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Updates

DATE	PAGE	DESCRIPTION
16-02-18	A20	ETD095 Removed.
	A21	Added ETD199 Low Threshold Infill
	B11, B12, B22, B23, E26 E50	Updated accessories for PAS24:2016. Include ACET252, ACET268, ACET29 & ACET292/293.

Specification

GENERAL DESCRIPTION

Alitherm Plus is a thermally broken residential door system suitable for both replacement doors in existing buildings and for installation into new buildings.

The system incorporates internally beaded sashes which are hung on either face fitted adjustable flag hinges or adjustable butt hinges which fit into the channels of the sash & outer frame. Sashes are locked by a multi-point lock which engages into a one piece keep for single doors or individual keeps for double doors, and operated by lever/lever handles.

The locks & face fitted hinges have been successfully tested to PAS24:2016.

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.

Specification

GENERAL MANUFACTURING

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

The corner joints can be made using mechanically fixed corner cleats by punching the corners using the relevant punch tooling shown in section E of this manual.

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

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

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

DESIGN LIMITATIONS & PERFORMANCE CHARACTERISTICS

	Width (mm) minimum	Width (mm) maximum	Height (mm) - minimum	Height (mm) - maximum	Weight (kg) - maximum	Air Permeability	Watertightness	Resistance to Wind	Exposure Category*
Single Leaf Open in & out low threshold	500	1000	1885	2500	100	4	3A	A3	1200
Single Leaf Open in & out standard threshold	500	1000	1885	2500	100	4	9A	AE2400	2000+
Double Leaf Open in & out low threshold	500	1000	1885	2500	100	4	3A	A3	1200
Double Leaf Open out standard threshold	500	1000	1885	2500	100	4	8A	A3	1200
Double Leaf Open in standard threshold	500	1000	1885	2500	100	4	7A	A3	1200

*** As given in Table 1 of BS 6375-1:2009**

Profiles

Outer Frame:	ETD012/015/017/196
Leaf:	ETD024N/025N
Midrail:	ETD030/033
Mullion:	ETD034
Frame Filler:	PCX17
Leaf Filler:	PCX15

Hardware

Locking:	ACET292/3, Shootbolt kit ACDV742/737/738, Secondary door lock set ACET285
Hinges:	ACET250
Handle:	ACET480
Cylinder:	ACCY3045S1 or ACCY4530S1

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

Specification

DOOR DRAINAGE

As with all dry glazed systems, it is recommended that the door 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 open out sashes.

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

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

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

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

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

Specification

SASHES

Corners are formed by coating the cut faces to be joined with a suitable gap sealer. In the mitred corner insert the cleat glue and the required corner cleats and chevrons. The mitred ends are then brought together and mechanically joined. The small gap sealer ensures a permanent joint and guards against the ingress of moisture and joint movement. Care should be taken to ensure any excess sealer is removed from the surfaces.

The cutting sizes produce vent frames which overlap the outer frame by 6mm.

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

The below is a summary of the sliding door testing under Kitemark Licence Number: KM530838. The full details may be downloaded from www.smartsystems.co.uk

Alitherm Plus Weather Performance (BS6375-1)

See Design Limitations & Design Characteristics table on Page A05

Alitherm Plus Operational Performance (BS6375-2:2009)

Alitherm Plus has passed the operational & strength requirements of of BS6375-2

Alitherm Plus Security (PAS24:2016)

Alitherm Plus has been successfully tested to PAS24:2016

Alitherm Plus U Values

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

Specification

GLAZING

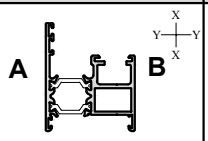
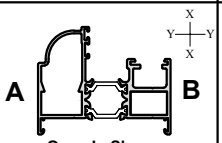
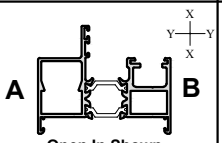
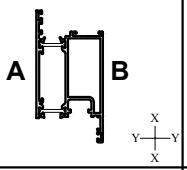
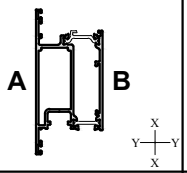
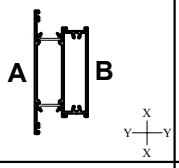
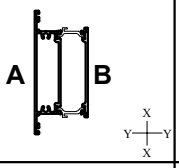
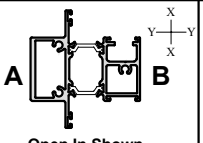
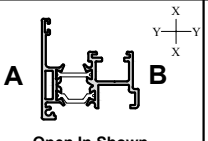
All beads are cut to suit the glazing aperture on the fully assembled door for glazing either at factory or on site as required.

BEAD GLAZING TO OUTER FRAME

Glazing beads are fitted to openings by cutting the horizontal beads square to head and cill of each vent and fixed light area. Beads are guided over the deep channel by ACET153 packers. Vertical beads are cut at 45° or 90° both ends. Insert bottom beads and two setting blocks to ensure glass will be centralized in vertical dimension of opening (glazing blocks must be full width of cavity to fully support glass or sealed unit), then insert top bead followed by side beads. Finish glazing by insertion of internal gaskets all round.

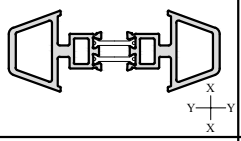
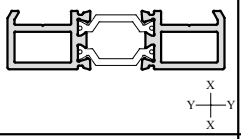
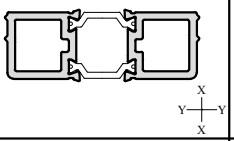
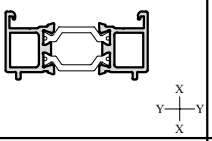
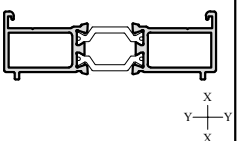
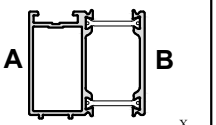
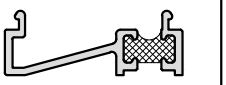
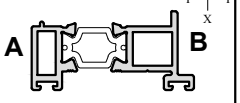
BEAD GLAZING TO SASH

Glazing beads are fitted to openings by cutting the horizontal beads square to head and cill of each vent and fixed light area. Vertical beads are cut square at both ends. Ensure the double glazed unit is properly toe & healed, and Insert bottom bead, then insert top bead followed by side beads. Finish glazing by insertion of internal gaskets all round.

Number	Picture	Page	Perim. mm	Mec. mm	Ix(cm4) wx(cm3)	Iy(cm4) wy(cm3)	Length	Pack pr.	MF	SA	KL	HP	M
ETD012	 Open In Shown Reverse For Open Out	A14	389	108	12.5 ----- 5.0	6.8 ----- 2.9	6.5	1	✓	✓	✓	✓	✓
ETD015	 Open In Shown Reverse For Open Out	A14	428	130	29.4 ----- 8.3	10.6 ----- 4.3	6.5	1	✓	✓	✓	✓	✓
ETD017	 Open In Shown Reverse For Open Out	A14	434	130	28.6 ----- 8.0	8.7 ----- 3.6	6.5	1	✓	✓	✓	✓	✓
ETD024N		A15	505	165	21.6 ----- 9.2	56.2 ----- 12.3	6.5	1	✓	✓	✓	✓	✓
ETD025N		A15	520	204	21.0 ----- 8.1	43.4 ----- 8.5	6.5	1	✓	✓	✓	✓	✓
ETD030		A16	418	203	21.6 ----- 8.7	57.3 ----- 10.5	6.5	1	✓	✓	✓	✓	✓
ETD033		A16	418	203	21.5 ----- 8.1	56.2 ----- 10.3	6.5	1	✓	✓	✓	✓	✓
ETD034	 Open In Shown Reverse For Open Out	A17	474	172	36.8 ----- 9.9	18.1 ----- 4.9	6.5	1	✓	✓	✓	✓	✓
ETD048	 Open In Shown Reverse For Open Out	A17	388	105	11.8 ----- 3.9	5.1 ----- 2.4	6.5	1	✓	✓	✓	✓	✓

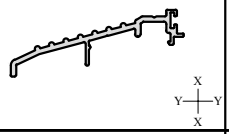
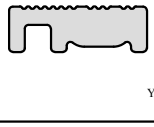
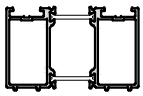
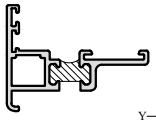
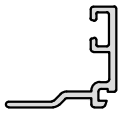
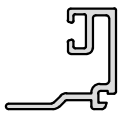
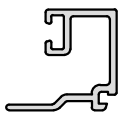
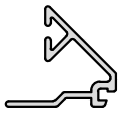
A = Outside
B = Inside

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
ETD051		A18	335	140	65.3 ----- 14	5.7 ----- 3.2	6.5	1	✓	✓	✓	✓	✓
ETD052		A18	303	-	13.88 ----- 4.42	0.90 ----- 1.17	6.5	1	✓				
ETD053		A18	175	-	19.4 ----- 6.0	2.7 ----- 2.3	6.5	1	✓				
ETD056		A20	205	41	6.31 ----- 2.69	0.82 ----- 0.77	6.5	1	✓	✓	✓	✓	✓
ETD057		A20	251	41	16.30 ----- 4.66	1.12 ----- 1.55	6.5	1	✓	✓	✓	✓	✓
ETD058	 Open Out Shown Reverse For Open In	A22	294	85	9.92 ----- 4.22	7.25 ----- 3.4	6.5	1	✓	✓	✓	✓	✓
ETD092		A20	172	25	0.35 ----- 0.33	7.25 ----- 2.13	6.5	1	✓	✓	✓	✓	
ETD196		A21	302	122	28.40 ----- 6.51	0.92 ----- 1.28	6.5	1		✓			
ETD197	 Open In Shown Reverse For Open Out	A21	185	21	4.16 ----- 1.86	0.61 ----- 0.66	6.5	1	✓	✓	✓	✓	✓

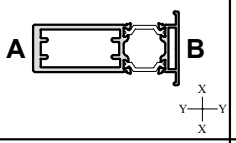
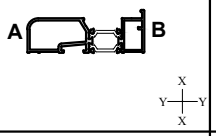
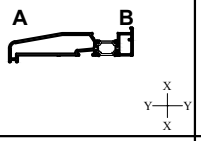
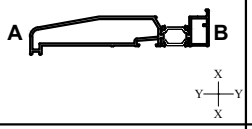
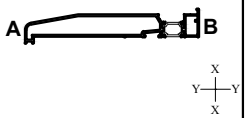
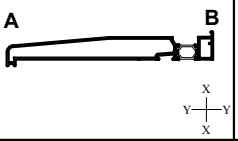
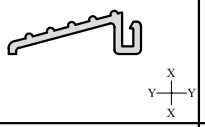
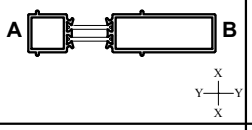
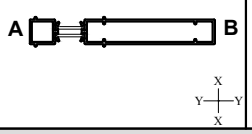
A = Outside
B = Inside

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
ETD198		A21	213	78	0.61 ----- 0.42	7.52 ----- 2.41	6.5	1		✓			
ETD199		A21	59	21	- ----- -	- ----- -	3	1	✓	✓	✓	✓	
DV515		A22	356	85	27.16 — 7.76	14.38 — 6.75	6.5	1	✓	✓	✓	✓	✓
ETC046		A15	237	44	4.31 ----- 1.39	1.15 ----- 0.74	6.5	1	✓	✓	✓	✓	
ETC160		A23	95	23	- ----- -	- ----- -	6.5	1	✓	✓	✓	✓	
ETC161		A23	115	27	- ----- -	- ----- -	6.5	1	✓	✓	✓	✓	
ETC162		A23	123	31	- ----- -	- ----- -	6.5	1	✓	✓	✓	✓	
ETC163		A23	106	26	- ----- -	- ----- -	6.5	1	✓	✓	✓	✓	
ETC164		A23	103	25	- ----- -	- ----- -	6.5	1	✓	✓	✓	✓	

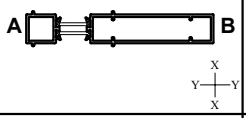
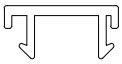
A = Outside
B = Inside

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
ETC357		A18	297	138	41.5 ----- 9.86	5.2 ----- 2.67	6.5	1	✓	✓	✓	✓	✓
ETC451		A24	304	109	32.44 ----- 7.29	3.46 ----- 2.79	6.5	1	✓	✓	✓	✓	✓
ETC452		A24	414	197	122.46 — 18.03	6.01 – – 3.34	6.5	1	✓	✓	✓	✓	✓
ETC457		A24	444	212	163.27 ----- 21.60	6.79 ----- 3.73	6.5	1	✓	✓	✓	✓	✓
ETC458		A25	524	252	313.62 ----- 32.63	8.87 ----- 4.79	6.5	1	✓	✓	✓	✓	✓
ETC479		A25	594	287	501.64 ----- 44.04	9.72 ----- 5.34	6.5	1	✓	✓	✓	✓	✓
EUD03		A23	113	39	- ----- -	- ----- -	4	1	✓	✓			
FT054		A19	281	96	43.3 — 8.58	2.65 – – 2.2	6.5	1	✓	✓	✓	✓	✓
FT155		A19	384	218	135.1 — 17.7	4.16 – – 3.46	6.5	1	✓	✓	✓	✓	✓

A = Outside
B = Inside

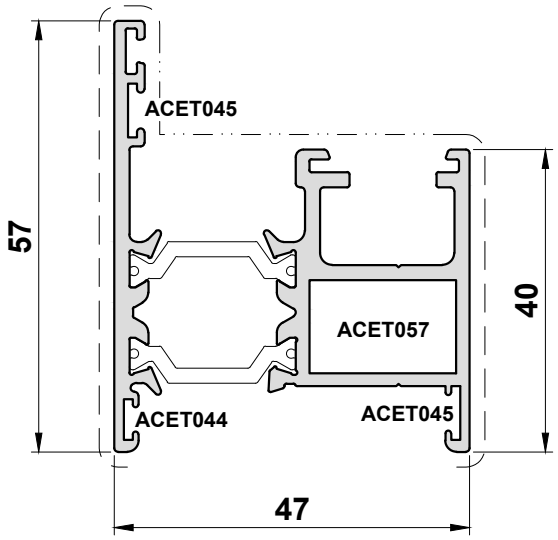
MF = Mill Finish
SA = Silver Anodised
KL = Basic Colour
HP = Special Colour
M = Dual Colour

Number	Picture	Page	Perim. mm	Mec. mm	Ix(cm4) wx(cm3)	Iy(cm4) wy(cm3)	Length	Pack pr.	MF	SA	KL	HP	M
FT156		A19	344	178	91.3 — 13.85	3.59 — 2.99	6.5	1	✓	✓	✓	✓	✓
PCX15	PVC	A22	-	-	- ----- -	- ----- -	4	1	✓				
PCX17	 PVC	A22	-	-	- ----- -	- ----- -	5	1	✓				
VL72		A22	101	54	- ----- -	- ----- -	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 — · — · — · — · — · — · —

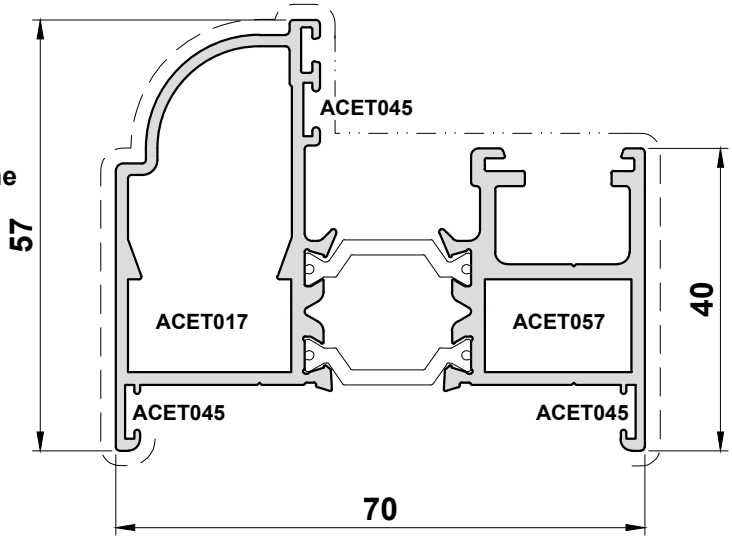


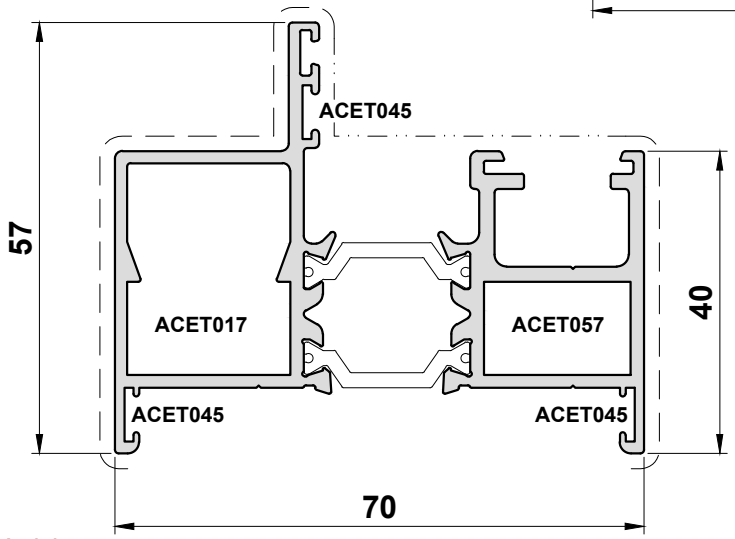
ETD012

47mm Outerframe

ETD015

70mm Ovolo Outerframe





ETD017

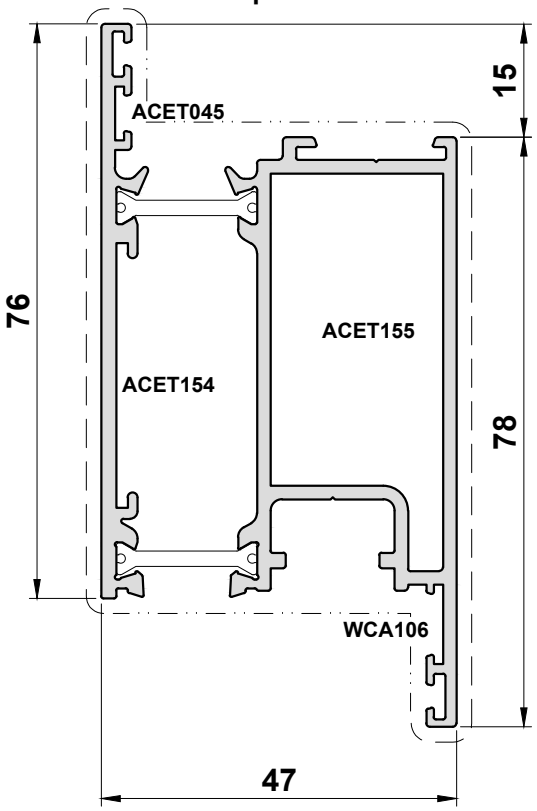
70mm Square Outerframe

Scale 1:1

Primary Visible Side - - - - - - - - - - - - - - - - - - Secondary Visible Side —·—·—·—·—·—·—·—

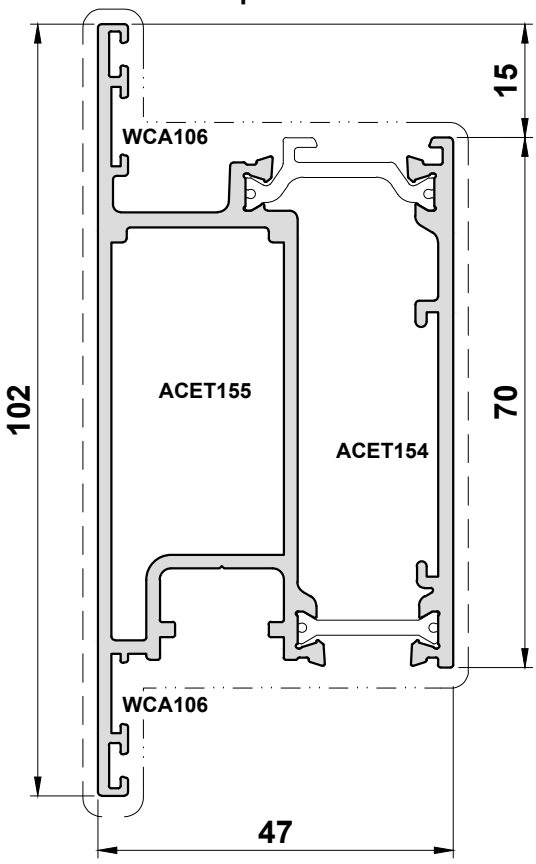
ETD024N

Open In Sash



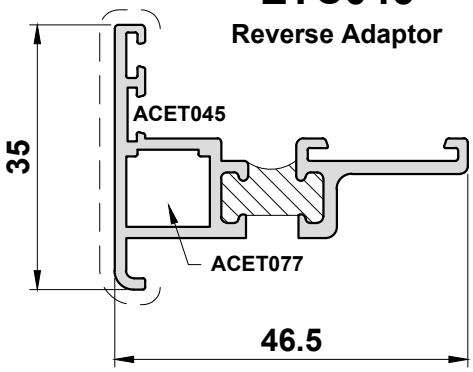
ETD025N

Open Out Sash



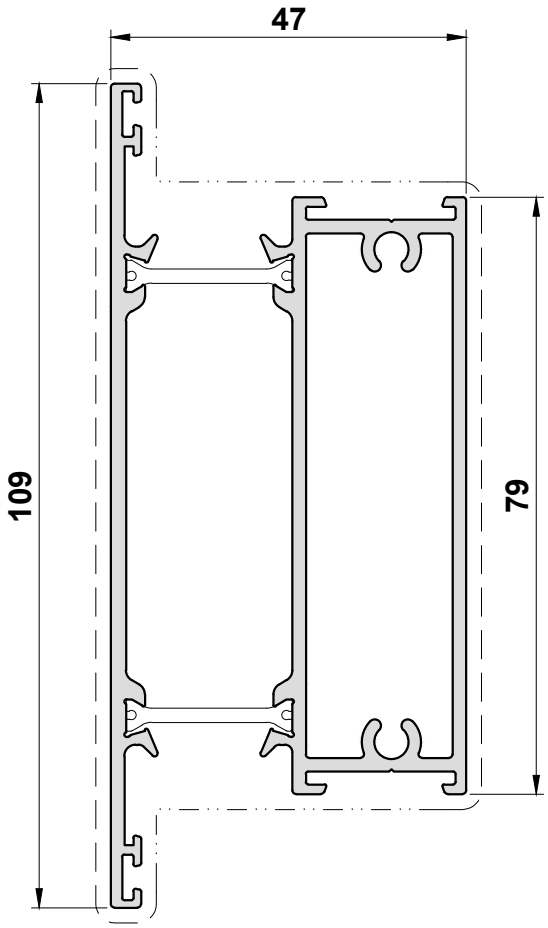
ETC046

Reverse Adaptor



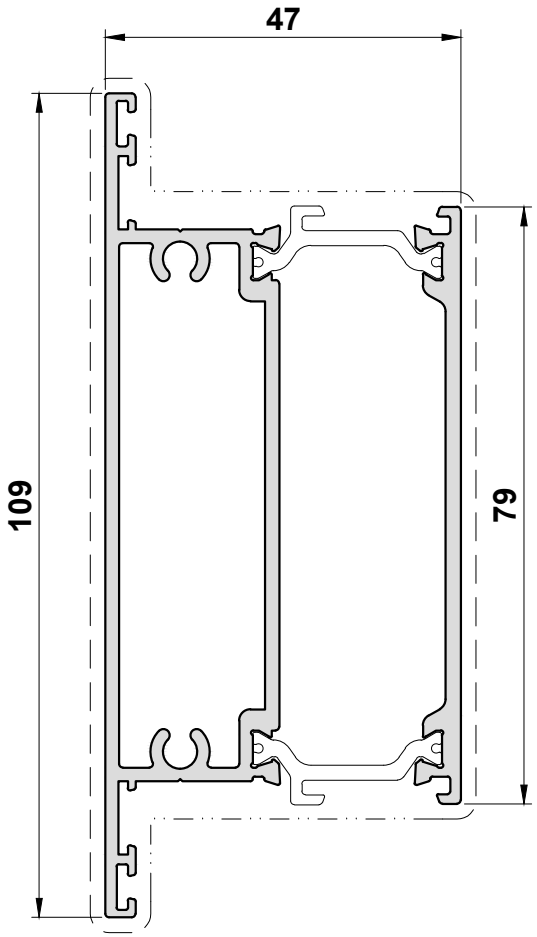
Scale 1:1

Primary Visible Side - - - - - - - - - - - - - - - - - Secondary Visible Side — · — · — · — · — · —



ETD030

Open In Mid Rail

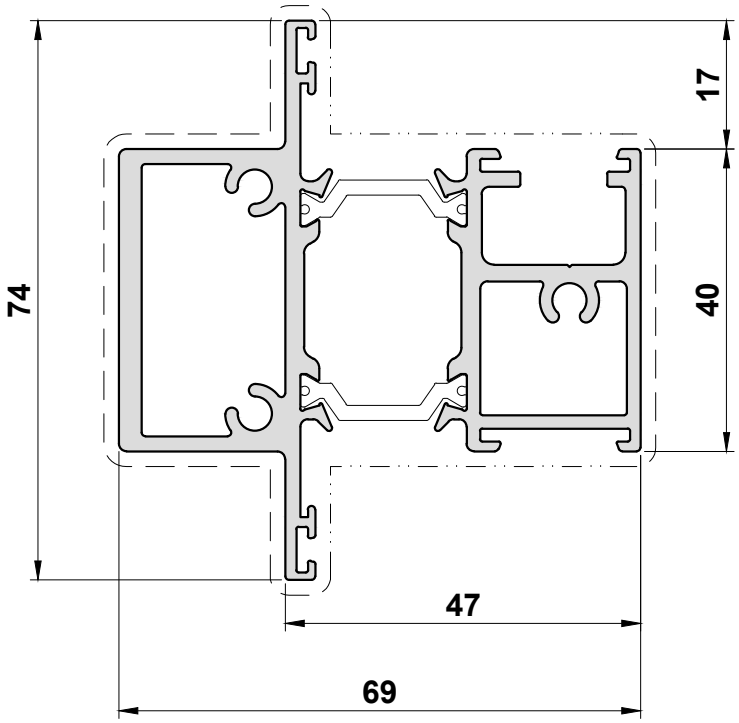


ETD033

Open Out Mid Rail

Scale 1:1

Primary Visible Side - - - - - - - - - - - - - - - - - - Secondary Visible Side — · — · — · — · — · —

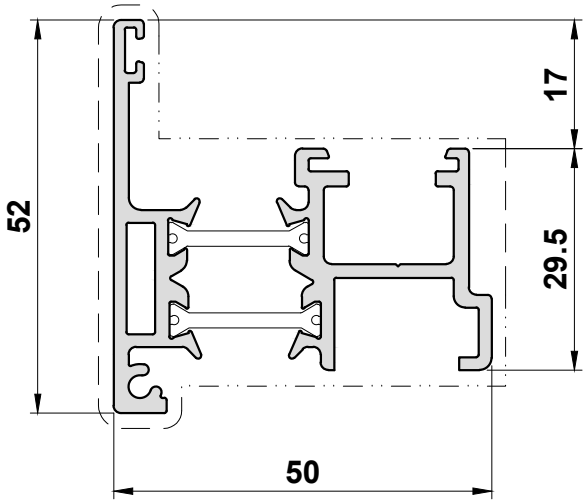


ETD034

Integral Transom/Mullion

ETD048

Meeting Stile Rebate



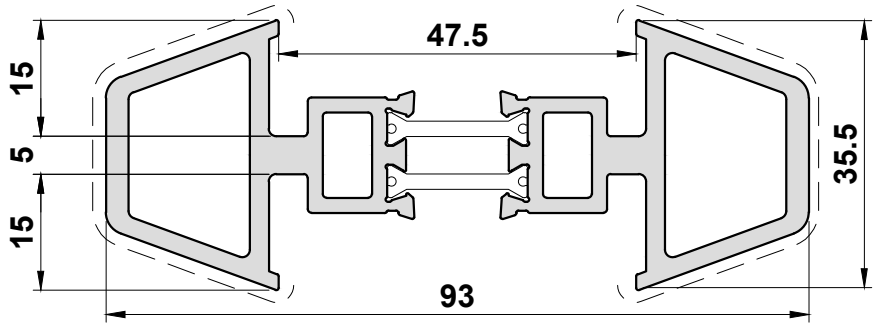
Scale 1:1

Primary Visible Side - - - - - - - - - - - - - - - - - - Secondary Visible Side —·—·—·—·—·—·—

ETD051

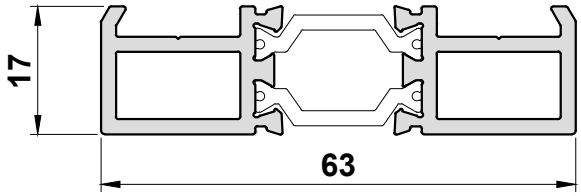
47mm Coupler

Note: ETD051 must be used with ETD056 where ACET250 hinges are selected



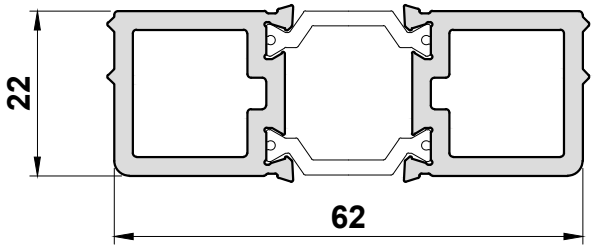
ETD052

Concealed Coupler



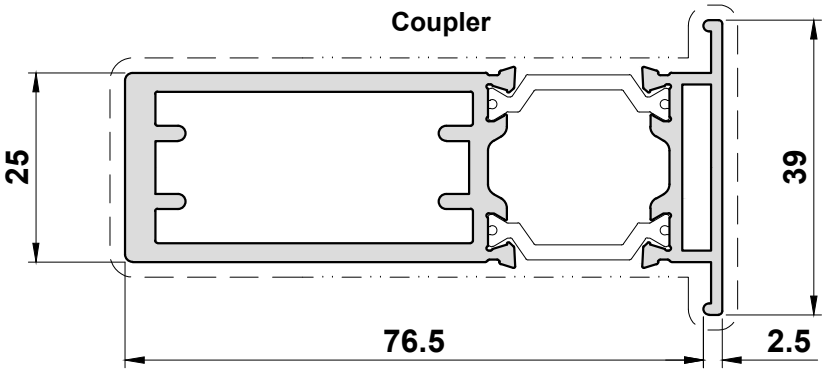
ETD053

70mm Concealed Coupler



ETC357

Coupler

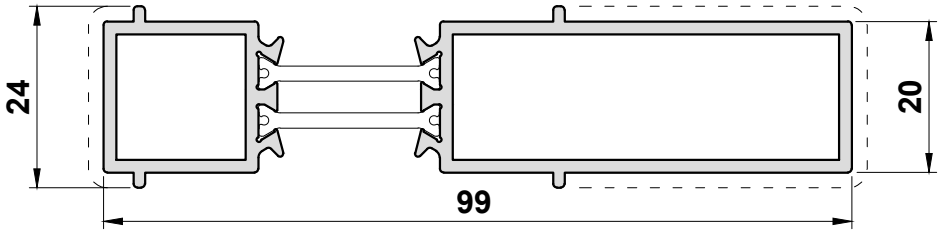


Scale 1:1

Primary Visible Side - - - - - - - - - - - - - - - - - Secondary Visible Side —·—·—·—·—·—·—·—

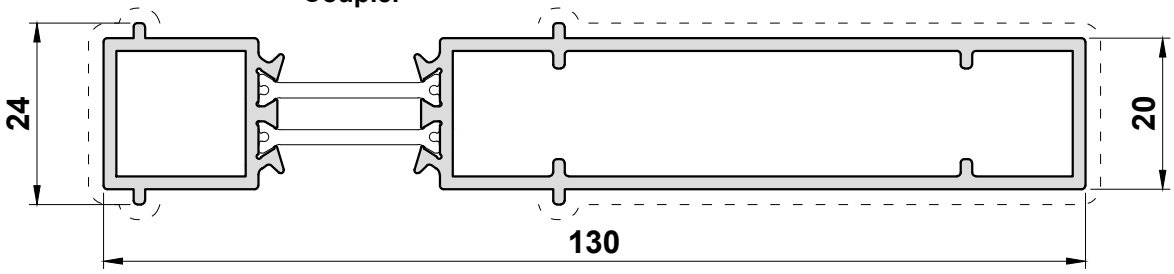
FT054

Coupler



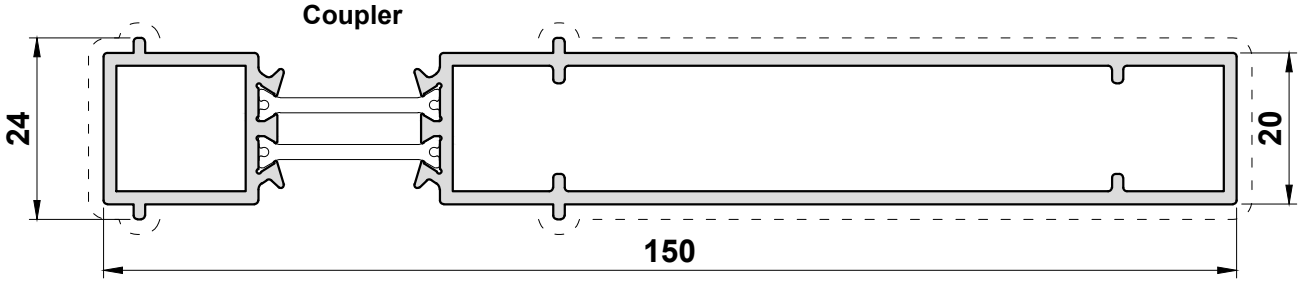
FT156

Coupler



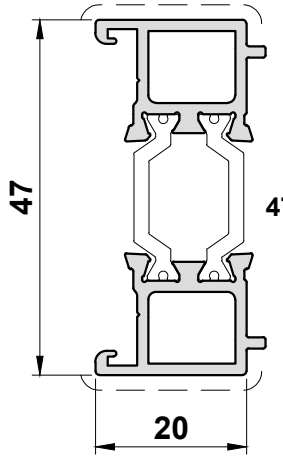
FT155

Coupler



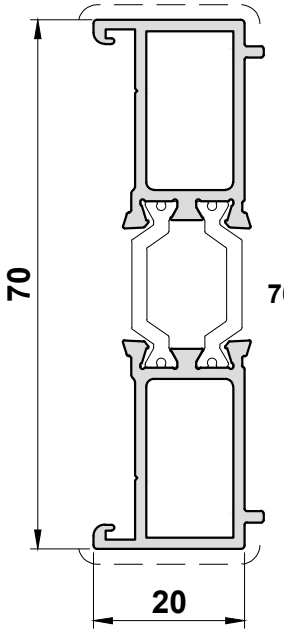
Scale 1:1

Primary Visible Side - - - - - - - - - - - - - - - - - Secondary Visible Side — · — · — · — · — · —



ETD056

47mm Frame Extension

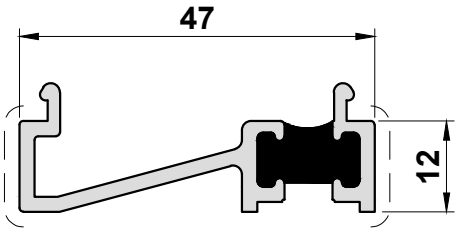


ETD057

70mm Frame Extension

ETD092

47mm Flush Cill

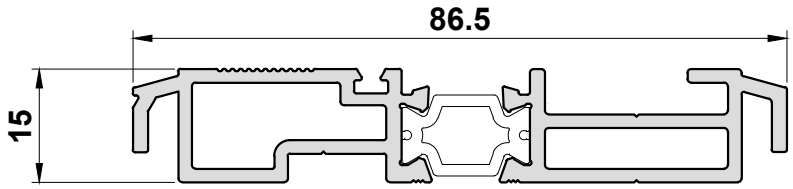


Scale 1:1

Primary Visible Side - - - - - - - - - - - - - - - - - - Secondary Visible Side — · — · — · — · — · — · —

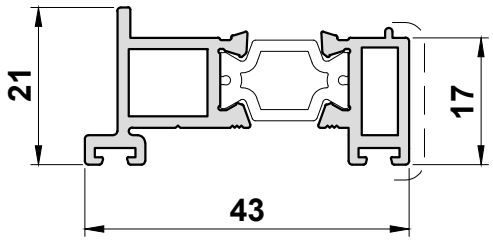
ETD196

Low Threshold



ETD197

Low Threshold Seal Carrier

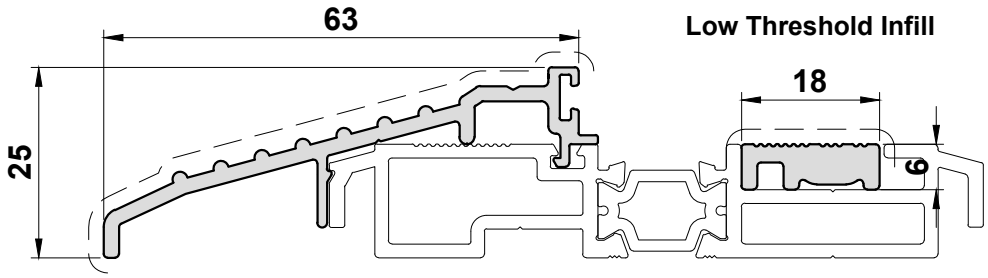


ETD198

Low Threshold Rebate

ETD199

Low Threshold Infill

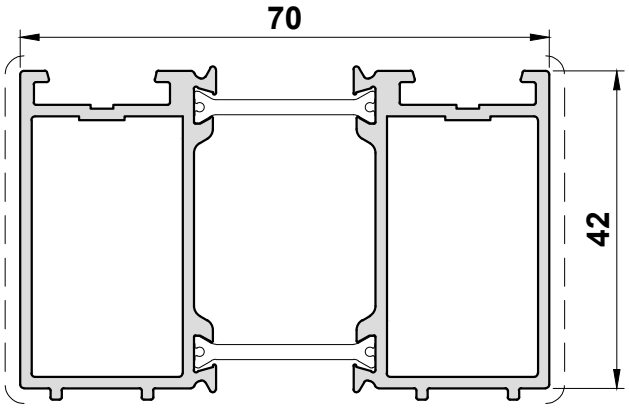


Scale 1:1

Primary Visible Side - - - - - - - - - - - - - - - - - - Secondary Visible Side — · — · — · — · — · — · —

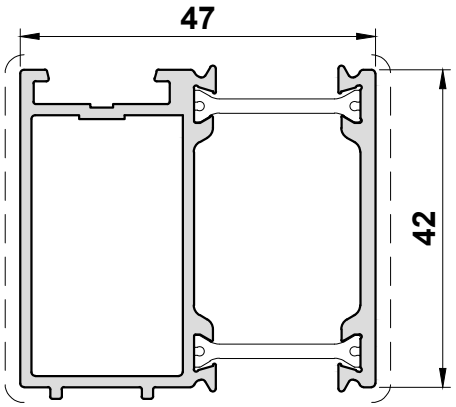
DV515

70mm Outerframe
Extension



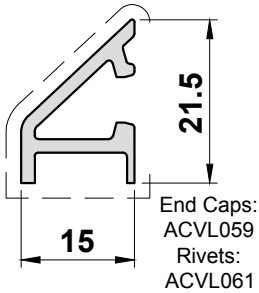
ETD058

47mm Outerframe
Extension



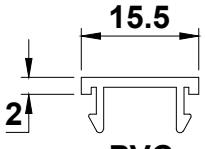
VL72

Weather Drip



PCX15

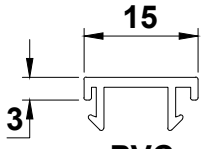
Sash Infill Strip



PVC

PCX17

Outerframe Infill Strip



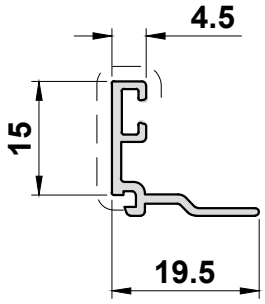
PVC

Scale 1:1

Primary Visible Side - - - - - - - - - - - - - - - - - - Secondary Visible Side — · — · — · — · — · — · —

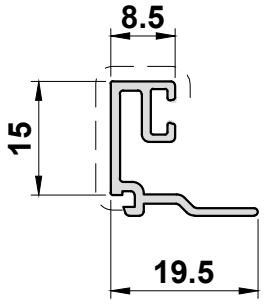
ETC160

32mm Glazing Bead



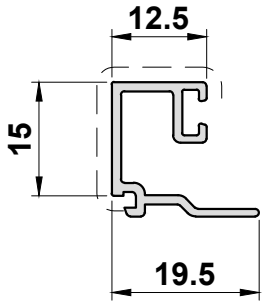
ETC161

28mm Glazing Bead



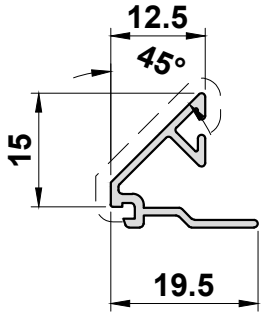
ETC162

24mm Glazing Bead



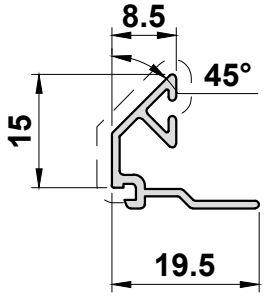
ETC163

24mm Glazing Bead



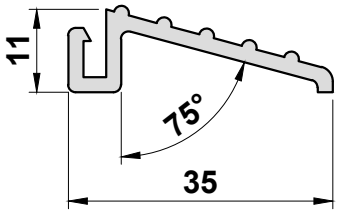
ETC164

28mm Glazing Bead



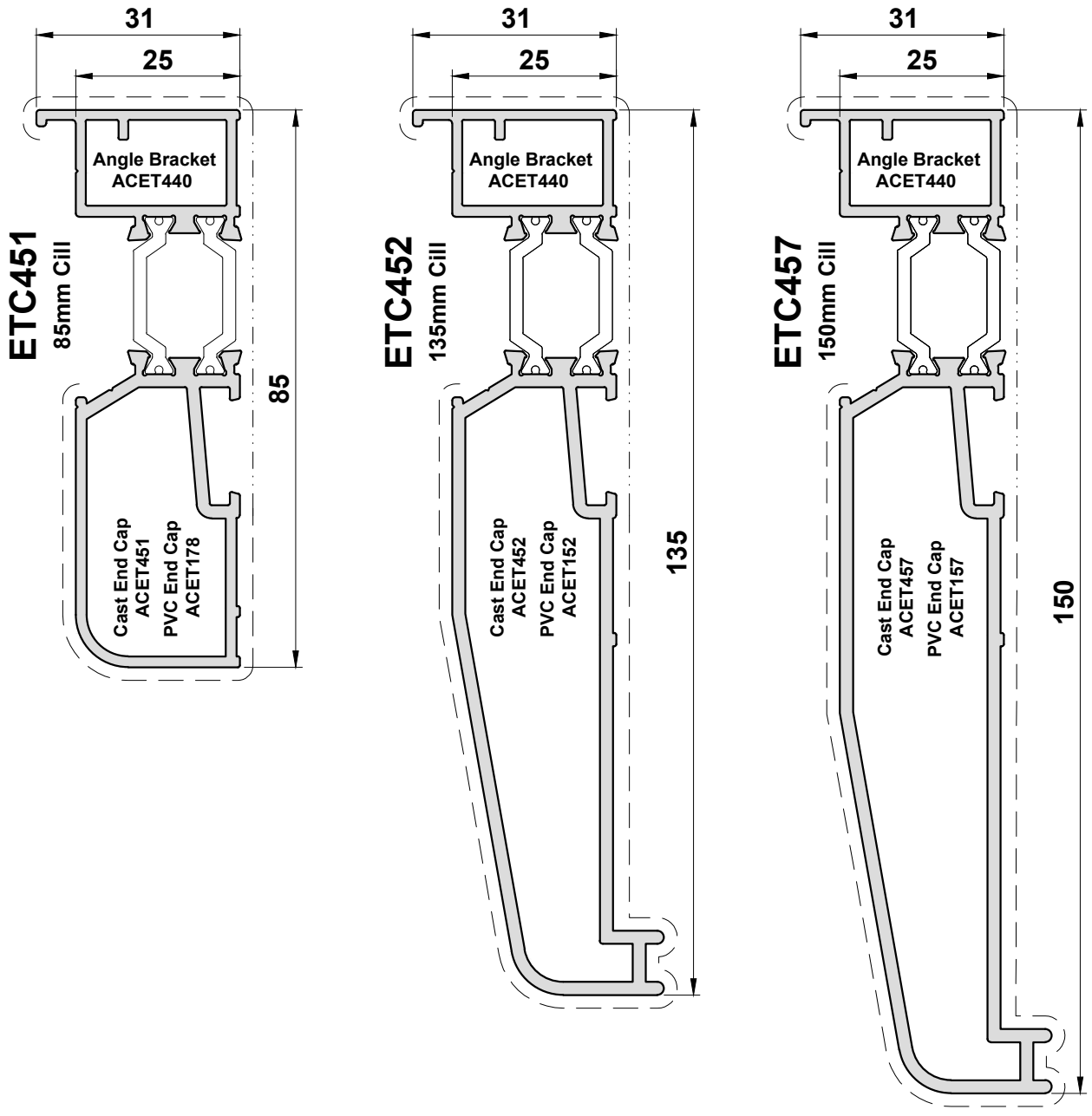
EUD03

Door Threshold Ramp



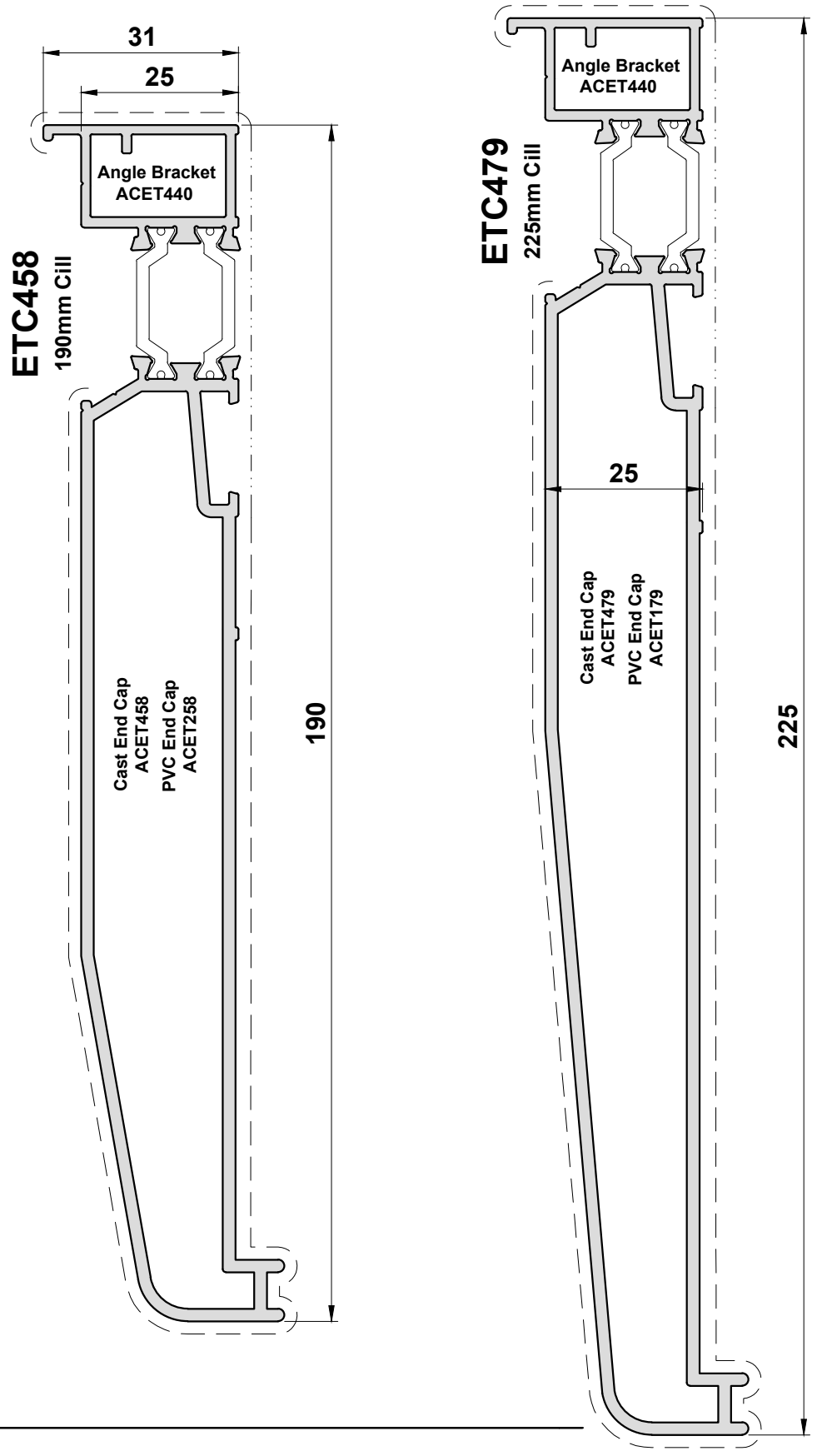
Scale 1:1

Primary Visible Side - - - - - - - - - - - - - - - - - - Secondary Visible Side —·—·—·—·—·—·—



Scale 1:1

Primary Visible Side - - - - - - - - - - - - - - - - - - Secondary Visible Side — · — · — · — · —



Scale 1:1

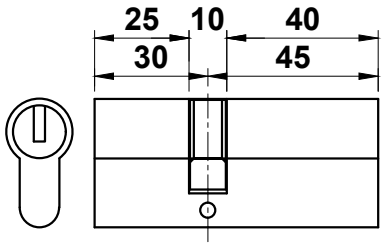
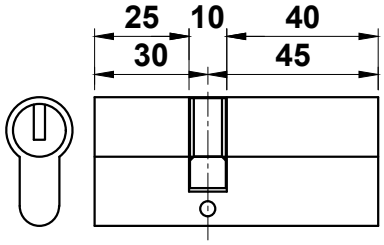
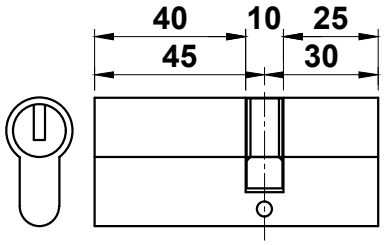
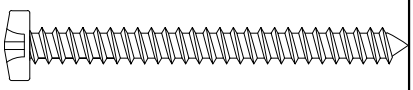
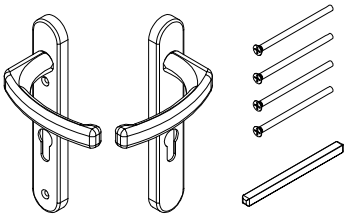
Primary Visible Side - - - - - - - - - - - - - - - - - - Secondary Visible Side — · — · — · — · — · — · — · —

Scale 1:1

Section B

Accessories

Photos & Drawings

Image	Part Code	Pack	Unit	Application	Colour	
	**ACCY3045** **Standard 30/45 Europrofile Cylinder** **Plished Chrome Finish** **For Keyed Alike Order ACCY3045 SL**	**1**	**each**	**ETD024N ETD025N**	MF	✓
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	
					Z	
					PC	
	**ACCY3045S1** **High Security 30/45 Europrofile Cylinder** **Anti-Bump, Anti-Pick, Anti-Screw & Anti-Drill protection. Nickel Finish** **Keyed Alike Unavailable**	**1**	**each**	**ETD025N (open out)**	MF	✓
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	
					Z	
					PC	
	**ACCY4530S1** **High Security 45/30 Europrofile Cylinder** **Anti-Bump, Anti-Pick, Anti-Screw & Anti-Drill protection. Nickel Finish** **Keyed Alike Unavailable**	**1**	**each**	**ETD024N (open in)**	MF	✓
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	
					Z	
					PC	
	**ACDR052** **No. 10 x 2" Pan Head S/S Self Tapper**	**200**	**pack**		MF	✓
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	
					Z	
					PC	
	**ACDV251** **Lever/Lever Handle**	**1**	**pair**	**ACET282 ACET283 ETD024N ETD025N**	MF	
					SA	
					KL	✓
					HP	✓
					SSC	
					SMC	
					W	✓
					Z	✓
					PC	✓

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

Screw (Grub)

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

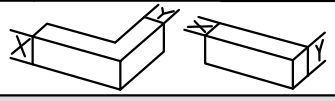
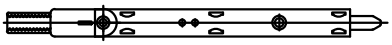
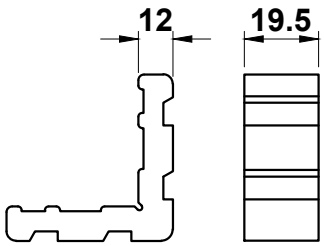


Image	Part Code	Pack	Unit	Application	Colour	
	ACDV737 **Bottom Shoot Bolt**	**1**	**each**	**ACET282** **ACET283** **ACET292** **ACET293** **ETD024N** **ETD025N**	MF SA KL HP SSC SMC W Z PC	✓
	**ACDV738** **Top Shoot Bolt**	**1**	**each**	**ACET282** **ACET283** **ACET292** **ACET293** **ETD024N** **ETD025N**	MF SA KL HP SSC SMC W Z PC	✓
	ACDV742 **200mm Shoot Bolt Extension**	**1**	**each**	**ACDV737** **ACDV738** **ACET282** **ACET283** **ACET285** **ACET292** **ACET293** **ETD024N** **ETD025N**	MF SA KL HP SSC SMC W Z PC	✓
	ACDV744 **400mm Shoot Bolt Extension**	**1**	**pack**	**ACDV737** **ACDV738** **ACET282** **ACET283** **ACET285** **ACET292** **ACET293** **ETD024N** **ETD025N**	MF SA KL HP SSC SMC W Z PC	✓
	**ACET012** **Crimping Cleat**	**24**	**pack**	**ETD012** **ETD015** **ETD017**	MF SA KL HP SSC SMC W Z PC	✓

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

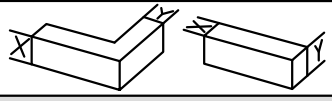
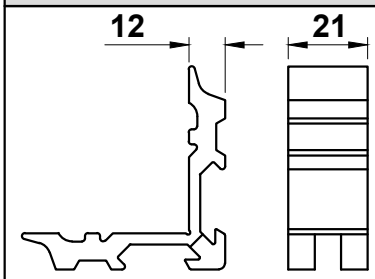
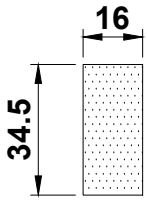
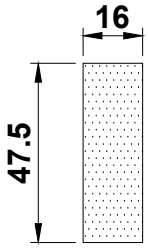
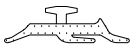
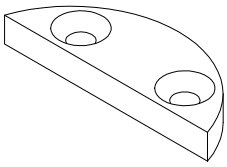


Image	Part Code	Pack	Unit	Application	Colour	
	**ACET017** **Mechanical Cleat**	**24**	**pack**	**ETD015** **ETD017**	MF SA KL HP SSC SMC W Z PC	✓
	**ACET024** **Foam Infill (1250mm lengths)**	**10**	**pack**	**ETD024N**	MF SA KL HP SSC SMC W Z PC	✓
	**ACET026** **Foam Infill (1250mm lengths)**	**10**	**pack**	**ETD025N**	MF SA KL HP SSC SMC W Z PC	✓
	**ACET035** **Bead Gasket**	**100**	**mtr**		MF SA KL HP SSC SMC W Z PC	✓
	**ACET041** **Cill Nose Bracket**	**1**	**each**	**ETC451** **ETC452** **ETC457** **ETC458** **ETC479**	MF SA KL HP SSC SMC W Z PC	✓

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

Screw (Grub)

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

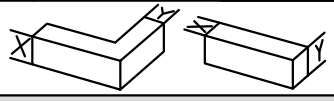
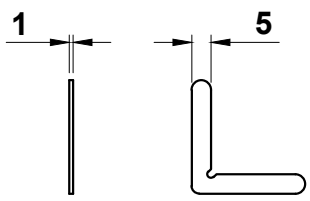
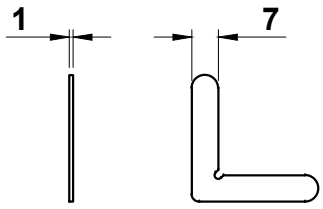
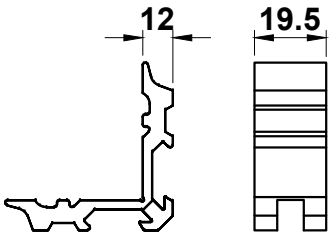
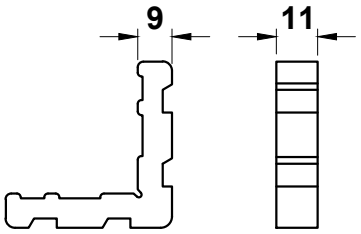
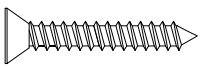


Image	Part Code	Pack	Unit	Application	Colour	
	**ACET044** **Stainless steel chevron**	**50**	**pack**	**ETD012** **ETD015** **ETD017**	MF SA KL HP SSC SMC W Z PC	✓
	**ACET045** **Stainless steel chevron**	**50**	**pack**	**ETD012** **ETD015** **ETD017** **ETD024N** **ETD025N**	MF SA KL HP SSC SMC W Z PC	✓
	**ACET057** **Mechanical Cleat**	**24**	**pack**	**ETD012** **ETD015** **ETD017**	MF SA KL HP SSC SMC W Z PC	✓
	**ACET077** **Crimping Cleat**	**24**	**pack**	**ETC046**	MF SA KL HP SSC SMC W Z PC	✓
	**ACET060** **No. 7 x 1" CSK S/S Self Tapper**	**100**	**pack**		MF SA KL HP SSC SMC W Z PC	✓

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

Screw (Grub)

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

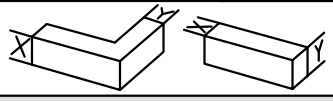
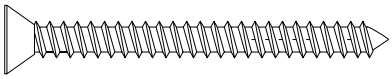


Image	Part Code	Pack	Unit	Application	Colour	
	**ACET062** **No. 10 x 2" CSK S/S Self Tapper**	**100**	**pack**	**ETD034**	MF	✓
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	
					Z	
					PC	
	ACET064 **No.8 x 16mm S/S Self Tapping Flange CSK Head**	**100**	**pack**		MF	✓
					SA	
					KL	
					HP	
					SSC	
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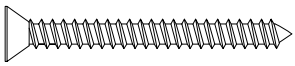
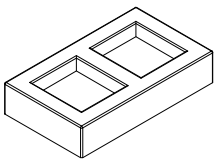
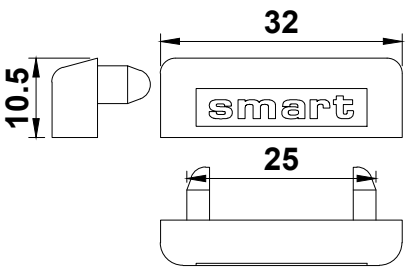
					Z	
					PC	
	**ACET066** **No. 7 x 1 1/2" CSK S/S Self Tapper**	**100**	**pack**		MF	✓
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	
					Z	
					PC	
	**ACET093** **Packer**	**24**	**pack**	**ETD012** **ETD015** **ETD017**	MF	✓
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	
					Z	
					PC	
	**ACET131** **Drainage Cap**	**100**	**pack**	**ETD012** **ETD015** **ETD017**	MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	✓
					Z	✓
					PC	

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

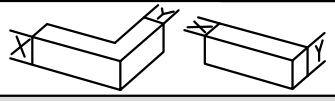
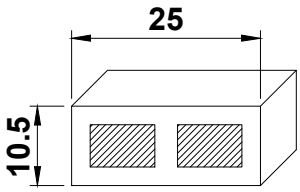
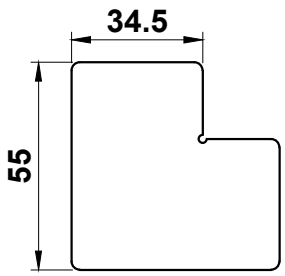
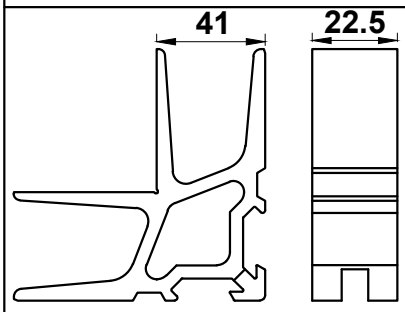
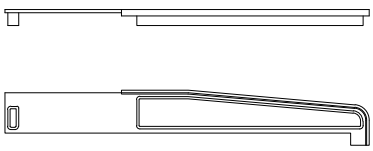


Image	Part Code	Pack	Unit	Application	Colour	
	ACET149 **Slimline Restrictor**	1	each	ETD012 ETD015 ETD017 ETD024N ETD025N	MF SA KL HP SSC SMC W Z PC	✓
	**ACET153** **Self-Adhesive Packer**	24	Pack	ETD012 ETD015 ETD017 ETD024N ETD025N	MF SA KL HP SSC SMC W Z PC	✓
	**ACET154** **Chevron**	24	pack	ETD024N ETD025N	MF SA KL HP SSC SMC W Z PC	✓
	**ACET155** **Cleat**	24	pack	ETD024N ETD025N	MF SA KL HP SSC SMC W Z PC	✓
	**ACET157** **PVC Cill End Cap**	10	pair	ETC457	MF SA KL HP SSC SMC W Z PC	✓ ✓

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

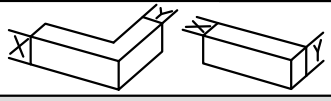
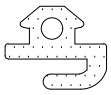
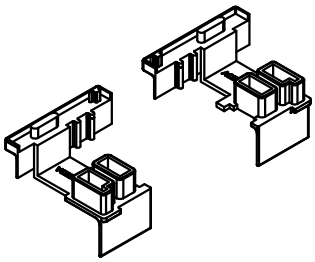
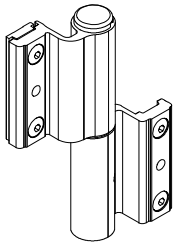
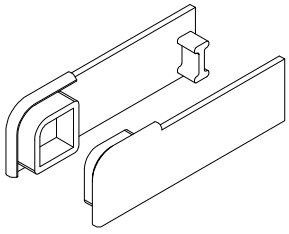


Image	Part Code	Pack	Unit	Application	Colour	
	**ACET160** **Flipper Gasket**	**100**	**mtr**	**ETD012** **ETD015** **ETD017** **ETD024N** **ETD025N** **ETD047**	MF SA KL HP SSC SMC W Z PC	 ✓
	**ACET162** **ETD048 End Cap**	**1**	**pair**	**ETD024N** **ETD025N**	MF SA KL HP SSC SMC W Z PC	 ✓ ✓
	**ACET174** **Adjustable Hinge**	**1**	**pair**	**ETD012** **ETD015** **ETD017** **ETD024N** **ETD025N**	MF SA KL HP SSC SMC W Z PC	✓ ✓ ✓ ✓
	**ACET178** **Cill End Cap**	**10**	**pair**	**ETC451**	MF SA KL HP SSC SMC W Z PC	 ✓ ✓
	ACET179 **PVC Cill End Cap**	**10**	**pair**	**ETC479**	MF SA KL HP SSC SMC W Z PC	 ✓ ✓

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

Screw (Grub)

MF	**= Mill Finish**	**W**	**= White**
SA	**= Silver Anodised**	**Z**	**= Black**
KL	**= Basic Colour**		
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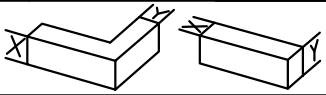
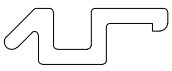
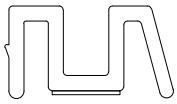
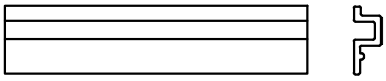
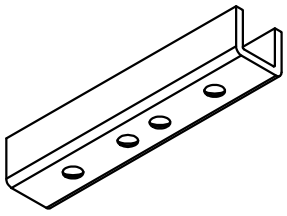


Image	Part Code	Pack	Unit	Application	Colour	
	**ACET200** **Bridge Packer**	**10**	**pack**	**ETD024N**	MF	✓
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	
					Z	
					PC	
	**ACET201** **Bridge Packer**	**10**	**pack**	**ETD012** **ETD015** **ETD017**	MF	✓
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	
					Z	
					PC	
	**ACET202** **Bridge Packer**	**10**	**pack**	**ETD025N**	MF	✓
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	
					Z	
					PC	
	**ACET217** **Steel Keep Reinforcement**	**1**	**each**	**ETD012** **ETD015** **ETD017** **ETD048**	MF	✓
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	
					Z	
					PC	
	ACET232 **Threshold Gasket**	**100**	**mtr**	**ETD198**	MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	
					Z	✓
					PC	

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

Screw (Grub)

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

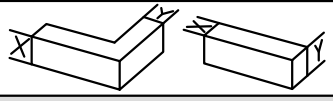
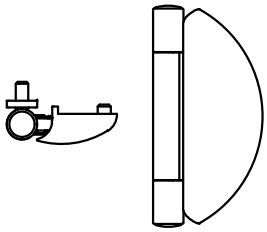
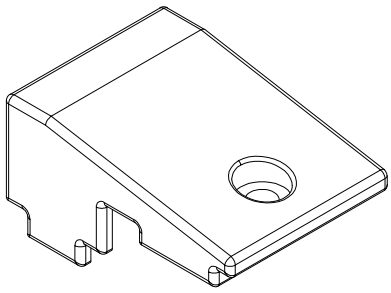


Image	Part Code	Pack	Unit	Application	Colour	
	ACET234 **Threshold Gasket**	**100**	**mtr**	**ETD196**	MF SA KL HP SSC SMC W Z PC	 ✓
	ACET249 **500mm Hold Open Restrictor**	**1**	**each**		MF SA KL HP SSC SMC W Z PC	✓
	**ACET250** **Fully adjustable hinge** **Available in White, Black or Silver-Grey.**	**24**	**pack**	**ETD012** **ETD015** **ETD017** **ETD024N** **ETD025N**	MF SA KL HP SSC SMC W Z PC	✓ ✓ ✓ ✓ ✓
	ACET252 **Hinge Protector Kit**	**1**	**kit**		MF SA KL HP SSC SMC W Z PC	✓
	**ACET257** **Guide Block**	**50**	**pack**	**ETD012** **ETD015** **ETD017**	MF SA KL HP SSC SMC W Z PC	 ✓ ✓

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

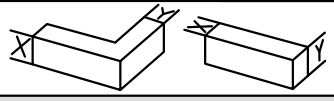
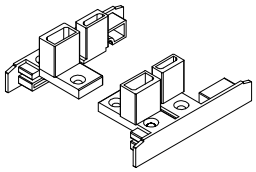
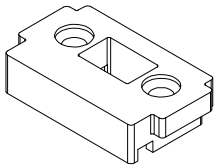
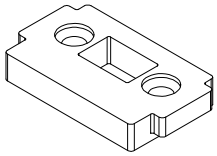


Image	Part Code	Pack	Unit	Application	Colour	
	ACET258 **PVC Cill End Cap**	**10**	**pair**	**ETC458**	MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	✓
					Z	✓
					PC	
	**ACET259** **ETD196 End Cap/Bracket**	**1**	**pair**	**ETD012** **ETD015** **ETD017** **ETD196**	MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	✓
					Z	✓
					PC	
	**ACET268** **Standard Outerframe Single Keep**	**1**	**each**		MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	
					Z	
					PC	
	**ACET269** **Standard Outerframe Single Keep**	**1**	**each**		MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	
					Z	
					PC	
	ACET271 **Open Out Split Spindle Kit** **1 x 51mm Spindle - Inside** **1 x 48mm Spindle - Outside**	**1**	**each**	**ETD024N** **ETD025N** **ACDV251** **ACET480** **ACET484** **ACET486** **ACET487** **ACET488**	MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	
					Z	
					PC	

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

Screw (Grub)

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

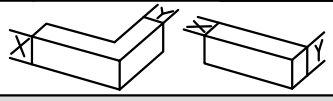
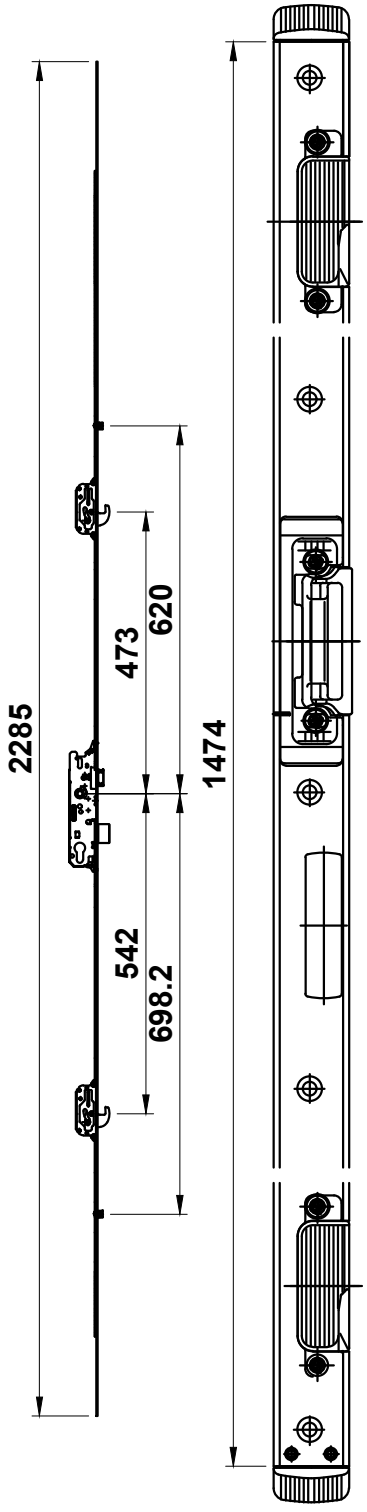
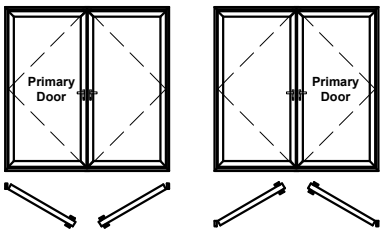
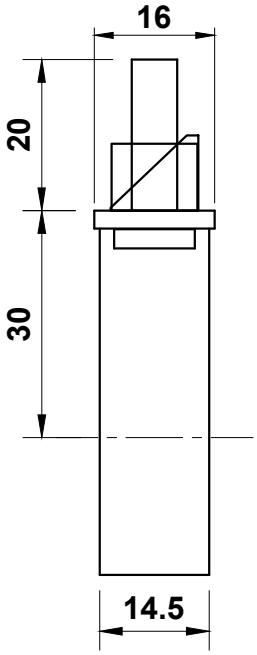


Image	Part Code	Pack	Unit	Application	Colour
	**ACET272** **Primary door lock kit with left hand full height keep.** **Kit includes:** • **1 x Lock** • **1 x Left Hand full height Keep**	**1**	**Each**	**ACDV251** **ACET480** **ACDV742** **ACDV744** **ETD024N** **ETD025N**	MF ✓ SA KL HP SSC SMC W Z PC

Viewed Externally



Left Hand Open Out | **Right Hand Open In**



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

Screw (Grub)

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

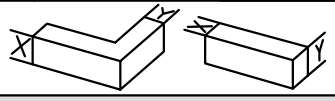
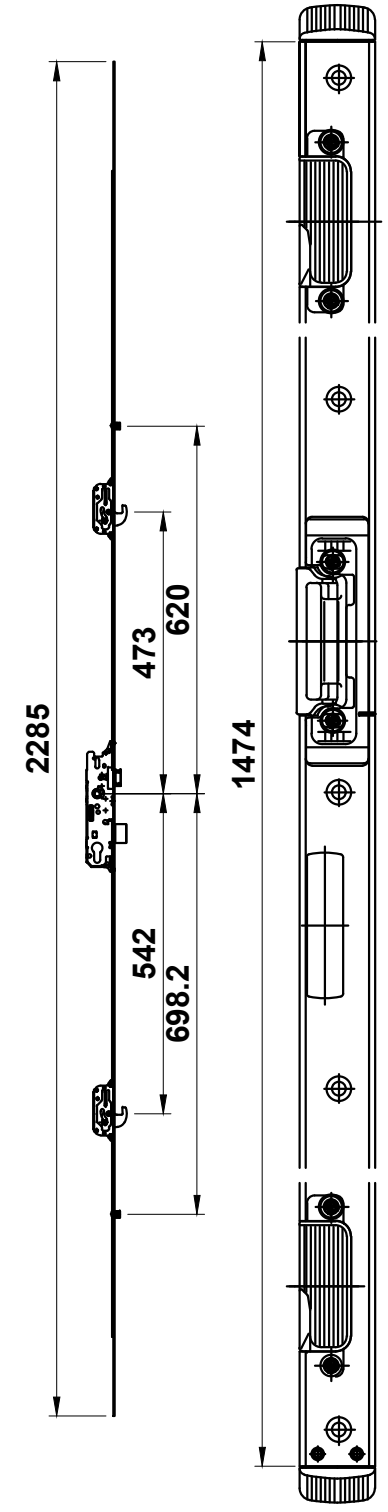
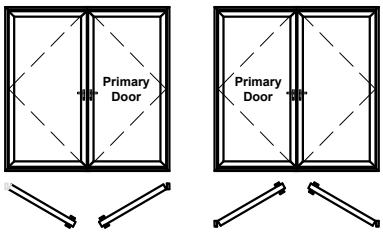
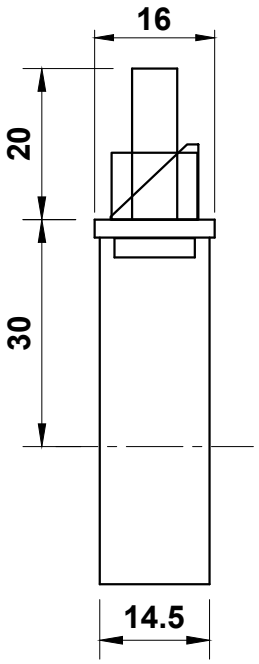


Image	Part Code	Pack	Unit	Application	Colour
	**ACET273** **Primary door lock kit with right hand full height keep.** **Kit includes:** • **1 x Lock** • **1 x Right Hand full height Keep** **Viewed Externally**  **Rigt Hand Open Out** **Left Hand Open In** 	**1**	**Each**	**ACDV251** **ACET480** **ACDV742** **ACDV744** **ETD024N** **ETD025N**	MF ✓ SA KL HP SSC SMC W Z PC

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

Screw (Grub)

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

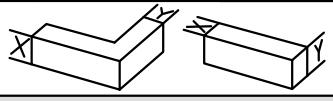


Image	Part Code	Pack	Unit	Application	Colour
	ACET275 **Open In Split Spindle Kit** **1 x 55mm Spindle - Outside** **1 x 45mm Spindle - Inside**	**1**	**each**	**ETD024N** **ETD025N** **ACDV251** **ACET480** **ACET484** **ACET486** **ACET487** **ACET488**	MF SA KL HP SSC SMC W Z PC
					MF SA KL HP SSC SMC W Z PC
					MF SA KL HP SSC SMC W Z PC
					MF SA KL HP SSC SMC W Z PC
					MF SA KL HP SSC SMC W Z PC

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

Screw (Grub)

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

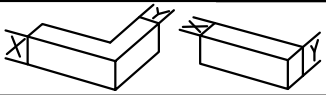
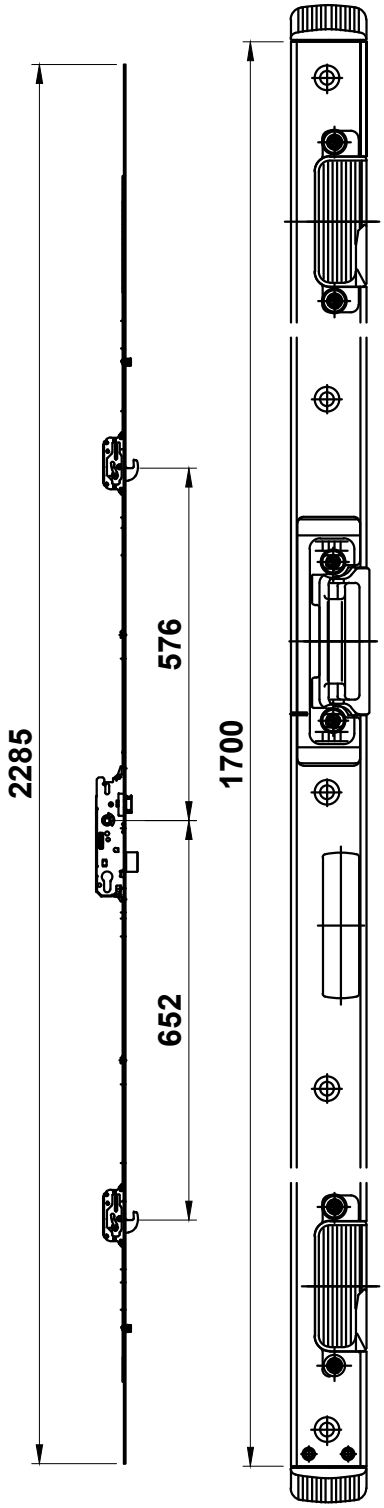
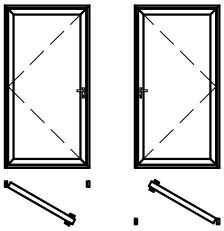
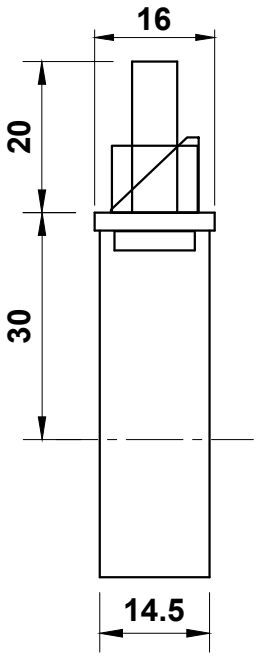


Image	Part Code	Pack	Unit	Application	Colour
	**ACET276** Split Spindle Multipoint Lock with left hand full height keep. Kit includes: • 1 x Lock • 1 x Left Hand full height Keep	1	Each	**ACDV251** **ACET480** **ACET484** **ACET486** **ACET487** **ACET488** **ACDV742** **ACDV744** **ETD024N** **ETD025N**	MF SA KL HP SSC SMC W Z PC

Viewed Externally



Left Hand Open Out | **Right Hand Open In**



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

Screw (Grub)

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

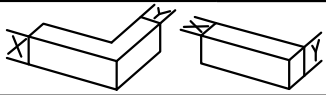
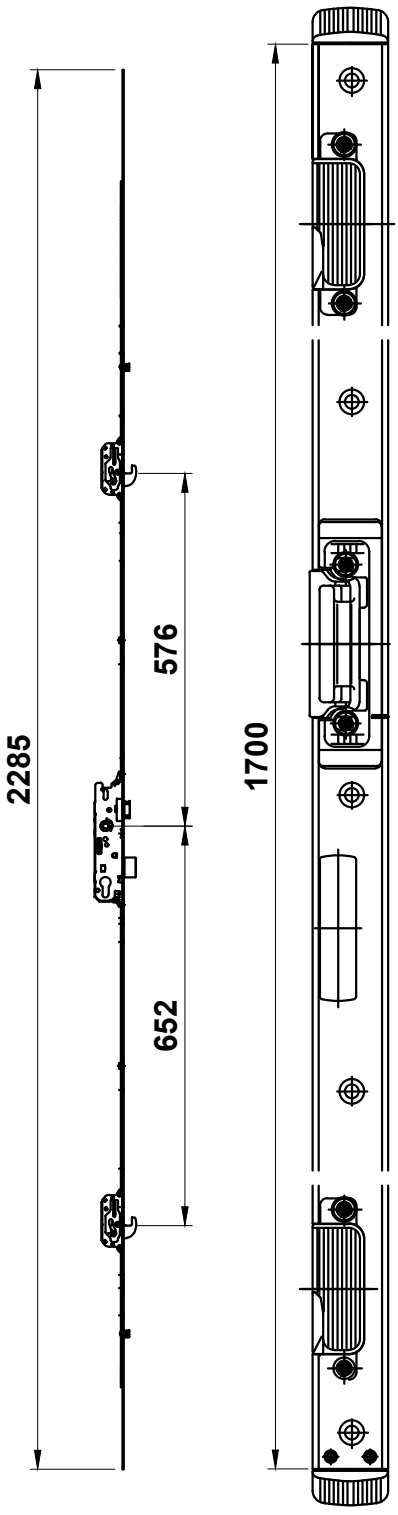
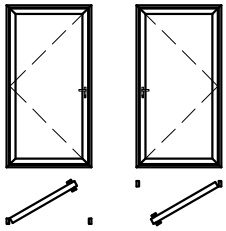
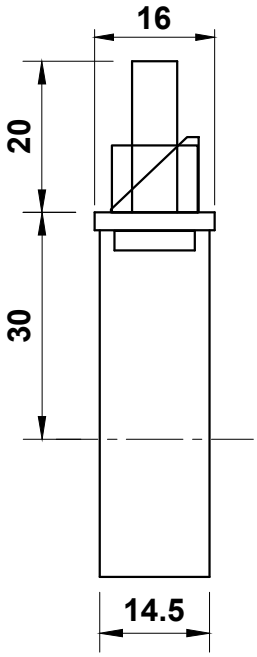


Image	Part Code	Pack	Unit	Application	Colour
	**ACET277** Split Spindle Multipoint Lock with right hand full height keep. Kit includes: • 1 x Lock • 1 x Right Hand full height Keep **Viewed Externally**  **Left Hand Open In** **Right Hand Open Out** 	**1**	**Each**	**ACDV251** **ACET480** **ACET484** **ACET486** **ACET487** **ACET488** **ACDV742** **ACDV744** **ETD024N** **ETD025N**	MF SA KL HP SSC SMC W Z PC

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

Screw (Grub)

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

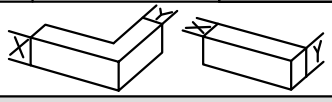
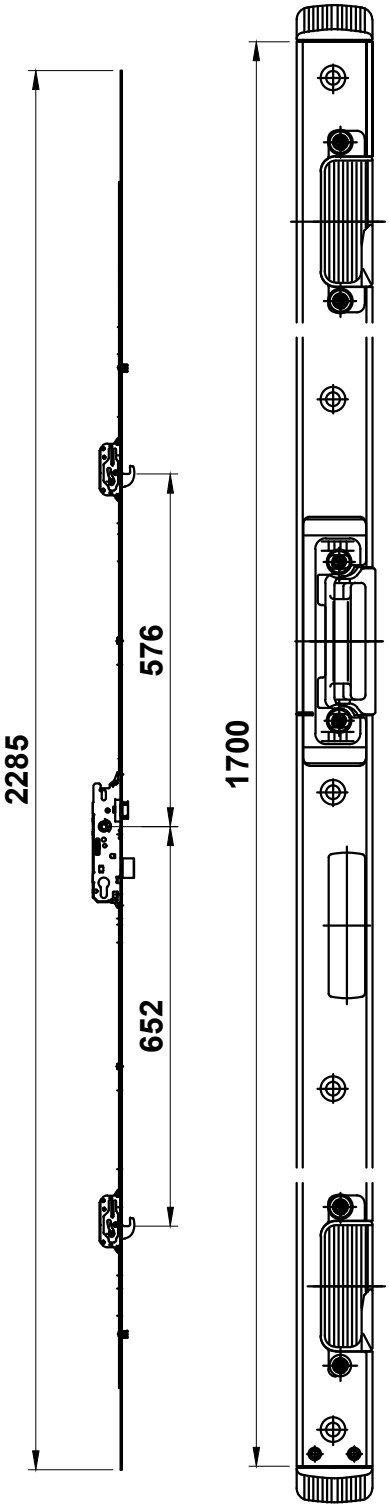
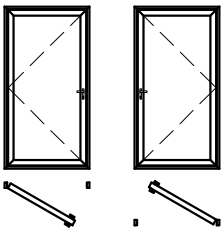
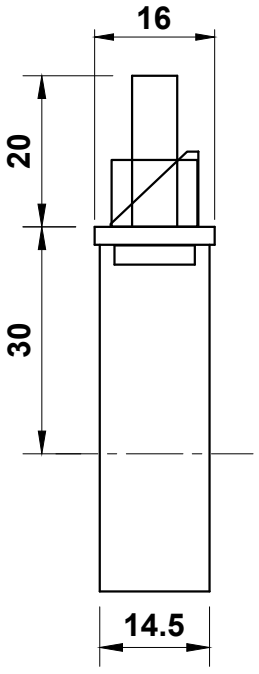


Image	Part Code	Pack	Unit	Application	Colour
	**ACET282** **Multi-point Lock Kit with Left Hand Full Height Keep** **Viewed Externally**  **Left Hand Open Out** **Right Hand Open In** 	**1**	**pack**	**ACDV251** **ACET480** **ACDV737** **ACDV738** **ACDV742** **ACDV744** **ETD024N** **ETD025N**	MF ✓ SA KL HP SSC SMC W Z PC

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

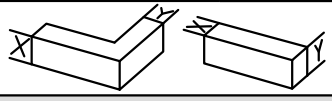
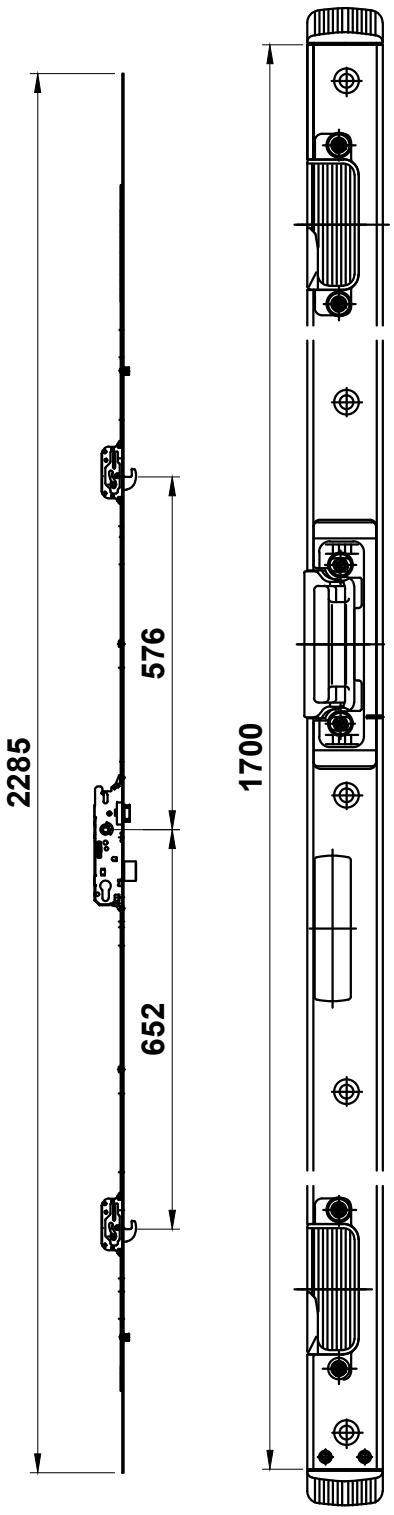
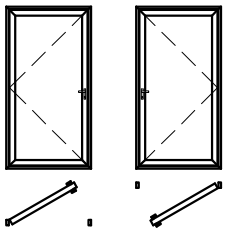
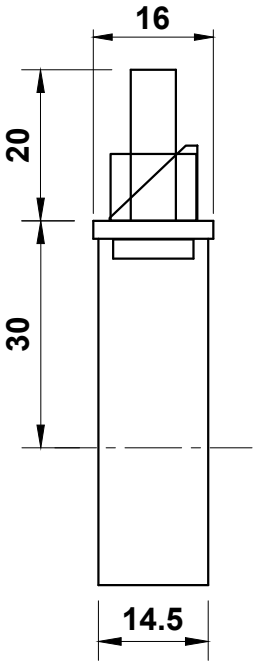


Image	Part Code	Pack	Unit	Application	Colour
	**ACET283** **Multi-point Lock Kit with Right Hand Full Height Keep** **Viewed Externally**  **Left Hand Open In** **Right Hand Open Out** 	**1**	**pack**	**ACDV251** **ACET480** **ACDV737** **ACDV738** **ACDV742** **ACDV744** **ETD024N** **ETD025N**	MF ✓ SA KL HP SSC SMC W Z PC

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

Screw (Grub)

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

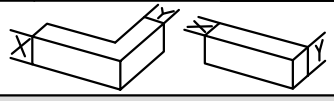
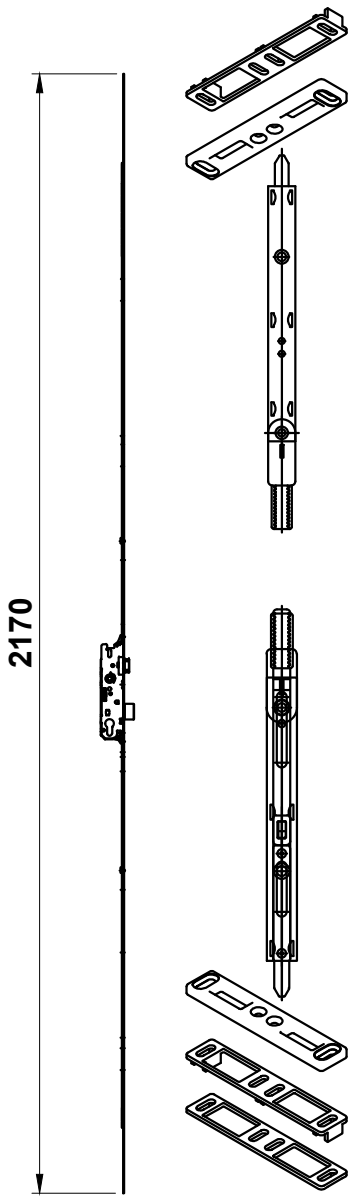
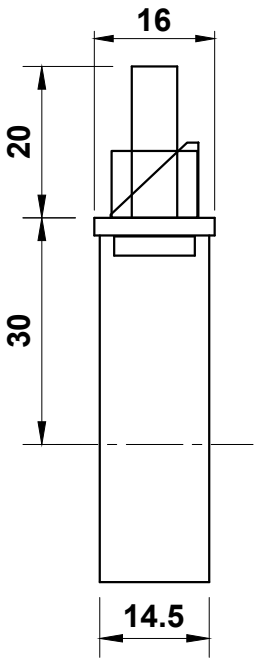


Image	Part Code	Pack	Unit	Application	Colour
	**ACET285** **Secondary Door Lock Kit** **Kit Includes:** • **1 x Lock** • **1 x Top Shoot Bolt** • **1 x Bottom Shoot Bolt** • **2 x Double Keeps** • **2 x Full Frame Keep Underplates** • **1 x Low Threshold Keep Underplate** 	**1**	**pack**	**ACDV251** **ACET480** **ACDV742** **ACDV744** **ETD024N** **ETD025N**	MF ✓ SA KL HP SSC SMC W Z PC

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

Screw (Grub)

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

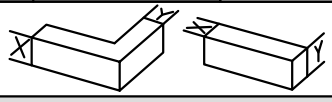
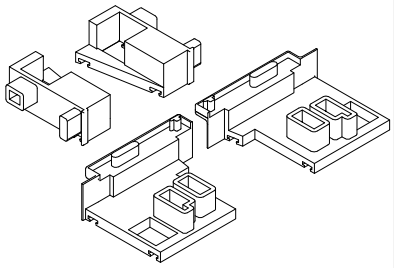
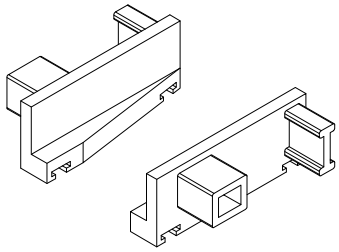


Image	Part Code	Pack	Unit	Application	Colour	
	**ACET289** **Double Door End Caps For Low Threshold** **Pack Includes:** **1 Pair Primary Door End Caps** **1 Pair Secondary Door End Caps**	**1**	**pack**	**ETD024N** **ETD025N** **ETD048** **ETD197**	MF SA KL HP SSC SMC W Z PC	✓ ✓ ✓
	**ACET291** **End Caps for ETD197**	**1**	**pair**	**ETD197**	MF SA KL HP SSC SMC W Z PC	 ✓ ✓
					MF SA KL HP SSC SMC W Z PC	
					MF SA KL HP SSC SMC W Z PC	
					MF SA KL HP SSC SMC W Z PC	

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

Screw (Grub)

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

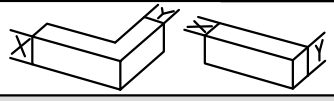
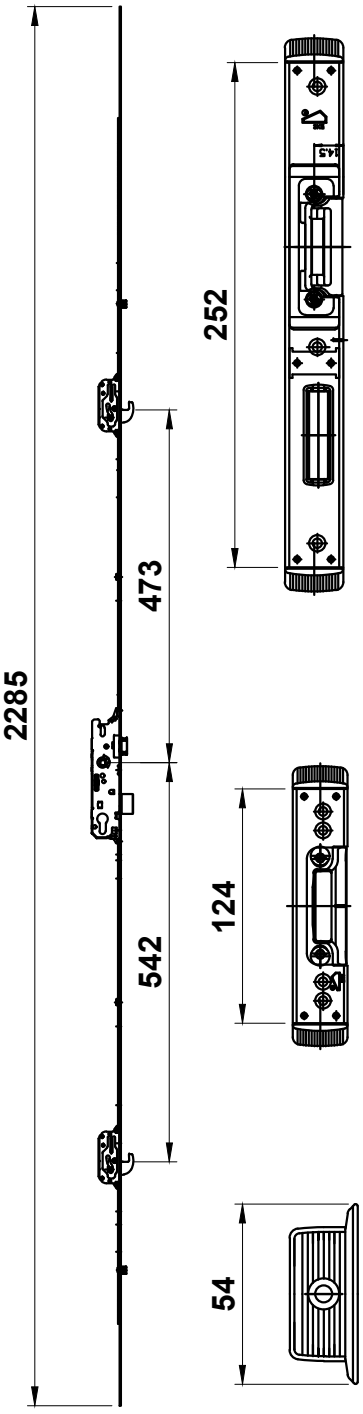
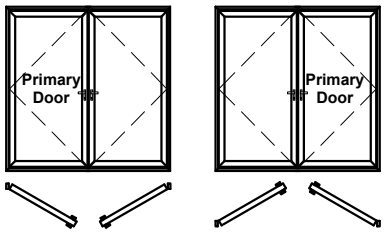
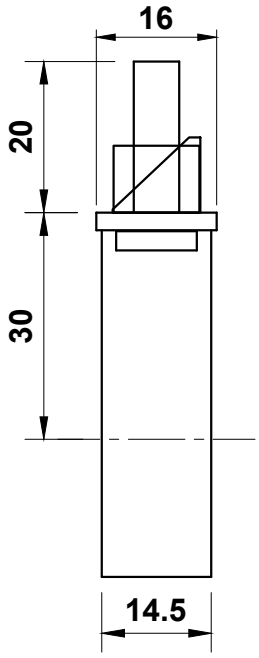


Image	Part Code	Pack	Unit	Application	Colour
	**ACET292** **Primary Door Lock Kit with Left Hand Keeps** **Kit Includes:** • 1 x Lock • 1 x Left Hand Centre Keep • 2 x Hook Keeps • 2 x Roller Keeps **Viewed Externally**  **Left Hand Open Out** **Right Hand Open In**  	1	pack	**ACDV251** **ACET480** **ACDV742** **ACDV744** **ETD024N** **ETD025N**	MF ✓ SA KL HP SSC SMC W Z PC

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

Screw (Grub)

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

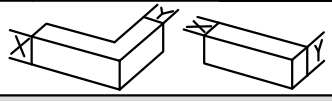
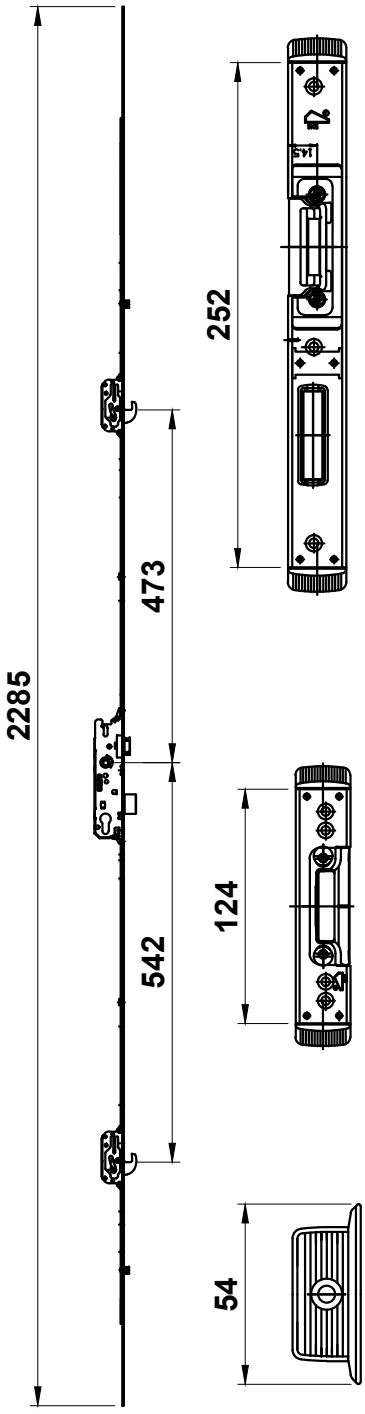
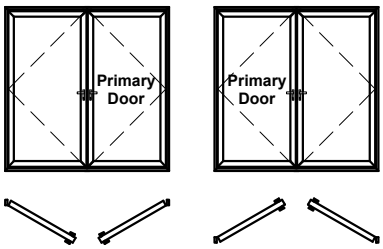
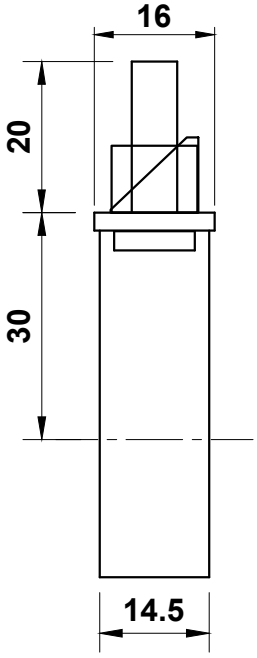


Image	Part Code	Pack	Unit	Application	Colour
	**ACET293** **Primary Door Lock Kit with Right Hand Keeps** **Kit Includes:** • 1 x Lock • 1 x Right Hand Centre Keep • 2 x Hook Keeps • 2 x Roller Keeps **Viewed Externally**  **Right Hand Open Out** **Left Hand Open In**  	1	pack	**ACDV251** **ACET480** **ACDV742** **ACDV744** **ETD024N** **ETD025N**	MF ✓ SA KL HP SSC SMC W Z PC

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

Screw (Grub)

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

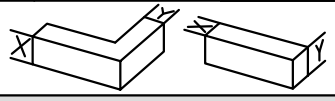
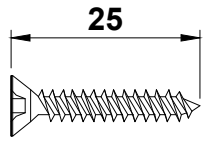
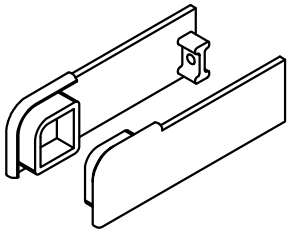
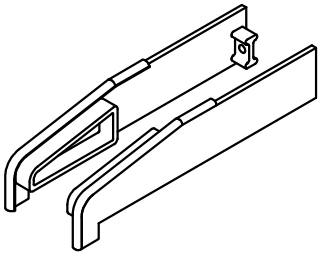
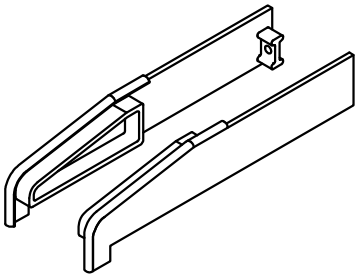
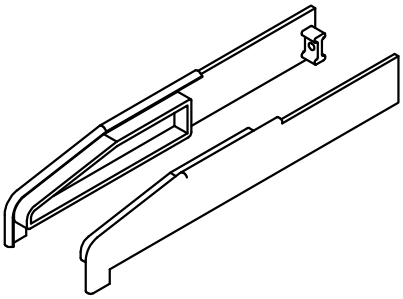


Image	Part Code	Pack	Unit	Application	Colour	
	**ACET390** 25mm Polyamide Screw	1000	pack	ACET259	MF SA KL HP SSC SMC W Z PC	 ✓
	**ACET451** Cast Cill End Caps	1	pair	ETC451	MF SA KL HP SSC SMC W Z PC	✓ ✓ ✓ ✓ ✓
	**ACET452** Cast Cill End Caps	1	pair	ETC452	MF SA KL HP SSC SMC W Z PC	✓ ✓ ✓ ✓ ✓
	**ACET457** Cast Cill End Caps	1	pair	ETC457	MF SA KL HP SSC SMC W Z PC	✓ ✓ ✓ ✓ ✓
	**ACET458** Cast Cill End Caps	1	pair	ETC458	MF SA KL HP SSC SMC W Z PC	 ✓ ✓ ✓ ✓

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

Screw (Grub)

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SA = Silver Anodised
KL = Basic Colour
HP = Special Colour
SSC = Smooth Satin Chrome
SMC = Smokey Chrome
PC = Polished Chrome
W = White
Z = Black

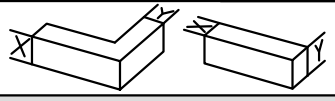
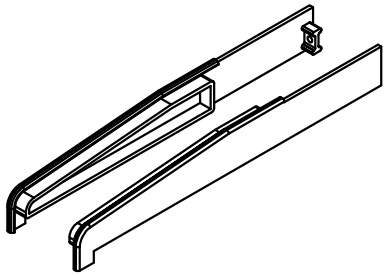
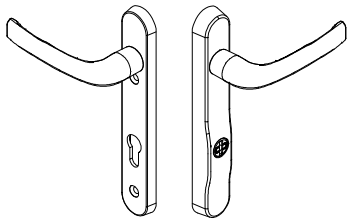
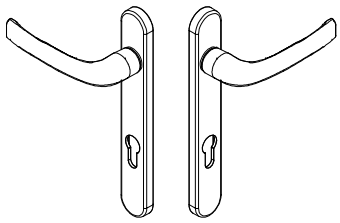
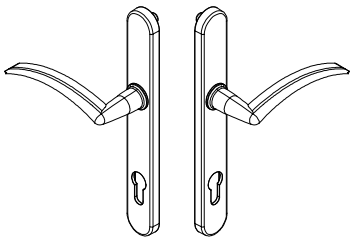
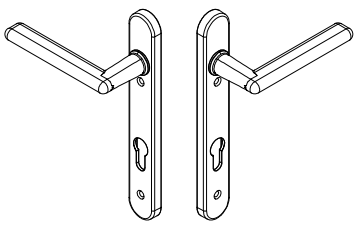


Image	Part Code	Pack	Unit	Application	Colour	
	**ACET479** **Cast Cill End Caps**	**1**	**pair**	**ETC479**	MF SA KL HP SSC SMC W Z PC	✓ ✓ ✓ ✓ ✓
	**ACET480** **PAS 24** **Lever / Lever Handle**	**1**	**pair**	**ACET282** **ACET283** **ETD024N** **ETD025N**	MF SA KL HP SSC SMC W Z PC	 ✓ ✓ ✓ ✓
	**ACET484** **Standard** **Lever / Lever Handle**	**1**	**pair**	**ACET282** **ACET283** **ETD024N** **ETD025N**	MF SA KL HP SSC SMC W Z PC	 ✓ ✓ ✓ ✓
	**ACET486** **Swept** **Lever / Lever Handle**	**1**	**pair**	**ACET282** **ACET283** **ETD024N** **ETD025N**	MF SA KL HP SSC SMC W Z PC	 ✓ ✓ ✓ ✓
	**ACET487** **Oval** **Lever / Lever Handle**	**1**	**pair**	**ACET282** **ACET283** **ETD024N** **ETD025N**	MF SA KL HP SSC SMC W Z PC	 ✓ ✓ ✓ ✓

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

Screw (Grub)

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

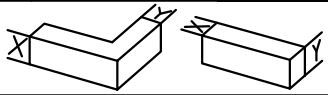
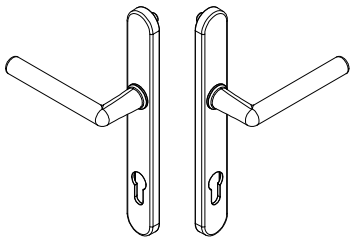
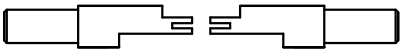
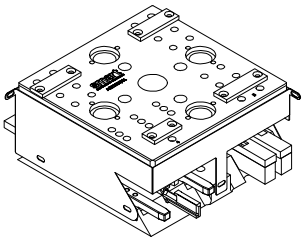
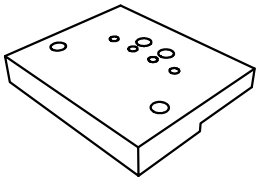


Image	Part Code	Pack	Unit	Application	Colour	
	**ACET488** **Round** **Lever / Lever Handle**	**1**	**pair**	**ACET282** **ACET283** **ETD024N** **ETD025N**	MF	
					SA	✓
					KL	
					HP	
					SSC	
					SMC	
					W	✓
					Z	✓
					PC	✓
	ACET835 **External Captive Bead Gasket - Low Line** **Alternative to ACET035**	**200**	**mtr**		MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	
					Z	✓
					PC	
	**ACET913** **Crimping Punches**	**1**	**pair**	**ETC046**	MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	
					Z	
					PC	
	**ACET939** **Punch Tool**	**1**	**each**		MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	
					Z	
					PC	
	**ACET950** **Drill Jig for ACET250**	**1**	**each**	**ACET250** **ETD012** **ETD015** **ETD017** **ETD024N** **ETD025N**	MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	
					Z	
					PC	

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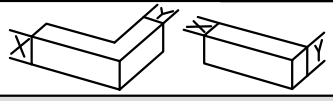
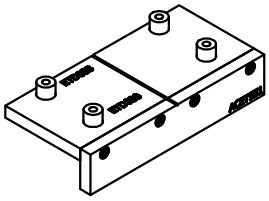
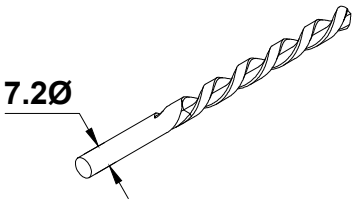
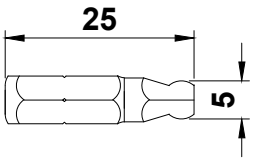


Image	Part Code	Pack	Unit	Application	Colour
	**ACET951** **Drill Jig for ETD030 & ETD033**	**1**	**each**	**ETD030** **ETD033**	MF SA KL HP SSC SMC W Z PC
	**ACET952** **Ø7.2mm Drill Bit**	**1**	**each**	**ACET250**	MF SA KL HP SSC SMC W Z PC
	ACET953 **9mm Spanner with 5mm Hex**	**1**	**each**	**ACET250**	MF SA KL HP SSC SMC W Z PC
	**ACET954** **5mm Ball Ended Bit**	**1**	**each**	**ACET250**	MF SA KL HP SSC SMC W Z PC
	ACET955 **Angle Driver**	**1**	**each**	**ACET250**	MF SA KL HP SSC SMC W Z PC

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

Screw (Grub)

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

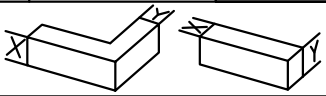
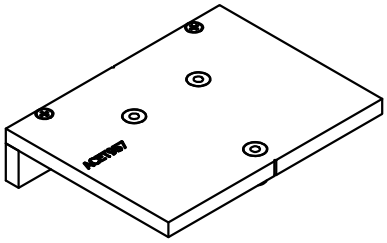
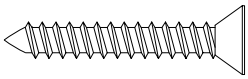
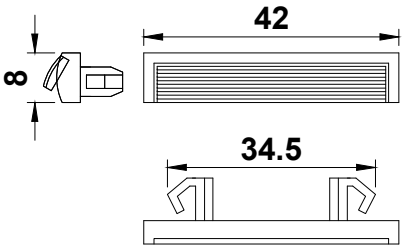
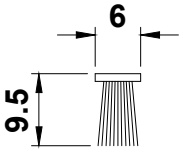


Image	Part Code	Pack	Unit	Application	Colour	
	**ACET957** **Drill Jig for ETD034**	**1**	**each**	**ETD034**	MF SA KL HP SSC SMC W Z PC	
	**ACIM062** **No. 10 x 2" CSK S/S Self Tapper**	**100**	**pack**		MF SA KL HP SSC SMC W Z PC	
	**ACGSL045** **Drainage Cap**	**100**	**pack**		MF SA KL HP SSC SMC W Z PC	
	**ACSH038N** **Brush Pile**	**225**	**mtr**	**ETD197**	MF SA KL HP SSC SMC W Z PC	
	ACSH471 **Letter Plate Set** **Outside dimensions-265mm x 70mm with brush fitting** **Please note: ACSH471 does not comply with BS EN 13724:2002**	1	each	**ETD030** **ETD033**	MF SA ✓ KL HP SSC SMC W ✓ Z ✓ PC	

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

Screw (Grub)

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

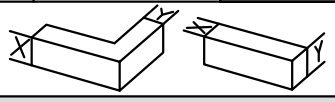
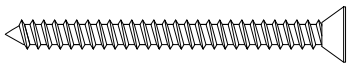
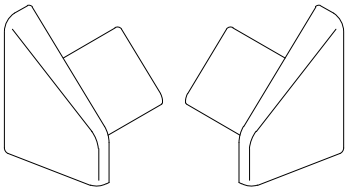
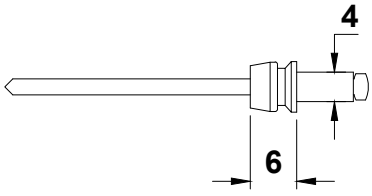


Image	Part Code	Pack	Unit	Application	Colour
	**ACUN3513** **No.8 x 45mm CSK SS Pozi Self-Tapper**	**100**	**pack**		MF SA KL HP SSC SMC W Z PC
	ACVG31 **Gasket**	**200**	**pack**	**ETD012** **ETD015** **ETD017** **ETD018** **ETD024N** **ETD025N** **ETD030** **ETD033**	MF ✓ SA KL HP SSC SMC W Z ✓ PC
	ACVG34 **Gasket**	**100**	**mtr**	**ETC161** **ETC164**	MF SA KL HP SSC SMC W Z ✓ PC
	**ACVL059** **End Caps**	**1**	**pair**	**VL72**	MF SA KL HP SSC SMC W ✓ Z ✓ PC
	**ACVL061** **Rivet to secure VL72**	**100**	**pack**	**VL72**	MF SA KL HP SSC SMC W Z PC

MF = Mill Finish **W = White**
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KL = Basic Colour
HP = Special Colour
SSC = Smooth Satin Chrome
SMC = Smokey Chrome
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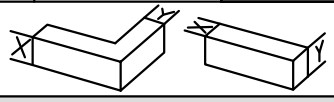
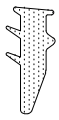
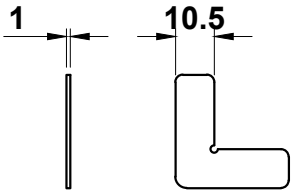
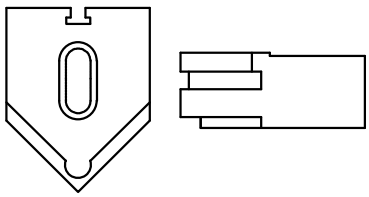
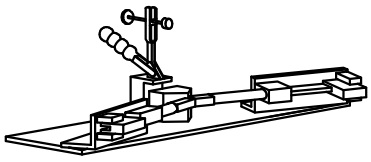


Image	Part Code	Pack	Unit	Application	Colour
	ACVL159 **Super Glue**	**1**	**each**		MF SA KL HP SSC SMC W Z PC
	**ACW20034** **4mm Wedge Gasket**	**100**	**mtr**		MF ✓ SA KL HP SSC SMC W Z ✓ PC
	**WCA106** **Chevron**	**100**	**pack**	**ETD024N** **ETD025N**	MF SA KL HP SSC SMC W Z PC
	**WCT072** **Vee Block**	**1**	**each**	**ETC046**	MF SA KL HP SSC SMC W Z PC
	**WUT024HSZA** **Manual Crimper** **Note: Vee blocks & punches are sold separately**	**1**	**each**		MF SA KL HP SSC SMC W Z PC

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

Screw (Grub)

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

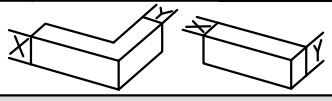


Image	Part Code	Pack	Unit	Application	Colour	
	ACMX09700 **Alu. Polish**	**1**	**each**		MF	✓
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	
					Z	
					PC	
	ACMX09761 **Maxi Gloss**	**1**	**each**		MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	
					Z	
					PC	
	ACMX09762 **Alu. Bright**	**1**	**each**		MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	
					Z	
					PC	
	ACMX09763 **Teflon Spray**	**1**	**each**		MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	
					Z	
					PC	
	ACMX09764 **Maxi Clean**	**1**	**each**		MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	
					Z	
					PC	

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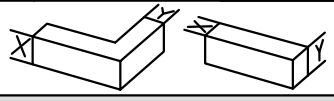

Image	Part Code	Pack	Unit	Application	Colour
	ACMX09765 **Alu. Cleaner**	**1**	**each**		MF SA KL HP SSC SMC W Z PC
	ACMX09770 **Roll & Wrap 100mm**	**1**	**each**		MF SA KL HP SSC SMC W Z PC
	ACMX09775 **Grip Handwrap**	**1**	**each**		MF SA KL HP SSC SMC W Z PC
	ACMX09801 **Protective Tape 50mm**	**1**	**each**		MF SA KL HP SSC SMC W Z PC
	ACMX09802 **Protective Tape 70mm**	**1**	**each**		MF SA KL HP SSC SMC W Z PC

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

Screw (Grub)

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SSC	**= Smooth Satin Chrome**		
SMC	**= Smokey Chrome**		
PC	**= Polished Chrome**		

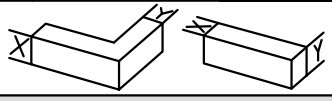

Image	Part Code	Pack	Unit	Application	Colour	
	ACMX09803 **Protective Tape 100mm**	**1**	**each**		MF SA KL HP SSC SMC W Z PC	
	ACMX09830 **Rubber Sealant**	**1**	**each**		MF SA KL HP SSC SMC W Z PC	
	ACSIL04 **Sealing Glue** **Order with suffix of KL colour (eg.ACSIL04KL005) or BL=Black/WP=White/ CL=Clear**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

T-BARS
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ACVL150=4.0mm

Screw (Grub)

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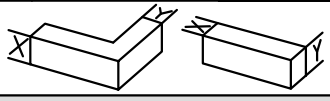

Image	Part Code	Pack	Unit	Application	Colour	
	ACSIL014 **Anti-Corrosion Coating**	**1**	**each**		MF	✓
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	
					Z	
					PC	
	ACUN3900 **Gasket Roller**	**1**	**each**		MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	
					Z	
					PC	
					MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					W	
					Z	
					PC	
					MF	
					SA	
					KL	
					HP	
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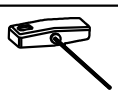

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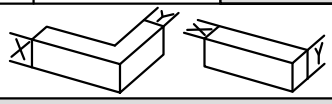
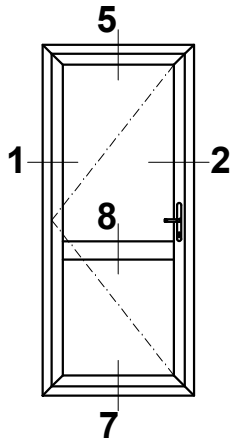


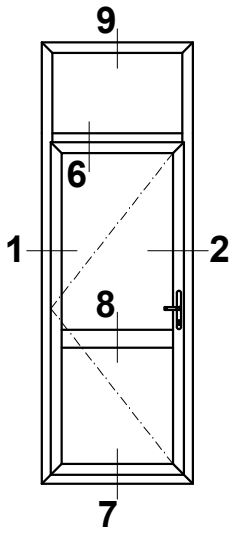
Section C

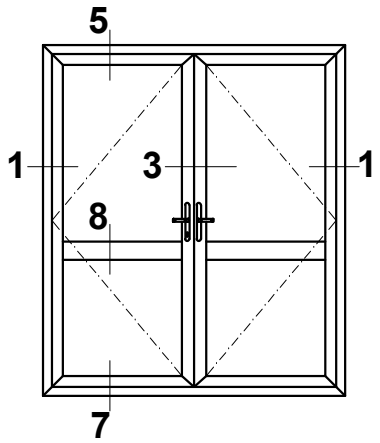
Sections

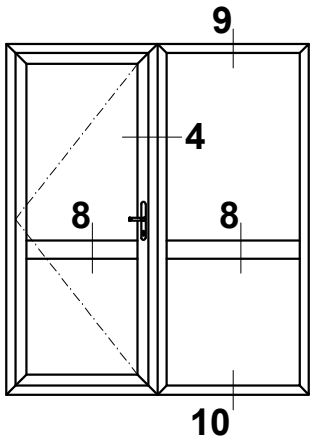
Scale Elevations

Open In



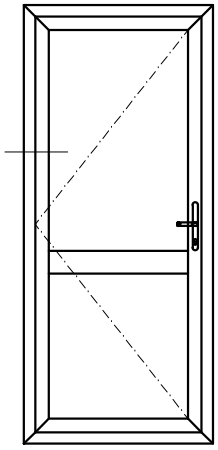


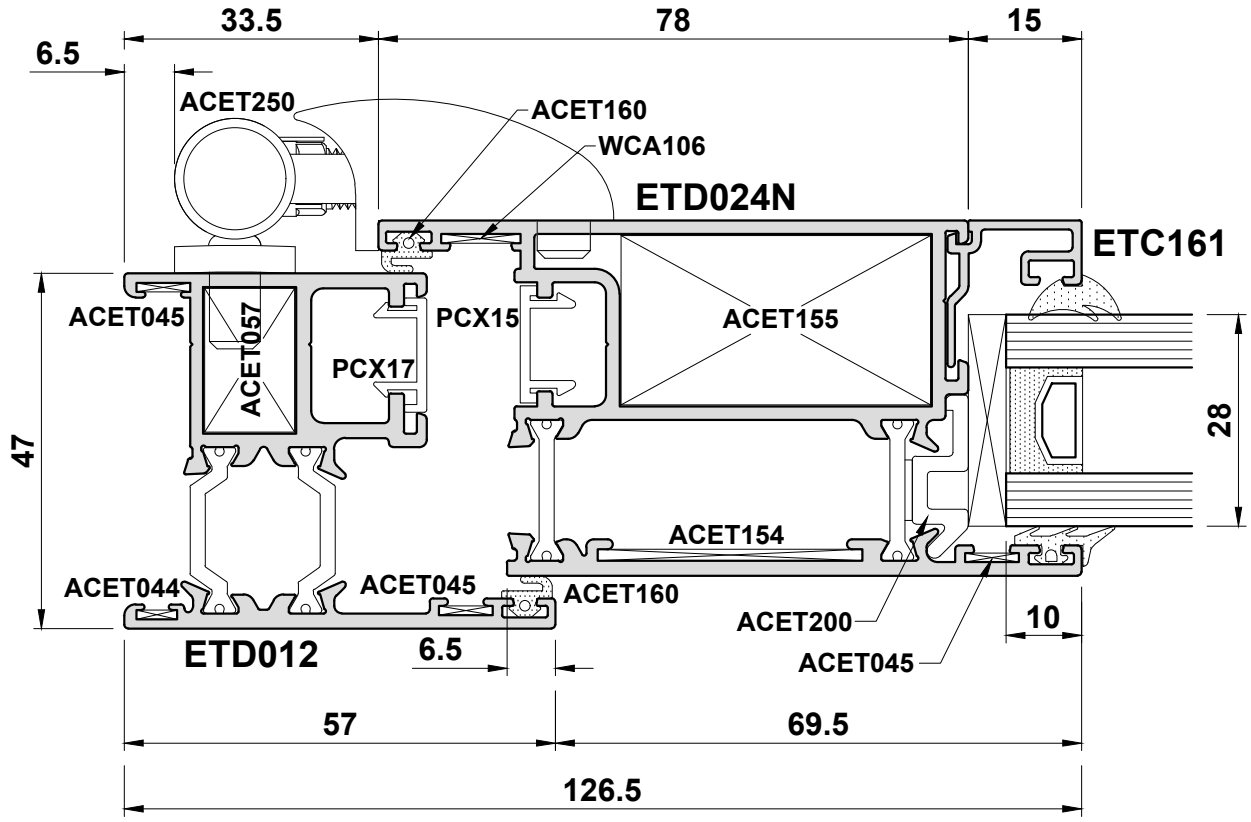




Do Not Scale From This Drawing

Detail 1a





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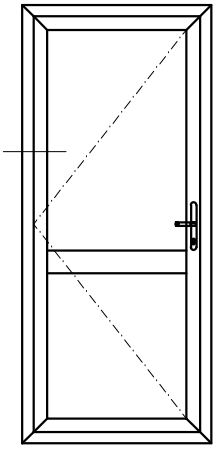
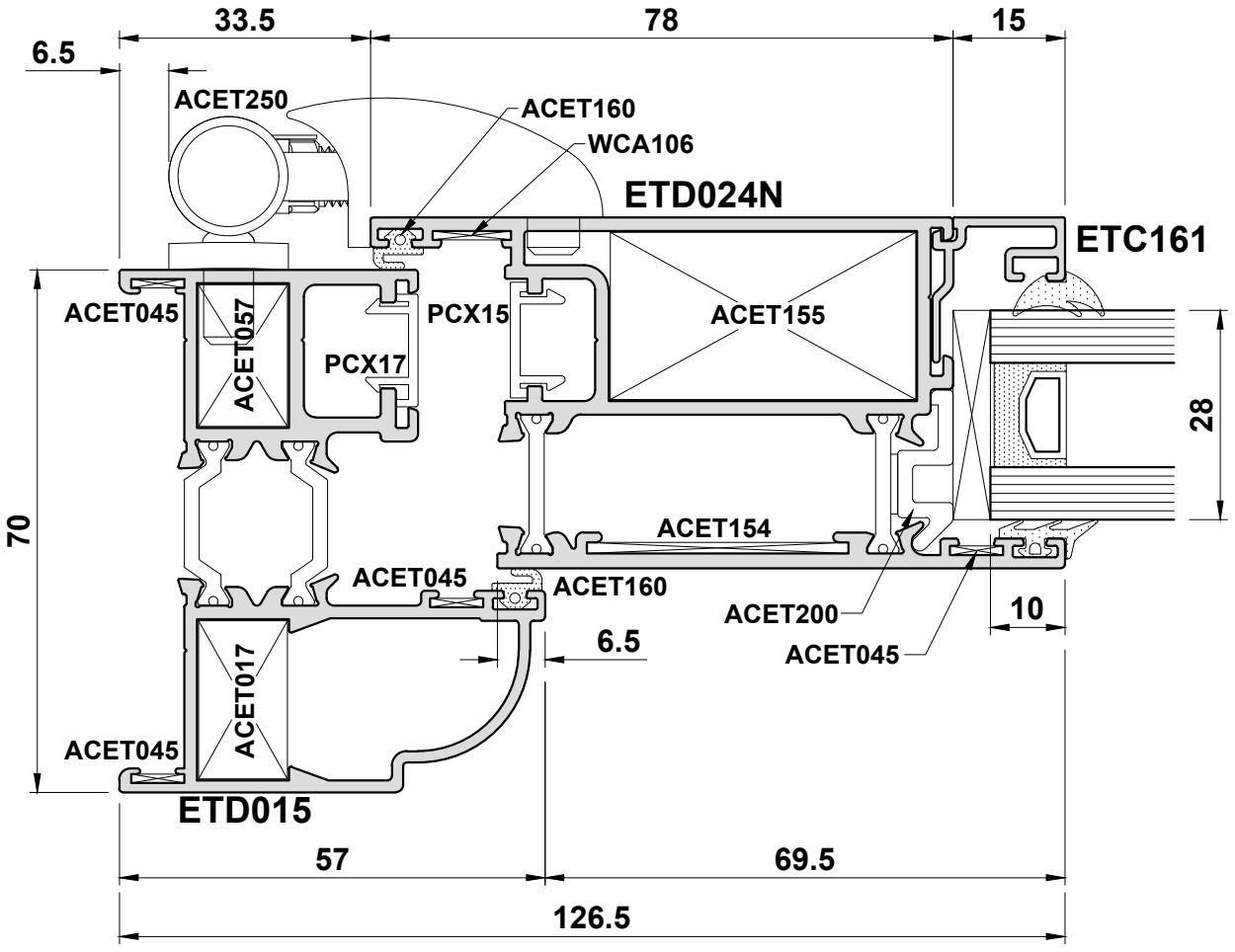
Detail 1b





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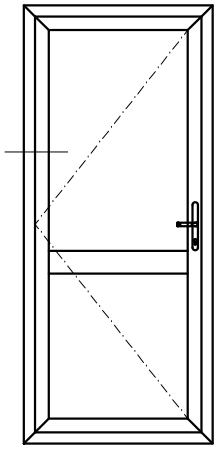
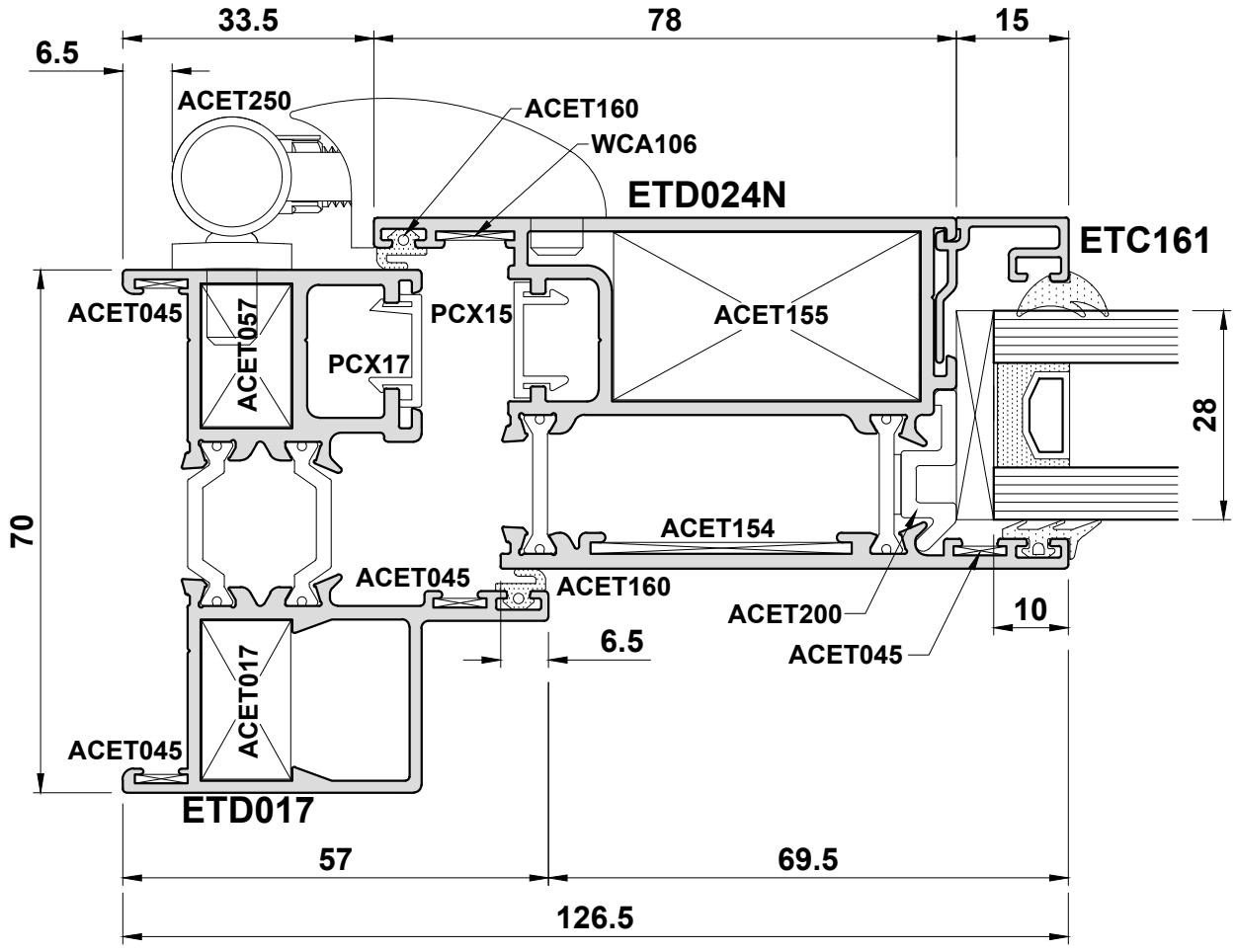
Detail 1c





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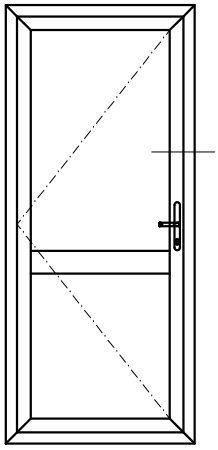
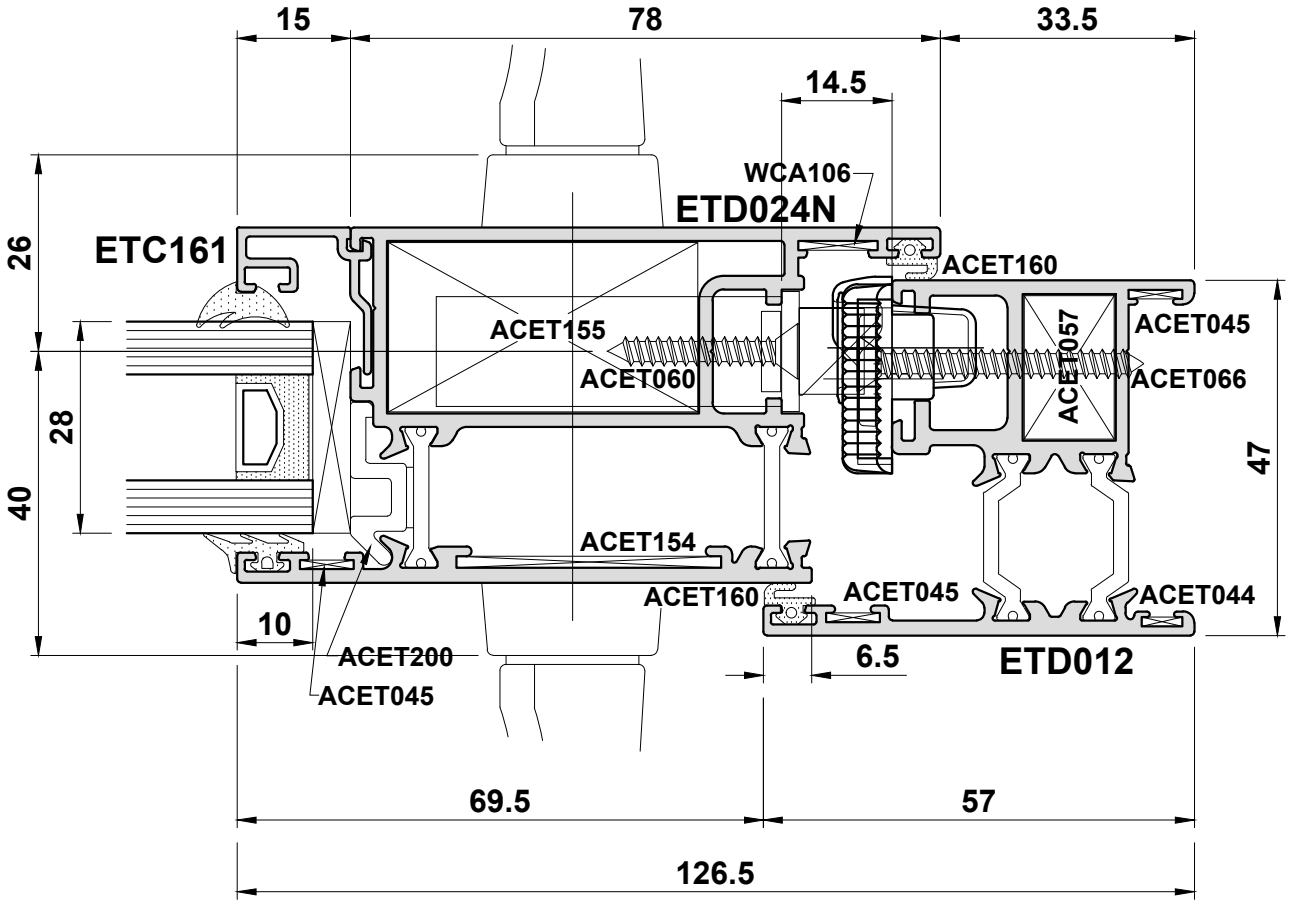
Detail 2a





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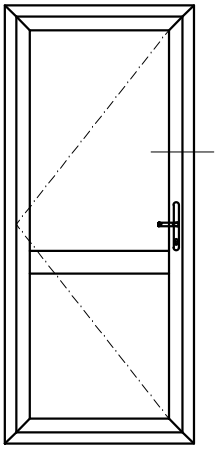
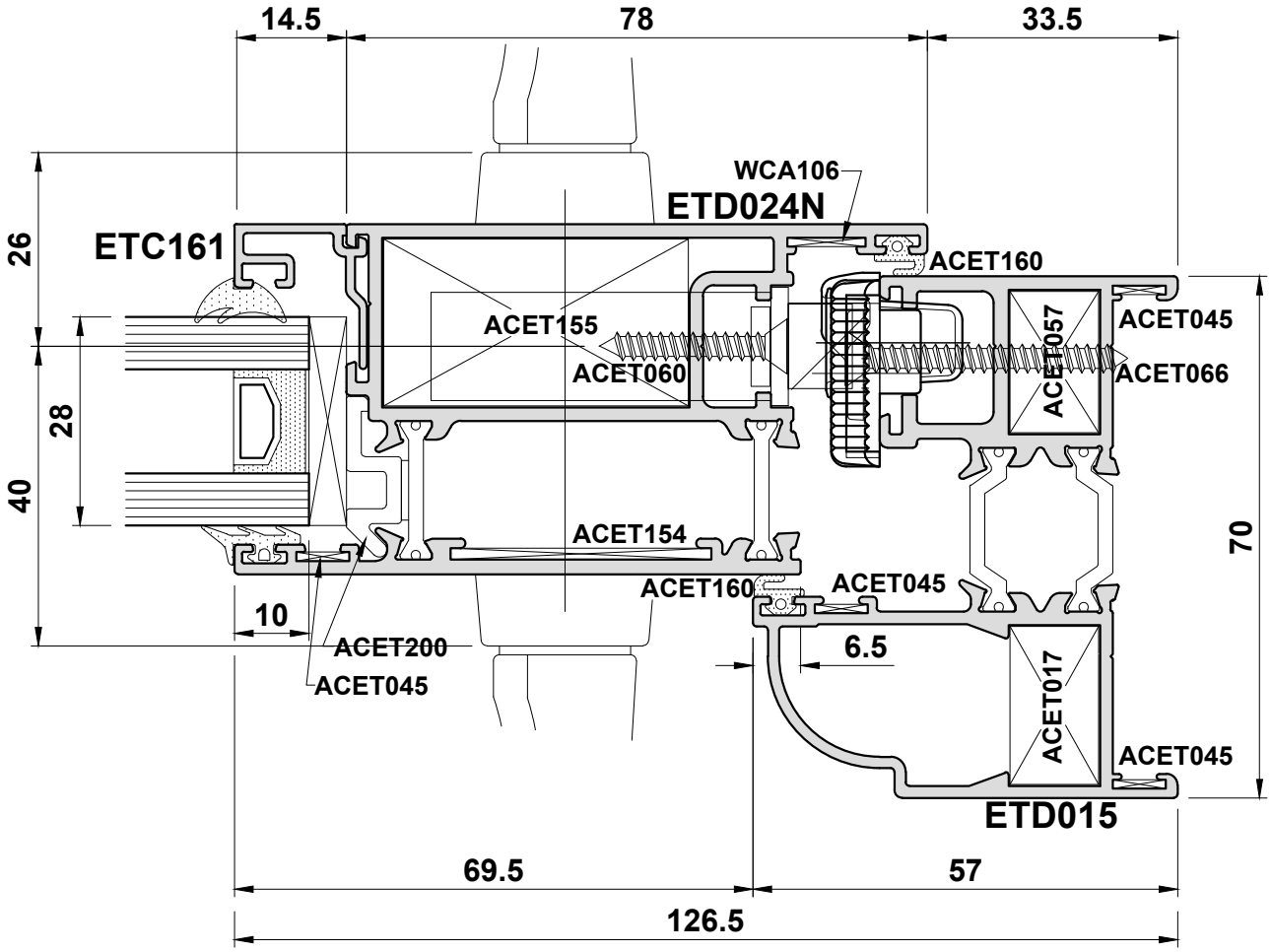
Detail 2b





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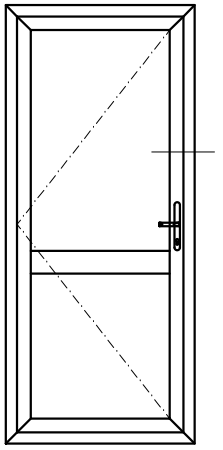
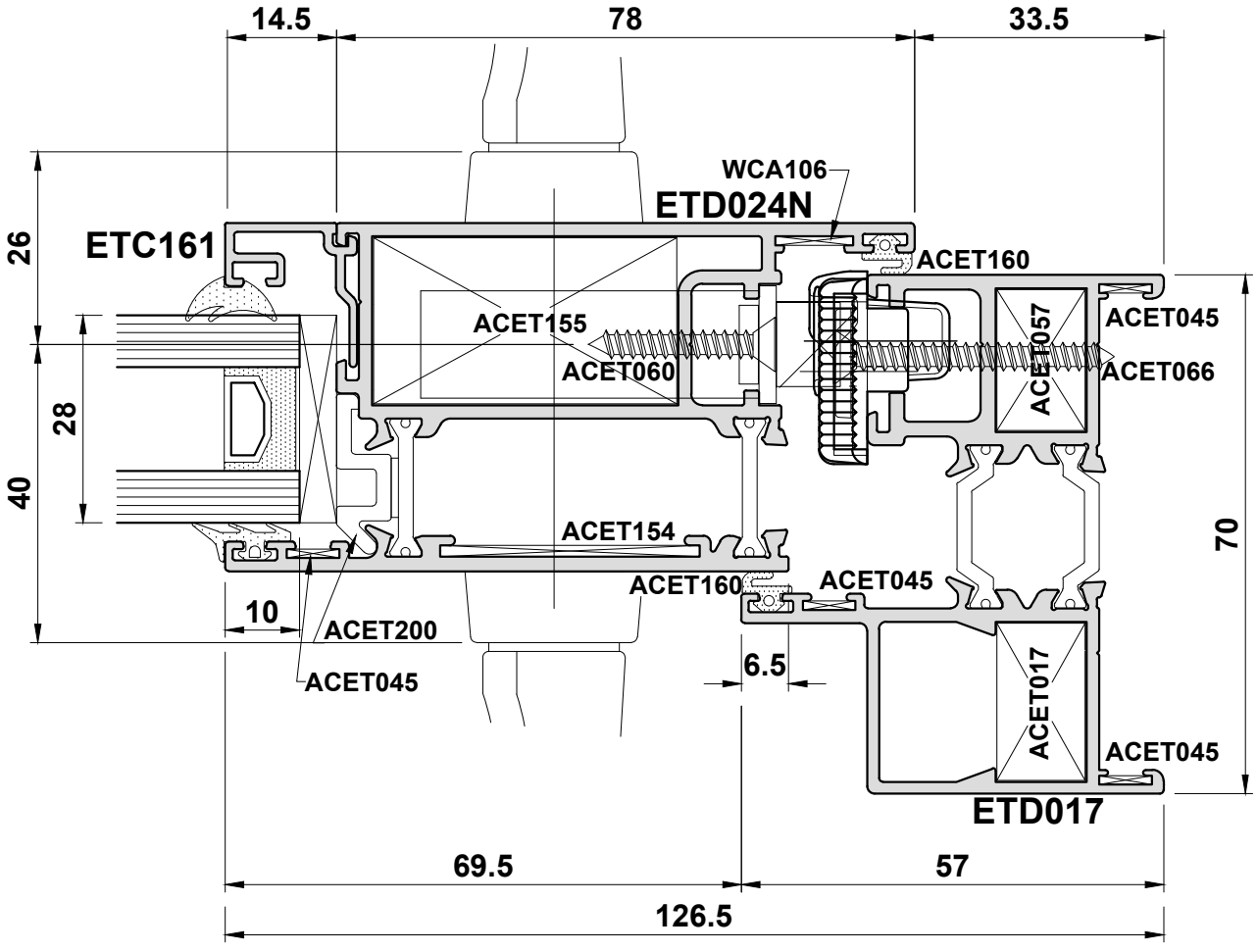
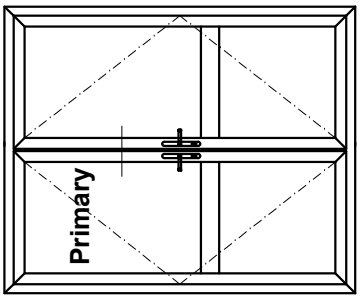
Detail 2c

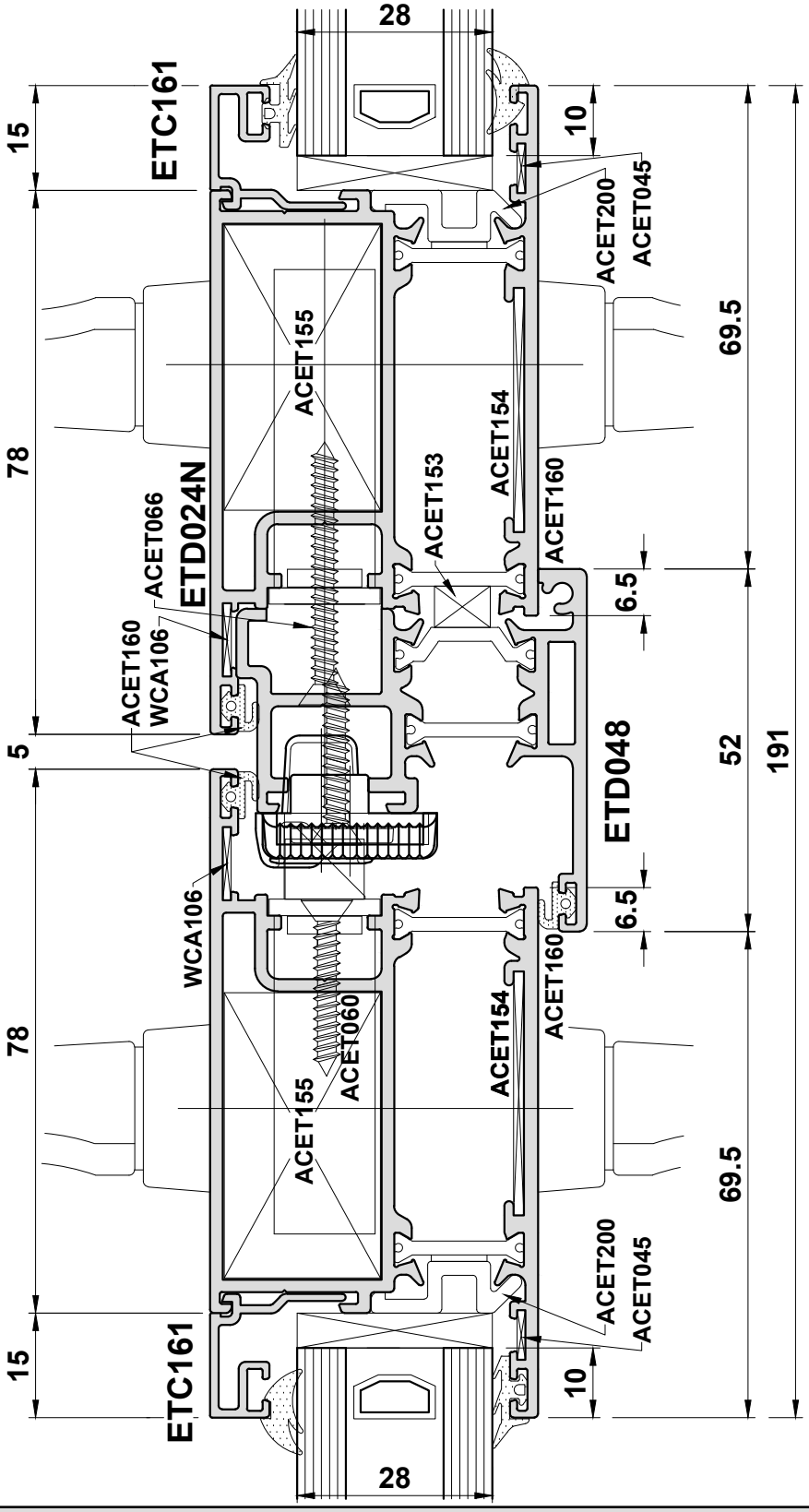




Do Not Scale From This Drawing

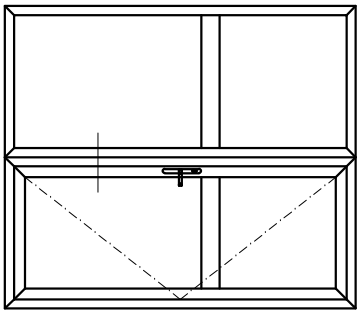
Detail 3

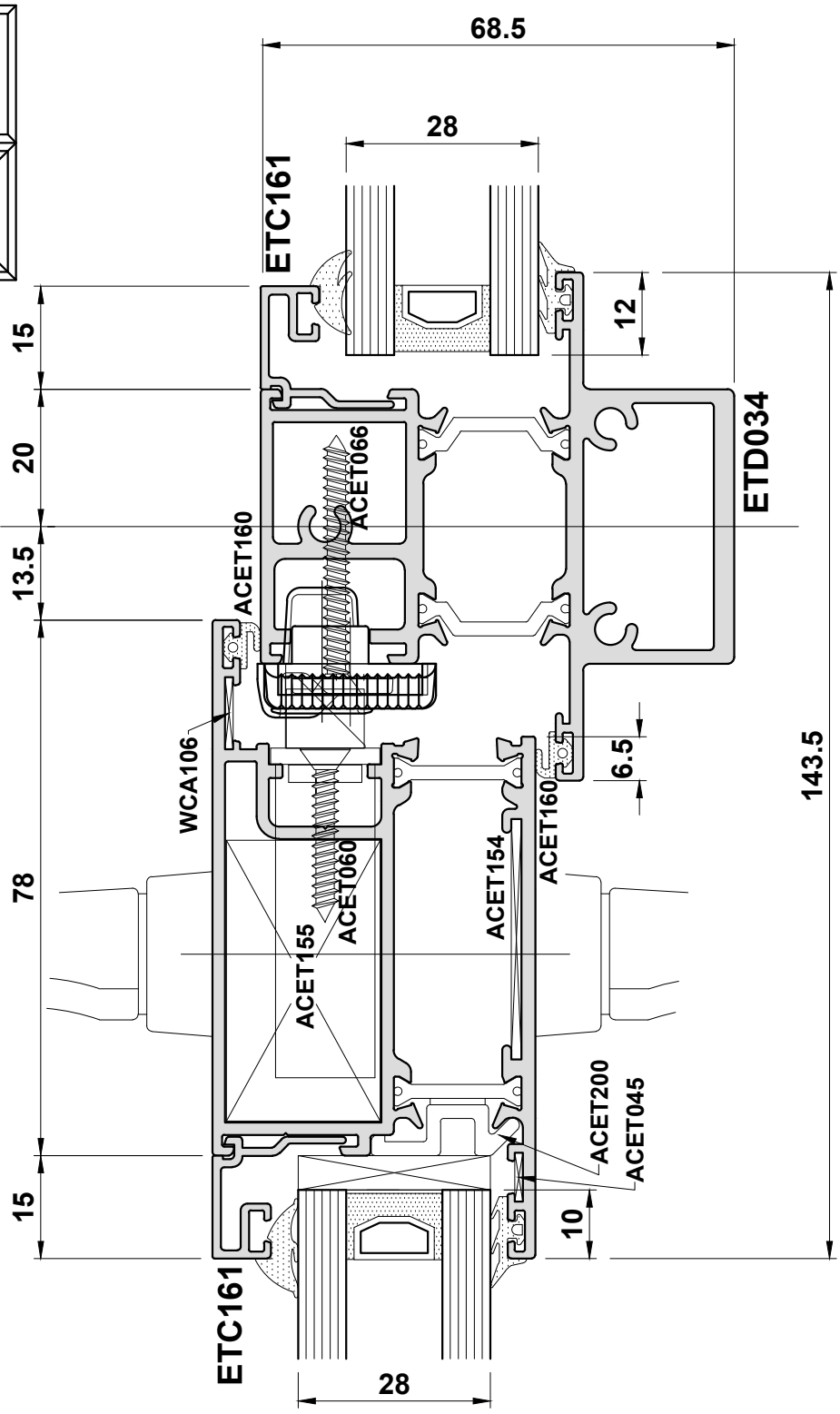




Do Not Scale From This Drawing

Detail 4a





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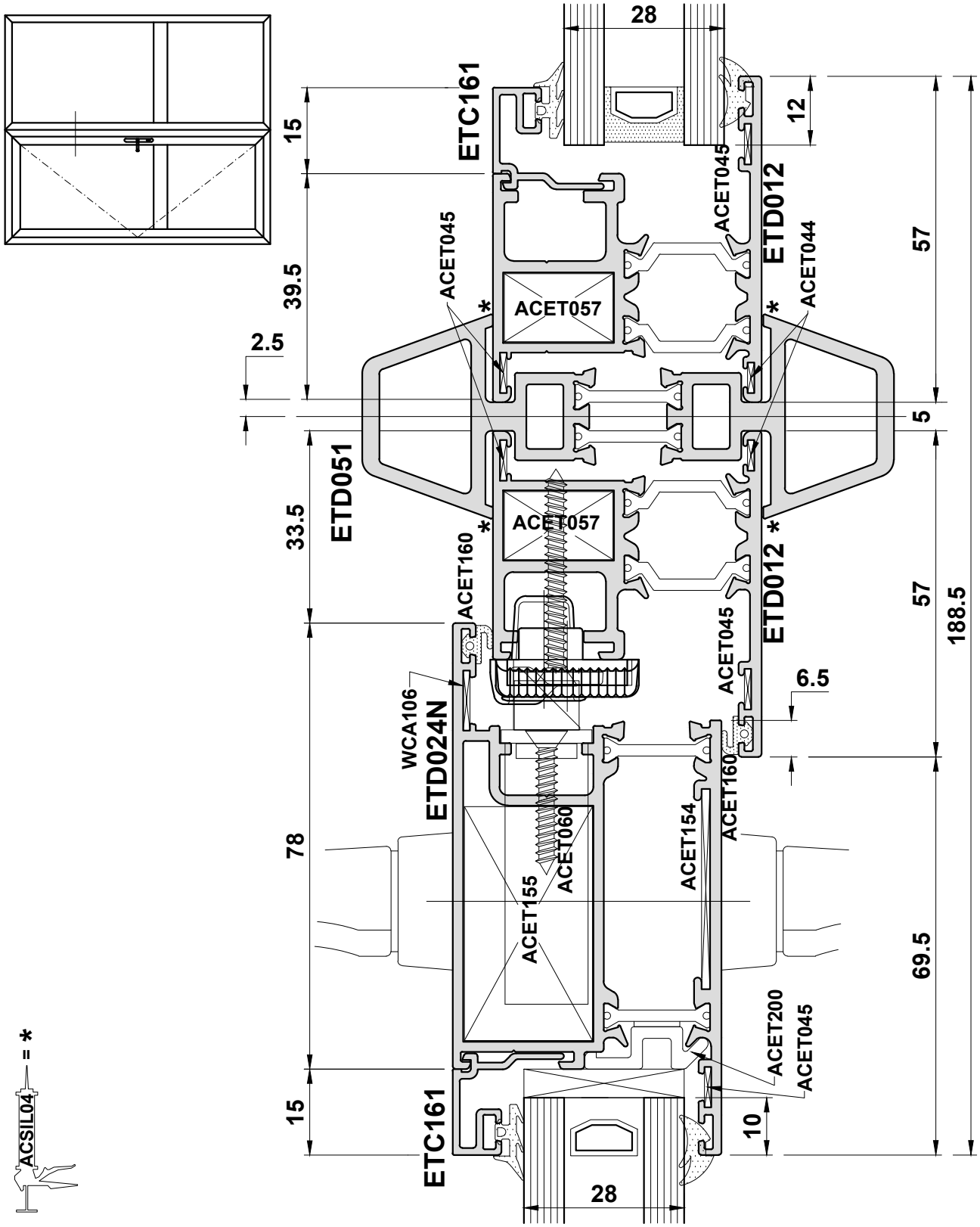

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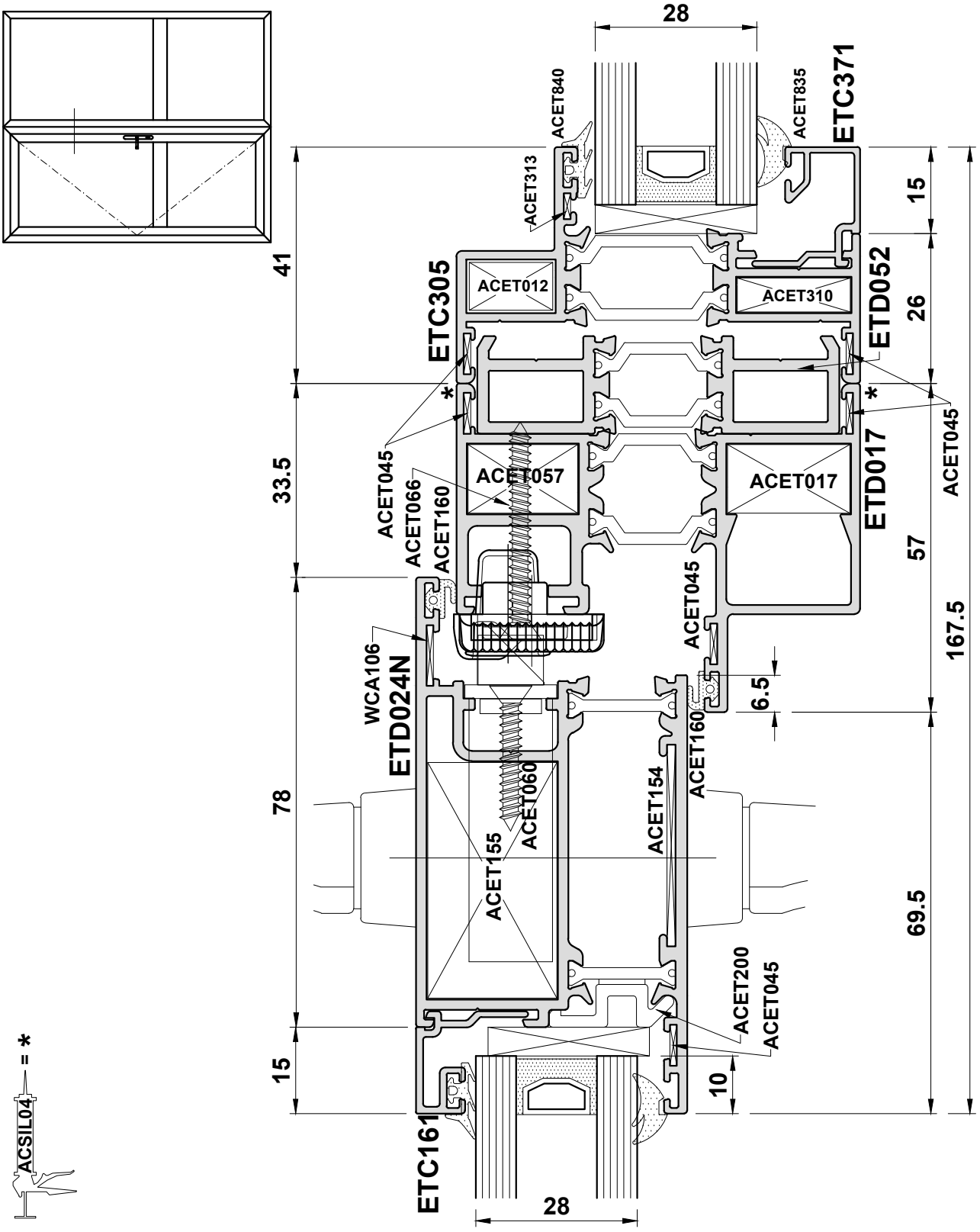

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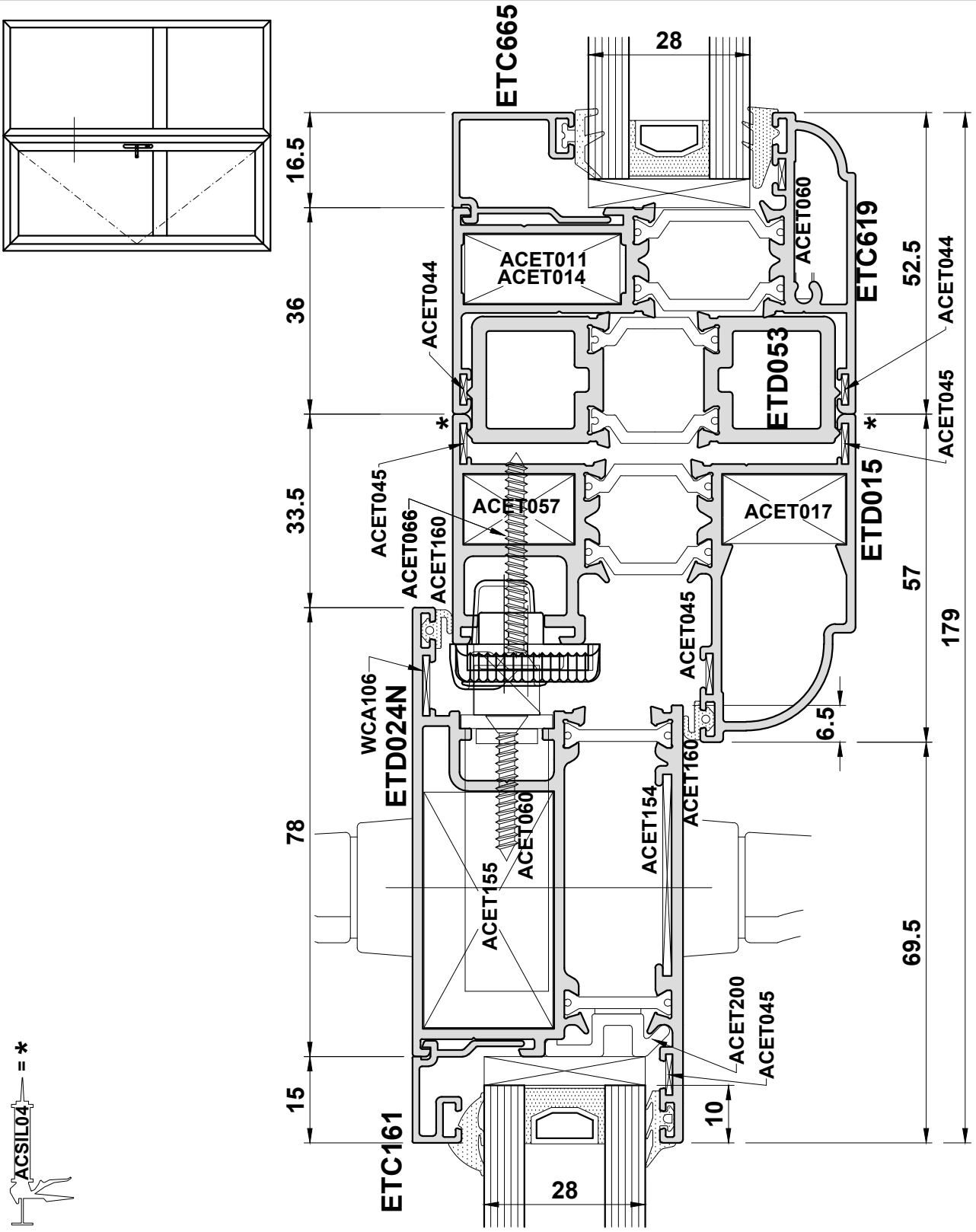

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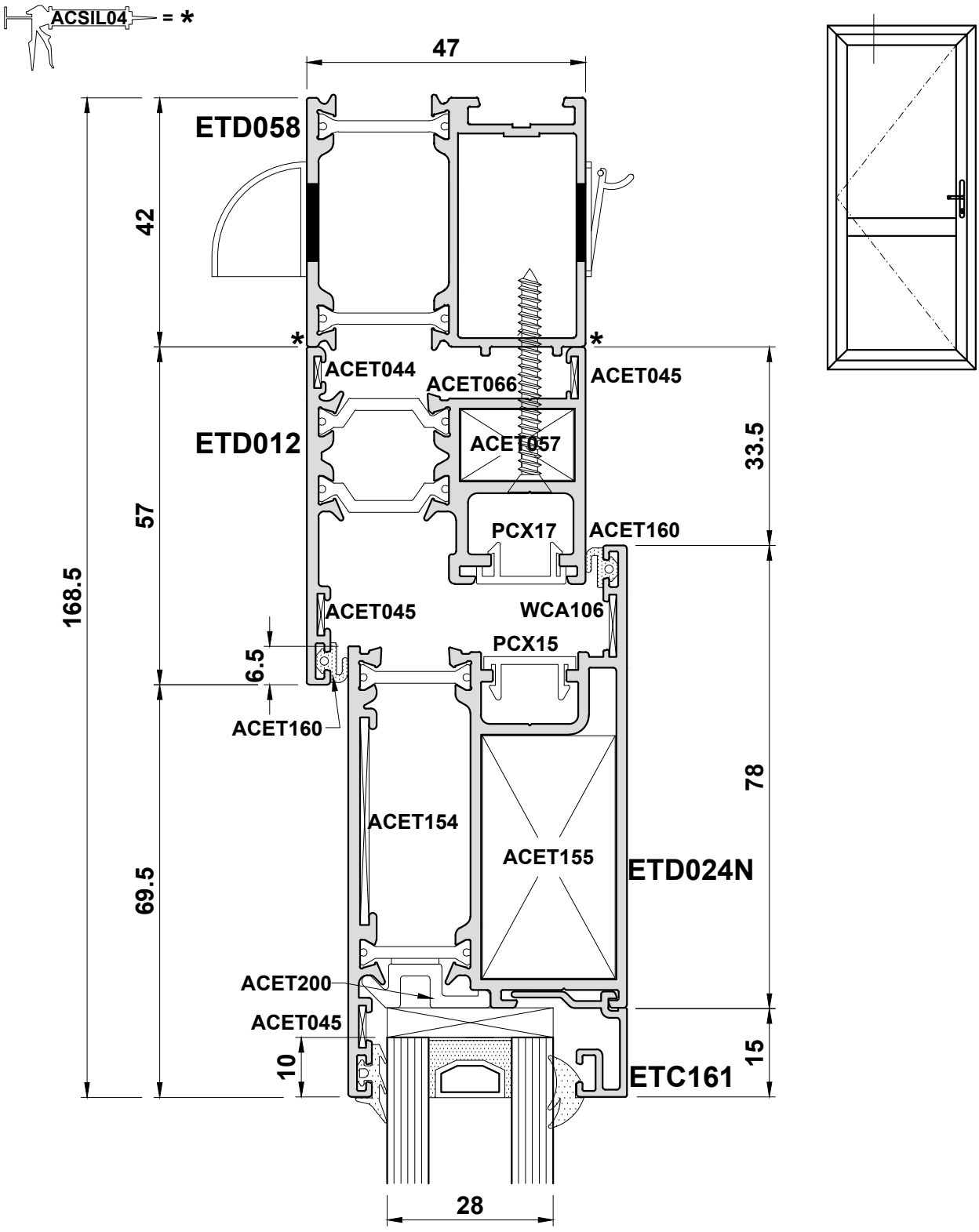

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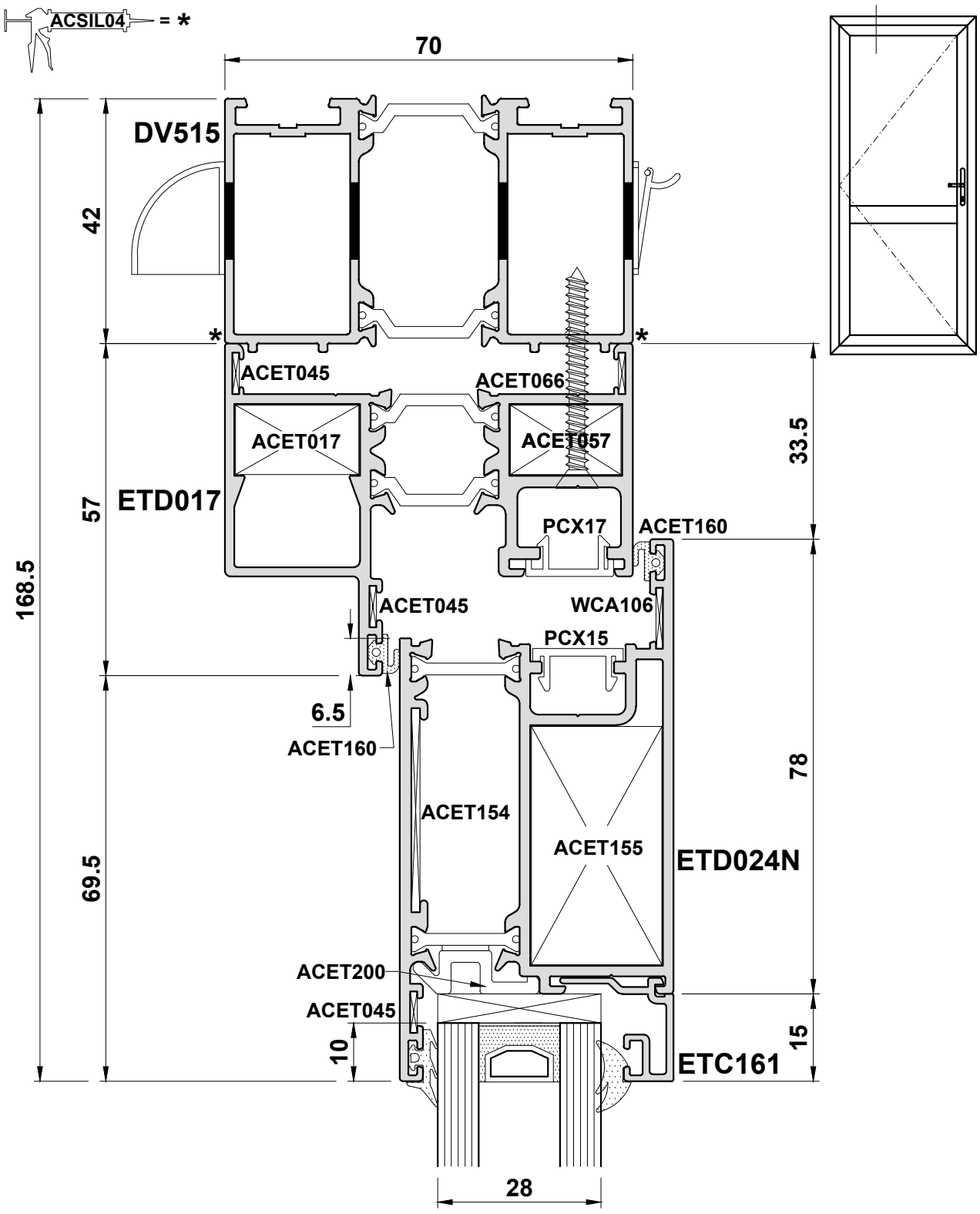

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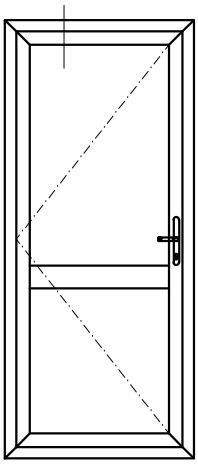

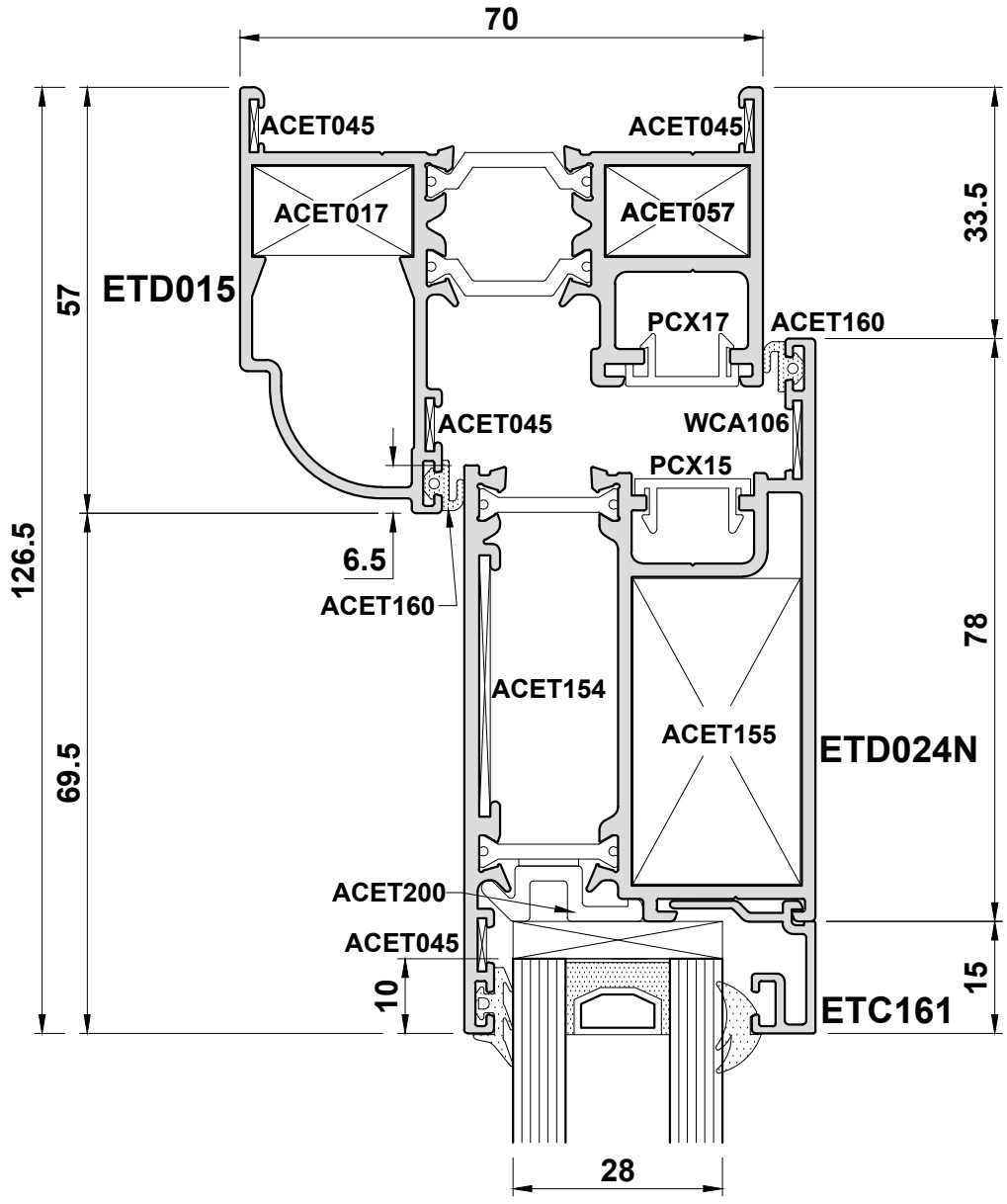

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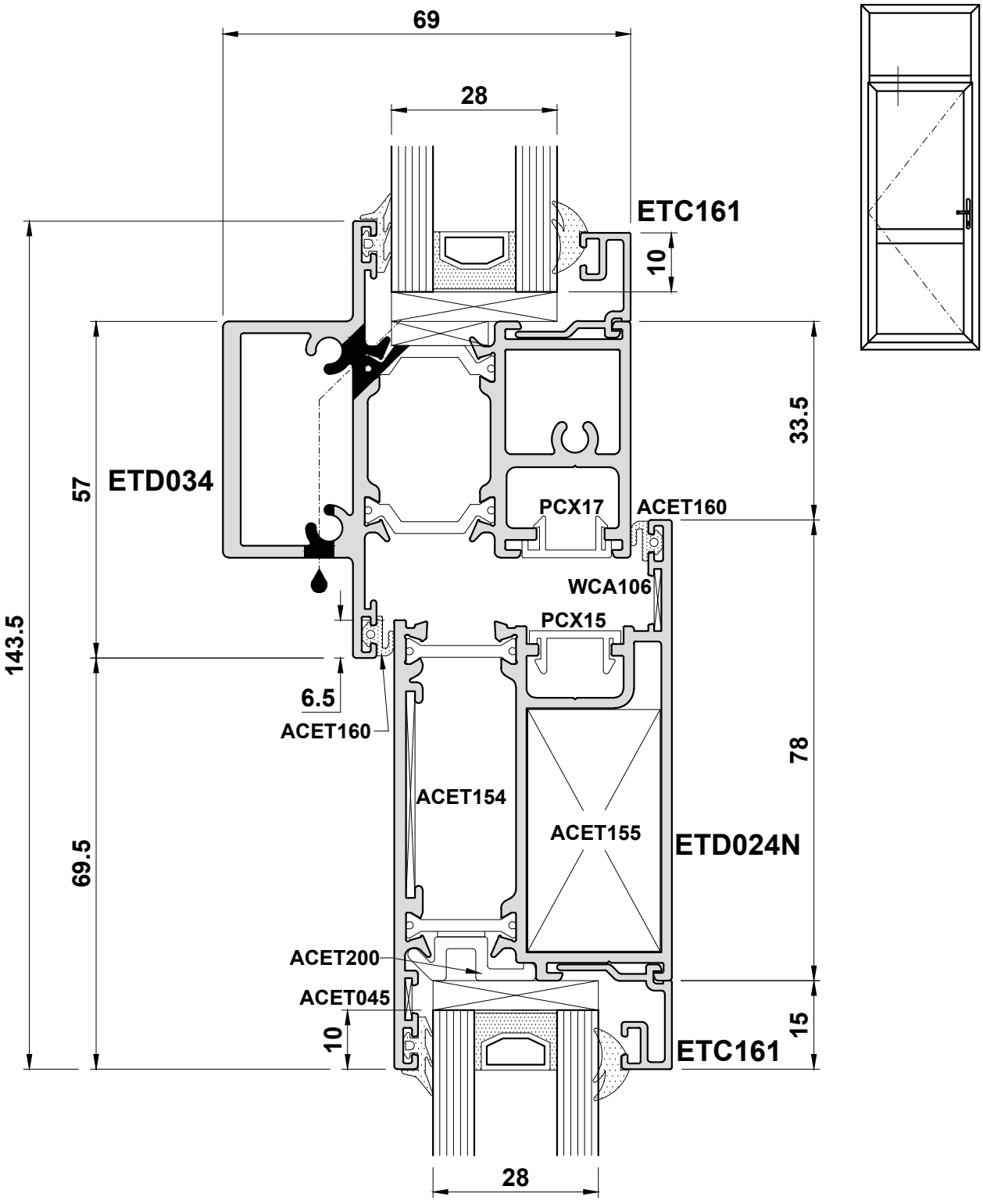
Detail 6



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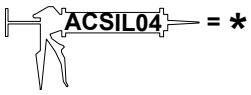
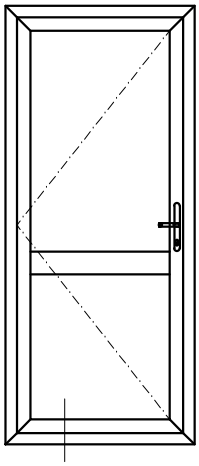
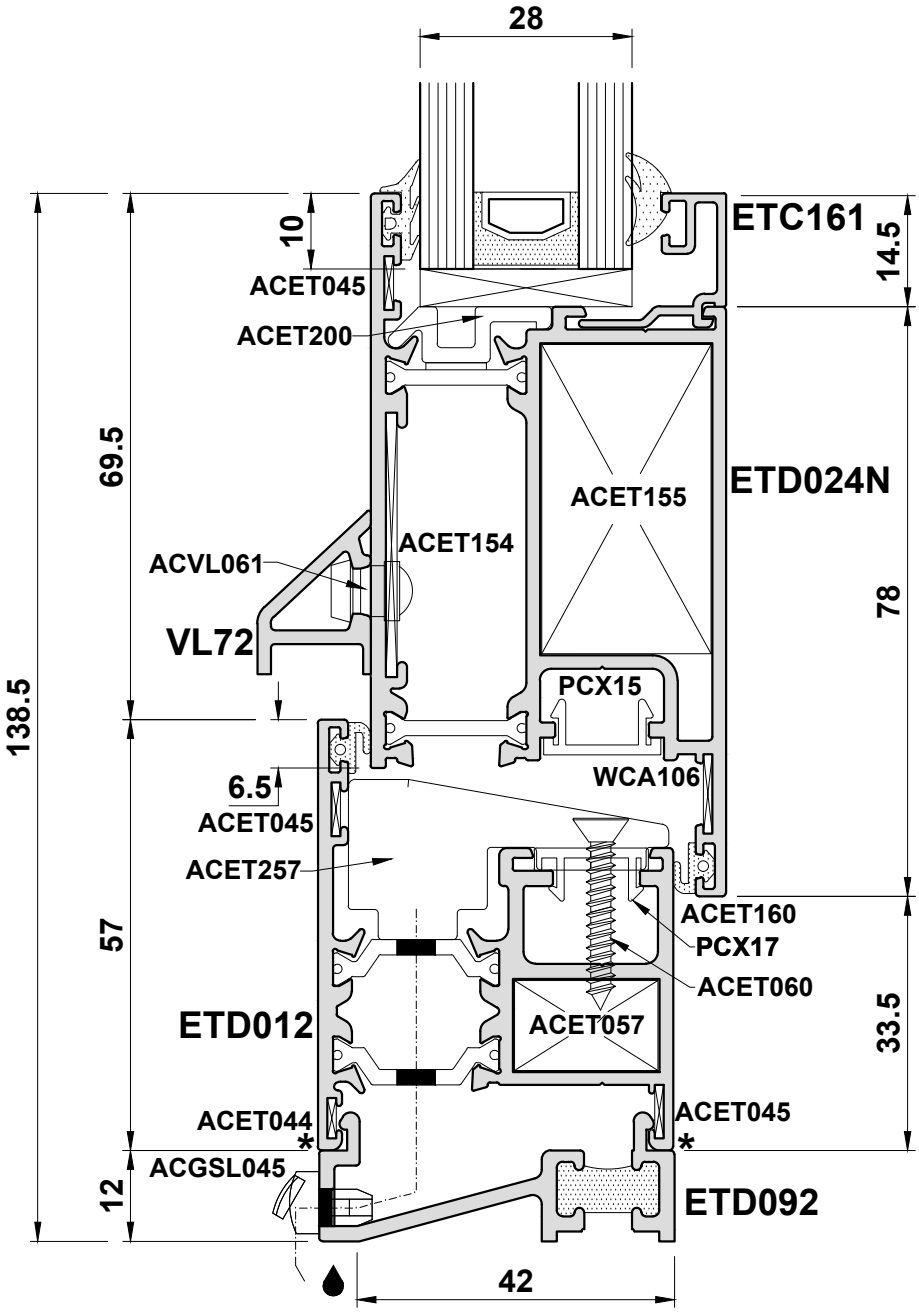
Detail 7a







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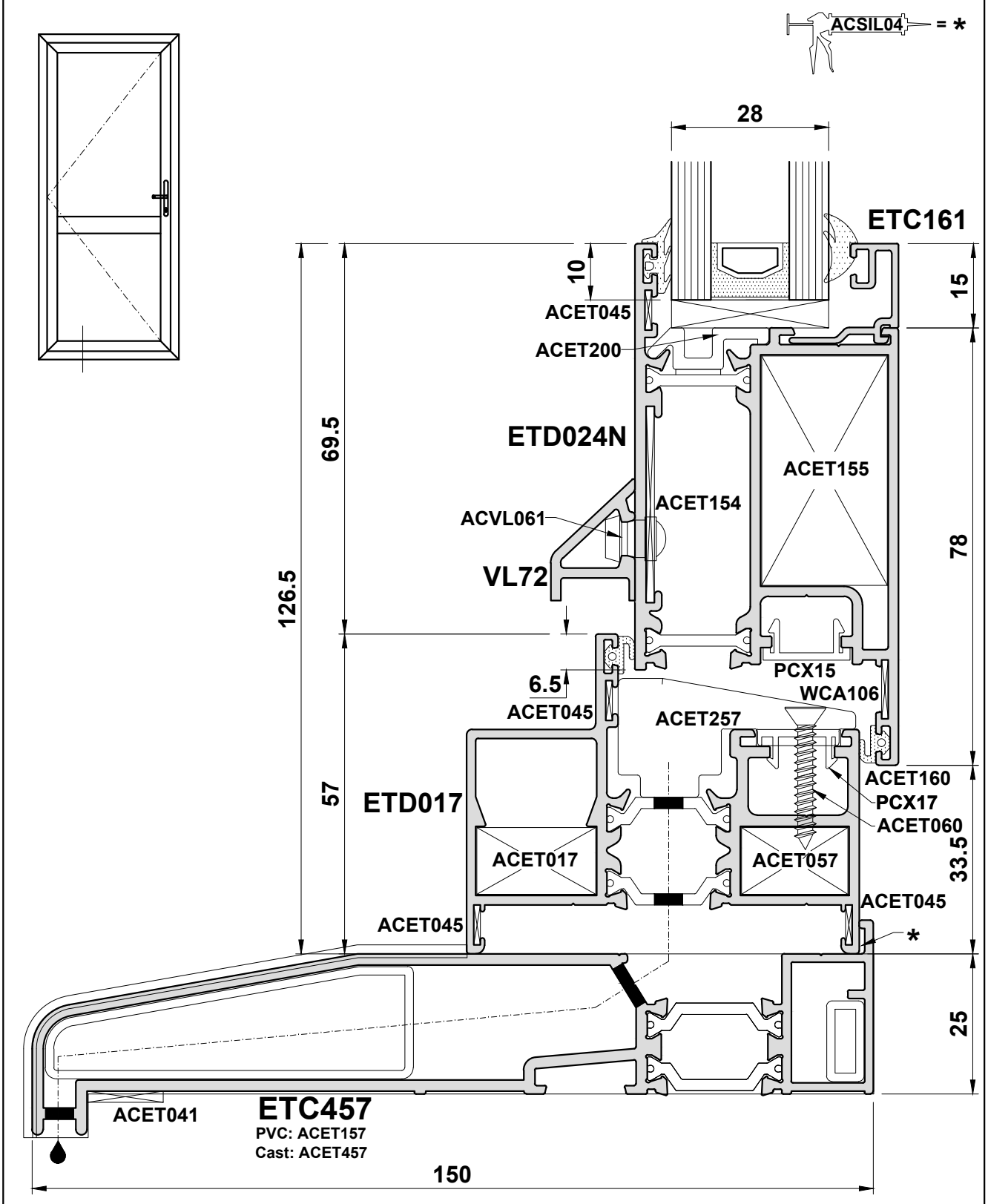

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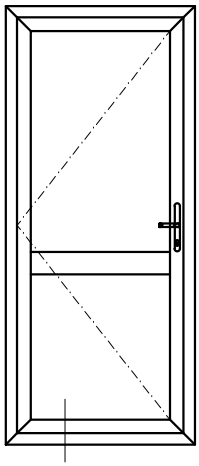
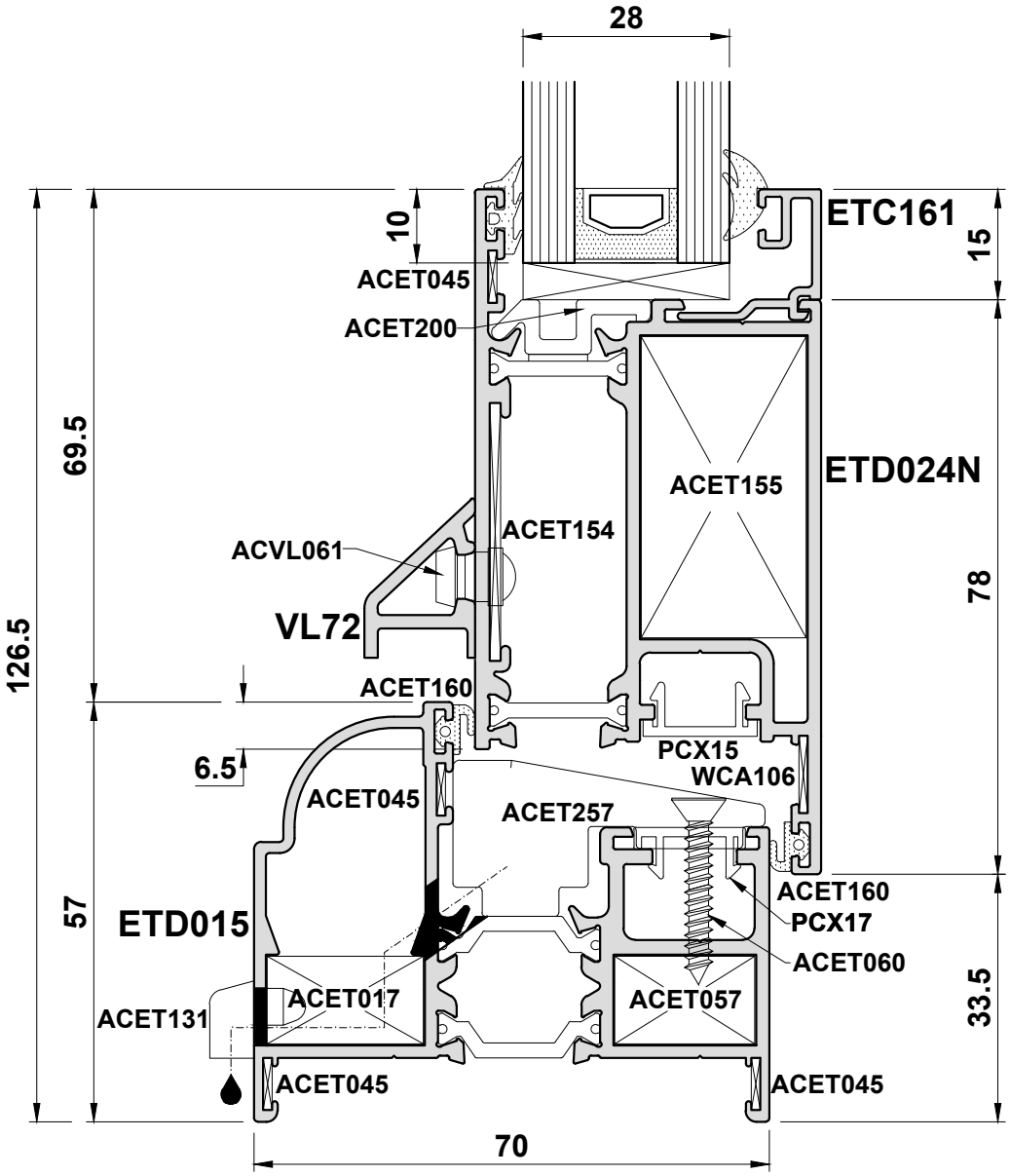
Detail 7c





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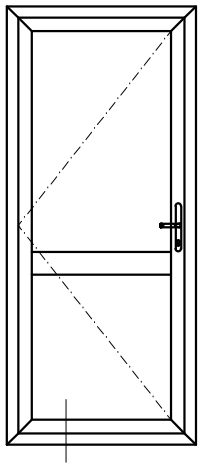

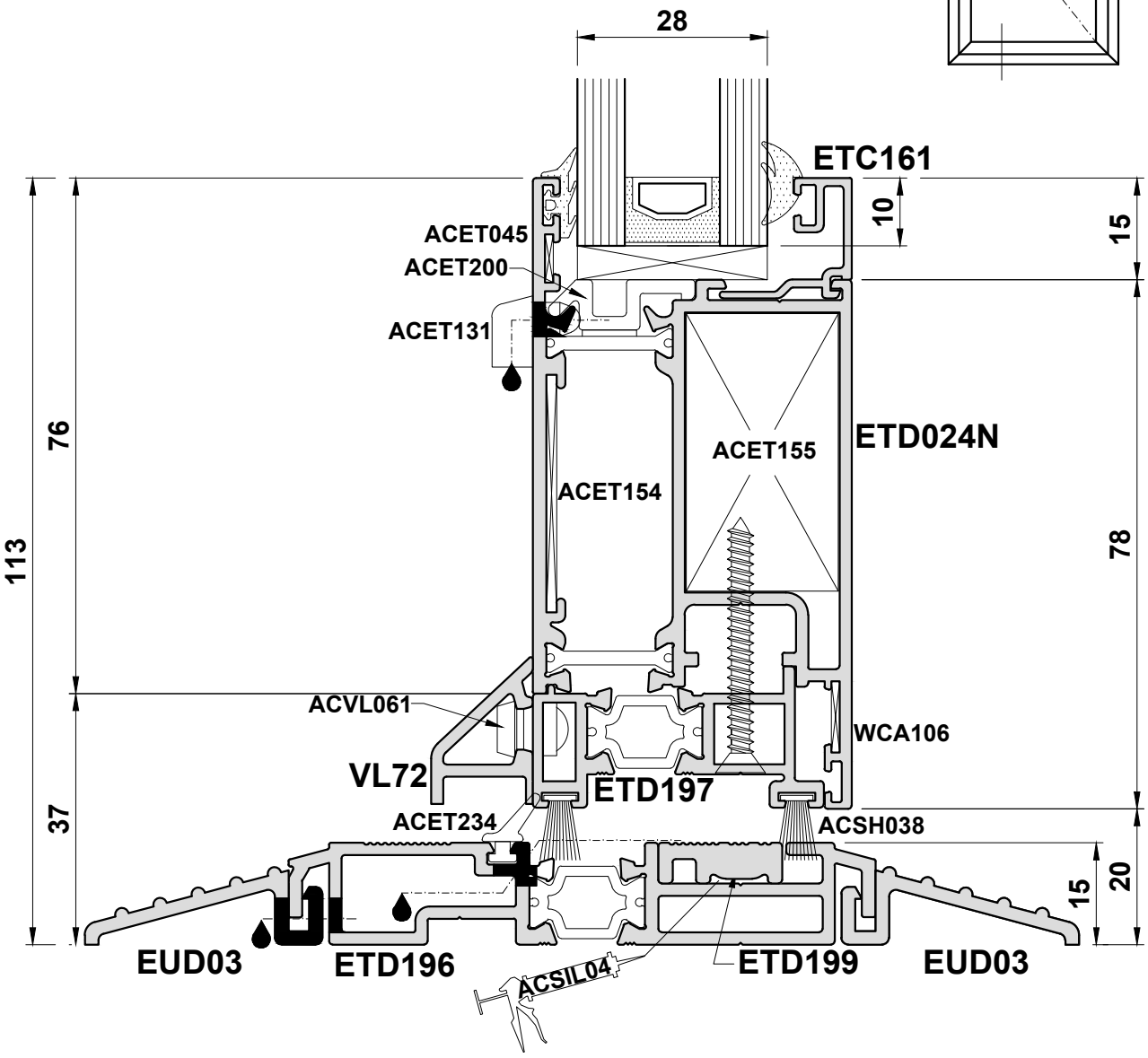

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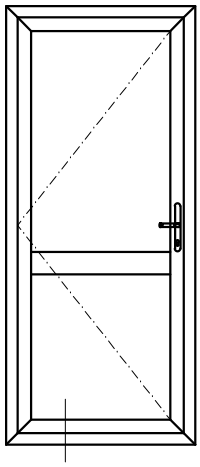
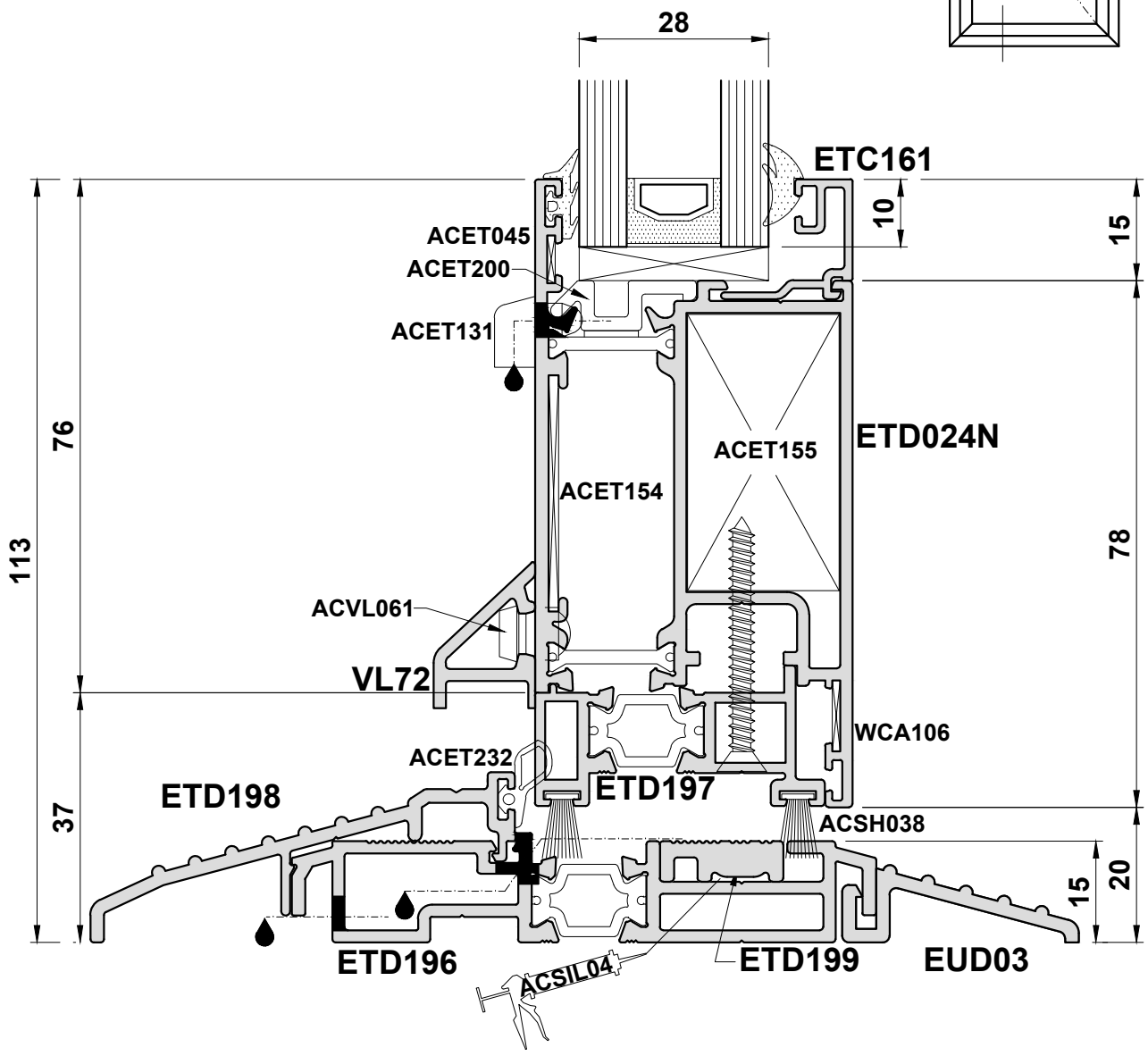
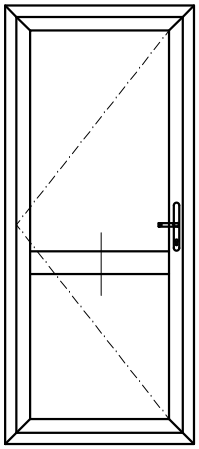
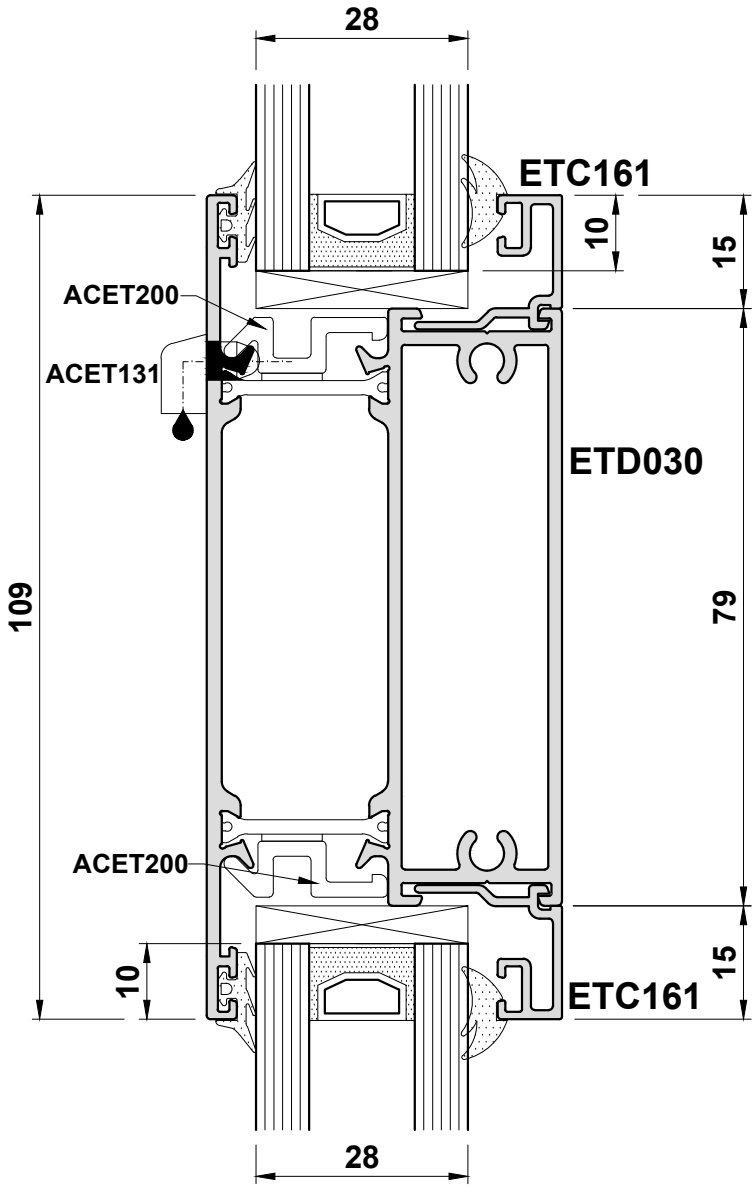




Do Not Scale From This Drawing

Detail 8

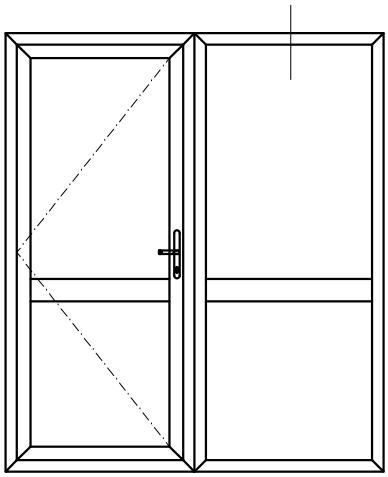


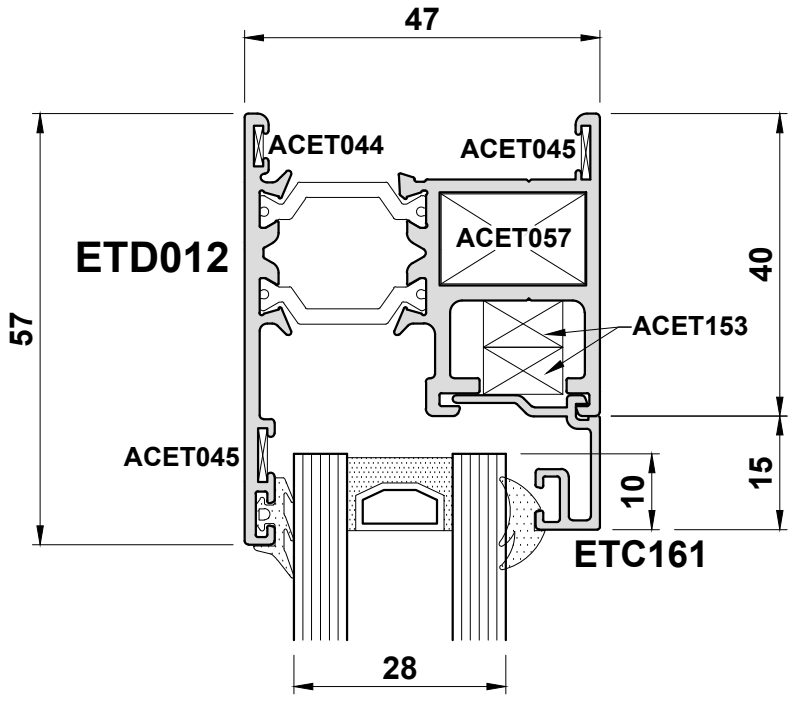


Note: Midrail will drain through the join to the stiles.

Do Not Scale From This Drawing

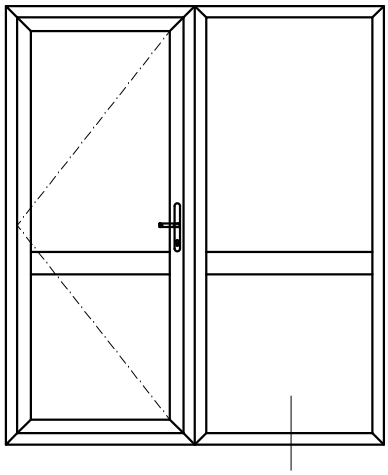
Detail 9

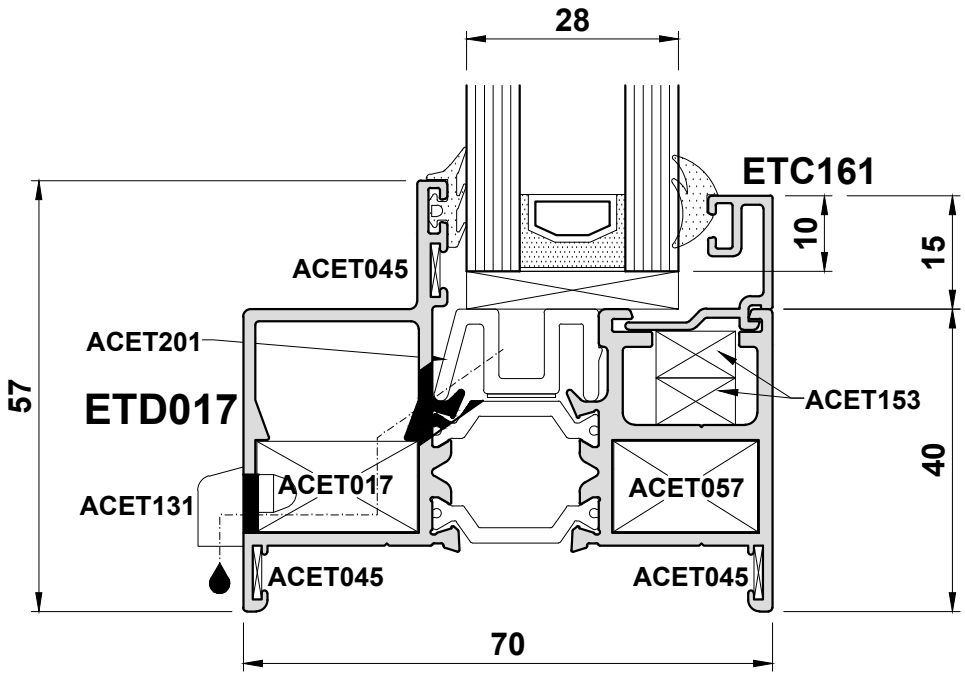




Do Not Scale From This Drawing

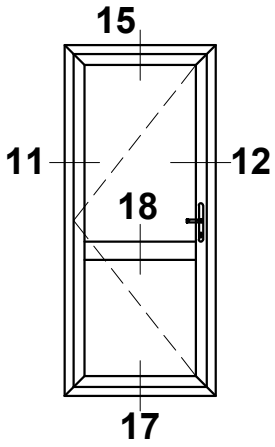
Detail 10

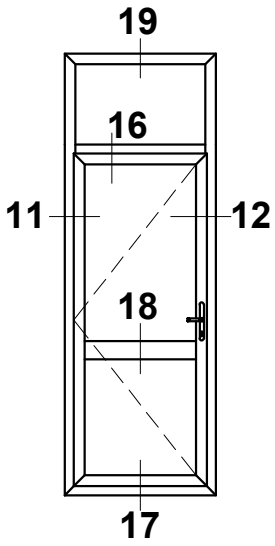


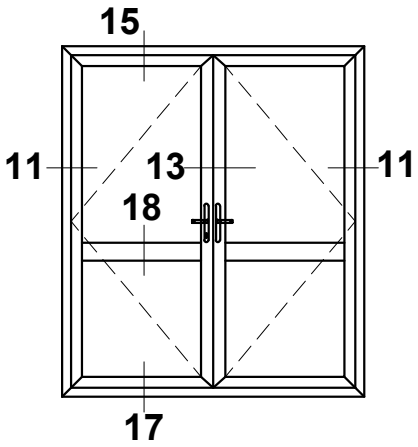


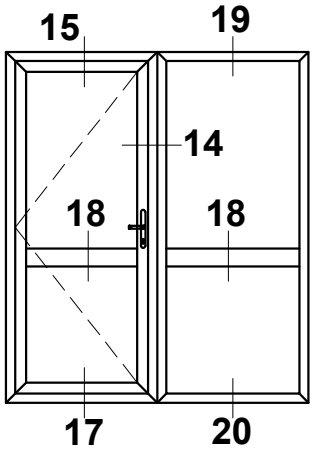
Do Not Scale From This Drawing

Open Out



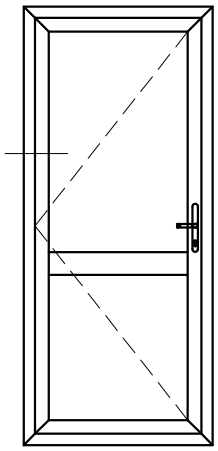


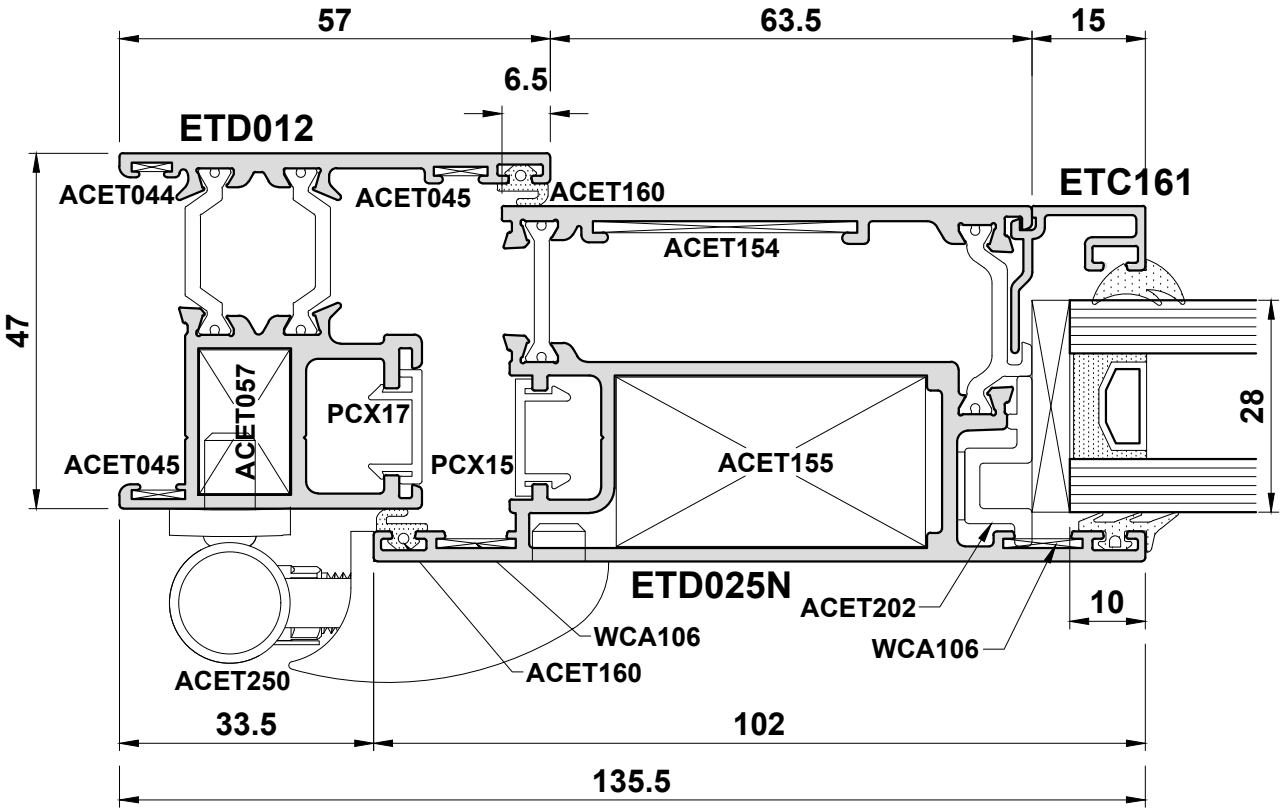




Do Not Scale From This Drawing

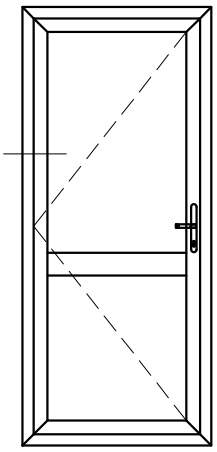
Detail 11a

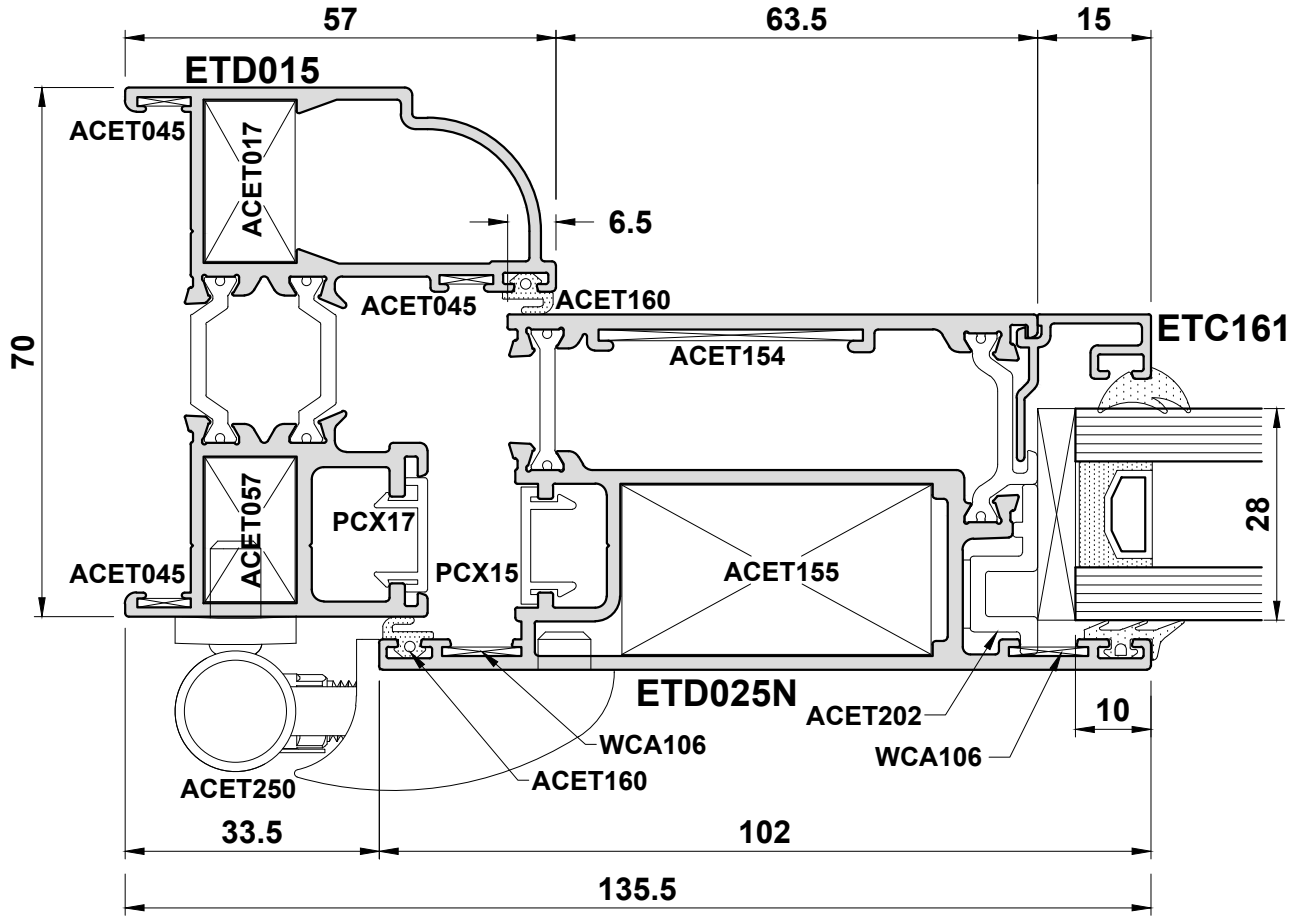




Do Not Scale From This Drawing

Detail 11b





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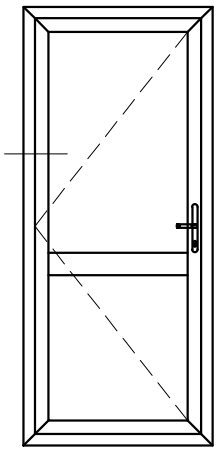
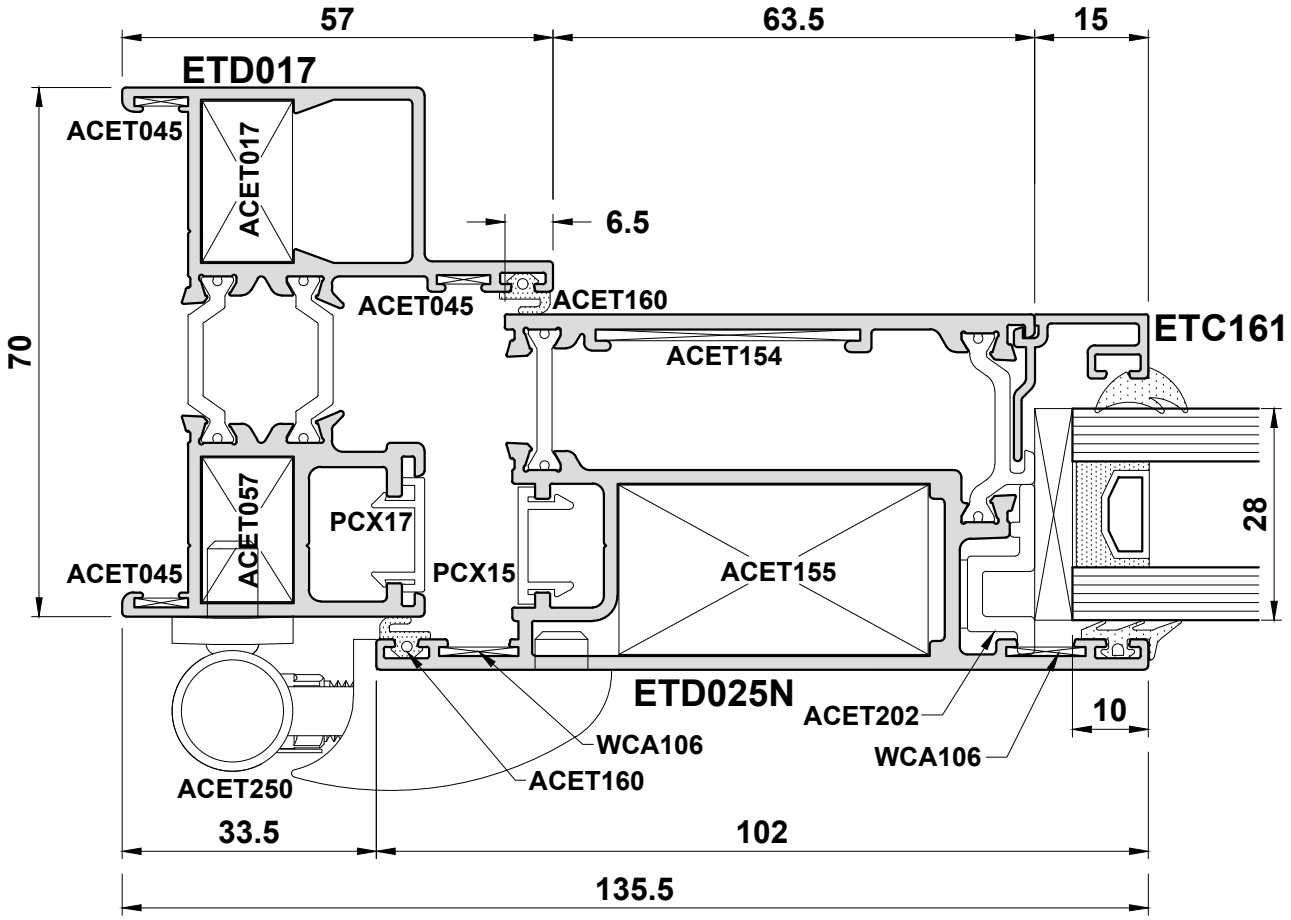
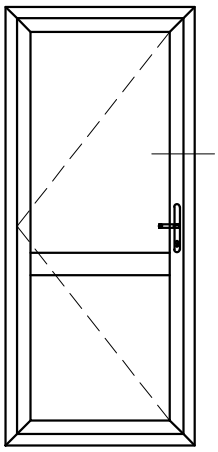
Detail 11c

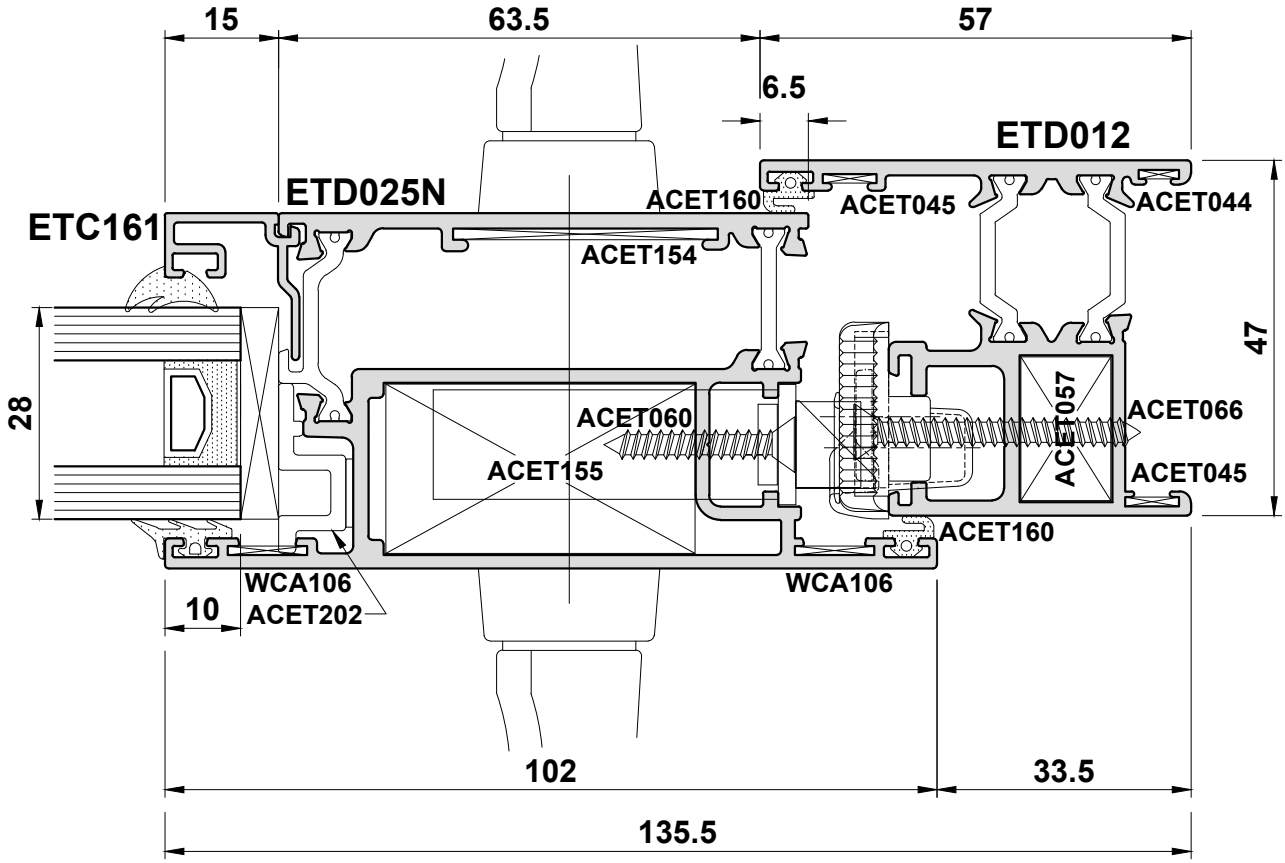




Do Not Scale From This Drawing

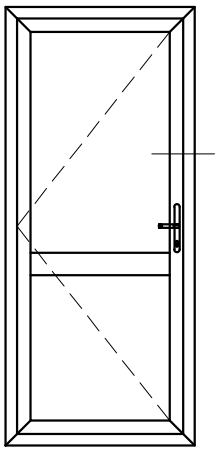
Detail 12a

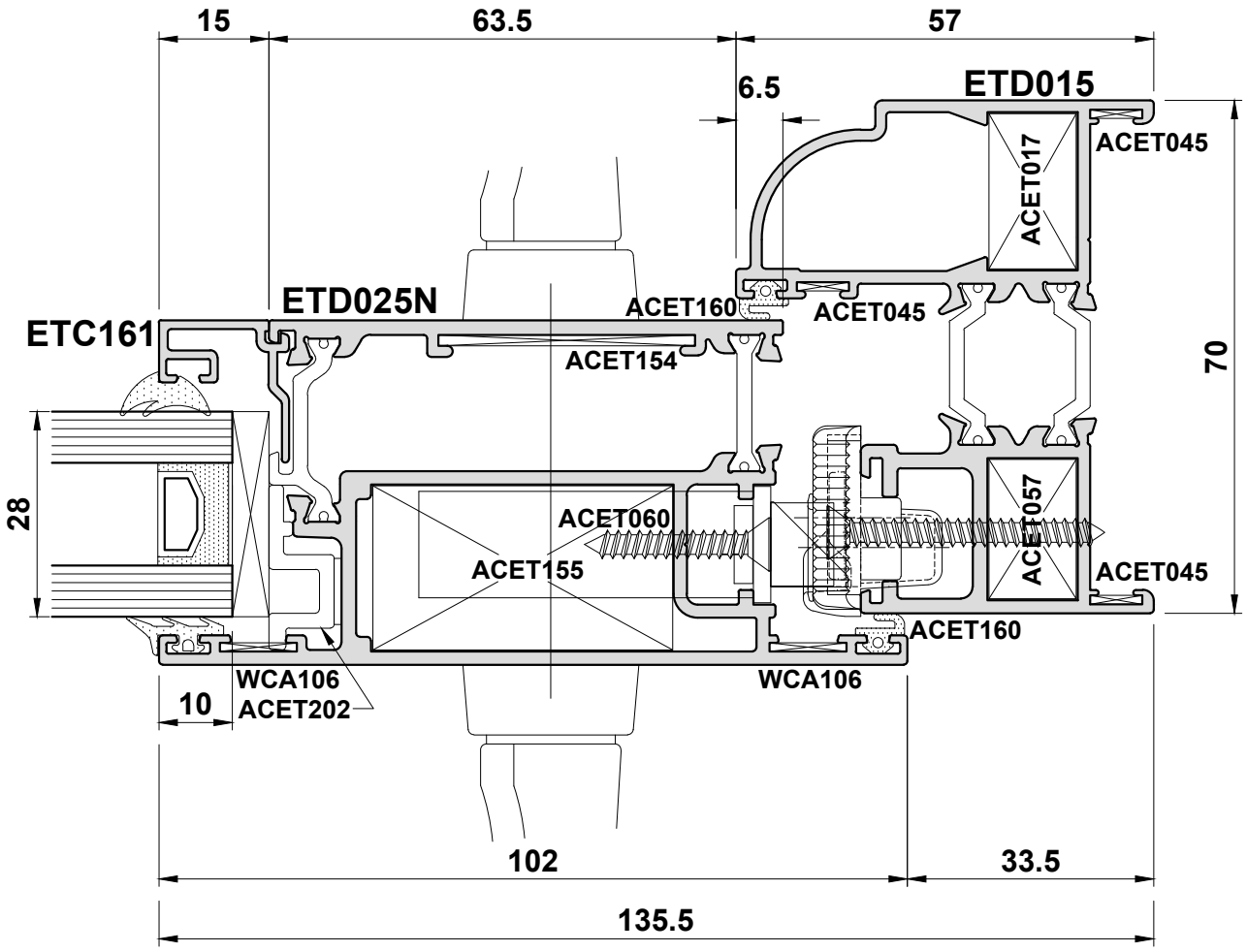




Do Not Scale From This Drawing

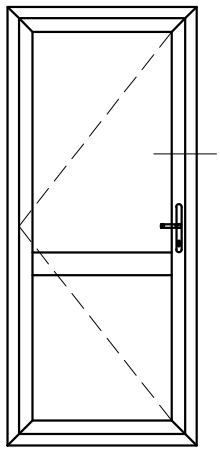
Detail 12b

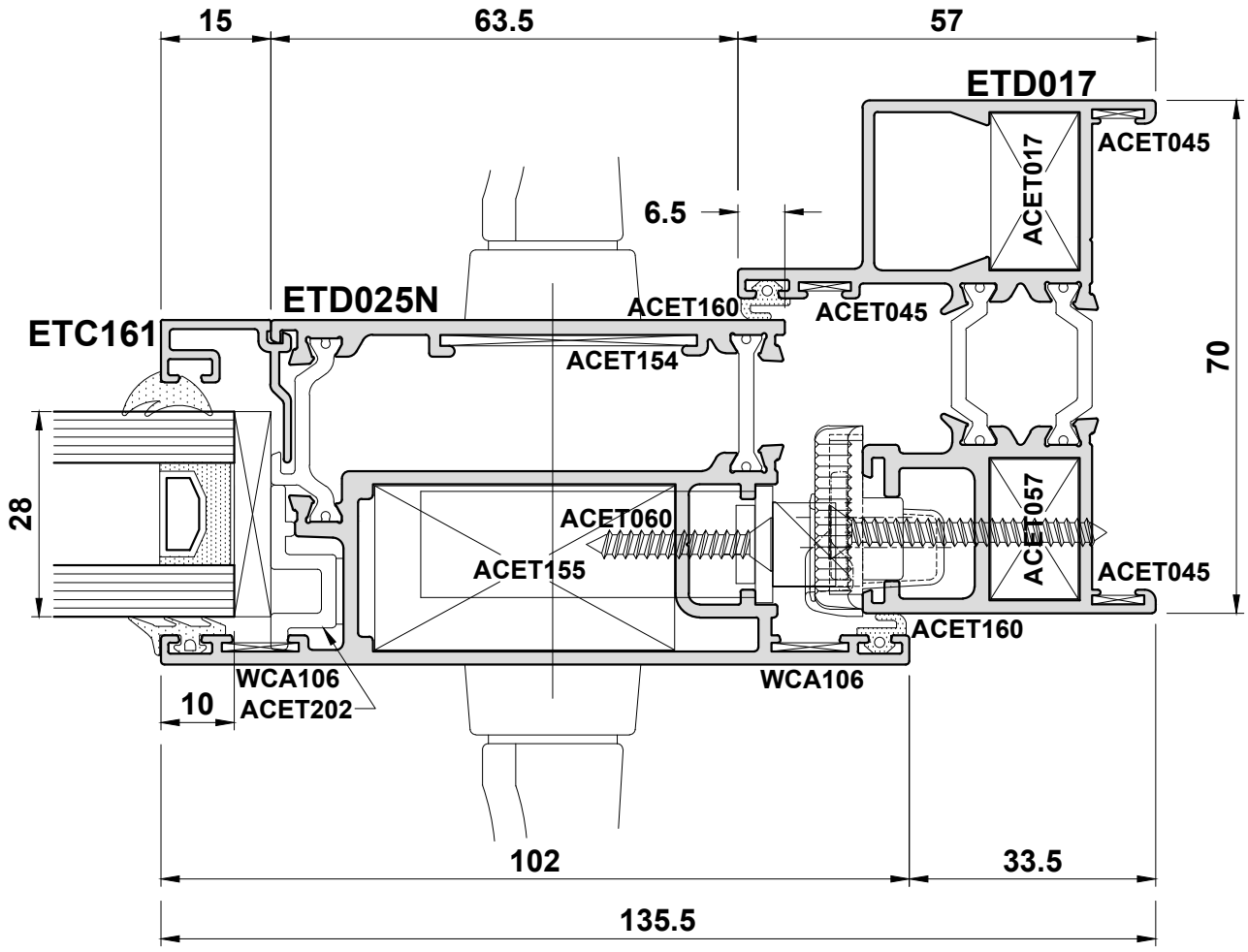




Do Not Scale From This Drawing

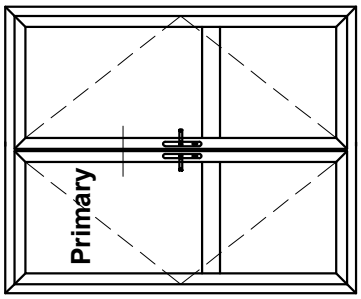
Detail 12c

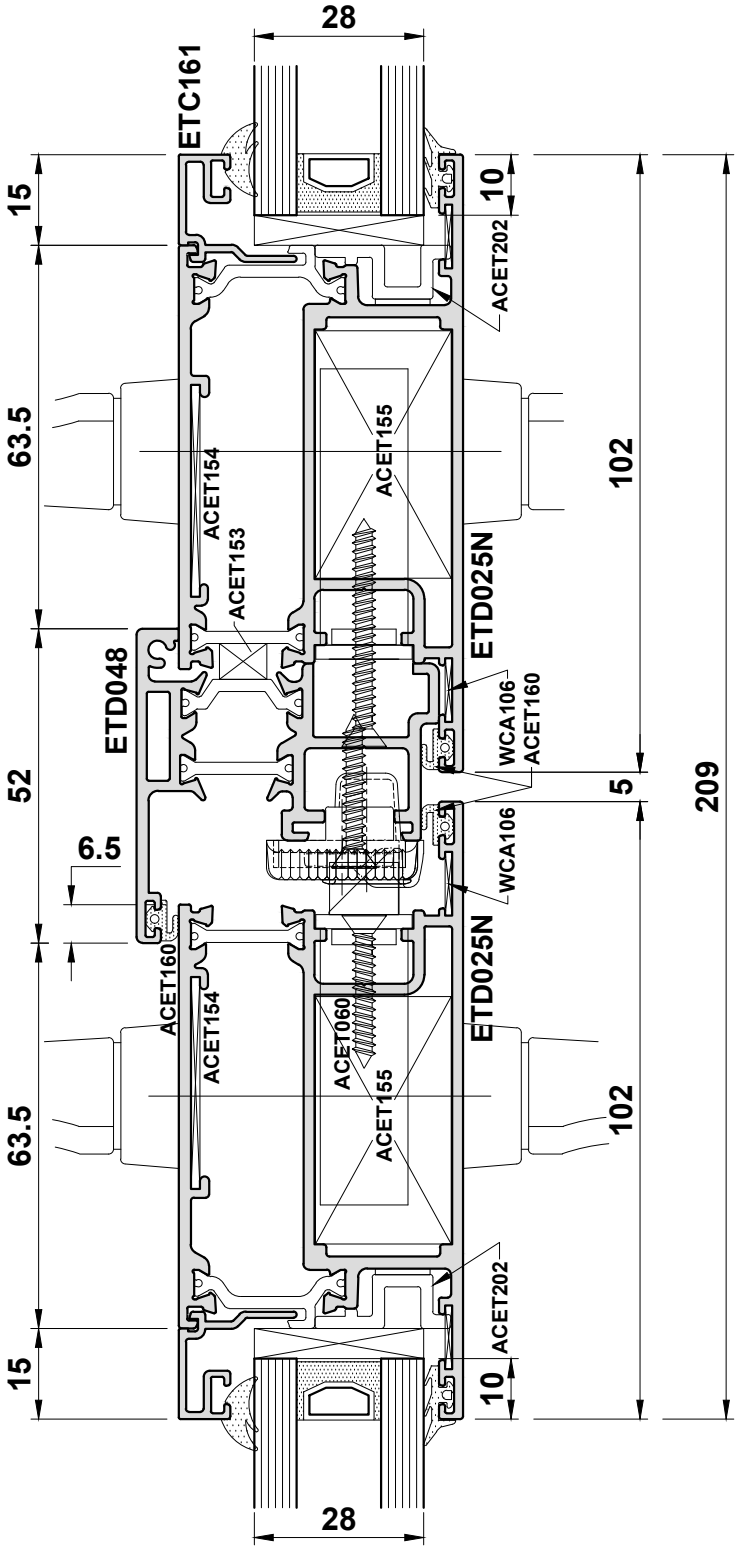




Do Not Scale From This Drawing

Detail 13

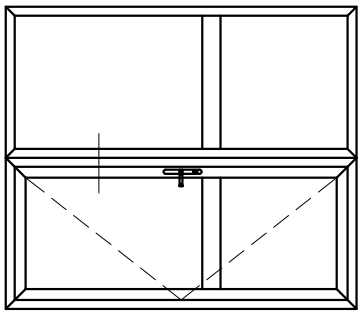


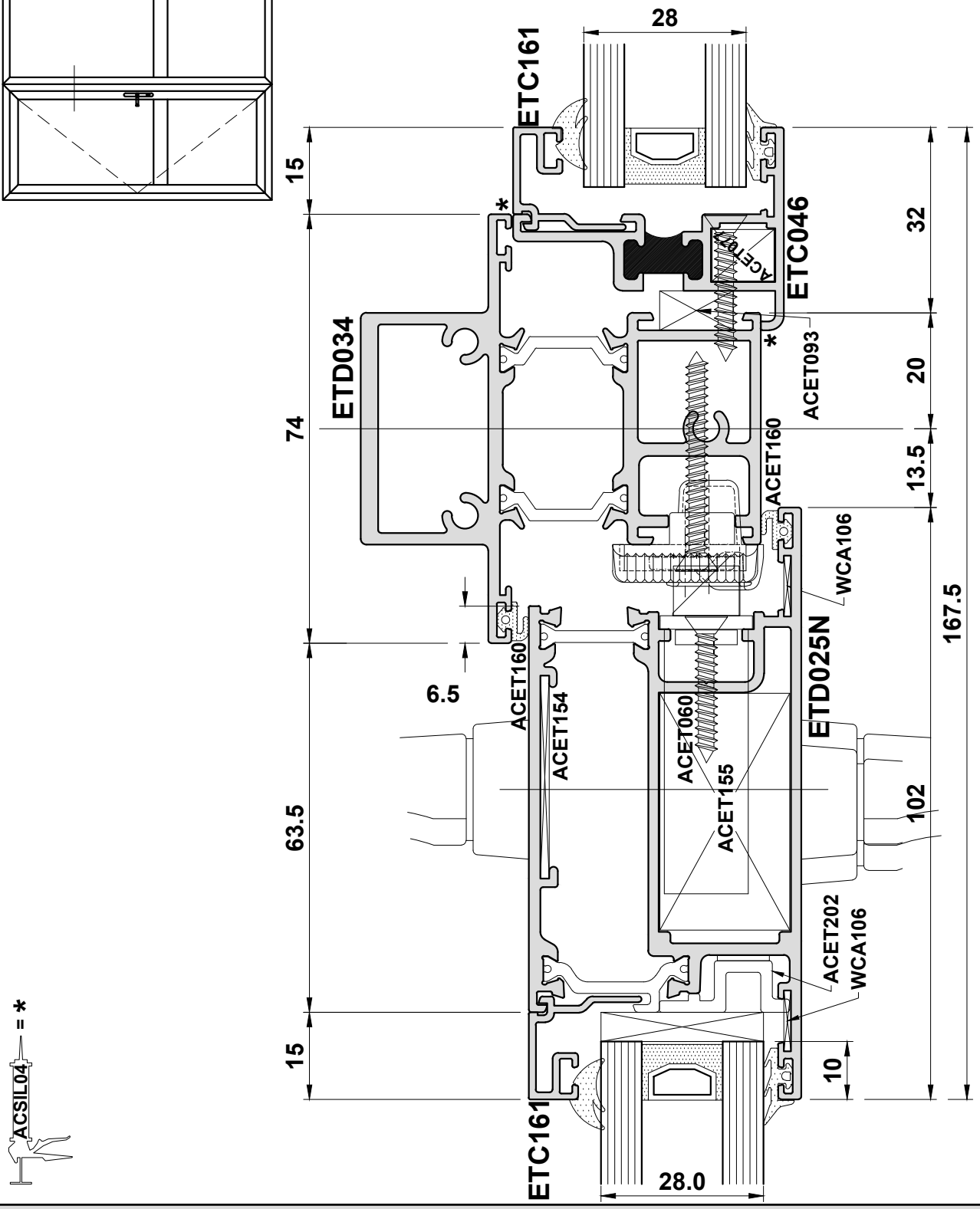


Scaled To Fit

Do Not Scale From This Drawing

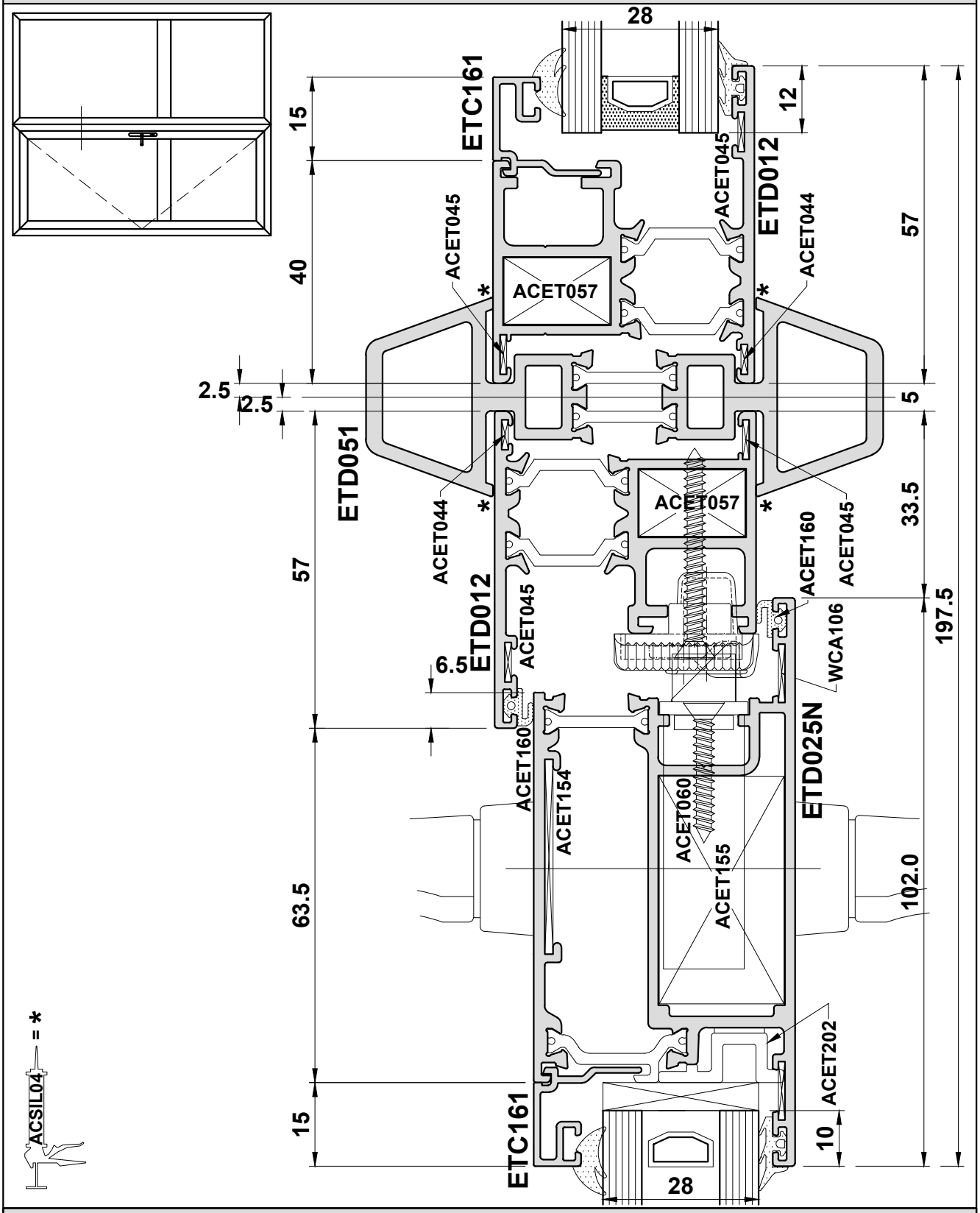
Detail 14a





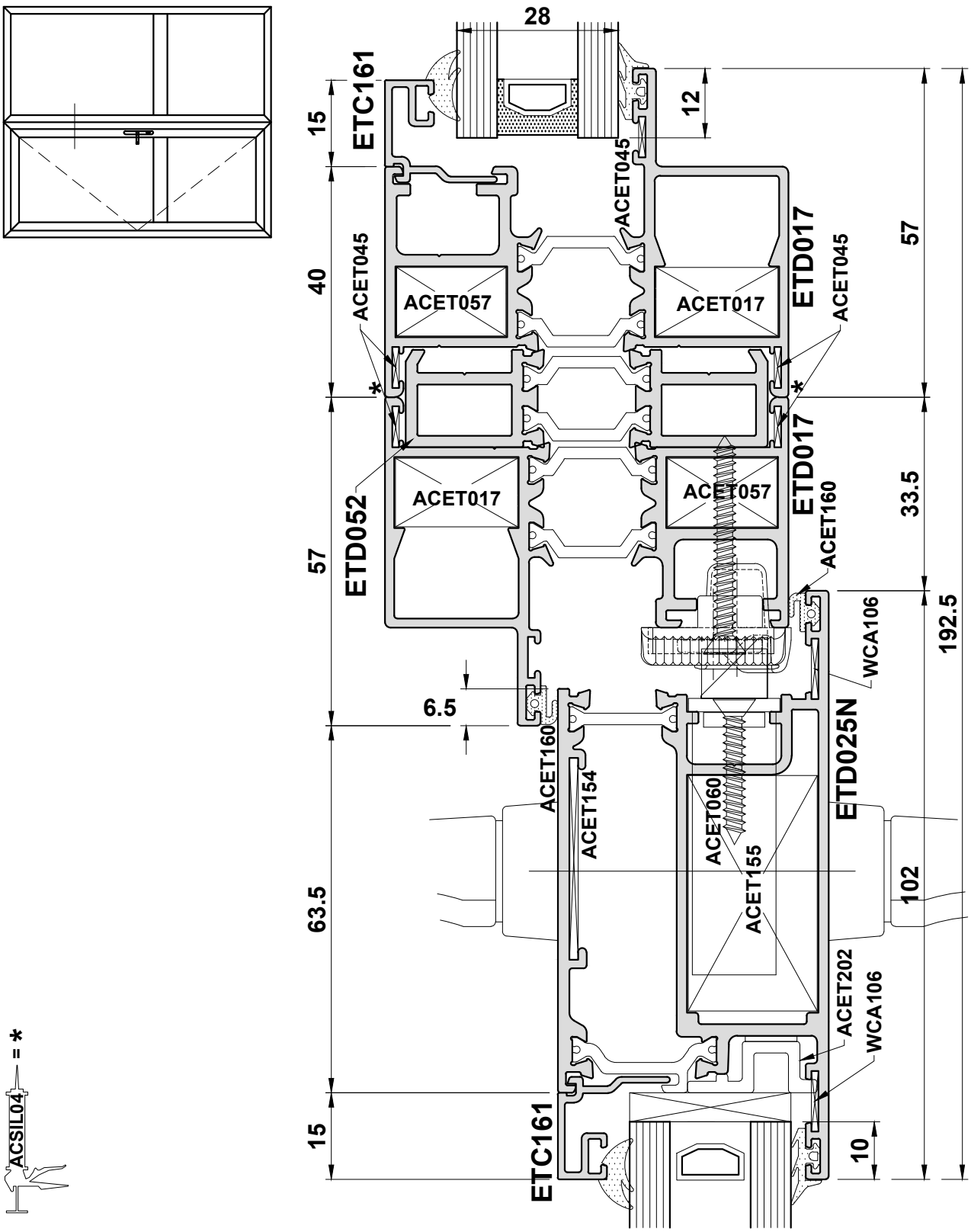
Do Not Scale From This Drawing

Detail 14b



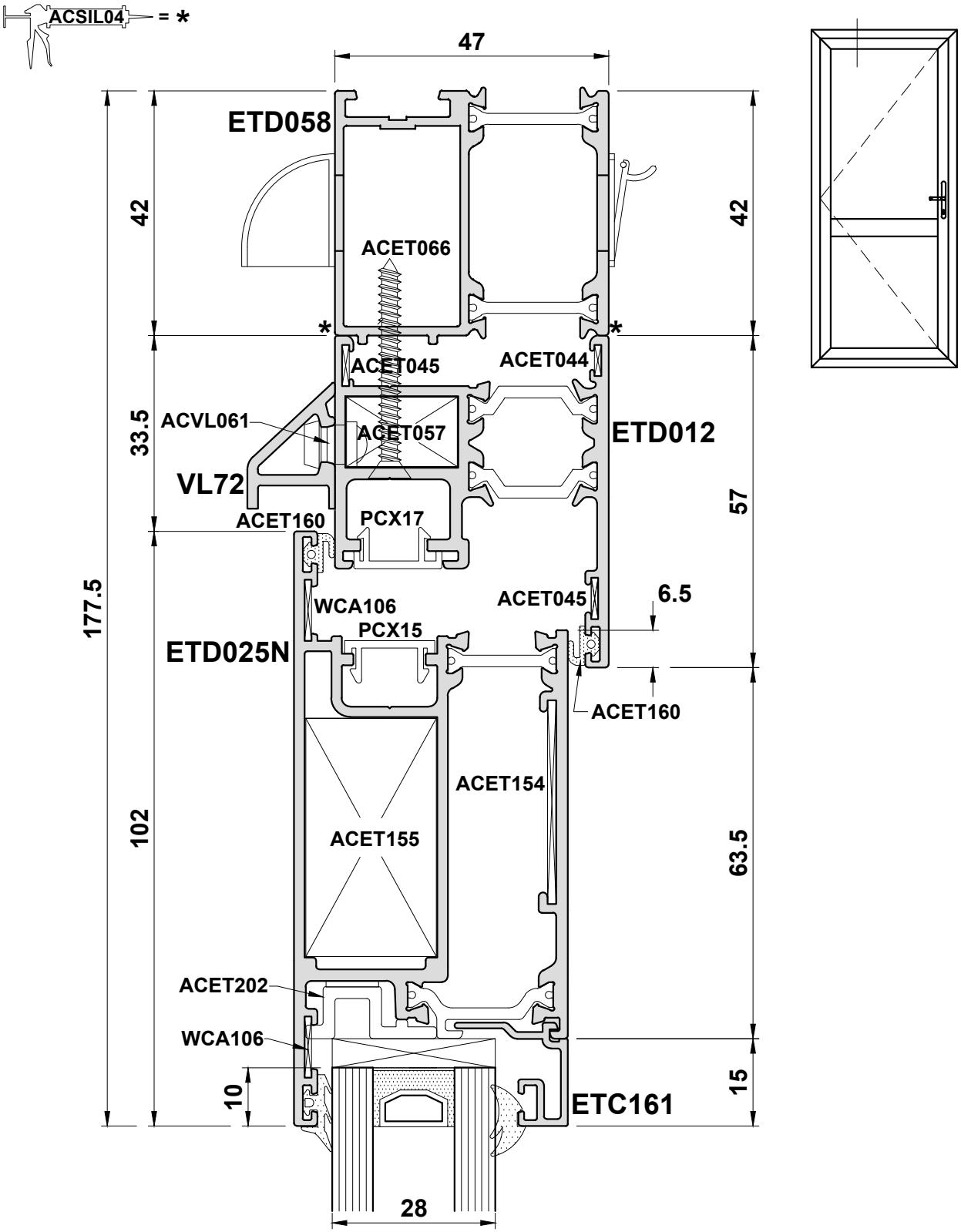
Do Not Scale From This Drawing

Detail 14c



Do Not Scale From This Drawing

Detail 15a



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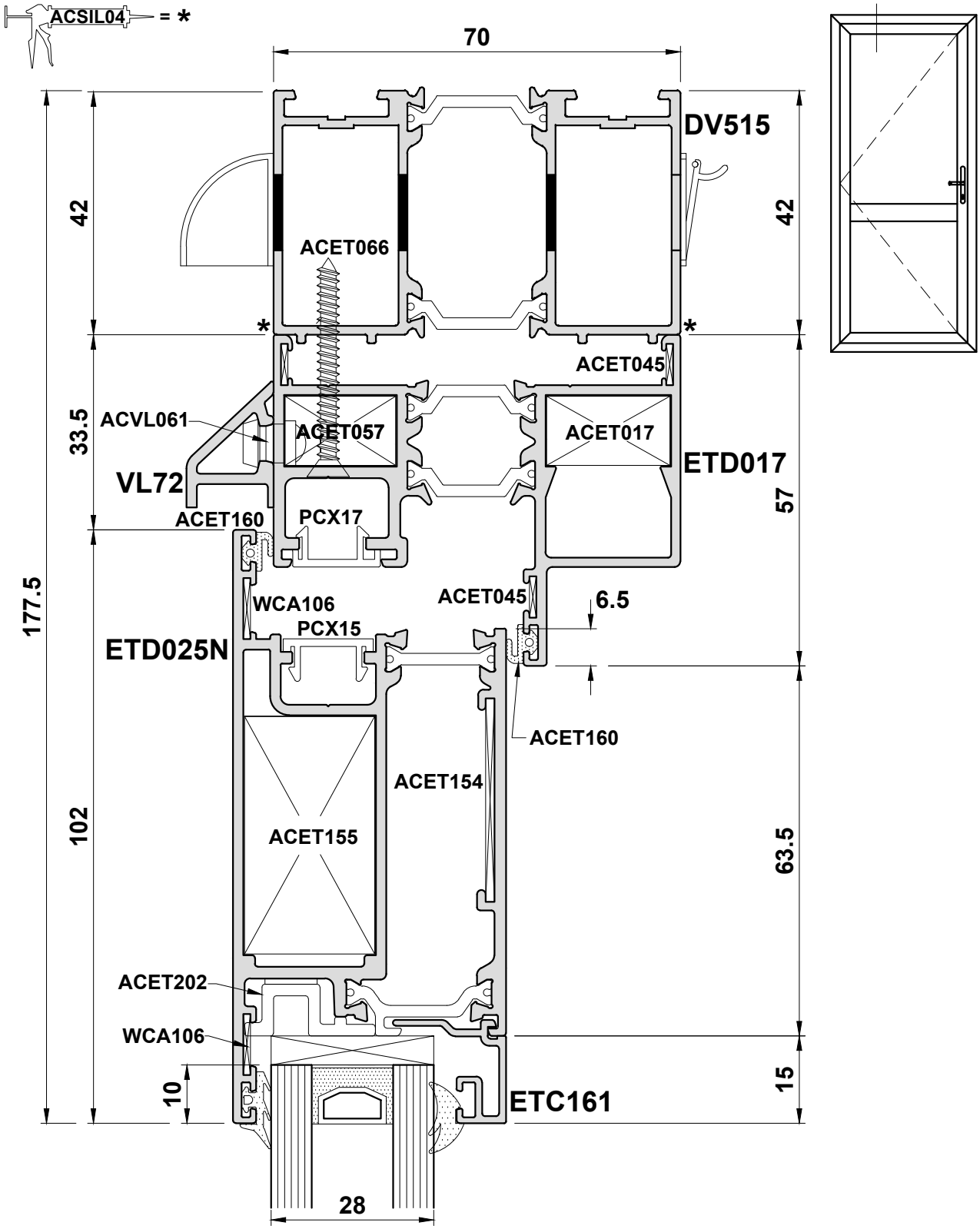
Detail 15b



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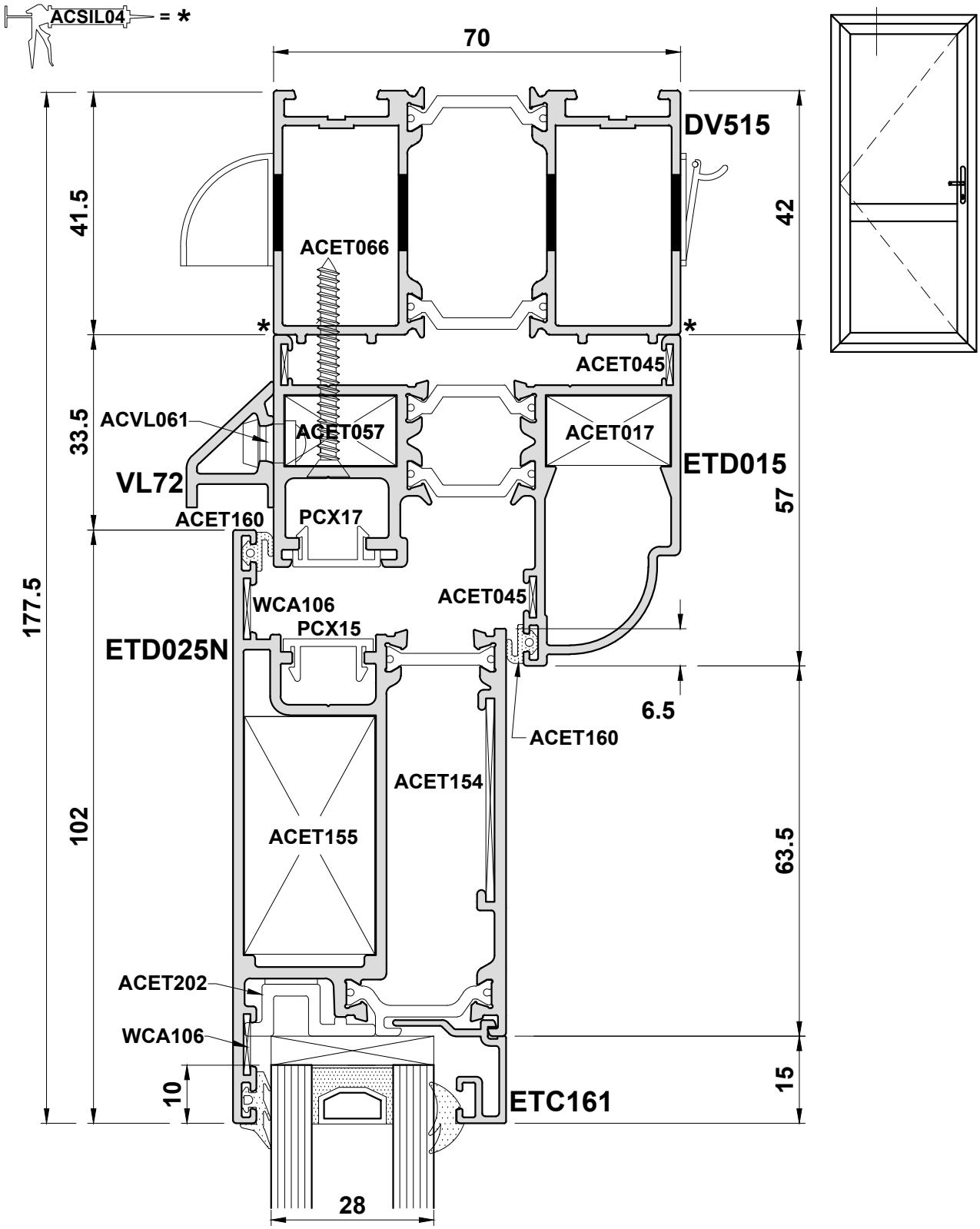
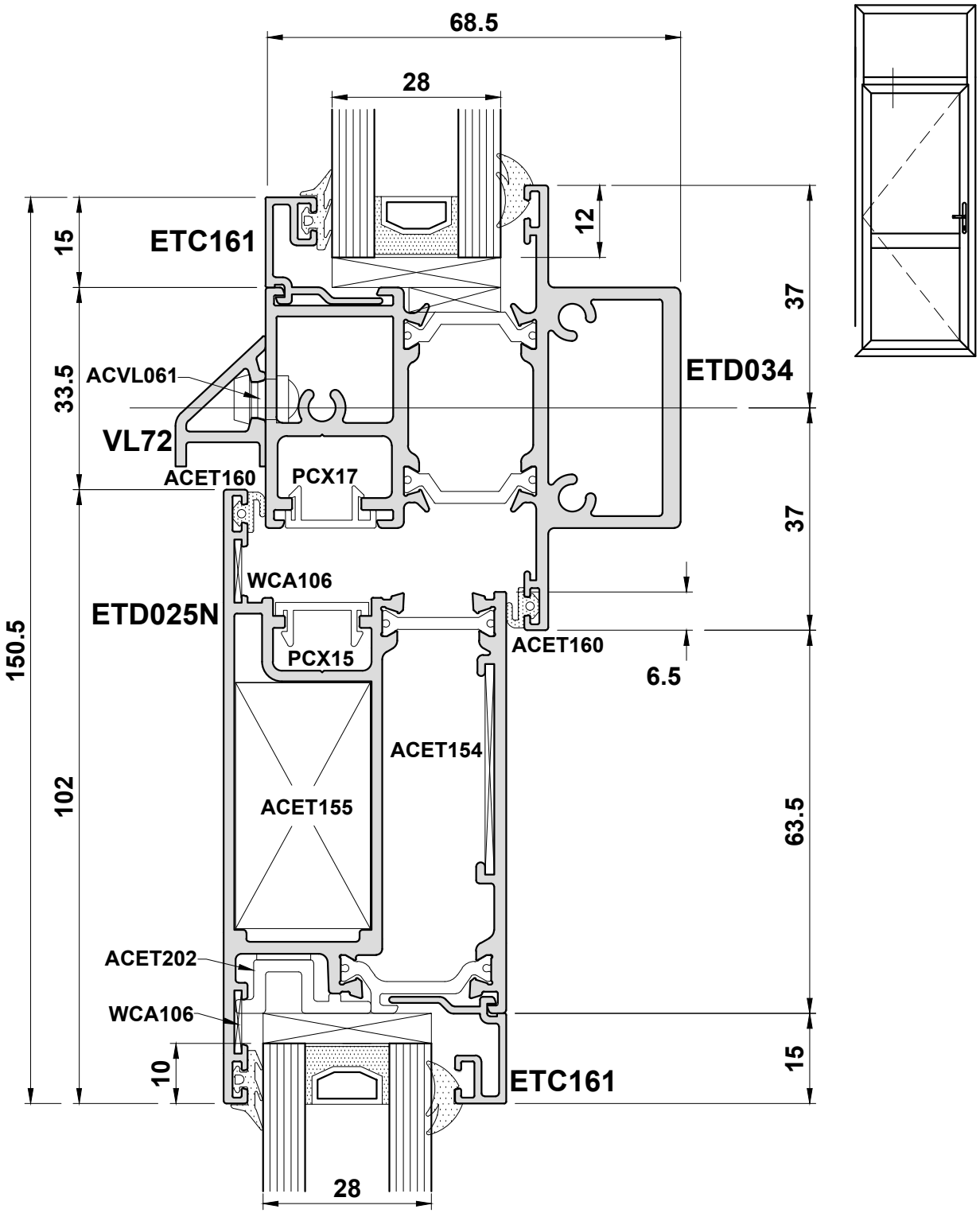
Detail 15c



Do Not Scale From This Drawing

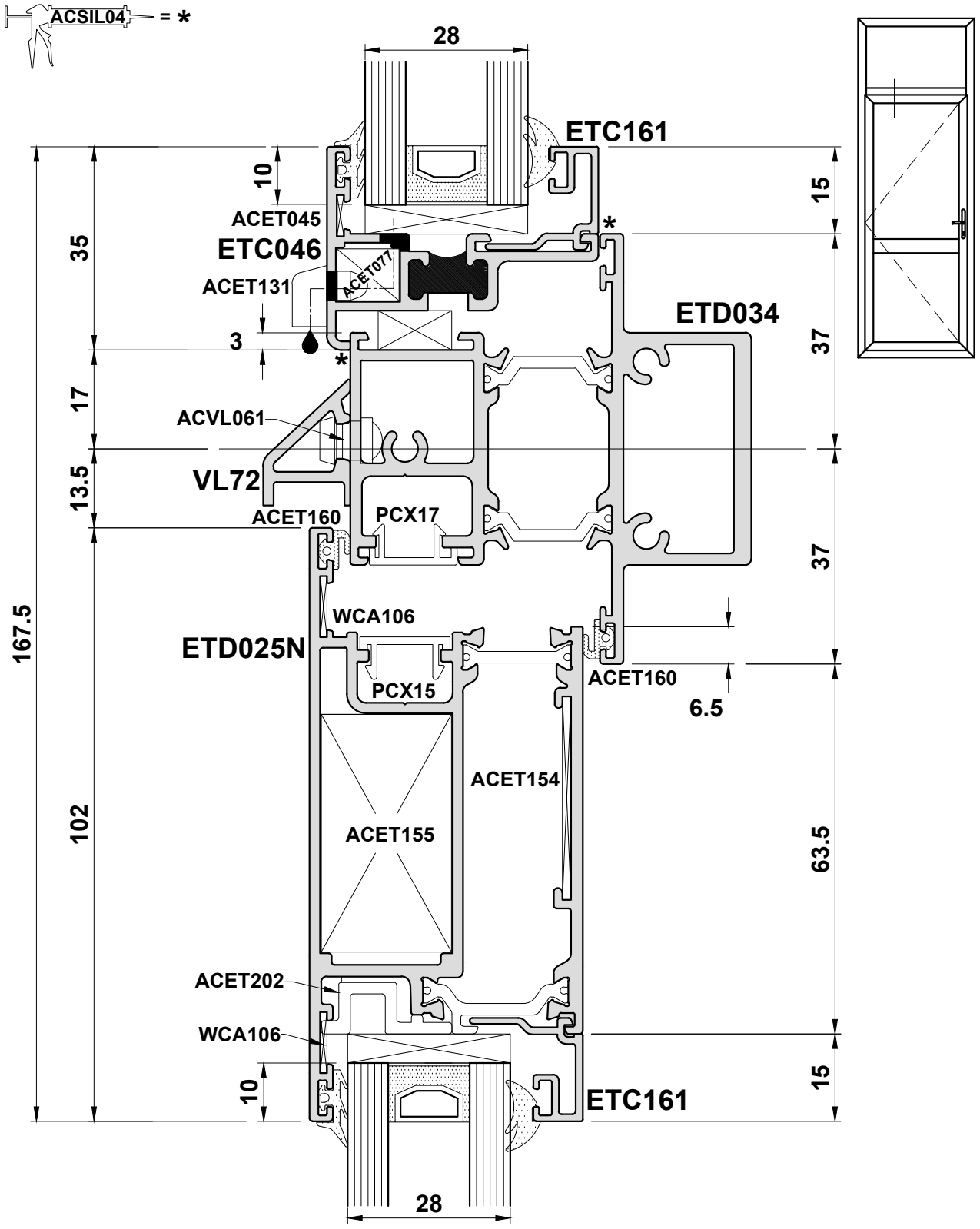
Detail 16a



Note: Midrail will drain through the join to the stiles.

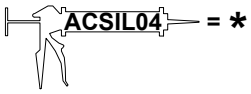
Do Not Scale From This Drawing

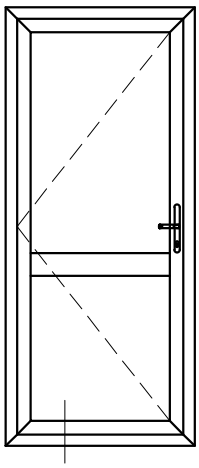
Detail 16b

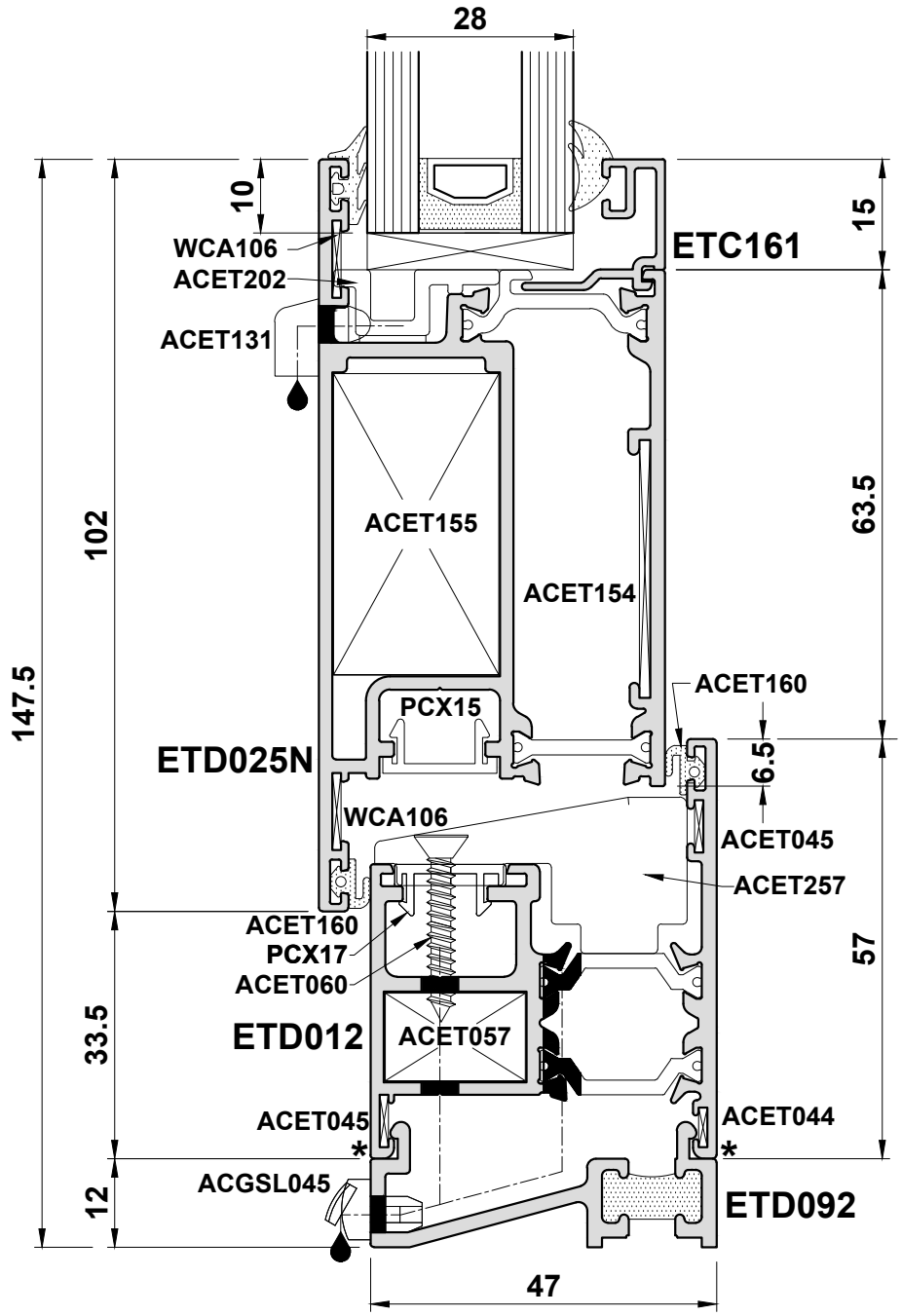


Do Not Scale From This Drawing

Detail 17a

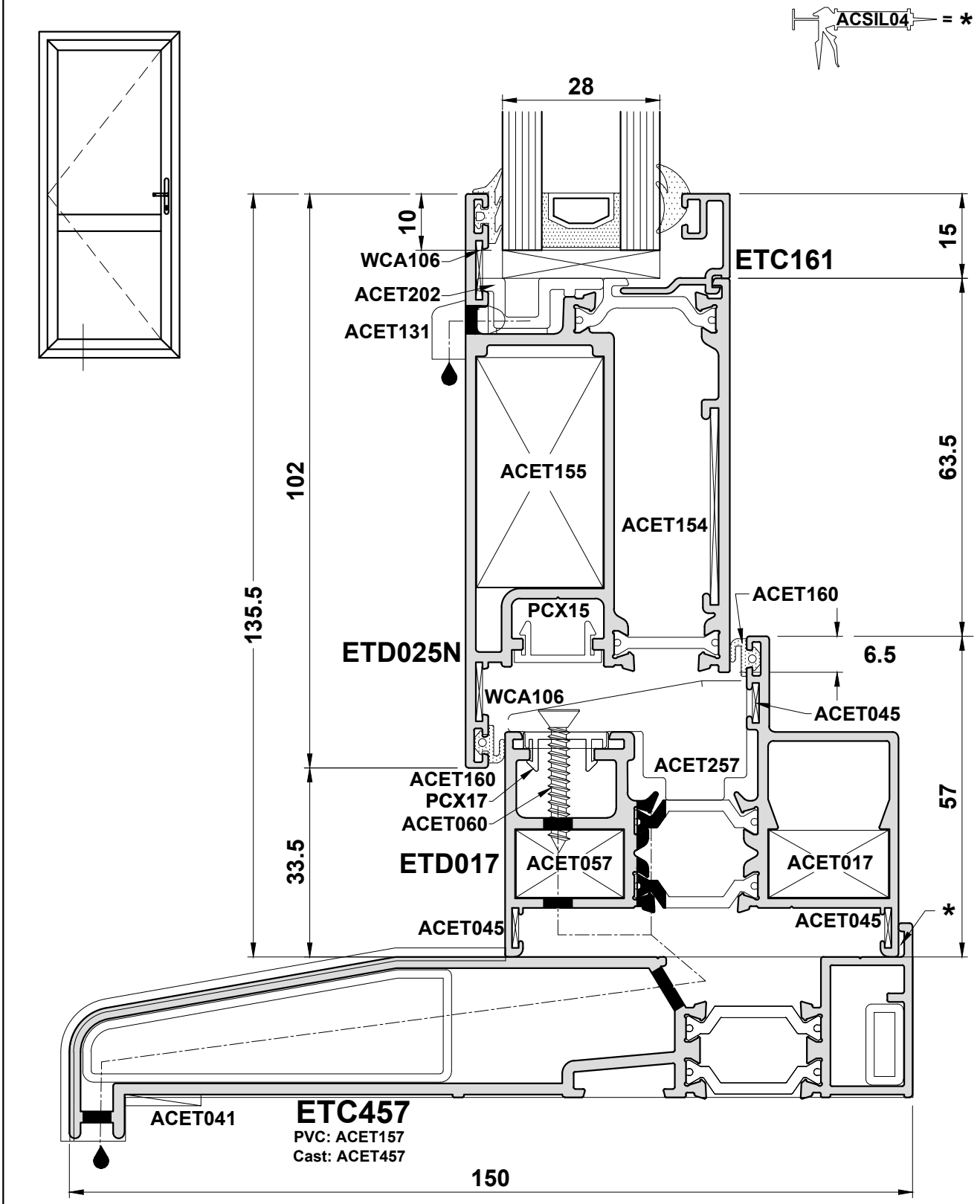






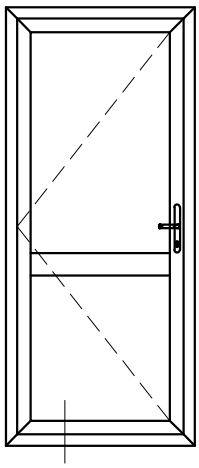
Do Not Scale From This Drawing

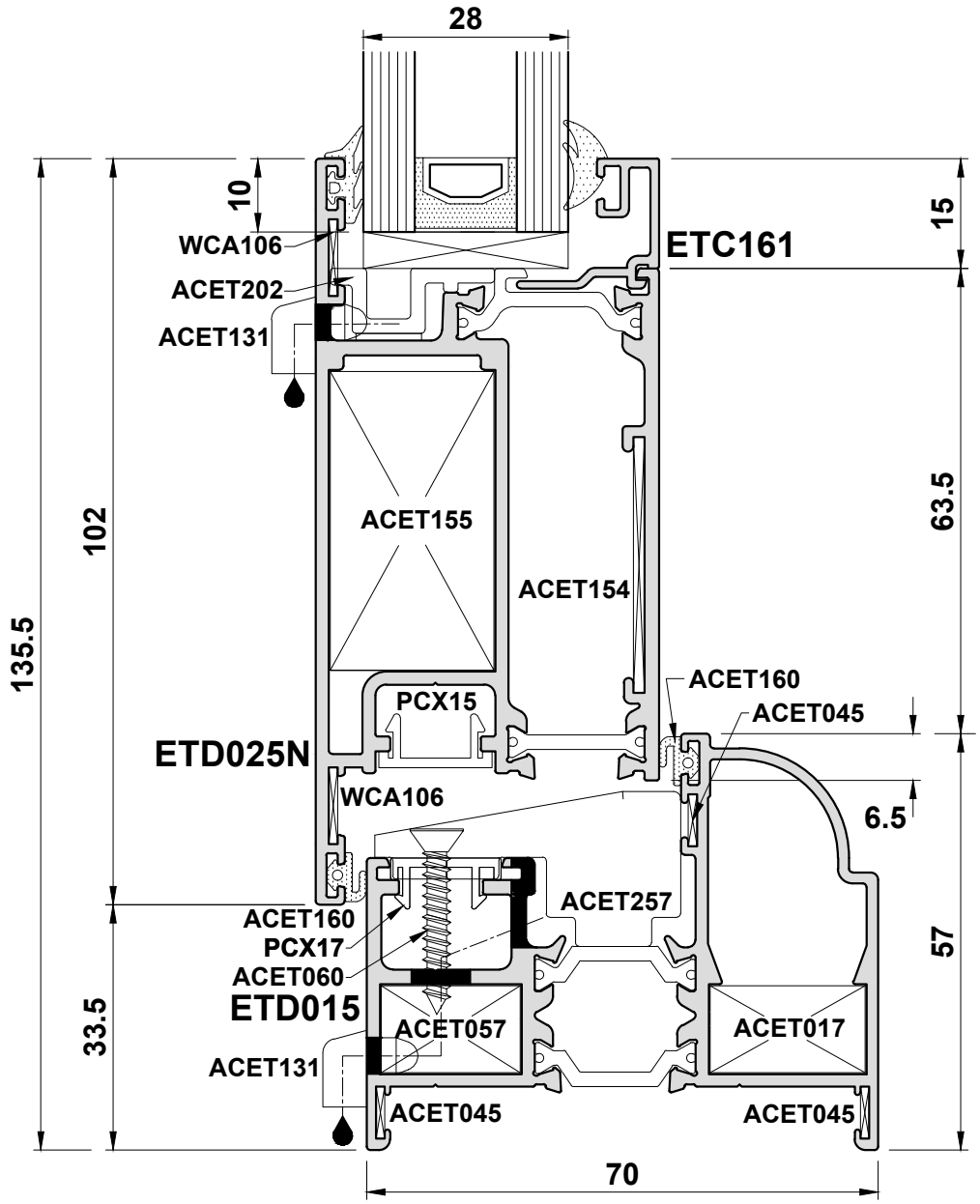
Detail 17b



Do Not Scale From This Drawing

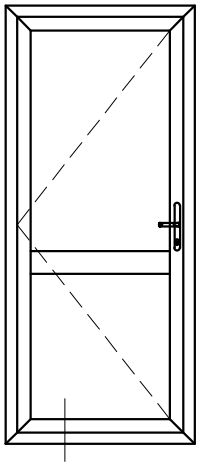
Detail 17c

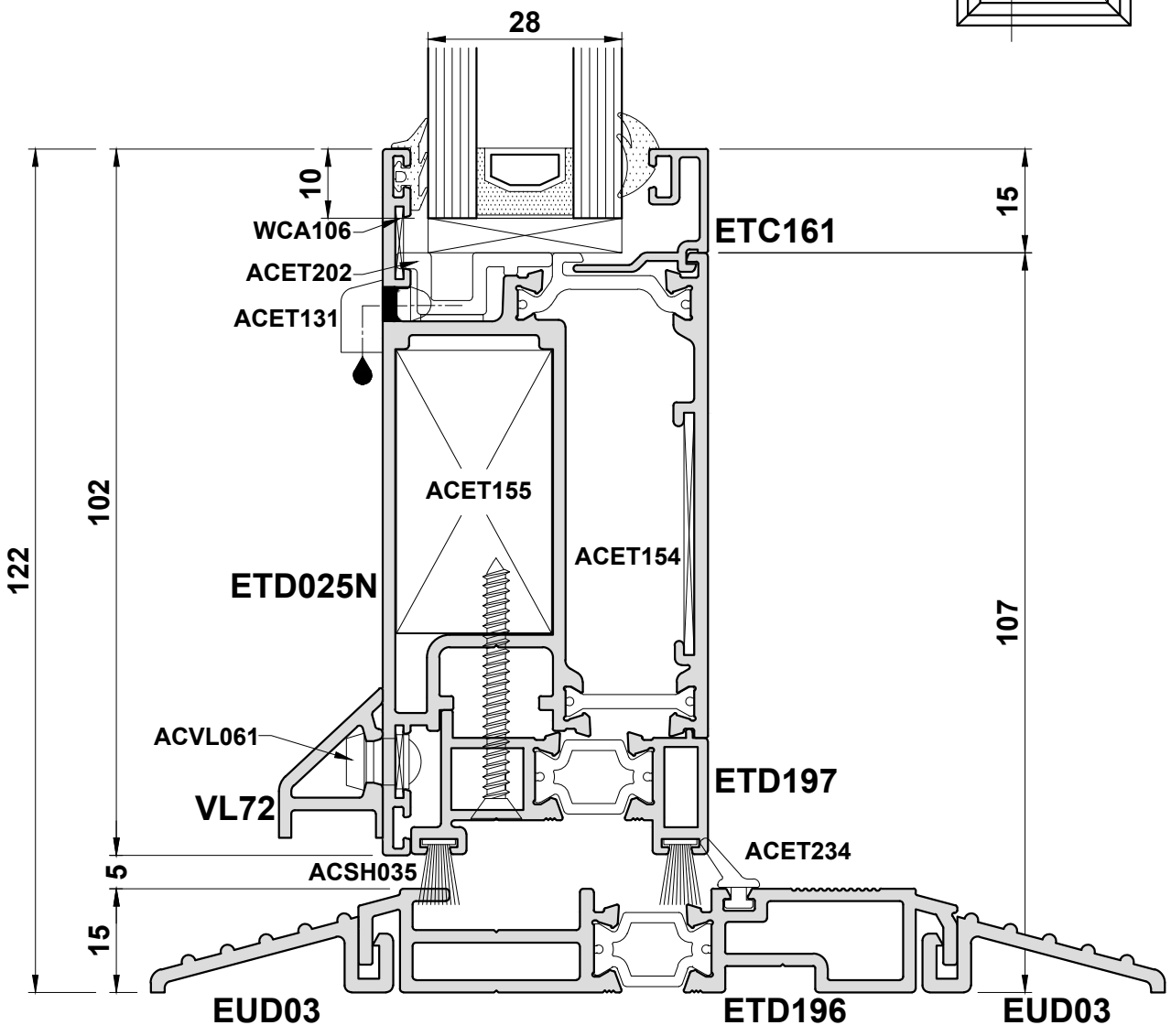




Do Not Scale From This Drawing

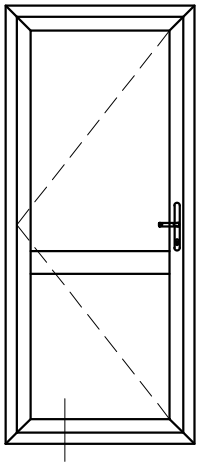
Detail 17d

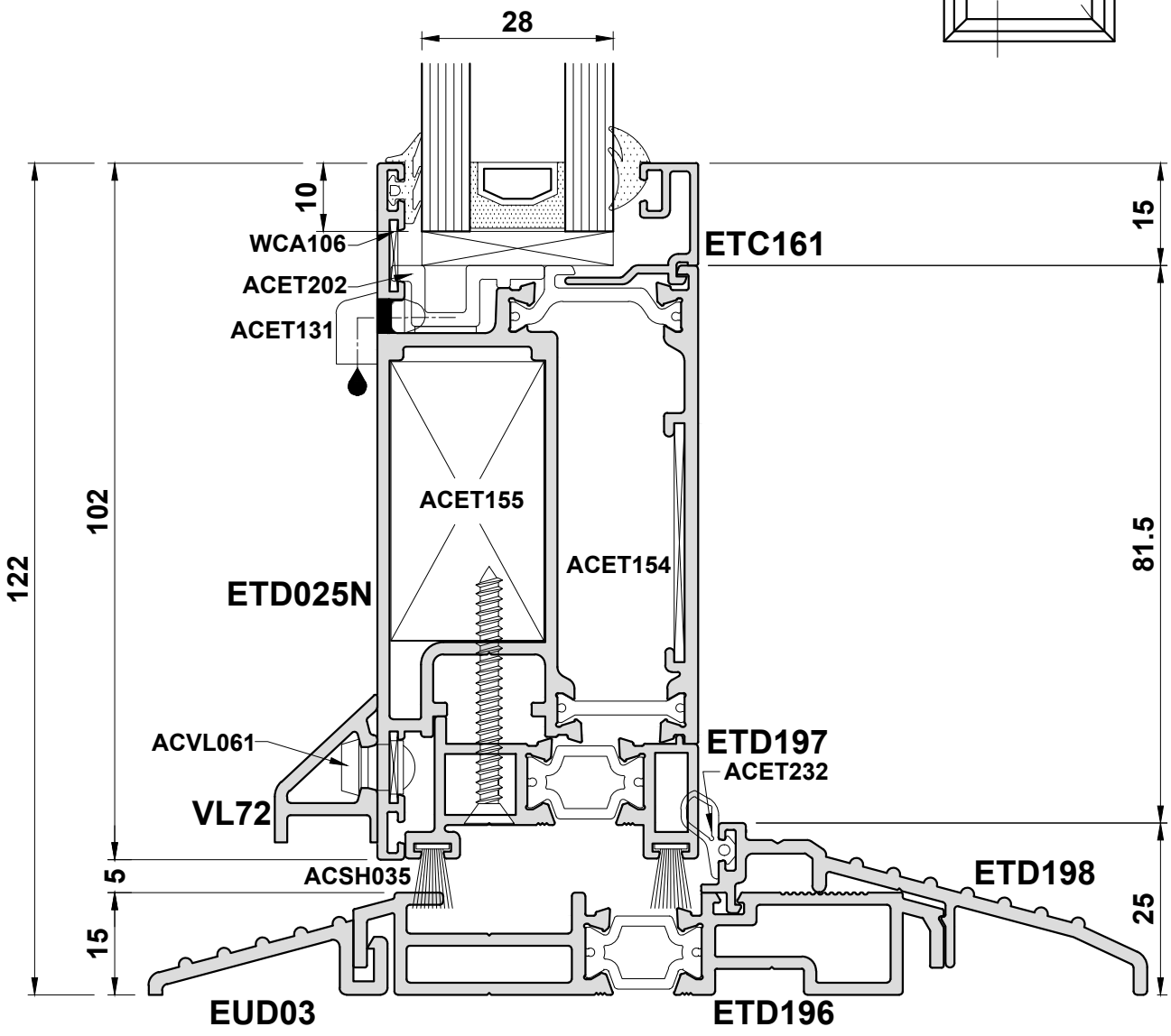




Do Not Scale From This Drawing

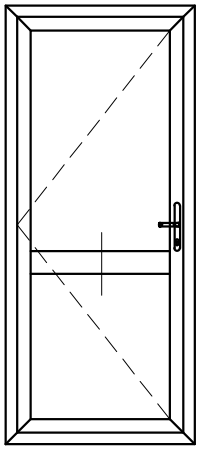
Detail 17e

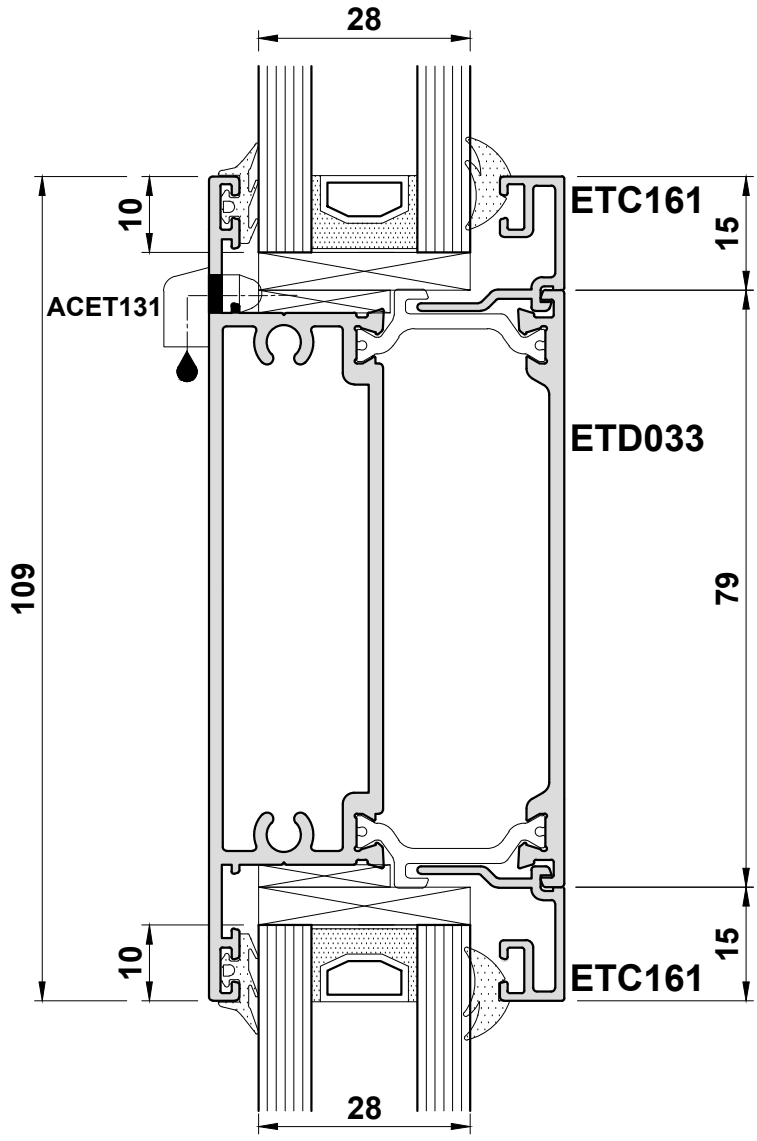




Do Not Scale From This Drawing

Detail 18

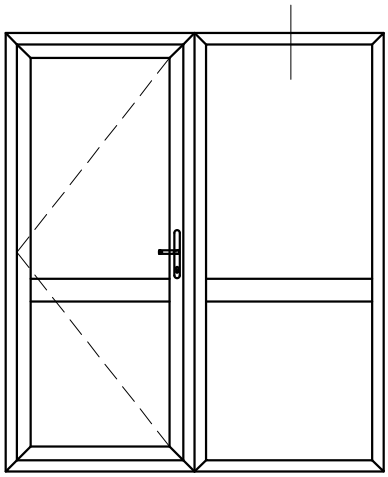


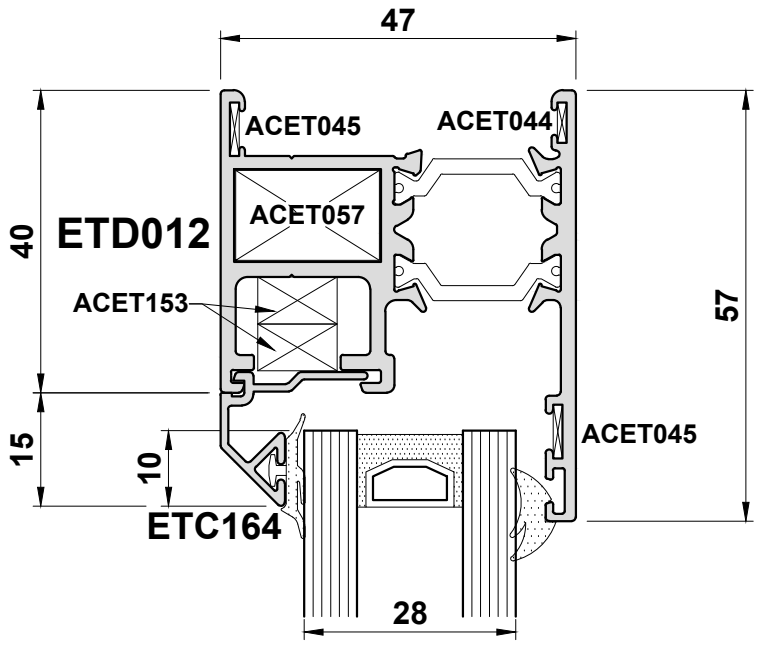


Note: Midrail will drain through the join to the stiles.

Do Not Scale From This Drawing

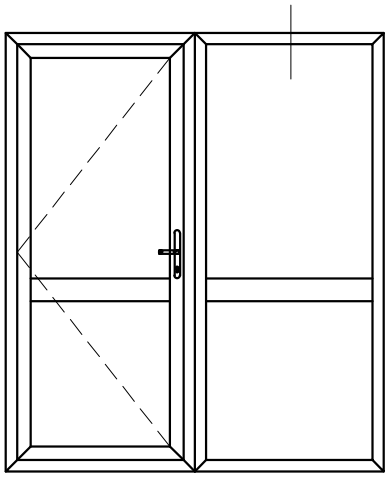
Detail 19a

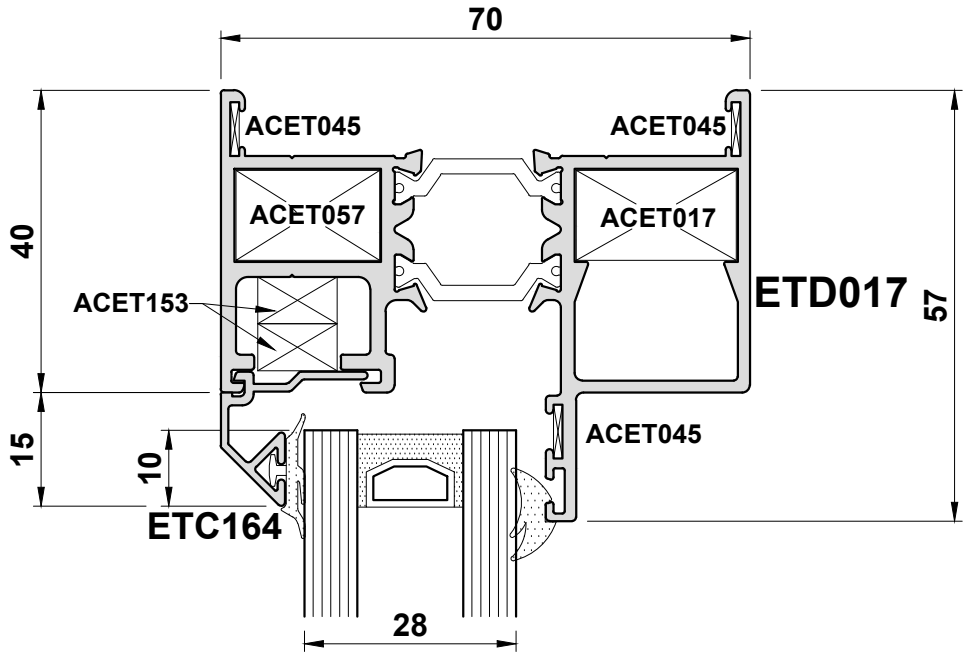




Do Not Scale From This Drawing

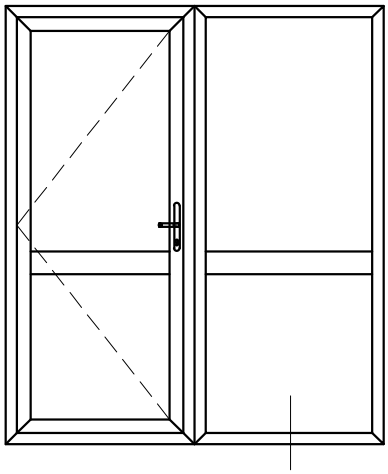
Detail 19b

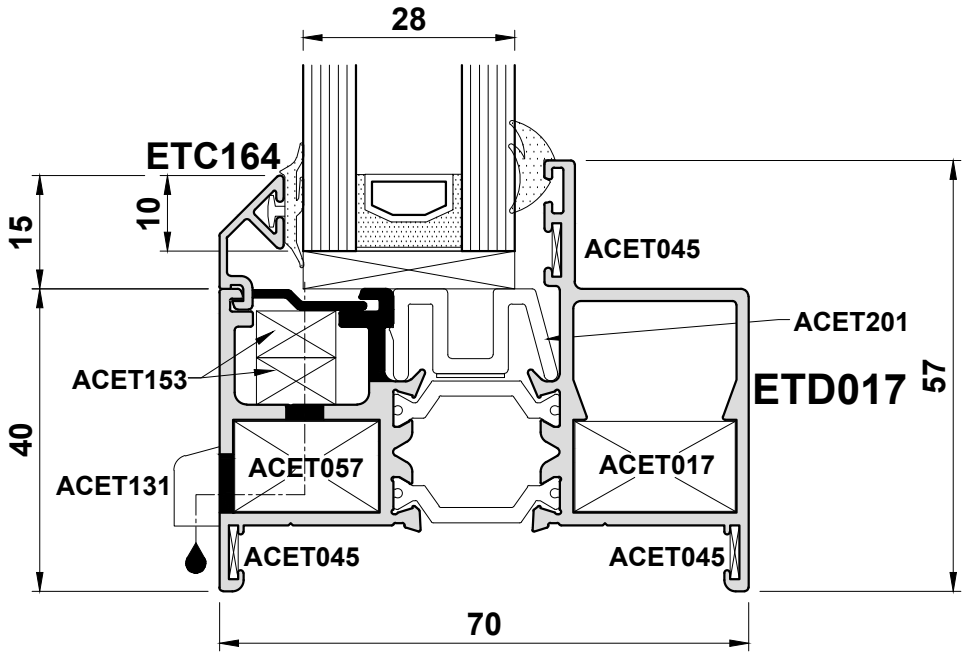




Do Not Scale From This Drawing

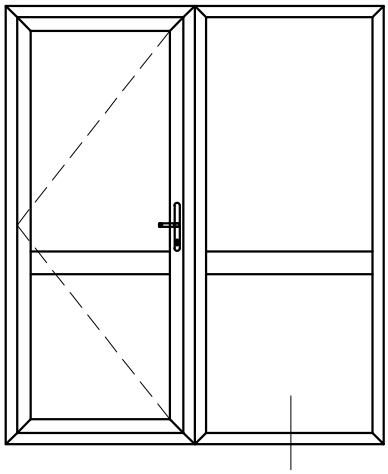
Detail 20a

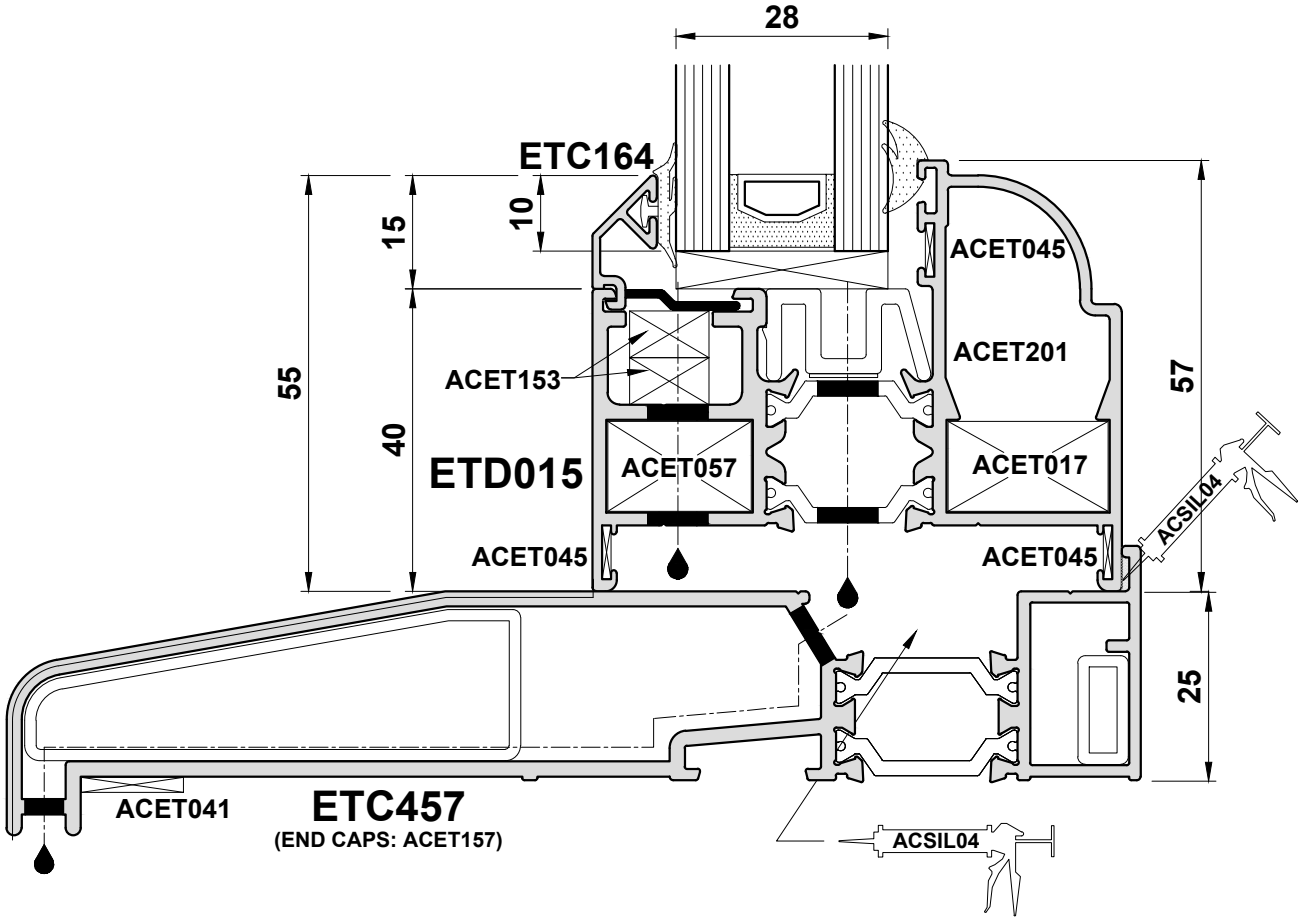




Do Not Scale From This Drawing

Detail 20b





Do Not Scale From This Drawing

Section D

Statics

Open Out & In

General Size Limitations are shown on Page A05.

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

Section E

E ETD **Construction Drawings - Open In**

Corner Joint Details..... E03 - E06
Drainage..... E07 - E08
Mullion & Mid Rail..... E09 - E11
Hinges..... E12 - E13
Lock Selection & Installation..... E14 - E20
ETD048 & ETD197 Preparation & End Caps..... E21
Letter Plate..... E22
Glazing Details..... E23
ACET149..... E24
Example Layout..... E25
PAS24:2016 Accessories & Position..... E26 & E27

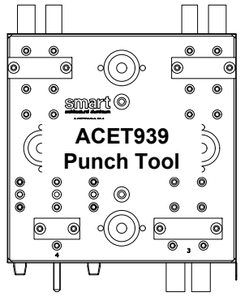
E ETD **Construction Drawings - Open Out**

Corner Joint Details..... E31 - E34
Drainage..... E35 - E36
Mullion & Mid Rail..... E37 - E39
Hinges..... E40 - E41
Lock Selection & Installation..... E42 - E46
ETD048 & ETD197 Preparation & End Caps..... E47
Letter Plate..... E48
Glazing Details..... E49
ACET149..... E50
Example Layout..... E51
PAS24:2016 Accessories & Position..... E52 & E53
Fixing Strap Guide..... E54

Corner Joint Details

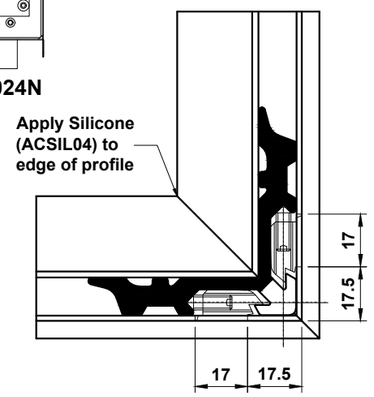
ETD012
ETD017

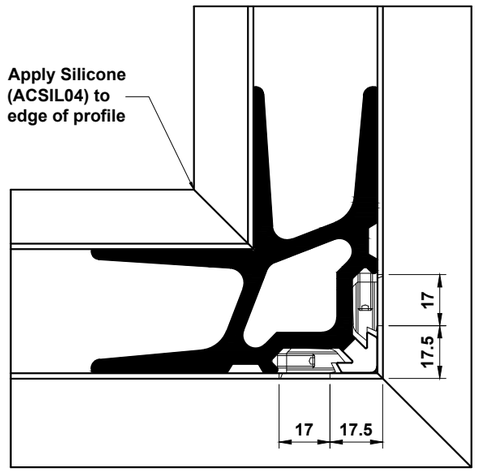
ETD017

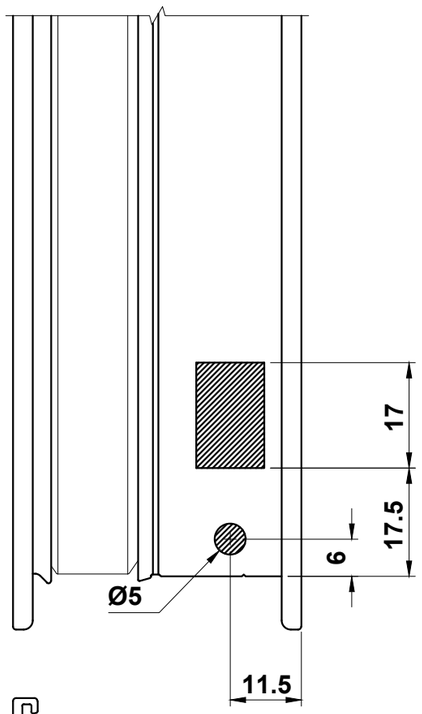


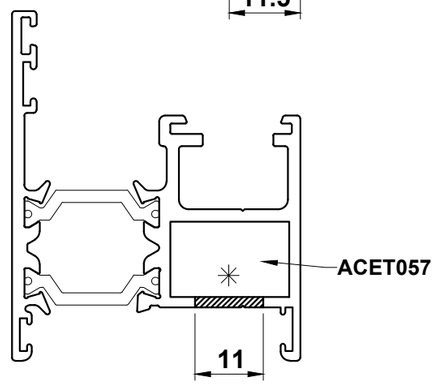
ETD015

ETD024N

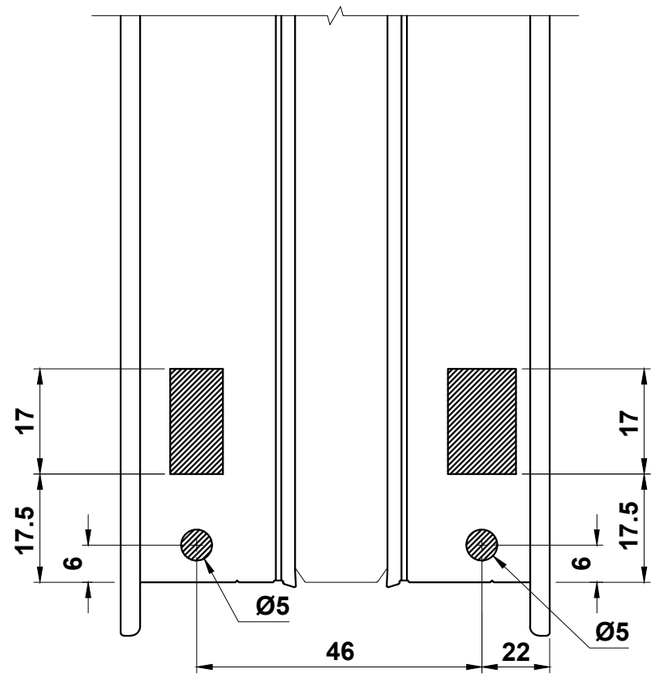


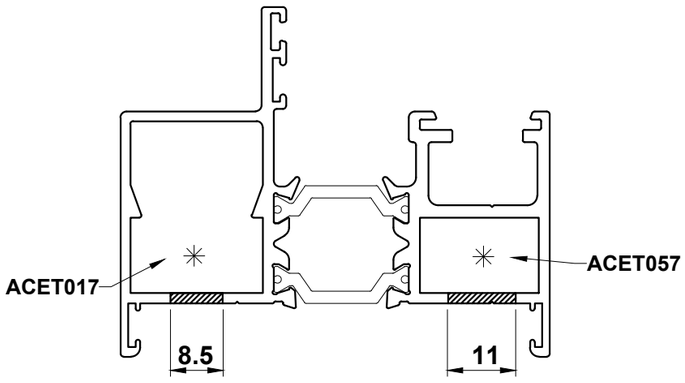






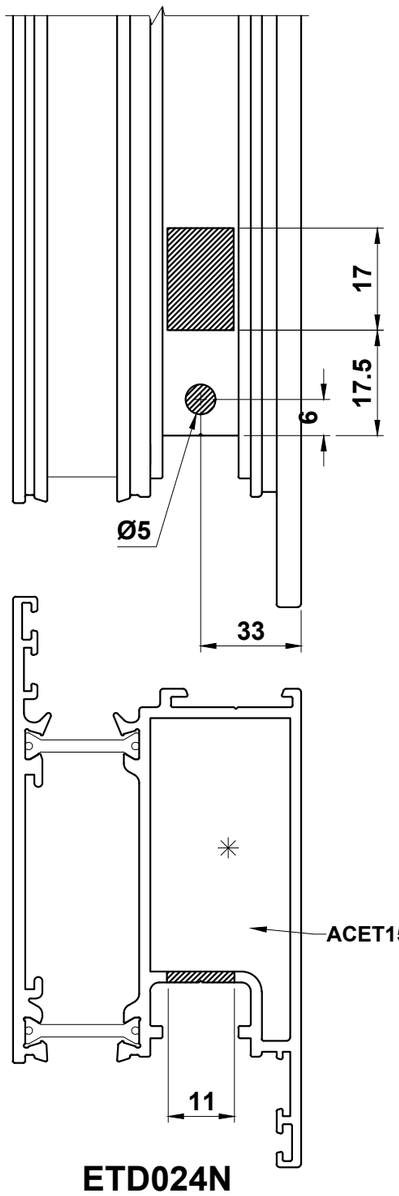
ETD012
47mm Outframe





ETD015
70mm Ovolo Outframe

ETD017
70mm Square Outframe

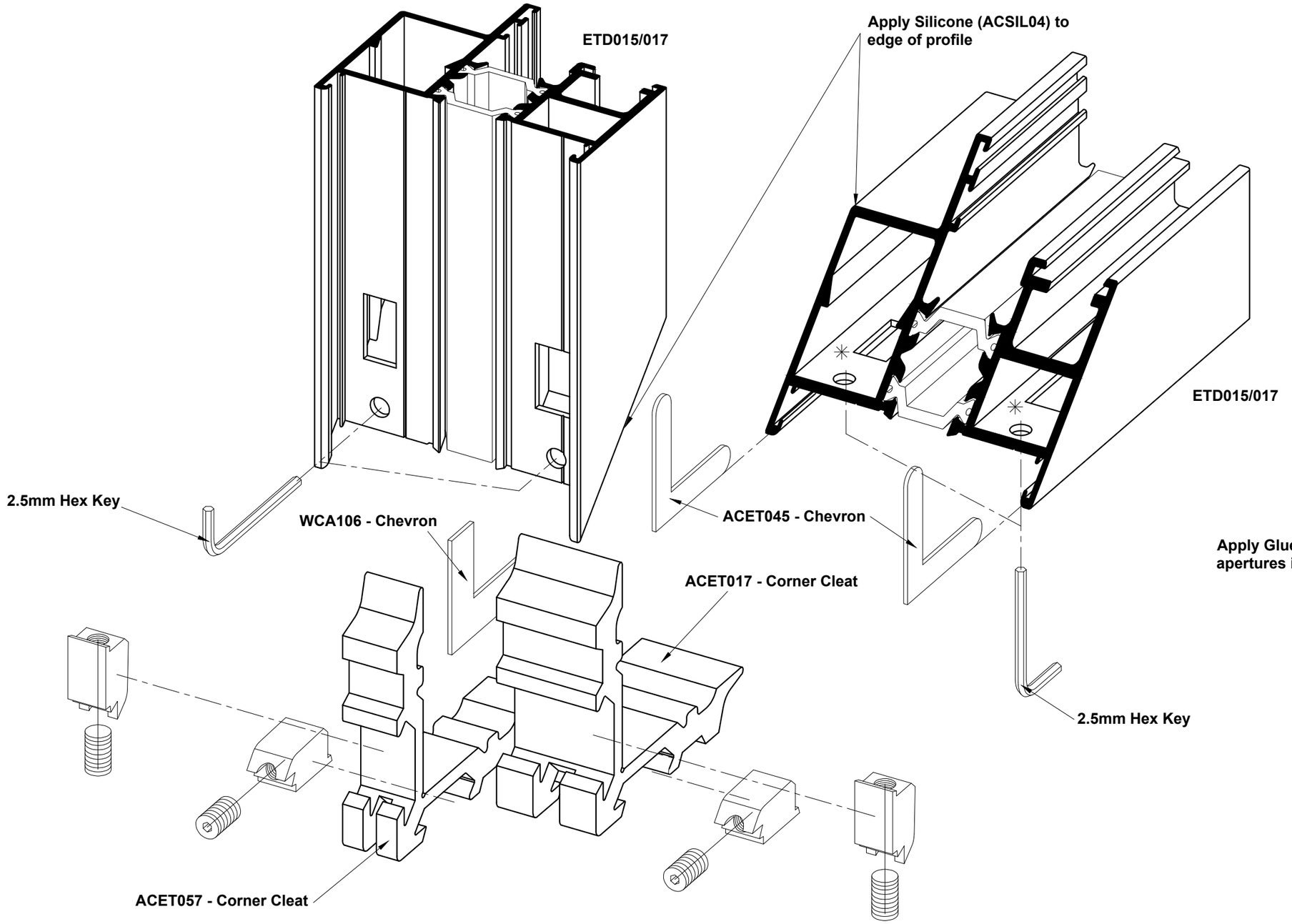


ETD024N
Open In Sash

Apply Glue (ACSIL013) to cleat aperture marked : ✳

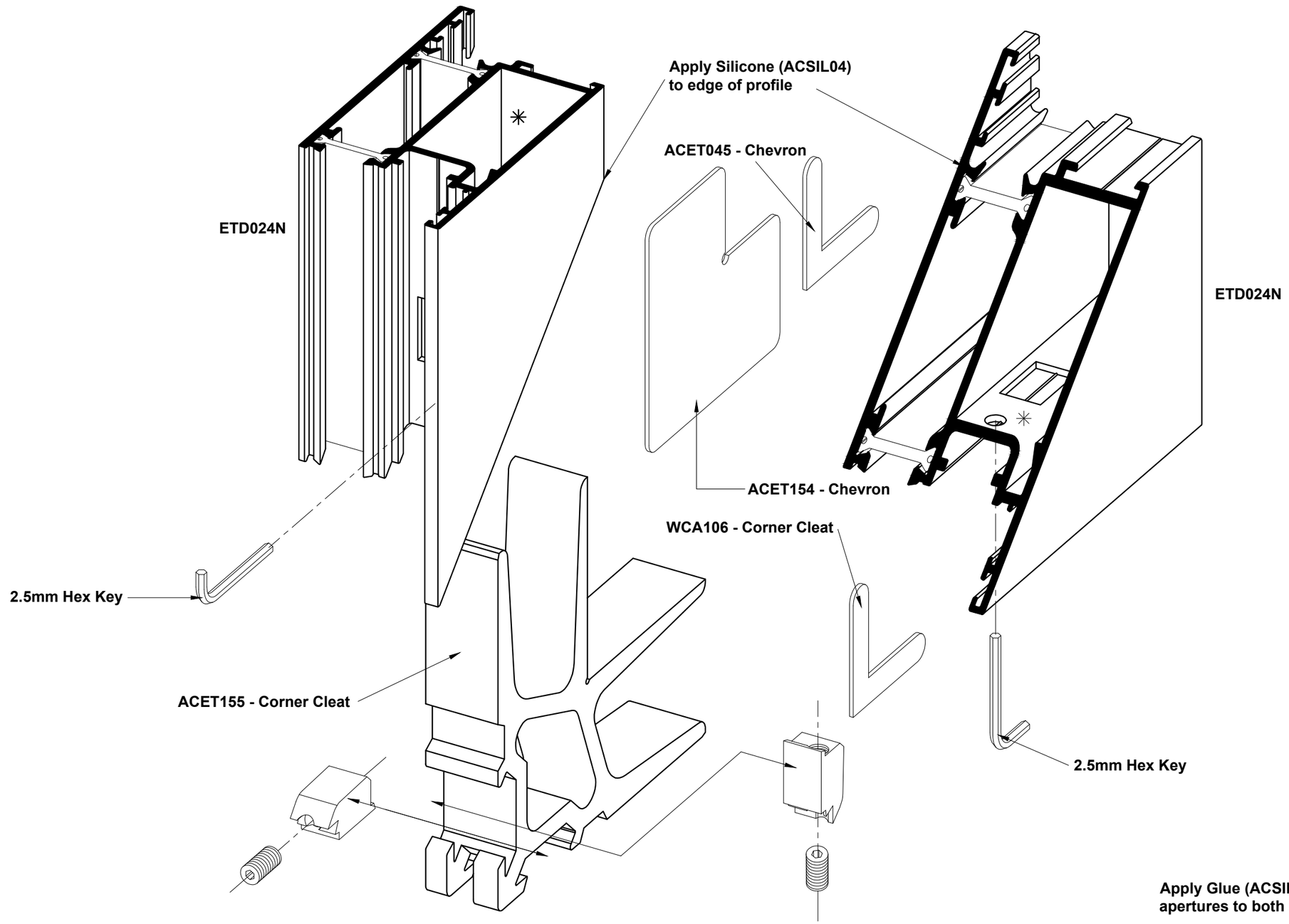
Do Not Scale From This Drawing

Outerframe Corner Assembly



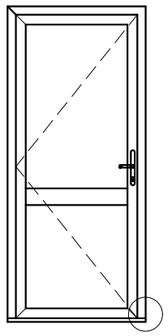
Do Not Scale From This Drawing

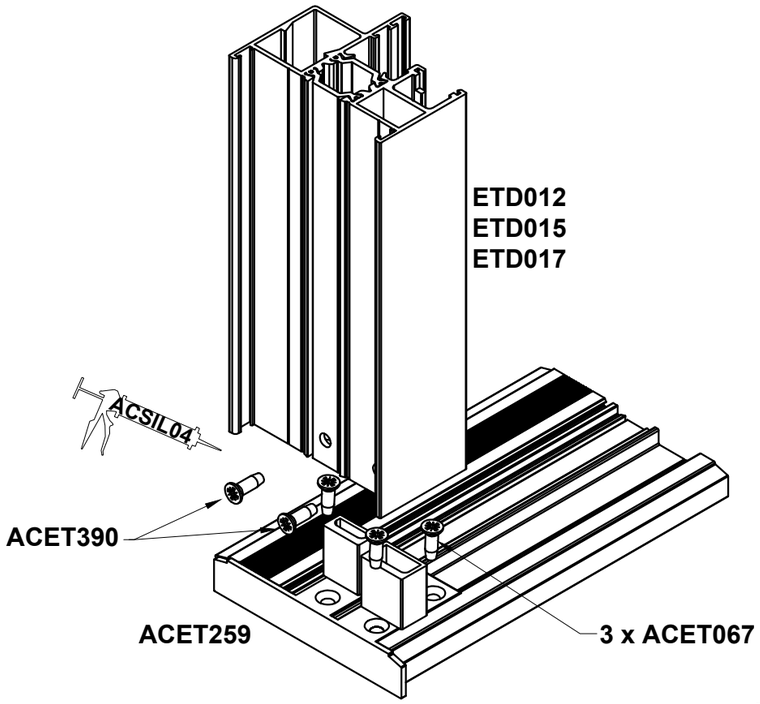
Sash Corner Assembly

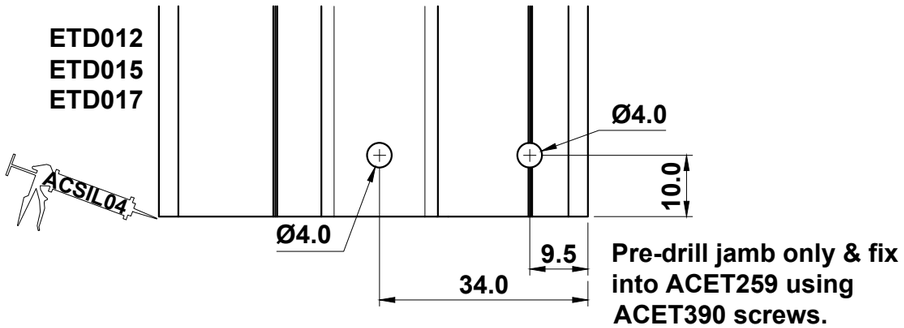


Do Not Scale From This Drawing

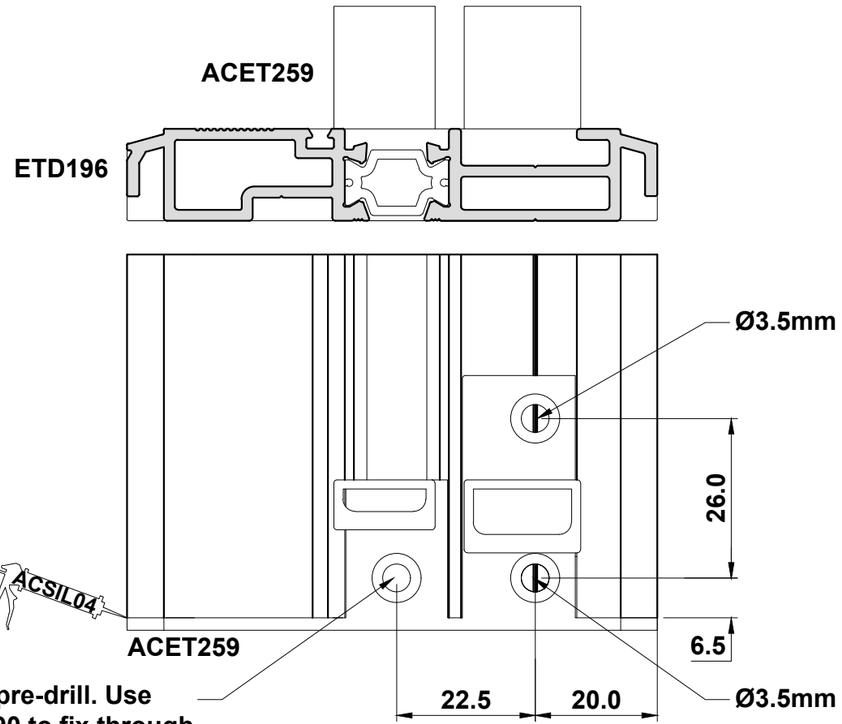
Low Threshold Preparation & Assembly





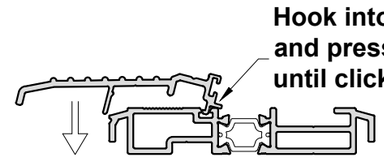


Pre-drill jamb only & fix into ACET259 using ACET390 screws.

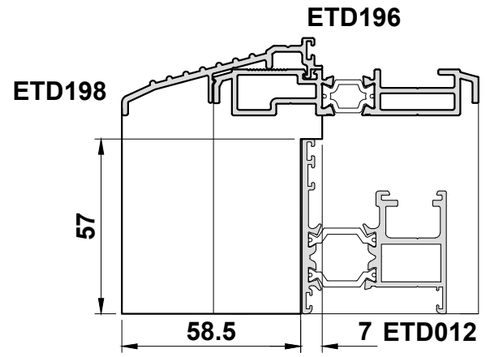


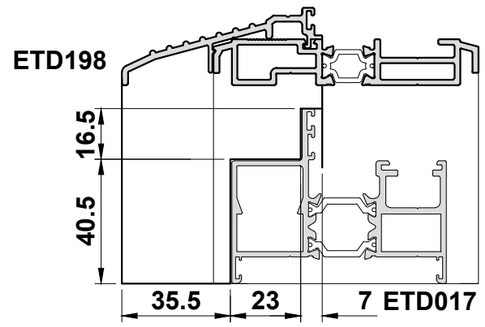
Do not pre-drill. Use ACET390 to fix through polyamide

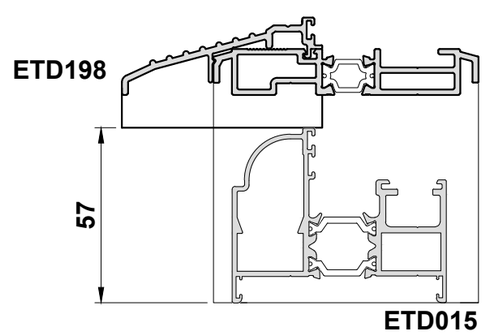
ETD198 Fitting



Hook into channel and press down until clicked in position

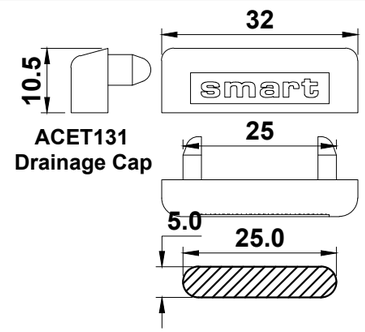


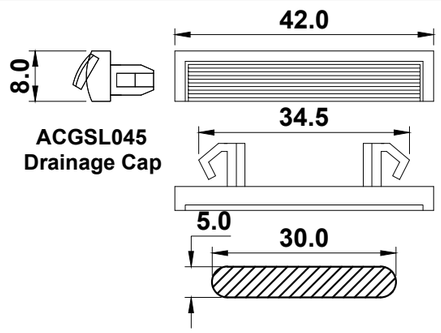


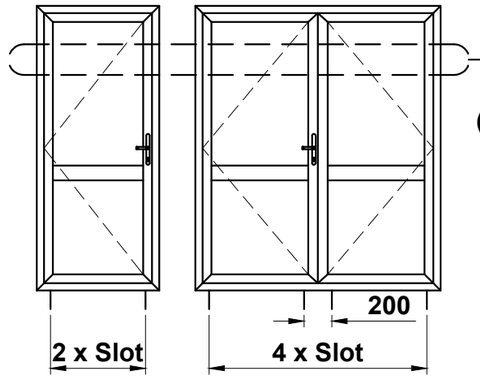


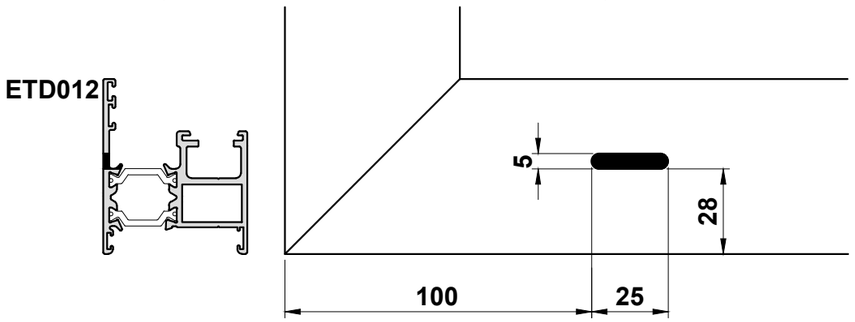
Do Not Scale From This Drawing

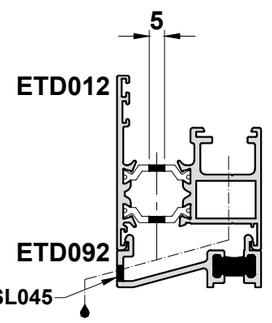
Drainage

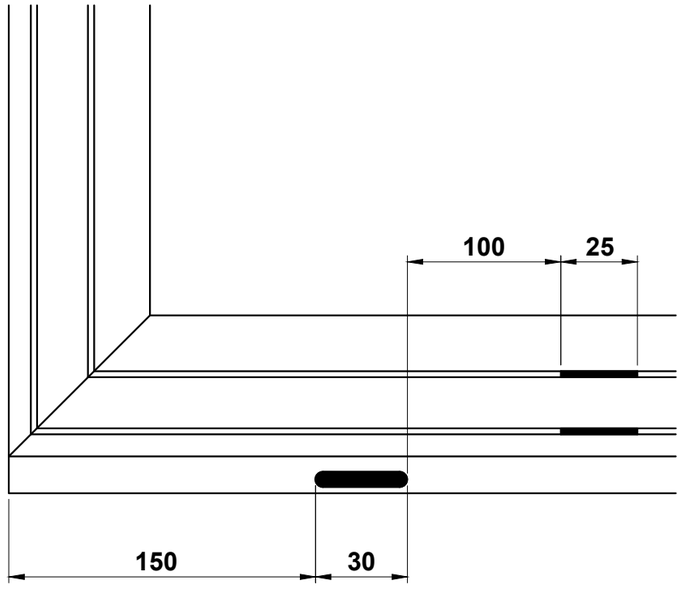


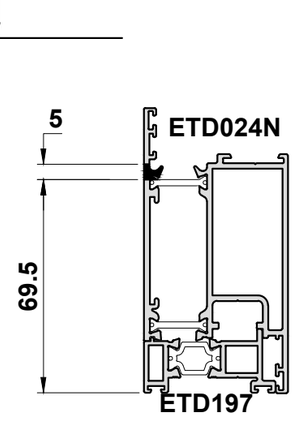


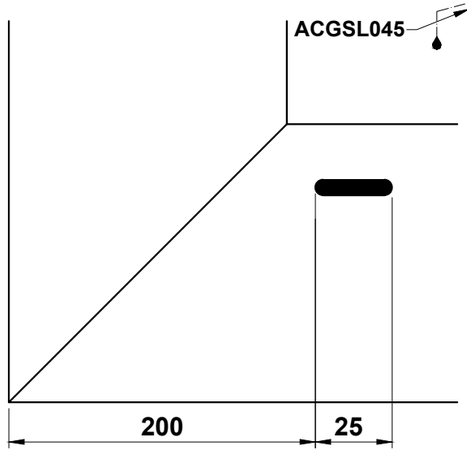


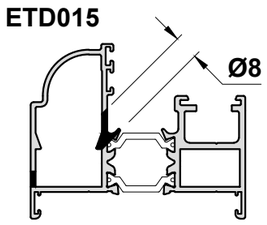


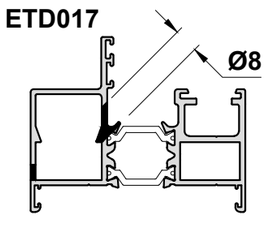


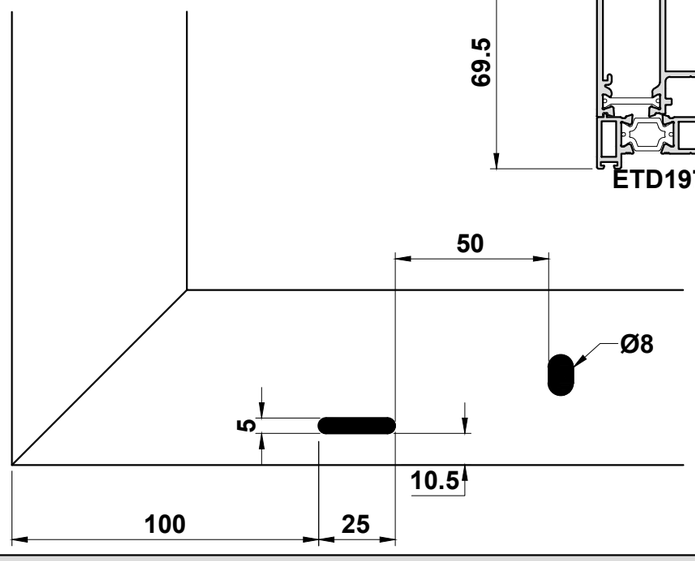


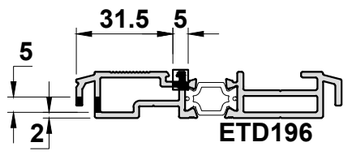


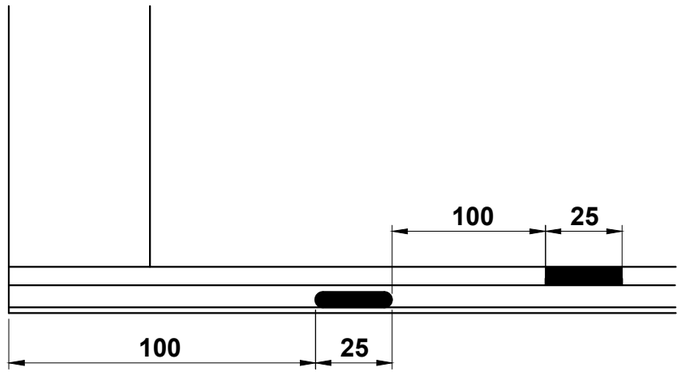








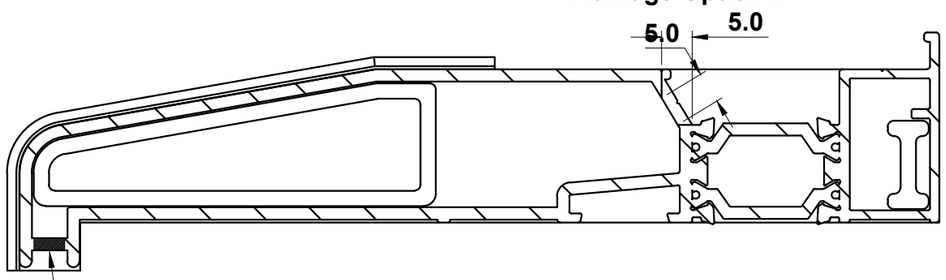




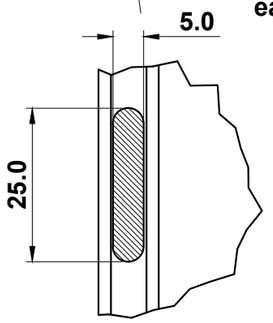
Do Not Scale From This Drawing

Cill Drainage Details

Drainage Option B



Drainage holes to be spaced 100mm in from each end and at approximately 300mm centres



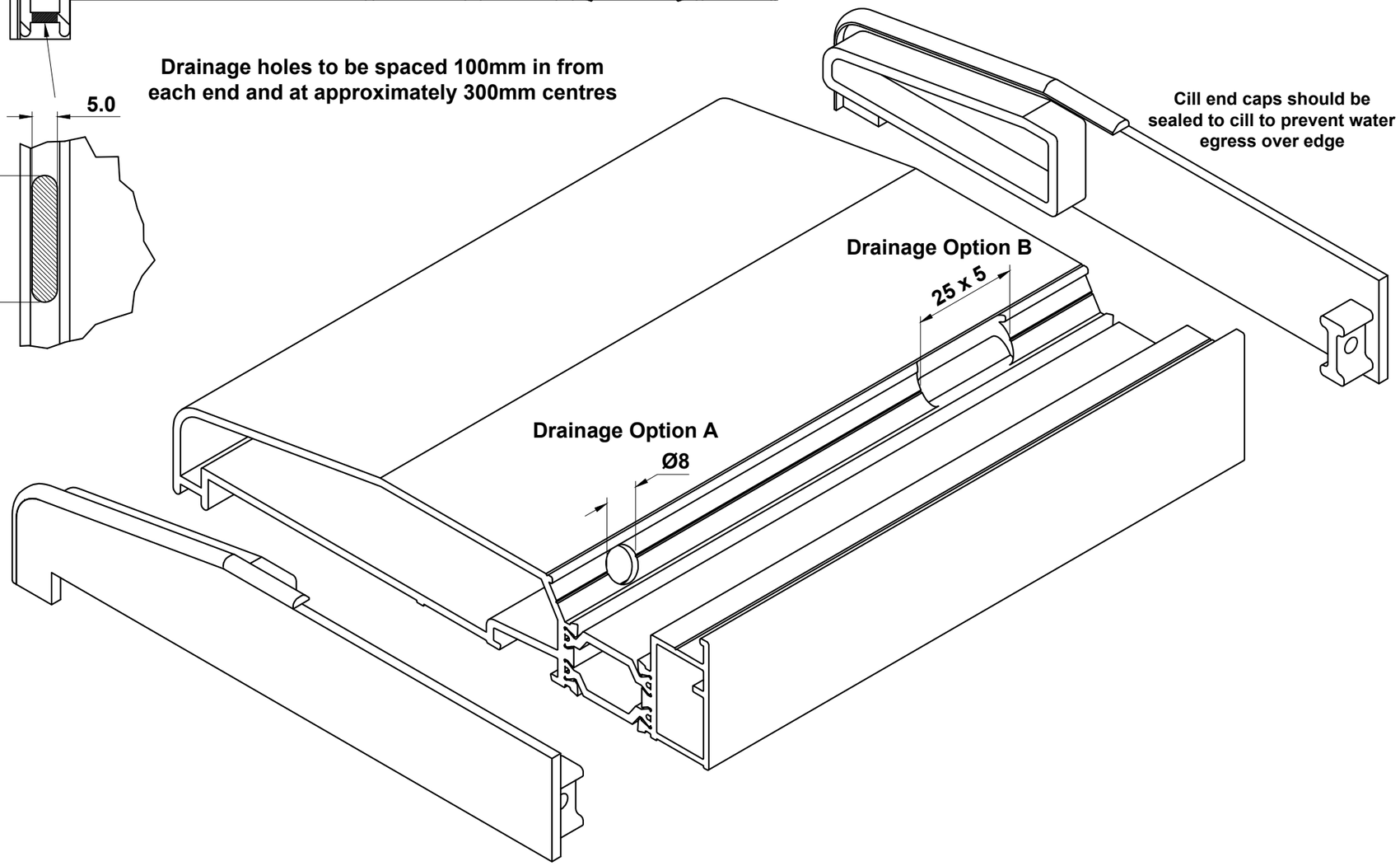
Cill end caps should be sealed to cill to prevent water egress over edge

Drainage Option B

25 x 5

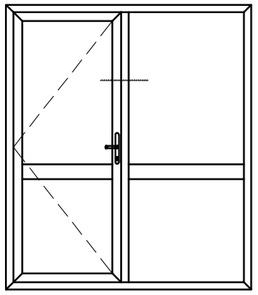
Drainage Option A

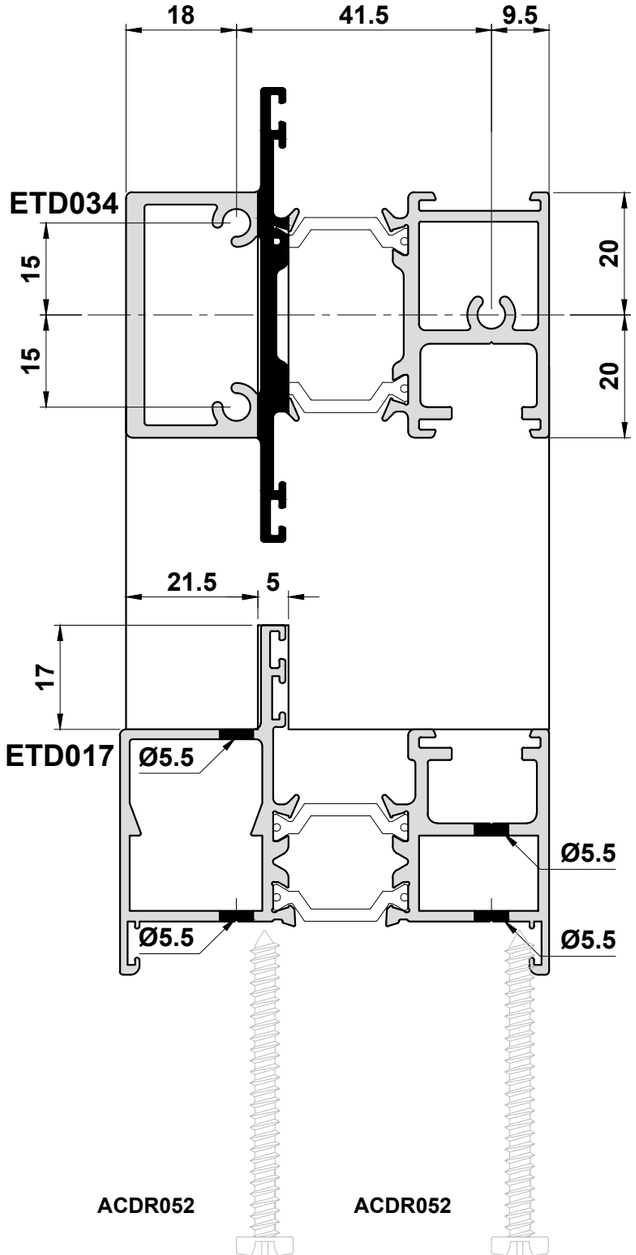
Ø8

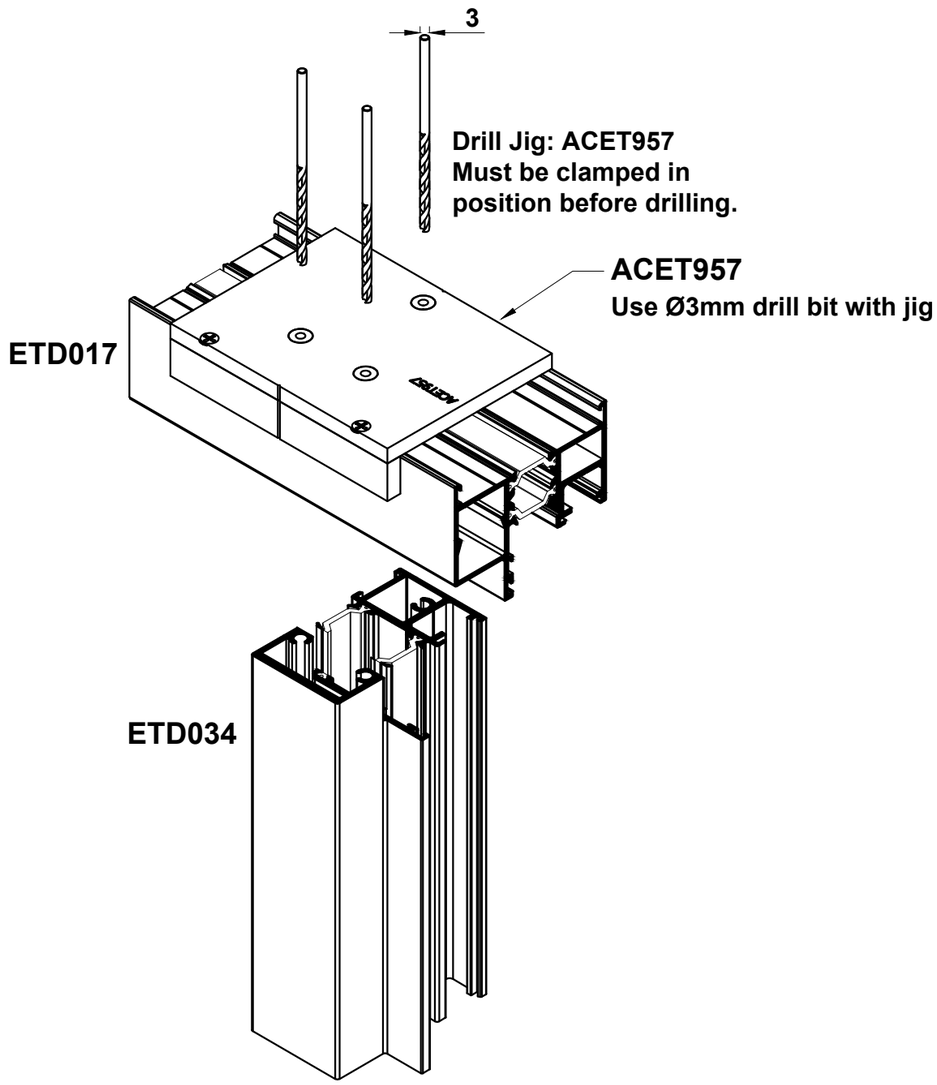


Do Not Scale From This Drawing

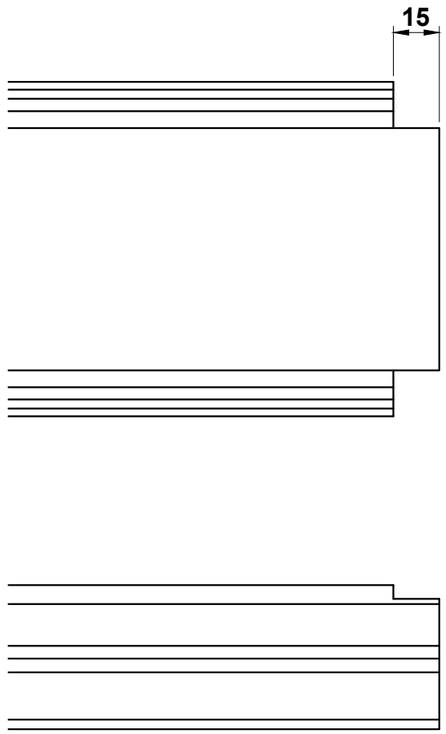
Mullion Preparation

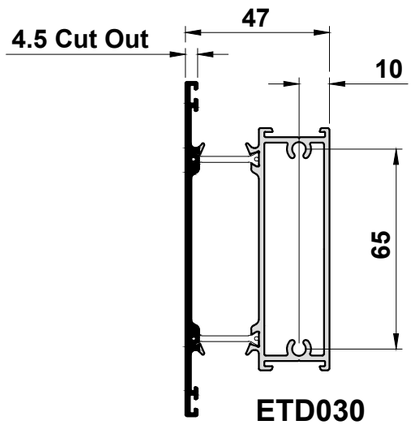






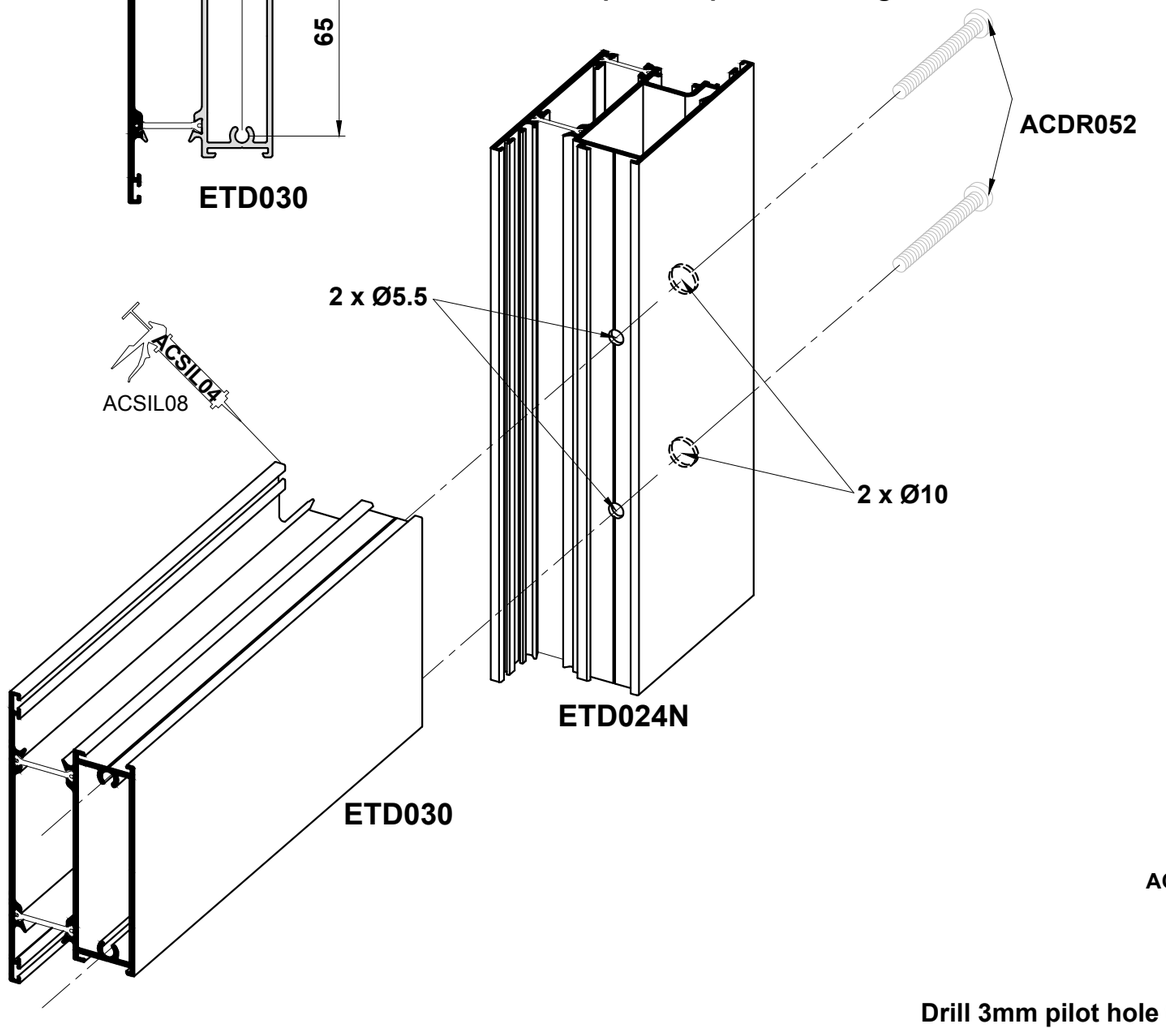
Mid Rail Preparation into Sash

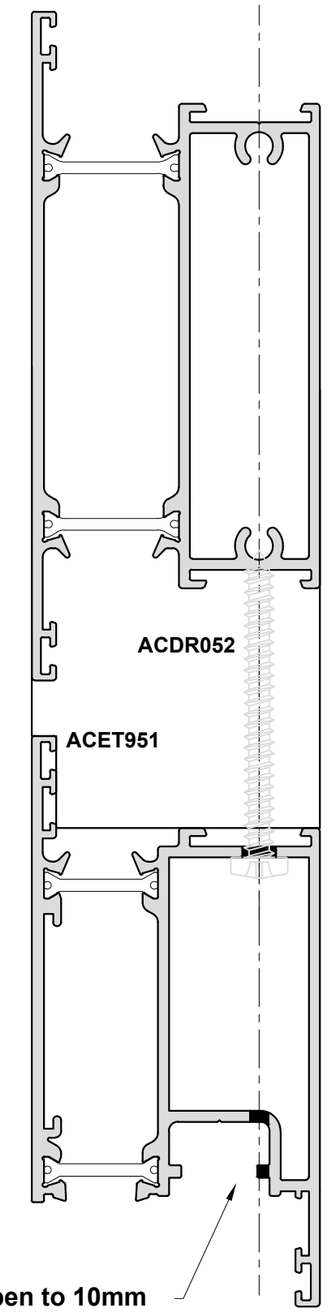




Use recommended drill jig: ACET951

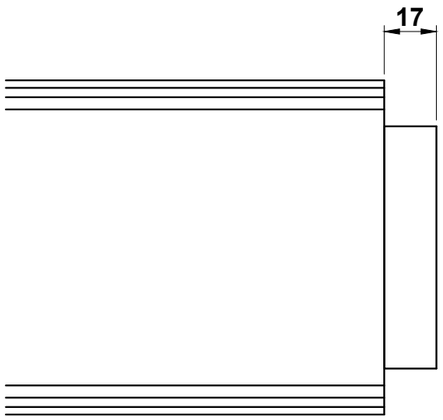
Important Note:
ACET951 must be clamped into position prior to drilling.

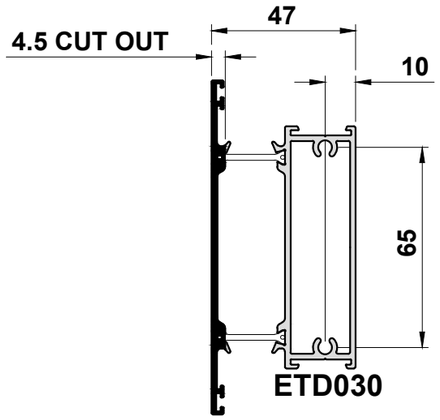




Do Not Scale From This Drawing

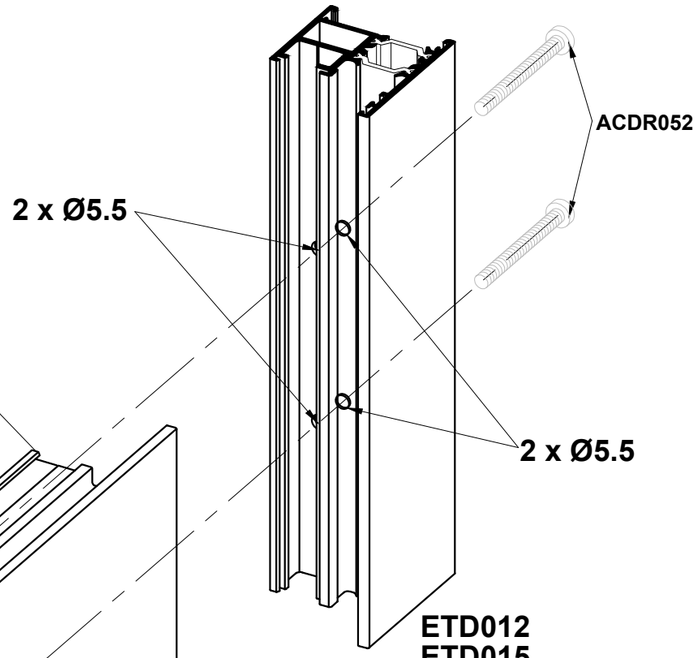
Mid Rail Preparation into Outerframe

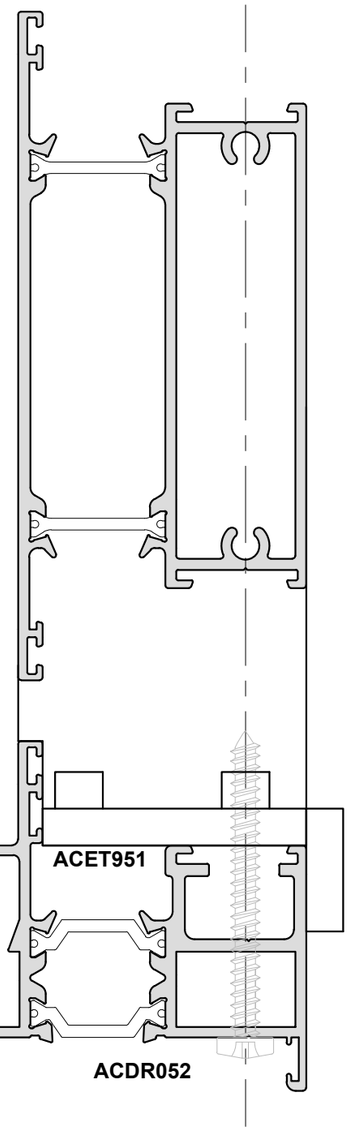


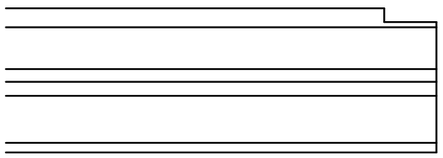


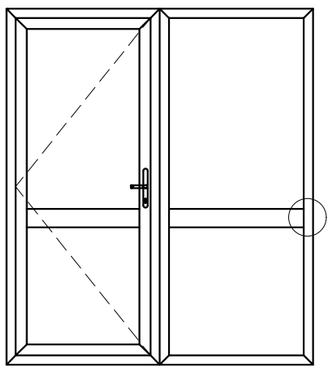
Use recommended drill jig: ACET951

Important Note:
ACET951 must be clamped into position prior to drilling.



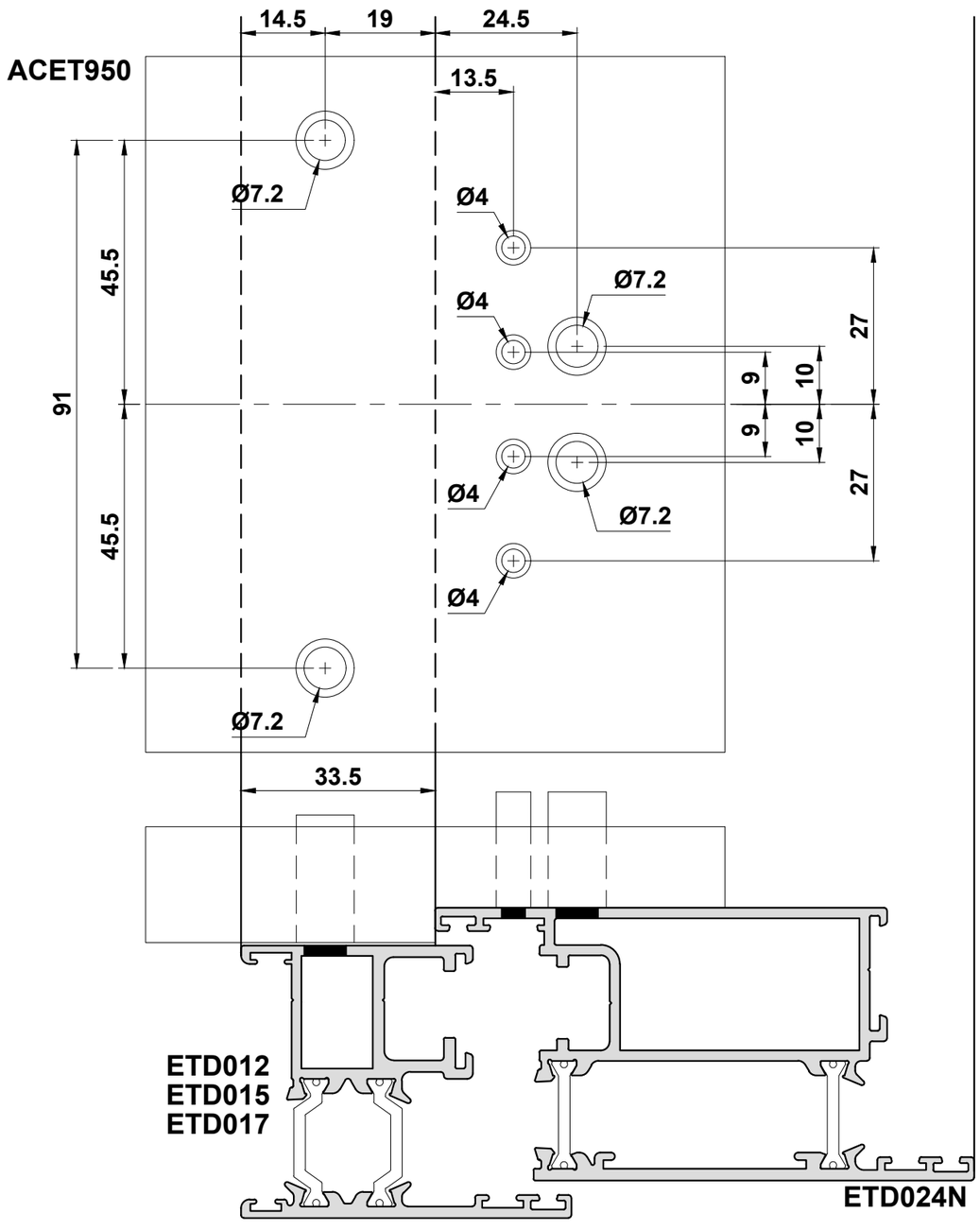






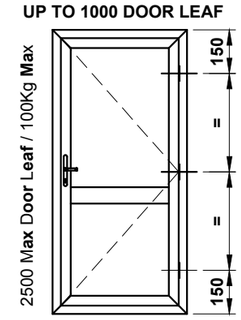
Do Not Scale From This Drawing

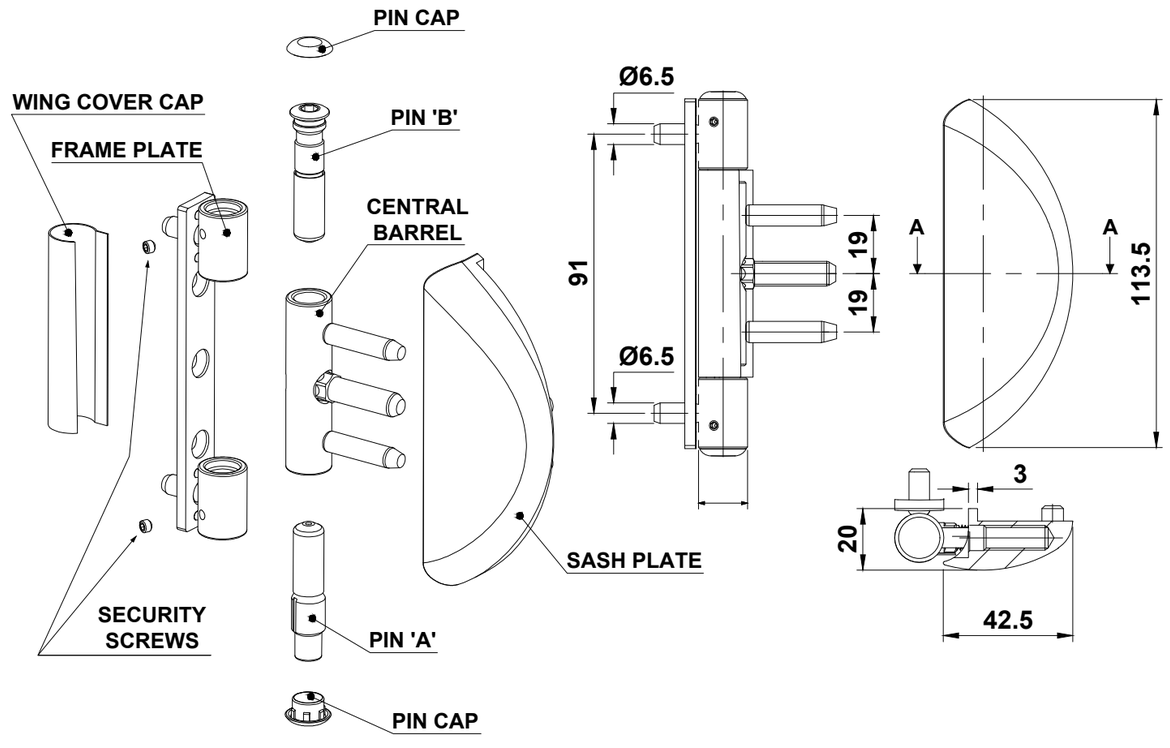
ACET250 Hinge Fitting Details



Fitting Instructions:
(Full instructions are supplied with each ACET250 Hinge)

1. Align outer frame and sash in correct position
2. Clamp drill jig ACET950 over the centre line of the hinge
3. Drill through all bushes marked '1' with a Ø7.2mm drill bit (supplied) and through all bushes marked '2' with a Ø4mm drill bit (not supplied)
4. Fasten the sash plate
5. Fasten the frame plate using ACIM062 screws ensuring the grub screws are positioned towards the door sash
6. Drive in the central barrel until it lines up with the rings on the frame plate
7. Drive in pin 'B' to the top of the hinge and then drive in pin 'A' to the bottom of the hinge
8. Open the door and lightly tighten the security screws
9. Adjust hinge as required then insert caps and cover caps.





Do Not Scale From This Drawing

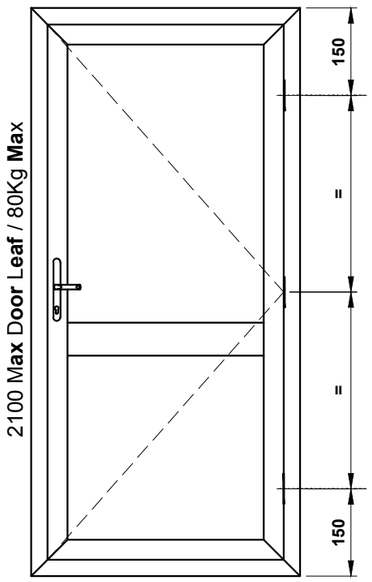
ACET174 Hinge Fitting Details

Assembly Instructions:

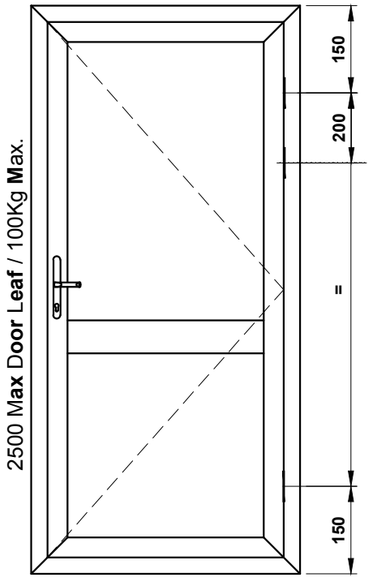
1. Fix 2no M5x10mm grub screws to sash frame clamp plate and slide into sash eurogroove to hinge position.
2. Locate hinge and clamp in position using 2no M5x10mm machine screws.
3. Fix sash to outer frame using clamp plates and fit M5 x 15mm CSK machine screws and adjust for correct position.
4. If the sash requires adjustment after the door has been glazed this can be acheived by loosening the clamp plate machine screws, adjusting the sash height and tightening the clamp plates.
5. The final adjustment of the sash width and compression of the gasket when the sash is closed can be acheived by rotating the cam in the hinge (A).

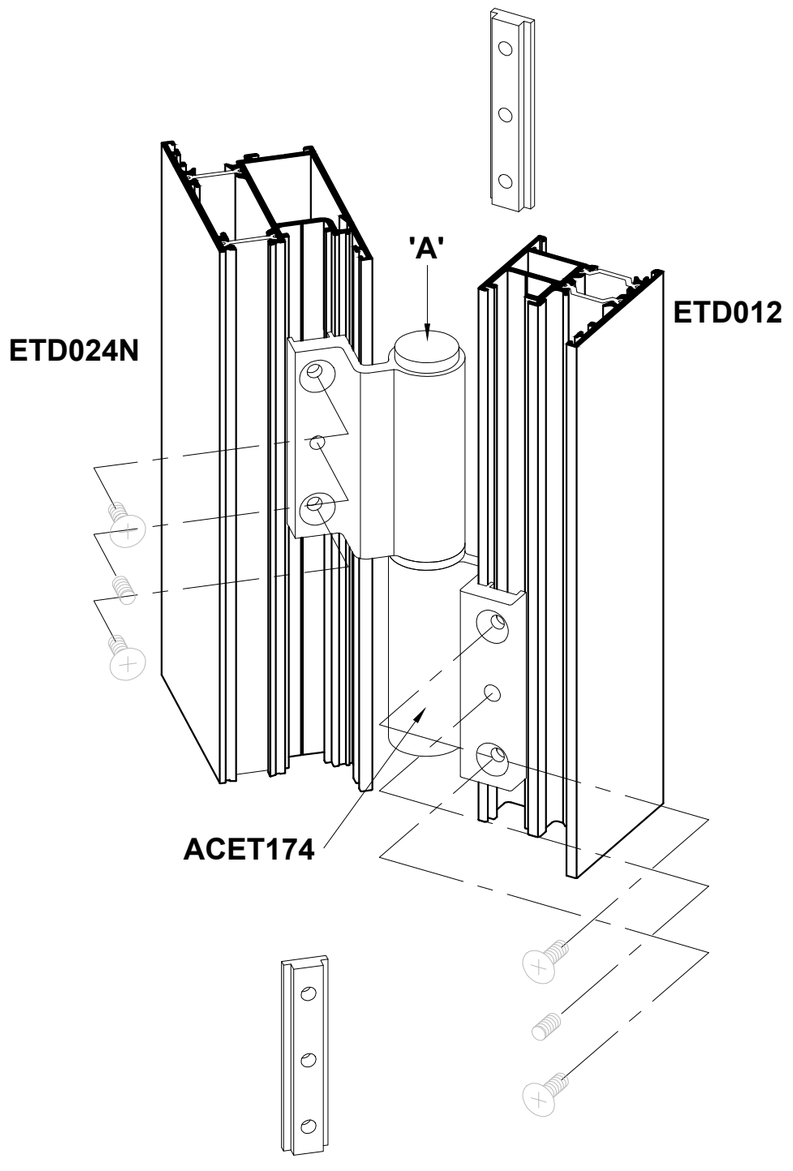
Important Note:
ACET174 hinges are not covered by the Kitemark. ACET250 hinges must be used where compliance is required.

UP TO 900 DOOR LEAF



UP TO 1000 DOOR LEAF

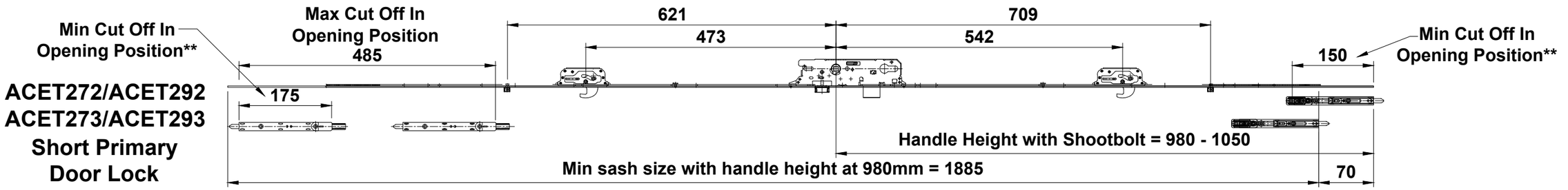


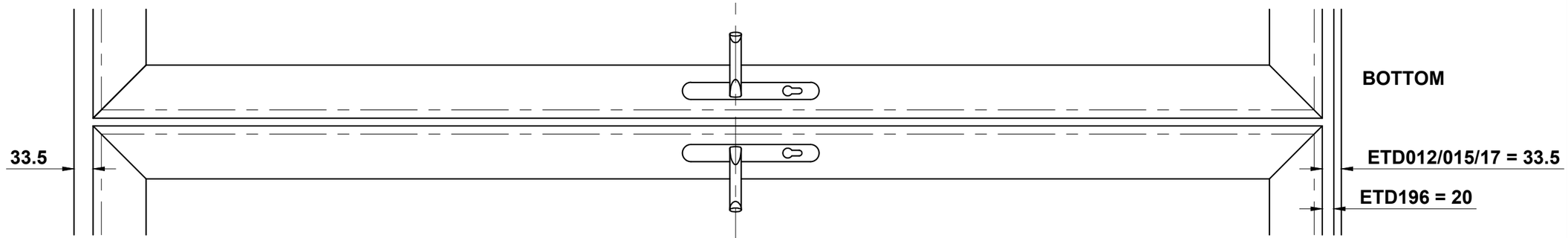


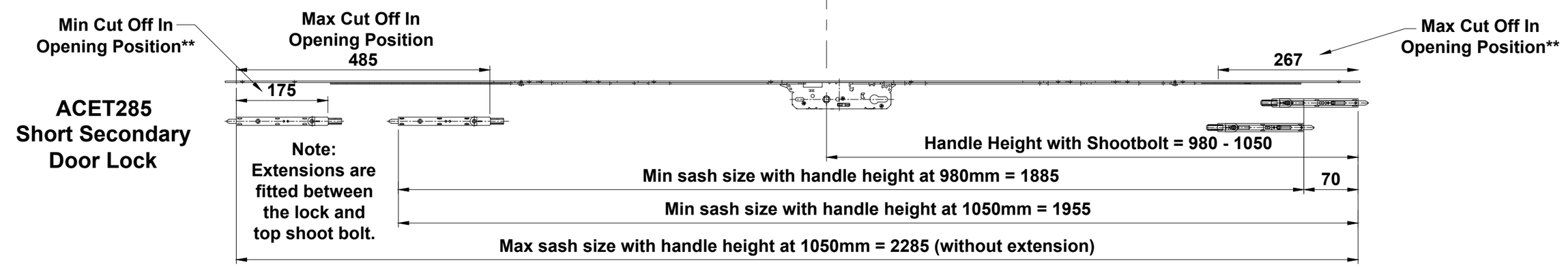
Do Not Scale From This Drawing

Lock Selection with Shootbolts

Note: ACDV742 & ACDV744 extensions may used with all locks



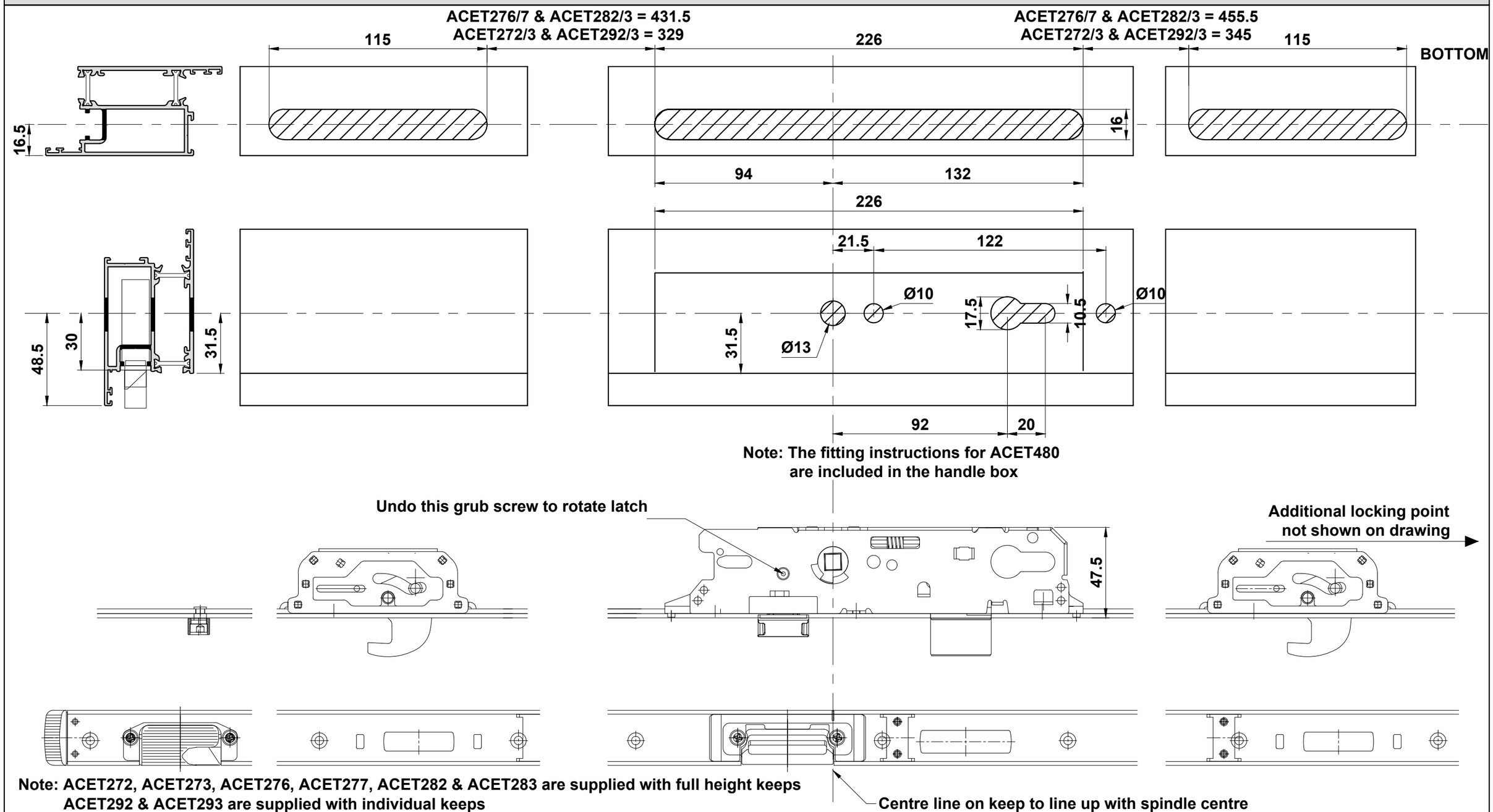




*Maximum sash height is 2500mm. Sizes shown here only indicate sizes with ACDV744.
**Minimum cut off positions are required to fit the shoot bolts.

Do Not Scale From This Drawing

Primary Door Lock Fitting Details with ACDV251 or ACET480 Handle

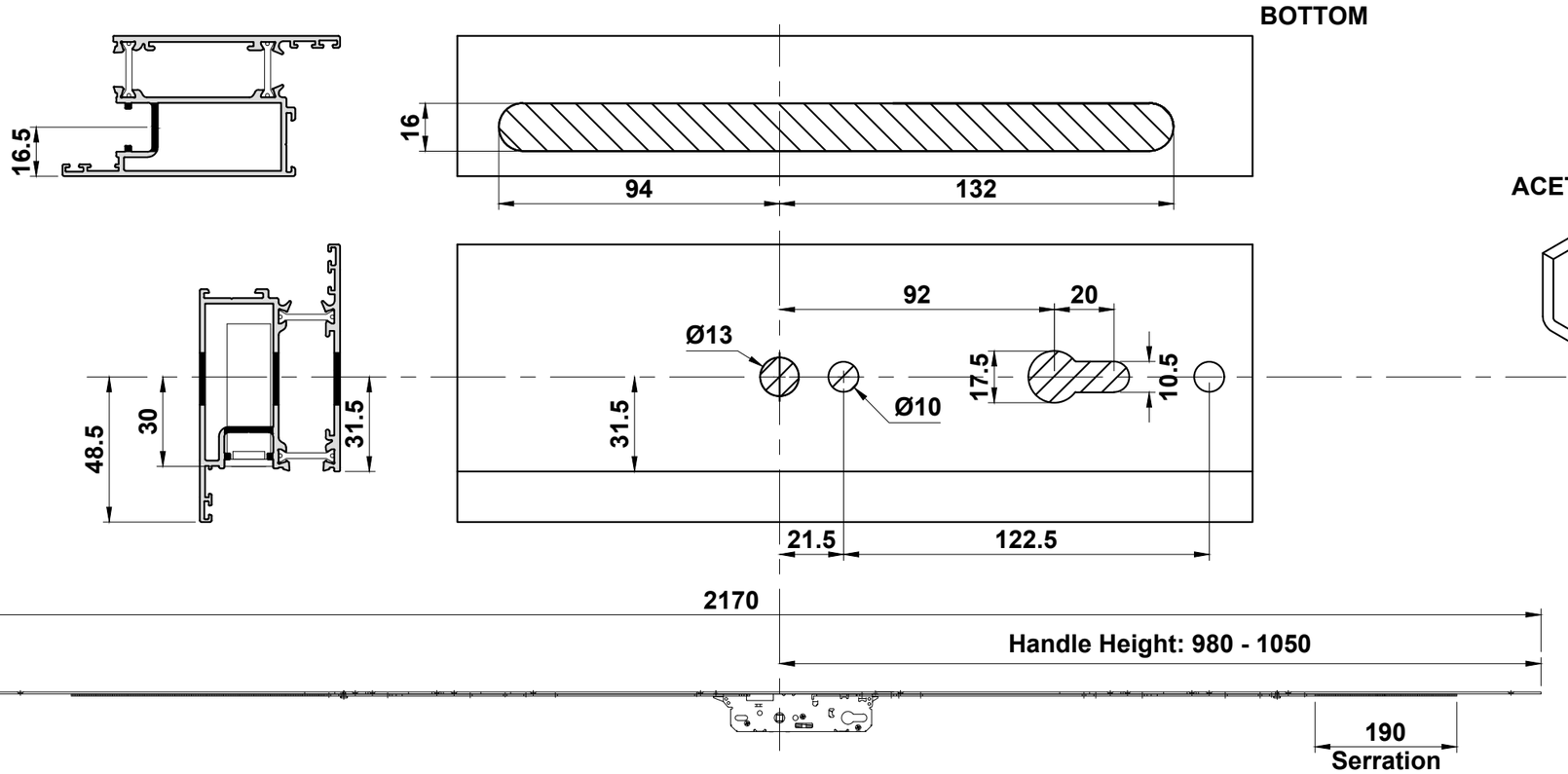


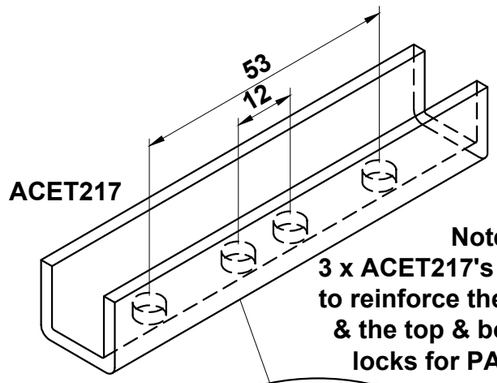
Note: The fitting instructions for ACET480 are included in the handle box

Note: ACET272, ACET273, ACET276, ACET277, ACET282 & ACET283 are supplied with full height keeps
ACET292 & ACET293 are supplied with individual keeps

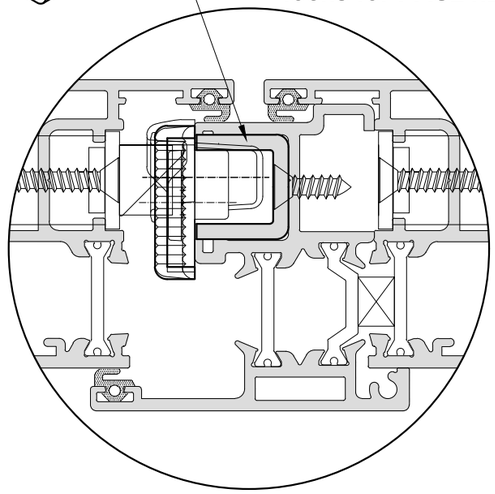
Do Not Scale From This Drawing

Secondary Door Lock Fitting Details & Primary/Secondary Shootbolt Details





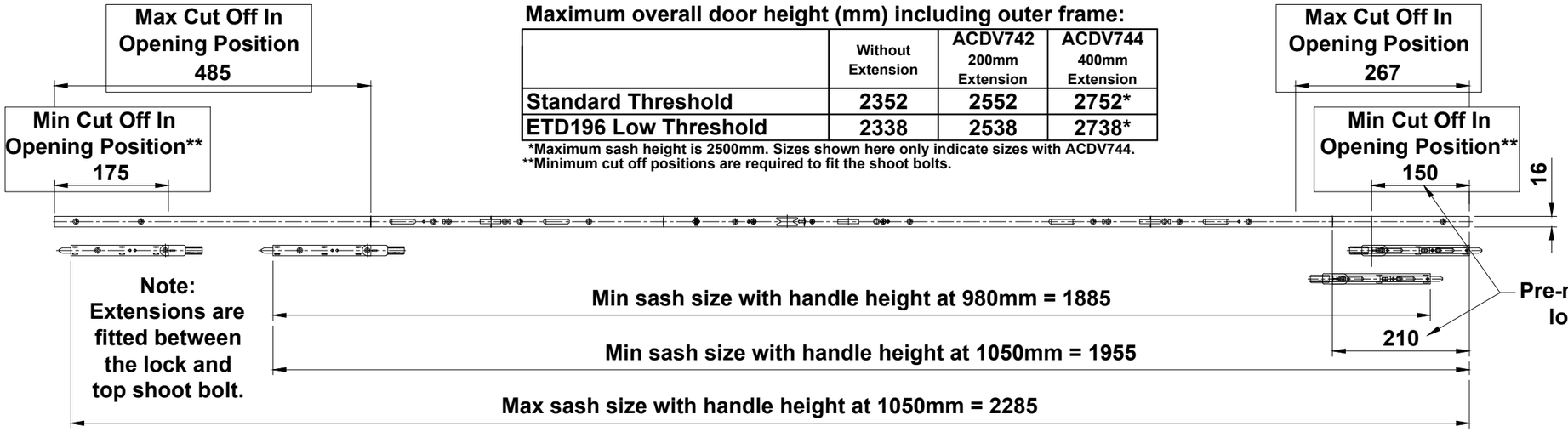
Note:
3 x ACET217's are required to reinforce the centre lock & the top & bottom hook locks for PAS24:2016



Maximum overall door height (mm) including outer frame:

	Without Extension	ACDV742 200mm Extension	ACDV744 400mm Extension
Standard Threshold	2352	2552	2752*
ETD196 Low Threshold	2338	2538	2738*

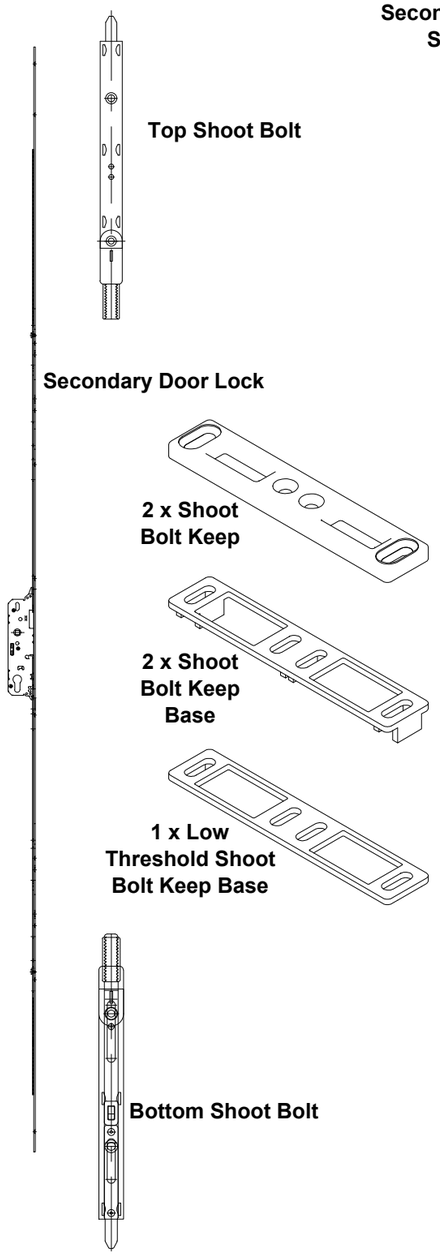
*Maximum sash height is 2500mm. Sizes shown here only indicate sizes with ACDV744.
**Minimum cut off positions are required to fit the shoot bolts.

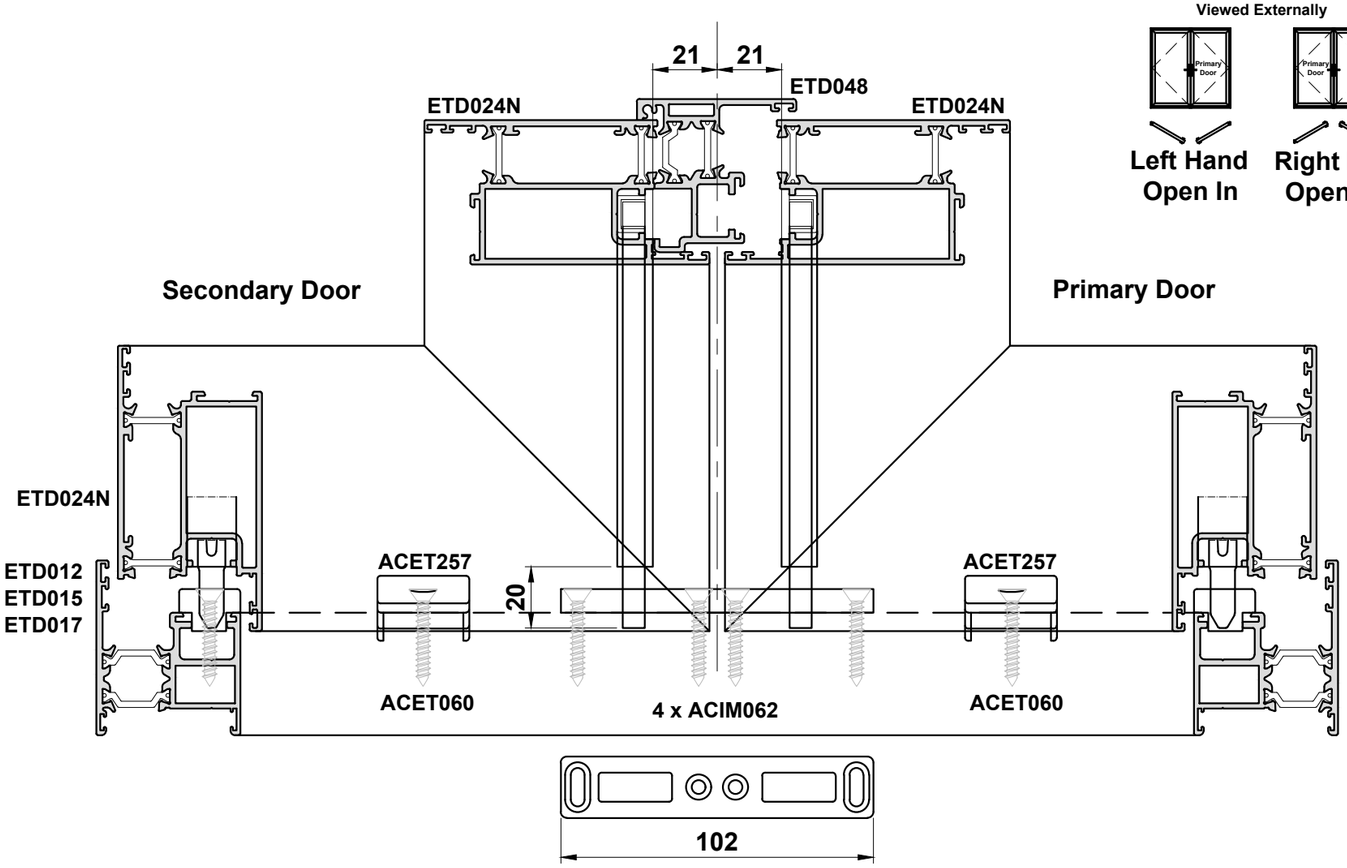


Do Not Scale From This Drawing

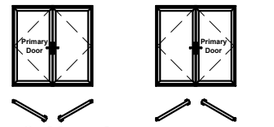
Lock Overview

ACET285
Secondary Door Lock Kit with Shoot Bolts & Keeps Non-Handed

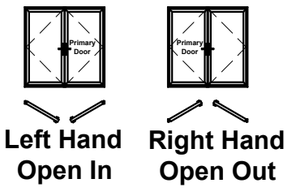




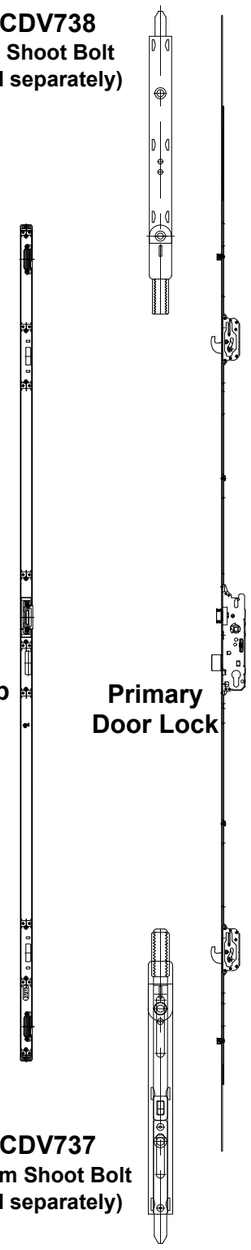
ACET292
Multi Point Lock Kit with LEFT HAND Full Height Keep
Viewed Externally



ACET293
Multi Point Lock Kit with RIGHT HAND Full Height Keep
Viewed Externally



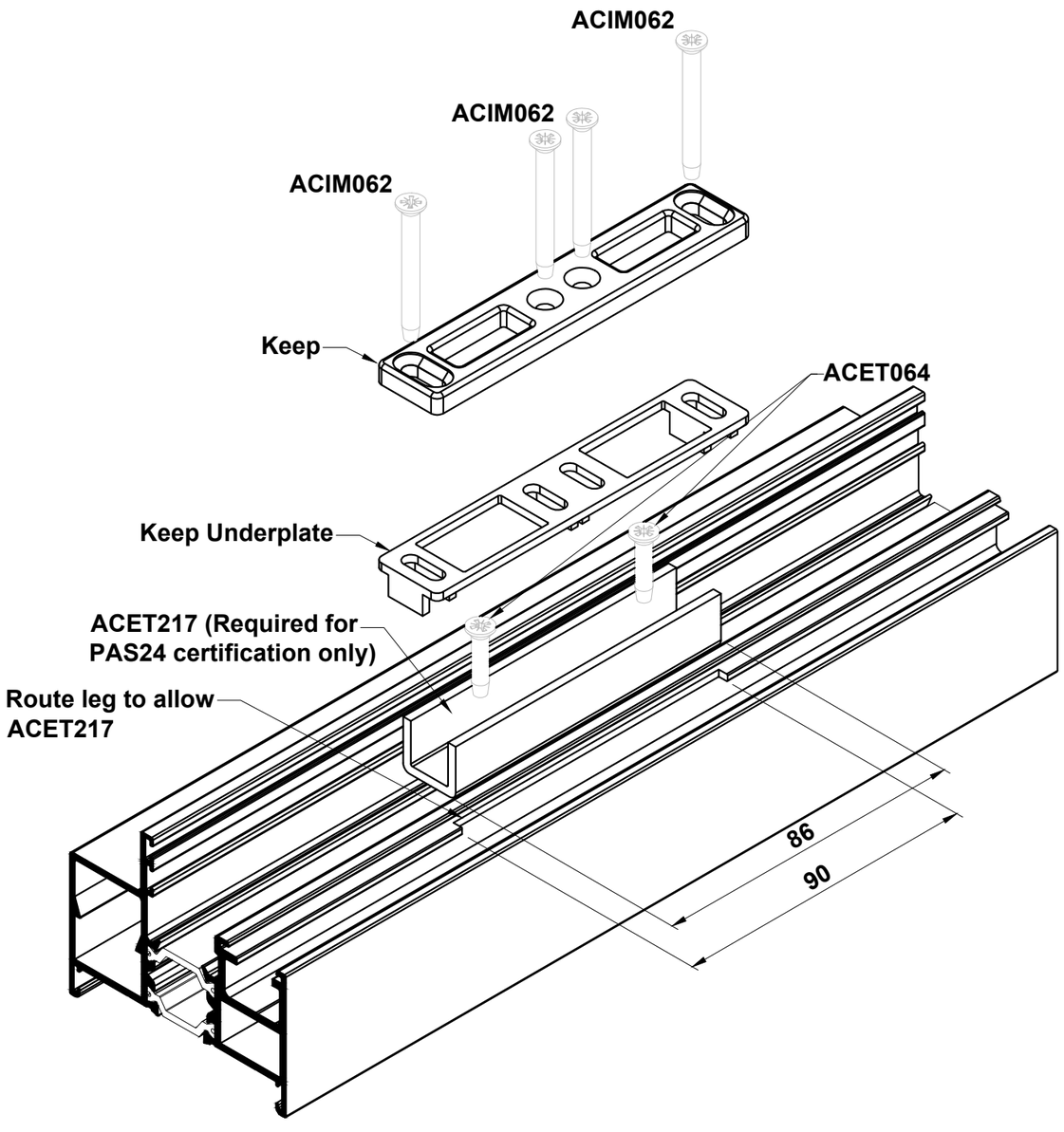
ACDV738
Top Shoot Bolt (sold separately)

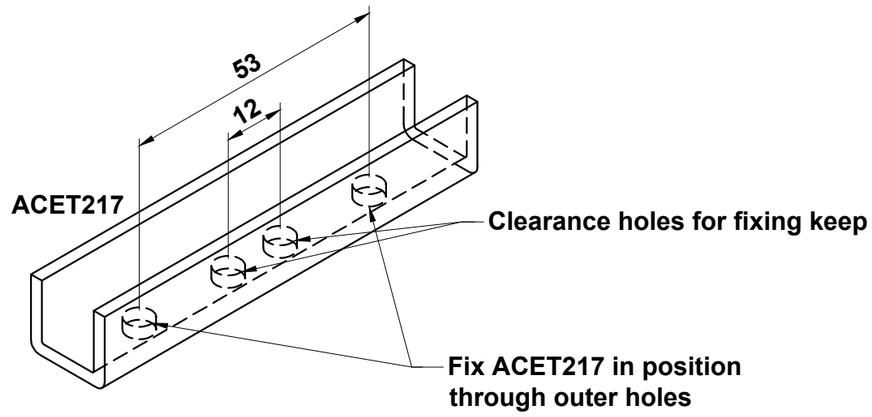


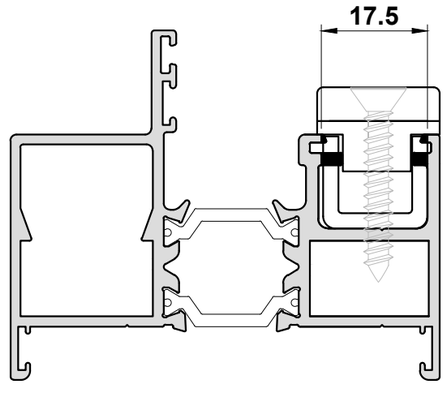
ACDV737
Bottom Shoot Bolt (sold separately)

Do Not Scale From This Drawing

Shootbolt Keep Fitting Details in Standard Outer Frame

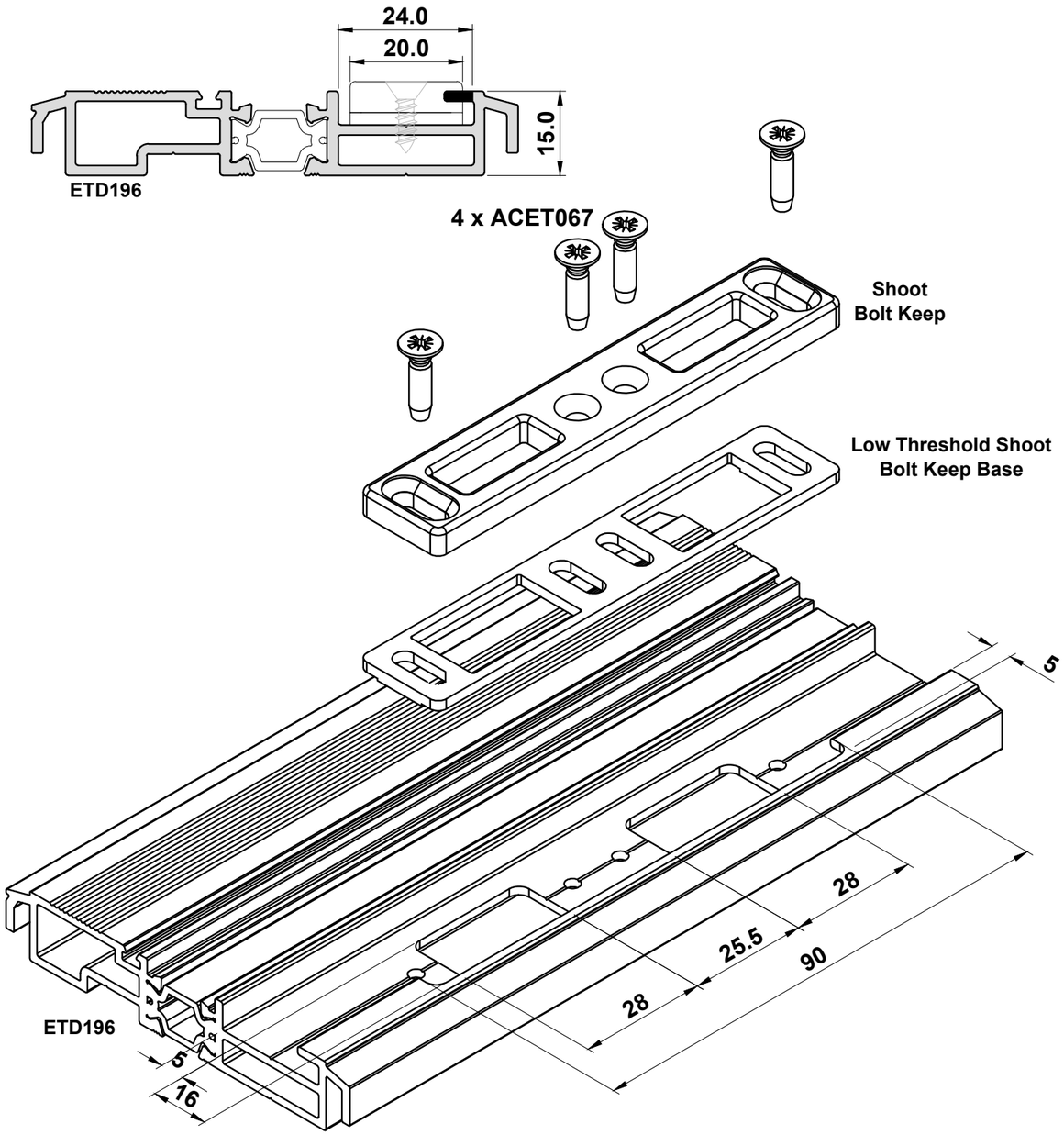


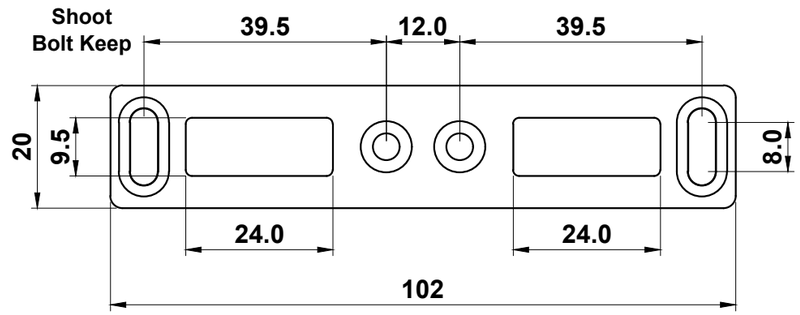


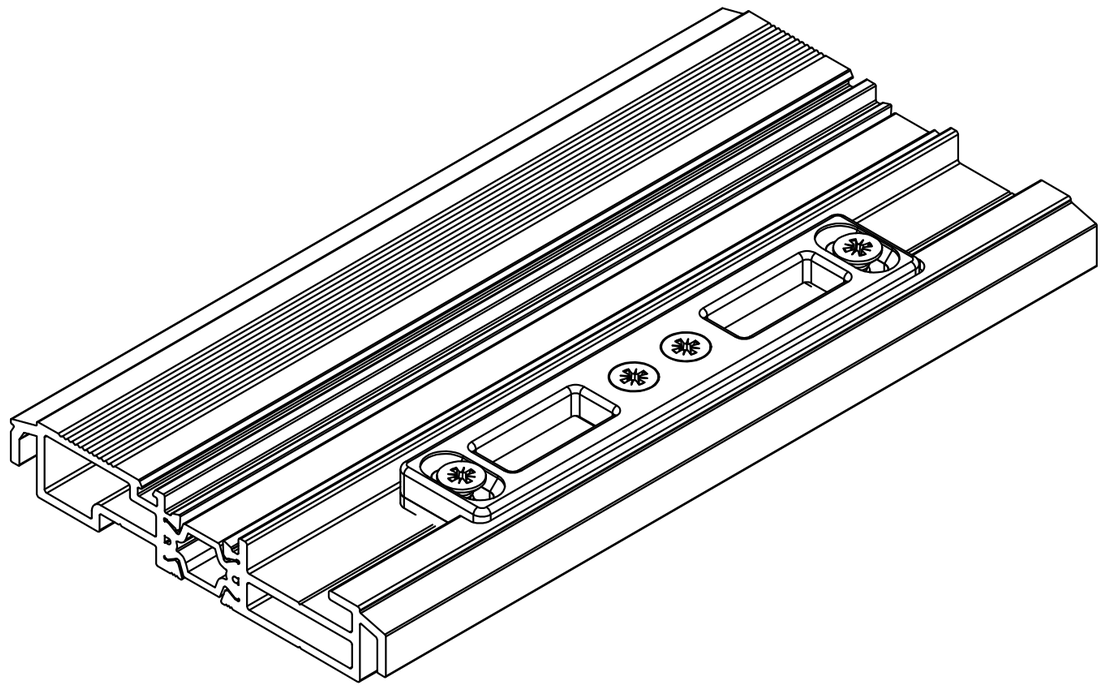


Do Not Scale From This Drawing

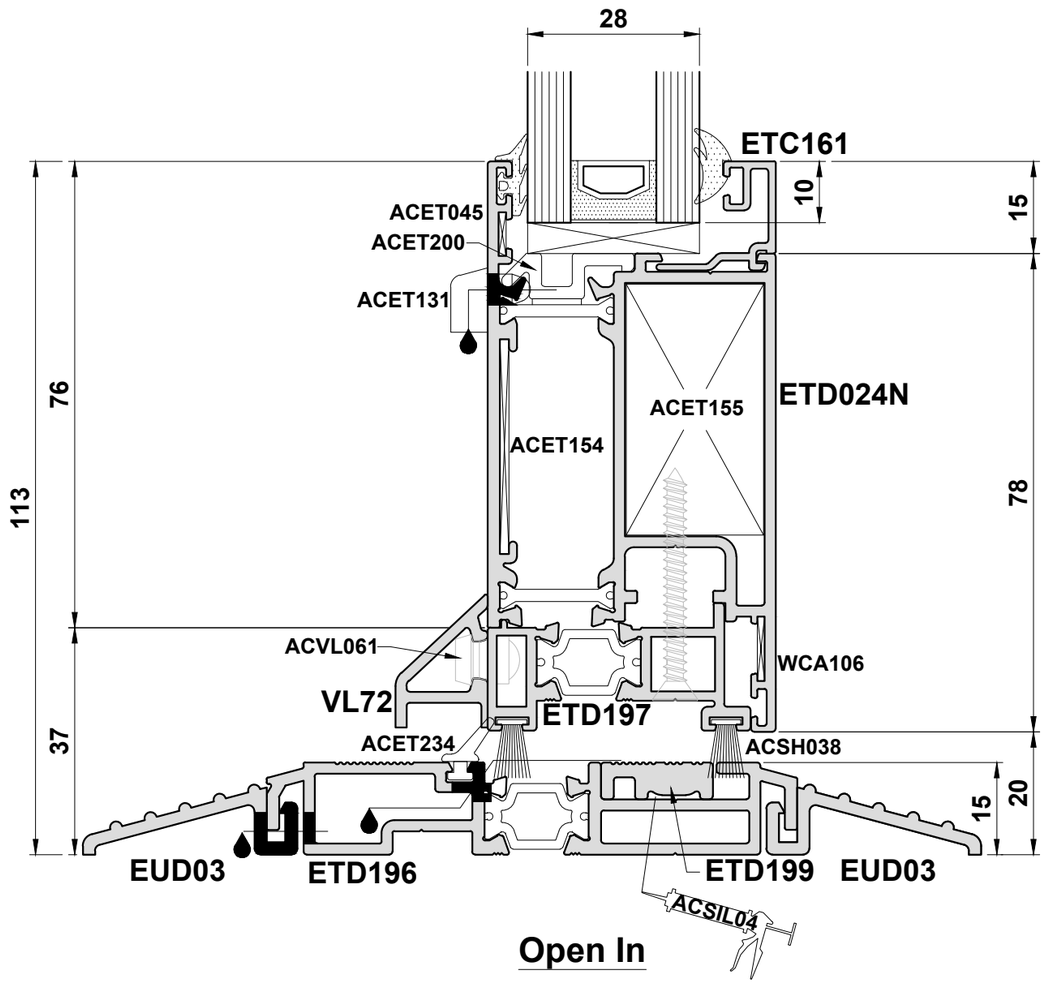
Shootbolt Keep Fitting Details in Low Threshold



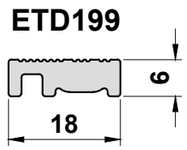


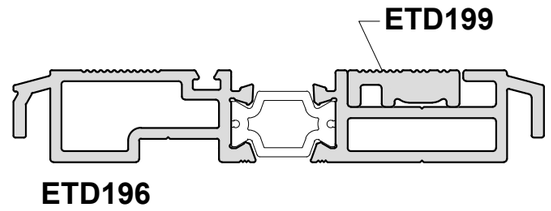


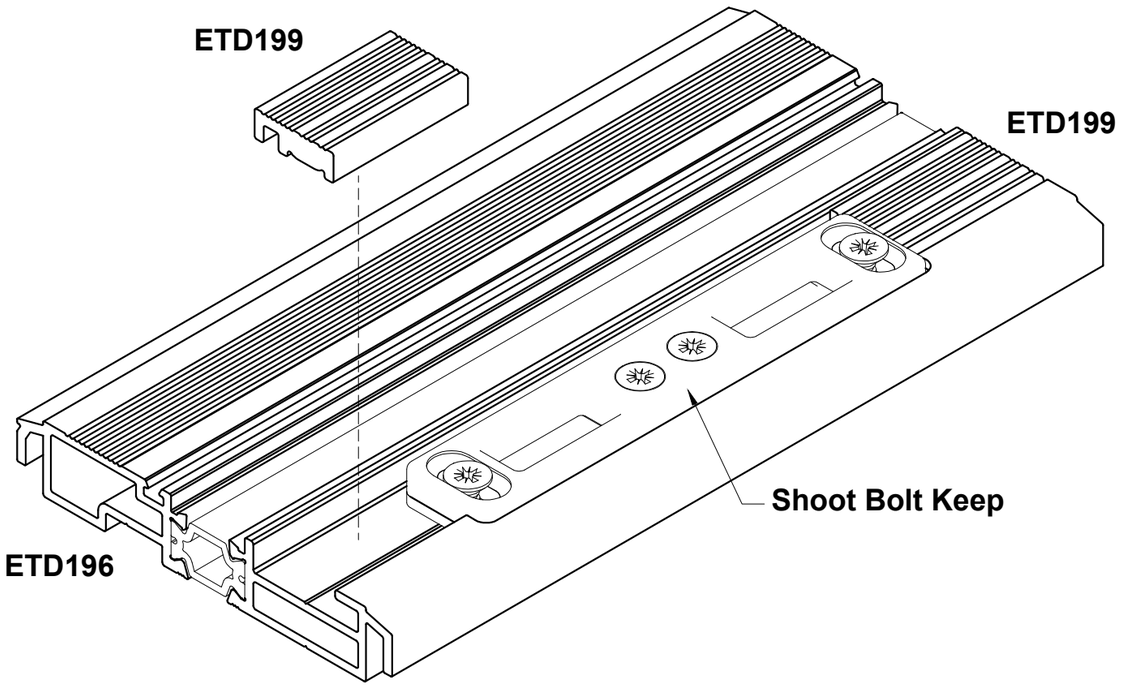
ETD199 Detail



Open In





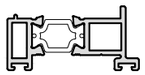


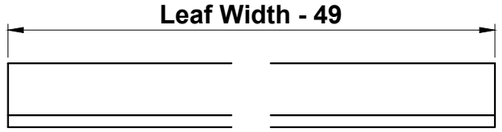
Do Not Scale From This Drawing

ETD048 & ETD197 Cutting & Notch Details

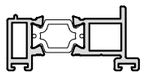
Low Threshold

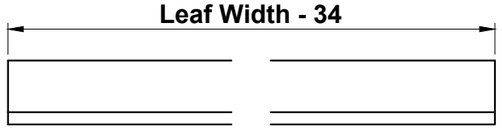
PRIMARY & SECONDARY DOOR
Leaf Width - 49


ETD197

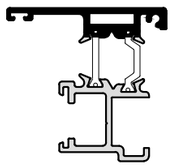


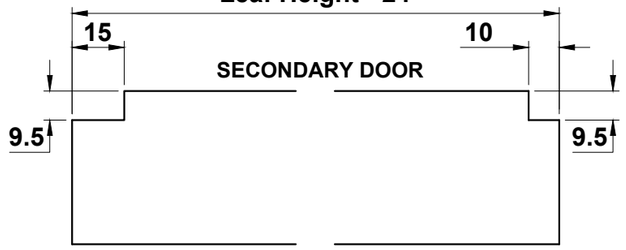
SINGLE DOOR
Leaf Width - 34

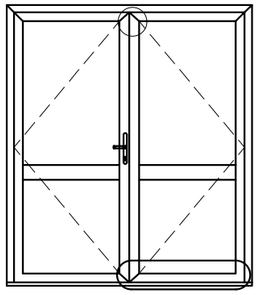

ETD197



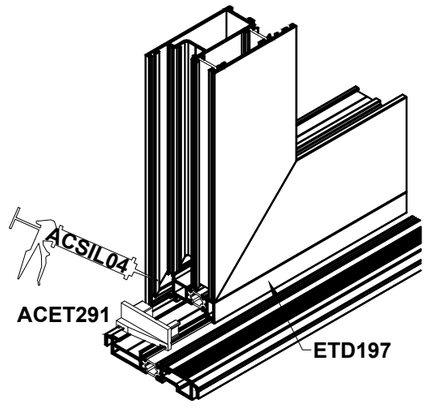
Leaf Height - 24

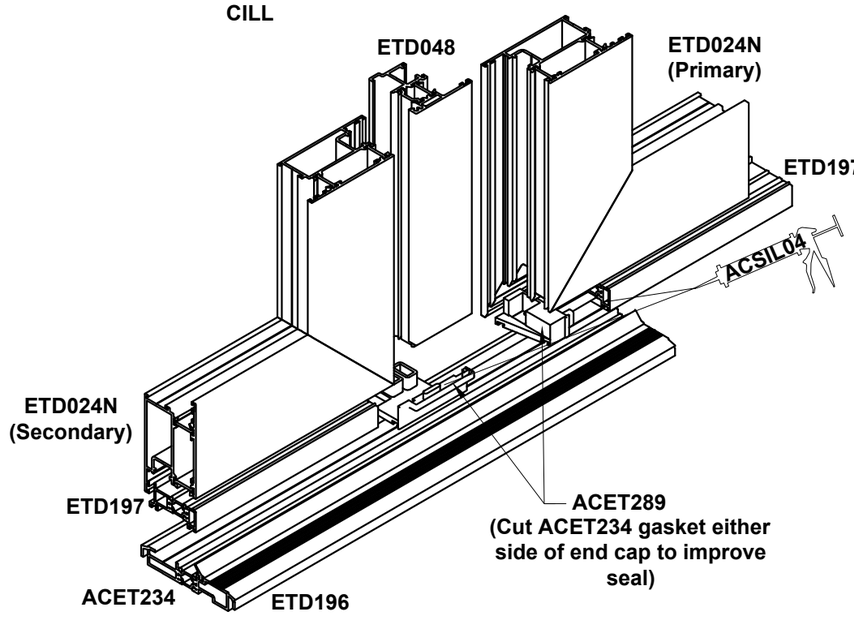

ETD048



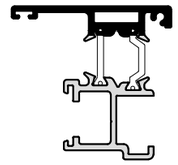


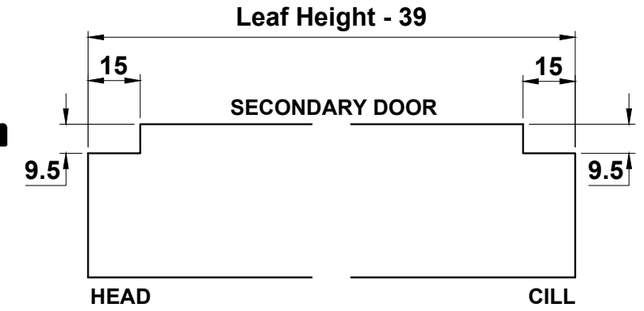
ETD024N
Hinge Side & Single Door
Lock Side

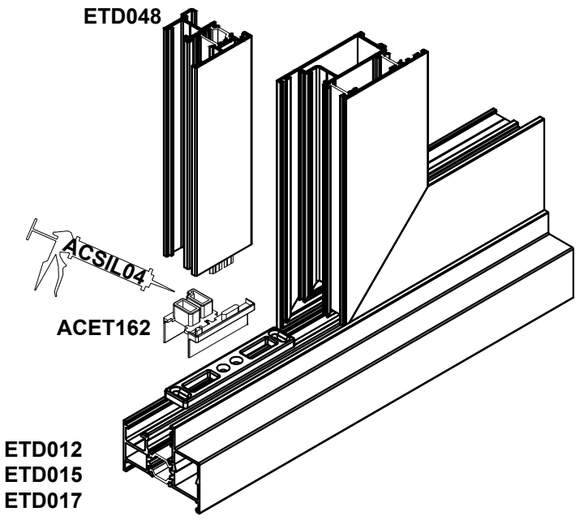




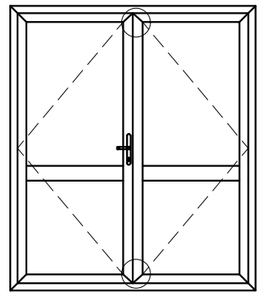
Standard Threshold


ETD048

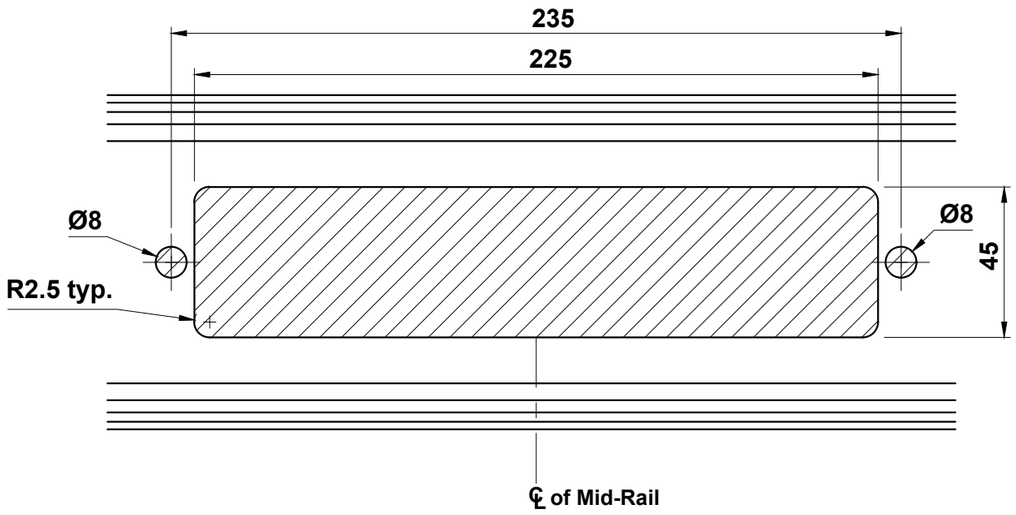


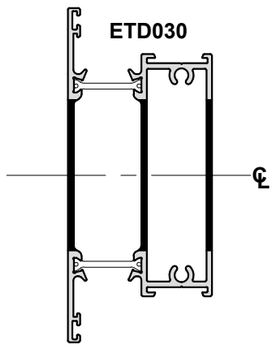


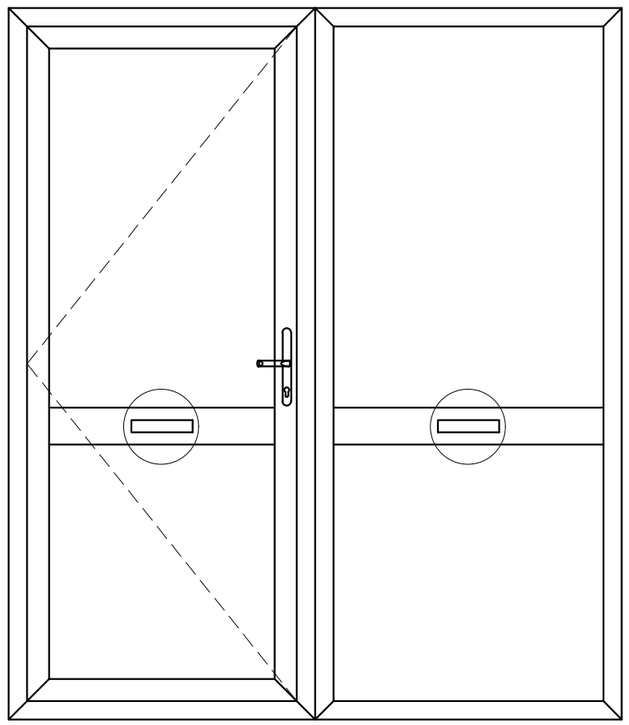
ETD024N
(Secondary)

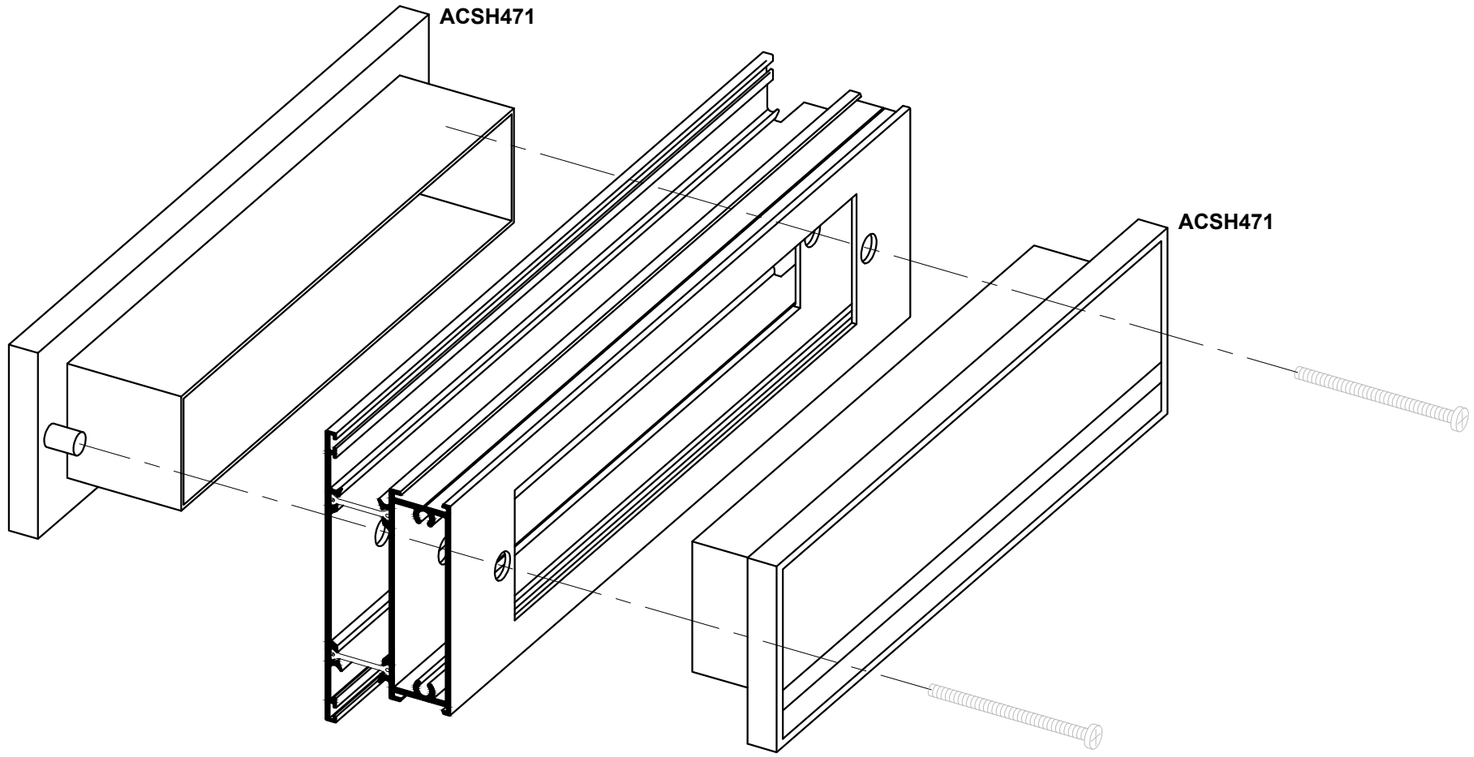


ACSH471 Letter Plate Fitting





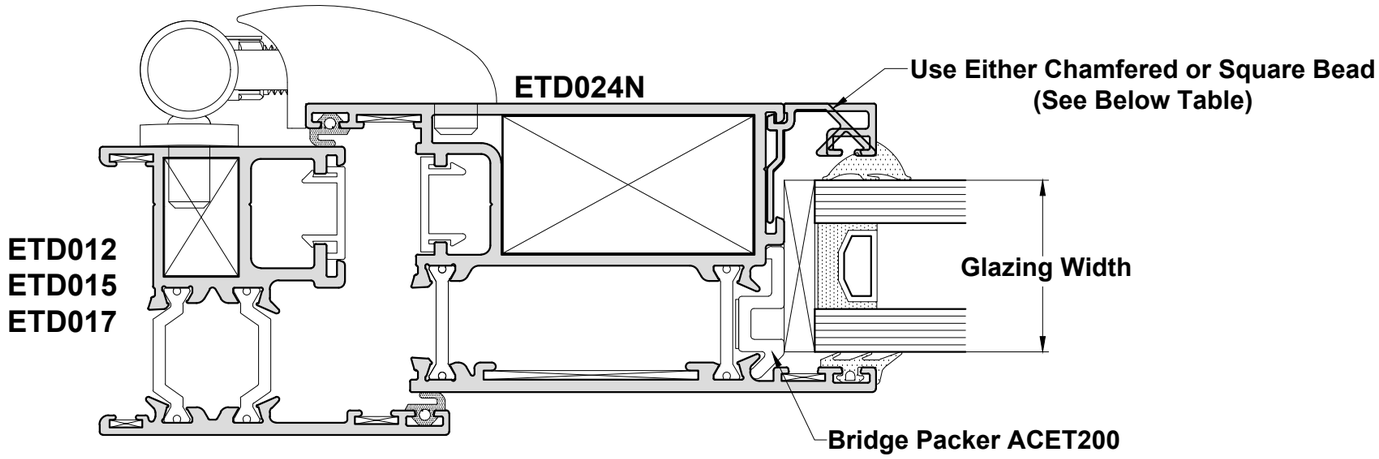




Please note: ACSH471 does not comply with BS EN 13724:2002

Do Not Scale From This Drawing

Glazing Chart



24mm		28mm		32mm	
Beads	Gaskets	Beads	Gaskets	Beads	Gaskets
ETC162	ACVG31 ACVG34	ETC161	ACVG31 ACVG34	ETC160	ACVG31 ACVG34
ETC163	ACVG31 ACVG34	ETC164	ACVG31 ACVG34		

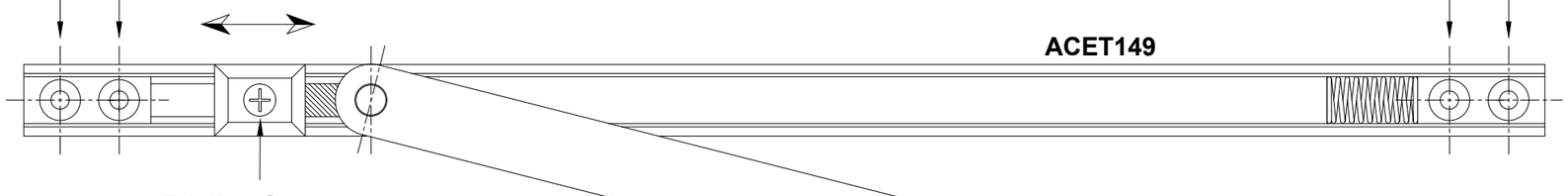
ACET149 Fitting Instructions

Ensure friction screw is loose
before fitting stay to door.
Adjust to required tension
once the stay is fixed in position.

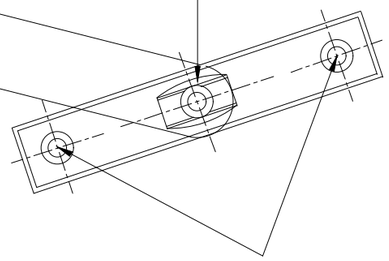
Fixing Plate
Snap-In-Fix

1" No.7 ACET060
Screw (2 off)

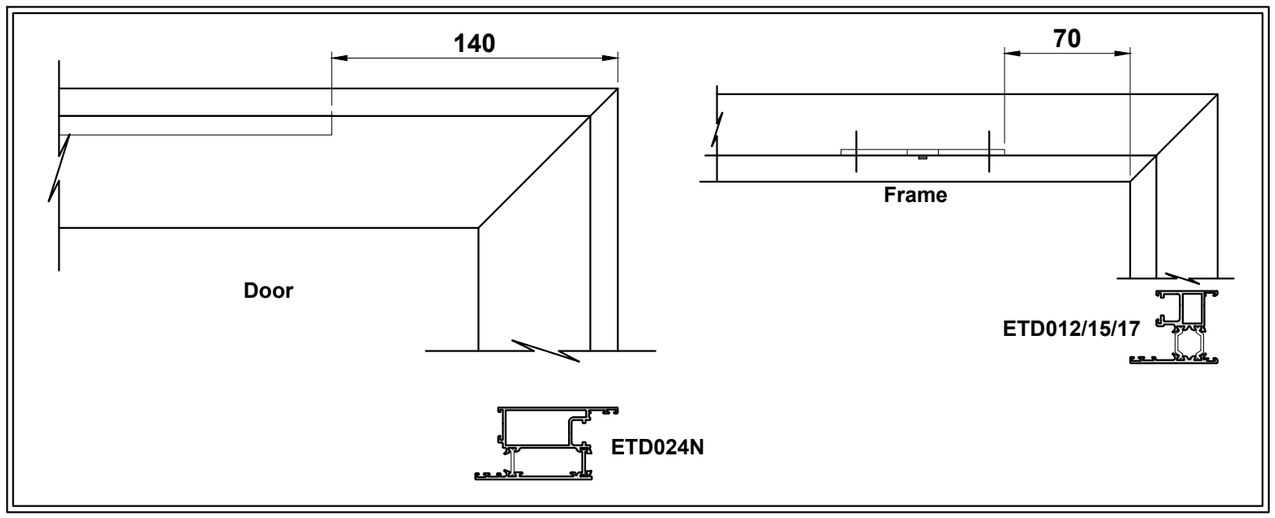
ACET060 x 2



Fixing Plate
Snap-in-fix



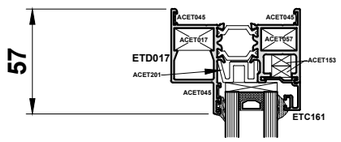
ACET060 x 2



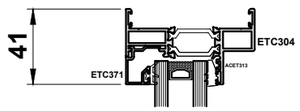
Do Not Scale From This Drawing

Example Layout

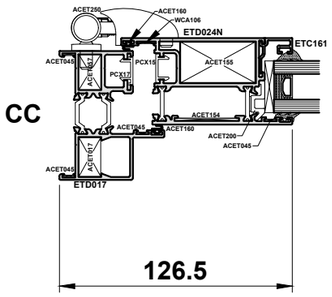
AA

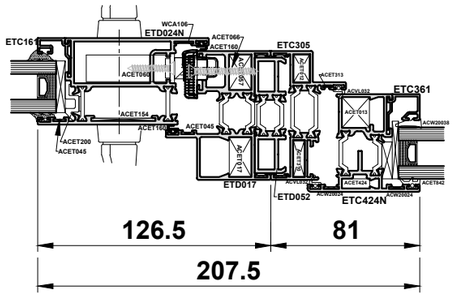


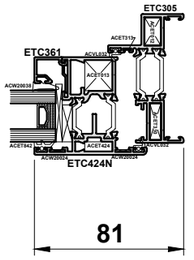
BB

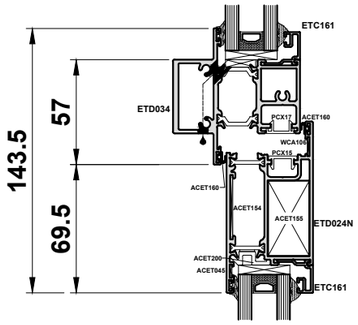


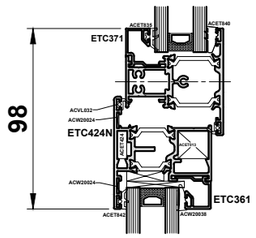
CC

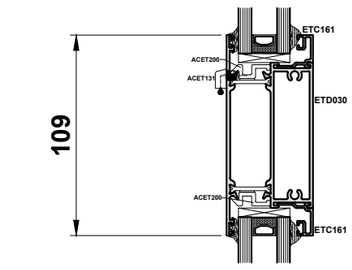


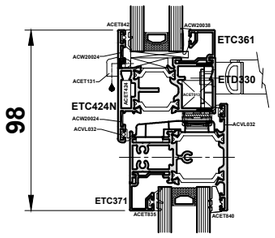


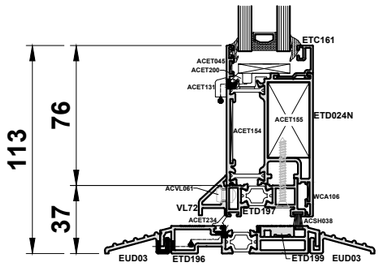


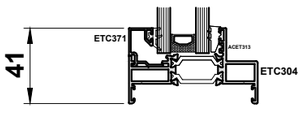




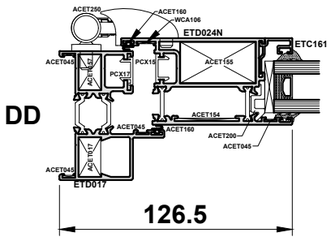


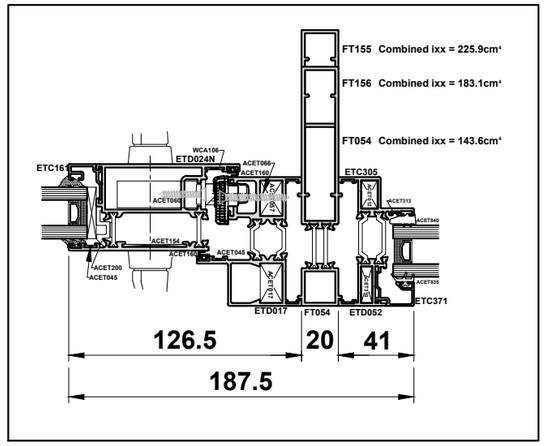






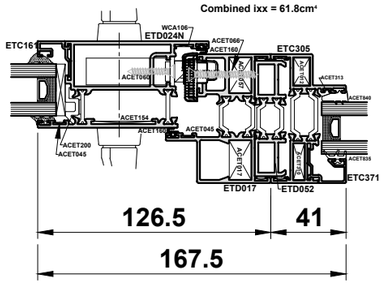
DD

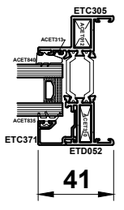


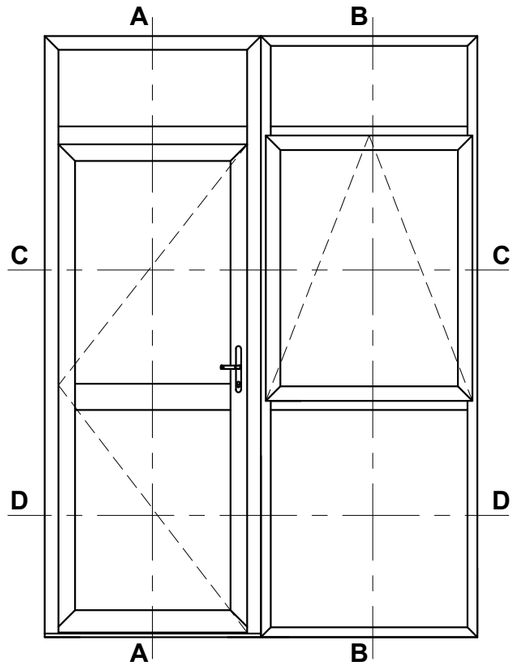


Alternative Coupling Detail

Combined ixx = 61.8cm⁴







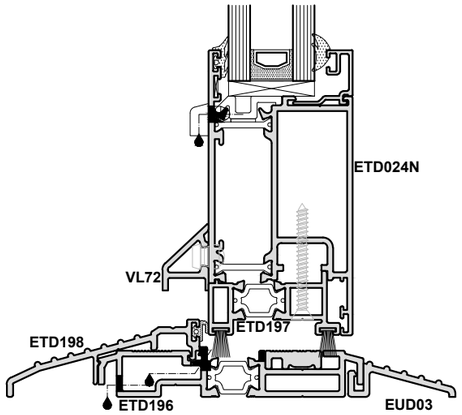
PAS24:2016 Details

Single Door

Accessories Required to Achieve PAS24:2016

A	Guide Blocks	ACET257
B	Hinges	ACET250
C	Lever/Lever Handle	ACET480
D	45/30 Cylinder	ACCY4530S1*
E	Keep Reinforcement	ACET217
F	Glass Packer Positions	
G	Hinge Protectors	ACET252
H	Lock with Shoot bolts	See Table 1

*Standard Handles may be used as an alternative to ACET480 providing the cylinder used has a TS007:2014 3 star accreditation (by others).



Note: To comply with PAS24:2016 & KM530838, ETD198 must be used with ETD196

Double Door

Accessories Required to Achieve PAS24:2016

A	Guide Blocks	ACET257
B	Hinges	ACET250
C	Lever/Lever Handle	ACET480
D	45/30 Cylinder	ACCY4530S1*
E	Keep Reinforcement	ACET217
F	Glass Packer Positions	
G	Hinge Protectors	ACET252
H	Top Shootbolt	ACDV738**
I	Bottom Shootbolt	ACDV737**

*Standard Handles may be used as an alternative to ACET480 providing the cylinder used has a TS007:2014 3 star accreditation (by others).

**ACDV737 & ACDV738 shoot bolts are supplied for the secondary door with ACET285 and need to be ordered separately from ACET292 & ACET293.

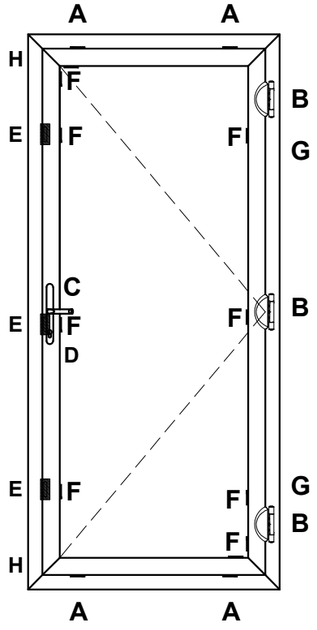
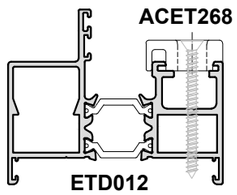
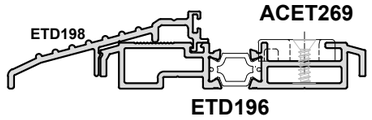
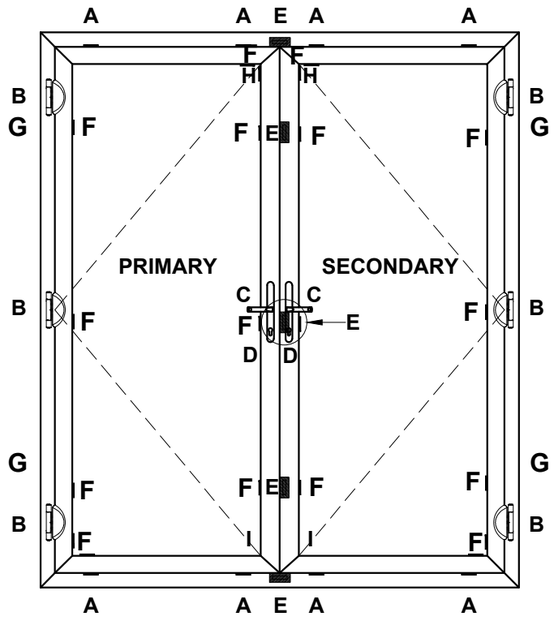


Table 1 - Single Door Locking Details

Height	Threshold Type	Lock	Bottom Shootbolt	Top Shootbolt	Bottom Keep	Top Keep
1885 - 2352	Standard Threshold	ACET292/3	ACDV737	ACDV738	ACET268	ACET268
1885 - 2338	ETD196 Low Threshold	ACET292/3	ACDV737	ACDV738	ACET269	ACET268
2352 - 2552	Standard Threshold	ACET292/3	ACDV737	ACDV742	ACET268	ACET268
2338 - 2538	ETD196 Low Threshold	ACET292/3	ACDV737	ACDV742	ACET269	ACET268

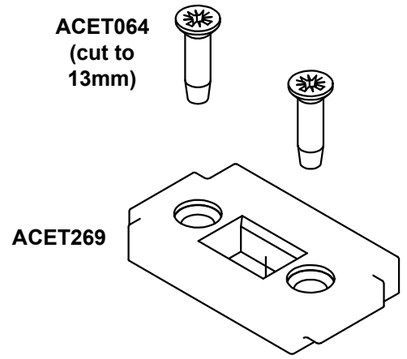


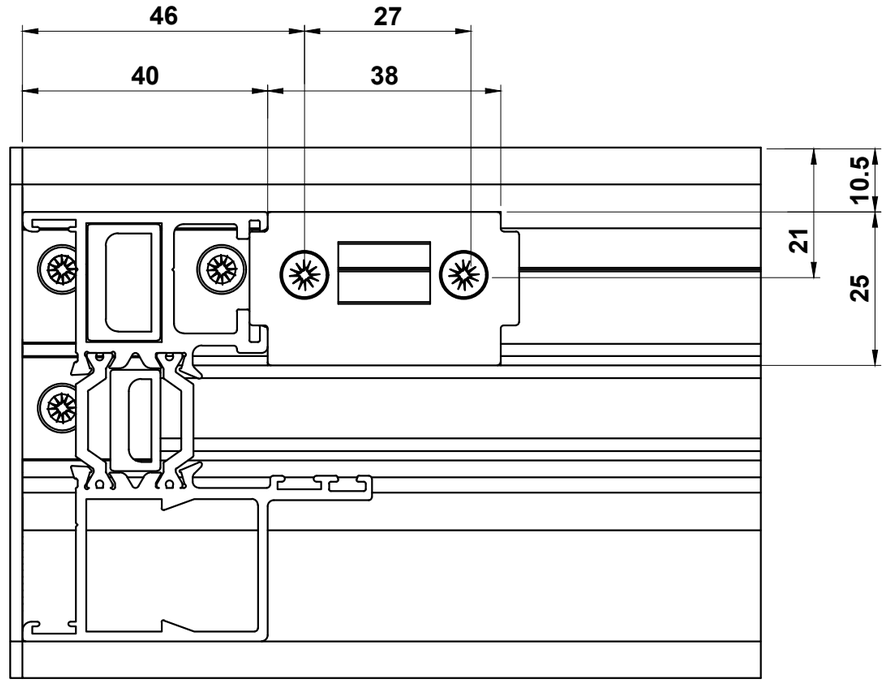


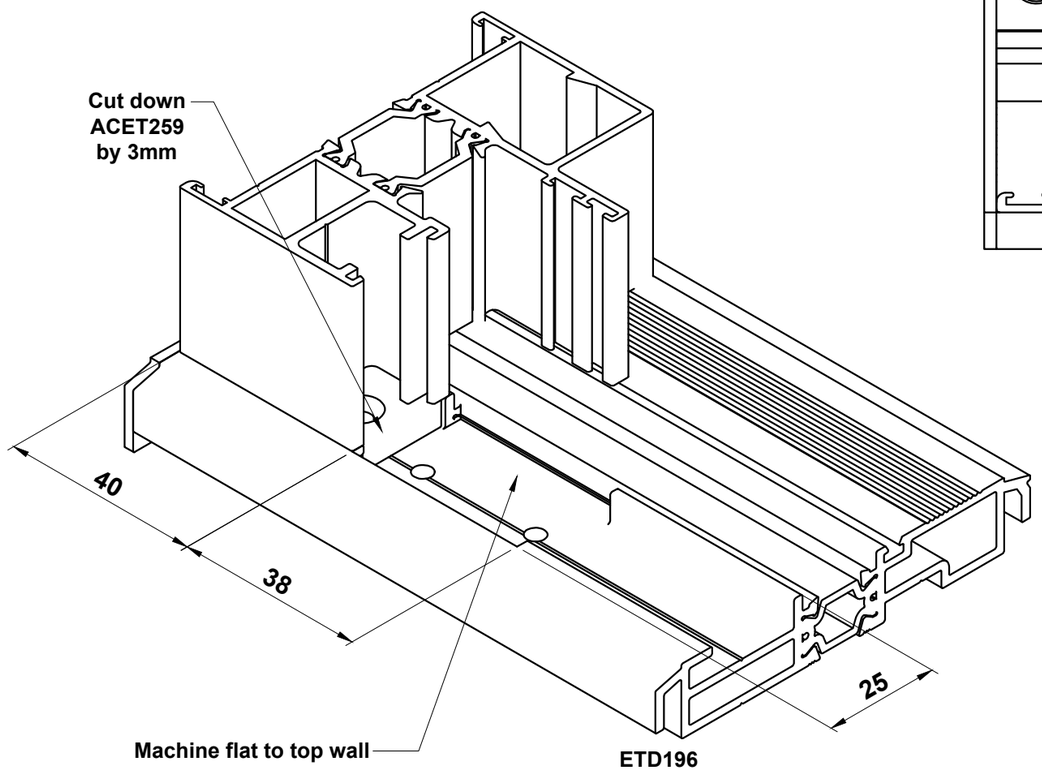


Do Not Scale From This Drawing

ACET268 & ACET269 Fitting Details

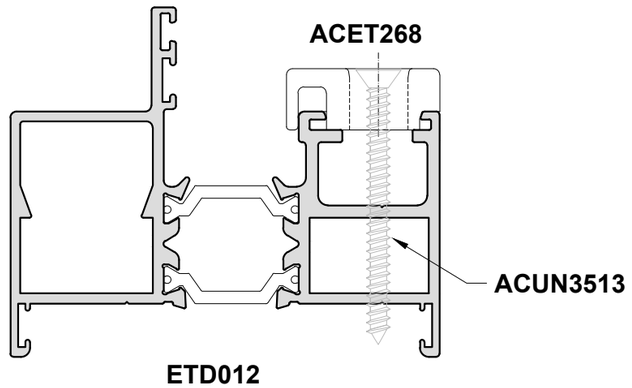






ETD196

ACET268 is fitted in the same location as ACET269 but no machining is required.



ETD012
ETD015
ETD017

Do Not Scale From This Drawing

Do Not Scale From This Drawing

Section E

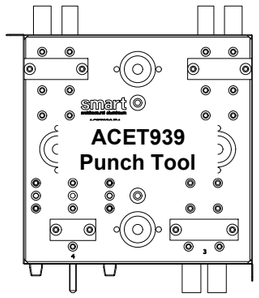
E ETD **Construction Drawings - Open Out**

Corner Joint Details..... E31 - E34
Drainage..... E35 - E36
Mullion & Mid Rail..... E37 - E39
Hinges..... E40 - E41
Lock Selection & Installation..... E42 - E46
ETD048 & ETD197 Preparation & End Caps..... E47
Letter Plate..... E48
Glazing Details..... E49
ACET149..... E50
Example Layout..... E51
PAS24:2016 Accessories & Position..... E52 & E53
Fixing Strap Guide..... E54

Corner Joint Details

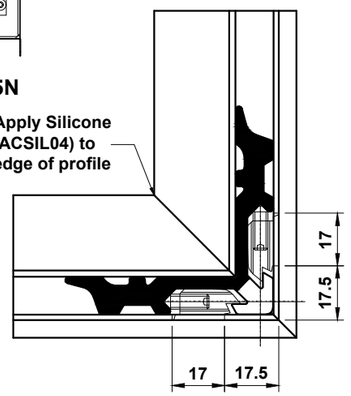
ETD012
ETD017

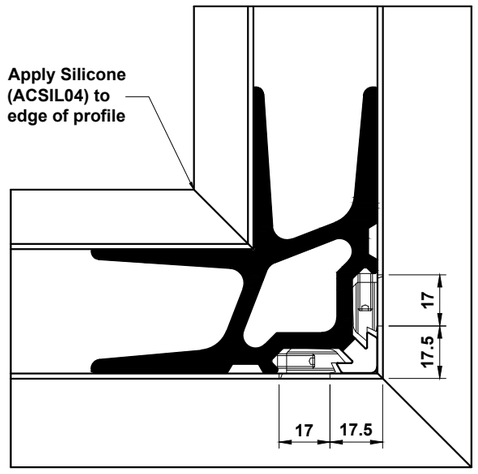
ETD017

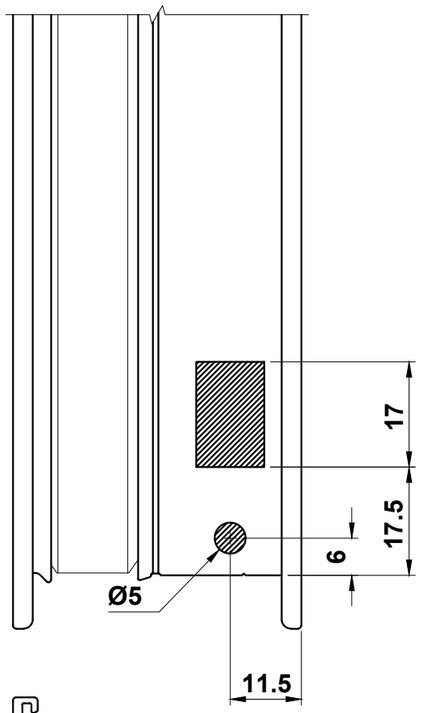


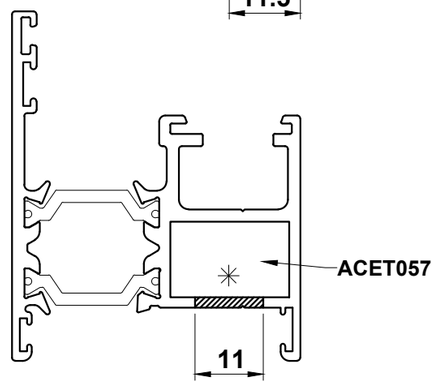
ETD015

ETD025N

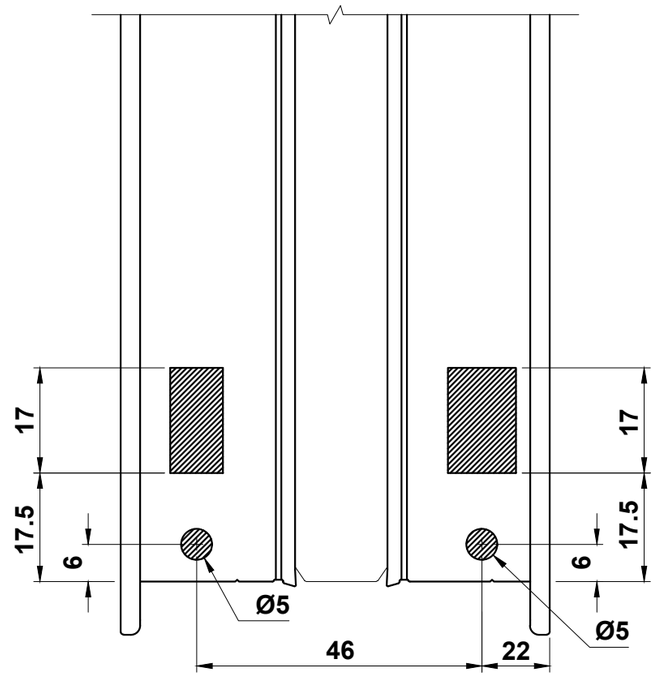


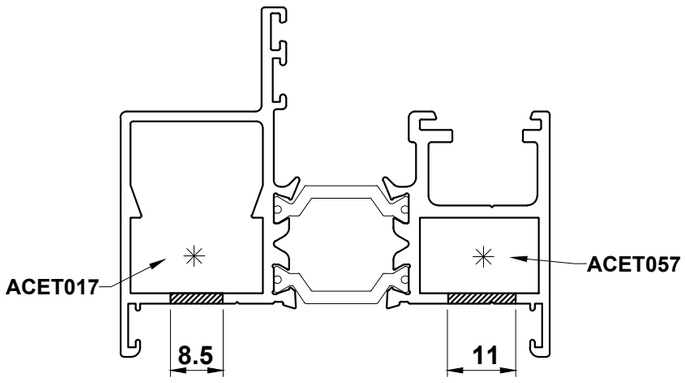






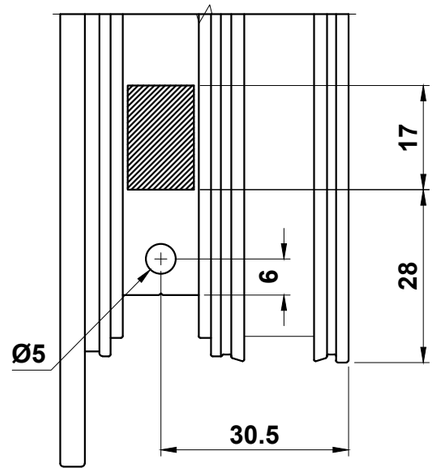
ETD012
47mm Outframe

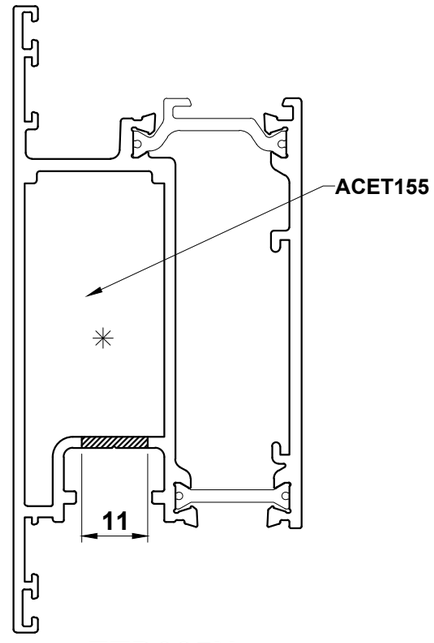




ETD015
70mm Ovolo Outframe

ETD017
70mm Square Outframe



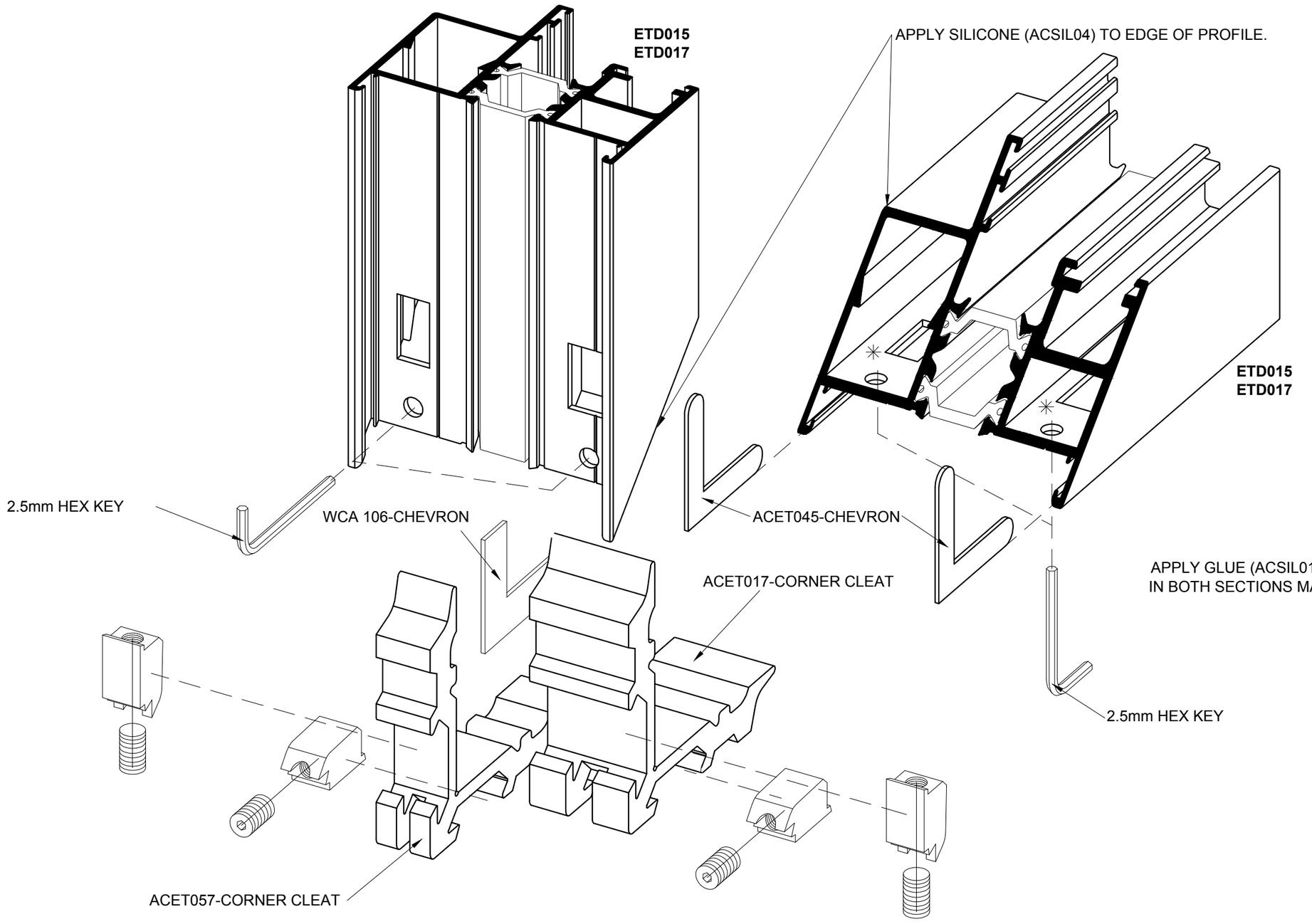


ETD025N
Open Out Sash

Apply Glue (ACSIL013) to cleat aperture marked : ✳

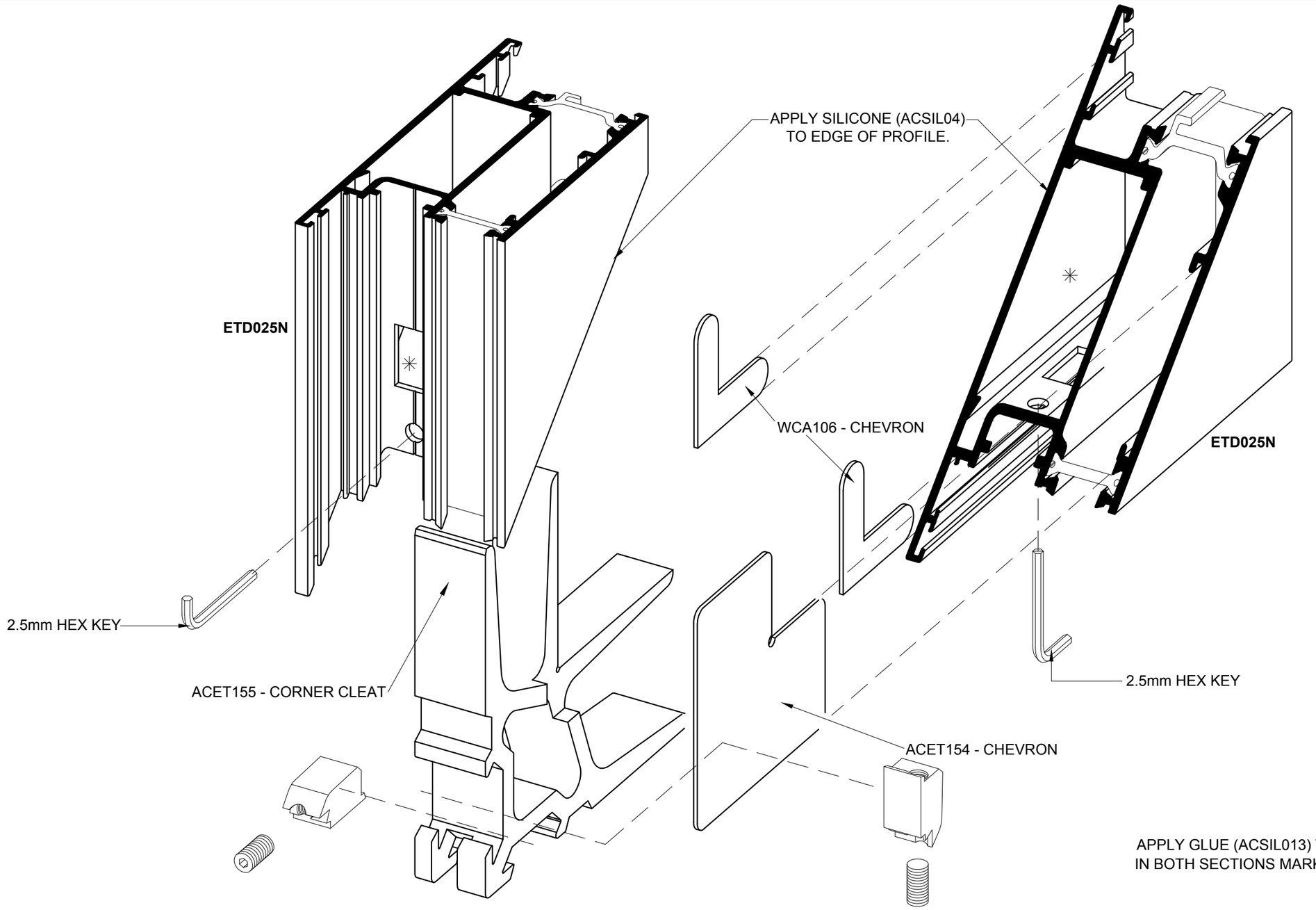
Do Not Scale From This Drawing

Outer Frame Corner Assembly



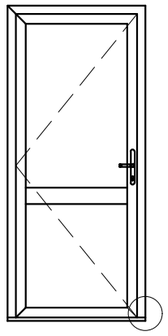
Do Not Scale From This Drawing

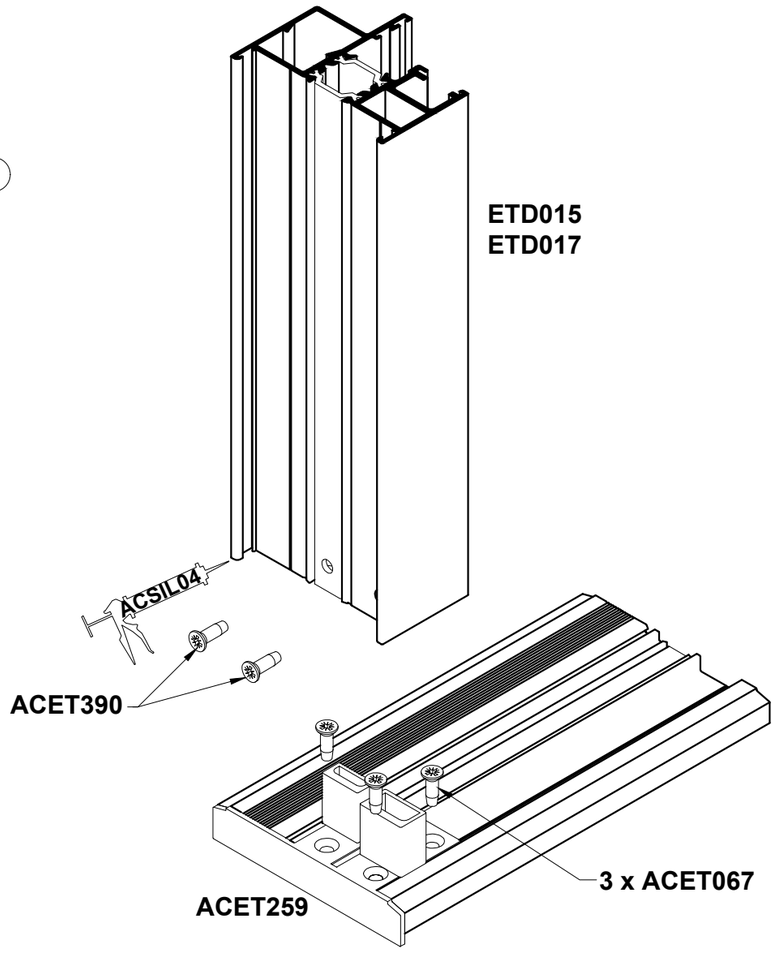
Sash Corner Assembly

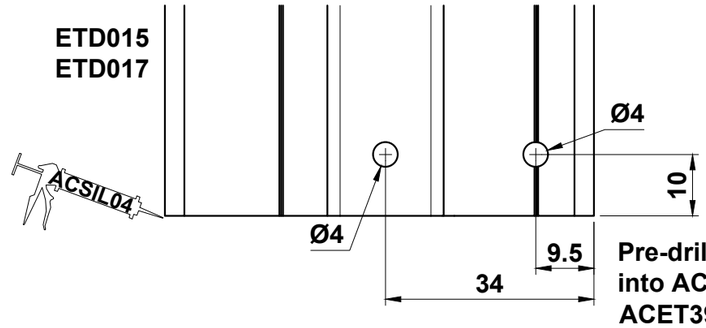


Do Not Scale From This Drawing

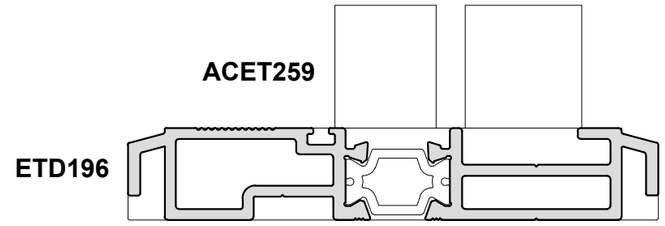
Low Threshold Preparation & Assembly

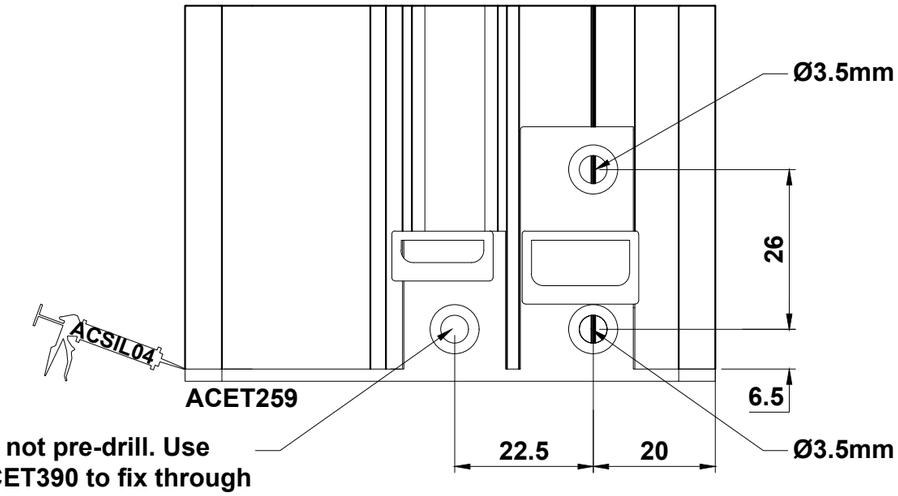






Pre-drill jamb only & fix into ACET259 using ACET390 screws.

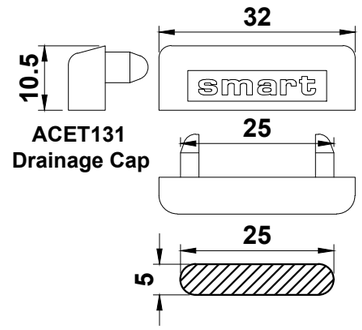




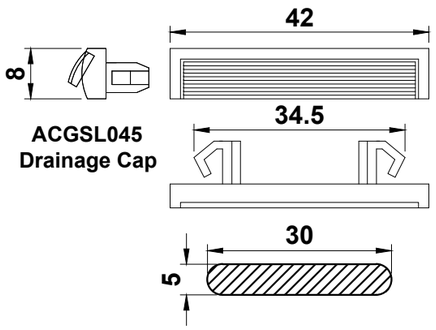
Do not pre-drill. Use ACET390 to fix through polyamide

Do Not Scale From This Drawing

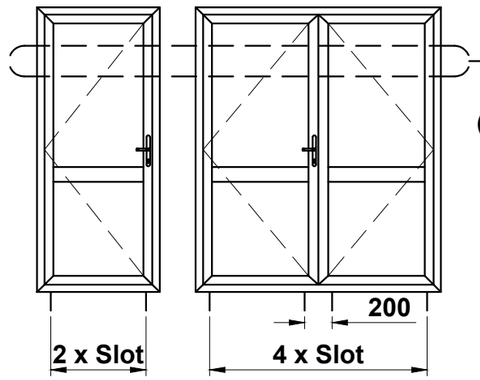
Drainage



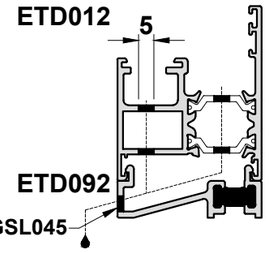
ACET131
Drainage Cap

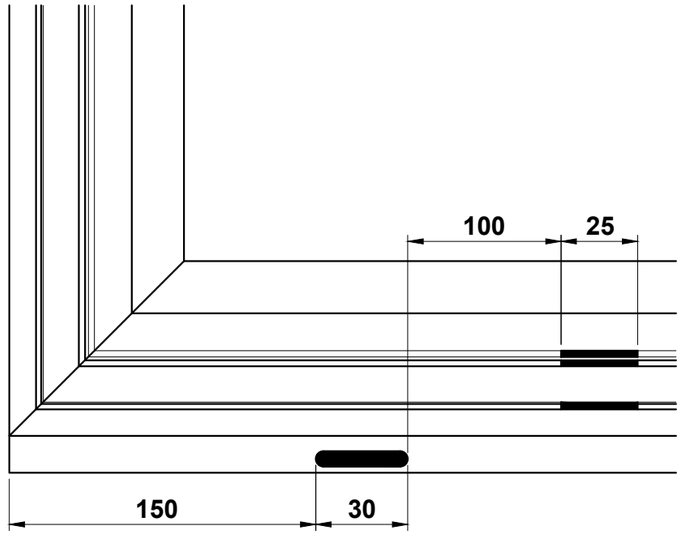


ACGSL045
Drainage Cap

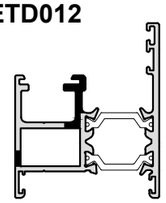


Pressure
Equalization
(Ø8mm Hole)





ETD012



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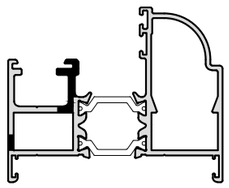
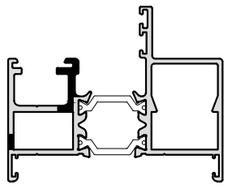
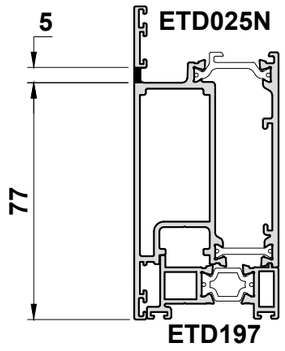
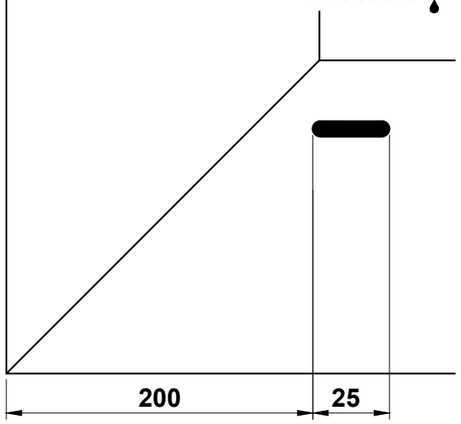
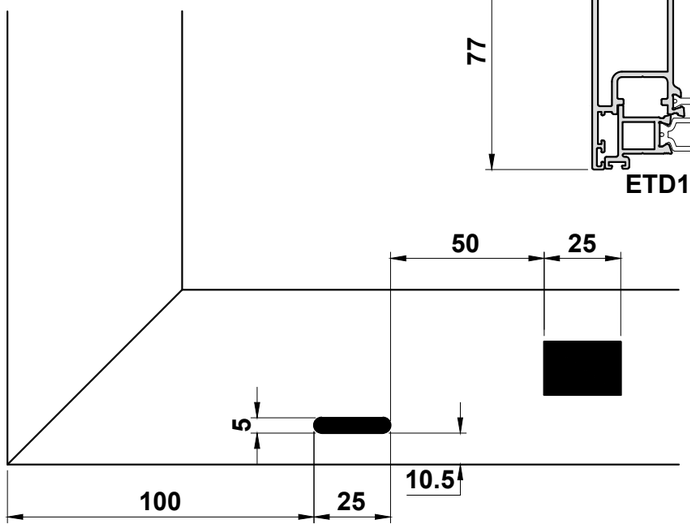


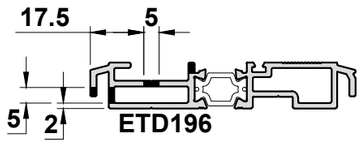
ETD017

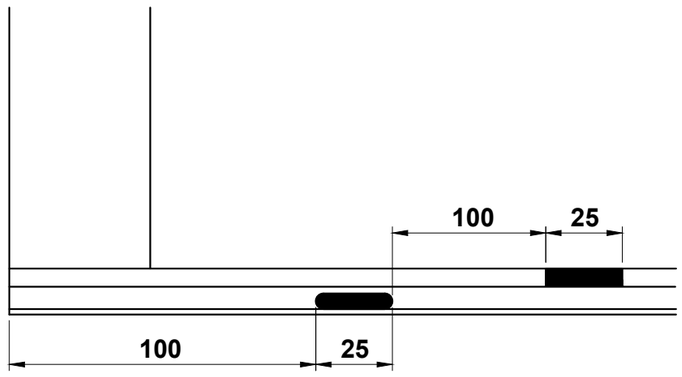








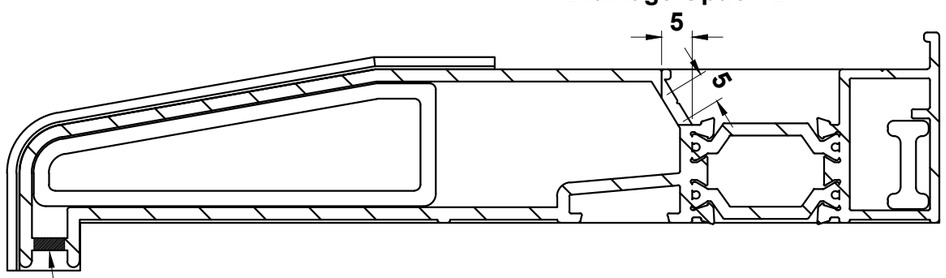




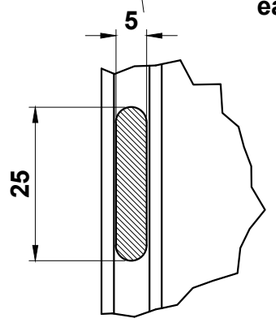
Do Not Scale From This Drawing

Cill Drainage Details

Drainage Option B

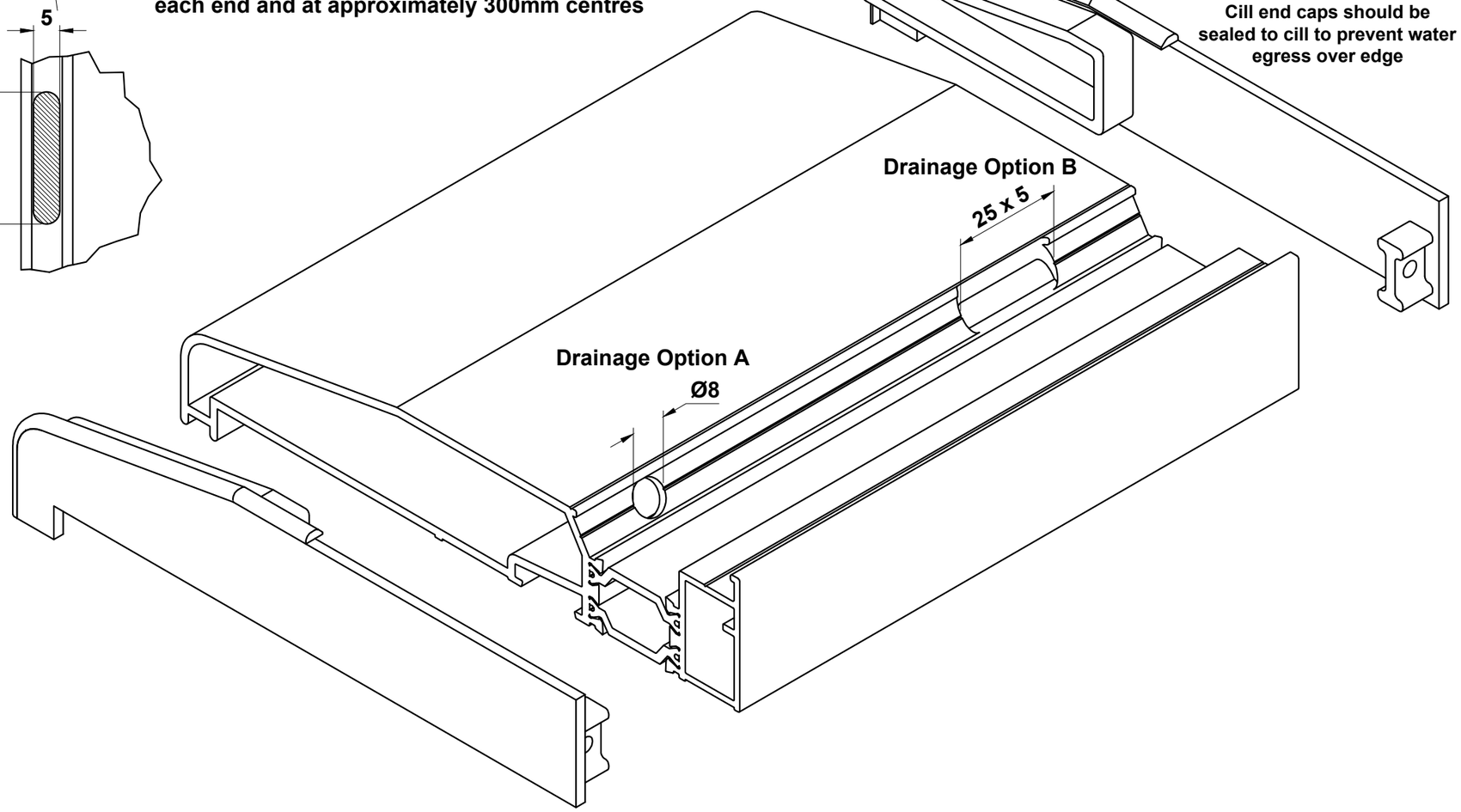


Drainage holes to be spaced 100mm in from each end and at approximately 300mm centres



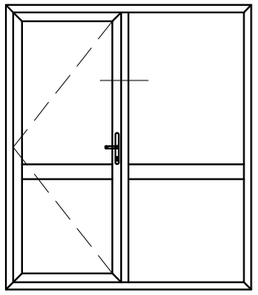
Cill end caps should be sealed to cill to prevent water egress over edge

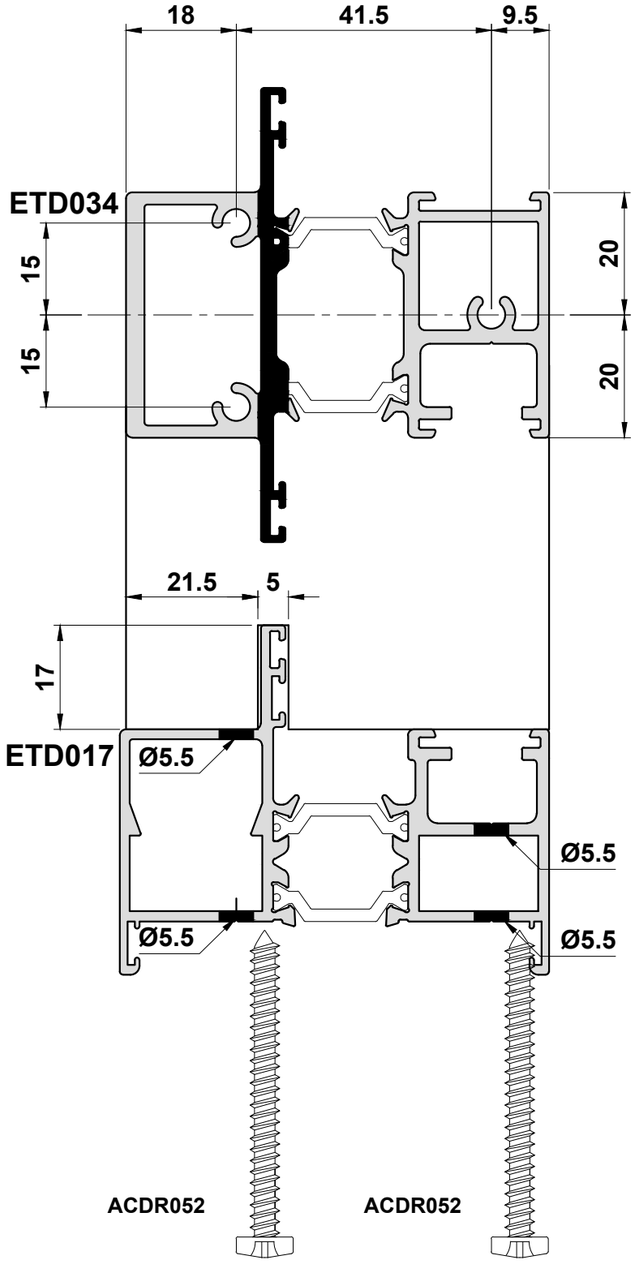
Drainage Option B

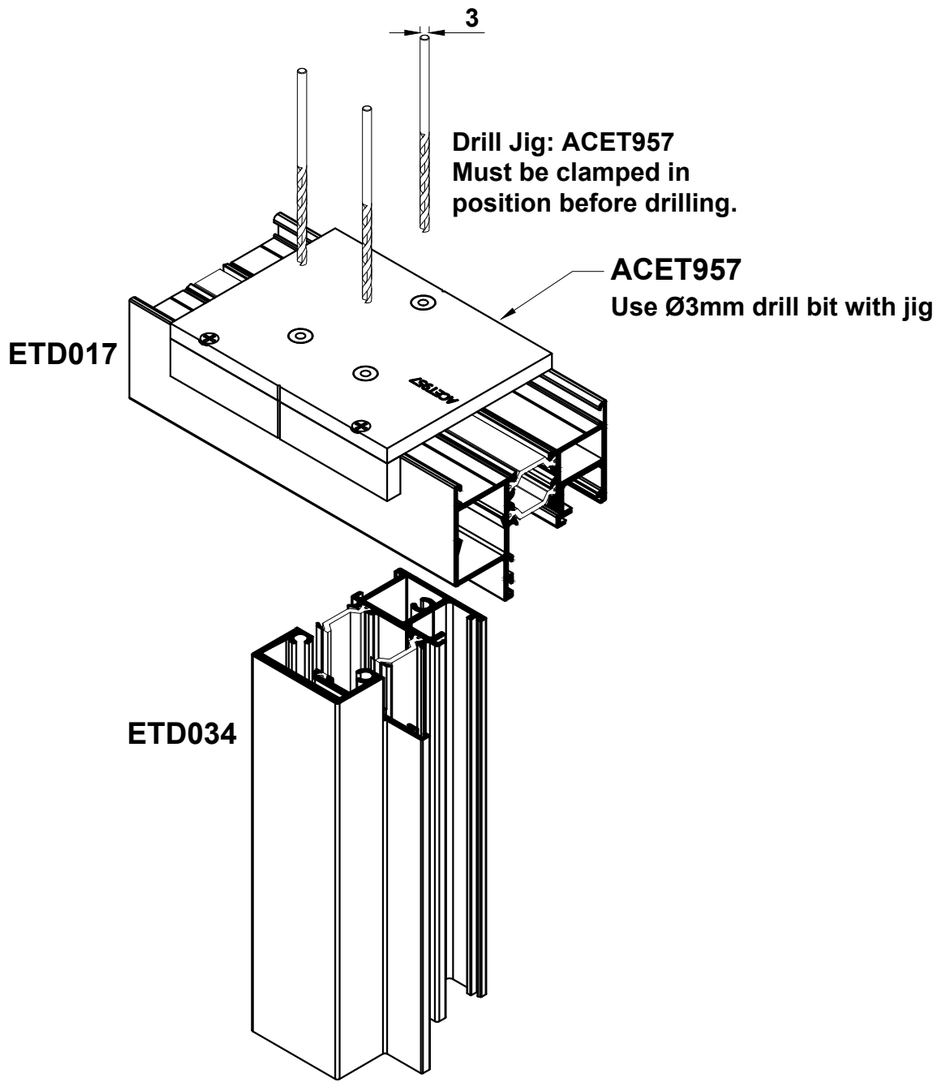


Do Not Scale From This Drawing

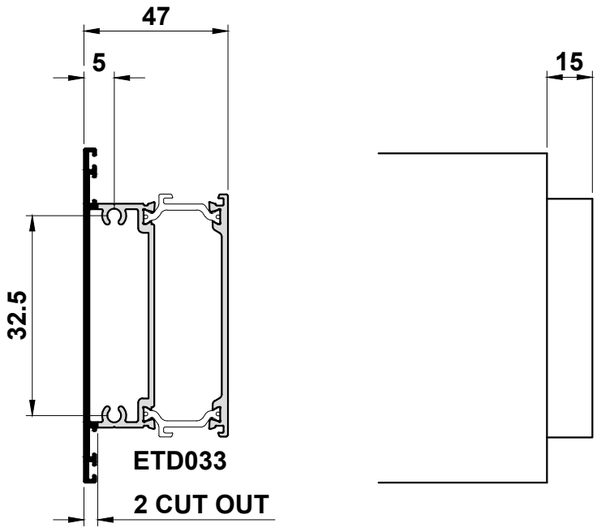
Mullion Preparation

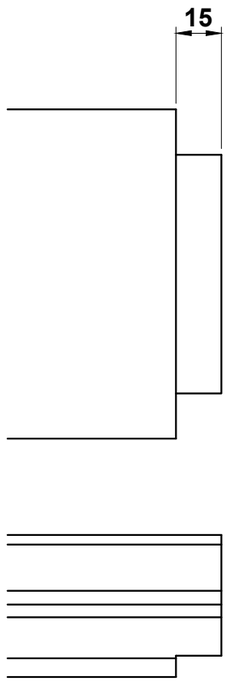






Mid Rail Preparation into Sash

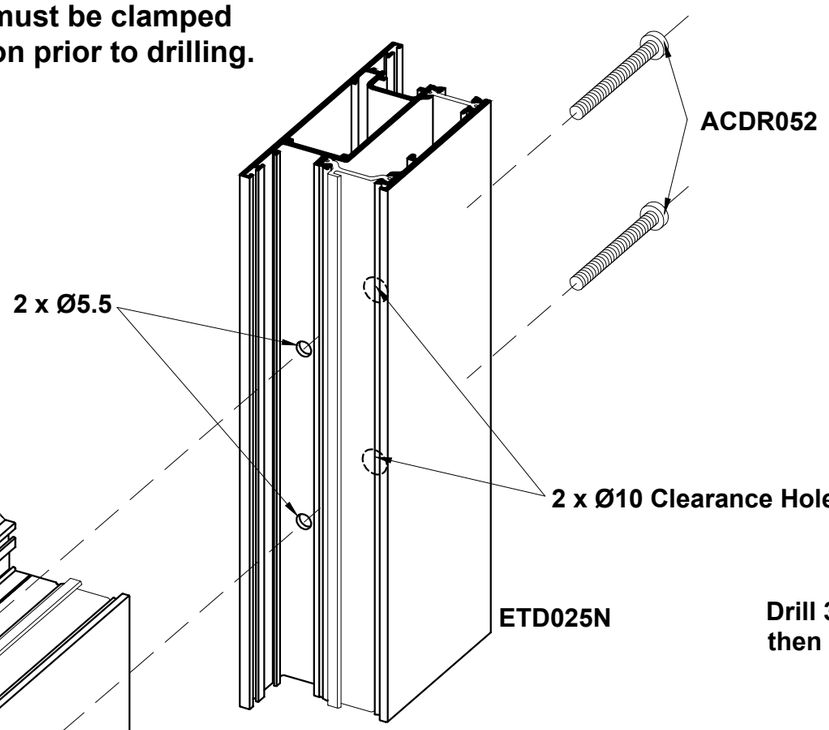


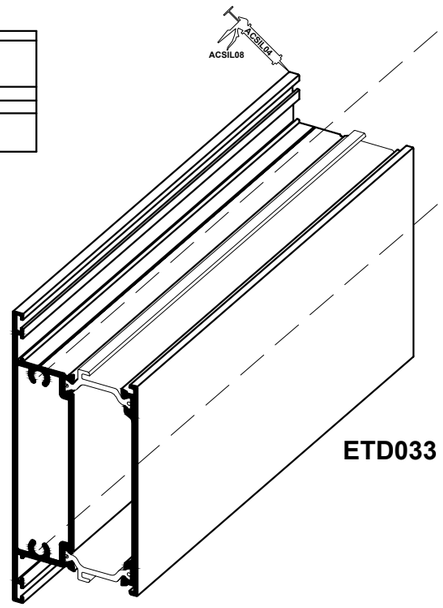


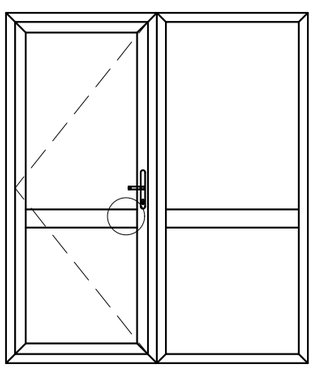
Use recommended drill jig: ACET951

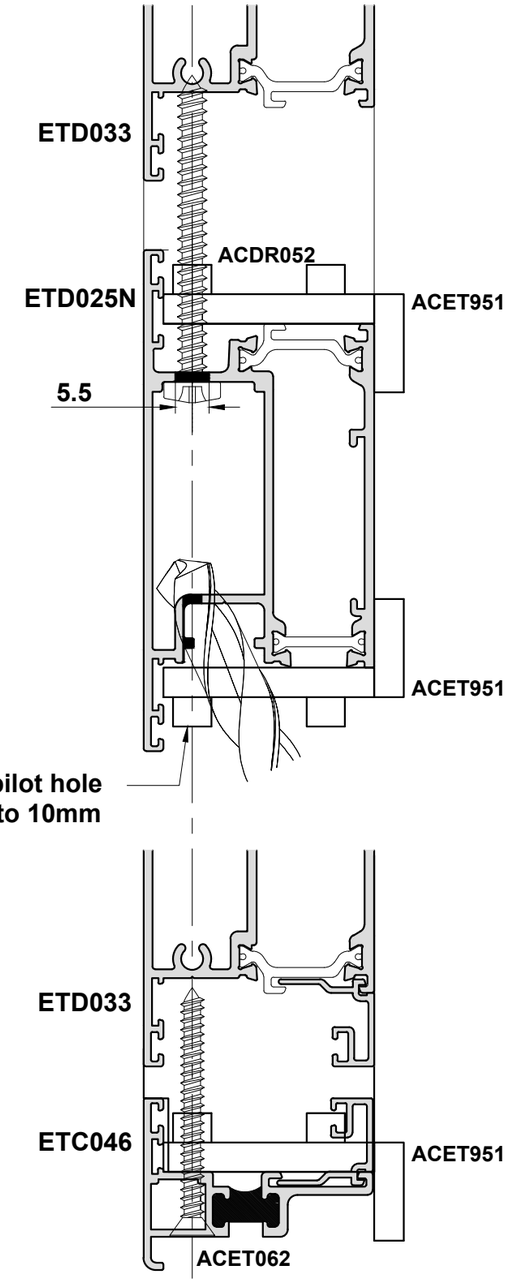
Important Note:

ACET951 must be clamped into position prior to drilling.



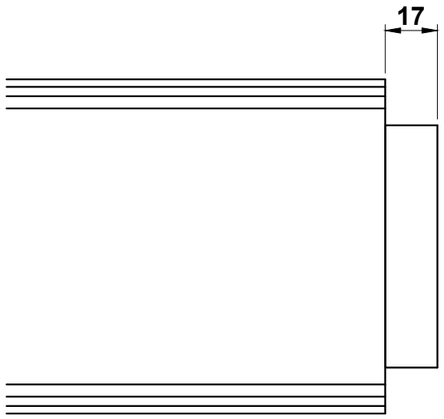


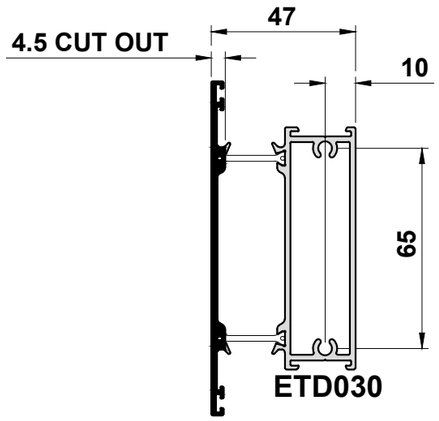


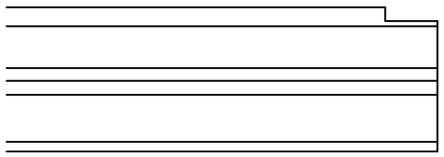


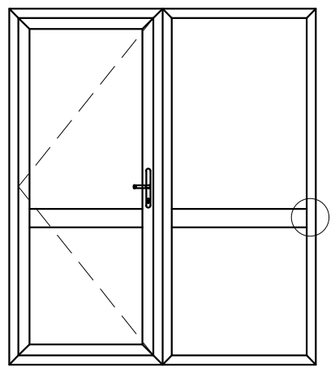
Do Not Scale From This Drawing

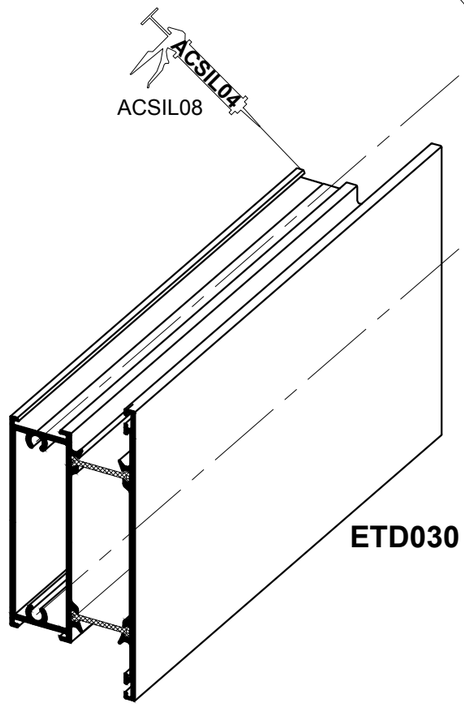
Midrail Prepartion into Outer Frame





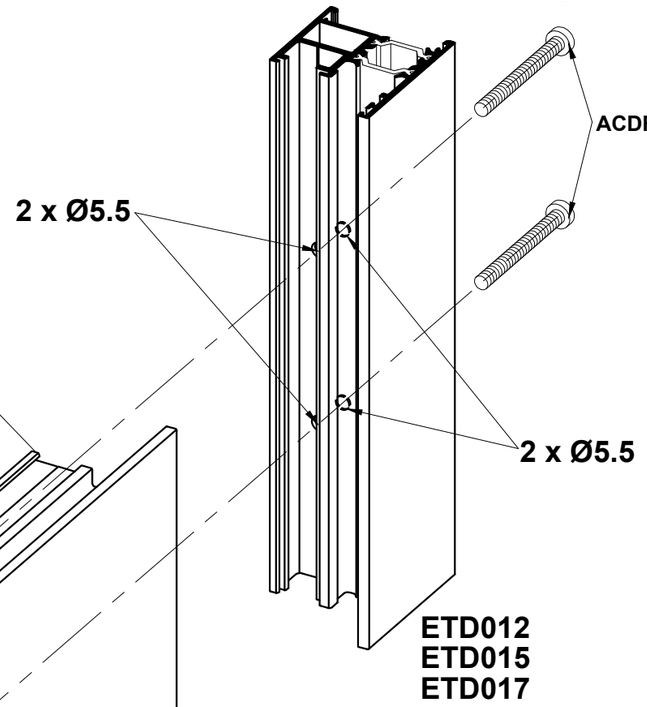


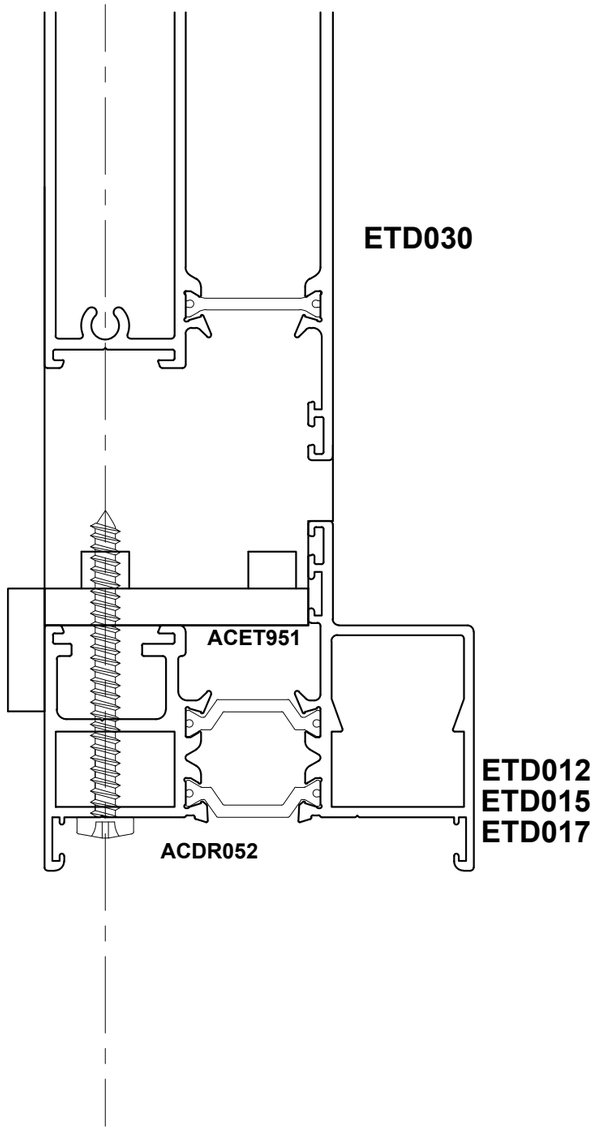




Use recommended drill jig: ACET951

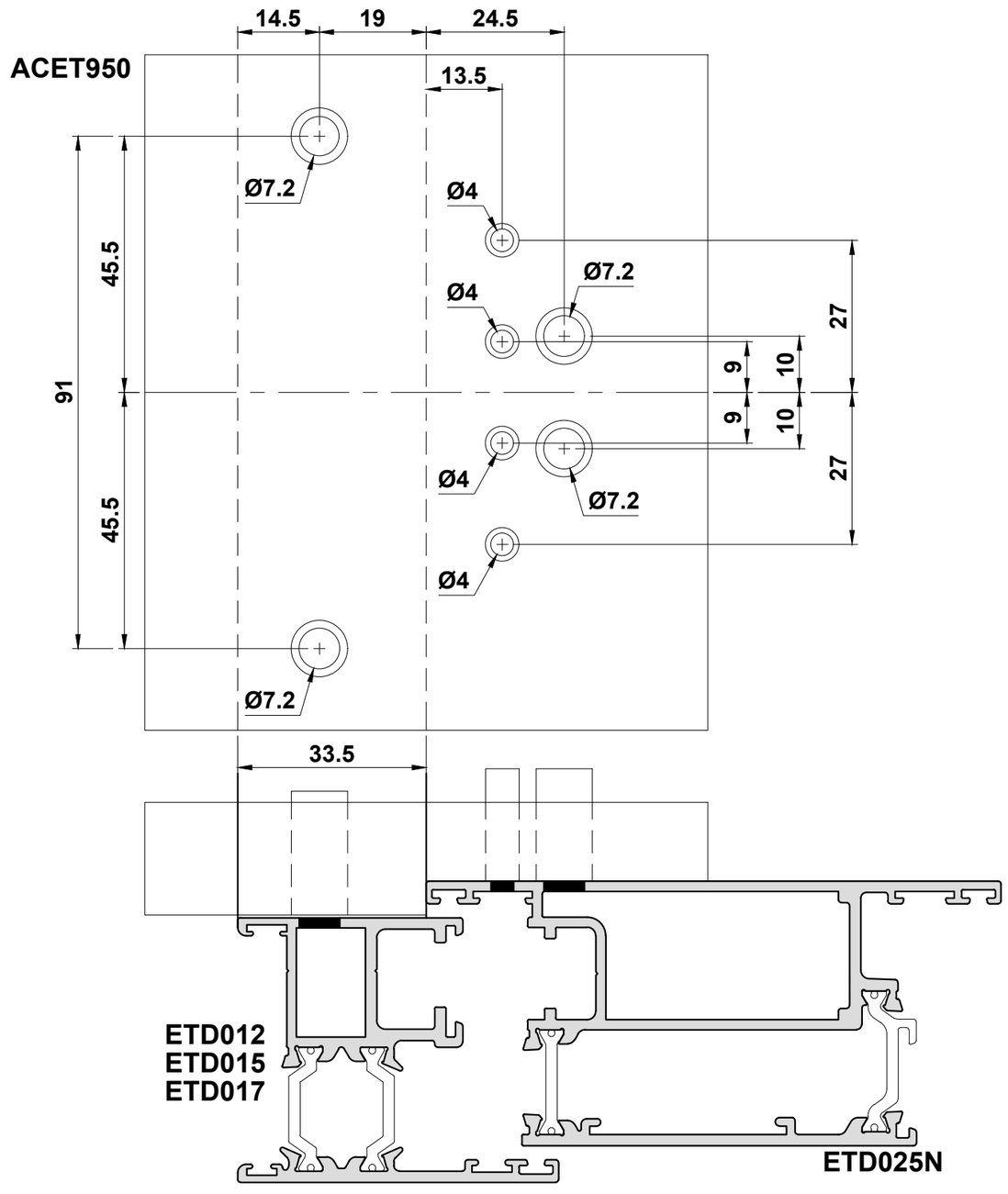
Important Note:
ACET951 must be clamped into position prior to drilling.





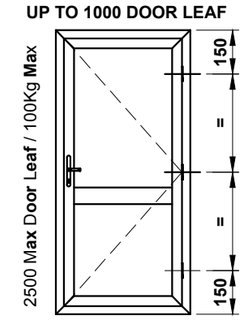
Do Not Scale From This Drawing

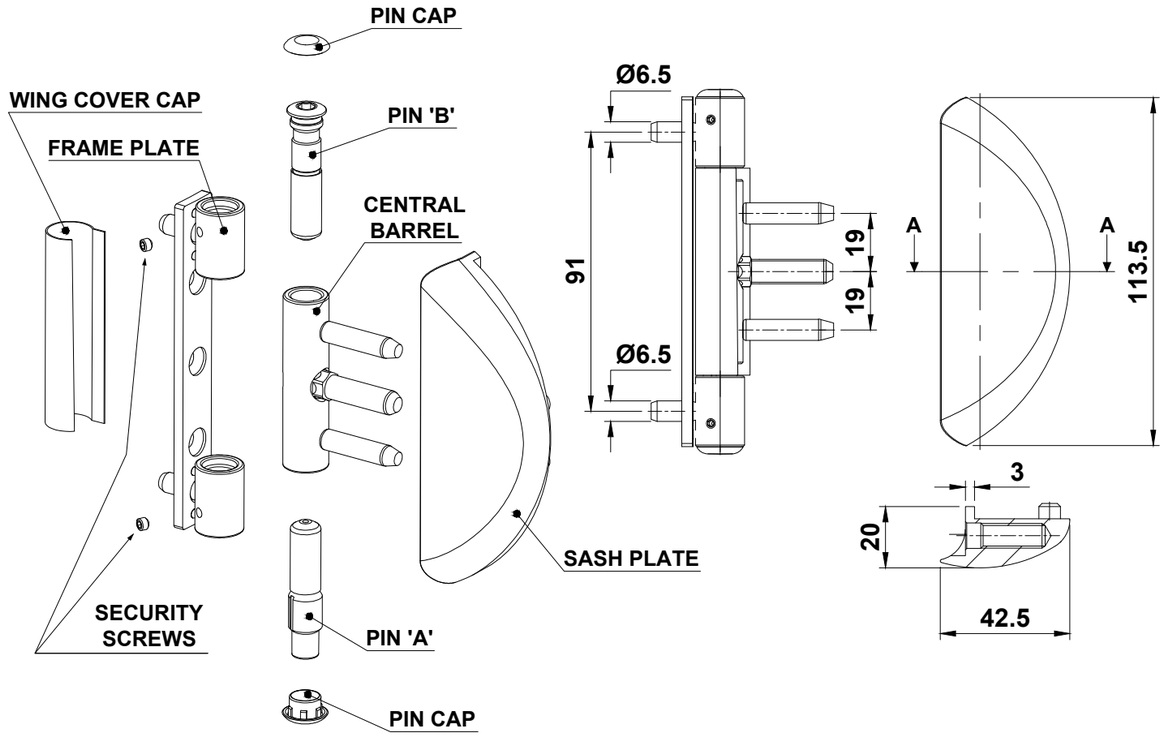
ACET250 Hinge Fitting Details



Fitting Instructions:
(Full instructions are supplied with each ACET250 Hinge)

1. Align outer frame and sash in correct position
2. Clamp drill jig ACET950 over the centre line of the hinge
3. Drill through all bushes marked '1' with a Ø7.2mm drill bit (supplied) and through all bushes marked '2' with a Ø4mm drill bit (not supplied)
4. Fasten the sash plate
5. Fasten the frame plate using ACIM062 screws ensuring the grub screws are positioned towards the door sash
6. Drive in the central barrel until it lines up with the rings on the frame plate
7. Drive in pin 'B' to the top of the hinge and then drive in pin 'A' to the bottom of the hinge
8. Open the door and lightly tighten the security screws
9. Adjust hinge as required then insert caps and cover caps.





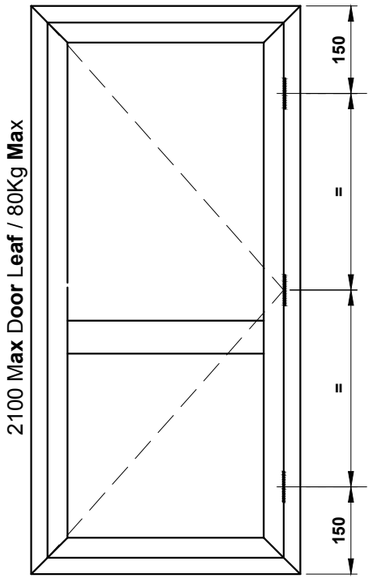
Do Not Scale From This Drawing

ACET174 Hinge Fitting Details

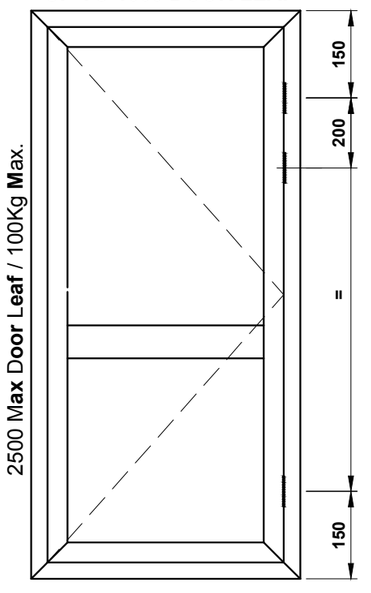
Assembly Instructions:

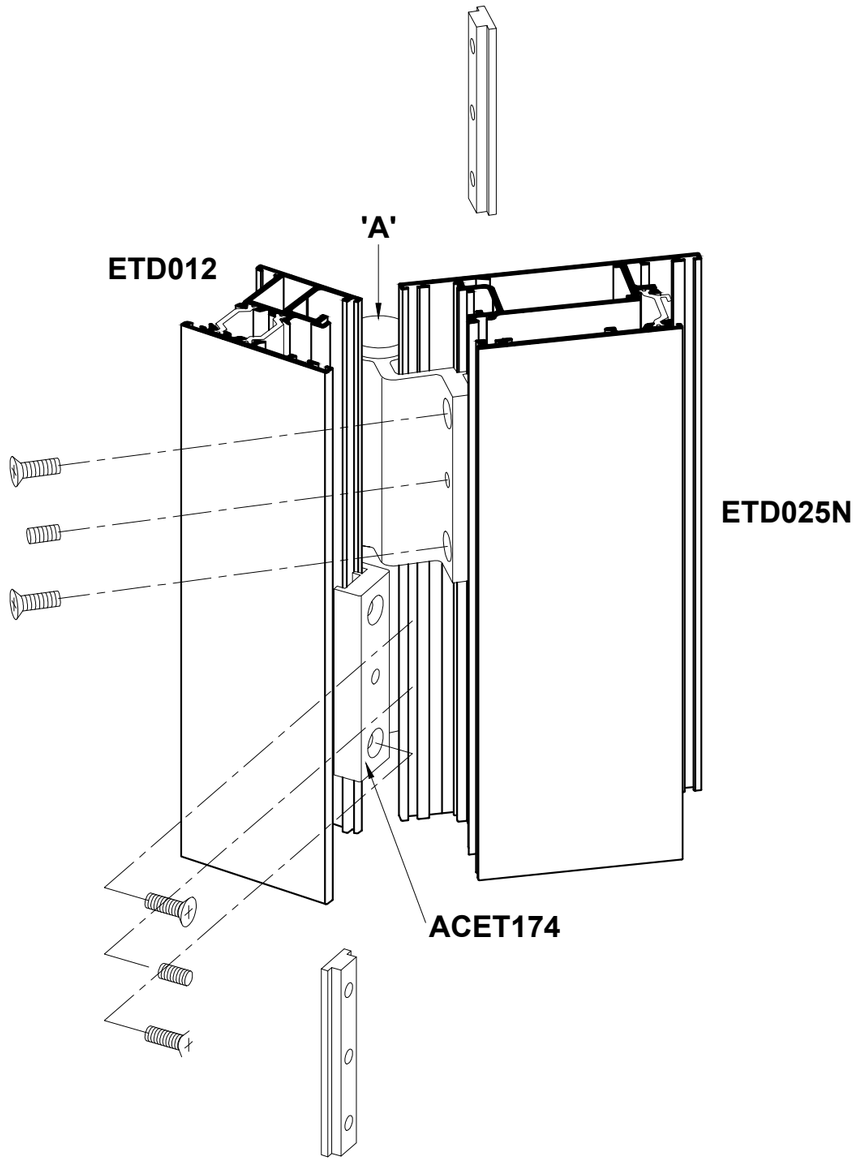
1. Fix 2no M5x10mm grub screws to sash frame clamp plate and slide into sash eurogroove to hinge position.
2. Locate hinge and clamp in position using 2no M5x10mm machine screws.
3. Fix sash to outer frame using clamp plates and fit M5 x 15mm CSK machine screws and adjust for correct position.
4. If the sash requires adjustment after the door has been glazed this can be acheived by loosening the clamp plate machine screws, adjusting the sash height and tightening the clamp plates.
5. The final adjustment of the sash width and compression of the gasket when the sash is closed can be acheived by rotating the cam in the hinge (A).

UP TO 900 DOOR LEAF



UP TO 1000 DOOR LEAF

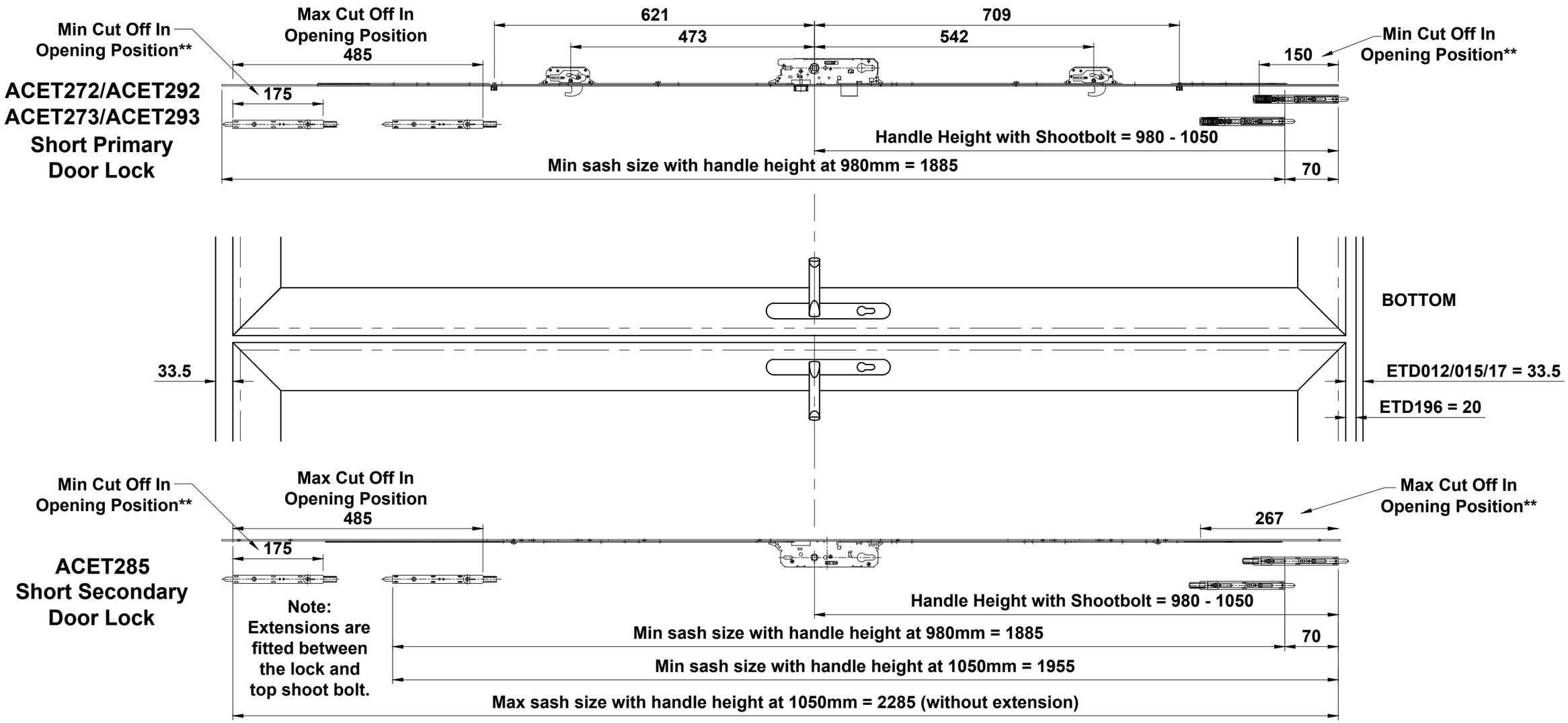




Do Not Scale From This Drawing

Lock Selection with Shootbolts

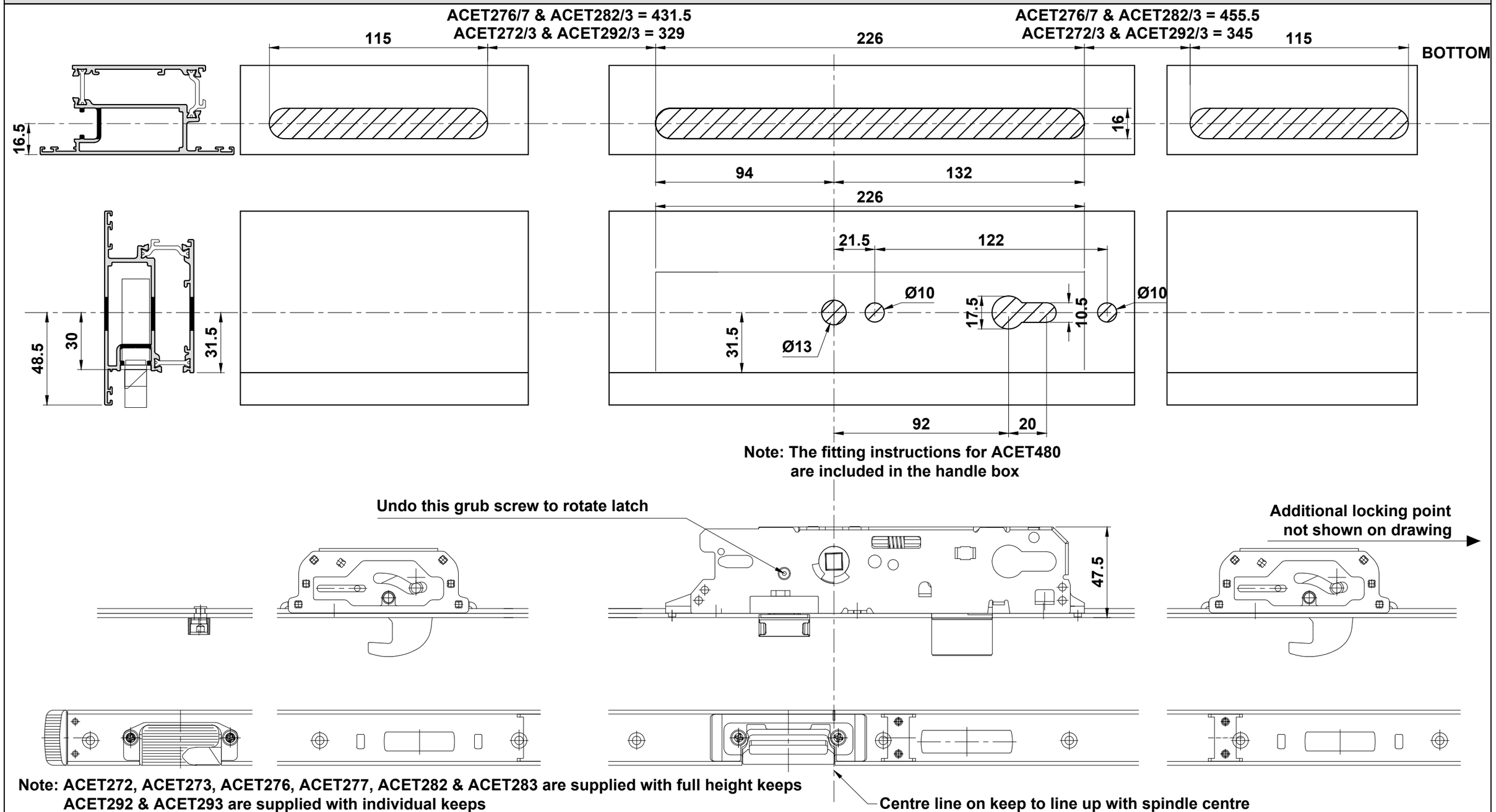
Note: ACDV742 & ACDV744 extensions may used with all locks



*Maximum sash height is 2500mm. Sizes shown here only indicate sizes with ACDV744.
**Minimum cut off positions are required to fit the shoot bolts.

Do Not Scale From This Drawing

Primary Door Lock Fitting Details with ACDV251 or ACET480 Handle

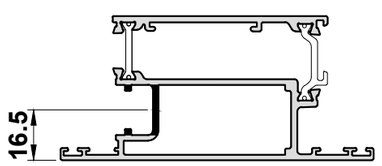


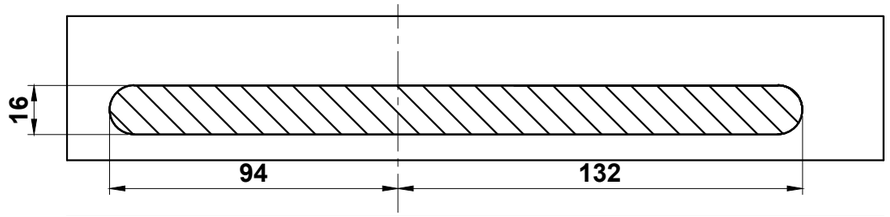
Note: The fitting instructions for ACET480 are included in the handle box

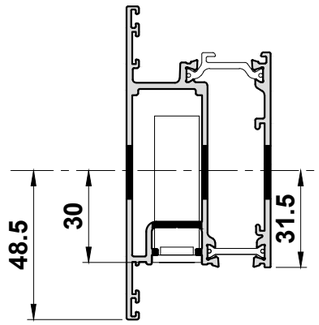
Note: ACET272, ACET273, ACET276, ACET277, ACET282 & ACET283 are supplied with full height keeps
ACET292 & ACET293 are supplied with individual keeps

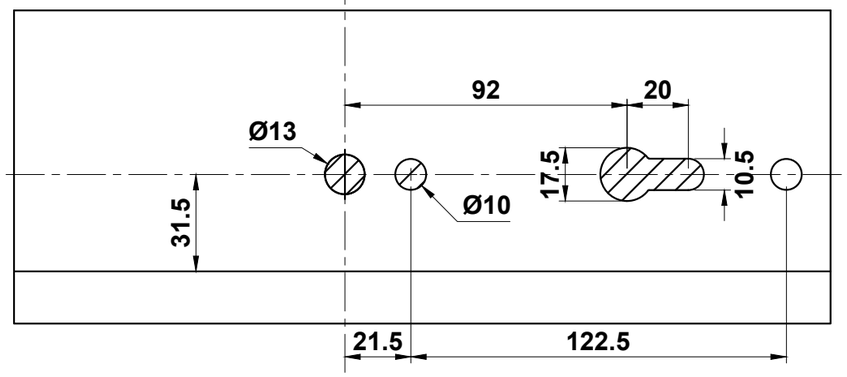
Do Not Scale From This Drawing

Secondary Door Lock Fitting Details

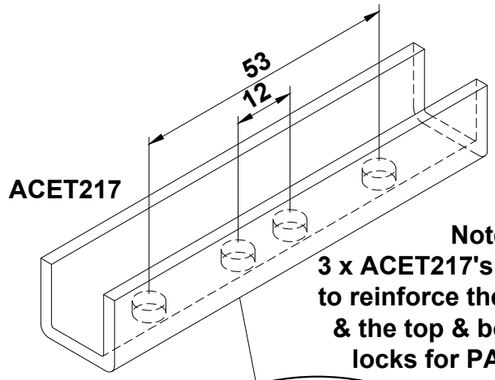




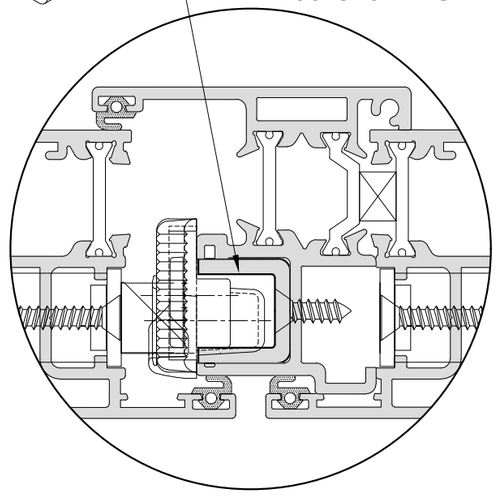




BOTTOM



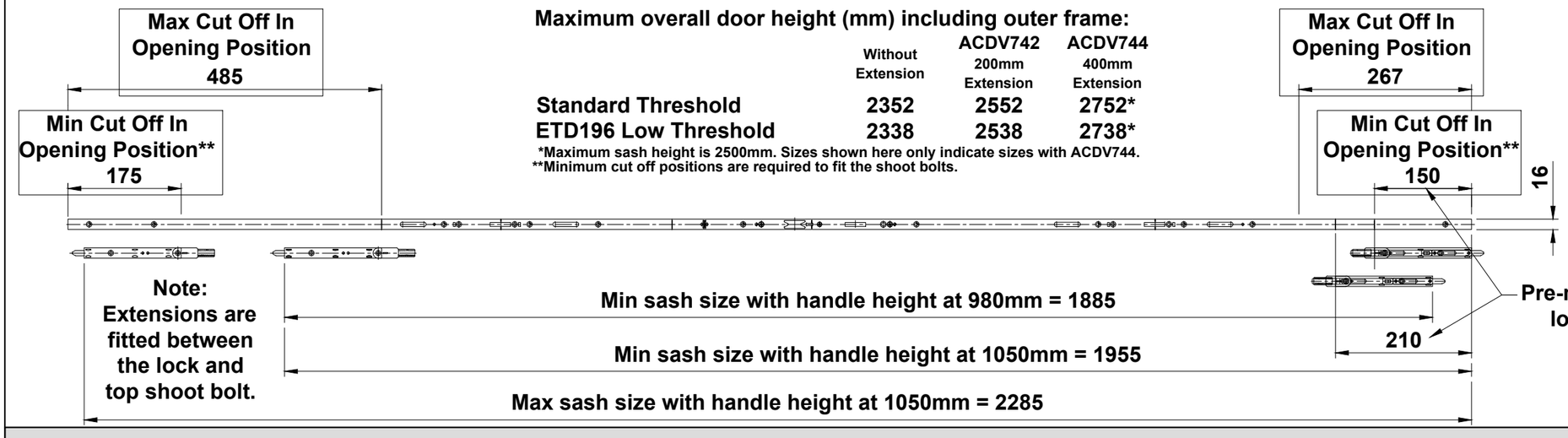
Note:
3 x ACET217's are required to reinforce the centre lock & the top & bottom hook locks for PAS24:2016



Maximum overall door height (mm) including outer frame:

	Without Extension	ACDV742 200mm Extension	ACDV744 400mm Extension
Standard Threshold	2352	2552	2752*
ETD196 Low Threshold	2338	2538	2738*

*Maximum sash height is 2500mm. Sizes shown here only indicate sizes with ACDV744.
**Minimum cut off positions are required to fit the shoot bolts.

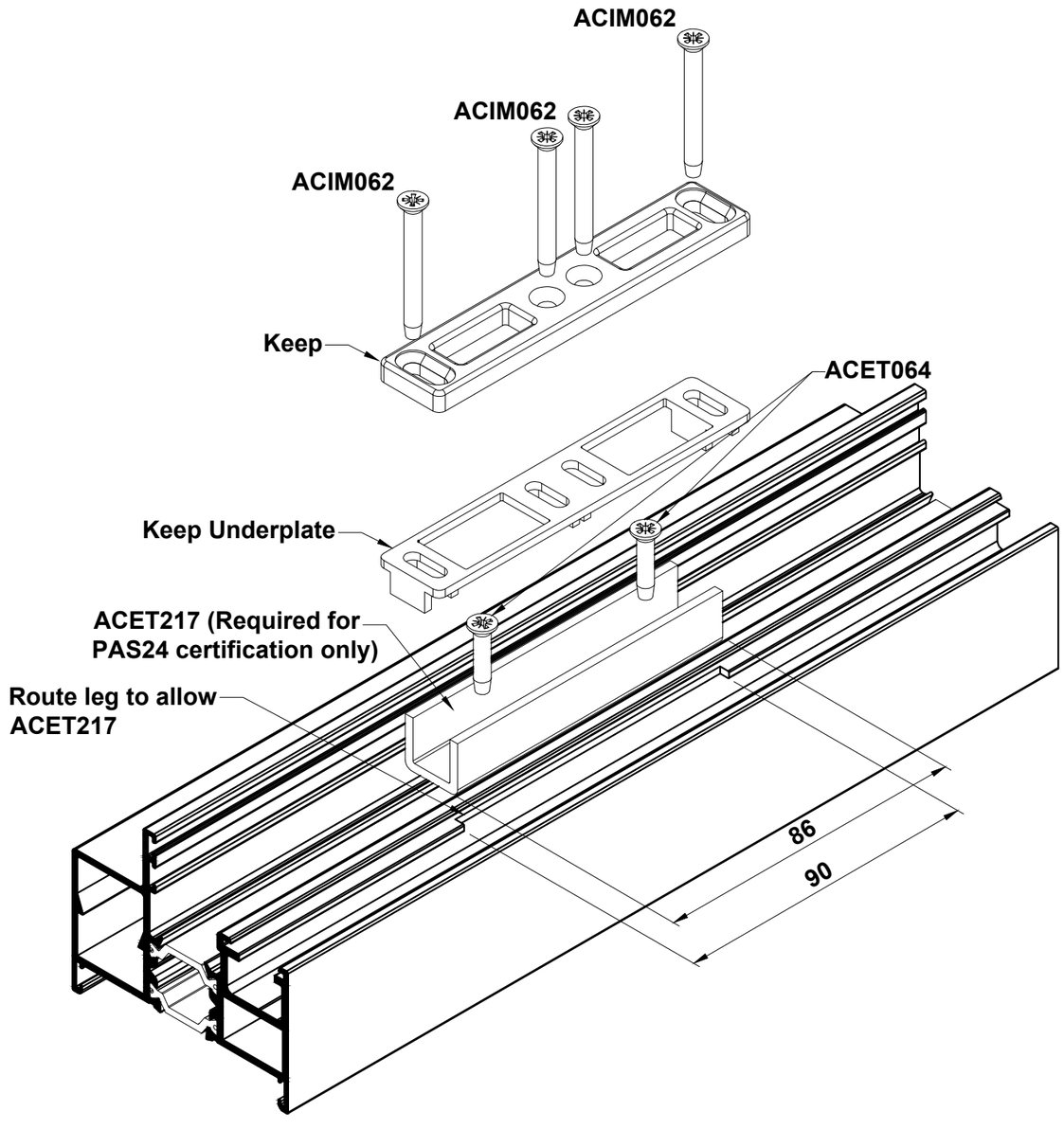


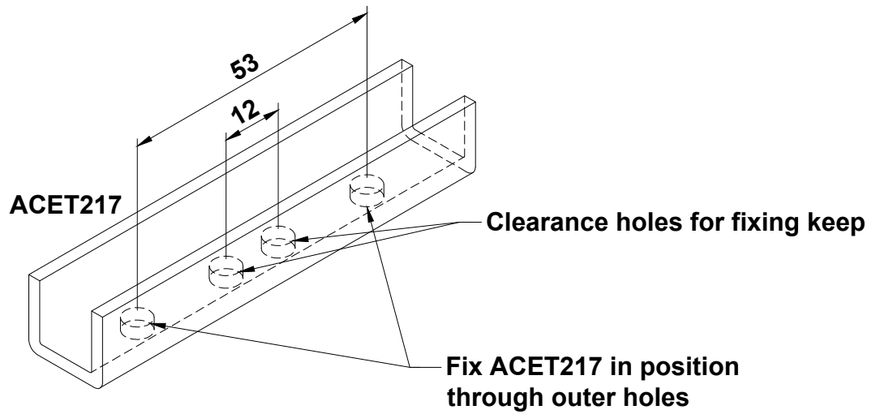
Note:
Extensions are fitted between the lock and top shoot bolt.

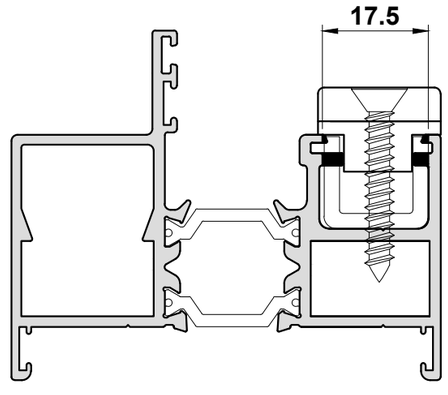
BOTTOM

Do Not Scale From This Drawing

Shootbolt Keep Fitting Details

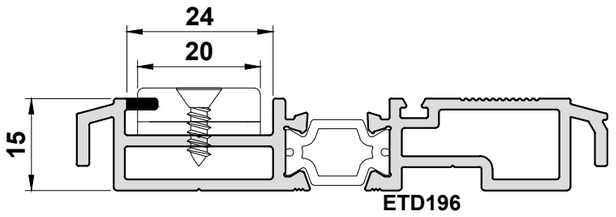


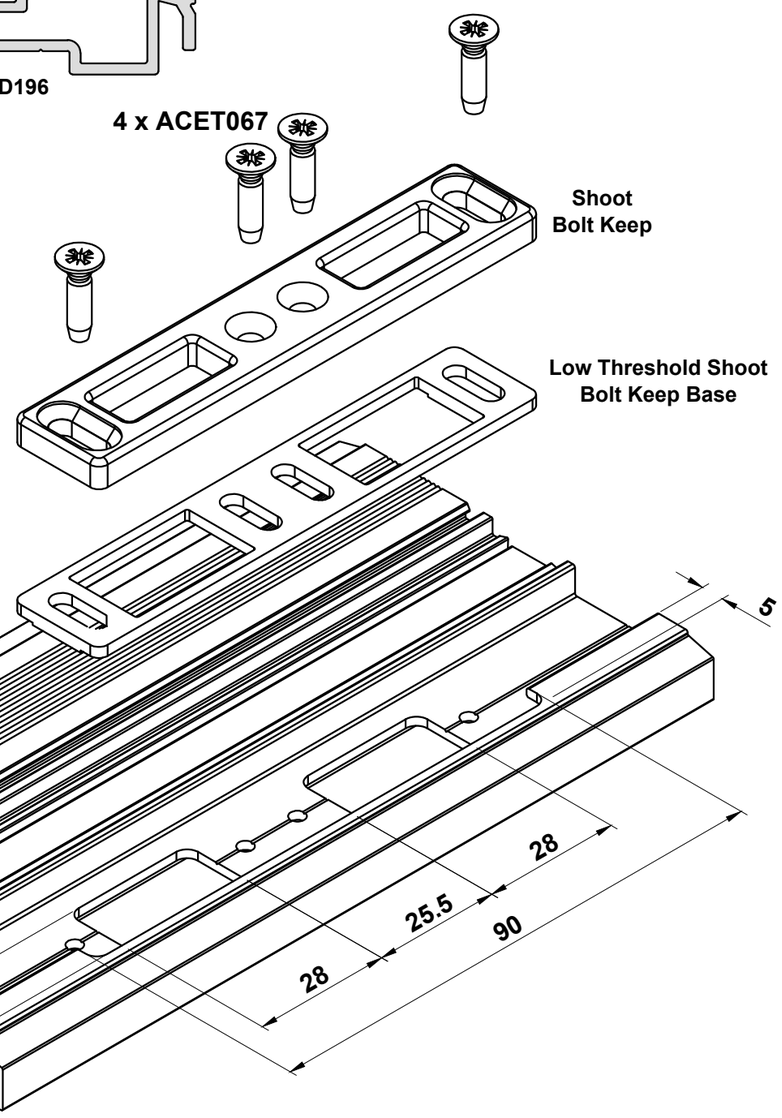


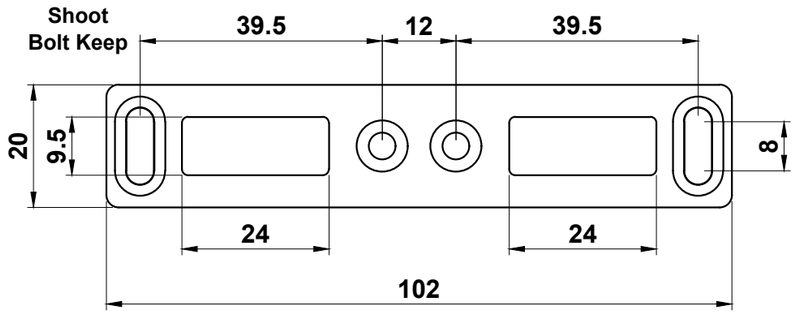


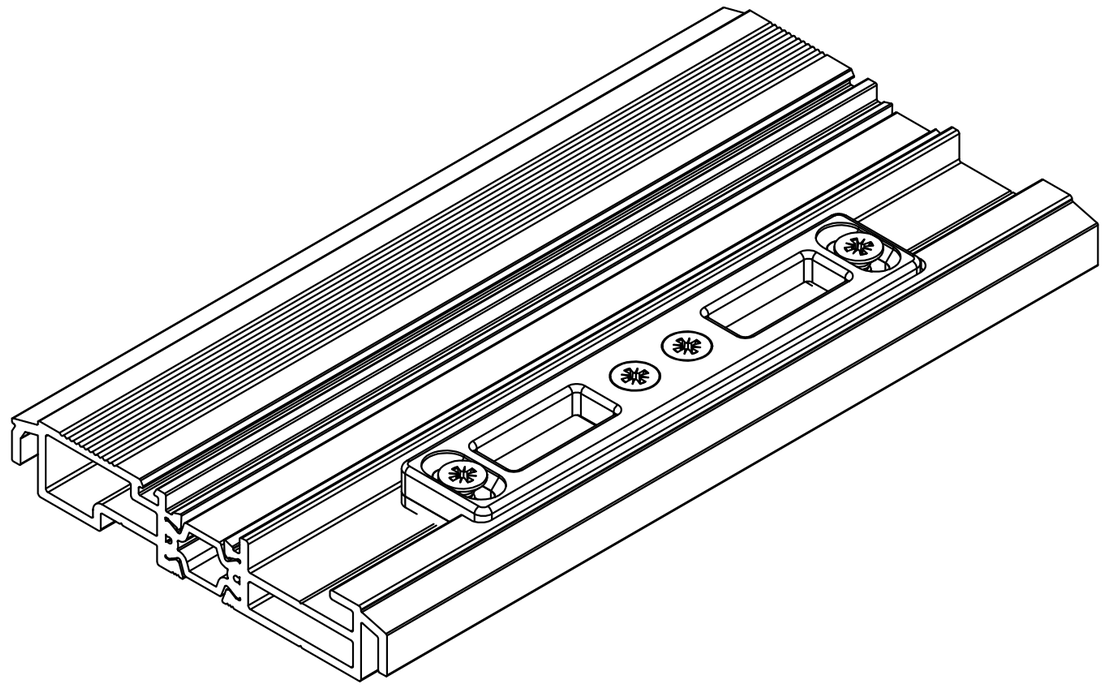
Do Not Scale From This Drawing

Shootbolt Keep Fitting Details in Low Threshold







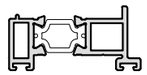


Do Not Scale From This Drawing

ETD048 & ETD197 Cutting & Notch Details

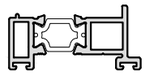
Low Threshold

PRIMARY & SECONDARY DOOR
Leaf Width - 49



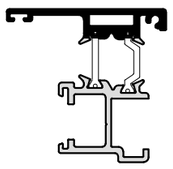
ETD197

SINGLE DOOR
Leaf Width - 34

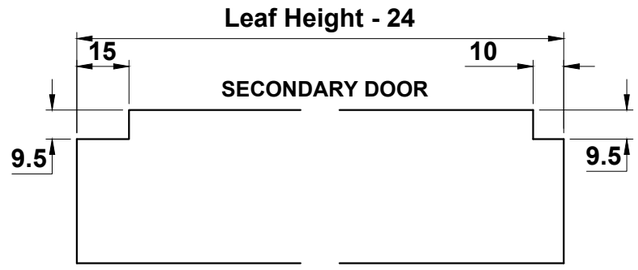


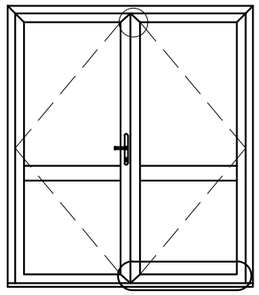
ETD197

Leaf Height - 24

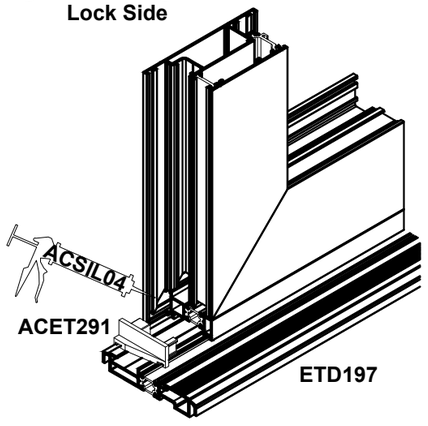


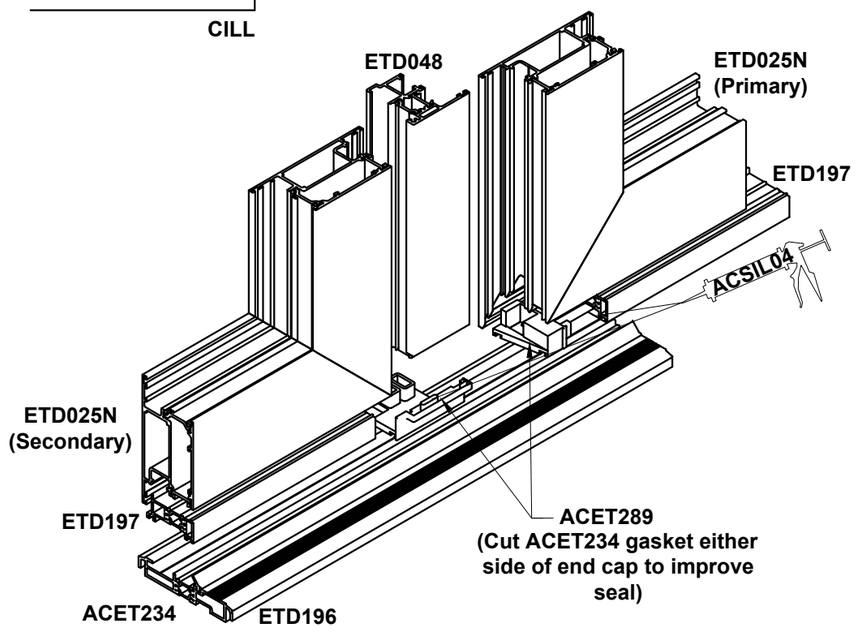
ETD048





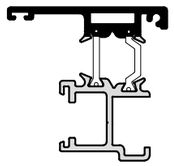
ETD025N
Hinge Side & Single Door
Lock Side



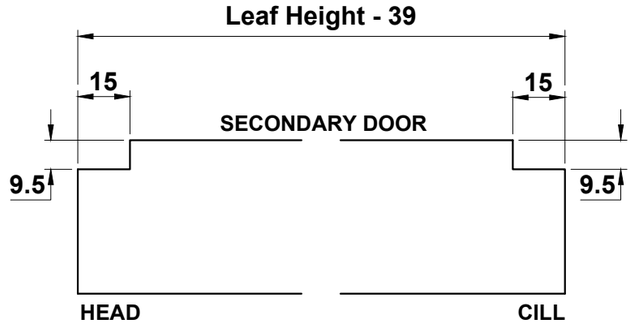


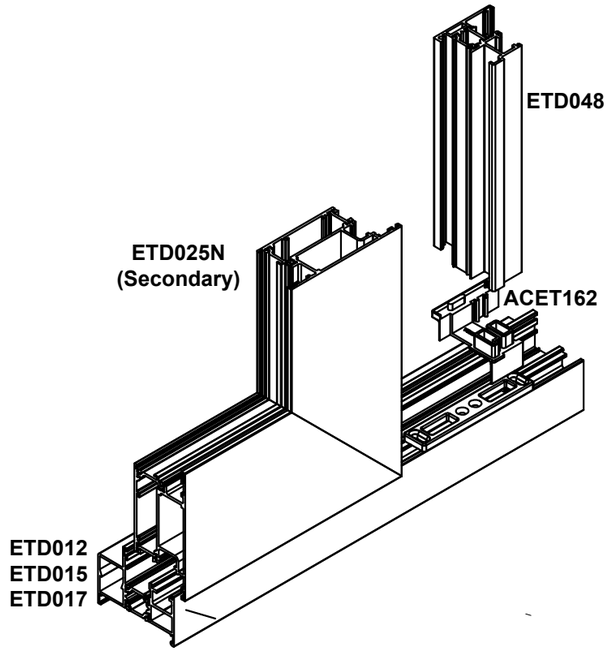
Standard Threshold

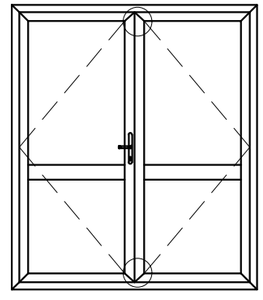
Leaf Height - 39



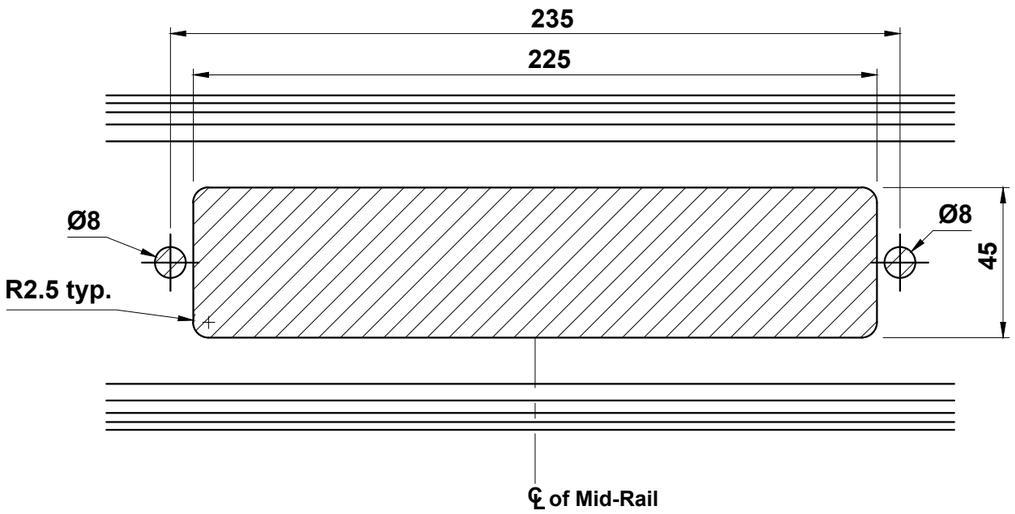
ETD048

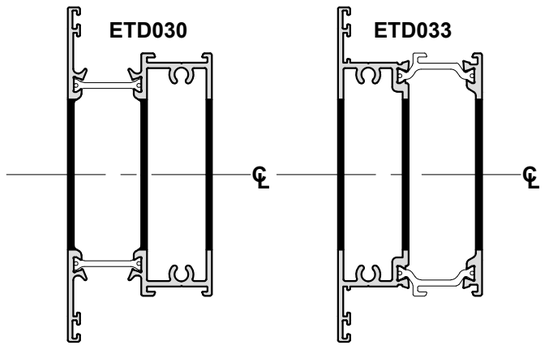


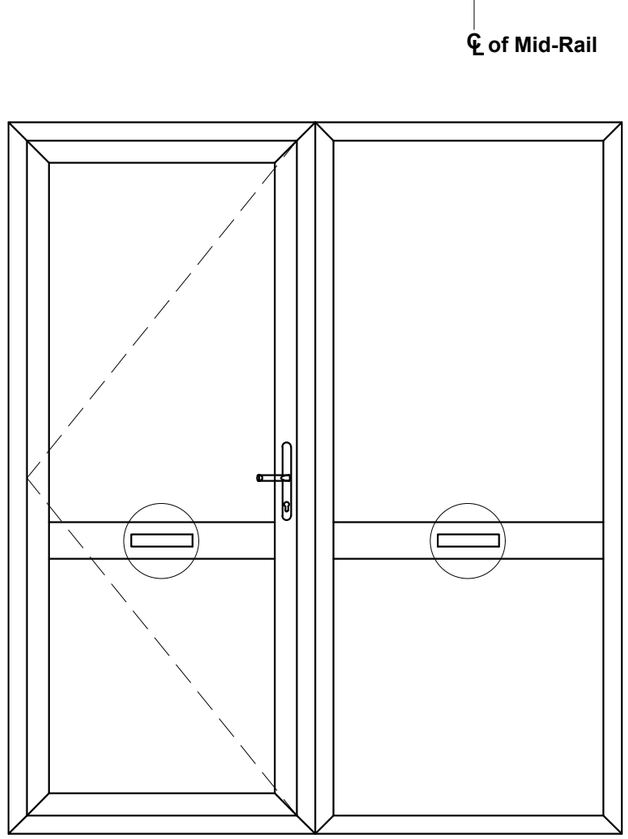


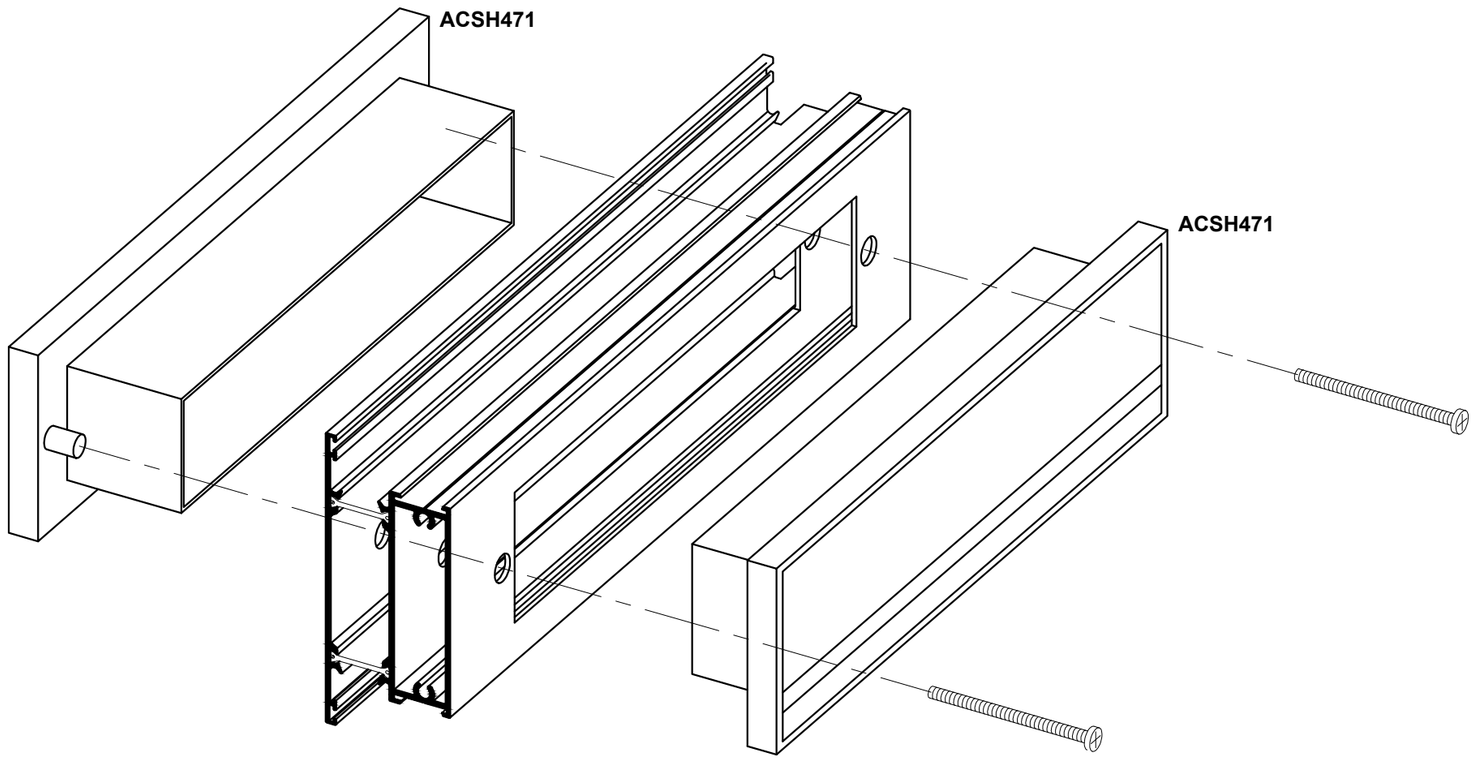


Letterplate Details





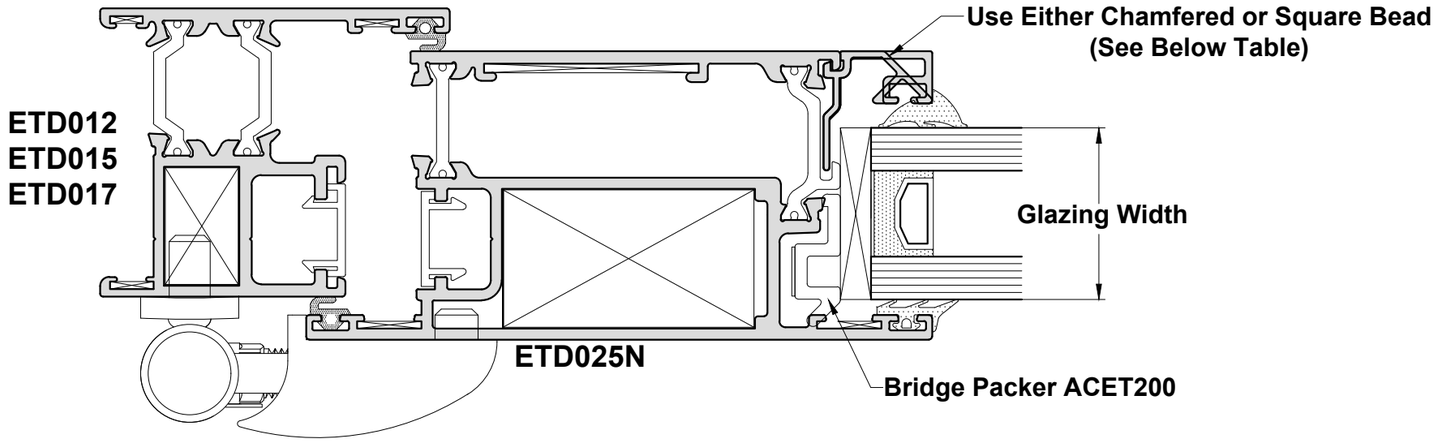




Please note: ACSH471 does not comply with BS EN 13724:2002

Do Not Scale From This Drawing

Glazing Chart



24mm		28mm		32mm	
Beads	Gaskets	Beads	Gaskets	Beads	Gaskets
ETC162	ACVG31 ACVG34	ETC161	ACVG31 ACVG34	ETC160	ACVG31 ACVG34
ETC163	ACVG31 ACVG34	ETC164	ACVG31 ACVG34		

ACET149 Fitting Instructions

Ensure friction screw is loose
before fitting stay to door.
Adjust to required tension
once the stay is fixed in position.

Fixing Plate
Snap-In-Fix

1" No.7 ACET060
Screw (2 off)

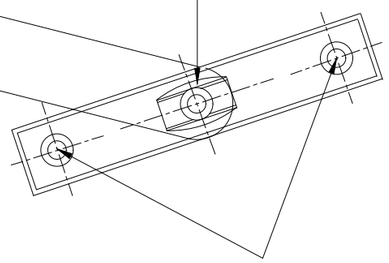
ACET060 x 2

ACET149

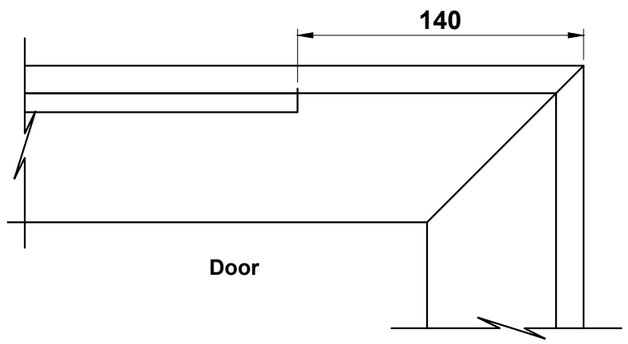
Friction Screw

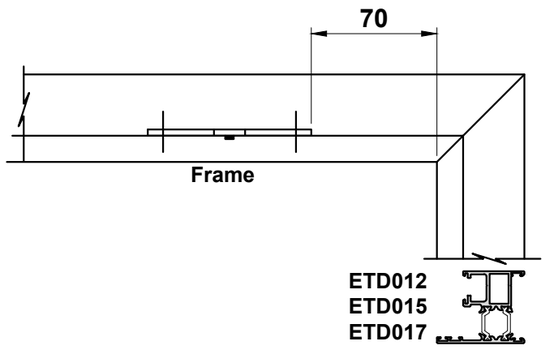
Identification Registration

Fixing Plate
Snap-in-fix

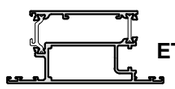


ACET060 x 2





ETD012
ETD015
ETD017

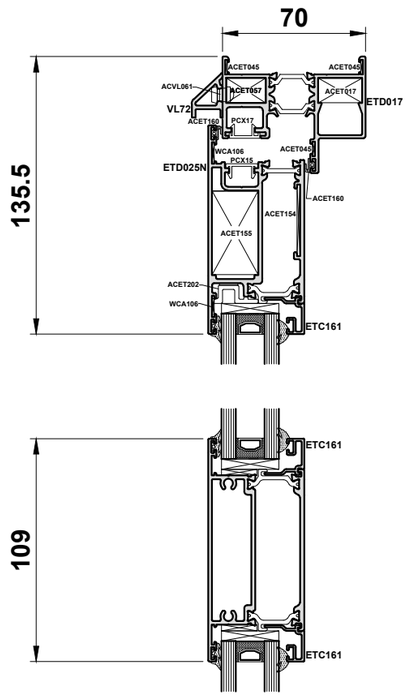


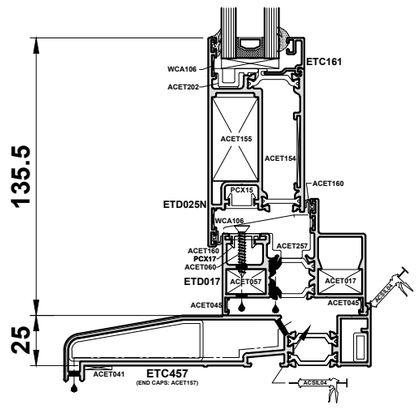
ETD025N

Do Not Scale From This Drawing

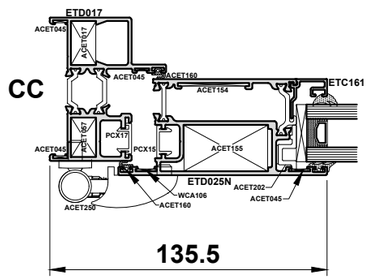
Example Layout

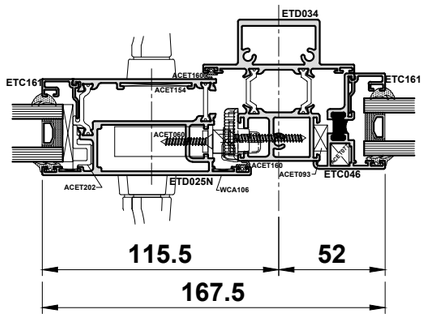
AA

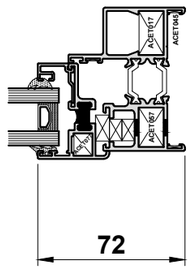


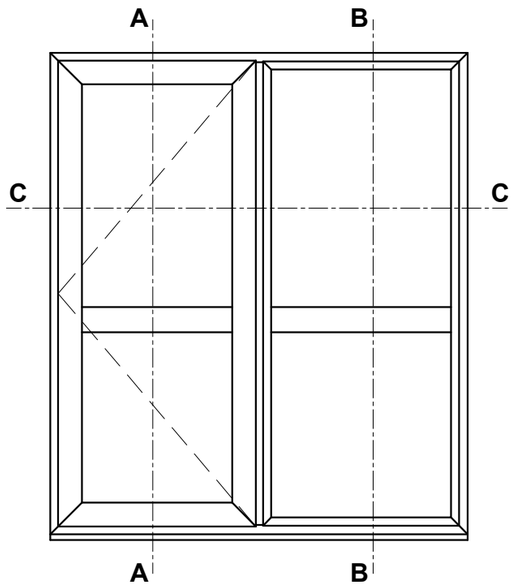


CC









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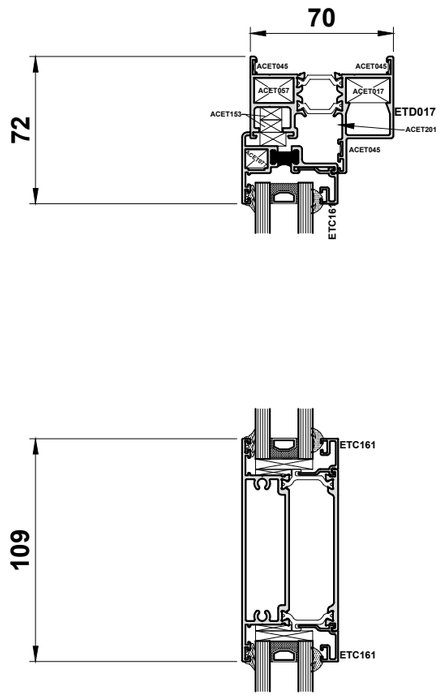
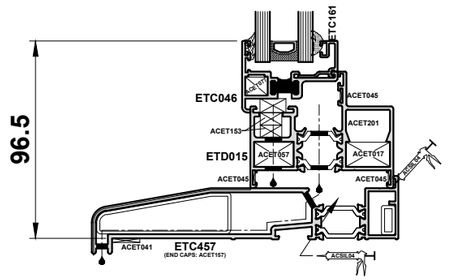




PAS24:2016 Details

Single Door

Accessories Required to Achieve PAS24:2016

A	Guide Blocks	ACET257
B	Hinges	ACET250
C	Lever/Lever Handle	ACET480
D	45/30 Cylinder	ACCY4530S1*
E	Keep Reinforcement	ACET217
F	Glass Packer Positions	
G	Hinge Protectors	ACET252
H	Lock with Shoot bolts	See Table 1

*Standard Handles may be used as an alternative to ACET480 providing the cylinder used has a TS007:2014 3 star accreditation (by others).

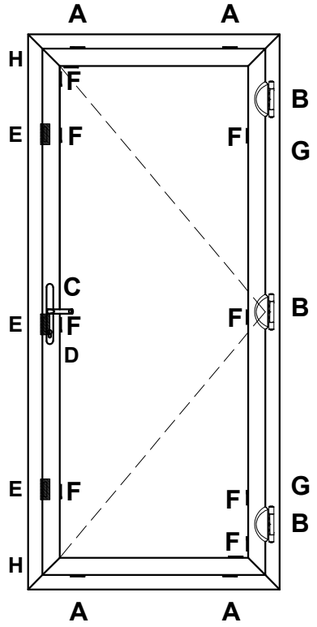
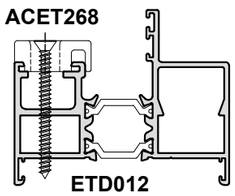


Table 1 - Single Door Locking Details

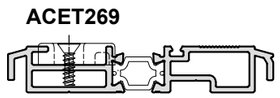
Height	Threshold Type	Lock	Bottom Shootbolt	Top Shootbolt	Bottom Keep	Top Keep
1885 - 2352	Standard Threshold	ACET292/3	ACDV737	ACDV738	ACET268	ACET268
1885 - 2338	ETD196 Low Threshold	ACET292/3	ACDV737	ACDV738	ACET269	ACET268
2352 - 2552	Standard Threshold	ACET292/3	ACDV737	ACDV742	ACET268	ACET268
2338 - 2538	ETD196 Low Threshold	ACET292/3	ACDV737	ACDV742	ACET269	ACET268

ACET268

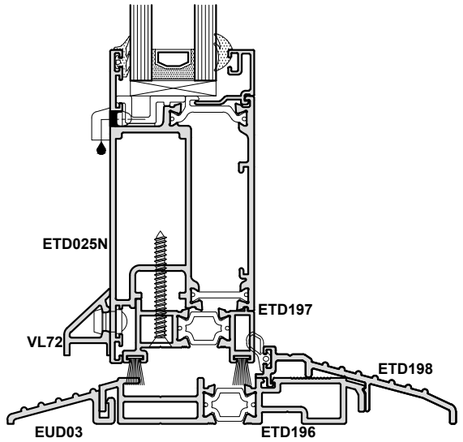


ETD012
ETD015
ETD017

ACET269



ETD169



Note: To comply with PAS24:2016 & KM530838, ETD198 must be used with ETD196

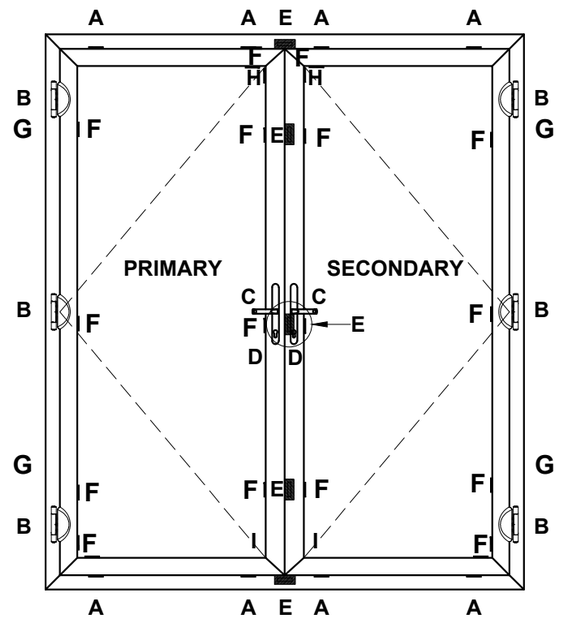
Double Door

Accessories Required to Achieve PAS24:2016

A	Guide Blocks	ACET257
B	Hinges	ACET250
C	Lever/Lever Handle	ACET480
D	45/30 Cylinder	ACCY4530S1*
E	Keep Reinforcement	ACET217
F	Glass Packer Positions	
G	Hinge Protectors	ACET252
H	Top Shootbolt	ACDV738**
I	Bottom Shootbolt	ACDV737**

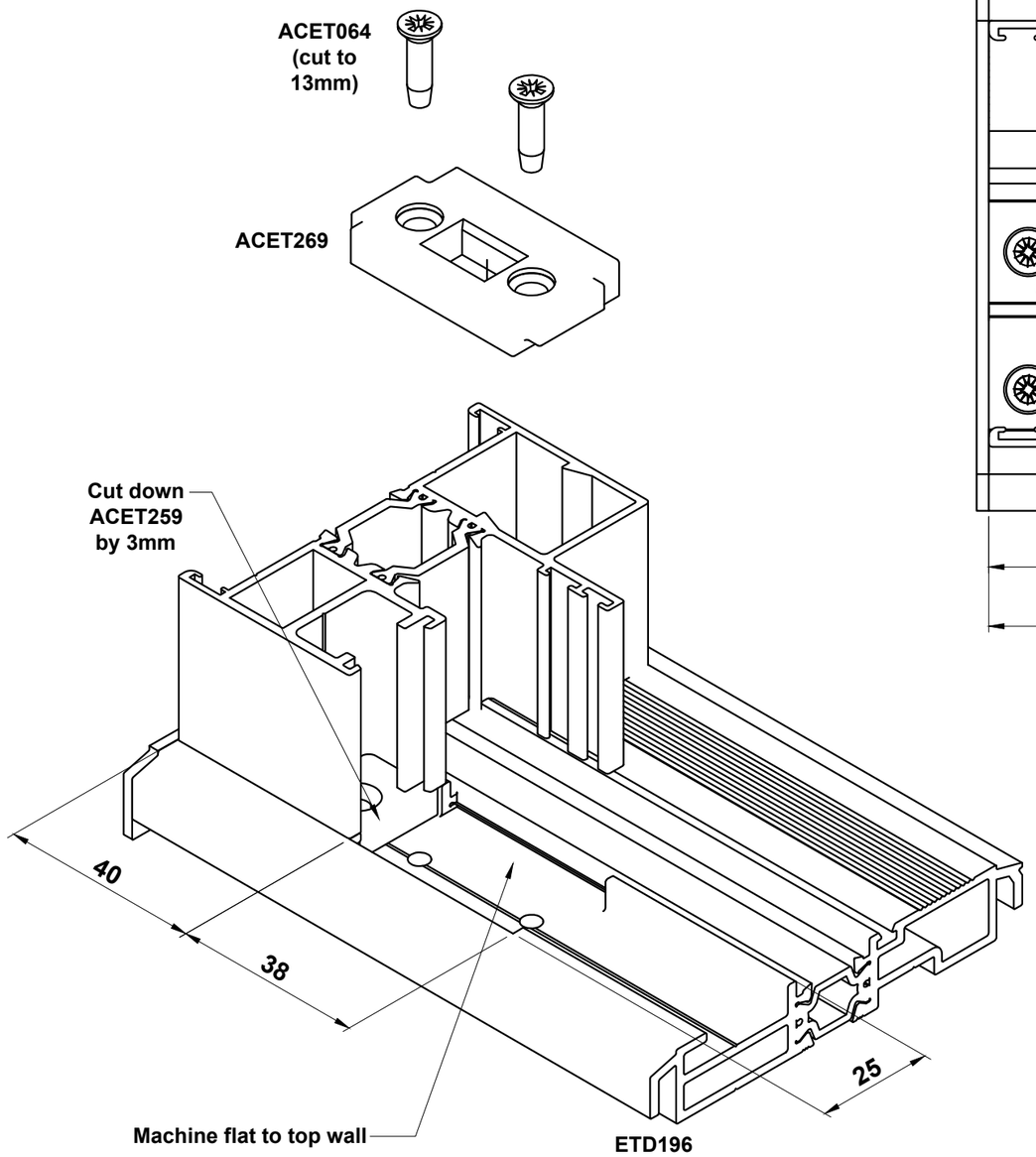
*Standard Handles may be used as an alternative to ACET480 providing the cylinder used has a TS007:2014 3 star accreditation (by others).

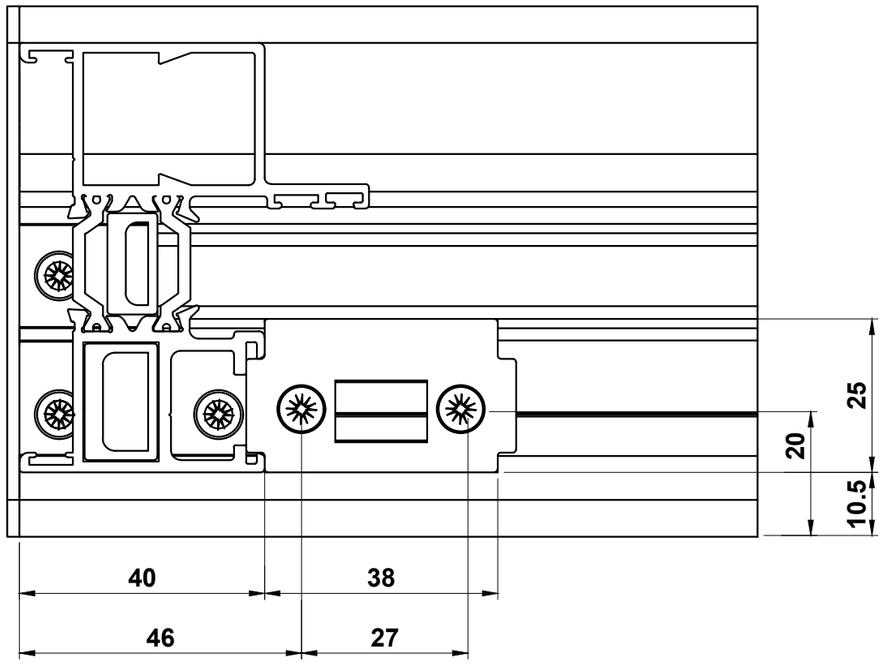
**ACDV737 & ACDV738 shoot bolts are supplied for the secondary door with ACET285 and need to be ordered separately from ACET292 & ACET293.



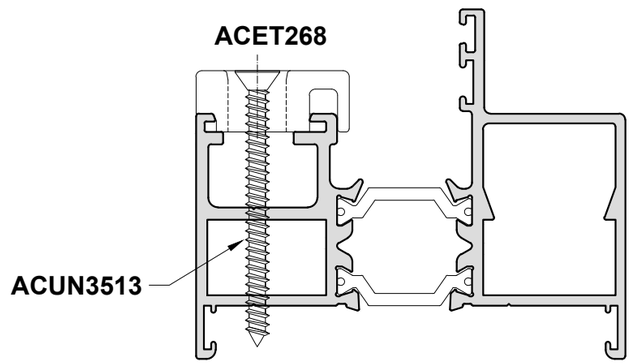
Do Not Scale From This Drawing

ACET268 & ACET269 Fitting Details





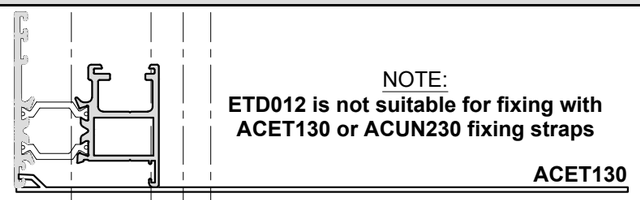
ACET268 is fitted in the same location as ACET269 but no machining is required.



ETD012
ETD015
ETD017

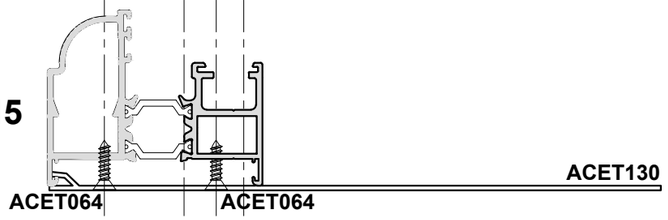
Fixing Strap Guide

ETD012

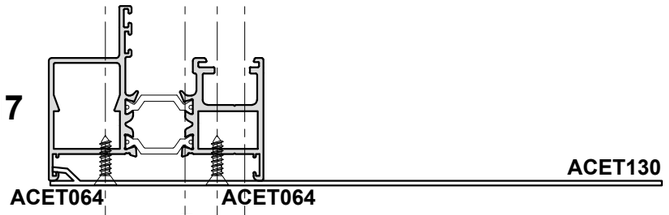


NOTE:
ETD012 is not suitable for fixing with ACET130 or ACUN230 fixing straps

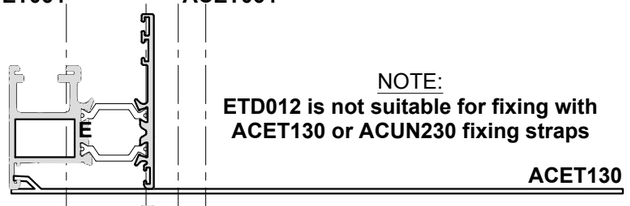
ETD015



ETD017

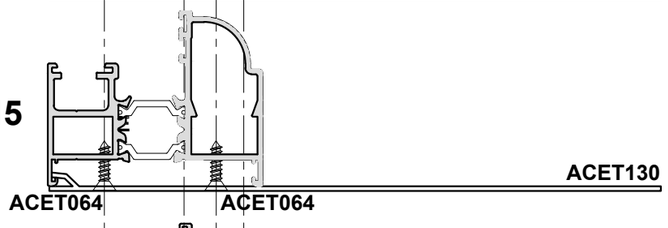


ETD012

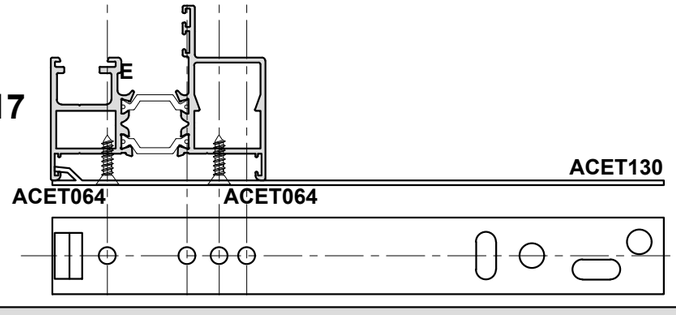


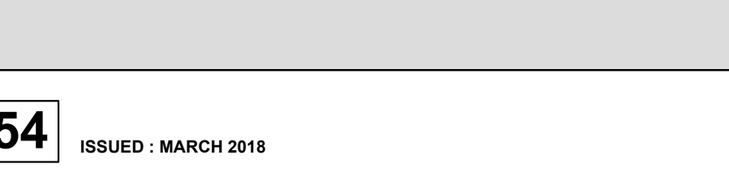
NOTE:
ETD012 is not suitable for fixing with ACET130 or ACUN230 fixing straps

ETD015



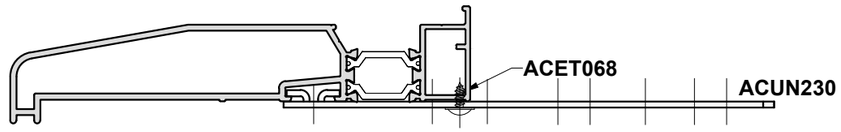
ETD017

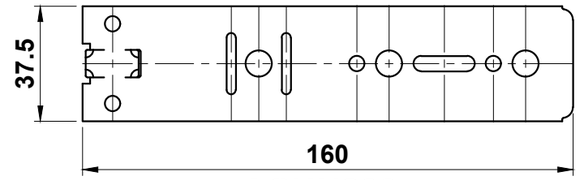




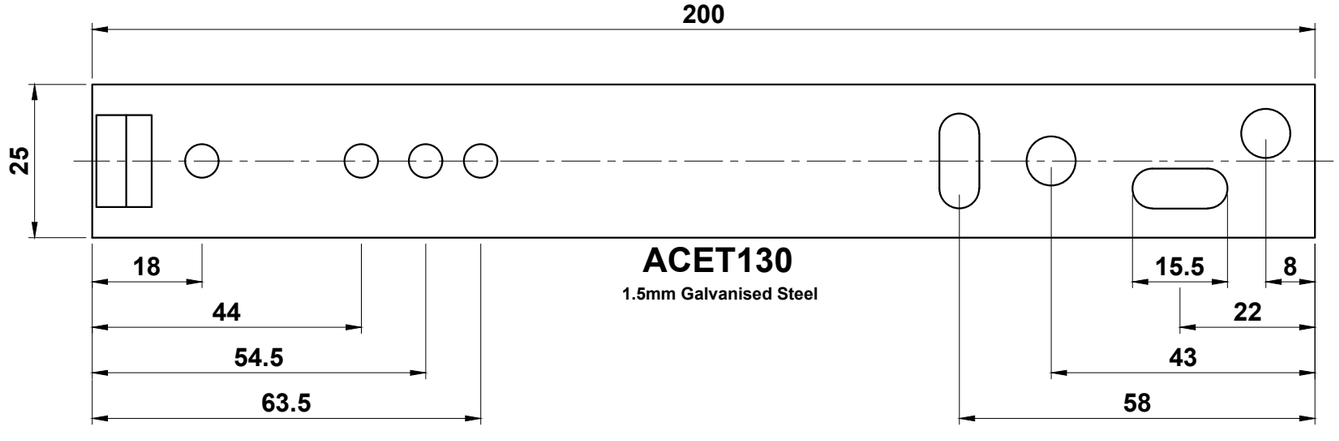
NOTE:
Fixing straps should be spaced a minimum of 150mm in from each end & at a maximum of 300mm apart.

ETC452
ETC457
ETC458
ETC479





ACUN230
2mm Galvanised Steel



ACET130
1.5mm Galvanised Steel

Do Not Scale From This Drawing

Section F

F ETD **Sawing Tables**

Open In

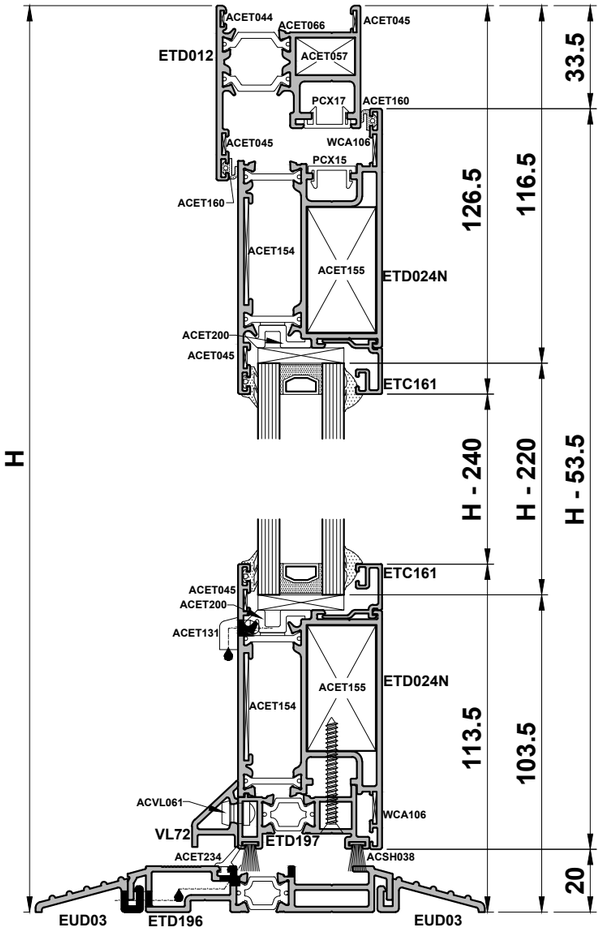
Single Door with Low Threshold..... F03
Double Door with Low Threshold..... F04
Single Door with Standard Threshold..... F05
Double Door with Standard Threshold..... F06

Open Out

Single Door with Low Threshold..... F07
Double Door with Low Threshold..... F08
Single Door with Standard Threshold..... F09
Double Door with Standard Threshold..... F10

Section F

Single Door with Low Threshold (Open In)



PROFILE CUTTING SCHEDULE

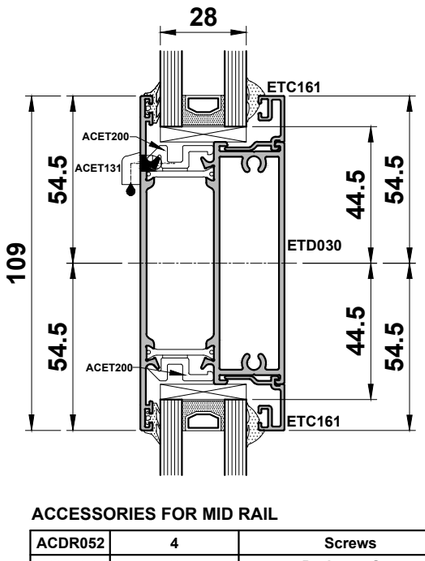
ETD012		2		H-15
ETD012		1		W
ETD024N		2		H-53.5
ETD024N		2		W-67
ETD196		1		W
ETD197		1		W-100
BEAD		2		H-240
BEAD		2		W-223
VL72		1		W-128
EUD03		2		W
PCX15		2		H-90
PCX15		1		W-105
PCX17		2		H-55
PCX17		1		W-80

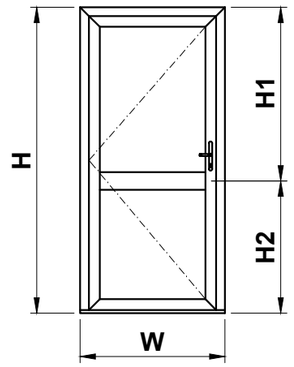
GLASS SIZES

WITHOUT MIDRAIL	W - 233	H - 220
ETD030	W - 233	H1 - 161
		H2 - 148

ACCESSORIES

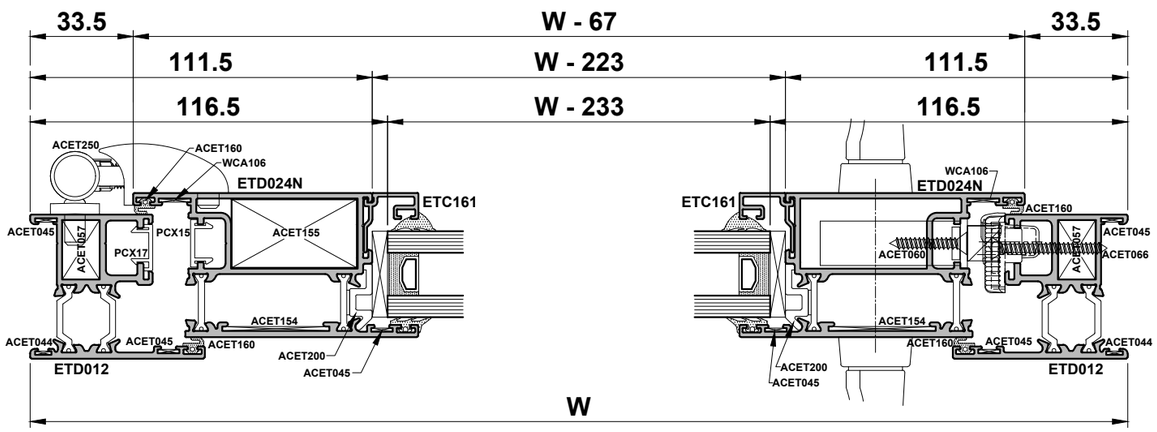
ACCY3045	1	30/45 Cylinder
ACDV251	1 Pair	Lever/Lever Handle
ACET044	2	Chevron
ACET045	8	Chevron
ACET057	2	Outer Frame Cleat
ACET060	11	Lock Screws
ACET066	14	Keep & ETD197 Screws
ACET131	2	Drainage Cap
ACET234	1xW	Threshold Gasket
ACET154	4	Sash Chevron
ACET155	4	Sash Cleat
ACET160	2xW + 4xH	Flipper Gasket
ACET200	4	Bridge Packer
ACET250	2 or 3	Hinge
ACET257	2	Guide Block
ACET259	1 Pair	Threshold Bracket
ACET282/3	1	Multi-Point Lock
ACET291	1 Pair	ETD197 Woolpile Carriers
ACET390	4	ACET259 Screws
ACSH038	2xW	Woolpile
ACVG31	2xW + 2xH	E Gasket
ACVG34	2xW + 2xH	Wedge Gasket
ACVL059	1 Pair	VL72 End Cap
ACVL061	5	VL72 Rivet
WCA106	4	Sash Chevron





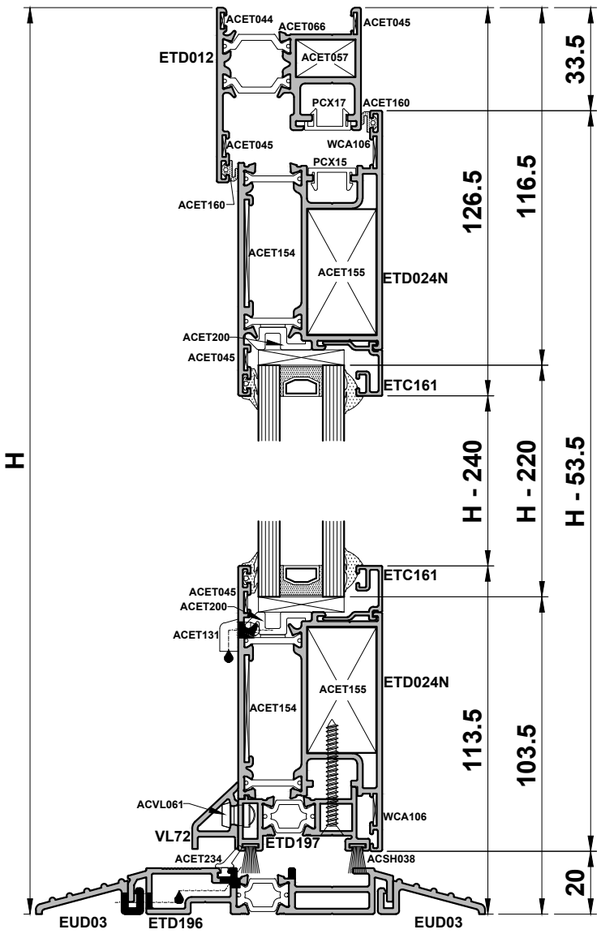
ACCESSORIES FOR MID RAIL

ACDR052	4	Screws
ACET131	2	Drainage Cap
ACET200	4	Bridge Packer
ACVG31	2xW	E Gasket
ACVG34	2xW	Wedge Gasket



Do Not Scale From This Drawing

Double Door with Low Threshold (Open In)



PROFILE CUTTING SCHEDULE

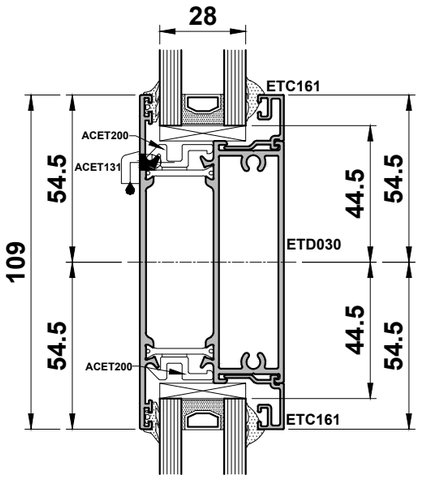
ETD012		2		H-15
ETD012		1		W
ETD024N		4		H-53.5
ETD024N		4		W/2-36
ETD048		1		H - 77.5
ETD196		1		W
ETD197		1		W/2-75
ETD197		1		W/2-70
BEAD		4		H-240
BEAD		4		W/2-192
VL72		2		W/2-83
EUD03		2		W
PCX15		3		H-90
PCX15		2		W/2-73.5
PCX17		3		H-55
PCX17		1		W-80

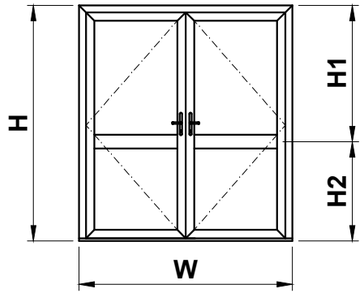
GLASS SIZES

WITHOUT MIDRAIL	W/2 - 202	H - 220
ETD030	W/2 - 202	H1 - 161
		H2 - 148

ACCESSORIES

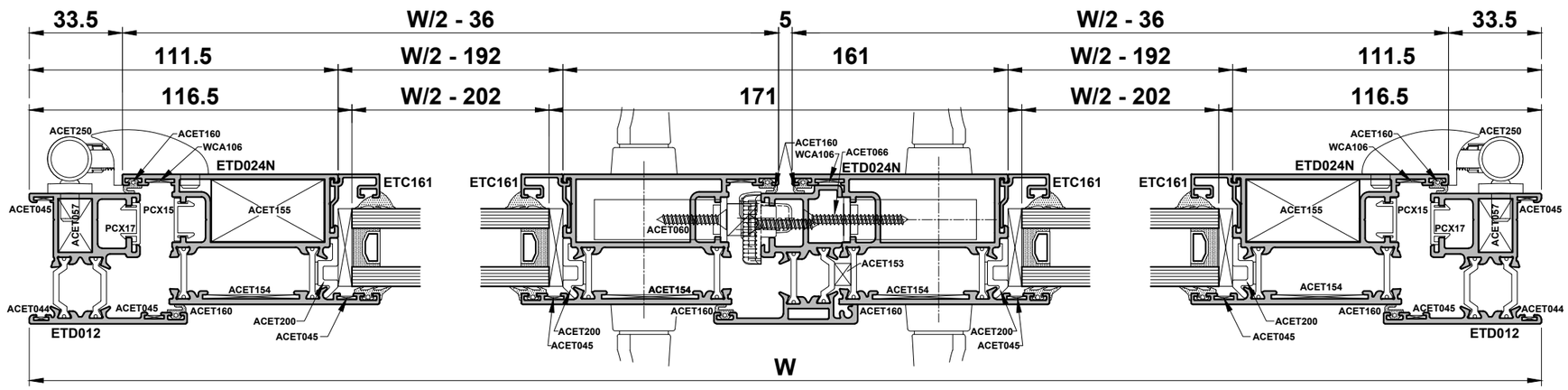
ACCY3045	2	Cylinder
ACDV251	2 Pairs	Lever/Lever Handle
ACDV737	1	Bottom Shoot Bolt
ACDV738	1	Top Shoot Bolt
ACET044	2	Chevron
ACET045	12	Chevron
ACET057	2	Outer Frame Cleat
ACET060	20	Lock & Keep Screws
ACET066	21	Lock & ETD197 Screws
ACET131	4	Drainage Cap
ACET153	at 300 ctrs	ETD048 Packer
ACET154	8	Sash Chevron
ACET155	8	Sash Cleat
ACET160	2xW + 7xH	Flipper Gasket
ACET162	1 Pair	ETD048 End Caps
ACET200	8	Bridge Packer
ACET234	1xW	Threshold Gasket
ACET250	4 or 6	Hinge
ACET257	4	Guide Blocks
ACET259	1 Pair	Threshold Bracket
ACET285	1	Secondary Door Lock Kit
ACET289	1 Pack	ETD048/ETD197 End Cap
ACET291	1 Pair	ETD197 End Cap
ACET292/3	1	Multi-Point Lock
ACET390	4	ACET259 Screws
ACSH038	2xW	Woolpile
ACVG31	2xW + 2xH	E Gasket
ACVG34	2xW + 2xH	Wedge Gasket
ACVL059	2 Pairs	VL72 End Cap
ACVL061	10	VL72 Rivet
WCA106	8	Sash Chevron





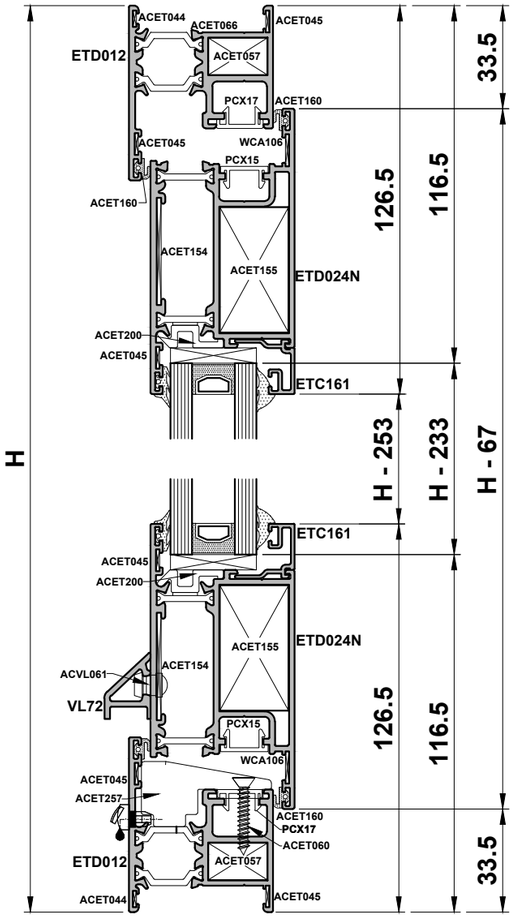
ACCESSORIES FOR MID RAIL

ACDR052	8	Screws
ACET131	4	Drainage Cap
ACET200	8	Bridge Packer
ACVG31	2xW	E Gasket
ACVG34	2xW	Wedge Gasket



Do Not Scale From This Drawing

Single Door with Standard Threshold (Open In)



PROFILE CUTTING SCHEDULE

ETD012		2		H
ETD012		2		W
ETD024N		2		H-67
ETD024N		2		W-67
BEAD		2		H-253
BEAD		2		W-223
VL72		1		W-128
PCX15		2		H-103
PCX15		2		W-105
PCX17		2		H-80
PCX17		2		W-80

GLASS SIZES

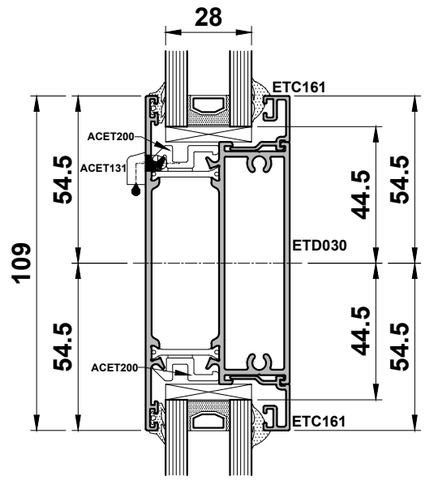
WITHOUT MIDRAIL	W - 233	H - 233
ETD030	W - 233	H1 - 161
		H2 - 161

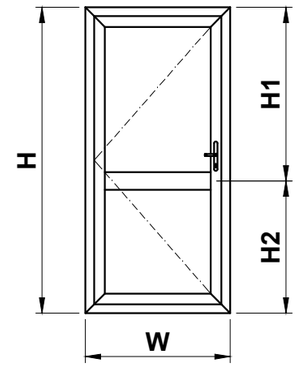
ACCESSORIES

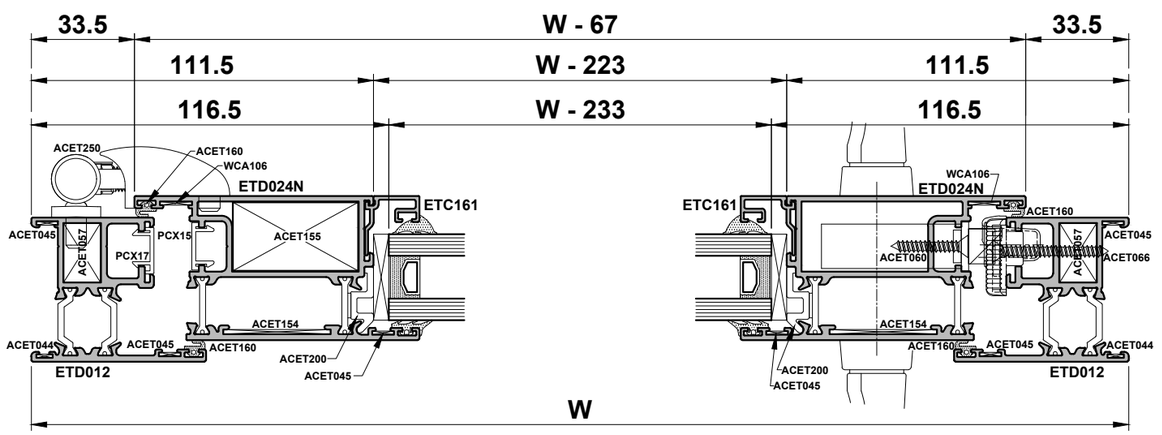
ACCY3045	1	Cylinder
ACDV251	1 Pair	Lever/Lever Handle
ACET044	4	Chevron
ACET045	12	Chevron
ACET057	4	Outer Frame Cleat
ACET060	12	Lock & ACET257 Screws
ACET066	9	Keep Screws
ACET131	2	Drainage Cap
ACET154	4	Sash Chevron
ACET155	4	Sash Cleat
ACET160	4xW + 4xH	Flipper Gasket
ACET200	4	Bridge Packer
ACET250	2 or 3	Hinge
ACET257	4	Guide Block
ACET282/3	1	Multi-Point Lock
ACVG31	2xW + 2xH	E Gasket
ACVG34	2xW + 2xH	Wedge Gasket
ACVL059	1 Pair	VL72 End Cap
ACVL061	5	VL72 Rivet
WCA106	4	Sash Chevron

ACCESSORIES FOR MID RAIL

ACDR052	4	Screws
ACET131	2	Drainage Cap
ACET200	4	Bridge Packer
ACVG31	2xW	E Gasket
ACVG34	2xW	Wedge Gasket

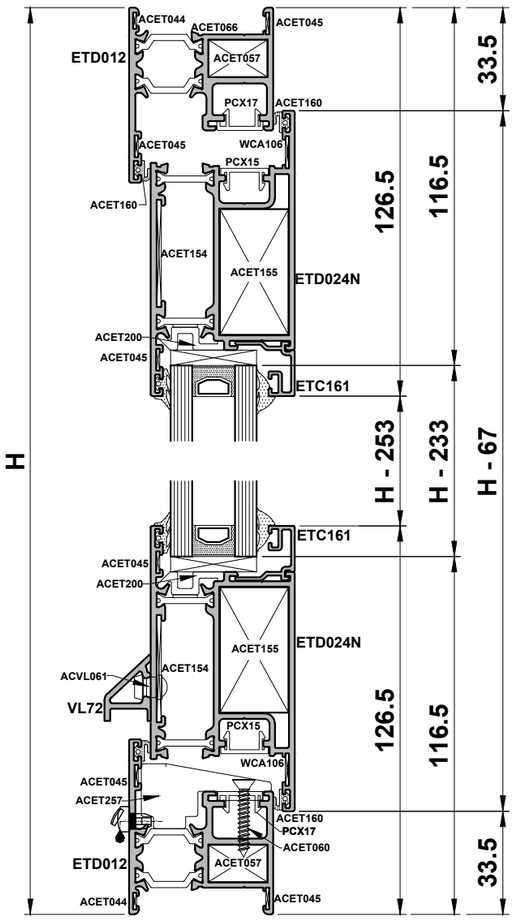






Do Not Scale From This Drawing

Double Door with Standard Threshold (Open In)



PROFILE CUTTING SCHEDULE

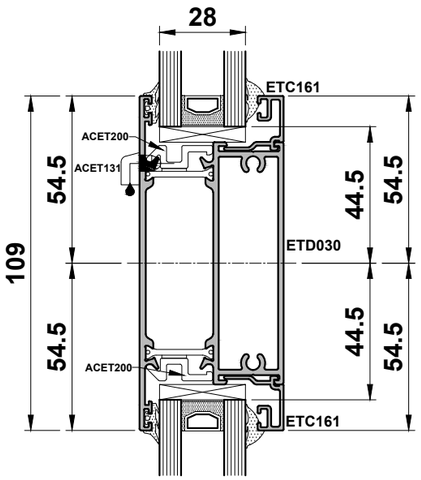
ETD012		2		H
ETD012		2		W
ETD024N		4		H-67
ETD024N		4		W/2-36
ETD048		1		H - 106
BEAD		4		H-253
BEAD		4		W/2-192
VL72		2		W/2-83
PCX15		4		H-103
PCX15		4		W/2-73.5
PCX17		3		H-80
PCX17		2		W-80

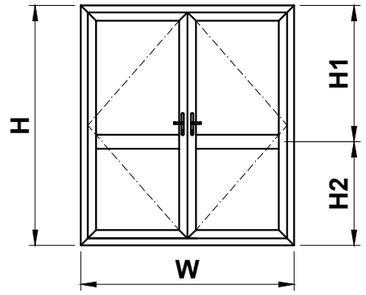
GLASS SIZES

WITHOUT MIDRAIL	W/2 - 202	H - 233
ETD030	W/2 - 202	H1 - 161
		H2 - 161

ACCESSORIES

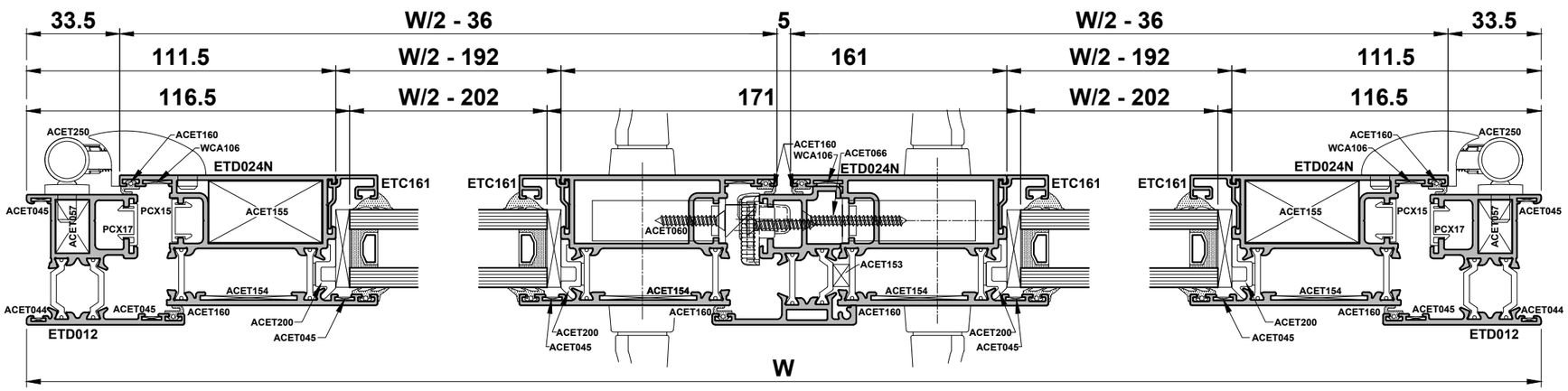
ACCY3045	2	Cylinder
ACDV251	2 Pairs	Lever/Lever Handle
ACDV737	1	Bottom Shoot Bolt
ACDV738	1	Top Shoot Bolt
ACET044	4	Chevron
ACET045	16	Chevron
ACET057	4	Outer Frame Cleat
ACET060	20	Lock & Keep Screws
ACET066	11	Secondary Lock Screws
ACET131	4	Drainage Cap
ACET153	at 300 ctrs	ETD048 Packer
ACET154	8	Sash Chevron
ACET155	8	Sash Cleat
ACET160	4xW + 7xH	Flipper Gasket
ACET162	1 Pair	ETD048 End Caps
ACET200	8	Bridge Packer
ACET250	4 or 6	Hinge
ACET257	8	Guide Block
ACET285	1	Secondary Door Lock Kit
ACET292/3	1	Multi-Point Lock
ACVG31	2xW + 2xH	E Gasket
ACVG34	2xW + 2xH	Wedge Gasket
ACVL059	2 Pairs	VL72 End Cap
ACVL061	10	VL72 Rivet
WCA106	8	Sash Chevron





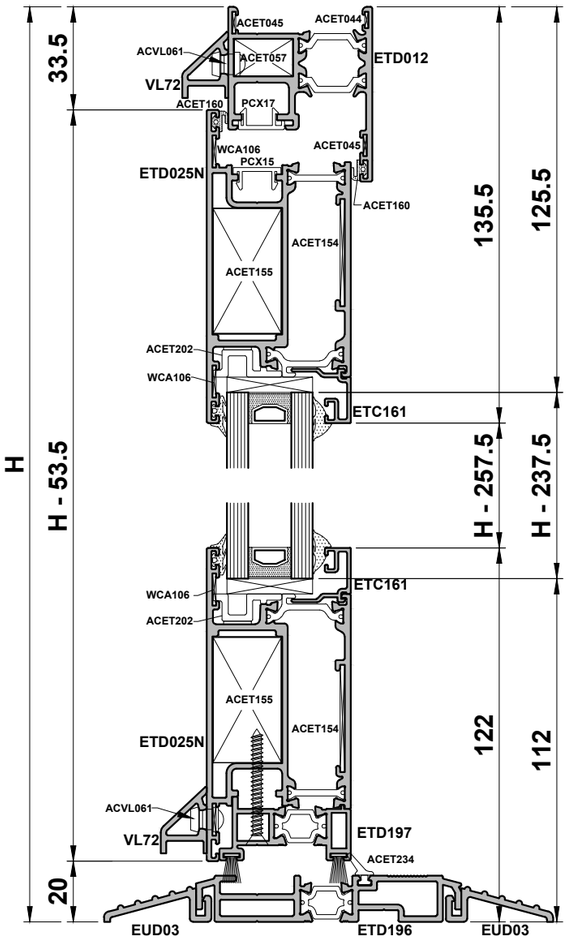
ACCESSORIES FOR MID RAIL

ACDR052	8	Screws
ACET131	4	Drainage Cap
ACET200	8	Bridge Packer
ACVG31	2xW	E Gasket
ACVG34	2xW	Wedge Gasket



Do Not Scale From This Drawing

Single Door with Low Threshold (Open Out)



PROFILE CUTTING SCHEDULE

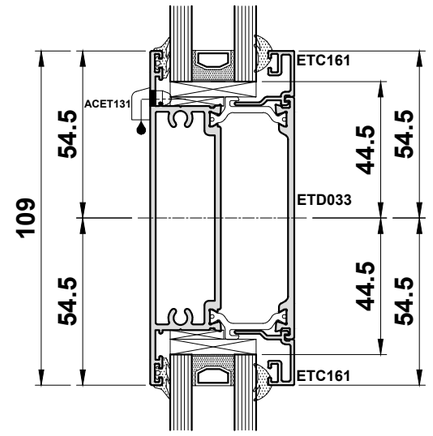
ETD012		2		H-15
ETD012		1		W
ETD025N		2		H-53.5
ETD025N		2		W-67
ETD196		1		W
ETD197		1		W-100
BEAD		2		H-257.5
BEAD		2		W-241
VL72		1		W-10
VL72		1		W - 79
EUD03		2		W
PCX15		2		H-90
PCX15		1		W-105
PCX17		2		H-55
PCX17		1		W-80

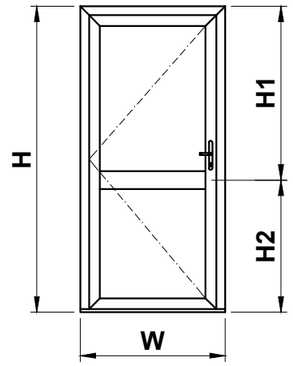
GLASS SIZES

WITHOUT MIDRAIL	W - 251	H - 237.5
ETD033	W - 251	H1 - 170
		H2 - 156.5

ACCESSORIES

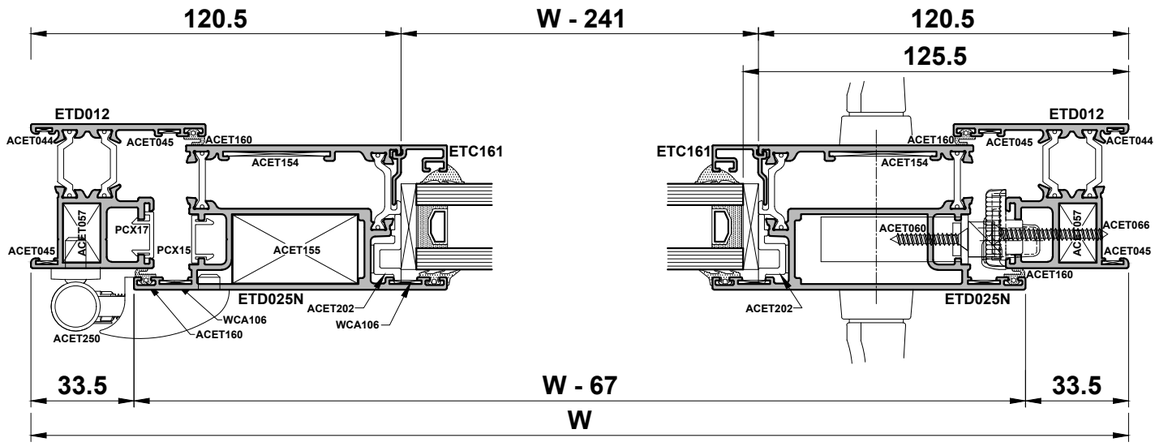
ACCY3045	1	Cylinder
ACDV251	1 Pair	Lever/Lever Handle
ACET044	2	Chevron
ACET045	4	Chevron
ACET057	2	Outer Frame Cleat
ACET060	12	Lock & ACET257 Screws
ACET066	9	Keep Screws
ACET131	2	Drainage Cap
ACET234	1xW	Threshold Gasket
ACET154	4	Sash Chevron
ACET155	4	Sash Cleat
ACET160	2xW + 4xH	Flipper Gasket
ACET202	4	Bridge Packer
ACET250	2 or 3	Hinge
ACET257	2	Guide Block
ACET259	1 Pair	Threshold Bracket
ACET282/3	1	Multi-Point Lock
ACET291	1 Pair	ETD197 Woolpile Carriers
ACET390	4	ACET259 Screws
ACSH038	2xW	Woolpile
ACVG31	2xW + 2xH	E Gasket
ACVG34	2xW + 2xH	Wedge Gasket
ACVL059	2 Pairs	VL72 End Cap
ACVL061	10	VL72 Rivet
WCA106	8	Sash Chevron





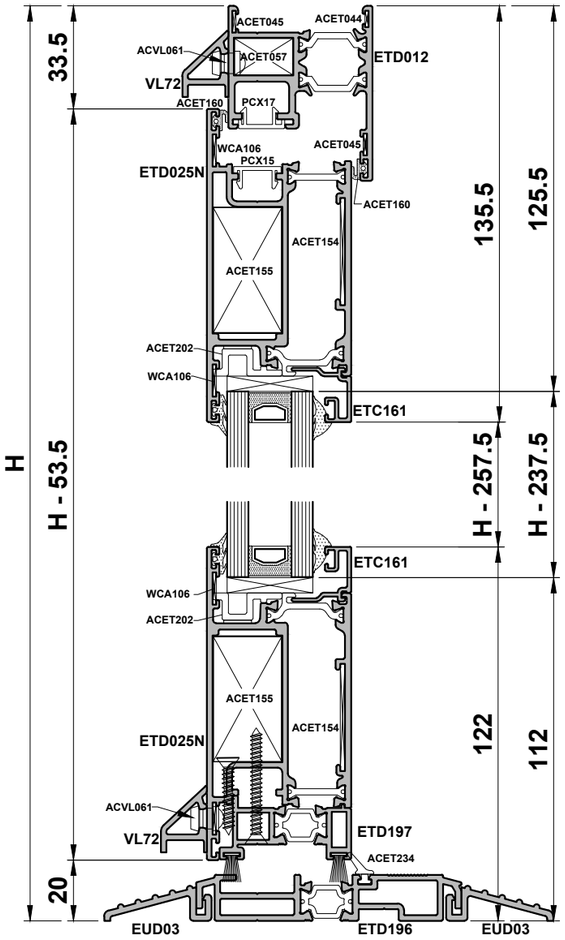
ACCESSORIES FOR MID RAIL

ACDR052	4	Screws
ACET131	2	Drainage Cap
ACVG31	2xW	E Gasket
ACVG34	2xW	Wedge Gasket



Do Not Scale From This Drawing

Double Door with Low Threshold (Open Out)



PROFILE CUTTING SCHEDULE

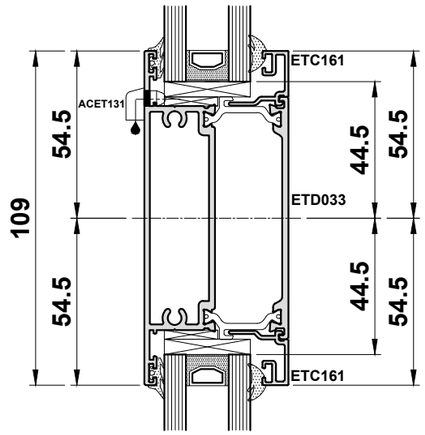
ETD012		2		H-15
ETD012		1		W
ETD025N		4		H-53.5
ETD025N		4		W/2-36
ETD048		1		H-77.5
ETD196		1		W
ETD197		1		W/2-75
ETD197		1		W/2-70
BEAD		4		H-257.5
BEAD		4		W/2-210
VL72		1		W-10
VL72		2		W/2-46
EUD03		2		W
PCX15		2		H-90
PCX15		1		W-105
PCX17		3		H-55
PCX17		1		W-80

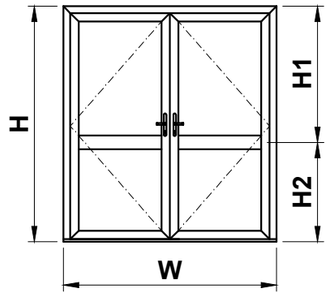
GLASS SIZES

WITHOUT MIDRAIL	W/2 - 220	H - **237.5**
ETD030	W/2 - 220	H1 - **170**
		H2 - **156.5**

ACCESSORIES

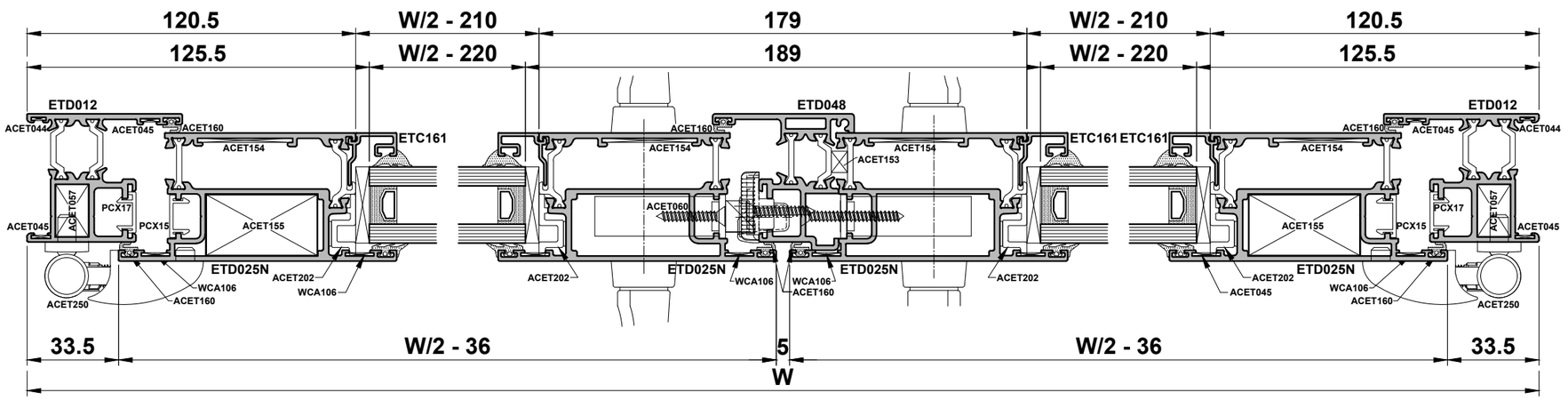
ACCY3045	1	Cylinder
ACDV251	2 Pairs	Lever/Lever Handle
ACDV737	1	Bottom Shoot Bolt
ACDV738	1	Top Shoot Bolt
ACET044	2	Chevron
ACET045	4	Chevron
ACET057	2	Outer Frame Cleat
ACET060	20	Lock & Keep Screws
ACET066	21	Lock & ETD197 Screws
ACET131	4	Drainage Cap
ACET153	at 300 ctrs	ETD048 Packer
ACET154	8	Sash Chevron
ACET155	8	Sash Cleat
ACET160	2xW + 7xH	Flipper Gasket
ACET162	1 Pair	ETD048 End Cap
ACET202	8	Bridge Packer
ACET234	1xW	Threshold Gasket
ACET250	4 or 6	Hinge
ACET257	4	Guide Blocks
ACET259	1 Pair	Threshold Bracket
ACET285	1	Secondary Door Lock Kit
ACET289	1 Pack	ETD048/ETD197 End Cap
ACET292/3	1	Multi-Point Lock
ACET291	1 Pair	ETD197 End Cap
ACET390	4	ACET259 Screws
ACSH038	2xW	Woolpile
ACVG31	2xW + 2xH	E Gasket
ACVG34	2xW + 2xH	Wedge Gasket
ACVL059	3 Pairs	VL72 End Cap
ACVL061	20	VL72 Rivet
WCA106	16	Sash Chevron





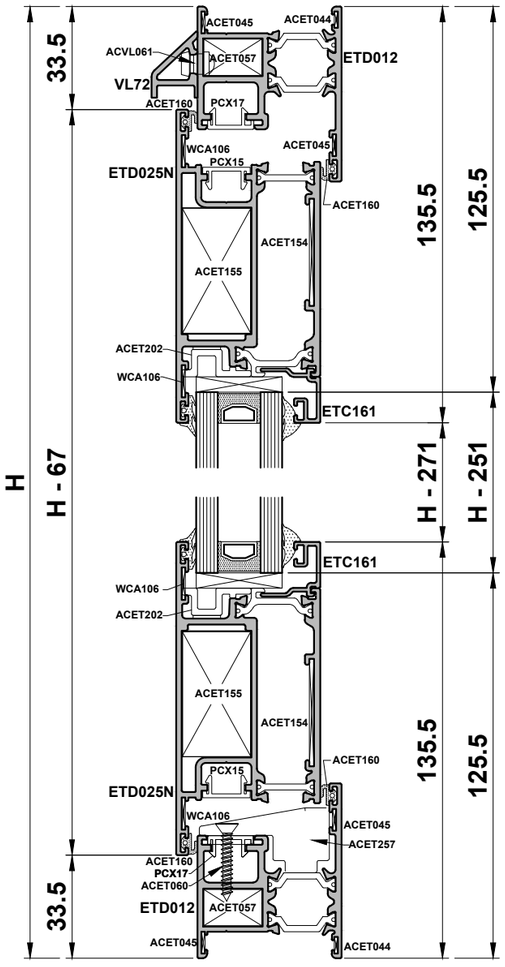
ACCESSORIES FOR MID RAIL

ACDR052	8	Screws
ACET131	4	Drainage Cap
ACVG31	2xW	E Gasket
ACVG34	2xW	Wedge Gasket



Do Not Scale From This Drawing

Single Door with Standard Threshold (Open Out)



PROFILE CUTTING SCHEDULE

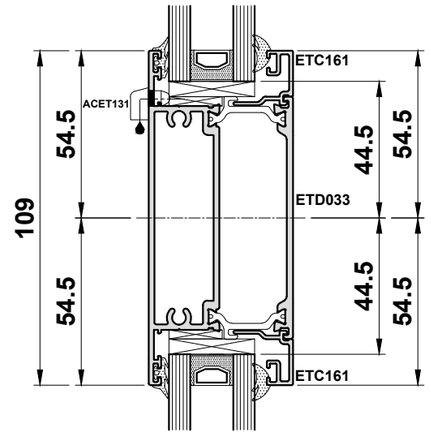
ETD012		2		H
ETD012		2		W
ETD025N		2		H-67
ETD025N		2		W-67
BEAD		2		H-271
BEAD		2		W-241
VL72		1		W-10
PCX15		2		H-105
PCX15		2		W-105
PCX17		2		H-80
PCX17		2		W-80

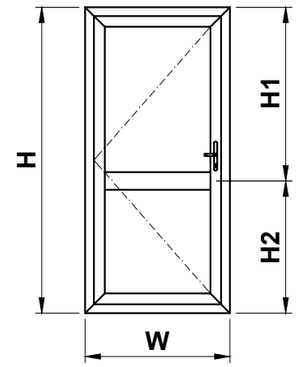
GLASS SIZES

WITHOUT MIDRAIL	W - 251	H - 251
ETD030	W - 251	H1 - 170
		H2 - 170

ACCESSORIES

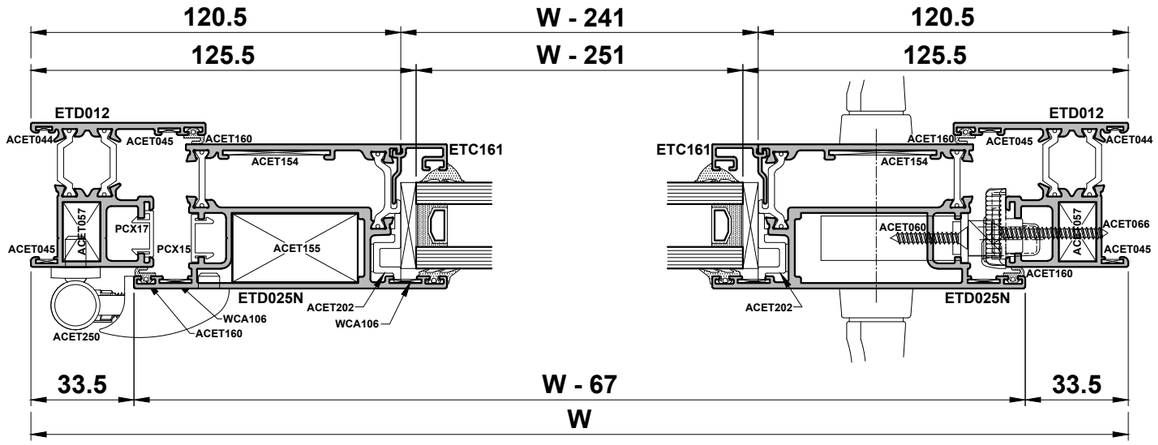
ACCY3045	1	Cylinder
ACDV251	1 Pair	Lever/Lever Handle
ACET044	4	Chevron
ACET045	8	Chevron
ACET057	4	Outer Frame Cleat
ACET060	14	Lock & ACET257 Screws
ACET066	9	Keep Screws
ACET131	2	Drainage Cap
ACET154	4	Sash Chevron
ACET155	4	Sash Cleat
ACET160	4xW + 4xH	Flipper Gasket
ACET202	4	Bridge Packer
ACET250	2 or 3	Hinge
ACET257	4	Guide Block
ACET282/3	1	Multi-Point Lock
ACVG31	2xW + 2xH	E Gasket
ACVG34	2xW + 2xH	Wedge Gasket
ACVL059	1 Pair	VL72 End Cap
ACVL061	5	VL72 Rivet
WCA106	8	Sash Chevron





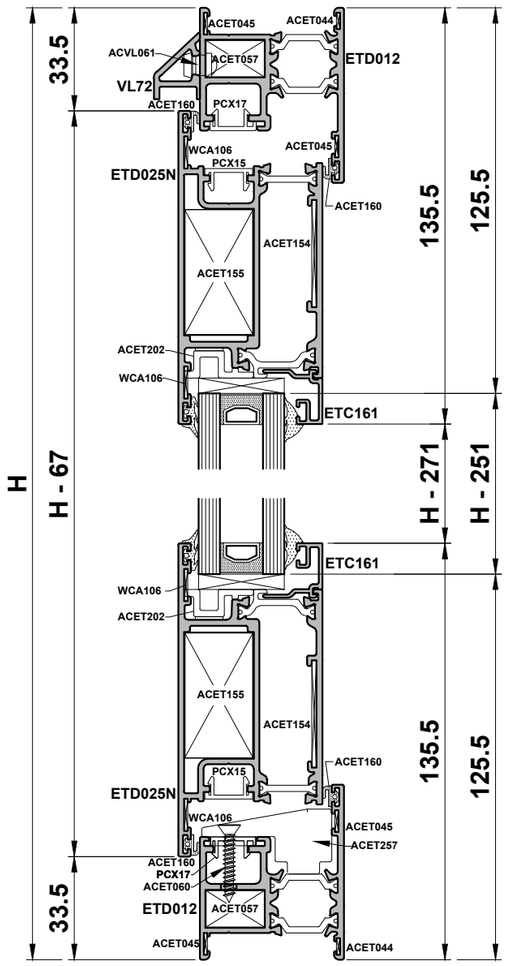
ACCESSORIES FOR MID RAIL

ACDR052	4	Screws
ACET131	2	Drainage Cap
ACVG31	2xW	E Gasket
ACVG34	2xW	Wedge Gasket



Do Not Scale From This Drawing

Double Door with Standard Threshold (Open Out)



PROFILE CUTTING SCHEDULE

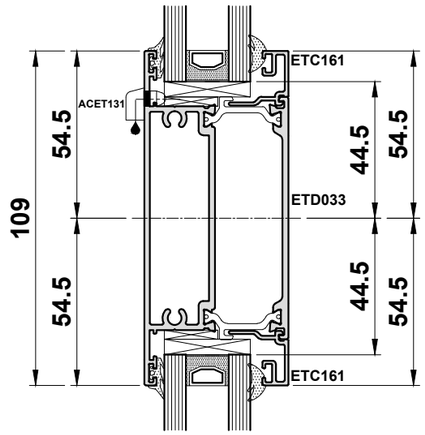
ETD012		2		H
ETD012		2		W
ETD025N		4		H-67
ETD025N		4		W/2-36
ETD048		1		H - 106
BEAD		4		H-271
BEAD		4		W/2-210
VL72		1		W-10
PCX15		4		H-105
PCX15		4		W/2-73.5
PCX17		3		H-80
PCX17		2		W-80

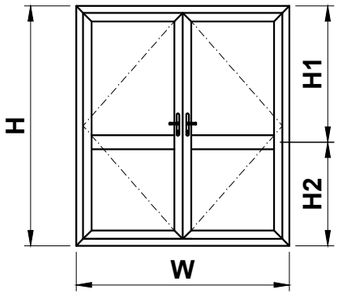
GLASS SIZES

WITHOUT MIDRAIL	W/2 - 220	H - 251
ETD030	W/2 - 220	H1 - 170
		H2 - 170

ACCESSORIES

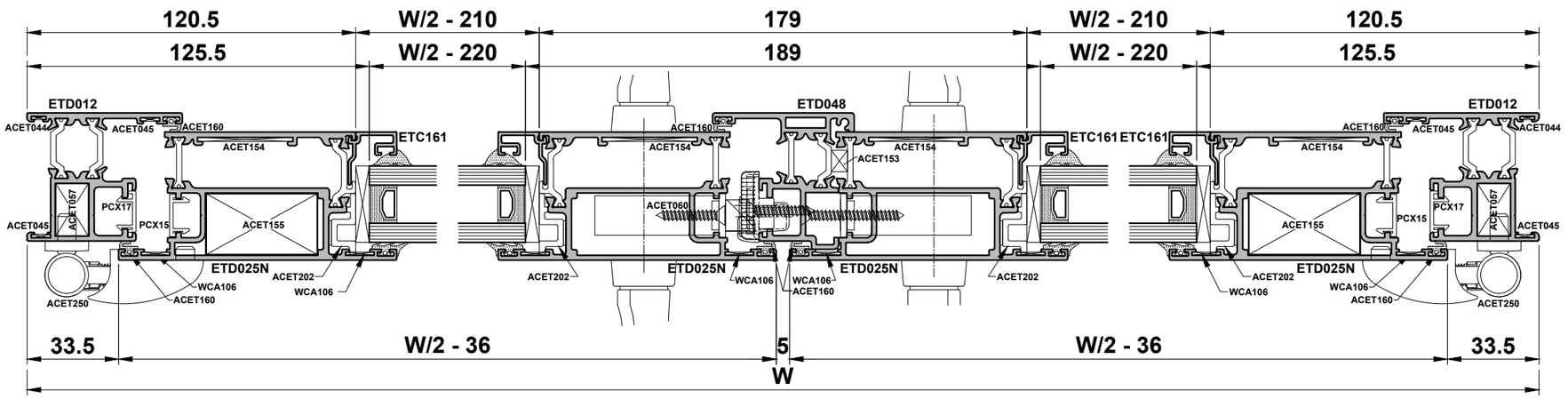
ACCY3045	2	Cylinder
ACDV251	2 Pairs	Lever/Lever Handle
ACDV737	1	Bottom Shoot Bolt
ACDV738	1	Top Shoot Bolt
ACET044	4	Chevron
ACET045	8	Chevron
ACET057	4	Outer Frame Cleat
ACET060	20	Lock & Keep Screws
ACET066	11	Secondary Lock Screws
ACET131	4	Drainage Cap
ACET153	at 300 ctrs	ETD048 Packer
ACET154	8	Sash Chevron
ACET155	8	Sash Cleat
ACET160	4xW + 7xH	Flipper Gasket
ACET162	1 Pair	ETD048 End Cap
ACET202	8	Bridge Packer
ACET250	4 or 6	Hinge
ACET257	8	Guide Blocks
ACET285	1	Secondary Door Lock Kit
ACET292/3	1	Multi-Point Lock
ACVG31	2xW + 2xH	E Gasket
ACVG34	2xW + 2xH	Wedge Gasket
ACVL061	10	VL72 Rivet
WCA106	16	Sash Chevron





ACCESSORIES FOR MID RAIL

ACDR052	8	Screws
ACET131	4	Drainage Cap
ACVG31	2xW	E Gasket
ACVG34	2xW	Wedge Gasket



Do Not Scale From This Drawing