ALTEC SYSTEMS

Architectural Aluminium Systems.

"Committed to building excellence"

ACW-55 Thermally Enhanced Curtain Walling System.

Technical Information

Scope

The ACW-55 curtain walling system comprises of slim 55mm wide vertical mullions and horizontal transoms. The system can be either transom or mullion zone drained and both systems come in a variety of mullion and transom sizes to suit all combinations of spans and wind loadings. The system is thermally enhanced and offers superior energy efficiency compared to traditional curtain walling. It is fully compatible with the complete range of Altec's glazing systems. Glazing from 6mm to 44mm triple glazing can be accommodated.

The system is designed for the widest variety of applications such as domestic and commercial including low to medium rise applications. Can be used for new buildings and refurbishments such as :

- small or large office buildings,
- new build or refurbishment projects
- stairwells and atriums
- low to medium rise buildings
- hospitals, hotels, surgeries, garden centres, etc.
- can also be used for sloped roof applications

Construction

The framing is joined together with dedicated mechanical cleats and transom end castings. This unique fixing method combined with straight transom cuts (no notching required) has the advantage of quick and easy construction. The system can be fabricated in stick or ladder form and can be hung or propped.

Materials

All mullion, transoms and cappings are extruded from aluminium using either 6060 or 6063 alloys to T6 temper and conform to BS EN 755 part 9 2008.

Enhanced thermal barriers are made from low conductivity ABS.

EPDM gaskets are manufactured to BS4255.

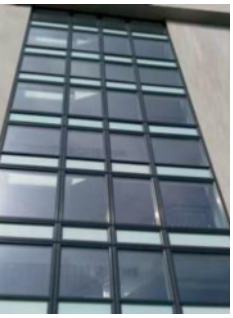
Non corrosive stainless steel fasteners to BS EN ISO 3506:2009 are used throughout fabrication.

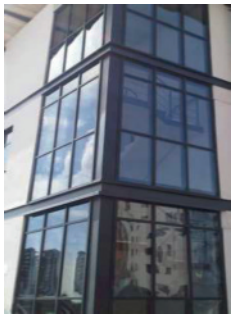
Finishes

Available in mill finish.

Anodised finish to BS3897:1991 to 15 (AA15) or 25 microns (AA25). Available in a range of colours.

Polyester Powder Coating to BS EN 12206:2004 Part 1. PPC is available in a multitude of RAL colours in either matt, satin or gloss finishes. For marine environments a 60 micron thickness is available.





Mullion Selection.

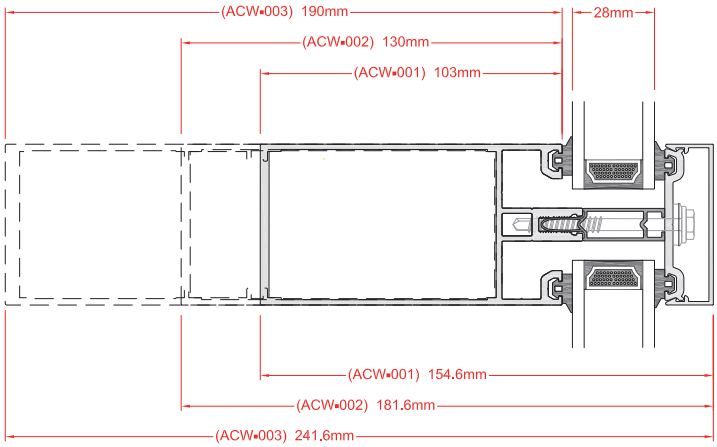
The mullion selection is dependant on the spans and wind loadings of each location and a structural engineer should be consulted at the start of each project.

Mullion	Box Dimension	Ixx (cm4)	Iyy (cm4)
ACW-001	103mm	128.72	26.32
ACW-001S	103mm	198.83	58.48
ACW-002	130mm	230.60	43.92
ACW-002S	130mm	363.96	52.38
ACW-003	190mm	716.34	71.30
ACW-003S	190mm	909.53	80.27
ACW-003SS	190mm	1068.43	88.76

"S denotes reinforcing inserts."

Please contact our Technical Department for further advice.

Mullion Back Box Dimensions.



Weather Rating (BS 6375 Part 1: 2009)

Air Permeability	600Pa (Class 4)
Water Tightness	750Pa (Class E750)
Wind Resistance	2400Pa (Class E2400)
Exposure Category	2400

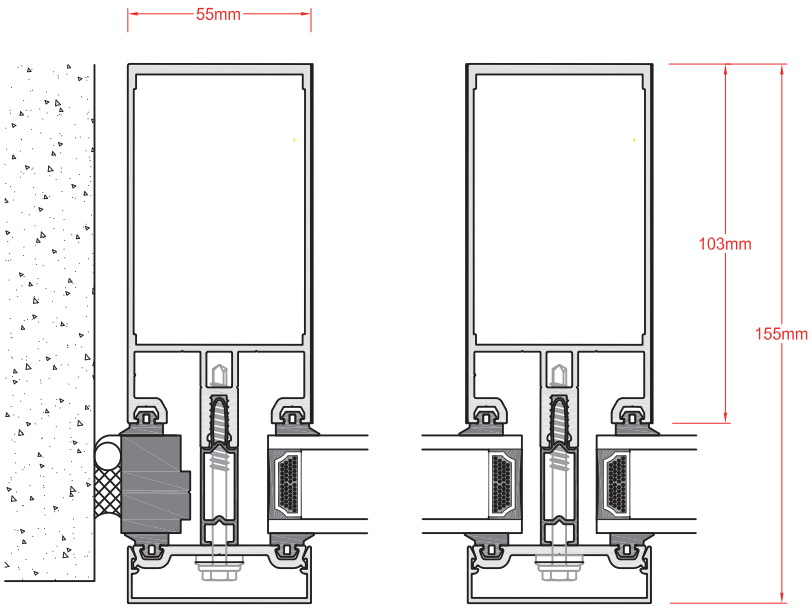
Thermal Efficiency (U values)

Although every facade is different in size, glass and spacer specifications, typical U values of 1.4 W/m²K are achievable when using a typical standard double glazed unit with a Swiss spacer Ultimate combination.

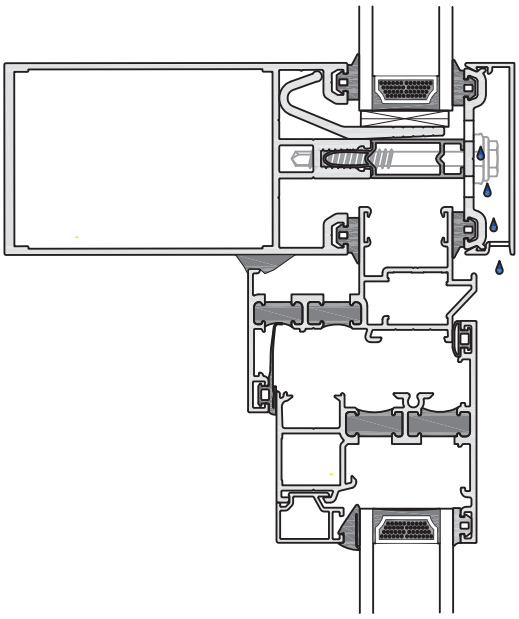
The thermal transmission coefficients when calculated for insertion elements and windows (Uw) according to EN ISO 10077-1: 2006 or DIN V 4108-4: 06.2007 and for curtain walls (Ucw) in compliance with EN 13947: 2006).

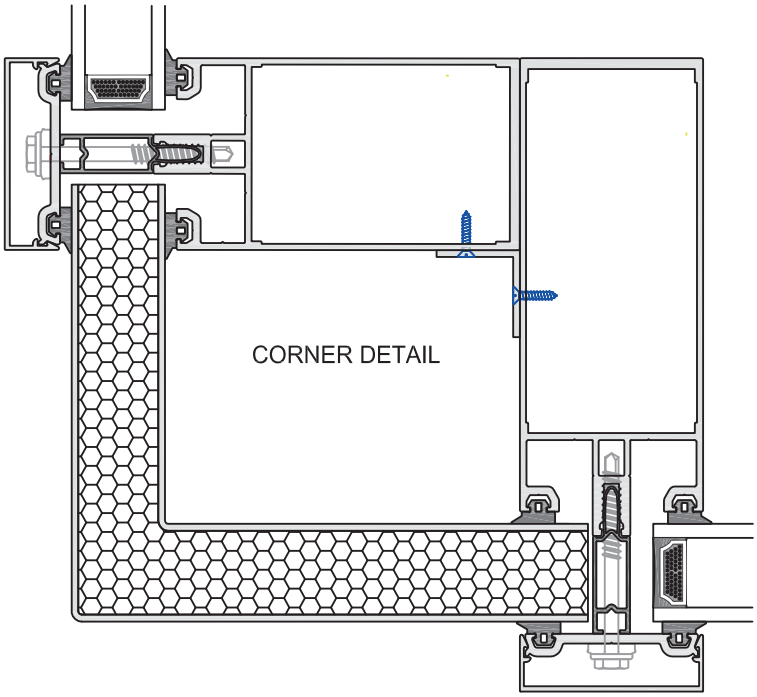
CROSS SECTION DETAILS

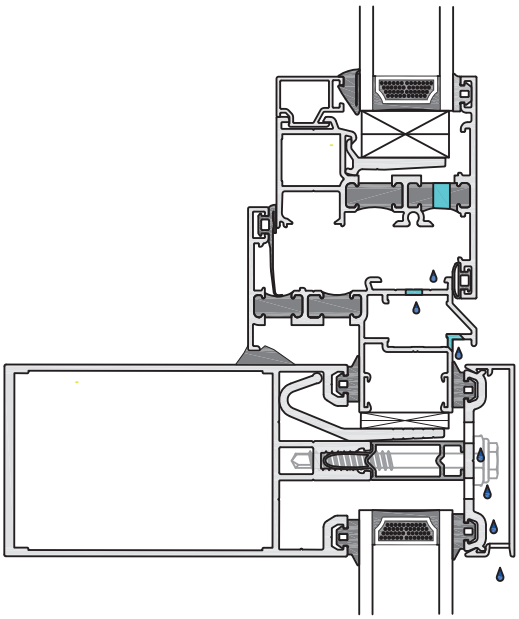
MULLION DETAILS



TRANSOM DETAILS
WITH TYPICAL WINDOW INSERT

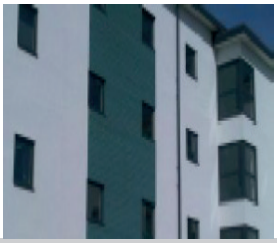
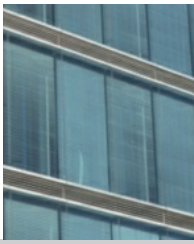










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