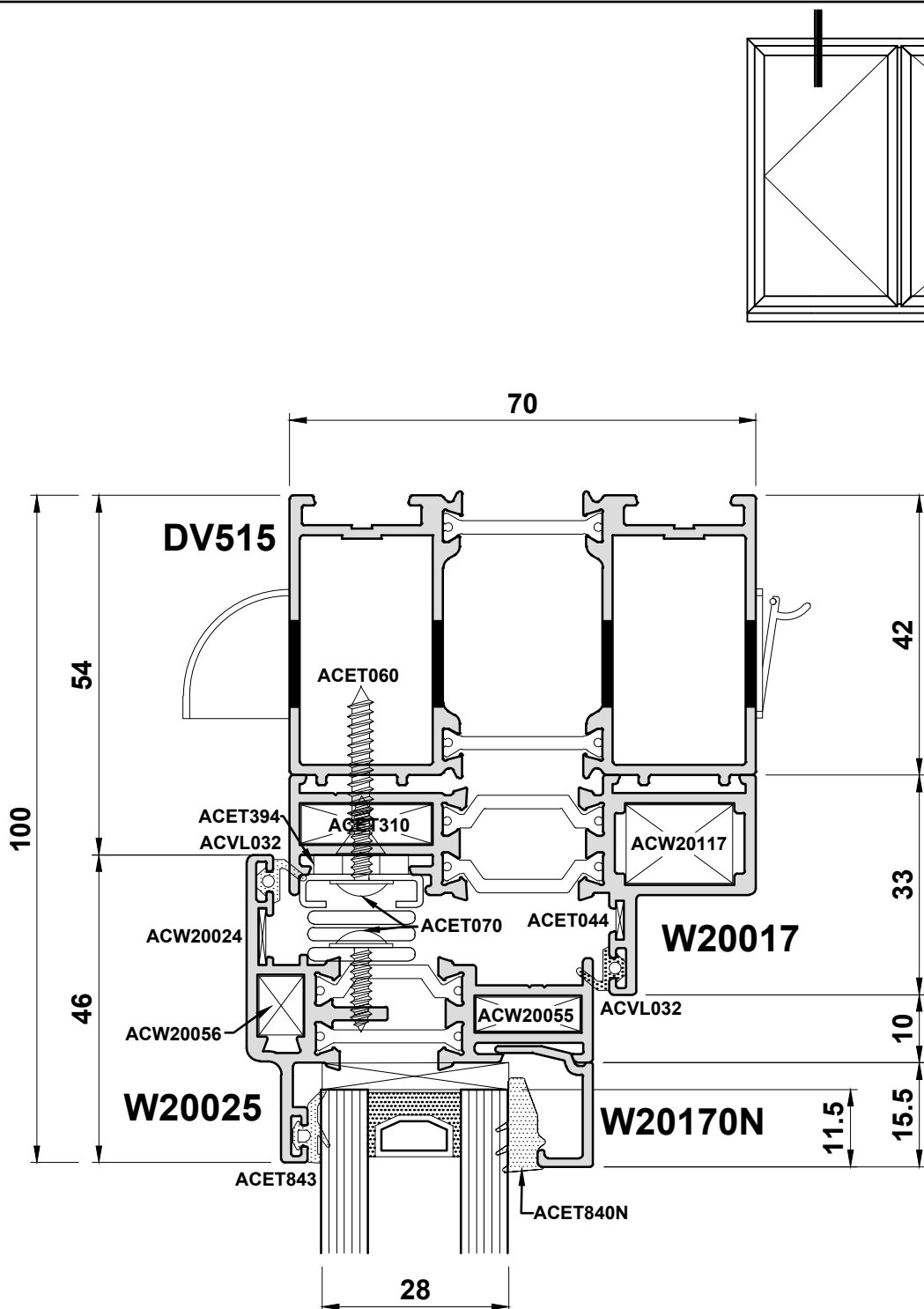
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Detail 3D



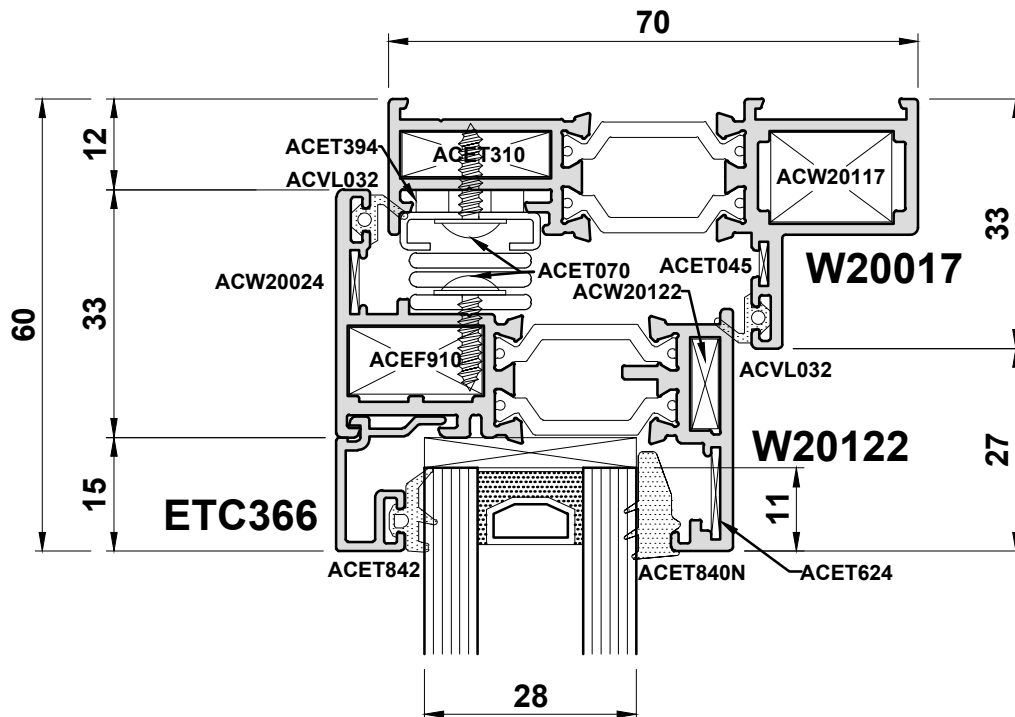
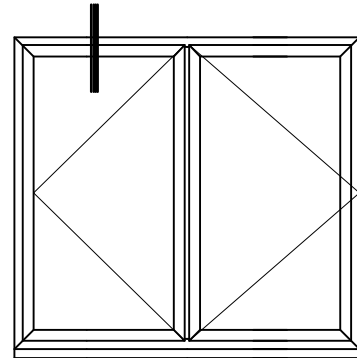
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Detail 3E



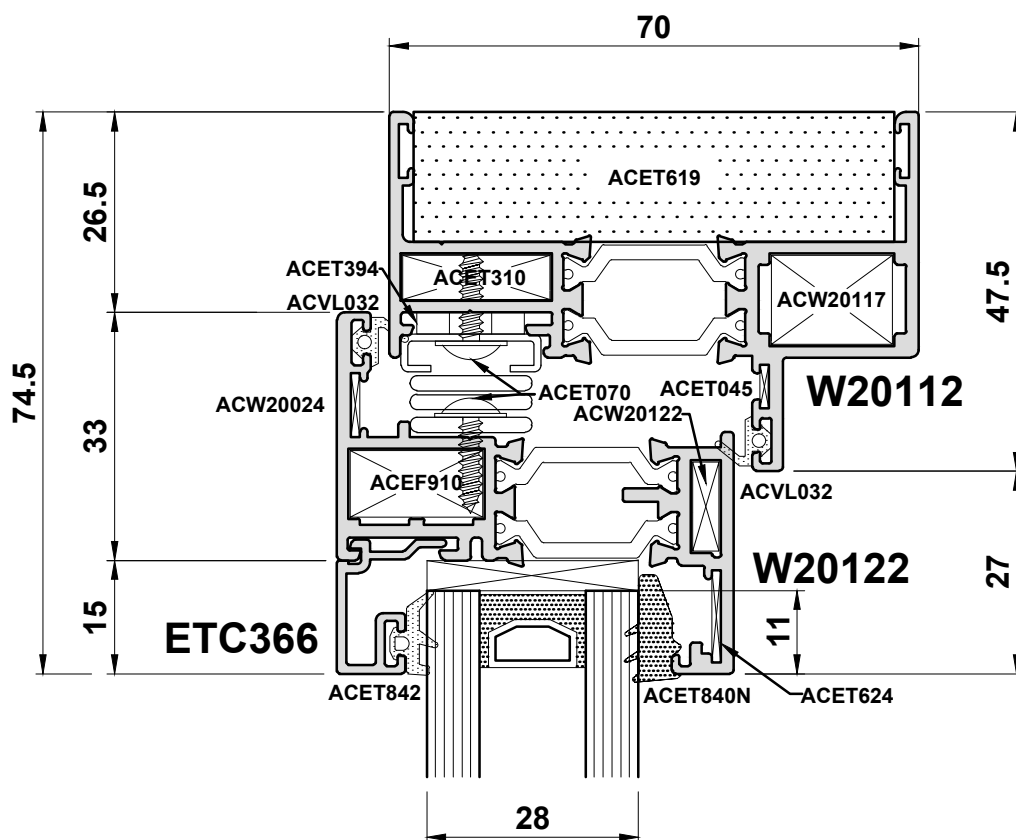
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Detail 3F



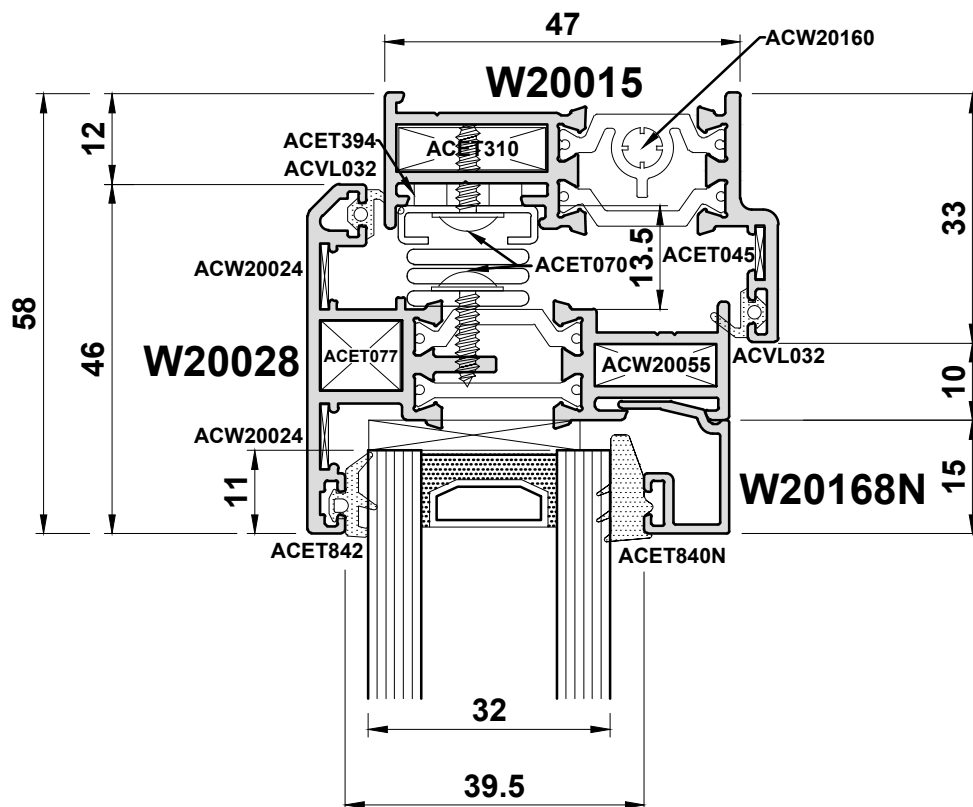
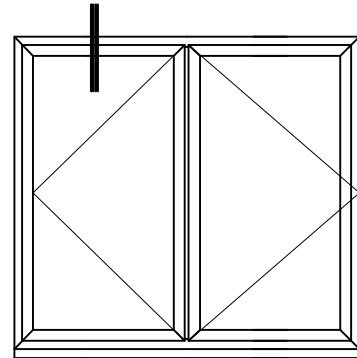
Do Not Scale From This Drawing

Detail 3G



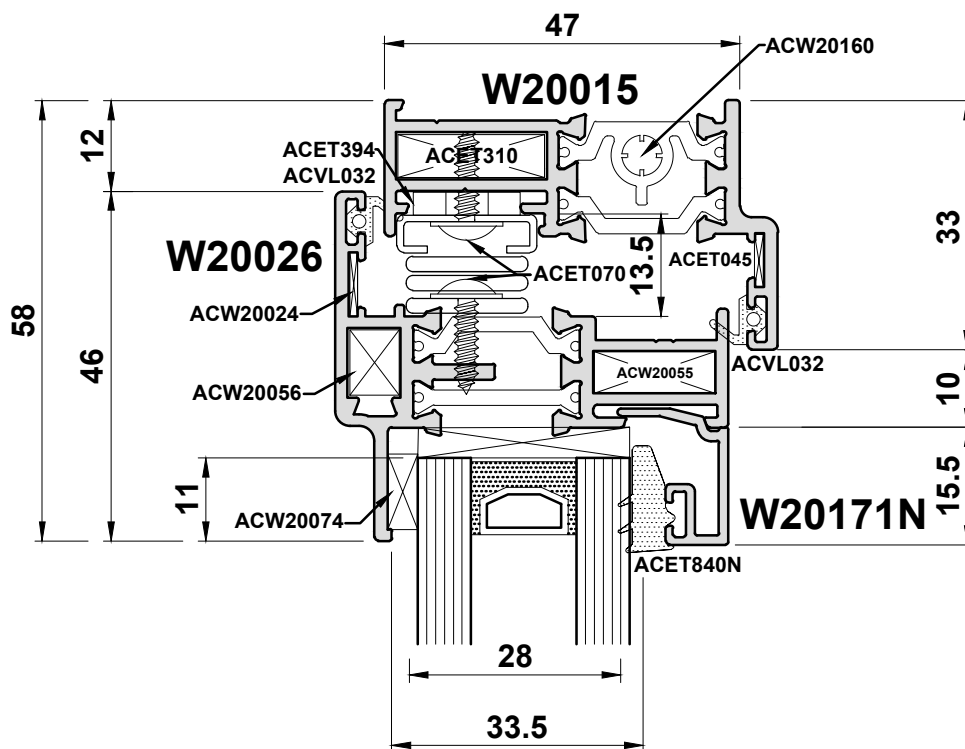
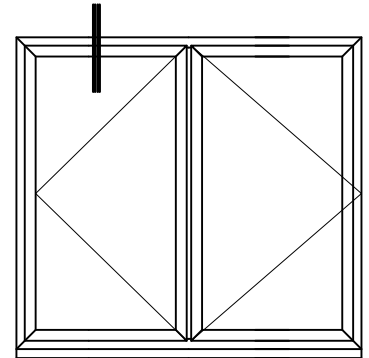
Do Not Scale From This Drawing

Detail 3H



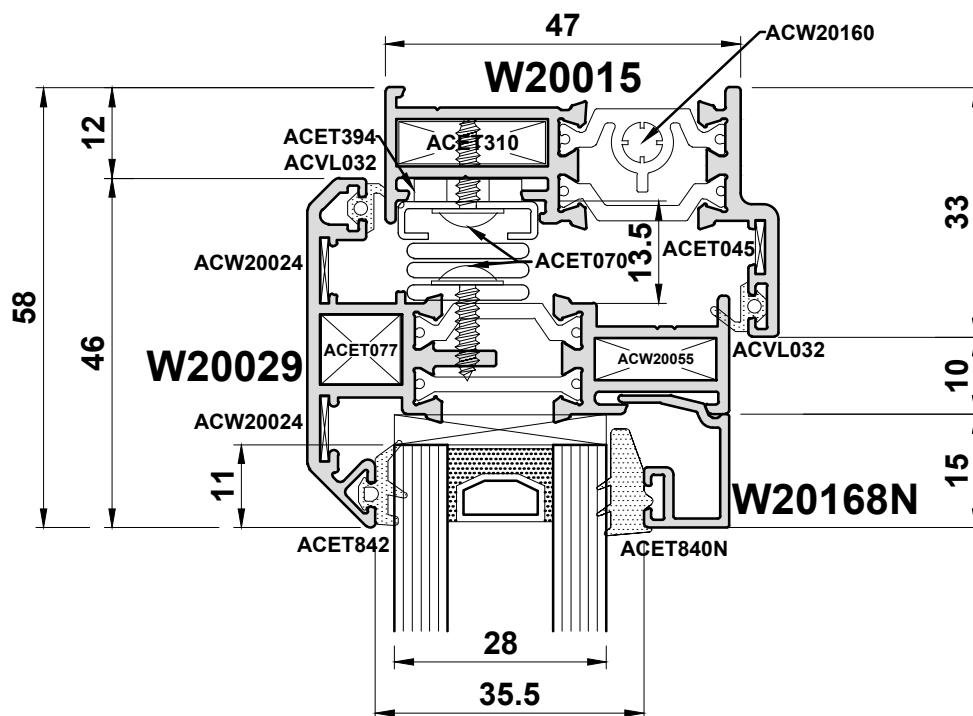
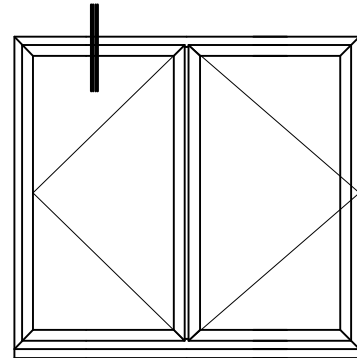
Do Not Scale From This Drawing

Detail 3I



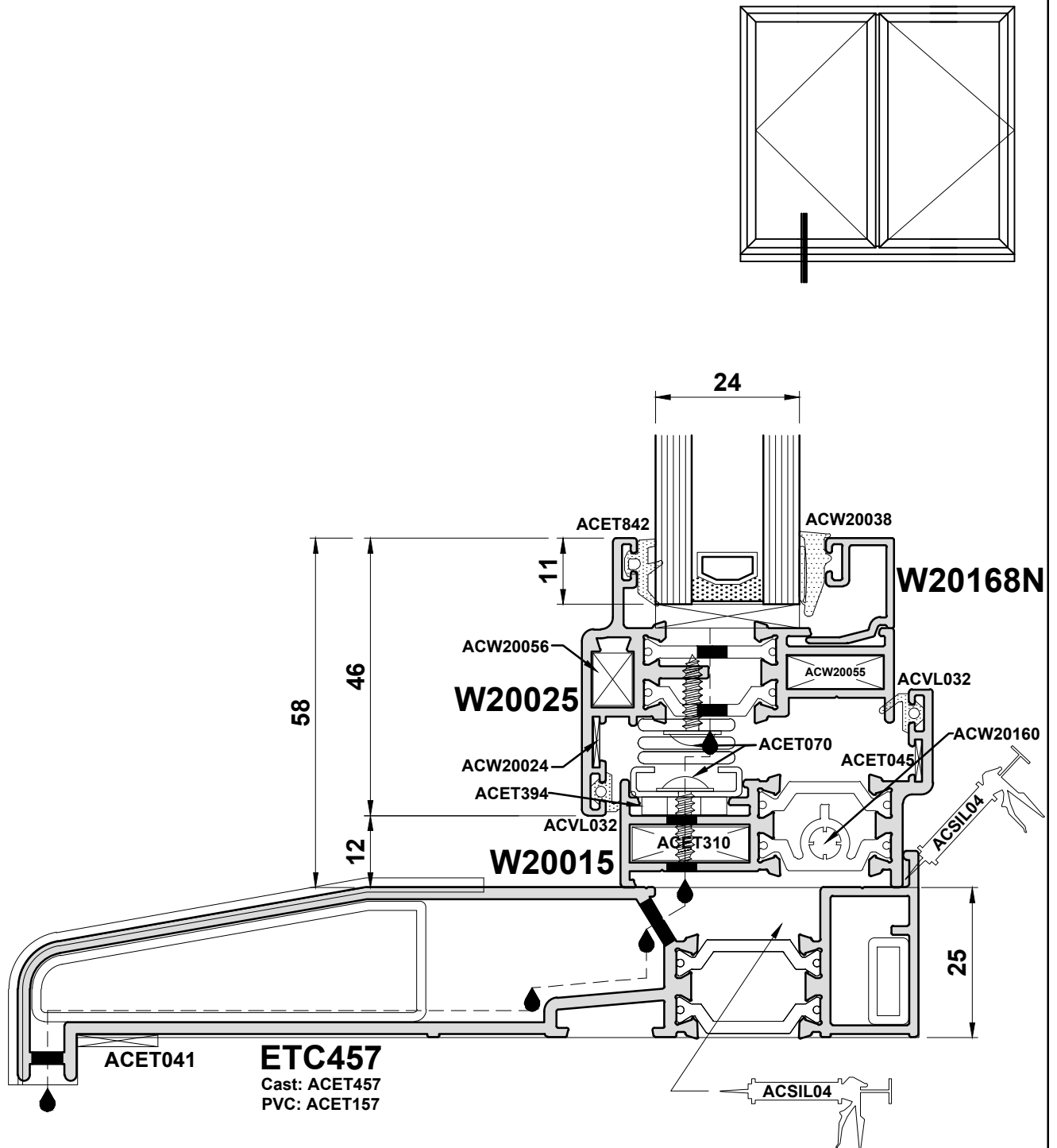
Do Not Scale From This Drawing

Detail 3J



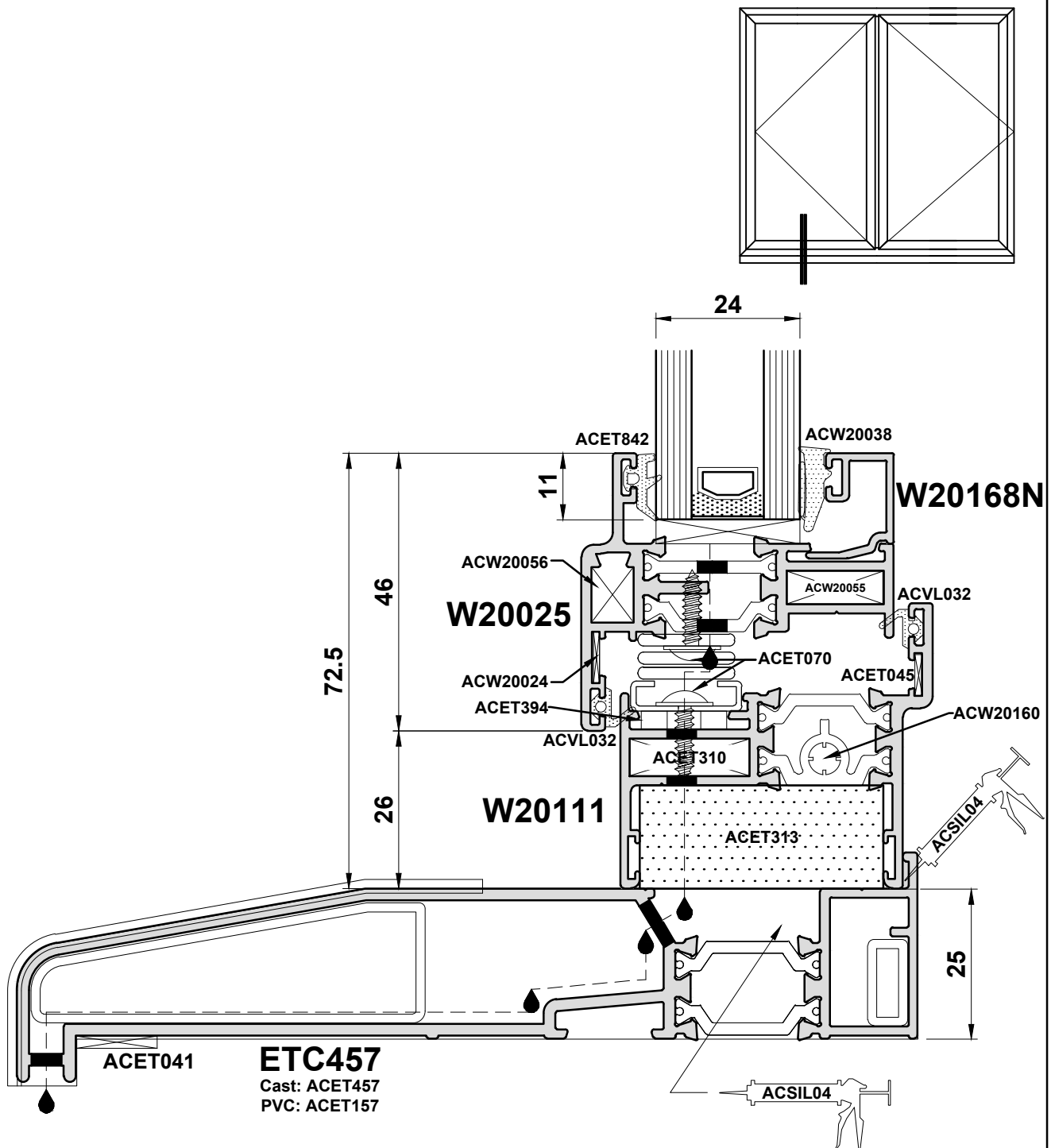
Do Not Scale From This Drawing

Detail 4A



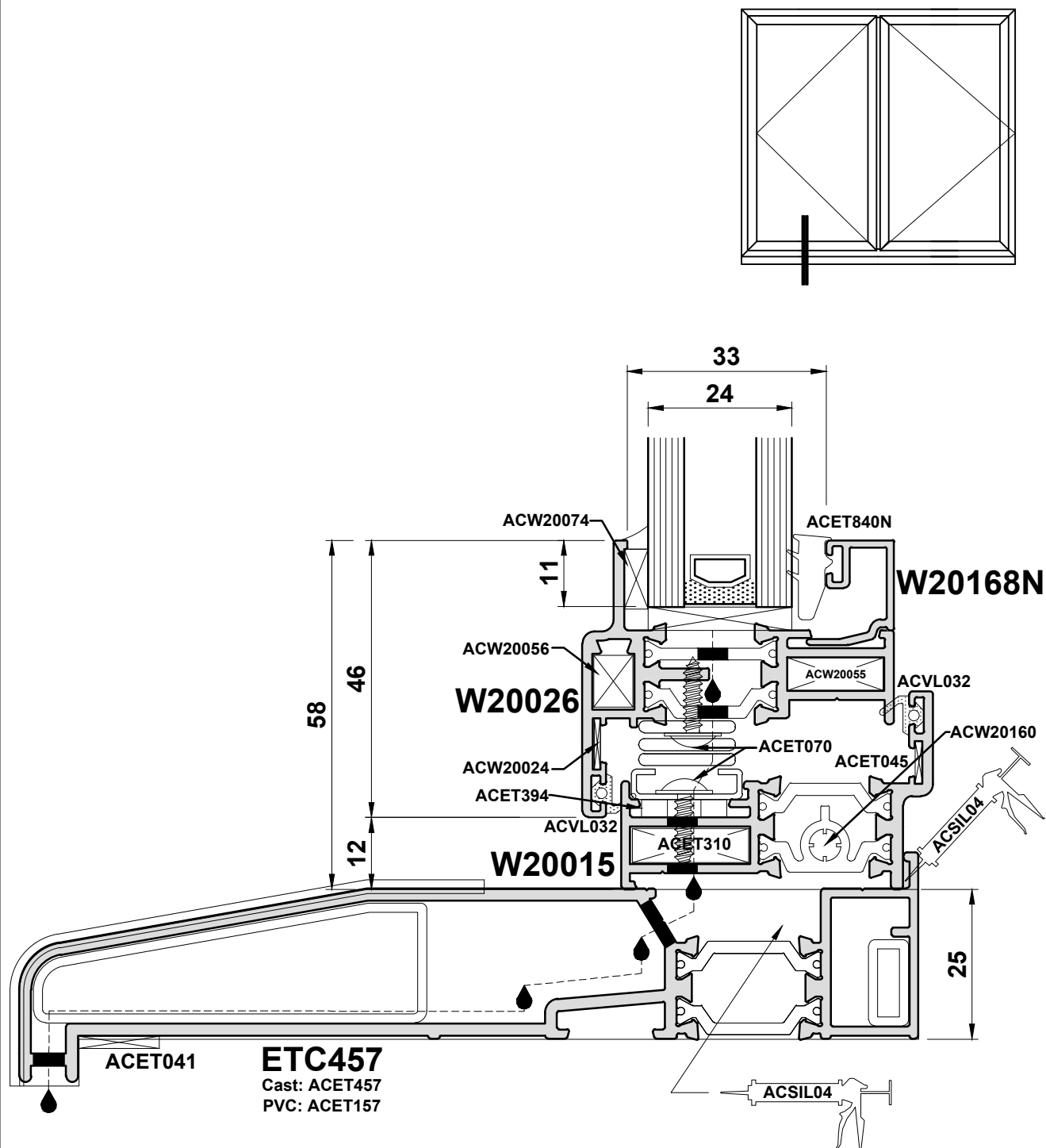
Do Not Scale From This Drawing

Detail 4B



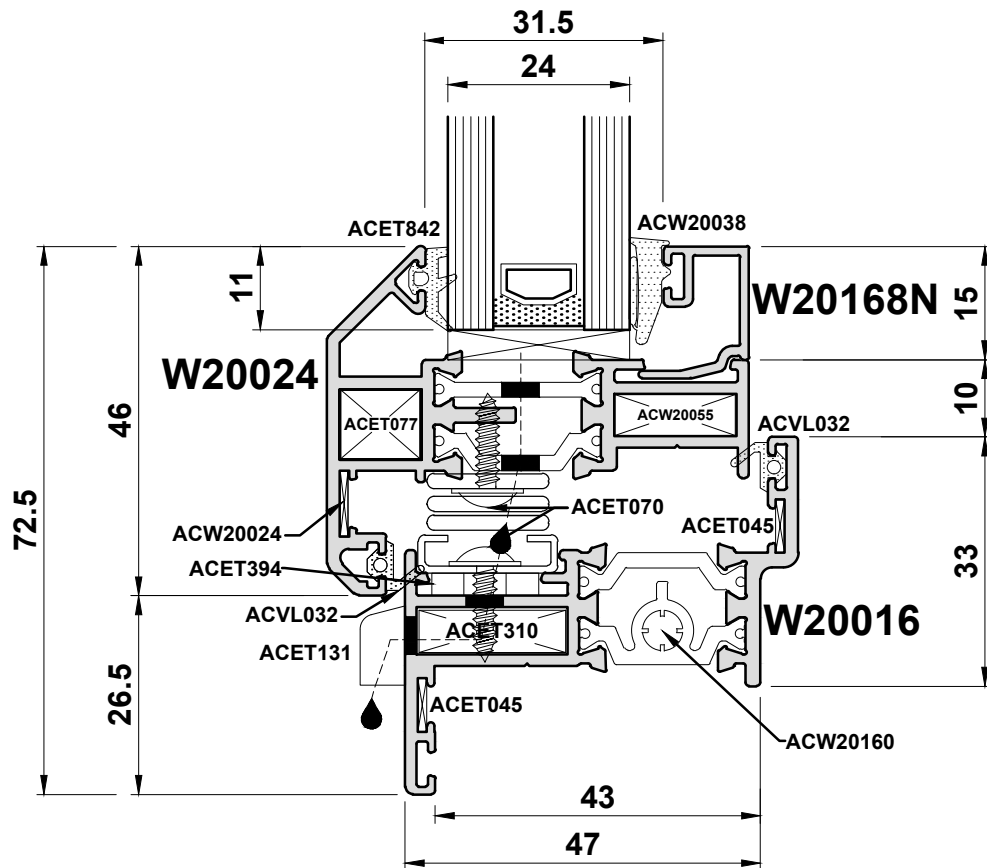
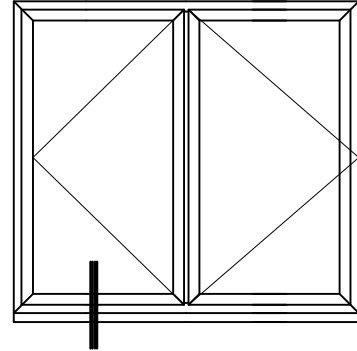
Do Not Scale From This Drawing

Detail 4C



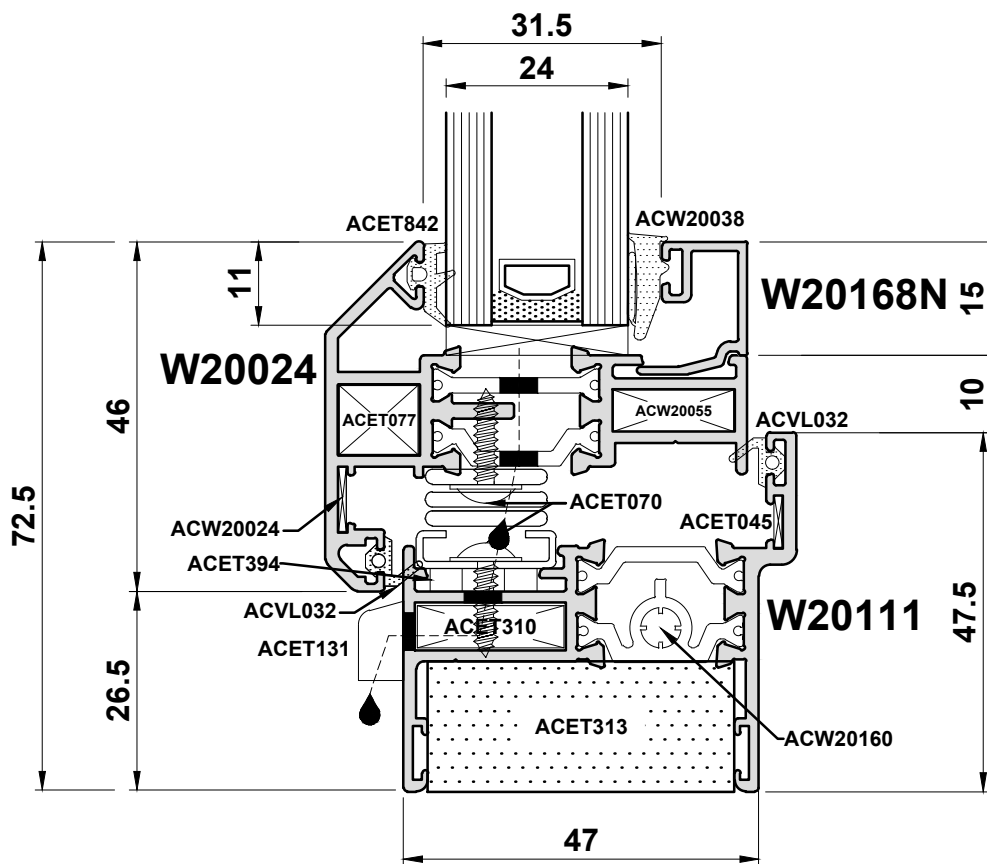
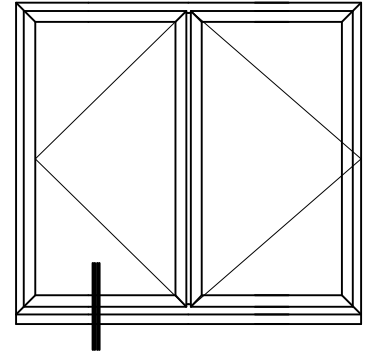
Do Not Scale From This Drawing

Detail 4D



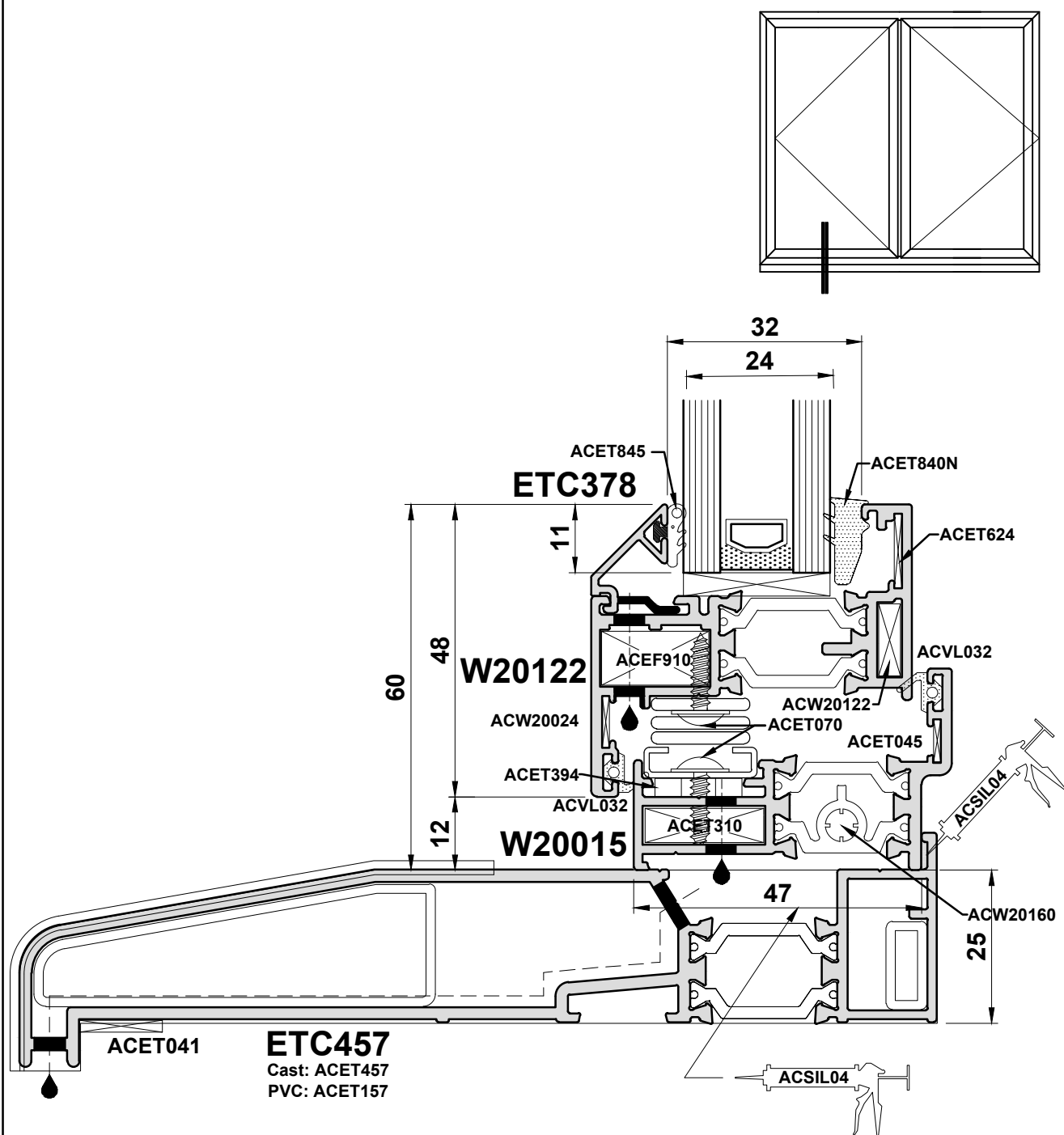
Do Not Scale From This Drawing

Detail 4E



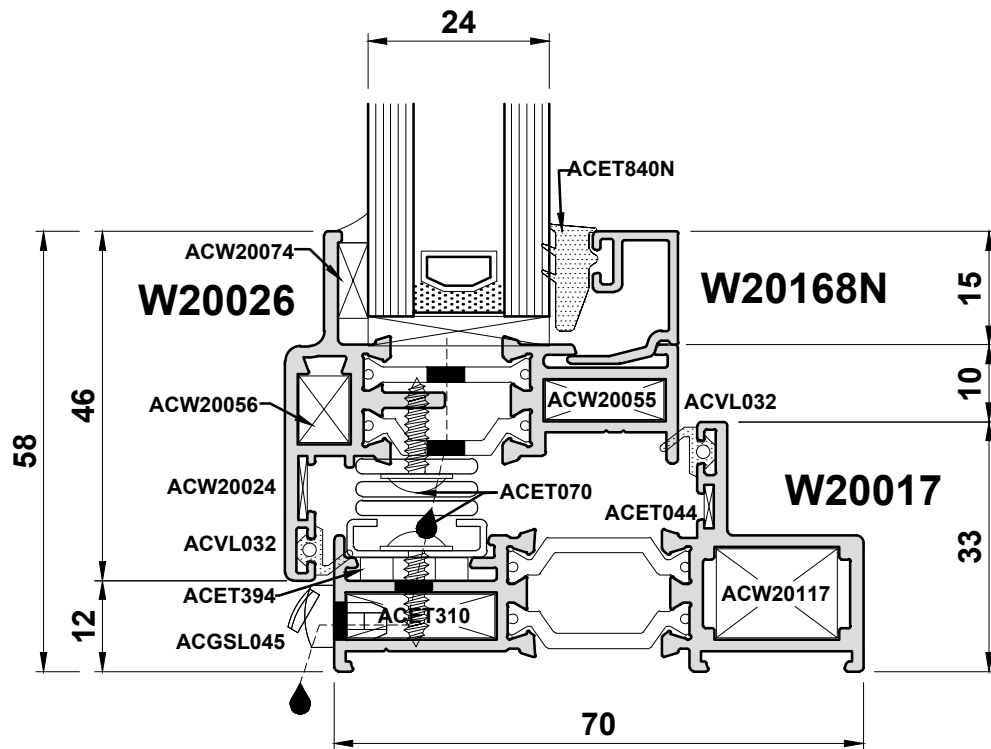
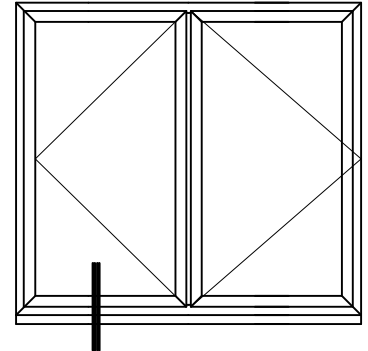
Do Not Scale From This Drawing

Detail 4F



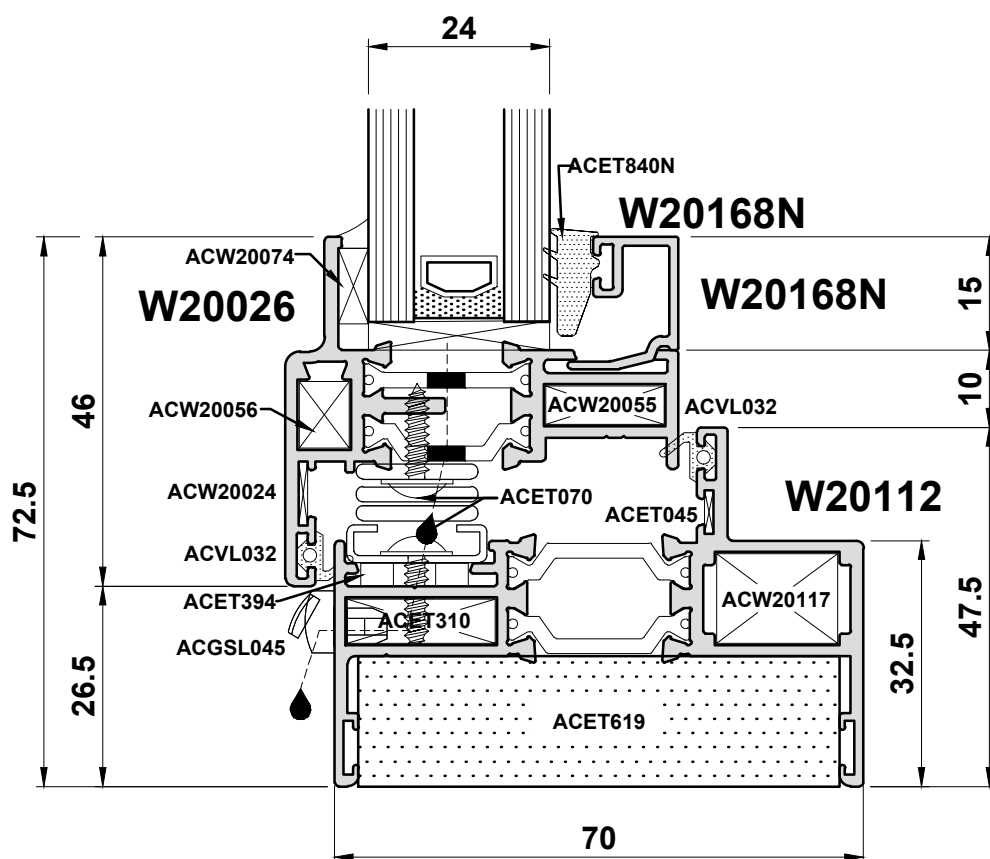
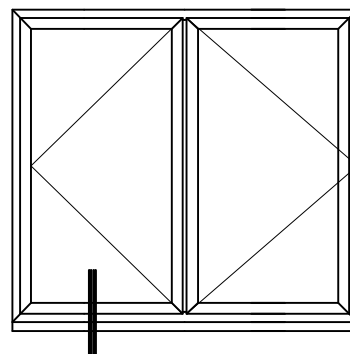
Do Not Scale From This Drawing

Detail 4G



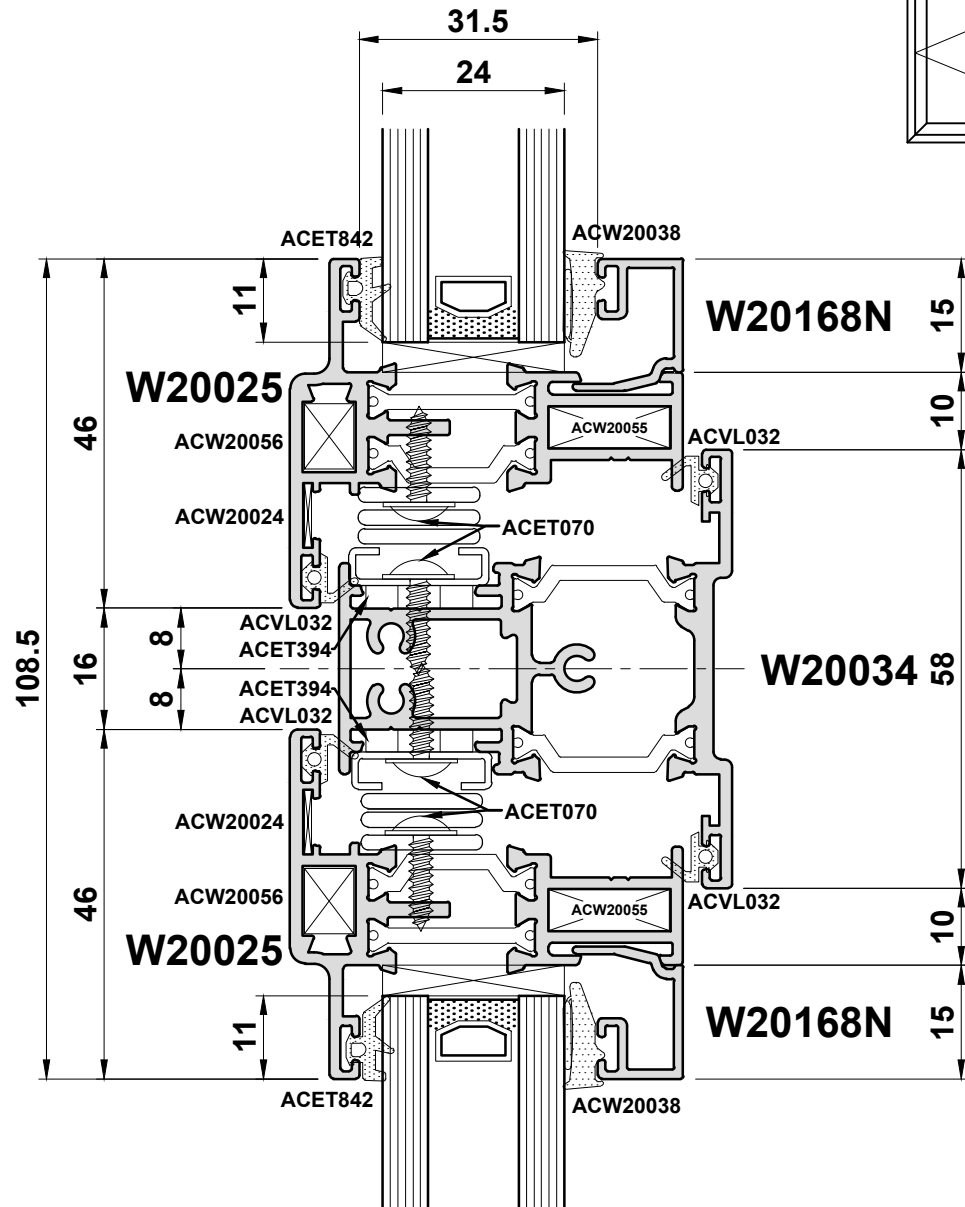
Do Not Scale From This Drawing

Detail 4H



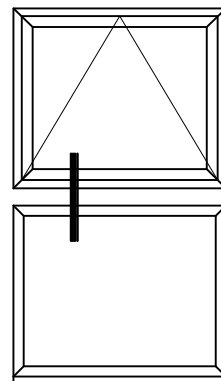
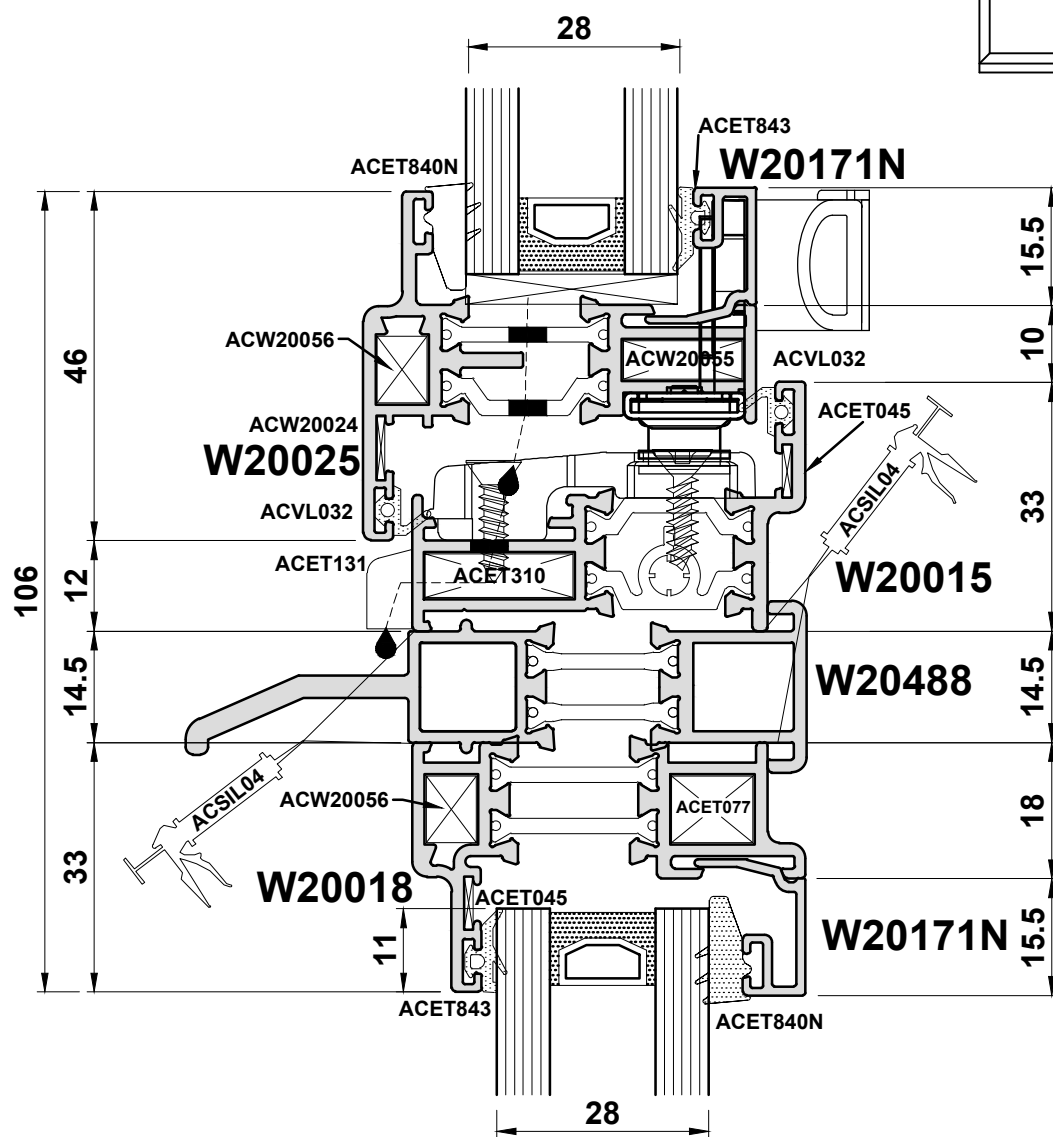
Do Not Scale From This Drawing

Detail 5



Do Not Scale From This Drawing

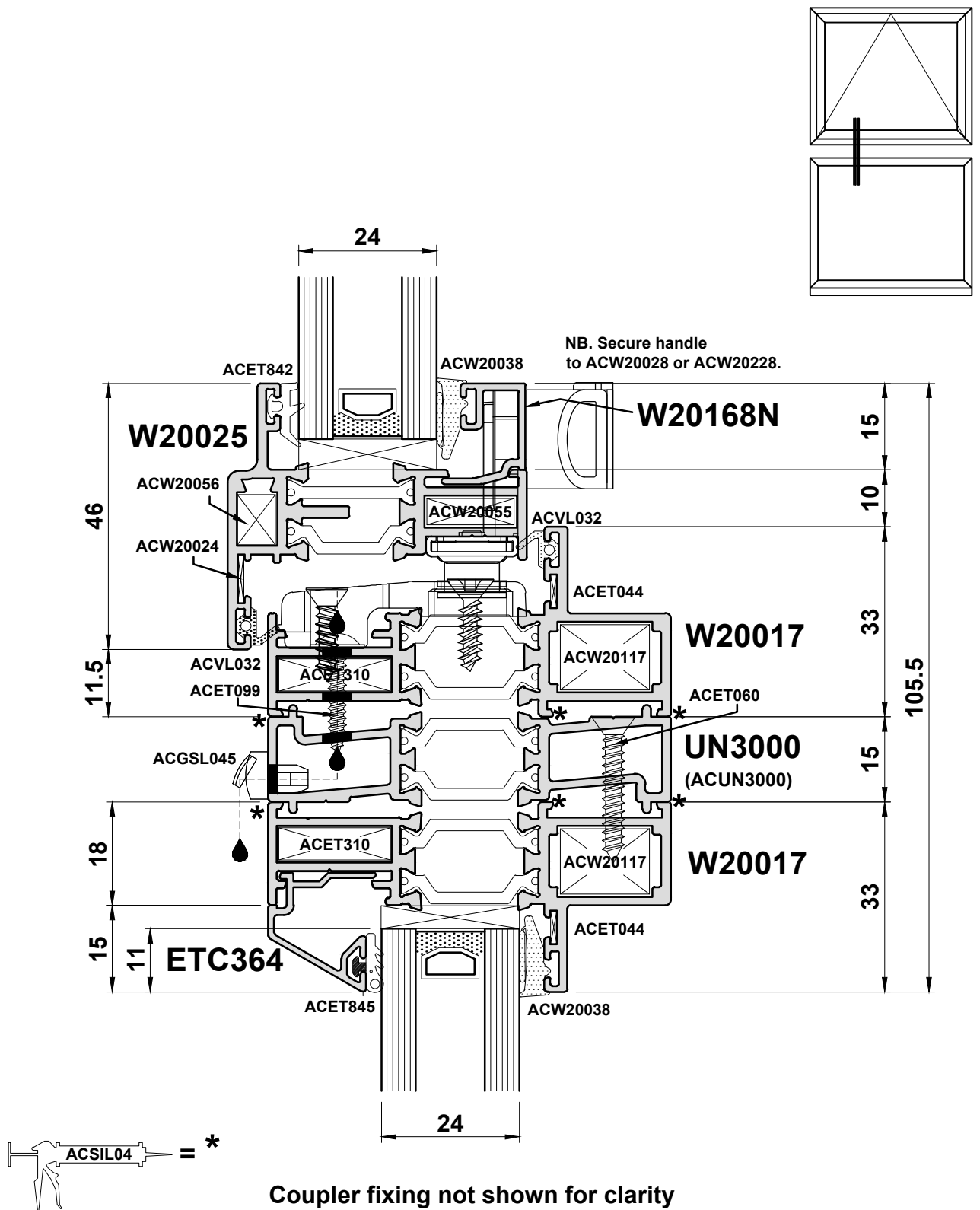
Detail 6A



Coupler fixing not shown for clarity

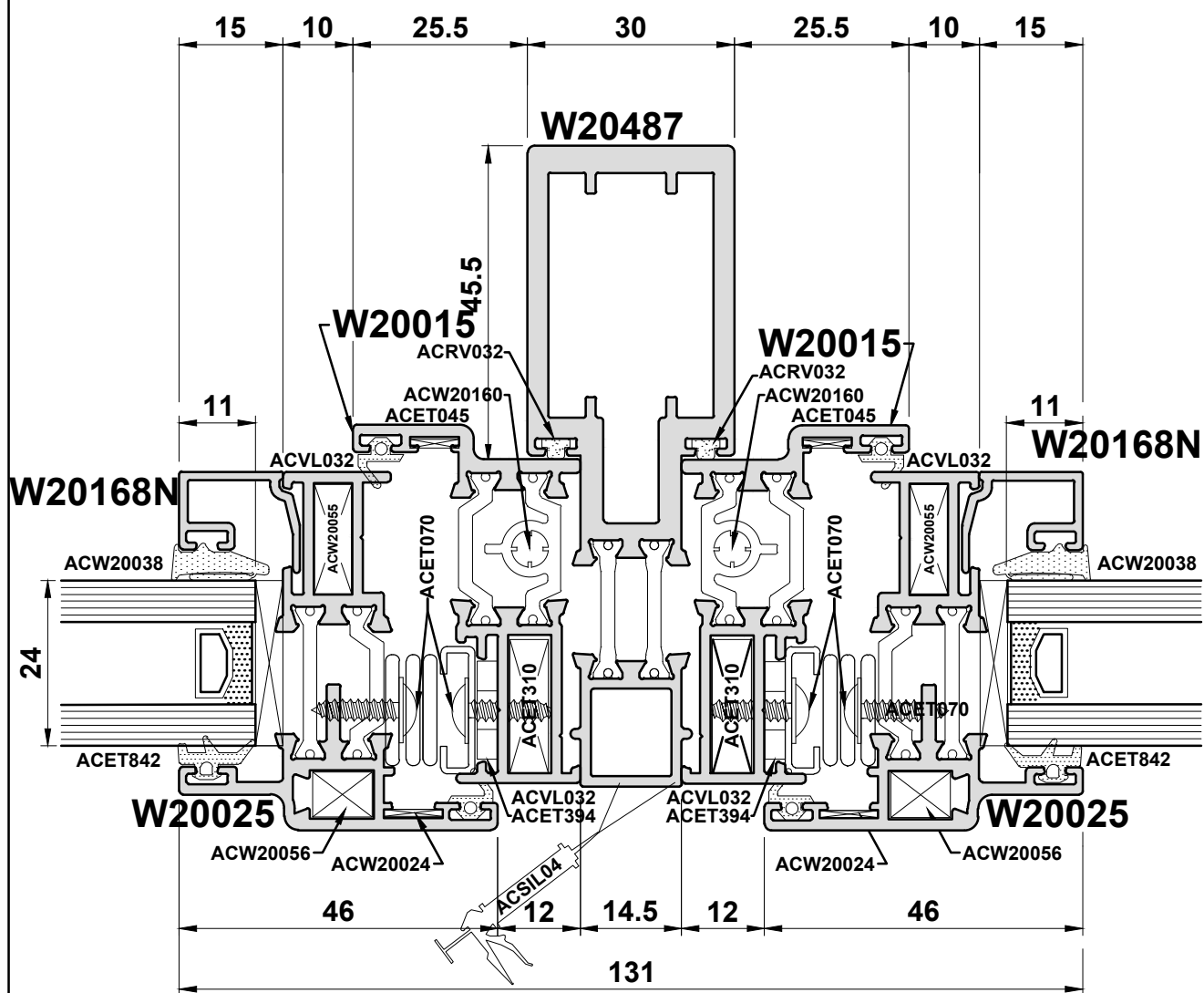
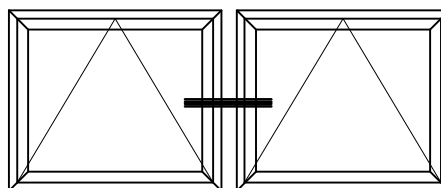
Do Not Scale From This Drawing

Detail 6B



Do Not Scale From This Drawing

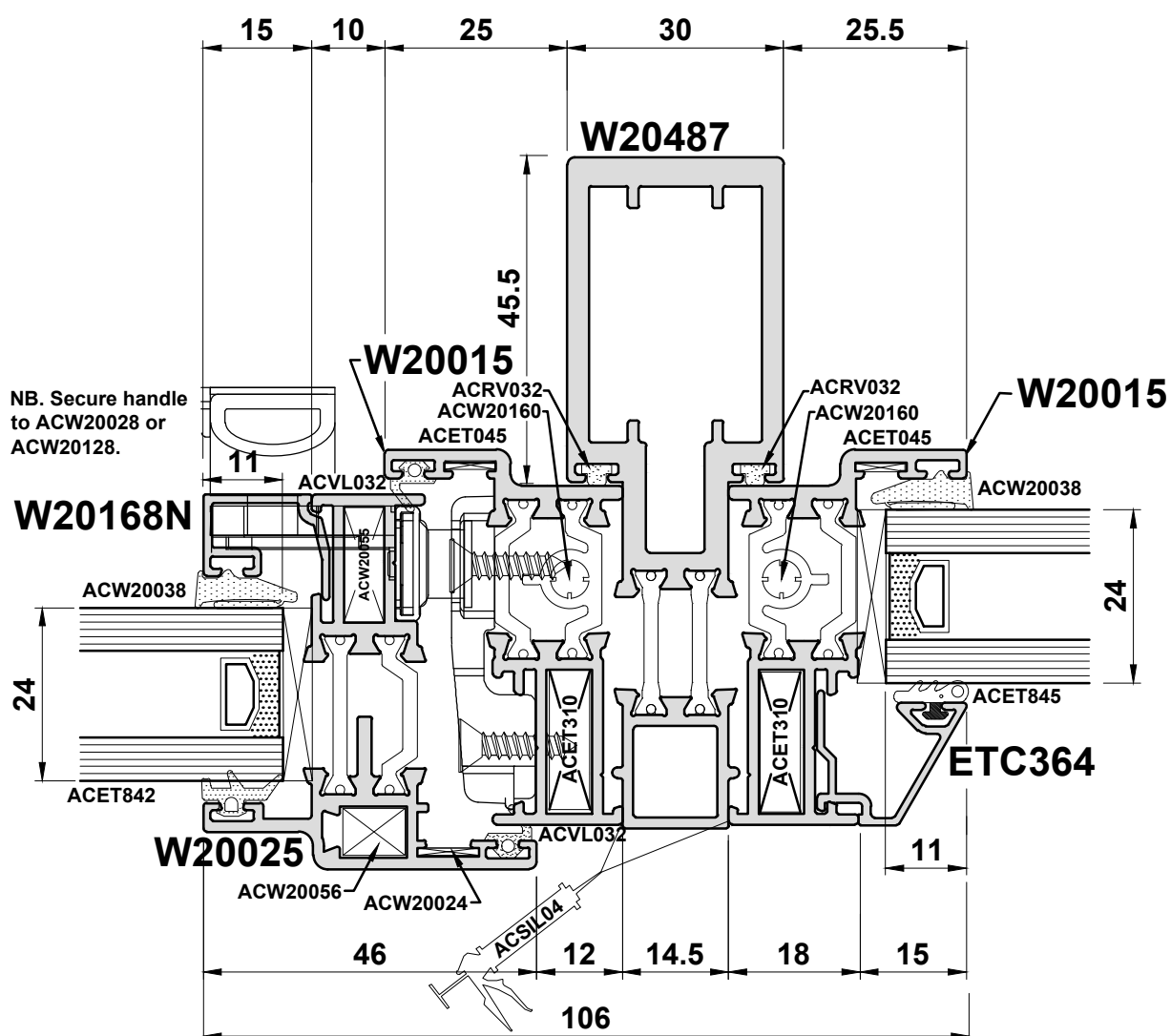
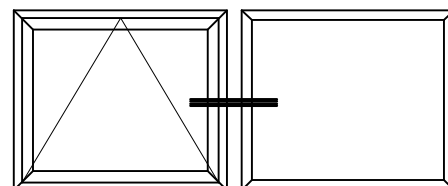
Detail 7



Coupler fixing not shown for clarity

Do Not Scale From This Drawing

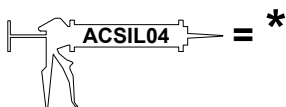
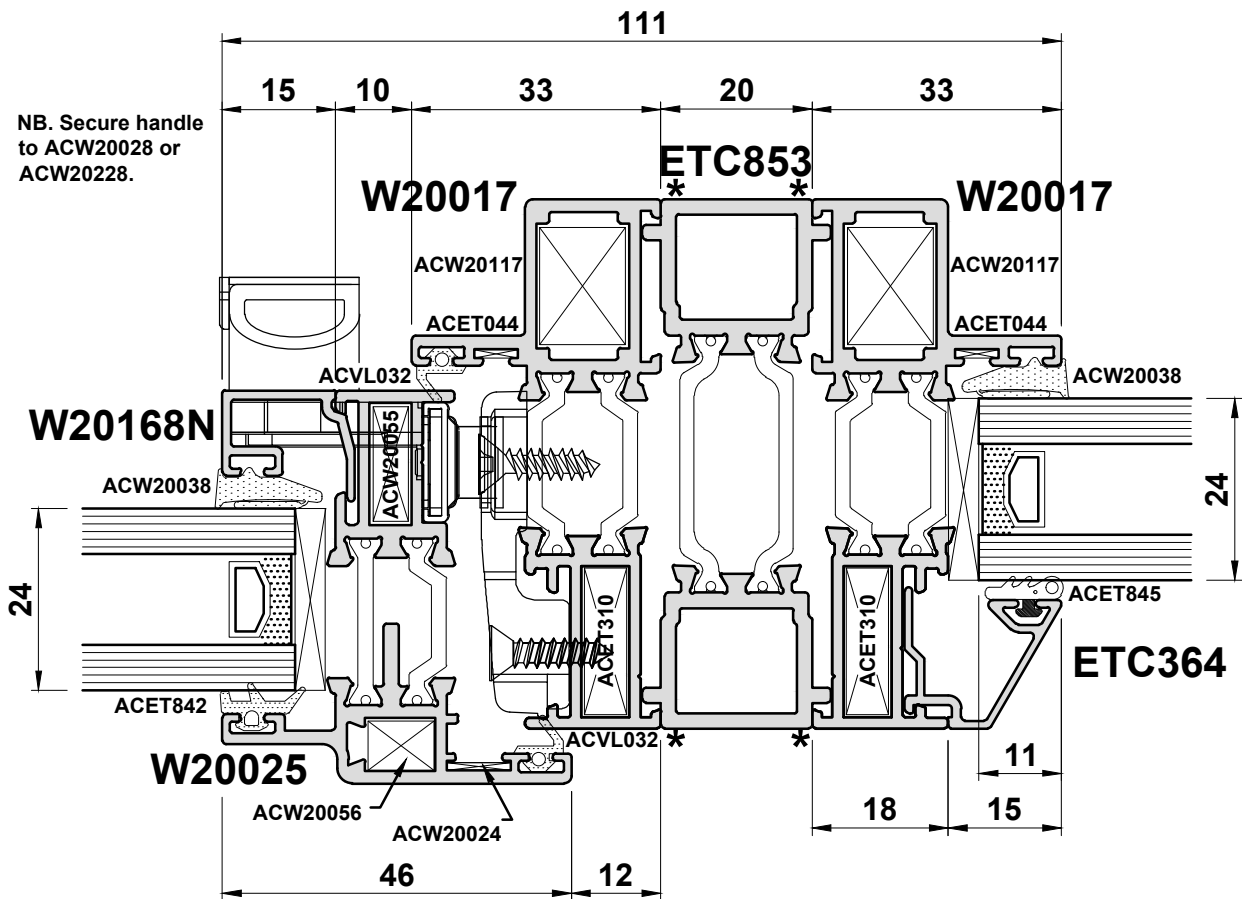
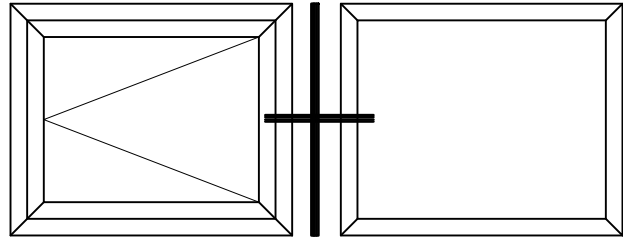
Detail 8A



Coupler fixing not shown for clarity

Do Not Scale From This Drawing

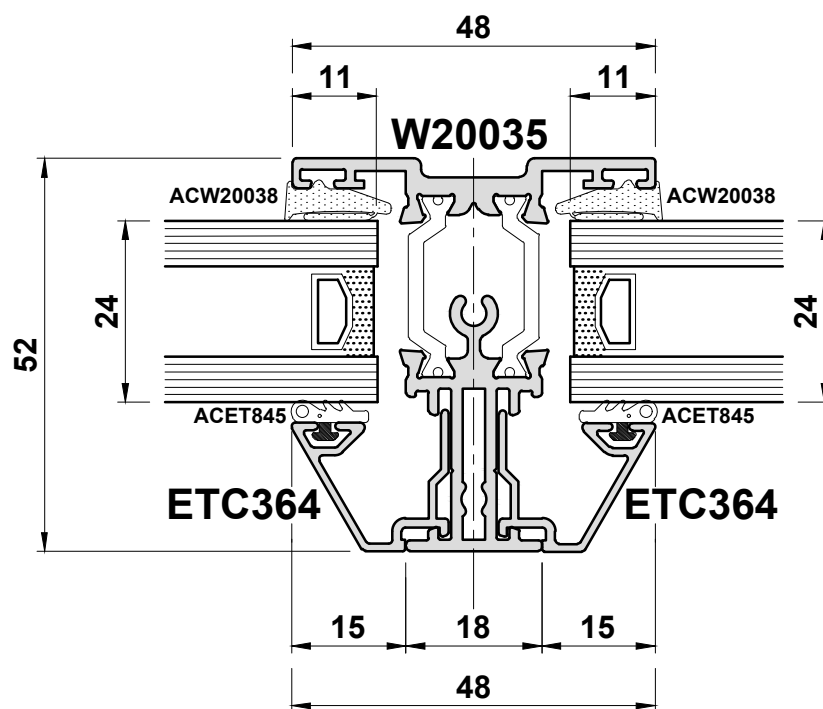
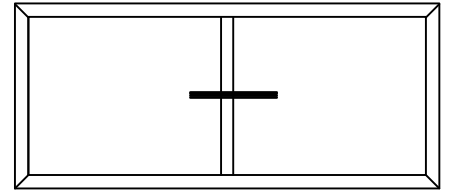
Detail 8B



Coupler fixing not shown for clarity

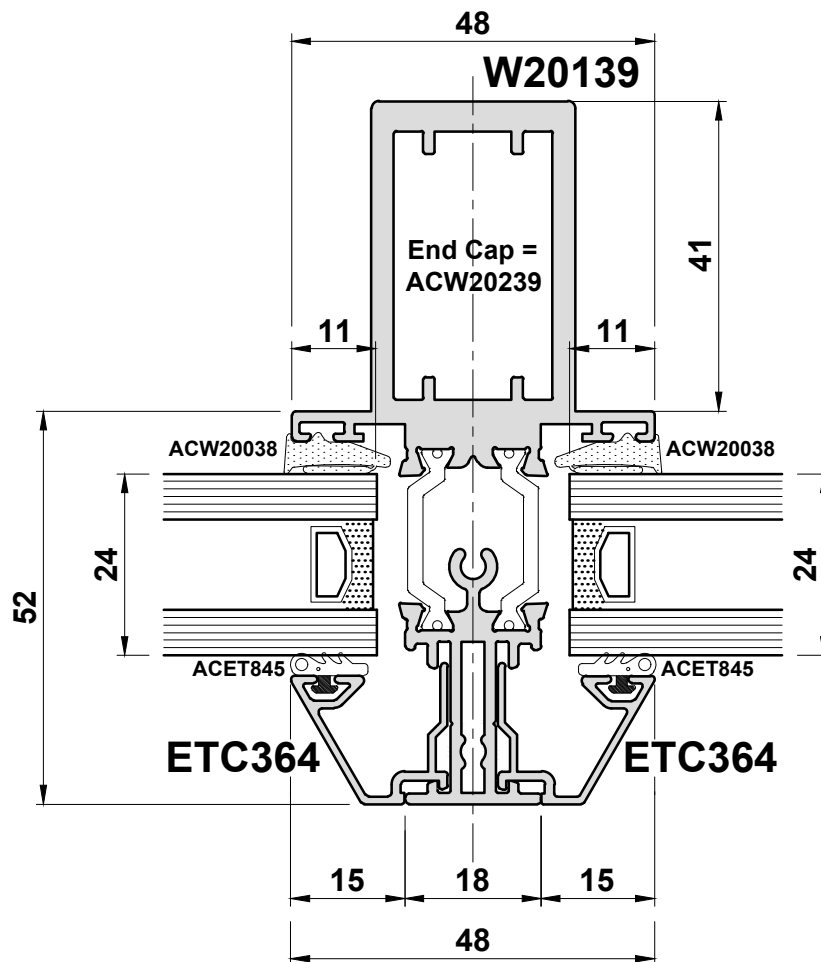
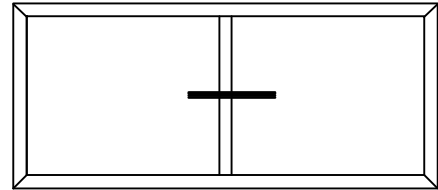
Do Not Scale From This Drawing

Detail 9A



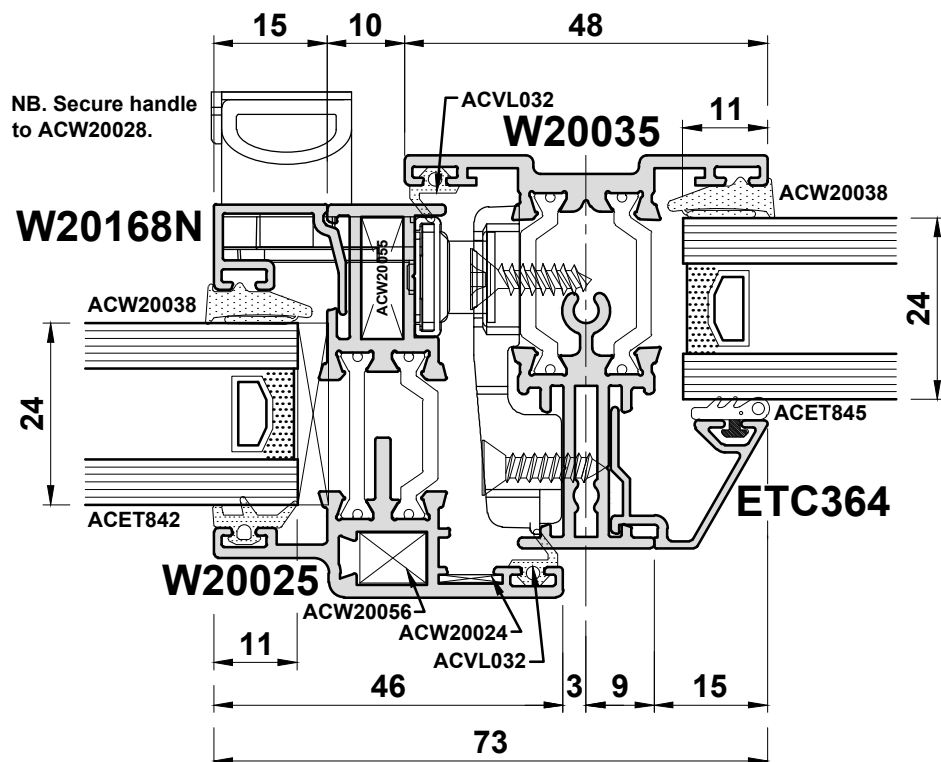
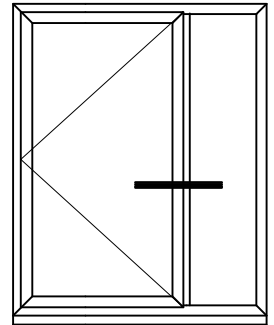
Do Not Scale From This Drawing

Detail 9B



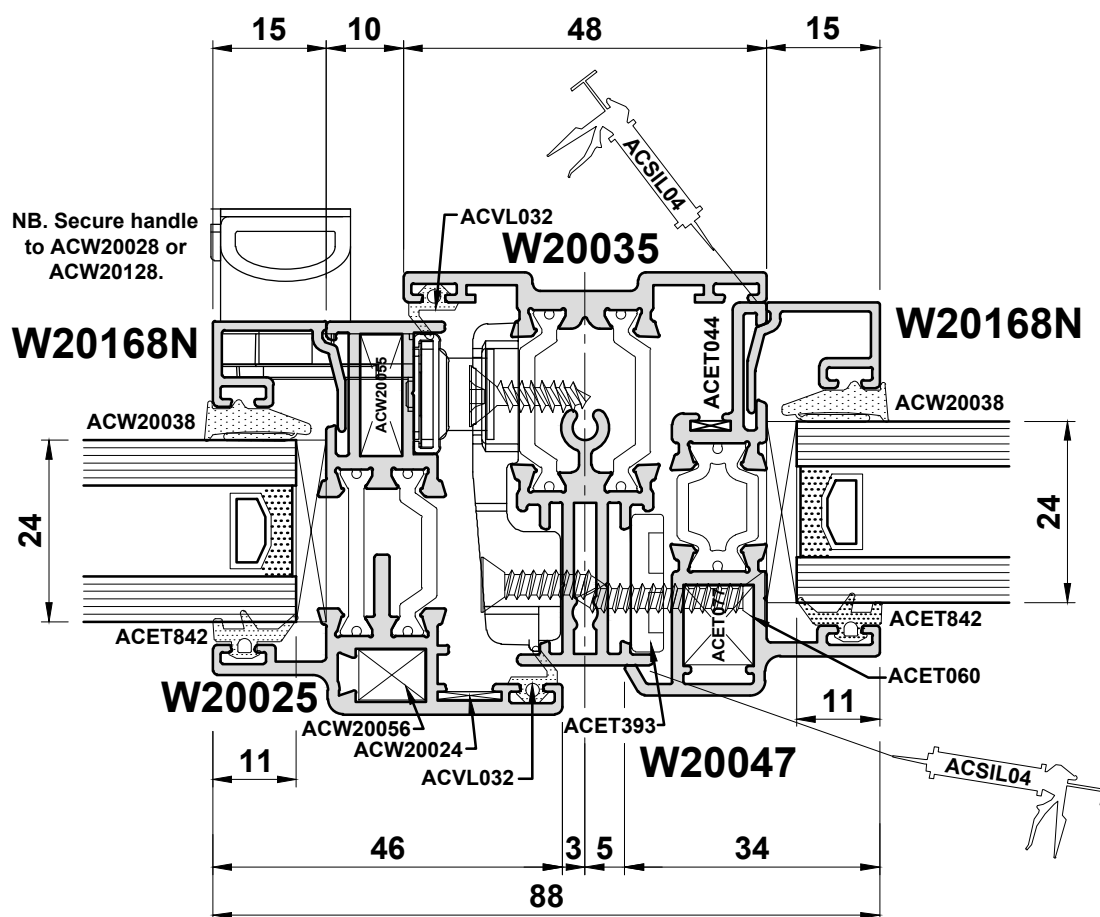
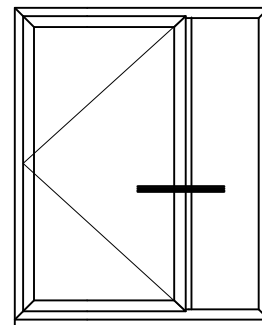
Do Not Scale From This Drawing

Detail 10A



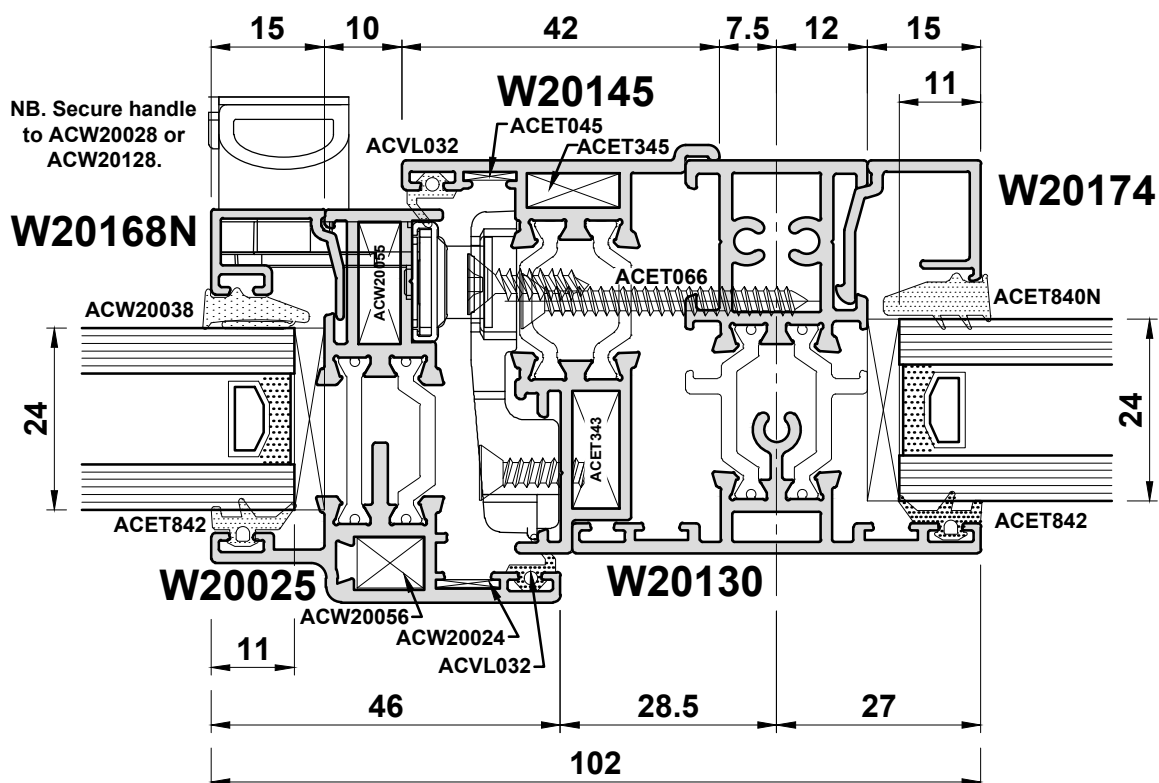
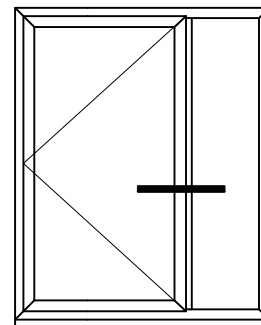
Do Not Scale From This Drawing

Detail 10B



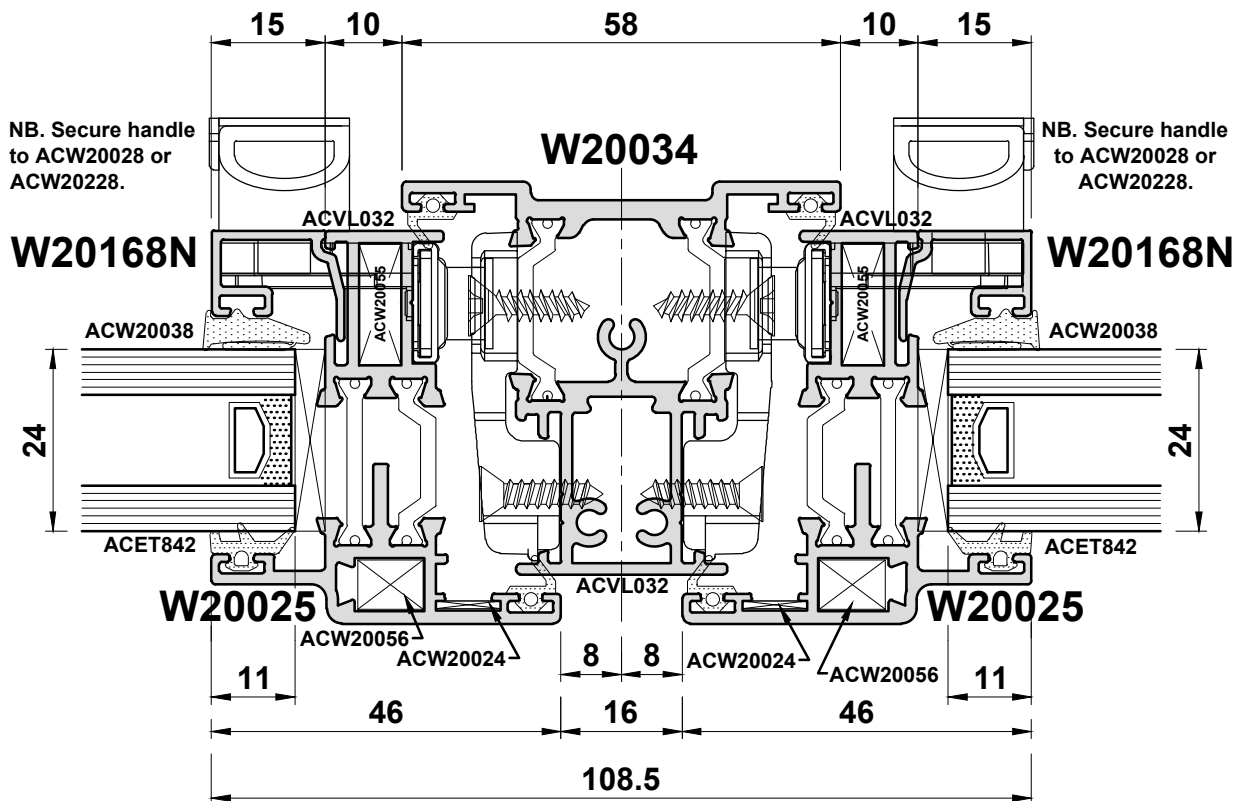
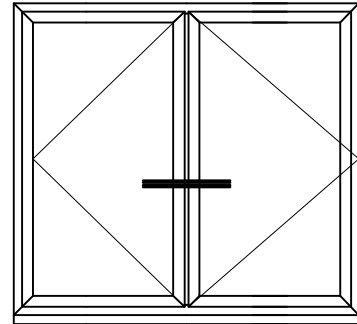
Do Not Scale From This Drawing

Detail 10C



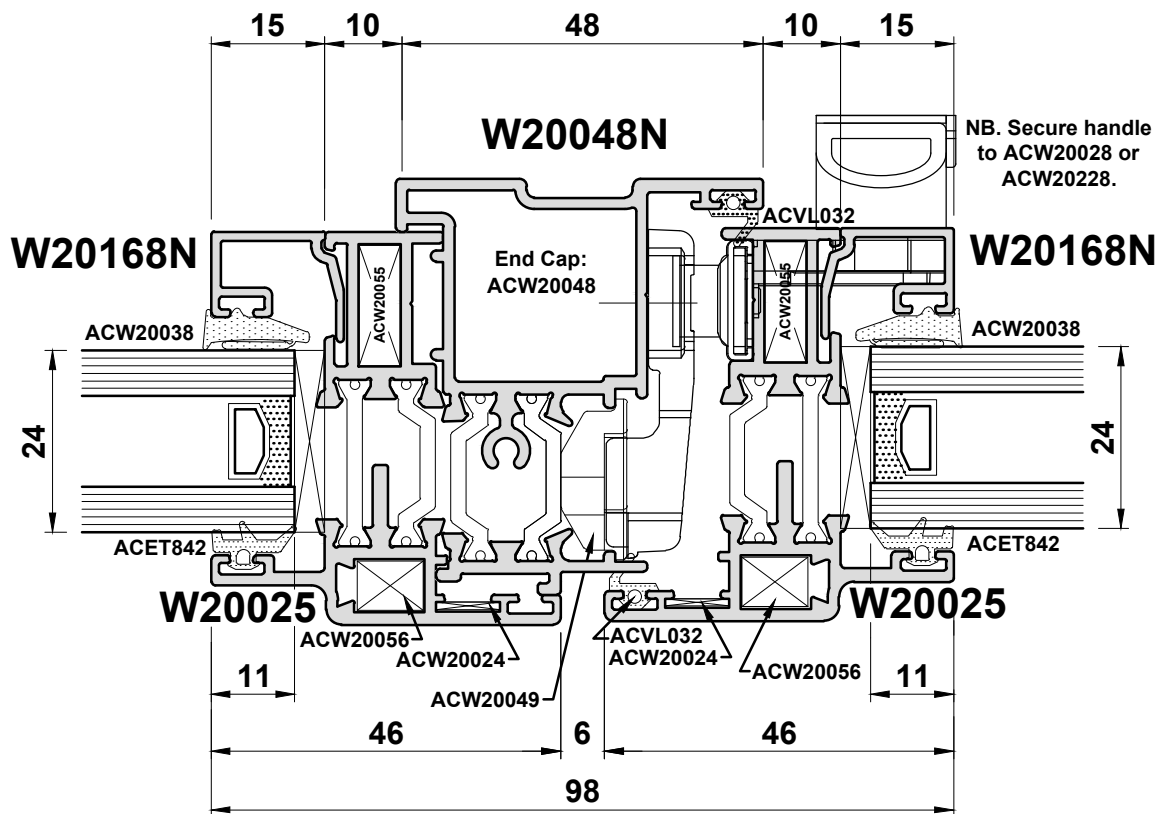
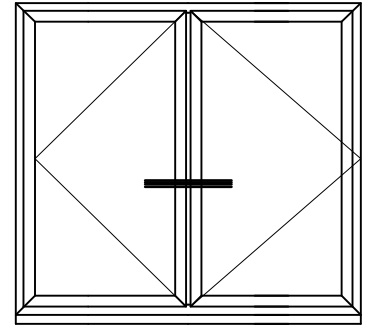
Do Not Scale From This Drawing

Detail 11A



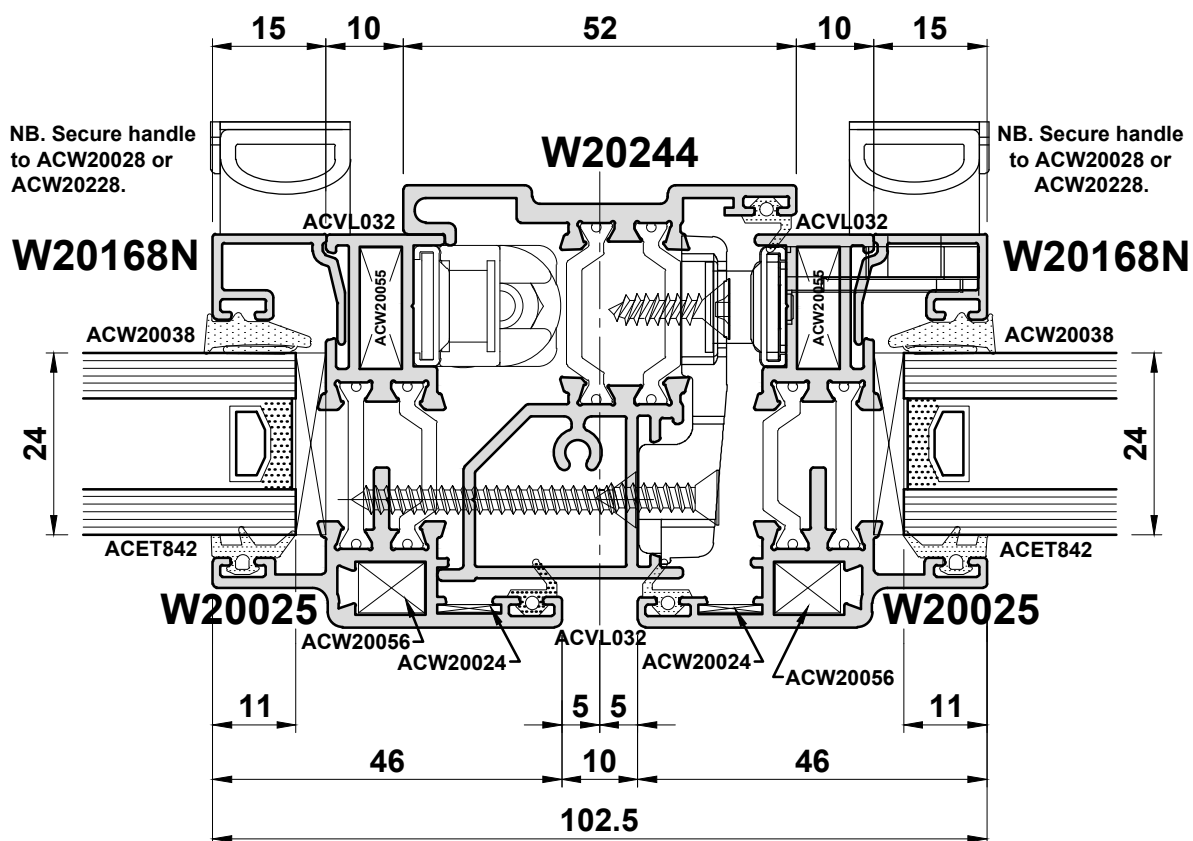
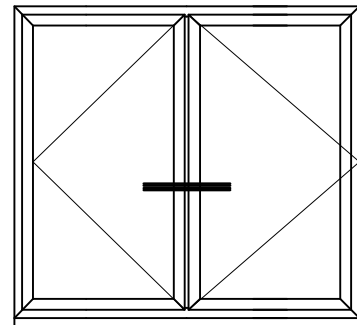
Do Not Scale From This Drawing

Detail 11B



Do Not Scale From This Drawing

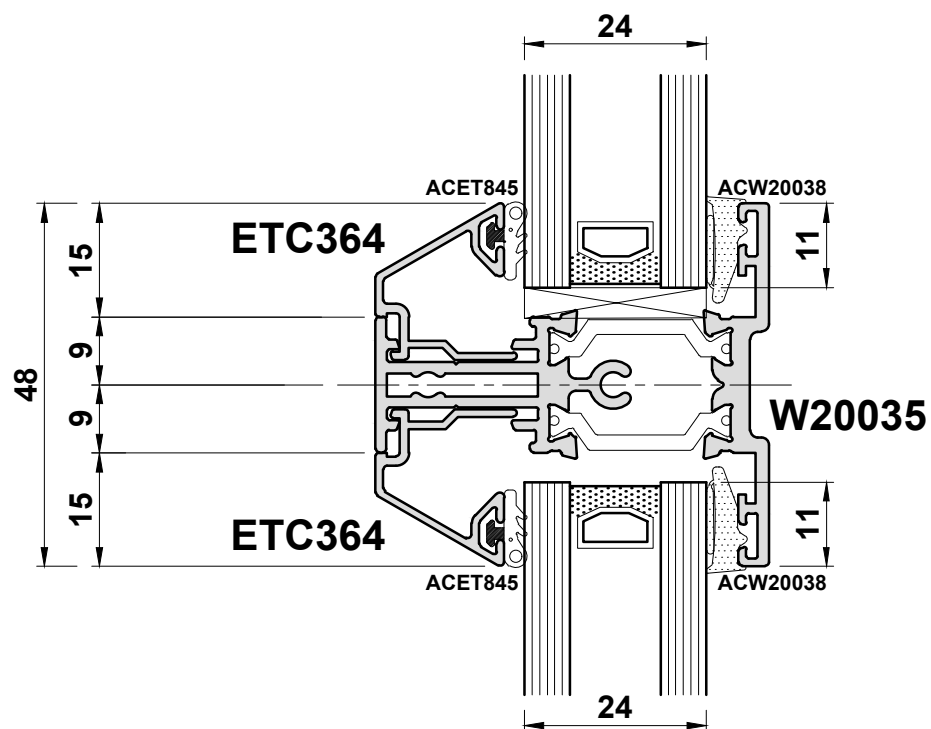
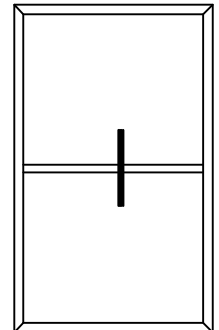
Detail 11C



Note: W20244 cannot be used with W20122

Do Not Scale From This Drawing

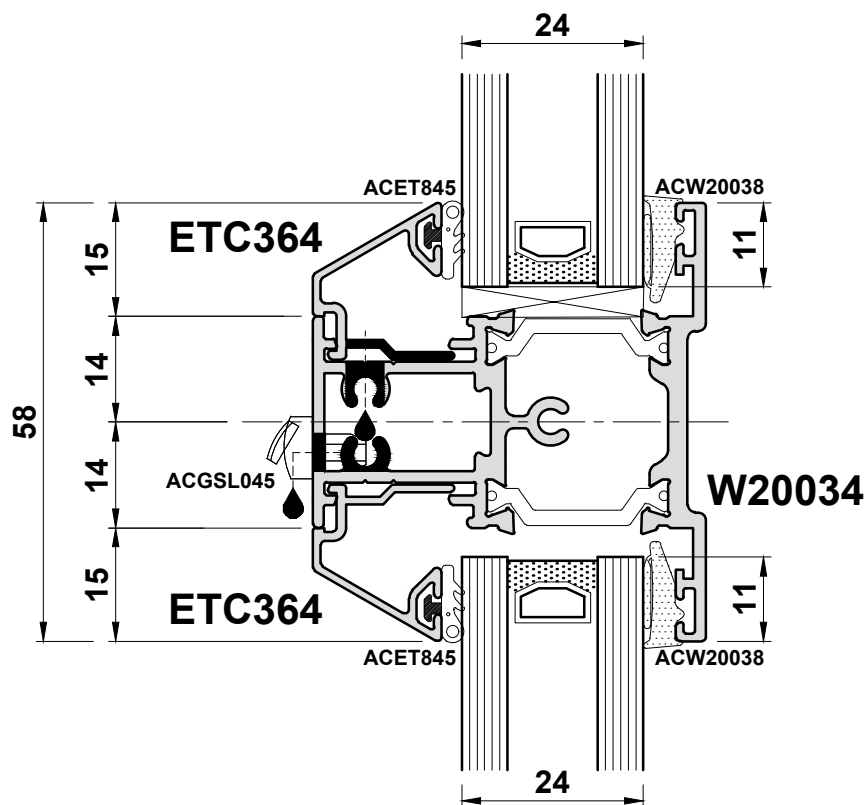
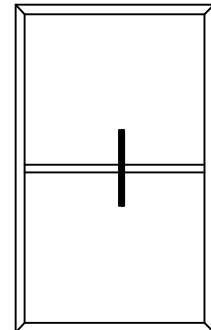
Detail 12A



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

Do Not Scale From This Drawing

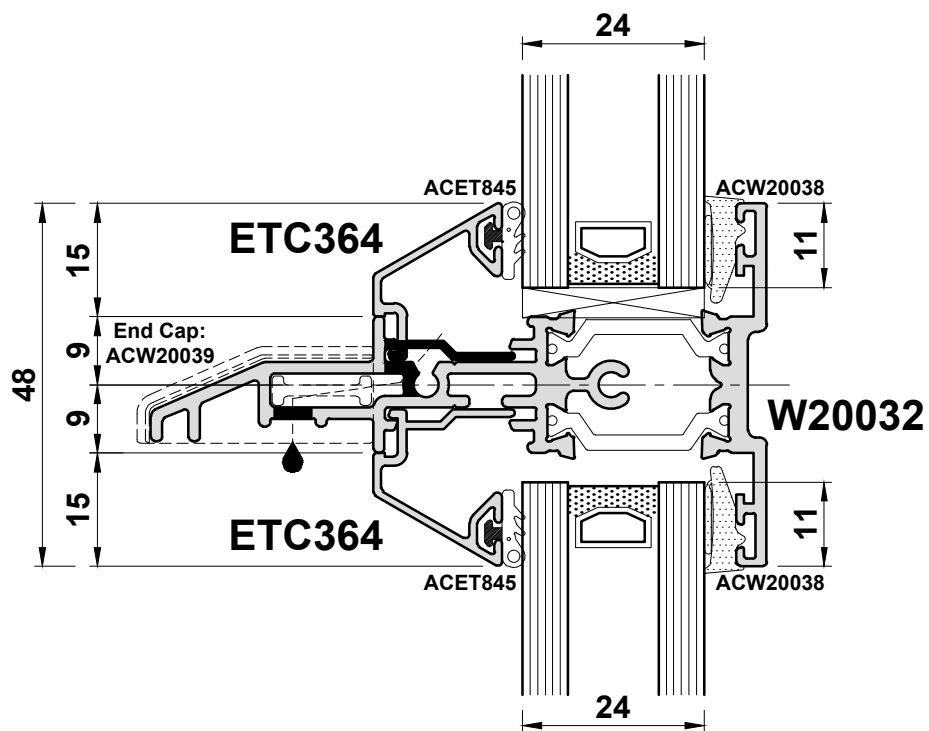
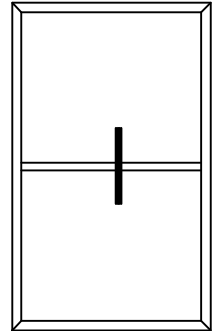
Detail 12B



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

Do Not Scale From This Drawing

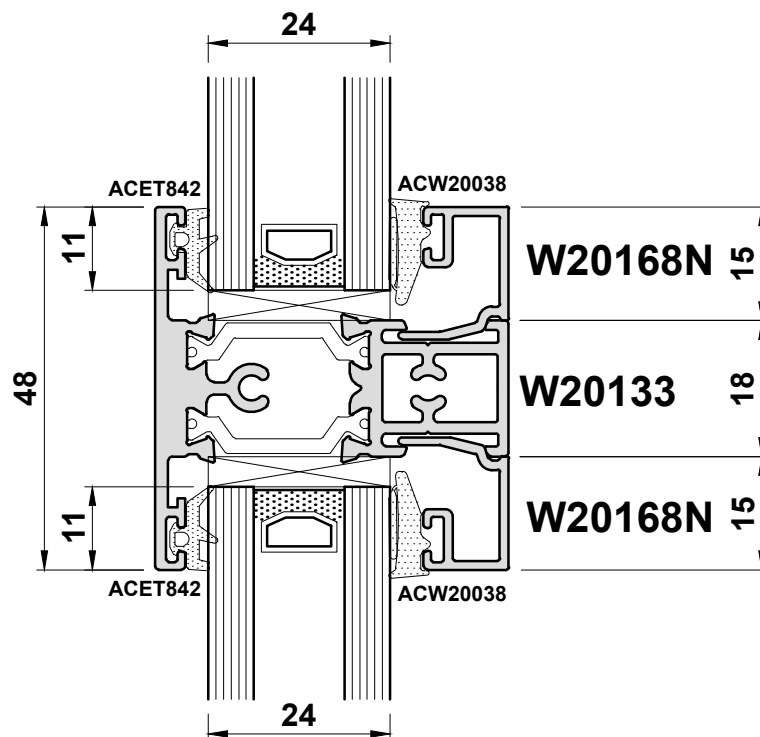
Detail 12C



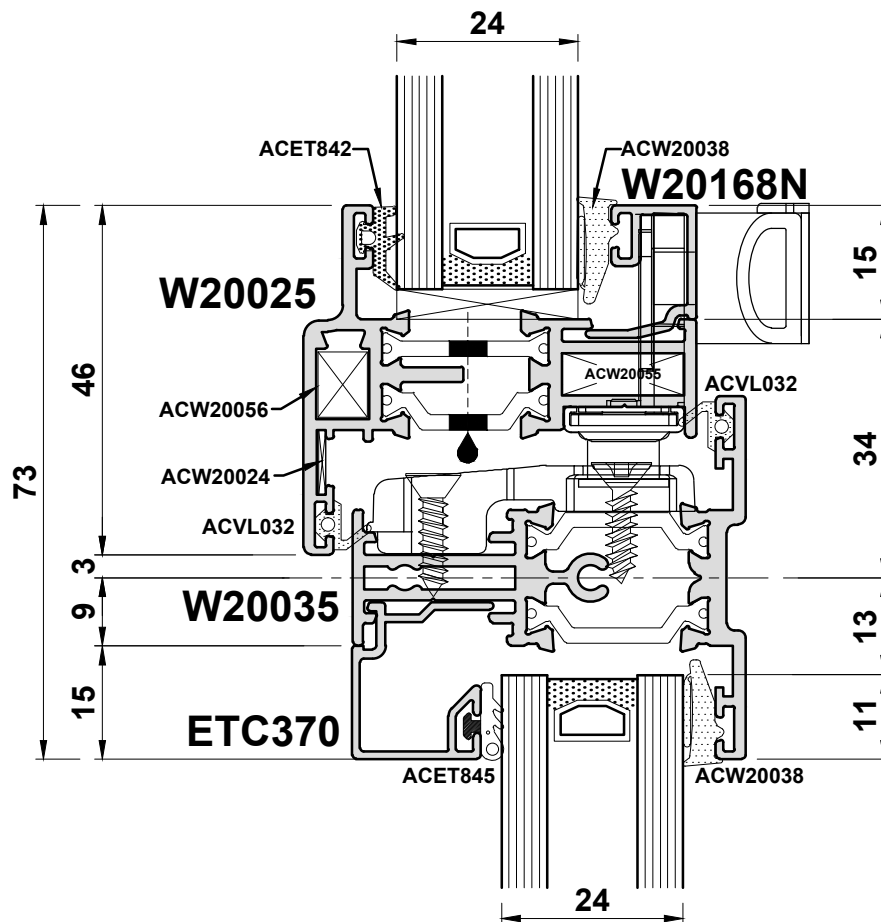
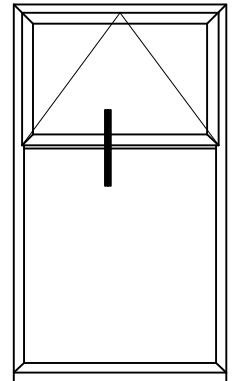
Note: Transoms will drain through the join to the outerframe.

Do Not Scale From This Drawing

Detail 12D



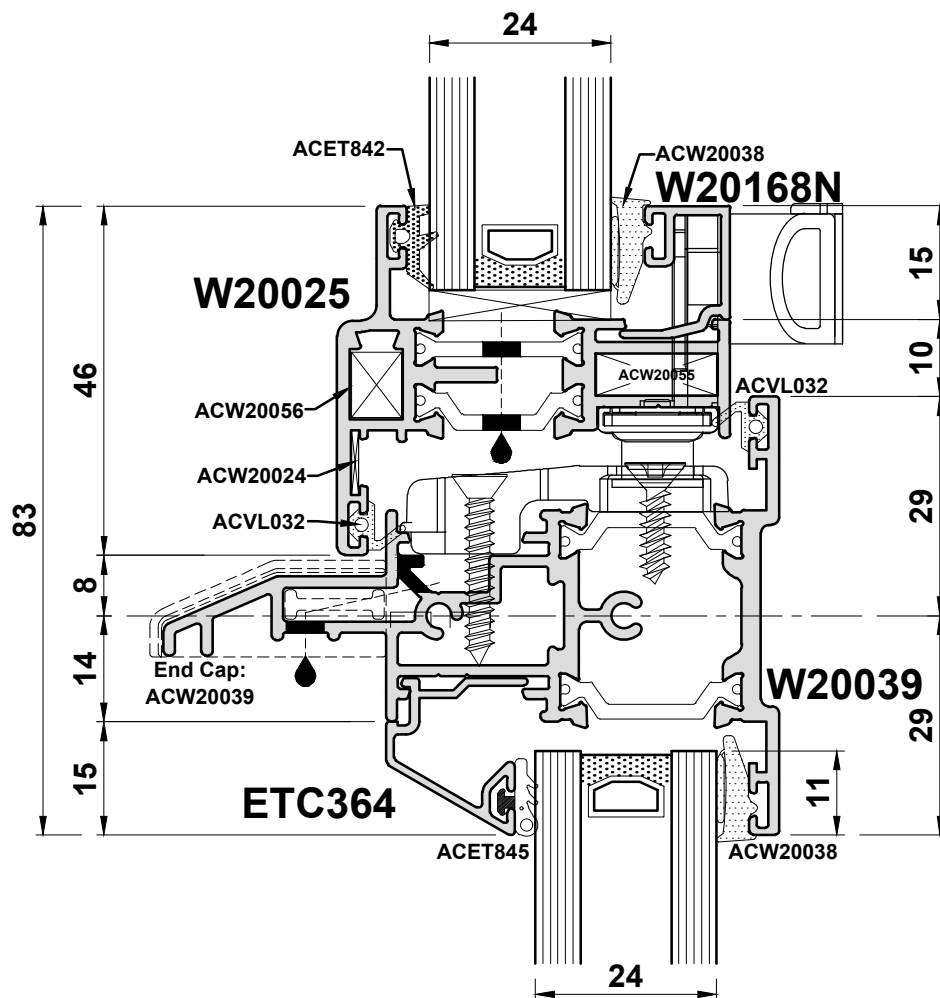
Do Not Scale From This Drawing



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

Do Not Scale From This Drawing

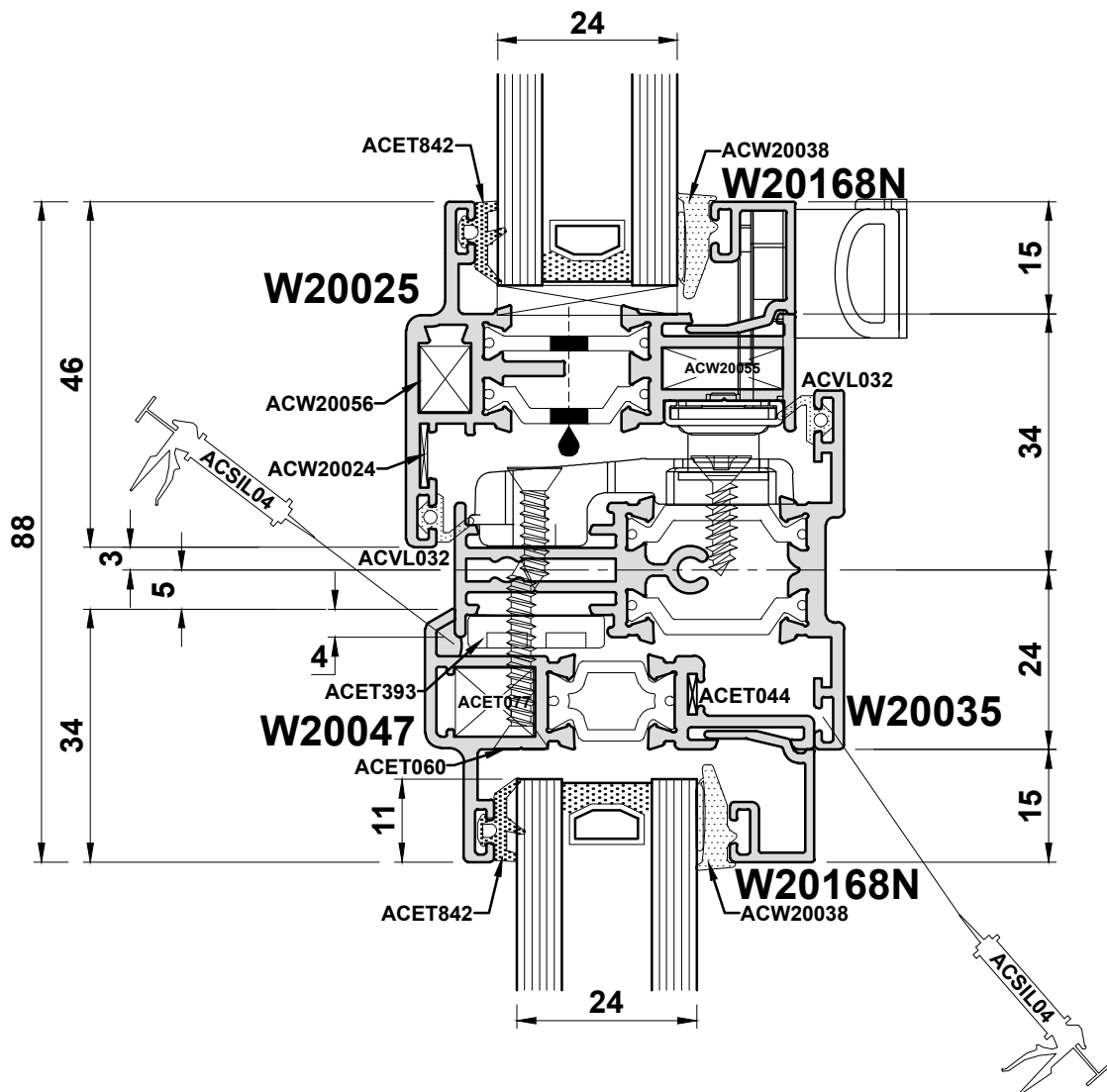
Detail 13B



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

Do Not Scale From This Drawing

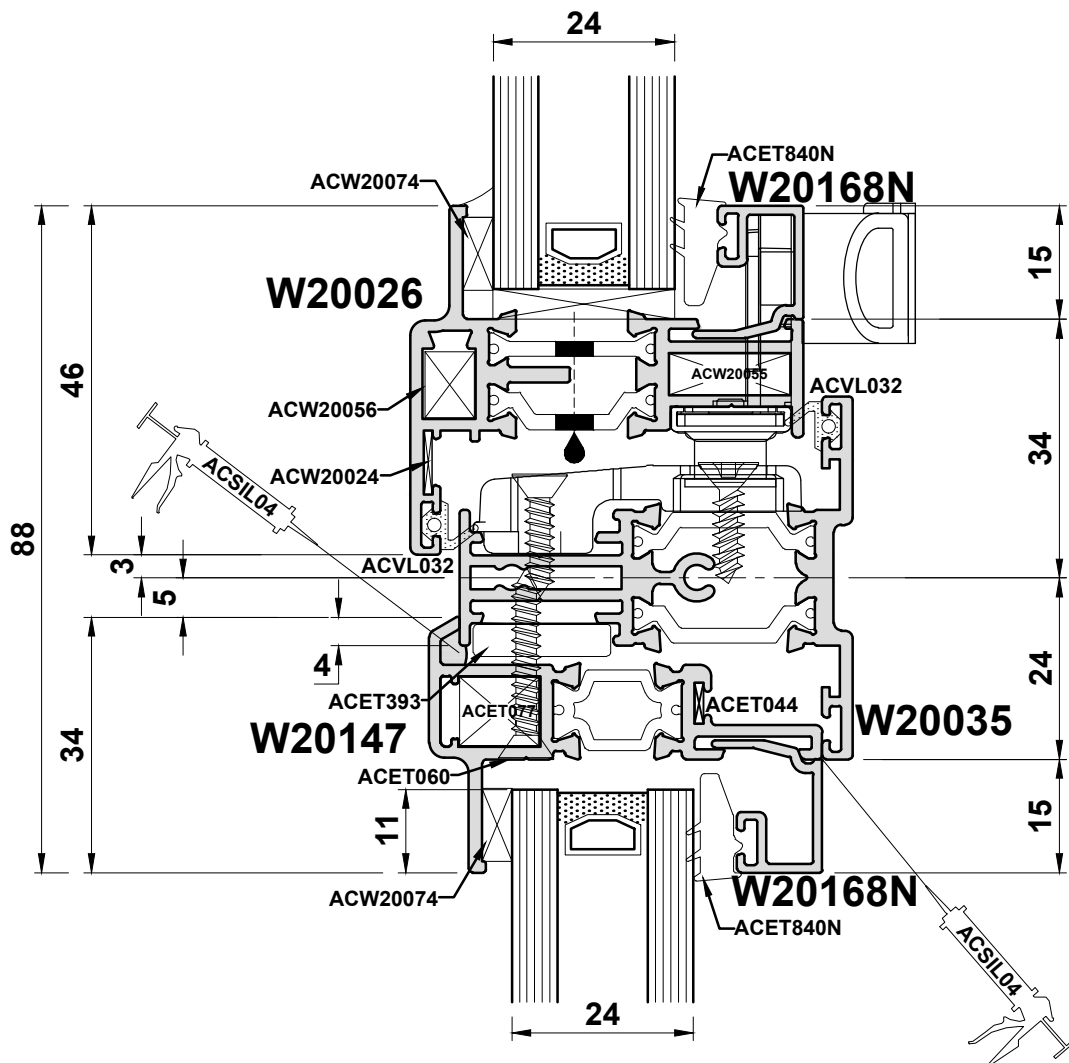
Detail 13C



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

Do Not Scale From This Drawing

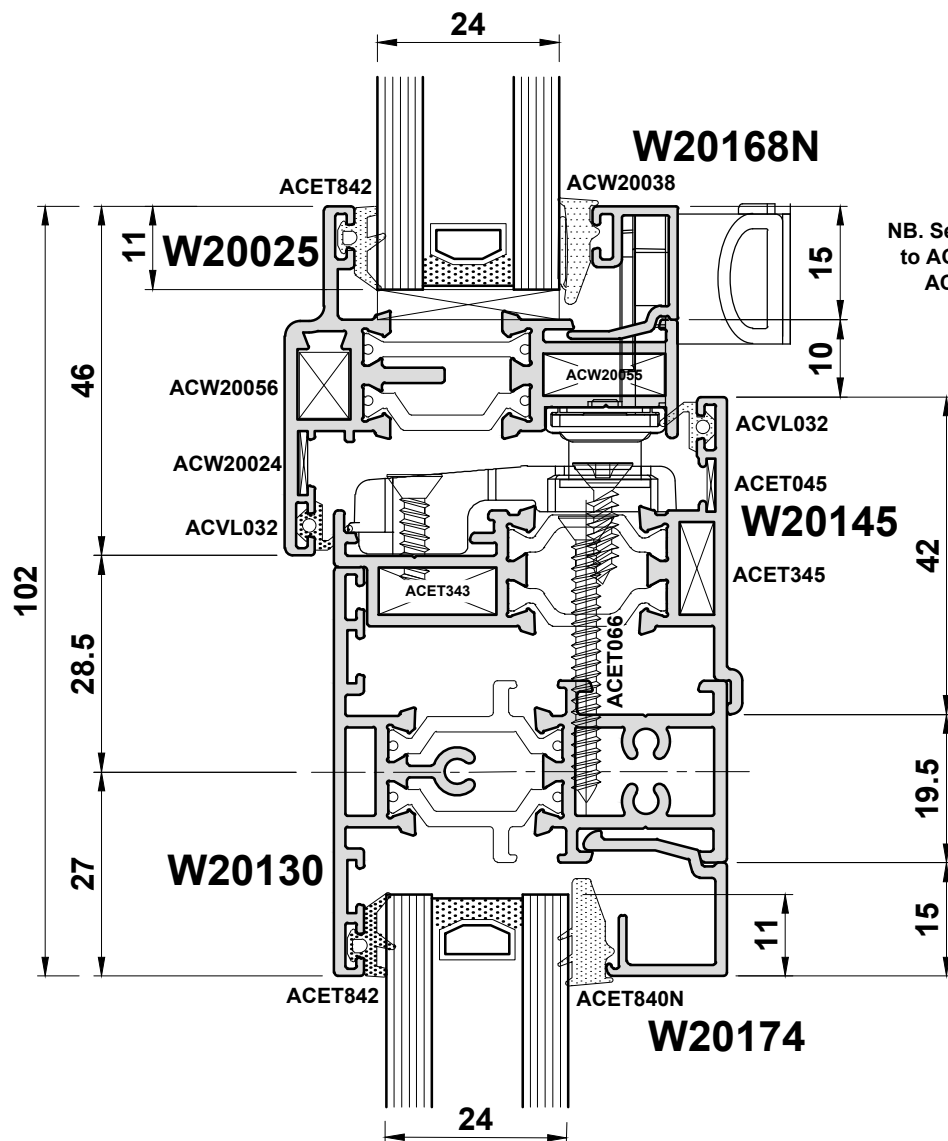
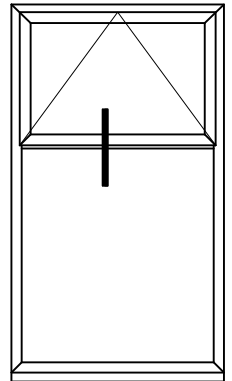
Detail 13D



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

Do Not Scale From This Drawing

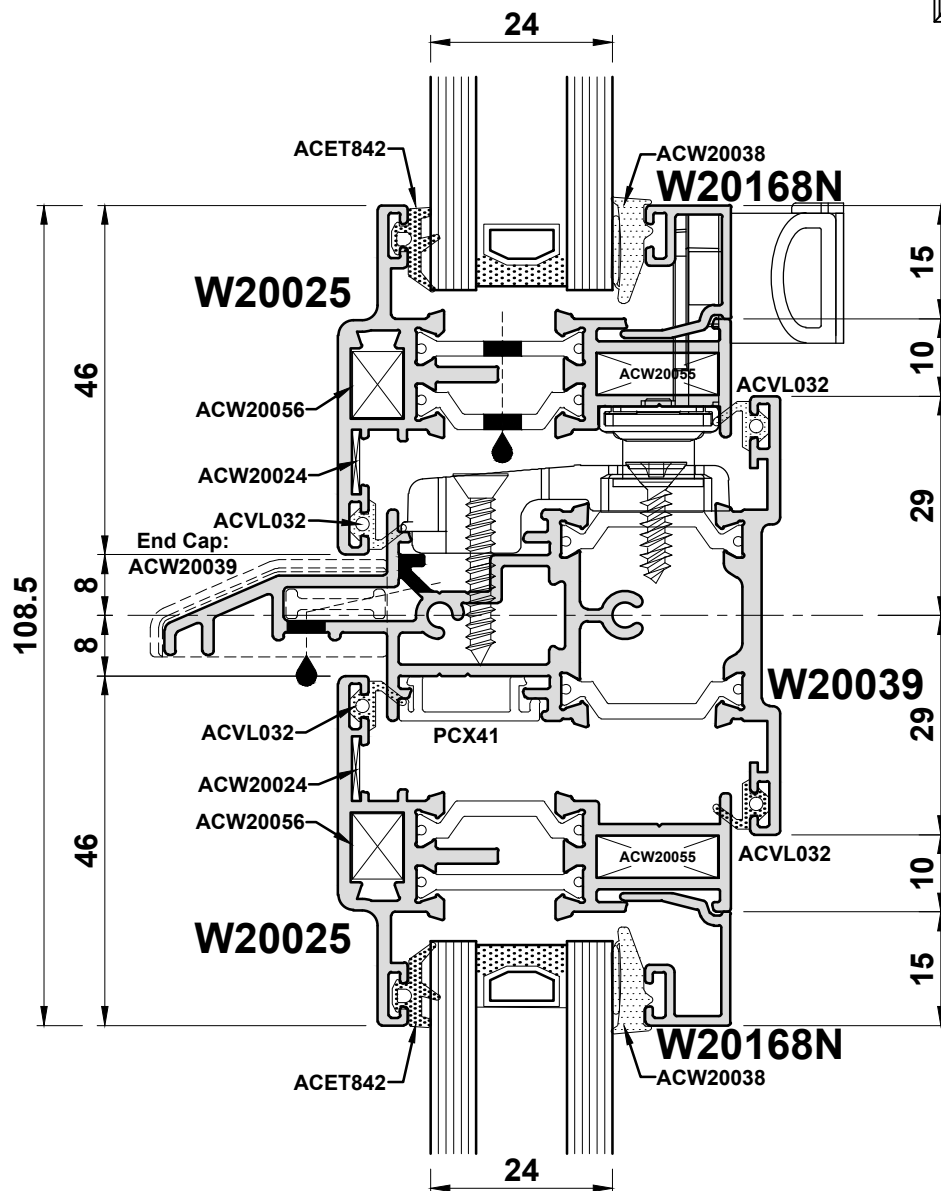
Detail 13E



NB. Secure handle
to ACW20028 or
ACW20128.

Do Not Scale From This Drawing

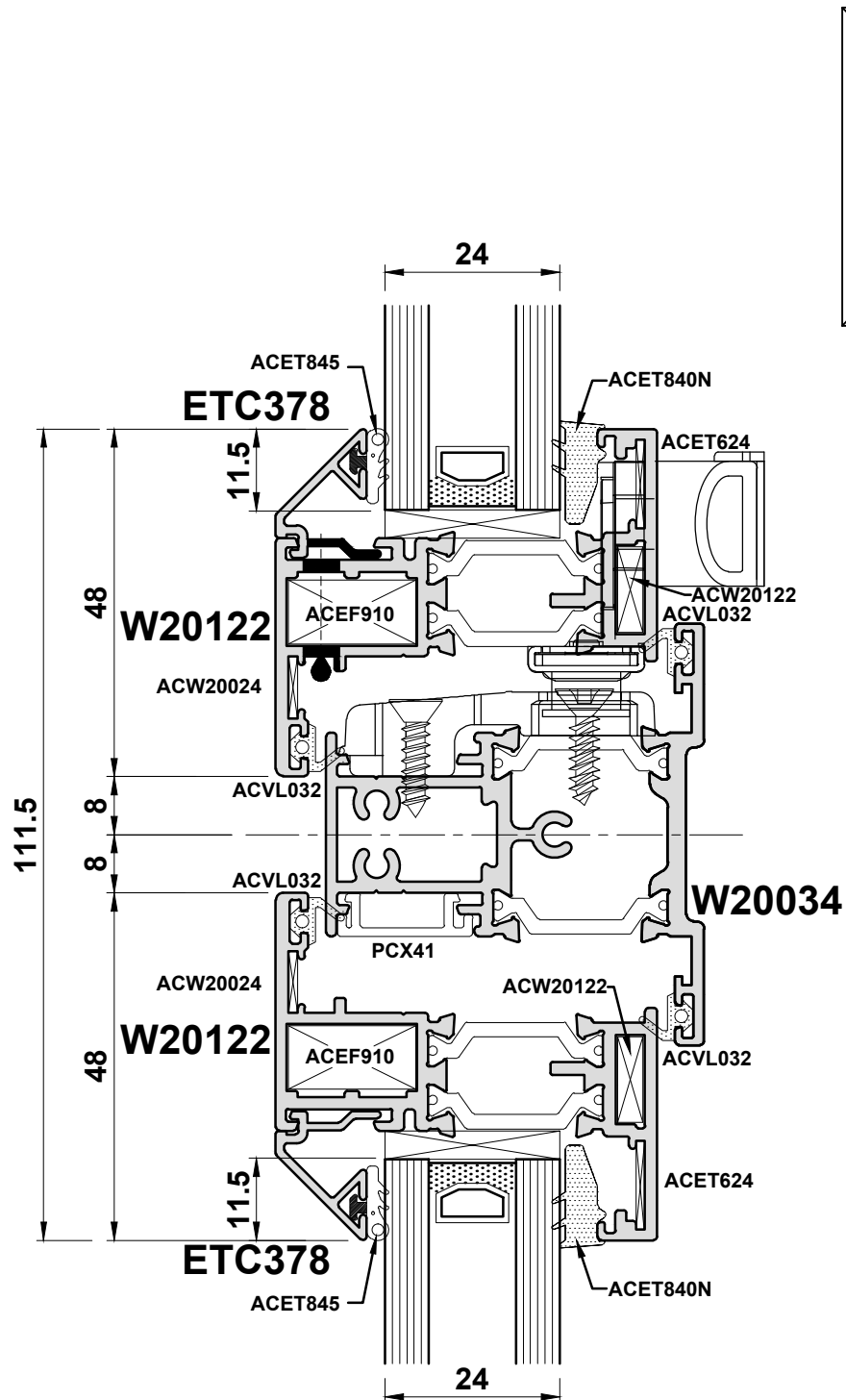
Detail 14A



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

Do Not Scale From This Drawing

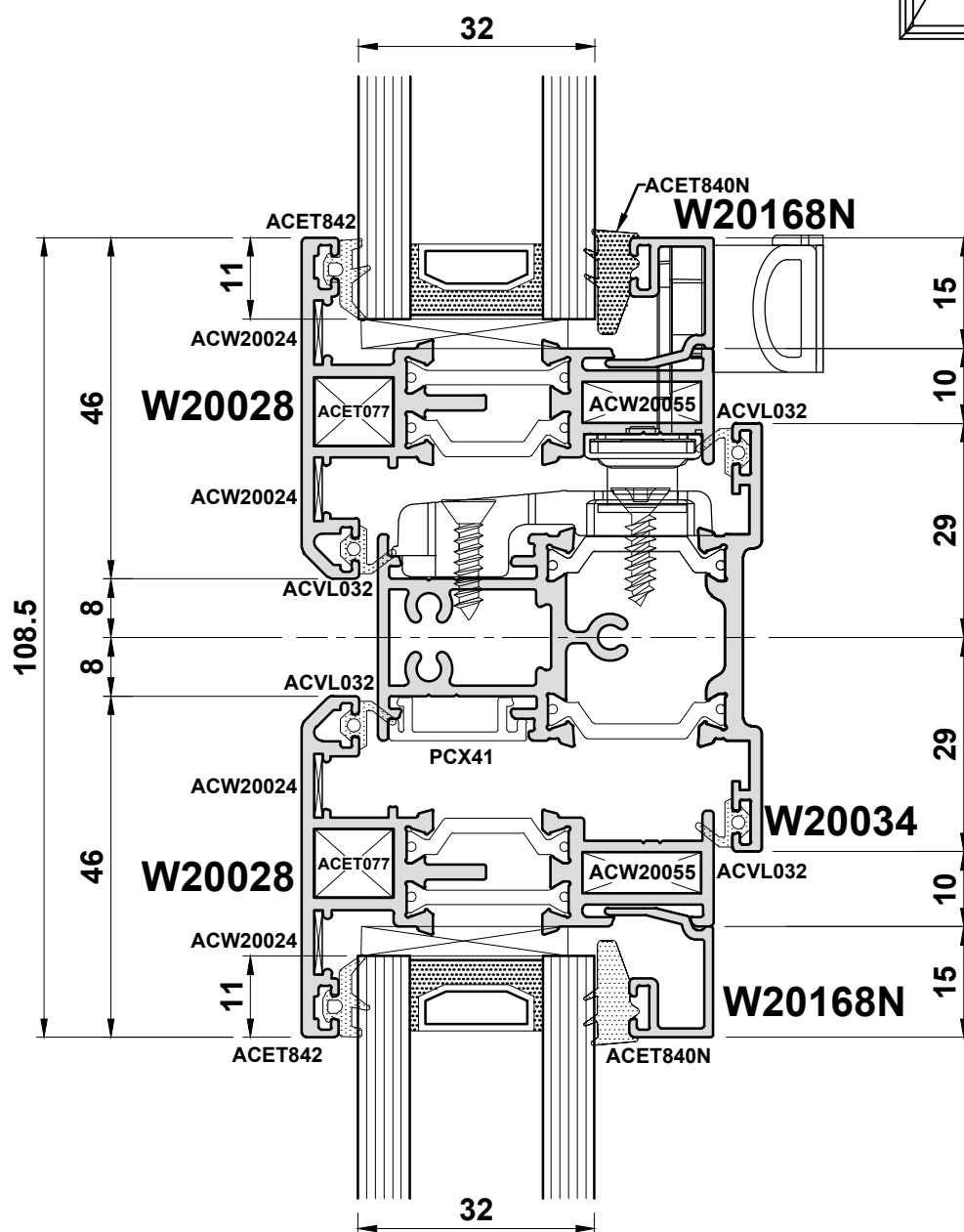
Detail 14B



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

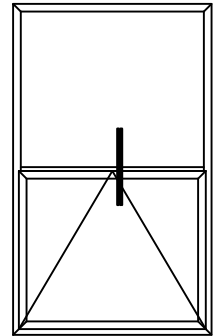
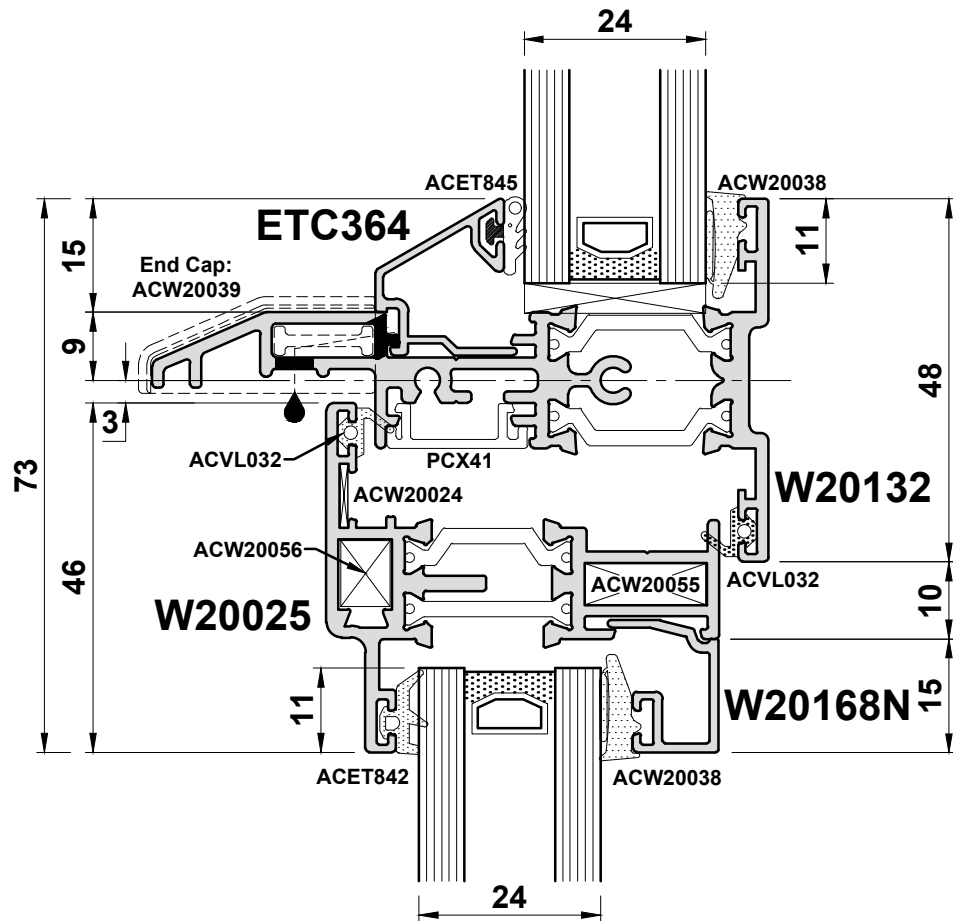
Do Not Scale From This Drawing

Detail 14C



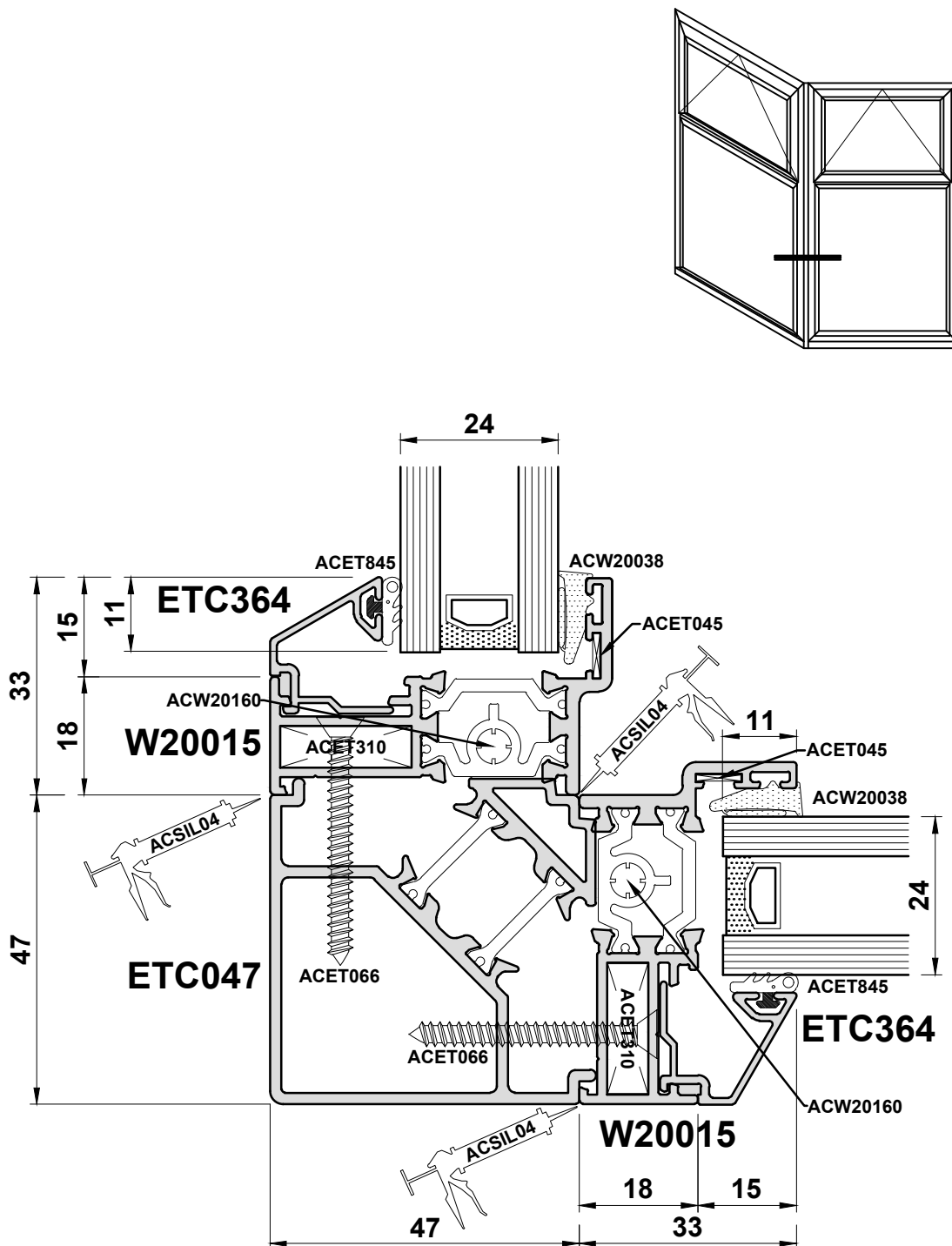
Do Not Scale From This Drawing

Detail 15



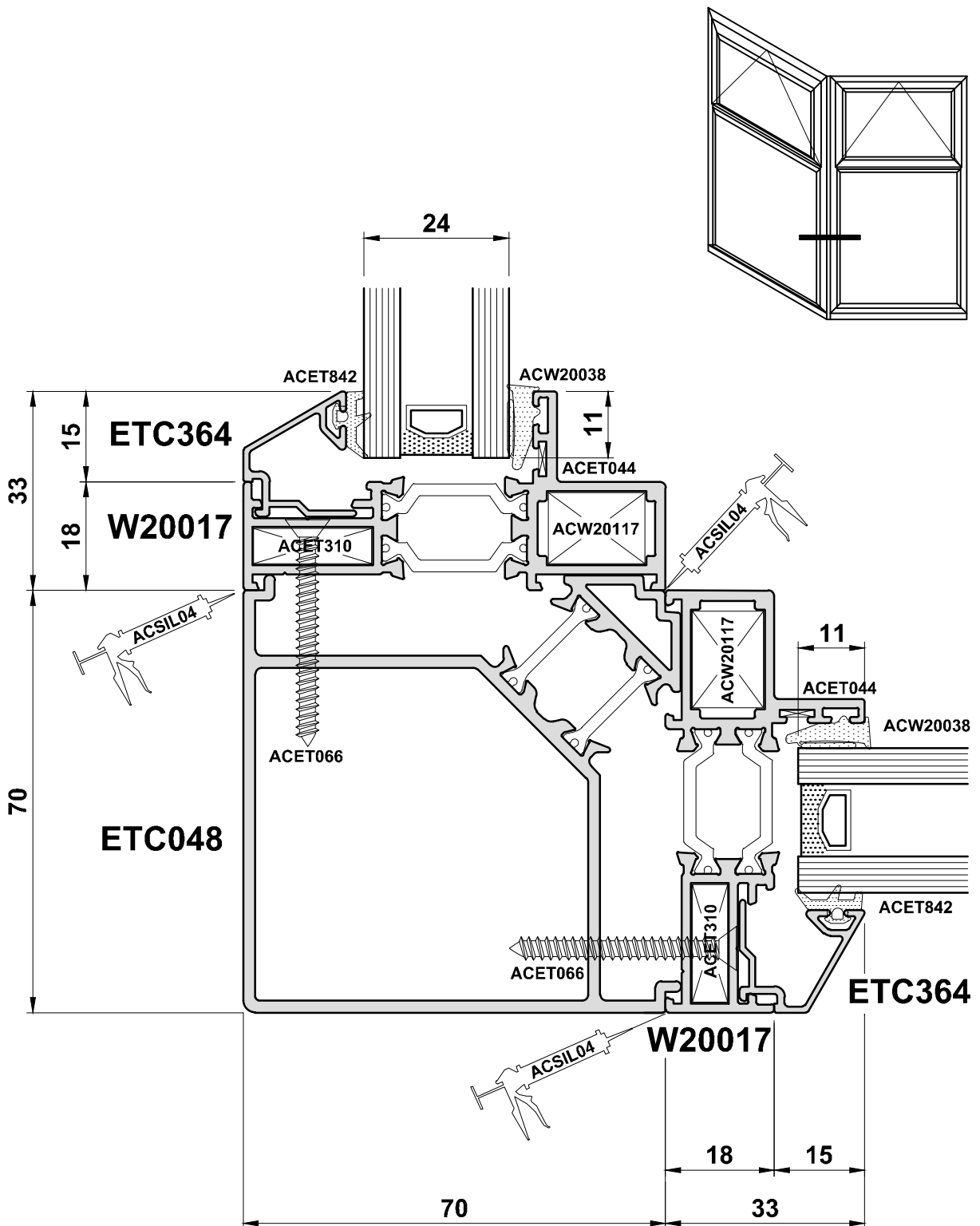
Do Not Scale From This Drawing

Detail 16A

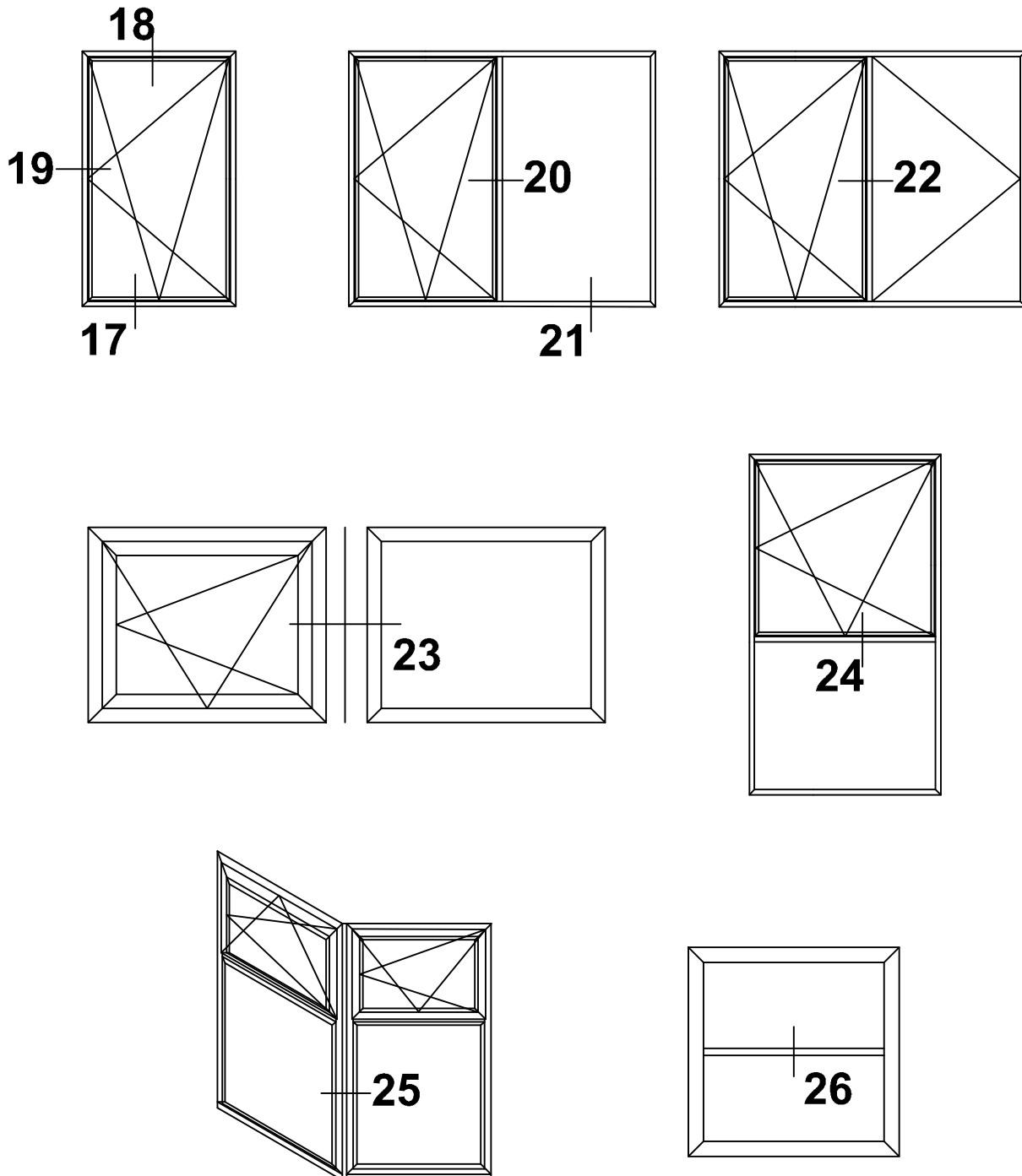


Do Not Scale From This Drawing

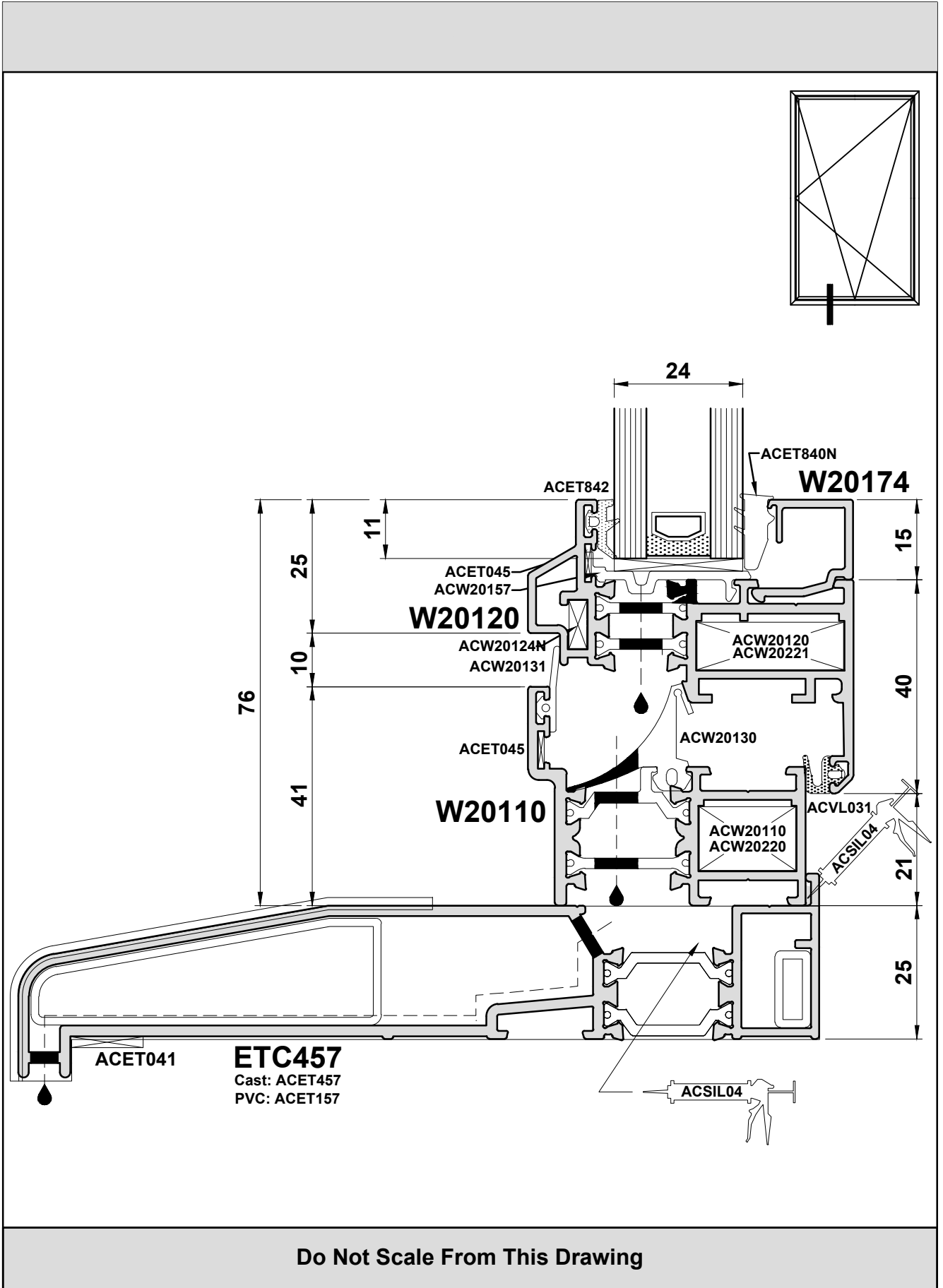
Detail 16B



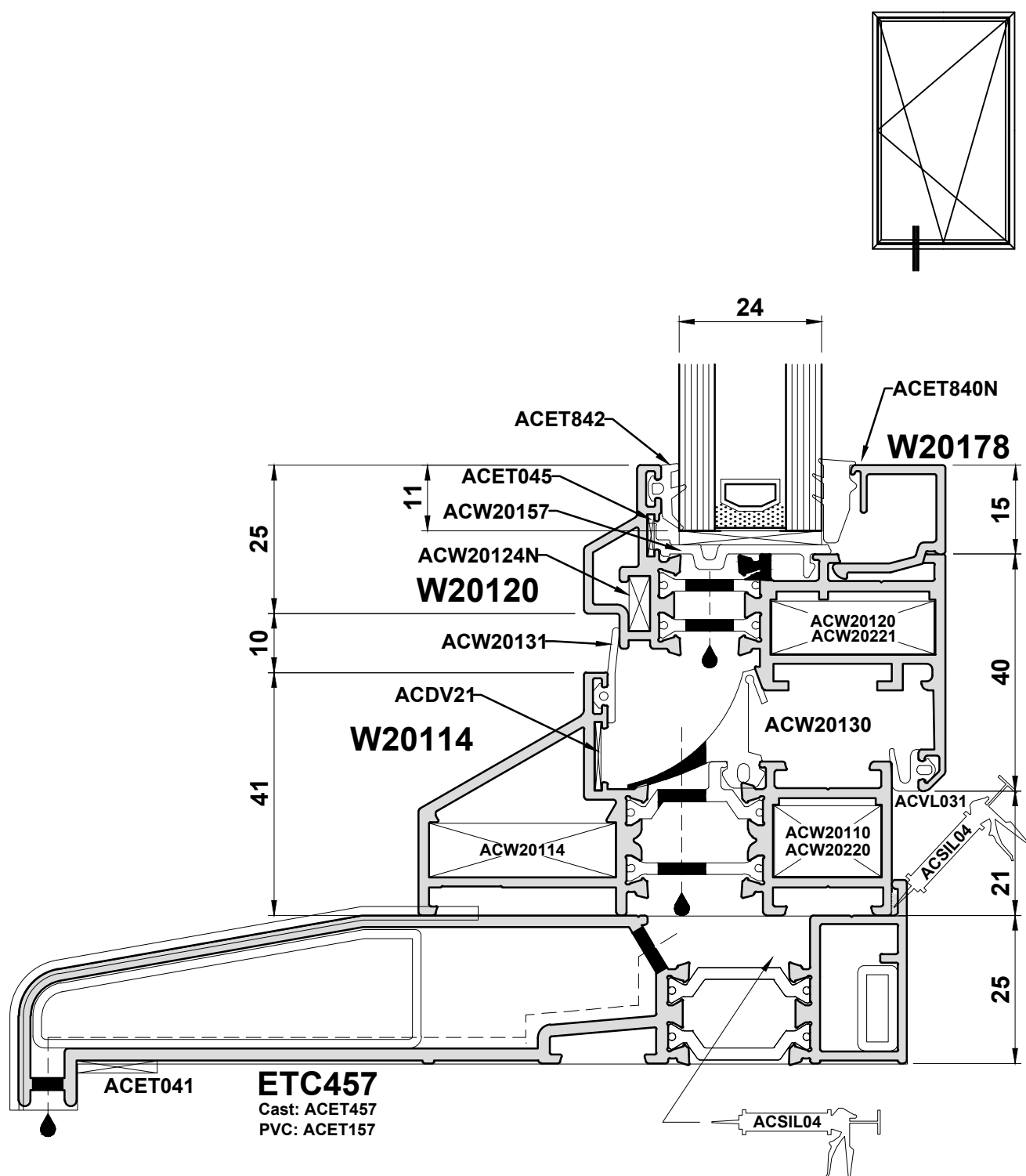
Do Not Scale From This Drawing



Do Not Scale From This Drawing

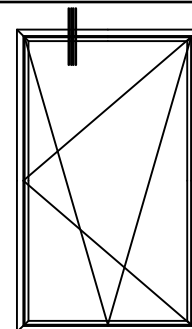
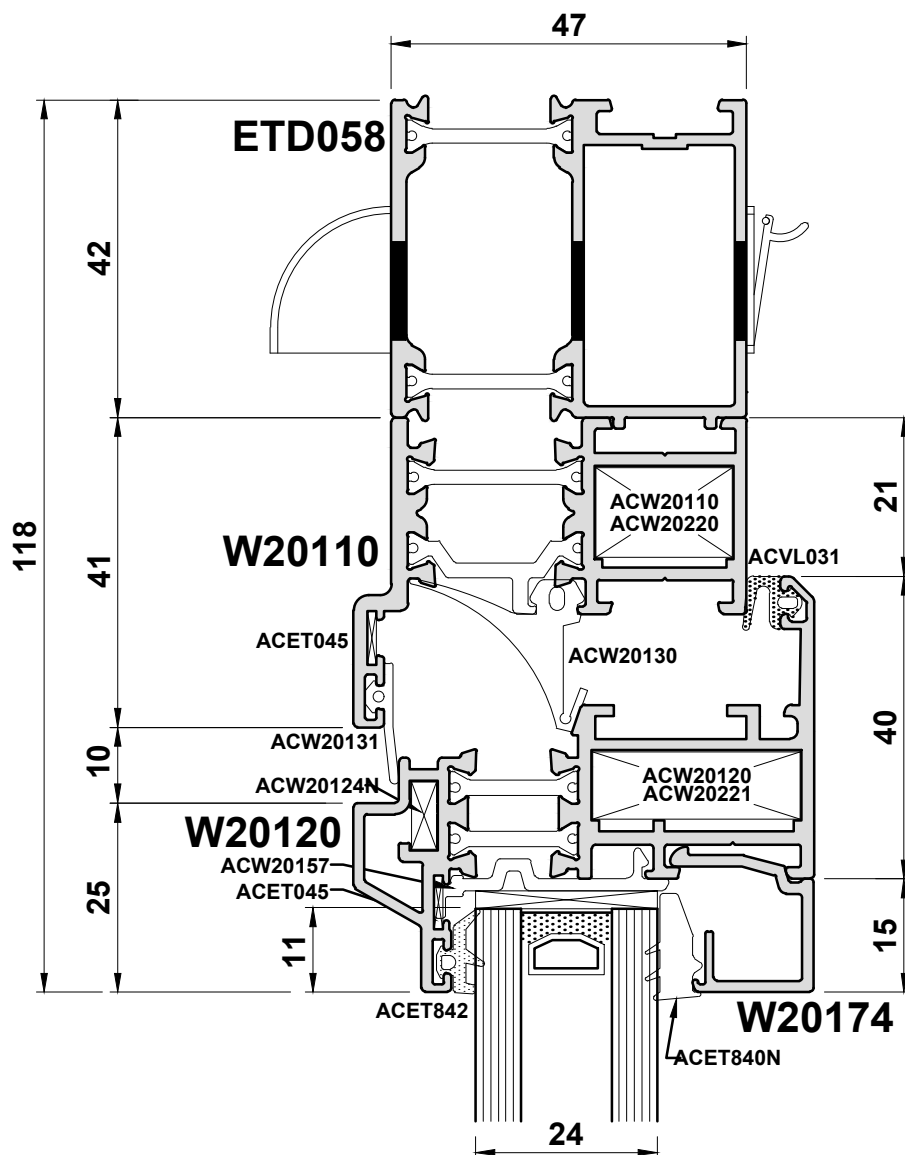


Detail 17B



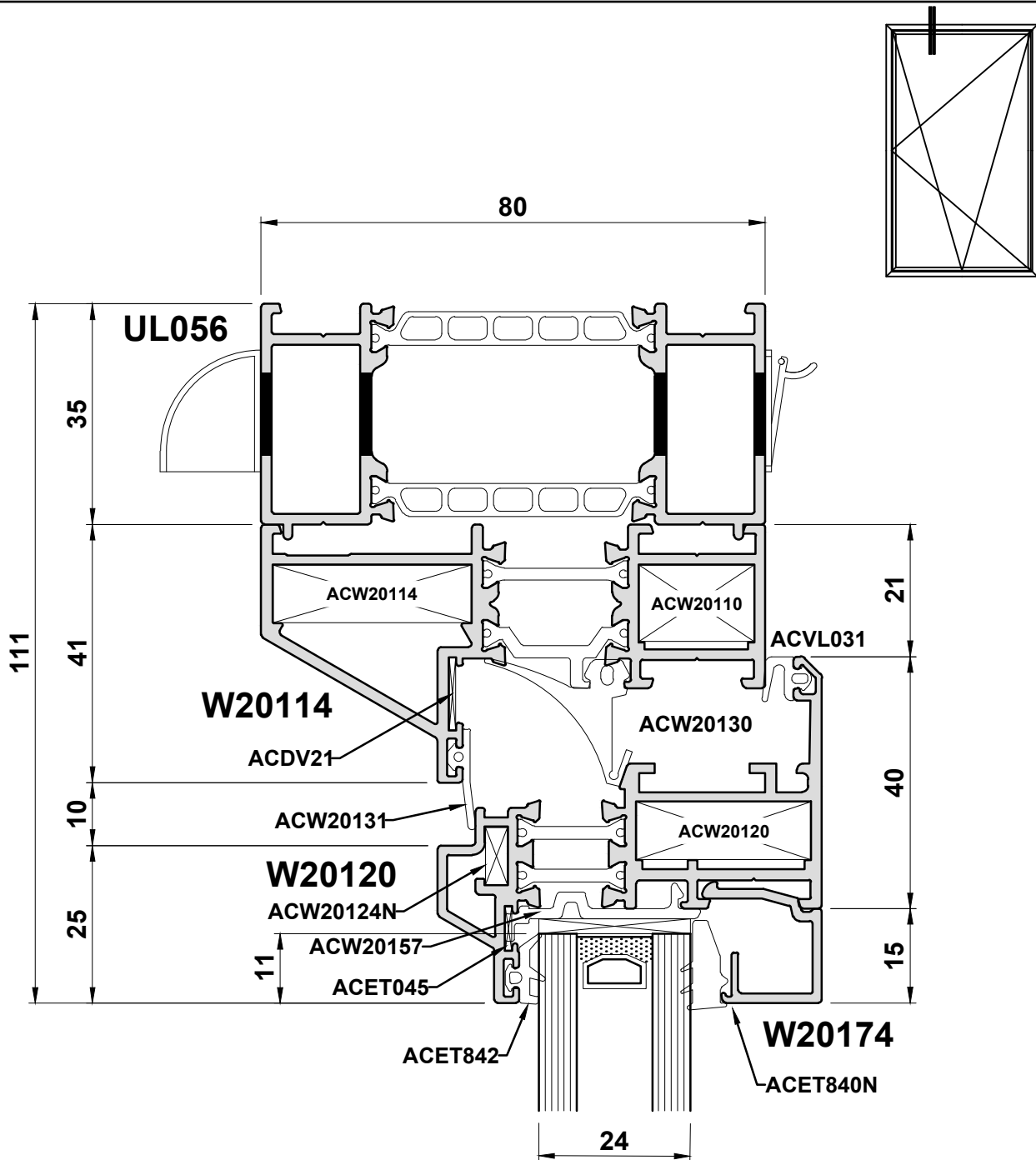
Do Not Scale From This Drawing

Detail 18A



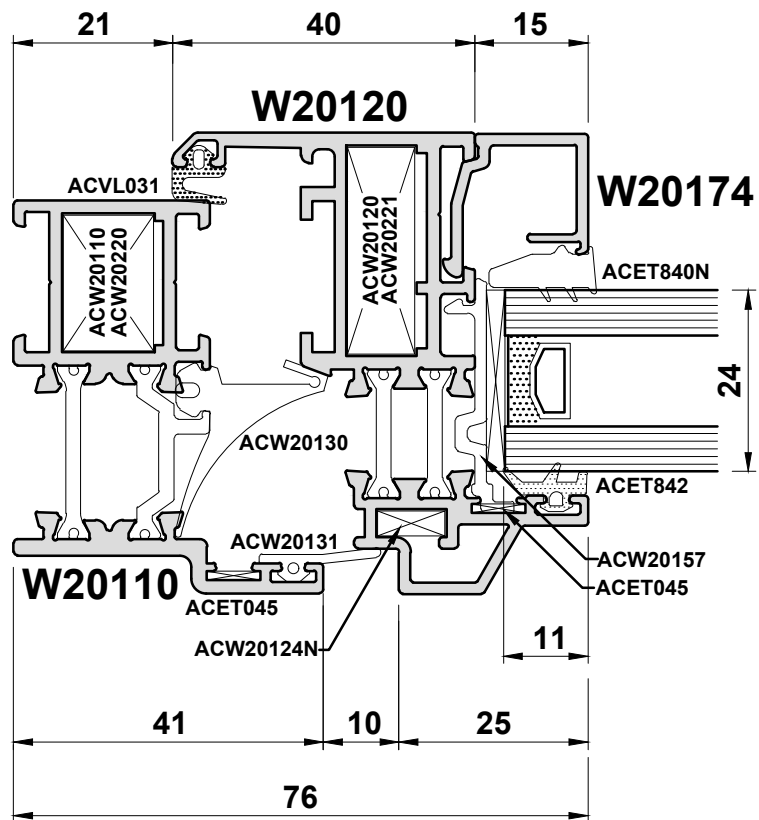
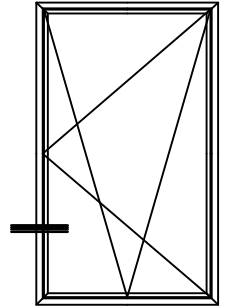
Do Not Scale From This Drawing

Detail 18B



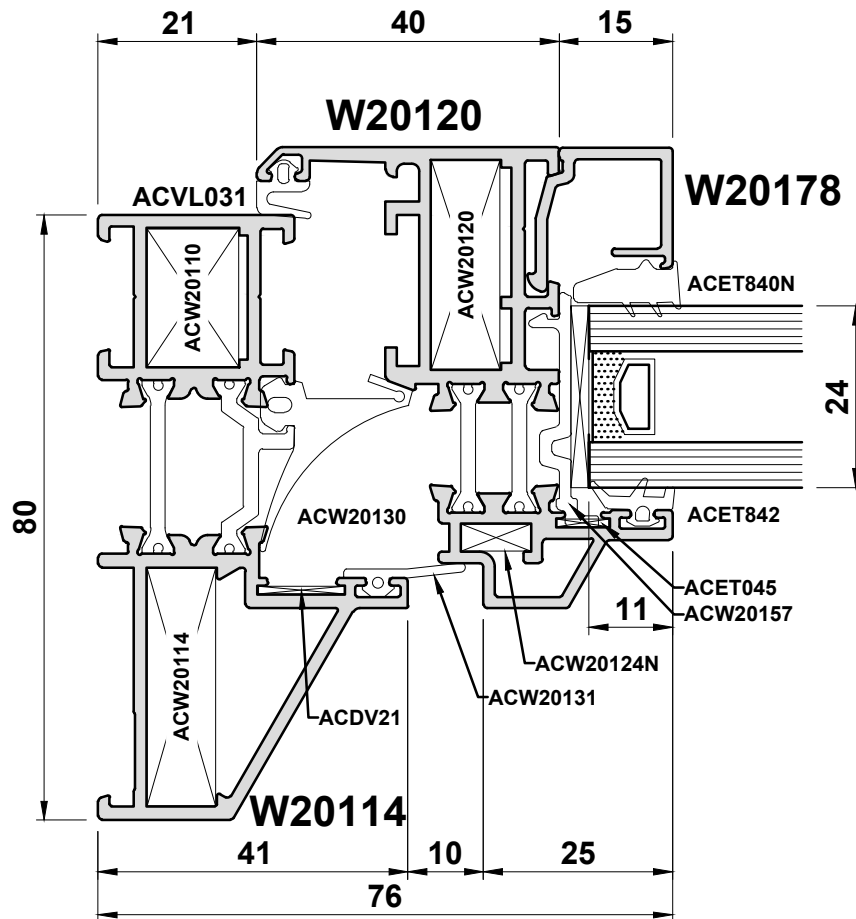
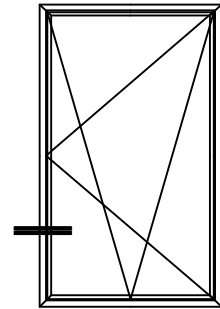
Do Not Scale From This Drawing

Detail 19A



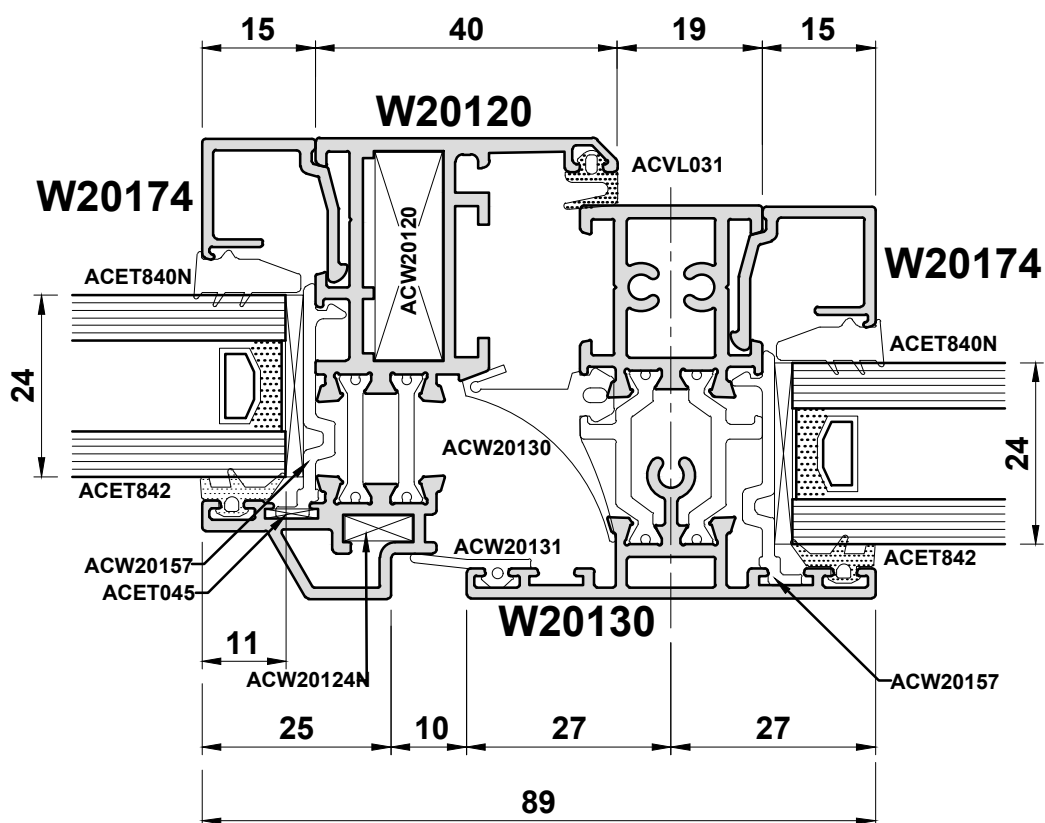
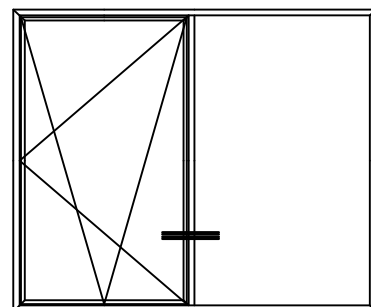
Do Not Scale From This Drawing

Detail 12B



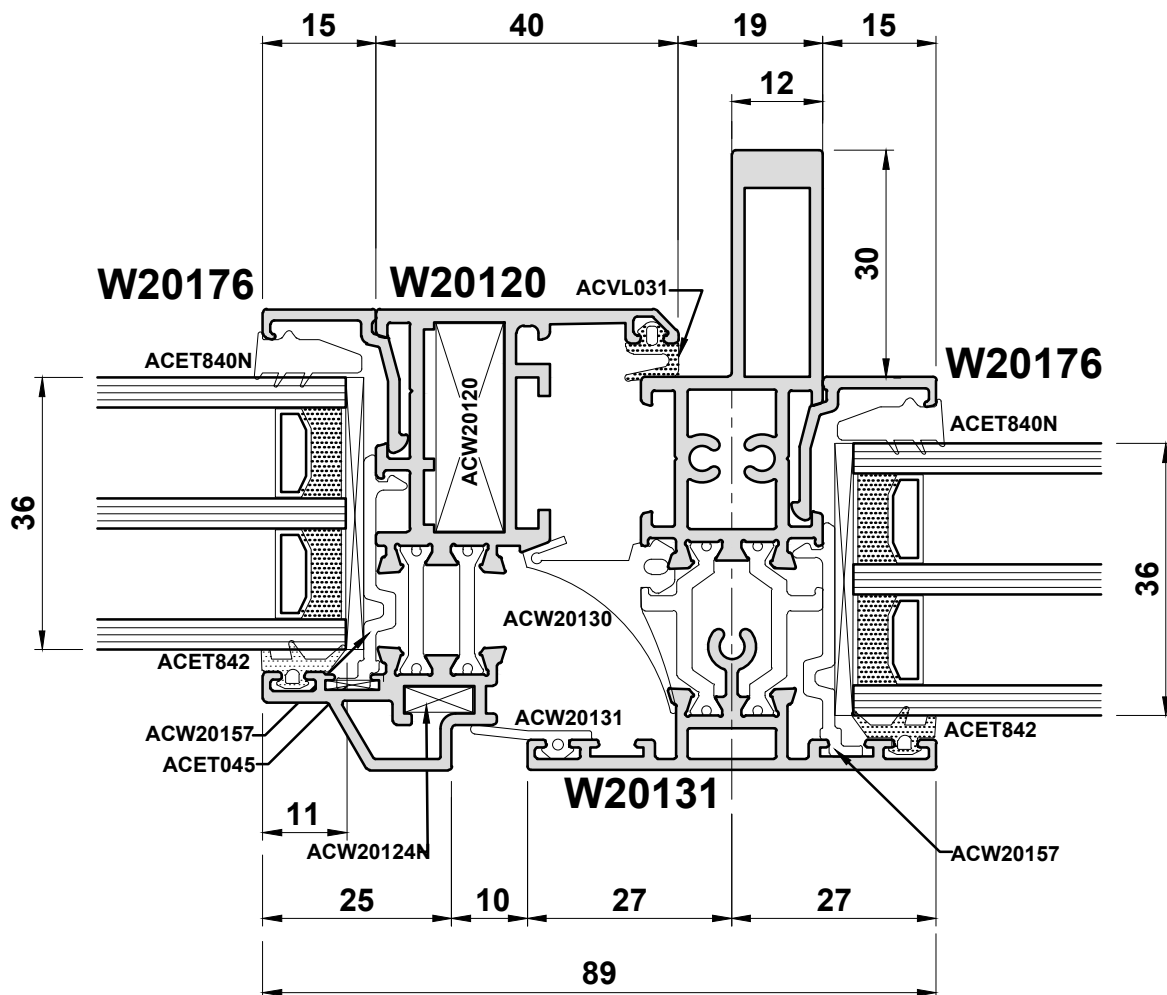
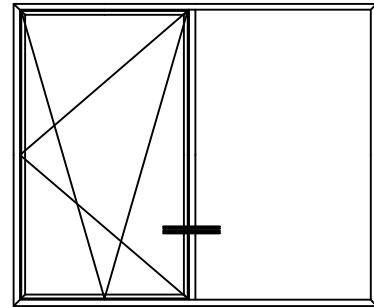
Do Not Scale From This Drawing

Detail 20A



Do Not Scale From This Drawing

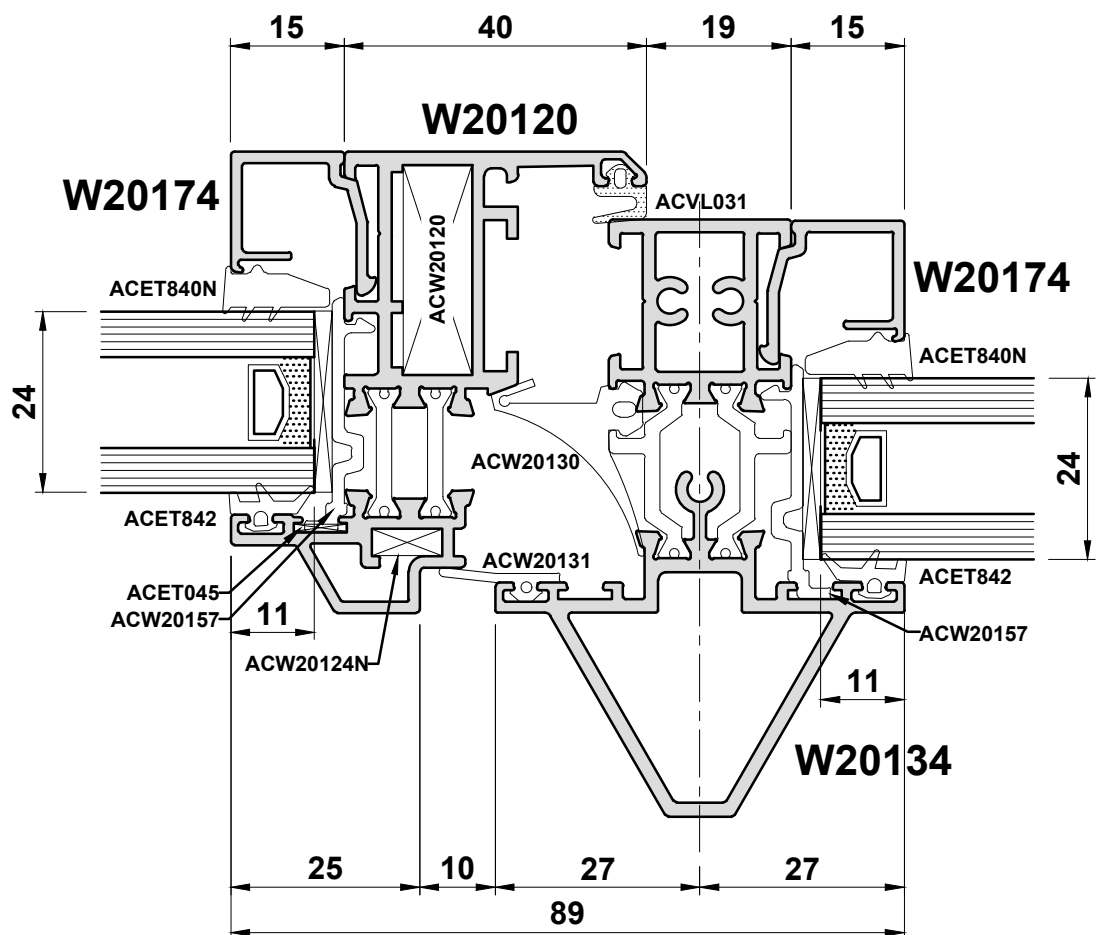
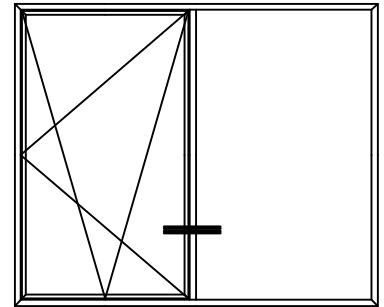
Detail 20B



Note: W20131 cannot be used with opening vents to both sides.

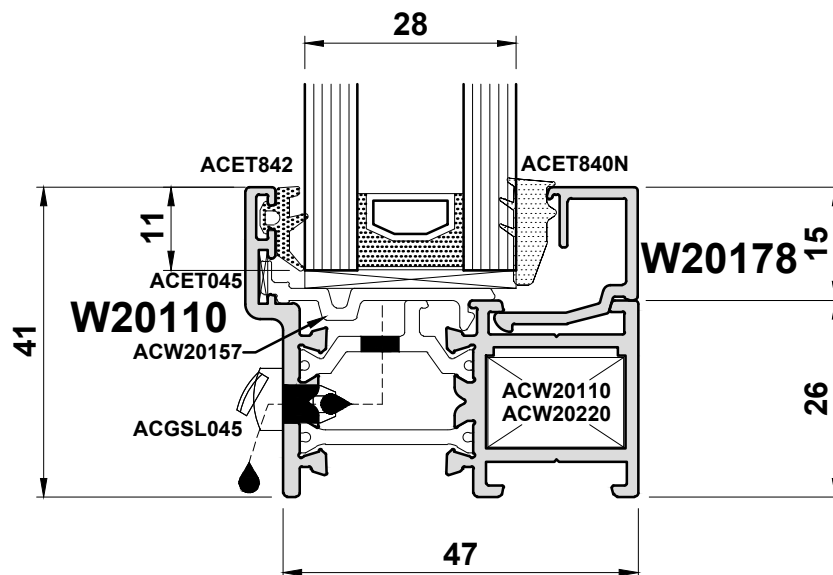
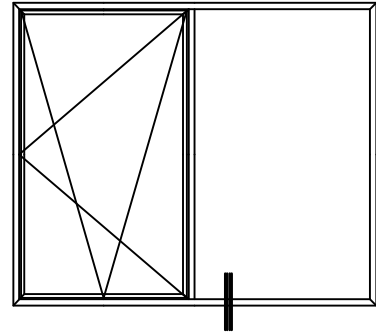
Do Not Scale From This Drawing

Detail 20C



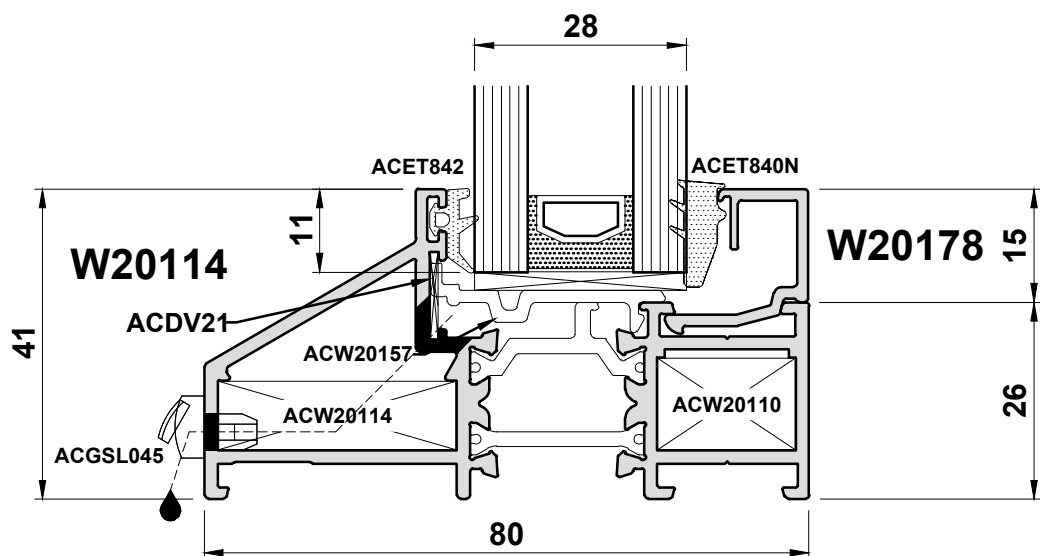
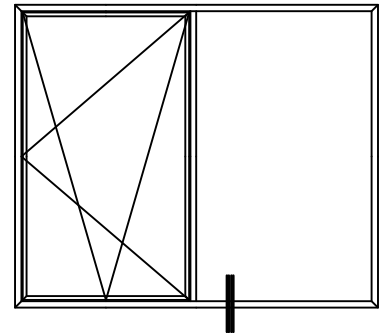
Do Not Scale From This Drawing

Detail 21A



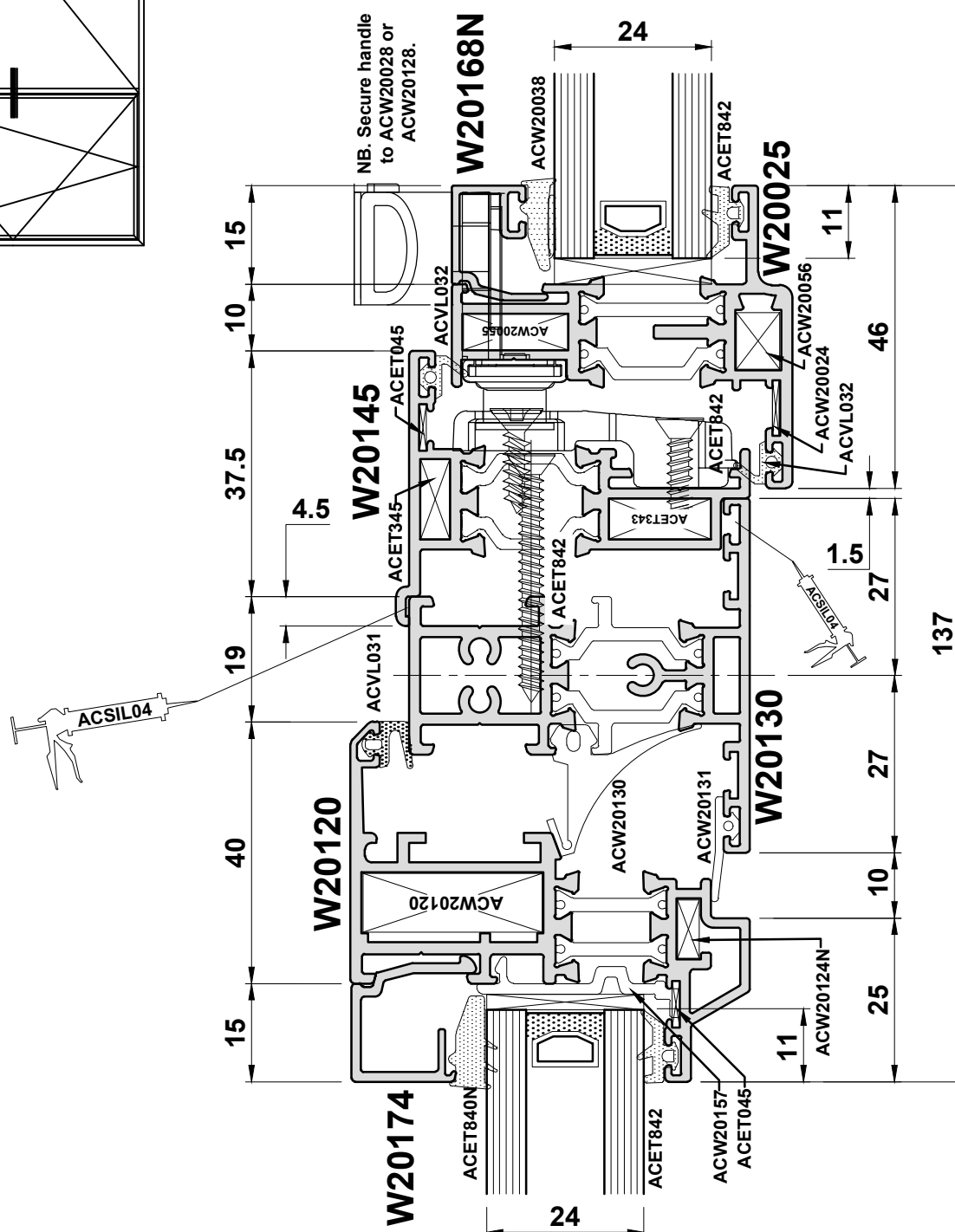
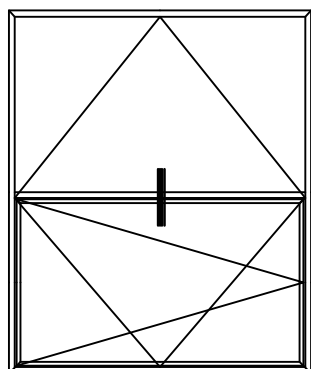
Do Not Scale From This Drawing

Detail 21B



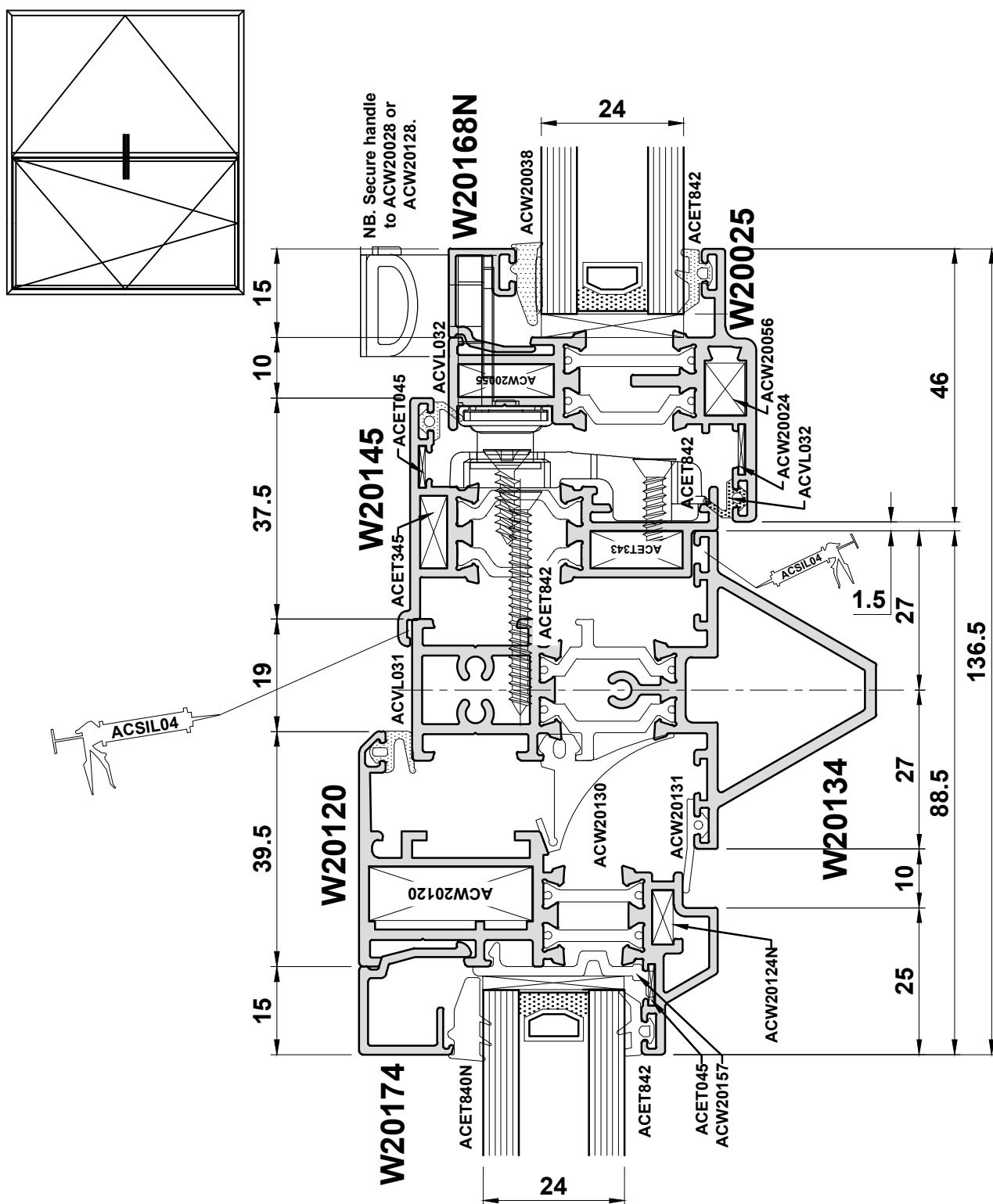
Do Not Scale From This Drawing

Detail 22A



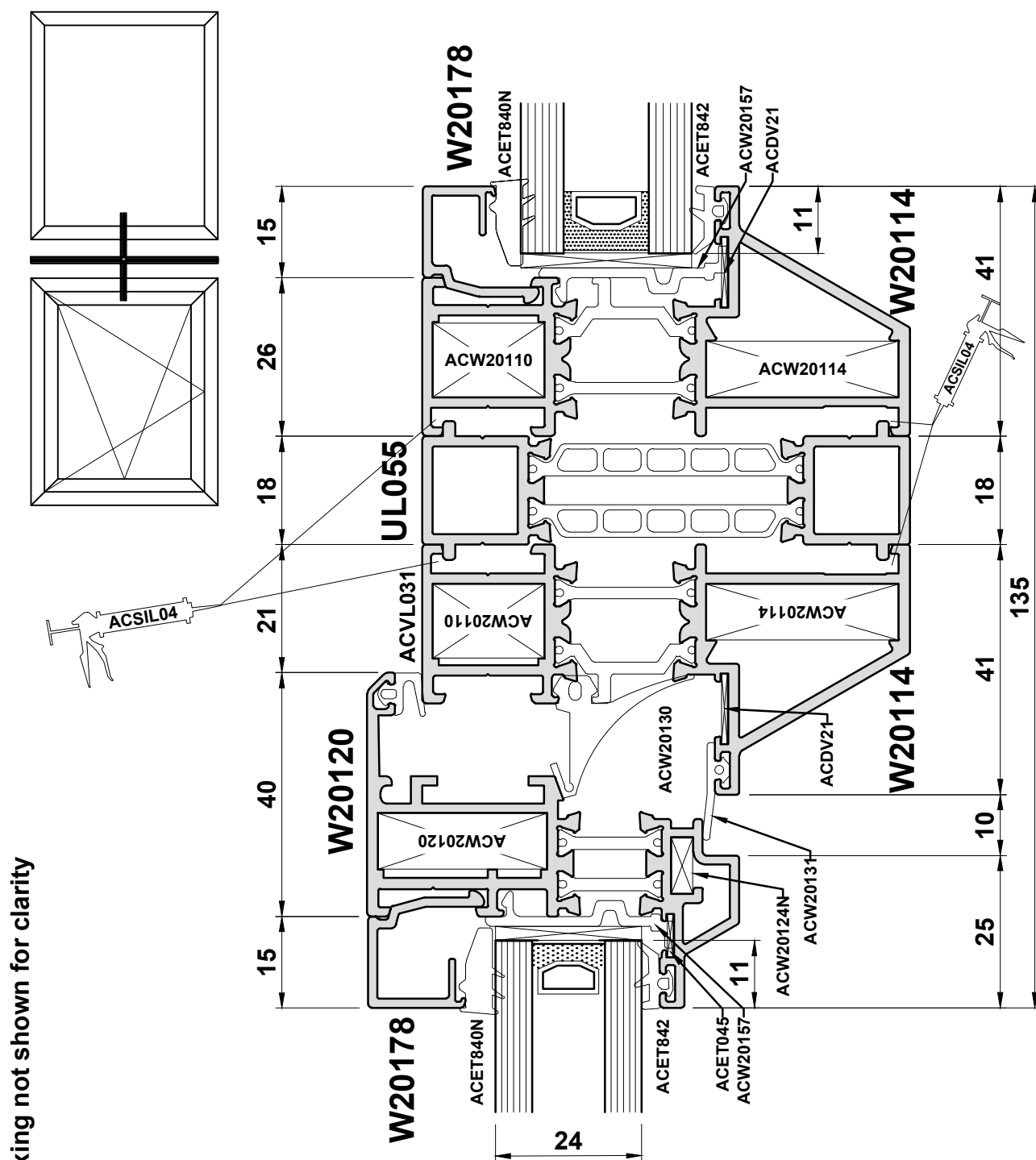
Do Not Scale From This Drawing

Detail 22B



Do Not Scale From This Drawing

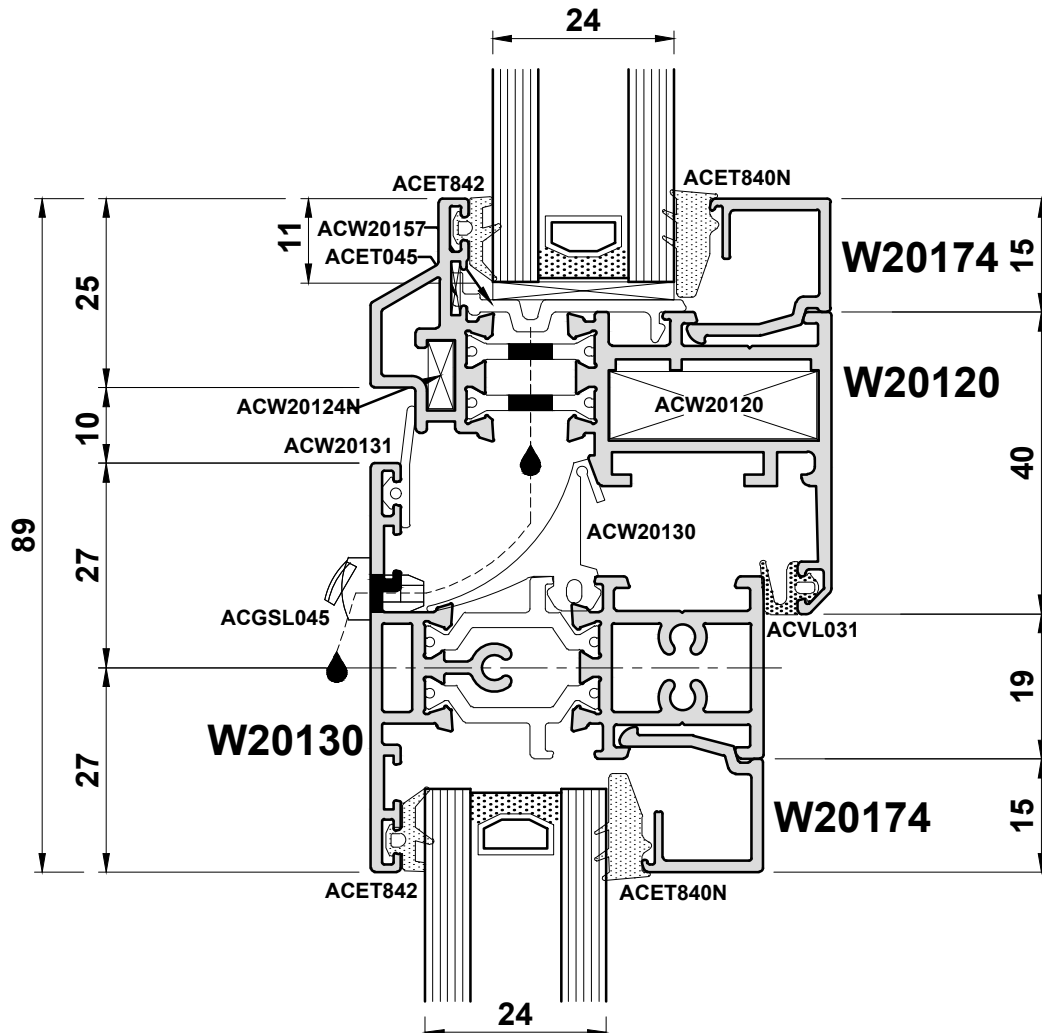
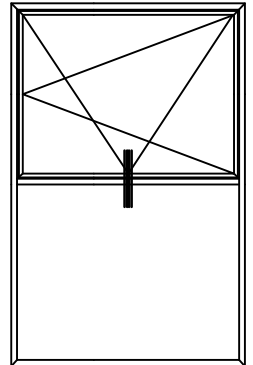
Detail 23



Coupler fixing not shown for clarity

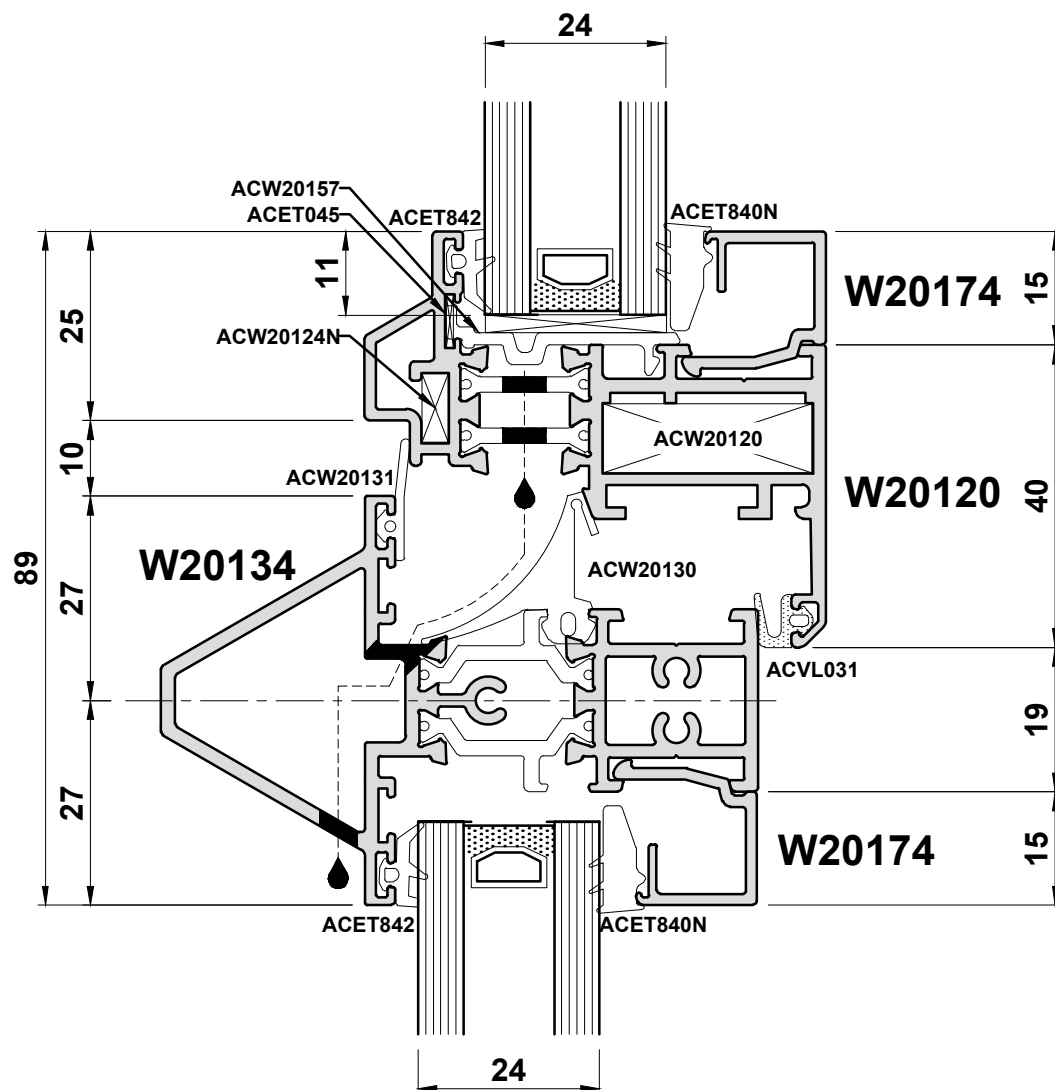
Do Not Scale From This Drawing

Detail 24A



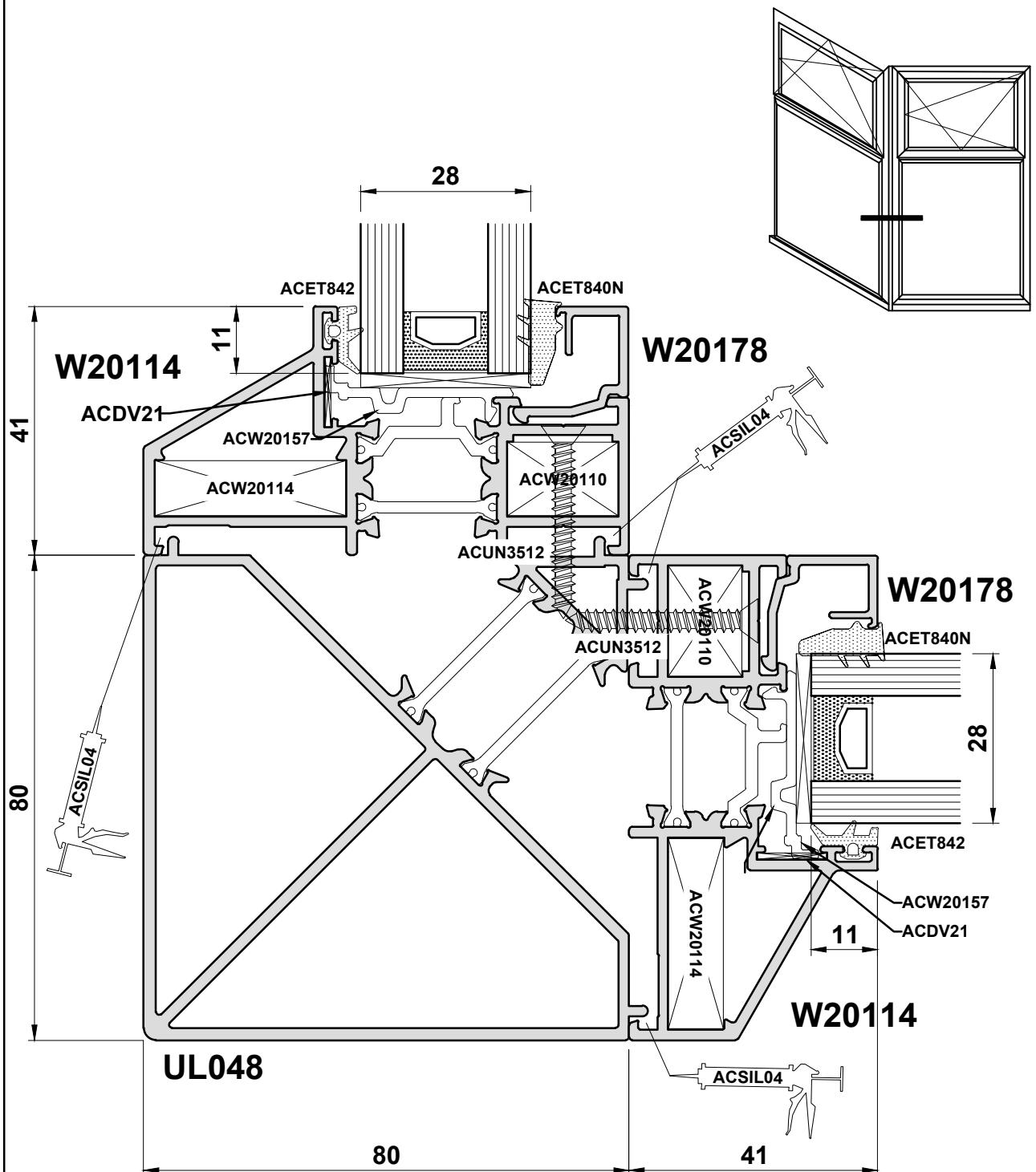
Do Not Scale From This Drawing

Detail 24B



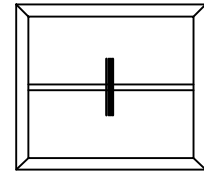
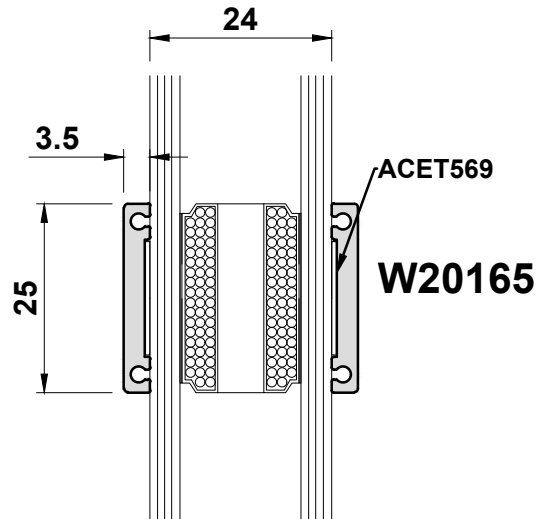
Do Not Scale From This Drawing

Detail 25

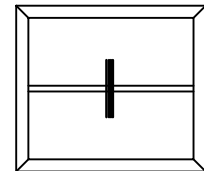
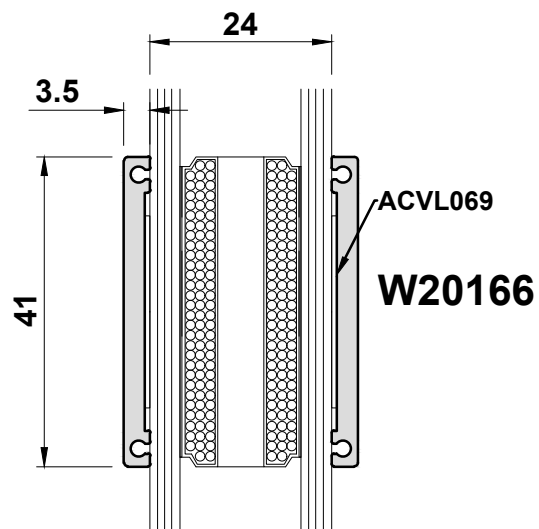


Do Not Scale From This Drawing

Detail 26A



Detail 26B



Do Not Scale From This Drawing

Section D

Statics

General Size Limitations are shown on Page A03.

**For Wind Loading Limitations, Please Contact
The Technical Department - T: 01934 876100**

Section E



Construction Drawings

Corner Joint Details.....	E03
Corner Crimping.....	E04 - E05
Drainage.....	E06 - E07
Angled Sub Cill.....	E08
Mullion/Transom Details.....	E09 - E12
Friction Stays.....	E13 - E14
Friction Stay Accessories.....	E15
Lock Installation.....	E16 - E19
Window French Casement.....	E20 - E21
Peg Stays.....	E22
W20492 Horizontal Coupler Detail.....	E23
UN3000 Horizontal Coupler Detail.....	E24
Astragal Bar Detail.....	E25
Tilt & Turn Size Chart.....	E26
ACUN3140 Hinge.....	E27
Tilt & Turn Variable Angle Cleat Detail.....	E28
Tilt & Turn Drainage.....	E29
Tilt & Turn Size Outer Frame & Sash Preperation.....	E30
Tilt & Turn Size Transom/Mullion.....	E31 - E34
Glazing Chart.....	E35 - E38
Bay Pole Detail.....	E39 - E40
Fixing Strap Guide.....	E41

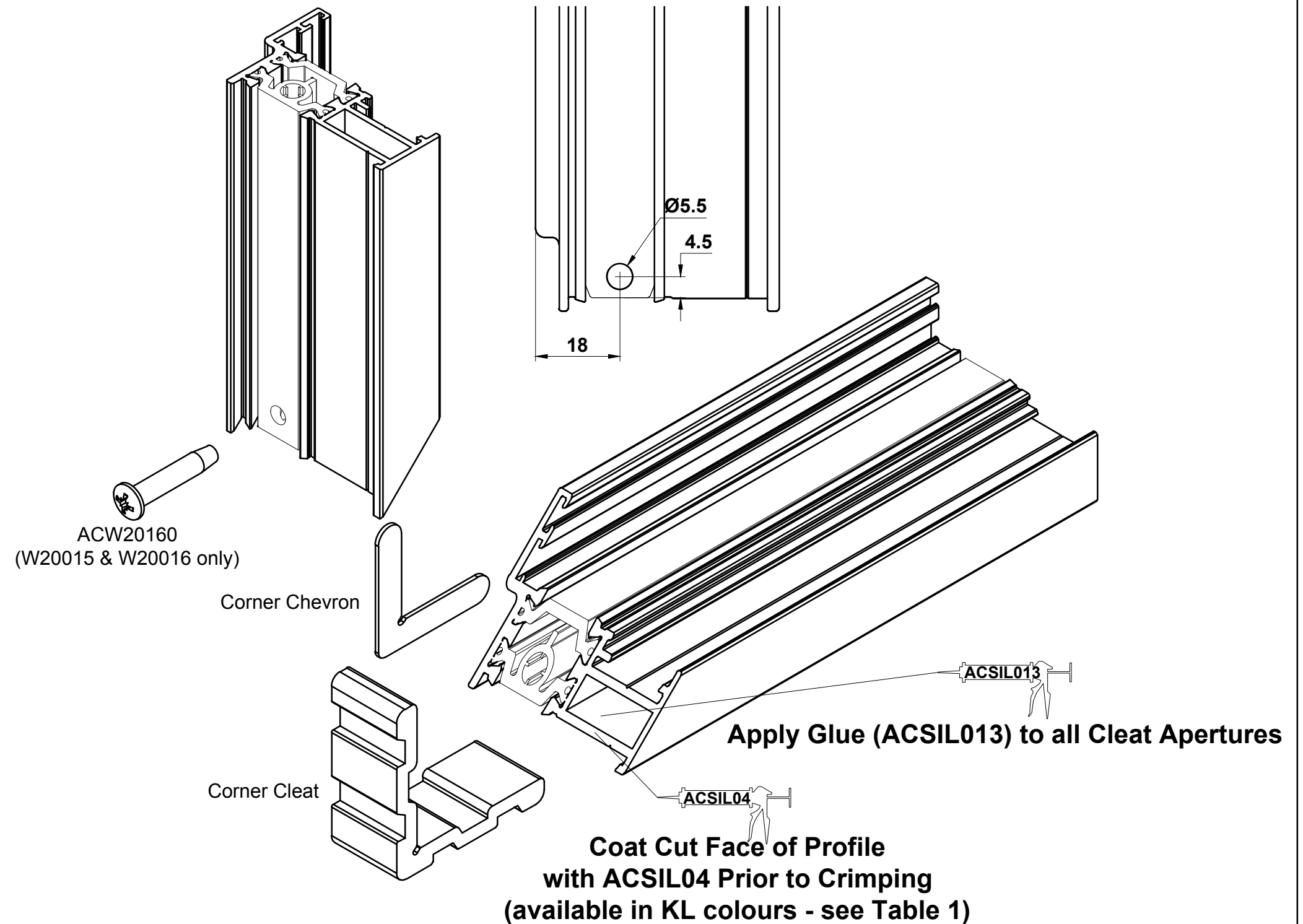
Corner Joint Details

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

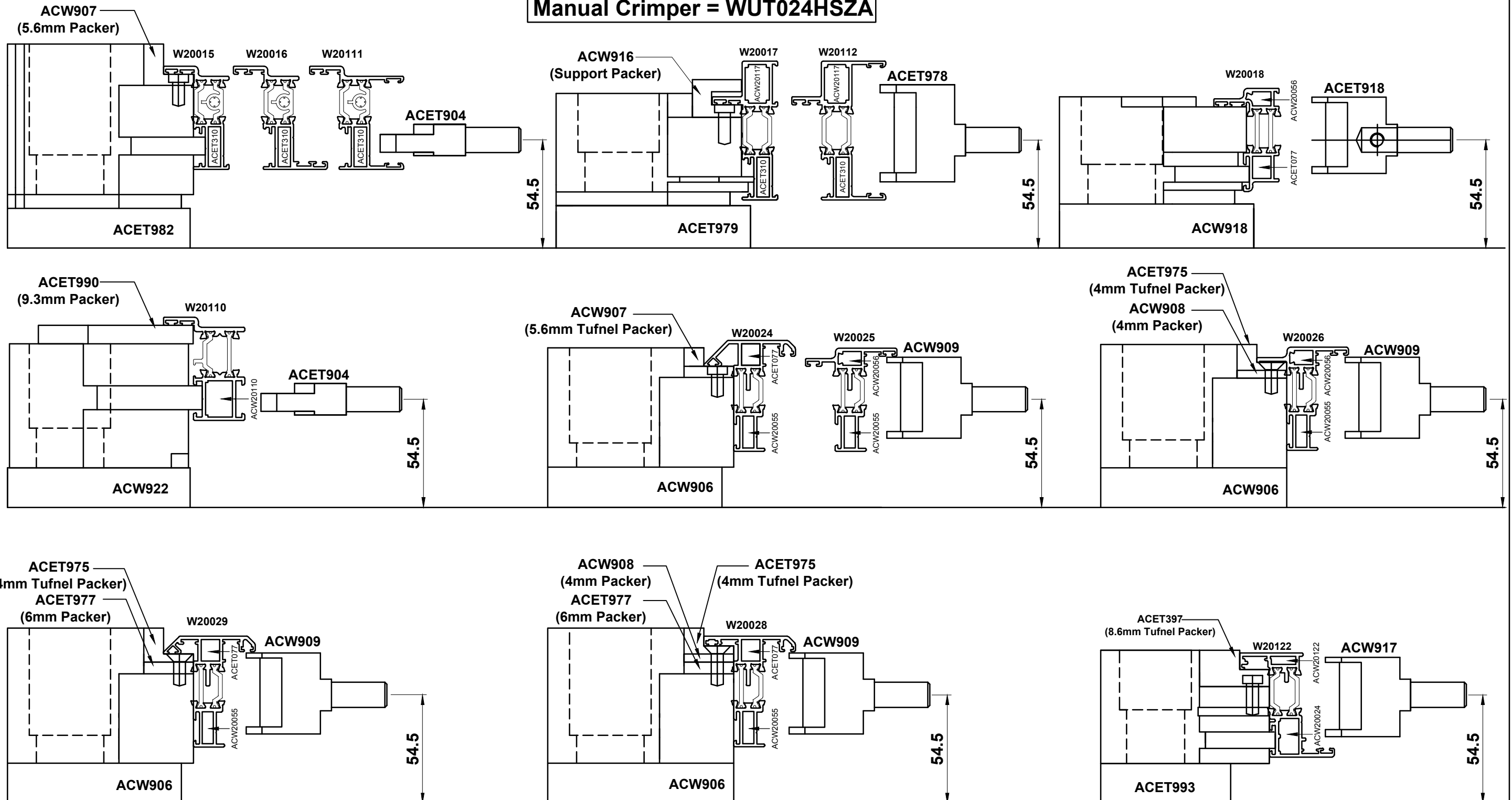
KL Colour	Sealant Part Number
Black	ACSIL04BL
White	ACSIL04WP
Clear	ACSIL04CL
KL001	ACSIL04KL001
KL002	ACSIL04KL002
KL003	ACSIL04KL003
KL004	ACSIL04KL004
KL005	ACSIL04KL005
KL006	ACSIL04KL006
KL007	ACSIL04KL007
KL010	ACSIL04KL010
KL011	ACSIL04KL011
KL012	ACSIL04KL012
KL013	ACSIL04KL013



Do Not Scale From This Drawing

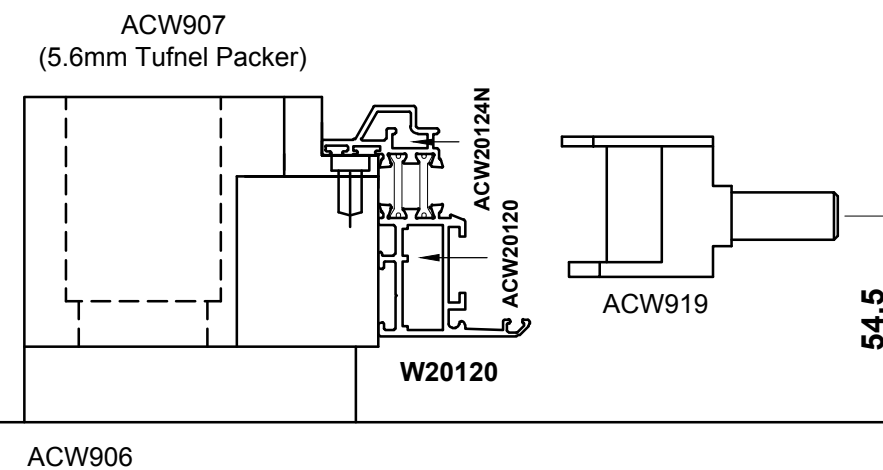
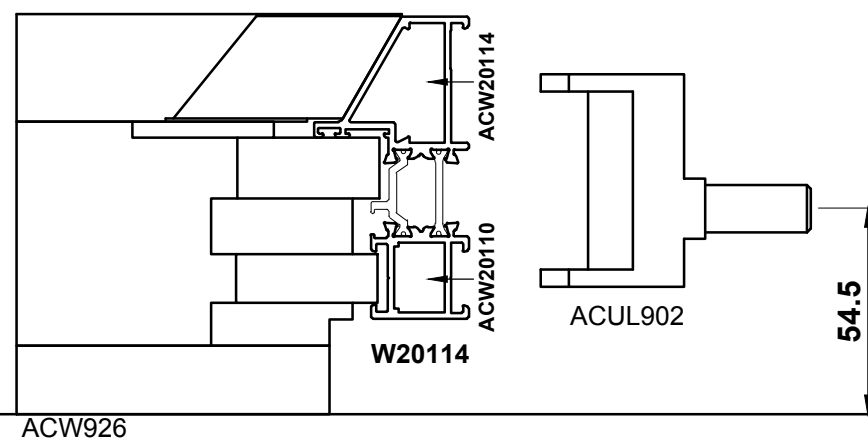
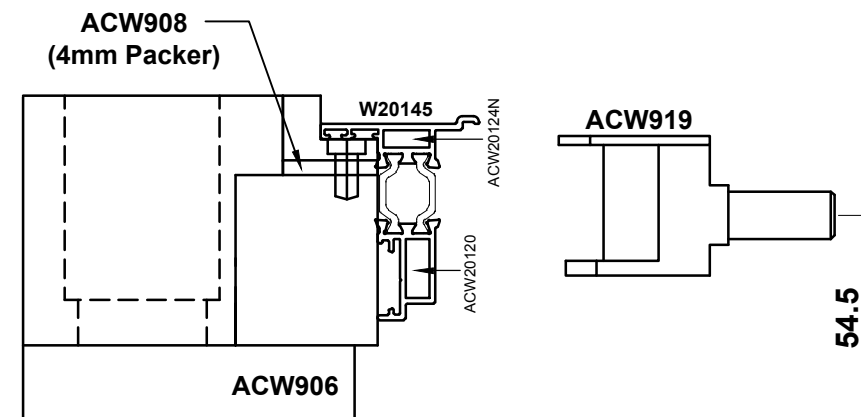
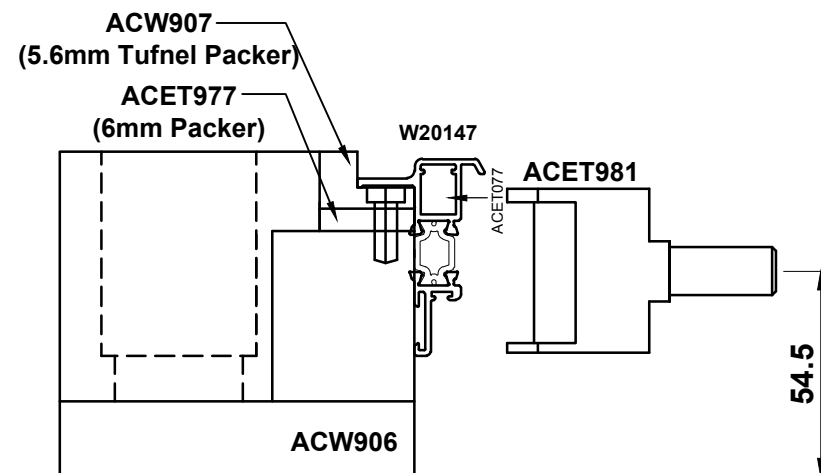
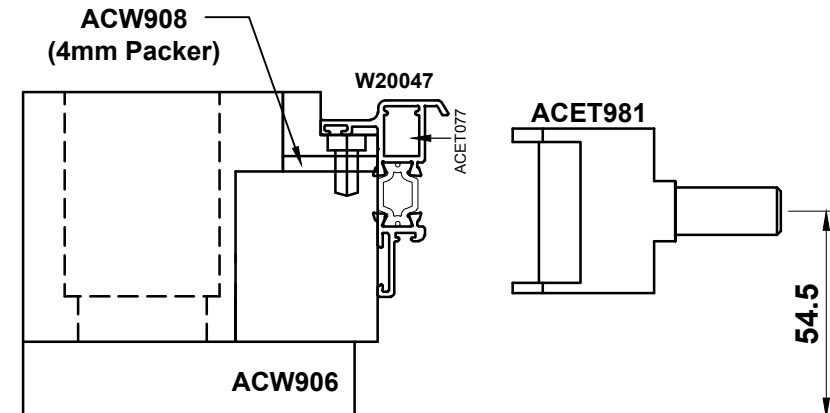
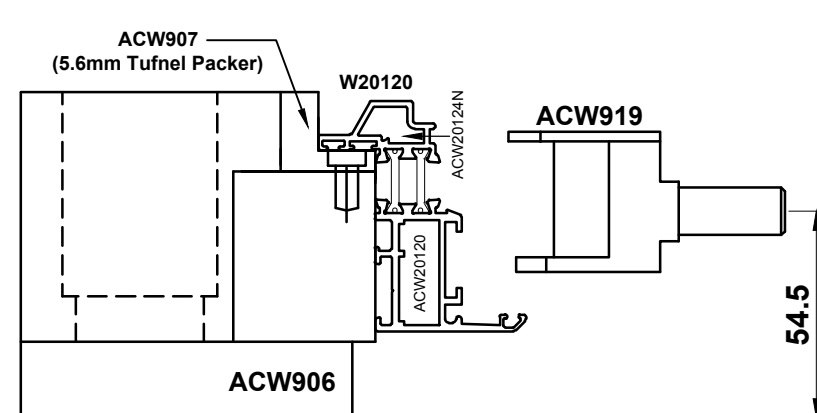
Crimping Details

Manual Crimper = WUT024HSZA



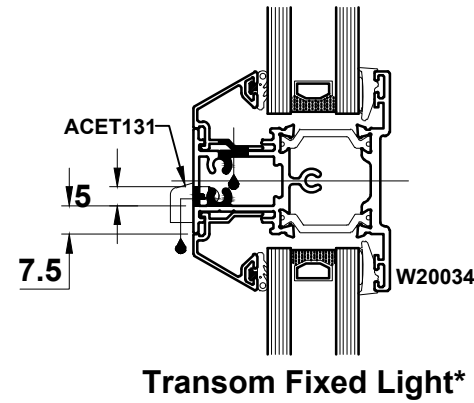
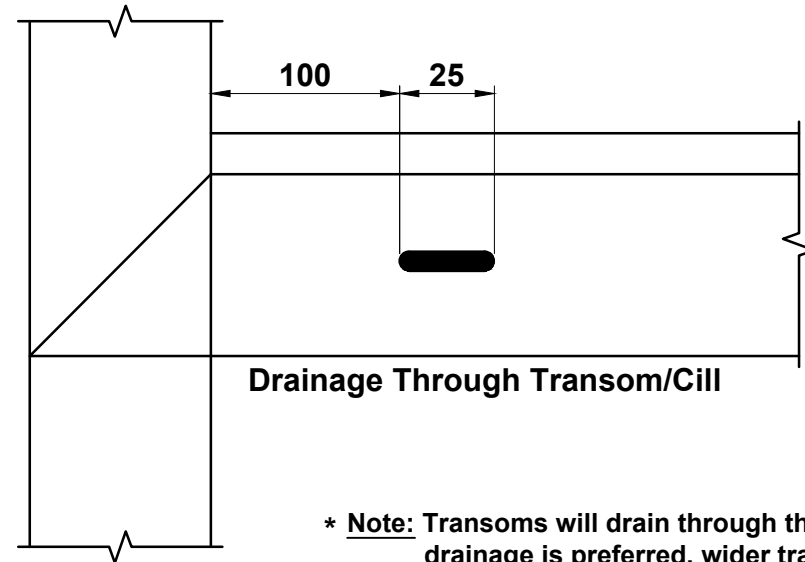
Do Not Scale From This Drawing

Crimping Details

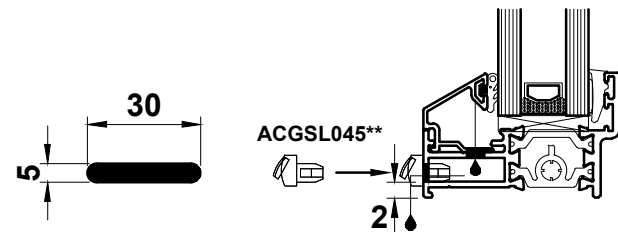
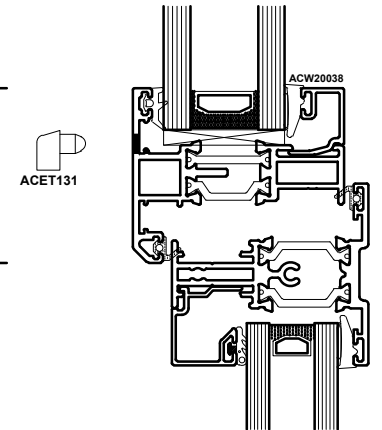
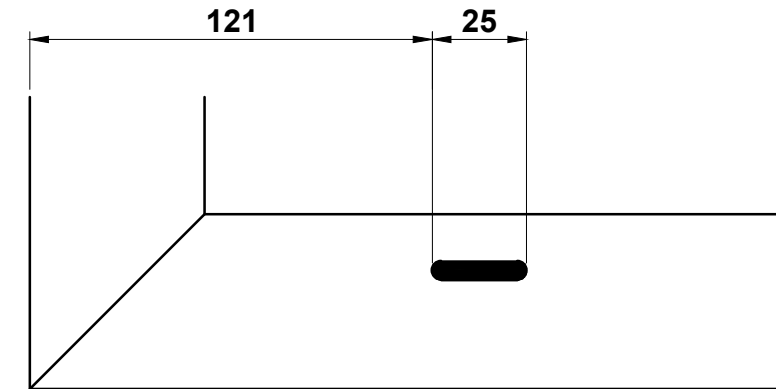
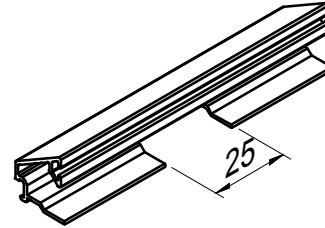


Do Not Scale From This Drawing

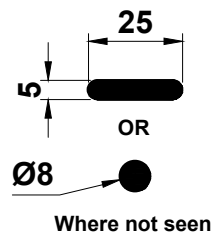
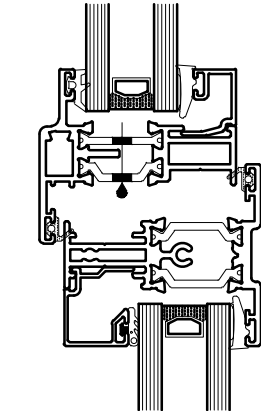
Window Drainage



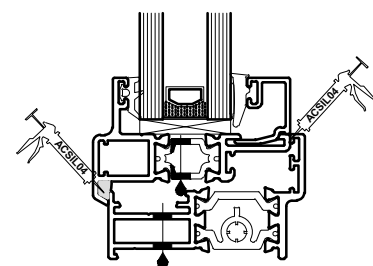
* **Note:** Transoms will drain through the join to the outerframe. If face drainage is preferred, wider transom W20034 must be used.



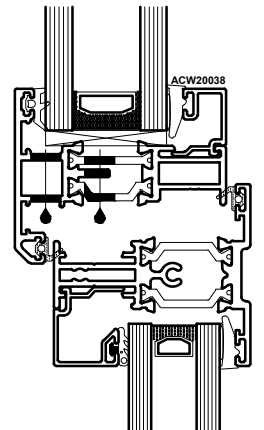
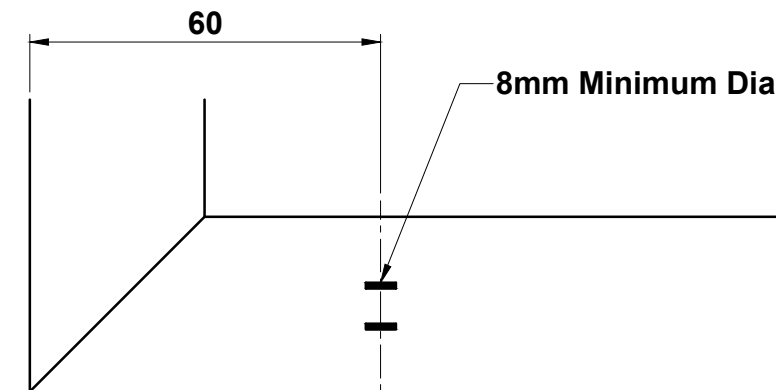
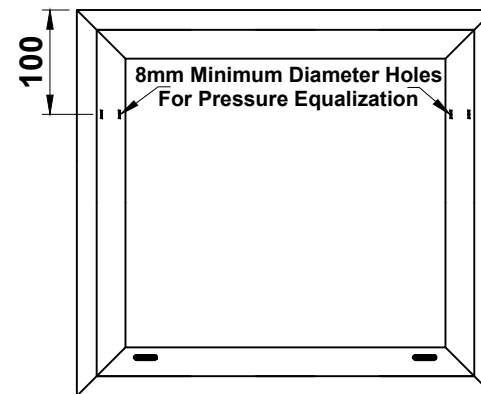
**ACGSL045 must be used here as water drains through the front of the cap. ACGSL045 may also be used throughout the system.



Outerframe With Cill



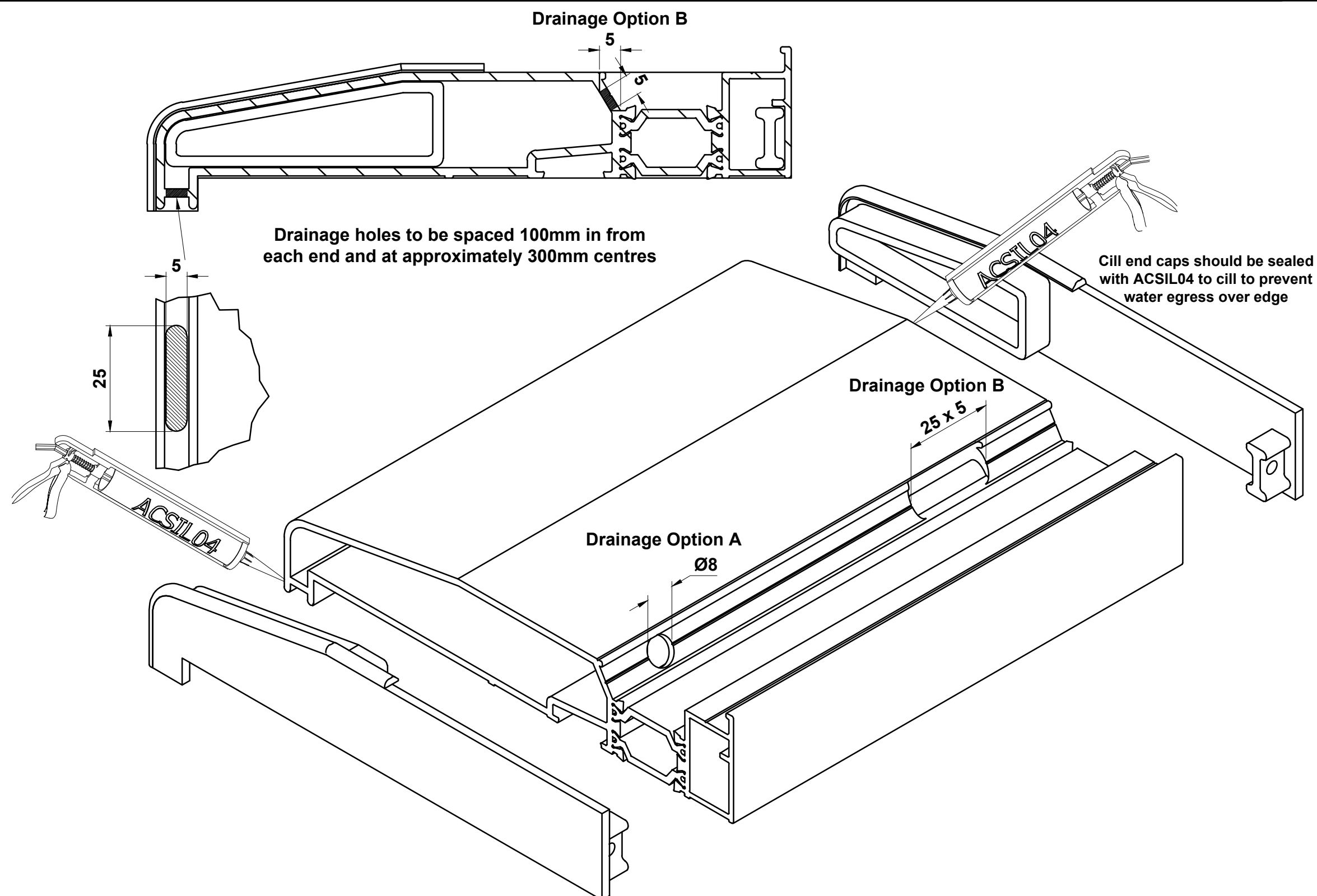
Outerframe With Reverse Adaptor



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

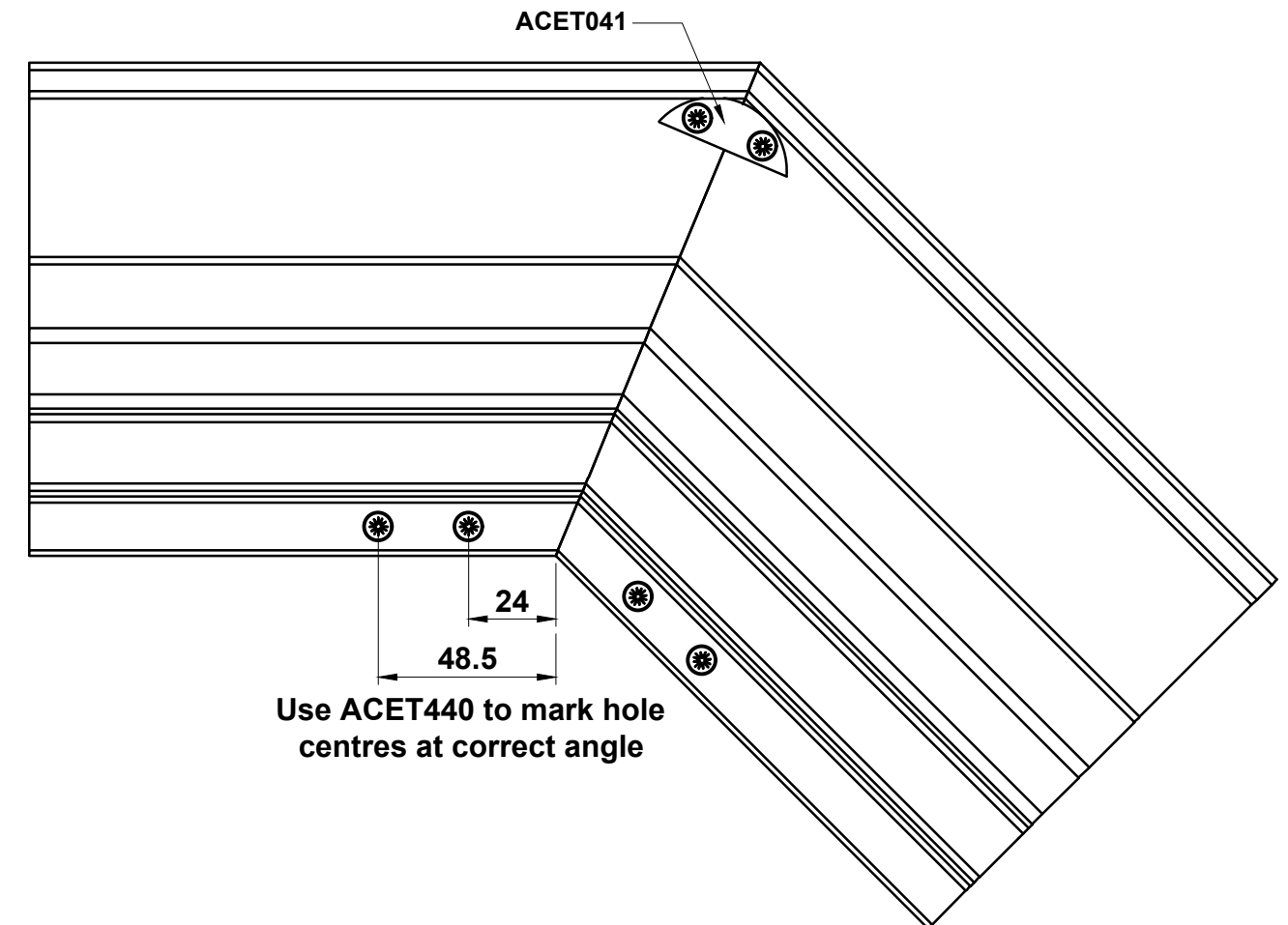
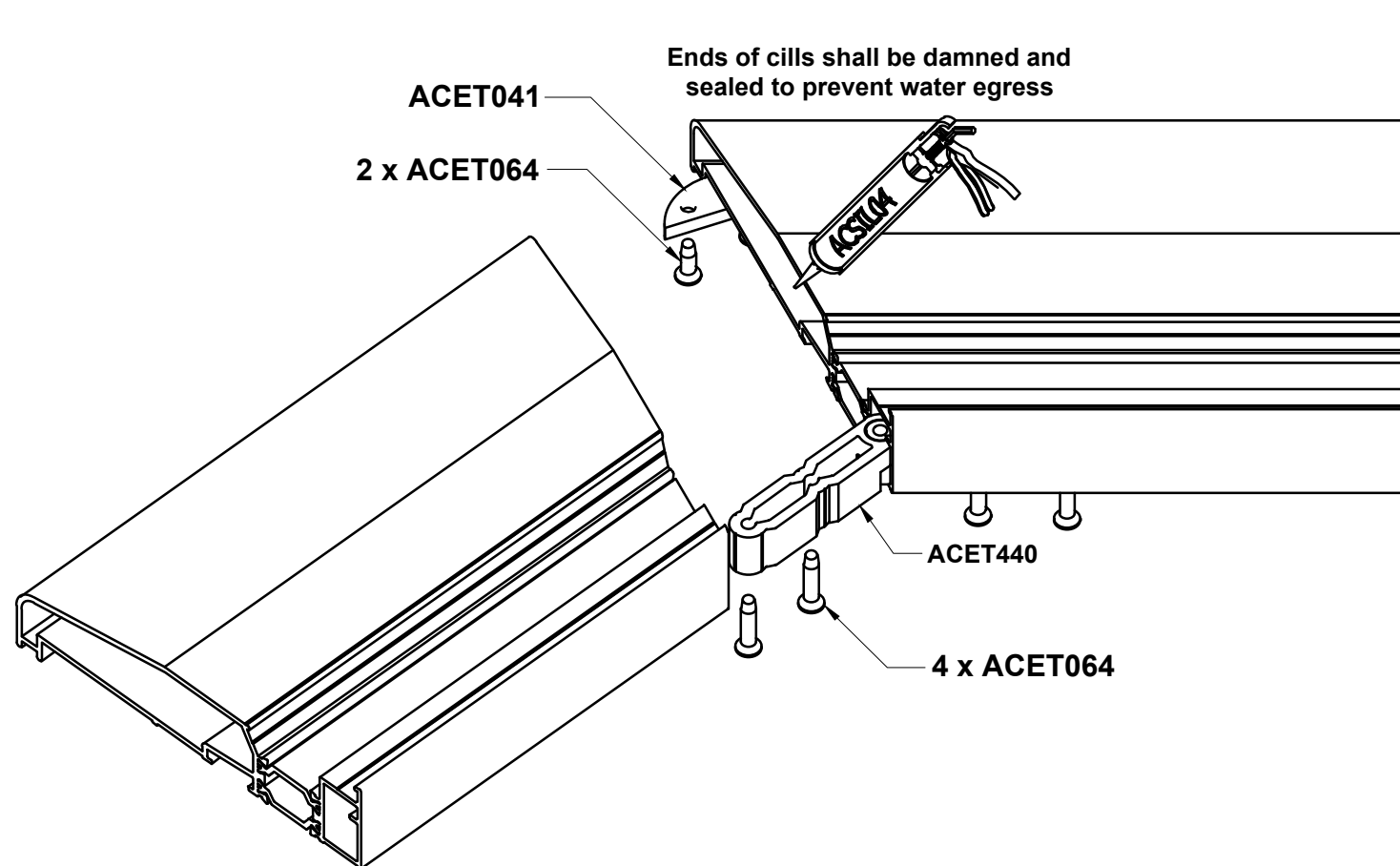
Do Not Scale From This Drawing

Cill Drainage



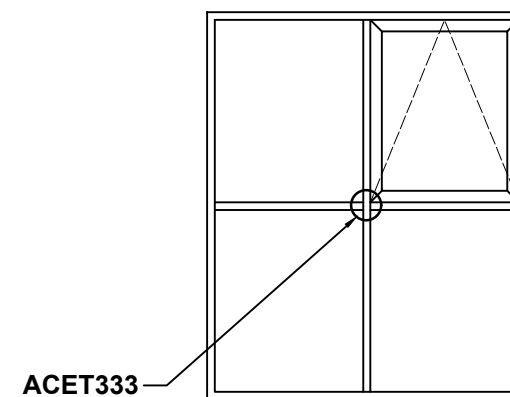
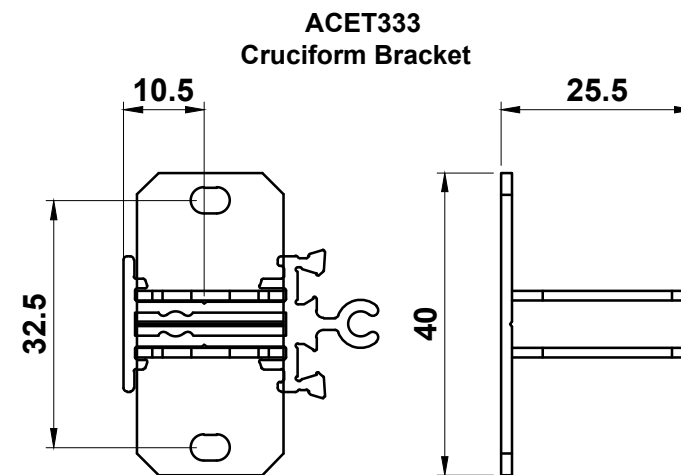
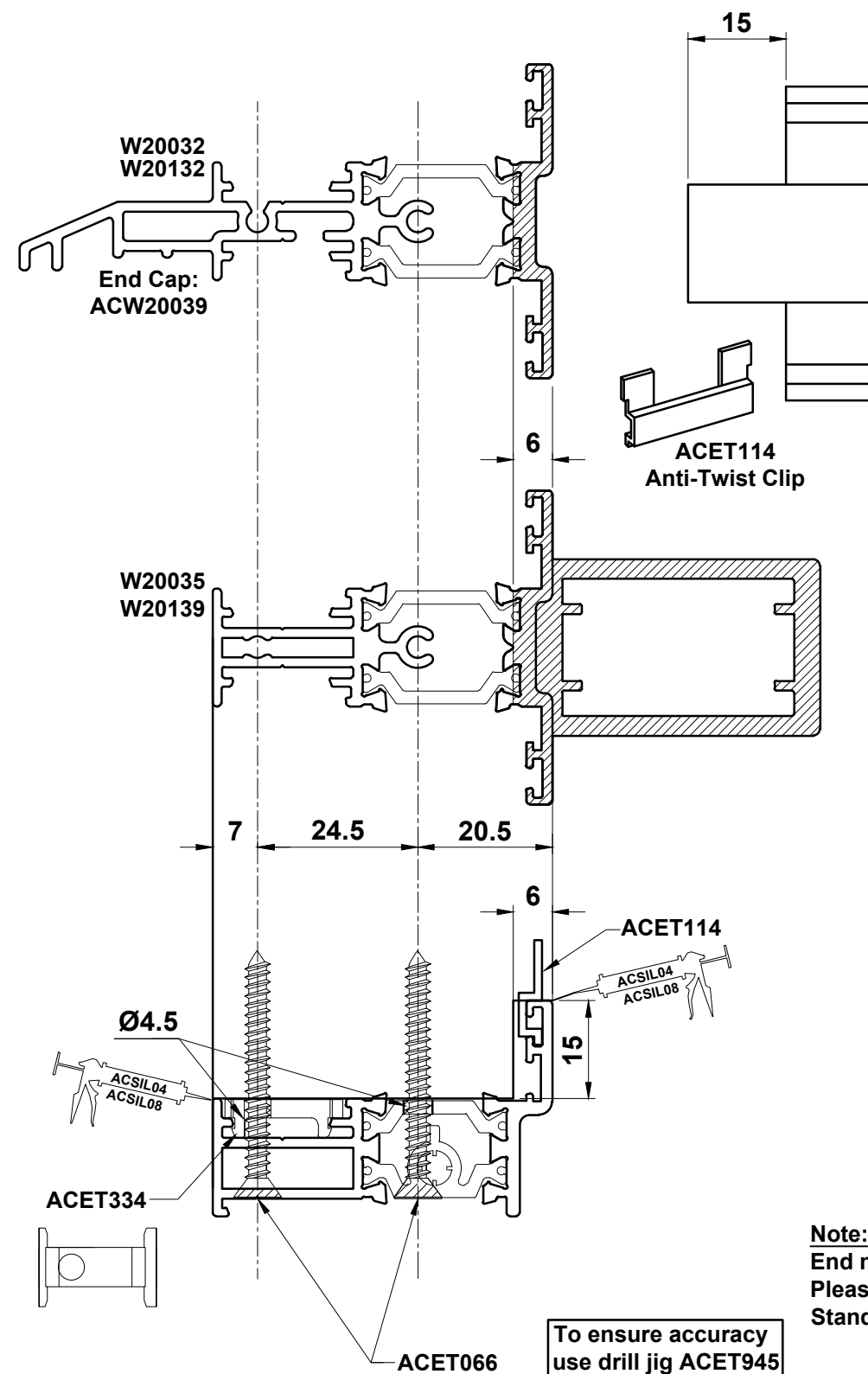
Do Not Scale From This Drawing

Angled Sub Cill

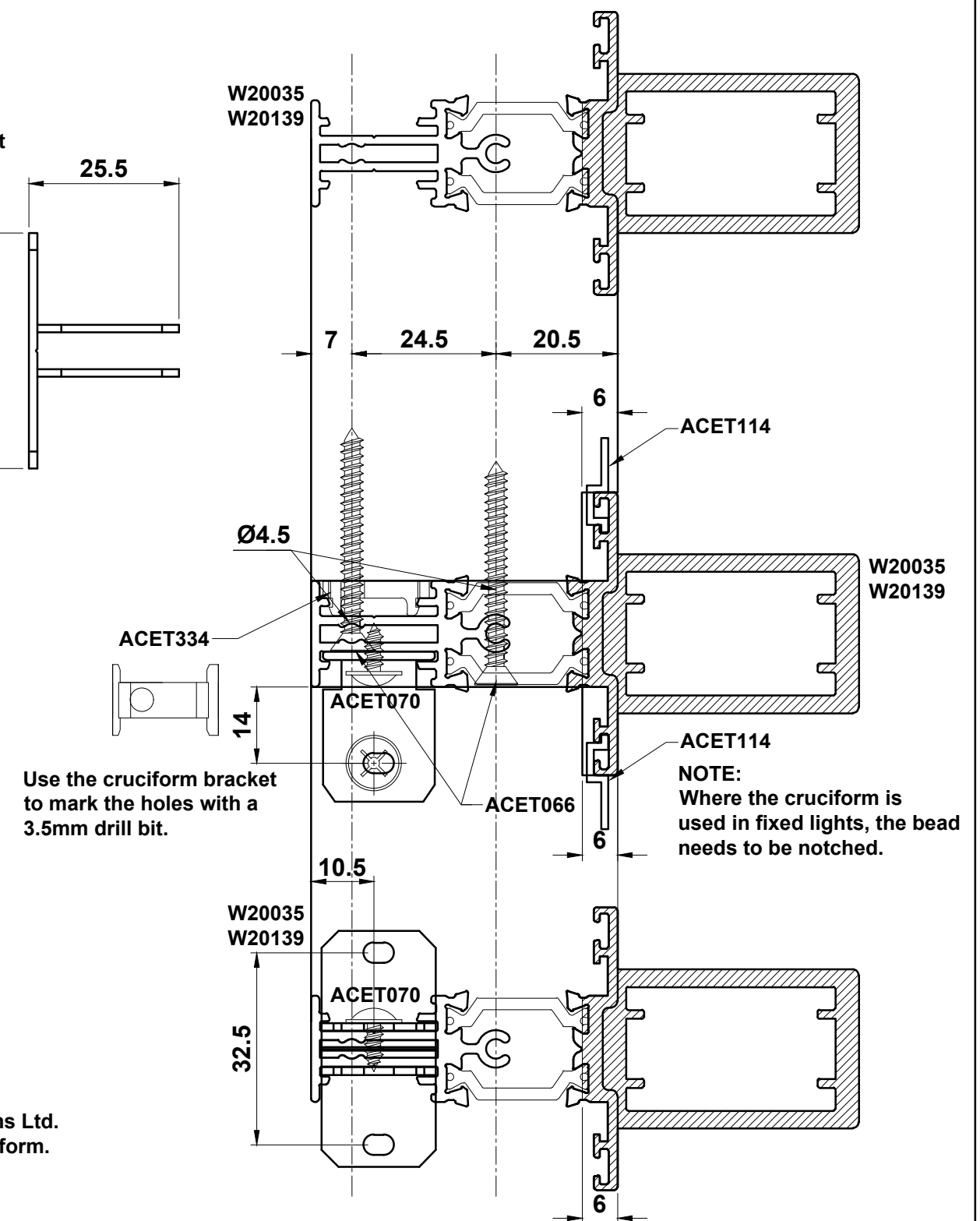


Do Not Scale From This Drawing

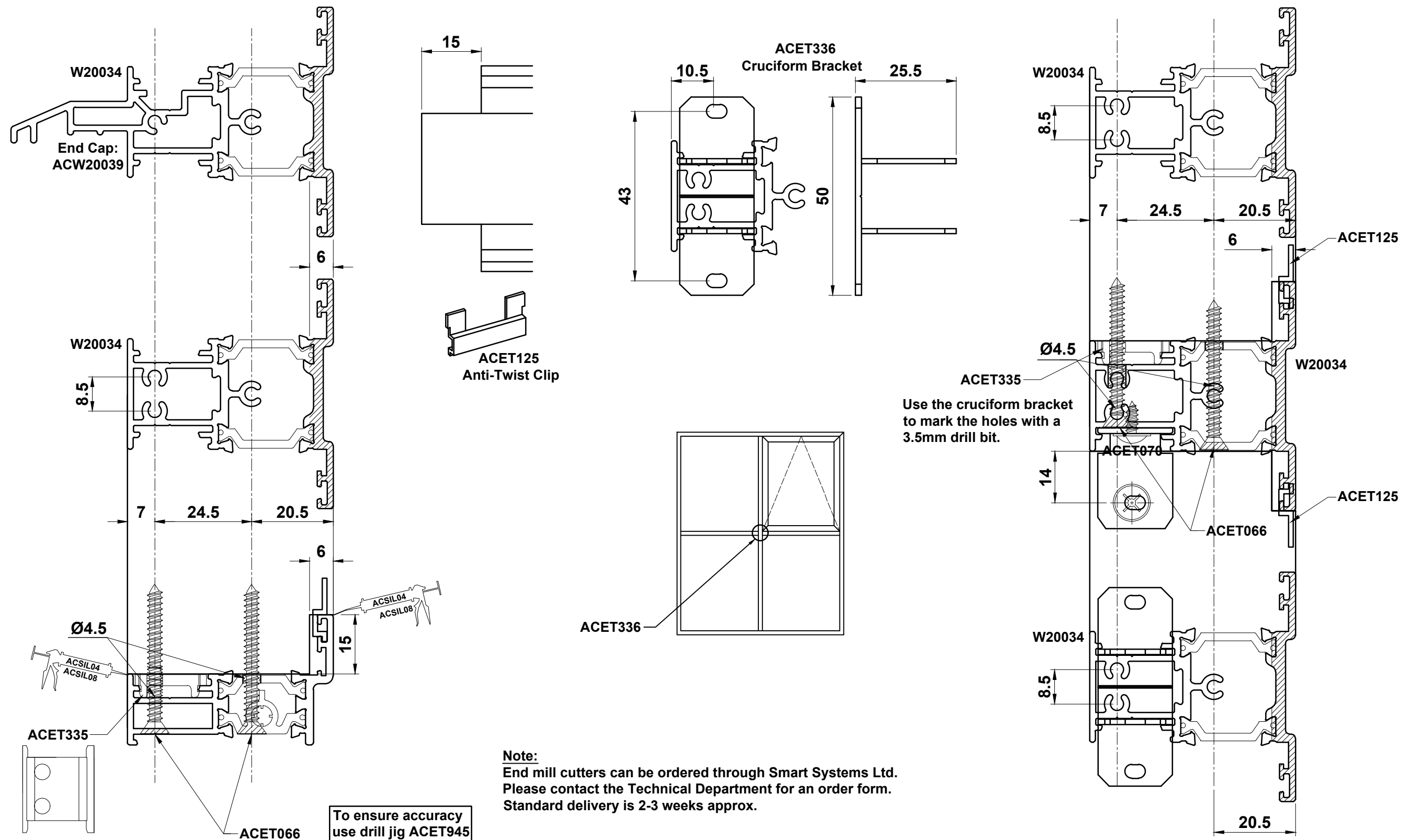
Mullion/Transom Detail



Note:
End mill cutters can be ordered through Smart Systems Ltd.
Please contact the Technical Department for an order form.
Standard delivery is 2-3 weeks approx.

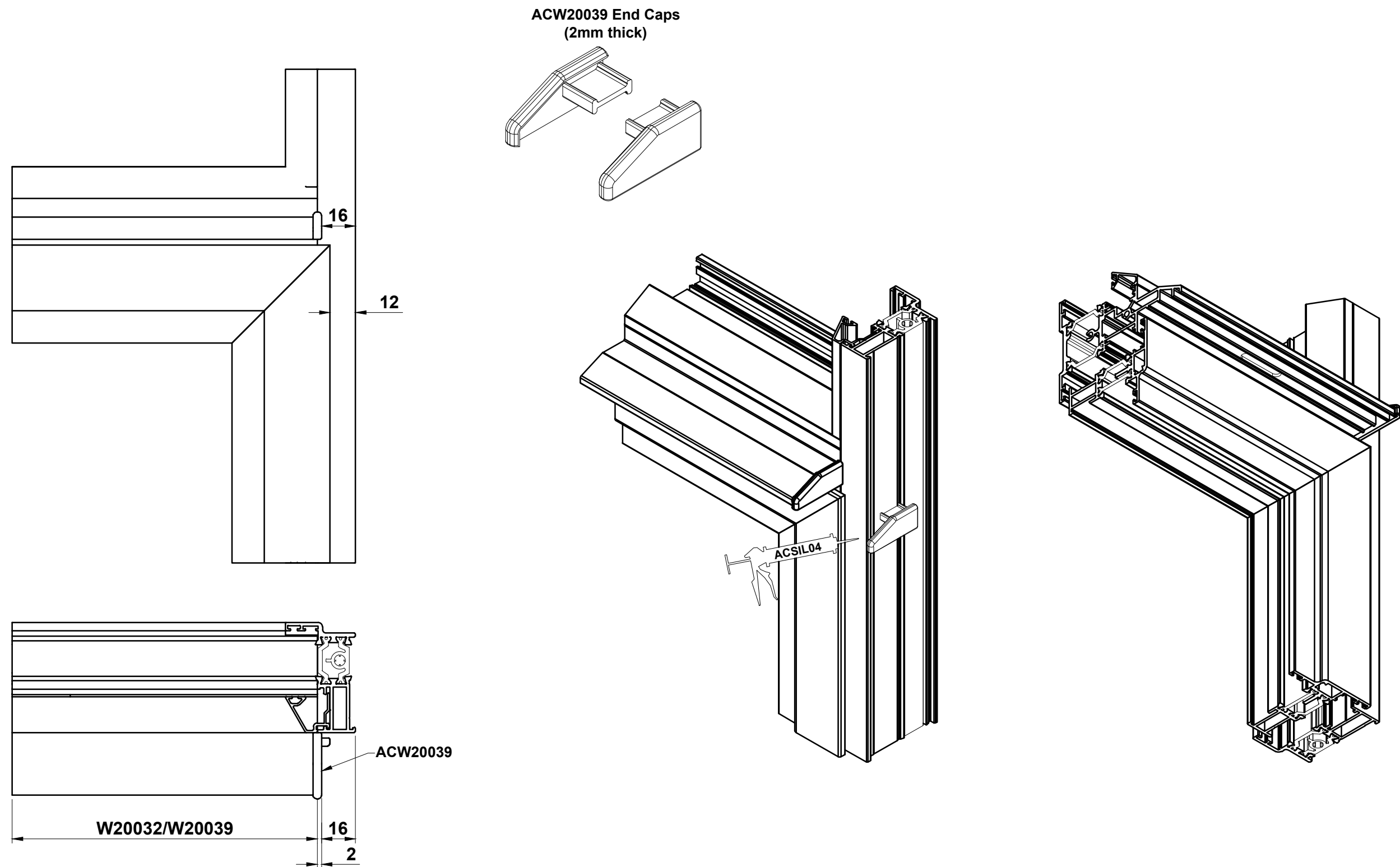


Mullion/Transom Detail



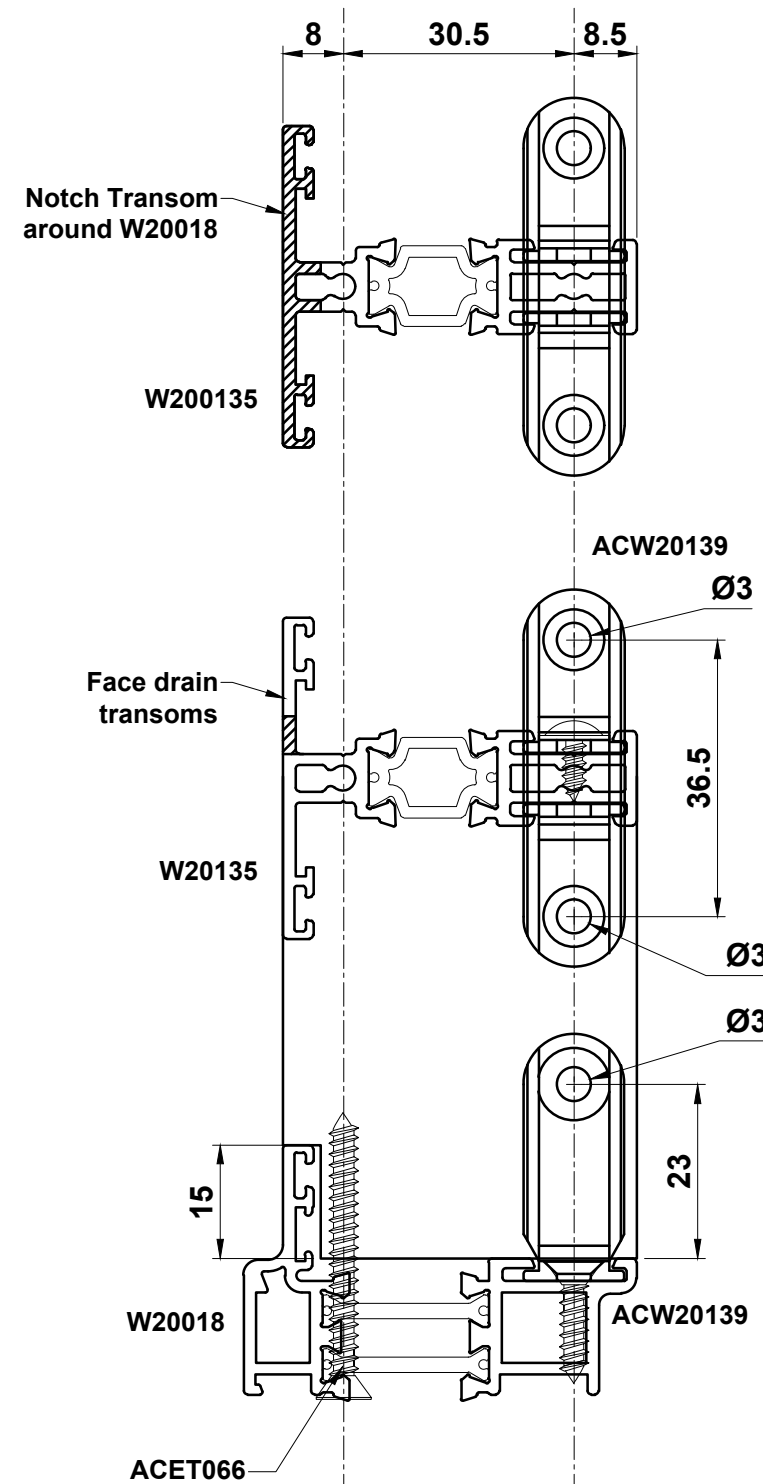
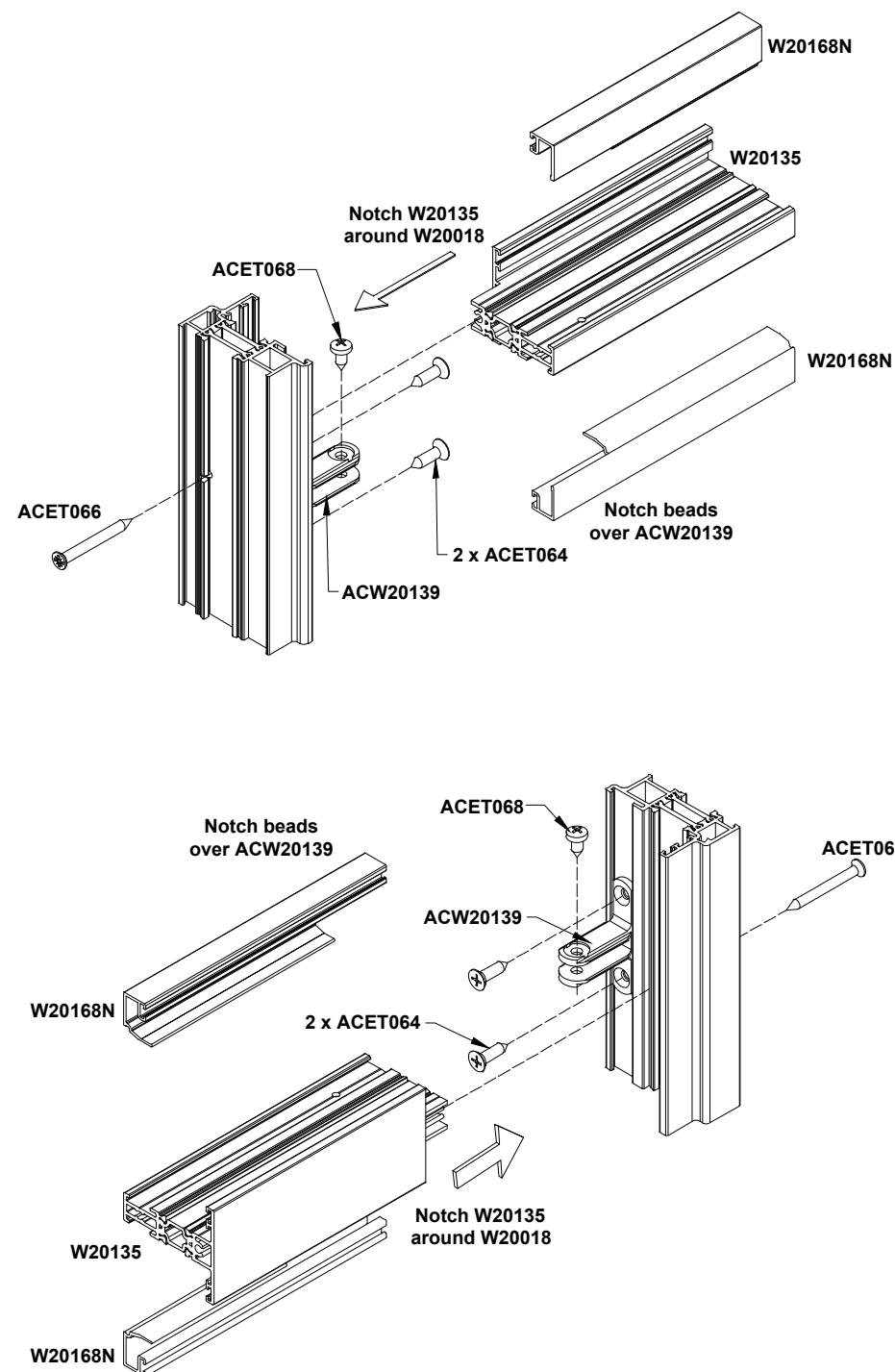
Do Not Scale From This Drawing

W20032, W20039 & W20132 Transom Detail

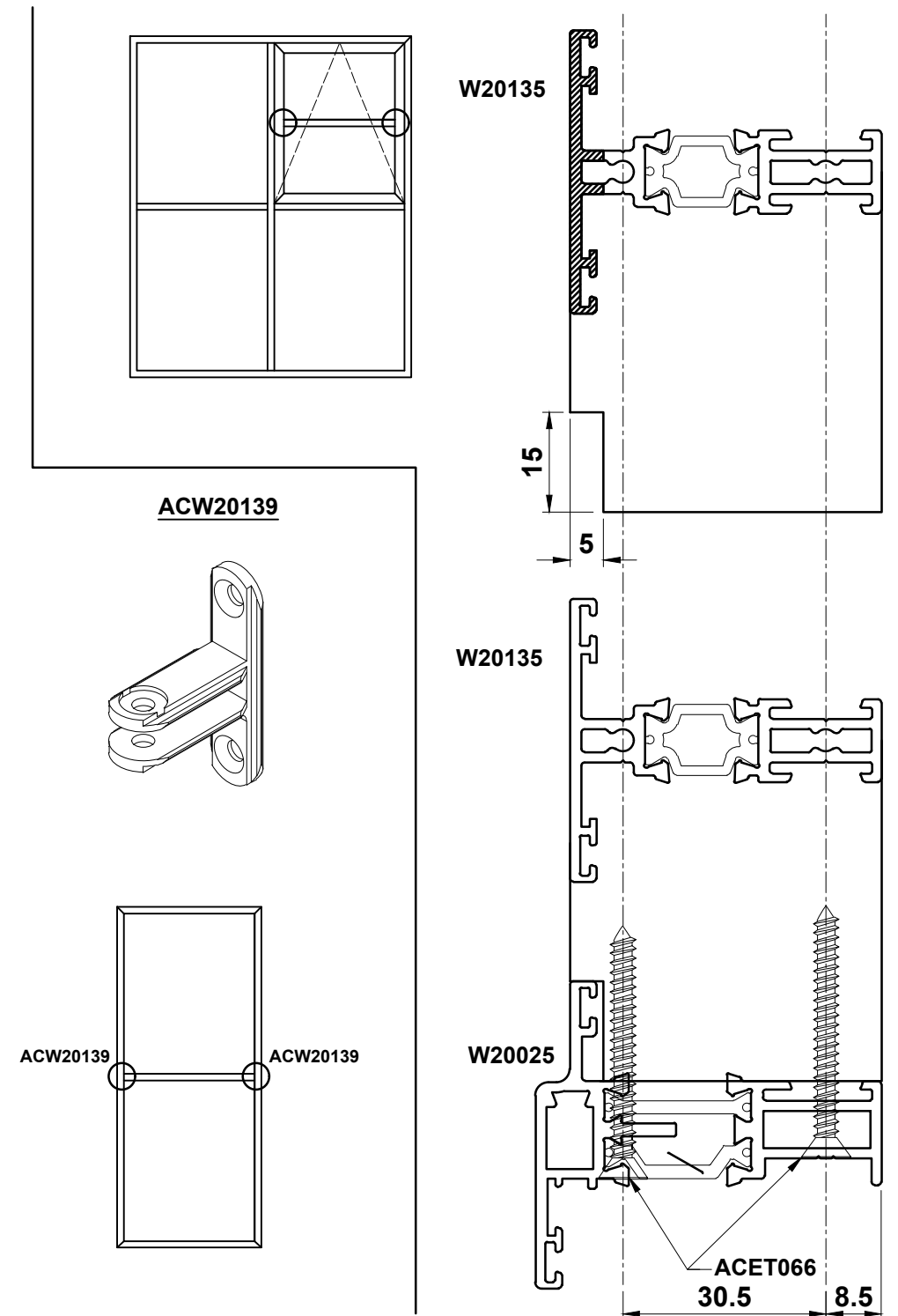


W20135 Transom + Dummy Transom Detail

W20018 with W20135 Transom



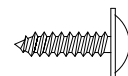
W20025 with W20135 Dummy Transom



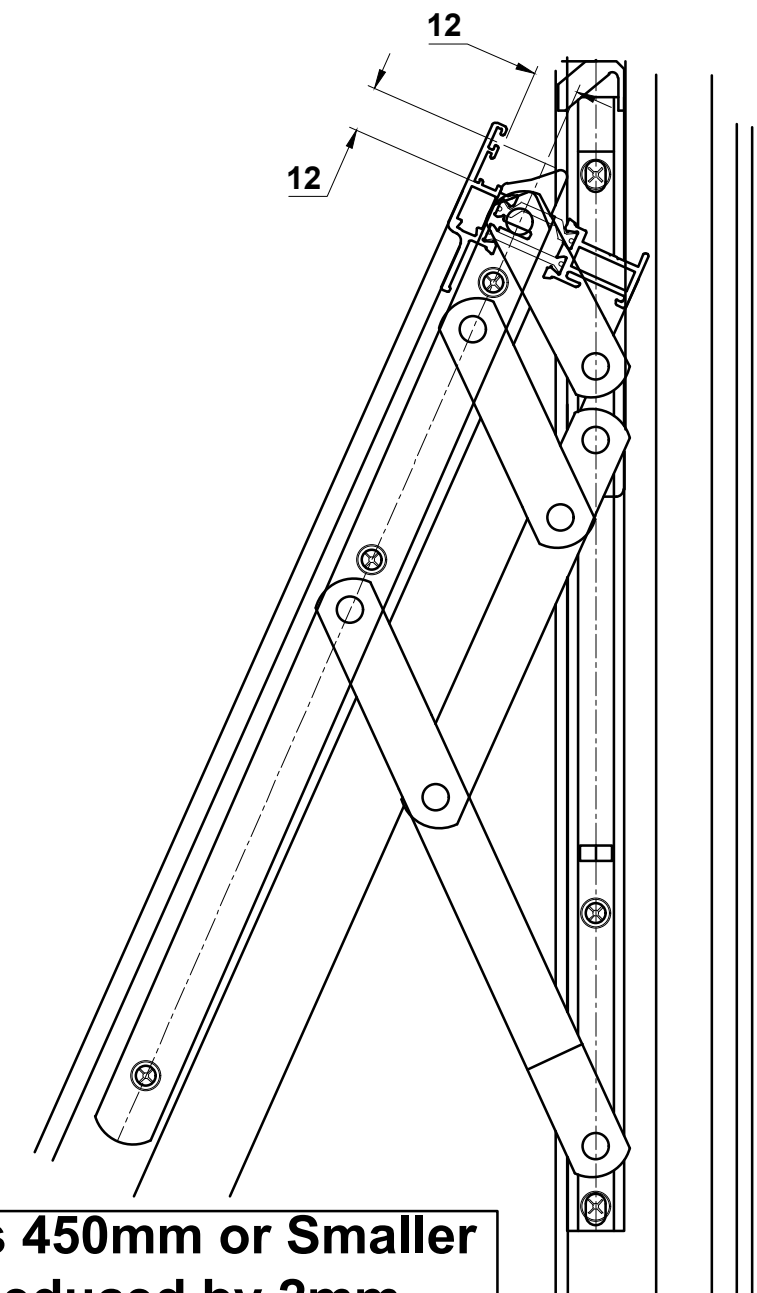
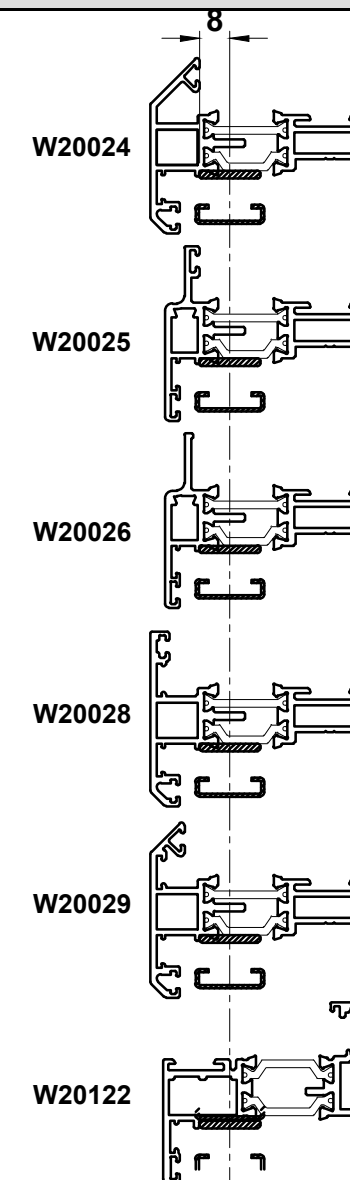
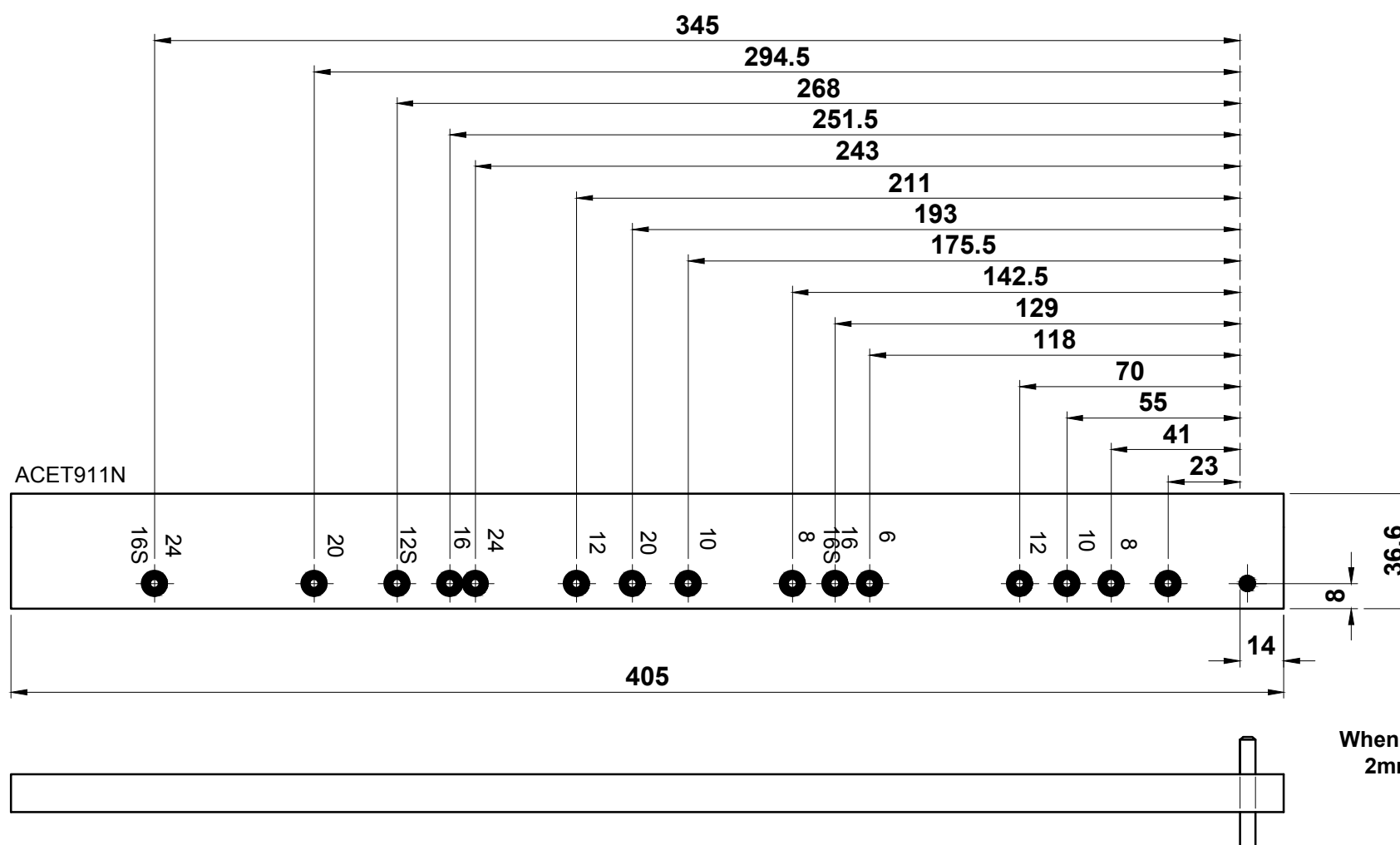
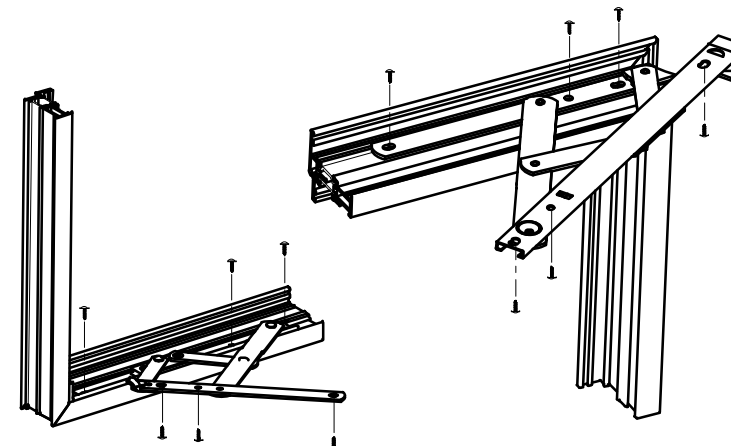
Do Not Scale From This Drawing

Friction Stay Details

To ensure accuracy use drill jig ACET911N.
Numbers indicate stay length in inches, numbers
followed by an 'S' are used for side hung stays.



ACET070 = Recommended Screw



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

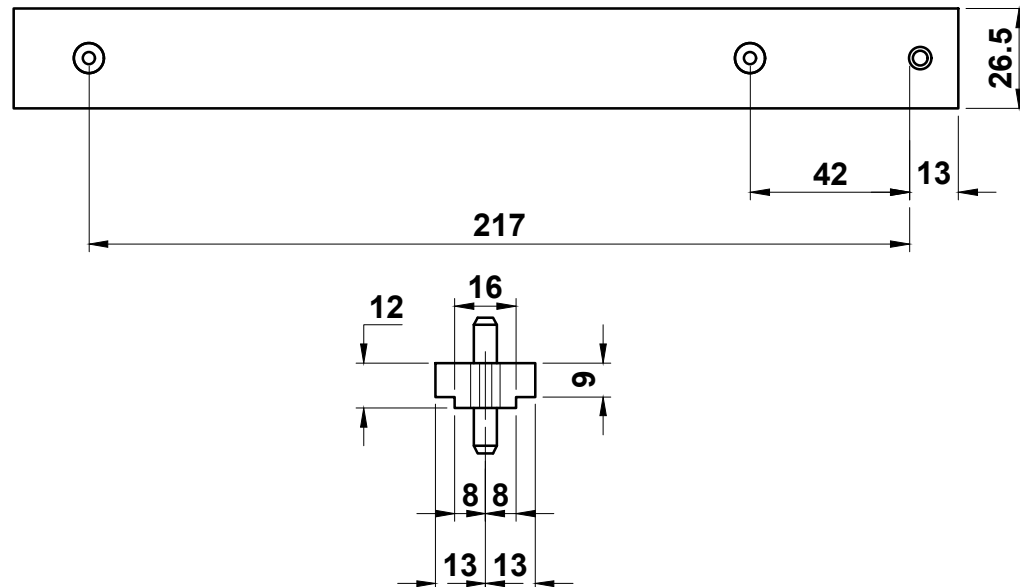
Important Note:

When using ACW20060 as a window hinge with the ACW201-205 reverse espagnolette locks, a further 2mm must be deducted from the sash locking edge for sashes under 600mm OR 1mm for sashes between 601-700mm.

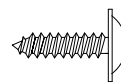
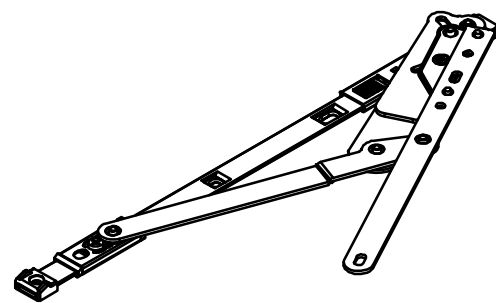
If in doubt, contact our technical department for further information - Tel: 01934 876 100
For ACINDP24 use first hole in drill jig only.

Egress Friction Stay Details

ACETME13
13mm Stack Egress Hinge
Jig = ACETME93



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

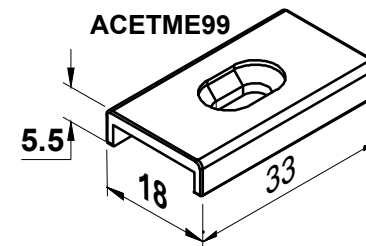
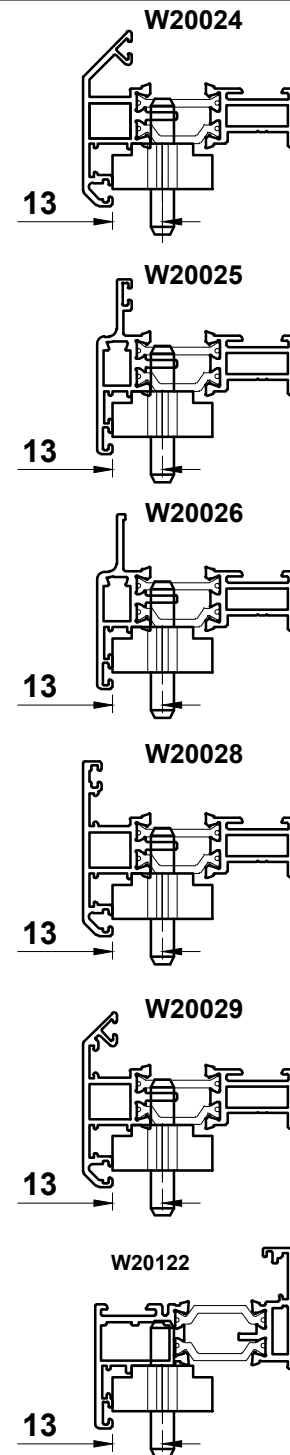


ACET070 = Recommended Screw for Sash

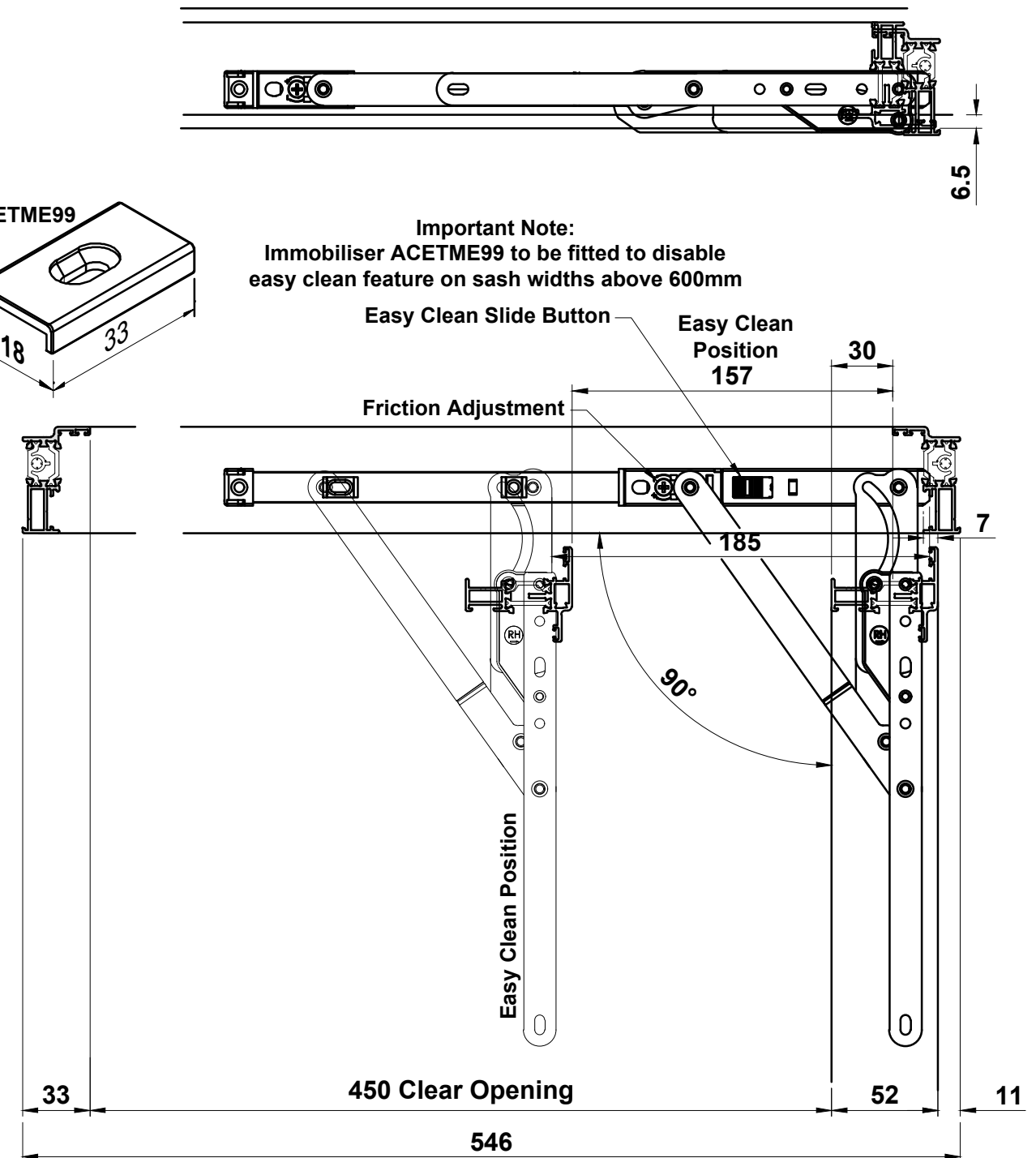


ACET067 = Recommended Screw for Outer Frame

Please use ACET394 underneath
outer frame friction stays.



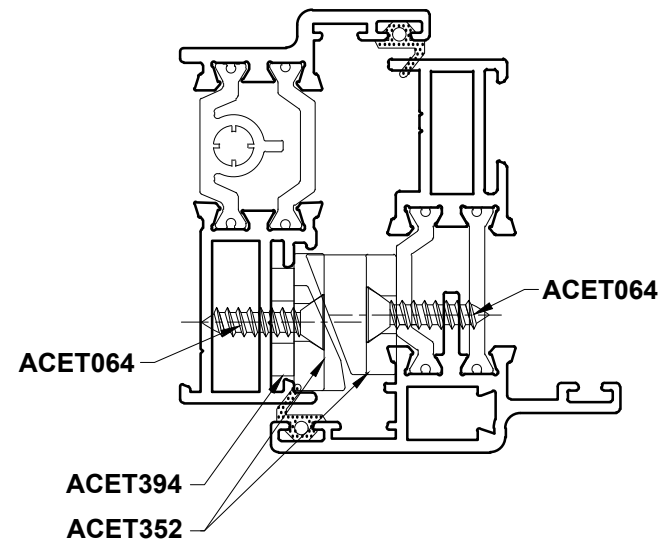
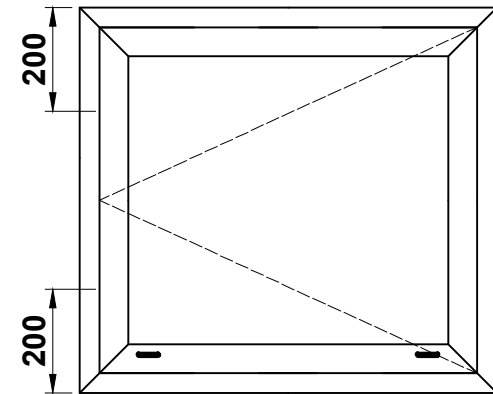
Important Note:
Immobiliser ACETME99 to be fitted to disable
easy clean feature on sash widths above 600mm



For further information regarding clear openings, please see
the Smart Systems' White Paper Document B

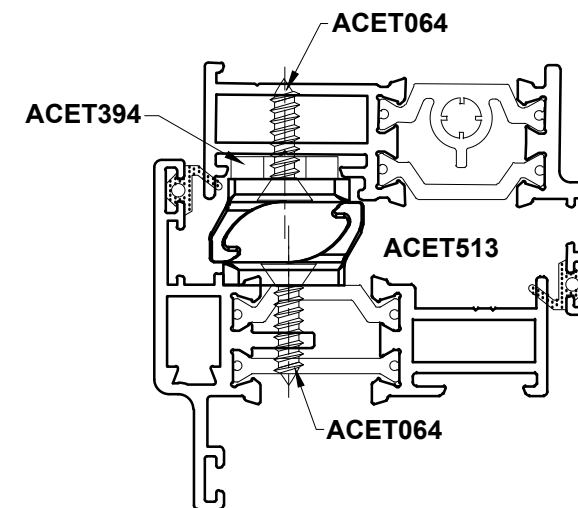
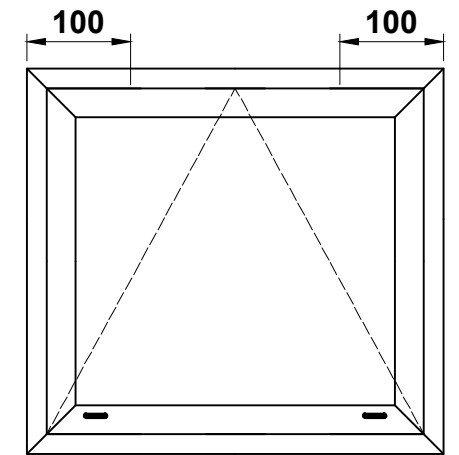
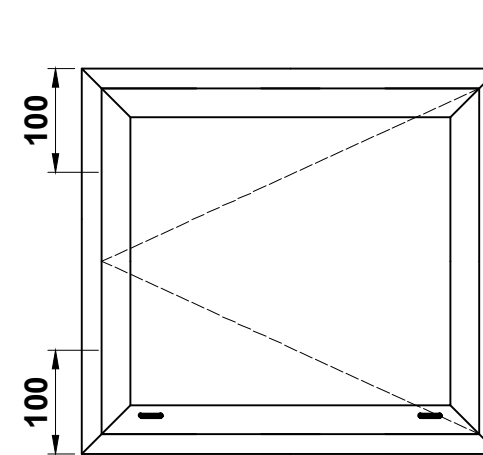
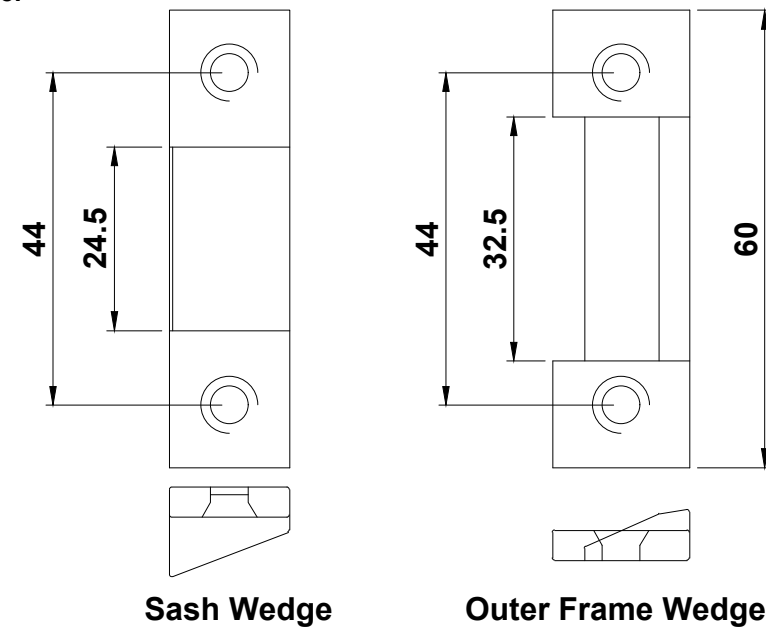
Do Not Scale From This Drawing

Friction Stay Accessories



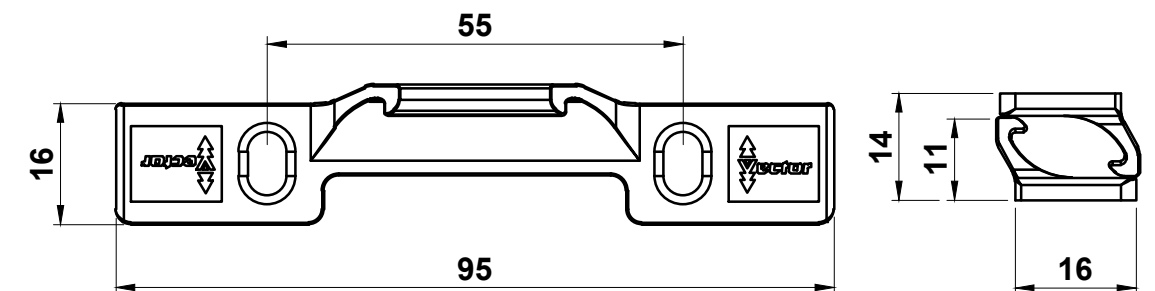
Please Note:

- 2 pairs per opening vent to be fitted to hinged side of window
- Each pair must be fitted with the wedge centre within 100mm of each hinge and in the centre of the window when sash height is greater than 800mm.



Please Note:

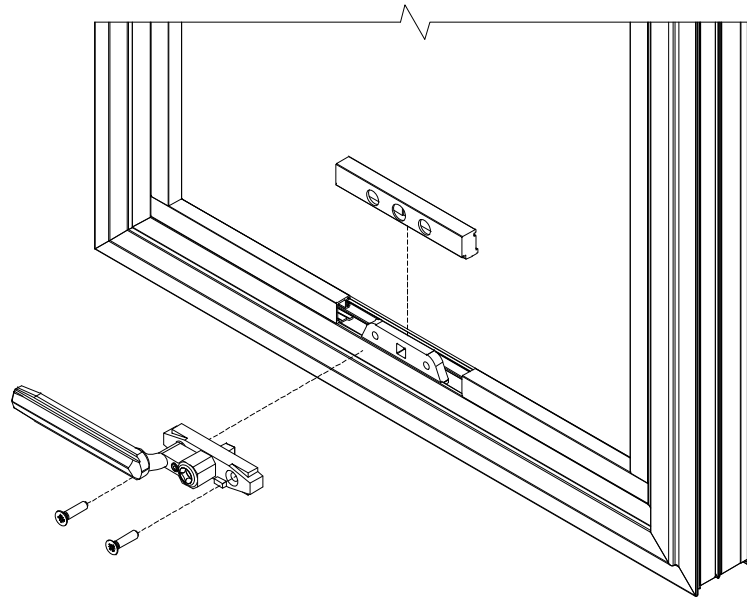
- 2 pairs per opening vent to be fitted to hinged side of window
- Each pair must be fitted with the hook centre within 100mm of each hinge



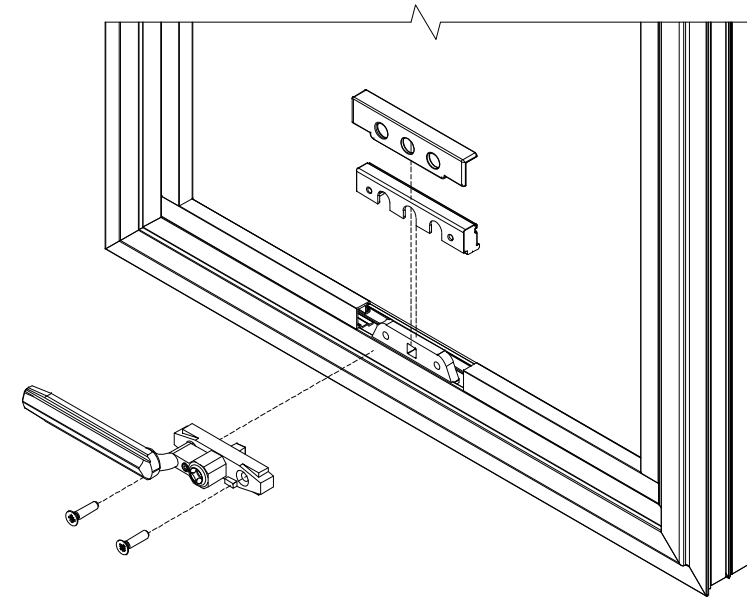
Do Not Scale From This Drawing

Handle Block Fitting

ACW20028/029



ACW20228/229



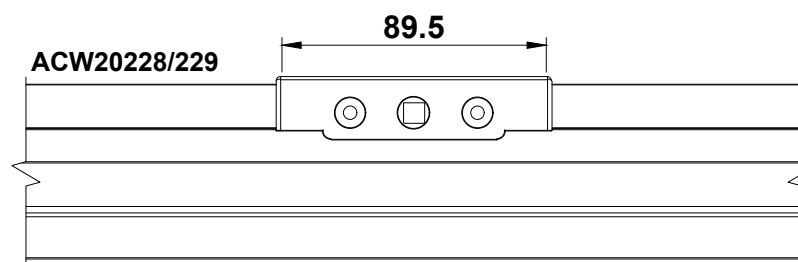
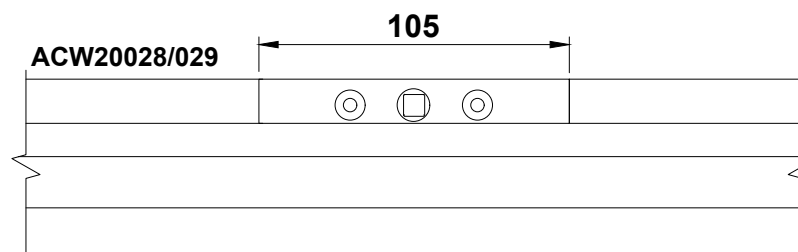
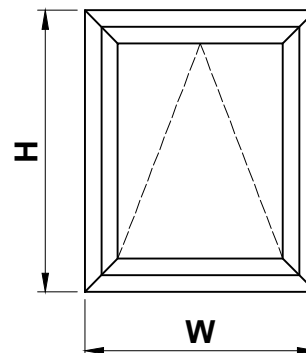
Important Information:

- When using ACW20060 as a window hinge with the ACW201-205 reverse espagnolette locks, a further 2mm must be deducted from the sash locking edge for sashes under 600mm OR 1mm for sashes between 601-700mm.
- ACW20228 & ACW20229 Provides a feature for fitting the handle in the bead line by raising the fitting platform and overlapping the bead join.
- Handle blocks required with beads W20168 & W20171.
- For handles ACW20100 and ACW20101 please drill central hole of handle block out to Ø12mm. Please note that these handles are hand made and dimensions may vary slightly.
- The bead must be fitted prior to cover component of ACW20228 & ACW20229.

If in doubt, contact our technical department for further information - Tel: 01934 876 100

Espag Handle Options

ACET165
ACSM002
ACW20165
ACW20100
ACW20101
ACSM010SS*

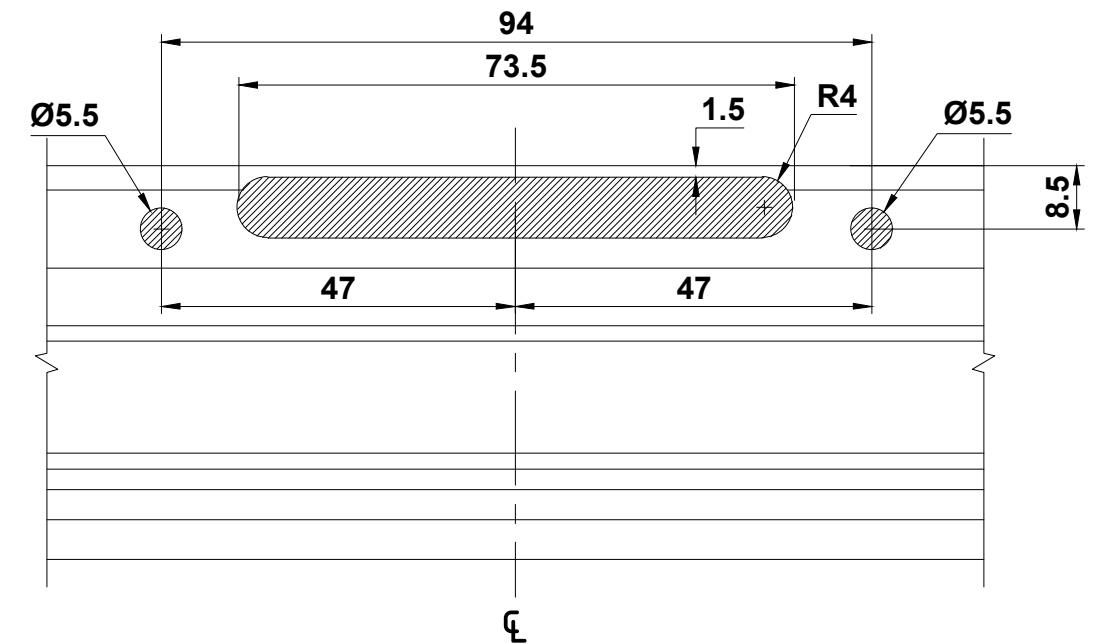
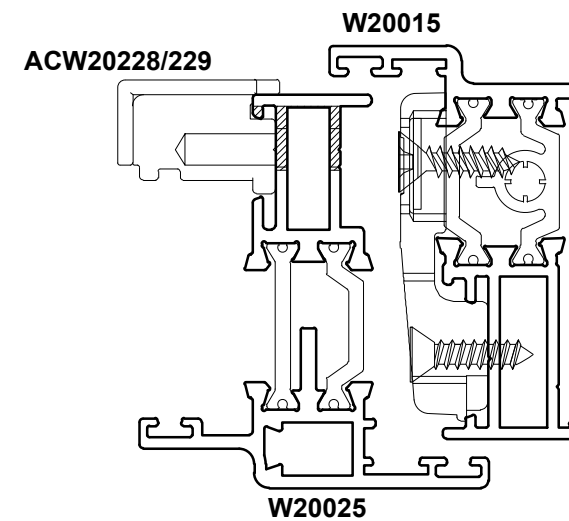
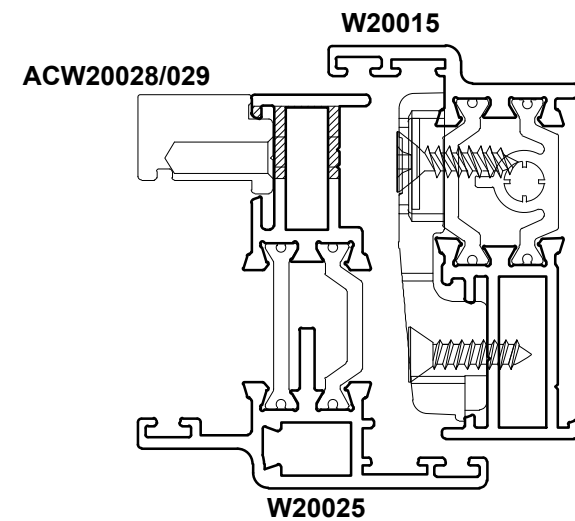


*ACSM010SS should only be used with ACW128/129 & ACW20228/229

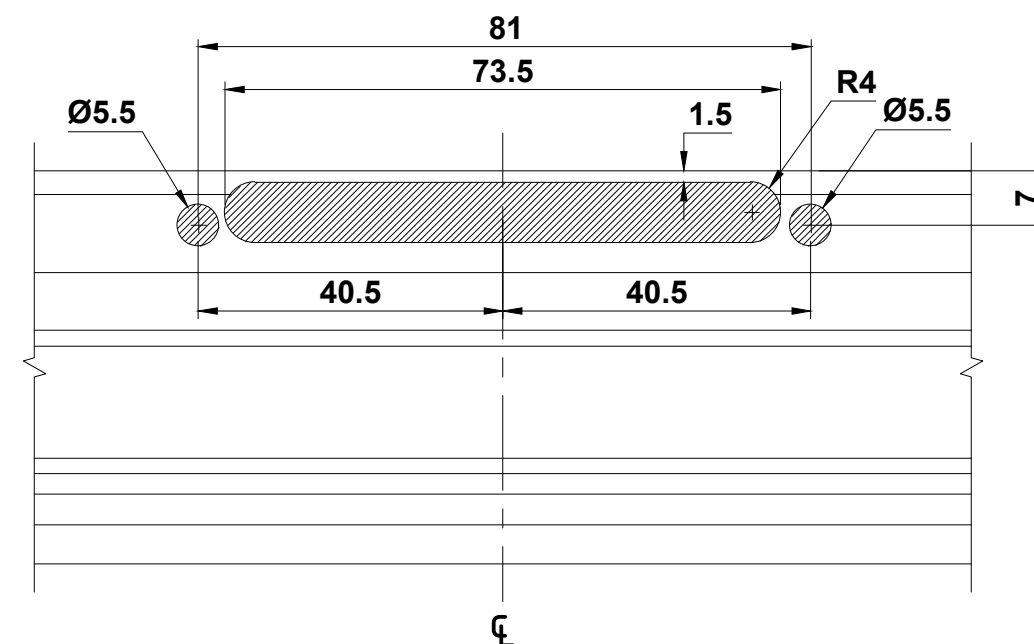
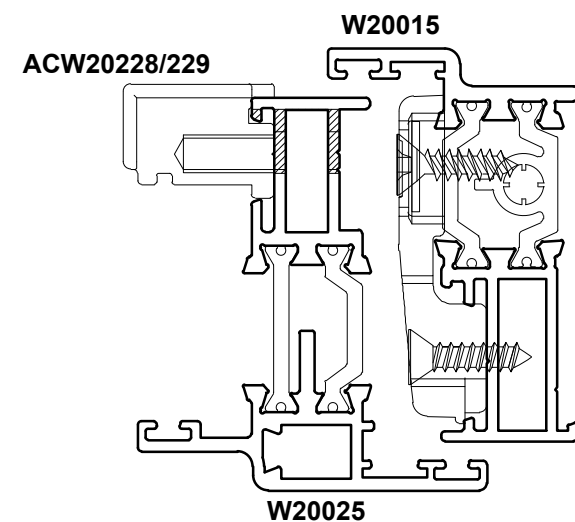
Do Not Scale From This Drawing

Handle Block and Espagnolette Prep

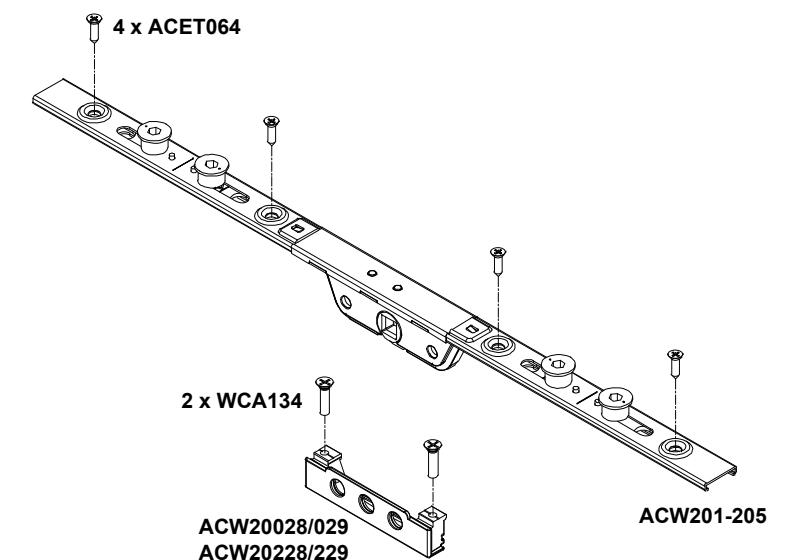
Sash Preparation for ACW201-205 Espag and ACW20028/029



Sash Preparation for ACW201-205 Espag and ACW20228/229

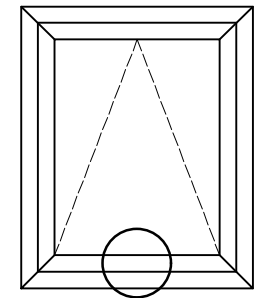
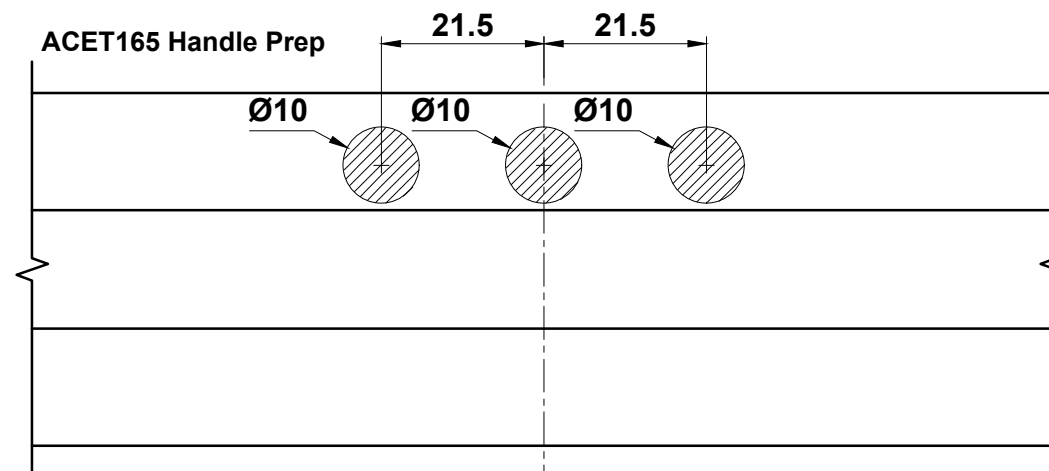
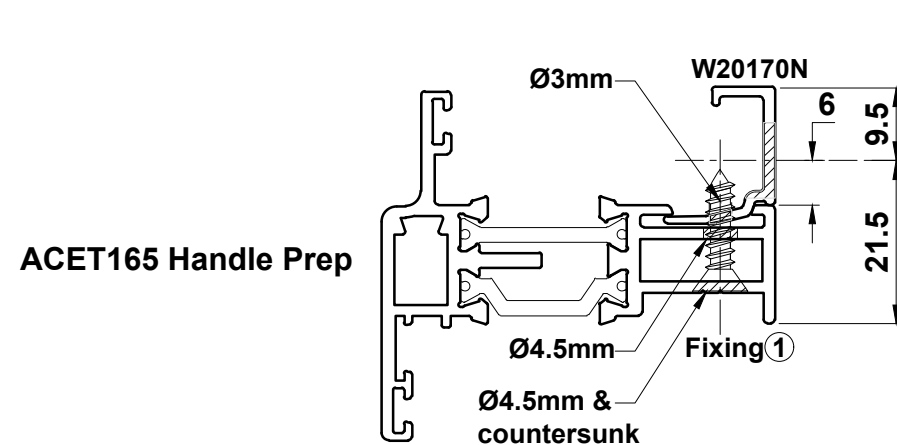


ACW201-205 Espag Fitting Guide



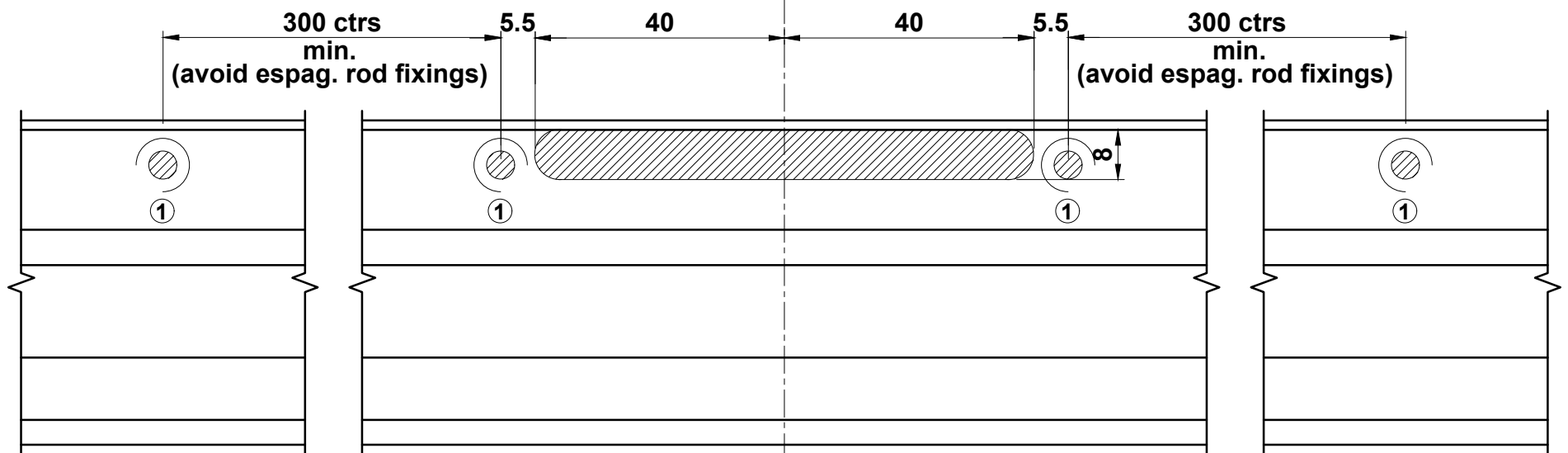
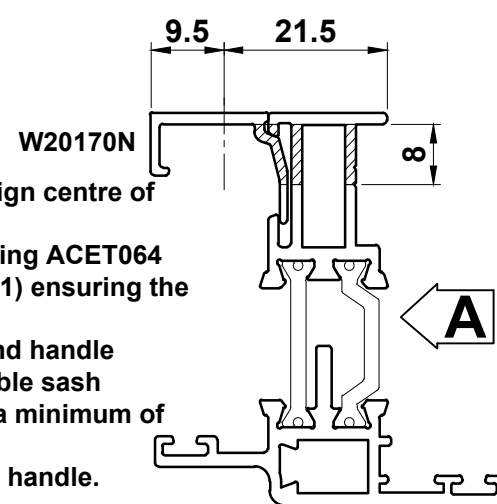
Do Not Scale From This Drawing

Espag Locking Details with ACET165, ACW20100 Monkey Tail & ACW20101 Bulb End Handles

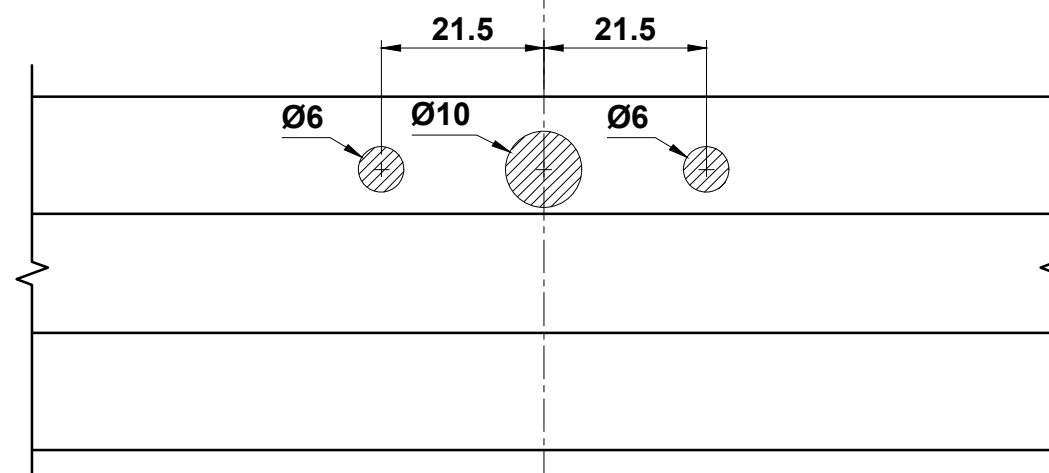
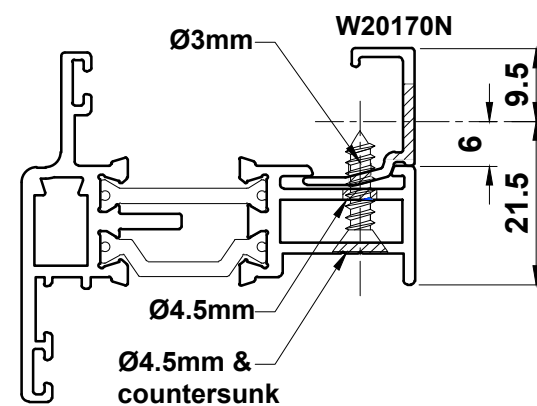


Steps:

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



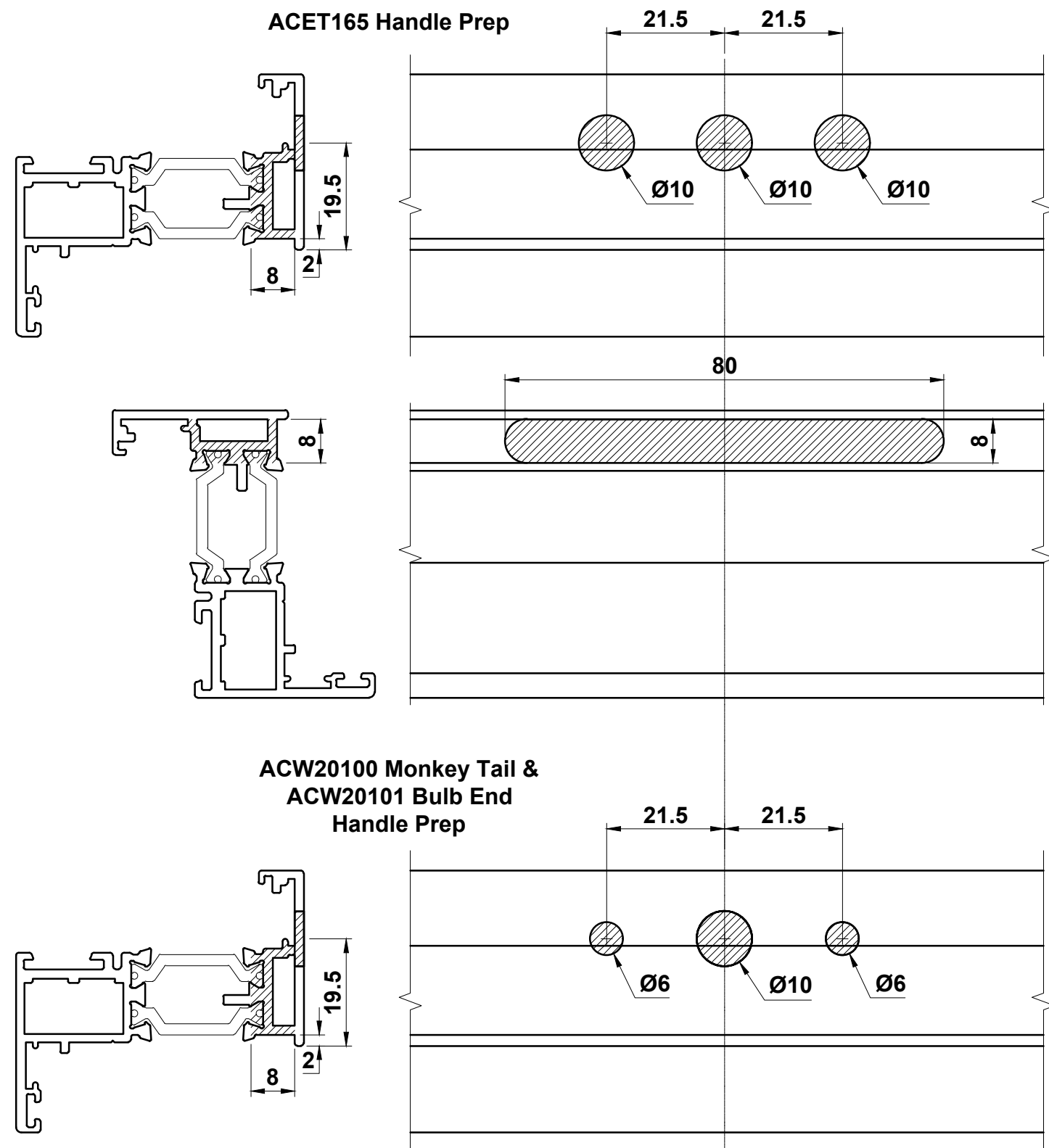
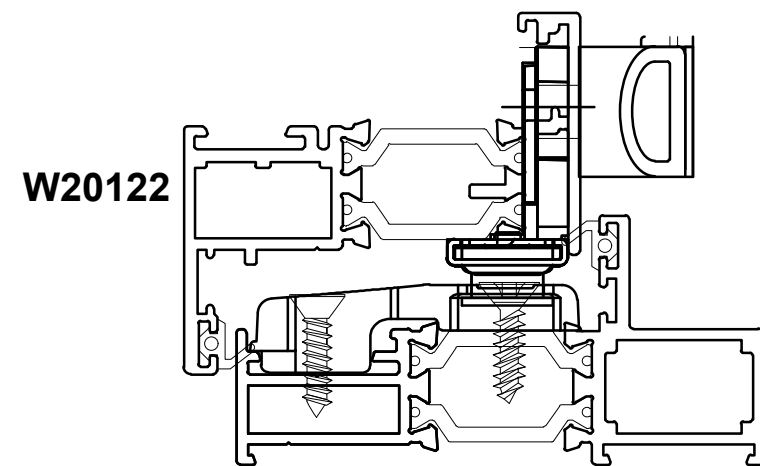
Do Not Scale From This Drawing

W20122 Espag Locking Details

Part Code	Rod Length (mm)	Number of Keeps	Sash Rebate Size ('A')	
			Minimum	Maximum
ACET301L	335	2	340	505
ACET301R				
ACET302L	500	2	506	755
ACET302R				
ACET303L	750	2	756	1005
ACET303R				
ACET304L	1000	4	1006	1255
ACET304R				
ACET305L	1250	4	1256	1400
ACET305R				

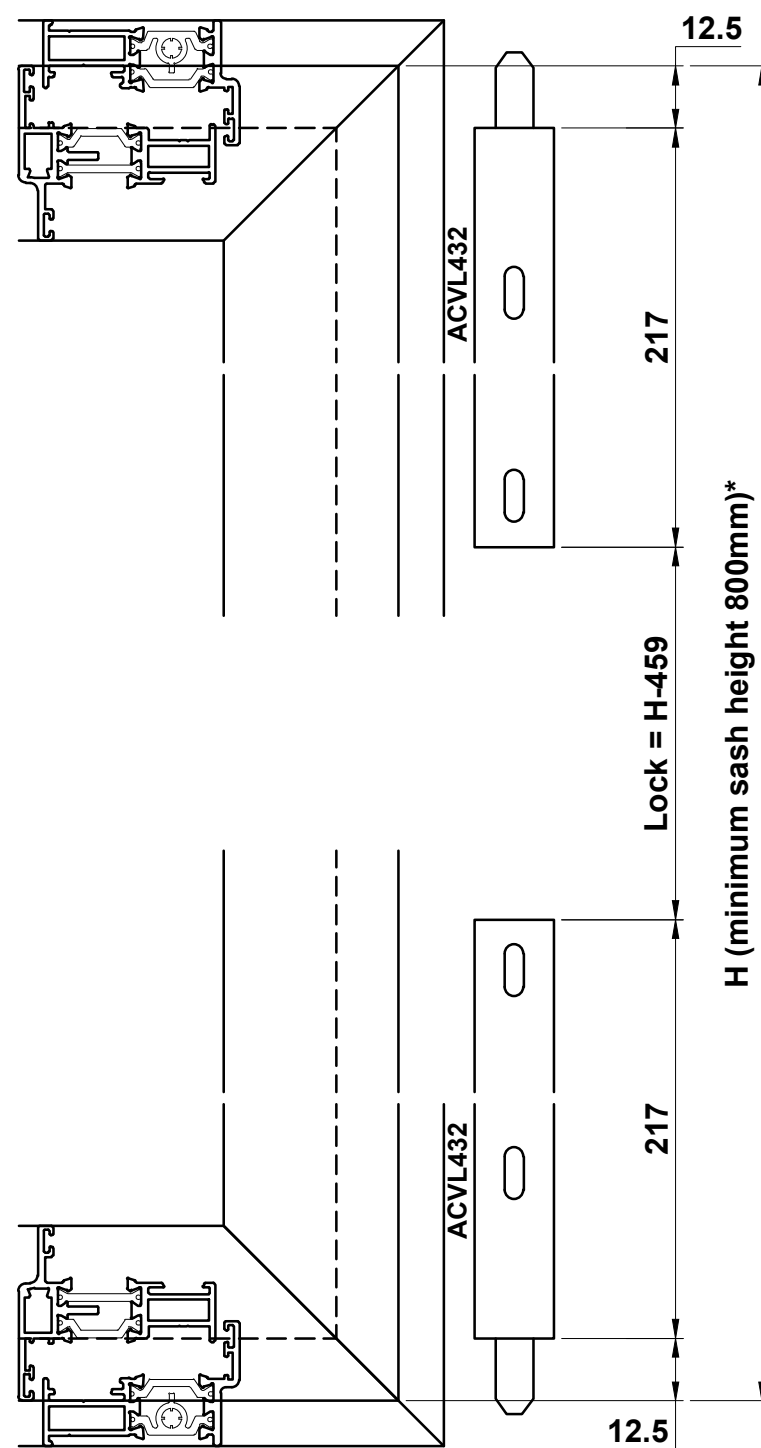
Note: 1) To suit handle ACET165

2) The reverse espags shown above are taken from Alitherm 300

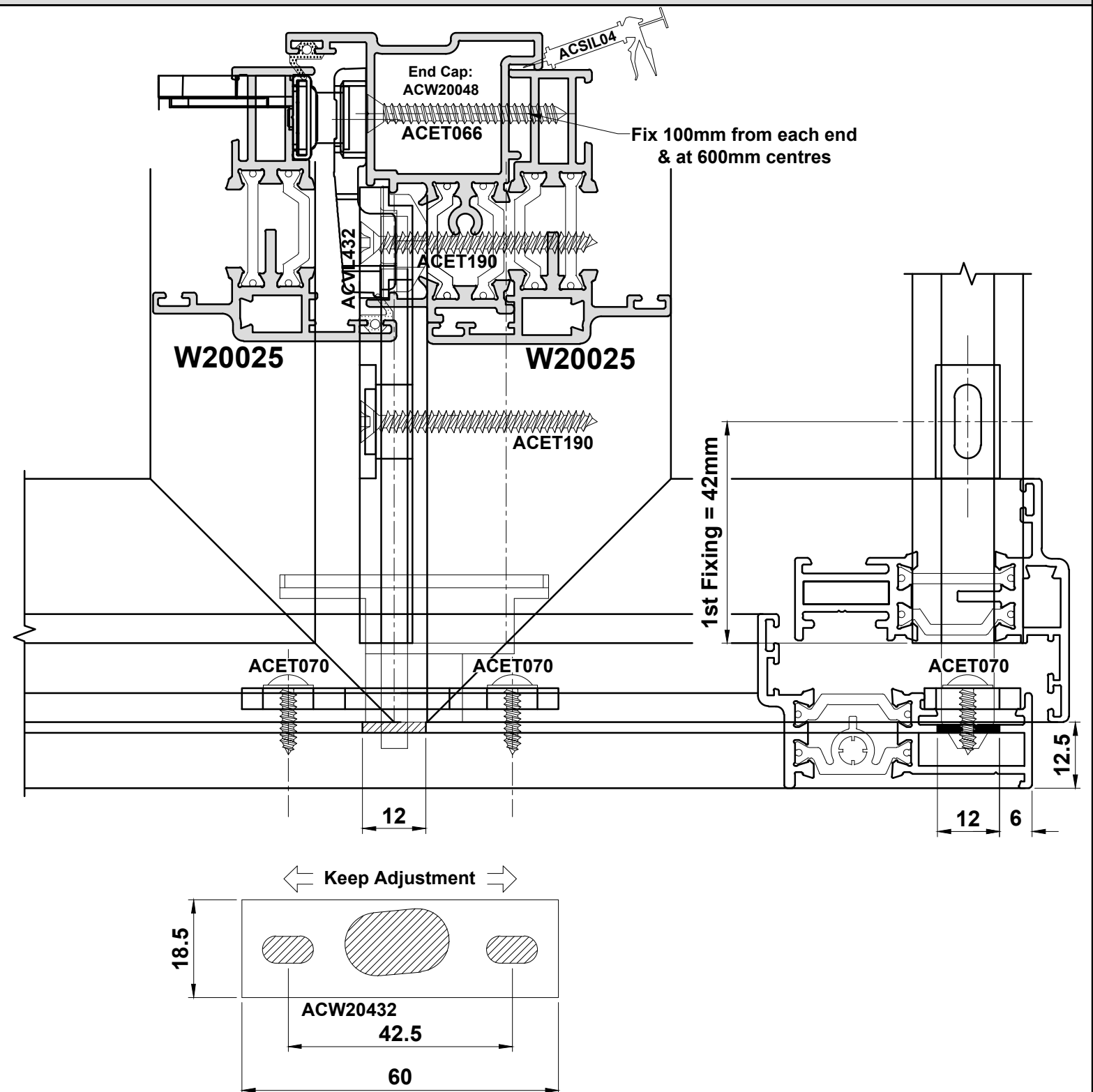
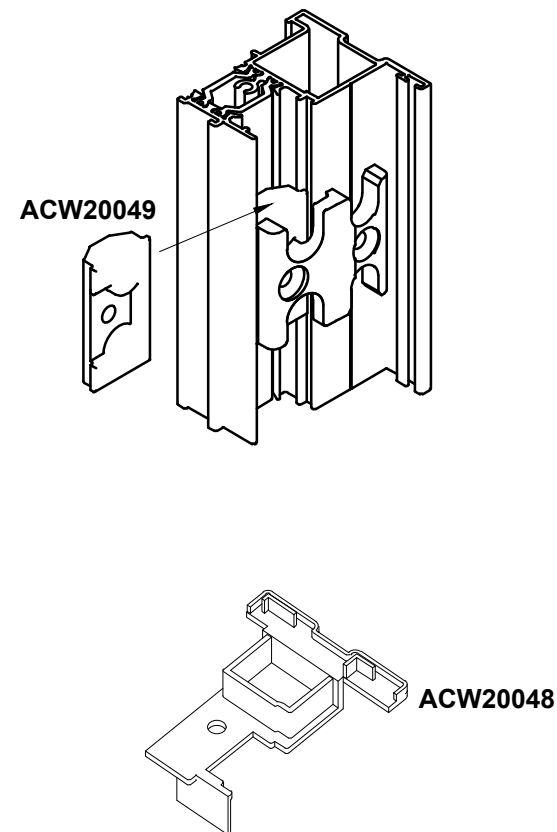


Do Not Scale From This Drawing

W20048 French Casement Assembly

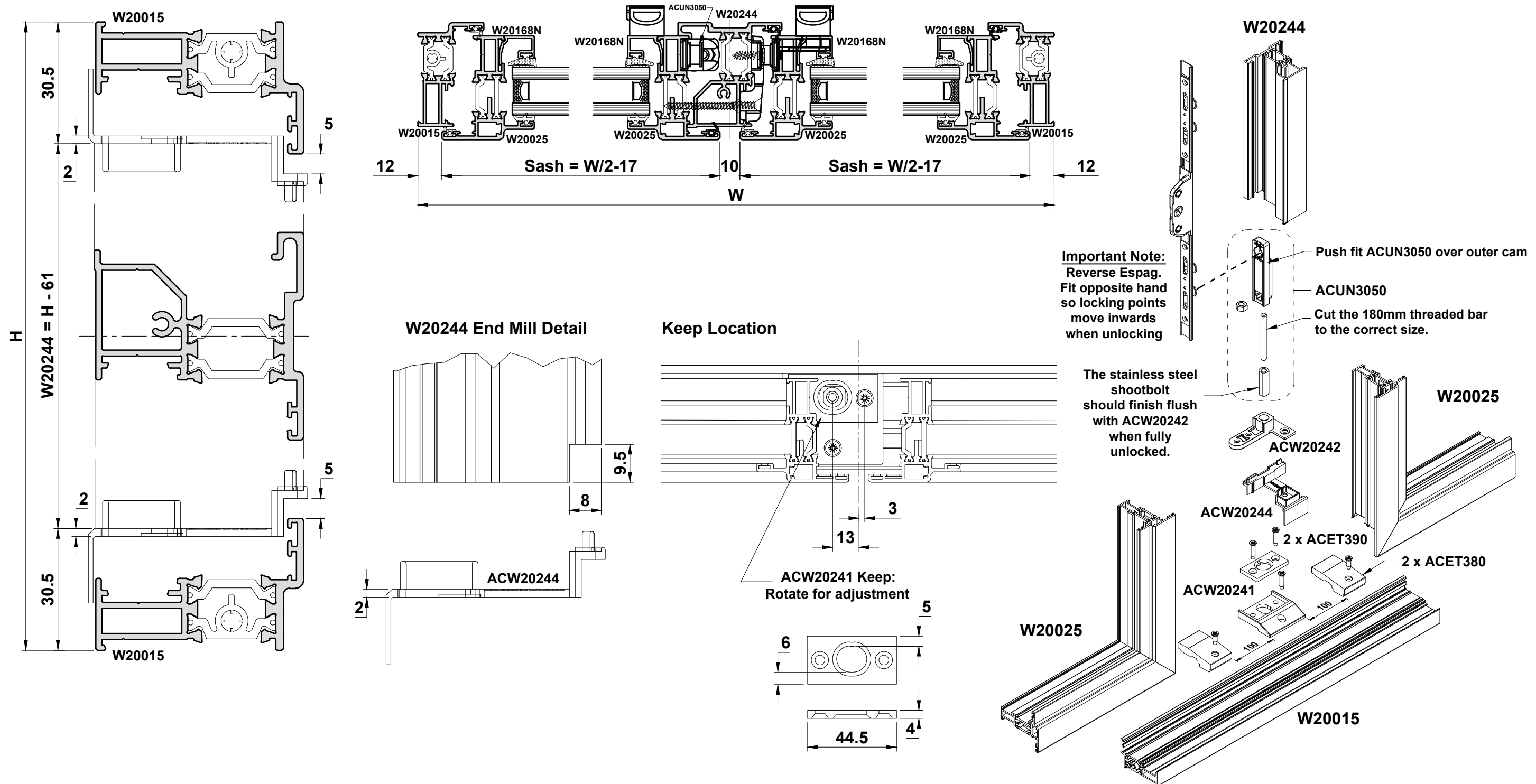


***Minimum sash height is based on using 335mm locking rod.**



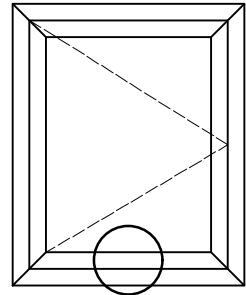
Do Not Scale From This Drawing

W20244 French Casement Assembly



Do Not Scale From This Drawing

Peg Stay Fixing Details

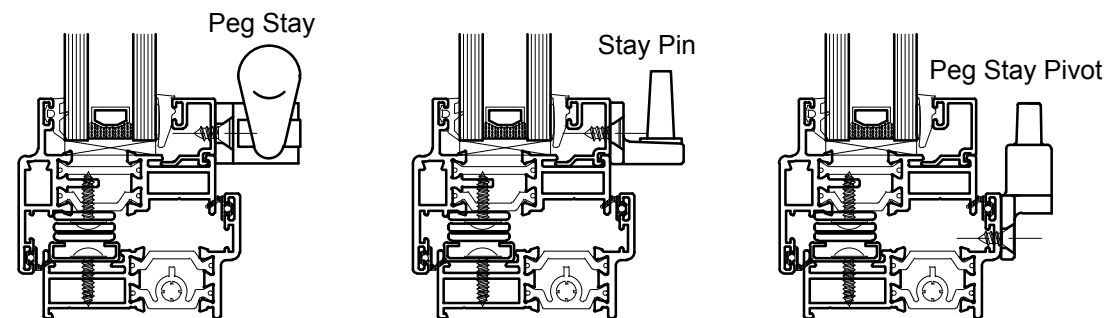


**TOP HUNG WITH PEG STAY HAS
NOT BE TESTED AS ADDITIONAL
HANDLE CAN NOT BE FITTED**



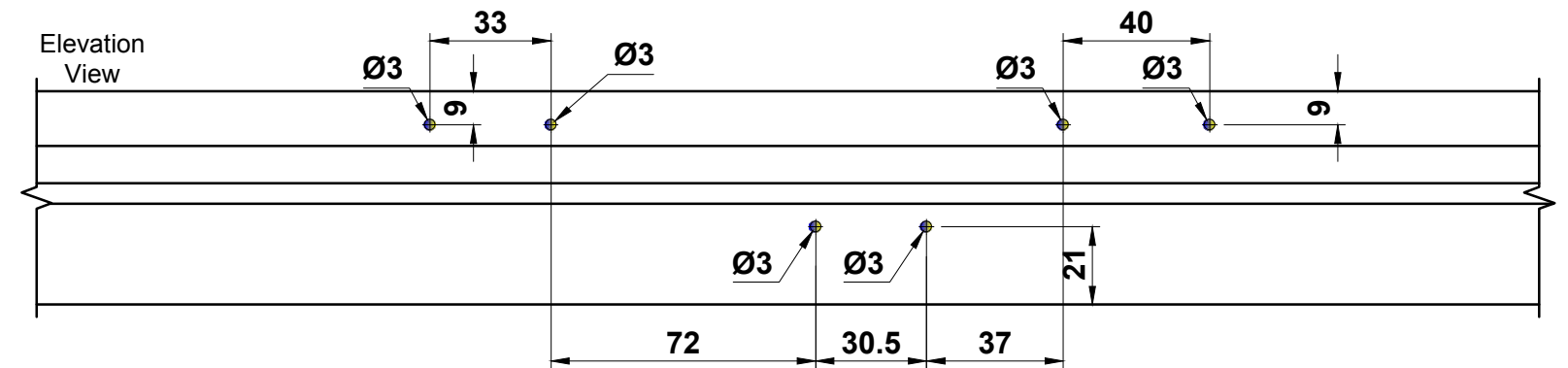
Monkey Tail
Peg Stay

Bulb End
Peg Stay

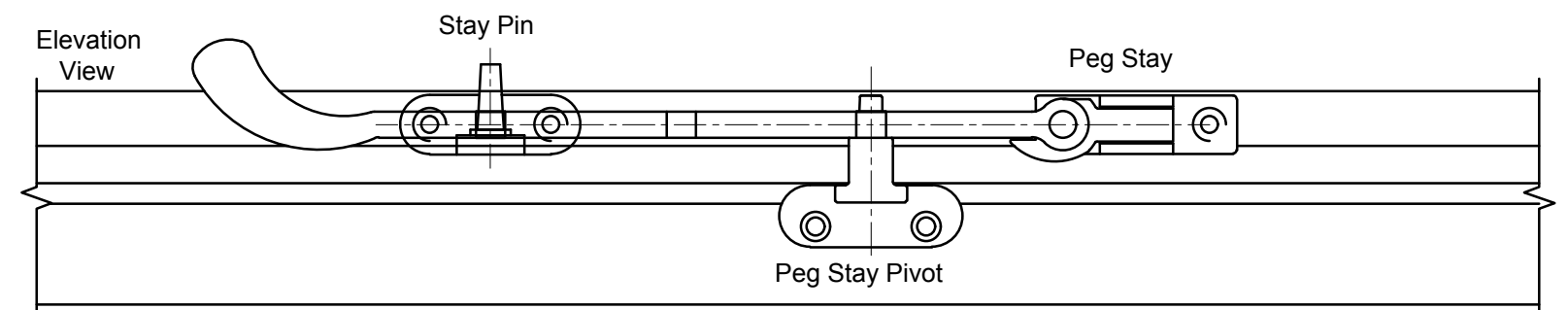
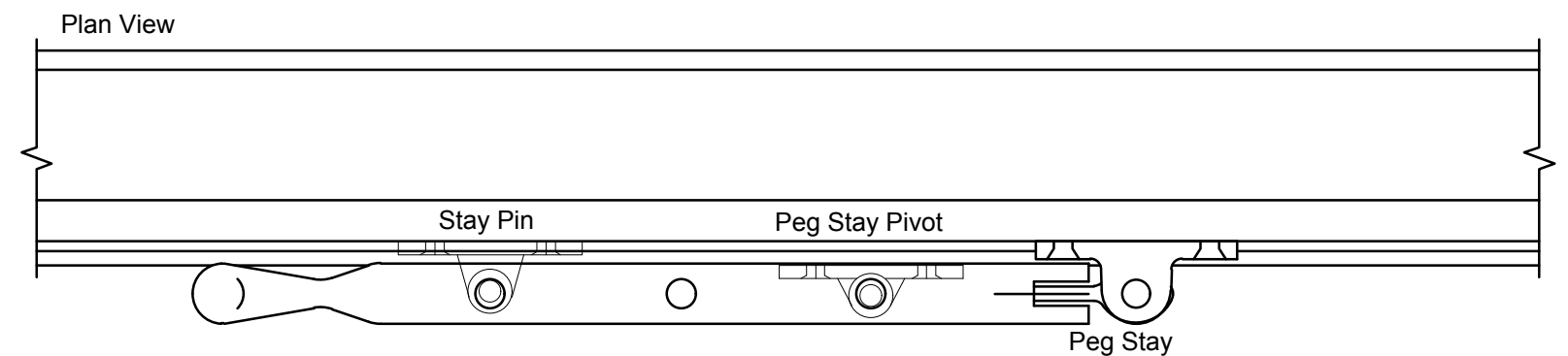


**PEG STAY CANNOT BE
INSTALLED ON OUTER FRAME
W20017 AND W20112**

Typical layout for 10" peg stay

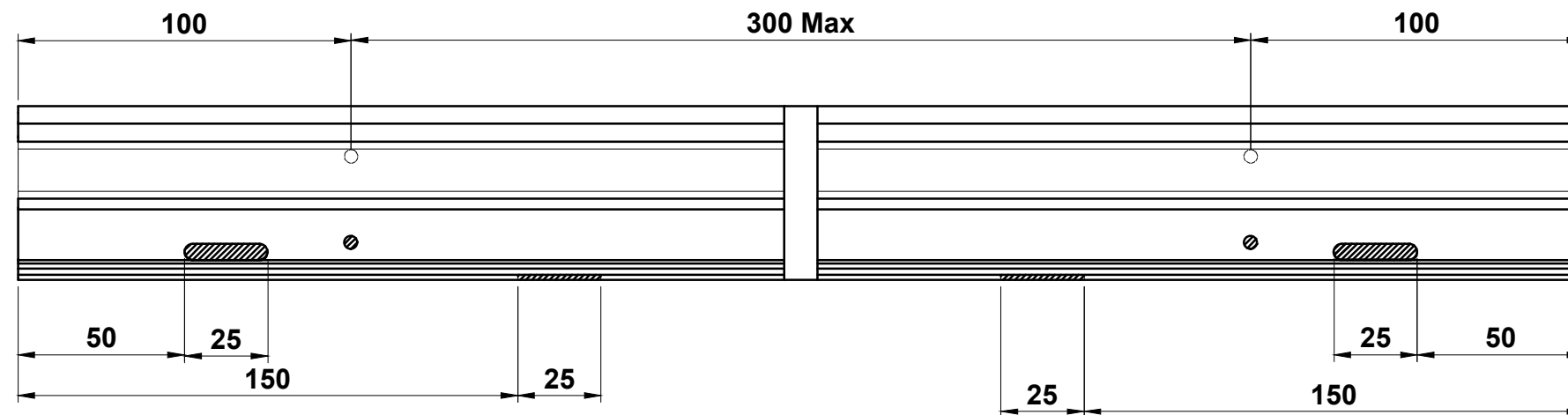


Please use the above dimensions for guidance only.
As each peg stay is hand made, the dimensions will vary slightly.

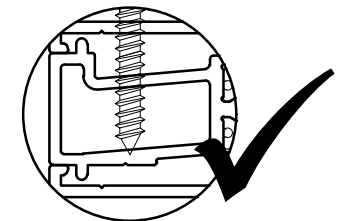
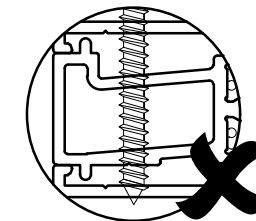
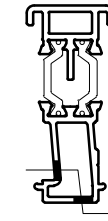


Do Not Scale From This Drawing

W20492 Horizontal Coupler Detail

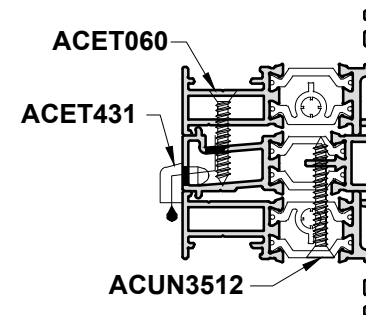


Important Note: Do not screw through drainage channel.

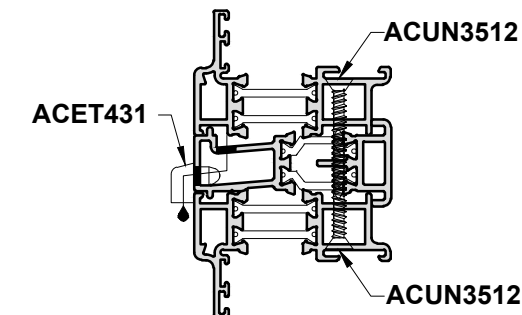


Zone Drainage of Jamb Cavity

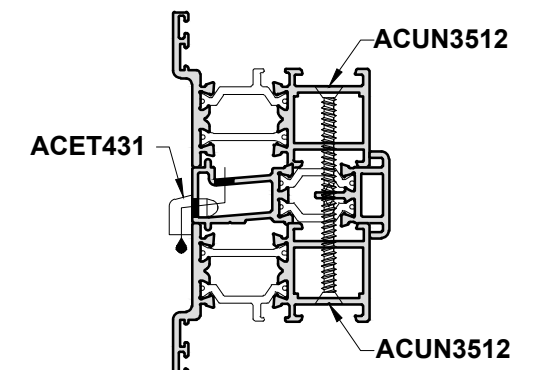
CWCT Built up wall guidance recommends drainage of Jamb Cavity



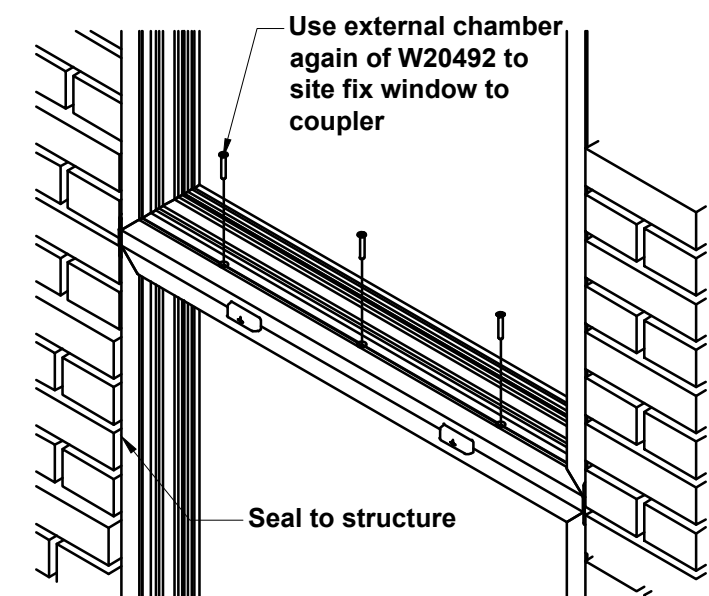
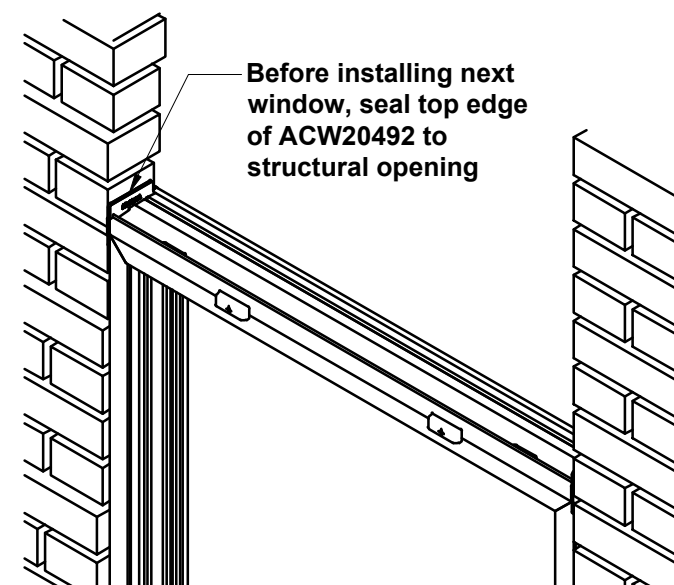
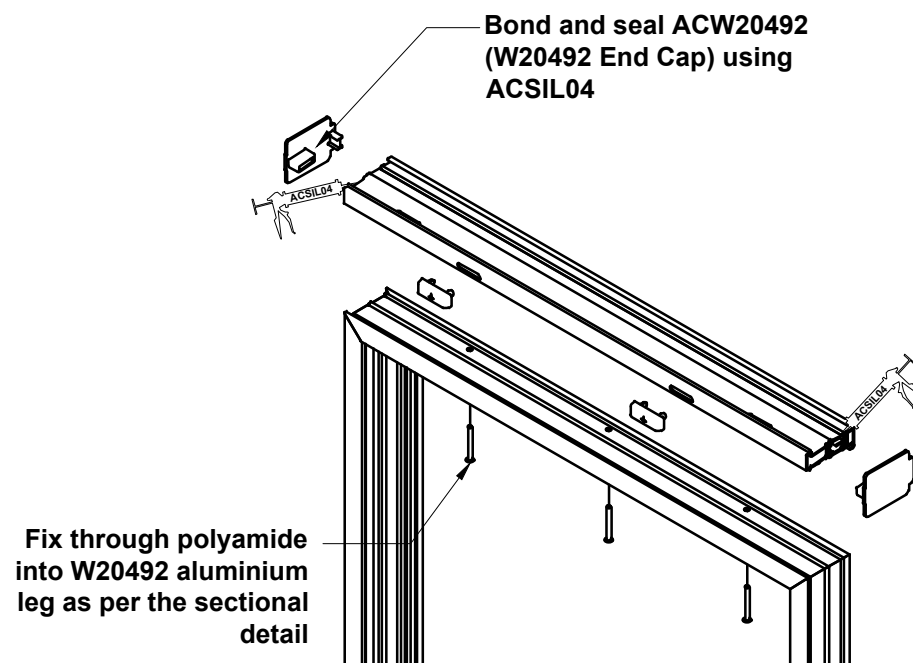
W20015



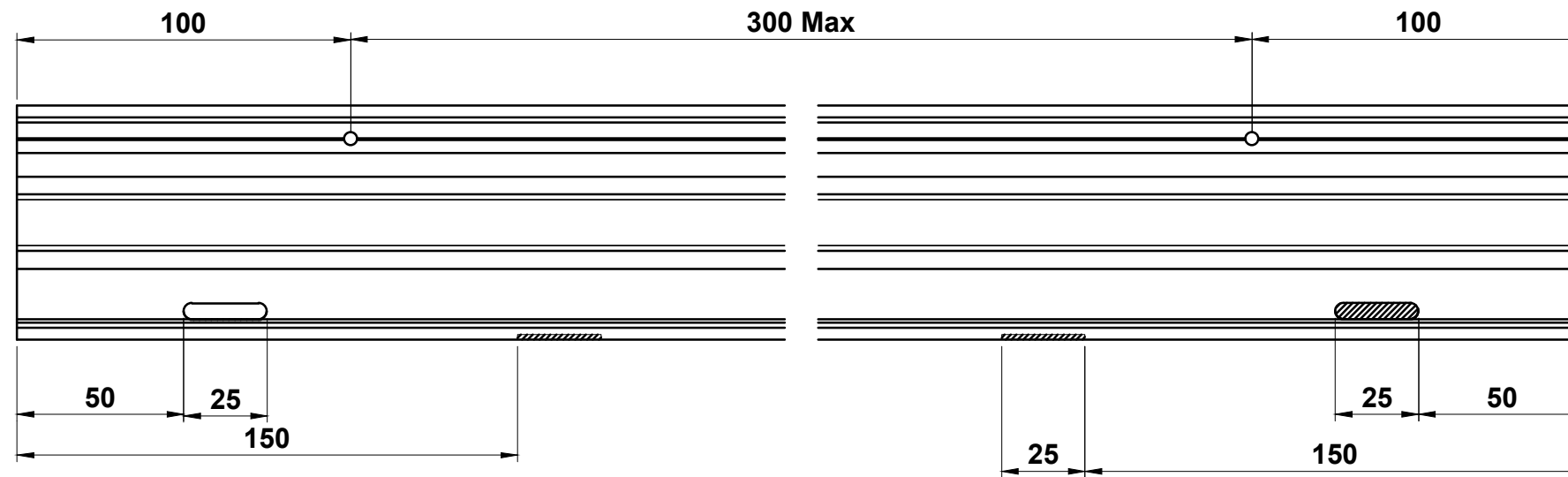
W20018



W20110

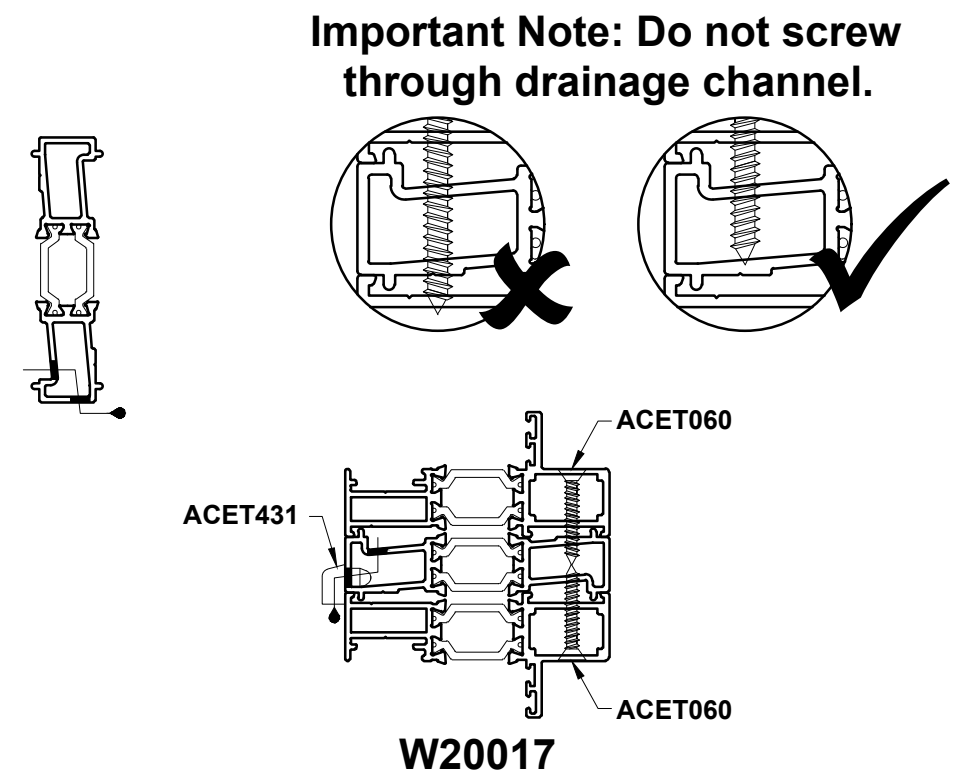
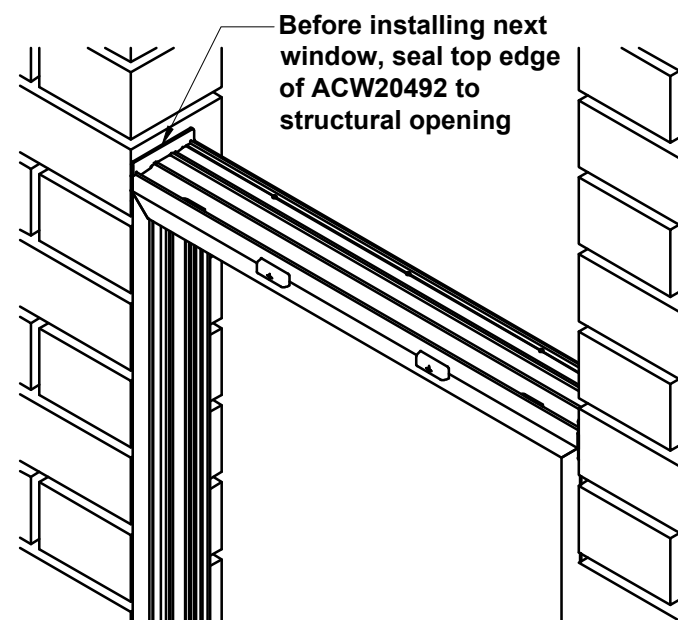
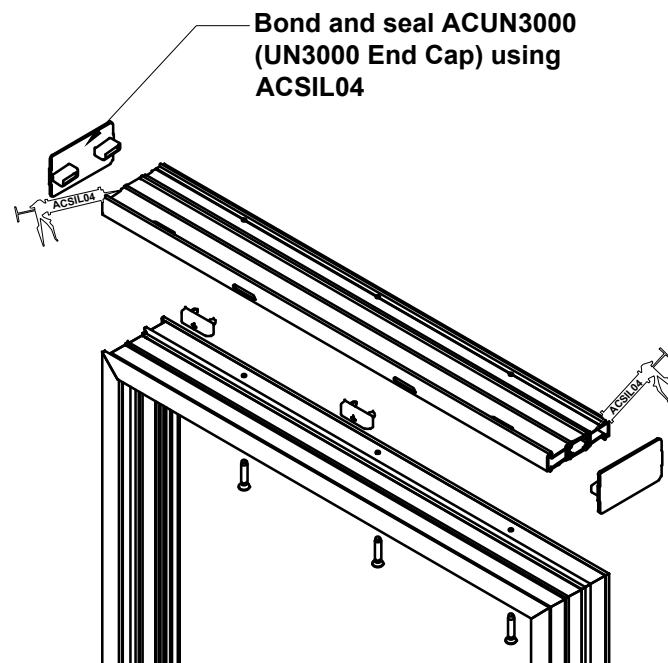


UN3000 Horizontal Coupler Detail



Zone Drainage of Jamb Cavity

CWCT Built up wall guidance recommends drainage of Jamb Cavity



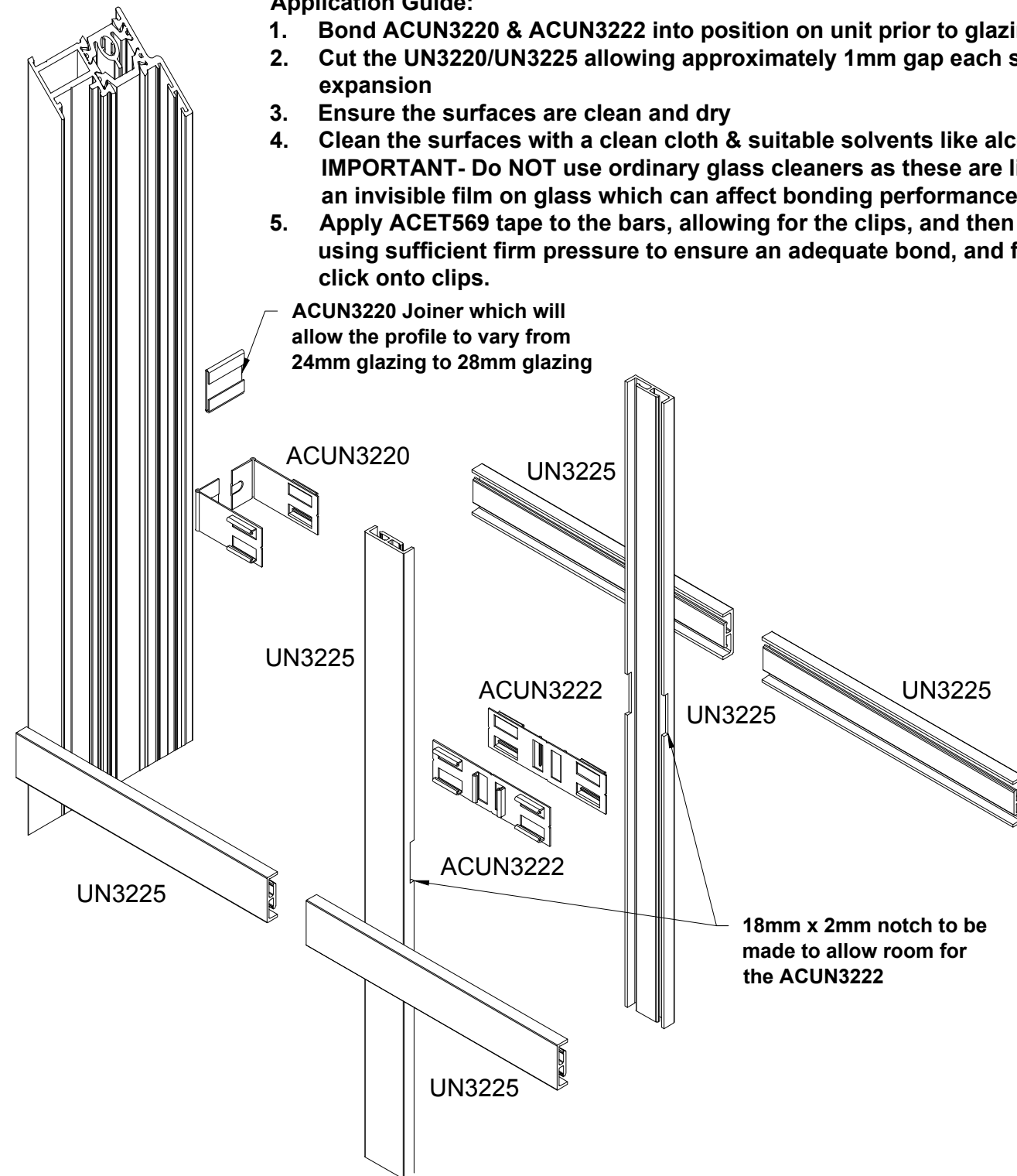
Do Not Scale From This Drawing

Astragal Bar Detail

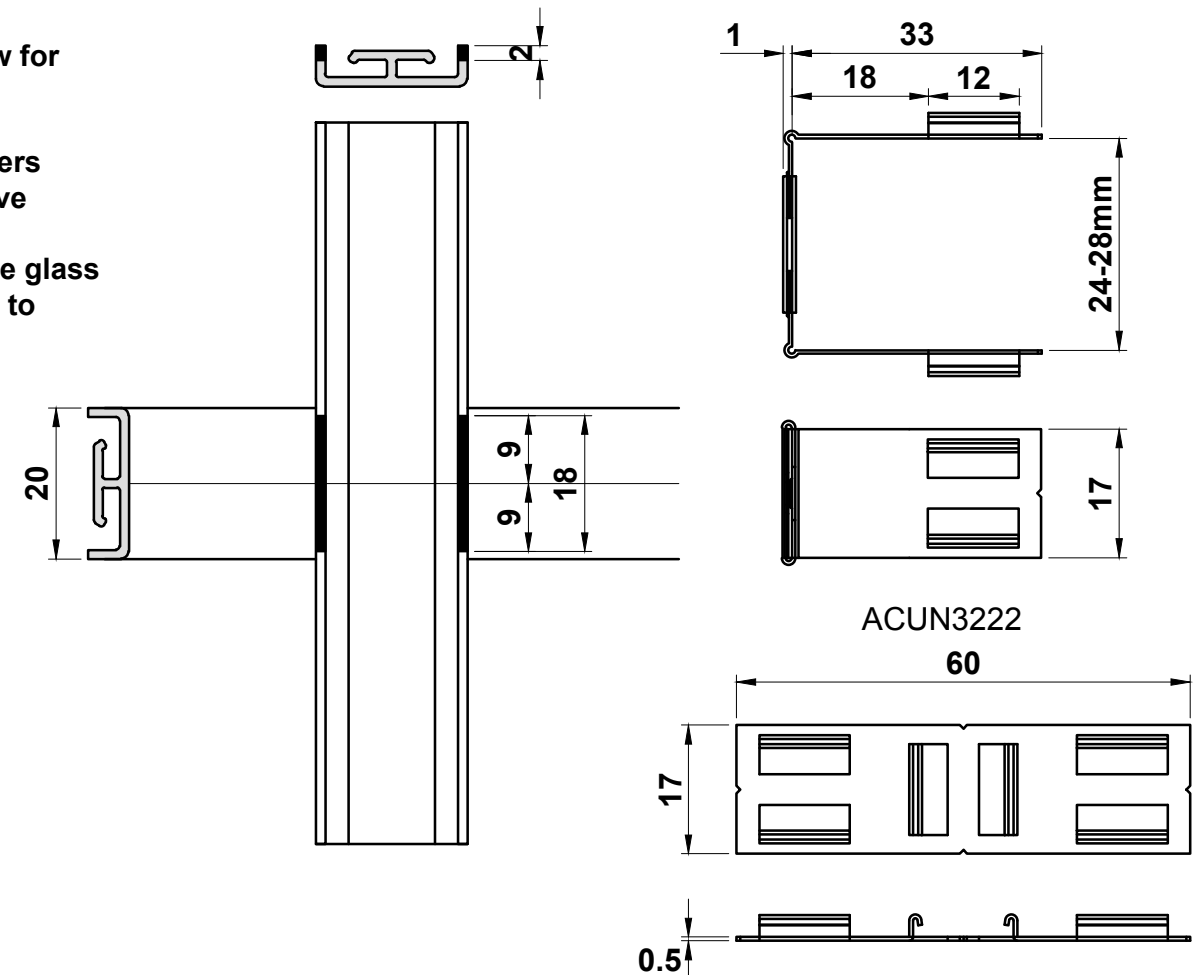
Application Guide:

1. Bond ACUN3220 & ACUN3222 into position on unit prior to glazing
2. Cut the UN3220/UN3225 allowing approximately 1mm gap each side to allow for expansion
3. Ensure the surfaces are clean and dry
4. Clean the surfaces with a clean cloth & suitable solvents like alcohol or ethers
IMPORTANT- Do NOT use ordinary glass cleaners as these are likely to leave an invisible film on glass which can affect bonding performance
5. Apply ACET569 tape to the bars, allowing for the clips, and then apply to the glass using sufficient firm pressure to ensure an adequate bond, and for the bars to click onto clips.

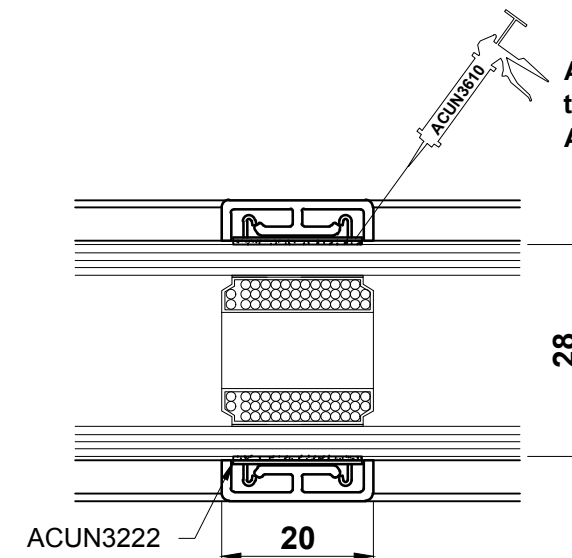
ACUN3220 Joiner which will allow the profile to vary from 24mm glazing to 28mm glazing



Notch Detail for ACUN3222



**ACUN3610 to be used
to bond ACUN3220 &
ACUN3222 to the glass**



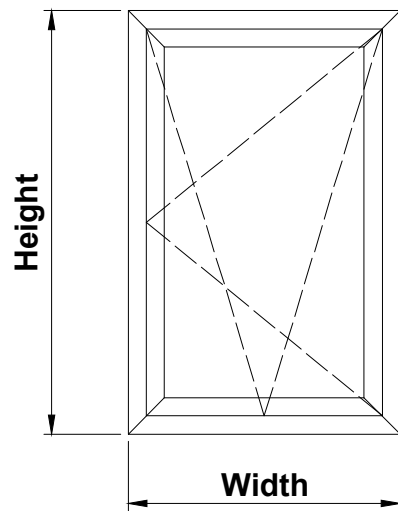
Ensure area of bonding is clean, dry and free from any dust or surface contamination.

Apply a small coating of ACUN3612 surface activator to the glass side of ACUN3222 and the bond area of the glass only. Allow to dry, leaving a slight residue.

Take care not to apply ACUN3612 to any visible surfaces.

Do Not Scale From This Drawing

Tilt & Turn Overview

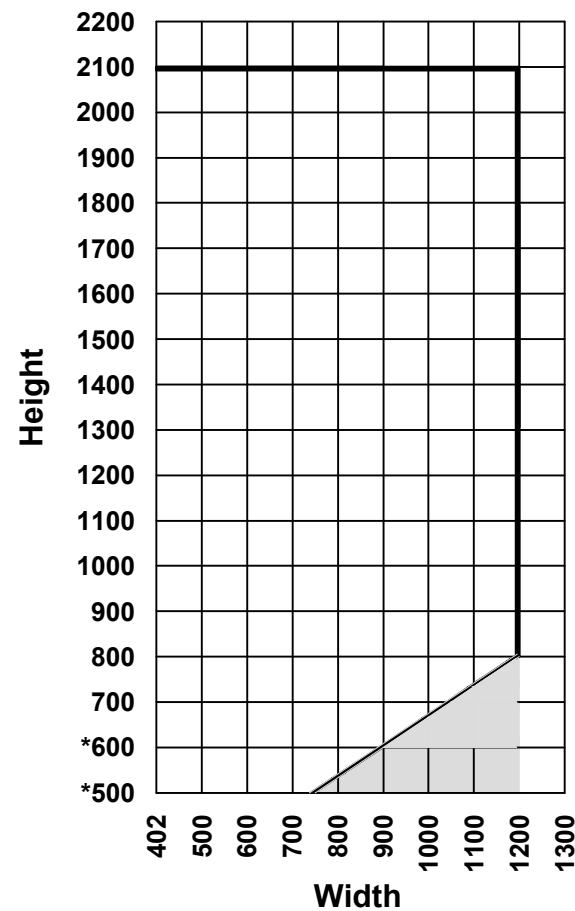


Important Notes:

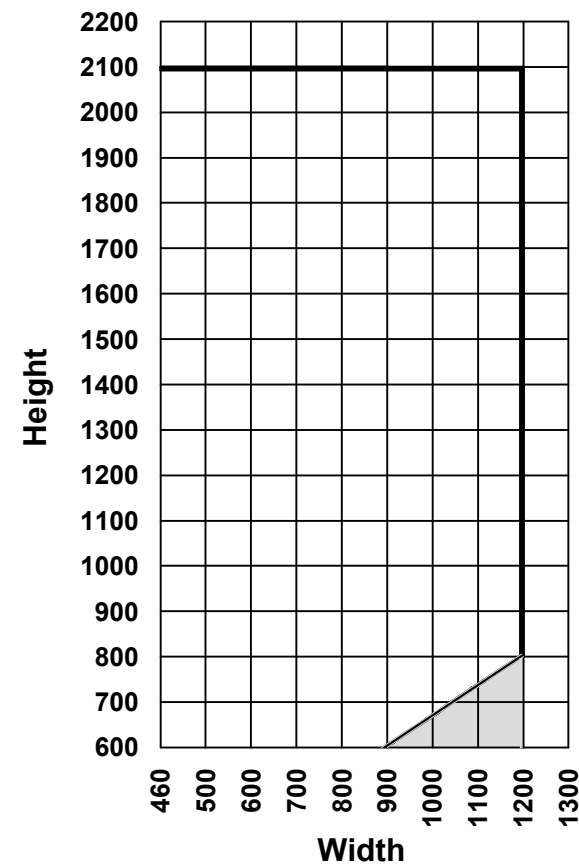
1. The size limitations of the chosen tilt & turn hardware must be adhered to
2. The width of the sash cannot be more than 1.5 times the height
3. Maximum sash weight = 90kg
4. Please refer to the tilt & turn hardware manuals for the latest information.

*Due to the narrow outer frame, we recommend using the Chrono Invision tilt & turn gear to avoid issue with the internal render. Alternatively, an extension section maybe used as shown. Please see the SB Chrono manual or the Fapim manual for full gearing details

Fapim Tilt & Turn Hardware

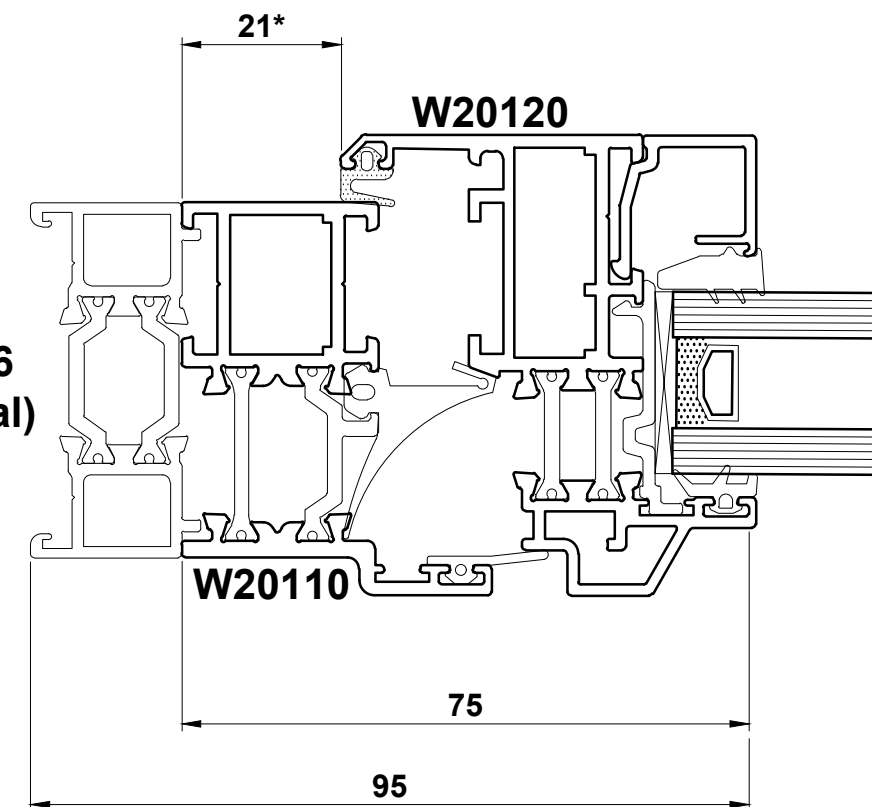


Sobinco Tilt & Turn Hardware

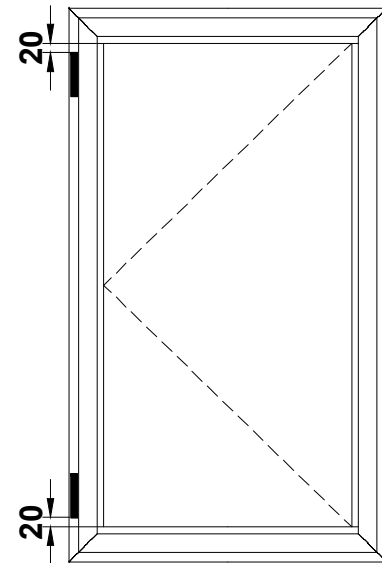


Important Note:
For PAS24 use Sobinco Safe Invision

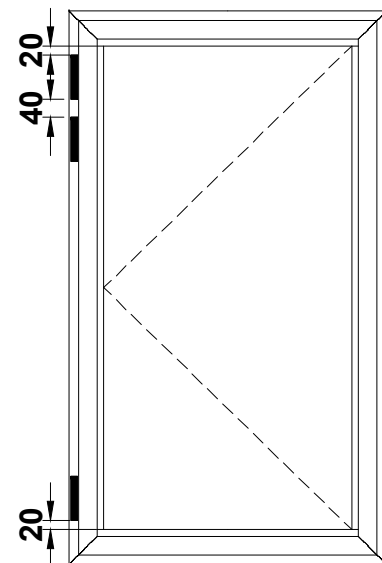
ETD056
(Optional)



ACUN3140 Hinge

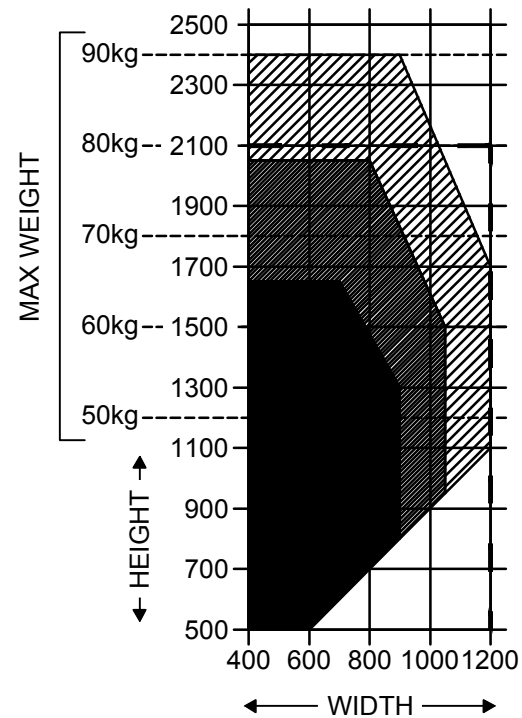


2 Hinge Locations



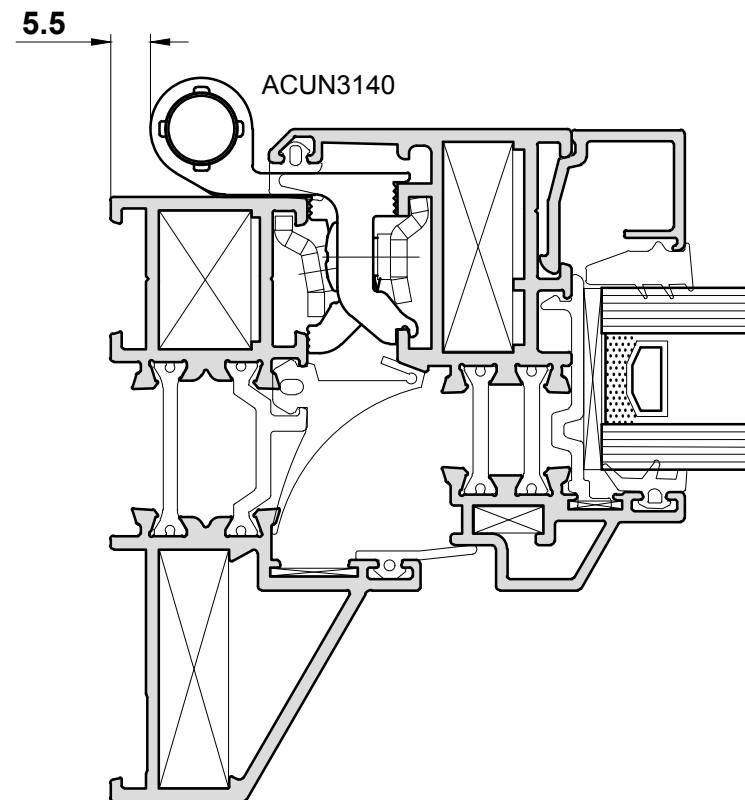
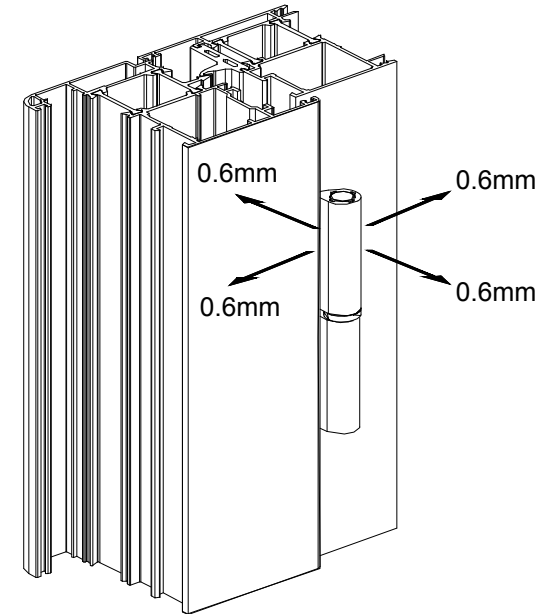
3 Hinge Locations

ACUN3140 - Hinge Limitations

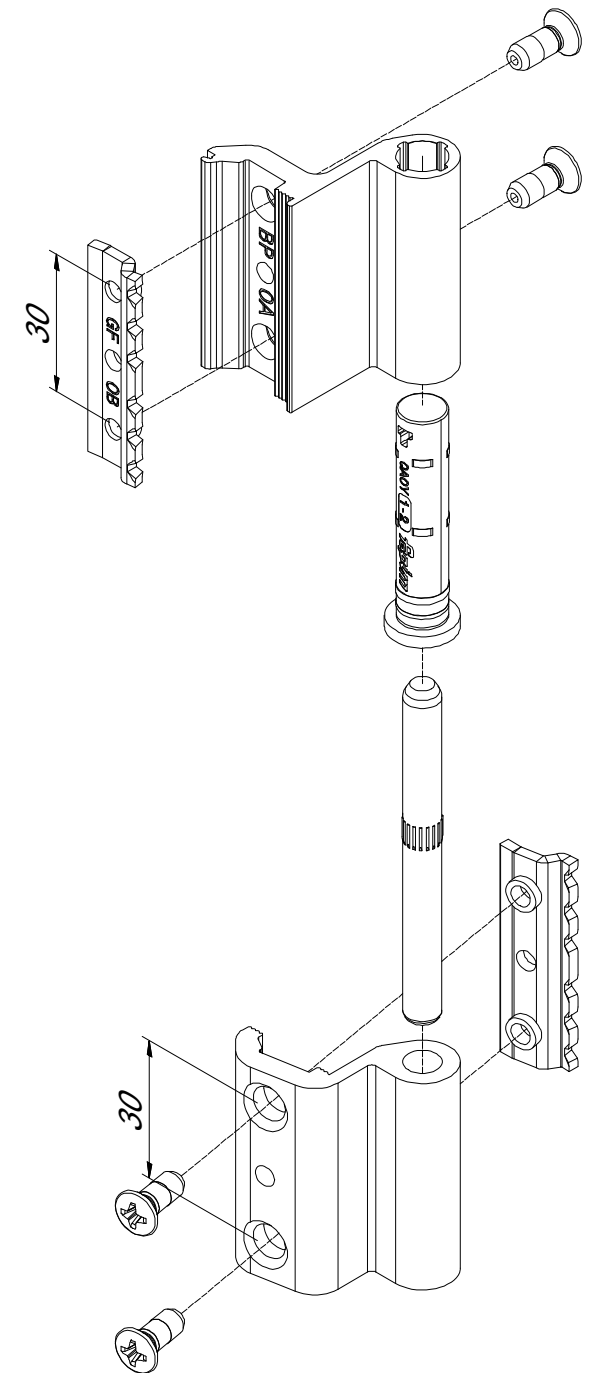


Please note:
Sash and Hinge
Limitations are different.
Anything fabricated outside
of Smart Systems Ltd.
sash limitations will not be
covered by Kitemark.

Smart Systems Ltd.
sash size limitations
— — —

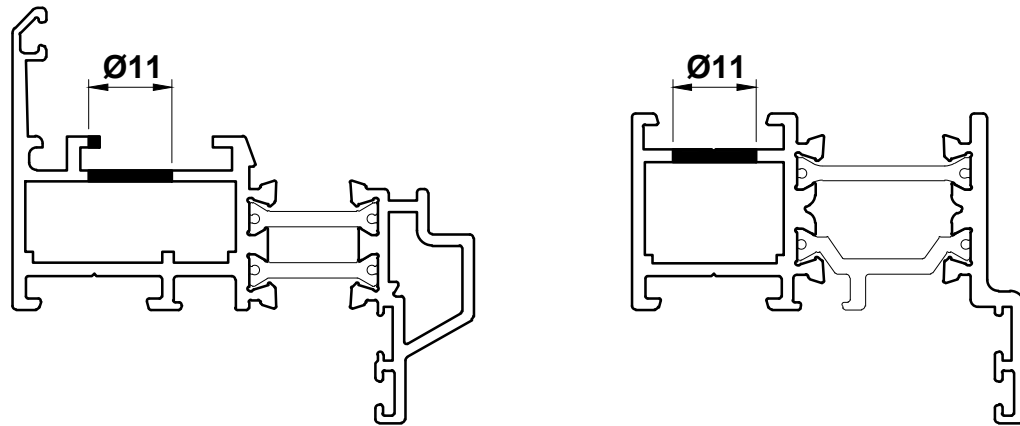


ACUN3140 - Hinge Assembly



Do Not Scale From This Drawing

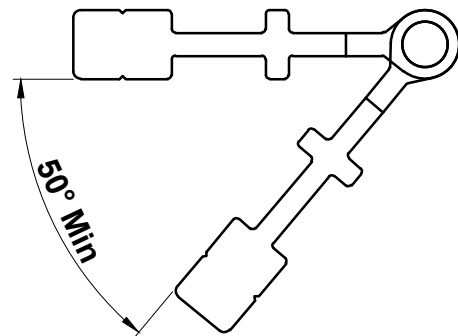
Tilt & Turn Variable Angle Cleat Detail



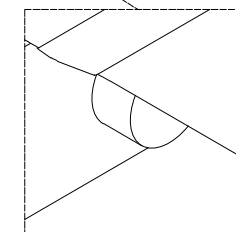
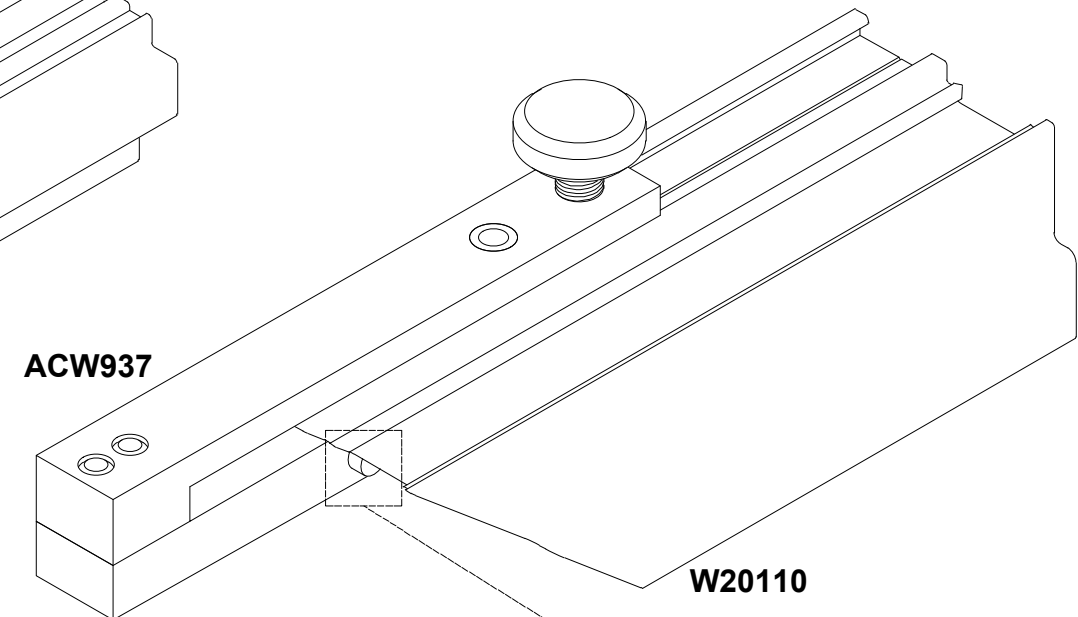
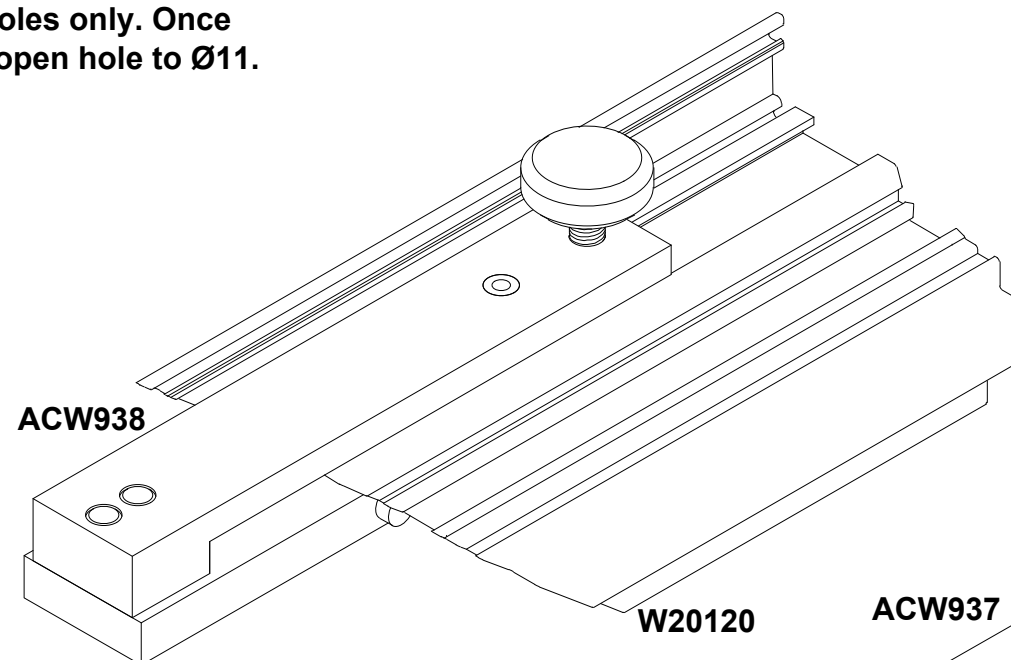
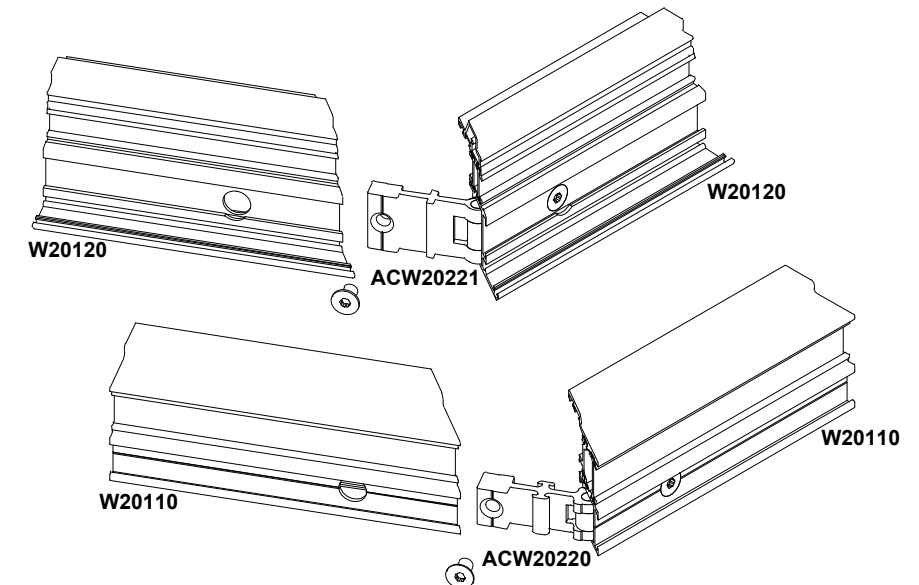
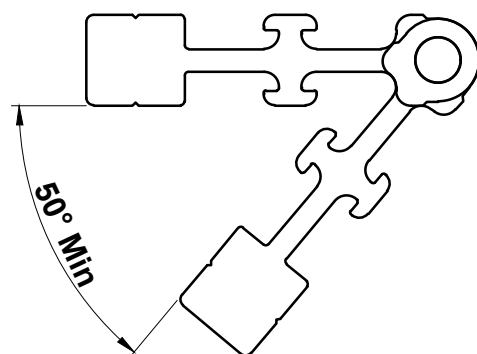
Note: Jigs to be used as pilot holes only. Once drilled with ACW937 & ACW938, open hole to Ø11.

Note: Minimum angle achievable is 50° for ACW20220 and ACW20221. To achieve the minimum angle of 50°, the mitre would be cut at a 25° angle.

ACW20221



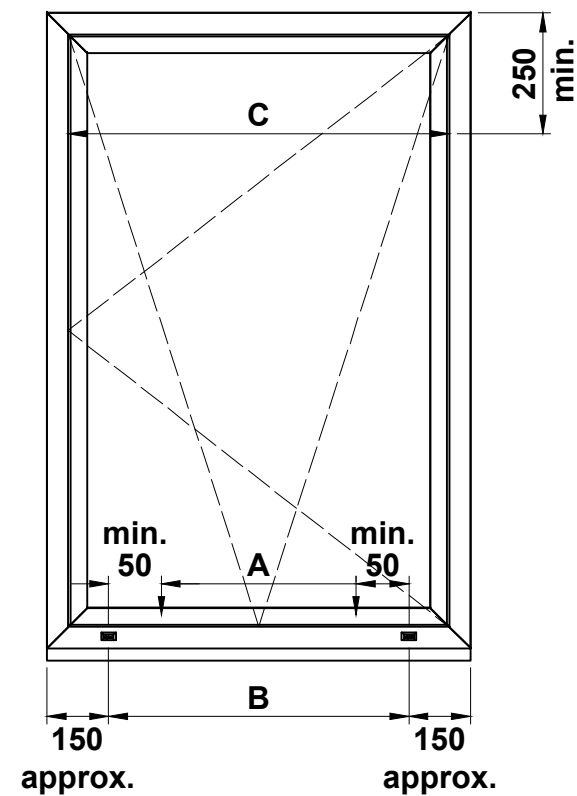
ACW20220



Ensure mitred face of profile is touching flat face of rotating pin in ACW937 & ACW938, then tighten security screw.

Do Not Scale From This Drawing

Tilt & Turn Drainage



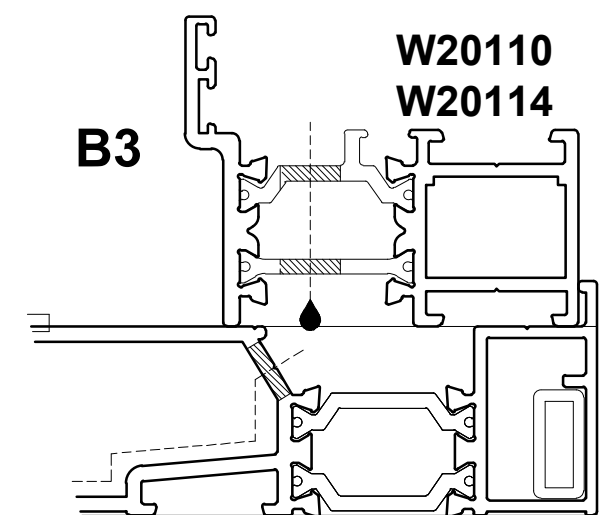
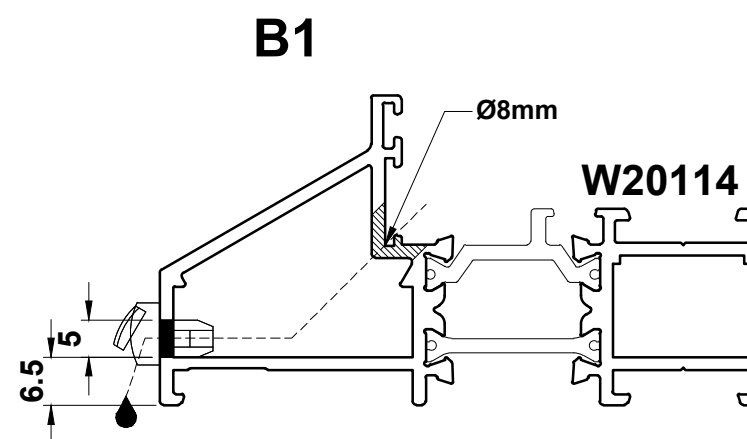
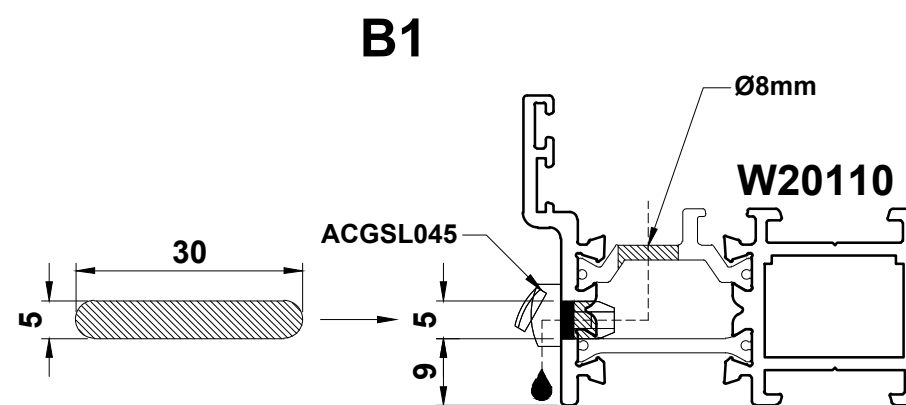
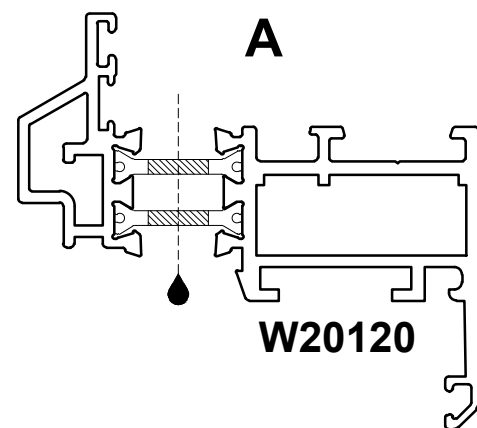
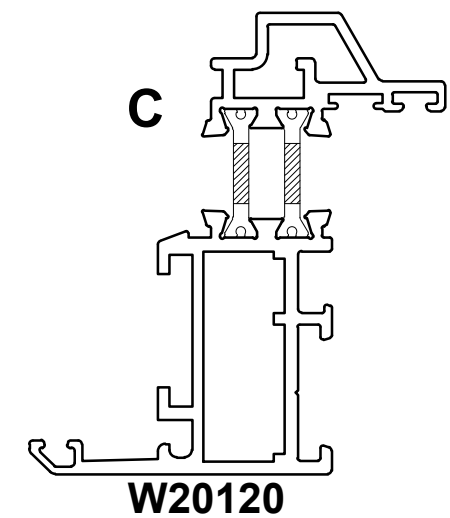
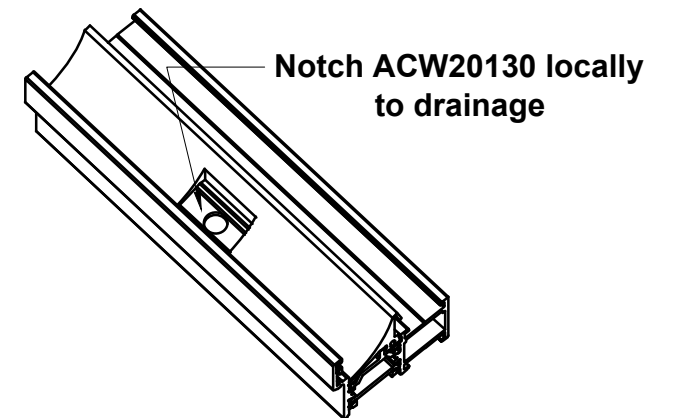
A: Vent Drainage = 2 x Ø8

B1: Outer Frame Drainage = 2 x 5

B2: Outer Frame Drainage = 2 x Ø8

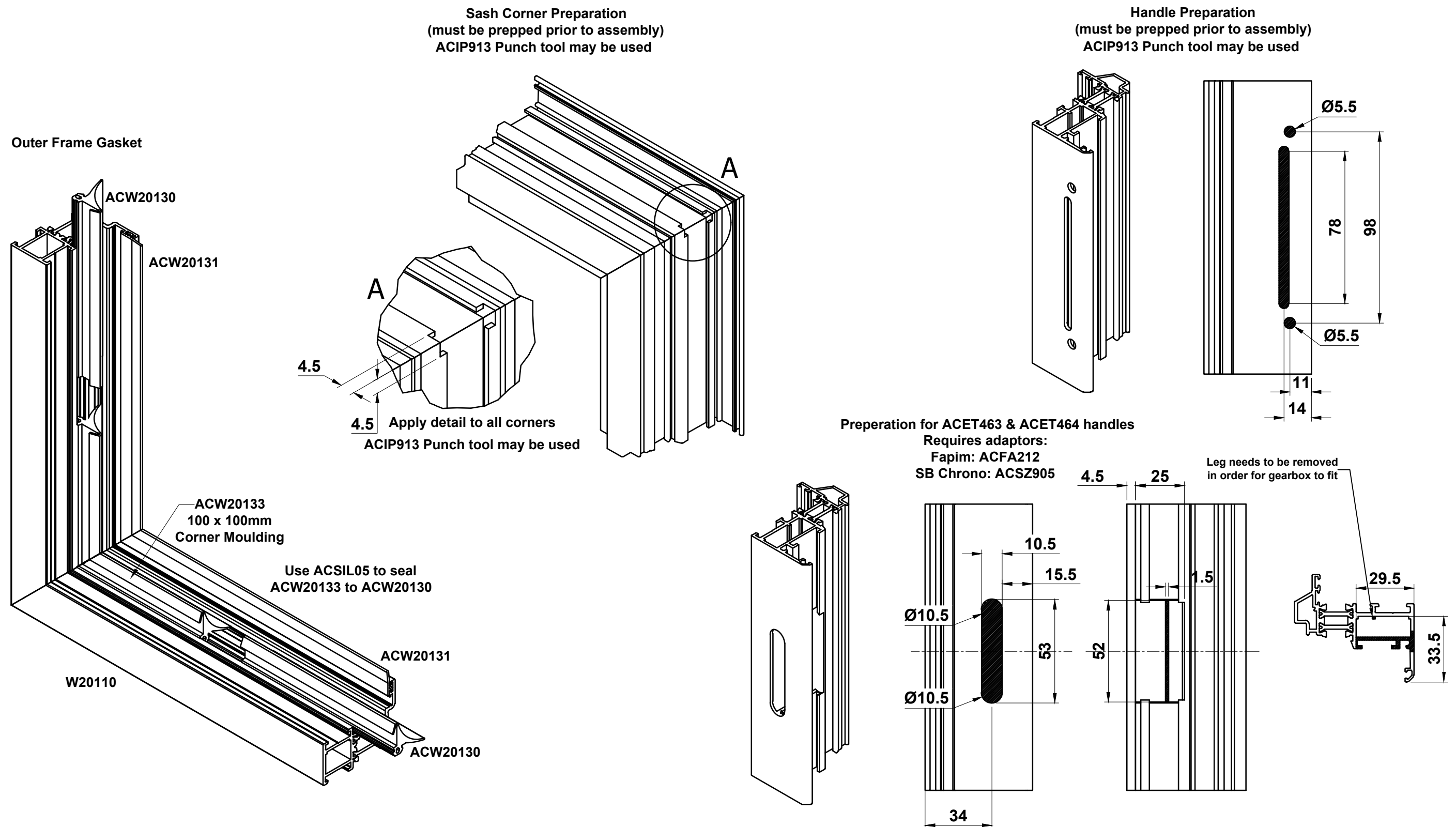
C: Sash Ventilation Holes = 2 x Ø8

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



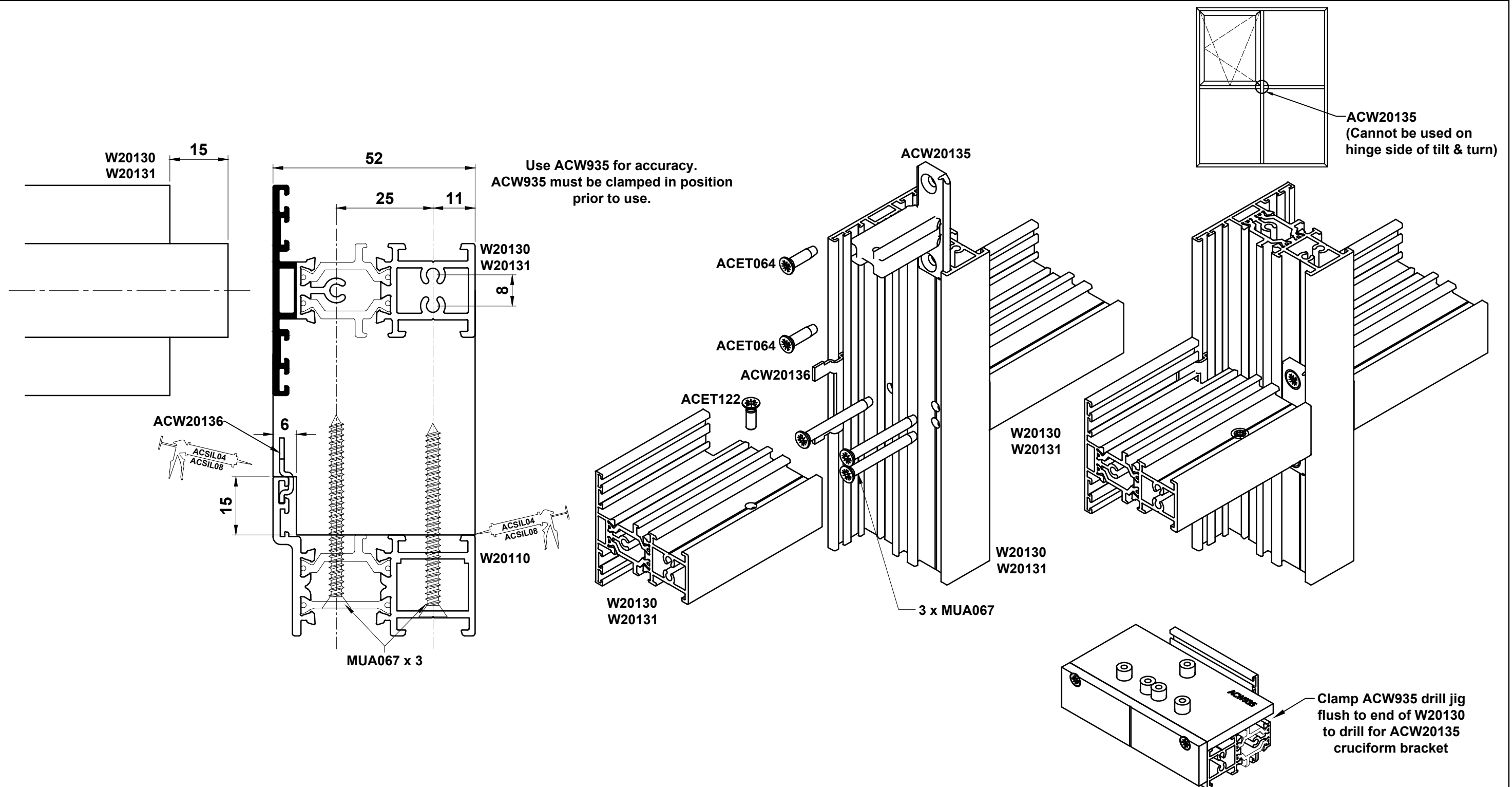
Do Not Scale From This Drawing

Tilt & Turn Outer Frame & Sash



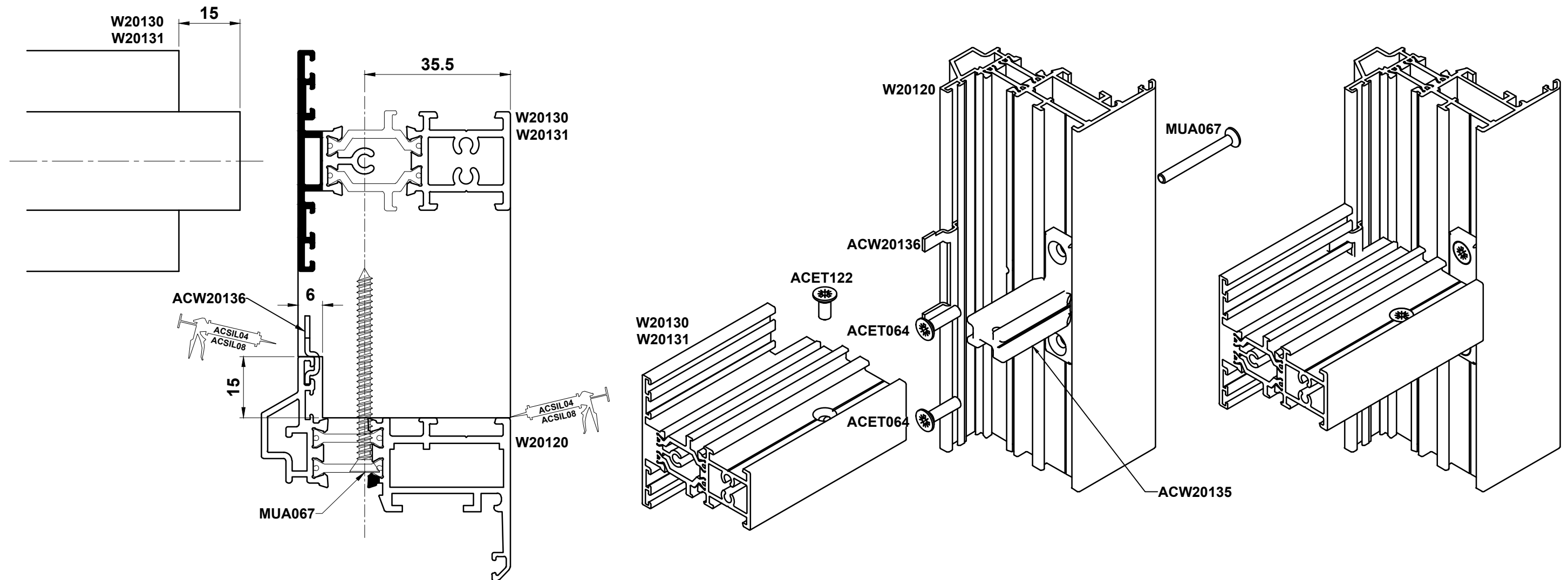
Do Not Scale From This Drawing

W20130/131 Tilt & Turn Transom/Mullion



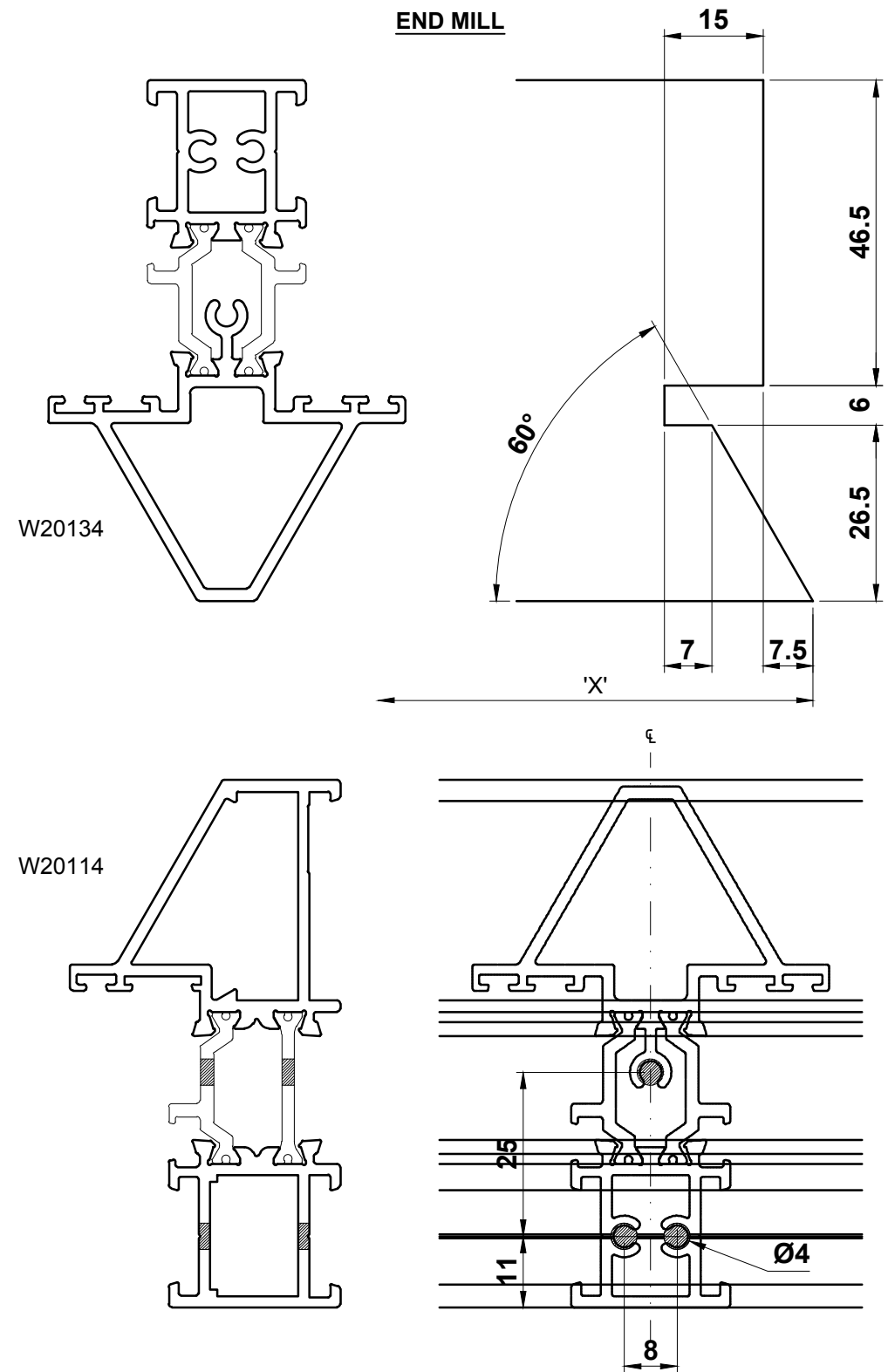
Do Not Scale From This Drawing

W20130/131 Tilt & Turn Transom/Mullion Continued



Do Not Scale From This Drawing

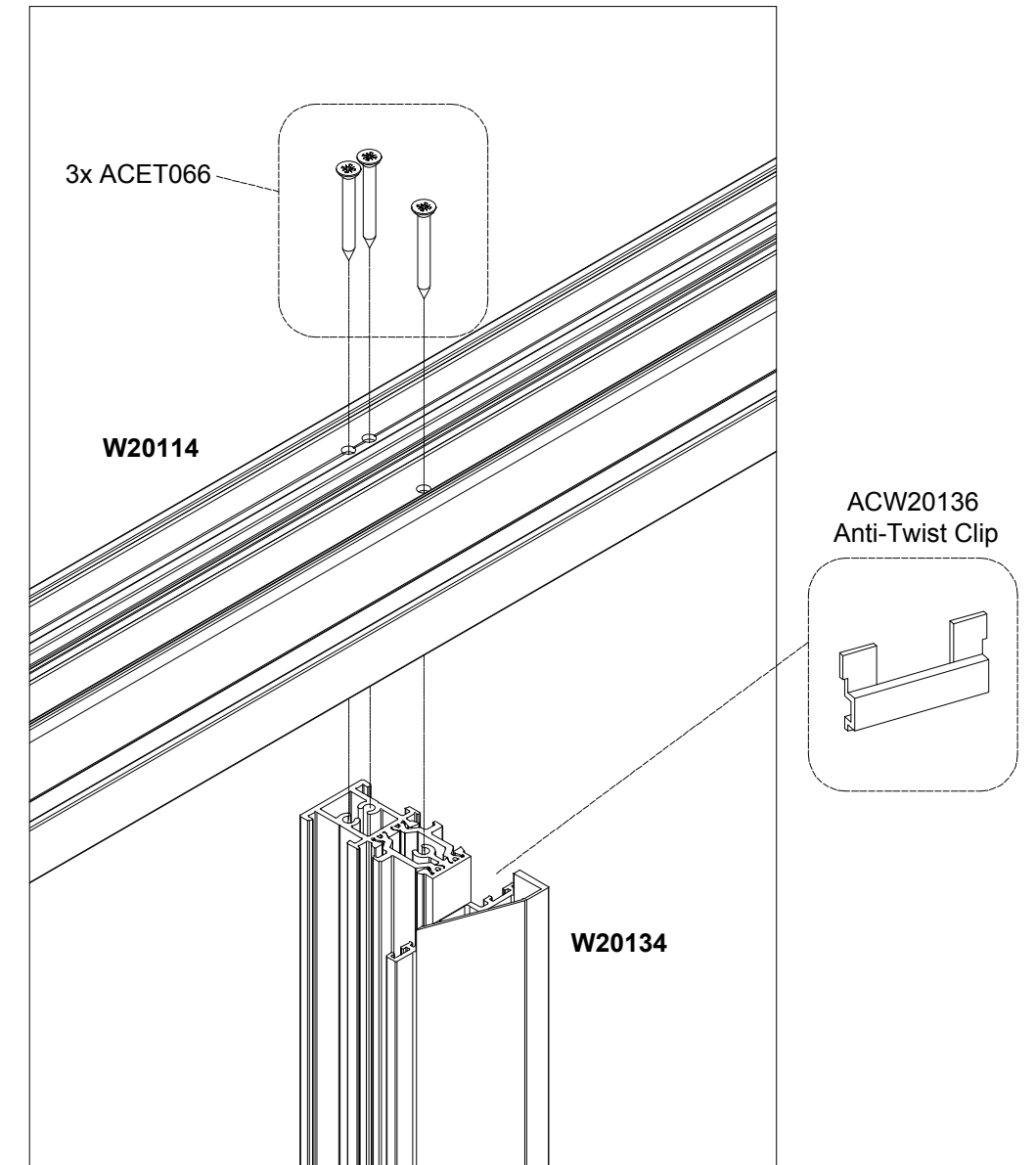
W20134 Tilt & Turn Transom/Mullion



Important Fabrication Note
End Mill Cutters can be ordered through Smart Systems Ltd. Please Contact Technical Department for order form. Standard Delivery is 2-3 weeks.

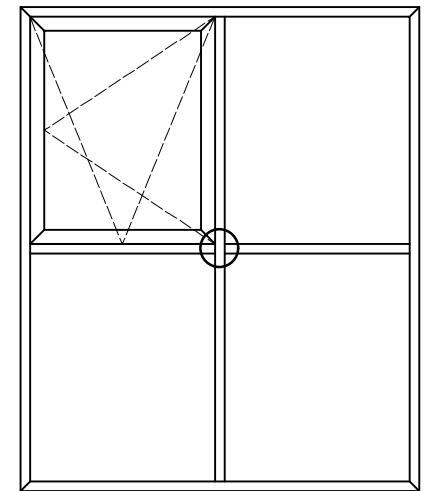
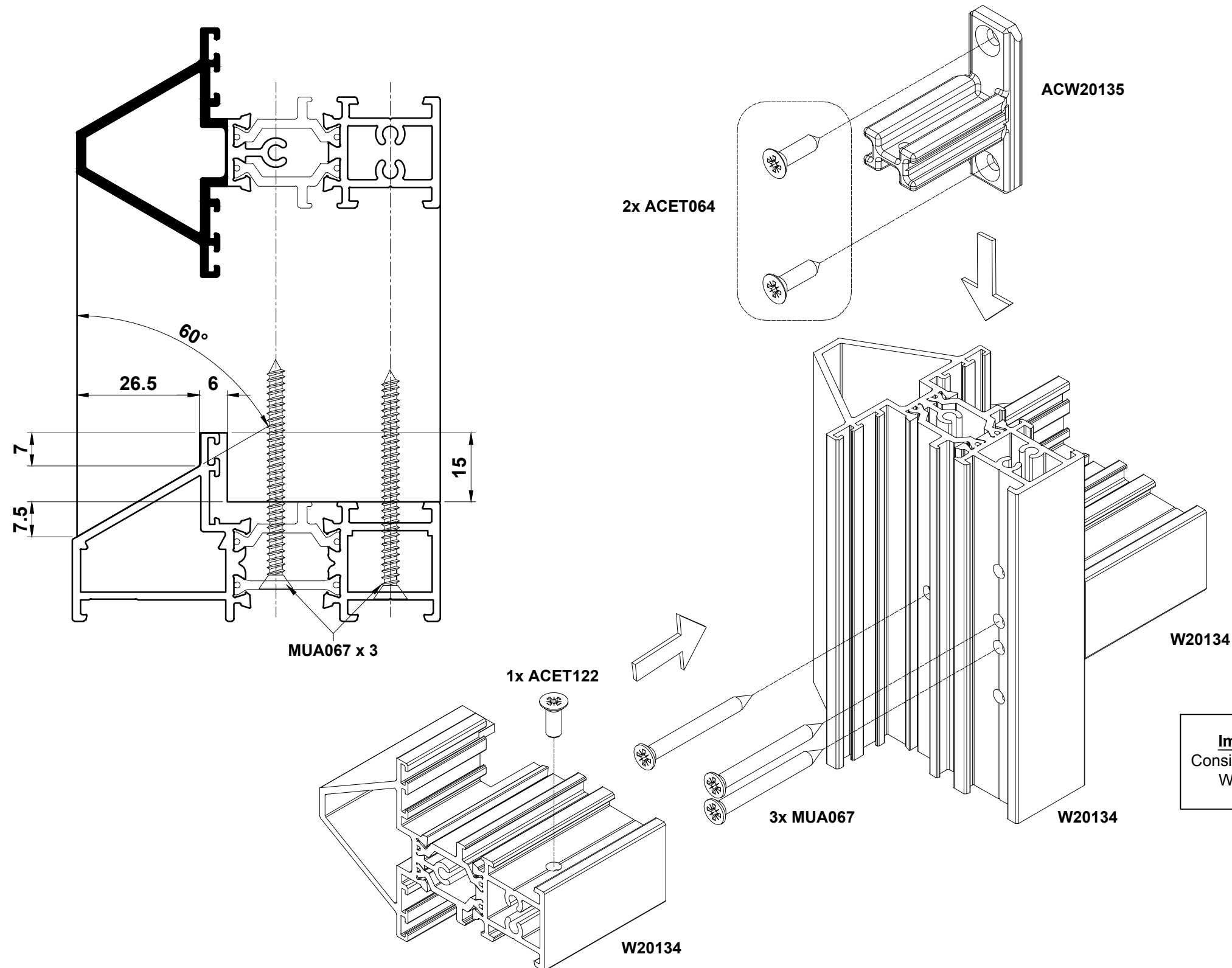
X =
O/F to O/F - 37
O/F to ϵ - 23
 ϵ to ϵ - 9

Important Fabrication Note
Consider using ACW935 for marking W20134 screwport locations.



Do Not Scale From This Drawing

W20134 Tilt & Turn Transom/Mullion Continued



Important Fabrication Note
ACW20135 cannot be used on hinge side of Tilt & Turn

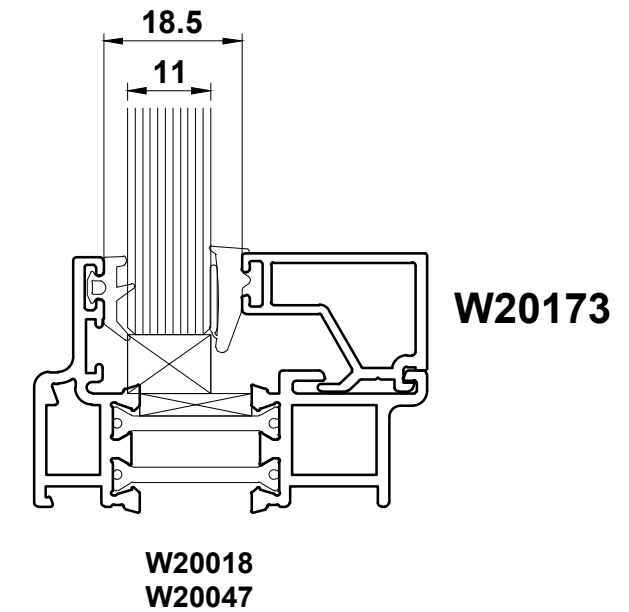
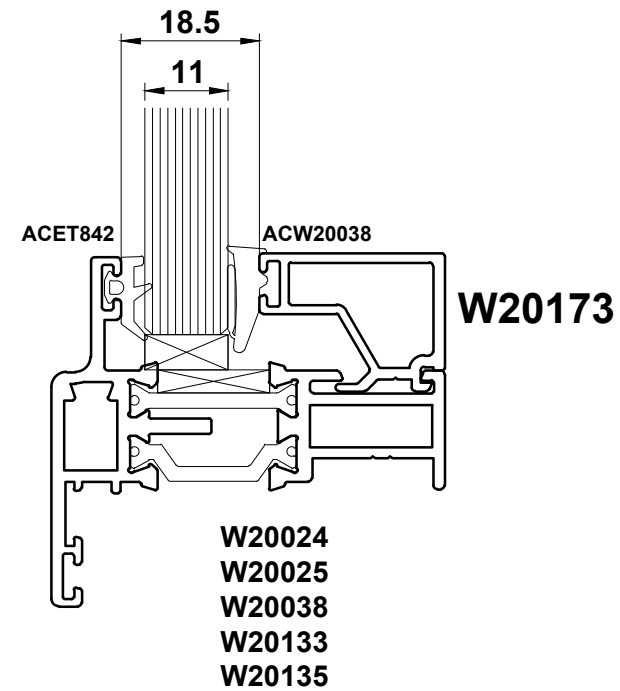
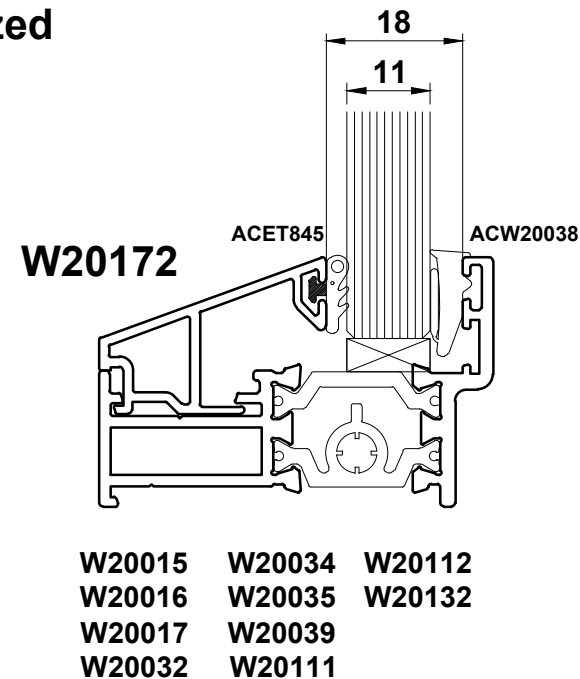
Important Fabrication Note
Consider using ACW935 for marking W20134 screwport locations.

Do Not Scale From This Drawing

Glazing Chart

11mm Glazing

Gasket Glazed

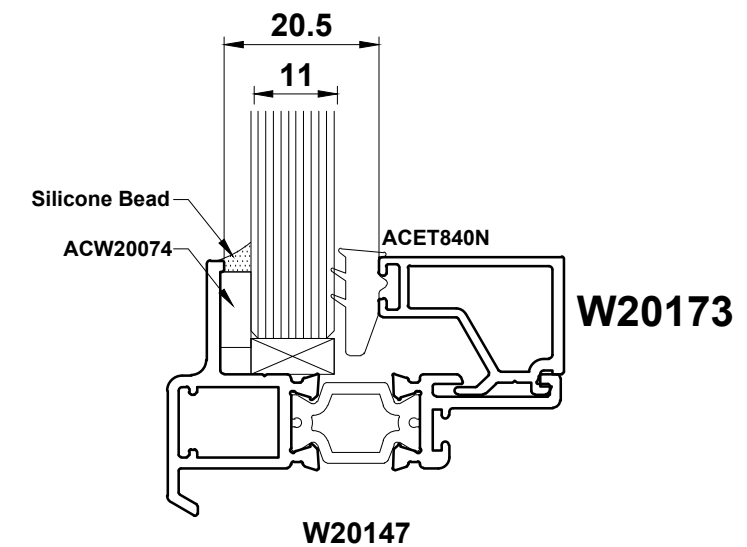
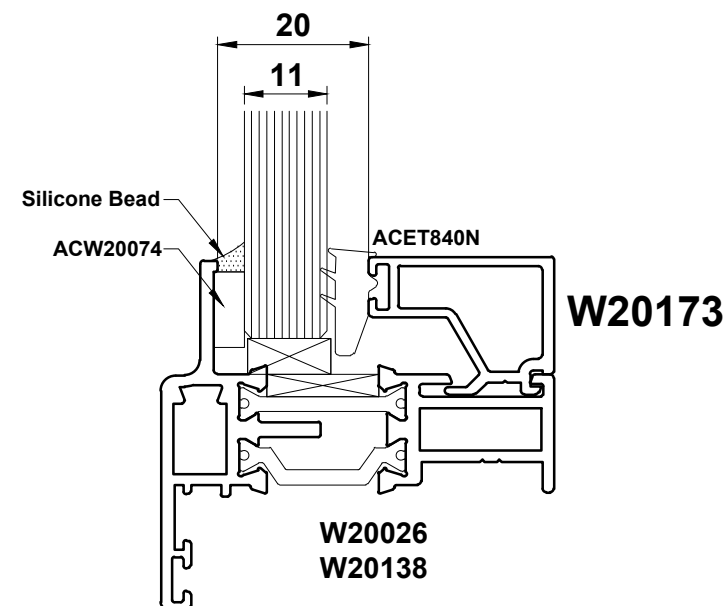


11mm Glazing

Tape Glazed

Important Notes:

- Glazing tape must be coated with silicone after installation
- Tape glazing is only available for the sections shown to the right



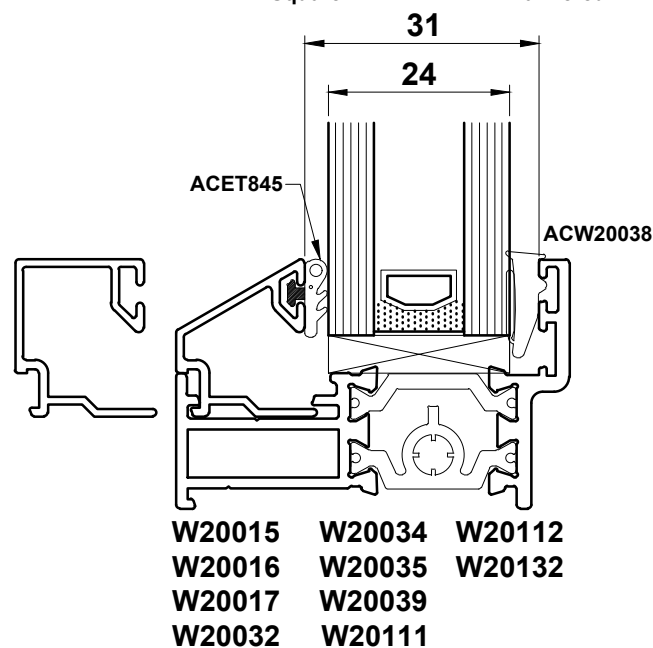
Do Not Scale From This Drawing

Glazing Chart

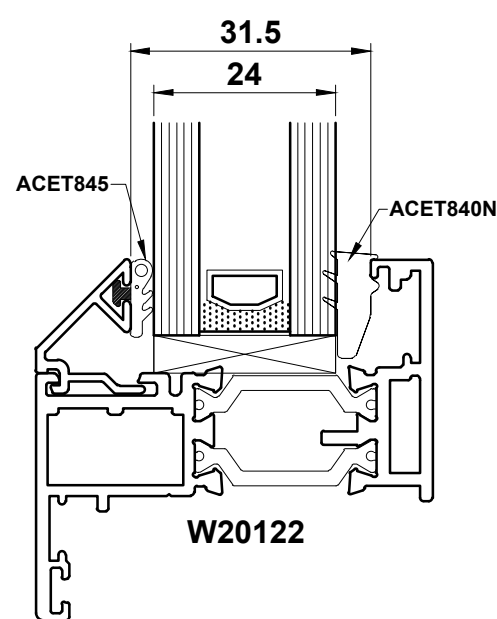
24mm Glazing

Gasket Glazed

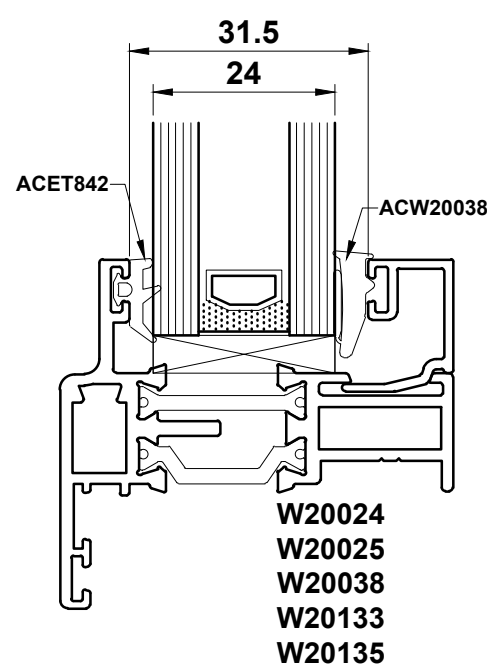
ETC370 or ETC364
Square Chamfered



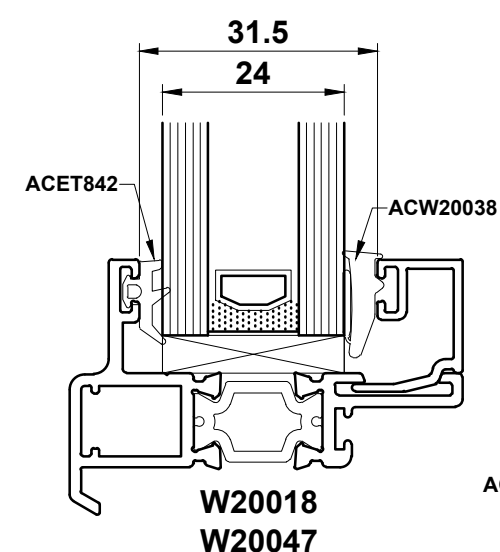
ETC378
Chamfered



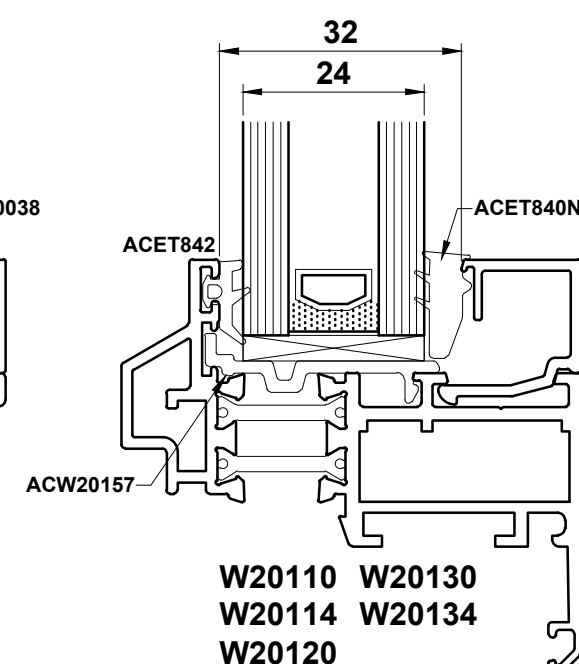
W20168N



W20168N



W20174

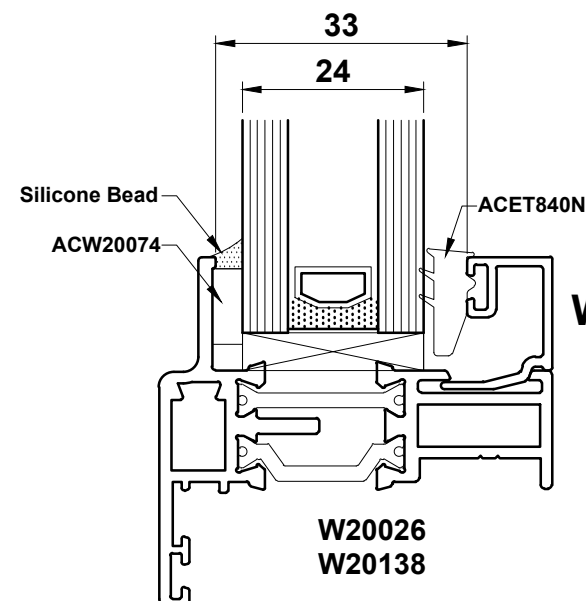


24mm Glazing

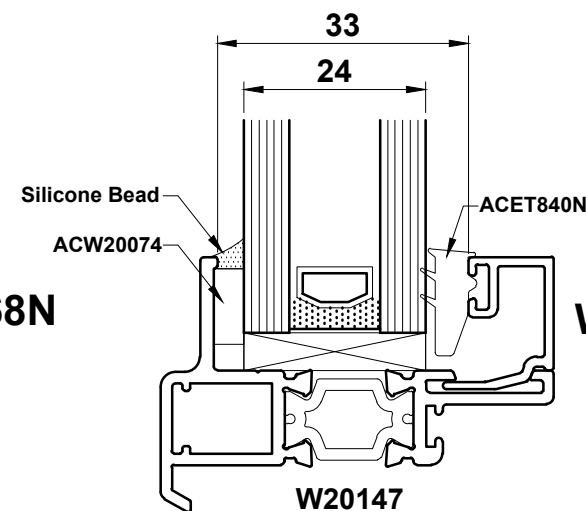
Tape Glazed

Important Notes:

- Glazing tape must be coated with silicone after installation
- Tape glazing is only available for the sections shown to the right



W20168N



W20168N

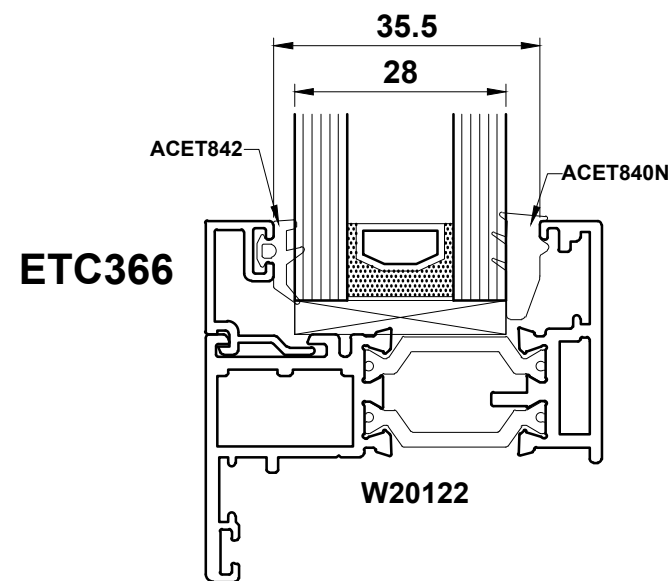
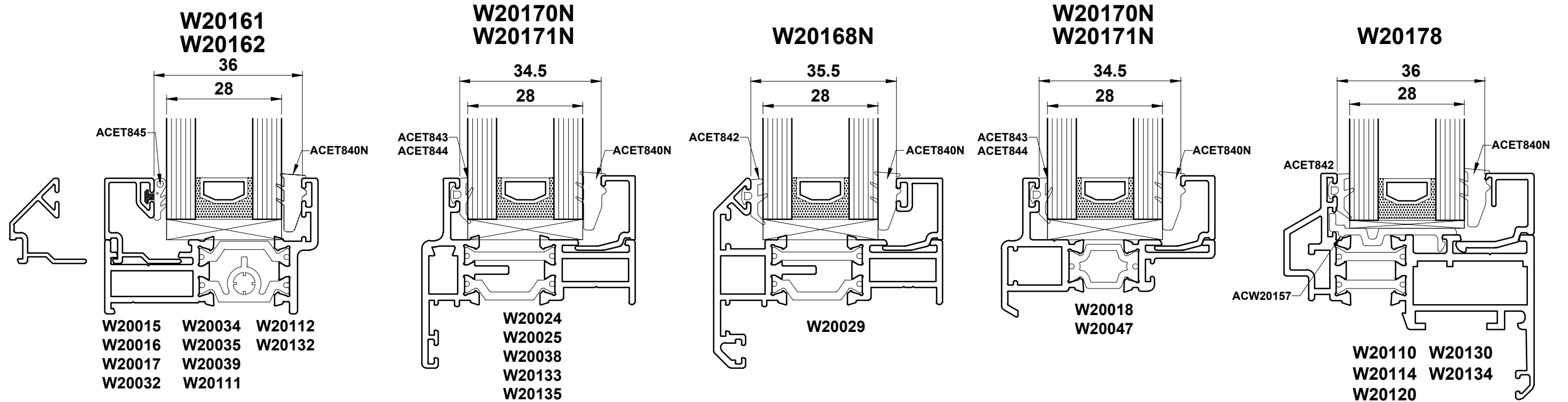
We recommend the use of Black Spacer Bar in the sealed units

Do Not Scale From This Drawing

Glazing Chart

28mm Glazing

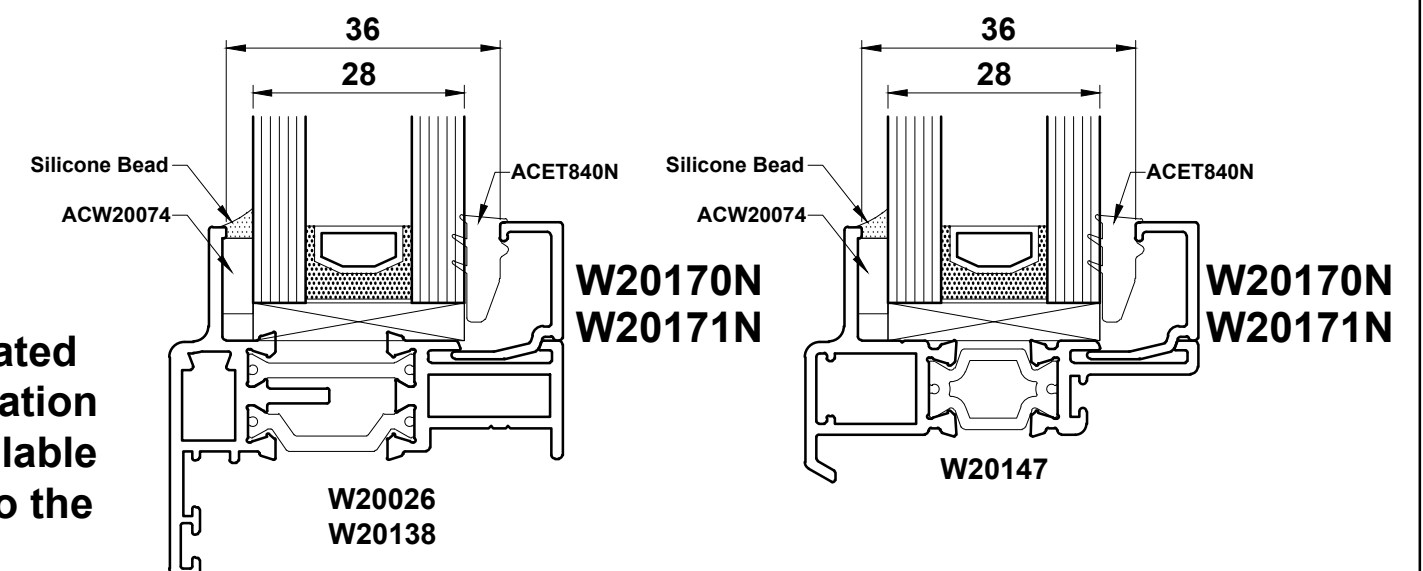
Gasket Glazed



28mm Glazing Tape Glazed

Important Notes:

- Glazing tape must be coated with silicone after installation
- Tape glazing is only available for the sections shown to the right



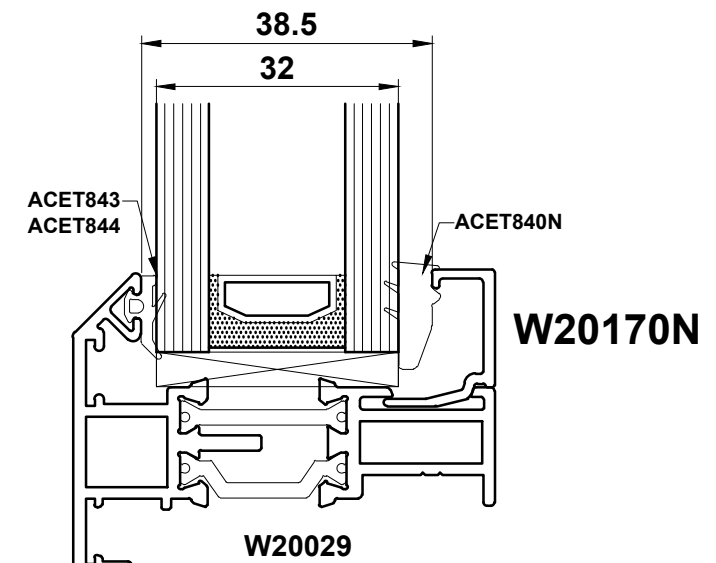
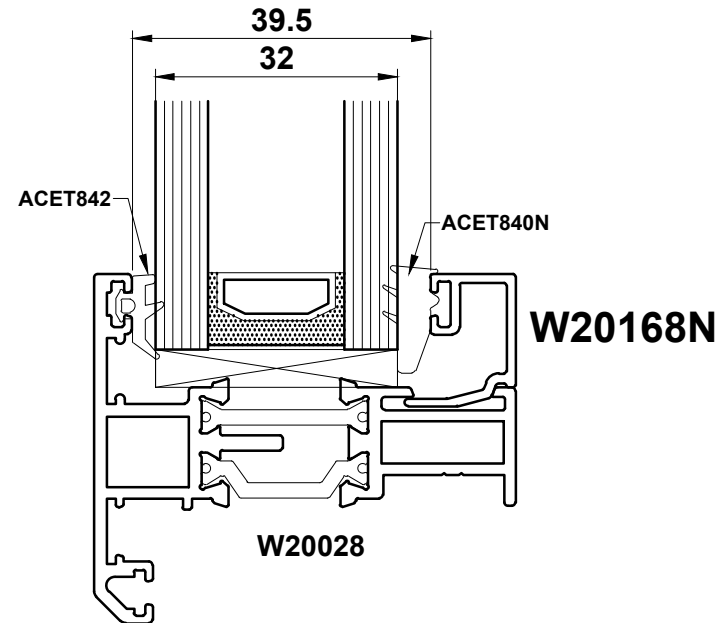
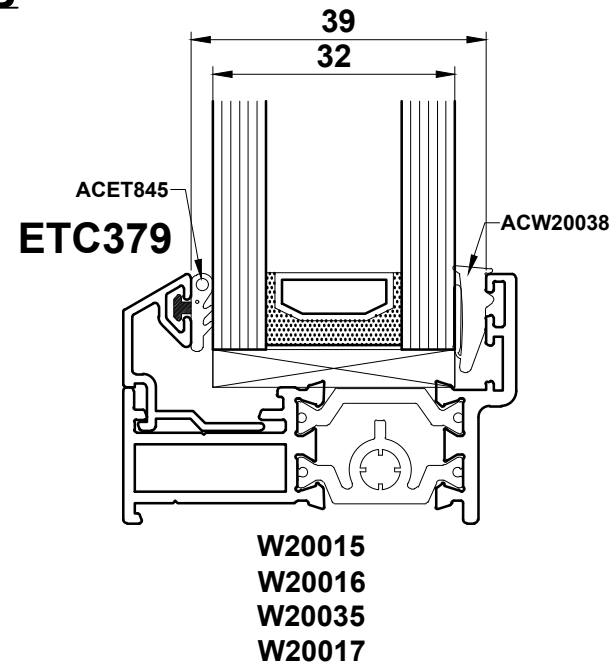
Do Not Scale From This Drawing

Glazing Chart

32mm Glazing

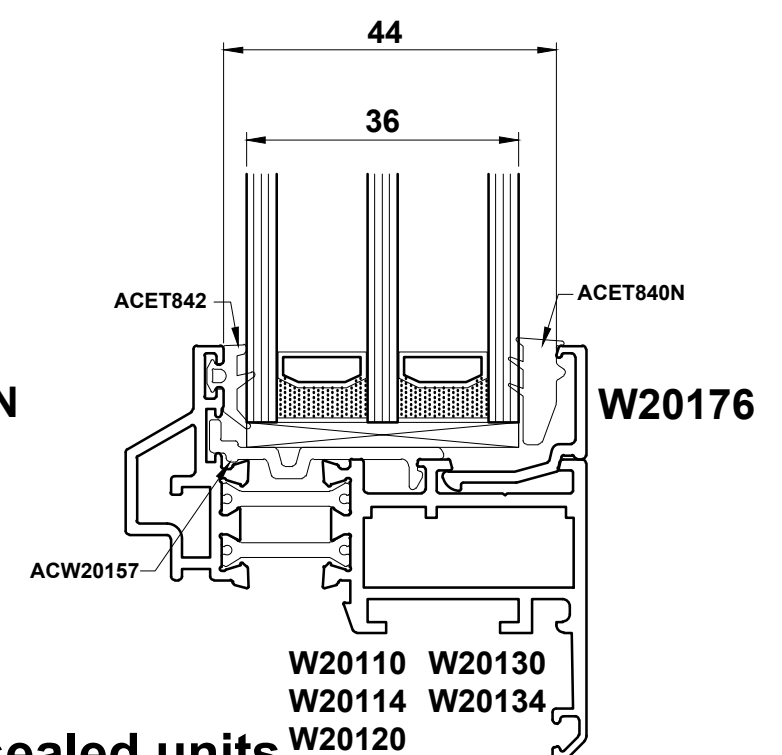
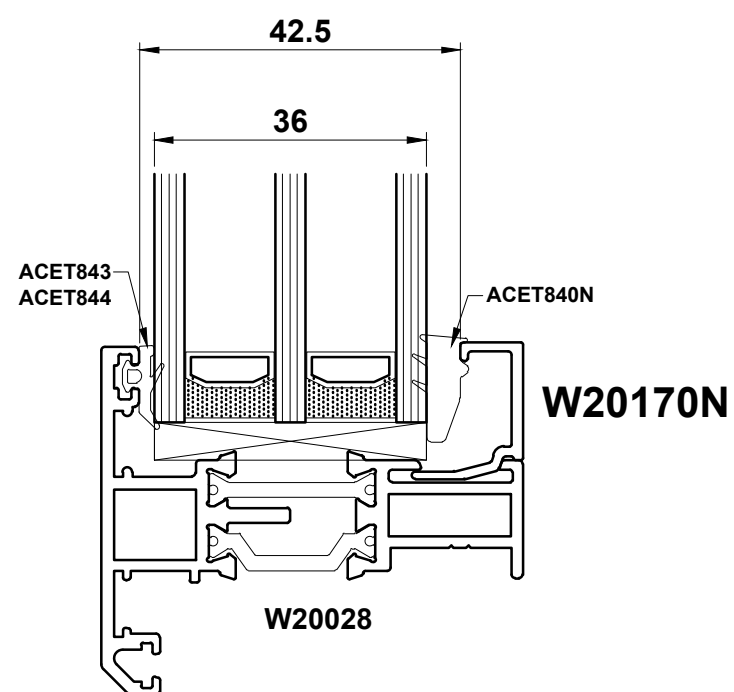
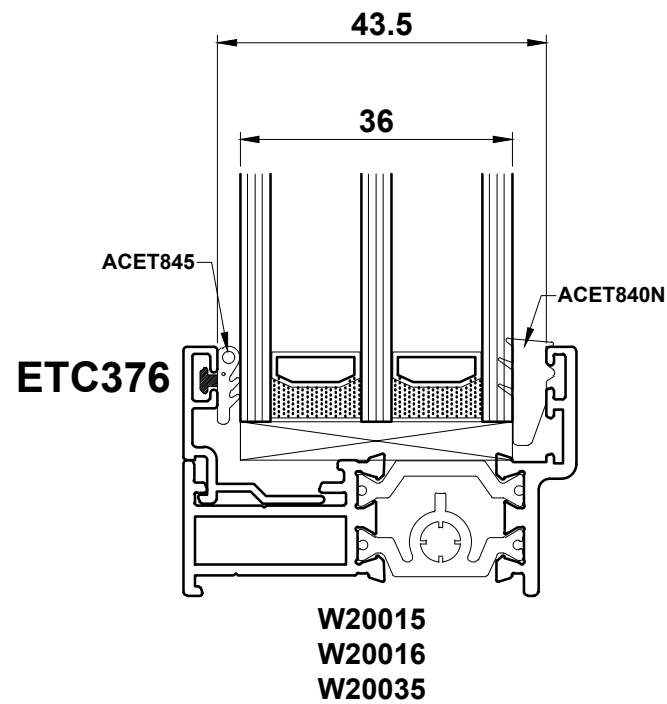
Gasket Glazed

Important Note: 32mm & 36mm glazing is compatible with the below sections only.



36mm Glazing

Gasket Glazed

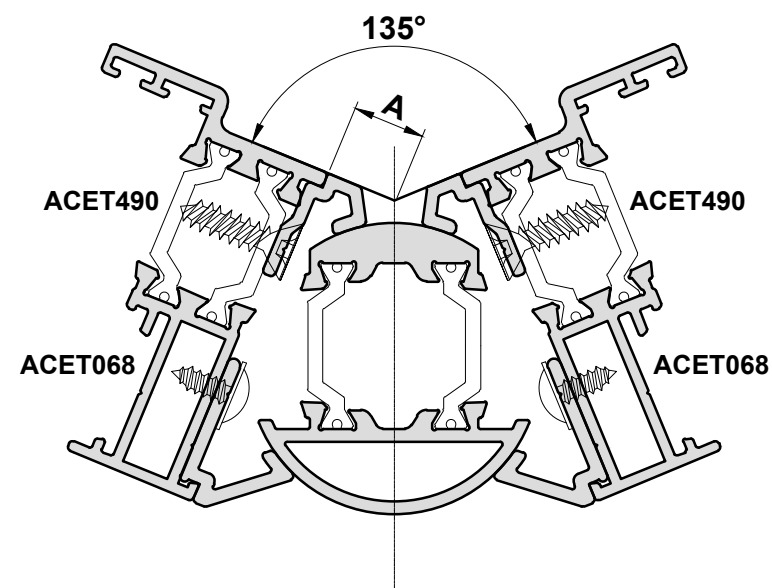
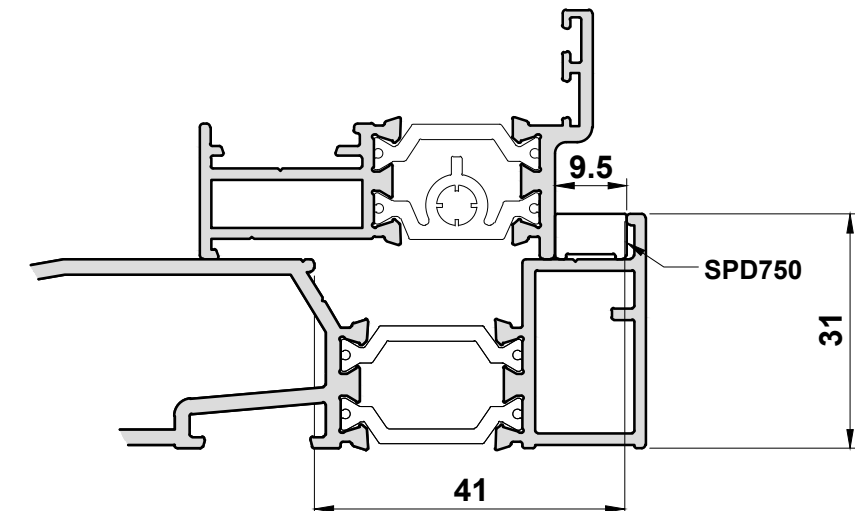
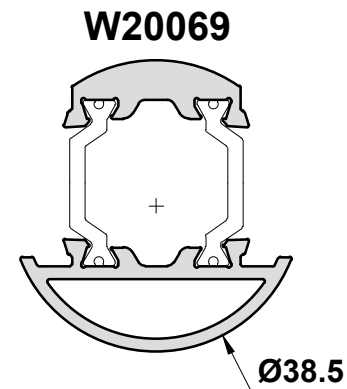
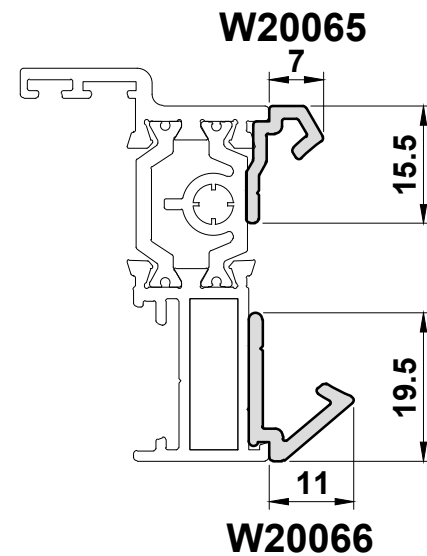


We recommend the use of Black Spacer Bar in the sealed units

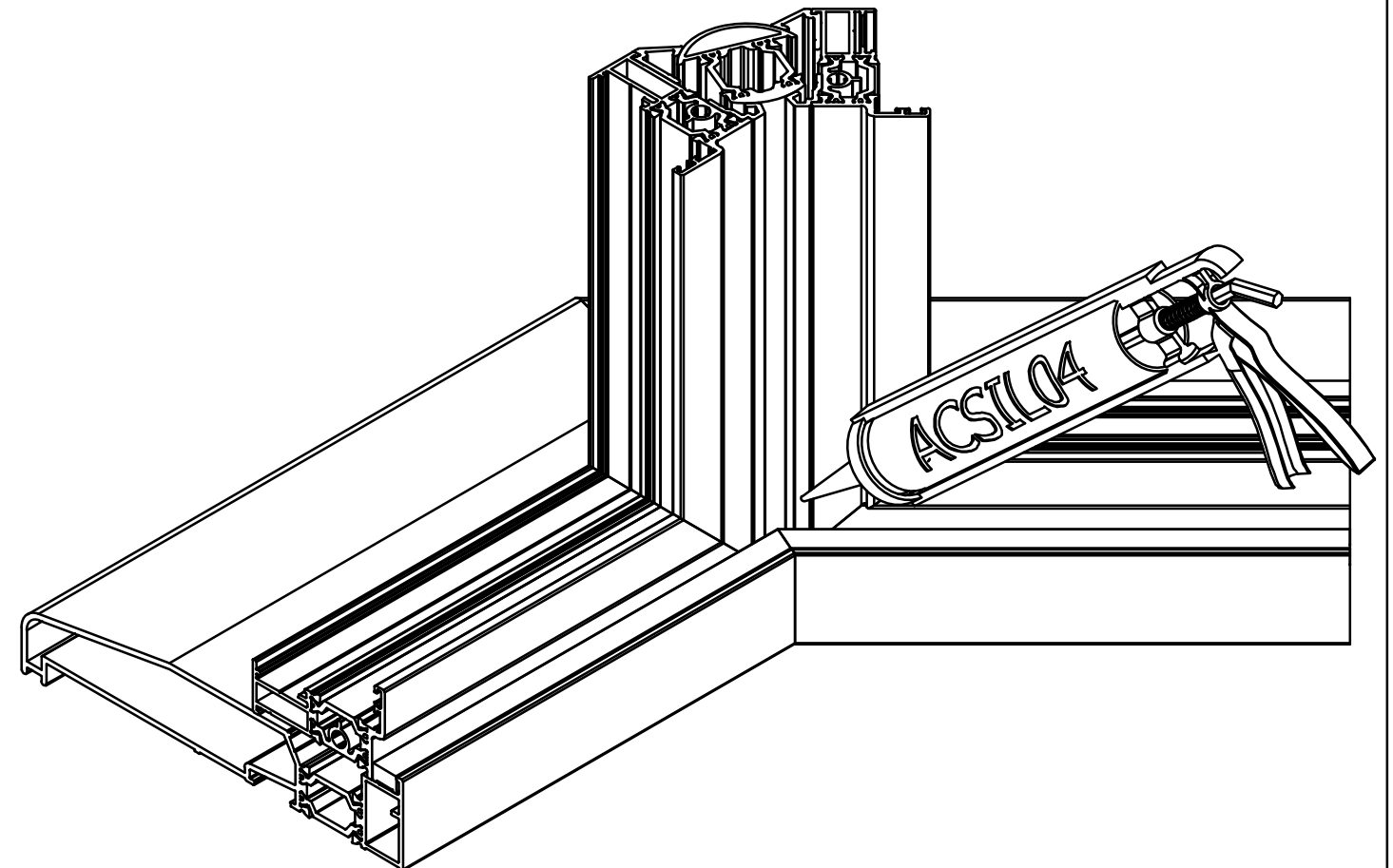
Do Not Scale From This Drawing

W20015 Bay Pole Selection

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

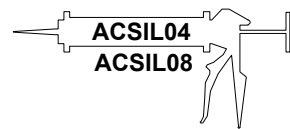
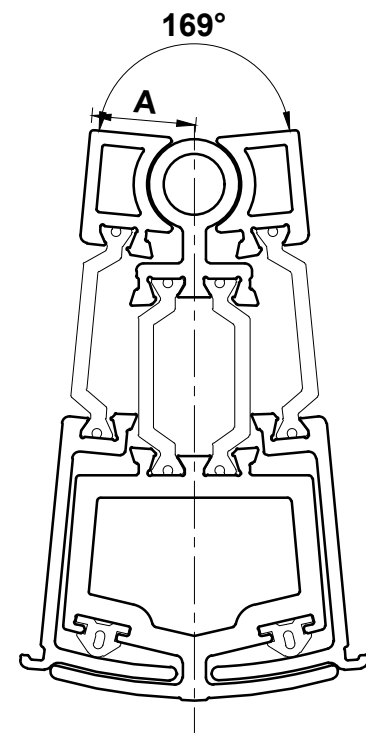


ANGLE	DEDUCTION 'A'
180°	18
175°	17
170°	16
165°	15.5
160°	14.5
155°	13.5
150°	12.5
145°	11.5
140°	10.5
135°	9.5
130°	8.5
125°	7.5
120°	6.5
115°	5



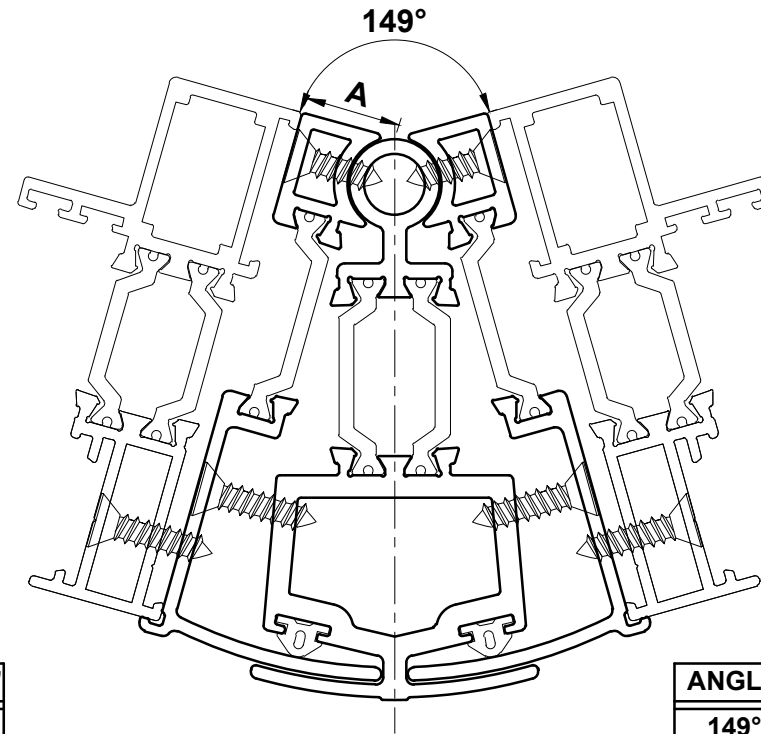
Do Not Scale From This Drawing

W20017 Bay Pole Selection

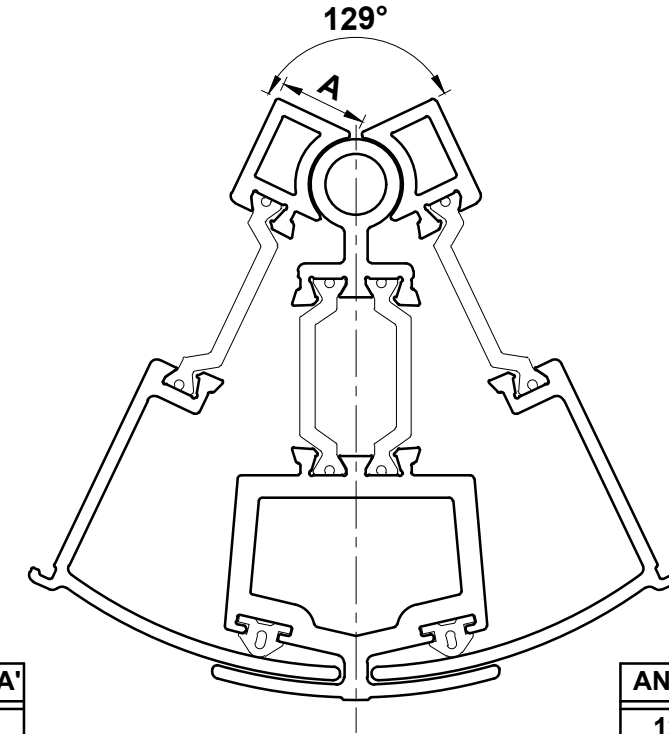


Important Note:
All joints must be adequately
sealed using ACSIL04

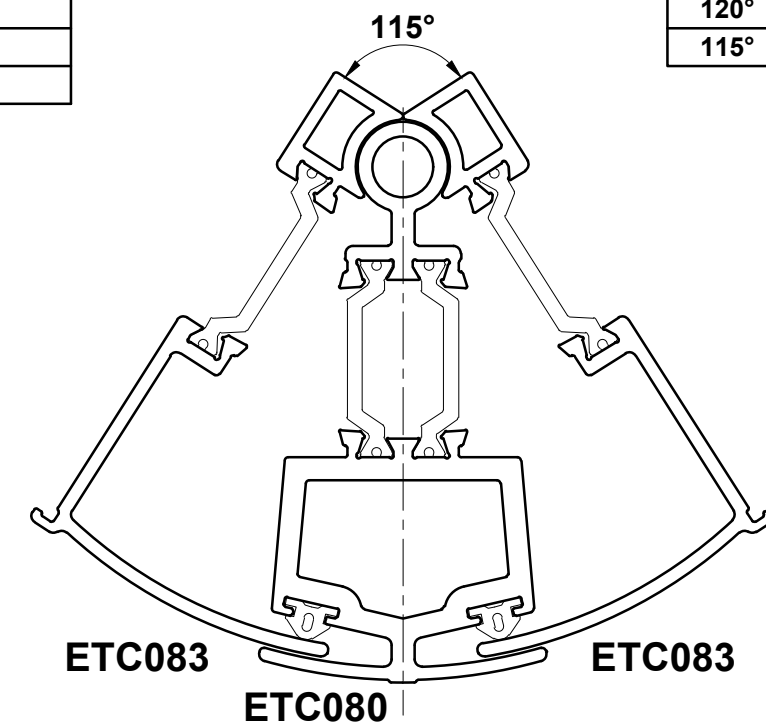
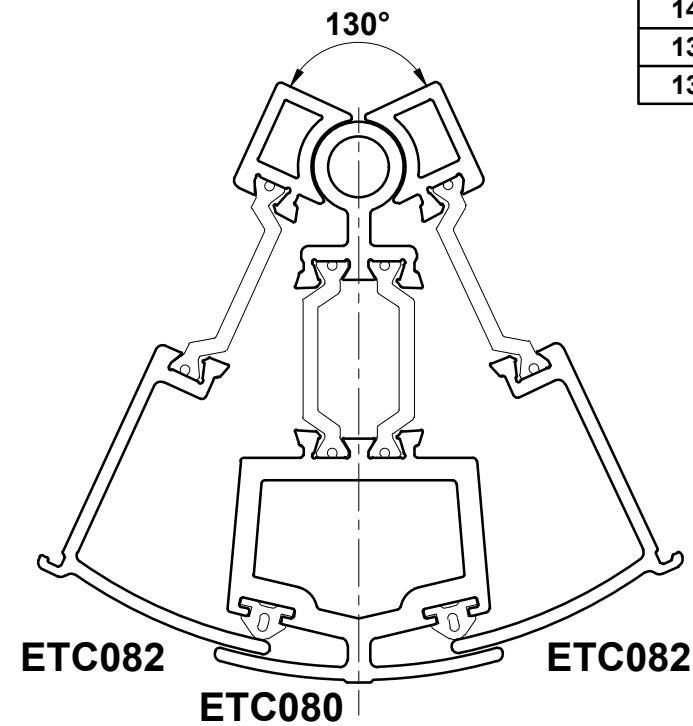
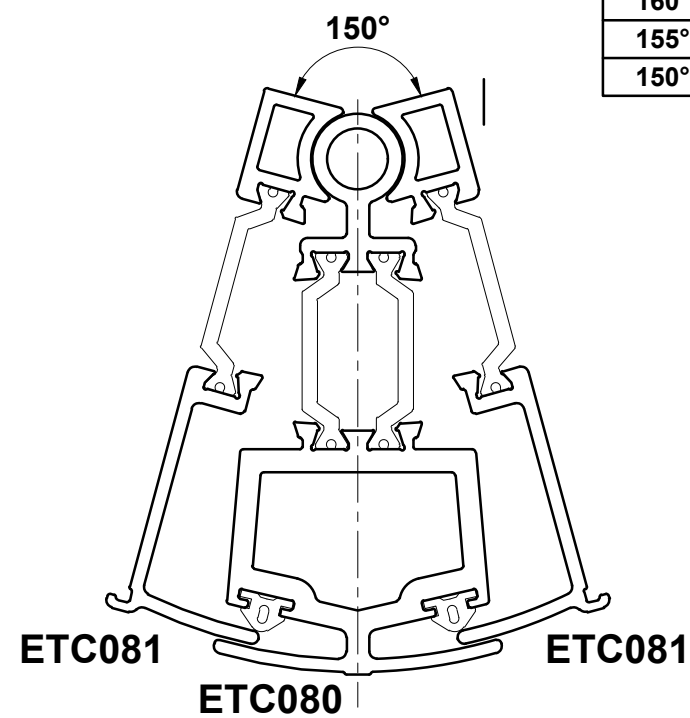
ANGLE	DEDUCTION 'A'
169°	14
165°	13.5
160°	13.6
155°	13
150°	13



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

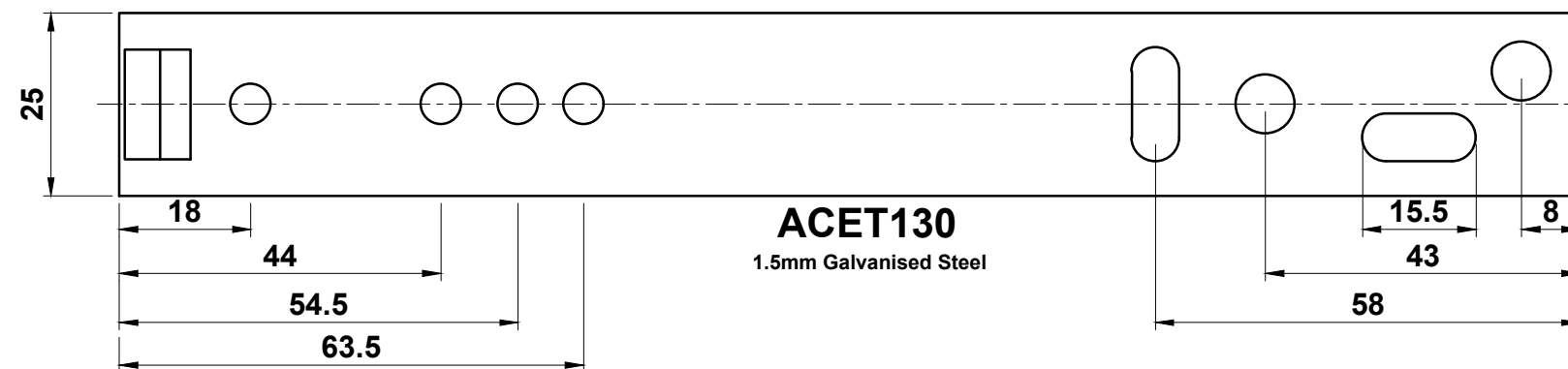
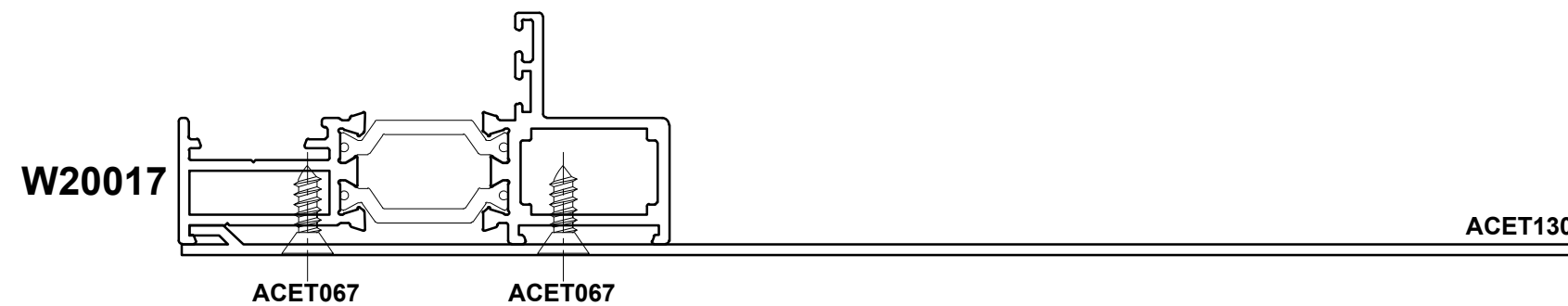


ANGLE	DEDUCTION 'A'
129°	11.5
125°	11.5
120°	11
115°	10.5

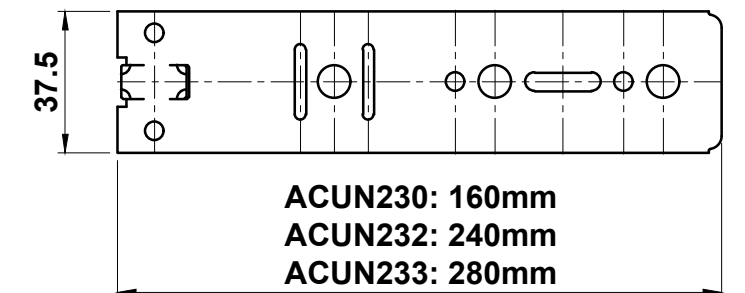
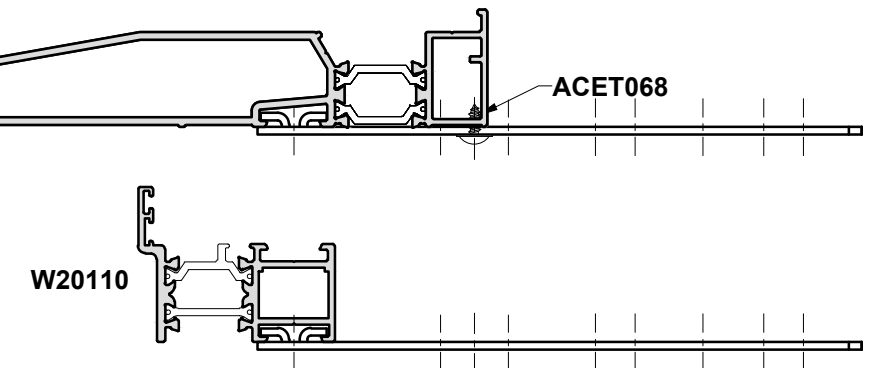


Do Not Scale From This Drawing

Fixing Strap Guide



ETC451
ETC452
ETC457
ETC458
ETC479



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

Do Not Scale From This Drawing

Do Not Scale From This Drawing

Section F

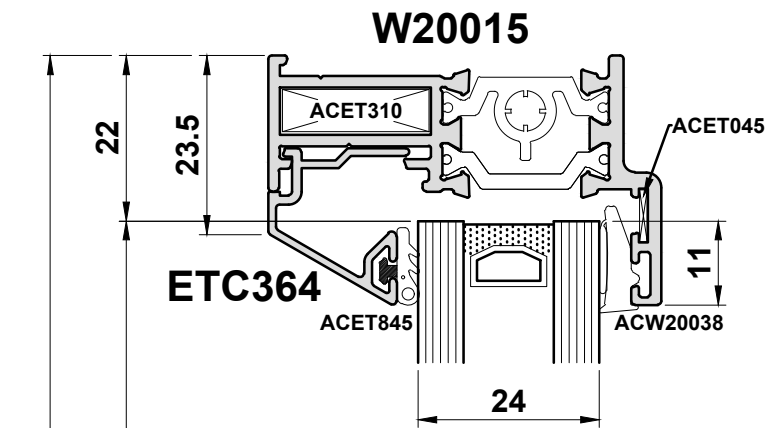


Sawing Table

Fixed Light.....	F03 - F05
Side Hung Casement.....	F06 - F07
Top Hung Casement.....	F08
Side Hung Casement Adjacent to Fixed Light.....	F09
Top Hung Over Fixed Light.....	F10
Fixed Light Over Top Hung.....	F11
Side Hung Casement Adjacement to Side Hung Casement.....	F12
Tilt & Turn.....	F13 - F14
Tilt & Turn Adjacent to Fixed Light.....	F15 - F16

Section F

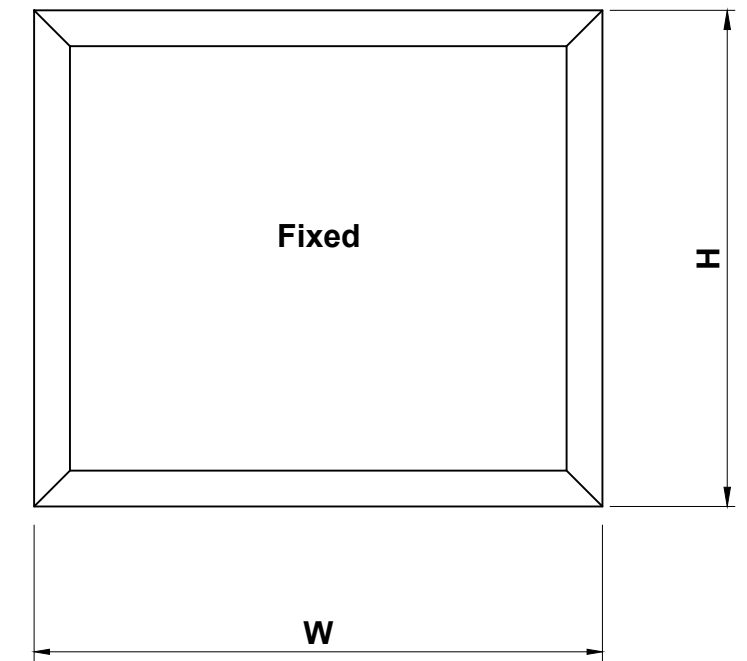
Cutting Information - Fixed Light Frame - Equal Leg W20015



Sections

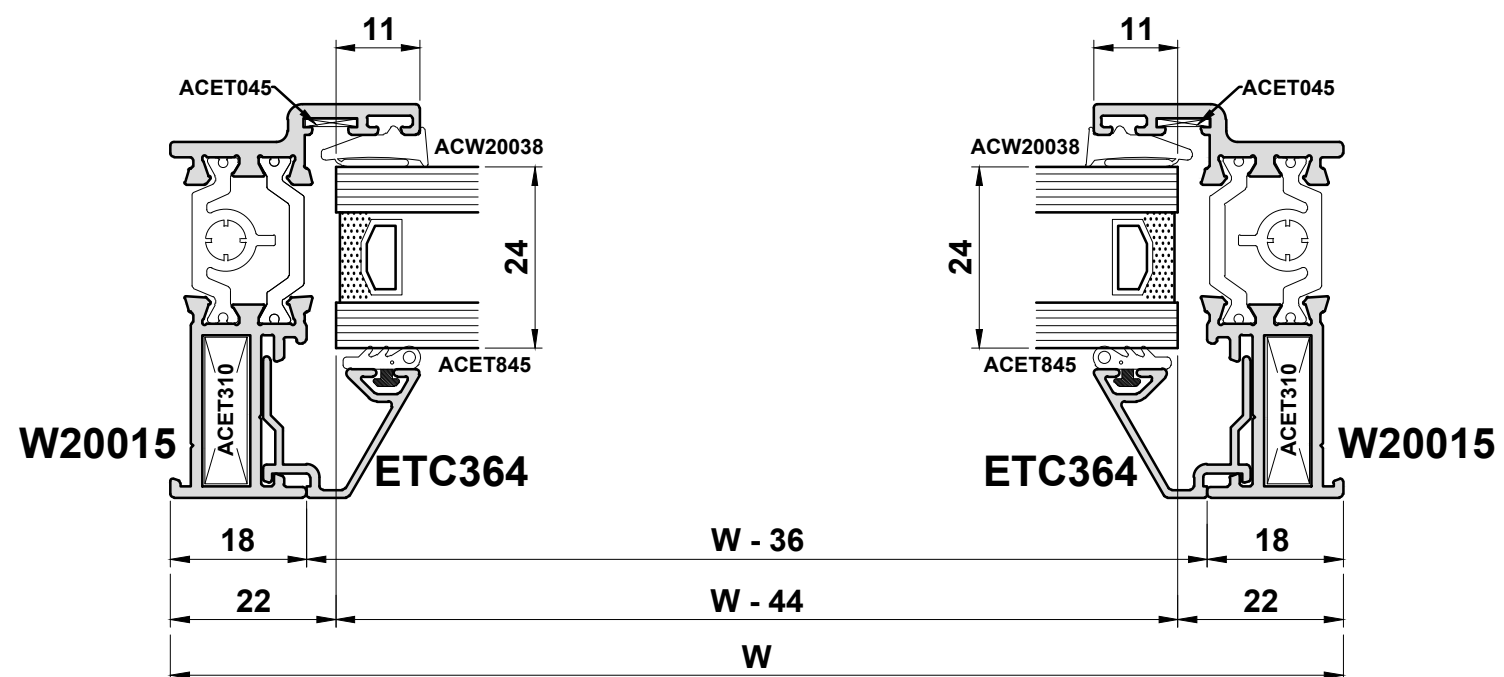
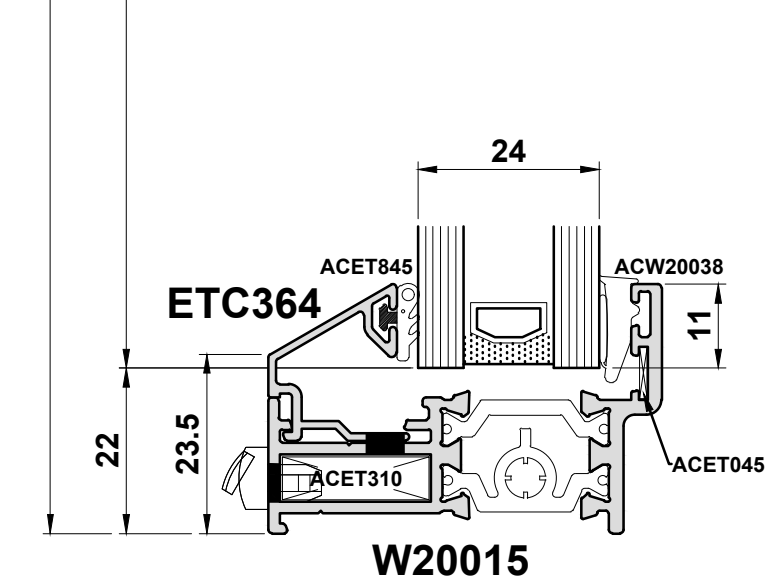
W20015		2		H
W20015		2		W
ETC364		2		W-36
ETC364		2		H-47

Glass
W - 44
H - 44



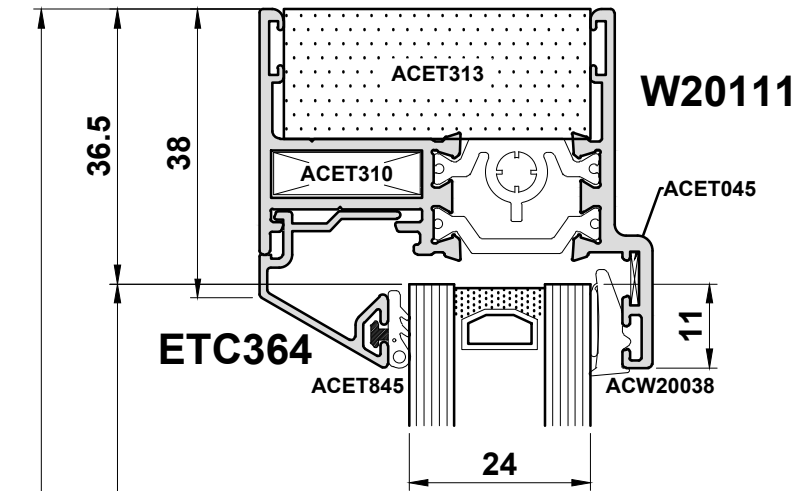
Accessories

ACET045	4	Chevron
ACET310	4	Cleat Outerframe
ACET845	2(W+H)	E Gasket
ACW20038	2(W+H)	Wedge Gasket
ACW20160	4	Outer Frame Screw
ACGSL045	2	Drainage Cap



Do Not Scale From This Drawing

Cutting Information - Fixed Light Frame - Long Leg W20111



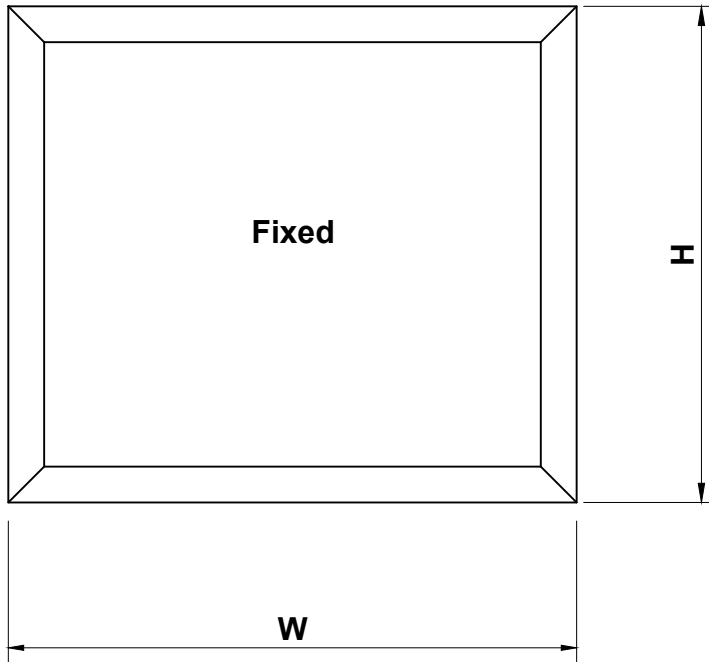
Sections

W20111		2		H
W20111		2		W
ETC364		2		W-65
ETC364		2		H-76

Glass

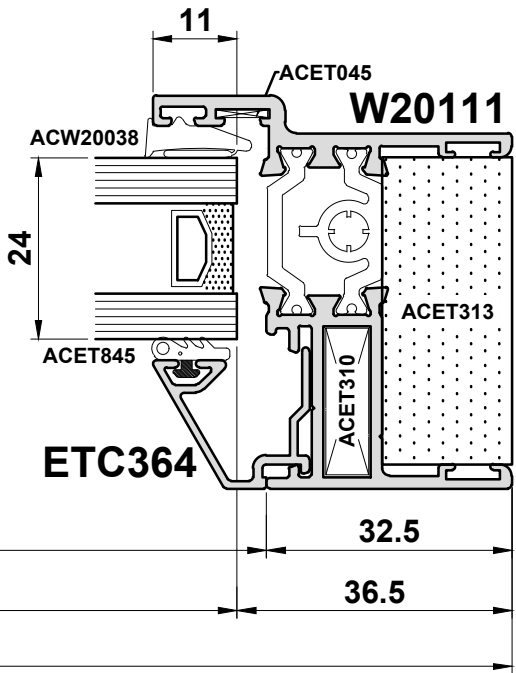
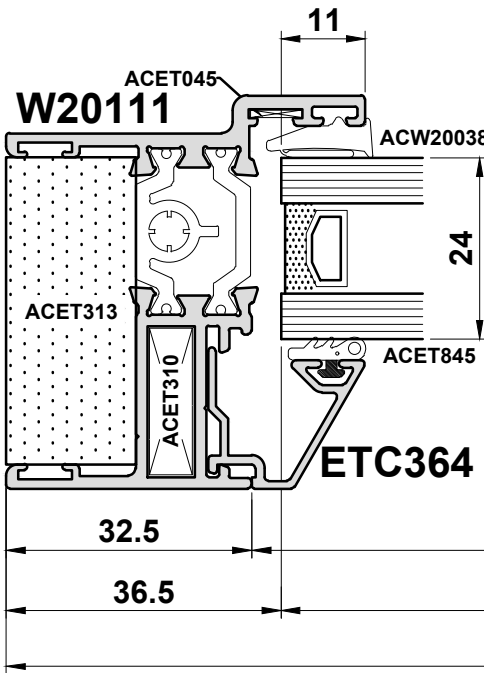
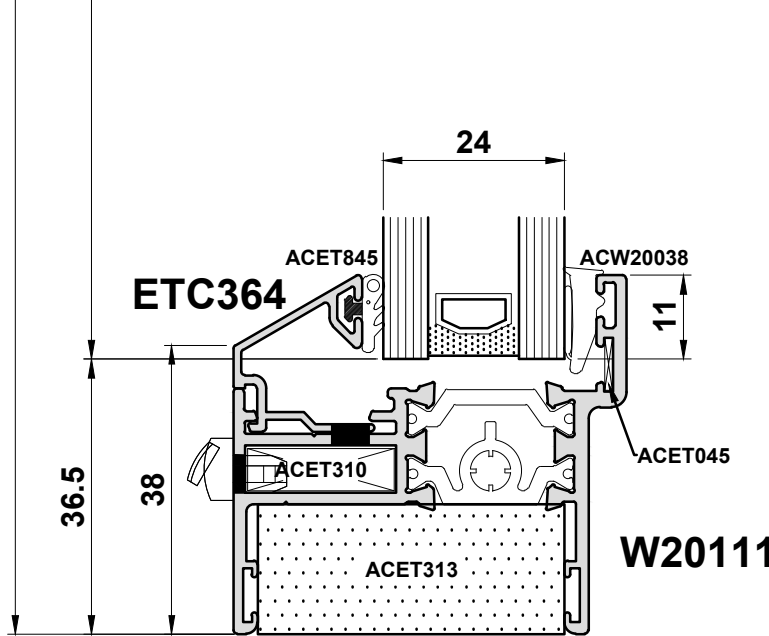
W - 73

H - 73



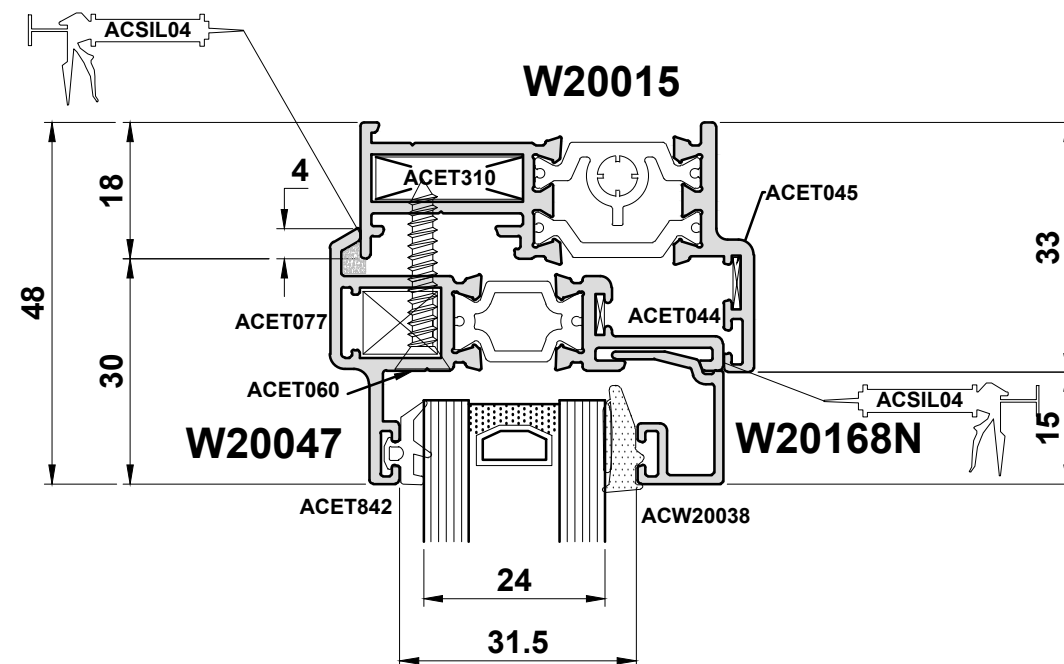
Accessories

ACET045	4	Chevron
ACET310	4	Cleat Outerframe
ACET845	2(W+H)	E Gasket
ACW20038	2(W+H)	Wedge Gasket
ACW20160	4	Outer Frame Screw
ACGSL045	2	Drainage Cap
ACET313	2H + 2W	Outerframe Foam



Do Not Scale From This Drawing

Cutting Information - Fixed Light Frame - With Reverse Adaptor



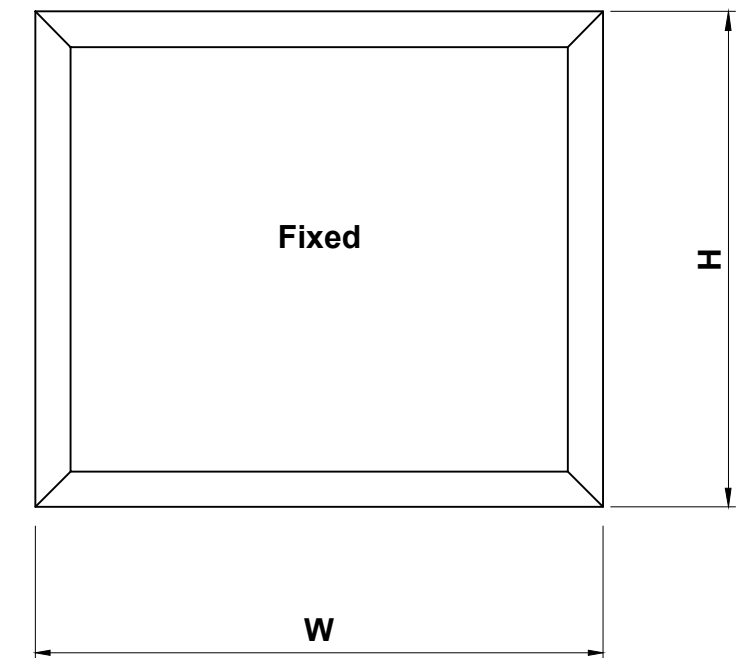
Sections

W20015		2		H
W20015		2		W
Bead		2		W-66
Bead		2		H-96
W20047		2		W-28
W20047		2		H-28

Accessories

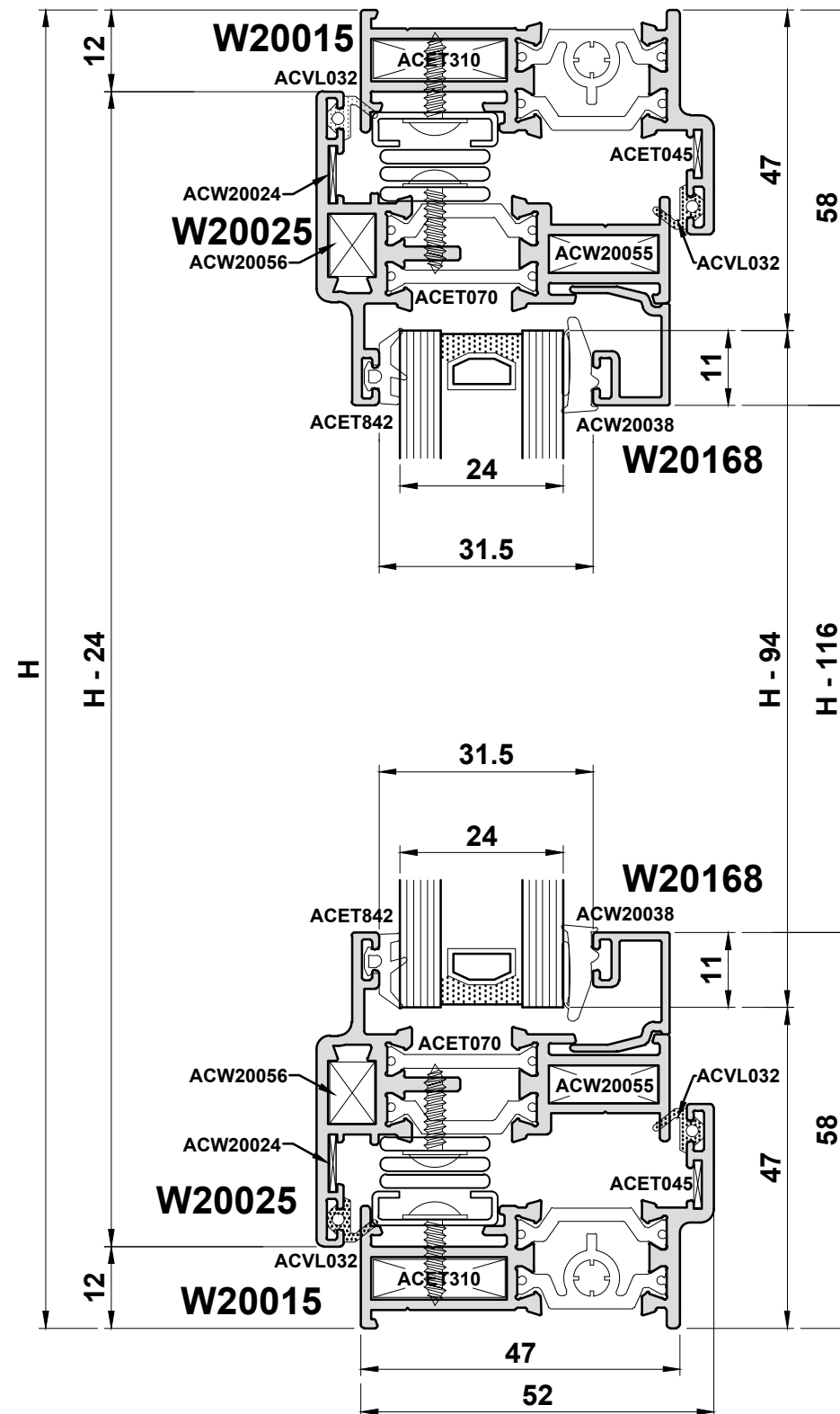
ACET044	4	Stainless Steel : Chevron
ACET045	4	Stainless Steel : Chevron
ACET077	4	Corner Cleat
ACET310	4	Outerframe : Cleat
ACET393	8 +	Packer
ACET842	2(W+H)	E Gasket
ACGSL045	2	Drainage Cap
ACW20038	2(W+H)	Wedge Gasket
ACW20160	4	Outer Frame Screw

Glass
W - 73
H - 73



Do Not Scale From This Drawing

Cutting Information - Vent Frame using W20015 Outer Frame and W20025 Vent



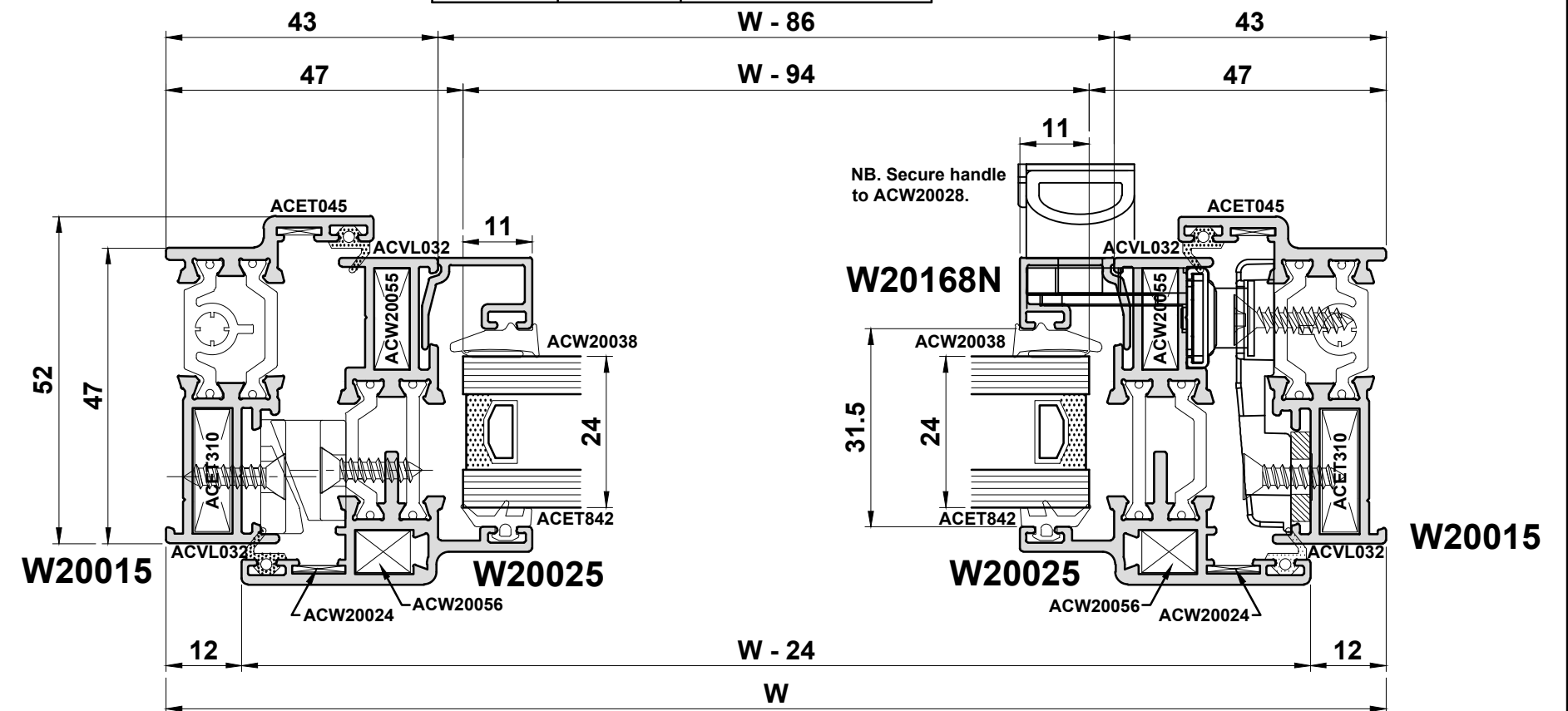
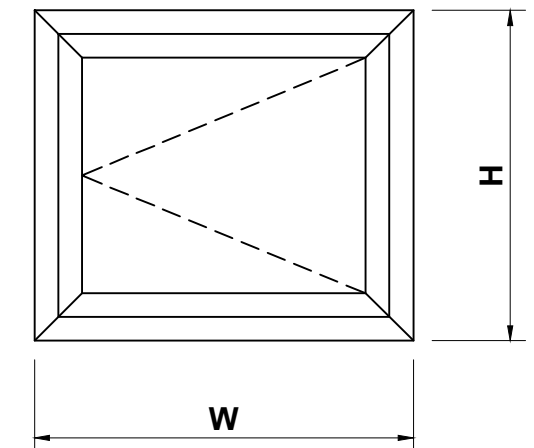
Sections

W20015		2		H
W20015		2		W
W20025		2		H-24
W20025		2		W-24
W20168N		2		W-86
W20168N		2		H-116

Accessories

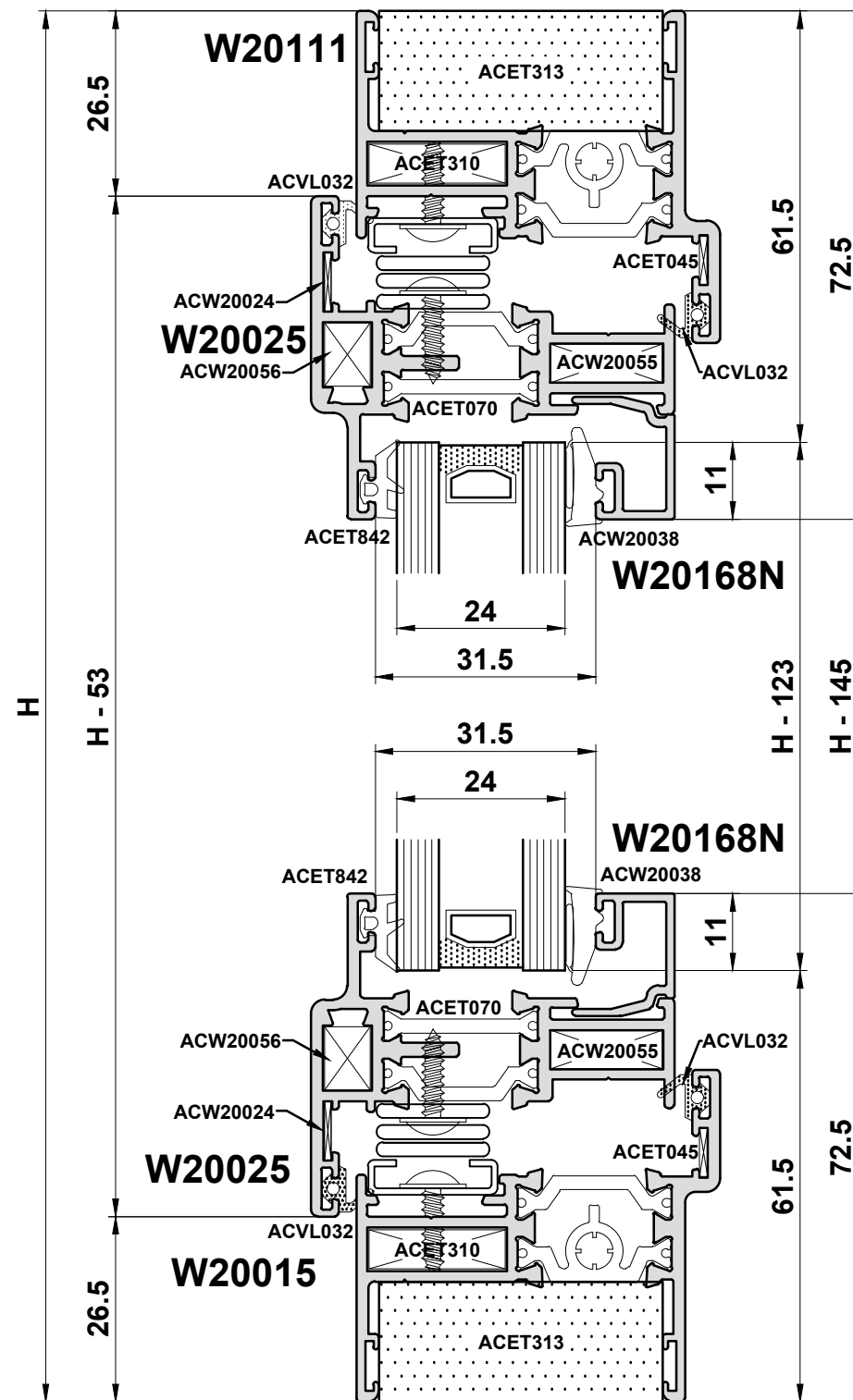
ACET045	4	Chevron
ACET165	1	Espag Locking Handle
ACET310	4	Cleat Outerframe
ACET352	2 Pairs	Pull-in Blocks
ACET380	1	Run-up Block
ACET394	8	Keep & Stay Packer
ACET513	1	Cavity Hinge Protector
ACET842	2(W+H)	Gasket E
ACGSL045	2	Drainage Cap
ACIN****	2	Friction Stay / Hinge
ACVL032	4(W+H)	Flipper Gasket
ACW20*	1	Reverse Locking Espag
ACW20024	4	Chevron
ACW20028	1	Handle Fixing Block
ACW20038	2(W+H)	Wedge Gasket
ACW20055	4	Cleat Ventframe
ACW20056	4	Cleat Ventframe
ACW20160	4	Outer Frame Screw

Glass
W - 94
H - 94



Do Not Scale From This Drawing

Cutting Information - Vent Frame using W20111 Outer Frame and W20025 Vent



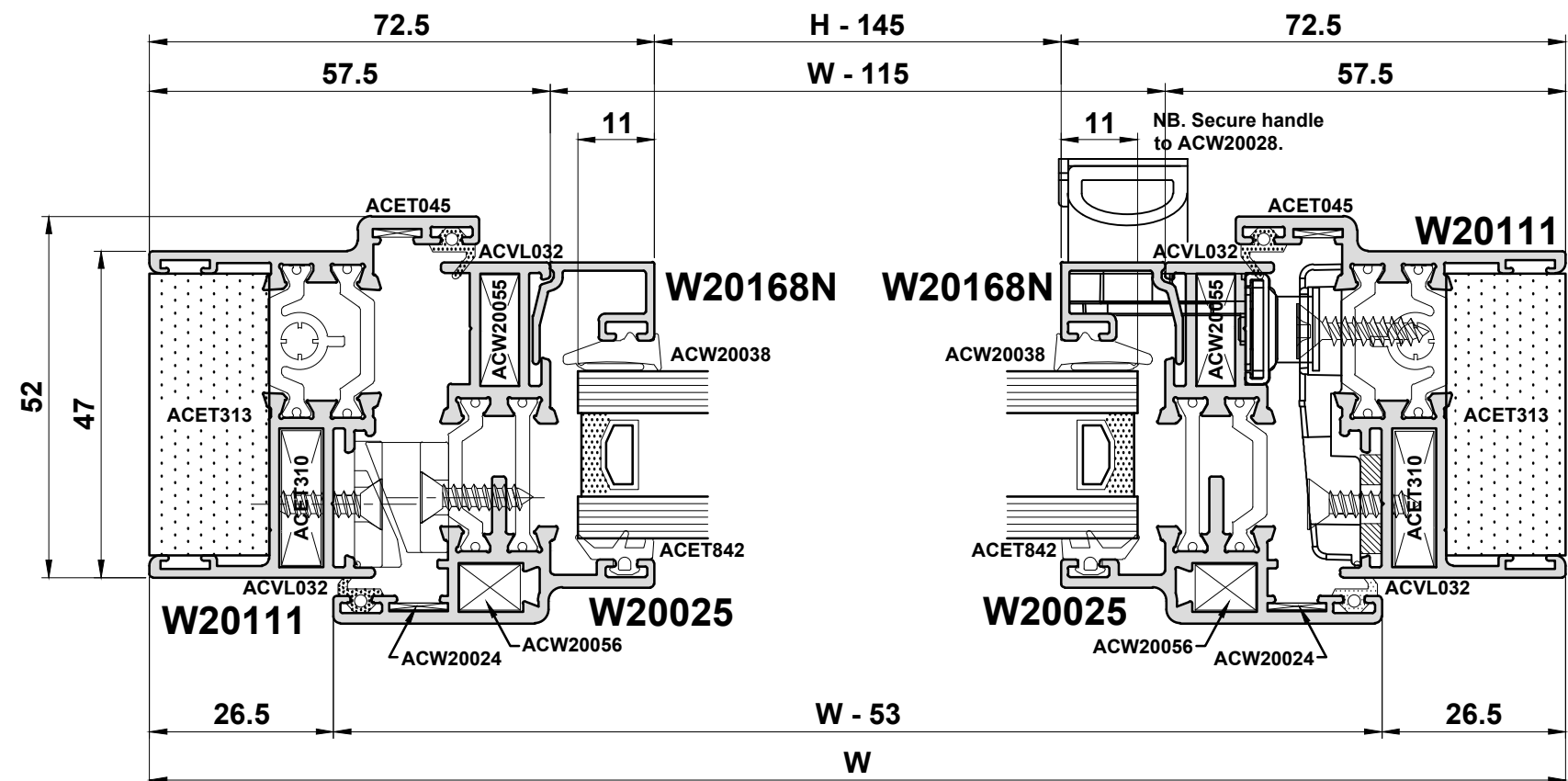
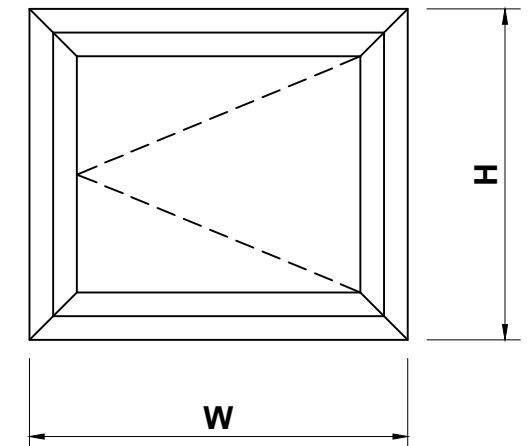
Sections

W20111		2		H
W20111		2		W
W20025		2		H-53
W20025		2		W-53
W20168N		2		W-115
W20168N		2		H-145

Accessories

ACET045	4	Chevron
ACET165	1	Espag Locking Handle
ACET310	4	Cleat Outerframe
ACET352	2 Pairs	Pull-in Blocks
ACET380	1	Run-up Block
ACET394	8	Keep & Stay Packer
ACET513	1	Cavity Hinge Protector
ACET842	2(W+H)	Gasket E
ACGSL045	2	Drainage Cap
ACIN****	2	Friction Stay / Hinge
ACVL032	4(W+H)	Flipper Gasket
ACW20*	1	Reverse Locking Espag
ACW20024	4	Chevron
ACW20028	1	Handle Fixing Block
ACW20038	2(W+H)	Wedge Gasket
ACW20055	4	Cleat Ventframe
ACW20056	4	Cleat Ventframe
ACW20160	4	Outer Frame Screw
ACET313	2H + 2W	Outerframe Foam

Glass
W - 123
H - 123



Do Not Scale From This Drawing

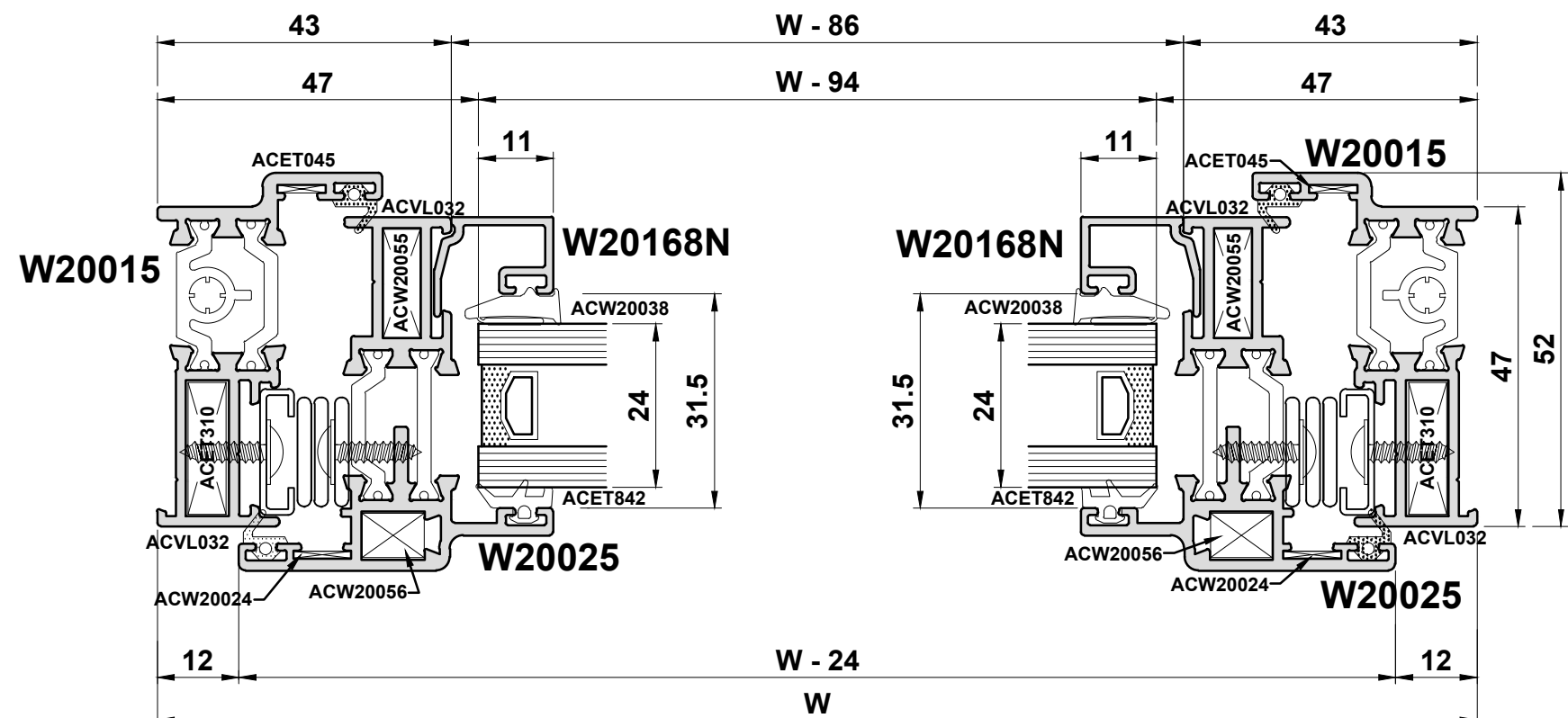
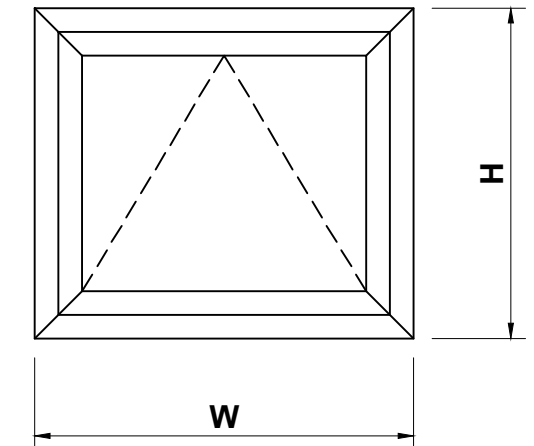


W20015		2		H
W20015		2		W
W20025		2		H-24
W20025		2		W-24
W20168N		2		W-86
W20168N		2		H-116

Accessories

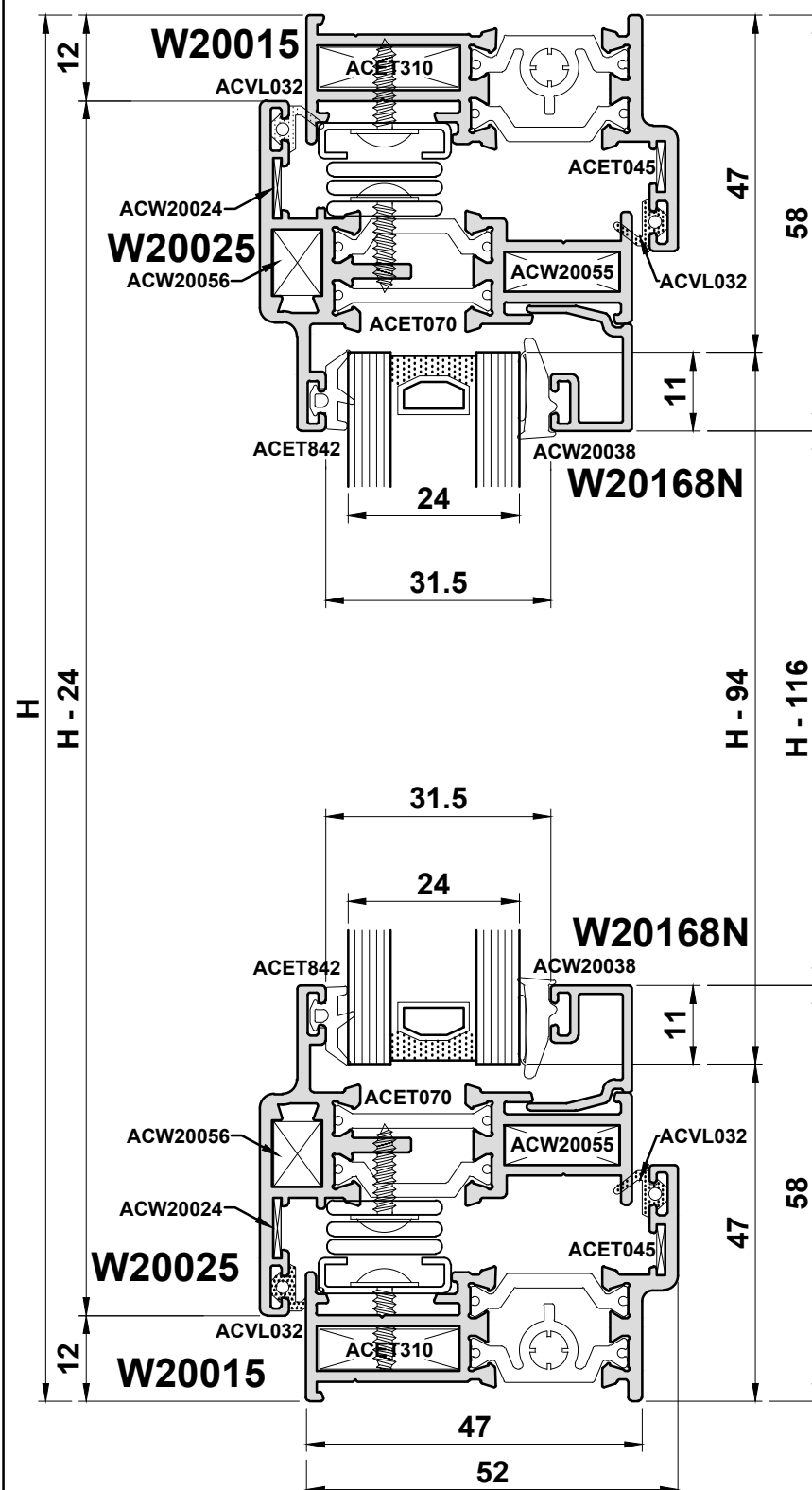
ACET045	4	Chevron
ACET165	1	Espag Locking Handle
ACET380	1	Run-up Block
ACET394	8	Keep & Stay Packer
ACET513	1	Cavity Hinge Protector
ACET842	2(W+H)	Gasket E
ACGSL045	2	Drainage Cap
ACIN****	2	Friction Stay / Hinge
ACVL032	4(W+H)	Flipper Gasket
ACW20*	1	Reverse Locking Espag
ACW20024	4	Chevron
ACW20028	1	Handle Fixing Block
ACW20038	2(W+H)	Wedge Gasket
ACW20055	4	Cleat Ventframe
ACW20056	4	Cleat Ventframe
ACW20160	4	Outer Frame Screw
ACET310	4	Cleat Outerframe

Glass
W - 94
H - 94



Do Not Scale From This Drawing

Cutting Information - Opening Vent adjacent to Fixed Light



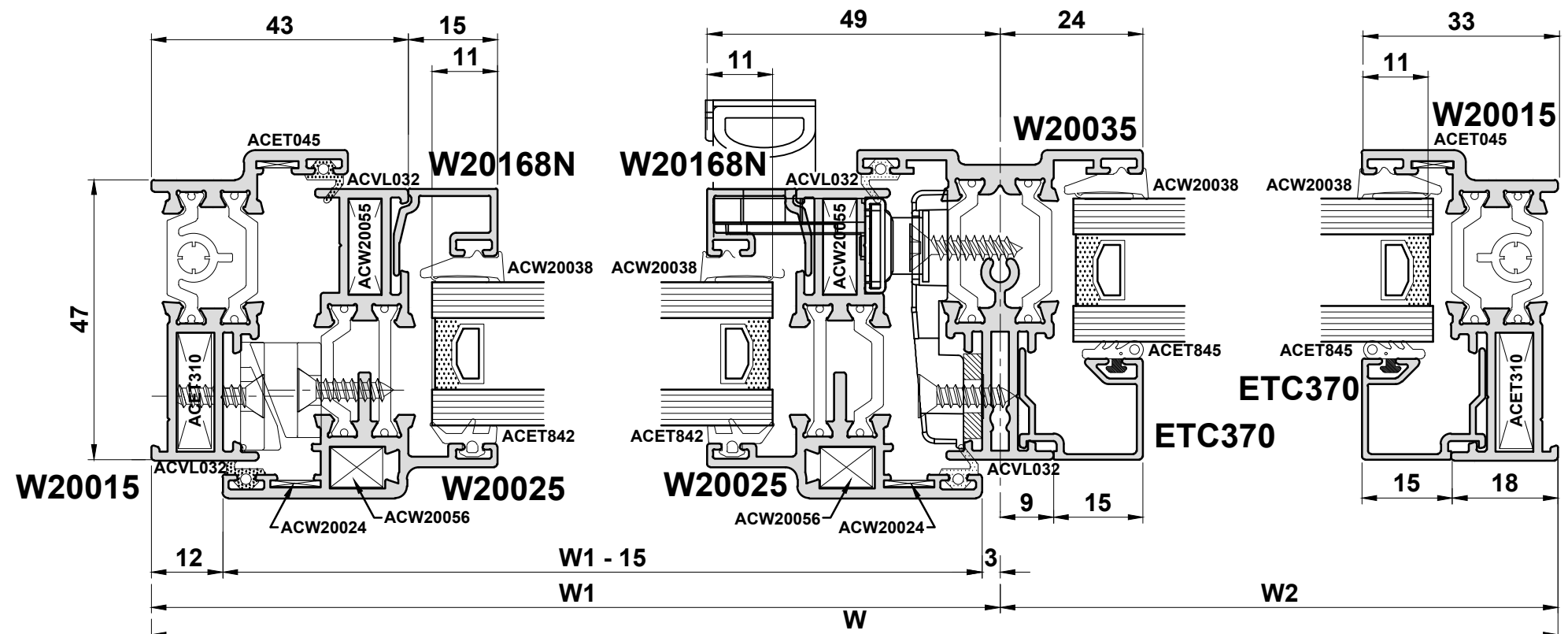
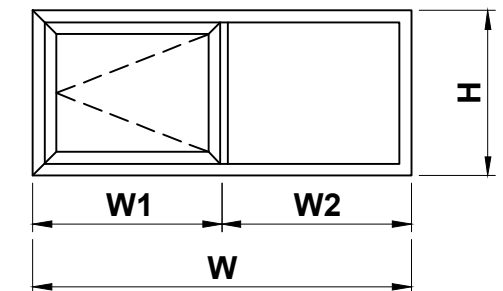
Profiles

W20015		2		H
W20015		2		W
W20025		2		H - 24
W20025		2		W1 - 15
W20035		1		H - 36
W20168N		2		H - 116
ETC370		2		H - 66
W20168N		2		W1 - 77
ETC370		2		W2 - 27

Accessories

ACET045	4	Chevron
ACET114	2	Anti-Twist Clip
ACET165	1	Espag Locking Handle
ACET310	4	Cleat Outerframe
ACET352	2 Pairs	Pull-in Blocks
ACET380	1	Run-up Block
ACET394	8	Keep & Stay Packer
ACET845	2H + 2W2	Gasket E
ACGSL045	2	Drainage Cap
ACVL032	4(H)	Flipper Gasket
ACVL032	2(W)	Flipper Gasket
ACW20*	1	Reverse Locking Espag
ACW20024	4	Chevron
ACW20028	1	Handle Fixing Block
ACW20038	4H + 2W	Wedge Gasket
ACW20055	4	Cleat Ventframe
ACW20056	4	Cleat Ventframe
ACW20160	4	Outer Frame Screw
ACIN***	2	Friction Stays

Glass	
W1 - 85 x H - 94	
W2 - 34 x H - 42	



Do Not Scale From This Drawing



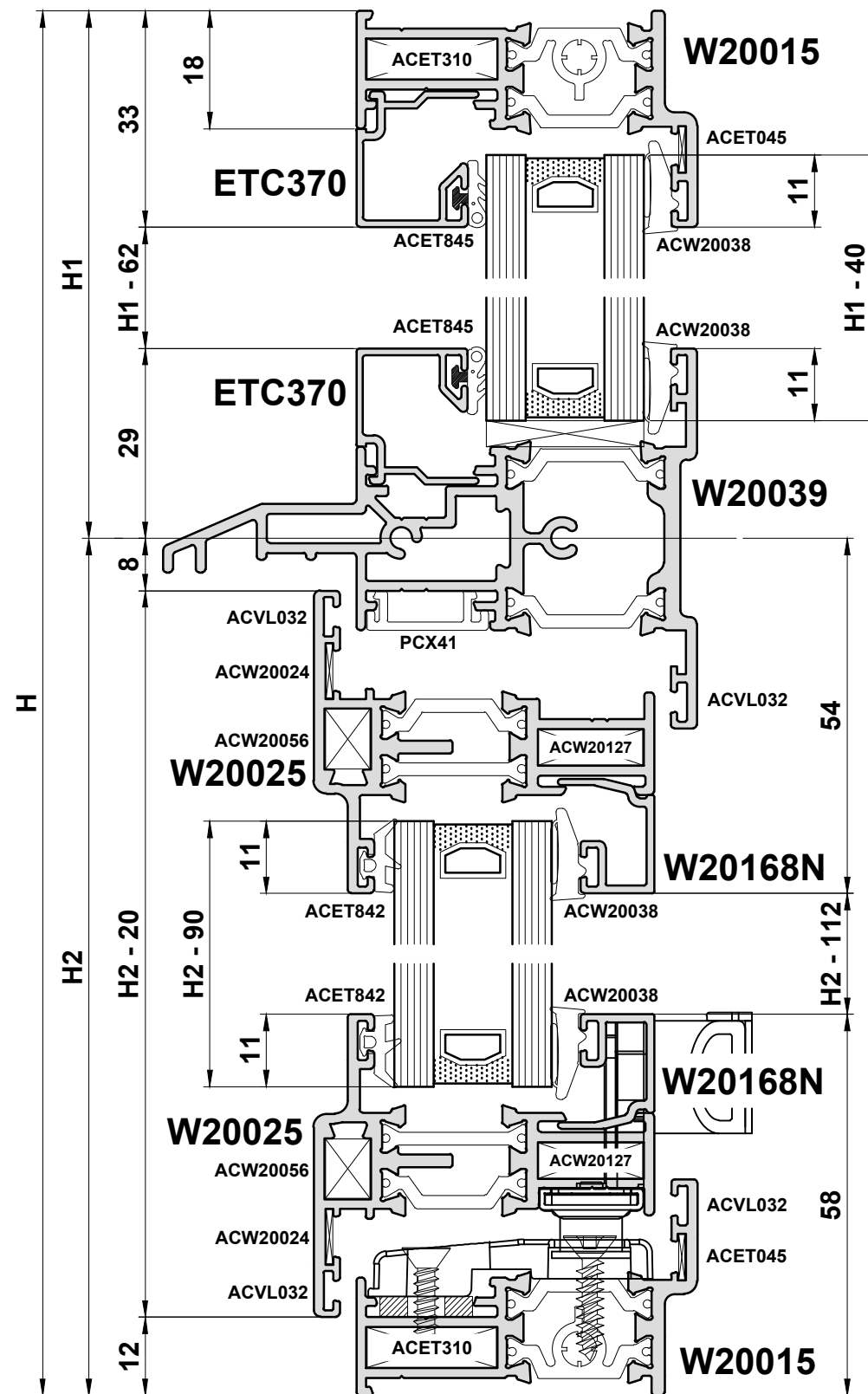
Glass
W - 94 x H1 - 85
W- 44 x H2 - 35

Accessories

Technical drawing of a rectangular box with a triangular lid. The box has width W and height H_2 . The lid has height H_1 and a dashed line indicating the fold. The total height is H .



Cutting Information - Fixed Light over Vent



Profiles

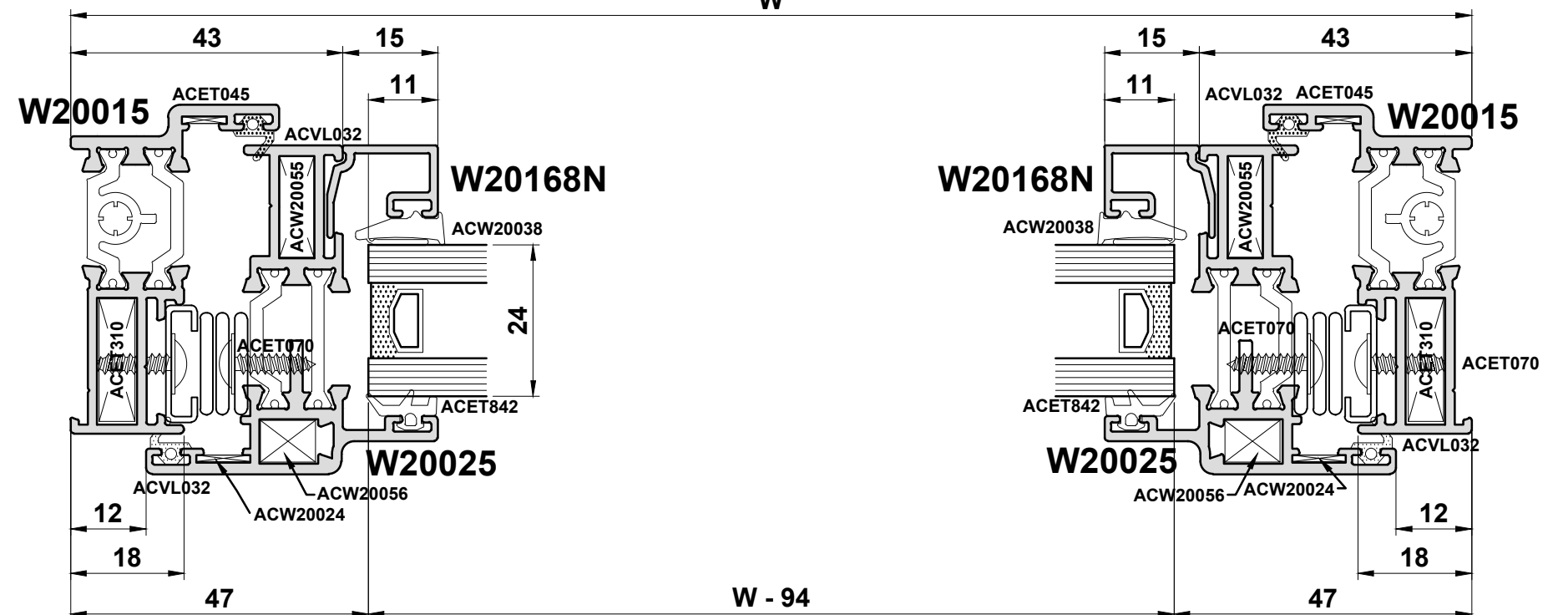
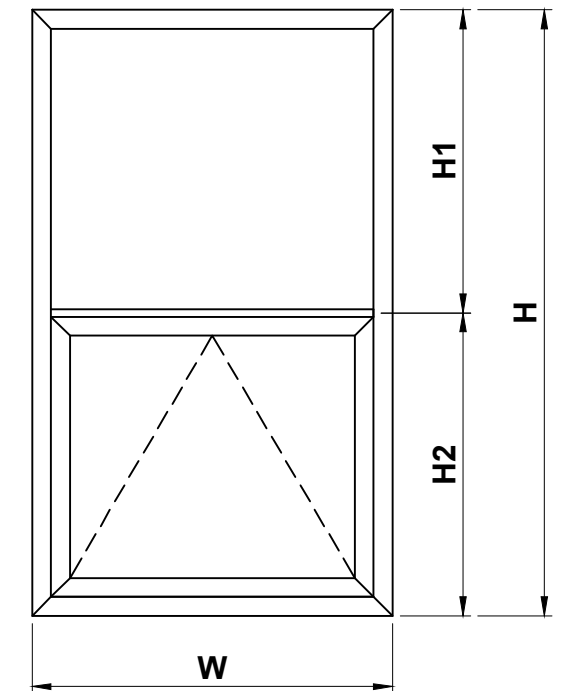
W20015		2		H
W20015		2		W
W20025		2		W - 24
W20025		2		H2 - 20
W20035		1		W - 36
W20168N		2		W - 86
ETC370		2		W - 36
W20168N		2		H1 - 112
ETC370		2		H2 - 62

Glass

W - 43 x H1 - 40
W - 94 x H2 - 112

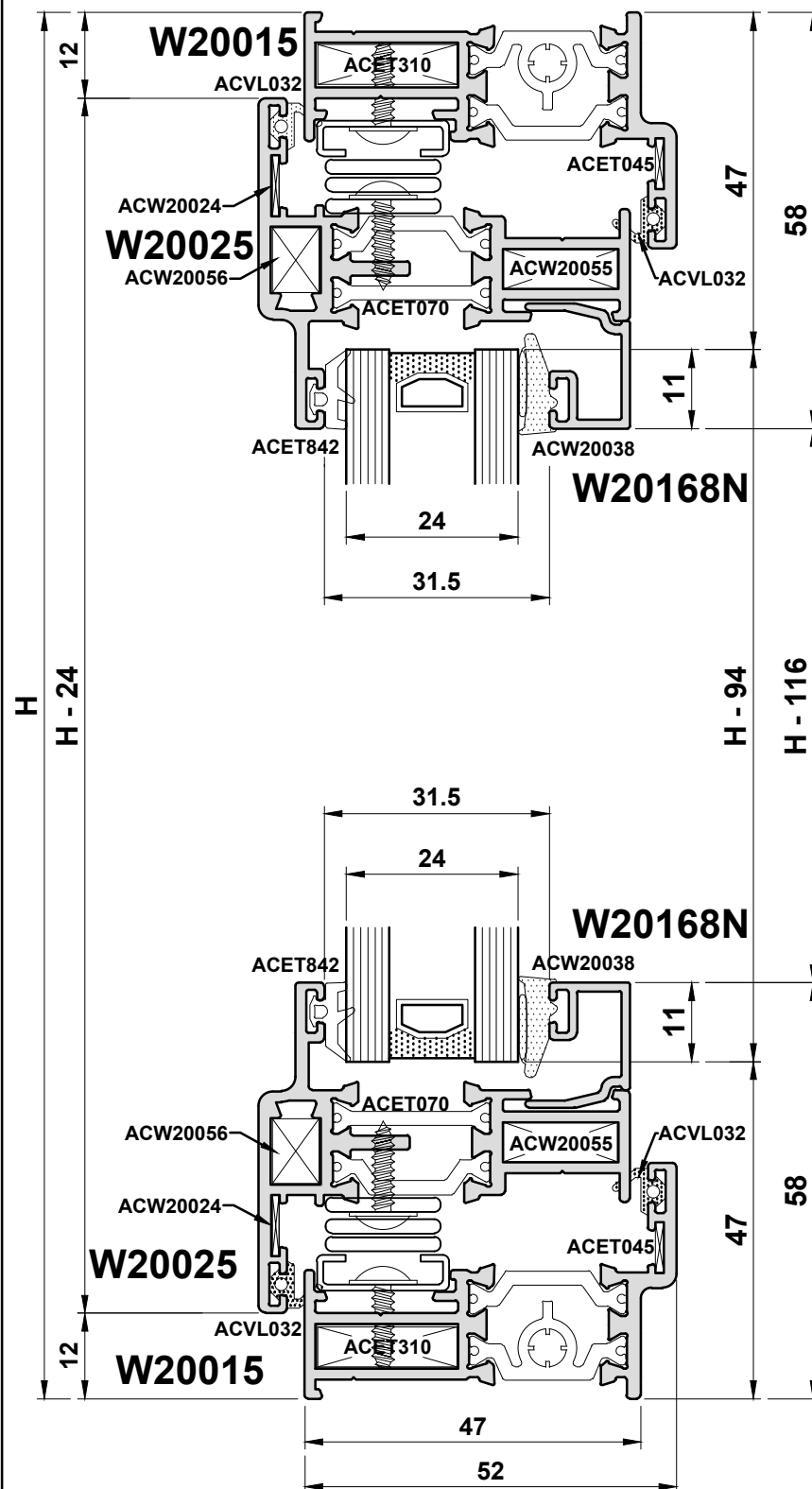
Accessories

ACET045	4	Chevron
ACET114	2	Anti-Twist Clip
ACET165	1	Espag Locking Handle
ACET310	4	Cleat Outerframe
ACET334	2	PVC Transom Loc. Block
ACET352	2 Pairs	Pull-in Blocks (Optional)
ACET380	2	Run-up Block
ACET394	8	Keep & Stay Packer
ACET845	4H + 2W	Gasket E
ACGSL045	2	Drainage Cap
ACVL032	4(H)	Flipper Gasket
ACVL032	4(W)	Flipper Gasket
ACW20*	1	Reverse Locking Espag
ACW20024	4	Chevron
ACW20028	1	Handle Fixing Block
ACW20038	4H + 2W	Wedge Gasket
ACW20055	4	Cleat Ventframe
ACW20056	4	Cleat Ventframe
ACW20039	1 Pair	W20039 End Caps
ACW20160	4	Outer Frame Screw
ACIN***	2	Friction Stays



Do Not Scale From This Drawing

Cutting Information - Opening Vent adjacent to Opening Vent



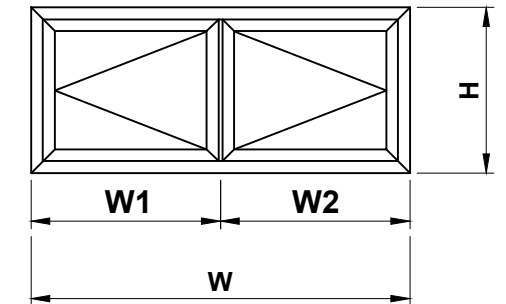
Profiles

W20015		2		H
W20015		2		W
W20025		4		H - 24
W20025		2		W1 - 15
W20025		2		W2 - 15
W20035		1		H - 36
W20168N		4		H - 116
W20168N		2		W1 - 77
W20168N		2		W2 - 77

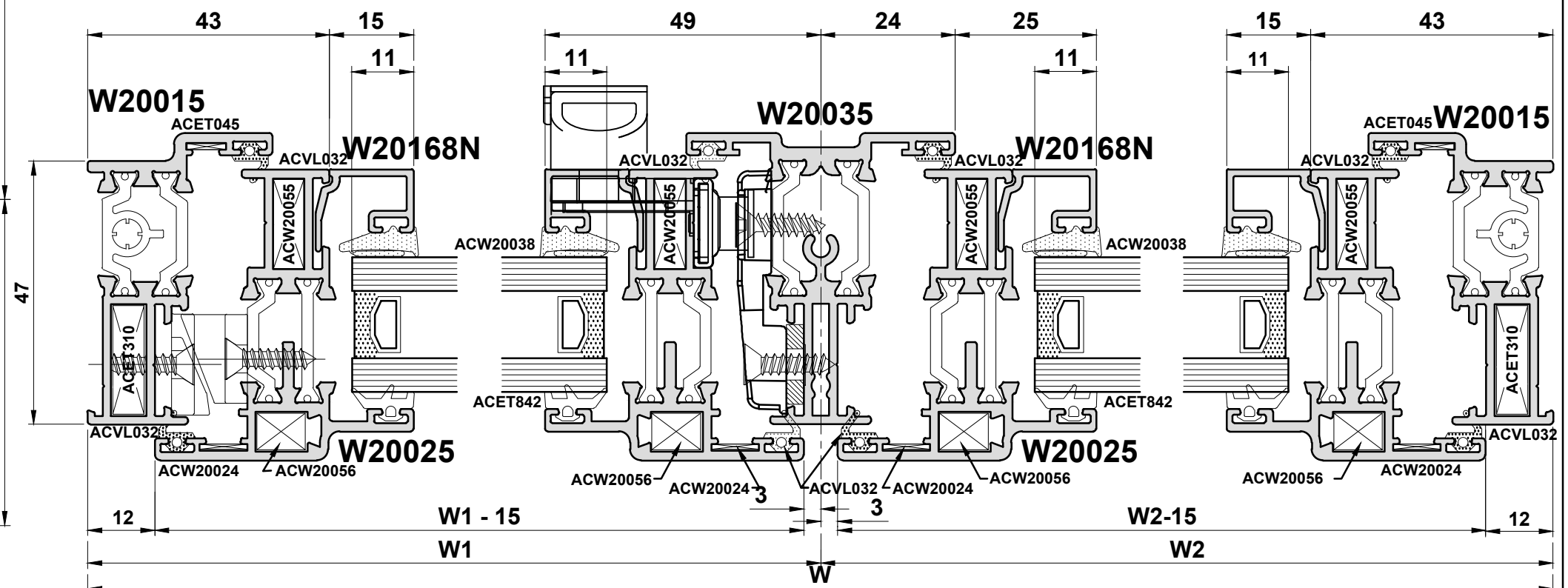
Accessories

ACET045	4	Chevron
ACET114	2	Anti-Twist Clip
ACET165	2	Espag Locking Handle
ACET310	4	Cleat Outerframe
ACET352	4 Pairs	Pull-in Blocks
ACET380	2	Run-up Block
ACET394	8	Keep & Stay Packer
ACGSL045	2	Drainage Cap
ACVL032	4(H)	Flipper Gasket
ACVL032	4(W)	Flipper Gasket
ACW20*	2	Reverse Locking Espag
ACW20024	8	Chevron
ACW20028	2	Handle Fixing Block
ACW20038	4H + 2W	Wedge Gasket
ACW20055	8	Cleat Ventframe
ACW20056	8	Cleat Ventframe
ACW20160	4	Outer Frame Screw
ACIN***	2	Friction Stays (Pairs)

Glass
W1 - 85 x H - 94
W2 - 85 x H- 94

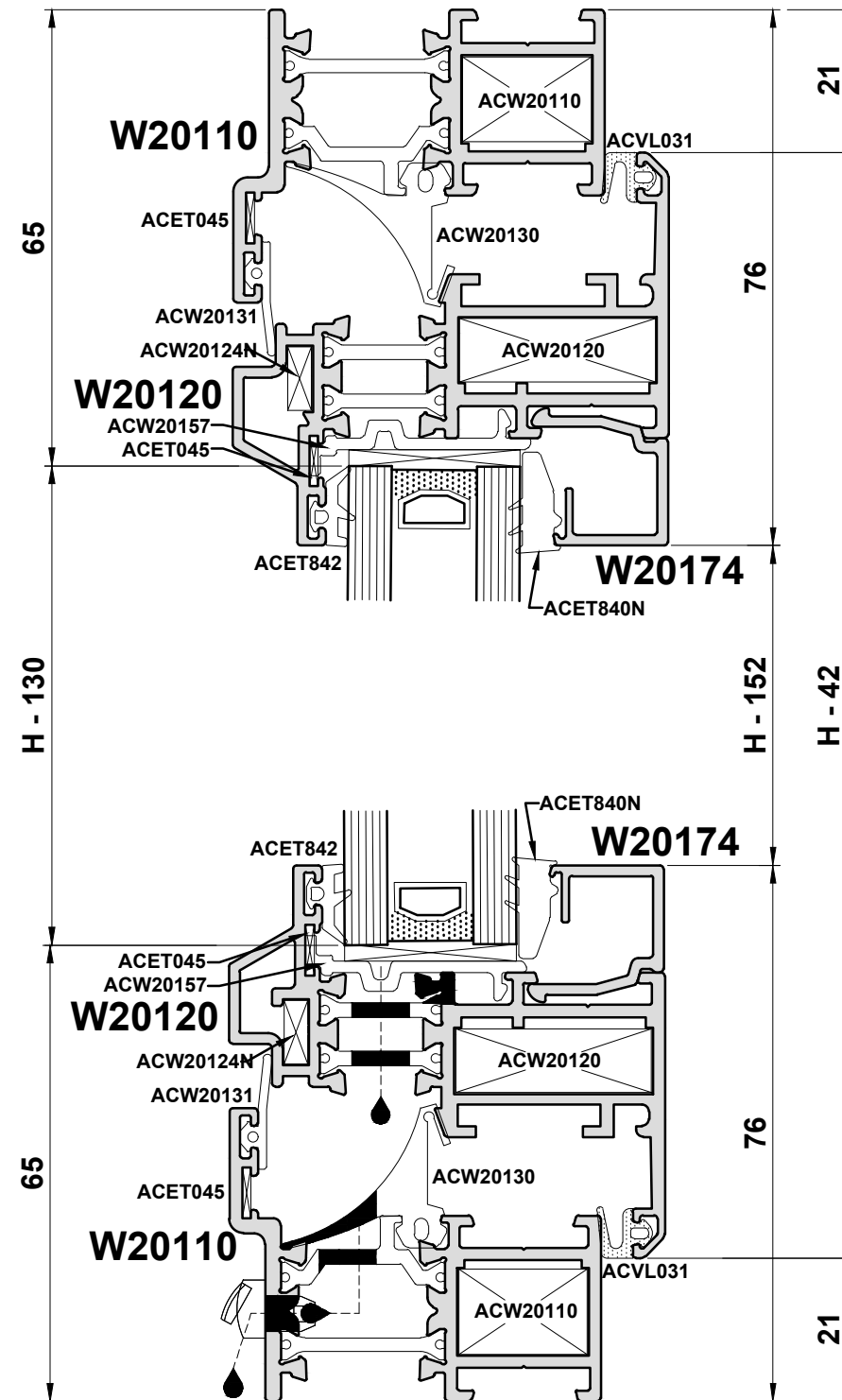


Note: The minimum sash height for this arrangement is 800mm



Do Not Scale From This Drawing

Cutting Information - Tilt & Turn

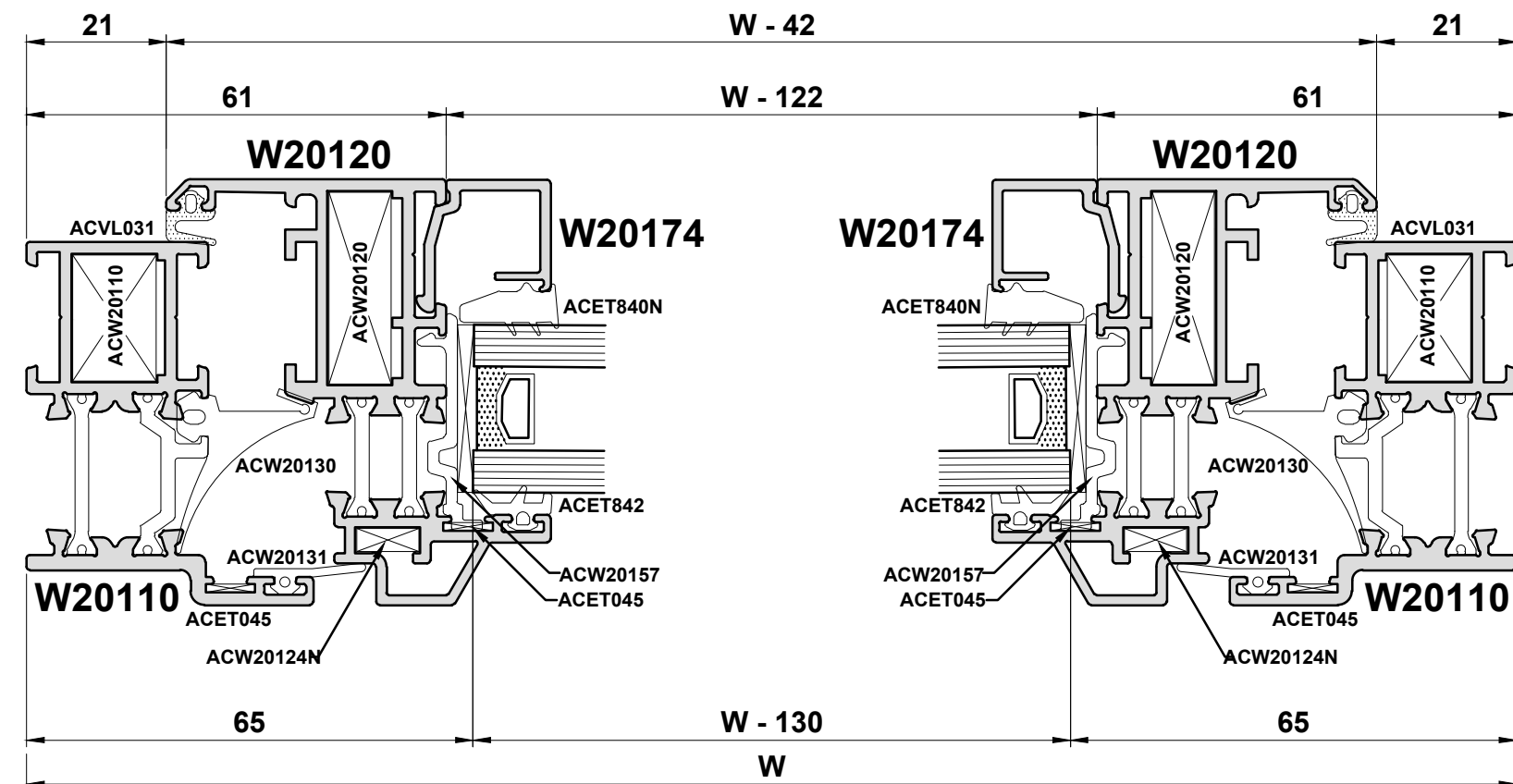
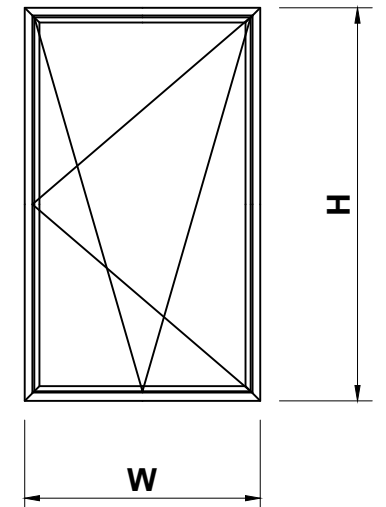


Sections				
W20110		2		H
W20110		2		W
W20120		2		H-42
W20120		2		W-42
W20174		2		W-122
W20174		2		H-152

Accessories		
ACET045	8	Chevron
ACET840	2(W+H)	Wedge Gasket
ACET842	2(W+H)	Gasket E
ACGSL045	2	Drainage Cap
ACW20110	4	Outer Frame Cleat
ACW20120	4	Inner Sash Cleat
ACW20124N	4	Outer Sash Cleat
ACW20131	2(W+H)	External Outer Frame Gasket
ACW20133	4	Corner Moulding
ACW20157	6	Bridge Packer
ACVL031	2(W+H)	Flipper Gasket
ACW20130	2(W+H)	Flipper Gasket

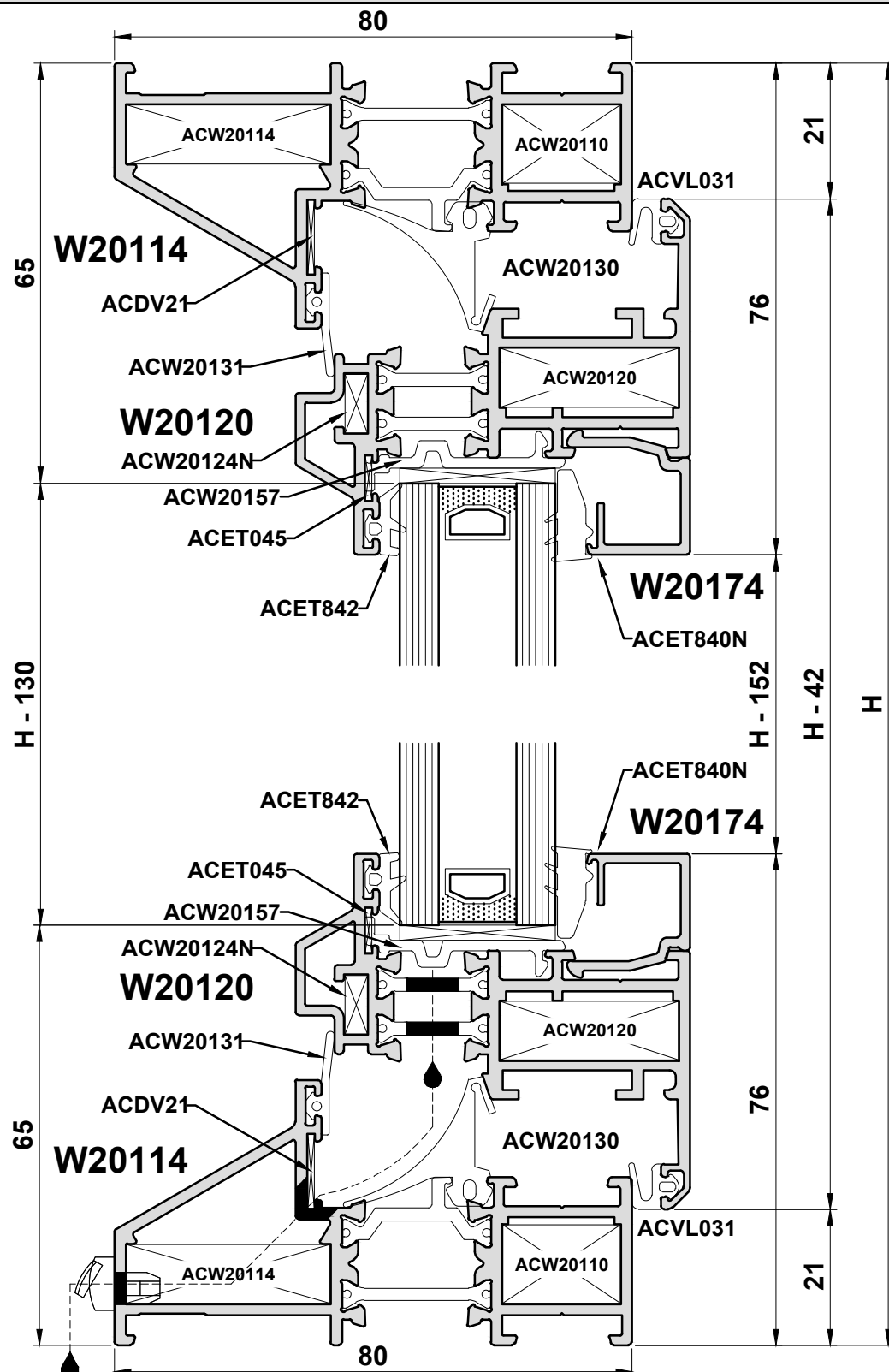
Please refer to the SB Chrono or Fapim manual for tilt & turn hardware

Glass	
W - 130	
H - 130	



Do Not Scale From This Drawing

Cutting Information - Tilt & Turn

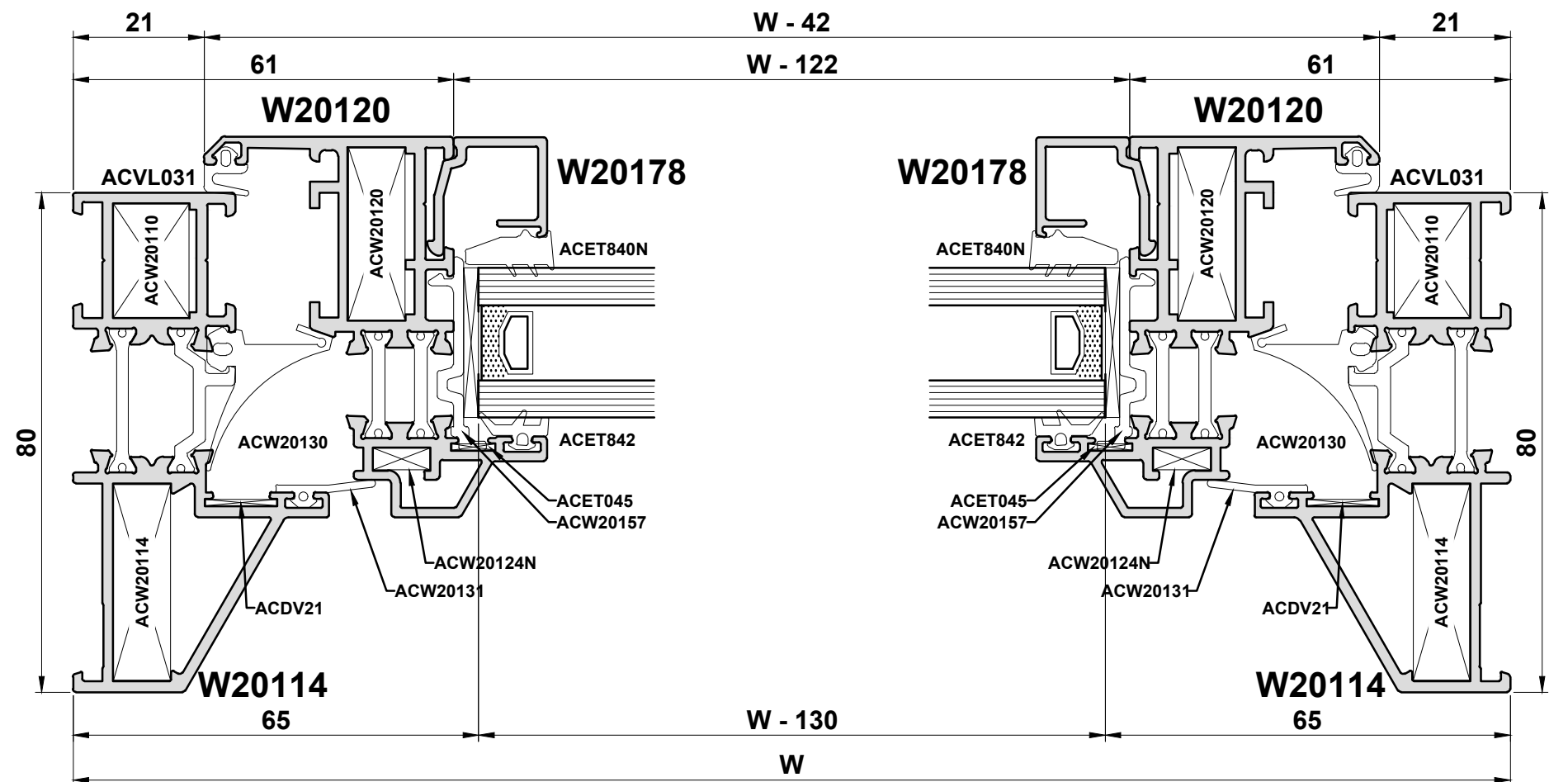
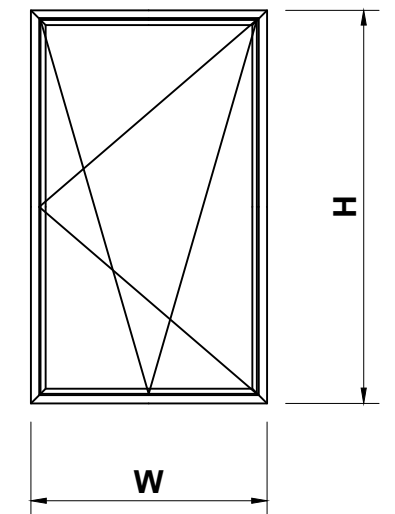


Sections				
W20114		2		H
W20114		2		W
W20120		2		H-42
W20120		2		W-42
W20174		2		W-122
W20174		2		W-152

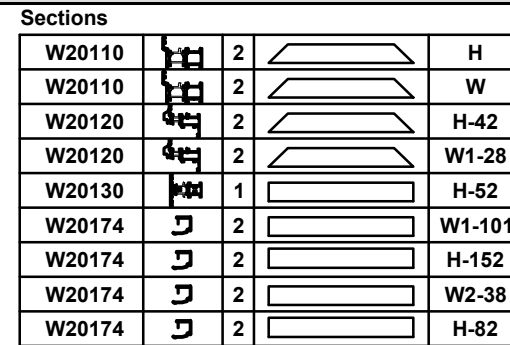
Accessories		
ACDV21	8	Chevron
ACET840	2xW + 4xH	Wedge Gasket
ACET842	2xW + 4xH	Gasket E
ACGSL045	2	Drainage Cap
ACW20110	4	Outer Frame Cleat
ACW20120	4	Inner Sash Cleat
ACW20114	4	Outer Sash Cleat
ACW20131	2(W1) + 2(H)	External Outer Frame Gasket
ACW20133	4	ACW20133 Corner Moulding
ACW20157	8	Bridge Packer
ACVL031	2(W1) + 2(H)	Flipper Gasket
MUA067	6	Transom Screws
ACW20130	2(W+H)	Flipper Gasket

Please refer to the SB Chrono or Fapim manual for tilt & turn hardware

Glass	
W - 130	
H - 130	

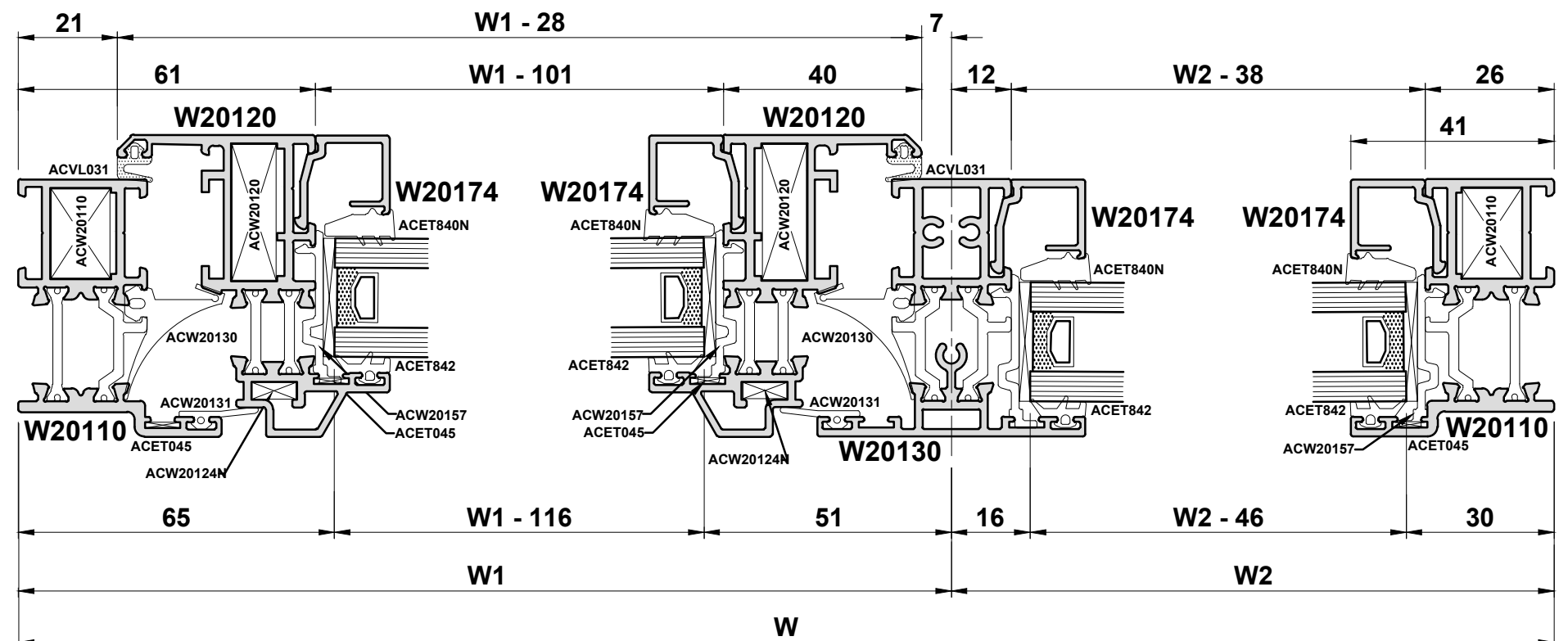
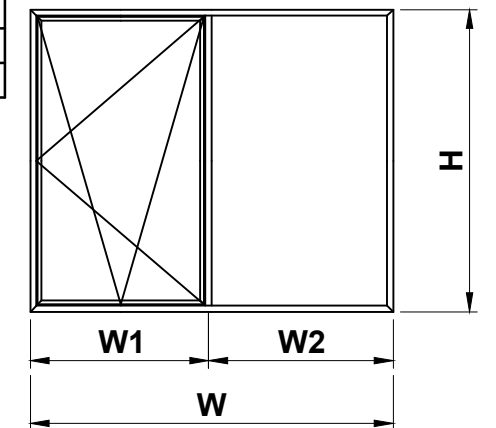


Do Not Scale From This Drawing



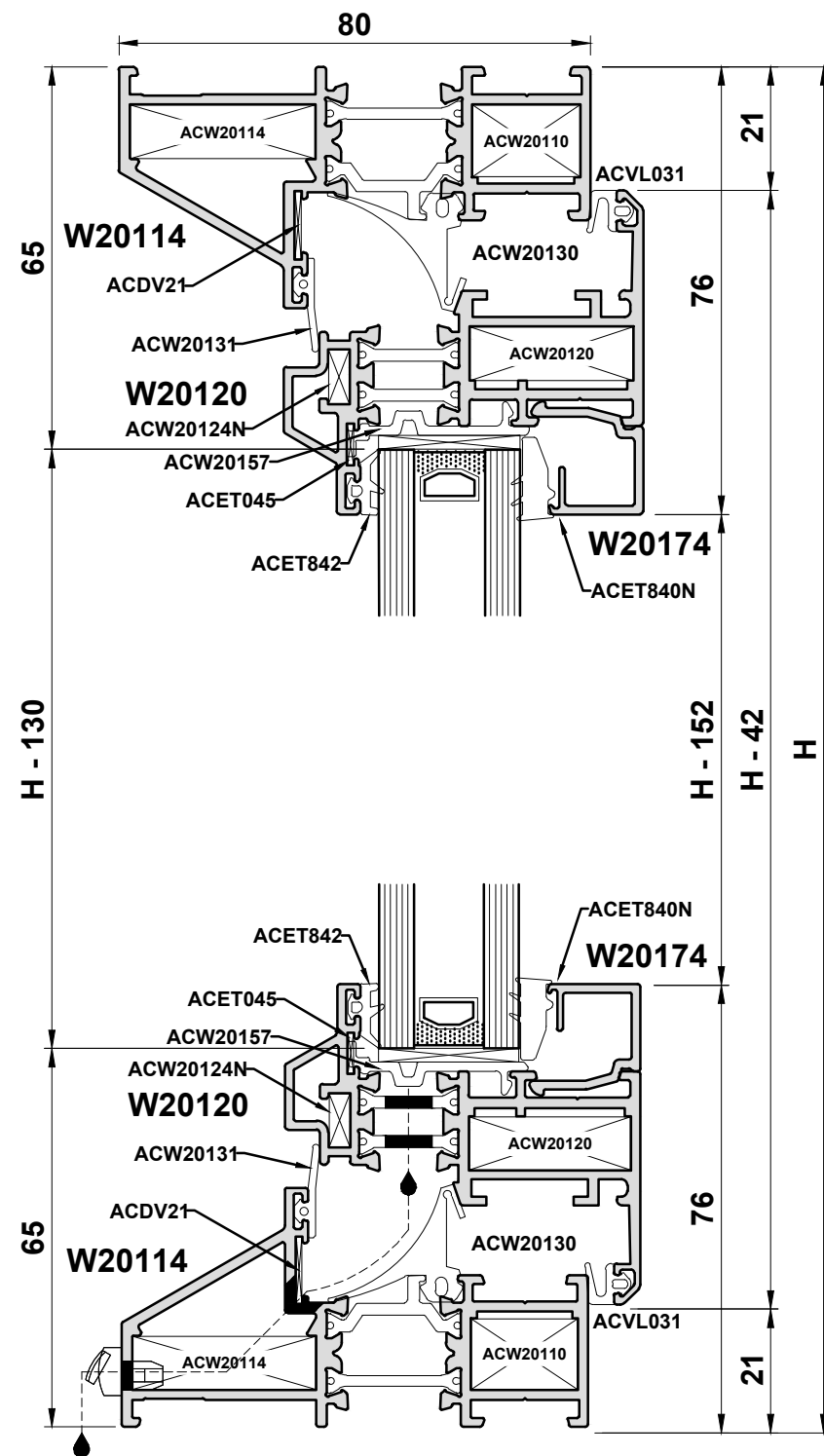
Accessories		
ACET045	8	Chevron
ACET840	2xW + 4xH	Wedge Gasket
ACET842	2xW + 4xH	Gasket E
ACGSL045	4	Drainage Cap
ACW20110	4	Outer Frame Cleat
ACW20120	4	Inner Sash Cleat
ACW20124N	4	Outer Sash Cleat
ACW20130	2(W+H)	Flipper Gasket
ACW20131	2(W1) + 2(H)	External Outer Frame Gasket
ACW20133	4	ACW20133 Corner Moulding
ACW20157	8	Bridge Packer
ACVL031	2(W1) + 2(H)	Flipper Gasket
MUA067	6	Transom Screws

Glass
W1 - 116 x H1 - 130
W2 - 46 x H2 - 48



Do Not Scale From This Drawing

Cutting Information - Tilt & Turn adjacent to Fixed Light



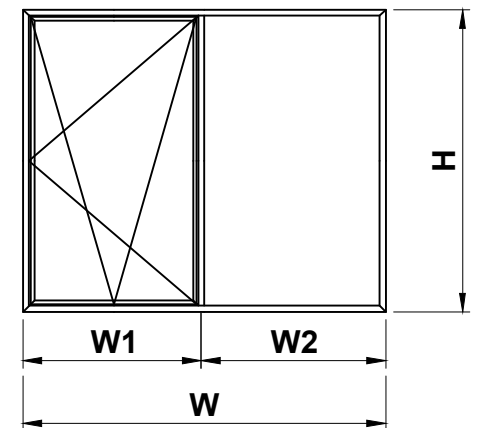
Sections

W20114		2		H
W20114		2		W
W20120		2		H-42
W20120		2		W1-28
W20134		1		H-74
W20174		2		W1-101
W20174		2		H-152
W20174		2		W2-38
W20174		2		H-82

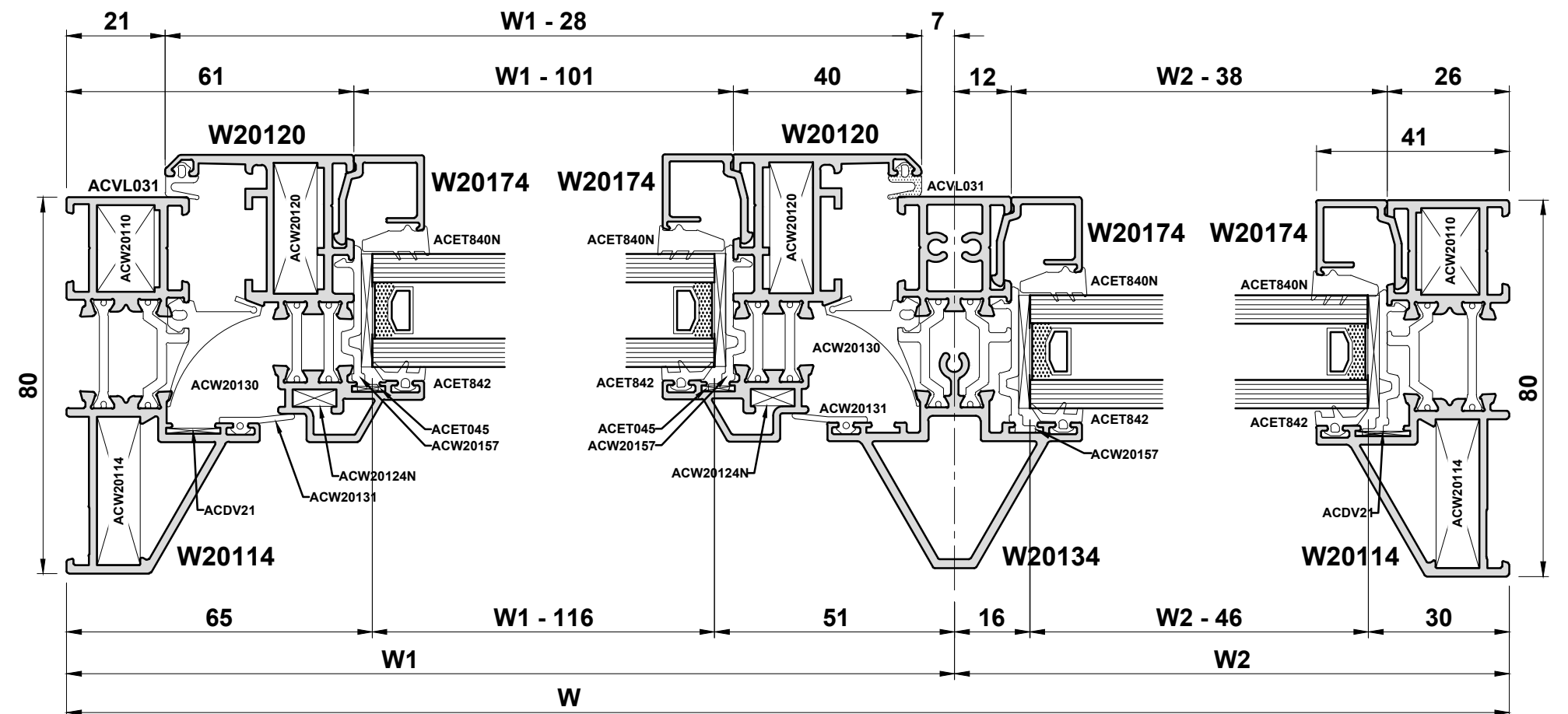
Accessories

ACDV21	8	Chevron
ACET840	2xW + 4xH	Wedge Gasket
ACET842	2xW + 4xH	Gasket E
ACGSL045	4	Drainage Cap
ACW20110	4	Inner Frame Cleat
ACW20120	4	Inner Sash Cleat
ACW20124N	4	Outer Sash Cleat
ACW20130	2(W+H)	Flipper Gasket
ACW20131	2(W1) + 2(H)	External Outer Frame Gasket
ACW20133	4	ACW20133 Corner Moulding
ACW20157	8	Bridge Packer
ACVL031	2(W1) + 2(H)	Flipper Gasket
MUA067	6	Transom Screws

Glass	
W1	116 x H1 - 130
W2	46 x H2 - 48



Please refer to the SB Chrono or Fapim manual for tilt & turn hardware



Do Not Scale From This Drawing