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Updates

DATE	PAGE	DESCRIPTION
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JUNE 2024	ALL PAGES	SPLIT MANUAL
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Specification

GENERAL DESCRIPTION

The Alitherm 400 Door system described in this manual is suitable for domestic or commercial applications as replacement doors for existing buildings, and for installation into new buildings.

The Alitherm 400 Door provides the option of mechanical joints using punch tooling on outer frame and sash.

Stepped & Flush designs are available as:

- Single Open In Doors
- Double Open In Doors
- Single Open Out Doors
- Double Open Out Doors

Alitherm 400 door features Quick-Glaze Beads with integrated gasket, providing a fast and efficient glazing process. Non integrated gasket options are also available.

PROFILE SPECIFICATION

The door frames are constructed of aluminium alloy extrusion to BS EN 755-9 and BS EN 12020, extruded to 6063 T6 alloy. The internal and external extrusions are separated with a polyamide thermal break.

The external aluminium alloy extrusion is pre-treated and finished either:-

- 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 sash 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 outer frame corner and sash 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.

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

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

Size Limitations

Door Type	Min Leaf Width (mm)	Max Leaf Width (mm)	Max Leaf Height (mm)	Overall Width (mm)	Overall Height (mm)
Single Door Open In	600	1100	2400	1164	2464
Double Door Open In	600	1100	2400	2276	2464
Single Door Open Out	600	1100	2400	1164	2464
Double Door Open Out	600	1100	2400	2276	2464

Important Notes:

1. Max leaf weight 100kg
2. Size limitations are based on current profiles using full frame

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 above all open-out door leaves and at the bottom of all open-in doors. it is also recommended to use at the bottom of open-out doors where the low ramp threshold are used.

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/mullions or mid-rail 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 either drilling or punching, the corners ready for the cleat machine screws. Then, coating the cut faces to be joined with ACSIL04. Into the mitred corner insert the ACSIL013 and the required corner cleats. The two mitred ends are then brought together and screwed. ACSIL04 ensures a permanent joint and guards against the ingress of moisture and joint movement. After screwing the corner joint, special care should be taken to ensure any excess ACSIL04 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 ACSIL04. After fixing, special care should be taken to ensure any excess is cleared from painted surfaces.

Specification

SASH

Corners are formed by either drilling or punching, the corners ready for the cleat machine screws. Then, coating the cut faces to be joined with ACSIL04. Into the mitred corner insert the ACSIL013 and the required corner cleats. The two mitred ends are then brought together and screwed. ACSIL04 ensures a permanent joint and guards against the ingress of moisture and joint movement. After screwing the corner joint, special care should be taken to ensure any excess ACSIL04 is removed from painted surfaces

INTERNALLY BEADED ADAPTOR FRAME

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

Corners are formed by coating the cut faces to be joined with a suitable small gap sealer. Into the mitred corner insert the ACSIL013 and a corner cleat and the required corner chevrons. ACSIL04 ensures a permanent joint and guards against the ingress of moisture and joint movements. Care should be taken to ensure any excess sealer is removed from painted surfaces.

Alitherm 400 Door Weather Performance (BS6375-1)

Low thresholds have not been weather tested as they are unlikely to exceed UK exposure category 800 X shown below:

See pages A08 & A09.

Alitherm 400 Door Security (PAS 24)

Alitherm 400 door standard parts are able to achieve PAS24 requirement.

Alitherm 400 Door 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.

INTERNALLY BEADED GLAZING

Glazing beads are fitted to openings by cutting the horizontal beads square to head and cill of each sash and reverse adaptor area. Vertical beads are cut square at both ends. Insert bottom beads and two setting blocks to ensure glass will be centralized in vertical dimension of opening (glazing blocks must be full width of cavity to fully support glass or sealed unit), then insert top bead followed by side beads. Finish glazing by insertion of internal gaskets all round.

Specification

Kitemark™ Certificate

Aluminium Alloy Residential Door System (Slam lock/Key wind/Lift lever)

BS 6375:2016 / PAS 24:2016 - General and enhanced security performance requirements for door assemblies.

Profiles:

Outer Frame: ETD402, 404, 410, 412, 490, 491, 492, 493, 495, 496, 497, 499

Sash: ETD4202, 4203, 4204, 4205, 422, 424, 446, 448

Mid-rail: ETD430, 4301, 4302, 432

Hardware:

Locking: ACUL272, ACUL273, ACUL280, ACUL281, ACUL282, ACUL283, ACUL360, ACUL361, ACUL362, ACUL363, ACUL263, ACUL374, ACUL375, ACUL377, ACUL378, ACUL380, ACUL381, ACUL382, ACUL383, ACUL390, ACDV737, ACDV738, ACDV742, ACDV744, ACPD884, ACPD846, ACPD847, ACPD848, ACPD849

Hinges: ACUL250, ACUL260

Hinge Protectors: ACET252 (not required for PAS24)

Handle: All handles listed in manual

Cylinder: ACCY3560NKS3, ACCY6035NKS3, ACCY3560NKTTS3, ACCY6035NKTTS3

Size Limitations And Performance Characteristics

Door Type	Leaf Width (mm) - Maximum	Leaf Height (mm) - Maximum	Air Permeability Classification	Watertightness Classification	Resistance To Wind Classification	Exposure Category As Given In Table 1 Of BS6375-1:2009
Double Leaf Open In Full Frame	1100	2400	Class 2 Air	Class 3A Water	C3	1200
Double Leaf Open Out Full Frame	1100	2400	Class 2 Air	Class 9A Water	A3	1200
Double Leaf Open In Low Rebate Threshold	1100	2400	Class 3 Air	Class 3A Water	A3	1200
Double Leaf Open Out Low Rebate Threshold	1100	2400	Class 2 Air	Class 4A Water	C3	1200

Specification

Kitemark™ Certificate

Aluminium Alloy Residential Door System (Lift Lever with cams)

BS 6375:2016 / PAS 24:2016 - General and enhanced security performance requirements for door assemblies.

Profiles:

Outer Frame: ETD402, 404, 410, 412, 490, 491, 492, 493, 495, 496, 497, 499

Sash: ETD4202, 4203, 4204, 4205, 422, 424, 445, 447

Mid-rail: ETD430, 4301, 4302, 432

Hardware:

Locking: ACUL267, ACUL268, ACUL276, ACUL277, ACUL278, ACUL279

Hinges: ACUL250, ACUL260

Hinge Protectors: ACET252 (not required for PAS24)

Handle: All handles listed in manual

Cylinder: ACCY3560NKS3, ACCY6035NKS3, ACCY3560NKTT3, ACCY6035NKTT3

Size Limitations And Performance Characteristics

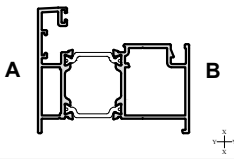
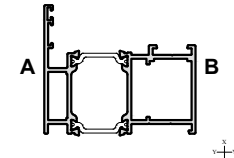
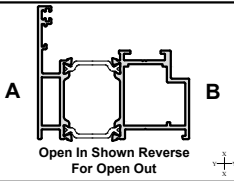
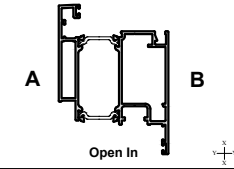
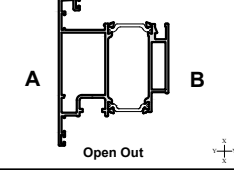
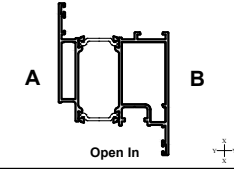
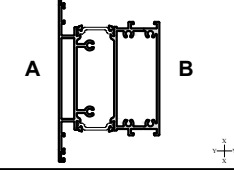
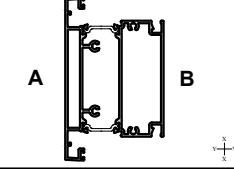
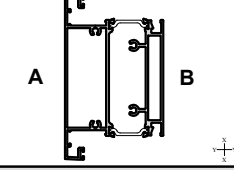
Door Type	Leaf Width (mm) - Maximum	Leaf Height (mm) - Maximum	Air Permeability Classification	Watertightness Classification	Resistance To Wind Classification	Exposure Category As Given In Table 1 Of BS6375-1:2009
Double Leaf Open In Full Frame	1100	2400	Class 4 Air	Class 3A Water	C3	AB2400
Double Leaf Open Out Full Frame	1100	2400	Class 4 Air	Class E 1050 Water	C3	AE2400
Double Leaf Open In Low Rebate Threshold	NOT TESTED					
Double Leaf Open Out Low Rebate Threshold						

Alitherm 400 Flush Door

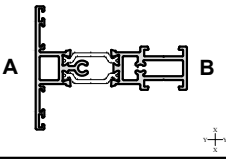
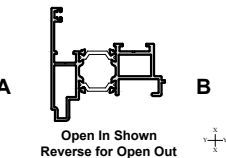
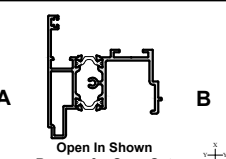
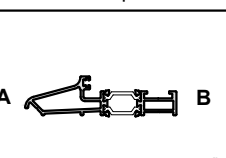
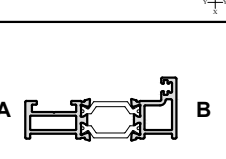
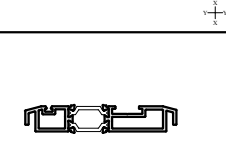
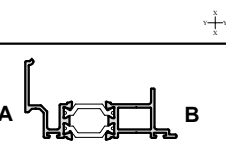
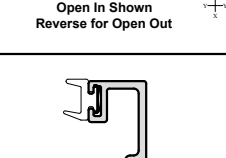
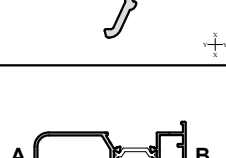
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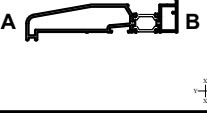
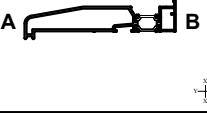
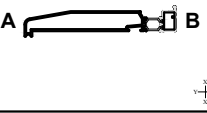
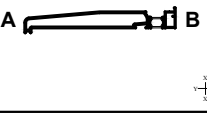
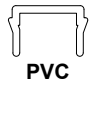
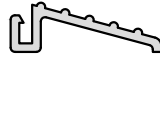
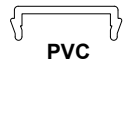
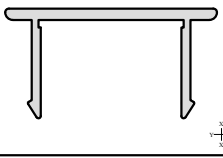
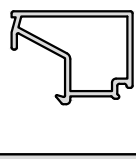
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ETD404		A18	420	105.4	34.65 --- 9.05	12.26 --- 5.22	6.5	1	✓	✓	✓	✓	✓
ETD412		A17	359	150.7	34.19 ---- 8.63	14.07 ---- 5.81	6.5	1	✓	✓	✓	✓	✓
ETD4202		A19	467	183.6	49.3 ---- 14.09	41.76 ---- 9.47	6.5	1	✓	✓	✓	✓	✓
ETD4203		A19	465	182.6	47.29 ---- 11.88	40.65 ---- 9.20	6.5	1	✓	✓	✓	✓	✓
ETD422		A20	437	176.9	47.26 ---- 13.24	36.16 ---- 7.55	6.5	1	✓	✓	✓	✓	✓
ETD430		A26	711	203.7	63.34 --- 16.20	81.07 --- 14.00	6.5	1	✓	✓	✓	✓	✓
ETD4301		A24	512	218.7	61.58 ---- 15.24	100.49 ---- 17.33	6.5	1	✓	✓	✓	✓	✓
ETD4302		A25	513	218.7	65.13 ---- 18.45	99.66 ---- 17.18	6.5	1	✓	✓	✓	✓	✓
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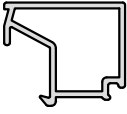
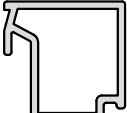
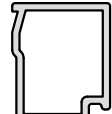
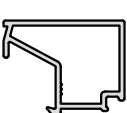
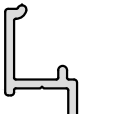
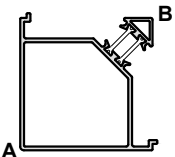
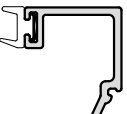
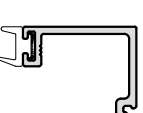
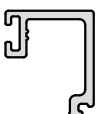
PROFILES : TECHNICAL INFORMATION

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ETD433		A27	402	89.8	29.52 --- 7.17	4.96 --- 1.75	6.5	1	✓	✓	✓	✓	✓
ETD445	 Open In Shown Reverse for Open Out	A23	354	118.1	27.3 --- 6.84	11.19 --- 3.59	6.5	1	✓	✓	✓	✓	✓
ETD446	 Open In Shown Reverse for Open Out	A23	404	133.6	28.16 --- 6.87	15.21 --- 4.27	6.5	1	✓	✓	✓	✓	✓
ETD491		A21	297	73	34.80 --- 7.07	1.57 --- 1.61	6.5	1	✓	✓			
ETD493		A21	216	54.9	13.93 --- 4.18	1.12 --- 1.11	6.5	1	✓	✓			
ETD497		A22	265	108.5	33.16 --- 7.35	1.07 --- 1.32	6.5	1	✓	✓			
ETD499	 Open In Shown Reverse for Open Out	A22	261	74.1	11.59 --- 3.22	1.64 --- 1.55	6.5	1	✓	✓	✓	✓	✓
ETC4179G ETC4179		A28	104	29	- --- -	- --- -	6.5	1	✓	✓	✓	✓	
ETC451		A35	271	180	32.44 --- 7.29	3.46 --- 2.79	6.5	1	✓	✓	✓	✓	✓
								A = Outside B = Inside		MF = Mill Finish SA = Silver Anodised KL = Basic Colour HP = Special Colour M = Dual Colour			

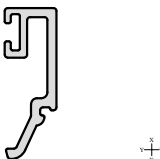
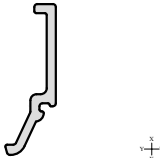
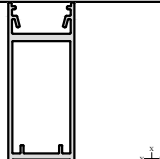
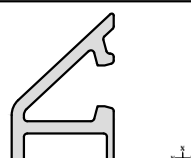
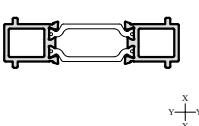
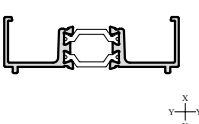
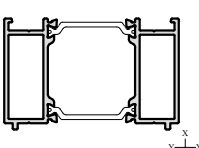
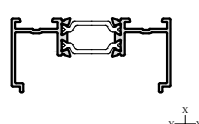
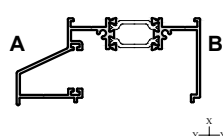
PROFILES : TECHNICAL INFORMATION

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ETC458		A36	524	492	313.62 — 32.63	8.87 — 4.79	6.5	1	✓	✓	✓	✓	✓
ETC479N		A36	594	559	501.64 — 44.04	9.72 — 5.34	6.5	1	✓	✓	✓	✓	✓
DV60		A23	21	---	- ----- -	- ----- -	6.5	1					
EUD03		A22	113	39	- ----- -	- ----- -	4	1	✓	✓			
PCX47		A20	43.4	---	- ----- -	- ----- -	6.5	1					
SR014		A33	110.4	31.7	- ----- -	- ----- -	7	1	✓	✓	✓	✓	
UL062		A30	115	49	- ----- -	- ----- -	6.5	1	✓	✓	✓	✓	
								A = Outside B = Inside		MF = Mill Finish SA = Silver Anodised KL = Basic Colour HP = Special Colour M = Dual Colour			

PROFILES : TECHNICAL INFORMATION

Number	Picture	Page	Perim. mm	Mec. mm	lx(cm4) wx(cm3)	ly(cm4) wy(cm3)	Length	Pack pr.	MF	SA	KL	HP	M
UL067		A30	110	46	- ---	- ---	6.5	1	✓	✓	✓	✓	
UL068		A30	101	40	- ---	- ---	6.5	1	✓	✓	✓	✓	
UL069		A30	87	48	- ---	- ---	6.5	1	✓	✓	✓	✓	
UL078		A30	120	51.9	- ---	- ---	6.5	1	✓	✓	✓	✓	
UL294		A21	102	37	- ---	- ---	6.5	1	✓	✓	✓	✓	
UN3010		A32	369	226	41.4 --- 10.7	40 --- 11.6	6.5	1	✓	✓	✓	✓	✓
UN3160G UN3160		A28	120	39	- ---	- ---	6.5	1	✓	✓	✓	✓	
UN3162NG UN3162N		A28	105	41	- ---	- ---	6.5	1	✓	✓	✓	✓	
UN3164		A29	112	33	- ---	- ---	6.5	1	✓	✓	✓	✓	
								A = Outside B = Inside		MF = Mill Finish SA = Silver Anodised KL = Basic Colour HP = Special Colour M = Dual Colour			

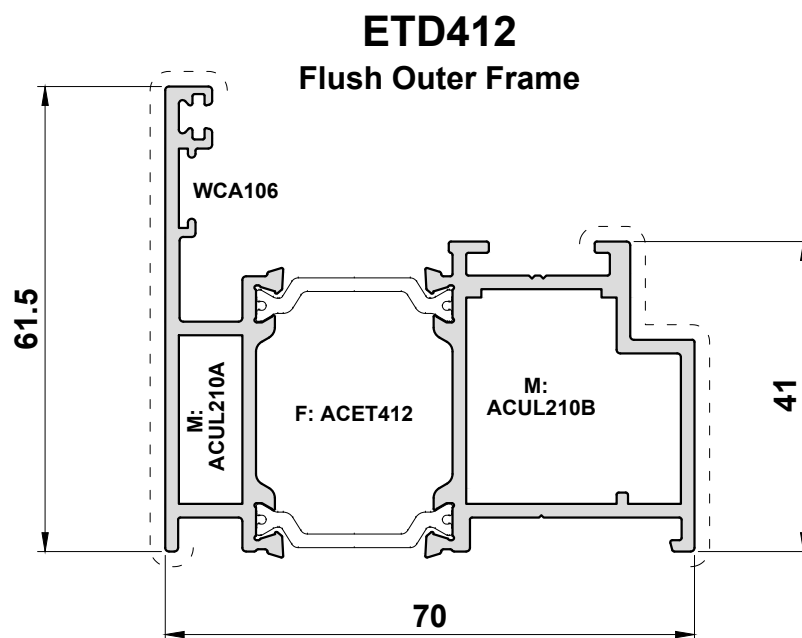
PROFILES : TECHNICAL INFORMATION

Number	Picture	Page	Perim. mm	Mec. mm	lx(cm4) wx(cm3)	ly(cm4) wy(cm3)	Length	Pack pr.	MF	SA	KL	HP	M
UN3166		A29	99.5	30.6	- -	- -	6.5	1	✓	✓	✓	✓	
UN3168		A29	99.5	30.6	- -	- -	6.5	1	✓	✓	✓	✓	
UN514		A33	282.7	157.1	35.14 8.74	8.86 5.47	6.5	1	✓	✓	✓	✓	
UN079 (VL72)		A20	99.5	30.6	- -	- -	6.5	1	✓	✓	✓	✓	
UN3015		A31	214.5	56	18.1 5.2	1 1	6.5	1	✓	✓	✓	✓	✓
UN3020		A31	281.6	70.4	14.8 4.2	0.9 1	6.5	1	✓	✓	✓	✓	✓
UN3042		A31	288	111	31.2 8.9	9.5 4.3	6.5	1	✓	✓	✓	✓	✓
UN3370		A32	360	61	18.4 5.26	2.15 1.97	6.5	1	✓	✓	✓	✓	✓
UN3570		A34	545	140	47.47 9.53	9.26 4.87	6.5	1	✓	✓	✓	✓	✓
								A = Outside B = Inside		MF = Mill Finish SA = Silver Anodised KL = Basic Colour HP = Special Colour M = Dual Colour			

BLANK PAGE

Primary Visible Side

Secondary Visible Side

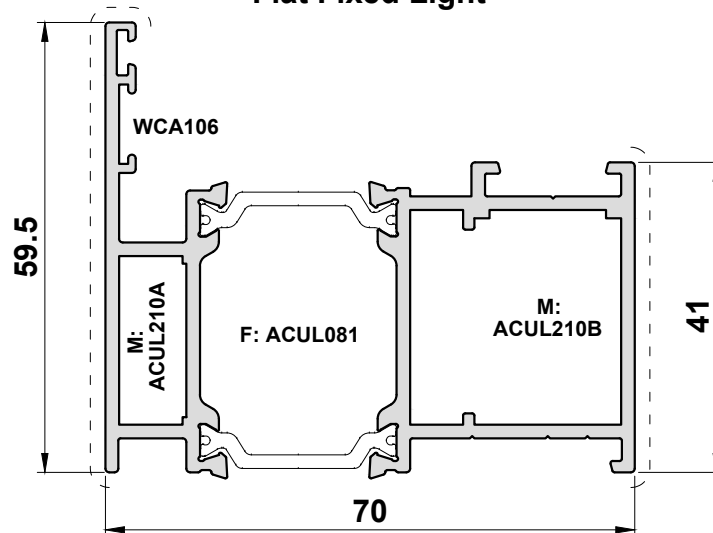


Scale 1:1

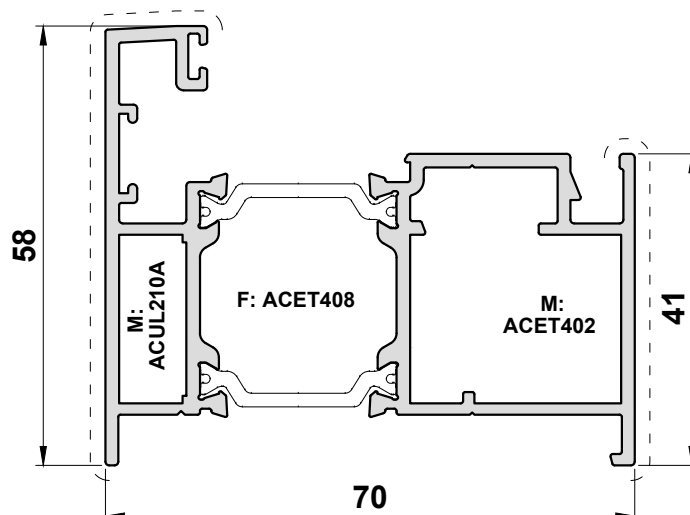
Primary Visible Side

Secondary Visible Side

ETD404
Flat Fixed Light



ETD402
Quick-Glaze Angled
Fixed Light

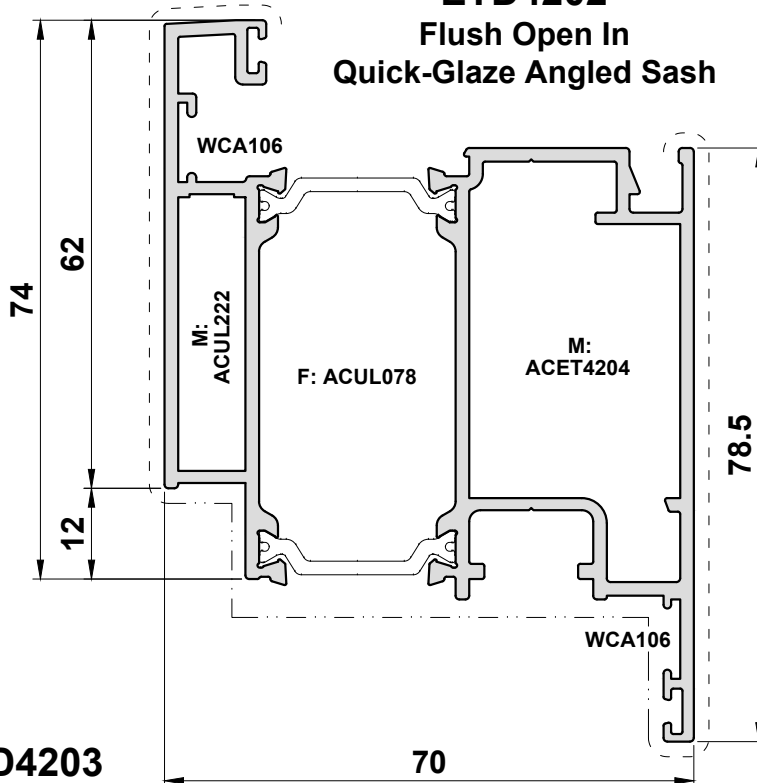


Scale 1:1

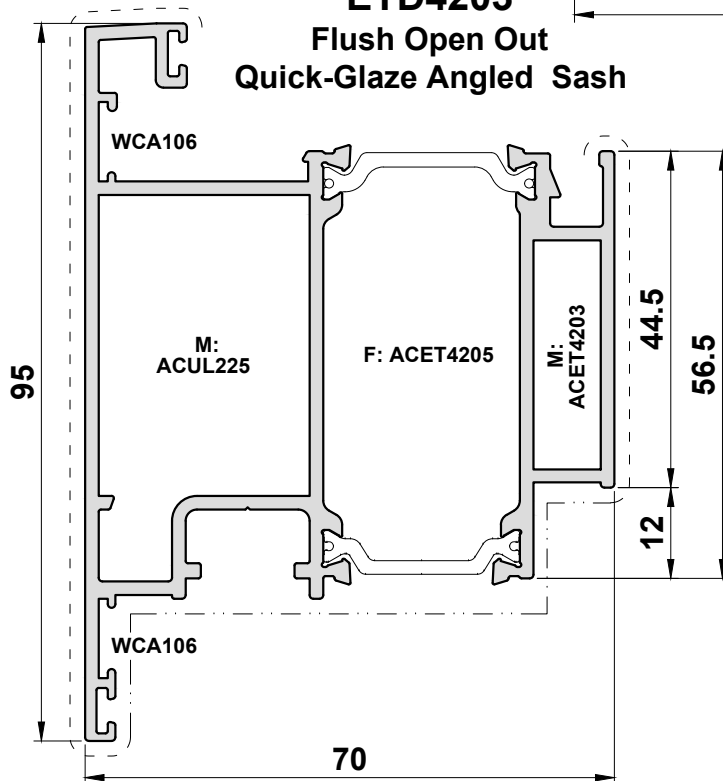
Primary Visible Side

Secondary Visible Side

ETD4202
Flush Open In
Quick-Glaze Angled Sash



ETD4203
Flush Open Out
Quick-Glaze Angled Sash

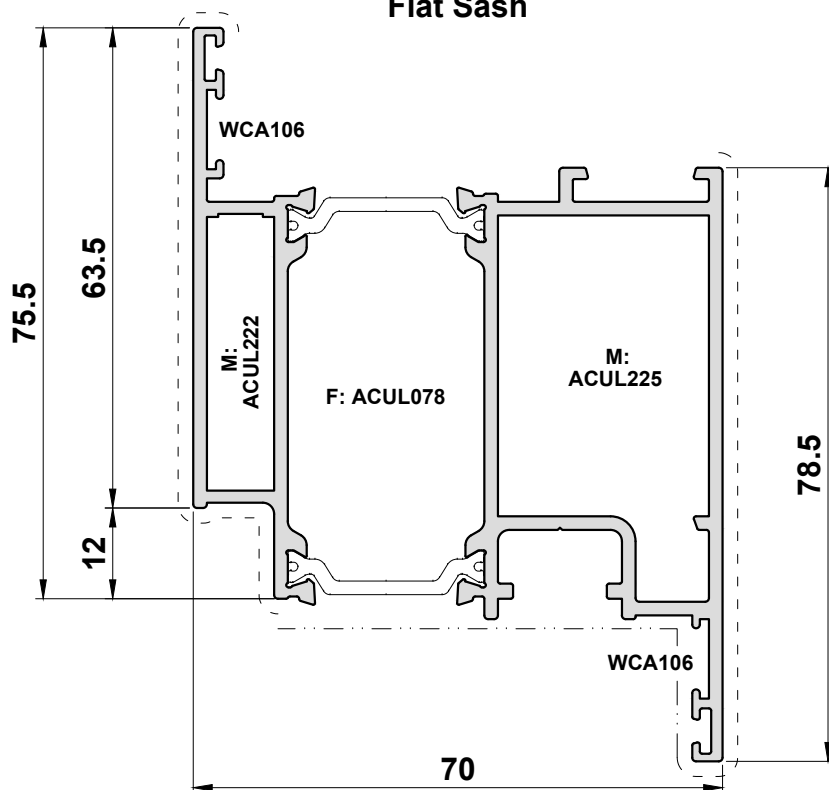


Scale 1:1

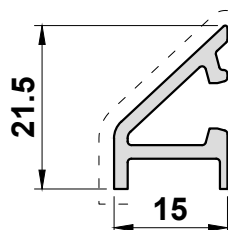
Primary Visible Side

Secondary Visible Side

ETD422 Flush Open In Flat Sash

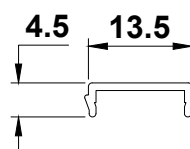


UN079 (VL72) Weather Drip



End Cap: ACVL059
Rivet: ACVL061

PCX47 PVC Infill



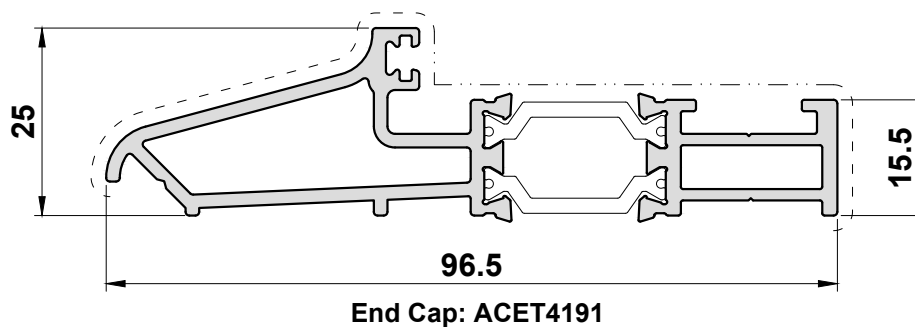
Scale 1:1

Primary Visible Side

Secondary Visible Side

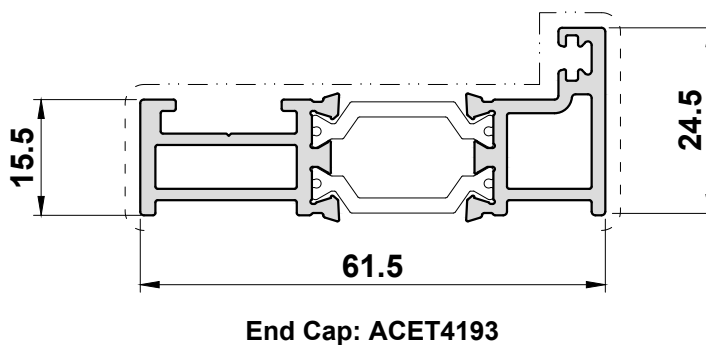
ETD491

Flush Open In Low Threshold



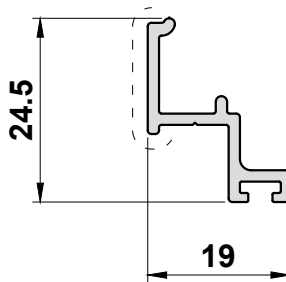
ETD493

Flush Open Out Low Threshold



UL294

Low Threshold Adaptor



End Cap: ACET4194

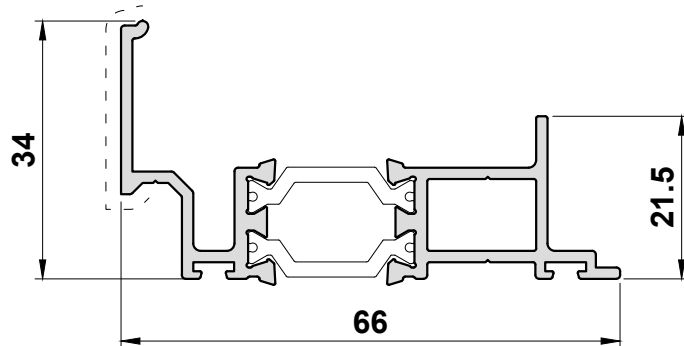
Scale 1:1

Primary Visible Side

Secondary Visible Side

ETD499

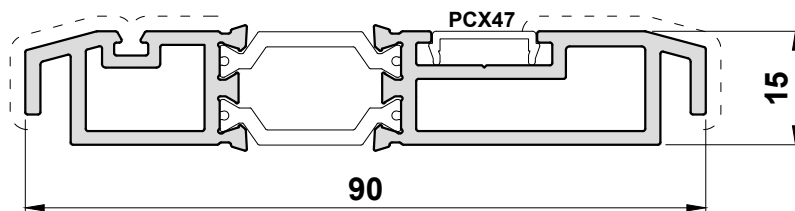
Flush Ramp Threshold Adaptor



End Cap: ACET4199

ETD497

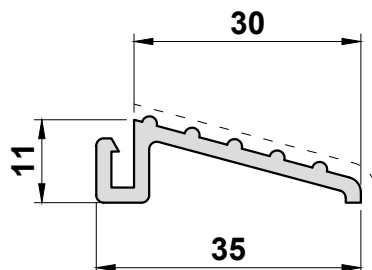
Flush Ramp Threshold



End Cap: ACET4198

EUD03

Ramp



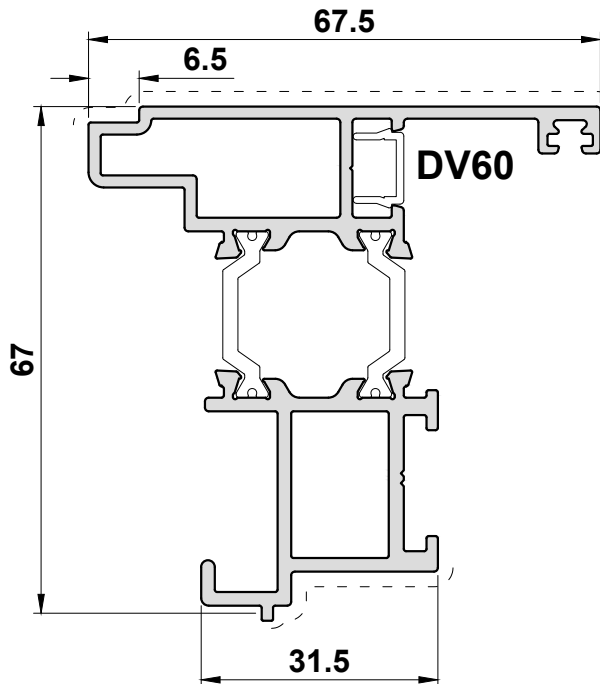
Scale 1:1

Primary Visible Side

Secondary Visible Side

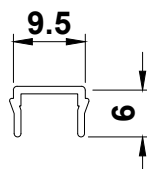
ETD445

Flush Double Door Meeting Stile



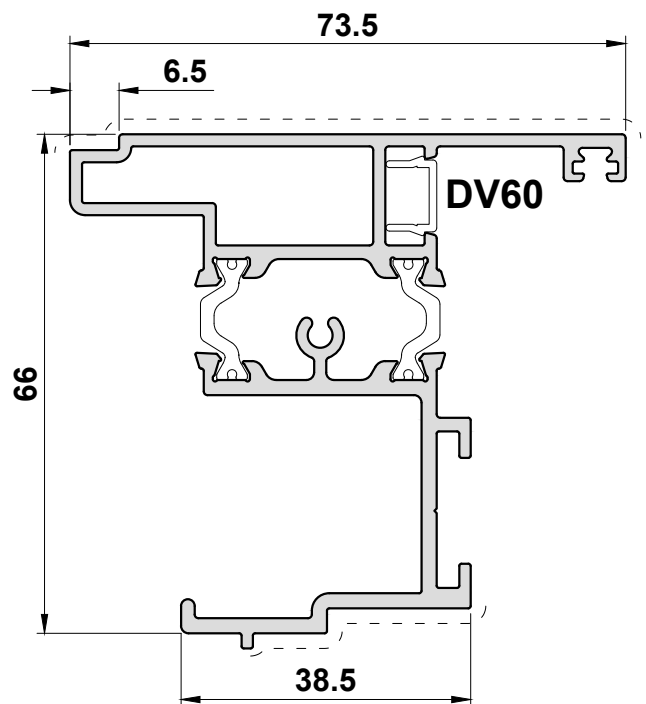
End Cap: ACET4152 
ACET4155 
ACET4157 

DV60
PVC Infill Strip
Black Only



ETD446

Flush Double Door Meeting Stile



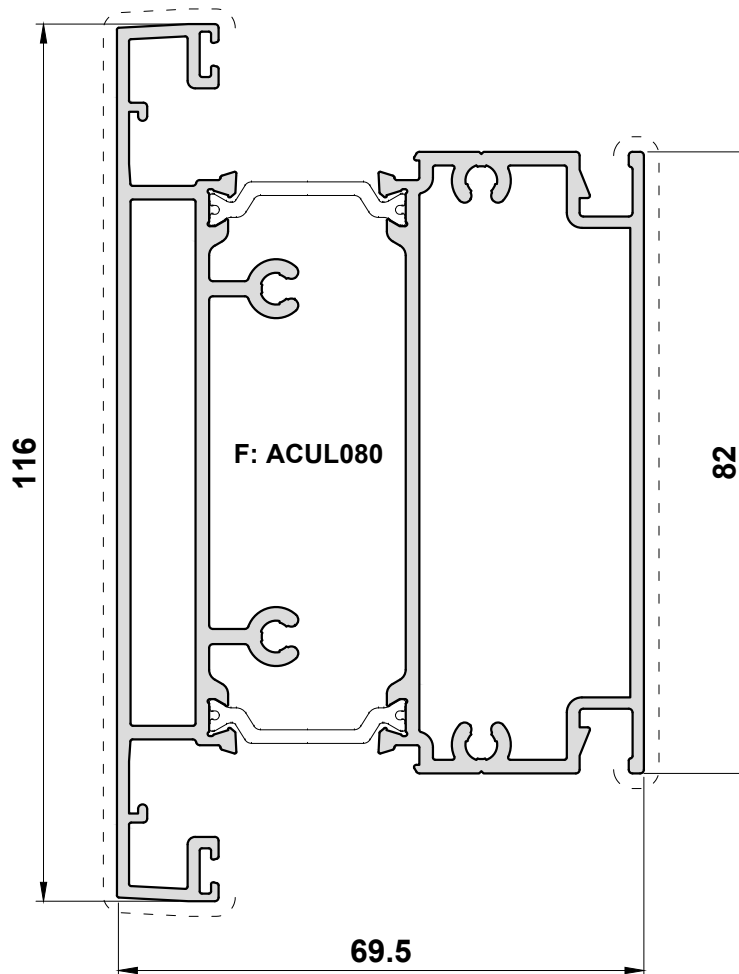
End Cap: ACET4153 
ACET4156 
ACET4158 

Scale 1:1

Primary Visible Side

Secondary Visible Side

ETD4301
Open In
Quick-Glaze Angled Midrail

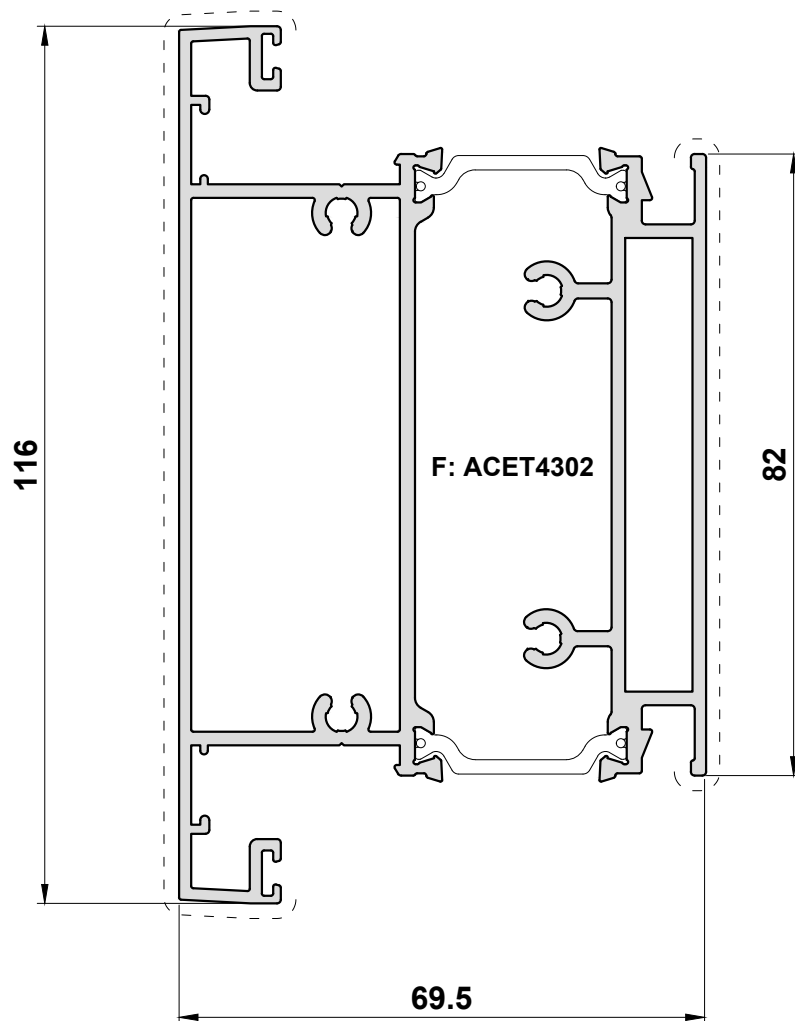


Scale 1:1

Primary Visible Side

Secondary Visible Side

ETD4302
Open Out
Quick-Glaze Angled Midrail



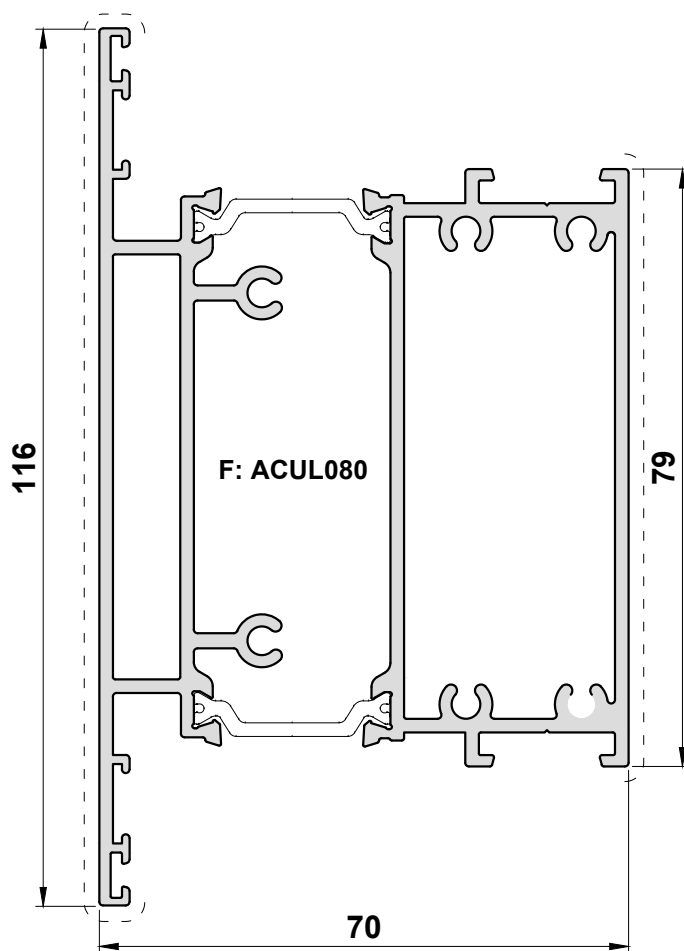
Scale 1:1

Primary Visible Side

Secondary Visible Side

ETD430

Flat Midrail

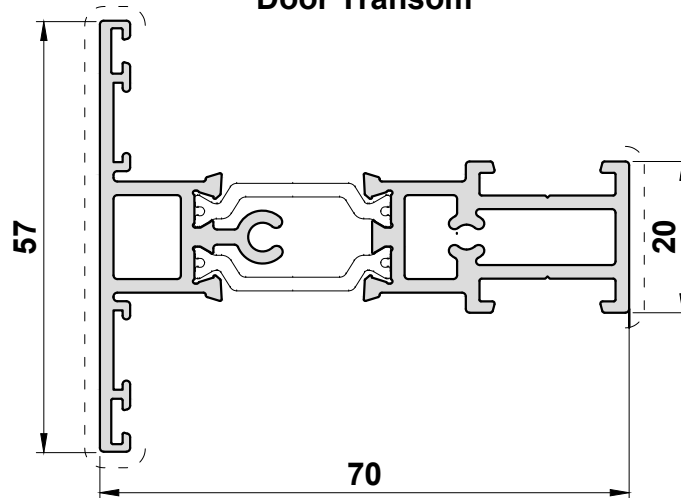


Scale 1:1

Primary Visible Side

Secondary Visible Side

ETD433
Door Transom

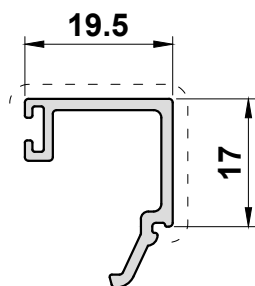


Scale 1:1

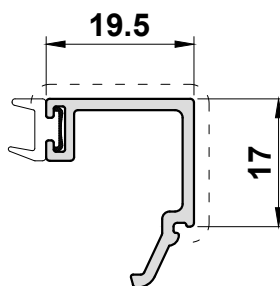
Primary Visible Side

Secondary Visible Side

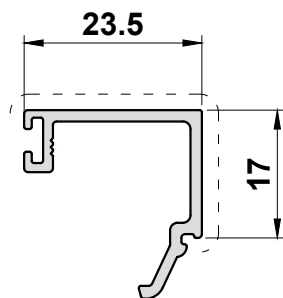
UN3160
28mm Square Bead



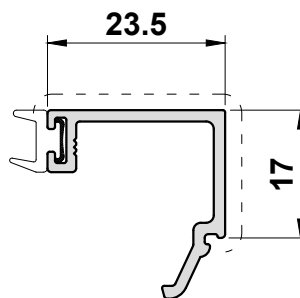
UN3160G
28mm Square Bead
with Gasket



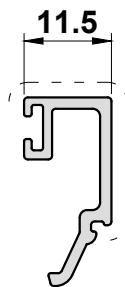
UN3162N
23.5mm Bead



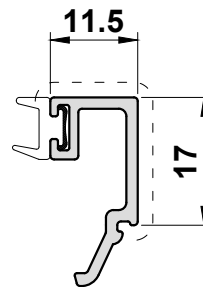
UN3162NG
23.5mm Bead
with Gasket



ETC4179
11.5mm Bead



ETC4179G
11.5mm Bead
with Gasket

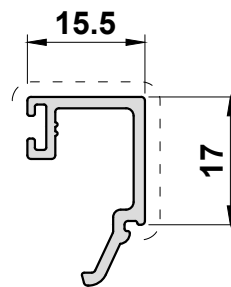


Scale 1:1

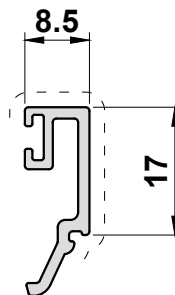
Primary Visible Side

Secondary Visible Side

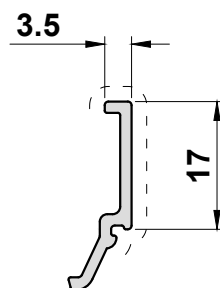
UN3164
15mm Bead



UN3166
8.5mm Bead



UN3168
3.5mm Bead

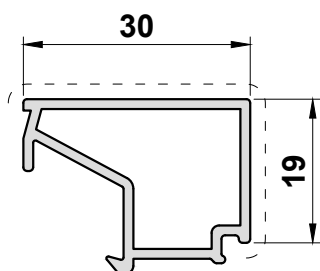


Scale 1:1

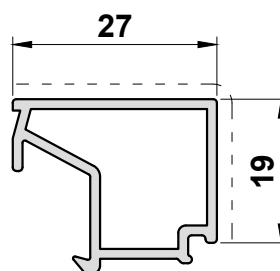
Primary Visible Side

Secondary Visible Side

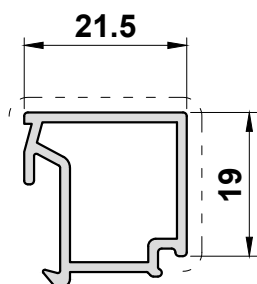
UL062
Glazing Bead



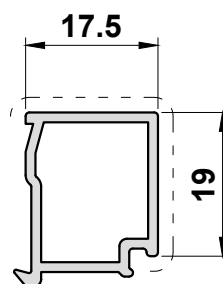
UL067
Glazing Bead



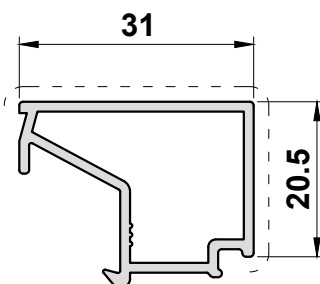
UL068
Glazing Bead



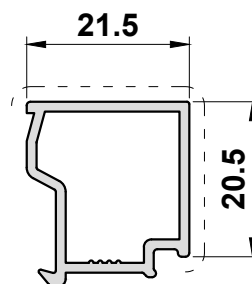
UL069
Glazing Bead



UL078
Glazing Bead



UL079
Glazing Bead

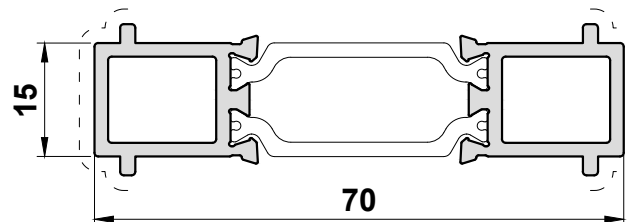


Scale 1:1

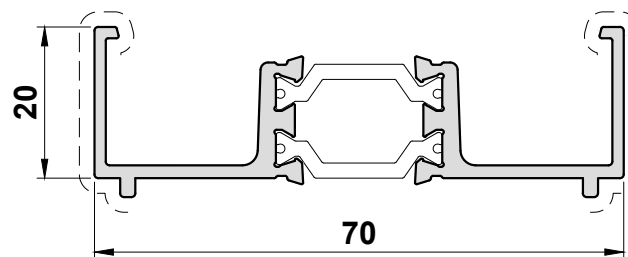
Primary Visible Side

Secondary Visible Side

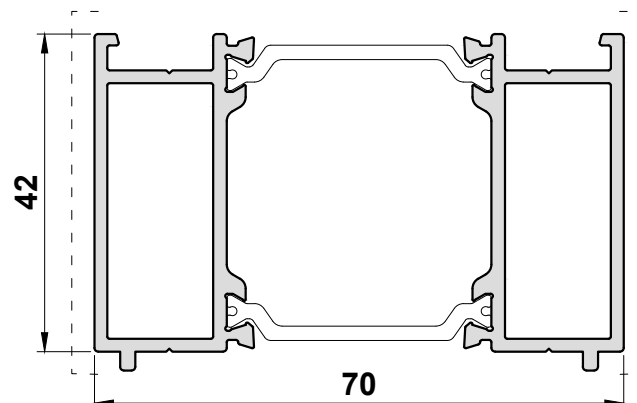
UN3015
70mm x 15mm Coupler



UN3020
70mm x 20mm Frame Extension



UN3042
42 x 70mm Head Extension



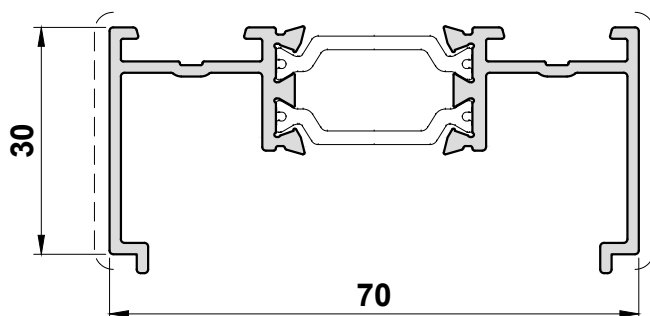
Scale 1:1

Primary Visible Side

Secondary Visible Side

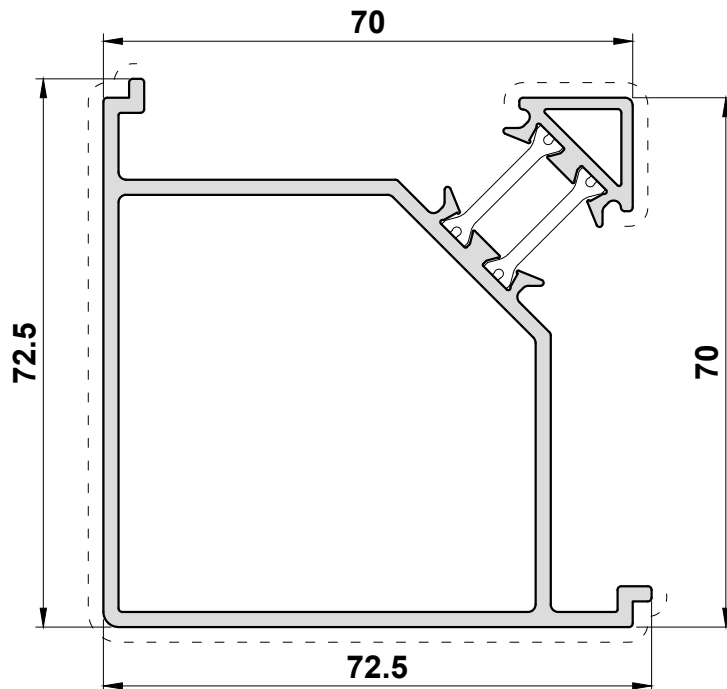
UN3370

30 x 70mm Head Extension



UN3010

90° Corner Post

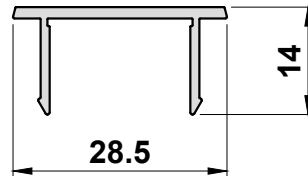


Scale 1:1

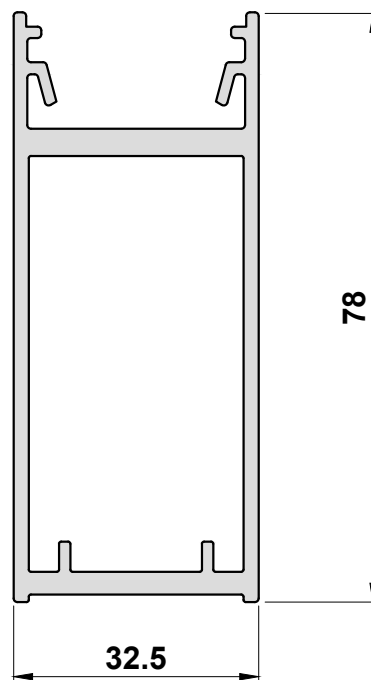
Primary Visible Side

Secondary Visible Side

SR014
Cover Cap for UN514



UN514
Re-Inforcement for ETD455

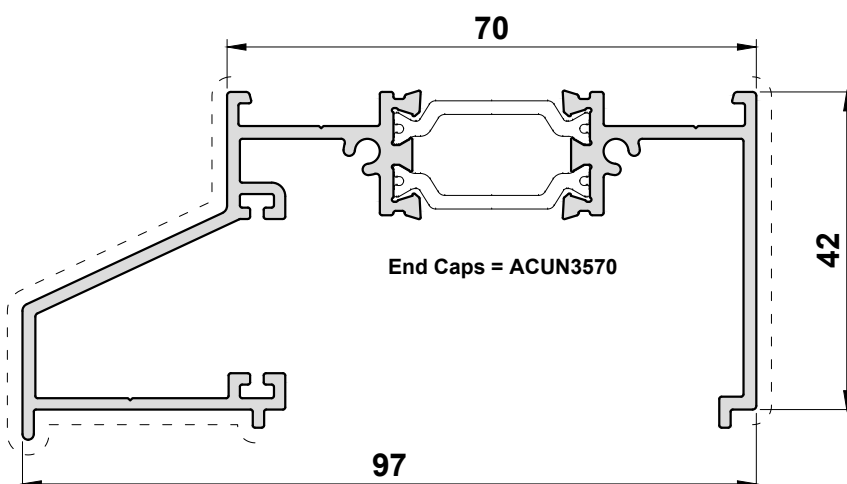


Scale 1:1

Primary Visible Side

Secondary Visible Side

UN3570
70mm x 42mm Hooded Head Extension



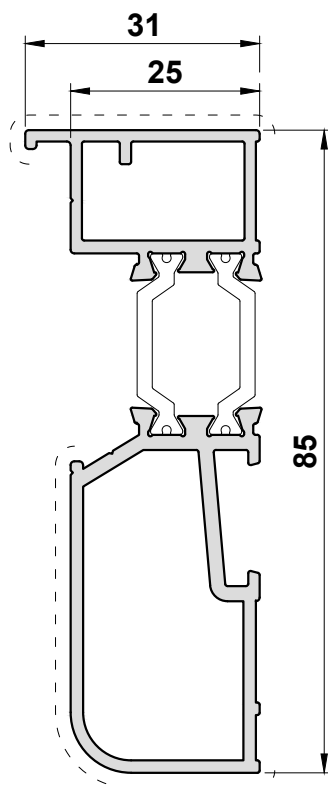
Scale 1:1

Primary Visible Side

Secondary Visible Side

ETC451

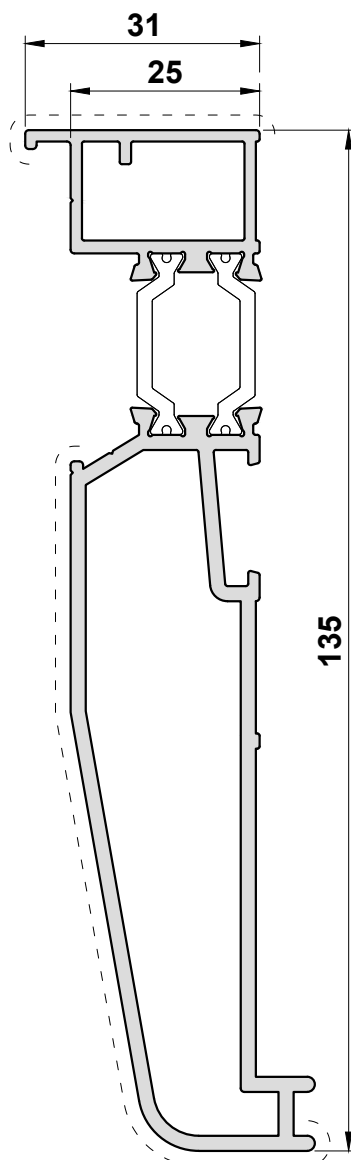
85mm Cill



Cast End Cap: ACET451
PVC End Cap: ACET178

ETC452

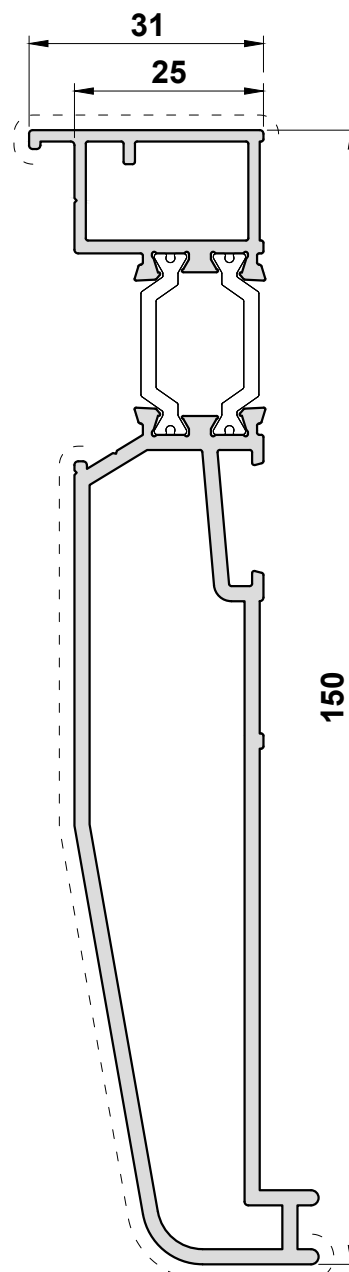
135mm Cill



Cast End Cap: ACET452
PVC End Cap: ACET152

ETC457

150mm Cill

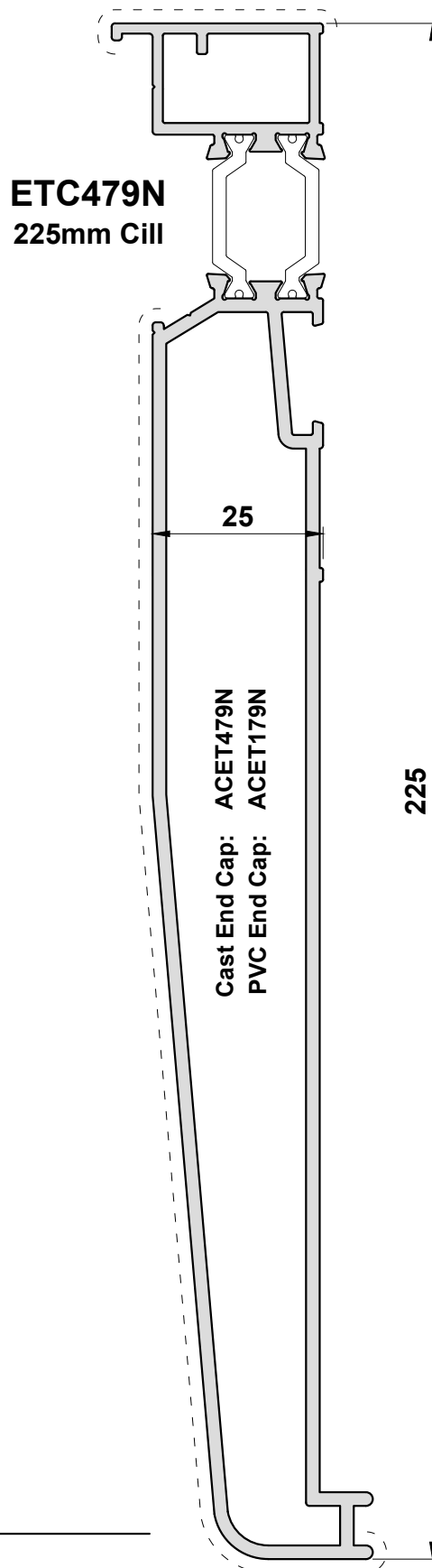
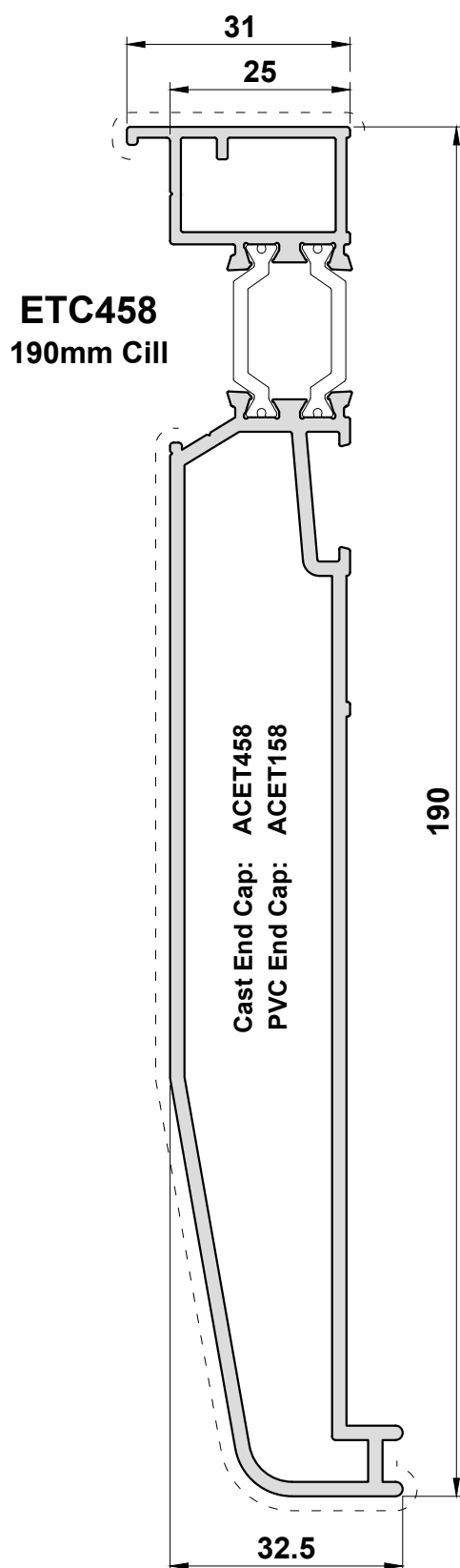


Cast End Cap: ACET457
PVC End Cap: ACET157

Scale 1:1

Primary Visible Side

Secondary Visible Side

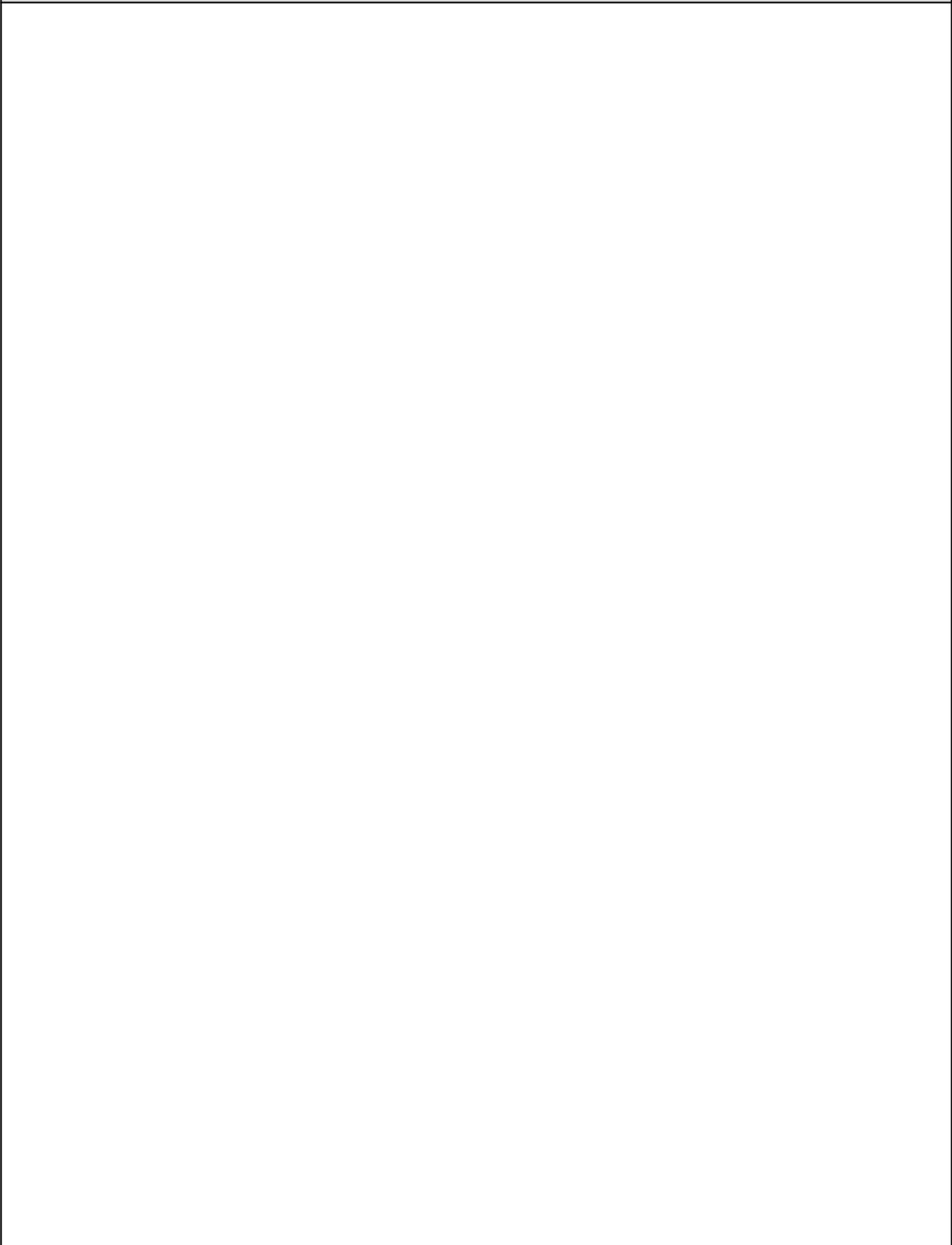
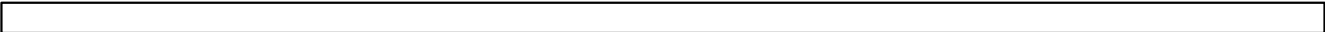


Scale 1:1

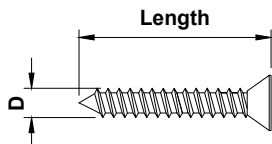
Section B

Accessories

Photos & Drawings



Countersunk Screws



Gauge	'D' (mm)
No.6	3.5
No.7	3.8
No.8	4
No.10	5
No.12	6

Part Number	Gauge	X	Length	Description	Box Qty.
ACUN3530	No.6	X	5/8"	Countersunk Pozi Self Tapper S/S	100
MUA025SSZ	No.6	X	1"	Countersunk Pozi Self Tapper S/S	100
ACET067	No.7	X	1/2"	Countersunk Pozi Self Tapper S/S	100
ACET060	No.7	X	1"	Countersunk Pozi Self Tapper S/S	100
ACET066	No.7	X	1 1/2"	Countersunk Pozi Self Tapper S/S	100
MUA067SSZ	No.7	X	2"	Countersunk Pozi Self Tapper S/S	100
ACPD815	No.7	X	3/4"	Countersunk Pozi Self Tapper S/S	100
ACET064	No.8	X	5/8"	Countersunk Pozi Self Tapper S/S	100
ACUN3512	No.8	X	1 1/4"	Countersunk Pozi Self Tapper S/S	100
ACUN3513	No.8	X	1 3/4"	Countersunk Pozi Self Tapper S/S	100
ACET072	No.8	X	2 1/2"	Countersunk Pozi Self Tapper S/S	100
ACET490	4.3mm	X	16mm	Countersunk PH2 Polyamide Screw	1000
ACET290	4.3mm	X	20mm	Countersunk PH2 Polyamide Screw	100
ACET390	4.3mm	X	25mm	Countersunk PH2 Polyamide Screw	200
ACET190	4.3mm	X	45mm	Countersunk PH2 Polyamide Screw	1000
ACVS062	4.3mm	X	65mm	Countersunk PH2 Polyamide Screw	1000
ACET048	No.10	X	3/8"	Countersunk Pozi Self Tapper S/S	100
ACIM062	No.10	X	1 1/4"	Countersunk Pozi Self Tapper S/S	100
ACET062	No.10	X	2"	Countersunk Pozi Self Tapper S/S	100
ACET076	No.10	X	2 1/2"	Countersunk Pozi Self Tapper S/S	100



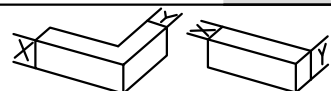
T-BARS
ACVG65=2.5mm
ACVG66=3.0mm
ACVL150=4.0mm



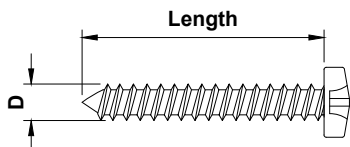
Screw (Grub)

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

WP = White
BL = Black



Pan Head Screws



Gauge	'D' (mm)
No.6	3.5
No.7	3.8
No.8	4
No.10	5
No.12	6

Part Number	Gauge	X	Length	Description	Box Qty.
ACET068	No.8	X	3/8"	Pozi Flange AB	100
ACET063	No.8	X	1/2"	Pan Head Self Tapper	100
ACET070	No.8	X	1/2"	Pozi Flange Self Tapper S/S	100
ACUN3535	No.8	X	5/8"	Pan Head Pozi S/S	100
ACET099	No.8	X	3/4"	Pozi Flange Self Tapper S/S	100
ACDR050	4.8mm	X	32mm	Pan Head Pozi S/S	200
PUA028	No.10	X	1"	Pan Head Pozi S/S	100
ACDR052	No.10	X	2"	Pan Head Self Tapper S/S	200
ACET079	No.10	X	2 1/2"	Pan Head Pozi S/S	100
ACW20160	No.12	X	1"	Flange Head Self Tapper S/S	100
ACMC109	6.3mm	X	38mm	DIN7981 - Pan Head Self Tapper	200



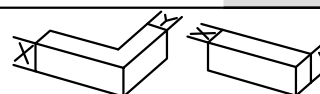
T-BARS
ACVG65=2.5mm
ACVG66=3.0mm
ACVL150=4.0mm



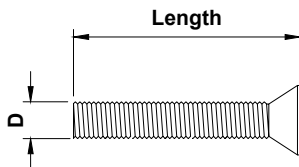
Screw (Grub)

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

WP = White
BL = Black



Countersunk Machine Screws



Thread	'D' (mm) Nominal
M4	4
M5	5
M6	6
M8	8
M10	10

Part Number	Thread	X	Length	Description	Box Qty.
ACET122	M4	X	10	CSK Pozi Machine Screw	100
ACET123	M4	X	20	CSK Pozi Machine Screw	100
ACDV264	M4	X	35	CSK Pozi Machine Screw	100
ACSG071	M4	X	40	CSK Pozi Machine Screw	100
ACDV266	M4	X	45	CSK Pozi Machine Screw	100
ACDV262	M4	X	50	CSK Pozi Machine Screw	100
ACDV265	M4	X	60	CSK Pozi Machine Screw	100
ACDR051	M5	X	10	CSK Pozi Machine Screw	100
ACET069	M5	X	12	CSK Pozi Machine Screw	100
HEA132	M5	X	16	CSK Pozi Machine Screw	100
WCA134	M5	X	20	CSK Pozi Machine Screw	100
WCA143	M5	X	25	CSK Pozi Machine Screw	50
ACVS061	M5	X	40	CSK Pozi Machine Screw	100
ACET133	M5	X	50	CSK Pozi Machine Screw	100
ACET220	M5	X	60	CSK Pozi Machine Screw	100
ACET238	M5	X	70	CSK Pozi Machine Screw	100
ACMX861	M5	X	80	DIN965 - CSK Machine Screw	10
ACMX862	M5	X	90	DIN965 - CSK Machine Screw	10
ACUN3503	M6	X	10	CSK Socket Machine Screw	24
ACUN3501	M6	X	13	CSK Flange Socket Machine Screw	48
ACMX852	M6	X	16	DIN965 - CSK Machine Screw	10
HEA390	M6	X	16	CSK Socket Machine Screw	32
ACET235	M6	X	60	CSK Pozi Machine Screw	100
ACET237	M6	X	70	CSK Pozi Machine Screw	100



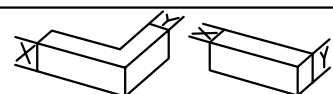
T-BARS
ACVG65=2.5mm
ACVG66=3.0mm
ACVL150=4.0mm



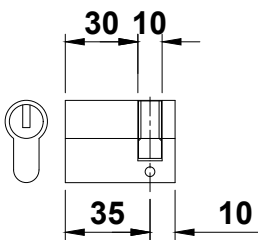
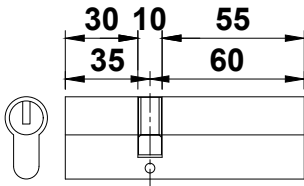
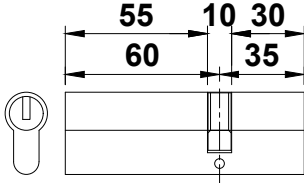
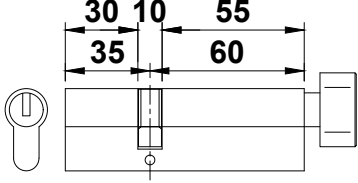
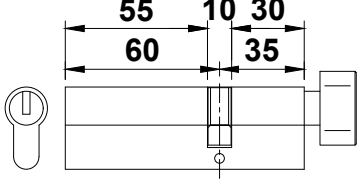
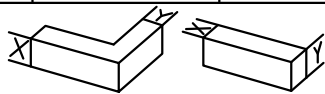
Screw (Grub)

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

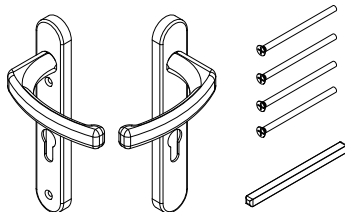
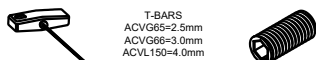
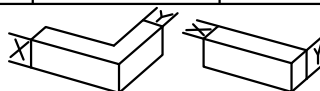
WP = White
BL = Black



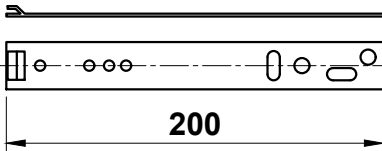
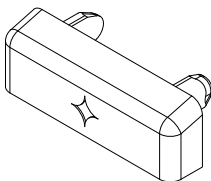
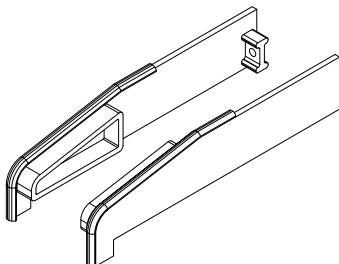
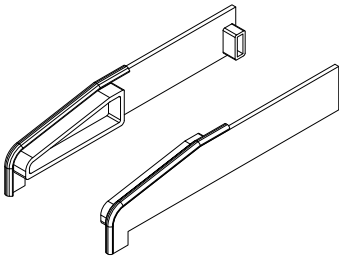
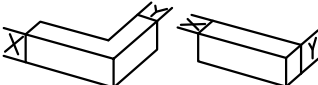
ACCESSORIES : PHOTOS & DRAWINGS

Image	Part Code	Pack	Unit	Application	Colour
	ACCY0035 35mm Euro Profile Half Cylinder	1	Each		MF ☒
					SA ☐
					KL ☐
					HP ☐
					SSC ☐
					SMC ☐
					WP ☐
					BL ☐
					PC ☐
	ACCY3560NKS3 35/60 TS007 3 Star Euro Profile Cylinder Supplied with 3 Keys	1	Each	Open Out	MF ☒
					SA ☐
					KL ☐
					HP ☐
					SSC ☐
					SMC ☐
					WP ☐
					BL ☐
					PC ☐
	ACCY6035NKS3 35/60 TS007 3 Star Euro Profile Cylinder Supplied with 3 Keys	1	Each	Open In	MF ☒
					SA ☐
					KL ☐
					HP ☐
					SSC ☐
					SMC ☐
					WP ☐
					BL ☐
					PC ☐
	ACCY3560NKTTTS3 35/60 TS007 3 Star Euro Profile Cylinder Supplied with 3 Keys	1	Each	Open Out	MF ☒
					SA ☐
					KL ☐
					HP ☐
					SSC ☐
					SMC ☐
					WP ☐
					BL ☐
					PC ☐
	ACCY6035NKTTTS3 60/35 TS007 3 Star Euro Profile Cylinder Supplied with 3 Keys	1	Each	Open In	MF ☒
					SA ☐
					KL ☐
					HP ☐
					SSC ☐
					SMC ☐
					WP ☐
					BL ☐
					PC ☐
 	MF = Mill Finish SA = Silver Anodised KL = Basic Colour HP = Special Colour SSC = Smooth Satin Chrome SMC = Smokey Chrome PC = Polished Chrome	WP = White BL = Black			

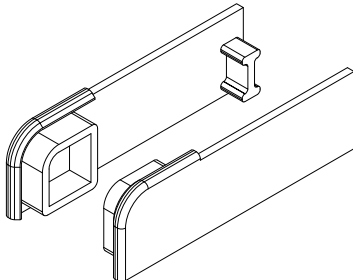
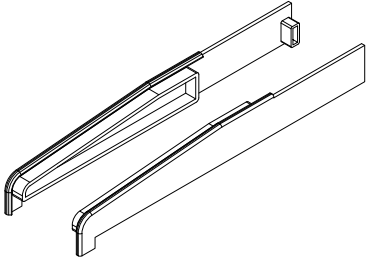
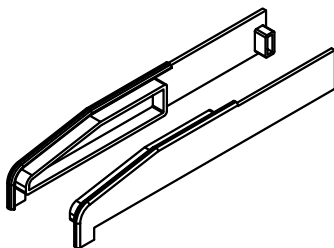
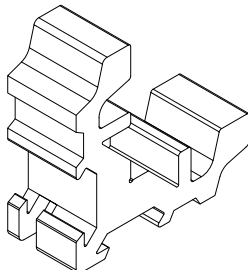
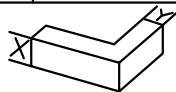
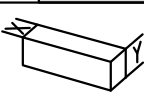
ACCESSORIES : PHOTOS & DRAWINGS

Image	Part Code	Pack	Unit	Application	Colour	
	ACDV251 Lever/Lever Handle	1	pair		MF	
					SA	
					KL	✓
					HP	✓
					SSC	
					SMC	
					WP	✓
					BL	✓
					PC	✓
	ACDV737 Bottom Shoot Bolt	1	Each	ACUL276 ACUL277 ACUL278	MF	✓
					SA	
					KL	
					HP	
					SSC	
					SMC	
					WP	
					BL	
					PC	
	ACDV738 Top Shoot Bolt	1	Each	ACUL276 ACUL277 ACUL278	MF	✓
					SA	
					KL	
					HP	
					SSC	
					SMC	
					WP	
					BL	
					PC	
	ACDV742 200mm Extension for ACDV738	1	Each	ACUL276 ACUL277 ACUL278 ACDV737 ACDV738	MF	✓
					SA	
					KL	
					HP	
					SSC	
					SMC	
					WP	
					BL	
					PC	
	ACDV744 400mm Extension for ACDV738	1	Each	ACUL276 ACUL277 ACUL278 ACDV737 ACDV738	MF	✓
					SA	
					KL	
					HP	
					SSC	
					SMC	
					WP	
					BL	
					PC	
 T-BARS ACVG65=2.5mm ACVG66=3.0mm ACVL150=4.0mm 	MF = Mill Finish SA = Silver Anodised KL = Basic Colour HP = Special Colour SSC = Smooth Satin Chrome SMC = Smokey Chrome PC = Polished Chrome	WP = White BL = Black				

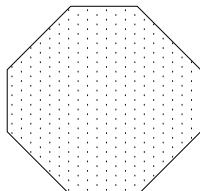
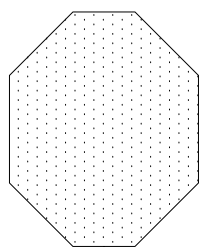
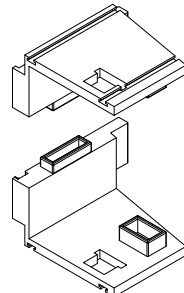
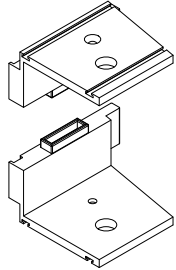
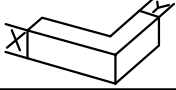
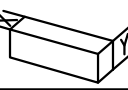
ACCESSORIES : PHOTOS & DRAWINGS

Image	Part Code	Pack	Unit	Application	Colour	
	ACET130 Galvanised Steel Fixing Strap 200mm x 25mm x 1.5mm	100	pack	ETD410 ETD412	MF	✓
					SA	
					KL	
					HP	
					SSC	
					SMC	
					WP	
					BL	
					PC	
	ACET131 PVC Drainage Cap For Colour match Drainage caps use - ACET432	100	pack		MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					WP	✓
					BL	✓
					PC	
	ACET149 Slimline Restrictor	1	each		MF	✓
					SA	
					KL	
					HP	
					SSC	
					SMC	
					WP	
					BL	
					PC	
	ACET152 PVC Cill End Caps	10	pair	ETC452	MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					WP	✓
					BL	✓
					PC	
	ACET157 PVC Cill End Caps	10	pair	ETC457	MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					WP	✓
					BL	✓
					PC	
 T-BARS ACVG65=2.5mm ACVG66=3.0mm ACVL150=4.0mm	 Screw (Grub)	MF = Mill Finish SA = Silver Anodised KL = Basic Colour HP = Special Colour SSC = Smooth Satin Chrome SMC = Smokey Chrome PC = Polished Chrome		W = White Z = Black		

ACCESSORIES : PHOTOS & DRAWINGS

Image	Part Code	Pack	Unit	Application	Colour	
	ACET178 PVC Cill End Caps	10	pair	ETC451	MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					WP	✓
					BL	✓
					PC	
	ACET179 PVC Cill End Caps	10	pair	ETC479	MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					WP	✓
					BL	✓
					PC	
	ACET252 Hinge Protector Kit	1	kit		MF	✓
					SA	
					KL	
					HP	
					SSC	
					SMC	
					WP	
					BL	
					PC	
	ACET258 PVC Cill End Cap	10	pair	ETC458	MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					WP	✓
					BL	✓
					PC	
	ACET402 Mechanical Cleat	24	pack	ETD402	MF	✓
					SA	
					KL	
					HP	
					SSC	
					SMC	
					WP	
					BL	
					PC	
 T-BARS ACVG65=2.5mm ACVG66=3.0mm ACVL150=4.0mm	 Screw (Grub)	MF = Mill Finish SA = Silver Anodised KL = Basic Colour HP = Special Colour SSC = Smooth Satin Chrome SMC = Smokey Chrome PC = Polished Chrome		W = White Z = Black	 	

ACCESSORIES : PHOTOS & DRAWINGS

Image	Part Code	Pack	Unit	Application	Colour	
	ACET408 Infill Foam	1	each	ETD402	MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					WP	
					BL	✓
					PC	
	ACET412 Infill Foam	1	each	ETD412	MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					WP	
					BL	✓
					PC	
	ACET4133 Bridge Packer	10	pack	ETD432	MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					WP	
					BL	✓
					PC	
	ACET4152 Flush Low Ramp Threshold End Cap	1	kit	ETD445 ETD497 ETD499	MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					WP	✓
					BL	✓
					PC	
	ACET4153 Flush Low Ramp Threshold End Cap	1	kit	ETD446 ETD497 ETD499	MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					WP	✓
					BL	✓
					PC	
 T-BARS ACVG65=2.5mm ACVG66=3.0mm ACVL150=4.0mm	 Screw (Grub)	MF = Mill Finish SA = Silver Anodised KL = Basic Colour HP = Special Colour SSC = Smooth Satin Chrome SMC = Smokey Chrome PC = Polished Chrome		W = White Z = Black	 	

ACCESSORIES : PHOTOS & DRAWINGS

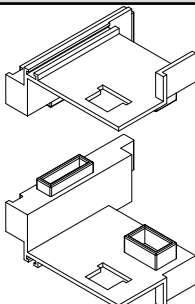
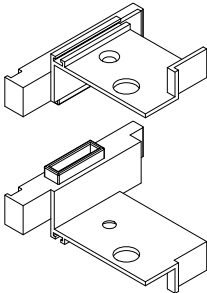
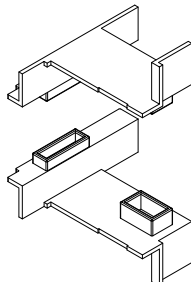
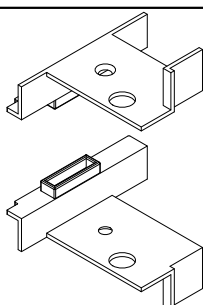
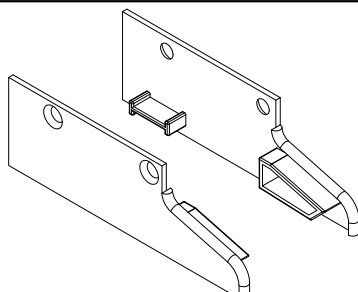
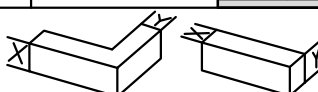
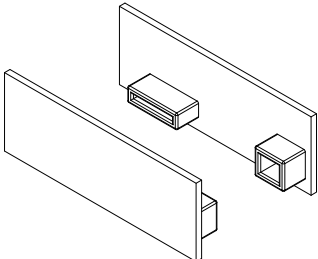
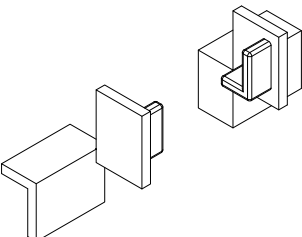
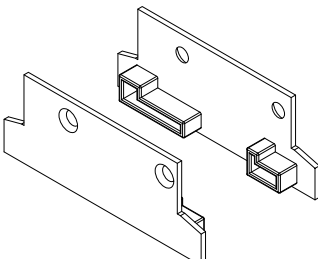
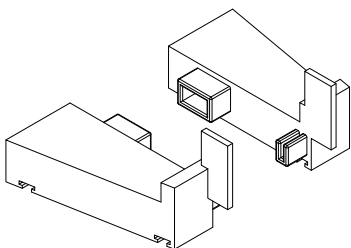
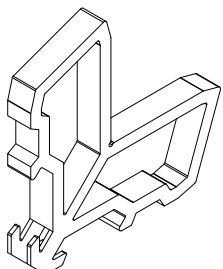
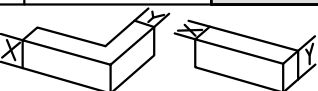
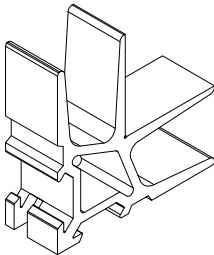
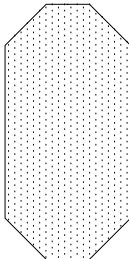
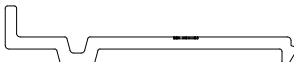
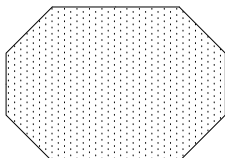
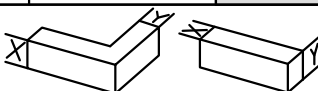
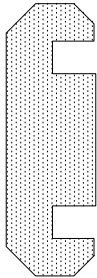
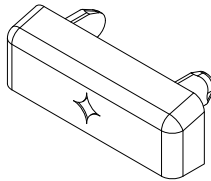
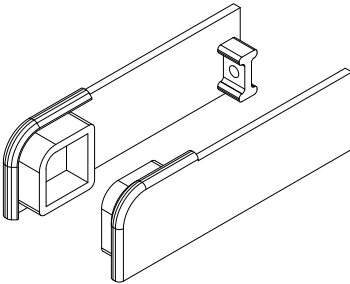
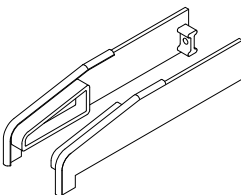
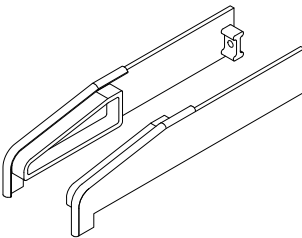
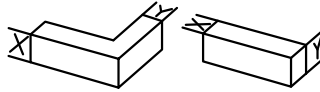
Image	Part Code	Pack	Unit	Application	Colour	
	ACET4155 Flush Low Rebate Threshold End Cap	1	kit	ETD445 ETD493 UL294	MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					WP	✓
					BL	✓
					PC	
	ACET4156 Flush Low Rebate Threshold End Cap	1	kit	ETD446 ETD493 UL294	MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					WP	✓
					BL	✓
					PC	
	ACET4157 End Cap	10	pairs	ETD412 ETD446	MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					WP	✓
					BL	✓
					PC	
	ACET4158 End Cap	10	pairs	ETD412 ETD445	MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					WP	✓
					BL	✓
					PC	
	ACET4191 End Cap	1	pair	ETD412 ETD491	MF	✓
					SA	
					KL	✓
					HP	✓
					SSC	
					SMC	
					WP	✓
					BL	✓
					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		WP = White BL = Black		

Image	Part Code	Pack	Unit	Application	Colour	
	ACET4193 End Cap	10	pairs	ETD412 ETD493	MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					WP	✓
					BL	✓
					PC	
	ACET4194 End Cap	1	pair	UL294	MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					WP	✓
					BL	✓
					PC	
	ACET4198 End Cap	1	pair	ETD412 ETD497	MF	✓
					SA	
					KL	✓
					HP	✓
					SSC	
					SMC	
					WP	✓
					BL	✓
					PC	
	ACET4199 End Cap	1	pair	ETD499	MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					WP	✓
					BL	✓
					PC	
	ACET4203 Mechanical Cleat	24	pack	ETD4203	MF	✓
					SA	
					KL	
					HP	
					SSC	
					SMC	
					WP	
					BL	
					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		WP = White BL = Black				

ACCESSORIES : PHOTOS & DRAWINGS

Image	Part Code	Pack	Unit	Application	Colour	
	ACET4204 Mechanical Cleat	24	pack	ETD4202	MF ☒	
					SA ☐	
					KL ☐	
					HP ☐	
					SSC ☐	
					SMC ☐	
					WP ☐	
					BL ☐	
					PC ☐	
	ACET4205 Infill Foam	1	each	ETD4203	MF ☐	
					SA ☐	
					KL ☐	
					HP ☐	
					SSC ☐	
					SMC ☐	
					WP ☐	
					BL ☒	
					PC ☐	
	ACET4206 Bridge Packer	10	pack	ETD402 ETD4202 ETD4301	MF ☐	
					SA ☐	
					KL ☐	
					HP ☐	
					SSC ☐	
					SMC ☐	
					WP ☐	
					BL ☒	
					PC ☐	
	ACET4207 Bridge Packer	10	pack	ETD4203 ETD4302	MF ☐	
					SA ☐	
					KL ☐	
					HP ☐	
					SSC ☐	
					SMC ☐	
					WP ☐	
					BL ☒	
					PC ☐	
	ACET430 Infill Foam	1	each	ETD432	MF ☐	
					SA ☐	
					KL ☐	
					HP ☐	
					SSC ☐	
					SMC ☐	
					WP ☐	
					BL ☒	
					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		WP = White BL = Black		

ACCESSORIES : PHOTOS & DRAWINGS

Image	Part Code	Pack	Unit	Application	Colour	
	ACET4302 Infill Foam	1	each	ETD4302	MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					WP	
					BL	✓
					PC	
	ACET432 Colour Match Drainage Cover Cap	8	pack		MF	
					SA	✓
					KL	✓
					HP	
					SSC	
					SMC	✓
					WP	✓
					BL	
					PC	
	ACET451 Cast Cill End Caps (Pair)	1	pair	ETC451	MF	✓
					SA	
					KL	✓
					HP	✓
					SSC	
					SMC	
					WP	✓
					BL	✓
					PC	
	ACET452 Cast Cill End Caps (Pair)	1	Pair	ETC452	MF	✓
					SA	
					KL	✓
					HP	✓
					SSC	
					SMC	
					WP	✓
					BL	✓
					PC	
	ACET457 Cast Cill End Caps (Pair)	1	Pair	ETC457	MF	✓
					SA	
					KL	✓
					HP	✓
					SSC	
					SMC	
					WP	✓
					BL	✓
					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		WP = White BL = Black		

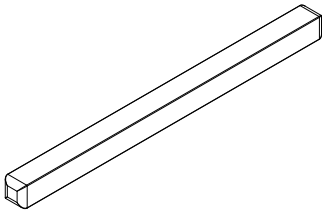
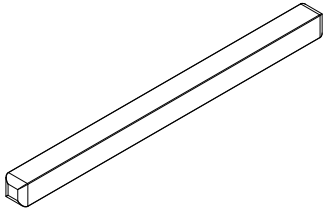
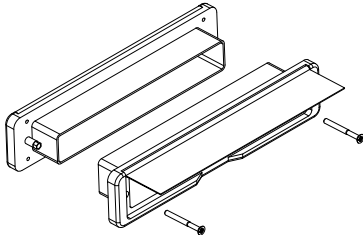
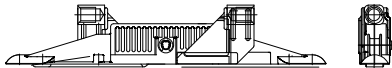
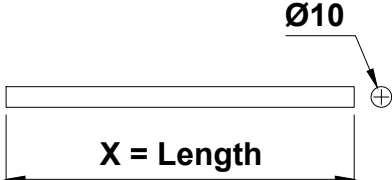
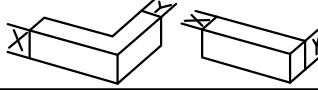
ACCESSORIES : PHOTOS & DRAWINGS

Image	Part Code	Pack	Unit	Application	Colour
	ACET458 Cast Cill End Caps (Pair)	1	Pair	ETC458	MF ☒
					SA ☐
					KL ☒
					HP ☒
					SSC ☐
					SMC ☐
					WP ☒
					BL ☒
					PC ☐
	ACET476 Run Up Block	2	pack	ETD412	MF ☐
					SA ☐
					KL ☐
					HP ☐
					SSC ☐
					SMC ☐
					WP ☒
					BL ☒
					PC ☐
	ACET479N Cast Cill End Caps (Pair)	1	Pair	ETC479	MF ☒
					SA ☐
					KL ☒
					HP ☒
					SSC ☐
					SMC ☐
					WP ☒
					BL ☒
					PC ☐
	ACET480 PAS 24 Lever / Lever Handle	1	pair		MF ☐
					SA ☐
					KL ☒
					HP ☐
					SSC ☐
					SMC ☐
					WP ☒
					BL ☒
					PC ☒
	ACET484 Standard Lever / Lever Handle	1	pair		MF ☐
					SA ☐
					KL ☒
					HP ☐
					SSC ☐
					SMC ☐
					WP ☒
					BL ☒
					PC ☒
	MF = Mill Finish SA = Silver Anodised KL = Basic Colour HP = Special Colour SSC = Smooth Satin Chrome SMC = Smokey Chrome PC = Polished Chrome		WP = White BL = Black		

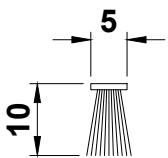
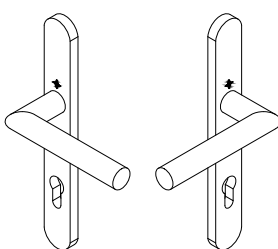
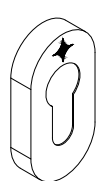
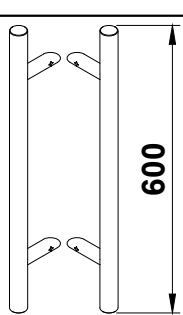
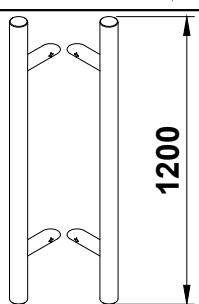
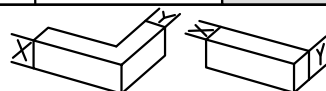
ACCESSORIES : PHOTOS & DRAWINGS

Image	Part Code	Pack	Unit	Application	Colour	
	ACET486 Swept Lever / Lever Handle	1	pair		MF	
					SA	
					KL	✓
					HP	
					SSC	
					SMC	
					WP	✓
					BL	✓
					PC	✓
	ACET487 Oval Lever / Lever Handle	1	pair		MF	
					SA	
					KL	✓
					HP	
					SSC	
					SMC	
					WP	✓
					BL	✓
					PC	
	ACET488 Round Lever / Lever Handle	1	pair		MF	
					SA	
					KL	✓
					HP	
					SSC	
					SMC	
					WP	✓
					BL	✓
					PC	✓
	ACET496 Glass Adjustment Kit	1	kit	ETD4202 ETD4203	MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					WP	
					BL	
					PC	
	ACET497 Drill Jig	1	each	ACET496 ETD4202 ETD4203	MF	✓
					SA	
					KL	
					HP	
					SSC	
					SMC	
					WP	
					BL	
					PC	
T-BARS ACVG65=2.5mm ACVG66=3.0mm ACVL150=4.0mm Screw (Grub)		WP = White BL = Black				
MF = Mill Finish SA = Silver Anodised KL = Basic Colour HP = Special Colour SSC = Smooth Satin Chrome SMC = Smokey Chrome PC = Polished Chrome						

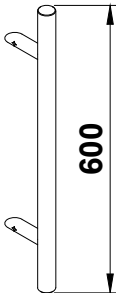
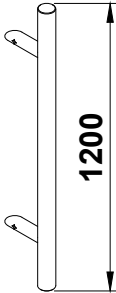
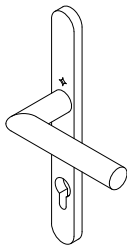
ACCESSORIES : PHOTOS & DRAWINGS

Image	Part Code	Pack	Unit	Application	Colour
	ACMX008 60mm Spindle	1	each		MF
					SA
					KL
					HP
					SSC
					SMC
					WP
					BL
					PC
	ACMX409 150mm Spindle	1	each		MF
					SA
					KL
					HP
					SSC
					SMC
					WP
					BL
					PC
	ACPD6051 Nu Mail Letter Box (Only available in black or satin nickel)	1	each	ETD430 ETD4301 ETD4302	MF
					SA
					KL
					HP
					SSC
					SMC
					WP
					BL
					PC
	ACPD844 35mm Backset Shootbolt Adaptor	1	each	All Locks Excluding ACUL267 ACUL268 ACUL276 ACUL277 ACUL278	MF
					SA
					KL
					HP
					SSC
					SMC
					WP
					BL
					PC
 Ø10 X = Length	ACPD8XX 10mm Dia Galvanised Rod ACPD846: X = 1000mm ACPD847: X = 1250mm ACPD848: X = 1500mm ACPD849: X = 2000mm	1	each	ACPD844	MF
					SA
					KL
					HP
					SSC
					SMC
					WP
					BL
					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	WP = White BL = Black			MF
					SA
					KL
					HP
					SSC
					SMC
					WP
					BL
					PC

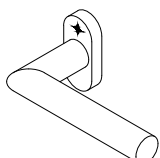
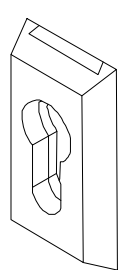
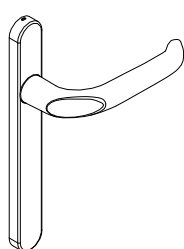
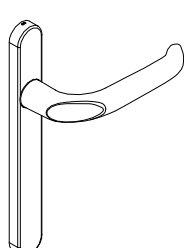
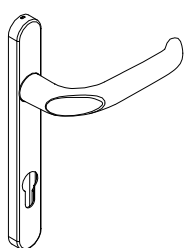
ACCESSORIES : PHOTOS & DRAWINGS

Image	Part Code	Pack	Unit	Application	Colour
	ACSH038N 5 x 10mm Woolpile (Grey)	225	m		MF
					SA
					KL
					HP
					SSC
					SMC
					WP
					BL
					PC
	ACSM013 Stainless Steel Lever Handle on Oval Backplate (Not Handed)	1	Pair		MF
					SA
					KL
					HP
					SSC
					SMC
					WP
					BL
					PC
	ACSM015SS Stainless Steel Oval Escutcheon Kit Contains: 1 x External Cover Plate 1 x Internal Fixing Plate 4 x Screws	1	each	ACSM020SS ACSM021SS ACSM040SS	MF
					SA
					KL
					HP
					SSC
					SMC
					WP
					BL
					PC
	ACSM020SS 600mm Stainless Steel Tubular Handle (Pair) Back to back fixing kit included.	1	each	ACSM015SS	MF
					SA
					KL
					HP
					SSC
					SMC
					WP
					BL
					PC
	ACSM021SS 1200mm Stainless Steel Tubular Handle (Pair) Back to back fixing kit included.	1	each	ACSM015SS	MF
					SA
					KL
					HP
					SSC
					SMC
					WP
					BL
					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	WP = White BL = Black		

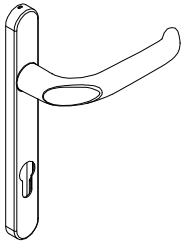
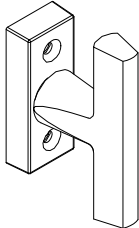
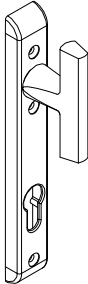
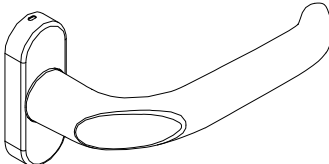
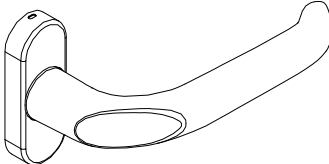
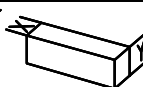
ACCESSORIES : PHOTOS & DRAWINGS

Image	Part Code	Pack	Unit	Application	Colour	
	ACSM030 Secret Single Fixing Kit for ACISM20SS & ACISM21SS	1	each	ACSM020SS ACSM021SS ACSM037 ACSM038	MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					WP	
					BL	
					PC	
	ACSM031 Back to Back Fixing Kit for ACISM20SS & ACISM21SS	1	each	ACSM020SS ACSM021SS	MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					WP	
					BL	
					PC	
	ACSM037SS 600mm Stainless Steel Tubular Handle (Single)	1	each	ACSM015SS ACSM032	MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					WP	
					BL	
					PC	
	ACSM038SS 1200mm Stainless Steel Tubular Handle (Single)	1	each	ACSM015SS ACSM032	MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					WP	
					BL	
					PC	
	ACSM058SS Stainless Steel Lever Handle on Long Backplate (Not Handed) Fixings and Spindle Sold Separately	1	pair	ACSM015SS ACMX409 ACMX008 ACUN3509 WCA134	MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					WP	
					BL	
					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		WP = White BL = Black		
						

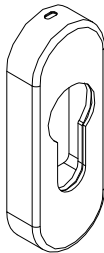
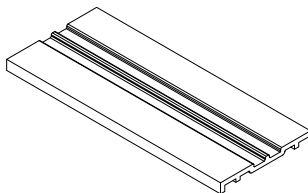
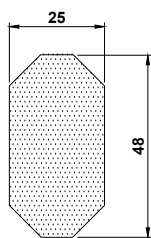
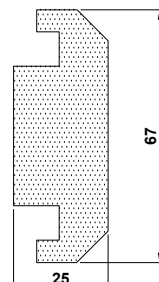
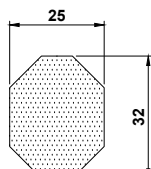
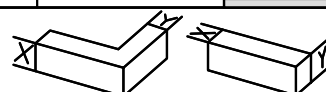
ACCESSORIES : PHOTOS & DRAWINGS

Image	Part Code	Pack	Unit	Application	Colour	
	ACSM059SS Stainless Steel Lever Handle on Oval Backplate (Not Handed) Fixings and Spindle Sold Separately	1	pair	ACSM015SS ACMX409 ACMX008 ACUN3509 WCA134	MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					WP	
					BL	
					PC	
	ACSZ400 Safety Lock Plate Door Handle - External	1	each		MF	
					SA	✓
					KL	✓
					HP	✓
					SSC	
					SMC	
					WP	
					BL	✓
					PC	✓
	ACSZ800 External Lever Handle Without Cylinder	1	each	ACSZ801 ACSZ803 ACSZ830	MF	
					SA	✓
					KL	✓
					HP	✓
					SSC	
					SMC	
					WP	
					BL	✓
					PC	✓
	ACSZ801 Internal Lever Handle Without Cylinder	1	each	ACSZ800 ACSZ803	MF	
					SA	✓
					KL	✓
					HP	✓
					SSC	
					SMC	
					WP	
					BL	✓
					PC	✓
	ACSZ802 External Handle With Cylinder	1	each	ACSZ800 ACSZ803	MF	
					SA	✓
					KL	✓
					HP	✓
					SSC	
					SMC	
					WP	
					BL	✓
					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		WP = White BL = Black		 

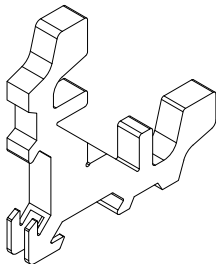
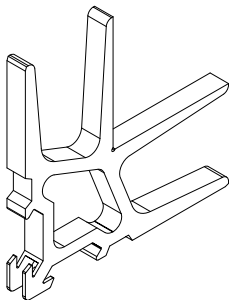
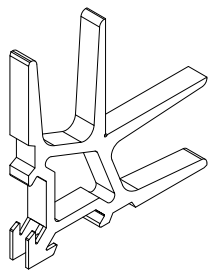
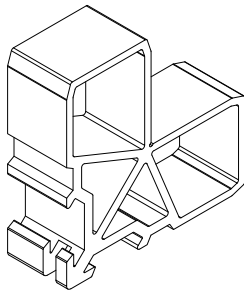
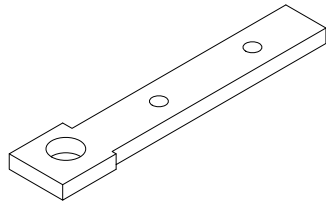
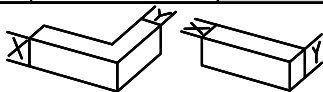
ACCESSORIES : PHOTOS & DRAWINGS

Image	Part Code	Pack	Unit	Application	Colour	
	ACSZ803 Internal Handle With Cylinder	1	each	ACSZ55* ACSZ801 ACSZ803 ACMX309	MF	
					SA	✓
					KL	✓
					HP	✓
					SSC	
					SMC	
					WP	
					BL	✓
					PC	✓
	ACSZ827 Internal 'T' Door Handle With Short Backplate	1	each		MF	
					SA	✓
					KL	✓
					HP	✓
					SSC	
					SMC	
					WP	
					BL	✓
					PC	✓
	ACSZ830 Internal 'T' Door Handle With Long Backplate	1	each		MF	
					SA	✓
					KL	✓
					HP	✓
					SSC	
					SMC	
					WP	
					BL	✓
					PC	✓
	ACSZ836 Internal Door Handle With Short Backplate	1	each		MF	
					SA	✓
					KL	✓
					HP	✓
					SSC	
					SMC	
					WP	
					BL	✓
					PC	✓
	ACSZ837 External Door Handle With Short Backplate	1	each		MF	
					SA	✓
					KL	✓
					HP	✓
					SSC	
					SMC	
					WP	
					BL	✓
					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		WP = White BL = Black	 	

ACCESSORIES : PHOTOS & DRAWINGS

Image	Part Code	Pack	Unit	Application	Colour		
	ACSZ839 Escutcheon (Cylinder Cover)	1	each		MF		
					SA	✓	
					KL	✓	
					HP	✓	
					SSC		
					SMC		
					WP		
					BL	✓	
					PC	✓	
	ACUL065 42mm Bridge Packer	12	pack	ETD404 ETD430	MF		
					SA		
					KL		
					HP		
					SSC		
					SMC		
					WP		
					BL	✓	
					PC		
	ACUL078 Infill Foam	1	each	ETD4202	MF		
					SA		
					KL		
					HP		
					SSC		
					SMC		
					WP		
					BL	✓	
					PC		
	ACUL080 Infill Foam	1	each	ETD430 ETD4301	MF		
					SA		
					KL		
					HP		
					SSC		
					SMC		
					WP		
					BL	✓	
					PC		
	ACUL081 Infill Foam	1	each	ETD404	MF		
					SA		
					KL		
					HP		
					SSC		
					SMC		
					WP		
					BL	✓	
					PC		
 T-BARS ACVG65=2.5mm ACVG66=3.0mm ACVL150=4.0mm 		MF = Mill Finish SA = Silver Anodised KL = Basic Colour HP = Special Colour SSC = Smooth Satin Chrome SMC = Smokey Chrome PC = Polished Chrome		WP = White BL = Black			

ACCESSORIES : PHOTOS & DRAWINGS

Image	Part Code	Pack	Unit	Application	Colour
	ACUL210A Mechanical Cleat	24	pack	ETD402 ETD412	MF ☒
					SA ☐
					KL ☐
					HP ☐
					SSC ☐
					SMC ☐
					WP ☐
					BL ☐
					PC ☐
	ACUL210B Mechanical Cleat	24	pack	ETD412	MF ☒
					SA ☐
					KL ☐
					HP ☐
					SSC ☐
					SMC ☐
					WP ☐
					BL ☐
					PC ☐
	ACUL222 Mechanical Cleat	24	pack	ETD422 ETD4202	MF ☒
					SA ☐
					KL ☐
					HP ☐
					SSC ☐
					SMC ☐
					WP ☐
					BL ☐
					PC ☐
	ACUL225 Mechanical Cleat	24	pack	ETD4203	MF ☒
					SA ☐
					KL ☐
					HP ☐
					SSC ☐
					SMC ☐
					WP ☐
					BL ☐
					PC ☐
	ACUL242 Aluminium Finger Bolt Guide	1	each	ACPD846 ACPD847 ACPD848	MF ☒
					SA ☐
					KL ☐
					HP ☐
					SSC ☐
					SMC ☐
					WP ☐
					BL ☐
					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 WP = White BL = Black				

ACCESSORIES : PHOTOS & DRAWINGS

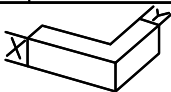
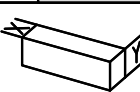
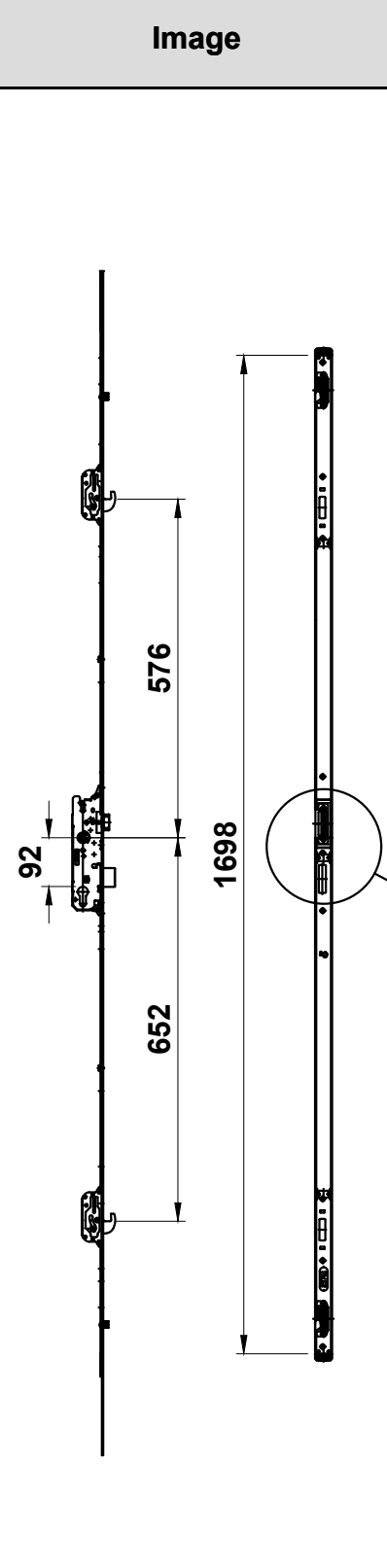
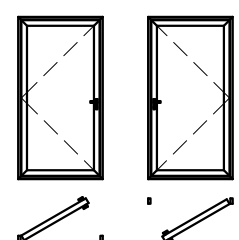
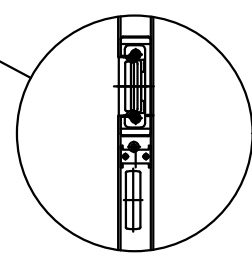
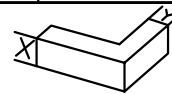
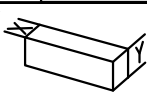
Image	Part Code	Pack	Unit	Application	Colour
	ACUL260 Door Hinge	1	each	ETD412 ETD4202 ETD4203 ETD422	MF ☒
					SA ☐
					KL ☐
					HP ☐
					SSC ☐
					SMC ☐
					WP ☐
					BL ☐
					PC ☐
					MF ☐
					SA ☐
					KL ☐
					HP ☐
					SSC ☐
					SMC ☐
					WP ☐
					BL ☐
					PC ☐
					MF ☐
					SA ☐
					KL ☐
					HP ☐
					SSC ☐
					SMC ☐
					WP ☐
					BL ☐
					PC ☐
					MF ☐
					SA ☐
					KL ☐
					HP ☐
					SSC ☐
					SMC ☐
					WP ☐
					BL ☐
					PC ☐
					MF ☐
					SA ☐
					KL ☐
					HP ☐
					SSC ☐
					SMC ☐
					WP ☐
					BL ☐
					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				 

Image	Part Code	Pack	Unit	Application	Colour																		
	ACUL267 Lift Lever Handle Lock with Left Hand Keep Kit includes: • 1 x Lift Level Handle Lock • 1 x Left Hand Full Height Keep Viewed Externally Left Hand Open Out Right Hand Open In 	1	Pack	ACDV251 ACDV737 ACDV738 ACET480 ACET484 ACET486 ACET487 ACSM015SS ACSM040SS	<table><tr><td>MF</td><td>✓</td></tr><tr><td>SA</td><td></td></tr><tr><td>KL</td><td></td></tr><tr><td>HP</td><td></td></tr><tr><td>SSC</td><td></td></tr><tr><td>SMC</td><td></td></tr><tr><td>W</td><td></td></tr><tr><td>Z</td><td></td></tr><tr><td>PC</td><td></td></tr></table>	MF	✓	SA		KL		HP		SSC		SMC		W		Z		PC	
	MF	✓																					
SA																							
KL																							
HP																							
SSC																							
SMC																							
W																							
Z																							
PC																							
T-BARS 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	WP = White BL = Black																					

Image	Part Code	Pack	Unit	Application	Colour																		
	ACUL268 Lift Lever Handle Lock with Right Hand Keep Kit includes: • 1 x Lift Level Handle Lock • 1 x Right Hand Full Height Keep Viewed Externally  Left Hand Open In Right Hand Open Out 	1	Pack	ACDV251 ACDV737 ACDV738 ACET480 ACET484 ACET486 ACET487 ACSM015SS ACSM040SS	<table><tr><td>MF</td><td>✓</td></tr><tr><td>SA</td><td></td></tr><tr><td>KL</td><td></td></tr><tr><td>HP</td><td></td></tr><tr><td>SSC</td><td></td></tr><tr><td>SMC</td><td></td></tr><tr><td>W</td><td></td></tr><tr><td>Z</td><td></td></tr><tr><td>PC</td><td></td></tr></table>	MF	✓	SA		KL		HP		SSC		SMC		W		Z		PC	
	MF	✓																					
	SA																						
	KL																						
	HP																						
	SSC																						
	SMC																						
	W																						
	Z																						
	PC																						
 T-BARS 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	WP = White BL = Black	 																			

ACCESSORIES : PHOTOS & DRAWINGS

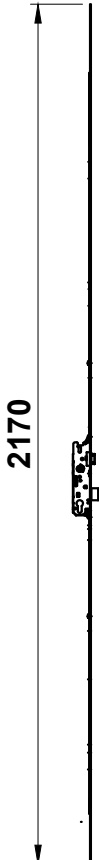
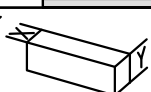
Image	Part Code	Pack	Unit	Application	Colour	
	ACUL276 Secondary Door Lock	1	Pack	ACDV251 ACDV737 ACDV738 ACET480 ACET484 ACET486 ACET487 ACSM015SS ACSM040SS ACUL279	MF	✓
					SA	
					KL	
					HP	
					SSC	
					SMC	
					WP	
					BL	
					PC	
					MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					WP	
					BL	
					PC	
					MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					WP	
					BL	
					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	WP = White BL = Black	 		

Image	Part Code	Pack	Unit	Application	Colour	
	ACUL277 Lift Lever Primary Double Door Lock Left Hand Keep Kit includes: • 1 x Primary Double Door Lock • 1 x Left Hand Full Height Keep Viewed Externally	1	Pack	ACDV251 ACDV737 ACDV738 ACET480 ACET484 ACET486 ACET487 ACSM015SS ACSM040SS ACUL276	MF	☒
					SA	☐
					KL	☐
					HP	☐
					SSC	☐
					SMC	☐
					W	☐
					Z	☐
					PC	☐
	ACUL278 Lift Lever Primary Double Door Lock Right Hand Keep Kit includes: • 1 x Primary Double Door Lock • 1 x Right Hand Full Height Keep Viewed Externally	1	Pack	ACDV251 ACDV737 ACDV738 ACET480 ACET484 ACET486 ACET487 ACSM015SS ACSM040SS ACUL276	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		WP = White BL = Black		

ACCESSORIES : PHOTOS & DRAWINGS

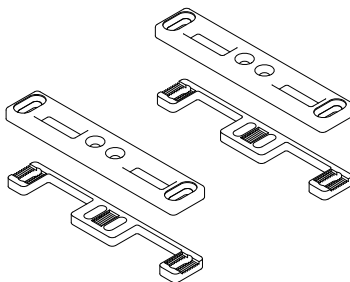
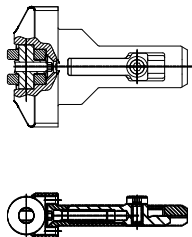
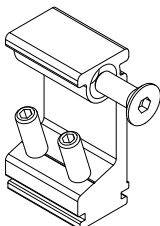
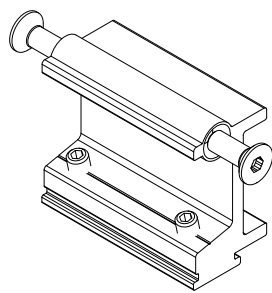
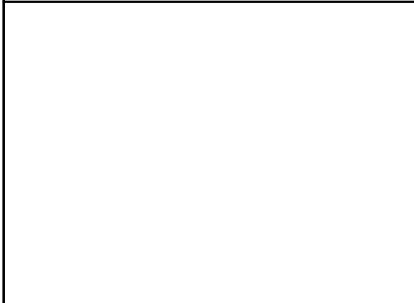
Image	Part Code	Pack	Unit	Application	Colour	
	ACUL279 Double Door Keep Kit Kit contains: 2 x Keeps 2 x Base Plates	1	Kit	ACDV737 ACDV738 ETD412 ETD491 ETD493 ETD497	MF	✓
					SA	
					KL	
					HP	
					SSC	
					SMC	
					WP	
					BL	
					PC	
	ACUL291 Roller Latch	1	Each	ACUL282 ACUL283 ACUL362 ACUL363 ACUL382 ACUL383	MF	✓
					SA	
					KL	
					HP	
					SSC	
					SMC	
					WP	
					BL	
					PC	
	ACUL295 Low Threshold Bracket	1	Pair	ETD491 ETD493 ETD497	MF	✓
					SA	
					KL	
					HP	
					SSC	
					SMC	
					WP	
					BL	
					PC	
	ACUL299 Transom/Mullion Bracket	10	Pack	ETD430	MF	✓
					SA	
					KL	
					HP	
					SSC	
					SMC	
					WP	
					BL	
					PC	
					MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					WP	
					BL	
					PC	
 	MF = Mill Finish SA = Silver Anodised KL = Basic Colour HP = Special Colour SSC = Smooth Satin Chrome SMC = Smokey Chrome PC = Polished Chrome					
		WP = White BL = Black		 		

Image	Part Code	Pack	Unit	Application	Colour																		
Short = 529 Standard = 743 Tall = 943 Short = 1576mm Including Plastic End Caps Standard = 1790mm Including Plastic End Caps Tall = 1990mm Including Plastic End Caps 766 Viewed Externally Left Hand Open Out Right Hand Open In 16 20 35 14.5	Slam Lock Left Hand Keep	1	Pack	ACSM015SS ACSM020SS ACSM021SS	<table><tr><td>MF</td><td>✓</td></tr><tr><td>SA</td><td></td></tr><tr><td>KL</td><td></td></tr><tr><td>HP</td><td></td></tr><tr><td>SSC</td><td></td></tr><tr><td>SMC</td><td></td></tr><tr><td>W</td><td></td></tr><tr><td>Z</td><td></td></tr><tr><td>PC</td><td></td></tr></table>	MF	✓	SA		KL		HP		SSC		SMC		W		Z		PC	
	MF			✓																			
	SA																						
	KL																						
	HP																						
	SSC																						
	SMC																						
	W																						
	Z																						
	PC																						
T-BARS ACV665=2.5mm ACV666=3.0mm ACVL150=4.0mm	MF = Mill Finish SA = Silver Anodised KL = Basic Colour HP = Special Colour SSC = Smooth Satin Chrome SMC = Smokey Chrome PC = Polished Chrome	WP = White BL = Black																					

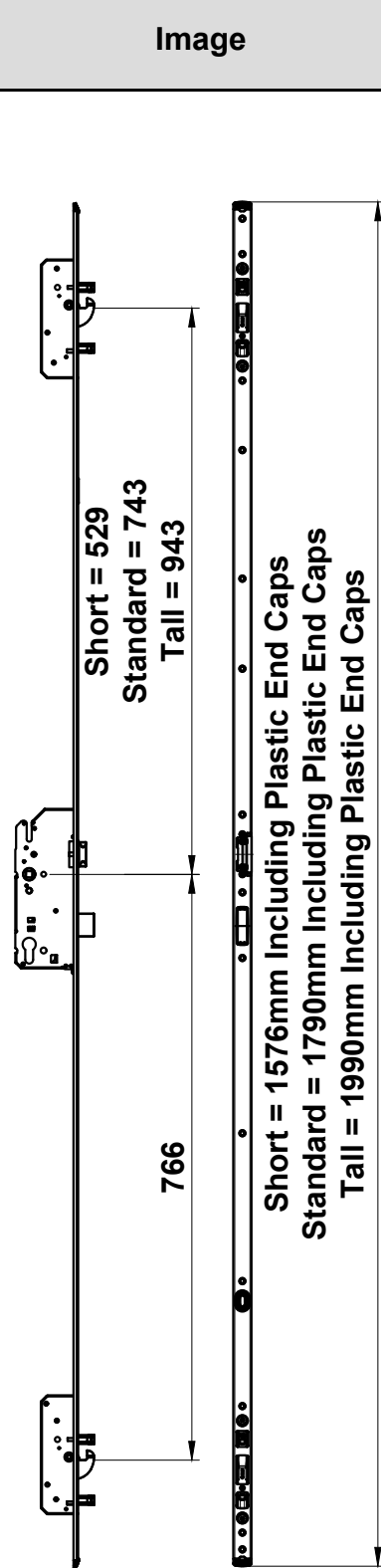
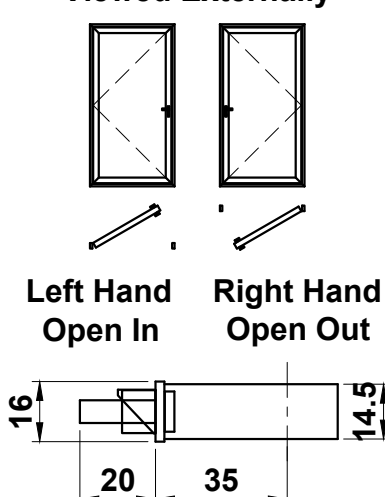
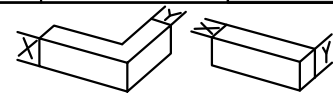
Image	Part Code	Pack	Unit	Application	Colour	
	Slam Lock Right Hand Keep	1	Pack	ACSM015SS ACSM020SS ACSM021SS	MF	✓
	ACUL361 Short Kit includes: • 1 x Short Slam Multi Point Lock • 1 x Short Right Hand full height keep • 2 x Release Magnets ACUL281 Standard Kit includes: • 1 x Slam Multi Point Lock • 1 x Right Hand full height Keep • 2 x Release Magnets ACUL381 Tall Kit includes: • 1 x Tall Slam Multi Point Lock • 1 x Tall Right Hand full height keep • 2 x Release Magnets Viewed Externally  Left Hand Open In Right Hand Open Out				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	WP = White BL = Black			

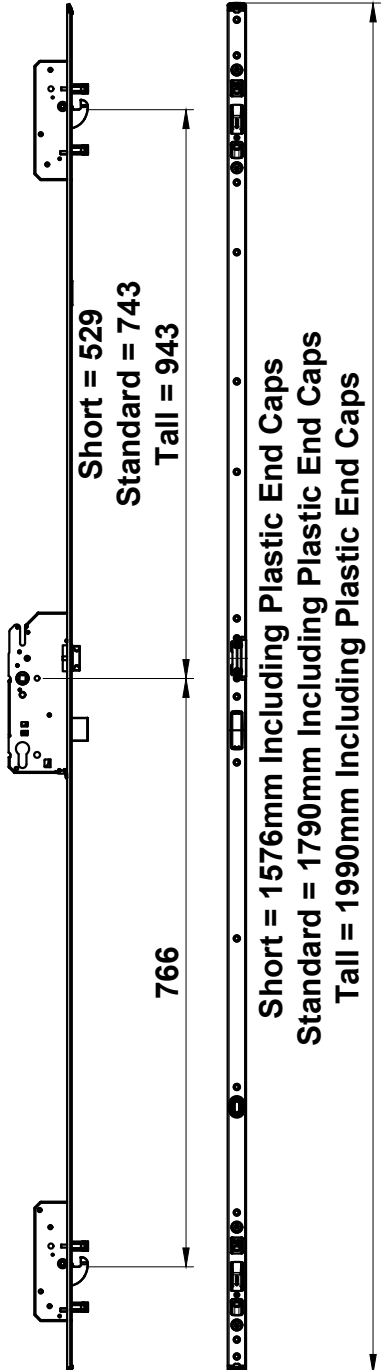
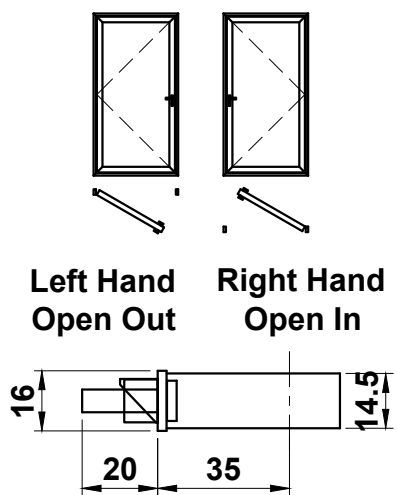
Image	Part Code	Pack	Unit	Application	Colour
	Key Wind Left Hand Keep ACUL362 Short Kit includes: • 1 x Short key wind multi point lock • 1 x Short Left Hand full height keep ACUL282 Standard Kit includes: • 1 x Keywind Multi Point Lock • 1 x Left Hand full height Keep ACUL382 Tall Kit includes: • 1 x Tall key wind multi point lock • 1 x Tall Left Hand full height keep Viewed Externally  Left Hand Open Out Right Hand Open In	1	Pack	ACDV251 ACDV737 ACDV738 ACET480 ACET484 ACET486 ACET487 ACSM015SS ACSM040SS	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

Image	Part Code	Pack	Unit	Application	Colour
	Key Wind Right Hand Keep ACUL363 Short Kit includes: • 1 x Short key wind multi point lock • 1 x Short Right Hand full height keep ACUL283 Standard Kit includes: • 1 x Lift Lever Multi Point Lock • 1 x Right Hand full height Keep ACUL383 Tall Kit includes: • 1 x Tall key wind multi point lock • 1 x Tall Right Hand full height keep	1	Pack	ACDV251 ACDV737 ACDV738 ACET480 ACET484 ACET486 ACET487 ACSM015SS ACSM040SS	MF ☒ SA ☐ KL ☐ HP ☐ SSC ☐ SMC ☐ W ☐ Z ☐ PC ☐
	Viewed Externally 				
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	WP = White BL = Black			

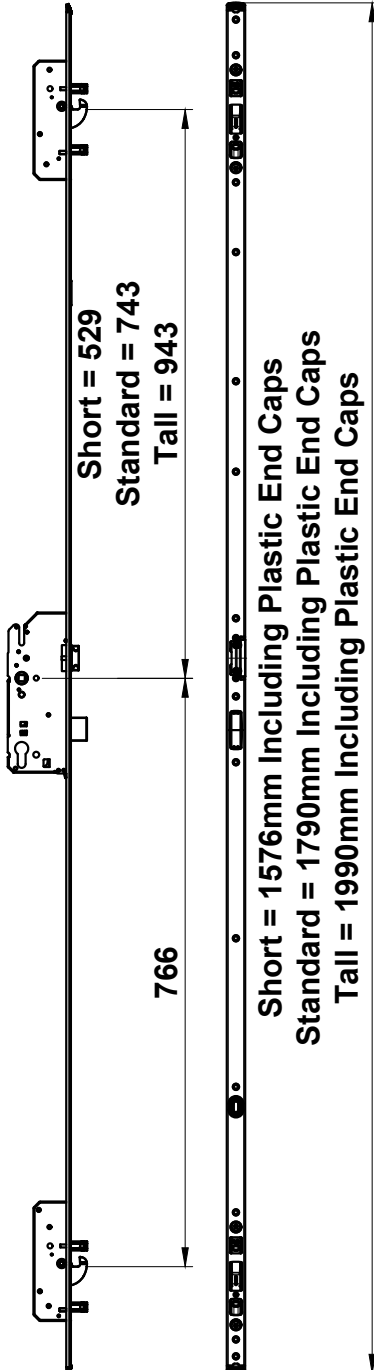
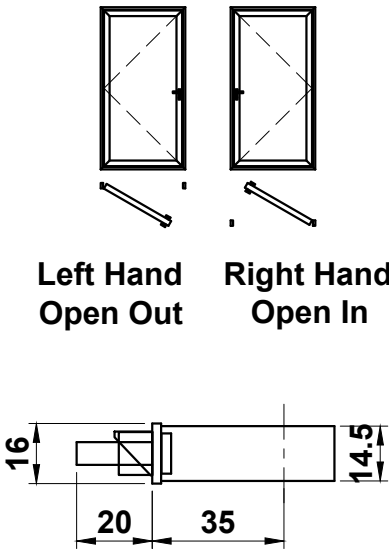
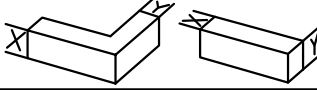
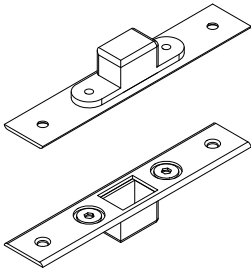
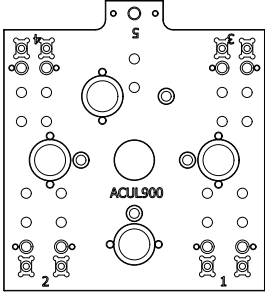
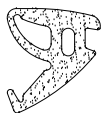
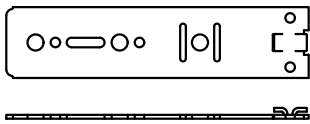
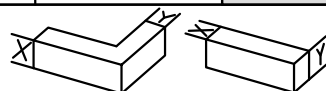
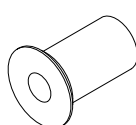
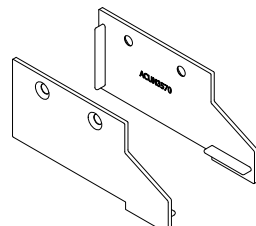
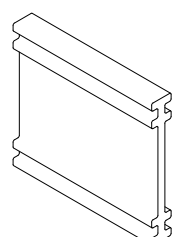
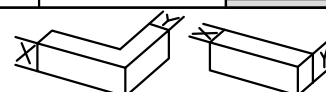
Image	Part Code	Pack	Unit	Application	Colour
	Lift Lever Left Hand Keep	1	Pack	ACDV251 ACET480 ACET484 ACET486 ACET487	MF SA KL HP SSC SMC W Z PC
	ACUL377 Short Kit includes: • 1 x Lift Lever Lock • 1 x Left Hand Full Height Keep				
	ACUL272 Standard Kit includes: • 1 x Lift Lever Lock • 1 x Left Hand Full Height Keep				
	ACUL374 Tall Kit includes: • 1 x Lift Lever Lock • 1 x Left Hand Full Height Keep				
	Viewed Externally 				
	Left Hand Open Out Right Hand Open In				
					
 T-BARS ACVG65=2.5mm ACVG66=3.0mm ACVL150=4.0mm	MF = Mill Finish SA = Silver Anodised KL = Basic Colour HP = Special Colour SSC = Smooth Satin Chrome SMC = Smokey Chrome PC = Polished Chrome	WP = White BL = Black			

Image	Part Code	Pack	Unit	Application	Colour																		
Short = 529 Standard = 743 Tall = 943 766 Short = 1576mm Including Plastic End Caps Standard = 1790mm Including Plastic End Caps Tall = 1990mm Including Plastic End Caps	Lift Lever Right Hand Keep ACUL378 Short Kit includes: • 1 x Lift Lever Lock • 1 x Right Hand Full Height Keep ACUL273 Standard Kit includes: • 1 x Lift Lever Lock • 1 x Right Hand Full Height Keep ACUL375 Tall Kit includes: • 1 x Lift Lever Lock • 1 x Right Hand Full Height Keep Viewed Externally Left Hand Open In Right Hand Open Out	1	Pack	ACDV251 ACET480 ACET484 ACET486 ACET487 ACUL276	<table><tr><td>MF</td><td>✓</td></tr><tr><td>SA</td><td></td></tr><tr><td>KL</td><td></td></tr><tr><td>HP</td><td></td></tr><tr><td>SSC</td><td></td></tr><tr><td>SMC</td><td></td></tr><tr><td>W</td><td></td></tr><tr><td>Z</td><td></td></tr><tr><td>PC</td><td></td></tr></table>	MF	✓	SA		KL		HP		SSC		SMC		W		Z		PC	
	MF	✓																					
SA																							
KL																							
HP																							
SSC																							
SMC																							
W																							
Z																							
PC																							
T-BARS 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	WP = White BL = Black																					

ACCESSORIES : PHOTOS & DRAWINGS

Image	Part Code	Pack	Unit	Application	Colour
	ACUL390 Finger Bolt Flat Keep	1	Pair	All Locks Excluding ACUL276 ACUL277 ACUL278	MF ☒
					SA ☐
					KL ☐
					HP ☐
					SSC ☐
					SMC ☐
					WP ☐
					BL ☐
					PC ☐
	ACUL900 Punch Tool	1	each	ETD402 ETD404 ETD412 ETD4202 ETD4203 ETD422	MF ☒
					SA ☐
					KL ☐
					HP ☐
					SSC ☐
					SMC ☐
					WP ☐
					BL ☐
					PC ☐
	ACUN033 3 - 5mm Glazing Gasket	100	m		MF ☐
					SA ☐
					KL ☐
					HP ☐
					SSC ☐
					SMC ☐
					WP ☐
					BL ☒
					PC ☐
	ACUN036 6 - 8mm Glazing Gasket	100	m		MF ☐
					SA ☐
					KL ☐
					HP ☐
					SSC ☐
					SMC ☐
					WP ☐
					BL ☒
					PC ☐
	ACUN23X Screw Fixing Lug B x 38mm x 2mm ACUN230: B = 160mm ACUN232: B = 240mm ACUN233: B = 280mm	100	Pack	ETC451 ETC452 ETC457 ETC458 ETC478 ETC479 ETD412	MF ☒
					SA ☐
					KL ☐
					HP ☐
					SSC ☐
					SMC ☐
					WP ☐
					BL ☐
					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	WP = White BL = Black		

ACCESSORIES : PHOTOS & DRAWINGS

Image	Part Code	Pack	Unit	Application	Colour	
	ACUN3035 Door Gasket	100	m		MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					WP	
					BL	✓
					PC	
	ACUN3509 M5 Rivnut	20	Pack		MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					WP	
					BL	
					PC	
	ACUN3570 UN3570 End Caps	1	Pair		MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					WP	✓
					BL	✓
					PC	
	ACUN3701 Anti-Crush Support	25	Pack		MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					WP	
					BL	✓
					PC	
	ACVG31N 3mm Glazing Gasket	200	m		MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					WP	
					BL	✓
					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		WP = White BL = Black		

ACCESSORIES : PHOTOS & DRAWINGS

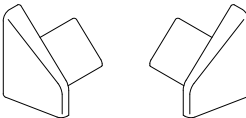
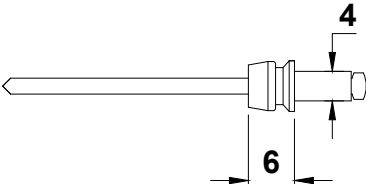
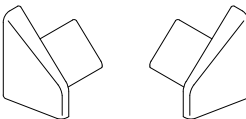
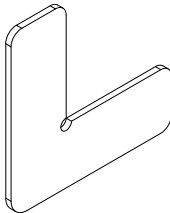
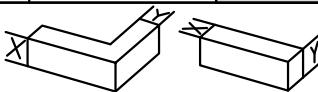
Image	Part Code	Pack	Unit	Application	Colour	
	ACVL059 End Caps	1	Pair	VL72 UN079	MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					WP	✓
					BL	✓
					PC	
	ACVL061 Rivet to secure VL72	100	Pack	VL72	MF	✓
					SA	
					KL	
					HP	
					SSC	
					SMC	
					WP	
					BL	
					PC	
	ACVL072 Cast End Caps	1	Pair	VL72	MF	✓
					SA	
					KL	✓
					HP	✓
					SSC	
					SMC	
					WP	✓
					BL	✓
					PC	
	WCA106SSZ Stainless Steel Chevrans	50	pack	ETD402 ETD4202 ETD4203 ETD422	MF	✓
					SA	
					KL	
					HP	
					SSC	
					SMC	
					WP	
					BL	
					PC	
					MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					WP	
					BL	
					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	WP = White BL = Black			

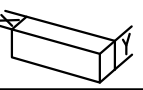
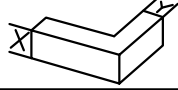
Image	Part Code	Pack	Unit	Application	Colour
	ACMX09700 Alu. Polish	1	each		MF ☒
					SA ☐
					KL ☐
					HP ☐
					SSC ☐
					SMC ☐
					WP ☐
					BL ☐
					PC ☐
	ACMX09761 Maxi Gloss	1	each		MF ☐
					SA ☐
					KL ☐
					HP ☐
					SSC ☐
					SMC ☐
					WP ☐
					BL ☐
					PC ☐
	ACMX09762 Alu. Bright	1	each		MF ☐
					SA ☐
					KL ☐
					HP ☐
					SSC ☐
					SMC ☐
					WP ☐
					BL ☐
					PC ☐
	ACMX09763 Teflon Spray	1	each		MF ☐
					SA ☐
					KL ☐
					HP ☐
					SSC ☐
					SMC ☐
					WP ☐
					BL ☐
					PC ☐
	ACMX09764 Maxi Clean	1	each		MF ☐
					SA ☐
					KL ☐
					HP ☐
					SSC ☐
					SMC ☐
					WP ☐
					BL ☐
					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 WP = White BL = Black				

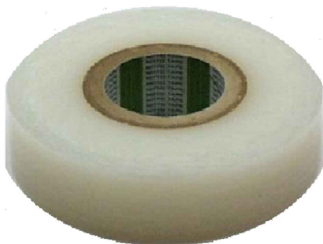
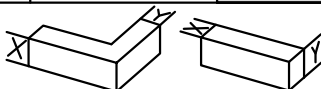
Image	Part Code	Pack	Unit	Application	Colour	
	ACMX09765 Glue Cleaner De-grease and silicone remover (1 Litre).	1	each		MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					WP	
					BL	
					PC	
	ACMX09770 Roll & Wrap 100mm	1	each		MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					WP	
					BL	
					PC	
	ACMX09775 Grip Handwrap	1	each		MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					WP	
					BL	
					PC	
	ACMX09801 Protective Tape 50mm	1	each		MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					WP	
					BL	
					PC	
	ACMX09802 Protective Tape 70mm	1	each		MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					WP	
					BL	
					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		WP = White BL = Black		

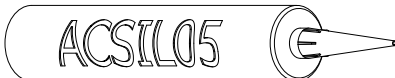
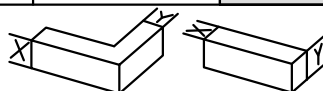
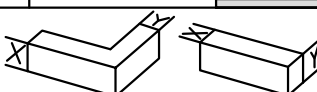
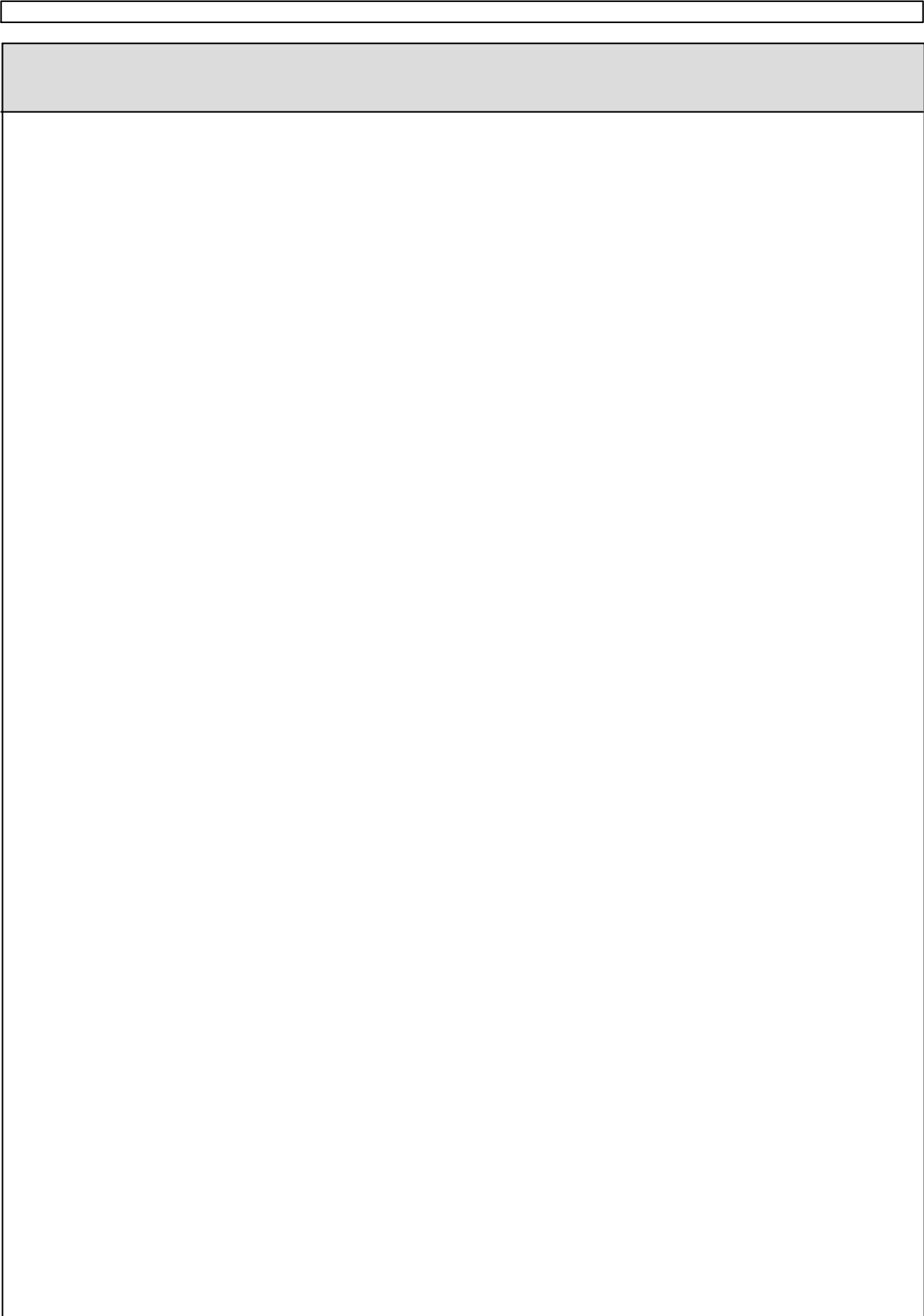
Image	Part Code	Pack	Unit	Application	Colour	
	ACMX09803 Protective Tape 100mm	1	each		MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					WP	
					BL	
					PC	
	ACSIL04 Sealing Glue Order with suffix of KL colour (eg.ACSIL04KL005) or BL=Black/WP=White/ CL=Clear	1	each		MF	
					SA	
					KL	✓
		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

Image	Part Code	Pack	Unit	Application	Colour	
	ACSIL014 Anti-Corrosion Coating	1	each		MF	✓
					SA	
					KL	
					HP	
					SSC	
					SMC	
					WP	
					BL	
					PC	
	ACUN3900 Gasket Roller	1	each		MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					WP	
					BL	
					PC	
					MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					WP	
					BL	
					PC	
					MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					WP	
					BL	
					PC	
	MF = Mill Finish SA = Silver Anodised KL = Basic Colour HP = Special Colour SSC = Smooth Satin Chrome SMC = Smokey Chrome PC = Polished Chrome				MF	
					SA	
					KL	
					HP	
					SSC	
					SMC	
					WP	
					BL	
					PC	
			WP = White BL = Black			

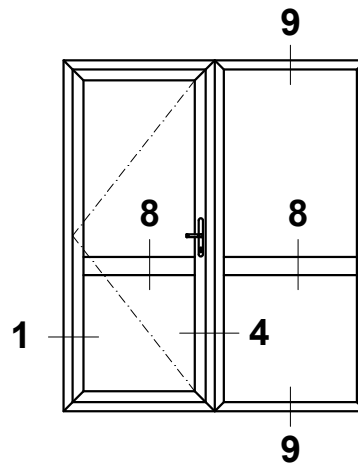
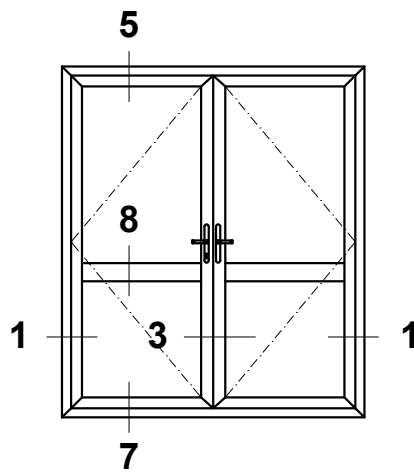
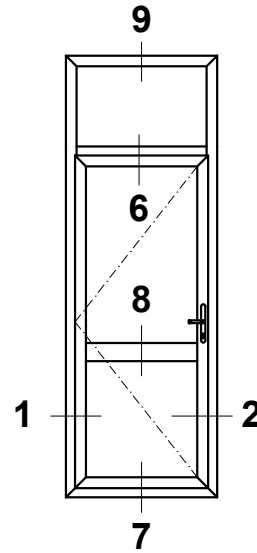
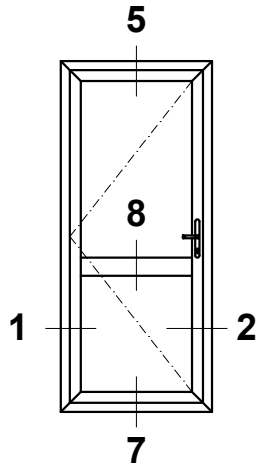
Section C

Sections

Scale Elevations

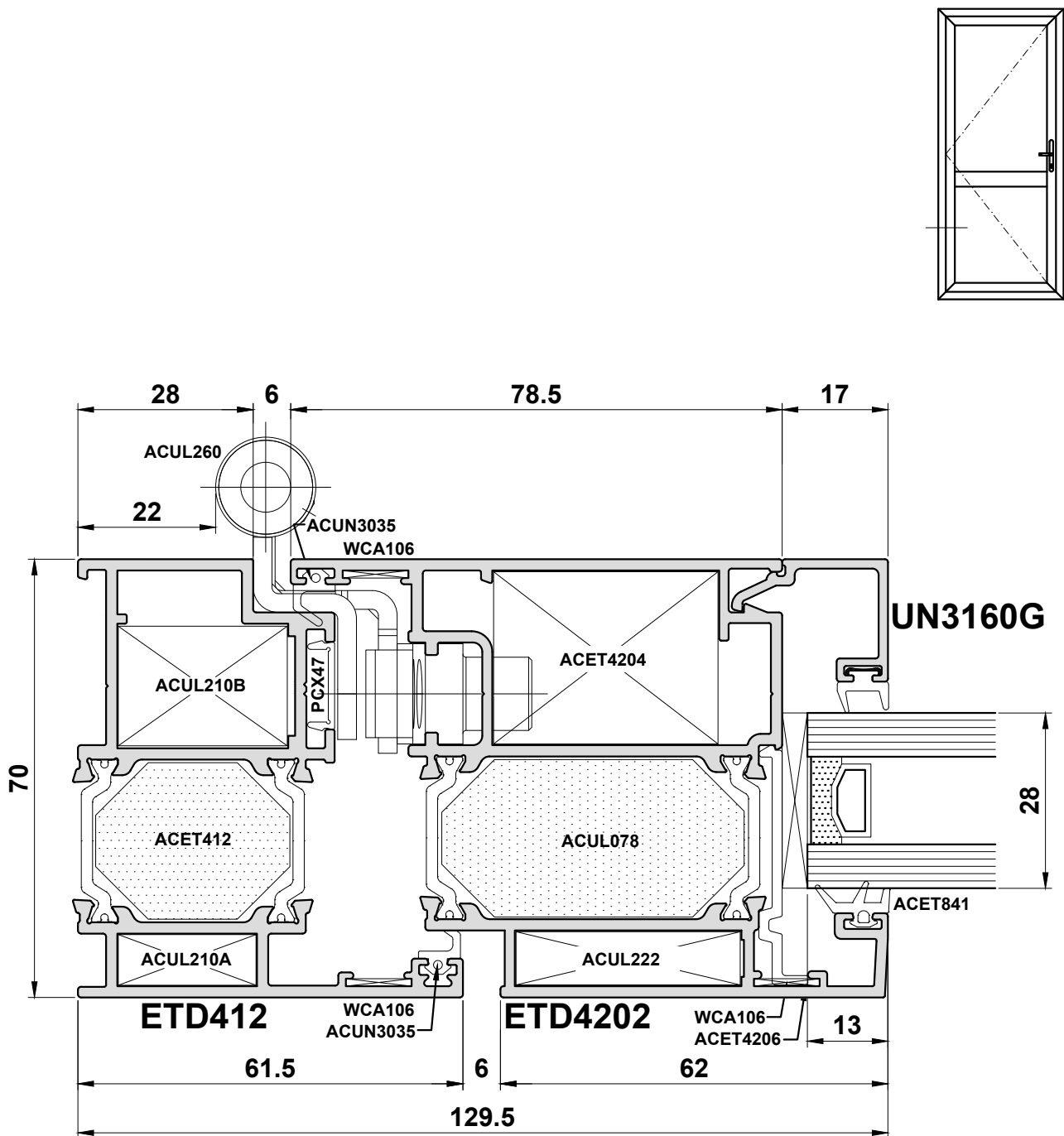


Open In - Elevations



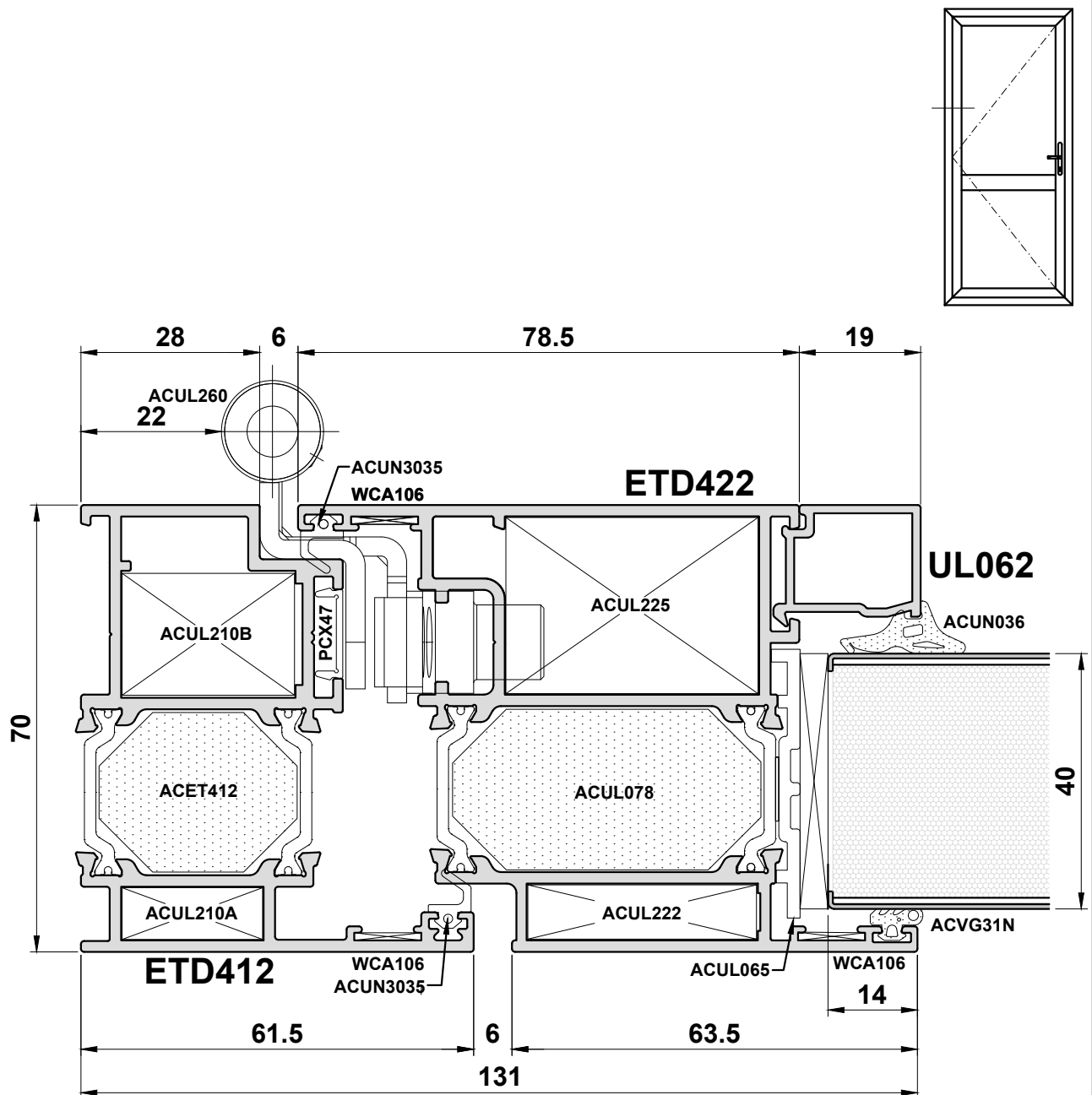
Do Not Scale From This Drawing

Open In - Detail 1a



Do Not Scale From This Drawing

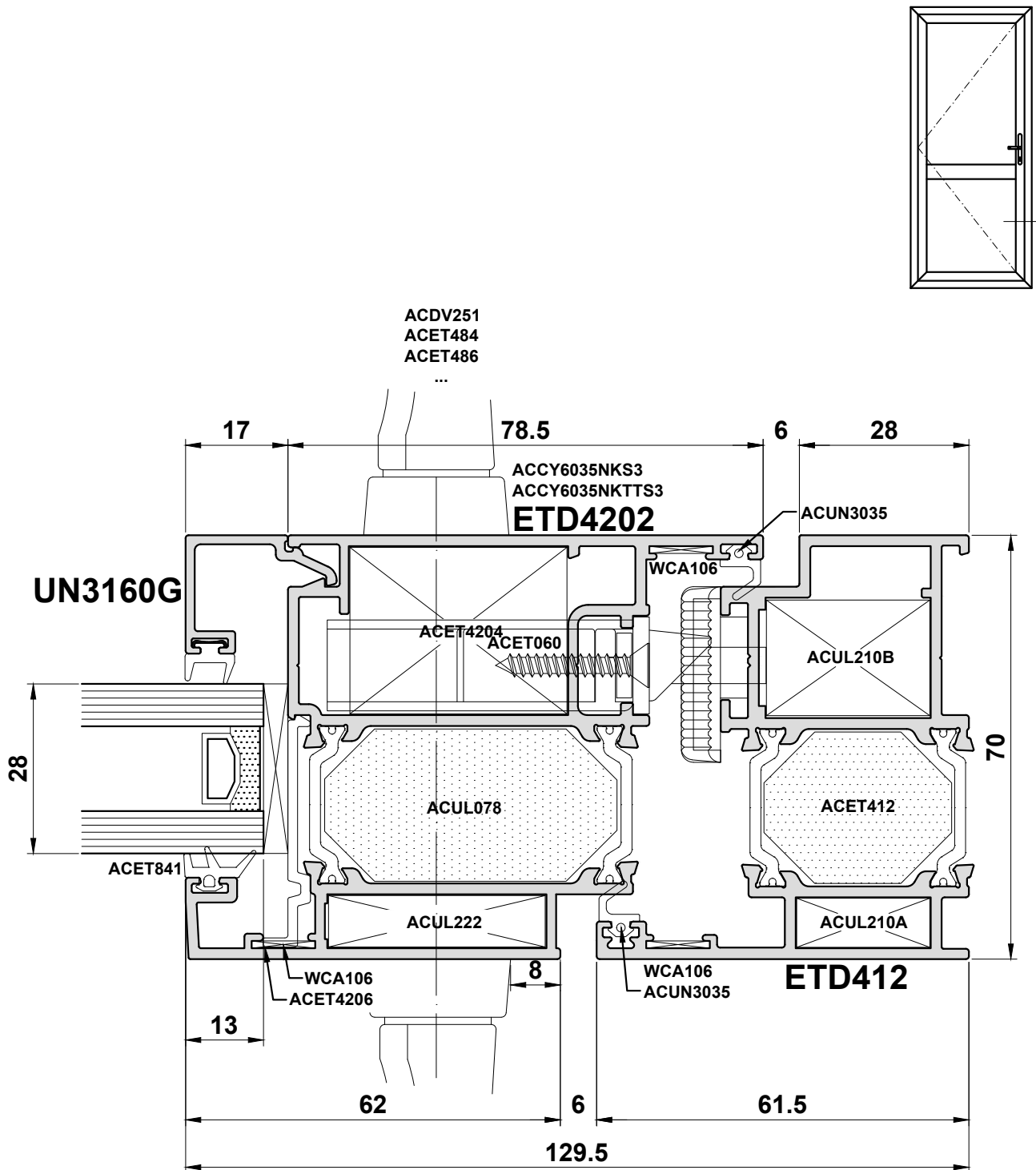
Open In - Detail 1b



Do Not Scale From This Drawing

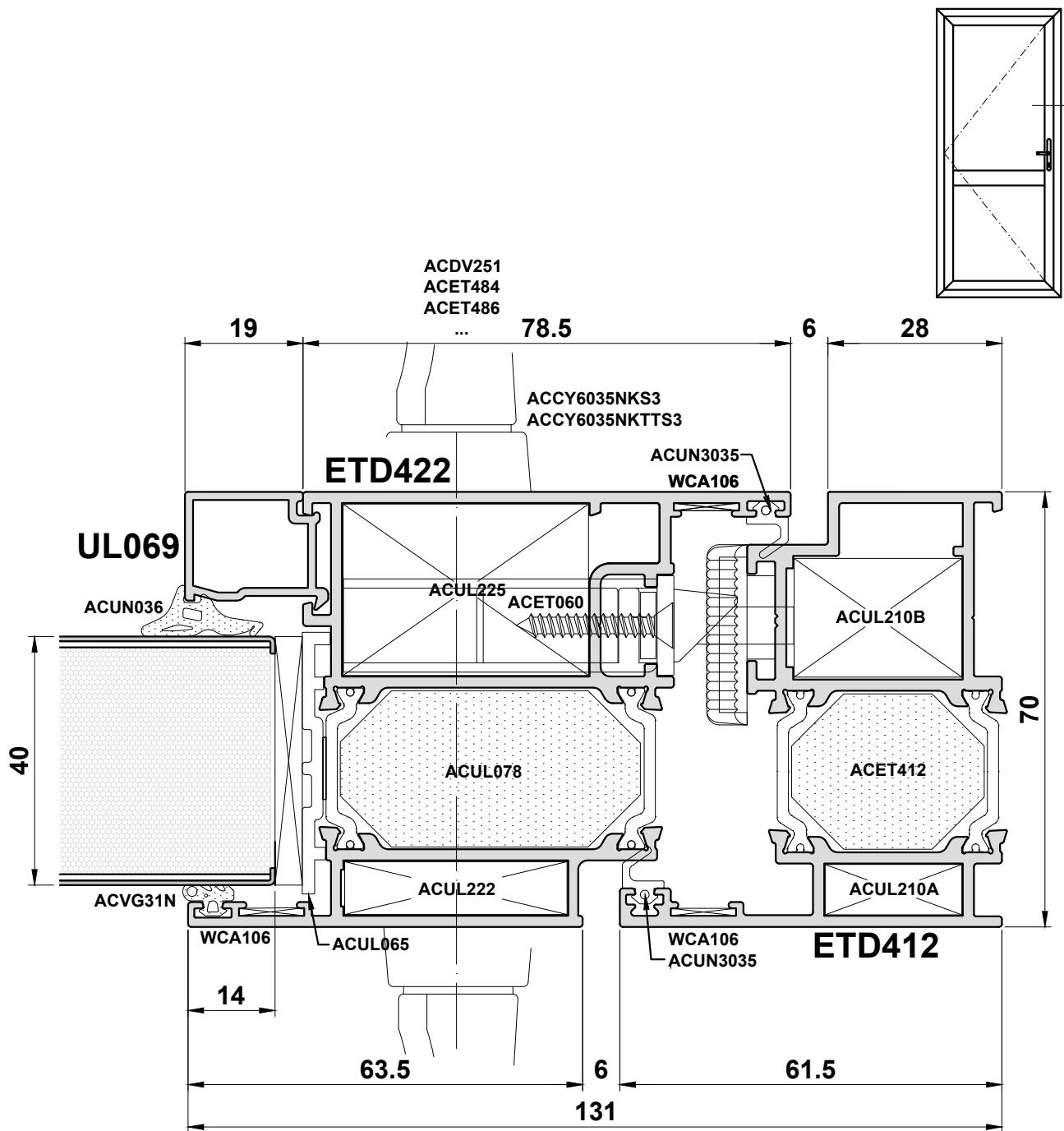
Alitherm 400 Flush Door

Open In - Detail 2a



Do Not Scale From This Drawing

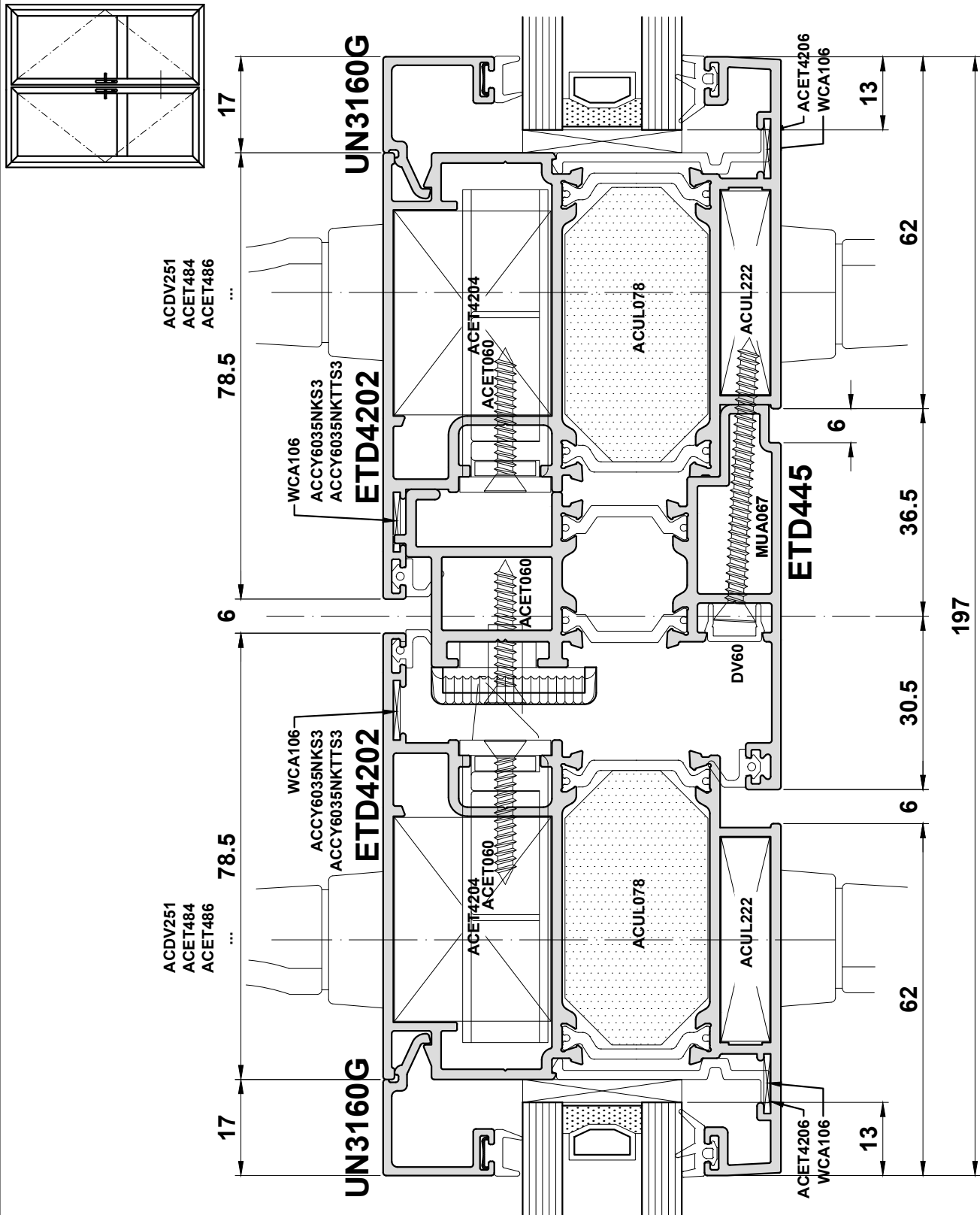
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Do Not Scale From This Drawing

Alitherm 400 Flush Door

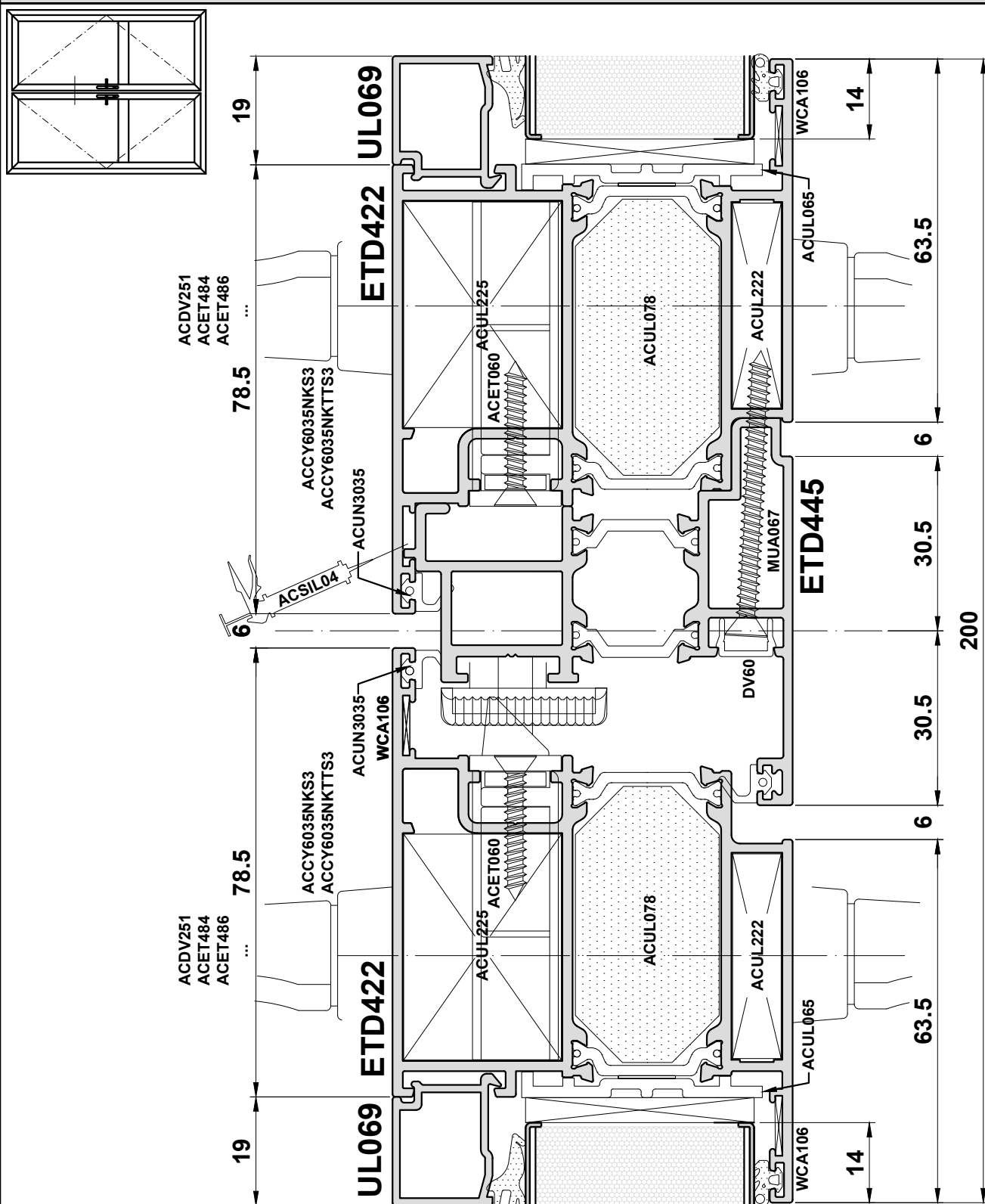
Open In - Detail 3a



Do Not Scale From This Drawing

Alitherm 400 Flush Door

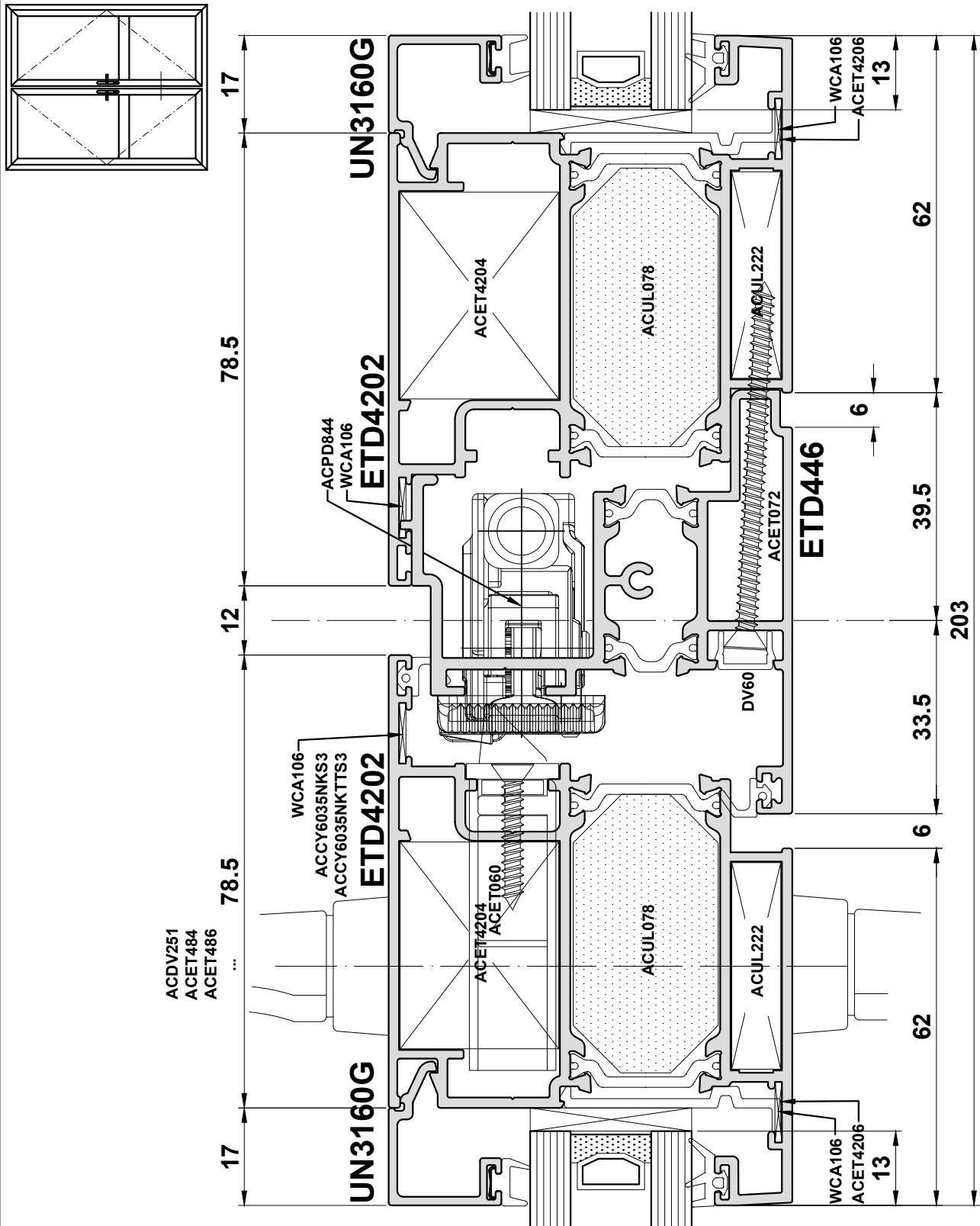
Open In - Detail 3b



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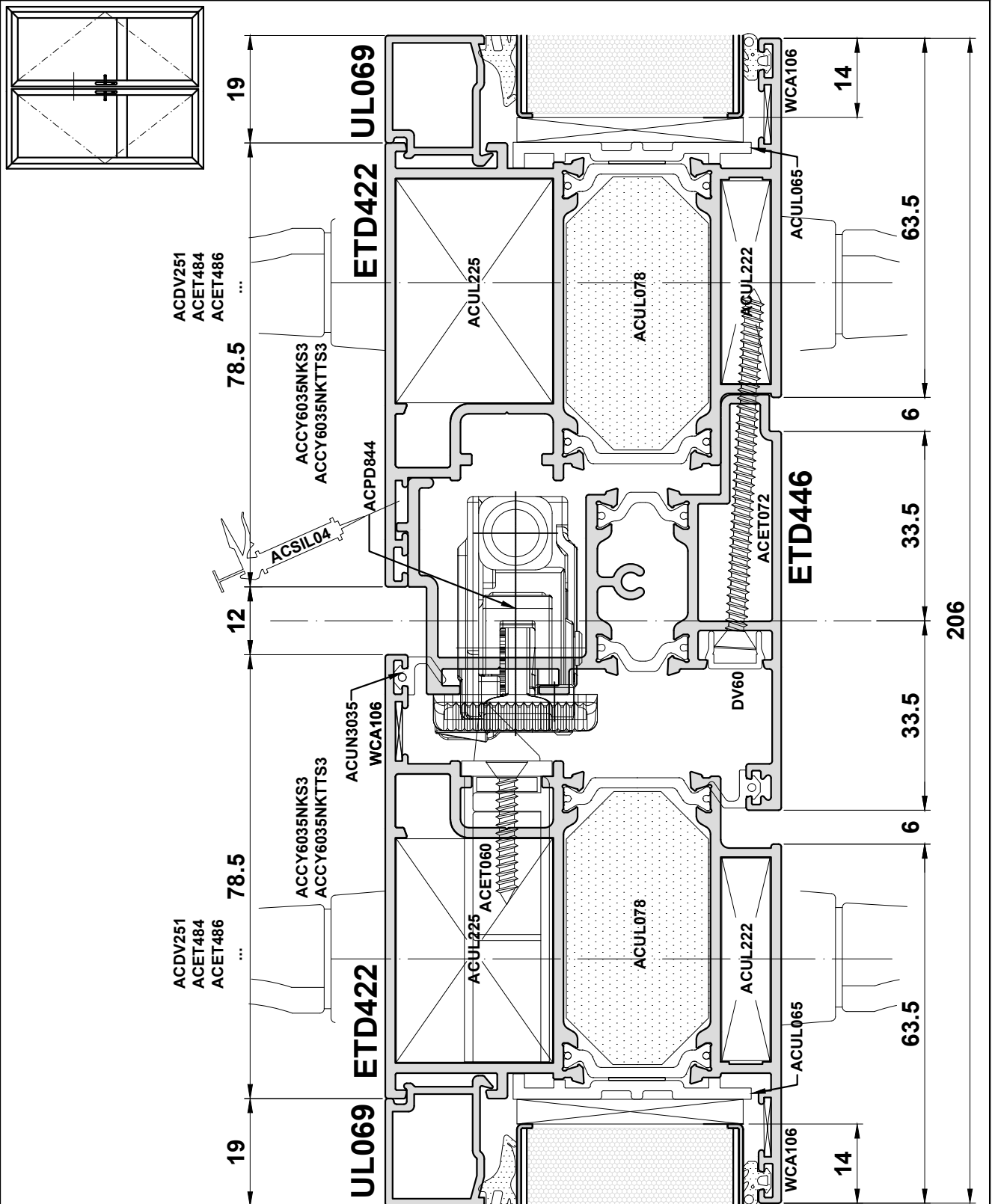
Alitherm 400 Flush Door

Open In - Detail 3c



Do Not Scale From This Drawing

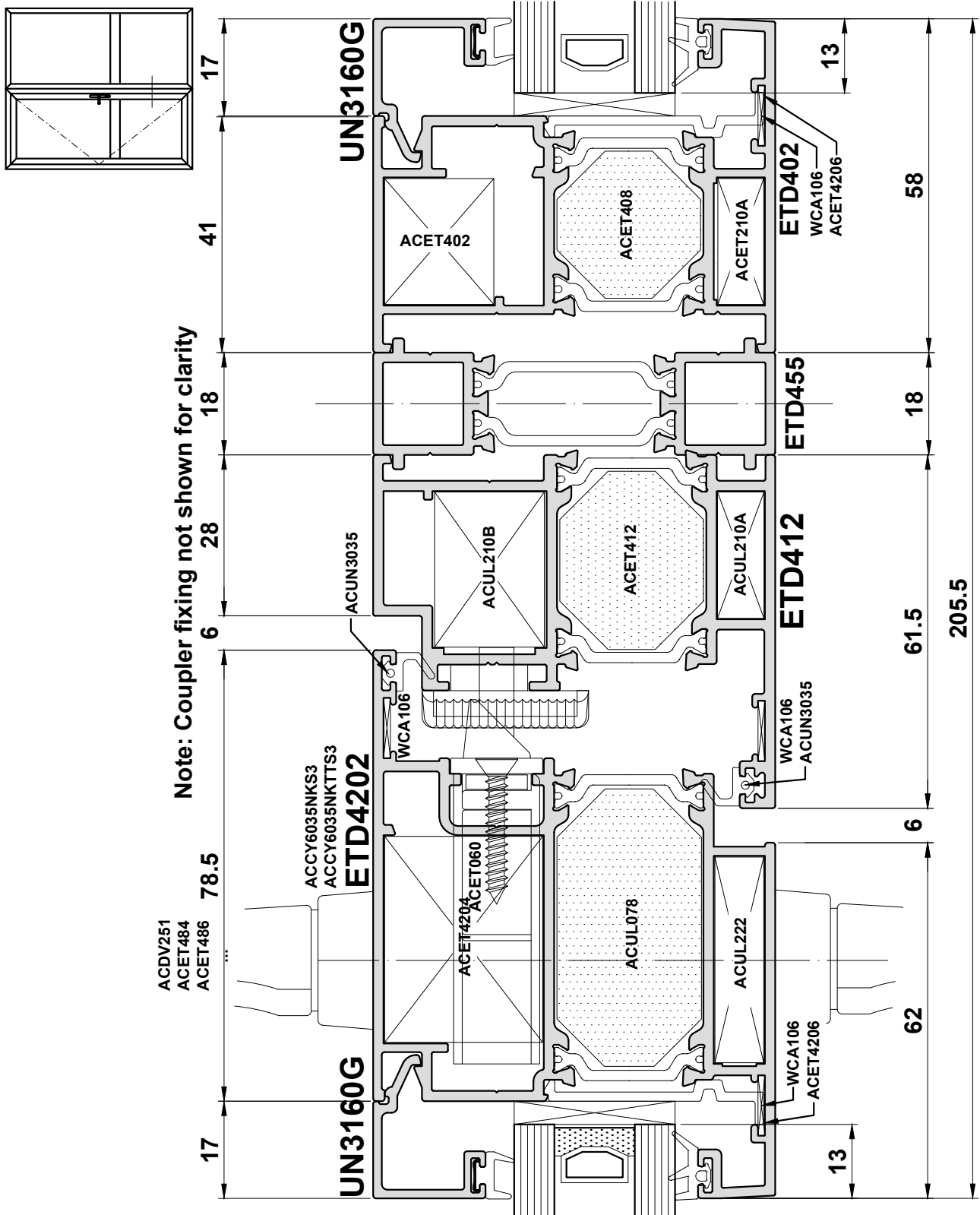
Open In - Detail 3d



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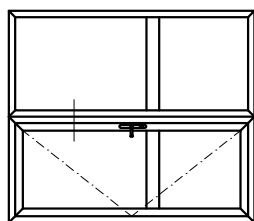
Alitherm 400 Flush Door

Open In - Detail 4a

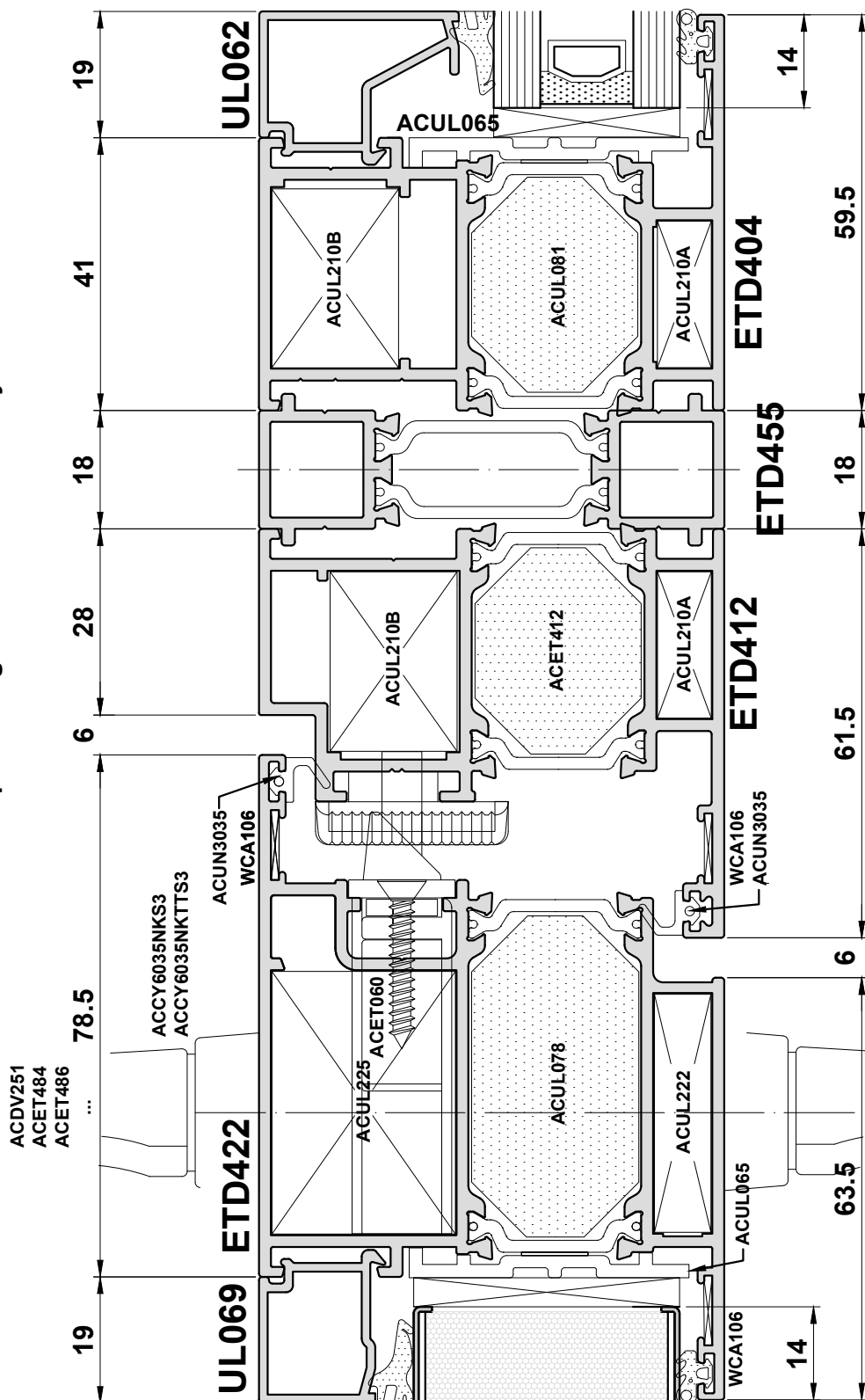


Do Not Scale From This Drawing

Open In - Detail 4b

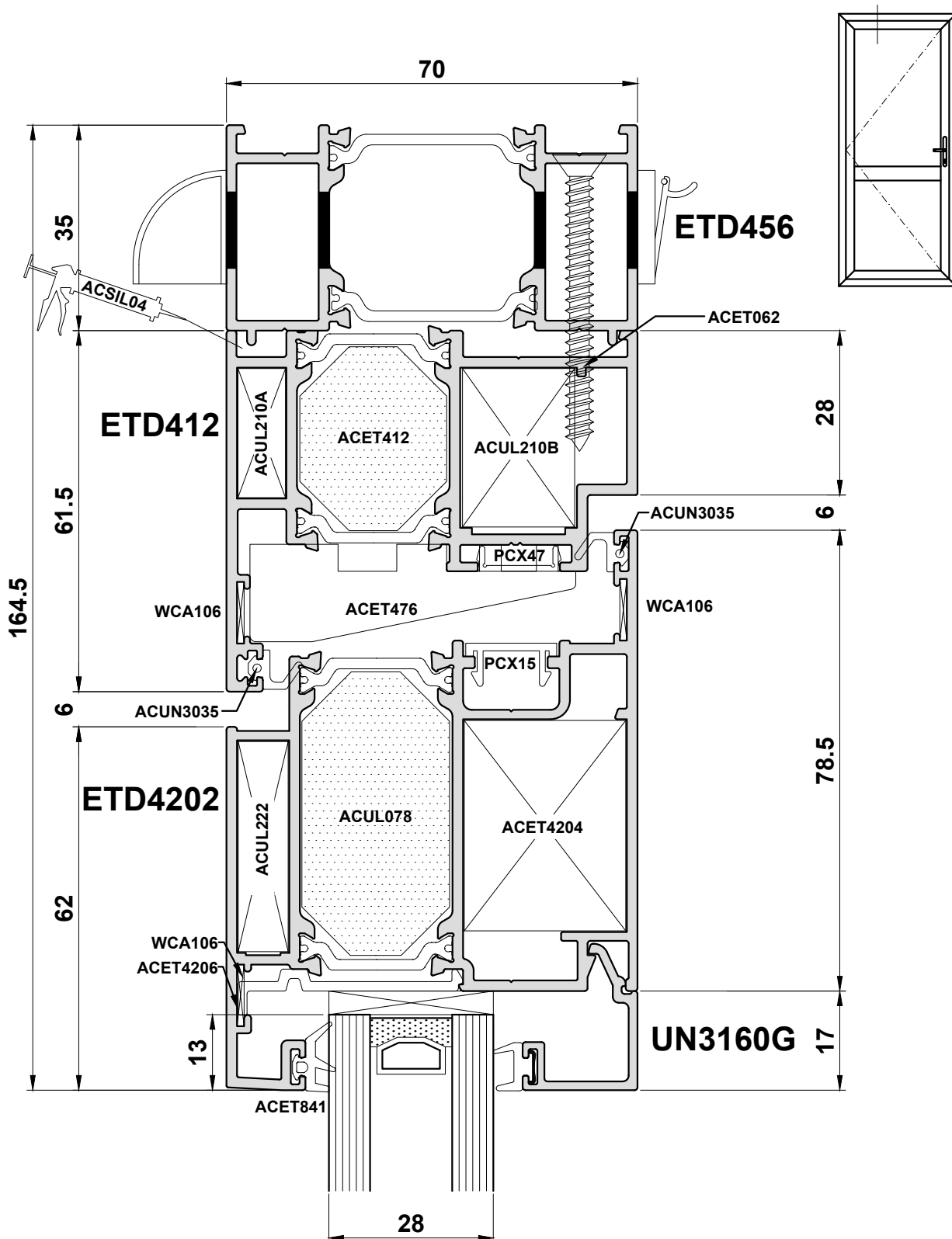


Note: Coupler fixing not shown for clarity



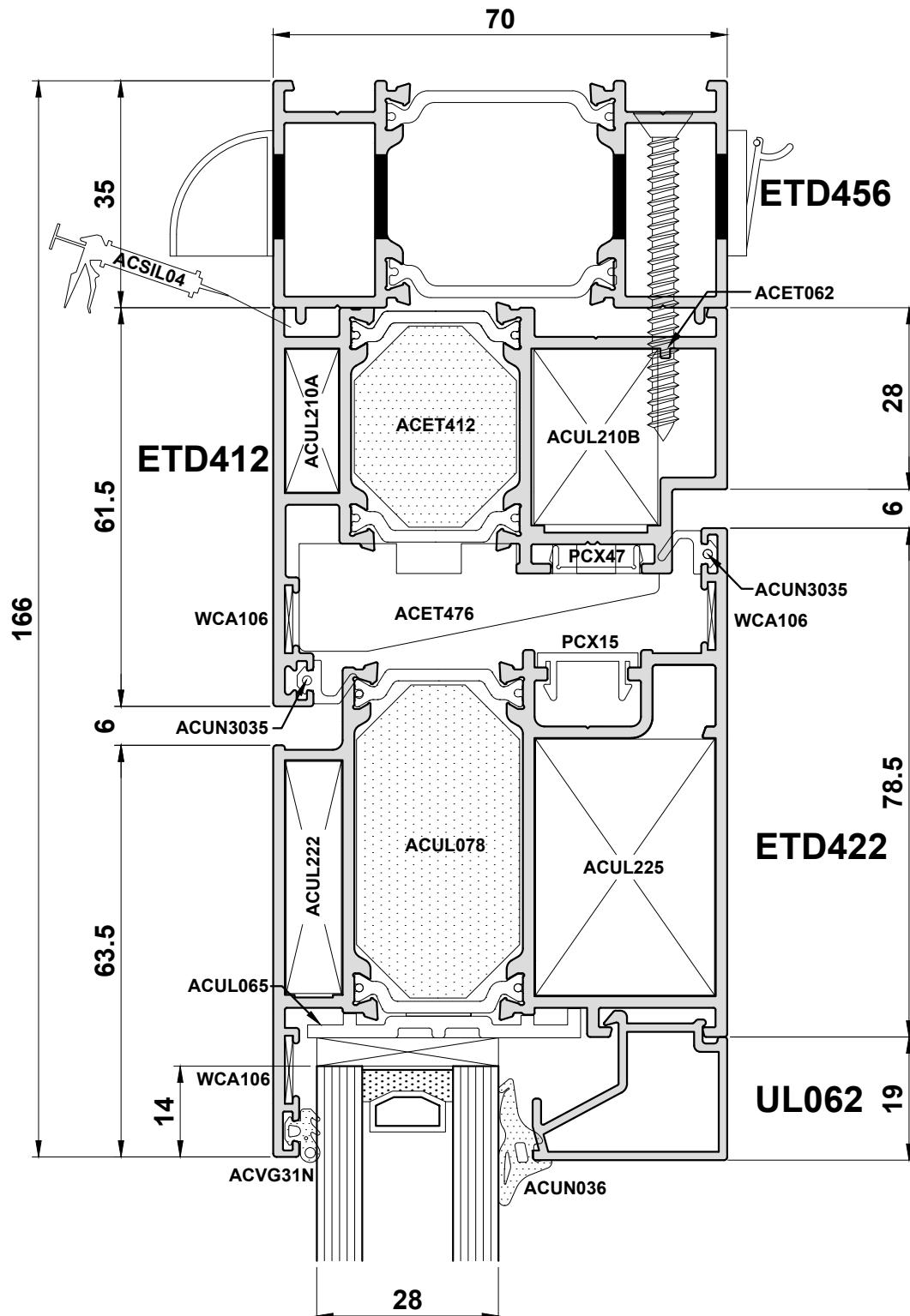
Do Not Scale From This Drawing

Open In - Detail 5a



Do Not Scale From This Drawing

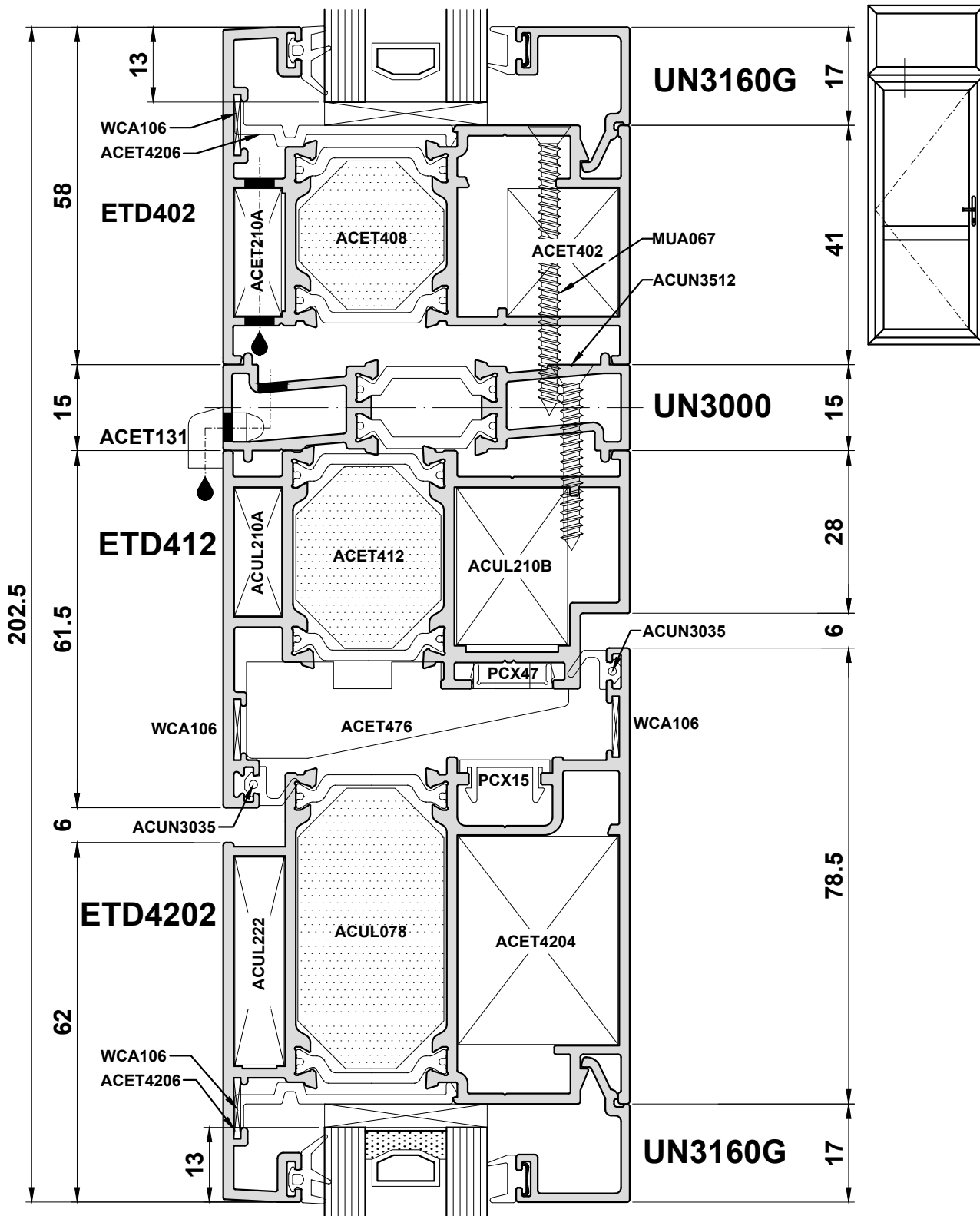
Open In - Detail 5b



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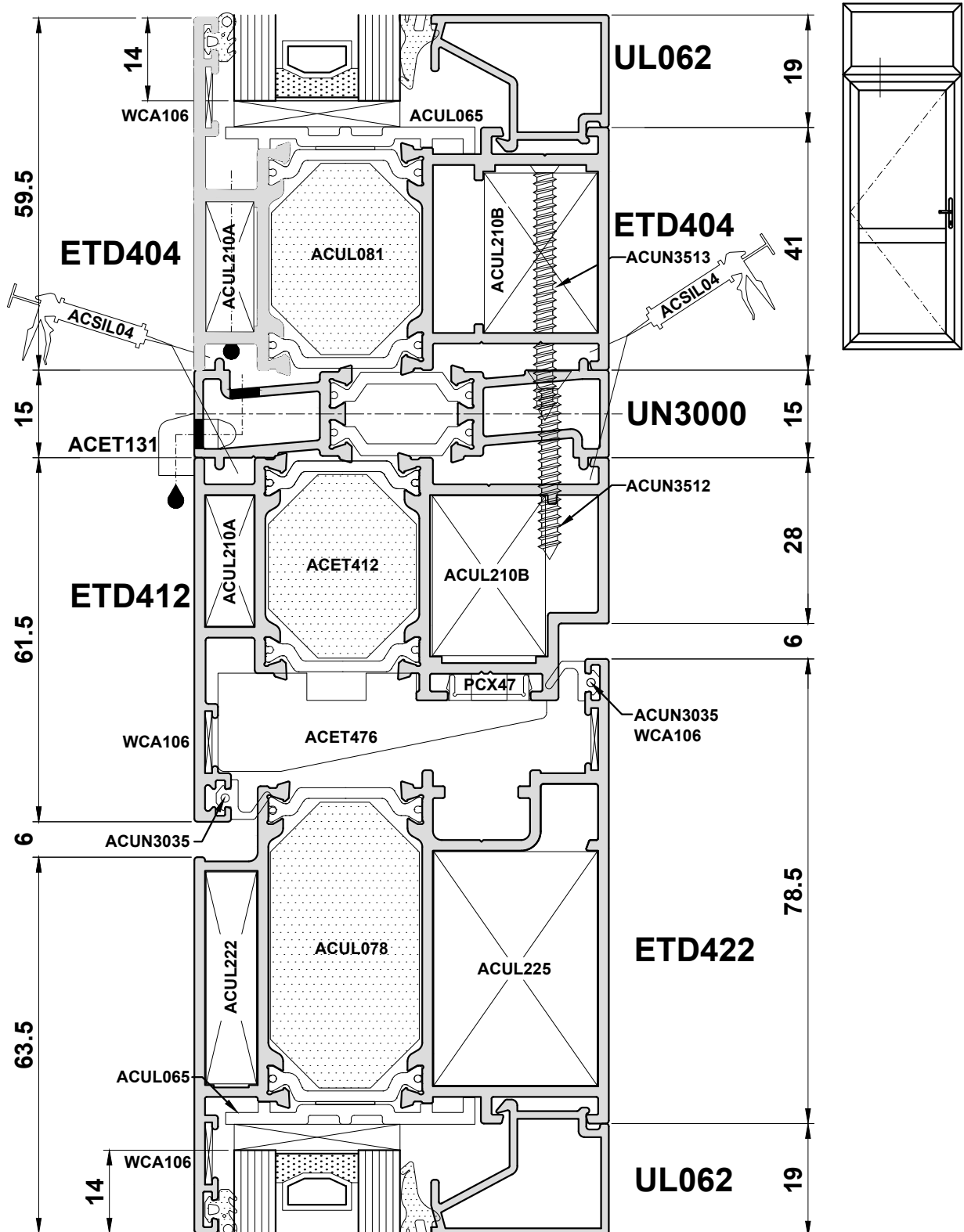
Alitherm 400 Flush Door

Open In - Detail 6a



Do Not Scale From This Drawing

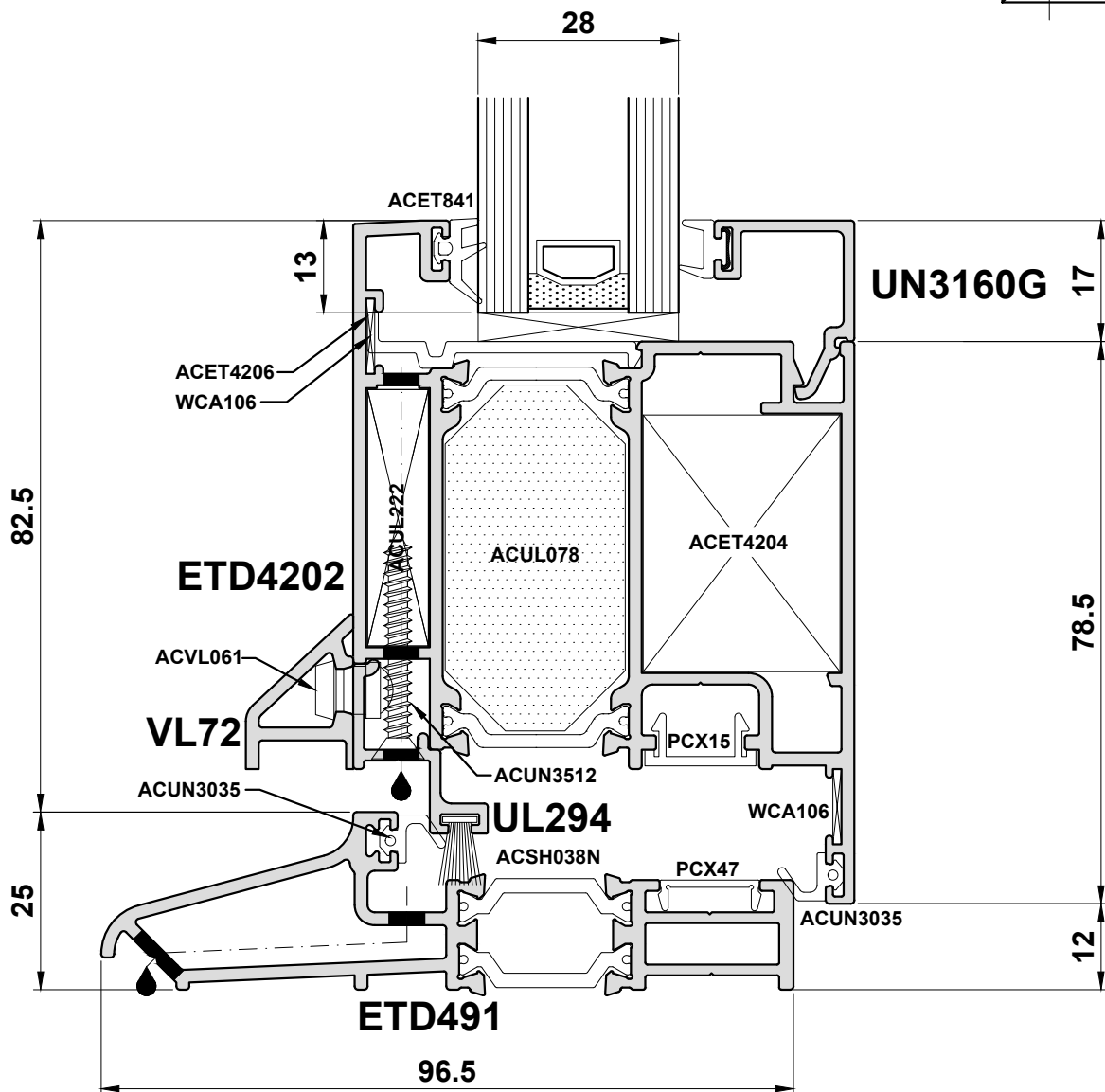
Open In - Detail 6b



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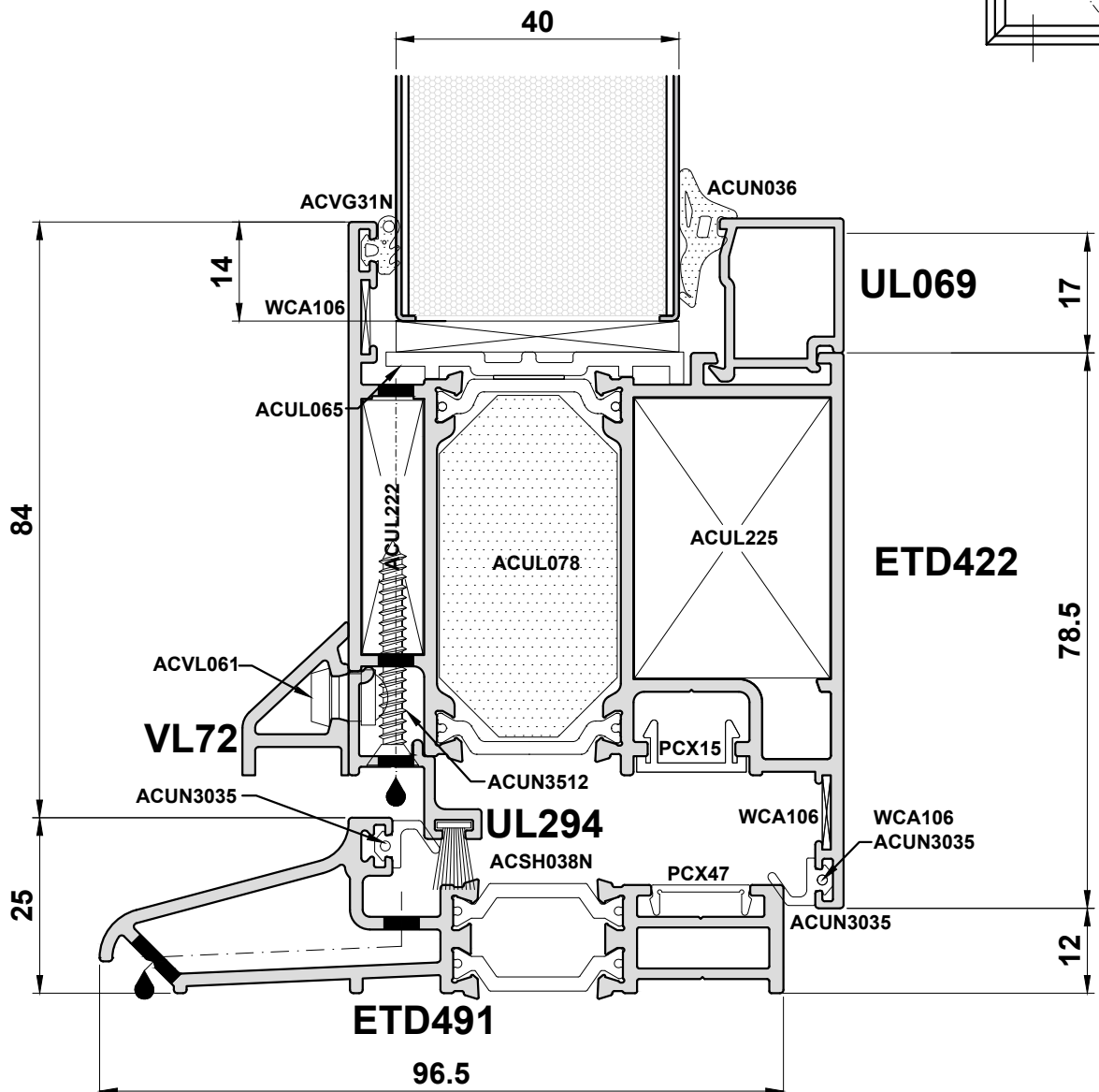
Alitherm 400 Flush Door

Open In - Detail 7a



Do Not Scale From This Drawing

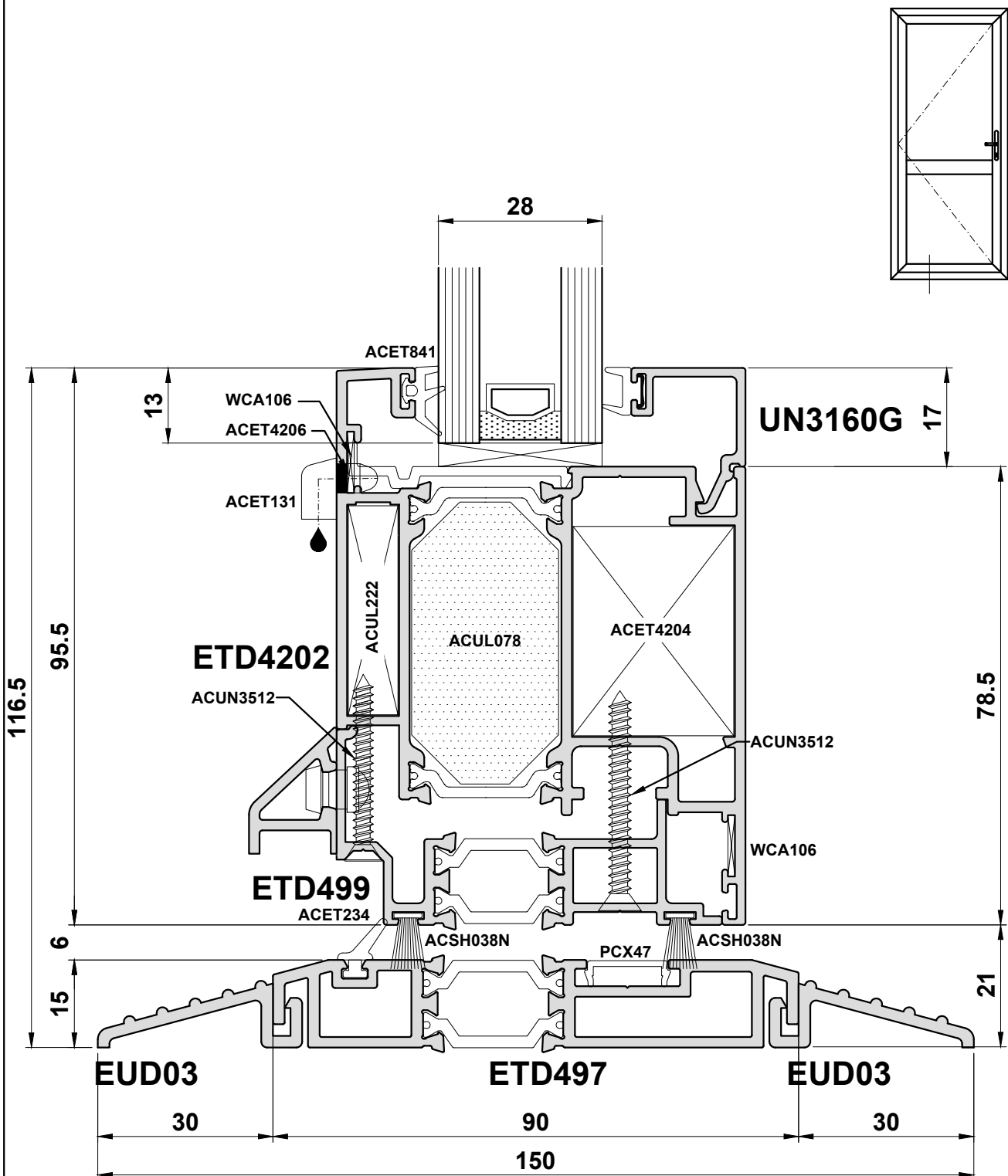
Open In - Detail 7b



Do Not Scale From This Drawing

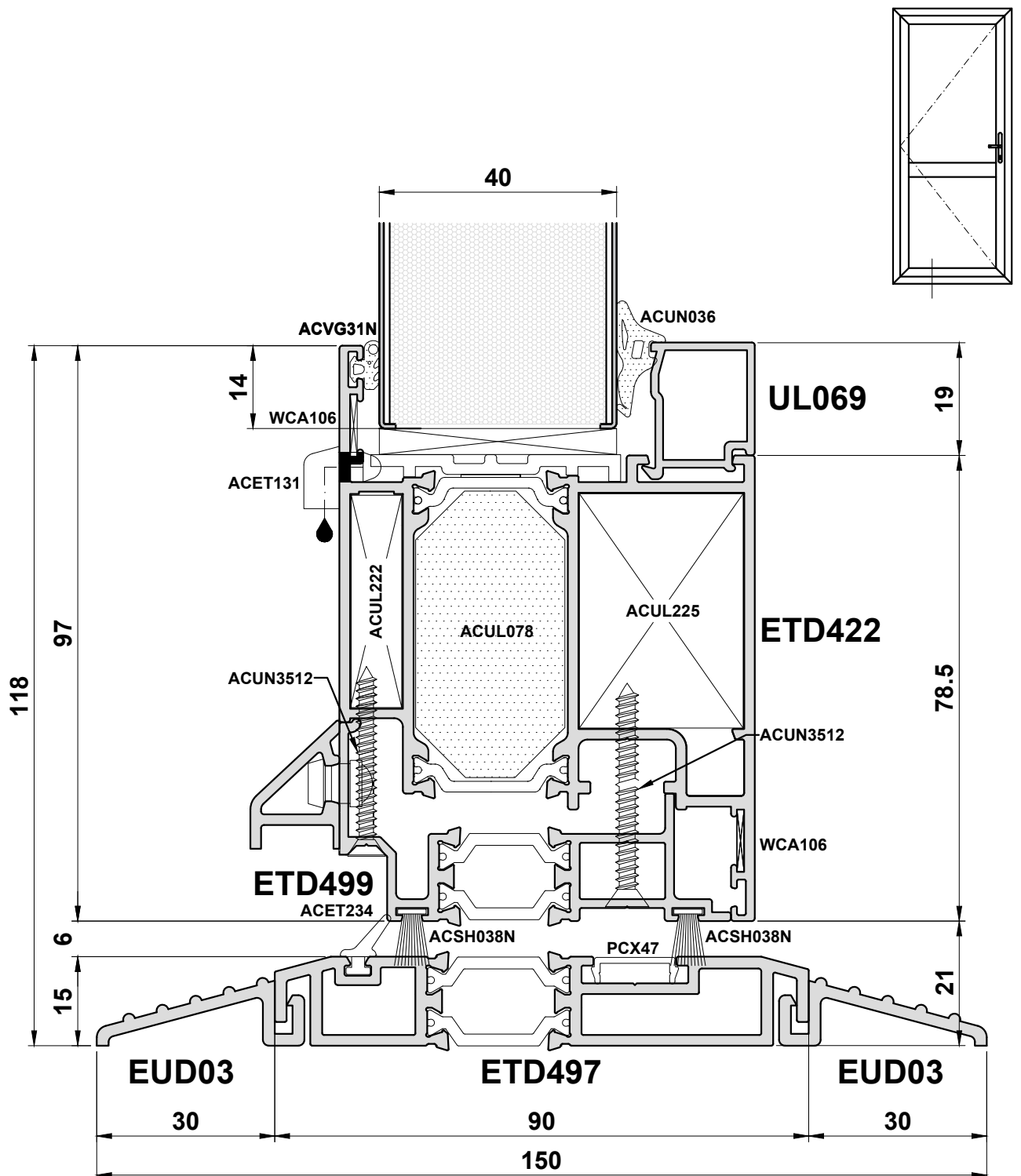
Alitherm 400 Flush Door

Open In - Detail 7c



Do Not Scale From This Drawing

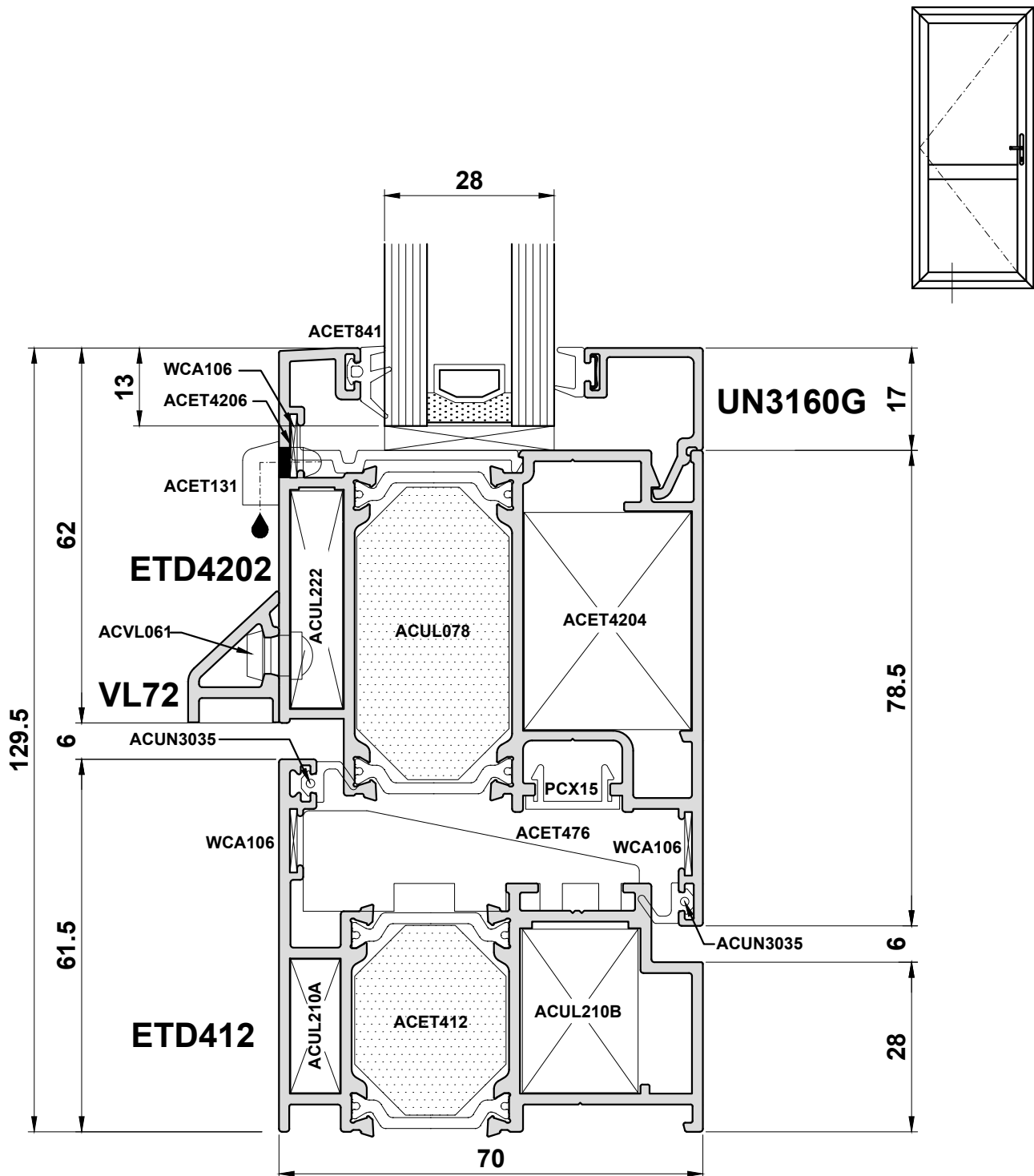
Open In - Detail 7d



Do Not Scale From This Drawing

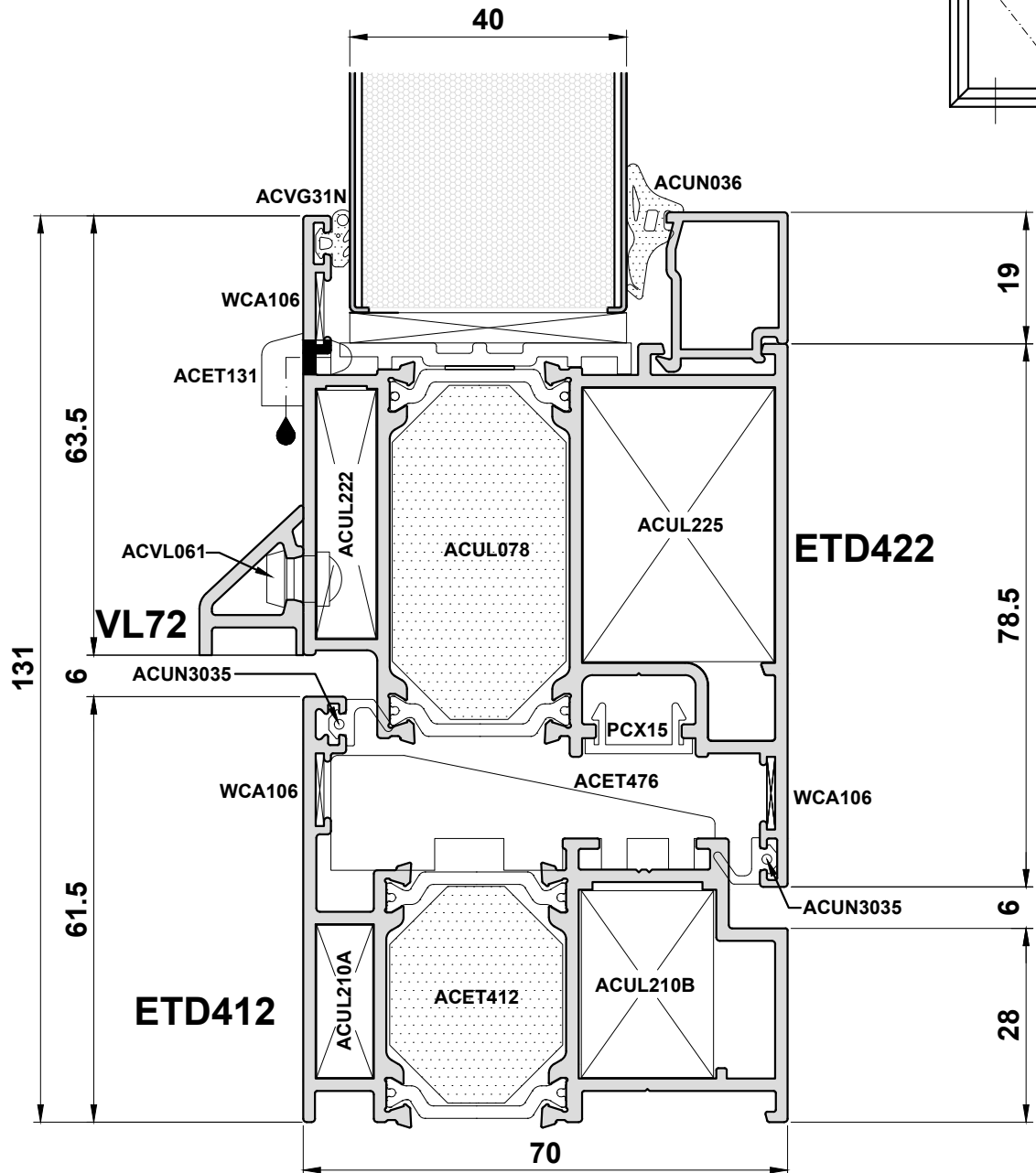
Alitherm 400 Flush Door

Open In - Detail 7e



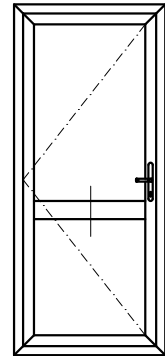
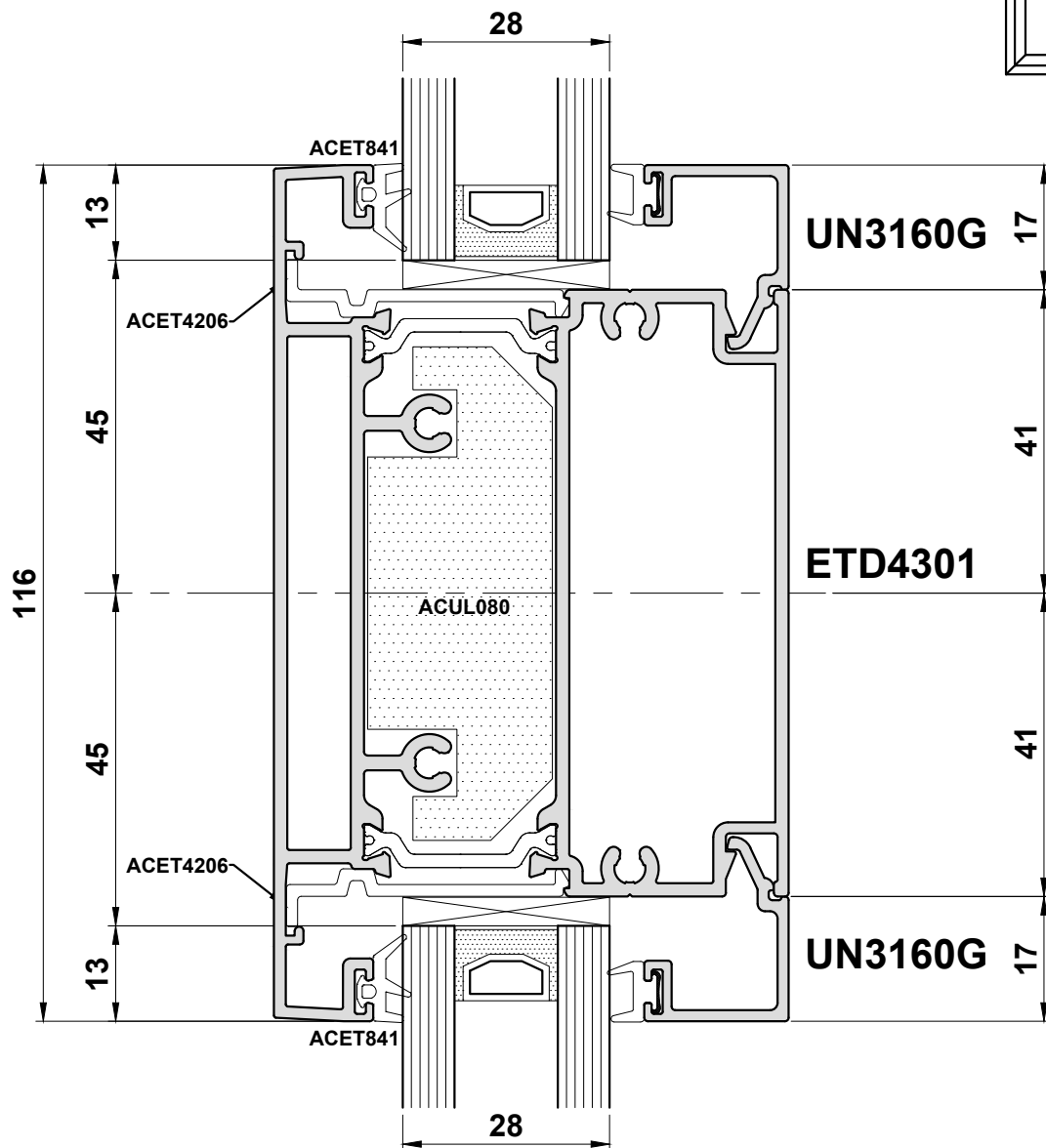
Do Not Scale From This Drawing

Open In - Detail 7f



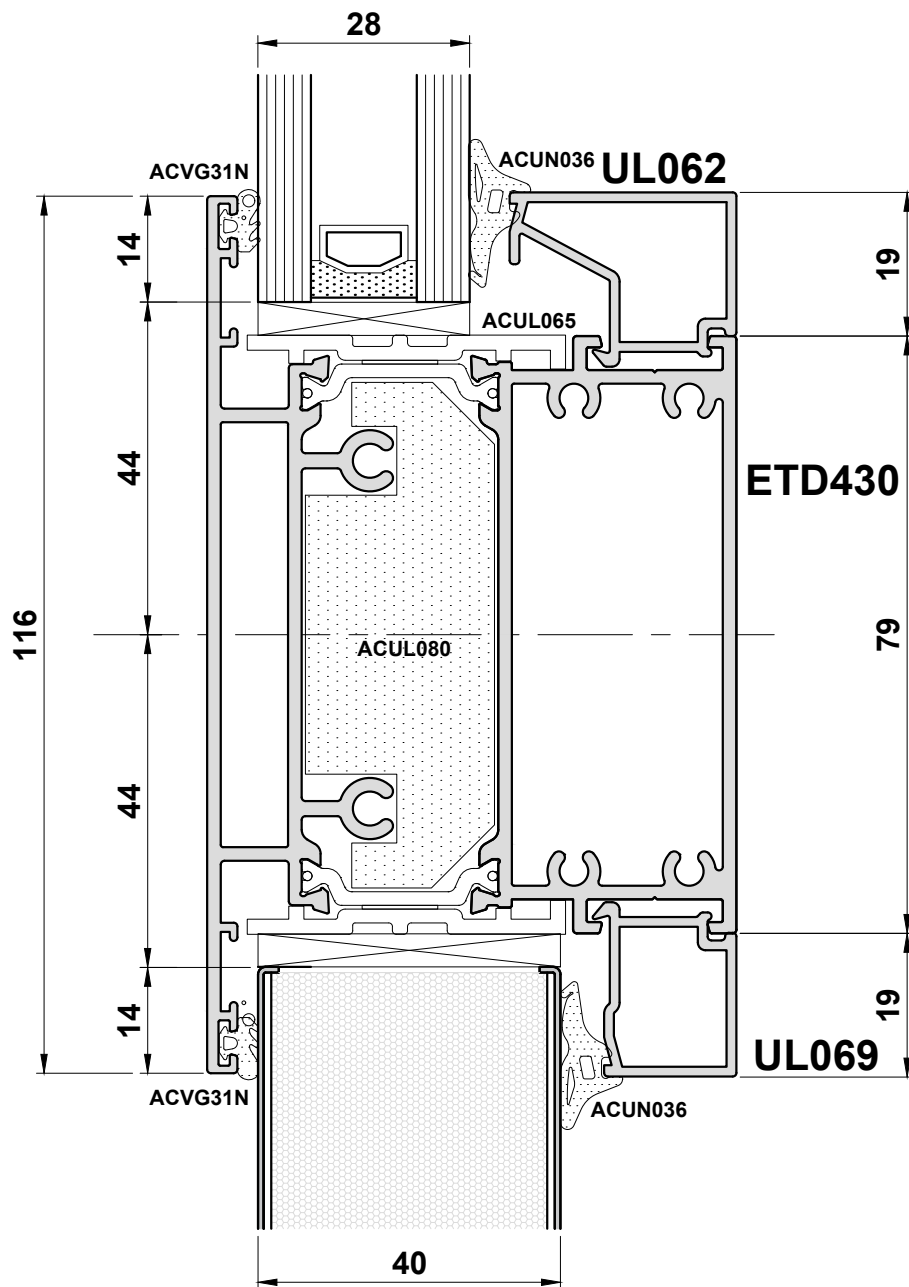
Do Not Scale From This Drawing

Open In - Detail 8a



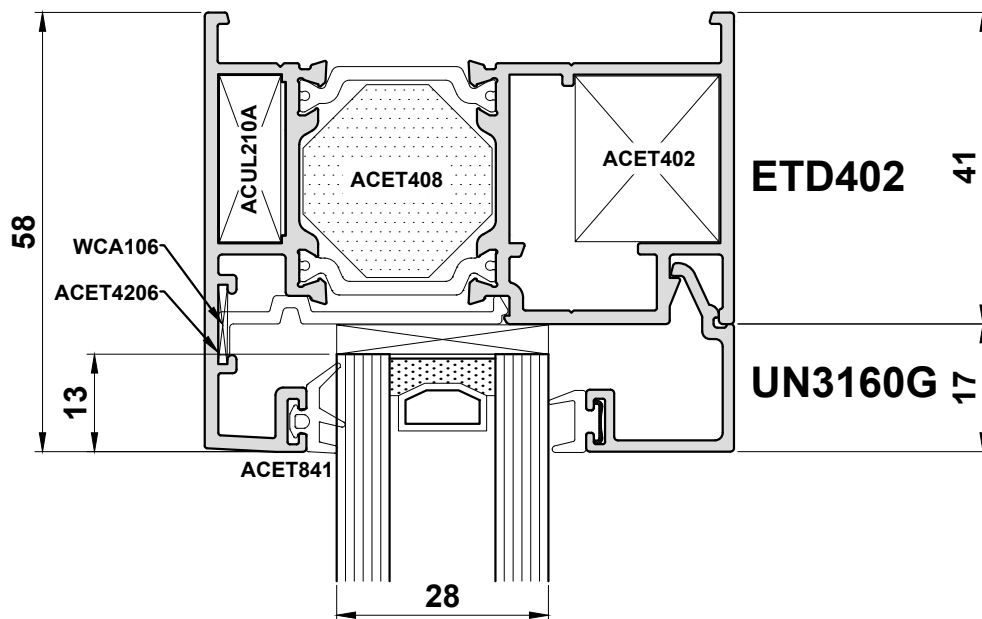
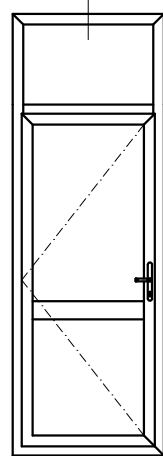
Do Not Scale From This Drawing

Open In - Detail 8b



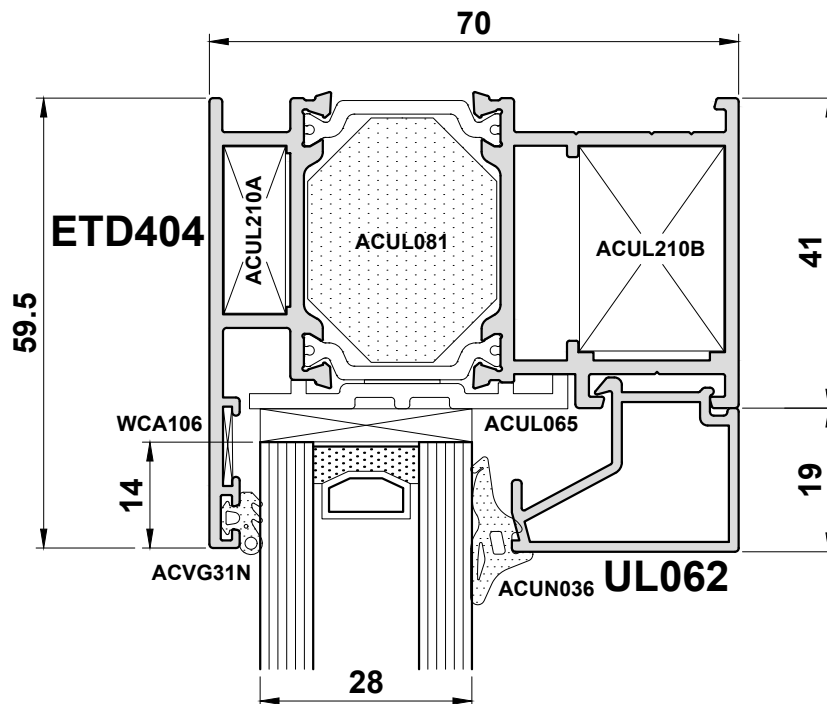
Do Not Scale From This Drawing

Open In - Detail 9a



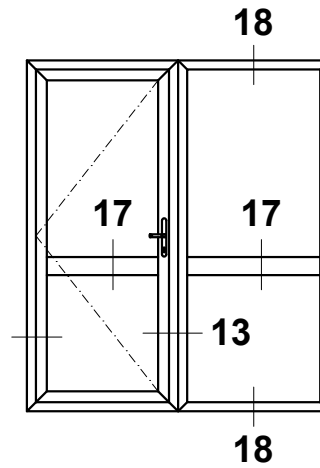
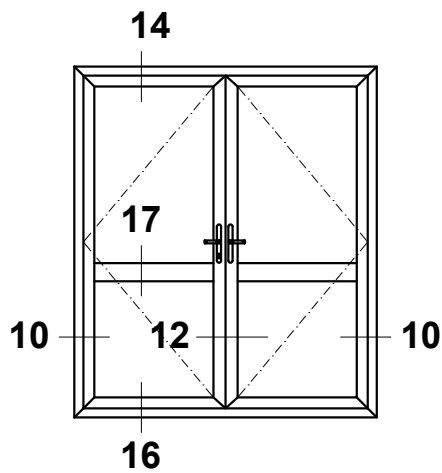
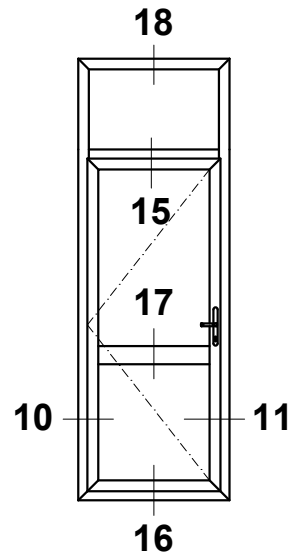
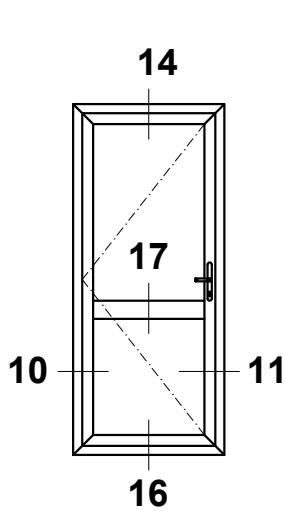
Do Not Scale From This Drawing

Open In - Detail 9b



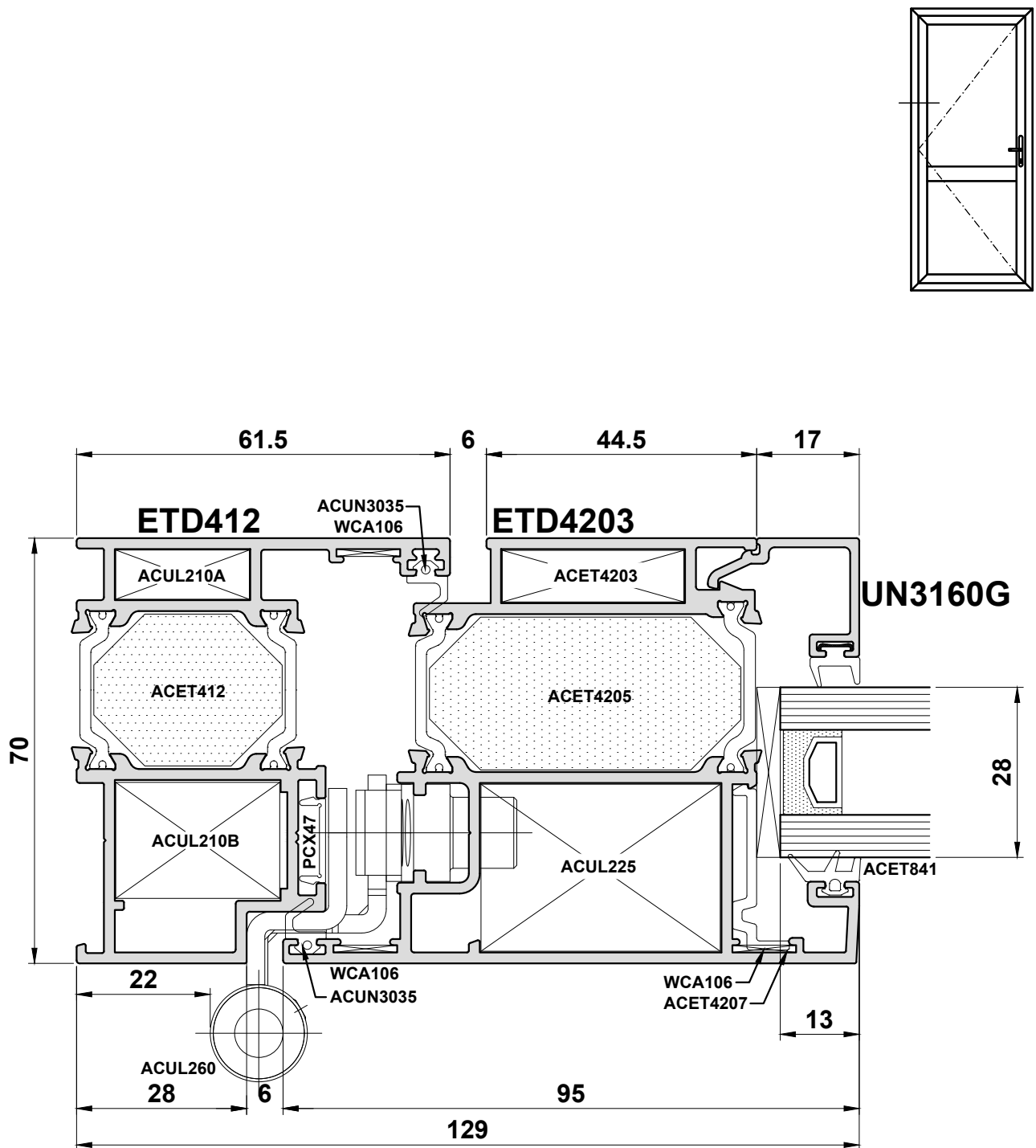
Do Not Scale From This Drawing

Open Out Quick-Glaze Bead - Elevations



Do Not Scale From This Drawing

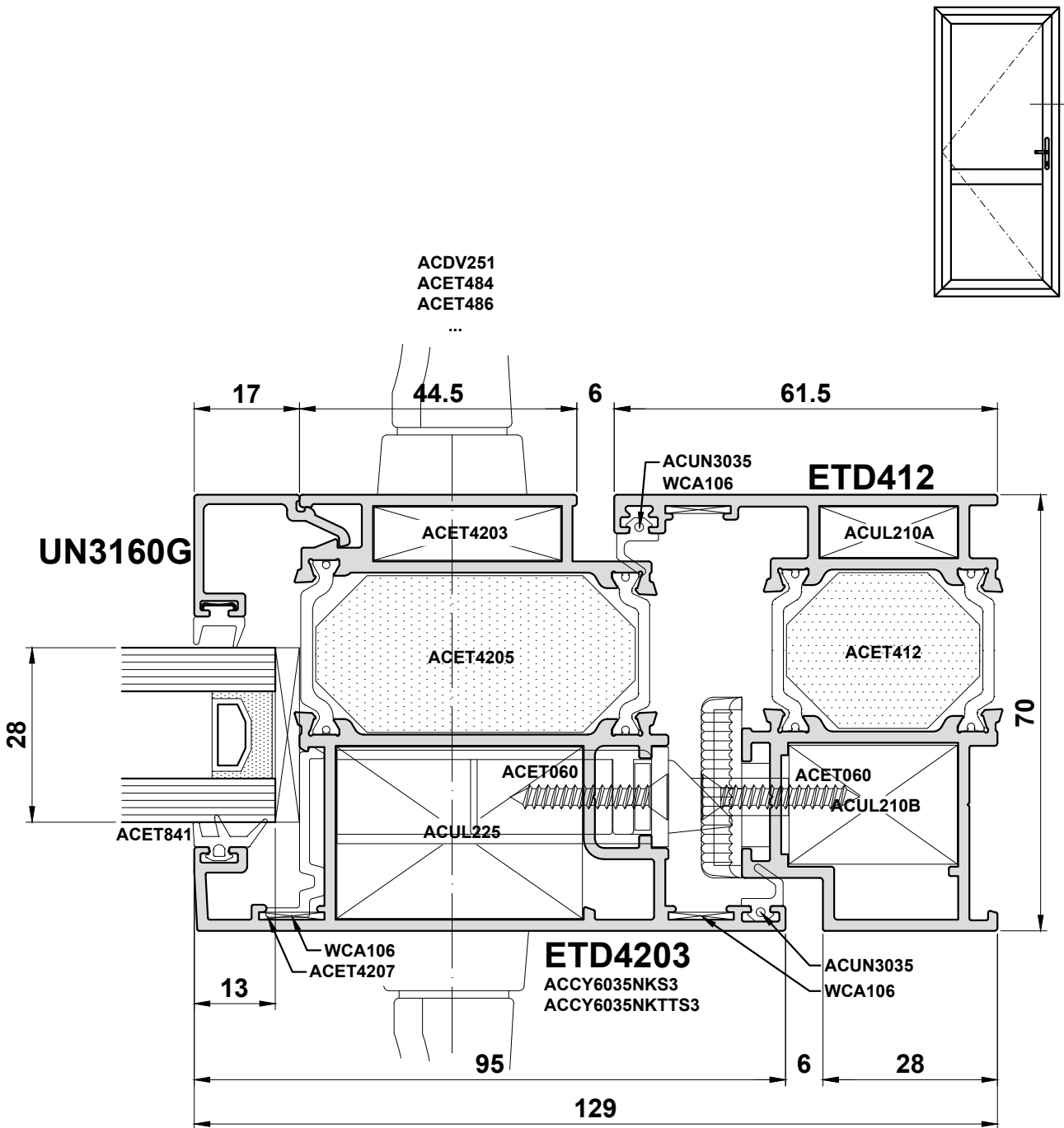
Open Out - Detail 10



Do Not Scale From This Drawing

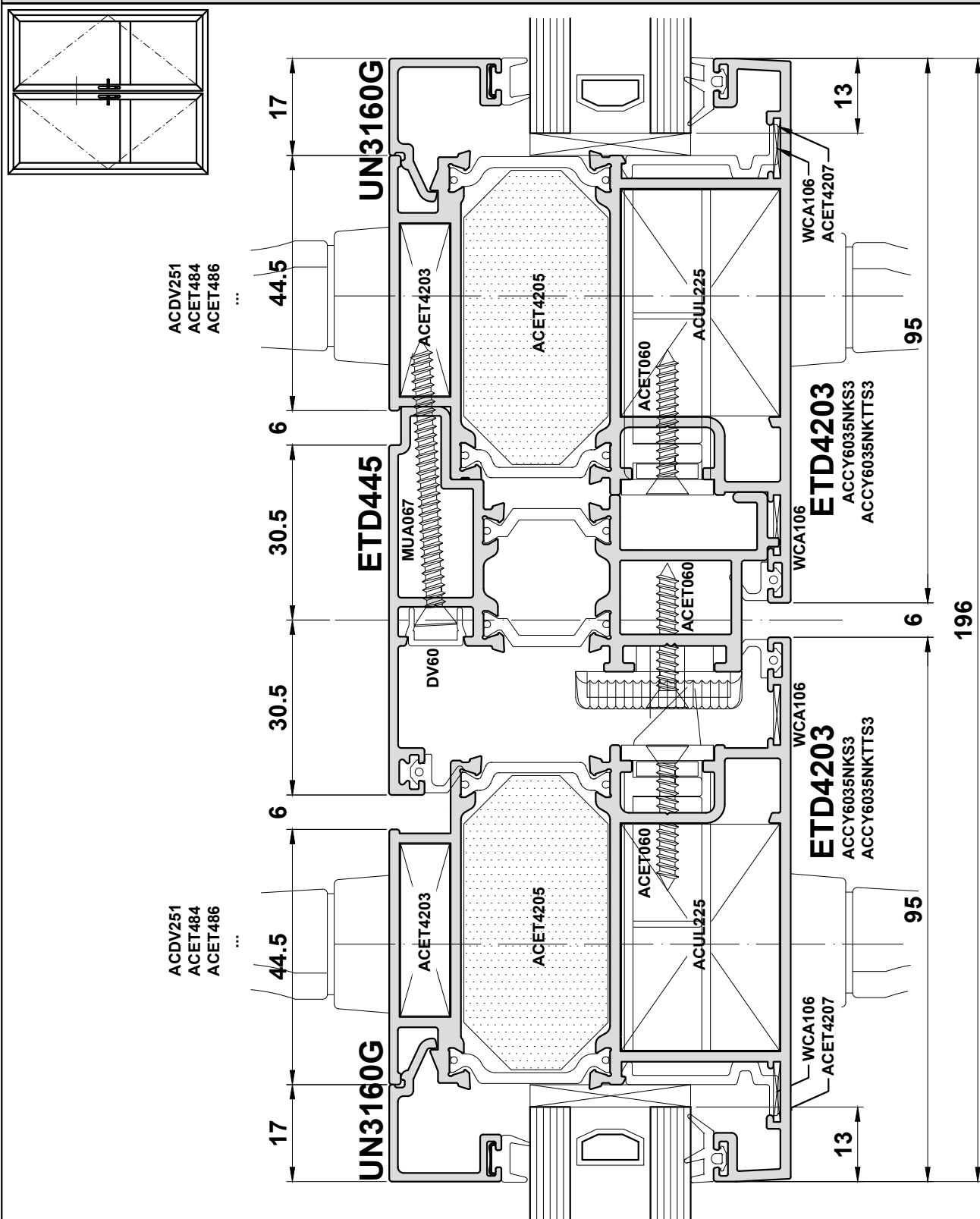
Alitherm 400 Flush Door

Open Out - Detail 11



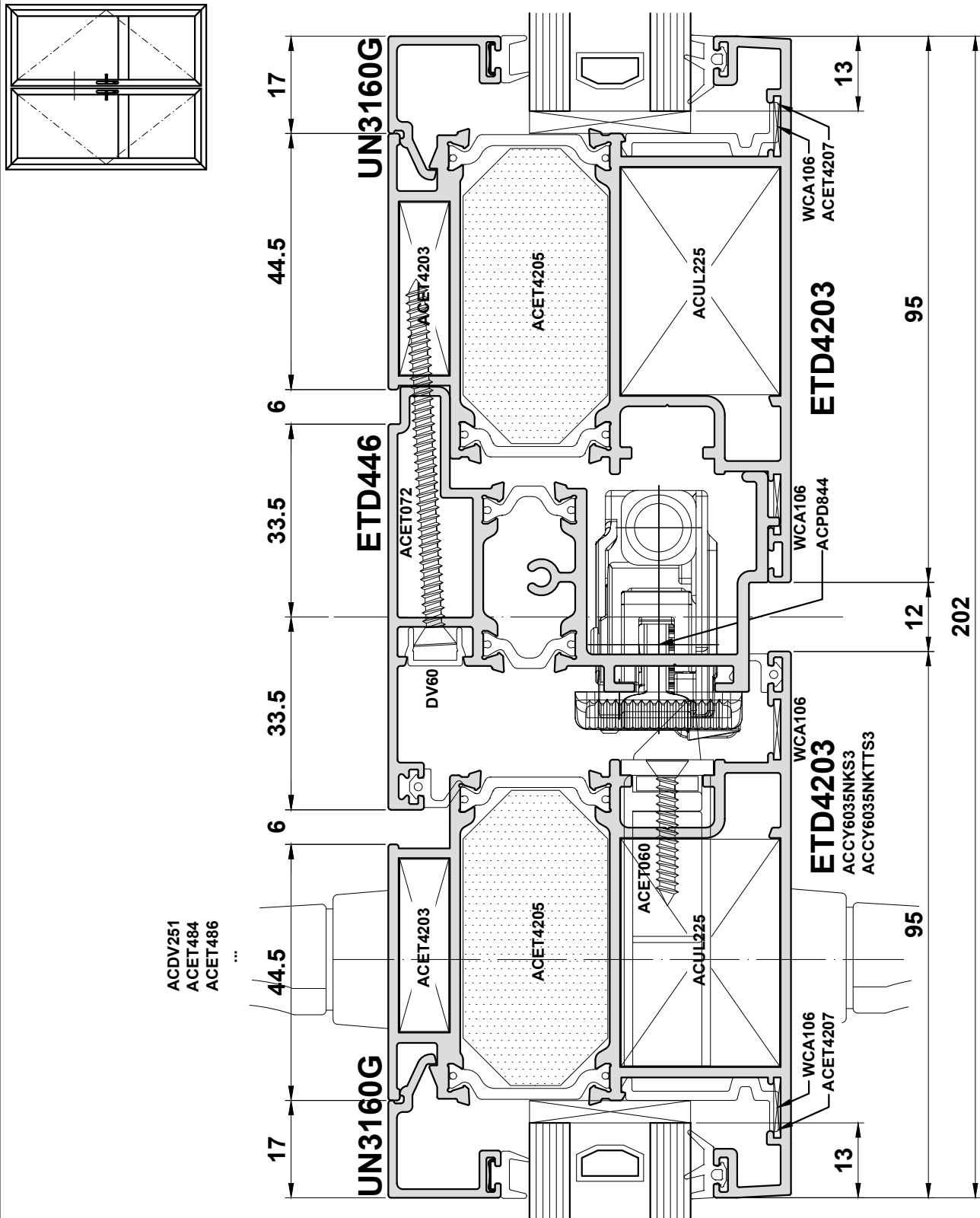
Do Not Scale From This Drawing

Open Out - Detail 12a



Do Not Scale From This Drawing

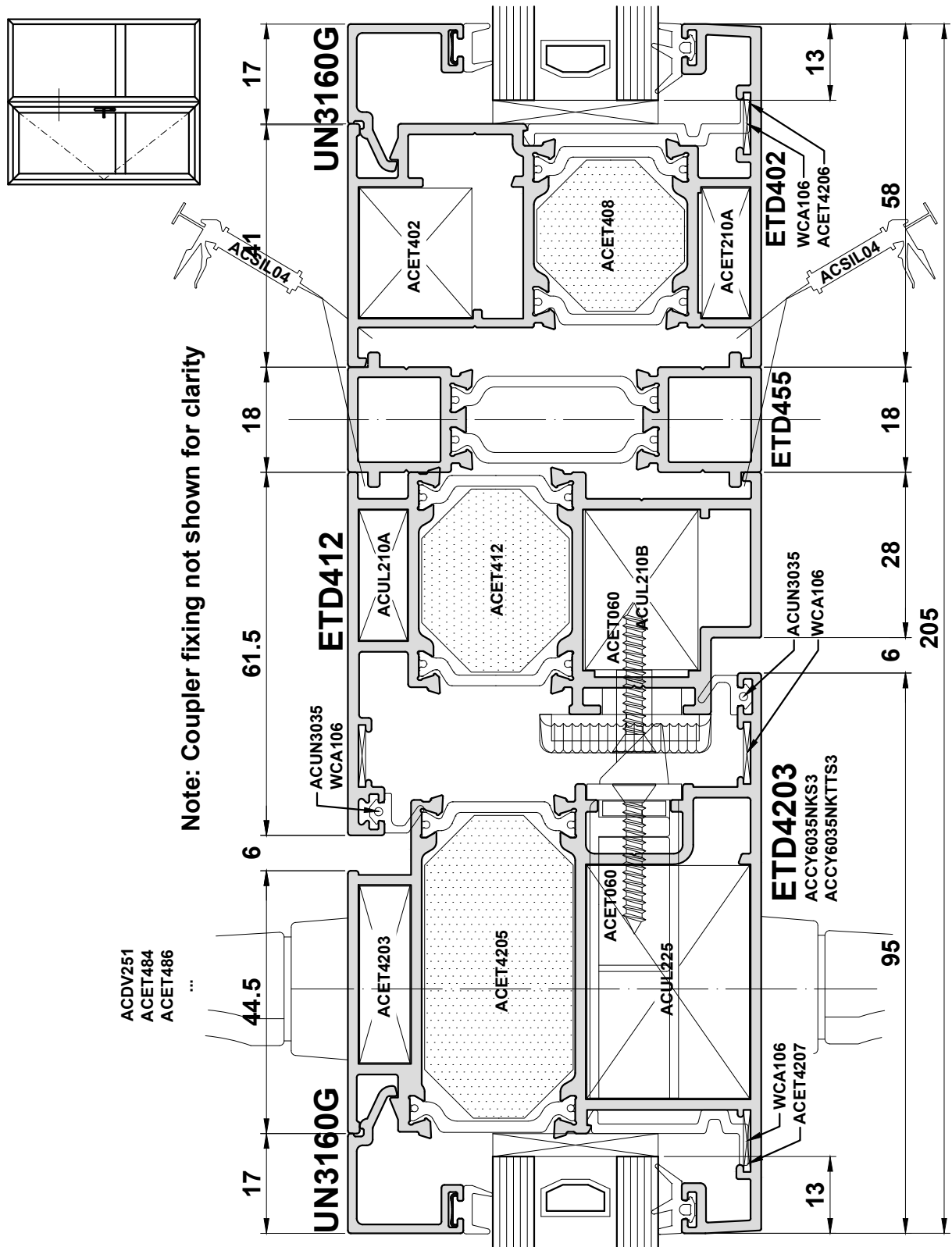
Open Out - Detail 12b



Do Not Scale From This Drawing

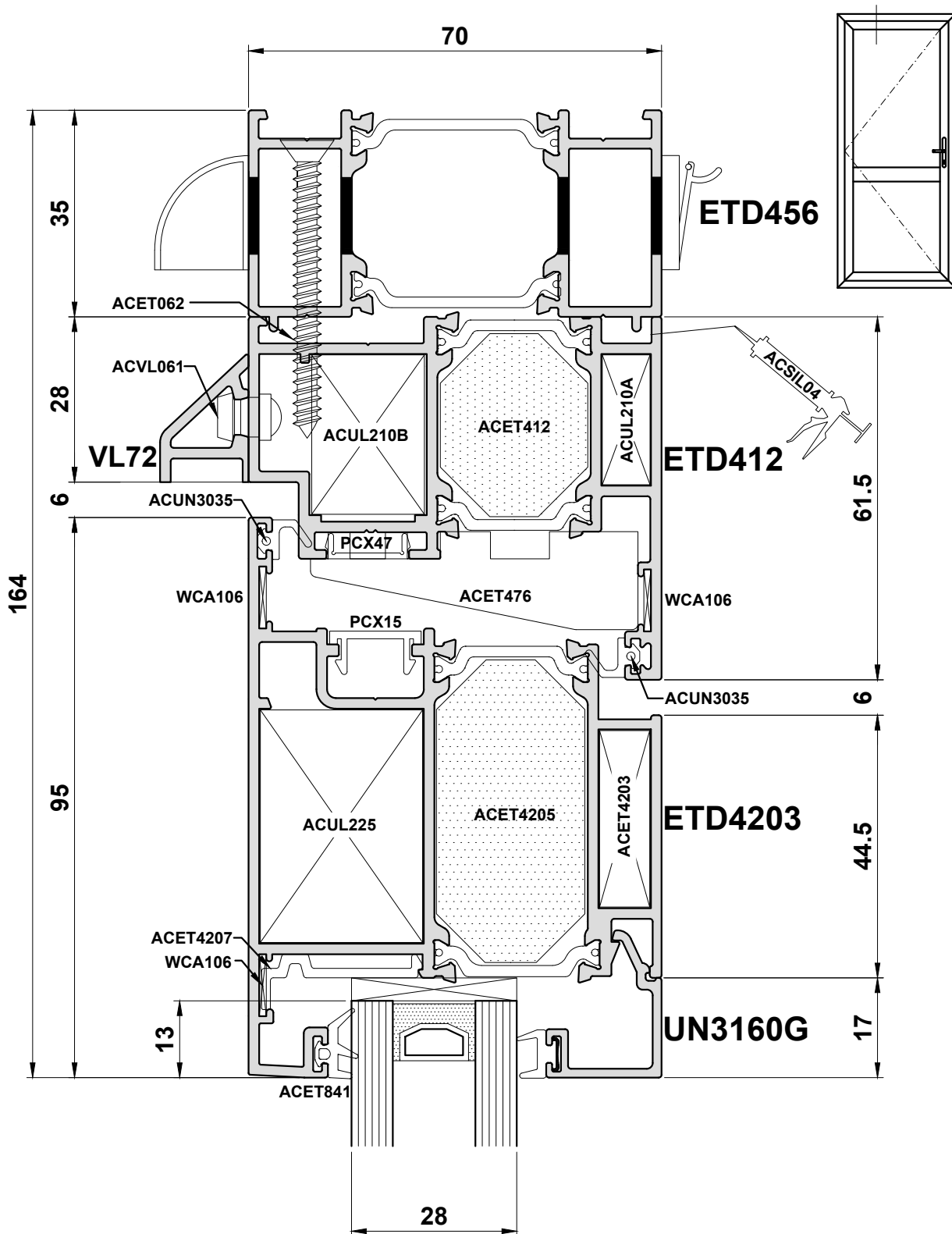
Alitherm 400 Flush Door

Open Out - Detail 13



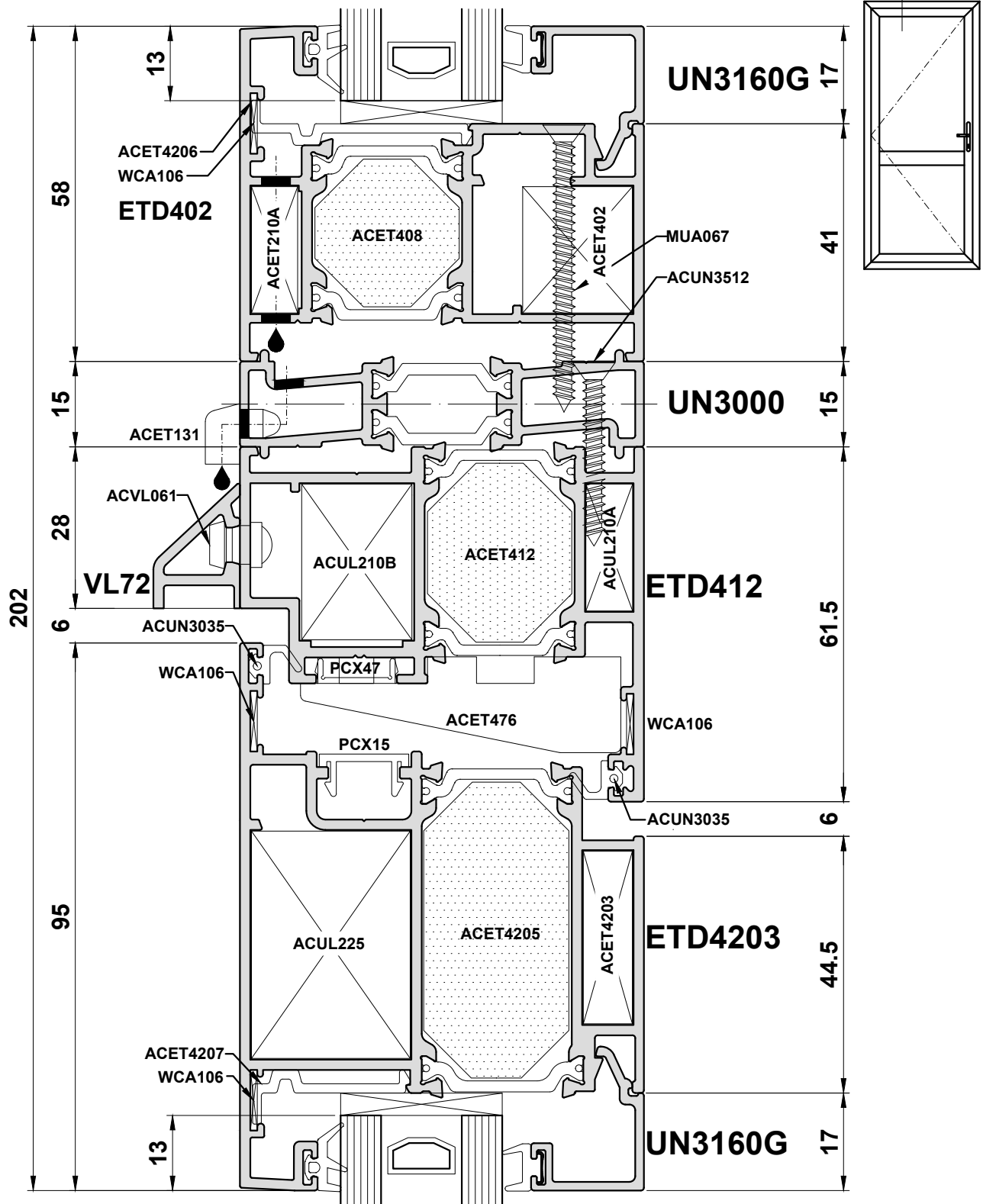
Do Not Scale From This Drawing

Open Out - Detail 14



Do Not Scale From This Drawing

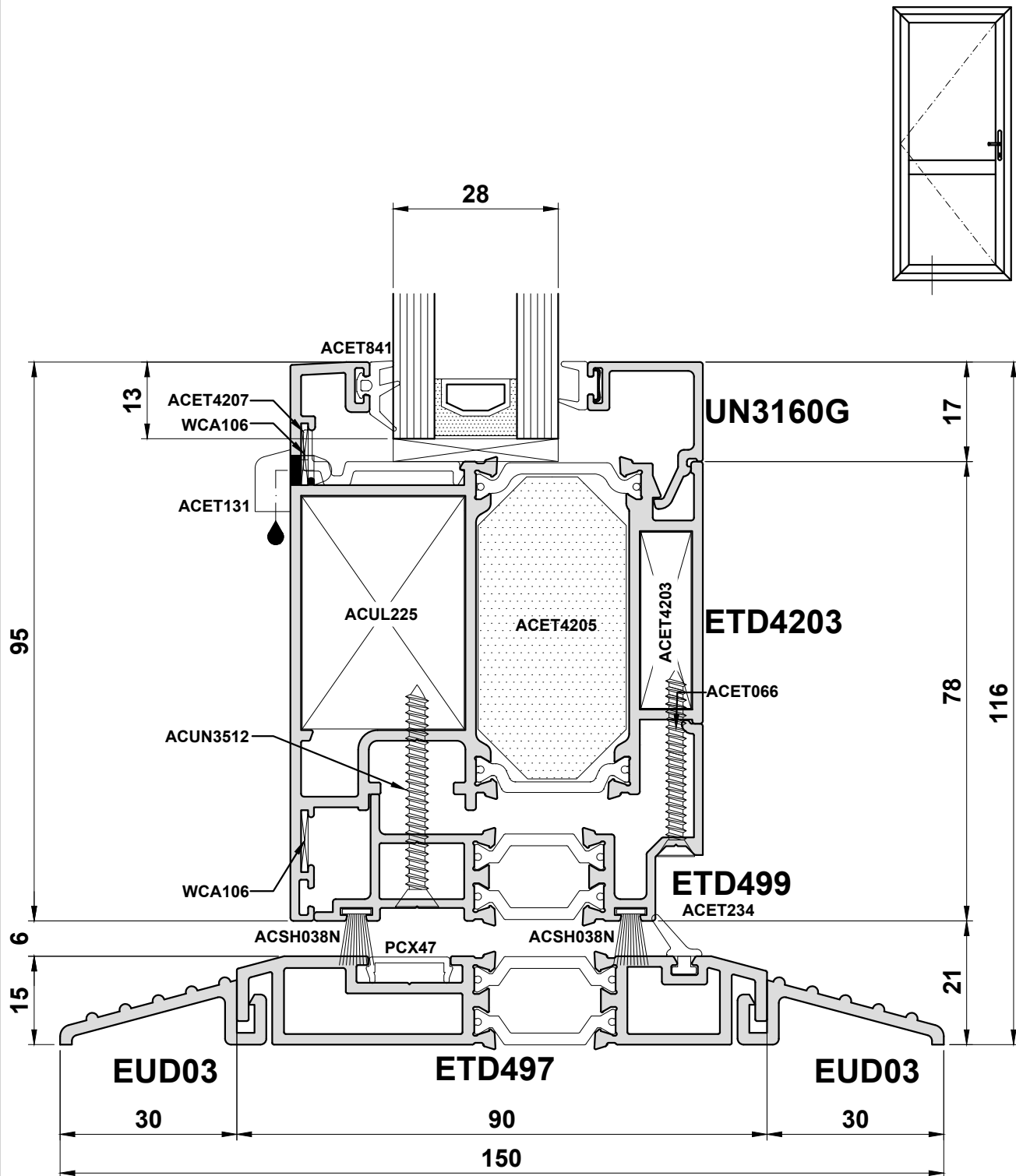
Open Out - Detail 15



Do Not Scale From This Drawing

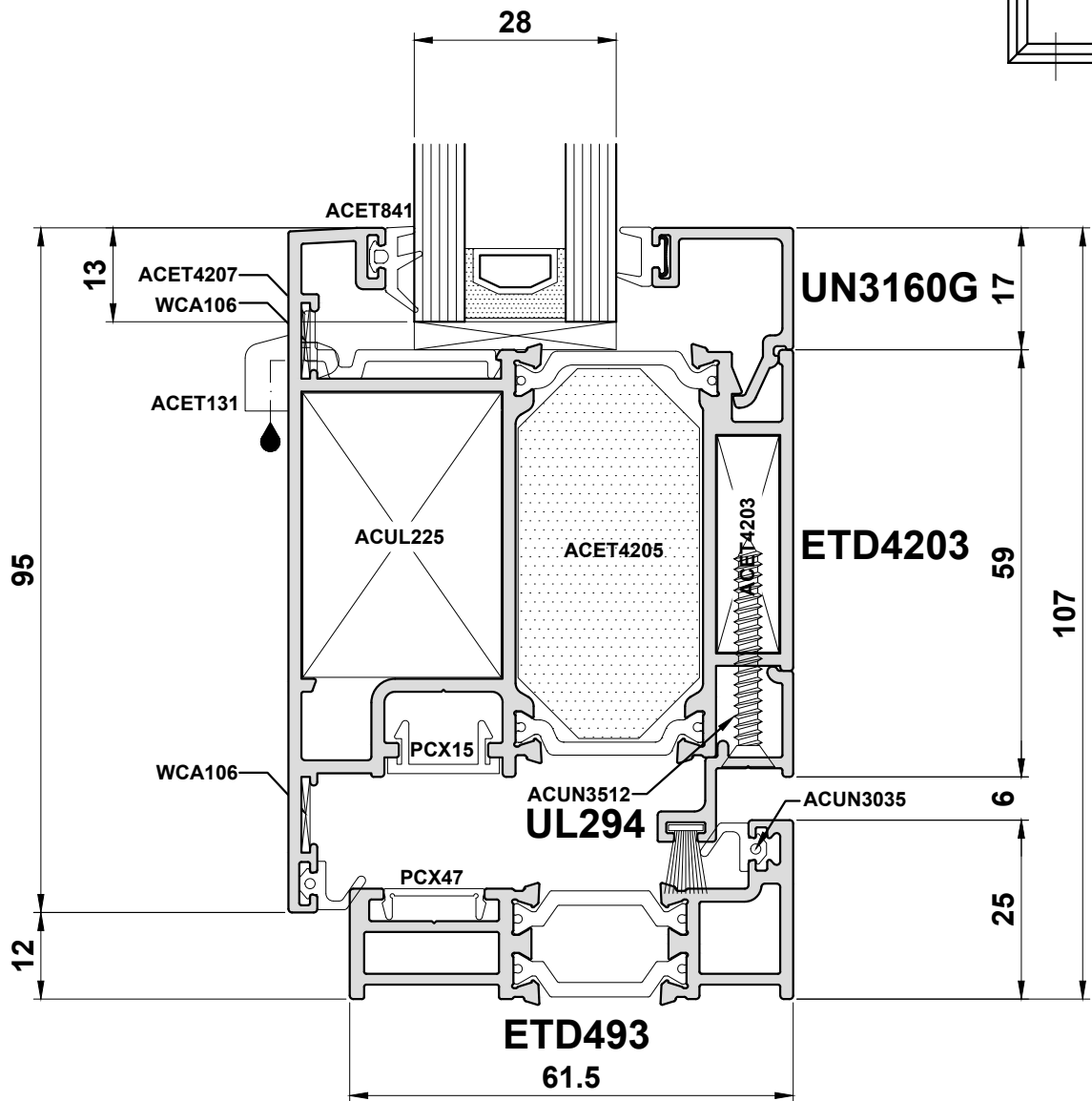
Alitherm 400 Flush Door

Open Out - Detail 16



Do Not Scale From This Drawing

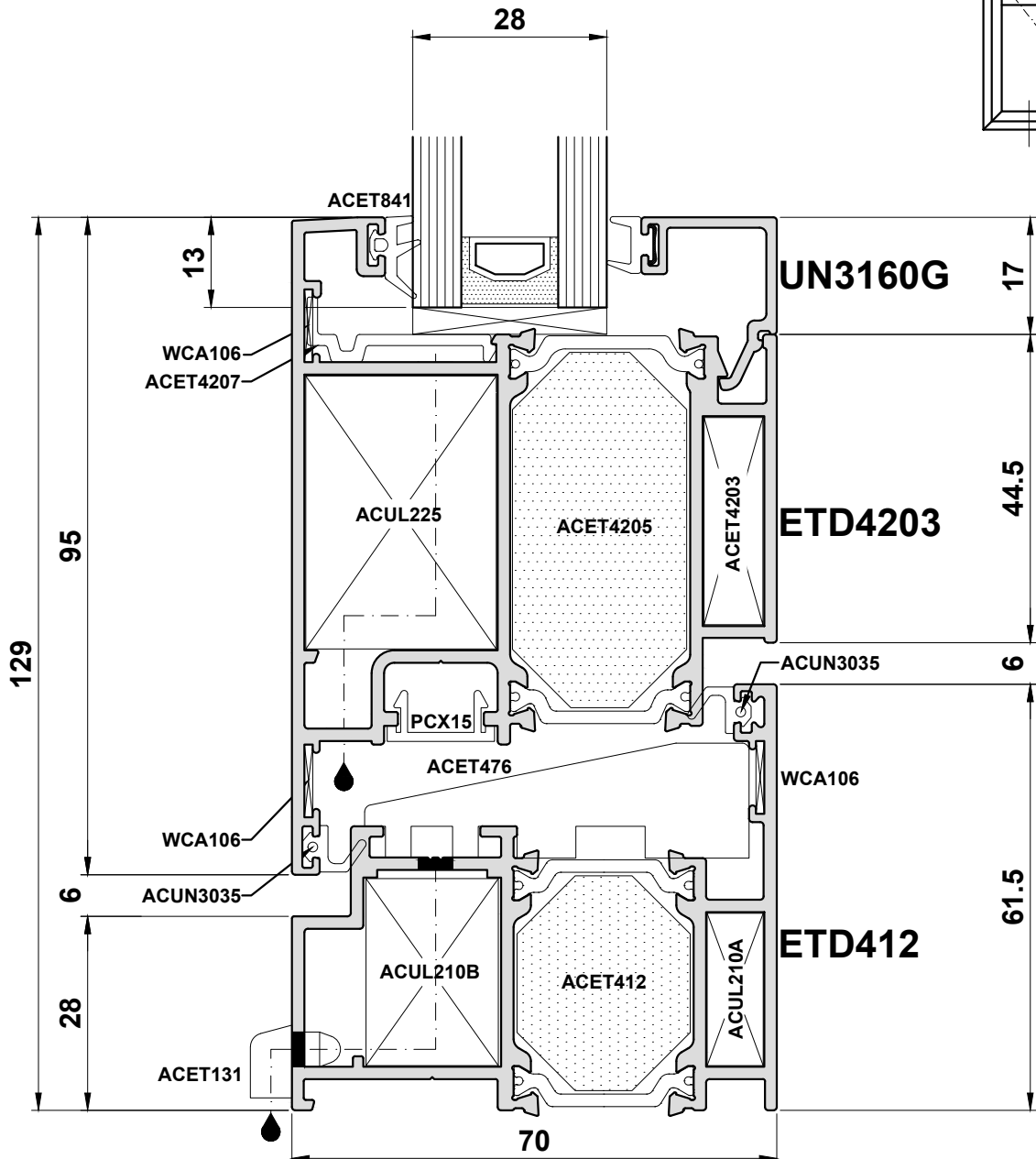
Open Out - Detail 16



Do Not Scale From This Drawing

Alitherm 400 Flush Door

Open Out - Detail 16



Do Not Scale From This Drawing

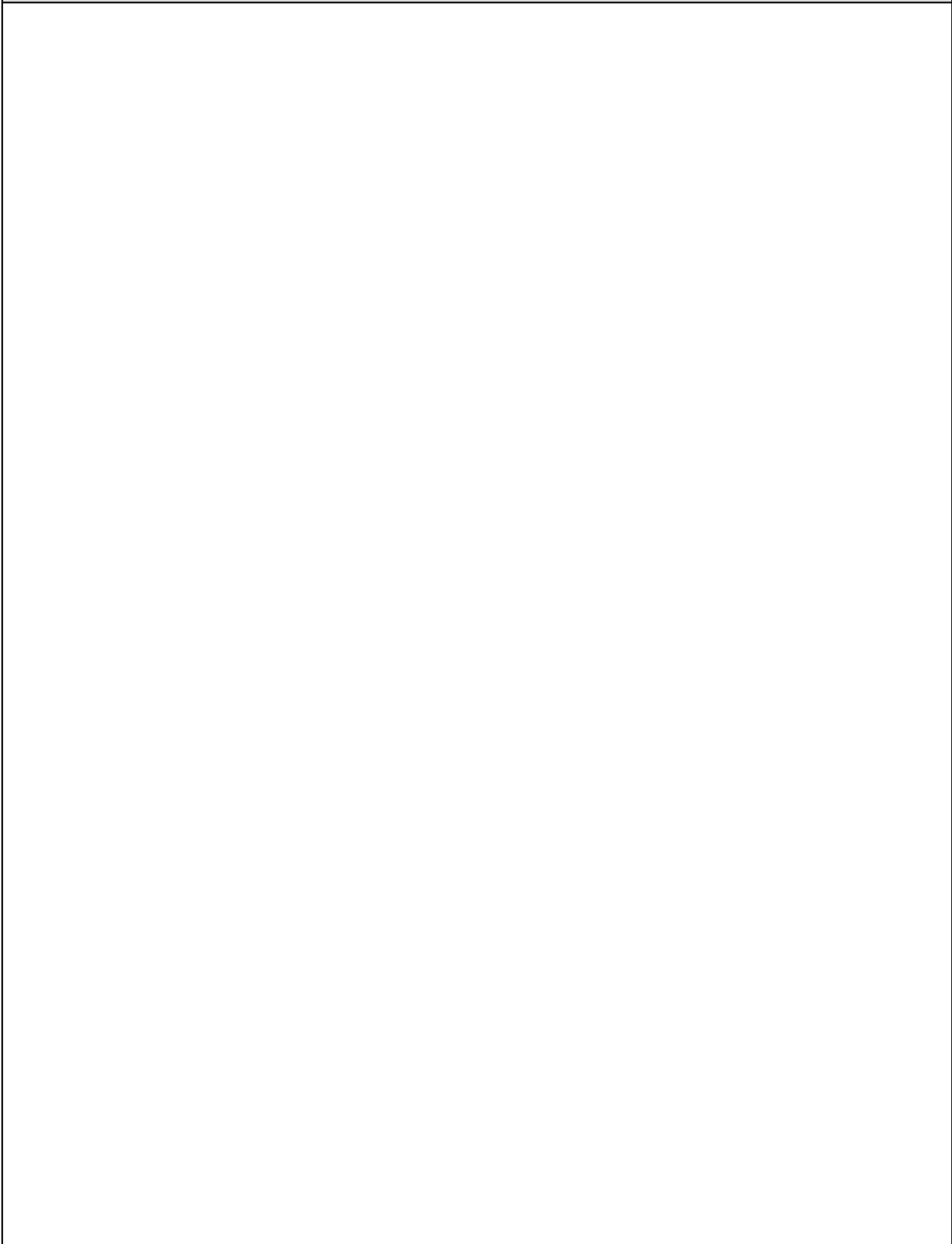
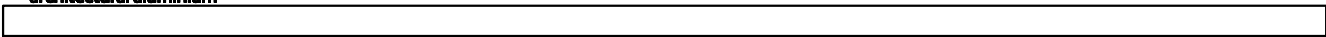
Section D

Statics

Open Out & In

General Size Limitations are shown on Page A02.

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



Section E

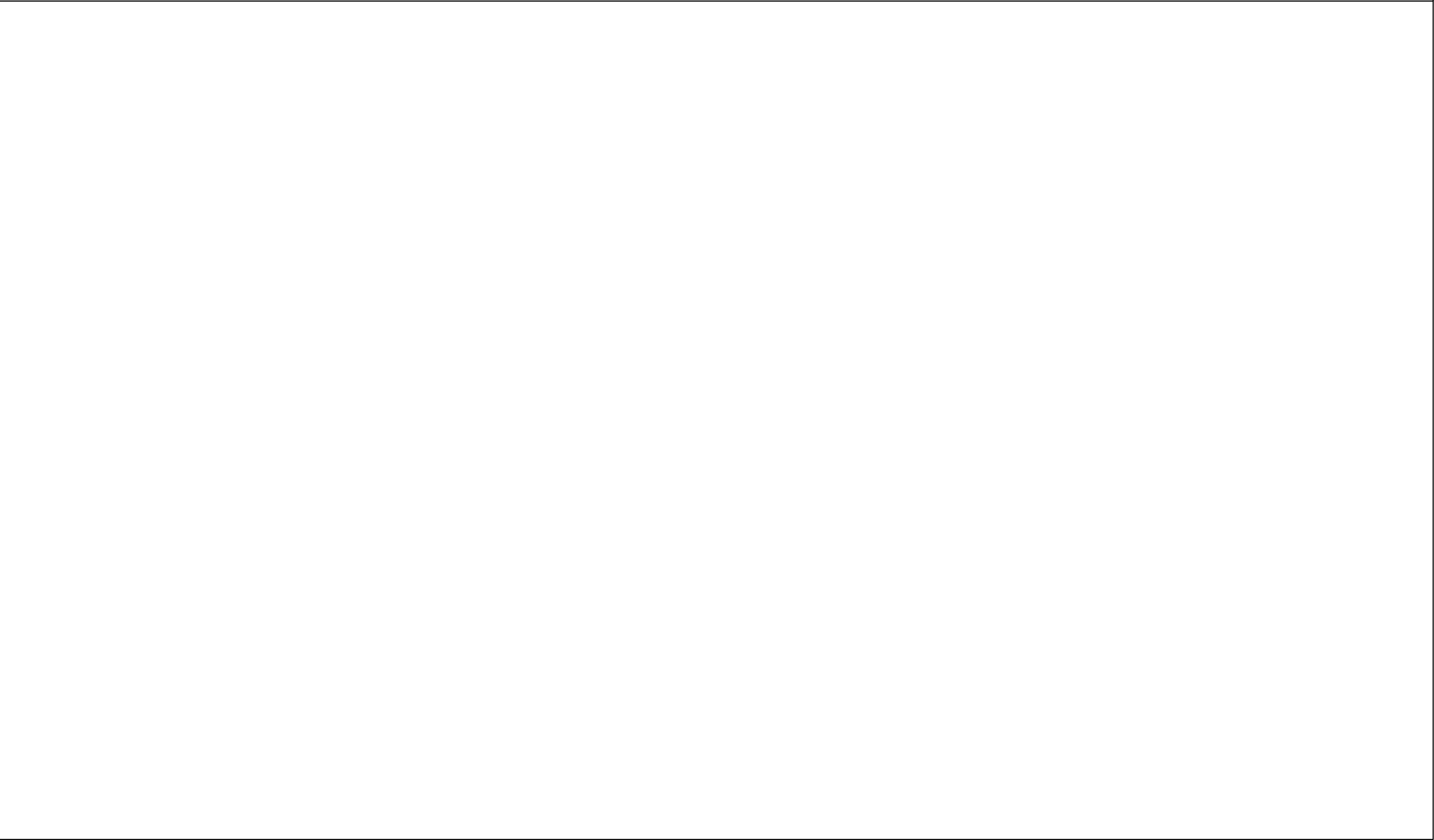


Construction Drawings - Open In

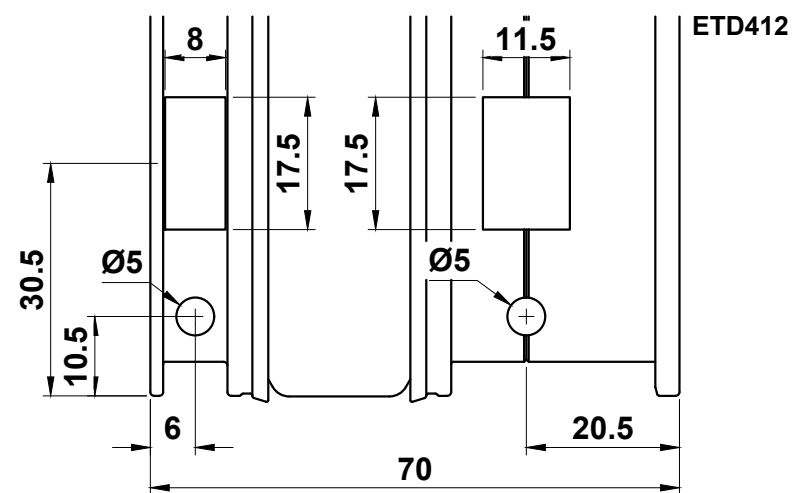
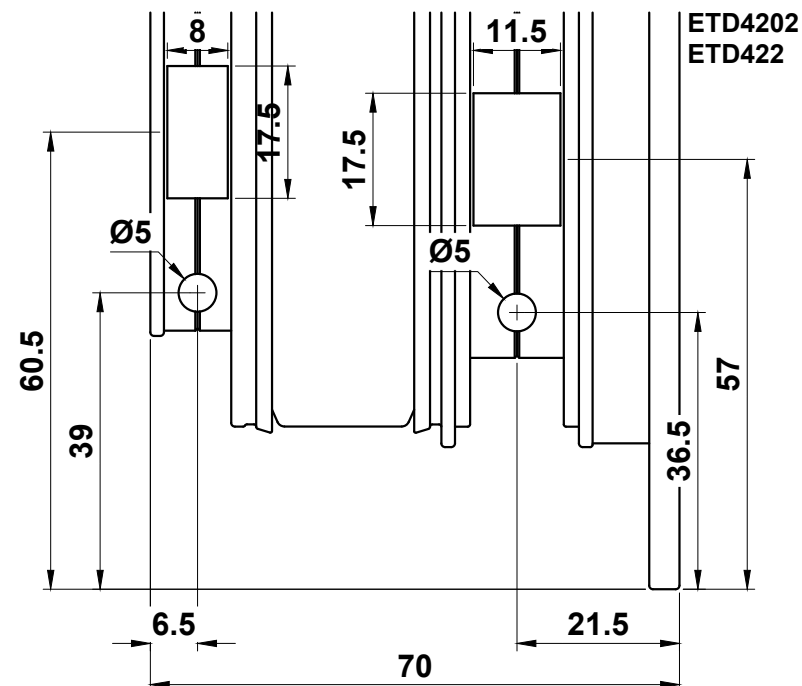
Corner Joint Detail.....	E03
ACUL900 Punch Tool	E04
Low Rebate Threshold Assembly.....	E05
Low Ramp Threshold Assembly.....	E06
Drainage.....	E07
Sub Cill Drainage.....	E08
Standard Bead Transom Assembly.....	E09
Quick-Glaze Bead Transom Assembly.....	E10-E11
Stainless Steel Hardware.....	E12
Panel Door Details.....	E13
ACSM020 & ACSM021 Fitting Detail.....	E14
Door Locking Hardware Options.....	E15
Hinge Preparation.....	E16
Lock Overview of Single and Double Doors.....	E17
Single Door Lock Preparation.....	E18
Lift Lever Shootbolt Layout.....	E19
Lift Lever Full Frame Preparation.....	E20-E21
Lift Lever Low Rebate Preparation.....	E22-E24
Lift Lever Low Ramp Preparation.....	E25-E26
ACUL267 & ACUL268 Lock Preparation.....	E27
Fingerbolt Full Frame Preparation.....	E28-E29
Fingerbolt Low Rebate Preparation.....	E30-E31
Fingerbolt Low Ramp Preparation.....	E32-E33
Letter Plate Fitting.....	E34
Glazing Chart.....	E35-E37
Quick-Glaze Bead.....	E38-E39
Glass Adjuster.....	E40
Fixing Strap Detail.....	E41
Example Layout.....	E42
Restrictor Fitting.....	E43
Trickle Vent.....	E44

Construction Drawings - Open Out

Corner Joint Detail.....	E47
ACUL900 Punch Tool	E48
Low Rebate Threshold Assembly.....	E49
Low Ramp Threshold Assembly.....	E50
Drainage.....	E51
Sub Cill Drainage.....	E52
Quick-Glaze Bead Transom Assembly.....	E53
Stainless Steel Hardware.....	E54
Door Locking Hardware Options.....	E55
Hinge Preparation.....	E56
Lock Overview of Single and Double Doors.....	E57
Single Door Lock Preparation.....	E58
Lift Lever Shootbolt Layout.....	E59
Lift Lever Full Frame Preparation.....	E60-E61
Lift Lever Low Rebate Preparation.....	E62-E63
Lift Lever Low Ramp Preparation.....	E64-E65
ACUL267 & ACUL268 Lock Preparation.....	E66
Fingerbolt Full Frame Preparation.....	E67-E68
Fingerbolt Low Rebate Preparation.....	E69-E70
Fingerbolt Low Ramp Preparation.....	E71-E72
Letter Plate Fitting.....	E73
Glazing Chart.....	E74-E75
Quick-Glaze Bead.....	E76-E77
Glass Adjuster.....	E78
Fixing Strap Detail.....	E79
Example Layout.....	E80
Restrictor Fitting.....	E81
Trickle Vent.....	E82

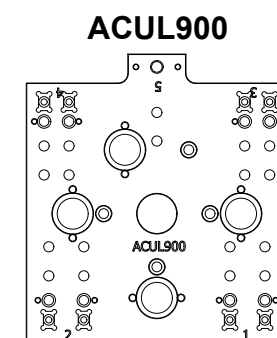
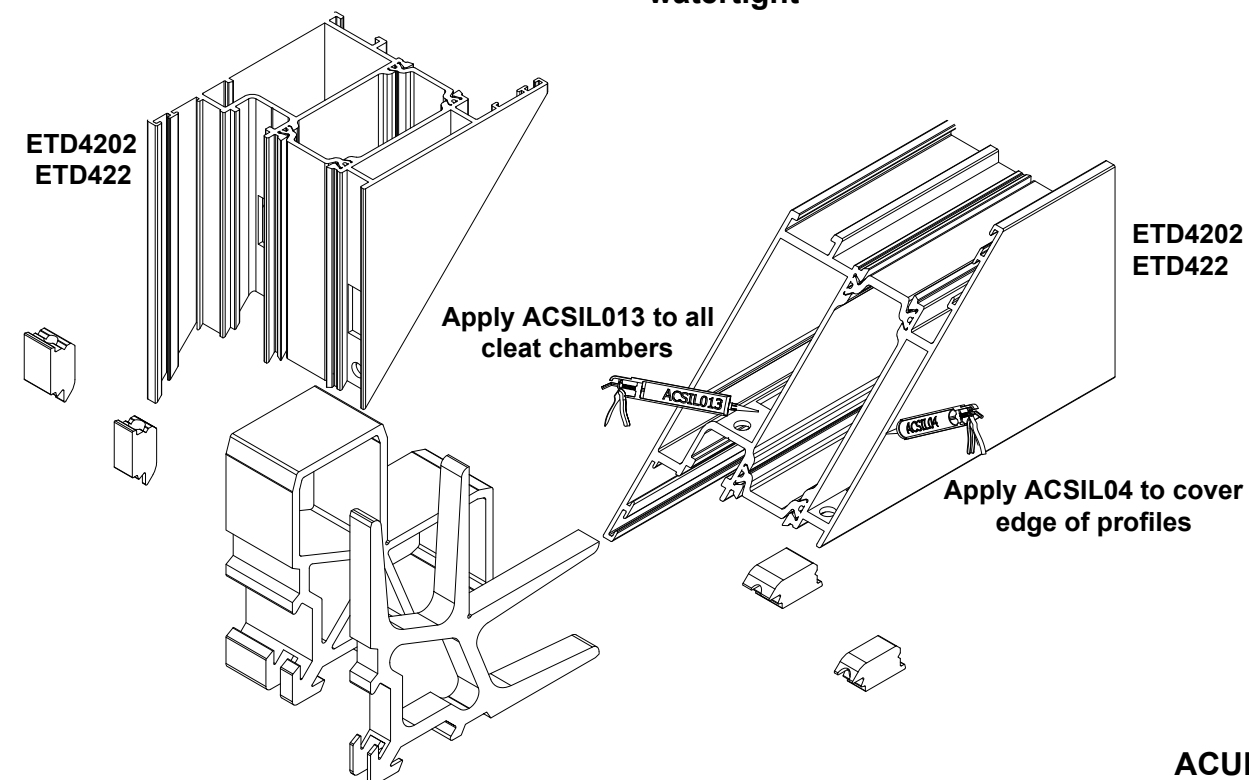


Corner Joint Details



Notes

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



To ensure accurate corners, we recommend the use of support blocks (by others) whilst cutting.

Do Not Scale From This Drawing

ACUL900

Station 3 & 4

Station 3 & 4 Profiles

- ETD412
- ETD404
- ETD402

Station 1 & 2

Station 1&2 Profiles

- ETD4203
- ETD422
- ETD4202

Station 5

Station 5 Profiles

- ETD412

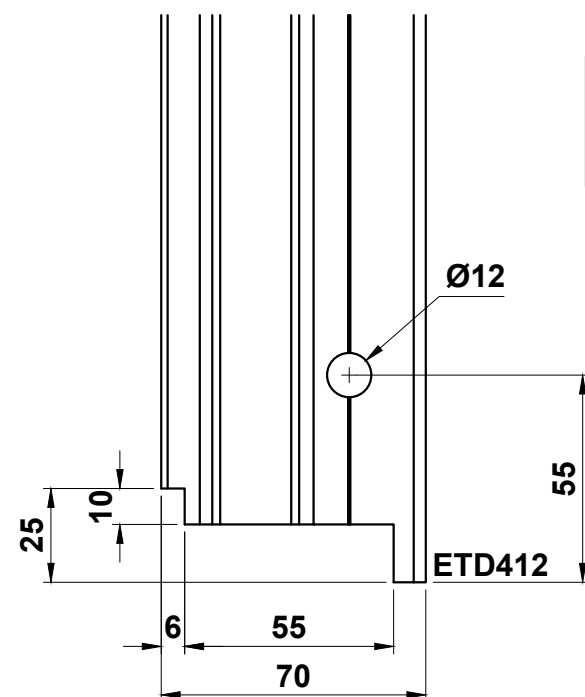
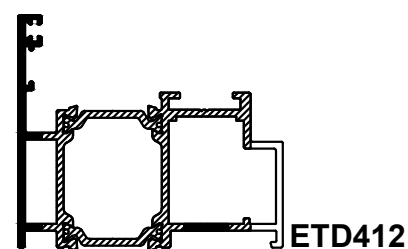
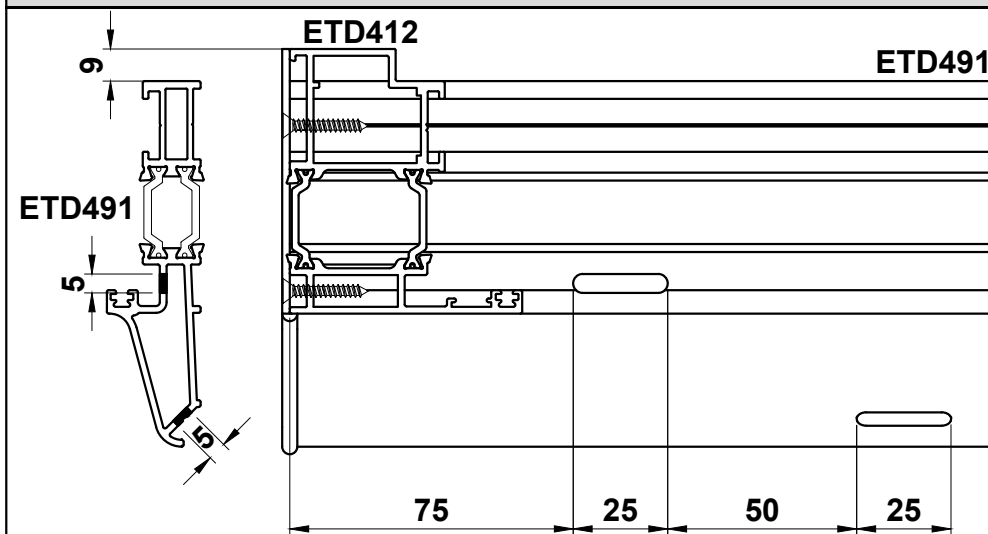
IMPORTANT NOTE:
Please do not overtighten retaining nut to punch tool base.
Use support stands for longer lengths of profiles.

Station 5 Cross-Section Details:

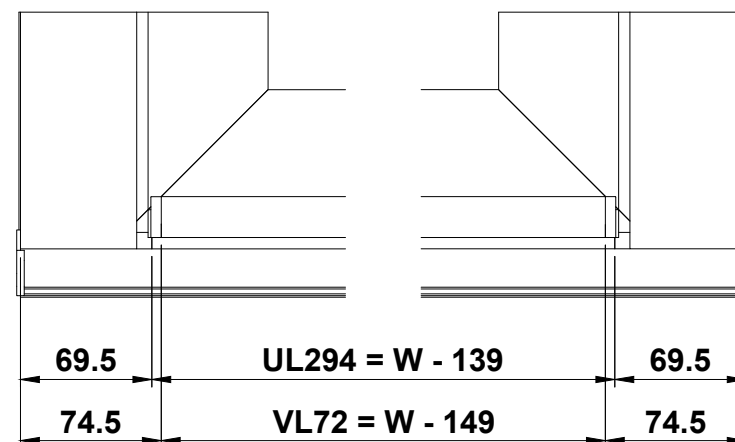
- Top flange width: 2
- Top flange thickness: 2
- Top flange hole diameter: $\varnothing 5$
- Top flange hole offset: 5
- Top flange hole diameter: $\varnothing 11$
- Top flange hole offset: 9
- Top flange hole diameter: $\varnothing 5$
- Top flange hole offset: 5
- Top flange hole diameter: $\varnothing 11$
- Top flange hole offset: 9
- Top flange hole diameter: $\varnothing 5$
- Top flange hole offset: 5

PAGE **E04** ISSUED: JULY 2024

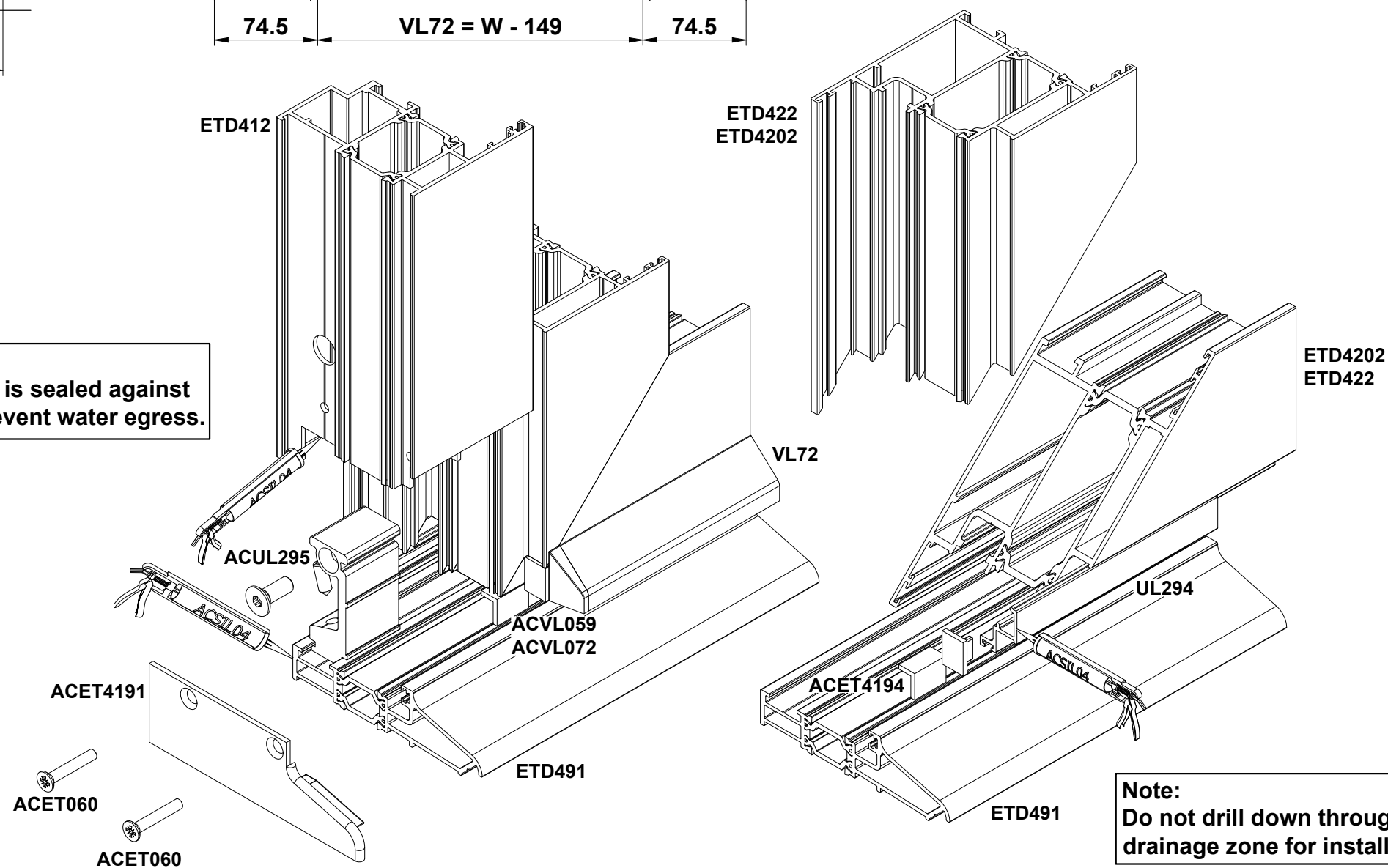
Flush Low Rebate Threshold Assembly



Important Note:
Ensure end cap is sealed against threshold to prevent water egress.



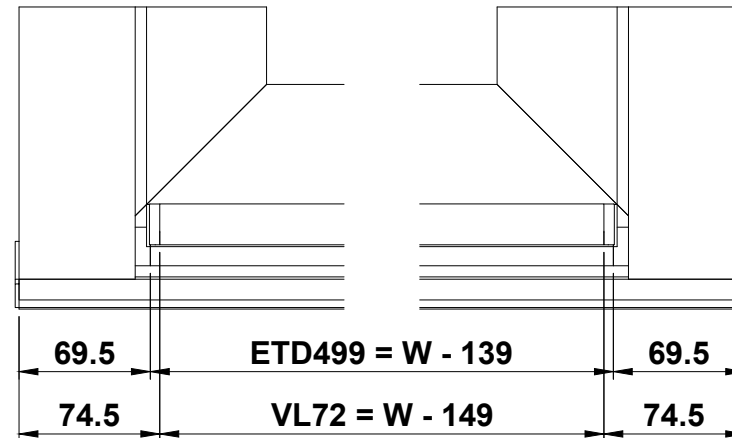
Important Note: All exposed aluminium should be coated using ACSIL014 or painted to match the frame.



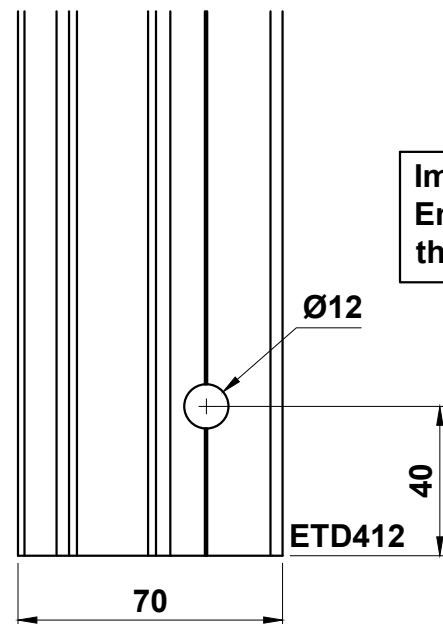
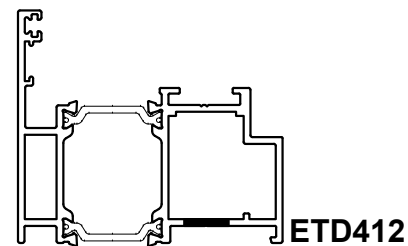
Note:
Do not drill down through
drainage zone for installation.

Do Not Scale From This Drawing

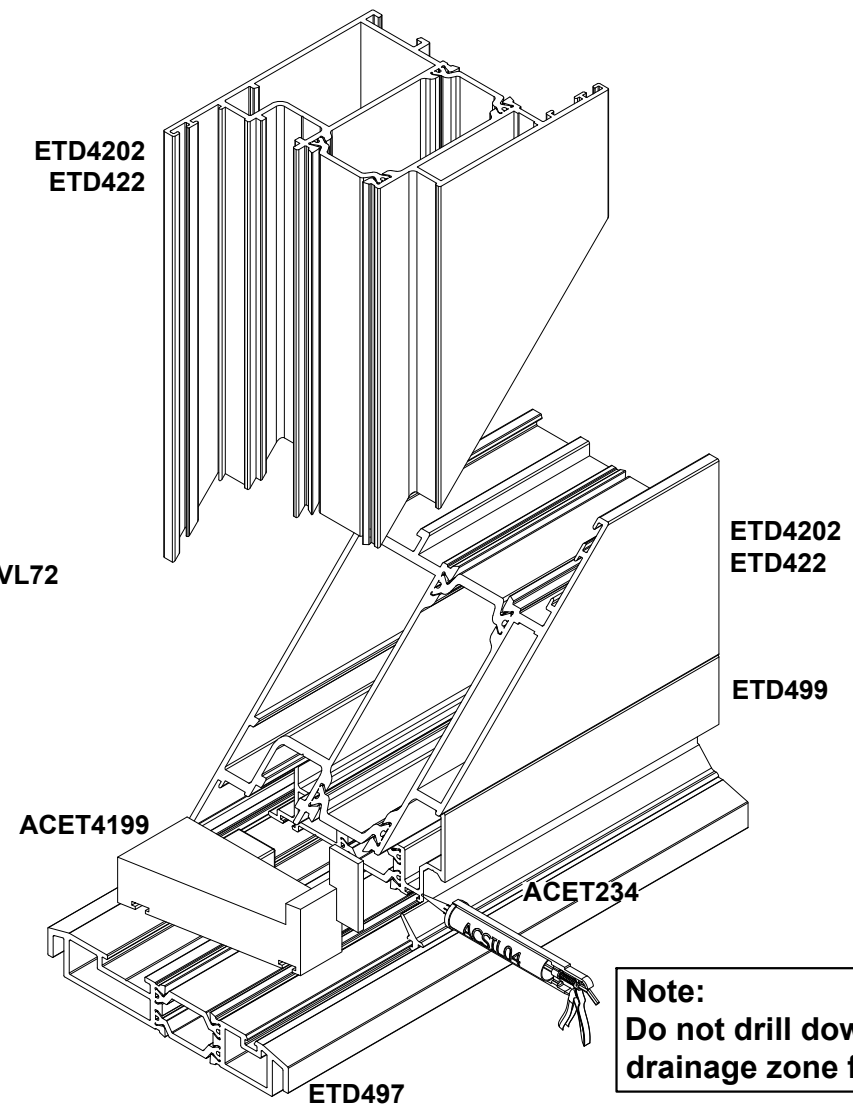
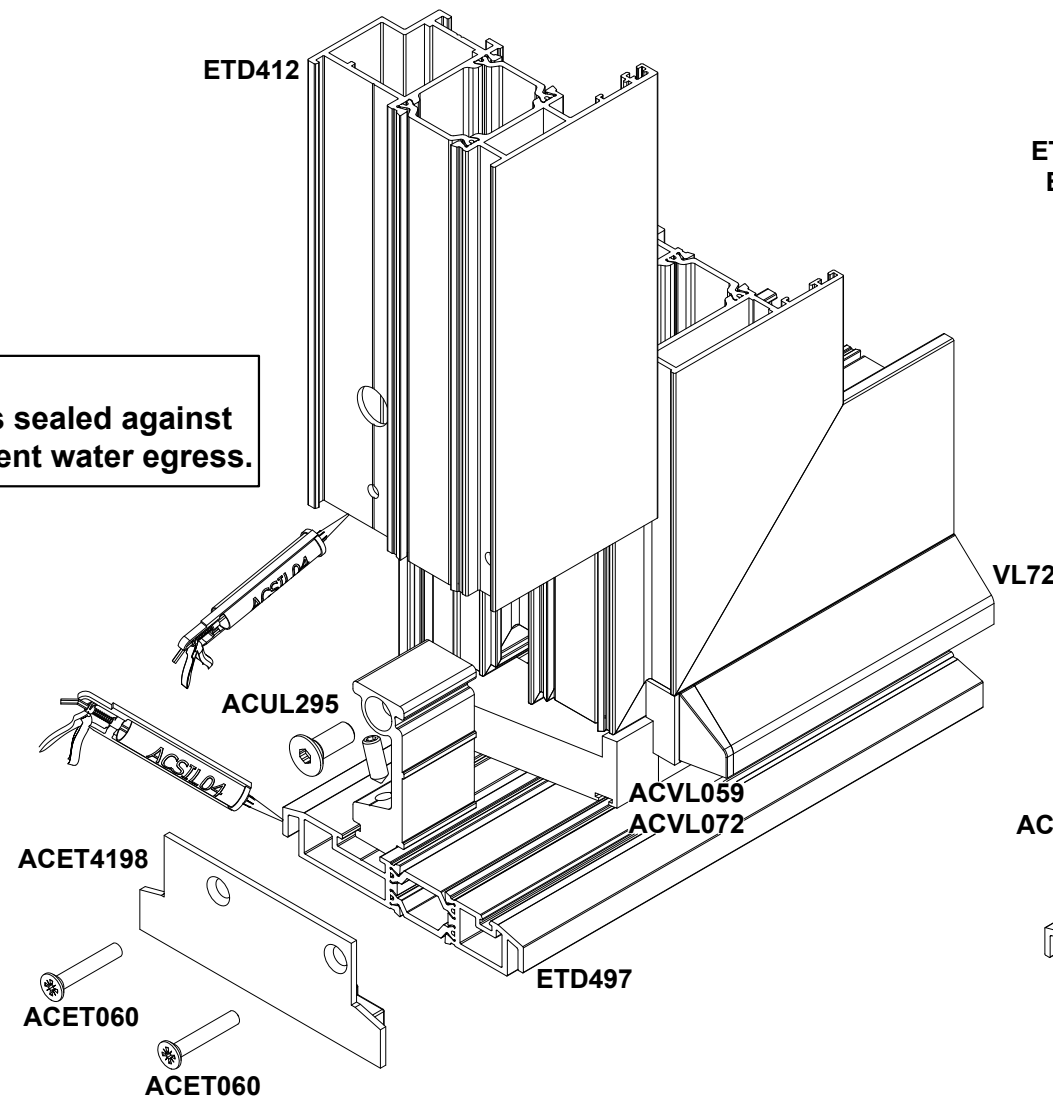
Flush Low Ramp Threshold Assembly



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



Important Note: Ensure end cap is sealed against threshold to prevent water egress.

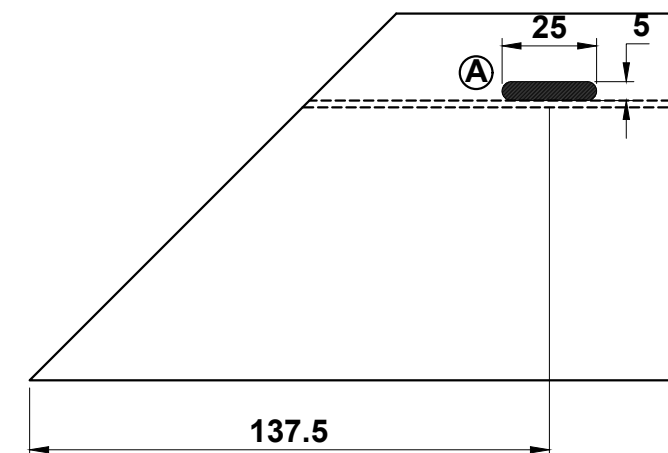
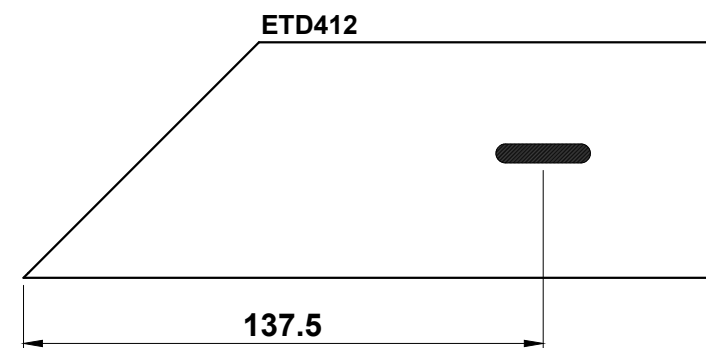
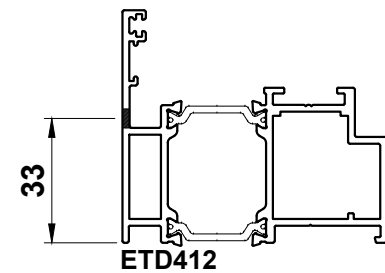
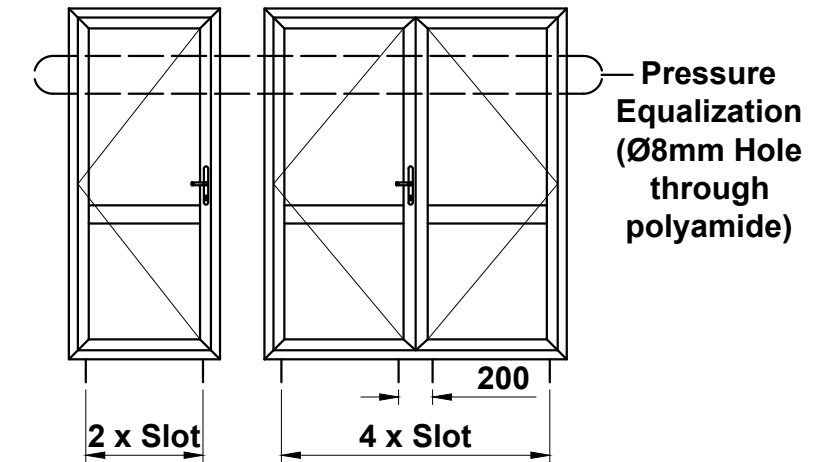
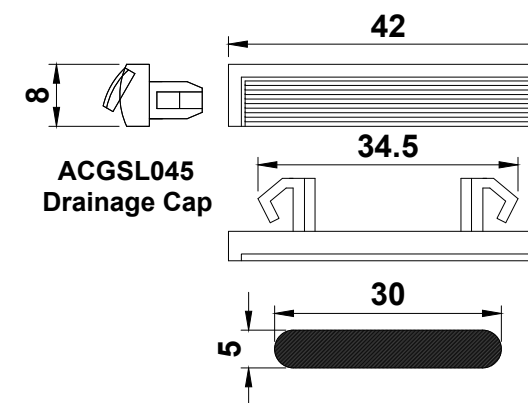
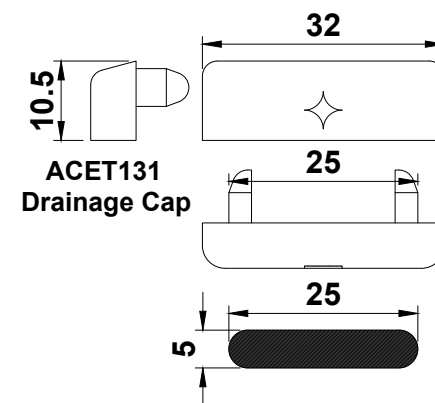


Note: Do not drill down through drainage zone for installation.

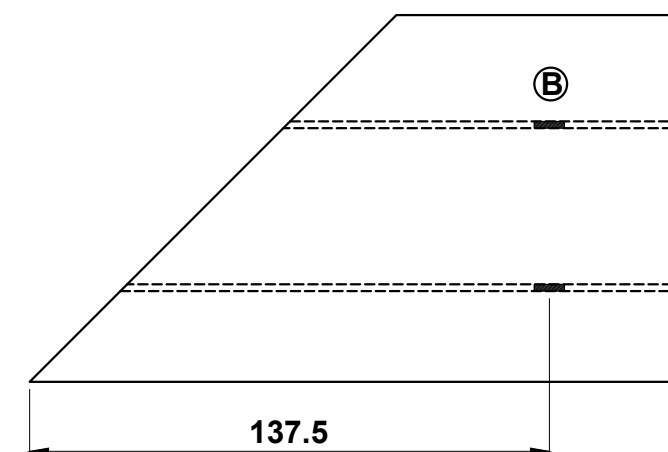
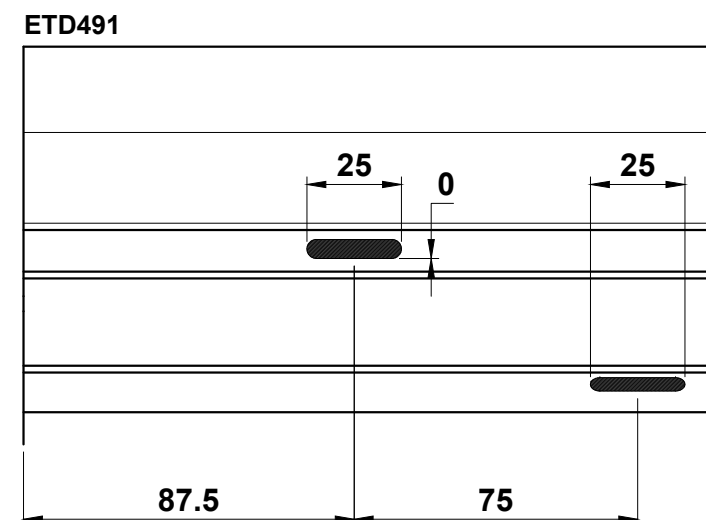
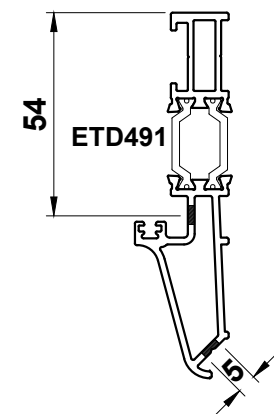
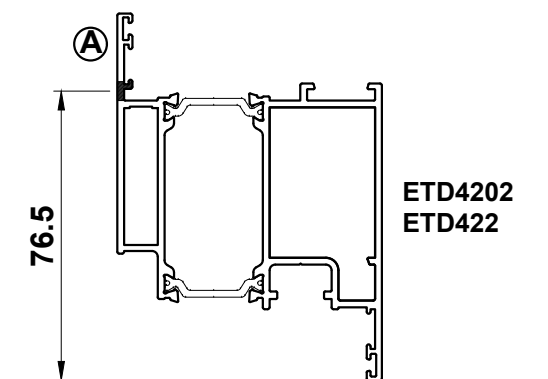
Do Not Scale From This Drawing

Flush Drainage

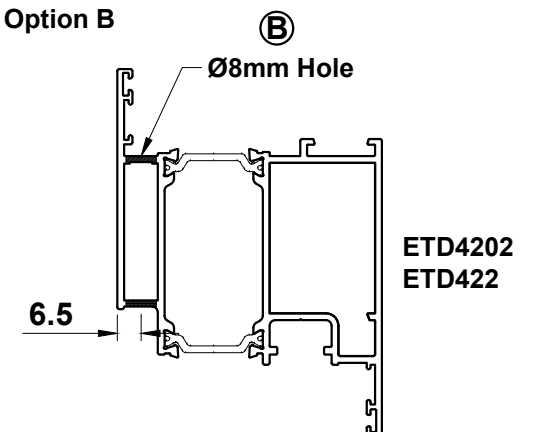
Important Note: All exposed aluminium should be coated using ACSIL014 or painted to match the frame.



Option A



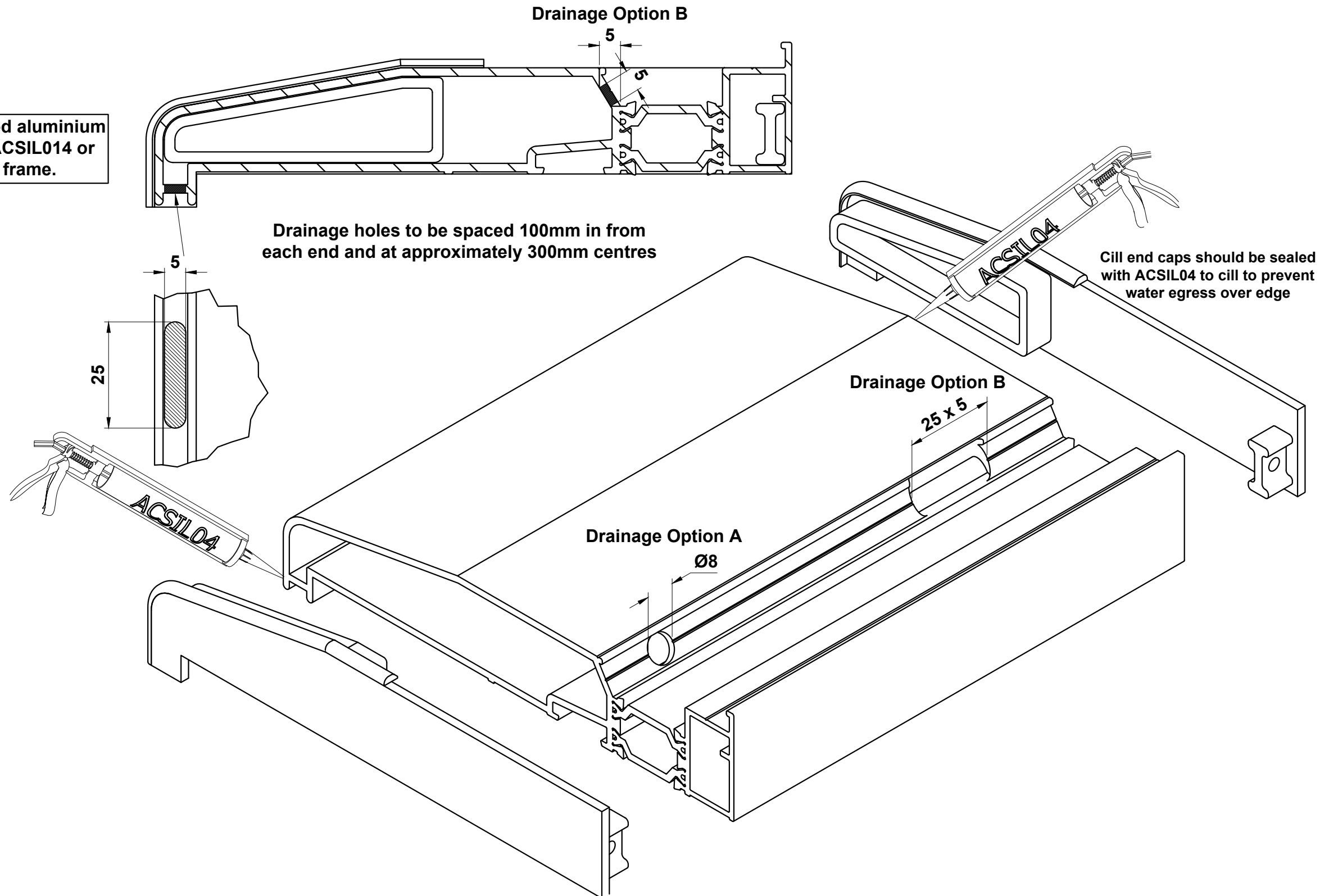
Option B



Do Not Scale From This Drawing

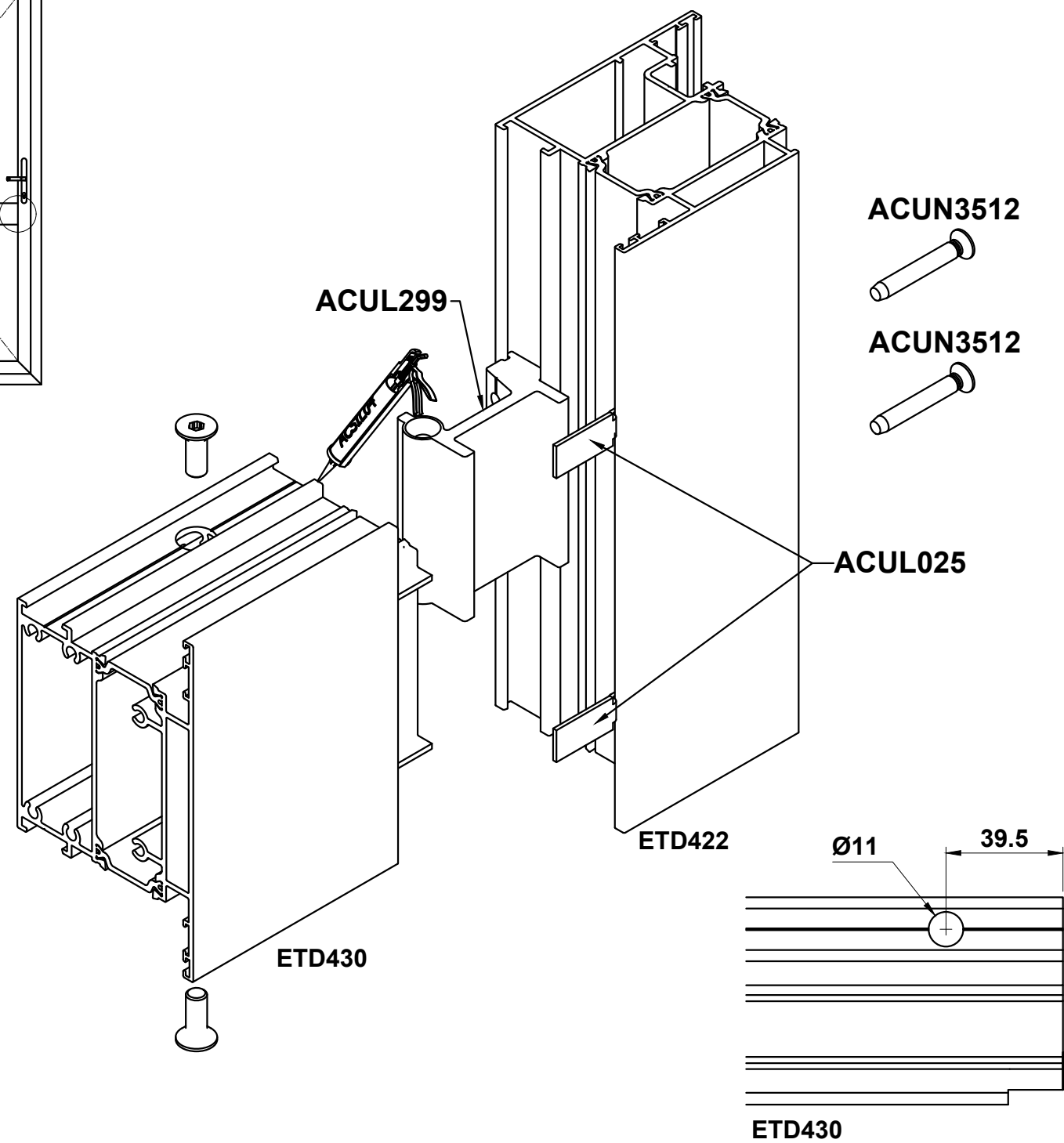
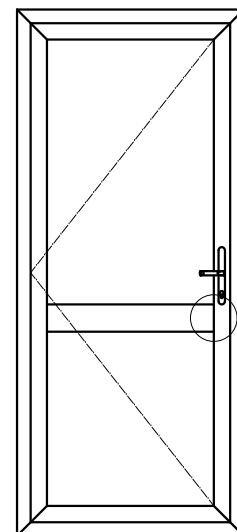
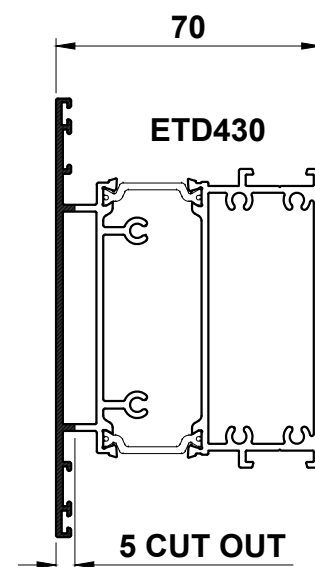
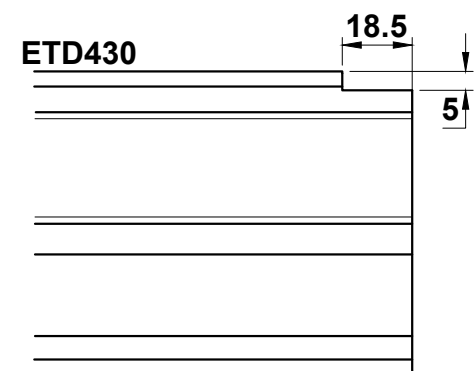
Sub Cill Drainage

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

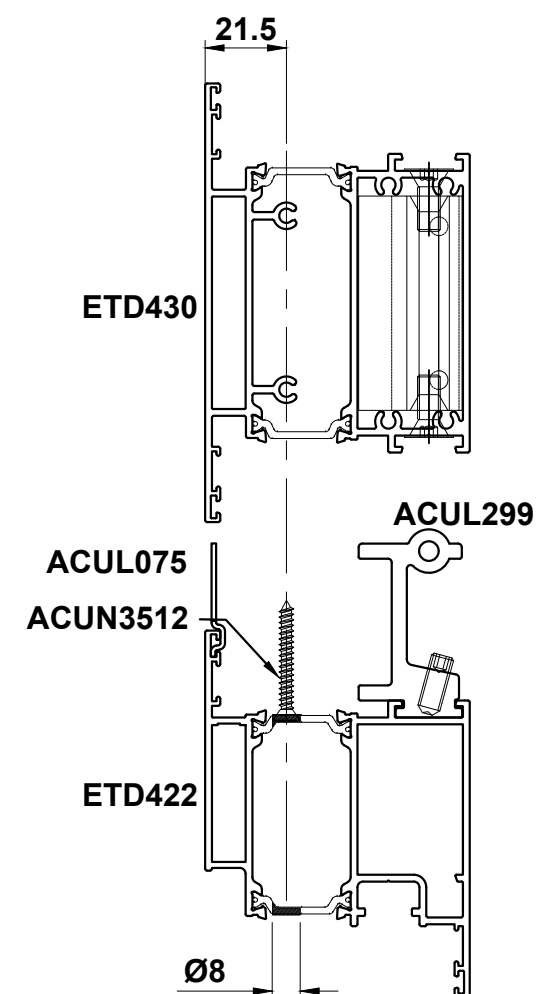


Do Not Scale From This Drawing

ETD430 & ETD422 Transom Assembly

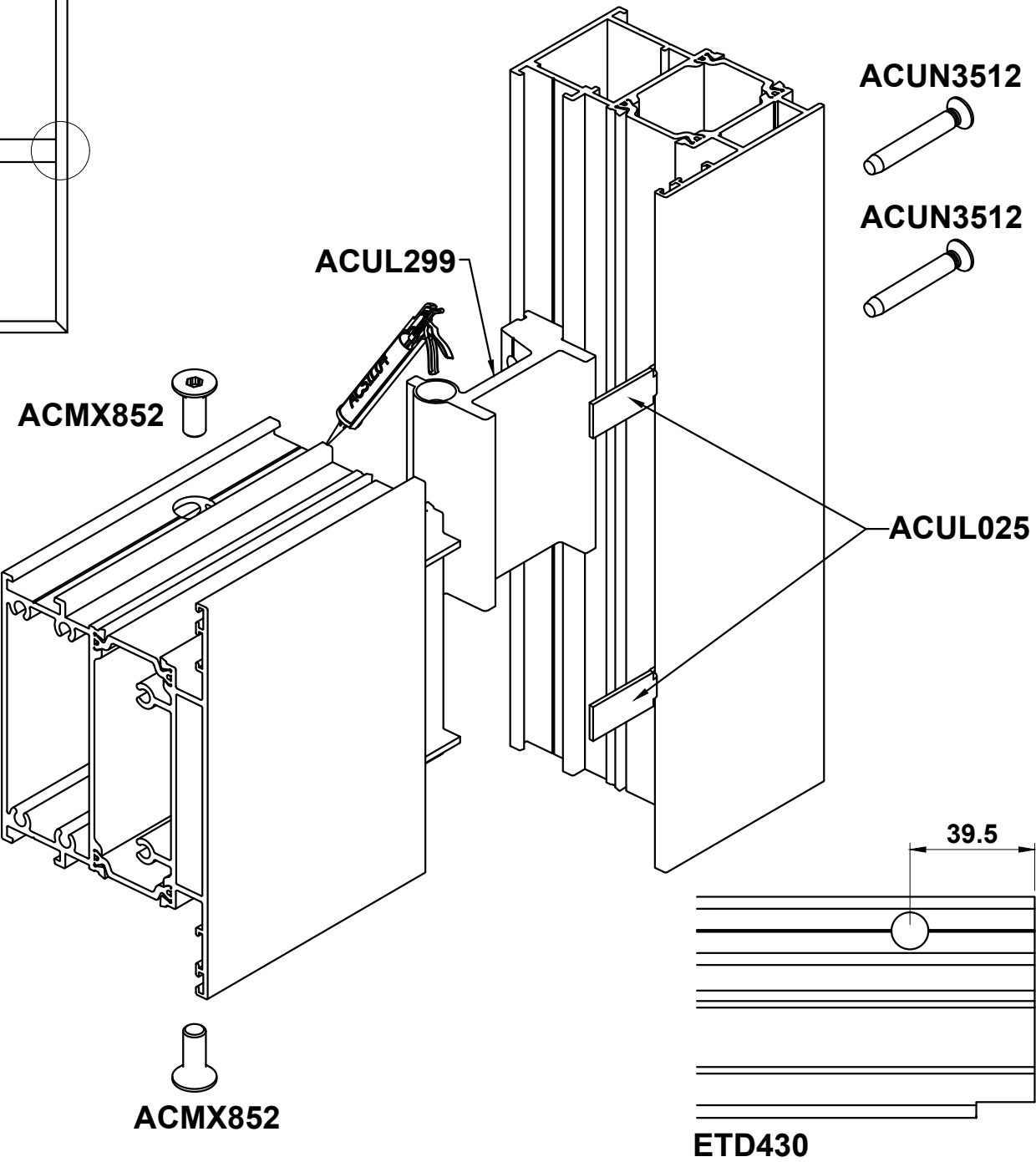
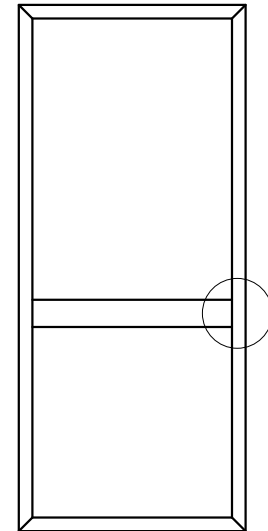
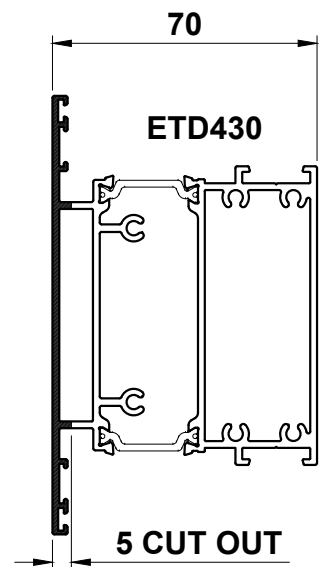
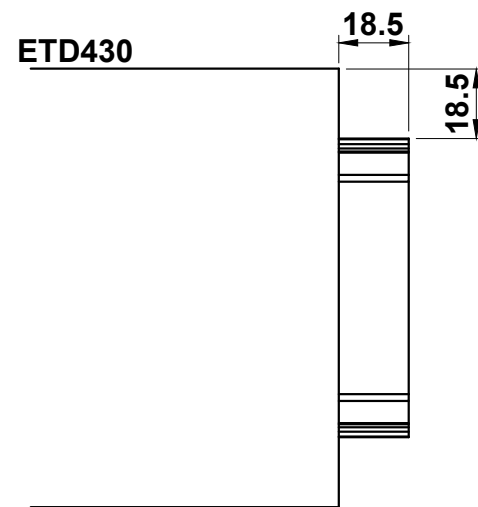
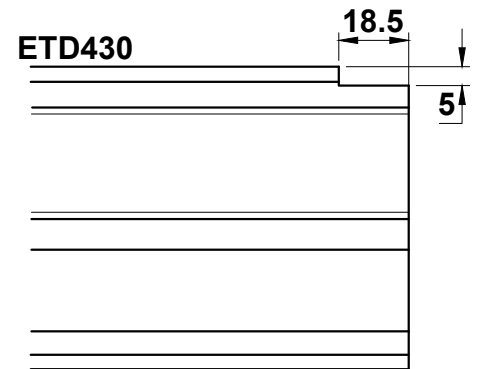


Note: 4 X ACUN3512 can be used to replace ACUL299.

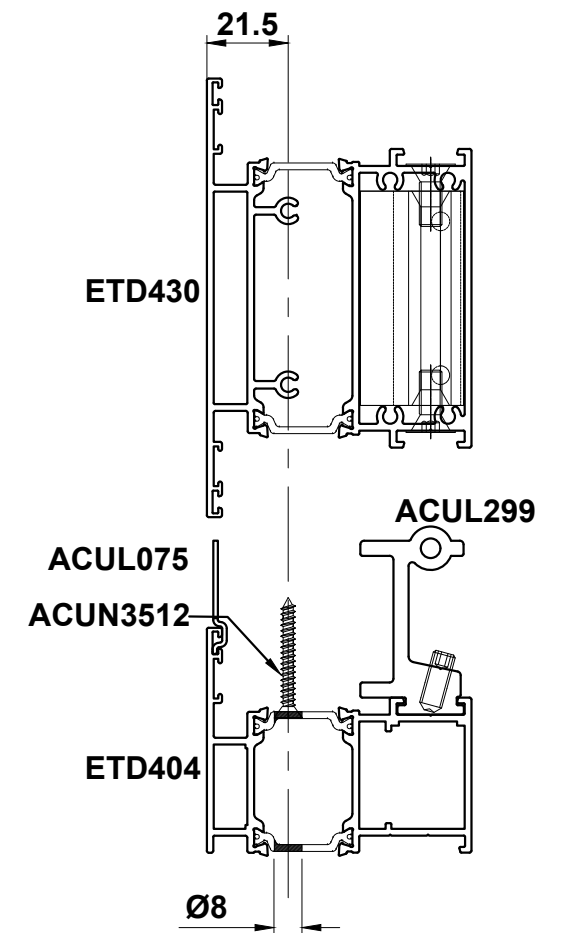


Do Not Scale From This Drawing

ETD430 & ETD404 Transom Assembly

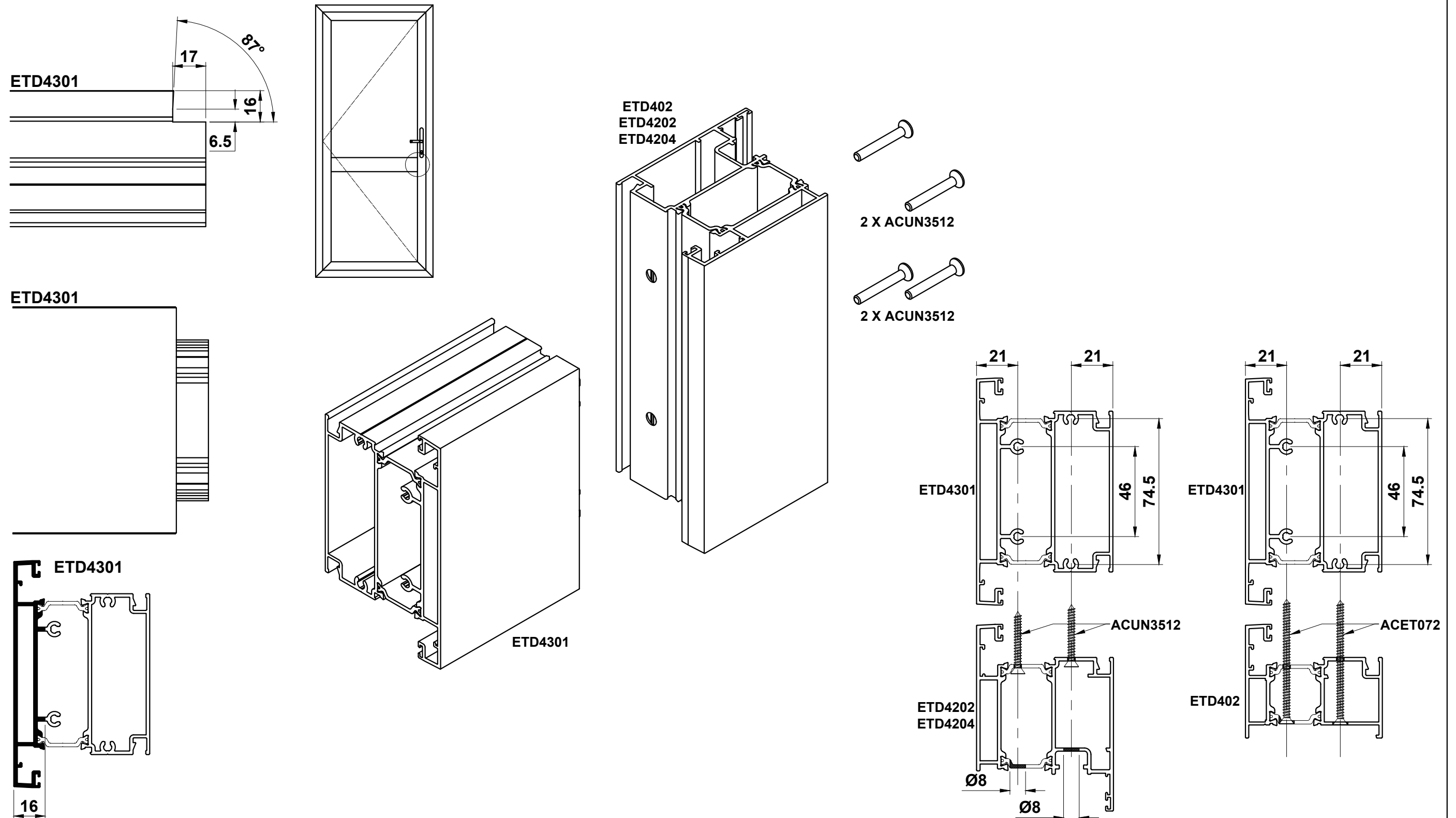


Note: 4 X ACUN3512 can be used to replace ACUL299.



Do Not Scale From This Drawing

ETD4301 Transom Assembly

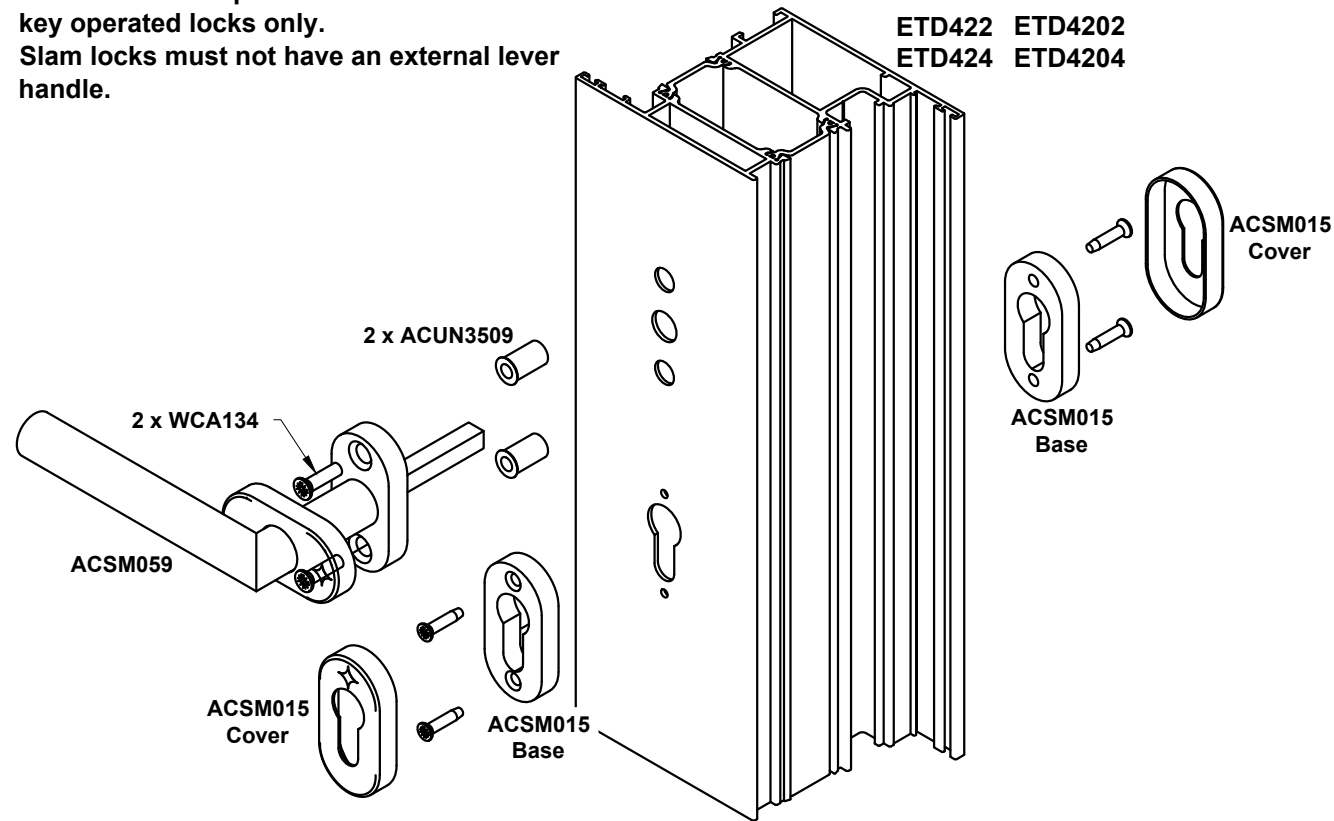


Do Not Scale From This Drawing

Stainless Steel Hardware - ACSM013, ACSM015, ACSM056 & ACSM059 Fitting Detail

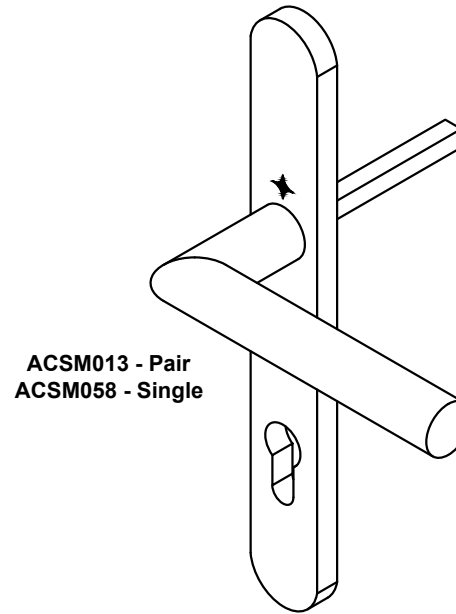
Please Note:

ACSM059 is compatible with slam locks and key operated locks only.
Slam locks must not have an external lever handle.



Please Note:

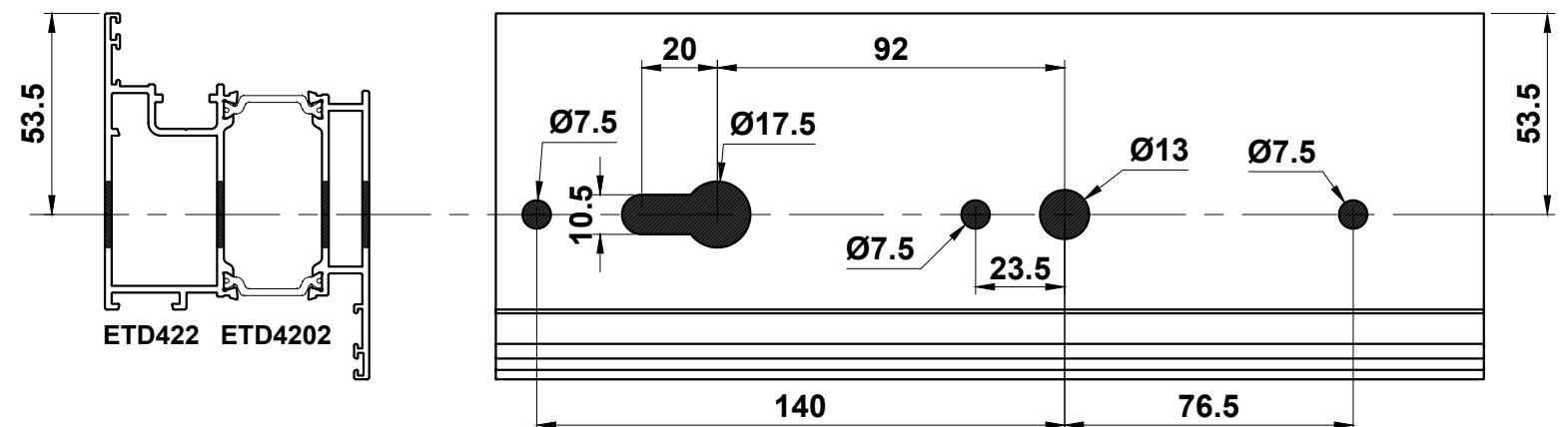
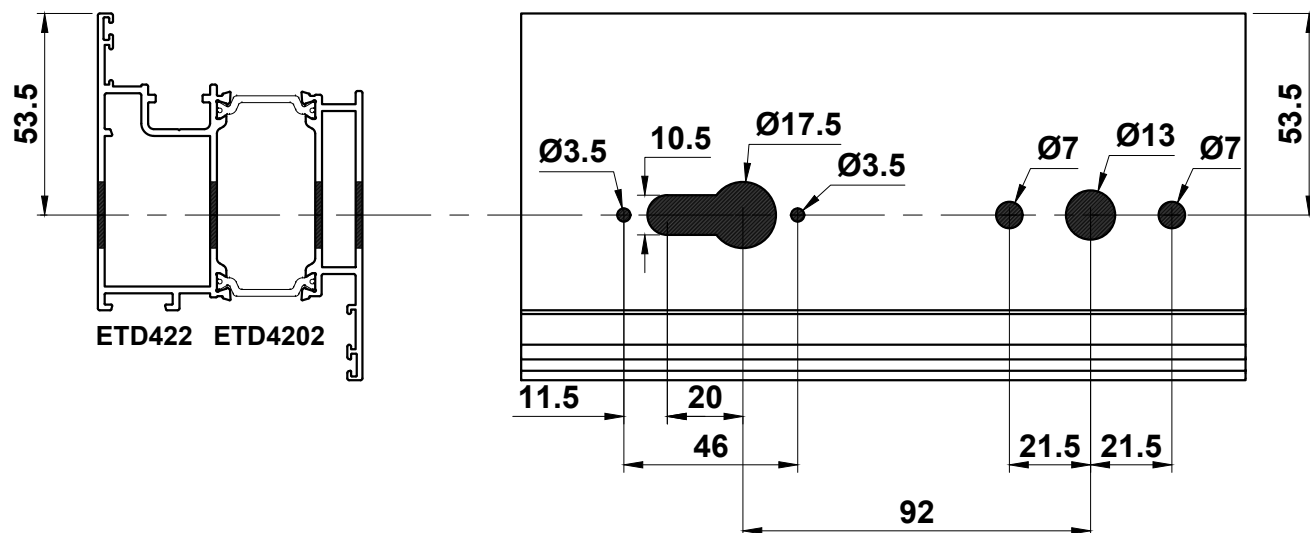
ACSM058 is compatible with all locks.
Slam locks must not have an external lever handle therefore require WCA134 & ACUN3509 for single side fixing and the spindle will need to be cut down.



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

Please Note:

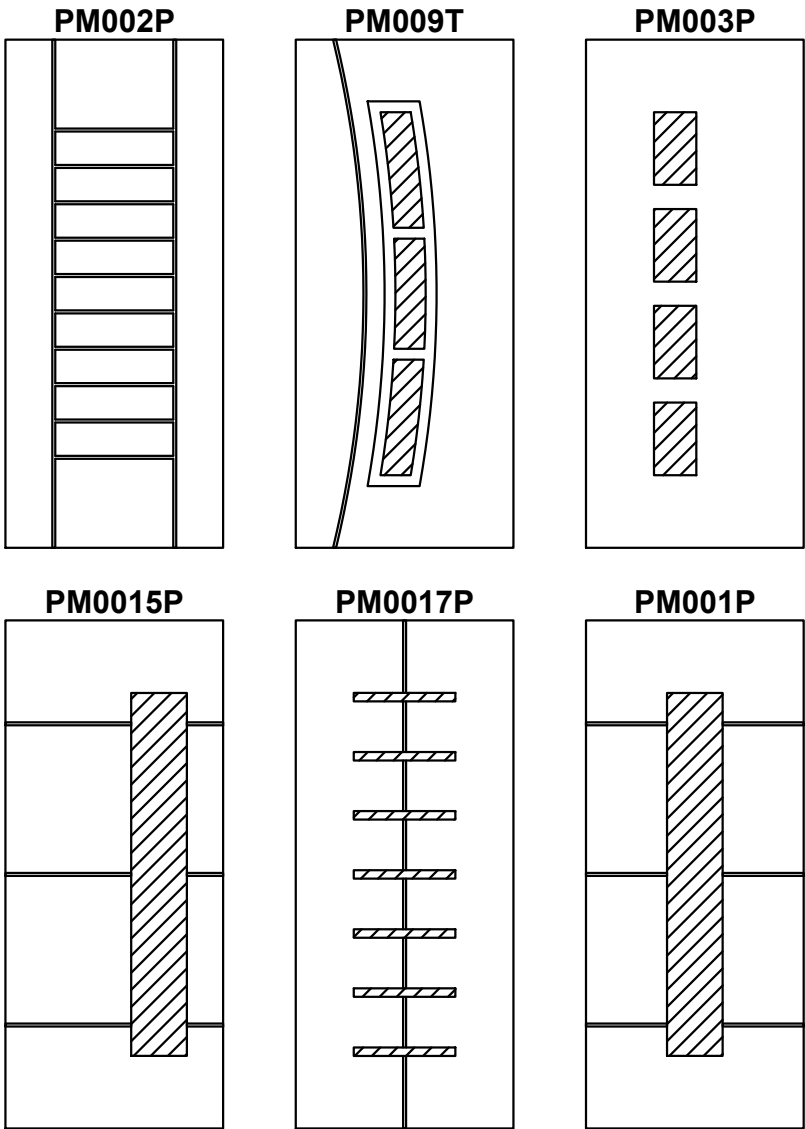
ACSM013SS pack contains;
2 x Universal Backplate & Lever
2 x Cover Plate
2 x Bolt Receiver Sleeve
2 x 40mm M5 Machine Screws
2 X 60mm M5 Machine Screws
1 x 3mm Allen Key
1 x 170mm Spindle



Do Not Scale From This Drawing

Panel Door Details

We offer a range of designs in panel doors from traditional Victorian, Georgian and Edwardian designs to contemporary chic. Here are just a select few we can offer:



An overall U-value of 1.2 W/m²K may be achieved by specifying glaze-in panels. Below are the centre pane U-values and overall U-values of the examples shown:

40mm Panel Thickness

Panel Number	CP U-Value (W/m²K)	Door U-Value (W/m²K)
PM002P	0.8	1.2
PM009T	0.9	1.3
PM003P	0.9	1.3
PM0015P	0.9	1.3
PM0017P	0.9	1.3
PM001P	0.9	1.3

32mm Panel Thickness

Panel Number	CP U-Value (W/m²K)	Door U-Value (W/m²K)
PM002P	1.0	1.4
PM009T	1.1	1.4
PM003P	1.1	1.4
PM0015P	1.1	1.4
PM0017P	1.1	1.4
PM001P	1.1	1.4

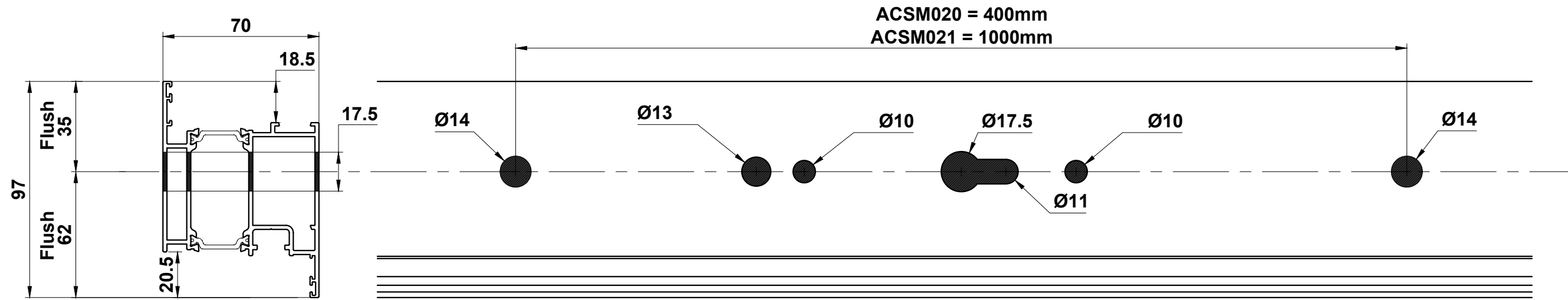
28mm Panel Thickness

Panel Number	CP U-Value (W/m²K)	Door U-Value (W/m²K)
PM002P	1.1	1.4
PM009T	1.2	1.5
PM003P	1.2	1.5
PM0015P	1.2	1.5
PM0017P	1.2	1.5
PM001P	1.2	1.5

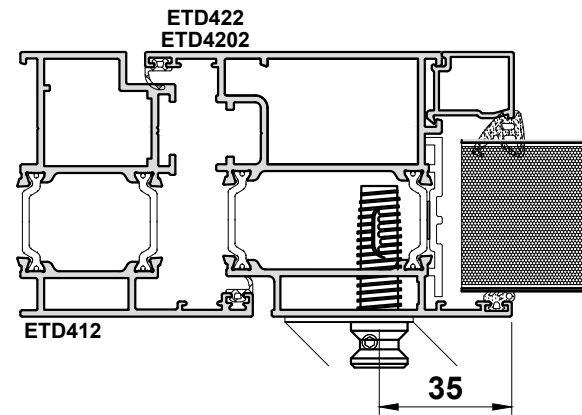
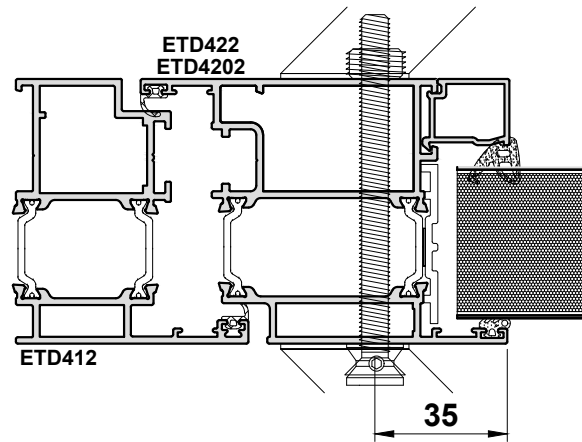
For more information and panel designs please visit our website, www.smartsystems.co.uk or call our sales team on 01934 876100.

Do Not Scale From This Drawing

ACSM020 & ACSM021 Fitting Detail



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



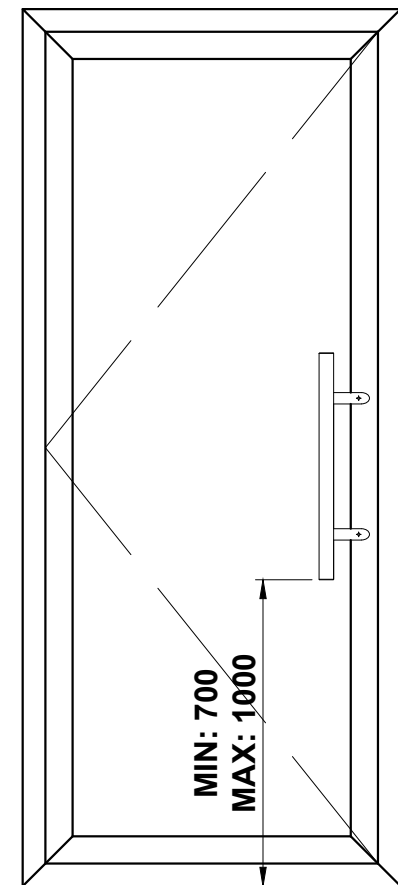
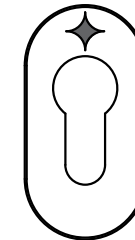
ACSM031 fixing kit is to be used when fixing two back to back handles. Screw will need to be cut down to size.

If a single handle is required, please use ACSM037 or ACSM038 single handle with ACSM030 Secret fixing.

Length (mm)		Single Handles	Fixing Kits
	600	ACSM037SS	ACSM030
	1200	ACSM038SS	
		Pair Handles	
	600	ACSM020SS	ACSM031
	1200	ACSM021SS	

We recommend to use ACSM015 escutcheon and position in-line with the handle fixings as shown in the above prep.

ACSM015



Do Not Scale From This Drawing

Door Locking & SZ Hardware Options

Slam Lock Guide

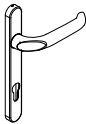
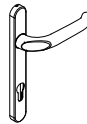
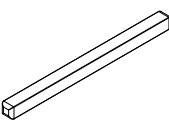
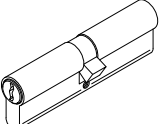
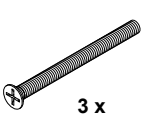
Overall Sash Height	Spindle Height (X)	Kit Part Number	
		Left Hand	Right Hand
2030-2230 (Standard)	1050	ACUL280	ACUL281
1820-2029 (Short)	1050	ACUL360	ACUL361
2231-2450 (Tall)	1050	ACUL380	ACUL381

Note: Height limits apply to all threshold options.

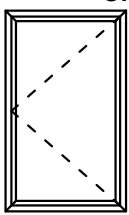
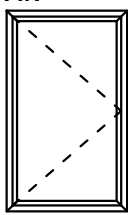
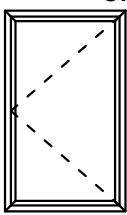
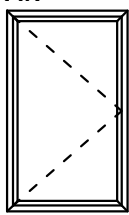
Key Operated Lock Guide

Overall Sash Height	Spindle Height (X)	Kit Part Number	
		Left Hand	Right Hand
2030-2230 (Standard)	1050	ACUL282	ACUL283
1820-2029 (Short)	1050	ACUL362	ACUL363
2231-2450 (Tall)	1050	ACUL382	ACUL383

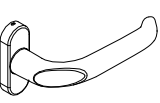
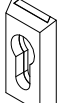
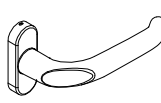
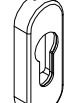
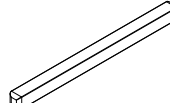
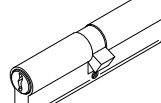
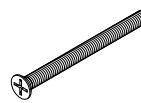
Handle With Large Backplate Guide

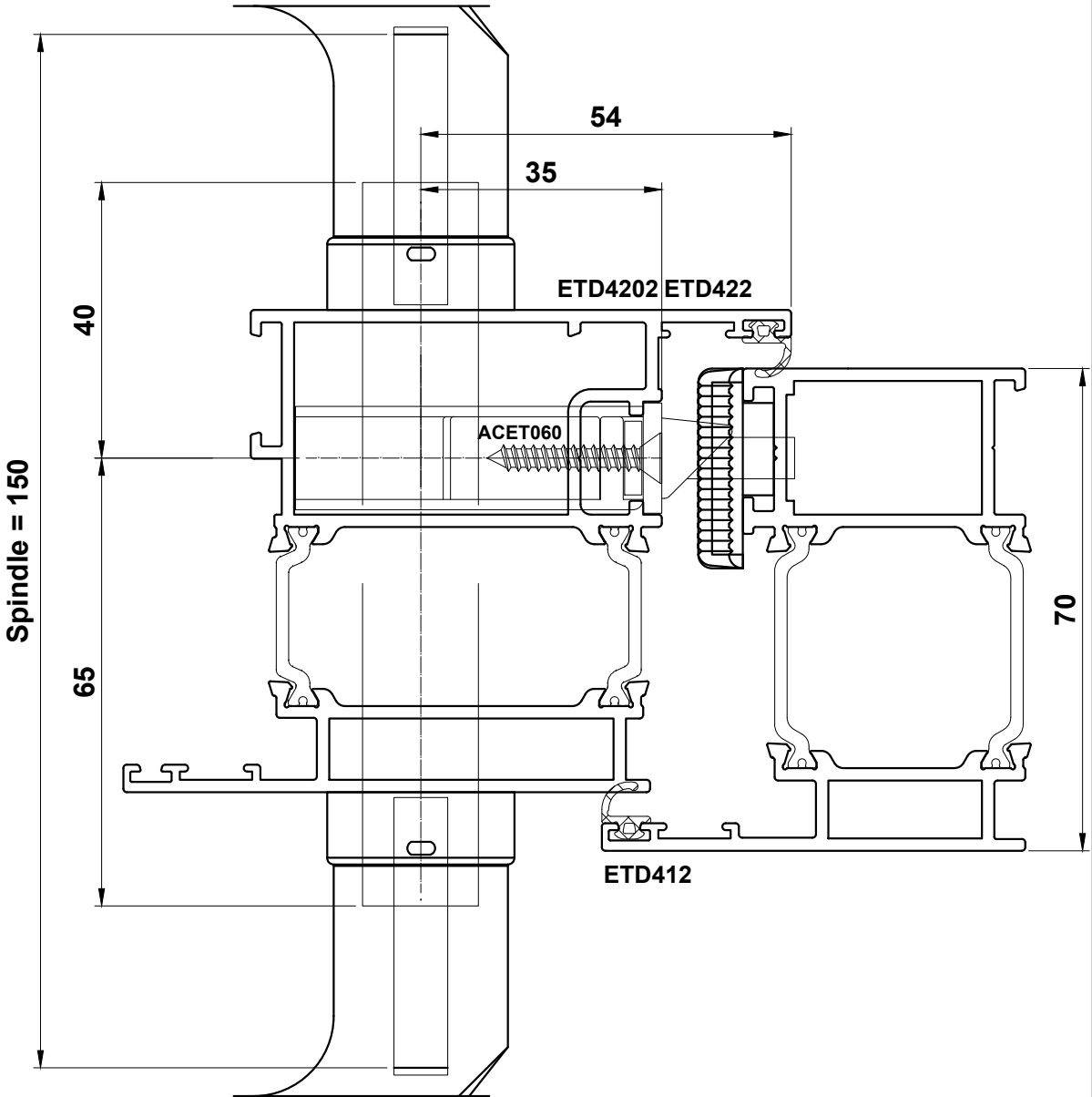
Ext. Handle	Int. Handle	Spindle	Cylinder	Screw
				 3 x
ACSZ800 	ACSZ801 	ACMX409Sq. Spindle 150mm	ACCY0035 Half Cylinder	ACMX861 M5 x 75mm
	ACSZ803 			
	ACSZ830 		ACCY6035S3 35/60 Cylinder	
ACSZ802 	ACSZ803 	ACMX008 Sq. Spindle 60mm	ACCY6035S3 35/60 Cylinder	ACVS061 M5 x 40mm
ACSZ400 + 2 x ACVS061	ACSZ830 			

Keep Handing Guide

Viewed Externally OPEN IN		Viewed Internally OPEN IN	
			
Right Hand Lock Set Outside	Left Hand Lock Set Outside	Left Hand Lock Set Outside	Right Hand Lock Set Outside

Handle with Small Backplate Guide

Ext. Handle	Ext. Escutcheon	Int. Handle	Int. Escutcheon	Spindle	Cylinder	Screw	Rivnuts
							
ACSZ837 	ACSZ400	ACSZ836 	ACSZ839	ACMX409Sq. Spindle 150mm	ACCY6035S3 ACCY0035	WCA134 M5 x 20mm	ACUN3509 M5
	ACSZ400			ACMX008 Sq. Spindle 60mm	ACCY6035S3 ACCY0035	WCA134 M5 x 20mm	ACUN3509 M5
ACSZ837 	ACSZ400	ACSZ827 		ACMX409Sq. Spindle 150mm	ACCY6035S3 ACCY0035	WCA134 M5 x 20mm	ACUN3509 M5

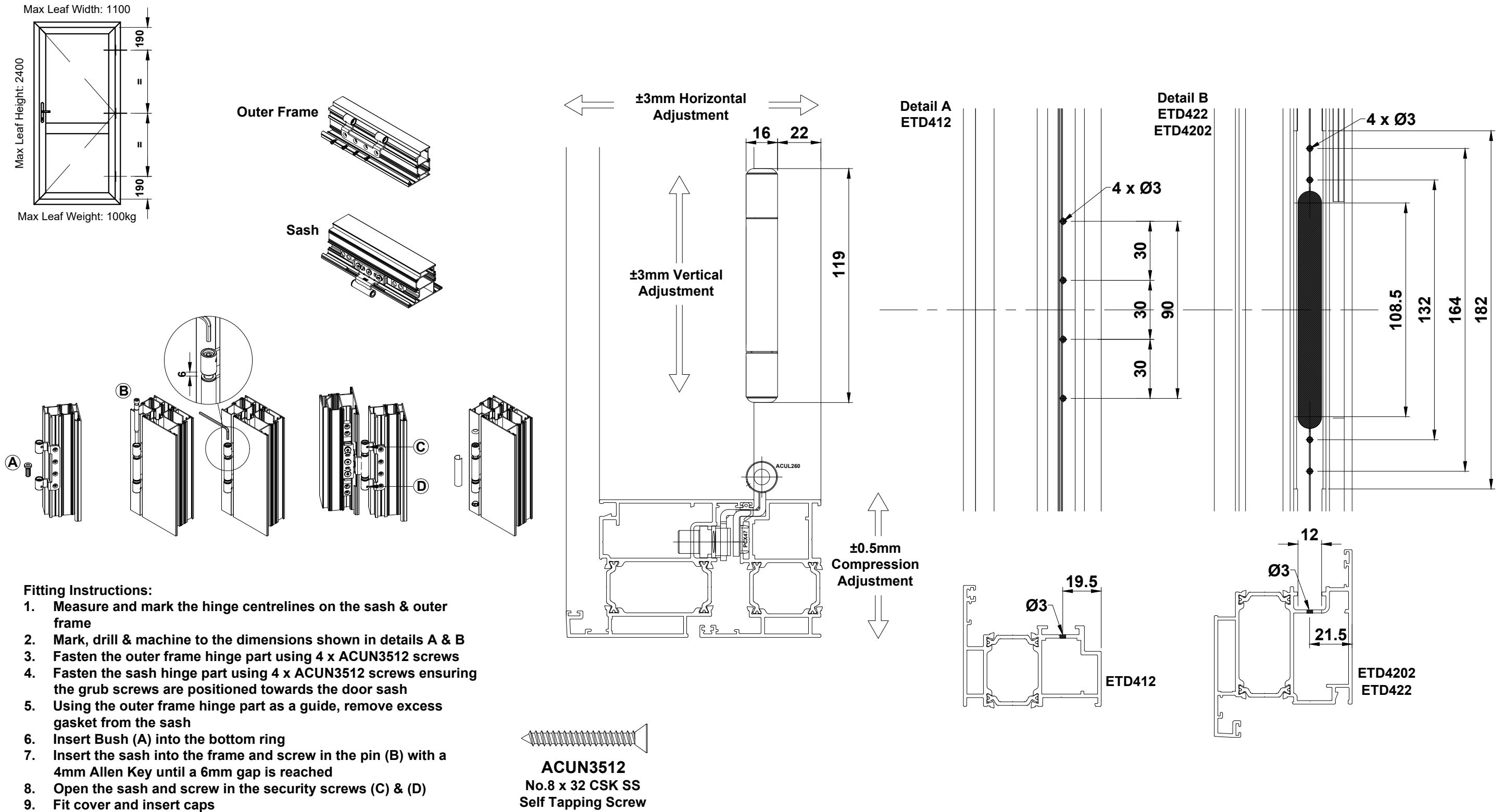


-  With Cylinder
-  Without Cylinder
-  T Handle With Cylinder
-  T Handle Without Cylinder

Note:
Please check kitemark for all
suitable hardware to achieve PAS24.

Do Not Scale From This Drawing

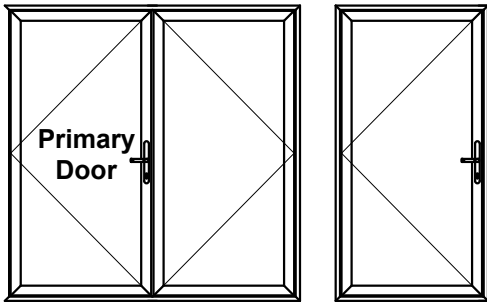
ACUL260 Hinge Preparation



Do Not Scale From This Drawing

Lock Overview of Single and Double Doors

Finger Bolt Locking Options



Single & Primary Door Lock Selection

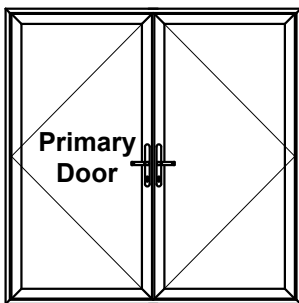
Overall Sash Height	Lift Lever		Slam Lock		Key Wind	
	Left	Right	Left	Right	Left	Right
2030-2230 (Standard)	ACUL272	ACUL273	ACUL280	ACUL281	ACUL282	ACUL283
1820-2029 (Short)	ACUL377	ACUL378	ACUL360	ACUL361	ACUL362	ACUL363
2231-2450* (Tall)	ACUL374	ACUL375	ACUL380	ACUL381	ACUL382	ACUL383

*Any doors above 2450mm are above the tested limit.

Secondary Door Accessory Selection

35mm Backset Shootbolt Adaptor	Bottom 10mm Dia Rod	Top 10mm Dia Rod		Keep	Shootbolt Guide
		Overall FRAME Size	Rod Part No.		
	ACPD846 (1000mm)	1820 - 1923	ACPD846 (1000mm)	ACUL390 (2 Required)	ACUL242 (2 Required)
		1923 - 2173	ACPD847 (1250mm)		
		2174 - 2423*	ACPD848 (1500mm)		
		*For doors above 2423mm, use ACPD849 (2000mm)			

Lift Lever Locking Options



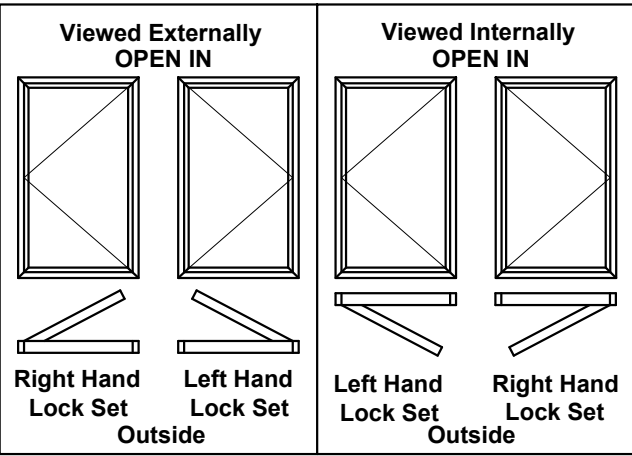
Double Handle Lift Lever Lock Option

Overall Sash Height	Primary Door Lift Lever		Secondary Door Lift Lever	Double Door Keep	Shootbolts	Shootbolt Extensions
	Left	Right				
1885-2450*	ACUL277	ACUL278	ACUL276	ACUL279	ACDV737 ACDV738	ACDV742 ACDV744

*Any doors above 2450mm are above the tested limit.

**Please see page E24 for shootbolt layout.

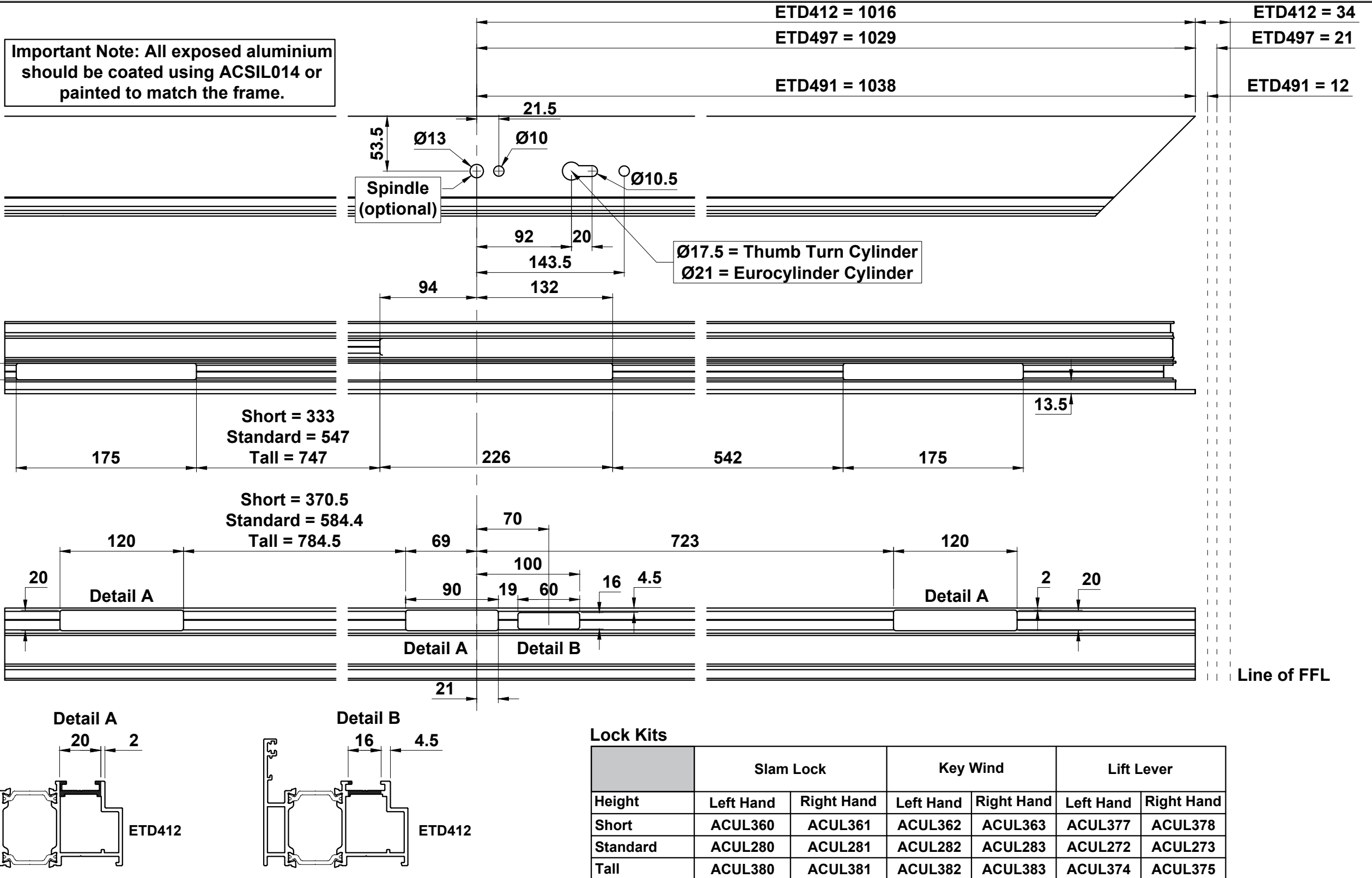
Keep Handing Guide



For ACUL267 & 268 Cam Lock Option Refer To Page E37

Do Not Scale From This Drawing

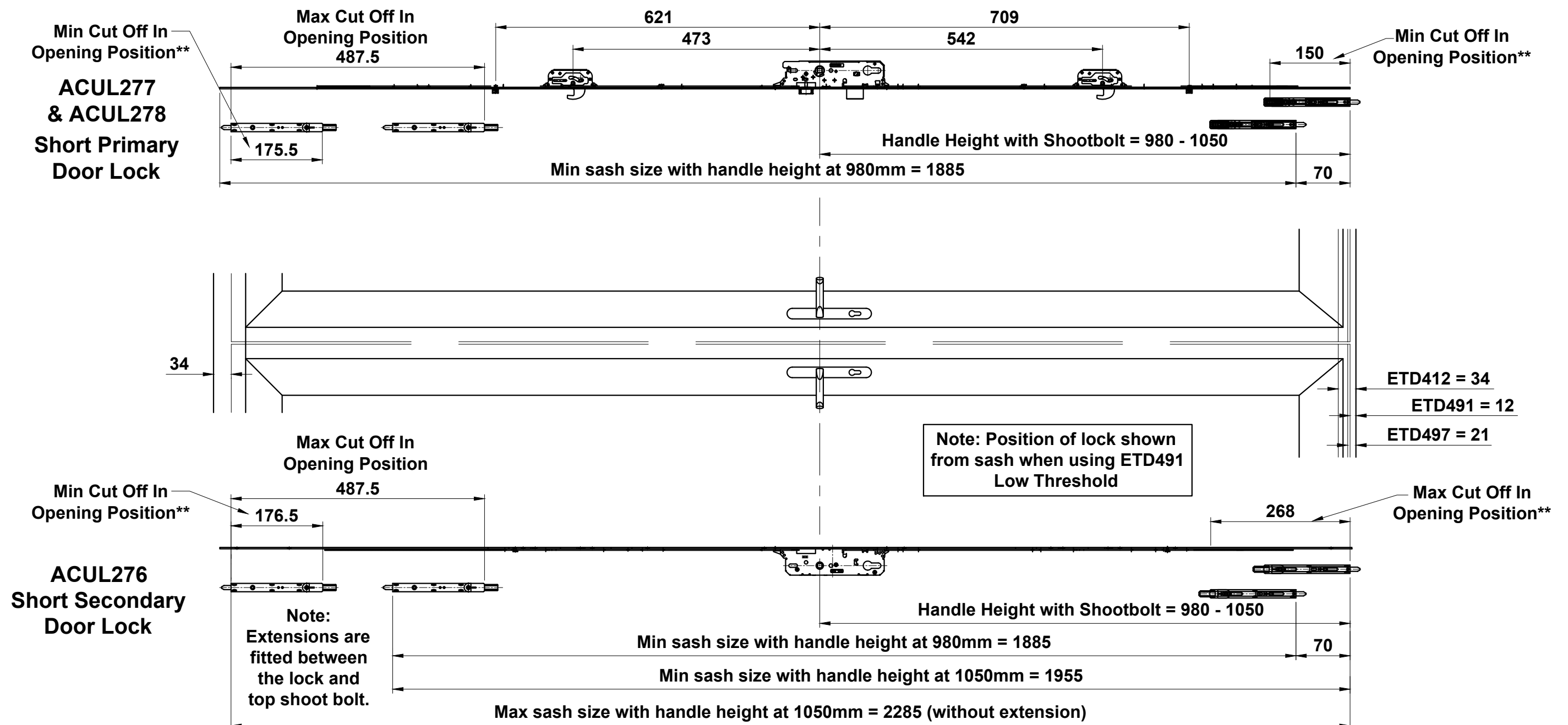
Single Door Lock Preparation



Do Not Scale From This Drawing

Double Door Lift Lever Shootbolt Layout

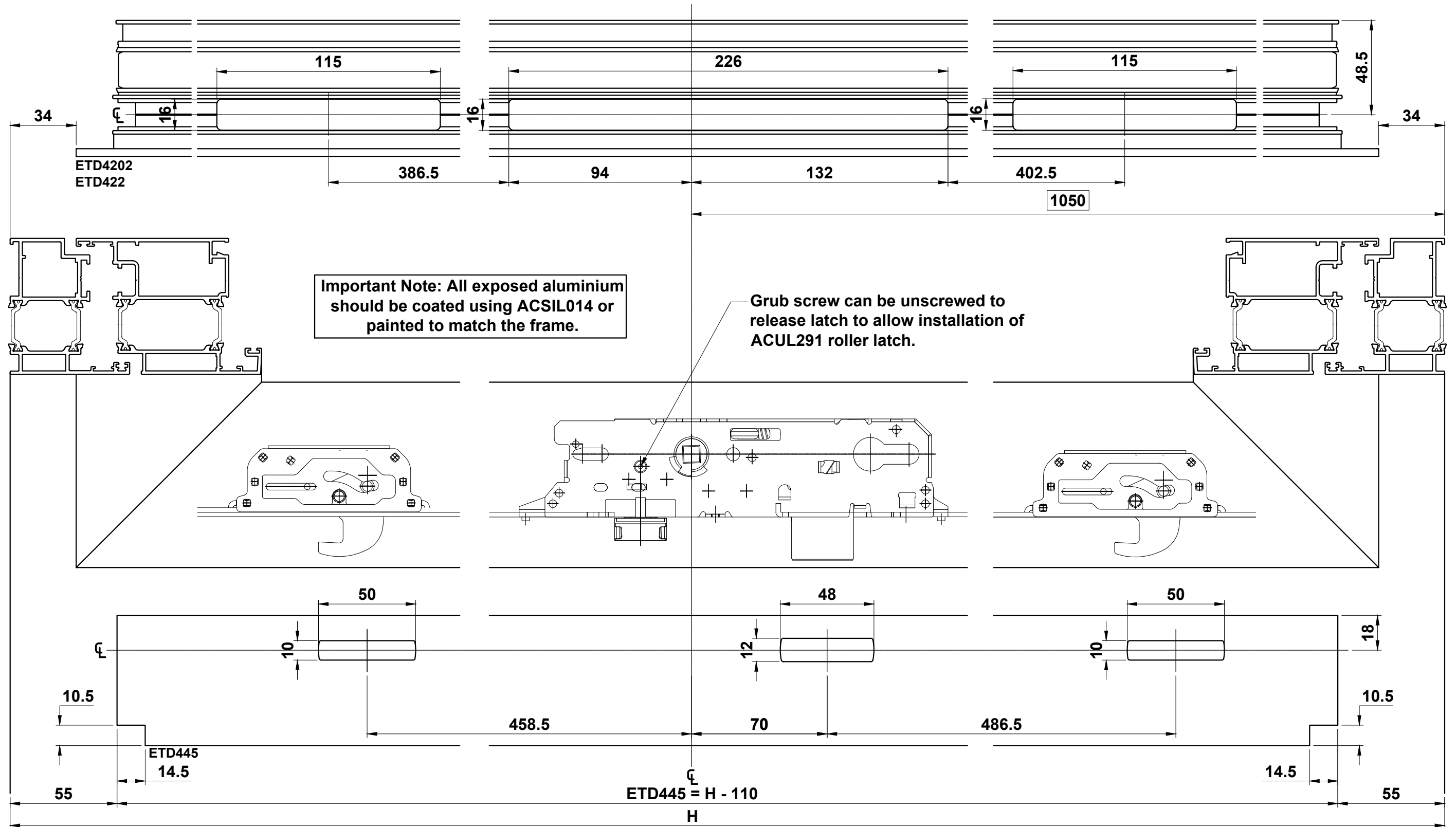
Note: ACDV742 & ACDV744 extensions may be used with all locks



*Maximum sash height is 2500mm. Sizes shown here only indicate sizes with ACDV744.

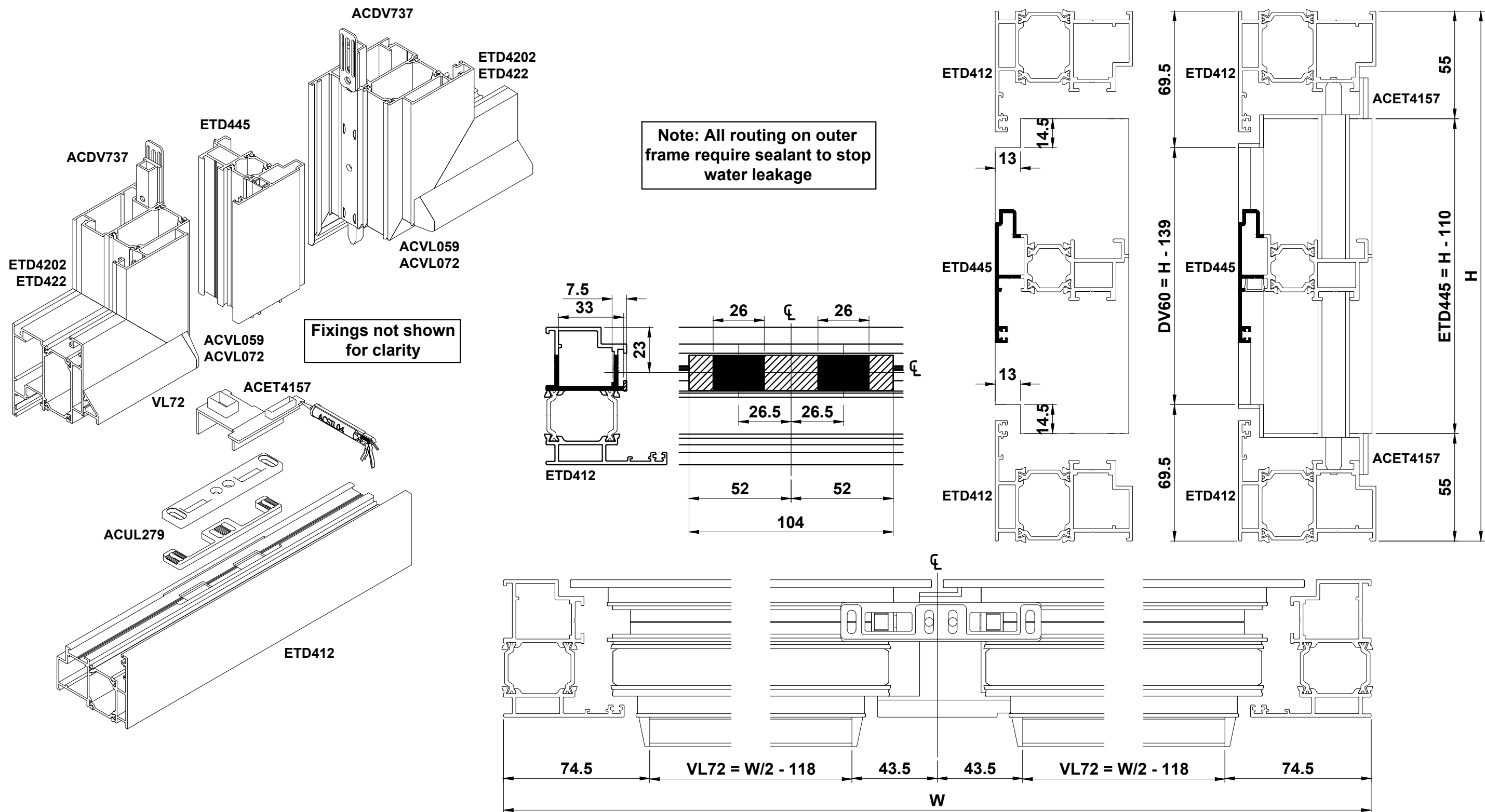
Do Not Scale From This Drawing

Flush Double Door Lift Lever Lock Preparation for Full Frame



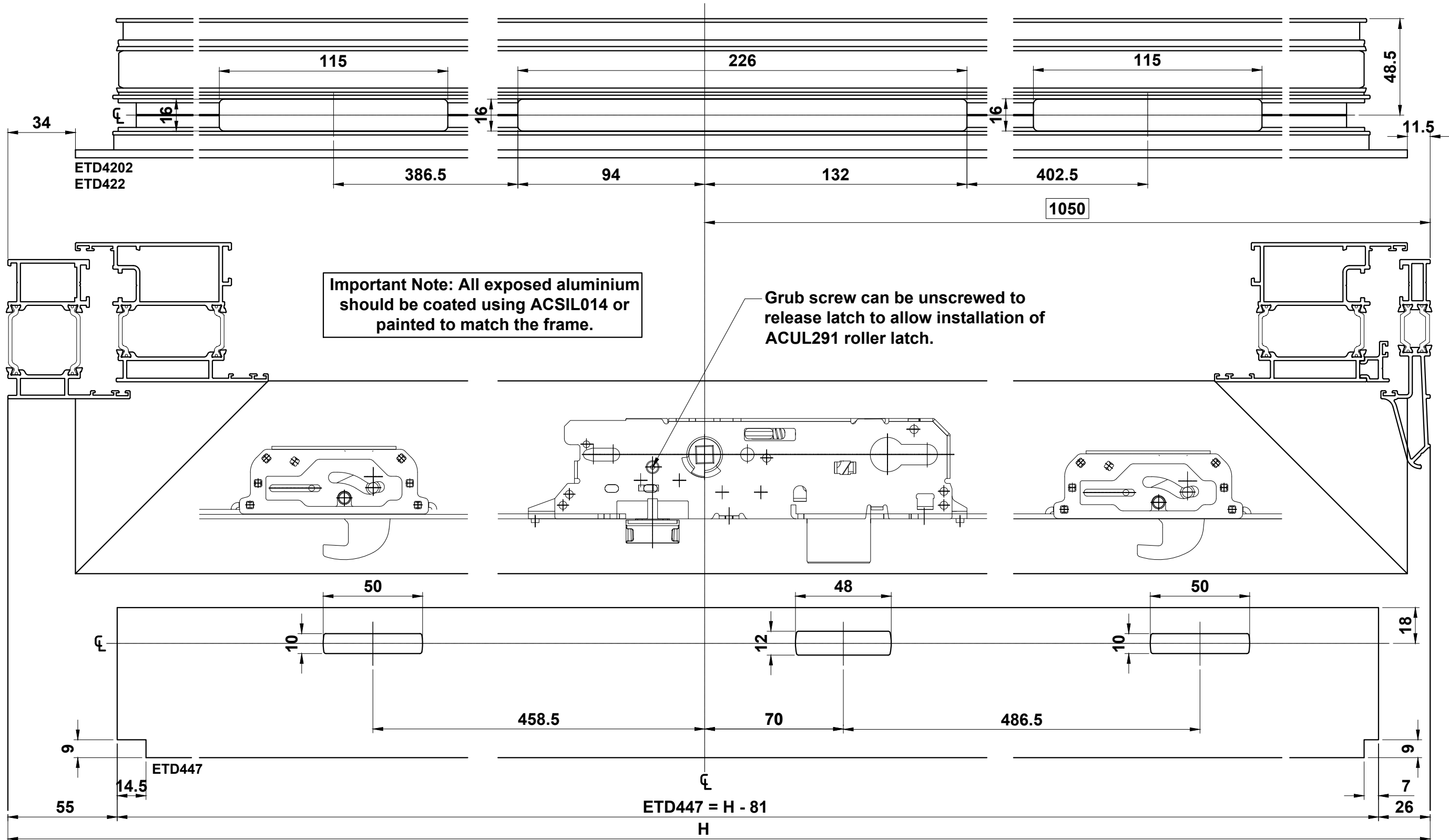
Do Not Scale From This Drawing

Flush Double Door Lift Lever Meeting Stile Assembly for Full Frame



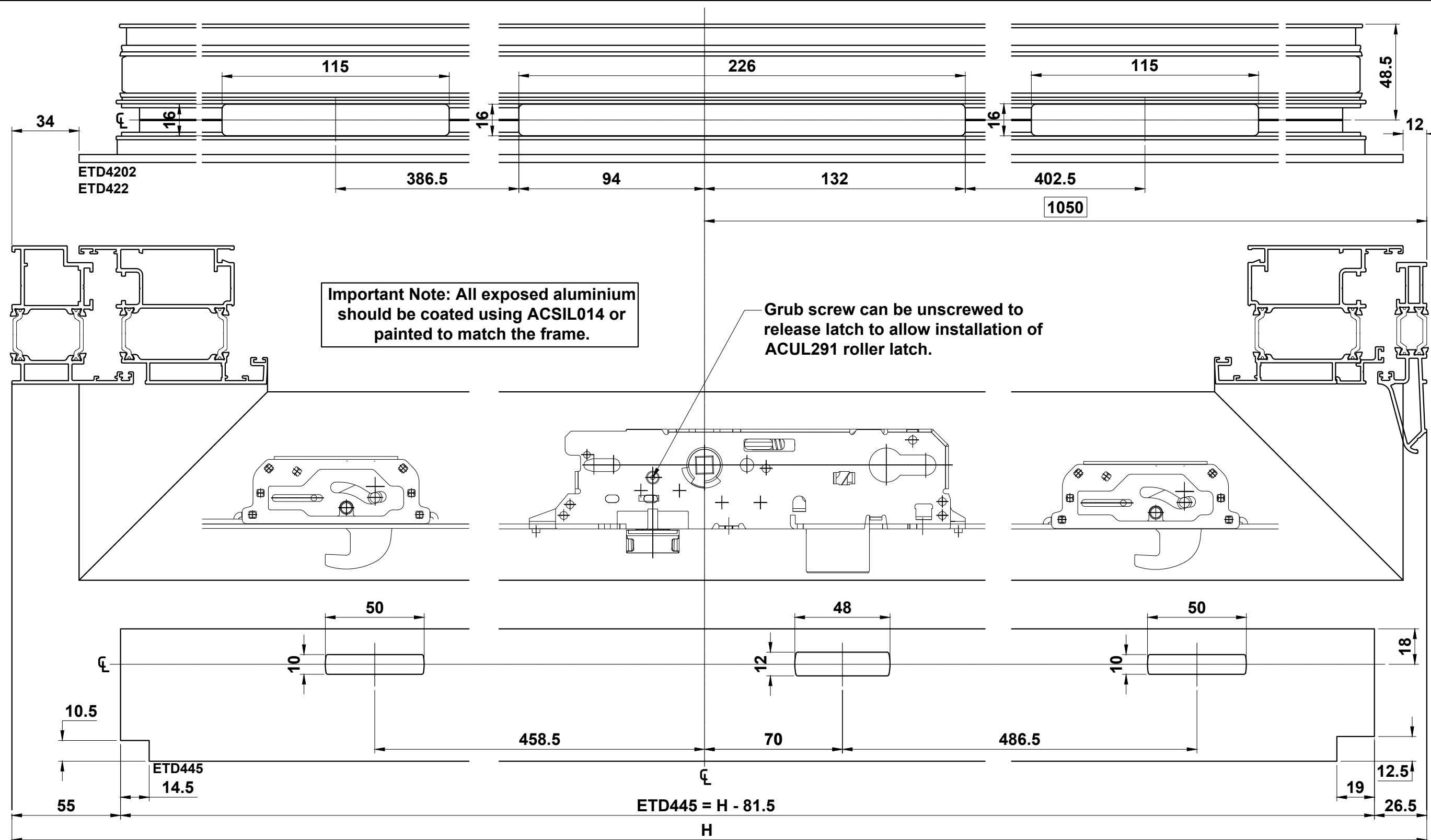
Do Not Scale From This Drawing

Double Door Lift Lever Lock Preparation for Low Rebate Threshold



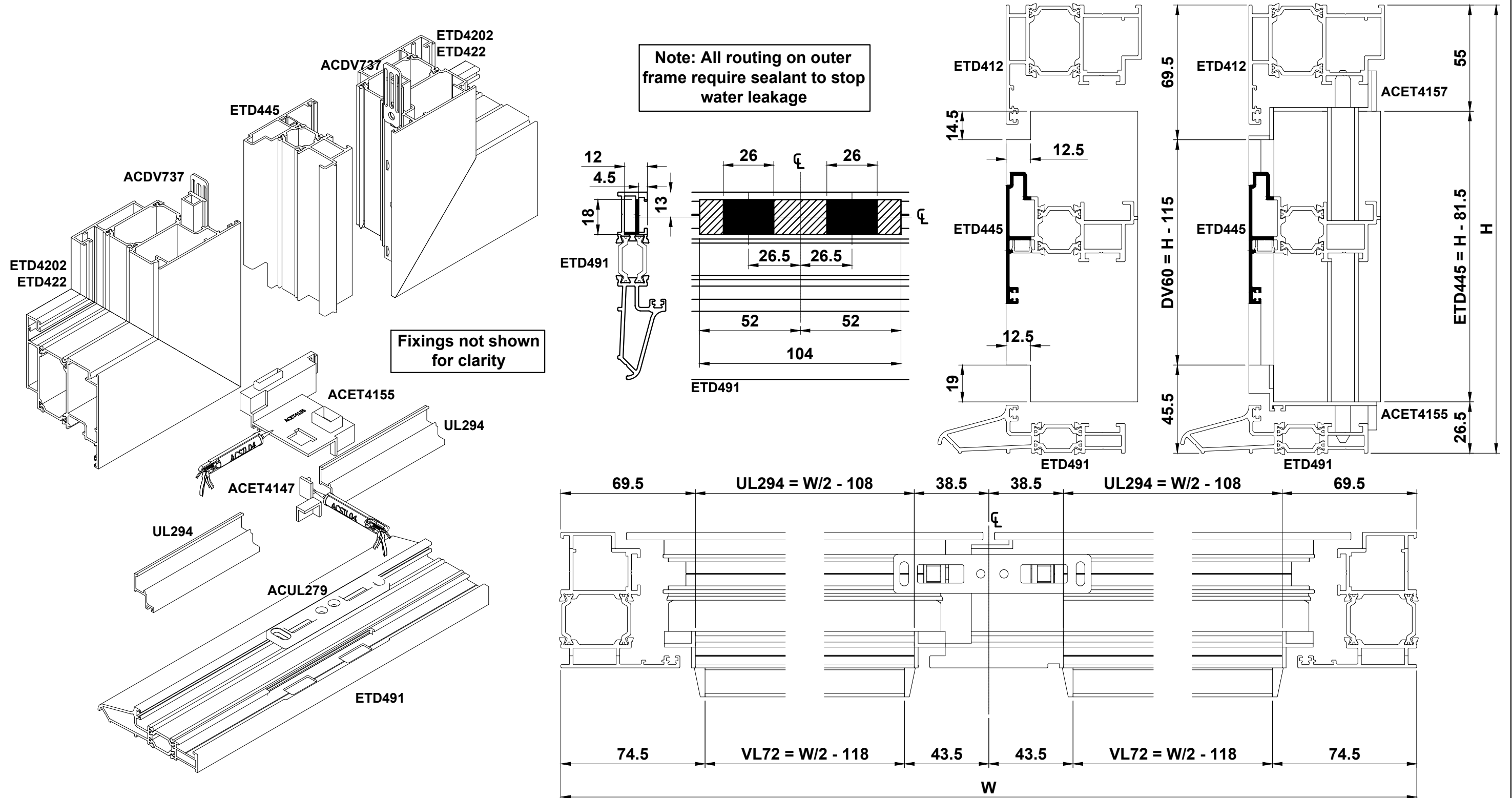
Do Not Scale From This Drawing

Flush Double Door Lift Lever Lock Preparation for Low Rebate Threshold



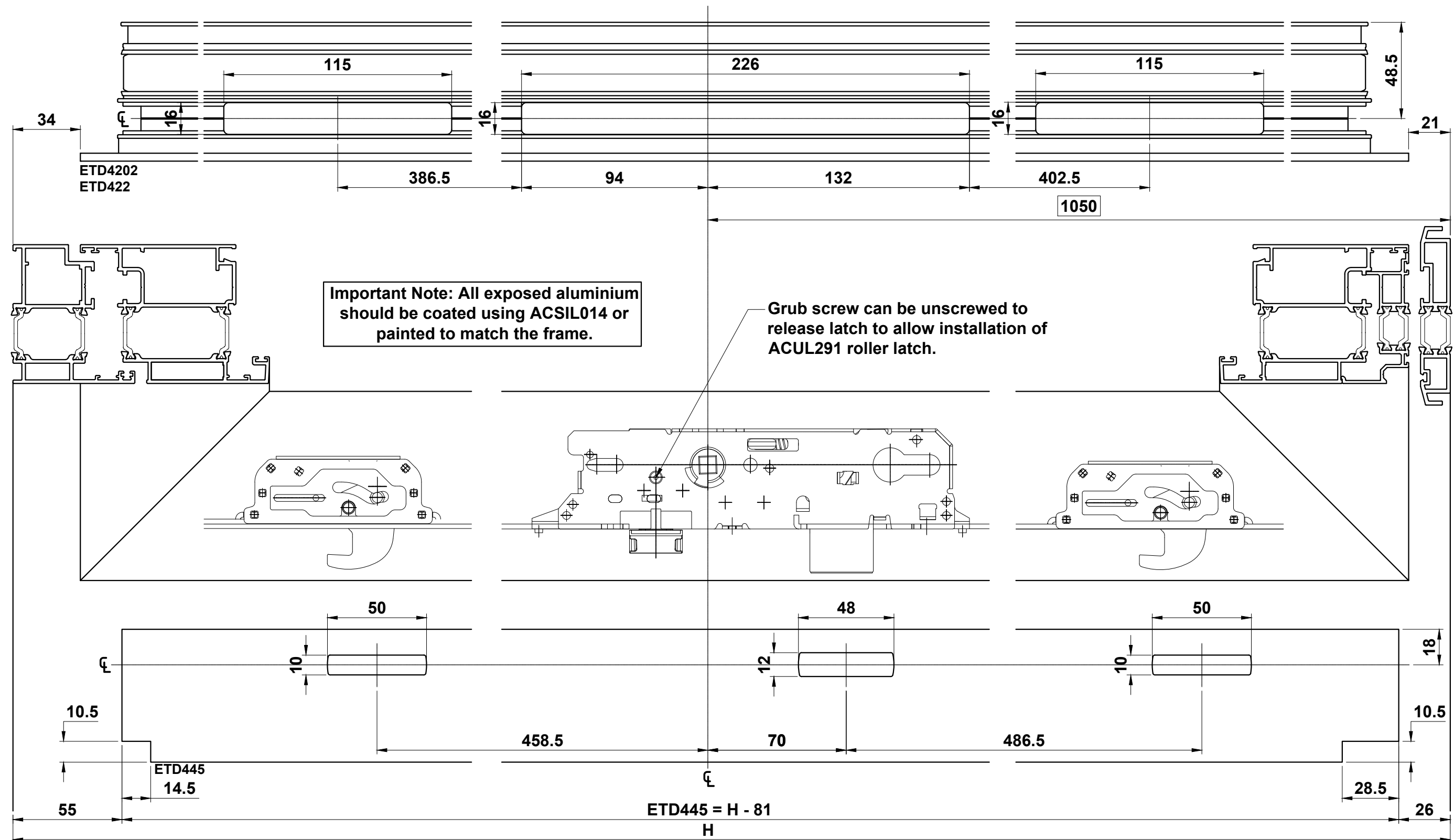
Do Not Scale From This Drawing

Flush Double Door Lift Lever Meeting Stile Assembly for Low Rebate Threshold



Do Not Scale From This Drawing

Flush Double Door Lift Lever Lock Preparation for Low Ramp Threshold



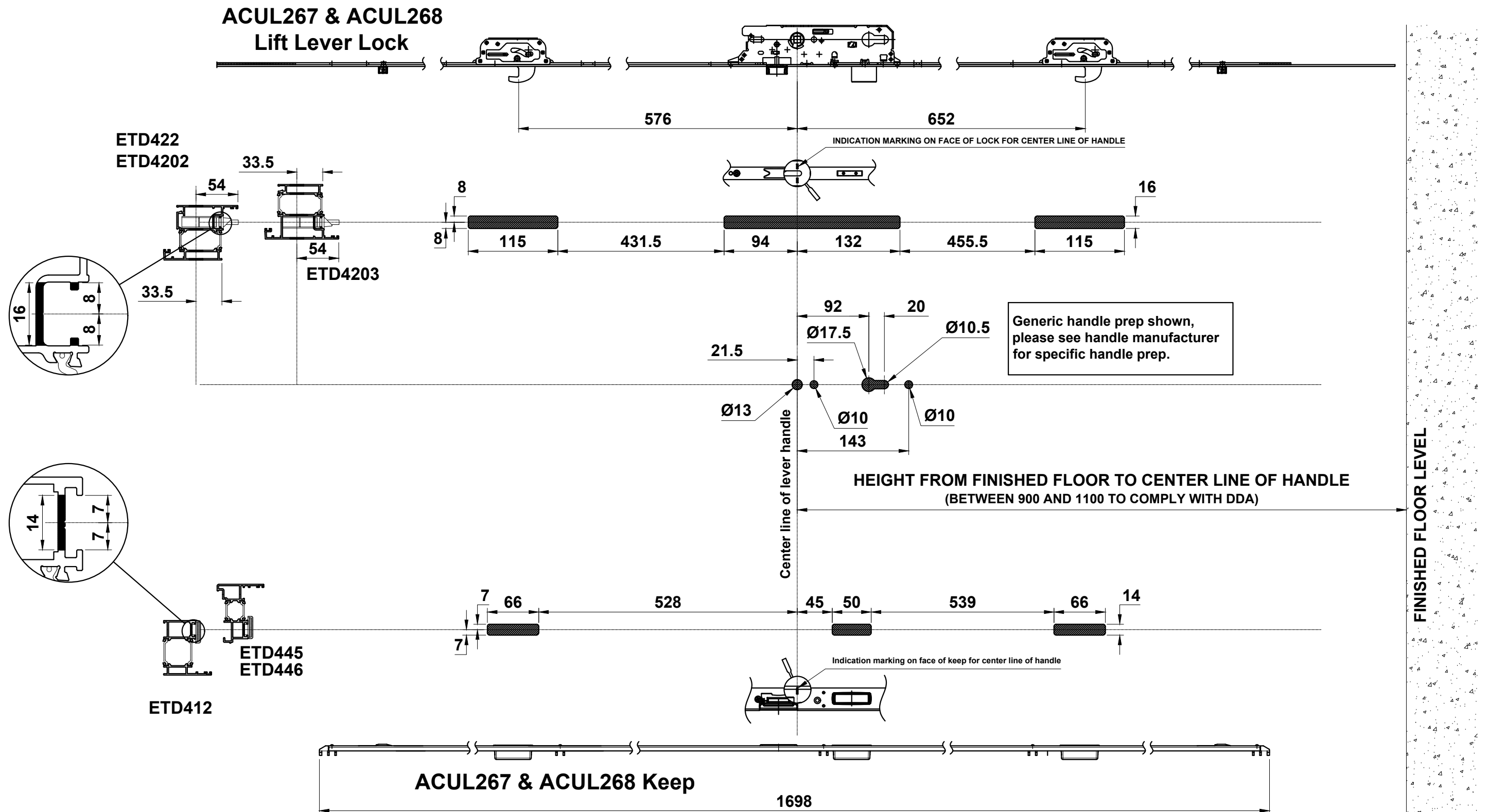
Do Not Scale From This Drawing

CONSTRUCTION DRAWINGS - OPEN IN



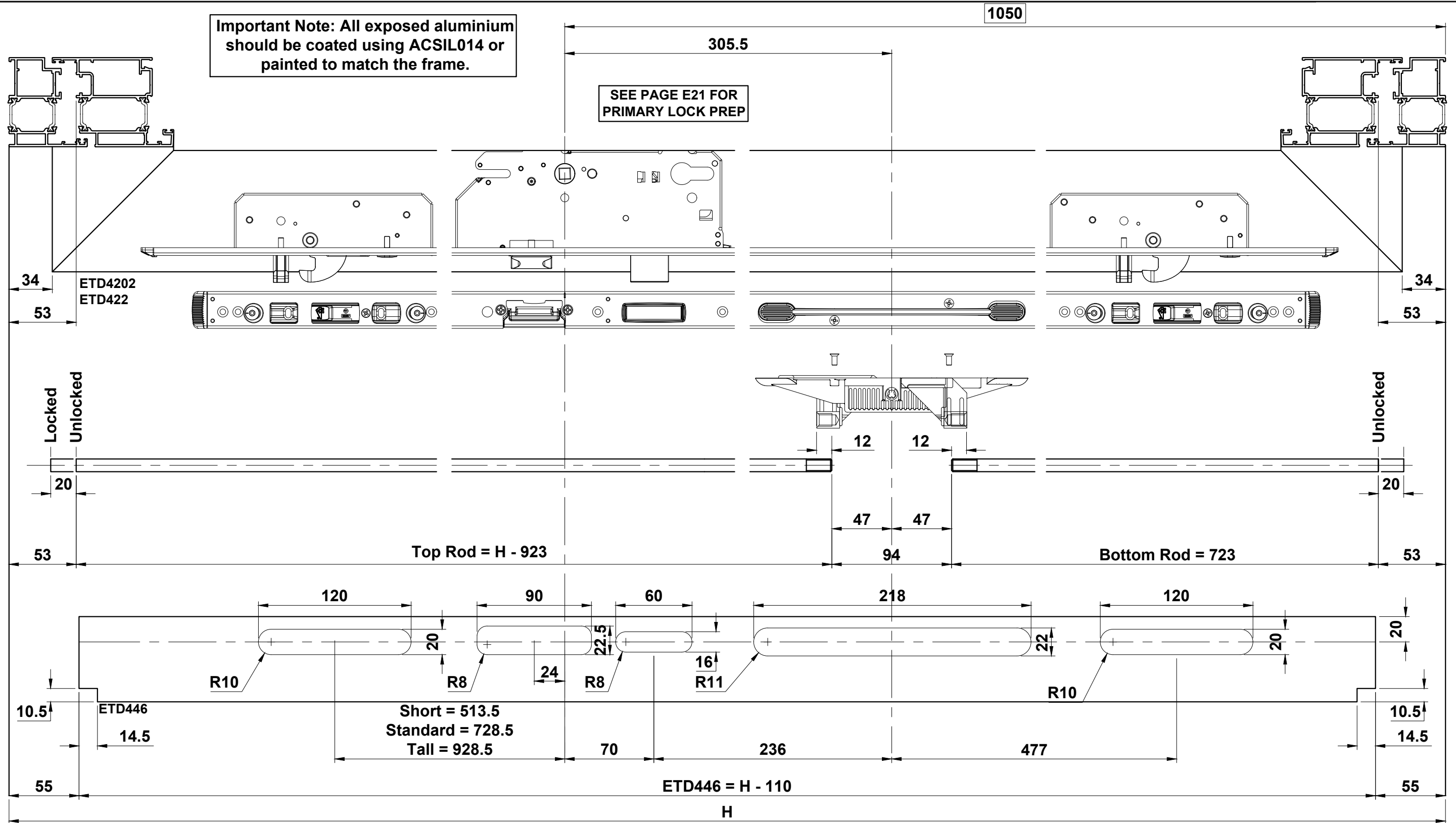
CONSTRUCTION DRAWINGS - OPEN IN

ACUL267 & ACUL268 Lift Lever Lock Preparation



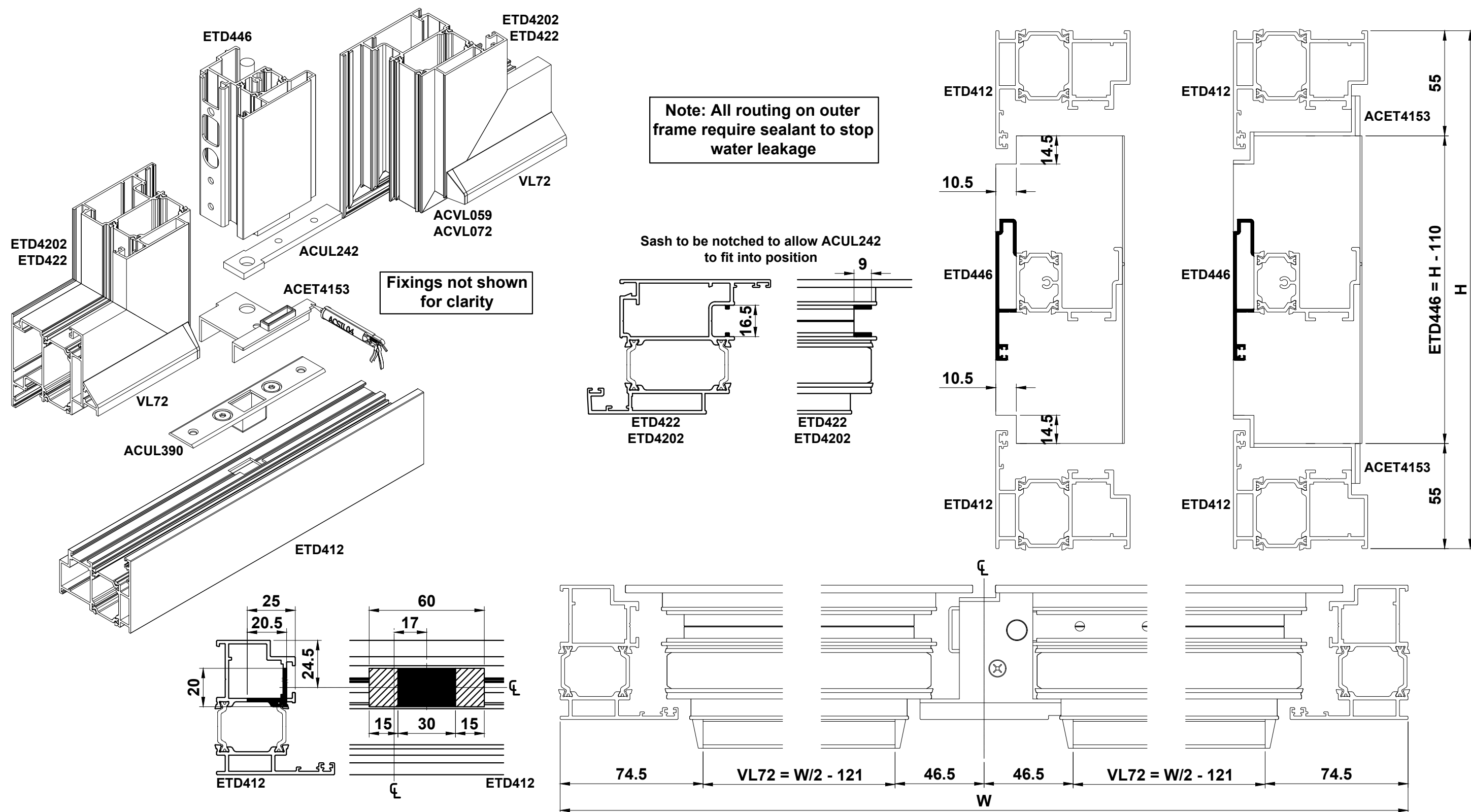
Do Not Scale From This Drawing

Flush Double Door Finger Bolt Lock Preparation for Full Frame



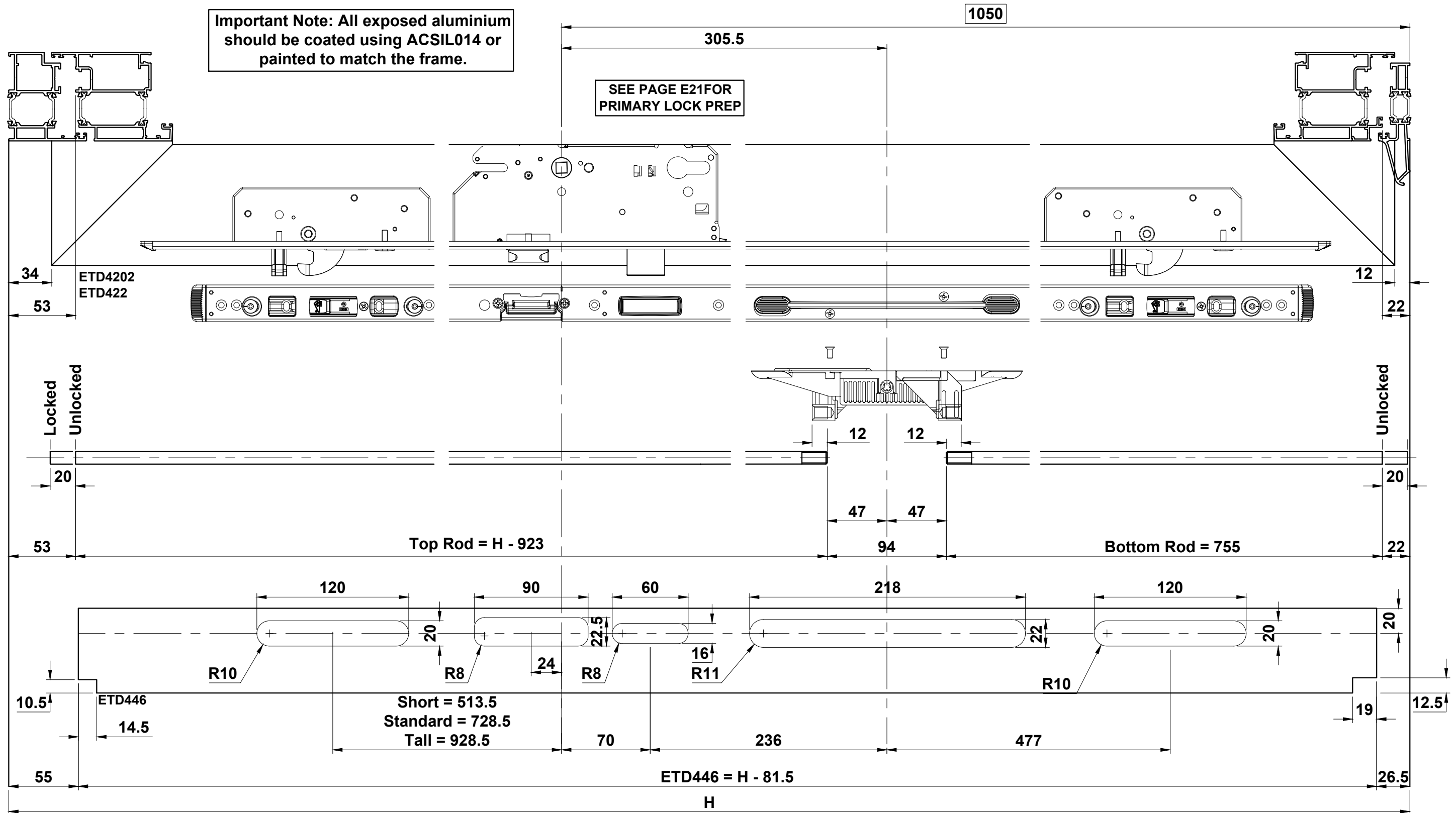
Do Not Scale From This Drawing

Flush Double Door Finger Bolt Meeting Stile Assembly for Full Frame



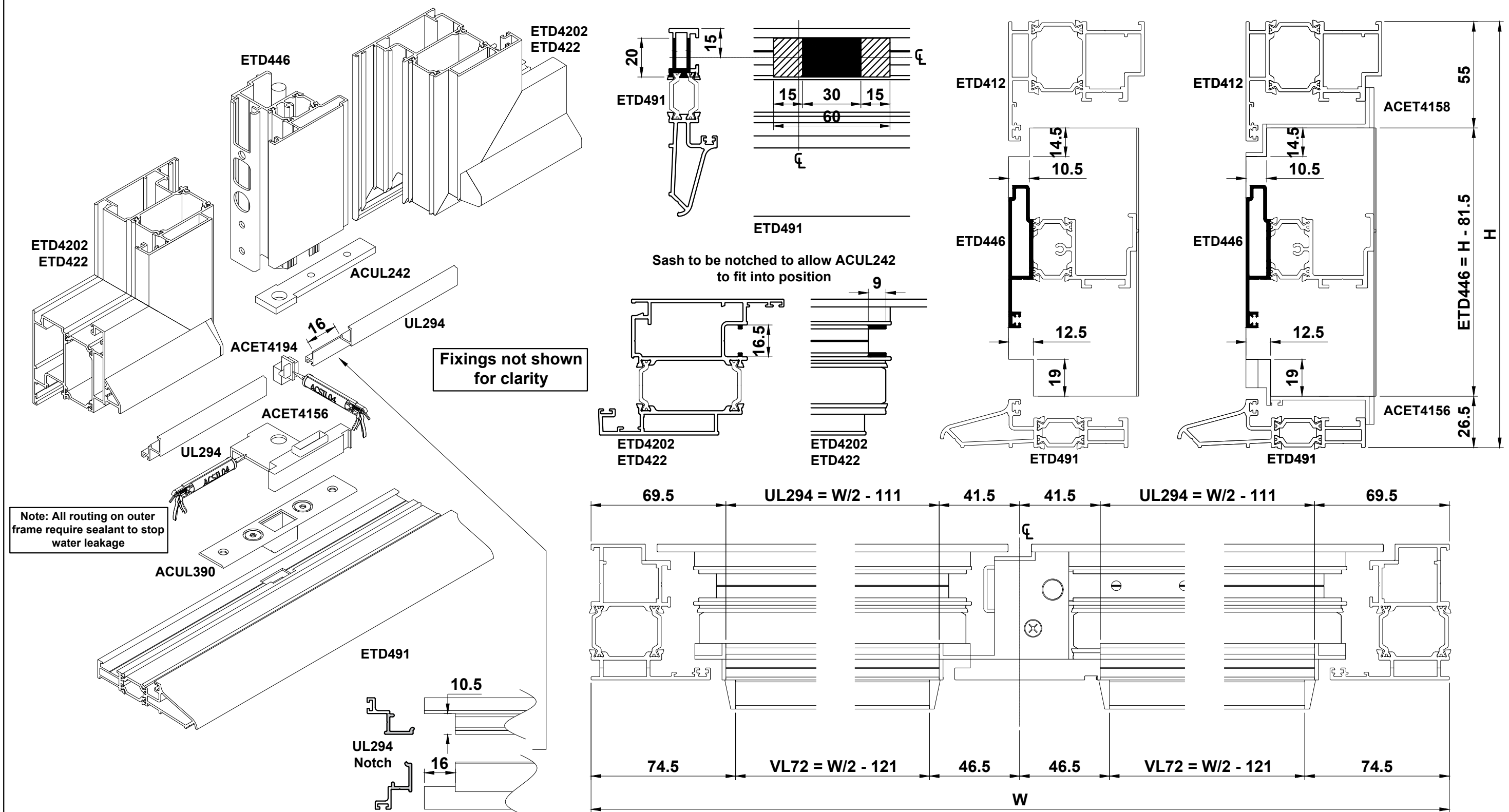
Do Not Scale From This Drawing

Flush Double Door Finger Bolt Lock Preparation for Low Rebate Threshold



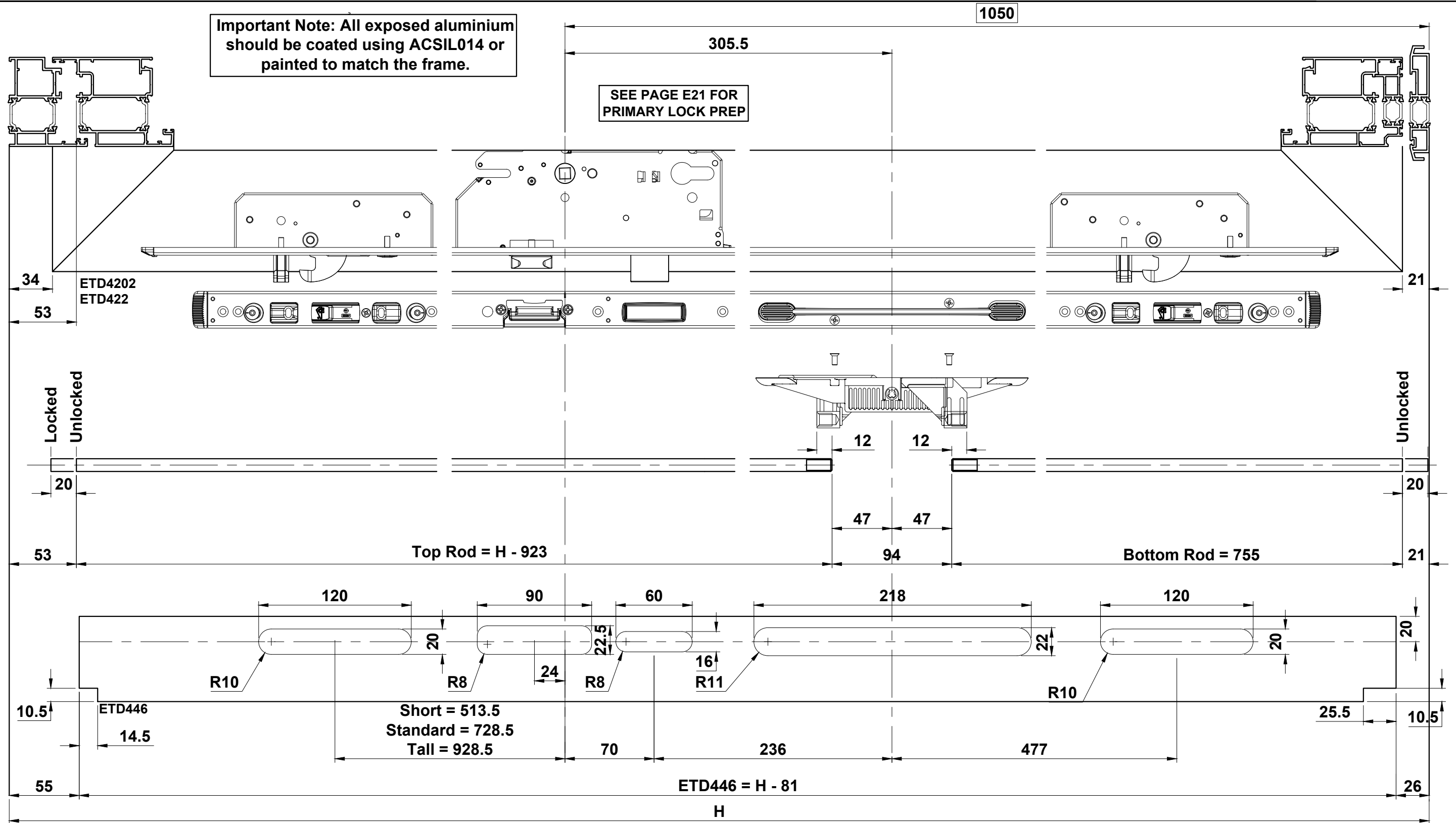
Do Not Scale From This Drawing

Flush Double Door Finger Bolt Meeting Stile Assembly for Low Rebate Threshold



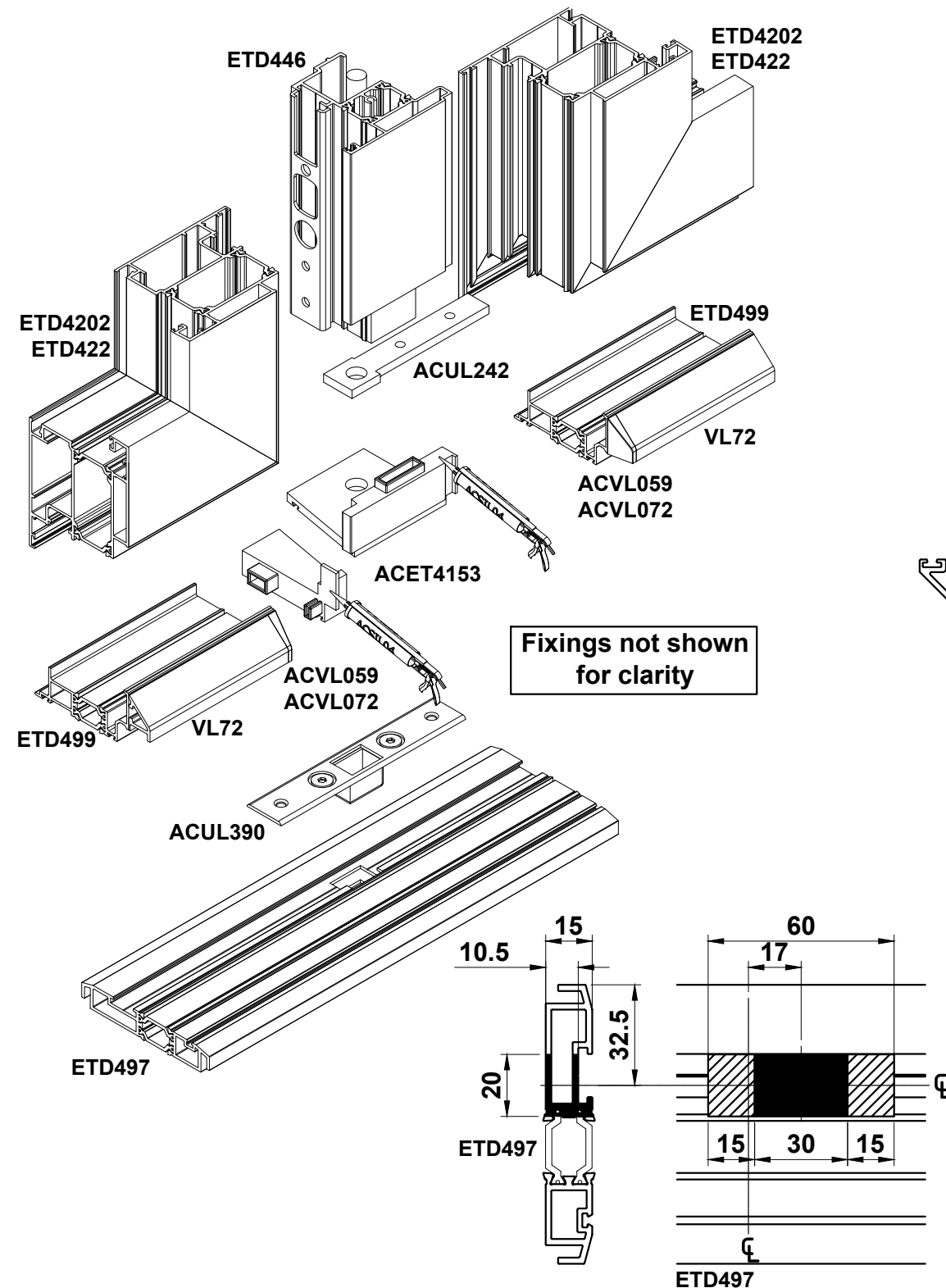
Do Not Scale From This Drawing

Flush Double Door Finger Bolt Lock Preparation for Low Ramp Threshold



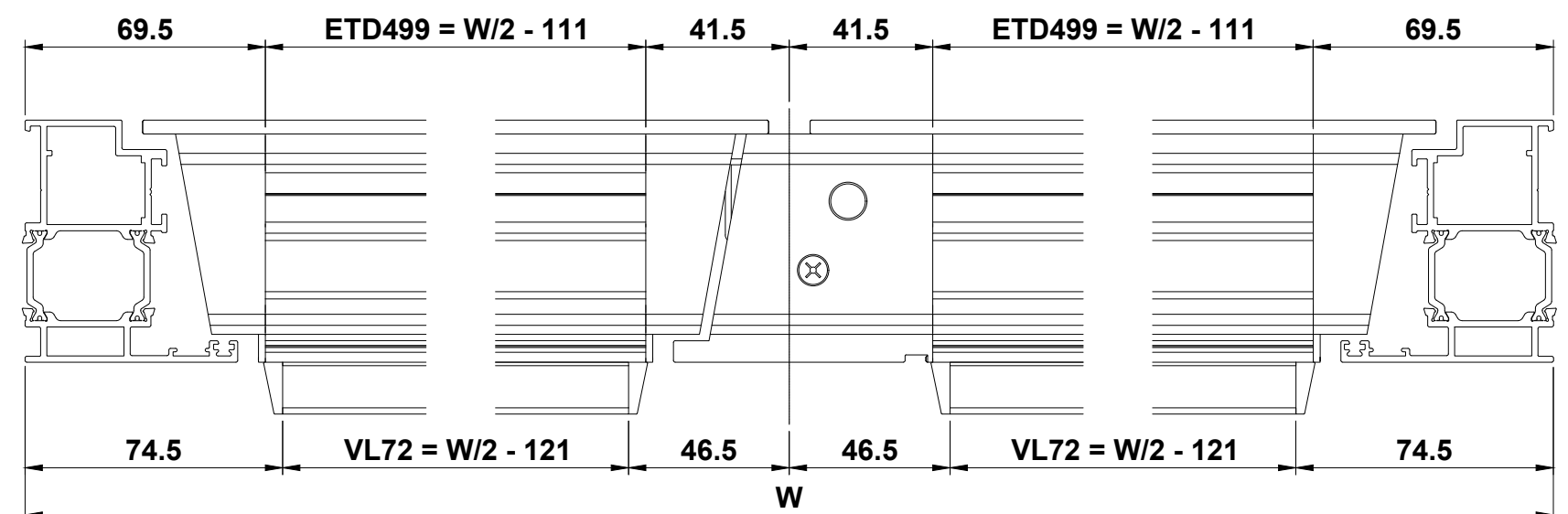
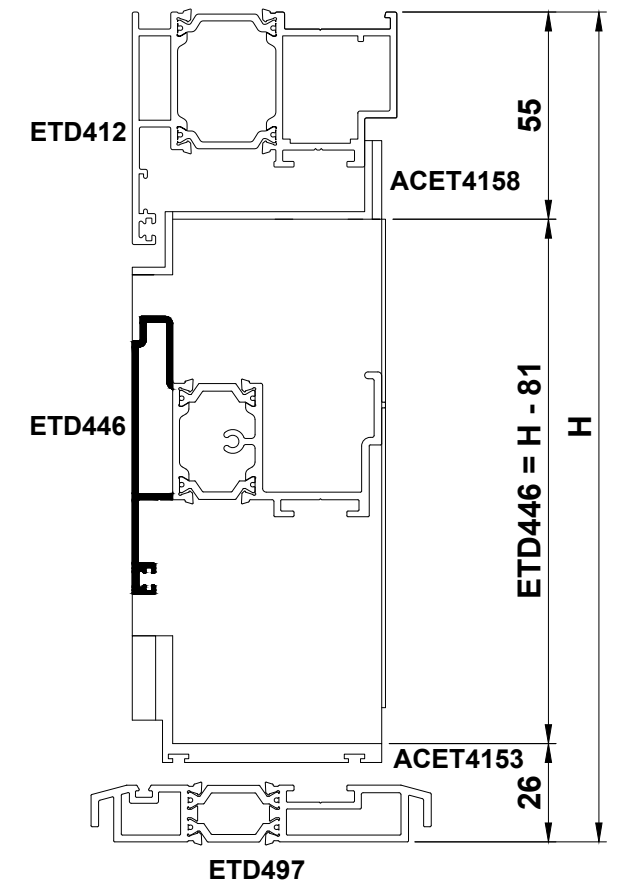
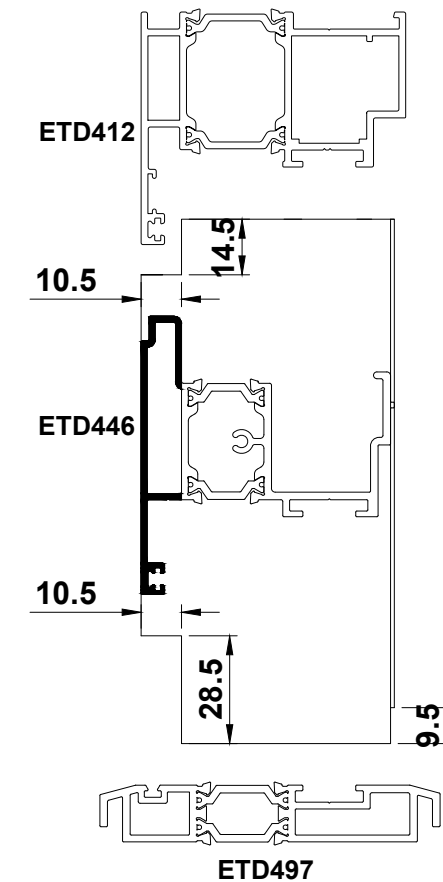
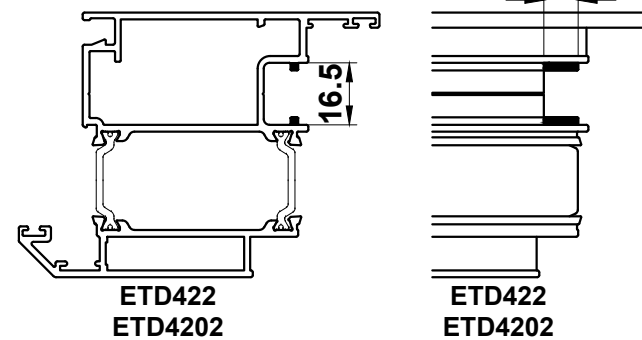
Do Not Scale From This Drawing

Flush Double Door Finger Bolt Meeting Stile Assembly for Low Ramp Threshold



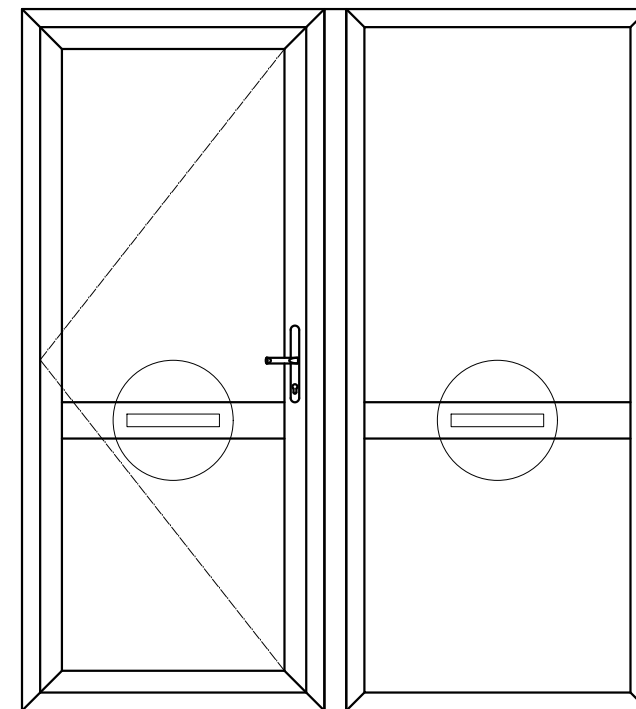
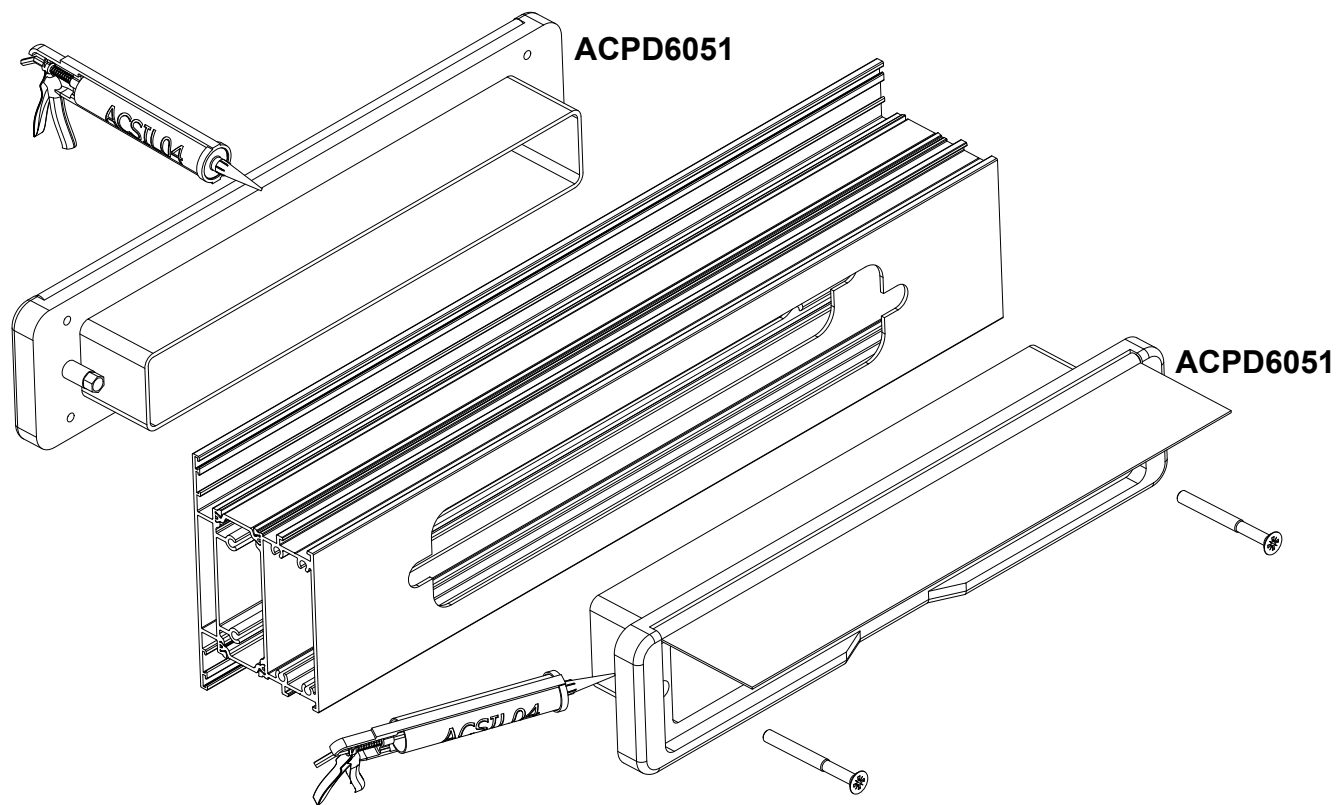
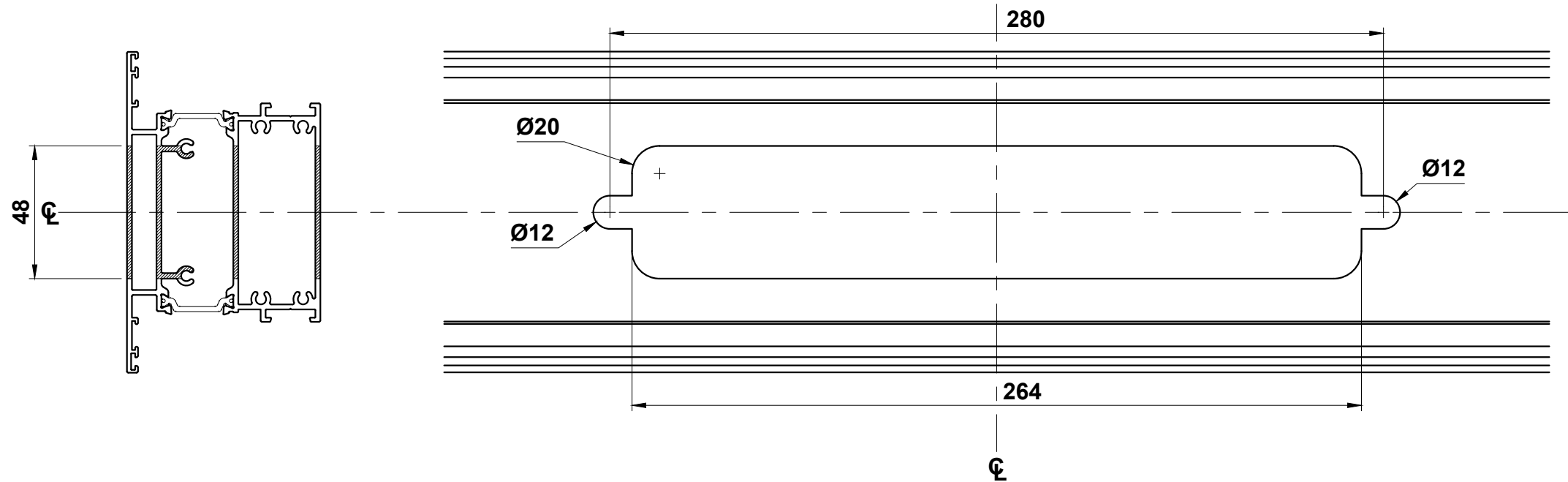
Note: All routing on outer frame require sealant to stop water leakage

Sash to be notched to allow ACUL242 to fit into position



Do Not Scale From This Drawing

Letter Plate Fitting

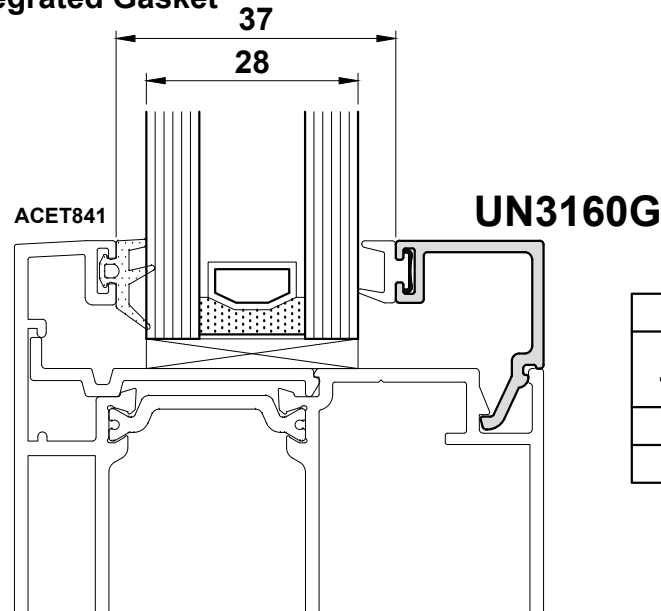


Do Not Scale From This Drawing

Glazing Chart

28mm Glazing

Integrated Gasket

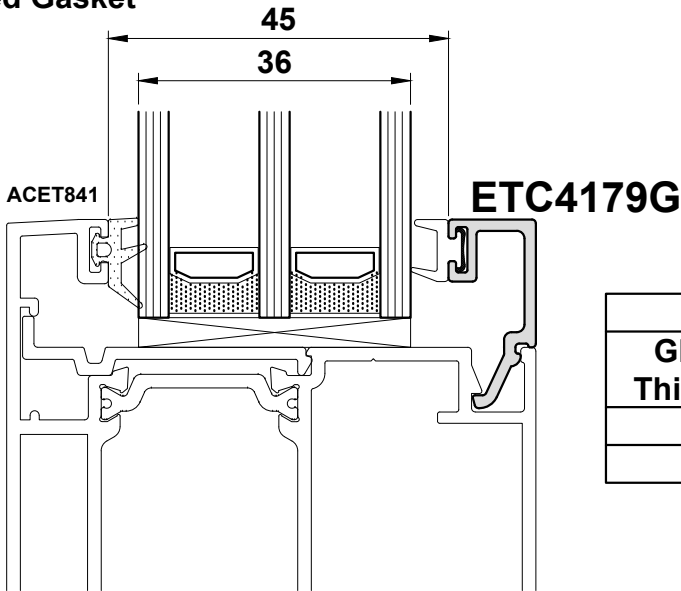


ETD402
ETD4202 ETD4301

Low Profile Gaskets		
Glazing Thickness	External Gasket	Internal Gasket
28	ACET841	-
29 (28.8)	ACET842	-

36mm Glazing

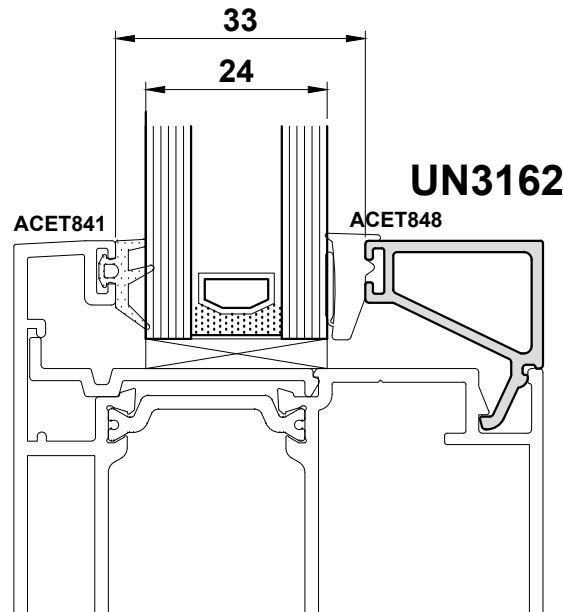
Integrated Gasket



ETD402
ETD4202 ETD4301

Low Profile Gaskets		
Glazing Thickness	External Gasket	Internal Gasket
36	ACET841	-
37	ACET842	-

24-26mm Glazing

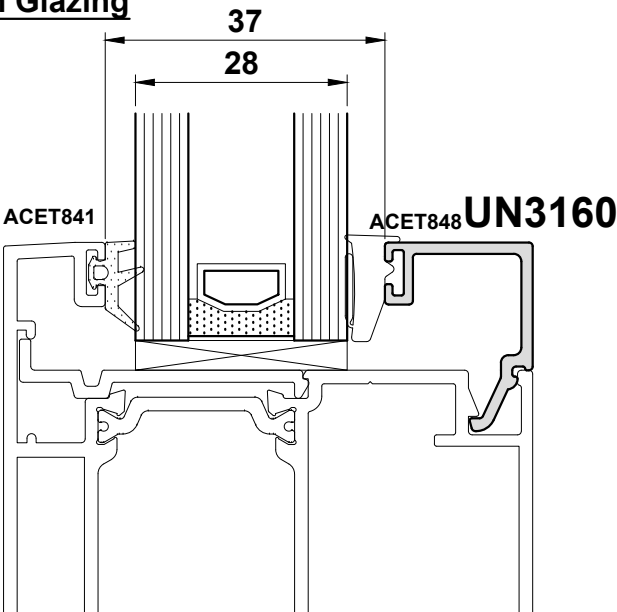


ETD402
ETD4202 ETD4301

Low Profile Gaskets		
Glazing Thickness	External Gasket	Internal Gasket
24	ACET841	ACET848
25	ACET842	ACET848
26	ACET843	ACET848

Standard Gaskets		
Glazing Thickness	External Gasket	Internal Gasket
24	ACVG31	ACUN036
25	ACVG231	ACUN036
26	ACVG231	ACUN036

28-30mm Glazing



ETD402
ETD4202 ETD4301

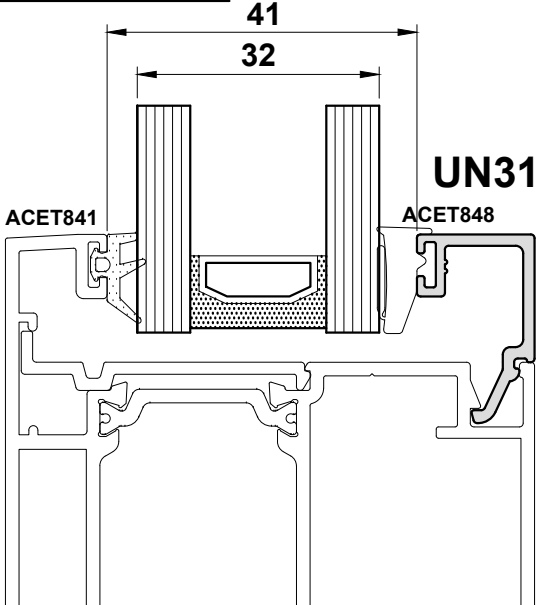
Low Profile Gaskets		
Glazing Thickness	External Gasket	Internal Gasket
28	ACET841	ACET848
29 (28.8)	ACET842	ACET848
30	ACET843	ACET848

Standard Gaskets		
Glazing Thickness	External Gasket	Internal Gasket
28	ACVG31	ACUN036
29 (28.8)	ACVG231	ACUN036
30	ACVG231	ACUN036

Do Not Scale From This Drawing

Glazing Chart

30-32mm Glazing

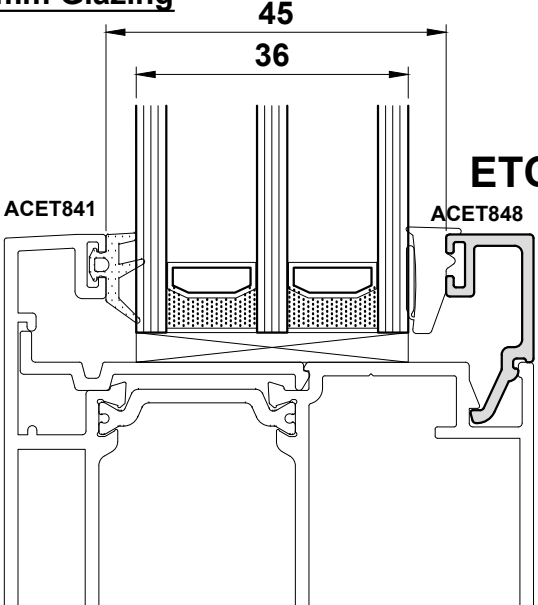


Low Profile Gaskets		
Glazing Thickness	External Gasket	Internal Gasket
30	ACET841	ACET848
31	ACET842	ACET848
32	ACET843	ACET848

Standard Gaskets		
Glazing Thickness	External Gasket	Internal Gasket
30	ACVG31	ACUN036
31	ACVG231	ACUN036
32	ACVG231	ACUN036

ETD402
ETD4202 ETD4301

36-38mm Glazing

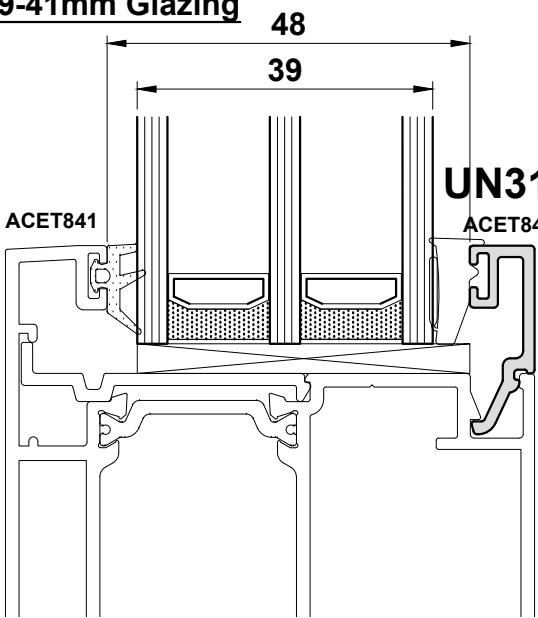


Low Profile Gaskets		
Glazing Thickness	External Gasket	Internal Gasket
36	ACET841	ACET848
37	ACET842	ACET848
38	ACET843	ACET848

Standard Gaskets		
Glazing Thickness	External Gasket	Internal Gasket
36	ACVG31	ACUN036
37	ACVG231	ACUN036
38	ACVG231	ACUN036

ETD402
ETD4202 ETD4301

39-41mm Glazing

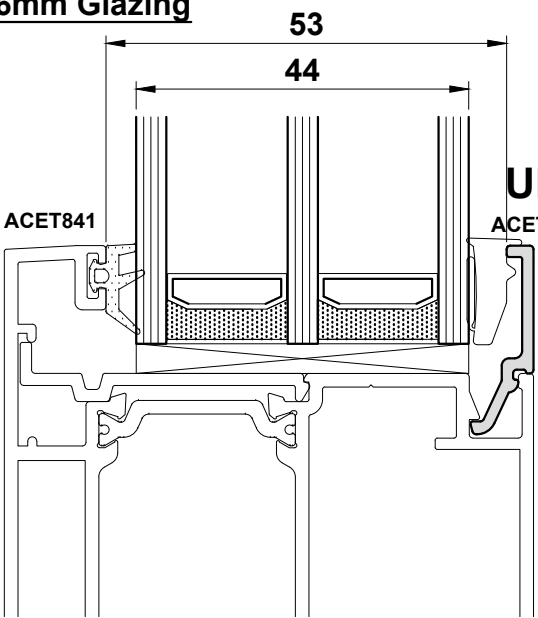


Low Profile Gaskets		
Glazing Thickness	External Gasket	Internal Gasket
39	ACET841	ACET848
40	ACET842	ACET848
41	ACET843	ACET848

Standard Gaskets		
Glazing Thickness	External Gasket	Internal Gasket
39	ACVG31	ACUN036
40	ACVG231	ACUN036
41	ACVG231	ACUN036

ETD402
ETD4202 ETD4301

44-46mm Glazing



Low Profile Gaskets		
Glazing Thickness	External Gasket	Internal Gasket
44	ACET841	ACET848
45	ACET842	ACET848
46	ACET843	ACET848

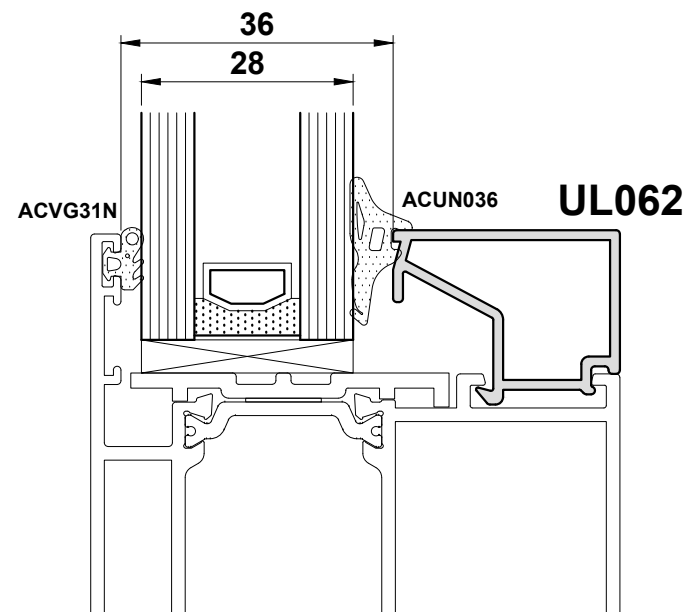
Standard Gaskets		
Glazing Thickness	External Gasket	Internal Gasket
44	ACVG31	ACUN036
45	ACVG231	ACUN036
46	ACVG231	ACUN036

ETD402
ETD4202 ETD4301

Do Not Scale From This Drawing

Glazing Chart

27-29mm Glazing

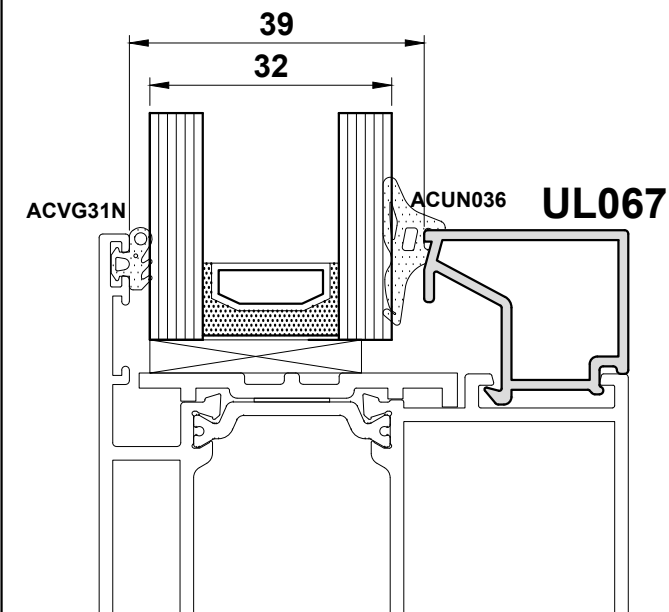


ETD404
ETD422 ETD430

Low Profile Gaskets		
Glazing Thickness	External Gasket	Internal Gasket
27	ACET841	ACET848
28	ACET842	ACET848
29 (28.8)	ACET843	ACET848

Standard Gaskets		
Glazing Thickness	External Gasket	Internal Gasket
27	ACVG31N	ACUN036
28	ACVG231	ACUN036
29 (28.8)	ACVG231	ACUN036

30-32mm Glazing

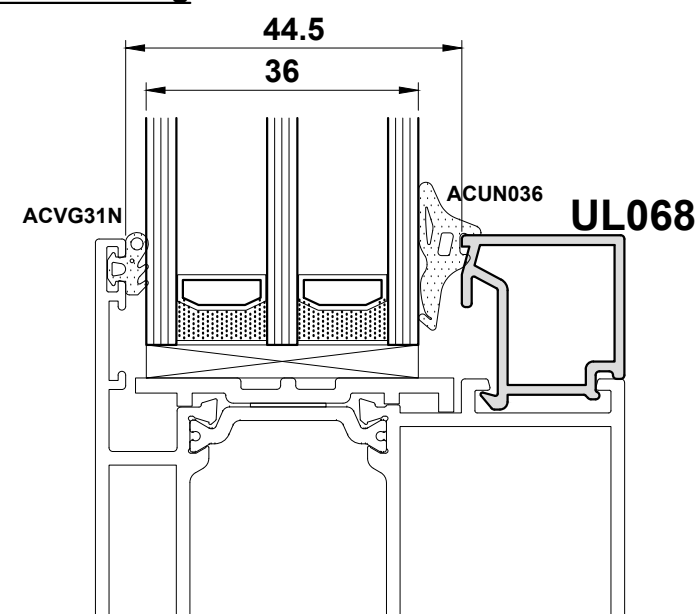


ETD404
ETD422 ETD430

Low Profile Gaskets		
Glazing Thickness	External Gasket	Internal Gasket
30	ACET841	ACET848
31	ACET842	ACET848
32	ACET843	ACET848

Standard Gaskets		
Glazing Thickness	External Gasket	Internal Gasket
30	ACVG31N	ACUN036
31	ACVG231	ACUN036
32	ACVG231	ACUN036

36mm Glazing

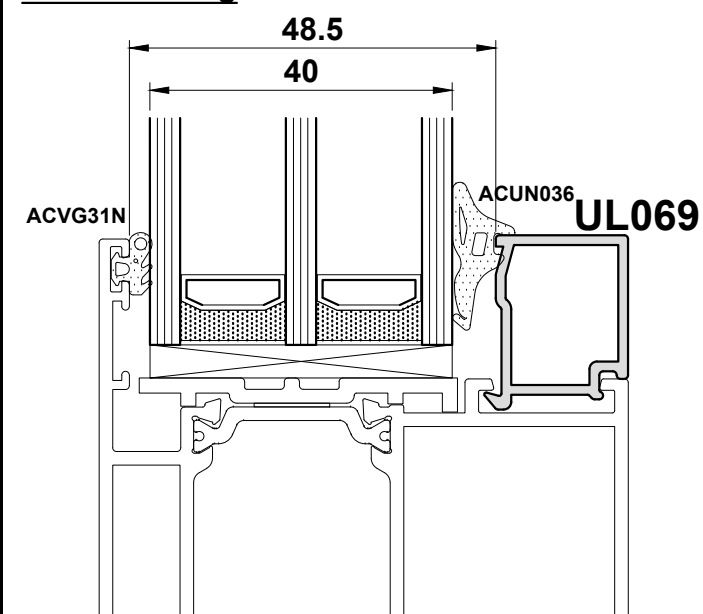


ETD404
ETD422 ETD430

Low Profile Gaskets		
Glazing Thickness	External Gasket	Internal Gasket
35	ACET841	ACET848
36	ACET842	ACET848
37	ACET843	ACET848

Standard Gaskets		
Glazing Thickness	External Gasket	Internal Gasket
35	ACVG31N	ACUN036
36	ACVG231	ACUN036
37	ACVG231	ACUN036

42mm Glazing



ETD404
ETD422 ETD430

Low Profile Gaskets		
Glazing Thickness	External Gasket	Internal Gasket
39	ACET841	ACET848
40	ACET842	ACET848
41	ACET843	ACET848
42	ACET843	ACET848

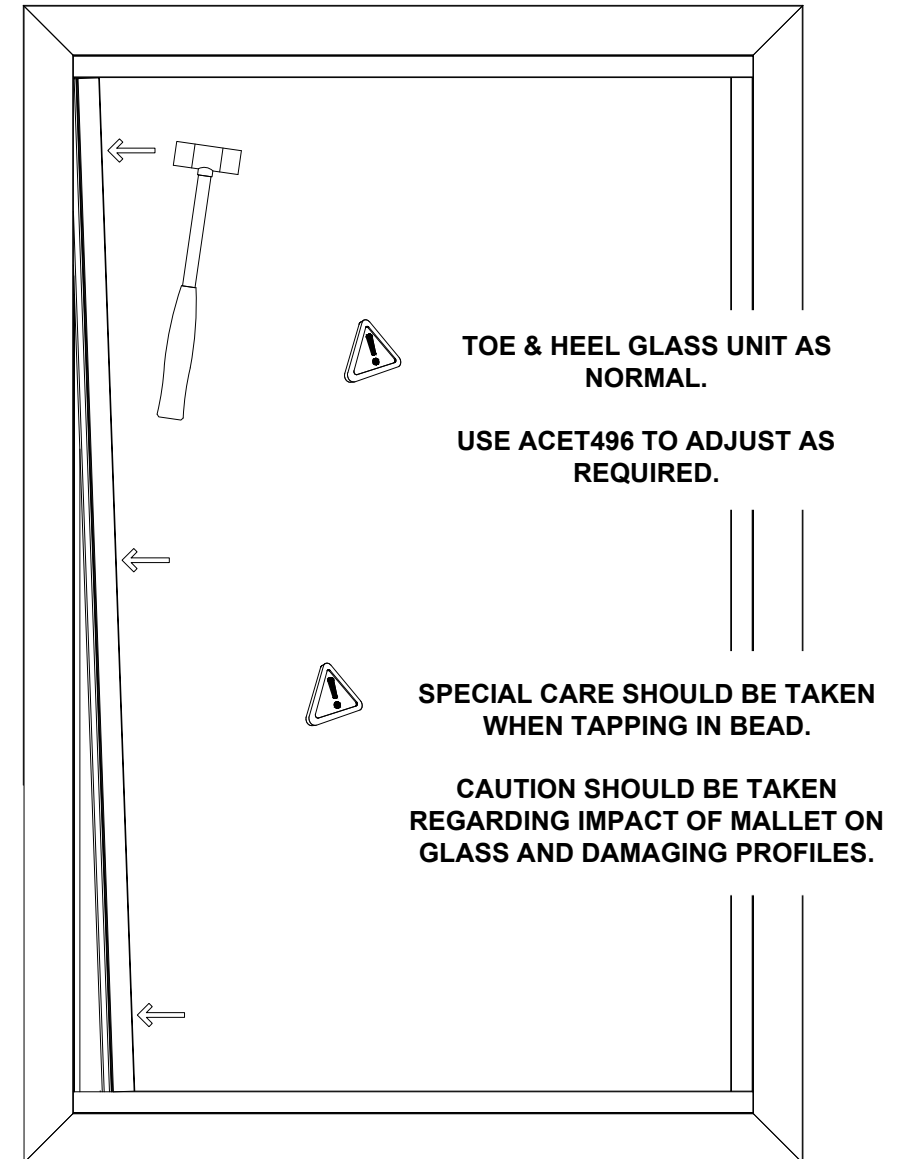
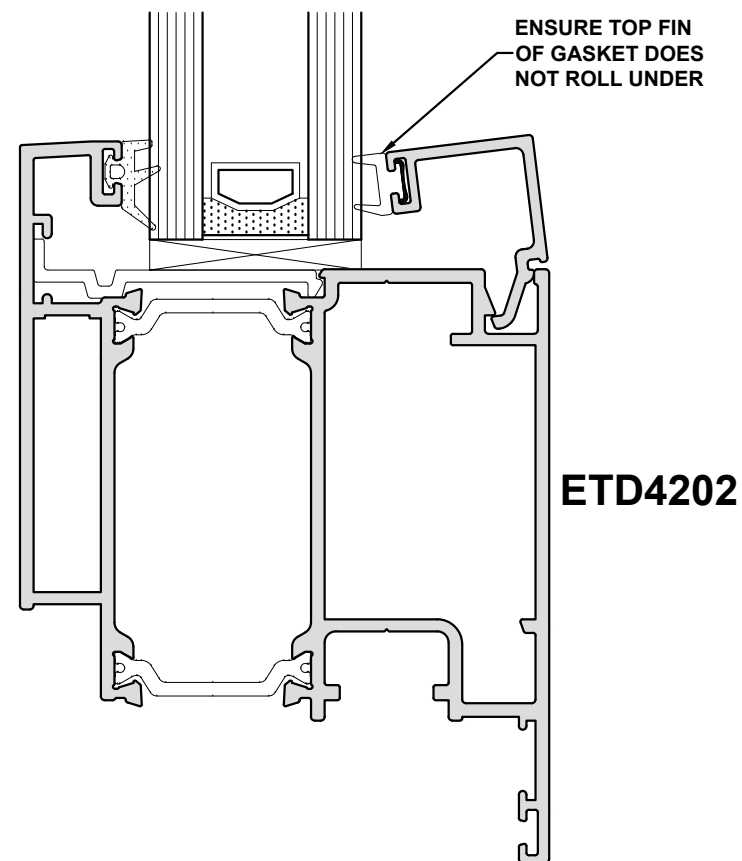
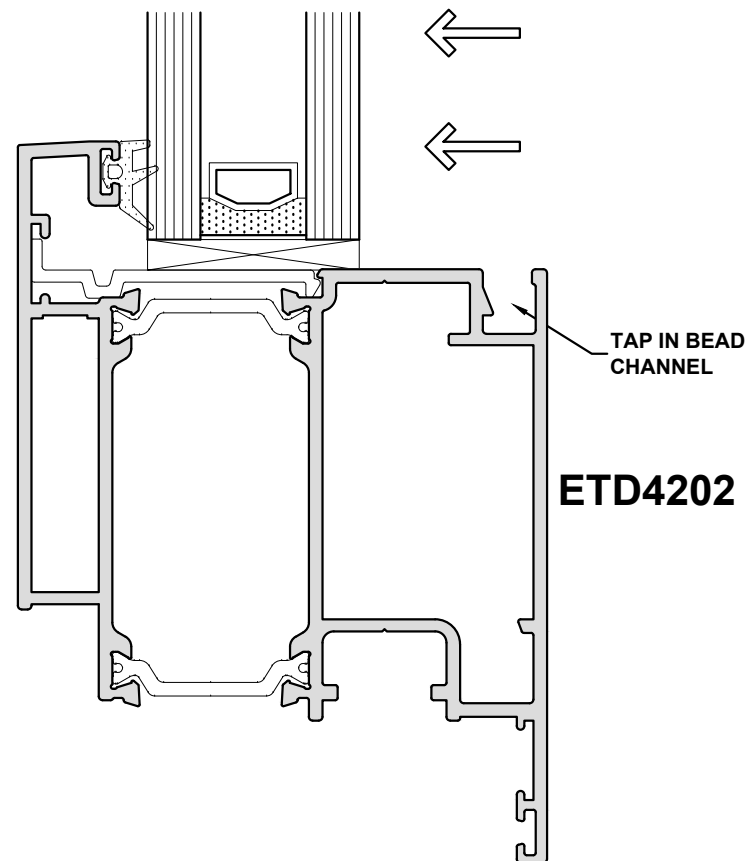
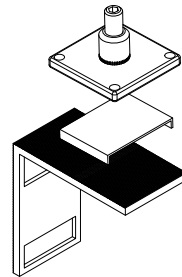
Standard Gaskets		
Glazing Thickness	External Gasket	Internal Gasket
39	ACVG31N	ACUN036
40	ACVG231	ACUN036
41	ACVG231	ACUN036
42	ACVG231	ACUN033

Do Not Scale From This Drawing

QUICK-GLAZE BEAD INSTALLATION

1. INSTALL GLASS UNIT, ENSURING IT HAS BEEN PUSHED FORWARD TO ENGAGE COMPRESSION OF E GASKET.
2. BEGINNING WITH HORIZONTAL BEADS, LOCATE BEAD IN CLIP CHANNEL OF SASH AS SHOWN. INTEGRATED GASKET MAY REST AGAINST GLASS UNIT.
3. APPLY FIRM PRESSURE TO THE BEAD TO HOLD IN POSITION. THIS MAY CAUSE THE BEAD TO FULLY LOCK INTO POSITION.
4. USING A NYLON MALLET, TAP BEAD INTO CHANNEL WORKING FROM ONE END TO THE OTHER. PLEASE TAKE CARE AT THIS STAGE TO AVOID DAMAGE TO BOTH THE GLAZING UNIT AND THE BEAD.
5. REPEAT STEPS 2 - 4 TO INSTALL VERTICAL BEADS.

WE STRONGLY RECOMMEND INSTALLING ACET496 GLASS ADJUSTERS WHEN USING QUICK-GLAZE BEADS. THIS WILL REMOVE THE NEED TO REMOVE BEADS IN ORDER TO ADJUST GLASS POSITION.

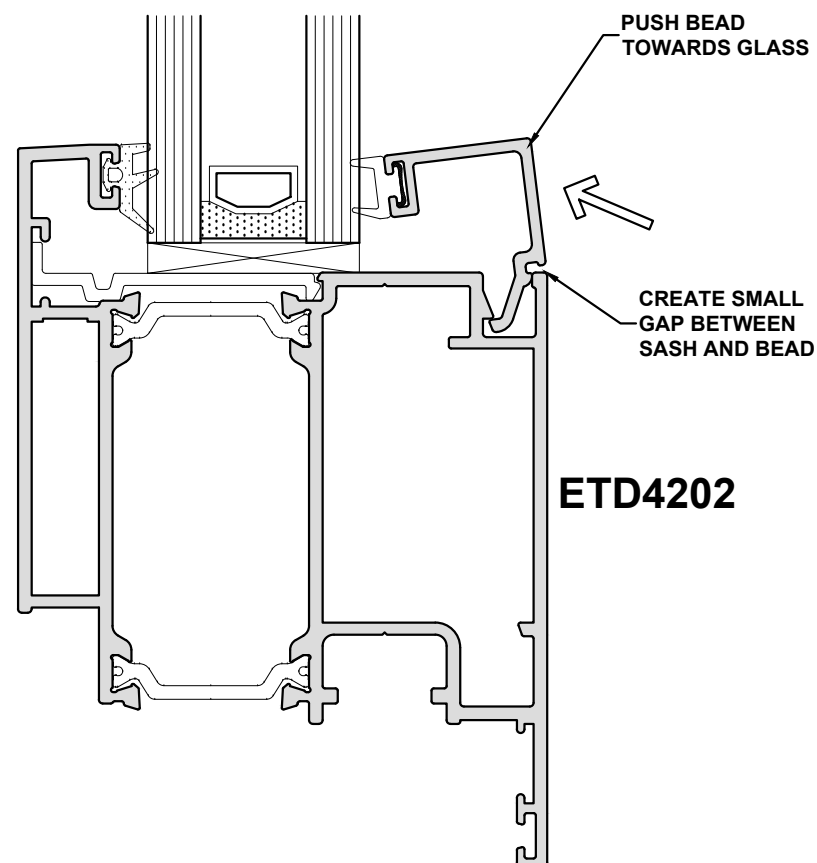


KEEP INTEGRATED GASKET

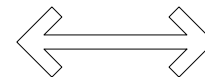
QUICK-GLAZE BEAD REMOVAL

1. STARTING ON VERTICAL BEADS, APPLY PRESSURE TO BEAD IN DIRECTION SHOWN IN ORDER TO CREATE SMALL GAP BETWEEN SASH AND BEAD.
2. GENTLY INSERT DE-GLAZING TOOL TAKING PARTICULAR CARE AS NOT TO DAMAGE PAINT FINISH.
3. SLOWLY PRISE THE BEAD UP AND AWAY FROM THE SASH.
4. THE BEAD SHOULD NOW BE EASILY REMOVABLE FROM QUICK-GLAZE BEAD CHANNEL IN SASH

BEAD AND INTEGRATED GASKET CAN BE REUSED.



OR

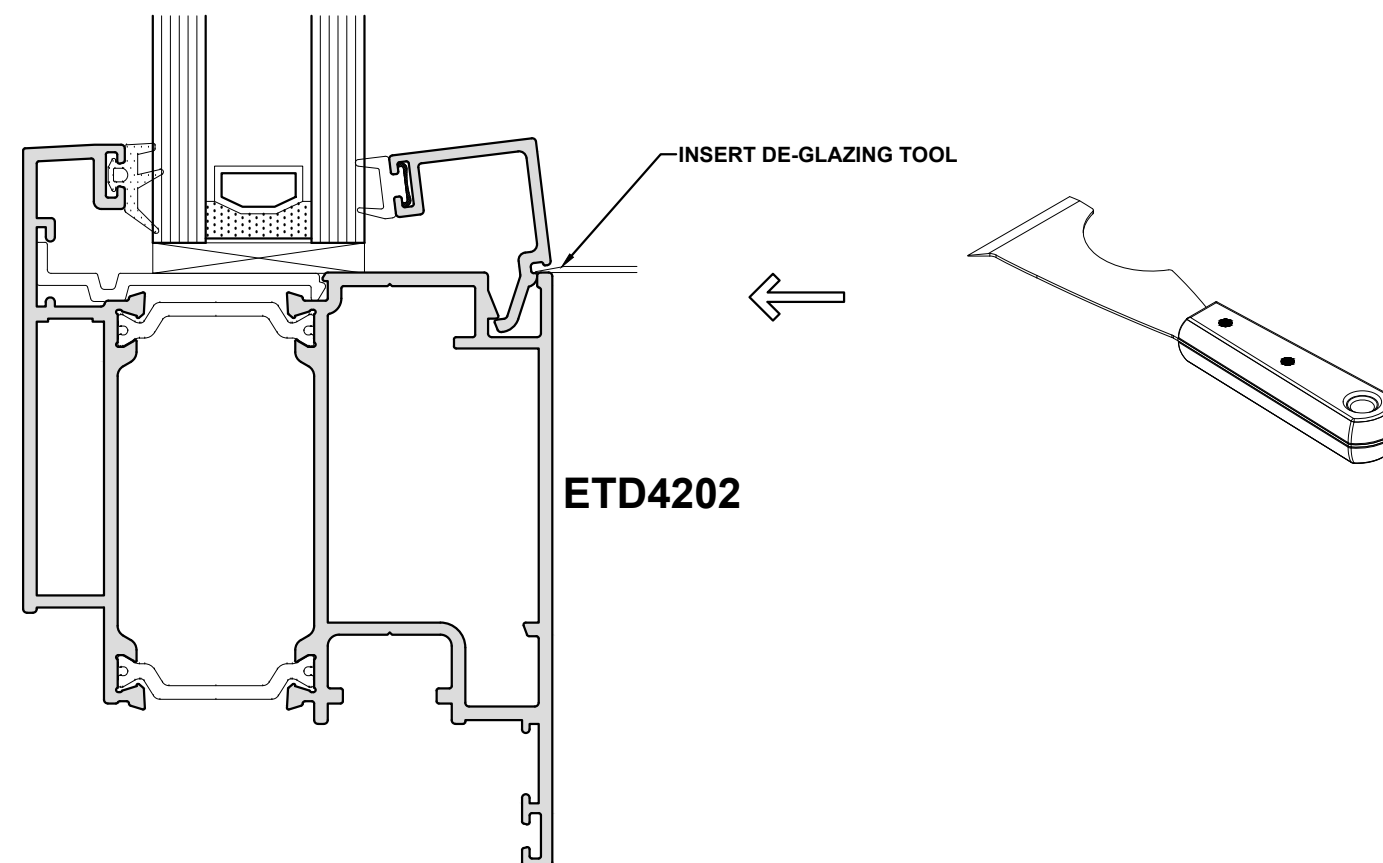


REPLACE INTEGRATED GASKET

QUICK-GLAZE BEAD REMOVAL

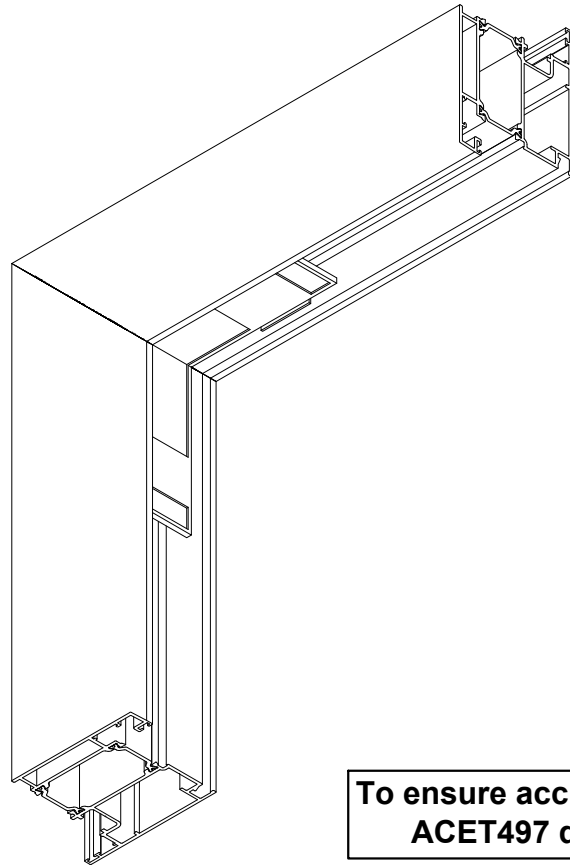
1. USING SMALL FLAT HEADED SCREWDRIVER OR SIMILAR, WEDGE TIP BETWEEN CO EXTRUDED GASKET AND ALUMINIUM.
2. IN A LEVERING MOTION, PRISE THE GASKET AWAY FROM THE ALUMINIUM. PARTICULAR CARE SHOULD BE TAKEN NOT TO DAMAGE THE GLASS UNIT AND ALUMINIUM.
3. COMPLETE THIS AT SEVERAL LOCATIONS ALONG THE LENGTH OF THE BEAD.
4. REMOVE GASKET AND DISCARD. THIS GASKET CAN NO LONGER BE USED.
5. THE BEAD SHOULD NOW BE EASILY REMOVABLE FROM TAP IN BEAD CHANNEL IN SASH

PLEASE SEE GLAZING CHART FOR REPLACEMENT GASKET CODES.

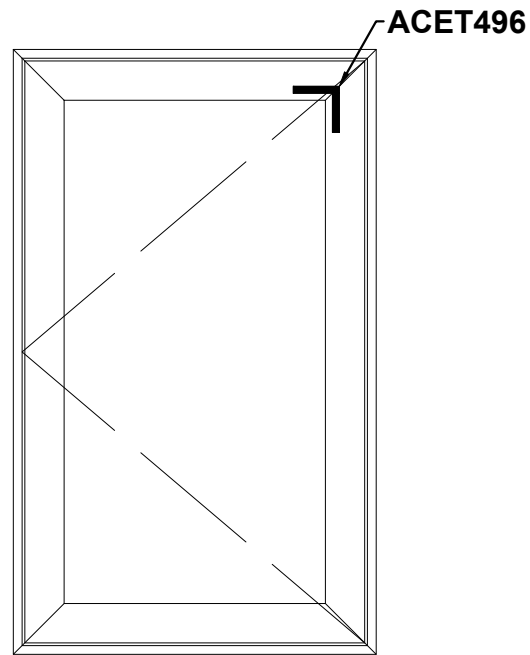


Do Not Scale From This Drawing

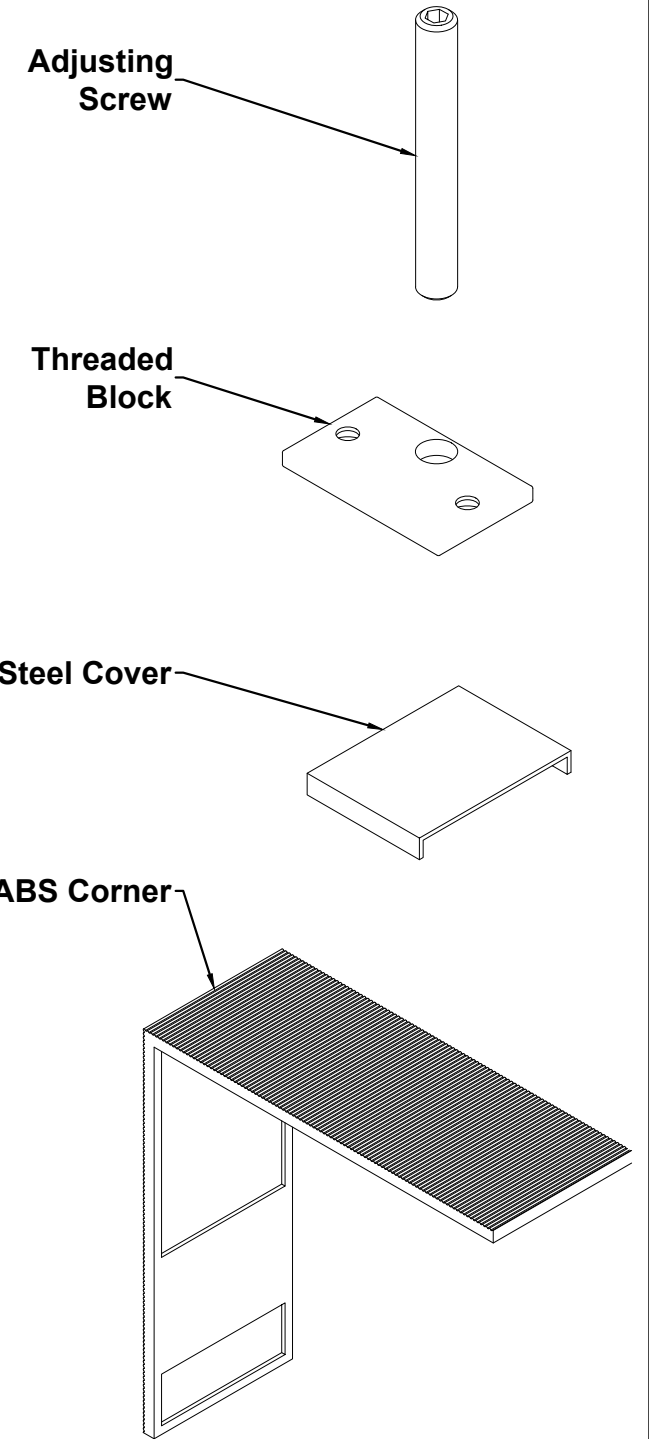
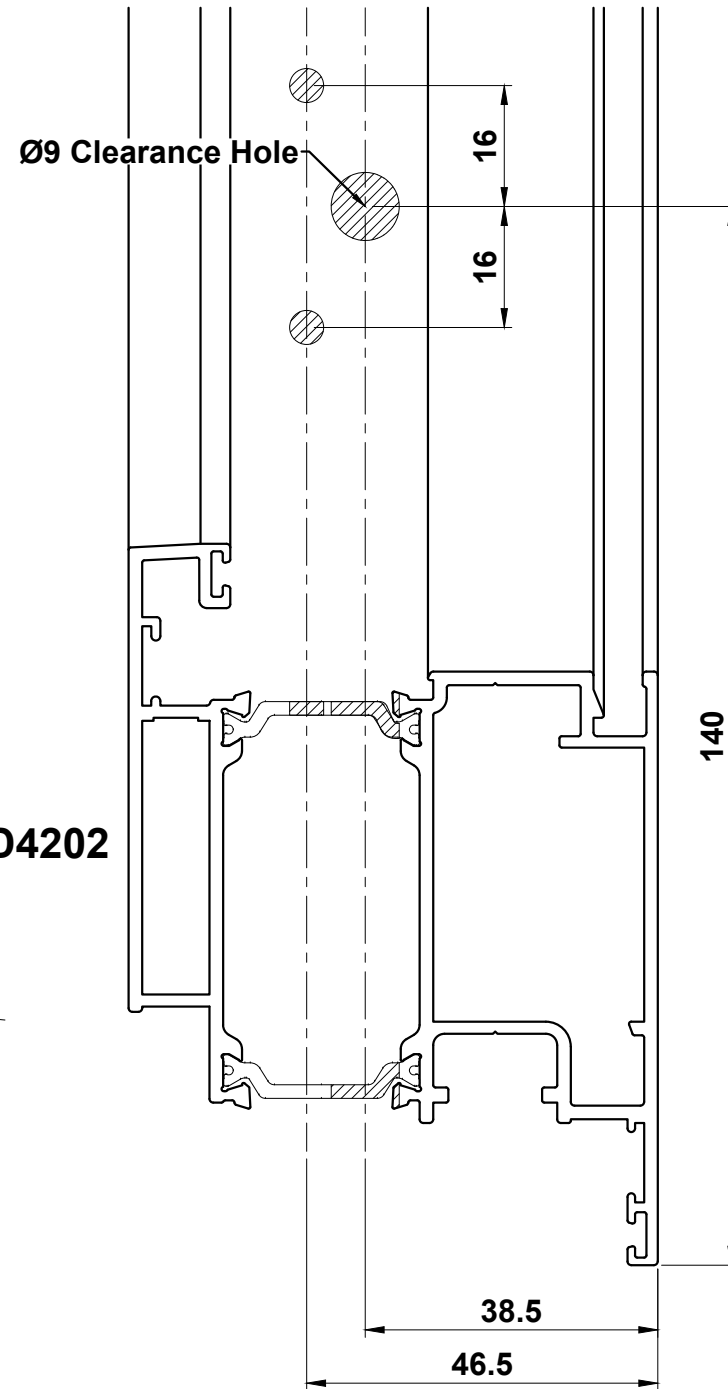
ACET496 Glass Adjuster



To ensure accuracy use
ACET497 drill jig

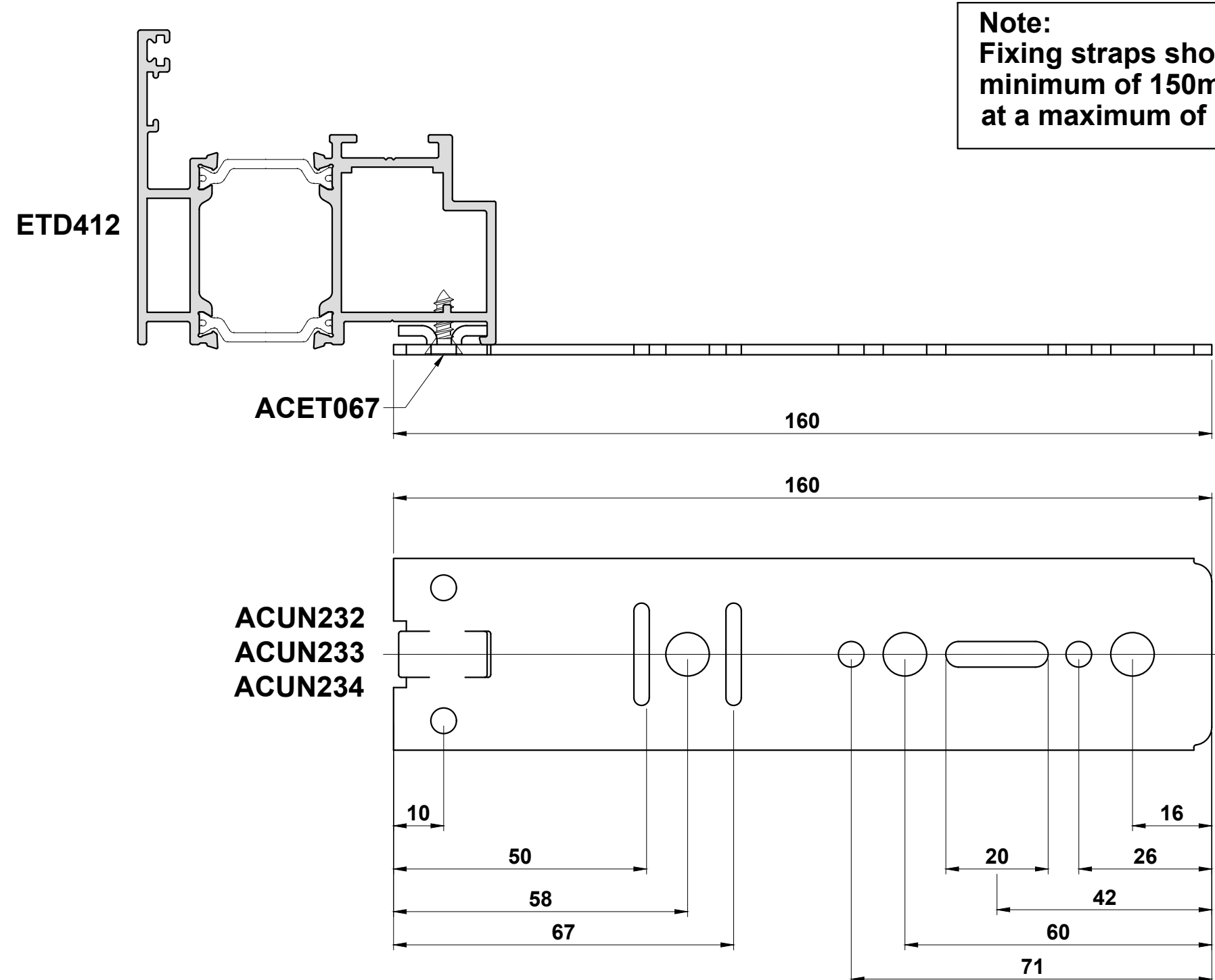


Note: Do not tighten the adjusting
screw too tightly as it can lead to
cracked glass.



Do Not Scale From This Drawing

Fixing Strap Detail

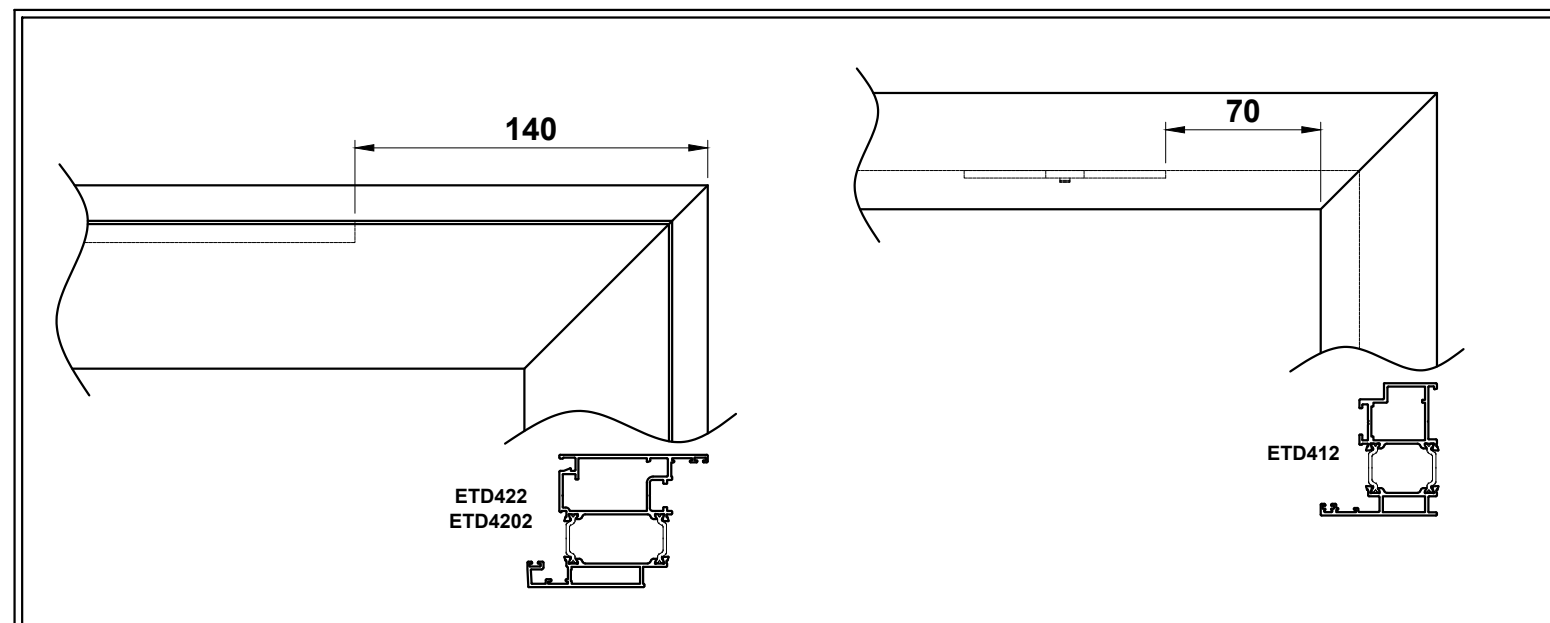
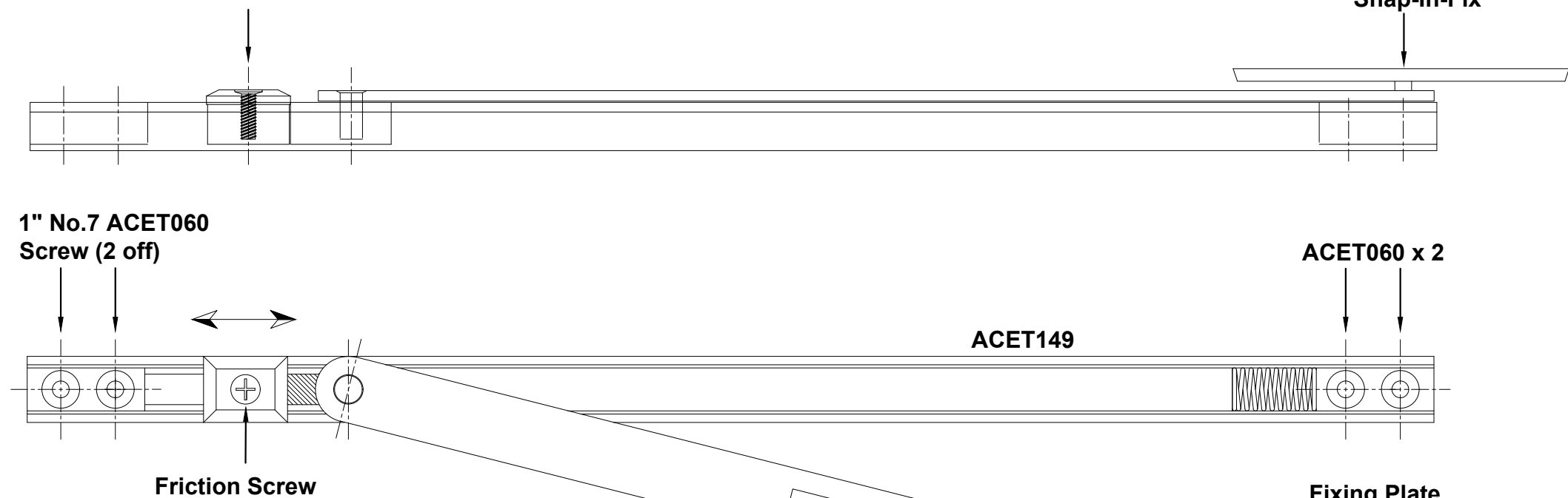
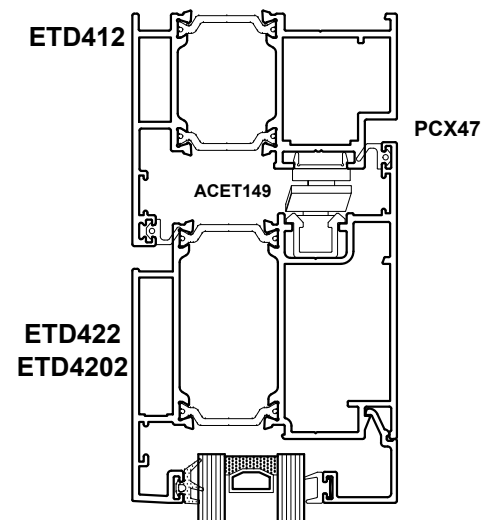


Do Not Scale From This Drawing



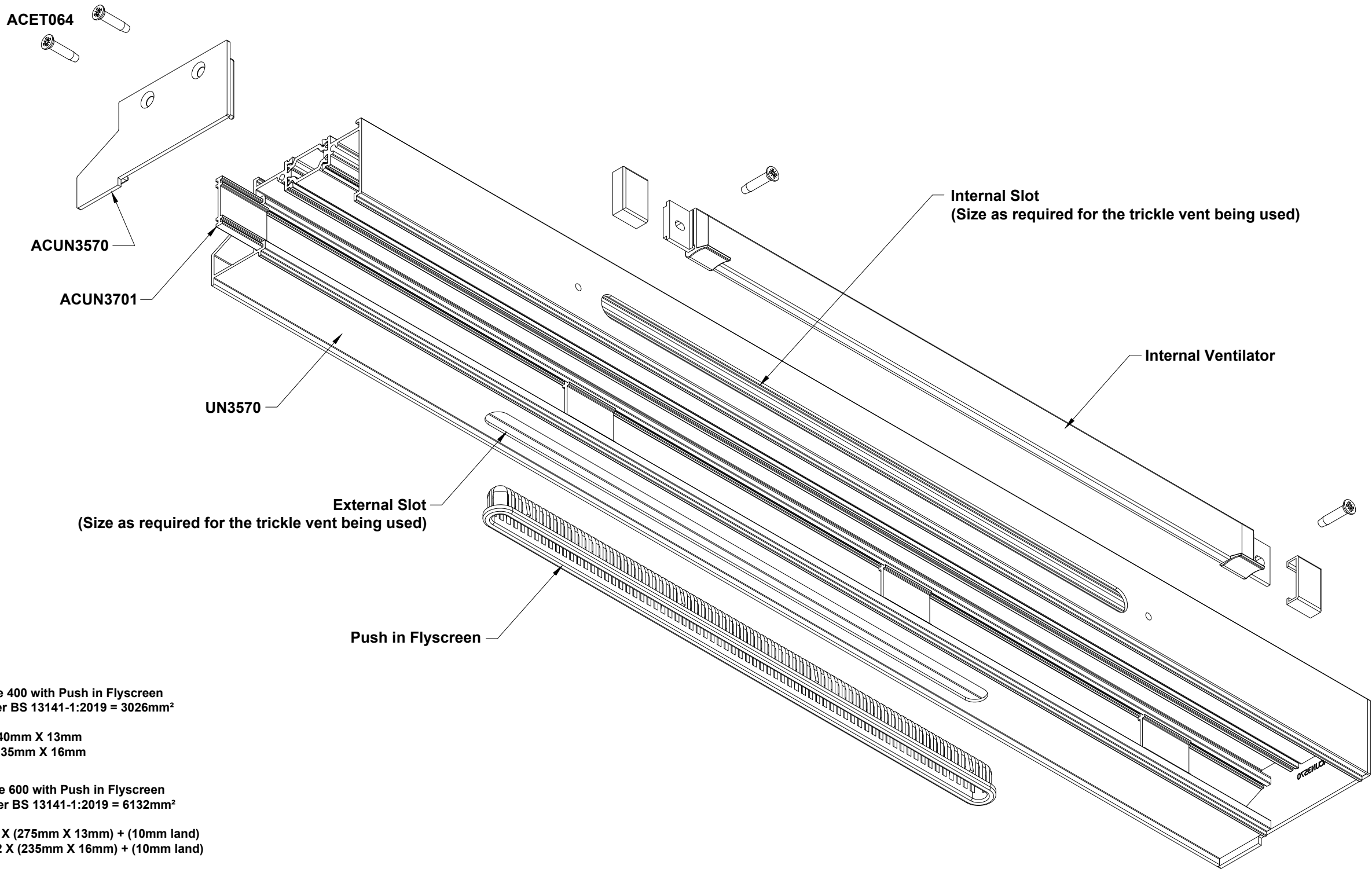
ACET149 Fitting Instructions

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



Do Not Scale From This Drawing

Trickle Vent



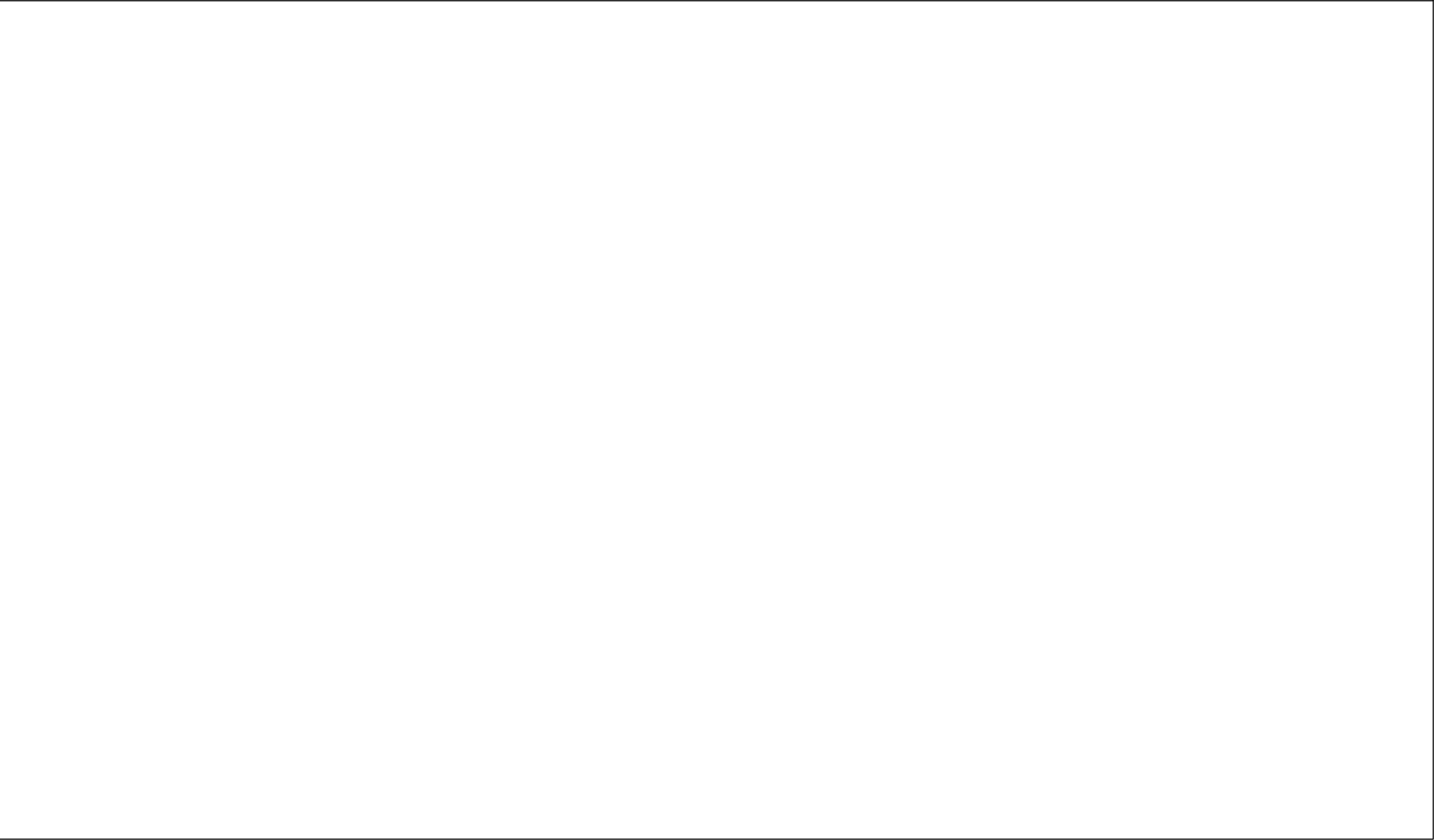
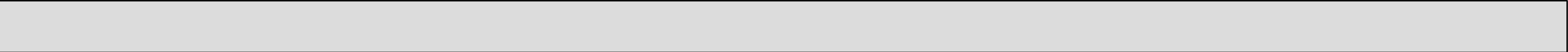
Do Not Scale From This Drawing

Section E

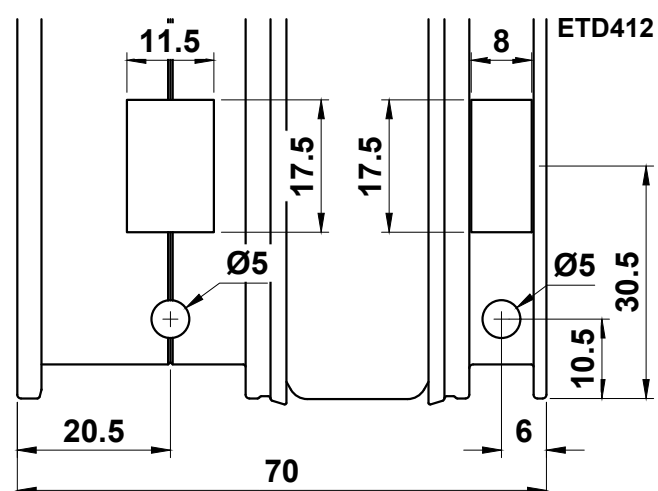
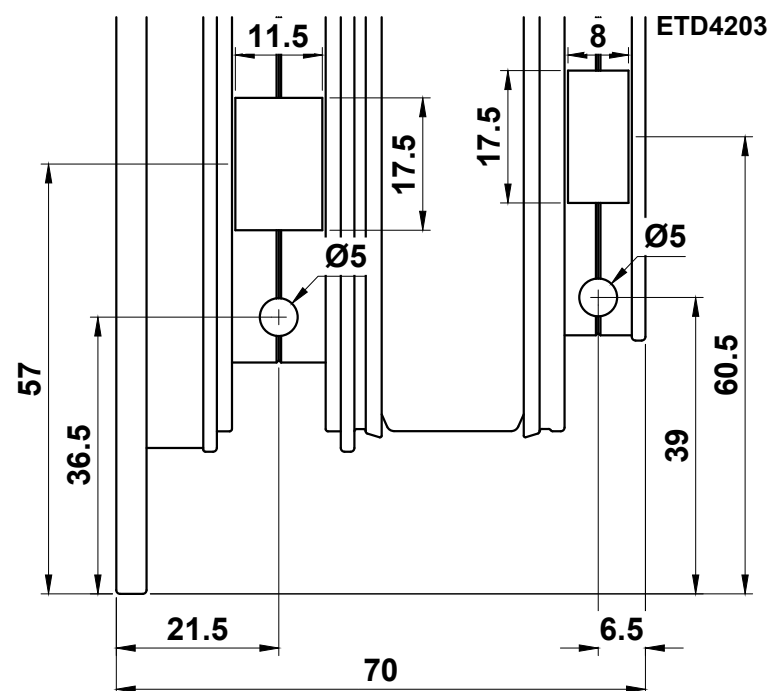


Construction Drawings - Open Out

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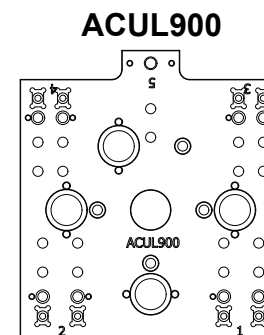
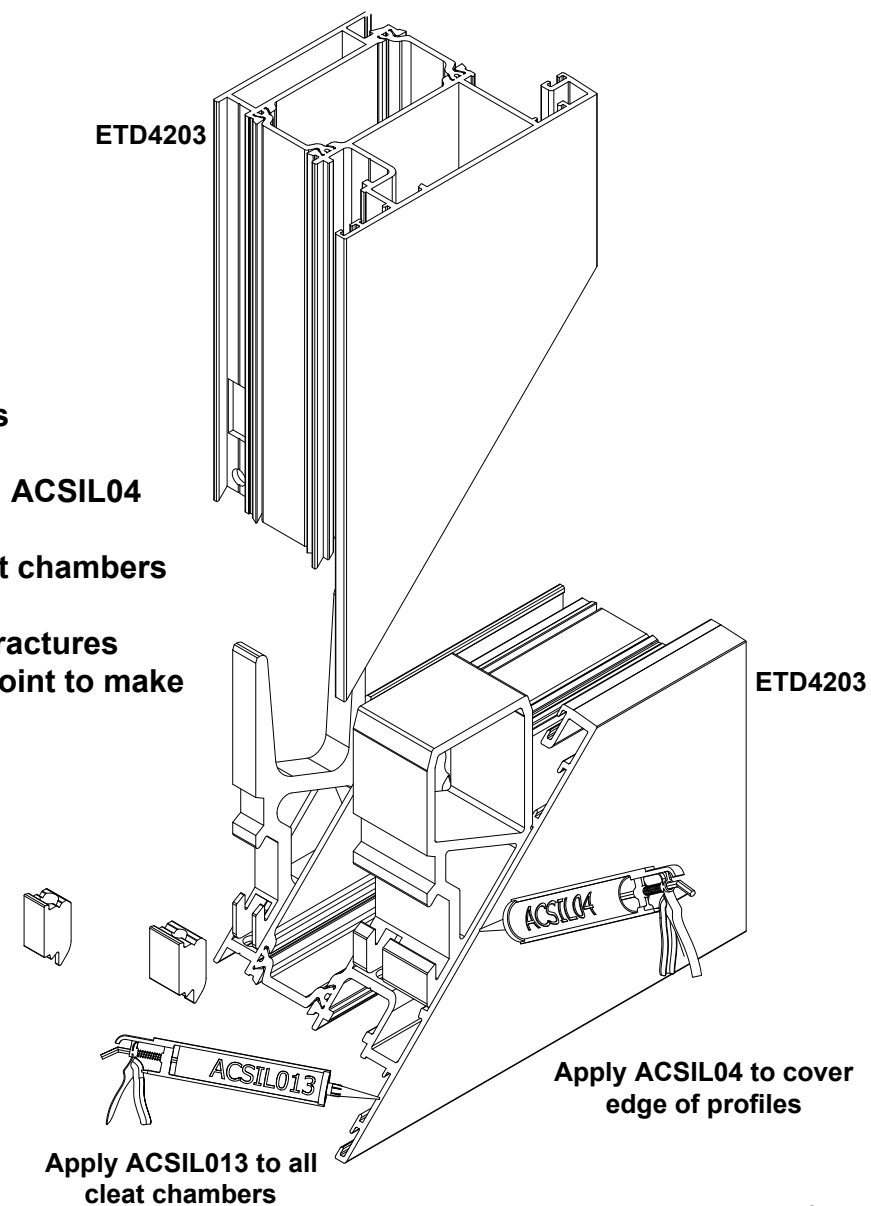


Corner Joint Details



Notes

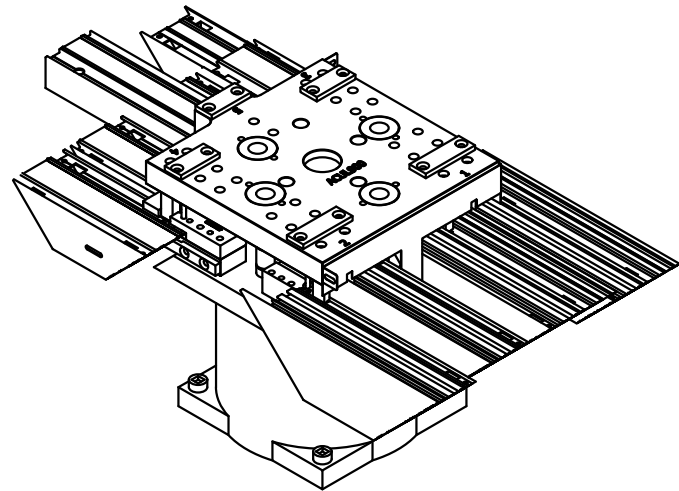
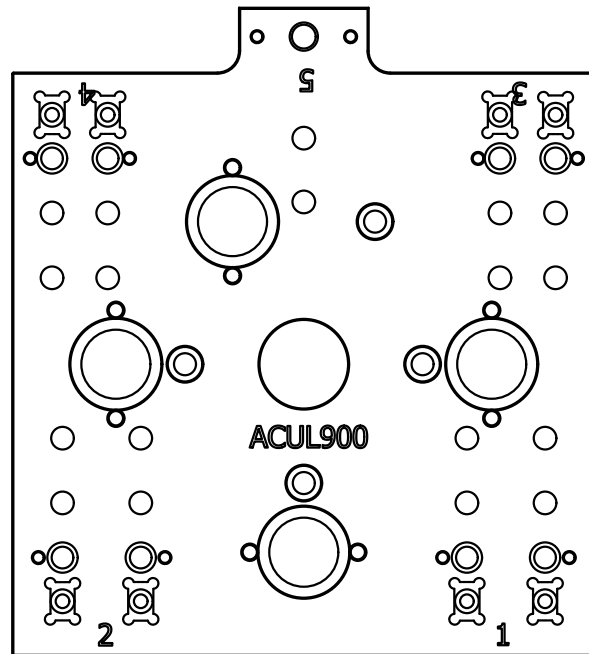
1. Degrease mitre sections
2. Cover mitred faces with ACSIL04
3. Apply ACSIL013 to cleat chambers
4. Apply ACSIL04 to any fractures formed by mechanical joint to make watertight



To ensure accurate corners, we recommend the use of support blocks (by others) whilst cutting.

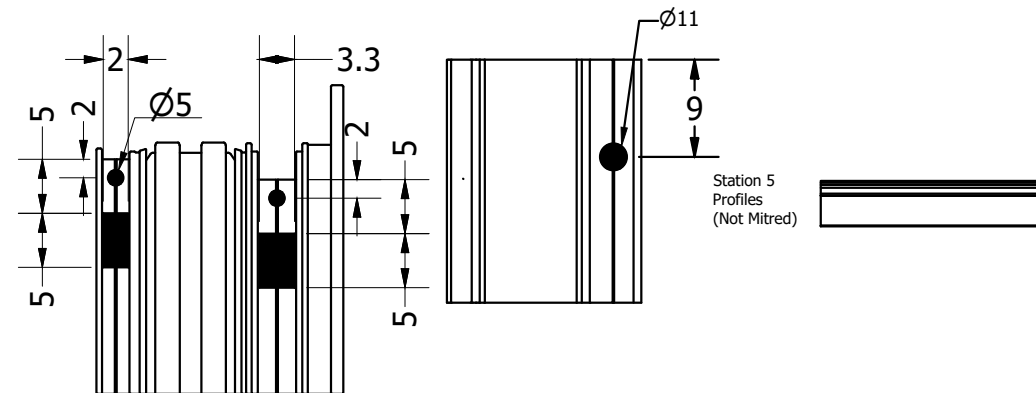
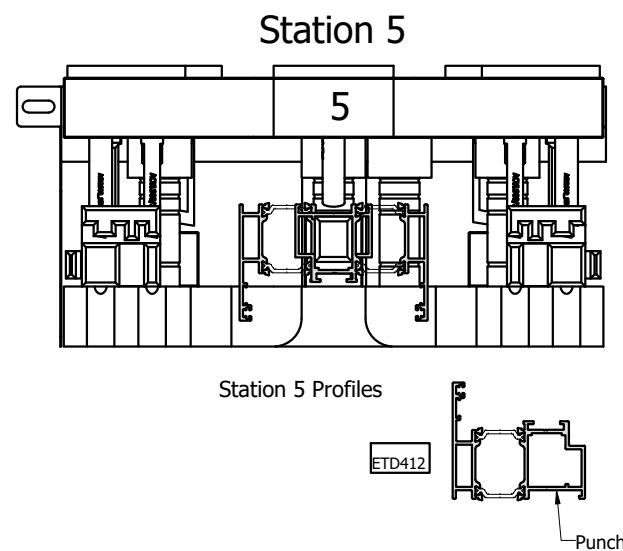
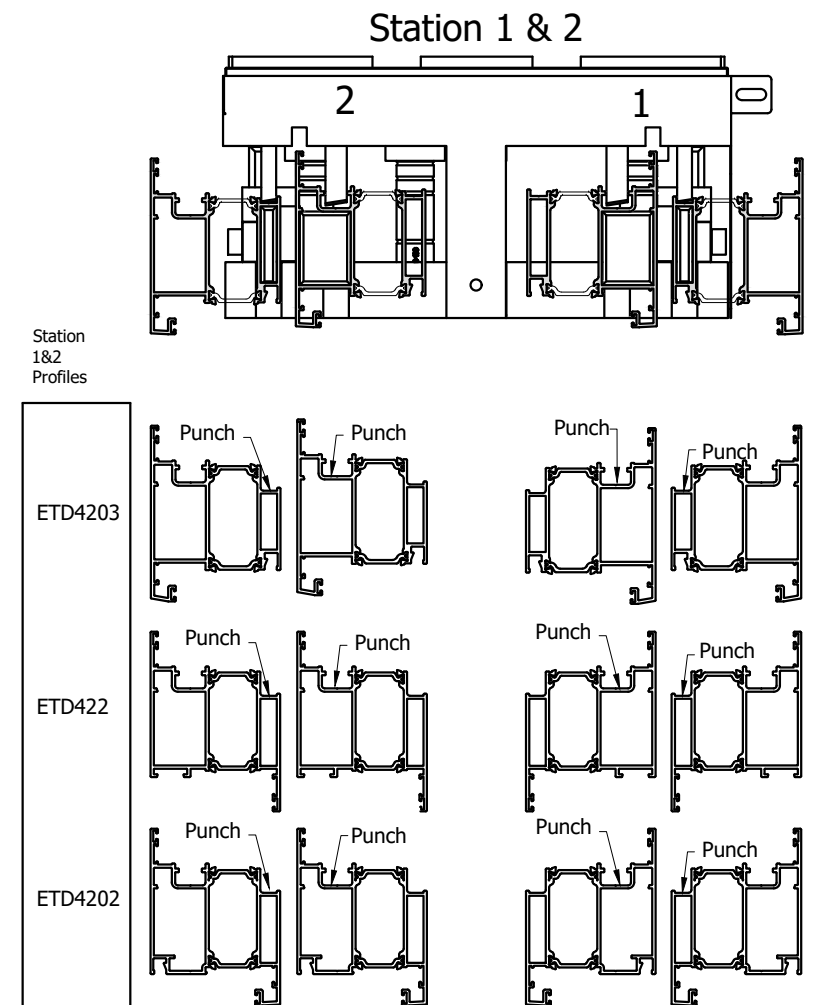
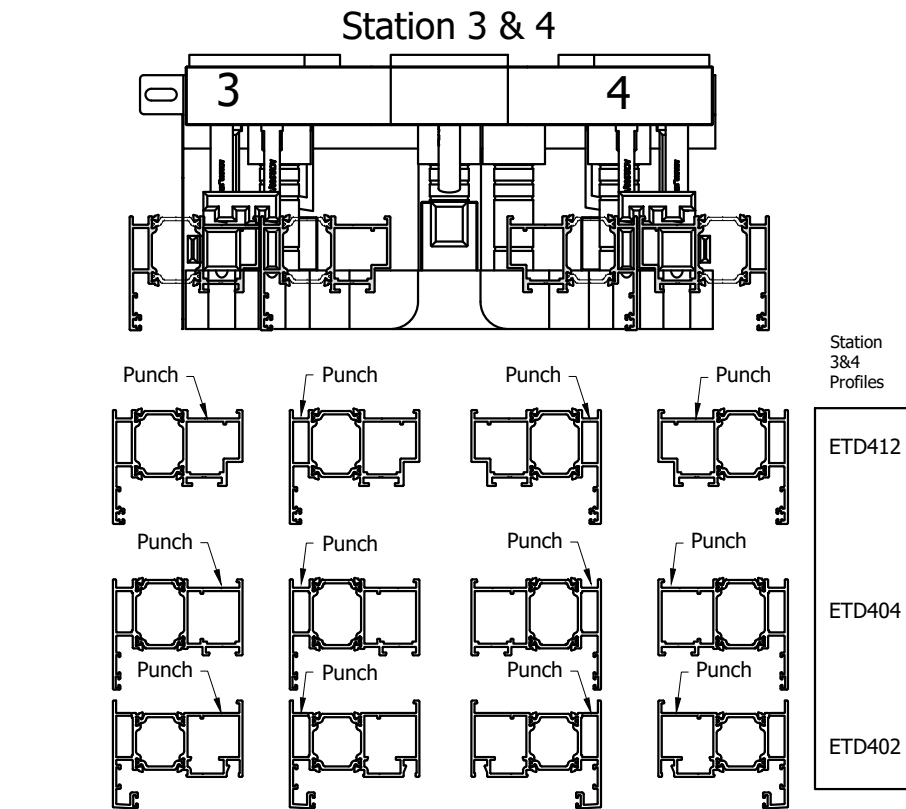
Do Not Scale From This Drawing

ACUL900 Punch Tool



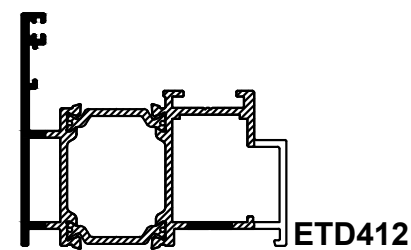
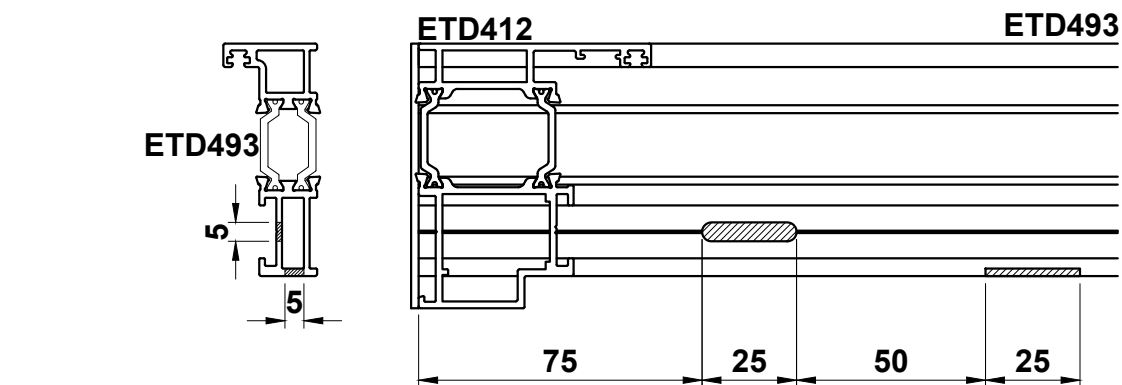
IMPORTANT NOTE:
Please do not overtighten
retaining nut to punch tool base.

Use support stands for longer
lengths of profiles.

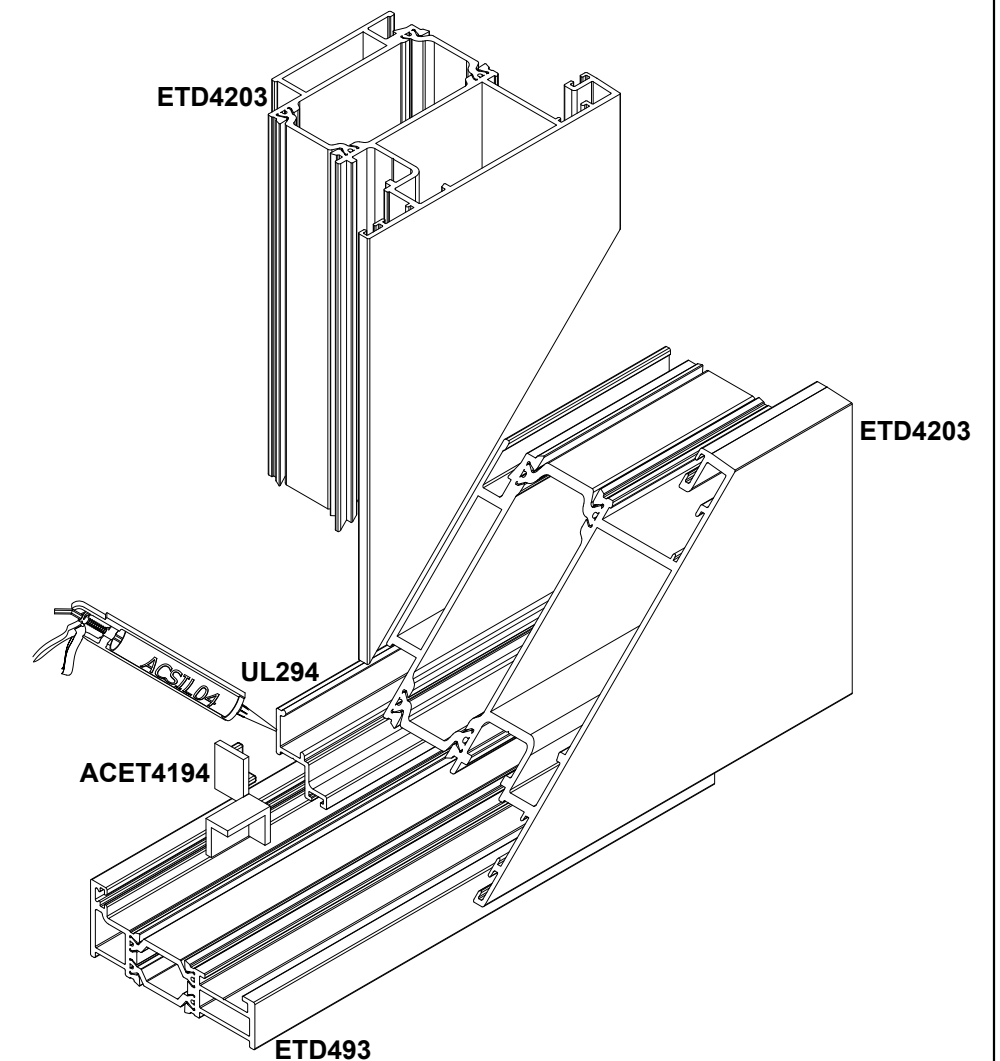
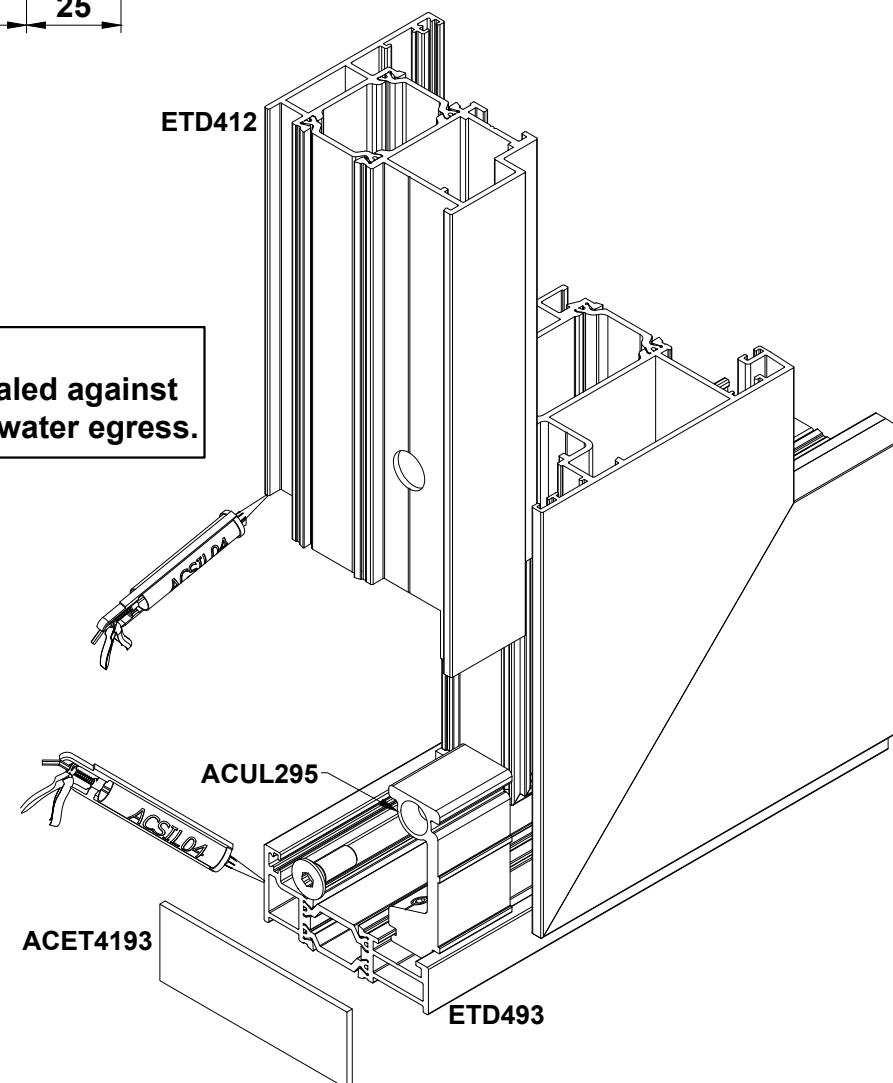
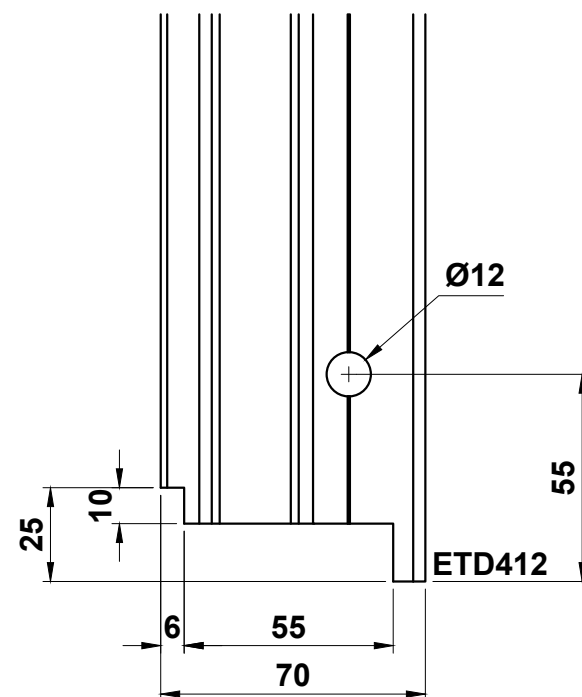


Do Not Scale From This Drawing

Flush Low Rebate Threshold Assembly



Important Note:
Ensure end cap is sealed against threshold to prevent water egress.

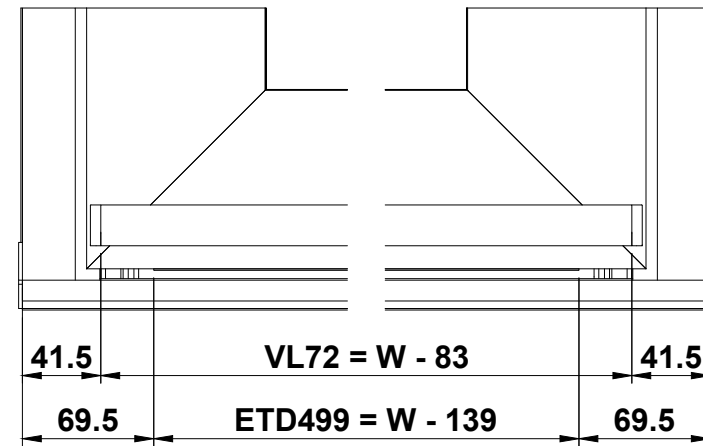


Important Note: All exposed aluminium should be coated using ACSIL014 or painted to match the frame.

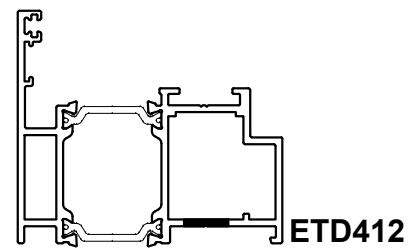
Note:
Do not drill down through drainage zone for installation.

Do Not Scale From This Drawing

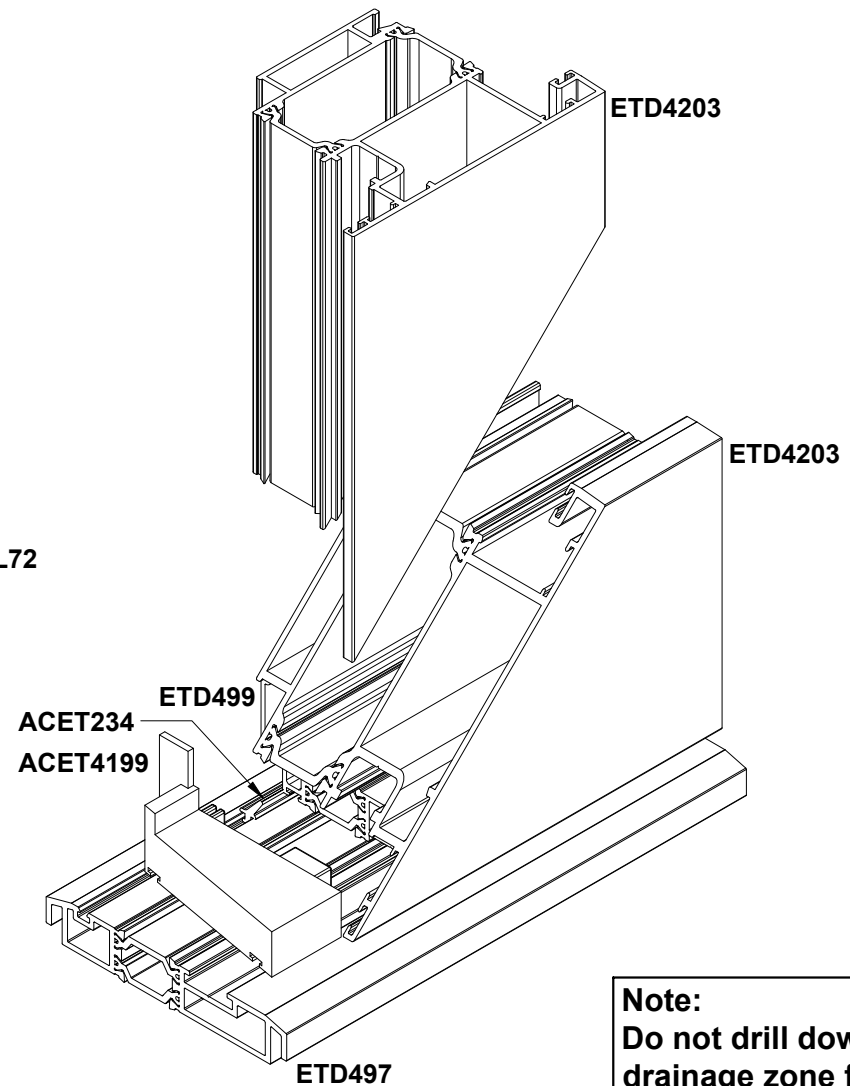
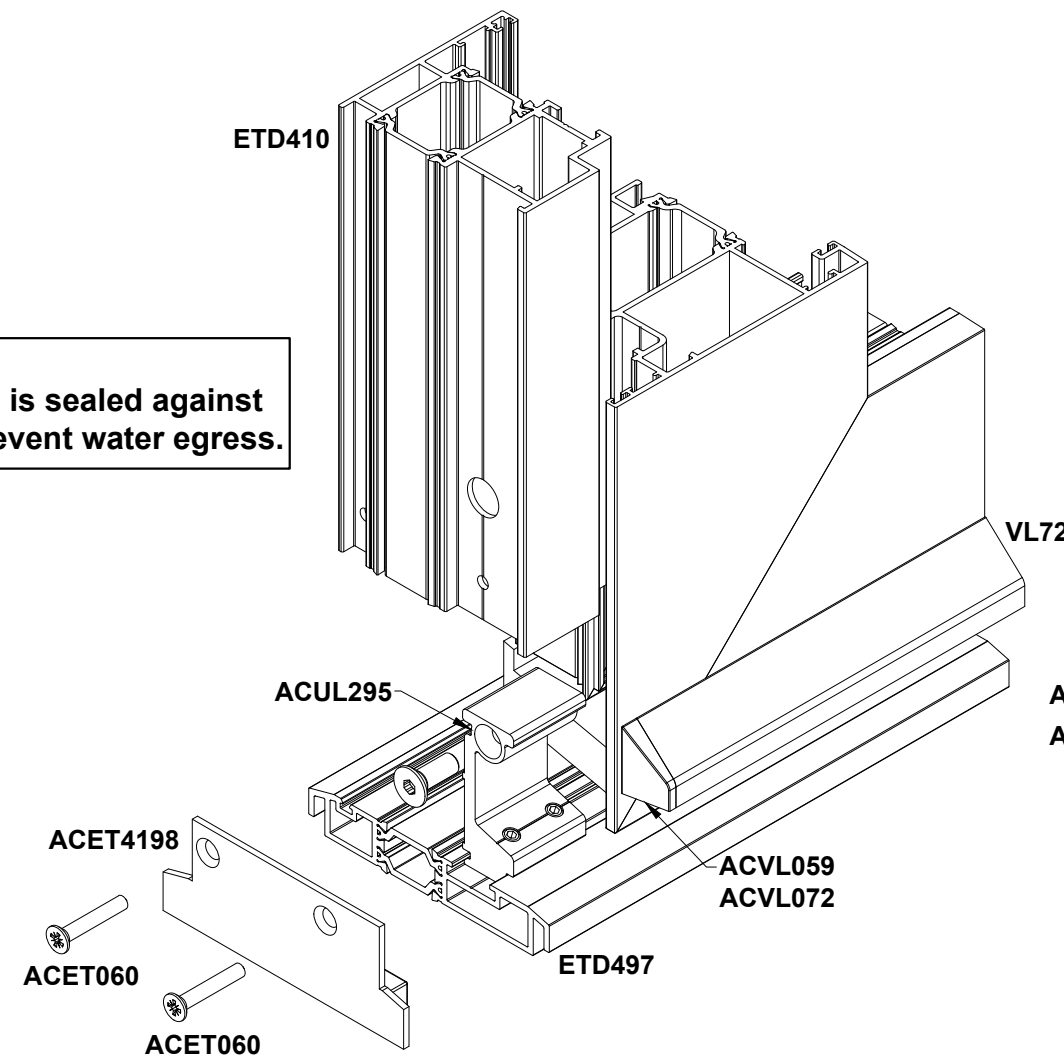
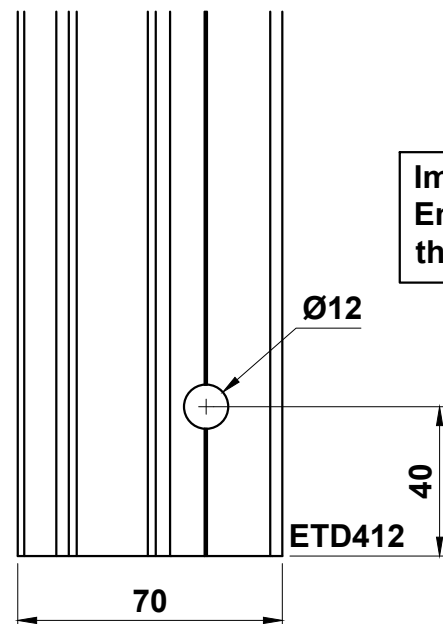
Flush Low Ramp Threshold Assembly



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



Important Note: Ensure end cap is sealed against threshold to prevent water egress.

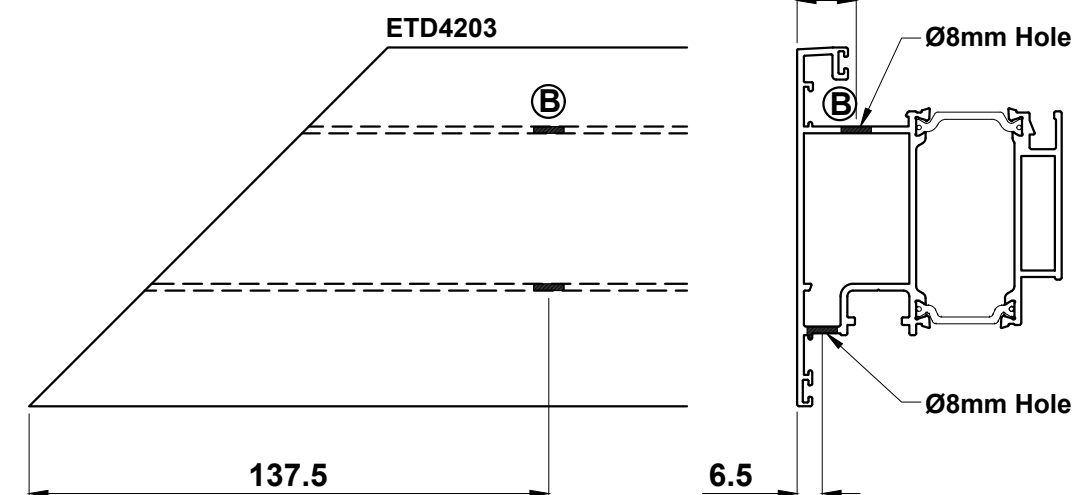
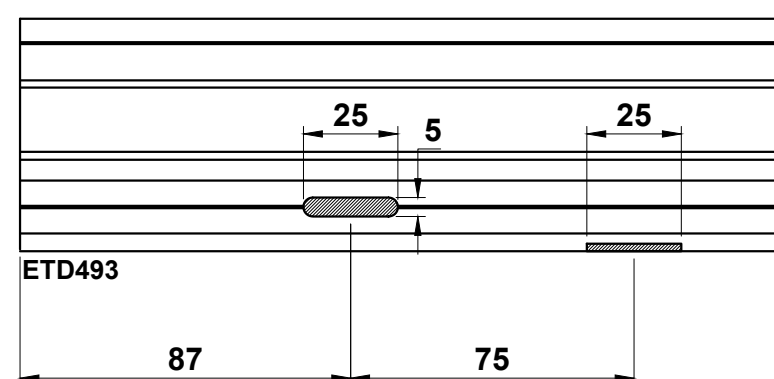
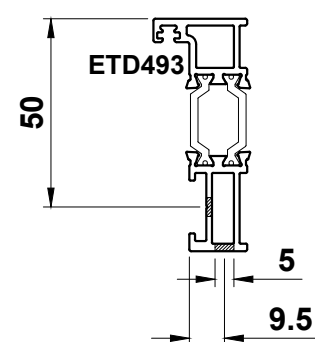
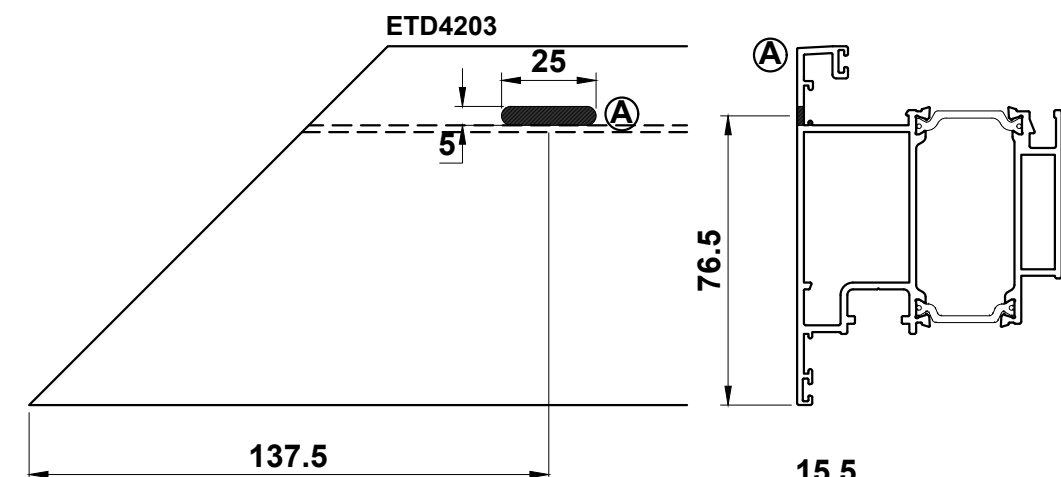
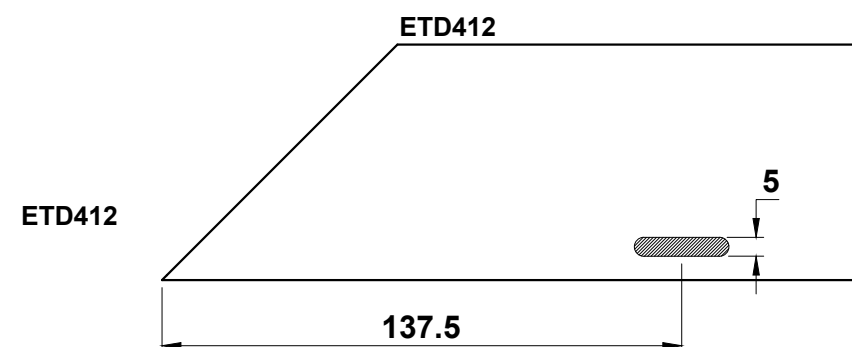
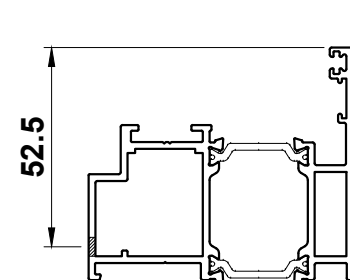
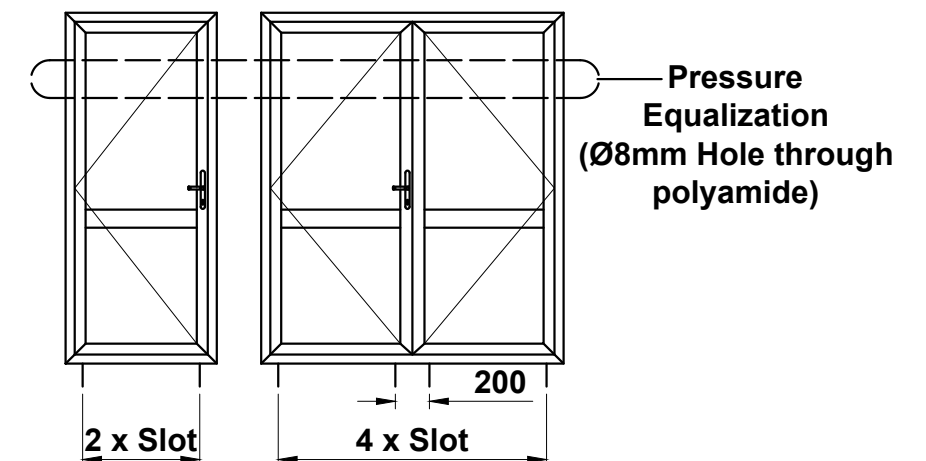
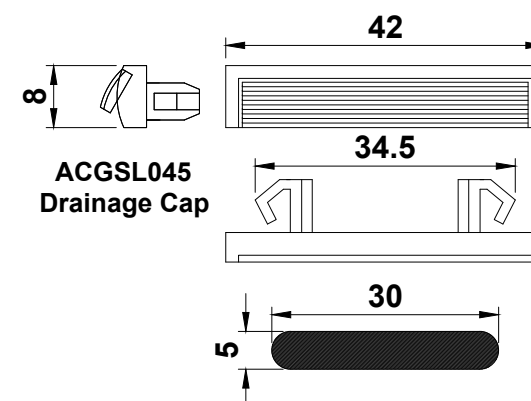
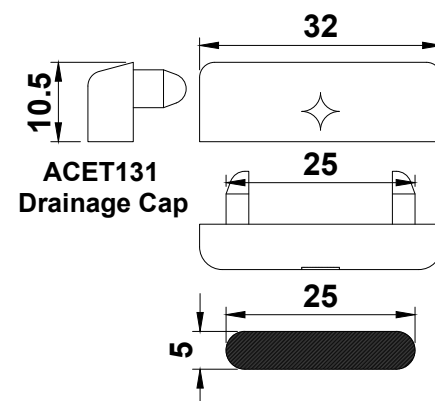


Note: Do not drill down through drainage zone for installation.

Do Not Scale From This Drawing

Flush Drainage

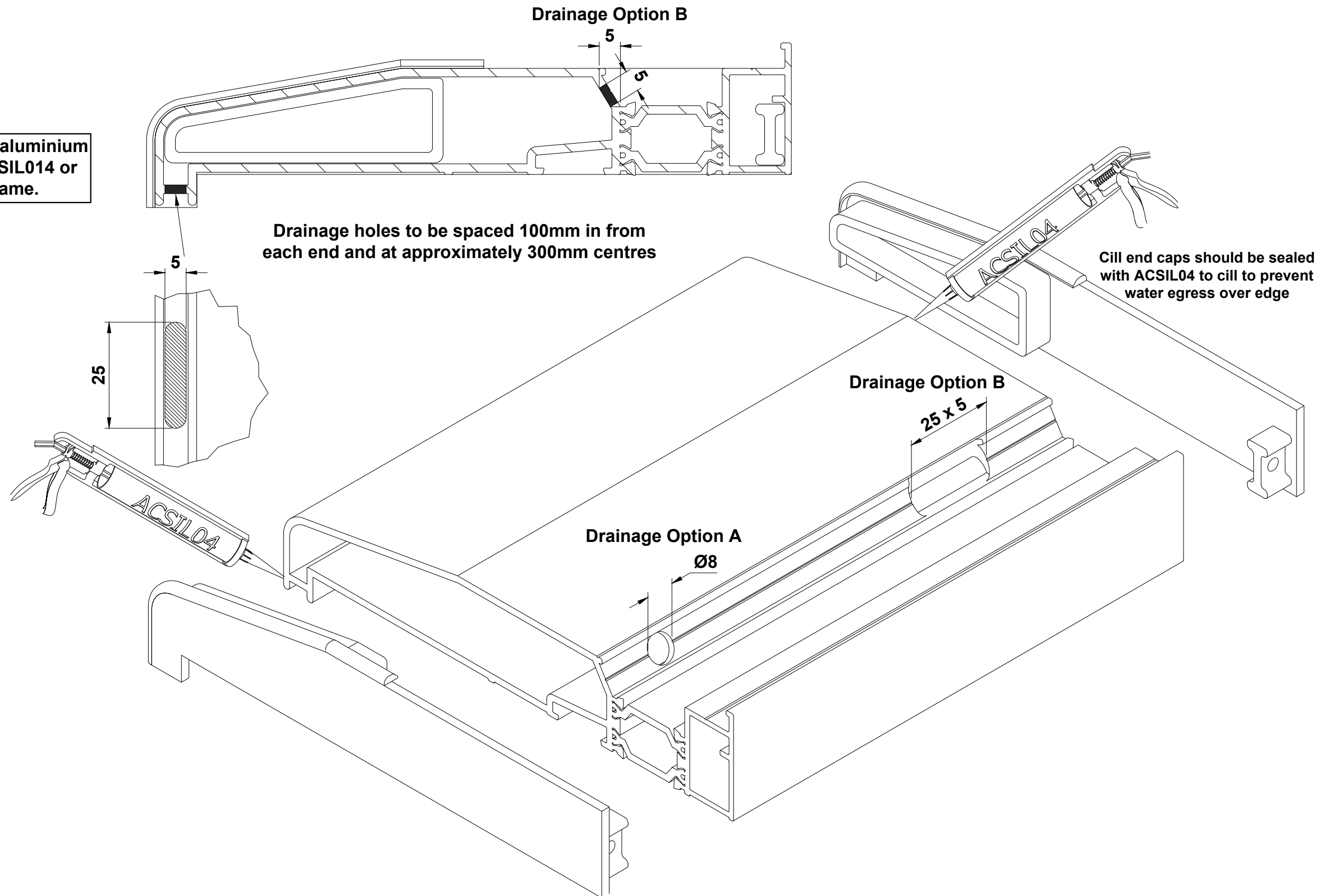
Important Note: All exposed aluminium should be coated using ACSIL014 or painted to match the frame.



Do Not Scale From This Drawing

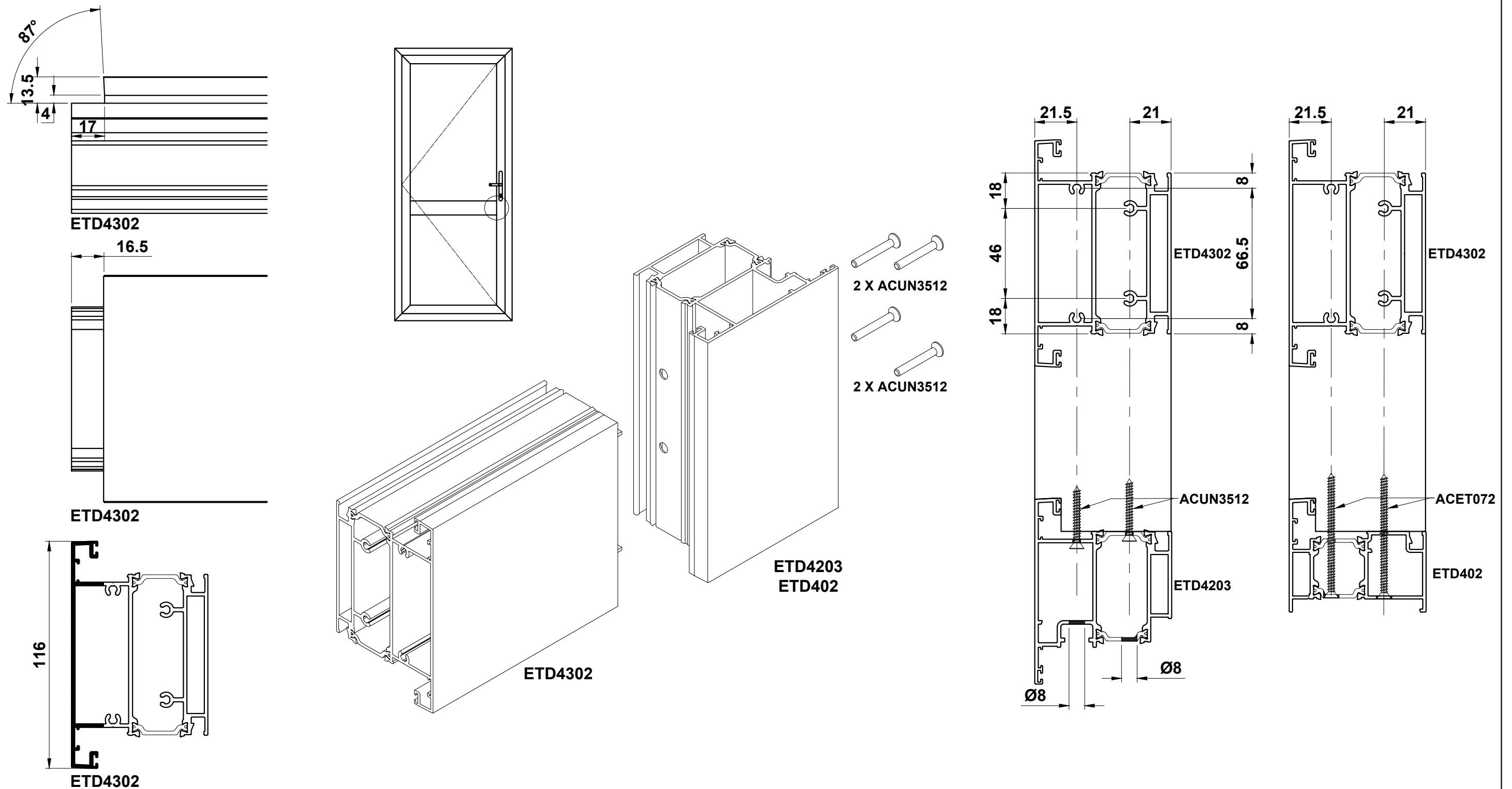
Sub Cill Drainage

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



Do Not Scale From This Drawing

ETD4302 Midrail Assembly

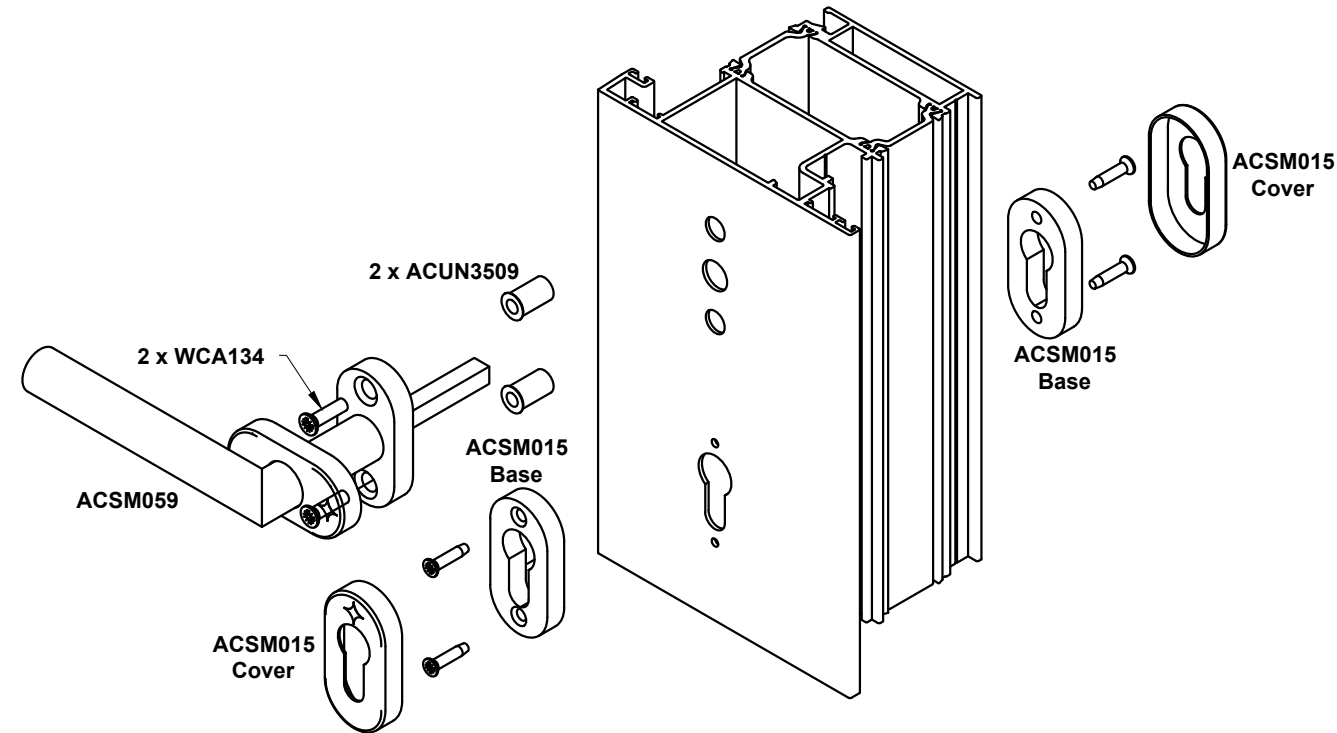


Do Not Scale From This Drawing

Stainless Steel Hardware - ACSM013, ACSM015, ACSM058 & ACSM059 Fitting Detail

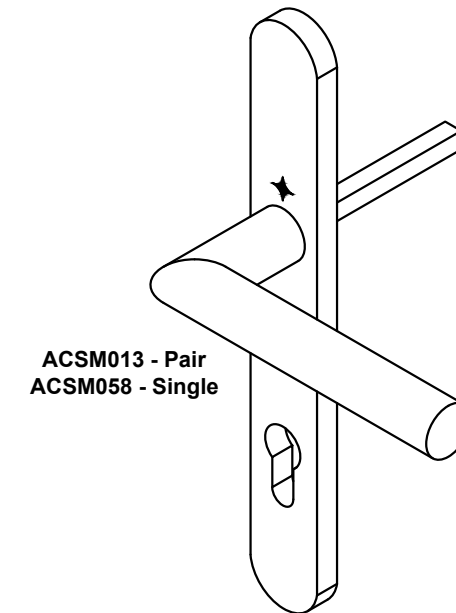
Please Note:

ACSM059 is compatible with slam locks and key operated locks only.
Slam locks must not have an external lever handle.



Please Note:

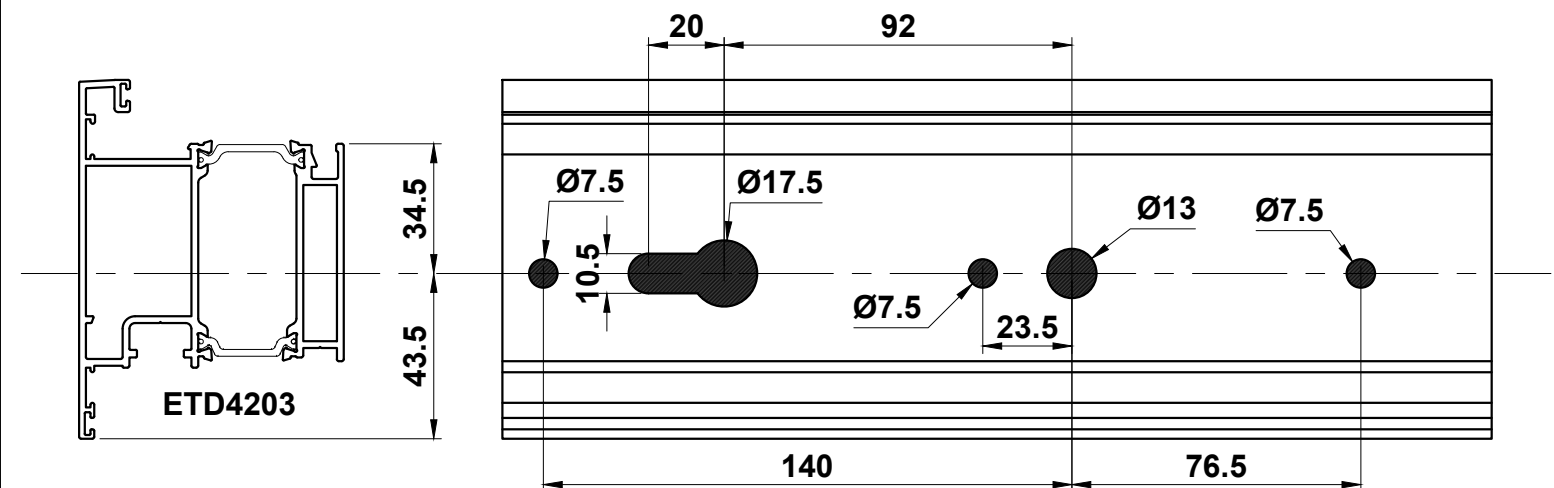
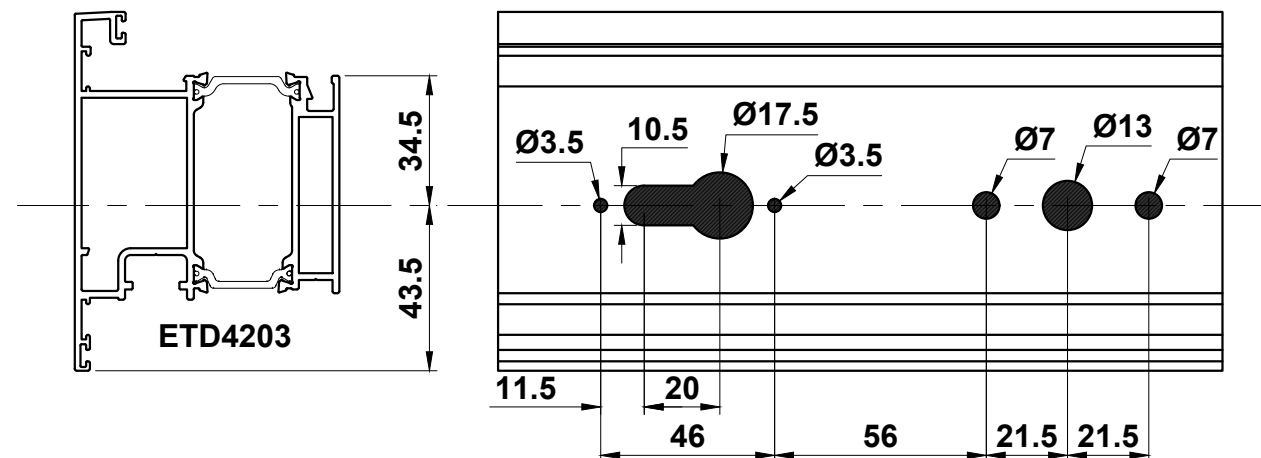
ACSM058 is compatible with all locks.
Slam locks must not have an external lever handle therefore require WCA134 & ACUN3509 for single side fixing and the spindle will need to be cut down.



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

Please Note:

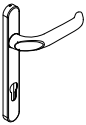
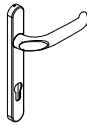
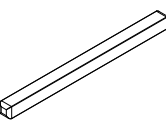
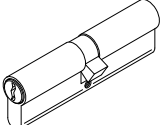
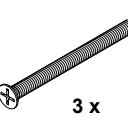
ACSM013SS pack contains;
2 x Universal Backplate & Lever
2 x Cover Plate
2 x Bolt Receiver Sleeve
2 x 40mm M5 Machine Screws
2 X 60mm M5 Machine Screws
1 x 3mm Allen Key
1 x 170mm Spindle



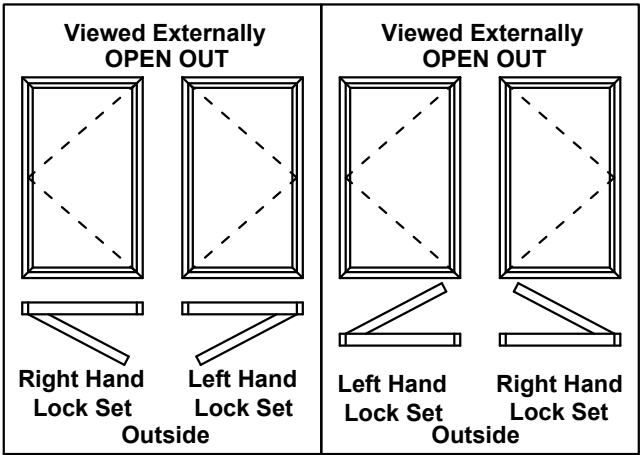
Do Not Scale From This Drawing

Door Locking & SZ Hardware Options

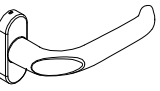
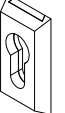
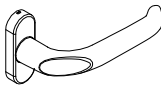
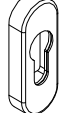
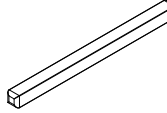
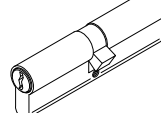
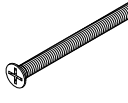
Handle With Large Backplate Guide

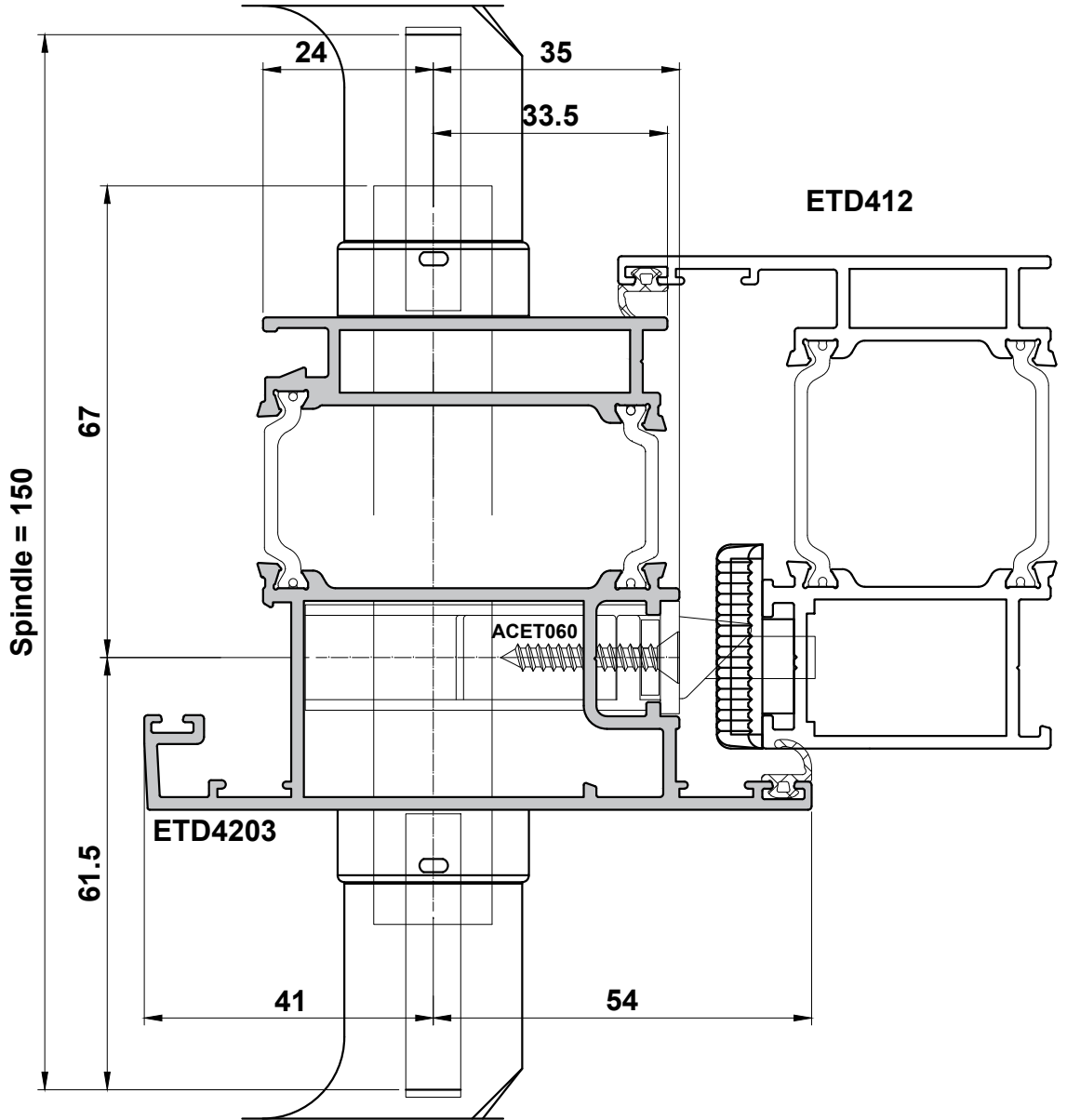
Ext. Handle	Int. Handle	Spindle	Cylinder	Screw
				 3 x
ACSZ800 	ACSZ801 	ACMX409Sq. Spindle 150mm	ACCY0035 Half Cylinder	ACMX861 M5 x 75mm
	ACSZ803 			
	ACSZ830 			
ACSZ802 	ACSZ803 		ACCY3560S3 35/60 Cylinder	
	ACSZ830 			
ACSZ400 + 2 x ACVS061	ACSZ803  ACSZ830 	ACMX008 Sq. Spindle 60mm	ACCY3560S3 35/60 Cylinder	ACVS061 M5 x 40mm

Keep Handing Guide



Handle with Small Backplate Guide

Ext. Handle	Ext. Escutcheon	Int. Handle	Int. Escutcheon	Spindle	Cylinder	Screw	Rivnuts
							
ACSZ837 	ACSZ400	ACSZ836 	ACSZ839	ACMX409Sq. Spindle 150mm	ACCY3560S3 ACCY0035	WCA134 M5 x 20mm	ACUN3509 M5
	ACSZ400			ACMX008 Sq. Spindle 60mm	ACCY3560S3 ACCY0035	WCA134 M5 x 20mm	ACUN3509 M5
ACSZ837 	ACSZ400	ACSZ827 		ACMX409Sq. Spindle 150mm	ACCY3560S3 ACCY0035	WCA134 M5 x 20mm	ACUN3509 M5

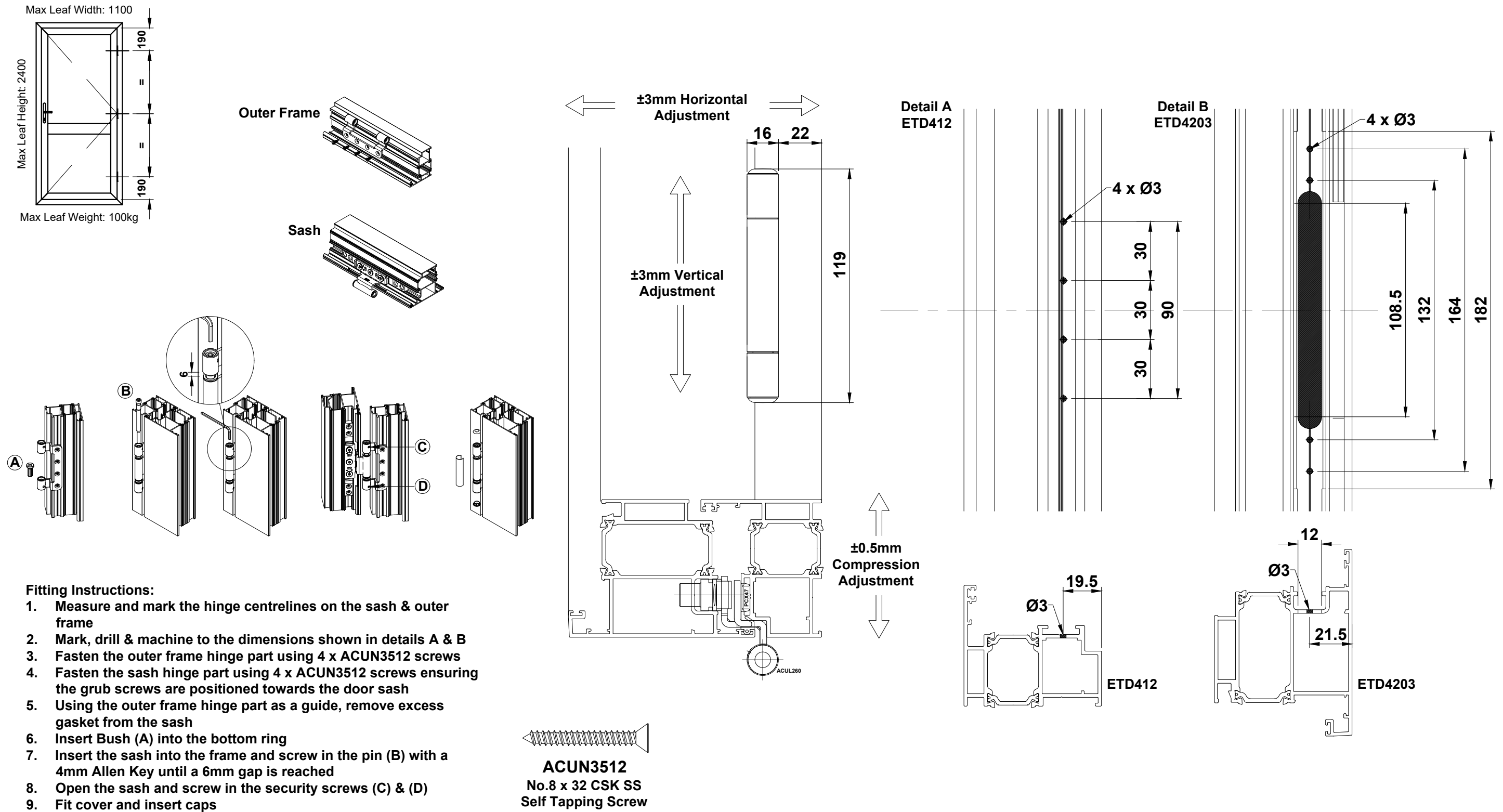


-  With Cylinder
-  Without Cylinder
-  T Handle With Cylinder
-  T Handle Without Cylinder

Note:
Please check kitemark for all
suitable hardware to achieve PAS24.

Do Not Scale From This Drawing

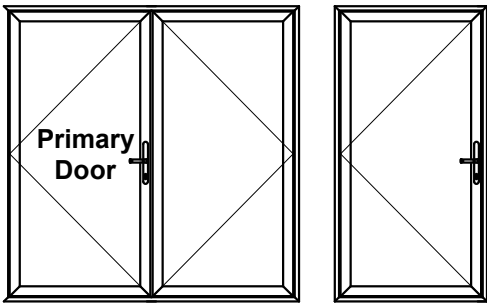
ACUL260 Hinge Preparation



Do Not Scale From This Drawing

Lock Overview of Single and Double Doors

Finger Bolt Locking Options



Single & Primary Door Lock Selection

Overall Sash Height	Lift Lever		Slam Lock		Key Wind	
	Left	Right	Left	Right	Left	Right
2030-2230 (Standard)	ACUL272	ACUL273	ACUL280	ACUL281	ACUL282	ACUL283
1820-2029 (Short)	ACUL377	ACUL378	ACUL360	ACUL361	ACUL362	ACUL363
2231-2450* (Tall)	ACUL374	ACUL375	ACUL380	ACUL381	ACUL382	ACUL383

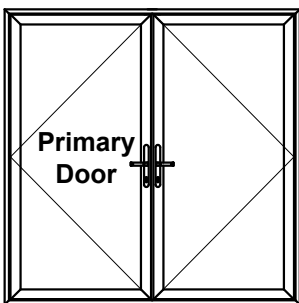
*Any doors above 2450mm are above the tested limit.

Secondary Door Accessory Selection

35mm Backset Shootbolt Adaptor	Bottom 10mm Dia Rod	Top 10mm Dia Rod		Keep	Shootbolt Guide
		Overall Size	Rod Part No.		
	ACPD846 (1000mm)	1820 - 1923	ACPD846 (1000mm)	ACUL390 (2 Required)	ACUL242 (2 Required)
		1923 - 2173	ACPD847 (1250mm)		
		2174 - 2323	ACPD848 (1500mm)		
		2323 - 2423*	ACPD848 (1500mm)		

*For doors above 2423mm, use ACPD849 (2000mm)

Lift Lever Locking Options



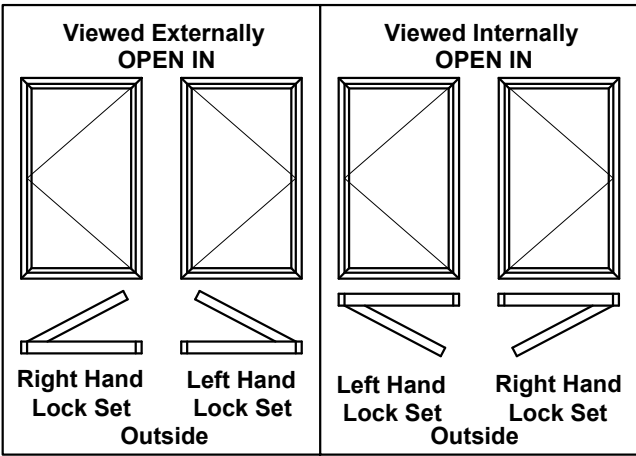
Double Handle Lift Lever Lock Option

Overall Sash Height	Primary Door Lift Lever		Secondary Door Lift Lever	Double Door Keep	Shootbolts	Shootbolt Extensions
	Left	Right				
1885-2450*	ACUL277	ACUL278	ACUL276	ACUL279	ACDV737 ACDV738	ACDV742 ACDV744

*Any doors above 2450mm are above the tested limit.

**Please see page E80 for shootbolt layout.

Keep Handing Guide

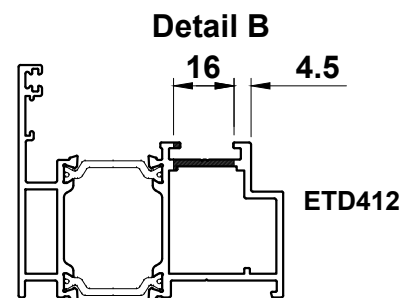
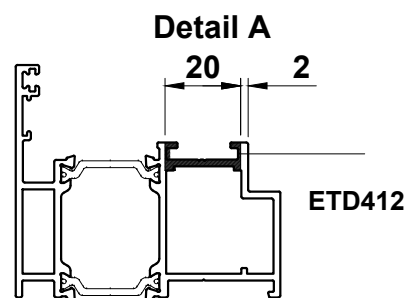
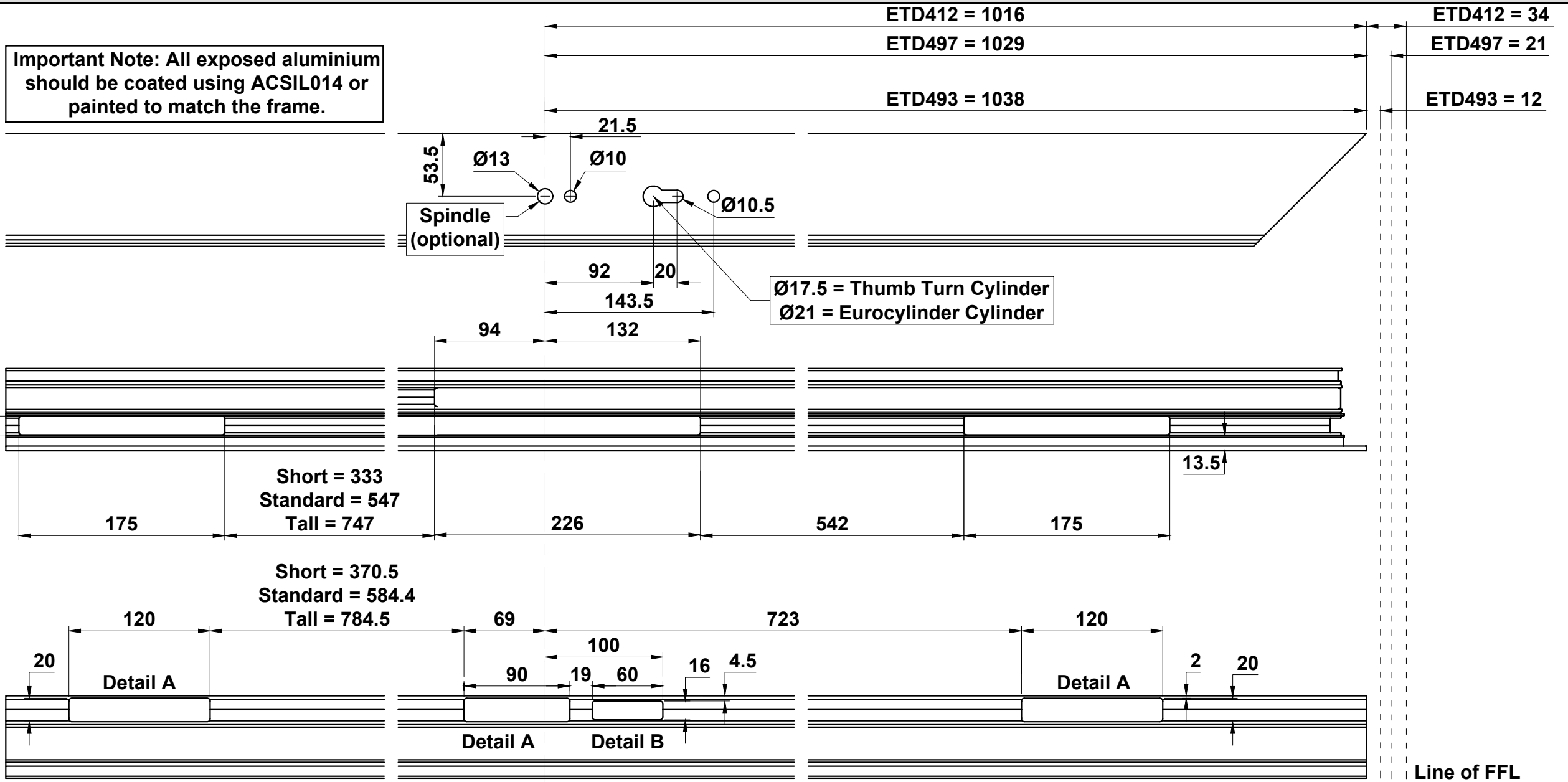
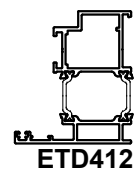
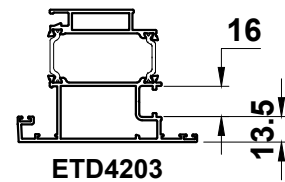
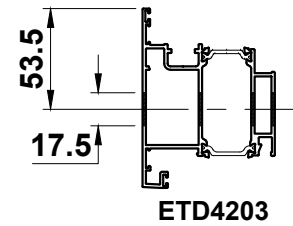


For ACUL267 & 268 Cam Lock Option Refer To Page E95

Do Not Scale From This Drawing

Single Door Lock Preparation

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



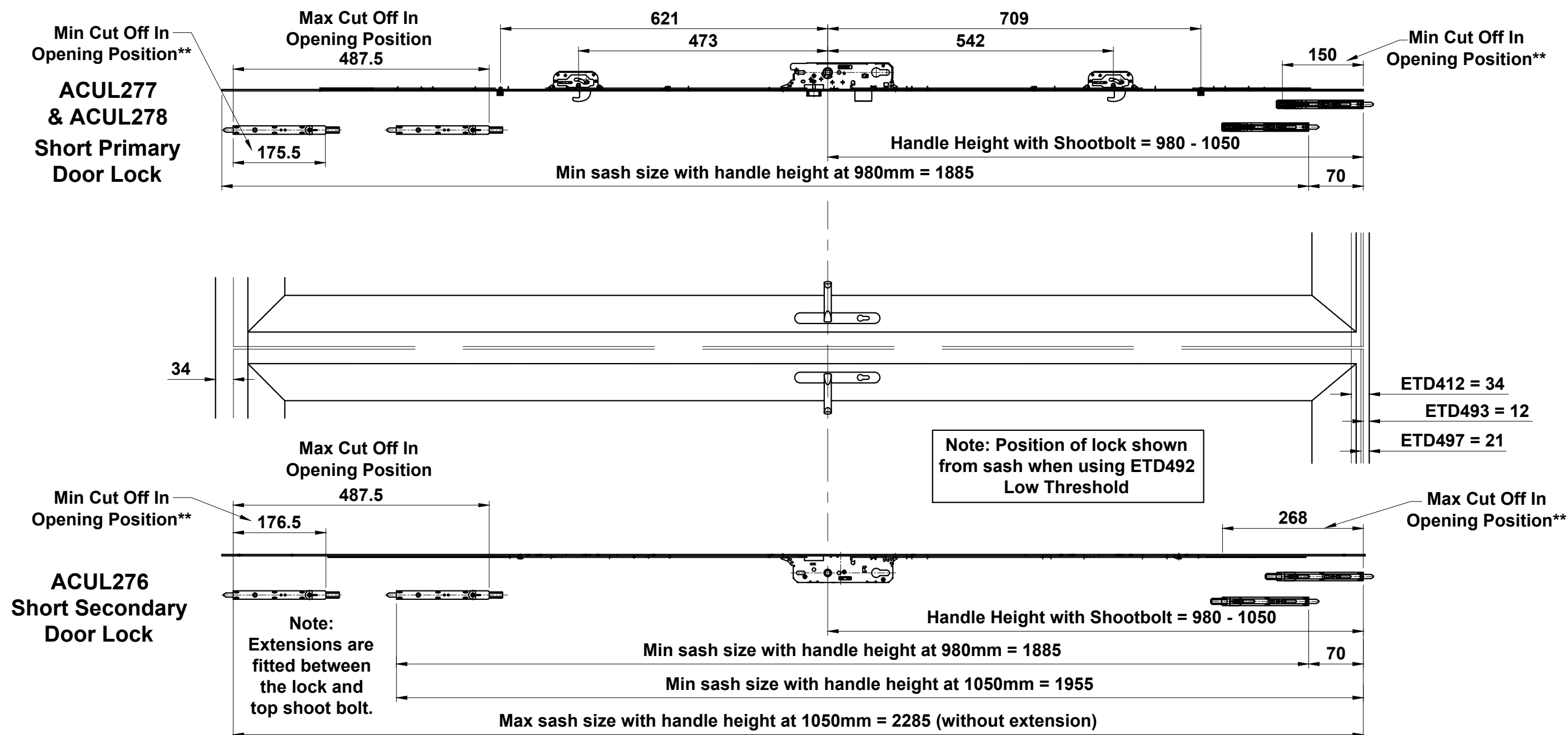
Lock Kits

	Slam Lock		Key Wind		Lift Lever	
Height	Left Hand	Right Hand	Left Hand	Right Hand	Left Hand	Right Hand
Short	ACUL360	ACUL361	ACUL362	ACUL363	ACUL377	ACUL378
Standard	ACUL280	ACUL281	ACUL282	ACUL283	ACUL272	ACUL273
Tall	ACUL380	ACUL381	ACUL382	ACUL383	ACUL374	ACUL375

Do Not Scale From This Drawing

Double Door Lift Lever Shootbolt Layout

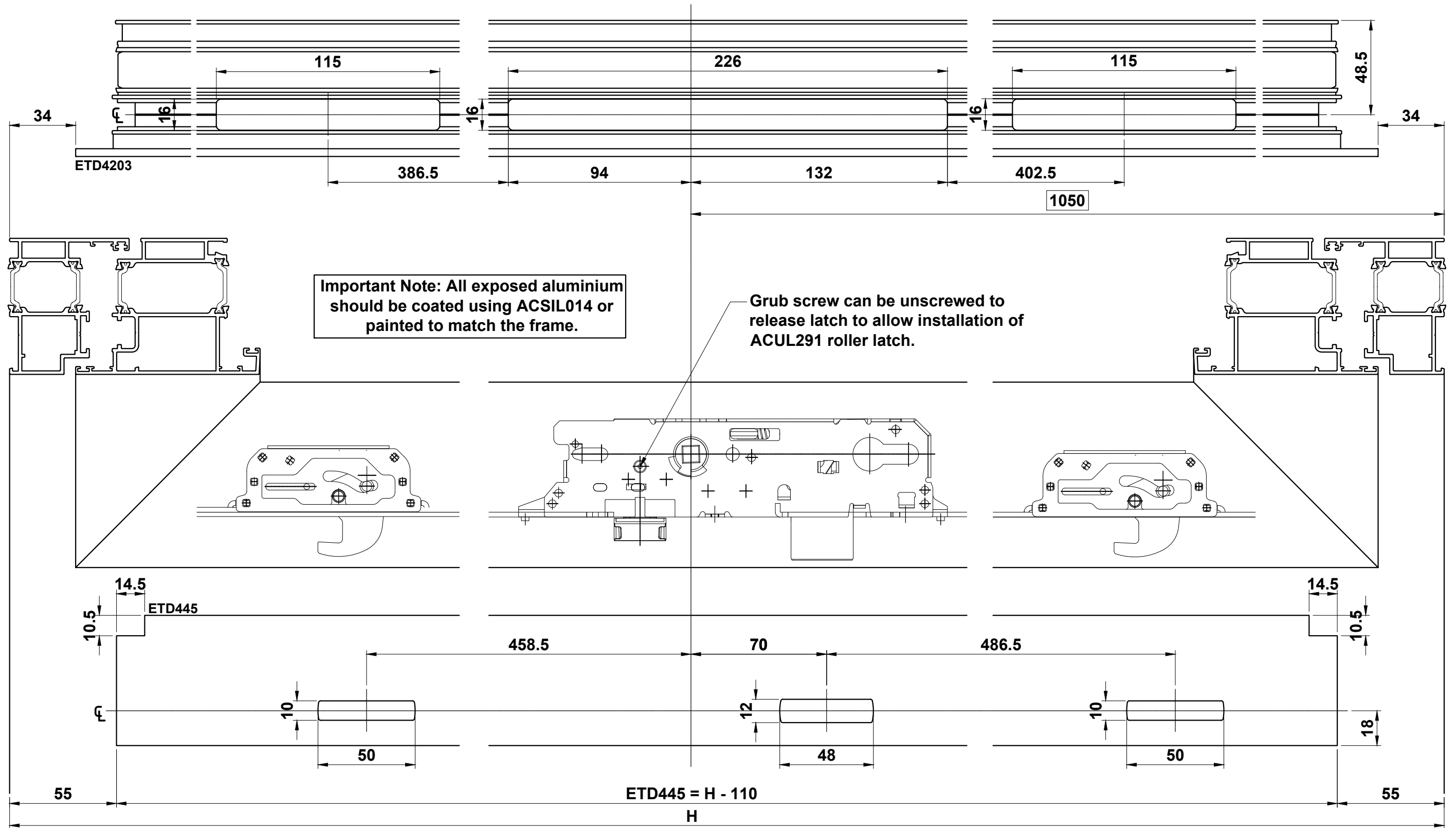
Note: ACDV742 & ACDV744 extensions may be used with all locks



*Maximum sash height is 2500mm. Sizes shown here only indicate sizes with ACDV744.

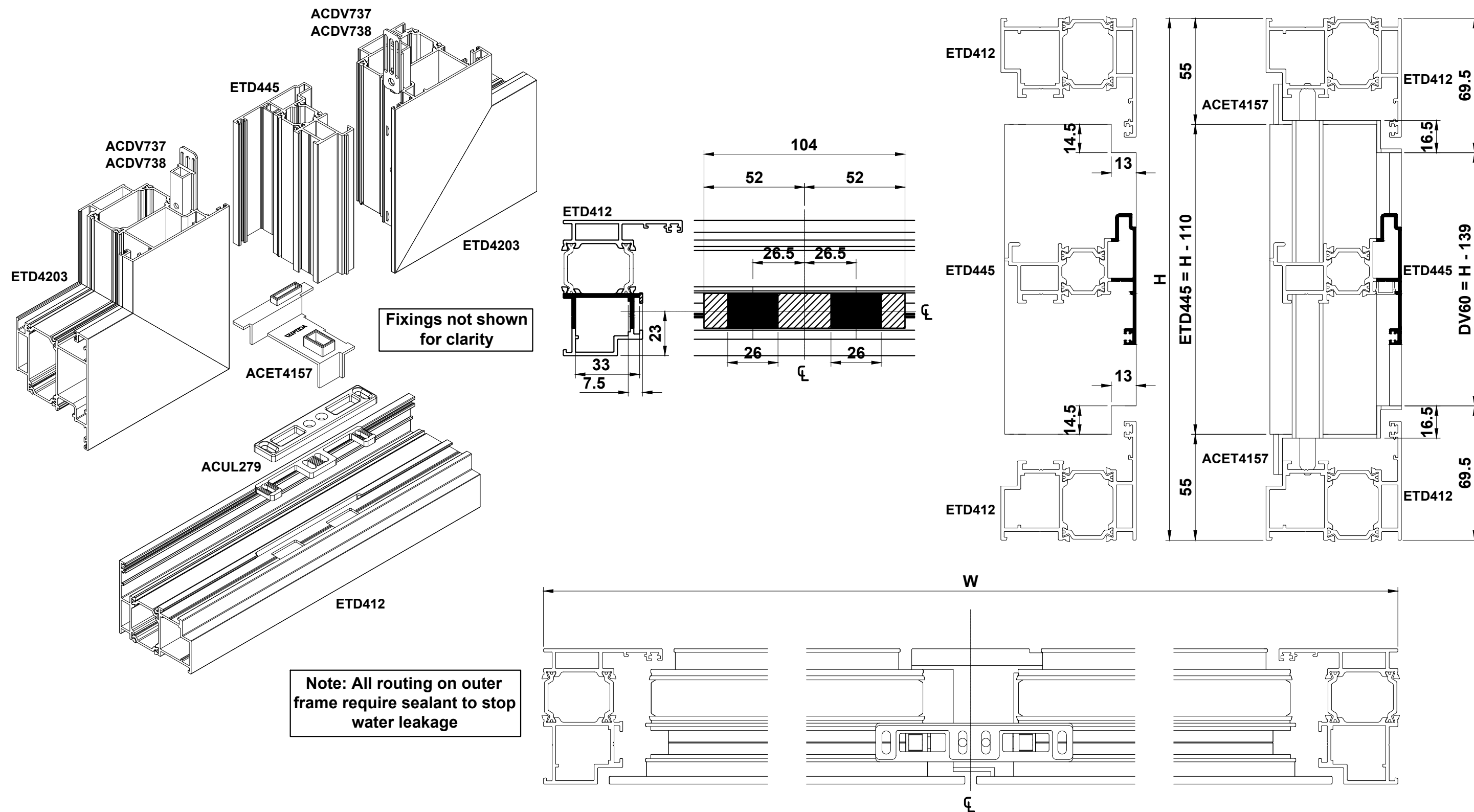
Do Not Scale From This Drawing

Flush Double Door Lift Lever Lock Preparation for Full Frame

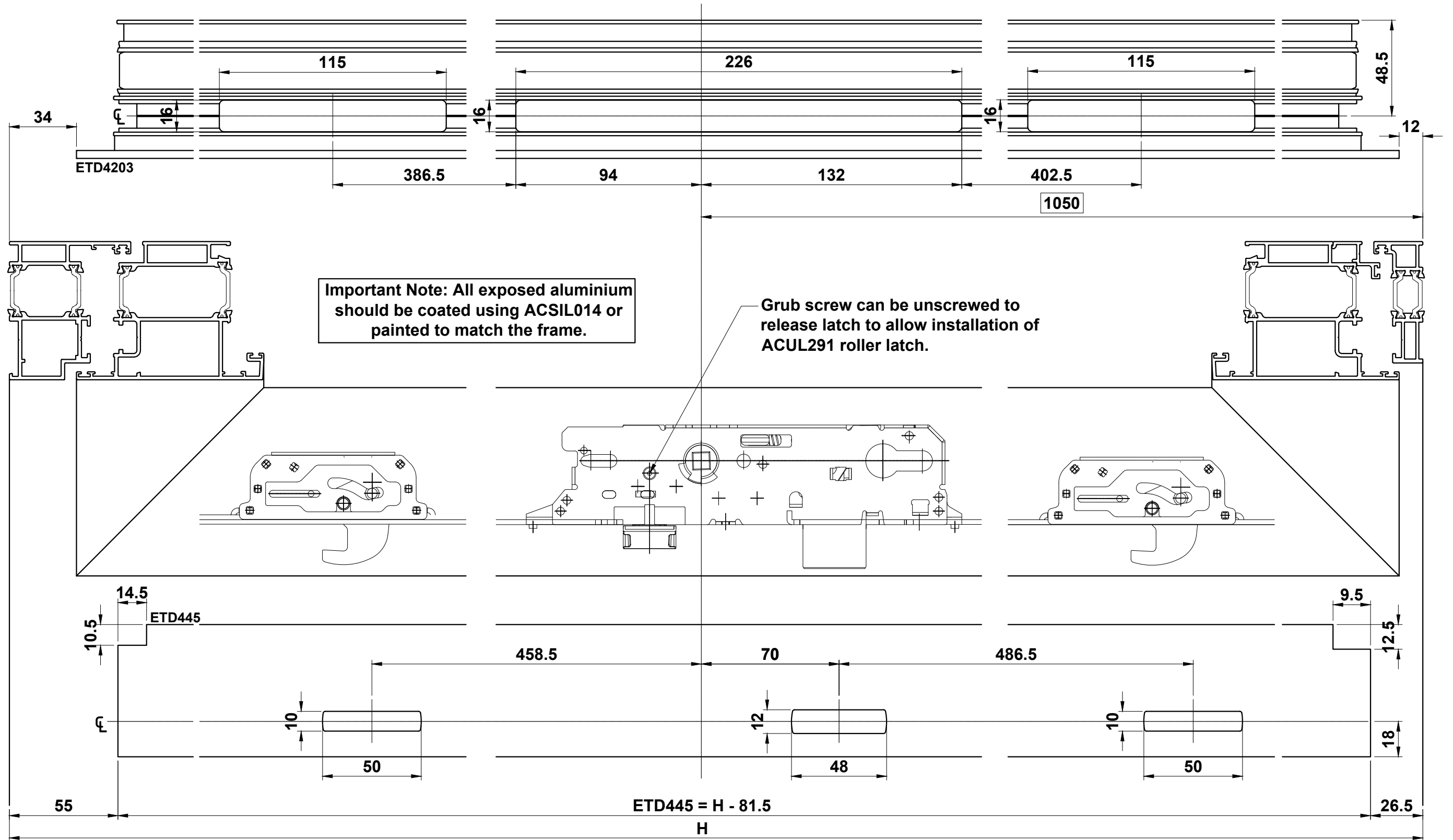


Do Not Scale From This Drawing

Flush Double Door Lift Lever Meeting Stile Assembly for Full Frame

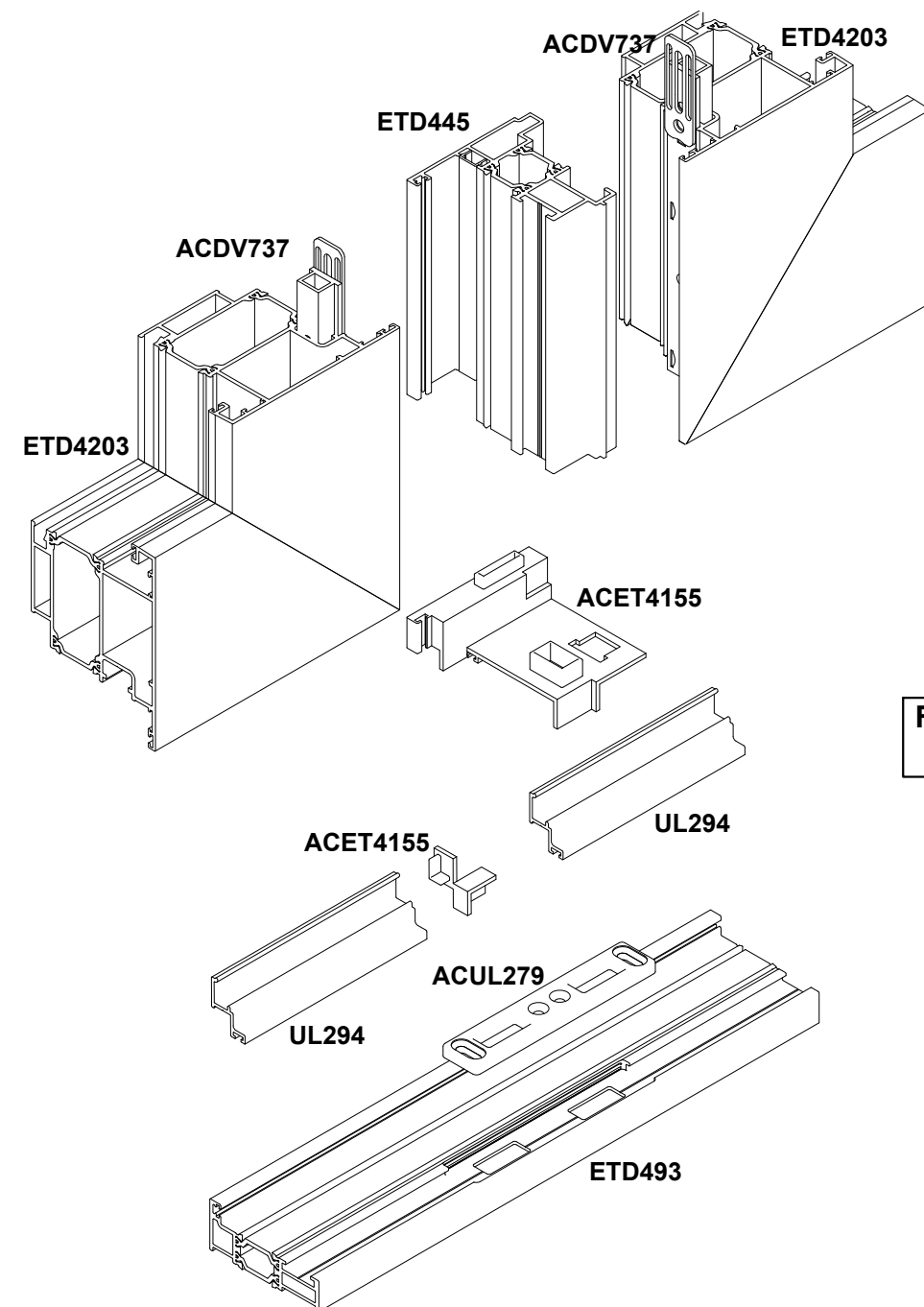


Flush Double Door Lift Lever Lock Preparation for Low Rebate Threshold

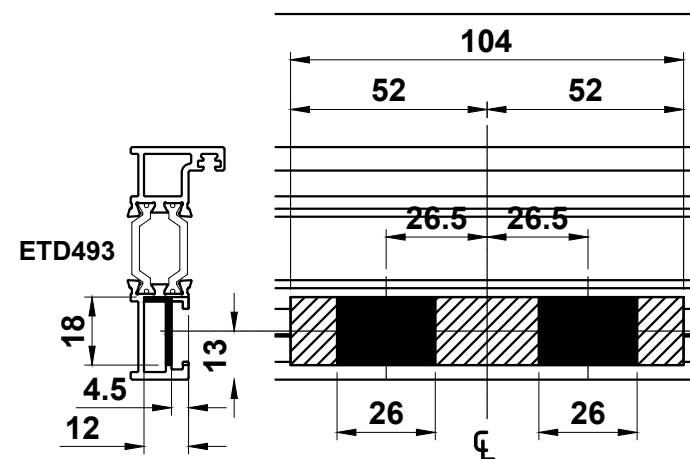


Do Not Scale From This Drawing

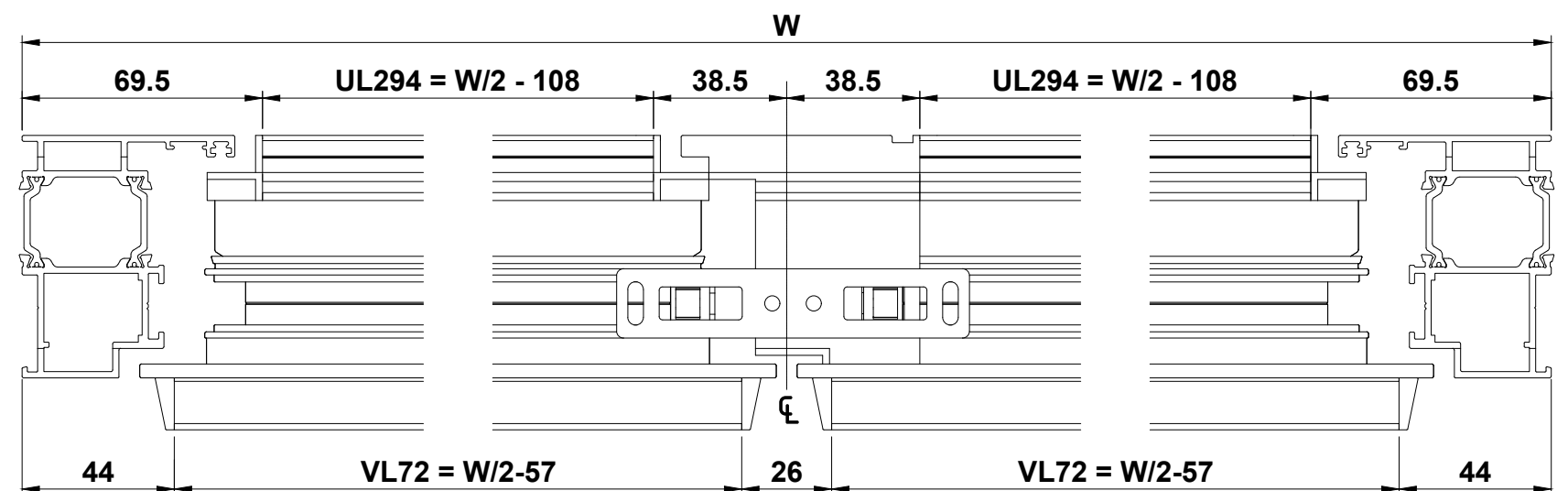
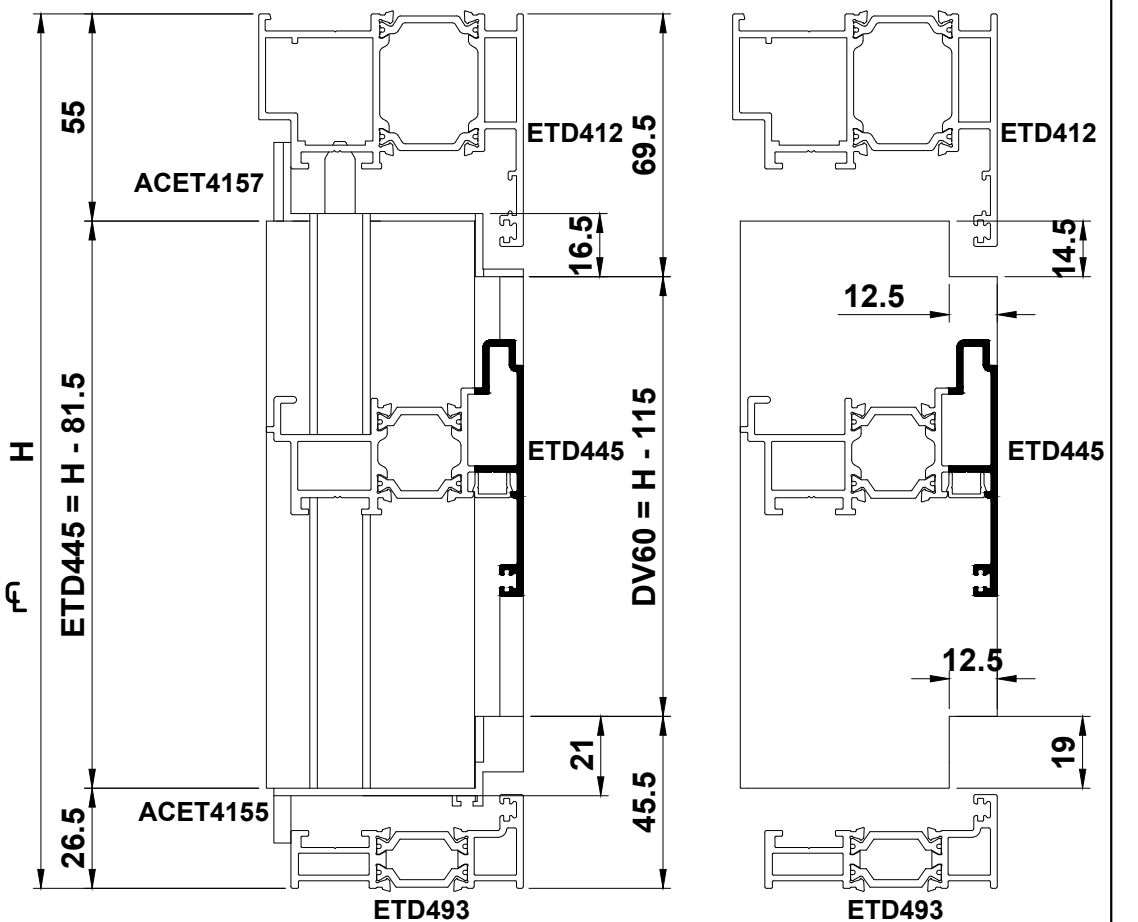
Flush Double Door Lift Lever Meeting Stile Assembly for Low Rebate Threshold



Note: All routing on outer frame require sealant to stop water leakage

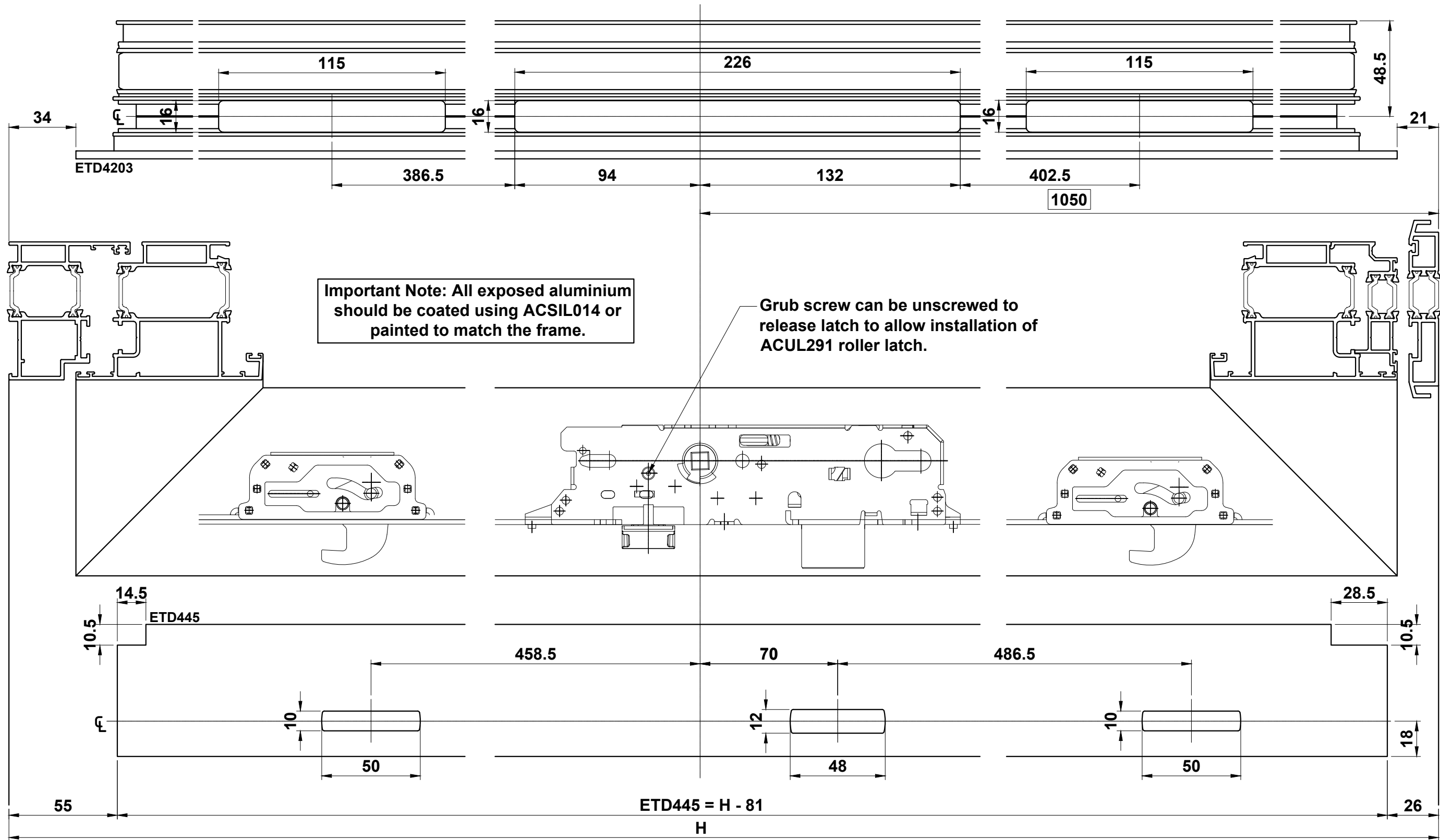


Fixings not shown for clarity



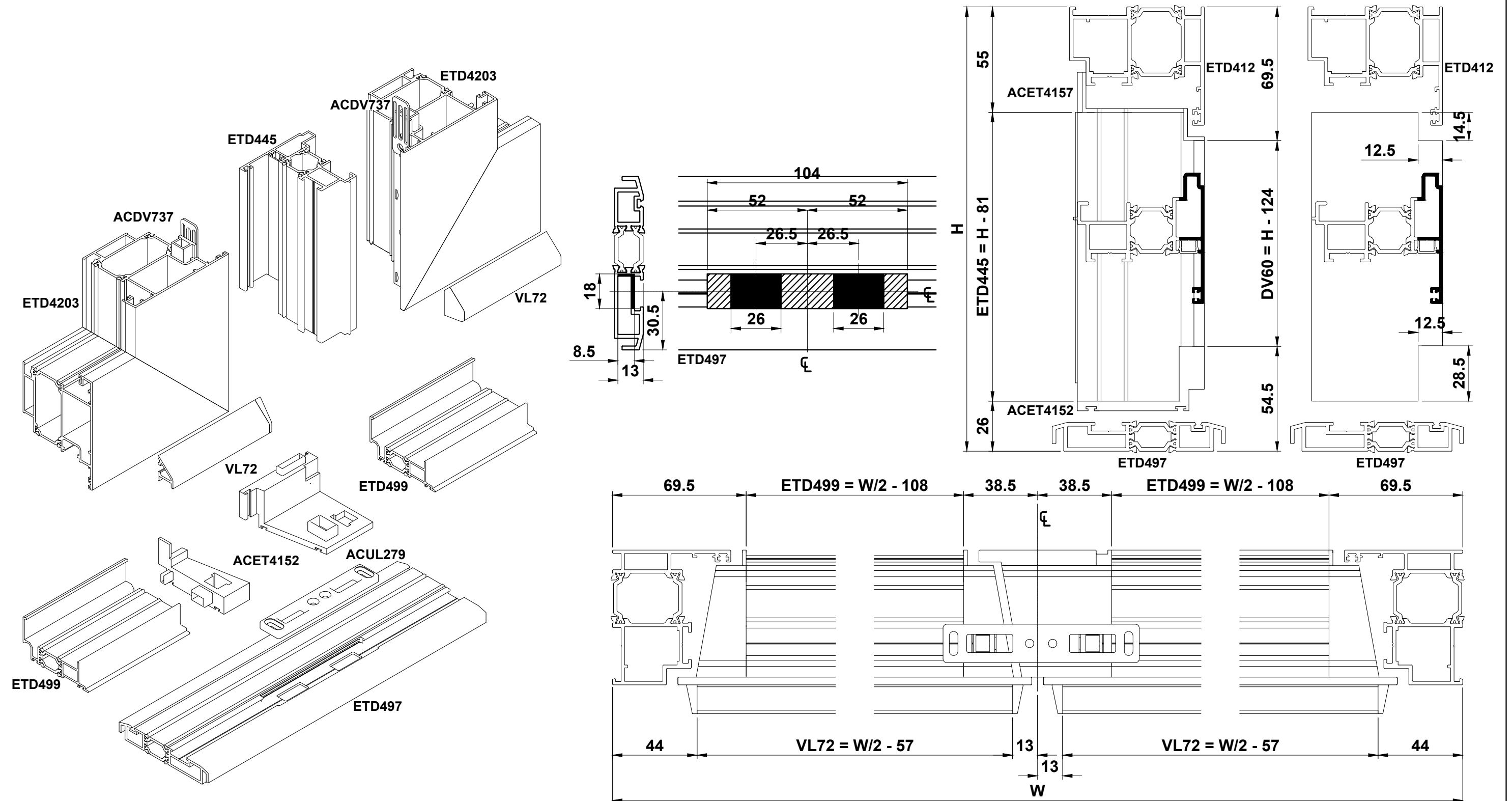
Do Not Scale From This Drawing

Flush Double Door Lift Lever Lock Preparation for Low Ramp Threshold



Do Not Scale From This Drawing

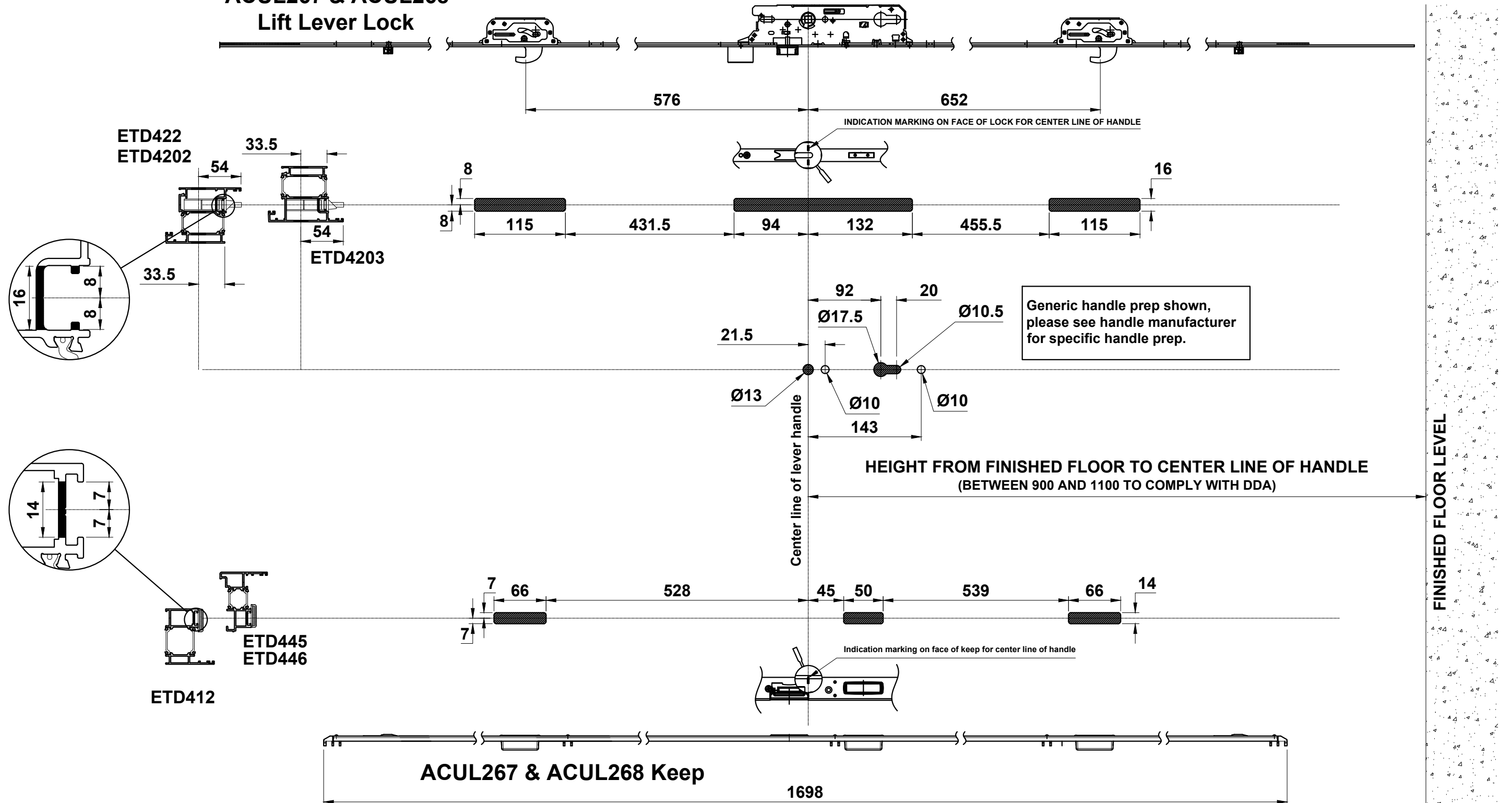
Double Door Lift Lever Meeting Stile Assembly for Low Ramp Threshold



Do Not Scale From This Drawing

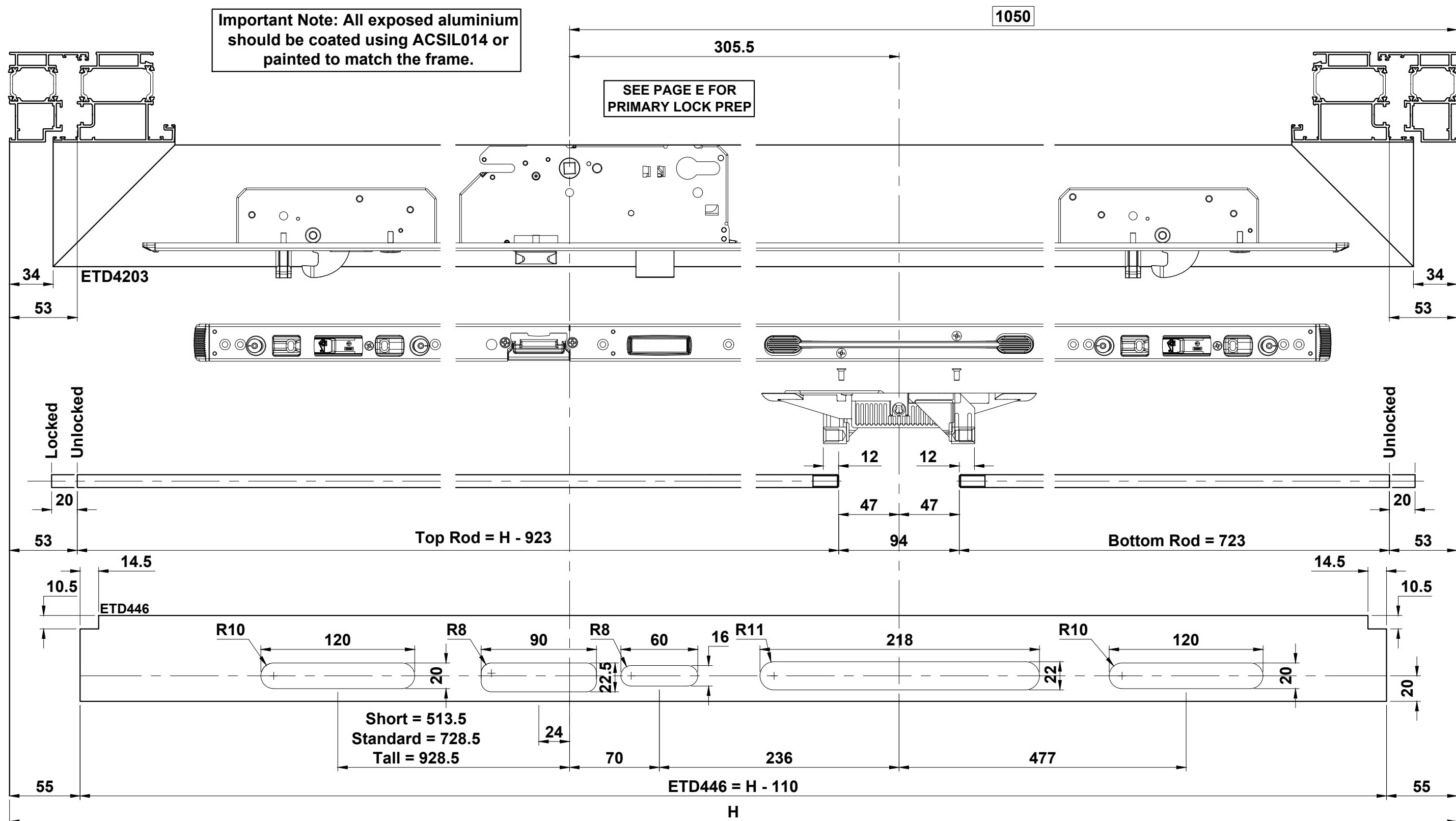
ACUL267 & ACUL268 Lift Lever Lock Preparation

ACUL267 & ACUL268 Lift Lever Lock



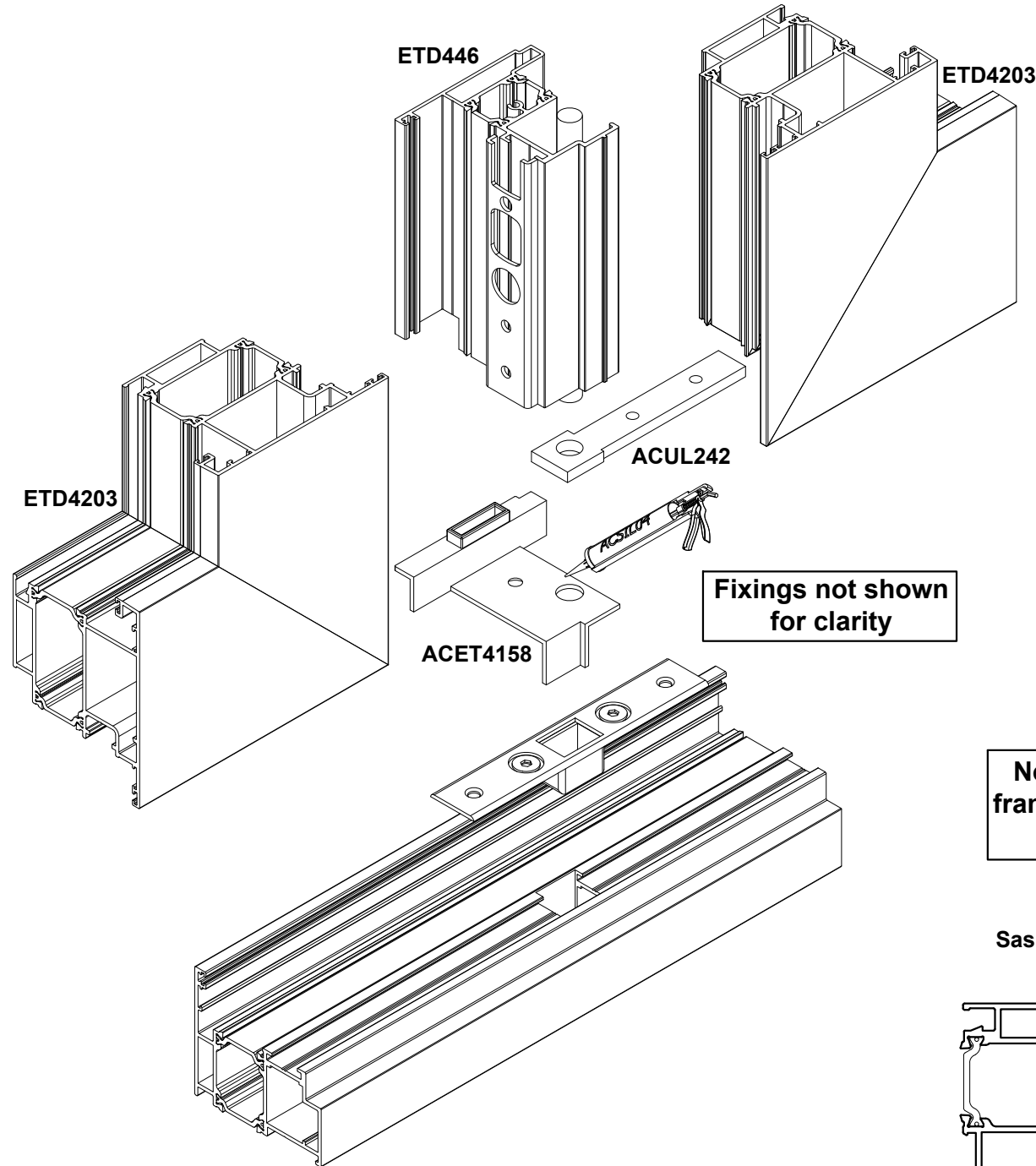
Do Not Scale From This Drawing

Flush Double Door Finger Bolt Lock Preparation for Full Frame



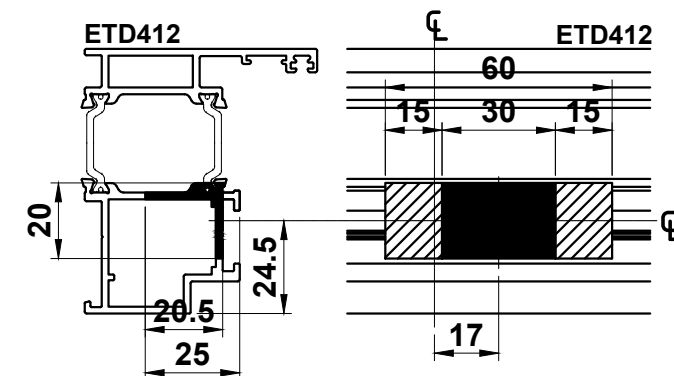
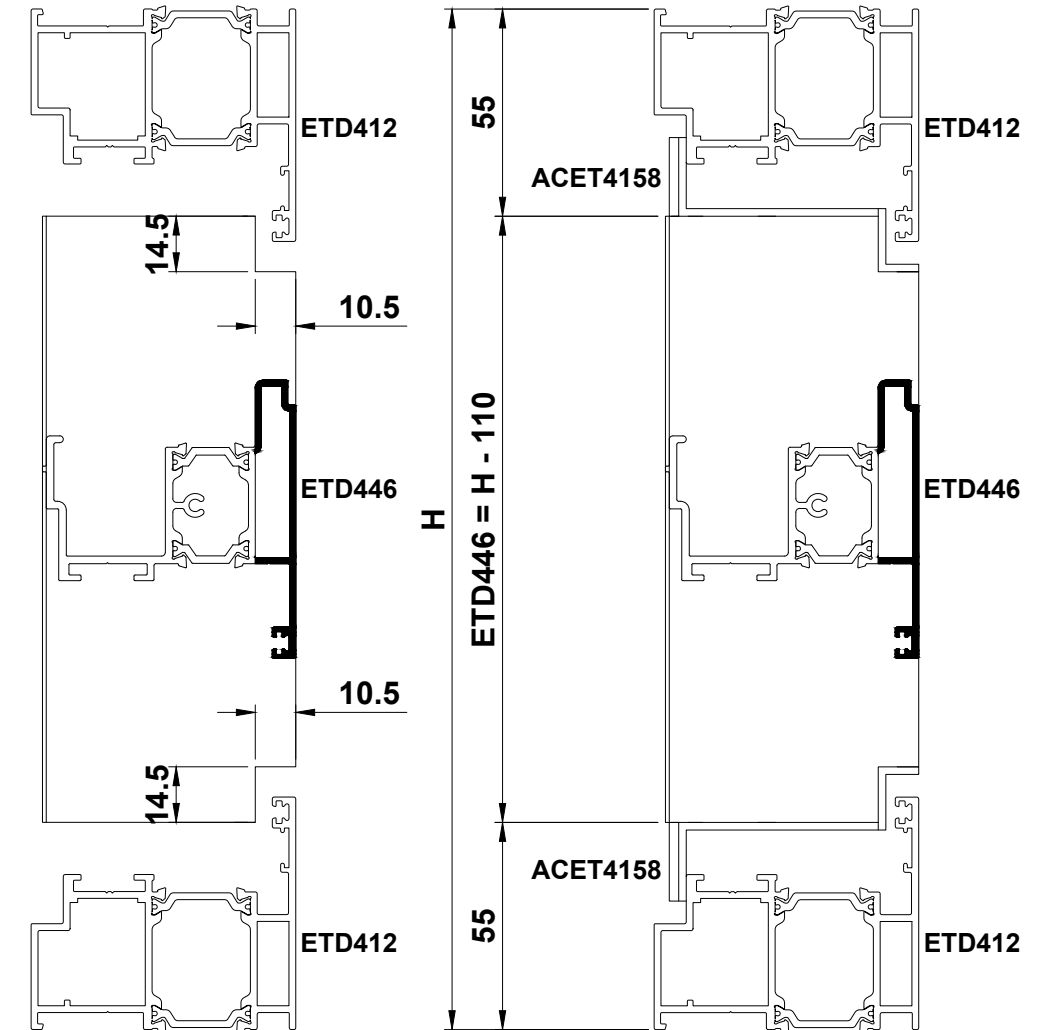
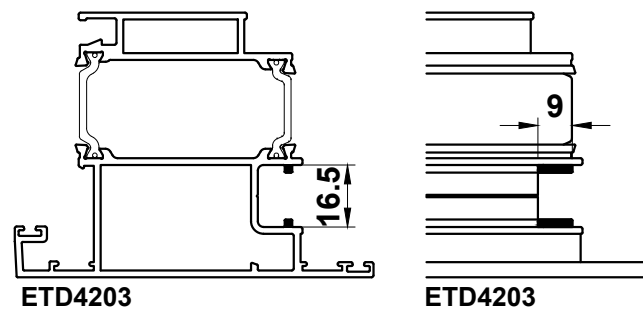
Do Not Scale From This Drawing

Flush Double Door Finger Bolt Meeting Stile Assembly for Full Frame



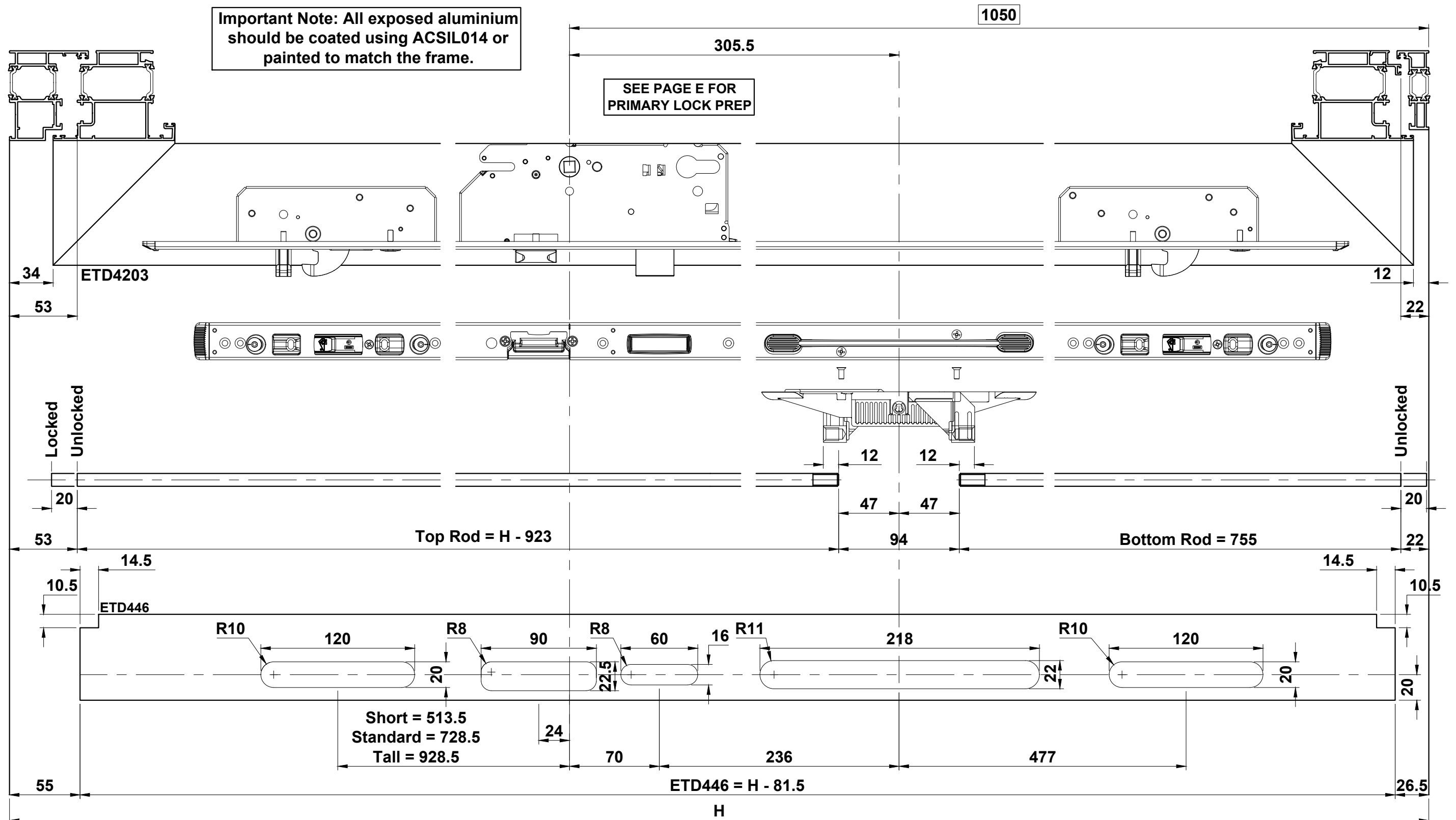
Note: All routing on outer frame require sealant to stop water leakage

Sash to be notched to allow ACUL242 to fit into position



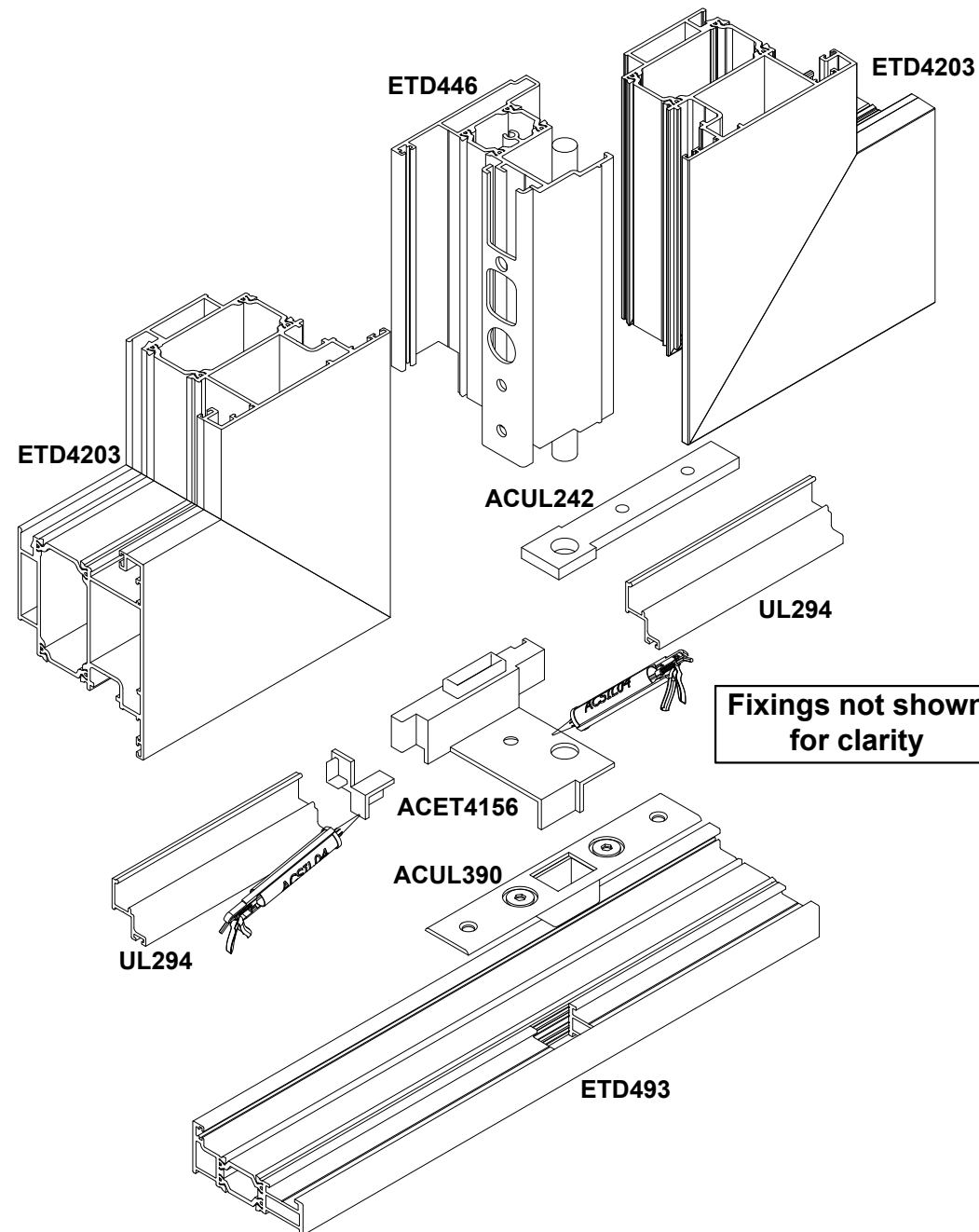
Do Not Scale From This Drawing

Flush Double Door Finger Bolt Lock Preparation for Low Rebate Threshold



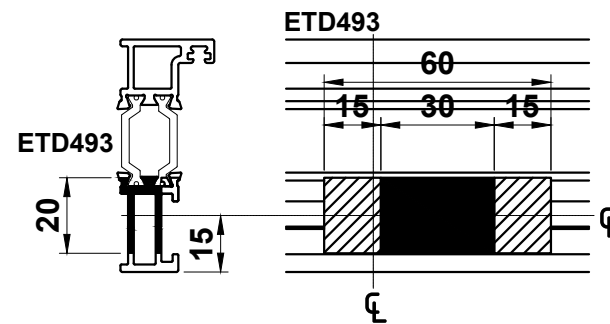
Do Not Scale From This Drawing

Flush Double Door Finger Bolt Meeting Stile Assembly for Low Rebate Threshold

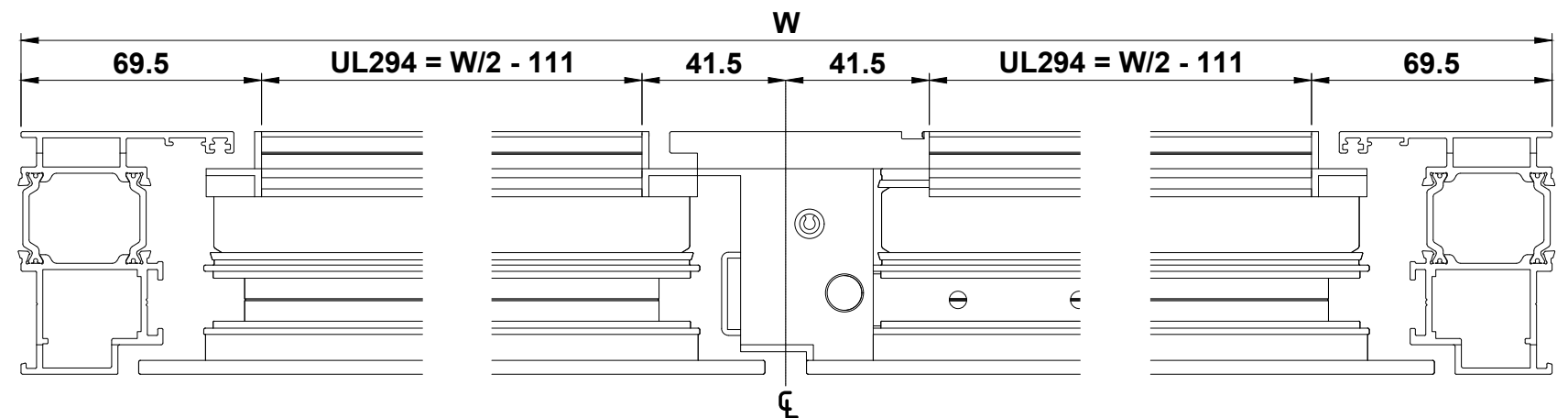
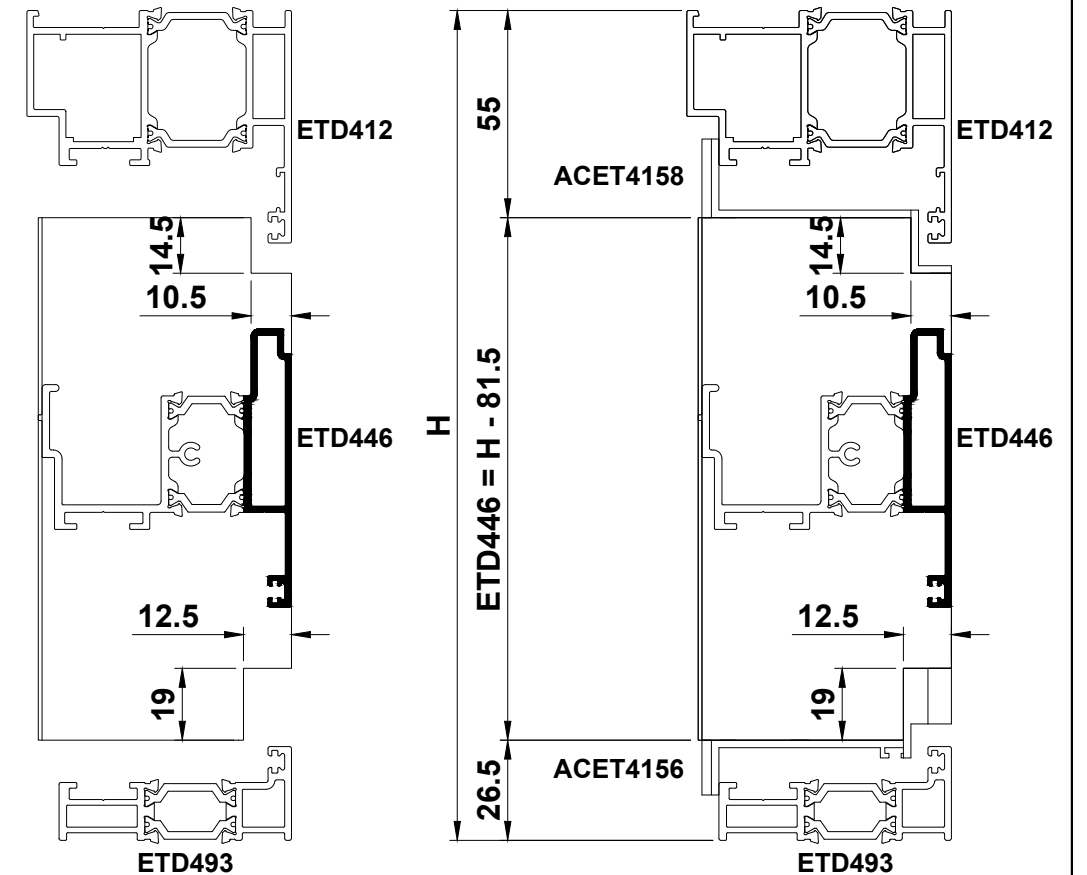
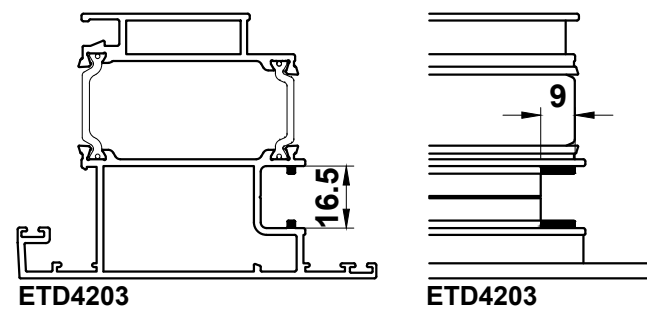


Fixings not shown
for clarity

Note: All routing on outer
frame require sealant to stop
water leakage

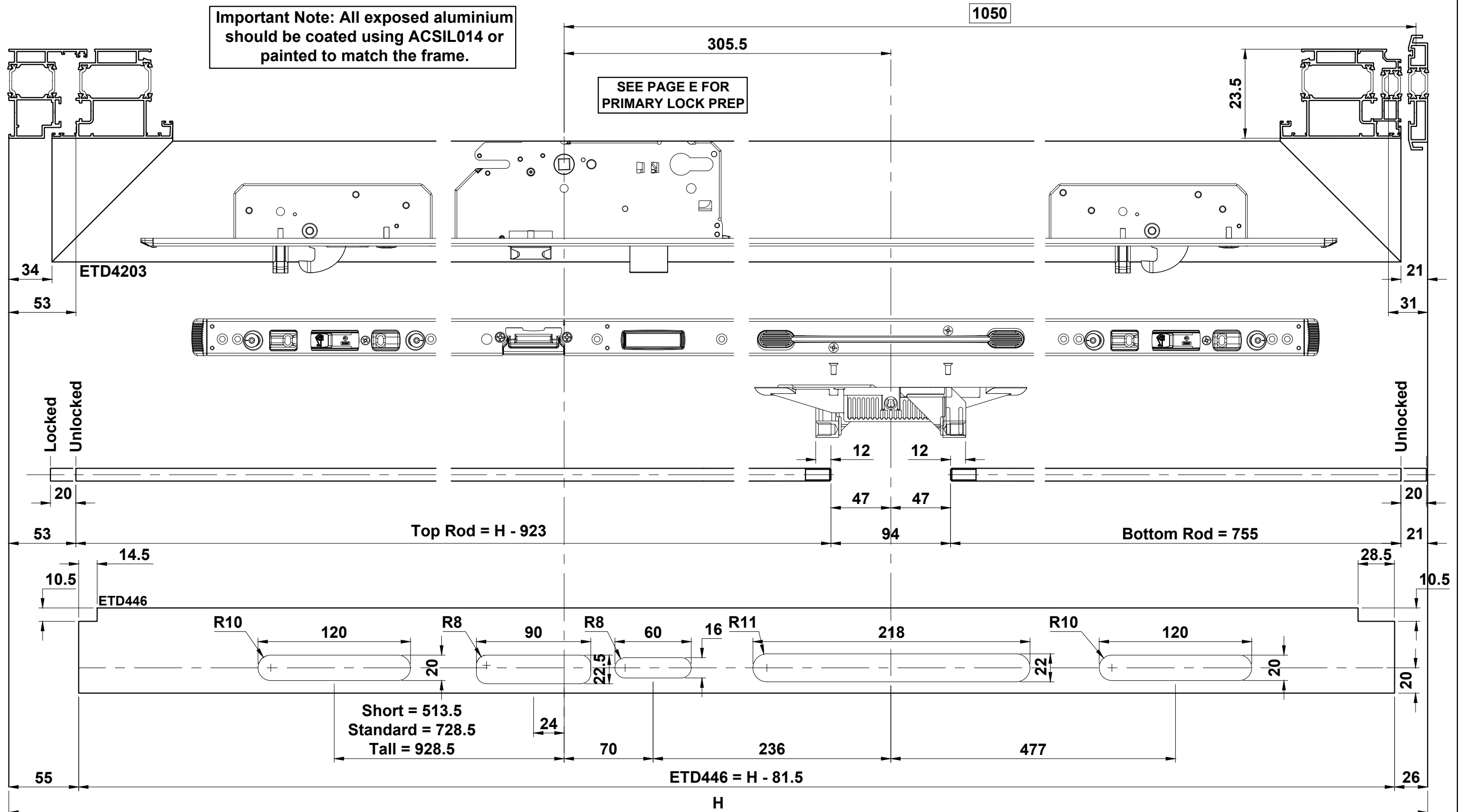


Sash to be notched to allow
ACUL242 to fit into position



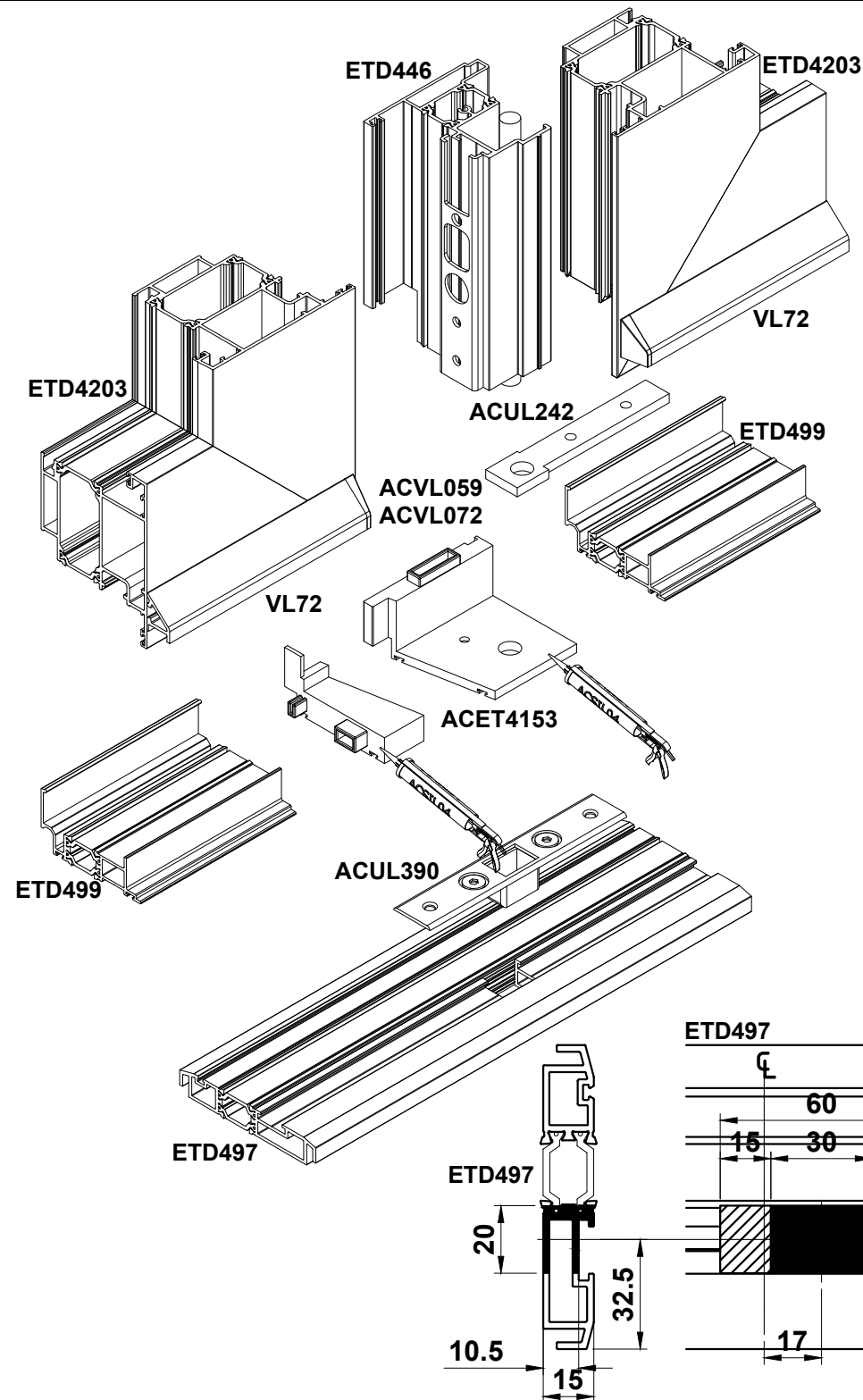
Do Not Scale From This Drawing

Flush Double Door Finger Bolt Lock Preparation for Low Ramp Threshold

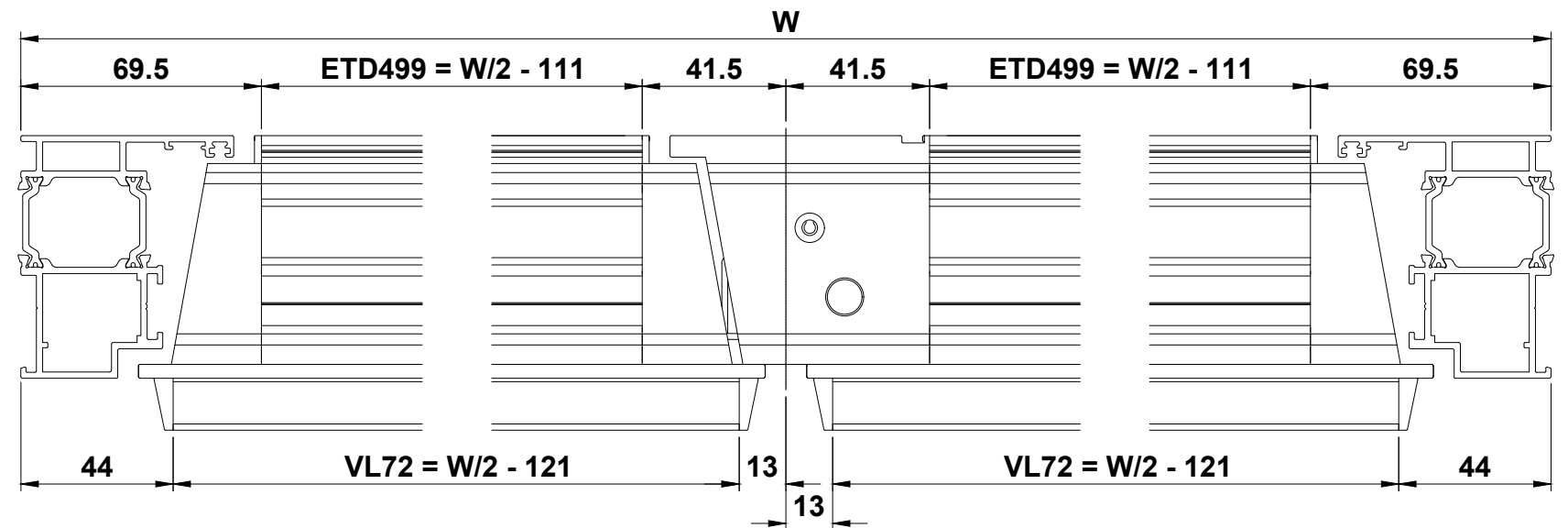
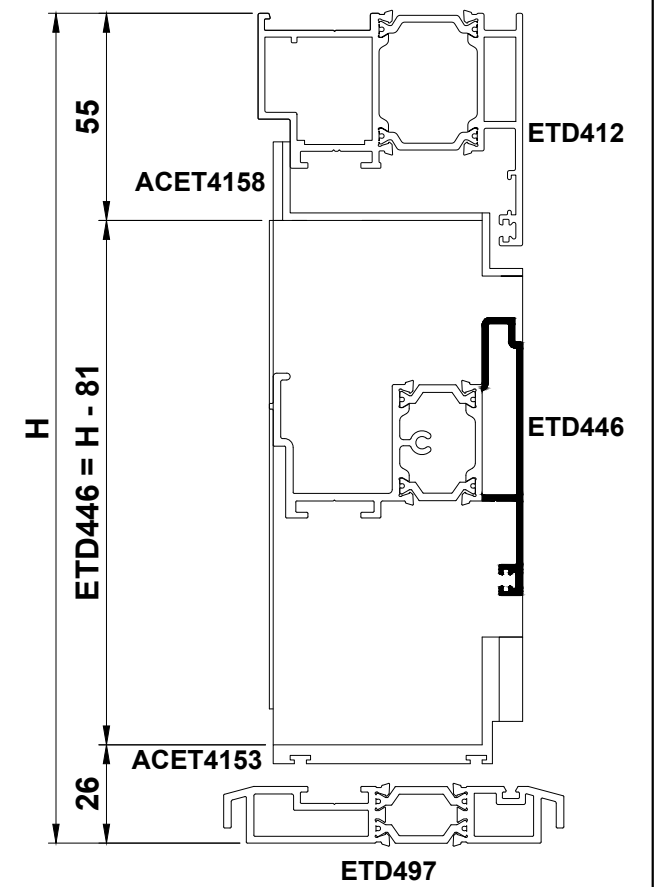
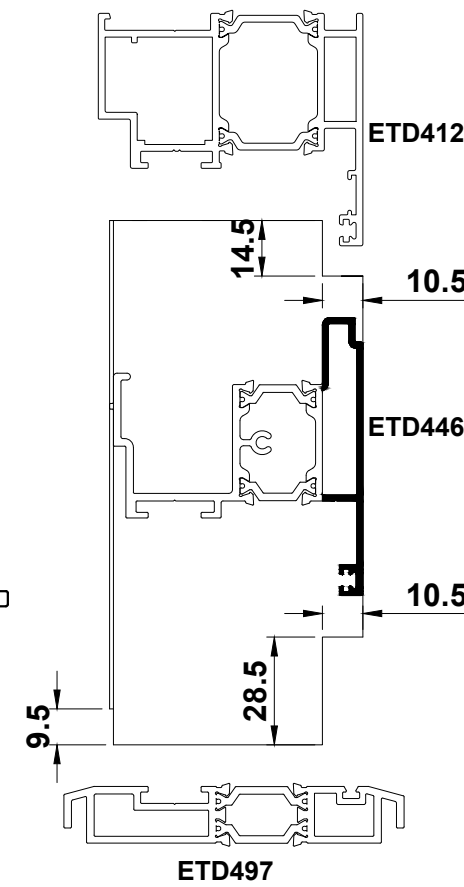
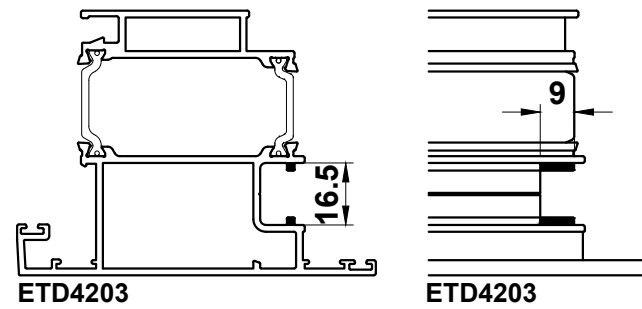


Do Not Scale From This Drawing

Flush Double Door Finger Bolt Meeting Stile Assembly for Low Ramp Threshold

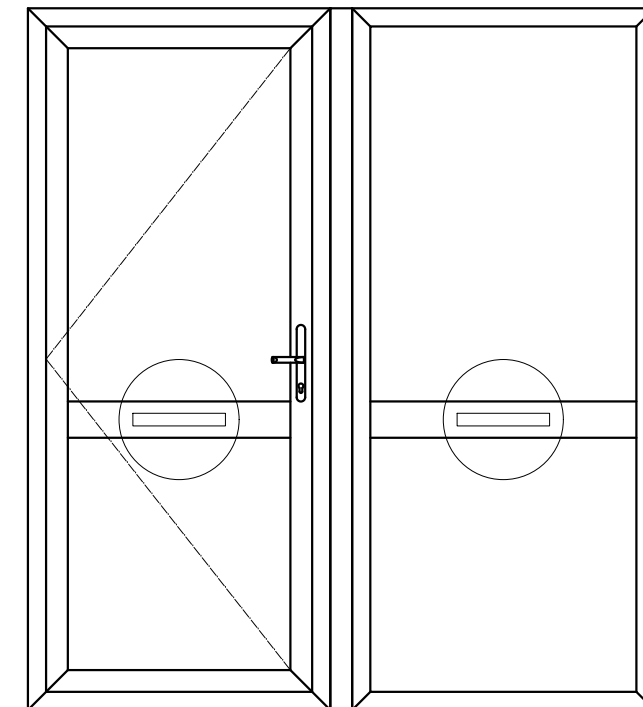
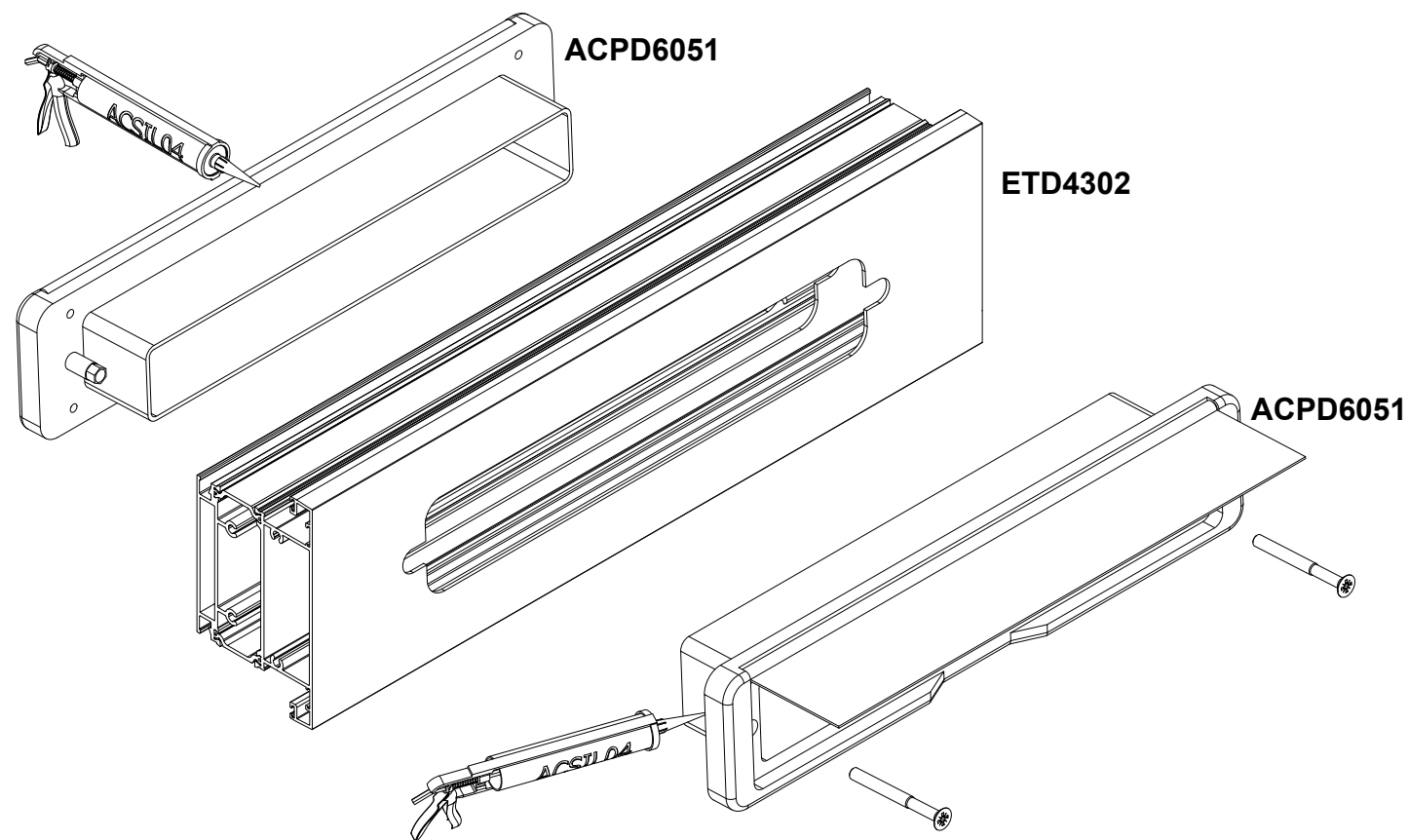
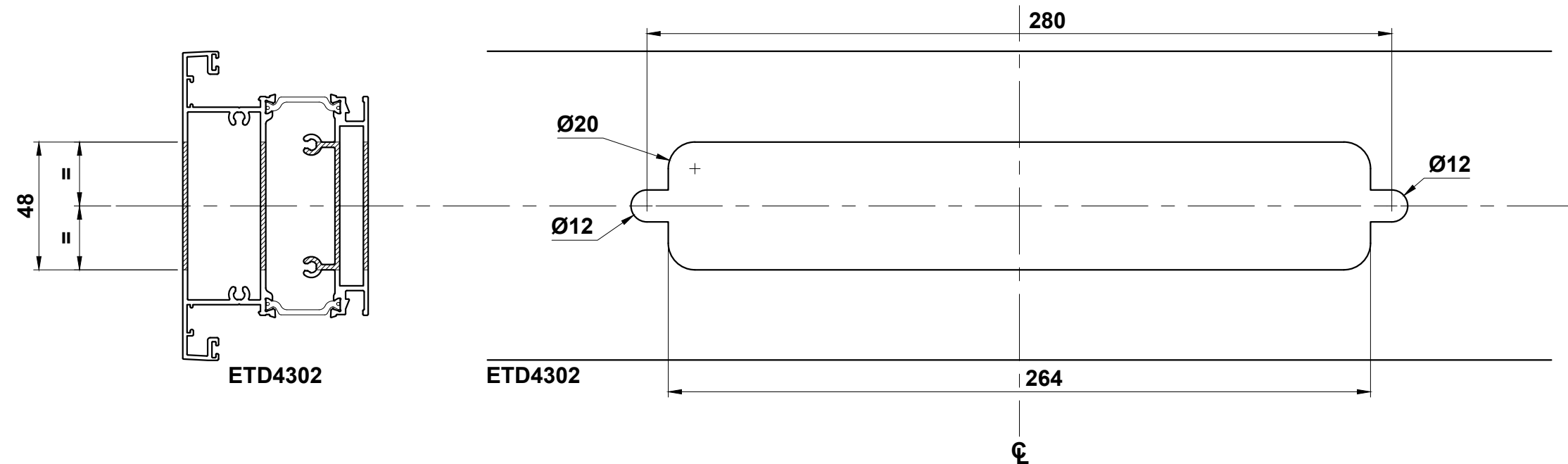


Sash to be notched to allow
ACUL242 to fit into position



Do Not Scale From This Drawing

Letter Plate Fitting

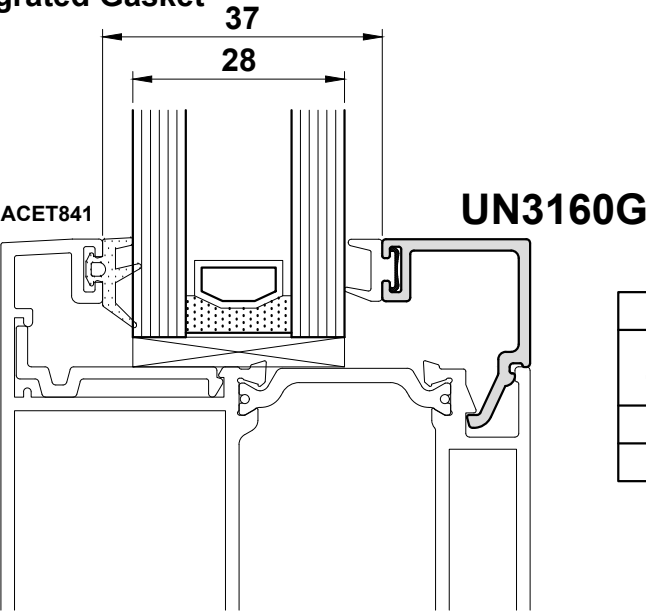


Do Not Scale From This Drawing

Glazing Chart

28mm Glazing

Integrated Gasket

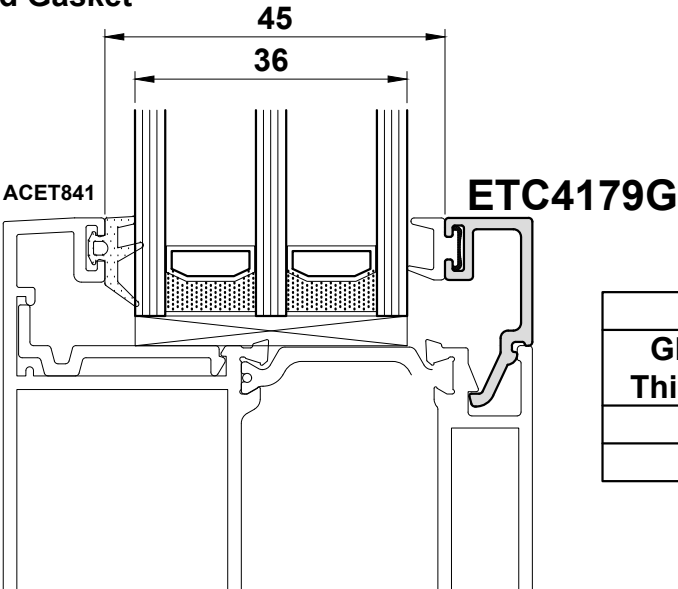


Low Profile Gaskets		
Glazing Thickness	External Gasket	Internal Gasket
28	ACET841	-
29 (28.8)	ACET842	-

ETD4203

36mm Glazing

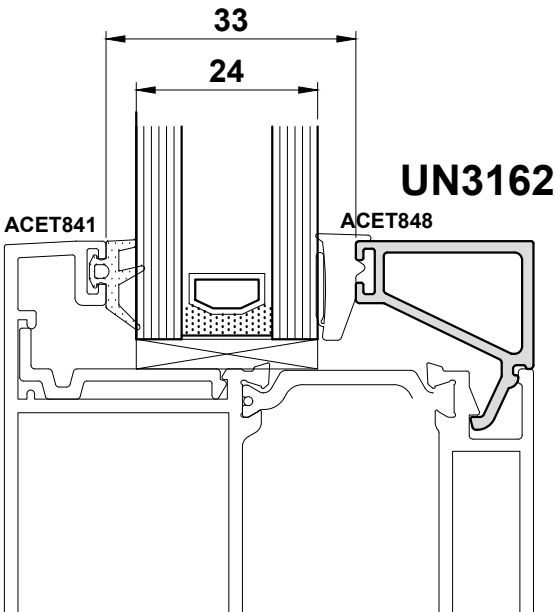
Integrated Gasket



Low Profile Gaskets		
Glazing Thickness	External Gasket	Internal Gasket
36	ACET841	-
37	ACET842	-

ETD4203

24-26mm Glazing

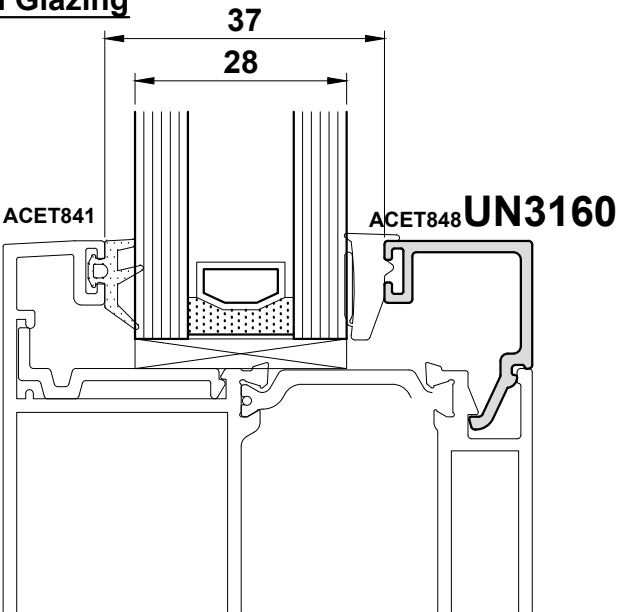


Low Profile Gaskets		
Glazing Thickness	External Gasket	Internal Gasket
24	ACET841	ACET848
25	ACET842	ACET848
26	ACET843	ACET848

Standard Gaskets		
Glazing Thickness	External Gasket	Internal Gasket
24	ACVG31	ACUN036
25	ACVG231	ACUN036
26	ACVG231	ACUN036

ETD4203

28-30mm Glazing



Low Profile Gaskets		
Glazing Thickness	External Gasket	Internal Gasket
28	ACET841	ACET848
29 (28.8)	ACET842	ACET848
30	ACET843	ACET848

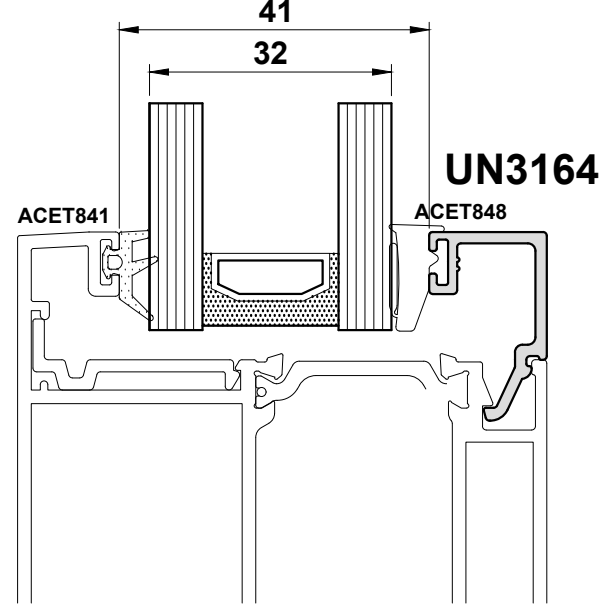
Standard Gaskets		
Glazing Thickness	External Gasket	Internal Gasket
28	ACVG31	ACUN036
29 (28.8)	ACVG231	ACUN036
30	ACVG231	ACUN036

ETD4203

Do Not Scale From This Drawing

Glazing Chart

30-32mm Glazing

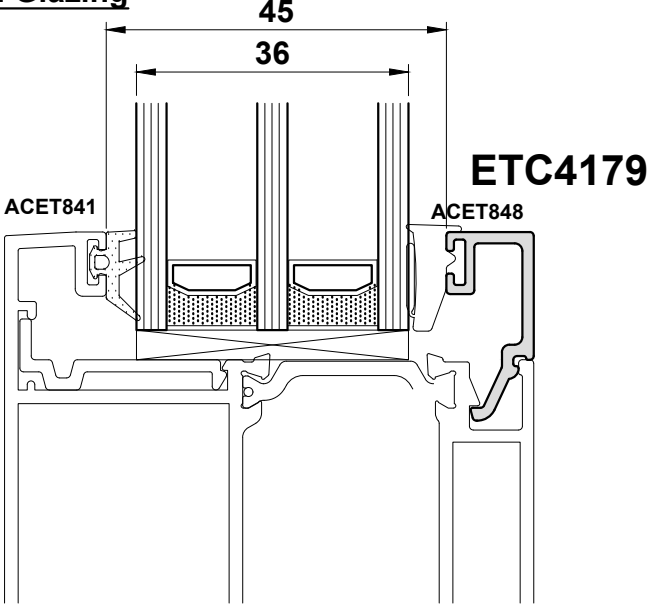


Low Profile Gaskets		
Glazing Thickness	External Gasket	Internal Gasket
30	ACET841	ACET848
31	ACET842	ACET848
32	ACET843	ACET848

Standard Gaskets		
Glazing Thickness	External Gasket	Internal Gasket
30	ACVG31	ACUN036
31	ACVG231	ACUN036
32	ACVG231	ACUN036

ETD4203

36mm Glazing

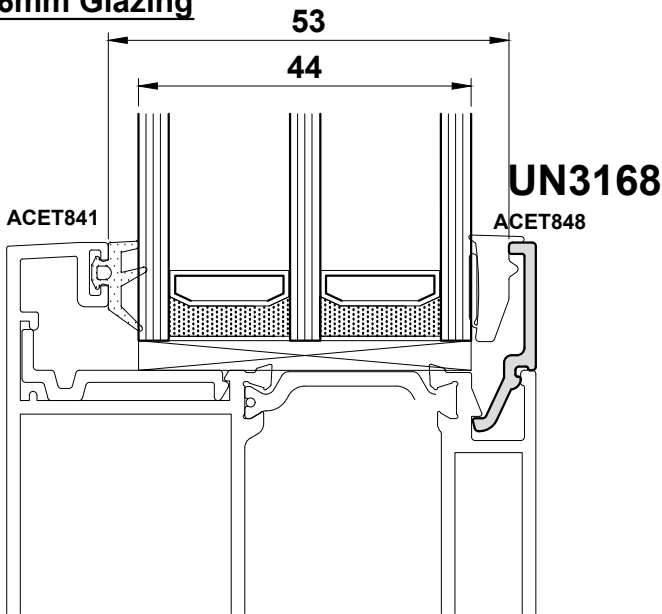


Low Profile Gaskets		
Glazing Thickness	External Gasket	Internal Gasket
36	ACET841	ACET848
37	ACET842	ACET848
38	ACET843	ACET848

Standard Gaskets		
Glazing Thickness	External Gasket	Internal Gasket
36	ACVG31	ACUN036
37	ACVG231	ACUN036
38	ACVG231	ACUN036

ETD4203

44-46mm Glazing



Low Profile Gaskets		
Glazing Thickness	External Gasket	Internal Gasket
44	ACET841	ACET848
45	ACET842	ACET848
46	ACET843	ACET848

Standard Gaskets		
Glazing Thickness	External Gasket	Internal Gasket
44	ACVG31	ACUN036
45	ACVG231	ACUN036
46	ACVG231	ACUN036

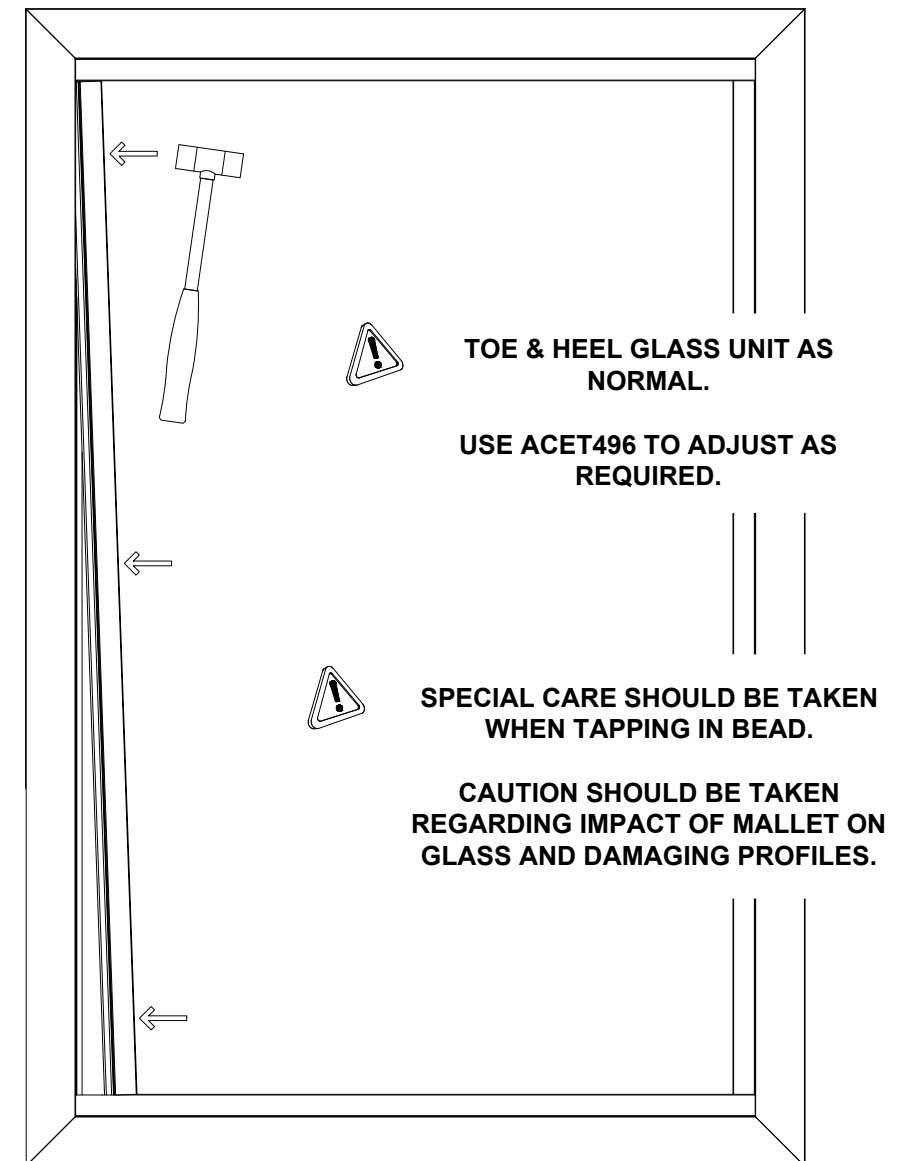
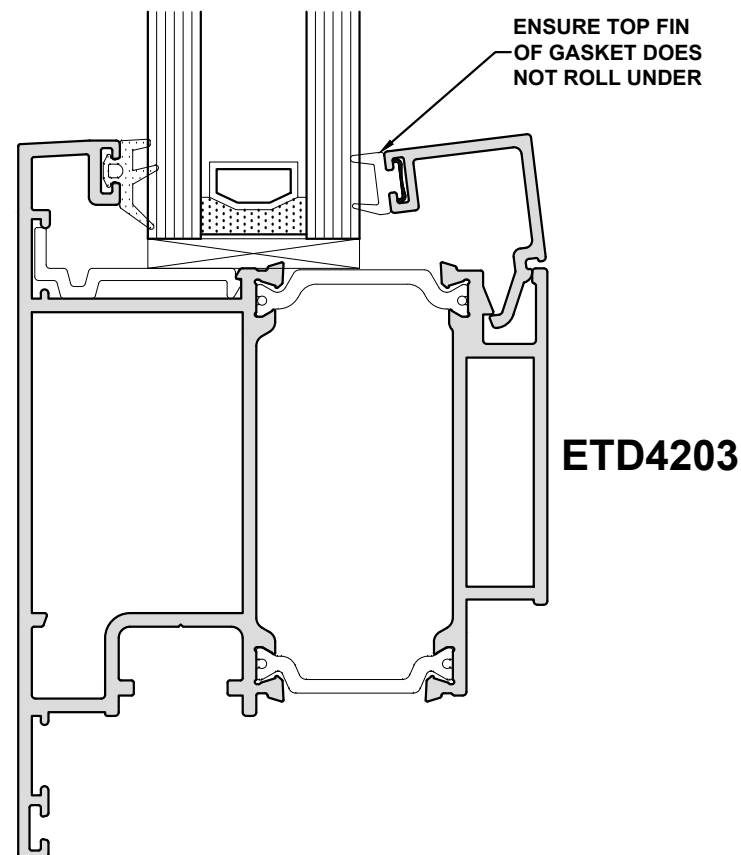
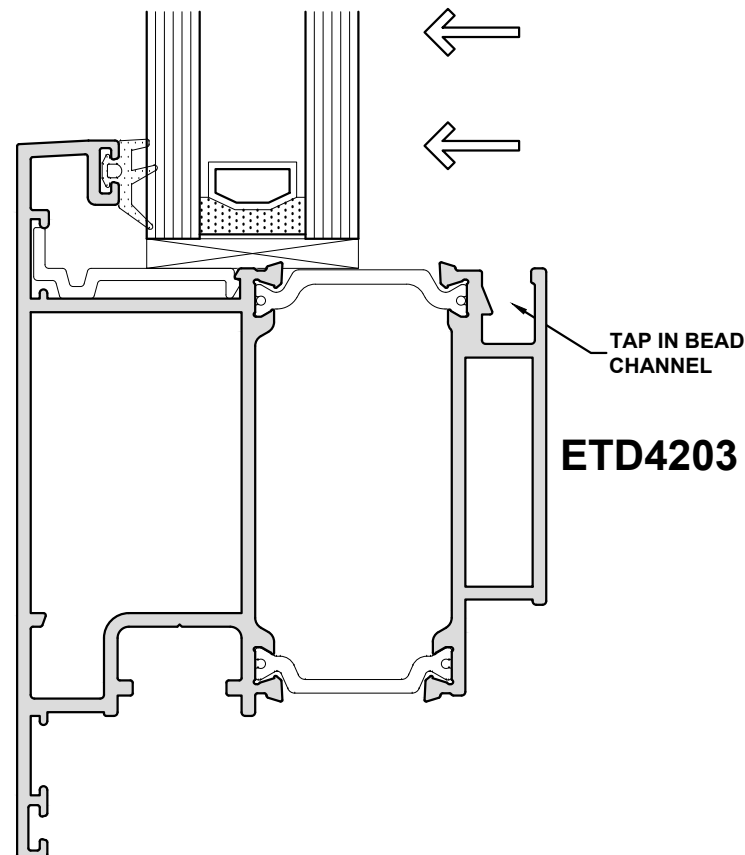
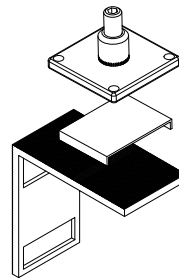
ETD4203

Do Not Scale From This Drawing

QUICK-GLAZE BEAD INSTALLATION

1. INSTALL GLASS UNIT, ENSURING IT HAS BEEN PUSHED FORWARD TO ENGAGE COMPRESSION OF E GASKET.
2. BEGINNING WITH HORIZONTAL BEADS, LOCATE BEAD IN CLIP CHANNEL OF SASH AS SHOWN. INTEGRATED GASKET MAY REST AGAINST GLASS UNIT.
3. APPLY FIRM PRESSURE TO THE BEAD TO HOLD IN POSITION. THIS MAY CAUSE THE BEAD TO FULLY LOCK INTO POSITION.
4. USING A NYLON MALLET, TAP BEAD INTO CHANNEL WORKING FROM ONE END TO THE OTHER. PLEASE TAKE CARE AT THIS STAGE TO AVOID DAMAGE TO BOTH THE GLAZING UNIT AND THE BEAD.
5. REPEAT STEPS 2 - 4 TO INSTALL VERTICAL BEADS.

WE STRONGLY RECOMMEND INSTALLING ACET496 GLASS ADJUSTERS WHEN USING QUICK-GLAZE BEADS. THIS WILL REMOVE THE NEED TO REMOVE BEADS IN ORDER TO ADJUST GLASS POSITION.



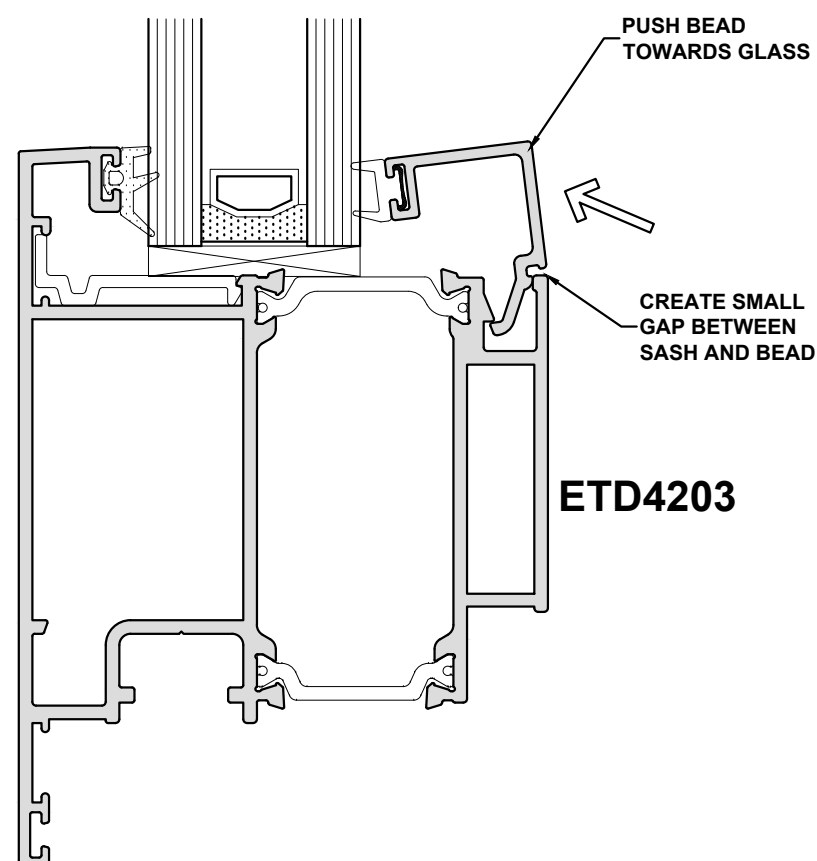
Do Not Scale From This Drawing

KEEP INTEGRATED GASKET

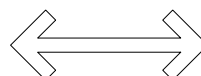
QUICK-GLAZE BEAD REMOVAL

1. STARTING ON VERTICAL BEADS, APPLY PRESSURE TO BEAD IN DIRECTION SHOWN IN ORDER TO CREATE SMALL GAP BETWEEN SASH AND BEAD.
2. GENTLY INSERT DE-GLAZING TOOL TAKING PARTICULAR CARE AS NOT TO DAMAGE PAINT FINISH.
3. SLOWLY PRISE THE BEAD UP AND AWAY FROM THE SASH.
4. THE BEAD SHOULD NOW BE EASILY REMOVABLE FROM QUICK-GLAZE BEAD CHANNEL IN SASH

BEAD AND INTEGRATED GASKET CAN BE REUSED.



OR

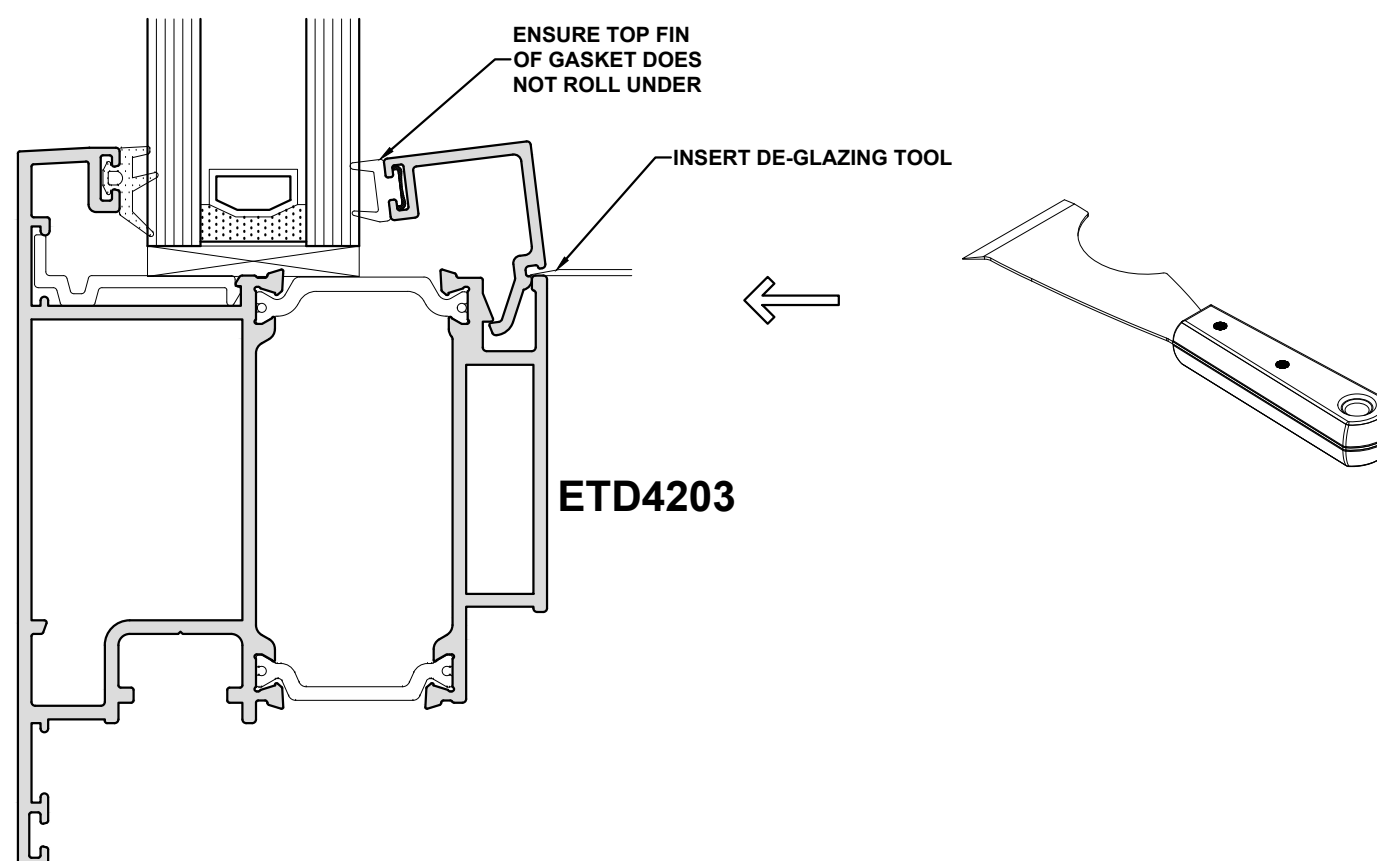


REPLACE INTEGRATED GASKET

QUICK-GLAZE BEAD REMOVAL

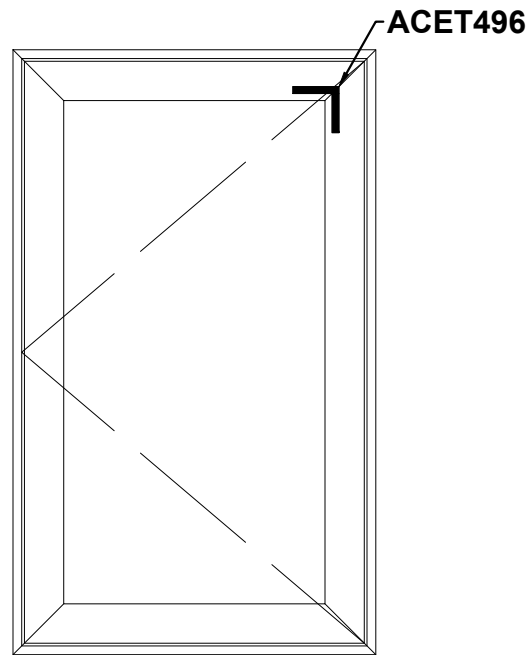
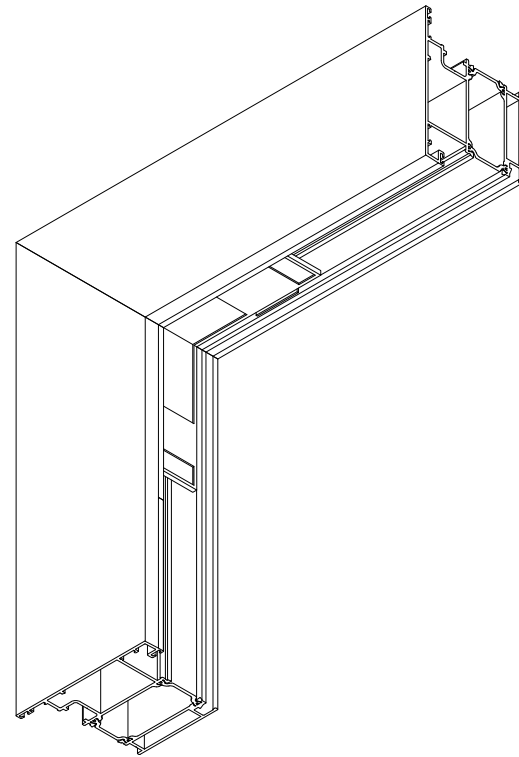
1. USING SMALL FLAT HEADED SCREWDRIVER OR SIMILAR, WEDGE TIP BETWEEN CO EXTRUDED GASKET AND ALUMINIUM.
2. IN A LEVERING MOTION, PRISE THE GASKET AWAY FROM THE ALUMINIUM. PARTICULAR CARE SHOULD BE TAKEN NOT TO DAMAGE THE GLASS UNIT AND ALUMINIUM.
3. COMPLETE THIS AT SEVERAL LOCATIONS ALONG THE LENGTH OF THE BEAD.
4. REMOVE GASKET AND DISCARD. THIS GASKET CAN NO LONGER BE USED.
5. THE BEAD SHOULD NOW BE EASILY REMOVABLE FROM TAP IN BEAD CHANNEL IN SASH

PLEASE SEE GLAZING CHART FOR REPLACEMENT GASKET CODES.



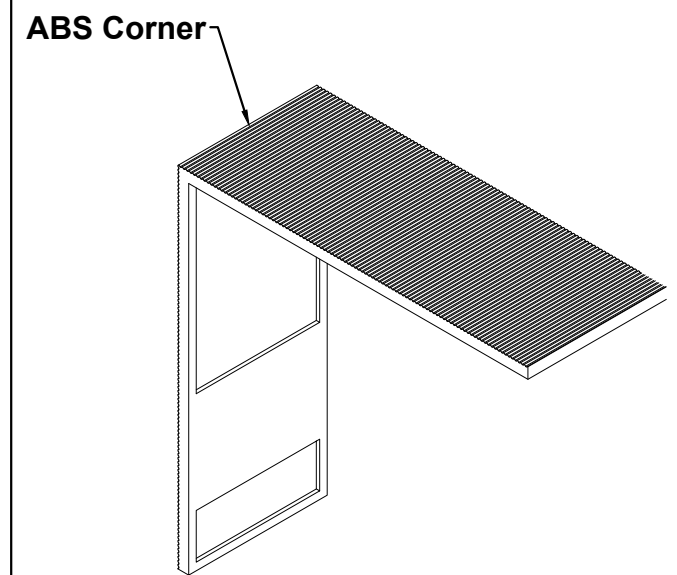
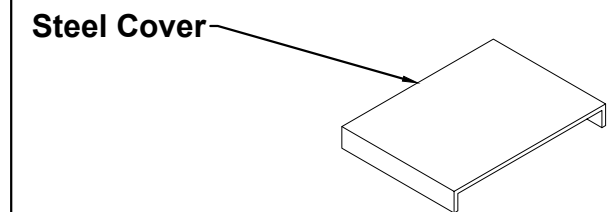
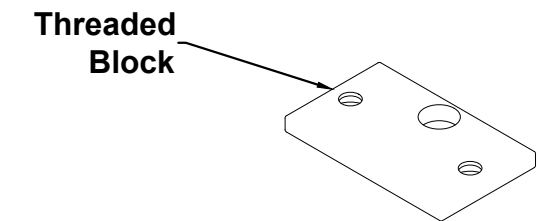
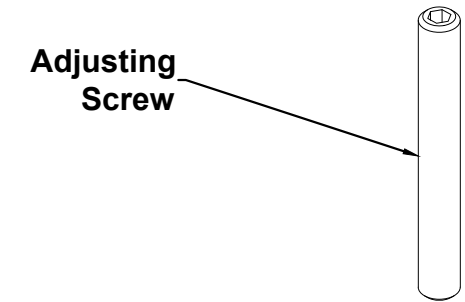
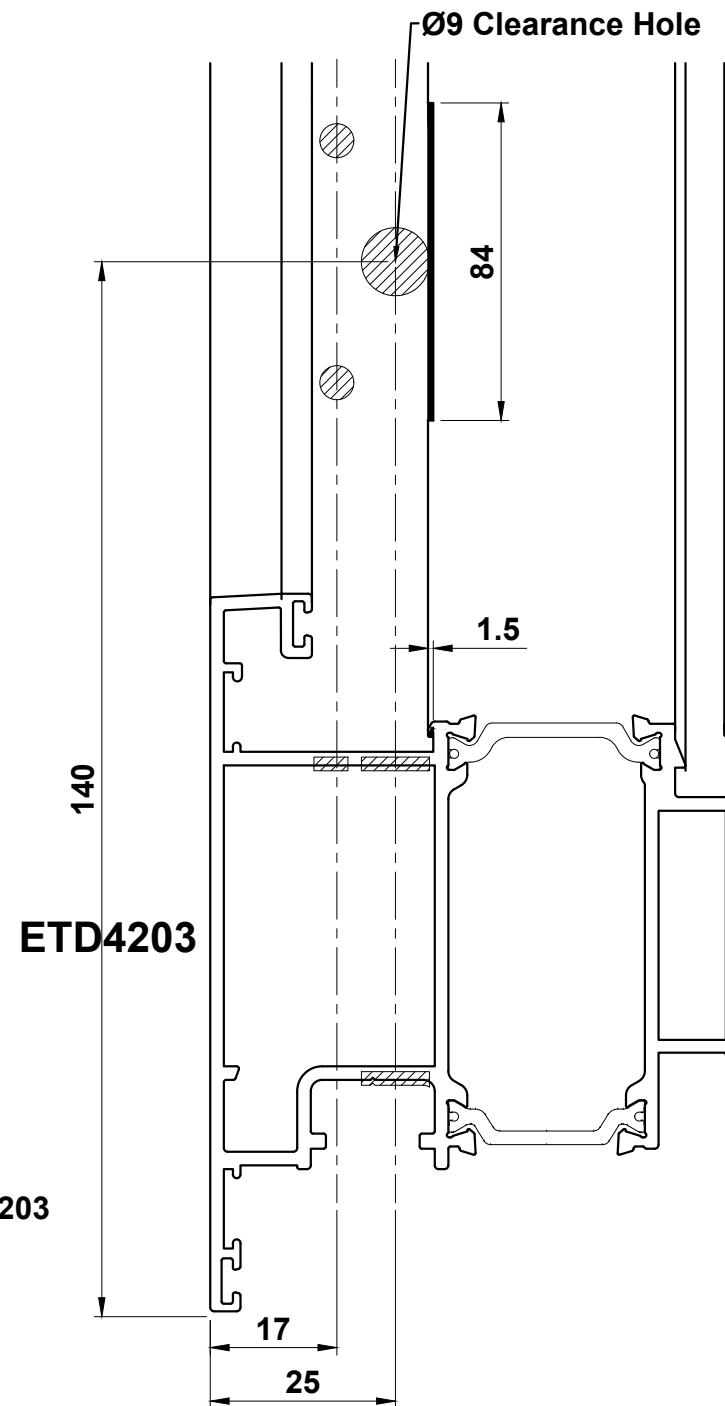
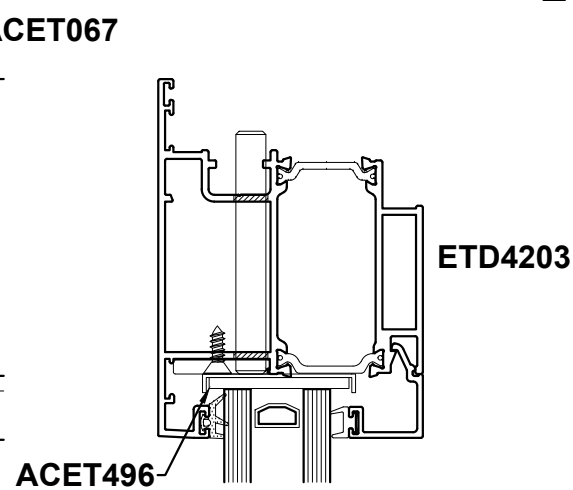
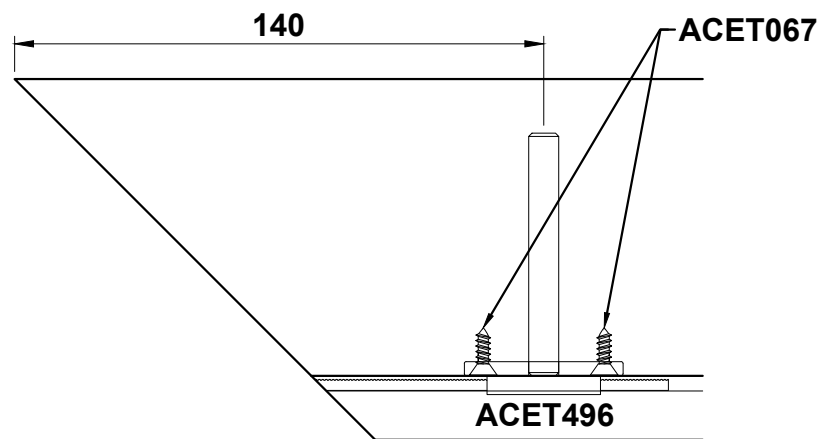
Do Not Scale From This Drawing

Glass Adjuster

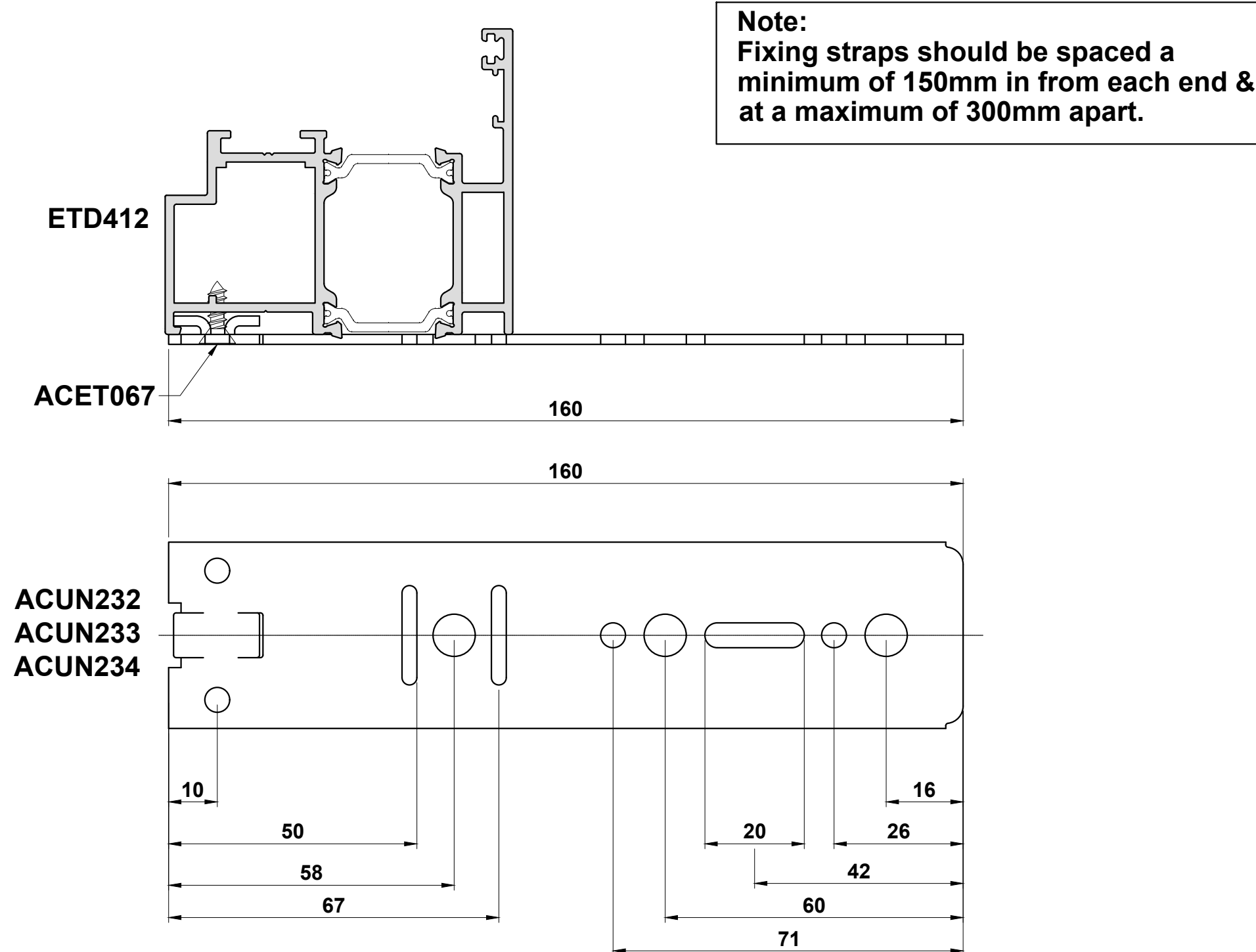


To ensure accuracy use
ACET497 drill jig

Note: Do not tighten the adjusting
screw too tightly as it can lead to
cracked glass.



Fixing Strap Detail

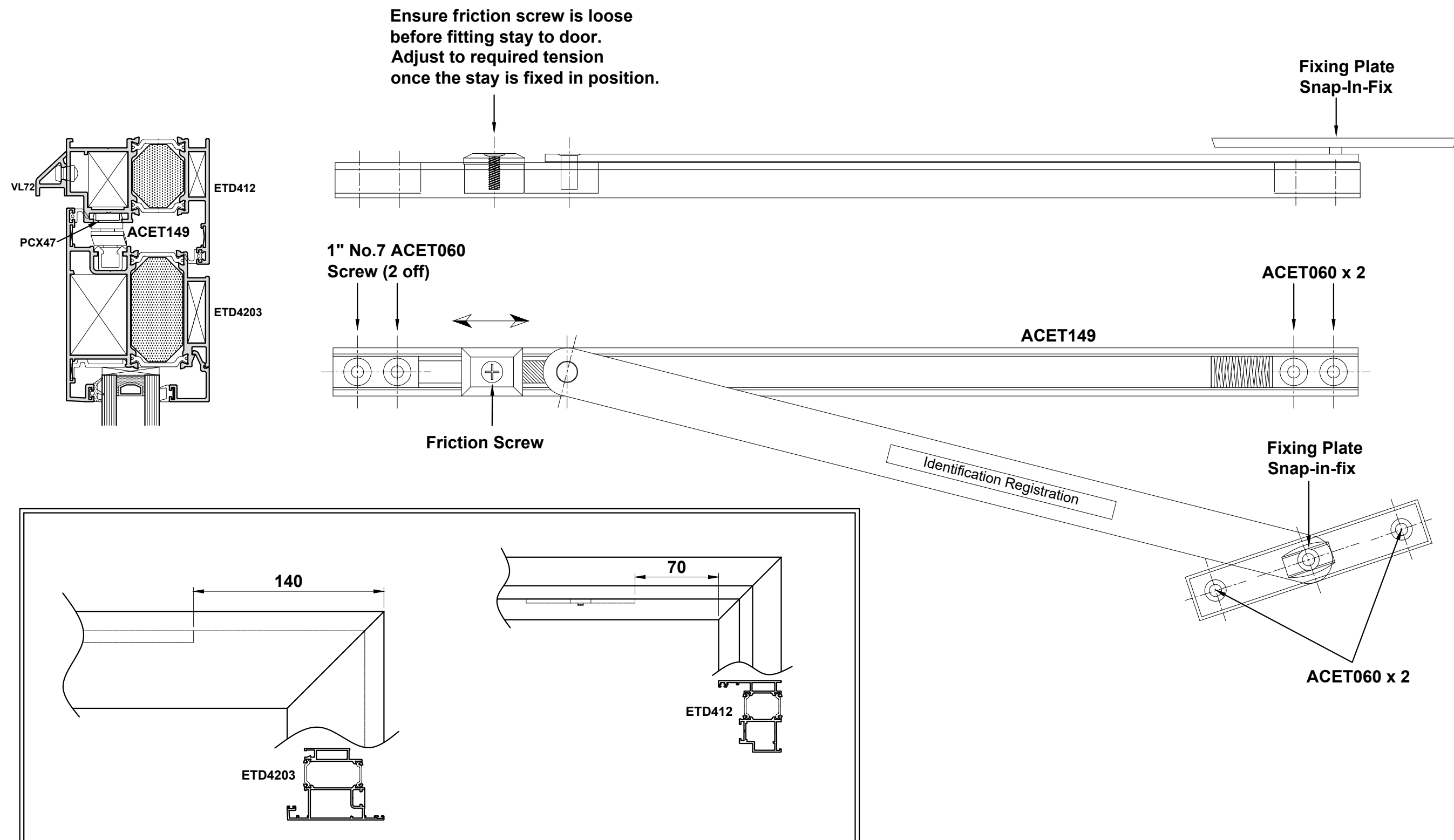


Do Not Scale From This Drawing

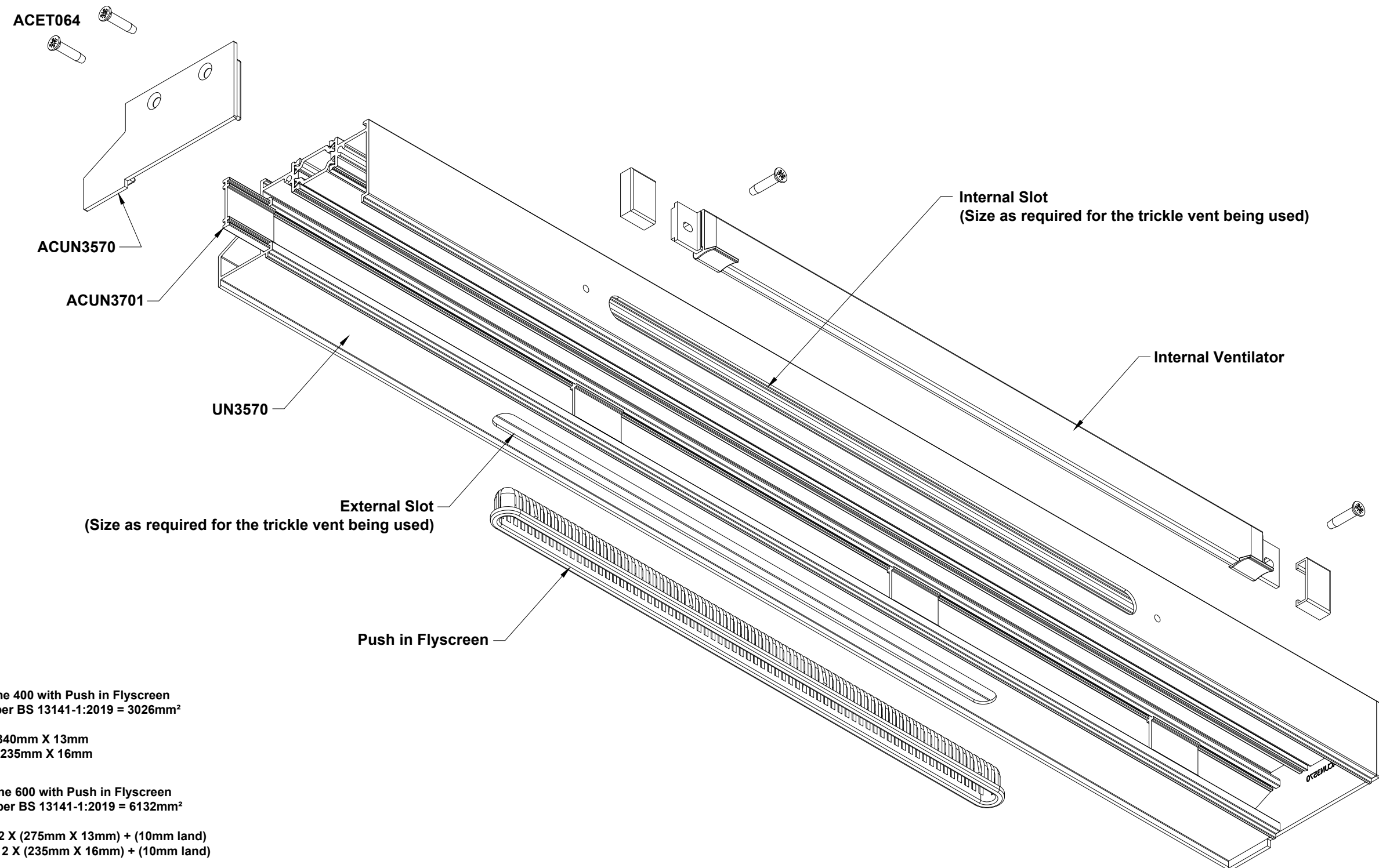
Fluent XPath layout



ACET149 Fixing Plate Installation



Trickle Vent



Section F

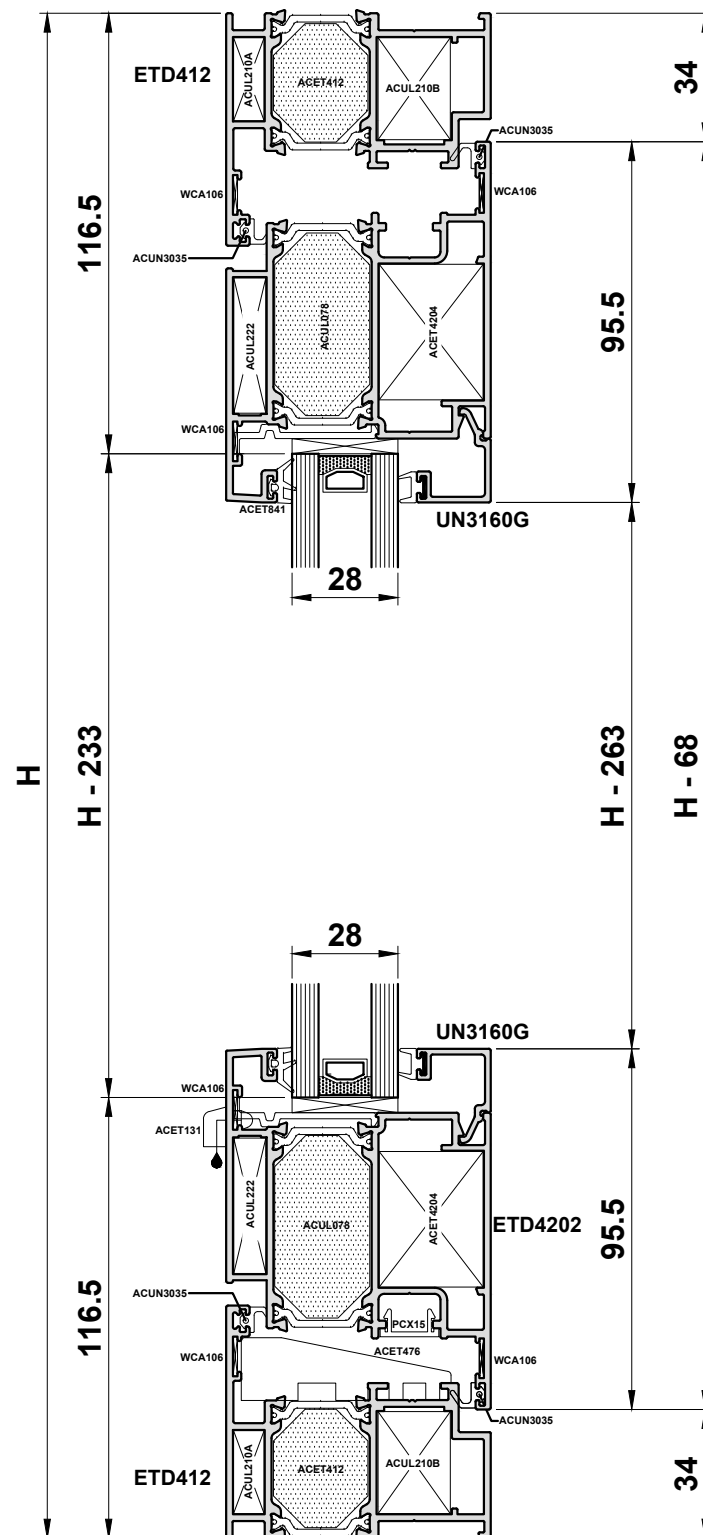


Sawing Tables

Open In	
Single Door.....	F03 - F04
Double Door Lift Lever.....	F05 - F07
Double Door Finger Bolt.....	F08 - F10
Open Out	
Single Door.....	F11
Double Door Lift Lever.....	F12 - F14
Double Door Finger Bolt.....	F15 - F17
Fan Light	F18
Side Light	F19

Section F

Flush Open In Single Door Full Frame Quick-Glaze Bead



Profile Cutting Schedule				
ETD412	2			W
ETD412	2			H
ETD4202	2			W - 68
ETD4202	2			H - 68
UG3160G	2			H - 263
UG3160G	2			W - 225
PCX15	2			H - 106
PCX15	2			W - 106
PCX47	2			H - 82
PCX47	2			W - 82
VL72	1			W - 139

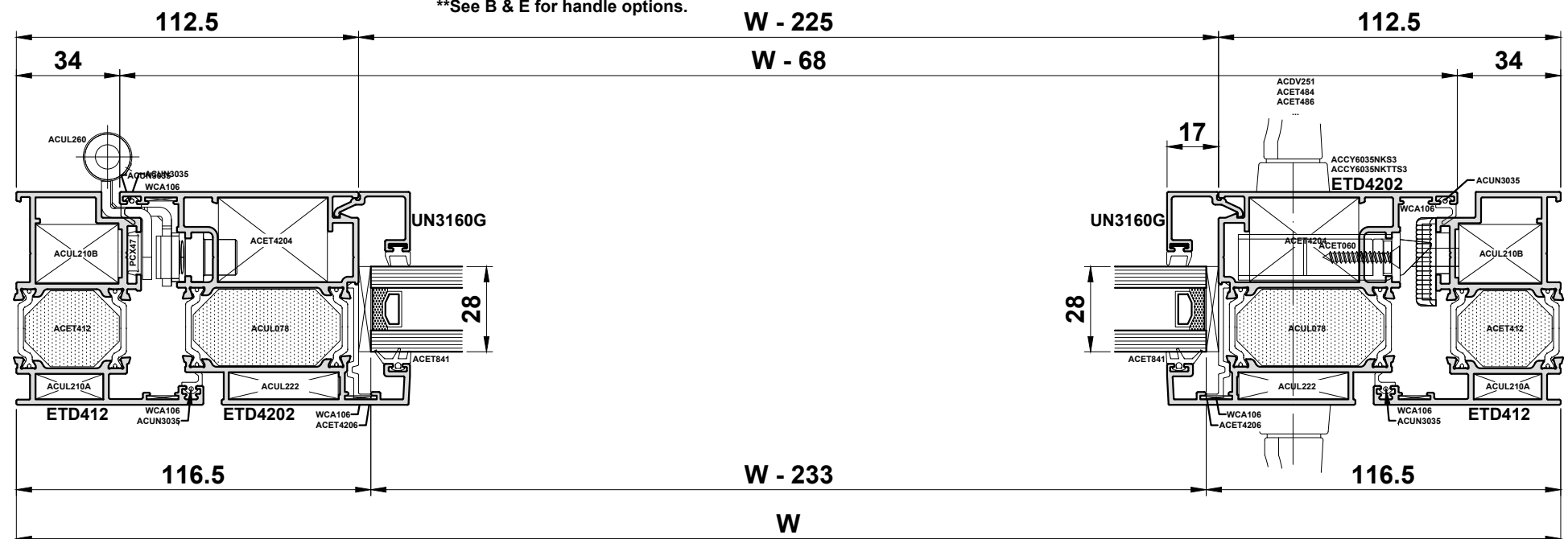
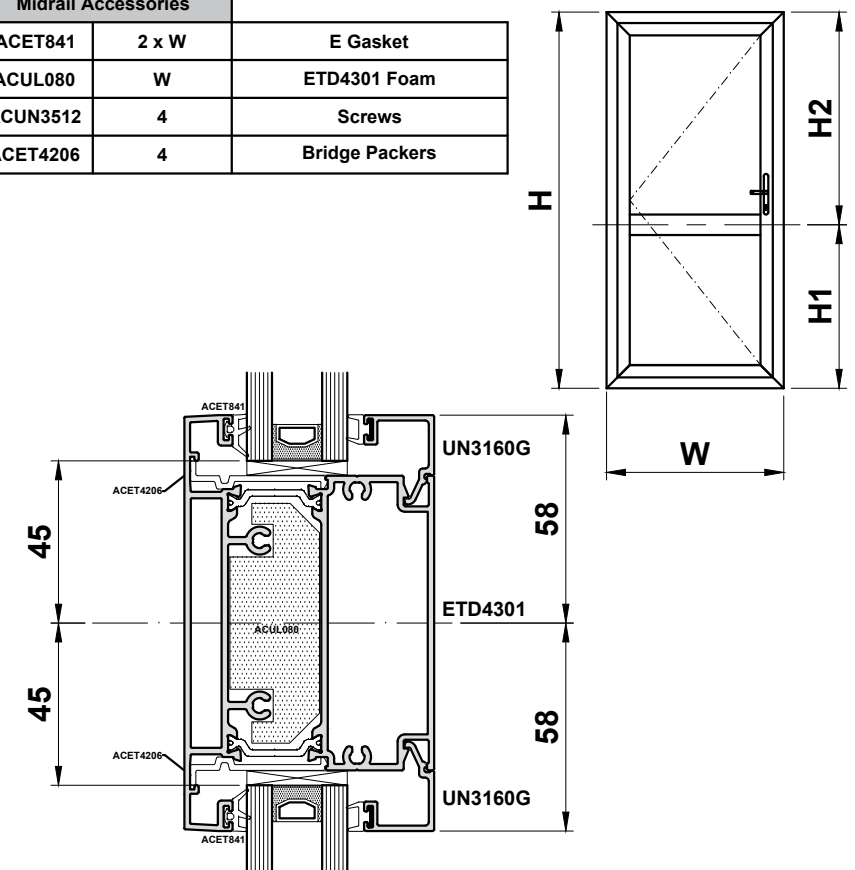
MIDRAIL	Glass Sizes				
	ETD4301	1			W - 225
	UN3160G	4			W - 225
	UN3160G	2			H1 - 190
	UN3160G	2			H2 - 190

Glass Sizes			
Without ETD4301	H - 233	W - 233	
Top Glass With ETD4301	H2 - 161	W - 233	
Bottom Glass With ETD4301	H1 - 161	W - 233	

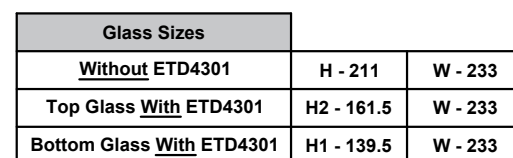
Accessories		
ACCY6035S3	1	Euro Cylinder
**	**	Handles
ACET060	16	Screws for Lock
ACET131	2	Drainage Cap
ACET412	2 x W & 2 x H	Outer Frame Foam
ACET476	2	Run Up Block
...	...	Screw for ACUL260
ACUL065	10	Bridge Packers
ACUL078	2 x W & 2 x H	Sash Foam
ACUL210A	4	Outer Frame Cleat
ACUL210B	4	Outer Frame Cleat
ACUL222	4	Sash Cleat
ACET4204	4	Sash Cleat
ACUL260	3	Hinge
ACUN036	2 x W & 2 x H	Wedge Gasket
ACUN3035	4 x W & 4 x H	Flipper Gasket
...	...	Screw for ACUL260
ACET841	2 x W & 2 x H	E Gasket
ACVL059 / ACVL072	1 Pair	VL72 End Cap
ACVL061	W/300 + 2	VL72 Rivet
WCA106	12	Chevrans
*	1	Primary Lock

*See Page E20 for lock options.
**See B & E for handle options.

Midrail Accessories		
ACET841	2 x W	E Gasket
ACUL080	W	ETD4301 Foam
ACUN3512	4	Screws
ACET4206	4	Bridge Packers

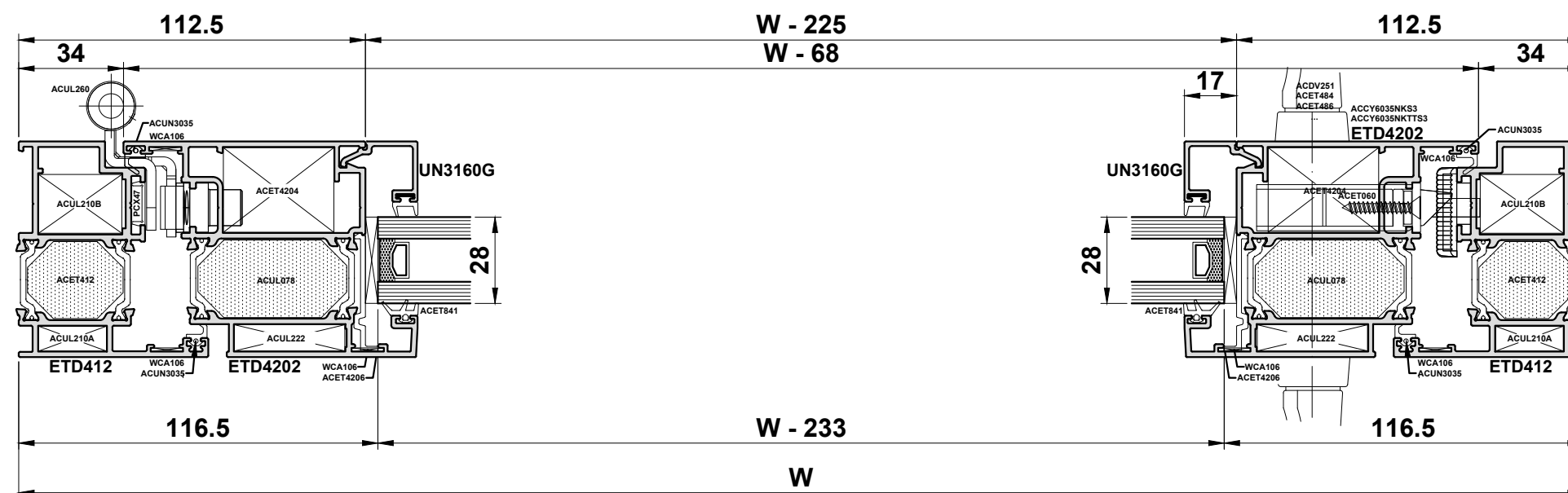
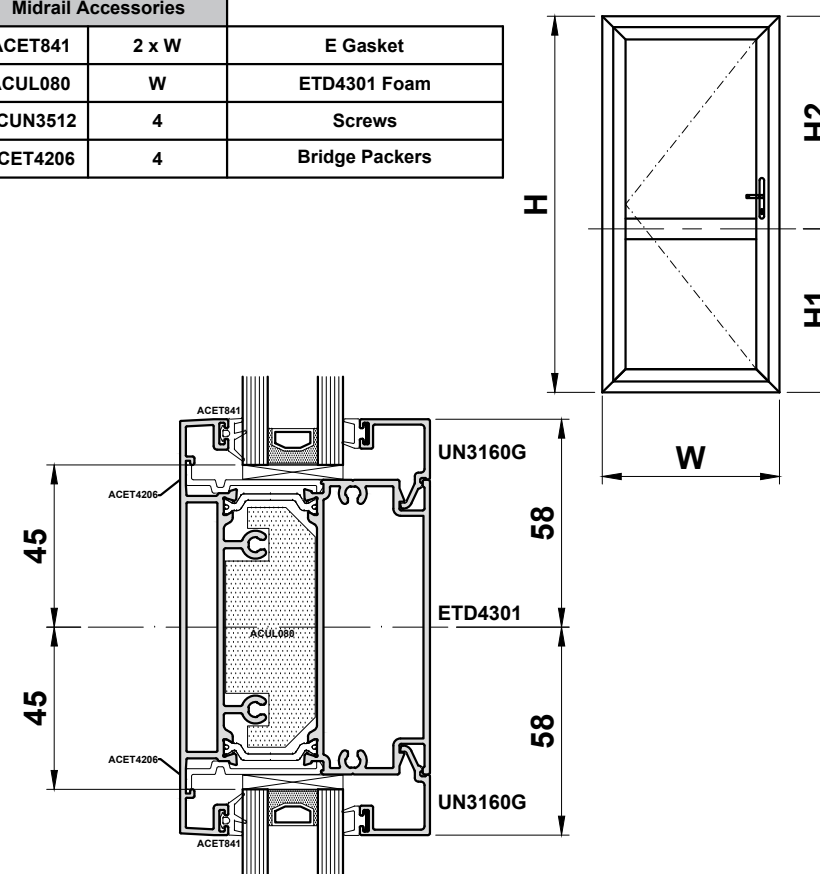


Do Not Scale From This Drawing



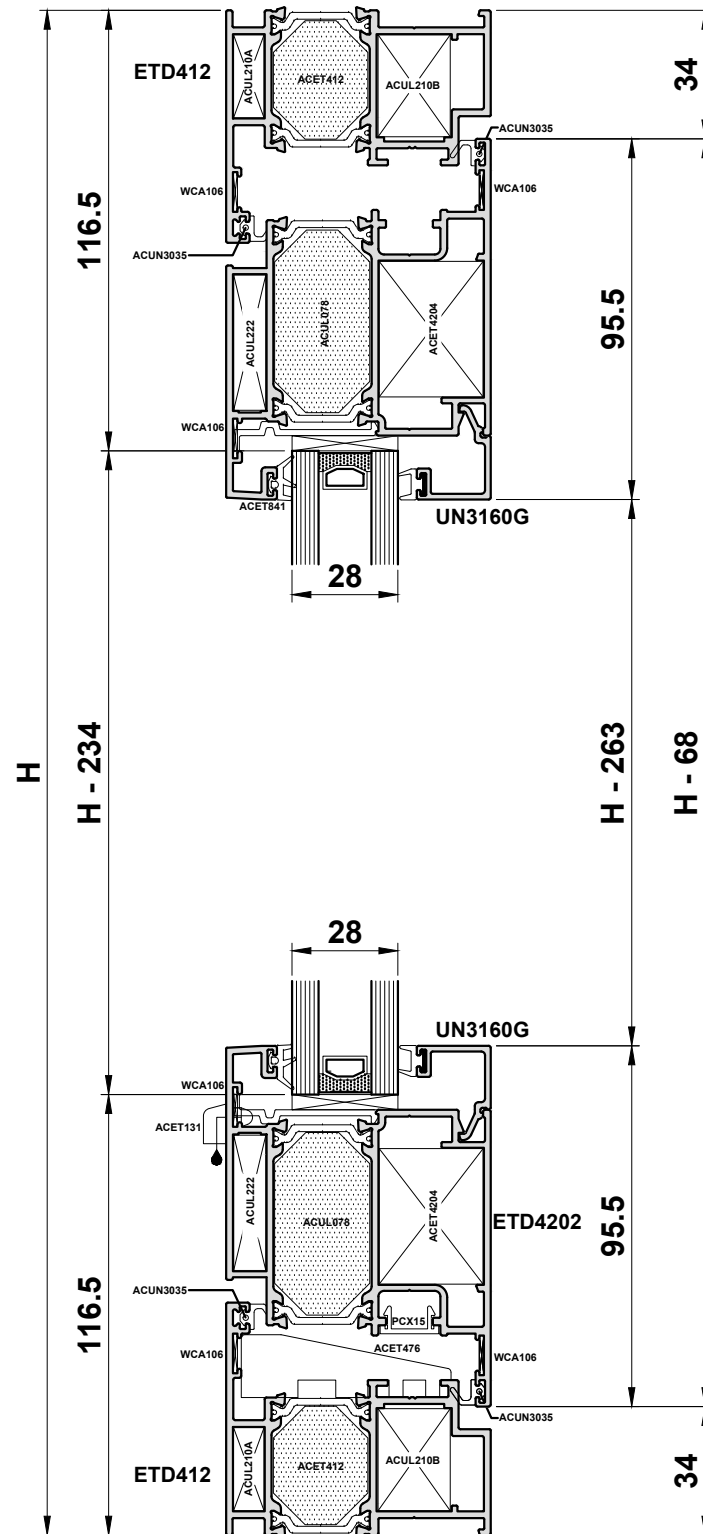
Accessories		
ACCY6035S3	1	Euro Cylinder
**	**	Handles
ACET060	4	Screw for ACET4190
ACET060	16	Screw for Lock
ACET099	W - 100 / 300	Screw for UL297
ACET4191	Pair	ETD491 End Cap
ACET4197	Pair	UL297 End Cap
ACET476	2	Run Up Block
ACIM062	12	Screw for ACUL250
ACSH038N	W	Woolpile
ACUL4206	10	Bridge Packers
ACUL078	2 x W & 2 X H	Sash Foam
ACUL210A	2	Outer Frame Cleat
ACUL210B	2	Outer Frame Cleat
ACUL222	4	Sash Cleat
ACUL4204	4	Sash Cleat
ACUL260	3	Hinge
ACUL295	2	Low Threshold Bracket
ACUN036	2 x W & 2 x H	Wedge Gasket
ACUN3035	4 x W & 4 x H	Flipper Gasket
ACUN3512	9	Screws for ACUL250
ACET841	2 x W & 2 x H	E Gasket
ACVL059 / ACVL072	1 Pair	VL72 End Cap

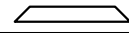
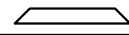
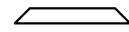
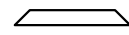
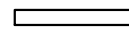
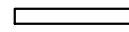
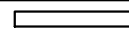
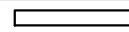
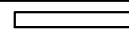
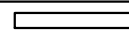
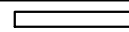
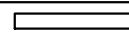
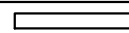
Midrail Accessories		
ACET841	2 x W	E Gasket
ACUL080	W	ETD4301 Foam
ACUN3512	4	Screws
ACET4206	4	Bridge Packers



Do Not Scale From This Drawing

Flush Open In Double Door Lift Lever Full Frame Quick-Glaze Bead



Profile Cutting Schedule				
ETD412	2			W
ETD412	2			H
ETD4202	4			W / 2 - 37
ETD4202	4			H - 68
ETD445	1			H - 110
UN3160G	4			H - 263
UN3160G	4			W / 2 - 194
PCX15	4			H - 106
PCX15	4			W / 2 - 74
PCX47	2			H - 56.5
PCX47	1			H - 110
PCX47	2			W - 82
VL72	2			W / 2 - 107.5

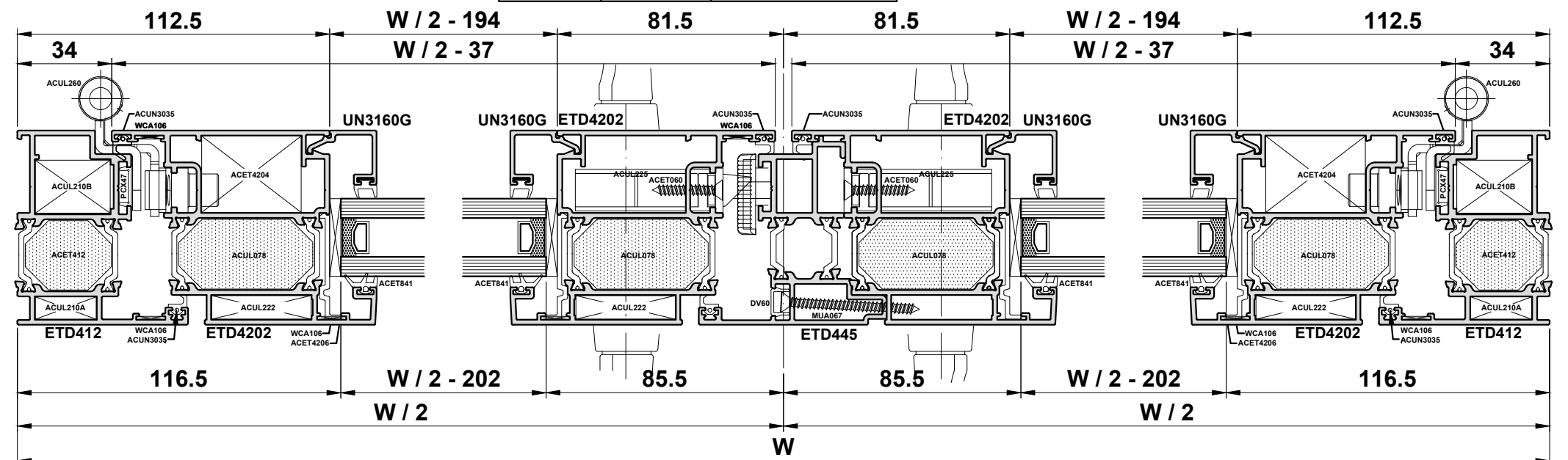
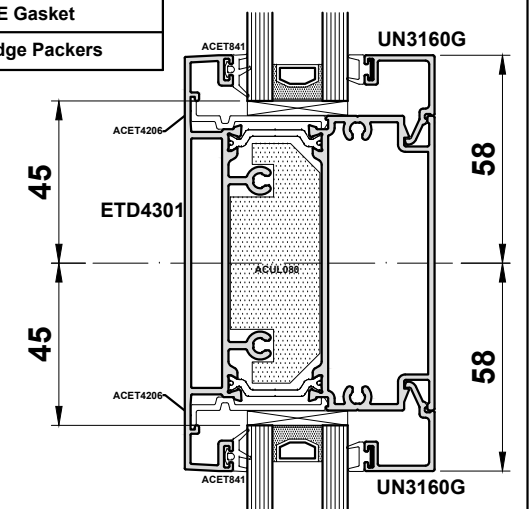
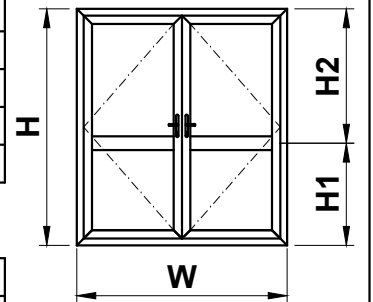
MIDRAIL	ETD4301	2			W / 2 - 194
	UN3160G	8			W / 2 - 194
	UN3160G	4			H2 - 190
	UN3160G	4			H1 - 190

Glass Sizes		
<u>Without</u> ETD4301	H - 234	W / 2 - 202
Top Glass <u>With</u> ETD4301	H2 - 161	W / 2 - 202
Bottom Glass <u>With</u> ETD4301	H1 - 161	W / 2 - 202

Accessories		
ACCY6035S3	2	Euro Cylinder
ACDV251	2 Pair	Handles
ACDV737	2	Bottom Shootbolt
ACDV738	2	Top Shootbolt
ACET060	40	Screw for Lock & Keep
ACET060	8	Screw for ACDV737/738
ACET131	4	Drainage Cap
ACET412	2 x W & 2 x H	Outer Frame Foam
ACET4157	Pair	ETD445 End Cap
ACET476	4	Run Up Block
...	...	Screw for ACUL260
ACUL065	20	Bridge Packers
ACUL078	4 x W / 2 & 4 x H	Sash Foam
ACUL210A	4	Outer Frame Cleat
ACUL210B	4	Outer Frame Cleat
ACUL222	8	Sash Cleat
ACET4204	8	Sash Cleat
ACUL260	6	Hinge
ACUL276	1	Secondary Lock
ACUL277/8	1	Double Door Primary Lock
ACUL279	1	Double Door Keep Kit
ACUN036	4 x W / 2 & 4 x H	Wedge Gasket
ACUN3035	4 x W & 7 x H	Flipper Gasket
...	...	Screw for ACUL260

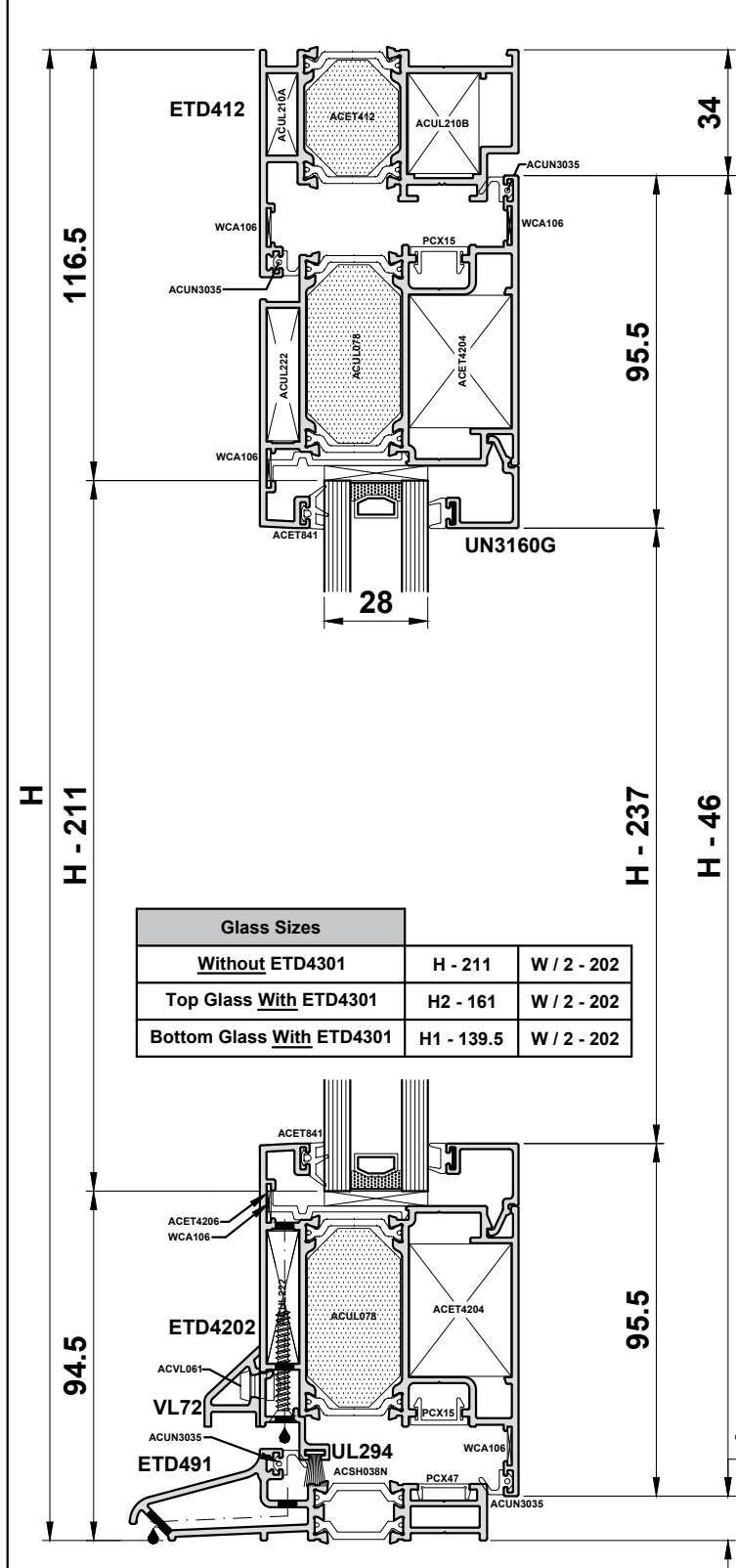
ACUN3513	2 + H / 300	Screw for ETD445
ACET841	4 x W / 2 & 4 x H	E Gasket
ACVL072	2 Pairs	VL72 End Cap
ACVL061	W/300 + 2	VL72 Rivet
WCA106	20	Chevrons

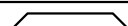
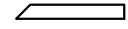
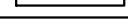
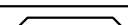
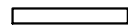
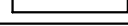
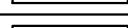
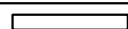
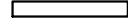
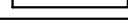
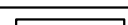
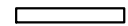
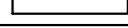
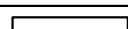
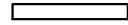
Midrail Accessories		
ACUL080	2 x W / 2	ETD4301 Foam
ACUL299	4	Bracket
ACUN036	4 x W / 2	Wedge Gasket
ACUN3512	8	Screw
ACET841	4 x W / 2	E Gasket
ACET4206	8	Bridge Packers



Do Not Scale From This Drawing

Flush Open In Double Door Lift Lever Low Rebate Threshold Quick-Glaze Bead



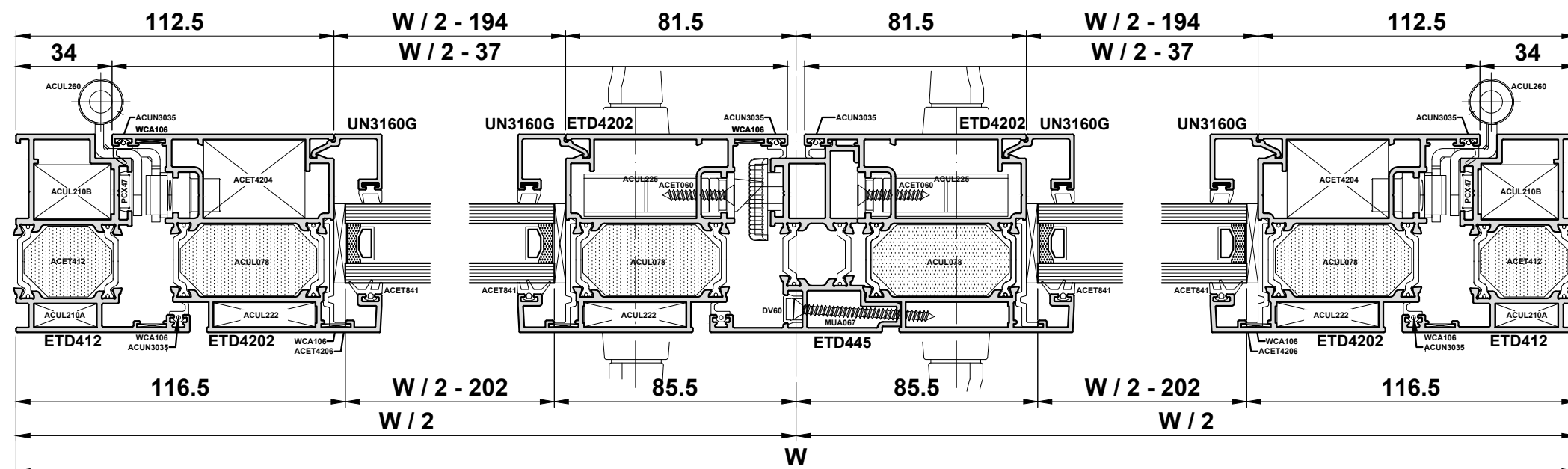
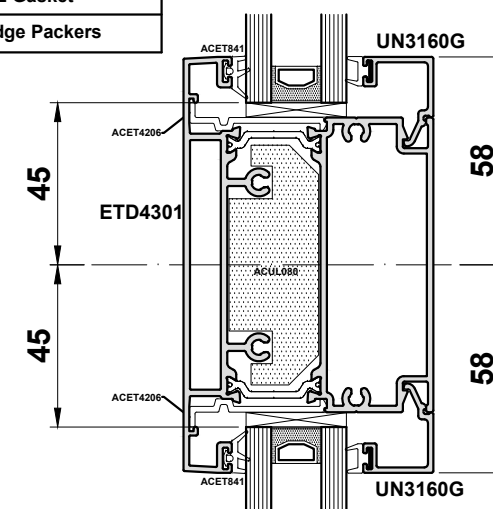
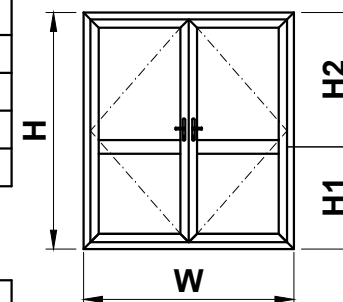
Profile Cutting Schedule				
ETD412	1			W
ETD412	2			H
ETD491	1			W
ETD4202	4			W / 2 - 37
ETD4202	4			H - 46
ETD445	1			H - 81.5
UN3160G	4			H - 237
UN3160G	4			W / 2 - 194
PCX15	4			H - 81
PCX15	4			W / 2 - 74
PCX47	2			H - 56.5
PCX47	1			H - 81.5
PCX47	2			W - 82
DV60	1			H - 115
UL294	2			W / 2 - 108
VL72	2			W / 2 - 118

MIDRAIL	ETD4301	2			W / 2 - 194
	UN3160G	8			W / 2 - 194
	UN3160G	4			H2 - 187.5
	UN3160G	4			H1 - 165.5

Accessories		
ACCY6035S3	2	Euro Cylinder
ACDV251	2 Pair	Handles
ACDV737	2	Bottom Shootbolt
ACDV738	2	Top Shootbolt
ACET060	40	Screw for Lock & Keep
ACET060	8	Screw for ACDV737/738
ACET131	4	Drainage Cap
ACET412	2 x W & 2 x H	Outer Frame Foam
ACET4157	Pair	ETD445 End Cap
ACET476	4	Run Up Block
ACET4191	Pair	ETD491 End Cap
ACUL065	20	Bridge Packers
ACUL078	4 x W / 2 & 4 x H	Sash Foam
ACUL210A	2	Outer Frame Cleat
ACUL210B	2	Outer Frame Cleat
ACUL222	8	Sash Cleat
ACET4204	8	Sash Cleat
ACUL260	6	Hinge
ACUL276	1	Secondary Lock
ACUL277/8	1	Double Door Primary Lock
ACUL279	1	Double Door Keep Kit
ACUL295	2	Low Threshold Bracket
ACUN3035	4 x W & 7 x H	Flipper Gasket

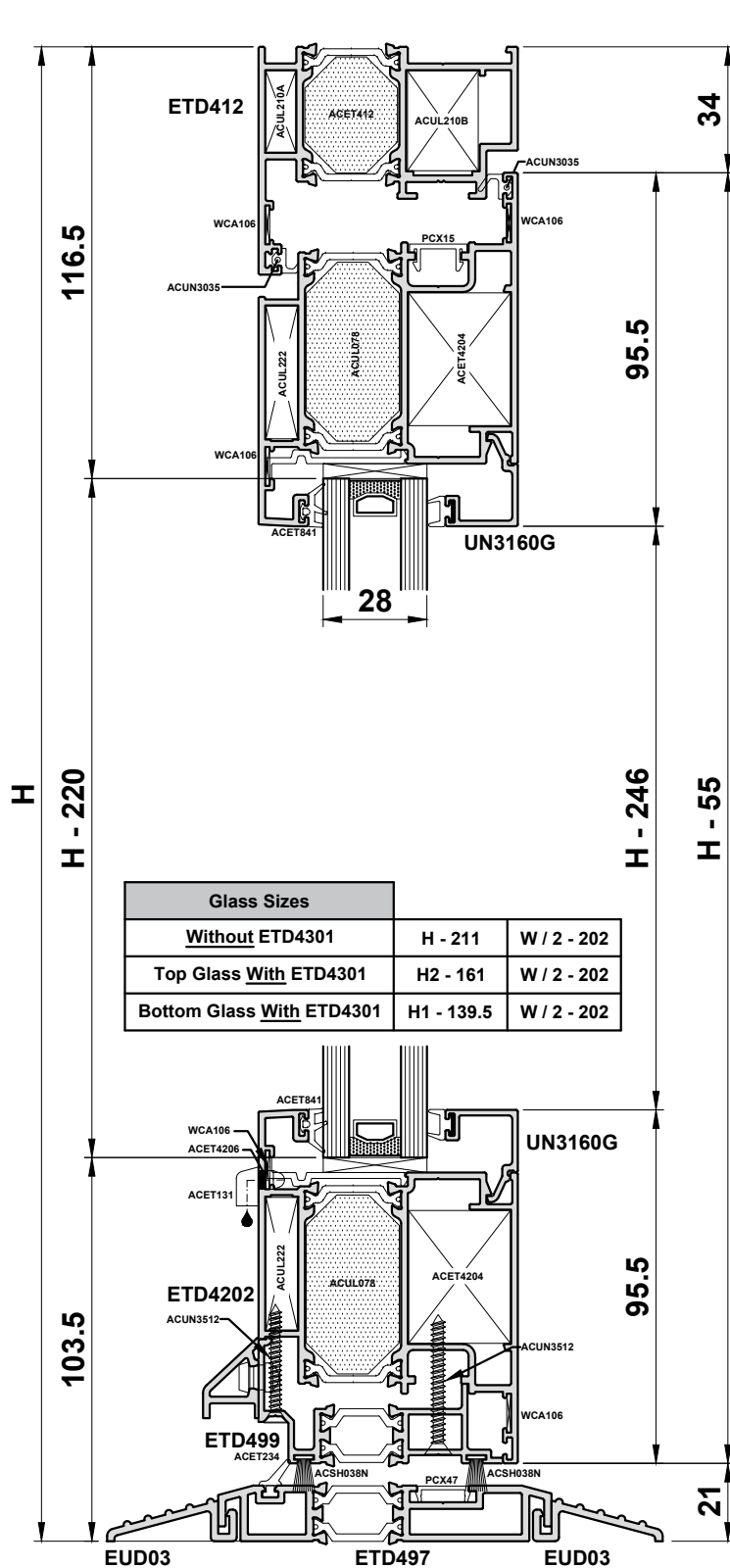
ACUN3513	2 + H / 300	Screw for ETD445
ACET841	4 x W / 2 & 4 x H	E Gasket
ACVL072	2 Pairs	VL72 End Cap
ACVL061	W/300 + 2	VL72 Rivet
WCA106	20	Chevrons

Midrail Accessories		
ACUL080	2 x W / 2	ETD4301 Foam
ACUL299	4	Bracket
ACUN3512	8	Screw
ACET841	4 x W / 2	E Gasket
ACET4206	8	Bridge Packers



Do Not Scale From This Drawing

Flush Open In Double Door Lift Lever Low Ramp Threshold Quick-Glaze Bead



Glass Sizes		
Without ETD4301	H - 211	W / 2 - 202
Top Glass With ETD4301	H2 - 161	W / 2 - 202
Bottom Glass With ETD4301	H1 - 139.5	W / 2 - 202

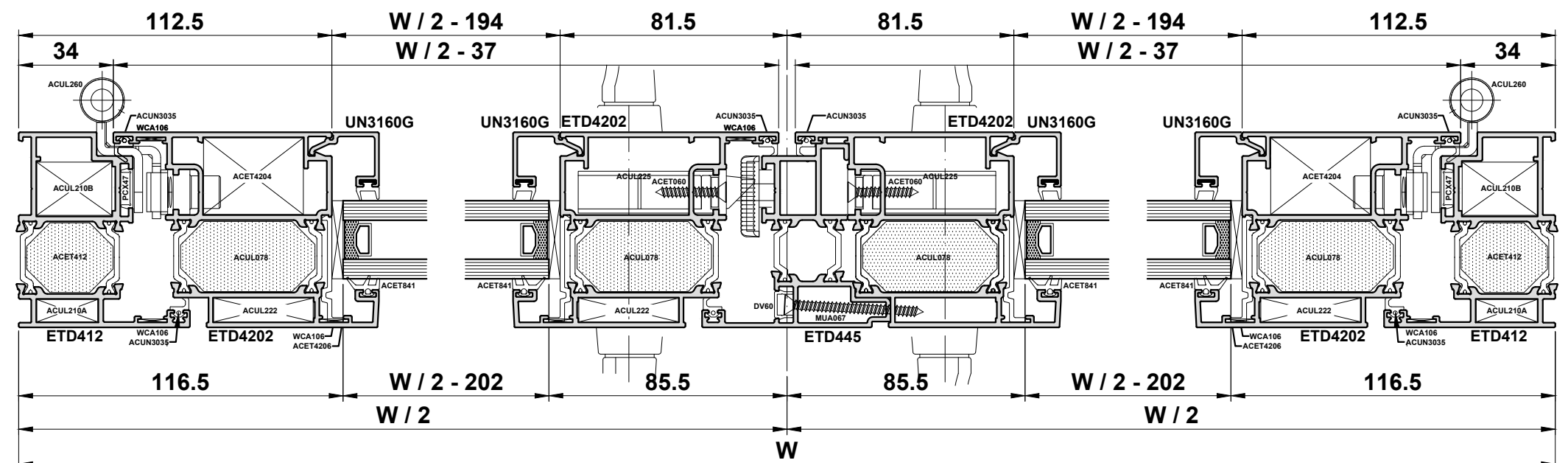
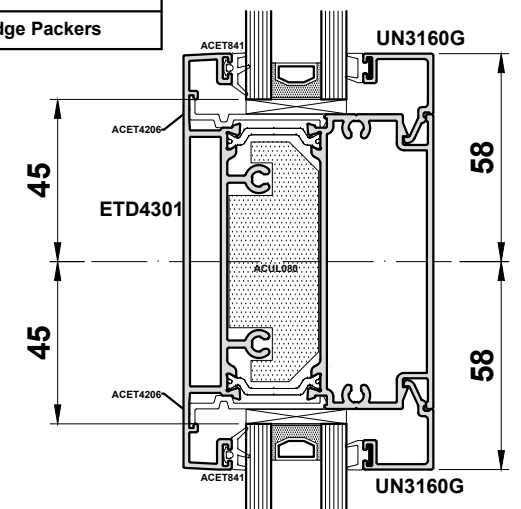
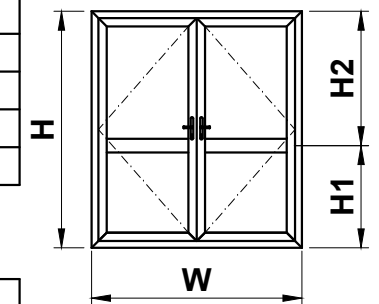
Profile Cutting Schedule				
ETD412	1			W
ETD412	2			H - 15
ETD497	1			W
EUD03	2			W
ETD4202	4			W / 2 - 37
ETD4202	4			H - 55
ETD445	1			H - 81
ETD499	2			W / 2 - 108
UN3160G	4			H - 220
UN3160G	4			W / 2 - 194
PCX15	4			H - 84.5
PCX15	4			W / 2 - 74
PCX47	2			H - 56
PCX47	1			H - 81
PCX47	2			W - 82
DV60	1			H - 124
VL72	2			W / 2 - 118

MIDRAIL	ETD4301	2		W / 2 - 194
	UN3160G	8		W / 2 - 194
	UN3160G	4		H2 - 187.5
	UN3160G	4		H1 - 165.5

Accessories		
ACCY6035S3	2	Euro Cylinder
ACDV251	2 Pair	Handles
ACDV737	2	Bottom Shootbolt
ACDV738	2	Top Shootbolt
ACET060	40	Screw for Lock & Keep
ACET060	8	Screw for ACDV737/738
ACET131	4	Drainage Cap
ACET412	2 x W & 2 x H	Outer Frame Foam
ACET4153	Pair	ETD445 End Cap
ACET476	4	Run Up Block
ACET4198	Pair	ETD497 End Cap
ACUL065	20	Bridge Packers
ACUL078	4 x W / 2 & 4 x H	Sash Foam
ACUL210A	2	Outer Frame Cleat
ACUL210B	2	Outer Frame Cleat
ACUL222	8	Sash Cleat
ACET4204	8	Sash Cleat
ACUL260	6	Hinge
ACUL276	1	Secondary Lock
ACUL277/8	1	Double Door Primary Lock
ACUL279	1	Double Door Keep Kit
ACUL295	2	Low Threshold Bracket
ACUN3035	4 x W & 7 x H	Flipper Gasket

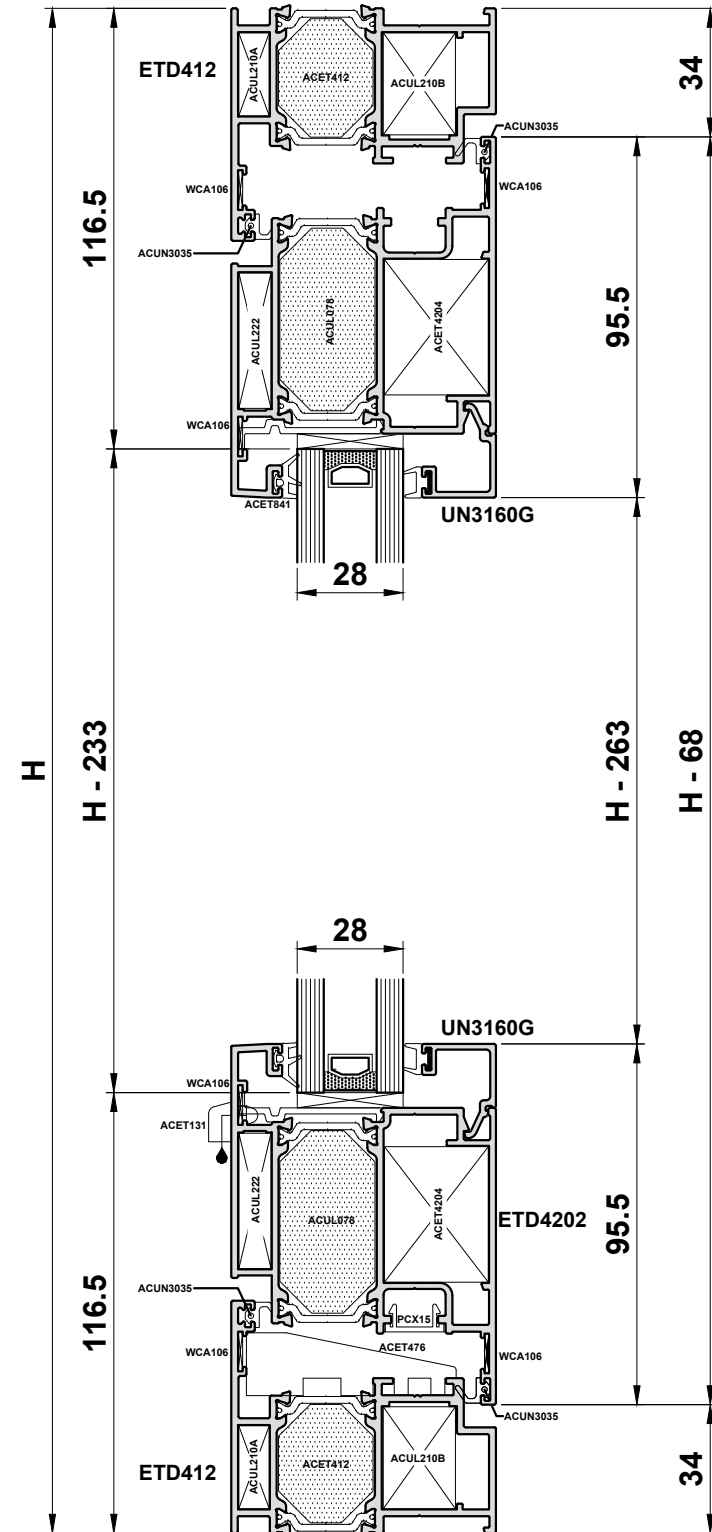
ACUN3513	2 + H / 300	Screw for ETD445
ACET841	4 x W / 2 & 4 x H	E Gasket
ACVL072	2 Pairs	VL72 End Cap
ACVL061	W/300 + 2	VL72 Rivet
WCA106	20	Chevrons

Midrail Accessories		
ACUL080	2 x W / 2	ETD4301 Foam
ACUL299	4	Bracket
ACUN3512	8	Screw
ACET841	4 x W / 2	E Gasket
ACET4206	8	Bridge Packers



Do Not Scale From This Drawing

Flush Open In Double Door Finger Bolt Full Frame Quick-Glaze Bead



Profile Cutting Schedule				
ETD412	2			W
ETD412	2			H
ETD4202	4			W / 2 - 40
ETD4202	4			H - 68
ETD446	1			H - 110
UG3160G	4			H - 263
UG3160G	4			W / 2 - 197
PCX15	4			H - 106
PCX15	4			W / 2 - 58
PCX47	2			H - 82
PCX47	1			H - 110
PCX47	2			W - 82
VL72	2			W / 2 - 119.5

MIDRAIL	ETD4301	1		W / 2 - 197
	UN3160G	4		W / 2 - 197
	UN3160G	2		H1 - 187.5
	UN3160G	2		H2 - 187.5

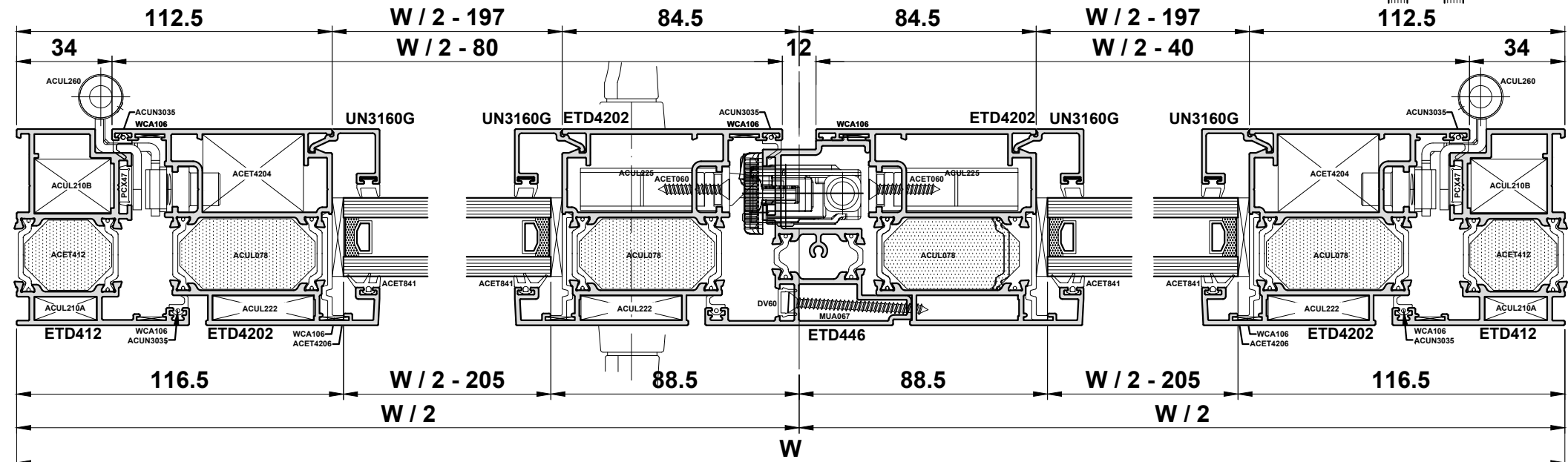
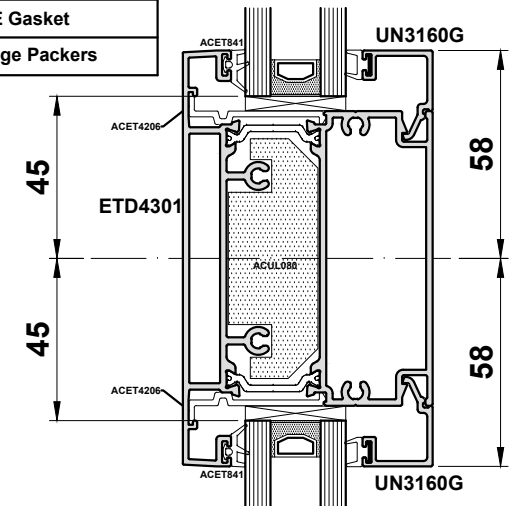
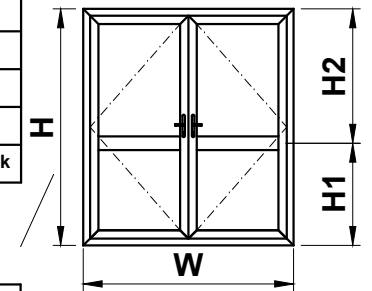
Glass Sizes		
Without ETD4301	H - 233	W / 2 - 205
Top Glass With ETD4301	H2 - 161.5	W / 2 - 205
Bottom Glass With ETD4301	H1 - 161.5	W / 2 - 205

Accessories		
ACCY6035S3	1	Euro Cylinder
**	**	Handles
ACET060	16	Screw for Lock
ACET131	4	Drainage Cap
ACET402	2 x W & 2 x H	Outer Frame Foam
ACET4158	Pair	ETD446 End Cap
ACET476	4	Run Up Block
...	...	Screw for ACUL260
ACPD844	1	Shootbolt Adaptor
ACPD84..	2	10mm Dia Galvanised Rod
ACSM015	Pair	Escutcheon
ACUL065	20	Bridge Packers
ACUL078	4 x W / 2 & 4 x H	Sash Foam
ACUL210A	4	Outer Frame Cleat
ACUL210B	4	Outer Frame Cleat
ACUL222	8	Sash Cleat
ACUL225	8	Sash Cleat
ACUL242	2	Finger Bolt Guide
ACUL260	6	Hinge
ACUL390	Pair	Finger Bolt Flat Keep
ACUN036	4 x W / 2 & 4 x H	Wedge Gasket
ACUN3035	4 x W & 6 x H	Flipper Gasket
...	...	Screw for ACUL260
ACUN3513	2 + H / 300	Screw for ETD446

ACET841	4 x W / 2 & 4 x H	E Gasket
ACVL072	2 Pairs	VL72 End Cap
ACVL061	W/300 + 2	VL72 Rivet
WCA106	20	Chevron
*	1	Double Door Primary Lock

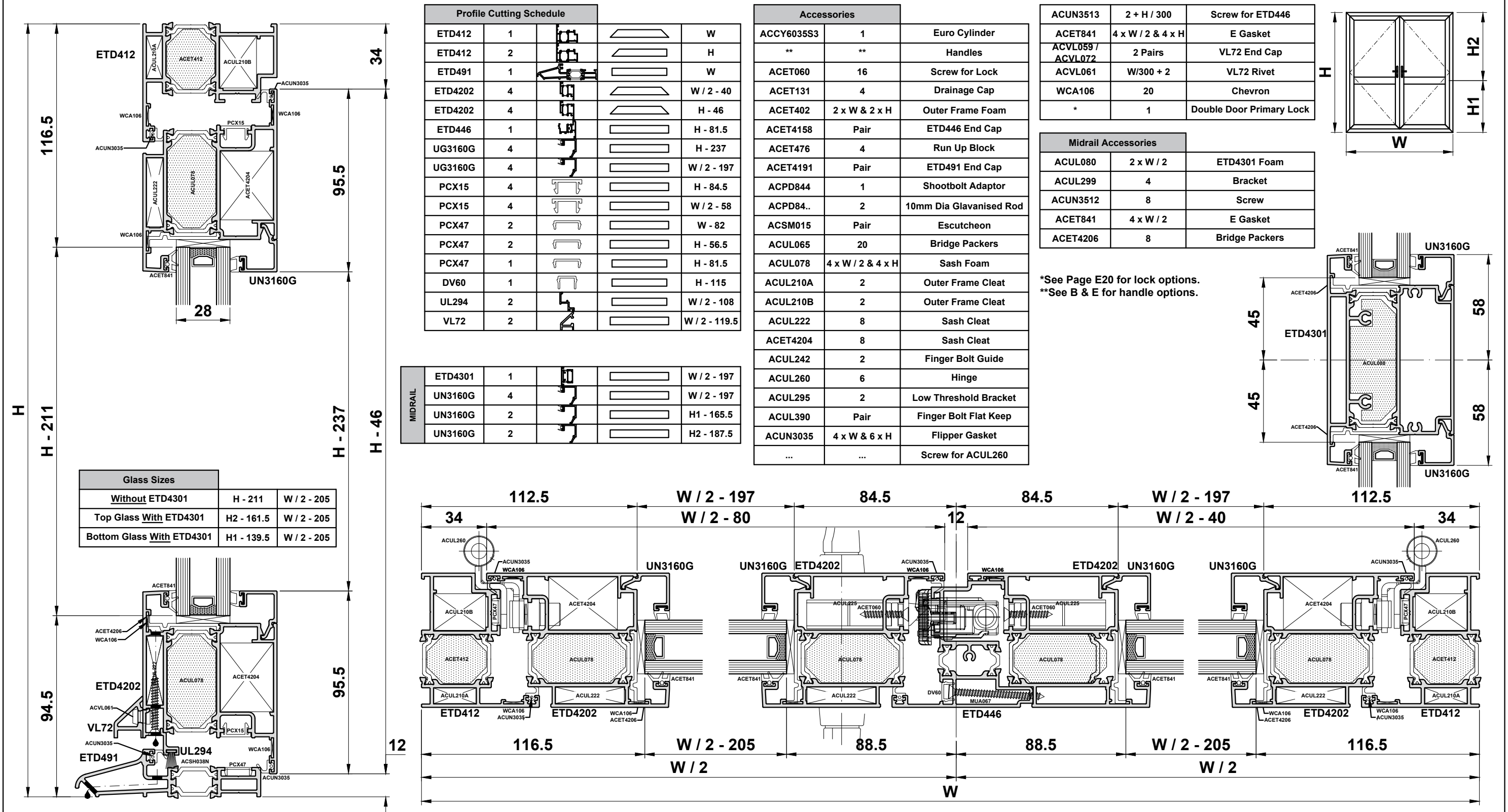
*See Page E20 for lock options.
**See B & E for handle options.

Midrail Accessories		
ACUL080	2 x W / 2	ETD4301 Foam
ACUL299	4	Bracket
ACUN036	4 x W / 2	Wedge Gasket
ACUN3512	8	Screw
ACET841	4 x W / 2	E Gasket
ACET4206	8	Bridge Packers

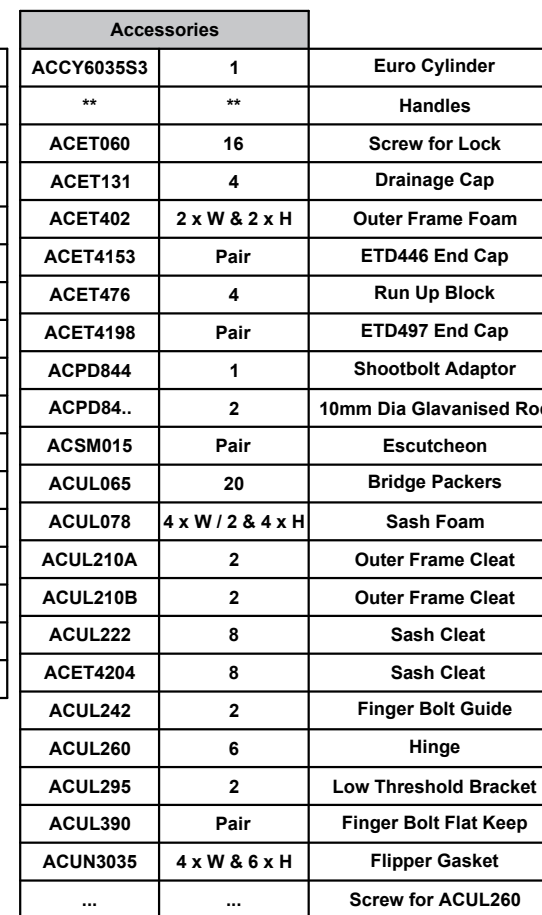


Do Not Scale From This Drawing

Flush Open In Double Door Finger Bolt Low Rebate Threshold Quick-Glaze Bead

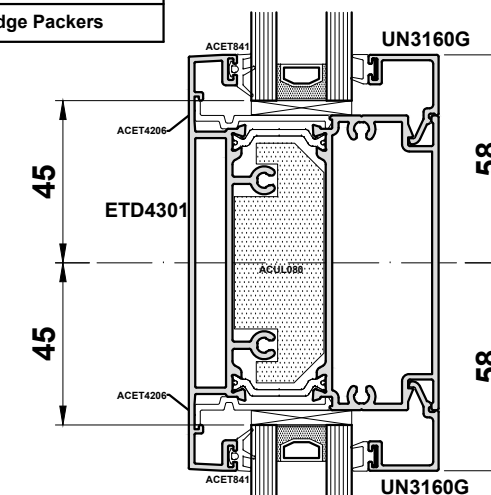
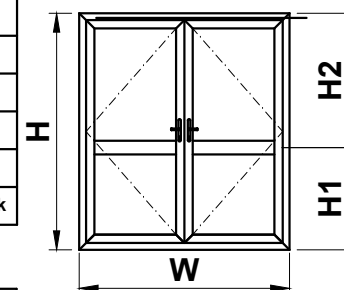


Do Not Scale From This Drawing

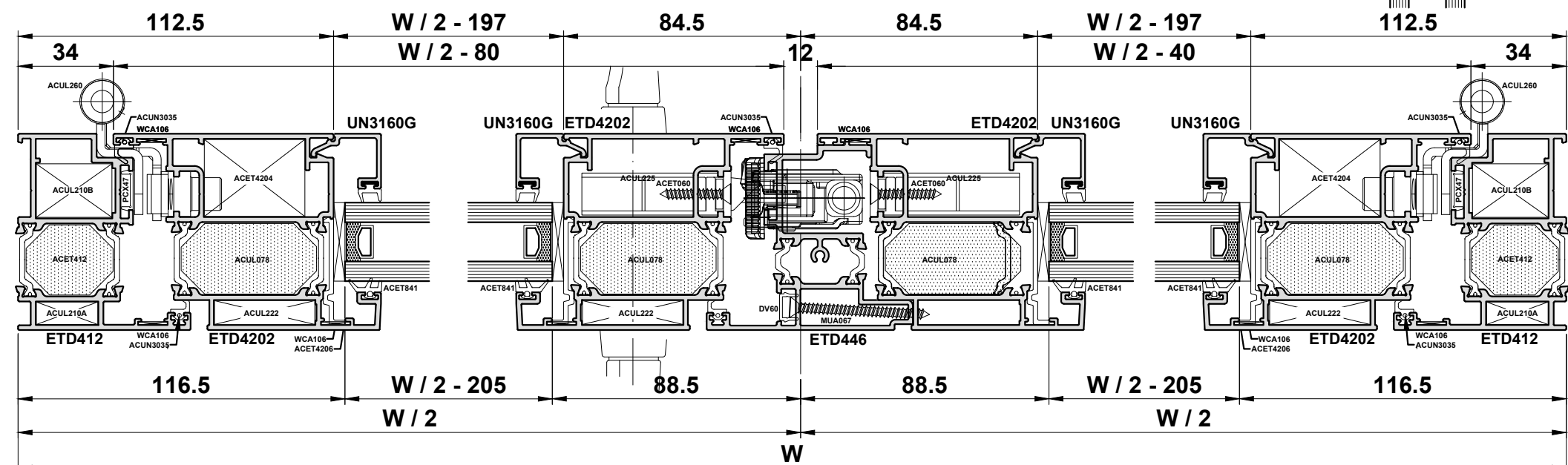


ACUN3513	2 + H / 300	Screw for ETD446
ACET841	4 x W / 2 & 4 x H	E Gasket
ACVL059 / ACVL072	2 Pairs	VL72 End Cap
ACVL061	W/300 + 2	VL72 Rivet
WCA106	20	Chevron
*	1	Double Door Primary Lock

Midrail Accessories		
ACUL080	2 x W / 2	ETD4301 Foam
ACUL299	4	Bracket
ACUN3512	8	Screw
ACET841	4 x W / 2	E Gasket
ACET4206	8	Bridge Packers

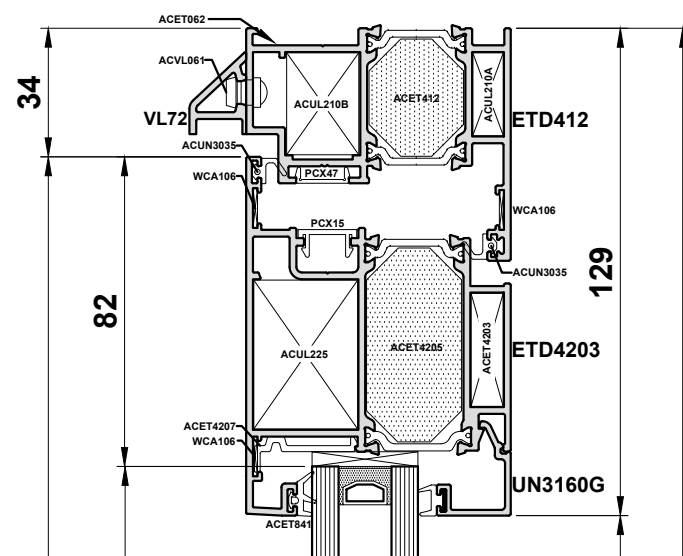


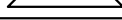
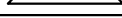
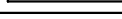
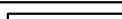
*See Page E20 for lock options.
**See B & E for handle options.



Do Not Scale From This Drawing

Flush Open Out Flush Single Door Full Frame Quick-Glaze Bead



Profile Cutting Schedule				
UN3160G	2			H - 258
UN3160G	2			W - 224
ETD412	2			W
ETD412	2			H
ETD4203	2			W - 68
ETD4203	2			H - 68
PCX15	2			H - 106
PCX15	2			W - 106
PCX47	2			H - 82
PCX47	2			W - 82
VL72	1			W - 139

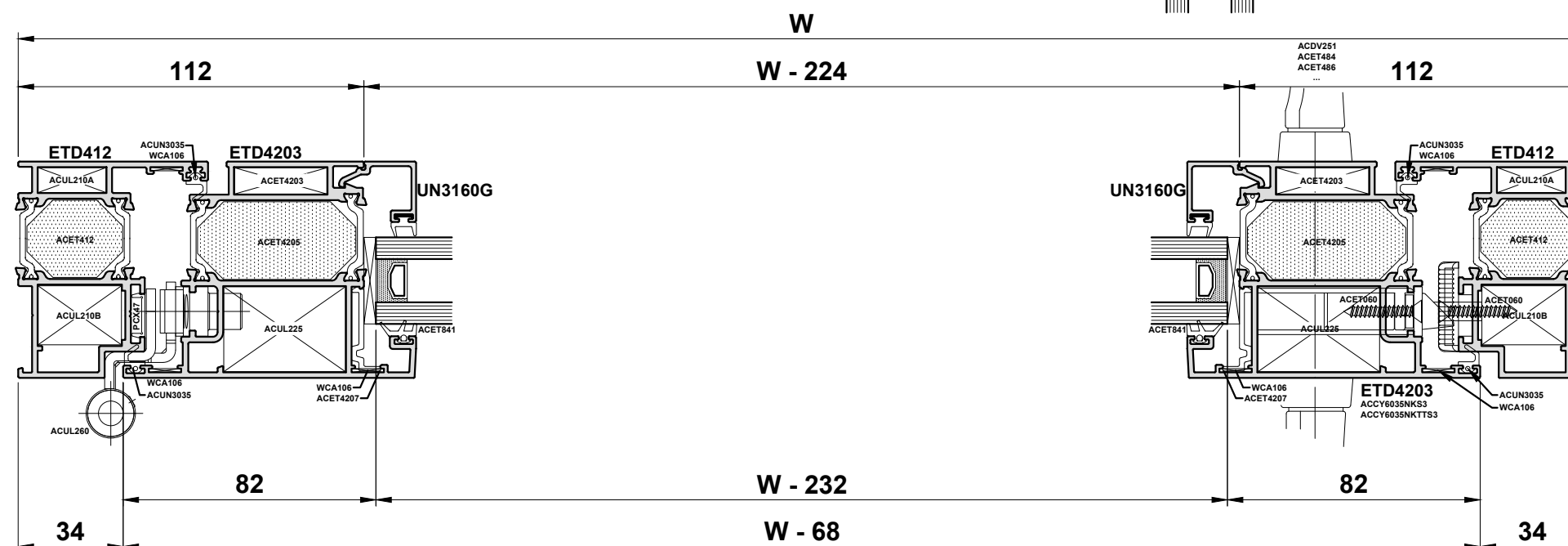
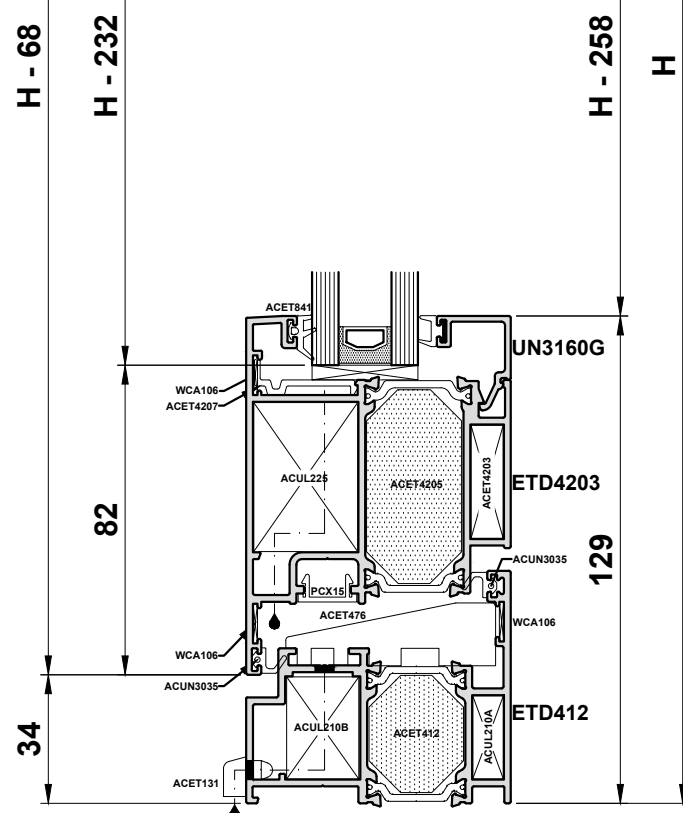
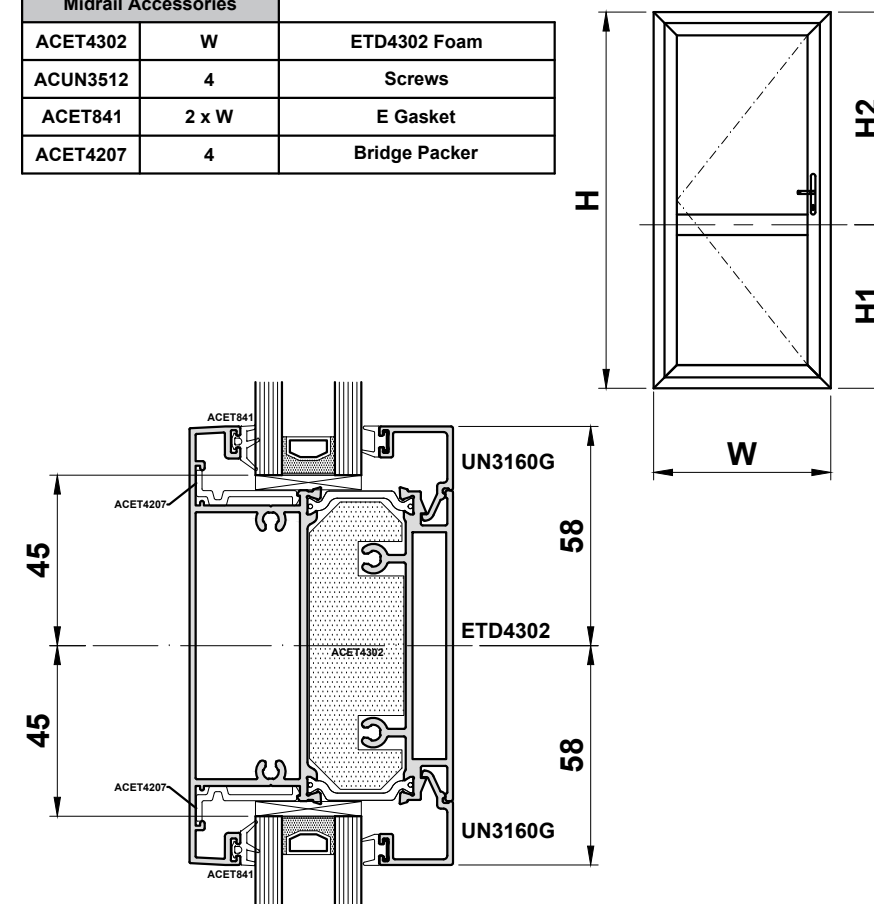
MIDRALL	ETD4302	1			W - 224
	UN3160G	4			W - 224
	UN3160G	2			H1 - 187
	UN3160G	2			H2 - 187

Glass Sizes		
<u>Without</u> ETD4302	H - 232	W - 232
Top Glass <u>With</u> ETD4302	H2 - 161	W - 232
Bottom Glass <u>With</u> ETD4302	H1 - 161	W - 232

Accessories		
ACCY3560S3	1	Euro Cylinder
**	**	Handles
ACET060	16	Screws for Lock
ACET131	2	Drainage Cap
ACET412	2 x W & 2 x H	Outer Frame Foam
ACET4203	4	Sash Cleat
ACET4205	2 x W & 2 X H	Sash Foam
ACET4207	10	Bridge Packers
ACET476	2	Run Up Block
ACET841	2 x W & 2 x H	E Gasket
...	...	Screw for ACUL260
ACUL210A	4	Outer Frame Cleat
ACUL210B	4	Outer Frame Cleat
ACUL225	4	Sash Cleat
ACUL260	3	Hinge
ACUN3035	4 x W & 4 x H	Flipper Gasket
...	...	Screw for ACUL260
ACVL059 / ACVL072	1 Pair	VL72 End Cap
ACVL061	W/300 + 2	VL72 Rivet
WCA106	12	Chevrons
*	1	Primary Lock

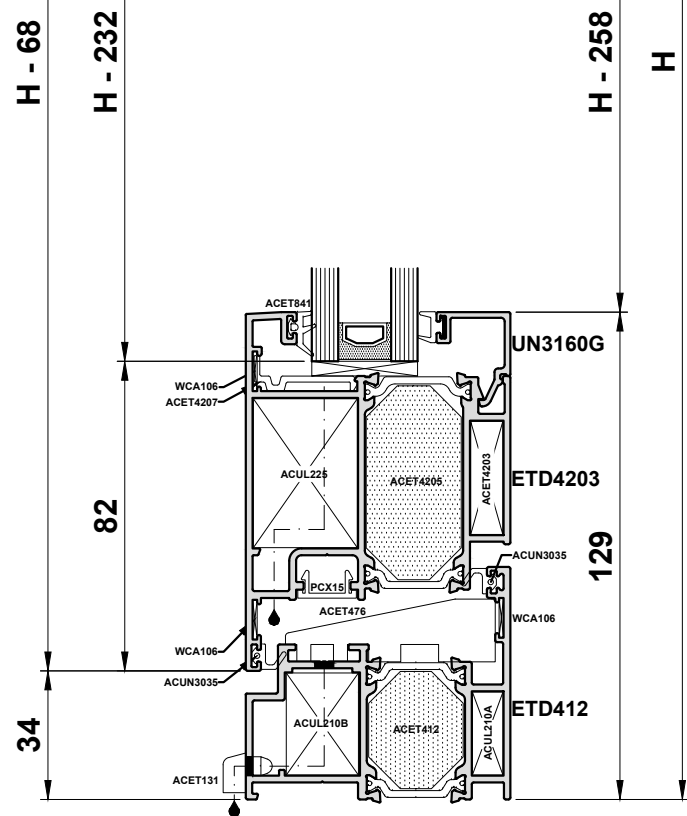
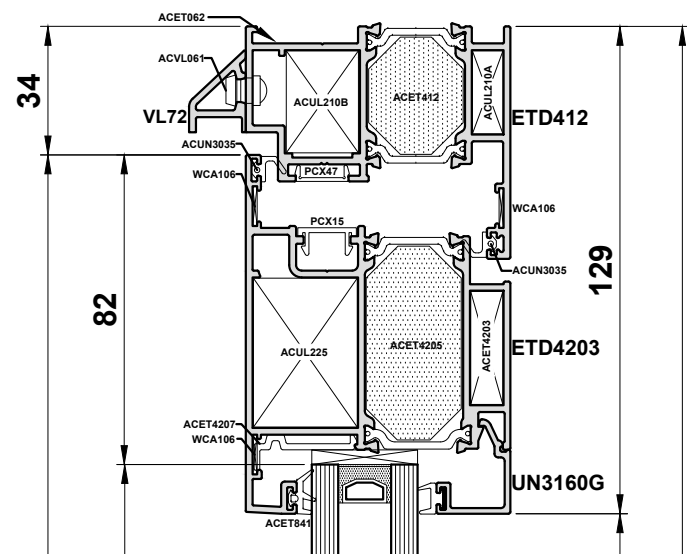
*See Page E72 for lock options.
**See B & E for handle options.

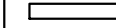
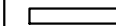
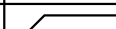
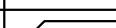
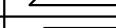
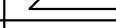
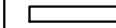
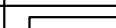
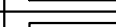
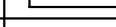
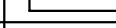
Midrail Accessories		
ACET4302	W	ETD4302 Foam
ACUN3512	4	Screws
ACET841	2 x W	E Gasket
ACET4207	4	Bridge Packer



Do Not Scale From This Drawing

Flush Open Out Double Door Lift Lever Full Frame Quick-Glaze Bead



Profile Cutting Schedule				
UN3160G	4			H - 258
UN3160G	4			W / 2 - 193
ETD412	2			W
ETD412	2			H
ETD4203	4			W / 2 - 37
ETD4203	4			H - 68
ETD445	1			H - 110
PCX15	4			H - 106
PCX15	4			W / 2 - 106
PCX47	2			H - 82
PCX47	1			H - 81
PCX47	2			W / 2 - 82
VL72	2			W / 2 - 107.5

MIDRAIL	ETD4302	2			W / 2 - 193
	UN3160G	8			W / 2 - 193
	UN3160G	4			H2 - 187
	UN3160G	4			H1 - 187

Glass Sizes		
<u>Without</u> ETD4302	H - 232	W / 2 - 201
Top Glass <u>With</u> ETD4302	H2 - 161	W / 2 - 201
Bottom Glass <u>With</u> ETD4302	H1 - 161	W / 2 - 201

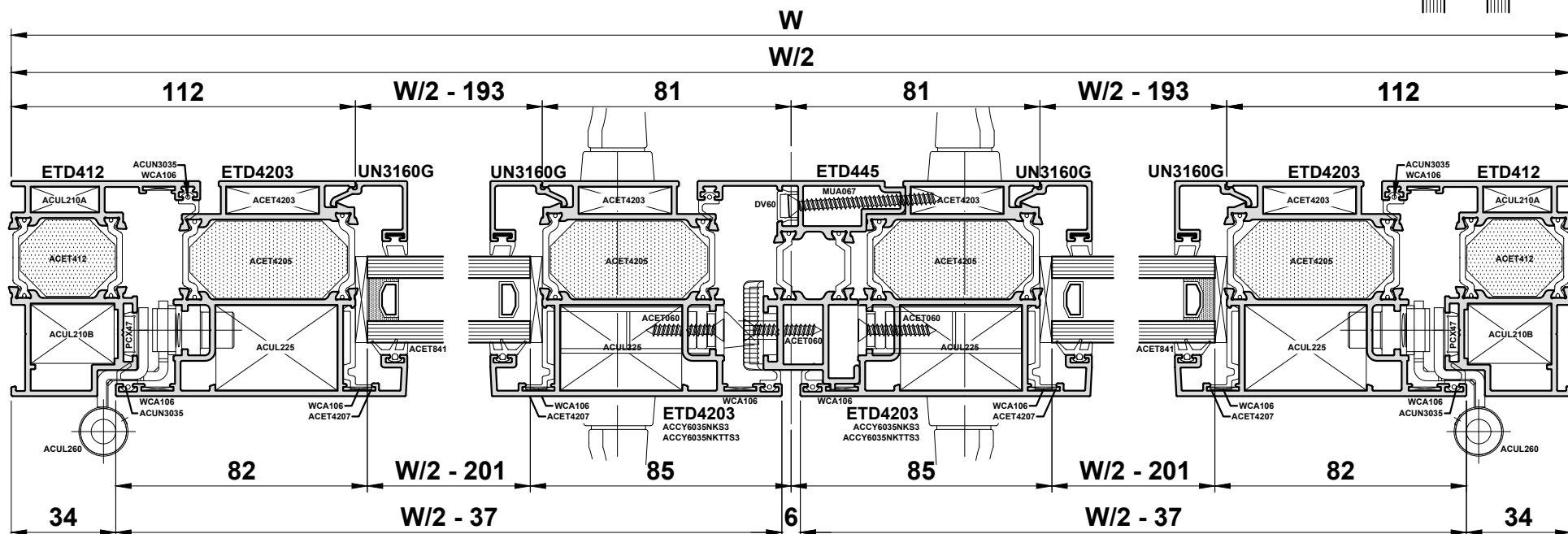
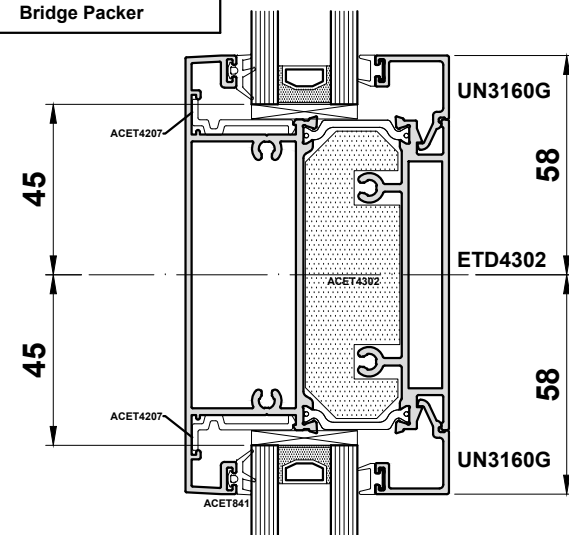
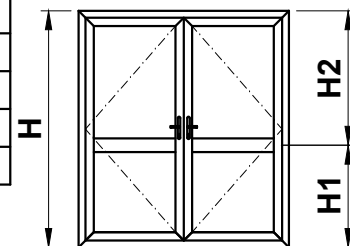
Accessories		
ACCY3560S3	2	Euro Cylinder
ACDV251	2 Pair	Handles
ACDV737	2	Shootbolt
ACDV738	2	Shootbolt
ACET060	40	Screw for Lock & Keep
ACET060	8	Screw for ACDV737/738
ACET131	4	Drainage Cap
ACET4157	Pair	ETD445 End Cap
ACET4203	8	Sash Cleat
ACET4205	4 x W / 2 & 4 x H	Sash Foam
ACET476	4	Run Up Block
...	...	Screw for ACUL260
ACET4207	20	Bridge Packers
ACET841	4 x W / 2 & 4 x H	E Gasket
ACUL077	2 x W & 2 x H	Outer Frame Foam
ACUL210A	4	Outer Frame Cleat
ACUL210B	4	Outer Frame Cleat
ACUL225	8	Sash Cleat
ACUL260	6	Hinge
ACUL276	1	Double Door Secondary Lock
ACUL277/8	1	Double Door Primary Lock
ACUL279	1	Double Door Keep Kit
ACUN3035	4 x W & 7 x H	Flipper Gasket

...	...	Screw for ACUL260
ACUN3513	2 + H / 300	Screw for ETD447
ACVL059 / ACVL072	2 Pair	VL72 End Cap
ACVL061	W/300 + 2	VL72 Rivet
WCA106	20	Chevrons

*See Page E72 for lock options.

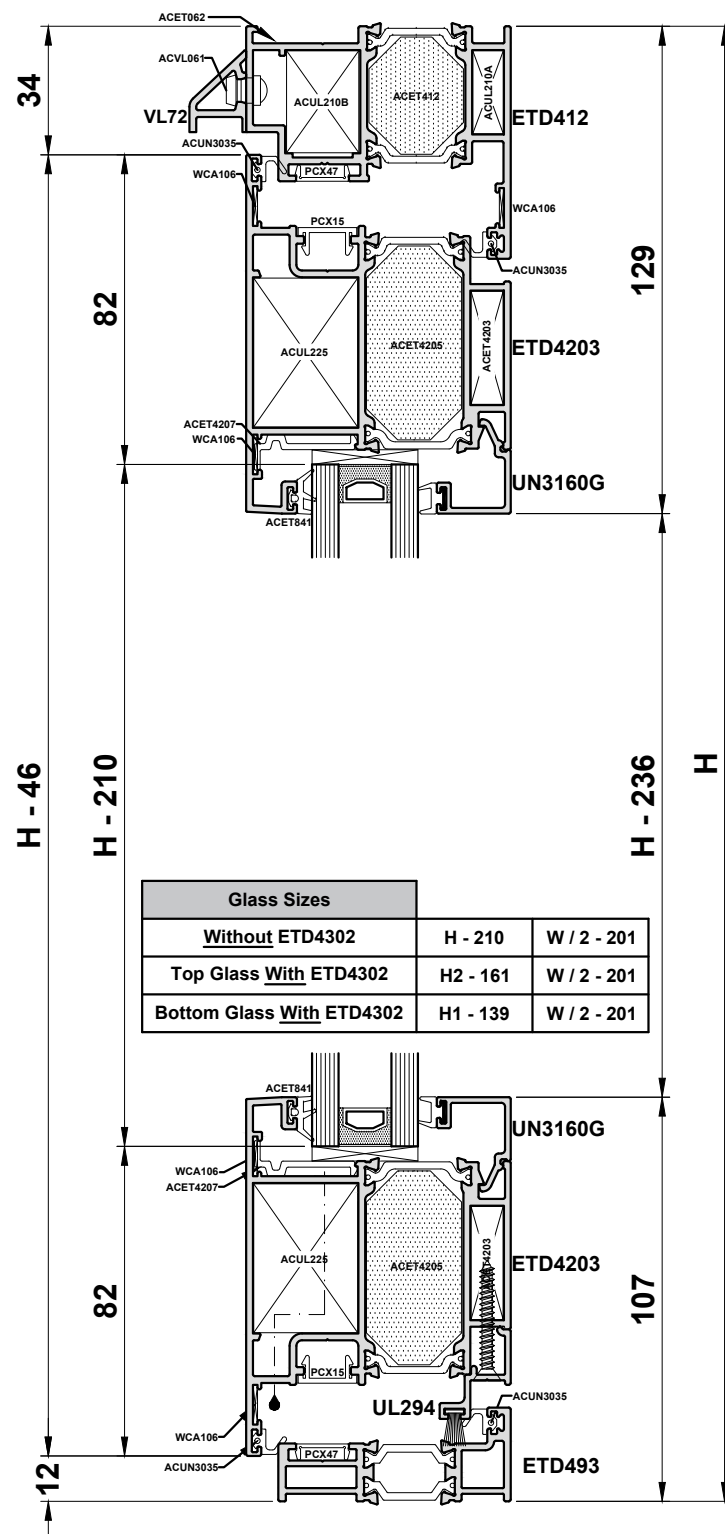
****See B & E for handle options.**

Midrail Accessories		
ACET4302	2 x W / 2	ETD4302 Foam
ACUN3512	8	Screws
ACET841	4 x W	E Gasket
ACET4207	8	Bridge Packer



Do Not Scale From This Drawing

Flush Open Out Double Door Lift Lever Low Rebate Threshold Quick-Glaze Bead



Profile Cutting Schedule				
UN3160G	4			H - 258
UN3160G	4			W / 2 - 193
ETD412	1			W
ETD412	2			H
ETD493	1			W
ETD4203	4			W / 2 - 37
ETD4203	4			H - 46
ETD445	1			H - 81.5
PCX15	4			H - 84
PCX15	4			W / 2 - 106
PCX47	2			H - 56
PCX47	1			H - 81.5
PCX47	2			W - 82
DV60	1			H - 115
UL294	2			W / 2 - 108
VL72	1			W

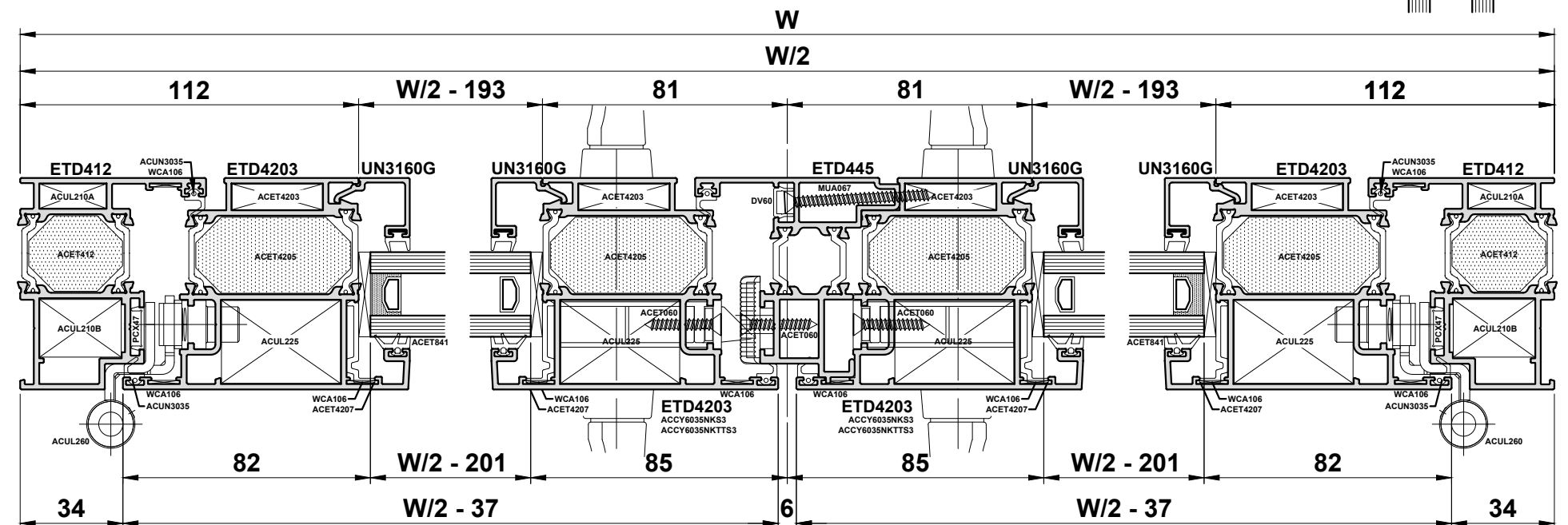
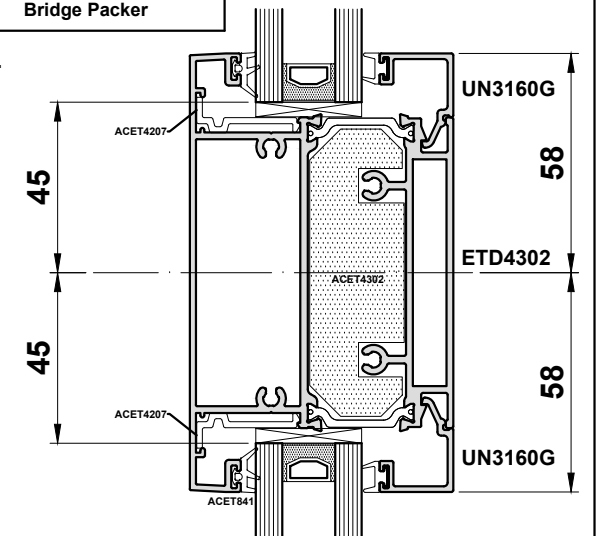
MIDRAIL	ETD4302	2		W / 2 - 193
	UN3160G	8		W / 2 - 193
	UN3160G	4		H2 - 187
	UN3160G	4		H1 - 165

Accessories		
ACCY3560S3	2	Euro Cylinder
ACDV251	2 Pair	Handles
ACDV737	2	Shootbolt
ACDV738	2	Shootbolt
ACET060	40	Screw for Lock & Keep
ACET060	8	Screw for ACDV737/738
ACET131	4	Drainage Cap
ACET4155	Pair	ETD445 End Cap
ACET4203	8	Sash Cleat
ACET4205	4 x W / 2 & 4 x H	Sash Foam
ACET476	4	Run Up Block
ACET4193	Pair	ETD493 End Cap
ACET4207	20	Bridge Packers
ACET841	4 x W / 2 & 4 x H	E Gasket
ACUL077	2 x W & 2 x H	Outer Frame Foam
ACUL210A	2	Outer Frame Cleat
ACUL210B	2	Outer Frame Cleat
ACUL225	8	Sash Cleat
ACUL260	6	Hinge
ACUL276	1	Double Door Secondary Lock
ACUL277/8	1	Double Door Primary Lock
ACUL279	1	Double Door Keep Kit
ACUL295	2	Low Threshold Bracket

ACUN3035	4 x W & 7 x H	Flipper Gasket
...	...	Screw for ACUL260
ACUN3513	2 + H / 300	Screw for ETD447
ACVL059 / ACVL072	2 Pair	VL72 End Cap
ACVL061	W/300 + 2	VL72 Rivet
WCA106	20	Chevrans

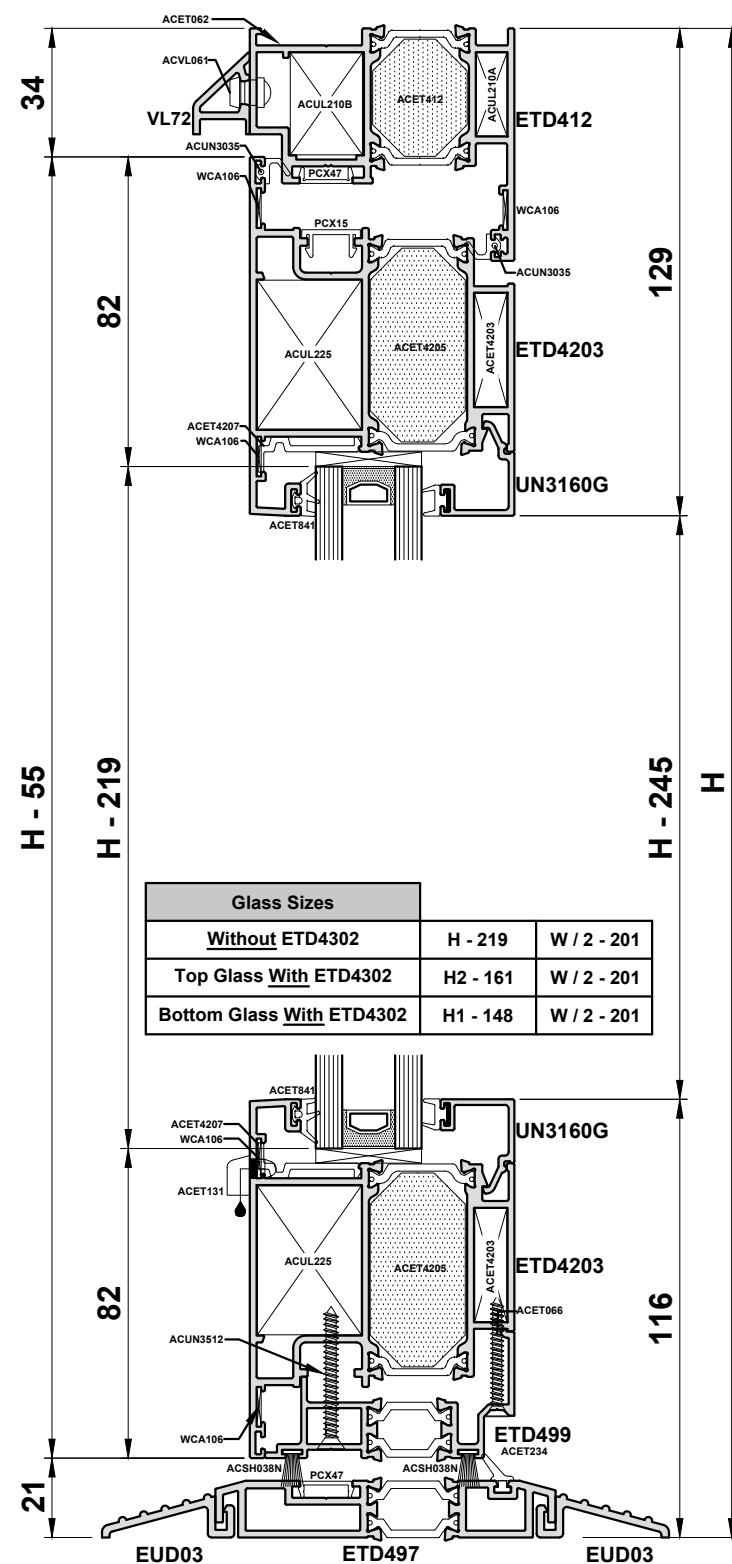
Midrail Accessories		
ACET4302	2 x W / 2	ETD4302 Foam
ACUN3512	16	Screws
ACET841	4 x W	E Gasket
ACET4207	8	Bridge Packer

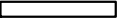
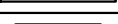
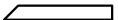
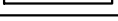
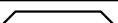
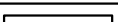
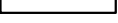
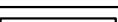
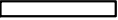
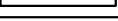
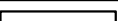
*See Page E72 for lock options.
**See B & E for handle options.



Do Not Scale From This Drawing

Flush Open Out Double Door Lift Lever Low Ramp Threshold Quick-Glaze Bead



Profile Cutting Schedule				
UN3160G	4			H - 258
UN3160G	4			W / 2 - 193
ETD412	1			W
ETD412	2			H - 15
ETD497	1			W
EUD03	2			W
ETD4203	4			W / 2 - 37
ETD4203	4			H - 55
ETD445	1			H - 81
ETD499	2			W / 2 - 108
PCX15	4			H - 68.5
PCX15	4			W / 2 - 106
PCX47	2			H - 56
PCX47	1			H - 81
PCX47	2			W - 82
DV60	1			H - 124
VL72	1			W

MIDRAIL	ETD4302	2			W / 2 - 193
	UN3160G	8			W / 2 - 193
	UN3160G	4			H2 - 187
	UN3160G	4			H1 - 174

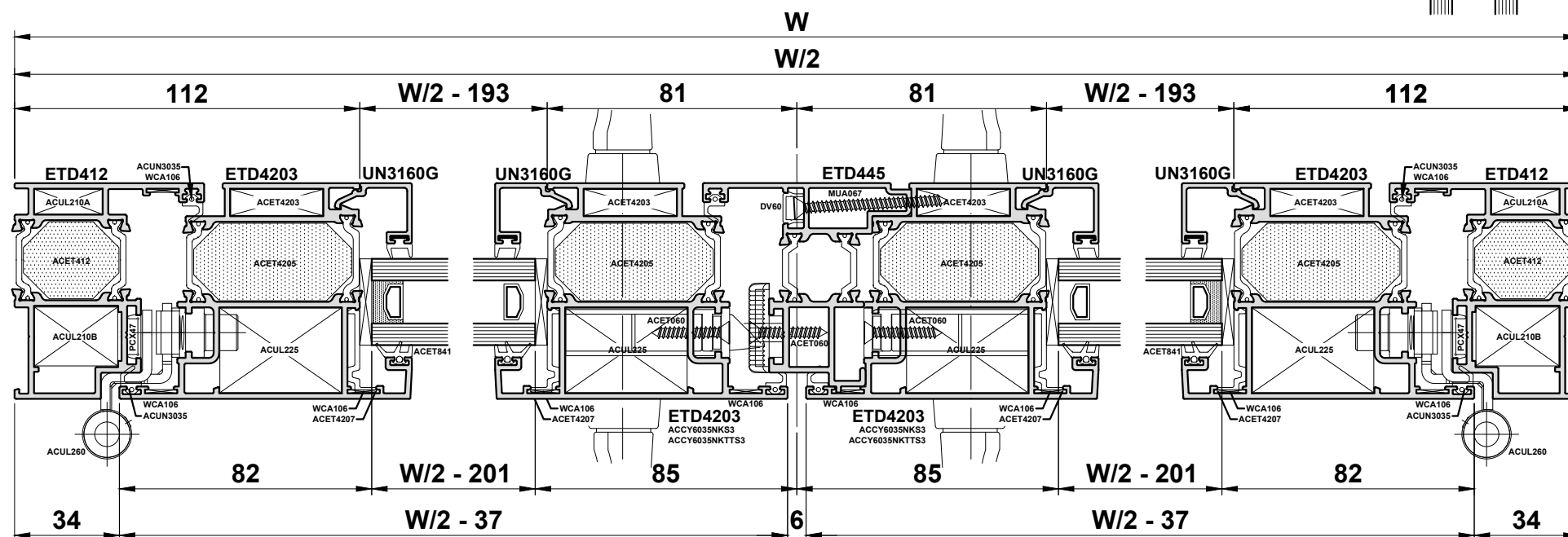
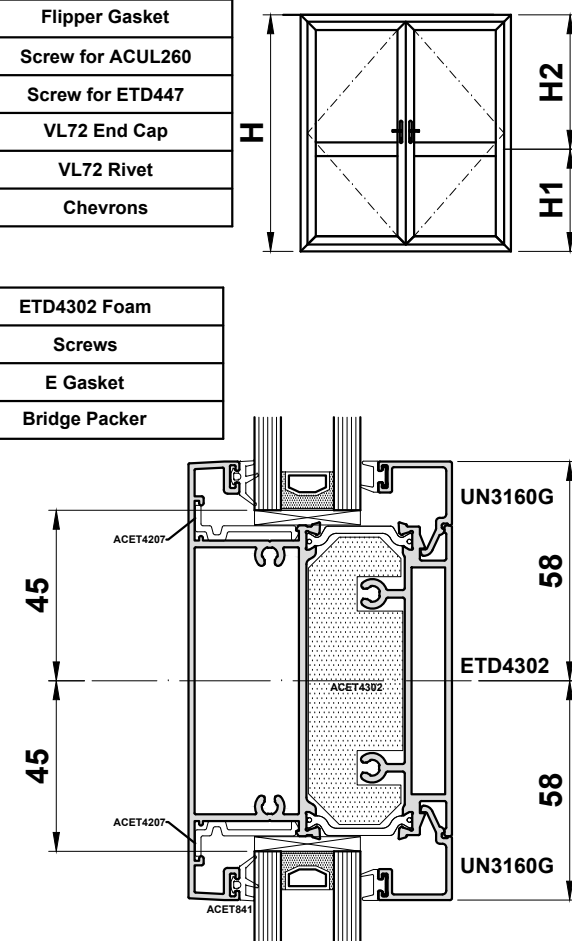
Accessories		
ACCY3560S3	2	Euro Cylinder
ACDV251	2 Pair	Handles
ACDV737	2	Shootbolt
ACDV738	2	Shootbolt
ACET060	40	Screw for Lock & Keep
ACET060	8	Screw for ACDV737/738
ACET131	4	Drainage Cap
ACET4152	Pair	ETD445 End Cap
ACET4203	8	Sash Cleat
ACET4205	4 x W / 2 & 4 x H	Sash Foam
ACET476	4	Run Up Block
ACET4198	Pair	ETD497 End Cap
ACET4207	20	Bridge Packers
ACET841	4 x W / 2 & 4 x H	E Gasket
ACUL077	2 x W & 2 x H	Outer Frame Foam
ACUL210A	2	Outer Frame Cleat
ACUL210B	2	Outer Frame Cleat
ACUL225	8	Sash Cleat
ACUL260	6	Hinge
ACUL276	1	Double Door Secondary Lock
ACUL277/8	1	Double Door Primary Lock
ACUL279	1	Double Door Keep Kit
ACUL295	2	Low Threshold Bracket

ACUN3035	4 x W & 7 x H	Flipper Gasket
...	...	Screw for ACUL260
ACUN3513	2 + H / 300	Screw for ETD447
ACVL059 / ACVL072	2 Pair	VL72 End Cap
ACVL061	W/300 + 2	VL72 Rivet
WCA106	20	Chevrons

Midrail Accessories		
ACET4302	2 x W / 2	ETD4302 Foam
ACUN3512	16	Screws
ACET841	4 x W	E Gasket
ACET4207	8	Bridge Packer

***See Page E72 for lock options.**

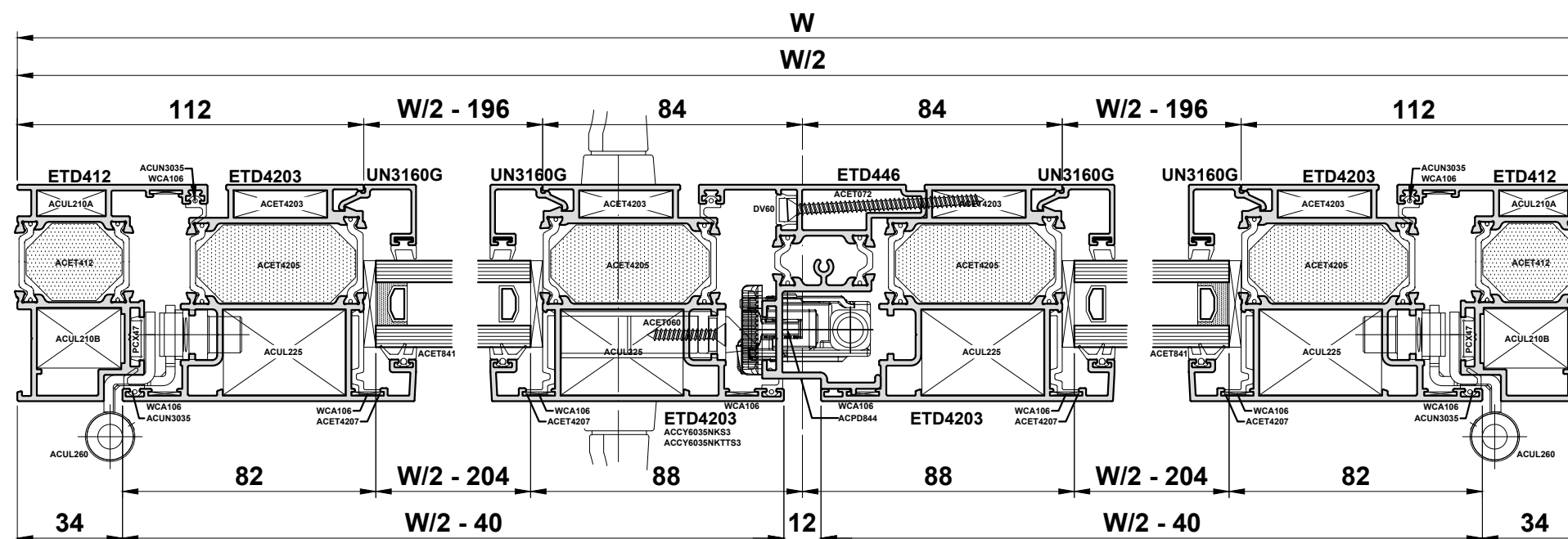
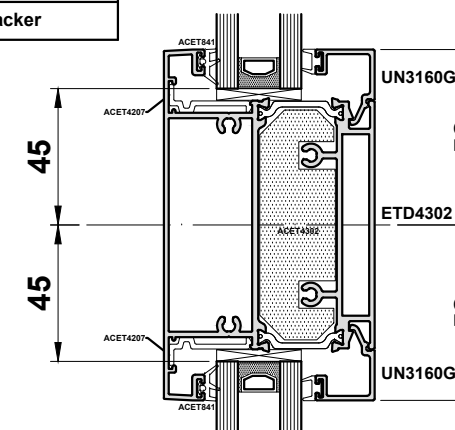
****See B & E for handle options.**



Do Not Scale From This Drawing

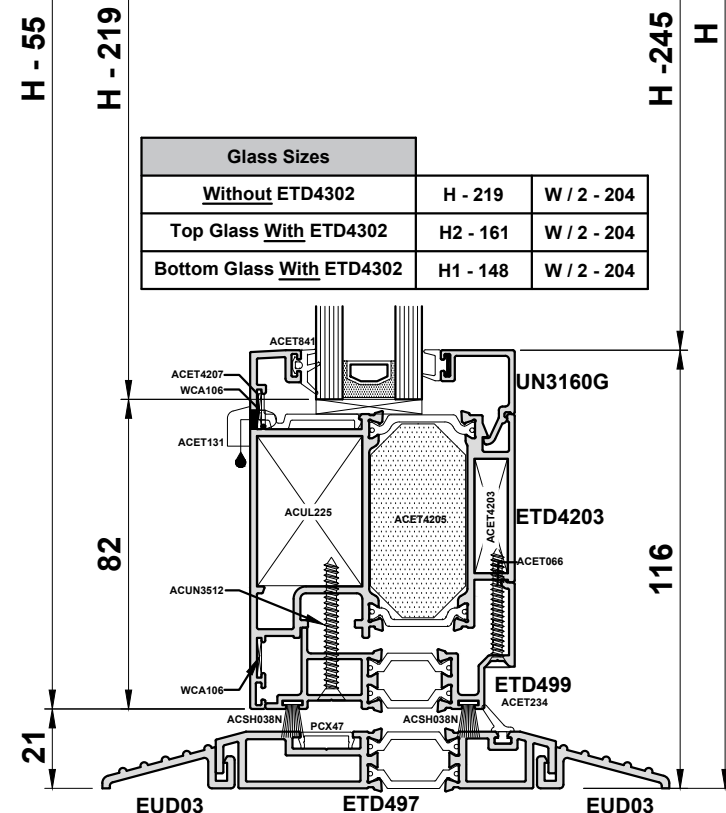
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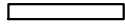
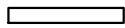
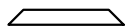
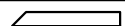
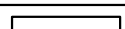
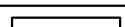
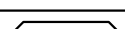
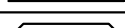
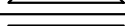
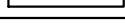
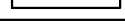
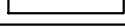
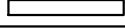
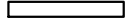
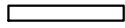
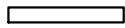
SAWING TABLES : OPEN IN

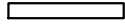
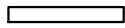
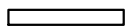


Do Not Scale From This Drawing

Do Not Scale From This Drawing



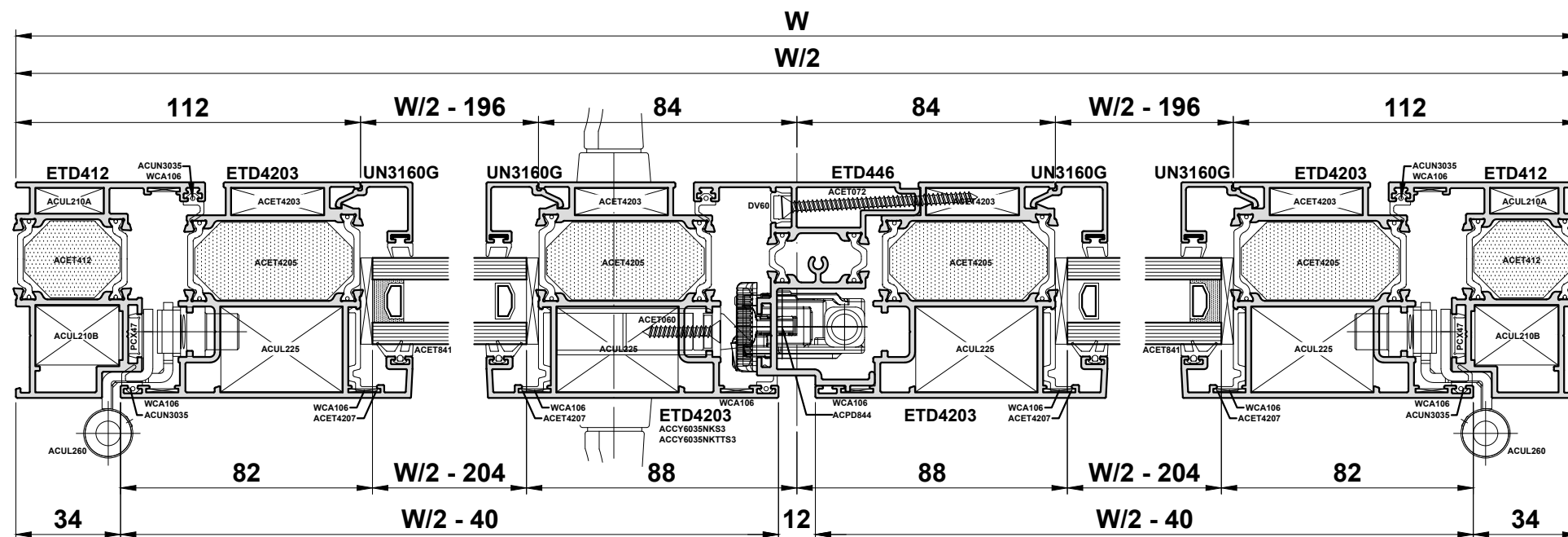
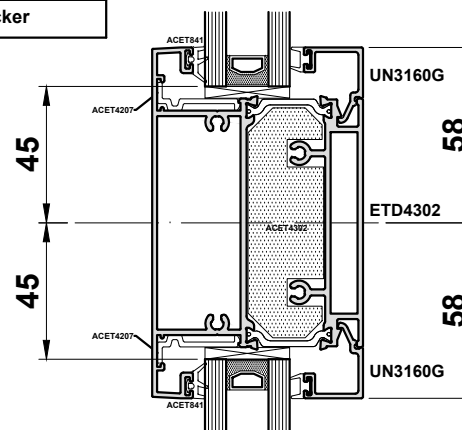
Profile Cutting Schedule				
UN3160G	4			H - 245
UN3160G	4			W / 2 - 196
ETD412	1			W
ETD412	2			H - 15
ETD497	1			W
EUD03	2			W
ETD4203	4			W / 2 - 40
ETD4203	4			H - 55
ETD446	1			H - 81
ETD499	2			W / 2 - 111
PCX15	4			H - 68.5
PCX15	4			W / 2 - 106
PCX47	2			H - 56
PCX47	1			H - 81
PCX47	2			W - 82
DV60	1			H - 124.5
VL72	1			W

MIDRAIL	ETD4302	2			W / 2 - 196
	UN3160G	8			W / 2 - 196
	UN3160G	4			H1 - 174
	UN3160G	4			H2 - 187

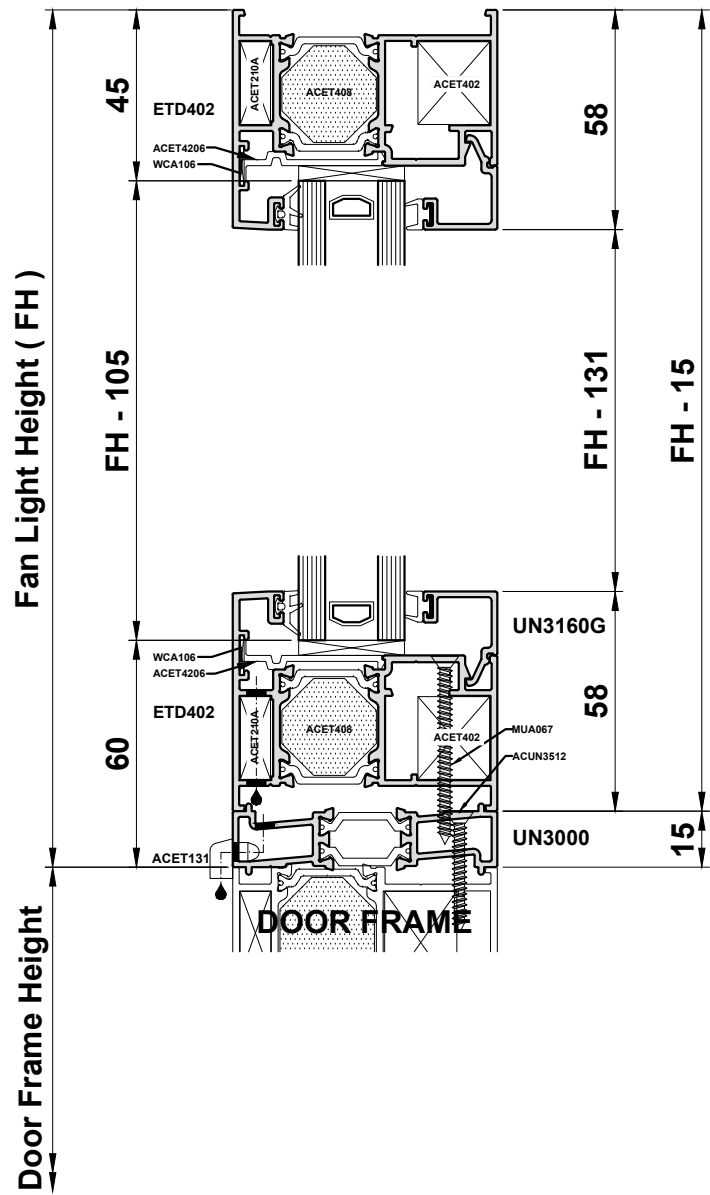
ACUN3513	2 + H / 300	Screw for ETD448
ACET841	2 x W & 4 x H	E Gasket
ACVL072	2 Pair	VL72 End Cap
ACVL061	W/300 + 2	VL72 Rivet
WCA106	20	Chevrons
*	1	Double Door Primary Lock

Midrail Accessories		
ACET4302	2 x W / 2	ETD4302 Foam
ACUN3512	16	Screws
ACET841	4 x W	E Gasket
ACET4207	8	Bridge Packer

***See Page E72 for lock options.**
****See B & E for handle options.**



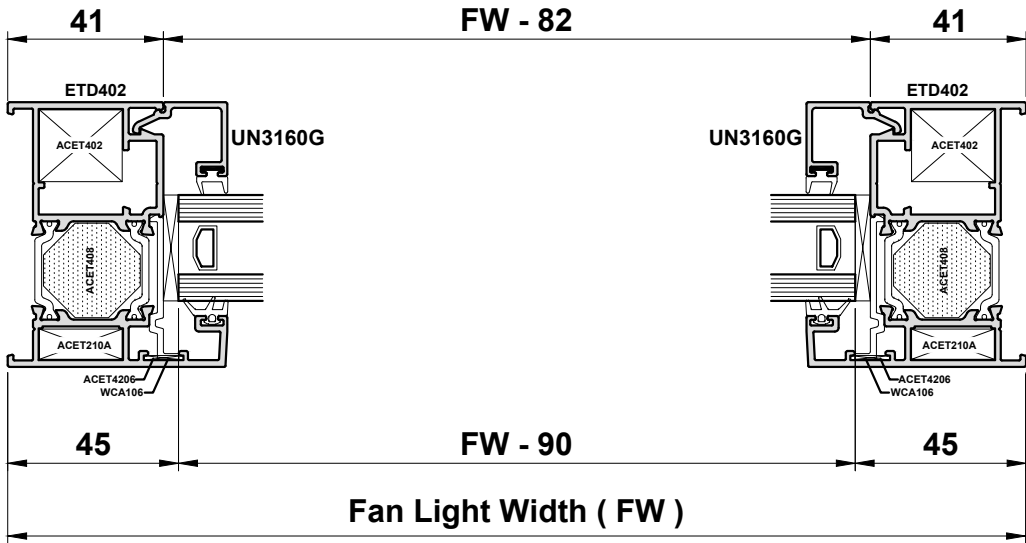
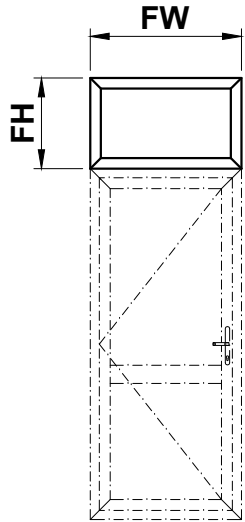
Fan Light Quick-Glaze Bead



Profile Cutting Schedule				
UN3000	1			FW
UN3160G	4			FH - 131
UN3160G	4			FW - 82
ETD402	2			FW
ETD402	2			FH - 15

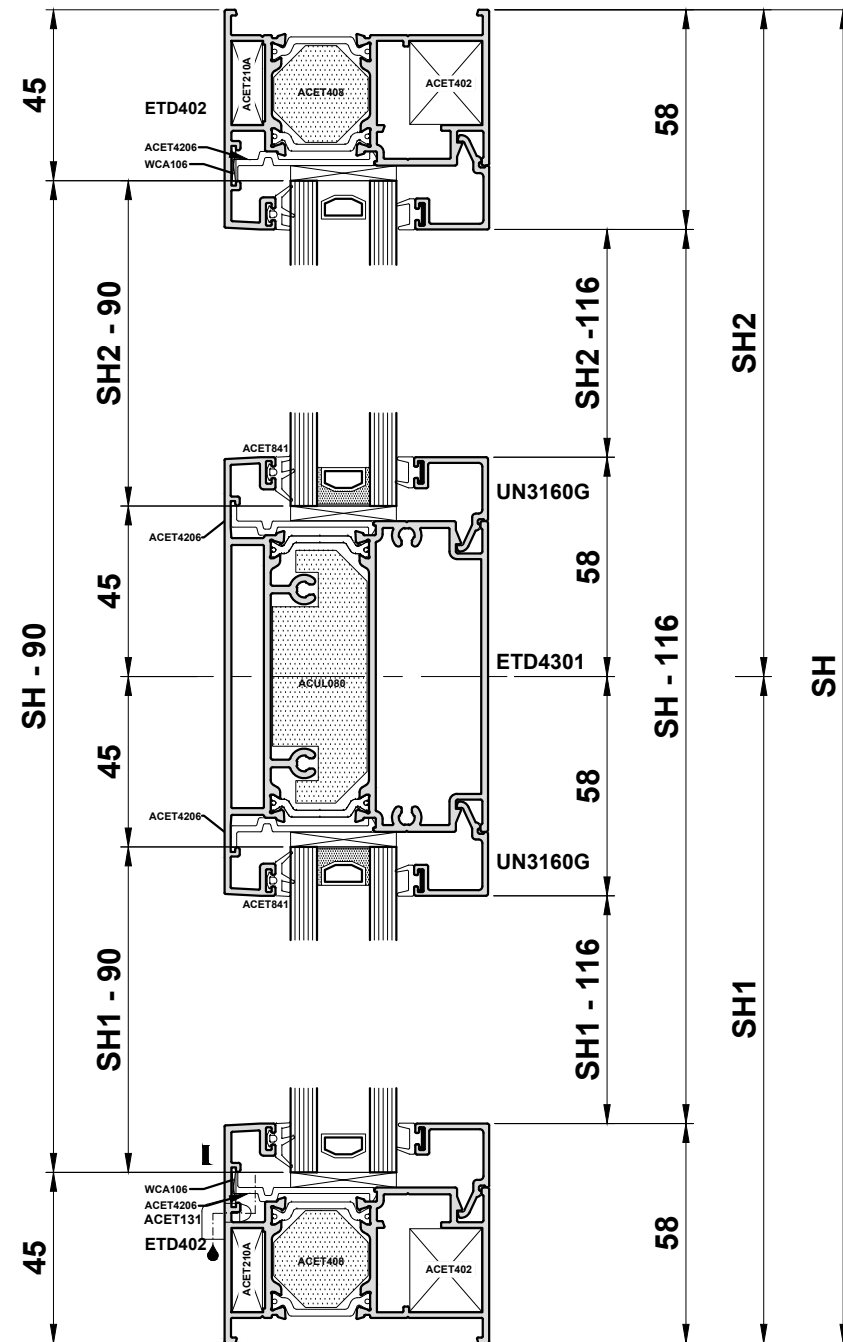
Accessories		
ACET402	4	Frame Cleat
ACET210A	4	Frame Cleat
ACET4206	4	Corner Chevron
ACET4207	8	Bridge Packers
ACET131	2	Drainage Cap
ACET408	2 X FW + 2 X FH	Outer Frame Foam
ACET841	2 X FW + 2 X FH	E Gasket

Glass Sizes		
	FH - 131	FW - 82



Do Not Scale From This Drawing

Side Light Quick-Glaze Bead



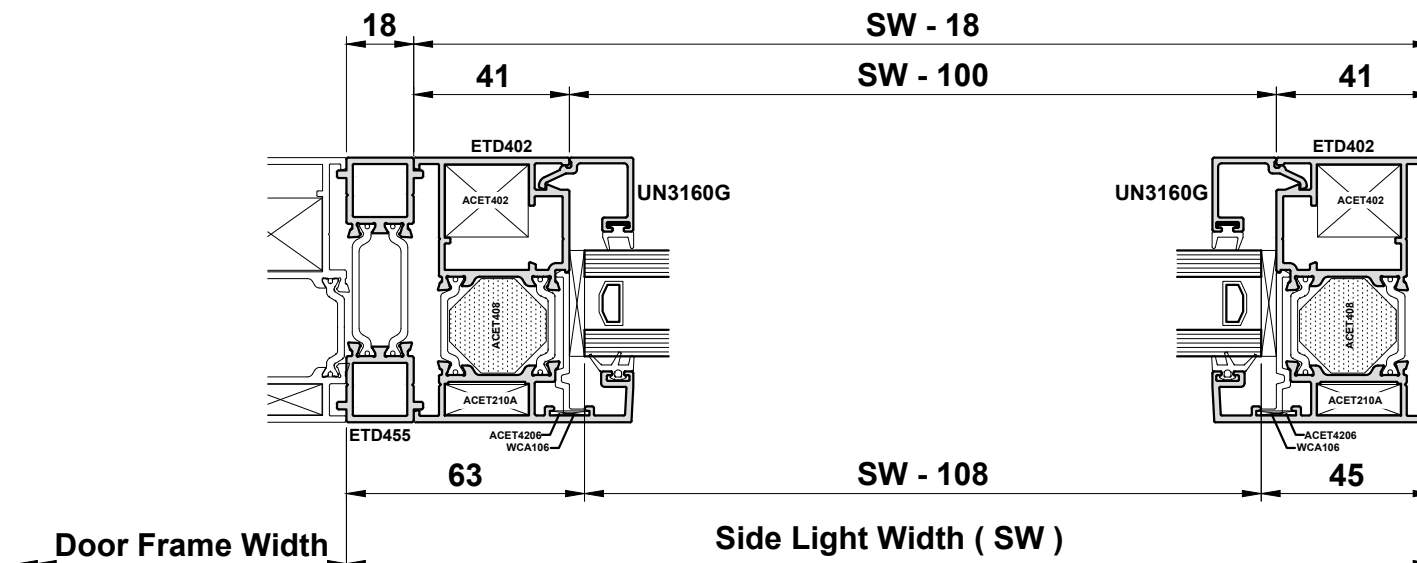
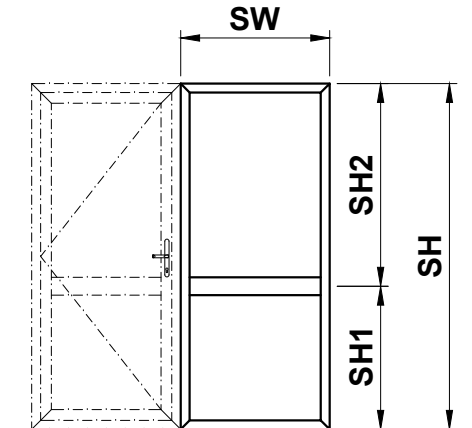
Profile Cutting Schedule				
UN3160G	2			SH - 116
UN3160G	2			SW - 100
ETD402	2			SW - 18
ETD402	2			SH

MIDRAIL	ETD4301	1		SW - 100
	UN3160G	2		SW - 100
	UN3160G	2		SH - 90
	UN3160G	2		SH - 90

Accessories		
ACET402	4	Frame Cleat
ACET210A	4	Frame Cleat
ACET4206	4	Corner Chevron
ACET4207	8	Bridge Packers
ACET131	2	Drainage Cap
ACET408	2 X SW + 2 X SH	Outer Frame Foam
ACET841	2 X SW + 2 X SH	E Gasket

Midrail Accessories		
ACUL080	7 X SW	ETD4301 Foam
ACUN3512	8	Screws
ACET841	2 X SW	E Gasket
ACET4207	4	Bridge Packer

Glass Sizes		
Without ETD4301	SH - 90	SW - 100
Top Glass With ETD4301	SH2 - 90	SW - 100
Bottom Glass With ETD4301	SH1 - 90	SW - 100



Do Not Scale From This Drawing

