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Updates

DATE	PAGE	DESCRIPTION
11-05-17	All Sections	Updated accessories, photos and drawings Added: - ETC302 - ETC477 - ACET355 - Angled Sub Cill
12-09-17	B21, E04	Amended Crimping details for ETC302
06-09-19	A13 - A41, B07, B15, C03 - C54, E03 - E28	Updated drawings: - ETC367 Replaced with ETC369 - ETC323 and ETC346 Removed - ETC381 Removed - ACET431 Replaced with ACET432 - ETC337 Added - ETC324 Replaced with ETC324N

Specification

GENERAL DESCRIPTION

The "Alitherm 300" window system described in this manual is suitable for both replacement windows for existing buildings, and for installation into new buildings.

The system incorporates internally & externally beaded vent frames suitable for cockspur and espag locking.

The low line gaskets and extended polyamide thermal breaks help to provide excellent U Values and Window Energy Rating capable of achieving an 'A' Rating when used in conjunction with the correct double glazed unit.

Corner assembly of Alitherm 300 is by crimping only.

PROFILE SPECIFICATION

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

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

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 300 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 silicone seal.

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

Kitemark™ Certificate

No. KM 81580

Size Limitations and Performance Characteristics

Alitherm 300 Aluminium Alloy Window System

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	5A	AE2400	2000+
Projecting side hung Internally beaded	600	1400	28	-	16"	-	4	7A	AE2400	2000+
Projecting side hung Externally beaded	600	1400	28	-	16"	-	4	5A	AE2400	2000+
Overall dimensions for windows with approved outer frame profiles:										
Fixed Internally Beaded	2100	2100	-	4.2	-	-	4	7A	AE2400	2000+
Fixed Externally Beaded	2100	2100	-	4.2	-	-	4	5A	AE2400	2000+
Overall dimensions for approved outer frames & transom/mullion profiles:										
Multilights* Internally Beaded	2100	2100	-	2.5	-	1200	4	7A	AE2400	2000+
Multilights* Externally Beaded	2100	2100	-	2.5	-	1200	4	5A	AE2400	2000+

*Transom/mullion subject to
lxx/lyy requirements

Please see pages B24, 25 & 26 for more
guidance on vent sizes & limitations.

- Side Hung Weight Limit Can Be Increased To 40 kg Using Egress Hinges
- See hardware for minimum and maximum sizes

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.

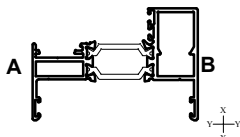
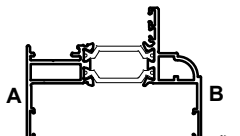
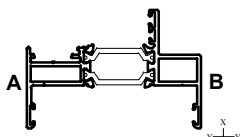
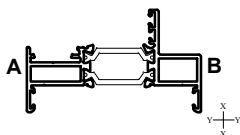
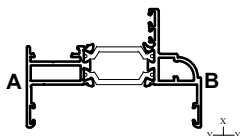
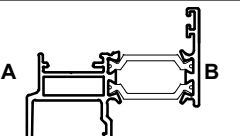
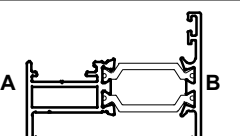
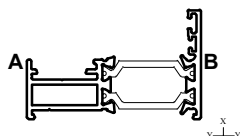
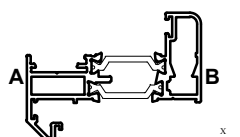
Using the marked centre line, Drill the transom/mullion fixing holes using a 5mm dia. drill bit.

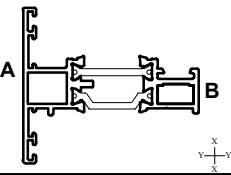
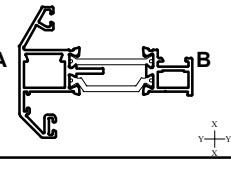
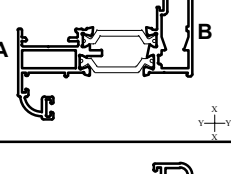
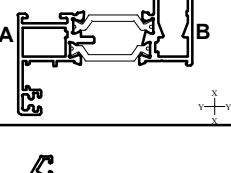
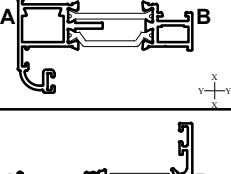
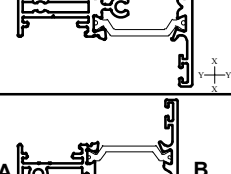
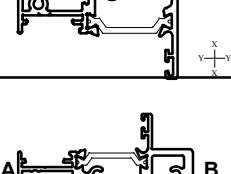
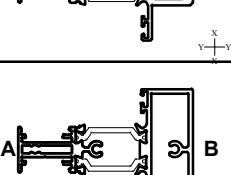
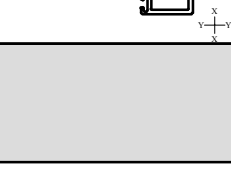
Corners are formed by coating the cut faces to be joined with a suitable small gap sealer. Into the mitred corner insert the cleat glue and the required corner cleats and, where required, the aluminium corner chevrons. The two mitred ends are then brought together and crimped. The small gap sealer ensures 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.

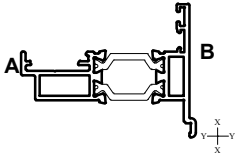
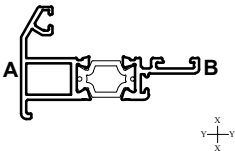
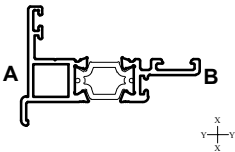
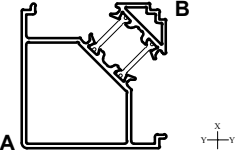
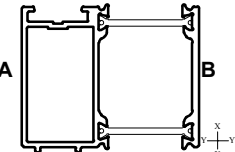
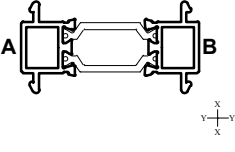
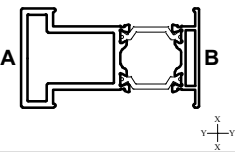
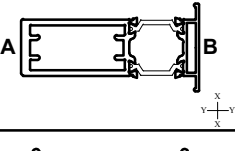
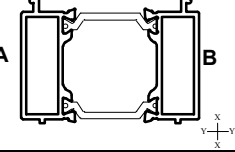
Transoms or mullions are cut with square ends to the sizes calculated on the cutting formula sheets. The ends are then profiled to allow them to fit into the outer frame. Special tooling is available on request to profile the end of transom/mullion.

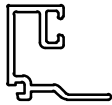
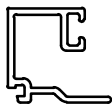
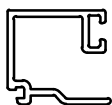
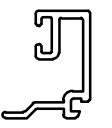
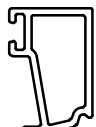
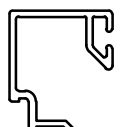
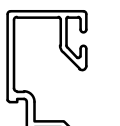
Prior to fixing of transoms and mullions smear the cut ends with a suitable gap sealer. After fixing, special care should be taken to ensure any excess is cleared from painted surfaces.

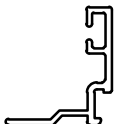
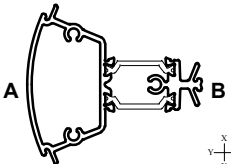
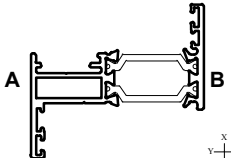
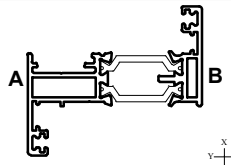
Specification

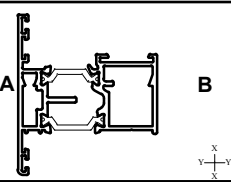
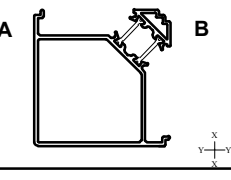
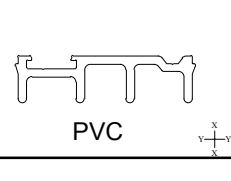
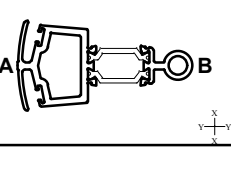
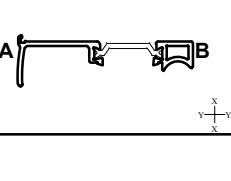
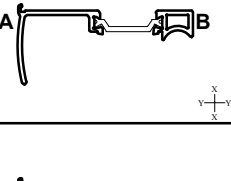
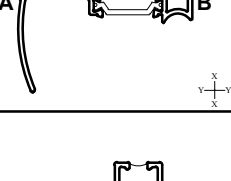
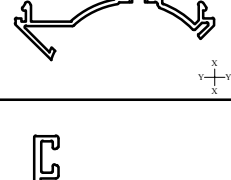
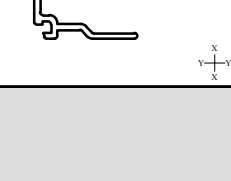
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ETC303		A15	383	110	23.2 ----- 6.54	4.41 ----- 1.68	6.5	1	✓	✓	✓	✓	✓
ETC304		A16	361	101	22.01 ----- 6.10	3.23 ----- 1.31	6.5	1	✓	✓	✓	✓	✓
ETC305		A16	335	88	19.40 ----- 5.34	2.25 ----- 1.28	6.5	1	✓	✓	✓	✓	✓
ETC306		A17	357	98	21.18 ----- 5.95	3.20 ----- 1.42	6.5	1	✓	✓	✓	✓	✓
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ETC310		A18	322	86	14.20 ----- 4.60	3.49 ----- 1.49	6.5	1	✓	✓	✓	✓	✓
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									A = Outside B = Inside MF = Mill Finish SA = Silver Anodised KL = Basic Colour HP = Special Colour M = Dual Colour				

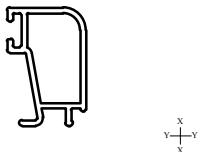
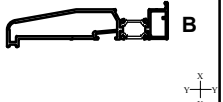
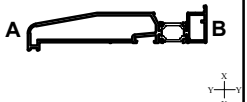
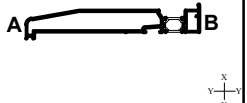
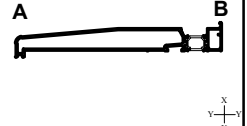
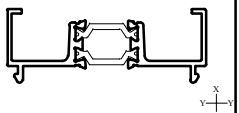
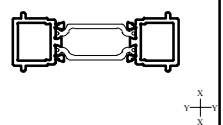
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ETC326		A20	342	77	14.90 ----- 3.87	3.40 ----- 1.49	6.5	1	✓	✓	✓	✓	✓
ETC327		A21	335	86	17.59 ----- 5.67	4.12 ----- 1.78	6.5	1	✓	✓	✓	✓	✓
ETC328N		A21	277	90	14.99 ----- 5.25	4.21 ----- 1.85	6.5	1	✓	✓	✓	✓	✓
ETC329		A22	343	80	14.95 ----- 3.88	3.42 ----- 1.51	6.5	1	✓	✓	✓	✓	✓
ETC333		A24	389	54	11.64 ----- 3.62	2.63 ----- 1.09	6.5	1	✓	✓	✓	✓	✓
ETC335		A24	383	97	15.06 ----- 5.25	5.56 ----- 1.92	6.5	1	✓	✓	✓	✓	✓
ETC336		A24	372	106	22.34 ----- 5.40	3.35 ----- 1.40	6.5	1	✓	✓	✓	✓	✓
ETC337		A24	374	108	23.76 ----- 5.63	6.91 ----- 2.88	6.5	1	✓	✓	✓	✓	✓
									A = Outside B = Inside		MF = Mill Finish SA = Silver Anodised KL = Basic Colour HP = Special Colour M = Dual Colour		

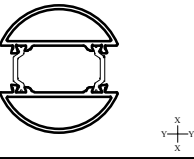
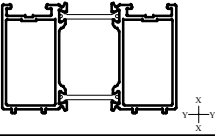
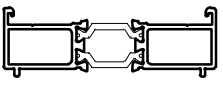
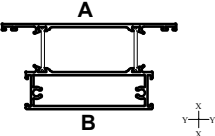
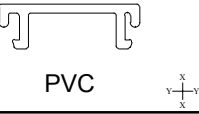
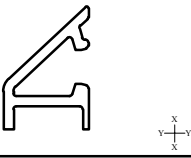
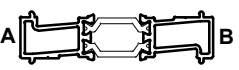
Number	Picture	Page	Perim. mm	Mec. mm	lx(cm4) wx(cm3)	ly(cm4) wy(cm3)	Length	Pack pr.	MF	SA	KL	HP	M
ETC343		A27	274	57	9.12 ----- 2.77	1.81 ----- 0.92	6.5	1	✓	✓	✓	✓	✓
ETC344		A26	246	41	5.75 ----- 3.04	1.16 ----- 0.62	6.5	1	✓	✓	✓	✓	✓
ETC345		A26	227	41	4.85 ----- 2.66	1.23 ----- 0.59	6.5	1	✓	✓	✓	✓	✓
ETC347		A32	344	94	16.65 ----- 5.90	16.65 ----- 6.11	6.5	1	✓	✓	✓	✓	✓
ETC352		A36	293	85	13.07 ----- 4.73	7.25 ----- 3.40	6.5	1	✓	✓	✓	✓	✓
ETC353		A34	214	32	9.44 ----- 3.56	1.15 ----- 0.85	6.5	1	✓	✓	✓	✓	✓
ETC356		A36	311	111	32.05 ----- 8.28	7.19 ----- 3.69	6.5	1	✓	✓	✓	✓	✓
ETC357		A37	297	138	41.5 ----- 9.86	5.2 ----- 2.67	6.5	1	✓	✓	✓	✓	✓
ETC358		A39	264	33	12.95 ----- 4.89	4.74 ----- 2.61	6.5	1	✓	✓	✓	✓	✓
									A = Outside B = Inside MF = Mill Finish SA = Silver Anodised KL = Basic Colour HP = Special Colour M = Dual Colour				

Number	Picture	Page	Perim. mm	Mec. mm	lx(cm4) wx(cm3)	ly(cm4) wy(cm3)	Length	Pack pr.	MF	SA	KL	HP	M
ETC360		A23	119	26	- ----	- ----	6.5	1	✓	✓	✓	✓	
ETC361		A23	127	30	- ----	- ----	6.5	1	✓	✓	✓	✓	
ETC362		A23	135	34	- ----	- ----	6.5	1	✓	✓	✓	✓	
ETC364		A28	122	28	- ----	- ----	6.5	1	✓	✓	✓	✓	
ETC366		A29	106	24	- ----	- ----	6.5	1	✓	✓	✓	✓	
ETC369		A29	89	33	- ----	- ----	6.5	1	✓	✓	✓	✓	
ETC370		A28	141	32	- ----	- ----	6.5	1	✓	✓	✓	✓	
ETC371		A29	133	28	- ----	- ----	6.5	1	✓	✓	✓	✓	
ETC372		A26	96	22	- ----	- ----	6.5	1	✓	✓	✓	✓	
									A = Outside B = Inside		MF = Mill Finish SA = Silver Anodised KL = Basic Colour HP = Special Colour M = Dual Colour		

Number	Picture	Page	Perim. mm	Mec. mm	lx(cm4) wx(cm3)	ly(cm4) wy(cm3)	Length	Pack pr.	MF	SA	KL	HP	M
ETC373		A26	102	25	- ----- -	- ----- -	6.5	1	✓	✓	✓	✓	
ETC374		A28	97	37	- ----- -	- ----- -	6.5	1	✓	✓	✓	✓	
ETC375		A29	112	22	- ----- -	- ----- -	6.5	1	✓	✓	✓	✓	
ETC376		A30	100	20	- ----- -	- ----- -	6.5	1	✓	✓	✓	✓	
ETC378		A32	96	21	- ----- -	- ----- -	6.5	1	✓	✓	✓	✓	
ETC379		A30	112	23	- ----- -	- ----- -	6.5	1	✓	✓	✓	✓	
ETC385		A31	357	65	26.65 ----- 6.53	12.38 ----- 3.83	6.5	1	✓	✓	✓	✓	✓
ETC420		A18	272	92	11.21 ----- 3.94	2.50 ----- 1.06	6.5	1	✓	✓	✓	✓	✓
ETC423		A22	331	77	14.35 ----- 5.09	3.30 ----- 1.40	6.5	1	✓	✓	✓	✓	✓
									A = Outside B = Inside		MF = Mill Finish SA = Silver Anodised KL = Basic Colour HP = Special Colour M = Dual Colour		

Number	Picture	Page	Perim. mm	Mec. mm	lx(cm4) wx(cm3)	ly(cm4) wy(cm3)	Length	Pack pr.	MF	SA	KL	HP	M
ETC424N		A23	383	84	15.26 ----- 4.81	6.91 ----- 2.26	6.5	1	✓	✓	✓	✓	✓
ETC048		A32	400	152	42.64 ----- 11.72	42.64 ----- 11.81	6.5	1	✓	✓	✓	✓	✓
ETC052		A38	242	-	0.77 ----- 0.71	15.51 ----- 4.77	4	1	✓				
ETC080		A33	334	61	25.58 ----- 5.47	4.88 ----- 2.57	6.5	1	✓	✓	✓	✓	✓
ETC081		A33	197	35	13.85 ----- 3.8	0.36 ----- 0.52	6.5	1	✓	✓	✓	✓	✓
ETC082		A33	221	47	16.21 ----- 4.19	1.15 ----- 1.29	6.5	1	✓	✓	✓	✓	✓
ETC083		A33	243	58	17.66 ----- 4.32	2.64 ----- 2.36	6.5	1	✓	✓	✓	✓	✓
ETC150		A31	282	48	11.29 ----- 0.75	1.12 ----- 0.73	6.5	1	✓	✓	✓	✓	
ETC160		A31	94	20	- ----- -	- ----- -	6.5	1	✓	✓	✓	✓	
									A = Outside B = Inside		MF = Mill Finish SA = Silver Anodised KL = Basic Colour HP = Special Colour M = Dual Colour		

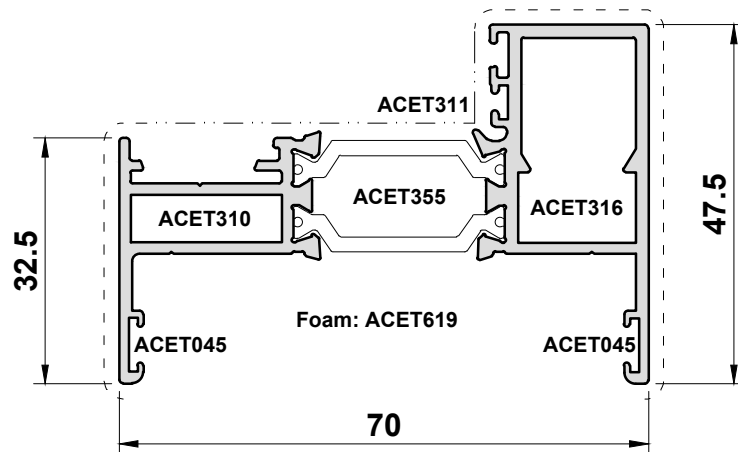
Number	Picture	Page	Perim. mm	Mec. mm	lx(cm4) wx(cm3)	ly(cm4) wy(cm3)	Length	Pack pr.	MF	SA	KL	HP	M
ETC273		A29	88	31	- --- -	- --- -	6.5	1	✓	✓	✓	✓	
ETC451	A  B	A39	304	109	32.44 ----- 7.29	3.46 ----- 2.79	6.5	1	✓	✓	✓	✓	✓
ETC452	A  B	A39	414	197	122.46 ----- 18.03	6.01 ----- 3.34	6.5	1	✓	✓	✓	✓	✓
ETC457	A  B	A39	444	212	163.27 ----- 21.60	6.79 ----- 3.73	6.5	1	✓	✓	✓	✓	✓
ETC458	A  B	A40	524	252	313.62 ----- 32.63	8.87 ----- 4.79	6.5	1	✓	✓	✓	✓	✓
ETC477	A  B	A40	752	408	1591.6 ----- 105.33	26.84 ----- 12.84	6.5	1	✓	✓	✓	✓	✓
ETC479	A  B	A40	594	287	501.64 ----- 44.04	9.72 ----- 5.34	6.5	1	✓	✓	✓	✓	✓
ETC559		A40	318	41	15.75 ----- 4.50	1.17 ----- 0.98	6.5	1	✓	✓	✓	✓	✓
ETC853		A35	230	41	23.28 ----- 6.65	1.94 ----- 1.4	6.5	1	✓	✓	✓	✓	✓
									A = Outside B = Inside MF = Mill Finish SA = Silver Anodised KL = Basic Colour HP = Special Colour M = Dual Colour				

Number	Picture	Page	Perim. mm	Mec. mm	Ix(cm4) wx(cm3)	Iy(cm4) wy(cm3)	Length	Pack pr.	MF	SA	KL	HP	M
ETC869		A31	312	144	18.38 ----- 6.13	14.30 ----- 5.17	6.5	1	✓	✓	✓	✓	✓
DV515		A38	289	97	27.16 ----- 7.76	14.38 ----- 6.75	6.5	1	✓	✓	✓	✓	✓
ETD057		A37	251	41	16.30 ----- 4.66	1.12 ----- 1.55	6.5	1	✓	✓	✓	✓	✓
ETD330	 A & B may be reversed	A25	545	197	28.40 ----- 10.55	56.92 ----- 10.44	6.5	1	✓	✓	✓	✓	✓
PCX41	 PVC	A40	65	-	- ----- -	- ----- -	6.5	1	✓				
VL72		A40	101	32	- ----- -	- ----- -	6.5	5	✓	✓	✓	✓	
UN3000		A35	209	33.8	15.8 ----- 4.51	0.79 ----- 0.84	6.5	5	✓	✓	✓	✓	✓
									A = Outside B = Inside		MF = Mill Finish SA = Silver Anodised KL = Basic Colour HP = Special Colour M = Dual Colour		

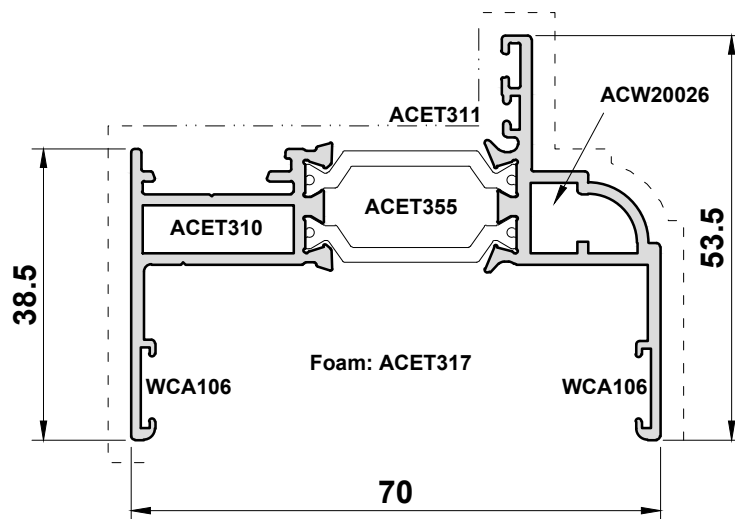
Primary Visible Side

Secondary Visible Side

ETC302
70mm Long Leg Square Outerframe



ETC303
70mm Long Leg Ovolo Outerframe

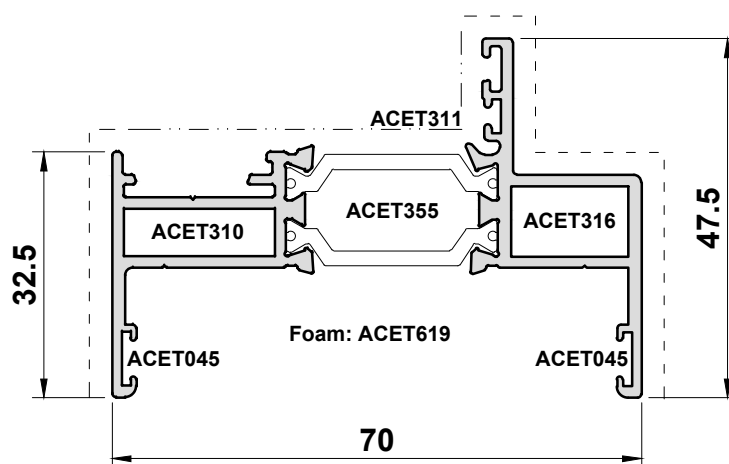


Scale 1:1

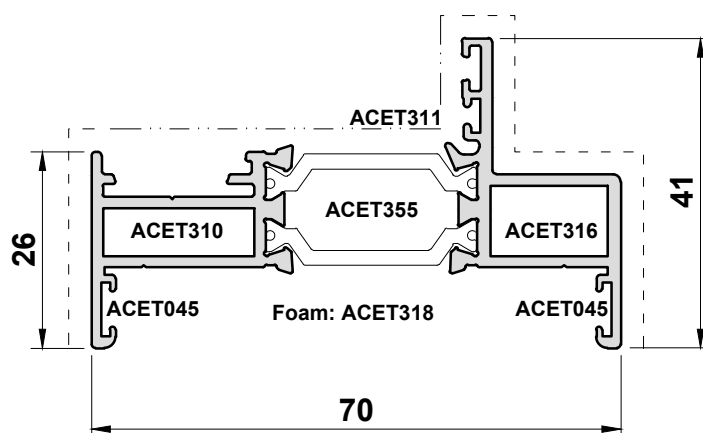
Primary Visible Side

Secondary Visible Side

ETC304
70mm Long Leg Square Outerframe



ETC305
70mm Short Leg Square Outerframe

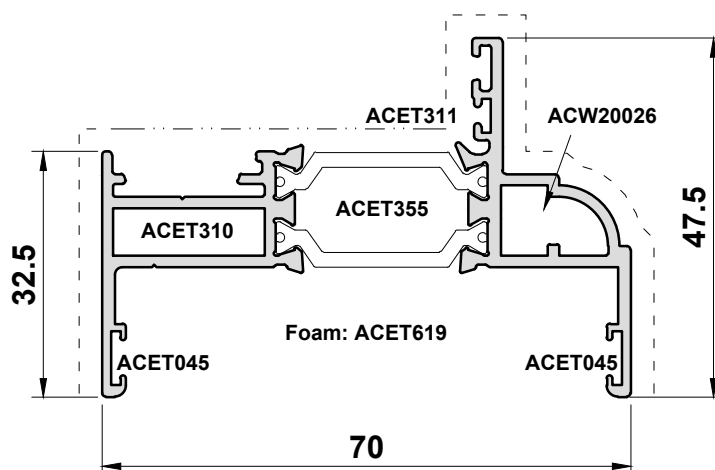


Scale 1:1

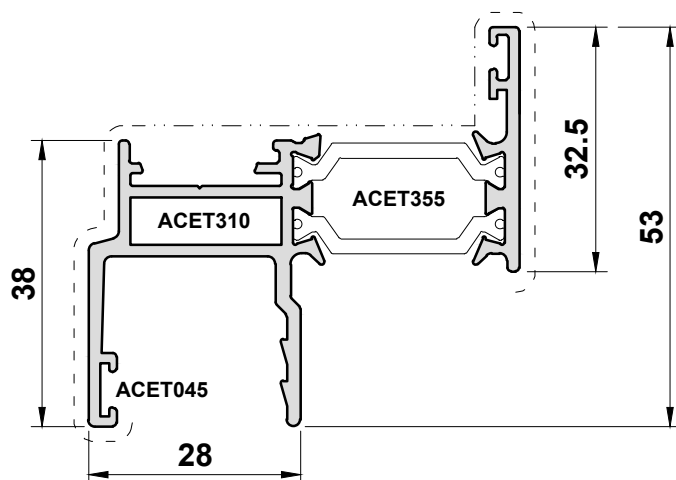
Primary Visible Side

Secondary Visible Side

ETC306
70mm Ovolo Outerframe



ETC308
Outerframe For Curtain Wall

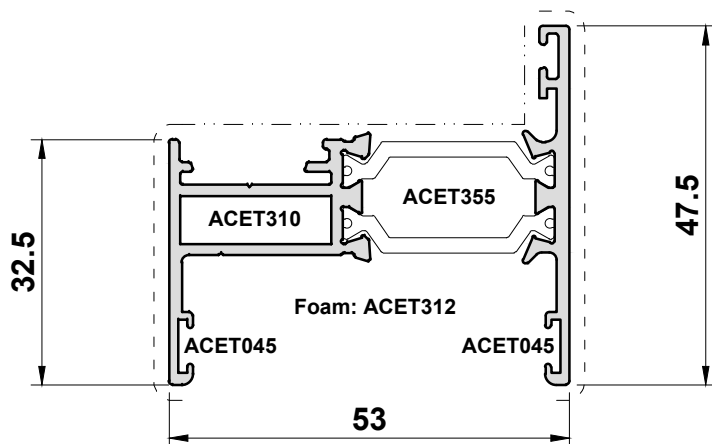


Scale 1:1

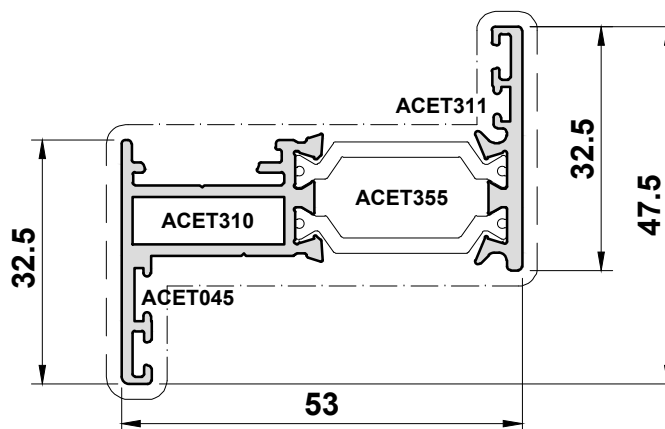
Primary Visible Side

Secondary Visible Side

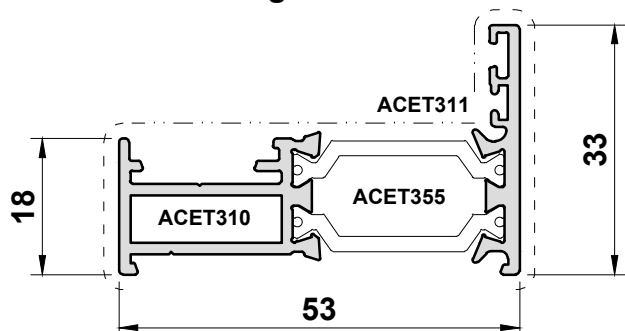
ETC310
Long Leg Outerframe



ETC420
Odd Leg Outer Frame



ETC313
Short Leg Outerframe

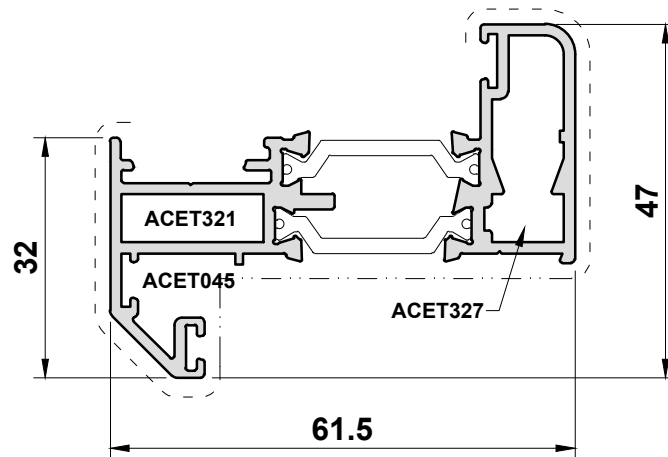


Scale 1:1

Primary Visible Side

Secondary Visible Side

ETC321
Chamfered Vent

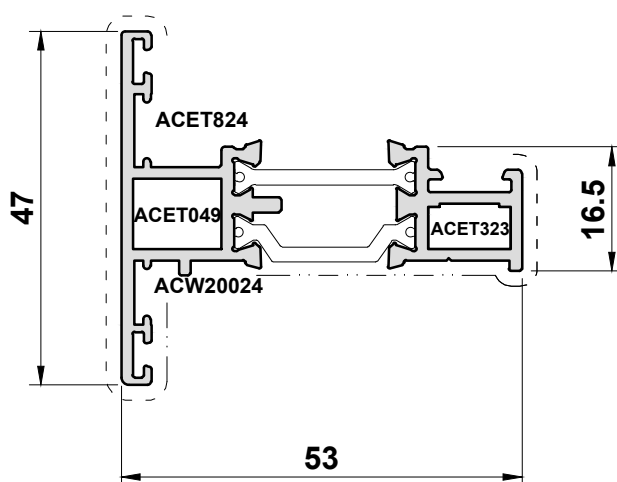


Scale 1:1

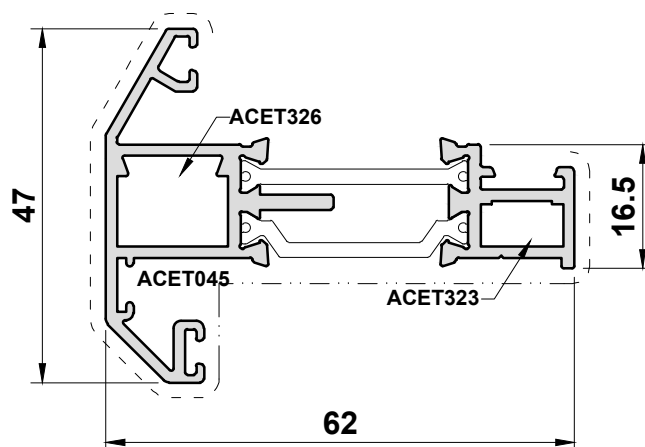
Primary Visible Side

Secondary Visible Side

ETC324 Internally Beaded Flat Vent



ETC326 Internally Beaded Chamfered Vent



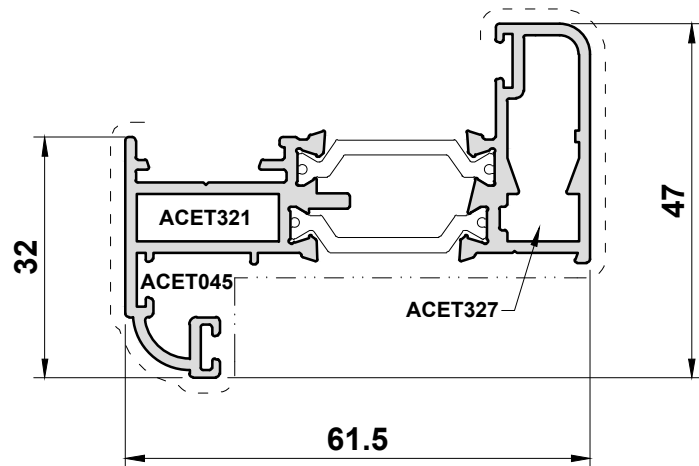
Scale 1:1

Primary Visible Side

Secondary Visible Side

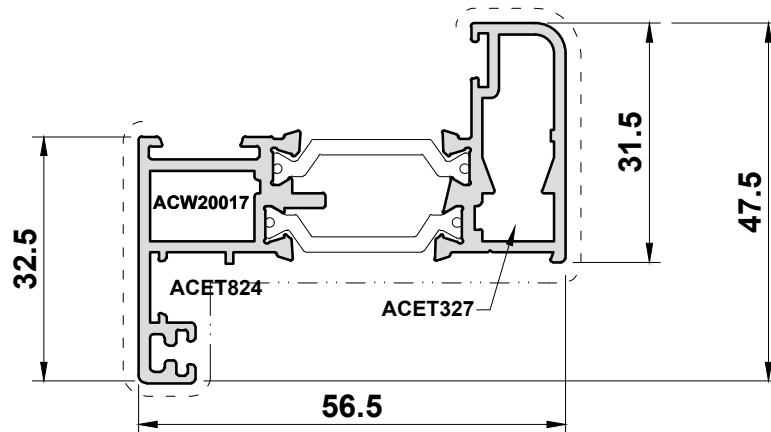
ETC327

Ovolo Vent



ETC328N

Externally Glazed Square Vent



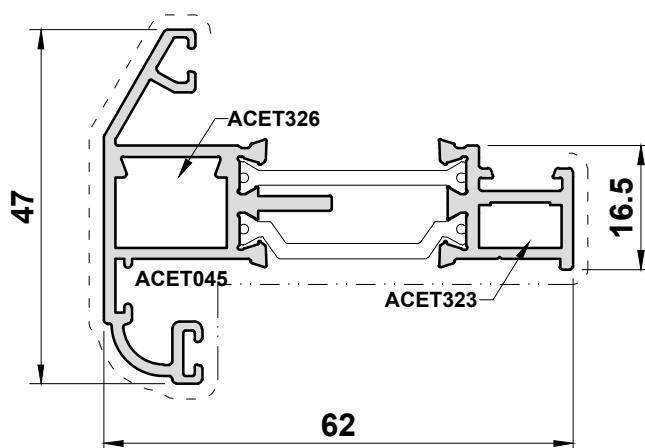
Scale 1:1

Primary Visible Side

Secondary Visible Side

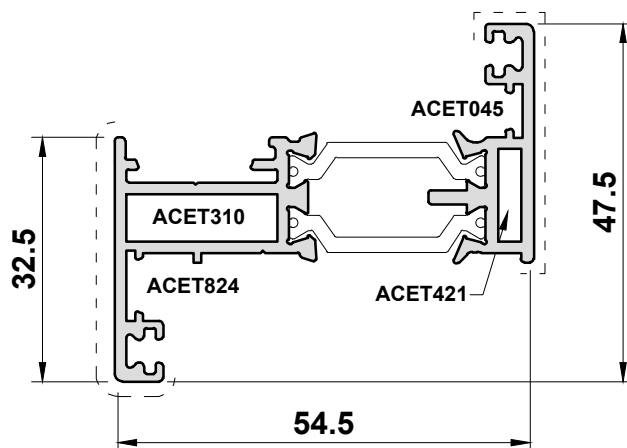
ETC329

Internally Beaded Ovolo Vent



ETC423

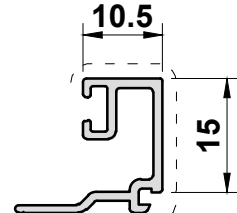
Vent/Odd Leg Outer Frame



Scale 1:1

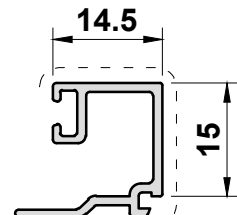
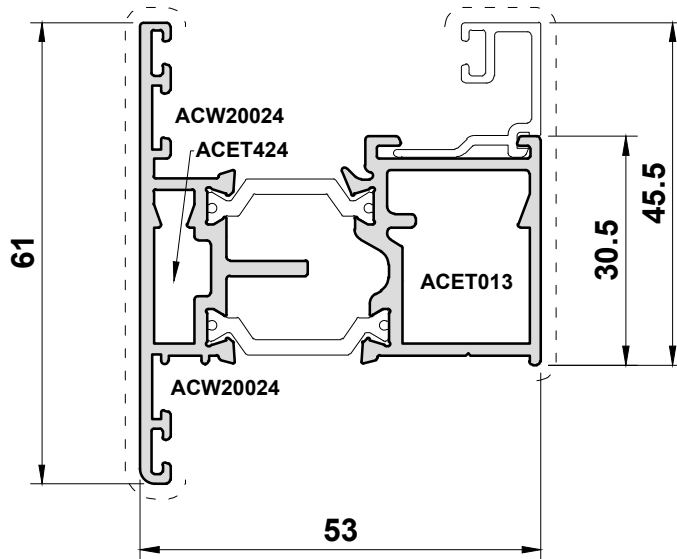
Primary Visible Side

Secondary Visible Side

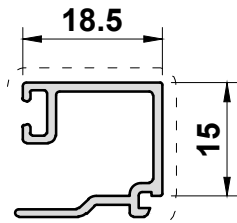


ETC360
(32mm Glazing)

ETC424N
Flat Internally Beaded Vent



ETC361
(28mm Glazing)



ETC362
(24mm Glazing)

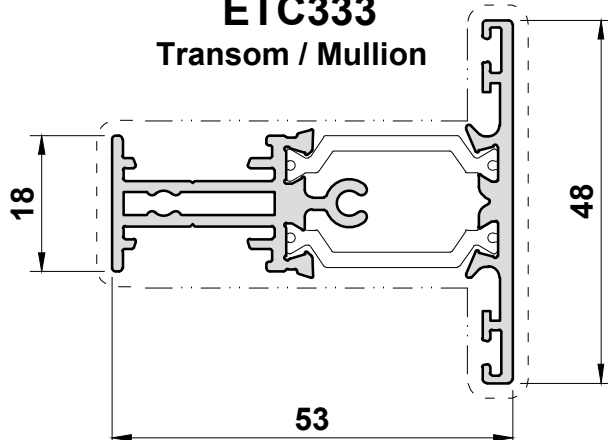
Scale 1:1

Primary Visible Side

Secondary Visible Side

ETC333

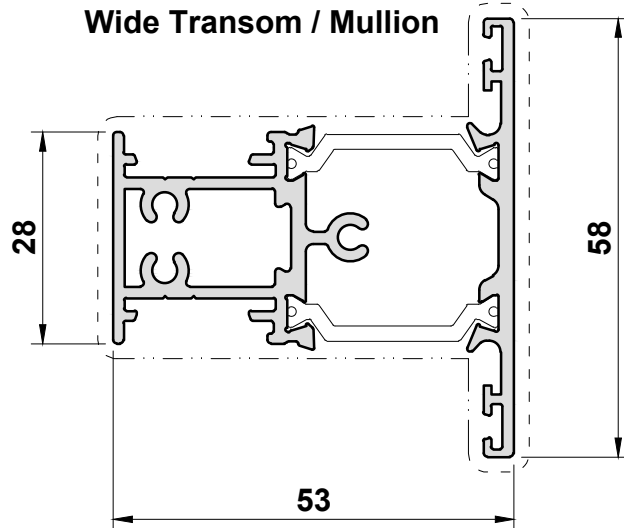
Transom / Mullion



Please note ETC333 is suitable for single vents & fixed lights only

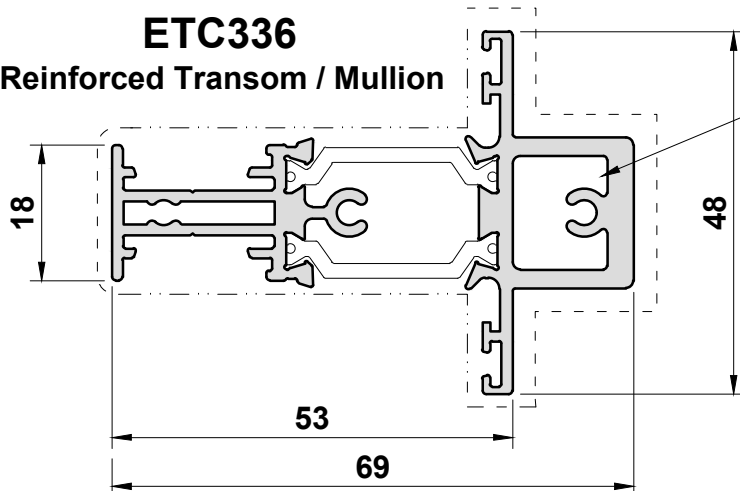
ETC335

Wide Transom / Mullion



ETC336

Reinforced Transom / Mullion

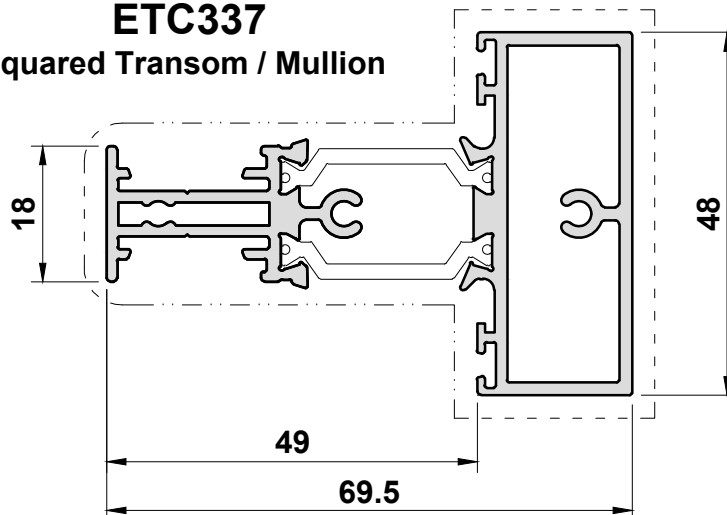


End Cap:
ACET339

Please note ETC336 is suitable for single vents & fixed lights only

ETC337

Squared Transom / Mullion



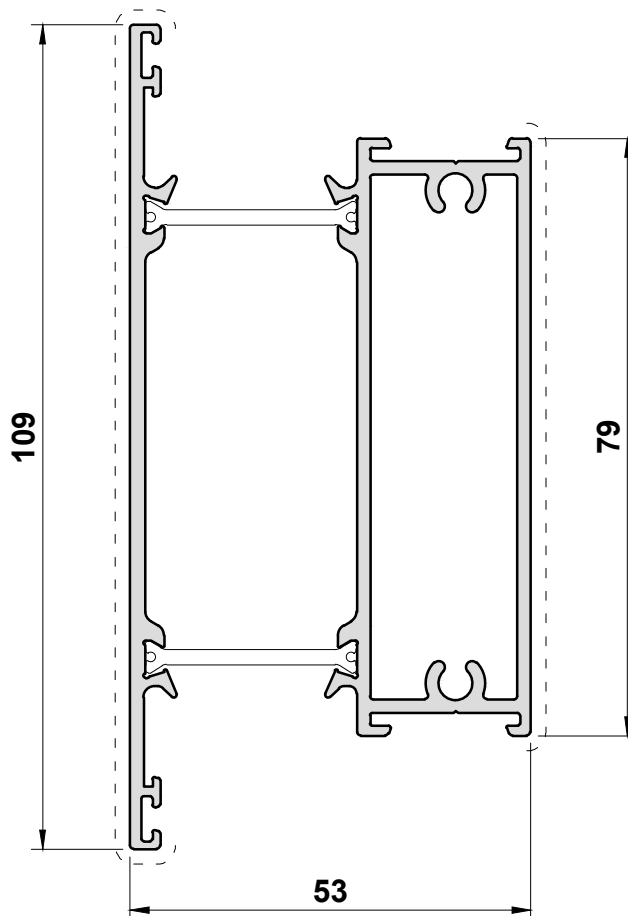
Scale 1:1

Primary Visible Side

Secondary Visible Side

ETD330

Transom / Mullion to match ETD030
(Recommended for fixed lights only)



ETD330 can be used with the outerframes shown in this manual providing the following beads & gasket are used in the midrail:

24mm = ETC362 with ACET841 gasket externally & ACW20034 gasket internally

28mm = ETC361 with ACET841 gasket externally & ACW20034 gasket internally

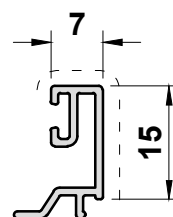
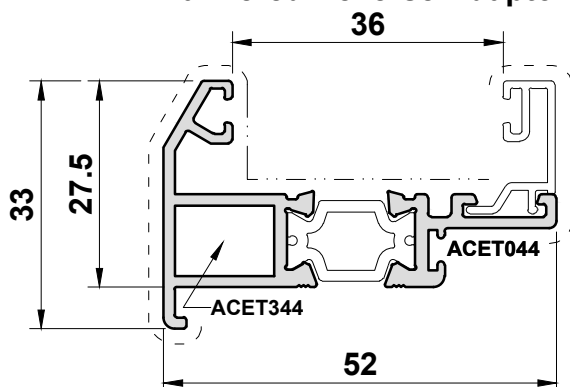
ETD330 is recommended for fixed lights only. The friction hinges and keeps in this manual are not compatible with this section as standard.

Scale 1:1

Primary Visible Side

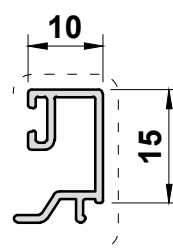
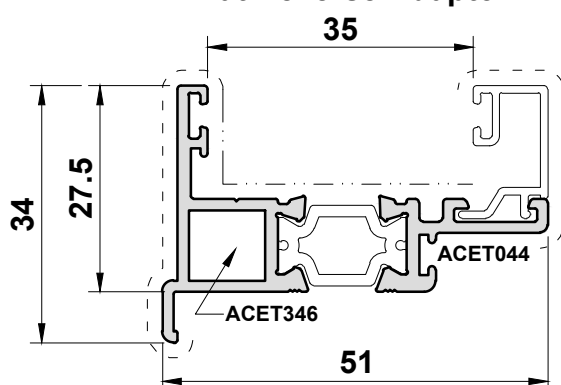
Secondary Visible Side

ETC344
Chamfered Reverse Adaptor



ETC372
(28mm Glazing)

ETC345
Flat Reverse Adaptor

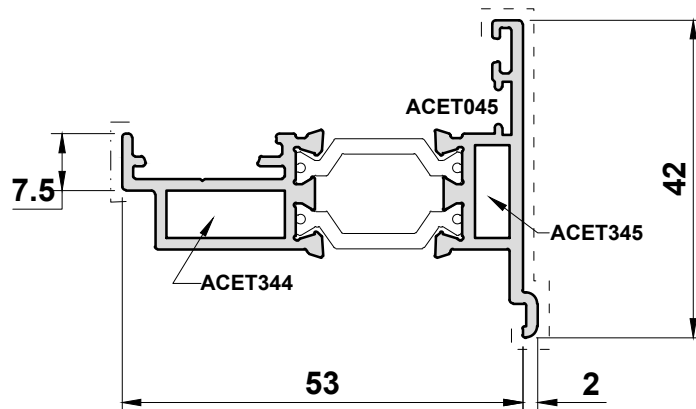


ETC373
(28mm Glazing)

Scale 1:1

Primary Visible Side

Secondary Visible Side



Scale 1:1

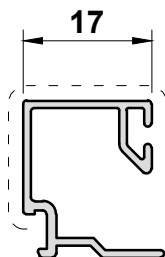
Primary Visible Side

Secondary Visible Side

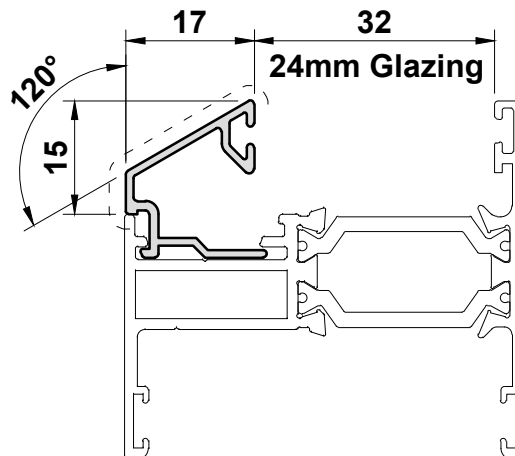
**24mm Glazing
External**

ETC150 ETC420
ETC302 ETC321
ETC303 ETC327
ETC304 ETC333
ETC305 ETC334
ETC306 ETC335
ETC336

ETC370

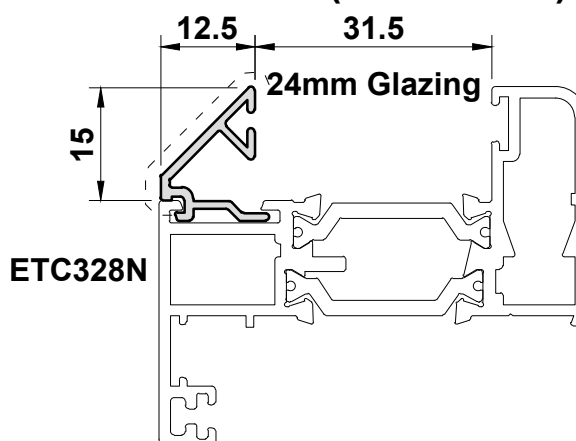


ETC364



**24mm Glazing
Internal**

ETC378 (chamfered)



Scale 1:1

See Page E19 for Glazing Schedule

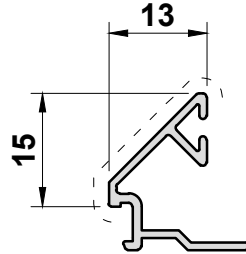
Primary Visible Side

Secondary Visible Side

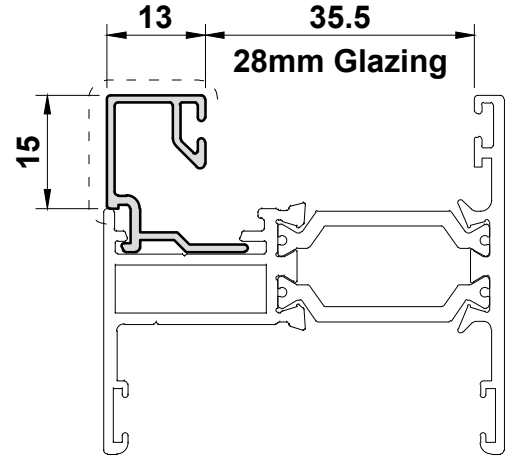
**28mm Glazing
External**

ETC150 ETC420
ETC302 ETC321
ETC303 ETC327
ETC304 ETC333
ETC305 ETC334
ETC306 ETC335
ETC336

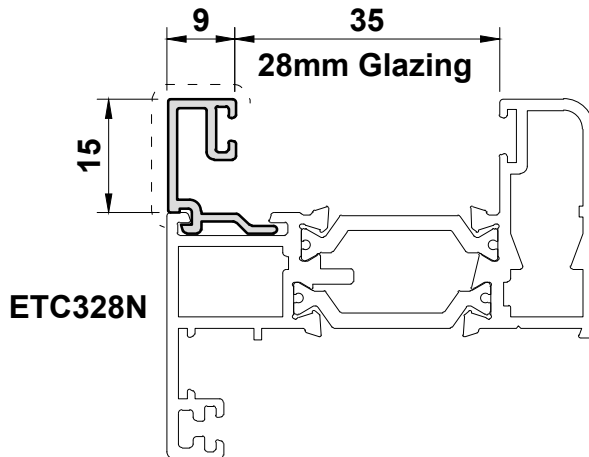
ETC375



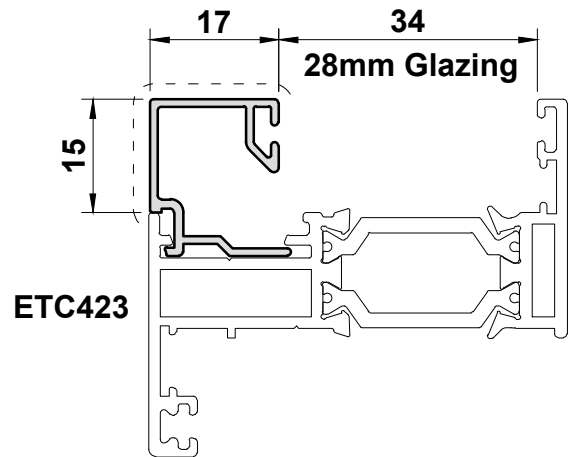
ETC371



ETC366



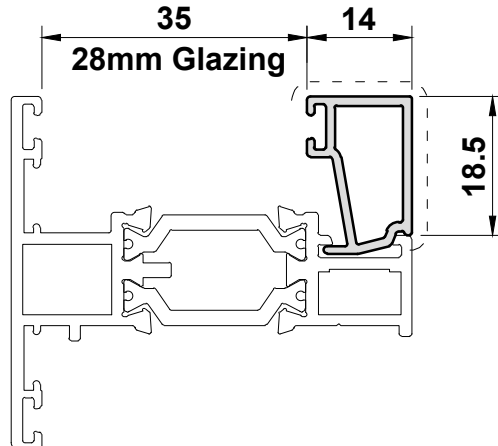
ETC370



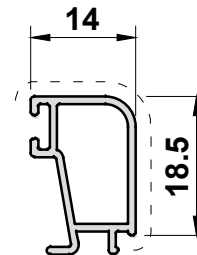
**28mm Glazing
Internal**

ETC324N
ETC326
ETC329

ETC369



ETC273



See Page E20 for Glazing Schedule

Scale 1:1

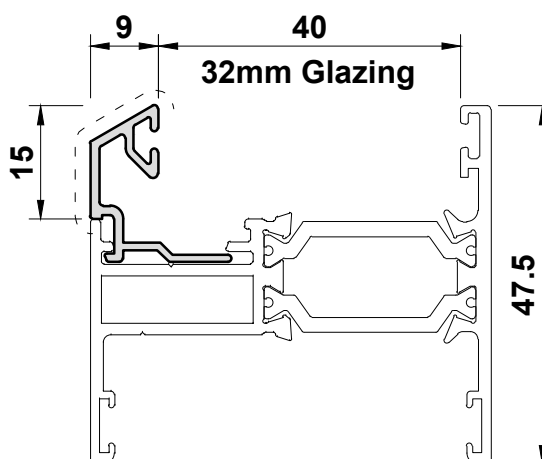
Primary Visible Side

Secondary Visible Side

**32mm Glazing
External**

ETC150 ETC420
ETC302 ETC321
ETC303 ETC327
ETC304 ETC333
ETC305 ETC334
ETC306 ETC335
ETC336

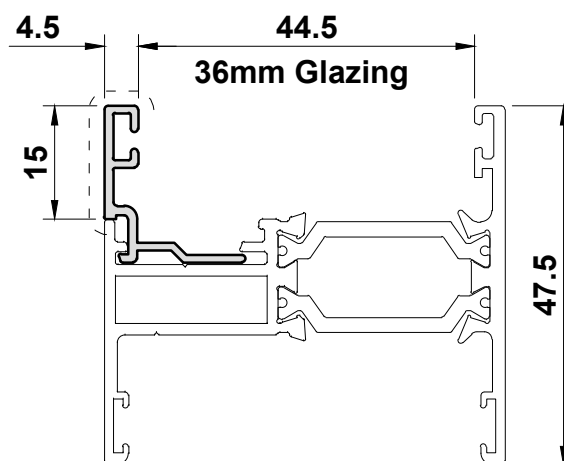
ETC379



**36mm Glazing
External**

ETC150 ETC420
ETC302 ETC321
ETC303 ETC327
ETC304 ETC333
ETC305 ETC334
ETC306 ETC335
ETC336

ETC376



Scale 1:1

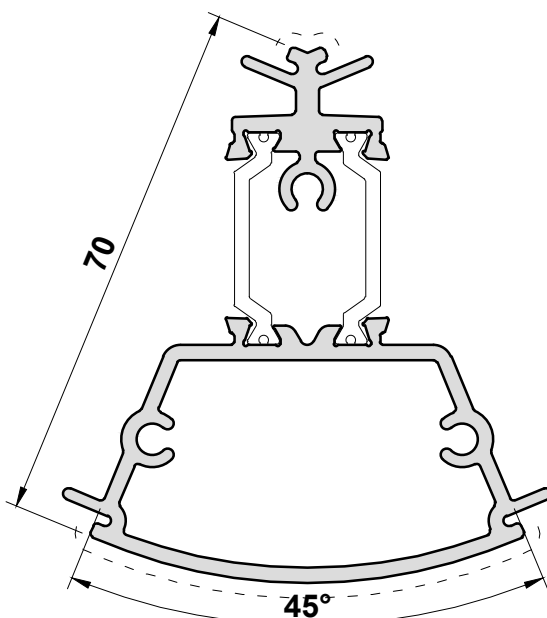
See Page E21 for Glazing Schedule

Primary Visible Side

Secondary Visible Side

ETC385

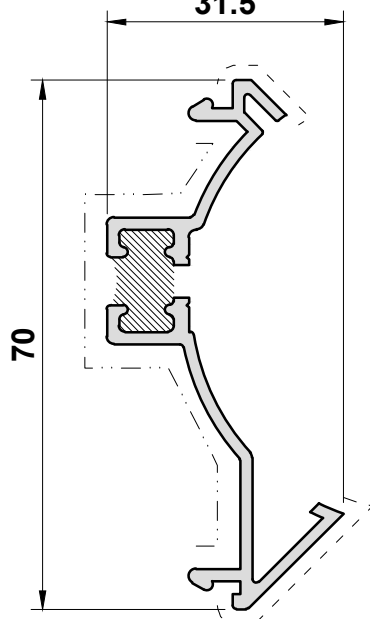
135° Bay Pole For 70mm Outer Frame



ETC150

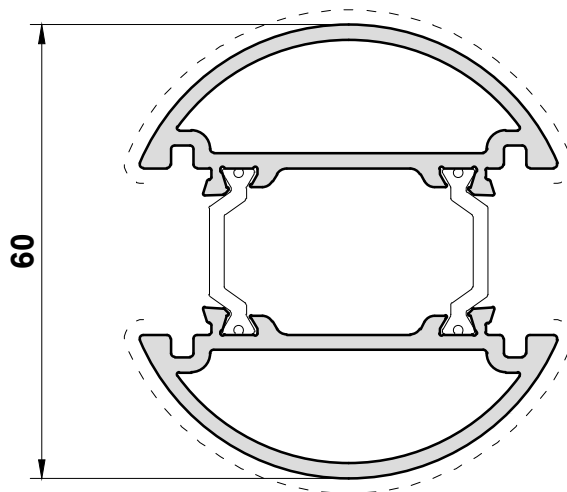
Bay Pole Adaptor

31.5



ETC869

Bay Pole



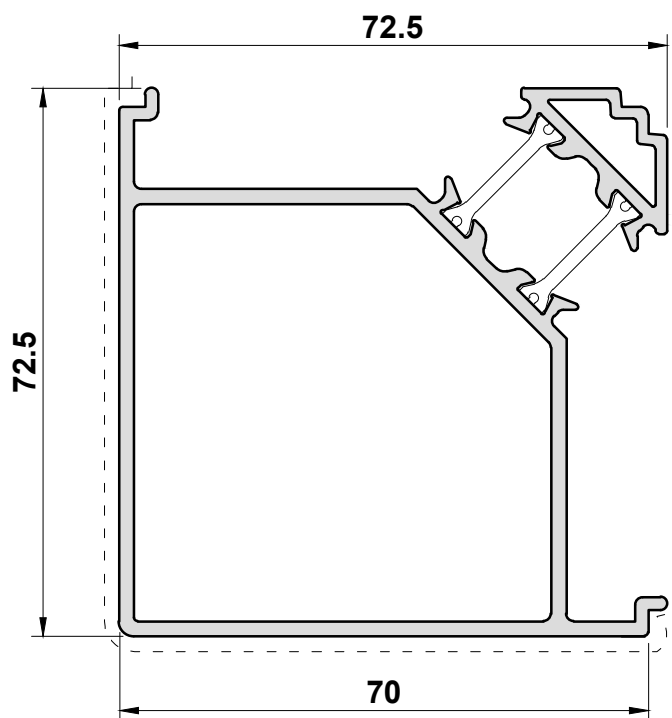
Note: ETC150 is NOT available in dual colour

Scale 1:1

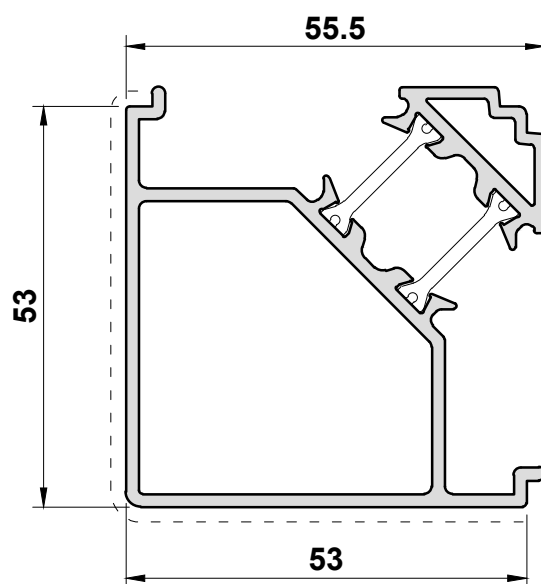
Primary Visible Side

Secondary Visible Side

ETC048
70mm 90° Corner Post



ETC347
90° Corner Post

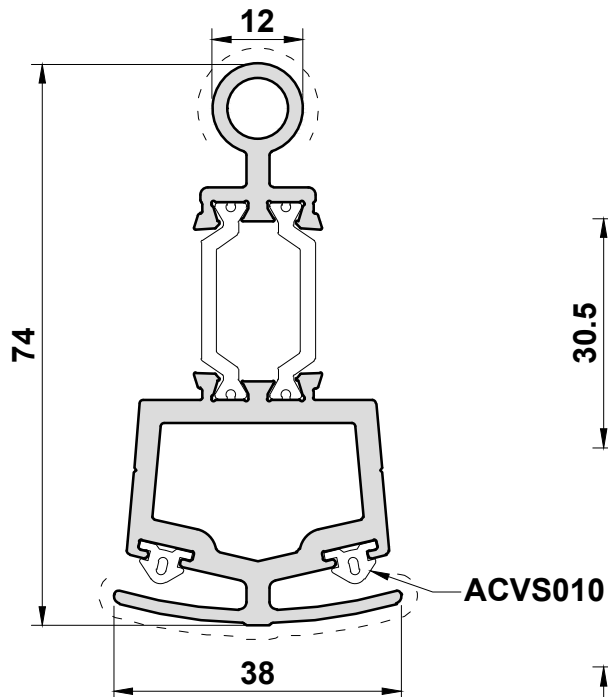


Scale 1:1

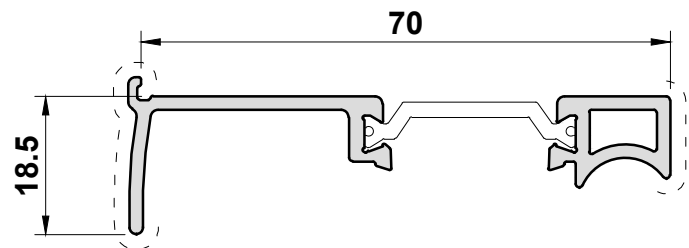
Primary Visible Side

Secondary Visible Side

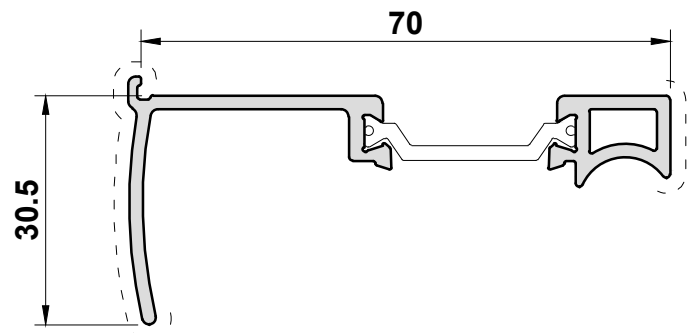
ETC080
Bay Pole



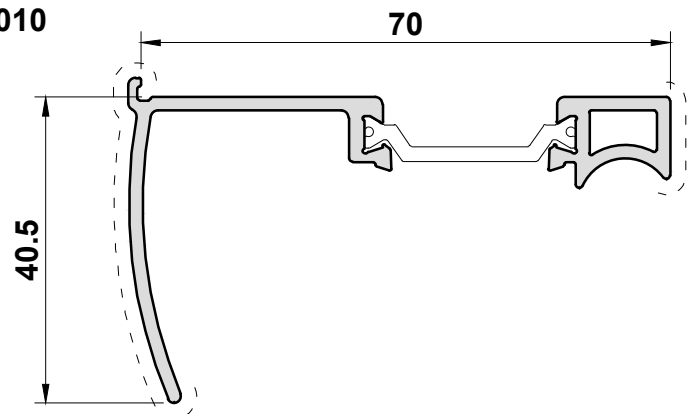
ETC081
169° - 150°
Bay Pole Adaptor



ETC082
149° - 130°
Bay Pole Adaptor



ETC083
129° - 115°
Bay Pole Adaptor

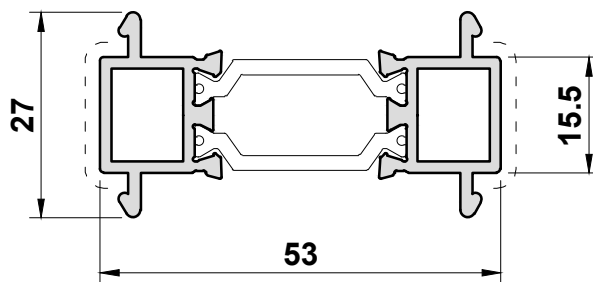


Scale 1:1

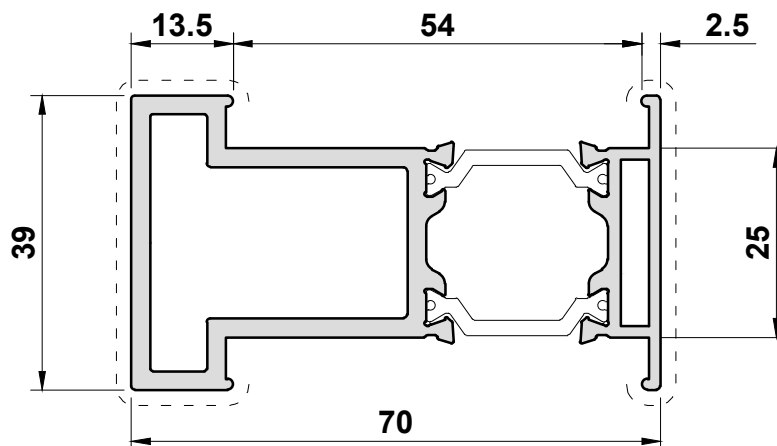
Primary Visible Side

Secondary Visible Side

ETC353
Coupler



ETC356
Coupler



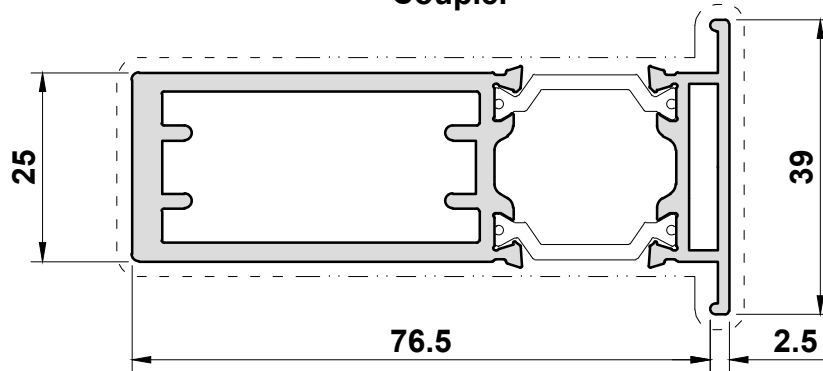
Scale 1:1

Primary Visible Side

Secondary Visible Side

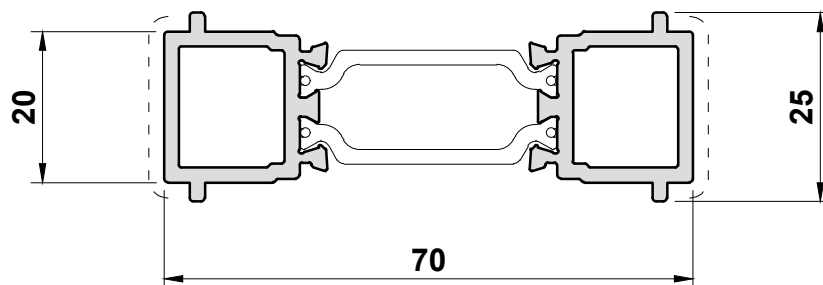
ETC357

Coupler



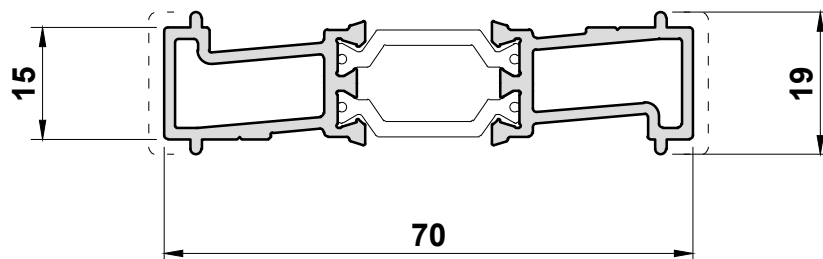
ETC853

Flush 70mm Coupler



UN3000

Horizontal Coupler

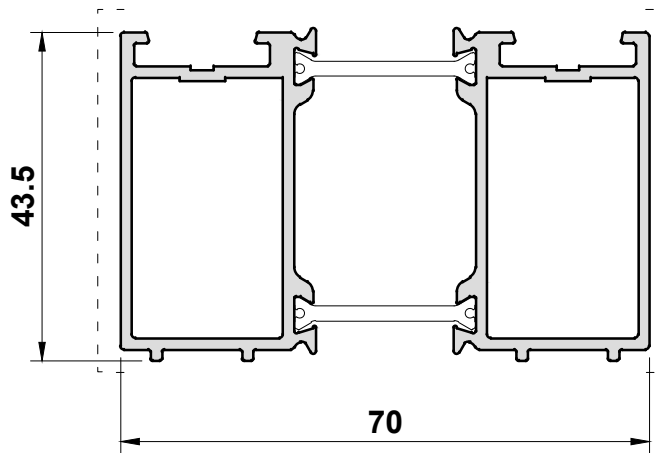


Scale 1:1

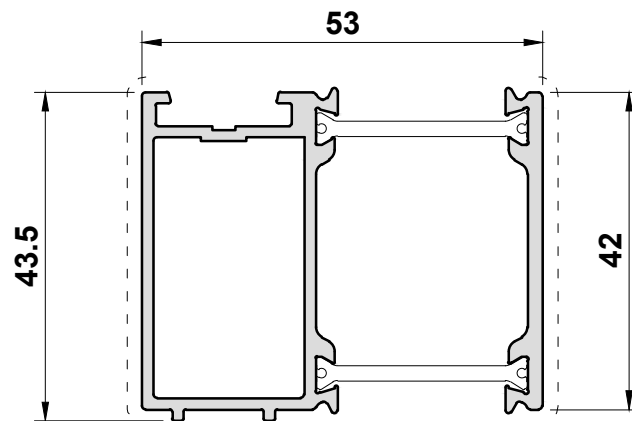
Primary Visible Side

Secondary Visible Side

DV515
70mm Head Extension



ETC352
Head Extension

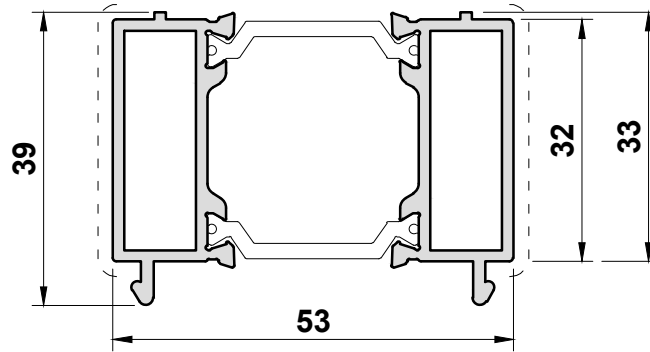


Scale 1:1

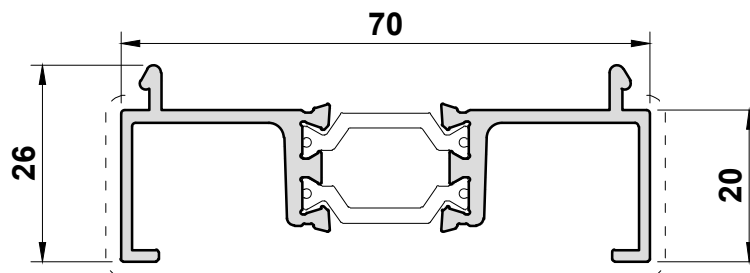
Primary Visible Side

Secondary Visible Side

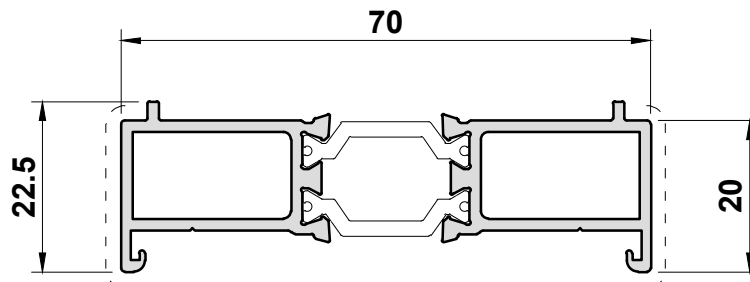
ETC358
Head Extension



ETC559
20x70mm Frame Extension



ETD057
20x70mm Universal Frame Extension

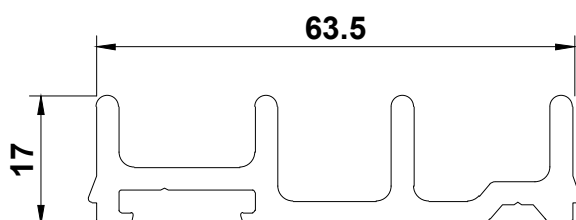


Scale 1:1

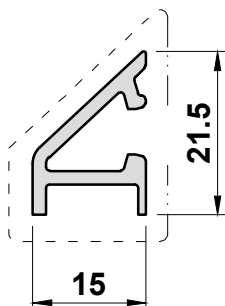
Primary Visible Side

Secondary Visible Side

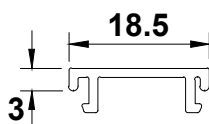
ETC052
PVC Closer / Insert



VL72
Drip / Weather Bar
End Caps: ACVL059



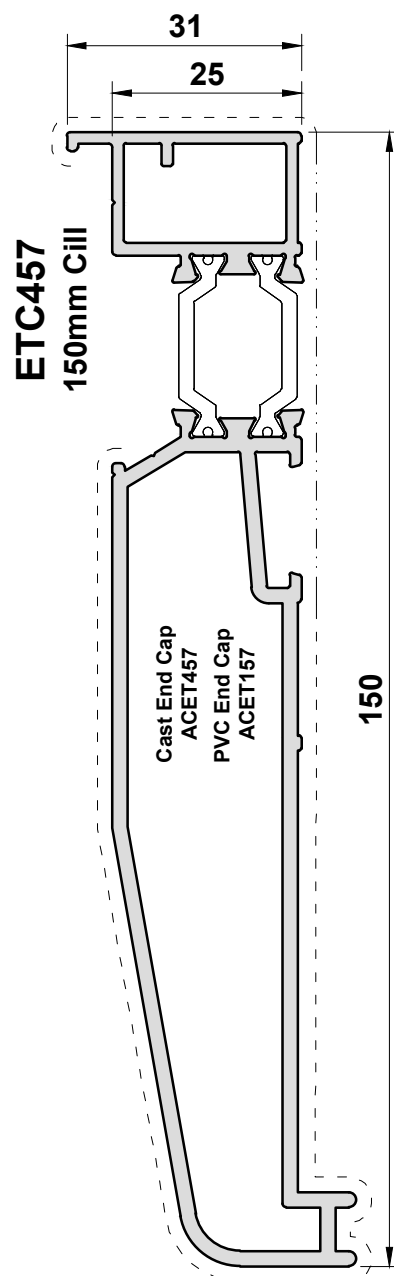
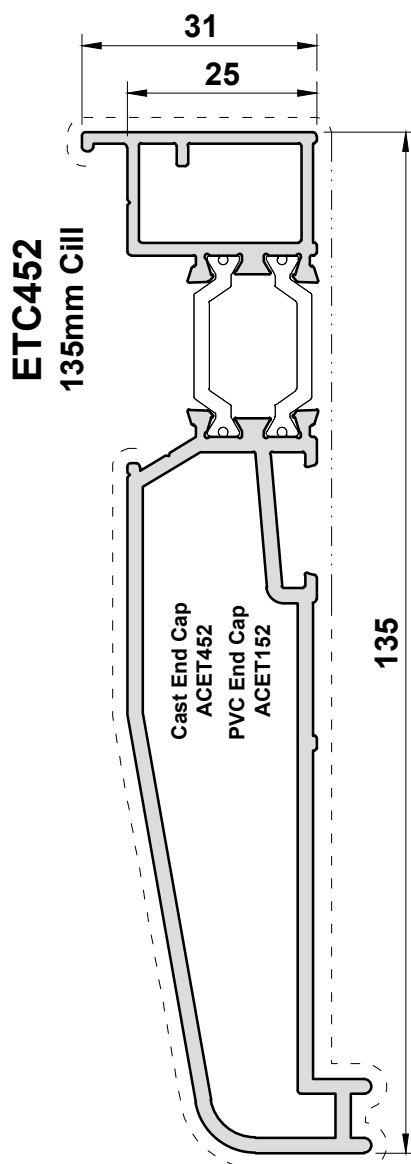
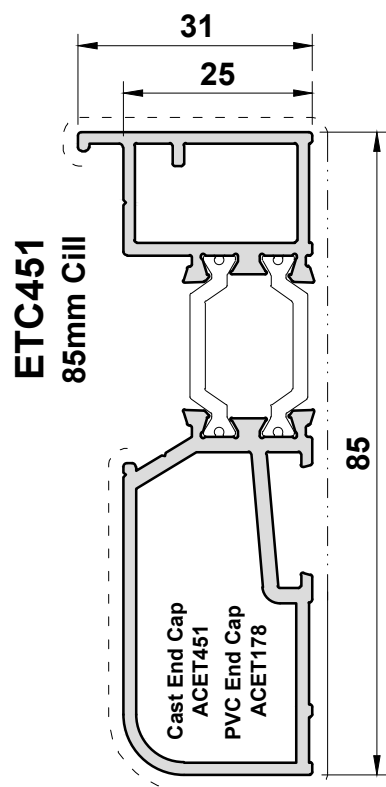
PCX41
PVC Infill



Scale 1:1

Primary Visible Side

Secondary Visible Side

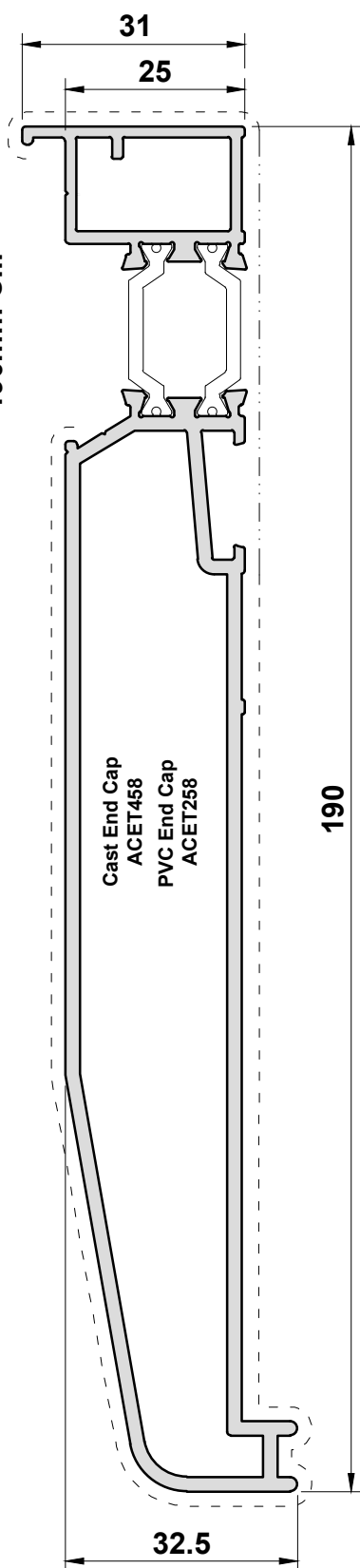


Scale 1:1

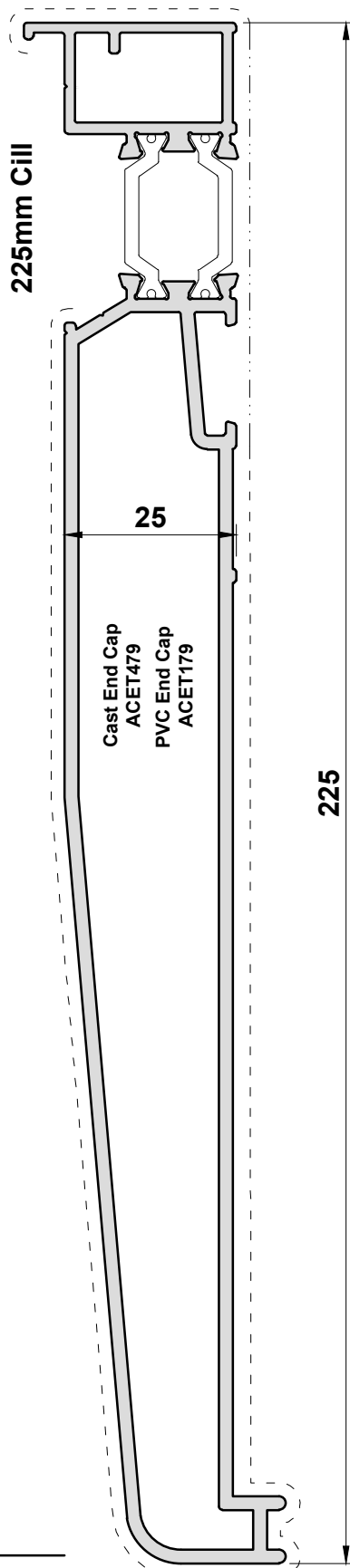
Primary Visible Side

Secondary Visible Side

ETC458
190mm Cill



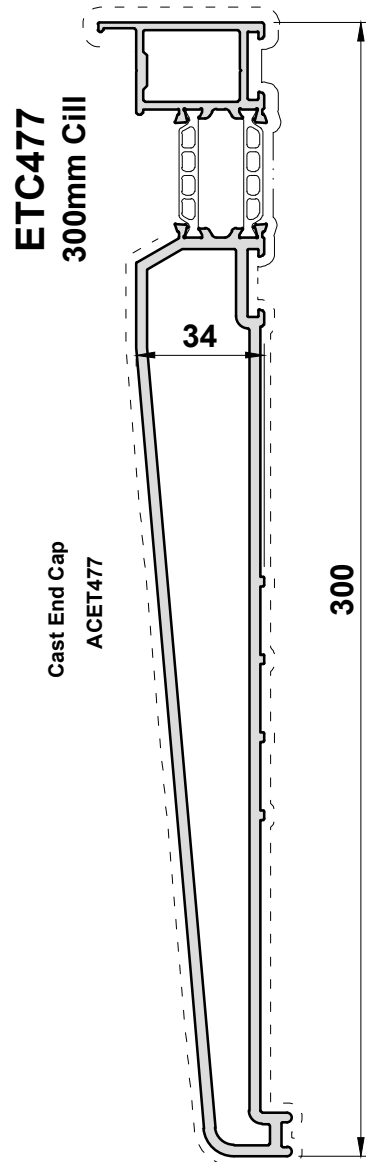
ETC479
225mm Cill



Scale 1:1

Primary Visible Side

Secondary Visible Side



Scale 1:2

Section B

Accessories

Photos & Drawings

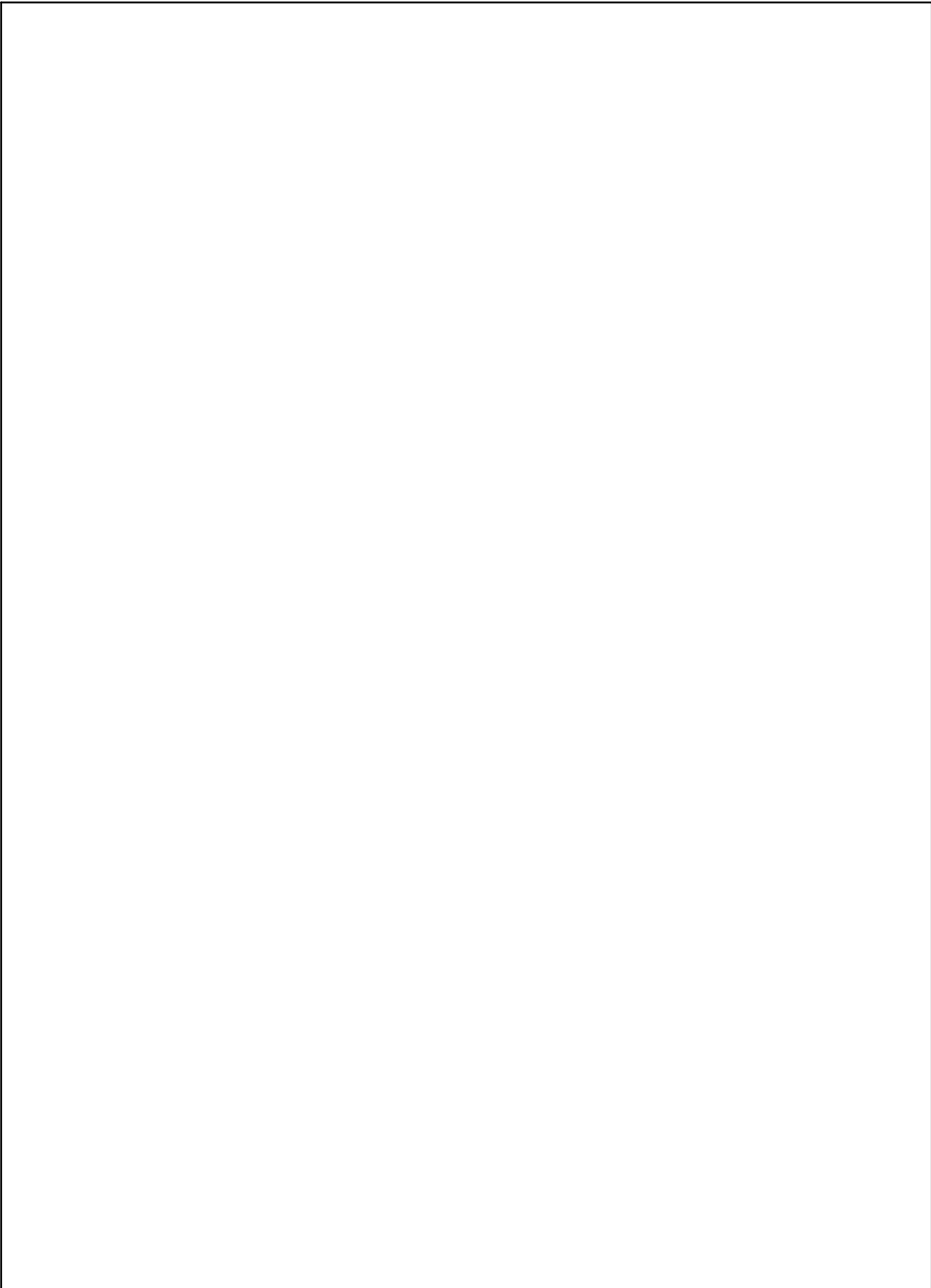


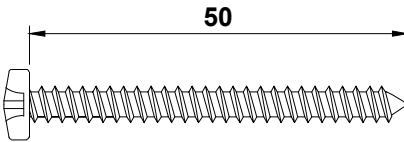
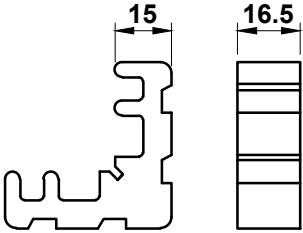
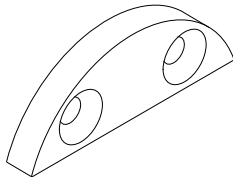
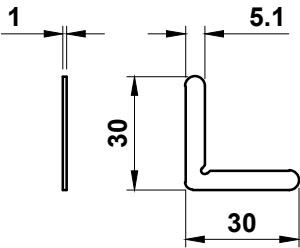
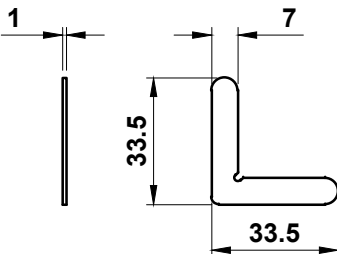
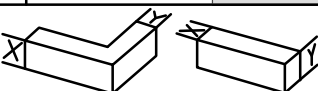
Image	Part Code	Pack	Unit	Application	Colour
	ACDR052 No. 10 x 50 S/S Self Tapping Pan Head Screw	200	pack		MF ☒
					SA ☐
					KL ☐
					HP ☐
					BSC ☐
					SMC ☐
					PC ☐
					W ☐
					Z ☐
	ACET013 Corner Cleat	24	pack	ETC424N	MF ☒
					SA ☐
					KL ☐
					HP ☐
					BSC ☐
					SMC ☐
					PC ☐
					W ☐
					Z ☐
	ACET041 Cill Nose Bracket S/S	1	each	ETC457 ETC458 ETC479	MF ☒
					SA ☐
					KL ☐
					HP ☐
					BSC ☐
					SMC ☐
					PC ☐
					W ☐
					Z ☐
	ACET044 Stainless Steel Chevron	100	pack	ETC344 ETC345 ETC346N	MF ☒
					SA ☐
					KL ☐
					HP ☐
					BSC ☐
					SMC ☐
					PC ☐
					W ☐
					Z ☐
	ACET045 Stainless Steel Chevron	100	pack	ETC302 ETC304 ETC305 ETC306 ETC308 ETC310 ETC321 ETC326 ETC327 ETC329 ETC343 ETC420 ETC423	MF ☒
					SA ☐
					KL ☐
					HP ☐
					BSC ☐
					SMC ☐
					PC ☐
					W ☐
					Z ☐
 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 BSC = Brushed Satin Chrome SMC = Smokey Chrome PC = Polished Chrome	W = White Z = Black		

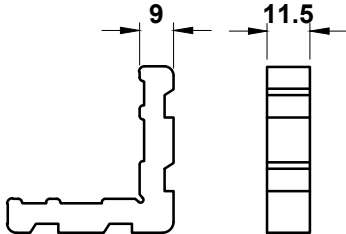
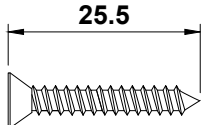
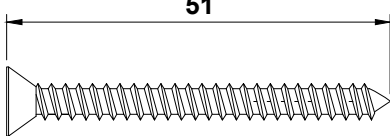
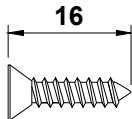
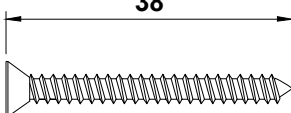
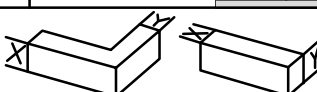
Image	Part Code	Pack	Unit	Application	Colour
	ACET049 Corner Cleat	24	pack	ETC324	MF
					SA
					KL
					HP
					BSC
					SMC
					PC
					W
					Z
	ACET060 No. 7 x 25 S/S Self Tapping CSK Screw	100	pack		MF
					SA
					KL
					HP
					BSC
					SMC
					PC
					W
					Z
	ACET062 No. 10 x 50 S/S Self Tapping CSK Screw	100	pack		MF
					SA
					KL
					HP
					BSC
					SMC
					PC
					W
					Z
	ACET064 No. 8 x 16 S/S Self Tapping Pan Head Screw	100	pack	Friction Hinges	MF
					SA
					KL
					HP
					BSC
					SMC
					PC
					W
					Z
	ACET066 No. 7 x 38 S/S Self Tapping CSK Screw	100	pack		MF
					SA
					KL
					HP
					BSC
					SMC
					PC
					W
					Z
 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 BSC = Brushed Satin Chrome SMC = Smokey Chrome PC = Polished Chrome	W = White Z = Black		

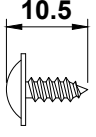
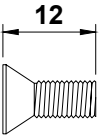
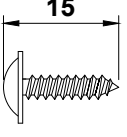
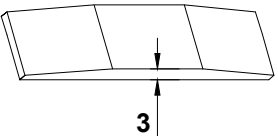
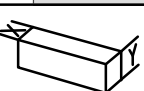
Image	Part Code	Pack	Unit	Application	Colour
	ACET068 No. 8 x 10 S/S Self Tapping Flange Screw	100	pack	Friction Hinges	MF ☒
					SA ☐
					KL ☐
					HP ☐
					BSC ☐
					SMC ☐
					PC ☐
					W ☐
					Z ☐
	ACET069 M5 x 12 S/S CSK Machine Screw	100	pack		MF ☒
					SA ☐
					KL ☐
					HP ☐
					BSC ☐
					SMC ☐
					PC ☐
					W ☐
					Z ☐
	ACET070 No. 8 x 13 S/S Self Tapping Flange Screw	100	pack	Friction Hinges	MF ☒
					SA ☐
					KL ☐
					HP ☐
					BSC ☐
					SMC ☐
					PC ☐
					W ☐
					Z ☐
	ACET080 Cockspur Handle	1	each	ACET083	MF ☐
					SA ☒
					KL ☐
					HP ☐
					BSC ☐
					SMC ☐
					PC ☐
					W ☒
					Z ☒
	ACET083 3mm Wedge	100	pack	ACET080	MF ☐
					SA ☐
					KL ☐
					HP ☐
					BSC ☐
					SMC ☐
					PC ☐
					W ☒
					Z ☒
 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 BSC = Brushed Satin Chrome SMC = Smokey Chrome PC = Polished Chrome	W = White Z = Black	 	

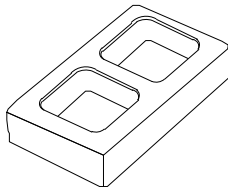
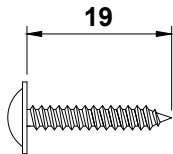
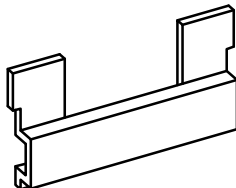
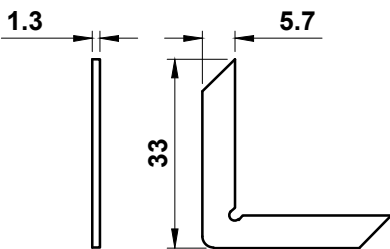
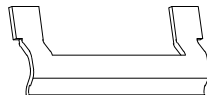
Image	Part Code	Pack	Unit	Application	Colour	
	ACET093 Packers	25	pack	ETC344 ETC345 ETC346	MF	
					SA	
					KL	
					HP	
					BSC	
					SMC	
					PC	
					W	
					Z	✓
	ACET099 No. 8 x 19 S/S Self Tapping Flange Screw	100	pack	Friction Hinges	MF	✓
					SA	
					KL	
					HP	
					BSC	
					SMC	
					PC	
					W	
					Z	
	ACET114 Anti-Twist Clip	100	pack	ETC333	MF	✓
					SA	
					KL	
					HP	
					BSC	
					SMC	
					PC	
					W	
					Z	
	ACET115 Outer Frame Chevron - For Fixed Light Only	100	pack		MF	
					SA	
					KL	
					HP	
					BSC	
					SMC	
					PC	
					W	
					Z	
	ACET125 Anti-Twist Clip	100	pack	ETC335	MF	✓
					SA	
					KL	
					HP	
					BSC	
					SMC	
					PC	
					W	
					Z	
 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 BSC = Brushed Satin Chrome SMC = Smokey Chrome PC = Polished Chrome		W = White Z = Black		

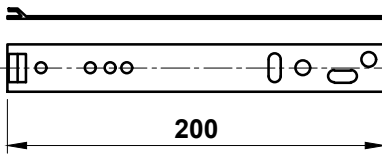
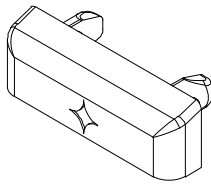
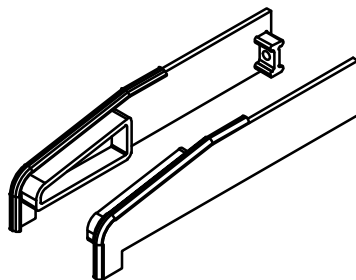
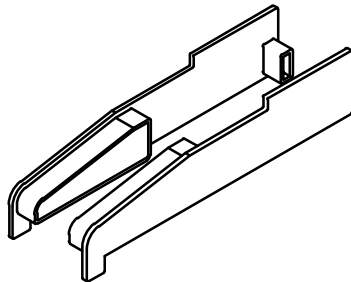
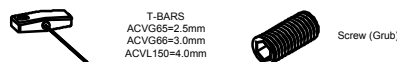
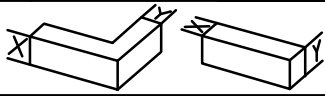
Image	Part Code	Pack	Unit	Application	Colour	
 200	ACET130 Galvanised Steel Fixing Strap 200mm x 25mm x 1.5mm	100	pack	ETC302 ETC303 ETC304 ETC305 ETC306 ETC308 ETC310 ETC313	MF	✓
					SA	
					KL	
					HP	
					BSC	
					SMC	
					PC	
					W	
					Z	
	ACET131 Drainage Cover Cap For colour matched drainage caps, please order ACET432	100	pack		MF	
					SA	
					KL	
					HP	
					BSC	
					SMC	
					PC	
					W	✓
					Z	✓
	ACET152 Cill End Cap (pair)	10	pair	ACET452	MF	
					SA	
					KL	
					HP	
					BSC	
					SMC	
					PC	
					W	✓
					Z	✓
	ACET157 Cill End Cap (pair)	10	pair	ETC457	MF	
					SA	
					KL	
					HP	
					BSC	
					SMC	
					PC	
					W	✓
					Z	✓
	ACET165 Espagnolette Handle 9mm Spindle	1	each	Shootbolt Locking	MF	
					SA	
					KL	
					HP	
					BSC	
					SMC	
					PC	
					W	✓
					Z	✓
 T-BARS ACVG65=2.5mm ACVG66=3.0mm ACVL150=4.0mm	MF = Mill Finish SA = Silver Anodised KL = Basic Colour HP = Special Colour BSC = Brushed Satin Chrome SMC = Smokey Chrome PC = Polished Chrome	W = White Z = Black				

Image	Part Code	Pack	Unit	Application	Colour	
	ACET171 Stainless Steel Chevron	100	pack	ETC324	MF	✓
					SA	
					KL	
					HP	
					BSC	
					SMC	
					PC	
					W	
					Z	
	ACET178 Cill End Cap (pair)	10	pair	ETC451	MF	
					SA	
					KL	
					HP	
					BSC	
					SMC	
					PC	
					W	✓
					Z	✓
	ACET179 Cill End Cap (pair)	10	pair	ETC479	MF	
					SA	
					KL	
					HP	
					BSC	
					SMC	
					PC	
					W	✓
					Z	✓
	ACET258 Cill End Cap (pair)	10	pair	ETC458	MF	
					SA	
					KL	
					HP	
					BSC	
					SMC	
					PC	
					W	✓
					Z	✓
	ACET310 Corner Cleat	24	pack	ETC302 ETC303 ETC304 ETC305 ETC306 ETC308 ETC310 ETC313 ETC420 ETC423	MF	✓
					SA	
					KL	
					HP	
					BSC	
					SMC	
					PC	
					W	
					Z	
 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 BSC = Brushed Satin Chrome SMC = Smokey Chrome PC = Polished Chrome	W = White Z = Black			

Image	Part Code	Pack	Unit	Application	Colour	
	ACET311 Stainless Steel Chevron	50	pack	ETC302 ETC303 ETC304 ETC305 ETC306 ETC313 ETC420	MF	✓
					SA	
					KL	
					HP	
					BSC	
					SMC	
					PC	
					W	
					Z	
	ACET312 Foam Infill 1250mm Lengths	1	each	ETC310	MF	
					SA	
					KL	
					HP	
					BSC	
					SMC	
					PC	
					W	
					Z	
	ACET314 Foam Infill 1250mm Lengths	1	each		MF	
					SA	
					KL	
					HP	
					BSC	
					SMC	
					PC	
					W	
					Z	
	ACET315 Foam Infill 1250mm Lengths	1	each		MF	
					SA	
					KL	
					HP	
					BSC	
					SMC	
					PC	
					W	
					Z	
	ACET316 Cleat	1	each	ETC302 ETC304 ETC305	MF	
					SA	
					KL	
					HP	
					BSC	
					SMC	
					PC	
					W	
					Z	
	MF = Mill Finish SA = Silver Anodised KL = Basic Colour HP = Special Colour BSC = Brushed Satin Chrome SMC = Smokey Chrome PC = Polished Chrome	W = White Z = Black				

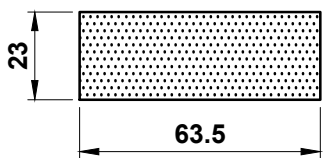
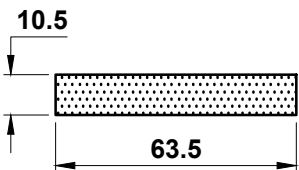
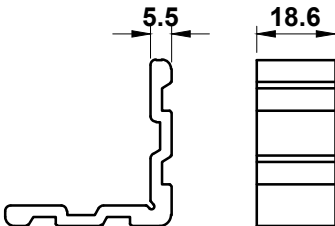
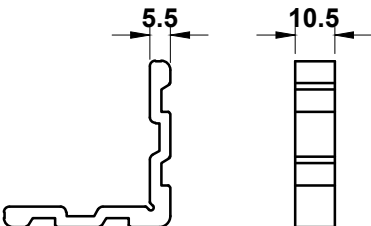
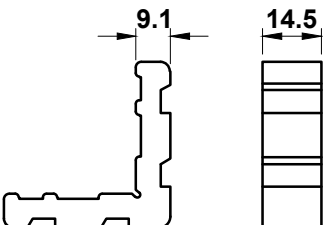
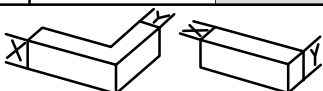
Image	Part Code	Pack	Unit	Application	Colour
	ACET317 Foam Infill 1250mm Lengths	1	each	ETC303	MF
					SA
					KL
					HP
					BSC
					SMC
					PC
					W
					Z
	ACET318 Foam Infill 1250mm Lengths	1	each	ETC305	MF
					SA
					KL
					HP
					BSC
					SMC
					PC
					W
					Z
	ACET321 Outer Corner Cleat	24	pack	ETC321 ETC327	MF
					SA
					KL
					HP
					BSC
					SMC
					PC
					W
					Z
	ACET323 Inner Corner Cleat	24	pack	ETC324 ETC326 ETC329	MF
					SA
					KL
					HP
					BSC
					SMC
					PC
					W
					Z
	ACET326 Corner Cleat	24	pack	ETC326 ETC329	MF
					SA
					KL
					HP
					BSC
					SMC
					PC
					W
					Z
 	MF = Mill Finish SA = Silver Anodised KL = Basic Colour HP = Special Colour BSC = Brushed Satin Chrome SMC = Smokey Chrome PC = Polished Chrome	W = White Z = Black			

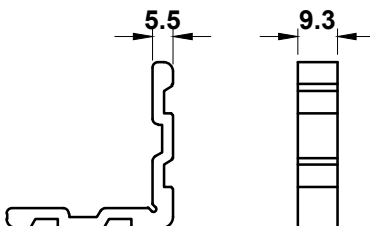
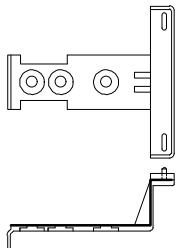
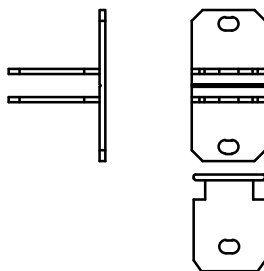
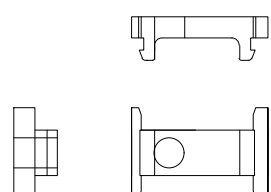
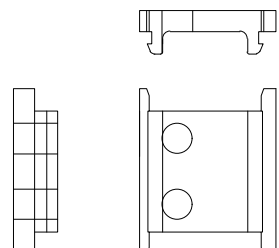
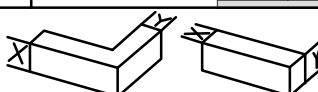
Image	Part Code	Pack	Unit	Application	Colour
	ACET327 Inner Corner Cleat	24	pack	ETC321 ETC327 ETC328N	MF ☒
					SA ☐
					KL ☐
					HP ☐
					BSC ☐
					SMC ☐
					PC ☐
					W ☐
					Z ☐
	ACET332 Transom End Cap for French Casement	10	pack	ETC333	MF ☐
					SA ☐
					KL ☐
					HP ☐
					BSC ☐
					SMC ☐
					PC ☐
					W ☒
					Z ☒
	ACET333 Cruciform Block	10	pack	ETC333	MF ☒
					SA ☐
					KL ☐
					HP ☐
					BSC ☐
					SMC ☐
					PC ☐
					W ☐
					Z ☐
	ACET334 Transom Locator Block	100	pack	ETC333	MF ☐
					SA ☐
					KL ☐
					HP ☐
					BSC ☐
					SMC ☐
					PC ☐
					W ☐
					Z ☒
	ACET335 Transom Locator Block	100	pack	ETC335	MF ☐
					SA ☐
					KL ☐
					HP ☐
					BSC ☐
					SMC ☐
					PC ☐
					W ☐
					Z ☒
 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 BSC = Brushed Satin Chrome SMC = Smokey Chrome PC = Polished Chrome W = White Z = Black				

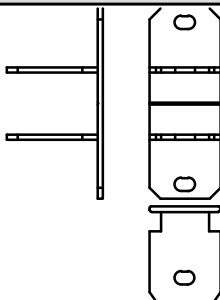
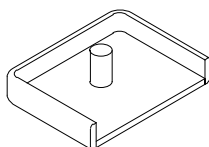
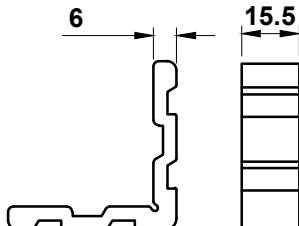
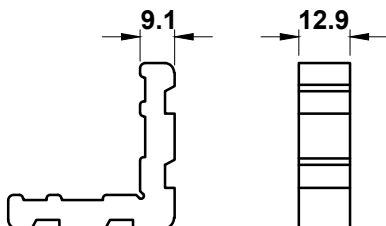
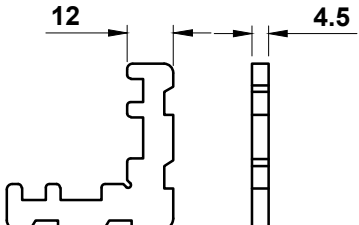
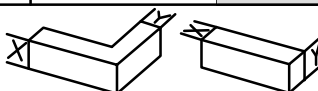
Image	Part Code	Pack	Unit	Application	Colour
	ACET336 Cruciform Block	10	pack	ETC335	MF ☒
					SA ☐
					KL ☐
					HP ☐
					BSC ☐
					SMC ☐
					PC ☐
					W ☐
					Z ☐
	ACET339 End Cap	50	pack	ETC336	MF ☐
					SA ☐
					KL ☐
					HP ☐
					BSC ☐
					SMC ☐
					PC ☐
					W ☐
					Z ☒
	ACET343 Corner Cleat	24	pack	ETC343	MF ☐
					SA ☐
					KL ☐
					HP ☐
					BSC ☐
					SMC ☐
					PC ☐
					W ☐
					Z ☐
	ACET344 Corner Cleat	24	pack	ETC344	MF ☒
					SA ☐
					KL ☐
					HP ☐
					BSC ☐
					SMC ☐
					PC ☐
					W ☐
					Z ☐
	ACET345 Corner Cleat	24	pack	ETC343	MF ☒
					SA ☐
					KL ☐
					HP ☐
					BSC ☐
					SMC ☐
					PC ☐
					W ☐
					Z ☐
 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 BSC = Brushed Satin Chrome SMC = Smokey Chrome PC = Polished Chrome	W = White Z = Black		

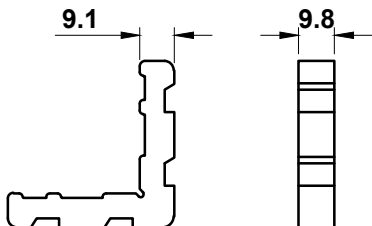
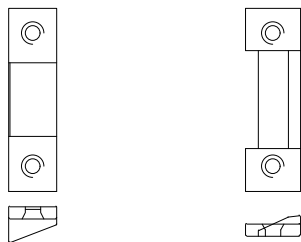
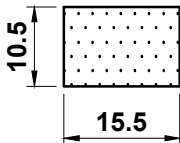
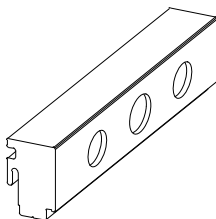
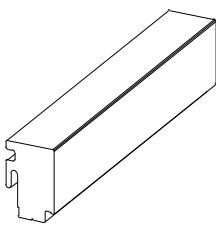
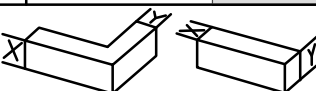
Image	Part Code	Pack	Unit	Application	Colour
	ACET346 Corner Cleat	24	pack	ETC345 ETC346N	MF ☒
					SA ☐
					KL ☐
					HP ☐
					BSC ☐
					SMC ☐
					PC ☐
					W ☐
					Z ☐
	ACET352 Pull in Block for Egress Hinges	50	pack	ALL SECTIONS	MF ☐
					SA ☐
					KL ☐
					HP ☐
					BSC ☐
					SMC ☐
					PC ☐
					W ☐
					Z ☐
	ACET355 Foam Infill 1250mm Lengths	1	each	ETC302 ETC303 ETC304 ETC305 ETC306 ETC308 ETC310 ETC313 ETC420	MF ☐
					SA ☐
					KL ☐
					HP ☐
					BSC ☐
					SMC ☐
					PC ☐
					W ☐
					Z ☐
	ACET365 Espag. Handle Fixing Block (94mm)	1	each	ACET165 ETC324 ETC326 ETC329 ETC369	MF ☒
					SA ☐
					KL ☒
					HP ☒
					BSC ☐
					SMC ☐
					PC ☐
					W ☒
					Z ☒
	ACET366 Cockspur Handle Fixing Block (94mm)	1	each	ACET080 ETC324 ETC326 ETC329 ETC369	MF ☒
					SA ☐
					KL ☒
					HP ☒
					BSC ☐
					SMC ☐
					PC ☐
					W ☒
					Z ☒
 	MF = Mill Finish SA = Silver Anodised KL = Basic Colour HP = Special Colour BSC = Brushed Satin Chrome SMC = Smokey Chrome PC = Polished Chrome		W = White Z = Black		

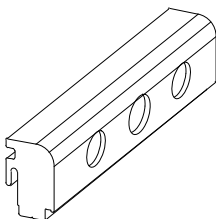
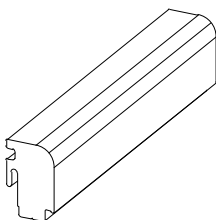
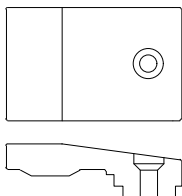
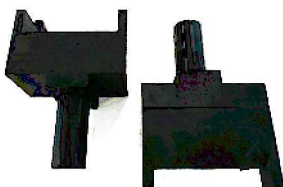
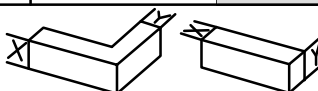
Image	Part Code	Pack	Unit	Application	Colour	
	ACET367 Curved Espag. Handle Fixing Block (94mm)	1	each	ACET165 ETC273	MF	✓
					SA	
					KL	✓
					HP	✓
					BSC	
					SMC	
					PC	
					W	✓
					Z	✓
	ACET368 Curved Cockspur Handle Fixing Block (94mm)	1	each	ACET165 ETC273	MF	
					SA	
					KL	✓
					HP	✓
					BSC	
					SMC	
					PC	
					W	✓
					Z	✓
	ACET380 Run Up Block	100	pack		MF	
					SA	
					KL	
					HP	
					BSC	
					SMC	
					PC	
					W	✓
					Z	✓
	ACET388 Punch	1	each	ETC423	MF	
					SA	
					KL	
					HP	
					BSC	
					SMC	
					PC	
					W	
					Z	
	ACET389 Punches For ETC302 / 303 / 304 / 305 / 306	1	pair		MF	
					SA	
					KL	
					HP	
					BSC	
					SMC	
					PC	
					W	
					Z	
 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 BSC = Brushed Satin Chrome SMC = Smokey Chrome PC = Polished Chrome	W = White Z = Black			

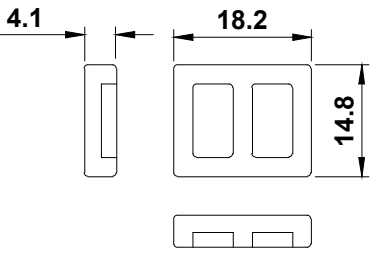
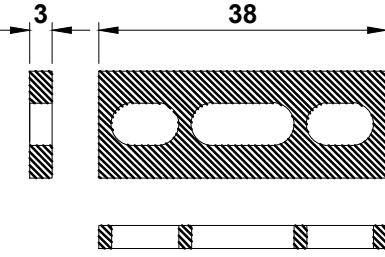
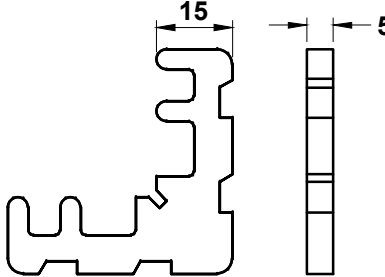
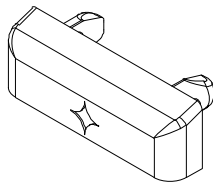
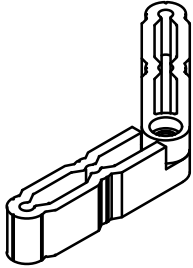
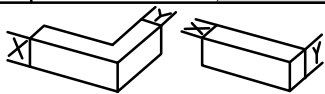
Image	Part Code	Pack	Unit	Application	Colour	
	ACET393 Packer for ETC346	25	pack	ETC344 ETC345 ETC346	MF	
					SA	
					KL	
					HP	
					BSC	
					SMC	
					PC	
					W	
					Z	✓
	ACET394 Stay Packer	25	pack	ETC303 ETC304 ETC305 ETC306 ETC310 ETC313	MF	
					SA	
					KL	
					HP	
					BSC	
					SMC	
					PC	
					W	
					Z	✓
	ACET424 Cleat For Outer Chamber	24	pack	ETC424N	MF	
					SA	
					KL	
					HP	
					BSC	
					SMC	
					PC	
					W	
					Z	
	ACET432 Drainage Cover Cap Colour matched drainage caps	10	pack		MF	
					SA	
					KL	✓
					HP	✓
					BSC	
					SMC	
					PC	
					W	
					Z	
	ACET440 Variable Cill Angle Bracket	10	Each		MF	
					SA	
					KL	
					HP	
					BSC	
					SMC	
					PC	
					W	
					Z	
	MF = Mill Finish SA = Silver Anodised KL = Basic Colour HP = Special Colour BSC = Brushed Satin Chrome SMC = Smokey Chrome PC = Polished Chrome		W = White Z = Black			

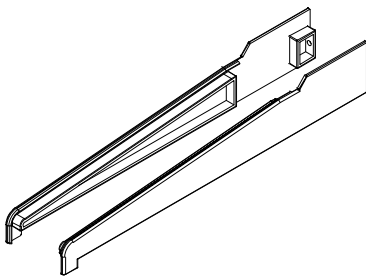
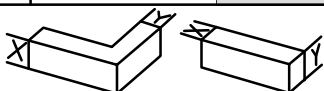
Image	Part Code	Pack	Unit	Application	Colour		
	ACET460 Inline Espag Handle with 9mm Spindle	1	Each	ACET801 ACET802 ACET803 ACET804 ACET805	MF		
					SA		
					KL	✓	
					HP	✓	
					BSC	✓	
					SMC	✓	
					PC	✓	
					W	✓	
					Z	✓	
	ACET461 Inline Espag Handle with 15mm Spindle	1	Each	ACET861 ACET862 ACET863 ACET864 ACET865 ACET866	MF		
					SA		
					KL	✓	
					HP	✓	
					BSC	✓	
					SMC	✓	
					PC	✓	
					W	✓	
					Z	✓	
	ACET465 L/R Cranked Espag Handle with 9mm Spindle	1	Each	ACET801 ACET802 ACET803 ACET804 ACET805	MF		
					SA		
					KL	✓	
					HP	✓	
					BSC	✓	
					SMC	✓	
					PC	✓	
					W	✓	
					Z	✓	
	ACET466 L/R Cranked Espag Handle with 15mm Spindle	1	Each	ACET861 ACET862 ACET863 ACET864 ACET865 ACET866	MF		
					SA		
					KL	✓	
					HP	✓	
					BSC	✓	
					SMC	✓	
					PC	✓	
					W	✓	
					Z	✓	
	ACET477 Cast Cill End Caps	1	Pair	ETC477	MF	✓	
					SA		
					KL	✓	
					HP	✓	
					BSC		
					SMC		
					PC		
					W		
					Z		
 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 BSC = Brushed Satin Chrome SMC = Smokey Chrome PC = Polished Chrome			W = White Z = Black				

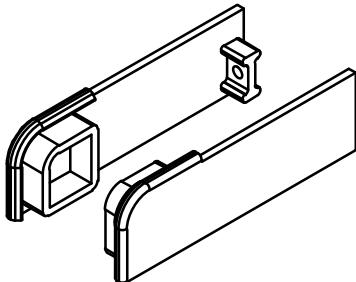
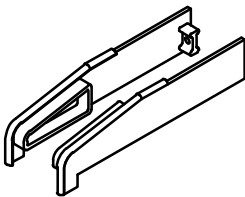
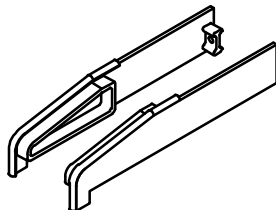
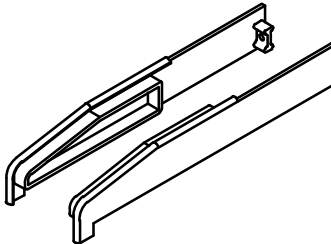
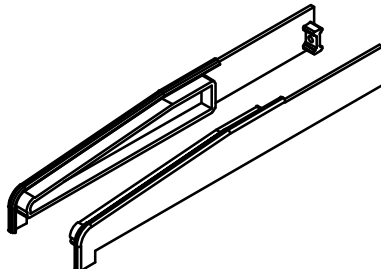
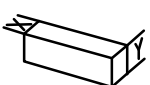
Image	Part Code	Pack	Unit	Application	Colour	
	ACET451 Cast Cill End Caps	1	pair	ETC451	MF	
					SA	
					KL	
					HP	
					BSC	
					SMC	
					PC	
					W	
					Z	
	ACET452 Cast Cill End Caps	1	pair	ETC452	MF	
					SA	
					KL	
					HP	
					BSC	
					SMC	
					PC	
					W	
					Z	
	ACET457 Cast Cill End Caps	1	pair	ETC457	MF	
					SA	
					KL	
					HP	
					BSC	
					SMC	
					PC	
					W	
					Z	
	ACET458 Cast Cill End Caps	1	pair	ETC458	MF	
					SA	
					KL	
					HP	
					BSC	
					SMC	
					PC	
					W	
					Z	
	ACET479N Cast Cill End Caps	1	pair	ETC479	MF	
					SA	
					KL	
					HP	
					BSC	
					SMC	
					PC	
					W	
					Z	
 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 BSC = Brushed Satin Chrome SMC = Smokey Chrome PC = Polished Chrome	W = White Z = Black	 		

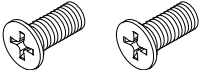
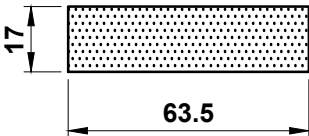
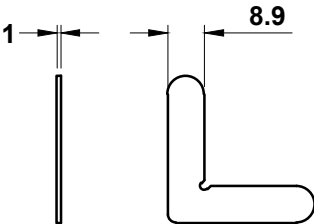
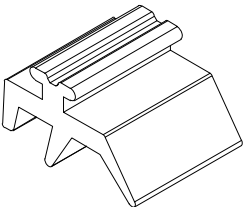
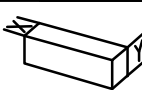
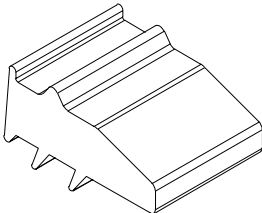
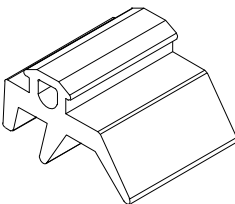
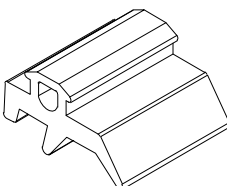
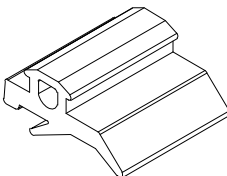
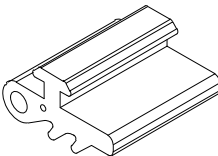
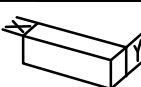
Image	Part Code	Pack	Unit	Application	Colour
	ACET495 1 pack contains: 2no M5 x 12 S/S CSK Machine Screw	1	pack	ACET460 ACET465	MF
					SA
					KL
					HP
					BSC
					SMC
					PC
					W
					Z
	ACET513 Cavity Hinge Protectors	50	sets		MF
					SA
					KL
					HP
					BSC
					SMC
					PC
					W
					Z
	ACET619 Foam Infill 1250mm Lengths	1	each	ETC302 ETC304 ETC306	MF
					SA
					KL
					HP
					BSC
					SMC
					PC
					W
					Z
	ACET824 Chevron	24	pack	ETC324 ETC328N ETC423	MF
					SA
					KL
					HP
					BSC
					SMC
					PC
					W
					Z
	ACET835 Low Line External Gasket	200	m	ETC364 ETC370 ETC371 ETC375	MF
					SA
					KL
					HP
					BSC
					SMC
					PC
					W
					Z
 T-BARS ACVG65=2.5mm ACVG66=3.0mm ACVL150=4.0mm 	MF = Mill Finish SA = Silver Anodised KL = Basic Colour HP = Special Colour BSC = Brushed Satin Chrome SMC = Smokey Chrome PC = Polished Chrome W = White Z = Black	 			

Image	Part Code	Pack	Unit	Application	Colour	
	ACET840 5mm Low Line Internal Wedge Gasket	150	m	ETC310 ETC364	MF	
					SA	
					KL	
					HP	
					BSC	
					SMC	
					PC	
					W	
					Z	✓
	ACET841 4mm Low Line External Gasket	200	m		MF	
					SA	
					KL	
					HP	
					BSC	
					SMC	
					PC	
					W	
					Z	✓
	ACET842 3mm Low Line External Gasket	200	m		MF	
					SA	
					KL	
					HP	
					BSC	
					SMC	
					PC	
					W	
					Z	✓
	ACET843 2mm Low Line External Gasket	200	m		MF	
					SA	
					KL	
					HP	
					BSC	
					SMC	
					PC	
					W	
					Z	✓
	ACET845 3mm Low Line Slide In Gasket	100	m		MF	
					SA	
					KL	
					HP	
					BSC	
					SMC	
					PC	
					W	
					Z	✓
 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 BSC = Brushed Satin Chrome SMC = Smokey Chrome PC = Polished Chrome		W = White Z = Black	 	

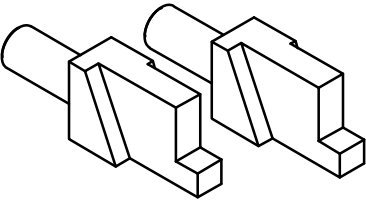
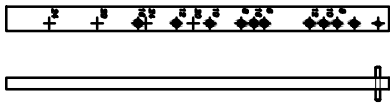
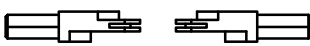
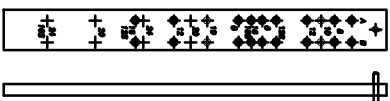
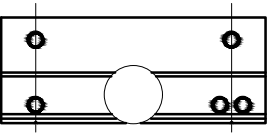
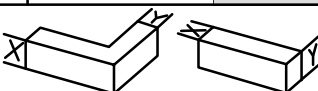
	ACET904 Crimping Punch	1	pair	ETC308 ETC310 ETC313 ETC423	MF	
					SA	
					KL	
					HP	
					BSC	
					SMC	
					PC	
					W	
	ACET911 Friction Hinge Drill Jig For Standard Top Hung	1	each		Z	
					MF	
					SA	
					KL	
					HP	
					BSC	
					SMC	
					PC	
	ACET913 Crimping Punch	1	pair	ETC328N	W	
					Z	
					MF	
					SA	
					KL	
					HP	
					BSC	
					SMC	
	ACET941 Friction Hinge Drill Jig For Standard Top & Side Hung	1	each	ETC423 ETC321 ETC324 ETC326 ETC327 ETC328N ETC329	PC	
					W	
					Z	
					MF	
					SA	
					KL	
					HP	
					BSC	
	ACET945 Transom/Mullion Drill Jig	1	each	ETC333 ETC335	SMC	
					PC	
					W	
					Z	
					MF	
					SA	
					KL	
					HP	
 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 BSC = Brushed Satin Chrome SMC = Smokey Chrome PC = Polished Chrome	W = White Z = Black				

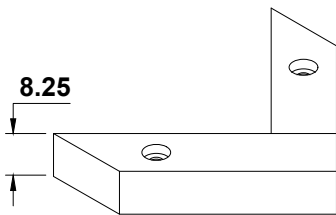
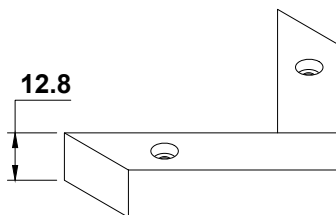
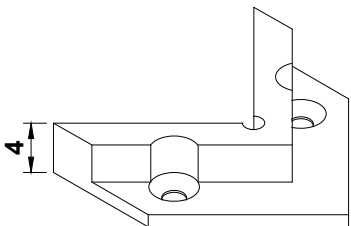
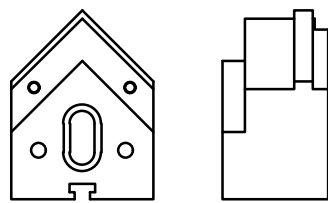
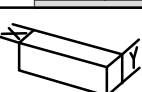
Image	Part Code	Pack	Unit	Application	Colour	
	ACET948 Punch Tool	1	each	ETC324	MF	
					SA	
					KL	
					HP	
					BSC	
					SMC	
					PC	
					W	
					Z	
	ACET968 8.25mm Packer	1	each	ACET979 ETC346	MF	
					SA	
					KL	
					HP	
					BSC	
					SMC	
					PC	
					W	
					Z	
	ACET969 12.8mm Packer	1	each	ACET979 ETC326 ETC329	MF	
					SA	
					KL	
					HP	
					BSC	
					SMC	
					PC	
					W	
					Z	
	ACET975 4mm Packer	1	each	ACET979 ETC302	MF	
					SA	
					KL	
					HP	
					BSC	
					SMC	
					PC	
					W	
					Z	
	ACET976 Vee Block	1	each	ACET977	MF	
					SA	
					KL	
					HP	
					BSC	
					SMC	
					PC	
					W	
					Z	
 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 BSC = Brushed Satin Chrome SMC = Smokey Chrome PC = Polished Chrome		W = White Z = Black	 	

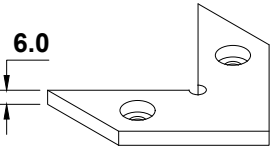
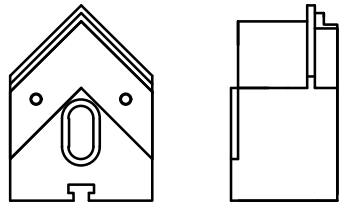
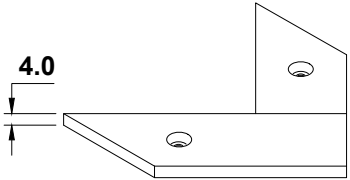
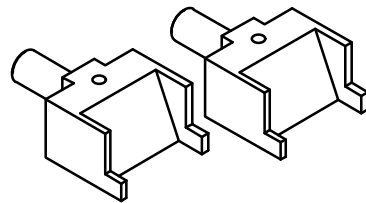
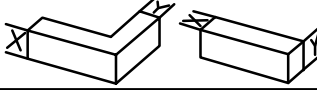
Image	Part Code	Pack	Unit	Application	Colour
	ACET977 6mm Packer	1	each	ACET976	MF
					SA
					KL
					HP
					BSC
					SMC
					PC
					W
					Z
	ACET978 Crimping Punch	1	pair	ETC315	MF
					SA
					KL
					HP
					BSC
					SMC
					PC
					W
					Z
	ACET979 Vee Block	1	each	ETC324 ETC346 ETC621	MF
					SA
					KL
					HP
					BSC
					SMC
					PC
					W
					Z
	ACET980 11.8mm Packer	1	each	ACET979 ETC324	MF
					SA
					KL
					HP
					BSC
					SMC
					PC
					W
					Z
	ACET981 Crimping Punch	1	pair	ETC321 ETC324 ETC326 ETC327 ETC329 ETC344 ETC345 ETC346	MF
					SA
					KL
					HP
					BSC
					SMC
					PC
					W
					Z
	MF = Mill Finish SA = Silver Anodised KL = Basic Colour HP = Special Colour BSC = Brushed Satin Chrome SMC = Smokey Chrome PC = Polished Chrome		W = White Z = Black		

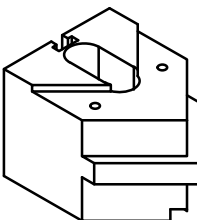
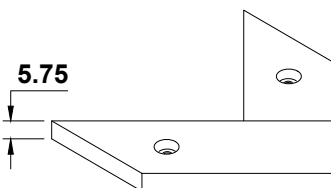
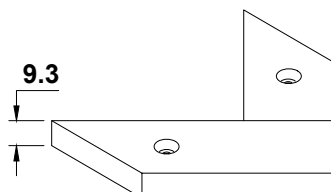
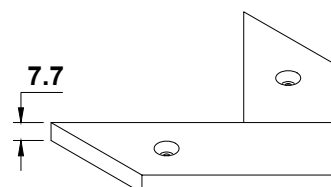
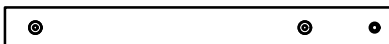
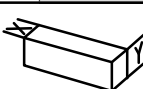
Image	Part Code	Pack	Unit	Application	Colour	
	ACET982 Vee Block	1	each	ACET983 ETC310 ETC313 ETC328N ETC423	MF	
					SA	
					KL	
					HP	
					BSC	
					SMC	
					PC	
					W	
					Z	
	ACET983 5.75mm Packer	1	each	ACET979 ACET982 ETC310 ETC313 ETC328N ETC344 ETC345 ETC423	MF	
					SA	
					KL	
					HP	
					BSC	
					SMC	
					PC	
					W	
					Z	
	ACET990 9.3mm Packer	1	each	ACET979 ACET982 ETC308 ETC344 ETC345	MF	
					SA	
					KL	
					HP	
					BSC	
					SMC	
					PC	
					W	
					Z	
	ACET991 7.7mm Packer	1	each	ACET979	MF	
					SA	
					KL	
					HP	
					BSC	
					SMC	
					PC	
					W	
					Z	
	ACETME93 Drill Jig	1	each	ACETME13	MF	
					SA	
					KL	
					HP	
					BSC	
					SMC	
					PC	
					W	
					Z	
 T-BARS ACVG65=2.5mm ACVG66=3.0mm ACVL150=4.0mm	MF = Mill Finish SA = Silver Anodised KL = Basic Colour HP = Special Colour BSC = Brushed Satin Chrome SMC = Smokey Chrome PC = Polished Chrome	W = White Z = Black	 			

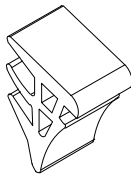
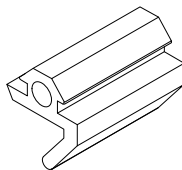
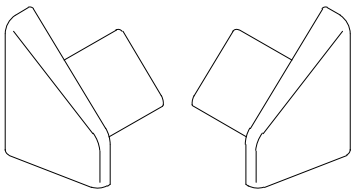
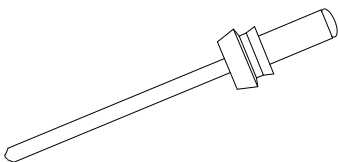
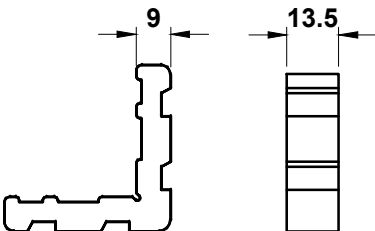
Image	Part Code	Pack	Unit	Application	Colour	
	ACVG49 6mm Wedge Glazing Gasket	100	m	ETC314	MF	
					SA	
					KL	
					HP	
					BSC	
					SMC	
					PC	
					W	
					Z	✓
						ACVL032 Glazing Gasket
SA						
KL						
HP						
BSC						
SMC						
PC						
W						
Z						
	ACVL059 End Caps	1	pair	VL72		
					SA	
					KL	
					HP	
					BSC	
					SMC	
					PC	
					W	✓
					Z	✓
						ACVL061 Rivet
SA						
KL						
HP						
BSC						
SMC						
PC						
W						
Z						
	ACW20017 Corner Cleat	24	pack	ETC328N		
					SA	
					KL	
					HP	
					BSC	
					SMC	
					PC	
					W	
					Z	
					 T-BARS ACVG65=2.5mm ACVG66=3.0mm ACVL150=4.0mm	 Screw (Grub)

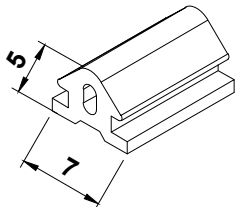
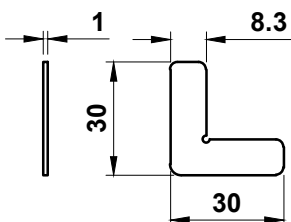
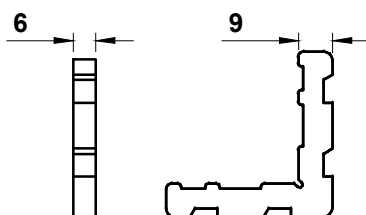
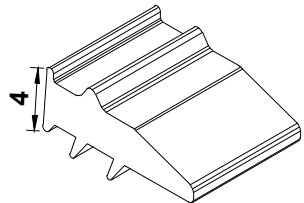
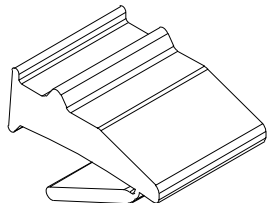
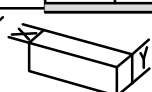
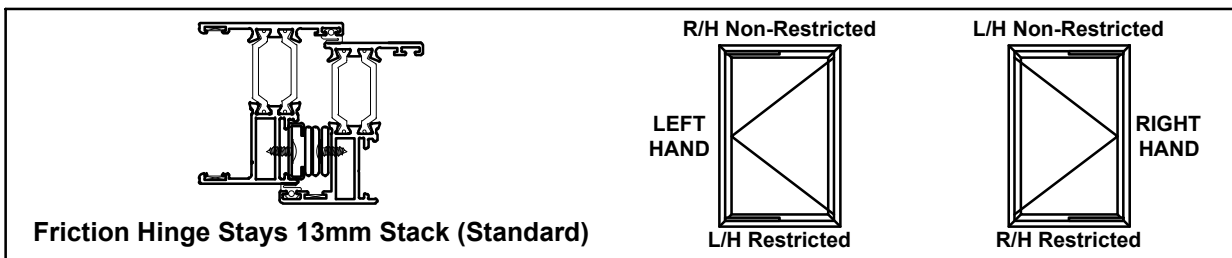
Image	Part Code	Pack	Unit	Application	Colour	
	ACVS010 PVC Insert	7.3	m	ETC080	MF	
					SA	
					KL	
					HP	
					BSC	
					SMC	
					PC	
					W	
					Z	
	ACW20024 Stainless Steel Chevron	100	pack	ETC324 ETC424N	MF	
					SA	
					KL	
					HP	
					BSC	
					SMC	
					PC	
					W	
					Z	
	ACW20026 Corner Cleat	24	pack	ETC303 ETC306	MF	
					SA	
					KL	
					HP	
					BSC	
					SMC	
					PC	
					W	
					Z	
	ACW20034 4mm Low Line Internal Wedge Gasket	200	m		MF	
					SA	
					KL	
					HP	
					BSC	
					SMC	
					PC	
					W	
					Z	
	ACW20038 4mm Low Line Internal Wedge Gasket with 1mm tear away strip	200	m		MF	
					SA	
					KL	
					HP	
					BSC	
					SMC	
					PC	
					W	
					Z	
 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 BSC = Brushed Satin Chrome SMC = Smokey Chrome PC = Polished Chrome	W = White Z = Black	 

Image	Part Code	Pack	Unit	Application	Colour	
	WCA106 Stainless Steel Chevron	50	pack	ETC315 ETC303	MF	✓
					SA	
					KL	
					HP	
					BSC	
					SMC	
					PC	
					W	
					Z	
						WUT024HSZA Manual Crimper Note: Vee blocks & punches are sold separately. Please see Page E04.
SA						
KL						
HP						
BSC						
SMC						
PC						
W						
Z						
	ACUN3000 End Cap for UN3000	10	pack	UN3000		
					SA	
					KL	
					HP	
					BSC	
					SMC	
					PC	
					W	✓
					Z	✓
						ACSM010SSR Spindle & fixings provided. Includes M4 Long Ball Point Allen Key for locking. (Stainless Steel)
SA						
KL						
HP						
BSC						
SMC						
PC						
W						
Z						
	ACSM010SSR Spindle & fixings provided. Includes M4 Long Ball Point Allen Key for locking. (Stainless Steel)	1	each			
					SA	
					KL	
					HP	
					BSC	
					SMC	
					PC	
					W	
					Z	
					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 BSC = Brushed Satin Chrome SMC = Smokey Chrome PC = Polished Chrome



Top Hung Windows

Top Hung	Type of Hinge / Stay	Max. Vent	Height		Typical
		Weight (kgs)	Minimum	Maximum	Width
ACINDS10	Standard	16	275	400	-
ACINDS16		21	400	780	-
ACINDS20		20	700	1100	-
ACINDS24		40	850	1300	-
ACINDP24		50	850	1500	-
ACINDA10	Austenitic	16	275	400	-
ACINDA16		21	400	780	-
ACINDA20		20	700	1100	-
ACINDA24		40	850	1300	-
ACINDR12	Restricted	20	350	550	-
ACINDR16		21	500	780	-
ACINDR20		26	700	1100	-
ACINDR24		40	850	1300	-

Side Hung Windows

Side Hung	Type of Hinge / Stay	Max. Vent	Width		Typical
		Weight (kgs)	Minimum	Maximum	Height
ACINDSSH12	Standard	22	300	600	-
ACINDSSH16		28	400	600	-
ACINDASH12	Austenitic	22	300	600	-
ACINDASH16		28	400	600	-
ACETSH1312 (L/R)	Restricted	22	300	600	-
ACETSH1316 (L/R)		24	400	600	-
ACETME13	Egress	40	400	900	-

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: * ACINVSH12 has a minimum order of 25 pairs



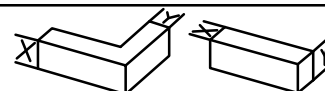
T-BARS
ACVG65=2.5mm
ACVG66=3.0mm
ACVL150=4.0mm

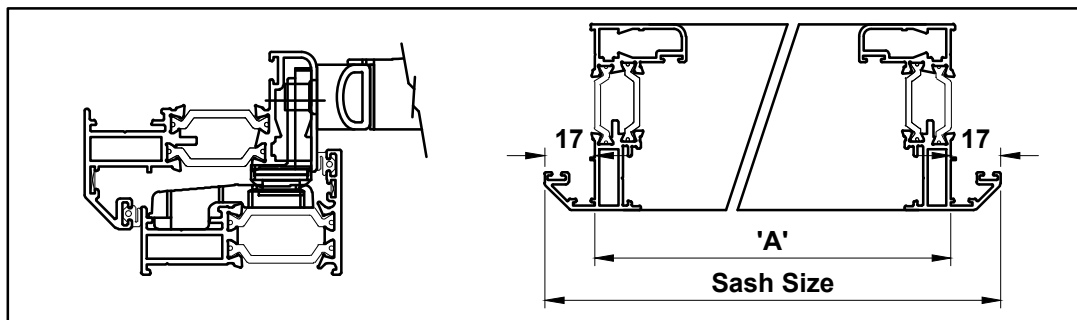


Screw (Grub)

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

W = White
Z = Black





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

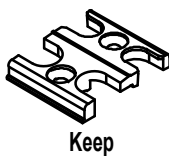
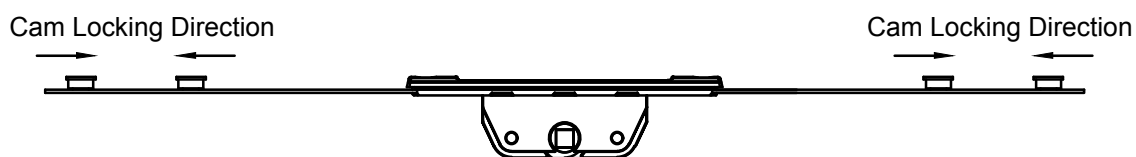


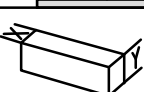
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	ACMX09700 Alu. Polish	1	each		MF	✓
					SA	
					KL	
					HP	
					M	
					GOZ	
					W	
					Z	
					PC	
	ACMX09761 Maxi Gloss	1	each		MF	
					SA	
					KL	
					HP	
					M	
					GOZ	
					W	
					Z	
					PC	
	ACMX09762 Alu. Bright	1	each		MF	
					SA	
					KL	
					HP	
					M	
					GOZ	
					W	
					Z	
					PC	
	ACMX09763 Teflon Spray	1	each		MF	
					SA	
					KL	
					HP	
					M	
					GOZ	
					W	
					Z	
					PC	
	ACMX09764 Maxi Clean	1	each		MF	
					SA	
					KL	
					HP	
					M	
					GOZ	
					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	M = Dual Colour GOZ = Gold W = White Z = Black				

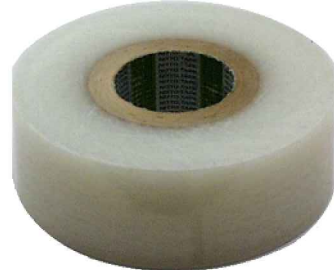
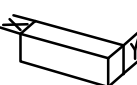
Image	Part Code	Pack	Unit	Application	Colour	
	ACMX09765 Alu. Cleaner	1	each		MF	
					SA	
					KL	
					HP	
					M	
					GOZ	
					W	
					Z	
					PC	
	ACMX09770 Roll & Wrap 100mm	1	each		MF	
					SA	
					KL	
					HP	
					M	
					GOZ	
					W	
					Z	
					PC	
	ACMX09775 Grip Handwrap	1	each		MF	
					SA	
					KL	
					HP	
					M	
					GOZ	
					W	
					Z	
					PC	
	ACMX09801 Protective Tape 50mm	1	each		MF	
					SA	
					KL	
					HP	
					M	
					GOZ	
					W	
					Z	
					PC	
	ACMX09802 Protective Tape 70mm	1	each		MF	
					SA	
					KL	
					HP	
					M	
					GOZ	
					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 M = Dual Colour GOZ = Gold W = White Z = Black					

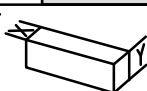
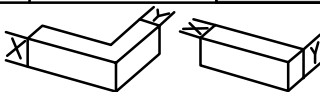
Image	Part Code	Pack	Unit	Application	Colour
	ACMX09803 Protective Tape 100mm	1	each		MF
					SA
					KL
					HP
					M
					GOZ
					W
					Z
					PC
	ACMX09830 Rubber Sealant	1	each		MF
					SA
					KL
					HP
					M
					GOZ
					W
					Z
					PC
	ACSIL04 Sealing Glue Order with suffix of KL colour (eg.ACSIL04KL005) or BL=Black/WP=White/ CL=Clear	1	each		MF
					SA
					KL
					HP
					M
					GOZ
					W
					Z
					PC
	ACSIL08 Silicon Gun	1	each		MF
					SA
					KL
					HP
					M
					GOZ
					W
					Z
					PC
	ACSIL013 Glue for Mitre	1	each		MF
					SA
					KL
					HP
					M
					GOZ
					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	M = Dual Colour GOZ = Gold W = White Z = Black	 	

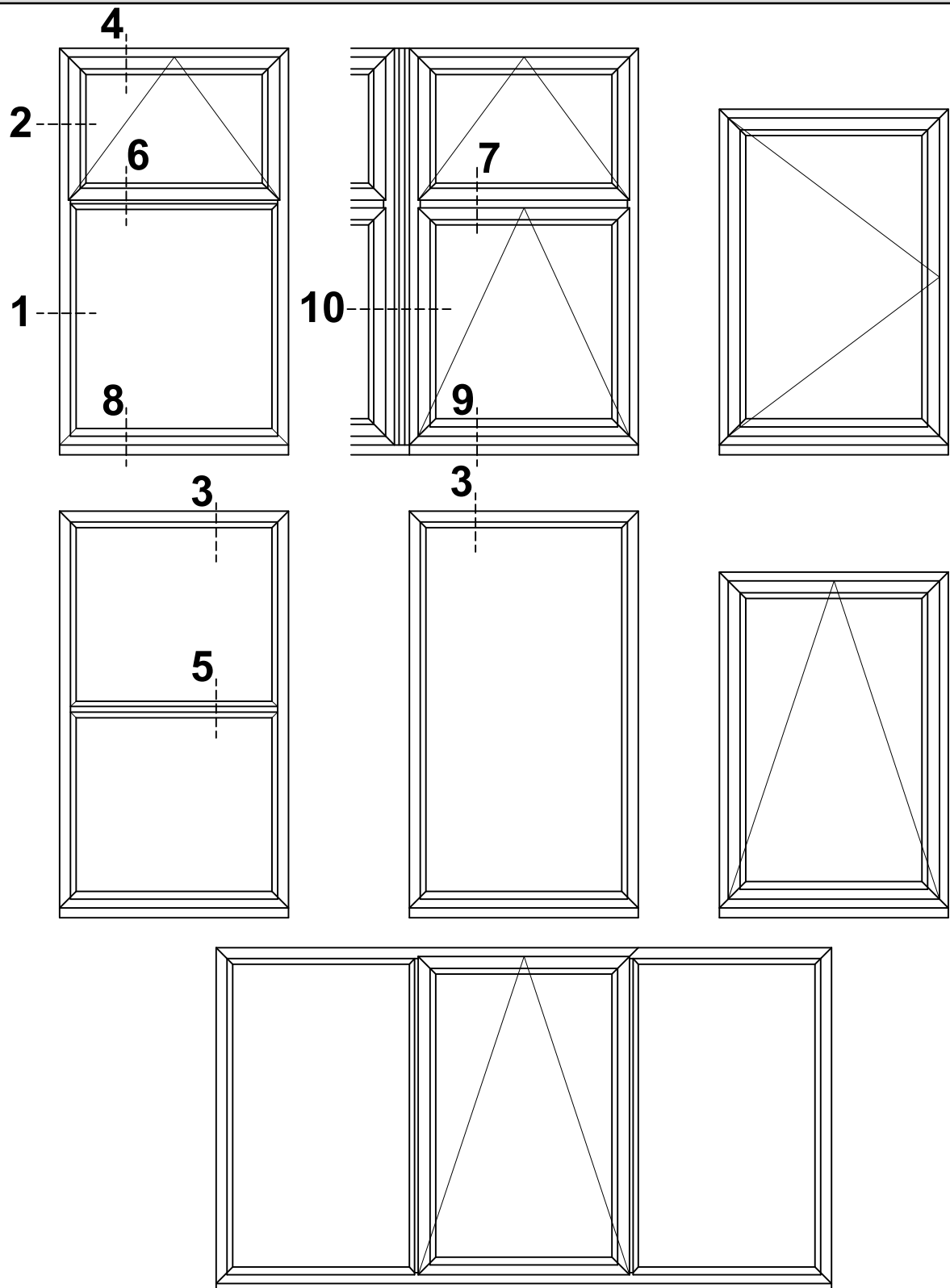
Image	Part Code	Pack	Unit	Application	Colour
	ACSIL014 Anti-Corrosion Coating	1	each		MF ☒
					SA ☐
					KL ☐
					HP ☐
					M ☐
					GOZ ☐
					W ☐
					Z ☐
					PC ☐
					MF ☐
					SA ☐
					KL ☐
					HP ☐
					M ☐
					GOZ ☐
					W ☐
					Z ☐
					PC ☐
					MF ☐
					SA ☐
					KL ☐
					HP ☐
					M ☐
					GOZ ☐
					W ☐
					Z ☐
					PC ☐
					MF ☐
					SA ☐
					KL ☐
					HP ☐
					M ☐
					GOZ ☐
					W ☐
					Z ☐
					PC ☐
 	MF = Mill Finish SA = Silver Anodised KL = Basic Colour HP = Special Colour				MF ☐
					SA ☐
					KL ☐
					HP ☐
					M ☐
					GOZ ☐
					W ☐
					Z ☐
					PC ☐
	M = Dual Colour GOZ = Gold W = White Z = Black				MF ☐
					SA ☐
					KL ☐
					HP ☐
					M ☐
					GOZ ☐
					W ☐
					Z ☐
					PC ☐
					MF ☐
					SA ☐
					KL ☐
					HP ☐
					M ☐
					GOZ ☐
					W ☐
					Z ☐
					PC ☐

Section C

Sections

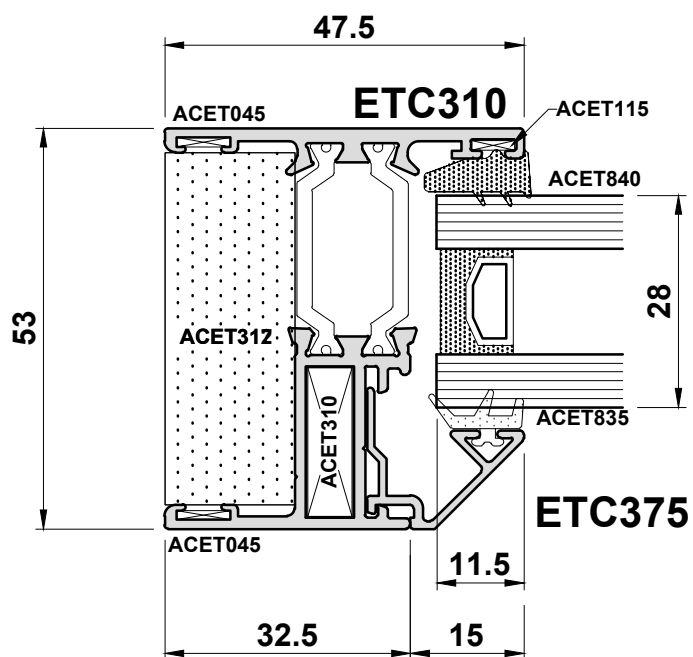
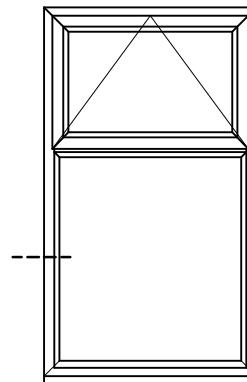
Scale Elevations

Scale Elevations



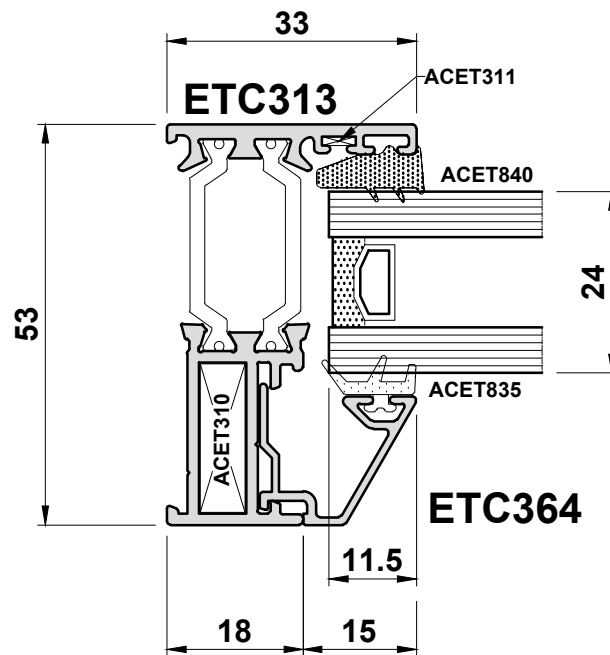
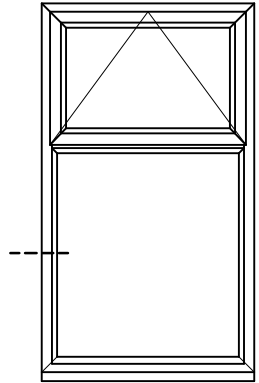
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Detail 1A



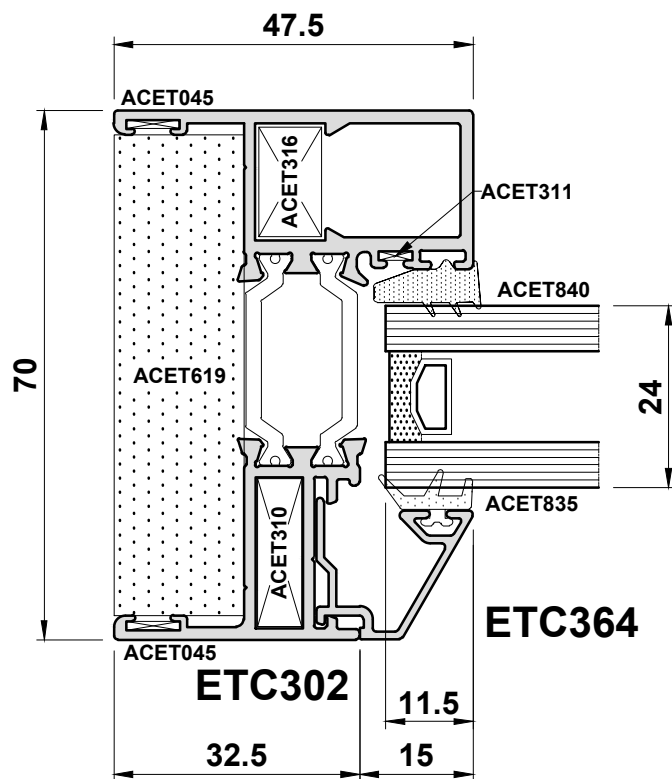
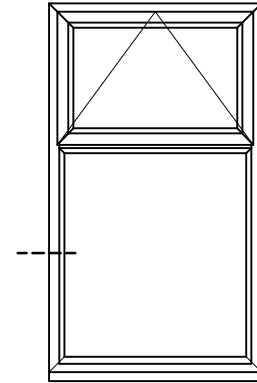
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Detail 1B



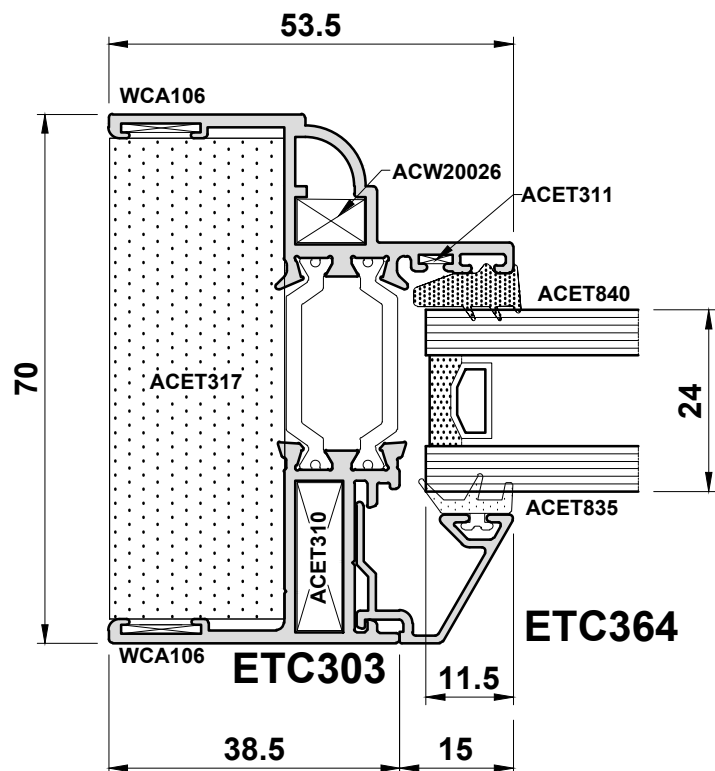
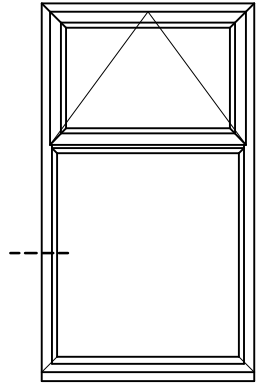
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Detail 1C



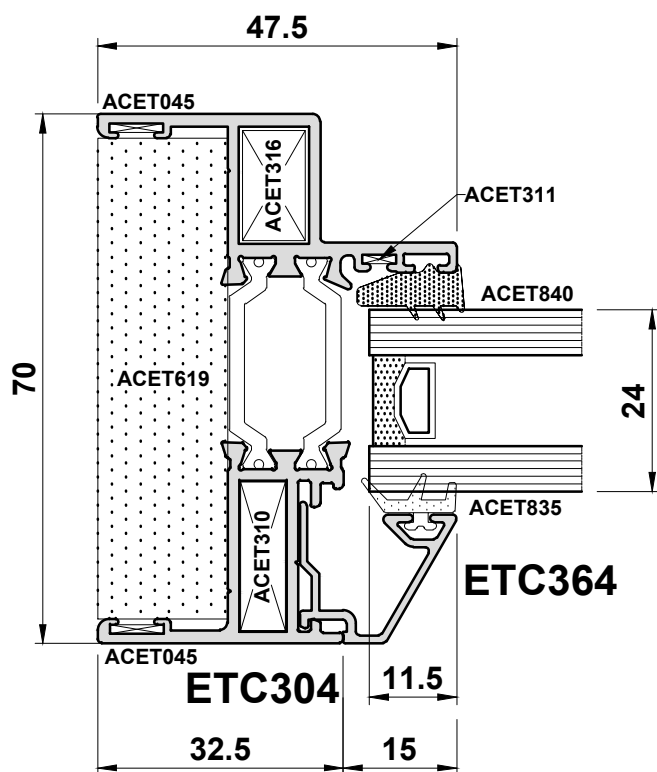
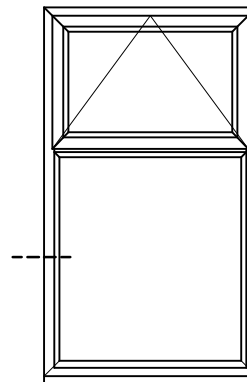
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Detail 1D



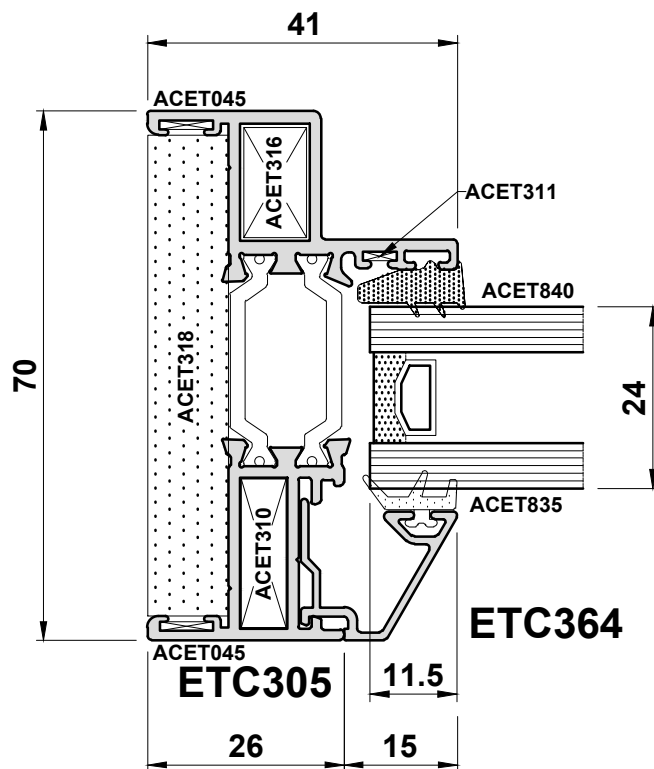
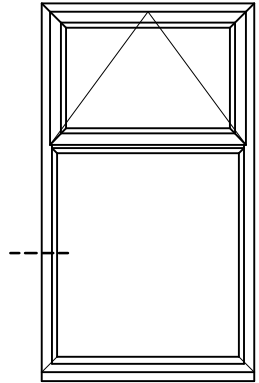
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Detail 1E



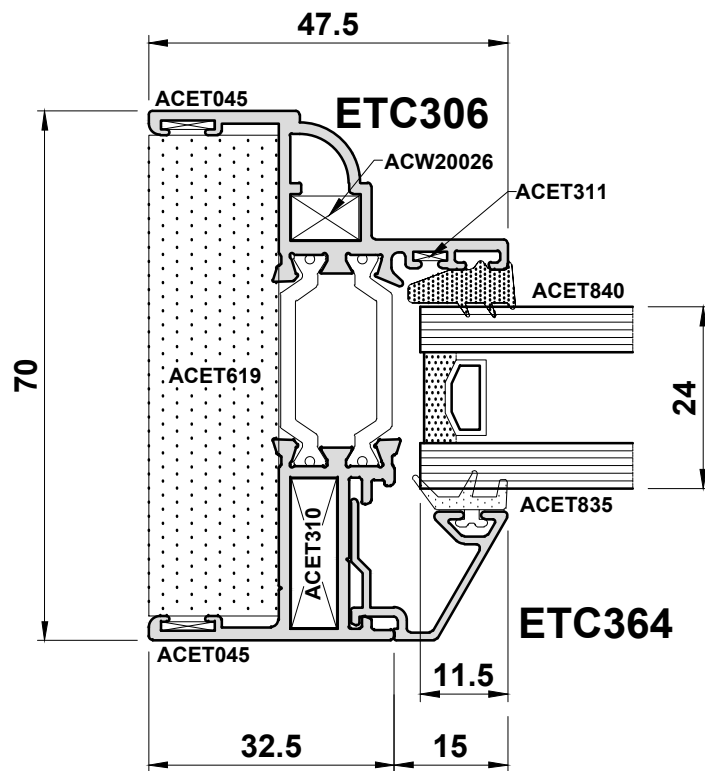
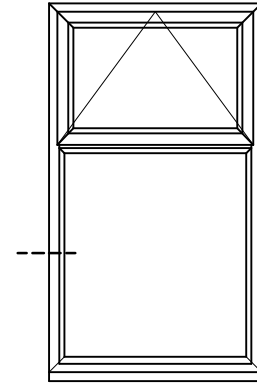
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Detail 1F



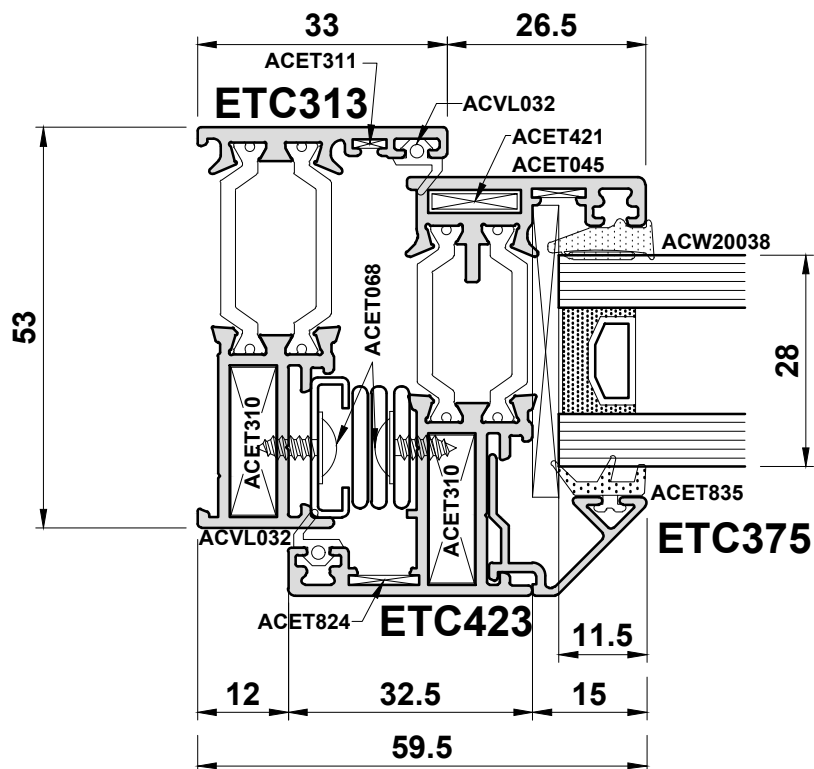
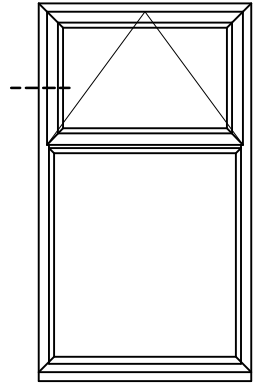
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Detail 1G



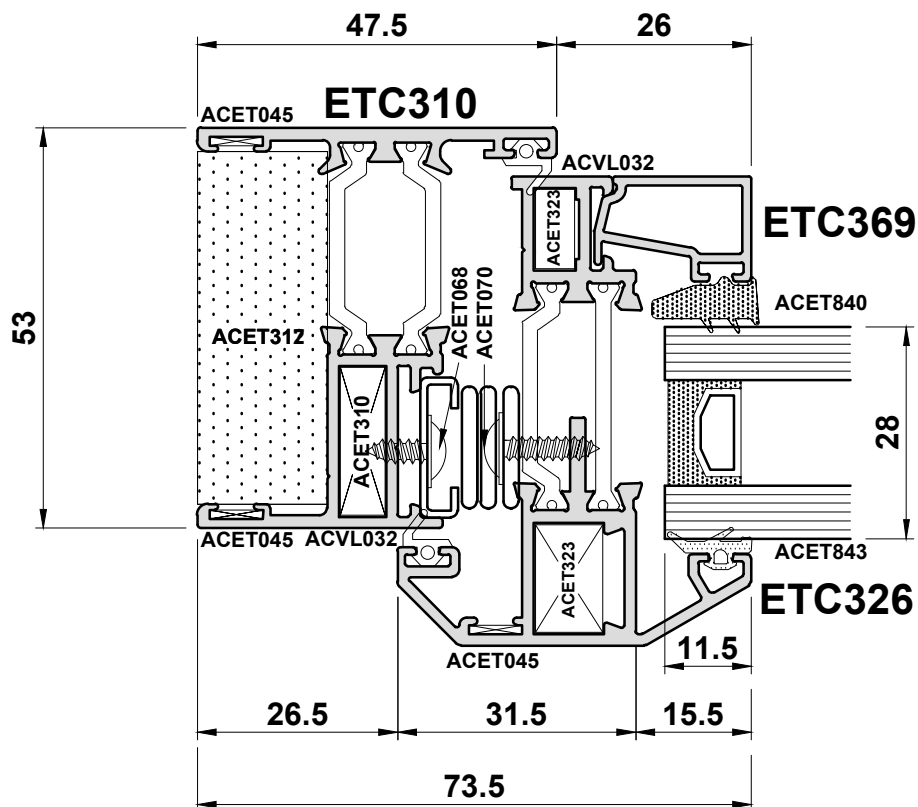
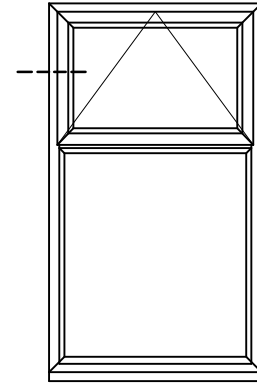
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Detail 2A



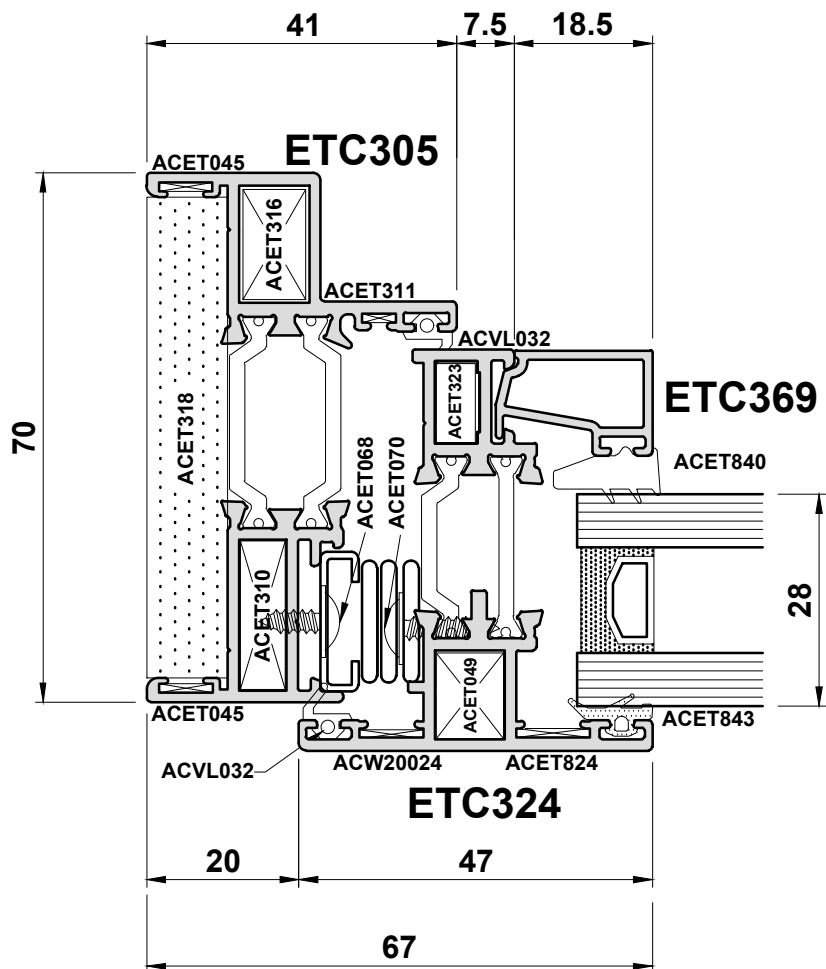
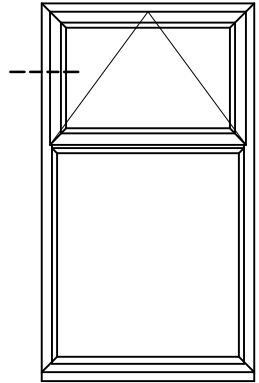
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Detail 2B



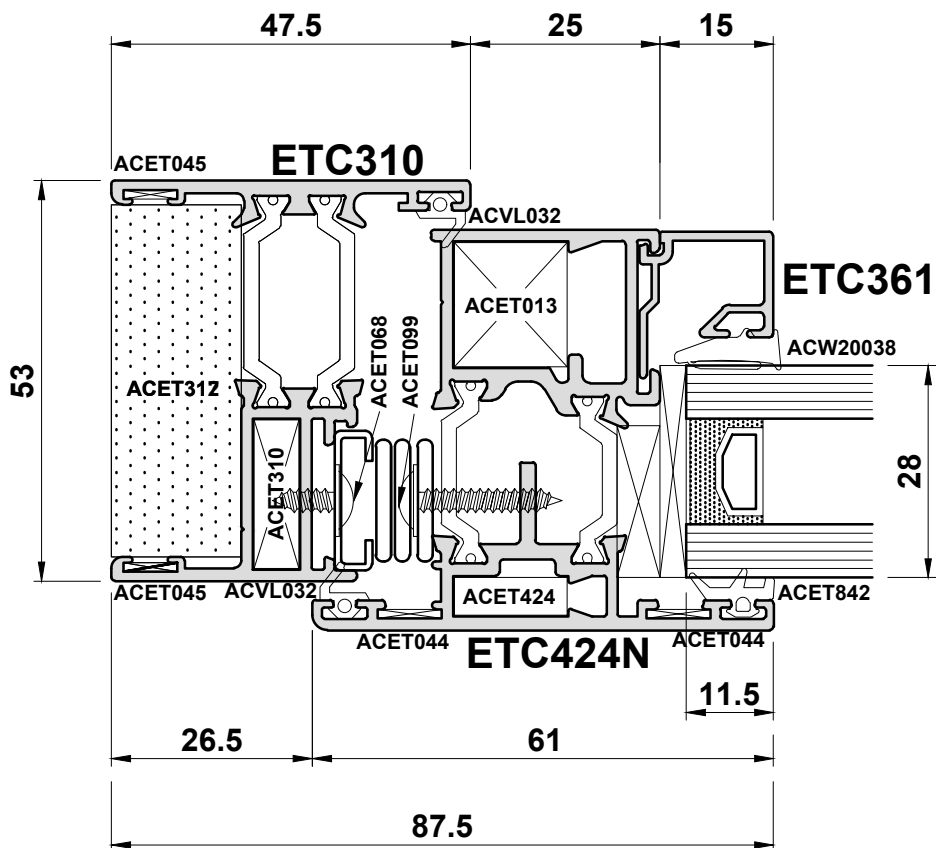
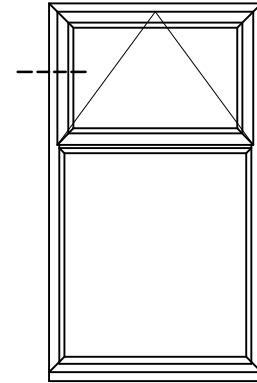
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Detail 2C



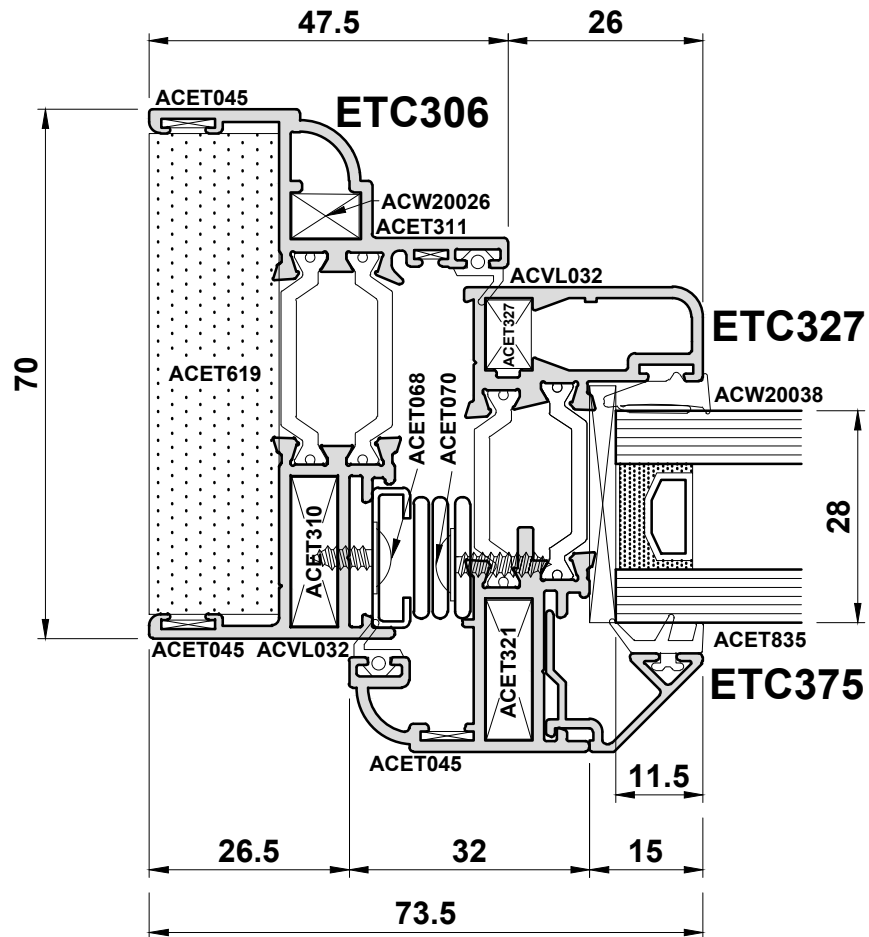
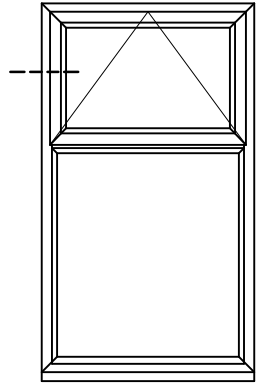
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Detail 2D



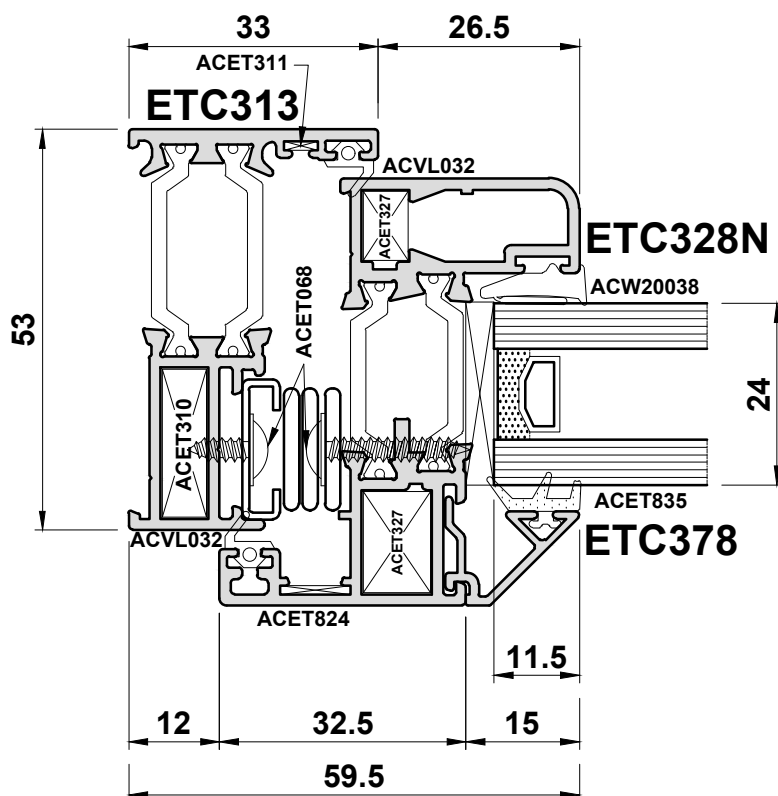
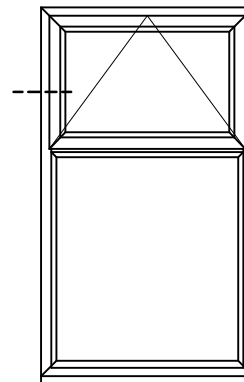
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Detail 2E



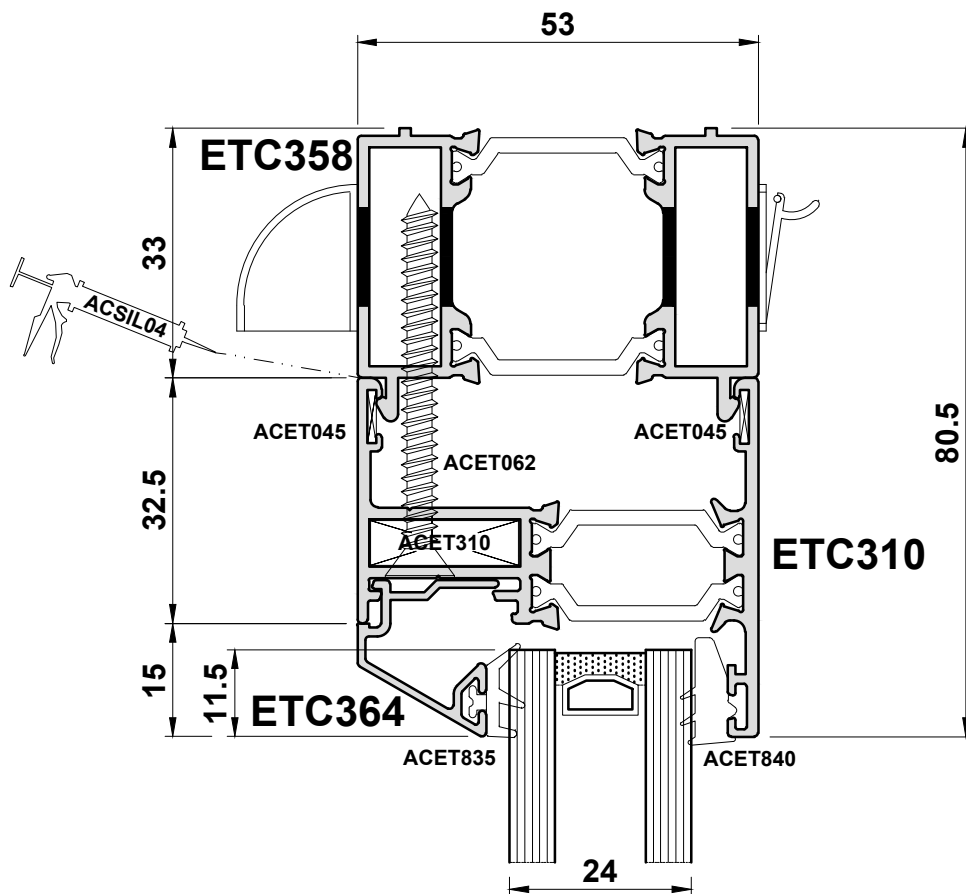
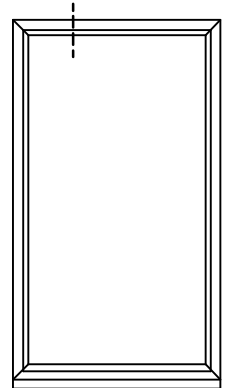
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Detail 2F



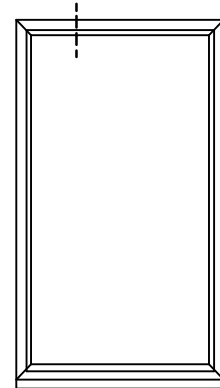
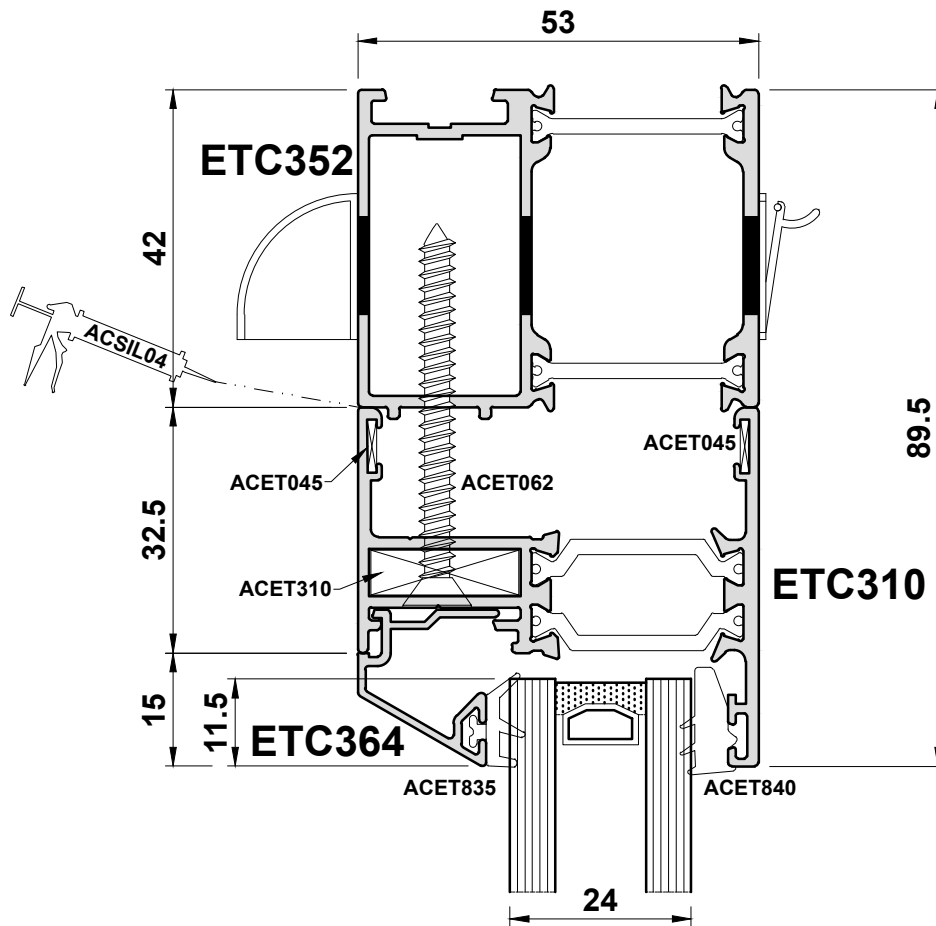
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Detail 3A



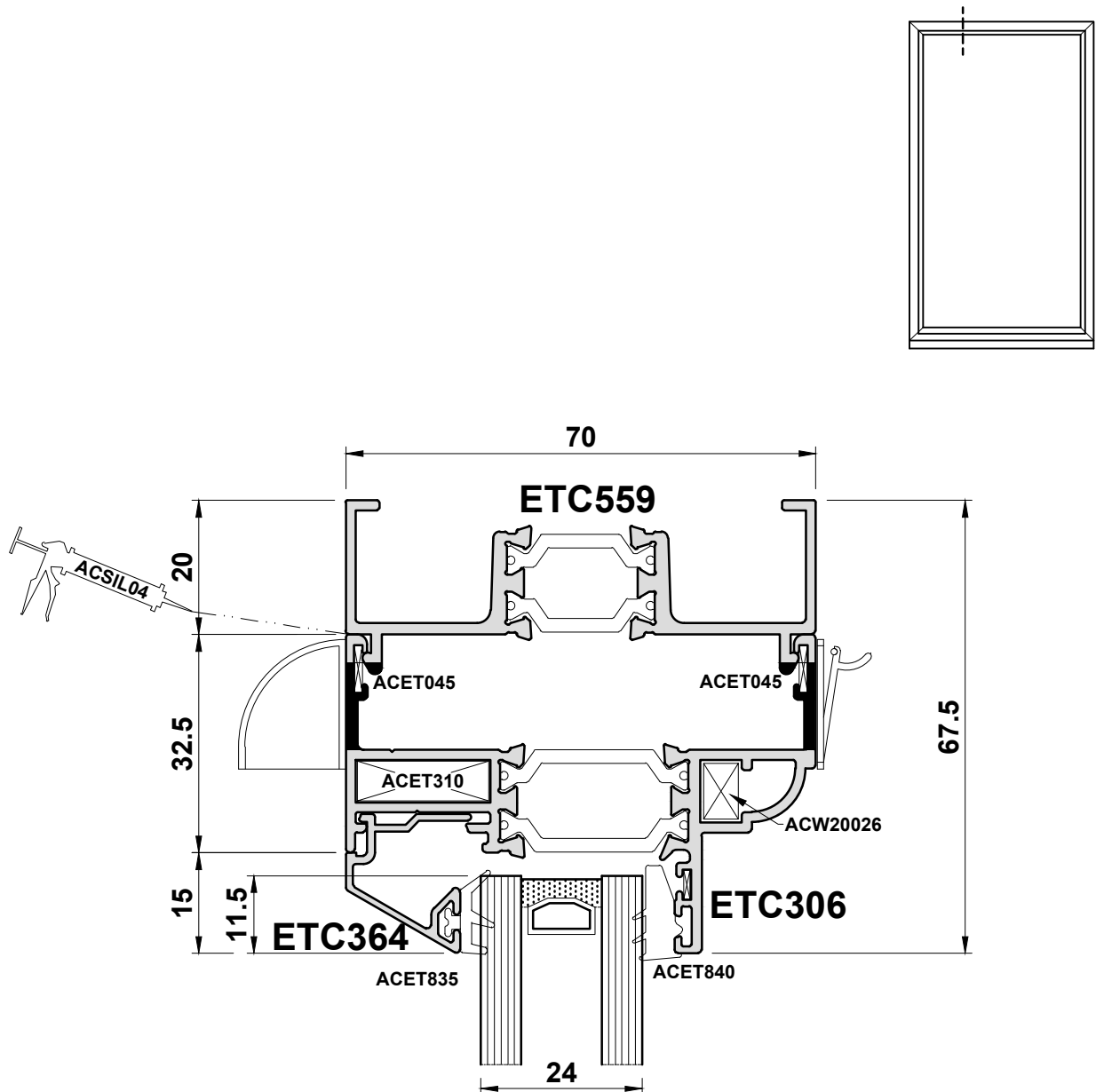
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Detail 3B



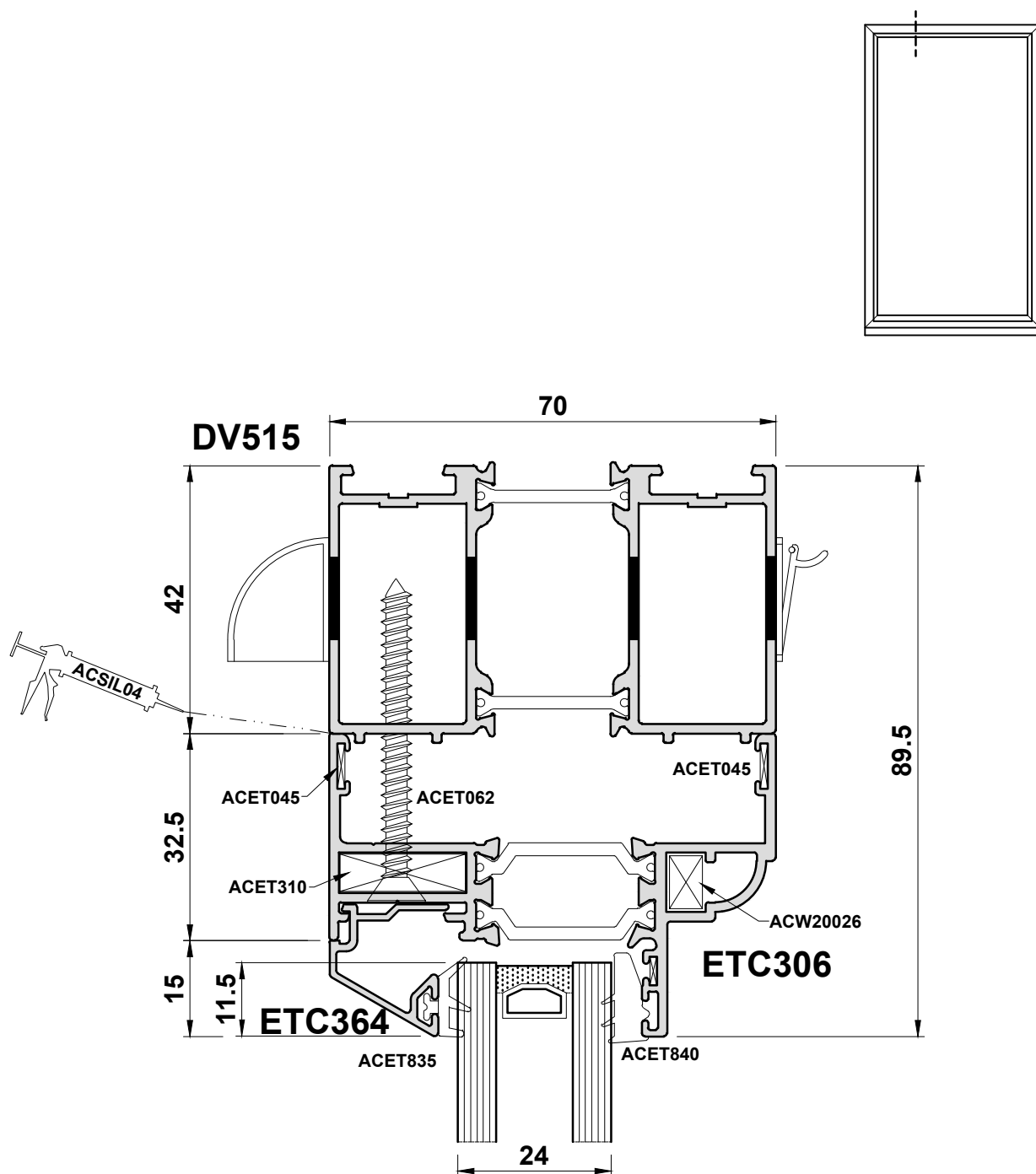
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Detail 3C



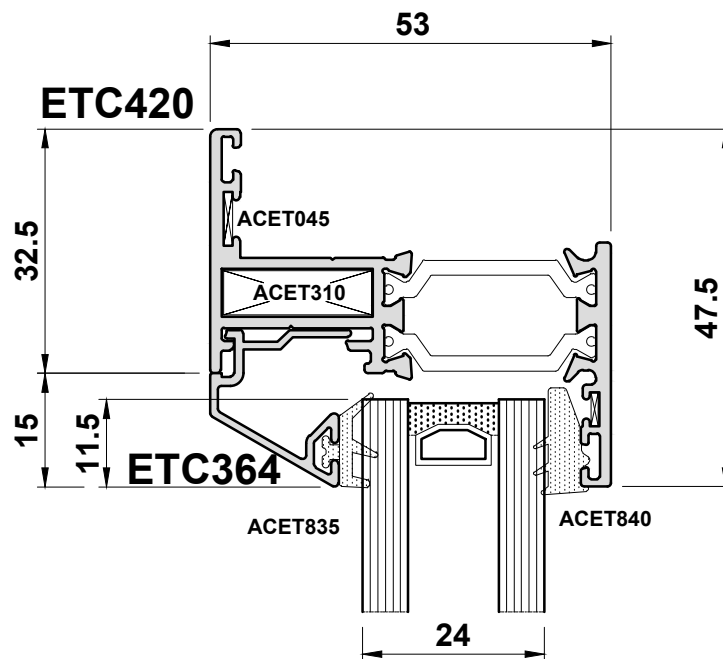
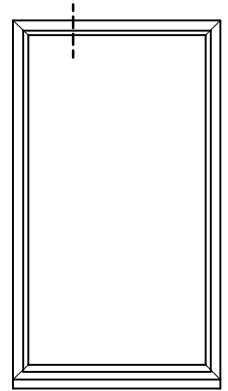
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Detail 3D



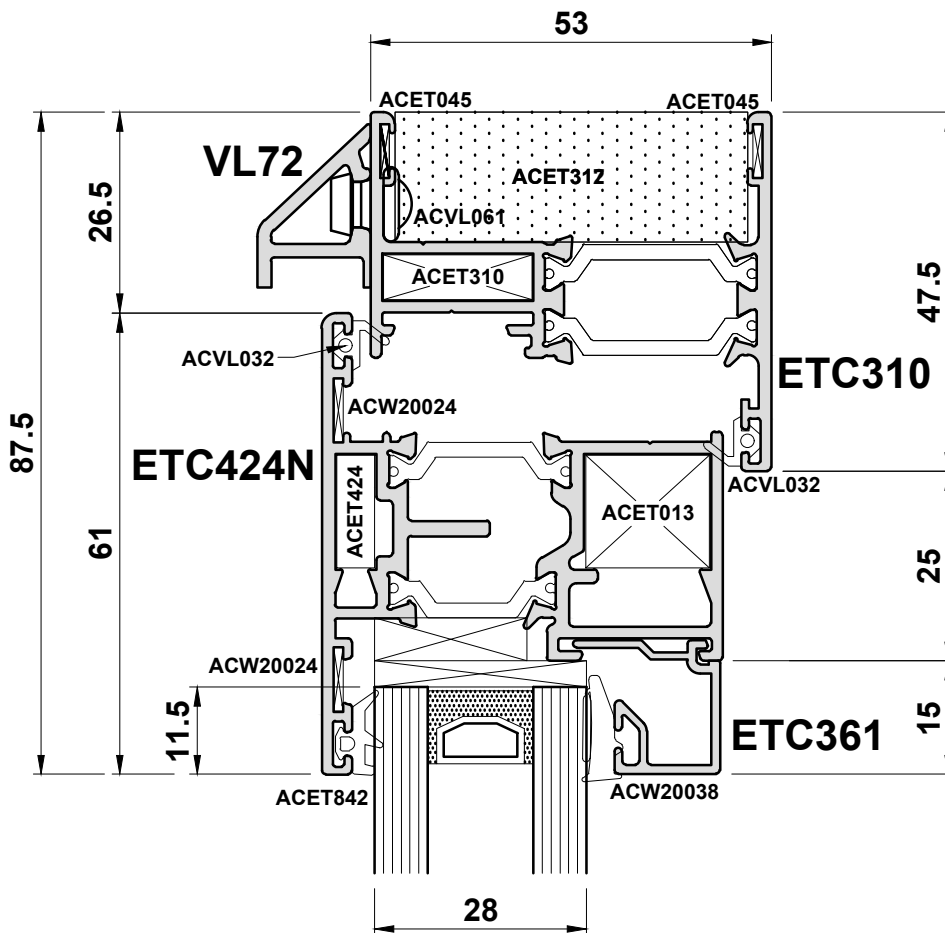
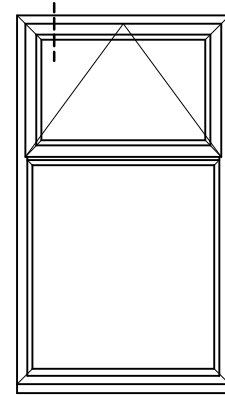
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Detail 3E



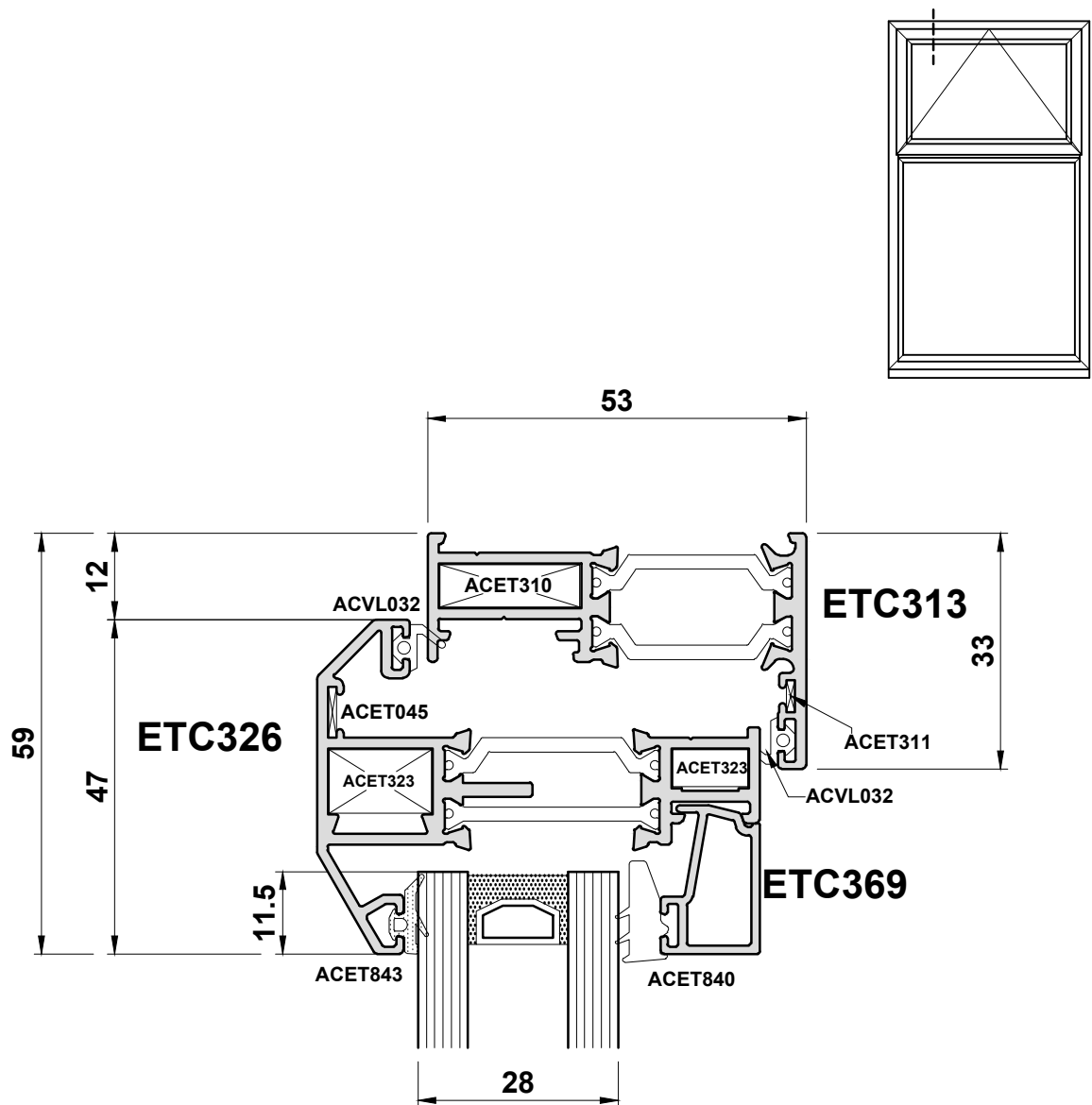
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Detail 4A



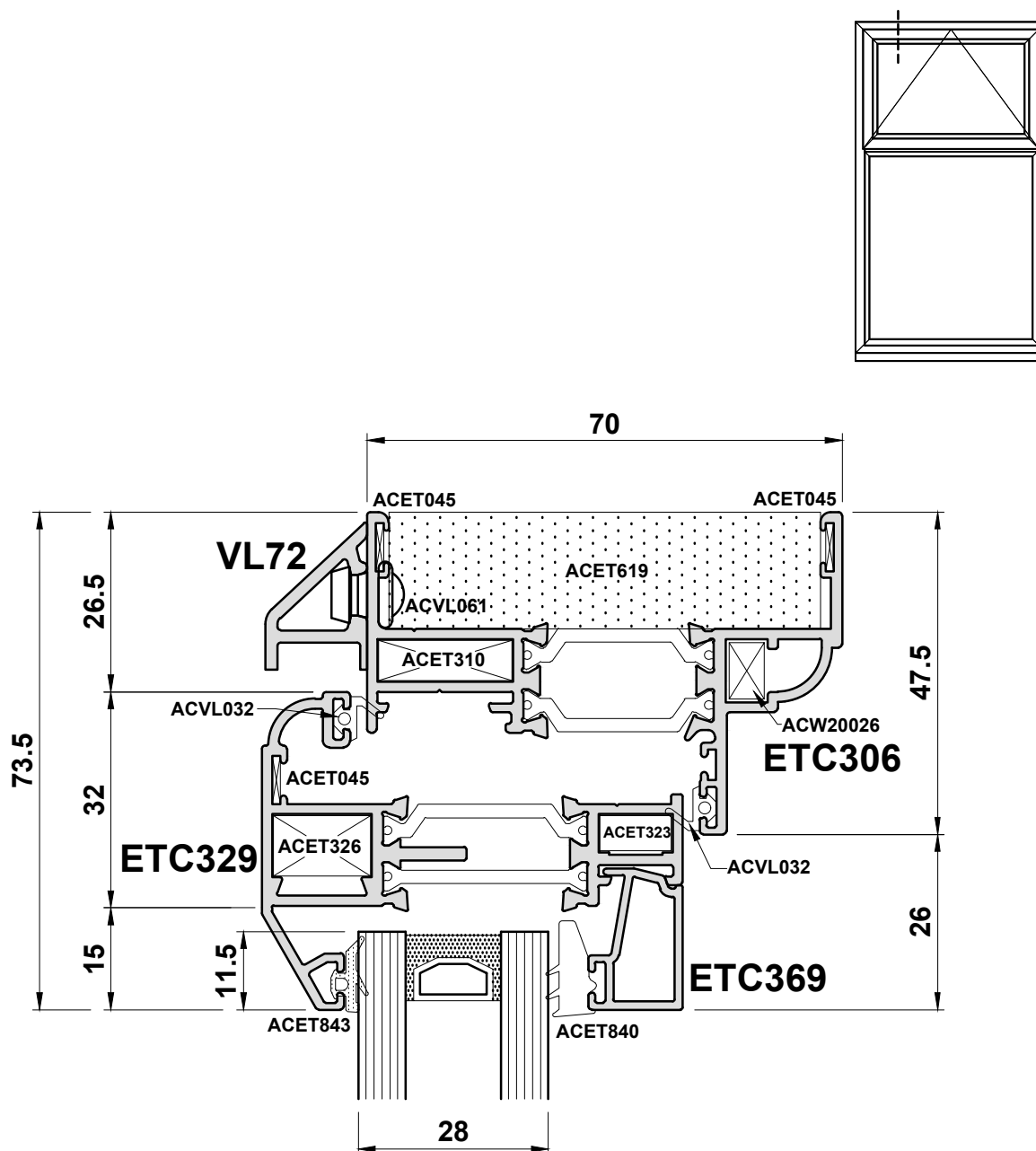
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Detail 4B



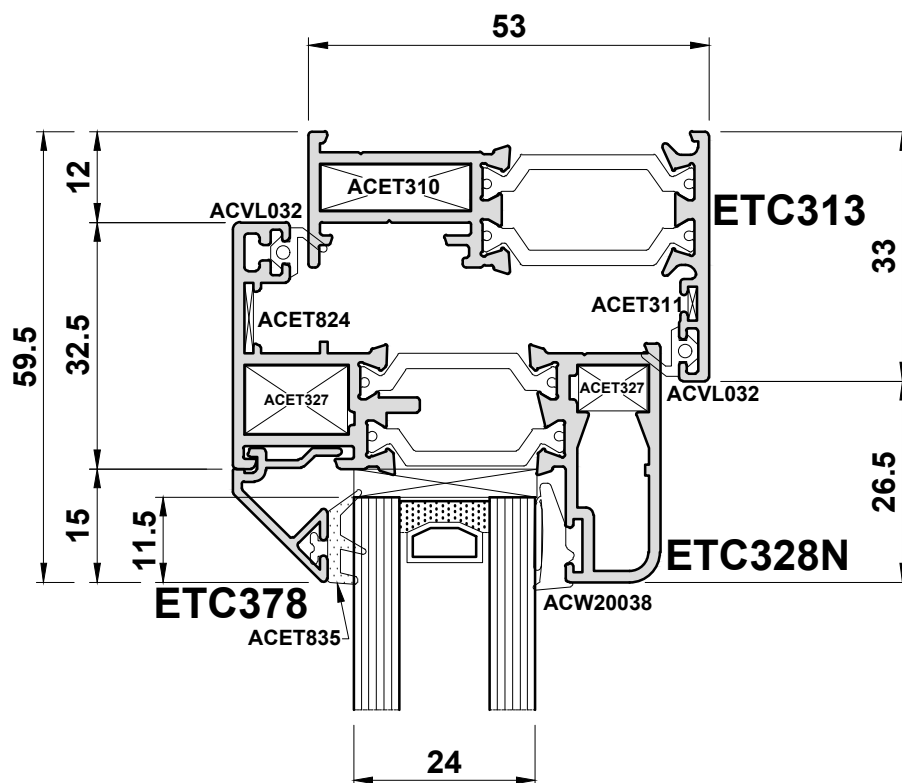
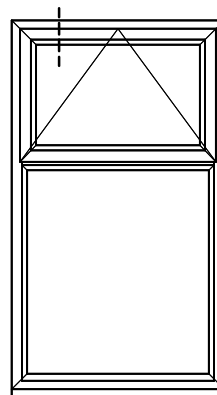
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Detail 4C



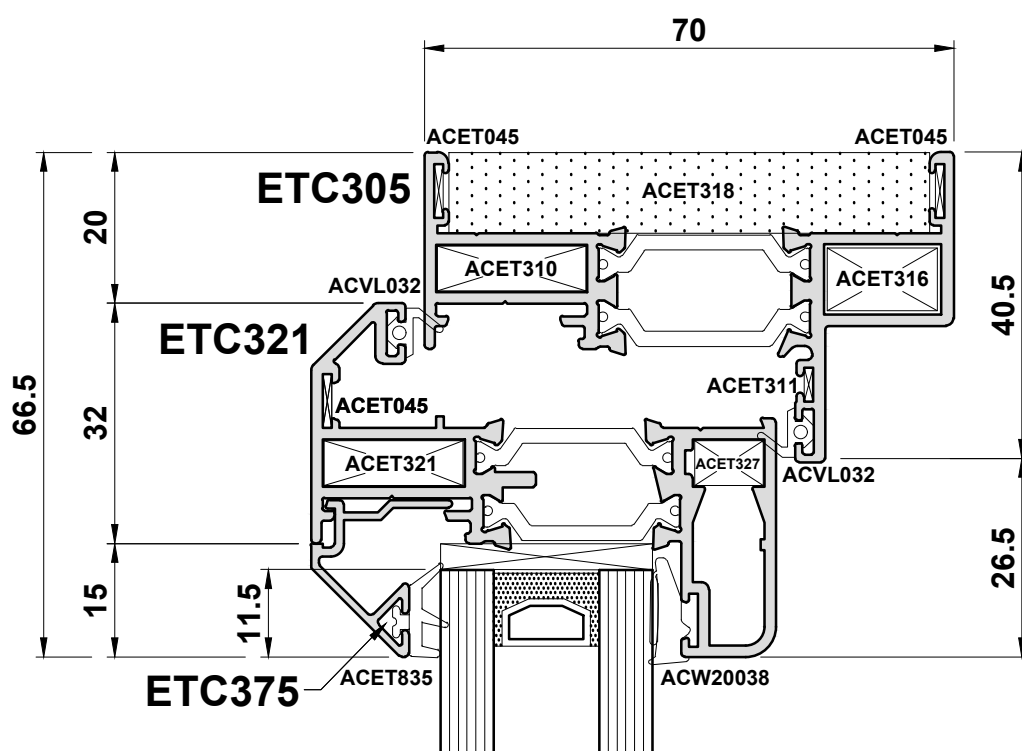
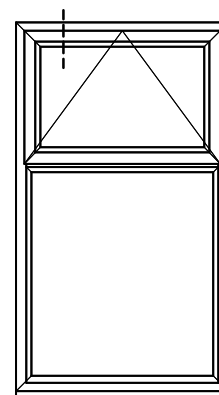
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Detail 4D



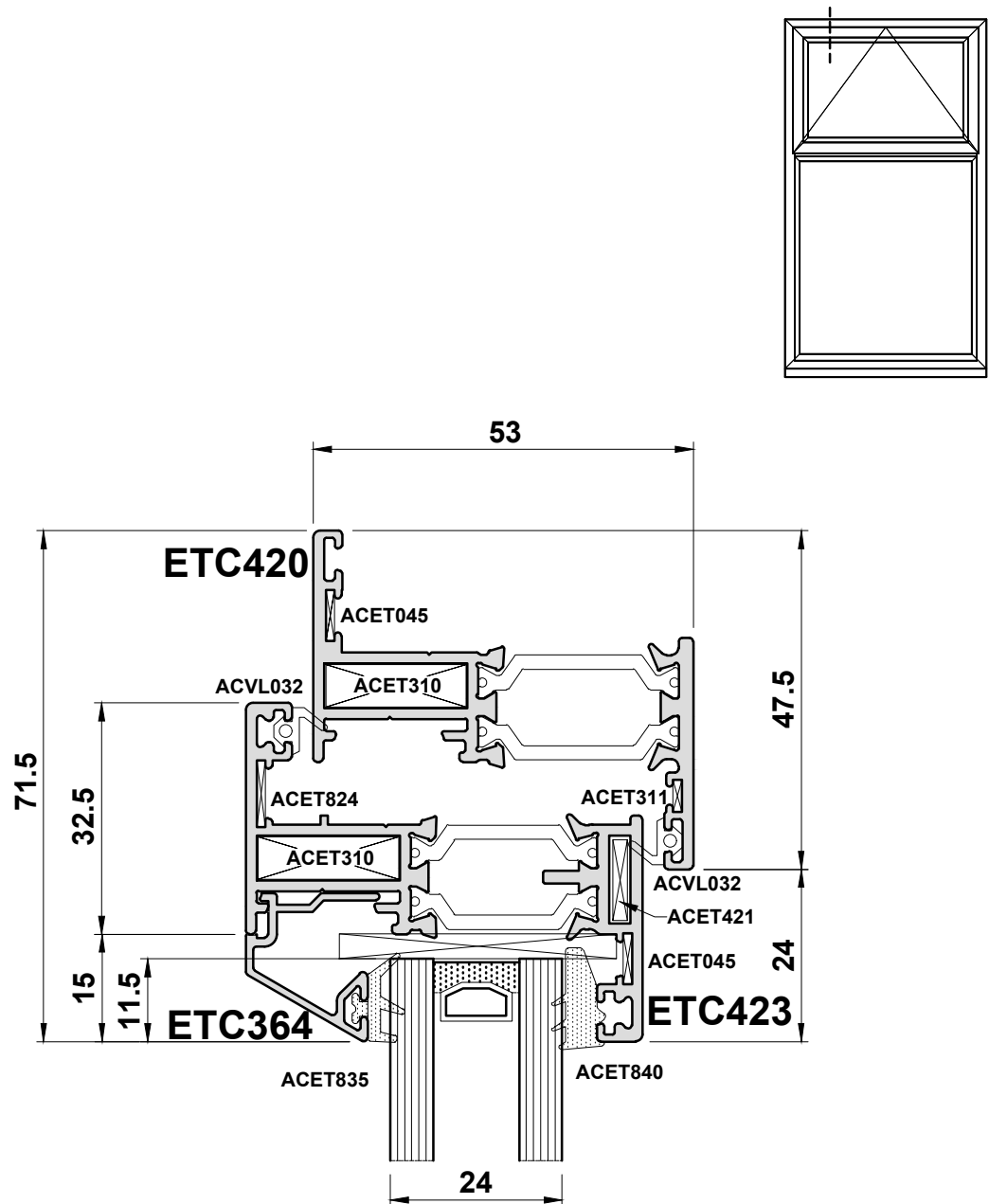
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Detail 4E



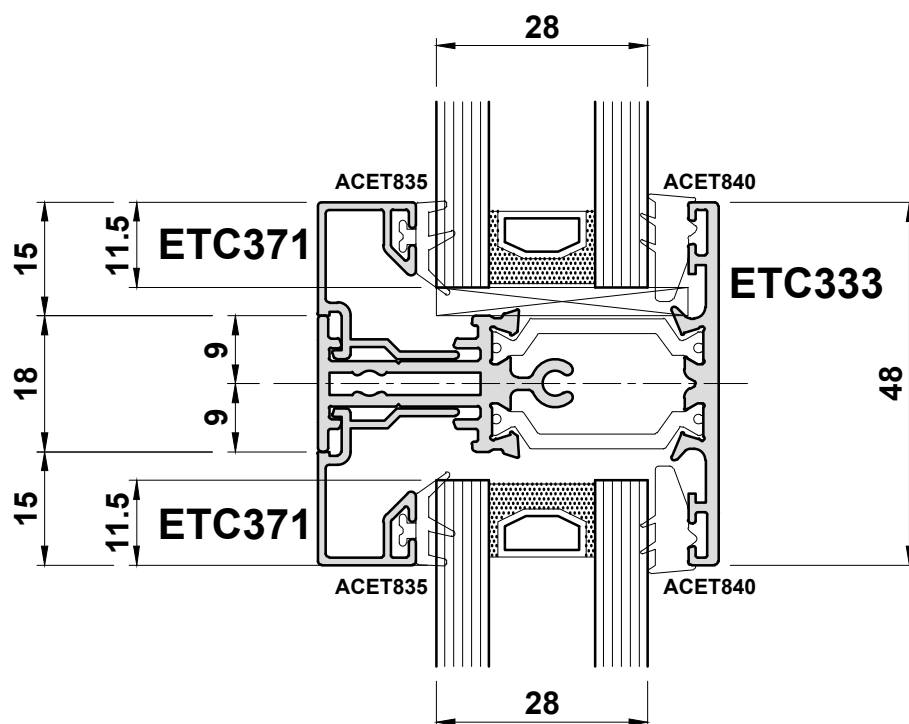
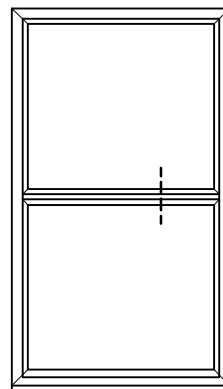
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Detail 4F



Do Not Scale From This Drawing

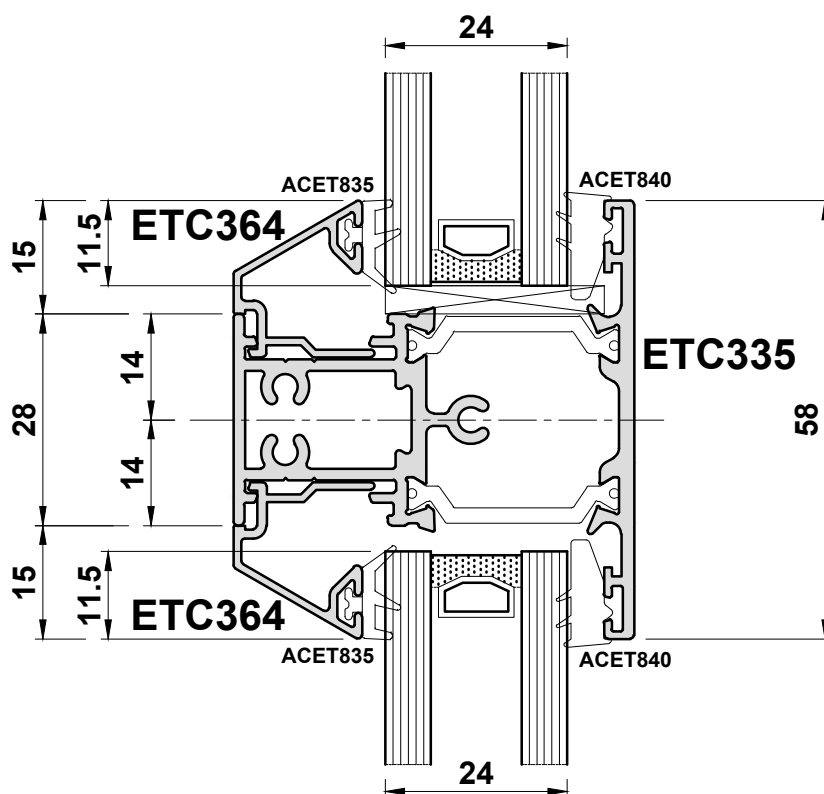
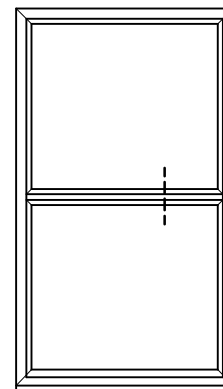
Detail 5A



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

Do Not Scale From This Drawing

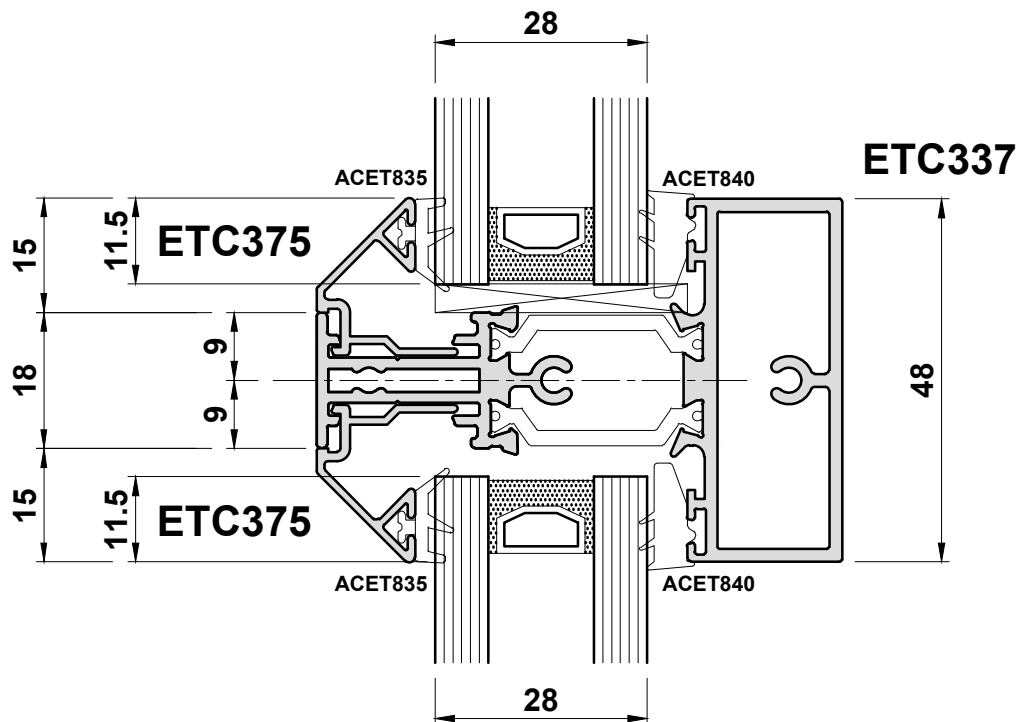
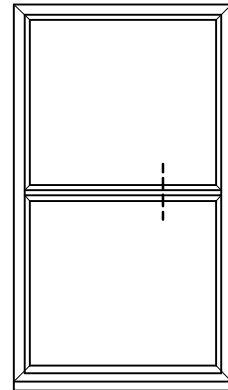
Detail 5B



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

Do Not Scale From This Drawing

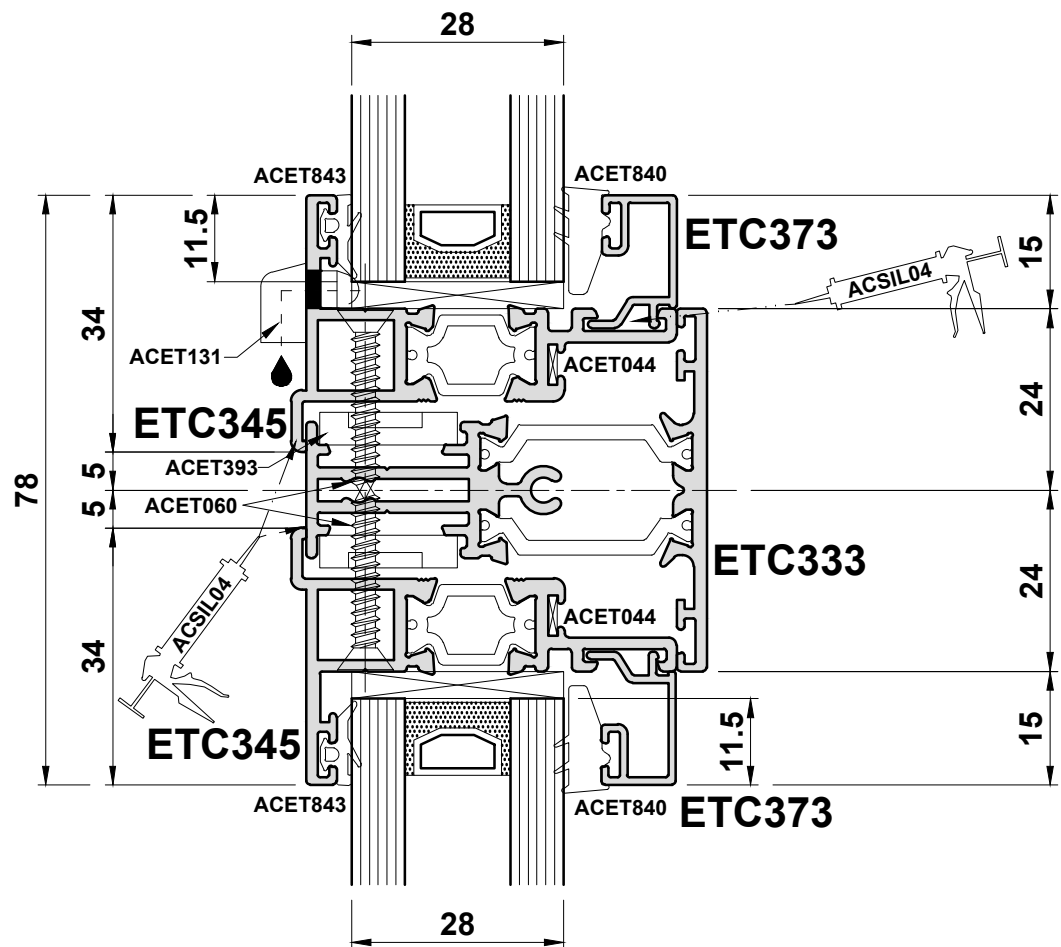
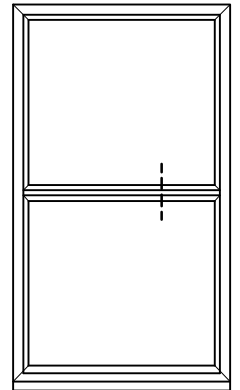
Detail 5C



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

Do Not Scale From This Drawing

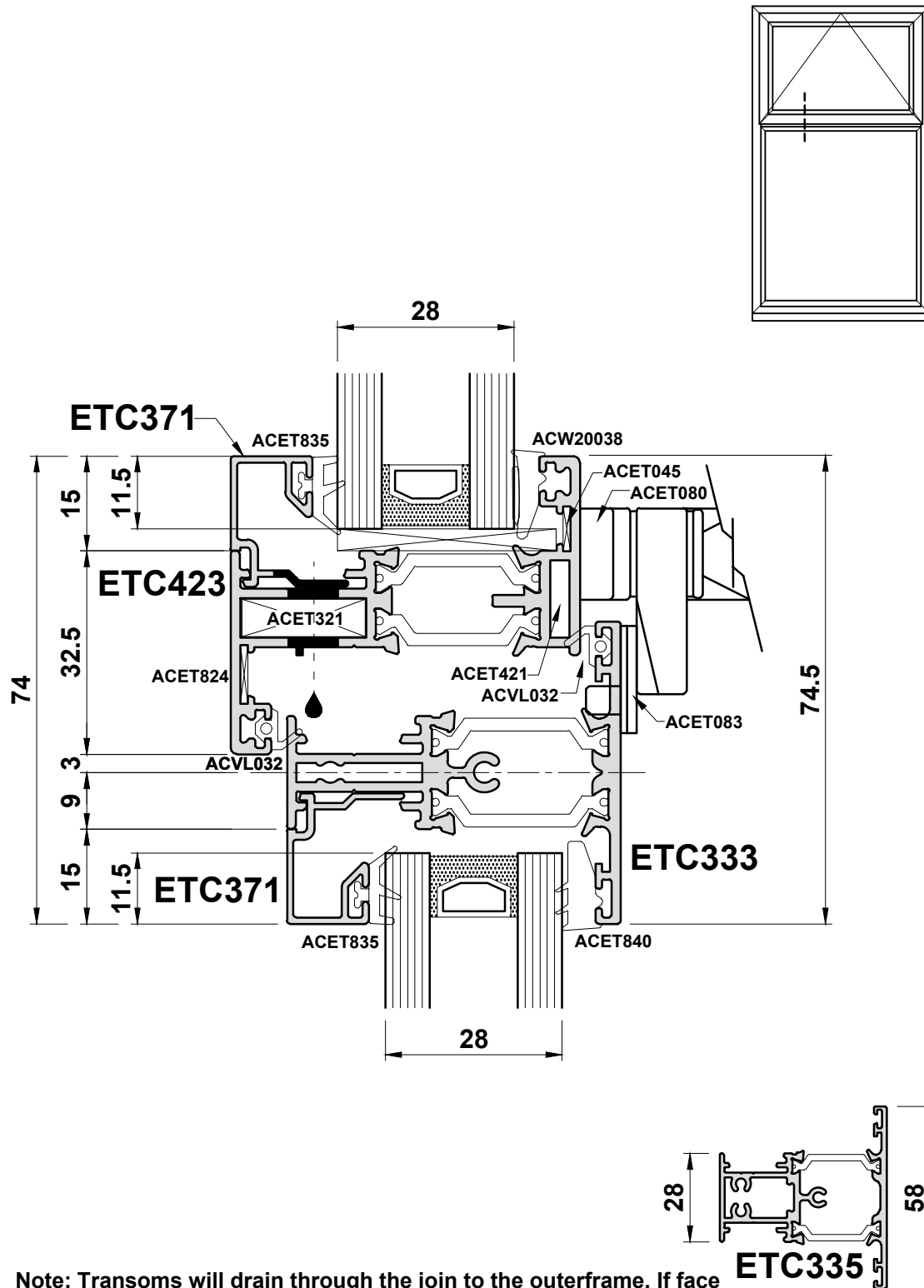
Detail 5D



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

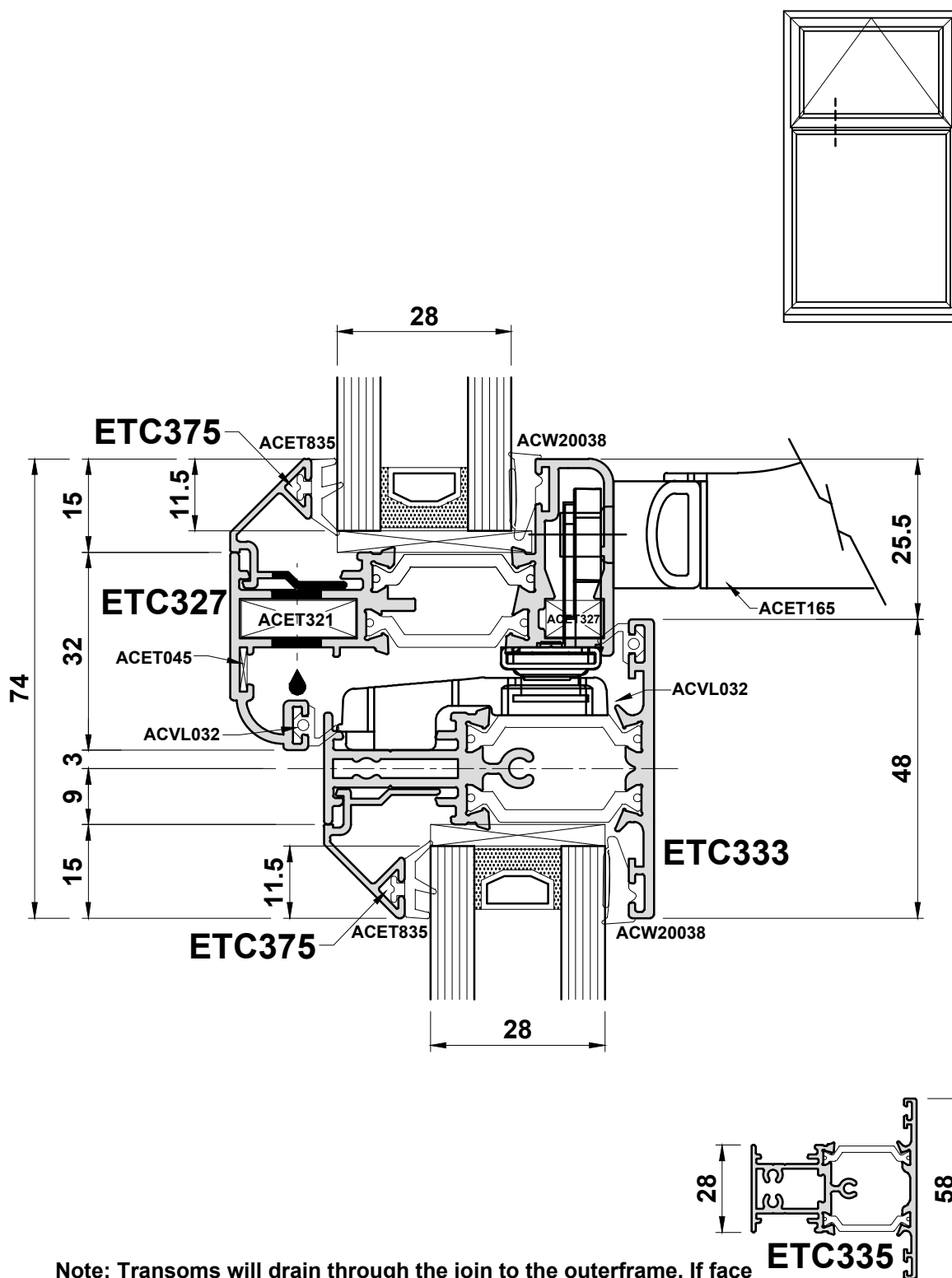
Do Not Scale From This Drawing

Detail 6A



Do Not Scale From This Drawing

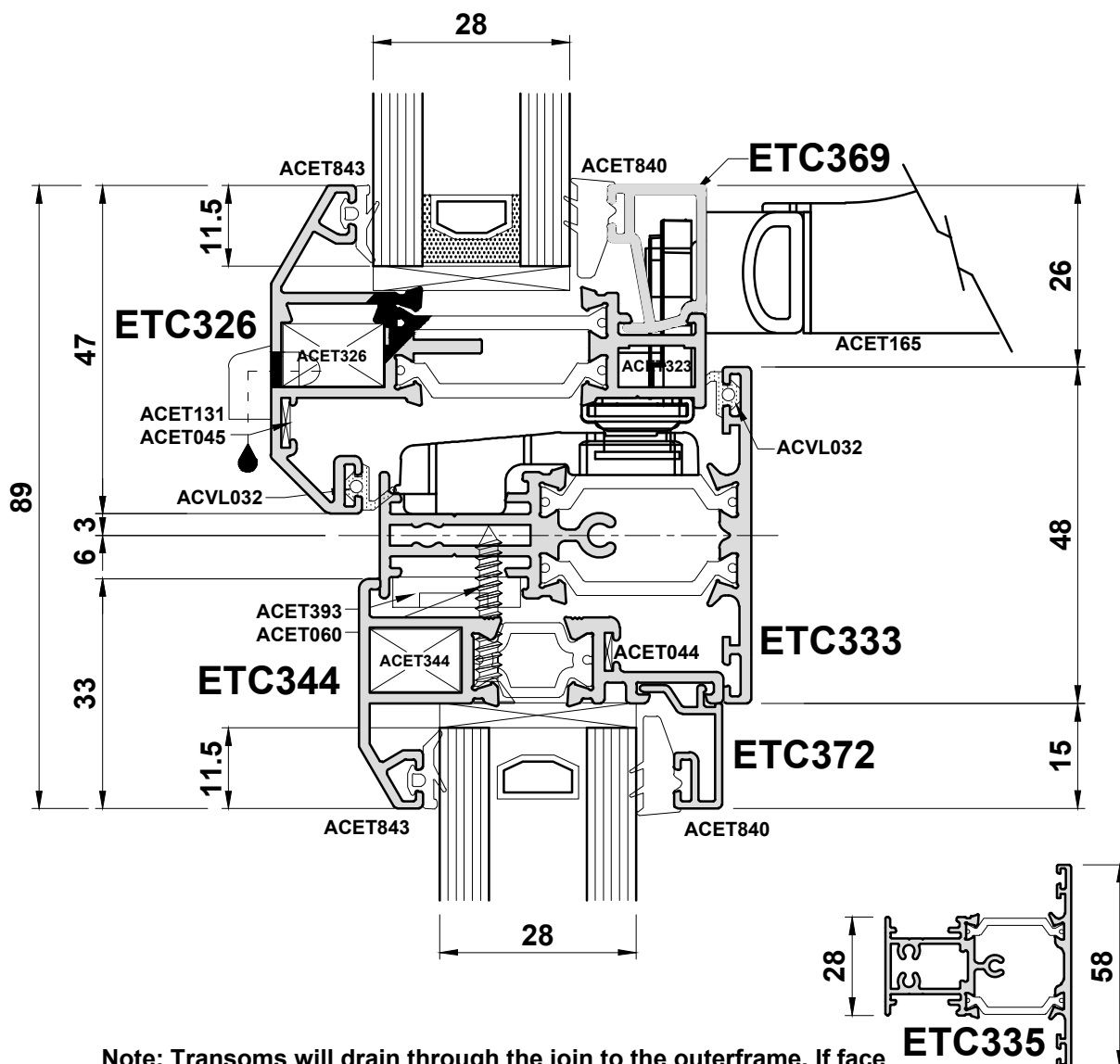
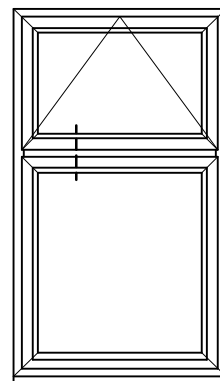
Detail 6B



Note: Transoms will drain through the join to the outerframe. If face drainage is preferred, wider transom ETC335 must be used.

Do Not Scale From This Drawing

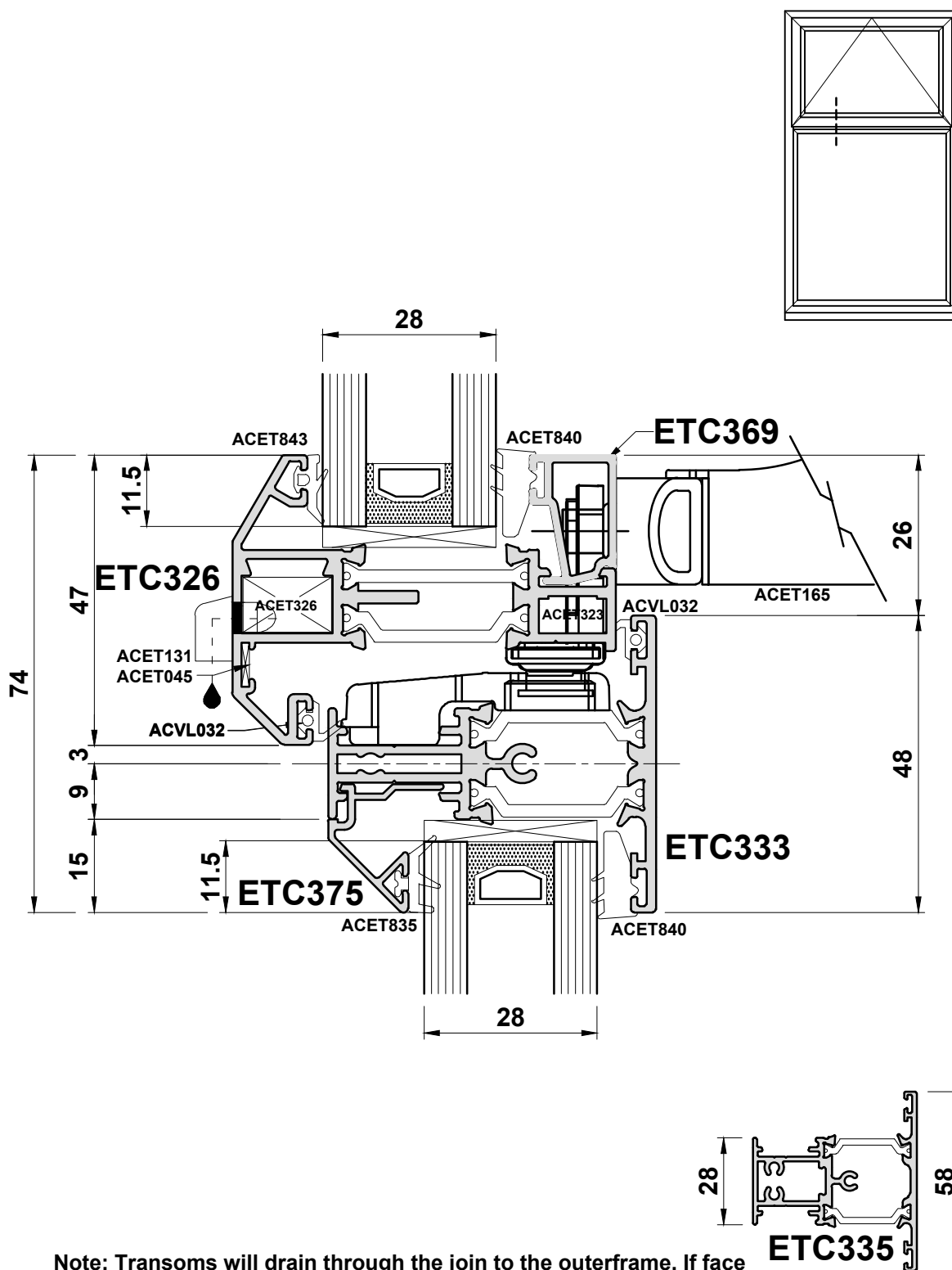
Detail 6C



Note: Transoms will drain through the join to the outerframe. If face drainage is preferred, wider transom ETC335 must be used.

Do Not Scale From This Drawing

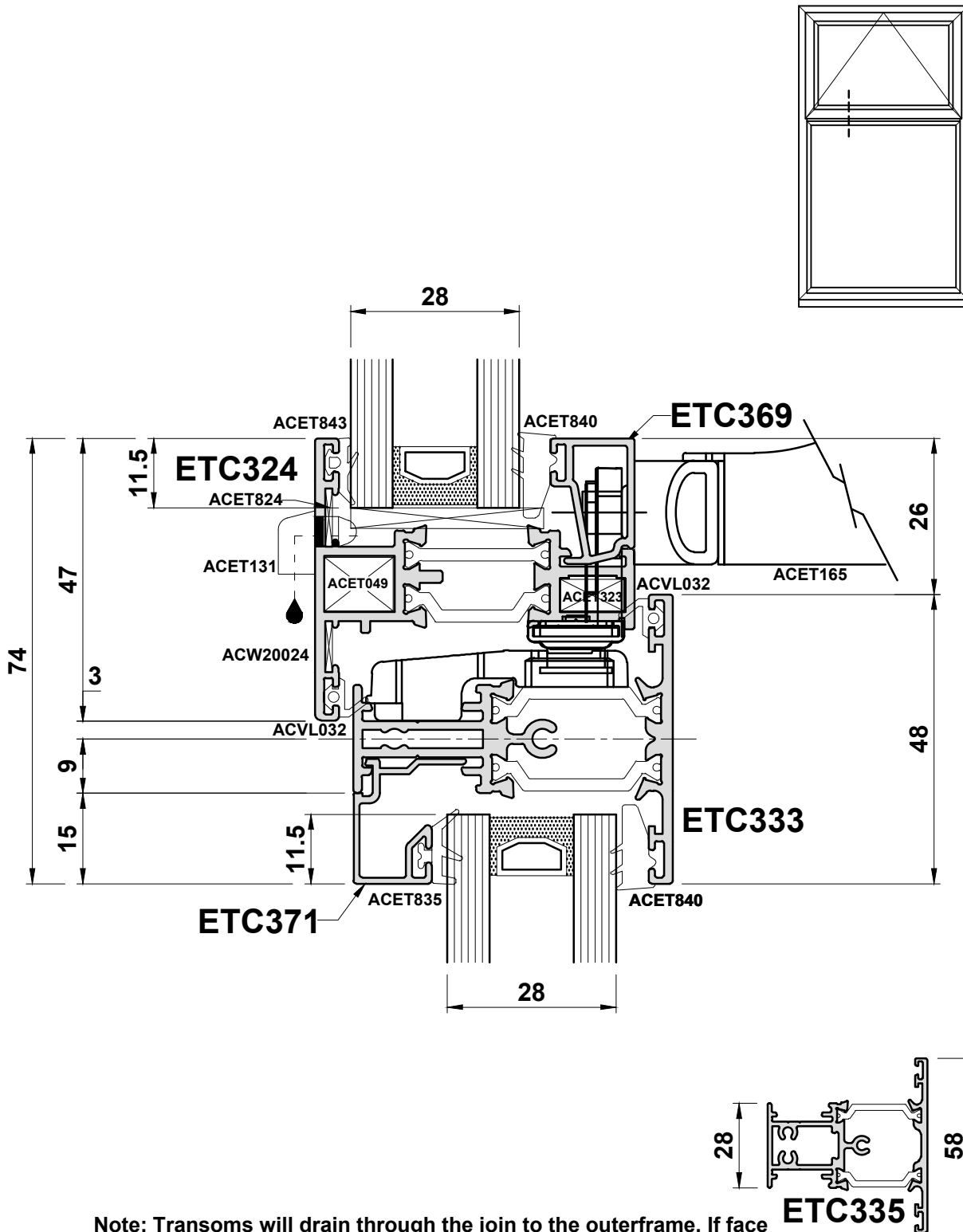
Detail 6D



Note: Transoms will drain through the join to the outerframe. If face drainage is preferred, wider transom ETC335 must be used.

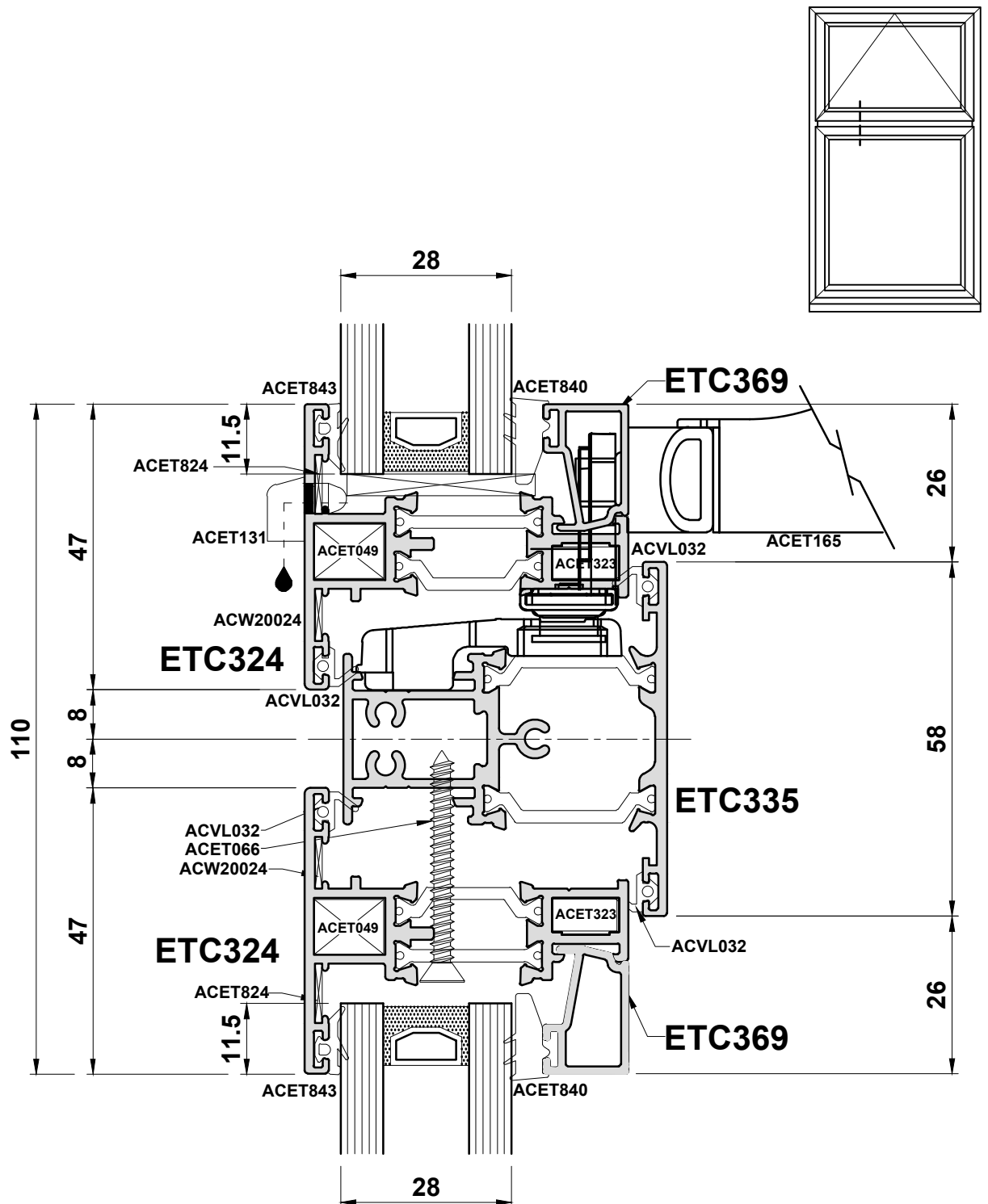
Do Not Scale From This Drawing

Detail 6E



Do Not Scale From This Drawing

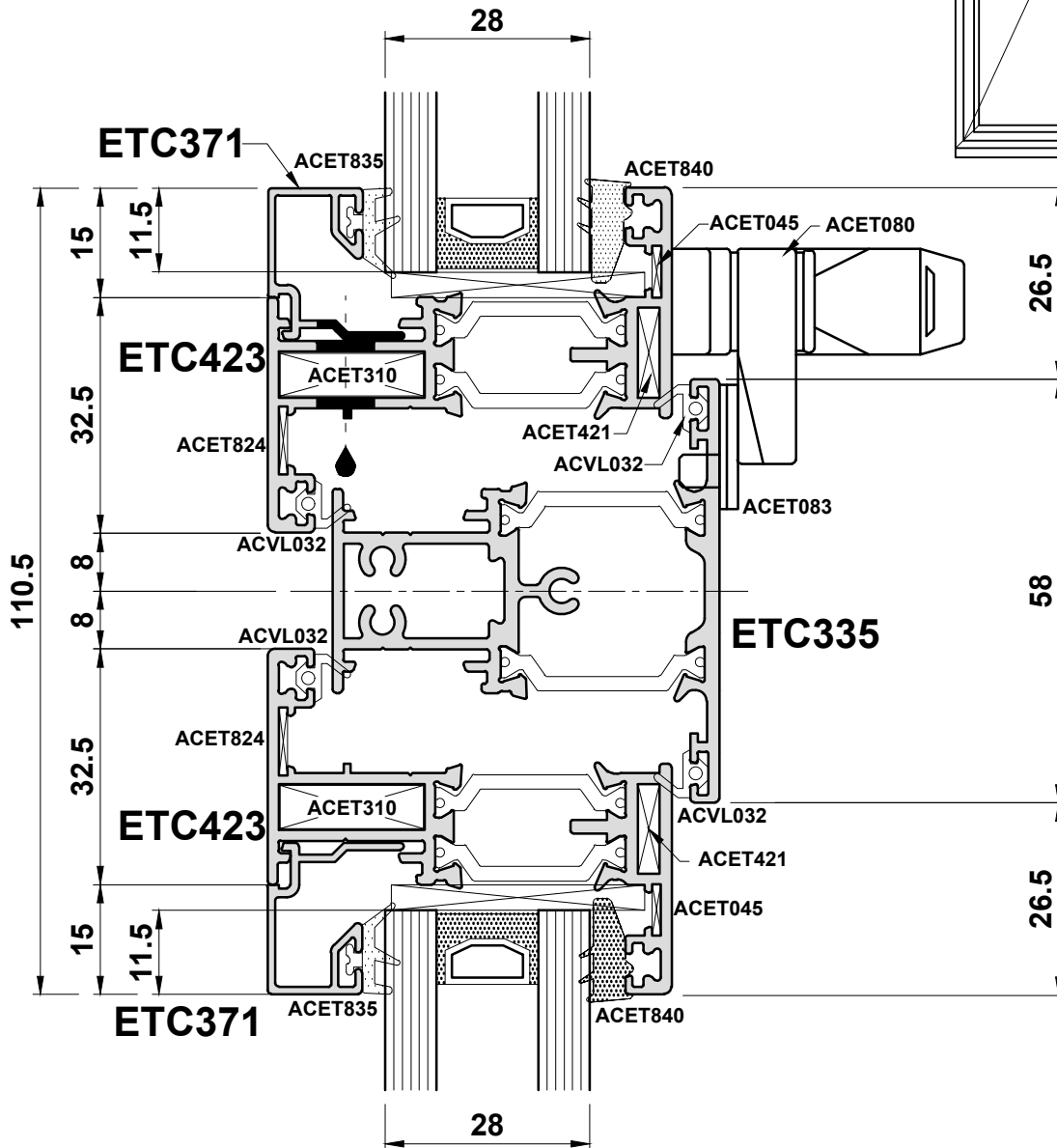
Detail 7A



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

Do Not Scale From This Drawing

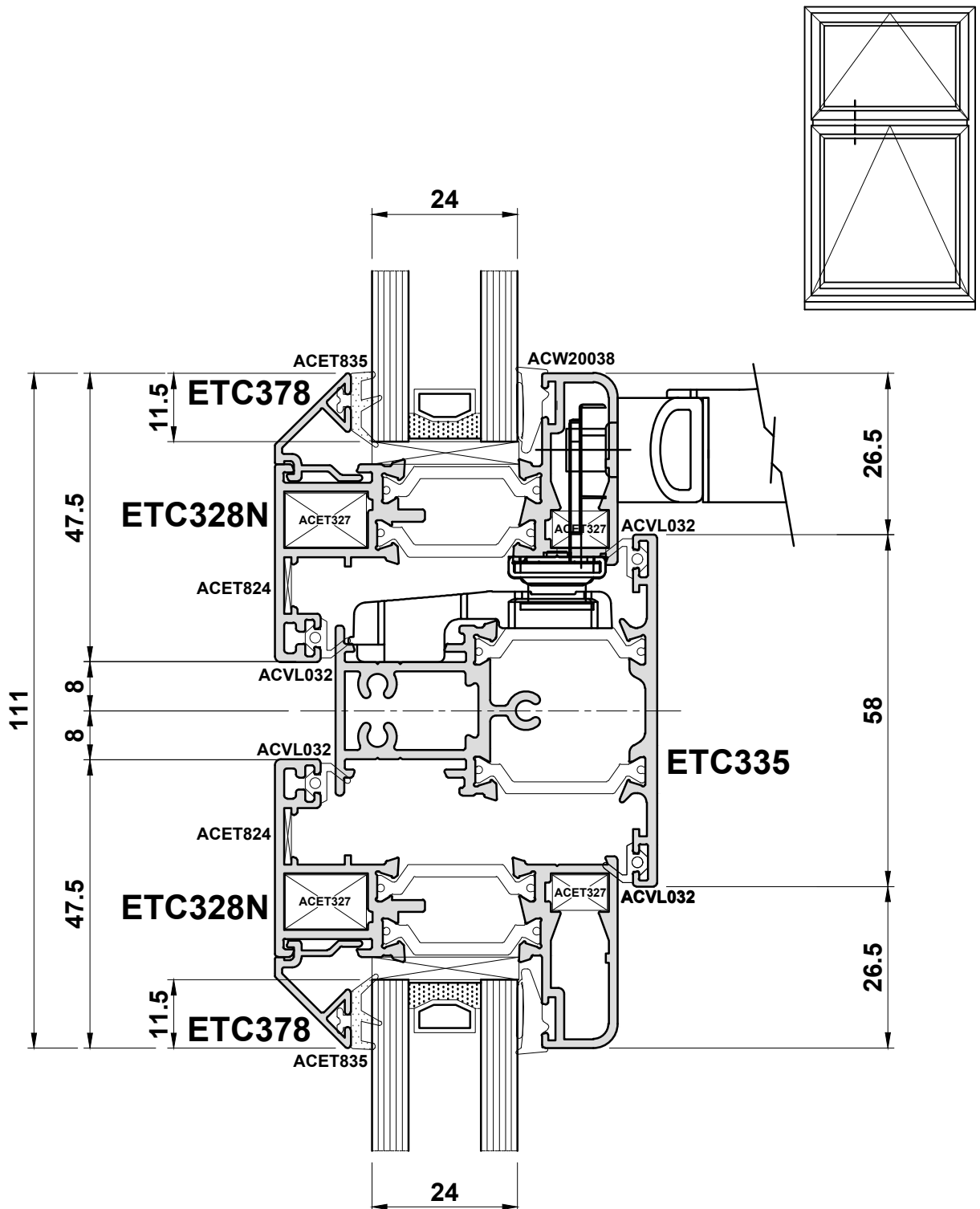
Detail 7B



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

Do Not Scale From This Drawing

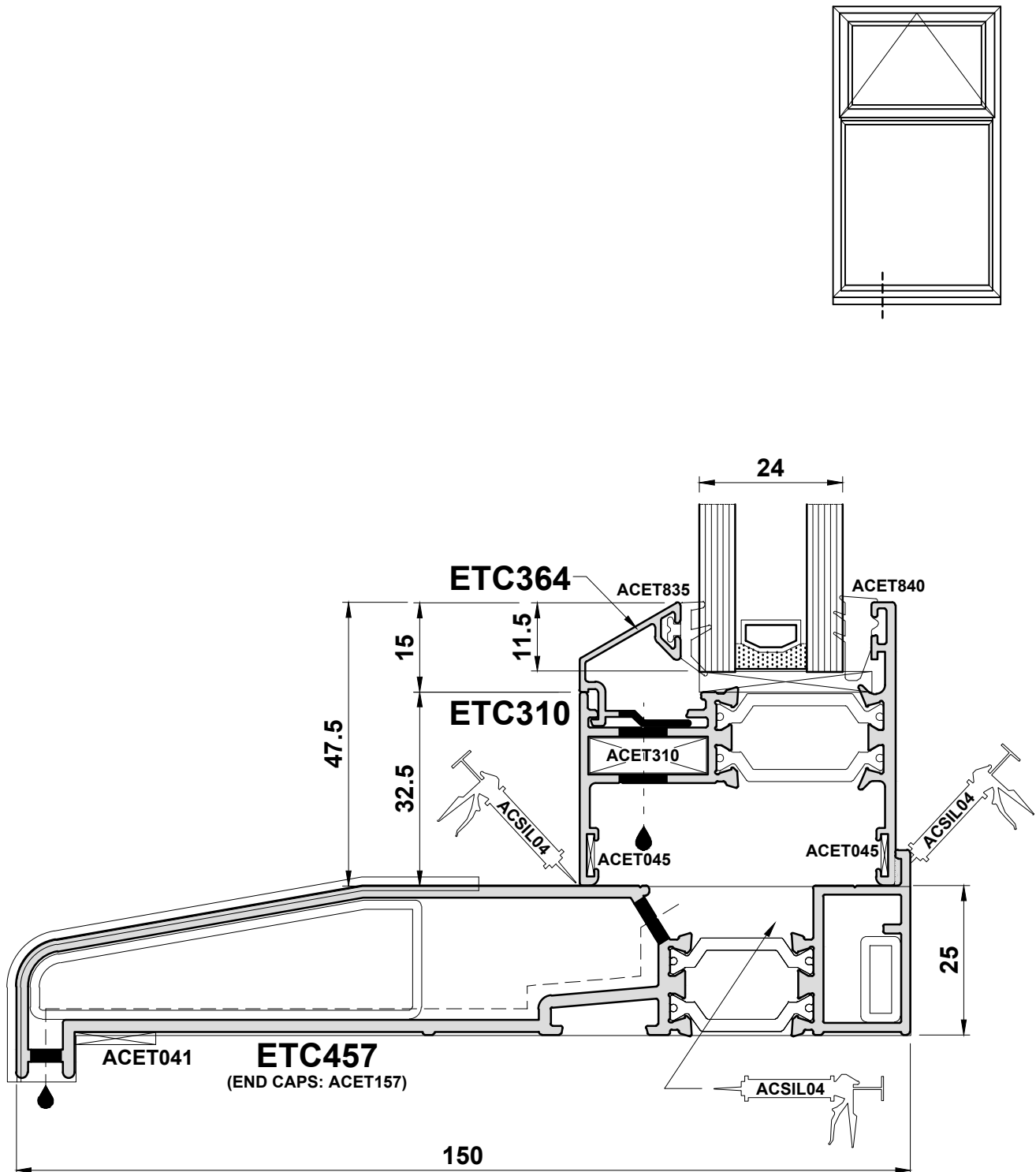
Detail 7E



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

Do Not Scale From This Drawing

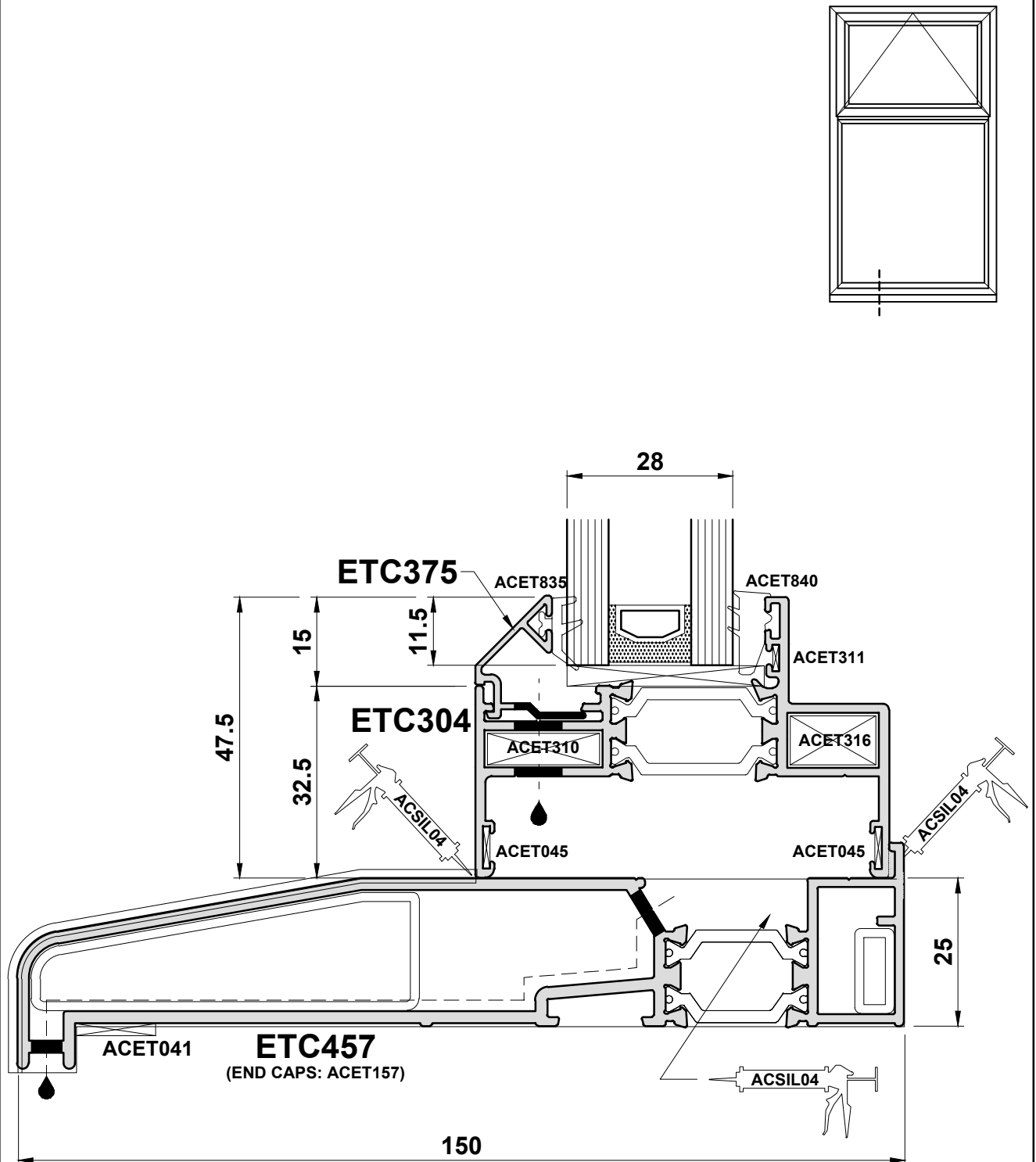
Detail 8A



Cill end caps should be sealed to cill to prevent water egress over edge

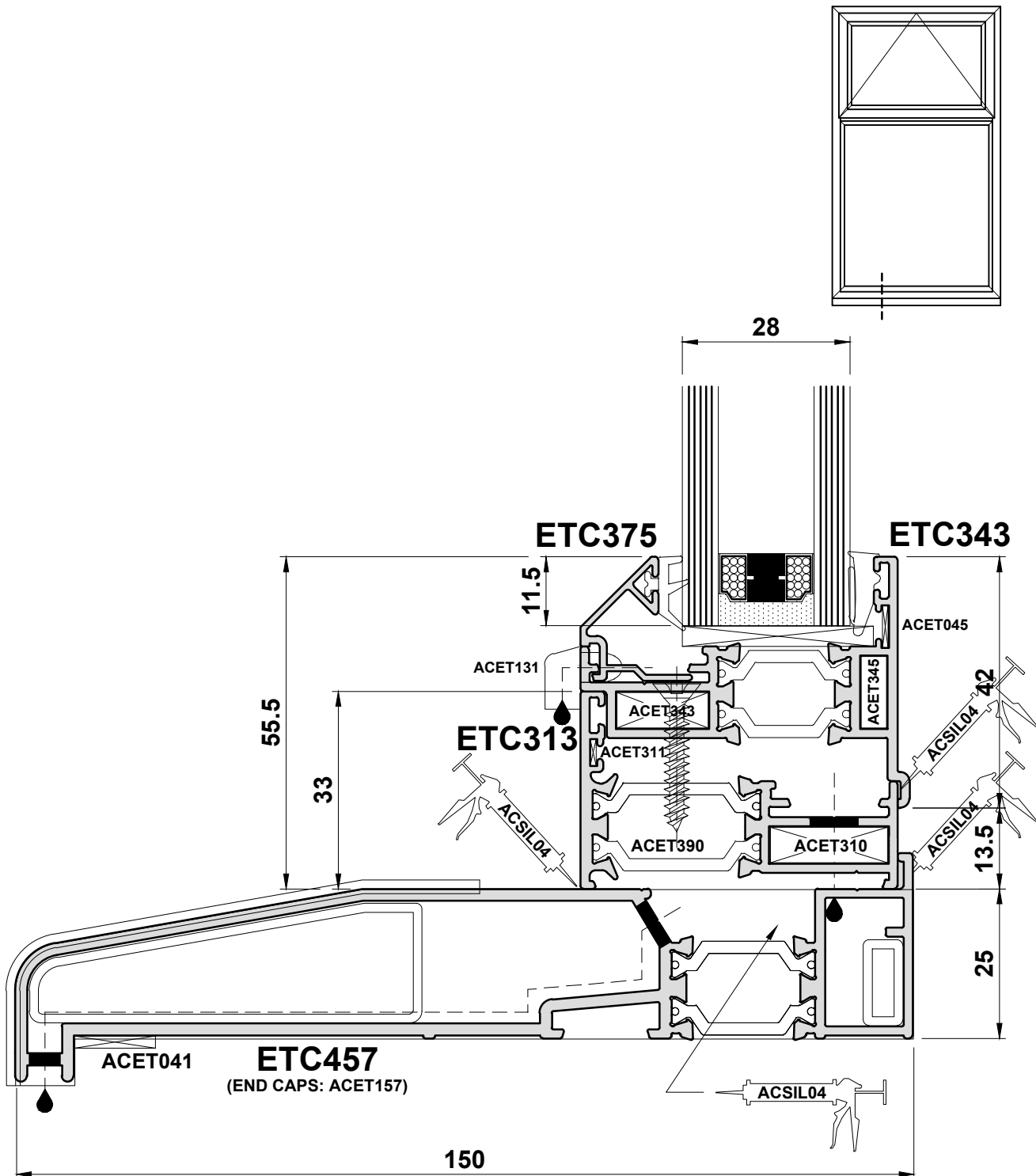
Do Not Scale From This Drawing

Detail 8B



Do Not Scale From This Drawing

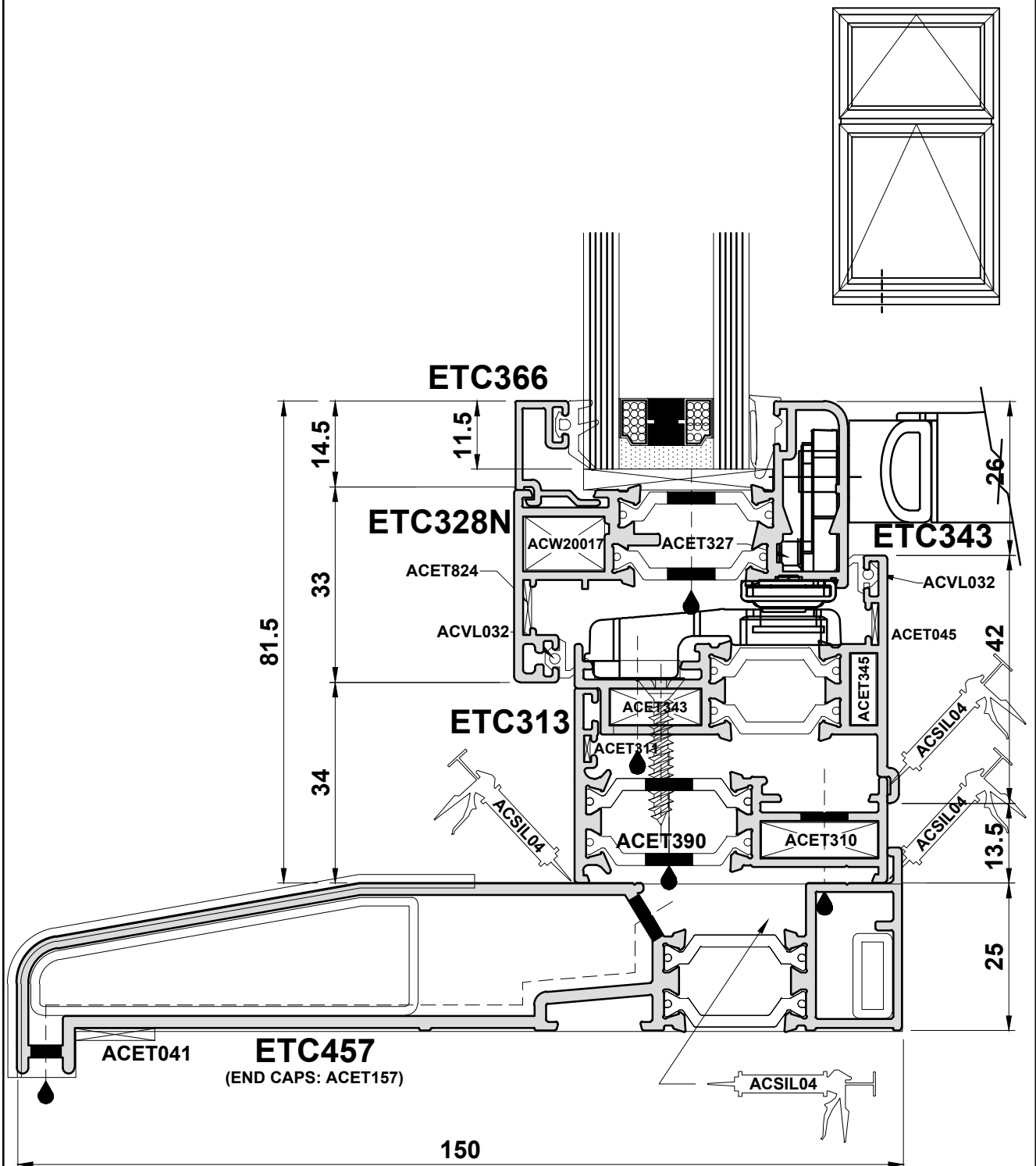
Detail 8C



Note: Where ETC343 is used, concealed drainage through a cill is recommended.

Do Not Scale From This Drawing

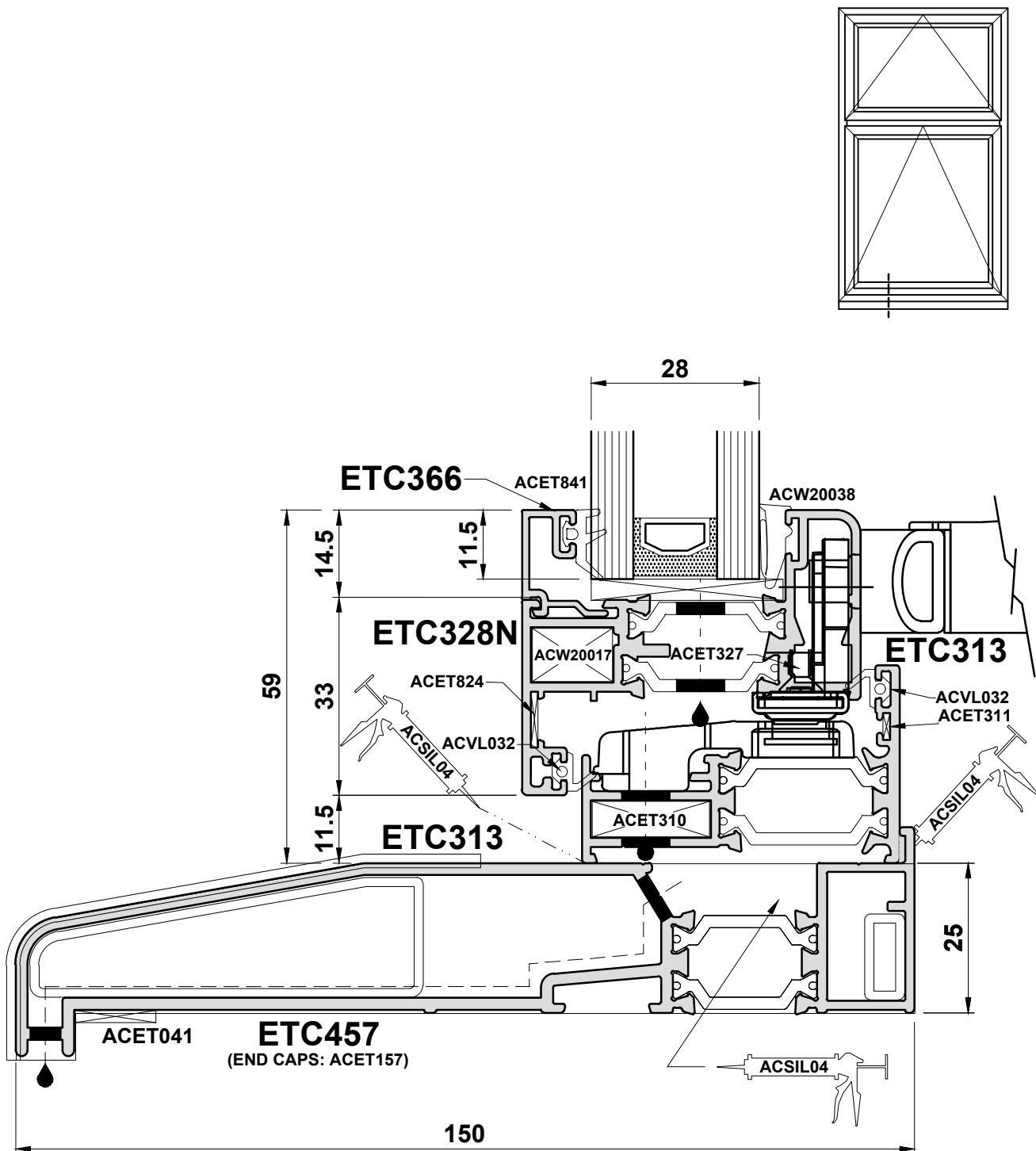
Detail 9A



Note: Where ETC343 is used, concealed drainage through a cill is recommended.

Do Not Scale From This Drawing

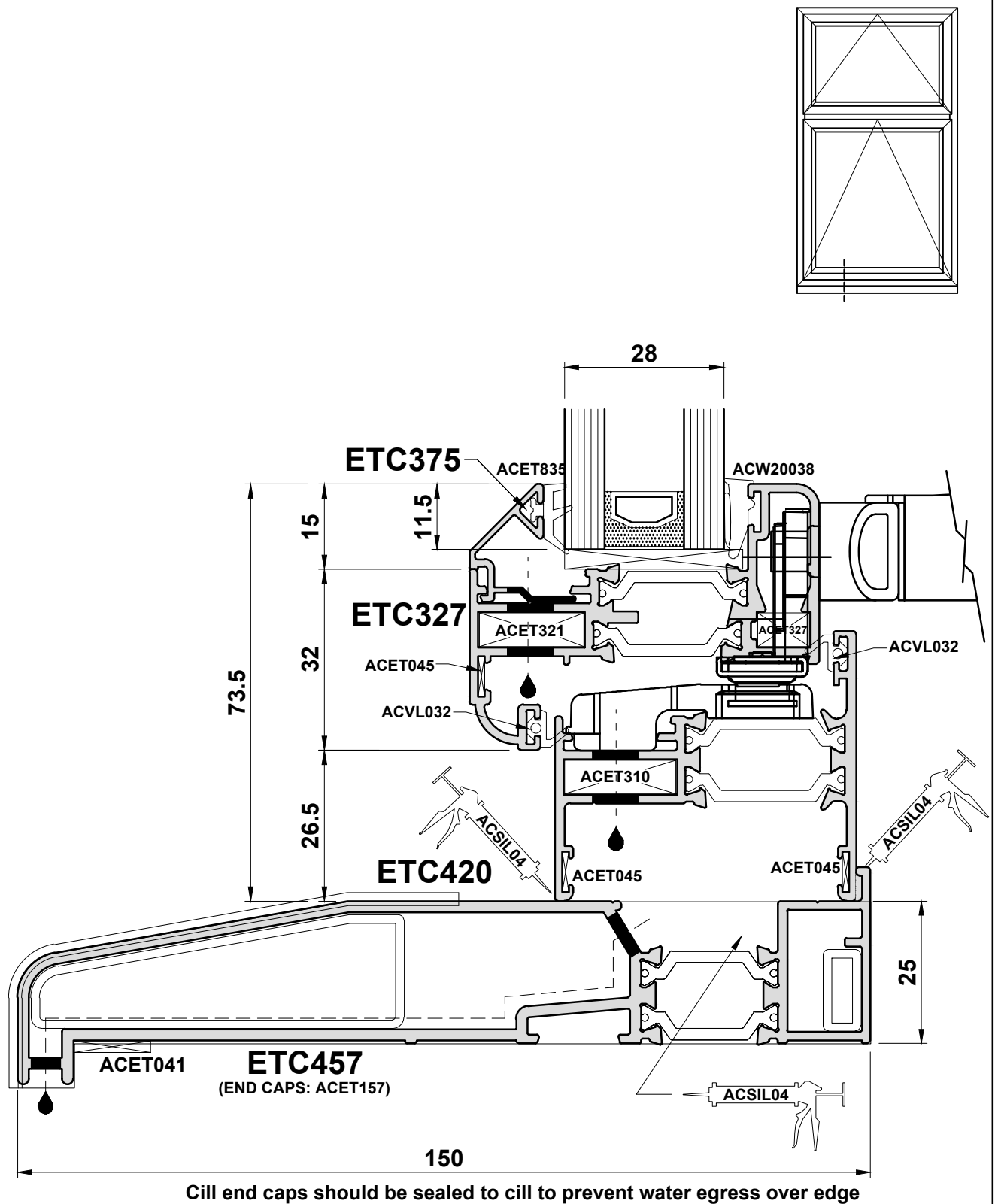
Detail 9B



Cill end caps should be sealed to cill to prevent water egress over edge

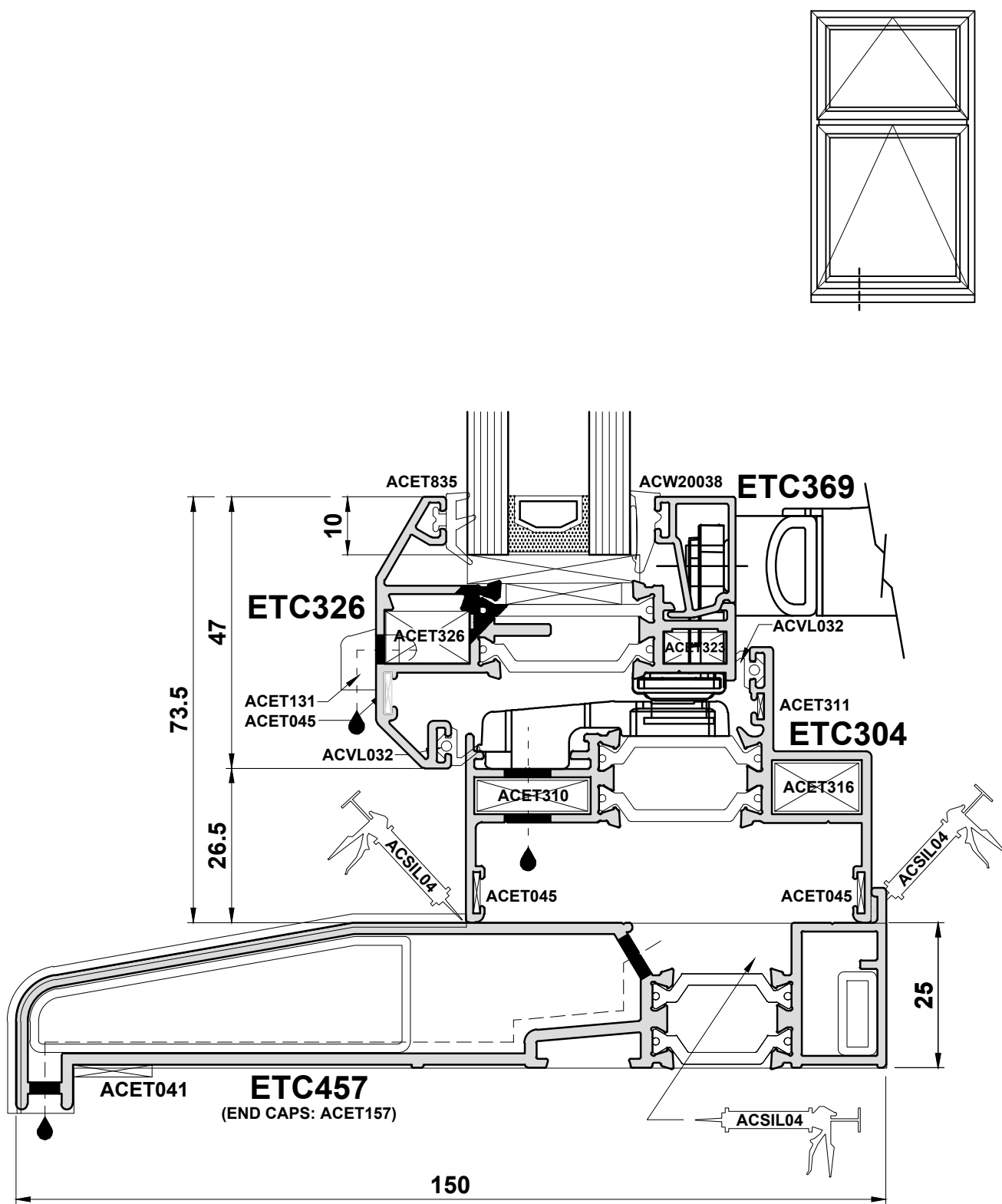
Do Not Scale From This Drawing

Detail 9C



Do Not Scale From This Drawing

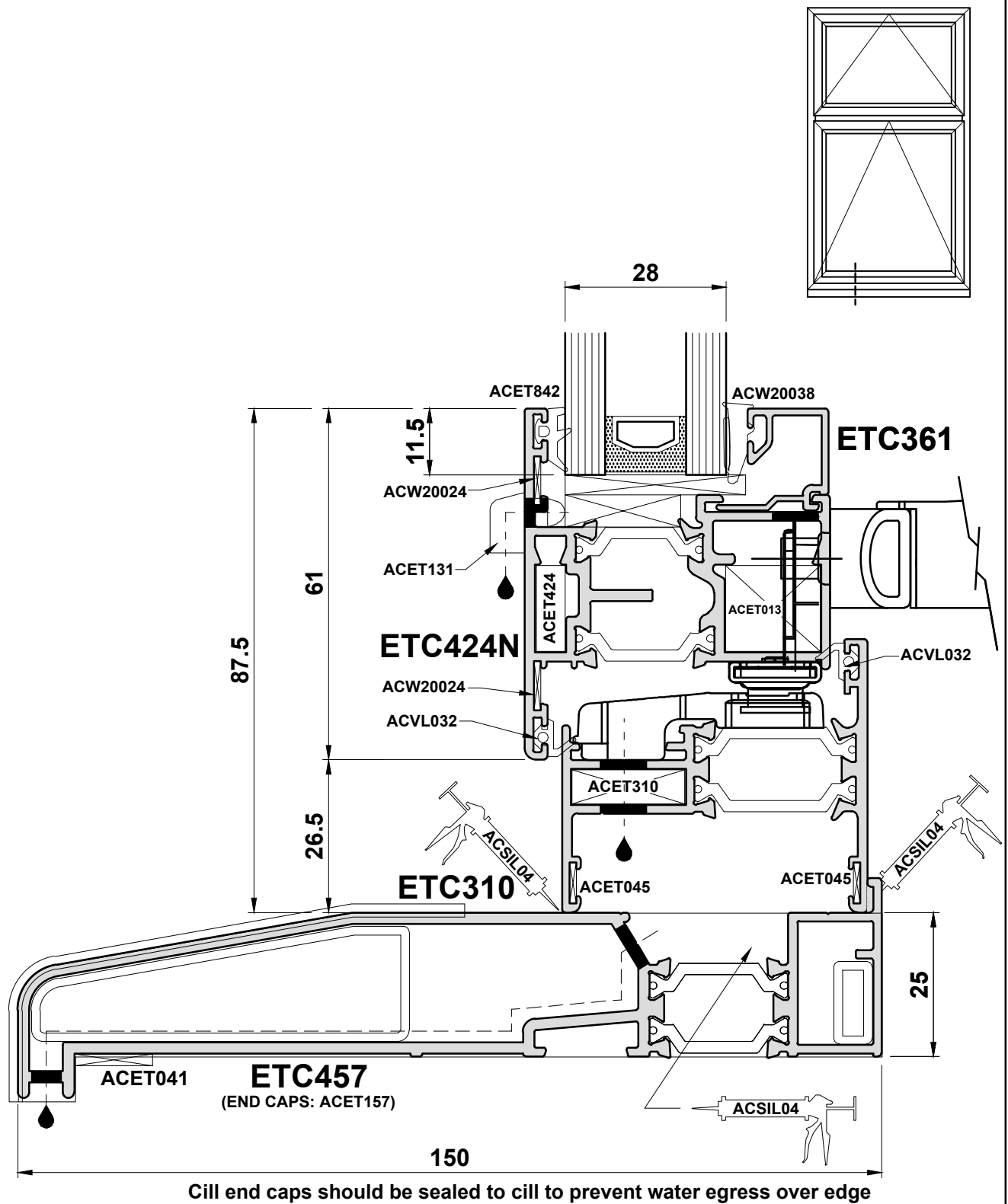
Detail 9D



Cill end caps should be sealed to cill to prevent water egress over edge

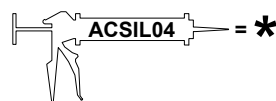
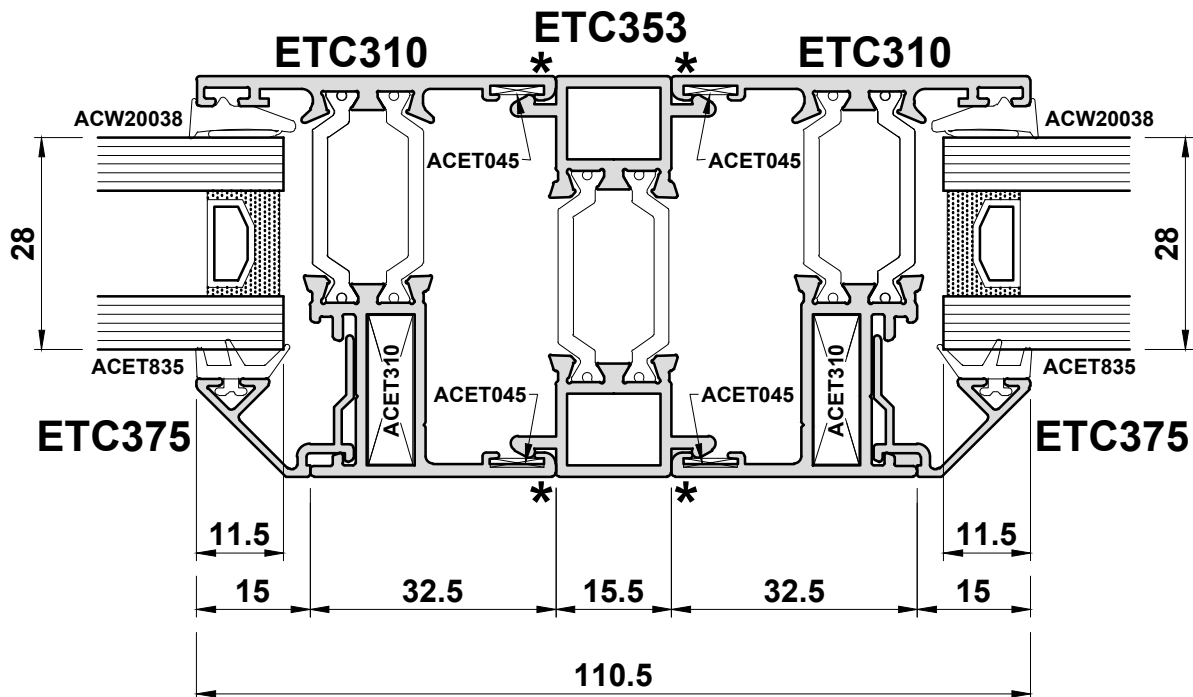
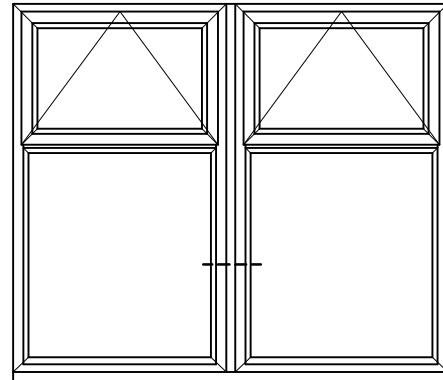
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Detail 9E



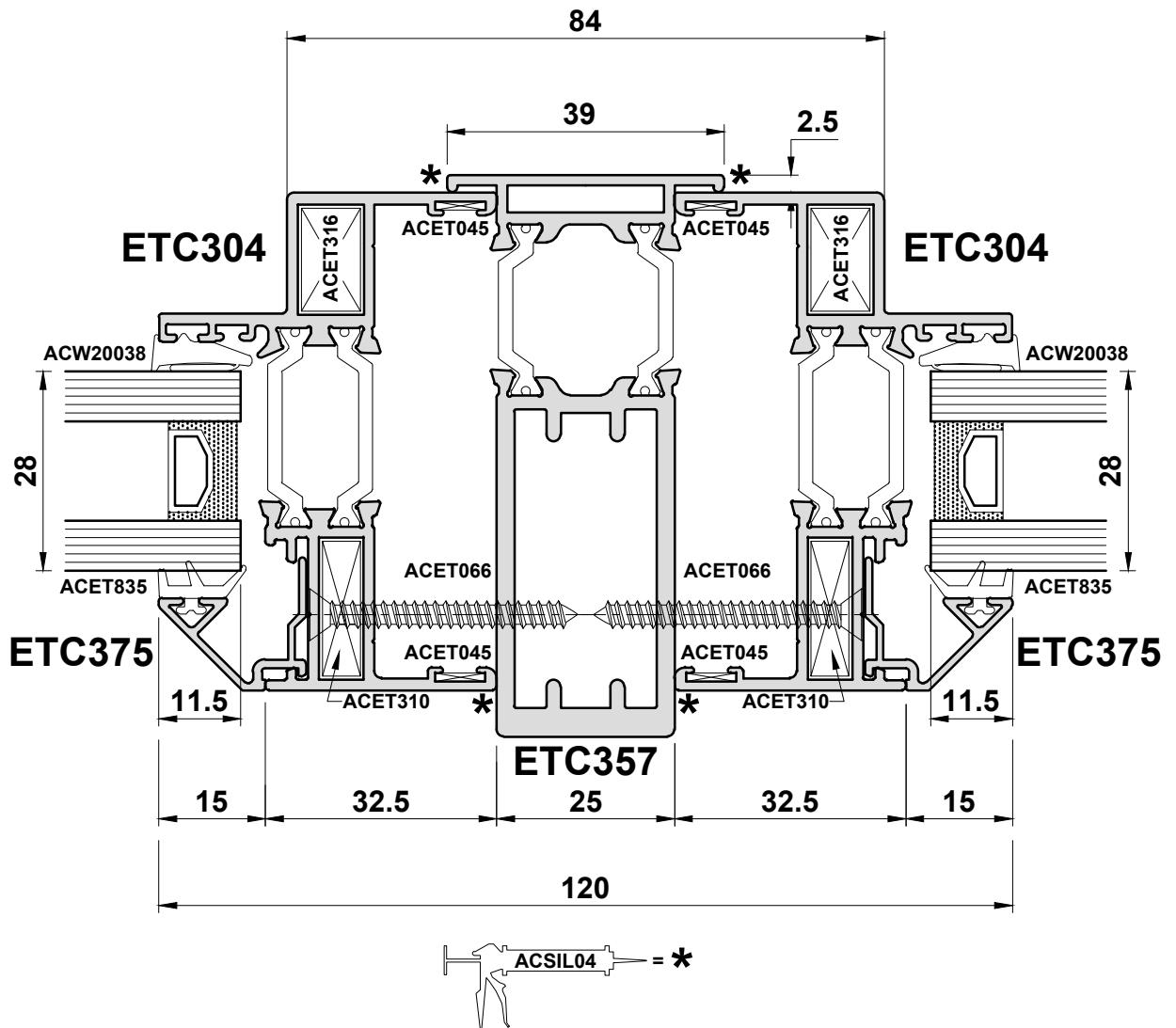
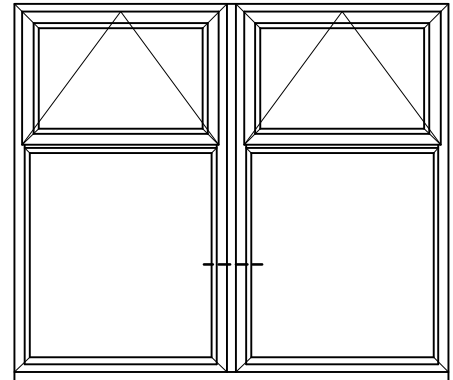
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Detail 10A



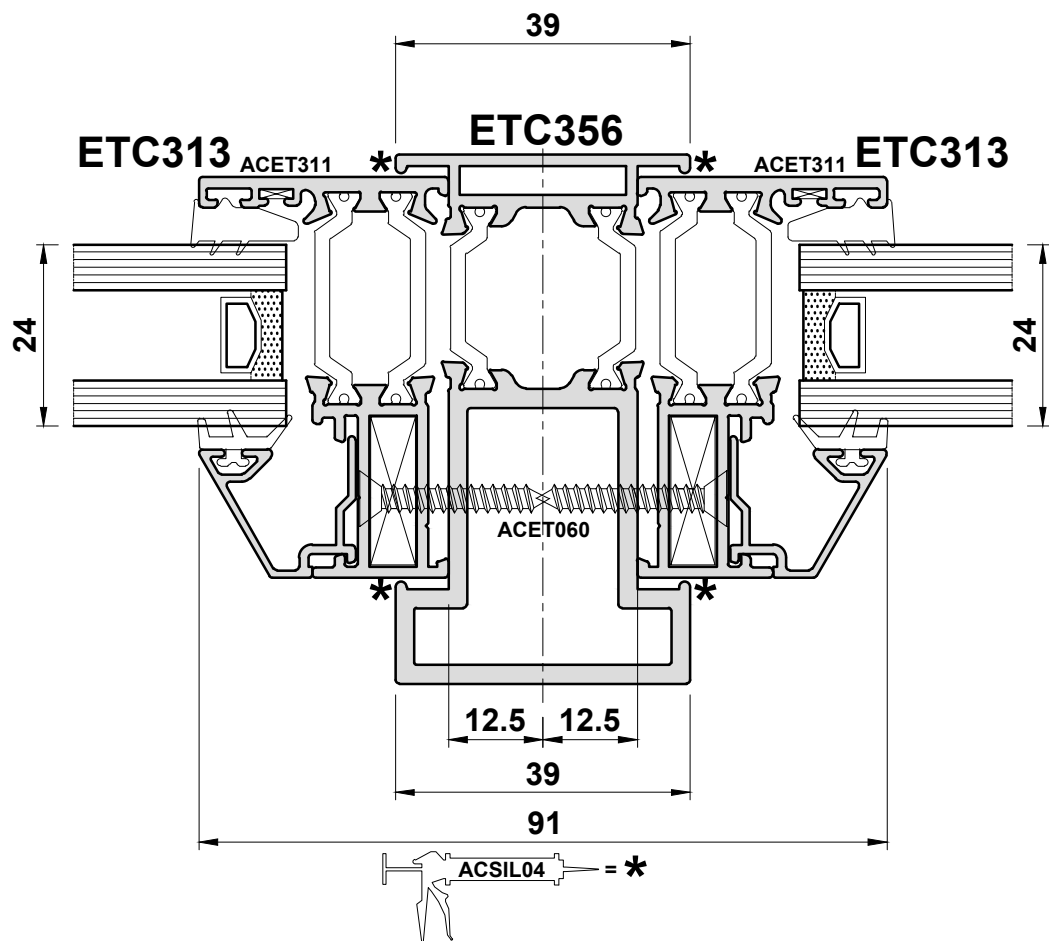
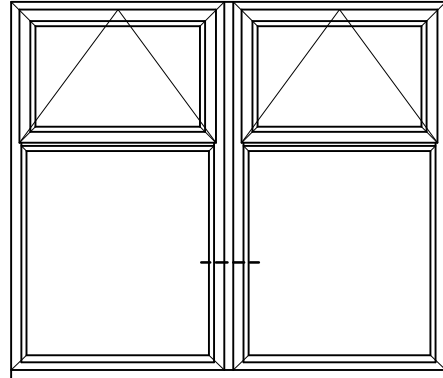
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Detail 10B



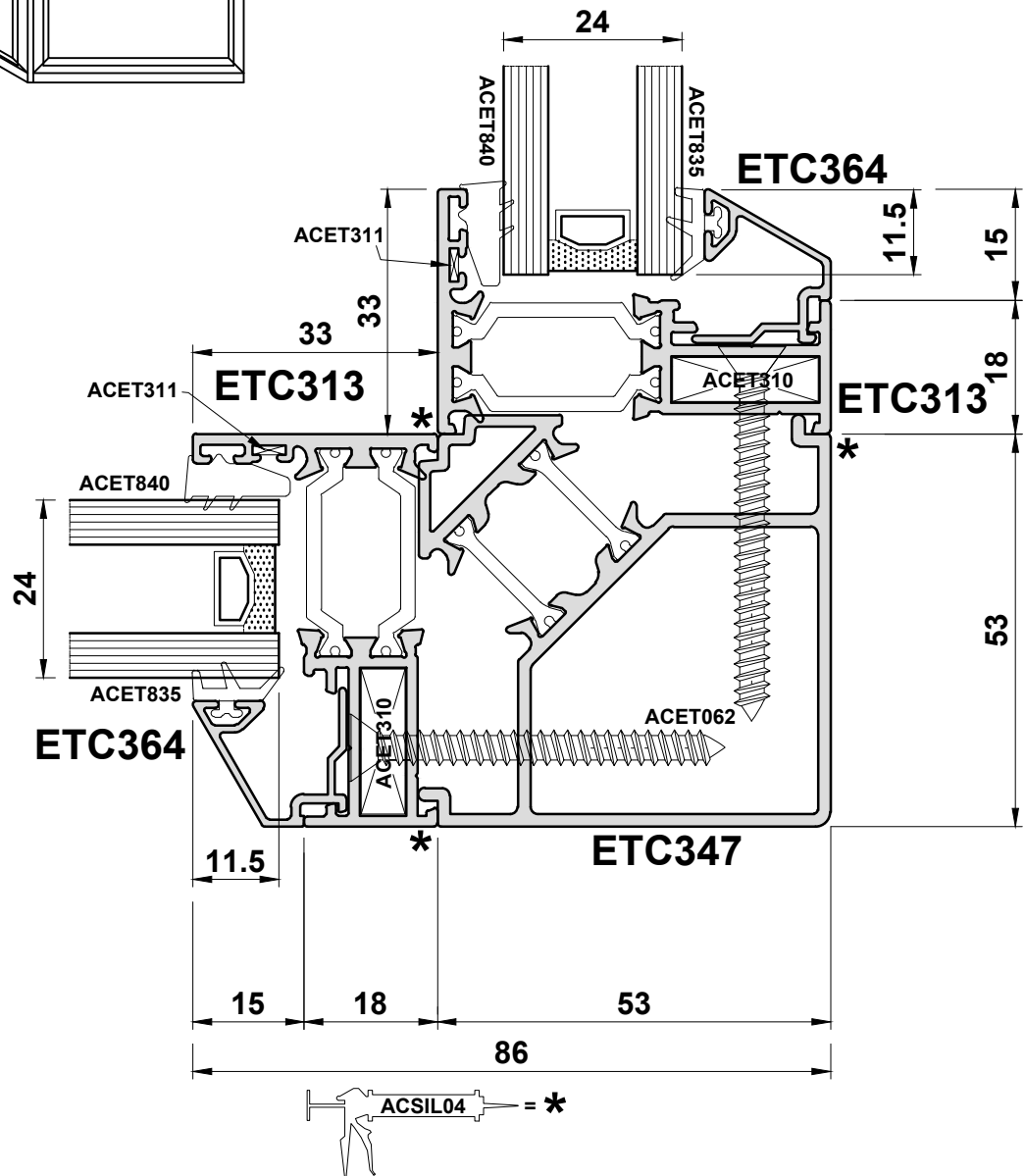
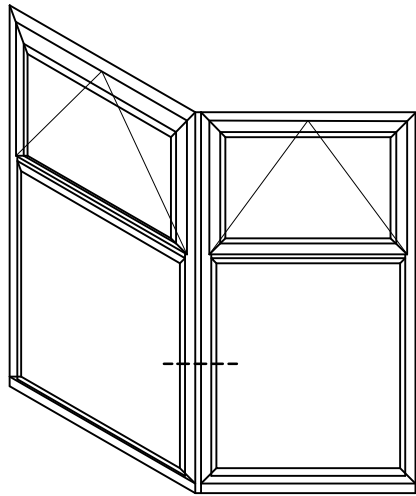
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Detail 10C



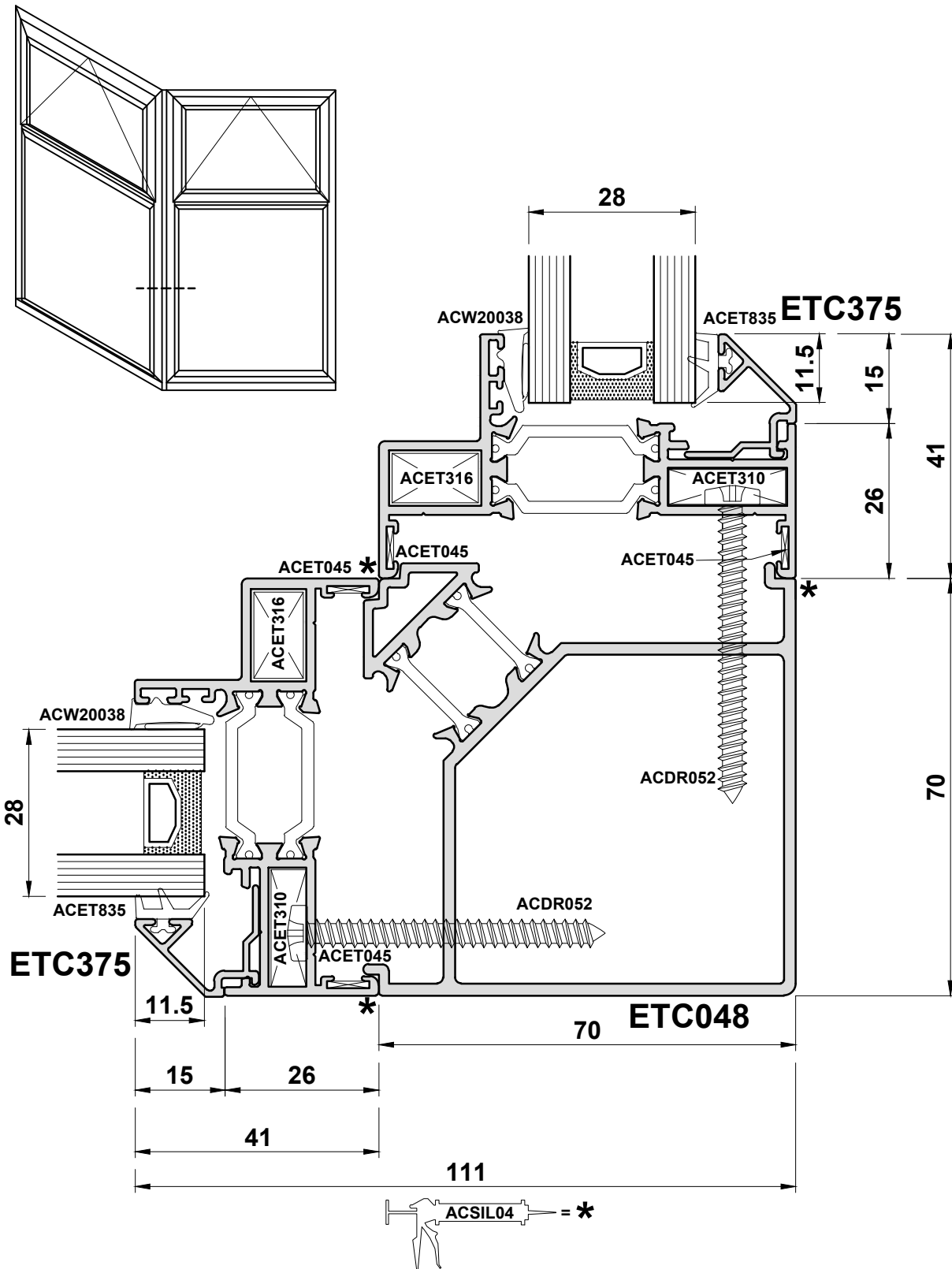
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Detail 10D



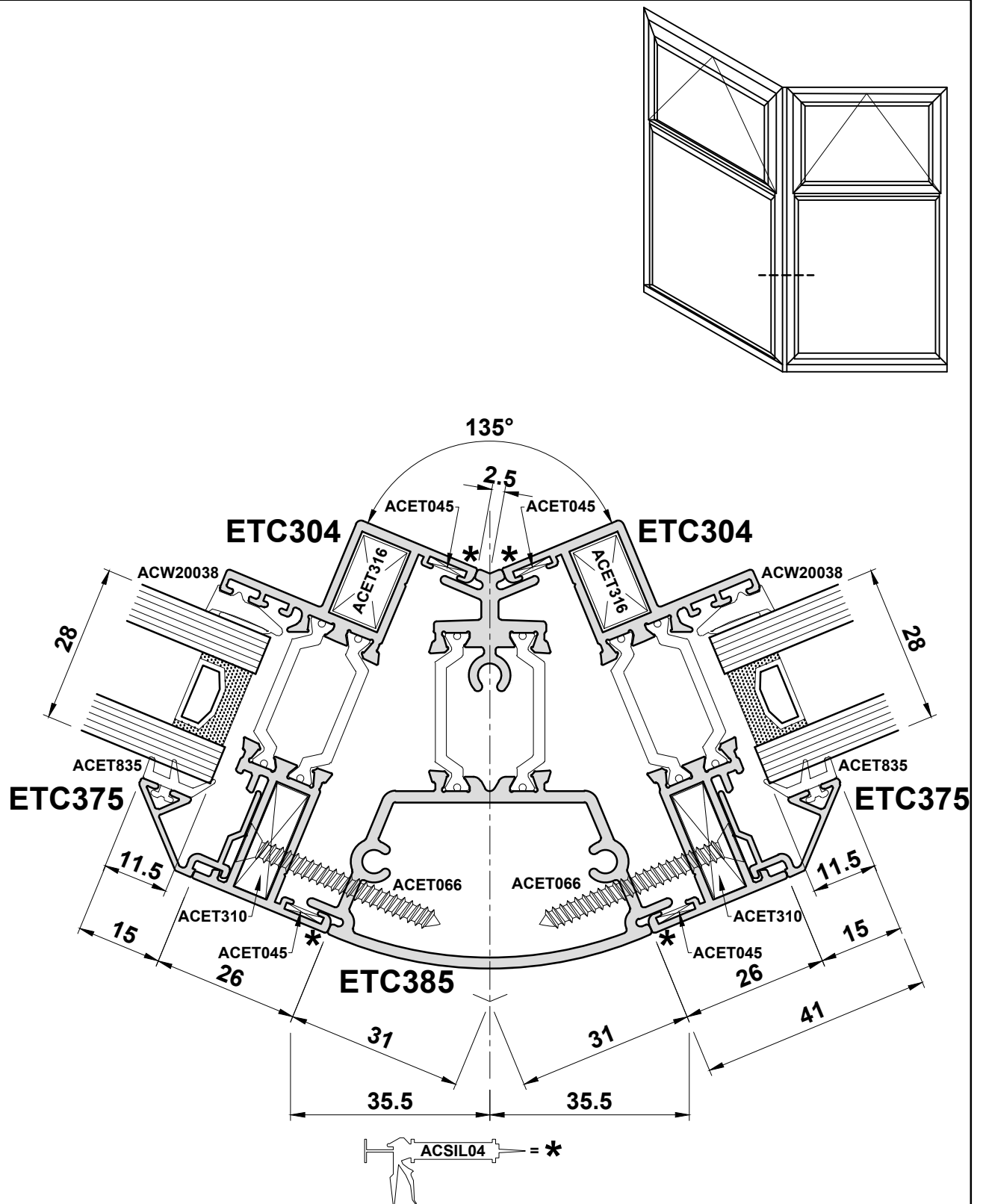
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Detail 10E



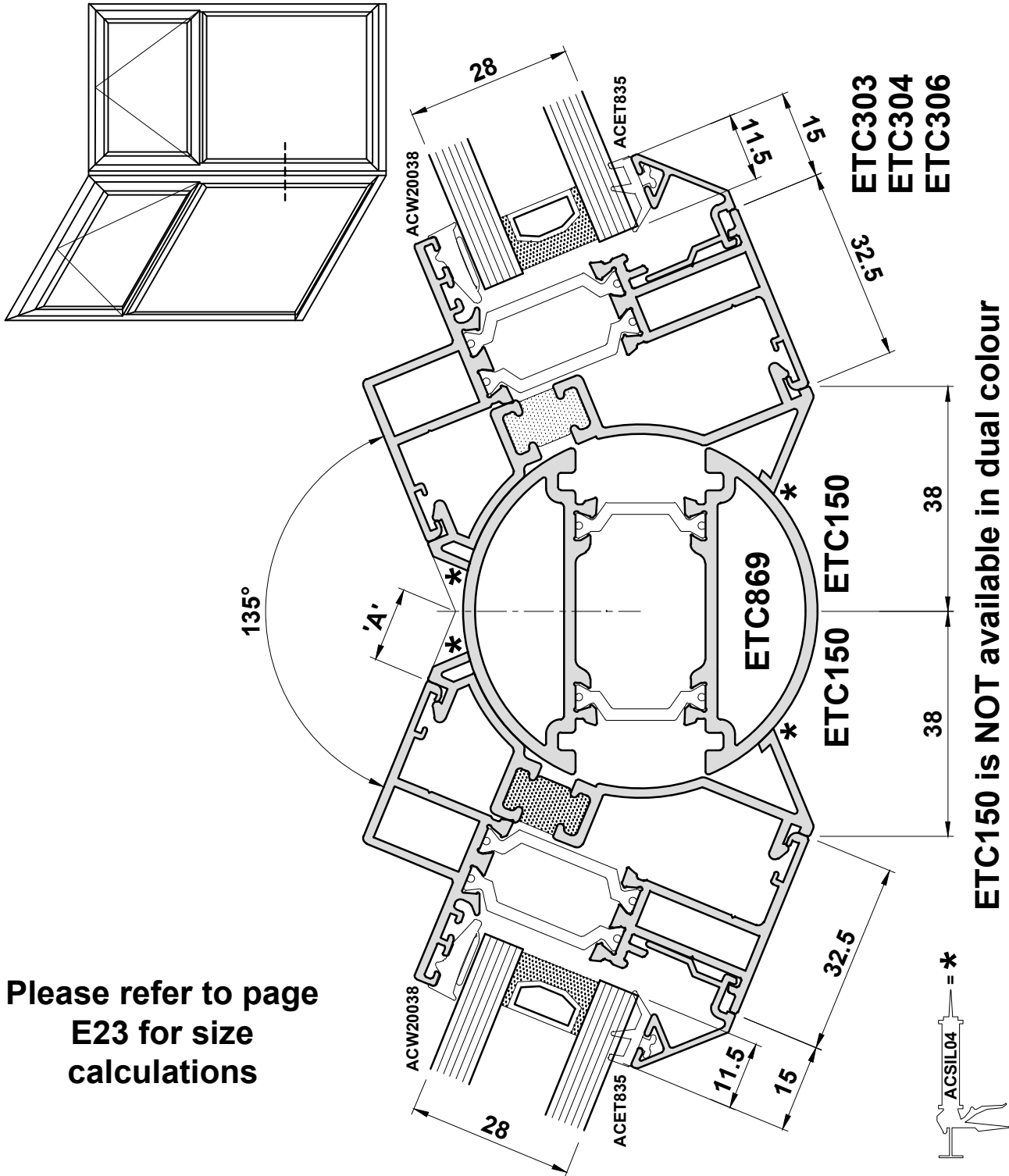
Do Not Scale From This Drawing

Detail 10F



Do Not Scale From This Drawing

Detail 10G

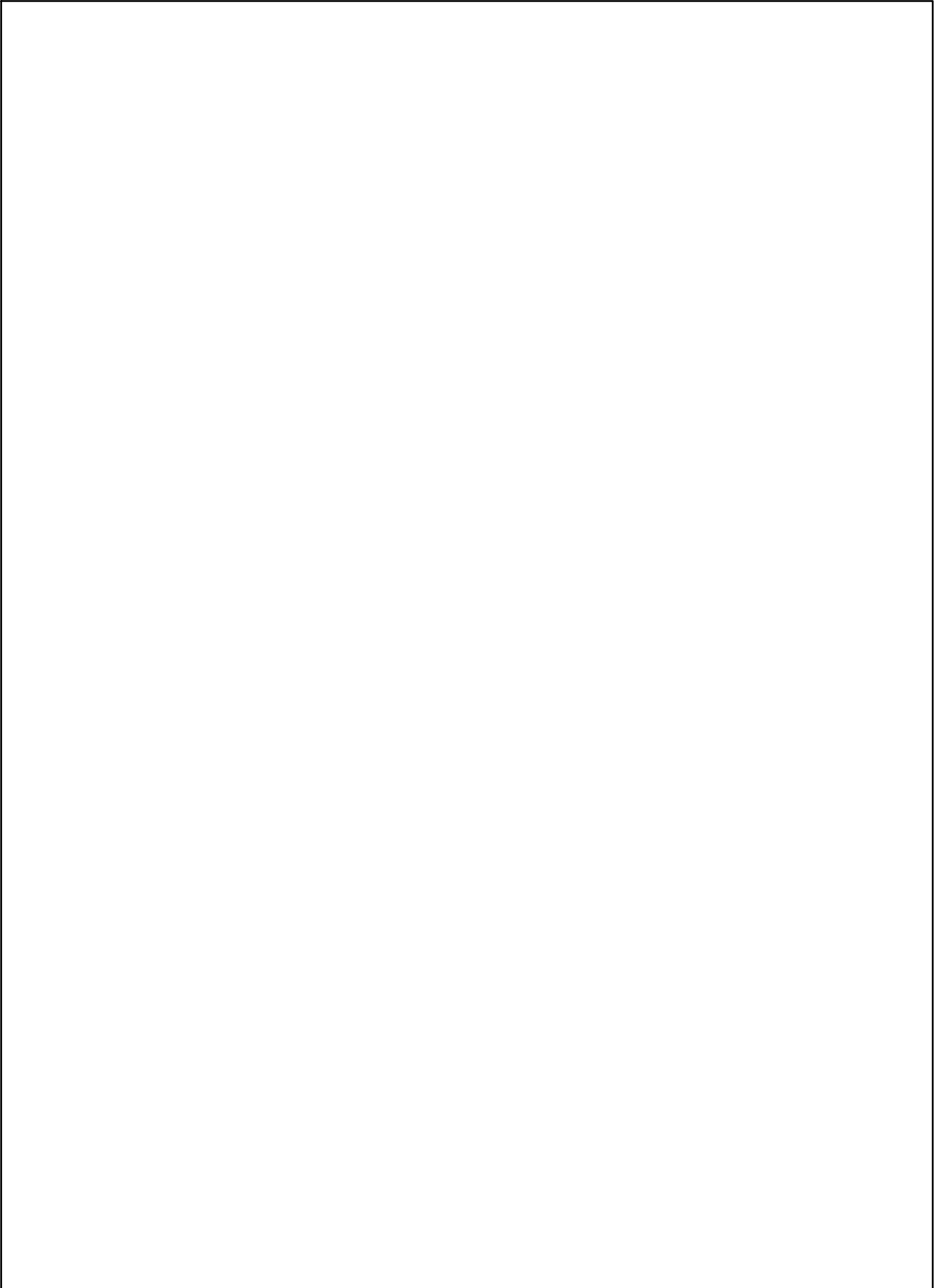


Do Not Scale From This Drawing

Section D

Statics

**For Wind Loading Limitations,
Please Contact
The Technical Department.
Tel : +44 (0) 1934 876 100**



Section E

Construction Drawings

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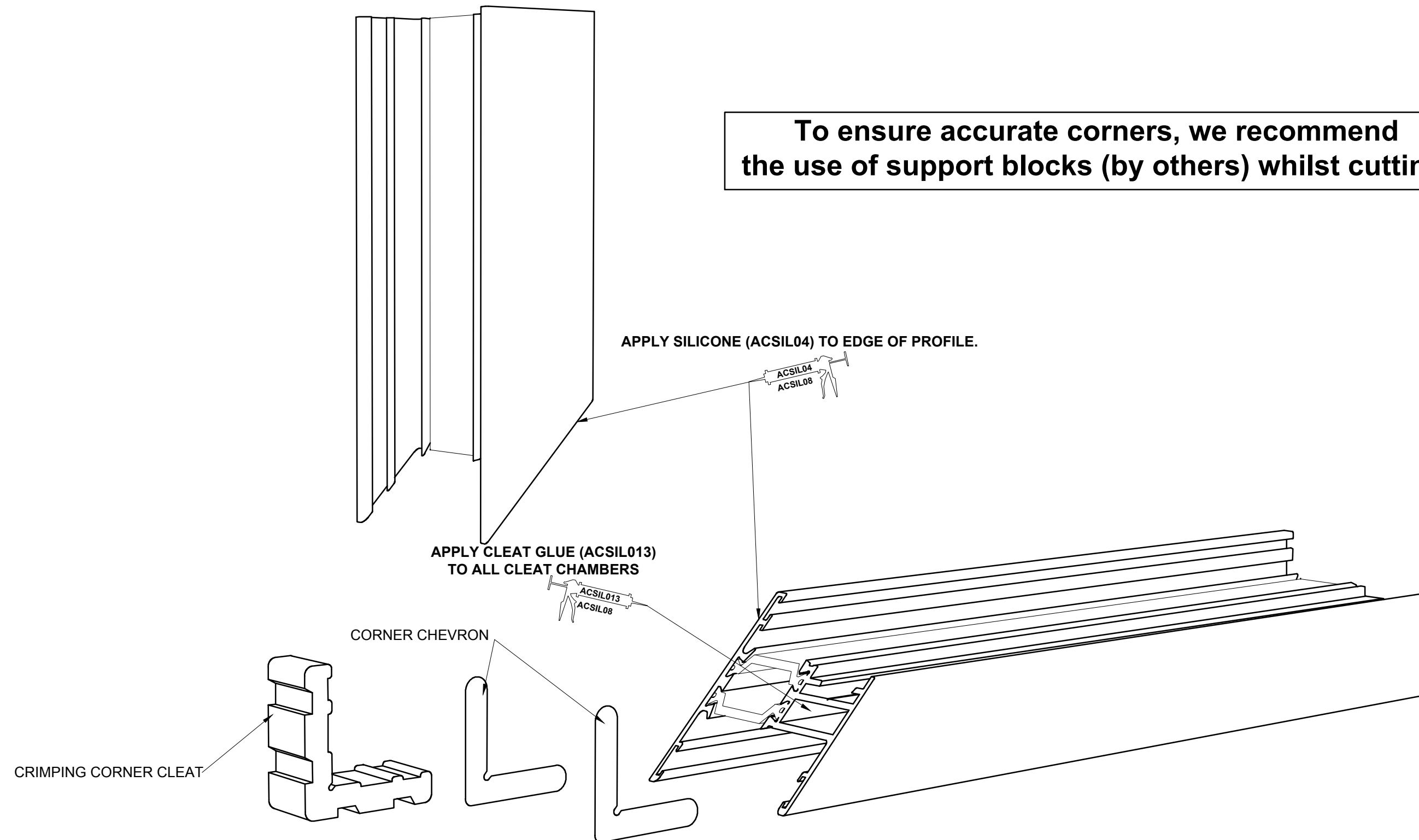
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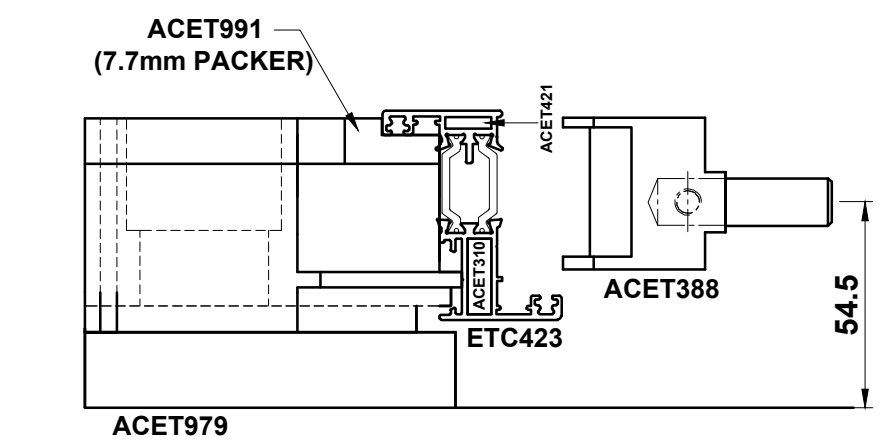
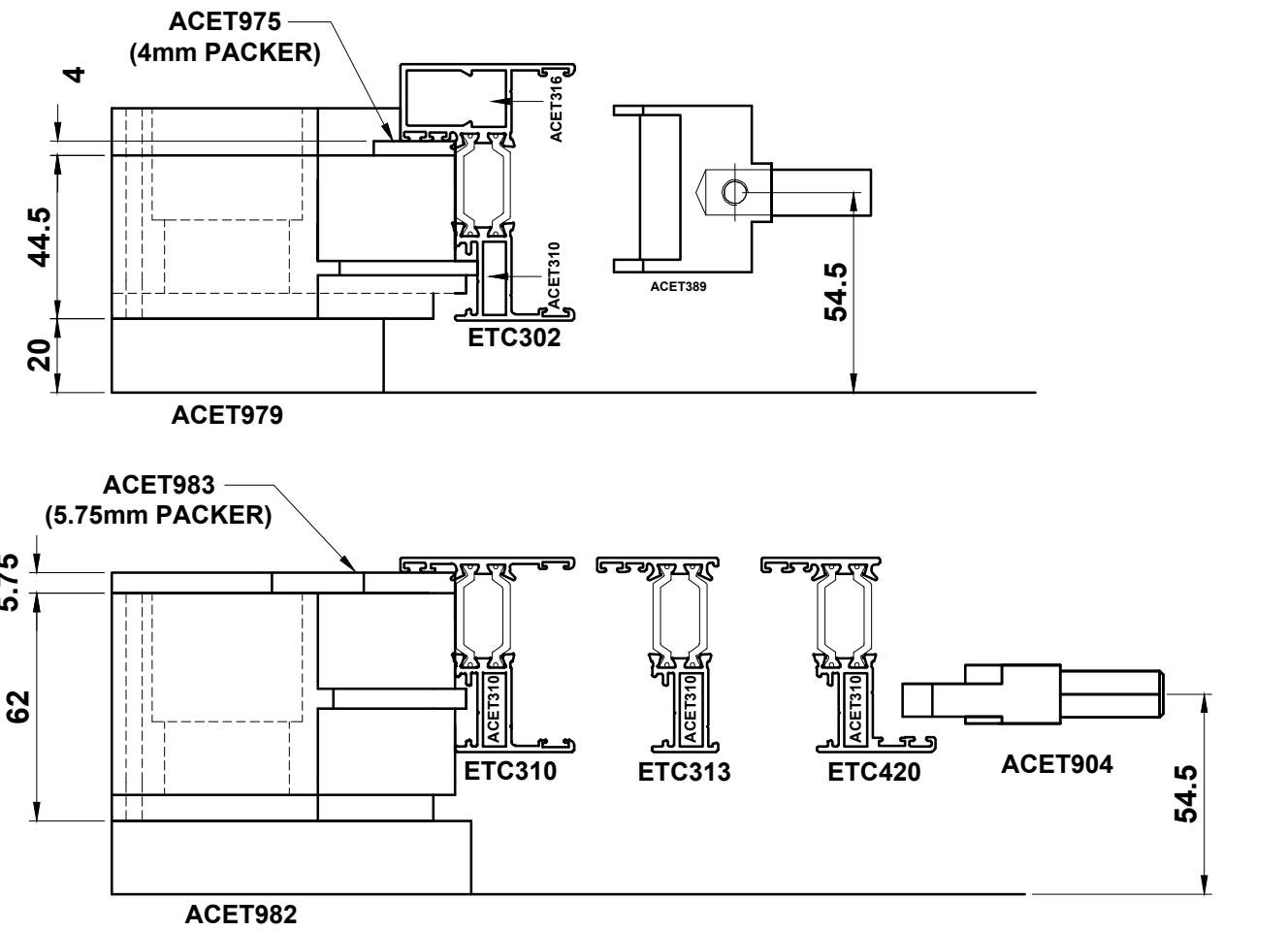
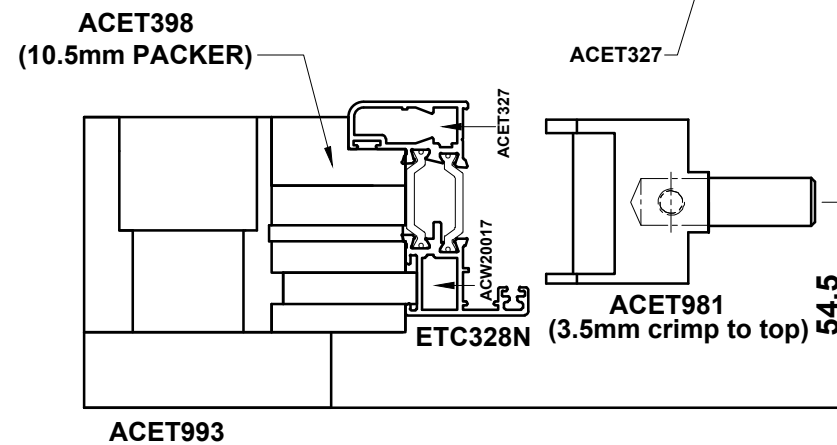
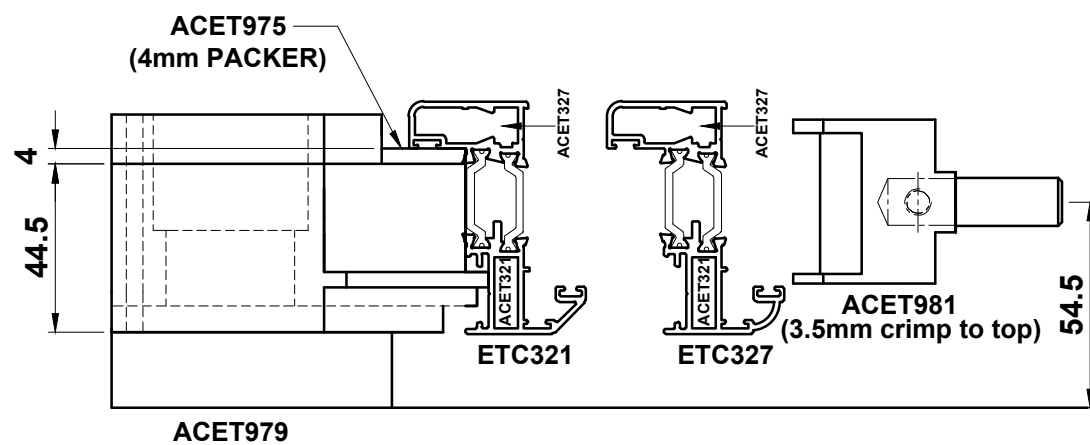
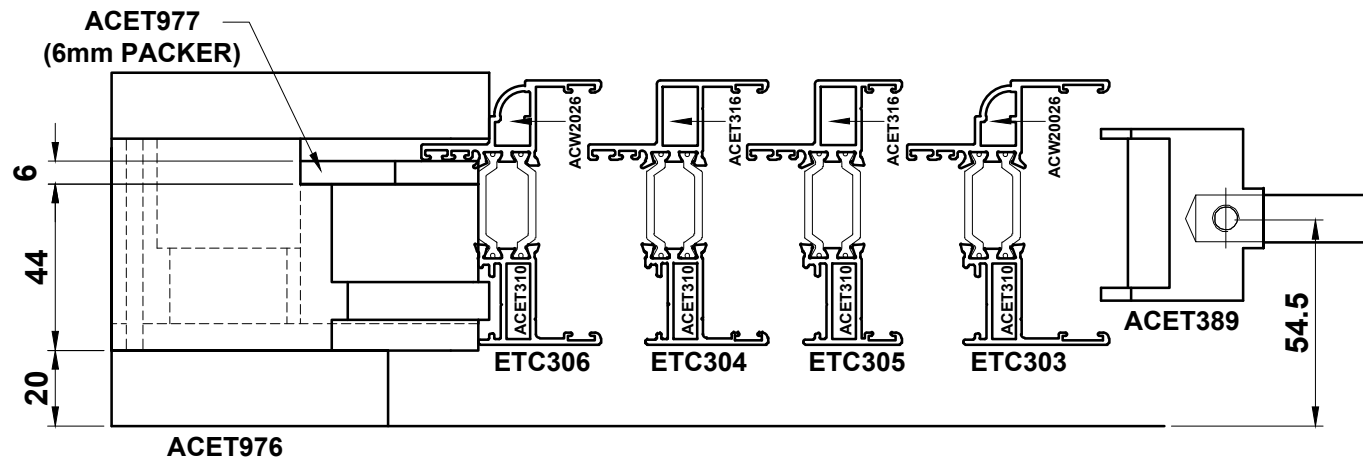
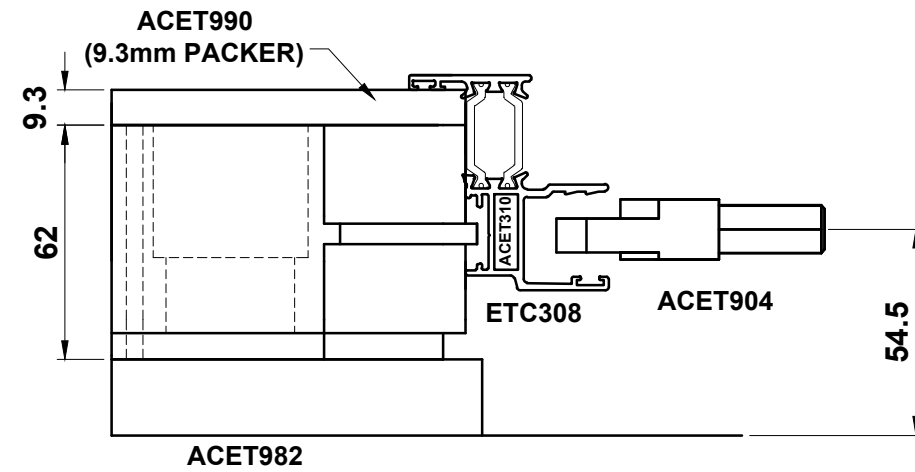
IF IN DOUBT ASK!

Typical Corner Detail



Do Not Scale From This Drawing

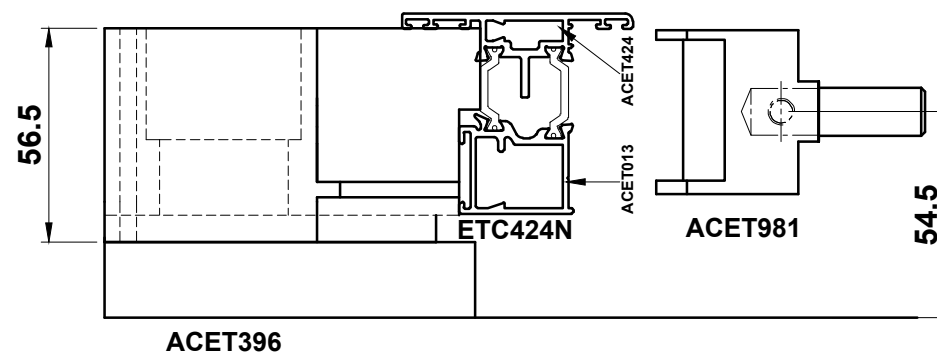
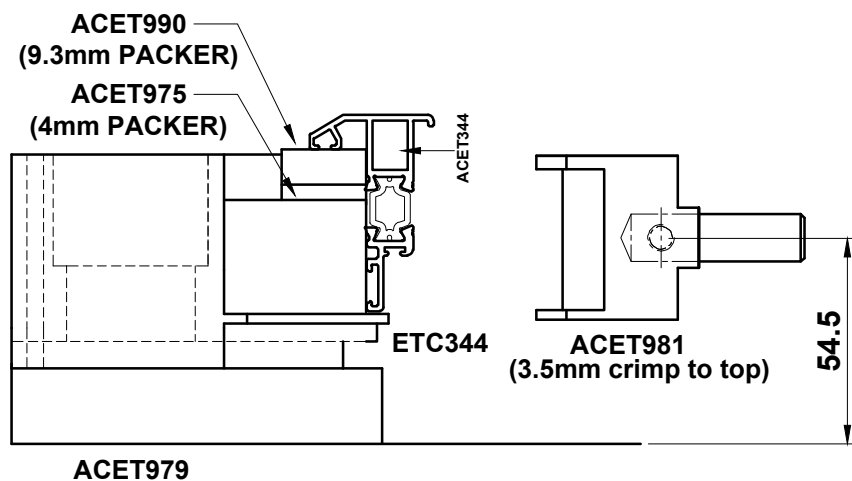
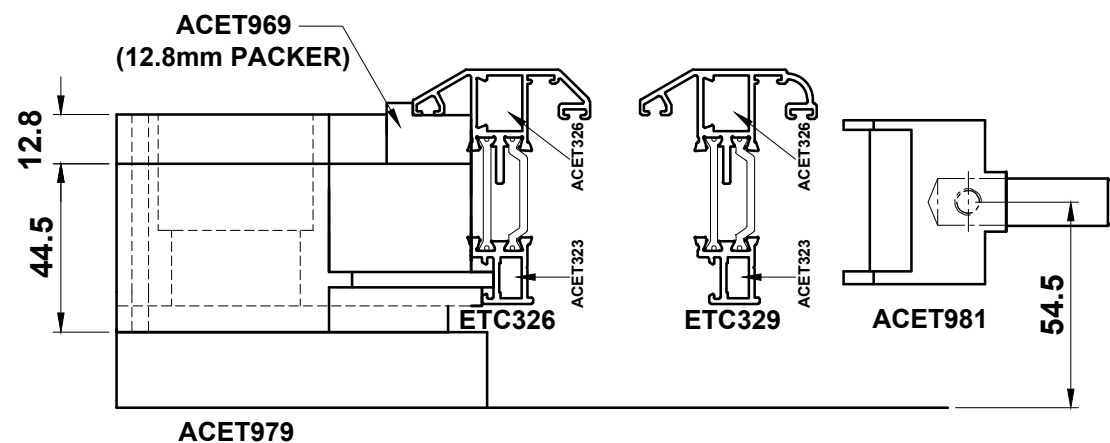
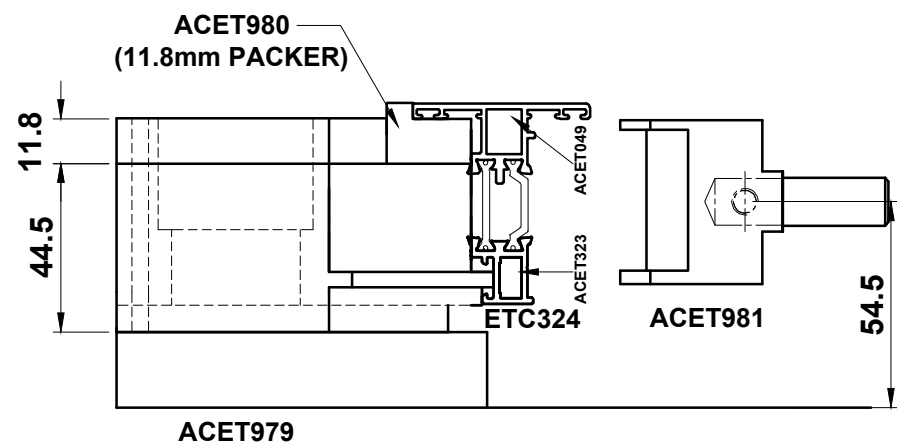
Corner Crimping - Externally Glazed Sections



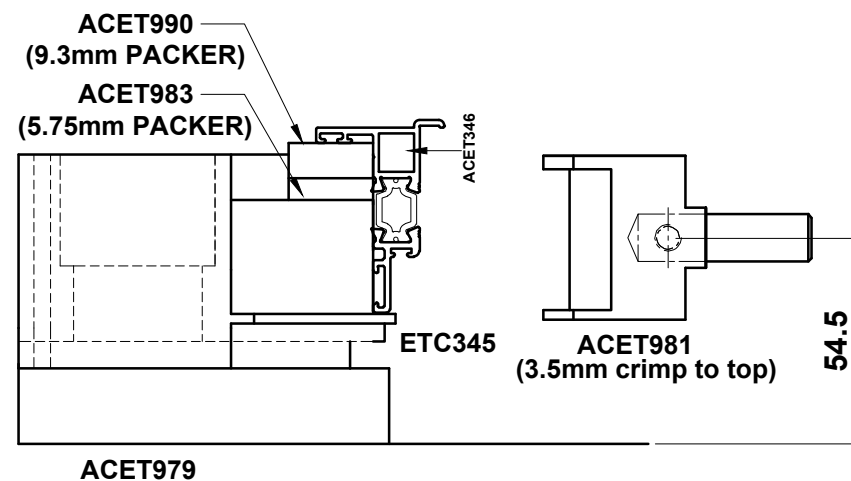
Manual Crimper = WUT024HSZA

Do Not Scale From This Drawing

Corner Crimping - Internally Glazed Sections

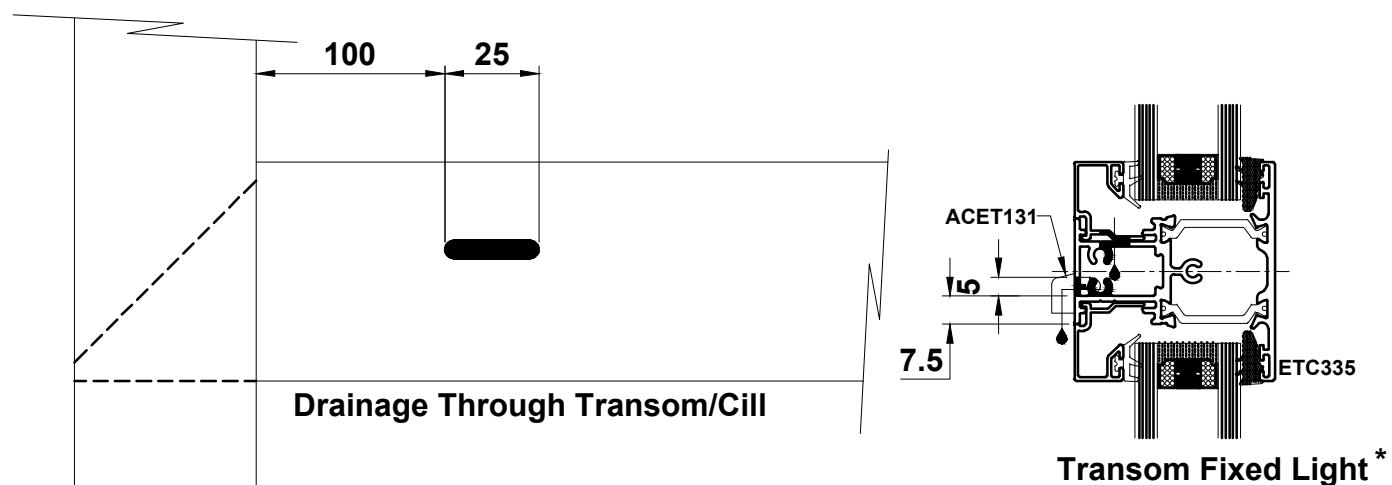


Manual Crimper = WUT024HSZA

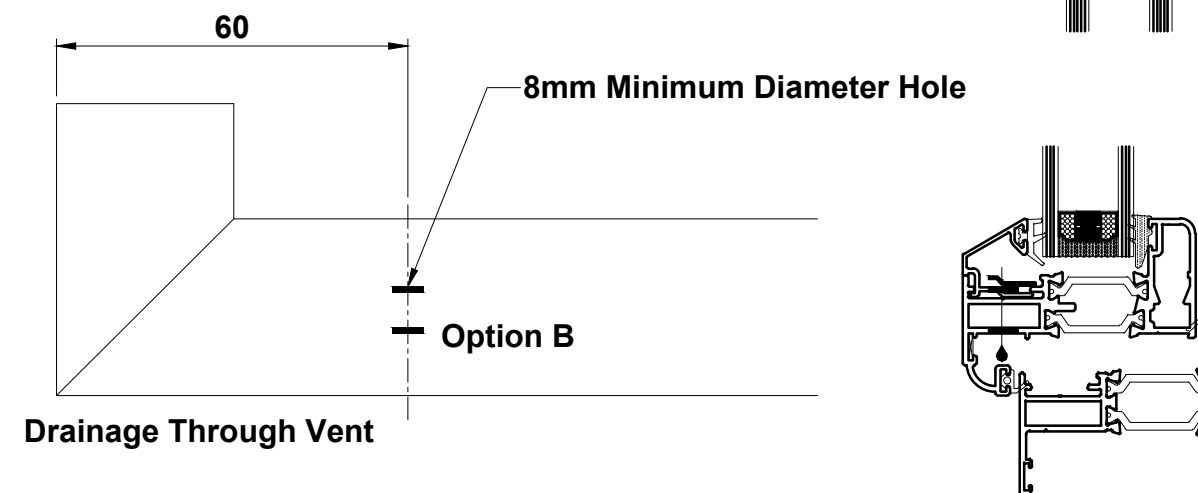
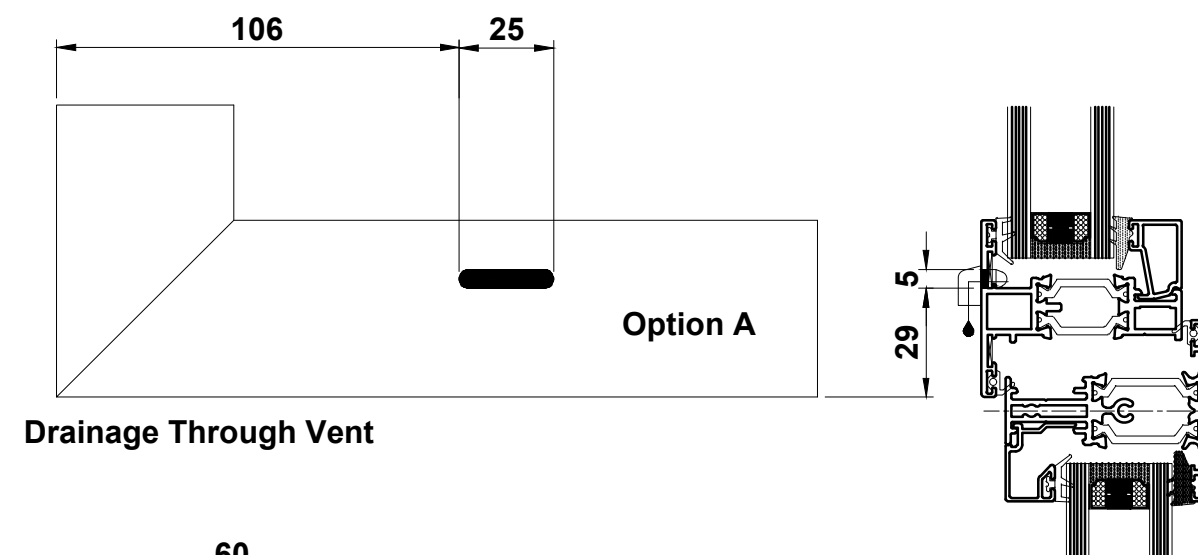


Do Not Scale From This Drawing

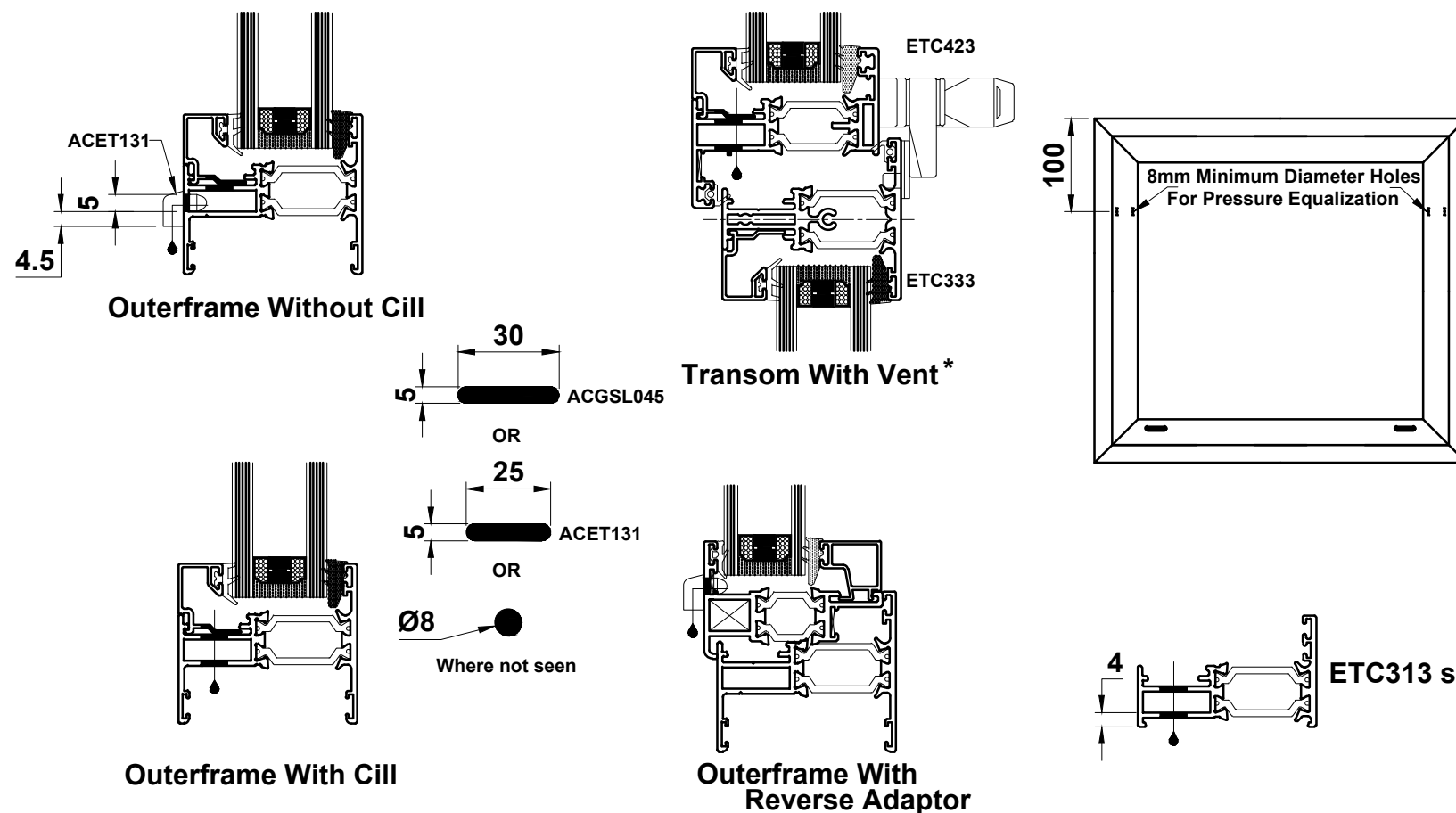
Drainage



* **Note:** Transoms will drain through the join to the outerframe. If face drainage is preferred, wider transom ETC335 must be used.

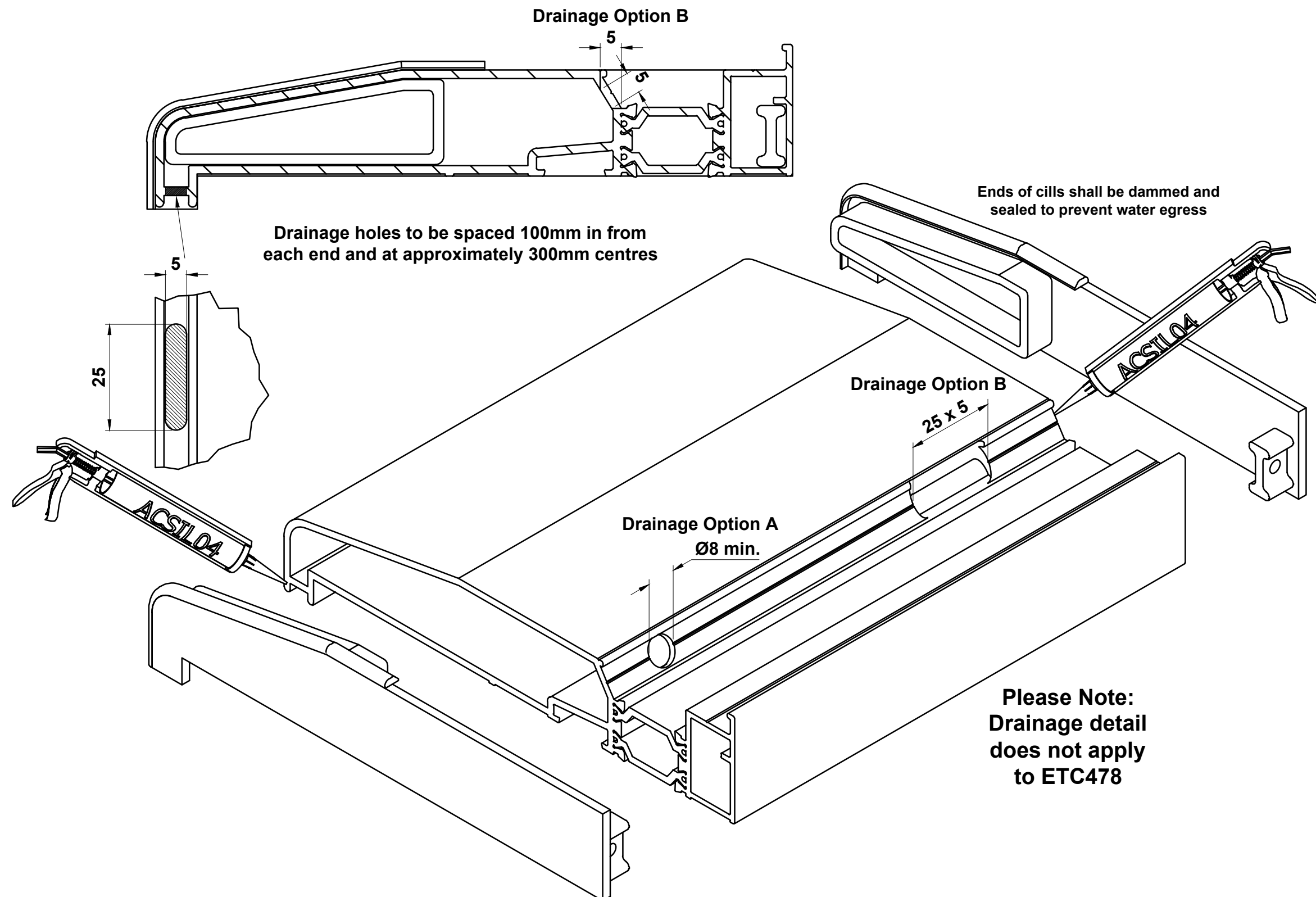


Important Note: All exposed aluminium should be coated using ACSIL014 or painted to match the frame.



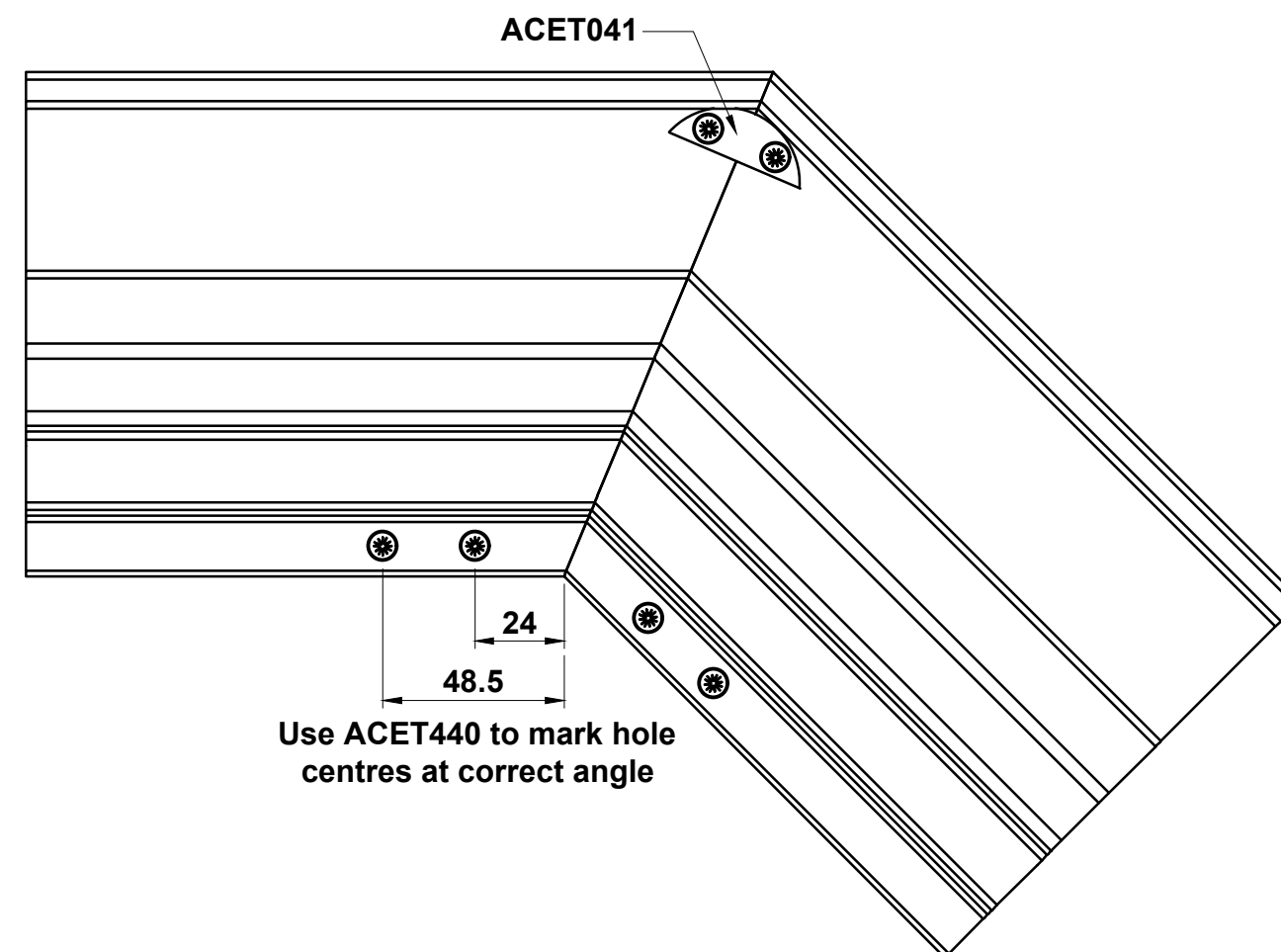
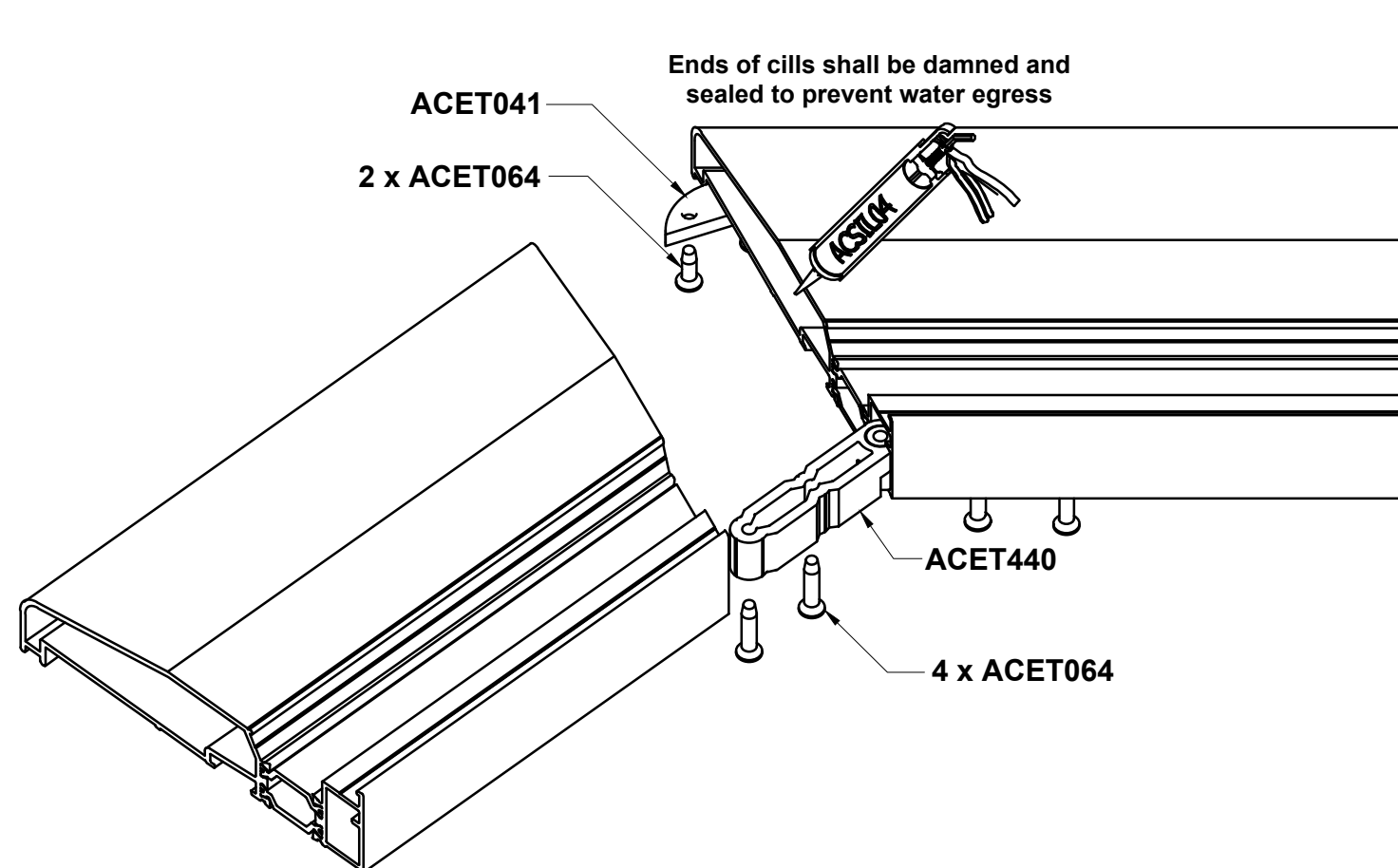
Do Not Scale From This Drawing

Sub Cill Drainage

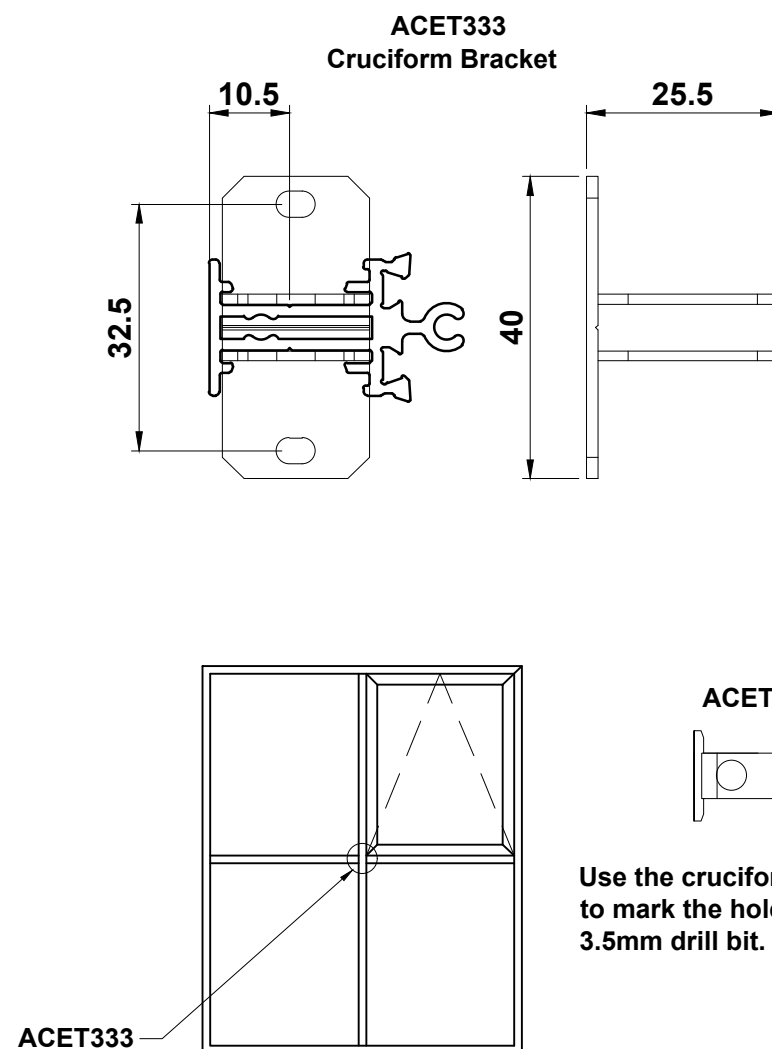
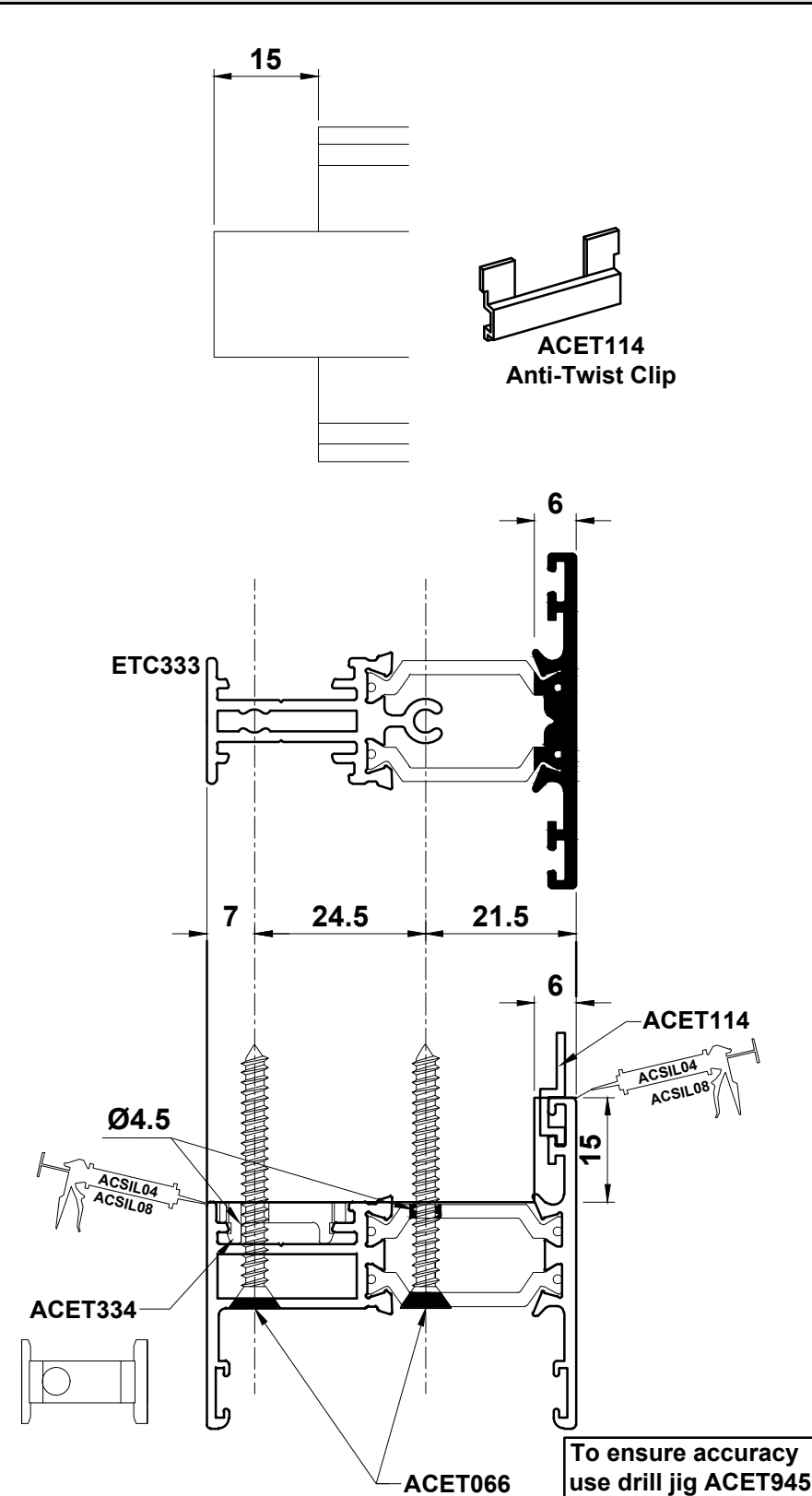


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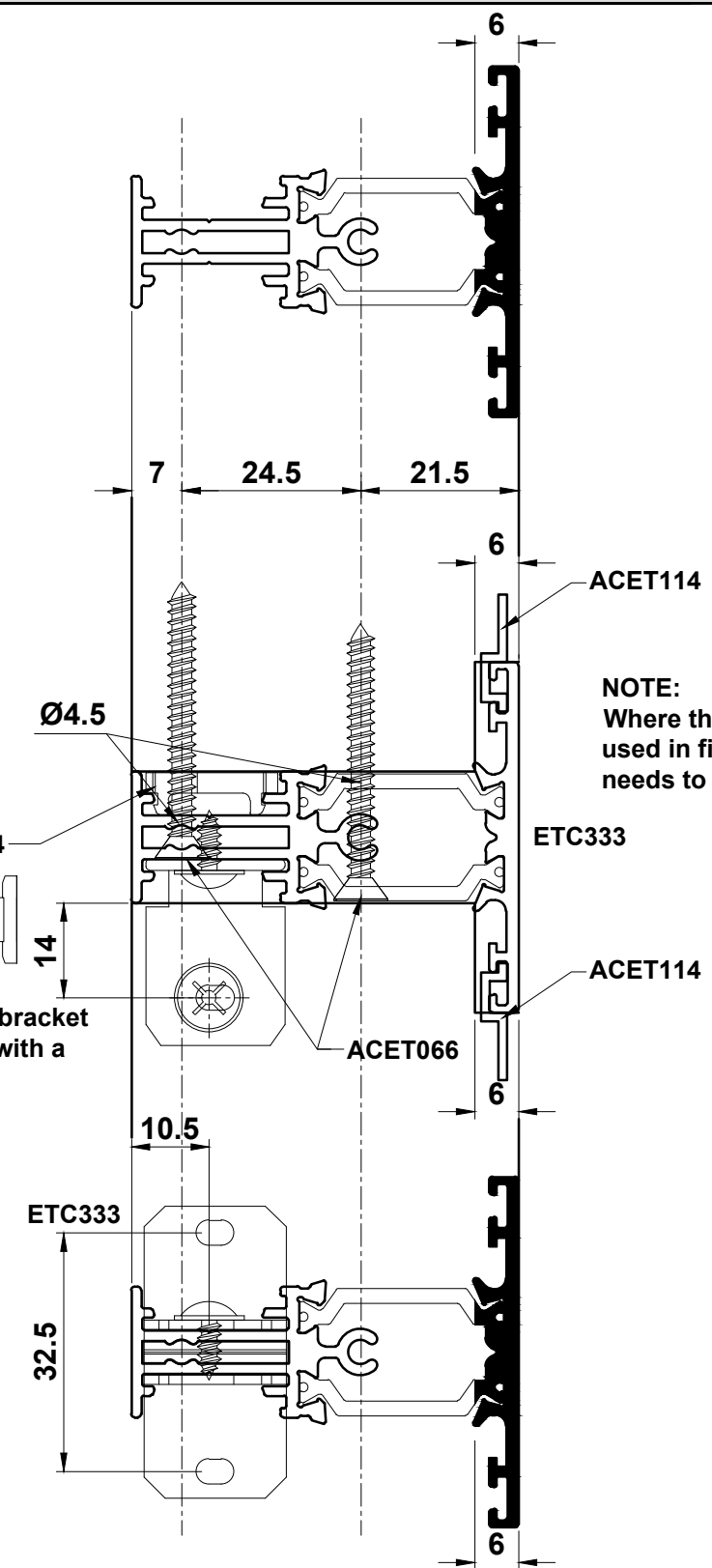
Angled Sub Cill



Do Not Scale From This Drawing



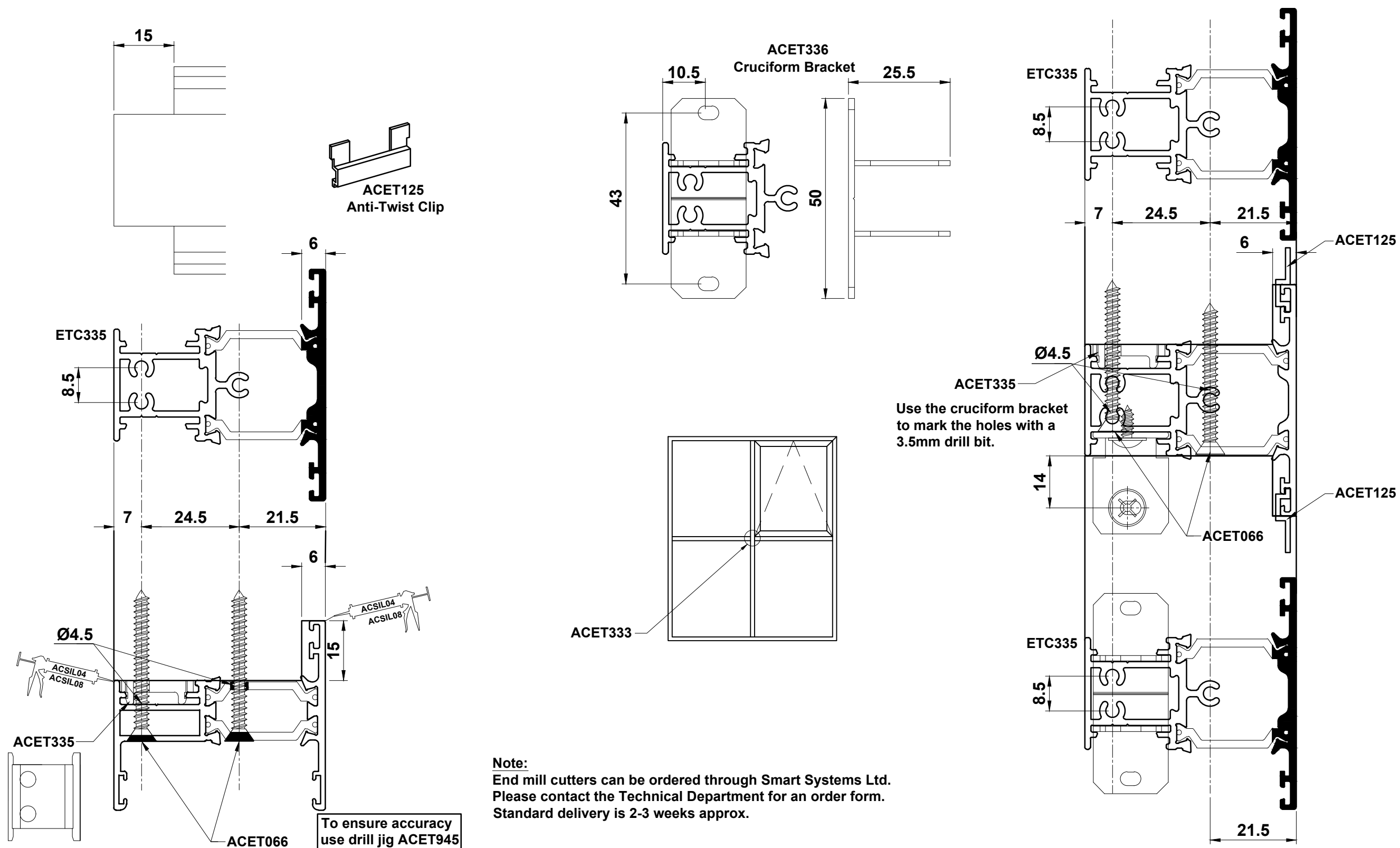
Use the cruciform bracket
to mark the holes with a
3.5mm drill bit.



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.

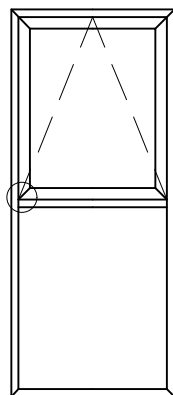
Do Not Scale From This Drawing

Transom/Mullion Preparation

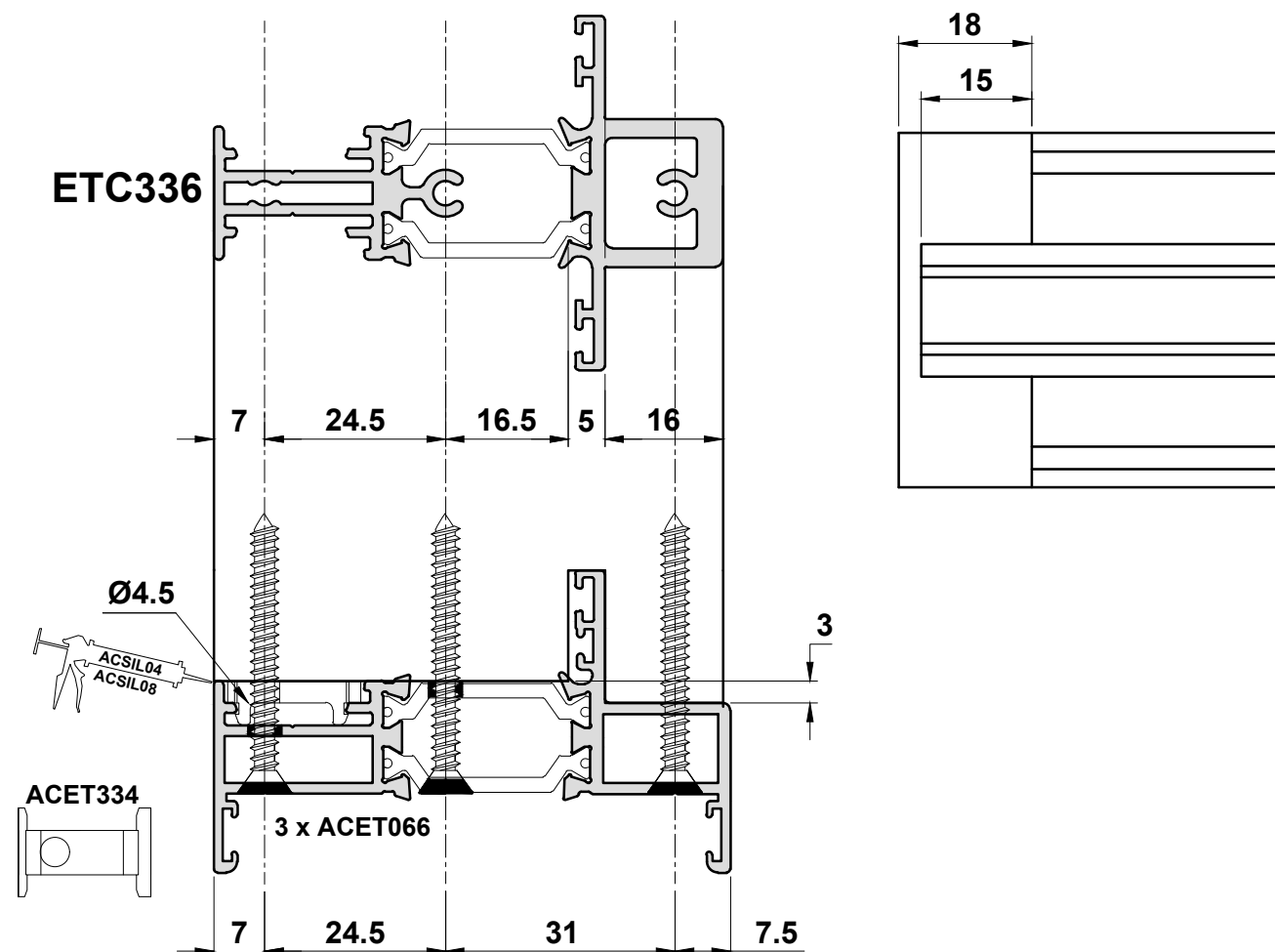


Do Not Scale From This Drawing

Transom/Mullion Preparation

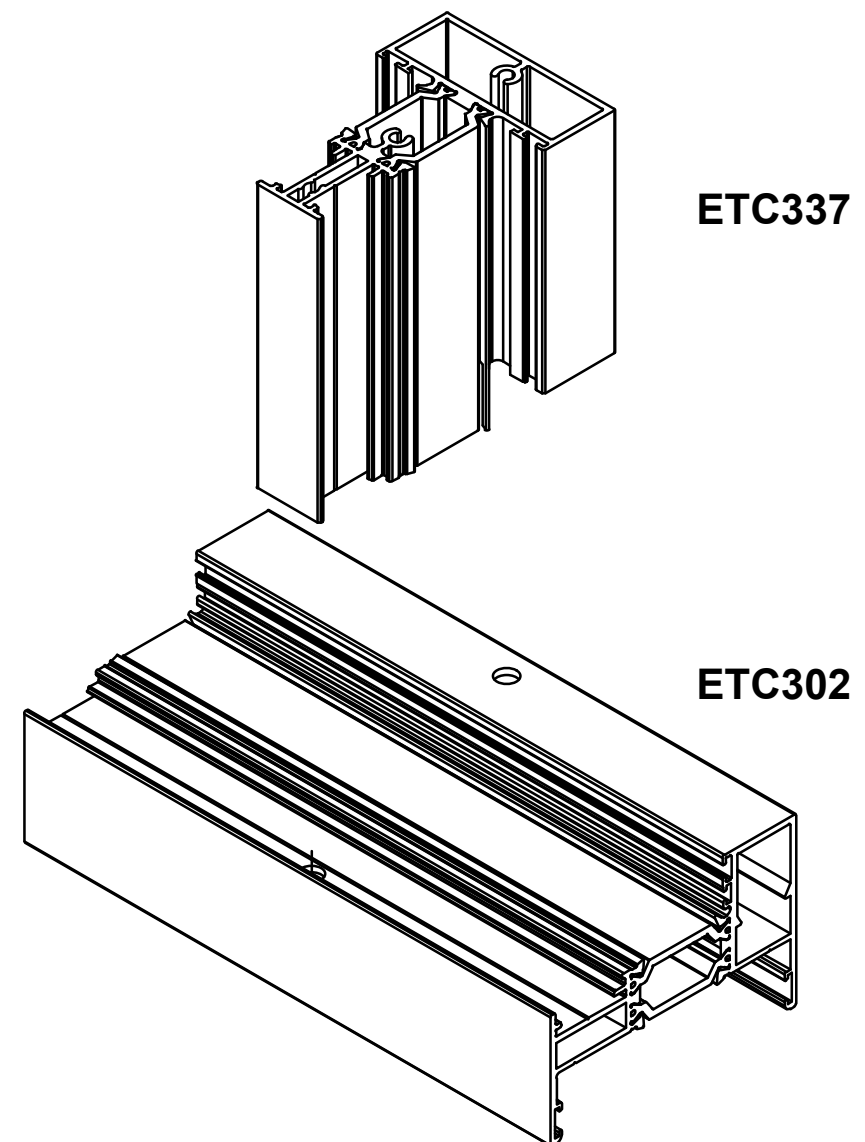
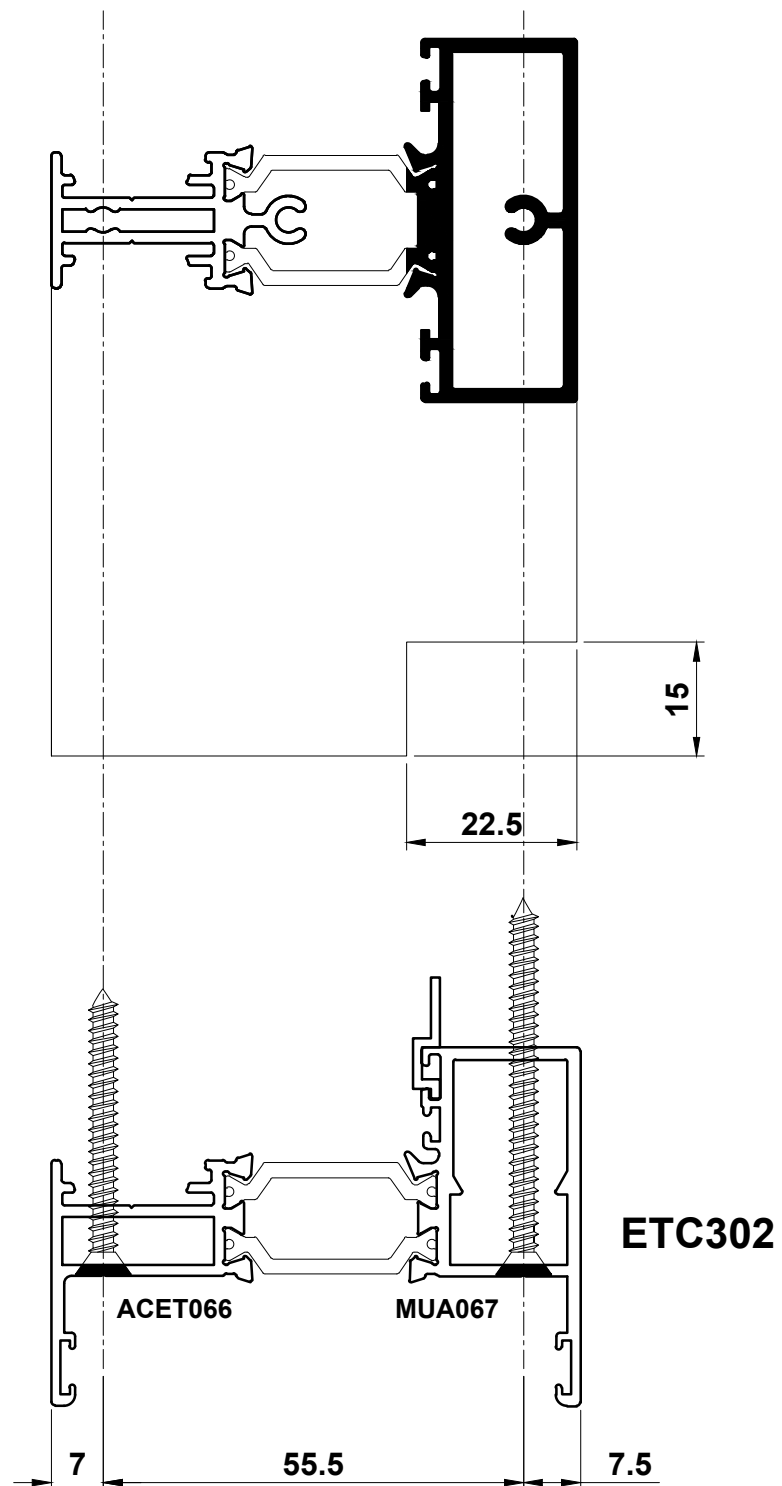
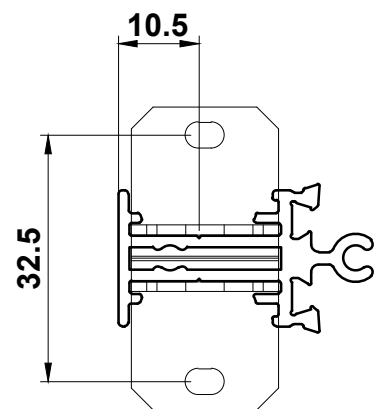


Note:
End mill cutters can be ordered through Smart Systems Ltd.
Please contact the Technical Department for an order form.
Standard delivery is 2-3 weeks approx.



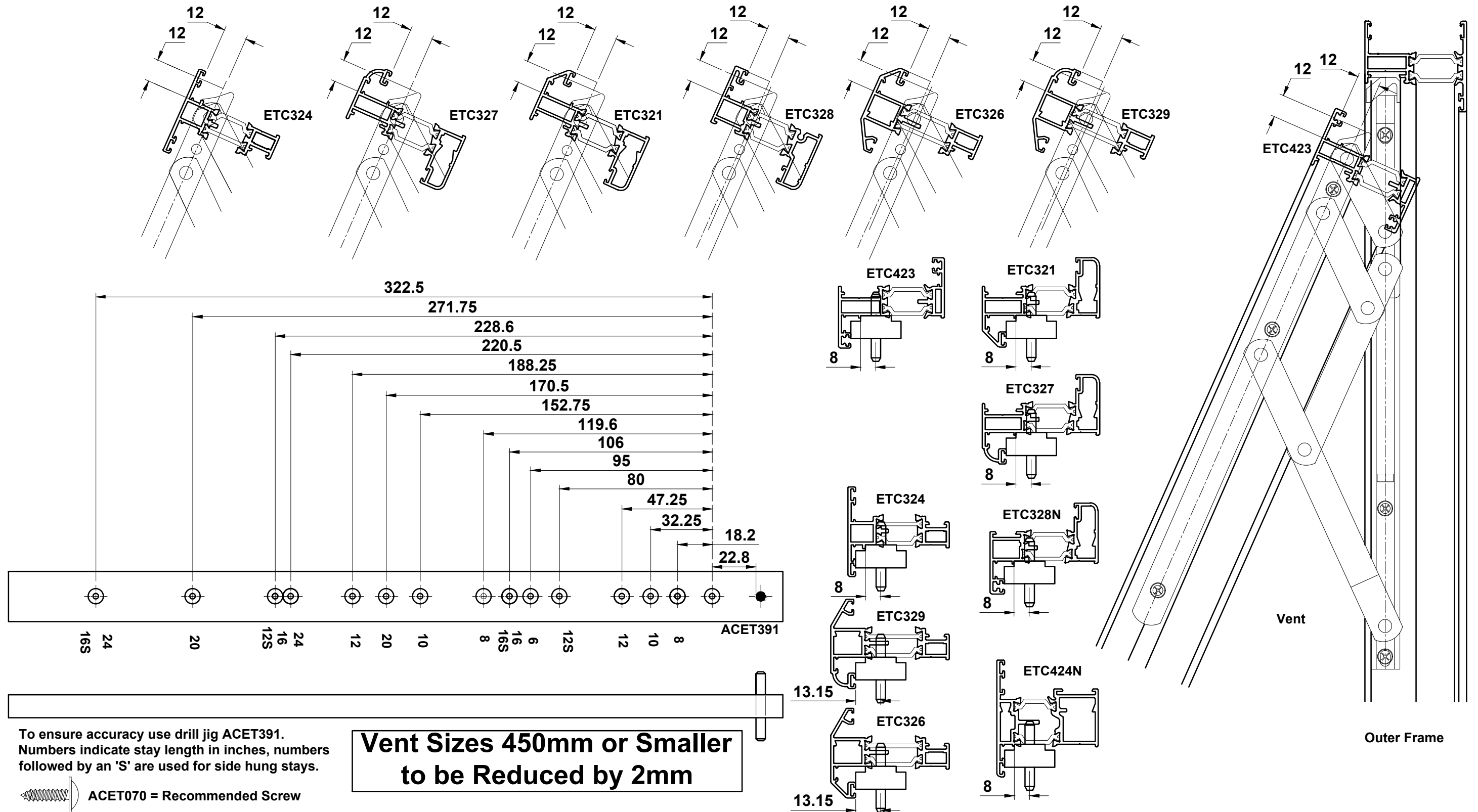
Do Not Scale From This Drawing

ETC337 & ETC302 Detail



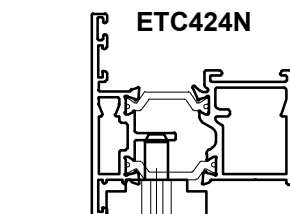
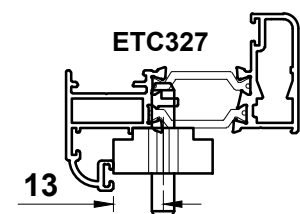
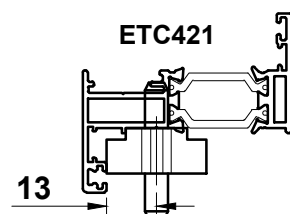
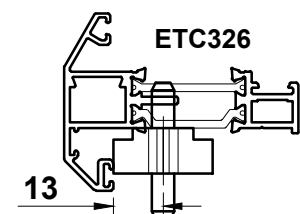
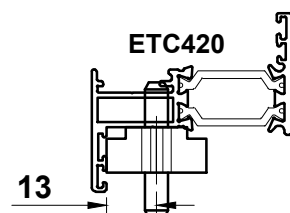
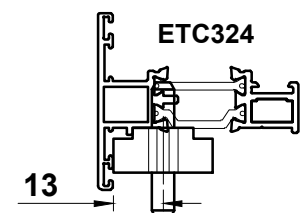
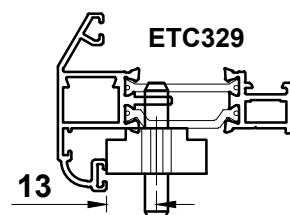
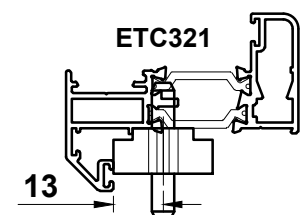
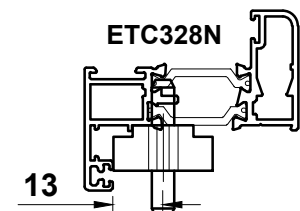
Do Not Scale From This Drawing

Top Hung & Side Hung Friction Hinge Details

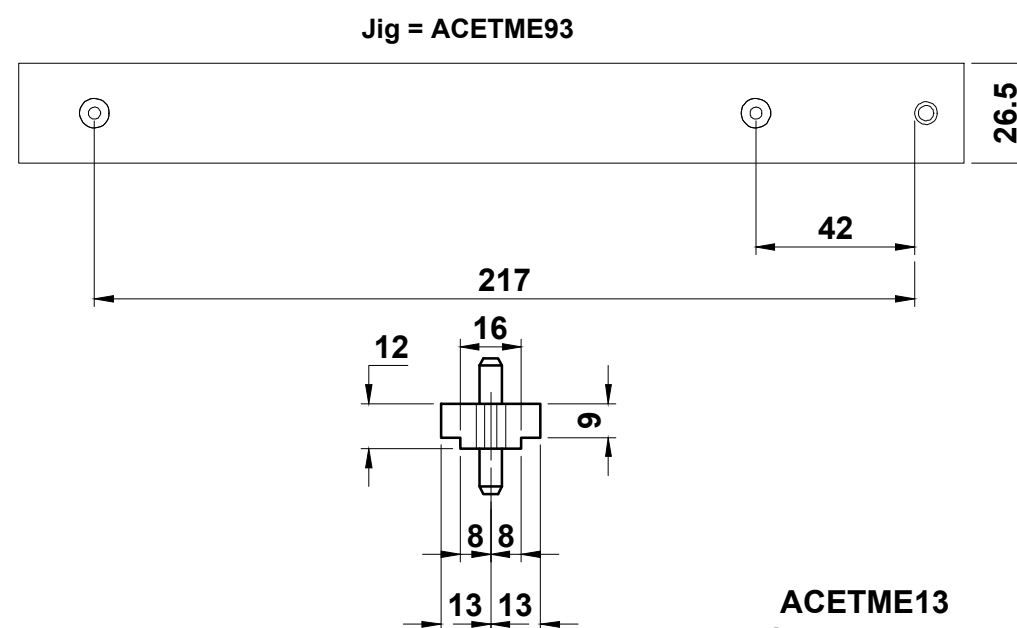


Egress Hinge Details

Alitherm 300



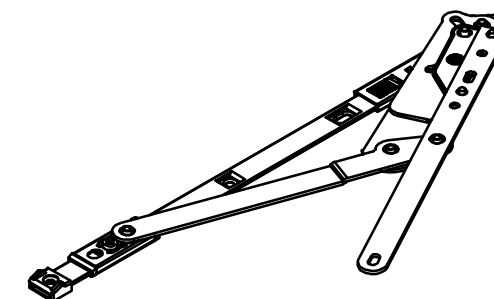
**Vent Sizes 450mm or Smaller
to be Reduced by 2mm**



**ACETME13
13mm Stack Egress Hinge**

The benefits of these hinges are:

- True 90° opening angle
- Achieves minimum fire escape requirement on smaller windows
- Can be moved into easy clean position, with automatic reset on closing
- Superior carrying weight (40kg max)
- The 345mm length replaces the current 305mm & 406mm hinges
- Tested to BS EN1670 and exceeded Grade 5 for ultimate corrosion resistance
- Tested to EN1191 over 25,000 cycles under 40kg.

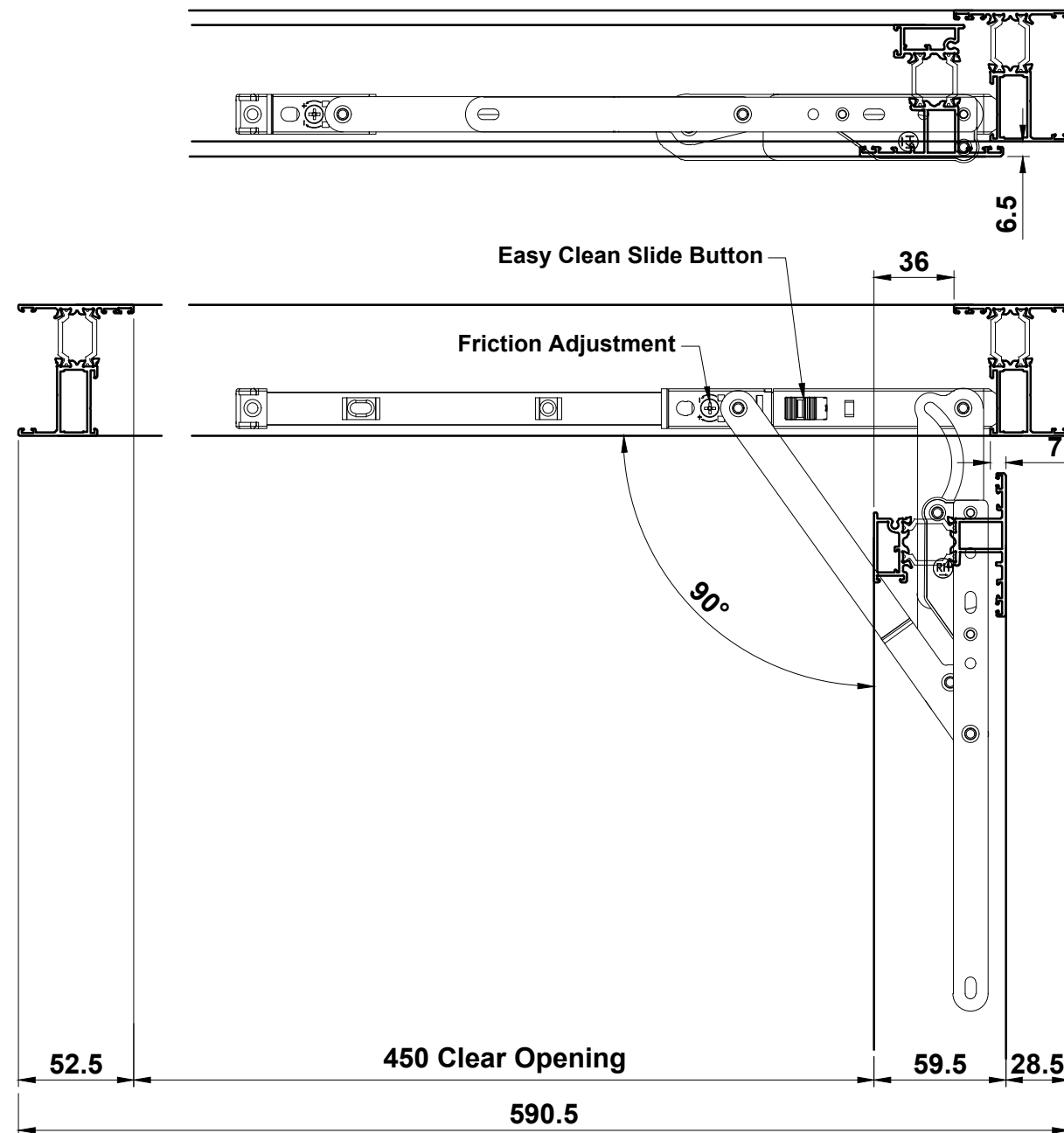


Side Hung	Type of Hinge / Stay	Max. Vent	Width		Typical
		Weight (kgs)	Minimum	Maximum	Height
ACETME13	Egress	40	400	900	-

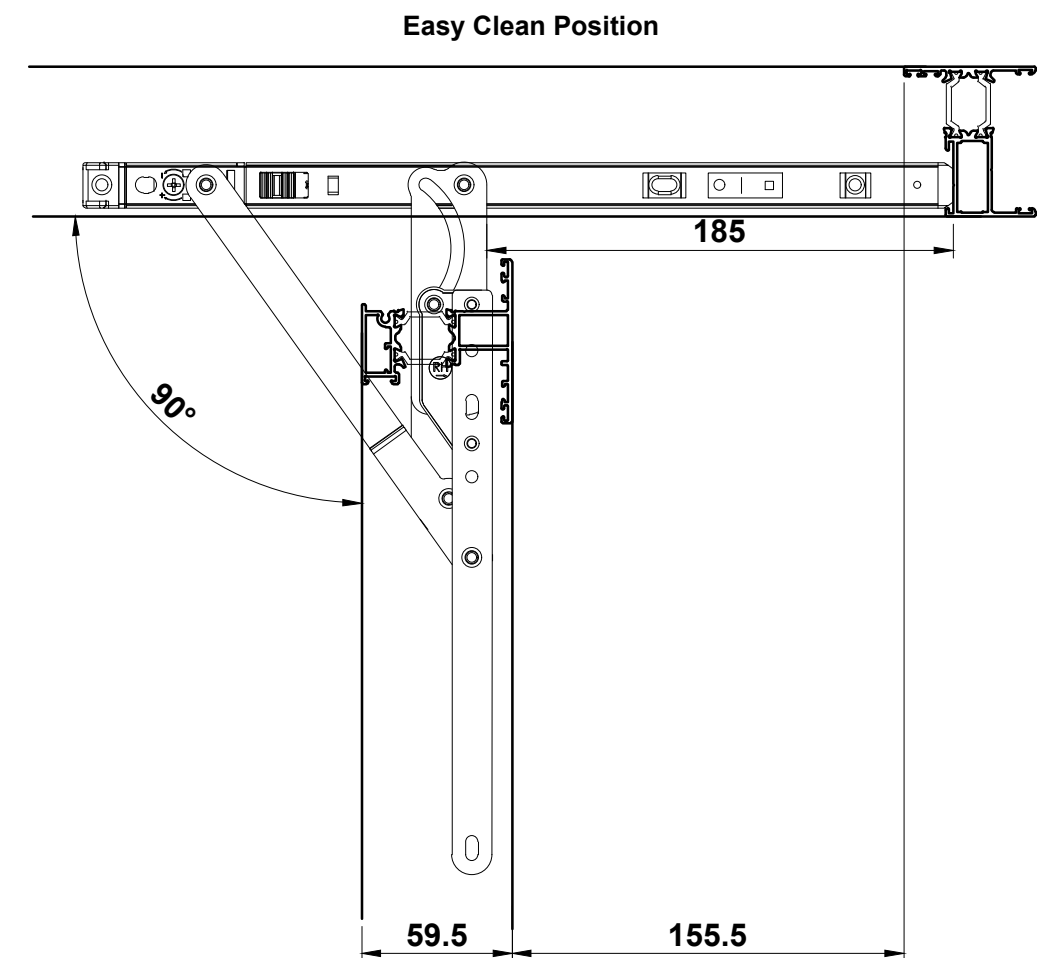
Do Not Scale From This Drawing

Egress Hinge Details

Example Opening Detail

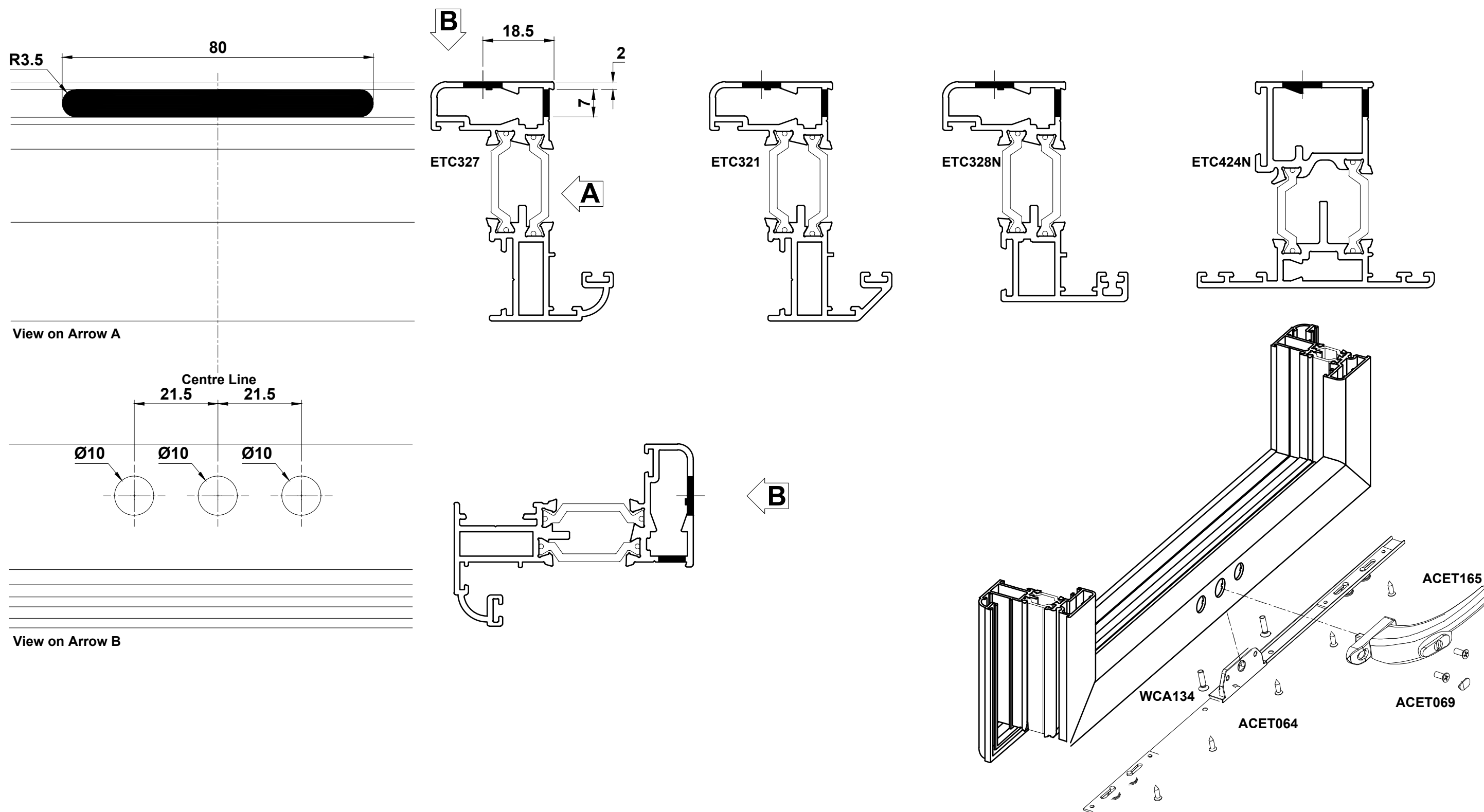


For further information regarding clear openings, please see
the Smart Systems' White Paper Document B



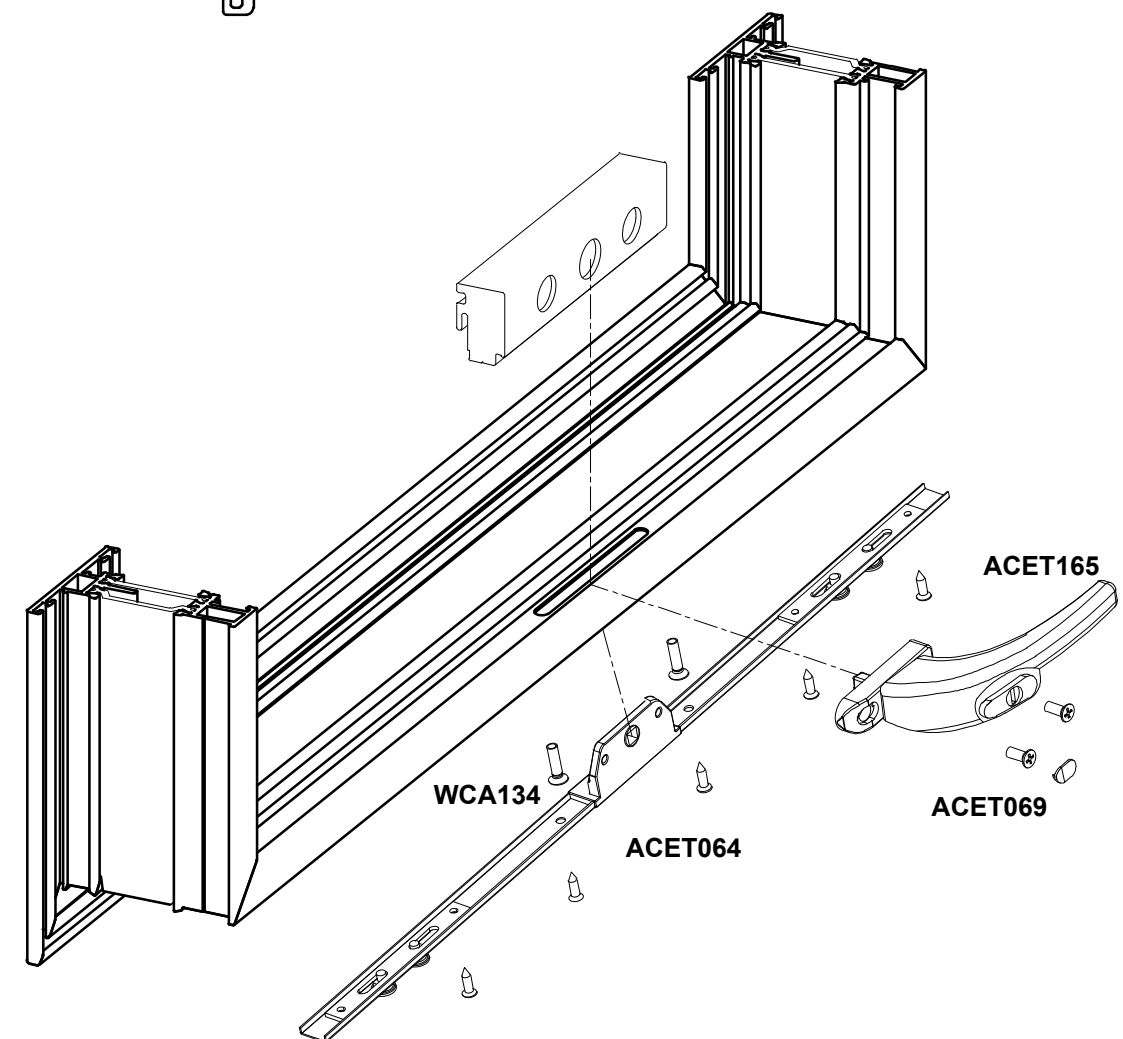
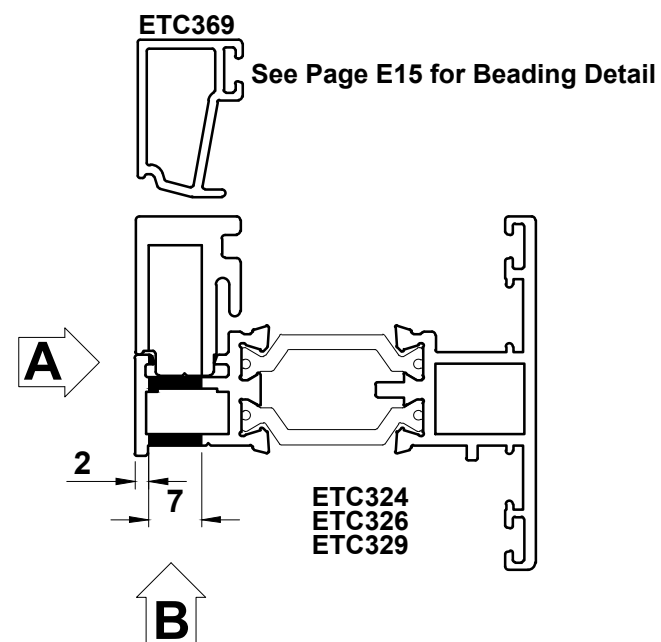
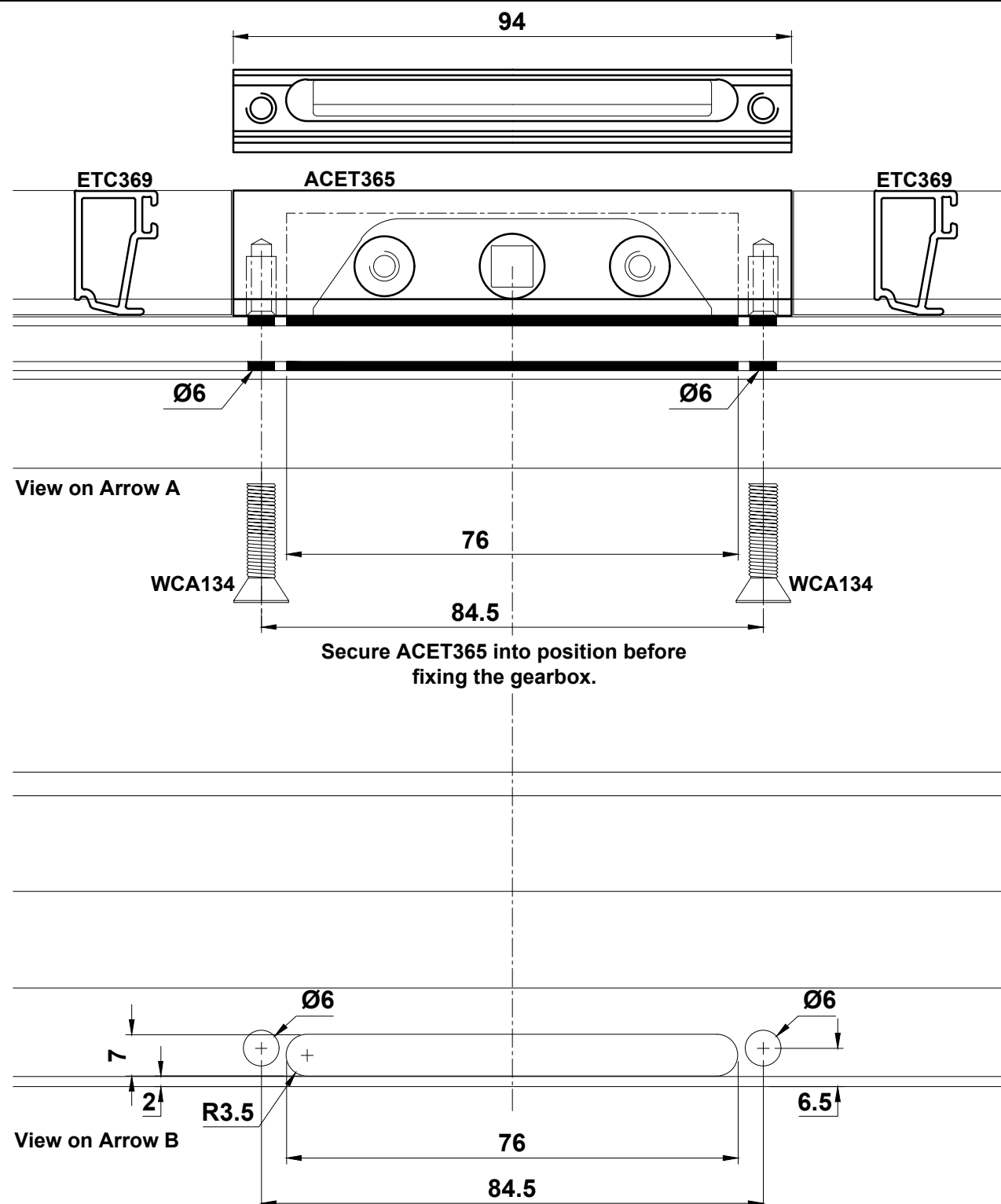
Do Not Scale From This Drawing

Multi-point Locking Preparation



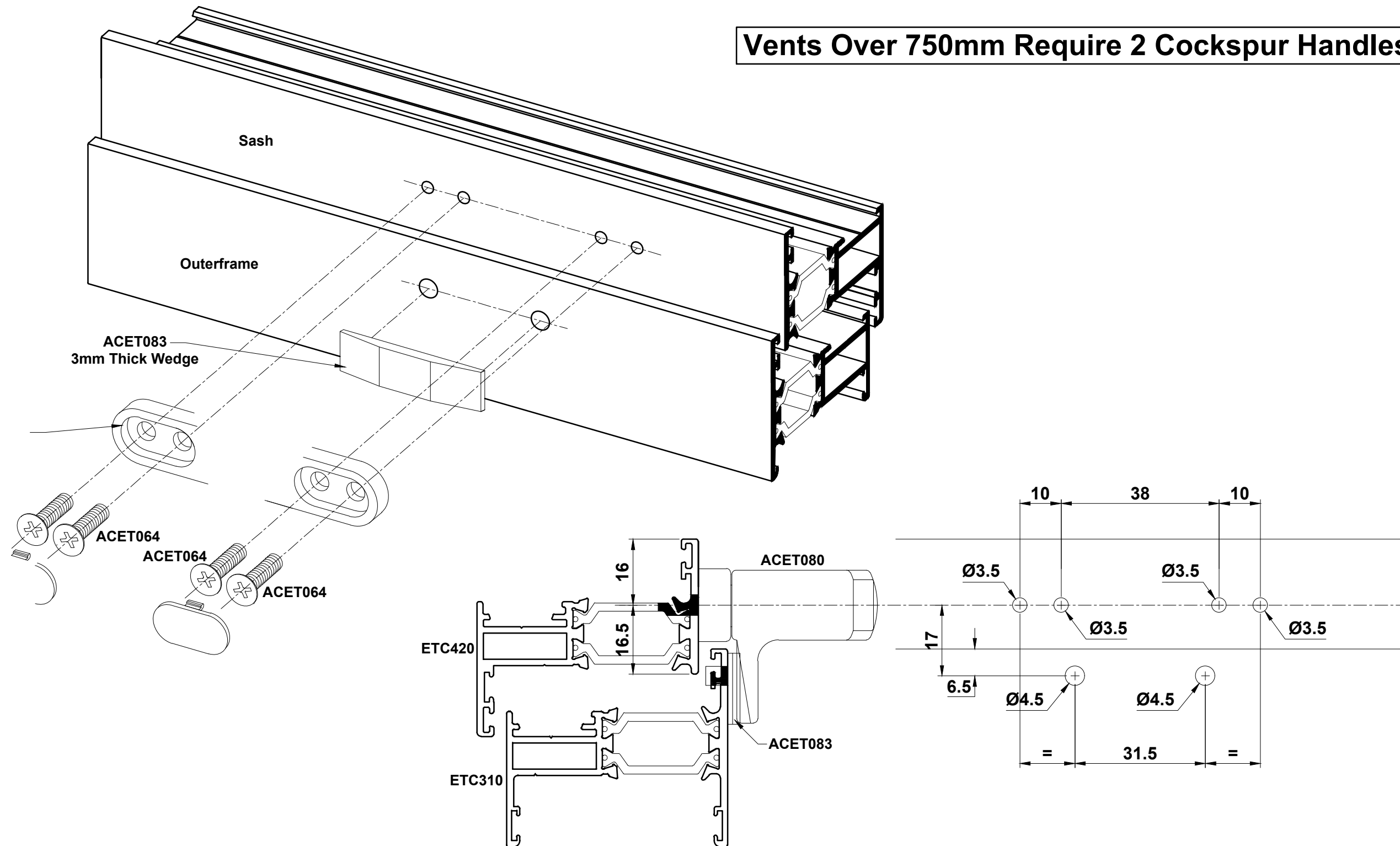
Do Not Scale From This Drawing

Multi-point Locking Preparation



Do Not Scale From This Drawing

Cockspur Handle Preparation



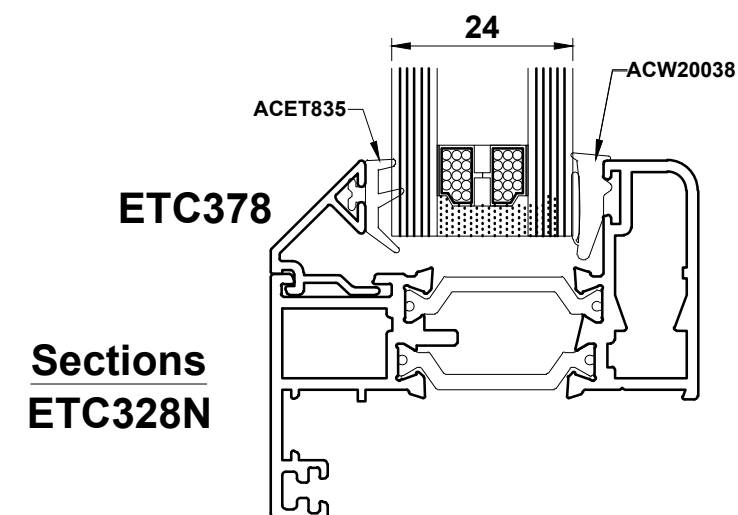
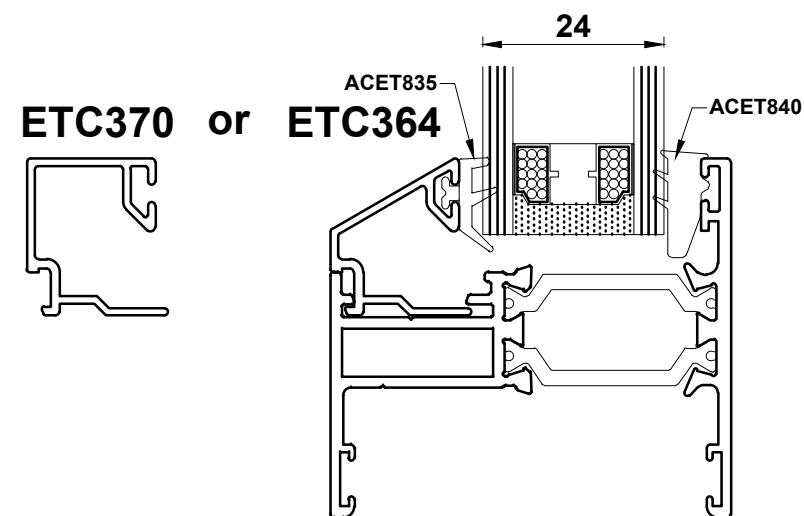
Do Not Scale From This Drawing

Glazing Details

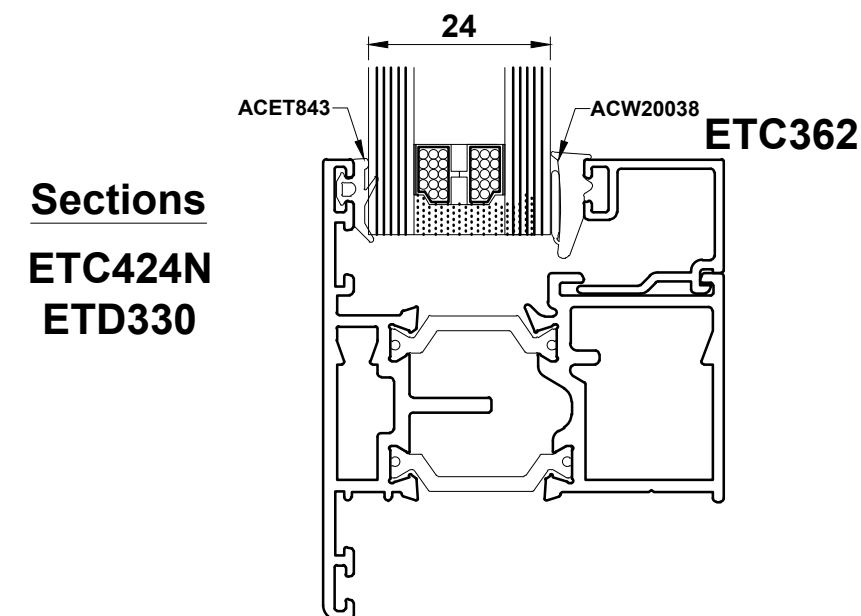
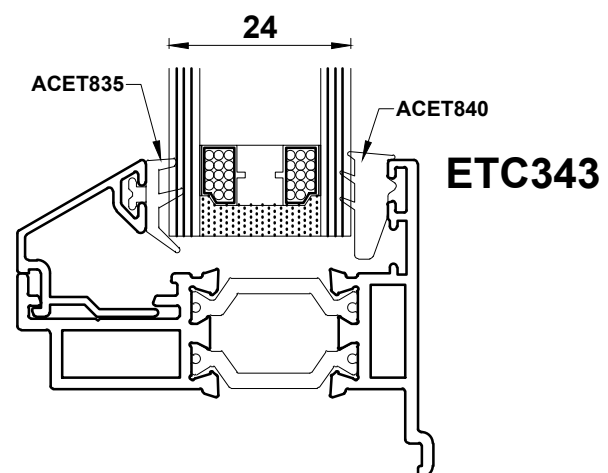
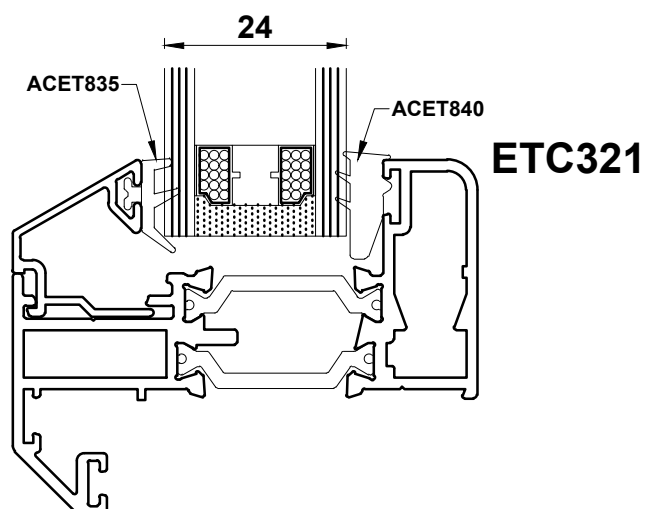
24mm Glazing Externally Glazed

Sections

ETC302	ETC321	ETC333
ETC303	ETC327	ETC335
ETC304	ETC423	ETC336
ETC305	ETC343	
ETC306		
ETC308		
ETC310		
ETC420		
ETC313		



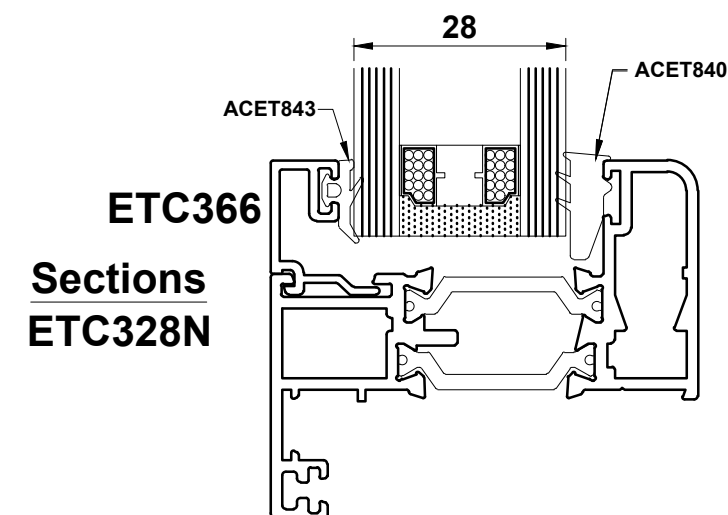
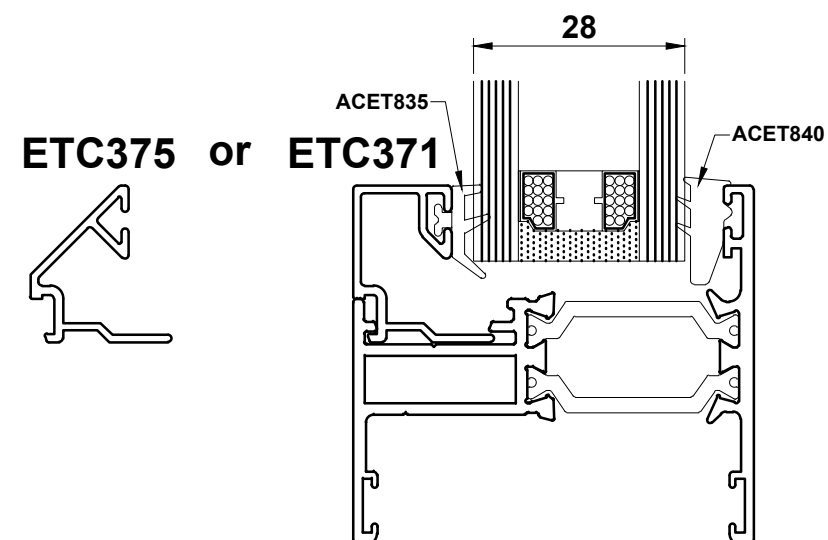
24mm Glazing Internally Glazed



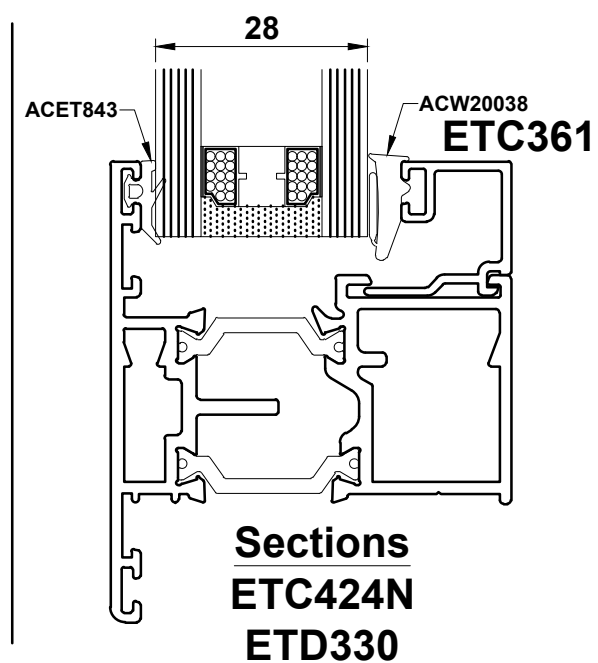
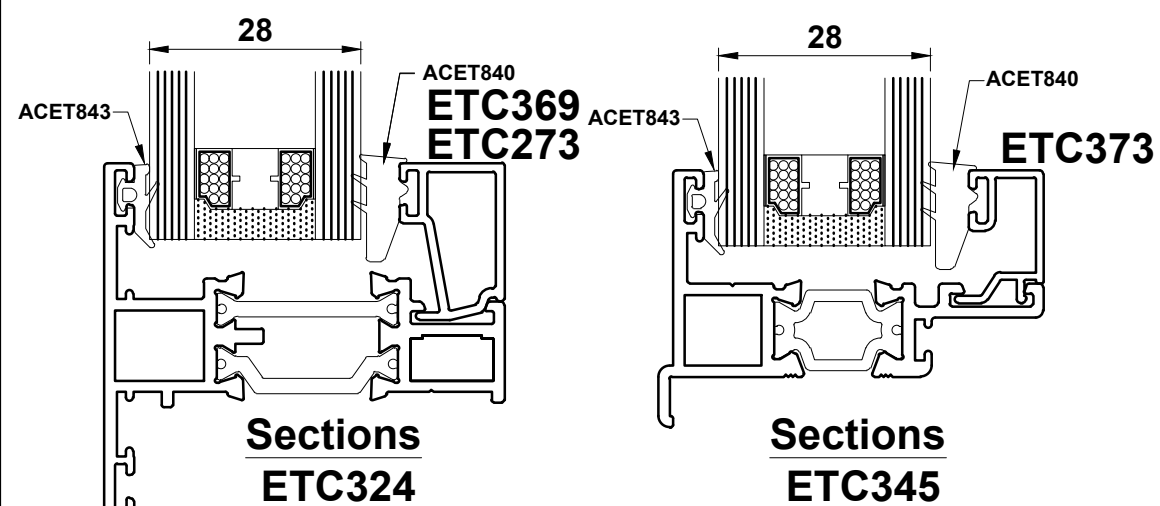
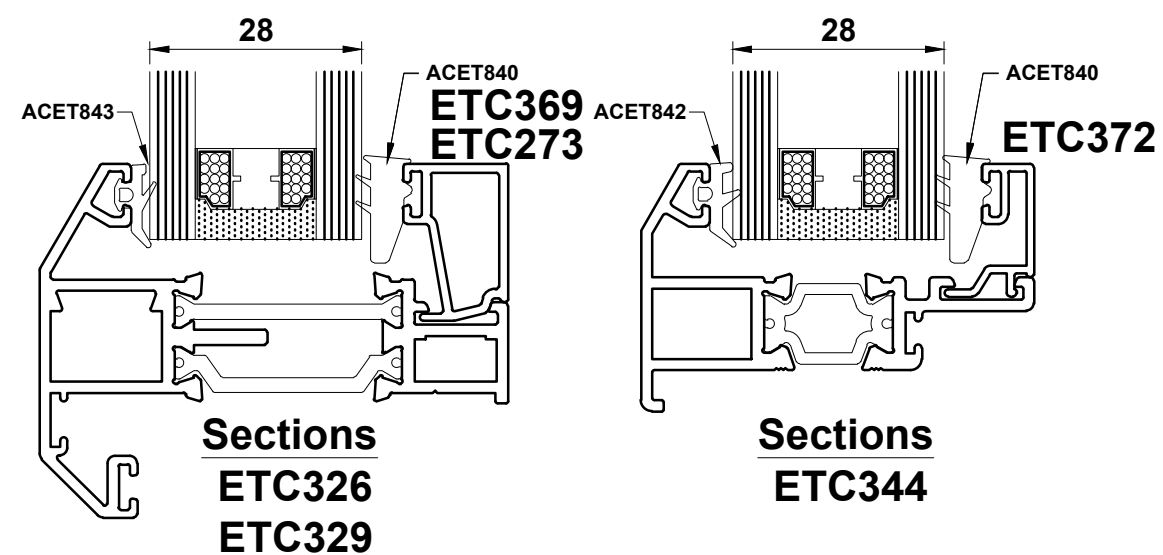
Do Not Scale From This Drawing

Glazing Details

28mm Glazing Externally Glazed



28mm Glazing Internally Glazed



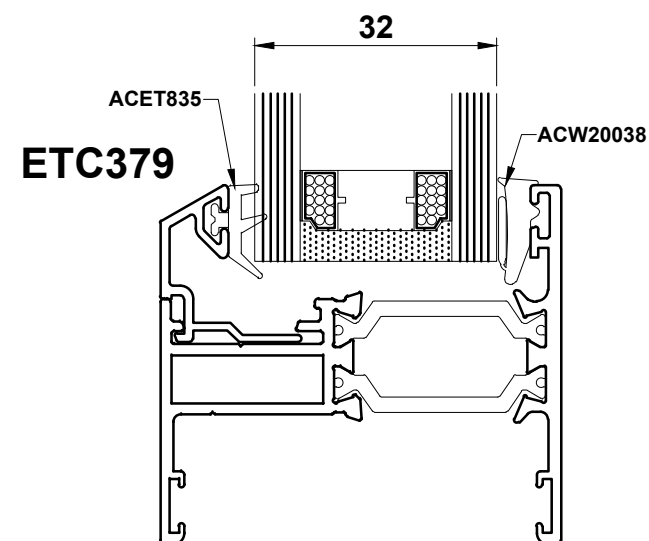
Do Not Scale From This Drawing

Glazing Details

**32mm Glazing
Externally Glazed**

Sections

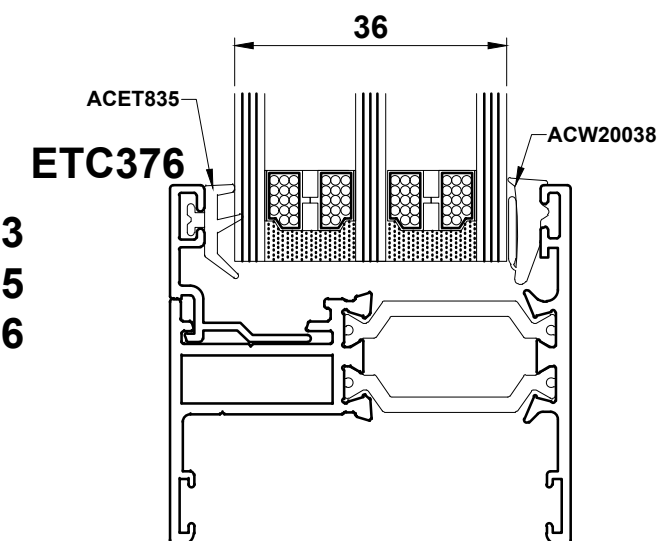
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ETC303	ETC327	ETC335
ETC304	ETC423	ETC336
ETC305	ETC343	
ETC306		
ETC308		
ETC310		
ETC420		
ETC313		



**36mm Glazing
Externally Glazed**

Sections

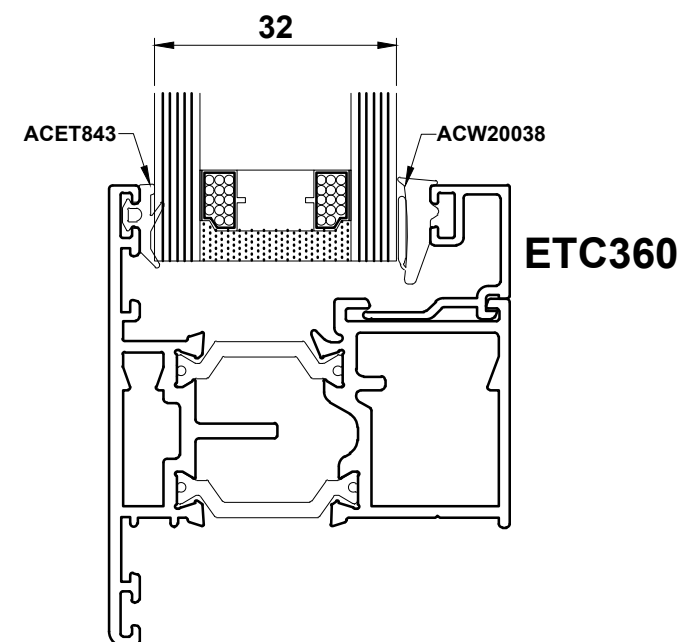
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ETC303	ETC327	ETC335
ETC304	ETC423	ETC336
ETC305	ETC343	
ETC306		
ETC308		
ETC310		
ETC313		
ETC420		



**32mm Glazing
Internally Glazed**

Sections

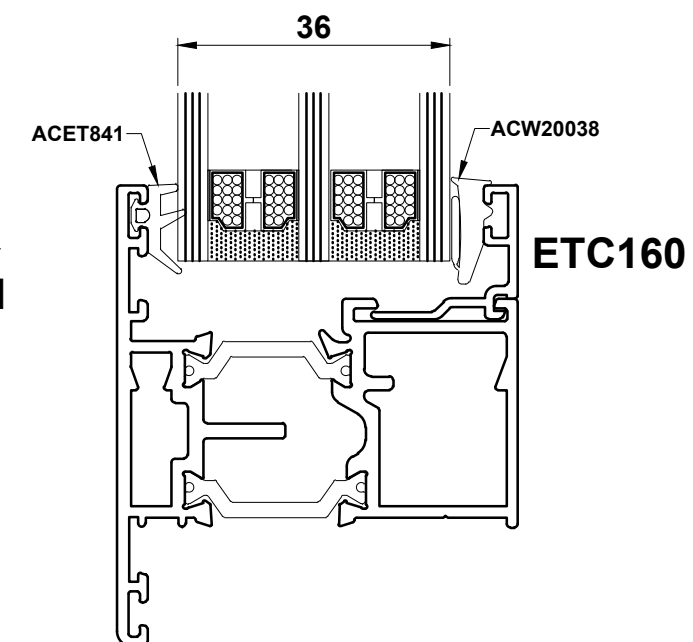
ETC424N
ETD330



**36mm Glazing
Internally Glazed**

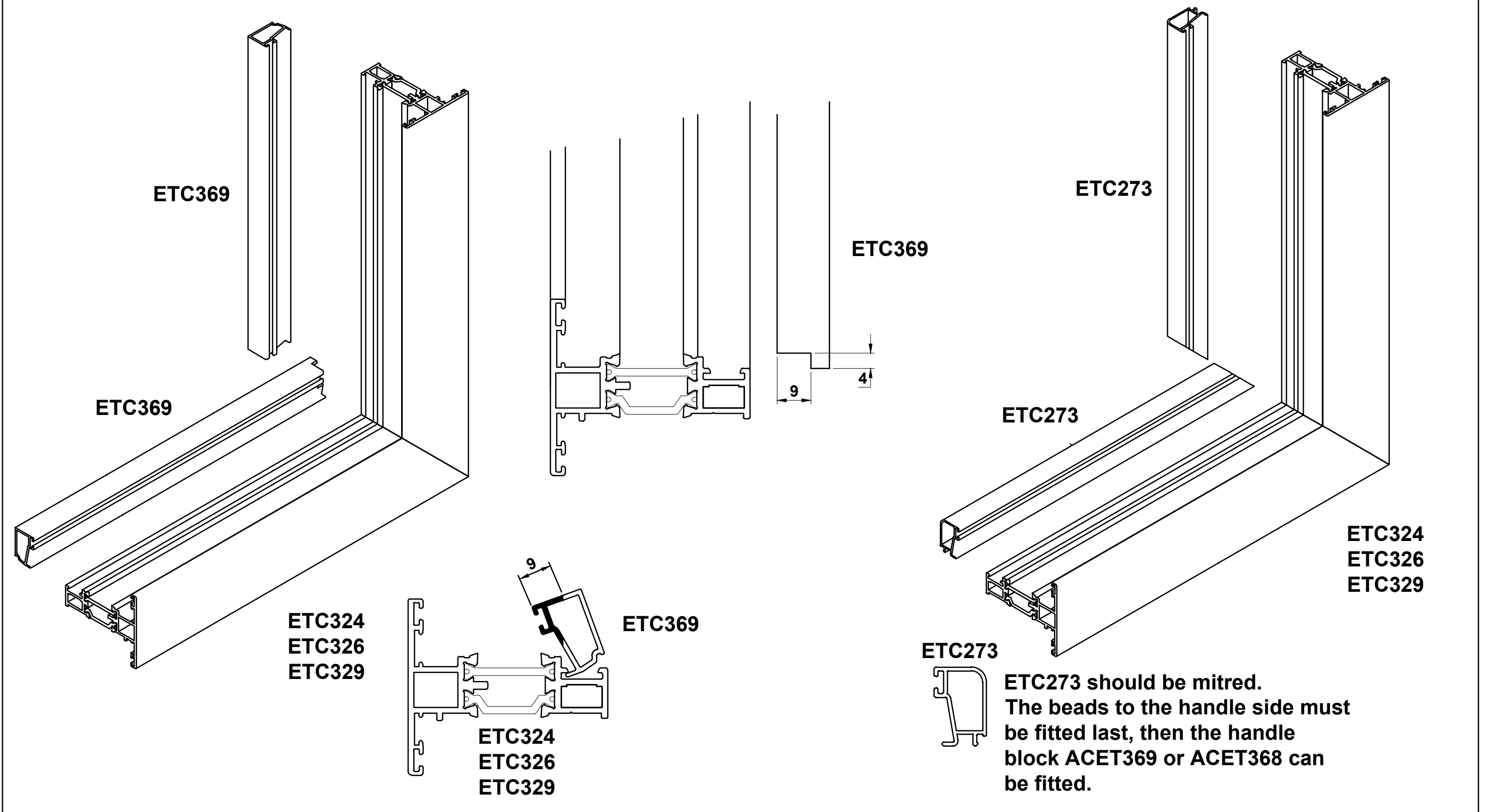
Sections

ETC424N
ETD330



Do Not Scale From This Drawing

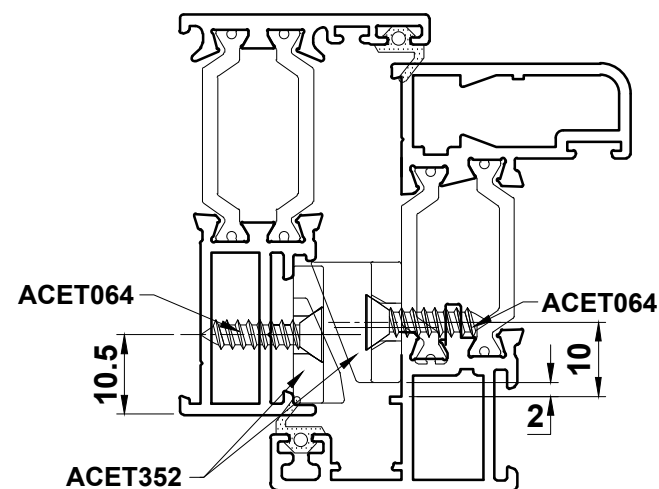
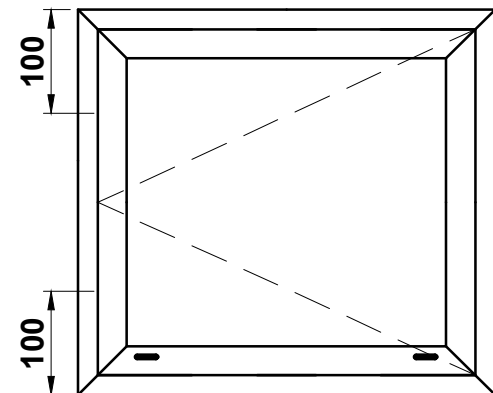
ETC369 Notch Detail



Do Not Scale From This Drawing

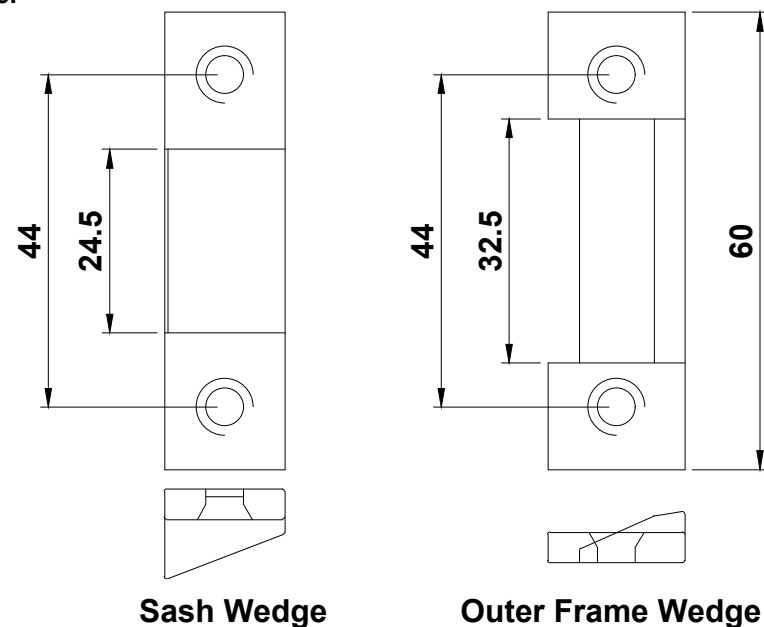
Pull in Blocks/ Hinge Protectors

Pull In Blocks for Easy Clean/Egress Stays

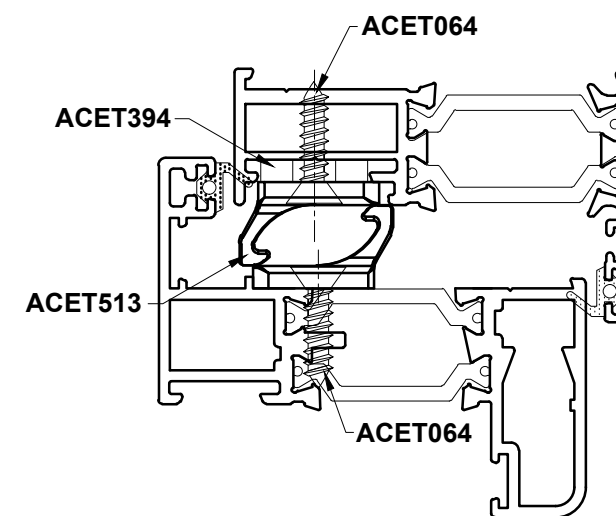
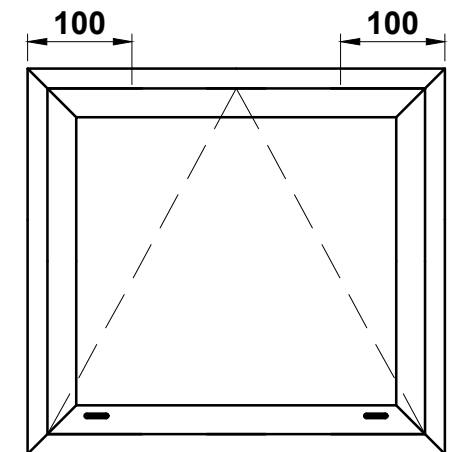
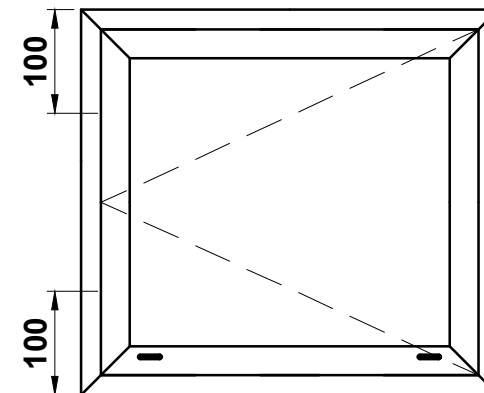


Please Note:

- 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.

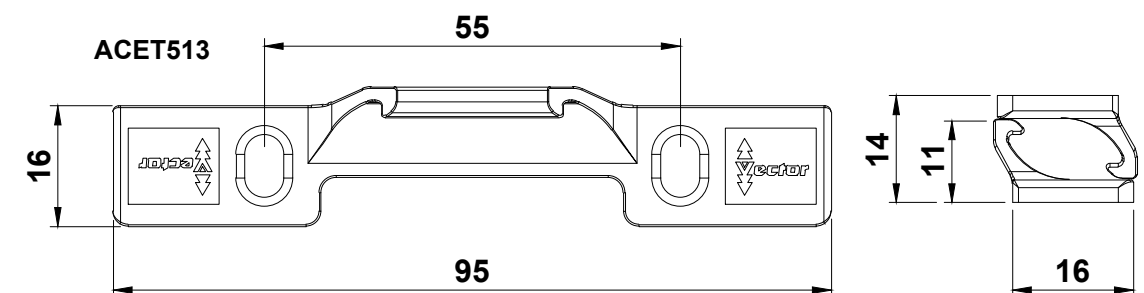


Security Hinge Protectors



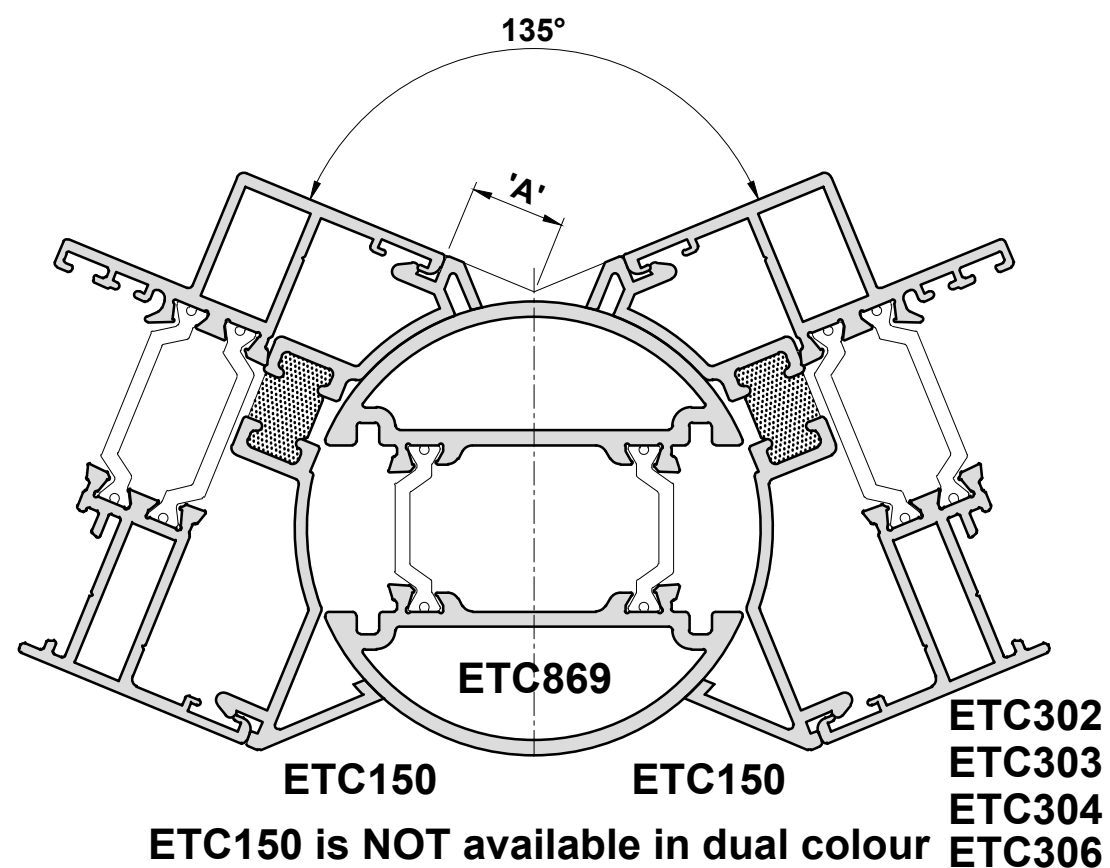
Please Note:

- 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

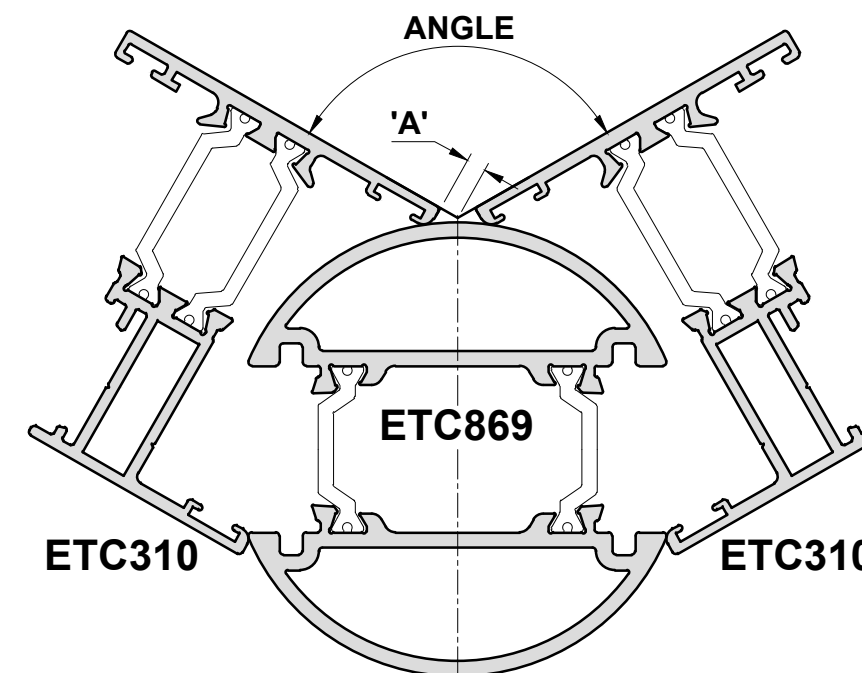


Do Not Scale From This Drawing

Bay Pole Angles / Deductions



ANGLE	DEDUCTION 'A'
180°	24.5
175°	23.5
170°	22
165°	20.5
160°	19
155°	18
150°	16.5
145°	15
140°	13.5
135°	12



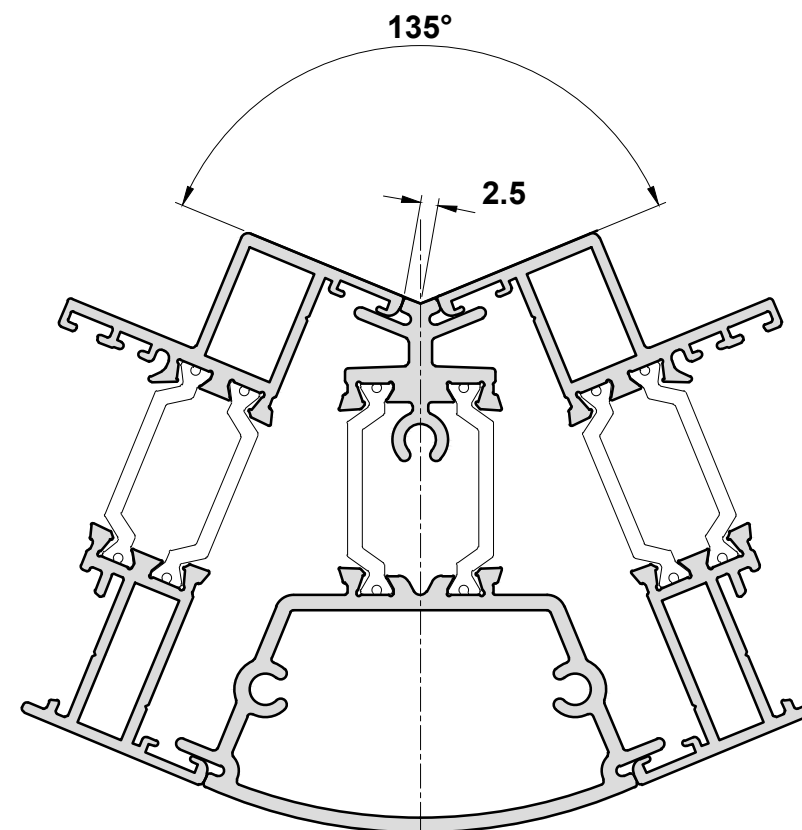
ANGLE	DEDUCTION 'A'
180°	18
175°	17
170°	15.5
165°	14.5
160°	13
155°	12
150°	10.5
145°	9
140°	8
135°	6.5
130°	5.5
125°	4
120°	2.5

Do Not Scale From This Drawing

Fixed Bay Pole Angle / Deduction

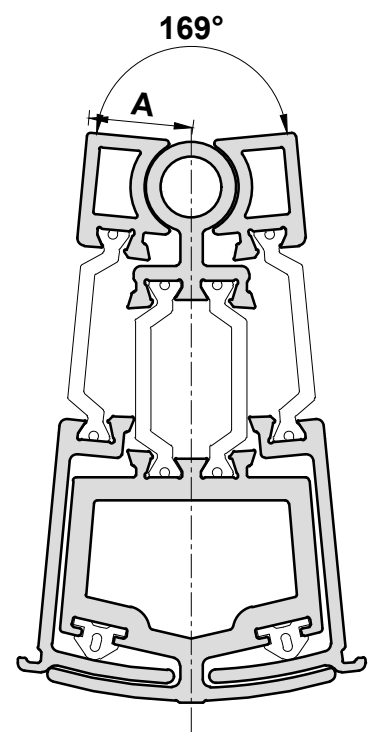
Sections

ETC302
ETC303
ETC304
ETC305
ETC306



ETC385

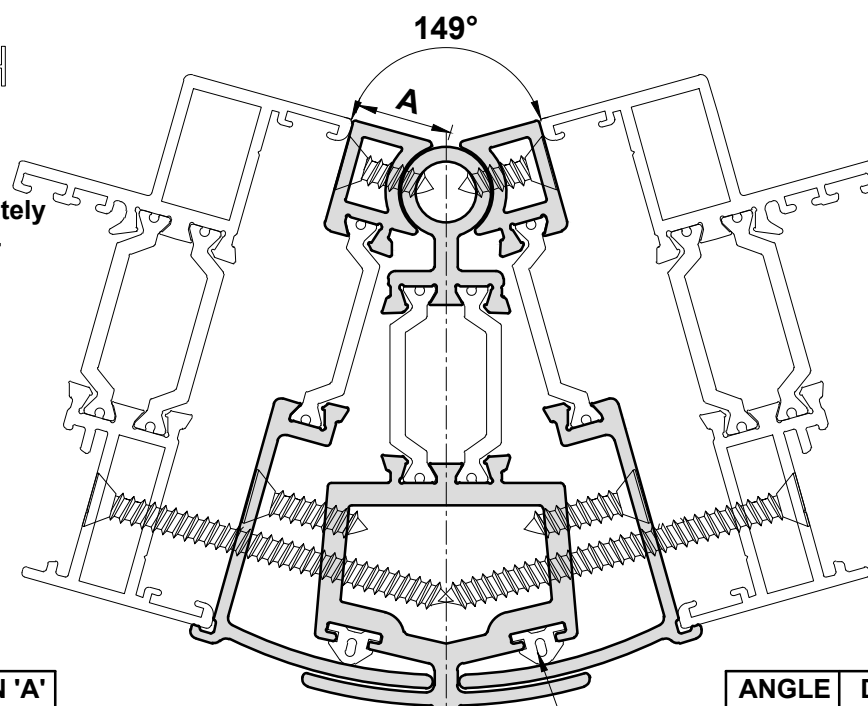
70mm Outer Frame Bay Pole Angles/Deductions



ACSIL04
ACSIL08

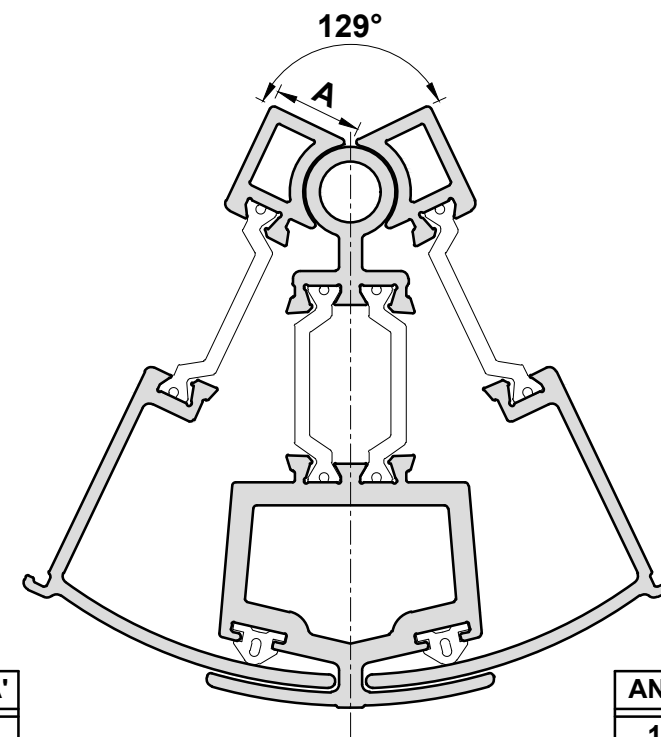
Important Note:
All joints must be adequately
sealed using ACSIL04

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

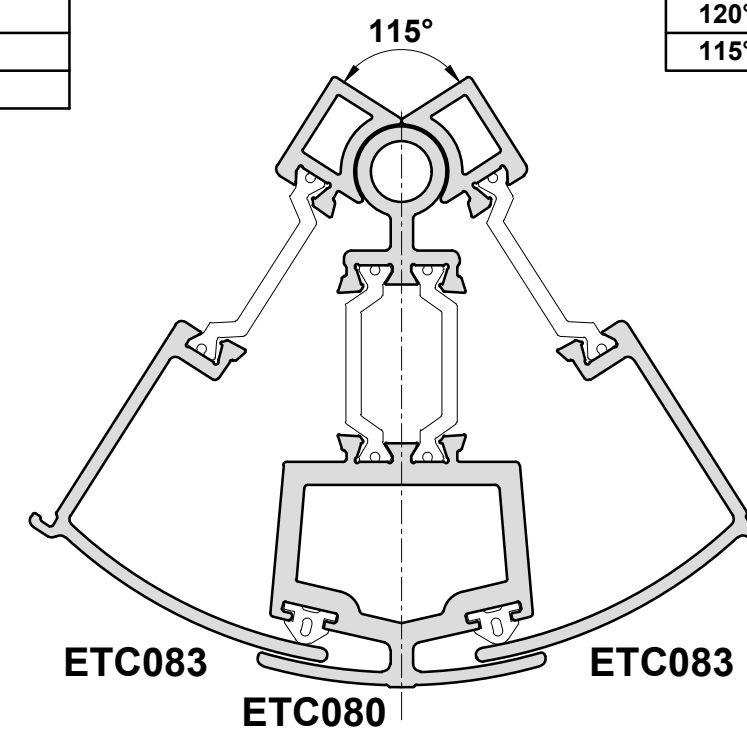
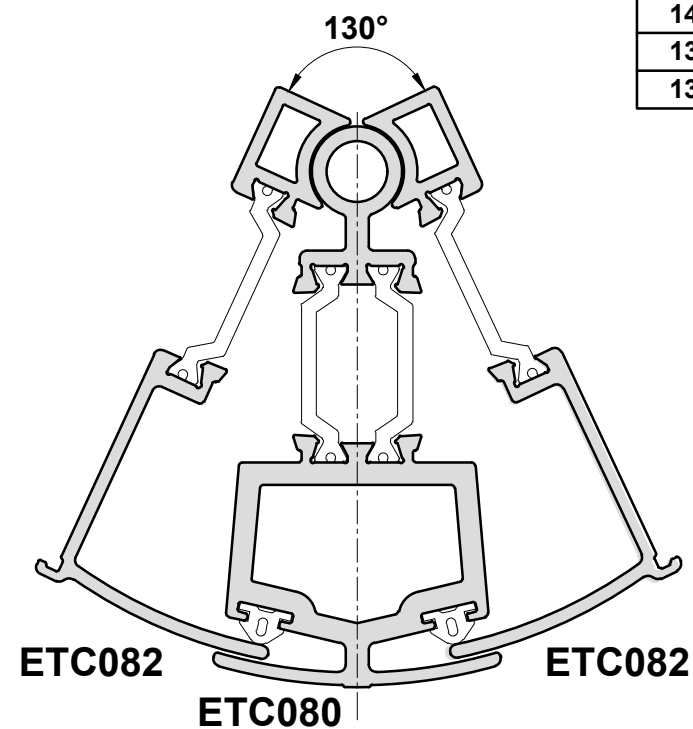
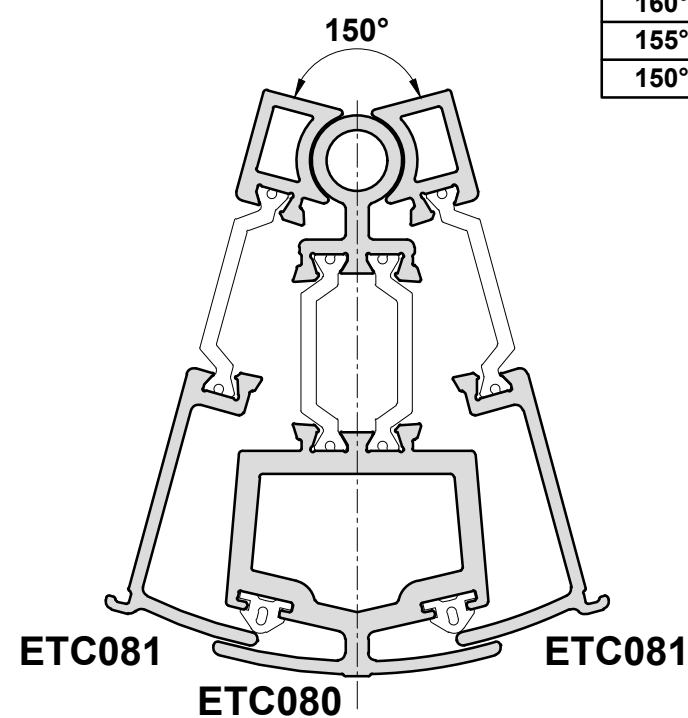


ACVS010

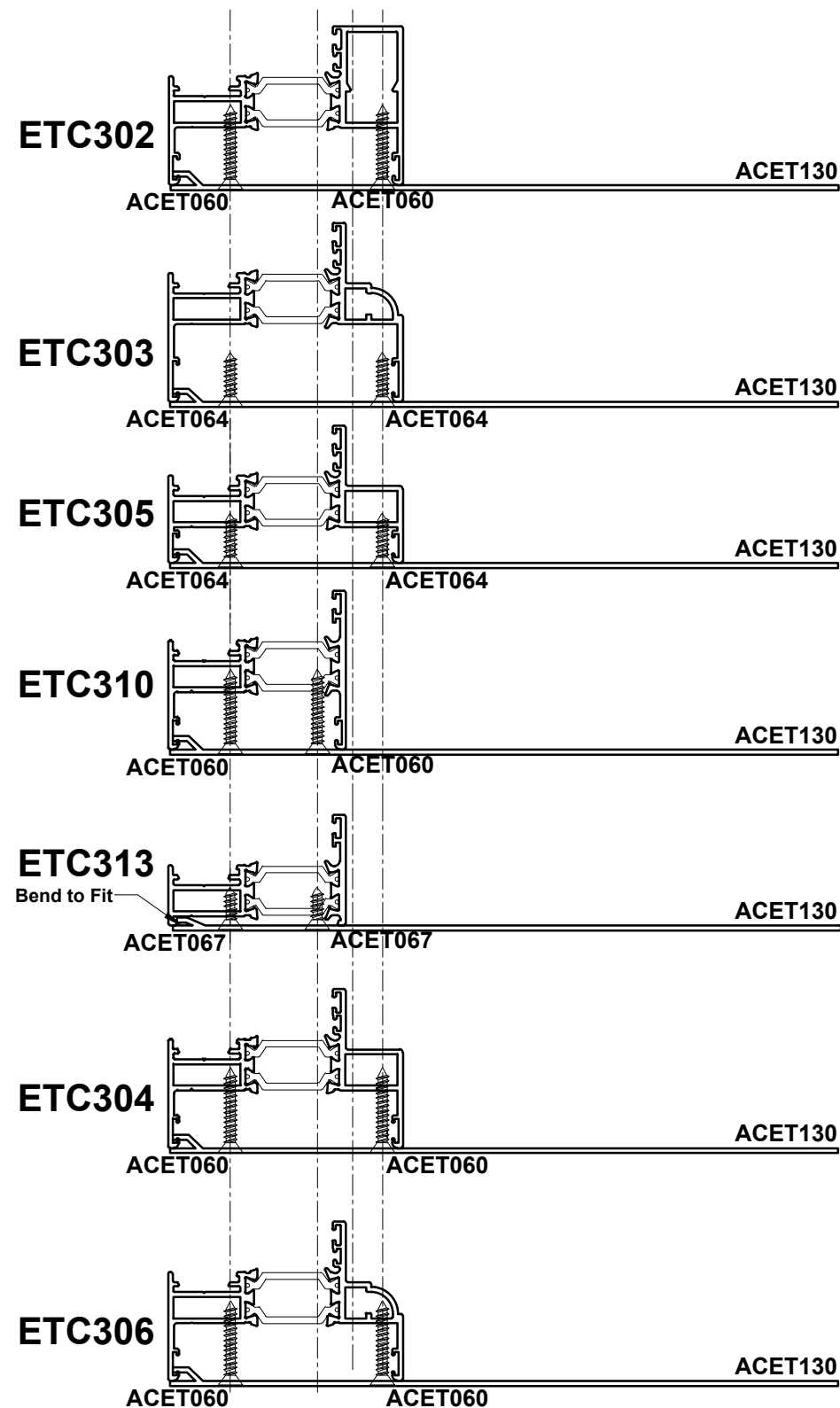
ANGLE	DEDUCTION 'A'
149°	12.5
145°	12.5
140°	12
135°	12
130°	11.5



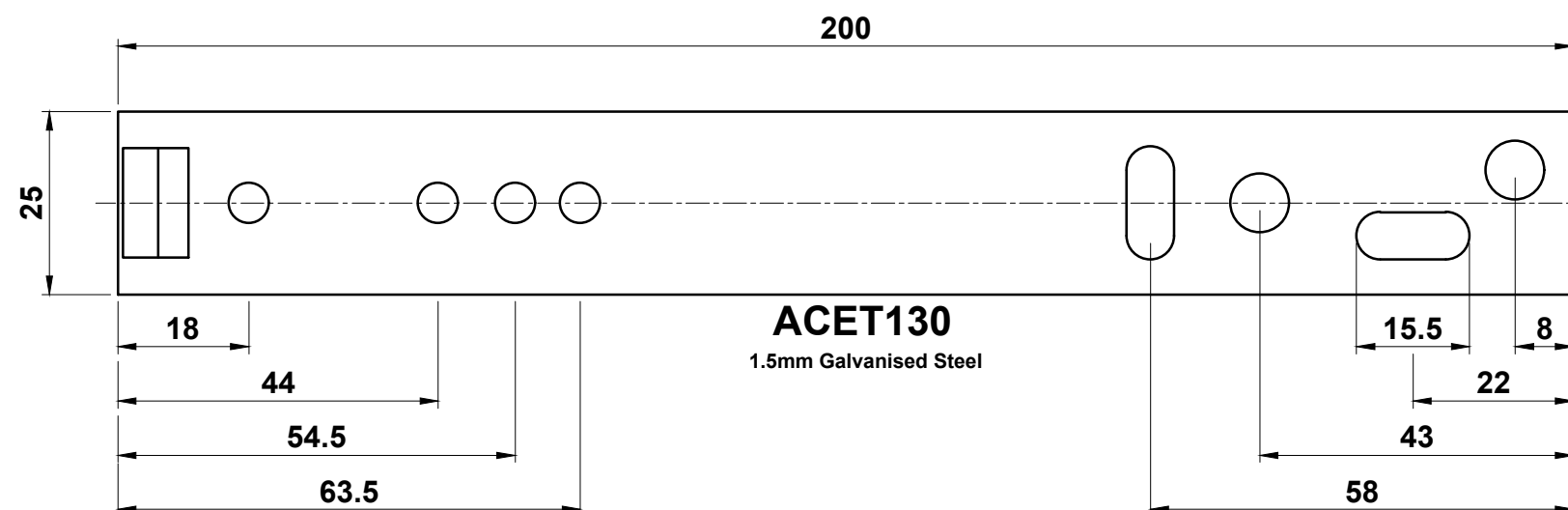
ANGLE	DEDUCTION 'A'
129°	11.5
125°	11.5
120°	11
115°	10.5



Fixing Strap Details



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

Section F

Sawing Tables

Cutting Information

Cutting Information - Standard Stays

PART DESCRIPTIONS		TYPICAL STYLES															
Outer Frame	Head & Cill		W	W	W	W	W	W	W	W	W	W	W	W	W	W	W
	Jambs		H	H	H	H	H	H	H	H	H	H	H	H	H	H	H
	Transoms			W - 65		W - 65	W - 65	W - 65		OF to €M - 41.5	W - 65		OF to €M - 41.5	€M to €M - 18	W - 65	OF to €M - 41.5	W - 65
	Mullions								H - 65	H - 65	OF to €T - 41.5	H - 65	H - 65	H - 65	OF to €T - 41.5	H - 65	
Vent (1)	Horizontal Components				W - 53	W - 53	W - 53	W - 53	OF to €M - 29.5	OF to €M - 29.5	OF to €M - 29.5	OF to €M - 29.5	OF to €M - 29.5	OF to €M - 29.5	OF to €M - 29.5	OF to €M - 29.5	W - 53
	Vertical Components				H - 53	OF to €T - 29.5	OF to €T - 29.5	€T to €T - 6	H - 53	H - 53	OF to €T - 29.5	H - 53	OF to €T - 29.5	H - 53	OF to €T - 29.5	OF to €T - 29.5	OF to €T - 29.5
Vent (2)	Horizontal Components								OF to €M - 29.5				OF to €M - 29.5	€M to €M - 6	€M to €M - 6		
	Vertical Components								OF to €T - 29.5				OF to €T - 29.5	OF to €T - 29.5	OF to €T - 29.5		
Vent (1)	Glass Width				W - 124	W - 124	W - 124	W - 124	OF to €M - 100.5	OF to €M - 100.5	OF to €M - 100.5	OF to €M - 100.5	OF to €M - 100.5	OF to €M - 100.5	OF to €M - 100.5	OF to €M - 100.5	W - 124
	Glass Height				H - 124	OF to €T - 100.5	OF to €T - 100.5	€T to €T - 77	H - 124	H - 124	OF to €T - 100.5	H - 124	OF to €T - 100.5	H - 124	OF to €T - 100.5	OF to €T - 100.5	OF to €T - 100.5
Vent (2)	Glass Width								OF to €M - 100.5				OF to €M - 100.5	€M to €M - 77	€M to €M - 77		
	Glass Height								OF to €T - 100.5				OF to €T - 100.5	OF to €T - 100.5	OF to €T - 100.5		
Fixed Panel (1)	Glass Width		W - 72	W - 72		W - 72		W - 72	OF to €M - 48.5	OF to €M - 48.5	W - 72	€M to €M - 25	€M to €M - 25	€M to €M - 25	W - 72	OF to €M - 48.5	W - 72
	Glass Height		H - 72	OF to €T - 48.5		OF to €T - 48.5		OF to €T - 48.5	H - 72	OF to €T - 48.5	OF to €T - 48.5	H - 72	H - 72	OF to €T - 48.5	OF to €T - 48.5	H - 72	OF to €T - 48.5

LEGEND:

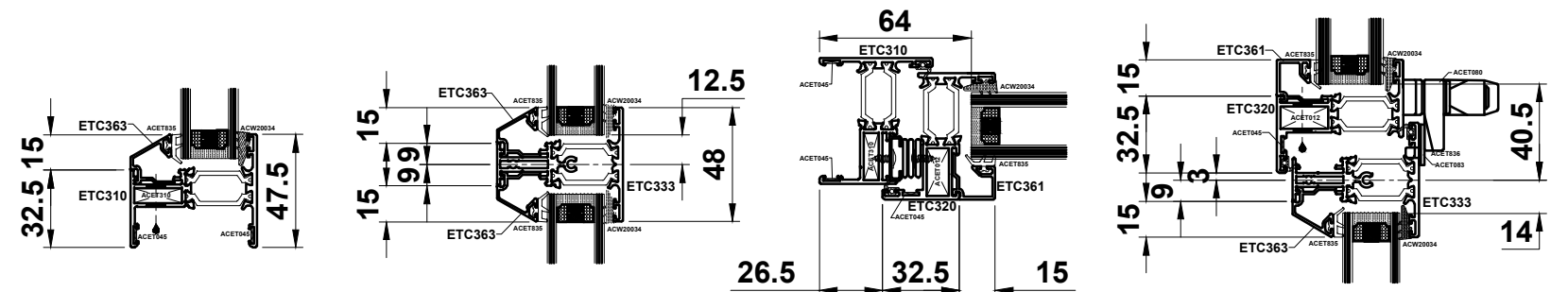
W = Overall window outer frame width - outside
H = Overall window outer frame height - outside
€ = Centre line of transom/mullion
O/F = Extreme edge of outer frame

Sections:

Outerframe: ETC302 ETC304
ETC306 ETC310

Sash: ETC326 ETC327
ETC328N ETC329

Transom/Mullion: ETC333



Do Not Scale From This Drawing

Cutting Information - Standard Stays

PART DESCRIPTIONS		TYPICAL STYLES														
Outer Frame	Head & Cill	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W
	Jambs	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H
	Transoms		W - 77		W - 77	W - 77	W - 77		OF to €M - 47.5	W - 77		OF to €M - 47.5	€M to €M - 18	W - 77	OF to €M - 47.5	W - 77
	Mullions							H - 77	H - 77	OF to €T - 47.5	H - 77	H - 77	H - 77	OF to €T - 47.5	H - 77	
Vent (1)	Horizontal Components			W - 65	W - 65	W - 65	W - 65	OF to €M - 35.5	OF to €M - 35.5	OF to €M - 35.5	OF to €M - 35.5	OF to €M - 35.5	OF to €M - 35.5	OF to €M - 35.5	OF to €M - 35.5	W - 65
	Vertical Components			H - 65	OF to €T - 35.5	OF to €T - 35.5	€T to €T - 6	H - 65	H - 65	OF to €T - 35.5	H - 65	OF to €T - 35.5	H - 65	OF to €T - 35.5	OF to €T - 35.5	OF to €T - 35.5
Vent (2)	Horizontal Components							OF to €M - 35.5					€M to €M - 6	€M to €M - 6		
	Vertical Components							OF to €T - 35.5					OF to €T - 35.5	OF to €T - 35.5		
Vent (1)	Glass Width			W - 136	W - 136	W - 136	W - 136	OF to €M - 106.5	OF to €M - 106.5	OF to €M - 106.5	OF to €M - 106.5	OF to €M - 106.5	OF to €M - 106.5	OF to €M - 106.5	OF to €M - 106.5	W - 136
	Glass Height			H - 136	OF to €T - 106.5	OF to €T - 106.5	€T to €T - 77	H - 136	H - 136	OF to €T - 106.5	H - 136	OF to €T - 106.5	H - 136	OF to €T - 106.5	OF to €T - 106.5	OF to €T - 106.5
Vent (2)	Glass Width					W - 136		OF to €M - 106.5					€M to €M - 77	€M to €M - 77	OF to €M - 106.5	
	Glass Height							OF to €T - 106.5					OF to €T - 106.5	OF to €T - 106.5	OF to €T - 106.5	
Fixed Panel (1)	Glass Width	W - 84	W - 84		W - 84		W - 84	OF to €M - 54.5	OF to €M - 54.5	W - 84	€M to €M - 25	€M to €M - 25	€M to €M - 25	W - 84	OF to €M - 54.5	W - 84
	Glass Height	H - 84	OF to €T - 54.5		OF to €T - 54.5		OF to €T - 54.5	H - 84	OF to €T - 54.5	OF to €T - 54.5	H - 84	H - 84	OF to €T - 54.5	OF to €T - 54.5	H - 84	OF to €T - 54.5

LEGEND:

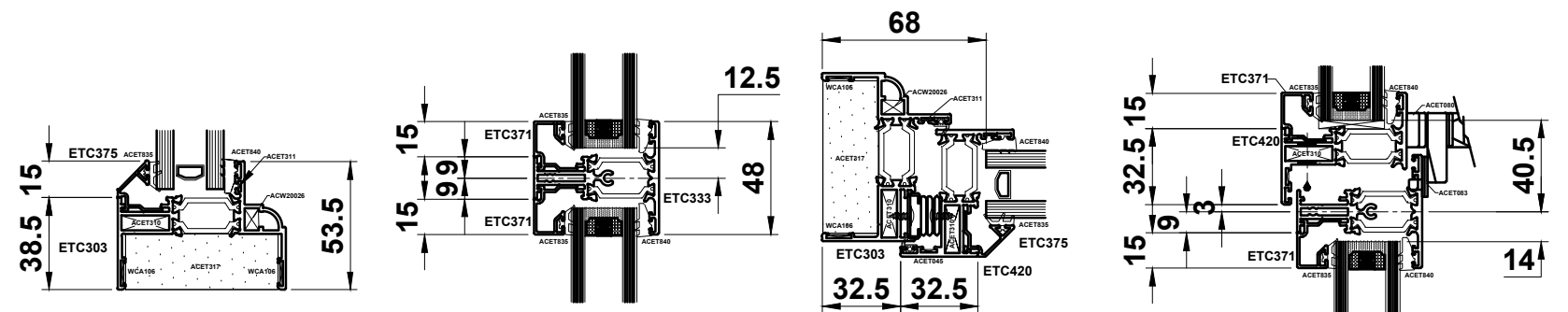
W = Overall window outer frame width - outside
H = Overall window outer frame height - outside
€ = Centre line of transom/mullion
O/F = Extreme edge of outer frame

Sections:

Outerframe: ETC303

Sash: ETC326 ETC327
ETC328N ETC329

Transom/Mullion: ETC333



Do Not Scale From This Drawing