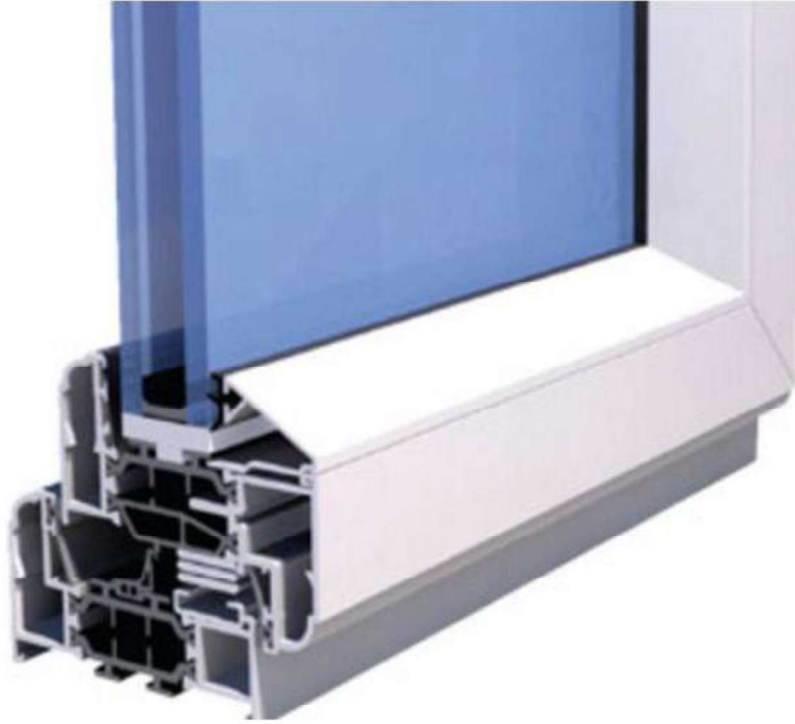


# Smart Systems Alitherm 800 Series



## **Alitherm 800 casement window**

Energy Rating A uValue 1.6Wm<sup>2</sup>k

70mm thermally broken Smart's aluminium

# Smart Systems Alitherm 800 Series

## Alitherm 800 Window – Window Energy Rating 'A'

- Open out casements and fixed windows with externally beaded sashes and externally beaded fixed frames as standard.
- Outer frame and vent available as feature Ovolo (70mm)
- Chamfered bead as standard – 28mm Double glazed – ETC867
- Chamfered bead as standard – 36mm triple glazed – ETC874
- Espagnolette with bi-directional locking
- Average U-value 1.6 W/m<sup>2</sup>K (28mm with 1.2 centre pane) – WER 'A'
- Average U-value 1.3 W/m<sup>2</sup>K (36mm with 0.8 centre pane) – WER 'A'

## Features and Options

- Internally beaded opening sash and externally beaded fixed panes
- Full internally beaded window, internally beaded opening sash with internally beaded dummy sash to fixed panes
- Internally beaded chamfered sash option – 28mm & 36mm square bead only
- Internally beaded flat sash option – 28mm & 36mm square bead only
- Finishes available in KL, RAL, Sensation range and dual colour options
- Square bead for externally beaded option available – 28mm double glazed – ETC861
- Square bead for externally beaded option available – 36mm triple glazed – ETC873
- Can be manufactured in accordance with Smarts PAS24 allowing windows to conform to Document Q – claw locks required

## Size Restrictions

- Large frames with mullions are subject to be split and coupled based on a design wind load of 800pa
- Max frame size will depend on wind loading requirements and style of window but indicative sash sizes with Securistyle (13mm stack height) friction stays are as follows:

## Top Hung Sashes

- Max width: 1400mm (sash size)
- Min width: 375mm (frame size 410mm)
- Max height: 1300mm (sash size)
- Min height: 300mm (frame size 340mm) (325mm transom drop)
- Max weight: 40kg

## Side Hung Sashes

- Max width: 700mm (sash size)
- Min width: 300mm (frame size 340mm)
- Max height: 1400mm (sash size)
- Min height: 375mm (frame size 410mm)
- Max weight: 24kg
- 450mm opening (fire escape) - frame/frame min 611mm - frame/mullion CL min 597mm

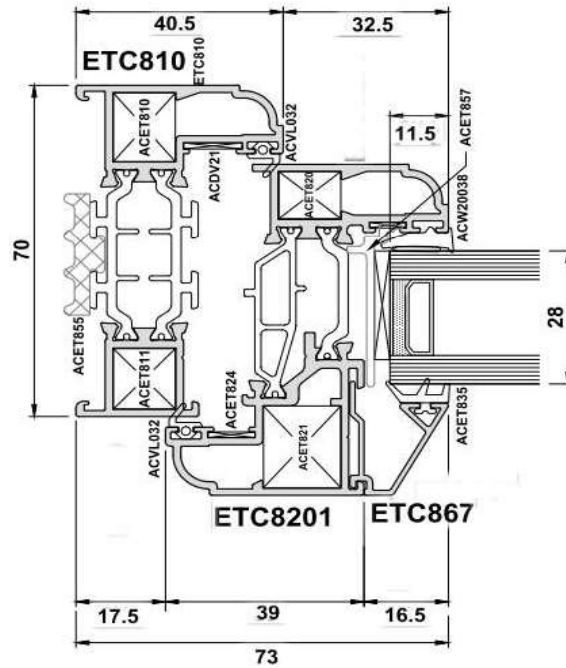
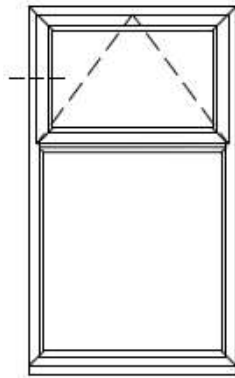
## Weather Performance (BS6375-1)

- BS EN 1026: 2000 Air Permeability: Class 3 600 Pa
- BS EN 1027: 2000 Water tightness: Class E 1050 Pa
- BS EN 12211: 2000 Resistance to Wind Load: Class 5A 2000 Pa

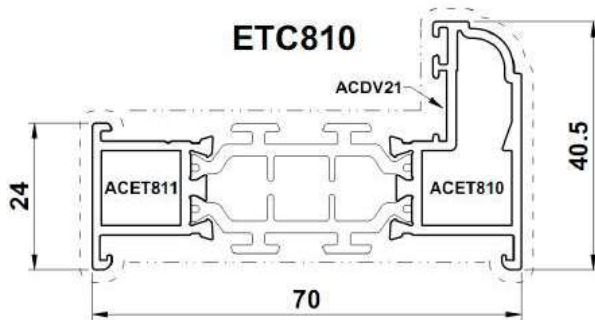
# Smart Systems Alitherm 800 Series

## Cross Sectional Drawings

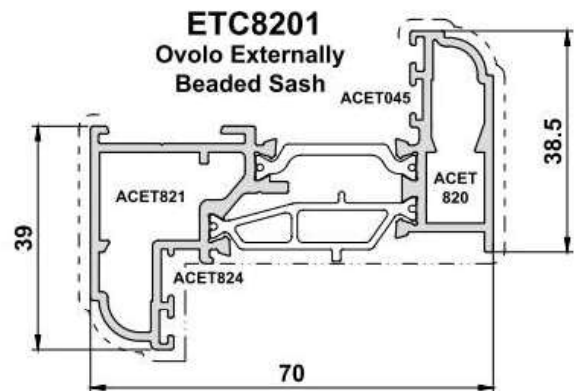
Standard Frame & Sash Detail



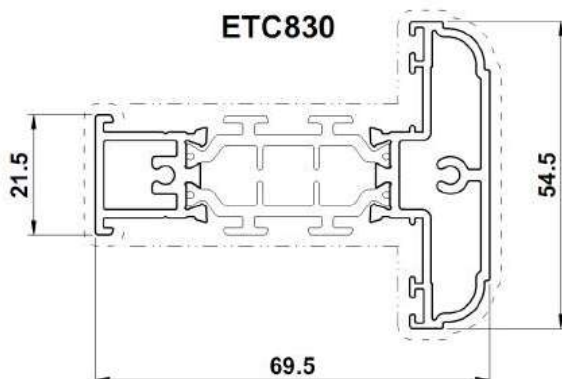
Standard Outerframe



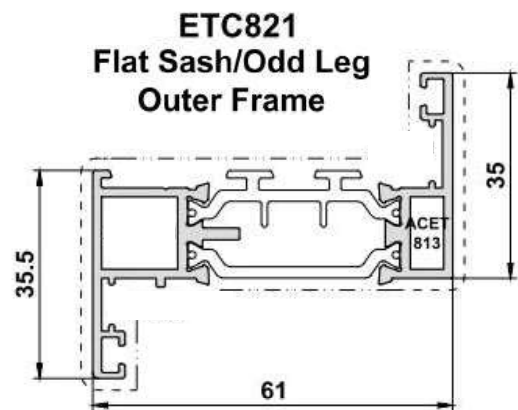
Standard Sash (externally beaded)



Standard Transom/Mullion



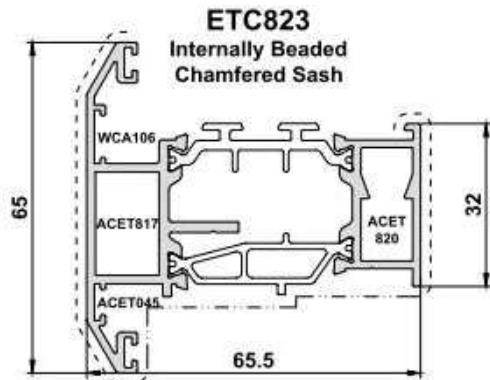
Odd leg Outerframe



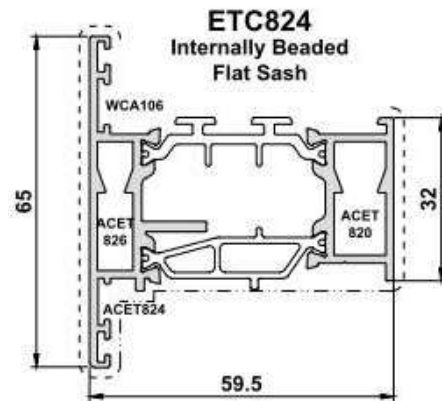
Can be used as sash – externally beaded – Cockspur locking only

# Smart Systems Alitherm 800 Series

## Chamfered Sash (internally beaded)



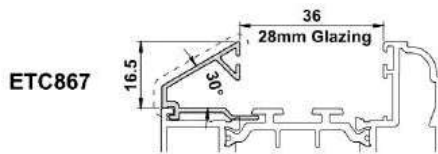
## Flat Sash (internally beaded)



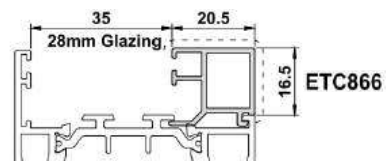
Note:

Check requirements when using internally beaded sashes. Fixed panes are externally beaded unless dummy sashes are requested

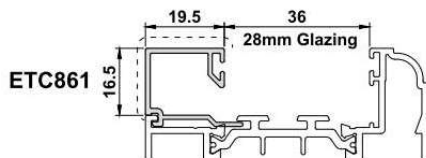
Standard external chamfered bead for 28mm double glazed



Standard internal square bead for 28mm double glazed



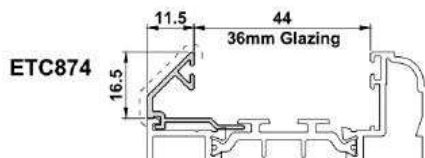
Optional external square bead for 28mm double glazed



Standard internal square bead for 36mm triple glazed



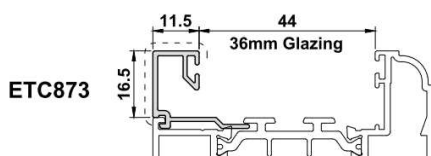
Standard external chamfered bead for 36mm triple glazed



Note:

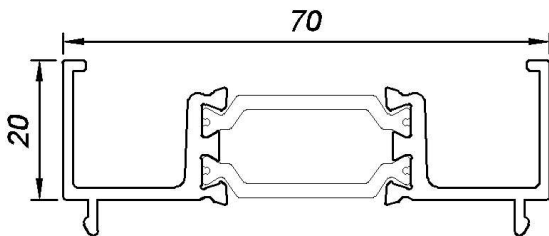
Raked/angled frames are only supplied with square bead

Optional external square bead for 36mm triple glazed

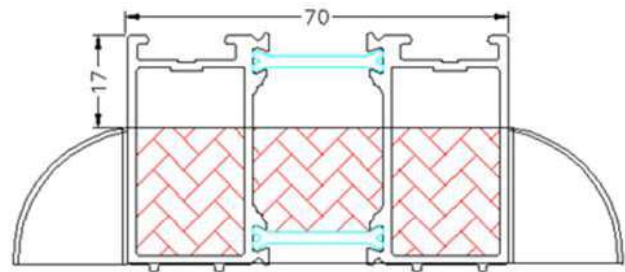


# Smart Systems Alitherm 800 Series

ETC858 70mm x 20mm extension



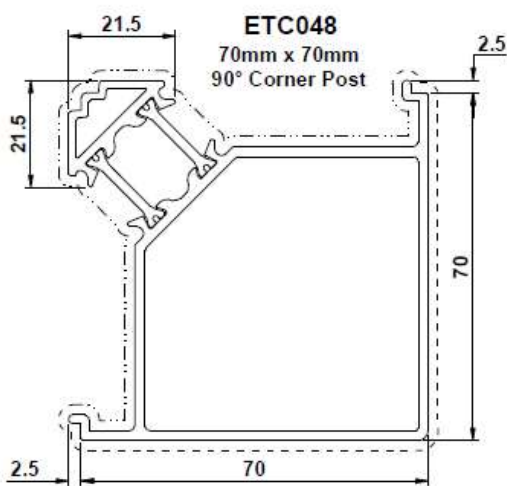
DV515 70mm x 42mm extension



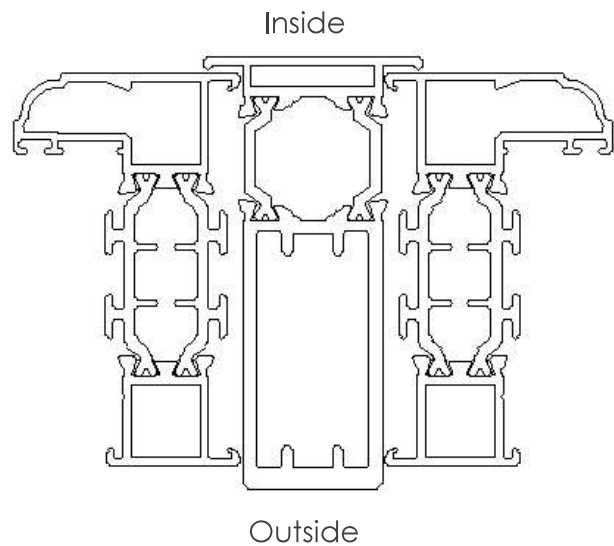
## **Note:**

With the hood of the head fitted approx. 17mm to the outer edge of the 42mm head extension. Extensions come fitted to the outerframe and pre-routed

ETC048 90° - Corner Post

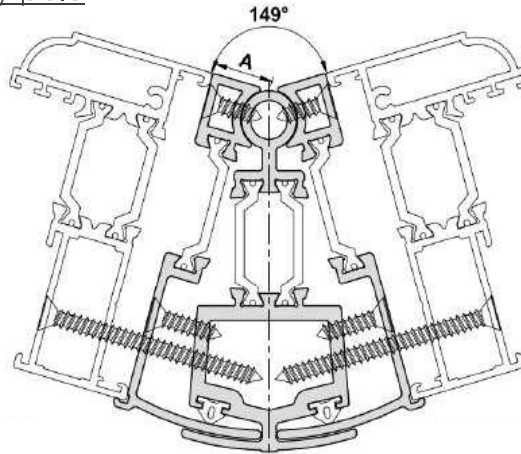


ETC517 180° - Coupler (25mm deduction)



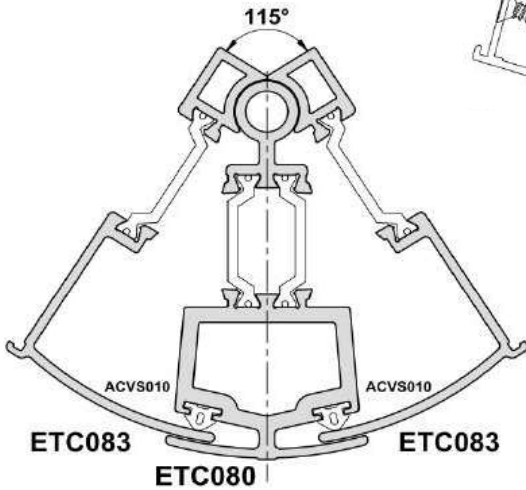
# Smart Systems Alitherm 800 Series

## Alitherm 800 - 70mm Frame Bay pole



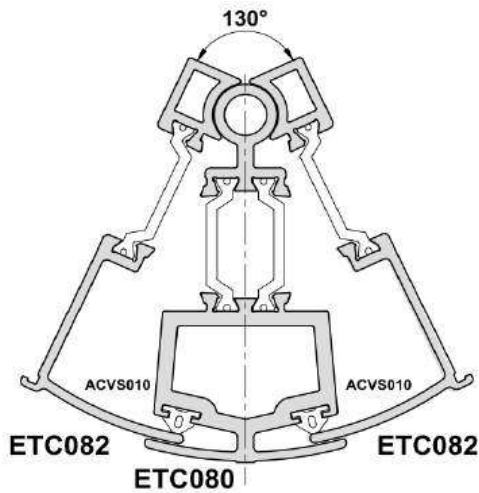
**Note:**

All joints must be adequately sealed



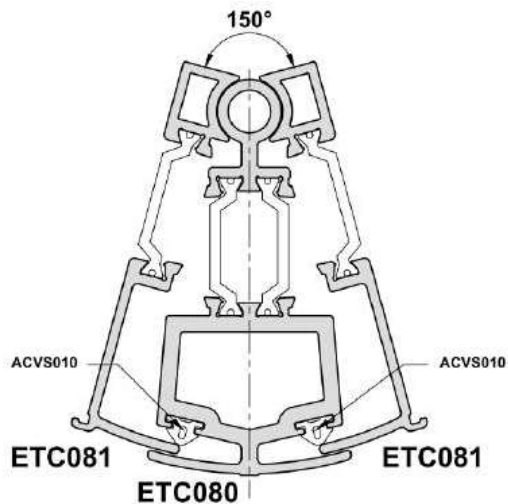
ANGLE	DEDUCTION 'A'
115°	10.5
120°	11
125°	11.5
129°	11.5

Parts  
ETC080 Qty 1  
ETC083 Qty 2  
ACVS010 x 2



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

Parts  
ETC080 Qty 1  
ETC082 Qty 2  
ACVS010 x 2



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

Parts  
ETC080 Qty 1  
ETC081 Qty 2  
ACVS010 x 2

# Smart Systems Alitherm 800 Series

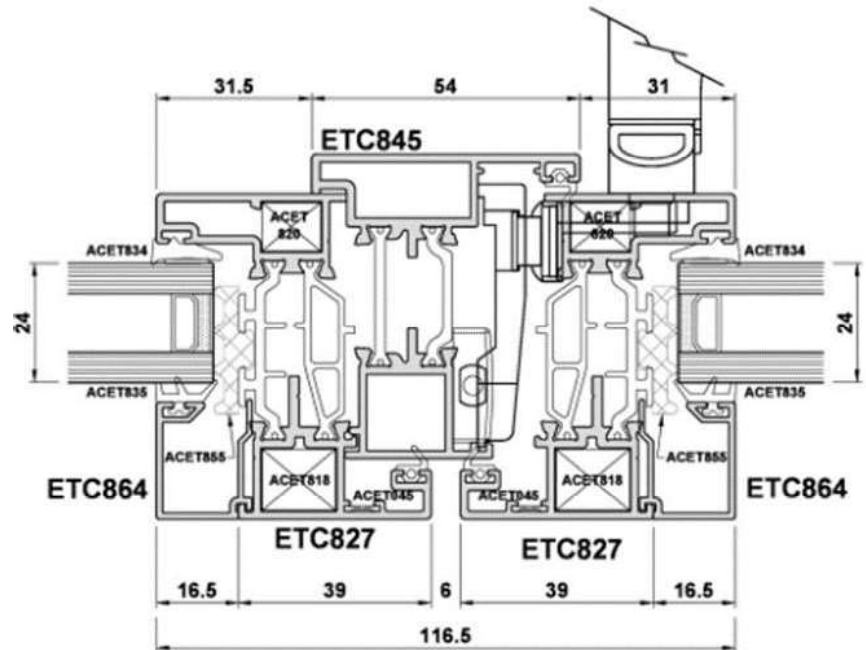
## Alitherm 800 French Escape Windows

There is no option on the 800 series for a double handle French escape window.

The only option available is for single handle gearing to the master and a finger operated bolt to the slave sash, as shown in the drawing.

### Parts

- ETC845 False mullion
- ACET847 False mullion end caps
- ACET854 Finger bolt keeps
- ACET853 Finger Bolts



French escape windows are available with the ETC8201 Externally beaded sashes

